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Airborne GPS Survey Report For

Data Access & Support Center

Kansas Geological Survey

1930 Constant Avenue

Lawrence, KS 66047-3724

785-864-2000

Contract ID 00036574

Prepared by

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Aerometric Project No. 1120103

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Kansas Department of Administration

Area 3, Eastern Kansas

Lidar Task Order/Contract ID 036574

Aerometric Project No. 1120103

1 INTRODUCTION

This report contains a summary of the LiDAR data acquisition and processing for Area 3 located in **Eastern Kansas under Contract ID 036574**.

1.1 Contact Info

Questions regarding the technical aspects of this report should be addressed to:
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1.2 Purpose

Aero-Metric, Inc. acquired high accuracy Light Detection and Ranging (LiDAR) data in the Area 3 region of eastern Kansas for the Kansas Department of Administration and Kansas Geological Survey in accordance with requirements specified to produce such dataset as outlined in contract ID 036574 and as defined by the National Digital Elevation Program (NDEP) and the American Society for Photogrammetry and Remote Sensing (ASPRS) and Other High Quality Digital Topography, as well as USGS National Geospatial Program Base LiDAR Specification, Version 13 (ILMF).

1.3 Project Locations

The project area includes three areas of Area 3 Kansas including: Bourbon, Brown, Buchanan, Butler, Cherokee, Crawford, Doniphan, Jackson, Leavenworth, Linn, Nemaha, Platte, Pottawatomie, Webaunsee, and Wyandotte counties. The Northeast area includes Brown, Doniphan, Jackson, Leavenworth, Nemaha, Pottawatomie, Webaunsee, and Wyandotte counties. The Southeast includes Cherokee, Crawford, Linn and Bourbon counties. The Butler area includes Butler County. Areas were defined and supplied by Kansas Department of Administration and includes approximately 9700 square miles for analysis.

1.4 Time Period

LiDAR data acquisition was performed January 13th, 2012 to April 17th, 2012. Fifty-four (54) missions were logged to cover the project area. See Items 3.3 a and b for a sketch of the acquisition passes and Section 7 contains each flight log.

1.5 Project Scope

To collect data over the approximately 9700 square miles of the project, aircraft were operated by; Keystone Aerial Surveys, Inc. and Aerometric Inc. utilizing Optech Gemini and Leica ALS70 airborne LiDAR systems. Data was collected at a nominal altitude of 2400 meters above ground to provide optimal data collection from the project area terrain.

2 GEODETIC CONTROL

QC surveys and control were completed between January 24th and April 21st, 2012.

2.1 Network Scope

Base horizontal control for the check point survey consisted of seventeen NGS CORS stations: **HBRK**, **ICT1**, **ICT3**, **KST5**, **KSU1**, **MOBT**, **MOCA**, **MOHV**, **MOID**, **MOMV**, **MONE**, **MOPL**, **MORK**, **MORM**, **MOSB**, **MOSV**, **ZKC1**: two NGS Order B stations: **K 56**, **P 340**; and three NGS First Order stations: **G 253**, **P 206**, **W 281**.

Horizontal control is referenced to the Universal Transverse Mercator (UTM) Coordinate System – Zone 14, based on the North American Datum of 1983 / High Accuracy Reference Network (HARN) (NAD83/HARN). Final coordinates are published in meters.

Base vertical control for the check point survey consisted of nine NGS First Order, Class 2 stations: **A 282**, **BELVUE**, **D 217**, **P 18**, **P 206**, **P 340**, **Q 210**, **W 281**, **Y 341**; twenty NGS Second Order stations: **801.25, 917**, **C 252 RESET**, **C 253**, **C 334**, **D 277**, **D 40**, **ELDORADO**, **G 251**, **G 253**, **H 274**, **K 334**, **K 56**, **M 325**, **P 215**, **Q 109**, **SKIRT RM 2**, **X 108**, **X 119**, **Z 231**; two NGS Third Order stations: **922 RESET**, **X 240 RESET**; and twelve NGS CORS stations: **HBRK**, **ICT3 KST5**, **KSU1**, **MOID**, **MOMV**, **MOPL**, **MORK**, **MORM**, **MOSB**, **MOSV**, **ZKC1** . The NGS stations **C 233 RESET**, **W 106**, and **X 274** were also observed, but not used as control due to large vertical misclosures. The NGS Model GEOID09 was applied to the derived ellipsoid heights to approximate the North American Vertical Datum of 1988.

Vertical control is based on the North American Vertical Datum of 1988 (NAVD88).

NGS recovery sheets are included in Section 9, Ground Control Survey Reports.

2.2 Network Computations

GPS measurements were done in two stages. Initial computations were done with LEICA Geo Office (LGO), version 4.0. LGO permits the conversion of raw satellite data collected by the receivers to a meaningful coordinate difference between points (baseline solutions). Once the baseline solutions were determined, they were input into the GeoSurv-GeoLab2 series of programs (Geolab version 2.4d). Due to the size and shape of the project, the data was split into three networks. Adjustments for each network were performed for analysis and quality closure holding the position and elevation one station fixed as follows:

Area 1, fixed station **ICT3**

HORIZONTAL CLOSURES (in meters)

STATION	NORTHING	EASTING	LINEAR	DISTANCE	PROPORTION
HBRK	0.017	0.005	0.018	61644.4	1:3478000
ICT1	0.016	0.006	0.017	20040.0	1:1172000

VERTICAL CLOSURES (in meters)

STATION	ADJUSTED ELEVATION	PUBLISHED ELEVATION	DIFFERENCE	DISTANCE	ALLOWABLE 3rd ORDER CLOSURE
C 334	420.688	420.690	0.002	32759.2	0.069
D 40	421.092	421.096	0.004	36676.2	0.073

ELDORADO	409.634	409.690	0.056	31828.3	0.068
K 334	469.823	469.828	0.005	52996.1	0.087
X 240 RESET	428.740	428.770	0.030	48690.2	0.084

Area 2, fixed station **MOSV** (horizontally) and **917** (vertically)

HORIZONTAL CLOSURES (in meters)

STATION	NORTHING	EASTING	LINEAR	DISTANCE	PROPORTION
HBRK	0.011	0.015	0.019	279860.6	1:15045000
KST5	0.018	0.027	0.032	143990.0	1:4437000
KSU1	0.026	0.043	0.050	178780.7	1:3557000
MOID	0.016	0.006	0.017	100659.2	1:5890000
MOMV	0.005	0.007	0.009	44905.4	1:5220000
MOPL	0.011	0.005	0.012	63572.7	1:5261000
MORK	0.003	0.016	0.016	78547.0	1:4825000
MORM	0.012	0.010	0.016	109278.2	1:6995000
MOSB	0.029	0.022	0.036	127837.3	1:3511000
P 206	0.013	0.011	0.017	51975.9	1:3052000
P 340	0.012	0.001	0.012	15374.0	1:1276000
W 281	0.021	0.006	0.022	49544.1	1:2268000
ZKC1	0.015	0.007	0.017	119488.1	1:7218000

VERTICAL CLOSURES (in meters)

STATION	ADJUSTED ELEVATION	PUBLISHED ELEVATION	DIFFERENCE	DISTANCE	ALLOWABLE 3rd ORDER CLOSURE
A 282	231.778	231.830	0.052	109761.8	0.126
BELVUE	294.304	294.315	0.011	111587.1	0.127
D 217	244.749	244.750	0.001	62012.6	0.094
HBRK	413.619*	413.664*	0.045	249508.6	0.190
KST5	303.992*	303.974*	0.018	121420.3	0.132
KSU1	326.596*	326.622*	0.026	143674.0	0.144
M 325	327.678	327.605	0.073	97684.4	0.119
MOID	273.806*	273.836*	0.030	138010.0	0.141
MOMV	278.899*	278.928*	0.029	63220.8	0.095
MOPL	213.060*	213.056*	0.004	93637.9	0.116
MORK	328.441*	328.462*	0.021	42470.0	0.078
MORM	199.091*	199.058*	0.033	157170.2	0.150
MOSB	302.290*	302.239*	0.051	156787.2	0.150
P 206	264.630	264.632	0.002	18133.6	0.051
P 215	438.067	438.054	0.013	158070.3	0.151
P 340	302.586	302.550	0.036	58946.0	0.036
Q 109	372.178	372.177	0.001	59758.4	0.093
Q 210	260.982	261.009	0.027	24178.9	0.059
SKIRT RM 2	349.414	349.382	0.032	63758.0	0.096
W 281	304.399	304.385	0.014	58965.8	0.092
X 108	382.036	382.069	0.033	28059.6	0.064
X 119	392.727	392.674	0.053	88080.0	0.113
Y 341	232.893	232.929	0.036	94928.1	0.117
Z 231	305.843	305.918	0.075	122557.1	0.133
ZKC1	306.583*	306.542*	0.041	141632.3	0.143
MOID	273.806*	273.836*	0.030	138010.0	0.141

Area 3, fixed station **MONE** (horizontally) and **G 251** (vertically)

HORIZONTAL CLOSURES (in meters)

STATION	NORTHING	EASTING	LINEAR	DISTANCE	PROPORTION
G 253	0.011	0.011	0.016	66704.1	1:4287000
K 56	0.013	0.014	0.019	79584.7	1:4165000
MOBT	0.013	0.003	0.013	43640.9	1:3271000
MOHV	0.009	0.002	0.009	82542.8	1:8953000
ZKC1	0.011	0.008	0.014	119001.1	1:8749000

VERTICAL CLOSURES (in meters)

STATION	ADJUSTED ELEVATION	PUBLISHED ELEVATION	DIFFERENCE	DISTANCE	ALLOWABLE 3rd ORDER CLOSURE
801.25	244.913	244.965	0.052	109519.5	0.126
922 RESET	278.383	278.380	0.003	90386.3	0.114
C 252 RESET	284.738	284.705	0.033	51537.8	0.086
C 253	303.583	303.497	0.086	53161.5	0.087
D 277	320.046	319.987	0.059	27835.2	0.063
G 253	298.015	298.001	0.014	66704.1	0.097
H 274	277.704	277.701	0.003	56877.3	0.091
P 18	269.806	269.801	0.005	89688.0	0.114

* Ellipsoid Height

The above control was held in the fully constrained scaled least squares base network adjustments to derive the ground control checkpoint values.

3 LiDAR ACQUISITION AND PROCEDURES

3.1 Acquisition Time Period

LiDAR data acquisition and Airborne GPS control surveys were completed between January 13th, 2012 and April 17th, 2012. Fifty-four flight missions were required to cover the project areas. Some areas required re-flight due to unfavorable data acquisition conditions.

3.2 LiDAR Planning

The LiDAR data for this project was collected with Aerometric's Optech Gemini and Leica ALS70 and Keystone Aerial Survey's, Optech Gemini airborne LiDAR systems. All flight planning and flights were completed using Optech ALTM-Nav, version 2.1.25b (flight planning and LiDAR control software). Plan version 5.97 in .pln files.

Item 3.2 Acquisition details for the project acquisition flights.

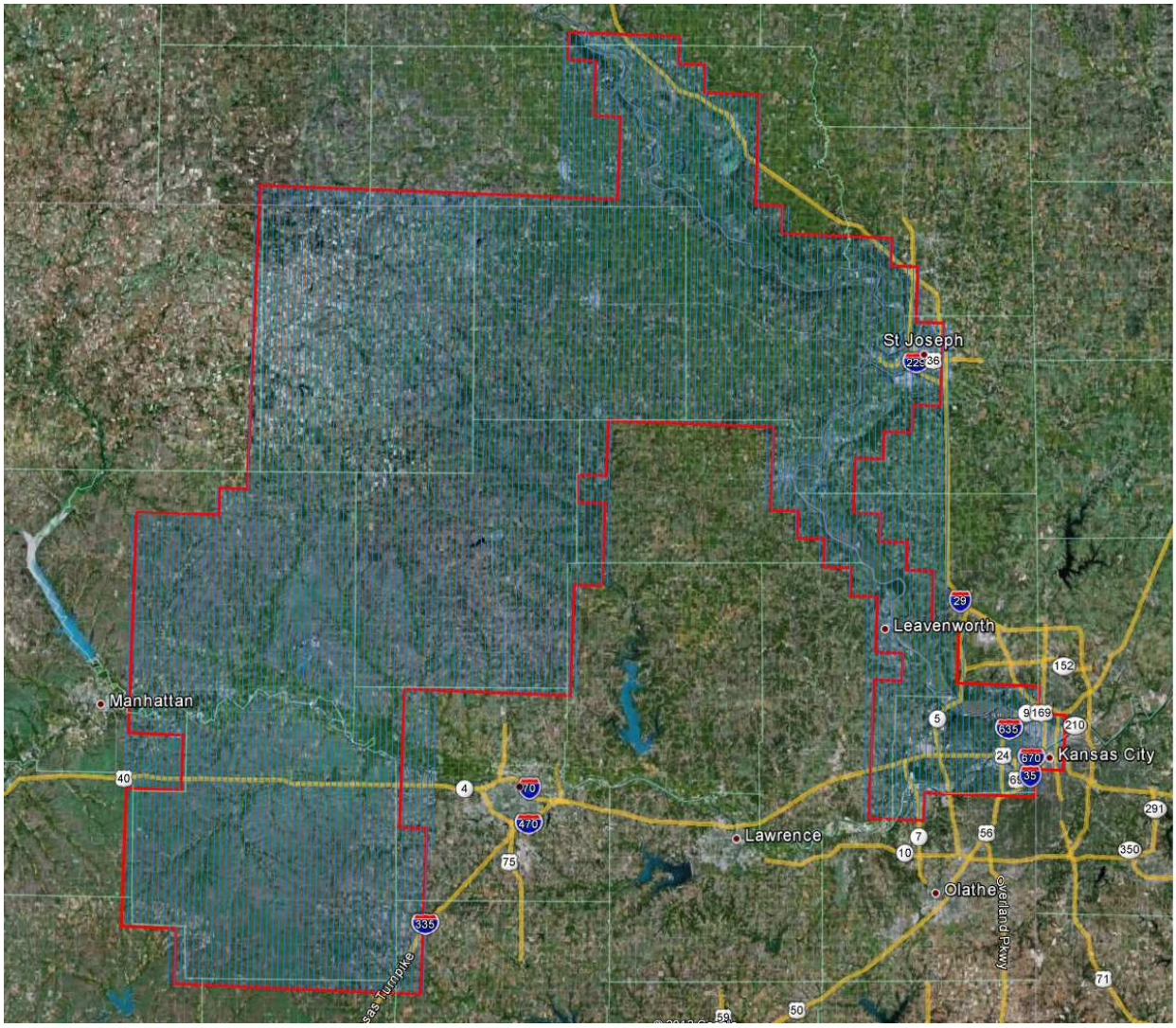
Flying Height (Above Ground)	2400 m
Laser Pulse Rate	70 kHz
Mirror Scan Rate Frequency	29.5 Hz
Scan Angle (degrees)	18
Side Lap	30%
Ground Speed	160 kts
Nominal Point Spacing/meter	1.4

3.3 LiDAR Acquisition

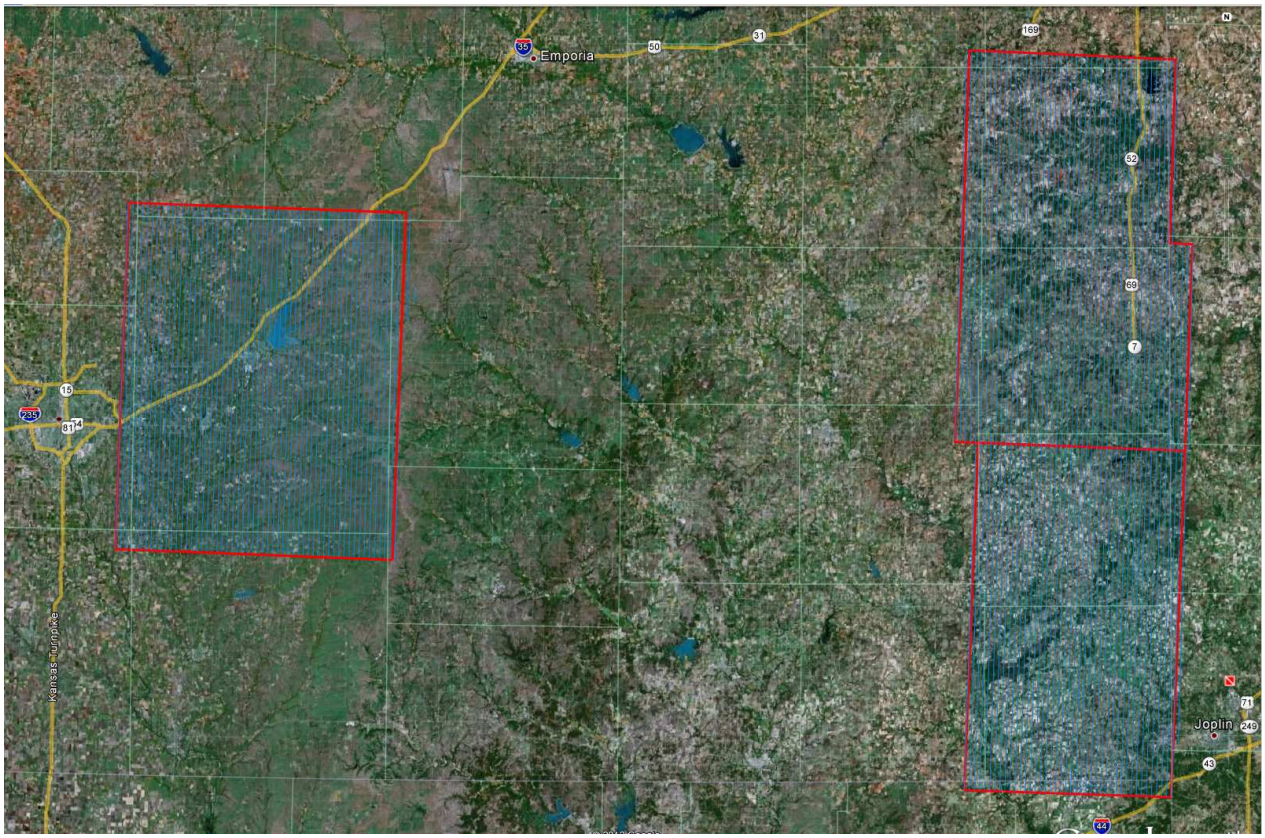
A total of 54 flight missions were required to cover the project area. The missions were flown using the values in the chart above, Item 3.2. Images of the acquisition missions or flight lines in the three areas follow as Items 3.3 a and 3.3 b. Section 7 contains images of the flight log sheets.

Airborne GPS and IMU position and trajectory data of the LiDAR sensor were also acquired during the time of flight.

Missions were typically four to five hours long. Before take-off, the LiDAR system and the Airborne GPS and IMU system were initialized for a period of five minutes and in operation after landing for another five minutes. The missions acquired data according to the planned flight lines and included a minimum of one (usually two) cross flights. The cross flights were flown perpendicular to the planned flight lines and their data used in the in-situ calibration of the sensor.



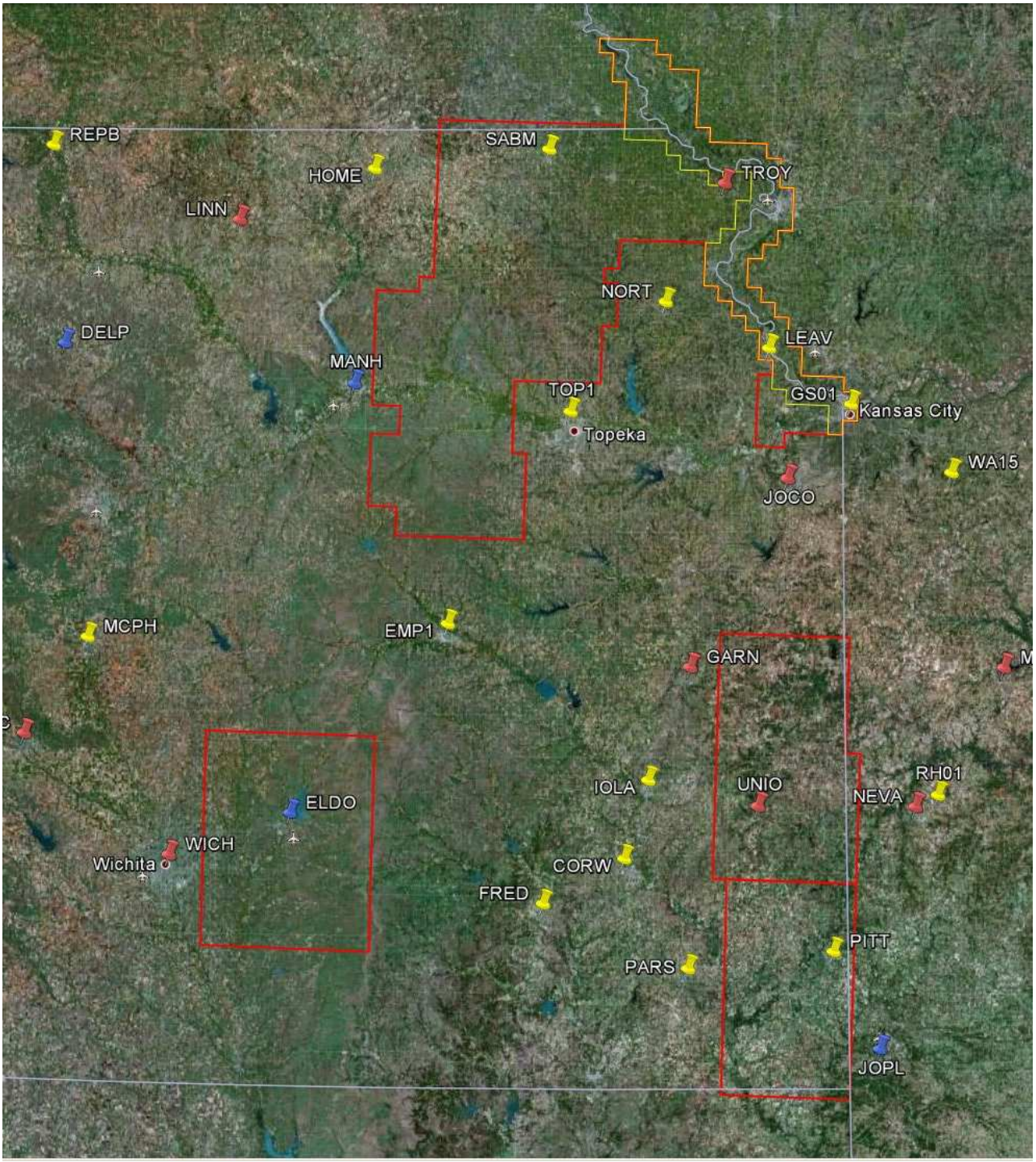
3.3 a Acquisition area; missions and flight lines in Kansas, Area 3, Northeastern, Brown, Doniphan Nemaha, Pottawatomie, Jackson, Wabaunsee and Wyandotte counties.



3.3 b Acquisition area; missions and flight lines in Kansas, (on right) Area 3, Southeastern, Bourbon, Linn, Crawford, Cherokee Counties. (on left) Area 3, Butler County.

3.4 LiDAR Trajectory Processing

The airborne positioning was based on the following control stations: SAMB, TROY, NORT, LEAV, GS)!, TOP1, MANH, HOME, EMP1, LDO, WICH, GARN, UNIO, PARS, PITT< NEVA, JOPL, IOLA, CORW, and FRED. See approximate locations in Item 3.4 a



3.4 a Control Station locations and Project boundary

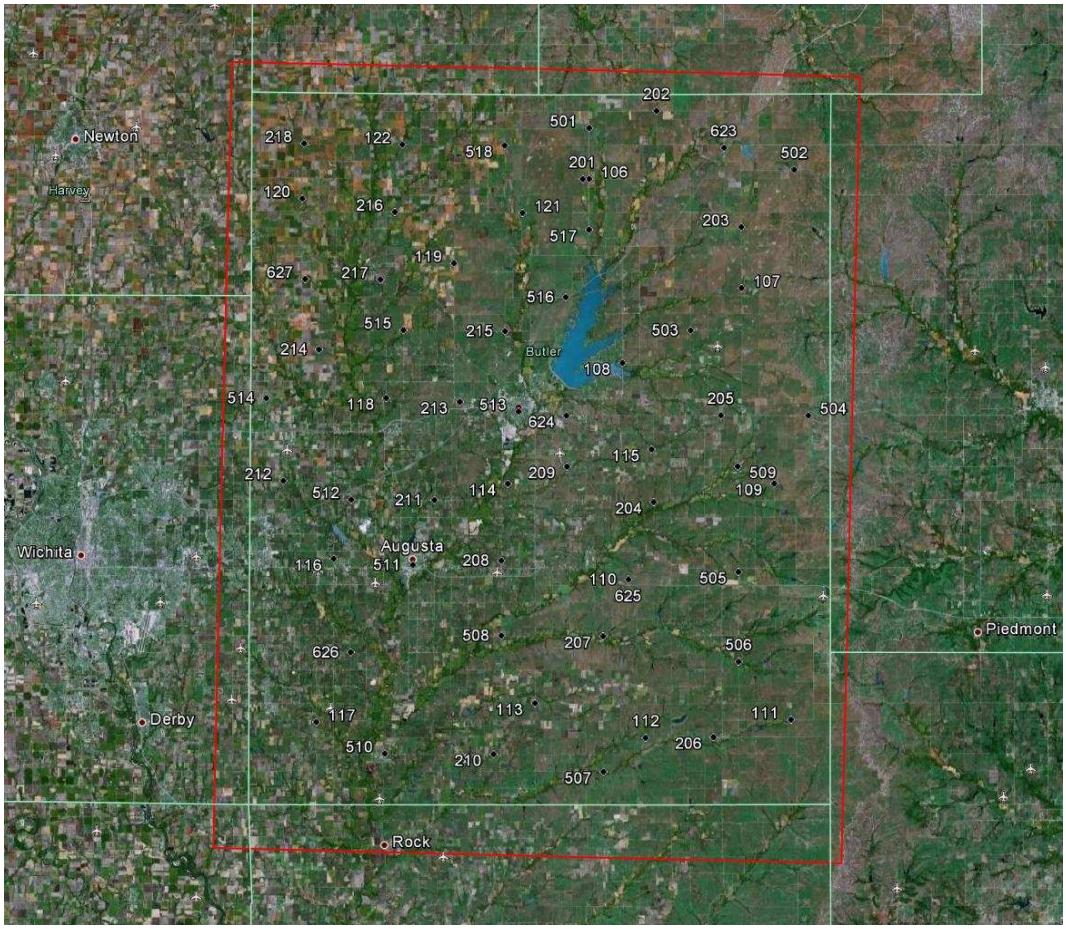
4 QC SURVEYS

The check point survey was performed between January 24th and April 21st, 2012 using Rapid Static GPS techniques. The project includes three areas of varying size separated from one another. Ground survey personnel collected between 54 and 208 check points in each of these three areas. These points were collected in all terrain categories to assess vertical accuracies in each category.

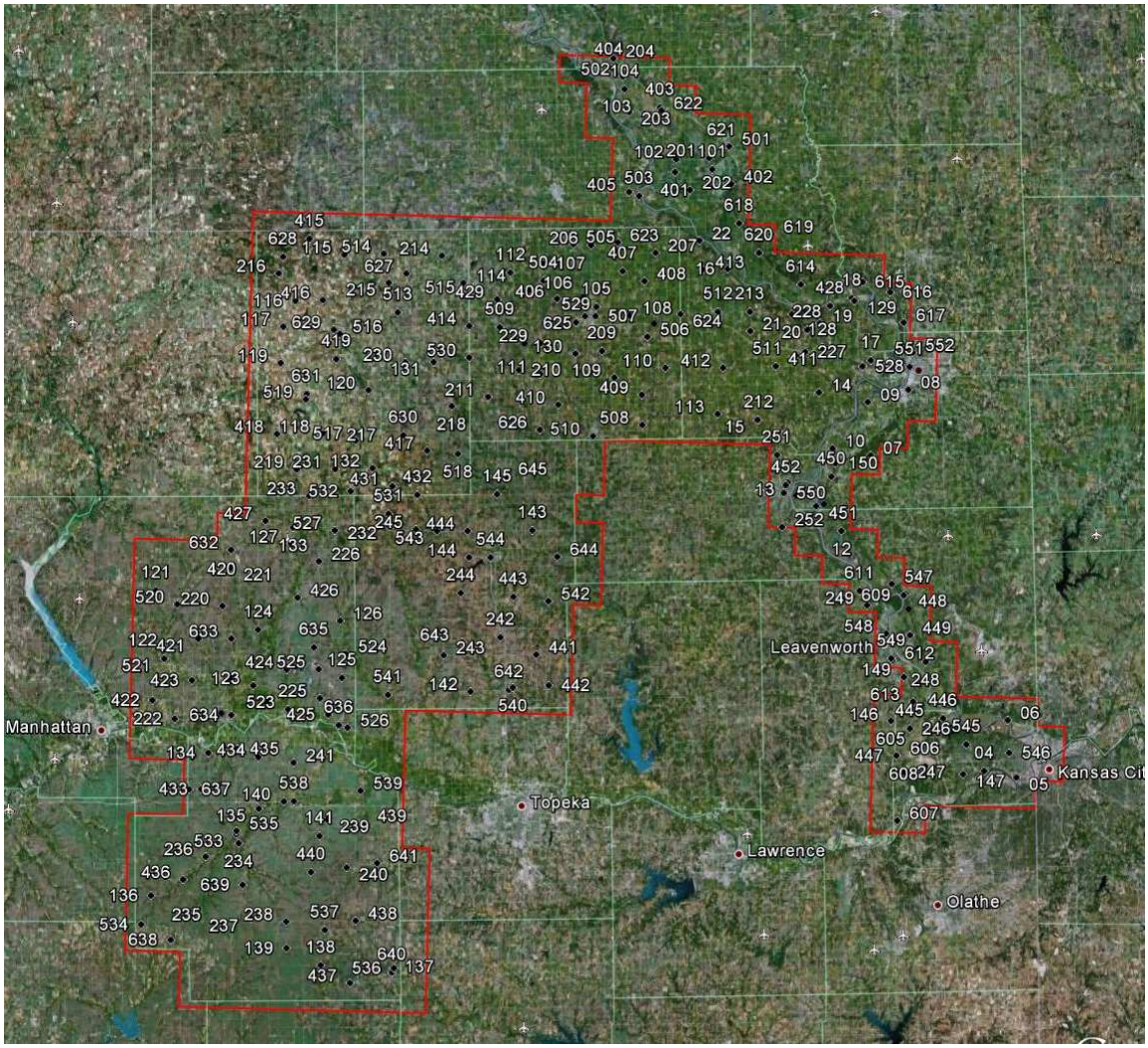
The control stations mentioned above to support the Airborne GPS acquisition were also used to complete the QC surveys.

Items 4.0a b and c indicate an overview of check point locations.

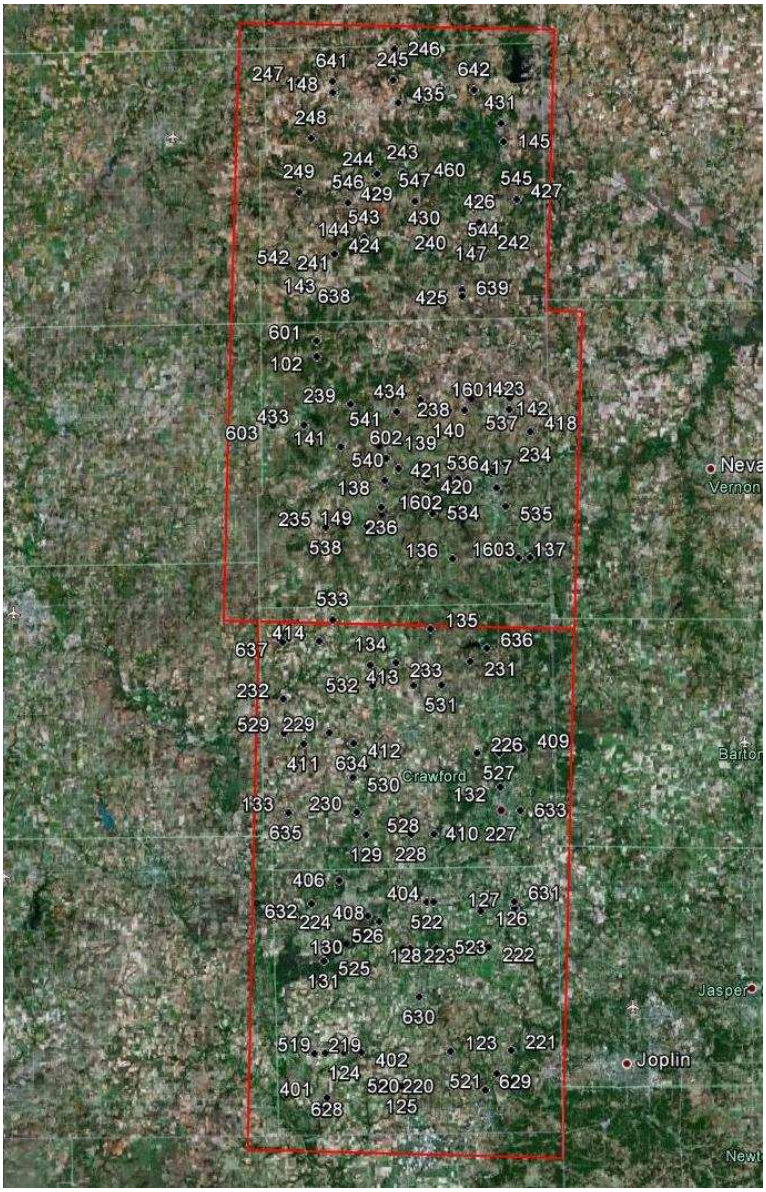
See Section 8 of the control report for a complete listing.



4.0a Area 3, Butler County, Kansas, Ground Survey Check Point Locations.



4.0b Area 3, Northeast zone, Kansas, Ground Survey Check Point Locations.



4.0c Area 3, Southeast zone, Kansas, Ground Survey Check Point Locations.

5 FINAL LiDAR PROCESSING

5.1 ABGPS and IMU Processing

Airborne GPS

Applanix - POSGPS

Utilizing carrier phase ambiguity resolution on the fly (i.e., without initialization). The solution to sub-decimeter kinematic positioning without the operational constraint of static initialization as used in semi-kinematic or stop-and-go positioning was utilized for the airborne GPS post-processing.

TerraTec – TERRAPOS

TERRAPOS represents a state-of-the-art solution to Precise Point Positioning (PPP). TERRAPOS has been implemented to be fully compliant with data and products from leading international organizations, e.g. the International Earth Rotation and Reference Systems Service (IERS) and the International GNSS Service (IGS). TERRAPOS thus allows kinematic positioning with sub decimeter accuracy within the globally consistent and long-term stable reference frames maintained by the IERS.

In the PPP solution the carrier phase biases are estimated as real numbers (a so-called “float solution”). This confirms that the precision of the solution benefits from an increased data rate using an increased number of observations. However, this gain is ultimately limited by the time correlated errors in the observations that include but not limited to multipath and residual satellite clock errors. The data requires both dual-frequency code and carrier phase observations and uses respective ionosphere-free linear combinations. Doppler observations are also included in the computation for all kinematic profiles which assists the algorithm in the pre-processing to aid cycle slip detection and also helps to improve the position estimates.

Inertial Data

The post-processing of inertial and aiding sensor data (i.e. airborne GPS post processed data) is to compute an optimally blended navigation solution. The Kalman filter-based aided inertial navigation algorithm generates an accurate (in the sense of least-square error) navigation solution that will retain the best characteristics of the processed input data. An example of inertial/GPS sensor blending is the following: inertial data is smooth in the short term. However, a free-inertial navigation solution has errors that grow without bound with time. A GPS navigation solution exhibits short-term noise but has errors that are bounded. This optimally blended navigation solution will retain the best features of both, i.e. the blended navigation solution has errors that are smooth and bounded.

The resultant processing generates the following data:

- Position: Latitude, Longitude, Altitude
- Velocity: North, East, and Down components
- 3-axis attitude: roll, pitch, true heading
- Acceleration: x, y, z components
- Angular rates: x, y, z components

These procedures are utilized with the TerraTec TERRAPOS, version 2.0.4 (1851) software to determine the ABGPS trajectory. The blending of inertial data utilized only the Applanix software, version 4.4.

The airborne GPS and blending of inertial and GPS post-processing were completed in multiple steps.

The collected data was transferred by the field data collectors to the main computer. Data was saved under the project number and separated between LiDAR mission dates. Inside each mission date, a sub-directory was created with the aircraft's tail number and an A or B suffix was attached for the time of when the data was collected. Inside the tail number sub-directory, five sub-directories were also created EO, GPS, IMU, PROC, and RAW.

The aircraft raw data (IMU and GPS data combined) was run through a data extractor program. This separated the IMU and GPS data. In addition to the extracting of data, it provided the analyst the first statistics on the overall flight. The program was POSPac (POS post-processing PACkage), version 4.4.

Executing POSGPS program to derive accurate GPS positions for all flights:

TerraTech – TERRAPOS

The Applanix POSPac software requires ground base stations along with the airborne GPS data to compute the position and velocity of the sensor. Given the difficulties due to the ground stations as mentioned in Conditions Affecting Progress, a new processing technique was also employed to achieve the same superior accuracy as found with the traditional Applanix POSPac processing without the need of any base station support. This software used was TERRAPOS

The TERRAPOS procedure is to convert the binary structure of the GPS collected data to a Receiver Exchange format (RINEX) and is ingested into software and subsequently runs its advance and fully automated algorithms.

Once the data has been executed a graphical and a textual log is displayed. These values are inspected and accepted. An accepted accuracy would indicate an accuracy of 0.1m or less at a 95% of the entire mission. This accepted post-processed trajectory is relative to the ITRF, but the user could then relate the accepted trajectory positions to another Global Datum (e.g. NAD83). TERRAPOS has many fixed datums to pick from to relate it to their local reference datum. However, the reference for this project is the same as the processing it was completed in, and the accepted trajectories did not require a translation to another known datum.

When the processed trajectory data was accepted after quality control analysis, the combined solution is stored in a file format acceptable for the IMU post processor (i.e. POSProc).

Execute POSProc.

POSProc comprises a set of individual processing interface tools that execute and provide the following functions:

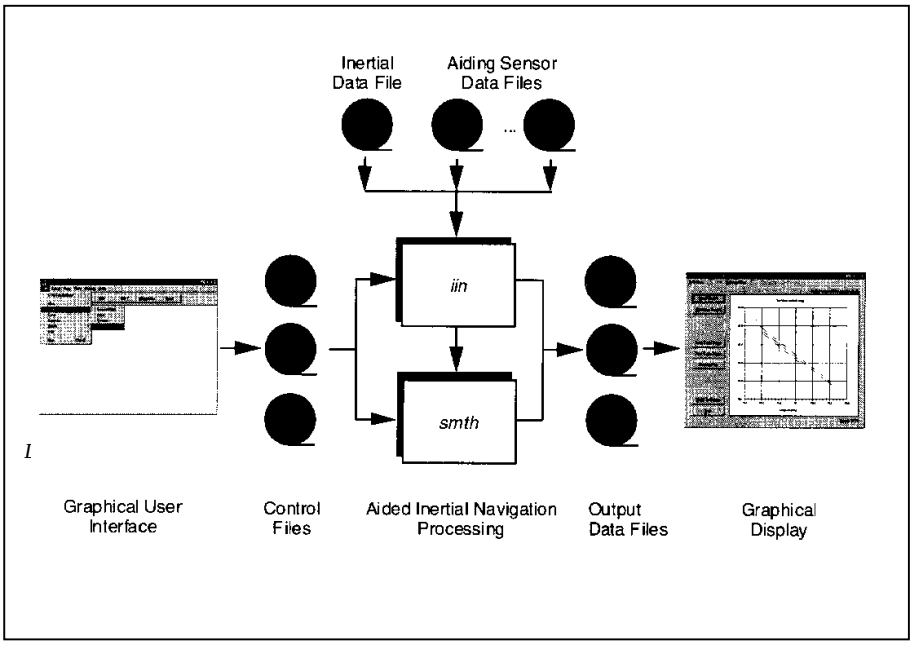


Diagram 3 shows the organization of these tools, and is a function of the POSProc processing components.

Integrated Inertial Navigation (iin) Module.

The name *iin* is a contraction of Integrated Inertial Navigation. *iin* reads inertial data and aiding data from data files specified in a processing environment file and computes the aided inertial navigation solution. The inertial data comes from a strapdown IMU. *iin* outputs the navigation data between start and end times at a data rate as specified in the environment file. *iin* also outputs Kalman filter data for analysis of estimation error statistics and smoother data that the smoothing program *smth* uses to improve the navigation solution accuracy.[3]

iin implements a full strapdown inertial navigator that solves Newton's equation of motion on the earth using inertial data from a strapdown IMU. The inertial navigator implements coning and sculling compensation to handle potential problems caused by vibration of the IMU. [3]

Smoother Module (smth).

smth is a companion processing module to *iin*. *smth* is comprised of two individual functions that run in sequence. *smth* first runs the *smoother function* and then runs the *navigation correction function*.[3]

The *smth* smoother function performs backwards-in-time processing of the forwards-in-time blended navigation solution and Kalman filter data generated by *iin* to compute smoothed error estimates. *smth* implements a modified Bryson-Frazier smoothing algorithm specifically designed for use with the *iin* Kalman filter. The resulting smoothed strapdown navigator error estimates at a given time point are the optimal estimates based on all input data before and after the given time point. In this sense, *smth* makes use of all available information in the input data. *smth* writes the smoothed error estimates and their RMS estimation errors to output data files. [3]

The *smth* navigation correction function implements a feedforward error correction mechanism similar to that in the *iin* strapdown navigation solution using the smoothed strapdown navigation errors. s*mth* reads in the smoothed error estimates and with these, corrects the strapdown navigation data. The resulting navigation solution is called a Best Estimate of Trajectory (BET), and is the best obtainable estimate of vehicle trajectory with the available inertial and aiding sensor data. [3]

The above mentioned modules provide the analyst the following statistics to ensure that the most optimal solution was achieved: a log of the *iin* processing, the Kalman filter Measurement Residuals, Smoothed RMS Estimation Errors, and Smoothed Sensor Errors and RMS.

5.2 LiDAR "Point Cloud" Processing

The ABGPS/IMU post processed data along with the LiDAR raw measurements were processed using Optech Incorporated's ASDA software. This software was used to match the raw LiDAR measurements with the computed ABGPS/IMU positions and attitudes of the LiDAR sensor. The result was a "point cloud" of LiDAR measured points referenced to the ground control system.

5.3 LiDAR CALIBRATION

Introduction

The purpose of the LiDAR system calibration is to refine the system parameters in order for the post-processing software to produce a "point cloud" that best fits the actual ground.

The following report outlines the calibration techniques employed for this project.

Calibration Procedures

All Companies involved in collection routinely performs two types of calibrations on its airborne LiDAR system. The first calibration, system calibration, is performed whenever the LiDAR system is installed in the aircraft. This calibration is performed to define the system parameters affected by the physical misalignment of the system versus aircraft. The second calibration, in-situ calibration, is performed for each mission using that missions data. This calibration is performed to refine the system parameters that are affected by the on site conditions as needed.

System Calibration

The system calibration is performed whenever the LiDAR system is installed in the aircraft. This calibration is performed to define the system parameters affected by the physical misalignment of the system versus aircraft. The main system parameters that are affected are the heading, pitch, roll, and mirror scale.

The system calibration is performed by collecting data over a known test site that incorporates a flat surface and a large, flat roofed building. A ground survey is completed to define the flat surface and the building corners. The processed LiDAR data and ground survey data is input into TerraSolid's TerraMatch software to determine the systematic errors. The system parameters are then corrected according to the determined errors and used in the processing of future LiDAR acquisition missions

In-situ Calibration

The in-situ calibration is performed as needed using the mission's data. This calibration is performed to refine the system parameters that are affected by the on site conditions.

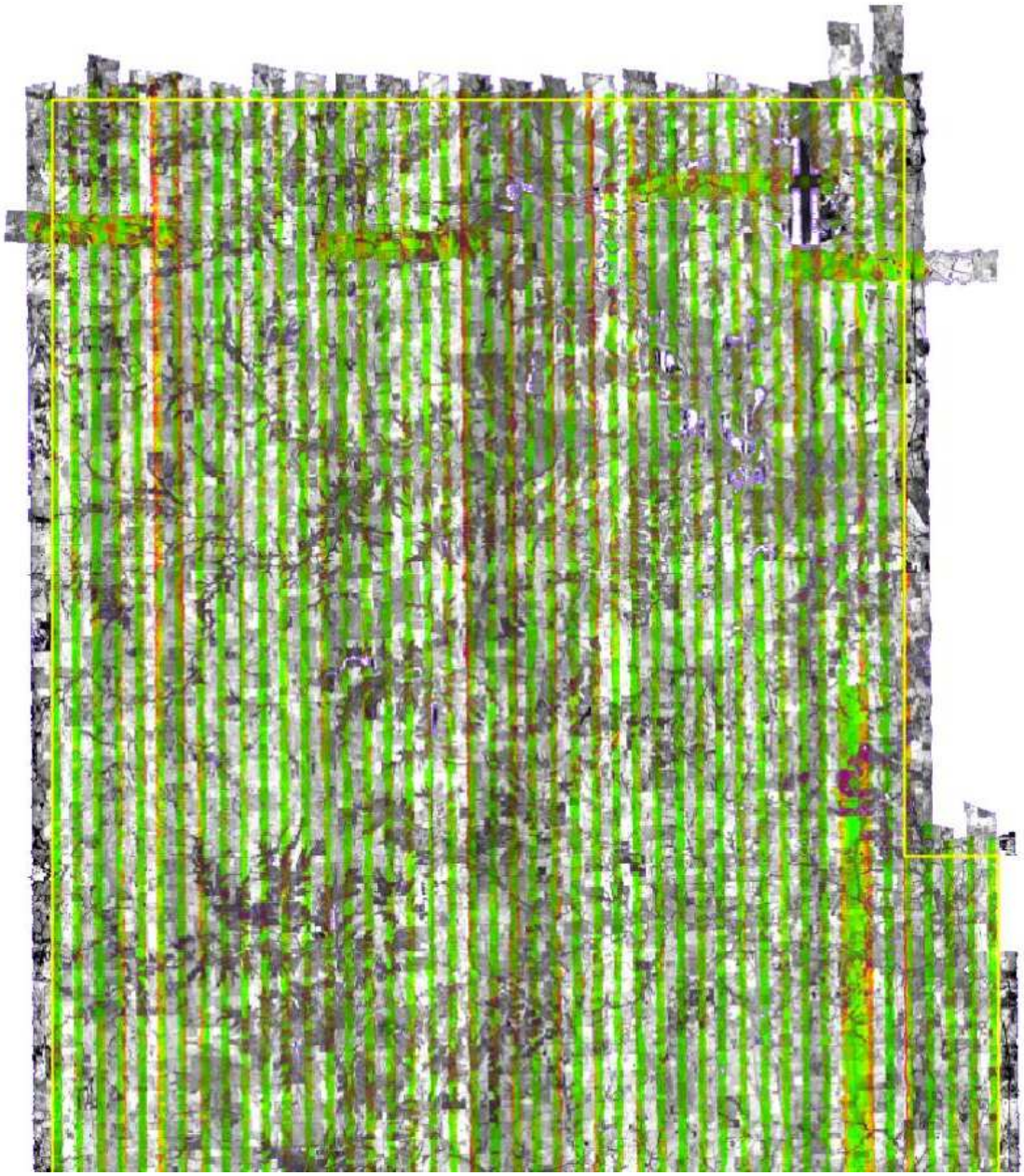
For each mission, LiDAR data for at least one cross flight is acquired over the mission's acquisition site. The processed data of the cross flight is compared to the perpendicular flight lines using either the Optech proprietary software or TerraSolid's TerraMatch software to determine if any systematic errors are present. In this calibration, the data of individual flight lines are compared against each other and their systematic errors are corrected in the final processed data.

5.4 LiDAR Processing

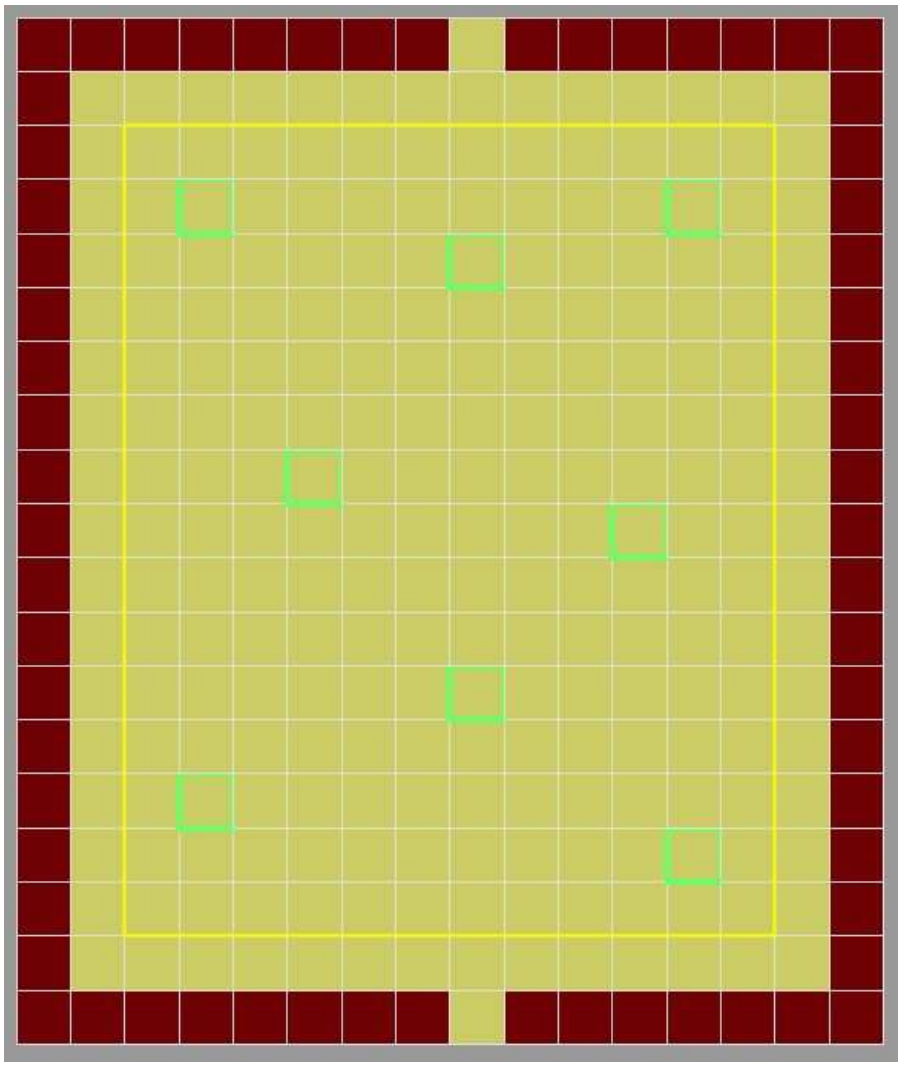
The LAS files were then imported, verified, and parsed into manageable, tiled grids using GeoCue version 2011.1.20.1. GeoCue allows for ease of data management and process tracking.

The first step after the data has been processed and calibrated is to perform a relative accuracy assessment on the flightline to flightline comparisons and also a data density test prior any further processing.

In addition to the relative accuracy assessment, Aerometric also reviews a few tiles to ensure that the desired point density has been met. Aerometric utilizes an in- house proprietary software to complete this task. Initially a grid is placed according to the version 12 specification that is based on the nominal post spacing. Point density is analyzed and the result indicates the density of the sampled tiles. The latest USGS specification, version 13, modifies the requirement allowing up to 2 times the nominal post spacing. Our data evaluation acknowledges this change.



Relative Accuracy assessment

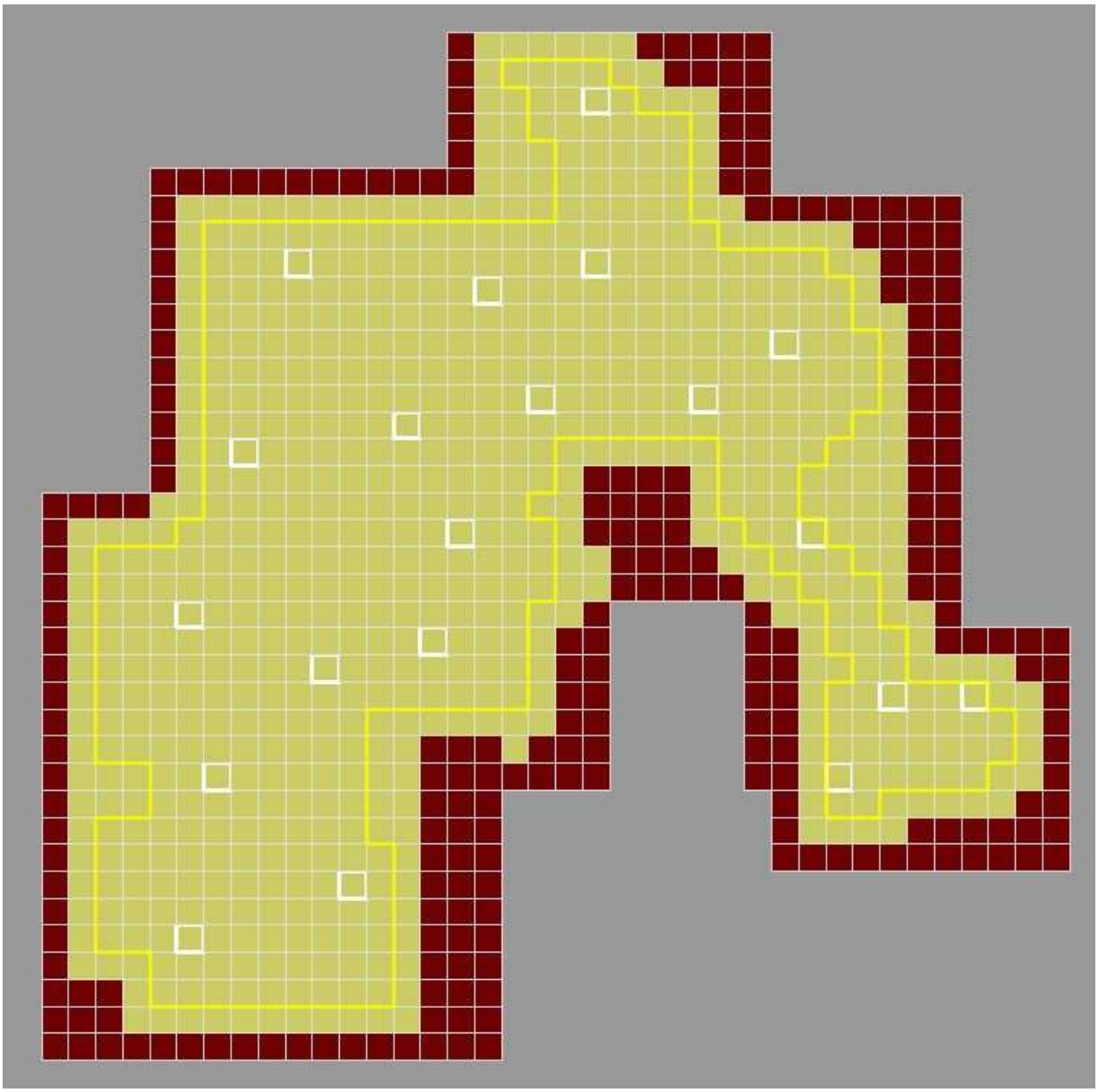


Sample tile location in Butler County for point density analysis

Sampled tiles: (r014c099.las, r015c090.las, r017c095.las, r020c098.las, r021c092.las, r025c095.las, r026c090.las, and r026c099.las)

Run 1 (Version 12 – 1.4 meter) Total number of cells: 102,155,646. Total number of cells with one or more points : 96,621,098. Percentage of tiles with 1 point or more: 94.6%

Run 2 (Version 13 – 2.8 meter) Total number of cells: 25,568,400. Total number of cells with one or more points: 25,445,787. Percentage of tiles with 1 point or more: 99.5%

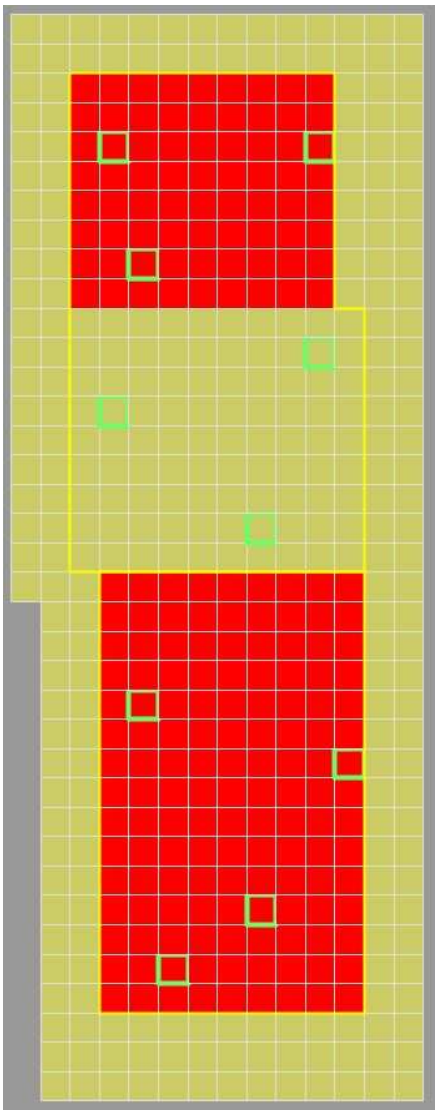


Sample tile location in Northeast Area for point density analysis

Sampled tiles: (r044c103.las, r046c109.las, r050c104.las, r050c127.las, r053c129.las, r053c132.las, r054c108.las, r055c112.las, r056c103.las, r059c113.las, r059c126.las, r062c105.las, r063c111.las, r064c116.las, r064c122.las, r066c125.las, r068c114.las, r069c107.las, r069c118.las, and r075c118.las)

Run 1 (Version 12 – 1.4 meter) Total number of cells: 255,369,458. Total number of cells with one or more points : 239,218,295. Percentage of tiles with 1 point or more: 93.7%

Run 2 (Version 13 – 2.8 meter) Total number of cells: 63,910,275 Total number of cells with one or more points: 63,400,428. Percentage of tiles with 1 point or more: 99.2%



Sample tile location in Southeast Area for point density analysis

Sampled tiles: (r005c128.las, r007c131.las, r012c134.las, r014c127.las, r020c131.las, r024c126.las, r026c133.las, r029c127.las, r033c126.las, and r033c133.las)

Run 1 (Version 12 – 1.4 meter) Total number of cells: 127,706,169. Total number of cells with one or more points : 111,853,987. Percentage of tiles with 1 point or more: 87.6%

Run 2 (Version 13 – 2.8 meter) Total number of cells: 31,964,076. Total number of cells with one or more points: 31,647,594. Percentage of tiles with 1 point or more: 99.0%

Once both the accuracy between swaths and data density is accepted an automated classification algorithm is performed using TerraSolid's TerraScan, version 012.010. This will produce the majority of the bare-earth datasets.

The remainder of the data was classified using manual classification techniques. The majority of the manual editing involved changing points initially misclassified as ground (class 2) to unclassified (class 1). Erroneous low points, high points, including clouds are classified to class 7.

5.5 Check Point Validation

The data was then verified against ground control data. TerraScan computes the vertical differences between the surveyed elevation of ground control points and the LiDAR derived elevations at these points.

A report listing the differences and common statistics was created and can be found in Section 9, of this report.

5.6 LiDAR Data Delivery

Raw point cloud data supplied is in the following format:

- LAS, version 1.2
- GPS times adjusted to GPS Absolute
- Full swaths and delivered as 1 file per swath which did not exceed 2 gigabytes.

Classified point cloud data is also being supplied using the following criteria.

- LAS, version 1.2 in 5000 meter grid
- GPS times adjusted to GPS Absolute
- Classification scheme:
  - 1 – Processed, but unclassified
  - 2 – Bare Earth, Ground
  - 7 – Noise
  - 9 – Water
  - 10 – Ignored Ground (Breakline proximity)
  - 11 – Withheld
  - 17 – Overlap – unclassified
  - 18 – Overlap – Bare-Earth
  - 23 – Overlap – noise
  - 24 – Overlap – water
  - 25 – Overlap – Ignored Ground

Bare earth hydro-flattened 1 meter DEMs were created using TerraModeler (TerraSolid Ltd.). The ASCII grids were then imported into ARC and translated to raster format and placed in a geo-database DEM feature dataset.

First return 1 meter DEM images were created using GeoCue. They are geo-referenced and converted to IMG format.

Break lines polygon are first collected in a Microstation environment using the project specifications. They are checked for QC/QA. Upon acceptance the breaklines, either polygons or lines, are translated into ARC and imported to the final geo-database as separate features.

6 CONCLUSION

Sound procedures and use of new technology ensure this project data will serve the Kansas Department of Administration and Kansas Geological Survey and all users requiring the provided LiDAR derivative products for the project areas in eastern Kansas well into the future. Although this project presented challenges to equipment and personnel, the results are accurate and reliable.

7 FLIGHT LOGS

YYYYMMDD_TIME(GPS)

OPERATORS FLIGHT LOG

MISSION: 20120128_16 DATE: 1/28/2012 LEICA ALS-70 [redacted] J402

PILOT: CAM OPERATOR: JUSTIN AIRCRAFT: N812TB

PROJECT NUMBER		LINE NO. & Hdg		GND SPEED (KTS)	FREQ Hz	SCAN ANGLE	PRF kHz	FIXED GAIN	ALT (m)	TIME START	TIME STOP	MM70 DRIVE	REMARKS
~~00~~1120103										1818	1900	079	Ferry: KFDE → SITE 0.7
KANSAS	X	54	N	160	~~224~~ 37	40	229	3/3	2400	1902	1922		
	X	53	S	160	37	40	229		2400	1927	1946		
	X	52	N	160	37	40	229		2400	1955	2021		
	X	51	S	160	37	40	229		2400	2027	2057		
	X	50	N	160	37	40	229		2400	2102	2137		
	X	49	S	160	37	40	229		2400	2138	2209		
X-FLT			E	160	37	40	229		2400	2225	2248		
										2230	2300		Ferry: SITE → KFDE 0.5

STATUS	TOTAL LINES	FLOWN	LEFT	AIRCRAFT SITE	AIRCRAFT FERRY	STATIC	START	STOP		NOTES:
⊘ 1120103		6		3.5	1.2					
○						WX				
○										

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YYYYMMDD_TIME(GPS)

OPERATORS FLIGHT LOG

MISSION: 20120128-233848 | DATE: 1-28-12 SAT | LEICA ALS-70  | JSI

PILOT: JOSEY | OPERATOR: JIM | AIRCRAFT: N812TB

PROJECT NUMBER	LINE NO. & Hdg	GND SPEED (KTS)	FREQ Hz	SCAN ANGLE	PRF kHz	FIXED GAIN	ALT (m)	TIME START	TIME STOP	MM70 DRIVE	REMARKS
1120103				FULL			GMT	23:43	00:20	079	FERRY: FOE → SITE 8 .4
KANSAS	48 358	160	37	40	228.8	3:3	2635	00:20	00:48		
	47 178	↓	↓	↓	↓	↓	↓	00:56	01:24		
	46 358							01:27	01:55		
	45 178							02:01	02:29		HIGH PDOP?
5	44 358							02:32	03:01		
	43 178							03:04	03:32		
	CROSS ~~NW~~ W							03:38	03:40		8
									04:00		FERRY: SITE → FOE .3

STATUS	TOTAL LINES	FLOWN	LEFT	AIRCRAFT SITE	AIRCRAFT FERRY	STATIC	START	STOP	NOTES: FLIGHT #28
⊘ 1120103	303	6		3.4	.9	4.3	23:43	04:00	
○						WX			
○									

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YYYYMMDD_TIME(GPS)

OPERATORS FLIGHT LOG

MISSION: 20120129_042108 | DATE: 1-29-12 SAT | LEICA ALS-70  | JS2

PILOT: JOSEY | OPERATOR: JIM | AIRCRAFT: N812TB

PROJECT NUMBER	LINE NO. & Hdg	GND SPEED (KTS)	FREQ Hz	SCAN ANGLE	PRF kHz	FIXED GAIN	ALT (m)	TIME START	TIME STOP	MM70 DRIVE	REMARKS
1120103				FULL			GMT	04:25	04:51	079	FERRY: FOE → SITE .5
KANSAS	42 358	160	37	40	229	3:3	2635	04:51	05:21		
	41 178							05:24	05:52		
	CROSS E							05:55	05:56		8
									06:16		FERRY: SITE → FOE .4

STATUS	TOTAL LINES	FLOWN	LEFT	AIRCRAFT SITE	AIRCRAFT FERRY	STATIC	START	STOP		NOTES: FLIGHT #30
⊘ 1120103	303	2		1.0	.9	1.9	04:25			
○						WX				
○										

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YYYYMMDD_TIME(GPS)

OPERATORS FLIGHT LOG

MISSION: 20120229_21 | DATE: 2/29/2012 | LEICA ALS-70  | JW3 JW4

PILOT: JESSE | OPERATOR: JUSTIN | AIRCRAFT: N812TB

PROJECT NUMBER	LINE NO. & Hdg		GND SPEED (KTS)	FREQ Hz	SCAN ANGLE	PRF kHz	FIXED GAIN	ALT (m)	TIME START	TIME STOP	MM70 DRIVE	REMARKS
1120103									2112	2142	065	Ferry: KICT → SITE 0.5
KANSAS X	173	N	170	37	40	229	3/3	2400	2147	2203		
Reflights X-FLT		W	135	37	40	229	3/3	2400	2205	2208		
	~~55~~	~~N~~		~~37~~	~~40~~	~~229~~	~~3/3~~	~~2400~~	2212	2300		Ferry: SITE → KFDE 0.8
20120229_23	~~55~~	~~N~~		37	40	229	3/3	2400	2312	2342	072	Ferry: KFDE → SITE 0.5
X	55	N	150	37	40	229	3/3	2400	2342	0002		
X	56	S	170	37	40	229	3/3	2400	0007	0025		
X	57	N	150	37	40	229	3/3	2400	0030	0049		
X	58	S	170	37	40	229	3/3	2400	0053	0111		
X-FLT		W	115	37	40	229	3/3	2400	0115	0117		
									0118	0142		Ferry: SITE → KFDE 0.4
									0142	0212		GPS IPAS DATA COLLECTION GROUND 0.5

STATUS		TOTAL LINES	FLOWN	LEFT	AIRCRAFT SITE	AIRCRAFT FERRY	STATIC	START	STOP
⊘	1120103		1	4	0.5	1.3			
⊗	1120103		4	0	1.6	0.9	WX SKC		
○									

NOTES: Line 173 acquired by laser during figure 8.
ALS DATA LOGGER Failure after line 173.

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OPERATORS FLIGHT LOG

YYYYMMDD_TIME(GPS)

MISSION: 20120229__ DATE: 2/29/2012 LEICA ALS-70  JW1

PILOT: JESSE OPERATOR: JUSTIN AIRCRAFT: N812TB

PROJECT NUMBER		LINE NO. & Hdg		GND SPEED (KTS)	FREQ Hz	SCAN ANGLE	PRF kHz	FIXED GAIN	ALT (m)	TIME START	TIME STOP	MM70 DRIVE	REMARKS
										1254	1406	065	Ferry: KFOE → SITE 1.2
1120103													
KANSAS	X	157	S	165	37	40	229	3/3	2400	1406	1421		
Reflights	X	158	N	165	37	40	229	3/3	2400	1426	1440		
	X	159	S	160	37	40	229	3/3	2400	1445	1500		
	X	160	N	170	37	40	229	3/3	2400	1504	1518		
	X	161	S	165	37	40	229	3/3	2400	1523	1538		
	X	162	N	170	37	40	229	3/3	2400	1542	1557		
	X	163	S	165	37	40	229	3/3	2400	1601	1617		
	X	164	N	170	37	40	229	3/3	2400	1621	1636		
	X	165	S	165	37	40	229	3/3	2400	1640	1655		
	X	166	N	170	37	40	229	3/3	2400	1659	1714		
	X	167	S	165	37	40	229	3/3	2400	1719	1734		
X-FLT			W	185	37	40	229	3/3	2400	1737	1742		
										1742	1806		Ferry: SITE → KTCT 0.4

STATUS	TOTAL LINES	FLOWN	LEFT	AIRCRAFT SITE	AIRCRAFT FERRY	STATIC	START	STOP	NOTES:
⊘ 1120103		11	10	3.6	1.6				
○						WX SKL			
○									

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FLT #32 YYYYMMDD_TIME(GPS)

OPERATORS FLIGHT LOG

MISSION: 20120129 ~~194126~~ 174001 DATE: 1/29/2012 LEICA ALS-70  JU2

PILOT: CAM OPERATOR: JUSTIN AIRCRAFT: N8RTB

PROJECT NUMBER		LINE NO. & Hdg		GND SPEED (KTS)	FREQ Hz	SCAN ANGLE	PRF kHz	FIXED GAIN	ALT (m)	TIME START	TIME STOP	MM70 DRIVE	REMARKS
120103										1730	1812		Ferry: KFOE → SLT 0.7
KANSAS	X	36	N	160	37	40	229	3/3	2400	1813	1846		27-27.5 miles from south end 70-80% R1
	X	35	S	160	37	40	229		2400	1850	1920		27 " " " 40% R1
	X	34	N	~145	37	40	229		2400	1925	1958		
	X	33	S	160	37	40	229		2400	2003	2034		27.8 mi, from south end 49% R1
X-FLT			E	160	37	40	229		2400	2038	2039		
										2042	2112		Ferry: ~~KFOE → SLT → KFOE~~ 0.5

STATUS		TOTAL LINES	FLOWN	LEFT	AIRCRAFT SITE	AIRCRAFT FERRY	STATIC	START	STOP		NOTES: IPAS failed to initialize on first attempt.
⊘	120103		4		2.5	1.2					
○							WX				
○											

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YYYYMMDD_TIME(GPS) FLT #35

OPERATORS FLIGHT LOG

MISSION: 20120130_130609 DATE: 1/30/2012 LEICA ALS-70  #41

PILOT: CAM OPERATOR: JUSTIN AIRCRAFT: N812TB

PROJECT NUMBER		LINE NO. & Hdg		GND SPEED (KTS)	FREQ Hz	SCAN ANGLE	PRF kHz	FIXED GAIN	ALT (m)	TIME START	TIME STOP	MM70 DRIVE	REMARKS
1120103										1306	1342		Ferry: KFOE → SITE 0.6
KANSAS	X	22	N	160	37	40	229	3/3	2400	1344	1414	072	
	X	21	S	~150	37	40	229	"	2400	1420	1452	"	
	X	20	N	160	37	40	229	"	2400	1486	1527	"	
	X	19	S	160	37	40	229	"	2400	1540	1600	"	
	X	18	N	160	37	40	229	"	2400	1604	1623	"	
	X	17	S	160	37	40	229	"	2400	1627	1647	"	
X-FLT			E	175	37	40	229	/	2400	1650	1652	/	
										1654	1724		Ferry: SITE → KFOE 0.5

STATUS		TOTAL LINES	FLOWN	LEFT	AIRCRAFT SITE	AIRCRAFT FERRY	STATIC	START	STOP		NOTES:
Ø	1120103	303	6	16	3.2	1.1					
○							WX CLR				
○											

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KASIIPA-239_44Q_20120118B_FLT3

KEYSTONE AERIAL SURVEYS

Date: 1/18/12 Pilot: CL

Project: KASIIPA-239 Operator: SB

Aircraft: N3444Q

Sensor: Optech HD: SSD

POS/AV Filename: 2012-0118-B

Flight Plan		Weather	
Roll Comp:	On or Off	Pressure (gnd):	30.04
Multipulse:	On or Off	Temperature (gnd):	35.6°F
Beam Divergence:	Wide or Narrow	Temperature (air):	17°F
Scan Rate:	29.5	Dew Point:	12.2°F
Pulse Rate:	70	Turbulence:	Light
Scan Angle:	19	Visibility:	10
Desired Range:	2400		
Planned GPS:	160		

Line #	Start Time	End Time	HDG	Range	PDOP	SV	Speed (kts)	Flight Notes
Test	18:28	18:28	—	—	—	—	—	
81	18:42	18:51	N	2474	1.08	17	164	Laser off at 39° 55'
82	19:00	19:07	S	2407	1.00	19	161	Laser on at 39° 55' 20 miles NA
83	19:12	19:20	N	2485	1.06	19	163	Laser off at 39° 55'
84	19:30	19:35	S	2402	1.03	20	160	Laser on at 39° 55'
85	19:41	19:48	N	2445	1.09	18	160	Laser off at 39° 55'
86	19:53	20:00	S	2407	1.02	20	163	Laser on at 39° 55'
87	20:04	20:11	N	2451	1.04	20	162	Laser off at 39° 55'
88	20:16	20:23	S	2400	0.99	21	163	Laser on at 39° 55' (Smoky conditions)
Cross	20:28	20:31	W	2411	1.20	19	131-141	kts below 160
Cross	20:33	20:36	E	2476	1.35	18	160	
156	20:53	20:56	S	2418	1.28	19	160	
155	21:01	21:03	N	2415	1.26	19	162	
154	21:07	21:10	S	2501	1.39	18	162	
153	21:14	21:17	N	2420	1.35	18	158	
152	21:21	21:25	S	2508	1.27	19	161	
151	21:28	21:33	N	2485	1.24	19	159	
150	21:36	21:41	S	2504	1.19	19	161	
149	21:45	21:50	N	2504	1.12	19	160	
148	21:53	21:58	S	2417	1.07	20	160	

Base Station

Point ID: N/A

Position Type: Known / Autonomous

Antenna Height: 2 Meters

Latitude: 38°50' 21.4050

Longitude: 94°53' 00.1494

Location: KIXD

Time On: 17:41 UTC

Time Off: _____ UTC

PDOP: _____

SV's _____

Airborne Station

Time On: 18:01 UTC

Kinematic On: 18:06 UTC

Kinematic Off: 23:43 UTC

Time Off: 23:48 UTC

Hobbs Start:	2609.5
Hobbs End:	2614.8
Flight Time:	5.9

KAS11PA-239_44Q_20120118B_FLT3

KEYSTONE AERIAL SURVEYS

Date: 1/18/12 Pilot: CL

Project: KAS11PA-239 Operator: SB

Aircraft: N3444Q

Sensor: Optech HD: SSD

POS/AV Filename: 20120118_B

Flight Plan		Weather	
Roll Comp:	On or Off	Pressure (gnd):	29.96
Multipulse:	On or Off	Temperature (gnd):	39.2°F
Beam Divergence:	Wide or Narrow	Temperature (air):	20°F
Scan Rate:	29.50	Dew Point:	8.6°F
Pulse Rate:	70	Turbulence:	Light
Scan Angle:	19	Visibility:	10
Desired Range:	2400		
Planned GPS:	160		

Line #	Start Time	End Time	HDG	Range	PDOP	SV	Speed (kts)	Flight Notes
147	22:01	22:06	N	2425	1.03	21	161	
146	22:08	22:13	S	2411	0.97	21	165	
145	22:17	22:22	N	2465	1.11	18	160	
144	22:24	22:29	S	2405	1.03	19	161	
143	22:34	22:39	N	2425	1.03	19	160	
Cross	23:21	23:25	E	2417	1.16	18	154	

Base Station

Point ID: N/A

Position Type: Known / Autonomous

Antenna Height: 2 Meters

Latitude: 38° 50' 21.4050

Longitude: 94° 53' 00.4874

Location: KIXD

Time On: 17:41 UTC

Time Off: _____ UTC

PDOP: _____

SV's _____

Airborne Station

Time On: 18:01 UTC

Kinematic On: 18:06 UTC

Kinematic Off: 23:43 UTC

Time Off: 23:48 UTC

Hobbs Start:	2609.5
Hobbs End:	2614.8
Flight Time:	5.3

DOWNTIME START 7:29 STOP 11:59

Keystone Aerial Surveys, Inc. - LIDAR FLIGHT REPORT

Date: 1/19/12 Pilot: AC

Project: KAS-11PA-239 Operator: PJ

Aircraft: N3444Q

Sensor: OPTECH HD: SSA

POS/AV Filename: 20120119_A

Flight Plan		Weather	
Roll Comp:	On or (Off)	Pressure (gnd):	29.94
Multipulse:	(On) or Off	Temperature (gnd):	-1
Beam Divergence:	Wide or (Narrow)	Temperature (air):	-6
Scan Rate:	29.5	Dew Point:	-11
Pulse Rate:	70	Turbulence:	LIGHT
Scan Angle:	19	Visibility:	10+
Desired Range:	2400		
Planned GS:	160		

Line #	Start Time	End Time	HDG	Range	PDOP	SV	Speed (kts)	Flight Notes
142	020636	021217	N	2395	1.22	15	158	
141	021924	022456	S	2402	1.21	15	153	
140	023206	023748	N	2385	1.41	16	156	
139	024351	025135	S	2390	1.26	16	162	
138	030253	031036	N	2411	1.13	19	158	
137	031840	032621	S	2438	1.23	18	162	
136	033516	035405	N	2442	0.99	21	159	
135	035912	041812	S	2368	1.06	20	158	
134	042717	044542	N	2467	1.06	21	159	
133	045239	051216	S	2370	1.35	18	159	
CROSS	051828	052140	E	2357	1.20	19	159	CROSS TIE

Base Station

Point ID: N/A (TEMP)

Position Type: Known / (Autonomous)

Antenna Height: 2.0 Meters

Latitude: 38°50'21.4050

Longitude: 94°53'00.4874

Location: KIXD

Time On: 1741 UTC

Time Off: 617 UTC

PDOP: 1.2

SV's: 16

Airborne Station

Time On: 137 UTC

Kinematic On: 147 UTC

Kinematic Off: 549 UTC

Time Off: 559 UTC

Hobbs Start:	26148
Hobbs End:	26185
Flight Time:	3.7

LIDAR FLIGHT LOG

MISSION: 20120415_193014 DATE: 4/15/12

PILOT: HUNTER OPERATOR: POWELL AIRCRAFT: 12TB

PROJECT NUMBER	LINE NO. & Hdg	GND SPEED (KTS)	SCAN FREQ	SCAN ANGLE	PRF	ALT (m)	TIME START	TIME STOP	Laser Time	TZPK	REMARKS
1120103							1130	1230			FERRY TOPEKA TO WICHITA 1417.2
							1437	1442			STARTED HOBBS 1417.9
	174 S	130	36.6	40	229.8	894	1506	1525			
	175 N	165					1534	1551			
	191 S	130				9088	1558	1616			
	197 N	160				9144	1626	1642			CLOS BUILDING
	XFLT E	135					1655	1658			XFLT 197, 191
	XFLT E	145					1701	1703			XFLT 175, 174
							1718	1723			STARTED HOBBS 1420.4

STATUS	TOTAL LINES	FLOWN	LEFT	AIRCRAFT SITE	AIRCRAFT FERRY	STATIC	START:	STOP:	NOTES:
○	4			2.5	1.8				
○						WX			
○									

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LIDAR FLIGHT LOG

ALTM

MISSION: 20120417-142856 DATE: 4/17/12

PILOT: Hunter OPERATOR: Power AIRCRAFT: 12TB

PROJECT NUMBER	LINE NO. & Hdg	GND SPEED (KTS)	SCAN FREQ	SCAN ANGLE	PRF	ALT (m)	TIME START	TIME STOP	Laser Time	TZPK	REMARKS
1120103							0933	0936			STATE 1424.9
	201 S	160	37	40	229	9160	1009	1024			
	202 N	165					1028	1044			SMALL DATA GAP
	203 S	165					1050	1105			
	204 N	165					1110	1125			
	202 S	160					1131	1147			REPOWN, NO GAP
	XPT W	155					1152	1154			
							1214	1219			STATE HOBBS 1427.3
							1900	1935			FERRY WICHITA-TOPEKA 1427.9

STATUS	TOTAL LINES	FLOWN	LEFT	AIRCRAFT SITE	AIRCRAFT FERRY	STATIC	START:	STOP:	NOTES:
○		4	0	1.8	1.6				
○						WX			
○									

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LIDAR FLIGHT LOG

ALS70

MISSION: 20120413_160847/_214729 DATE: 4/10, 11, 13/12

PILOT: HUNTER OPERATOR: POWELL AIRCRAFT: 12TB

PROJECT NUMBER	LINE NO. & Hdg	GND SPEED (KTS)	SCAN FREQ	SCAN ANGLE	PRF	ALT (m)	TIME START	TIME STOP	Laser Time	TZPK	REMARKS
4/10/12							1105	1300			FERRY MNJKS 1407.5
1120103							0730	0735			STATIC HOBBS: 1409.1
4/11/12	7 S	175	36.6	40	228.8	8766	0804	811			LINE ABORTED CLSS
								0830			LAND HOBBS 1409.9
4/13/12							1114	1119			STATIC
1120103	7 N	160	36.6	40	228.8	8753	1159	1214			20120413_160847
	8 S	140					1220	1237			
	9 N	160					1243	1300			
	10 S	140					1306	1325			
	11 N	165					1330	1347			
	12 S	140					1353	1412			
	XFLT W						1418	1429			
							1512	1517			STATIC HOBBS 1413.7
							1652	1657			STATIC
1120103	71 N	165	36.6	40	228.8	8645	1714	1739			20120413_214729
	72 S	140					1744	1811			
	73 N	165					1816	1840			
	74 S	155					1846	1911			
	75 N	160					1915	1940			
	76 XFLT S W	160					1945 2007	2006 2011			

STATUS	TOTAL LINES	FLOWN	LEFT	AIRCRAFT SITE	AIRCRAFT FERRY
○ SCRUBED	4/11	1		.1	2.7
○ _160847	4/13	6		4.4	1.6
○ _214729	4/13	6		3.0	0.8

STATIC	START:	STOP:
	2031	2036

WX

NOTES: STATIC HOBBS 1417.1

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LIDAR FLIGHT LOG

ALS70

MISSION: 20120413_160847/_214729 DATE: 4/10, 11, 13/12

PILOT: HUNTER OPERATOR: POWELL AIRCRAFT: 12TB

PROJECT NUMBER	LINE NO. & Hdg	GND SPEED (KTS)	SCAN FREQ	SCAN ANGLE	PRF	ALT (m)	TIME START	TIME STOP	Laser Time	TZPK	REMARKS
4/10/12							1105	1300			FERRY MNJKS 1407.5
1120103							0730	0735			STATIC HOBBS: 1409.1
4/11/12	7 S	175	36.6	40	228.8	8766	0804	811			LINE ABORTED CLSS
								0830			LAND HOBBS 1409.9
4/13/12							1114	1119			STATIC
1120103	7 N	160	36.6	40	228.8	8753	1159	1214			20120413_160847
	8 S	140					1220	1237			
	9 N	160					1243	1300			
	10 S	140					1306	1325			
	11 N	165					1330	1347			
	12 S	140					1353	1412			
	XFLT W						1418	1429			
							1512	1517			STATIC HOBBS 1413.7
							1652	1657			STATIC
1120103	71 N	165	36.6	40	228.8	8645	1714	1739			20120413_214729
	72 S	140					1744	1811			
	73 N	165					1816	1840			
	74 S	155					1846	1911			
	75 N	160					1915	1940			
	76 XFLT S W	160					1945 2007	2006 2011			

STATUS	TOTAL LINES	FLOWN	LEFT	AIRCRAFT SITE	AIRCRAFT FERRY
○ SCRUBED	4/11	1		.1	2.7
○ _160847	4/13	6		4.4	1.6
○ _214729	4/13	6		3.0	0.8

STATIC	START:	STOP:
	2031	2036

WX

NOTES: STATIC HOBBS 1417.1

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YYYYMMDD_TIME(GPS) FLT. #36

OPERATORS FLIGHT LOG

20120130_181746 | DATE: 1/30/2012 | LEICA ALS-70  | TW2

CAMERA | OPERATOR: JUSTIN | AIRCRAFT: N 812 TB

T NUMBER	LINE NO. & Hdg		GND SPEED (KTS)	FREQ Hz	SCAN ANGLE	PRF kHz	FIXED GAIN	ALT (m)	TIME START	TIME STOP	MM70 DRIVE	REMARKS
3									1818	1854		Ferry: KFOE → SITE 0.6
X	16	N	160	37	40	229	3/3	2400	1856	1915	072	
X	15	S	160	37	40	229	3/3	2400	1919	1939		
X	14	N	160	37	40	229	3/3	2400	1943	2001		
X	13	S	160	37	40	229	3/3	2400	2005	2024		
P	12	N	160	37	40	229	3/3	2400	2027	2036		System shut down on its
												own with about 27 miles left
												on line
									2036	2112		Ferry: SITE → KFOE 0.6

ATUS	TOTAL LINES	FLOWN	LEFT	AIRCRAFT SITE	AIRCRAFT FERRY	STATIC	START	STOP	
20103	303	4	12	1.7	1.2				
						WX CLR			

NOTES: Warning note:
"ALS Data Logging was stopped through external control. Scanner is O expect 1" - "Shut down the system"

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YYYYMMDD_TIME(GPS)

OPERATORS FLIGHT LOG

MISSION: 20120229_21 | DATE: 2/29/2012 | LEICA ALS-70  | JW3 JW4

PILOT: JESSE | OPERATOR: JUSTIN | AIRCRAFT: N812TB

PROJECT NUMBER	LINE NO. & Hdg		GND SPEED (KTS)	FREQ Hz	SCAN ANGLE	PRF kHz	FIXED GAIN	ALT (m)	TIME START	TIME STOP	MM70 DRIVE	REMARKS
1120103									2112	2142	065	Ferry: KICT → SITE 0.5
KANSAS X	173	N	170	37	40	229	3/3	2400	2147	2203		
Reflights X-FLT		W	135	37	40	229	3/3	2400	2205	2208		
	~~55~~	~~N~~		~~37~~	~~40~~	~~229~~	~~3/3~~	~~2400~~	2212	2300		Ferry: SITE → KFDE 0.8
20120229_23	~~55~~	~~N~~		37	40	229	3/3	2400	2312	2342	072	Ferry: KFDE → SITE 0.5
X	55	N	150	37	40	229	3/3	2400	2342	0002		
X	56	S	170	37	40	229	3/3	2400	0007	0025		
X	57	N	150	37	40	229	3/3	2400	0030	0049		
X	58	S	170	37	40	229	3/3	2400	0053	0111		
X-FLT		W	115	37	40	229	3/3	2400	0115	0117		
									0118	0142		Ferry: SITE → KFDE 0.4
									0142	0212		GPS IPAS DATA COLLECTION GROUND 0.5

STATUS		TOTAL LINES	FLOWN	LEFT	AIRCRAFT SITE	AIRCRAFT FERRY	STATIC	START	STOP
⊘	1120103		1	4	0.5	1.3			
⊗	1120103		4	0	1.6	0.9	WX SKC		
○									

NOTES: Line 173 acquired by laser during figure 8.
ALS DATA LOGGER Failure after line 173.

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Flight 31

YYYYMMDD_TIME(GPS)

OPERATORS FLIGHT LOG

MISSION: 20120129 ~~131916~~ 131704 DATE: 1/29/2012 LEICA ALS-70  FW1

PILOT: CAMERON OPERATOR: JUSTIN AIRCRAFT: N812TB

PROJECT NUMBER		LINE NO. & Hdg		GND SPEED (KTS)	FREQ Hz	SCAN ANGLE	PRF kHz	FIXED GAIN	ALT (m)	TIME START	TIME STOP	MM70 DRIVE	REMARKS
1120103								3/3		1318	1400	065	Ferry: KFOE → SZTE .7
KANSAS	X	40	N	160	37	40	229		2400	1400	1434		Drop over river ~~4 miles~~ from S. end 25-26
	X	39	S	160	37	40	229		2400	1438	1508		24-25 miles from S. end: 47% returns over river
	X	38	N	~140	37	40	229		2400	1515	1547		24.8-26.8 miles from S. end ~80% returns
	X	37	S	160	37	40	229		2400	1551	1622		~~24.8~~ 25-26.8 miles from S. end 70-80% returns
X	FLT		E	160	37	40	229	Y	2400	1627	1628	Y	
										1630	1654		Ferry: SZTE → KFOE 0.4

STATUS		TOTAL LINES	FLOWN	LEFT	AIRCRAFT SITE	AIRCRAFT FERRY	STATIC	START	STOP	
⊘	1120103	303	4		2.5	1.1				
○							WX CLEAR			
○										

NOTES: PDOP from 0746-0754
0816-0845 (never above 3.5)
1108-1158

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LIDAR FLIGHT LOG

ALS70

MISSION: 20120413_160847/_214729 DATE: 4/10, 11, 13/12

PILOT: HUNTER OPERATOR: POWELL AIRCRAFT: 12TB

PROJECT NUMBER	LINE NO. & Hdg	GND SPEED (KTS)	SCAN FREQ	SCAN ANGLE	PRF	ALT (m)	TIME START	TIME STOP	Laser Time	TZPK	REMARKS
4/10/12							1105	1300			FERRY MNJKS 1407.5
1120103							0730	0735			STATIC HOBBS: 1409.1
4/11/12	7 S	175	36.6	40	228.8	8766	0804	811			LINE ABORTED CLSS
								0830			LAND HOBBS 1409.9
4/13/12							1114	1119			STATIC
1120103	7 N	160	36.6	40	228.8	8753	1159	1214			20120413_160847
	8 S	140					1220	1237			
	9 N	160					1243	1300			
	10 S	140					1306	1325			
	11 N	165					1330	1347			
	12 S	140					1353	1412			
	XFLT W						1418	1429			
							1512	1517			STATIC HOBBS 1413.7
							1652	1657			STATIC
1120103	71 N	165	36.6	40	228.8	8645	1714	1739			20120413_214729
	72 S	140					1744	1811			
	73 N	165					1816	1840			
	74 S	155					1846	1911			
	75 N	160					1915	1940			
	76 XFLT S W	160					1945 2007	2006 2011			

STATUS	TOTAL LINES	FLOWN	LEFT	AIRCRAFT SITE	AIRCRAFT FERRY
○ SCRUBED	4/11	1		.1	2.7
○ _160847	4/13	6		4.4	1.6
○ _214729	4/13	6		3.0	0.8

STATIC	START:	STOP:
	2031	2036

WX

NOTES: STATIC HOBBS 1417.1

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LIDAR FLIGHT LOG

MISSION: 20120416_131454 DATE: 4/16/12

PILOT: HUNTER OPERATOR: POWELL AIRCRAFT: 12TB

ALTM

PROJECT NUMBER	LINE NO. & Hdg	GND SPEED (KTS)	SCAN FREQ	SCAN ANGLE	PRF	ALT (m)	TIME START	TIME STOP	Laser Time	TZPK	REMARKS
1120103							0819	0824			STATIC HOBBS 1420.4
	176 S	170	37	40	229	896	0856	0911			
	177 N	150					0917	0933			
	178 S	155					0939	0955			
	179 N	150					1000	1016			
	180 S	160					1022	1037			
	181 N	155					1043	1058			
	182 S	160					1105	1120			
	XFR W	135					1124	1127			
	198 N	160					1134	1150			
	199 S	160					1155	1210			
	200 N	160					1216	1231			
	XFR W	150					1236	1237			
							1257	1302			STATIC HOBBS 1424.9

STATUS	TOTAL LINES	FLOWN	LEFT	AIRCRAFT SITE	AIRCRAFT FERRY	STATIC	START:	STOP:	NOTES:
○		9		3.3	1.0				
○						WX			
○									

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KASIIPA-239_44Q_20120128A_FLT 11

Keystone Aerial Surveys, Inc. - LIDAR FLIGHT REPORT

Date: 1/28/12 Pilot: CL
Project: KASIIPA-239 Operator: SB
Aircraft: N3444Q
Sensor: Optech HD: SSE
—
POS/AV Filename: 20120128_A

Flight Plan		Weather	
Roll Comp:	On or (Off)	Pressure (gnd):	30.37
Multipulse:	(On) or Off	Temperature (gnd):	39.2°F
Beam Divergence:	Wide or (Narrow)	Temperature (air):	10°F
Scan Rate:	29.5	Dew Point:	15.8°F
Pulse Rate:	70	Turbulence:	Light
Scan Angle:	19	Visibility:	10
Desired Range:	2400		
Planned GPS:	160		

Line #	Start Time	End Time	HDG	Range	PDOP	SV	Speed (kts)	Flight Notes
Test	18:54	18:55	—	—	—	—	—	
90	19:00	19:15	N	2399	1.09	18	160	Dust
89	19:20	19:35	S	2415	1.08	19	156	Dust
88	19:42	19:52	N	2368	1.22	18	158	Laser on at 39° 50' Little bit of turbulence
87	19:56	20:06	S	2406	1.39	17	162	Laser off at 39° 51' " "
86	20:10	20:21	N	2401	1.38	17	160	Laser on at 39° 50'
85	20:25	20:35	S	2402	1.37	17	157	Laser off at 39° 51'
84	20:38	20:49	N	2372	1.28	18	159	Laser on at 39° 50'
83	20:52	21:03	S	2445	1.23	18	161	Laser off at 39° 51' Little bit of turbulence
82	21:05	21:16	N	2417	1.14	18	162	Laser on at 39° 50' " "
81	21:19	21:30	S	2427	1.16	18	159	Laser off at 39° 51' " "
80	21:33	21:44	N	2404	1.02	20	159	Laser on at 39° 50'
74	21:48	21:51	S	2425	1.06	18	162	Laser off at 40° 10'
73	21:57	22:00	N	2368	1.09	19	159	Laser on at 40° 8'
Cross	22:07	22:12	E	2403	1.09	18	161	Crossed lines 73-74 and 80-90

Base Station
Point ID: N/A
Position Type: Known / Autonomous
Antenna Height: 2 Meters
Latitude: 35°50' 21.4650
Longitude: 94°53' 00.4974
Location: KFYV
Time On: 17:48 UTC
Time Off: _____ UTC
PDOP: _____
SV's _____

Airborne Station
Time On: 18:22 UTC
Kinematic On: 18:33 UTC
Kinematic Off: 22:47 UTC
Time Off: 22:52 UTC

Hobbs Start:	2639.3
Hobbs End:	2643.3
Flight Time:	4.7

Page 1 of 1

START: 644
STOP: 939
2.92

Keystone Aerial Surveys, Inc. - LIDAR FLIGHT REPORT

Date: 1/28/12
Pilot: AC
Project: KAS-11PA-239
Operator: PJ
Aircraft: N3444Q
Sensor: OPTECH
HD: SSA
—

POS/AV Filename: 20120129-A

Flight Plan		Weather	
Roll Comp:	On or (Off)	Pressure (gnd):	30.4
Multipulse:	(On) or Off	Temperature (gnd):	6
Beam Divergence:	Wide or (Narrow)	Temperature (air):	-8
Scan Rate:	29.5	Dew Point:	-14
Pulse Rate:	70	Turbulence:	LIGHT
Scan Angle:	19	Visibility:	10+
Desired Range:	2400		
Planned GS:	160		

Line #	Start Time	End Time	HDG	Range	PDOP	SV	Speed (kts)	Flight Notes
79	014116	015211	N	2365	1.21	15	151	STARTED LINE @ LAT 39 50
78	015905	021000	S	2383	1.25	16	155	ENDED LINE @ LAT 39 50
77	021926	023036	N	2326	1.13	18	152	STARTED LINE @ LAT 39 50
XTIE	025728	025928	E	2394	1.01	20	169	CROSS TIE

Base Station
Point ID: N/A
Position Type: Known / (Autonomous)
Antenna Height: 2.0 Meters
Latitude: 38 50 21.40250
Longitude: 94 53 00.8774

Location: KIXD
Time On: 1748 UTC
Time Off: _____ UTC
PDOP: 1.21
SV's: 15

Airborne Station
Time On: 0053 UTC
Kinematic On: 0059 UTC
Kinematic Off: 0337 UTC
Time Off: 0336 UTC

Hobbs Start:	2643.3
Hobbs End:	2645.5
Flight Time:	2.2

KASIIPA-239_44Q_20120129B_FLT13

Keystone Aerial Surveys, Inc. - LIDAR FLIGHT REPORT

Date: 1/29/12 Pilot: CL

Project: KASIIPA-239 Operator: SB

Aircraft: N3444Q

Sensor: Optech HD: SSE

POS/AV Filename: 20120129_B

Flight Plan		Weather	
Roll Comp:	On or Off	Pressure (gnd):	30.19
Multipulse:	On or Off	Temperature (gnd):	50°F
Beam Divergence:	Wide or Narrow	Temperature (air):	28°F
Scan Rate:	29.5	Dew Point:	8.6°F
Pulse Rate:	70	Turbulence:	Light
Scan Angle:	19	Visibility:	10
Desired Range:	2400		
Planned GPS:	160		

Line #	Start Time	End Time	HDG	Range	PDOP	SV	Speed (kts)	Flight Notes
Test	19:04	19:05	—	—	—	—	—	
88	19:19	19:20	N	2373	1.05	19	164	Laser on at 40° 12.5, Laser off 40° 16.5
88	19:24	19:25	S	2360	1.06	19	156	Laser on at 40° 16.5, Laser off at 40° 12.5
289	20:12	20:28	S	2413	1.29	18	160	
290	20:32	20:48	N	2401	1.25	18	158	
291	20:52	21:08	S	2397	1.20	18	160	
292	21:12	21:28	N	2407	1.09	19	158	
293	21:31	21:48	S	2415	1.02	21	161	
294	21:51	22:07	N	2413	1.03	18	159	
295	22:11	22:27	S	2422	1.04	20	160	
296	22:31	22:47	N	2402	1.19	18	162	
Cross	22:52	22:54	W	2404	1.03	18	160	

Base Station

Point ID: N/A

Position Type: Known / Autonomous

Antenna Height: 2 Meters

Latitude: 38°50'21.4050

Longitude: 94°53'00.4874

Location: KIXD

Time On: 18:10 UTC

Time Off: 23:44 UTC

PDOP: 1.5

SV's: 12

Airborne Station

Time On: 18:34 UTC

Kinematic On: 18:39 UTC

Kinematic Off: 23:27 UTC

Time Off: 23:33 UTC

Hobbs Start:	2645.6
Hobbs End:	2650.1
Flight Time:	5.2

KASIIPA-239_44Q_20120119B_FLTS

KEYSTONE AERIAL SURVEYS

Date: 1/19/12 Pilot: CL

Project: KASIIPA-239 Operator: SB

Aircraft: N3444Q

Sensor: Optech HD: SSD

POS/AV Filename: 20120119-B

Flight Plan		Weather	
Roll Comp:	On or (Off)	Pressure (gnd):	30.02
Multipulse:	(On) or Off	Temperature (gnd):	26.6°F
Beam Divergence:	Wide or (Narrow)	Temperature (air):	32°F
Scan Rate:	29.5	Dew Point:	6.8°F
Pulse Rate:	70	Turbulence:	Light
Scan Angle:	19	Visibility:	10
Desired Range:	2400		
Planned GPS:	160		

Line #	Start Time	End Time	HDG	Range	PDOP	SV	Speed (kts)	Flight Notes
Test	19:29	19:29	N	—	—	—	—	
132	19:31	19:43	N	2436	1.03	19	157	Laser off at 39° 30' (Clouds)
131	19:48	20:00	S	2448	1.01	20	157	Laser on at 39° 30' (Clouds)
130	20:04	20:26	N	2418	1.05	20	160	
129	20:29	20:50	S	2478	1.22	19	154	
128	20:52	21:13	N	2468	1.36	18	160	
127	21:18	21:40	S	2425	1.22	19	162	
126	21:43	22:05	N	2476	1.10	19	163	
125	22:08	22:30	S	2404	0.97	21	160	
124	22:33	22:56	N	2406	1.13	18	161	
123	22:59	23:21	S	2481	1.05	20	156	
Cross	23:30	23:34	E	2423	1.17	17	160	

Base Station

Point ID: N/A

Position Type: Known / (Autonomous)

Antenna Height: 2 Meters

Latitude: 39° 50' 21.4050

Longitude: 94° 53' 00.4874

Location: KIXD

Time On: 18:01 UTC

Time Off: _____ UTC

PDOP: _____

SV's _____

Airborne Station

Time On: 19:01 UTC

Kinematic On: 19:06 UTC

Kinematic Off: 17:49 UTC

Time Off: 17:55 UTC

Hobbs Start:	2616.5
Hobbs End:	2622.8
Flight Time:	5.5

START 836
END 1259

Keystone Aerial Surveys, Inc. - LIDAR FLIGHT REPORT

Date: 1/19/12
Project: KAS-11PA-239
Aircraft: N3444Q
Sensor: OPTECH

Pilot: AC
Operator: PJ
HD: SSA

POS/AV Filename: 20120120-B

Flight Plan		Weather	
Roll Comp:	On or (Off)	Pressure (gnd):	3004
Multipulse:	(On) or Off	Temperature (gnd):	-7
Beam Divergence:	Wide or (Narrow)	Temperature (air):	2
Scan Rate:	29.5	Dew Point:	-16
Pulse Rate:	70	Turbulence:	LIGHT
Scan Angle:	19	Visibility:	10+
Desired Range:	2400		
Planned GS:	160		

Line #	Start Time	End Time	HDG	Range	PDOP	SV	Speed (kts)	Flight Notes
122	033757	035505	N	2406	1.04	19	161	
121	035942	044446	S	2334	1.08	20	166	INDUST SMOKE @ 5.1 mi ON SOUTH EOL-EOL
120	042221	043659	N	2400	1.07	21	165	
119	044243	045646	S	2405	1.30	19	154	
118	050345	051735	N	2430	1.16	19	163	
117	052326	053737	S	2398	1.22	19	159	
116	054427	055927	N	2345	1.12	20	159	
115	060537	061938	S	2376	1.04	21	158	
CROSS	062710	063029	E	2430	1.20	19	161	CROSS TIE

Base Station
Point ID: N/A
Position Type: Known / (Autonomous)
Antenna Height: 2 Meters
Latitude: 38° 50' 21.4050
Longitude: 94° 53' 00.4874

Location: KIXD
Time On: 1801 UTC
Time Off: 731 UTC
PDOP: 1.2
SV's: 19

Airborne Station
Time On: 306 UTC
Kinematic On: 318 UTC
Kinematic Off: 653 UTC
Time Off: 658 UTC

Hobbs Start:	2622.9
Hobbs End:	2626.3
Flight Time:	4.6

KASIIPA-239_44Q_20120124A_FLT7

KEYSTONE AERIAL SURVEYS

Date: 1/23/12 Pilot: AZ

Project: KASIIPA-239 Operator: SB

Aircraft: N3444Q

Sensor: Optech HD: SSC

POS/AV Filename: 20120124 A

Flight Plan		Weather	
Roll Comp:	On or (Off)	Pressure (gnd):	30.05
Multipulse:	(On) or Off	Temperature (gnd):	35.6°F
Beam Divergence:	Wide or (Narrow)	Temperature (air):	32°F
Scan Rate:	29.5	Dew Point:	19.4°F
Pulse Rate:	70	Turbulence:	Light
Scan Angle:	19	Visibility:	10
Desired Range:	2400		
Planned GPS:	160		

Line #	Start Time	End Time	HDG	Range	PDOP	SV	Speed (kts)	Flight Notes
Test	04:10	04:11	N	—	—	—	—	
114	04:17	04:29	N	2435	1.19	19	160	
113	04:35	04:48	S	2407	1.30	18	157	
112	04:56	05:09	N	2400	1.10	19	159	
111	05:14	05:27	S	2400	1.27	18	158	
110	05:35	05:46	N	2401	1.28	18	160	
109	05:52	06:04	S	2406	1.23	18	158	
108	06:12	06:25	N	2420	1.25	18	161	
107	06:31	06:49	S	2427	1.23	17	157	
106	06:50	07:03	N	2429	1.08	18	160	
105	07:09	07:19	S	2427	1.01	18	161	
Cross	07:26	07:29	E	2371	1.00	18	156	

Base Station

Point ID: N/A

Position Type: Known / Autonomous

Antenna Height: 2 Meters

Latitude: 38°50' 21.4050

Longitude: 94°53' 00.4874

Location: KIXD

Time On: 1:35 UTC

Time Off: 8:13 UTC

PDOP: 1.0

SV's 12

Airborne Station

Time On: 3:48 UTC

Kinematic On: 3:53 UTC

Kinematic Off: 7:57 UTC

Time Off: 8:02 UTC

Hobbs Start:	2626.3
Hobbs End:	2630.1
Flight Time:	4.5

KASIIPA-239_44Q_20120124B_FLT 8

KEYSTONE AERIAL SURVEYS

Date: 1/24/12 Pilot: CL

Project: KASIIPA-239 Operator: SB

Aircraft: N3444Q

Sensor: Optech HD: SSC

POS/AV Filename: 20120124_B

Flight Plan		Weather	
Roll Comp:	On or Off	Pressure (gnd):	30.16
Multipulse:	On or Off	Temperature (gnd):	50°F
Beam Divergence:	Wide or Narrow	Temperature (air):	33°F
Scan Rate:	29.5	Dew Point:	24.8°F
Pulse Rate:	70	Turbulence:	Light
Scan Angle:	19	Visibility:	10
Desired Range:	2400		
Planned GPS:	160		

Line #	Start Time	End Time	HDG	Range	PDOP	SV	Speed (kts)	Flight Notes
Test	20:00	20:00	N	—	—	—	—	
131	20:02	20:11	N	2395	1.34	18	162	Lshr on at 39°30'
132	20:16	20:25	S	2397	1.37	18	161	Lshr off at 39°28'
Cross	20:31	20:32	W	2423	1.27	19	161	
104	20:38	20:51	N	2424	1.36	18	163	
103	20:54	21:08	S	2390	1.26	19	160	
102	21:11	21:24	N	2382	1.19	19	158	
101	21:28	21:41	S	2403	1.04	20	157	
100	21:44	21:57	N	2398	1.05	20	160	
99	21:01	22:14	S	2397	1.04	19	163	
98	21:17	22:30	N	2393	1.08	19	160	
97	22:33	22:46	S	2401	1.05	20	159	
96	22:49	23:02	N	2405	1.18	18	162	
95	23:06	23:20	S	2401	1.18	17	158	
94	23:23	23:37	N	2402	1.02	18	156	
93	23:41	23:56	S	2387	1.02	18	161	
92	23:58	00:12	N	2368	1.24	16	160	
91	00:17	00:32	S	2396	1.27	16	161	
Cross	00:38	00:41	E	2422	1.34	15	158	

Base Station

Point ID: N/A

Position Type: Known / Autonomous

Antenna Height: 2 Meters

Latitude: 38° 50' 21.4050

Longitude: 94° 53' 00.4874

Location: KIXD

Time On: 19:07 UTC

Time Off: _____ UTC

PDOP: _____

SV's _____

Airborne Station

Time On: 19:33 UTC

Kinematic On: 19:40 UTC

Kinematic Off: 1:09 UTC

Time Off: 1:14 UTC

Hobbs Start:	2630.1
Hobbs End:	2635.3
Flight Time:	5.2

OPERATORS FLIGHT LOG

YYYYMMDD_TIME(GPS)

MISSION: 20120229_ DATE: 2/29/2012 LEICA ALS-70  JW2

PILOT: JESSE OPERATOR: JUSTIN AIRCRAFT: N812TB

PROJECT NUMBER		LINE NO. & Hdg		GND SPEED (KTS)	FREQ Hz	SCAN ANGLE	PRF kHz	FIXED GAIN	ALT (m)	TIME START	TIME STOP	MM70 DRIVE	REMARKS
1120103										1836	1912	065	Ferry: KTCT → SITE 0.6
KANSAS	X	168	S	170	37	40	229	3/3	2400	1917	1932		
REFLIGHTS	X	169	N	160	37	40	229	3/3	2400	1936	1952		
	X	170	S	170	37	40	229	3/3	2400	1956	2011		
	X	171	N	160	37	40	229	3/3	2400	2015	2031		
	X	172	S	170	37	40	229	3/3	2400	2035	2050		
		173	N	160	37	40	229	3/3	2400				ALS COMM. ERROR Before Start of Line
										2054	2112		Ferry: SITE → KTCT 0.3
													CANNOT CONTROL LASER NOR
													SHUTTERS. WITH COMM ERROR.
													COMM ISSUE WITH DATA LOGGER

STATUS		TOTAL LINES	FLOWN	LEFT	AIRCRAFT SITE	AIRCRAFT FERRY	STATIC	START	STOP
Ø	1120103		5	5	1.7	.9			
O							WX SKC		
O									

NOTES: ALS COMM ERROR. Ferry to KTCT to Re-START SYSTEM.

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LIDAR FLIGHT LOG

ALS70

MISSION: 20120413_160847/_214729 DATE: 4/10, 11, 13/12

PILOT: HUNTER OPERATOR: POWELL AIRCRAFT: 12TB

PROJECT NUMBER	LINE NO. & Hdg	GND SPEED (KTS)	SCAN FREQ	SCAN ANGLE	PRF	ALT (m)	TIME START	TIME STOP	Laser Time	TZPK	REMARKS
4/10/12							1105	1300			FERRY MNJKS 1407.5
1120103							0730	0735			STATIC HOBBS: 1409.1
4/11/12	7 S	175	36.6	40	228.8	8766	0804	811			LINE ABORTED CLSS
								0830			LAND HOBBS 1409.9
4/13/12							1114	1119			STATIC
1120103	7 N	160	36.6	40	228.8	8753	1159	1214			20120413_160847
	8 S	140					1220	1237			
	9 N	160					1243	1300			
	10 S	140					1306	1325			
	11 N	165					1330	1347			
	12 S	140					1353	1412			
	XFLT W						1418	1429			
							1512	1517			STATIC HOBBS 1413.7
							1652	1657			STATIC
1120103	71 N	165	36.6	40	228.8	8645	1714	1739			20120413_214729
	72 S	140					1744	1811			
	73 N	165					1816	1840			
	74 S	155					1846	1911			
	75 N	160					1915	1940			
	76 XFLT S W	160					1945 2007	2006 2011			

STATUS	TOTAL LINES	FLOWN	LEFT	AIRCRAFT SITE	AIRCRAFT FERRY
○ SCRUBED	4/11	1		.1	2.7
○ _160847	4/13	6		4.4	1.6
○ _214729	4/13	6		3.0	0.8

STATIC	START:	STOP:
	2031	2036

WX

NOTES: STATIC HOBBS 1417.1

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KAS11PA-239_44Q_20120130A_FLT 14

Keystone Aerial Surveys, Inc. - LIDAR FLIGHT REPORT

Date: 1/30/12 Pilot: CL

Project: KAS11PA-239 Operator: SB

Aircraft: N3444Q

Sensor: Optech HD: SSE

POS/AV Filename: 20120130_A

Flight Plan		Weather	
Roll Comp:	On or (Off)	Pressure (gnd):	29.91
Multipulse:	(On) or Off	Temperature (gnd):	59°F
Beam Divergence:	Wide or (Narrow)	Temperature (air):	42°F
Scan Rate:	29.5	Dew Point:	30.2°F
Pulse Rate:	70	Turbulence:	Light
Scan Angle:	19	Visibility:	10
Desired Range:	2400		
Planned GPS:	160		

Line #	Start Time	End Time	HDG	Range	PDOP	SV	Speed (kts)	Flight Notes
Test	19:08	19:08	—	—	—	—	—	(170) RFB Altitude Error
297	19:25	19:42	S	2409	1.31	18	158	
298	19:46	20:02	N	2405	1.35	18	162	
299	20:06	20:23	S	2397	1.28	19	156	
300	20:26	20:43	N	2410	1.37	18	159	
301	20:46	21:03	S	2402	1.20	19	161	
302	21:06	21:22	N	2423	1.06	19	160	
303	21:25	21:39	S	2402	1.01	21	159	
Cross	21:43	21:46	W	2407	1.13	18	158	

Base Station

Point ID: N/A

Position Type: Known / (Autonomous)

Antenna Height: 2 Meters

Latitude: 38°50' 21.4050

Longitude: 94° 53' 00.4874

Location: KIXD

Time On: 17:16 UTC

Time Off: 22:45 UTC

PDOP: 1.4

SV's 12

Airborne Station

Time On: 18:49 UTC

Kinematic On: 18:54 UTC

Kinematic Off: 22:25 UTC

Time Off: 22:31 UTC

Hobbs Start:	2650.1
Hobbs End:	2653.5
Flight Time:	3.9

LIDAR FLIGHT LOG

TP1

MISSION: L01612A, A1, B | DATE: 01-16-12

PILOT: DAVE | OPERATOR: Tom | AIRCRAFT: N73Tm

PROJECT NUMBER	LINE NO. & Hdg	GND SPEED (KTS)	SCAN FREQ	SCAN ANGLE	PRF	ALT (m)	TIME START	TIME STOP	Laser Time	TZPK	REMARKS
1120103						*	9:48	10:48			FERRY: FOE → SITE 1.0
"A"	1ST TEST	FIRE = OK,		THEN	108 E.S.S.O.s &		105 RANGE	MISSING		134	
	Chged EYE SAFE	IN STEPS TO Ø,		Chged FROM							
	MULTI PULSE ON/	VARIABLE TO OFF		=	N.G.						
A1	AIR RESTART:	AGAIN FIRST TEST OK		& THEN							
	SAME AS BEFORE	— POS PROGRESSIVELY		WORSE IN						↓	
	LAT / LON	ACC & SPEED WRONG					11:24	11:54			FERRY: SITE → ICT 0.5
							2:00	2:36			FERRY: ICT → SITE 0.6
"B" FLT	1ST TEST	FIRE: OK, THEN E.S.S.O.,		THEN ABLE 2ND TEST						008	RED BANDING IN SWATH 2,250 ↑ 2350 M
	213 N	±160	29.5	19°	70	2,340 2,600+	20:45	20:51			
	212 S	±144	28.0	↓	↓	↓	20:57	21:14			
	211 N	±160	29.5				21:18	21:33			
XFLT	213 W	↓	↓				21:42	21:44		↓	3 TRYS @ XFLT, ESSO, THEN → ON PO NO RNG BUT MIRROR SWING,
											ACTUAL XFLT = NO RNG DATA ON PILOT DISPLAY, NO SWATH DATA BUT RNGs & MIRROR SWING ON LIDAR MONITOR PAGE.
							3:48	4:24			FERRY: SITE → FOE 0.6

STATUS	TOTAL LINES	FLOWN	LEFT	AIRCRAFT .6 SITE	AIRCRAFT FERRY
⊘ 1120103	303/59 SW	3?.*	54?.*	1.8	2.7
○ SW					
○	* IF LINES ACCEPTED				

STATIC: | START: | STOP:

WX

CLR 20+

NOTES: * REPAIR TO BAGGAGE DOOR LATCH & "AJAR" SWITCH PRIOR TO DEPARTURE

NO

p.2

19204671220

Aerometric Inc.

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LIDAR FLIGHT LOG

TP1

MISSION: L01712A | DATE: 01-17-12

PILOT: DAVE | OPERATOR: Tom | AIRCRAFT: N73TM

PROJECT NUMBER	LINE NO. & Hdg		GND SPEED (KTS)	SCAN FREQ	SCAN ANGLE	PRF	ALT (m)	TIME START	TIME STOP	Laser Time	TZPK	REMARKS
1120103		1ST T	21:36 -	21:38	*	2ND T	21:41 21:45	2:54	3:36			FERRY: FOE → SITE .7
	256	$N	±160	29.5	19°	70	± 2400	21:55	22:15	19:44 ~~20:56~~	134	
	255	S	±160					22:20	22:39	19:46		E.S.=60 CLOUD FROM PWR PLANT
	254	N	±160					22:43	23:01			STEAM FROM PWR PLANT NEAR N. END
	253	S	±160					23:07	23:27			53.5 38:04:42 HOLE JUST N. OF SHORT LINES
	252	N	±160					23:31	23:49			ESSO/REST RNG (M) OUT OF COV
XFLT	256	W	"	"	"	"	"	23:54	23:56			
								6:00	6:34			FERRY: SITE → FOE .6

STATUS	TOTAL LINES	FLOWN	LEFT	AIRCRAFT SITE	AIRCRAFT FERRY	STATIC	START:	STOP:	NOTES:
⊘ 1120103	303/47	5	42	2.4	1.3	30:45			* MULTIPLE E.S.O.s ON 2ND TEST FIRE + RANGE (M)
○						WX			
○									

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LIDAR FLIGHT LOG

MISSION: L0118R2B DATE: 1/18/12

PILOT: JOSEY OPERATOR: PATRICK AIRCRAFT: TM

PROJECT NUMBER	LINE NO. & Hdg	GND SPEED (KTS)	SCAN FREQ	SCAN ANGLE	PRF	ALT (m)	TIME START	TIME STOP	Laser Time	TZPK	REMARKS
1120103							1935	1940			HOBBS: 4101.3 STATIC
	251 S	160	29.5	19	70	2450	2012	2029			
	250 N	160					2031	2049			
	249 S	160					2051	2108			
	248 N	160					2110	2128			
	247 S	160					2130	2147			
	246 N	160					2149	2207			
	245 S	160					2210	2227			
	244 N	160					2229	2247			
	XFER E	160					2249	2251			
							2322	2327			STATIC HOBBS 4104.8
									2:17:8		TOTAL USER TIME

STATUS	TOTAL LINES	FLOWN	LEFT	AIRCRAFT SITE	AIRCRAFT FERRY	STATIC	START:	STOP:	NOTES:
	303	8		3.5					

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LIDAR FLIGHT LOG

MISSION: L011912A | DATE: 1/19/12

PILOT: Nick | OPERATOR: Jessica | AIRCRAFT: 73TM

ALTM

PROJECT NUMBER	LINE NO. & Hdg	GND SPEED (KTS)	SCAN FREQ	SCAN ANGLE	PRF	ALT (m)	TIME START	TIME STOP	Laser Time	TZPK	REMARKS
1120103		2 test strips flown					1521	1526			T/O FOE 4104.8 / static
Kansas	210 S	160	29.5	19	70	2100	1601	1617	16		flown at 7900' RFD errors
	209 N	150	28.6			2150	1622	1638	16		flown at 8300' "
	208 S	160	29.5			2100	1643	1658	15		" 7900'
	207 N	155	29.1				1703	1719	16		
	206 S	160	29.5				1723	1739	16		
	x-fill E						1743	1745	2		
	205 N	155	29.1				1753	1809	16		
	x-fill E	160	29.5				1813	1815			PDOP 4.3 spike
							1843	1848			static
											Land FOE 4108.0

STATUS	TOTAL LINES	FLOWN	LEFT	AIRCRAFT SITE	AIRCRAFT FERRY	STATIC	START:	STOP:	NOTES:
1120103	303	6		3,2			1521	1848	
						WX			

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LIDAR FLIGHT LOG

MISSION: L011912B | DATE: 1/19/12

PILOT: Josey | OPERATOR: Patrick | AIRCRAFT: 73TM

PROJECT NUMBER	LINE NO. & Hdg		GND SPEED (KTS)	SCAN FREQ	SCAN ANGLE	PRF	ALT (m)	TIME START	TIME STOP	Laser Time	TZPK	REMARKS
1120103								1540	1545			STATIC HOBBS 4107.9
	243	S	170	29.5	19	70	2450	1606	1624			
	242	N	170					1626	1643			
	241	S	165					1645	1702			
	240	N	160					1705	1722			
	239	S	160					1725	1742			
	238	N	164					1745	1801			
	237	S	165					1804	1821			
	236	N	160					1823	1841			
	235	S	165					1843	1900			
	XFLT	E	220					1903	1905	2:20:01		
								1920	1925			STATIC HOBBS 4111.5

STATUS	TOTAL LINES	FLOWN	LEFT	AIRCRAFT SITE	AIRCRAFT FERRY	STATIC	START:	STOP:	NOTES:
○	303	9		3.6					
○									
○									

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LIDAR FLIGHT LOG

MISSION: L0119 12C DATE: 1/19/12

PILOT: Josey OPERATOR: PATRICK AIRCRAFT: 73-TM

PROJECT NUMBER	LINE NO. & Hdg	GND SPEED (KTS)	SCAN FREQ	SCAN ANGLE	PRF	ALT (m)	TIME START	TIME STOP	Laser Time	TZPK	REMARKS
1120103							1959	2004			STATIC HOBBS: 4111.5
	234 N	165	29.5	19	70	2450	2021	2039			
	233 S	160					2041	2058			
	232 N	160					2100	2118			
	231 S	170					2120	2137			
	230 N	160					2139	2157			
	229 S	165					2159	2217			
	228 N	165					2219	2236			
	XFLT E	210					2239	2241	2:02:25		
							2305	2310			STATIC HOBBS: 4114.4

STATUS	TOTAL LINES	FLOWN	LEFT	AIRCRAFT SITE	AIRCRAFT FERRY	STATIC	START:	STOP:	NOTES:
○	303	7		2.9					
○						WX			
○									

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LIDAR FLIGHT LOG

MISSION: L012112B/C DATE: 1/21/12

PILOT: JOSEY OPERATOR: PATRICK AIRCRAFT: 73TM

PROJECT NUMBER	LINE NO. & Hdg	GND SPEED (KTS)	SCAN FREQ	SCAN ANGLE	PRF	ALT (m)	TIME START	TIME STOP	Laser Time	TZPK	REMARKS
1120103							1642	1647			STATIC HOBBS 4118.2
L012112B	196 S	150	29.5	19	70	2400	1741	1742			SWATH ERROR, LAND & RESET
L012112B									0:01:27		NO LINES COMPLETED DATA SAVED FOR TROUBLESHOOTING
L012112C							1835	1840			STATIC HOBBS 4119.4
	196 N	160	29.5	19	70	2400	1859	1914			MULTIPLE RED LINES ON SWATH
	195 S	155					1916	1932			BUT NO RANGE DROPS USABLE
	194 N	160					1934	1949			
	193 S	160					1952	2002	0:55:A		LINE STOPPED FOR IMMEDIATE LANDING
L012112C							2019	2024			STATIC HOBBS 4121.0
L012112D							2054	2059			STATIC
	193 S	150	29.5	19	70	2400	2123	2138			
	192 N	165					2140	2155			
	191 S	145					2157	2215			NAV MODE WITH GPS ALTI & SAFE UNARMED PROFILE MSGS ON ALT-M
							2220				LASER EMISSION WILL NOT FIRE TRYING TROUBLESHOOTING WITH NO JOY
	XFLT E	185					2286	2238	~~0:51:35~~		FLEW XFLT WITH NO LASER EMISSION
							2311	2316	0:51:35		STATIC 4123.0

STATUS	TOTAL LINES	FLOWN	LEFT	AIRCRAFT SITE	AIRCRAFT FERRY
○ L012112B		0		1.2	
○ L012112C		3		1.6	
○ L012112D		3		2.0	

STATIC	START:	STOP:
WX		

NOTES:

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LIDAR FLIGHT LOG

MISSION: L012212A DATE: 1/22/12

PILOT: Josey OPERATOR: PATRICK AIRCRAFT: 73TM

ALTM

PROJECT NUMBER	LINE NO. & Hdg	GND SPEED (KTS)	SCAN FREQ	SCAN ANGLE	PRF	ALT (m)	TIME START	TIME STOP	Laser Time	TZPK	REMARKS
112093							1443	1448			STATIC HOBBS 4123.0
	190 S	160	29.5	19	70	2300	1524	1539			RED SWATH RETURNS BUT NO ERRORS OR NOTICABLE RANGE DROPS
	189 N	165					1541	1557			
	188 S	160					1559	1614			POSSIBLE CLD 28 NMI FROM START OF LINE
	187 N	170					1616	1631			CLD'S BUILDING
	XFR E	200					1634	1637	1:05:35		EXTENDED E BOUND TO COVER LINES FROM L012112 F/D
							1734	1739			STATIC HOBBS 4125.6

STATUS	TOTAL LINES	FLOWN	LEFT	AIRCRAFT SITE	AIRCRAFT FERRY	STATIC	START:	STOP:	NOTES:
○									
○						WX			
○									

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LIDAR FLIGHT LOG

MISSION: L012312A & B | DATE: 01-23-12 | TP1

PILOT: NICK | OPERATOR: Tom | AIRCRAFT: N 73 TM

PROJECT NUMBER	LINE NO. & Hdg		GND SPEED (KTS)	SCAN FREQ	SCAN ANGLE	PRF	ALT (m)	TIME START	TIME STOP	Laser Time	TZPK	REMARKS
1120103		2	TESTS	15:02	±	15:15		8:30*	9:04			FERRY: FOE → SITE .6
AREA 3 ⊗	217	S	160 ±	29.5	19°	70	±2400	15:16	15:34		081	
L012312A ⊗	216	N						15:38	15:55			CLOUDS JUST N. OF PROJECT
⊗	215	S						16:00	16:17			
⊗	214	N						16:21	16:39			
⊗	219	S						16:45	17:03			
⊗	218	N						17:08	17:25			
XFLT	219	W						17:31	17:33			PDOP SPIKE COMING UP: RTB FUEL
								11:36	12:06			FERRY: SITE → FOE .5
								12:36	12:42			FERRY: FOE → TOP ** .2
			2 TESTS	19:36				1:00	1:42			FERRY: TOP → SITE .7
L012312B ⊗	253	S	160 -/+	29.5	19°	70	2400	19:43	19:55			GAP FILL FROM 17TH FLT / N. END OF PATCH
AREA 3	260	N	155 +/-	29				19:58	20:08			
	259	S	160	29.5				20:18	20:22			1ST TRY: E.S.S.O.
	258	N	±157	29.2				20:32	20:42			
	257	S	160	29.5				20:46	20:54			
ENTIRE BLOCK #2	260	W	±138	27.5				21:00	21:13			
	220	N	±159	29.5				21:23	21:42			
								3:42	4:12			FERRY: SITE → FOE .5

STATUS	TOTAL LINES (AREA 3)	FLOWN	LEFT	AIRCRAFT 2.0 SITE	AIRCRAFT 2.0 FERRY	STATIC	START:	STOP:	NOTES:
⊘ 1120103	303 / 47	35 / 6	12+GAP	—	—	45:25			** NO FUEL @ KFOE
⊘ 1120103	303 / 40	40 / 5	7	4.5	2.5	WX GPS LOST ON LAND ANT CABLE..S ING... MINUTES FOR WHAT IT'S WORTH			*POOP SPIKES 8:15 → 9:15
○									CLOUDS UNFORECAST ON EASTERN LINES... MOVED TO WEST SIDE

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LIDAR FLIGHT LOG

ALTM

MISSION: L012312C DATE: 1/23/12

PILOT: Josey OPERATOR: Patrick AIRCRAFT: 73 TM

PROJECT NUMBER	LINE NO. & Hdg	GND SPEED (KTS)	SCAN FREQ	SCAN ANGLE	PRF	ALT (m)	TIME START	TIME STOP	Laser Time	TZPK	REMARKS
1120103							1651	1656			STATIC HOBBS: 4131.3
	221 S	165	29.5	19	70	2400	1718	1735			
	222 N	160					1738	1755			
	223 S	160					1757	1815			
	224 N	160					1817	1834			
	225 S	160					1836	1854			
	226 N	165					1856	1914			
	227 S	160					1916	1934			
	XFLT W	160					1937	1939			
	261 S	170	29.5	19	70	2400	1940	1955			
	262 N	165					1957	2013			
	XFLT E	215					2016	2017	2:17:24		
							2032	2037			STATIC HOBBS: 4134.8

STATUS	TOTAL LINES	FLOWN	LEFT	AIRCRAFT SITE	AIRCRAFT FERRY	STATIC	START:	STOP:	NOTES:
○	303	9		3.5					
○						WX			
○									

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LIDAR FLIGHT LOG

MISSION: L012312D DATE: 1/23/12

PILOT: JOSEY OPERATOR: PATRICK AIRCRAFT: 73TM

ALTM

PROJECT NUMBER	LINE NO. & Hdg	GND SPEED (KTS)	SCAN FREQ	SCAN ANGLE	PRF	ALT (m)	TIME START	TIME STOP	Laser Time	TZPK	REMARKS
1120103							2111	2116			STATIC HOBBS 4134.8
	263 S	160	29.5	19	70	2400	2134	2135			BAD RETURNS >300m
	263 S	160					2139	2155			
	264 N	165					257	2212			
	265 S	165					2215	2231			
	266 N	165					2233	2249			
	XFLT W	165					2251	2255			
							2326	2331			STATIC HOBBS: 4136.9

STATUS	TOTAL LINES	FLOWN	LEFT	AIRCRAFT SITE	AIRCRAFT FERRY	STATIC	START:	STOP:	NOTES:
○	303	4		2.1					
○						WX			
○									

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LIDAR FLIGHT LOG

MISSION: L0127124 DATE: 1/26/2012 JW1

PILOT: JOSEY OPERATOR: JUSTIN AIRCRAFT: N7JTM

PROJECT NUMBER	LINE NO. & Hdg		GND SPEED (KTS)	SCAN FREQ	SCAN ANGLE	PRF	ALT (m)	TIME START	TIME STOP	Tranzpak Drive	REMARKS
1120103	2 TEST STRIPS		BEGIN		0115	END	0116	2342	0100		Ferry: KFOE → ~~SITE~~ KICT 1.3
KANSAS	~~182~~	~~N~~	160	29.5	19	~~90~~	~~2400~~	0100	0118		Ferry: KICT → SITE 0.3
⊗	182	N	160	29.5	19	70	2400	0122	0138		
	183	S	160	29.5	19	70	2400				Kept GETTING ~~KFOE MESSAGE~~ MISSING
X-FLT		W	166	29.5	19	70	2400	0150	0151		
⊗	183	S	160	29.5	19	70	2400	0156	0211		
⊗	184	N	160	29.5	19	70	2400	0214	0230		
⊗	185	S	160	29.5	19	70	2400	0242	0327		OPTED TO LEAVE LASER ON FOR LAST 2 LINES ONCE
⊗	186	N	160	29.5	19	70	2400	0242	0327		WE GOT IT WORKING AGAIN. SEVERAL
X-FLT		W	160	29.5	19	70	2400	0242	0327		ATTEMPTS TO TURN ON FAILED. SEVERAL
											MESSAGES ABOUT RANGE MISSING AND
											EYESAFE SHUT-OFFS.
								0335	0406		Ferry: SITE → KFOE 0.6

STATUS	TOTAL LINES	FLOWN	LEFT	AIRCRAFT SITE	AIRCRAFT FERRY	STATIC	START:	STOP:
1120103	303	5		2.2	2.2			
						WX CLEAR		

NOTES: SEVERAL ATTEMPTS AT TEST STRIPS. NO RANGE DATA. KS ESSO. 1-888-253-6695

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LIDAR FLIGHT LOG

ALTM

J51

MISSION: L0127128 DATE: 1-27-12 FRI

PILOT: JOSEY OPERATOR: JIM AIRCRAFT: N73TM

PROJECT NUMBER	LINE NO. & Hdg		GND SPEED (KTS)	SCAN FREQ	SCAN ANGLE	PRF	ALT (m)	TIME START	TIME STOP	Laser Time	TZPK	REMARKS
1120103								20:13	20:43	GMT	134	FERRY: KFOE → SITE .5
KS	TEST							20:~~29~~	20:~~29~~			
	TEST							20:43	20:43			
AREA 2 ⊗	207	181	160	29.5	19	70	2400	21:00	21:05			14.7 MILES FROM S. END → S. END
	CROSS	E						21:08	21:09			
AREA 4 /	267	2						21:32	21:44			PART- S. 31 MILES
/	268	182						21:50	21:59			25 START MILES FROM SOUTH END → S. END
/	269	2						22:02	22:13			S. 27 MILES
/	270	182						22:17	22:27			START 25 MILES FROM S. END → S. END
/	271	2						22:30	22:38			S. 20 MILES
REFLY ALT → /	272	182						22:44	22:49			* RANGE MISSING DATA AT START S. 10 MILES
	CROSS	W						22:52	22:54			IT'S GOTTEN PRETTY HAZY - RANGE FLUXUATING
									23:48			FERRY: SITE → KFOE ALOT .9

STATUS	TOTAL LINES	FLOWN	LEFT	AIRCRAFT SITE	AIRCRAFT FERRY	STATIC	START:	STOP:	NOTES: MP-FIXED
⊘ 1120103	303	7 PARTS		2.2	1.4	3.4	20:13	23:48	NEW ALTM/NAV (V2.6.30)
○						WX OVC ± 9K LOW OVC NORTH END			
○									

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LIDAR FLIGHT LOG

MISSION: L013012A | DATE: 1-30-12 MON. | JS1

PILOT: JESSE | OPERATOR: JIM | AIRCRAFT: N73TM

PROJECT NUMBER	LINE NO. & Hdg	GND SPEED (KTS)	SCAN FREQ	SCAN ANGLE	PRF	ALT (m)	TIME START	TIME STOP	Laser Time	TZPK	REMARKS
1120103							15:29	16:00	GMT	134	FERRY: FOE → SITE .5
KANSAS	TEST	160	29.5	19	70	2400	16:00	16:00			
AREA 4	TEST						16:00	16:00			
	286 182						16:13	16:14			EYE SAFE SHUT OFF
X	286 182						16:18	16:34			
X	287 ~~2~~						16:38	16:54			
X	288 182						16:58	17:14			
	CROSS CW						17:17	17:18			
								18:09			FERRY: SITE → FOE .8

STATUS	TOTAL LINES	FLOWN	LEFT	AIRCRAFT SITE	AIRCRAFT FERRY	STATIC	START:	STOP:	NOTES:
∅ 1120103	303	3		1-3	1-3	2.6	15:29	18:09	
○						WX			
○									

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LIDAR FLIGHT LOG

ALTM

JS2

MISSION: L0130128 DATE: 1-30-12 MON.

PILOT: JESSE OPERATOR: JIM AIRCRAFT:

PROJECT NUMBER	LINE NO. & Hdg		GND SPEED (KTS)	SCAN FREQ	SCAN ANGLE	PRF	ALT (m)	TIME START	TIME STOP	Laser Time	TZPK	REMARKS
1120103								18:59	19:18	GMT	134	FERRY: FOE → SITE .3
KANSAS	TEST		160	29.5	19	70	2400	19:18	19:18			
AREA 1	TEST							19:20	19:20			
	1	1						19:31	19:47			
	2	181						19:51	20:06			
	3	1						20:13	20:29			
	4	181						20:32	20:48			
	5	1						20:52	21:08			
	6	181						21:12	21:27			
	CROSS	E						21:32	21:35			
									21:54			FERRY: SITE → FOE .3

STATUS		TOTAL LINES	FLOWN	LEFT	AIRCRAFT SITE	AIRCRAFT FERRY	STATIC	START:	STOP:	NOTES:
⊘	1120103	303	6	6	2.3	.6	2.9	18:59	21:54	
○							WX			
○										

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LIDAR FLIGHT LOG

MISSION: L013012C DATE: 1/30/12 AIRCRAFT: 73TM

PILOT: NICK OPERATOR: PATRICK

PROJECT NUMBER	LINE NO. & Hdg	GND SPEED (KTS)	SCAN FREQ	SCAN ANGLE	PRF	ALT (m)	TIME START	TIME STOP	Laser Time	TZPK	REMARKS
							1637	1642			STATIC HOBBS 4162.0
1120103	XFLT W	160	29.5	19	70	2400	1700	1702			FOR 12TB LINES 16-13
	7 N	160					1709	1725			START OF LINE NO GOOD 1.5 mi ARM'S
	8 S	160					1728	1743			
	9 N	160					1751	1809			
	10 S	160					1812	1829			
	11 N	160					1832	1850			
	12 S	160					1853	1911			
	7 N	160					1914	1915			REFLY FIRST 1.5 mi OF LINE
	XFLT E	175					1918	1919			
							1937	1942			STATIC HOBBS 4164.8

STATUS	TOTAL LINES	FLOWN	LEFT	AIRCRAFT SITE	AIRCRAFT FERRY	STATIC	START:	STOP:	NOTES:
○	303	6	0	2.8					
○						WX			
○									

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LIDAR FLIGHT LOG

MISSION: —	DATE: 01/13/12 FR2	Leica ALS-70	TP1
PILOT: JOSEY / DAVE	OPERATOR: TOM	AIRCRAFT: N812TB	

PROJECT NUMBER	LINE NO. & Hdg	GND SPEED (KTS)	SCAN FREQ	SCAN ANGLE	PRF	ALT (m)	TIME START	TIME STOP	Laser Time	Drive	REMARKS
1120103							2:36	4:36			FERRY: SBM → OTM 2.0
							4:54	6:30			1.6

STATUS	TOTAL LINES	FLOWN	LEFT	AIRCRAFT SITE	AIRCRAFT FERRY
⊖ 1120103	—	—	—	—	3.6
○					
○					

STATIC START: STOP:

WX

NOTES:
RV AF ↑3↑ 6Q10 4347
R B→ OTM

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LIDAR FLIGHT LOG

MISSION: | DATE: Sun 01/15/12 | Leica ALS-70  | TP1

PILOT: DAVE | OPERATOR: Tom / YWJF | AIRCRAFT: N812TB

PROJECT NUMBER	LINE NO. & Hdg		GND SPEED (KTS)	SCAN FREQ	SCAN ANGLE	PRF	ALT (m)	TIME START	TIME STOP	Laser Time	Drive	REMARKS
1120103								12:24	1:12			FERRY: KFOE → SITE -8
	66	N	±160	37	40°	229	2400m	19:12	19:31			
	65	S	″	″	″	″	″	19:36	19:55			
	64	N	″	″	″	″	″					
	63	S	″	″	″	″	″					
XFLT	63	W	″	″	″	″	″		20:50			
								2:54	3:30			FERRY: SITE → KFOE .6

STATUS	TOTAL LINES	FLOWN	LEFT	AIRCRAFT SITE	AIRCRAFT FERRY	STATIC	START:	STOP:
⊘ 1120103	303	4/8	295	1.7	1.4	12:35	21:18	3:23
○						WX		
○								

NOTES: WIND 241° @ 42
F3 TEMPS | ALT+TAB
F4 RANGES | F4 HISTOGRAM
F5 SWATH TYPE DATA + UTM ZONE (5)

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127.72

LIDAR FLIGHT LOG

MISSION: | DATE: 1/15/12 | Leica ALS-70 [redacted] | JC4

PILOT: Cameron | OPERATOR: Jessica | AIRCRAFT: TB

PROJECT NUMBER	LINE NO. & Hdg	GND SPEED (KTS)	SCAN FREQ	SCAN ANGLE	PRF	ALT (AGL)	TIME START	TIME STOP	Laser Time	Drive	REMARKS
1120103					static		08:53	08:58			T/O Topeka 1177.2
	N 70	160	37	40	229	2350 ~~2600~~					
	S 69	145				2400	1552	1611			
	N 68	160					1615	1633			
	S 67	150					1638	1659			
	~~Maint~~						1703	1704			test recording
	x-flt W						1706	1708			120115-170558 ID
							1133	1138			Land Topeka 1179.6
											finished on kansas Jan 10-7

STATUS	TOTAL LINES	FLOWN	LEFT	AIRCRAFT SITE	AIRCRAFT FERRY	STATIC	START:	STOP:	NOTES:
○									
○						WX			
○									

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1530

LIDAR FLIGHT LOG

MISSION: | DATE: 01-15-12 SUN | Leica ALS-70 | [redacted] | PP1

PILOT: GLENN | OPERATOR: PATRICK | AIRCRAFT: N812TB

PROJECT NUMBER	LINE NO. & Hdg	GND SPEED (KTS)	SCAN FREQ	SCAN ANGLE	PRF	ALT (m)	TIME START	TIME STOP	Laser Time	Drive	REMARKS
120103							1606	1611			11820 HOBBS STATIC
	62 N	160	37	40	229	2400	1643	1702			
	61 S	150					1706	1726			
	60 N	160				1750	[redacted]	1749			
	59 S	160					1752	1812			
	XPLT E						1816	1819			120116-001612
							1847	1852			LAND TOPCON STATIC 11843

STATUS	TOTAL LINES	FLOWN	LEFT	AIRCRAFT SITE	AIRCRAFT FERRY	STATIC	START:	STOP:	NOTES:
○		4		23	0				
○						WX WX			
○									

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LIDAR FLIGHT LOG

MISSION: [redacted]012912C/D | DATE: 1/29/12 | Leica ALS-70 [redacted]

PILOT: NICK | OPERATOR: PATRICK | AIRCRAFT: 12TB

PROJECT NUMBER	LINE NO. & Hdg	GND SPEED (KTS)	SCAN FREQ	SCAN ANGLE	PRF	ALT (m)	TIME START	TIME STOP	Laser Time	Drive	REMARKS
1120103							1536	1541			STATIC HOBBS 1213.6
FLIGHT 33	A32 N	150	36.6	40	2288	2400	1616	1645			
	A31 S	170					1650	1718			LOW POWER 47.5 MI FROM N & 60 MI FROM N
	A30 N	160					1723	1754			LOW POWER 46 MI FROM N
	A29 S	170					1758	1826			
	A28 N	160					1832	1905			
	A27 S	170					1909	1939			
							2004	2009			STATIC HOBBS 1217.8
							2049	2054			STATIC
FLIGHT 34	A26 N	150	37	40	229	2400	2126	2157			
	A25 S	170					2201	2230			
	A24 N	160					2234	2305			
	A23 S	165					2308	[illegible]			
	XFLT E	185					2340	2342			XFLT ALL LINES ABOVE
							0003	0028			STATIC HOBBS 1220.7

STATUS	TOTAL LINES	FLOWN	LEFT	AIRCRAFT SITE	AIRCRAFT FERRY
FLT 33	303	6		4.2	
FLT 34	303	4		2.9	

STATIC	START:	STOP:

WX

NOTES:

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YYYYMMDD_TIME(GPS)

OPERATORS FLIGHT LOG

MISSION: RTB | DATE: 2-2-12 THUR | LEICA ALS-70  | JSI

PILOT: JESSE | OPERATOR: JIM | AIRCRAFT: N812TB

PROJECT NUMBER	LINE NO. & Hdg	GND SPEED (KTS)	FREQ Hz	SCAN ANGLE	PRF kHz	FIXED GAIN	ALT (m)	TIME START	TIME STOP	MM70 DRIVE	REMARKS
120103								17:36	20:28	65	FERRY: FOE → SDA 1636..2028 2.9
KANSAS											

STATUS	TOTAL LINES	FLOWN	LEFT	AIRCRAFT SITE	AIRCRAFT FERRY	STATIC	START	STOP		NOTES:
⊗ 120103										
○						WX				
○										

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LIDAR FLIGHT LOG

MISSION: KANSAS SMOKE / 3 | DATE: 4/18/12

PILOT: HUNTER | OPERATOR: POWELL | AIRCRAFT: 12TB

PROJECT NUMBER	LINE NO. & Hdg		GND SPEED (KTS)	SCAN FREQ	SCAN ANGLE	PRF	ALT (m)	TIME START	TIME STOP	Laser Time	TZPK	REMARKS
								0820	0825			STATIC HOBBS: 1427.9
KANSAS	1	S	160	53	40	387	1100±	0856	0859			LINE ABORTED. VERT DEVIATION
SMOKE	1	N	160					0907	0914			
	2	S	160					0922	0924			VERT DEV. UNABLE TO FLY PLAN
									0946			LAND. MISSION SCRUBBED
20120418_155622								1101	1106			STATIC HOBBS: 1429.1
KANSAS 3	1	S	155	53	40	387	1400	1133	1137			SMOKE CONFIRMED
	2	N	145					1142	1146			
	3	S	160					1153	1157			
	1	N	155					1202	1206			REPEAT OF PREVIOUS LINES
	2	S	155					1212	1217			
	3	N	145					1222	1226			
	XFR	E	190					1231	1232			XFER OVER STACK
	1	E	165					1238	1238			
	2	W	135					1243	1244			
	2	E	165					1250	1250			
	1	W	140					1255	1255			
	XFR	S	130					1259	1301			
								1330	1335			STATIC HOBBS 1431.4

STATUS	TOTAL LINES	FLOWN	LEFT	AIRCRAFT SITE	AIRCRAFT FERRY
○ SMOKE	3	1	X	.5	1.0
○ 3	5	10	0	1.5	1.0
○					

STATIC | START: | STOP:

WX

NOTES:
WIND ~ 223@10-15 KTS

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8882536695

Flight Log

Project Number: 0
S/N : 0
Operator : ???
Pilot(s) : ???
Aircraft : ???
Airport : ???
Mission : ???
Wheels Up : ???
Flight Length :
HOBBS Start :
HOBBS End :

Weather

Date : January 28, 2012
Julian Day : 028
Temperature : ???
Visibility : ???
Clouds : ???
Precipitation : ???
Wind Dir : ???
Wind Speed : ???
Pressure : ???

Statistics

Laser Time : 03:28:19

START	STOP	LINE#	ALT	PRF	FREQ	ANGLE	MP	DIV	RC	MPM	HDG	Plan File
14:01:48.576	14:02:08.176	272	2634	70	29.50	19.00	ON	NAR	OFF	ON	182.00	Kansas_Final.pln
14:03:16.176	14:03:39.276	272	2631	70	29.50	19.00	ON	NAR	OFF	ON	182.00	Kansas_Final.pln
14:11:25.076	14:27:00.176	272	2688	70	29.50	19.00	ON	NAR	OFF	ON	182.00	Kansas_Final.pln
14:11:25.076	14:27:00.176	272	2688	70	29.50	19.00	ON	NAR	OFF	ON	182.00	Kansas_Final.pln
14:31:25.477	14:47:17.877	273	2693	70	29.50	19.00	ON	NAR	OFF	ON	182.00	Kansas_Final.pln
14:50:43.278	15:06:15.279	274	2702	70	29.50	19.00	ON	NAR	OFF	ON	2.00	Kansas_Final.pln
15:10:17.679	15:25:57.981	275	2700	70	29.50	19.00	ON	NAR	OFF	ON	2.00	Kansas_Final.pln
15:28:57.081	15:44:44.883	276	2707	70	29.50	19.00	ON	NAR	OFF	ON	2.00	Kansas_Final.pln
15:47:57.584	16:03:34.086	277	2684	70	29.50	19.00	ON	NAR	OFF	ON	2.00	Kansas_Final.pln
16:06:17.786	16:22:06.889	278	2691	70	29.50	19.00	ON	NAR	OFF	ON	182.00	Kansas_Final.pln
16:25:08.589	16:41:02.592	279	2691	70	29.50	19.00	ON	NAR	OFF	ON	2.00	Kansas_Final.pln
16:43:49.592	16:59:38.195	280	2698	70	29.50	19.00	ON	NAR	OFF	ON	182.00	Kansas_Final.pln
17:03:00.496	17:18:28.098	281	2698	70	29.50	19.00	ON	NAR	OFF	ON	2.00	Kansas_Final.pln
17:21:16.499	17:37:02.102	282	2694	70	29.50	19.00	ON	NAR	OFF	ON	182.00	Kansas_Final.pln
17:21:16.499	17:37:06.302	282	2694	70	29.50	19.00	ON	NAR	OFF	ON	182.00	Kansas_Final.pln
17:40:23.702	17:56:10.905	283	2697	70	29.50	19.00	ON	NAR	OFF	ON	2.00	Kansas_Final.pln
17:58:59.106	18:14:34.909	284	2701	70	29.50	19.00	ON	NAR	OFF	ON	182.00	Kansas_Final.pln
18:18:19.009	18:22:36.01	284	2707	70	29.50	19.00	ON	NAR	OFF	ON	182.00	Kansas_Final.pln

Flight Log

Project Number: 0
S/N : 0
Operator : ???
Pilot(s) : ???
Aircraft : ???
Airport : ???
Mission : ???
Wheels Up : ???
Flight Length :
HOBBS Start :
HOBBS End :

Weather

Date : January 28, 2012
Julian Day : 028
Temperature : ???
Visibility : ???
Clouds : ???
Precipitation : ???
Wind Dir : ???
Wind Speed : ???
Pressure : ???

Statistics

Laser Time : 00:52:51

START	STOP	LINE#	ALT	PRF	FREQ	ANGLE	MP	DIV	RC	MPM	HDG	Plan File
19:39:39.754	19:39:57.854	285	2677	70	29.50	19.00	ON	NAR	OFF	ON	2.00	Kansas_Final.pln
19:40:27.854	19:40:44.954	285	2676	70	29.50	19.00	ON	NAR	OFF	ON	2.00	Kansas_Final.pln
19:43:48.255	19:59:29.459	285	2659	70	29.50	19.00	ON	NAR	OFF	ON	2.00	Kansas_Final.pln
20:02:40.259	20:03:37.36	285	2661	70	29.50	19.00	ON	NAR	OFF	ON	2.00	Kansas_Final.pln
20:09:58.861	20:20:11.964	271	2664	70	29.50	19.00	ON	NAR	OFF	ON	182.00	Kansas_Final.pln
20:27:22.365	20:33:34.967	270	2661	70	29.50	19.00	ON	NAR	OFF	ON	2.00	Kansas_Final.pln
20:36:16.067	20:43:23.569	269	2661	70	29.50	19.00	ON	NAR	OFF	ON	182.00	Kansas_Final.pln
20:47:12.27	20:53:51.071	268	2660	70	29.50	19.00	ON	NAR	OFF	ON	182.00	Kansas_Final.pln
20:56:36.472	21:01:13.573	267	2663	70	29.50	19.00	ON	NAR	OFF	ON	182.00	Kansas_Final.pln
21:02:41.173	21:04:04.573	267	2655	70	29.50	19.00	ON	NAR	OFF	ON	182.00	Kansas_Final.pln

8 (Check point index)QA QC

QA QC (Check point index)

Area 3 Block 7 (Butler County) Output Control Report result

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Number	Easting	Northing	Known Z	Laser Z	Dz
105	699573.886	4202384.470	426.464	426.450	-0.014
106	694371.590	4209618.516	432.844	432.820	-0.024
107	709146.492	4199556.376	448.396	448.400	+0.004
108	697965.211	4192159.764	414.808	414.770	-0.038
109	712716.746	4181029.166	462.694	462.780	+0.086
110	699033.186	4171563.157	431.237	431.250	+0.013
111	714836.372	4158583.730	472.113	472.170	+0.057
112	701024.099	4156526.966	439.938	439.830	-0.108
113	690409.731	4159557.358	410.620	410.540	-0.080
114	687318.119	4180400.524	394.185	394.220	+0.035
115	700931.870	4183991.289	433.379	433.280	-0.099
116	670868.515	4172856.486	407.474	407.540	+0.066
117	669580.844	4157259.832	380.412	380.460	+0.048
118	675520.378	4188288.013	397.574	397.580	+0.006
119	681683.729	4201272.937	442.109	442.080	-0.029
120	667053.652	4207107.587	425.621	425.550	-0.071
121	688102.788	4206225.361	435.809	435.630	-0.179
122	676469.184	4212480.838	420.896	420.930	+0.034
201	693768.368	4209579.420	436.770	436.950	+0.180
202	700654.821	4216257.101	451.332	451.270	-0.062
203	708991.278	4205372.048	450.383	450.480	+0.097
204	701264.759	4178986.259	428.776	428.740	-0.036
205	707470.451	4187391.927	457.498	457.560	+0.062
206	707500.608	4156750.515	448.932	448.930	-0.002
207	696750.247	4166094.065	403.796	403.790	-0.006
208	686873.106	4173070.315	403.338	403.310	-0.028
209	692934.289	4182166.115	414.921	414.870	-0.051
210	686566.506	4154602.475	398.326	398.330	+0.004
211	680354.890	4178676.434	398.101	398.150	+0.049
212	665894.378	4180173.148	410.906	410.910	+0.004
213	682550.541	4188083.600	427.465	427.390	-0.075
214	668997.701	4192760.252	402.924	402.840	-0.084
215	686706.492	4194916.350	408.341	408.250	-0.091
216	675924.454	4206031.751	425.020	425.000	-0.020
217	674695.828	4199560.328	416.489	416.460	-0.029
218	667096.966	4212367.083	421.429	421.380	-0.049
501	694259.577	4214468.111	449.762	449.730	-0.032
502	713914.926	4210957.882	471.970	471.910	-0.060
503	704393.379	4195409.896	440.216	440.160	-0.056
504	715810.525	4187581.457	490.956	490.970	+0.014
505	709497.029	4172533.857	466.345	466.350	+0.005
506	709723.668	4163990.788	435.585	435.640	+0.055
507	697086.101	4153189.252	405.019	404.960	-0.059
508	687043.119	4165925.256	396.293	396.320	+0.027
509	709186.192	4182571.786	440.993	441.020	+0.027
510	676185.420	4154402.735	369.491	369.510	+0.019
511	678439.789	4172450.536	378.809	378.810	+0.001
512	672416.746	4178531.966	399.773	399.760	-0.013
513	688179.078	4187299.426	408.024	407.860	-0.164

514	664073.481	4187997.585	407.439	407.360	-0.079
515	677014.197	4194794.340	409.435	409.390	-0.045
516	692415.008	4198283.156	419.282	419.230	-0.052
517	694477.407	4204777.229	425.196	425.180	-0.016
518	686238.631	4212606.040	450.062	450.050	-0.012
623	707176.782	4212892.692	448.861	448.870	+0.009
624	692751.586	4187016.546	414.425	414.360	-0.065
625	699034.350	4171563.381	431.237	431.250	+0.013
626	672704.179	4163985.611	386.129	386.010	-0.119
627	667513.354	4199438.831	417.170	417.100	-0.070

Average dz	-0.019
Minimum dz	-0.179
Maximum dz	+0.180
Average magnitude	0.050
Root mean square	0.065
Std deviation	0.063

Area 3 Block 2_5_6 (Nemaha, Brown, Doniphan, Pottawatomie, Jackson, Wabaunsee, Wyandotte Counties) Output Control Report result

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Number	Easting	Northing	Known Z	Laser Z	Dz
103	871637.563	4346886.784	245.071	245.040	-0.031
104	821511.960	4426748.599	259.826	259.790	-0.036
1101	818243.369	4444817.534	264.001	263.990	-0.011
1102	811638.425	4446506.592	264.250	264.260	+0.010
1103	805663.100	4454657.092	264.809	264.850	+0.041
1104	801919.419	4459054.806	266.884	266.910	+0.026
1105	797787.796	4419199.529	340.918	340.950	+0.032
1106	785682.497	4421920.322	345.977	345.980	+0.003
1107	787914.734	4426841.610	334.281	334.290	+0.009
1108	803847.548	4417802.943	345.965	346.020	+0.055
1109	801384.075	4406423.085	345.347	345.340	-0.007
1110	810626.330	4408428.126	336.544	336.530	-0.014
1111	787923.707	4406711.968	368.577	368.560	-0.017
1112	781996.395	4425018.793	342.090	342.180	+0.090
1113	820313.768	4400306.558	307.959	307.910	-0.049
1114	773540.294	4422907.991	390.357	390.320	-0.037
1115	751787.749	4427537.188	320.657	320.740	+0.083
1116	743118.565	4418905.331	387.922	387.890	-0.032
1117	741044.715	4414184.104	397.150	397.100	-0.050
1118	748698.978	4394887.748	416.004	416.070	+0.066
1119	740738.298	4407543.897	391.730	391.720	-0.010
1120	756827.449	4403024.075	374.689	374.810	+0.121
1121	719105.415	4365688.639	385.047	385.070	+0.023
1122	721877.875	4355377.976	328.069	328.140	+0.071
1123	737219.491	4348837.863	298.689	298.720	+0.031
1124	737851.356	4359005.675	331.294	331.230	-0.064
1125	753306.614	4350648.652	373.949	373.970	+0.021
1126	752738.186	4361019.700	335.537	335.550	+0.013
1127	743471.414	4374716.835	332.584	332.580	-0.004
1128	839053.451	4412871.842	324.678	324.560	-0.118
1129	844693.679	4421543.827	252.198	252.300	+0.102
1130	794212.907	4410582.262	343.867	343.850	-0.017
1131	768518.189	4408409.072	386.951	386.960	+0.009
1132	757933.961	4388852.645	412.377	412.400	+0.023
1133	743764.890	4377747.628	336.985	336.970	-0.015
1134	729327.667	4336380.684	313.892	313.900	+0.008
1135	738770.010	4326489.495	310.625	310.700	+0.075
1136	719500.159	4310150.790	389.958	389.990	+0.032
1137	763647.634	4297019.475	360.064	360.170	+0.106
1138	750685.778	4298267.379	411.411	411.570	+0.159
1139	744401.391	4301237.441	464.358	464.400	+0.042
1140	743303.348	4327916.375	303.830	303.970	+0.140
1141	749926.529	4321807.671	343.641	343.760	+0.119
1142	776713.340	4348751.943	343.046	343.140	+0.094
1143	787198.530	4378294.366	337.954	337.890	-0.064
1144	775864.664	4373113.904	352.732	352.790	+0.058
1145	780645.751	4384700.077	339.933	340.050	+0.117
1146	853295.681	4345192.330	305.160	305.220	+0.060
1147	866666.149	4335894.633	275.875	275.870	-0.005
1148	855955.860	4365725.670	235.668	235.680	+0.012
1149	855401.296	4353339.813	246.738	246.780	+0.042

1150	841947.918	4391889.952	243.185	243.160	-0.025
1201	817623.883	4446882.205	262.194	262.270	+0.076
1202	814259.246	4440954.847	261.440	261.450	+0.010
1203	802857.488	4454900.275	266.987	267.020	+0.033
1204	799743.504	4464625.375	267.171	267.190	+0.019
1205	795349.284	4420907.947	337.152	337.140	-0.012
1206	796564.355	4430410.898	320.696	320.750	+0.054
1207	808312.413	4429323.478	292.963	292.990	+0.027
1208	808365.504	4416427.844	332.692	332.770	+0.078
1209	799018.315	4411180.085	314.265	314.250	-0.015
1210	784007.218	4407353.819	360.837	360.970	+0.133
1211	778549.440	4402335.417	350.812	350.910	+0.098
1212	827786.652	4399434.577	318.294	318.350	+0.056
1213	825733.560	4419042.373	262.312	262.370	+0.058
1214	769510.985	4427787.989	410.392	410.390	-0.002
1215	759976.798	4422613.040	365.265	365.360	+0.095
1216	739938.153	4423847.962	399.653	399.720	+0.067
1217	760833.574	4393651.185	422.847	422.910	+0.063
1218	772020.038	4400500.533	381.621	381.640	+0.019
1219	744148.019	4388284.827	419.861	419.900	+0.039
1220	731273.789	4363156.389	400.407	400.490	+0.083
1221	732695.874	4370169.095	425.503	425.520	+0.017
1222	723056.382	4342424.883	344.108	344.140	+0.032
1223	732858.500	4350114.097	327.509	327.600	+0.091
1224	739789.227	4345791.955	295.897	296.000	+0.103
1225	749415.800	4346847.333	324.515	324.610	+0.095
1226	748612.288	4371712.099	407.705	407.790	+0.085
1227	835943.243	4411996.976	332.172	332.190	+0.018
1228	836239.783	4416024.322	355.459	355.510	+0.051
1229	787860.880	4412347.958	360.438	360.450	+0.012
1230	763387.380	4408235.837	404.964	404.940	-0.024
1231	751133.056	4388519.590	396.267	396.370	+0.103
1232	761256.301	4378428.180	379.227	379.280	+0.053
1233	746539.022	4383538.029	394.206	394.240	+0.034
1234	735260.443	4320094.361	327.272	327.350	+0.078
1235	731097.877	4305668.309	449.721	449.730	+0.009
1236	729302.983	4317498.277	341.015	341.080	+0.065
1237	737901.428	4306417.196	393.258	393.360	+0.102
1238	744240.027	4306076.293	413.971	414.090	+0.119
1239	751287.135	4324825.914	323.043	323.240	+0.197
1240	754992.613	4316181.408	349.859	350.070	+0.211
1241	744893.043	4335017.917	347.433	347.610	+0.177
1242	781880.682	4358743.946	360.887	360.930	+0.043
1243	771680.010	4355244.393	346.798	346.880	+0.082
1244	774498.677	4366608.474	378.348	378.360	+0.012
1245	766102.079	4377943.124	380.457	380.400	-0.057
1246	861685.293	4340770.588	302.462	302.500	+0.038
1247	855942.702	4336010.545	299.849	299.880	+0.031
1248	859324.263	4356186.558	233.879	233.930	+0.051
1249	848362.893	4366230.522	256.714	256.810	+0.096
1250	834992.982	4385869.775	240.346	240.310	-0.036
1251	831319.038	4393123.601	310.872	310.890	+0.018
1252	832552.948	4380073.262	284.611	284.660	+0.049
1401	811496.512	4444152.703	260.439	260.440	+0.001
1402	821760.610	4442238.880	280.668	280.710	+0.042
1403	808459.731	4455890.391	264.806	264.810	+0.004

1404	798972.182	4463008.815	266.161	266.170	+0.009
1405	803235.050	4440300.772	305.307	305.320	+0.013
1406	790617.035	4420487.547	320.655	320.730	+0.075
1407	802413.379	4425830.733	303.872	304.050	+0.178
1408	806415.145	4424121.978	302.154	302.200	+0.046
1409	806454.725	4403428.679	336.703	336.710	+0.007
1410	791340.826	4401247.033	356.350	356.340	-0.010
1411	830672.268	4409263.098	328.699	328.720	+0.021
1412	821089.163	4408727.341	276.345	276.280	-0.065
1413	816920.946	4426515.364	269.911	269.920	+0.009
1414	774822.098	4415132.405	361.136	361.110	-0.026
1415	745367.748	4430310.369	355.314	355.320	+0.006
1416	748074.747	4419177.802	349.526	349.600	+0.074
1417	767765.324	4392302.239	373.418	373.510	+0.092
1418	740406.051	4394642.729	413.171	413.270	+0.099
1419	750811.669	4408526.409	372.499	372.620	+0.121
1420	735972.229	4368690.250	385.660	385.670	+0.010
1421	727022.615	4357086.453	359.233	359.150	-0.083
1422	718918.640	4345691.477	361.403	361.360	-0.043
1423	726041.914	4349483.255	312.603	312.610	+0.007
1424	743237.621	4351902.407	337.903	337.930	+0.027
1425	750989.128	4343930.130	295.605	295.650	+0.045
1426	744890.516	4365035.084	323.074	323.150	+0.076
1427	738724.280	4378810.393	384.262	384.380	+0.118
1428	840265.398	4420508.934	254.711	254.710	-0.001
1429	779754.815	4420096.173	358.814	359.070	+0.256
1430	784929.594	4412220.005	337.173	337.210	+0.037
1431	761618.940	4385646.986	391.494	391.450	-0.044
1432	766171.721	4384234.129	375.305	375.310	+0.005
1433	728178.091	4329755.376	371.458	371.440	-0.018
1434	738473.017	4335843.719	353.503	353.530	+0.027
1435	734609.800	4337274.358	324.671	324.620	-0.051
1436	725277.139	4313208.482	358.652	358.680	+0.028
1437	756089.367	4295169.101	394.453	394.480	+0.027
1438	756870.207	4306550.169	408.276	408.370	+0.094
1439	758143.116	4324321.815	309.652	309.740	+0.088
1440	748555.618	4315193.645	426.954	427.020	+0.066
1441	788473.121	4355772.802	355.956	355.950	-0.006
1442	790887.660	4350230.388	320.603	320.710	+0.107
1443	784071.995	4366149.501	353.728	353.900	+0.172
1444	775465.453	4377914.186	340.687	340.800	+0.113
1445	856742.355	4344008.468	268.879	268.860	-0.019
1446	862739.901	4346001.902	231.694	231.750	+0.056
1447	854395.673	4339030.081	289.694	289.700	+0.006
1448	855392.916	4368450.386	294.349	294.350	+0.001
1449	856341.279	4360977.737	233.076	233.020	-0.056
1450	841283.127	4389449.246	247.622	247.540	-0.082
1451	838650.263	4384022.168	241.019	240.820	-0.199
1452	833038.591	4387695.017	264.633	264.670	+0.037
1501	821210.679	4449089.279	269.955	269.790	-0.165
1502	801544.412	4461381.850	266.359	266.360	+0.001
1503	805056.429	4439600.141	262.753	262.760	+0.007
1504	788053.824	4423714.069	303.977	303.990	+0.013
1505	793333.117	4430515.025	290.147	290.190	+0.043
1506	807202.123	4414004.622	308.634	308.630	-0.004
1507	797685.952	4417508.719	340.707	340.730	+0.023

1508	806671.015	4397946.550	348.556	348.520	-0.036
1509	780348.440	4415042.434	375.962	376.030	+0.068
1510	797792.350	4395675.526	318.575	318.680	+0.105
1511	834245.021	4411316.430	337.419	337.450	+0.031
1512	819896.665	4418887.442	306.564	306.620	+0.056
1513	761761.121	4417268.399	381.110	381.070	-0.040
1514	758946.621	4427915.125	390.961	390.850	-0.111
1515	774466.544	4420820.812	394.070	394.010	-0.060
1516	751340.055	4413107.996	342.340	342.480	+0.140
1517	754734.622	4393782.874	410.351	410.370	+0.019
1518	773362.613	4391854.438	334.701	334.650	-0.051
1519	745493.066	4401067.656	384.937	385.080	+0.143
1520	723040.978	4363267.601	355.970	355.970	+0.000
1521	720900.106	4353300.038	339.429	339.390	-0.039
1522	731525.815	4343651.433	313.598	313.650	+0.052
1523	743674.652	4344675.076	292.960	292.950	-0.010
1524	753836.592	4355032.473	311.901	311.820	-0.081
1525	749050.543	4352110.428	392.418	392.480	+0.062
1526	754536.696	4341635.050	289.599	289.610	+0.011
1527	751354.975	4377397.099	358.774	358.840	+0.066
1528	846445.591	4409671.508	256.264	256.270	+0.006
1529	794186.313	4416282.354	349.133	349.130	-0.003
1530	774957.851	4409392.745	389.416	389.460	+0.044
1531	761045.074	4380636.333	368.641	368.700	+0.059
1532	754053.704	4384570.061	375.436	375.510	+0.074
1533	734788.974	4321732.337	327.193	327.200	+0.007
1534	717815.128	4304811.394	440.914	440.970	+0.056
1535	734813.253	4322340.297	339.194	339.280	+0.086
1536	764022.417	4298072.449	340.621	340.750	+0.129
1537	751303.622	4304727.166	426.199	426.330	+0.131
1538	745119.712	4327998.391	301.718	301.870	+0.152
1539	757188.141	4330235.216	293.675	293.820	+0.145
1540	784387.382	4349688.914	356.473	356.570	+0.097
1541	761746.094	4347791.555	297.511	297.640	+0.129
1542	790439.965	4365538.154	315.626	315.730	+0.104
1543	769934.209	4377747.222	336.764	336.790	+0.026
1544	779751.815	4373206.925	330.579	330.730	+0.151
1545	867129.290	4341348.539	311.318	311.220	-0.098
1546	874982.979	4339999.678	274.607	274.560	-0.047
1547	852765.871	4370231.143	236.832	236.840	+0.008
1548	851985.650	4361179.863	259.497	259.470	-0.027
1549	853013.836	4356662.063	251.401	251.400	-0.001
1550	832703.600	4386261.259	250.859	250.870	+0.011
1551	855052.889	4409803.862	254.260	254.250	-0.010
1552	855525.531	4412410.175	265.229	265.180	-0.049
604	870501.690	4336580.178	232.438	232.410	-0.028
605	876430.751	4335542.307	230.469	230.480	+0.011
606	874550.793	4345946.396	230.403	230.420	+0.017
607	848300.354	4393498.811	275.299	275.260	-0.039
608	854911.427	4405648.331	267.340	267.200	-0.140
609	847566.987	4403195.720	245.074	245.090	+0.016
610	841369.571	4394582.702	242.713	242.690	-0.023
611	840061.899	4384425.328	241.052	240.970	-0.082
612	843350.766	4379632.936	237.854	237.750	-0.104
613	833390.580	4388166.630	281.559	281.580	+0.021
614	838636.351	4404704.103	308.077	307.990	-0.087

615	827578.303	4399418.363	307.806	307.810	+0.004
616	821474.319	4426745.054	260.177	260.150	-0.027
617	847932.786	4410786.077	250.925	250.880	-0.045
618	844174.675	4422029.383	252.593	252.520	-0.073
619	838487.760	4417279.830	290.703	290.570	-0.133
620	833375.950	4418808.604	274.611	274.600	-0.011
621	825873.198	4415538.794	273.509	273.540	+0.031
622	816233.746	4431768.292	272.979	272.970	-0.009
1605	853255.018	4345340.227	302.633	302.690	+0.057
1606	859711.870	4337172.608	306.370	306.270	-0.100
1607	854869.337	4327169.384	240.017	240.040	+0.023
1608	855898.076	4335682.756	307.358	307.340	-0.018
1609	855006.626	4368233.845	306.676	306.660	-0.016
1610	857776.433	4358589.774	232.076	232.060	-0.016
1611	846951.728	4368818.535	269.378	269.380	+0.002
1612	853240.135	4356297.217	261.516	261.520	+0.004
1613	857192.365	4348899.375	269.199	269.100	-0.099
1614	834876.986	4424266.767	259.412	259.390	-0.022
1615	846098.431	4425030.421	252.264	252.300	+0.036
1616	851173.560	4423301.823	255.587	255.570	-0.017
1617	853777.941	4417844.279	328.738	328.740	+0.002
1618	823374.553	4435105.809	263.934	263.910	-0.024
1619	829310.711	4433334.340	332.664	332.550	-0.114
1620	827120.442	4429837.152	262.819	262.820	+0.001
1621	819908.563	4448761.090	265.485	265.430	-0.055
1622	808742.520	4455309.175	264.832	264.810	-0.022
1623	801387.629	4431047.995	289.995	290.090	+0.095
1624	813121.964	4418265.391	325.569	325.520	-0.049
1625	795782.283	4417447.215	334.316	334.290	-0.026
1626	788115.334	4396624.731	322.863	322.890	+0.027
1627	763152.445	4424391.394	389.385	389.350	-0.035
1628	740647.557	4426881.106	359.308	359.300	-0.008
1629	750229.053	4413848.092	358.021	358.120	+0.099
1630	763378.561	4394985.555	371.493	371.490	-0.003
1631	745608.996	4402044.612	403.546	403.640	+0.094
1632	732599.846	4373402.561	452.619	452.660	+0.041
1633	733024.348	4357267.382	336.235	336.250	+0.015
1634	733353.419	4343372.250	300.101	300.150	+0.049
1635	748102.325	4356046.187	376.140	376.130	-0.010
1636	752946.720	4342044.939	287.295	287.300	+0.005
1637	725991.997	4329663.623	424.988	424.960	-0.028
1638	723277.538	4302173.364	443.819	443.910	+0.091
1639	736151.899	4312523.890	368.553	368.490	-0.063
1640	763680.535	4297302.026	360.779	360.830	+0.051
1641	760501.284	4317129.984	339.194	339.340	+0.146
1642	783668.159	4349261.962	360.176	360.400	+0.224
1643	774984.038	4357682.494	367.241	367.180	-0.061
1644	791858.560	4373630.537	319.669	319.690	+0.021
1645	782158.927	4387971.610	347.383	347.480	+0.097

Average dz	+0.026
Minimum dz	-0.199
Maximum dz	+0.256
Average magnitude	0.054
Root mean square	0.072
Std deviation	0.068

Area 3 Block 1_3_4 (Bourbon, Linn, Crawford, Cherokee Counties) Output Control Report result

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Number	Easting	Northing	Known Z	Laser Z	Dz
101	854322.884	4183754.137	281.142	281.240	+0.098
102	852342.496	4212748.359	318.880	318.980	+0.100
123	873708.977	4114756.188	256.831	256.890	+0.059
124	858522.015	4114165.305	254.108	254.090	-0.018
125	866794.190	4109592.011	273.613	273.600	-0.013
126	877591.328	4134790.574	282.499	282.560	+0.061
127	882407.876	4135301.263	265.865	265.950	+0.085
128	871407.266	4129386.763	278.488	278.430	-0.058
129	861009.061	4145160.763	269.824	269.710	-0.114
130	860092.942	4130298.991	268.332	268.290	-0.042
131	855359.822	4127119.606	259.506	259.480	-0.026
132	879987.736	4152417.045	284.059	284.220	+0.161
133	849868.983	4148024.029	286.461	286.340	-0.121
134	861068.151	4169217.162	306.069	306.040	-0.029
135	869528.968	4174545.949	291.452	291.400	-0.052
136	872413.439	4184544.898	287.065	287.150	+0.085
137	881824.151	4184875.534	265.704	265.780	+0.076
138	862472.420	4195413.519	259.683	259.830	+0.147
139	867508.582	4197844.305	275.752	275.690	-0.062
140	871350.687	4205508.599	273.767	273.680	-0.087
141	856105.403	4200021.935	270.476	270.420	-0.056
142	883207.243	4206010.470	252.080	252.230	+0.150
143	849544.548	4225556.905	338.852	338.850	-0.002
144	858652.734	4229754.919	282.983	283.160	+0.177
145	878170.350	4243877.645	249.142	249.300	+0.158
146	867931.354	4231983.443	253.909	253.970	+0.061
147	869536.033	4228829.128	275.916	276.130	+0.214
148	853604.794	4250333.850	305.430	305.470	+0.040
149	860086.825	4188846.417	284.123	284.230	+0.107
219	854276.434	4113928.448	249.514	249.490	-0.024
220	864893.721	4109525.849	266.913	266.860	-0.053
221	882365.666	4115110.166	261.749	261.800	+0.051
222	878832.956	4129683.964	271.612	271.740	+0.128
223	867634.627	4129248.149	269.670	269.560	-0.110
224	858320.467	4133799.874	271.128	271.110	-0.018
225	861505.068	4133334.028	272.722	272.810	+0.088
226	876549.576	4157138.170	293.332	293.450	+0.118
227	880278.542	4145702.403	269.465	269.600	+0.135
228	867427.897	4145415.153	289.219	289.180	-0.039
229	855454.215	4159492.166	295.690	295.550	-0.140
230	859600.052	4148358.879	267.926	267.940	+0.014
231	875291.500	4170083.210	285.910	286.040	+0.130
232	848763.765	4164129.430	277.762	277.670	-0.092
233	864713.479	4169648.831	309.698	309.710	+0.012
234	879569.444	4198264.058	241.973	241.970	-0.003
235	854231.156	4188529.817	277.016	277.010	-0.006
236	862092.353	4191583.154	269.837	269.960	+0.123
237	871793.455	4195823.155	269.115	269.150	+0.035
238	873609.970	4205624.647	274.833	274.880	+0.047
239	857335.578	4206097.460	333.313	333.340	+0.027
240	872528.485	4228138.756	271.661	271.690	+0.029

241	847200.069	4225850.640	303.436	303.480	+0.044
242	875718.922	4228300.455	273.978	274.070	+0.092
243	863922.648	4239080.039	284.077	284.190	+0.113
244	857611.374	4237983.616	298.001	298.070	+0.069
245	862174.082	4252280.291	278.617	278.670	+0.053
246	862222.321	4256708.771	278.386	278.410	+0.024
247	848671.479	4251710.036	317.996	318.030	+0.034
248	850705.543	4243729.477	283.574	283.570	-0.004
249	849187.104	4236023.412	285.871	285.700	-0.171
401	856191.261	4107702.215	242.931	242.870	-0.061
402	860999.554	4114288.304	250.937	250.770	-0.167
404	870850.563	4135911.643	280.871	280.910	+0.039
406	857299.612	4138610.121	259.023	259.000	-0.023
407	858532.029	4129651.743	268.468	268.200	-0.268
408	863155.813	4132943.675	270.498	270.530	+0.032
409	883094.309	4157809.326	294.761	294.700	-0.061
410	879133.620	4145720.323	269.314	269.360	+0.046
411	851819.913	4157823.990	287.357	287.230	-0.127
412	858958.470	4158099.839	281.956	281.920	-0.036
413	867302.602	4166501.008	305.291	305.150	-0.141
414	853703.553	4172436.451	289.514	289.460	-0.054
417	878440.898	4194727.298	264.193	264.210	+0.017
418	883046.405	4202809.940	268.173	268.190	+0.017
419	856756.238	4188691.892	264.094	264.140	+0.046
420	868435.853	4195693.771	264.985	264.990	+0.005
421	872832.467	4195878.455	257.050	257.050	+0.000
422	874554.526	4207256.959	285.015	285.060	+0.045
423	879972.616	4205875.352	265.161	265.100	-0.061
424	854488.854	4227349.000	318.131	318.290	+0.159
425	872818.227	4222659.525	262.870	262.830	-0.040
426	875031.521	4232309.832	265.331	265.400	+0.069
427	880267.349	4235708.417	246.294	246.390	+0.096
429	860258.728	4238870.723	299.201	299.340	+0.139
430	867252.804	4229824.235	269.753	269.810	+0.057
431	877737.974	4246493.105	250.584	250.710	+0.126
432	861557.280	4200210.306	279.013	279.150	+0.137
433	850777.121	4202992.517	334.307	334.320	+0.013
434	867270.500	4206939.760	262.131	262.150	+0.019
435	863008.462	4249079.150	300.458	300.550	+0.092
460	866344.441	4238372.229	297.502	297.640	+0.138
519	855837.350	4114031.923	252.837	252.760	-0.077
520	864231.578	4109517.105	264.914	264.840	-0.074
521	880376.289	4111757.908	252.034	252.100	+0.066
522	869852.815	4135869.103	278.503	278.420	-0.083
523	876255.759	4129570.810	277.401	277.480	+0.079
524	866581.924	4129209.679	271.302	271.320	+0.018
525	855358.211	4127119.865	259.552	259.430	-0.122
526	861501.790	4133688.229	273.007	273.100	+0.093
527	879717.168	4157238.858	287.464	287.570	+0.106
528	870688.435	4145530.429	292.686	292.700	+0.014
529	848983.478	4159272.776	289.424	289.390	-0.034
530	858954.163	4153252.864	282.252	282.190	-0.062
531	871286.635	4166660.178	310.331	310.350	+0.019
532	861445.262	4166290.880	290.104	290.120	+0.016
533	855569.752	4175475.101	303.393	303.470	+0.077
534	869431.032	4190891.833	275.885	275.920	+0.035

535	879801.937	4192138.271	285.188	285.230	+0.042
536	877931.023	4197039.238	256.189	256.180	-0.009
537	883417.534	4202829.964	257.543	257.580	+0.037
538	854230.783	4188531.335	277.084	277.210	+0.126
539	862163.872	4190583.453	256.955	256.980	+0.025
540	864412.973	4197126.553	268.102	268.070	-0.032
541	863929.453	4205158.802	283.180	283.160	-0.020
542	850110.720	4225574.340	317.952	318.050	+0.098
543	858653.207	4229752.776	282.918	283.100	+0.182
544	875718.014	4228302.806	274.198	274.240	+0.042
545	880268.956	4235778.020	247.117	247.250	+0.133
546	856223.850	4234673.071	302.009	302.060	+0.051
547	865764.239	4235108.884	269.687	269.700	+0.013
601	852252.962	4214954.297	270.375	270.460	+0.085
602	862622.827	4198532.004	274.021	274.080	+0.059
603	846328.373	4202800.624	321.532	321.530	-0.002
628	856272.462	4105971.534	247.221	247.150	-0.071
629	878791.496	4109386.087	254.981	255.030	+0.049
630	869084.395	4122377.965	273.204	273.120	-0.084
631	882353.440	4136249.668	262.433	262.540	+0.107
632	853435.373	4135205.185	255.511	255.490	-0.021
633	882923.851	4149164.562	280.847	280.820	-0.027
634	858703.056	4158089.051	287.440	287.280	-0.160
635	849517.117	4148008.994	282.919	282.860	-0.059
636	877599.696	4171990.986	281.280	281.360	+0.080
637	848481.629	4172162.043	285.350	285.270	-0.080
638	850296.668	4222335.214	318.018	318.150	+0.132
639	872869.966	4221755.770	262.930	262.900	-0.030
641	853525.209	4251920.082	308.724	308.670	-0.054
642	873772.180	4251142.858	252.728	252.820	+0.092
1601	880025.423	4207487.277	262.030	262.020	-0.010
1602	872845.149	4191323.477	276.993	277.020	+0.027
1603	883446.955	4184946.192	262.606	262.660	+0.054

Average dz	+0.021
Minimum dz	-0.268
Maximum dz	+0.214
Average magnitude	0.071
Root mean square	0.087
Std deviation	0.085

9 Ground Control Survey Reports

Coordinate List

Constrained Adjustments

NGS Data Reports

Ground Survey field Logs

TerraPOS Adjustments

1120103 KS-AREA 1 (BUTLER CO) *** GROUND SURVEY FILE ***
HORIZONTAL - NAD 83/07 UTM ZONE 14
VERTICAL - NAVD88 METER

STATION	EASTING	NORTHING	ELEVATION
105	699573.886	4202384.470	426.464
106	694371.590	4209618.516	432.844
107	709146.492	4199556.376	448.396
108	697965.211	4192159.764	414.808
109	712716.746	4181029.166	462.694
110	699033.186	4171563.157	431.237
111	714836.372	4158583.730	472.113
112	701024.099	4156526.966	439.938
113	690409.731	4159557.358	410.620
114	687318.119	4180400.524	394.185
115	700931.870	4183991.289	433.379
116	670868.515	4172856.486	407.474
117	669580.844	4157259.832	380.412
118	675520.378	4188288.013	397.574
119	681683.729	4201272.937	442.109
120	667053.652	4207107.587	425.621
121	688102.788	4206225.361	435.809
122	676469.184	4212480.838	420.896
201	693768.368	4209579.420	436.770
202	700654.821	4216257.101	451.332
203	708991.278	4205372.048	450.383
204	701264.759	4178986.259	428.776
205	707470.451	4187391.927	457.498
206	707500.608	4156750.515	448.932
207	696750.247	4166094.065	403.796
208	686873.106	4173070.315	403.338
209	692934.289	4182166.115	414.921
210	686566.506	4154602.475	398.326
211	680354.890	4178676.434	398.101
212	665894.378	4180173.148	410.906
213	682550.541	4188083.600	427.465
214	668997.701	4192760.252	402.924
215	686706.492	4194916.350	408.341
216	675924.454	4206031.751	425.020
217	674695.828	4199560.328	416.489
218	667096.966	4212367.083	421.429
501	694259.577	4214468.111	449.762
502	713914.926	4210957.882	471.970
503	704393.379	4195409.896	440.216
504	715810.525	4187581.457	490.956
505	709497.029	4172533.857	466.345
506	709723.668	4163990.788	435.585
507	697086.101	4153189.252	405.019
508	687043.119	4165925.256	396.293
509	709186.192	4182571.786	440.993
510	676185.420	4154402.735	369.491
511	678439.789	4172450.536	378.809
512	672416.746	4178531.966	399.773
513	688179.078	4187299.426	408.024
514	664073.481	4187997.585	407.439
515	677014.197	4194794.340	409.435
516	692415.008	4198283.156	419.282
517	694477.407	4204777.229	425.196
518	686238.631	4212606.040	450.062
623	707176.782	4212892.692	448.861
624	692751.586	4187016.546	414.425

625	699034.350	4171563.381	431.237
626	672704.179	4163985.611	386.129
627	667513.354	4199438.831	417.170
C 334	676869.179	4206016.392	420.690
D 40	693319.434	4173831.378	421.096
ELDORADO	688092.295	4187288.981	409.690
HBRK	649208.027	4240994.193	442.597
ICT1	649309.003	4161417.026	393.187
ICT3	657142.479	4179862.536	431.198
K 334	709510.620	4171728.566	469.828
X 240RESET	700006.534	4202958.194	428.770

1120103 KS-AREA 2
HORIZONTAL - NAD 83/07 UTM ZONE 14
VERTICAL - NAVD88 METER

STATION	EASTING	NORTHING	ELEVATION
1003	856241.275	4335267.059	308.005
1004	854059.004	4345518.798	302.824
1005	854007.232	4370912.102	282.624
1006	834781.268	4424297.326	259.822
1007	824322.424	4433323.503	260.734
1008	815657.229	4446643.969	263.234
1009	797691.817	4419177.932	339.691
1010	814814.124	4416565.706	323.958
1011	778310.826	4415230.511	376.895
1012	760940.851	4414613.006	378.035
1013	754525.726	4393504.696	414.103
1014	723422.418	4362460.484	349.934
1015	732305.805	4344802.837	314.923
1016	753353.904	4349298.974	367.510
1017	750419.805	4377940.820	368.273
103	871637.563	4346886.784	245.071
104	821511.960	4426748.599	259.826
1101	818243.369	4444817.534	264.001
1102	811638.425	4446506.592	264.250
1103	805663.100	4454657.092	264.809
1104	801919.419	4459054.806	266.884
1105	797787.796	4419199.529	340.918
1106	785682.497	4421920.322	345.977
1107	787914.734	4426841.610	334.281
1108	803847.548	4417802.943	345.965
1109	801384.075	4406423.085	345.347
1110	810626.330	4408428.126	336.544
1111	787923.707	4406711.968	368.577
1112	781996.395	4425018.793	342.090
1113	820313.768	4400306.558	307.959
1114	773540.294	4422907.991	390.357
1115	751787.749	4427537.188	320.657
1116	743118.565	4418905.331	387.922
1117	741044.715	4414184.104	397.150
1118	748698.978	4394887.748	416.004
1119	740738.298	4407543.897	391.730
1120	756827.449	4403024.075	374.689
1121	719105.415	4365688.639	385.047
1122	721877.875	4355377.976	328.069
1123	737219.491	4348837.863	298.689
1124	737851.356	4359005.675	331.294
1125	753306.614	4350648.652	373.949
1126	752738.186	4361019.700	335.537
1127	743471.414	4374716.835	332.584
1128	839053.451	4412871.842	324.678
1129	844693.679	4421543.827	252.198
1130	794212.907	4410582.262	343.867
1131	768518.189	4408409.072	386.951
1132	757933.961	4388852.645	412.377
1133	743764.890	4377747.628	336.985
1134	729327.667	4336380.684	313.892
1135	738770.010	4326489.495	310.625
1136	719500.159	4310150.790	389.958
1137	763647.634	4297019.475	360.064
1138	750685.778	4298267.379	411.411
1139	744401.391	4301237.441	464.358

1140	743303.348	4327916.375	303.830
1141	749926.529	4321807.671	343.641
1142	776713.340	4348751.943	343.046
1143	787198.530	4378294.366	337.954
1144	775864.664	4373113.904	352.732
1145	780645.751	4384700.077	339.933
1146	853295.681	4345192.330	305.160
1147	866666.149	4335894.633	275.875
1148	855955.860	4365725.670	235.668
1149	855401.296	4353339.813	246.738
1150	841947.918	4391889.952	243.185
1201	817623.883	4446882.205	262.194
1202	814259.246	4440954.847	261.440
1203	802857.488	4454900.275	266.987
1204	799743.504	4464625.375	267.171
1205	795349.284	4420907.947	337.152
1206	796564.355	4430410.898	320.696
1207	808312.413	4429323.478	292.963
1208	808365.504	4416427.844	332.692
1209	799018.315	4411180.085	314.265
1210	784007.218	4407353.819	360.837
1211	778549.440	4402335.417	350.812
1212	827786.652	4399434.577	318.294
1213	825733.560	4419042.373	262.312
1214	769510.985	4427787.989	410.392
1215	759976.798	4422613.040	365.265
1216	739938.153	4423847.962	399.653
1217	760833.574	4393651.185	422.847
1218	772020.038	4400500.533	381.621
1219	744148.019	4388284.827	419.861
1220	731273.789	4363156.389	400.407
1221	732695.874	4370169.095	425.503
1222	723056.382	4342424.883	344.108
1223	732858.500	4350114.097	327.509
1224	739789.227	4345791.955	295.897
1225	749415.800	4346847.333	324.515
1226	748612.288	4371712.099	407.705
1227	835943.243	4411996.976	332.172
1228	836239.783	4416024.322	355.459
1229	787860.880	4412347.958	360.438
1230	763387.380	4408235.837	404.964
1231	751133.056	4388519.590	396.267
1232	761256.301	4378428.180	379.227
1233	746539.022	4383538.029	394.206
1234	735260.443	4320094.361	327.272
1235	731097.877	4305668.309	449.721
1236	729302.983	4317498.277	341.015
1237	737901.428	4306417.196	393.258
1238	744240.027	4306076.293	413.971
1239	751287.135	4324825.914	323.043
1240	754992.613	4316181.408	349.859
1241	744893.043	4335017.917	347.433
1242	781880.682	4358743.946	360.887
1243	771680.010	4355244.393	346.798
1244	774498.677	4366608.474	378.348
1245	766102.079	4377943.124	380.457
1246	861685.293	4340770.588	302.462
1247	855942.702	4336010.545	299.849
1248	859324.263	4356186.558	233.879
1249	848362.893	4366230.522	256.714

1250	834992.982	4385869.775	240.346
1251	831319.038	4393123.601	310.872
1252	832552.948	4380073.262	284.611
1401	811496.512	4444152.703	260.439
1402	821760.610	4442238.880	280.668
1403	808459.731	4455890.391	264.806
1404	798972.182	4463008.815	266.161
1405	803235.050	4440300.772	305.307
1406	790617.035	4420487.547	320.655
1407	802413.379	4425830.733	303.872
1408	806415.145	4424121.978	302.154
1409	806454.725	4403428.679	336.703
1410	791340.826	4401247.033	356.350
1411	830672.268	4409263.098	328.699
1412	821089.163	4408727.341	276.345
1413	816920.946	4426515.364	269.911
1414	774822.098	4415132.405	361.136
1415	745367.748	4430310.369	355.314
1416	748074.747	4419177.802	349.526
1417	767765.324	4392302.239	373.418
1418	740406.051	4394642.729	413.171
1419	750811.669	4408526.409	372.499
1420	735972.229	4368690.250	385.660
1421	727022.615	4357086.453	359.233
1422	718918.640	4345691.477	361.403
1423	726041.914	4349483.255	312.603
1424	743237.621	4351902.407	337.903
1425	750989.128	4343930.130	295.605
1426	744890.516	4365035.084	323.074
1427	738724.280	4378810.393	384.262
1428	840265.398	4420508.934	254.711
1429	779754.815	4420096.173	358.814
1430	784929.594	4412220.005	337.173
1431	761618.940	4385646.986	391.494
1432	766171.721	4384234.129	375.305
1433	728178.091	4329755.376	371.458
1434	738473.017	4335843.719	353.503
1435	734609.800	4337274.358	324.671
1436	725277.139	4313208.482	358.652
1437	756089.367	4295169.101	394.453
1438	756870.207	4306550.169	408.276
1439	758143.116	4324321.815	309.652
1440	748555.618	4315193.645	426.954
1441	788473.121	4355772.802	355.956
1442	790887.660	4350230.388	320.603
1443	784071.995	4366149.501	353.728
1444	775465.453	4377914.186	340.687
1445	856742.355	4344008.468	268.879
1446	862739.901	4346001.902	231.694
1447	854395.673	4339030.081	289.694
1448	855392.916	4368450.386	294.349
1449	856341.279	4360977.737	233.076
1450	841283.127	4389449.246	247.622
1451	838650.263	4384022.168	241.019
1452	833038.591	4387695.017	264.633
1501	821210.679	4449089.279	269.955
1502	801544.412	4461381.850	266.359
1503	805056.429	4439600.141	262.753
1504	788053.824	4423714.069	303.977
1505	793333.117	4430515.025	290.147

1506	807202.123	4414004.622	308.634
1507	797685.952	4417508.719	340.707
1508	806671.015	4397946.550	348.556
1509	780348.440	4415042.434	375.962
1510	797792.350	4395675.526	318.575
1511	834245.021	4411316.430	337.419
1512	819896.665	4418887.442	306.564
1513	761761.121	4417268.399	381.110
1514	758946.621	4427915.125	390.961
1515	774466.544	4420820.812	394.070
1516	751340.055	4413107.996	342.340
1517	754734.622	4393782.874	410.351
1518	773362.613	4391854.438	334.701
1519	745493.066	4401067.656	384.937
1520	723040.978	4363267.601	355.970
1521	720900.106	4353300.038	339.429
1522	731525.815	4343651.433	313.598
1523	743674.652	4344675.076	292.960
1524	753836.592	4355032.473	311.901
1525	749050.543	4352110.428	392.418
1526	754536.696	4341635.050	289.599
1527	751354.975	4377397.099	358.774
1528	846445.591	4409671.508	256.264
1529	794186.313	4416282.354	349.133
1530	774957.851	4409392.745	389.416
1531	761045.074	4380636.333	368.641
1532	754053.704	4384570.061	375.436
1533	734788.974	4321732.337	327.193
1534	717815.128	4304811.394	440.914
1535	734813.253	4322340.297	339.194
1536	764022.417	4298072.449	340.621
1537	751303.622	4304727.166	426.199
1538	745119.712	4327998.391	301.718
1539	757188.141	4330235.216	293.675
1540	784387.382	4349688.914	356.473
1541	761746.094	4347791.555	297.511
1542	790439.965	4365538.154	315.626
1543	769934.209	4377747.222	336.764
1544	779751.815	4373206.925	330.579
1545	867129.290	4341348.539	311.318
1546	874982.979	4339999.678	274.607
1547	852765.871	4370231.143	236.832
1548	851985.650	4361179.863	259.497
1549	853013.836	4356662.063	251.401
1550	832703.600	4386261.259	250.859
1551	855052.889	4409803.862	254.260
1552	855525.531	4412410.175	265.229
1605	853255.018	4345340.227	302.633
1606	859711.870	4337172.608	306.370
1607	854869.337	4327169.384	240.017
1608	855898.076	4335682.756	307.358
1609	855006.626	4368233.845	306.676
1610	857776.433	4358589.774	232.076
1611	846951.728	4368818.535	269.378
1612	853240.135	4356297.217	261.516
1613	857192.365	4348899.375	269.199
1614	834876.986	4424266.767	259.412
1615	846098.431	4425030.421	252.264
1616	851173.560	4423301.823	255.587
1617	853777.941	4417844.279	328.738

1618	823374.553	4435105.809	263.934
1619	829310.711	4433334.340	332.664
1620	827120.442	4429837.152	262.819
1621	819908.563	4448761.090	265.485
1622	808742.520	4455309.175	264.832
1623	801387.629	4431047.995	289.995
1624	813121.964	4418265.391	325.569
1625	795782.283	4417447.215	334.316
1626	788115.334	4396624.731	322.863
1627	763152.445	4424391.394	389.385
1628	740647.557	4426881.106	359.308
1629	750229.053	4413848.092	358.021
1630	763378.561	4394985.555	371.493
1631	745608.996	4402044.612	403.546
1632	732599.846	4373402.561	452.619
1633	733024.348	4357267.382	336.235
1634	733353.419	4343372.250	300.101
1635	748102.325	4356046.187	376.140
1636	752946.720	4342044.939	287.295
1637	725991.997	4329663.623	424.988
1638	723277.538	4302173.364	443.819
1639	736151.899	4312523.890	368.553
1640	763680.535	4297302.026	360.779
1641	760501.284	4317129.984	339.194
1642	783668.159	4349261.962	360.176
1643	774984.038	4357682.494	367.241
1644	791858.560	4373630.537	319.669
1645	782158.927	4387971.610	347.383
604	870501.690	4336580.178	232.438
605	876430.751	4335542.307	230.469
606	874550.793	4345946.396	230.403
607	848300.354	4393498.811	275.299
608	854911.427	4405648.331	267.340
609	847566.987	4403195.720	245.074
610	841369.571	4394582.702	242.713
611	840061.899	4384425.328	241.052
612	843350.766	4379632.936	237.854
613	833390.580	4388166.630	281.559
614	838636.351	4404704.103	308.077
615	827578.303	4399418.363	307.806
616	821474.319	4426745.054	260.177
617	847932.786	4410786.077	250.925
618	844174.675	4422029.383	252.593
619	838487.760	4417279.830	290.703
620	833375.950	4418808.604	274.611
621	825873.198	4415538.794	273.509
622	816233.746	4431768.292	272.979
917	801666.799	4438505.869	279.384
A 282	861923.720	4346762.962	231.830
BELVUE	741466.176	4344550.681	294.315
D 217	846354.834	4395511.203	244.750
HBRK	649208.027	4240994.193	442.537
KST5	756251.875	4325898.663	334.708
KSU1	706718.683	4330676.976	356.563
M 325	765473.476	4347773.924	327.605
MOID	898736.103	4340402.320	306.432
MOMV	852717.850	4475797.449	310.294
MOPL	863207.711	4367931.311	245.433
MORK	793556.872	4480194.366	358.798
MORM	937746.429	4359862.347	199.058

MOSB	887676.577	4307416.022	334.523
MOSV	854740.187	4430937.566	352.643
P 206	808769.671	4455190.534	264.632
P 215	717549.309	4304675.871	438.054
P 340	855986.210	4415614.136	302.550
Q 109	747502.108	4413262.000	372.177
Q 210	825110.964	4432590.699	261.009
SKIRT RM 2	779551.358	4378706.351	349.382
W 106	834872.287	4410991.896	334.793
W 281	831087.361	4387404.079	304.385
X 108	777717.979	4423884.198	382.069
X 119	737291.965	4378389.594	392.674
Y 341	856497.334	4361014.277	232.929
Z 231	732865.080	4337083.247	305.918
ZKC1	865164.282	4311904.987	338.681

1120103 KS-AREA 3 (Bourbon,Cherokee,Crawford,Linn)
HORIZONTAL - NAD 83/07 UTM ZONE 14
VERTICAL - NAVD88   METER

STATION	EASTING	NORTHING	ELEVATION
101	854322.884	4183754.137	281.142
102	852342.496	4212748.359	318.880
123	873708.977	4114756.188	256.831
124	858522.015	4114165.305	254.108
125	866794.190	4109592.011	273.613
126	877591.328	4134790.574	282.499
127	882407.876	4135301.263	265.865
128	871407.266	4129386.763	278.488
129	861009.061	4145160.763	269.824
130	860092.942	4130298.991	268.332
131	855359.822	4127119.606	259.506
132	879987.736	4152417.045	284.059
133	849868.983	4148024.029	286.461
134	861068.151	4169217.162	306.069
135	869528.968	4174545.949	291.452
136	872413.439	4184544.898	287.065
137	881824.151	4184875.534	265.704
138	862472.420	4195413.519	259.683
139	867508.582	4197844.305	275.752
140	871350.687	4205508.599	273.767
141	856105.403	4200021.935	270.476
142	883207.243	4206010.470	252.080
143	849544.548	4225556.905	338.852
144	858652.734	4229754.919	282.983
145	878170.350	4243877.645	249.142
146	867931.354	4231983.443	253.909
147	869536.033	4228829.128	275.916
148	853604.794	4250333.850	305.430
149	860086.825	4188846.417	284.123
219	854276.434	4113928.448	249.514
220	864893.721	4109525.849	266.913
221	882365.666	4115110.166	261.749
222	878832.956	4129683.964	271.612
223	867634.627	4129248.149	269.670
224	858320.467	4133799.874	271.128
225	861505.068	4133334.028	272.722
226	876549.576	4157138.170	293.332
227	880278.542	4145702.403	269.465
228	867427.897	4145415.153	289.219
229	855454.215	4159492.166	295.690
230	859600.052	4148358.879	267.926
231	875291.500	4170083.210	285.910
232	848763.765	4164129.430	277.762
233	864713.479	4169648.831	309.698
234	879569.444	4198264.058	241.973
235	854231.156	4188529.817	277.016
236	862092.353	4191583.154	269.837
237	871793.455	4195823.155	269.115
238	873609.970	4205624.647	274.833
239	857335.578	4206097.460	333.313
240	872528.485	4228138.756	271.661
241	847200.069	4225850.640	303.436
242	875718.922	4228300.455	273.978
243	863922.648	4239080.039	284.077
244	857611.374	4237983.616	298.001
245	862174.082	4252280.291	278.617

246	862222.321	4256708.771	278.386
247	848671.479	4251710.036	317.996
248	850705.543	4243729.477	283.574
249	849187.104	4236023.412	285.871
401	856191.261	4107702.215	242.931
402	860999.554	4114288.304	250.937
404	870850.563	4135911.643	280.871
406	857299.612	4138610.121	259.023
407	858532.029	4129651.743	268.468
408	863155.813	4132943.675	270.498
409	883094.309	4157809.326	294.761
410	879133.620	4145720.323	269.314
411	851819.913	4157823.990	287.357
412	858958.470	4158099.839	281.956
413	867302.602	4166501.008	305.291
414	853703.553	4172436.451	289.514
417	878440.898	4194727.298	264.193
418	883046.405	4202809.940	268.173
419	856756.238	4188691.892	264.094
420	868435.853	4195693.771	264.985
421	872832.467	4195878.455	257.050
422	874554.526	4207256.959	285.015
423	879972.616	4205875.352	265.161
424	854488.854	4227349.000	318.131
425	872818.227	4222659.525	262.870
426	875031.521	4232309.832	265.331
427	880267.349	4235708.417	246.294
429	860258.728	4238870.723	299.201
430	867252.804	4229824.235	269.753
431	877737.974	4246493.105	250.584
432	861557.280	4200210.306	279.013
433	850777.121	4202992.517	334.307
434	867270.500	4206939.760	262.131
435	863008.462	4249079.150	300.458
460	866344.441	4238372.229	297.502
519	855837.350	4114031.923	252.837
520	864231.578	4109517.105	264.914
521	880376.289	4111757.908	252.034
522	869852.815	4135869.103	278.503
523	876255.759	4129570.810	277.401
524	866581.924	4129209.679	271.302
525	855358.211	4127119.865	259.552
526	861501.790	4133688.229	273.007
527	879717.168	4157238.858	287.464
528	870688.435	4145530.429	292.686
529	848983.478	4159272.776	289.424
530	858954.163	4153252.864	282.252
531	871286.635	4166660.178	310.331
532	861445.262	4166290.880	290.104
533	855569.752	4175475.101	303.393
534	869431.032	4190891.833	275.885
535	879801.937	4192138.271	285.188
536	877931.023	4197039.238	256.189
537	883417.534	4202829.964	257.543
538	854230.783	4188531.335	277.084
539	862163.872	4190583.453	256.955
540	864412.973	4197126.553	268.102
541	863929.453	4205158.802	283.180
542	850110.720	4225574.340	317.952
543	858653.207	4229752.776	282.918

544	875718.014	4228302.806	274.198
545	880268.956	4235778.020	247.117
546	856223.850	4234673.071	302.009
547	865764.239	4235108.884	269.687
601	852252.962	4214954.297	270.375
602	862622.827	4198532.004	274.021
603	846328.373	4202800.624	321.532
628	856272.462	4105971.534	247.221
629	878791.496	4109386.087	254.981
630	869084.395	4122377.965	273.204
631	882353.440	4136249.668	262.433
632	853435.373	4135205.185	255.511
633	882923.851	4149164.562	280.847
634	858703.056	4158089.051	287.440
635	849517.117	4148008.994	282.919
636	877599.696	4171990.986	281.280
637	848481.629	4172162.043	285.350
638	850296.668	4222335.214	318.018
639	872869.966	4221755.770	262.930
641	853525.209	4251920.082	308.724
642	873772.180	4251142.858	252.728
1601	880025.423	4207487.277	262.030
1602	872845.149	4191323.477	276.993
1603	883446.955	4184946.192	262.606

15:46:21, Fri Feb 03, 2012

INI file: C:\WINNT\GEOLAB.INI
Input file: Y:\1120103\GEOMAT~1\SURVEY\GEO\C1.IOB
Output file: Y:\1120103\GEOMAT~1\SURVEY\GEO\C1.LST

Geoid File: C:\GEOLAB2\G2009U06.GEO

PARAMETERS		OBSERVATIONS	
Description	Number	Description	Number
No. of Stations	67	Directions	0
Coord Parameters	189	Distances	0
Free Latitudes	64	Azimuths	0
Free Longitudes	64	Vertical Angles	0
Free Heights	61	Zenithal Angles	0
Fixed Coordinates	12	Angles	0
Astro. Latitudes	0	Heights	0
Astro. Longitudes	0	Height Differences	0
Geoid Records	0	Auxiliary Params.	0
All Aux. Pars.	0	2-D Coords.	0
Direction Pars.	0	2-D Coord. Diffs.	0
Scale Parameters	0	3-D Coords.	0
Constant Pars.	0	3-D Coord. Diffs.	459
Rotation Pars.	0		
Translation Pars.	0		
	--------		--------
Total Parameters	189	Total Observations	459
Degrees of Freedom = 270			

SUMMARY OF SELECTED OPTIONS

OPTION	SELECTION
Computation Mode	Adjustment
Maximum Iterations	5
Convergence Criterion	0.00100
Confidence Level for Statistics	95.000
Covariance Matrix Computation	Connected Portion Only
Residual Rejection Criterion	Tau Max
Confidence Region Types	3D Station Relative
Relative Confidence Regions	Connected Only
Variance Factor (VF) Known	Yes
CMULT (Multiply Parm Cov With VF)	Yes
RMULT (Multiply Res Cov With VF)	No
Force Convergence in Max Iters	Yes
Distances Affect 3D	No
Full Inverse Computed	No
Normals Reordered	Yes
Coordinates Generated	No
Geoid Interpolation Method	Bi-Linear

Adjusted NEO Coordinates:

CODE	FFF	STATION	NORTHING STD DEV	EASTING STD DEV	O-HEIGHT STD DEV	MAPPROJ
NEO	000	105	4202384.470	699573.886	426.464	UTM 14
			0.007	0.007	0.001	
SFMC		105	1.00009058	1 23 49.879205		UTM 14
NEO	000	106	4209618.516	694371.590	432.844	UTM 14
			0.007	0.007	0.004	
SFMC		106	1.00006533	1 21 50.378446		UTM 14
NEO	000	107	4199556.376	709146.492	448.396	UTM 14
			0.010	0.010	0.007	
SFMC		107	1.00013878	1 27 46.044827		UTM 14
NEO	000	108	4192159.764	697965.211	414.808	UTM 14
			0.009	0.009	0.006	
SFMC		108	1.00008272	1 22 52.884824		UTM 14
NEO	000	109	4181029.166	712716.746	462.694	UTM 14
			0.010	0.010	0.008	
SFMC		109	1.00015736	1 28 43.780612		UTM 14
NEO	000	110	4171563.157	699033.186	431.237	UTM 14
			0.009	0.009	0.007	
SFMC		110	1.00008796	1 22 46.407193		UTM 14
NEO	000	111	4158583.730	714836.372	472.113	UTM 14
			0.011	0.011	0.009	
SFMC		111	1.00016855	1 28 57.741414		UTM 14
NEO	000	112	4156526.966	701024.099	439.938	UTM 14
			0.011	0.011	0.009	
SFMC		112	1.00009779	1 23 11.602548		UTM 14
NEO	000	113	4159557.358	690409.731	410.620	UTM 14
			0.011	0.011	0.009	
SFMC		113	1.00004660	1 18 52.950959		UTM 14
NEO	000	114	4180400.524	687318.119	394.185	UTM 14
			0.009	0.009	0.006	
SFMC		114	1.00003220	1 18 7.780727		UTM 14
NEO	000	115	4183991.289	700931.870	433.379	UTM 14
			0.009	0.009	0.007	
SFMC		115	1.00009730	1 23 53.985910		UTM 14
NEO	000	116	4172856.486	670868.515	407.474	UTM 14
			0.006	0.006	0.005	
SFMC		116	0.99995962	1 11 5.992186		UTM 14
NEO	000	117	4157259.832	669580.844	380.412	UTM 14
			0.011	0.011	0.010	
SFMC		117	0.99995423	1 10 12.478838		UTM 14
NEO	000	118	4188288.013	675520.378	397.574	UTM 14
			0.007	0.007	0.003	
SFMC		118	0.99997946	1 13 24.025586		UTM 14
NEO	000	119	4201272.937	681683.729	442.109	UTM 14
			0.010	0.010	0.008	
SFMC		119	1.00000657	1 16 17.754051		UTM 14
NEO	000	120	4207107.587	667053.652	425.621	UTM 14
			0.014	0.014	0.012	
SFMC		120	0.99994372	1 10 17.369419		UTM 14
NEO	000	121	4206225.361	688102.788	435.809	UTM 14
			0.010	0.010	0.010	
SFMC		121	1.00003580	1 19 6.945931		UTM 14
NEO	000	122	4212480.838	676469.184	420.896	UTM 14

Adjusted NEO Coordinates:

CODE	FFF	STATION	NORTHING STD DEV	EASTING STD DEV	O-HEIGHT STD DEV	MAPPROJ
			0.008	0.008	0.008	
SFMC		122	0.99998355	1 14 22.631943		UTM 14
NEO	000	201	4209579.420	693768.368	436.770	UTM 14
			0.007	0.007	0.004	
SFMC		201	1.00006245	1 21 35.092482		UTM 14
NEO	000	202	4216257.101	700654.821	451.332	UTM 14
			0.016	0.016	0.017	
SFMC		202	1.00009590	1 24 39.840193		UTM 14
NEO	000	203	4205372.048	708991.278	450.383	UTM 14
			0.009	0.009	0.006	
SFMC		203	1.00013798	1 27 52.055934		UTM 14
NEO	000	204	4178986.259	701264.759	428.776	UTM 14
			0.007	0.007	0.004	
SFMC		204	1.00009896	1 23 54.140761		UTM 14
NEO	000	205	4187391.927	707470.451	457.498	UTM 14
			0.009	0.009	0.007	
SFMC		205	1.00013019	1 26 43.349135		UTM 14
NEO	000	206	4156750.515	707500.608	448.932	UTM 14
			0.011	0.011	0.009	
SFMC		206	1.00013038	1 25 52.617330		UTM 14
NEO	000	207	4166094.065	696750.247	403.796	UTM 14
			0.008	0.008	0.005	
SFMC		207	1.00007683	1 21 40.791800		UTM 14
NEO	000	208	4173070.315	686873.106	403.338	UTM 14
			0.008	0.008	0.004	
SFMC		208	1.00003015	1 17 45.546991		UTM 14
NEO	000	209	4182166.115	692934.289	414.921	UTM 14
			0.008	0.008	0.005	
SFMC		209	1.00005850	1 20 30.960180		UTM 14
NEO	000	210	4154602.475	686566.506	398.326	UTM 14
			0.012	0.012	0.011	
SFMC		210	1.00002876	1 17 10.048123		UTM 14
NEO	000	211	4178676.434	680354.890	398.101	UTM 14
			0.008	0.008	0.007	
SFMC		211	1.00000066	1 15 11.148160		UTM 14
NEO	000	212	4180173.148	665894.378	410.906	UTM 14
			0.008	0.008	0.007	
SFMC		212	0.99993898	1 9 11.738773		UTM 14
NEO	000	213	4188083.600	682550.541	427.465	UTM 14
			0.008	0.008	0.003	
SFMC		213	1.00001047	1 16 19.967030		UTM 14
NEO	000	214	4192760.252	668997.701	402.924	UTM 14
			0.009	0.009	0.006	
SFMC		214	0.99995178	1 10 46.637710		UTM 14
NEO	000	215	4194916.350	686706.492	408.341	UTM 14
			0.008	0.008	0.005	
SFMC		215	1.00002936	1 18 14.521801		UTM 14
NEO	000	216	4206031.751	675924.454	425.020	UTM 14
			0.006	0.006	0.006	
SFMC		216	0.99998119	1 13 59.594759		UTM 14
NEO	000	217	4199560.328	674695.828	416.489	UTM 14
			0.010	0.010	0.007	

Adjusted NEO Coordinates:

CODE	FFF	STATION	NORTHING STD DEV	EASTING STD DEV	O-HEIGHT STD DEV	MAPPROJ
SFMC		217	0.99997589	1 13 19.388571		UTM 14
NEO	000	218	4212367.083	667096.966	421.429	UTM 14
			0.009	0.009	0.009	
SFMC		218	0.99994389	1 10 25.646529		UTM 14
NEO	000	501	4214468.111	694259.577	449.762	UTM 14
			0.008	0.008	0.005	
SFMC		501	1.00006479	1 21 55.255408		UTM 14
NEO	000	502	4210957.882	713914.926	471.970	UTM 14
			0.011	0.011	0.009	
SFMC		502	1.00016362	1 30 5.873688		UTM 14
NEO	000	503	4195409.896	704393.379	440.216	UTM 14
			0.009	0.009	0.006	
SFMC		503	1.00011457	1 25 39.594520		UTM 14
NEO	000	504	4187581.457	715810.525	490.956	UTM 14
			0.012	0.012	0.010	
SFMC		504	1.00017368	1 30 12.600618		UTM 14
NEO	000	505	4172533.857	709497.029	466.345	UTM 14
			0.010	0.010	0.008	
SFMC		505	1.00014062	1 27 8.863786		UTM 14
NEO	000	506	4163990.788	709723.668	435.585	UTM 14
			0.008	0.008	0.006	
SFMC		506	1.00014180	1 27 0.018822		UTM 14
NEO	000	507	4153189.252	697086.101	405.019	UTM 14
			0.012	0.012	0.011	
SFMC		507	1.00007848	1 21 28.612683		UTM 14
NEO	000	508	4165925.256	687043.119	396.293	UTM 14
			0.009	0.009	0.007	
SFMC		508	1.00003094	1 17 38.970217		UTM 14
NEO	000	509	4182571.786	709186.192	440.993	UTM 14
			0.009	0.009	0.007	
SFMC		509	1.00013900	1 27 18.140409		UTM 14
NEO	000	510	4154402.735	676185.420	369.491	UTM 14
			0.012	0.012	0.012	
SFMC		510	0.99998237	1 12 52.348810		UTM 14
NEO	000	511	4172450.536	678439.789	378.809	UTM 14
			0.008	0.008	0.006	
SFMC		511	0.99999220	1 14 14.280296		UTM 14
NEO	000	512	4178531.966	672416.746	399.773	UTM 14
			0.007	0.007	0.006	
SFMC		512	0.99996616	1 11 52.549786		UTM 14
NEO	000	513	4187299.426	688179.078	408.024	UTM 14
			0.007	0.007	0.001	
SFMC		513	1.00003617	1 18 39.851611		UTM 14
NEO	000	514	4187997.585	664073.481	407.439	UTM 14
			0.010	0.010	0.008	
SFMC		514	0.99993158	1 8 36.630323		UTM 14
NEO	000	515	4194794.340	677014.197	409.435	UTM 14
			0.008	0.008	0.005	
SFMC		515	0.99998594	1 14 10.849606		UTM 14
NEO	000	516	4198283.156	692415.008	419.282	UTM 14
			0.010	0.010	0.007	
SFMC		516	1.00005602	1 20 43.196694		UTM 14

Adjusted NEO Coordinates:

CODE	FFF	STATION	NORTHING STD DEV	EASTING STD DEV	O-HEIGHT STD DEV	MAPPROJ
NEO	000	517	4204777.229	694477.407	425.196	UTM 14
			0.013	0.013	0.013	
SFMC		517	1.00006584	1 21 45.358766		UTM 14
NEO	000	518	4212606.040	686238.631	450.062	UTM 14
			0.010	0.010	0.010	
SFMC		518	1.00002720	1 18 29.657391		UTM 14
NEO	000	623	4212892.692	707176.782	448.861	UTM 14
			0.010	0.010	0.007	
SFMC		623	1.00012867	1 27 19.065801		UTM 14
NEO	000	624	4187016.546	692751.586	414.425	UTM 14
			0.010	0.010	0.007	
SFMC		624	1.00005763	1 20 33.984654		UTM 14
NEO	000	625	4171563.381	699034.350	431.237	UTM 14
			0.009	0.009	0.007	
SFMC		625	1.00008797	1 22 46.436578		UTM 14
NEO	000	626	4163985.611	672704.179	386.129	UTM 14
			0.008	0.008	0.008	
SFMC		626	0.99996740	1 11 39.387874		UTM 14
NEO	000	627	4199438.831	667513.354	417.170	UTM 14
			0.011	0.011	0.009	
SFMC		627	0.99994562	1 10 18.481321		UTM 14
NEO	001	C 334	4206016.392	676869.179	420.690	UTM 14
			0.012	0.012	0.000	
SFMC		C 334	0.99998530	1 14 23.393922		UTM 14
NEO	001	D 40	4173831.378	693319.434	421.096	UTM 14
			0.006	0.006	0.000	
SFMC		D 40	1.00006034	1 20 27.526475		UTM 14
NEO	001	ELDORADO	4187288.981	688092.295	409.690	UTM 14
			0.007	0.007	0.000	
SFMC		ELDORADO	1.00003577	1 18 37.661003		UTM 14
NEO	110	HBRK	4240994.193	649208.027	442.597	UTM 14
			0.000	0.000	0.010	
SFMC		HBRK	0.99987418	1 3 28.608785		UTM 14
NEO	110	ICT1	4161417.026	649309.003	393.187	UTM 14
			0.000	0.000	0.011	
SFMC		ICT1	0.99987460	1 1 54.239980		UTM 14
NEO	111	ICT3	4179862.536	657142.479	431.198	UTM 14
			0.000	0.000	0.000	
SFMC		ICT3	0.99990416	1 5 32.459152		UTM 14
NEO	001	K 334	4171728.566	709510.620	469.828	UTM 14
			0.007	0.007	0.000	
SFMC		K 334	1.00014069	1 27 7.836390		UTM 14
NEO	001	X 240 RESET	4202958.194	700006.534	428.770	UTM 14
			0.007	0.007	0.000	
SFMC		X 240 RESET	1.00009271	1 24 1.708047		UTM 14

Adjusted PLH Coordinates:

CODE	FFF	STATION	LATITUDE	STD DEV	LONGITUDE	STD DEV	ELIP-HEIGHT	STD DEV
PLH	000	105	N 37 56 49.73884	0.007	W 96 43 43.15932	0.007	396.881	0.001
PLH	000	106	N 38 00 48.34339	0.007	W 96 47 9.10957	0.007	403.347	0.004
PLH	000	107	N 37 55 10.30475	0.010	W 96 37 14.21697	0.010	418.655	0.007
PLH	000	108	N 37 51 19.50172	0.009	W 96 44 59.12719	0.009	385.379	0.006
PLH	000	109	N 37 45 6.70139	0.010	W 96 35 7.72280	0.010	433.006	0.008
PLH	000	110	N 37 40 10.87191	0.009	W 96 44 35.78147	0.009	401.876	0.007
PLH	000	111	N 37 32 57.26023	0.011	W 96 34 4.95490	0.011	442.465	0.009
PLH	000	112	N 37 32 1.79196	0.011	W 96 43 29.44194	0.011	410.558	0.009
PLH	000	113	N 37 33 48.16583	0.011	W 96 50 38.79643	0.011	381.402	0.009
PLH	000	114	N 37 45 6.30812	0.009	W 96 52 25.47359	0.009	364.996	0.006
PLH	000	115	N 37 46 52.32972	0.009	W 96 43 5.97755	0.009	403.970	0.007
PLH	000	116	N 37 41 13.25271	0.006	W 97 03 43.67449	0.006	378.496	0.005
PLH	000	117	N 37 32 48.30966	0.011	W 97 04 49.24185	0.011	351.491	0.010
PLH	000	118	N 37 49 30.50523	0.007	W 97 00 20.42342	0.007	368.461	0.003
PLH	000	119	N 37 56 27.21088	0.010	W 96 55 56.69519	0.010	412.863	0.008
PLH	000	120	N 37 59 46.52777	0.014	W 97 05 50.86711	0.014	396.544	0.012
PLH	000	121	N 37 59 3.08631	0.010	W 96 51 29.21745	0.010	406.444	0.010
PLH	000	122	N 38 02 34.34301	0.008	W 96 59 20.28530	0.008	391.706	0.008
PLH	000	201	N 38 00 47.54077	0.007	W 96 47 33.86792	0.007	407.285	0.004
PLH	000	202	N 38 04 18.63953	0.016	W 96 42 44.93307	0.016	421.733	0.017
PLH	000	203	N 37 58 18.96980	0.009	W 96 37 14.48798	0.009	420.630	0.006
PLH	000	204	N 37 44 9.79341	0.007	W 96 42 57.37262	0.007	399.371	0.004
PLH	000	205	N 37 48 37.31983	0.009	W 96 38 35.38340	0.009	427.886	0.007
PLH	000	206	N 37 32 3.87534	0.011	W 96 39 5.53449	0.011	419.437	0.009
PLH	000	207	N 37 37 15.31576	0.008	W 96 46 14.20667	0.008	374.476	0.005
PLH	000	208	N 37 41 8.94840	0.008	W 96 52 50.42436	0.008	374.146	0.004

Adjusted PLH Coordinates:

CODE	FFF	STATION	LATITUDE	STD DEV	LONGITUDE	STD DEV	ELIP-HEIGHT	STD DEV
PLH	000	209	N 37 45 59.35427	0.008	W 96 48 34.43872	0.008	385.680	0.005
PLH	000	210	N 37 31 10.32567	0.012	W 96 53 19.88358	0.012	369.166	0.011
PLH	000	211	N 37 44 15.43798	0.008	W 96 57 11.38790	0.008	368.976	0.007
PLH	000	212	N 37 45 13.82340	0.008	W 97 07 0.65331	0.008	381.959	0.007
PLH	000	213	N 37 49 18.91136	0.008	W 96 55 33.21341	0.008	398.304	0.003
PLH	000	214	N 37 51 59.96855	0.009	W 97 04 43.32674	0.009	373.861	0.006
PLH	000	215	N 37 52 57.43615	0.008	W 96 52 36.97679	0.008	379.080	0.005
PLH	000	216	N 37 59 5.60355	0.006	W 96 59 48.31648	0.006	395.838	0.006
PLH	000	217	N 37 55 36.60875	0.010	W 97 00 44.31322	0.010	387.323	0.007
PLH	000	218	N 38 02 37.05596	0.009	W 97 05 44.67845	0.009	392.349	0.009
PLH	000	501	N 38 03 25.66329	0.008	W 96 47 8.96542	0.008	420.276	0.005
PLH	000	502	N 38 01 15.91752	0.011	W 96 33 46.86517	0.011	442.147	0.009
PLH	000	503	N 37 52 59.76526	0.009	W 96 40 32.96684	0.009	410.598	0.006
PLH	000	504	N 37 48 36.50485	0.012	W 96 32 54.38963	0.012	461.138	0.010
PLH	000	505	N 37 40 33.95754	0.010	W 96 37 27.98860	0.010	436.777	0.008
PLH	000	506	N 37 35 56.80101	0.008	W 96 37 27.57247	0.008	406.035	0.006
PLH	000	507	N 37 30 16.62876	0.012	W 96 46 13.00250	0.012	375.703	0.011
PLH	000	508	N 37 37 17.13739	0.009	W 96 52 50.07833	0.009	367.107	0.007
PLH	000	509	N 37 45 59.64322	0.009	W 96 37 30.27798	0.009	411.381	0.007
PLH	000	510	N 37 31 11.19595	0.012	W 97 00 22.70655	0.012	340.476	0.012
PLH	000	511	N 37 40 54.89742	0.008	W 96 58 35.08078	0.008	349.728	0.006
PLH	000	512	N 37 44 16.26001	0.007	W 97 02 35.65588	0.007	370.750	0.006
PLH	000	513	N 37 48 49.36909	0.007	W 96 51 43.87055	0.007	378.825	0.001
PLH	000	514	N 37 49 28.75528	0.010	W 97 08 8.65450	0.010	378.464	0.008
PLH	000	515	N 37 53 0.44830	0.008	W 96 59 13.61729	0.008	380.273	0.005
PLH	000	516	N 37 54 42.32127	0.010	W 96 48 40.21378	0.010	389.886	0.007

Adjusted PLH Coordinates:

CODE	FFF	STATION	LATITUDE	STD DEV	LONGITUDE	STD DEV	ELIP-HEIGHT	STD DEV
PLH	000	517	N 37 58 11.29658	0.013	W 96 47 9.49461	0.013	395.702	0.013
PLH	000	518	N 38 02 31.35828	0.010	W 96 52 39.61958	0.010	420.736	0.010
PLH	000	623	N 38 02 24.27752	0.010	W 96 38 20.97814	0.010	419.151	0.007
PLH	000	624	N 37 48 36.76271	0.010	W 96 48 37.25959	0.010	385.171	0.007
PLH	000	625	N 37 40 10.87826	0.009	W 96 44 35.73375	0.009	401.876	0.007
PLH	000	626	N 37 36 24.33755	0.008	W 97 02 36.32005	0.008	357.153	0.008
PLH	000	627	N 37 55 37.53520	0.011	W 97 05 38.46206	0.011	388.095	0.009
PLH	001	C 334	N 37 59 4.44429	0.012	W 96 59 9.62492	0.012	391.499	0.000
PLH	001	D 40	N 37 41 28.81514	0.006	W 96 48 26.68347	0.006	391.825	0.000
PLH	001	ELDORADO	N 37 48 49.09481	0.007	W 96 51 47.42727	0.007	380.491	0.000
PLH	110	HBRK	N 38 18 16.71508	0.000	W 97 17 36.65570	0.000	413.724	0.010
PLH	110	ICT1	N 37 35 15.77368	0.000	W 97 18 31.95958	0.000	364.416	0.011
PLH	111	ICT3	N 37 45 9.31281	0.000	W 97 12 58.38183	0.000	402.333	0.000
PLH	001	K 334	N 37 40 7.83860	0.007	W 96 37 28.26698	0.007	440.261	0.000
PLH	001	X 240 RESET	N 37 57 7.99709	0.007	W 96 43 24.87169	0.007	399.175	0.000

Geoid Values:

CODE	NAME	N/S DEFLECTION	E/W DEFLECTION	UNDULATION
GEOI	105	+ 0 0 1.1	+ 0 0 3.1	-29.582
GEOI	106	- 0 0 0.5	+ 0 0 3.3	-29.497
GEOI	107	+ 0 0 0.6	+ 0 0 3.2	-29.741
GEOI	108	+ 0 0 3.0	+ 0 0 4.0	-29.429
GEOI	109	+ 0 0 1.4	+ 0 0 4.3	-29.688
GEOI	110	+ 0 0 0.0	+ 0 0 2.7	-29.360
GEOI	111	+ 0 0 0.4	+ 0 0 3.9	-29.648
GEOI	112	- 0 0 0.4	+ 0 0 2.9	-29.381
GEOI	113	+ 0 0 0.3	+ 0 0 2.3	-29.217
GEOI	114	- 0 0 0.3	+ 0 0 1.3	-29.189
GEOI	115	+ 0 0 1.6	+ 0 0 4.3	-29.409
GEOI	116	+ 0 0 0.8	+ 0 0 2.1	-28.977
GEOI	117	+ 0 0 0.3	+ 0 0 2.3	-28.921
GEOI	118	+ 0 0 1.0	+ 0 0 1.3	-29.112
GEOI	119	+ 0 0 0.7	+ 0 0 2.1	-29.245
GEOI	120	- 0 0 0.0	+ 0 0 2.1	-29.078
GEOI	121	- 0 0 0.1	+ 0 0 3.4	-29.366
GEOI	122	+ 0 0 0.1	+ 0 0 1.9	-29.190
GEOI	201	- 0 0 0.5	+ 0 0 3.4	-29.484
GEOI	202	- 0 0 0.5	+ 0 0 2.7	-29.599
GEOI	203	- 0 0 0.3	+ 0 0 2.7	-29.753
GEOI	204	+ 0 0 0.1	+ 0 0 3.7	-29.405
GEOI	205	+ 0 0 2.0	+ 0 0 4.2	-29.612
GEOI	206	- 0 0 0.1	+ 0 0 3.2	-29.495
GEOI	207	+ 0 0 0.2	+ 0 0 2.5	-29.319
GEOI	208	- 0 0 0.0	+ 0 0 1.9	-29.192
GEOI	209	+ 0 0 0.1	+ 0 0 2.4	-29.241
GEOI	210	+ 0 0 0.0	+ 0 0 2.2	-29.160
GEOI	211	+ 0 0 0.3	+ 0 0 1.8	-29.125
GEOI	212	+ 0 0 1.0	+ 0 0 2.0	-28.947
GEOI	213	+ 0 0 0.9	+ 0 0 1.1	-29.162
GEOI	214	+ 0 0 1.1	+ 0 0 2.1	-29.064
GEOI	215	+ 0 0 2.4	+ 0 0 2.1	-29.261
GEOI	216	+ 0 0 0.0	+ 0 0 1.7	-29.182
GEOI	217	+ 0 0 0.2	+ 0 0 1.8	-29.167
GEOI	218	+ 0 0 0.1	+ 0 0 2.0	-29.080
GEOI	501	- 0 0 0.3	+ 0 0 3.1	-29.486
GEOI	502	- 0 0 0.7	+ 0 0 2.8	-29.823
GEOI	503	+ 0 0 1.5	+ 0 0 3.5	-29.618
GEOI	504	+ 0 0 1.3	+ 0 0 4.5	-29.818
GEOI	505	+ 0 0 0.8	+ 0 0 3.8	-29.568
GEOI	506	+ 0 0 0.5	+ 0 0 3.7	-29.550
GEOI	507	- 0 0 0.0	+ 0 0 2.5	-29.317
GEOI	508	+ 0 0 0.4	+ 0 0 2.3	-29.185
GEOI	509	+ 0 0 1.5	+ 0 0 4.0	-29.612
GEOI	510	+ 0 0 0.0	+ 0 0 2.3	-29.015
GEOI	511	+ 0 0 0.7	+ 0 0 2.4	-29.081
GEOI	512	+ 0 0 0.9	+ 0 0 2.1	-29.023
GEOI	513	+ 0 0 1.6	+ 0 0 1.8	-29.200
GEOI	514	+ 0 0 1.3	+ 0 0 1.9	-28.975
GEOI	515	+ 0 0 1.4	+ 0 0 1.4	-29.162
GEOI	516	+ 0 0 2.1	+ 0 0 3.5	-29.396
GEOI	517	+ 0 0 0.6	+ 0 0 3.4	-29.494

Geoid Values:

CODE	NAME	N/S DEFLECTION	E/W DEFLECTION	UNDULATION
GEOI	518	+ 0 0 0.0	+ 0 0 3.0	-29.326
GEOI	623	- 0 0 0.6	+ 0 0 2.5	-29.711
GEOI	624	+ 0 0 2.1	+ 0 0 2.6	-29.254
GEOI	625	+ 0 0 0.0	+ 0 0 2.7	-29.360
GEOI	626	+ 0 0 0.5	+ 0 0 2.2	-28.975
GEOI	627	+ 0 0 0.5	+ 0 0 2.2	-29.075
GEOI	C 334	+ 0 0 0.1	+ 0 0 1.9	-29.191
GEOI	D 40	- 0 0 0.5	+ 0 0 2.4	-29.271
GEOI	ELDORADO	+ 0 0 1.6	+ 0 0 1.8	-29.199
GEOI	HBRK	- 0 0 0.3	+ 0 0 3.0	-28.873
GEOI	ICT1	+ 0 0 0.6	+ 0 0 0.4	-28.772
GEOI	ICT3	+ 0 0 0.7	+ 0 0 1.2	-28.865
GEOI	K 334	+ 0 0 0.6	+ 0 0 3.8	-29.567
GEOI	X 240 RESET	+ 0 0 1.1	+ 0 0 2.9	-29.595

Residuals (critical value = 3.986):

TYPE	AT	FROM	TO	OBSERVATION / STD DEV	RESIDUAL / STD DEV	STD RES / PPM
GROUP: 012812M.ASC ,obs#:		1				
DXCT		HBRK	105	46171.54660	0.000	0.005
				0.045	0.044	0.00
DYCT		HBRK	105	-30349.60940	-0.000	-0.001
				0.045	0.044	0.00
DZCT		HBRK	105	-31227.90670	-0.012	-0.280
				0.045	0.044	0.19
GROUP: 012812M.ASC ,obs#:		2				
DXCT		ICT3	105	44205.19360	-0.013	-0.388
				0.034	0.033	0.27
DYCT		ICT3	105	7948.39220	-0.032	-0.966
				0.034	0.033	0.67
DZCT		ICT3	105	17049.77810	-0.006	-0.177
				0.034	0.033	0.12
GROUP: 012812M.ASC ,obs#:		3				
DXCT		ICT1	105	53724.99970	-0.020	-0.444
				0.046	0.045	0.31
DYCT		ICT1	105	17978.94240	-0.013	-0.297
				0.046	0.044	0.20
DZCT		ICT1	105	31558.37200	0.011	0.240
				0.046	0.045	0.17
GROUP: 012812M.ASC ,obs#:		4				
DXCT		HBRK	106	41712.17130	0.003	0.075
				0.039	0.038	0.05
DYCT		HBRK	106	-25267.16850	0.007	0.197
				0.039	0.037	0.13
DZCT		HBRK	106	-25424.84290	-0.004	-0.113
				0.039	0.038	0.08
GROUP: 012812M.ASC ,obs#:		5				
DXCT		ICT3	106	39745.81930	-0.011	-0.343
				0.034	0.033	0.24
DYCT		ICT3	106	13030.83560	-0.027	-0.828
				0.034	0.033	0.57
DZCT		ICT3	106	22852.84020	0.004	0.116
				0.034	0.033	0.08
GROUP: 012812M.ASC ,obs#:		6				
DXCT		ICT1	106	49265.62550	-0.018	-0.403
				0.046	0.046	0.28
DYCT		ICT1	106	23061.38590	-0.008	-0.185
				0.046	0.045	0.13
DZCT		ICT1	106	37361.43370	0.021	0.458
				0.046	0.045	0.32
GROUP: 012812M.ASC ,obs#:		7				
DXCT		105	201	-5061.28990	0.003	0.563
				0.007	0.005	0.33
DYCT		105	201	5135.62330	0.011	2.001
				0.007	0.006	1.22
DZCT		105	201	5786.00150	-0.002	-0.413
				0.007	0.006	0.26
GROUP: 012812M.ASC ,obs#:		8				
DXCT		106	201	-601.91410	-0.000	0.000*
				0.000	0.000	0.06

Residuals (critical value = 3.986):

TYPE	AT	FROM	TO	OBSERVATION / STD DEV	RESIDUAL / STD DEV	STD RES / PPM
DYCT		106	201	53.18650	-0.000	-1.783
				0.001	0.000	0.44
DZCT		106	201	-17.07290	0.000	1.392
				0.001	0.000	0.40
GROUP: 012812M.ASC ,obs#:		9				
DXCT		106	203	14078.15580	0.015	1.766
				0.011	0.009	1.00
DYCT		106	203	-4523.02530	0.008	0.909
				0.011	0.009	0.52
DZCT		106	203	-3619.16250	-0.006	-0.690
				0.011	0.009	0.40
GROUP: 012812M.ASC ,obs#:		10				
DXCT		105	203	9618.80480	-0.006	-1.763
				0.007	0.004	0.65
DYCT		105	203	559.43430	-0.003	-0.899
				0.007	0.004	0.33
DZCT		105	203	2183.90080	0.002	0.678
				0.007	0.004	0.25
GROUP: 012812M.ASC ,obs#:		11				
DXCT		105	501	-4104.29450	-0.004	-0.452
				0.009	0.008	0.28
DYCT		105	501	8036.71200	-0.001	-0.079
				0.010	0.008	0.05
DZCT		105	501	9634.21700	-0.003	-0.413
				0.009	0.008	0.26
GROUP: 012812M.ASC ,obs#:		12				
DXCT		106	501	355.07400	0.001	0.451
				0.003	0.001	0.10
DYCT		106	501	2954.26290	0.000	0.074
				0.004	0.001	0.02
DZCT		106	501	3831.14130	0.000	0.411
				0.004	0.001	0.10
GROUP: 012812M.ASC ,obs#:		13				
DXCT		105	502	15035.08320	0.001	0.101
				0.012	0.007	0.05
DYCT		105	502	3297.63870	0.007	0.967
				0.012	0.007	0.43
DZCT		105	502	6496.80440	0.001	0.125
				0.012	0.007	0.06
GROUP: 012812M.ASC ,obs#:		14				
DXCT		106	502	19494.45770	-0.001	-0.102
				0.014	0.010	0.05
DYCT		106	502	-1784.79240	-0.010	-0.967
				0.014	0.010	0.51
DZCT		106	502	693.73480	-0.001	-0.123
				0.014	0.010	0.06
GROUP: 012812M.ASC ,obs#:		15				
DXCT		105	623	8545.31400	0.002	0.288
				0.009	0.006	0.14
DYCT		105	623	5374.17670	-0.002	-0.370
				0.009	0.006	0.18
DZCT		105	623	8142.94700	0.008	1.377

Residuals (critical value = 3.986):

TYPE	AT	FROM	TO	OBSERVATION / STD DEV	RESIDUAL / STD DEV	STD RES / PPM
				0.009	0.006	0.65
GROUP: 012812M.ASC ,obs#: 16						
DXCT		106	623	13004.69030	-0.002	-0.288
				0.009	0.006	0.14
DYCT		106	623	291.72370	0.002	0.370
				0.009	0.006	0.18
DZCT		106	623	2339.89250	-0.009	-1.377
				0.009	0.006	0.67
GROUP: 012812M.ASC ,obs#: 17						
DXCT		105	X 240 RESET	483.77700	0.000	0.000*
				0.001	0.000	0.07
DYCT		105	X 240 RESET	289.73630	-0.001	-3.291
				0.001	0.000	0.73
DZCT		105	X 240 RESET	445.34530	0.000	2.086
				0.001	0.000	0.31
GROUP: 012812M.ASC ,obs#: 18						
DXCT		106	X 240 RESET	4943.15560	-0.006	-1.168
				0.006	0.005	0.67
DYCT		106	X 240 RESET	-4792.71970	0.007	1.406
				0.006	0.005	0.82
DZCT		106	X 240 RESET	-5357.73240	0.006	1.220
				0.006	0.005	0.70
GROUP: 012912M.ASC ,obs#: 19						
DXCT		ICT1	105	53725.00270	-0.023	-0.511
				0.046	0.045	0.35
DYCT		ICT1	105	17978.93630	-0.007	-0.160
				0.046	0.044	0.11
DZCT		ICT1	105	31558.36250	0.020	0.452
				0.046	0.045	0.31
GROUP: 012912M.ASC ,obs#: 20						
DXCT		ICT3	105	44205.19640	-0.016	-0.473
				0.034	0.033	0.32
DYCT		ICT3	105	7948.38750	-0.028	-0.825
				0.034	0.033	0.57
DZCT		ICT3	105	17049.76790	0.004	0.130
				0.034	0.033	0.09
GROUP: 012912M.ASC ,obs#: 21						
DXCT		HBRK	105	46171.54870	-0.002	-0.042
				0.045	0.044	0.03
DYCT		HBRK	105	-30349.61200	0.003	0.058
				0.045	0.044	0.04
DZCT		HBRK	105	-31227.91730	-0.002	-0.038
				0.045	0.044	0.03
GROUP: 012912M.ASC ,obs#: 22						
DXCT		204	107	9784.16880	0.001	0.103
				0.016	0.014	0.06
DYCT		204	107	11416.01980	-0.012	-0.882
				0.016	0.014	0.55
DZCT		204	107	16097.91700	0.011	0.777
				0.016	0.014	0.48
GROUP: 012912M.ASC ,obs#: 23						
DXCT		105	107	9213.12250	-0.000	-0.103

Residuals (critical value = 3.986):

TYPE	AT	FROM	TO	OBSERVATION / STD DEV	RESIDUAL / STD DEV	STD RES / PPM
				0.007	0.003	0.03
DYCT		105	107	-2993.08710	0.002	0.883
				0.007	0.003	0.25
DZCT		105	107	-2404.80780	-0.002	-0.777
				0.007	0.003	0.22
GROUP: 012912M.ASC ,obs#:		24				
DXCT		204	108	-2005.15120	-0.002	-0.220
				0.010	0.007	0.11
DYCT		204	108	8424.03900	-0.009	-1.222
				0.010	0.007	0.65
DZCT		204	108	10461.00650	0.002	0.327
				0.010	0.007	0.17
GROUP: 012912M.ASC ,obs#:		25				
DXCT		105	108	-2576.20160	0.001	0.219
				0.007	0.004	0.09
DYCT		105	108	-5985.06720	0.005	1.220
				0.007	0.004	0.49
DZCT		105	108	-8041.72750	-0.001	-0.323
				0.007	0.004	0.13
GROUP: 012912M.ASC ,obs#:		26				
DXCT		204	109	11542.87900	-0.001	-0.288
				0.008	0.003	0.08
DYCT		204	109	-291.33320	-0.000	-0.060
				0.008	0.003	0.02
DZCT		204	109	1408.08220	0.000	0.075
				0.008	0.003	0.02
GROUP: 012912M.ASC ,obs#:		27				
DXCT		105	109	10971.82560	0.004	0.288
				0.018	0.016	0.18
DYCT		105	109	-14700.42670	0.001	0.060
				0.018	0.016	0.04
DZCT		105	109	-17094.65400	-0.001	-0.075
				0.018	0.016	0.05
GROUP: 012912M.ASC ,obs#:		28				
DXCT		105	110	-3493.36340	-0.016	-0.773
				0.022	0.021	0.51
DYCT		105	110	-18602.67750	-0.009	-0.427
				0.022	0.021	0.29
DZCT		105	110	-24329.57830	-0.031	-1.527
				0.022	0.021	1.02
GROUP: 012912M.ASC ,obs#:		29				
DXCT		204	110	-2922.33230	0.001	0.773
				0.005	0.001	0.13
DYCT		204	110	-4193.59450	0.001	0.420
				0.005	0.001	0.07
DZCT		204	110	-5826.87410	0.002	1.525
				0.005	0.001	0.26
GROUP: 012912M.ASC ,obs#:		30				
DXCT		ICT1	204	53153.95530	-0.024	-0.623
				0.039	0.038	0.43
DYCT		ICT1	204	3569.84300	-0.006	-0.166
				0.039	0.037	0.11

Residuals (critical value = 3.986):

TYPE	AT	FROM	TO	OBSERVATION / STD DEV	RESIDUAL / STD DEV	STD RES / PPM
DZCT		ICT1	204	13055.62950	0.016	0.417
				0.039	0.037	0.28
GROUP: 012912M.ASC ,obs#: 31						
DXCT		ICT3	204	43634.14910	-0.016	-0.541
				0.031	0.030	0.37
DYCT		ICT3	204	-6460.70640	-0.026	-0.855
				0.031	0.030	0.59
DZCT		ICT3	204	-1452.96480	-0.001	-0.020
				0.031	0.030	0.01
GROUP: 012912M.ASC ,obs#: 32						
DXCT		HBRK	204	45600.50200	-0.003	-0.056
				0.057	0.056	0.04
DYCT		HBRK	204	-44758.70440	0.003	0.046
				0.057	0.056	0.03
DZCT		HBRK	204	-49730.65150	-0.005	-0.091
				0.057	0.056	0.06
GROUP: 012912M.ASC ,obs#: 33						
DXCT		204	205	6953.59400	0.000	0.036
				0.007	0.004	0.01
DYCT		204	205	4250.11900	0.004	1.014
				0.007	0.004	0.36
DZCT		204	205	6537.57670	-0.006	-1.525
				0.007	0.004	0.54
GROUP: 012912M.ASC ,obs#: 34						
DXCT		105	205	6382.54650	-0.000	-0.036
				0.012	0.010	0.02
DYCT		105	205	-10158.95970	-0.010	-1.018
				0.012	0.010	0.58
DZCT		105	205	-11965.18150	0.015	1.527
				0.012	0.010	0.88
GROUP: 012912M.ASC ,obs#: 35						
DXCT		204	503	4675.41820	-0.000	-0.051
				0.012	0.010	0.03
DYCT		204	503	9528.58320	-0.050	-4.948
				0.012	0.010	2.99
						^^^^^^^^^^^^^^^^
DZCT		204	503	12916.92760	0.020	2.048
				0.012	0.010	1.21
GROUP: 012912M.ASC ,obs#: 36						
DXCT		105	503	4104.36960	0.000	0.050
				0.006	0.003	0.01
DYCT		105	503	-4880.57200	0.013	4.945
				0.006	0.003	1.51
						^^^^^^^^^^^^^^^^
DZCT		105	503	-5585.78460	-0.005	-2.041
				0.006	0.003	0.61
GROUP: 012912M.ASC ,obs#: 37						
DXCT		204	504	15235.09710	0.003	0.427
				0.012	0.007	0.18
DYCT		204	504	3250.58180	-0.000	-0.023
				0.012	0.007	0.01
DZCT		204	504	6538.10320	-0.000	-0.031

Residuals (critical value = 3.986):

TYPE	AT	FROM	TO	OBSERVATION / STD DEV	RESIDUAL / STD DEV	STD RES / PPM
				0.012	0.007	0.01
GROUP: 012912M.ASC ,obs#:		38				
DXCT		105	504	14664.05720	-0.005	-0.427
				0.015	0.012	0.23
DYCT		105	504	-11158.51100	0.000	0.023
				0.016	0.012	0.01
DZCT		105	504	-11964.63500	0.000	0.030
				0.016	0.012	0.02
GROUP: 012912M.ASC ,obs#:		39				
DXCT		204	505	7537.95680	-0.001	-0.409
				0.007	0.002	0.09
DYCT		204	505	-5009.23080	0.000	0.042
				0.007	0.002	0.01
DZCT		204	505	-5242.15010	-0.000	-0.060
				0.007	0.002	0.01
GROUP: 012912M.ASC ,obs#:		40				
DXCT		105	505	6966.89950	0.008	0.409
				0.022	0.021	0.27
DYCT		105	505	-19418.32220	-0.001	-0.042
				0.022	0.021	0.03
DZCT		105	505	-23744.88910	0.001	0.060
				0.022	0.021	0.04
GROUP: 012912M.ASC ,obs#:		41				
DXCT		204	624	-7665.53410	0.003	0.564
				0.008	0.004	0.21
DYCT		204	624	5997.77060	0.003	0.720
				0.008	0.005	0.28
DZCT		204	624	6497.81290	0.000	0.024
				0.008	0.004	0.01
GROUP: 012912M.ASC ,obs#:		42				
DXCT		105	624	-8236.57440	-0.005	-0.564
				0.012	0.009	0.31
DYCT		105	624	-8411.31180	-0.007	-0.720
				0.012	0.009	0.40
DZCT		105	624	-12004.92440	-0.000	-0.023
				0.012	0.009	0.01
GROUP: 012912M.ASC ,obs#:		43				
DXCT		105	625	-3492.19330	-0.011	-0.516
				0.022	0.021	0.34
DYCT		105	625	-18602.68510	-0.020	-0.946
				0.022	0.021	0.63
DZCT		105	625	-24329.44120	-0.013	-0.654
				0.022	0.021	0.44
GROUP: 012912M.ASC ,obs#:		44				
DXCT		204	625	-2921.15660	0.001	0.517
				0.005	0.001	0.09
DYCT		204	625	-4193.61350	0.001	0.945
				0.005	0.001	0.16
DZCT		204	625	-5826.71790	0.001	0.653
				0.005	0.001	0.11
GROUP: 012912M.ASC ,obs#:		45				
DXCT		204	K 334	7474.08970	-0.006	-1.443

Residuals (critical value = 3.986):

TYPE	AT	FROM	TO	OBSERVATION / STD DEV	RESIDUAL / STD DEV	STD RES / PPM
				0.008	0.004	0.57
DYCT		204	K 334	-5500.08230	0.017	3.001
				0.008	0.006	1.56
DZCT		204	K 334	-5877.43340	-0.012	-2.260
				0.008	0.005	1.08
GROUP: 012912M.ASC ,obs#: 46						
DXCT		105	K 334	6903.03900	-0.004	-0.165
				0.023	0.022	0.11
DYCT		105	K 334	-19909.15540	-0.002	-0.094
				0.023	0.022	0.06
DZCT		105	K 334	-24380.17620	-0.007	-0.302
				0.023	0.022	0.21
GROUP: 013012M.ASC ,obs#: 47						
DXCT		D 40	111	19863.94420	0.001	0.042
				0.019	0.016	0.03
DYCT		D 40	111	-12063.39690	-0.003	-0.171
				0.019	0.016	0.11
DZCT		D 40	111	-12462.02630	-0.005	-0.301
				0.019	0.016	0.19
GROUP: 013012M.ASC ,obs#: 48						
DXCT		K 334	111	4023.05910	-0.000	-0.042
				0.010	0.005	0.01
DYCT		K 334	111	-8622.77970	0.001	0.172
				0.010	0.005	0.06
DZCT		K 334	111	-10515.64120	0.001	0.302
				0.010	0.005	0.10
GROUP: 013012M.ASC ,obs#: 49						
DXCT		D 40	112	5980.87890	0.000	0.026
				0.013	0.010	0.01
DYCT		D 40	112	-11469.32110	-0.013	-1.206
				0.014	0.011	0.67
DZCT		D 40	112	-13837.51440	0.004	0.409
				0.013	0.010	0.21
GROUP: 013012M.ASC ,obs#: 50						
DXCT		K 334	112	-9860.00680	-0.000	-0.003
				0.012	0.008	0.00
DYCT		K 334	112	-8028.72280	0.010	1.194
				0.012	0.008	0.56
DZCT		K 334	112	-11891.11600	-0.003	-0.366
				0.012	0.008	0.17
GROUP: 013012M.ASC ,obs#: 51						
DXCT		D 40	113	-4246.34420	-0.001	-0.148
				0.010	0.005	0.05
DYCT		D 40	113	-8216.47510	-0.007	-1.273
				0.010	0.005	0.48
DZCT		D 40	113	-11255.00440	-0.001	-0.131
				0.010	0.005	0.05
GROUP: 013012M.ASC ,obs#: 52						
DXCT		K 334	113	-20087.23290	0.002	0.148
				0.016	0.013	0.09
DYCT		K 334	113	-4775.87830	0.017	1.273
				0.016	0.013	0.75

Residuals (critical value = 3.986):

TYPE	AT	FROM	TO	OBSERVATION / STD DEV	RESIDUAL / STD DEV	STD RES / PPM
DZCT	K	334	113	-9308.61540	0.002	0.128
				0.016	0.013	0.07
GROUP: 013012M.ASC ,obs#: 53						
DXCT	K	334	114	-21156.32900	-0.005	-0.338
				0.017	0.015	0.22
DYCT	K	334	114	8231.86410	0.028	1.794
				0.017	0.016	1.17
DZCT	K	334	114	7234.32020	-0.019	-1.228
				0.017	0.015	0.80
GROUP: 013012M.ASC ,obs#: 54						
DXCT	D	40	114	-5315.44890	0.001	0.333
				0.006	0.002	0.08
DYCT	D	40	114	4791.27520	-0.004	-1.801
				0.006	0.002	0.44
DZCT	D	40	114	5287.90710	0.003	1.238
				0.006	0.002	0.30
GROUP: 013012M.ASC ,obs#: 55						
DXCT	D	40	115	8516.11960	0.002	0.439
				0.009	0.006	0.19
DYCT	D	40	115	5128.12190	0.001	0.242
				0.009	0.006	0.11
DZCT	D	40	115	7895.93610	0.003	0.499
				0.009	0.006	0.22
GROUP: 013012M.ASC ,obs#: 56						
DXCT	K	334	115	-7324.76060	-0.003	-0.439
				0.011	0.008	0.22
DYCT	K	334	115	8568.74600	-0.002	-0.243
				0.011	0.008	0.13
DZCT	K	334	115	9842.33420	-0.004	-0.499
				0.011	0.008	0.26
GROUP: 013012M.ASC ,obs#: 57						
DXCT	D	40	206	12420.25150	-0.002	-0.159
				0.016	0.013	0.09
DYCT	D	40	206	-12192.13070	0.003	0.219
				0.016	0.013	0.13
DZCT	D	40	206	-13781.16200	-0.001	-0.102
				0.016	0.013	0.06
GROUP: 013012M.ASC ,obs#: 58						
DXCT	K	334	206	-3420.63740	0.001	0.158
				0.011	0.006	0.06
DYCT	K	334	206	-8751.50570	-0.001	-0.219
				0.011	0.006	0.09
DZCT	K	334	206	-11834.77250	0.001	0.103
				0.011	0.006	0.04
GROUP: 013012M.ASC ,obs#: 59						
DXCT	K	334	207	-13179.10020	-0.012	-1.561
				0.010	0.008	0.87
DYCT	K	334	207	-1671.07630	-0.024	-2.925
				0.010	0.008	1.73
DZCT	K	334	207	-4252.08030	0.015	1.891
				0.010	0.008	1.11
GROUP: 013012M.ASC ,obs#: 60						

Residuals (critical value = 3.986):

TYPE	AT	FROM	TO	OBSERVATION / STD DEV	RESIDUAL / STD DEV	STD RES / PPM
DXCT		D 40	207	2661.76910	0.005	1.567
				0.006	0.003	0.53
DYCT		D 40	207	-5111.73030	0.009	2.946
				0.006	0.003	1.07
DZCT		D 40	207	-6198.45040	-0.006	-1.927
				0.006	0.003	0.70
GROUP: 013012M.ASC ,obs#:		61				
DXCT		K 334	208	-22300.03090	0.005	0.350
				0.016	0.015	0.23
DYCT		K 334	208	3852.76930	0.007	0.454
				0.016	0.015	0.30
DZCT		K 334	208	1450.87500	-0.025	-1.666
				0.016	0.015	1.11
GROUP: 013012M.ASC ,obs#:		62				
DXCT		D 40	208	-6459.13930	-0.000	-0.351
				0.005	0.001	0.07
DYCT		D 40	208	412.15600	-0.001	-0.465
				0.005	0.001	0.09
DZCT		D 40	208	-495.54360	0.002	1.668
				0.005	0.001	0.32
GROUP: 013012M.ASC ,obs#:		63				
DXCT		K 334	209	-15423.77610	0.017	1.365
				0.014	0.012	0.85
DYCT		K 334	209	8536.32150	0.016	1.273
				0.014	0.013	0.82
DZCT		K 334	209	8540.02420	0.010	0.771
				0.014	0.012	0.49
GROUP: 013012M.ASC ,obs#:		64				
DXCT		D 40	209	417.12950	-0.003	-1.365
				0.006	0.002	0.36
DYCT		D 40	209	5095.71960	-0.003	-1.272
				0.006	0.002	0.35
DZCT		D 40	209	6593.64410	-0.002	-0.771
				0.006	0.002	0.21
GROUP: 013012M.ASC ,obs#:		65				
DXCT		D 40	506	15315.70800	0.000	0.034
				0.013	0.012	0.02
DYCT		D 40	506	-8110.34550	0.009	0.737
				0.014	0.012	0.48
DZCT		D 40	506	-8096.89990	0.001	0.078
				0.014	0.012	0.05
GROUP: 013012M.ASC ,obs#:		66				
DXCT		K 334	506	-525.17750	-0.000	-0.036
				0.005	0.002	0.01
DYCT		K 334	506	-4669.71390	-0.002	-0.713
				0.006	0.002	0.21
DZCT		K 334	506	-6150.50760	0.000	0.023
				0.006	0.002	0.01
GROUP: 013012M.ASC ,obs#:		67				
DXCT		D 40	507	1763.24390	-0.004	-0.427
				0.015	0.010	0.20
DYCT		D 40	507	-12930.94760	-0.002	-0.210

Residuals (critical value = 3.986):

TYPE	AT	FROM	TO	OBSERVATION / STD DEV	RESIDUAL / STD DEV	STD RES / PPM
				0.015	0.010	0.10
DZCT		D 40	507	-16430.42400	0.008	0.776
				0.015	0.010	0.37
GROUP: 013012M.ASC ,obs#:		68				
DXCT		K 334	507	-14077.65110	0.005	0.427
				0.016	0.011	0.21
DYCT		K 334	507	-9490.33130	0.002	0.208
				0.016	0.011	0.11
DZCT		K 334	507	-14484.01600	-0.009	-0.775
				0.016	0.011	0.39
GROUP: 013012M.ASC ,obs#:		69				
DXCT		D 40	508	-6973.12290	-0.000	-0.082
				0.007	0.003	0.02
DYCT		D 40	508	-3918.05380	-0.002	-0.598
				0.007	0.003	0.17
DZCT		D 40	508	-6158.47020	0.002	0.638
				0.007	0.003	0.18
GROUP: 013012M.ASC ,obs#:		70				
DXCT		K 334	508	-22814.01030	0.001	0.082
				0.016	0.015	0.05
DYCT		K 334	508	-477.44360	0.009	0.598
				0.016	0.015	0.38
DZCT		K 334	508	-4212.06760	-0.009	-0.639
				0.016	0.015	0.41
GROUP: 013012M.ASC ,obs#:		71				
DXCT		D 40	509	16560.15410	0.016	1.518
				0.013	0.011	0.88
DYCT		D 40	509	3179.42600	0.008	0.738
				0.013	0.011	0.44
DZCT		D 40	509	6616.43180	-0.006	-0.600
				0.013	0.011	0.35
GROUP: 013012M.ASC ,obs#:		72				
DXCT		K 334	509	719.28980	-0.006	-1.519
				0.008	0.004	0.53
DYCT		K 334	509	6620.05770	-0.003	-0.737
				0.008	0.004	0.26
DZCT		K 334	509	8562.81450	0.002	0.599
				0.008	0.004	0.21
GROUP: 013012M.ASC ,obs#:		73				
DXCT		ICT1	D 40	44787.11950	0.010	0.308
				0.032	0.031	0.21
DYCT		ICT1	D 40	1510.39720	-0.005	-0.154
				0.032	0.031	0.10
DZCT		ICT1	D 40	9124.59570	-0.004	-0.142
				0.032	0.031	0.10
GROUP: 013012M.ASC ,obs#:		74				
DXCT		ICT3	D 40	35267.31170	0.019	0.743
				0.026	0.025	0.51
DYCT		ICT3	D 40	-8520.15150	-0.025	-0.993
				0.026	0.025	0.69
DZCT		ICT3	D 40	-5383.99630	-0.023	-0.906
				0.026	0.025	0.62

Residuals (critical value = 3.986):

TYPE	AT	FROM	TO	OBSERVATION / STD DEV	RESIDUAL / STD DEV	STD RES / PPM
GROUP: 013012M.ASC ,obs#: 75						
DXCT		ICT1	K 334	60628.01170	0.003	0.082
				0.043	0.042	0.06
DYCT		ICT1	K 334	-1930.22610	-0.002	-0.053
				0.043	0.042	0.04
DZCT		ICT1	K 334	7178.19560	0.004	0.102
				0.043	0.042	0.07
GROUP: 013012M.ASC ,obs#: 76						
DXCT		ICT3	K 334	51108.20380	0.012	0.340
				0.037	0.037	0.23
DYCT		ICT3	K 334	-11960.76790	-0.030	-0.803
				0.037	0.037	0.56
DZCT		ICT3	K 334	-7330.39750	-0.013	-0.356
				0.037	0.037	0.25
GROUP: 013112M.ASC ,obs#: 77						
DXCT		HBRK	116	14895.80230	0.023	0.470
				0.050	0.050	0.33
DYCT		HBRK	116	-44386.12500	0.021	0.429
				0.050	0.049	0.30
DZCT		HBRK	116	-54049.55540	-0.012	-0.241
				0.050	0.050	0.17
GROUP: 013112M.ASC ,obs#: 78						
DXCT		ICT1	116	22449.25850	0.000	0.009
				0.017	0.016	0.01
DYCT		ICT1	116	3942.41850	0.016	1.160
				0.017	0.014	0.67
DZCT		ICT1	116	8736.72360	0.011	0.722
				0.017	0.015	0.44
GROUP: 013112M.ASC ,obs#: 79						
DXCT		ICT3	116	12929.45170	0.008	0.902
				0.011	0.009	0.52
DYCT		ICT3	116	-6088.12860	-0.006	-0.624
				0.011	0.009	0.38
DZCT		ICT3	116	-5771.87150	-0.005	-0.506
				0.011	0.009	0.30
GROUP: 013112M.ASC ,obs#: 80						
DXCT		116	117	-2763.02570	-0.001	-0.245
				0.011	0.005	0.08
DYCT		116	117	-9211.18610	-0.000	-0.056
				0.011	0.005	0.02
DZCT		116	117	-12348.40980	-0.002	-0.331
				0.011	0.005	0.11
GROUP: 013112M.ASC ,obs#: 81						
DXCT		D 40	117	-25100.90180	0.004	0.246
				0.020	0.017	0.15
DYCT		D 40	117	-6779.14510	0.001	0.058
				0.020	0.018	0.04
DZCT		D 40	117	-12736.27430	0.006	0.331
				0.020	0.018	0.20
GROUP: 013112M.ASC ,obs#: 82						
DXCT		116	118	6088.66750	0.003	0.294
				0.011	0.009	0.16

Residuals (critical value = 3.986):

TYPE	AT	FROM	TO	OBSERVATION / STD DEV	RESIDUAL / STD DEV	STD RES / PPM
DYCT		116	118	8715.59120	-0.029	-2.975
				0.011	0.010	1.79
DZCT		116	118	12115.49160	0.004	0.415
				0.011	0.009	0.24
GROUP: 013112M.ASC ,obs#:		83				
DXCT		D 40	118	-16249.19090	-0.010	-0.669
				0.016	0.014	0.42
DYCT		D 40	118	11147.61540	-0.011	-0.694
				0.016	0.015	0.47
DZCT		D 40	118	11727.62160	0.017	1.132
				0.016	0.015	0.74
GROUP: 013112M.ASC ,obs#:		84				
DXCT		116	210	13811.75930	0.003	0.238
				0.017	0.013	0.12
DYCT		116	210	-13110.14020	0.010	0.765
				0.017	0.013	0.40
DZCT		116	210	-14733.30280	-0.004	-0.309
				0.017	0.013	0.16
GROUP: 013112M.ASC ,obs#:		85				
DXCT		D 40	210	-8526.10610	-0.002	-0.239
				0.014	0.009	0.11
DYCT		D 40	210	-10678.08120	-0.007	-0.765
				0.014	0.009	0.34
DZCT		D 40	210	-15121.16650	0.003	0.311
				0.014	0.009	0.14
GROUP: 013112M.ASC ,obs#:		86				
DXCT		116	211	9957.14270	0.001	0.310
				0.008	0.004	0.12
DYCT		116	211	2245.55620	0.018	3.920
				0.008	0.005	1.60
DZCT		116	211	4437.94610	-0.003	-0.772
				0.008	0.005	0.31
GROUP: 013112M.ASC ,obs#:		87				
DXCT		D 40	211	-12380.72430	-0.002	-0.312
				0.010	0.007	0.16
DYCT		D 40	211	4677.64410	-0.028	-3.921
				0.010	0.007	2.01
DZCT		D 40	211	4050.08020	0.005	0.778
				0.010	0.007	0.39
GROUP: 013112M.ASC ,obs#:		88				
DXCT		116	212	-4227.71400	0.001	0.527
				0.006	0.002	0.11
DYCT		116	212	5096.06840	-0.001	-0.370
				0.006	0.002	0.08
DZCT		116	212	5869.36680	-0.004	-2.342
				0.006	0.002	0.49
GROUP: 013112M.ASC ,obs#:		89				
DXCT		D 40	212	-26565.57400	-0.010	-0.524
				0.020	0.018	0.34
DYCT		D 40	212	7528.10300	0.007	0.381
				0.020	0.018	0.25
DZCT		D 40	212	5481.46240	0.043	2.343

Residuals (critical value = 3.986):

TYPE	AT	FROM	TO	OBSERVATION / STD DEV	RESIDUAL / STD DEV	STD RES / PPM
				0.020	0.018	1.53
GROUP: 013112M.ASC ,obs#:		90				
DXCT		116	510	3509.24150	-0.000	-0.005
				0.014	0.008	0.00
DYCT		116	510	-11815.32480	0.004	0.458
				0.014	0.008	0.19
DZCT		116	510	-14729.49010	-0.008	-0.971
				0.014	0.008	0.40
GROUP: 013112M.ASC ,obs#:		91				
DXCT		D 40	510	-18828.62920	0.000	0.007
				0.018	0.014	0.00
DYCT		D 40	510	-9383.27190	-0.007	-0.466
				0.019	0.015	0.27
DZCT		D 40	510	-15117.36870	0.014	0.975
				0.018	0.014	0.54
GROUP: 013112M.ASC ,obs#:		92				
DXCT		116	511	7465.44680	-0.001	-0.241
				0.005	0.002	0.07
DYCT		116	511	-1244.83020	0.000	0.112
				0.006	0.002	0.03
DZCT		116	511	-465.47000	0.006	2.481
				0.005	0.002	0.74
GROUP: 013112M.ASC ,obs#:		93				
DXCT		D 40	511	-14872.42630	0.002	0.239
				0.011	0.008	0.14
DYCT		D 40	511	1187.21370	-0.001	-0.153
				0.011	0.009	0.09
DZCT		D 40	511	-853.30000	-0.021	-2.486
				0.011	0.009	1.43
GROUP: 013112M.ASC ,obs#:		94				
DXCT		116	512	2078.00600	-0.000	-0.252
				0.004	0.001	0.04
DYCT		116	512	3226.97570	-0.001	-0.586
				0.004	0.001	0.10
DZCT		116	512	4459.07380	-0.002	-1.815
				0.004	0.001	0.32
GROUP: 013112M.ASC ,obs#:		95				
DXCT		D 40	512	-20259.86830	0.003	0.254
				0.015	0.014	0.16
DYCT		D 40	512	5659.00920	0.008	0.587
				0.015	0.014	0.38
DZCT		D 40	512	4071.18970	0.025	1.815
				0.015	0.014	1.18
GROUP: 013112M.ASC ,obs#:		96				
DXCT		116	626	972.77690	0.002	0.782
				0.006	0.002	0.19
DYCT		116	626	-5585.69740	-0.003	-1.403
				0.007	0.002	0.37
DZCT		116	626	-7066.23950	0.006	2.295
				0.007	0.002	0.62
GROUP: 013112M.ASC ,obs#:		97				
DXCT		D 40	626	-21365.08050	-0.011	-0.797

Residuals (critical value = 3.986):

TYPE	AT	FROM	TO	OBSERVATION / STD DEV	RESIDUAL / STD DEV	STD RES / PPM
				0.016	0.014	0.50
DYCT		D 40	626	-3153.67800	0.020	1.326
				0.017	0.015	0.85
DZCT		D 40	626	-7454.05730	-0.034	-2.256
				0.017	0.015	1.47
GROUP: 013112M.ASC ,obs#: 98						
DXCT		ICT1	D 40	44787.12780	0.001	0.045
				0.032	0.031	0.03
DYCT		ICT1	D 40	1510.37010	0.022	0.731
				0.032	0.031	0.49
DZCT		ICT1	D 40	9124.59740	-0.006	-0.197
				0.032	0.031	0.13
GROUP: 013112M.ASC ,obs#: 99						
DXCT		ICT3	D 40	35267.32050	0.010	0.391
				0.026	0.025	0.27
DYCT		ICT3	D 40	-8520.17710	0.000	0.011
				0.026	0.025	0.01
DZCT		ICT3	D 40	-5383.99750	-0.022	-0.858
				0.026	0.025	0.59
GROUP: 013112M.ASC ,obs#: 100						
DXCT		HBRK	D 40	37233.65160	0.045	0.797
				0.056	0.056	0.56
DYCT		HBRK	D 40	-46818.17120	0.025	0.449
				0.056	0.056	0.31
DZCT		HBRK	D 40	-53661.68160	-0.029	-0.515
				0.056	0.056	0.36
GROUP: 020112M.ASC ,obs#: 101						
DXCT		ICT3	118	19018.13720	-0.007	-0.592
				0.014	0.013	0.37
DYCT		ICT3	118	2627.46900	-0.041	-3.081
				0.014	0.013	2.03
DZCT		ICT3	118	6343.59110	0.028	2.165
				0.014	0.013	1.39
GROUP: 020112M.ASC ,obs#: 102						
DXCT		HBRK	118	20984.49280	0.003	0.074
				0.041	0.041	0.05
DYCT		HBRK	118	-35670.52110	-0.020	-0.504
				0.041	0.040	0.35
DZCT		HBRK	118	-41934.10220	0.030	0.747
				0.041	0.041	0.51
GROUP: 020112M.ASC ,obs#: 103						
DXCT		118	119	7350.41980	0.004	0.534
				0.010	0.007	0.25
DYCT		118	119	7014.60370	-0.008	-1.177
				0.010	0.007	0.55
DZCT		118	119	10168.17950	0.009	1.347
				0.010	0.007	0.63
GROUP: 020112M.ASC ,obs#: 104						
DXCT		ELDORADO	119	-5009.51550	-0.004	-0.532
				0.011	0.008	0.27
DYCT		ELDORADO	119	9316.09180	0.009	1.187
				0.011	0.008	0.61

Residuals (critical value = 3.986):

TYPE	AT	FROM	TO	OBSERVATION / STD DEV	RESIDUAL / STD DEV	STD RES / PPM
DZCT		ELDORADO	119	11169.44090	-0.011	-1.356
				0.011	0.008	0.69
GROUP: 020112M.ASC ,obs#: 105						
DXCT		118	120	-6581.30870	-0.001	-0.162
				0.015	0.008	0.07
DYCT		118	120	12551.42090	-0.005	-0.567
				0.015	0.008	0.23
DZCT		118	120	15003.14720	0.006	0.702
				0.015	0.008	0.29
GROUP: 020112M.ASC ,obs#: 106						
DXCT		ELDORADO	120	-18941.25570	0.003	0.162
				0.020	0.016	0.09
DYCT		ELDORADO	120	14852.91220	0.009	0.566
				0.020	0.016	0.32
DZCT		ELDORADO	120	16004.40640	-0.012	-0.701
				0.020	0.016	0.40
GROUP: 020112M.ASC ,obs#: 107						
DXCT		118	213	6943.20560	0.003	0.780
				0.005	0.003	0.36
DYCT		118	213	-1092.89860	-0.005	-1.574
				0.005	0.003	0.76
DZCT		118	213	-264.06740	-0.005	-1.361
				0.005	0.003	0.67
GROUP: 020112M.ASC ,obs#: 108						
DXCT		ELDORADO	213	-5416.73320	-0.002	-0.784
				0.004	0.002	0.29
DYCT		ELDORADO	213	1208.59800	0.003	1.550
				0.004	0.002	0.61
DZCT		ELDORADO	213	737.16670	0.003	1.339
				0.004	0.002	0.54
GROUP: 020112M.ASC ,obs#: 109						
DXCT		118	214	-6033.44520	0.001	0.478
				0.006	0.002	0.12
DYCT		118	214	3589.98760	0.002	0.884
				0.006	0.002	0.26
DZCT		118	214	3642.43910	0.003	1.290
				0.006	0.002	0.33
GROUP: 020112M.ASC ,obs#: 110						
DXCT		ELDORADO	214	-18393.38120	-0.006	-0.476
				0.014	0.013	0.30
DYCT		ELDORADO	214	5891.50740	-0.012	-0.896
				0.015	0.014	0.62
DZCT		ELDORADO	214	4643.70020	-0.017	-1.303
				0.014	0.013	0.84
GROUP: 020112M.ASC ,obs#: 111						
DXCT		118	215	11719.30240	0.001	0.083
				0.009	0.007	0.05
DYCT		118	215	2509.02320	-0.006	-0.794
				0.009	0.008	0.46
DZCT		118	215	5044.30800	0.020	2.720
				0.009	0.008	1.58
GROUP: 020112M.ASC ,obs#: 112						

Residuals (critical value = 3.986):

TYPE	AT	FROM	TO	OBSERVATION / STD DEV	RESIDUAL / STD DEV	STD RES / PPM
DXCT		ELDORADO	215	-640.63980	-0.000	-0.068
				0.005	0.003	0.02
DYCT		ELDORADO	215	4810.52020	0.002	0.866
				0.006	0.003	0.31
DZCT		ELDORADO	215	6045.57790	-0.008	-2.738
				0.006	0.003	0.98
GROUP: 020112M.ASC ,obs#: 113						
DXCT		118	216	2103.78740	-0.000	-0.025
				0.012	0.010	0.01
DYCT		118	216	10695.68700	0.013	1.243
				0.013	0.011	0.74
DZCT		118	216	14008.24870	-0.022	-2.138
				0.013	0.010	1.25
GROUP: 020112M.ASC ,obs#: 114						
DXCT		ELDORADO	216	-10256.15960	0.004	0.272
				0.016	0.014	0.17
DYCT		ELDORADO	216	12997.18710	0.018	1.290
				0.016	0.014	0.82
DZCT		ELDORADO	216	15009.49070	-0.022	-1.598
				0.016	0.014	1.01
GROUP: 020112M.ASC ,obs#: 115						
DXCT		118	217	264.35950	0.004	1.018
				0.008	0.004	0.37
DYCT		118	217	6935.16460	-0.005	-1.228
				0.008	0.004	0.45
DZCT		118	217	8921.87020	0.005	1.156
				0.008	0.004	0.42
GROUP: 020112M.ASC ,obs#: 116						
DXCT		ELDORADO	217	-12095.56850	-0.011	-1.020
				0.013	0.011	0.59
DYCT		ELDORADO	217	9236.65170	0.013	1.226
				0.013	0.011	0.72
DZCT		ELDORADO	217	9923.12900	-0.012	-1.153
				0.013	0.011	0.67
GROUP: 020112M.ASC ,obs#: 117						
DXCT		ELDORADO	513	87.15420	0.000	0.000*
				0.000	0.000	0.36
DYCT		ELDORADO	513	-3.94100	0.000	2.195
				0.001	0.000	3.08
DZCT		ELDORADO	513	5.65960	-0.000	-2.147
				0.001	0.000	3.07
GROUP: 020112M.ASC ,obs#: 118						
DXCT		118	513	12447.10520	-0.008	-0.965
				0.009	0.008	0.63
DYCT		118	513	-2305.43110	-0.015	-1.791
				0.009	0.008	1.18
DZCT		118	513	-995.59300	0.011	1.263
				0.009	0.008	0.83
GROUP: 020112M.ASC ,obs#: 119						
DXCT		118	514	-11369.58850	-0.002	-0.583
				0.008	0.003	0.17
DYCT		118	514	1368.95820	-0.008	-2.275

Residuals (critical value = 3.986):

TYPE	AT	FROM	TO	OBSERVATION / STD DEV	RESIDUAL / STD DEV	STD RES / PPM
				0.008	0.003	0.69
DZCT		118	514	-36.48850	0.003	0.958
				0.008	0.003	0.29
GROUP: 020112M.ASC ,obs#: 120						
DXCT		ELDORADO	514	-23729.54220	0.009	0.580
				0.017	0.015	0.36
DYCT		ELDORADO	514	3670.42140	0.034	2.270
				0.017	0.015	1.43
DZCT		ELDORADO	514	964.77080	-0.014	-0.945
				0.017	0.015	0.59
GROUP: 020112M.ASC ,obs#: 121						
DXCT		118	515	2103.80960	-0.002	-1.213
				0.005	0.002	0.36
DYCT		118	515	3734.57860	-0.003	-1.272
				0.005	0.002	0.39
DZCT		118	515	5118.36180	0.003	1.291
				0.005	0.002	0.39
GROUP: 020112M.ASC ,obs#: 122						
DXCT		ELDORADO	515	-10256.14550	0.010	1.212
				0.009	0.008	0.72
DYCT		ELDORADO	515	6036.07100	0.010	1.270
				0.010	0.008	0.77
DZCT		ELDORADO	515	6119.61660	-0.010	-1.289
				0.010	0.008	0.78
GROUP: 020112M.ASC ,obs#: 123						
DXCT		118	516	17698.71790	-0.006	-0.558
				0.014	0.012	0.33
DYCT		118	516	3783.46260	0.028	2.363
				0.014	0.012	1.42
DZCT		118	516	7602.96670	-0.010	-0.862
				0.014	0.012	0.52
GROUP: 020112M.ASC ,obs#: 124						
DXCT		ELDORADO	516	5338.76610	0.002	0.561
				0.008	0.004	0.20
DYCT		ELDORADO	516	6085.00580	-0.010	-2.352
				0.008	0.004	0.84
DZCT		ELDORADO	516	8604.19480	0.003	0.828
				0.008	0.004	0.29
GROUP: 020112M.ASC ,obs#: 125						
DXCT		118	627	-6863.35190	-0.001	-0.257
				0.010	0.005	0.09
DYCT		118	627	7834.12630	-0.001	-0.190
				0.010	0.005	0.07
DZCT		118	627	8944.88470	-0.002	-0.401
				0.010	0.005	0.14
GROUP: 020112M.ASC ,obs#: 126						
DXCT		ELDORADO	627	-19223.29980	0.004	0.257
				0.017	0.014	0.15
DYCT		ELDORADO	627	10135.62800	0.003	0.191
				0.017	0.014	0.12
DZCT		ELDORADO	627	9946.11880	0.006	0.402
				0.017	0.014	0.24

Residuals (critical value = 3.986):

TYPE	AT	FROM	TO	OBSERVATION / STD DEV	RESIDUAL / STD DEV	STD RES / PPM
GROUP: 020112M.ASC ,obs#: 127						
DXCT		118	C 334	3038.75180	-0.000	-0.012
				0.013	0.008	0.01
DYCT		118	C 334	10562.30440	0.021	1.939
				0.013	0.011	1.17
DZCT		118	C 334	13977.40780	-0.025	-2.594
				0.013	0.010	1.42
GROUP: 020112M.ASC ,obs#: 128						
DXCT		ELDORADO	C 334	-9321.20260	0.011	0.961
				0.015	0.012	0.52
DYCT		ELDORADO	C 334	12863.77140	0.059	4.190
				0.015	0.014	2.71
					^^^^^^^^^^^^^^^^	
DZCT		ELDORADO	C 334	14978.65750	-0.033	-2.496
				0.015	0.013	1.51
GROUP: 020112M.ASC ,obs#: 129						
DXCT		ICT3	ELDORADO	31378.08460	-0.012	-0.557
				0.022	0.021	0.37
DYCT		ICT3	ELDORADO	325.97480	-0.052	-2.386
				0.022	0.022	1.64
DZCT		ICT3	ELDORADO	5342.33600	0.042	1.918
				0.022	0.022	1.30
GROUP: 020112M.ASC ,obs#: 130						
DXCT		HBRK	ELDORADO	33344.44010	-0.001	-0.027
				0.047	0.046	0.02
DYCT		HBRK	ELDORADO	-37972.01810	-0.029	-0.629
				0.047	0.046	0.43
DZCT		HBRK	ELDORADO	-42935.35510	0.041	0.904
				0.047	0.046	0.62
GROUP: 020212M.ASC ,obs#: 131						
DXCT		216	106	18623.89980	-0.009	-0.839
				0.013	0.010	0.46
DYCT		216	106	-292.32440	0.005	0.419
				0.013	0.011	0.25
DZCT		216	106	2500.99170	0.007	0.612
				0.013	0.011	0.35
GROUP: 020212M.ASC ,obs#: 132						
DXCT		ICT3	106	39745.82260	-0.015	-0.444
				0.034	0.033	0.30
DYCT		ICT3	106	13030.82240	-0.014	-0.428
				0.034	0.033	0.30
DZCT		ICT3	106	22852.82190	0.022	0.672
				0.034	0.033	0.46
GROUP: 020212M.ASC ,obs#: 133						
DXCT		HBRK	106	41712.17240	0.002	0.046
				0.039	0.038	0.03
DYCT		HBRK	106	-25267.15670	-0.004	-0.117
				0.039	0.038	0.08
DZCT		HBRK	106	-25424.86390	0.017	0.444
				0.039	0.038	0.30
GROUP: 020212M.ASC ,obs#: 134						
DXCT		216	121	12084.59940	0.000	0.058

Residuals (critical value = 3.986):

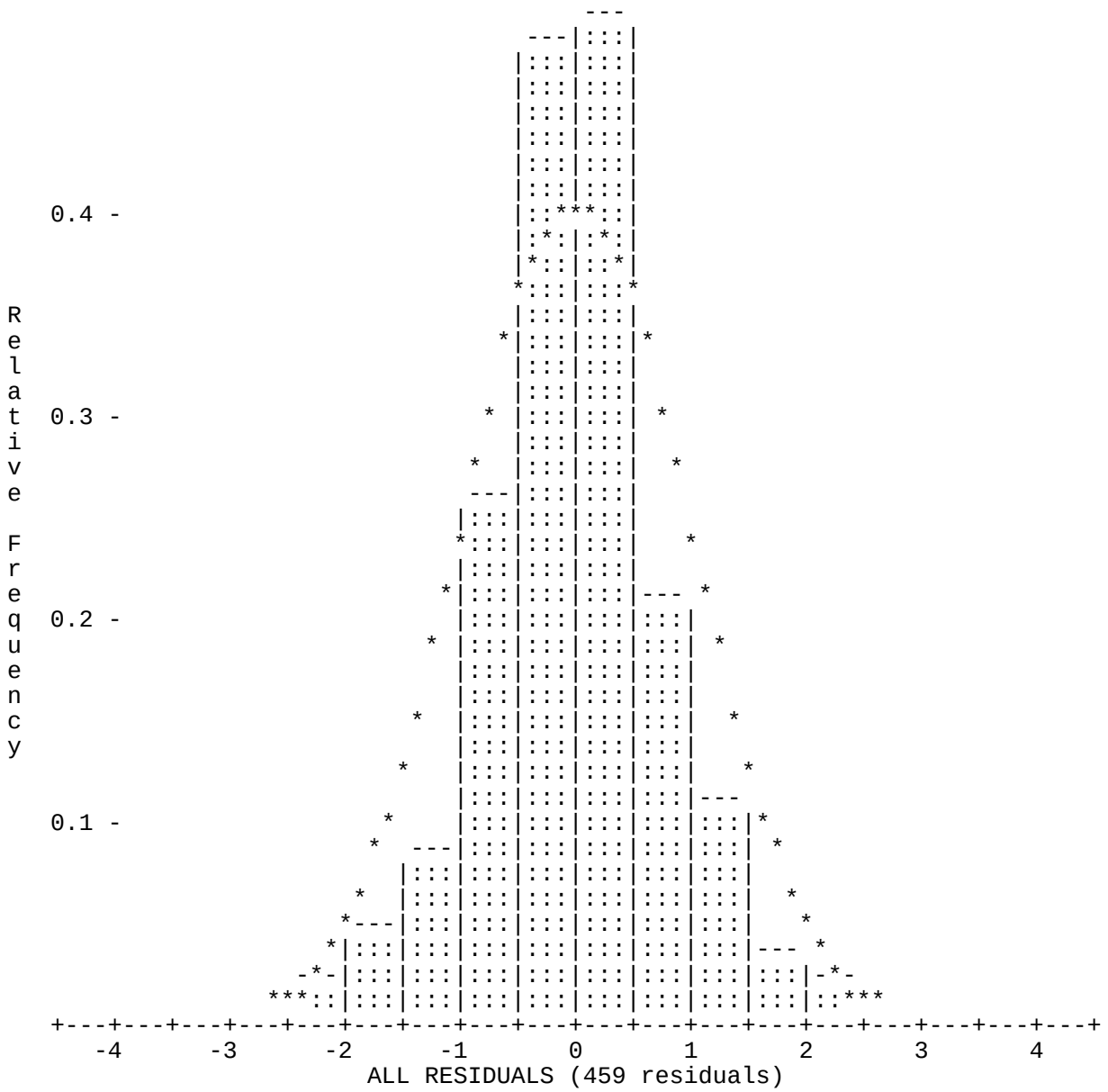
TYPE	AT	FROM	TO	OBSERVATION / STD DEV	RESIDUAL / STD DEV	STD RES / PPM
				0.009	0.003	0.01
DYCT		216	121	-1524.81520	0.005	1.614
				0.009	0.003	0.40
DZCT		216	121	-54.64560	-0.003	-1.032
				0.009	0.003	0.25
GROUP: 020212M.ASC ,obs#: 135						
DXCT		ICT3	121	33206.52130	-0.005	-0.178
				0.029	0.027	0.12
DYCT		ICT3	121	11798.36380	-0.046	-1.716
				0.029	0.027	1.13
DZCT		ICT3	121	20297.17400	0.023	0.858
				0.029	0.027	0.57
GROUP: 020212M.ASC ,obs#: 136						
DXCT		HBRK	121	35172.87740	0.005	0.146
				0.037	0.035	0.10
DYCT		HBRK	121	-26499.64120	-0.010	-0.300
				0.037	0.035	0.20
DZCT		HBRK	121	-27980.51080	0.017	0.476
				0.037	0.035	0.32
GROUP: 020212M.ASC ,obs#: 137						
DXCT		216	122	1161.70460	0.000	0.246
				0.005	0.001	0.04
DYCT		216	122	3854.32990	0.001	0.679
				0.005	0.001	0.11
DZCT		216	122	5068.40370	-0.001	-1.126
				0.005	0.001	0.19
GROUP: 020212M.ASC ,obs#: 138						
DXCT		ICT3	122	22283.63450	-0.013	-0.497
				0.027	0.026	0.34
DYCT		ICT3	122	17177.48890	-0.030	-1.181
				0.027	0.026	0.80
DZCT		ICT3	122	25420.21720	0.031	1.205
				0.027	0.026	0.82
GROUP: 020212M.ASC ,obs#: 139						
DXCT		HBRK	122	24249.98270	0.005	0.192
				0.028	0.027	0.13
DYCT		HBRK	122	-21120.52070	0.010	0.379
				0.028	0.026	0.25
DZCT		HBRK	122	-22857.44980	0.007	0.257
				0.028	0.027	0.17
GROUP: 020212M.ASC ,obs#: 140						
DXCT		216	202	25489.20220	0.001	0.074
				0.019	0.010	0.03
DYCT		216	202	2904.51030	0.003	0.247
				0.019	0.010	0.10
DZCT		216	202	7619.13550	-0.008	-0.755
				0.019	0.010	0.29
GROUP: 020212M.ASC ,obs#: 141						
DXCT		ICT3	202	46611.12760	-0.008	-0.212
				0.040	0.036	0.14
DYCT		ICT3	202	16227.65400	-0.013	-0.363
				0.040	0.036	0.23

Residuals (critical value = 3.986):

TYPE	AT	FROM	TO	OBSERVATION / STD DEV	RESIDUAL / STD DEV	STD RES / PPM
DZCT		ICT3	202	27970.95420	0.019	0.529
				0.040	0.036	0.34
GROUP: 020212M.ASC ,obs#: 142						
DXCT		HBRK	202	48577.48150	0.004	0.121
				0.040	0.037	0.08
DYCT		HBRK	202	-22070.33060	0.002	0.057
				0.040	0.036	0.04
DZCT		HBRK	202	-20306.73330	0.016	0.427
				0.040	0.036	0.27
GROUP: 020212M.ASC ,obs#: 143						
DXCT		216	218	-8134.77330	0.000	0.166
				0.008	0.003	0.05
DYCT		216	218	5054.20560	-0.001	-0.223
				0.008	0.003	0.07
DZCT		216	218	5134.68140	-0.003	-0.952
				0.008	0.003	0.28
GROUP: 020212M.ASC ,obs#: 144						
DXCT		ICT3	218	12987.15960	-0.015	-0.695
				0.024	0.022	0.45
DYCT		ICT3	218	18377.34990	-0.017	-0.768
				0.024	0.022	0.50
DZCT		ICT3	218	25486.49540	0.029	1.291
				0.024	0.022	0.84
GROUP: 020212M.ASC ,obs#: 145						
DXCT		HBRK	218	14953.49960	0.011	0.480
				0.024	0.022	0.31
DYCT		HBRK	218	-19920.66160	0.025	1.177
				0.024	0.021	0.74
DZCT		HBRK	218	-22791.16660	-0.001	-0.023
				0.024	0.022	0.01
GROUP: 020212M.ASC ,obs#: 146						
DXCT		216	517	18263.06870	0.001	0.191
				0.013	0.006	0.06
DYCT		216	517	-3245.07820	-0.000	-0.080
				0.013	0.006	0.03
DZCT		216	517	-1320.02070	-0.002	-0.321
				0.013	0.006	0.10
GROUP: 020212M.ASC ,obs#: 147						
DXCT		ICT3	517	39384.99550	-0.009	-0.302
				0.032	0.029	0.19
DYCT		ICT3	517	10078.06250	-0.013	-0.458
				0.032	0.029	0.29
DZCT		ICT3	517	19031.81260	0.011	0.364
				0.032	0.029	0.23
GROUP: 020212M.ASC ,obs#: 148						
DXCT		HBRK	517	41351.34920	0.004	0.093
				0.041	0.039	0.06
DYCT		HBRK	517	-28219.94690	0.027	0.700
				0.041	0.038	0.46
DZCT		HBRK	517	-29245.86900	0.001	0.024
				0.041	0.038	0.02
GROUP: 020212M.ASC ,obs#: 149						

Residuals (critical value = 3.986):

TYPE	AT	FROM	TO	OBSERVATION STD DEV	RESIDUAL STD DEV	STD RES PPM
DXCT		216	518	10851.03560	0.001	0.384
				0.009	0.003	0.09
DYCT		216	518	2595.91050	0.001	0.253
				0.009	0.003	0.06
DZCT		216	518	5013.81420	-0.003	-0.999
				0.009	0.003	0.25
GROUP: 020212M.ASC ,obs#: 150						
DXCT		ICT3	518	31972.96430	-0.011	-0.364
				0.031	0.029	0.24
DYCT		ICT3	518	15919.05280	-0.014	-0.465
				0.031	0.029	0.31
DZCT		ICT3	518	25365.64380	0.013	0.449
				0.031	0.029	0.30
GROUP: 020212M.ASC ,obs#: 151						
DXCT		HBRK	518	33939.32410	-0.004	-0.140
				0.033	0.031	0.09
DYCT		HBRK	518	-22378.93520	0.005	0.166
				0.033	0.031	0.11
DZCT		HBRK	518	-22912.06230	0.028	0.904
				0.033	0.031	0.60
GROUP: 020212M.ASC ,obs#: 152						
DXCT		216	HBRK	-23088.28130	-0.002	-0.056
				0.031	0.030	0.04
DYCT		216	HBRK	24974.84350	-0.002	-0.072
				0.031	0.030	0.05
DZCT		216	HBRK	27925.86120	-0.016	-0.527
				0.031	0.030	0.36
GROUP: 020212M.ASC ,obs#: 153						
DXCT		216	ICT3	-21121.92650	0.010	0.440
				0.023	0.022	0.30
DYCT		216	ICT3	-13323.14790	0.020	0.917
				0.023	0.022	0.62
DZCT		216	ICT3	-20351.82650	-0.019	-0.885
				0.023	0.022	0.60


Relative Frequency
0.4
0.3
0.2
0.1
-4
-3
-2
-1
0
1
2
3
4
ALL RESIDUALS (459 residuals)

S T A T I S T I C S S U M M A R Y

Residual Critical Value Type	Tau Max
Residual Critical Value	3.9862
Number of Flagged Residuals	3
Convergence Criterion	0.0010
Final Iteration Counter Value	2
Confidence Level Used	95.0000
Estimated Variance Factor	1.0000
Number of Degrees of Freedom	270

Chi-Square Test on the Variance Factor:

8.5063e-01 < 1.0000 < 1.1927e+00 ?

THE TEST PASSES

NOTE: All confidence regions were computed using the following factors:

Variance factor used = 1.0000
3-D expansion factor = 2.7955

Note that, for relative confidence regions, precisions are computed from the ratio of the major semi-axis and the spatial distance between the two stations.

3D Station Confidence Regions (95.000 percent):

STATION	MAJ-SEMI	(AZ,VANG)	MED-SEMI	(AZ,VANG)	MIN-SEMI	(AZ,VANG)
105	0.020	(0, 0)	0.020	(90, 0)	0.003	(0, 90)
106	0.021	(0, 0)	0.021	(90, 0)	0.010	(0, 90)
107	0.027	(0, 0)	0.027	(90, 0)	0.018	(0, 90)
108	0.025	(0, 0)	0.025	(90, 0)	0.017	(0, 90)
109	0.029	(0, 0)	0.029	(90, 0)	0.023	(0, 90)
110	0.025	(0, 0)	0.025	(90, 0)	0.019	(0, 90)
111	0.031	(0, 0)	0.031	(90, 0)	0.025	(0, 90)
112	0.031	(180, 4)	0.031	(90, 2)	0.026	(334, 86)
113	0.030	(0, 0)	0.030	(90, 0)	0.024	(0, 90)
114	0.024	(0, 0)	0.024	(90, 0)	0.017	(0, 90)
115	0.026	(0, 0)	0.026	(90, 0)	0.019	(0, 90)
116	0.017	(0, 0)	0.017	(90, 0)	0.013	(0, 90)
117	0.032	(0, 0)	0.032	(90, 0)	0.029	(0, 90)
118	0.019	(0, 0)	0.019	(90, 0)	0.009	(0, 90)
119	0.028	(0, 0)	0.028	(90, 0)	0.021	(0, 90)
120	0.038	(0, 0)	0.038	(90, 0)	0.034	(0, 90)
121	0.028	(0, 90)	0.027	(0, 0)	0.027	(90, 0)
122	0.021	(0, 90)	0.021	(0, 0)	0.021	(90, 0)
201	0.021	(0, 0)	0.021	(90, 0)	0.010	(0, 90)
202	0.046	(0, 90)	0.046	(0, 0)	0.046	(90, 0)
203	0.026	(0, 0)	0.026	(90, 0)	0.017	(0, 90)
204	0.021	(0, 0)	0.021	(90, 0)	0.012	(0, 90)
205	0.026	(0, 0)	0.026	(90, 0)	0.020	(0, 90)
206	0.031	(180, 2)	0.030	(90, 0)	0.025	(0, 88)
207	0.023	(0, 0)	0.023	(90, 0)	0.015	(0, 90)
208	0.022	(0, 0)	0.022	(90, 0)	0.013	(0, 90)
209	0.023	(0, 0)	0.023	(90, 0)	0.015	(0, 90)
210	0.035	(0, 0)	0.035	(90, 0)	0.031	(0, 90)
211	0.023	(0, 0)	0.023	(90, 0)	0.019	(0, 90)
212	0.024	(0, 0)	0.024	(90, 0)	0.021	(0, 90)
213	0.021	(0, 0)	0.021	(90, 0)	0.010	(0, 90)
214	0.024	(180, 4)	0.024	(90, 0)	0.018	(0, 86)
215	0.024	(0, 0)	0.023	(90, 0)	0.014	(0, 90)
216	0.018	(0, 0)	0.018	(90, 0)	0.018	(0, 90)
217	0.027	(0, 0)	0.027	(90, 0)	0.020	(0, 90)
218	0.026	(0, 90)	0.025	(0, 0)	0.025	(90, 0)
501	0.022	(0, 0)	0.022	(90, 0)	0.013	(0, 90)
502	0.032	(0, 0)	0.032	(90, 0)	0.026	(0, 90)
503	0.025	(0, 0)	0.025	(90, 0)	0.016	(0, 90)
504	0.033	(0, 0)	0.033	(90, 0)	0.028	(0, 90)
505	0.028	(0, 0)	0.028	(90, 0)	0.022	(0, 90)
506	0.024	(0, 3)	0.023	(90, 0)	0.016	(180, 87)
507	0.035	(0, 0)	0.035	(90, 0)	0.030	(0, 90)
508	0.025	(0, 0)	0.025	(90, 0)	0.018	(0, 90)
509	0.026	(0, 0)	0.026	(90, 0)	0.018	(0, 90)
510	0.035	(180, 6)	0.034	(90, 0)	0.032	(0, 84)
511	0.021	(0, 0)	0.021	(90, 0)	0.017	(0, 90)
512	0.020	(0, 0)	0.020	(90, 0)	0.017	(0, 90)
513	0.020	(0, 0)	0.020	(90, 0)	0.004	(0, 90)
514	0.028	(0, 0)	0.028	(90, 0)	0.022	(0, 90)
515	0.022	(0, 0)	0.022	(90, 0)	0.014	(0, 90)
516	0.028	(0, 0)	0.028	(90, 0)	0.020	(0, 90)
517	0.036	(180, 75)	0.035	(0, 15)	0.035	(90, 0)

3D Station Confidence Regions (95.000 percent):

STATION	MAJ-SEMI (AZ,VANG)	MED-SEMI (AZ,VANG)	MIN-SEMI (AZ,VANG)
518	0.028 (0, 90)	0.027 (0, 0)	0.027 (90, 0)
623	0.027 (0, 0)	0.027 (90, 0)	0.019 (0, 90)
624	0.027 (0, 0)	0.027 (90, 0)	0.021 (0, 90)
625	0.025 (0, 0)	0.025 (90, 0)	0.019 (0, 90)
626	0.024 (0, 6)	0.024 (90, 0)	0.021 (180, 84)
627	0.030 (0, 0)	0.030 (90, 0)	0.024 (0, 90)
C 334	0.033 (0, 0)	0.033 (90, 0)	0.000 (0, 90)
D 40	0.018 (0, 0)	0.018 (90, 0)	0.000 (0, 90)
ELDORADO	0.020 (0, 0)	0.020 (90, 0)	0.000 (0, 90)
HBRK	0.029 (0, 90)	0.000 (0, 0)	0.000 (90, 0)
ICT1	0.032 (0, 90)	0.000 (0, 0)	0.000 (90, 0)
K 334	0.019 (0, 0)	0.019 (90, 0)	0.000 (0, 90)
X 240 RESET	0.020 (0, 0)	0.020 (90, 0)	0.000 (0, 90)

3D Relative Confidence Regions (95.000 percent):

FROM	TO	MAJ-SEMI (AZ,VANG)	MED-SEMI (AZ,VANG)	MIN-SEMI (AZ,VANG)	DISTANCE	PPM
105	107	0.018 (0, 90)	0.018 (0, 0)	0.018 (90, 0)	9981.147	1.82
105	108	0.017 (0, 90)	0.017 (0, 0)	0.017 (90, 0)	10350.226	1.64
105	109	0.024 (0, 0)	0.024 (90, 0)	0.023 (0, 90)	25074.106	0.94
105	110	0.019 (0, 0)	0.019 (90, 0)	0.019 (0, 90)	30825.210	0.63
105	201	0.010 (0, 90)	0.010 (0, 0)	0.010 (90, 0)	9244.953	1.13
105	203	0.017 (0, 90)	0.017 (0, 0)	0.017 (90, 0)	9879.457	1.70
105	205	0.020 (0, 0)	0.020 (90, 0)	0.020 (0, 90)	16944.225	1.18
105	501	0.013 (0, 90)	0.013 (0, 0)	0.013 (90, 0)	13200.457	0.98
105	502	0.026 (0, 90)	0.025 (0, 0)	0.025 (90, 0)	16707.385	1.53
105	503	0.015 (0, 90)	0.015 (0, 0)	0.015 (90, 0)	8477.426	1.81
105	504	0.028 (0, 90)	0.028 (0, 0)	0.028 (90, 0)	21970.418	1.27
105	505	0.023 (0, 0)	0.023 (90, 0)	0.022 (0, 90)	31455.187	0.73
105	623	0.019 (0, 90)	0.019 (0, 0)	0.019 (90, 0)	12969.653	1.46
105	624	0.021 (0, 0)	0.021 (90, 0)	0.021 (0, 90)	16813.974	1.25
105	625	0.019 (0, 0)	0.019 (90, 0)	0.019 (0, 90)	30824.965	0.63
105	HBRK	0.029 (0, 90)	0.020 (0, 0)	0.020 (90, 0)	63467.263	0.45
105	ICT1	0.032 (0, 90)	0.020 (0, 0)	0.020 (90, 0)	64850.188	0.49
105	ICT3	0.020 (0, 0)	0.020 (90, 0)	0.003 (0, 90)	48041.328	0.42
105	K 334	0.020 (0, 0)	0.020 (90, 0)	0.003 (0, 90)	32224.521	0.61
105	X 240 RESET	0.003 (0, 90)	0.002 (0, 0)	0.002 (90, 0)	718.554	3.77
106	201	0.004 (0, 90)	0.002 (0, 0)	0.001 (90, 0)	604.501	6.10
106	203	0.018 (0, 90)	0.018 (0, 0)	0.018 (90, 0)	15223.369	1.18
106	216	0.023 (0, 0)	0.023 (90, 0)	0.019 (0, 90)	18793.344	1.24
106	501	0.010 (0, 90)	0.009 (0, 0)	0.009 (90, 0)	4850.917	1.97
106	502	0.026 (0, 90)	0.026 (0, 0)	0.026 (90, 0)	19588.278	1.32
106	623	0.019 (0, 90)	0.019 (0, 0)	0.019 (90, 0)	13216.735	1.44

3D Relative Confidence Regions (95.000 percent):

FROM	TO	MAJ-SEMI (AZ,VANG)	MED-SEMI (AZ,VANG)	MIN-SEMI (AZ,VANG)	DISTANCE	PPM
106	HBRK	0.029 (0, 90)	0.021 (0, 0)	0.021 (90, 0)	54997.798	0.54
106	ICT1	0.033 (0, 90)	0.021 (0, 0)	0.021 (90, 0)	65990.950	0.50
106	ICT3	0.021 (0, 0)	0.021 (90, 0)	0.010 (0, 90)	47663.232	0.44
106	X 240 RESET	0.010 (0, 90)	0.010 (0, 0)	0.010 (90, 0)	8724.108	1.17
107	204	0.021 (0, 0)	0.021 (90, 0)	0.021 (0, 90)	22027.222	0.96
108	204	0.018 (0, 0)	0.018 (90, 0)	0.018 (0, 90)	13580.045	1.35
109	204	0.021 (0, 90)	0.021 (0, 0)	0.021 (90, 0)	11632.094	1.80
110	204	0.015 (0, 90)	0.015 (0, 0)	0.015 (90, 0)	7751.044	1.93
111	D 40	0.026 (0, 0)	0.026 (90, 0)	0.025 (0, 90)	26370.516	1.00
111	K 334	0.025 (0, 0)	0.025 (90, 0)	0.025 (0, 90)	14181.537	1.74
112	D 40	0.027 (154, 44)	0.026 (257, 13)	0.026 (0, 43)	18941.838	1.40
112	K 334	0.026 (180, 58)	0.026 (90, 0)	0.026 (0, 32)	17409.155	1.52
113	D 40	0.024 (0, 0)	0.024 (90, 0)	0.024 (0, 90)	14567.675	1.67
113	K 334	0.026 (0, 0)	0.026 (90, 0)	0.024 (0, 90)	22648.532	1.13
114	D 40	0.017 (0, 90)	0.017 (0, 0)	0.016 (90, 0)	8897.880	1.87
114	K 334	0.019 (0, 0)	0.019 (90, 0)	0.017 (0, 90)	23826.238	0.82
115	D 40	0.020 (0, 0)	0.020 (90, 0)	0.019 (0, 90)	12695.189	1.55
115	K 334	0.020 (0, 0)	0.020 (90, 0)	0.019 (0, 90)	14964.859	1.35
116	117	0.028 (0, 90)	0.027 (0, 0)	0.027 (90, 0)	15651.311	1.77
116	118	0.020 (0, 0)	0.020 (90, 0)	0.015 (0, 90)	16118.876	1.26
116	210	0.032 (0, 90)	0.032 (0, 0)	0.032 (90, 0)	24077.181	1.32
116	211	0.018 (0, 0)	0.018 (90, 0)	0.018 (0, 90)	11130.259	1.62
116	212	0.017 (0, 90)	0.017 (0, 0)	0.017 (90, 0)	8848.326	1.90
116	510	0.031 (180, 67)	0.031 (0, 23)	0.031 (90, 0)	19206.111	1.64
116	511	0.014 (0, 90)	0.014 (0, 0)	0.014 (90, 0)	7582.819	1.86
116	512	0.011 (0, 90)	0.011 (0, 0)	0.011 (90, 0)	5883.434	1.92

3D Relative Confidence Regions (95.000 percent):

FROM	TO	MAJ-SEMI (AZ,VANG)	MED-SEMI (AZ,VANG)	MIN-SEMI (AZ,VANG)	DISTANCE	PPM
116	626	0.018 (0, 77)	0.017 (180, 13)	0.017 (90, 0)	9059.692	2.02
116	HBRK	0.031 (0, 90)	0.017 (0, 0)	0.017 (90, 0)	71507.815	0.44
116	ICT1	0.032 (0, 90)	0.017 (0, 0)	0.017 (90, 0)	24409.886	1.32
116	ICT3	0.017 (0, 0)	0.017 (90, 0)	0.013 (0, 90)	15412.685	1.13
117	D 40	0.029 (0, 0)	0.029 (90, 0)	0.029 (0, 90)	28952.105	1.01
118	119	0.021 (0, 90)	0.021 (0, 0)	0.021 (90, 0)	14374.468	1.48
118	120	0.033 (0, 90)	0.033 (0, 0)	0.033 (90, 0)	20638.466	1.62
118	213	0.011 (0, 90)	0.010 (0, 0)	0.010 (90, 0)	7033.656	1.50
118	214	0.016 (180, 68)	0.015 (90, 0)	0.015 (0, 22)	7909.352	2.05
118	215	0.015 (0, 90)	0.015 (0, 0)	0.015 (90, 0)	13003.172	1.16
118	216	0.020 (0, 0)	0.020 (90, 0)	0.019 (0, 90)	17749.770	1.15
118	217	0.019 (0, 90)	0.019 (0, 0)	0.019 (90, 0)	11303.370	1.71
118	513	0.010 (0, 0)	0.010 (90, 0)	0.009 (0, 90)	12697.893	0.75
118	514	0.021 (0, 90)	0.020 (0, 0)	0.020 (90, 0)	11451.766	1.80
118	515	0.012 (0, 90)	0.012 (0, 0)	0.012 (90, 0)	6676.130	1.82
118	516	0.021 (0, 90)	0.021 (0, 0)	0.021 (90, 0)	19630.694	1.09
118	627	0.024 (0, 90)	0.024 (0, 0)	0.024 (90, 0)	13729.168	1.73
118	C 334	0.027 (0, 0)	0.027 (90, 0)	0.009 (0, 90)	17781.000	1.55
118	D 40	0.021 (0, 0)	0.021 (90, 0)	0.009 (0, 90)	22931.269	0.92
118	HBRK	0.029 (0, 90)	0.019 (0, 0)	0.019 (90, 0)	58916.916	0.50
118	ICT3	0.019 (0, 0)	0.019 (90, 0)	0.009 (0, 90)	20219.647	0.94
119	ELDORADO	0.021 (0, 90)	0.021 (0, 0)	0.021 (90, 0)	15383.147	1.39
120	ELDORADO	0.034 (0, 90)	0.034 (0, 0)	0.034 (90, 0)	28905.380	1.17
121	216	0.023 (0, 90)	0.023 (0, 0)	0.023 (90, 0)	12180.541	1.88
121	HBRK	0.035 (0, 90)	0.027 (0, 0)	0.027 (90, 0)	52175.389	0.66
121	ICT3	0.028 (0, 90)	0.027 (0, 0)	0.027 (90, 0)	40667.545	0.68

3D Relative Confidence Regions (95.000 percent):

FROM	TO	MAJ-SEMI (AZ,VANG)	MED-SEMI (AZ,VANG)	MIN-SEMI (AZ,VANG)	DISTANCE	PPM
122	216	0.013 (0, 90)	0.013 (0, 0)	0.012 (90, 0)	6472.567	2.04
122	HBRK	0.030 (0, 90)	0.021 (0, 0)	0.021 (90, 0)	39453.778	0.76
122	ICT3	0.021 (0, 90)	0.021 (0, 0)	0.021 (90, 0)	37918.517	0.56
202	216	0.044 (0, 90)	0.044 (0, 0)	0.044 (90, 0)	26761.666	1.66
202	HBRK	0.050 (0, 90)	0.046 (0, 0)	0.046 (90, 0)	57089.704	0.87
202	ICT3	0.046 (0, 90)	0.046 (0, 0)	0.046 (90, 0)	56730.135	0.82
204	205	0.018 (0, 90)	0.018 (0, 0)	0.018 (90, 0)	10447.768	1.75
204	503	0.018 (0, 0)	0.018 (90, 0)	0.018 (0, 90)	16718.254	1.10
204	504	0.027 (0, 90)	0.027 (0, 0)	0.027 (90, 0)	16894.418	1.61
204	505	0.020 (0, 90)	0.020 (0, 0)	0.020 (90, 0)	10459.126	1.88
204	624	0.020 (0, 90)	0.019 (0, 0)	0.019 (90, 0)	11702.788	1.67
204	625	0.015 (0, 90)	0.015 (0, 0)	0.015 (90, 0)	7750.495	1.92
204	HBRK	0.031 (0, 90)	0.021 (0, 0)	0.021 (90, 0)	80968.420	0.38
204	ICT1	0.034 (0, 90)	0.021 (0, 0)	0.021 (90, 0)	54850.105	0.61
204	ICT3	0.021 (0, 0)	0.021 (90, 0)	0.012 (0, 90)	44133.771	0.47
204	K 334	0.018 (0, 0)	0.018 (90, 0)	0.012 (0, 90)	10984.398	1.63
206	D 40	0.026 (180, 15)	0.026 (90, 0)	0.025 (0, 75)	22199.798	1.17
206	K 334	0.025 (180, 63)	0.025 (90, 0)	0.025 (0, 27)	15111.302	1.68
207	D 40	0.015 (0, 90)	0.015 (0, 0)	0.015 (90, 0)	8463.781	1.74
207	K 334	0.017 (0, 0)	0.017 (90, 0)	0.015 (0, 90)	13948.535	1.20
208	D 40	0.013 (0, 90)	0.012 (0, 0)	0.012 (90, 0)	6491.219	1.93
208	K 334	0.017 (0, 0)	0.016 (90, 0)	0.013 (0, 90)	22676.860	0.73
209	D 40	0.015 (0, 90)	0.015 (0, 0)	0.015 (90, 0)	8343.647	1.83
209	K 334	0.018 (0, 0)	0.018 (90, 0)	0.015 (0, 90)	19588.098	0.93
210	D 40	0.031 (0, 90)	0.031 (0, 0)	0.031 (90, 0)	20380.522	1.54
211	D 40	0.019 (0, 0)	0.019 (90, 0)	0.019 (0, 90)	13840.725	1.39

3D Relative Confidence Regions (95.000 percent):

FROM	TO	MAJ-SEMI (AZ,VANG)	MED-SEMI (AZ,VANG)	MIN-SEMI (AZ,VANG)	DISTANCE	PPM
212	D 40	0.021 (0, 0)	0.021 (90, 0)	0.021 (0, 90)	28150.481	0.75
213	ELDORADO	0.010 (0, 90)	0.009 (0, 0)	0.009 (90, 0)	5598.674	1.74
214	ELDORADO	0.018 (180, 64)	0.017 (90, 0)	0.017 (0, 26)	19864.295	0.90
215	ELDORADO	0.014 (0, 90)	0.013 (0, 0)	0.013 (90, 0)	7752.449	1.79
216	218	0.021 (0, 90)	0.020 (0, 0)	0.020 (90, 0)	10866.666	1.95
216	517	0.033 (180, 67)	0.033 (0, 23)	0.033 (90, 0)	18596.040	1.79
216	518	0.023 (0, 90)	0.023 (0, 0)	0.023 (90, 0)	12232.009	1.87
216	ELDORADO	0.021 (0, 0)	0.021 (90, 0)	0.018 (0, 90)	22347.264	0.95
216	HBRK	0.028 (0, 90)	0.018 (0, 0)	0.018 (90, 0)	44007.549	0.63
216	ICT3	0.018 (0, 0)	0.018 (90, 0)	0.018 (0, 90)	32215.505	0.56
217	ELDORADO	0.020 (0, 90)	0.020 (0, 0)	0.020 (90, 0)	18168.304	1.11
218	HBRK	0.032 (0, 90)	0.025 (0, 0)	0.025 (90, 0)	33762.057	0.96
218	ICT3	0.026 (0, 90)	0.025 (0, 0)	0.025 (90, 0)	33999.341	0.76
506	D 40	0.018 (0, 20)	0.017 (90, 0)	0.016 (180, 70)	19128.728	0.93
506	K 334	0.017 (0, 76)	0.014 (180, 14)	0.014 (90, 0)	7740.207	2.14
507	D 40	0.031 (0, 0)	0.031 (90, 0)	0.030 (0, 90)	20982.780	1.46
507	K 334	0.031 (0, 0)	0.031 (90, 0)	0.030 (0, 90)	22316.663	1.38
508	D 40	0.018 (0, 0)	0.018 (90, 0)	0.018 (0, 90)	10094.669	1.82
508	K 334	0.021 (0, 0)	0.021 (90, 0)	0.018 (0, 90)	23204.494	0.90
509	D 40	0.020 (0, 0)	0.020 (90, 0)	0.018 (0, 90)	18114.224	1.12
509	K 334	0.019 (0, 0)	0.019 (90, 0)	0.018 (0, 90)	10847.319	1.72
510	D 40	0.032 (180, 61)	0.032 (90, 0)	0.032 (0, 29)	25905.552	1.25
511	D 40	0.018 (0, 0)	0.018 (90, 0)	0.017 (0, 90)	14944.117	1.18
512	D 40	0.017 (0, 0)	0.017 (90, 0)	0.017 (0, 90)	21425.718	0.81
513	ELDORADO	0.004 (0, 90)	0.001 (0, 0)	0.001 (90, 0)	87.427	41.07
514	ELDORADO	0.022 (0, 90)	0.022 (0, 0)	0.022 (90, 0)	24031.100	0.91

3D Relative Confidence Regions (95.000 percent):

FROM	TO	MAJ-SEMI (AZ,VANG)	MED-SEMI (AZ,VANG)	MIN-SEMI (AZ,VANG)	DISTANCE	PPM
515	ELDORADO	0.014 (0, 0)	0.014 (90, 0)	0.014 (0, 90)	13381.785	1.05
516	ELDORADO	0.020 (0, 90)	0.020 (0, 0)	0.020 (90, 0)	11813.630	1.73
517	HBRK	0.041 (180, 88)	0.035 (0, 2)	0.035 (90, 0)	57979.471	0.71
517	ICT3	0.036 (180, 75)	0.035 (0, 15)	0.035 (90, 0)	44888.245	0.80
518	HBRK	0.034 (0, 90)	0.027 (0, 0)	0.027 (90, 0)	46665.354	0.74
518	ICT3	0.028 (0, 90)	0.027 (0, 0)	0.027 (90, 0)	43807.558	0.64
626	D 40	0.021 (0, 66)	0.021 (90, 0)	0.021 (180, 24)	22846.798	0.94
627	ELDORADO	0.025 (0, 0)	0.024 (0, 90)	0.024 (90, 0)	23899.613	1.03
C 334	ELDORADO	0.028 (0, 0)	0.028 (90, 0)	0.000 (0, 90)	21833.963	1.27
D 40	HBRK	0.029 (0, 90)	0.018 (0, 0)	0.018 (90, 0)	80360.849	0.36
D 40	ICT1	0.032 (0, 90)	0.018 (0, 0)	0.018 (90, 0)	45732.116	0.70
D 40	ICT3	0.018 (0, 0)	0.018 (90, 0)	0.000 (0, 90)	36679.227	0.49
ELDORADO	HBRK	0.029 (0, 90)	0.020 (0, 0)	0.020 (90, 0)	66311.154	0.43
ELDORADO	ICT3	0.020 (0, 0)	0.020 (90, 0)	0.000 (0, 90)	31831.285	0.64
ICT1	K 334	0.032 (0, 90)	0.019 (0, 0)	0.019 (90, 0)	61081.982	0.52
ICT3	K 334	0.019 (0, 0)	0.019 (90, 0)	0.000 (0, 90)	52998.541	0.36

07:48:57, Wed Apr 25, 2012

INI file: C:\WINNT\GEOLAB.INI
Input file: Y:\1120103\GEOMAT~1\SURVEY\GEO\C2_ALL.IOB
Output file: Y:\1120103\GEOMAT~1\SURVEY\GEO\C2_ALL.LST

Geoid File: C:\GEOLAB2\G2009U06.GEO
WARNING: Some stations were not assigned geoid values

PARAMETERS		OBSERVATIONS	
Description	Number	Description	Number
No. of Stations	311	Directions	0
Coord Parameters	878	Distances	0
Free Latitudes	297	Azimuths	0
Free Longitudes	297	Vertical Angles	0
Free Heights	284	Zenithal Angles	0
Fixed Coordinates	55	Angles	0
Astro. Latitudes	0	Heights	0
Astro. Longitudes	0	Height Differences	0
Geoid Records	0	Auxiliary Params.	0
All Aux. Pars.	0	2-D Coords.	0
Direction Pars.	0	2-D Coord. Diffs.	0
Scale Parameters	0	3-D Coords.	0
Constant Pars.	0	3-D Coord. Diffs.	2286
Rotation Pars.	0		
Translation Pars.	0		
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Total Parameters	878	Total Observations	2286
Degrees of Freedom =	1408		

SUMMARY OF SELECTED OPTIONS

OPTION	SELECTION
Computation Mode	Adjustment
Maximum Iterations	5
Convergence Criterion	0.00100
Confidence Level for Statistics	95.000
Covariance Matrix Computation	Connected Portion Only
Residual Rejection Criterion	Tau Max
Confidence Region Types	3D Station Relative
Relative Confidence Regions	Connected Only
Variance Factor (VF) Known	Yes
CMULT (Multiply Parm Cov With VF)	Yes
RMULT (Multiply Res Cov With VF)	No
Force Convergence in Max Iters	Yes
Distances Affect 3D	No
Full Inverse Computed	No
Normals Reordered	Yes
Coordinates Generated	No

Geoid Interpolation Method	Bi-Linear

Adjusted NEO Coordinates:

CODE	FFF	STATION	NORTHING STD DEV	EASTING STD DEV	O-HEIGHT STD DEV	MAPPROJ
NEO	000	1003	4335267.059	856241.275	308.005	UTM 14
			0.007	0.007	0.004	
SFMC		1003	1.00116298	2 35 59.913194		UTM 14
NEO	000	1004	4345518.798	854059.004	302.824	UTM 14
			0.006	0.006	0.004	
SFMC		1004	1.00114386	2 35 33.350988		UTM 14
NEO	000	1005	4370912.102	854007.232	282.624	UTM 14
			0.006	0.006	0.005	
SFMC		1005	1.00114332	2 36 48.069075		UTM 14
NEO	000	1006	4424297.326	834781.268	259.822	UTM 14
			0.004	0.004	0.003	
SFMC		1006	1.00098005	2 30 51.572315		UTM 14
NEO	000	1007	4433323.503	824322.424	260.734	UTM 14
			0.004	0.004	0.002	
SFMC		1007	1.00089513	2 26 34.872891		UTM 14
NEO	000	1008	4446643.969	815657.229	263.234	UTM 14
			0.004	0.004	0.003	
SFMC		1008	1.00082680	2 23 16.918806		UTM 14
NEO	000	1009	4419177.932	797691.817	339.691	UTM 14
			0.005	0.005	0.004	
SFMC		1009	1.00069116	2 13 58.268578		UTM 14
NEO	000	1010	4416565.706	814814.124	323.958	UTM 14
			0.006	0.006	0.005	
SFMC		1010	1.00082033	2 21 32.299341		UTM 14
NEO	000	1011	4415230.511	778310.826	376.895	UTM 14
			0.006	0.006	0.004	
SFMC		1011	1.00055369	2 5 6.653728		UTM 14
NEO	000	1012	4414613.006	760940.851	378.035	UTM 14
			0.007	0.007	0.004	
SFMC		1012	1.00043835	1 57 17.673553		UTM 14
NEO	000	1013	4393504.696	754525.726	414.103	UTM 14
			0.008	0.008	0.004	
SFMC		1013	1.00039766	1 53 38.892855		UTM 14
NEO	000	1014	4362460.484	723422.418	349.934	UTM 14
			0.012	0.012	0.012	
SFMC		1014	1.00021465	1 38 47.734061		UTM 14
NEO	000	1015	4344802.837	732305.805	314.923	UTM 14
			0.006	0.006	0.003	
SFMC		1015	1.00026452	1 42 8.347539		UTM 14
NEO	000	1016	4349298.974	753353.904	367.510	UTM 14
			0.007	0.007	0.004	
SFMC		1016	1.00039041	1 51 32.306665		UTM 14
NEO	000	1017	4377940.820	750419.805	368.273	UTM 14
			0.009	0.009	0.004	
SFMC		1017	1.00037216	1 51 15.814763		UTM 14
NEO	000	103	4346886.784	871637.563	245.071	UTM 14
			0.008	0.008	0.006	
SFMC		103	1.00130100	2 43 19.332792		UTM 14
NEO	000	104	4426748.599	821511.960	259.826	UTM 14
			0.005	0.004	0.004	
SFMC		104	1.00087279	2 25 0.645152		UTM 14
NEO	000	1101	4444817.534	818243.369	264.001	UTM 14

Adjusted NEO Coordinates:

CODE	FFF	STATION	NORTHING / STD DEV	EASTING / STD DEV	O-HEIGHT / STD DEV	MAPPROJ
			0.005	0.005	0.005	
SFMC		1101	1.00084699	2 24 22.119658		UTM 14
NEO	000	1102	4446506.592	811638.425	264.250	UTM 14
			0.005	0.005	0.005	
SFMC		1102	1.00079575	2 21 27.394006		UTM 14
NEO	000	1103	4454657.092	805663.100	264.809	UTM 14
			0.003	0.003	0.004	
SFMC		1103	1.00075031	2 19 6.696331		UTM 14
NEO	000	1104	4459054.806	801919.419	266.884	UTM 14
			0.006	0.006	0.007	
SFMC		1104	1.00072229	2 17 36.267428		UTM 14
NEO	000	1105	4419199.529	797787.796	340.918	UTM 14
			0.005	0.005	0.004	
SFMC		1105	1.00069187	2 14 0.909165		UTM 14
NEO	000	1106	4421920.322	785682.497	345.977	UTM 14
			0.011	0.011	0.011	
SFMC		1106	1.00060488	2 8 41.486122		UTM 14
NEO	000	1107	4426841.610	787914.734	334.281	UTM 14
			0.011	0.011	0.010	
SFMC		1107	1.00062064	2 9 53.891832		UTM 14
NEO	000	1108	4417802.943	803847.548	345.965	UTM 14
			0.007	0.007	0.007	
SFMC		1108	1.00073677	2 16 40.471140		UTM 14
NEO	000	1109	4406423.085	801384.075	345.347	UTM 14
			0.011	0.011	0.011	
SFMC		1109	1.00071843	2 15 4.696997		UTM 14
NEO	000	1110	4408428.126	810626.330	336.544	UTM 14
			0.009	0.009	0.009	
SFMC		1110	1.00078809	2 19 17.926102		UTM 14
NEO	000	1111	4406711.968	787923.707	368.577	UTM 14
			0.011	0.011	0.010	
SFMC		1111	1.00062074	2 9 4.287000		UTM 14
NEO	000	1112	4425018.793	781996.395	342.090	UTM 14
			0.010	0.010	0.009	
SFMC		1112	1.00057910	2 7 9.606856		UTM 14
NEO	000	1113	4400306.558	820313.768	307.959	UTM 14
			0.012	0.012	0.012	
SFMC		1113	1.00086339	2 23 15.565238		UTM 14
NEO	000	1114	4422907.991	773540.294	390.357	UTM 14
			0.010	0.010	0.008	
SFMC		1114	1.00052126	2 3 16.327078		UTM 14
NEO	000	1115	4427537.188	751787.749	320.657	UTM 14
			0.012	0.012	0.010	
SFMC		1115	1.00038054	1 53 39.284316		UTM 14
NEO	000	1116	4418905.331	743118.565	387.922	UTM 14
			0.010	0.010	0.006	
SFMC		1116	1.00032772	1 49 26.794938		UTM 14
NEO	000	1117	4414184.104	741044.715	397.150	UTM 14
			0.010	0.010	0.006	
SFMC		1117	1.00031536	1 48 21.076227		UTM 14
NEO	000	1118	4394887.748	748698.978	416.004	UTM 14
			0.009	0.009	0.007	

Adjusted NEO Coordinates:

CODE	FFF	STATION	NORTHING STD DEV	EASTING STD DEV	O-HEIGHT STD DEV	MAPPROJ
SFMC		1118	1.00036155	1 51 6.002203		UTM 14
NEO	000	1119	4407543.897 0.011	740738.298 0.011	391.730 0.008	UTM 14
SFMC		1119	1.00031356	1 47 59.089320		UTM 14
NEO	000	1120	4403024.075 0.011	756827.449 0.011	374.689 0.008	UTM 14
SFMC		1120	1.00041214	1 55 1.381200		UTM 14
NEO	000	1121	4365688.639 0.013	719105.415 0.013	385.047 0.013	UTM 14
SFMC		1121	1.00019112	1 36 59.355393		UTM 14
NEO	000	1122	4355377.976 0.013	721877.875 0.013	328.069 0.012	UTM 14
SFMC		1122	1.00020619	1 37 53.483672		UTM 14
NEO	000	1123	4348837.863 0.007	737219.491 0.007	298.689 0.005	UTM 14
SFMC		1123	1.00029293	1 44 25.867922		UTM 14
NEO	000	1124	4359005.675 0.012	737851.356 0.012	331.294 0.010	UTM 14
SFMC		1124	1.00029661	1 45 3.011709		UTM 14
NEO	000	1125	4350648.652 0.007	753306.614 0.007	373.949 0.005	UTM 14
SFMC		1125	1.00039011	1 51 33.951337		UTM 14
NEO	000	1126	4361019.700 0.012	752738.186 0.012	335.537 0.010	UTM 14
SFMC		1126	1.00038655	1 51 41.159113		UTM 14
NEO	000	1127	4374716.835 0.010	743471.414 0.010	332.584 0.005	UTM 14
SFMC		1127	1.00032990	1 48 4.201542		UTM 14
NEO	000	1128	4412871.842 0.006	839053.451 0.006	324.678 0.006	UTM 14
SFMC		1128	1.00101554	2 32 13.409082		UTM 14
NEO	000	1129	4421543.827 0.010	844693.679 0.009	252.198 0.010	UTM 14
SFMC		1129	1.00106301	2 35 10.539158		UTM 14
NEO	000	1130	4410582.262 0.009	794212.907 0.009	343.867 0.008	UTM 14
SFMC		1130	1.00066582	2 12 2.819821		UTM 14
NEO	000	1131	4408409.072 0.010	768518.189 0.010	386.951 0.008	UTM 14
SFMC		1131	1.00048776	2 0 27.323733		UTM 14
NEO	000	1132	4388852.645 0.009	757933.961 0.009	412.377 0.006	UTM 14
SFMC		1132	1.00041918	1 54 59.779399		UTM 14
NEO	000	1133	4377747.628 0.010	743764.890 0.010	336.985 0.007	UTM 14
SFMC		1133	1.00033166	1 48 18.296372		UTM 14
NEO	000	1134	4336380.684 0.010	729327.667 0.010	313.892 0.003	UTM 14
SFMC		1134	1.00024761	1 40 33.593912		UTM 14
NEO	000	1135	4326489.495 0.011	738770.010 0.011	310.625 0.007	UTM 14
SFMC		1135	1.00030205	1 44 21.759687		UTM 14

Adjusted NEO Coordinates:

CODE	FFF	STATION	NORTHING STD DEV	EASTING STD DEV	O-HEIGHT STD DEV	MAPPROJ
NEO	000	1136	4310150.790 0.013	719500.159 0.013	389.958 0.011	UTM 14
SFMC		1136	1.00019332	1 35 26.991125		UTM 14
NEO	000	1137	4297019.475 0.016	763647.634 0.016	360.064 0.016	UTM 14
SFMC		1137	1.00045604	1 54 7.932807		UTM 14
NEO	000	1138	4298267.379 0.017	750685.778 0.017	411.411 0.017	UTM 14
SFMC		1138	1.00037393	1 48 34.457857		UTM 14
NEO	000	1139	4301237.441 0.016	744401.391 0.016	464.358 0.016	UTM 14
SFMC		1139	1.00033560	1 45 57.476461		UTM 14
NEO	000	1140	4327916.375 0.004	743303.348 0.004	303.830 0.004	UTM 14
SFMC		1140	1.00032897	1 46 23.377993		UTM 14
NEO	000	1141	4321807.671 0.006	749926.529 0.006	343.641 0.006	UTM 14
SFMC		1141	1.00036921	1 49 4.024307		UTM 14
NEO	000	1142	4348751.943 0.013	776713.340 0.013	343.046 0.008	UTM 14
SFMC		1142	1.00054291	2 1 46.832716		UTM 14
NEO	000	1143	4378294.366 0.012	787198.530 0.012	337.954 0.007	UTM 14
SFMC		1143	1.00061567	2 7 35.071537		UTM 14
NEO	000	1144	4373113.904 0.012	775864.664 0.012	352.732 0.006	UTM 14
SFMC		1144	1.00053708	2 2 21.454601		UTM 14
NEO	000	1145	4384700.077 0.011	780645.751 0.011	339.933 0.006	UTM 14
SFMC		1145	1.00056983	2 4 56.115925		UTM 14
NEO	000	1146	4345192.330 0.006	853295.681 0.006	305.160 0.004	UTM 14
SFMC		1146	1.00113721	2 35 12.324271		UTM 14
NEO	000	1147	4335894.633 0.010	866666.149 0.010	275.875 0.009	UTM 14
SFMC		1147	1.00125582	2 40 34.771006		UTM 14
NEO	000	1148	4365725.670 0.008	855955.860 0.008	235.668 0.007	UTM 14
SFMC		1148	1.00116038	2 37 24.013236		UTM 14
NEO	000	1149	4353339.813 0.009	855401.296 0.009	246.738 0.008	UTM 14
SFMC		1149	1.00115556	2 36 32.084992		UTM 14
NEO	000	1150	4391889.952 0.004	841947.918 0.004	243.185 0.004	UTM 14
SFMC		1150	1.00103988	2 32 29.705029		UTM 14
NEO	000	1201	4446882.205 0.004	817623.883 0.004	262.194 0.004	UTM 14
SFMC		1201	1.00084213	2 24 10.986092		UTM 14
NEO	000	1202	4440954.847 0.006	814259.246 0.006	261.440 0.006	UTM 14
SFMC		1202	1.00081597	2 22 23.470703		UTM 14
NEO	000	1203	4454900.275	802857.488	266.987	UTM 14

Adjusted NEO Coordinates:

CODE	FFF	STATION	NORTHING STD DEV	EASTING STD DEV	O-HEIGHT STD DEV	MAPPROJ
			0.005	0.005	0.005	
SFMC		1203	1.00072928	2 17 50.920727	UTM 14	
NEO	000	1204	4464625.375	799743.504	267.171	UTM 14
			0.009	0.009	0.009	
SFMC		1204	1.00070615	2 16 51.443535	UTM 14	
NEO	000	1205	4420907.947	795349.284	337.152	UTM 14
			0.006	0.006	0.005	
SFMC		1205	1.00067405	2 12 59.566631	UTM 14	
NEO	000	1206	4430410.898	796564.355	320.696	UTM 14
			0.009	0.009	0.007	
SFMC		1206	1.00068289	2 13 56.606273	UTM 14	
NEO	000	1207	4429323.478	808312.413	292.963	UTM 14
			0.010	0.010	0.009	
SFMC		1207	1.00077040	2 19 11.250840	UTM 14	
NEO	000	1208	4416427.844	808365.504	332.692	UTM 14
			0.007	0.007	0.007	
SFMC		1208	1.00077083	2 18 38.440699	UTM 14	
NEO	000	1209	4411180.085	799018.315	314.265	UTM 14
			0.009	0.009	0.008	
SFMC		1209	1.00070093	2 14 13.441856	UTM 14	
NEO	000	1210	4407353.819	784007.218	360.837	UTM 14
			0.010	0.010	0.009	
SFMC		1210	1.00059316	2 7 20.745144	UTM 14	
NEO	000	1211	4402335.417	778549.440	350.812	UTM 14
			0.012	0.012	0.011	
SFMC		1211	1.00055536	2 4 42.243233	UTM 14	
NEO	000	1212	4399434.577	827786.652	318.294	UTM 14
			0.011	0.011	0.011	
SFMC		1212	1.00092304	2 26 33.066416	UTM 14	
NEO	000	1213	4419042.373	825733.560	262.312	UTM 14
			0.009	0.009	0.009	
SFMC		1213	1.00090646	2 26 32.944188	UTM 14	
NEO	000	1214	4427787.989	769510.985	410.392	UTM 14
			0.012	0.012	0.012	
SFMC		1214	1.00049431	2 1 38.938280	UTM 14	
NEO	000	1215	4422613.040	759976.798	365.265	UTM 14
			0.010	0.010	0.008	
SFMC		1215	1.00043215	1 57 9.624449	UTM 14	
NEO	000	1216	4423847.962	739938.153	399.653	UTM 14
			0.013	0.013	0.011	
SFMC		1216	1.00030880	1 48 11.246155	UTM 14	
NEO	000	1217	4393651.185	760833.574	422.847	UTM 14
			0.010	0.010	0.007	
SFMC		1217	1.00043770	1 56 27.898104	UTM 14	
NEO	000	1218	4400500.533	772020.038	381.621	UTM 14
			0.014	0.014	0.013	
SFMC		1218	1.00051109	2 1 42.939410	UTM 14	
NEO	000	1219	4388284.827	744148.019	419.861	UTM 14
			0.012	0.012	0.010	
SFMC		1219	1.00033394	1 48 50.439773	UTM 14	
NEO	000	1220	4363156.389	731273.789	400.407	UTM 14
			0.013	0.013	0.014	

Adjusted NEO Coordinates:

CODE	FFF	STATION	NORTHING STD DEV	EASTING STD DEV	O-HEIGHT STD DEV	MAPPROJ
SFMC		1220	1.00025861	1 42 17.109882		UTM 14
NEO	000	1221	4370169.095 0.016	732695.874 0.016	425.503 0.016	UTM 14
SFMC		1221	1.00026672	1 43 8.655222		UTM 14
NEO	000	1222	4342424.883 0.009	723056.382 0.009	344.108 0.008	UTM 14
SFMC		1222	1.00021266	1 38 0.199097		UTM 14
NEO	000	1223	4350114.097 0.007	732858.500 0.007	327.509 0.005	UTM 14
SFMC		1223	1.00026768	1 42 33.362929		UTM 14
NEO	000	1224	4345791.955 0.006	739789.227 0.006	295.897 0.002	UTM 14
SFMC		1224	1.00030803	1 45 27.464475		UTM 14
NEO	000	1225	4346847.333 0.008	749415.800 0.008	324.515 0.005	UTM 14
SFMC		1225	1.00036603	1 49 43.289981		UTM 14
NEO	000	1226	4371712.099 0.010	748612.288 0.010	407.705 0.007	UTM 14
SFMC		1226	1.00036106	1 50 14.529254		UTM 14
NEO	000	1227	4411996.976 0.004	835943.243 0.004	332.172 0.004	UTM 14
SFMC		1227	1.00098968	2 30 47.365746		UTM 14
NEO	000	1228	4416024.322 0.006	836239.783 0.006	355.459 0.006	UTM 14
SFMC		1228	1.00099213	2 31 6.956272		UTM 14
NEO	000	1229	4412347.958 0.009	787860.880 0.009	360.438 0.008	UTM 14
SFMC		1229	1.00062029	2 9 16.528145		UTM 14
NEO	000	1230	4408235.837 0.009	763387.380 0.009	404.964 0.007	UTM 14
SFMC		1230	1.00045416	1 58 9.100434		UTM 14
NEO	000	1231	4388519.590 0.009	751133.056 0.009	396.267 0.006	UTM 14
SFMC		1231	1.00037655	1 51 57.459010		UTM 14
NEO	000	1232	4378428.180 0.010	761256.301 0.010	379.227 0.006	UTM 14
SFMC		1232	1.00044044	1 56 5.255034		UTM 14
NEO	000	1233	4383538.029 0.010	746539.022 0.010	394.206 0.007	UTM 14
SFMC		1233	1.00034840	1 49 44.297274		UTM 14
NEO	000	1234	4320094.361 0.009	735260.443 0.009	327.272 0.005	UTM 14
SFMC		1234	1.00028157	1 42 37.217626		UTM 14
NEO	000	1235	4305668.309 0.010	731097.877 0.010	449.721 0.006	UTM 14
SFMC		1235	1.00025768	1 40 20.492303		UTM 14
NEO	000	1236	4317498.277 0.010	729302.983 0.010	341.015 0.007	UTM 14
SFMC		1236	1.00024749	1 39 56.526930		UTM 14
NEO	000	1237	4306417.196 0.011	737901.428 0.011	393.258 0.008	UTM 14
SFMC		1237	1.00029698	1 43 18.960875		UTM 14

Adjusted NEO Coordinates:

CODE	FFF	STATION	NORTHING STD DEV	EASTING STD DEV	O-HEIGHT STD DEV	MAPPROJ
NEO	000	1238	4306076.293	744240.027	413.971	UTM 14
			0.015	0.015	0.015	
SFMC		1238	1.00033462	1 46 3.166557		UTM 14
NEO	000	1239	4324825.914	751287.135	323.043	UTM 14
			0.004	0.004	0.005	
SFMC		1239	1.00037760	1 49 45.961464		UTM 14
NEO	000	1240	4316181.408	754992.613	349.859	UTM 14
			0.008	0.008	0.008	
SFMC		1240	1.00040072	1 51 4.403721		UTM 14
NEO	000	1241	4335017.917	744893.043	347.433	UTM 14
			0.007	0.007	0.007	
SFMC		1241	1.00033851	1 47 19.660304		UTM 14
NEO	000	1242	4358743.946	781880.682	360.887	UTM 14
			0.011	0.011	0.004	
SFMC		1242	1.00057844	2 4 26.824814		UTM 14
NEO	000	1243	4355244.393	771680.010	346.798	UTM 14
			0.013	0.013	0.007	
SFMC		1243	1.00050890	1 59 49.115863		UTM 14
NEO	000	1244	4366608.474	774498.677	378.348	UTM 14
			0.013	0.013	0.008	
SFMC		1244	1.00052784	2 1 30.000951		UTM 14
NEO	000	1245	4377943.124	766102.079	380.457	UTM 14
			0.010	0.010	0.007	
SFMC		1245	1.00047191	1 58 13.098675		UTM 14
NEO	000	1246	4340770.588	861685.293	302.462	UTM 14
			0.008	0.008	0.007	
SFMC		1246	1.00121111	2 38 39.205102		UTM 14
NEO	000	1247	4336010.545	855942.702	299.849	UTM 14
			0.007	0.007	0.005	
SFMC		1247	1.00116036	2 35 54.322138		UTM 14
NEO	000	1248	4356186.558	859324.263	233.879	UTM 14
			0.011	0.011	0.010	
SFMC		1248	1.00119009	2 38 24.042752		UTM 14
NEO	000	1249	4366230.522	848362.893	256.714	UTM 14
			0.009	0.009	0.008	
SFMC		1249	1.00109450	2 34 4.726547		UTM 14
NEO	000	1250	4385869.775	834992.982	240.346	UTM 14
			0.004	0.004	0.004	
SFMC		1250	1.00098191	2 29 6.979563		UTM 14
NEO	000	1251	4393123.601	831319.038	310.872	UTM 14
			0.005	0.005	0.005	
SFMC		1251	1.00095173	2 27 49.663896		UTM 14
NEO	000	1252	4380073.262	832552.948	284.611	UTM 14
			0.006	0.006	0.006	
SFMC		1252	1.00096186	2 27 45.586256		UTM 14
NEO	000	1401	4444152.703	811496.512	260.439	UTM 14
			0.006	0.006	0.006	
SFMC		1401	1.00079467	2 21 17.188467		UTM 14
NEO	000	1402	4442238.880	821760.610	280.668	UTM 14
			0.006	0.006	0.006	
SFMC		1402	1.00087472	2 25 50.397088		UTM 14
NEO	000	1403	4455890.391	808459.731	264.806	UTM 14

Adjusted NEO Coordinates:

CODE	FFF	STATION	NORTHING STD DEV	EASTING STD DEV	O-HEIGHT STD DEV	MAPPROJ
			0.001	0.001	0.002	
SFMC		1403	1.00077145	2 20 26.165351		UTM 14
NEO	000	1404	4463008.815	798972.182	266.161	UTM 14
			0.009	0.009	0.009	
SFMC		1404	1.00070047	2 16 26.158719		UTM 14
NEO	000	1405	4440300.772	803235.050	305.307	UTM 14
			0.006	0.006	0.003	
SFMC		1405	1.00073214	2 17 22.831195		UTM 14
NEO	000	1406	4420487.547	790617.035	320.655	UTM 14
			0.008	0.008	0.007	
SFMC		1406	1.00063990	2 10 50.963296		UTM 14
NEO	000	1407	4425830.733	802413.379	303.872	UTM 14
			0.008	0.008	0.007	
SFMC		1407	1.00072604	2 16 22.765376		UTM 14
NEO	000	1408	4424121.978	806415.145	302.154	UTM 14
			0.009	0.009	0.008	
SFMC		1408	1.00075605	2 18 6.254488		UTM 14
NEO	000	1409	4403428.679	806454.725	336.703	UTM 14
			0.012	0.012	0.012	
SFMC		1409	1.00075640	2 17 12.838626		UTM 14
NEO	000	1410	4401247.033	791340.826	356.350	UTM 14
			0.014	0.014	0.013	
SFMC		1410	1.00064513	2 10 22.335900		UTM 14
NEO	000	1411	4409263.098	830672.268	328.699	UTM 14
			0.006	0.006	0.006	
SFMC		1411	1.00094641	2 28 18.086384		UTM 14
NEO	000	1412	4408727.341	821089.163	276.345	UTM 14
			0.009	0.009	0.009	
SFMC		1412	1.00086949	2 23 59.482649		UTM 14
NEO	000	1413	4426515.364	816920.946	269.911	UTM 14
			0.010	0.010	0.010	
SFMC		1413	1.00083669	2 22 56.116120		UTM 14
NEO	000	1414	4415132.405	774822.098	361.136	UTM 14
			0.007	0.007	0.005	
SFMC		1414	1.00052993	2 3 32.521058		UTM 14
NEO	000	1415	4430310.369	745367.748	355.314	UTM 14
			0.015	0.015	0.013	
SFMC		1415	1.00034123	1 50 51.577024		UTM 14
NEO	000	1416	4419177.802	748074.747	349.526	UTM 14
			0.009	0.009	0.005	
SFMC		1416	1.00035770	1 51 41.020820		UTM 14
NEO	000	1417	4392302.239	767765.324	373.418	UTM 14
			0.013	0.013	0.011	
SFMC		1417	1.00048282	1 59 30.154294		UTM 14
NEO	000	1418	4394642.729	740406.051	413.171	UTM 14
			0.013	0.013	0.011	
SFMC		1418	1.00031161	1 47 23.578401		UTM 14
NEO	000	1419	4408526.409	750811.669	372.499	UTM 14
			0.009	0.009	0.005	
SFMC		1419	1.00037453	1 52 31.852290		UTM 14
NEO	000	1420	4368690.250	735972.229	385.660	UTM 14
			0.017	0.017	0.017	

Adjusted NEO Coordinates:

CODE	FFF	STATION	NORTHING STD DEV	EASTING STD DEV	O-HEIGHT STD DEV	MAPPROJ
SFMC		1420	1.00028563	1 44 32.692752		UTM 14
NEO	000	1421	4357086.453 0.012	727022.615 0.012	359.233 0.012	UTM 14
SFMC		1421	1.00023462	1 40 12.771370		UTM 14
NEO	000	1422	4345691.477 0.011	718918.640 0.011	361.403 0.011	UTM 14
SFMC		1422	1.00019013	1 36 17.305312		UTM 14
NEO	000	1423	4349483.255 0.009	726041.914 0.009	312.603 0.008	UTM 14
SFMC		1423	1.00022916	1 39 32.280219		UTM 14
NEO	000	1424	4351902.407 0.009	743237.621 0.009	337.903 0.006	UTM 14
SFMC		1424	1.00032854	1 47 10.883064		UTM 14
NEO	000	1425	4343930.130 0.008	750989.128 0.008	295.605 0.006	UTM 14
SFMC		1425	1.00037573	1 50 18.561060		UTM 14
NEO	000	1426	4365035.084 0.014	744890.516 0.014	323.074 0.013	UTM 14
SFMC		1426	1.00033845	1 48 21.775665		UTM 14
NEO	000	1427	4378810.393 0.010	738724.280 0.010	384.262 0.002	UTM 14
SFMC		1427	1.00030171	1 46 6.297455		UTM 14
NEO	000	1428	4420508.934 0.009	840265.398 0.009	254.711 0.009	UTM 14
SFMC		1428	1.00102566	2 33 8.282965		UTM 14
NEO	000	1429	4420096.173 0.008	779754.815 0.008	358.814 0.006	UTM 14
SFMC		1429	1.00056361	2 5 57.228245		UTM 14
NEO	000	1430	4412220.005 0.009	784929.594 0.009	337.173 0.007	UTM 14
SFMC		1430	1.00059961	2 7 57.408365		UTM 14
NEO	000	1431	4385646.986 0.011	761618.940 0.011	391.494 0.009	UTM 14
SFMC		1431	1.00044276	1 56 31.008529		UTM 14
NEO	000	1432	4384234.129 0.013	766171.721 0.013	375.305 0.011	UTM 14
SFMC		1432	1.00047236	1 58 29.225043		UTM 14
NEO	000	1433	4329755.376 0.011	728178.091 0.011	371.458 0.007	UTM 14
SFMC		1433	1.00024114	1 39 50.656060		UTM 14
NEO	000	1434	4335843.719 0.011	738473.017 0.011	353.503 0.005	UTM 14
SFMC		1434	1.00030029	1 44 32.764051		UTM 14
NEO	000	1435	4337274.358 0.010	734609.800 0.010	324.671 0.002	UTM 14
SFMC		1435	1.00027778	1 42 54.129214		UTM 14
NEO	000	1436	4313208.482 0.012	725277.139 0.012	358.652 0.009	UTM 14
SFMC		1436	1.00022496	1 38 3.287038		UTM 14
NEO	000	1437	4295169.101 0.017	756089.367 0.017	394.453 0.017	UTM 14
SFMC		1437	1.00040766	1 50 48.012783		UTM 14

Adjusted NEO Coordinates:

CODE	FFF	STATION	NORTHING STD DEV	EASTING STD DEV	O-HEIGHT STD DEV	MAPPROJ
NEO	000	1438	4306550.169	756870.207	408.276	UTM 14
			0.017	0.017	0.017	
SFMC		1438	1.00041258	1 51 32.668192		UTM 14
NEO	000	1439	4324321.815	758143.116	309.652	UTM 14
			0.003	0.003	0.004	
SFMC		1439	1.00042062	1 52 44.236398		UTM 14
NEO	000	1440	4315193.645	748555.618	426.954	UTM 14
			0.009	0.009	0.009	
SFMC		1440	1.00036080	1 48 14.393730		UTM 14
NEO	000	1441	4355772.802	788473.121	355.956	UTM 14
			0.012	0.012	0.008	
SFMC		1441	1.00062475	2 7 13.803088		UTM 14
NEO	000	1442	4350230.388	790887.660	320.603	UTM 14
			0.015	0.015	0.011	
SFMC		1442	1.00064199	2 8 3.912081		UTM 14
NEO	000	1443	4366149.501	784071.995	353.728	UTM 14
			0.012	0.012	0.007	
SFMC		1443	1.00059369	2 5 42.586646		UTM 14
NEO	000	1444	4377914.186	775465.453	340.687	UTM 14
			0.011	0.011	0.004	
SFMC		1444	1.00053436	2 2 22.106760		UTM 14
NEO	000	1445	4344008.468	856742.355	268.879	UTM 14
			0.007	0.007	0.005	
SFMC		1445	1.00116736	2 36 39.299394		UTM 14
NEO	000	1446	4346001.902	862739.901	231.694	UTM 14
			0.009	0.009	0.008	
SFMC		1446	1.00122051	2 39 22.859328		UTM 14
NEO	000	1447	4339030.081	854395.673	289.694	UTM 14
			0.007	0.007	0.006	
SFMC		1447	1.00114681	2 35 22.813000		UTM 14
NEO	000	1448	4368450.386	855392.916	294.349	UTM 14
			0.007	0.007	0.005	
SFMC		1448	1.00115544	2 37 17.342527		UTM 14
NEO	000	1449	4360977.737	856341.279	233.076	UTM 14
			0.010	0.010	0.009	
SFMC		1449	1.00116378	2 37 19.866880		UTM 14
NEO	000	1450	4389449.246	841283.127	247.622	UTM 14
			0.004	0.004	0.005	
SFMC		1450	1.00103429	2 32 4.863934		UTM 14
NEO	000	1451	4384022.168	838650.263	241.019	UTM 14
			0.006	0.006	0.006	
SFMC		1451	1.00101226	2 30 39.019597		UTM 14
NEO	000	1452	4387695.017	833038.591	264.633	UTM 14
			0.002	0.002	0.002	
SFMC		1452	1.00096582	2 28 20.125043		UTM 14
NEO	000	1501	4449089.279	821210.679	269.955	UTM 14
			0.006	0.006	0.006	
SFMC		1501	1.00087035	2 25 54.542693		UTM 14
NEO	000	1502	4461381.850	801544.412	266.359	UTM 14
			0.007	0.007	0.007	
SFMC		1502	1.00071949	2 17 32.141387		UTM 14
NEO	000	1503	4439600.141	805056.429	262.753	UTM 14

Adjusted NEO Coordinates:

CODE	FFF	STATION	NORTHING / STD DEV	EASTING / STD DEV	O-HEIGHT / STD DEV	MAPPROJ
			0.006	0.006	0.003	
SFMC		1503	1.00074578	2 18 10.364971		UTM 14
NEO	000	1504	4423714.069	788053.824	303.977	UTM 14
			0.010	0.010	0.009	
SFMC		1504	1.00062163	2 9 49.882981		UTM 14
NEO	000	1505	4430515.025	793333.117	290.147	UTM 14
			0.009	0.009	0.008	
SFMC		1505	1.00065941	2 12 29.516786		UTM 14
NEO	000	1506	4414004.622	807202.123	308.634	UTM 14
			0.008	0.008	0.007	
SFMC		1506	1.00076202	2 18 0.741507		UTM 14
NEO	000	1507	4417508.719	797685.952	340.707	UTM 14
			0.006	0.006	0.004	
SFMC		1507	1.00069112	2 13 53.835848		UTM 14
NEO	000	1508	4397946.550	806671.015	348.556	UTM 14
			0.015	0.015	0.015	
SFMC		1508	1.00075804	2 17 4.239019		UTM 14
NEO	000	1509	4415042.434	780348.440	375.962	UTM 14
			0.007	0.007	0.005	
SFMC		1509	1.00056771	2 6 1.040272		UTM 14
NEO	000	1510	4395675.526	797792.350	318.575	UTM 14
			0.018	0.018	0.017	
SFMC		1510	1.00069195	2 13 0.937016		UTM 14
NEO	000	1511	4411316.430	834245.021	337.419	UTM 14
			0.004	0.004	0.004	
SFMC		1511	1.00097567	2 29 59.819623		UTM 14
NEO	000	1512	4418887.442	819896.665	306.564	UTM 14
			0.007	0.007	0.007	
SFMC		1512	1.00086005	2 23 55.405274		UTM 14
NEO	000	1513	4417268.399	761761.121	381.110	UTM 14
			0.008	0.008	0.005	
SFMC		1513	1.00044362	1 57 45.733597		UTM 14
NEO	000	1514	4427915.125	758946.621	390.961	UTM 14
			0.013	0.013	0.011	
SFMC		1514	1.00042556	1 56 53.659946		UTM 14
NEO	000	1515	4420820.812	774466.544	394.070	UTM 14
			0.009	0.009	0.007	
SFMC		1515	1.00052751	2 3 36.385604		UTM 14
NEO	000	1516	4413107.996	751340.055	342.340	UTM 14
			0.008	0.008	0.003	
SFMC		1516	1.00037779	1 52 55.945096		UTM 14
NEO	000	1517	4393782.874	754734.622	410.351	UTM 14
			0.008	0.008	0.004	
SFMC		1517	1.00039897	1 53 45.085395		UTM 14
NEO	000	1518	4391854.438	773362.613	334.701	UTM 14
			0.016	0.016	0.015	
SFMC		1518	1.00052012	2 1 58.686020		UTM 14
NEO	000	1519	4401067.656	745493.066	384.937	UTM 14
			0.011	0.011	0.008	
SFMC		1519	1.00034204	1 49 53.208086		UTM 14
NEO	000	1520	4363267.601	723040.978	355.970	UTM 14
			0.012	0.012	0.012	

Adjusted NEO Coordinates:

CODE	FFF	STATION	NORTHING STD DEV	EASTING STD DEV	O-HEIGHT STD DEV	MAPPROJ
SFMC		1520	1.00021255	1 38 39.155805		UTM 14
NEO	000	1521	4353300.038	720900.106	339.429	UTM 14
			0.012	0.012	0.012	
SFMC		1521	1.00020086	1 37 23.746820		UTM 14
NEO	000	1522	4343651.433	731525.815	313.598	UTM 14
			0.006	0.006	0.003	
SFMC		1522	1.00026007	1 41 45.548985		UTM 14
NEO	000	1523	4344675.076	743674.652	292.960	UTM 14
			0.007	0.007	0.002	
SFMC		1523	1.00033117	1 47 7.528042		UTM 14
NEO	000	1524	4355032.473	753836.592	311.901	UTM 14
			0.014	0.014	0.013	
SFMC		1524	1.00039341	1 51 57.350821		UTM 14
NEO	000	1525	4352110.428	749050.543	392.418	UTM 14
			0.008	0.008	0.006	
SFMC		1525	1.00036378	1 49 44.751109		UTM 14
NEO	000	1526	4341635.050	754536.696	289.599	UTM 14
			0.009	0.009	0.007	
SFMC		1526	1.00039782	1 51 47.014714		UTM 14
NEO	000	1527	4377397.099	751354.975	358.774	UTM 14
			0.009	0.009	0.005	
SFMC		1527	1.00037794	1 51 39.537761		UTM 14
NEO	000	1528	4409671.508	846445.591	256.264	UTM 14
			0.010	0.010	0.010	
SFMC		1528	1.00107796	2 35 22.372120		UTM 14
NEO	000	1529	4416282.354	794186.313	349.133	UTM 14
			0.007	0.007	0.005	
SFMC		1529	1.00066562	2 12 16.513686		UTM 14
NEO	000	1530	4409392.745	774957.851	389.416	UTM 14
			0.009	0.009	0.007	
SFMC		1530	1.00053086	2 3 22.615265		UTM 14
NEO	000	1531	4380636.333	761045.074	368.641	UTM 14
			0.011	0.011	0.009	
SFMC		1531	1.00043908	1 56 4.546030		UTM 14
NEO	000	1532	4384570.061	754053.704	375.436	UTM 14
			0.010	0.010	0.007	
SFMC		1532	1.00039472	1 53 6.878084		UTM 14
NEO	000	1533	4321732.337	734788.974	327.193	UTM 14
			0.009	0.009	0.005	
SFMC		1533	1.00027884	1 42 28.126373		UTM 14
NEO	000	1534	4304811.394	717815.128	440.914	UTM 14
			0.014	0.014	0.012	
SFMC		1534	1.00018425	1 34 33.347760		UTM 14
NEO	000	1535	4322340.297	734813.253	339.194	UTM 14
			0.009	0.009	0.005	
SFMC		1535	1.00027898	1 42 29.960392		UTM 14
NEO	000	1536	4298072.449	764022.417	340.621	UTM 14
			0.016	0.016	0.016	
SFMC		1536	1.00045848	1 54 19.969331		UTM 14
NEO	000	1537	4304727.166	751303.622	426.199	UTM 14
			0.016	0.016	0.017	
SFMC		1537	1.00037774	1 49 4.050050		UTM 14

Adjusted NEO Coordinates:

CODE	FFF	STATION	NORTHING STD DEV	EASTING STD DEV	O-HEIGHT STD DEV	MAPPROJ
NEO	000	1538	4327998.391	745119.712	301.718	UTM 14
			0.004	0.004	0.005	
SFMC		1538	1.00033989	1 47 11.124587		UTM 14
NEO	000	1539	4330235.216	757188.141	293.675	UTM 14
			0.004	0.004	0.005	
SFMC		1539	1.00041455	1 52 32.046578		UTM 14
NEO	000	1540	4349688.914	784387.382	356.473	UTM 14
			0.013	0.013	0.009	
SFMC		1540	1.00059594	2 5 11.284719		UTM 14
NEO	000	1541	4347791.555	761746.094	297.511	UTM 14
			0.012	0.012	0.004	
SFMC		1541	1.00044365	1 55 10.243106		UTM 14
NEO	000	1542	4365538.154	790439.965	315.626	UTM 14
			0.013	0.013	0.010	
SFMC		1542	1.00063875	2 8 29.774598		UTM 14
NEO	000	1543	4377747.222	769934.209	336.764	UTM 14
			0.013	0.013	0.008	
SFMC		1543	1.00049721	1 59 54.593408		UTM 14
NEO	000	1544	4373206.925	779751.815	330.579	UTM 14
			0.011	0.011	0.005	
SFMC		1544	1.00056368	2 4 4.902891		UTM 14
NEO	000	1545	4341348.539	867129.290	311.318	UTM 14
			0.011	0.011	0.010	
SFMC		1545	1.00125999	2 41 3.754032		UTM 14
NEO	000	1546	4339999.678	874982.979	274.607	UTM 14
			0.015	0.015	0.014	
SFMC		1546	1.00133180	2 44 25.443366		UTM 14
NEO	000	1547	4370231.143	852765.871	236.832	UTM 14
			0.006	0.006	0.005	
SFMC		1547	1.00113252	2 36 13.151604		UTM 14
NEO	000	1548	4361179.863	851985.650	259.497	UTM 14
			0.010	0.010	0.009	
SFMC		1548	1.00112577	2 35 25.475871		UTM 14
NEO	000	1549	4356662.063	853013.836	251.401	UTM 14
			0.010	0.010	0.009	
SFMC		1549	1.00113472	2 35 39.124298		UTM 14
NEO	000	1550	4386261.259	832703.600	250.859	UTM 14
			0.002	0.002	0.002	
SFMC		1550	1.00096308	2 28 7.131670		UTM 14
NEO	000	1551	4409803.862	855052.889	254.260	UTM 14
			0.018	0.018	0.018	
SFMC		1551	1.00115233	2 39 13.589995		UTM 14
NEO	000	1552	4412410.175	855525.531	265.229	UTM 14
			0.012	0.012	0.012	
SFMC		1552	1.00115646	2 39 34.212255		UTM 14
NEO	000	1605	4345340.227	853255.018	302.633	UTM 14
			0.006	0.006	0.004	
SFMC		1605	1.00113685	2 35 11.696789		UTM 14
NEO	000	1606	4337172.608	859711.870	306.370	UTM 14
			0.007	0.007	0.005	
SFMC		1606	1.00119359	2 37 36.550347		UTM 14
NEO	000	1607	4327169.384	854869.337	240.017	UTM 14

Adjusted NEO Coordinates:

CODE	FFF	STATION	NORTHING / STD DEV	EASTING / STD DEV	O-HEIGHT / STD DEV	MAPPROJ
			0.009	0.009	0.008	
SFMC		1607	1.00115099	2 34 59.836429		UTM 14
NEO	000	1608	4335682.756	855898.076	307.358	UTM 14
			0.007	0.007	0.005	
SFMC		1608	1.00115997	2 35 52.171683		UTM 14
NEO	000	1609	4368233.845	855006.626	306.676	UTM 14
			0.007	0.007	0.005	
SFMC		1609	1.00115206	2 37 6.467751		UTM 14
NEO	000	1610	4358589.774	857776.433	232.076	UTM 14
			0.011	0.011	0.010	
SFMC		1610	1.00117641	2 37 50.520510		UTM 14
NEO	000	1611	4368818.535	846951.728	269.378	UTM 14
			0.009	0.009	0.008	
SFMC		1611	1.00108241	2 33 35.018890		UTM 14
NEO	000	1612	4356297.217	853240.135	261.516	UTM 14
			0.010	0.010	0.009	
SFMC		1612	1.00113669	2 35 44.000555		UTM 14
NEO	000	1613	4348899.375	857192.365	269.199	UTM 14
			0.008	0.008	0.006	
SFMC		1613	1.00117130	2 37 5.855076		UTM 14
NEO	000	1614	4424266.767	834876.986	259.412	UTM 14
			0.004	0.004	0.003	
SFMC		1614	1.00098084	2 30 54.064116		UTM 14
NEO	000	1615	4425030.421	846098.431	252.264	UTM 14
			0.006	0.006	0.006	
SFMC		1615	1.00107495	2 35 58.743676		UTM 14
NEO	000	1616	4423301.823	851173.560	255.587	UTM 14
			0.005	0.005	0.005	
SFMC		1616	1.00111854	2 38 10.287812		UTM 14
NEO	000	1617	4417844.279	853777.941	328.738	UTM 14
			0.003	0.003	0.003	
SFMC		1617	1.00114117	2 39 3.822666		UTM 14
NEO	000	1618	4435105.809	823374.553	263.934	UTM 14
			0.004	0.004	0.003	
SFMC		1618	1.00088756	2 26 14.220353		UTM 14
NEO	000	1619	4433334.340	829310.711	332.664	UTM 14
			0.005	0.005	0.004	
SFMC		1619	1.00093528	2 28 49.770220		UTM 14
NEO	000	1620	4429837.152	827120.442	262.819	UTM 14
			0.005	0.005	0.004	
SFMC		1620	1.00091758	2 27 40.683732		UTM 14
NEO	000	1621	4448761.090	819908.563	265.485	UTM 14
			0.006	0.006	0.005	
SFMC		1621	1.00086007	2 25 18.245105		UTM 14
NEO	000	1622	4455309.175	808742.520	264.832	UTM 14
			0.001	0.000	0.001	
SFMC		1622	1.00077360	2 20 32.311141		UTM 14
NEO	000	1623	4431047.995	801387.629	289.995	UTM 14
			0.008	0.008	0.006	
SFMC		1623	1.00071840	2 16 8.642453		UTM 14
NEO	000	1624	4418265.391	813121.964	325.569	UTM 14
			0.006	0.006	0.005	

Adjusted NEO Coordinates:

CODE	FFF	STATION	NORTHING STD DEV	EASTING STD DEV	O-HEIGHT STD DEV	MAPPROJ
SFMC		1624	1.00080724	2 20 51.352703	UTM 14	
NEO	000	1625	4417447.215	795782.283	334.316	UTM 14
			0.006	0.006	0.004	
SFMC		1625	1.00067721	2 13 2.428623	UTM 14	
NEO	000	1626	4396624.731	788115.334	322.863	UTM 14
			0.016	0.016	0.015	
SFMC		1626	1.00062212	2 8 44.531472	UTM 14	
NEO	000	1627	4424391.394	763152.445	389.385	UTM 14
			0.011	0.011	0.009	
SFMC		1627	1.00045261	1 58 39.361602	UTM 14	
NEO	000	1628	4426881.106	740647.557	359.308	UTM 14
			0.014	0.014	0.012	
SFMC		1628	1.00031299	1 48 36.703181	UTM 14	
NEO	000	1629	4413848.092	750229.053	358.021	UTM 14
			0.008	0.008	0.003	
SFMC		1629	1.00037093	1 52 27.637496	UTM 14	
NEO	000	1630	4394985.555	763378.561	371.493	UTM 14
			0.011	0.011	0.009	
SFMC		1630	1.00045412	1 57 38.956580	UTM 14	
NEO	000	1631	4402044.612	745608.996	403.546	UTM 14
			0.011	0.011	0.008	
SFMC		1631	1.00034273	1 49 58.373175	UTM 14	
NEO	000	1632	4373402.561	732599.846	452.619	UTM 14
			0.016	0.016	0.016	
SFMC		1632	1.00026617	1 43 12.503521	UTM 14	
NEO	000	1633	4357267.382	733024.348	336.235	UTM 14
			0.012	0.012	0.012	
SFMC		1633	1.00026863	1 42 51.854401	UTM 14	
NEO	000	1634	4343372.250	733353.419	300.101	UTM 14
			0.006	0.006	0.003	
SFMC		1634	1.00027053	1 42 33.123332	UTM 14	
NEO	000	1635	4356046.187	748102.325	376.140	UTM 14
			0.012	0.012	0.010	
SFMC		1635	1.00035797	1 49 27.991031	UTM 14	
NEO	000	1636	4342044.939	752946.720	287.295	UTM 14
			0.009	0.009	0.007	
SFMC		1636	1.00038788	1 51 6.067140	UTM 14	
NEO	000	1637	4329663.623	725991.997	424.988	UTM 14
			0.012	0.012	0.008	
SFMC		1637	1.00022891	1 38 53.166900	UTM 14	
NEO	000	1638	4302173.364	723277.538	443.819	UTM 14
			0.012	0.012	0.009	
SFMC		1638	1.00021393	1 36 50.511179	UTM 14	
NEO	000	1639	4312523.890	736151.899	368.553	UTM 14
			0.011	0.011	0.007	
SFMC		1639	1.00028676	1 42 45.517864	UTM 14	
NEO	000	1640	4297302.026	763680.535	360.779	UTM 14
			0.016	0.016	0.016	
SFMC		1640	1.00045626	1 54 9.407510	UTM 14	
NEO	000	1641	4317129.984	760501.284	339.194	UTM 14
			0.008	0.008	0.009	
SFMC		1641	1.00043570	1 53 30.188138	UTM 14	

Adjusted NEO Coordinates:

CODE	FFF	STATION	NORTHING STD DEV	EASTING STD DEV	O-HEIGHT STD DEV	MAPPROJ
NEO	000	1642	4349261.962 0.013	783668.159 0.013	360.176 0.009	UTM 14
SFMC		1642	1.00059091	2 4 51.306265		UTM 14
NEO	000	1643	4357682.494 0.012	774984.038 0.012	367.241 0.007	UTM 14
SFMC		1643	1.00053114	2 1 22.045480		UTM 14
NEO	000	1644	4373630.537 0.014	791858.560 0.014	319.669 0.010	UTM 14
SFMC		1644	1.00064891	2 9 27.410316		UTM 14
NEO	000	1645	4387971.610 0.013	782158.927 0.013	347.383 0.008	UTM 14
SFMC		1645	1.00058031	2 5 44.322662		UTM 14
NEO	000	604	4336580.178 0.010	870501.690 0.010	232.438 0.008	UTM 14
SFMC		604	1.00129065	2 42 17.320947		UTM 14
NEO	000	605	4335542.307 0.011	876430.751 0.011	230.469 0.010	UTM 14
SFMC		605	1.00134522	2 44 49.266001		UTM 14
NEO	000	606	4345946.396 0.008	874550.793 0.008	230.403 0.006	UTM 14
SFMC		606	1.00132779	2 44 32.886713		UTM 14
NEO	000	607	4393498.811 0.006	848300.354 0.006	275.299 0.003	UTM 14
SFMC		607	1.00109388	2 35 23.904828		UTM 14
NEO	000	608	4405648.331 0.012	854911.427 0.012	267.340 0.012	UTM 14
SFMC		608	1.00115111	2 38 57.155787		UTM 14
NEO	000	609	4403195.720 0.008	847566.987 0.008	245.074 0.007	UTM 14
SFMC		609	1.00108757	2 35 33.159290		UTM 14
NEO	000	610	4394582.702 0.006	841369.571 0.006	242.713 0.005	UTM 14
SFMC		610	1.00103500	2 32 22.130623		UTM 14
NEO	000	611	4384425.328 0.007	840061.899 0.007	241.052 0.007	UTM 14
SFMC		611	1.00102406	2 31 17.747143		UTM 14
NEO	000	612	4379632.936 0.010	843350.766 0.010	237.854 0.011	UTM 14
SFMC		612	1.00105176	2 32 31.245844		UTM 14
NEO	000	613	4388166.630 0.002	833390.580 0.002	281.559 0.003	UTM 14
SFMC		613	1.00096871	2 28 30.844225		UTM 14
NEO	000	614	4404704.103 0.010	838636.351 0.010	308.077 0.010	UTM 14
SFMC		614	1.00101208	2 31 38.488844		UTM 14
NEO	000	615	4399418.363 0.010	827578.303 0.010	307.806 0.010	UTM 14
SFMC		615	1.00092136	2 26 27.448414		UTM 14
NEO	000	616	4426745.054 0.005	821474.319 0.005	260.177 0.004	UTM 14
SFMC		616	1.00087249	2 24 59.619635		UTM 14
NEO	000	617	4410786.077	847932.786	250.925	UTM 14

Adjusted NEO Coordinates:

CODE	FFF	STATION	NORTHING / STD DEV	EASTING / STD DEV	O-HEIGHT / STD DEV	MAPPROJ
			0.006	0.006	0.006	
SFMC		617	1.00109068	2 36 5.583510		UTM 14
NEO	000	618	4422029.383	844174.675	252.593	UTM 14
			0.006	0.006	0.006	
SFMC		618	1.00105861	2 34 58.004174		UTM 14
NEO	000	619	4417279.830	838487.760	290.703	UTM 14
			0.005	0.005	0.005	
SFMC		619	1.00101080	2 32 11.035328		UTM 14
NEO	000	620	4418808.604	833375.950	274.611	UTM 14
			0.005	0.005	0.005	
SFMC		620	1.00096850	2 29 57.947914		UTM 14
NEO	000	621	4415538.794	825873.198	273.509	UTM 14
			0.006	0.006	0.006	
SFMC		621	1.00090759	2 26 26.887574		UTM 14
NEO	000	622	4431768.292	816233.746	272.979	UTM 14
			0.006	0.006	0.005	
SFMC		622	1.00083132	2 22 51.898277		UTM 14
NEO	001	917	4438505.869	801666.799	279.384	UTM 14
			0.006	0.006	0.000	
SFMC		917	1.00072046	2 16 35.626244		UTM 14
NEO	001	A 282	4346762.962	861923.720	231.830	UTM 14
			0.008	0.008	0.000	
SFMC		A 282	1.00121322	2 39 3.742808		UTM 14
NEO	001	BELVUE	4344550.681	741466.176	294.315	UTM 14
			0.006	0.006	0.000	
SFMC		BELVUE	1.00031797	1 46 9.112905		UTM 14
NEO	001	D 217	4395511.203	846354.834	244.750	UTM 14
			0.005	0.005	0.000	
SFMC		D 217	1.00107723	2 34 37.950523		UTM 14
NEO	111	HBRK	4240994.193	649208.027	442.537	UTM 14
			0.000	0.000	0.000	
SFMC		HBRK	0.99987418	1 3 28.608785		UTM 14
NEO	111	KST5	4325898.663	756251.875	334.708	UTM 14
			0.000	0.000	0.000	
SFMC		KST5	1.00040864	1 51 58.163691		UTM 14
NEO	111	KSU1	4330676.976	706718.683	356.563	UTM 14
			0.000	0.000	0.000	
SFMC		KSU1	1.00012620	1 30 29.544154		UTM 14
NEO	001	M 325	4347773.924	765473.476	327.605	UTM 14
			0.011	0.011	0.000	
SFMC		M 325	1.00046785	1 56 48.421324		UTM 14
NEO	111	MOID	4340402.320	898736.103	306.432	UTM 14
			0.000	0.000	0.000	
SFMC		MOID	1.00155822	2 54 49.107260		UTM 14
NEO	111	MOMV	4475797.449	852717.850	310.294	UTM 14
			0.000	0.000	0.000	
SFMC		MOMV	1.00113176	2 41 32.328415		UTM 14
NEO	111	MOPL	4367931.311	863207.711	245.433	UTM 14
			0.000	0.000	0.000	
SFMC		MOPL	1.00122462	2 40 42.523538		UTM 14
NEO	111	MORK	4480194.366	793556.872	358.798	UTM 14
			0.000	0.000	0.000	

Adjusted NEO Coordinates:

CODE	FFF	STATION	NORTHING STD DEV	EASTING STD DEV	O-HEIGHT STD DEV	MAPPROJ
SFMC		MORK	1.00066092	2 14 42.256765		UTM 14
NEO	111	MORM	4359862.347	937746.429	199.058	UTM 14
			0.000	0.000	0.000	
SFMC		MORM	1.00196020	3 13 2.054558		UTM 14
NEO	111	MOSB	4307416.022	887676.577	334.523	UTM 14
			0.000	0.000	0.000	
SFMC		MOSB	1.00145119	2 48 12.151442		UTM 14
NEO	111	MOSV	4430937.566	854740.187	352.643	UTM 14
			0.000	0.000	0.000	
SFMC		MOSV	1.00114953	2 40 9.673788		UTM 14
NEO	111	P 206	4455190.534	808769.671	264.632	UTM 14
			0.000	0.000	0.000	
SFMC		P 206	1.00077381	2 20 32.732544		UTM 14
NEO	001	P 215	4304675.871	717549.309	438.054	UTM 14
			0.014	0.014	0.000	
SFMC		P 215	1.00018282	1 34 26.186262		UTM 14
NEO	111	P 340	4415614.136	855986.210	302.550	UTM 14
			0.000	0.000	0.000	
SFMC		P 340	1.00116049	2 39 56.366495		UTM 14
NEO	001	Q 109	4413262.000	747502.108	372.177	UTM 14
			0.008	0.008	0.000	
SFMC		Q 109	1.00035421	1 51 12.981185		UTM 14
NEO	001	Q 210	4432590.699	825110.964	261.009	UTM 14
			0.004	0.004	0.000	
SFMC		Q 210	1.00090143	2 26 54.137090		UTM 14
NEO	001	SKIRT RM 2	4378706.351	779551.358	349.382	UTM 14
			0.010	0.010	0.000	
SFMC		SKIRT RM 2	1.00056229	2 4 12.664833		UTM 14
NEO	000	W 106	4410991.896	834872.287	334.793	UTM 14
			0.004	0.004	0.003	
SFMC		W 106	1.00098084	2 30 15.724401		UTM 14
NEO	111	W 281	4387404.079	831087.361	304.385	UTM 14
			0.000	0.000	0.000	
SFMC		W 281	1.00094986	2 27 27.315982		UTM 14
NEO	001	X 108	4423884.198	777717.979	382.069	UTM 14
			0.010	0.010	0.000	
SFMC		X 108	1.00054962	2 5 11.384995		UTM 14
NEO	001	X 119	4378389.594	737291.965	392.674	UTM 14
			0.010	0.010	0.000	
SFMC		X 119	1.00029331	1 45 27.308694		UTM 14
NEO	001	Y 341	4361014.277	856497.334	232.929	UTM 14
			0.010	0.010	0.000	
SFMC		Y 341	1.00116515	2 37 24.096938		UTM 14
NEO	001	Z 231	4337083.247	732865.080	305.918	UTM 14
			0.010	0.010	0.000	
SFMC		Z 231	1.00026774	1 42 7.906640		UTM 14
NEO	111	ZKC1	4311904.987	865164.282	338.681	UTM 14
			0.000	0.000	0.000	
SFMC		ZKC1	1.00124236	2 38 41.967039		UTM 14

Adjusted PLH Coordinates:

CODE	FFF	STATION	LATITUDE	STD DEV	LONGITUDE	STD DEV	ELIP-HEIGHT	STD DEV
PLH	000	1003	N 39 05 37.65651	0.007	W 94 52 52.52171	0.007	275.732	0.004
PLH	000	1004	N 39 11 12.56892	0.006	W 94 54 3.87907	0.006	270.518	0.004
PLH	000	1005	N 39 24 54.26506	0.006	W 94 53 17.95975	0.006	250.347	0.005
PLH	000	1006	N 39 54 9.53368	0.004	W 95 05 2.74142	0.004	228.428	0.003
PLH	000	1007	N 39 59 16.29025	0.004	W 95 12 6.05693	0.004	229.590	0.002
PLH	000	1008	N 40 06 39.24279	0.004	W 95 17 47.32070	0.004	232.288	0.003
PLH	000	1009	N 39 52 13.58935	0.005	W 95 31 10.04364	0.005	308.962	0.004
PLH	000	1010	N 39 50 26.80132	0.006	W 95 19 15.24348	0.006	292.892	0.005
PLH	000	1011	N 39 50 29.43042	0.006	W 95 44 50.55679	0.006	346.532	0.004
PLH	000	1012	N 39 50 29.27341	0.007	W 95 57 1.24637	0.007	348.138	0.004
PLH	000	1013	N 39 39 12.51722	0.008	W 96 02 0.20064	0.008	384.001	0.004
PLH	000	1014	N 39 22 57.83602	0.012	W 96 24 21.45347	0.012	319.987	0.012
PLH	000	1015	N 39 13 17.23132	0.006	W 96 18 32.47452	0.006	284.596	0.003
PLH	000	1016	N 39 15 21.70700	0.007	W 96 03 49.69169	0.007	336.905	0.004
PLH	000	1017	N 39 30 52.68060	0.009	W 96 05 13.42138	0.009	338.022	0.004
PLH	000	103	N 39 11 30.43164	0.008	W 94 41 50.43841	0.008	212.601	0.006
PLH	000	104	N 39 55 47.35484	0.005	W 95 14 15.99177	0.004	228.705	0.004
PLH	000	1101	N 40 05 36.62393	0.005	W 95 16 1.54159	0.005	233.010	0.005
PLH	000	1102	N 40 06 40.18637	0.005	W 95 20 36.97604	0.005	233.374	0.005
PLH	000	1103	N 40 11 11.91098	0.003	W 95 24 34.98823	0.003	234.079	0.004
PLH	000	1104	N 40 13 39.14967	0.006	W 95 27 5.57076	0.006	236.248	0.007
PLH	000	1105	N 39 52 14.16739	0.005	W 95 31 5.97550	0.005	310.188	0.004
PLH	000	1106	N 39 53 57.24549	0.011	W 95 39 30.37863	0.011	315.516	0.011
PLH	000	1107	N 39 56 33.87699	0.011	W 95 37 48.71768	0.011	303.810	0.010
PLH	000	1108	N 39 51 21.22535	0.007	W 95 26 53.70929	0.007	315.114	0.007
PLH	000	1109	N 39 45 15.96167	0.011	W 95 28 56.00315	0.011	314.363	0.011

Adjusted PLH Coordinates:

CODE	FFF	STATION	LATITUDE	STD DEV	LONGITUDE	STD DEV	ELIP-HEIGHT	STD DEV
PLH	000	1110	N 39 46 8.92529	0.009	W 95 22 24.96069	0.009	305.438	0.009
PLH	000	1111	N 39 45 42.06721	0.011	W 95 38 20.20842	0.011	337.852	0.010
PLH	000	1112	N 39 55 42.02138	0.010	W 95 42 0.53091	0.010	311.741	0.009
PLH	000	1113	N 39 41 33.13793	0.012	W 95 15 52.83357	0.012	276.576	0.012
PLH	000	1114	N 39 54 43.64495	0.010	W 95 47 59.40905	0.010	360.215	0.008
PLH	000	1115	N 39 57 37.86760	0.012	W 96 03 7.92377	0.012	291.265	0.010
PLH	000	1116	N 39 53 7.36106	0.010	W 96 09 24.45299	0.010	358.661	0.006
PLH	000	1117	N 39 50 36.53930	0.010	W 96 10 57.92681	0.010	367.852	0.006
PLH	000	1118	N 39 40 3.49293	0.009	W 96 06 2.51752	0.009	386.079	0.007
PLH	000	1119	N 39 47 1.72814	0.011	W 96 11 19.57932	0.011	362.278	0.008
PLH	000	1120	N 39 44 18.39754	0.011	W 96 00 10.40447	0.011	344.699	0.008
PLH	000	1121	N 39 24 46.43229	0.013	W 96 27 17.92296	0.013	355.246	0.013
PLH	000	1122	N 39 19 9.75347	0.013	W 96 25 34.38027	0.013	298.034	0.012
PLH	000	1123	N 39 15 23.19290	0.007	W 96 15 2.67839	0.007	268.306	0.005
PLH	000	1124	N 39 20 52.02255	0.012	W 96 14 23.40342	0.012	301.030	0.010
PLH	000	1125	N 39 16 5.48189	0.007	W 96 03 49.83664	0.007	343.356	0.005
PLH	000	1126	N 39 21 42.06550	0.012	W 96 03 59.49369	0.012	305.047	0.010
PLH	000	1127	N 39 29 15.41592	0.010	W 96 10 8.29602	0.010	302.416	0.005
PLH	000	1128	N 39 47 53.71417	0.006	W 95 02 24.54020	0.006	293.109	0.006
PLH	000	1129	N 39 52 26.15043	0.010	W 94 58 11.52698	0.009	220.581	0.010
PLH	000	1130	N 39 47 39.64729	0.009	W 95 33 50.11378	0.009	313.077	0.008
PLH	000	1131	N 39 46 59.84422	0.010	W 95 51 52.02534	0.010	356.740	0.008
PLH	000	1132	N 39 36 38.14944	0.009	W 95 59 43.90257	0.009	382.112	0.006
PLH	000	1133	N 39 30 53.30927	0.010	W 96 09 52.03269	0.010	306.856	0.007
PLH	000	1134	N 39 08 47.16161	0.010	W 96 20 46.81690	0.010	283.590	0.003
PLH	000	1135	N 39 03 17.52484	0.011	W 96 14 26.40294	0.011	280.161	0.007

Adjusted PLH Coordinates:

CODE	FFF	STATION	LATITUDE	STD DEV	LONGITUDE	STD DEV	ELIP-HEIGHT	STD DEV
PLH	000	1136	N 38 54 46.19958	0.013	W 96 28 6.21759	0.013	359.930	0.011
PLH	000	1137	N 38 46 57.07688	0.016	W 95 57 53.49292	0.016	329.198	0.016
PLH	000	1138	N 38 47 51.11469	0.017	W 96 06 48.39689	0.017	380.817	0.017
PLH	000	1139	N 38 49 33.70537	0.016	W 96 11 4.81506	0.016	433.893	0.016
PLH	000	1140	N 39 03 59.25479	0.004	W 96 11 16.17610	0.004	273.288	0.004
PLH	000	1141	N 39 00 34.60294	0.006	W 96 06 48.97075	0.006	313.008	0.006
PLH	000	1142	N 39 14 38.29947	0.013	W 95 47 37.27536	0.013	312.063	0.008
PLH	000	1143	N 39 30 22.73221	0.012	W 95 39 35.02491	0.012	306.861	0.007
PLH	000	1144	N 39 27 48.31123	0.012	W 95 47 36.57682	0.012	321.883	0.006
PLH	000	1145	N 39 33 57.97111	0.011	W 95 43 59.23553	0.011	309.053	0.006
PLH	000	1146	N 39 11 3.12256	0.006	W 94 54 36.22955	0.006	272.864	0.004
PLH	000	1147	N 39 05 42.41989	0.010	W 94 45 38.49239	0.010	243.462	0.009
PLH	000	1148	N 39 22 3.57689	0.008	W 94 52 6.59691	0.008	203.335	0.007
PLH	000	1149	N 39 15 23.65349	0.009	W 94 52 53.26561	0.009	214.386	0.008
PLH	000	1150	N 39 36 30.60979	0.004	W 95 01 2.26603	0.004	211.285	0.004
PLH	000	1201	N 40 06 44.29073	0.004	W 95 16 23.99753	0.004	231.220	0.004
PLH	000	1202	N 40 03 36.98262	0.006	W 95 18 56.19734	0.006	230.503	0.006
PLH	000	1203	N 40 11 23.44349	0.005	W 95 26 32.99492	0.005	236.320	0.005
PLH	000	1204	N 40 16 42.29319	0.009	W 95 28 28.10355	0.009	236.592	0.009
PLH	000	1205	N 39 53 12.54745	0.006	W 95 32 45.65919	0.006	306.482	0.005
PLH	000	1206	N 39 58 18.68988	0.009	W 95 31 39.03721	0.009	290.063	0.007
PLH	000	1207	N 39 57 28.36987	0.010	W 95 23 26.58879	0.010	262.105	0.009
PLH	000	1208	N 39 50 30.84982	0.007	W 95 23 46.27056	0.007	301.743	0.007
PLH	000	1209	N 39 47 52.97458	0.009	W 95 30 27.44559	0.009	283.398	0.008
PLH	000	1210	N 39 46 7.58321	0.010	W 95 41 3.53706	0.010	330.206	0.009
PLH	000	1211	N 39 43 31.55255	0.012	W 95 45 0.21607	0.012	320.232	0.011

Adjusted PLH Coordinates:

CODE	FFF	STATION	LATITUDE	STD DEV	LONGITUDE	STD DEV	ELIP-HEIGHT	STD DEV
PLH	000	1212	N 39 40 54.71391	0.011	W 95 10 41.31980	0.011	286.758	0.011
PLH	000	1213	N 39 51 32.14560	0.009	W 95 11 32.34937	0.009	231.057	0.009
PLH	000	1214	N 39 57 26.33737	0.012	W 95 50 41.60349	0.012	380.411	0.012
PLH	000	1215	N 39 54 49.46015	0.010	W 95 57 30.30198	0.010	335.517	0.008
PLH	000	1216	N 39 55 50.74641	0.013	W 96 11 31.65882	0.013	370.626	0.011
PLH	000	1217	N 39 39 10.42124	0.010	W 95 57 35.66366	0.010	392.582	0.007
PLH	000	1218	N 39 42 39.71038	0.014	W 95 49 36.79351	0.014	351.178	0.013
PLH	000	1219	N 39 36 34.29936	0.012	W 96 09 22.06218	0.012	389.919	0.010
PLH	000	1220	N 39 23 12.94347	0.013	W 96 18 52.75119	0.013	370.339	0.014
PLH	000	1221	N 39 26 58.79614	0.016	W 96 17 44.58728	0.016	395.518	0.016
PLH	000	1222	N 39 12 8.90055	0.009	W 96 25 0.64191	0.009	313.929	0.008
PLH	000	1223	N 39 16 8.80166	0.007	W 96 18 2.85090	0.007	297.216	0.005
PLH	000	1224	N 39 13 41.95767	0.006	W 96 13 19.47707	0.006	265.447	0.002
PLH	000	1225	N 39 14 6.38718	0.008	W 96 06 37.06095	0.008	293.942	0.005
PLH	000	1226	N 39 27 32.77906	0.010	W 96 06 37.38454	0.010	377.407	0.007
PLH	000	1227	N 39 47 29.84233	0.004	W 95 04 36.62961	0.004	300.659	0.004
PLH	000	1228	N 39 49 39.74586	0.006	W 95 04 16.76221	0.006	323.982	0.006
PLH	000	1229	N 39 48 44.64005	0.009	W 95 38 13.95278	0.009	329.804	0.008
PLH	000	1230	N 39 47 0.00282	0.009	W 95 55 27.66916	0.009	374.895	0.007
PLH	000	1231	N 39 36 34.63530	0.009	W 96 04 29.18957	0.009	366.164	0.006
PLH	000	1232	N 39 30 56.85621	0.010	W 95 57 39.53018	0.010	348.751	0.006
PLH	000	1233	N 39 33 58.05303	0.010	W 96 07 48.26856	0.010	364.121	0.007
PLH	000	1234	N 38 59 53.72394	0.009	W 96 17 0.19886	0.009	296.880	0.005
PLH	000	1235	N 38 52 10.22477	0.010	W 96 20 10.57677	0.010	419.494	0.006
PLH	000	1236	N 38 58 35.28626	0.010	W 96 21 10.73741	0.010	310.746	0.007
PLH	000	1237	N 38 52 27.96028	0.011	W 96 15 27.62647	0.011	362.883	0.008

Adjusted PLH Coordinates:

CODE	FFF	STATION	LATITUDE	STD DEV	LONGITUDE	STD DEV	ELIP-HEIGHT	STD DEV
PLH	000	1238	N 38 52 10.65747	0.015	W 96 11 5.31672	0.015	383.481	0.015
PLH	000	1239	N 39 02 10.98824	0.004	W 96 05 48.46706	0.004	292.384	0.005
PLH	000	1240	N 38 57 27.06103	0.008	W 96 03 26.15356	0.008	319.158	0.008
PLH	000	1241	N 39 07 47.74945	0.007	W 96 10 0.89264	0.007	316.871	0.007
PLH	000	1242	N 39 19 55.91805	0.011	W 95 43 46.99400	0.011	329.855	0.004
PLH	000	1243	N 39 18 14.31657	0.013	W 95 50 57.51074	0.013	315.949	0.007
PLH	000	1244	N 39 24 19.18415	0.013	W 95 48 43.26959	0.013	347.504	0.008
PLH	000	1245	N 39 30 35.79346	0.010	W 95 54 17.57963	0.010	349.864	0.007
PLH	000	1246	N 39 08 27.65607	0.008	W 94 48 55.94298	0.008	270.088	0.007
PLH	000	1247	N 39 06 2.15160	0.007	W 94 53 3.51812	0.007	267.576	0.005
PLH	000	1248	N 39 16 49.94043	0.011	W 94 50 4.54721	0.011	201.484	0.010
PLH	000	1249	N 39 22 31.04949	0.009	W 94 57 22.17271	0.009	224.476	0.008
PLH	000	1250	N 39 33 25.67175	0.004	W 95 06 4.18089	0.004	208.481	0.004
PLH	000	1251	N 39 37 25.56635	0.005	W 95 08 24.74507	0.005	279.172	0.005
PLH	000	1252	N 39 30 21.48950	0.006	W 95 07 56.62460	0.006	252.725	0.006
PLH	000	1401	N 40 05 24.18329	0.006	W 95 20 47.04016	0.006	229.559	0.006
PLH	000	1402	N 40 04 8.35771	0.006	W 95 13 37.93553	0.006	249.613	0.006
PLH	000	1403	N 40 11 48.14995	0.001	W 95 22 34.82758	0.001	234.022	0.002
PLH	000	1404	N 40 15 50.95426	0.009	W 95 29 3.41855	0.009	235.594	0.009
PLH	000	1405	N 40 03 30.33895	0.006	W 95 26 41.73138	0.006	274.581	0.003
PLH	000	1406	N 39 53 4.81841	0.008	W 95 36 5.22897	0.008	290.069	0.007
PLH	000	1407	N 39 55 42.95932	0.008	W 95 27 40.57779	0.008	273.111	0.007
PLH	000	1408	N 39 54 42.46726	0.009	W 95 24 55.19752	0.009	271.307	0.008
PLH	000	1409	N 39 43 32.51467	0.012	W 95 25 28.34141	0.012	305.589	0.012
PLH	000	1410	N 39 42 40.93421	0.014	W 95 36 5.54667	0.014	325.466	0.013
PLH	000	1411	N 39 46 8.79473	0.006	W 95 08 22.70095	0.006	297.255	0.006

Adjusted PLH Coordinates:

CODE	FFF	STATION	LATITUDE	STD DEV	LONGITUDE	STD DEV	ELIP-HEIGHT	STD DEV
PLH	000	1412	N 39 46 4.64841	0.009	W 95 15 5.57265	0.009	245.065	0.009
PLH	000	1413	N 39 55 46.03265	0.010	W 95 17 29.41598	0.010	238.884	0.010
PLH	000	1414	N 39 50 30.34103	0.007	W 95 47 17.26854	0.007	330.861	0.005
PLH	000	1415	N 39 59 14.49405	0.015	W 96 07 34.41685	0.015	326.224	0.013
PLH	000	1416	N 39 53 11.02220	0.009	W 96 05 55.66972	0.009	320.099	0.005
PLH	000	1417	N 39 38 19.01984	0.013	W 95 52 47.17976	0.013	342.954	0.011
PLH	000	1418	N 39 40 4.09574	0.013	W 96 11 50.48079	0.013	383.434	0.011
PLH	000	1419	N 39 47 23.08733	0.009	W 96 04 15.26347	0.009	342.783	0.005
PLH	000	1420	N 39 26 7.67130	0.017	W 96 15 29.53930	0.017	355.581	0.017
PLH	000	1421	N 39 20 0.31254	0.012	W 96 21 57.66797	0.012	329.136	0.012
PLH	000	1422	N 39 13 58.55208	0.011	W 96 27 49.17675	0.011	331.314	0.011
PLH	000	1423	N 39 15 54.85411	0.009	W 96 22 47.78528	0.009	282.427	0.008
PLH	000	1424	N 39 16 56.48380	0.009	W 96 10 47.88753	0.009	307.464	0.006
PLH	000	1425	N 39 12 30.24368	0.008	W 96 05 35.41935	0.008	264.984	0.006
PLH	000	1426	N 39 24 0.29354	0.014	W 96 09 21.73724	0.014	292.751	0.013
PLH	000	1427	N 39 31 32.83620	0.010	W 96 13 21.50719	0.010	354.262	0.002
PLH	000	1428	N 39 51 59.09429	0.009	W 95 01 19.42882	0.009	223.180	0.009
PLH	000	1429	N 39 53 5.28870	0.008	W 95 43 42.40763	0.008	328.479	0.006
PLH	000	1430	N 39 48 44.04961	0.009	W 95 40 17.23180	0.009	306.599	0.007
PLH	000	1431	N 39 34 50.29017	0.011	W 95 57 14.13508	0.011	361.096	0.009
PLH	000	1432	N 39 33 59.48393	0.013	W 95 54 5.60259	0.013	344.784	0.011
PLH	000	1433	N 39 05 13.55091	0.011	W 96 21 42.67287	0.011	341.193	0.007
PLH	000	1434	N 39 08 20.91890	0.011	W 96 14 26.93031	0.011	323.046	0.005
PLH	000	1435	N 39 09 11.05394	0.010	W 96 17 5.89190	0.010	294.278	0.002
PLH	000	1436	N 38 56 20.02478	0.012	W 96 24 2.96303	0.012	328.493	0.009
PLH	000	1437	N 38 46 5.14262	0.017	W 96 03 8.81338	0.017	363.741	0.017

Adjusted PLH Coordinates:

CODE	FFF	STATION	LATITUDE	STD DEV	LONGITUDE	STD DEV	ELIP-HEIGHT	STD DEV
PLH	000	1438	N 38 52 13.05574	0.017	W 96 02 21.22822	0.017	377.556	0.017
PLH	000	1439	N 39 01 47.46587	0.003	W 96 01 4.35563	0.003	278.889	0.004
PLH	000	1440	N 38 57 1.71284	0.009	W 96 07 54.55782	0.009	396.366	0.009
PLH	000	1441	N 39 18 11.87923	0.012	W 95 39 16.67791	0.012	324.764	0.008
PLH	000	1442	N 39 15 9.49182	0.015	W 95 37 44.65161	0.015	289.338	0.011
PLH	000	1443	N 39 23 53.16699	0.012	W 95 42 4.32329	0.012	322.666	0.007
PLH	000	1444	N 39 30 24.23986	0.011	W 95 47 46.11792	0.011	309.877	0.004
PLH	000	1445	N 39 10 19.75531	0.007	W 94 52 15.17927	0.007	236.548	0.005
PLH	000	1446	N 39 11 15.32525	0.009	W 94 48 2.05059	0.009	199.288	0.008
PLH	000	1447	N 39 07 42.12171	0.007	W 94 54 2.09099	0.007	257.420	0.006
PLH	000	1448	N 39 23 32.56757	0.007	W 94 52 24.86335	0.007	262.038	0.005
PLH	000	1449	N 39 19 29.38909	0.010	W 94 51 59.59943	0.010	200.718	0.009
PLH	000	1450	N 39 35 12.58408	0.004	W 95 01 34.59845	0.004	215.703	0.005
PLH	000	1451	N 39 32 20.71641	0.006	W 95 03 34.67103	0.006	209.069	0.006
PLH	000	1452	N 39 34 27.47993	0.002	W 95 07 22.59697	0.002	232.830	0.002
PLH	000	1501	N 40 07 50.82195	0.006	W 95 13 48.85398	0.006	238.934	0.006
PLH	000	1502	N 40 14 54.96609	0.007	W 95 27 17.47564	0.007	235.734	0.007
PLH	000	1503	N 40 03 5.29379	0.006	W 95 25 26.18673	0.006	231.983	0.003
PLH	000	1504	N 39 54 52.43868	0.010	W 95 37 47.83921	0.010	273.478	0.009
PLH	000	1505	N 39 58 26.11716	0.009	W 95 33 54.84125	0.009	259.576	0.008
PLH	000	1506	N 39 49 13.92098	0.008	W 95 24 39.21490	0.008	277.671	0.007
PLH	000	1507	N 39 51 19.55414	0.006	W 95 31 13.02362	0.006	309.959	0.004
PLH	000	1508	N 39 40 34.75849	0.015	W 95 25 28.44722	0.015	317.351	0.015
PLH	000	1509	N 39 50 20.92864	0.007	W 95 43 25.24902	0.007	345.543	0.005
PLH	000	1510	N 39 39 32.53013	0.018	W 95 31 44.13319	0.018	287.466	0.017
PLH	000	1511	N 39 47 10.22509	0.004	W 95 05 49.11463	0.004	305.933	0.004

Adjusted PLH Coordinates:

CODE	FFF	STATION	LATITUDE	STD DEV	LONGITUDE	STD DEV	ELIP-HEIGHT	STD DEV
PLH	000	1512	N 39 51 35.11707	0.007	W 95 15 37.75517	0.007	275.428	0.007
PLH	000	1513	N 39 51 54.37268	0.008	W 95 56 22.95833	0.008	351.231	0.005
PLH	000	1514	N 39 57 42.33097	0.013	W 95 58 6.05116	0.013	361.328	0.011
PLH	000	1515	N 39 53 34.97413	0.009	W 95 47 23.61415	0.009	363.882	0.007
PLH	000	1516	N 39 49 50.94067	0.008	W 96 03 46.75679	0.008	312.690	0.003
PLH	000	1517	N 39 39 21.30451	0.008	W 96 01 51.06063	0.008	380.247	0.004
PLH	000	1518	N 39 37 58.14669	0.016	W 95 48 53.37542	0.016	304.087	0.015
PLH	000	1519	N 39 43 27.03577	0.011	W 96 08 8.62677	0.011	355.213	0.008
PLH	000	1520	N 39 23 24.34611	0.012	W 96 24 36.41415	0.012	326.045	0.012
PLH	000	1521	N 39 18 3.31499	0.012	W 96 26 17.63088	0.012	309.383	0.012
PLH	000	1522	N 39 12 40.67105	0.006	W 96 19 6.38841	0.006	283.281	0.003
PLH	000	1523	N 39 13 1.87621	0.007	W 96 10 39.06644	0.007	262.445	0.002
PLH	000	1524	N 39 18 26.94390	0.014	W 96 03 21.79890	0.014	281.336	0.013
PLH	000	1525	N 39 16 57.27945	0.008	W 96 06 45.27901	0.008	361.902	0.006
PLH	000	1526	N 39 11 12.17530	0.009	W 96 03 10.80041	0.009	258.916	0.007
PLH	000	1527	N 39 30 34.08367	0.009	W 96 04 35.04684	0.009	328.498	0.005
PLH	000	1528	N 39 45 59.45216	0.010	W 94 57 20.53315	0.010	224.492	0.010
PLH	000	1529	N 39 50 44.23691	0.007	W 95 33 42.02480	0.007	318.434	0.005
PLH	000	1530	N 39 47 24.30266	0.009	W 95 47 20.22770	0.009	359.048	0.007
PLH	000	1531	N 39 32 8.61437	0.011	W 95 57 45.24530	0.011	338.195	0.009
PLH	000	1532	N 39 34 23.59300	0.010	W 96 02 32.31652	0.010	345.200	0.007
PLH	000	1533	N 39 00 47.25739	0.009	W 96 17 17.74967	0.009	296.805	0.005
PLH	000	1534	N 38 51 54.65919	0.014	W 96 29 22.21533	0.014	410.955	0.012
PLH	000	1535	N 39 01 6.93448	0.009	W 96 17 15.98812	0.009	308.806	0.005
PLH	000	1536	N 38 47 30.78581	0.016	W 95 57 36.53105	0.016	309.748	0.016
PLH	000	1537	N 38 51 19.78084	0.016	W 96 06 14.33297	0.016	395.589	0.017

Adjusted PLH Coordinates:

CODE	FFF	STATION	LATITUDE	STD DEV	LONGITUDE	STD DEV	ELIP-HEIGHT	STD DEV
PLH	000	1538	N 39 04 0.08347	0.004	W 96 10 0.57699	0.004	271.148	0.005
PLH	000	1539	N 39 05 0.05434	0.004	W 96 01 35.98264	0.004	262.925	0.005
PLH	000	1540	N 39 14 59.71385	0.013	W 95 42 16.22981	0.013	325.341	0.009
PLH	000	1541	N 39 14 23.90584	0.012	W 95 58 2.11358	0.012	266.766	0.004
PLH	000	1542	N 39 23 25.74144	0.013	W 95 37 39.49080	0.013	284.411	0.010
PLH	000	1543	N 39 30 25.14761	0.013	W 95 51 37.62812	0.013	306.085	0.008
PLH	000	1544	N 39 27 46.80958	0.011	W 95 44 54.02441	0.011	299.636	0.005
PLH	000	1545	N 39 08 38.15817	0.011	W 94 45 8.65441	0.011	278.891	0.010
PLH	000	1546	N 39 07 42.48782	0.015	W 94 39 45.08818	0.015	242.115	0.014
PLH	000	1547	N 39 24 34.06232	0.006	W 94 54 11.03176	0.006	204.562	0.005
PLH	000	1548	N 39 19 42.34403	0.010	W 94 55 0.66961	0.010	227.188	0.009
PLH	000	1549	N 39 17 14.65789	0.010	W 94 54 26.36531	0.010	219.075	0.009
PLH	000	1550	N 39 33 41.54641	0.002	W 95 07 39.19138	0.002	219.045	0.002
PLH	000	1551	N 39 45 50.98323	0.018	W 94 51 19.43173	0.018	222.308	0.018
PLH	000	1552	N 39 47 14.59154	0.012	W 94 50 54.54491	0.012	233.295	0.012
PLH	000	1605	N 39 11 7.96751	0.006	W 94 54 37.64240	0.006	270.338	0.004
PLH	000	1606	N 39 06 34.18598	0.007	W 94 50 24.79297	0.007	274.039	0.005
PLH	000	1607	N 39 01 17.64948	0.009	W 94 54 4.66978	0.009	207.819	0.008
PLH	000	1608	N 39 05 51.61103	0.007	W 94 53 5.98887	0.007	275.087	0.005
PLH	000	1609	N 39 23 26.13340	0.007	W 94 52 41.38377	0.007	274.368	0.005
PLH	000	1610	N 39 18 9.99837	0.011	W 94 51 4.38740	0.011	199.699	0.010
PLH	000	1611	N 39 23 56.83726	0.009	W 94 58 16.18490	0.009	237.179	0.008
PLH	000	1612	N 39 17 2.52095	0.010	W 94 54 17.63160	0.010	229.187	0.009
PLH	000	1613	N 39 12 57.33685	0.008	W 94 51 47.18131	0.008	236.841	0.006
PLH	000	1614	N 39 54 8.40879	0.004	W 95 04 58.77611	0.004	228.016	0.003
PLH	000	1615	N 39 54 16.90141	0.006	W 94 57 5.89310	0.006	220.646	0.006

Adjusted PLH Coordinates:

CODE	FFF	STATION	LATITUDE	STD DEV	LONGITUDE	STD DEV	ELIP-HEIGHT	STD DEV
PLH	000	1616	N 39 53 13.46739	0.005	W 94 53 36.03852	0.005	223.845	0.005
PLH	000	1617	N 39 50 13.01438	0.003	W 94 51 57.28324	0.003	296.893	0.003
PLH	000	1618	N 40 00 15.28025	0.004	W 95 12 42.74679	0.004	232.817	0.003
PLH	000	1619	N 39 59 9.70052	0.005	W 95 08 36.16928	0.005	301.438	0.004
PLH	000	1620	N 39 57 19.58196	0.005	W 95 10 14.64274	0.005	231.610	0.004
PLH	000	1621	N 40 07 41.98632	0.006	W 95 14 44.34176	0.006	234.482	0.005
PLH	000	1622	N 40 11 28.96218	0.001	W 95 22 23.89426	0.000	234.039	0.001
PLH	000	1623	N 39 58 33.17850	0.008	W 95 28 15.02238	0.008	259.272	0.006
PLH	000	1624	N 39 51 24.07023	0.006	W 95 20 23.37284	0.006	294.554	0.005
PLH	000	1625	N 39 51 19.95698	0.006	W 95 32 33.09448	0.006	303.601	0.004
PLH	000	1626	N 39 40 15.19970	0.016	W 95 38 28.04056	0.016	291.969	0.015
PLH	000	1627	N 39 55 43.53074	0.011	W 95 55 14.14880	0.011	359.568	0.009
PLH	000	1628	N 39 57 28.28456	0.014	W 96 10 57.77364	0.014	330.325	0.012
PLH	000	1629	N 39 50 16.09537	0.008	W 96 04 32.41884	0.008	328.419	0.003
PLH	000	1630	N 39 39 50.83480	0.011	W 95 55 47.10765	0.011	341.179	0.009
PLH	000	1631	N 39 43 58.56526	0.011	W 96 08 2.45165	0.011	373.840	0.008
PLH	000	1632	N 39 28 43.66059	0.016	W 96 17 44.54354	0.016	422.687	0.016
PLH	000	1633	N 39 20 0.42945	0.012	W 96 17 47.01814	0.012	306.036	0.012
PLH	000	1634	N 39 12 29.86414	0.006	W 96 17 50.61126	0.006	269.745	0.003
PLH	000	1635	N 39 19 5.77020	0.012	W 96 07 19.58405	0.012	345.679	0.010
PLH	000	1636	N 39 11 27.12495	0.009	W 96 04 16.43850	0.009	256.636	0.007
PLH	000	1637	N 39 05 12.62577	0.012	W 96 23 13.68445	0.012	394.764	0.008
PLH	000	1638	N 38 50 24.23186	0.012	W 96 25 38.85634	0.012	413.773	0.009
PLH	000	1639	N 38 55 47.54396	0.011	W 96 16 32.58670	0.011	338.174	0.007
PLH	000	1640	N 38 47 6.19513	0.016	W 95 57 51.74268	0.016	329.913	0.016
PLH	000	1641	N 38 57 51.96095	0.008	W 95 59 36.28262	0.008	308.397	0.009

Adjusted PLH Coordinates:

CODE	FFF	STATION	LATITUDE	STD DEV	LONGITUDE	STD DEV	ELIP-HEIGHT	STD DEV
PLH	000	1642	N 39 14 46.73411	0.013	W 95 42 46.83356	0.013	329.056	0.009
PLH	000	1643	N 39 19 29.52958	0.012	W 95 48 36.17915	0.012	336.347	0.007
PLH	000	1644	N 39 27 46.06364	0.014	W 95 36 27.57648	0.014	288.445	0.010
PLH	000	1645	N 39 35 42.13067	0.013	W 95 42 50.91446	0.013	316.501	0.008
PLH	000	604	N 39 05 58.76648	0.010	W 94 42 57.91804	0.010	199.983	0.008
PLH	000	605	N 39 05 16.06167	0.011	W 94 38 53.84843	0.011	197.978	0.010
PLH	000	606	N 39 10 55.51522	0.008	W 94 39 51.21353	0.008	197.920	0.006
PLH	000	607	N 39 37 13.45750	0.006	W 94 56 33.48860	0.006	243.329	0.003
PLH	000	608	N 39 43 36.75638	0.012	W 94 51 33.42533	0.012	235.351	0.012
PLH	000	609	N 39 42 28.28217	0.008	W 94 56 45.81823	0.008	213.200	0.007
PLH	000	610	N 39 37 58.57485	0.006	W 95 01 21.46605	0.006	210.851	0.005
PLH	000	611	N 39 32 31.75551	0.007	W 95 02 34.93068	0.007	209.085	0.007
PLH	000	612	N 39 29 51.96890	0.010	W 95 00 26.37009	0.010	205.792	0.011
PLH	000	613	N 39 34 42.25069	0.002	W 95 07 7.02459	0.002	249.755	0.003
PLH	000	614	N 39 43 30.00964	0.010	W 95 02 57.17352	0.010	276.412	0.010
PLH	000	615	N 39 40 54.47668	0.010	W 95 10 50.07580	0.010	276.274	0.010
PLH	000	616	N 39 55 47.29151	0.005	W 95 14 17.58048	0.005	229.057	0.004
PLH	000	617	N 39 46 33.33303	0.006	W 94 56 16.05787	0.006	219.132	0.006
PLH	000	618	N 39 52 42.61898	0.006	W 94 58 32.40181	0.006	220.990	0.006
PLH	000	619	N 39 50 17.16222	0.005	W 95 02 40.08324	0.005	259.188	0.005
PLH	000	620	N 39 51 13.90725	0.005	W 95 06 11.86037	0.005	243.209	0.005
PLH	000	621	N 39 49 38.56165	0.006	W 95 11 32.75899	0.006	242.220	0.006
PLH	000	622	N 39 58 36.98232	0.006	W 95 17 49.12912	0.006	241.982	0.005
PLH	001	917	N 40 02 34.25705	0.006	W 95 27 50.80797	0.006	248.680	0.000
PLH	001	A 282	N 39 11 41.17149	0.008	W 94 48 34.51668	0.008	199.428	0.000
PLH	001	BELVUE	N 39 13 0.06611	0.006	W 96 12 11.21422	0.006	263.831	0.000

Adjusted PLH Coordinates:

CODE	FFF	STATION	LATITUDE	STD DEV	LONGITUDE	STD DEV	ELIP-HEIGHT	STD DEV
PLH	001	D 217	N 39 38	21.41155	W 94 57	51.09733	212.821	
				0.005		0.005		0.000
PLH	111	HBRK	N 38 18	16.71508	W 97 17	36.65570	413.664	
				0.000		0.000		0.000
PLH	111	KST5	N 39 02	40.55410	W 96 02	20.77650	303.974	
				0.000		0.000		0.000
PLH	111	KSU1	N 39 06	2.67730	W 96 36	34.09342	326.622	
				0.000		0.000		0.000
PLH	001	M 325	N 39 14	19.25934	W 95 55	26.87093	296.804	
				0.011		0.011		0.000
PLH	111	MOID	N 39 07	17.57517	W 94 23	18.02046	273.836	
				0.000		0.000		0.000
PLH	111	MOMV	N 40 21	29.38595	W 94 50	48.02244	278.928	
				0.000		0.000		0.000
PLH	111	MOPL	N 39 23	4.07225	W 94 47	0.04354	213.056	
				0.000		0.000		0.000
PLH	111	MORK	N 40 25	14.22189	W 95 32	23.84233	328.462	
				0.000		0.000		0.000
PLH	111	MORM	N 39 16	39.07157	W 93 55	34.14095	199.058	
				0.000		0.000		0.000
PLH	111	MOSB	N 38 49	48.68725	W 94 32	4.44850	302.239	
				0.000		0.000		0.000
PLH	111	MOSV	N 39 57	15.14775	W 94 50	51.31806	320.918	
				0.000		0.000		0.000
PLH	111	P 206	N 40 11	25.08593	W 95 22	22.95315	233.839	
				0.000		0.000		0.000
PLH	001	P 215	N 38 51	50.50370	W 96 29	33.38947	408.102	
				0.014		0.014		0.000
PLH	111	P 340	N 39 48	57.54967	W 94 50	28.97368	270.636	
				0.000		0.000		0.000
PLH	001	Q 109	N 39 49	59.98416	W 96 06	27.80491	342.649	
				0.008		0.008		0.000
PLH	001	Q 210	N 39 58	51.48392	W 95 11	34.19843	229.847	
				0.004		0.004		0.000
PLH	001	SKIRT RM 2	N 39 30	45.14752	W 95 44	54.09845	318.476	
				0.010		0.010		0.000
PLH	000	W 106	N 39 46	58.83583	W 95 05	23.39897	303.291	
				0.004		0.004		0.003
PLH	111	W 281	N 39 34	20.78252	W 95 08	44.71960	272.619	
				0.000		0.000		0.000
PLH	001	X 108	N 39 55	10.36750	W 95 45	2.22829	351.822	
				0.010		0.010		0.000
PLH	001	X 119	N 39 31	20.63071	W 96 14	21.97158	362.704	
				0.010		0.010		0.000
PLH	001	Y 341	N 39 19	30.34004	W 94 51	53.02893	200.569	
				0.010		0.010		0.000
PLH	001	Z 231	N 39 09	6.54765	W 96 18	18.73989	275.553	
				0.010		0.010		0.000
PLH	111	ZKC1	N 38 52	48.55019	W 94 47	26.96407	306.542	
				0.000		0.000		0.000

Geoid Values:

CODE	NAME	N/S DEFLECTION	E/W DEFLECTION	UNDULATION
GEOI	1003	+ 0 0 1.2	+ 0 0 2.6	-32.273
GEOI	1004	+ 0 0 0.8	+ 0 0 1.9	-32.306
GEOI	1005	- 0 0 2.0	+ 0 0 1.5	-32.277
GEOI	1006	- 0 0 1.9	+ 0 0 3.0	-31.394
GEOI	1007	- 0 0 1.3	+ 0 0 2.6	-31.144
GEOI	1008	- 0 0 0.8	+ 0 0 2.4	-30.946
GEOI	1009	- 0 0 2.3	+ 0 0 2.7	-30.729
GEOI	1010	- 0 0 2.6	+ 0 0 2.8	-31.066
GEOI	1011	- 0 0 3.4	+ 0 0 4.0	-30.363
GEOI	1012	- 0 0 3.4	+ 0 0 4.3	-29.896
GEOI	1013	- 0 0 3.9	+ 0 0 4.1	-30.102
GEOI	1014	- 0 0 3.8	+ 0 0 2.2	-29.948
GEOI	1015	- 0 0 1.4	+ 0 0 3.1	-30.326
GEOI	1016	- 0 0 1.8	+ 0 0 2.4	-30.605
GEOI	1017	- 0 0 3.1	+ 0 0 2.9	-30.252
GEOI	103	- 0 0 1.0	+ 0 0 0.8	-32.471
GEOI	104	- 0 0 1.3	+ 0 0 3.0	-31.121
GEOI	1101	- 0 0 0.8	+ 0 0 2.3	-30.990
GEOI	1102	- 0 0 0.6	+ 0 0 2.8	-30.876
GEOI	1103	- 0 0 0.9	+ 0 0 3.4	-30.730
GEOI	1104	- 0 0 0.6	+ 0 0 3.3	-30.636
GEOI	1105	- 0 0 2.3	+ 0 0 2.7	-30.730
GEOI	1106	- 0 0 2.0	+ 0 0 3.7	-30.460
GEOI	1107	- 0 0 1.1	+ 0 0 3.3	-30.471
GEOI	1108	- 0 0 2.4	+ 0 0 2.8	-30.851
GEOI	1109	- 0 0 3.4	+ 0 0 2.6	-30.984
GEOI	1110	- 0 0 3.1	+ 0 0 2.6	-31.106
GEOI	1111	- 0 0 3.7	+ 0 0 3.2	-30.725
GEOI	1112	- 0 0 1.5	+ 0 0 3.6	-30.349
GEOI	1113	- 0 0 3.4	+ 0 0 2.9	-31.383
GEOI	1114	- 0 0 2.0	+ 0 0 4.2	-30.142
GEOI	1115	- 0 0 3.9	+ 0 0 5.8	-29.392
GEOI	1116	- 0 0 4.8	+ 0 0 5.5	-29.261
GEOI	1117	- 0 0 5.1	+ 0 0 5.1	-29.298
GEOI	1118	- 0 0 3.9	+ 0 0 3.9	-29.925
GEOI	1119	- 0 0 5.2	+ 0 0 4.2	-29.452
GEOI	1120	- 0 0 4.2	+ 0 0 4.3	-29.990
GEOI	1121	- 0 0 4.1	+ 0 0 3.2	-29.801
GEOI	1122	- 0 0 3.1	+ 0 0 2.8	-30.035
GEOI	1123	- 0 0 2.1	+ 0 0 2.5	-30.383
GEOI	1124	- 0 0 3.1	+ 0 0 2.9	-30.264
GEOI	1125	- 0 0 1.8	+ 0 0 2.4	-30.594
GEOI	1126	- 0 0 2.2	+ 0 0 2.5	-30.490
GEOI	1127	- 0 0 3.1	+ 0 0 3.0	-30.168
GEOI	1128	- 0 0 2.4	+ 0 0 3.3	-31.569
GEOI	1129	- 0 0 1.7	+ 0 0 3.4	-31.617
GEOI	1130	- 0 0 3.5	+ 0 0 2.9	-30.790
GEOI	1131	- 0 0 3.8	+ 0 0 4.1	-30.211
GEOI	1132	- 0 0 3.4	+ 0 0 3.8	-30.265
GEOI	1133	- 0 0 3.5	+ 0 0 3.2	-30.129
GEOI	1134	- 0 0 0.4	+ 0 0 3.1	-30.302
GEOI	1135	- 0 0 0.2	+ 0 0 2.7	-30.464
GEOI	1136	+ 0 0 1.1	+ 0 0 3.3	-30.028

Geoid Values:

CODE	NAME	N/S DEFLECTION	E/W DEFLECTION	UNDULATION
GEOI	1137	- 0 0 0.4	+ 0 0 3.1	-30.866
GEOI	1138	- 0 0 0.0	+ 0 0 3.4	-30.594
GEOI	1139	+ 0 0 1.0	+ 0 0 3.4	-30.465
GEOI	1140	- 0 0 0.2	+ 0 0 2.5	-30.542
GEOI	1141	+ 0 0 0.3	+ 0 0 2.2	-30.633
GEOI	1142	- 0 0 1.3	+ 0 0 3.0	-30.983
GEOI	1143	- 0 0 1.7	+ 0 0 3.7	-31.093
GEOI	1144	- 0 0 1.3	+ 0 0 3.7	-30.849
GEOI	1145	- 0 0 2.4	+ 0 0 3.8	-30.880
GEOI	1146	+ 0 0 0.8	+ 0 0 1.9	-32.295
GEOI	1147	+ 0 0 0.4	+ 0 0 2.0	-32.413
GEOI	1148	- 0 0 1.4	+ 0 0 1.2	-32.333
GEOI	1149	+ 0 0 0.3	+ 0 0 1.9	-32.352
GEOI	1150	- 0 0 2.4	+ 0 0 2.1	-31.900
GEOI	1201	- 0 0 0.7	+ 0 0 2.5	-30.974
GEOI	1202	- 0 0 0.7	+ 0 0 2.6	-30.937
GEOI	1203	- 0 0 0.8	+ 0 0 3.6	-30.667
GEOI	1204	- 0 0 1.1	+ 0 0 3.0	-30.579
GEOI	1205	- 0 0 1.9	+ 0 0 2.7	-30.670
GEOI	1206	- 0 0 0.9	+ 0 0 2.9	-30.634
GEOI	1207	- 0 0 0.6	+ 0 0 2.8	-30.858
GEOI	1208	- 0 0 2.5	+ 0 0 2.8	-30.949
GEOI	1209	- 0 0 3.5	+ 0 0 2.6	-30.867
GEOI	1210	- 0 0 3.6	+ 0 0 3.2	-30.631
GEOI	1211	- 0 0 3.6	+ 0 0 3.9	-30.581
GEOI	1212	- 0 0 3.5	+ 0 0 3.0	-31.536
GEOI	1213	- 0 0 1.8	+ 0 0 3.2	-31.255
GEOI	1214	- 0 0 1.7	+ 0 0 4.9	-29.981
GEOI	1215	- 0 0 3.4	+ 0 0 4.7	-29.748
GEOI	1216	- 0 0 5.3	+ 0 0 5.9	-29.027
GEOI	1217	- 0 0 3.4	+ 0 0 4.1	-30.265
GEOI	1218	- 0 0 3.8	+ 0 0 4.1	-30.443
GEOI	1219	- 0 0 4.0	+ 0 0 3.6	-29.942
GEOI	1220	- 0 0 3.5	+ 0 0 3.1	-30.069
GEOI	1221	- 0 0 3.4	+ 0 0 3.2	-29.985
GEOI	1222	- 0 0 1.6	+ 0 0 2.5	-30.178
GEOI	1223	- 0 0 2.4	+ 0 0 2.9	-30.293
GEOI	1224	- 0 0 1.9	+ 0 0 2.4	-30.450
GEOI	1225	- 0 0 2.0	+ 0 0 2.1	-30.573
GEOI	1226	- 0 0 2.6	+ 0 0 2.5	-30.299
GEOI	1227	- 0 0 2.3	+ 0 0 3.1	-31.512
GEOI	1228	- 0 0 1.4	+ 0 0 3.3	-31.476
GEOI	1229	- 0 0 3.2	+ 0 0 3.2	-30.634
GEOI	1230	- 0 0 3.7	+ 0 0 4.4	-30.069
GEOI	1231	- 0 0 4.0	+ 0 0 3.8	-30.103
GEOI	1232	- 0 0 2.5	+ 0 0 3.6	-30.476
GEOI	1233	- 0 0 3.9	+ 0 0 3.5	-30.085
GEOI	1234	+ 0 0 0.4	+ 0 0 3.0	-30.391
GEOI	1235	+ 0 0 1.4	+ 0 0 3.5	-30.227
GEOI	1236	- 0 0 0.0	+ 0 0 3.3	-30.268
GEOI	1237	+ 0 0 1.2	+ 0 0 2.9	-30.376
GEOI	1238	+ 0 0 0.8	+ 0 0 2.6	-30.489
GEOI	1239	+ 0 0 0.0	+ 0 0 2.4	-30.659

Geoid Values:

CODE	NAME	N/S DEFLECTION	E/W DEFLECTION	UNDULATION
GEOI	1240	+ 0 0 0.3	+ 0 0 2.8	-30.701
GEOI	1241	- 0 0 0.3	+ 0 0 2.5	-30.562
GEOI	1242	- 0 0 0.8	+ 0 0 3.4	-31.032
GEOI	1243	- 0 0 1.5	+ 0 0 2.8	-30.849
GEOI	1244	- 0 0 0.9	+ 0 0 3.4	-30.844
GEOI	1245	- 0 0 2.6	+ 0 0 3.6	-30.593
GEOI	1246	+ 0 0 0.8	+ 0 0 1.8	-32.373
GEOI	1247	+ 0 0 1.3	+ 0 0 2.5	-32.273
GEOI	1248	- 0 0 0.5	+ 0 0 1.1	-32.395
GEOI	1249	- 0 0 1.5	+ 0 0 2.2	-32.239
GEOI	1250	- 0 0 2.7	+ 0 0 2.8	-31.865
GEOI	1251	- 0 0 2.9	+ 0 0 3.0	-31.700
GEOI	1252	- 0 0 2.3	+ 0 0 2.9	-31.885
GEOI	1401	- 0 0 0.7	+ 0 0 2.8	-30.880
GEOI	1402	- 0 0 1.1	+ 0 0 2.5	-31.055
GEOI	1403	- 0 0 0.9	+ 0 0 3.1	-30.784
GEOI	1404	- 0 0 0.8	+ 0 0 3.4	-30.567
GEOI	1405	- 0 0 1.0	+ 0 0 3.5	-30.727
GEOI	1406	- 0 0 2.0	+ 0 0 3.1	-30.586
GEOI	1407	- 0 0 1.0	+ 0 0 2.8	-30.761
GEOI	1408	- 0 0 1.4	+ 0 0 2.7	-30.846
GEOI	1409	- 0 0 3.5	+ 0 0 2.2	-31.114
GEOI	1410	- 0 0 3.5	+ 0 0 3.1	-30.884
GEOI	1411	- 0 0 2.9	+ 0 0 2.9	-31.444
GEOI	1412	- 0 0 2.7	+ 0 0 2.7	-31.281
GEOI	1413	- 0 0 1.2	+ 0 0 3.3	-31.027
GEOI	1414	- 0 0 3.3	+ 0 0 4.0	-30.275
GEOI	1415	- 0 0 4.9	+ 0 0 6.2	-29.090
GEOI	1416	- 0 0 4.6	+ 0 0 5.3	-29.427
GEOI	1417	- 0 0 3.0	+ 0 0 3.9	-30.464
GEOI	1418	- 0 0 4.3	+ 0 0 3.5	-29.736
GEOI	1419	- 0 0 4.0	+ 0 0 4.7	-29.716
GEOI	1420	- 0 0 3.4	+ 0 0 3.7	-30.079
GEOI	1421	- 0 0 3.6	+ 0 0 2.6	-30.097
GEOI	1422	- 0 0 1.9	+ 0 0 2.5	-30.088
GEOI	1423	- 0 0 2.0	+ 0 0 3.0	-30.176
GEOI	1424	- 0 0 2.4	+ 0 0 2.0	-30.439
GEOI	1425	- 0 0 2.0	+ 0 0 1.6	-30.621
GEOI	1426	- 0 0 2.6	+ 0 0 2.5	-30.323
GEOI	1427	- 0 0 3.8	+ 0 0 3.6	-30.000
GEOI	1428	- 0 0 1.7	+ 0 0 3.2	-31.532
GEOI	1429	- 0 0 2.5	+ 0 0 4.0	-30.334
GEOI	1430	- 0 0 3.3	+ 0 0 3.3	-30.573
GEOI	1431	- 0 0 2.9	+ 0 0 3.7	-30.398
GEOI	1432	- 0 0 2.5	+ 0 0 3.7	-30.521
GEOI	1433	+ 0 0 0.5	+ 0 0 3.1	-30.264
GEOI	1434	- 0 0 0.1	+ 0 0 2.6	-30.457
GEOI	1435	- 0 0 0.3	+ 0 0 2.5	-30.393
GEOI	1436	+ 0 0 1.5	+ 0 0 3.3	-30.159
GEOI	1437	- 0 0 0.5	+ 0 0 3.3	-30.712
GEOI	1438	- 0 0 0.2	+ 0 0 3.1	-30.720
GEOI	1439	- 0 0 0.0	+ 0 0 2.3	-30.763
GEOI	1440	+ 0 0 0.5	+ 0 0 2.7	-30.588

Geoid Values:

CODE	NAME	N/S DEFLECTION	E/W DEFLECTION	UNDULATION
GEOI	1441	- 0 0 0.9	+ 0 0 3.5	-31.192
GEOI	1442	- 0 0 1.0	+ 0 0 3.4	-31.265
GEOI	1443	- 0 0 0.6	+ 0 0 3.8	-31.063
GEOI	1444	- 0 0 1.8	+ 0 0 3.9	-30.810
GEOI	1445	+ 0 0 0.8	+ 0 0 1.9	-32.331
GEOI	1446	+ 0 0 0.7	+ 0 0 1.5	-32.405
GEOI	1447	+ 0 0 1.3	+ 0 0 2.1	-32.275
GEOI	1448	- 0 0 1.8	+ 0 0 1.4	-32.311
GEOI	1449	- 0 0 0.7	+ 0 0 1.3	-32.358
GEOI	1450	- 0 0 2.6	+ 0 0 1.9	-31.919
GEOI	1451	- 0 0 2.6	+ 0 0 2.4	-31.950
GEOI	1452	- 0 0 3.0	+ 0 0 3.0	-31.803
GEOI	1501	- 0 0 1.1	+ 0 0 2.2	-31.021
GEOI	1502	- 0 0 0.7	+ 0 0 3.1	-30.625
GEOI	1503	- 0 0 1.1	+ 0 0 3.2	-30.770
GEOI	1504	- 0 0 1.8	+ 0 0 3.6	-30.499
GEOI	1505	- 0 0 0.8	+ 0 0 3.1	-30.571
GEOI	1506	- 0 0 3.2	+ 0 0 2.8	-30.963
GEOI	1507	- 0 0 2.7	+ 0 0 2.7	-30.748
GEOI	1508	- 0 0 3.4	+ 0 0 2.2	-31.205
GEOI	1509	- 0 0 3.3	+ 0 0 3.9	-30.419
GEOI	1510	- 0 0 3.8	+ 0 0 2.6	-31.109
GEOI	1511	- 0 0 2.4	+ 0 0 3.1	-31.487
GEOI	1512	- 0 0 1.7	+ 0 0 3.1	-31.136
GEOI	1513	- 0 0 3.3	+ 0 0 4.3	-29.880
GEOI	1514	- 0 0 2.4	+ 0 0 5.4	-29.633
GEOI	1515	- 0 0 2.2	+ 0 0 4.0	-30.187
GEOI	1516	- 0 0 3.9	+ 0 0 4.6	-29.650
GEOI	1517	- 0 0 3.8	+ 0 0 4.1	-30.103
GEOI	1518	- 0 0 3.0	+ 0 0 4.0	-30.614
GEOI	1519	- 0 0 4.7	+ 0 0 3.9	-29.724
GEOI	1520	- 0 0 3.8	+ 0 0 2.9	-29.925
GEOI	1521	- 0 0 2.9	+ 0 0 2.8	-30.046
GEOI	1522	- 0 0 1.3	+ 0 0 3.3	-30.317
GEOI	1523	- 0 0 1.7	+ 0 0 2.3	-30.515
GEOI	1524	- 0 0 1.9	+ 0 0 2.4	-30.566
GEOI	1525	- 0 0 2.4	+ 0 0 2.3	-30.516
GEOI	1526	- 0 0 1.5	+ 0 0 2.1	-30.682
GEOI	1527	- 0 0 2.9	+ 0 0 2.8	-30.276
GEOI	1528	- 0 0 2.7	+ 0 0 3.5	-31.771
GEOI	1529	- 0 0 2.5	+ 0 0 3.0	-30.699
GEOI	1530	- 0 0 3.6	+ 0 0 4.2	-30.368
GEOI	1531	- 0 0 2.8	+ 0 0 3.7	-30.446
GEOI	1532	- 0 0 3.3	+ 0 0 3.5	-30.236
GEOI	1533	+ 0 0 0.1	+ 0 0 2.8	-30.387
GEOI	1534	+ 0 0 1.1	+ 0 0 2.8	-29.959
GEOI	1535	+ 0 0 0.1	+ 0 0 2.9	-30.389
GEOI	1536	- 0 0 0.6	+ 0 0 3.0	-30.873
GEOI	1537	+ 0 0 0.1	+ 0 0 3.2	-30.610
GEOI	1538	- 0 0 0.1	+ 0 0 2.4	-30.570
GEOI	1539	- 0 0 0.2	+ 0 0 2.5	-30.750
GEOI	1540	- 0 0 1.3	+ 0 0 3.2	-31.132
GEOI	1541	- 0 0 1.8	+ 0 0 2.4	-30.745

Geoid Values:

CODE	NAME	N/S DEFLECTION	E/W DEFLECTION	UNDULATION
GEOI	1542	- 0 0 0.7	+ 0 0 3.7	-31.215
GEOI	1543	- 0 0 2.1	+ 0 0 3.5	-30.679
GEOI	1544	- 0 0 1.1	+ 0 0 3.9	-30.943
GEOI	1545	+ 0 0 0.7	+ 0 0 1.6	-32.427
GEOI	1546	- 0 0 0.3	+ 0 0 0.9	-32.492
GEOI	1547	- 0 0 2.0	+ 0 0 1.6	-32.270
GEOI	1548	- 0 0 0.9	+ 0 0 1.9	-32.309
GEOI	1549	+ 0 0 0.0	+ 0 0 1.9	-32.327
GEOI	1550	- 0 0 2.8	+ 0 0 3.3	-31.814
GEOI	1551	- 0 0 2.3	+ 0 0 2.8	-31.953
GEOI	1552	- 0 0 2.2	+ 0 0 3.0	-31.935
GEOI	1605	+ 0 0 0.8	+ 0 0 1.9	-32.295
GEOI	1606	+ 0 0 1.0	+ 0 0 2.2	-32.332
GEOI	1607	+ 0 0 1.5	+ 0 0 2.3	-32.199
GEOI	1608	+ 0 0 1.3	+ 0 0 2.5	-32.270
GEOI	1609	- 0 0 1.6	+ 0 0 1.5	-32.308
GEOI	1610	- 0 0 0.6	+ 0 0 1.3	-32.377
GEOI	1611	- 0 0 1.6	+ 0 0 2.4	-32.199
GEOI	1612	- 0 0 0.0	+ 0 0 1.9	-32.329
GEOI	1613	+ 0 0 0.8	+ 0 0 2.0	-32.358
GEOI	1614	- 0 0 1.9	+ 0 0 3.0	-31.396
GEOI	1615	- 0 0 2.1	+ 0 0 3.2	-31.618
GEOI	1616	- 0 0 2.4	+ 0 0 3.2	-31.741
GEOI	1617	- 0 0 2.2	+ 0 0 3.2	-31.845
GEOI	1618	- 0 0 1.3	+ 0 0 2.7	-31.117
GEOI	1619	- 0 0 1.2	+ 0 0 2.6	-31.226
GEOI	1620	- 0 0 1.2	+ 0 0 2.7	-31.209
GEOI	1621	- 0 0 1.0	+ 0 0 2.4	-31.003
GEOI	1622	- 0 0 1.0	+ 0 0 3.0	-30.792
GEOI	1623	- 0 0 0.6	+ 0 0 3.1	-30.723
GEOI	1624	- 0 0 2.3	+ 0 0 2.9	-31.016
GEOI	1625	- 0 0 2.6	+ 0 0 2.9	-30.715
GEOI	1626	- 0 0 3.5	+ 0 0 3.3	-30.895
GEOI	1627	- 0 0 2.6	+ 0 0 4.9	-29.818
GEOI	1628	- 0 0 5.3	+ 0 0 6.2	-28.982
GEOI	1629	- 0 0 4.0	+ 0 0 4.9	-29.602
GEOI	1630	- 0 0 3.8	+ 0 0 3.9	-30.314
GEOI	1631	- 0 0 4.6	+ 0 0 3.9	-29.706
GEOI	1632	- 0 0 3.2	+ 0 0 3.4	-29.932
GEOI	1633	- 0 0 3.4	+ 0 0 3.0	-30.198
GEOI	1634	- 0 0 1.5	+ 0 0 3.0	-30.356
GEOI	1635	- 0 0 2.0	+ 0 0 2.5	-30.460
GEOI	1636	- 0 0 1.6	+ 0 0 2.1	-30.659
GEOI	1637	+ 0 0 0.7	+ 0 0 3.0	-30.223
GEOI	1638	+ 0 0 0.7	+ 0 0 3.1	-30.046
GEOI	1639	+ 0 0 0.9	+ 0 0 3.1	-30.379
GEOI	1640	- 0 0 0.4	+ 0 0 3.1	-30.866
GEOI	1641	+ 0 0 0.0	+ 0 0 2.7	-30.797
GEOI	1642	- 0 0 1.3	+ 0 0 3.1	-31.120
GEOI	1643	- 0 0 1.2	+ 0 0 3.1	-30.894
GEOI	1644	- 0 0 1.2	+ 0 0 3.5	-31.224
GEOI	1645	- 0 0 2.7	+ 0 0 3.7	-30.882
GEOI	604	+ 0 0 0.3	+ 0 0 1.5	-32.456

Geoid Values:

CODE	NAME	N/S DEFLECTION	E/W DEFLECTION	UNDULATION
GEOI	605	+ 0 0 1.0	+ 0 0 0.6	-32.491
GEOI	606	- 0 0 0.8	+ 0 0 0.5	-32.483
GEOI	607	- 0 0 1.5	+ 0 0 1.9	-31.970
GEOI	608	- 0 0 2.1	+ 0 0 2.7	-31.989
GEOI	609	- 0 0 2.4	+ 0 0 3.1	-31.874
GEOI	610	- 0 0 2.6	+ 0 0 2.4	-31.862
GEOI	611	- 0 0 2.8	+ 0 0 2.1	-31.967
GEOI	612	- 0 0 2.2	+ 0 0 1.8	-32.062
GEOI	613	- 0 0 2.8	+ 0 0 3.0	-31.804
GEOI	614	- 0 0 3.0	+ 0 0 3.2	-31.664
GEOI	615	- 0 0 3.5	+ 0 0 3.0	-31.532
GEOI	616	- 0 0 1.3	+ 0 0 3.0	-31.120
GEOI	617	- 0 0 2.8	+ 0 0 3.4	-31.793
GEOI	618	- 0 0 2.0	+ 0 0 3.4	-31.603
GEOI	619	- 0 0 1.6	+ 0 0 3.2	-31.515
GEOI	620	- 0 0 1.5	+ 0 0 3.0	-31.402
GEOI	621	- 0 0 2.0	+ 0 0 2.9	-31.289
GEOI	622	- 0 0 0.5	+ 0 0 3.2	-30.997
GEOI	917	- 0 0 1.3	+ 0 0 3.2	-30.704
GEOI	A 282	+ 0 0 0.4	+ 0 0 1.6	-32.402
GEOI	BELVUE	- 0 0 1.6	+ 0 0 2.4	-30.484
GEOI	D 217	- 0 0 2.1	+ 0 0 2.1	-31.929
GEOI	HBRK	- 0 0 0.3	+ 0 0 3.0	-28.873
GEOI	KST5	+ 0 0 0.0	+ 0 0 2.5	-30.734
GEOI	KSU1	+ 0 0 0.5	+ 0 0 2.4	-29.941
GEOI	M 325	- 0 0 1.5	+ 0 0 2.5	-30.801
GEOI	MOID	+ 0 0 0.2	+ 0 0 0.4	-32.596
GEOI	MOMV	- 0 0 1.2	+ 0 0 2.3	-31.366
GEOI	MOPL	- 0 0 1.3	+ 0 0 1.2	-32.377
GEOI	MORK	- 0 0 0.8	+ 0 0 3.6	-30.336
GEOI	MORM	+ 0 0 0.0	+ 0 0 0.0	0.000
GEOI	MOSB	+ 0 0 1.9	+ 0 0 1.2	-32.284
GEOI	MOSV	- 0 0 1.9	+ 0 0 2.8	-31.724
GEOI	P 206	- 0 0 1.0	+ 0 0 3.0	-30.793
GEOI	P 215	+ 0 0 1.1	+ 0 0 3.0	-29.952
GEOI	P 340	- 0 0 2.4	+ 0 0 2.8	-31.914
GEOI	Q 109	- 0 0 4.4	+ 0 0 4.8	-29.528
GEOI	Q 210	- 0 0 1.4	+ 0 0 2.6	-31.162
GEOI	SKIRT RM 2	- 0 0 1.9	+ 0 0 4.0	-30.906
GEOI	W 106	- 0 0 2.4	+ 0 0 3.3	-31.502
GEOI	W 281	- 0 0 2.6	+ 0 0 3.2	-31.766
GEOI	X 108	- 0 0 1.7	+ 0 0 4.1	-30.247
GEOI	X 119	- 0 0 3.5	+ 0 0 3.9	-29.970
GEOI	Y 341	- 0 0 1.0	+ 0 0 1.3	-32.360
GEOI	Z 231	- 0 0 0.4	+ 0 0 2.6	-30.365
GEOI	ZKC1	+ 0 0 2.2	+ 0 0 1.7	-32.139

Residuals (critical value = 4.385):

TYPE	AT	FROM	TO	OBSERVATION / STD DEV	RESIDUAL / STD DEV	STD RES / PPM
GROUP: 000_U2~1.ASC,obs#:		1				
DXCT		ZKC1	1003	-6547.69350	-0.011	-0.471
				0.023	0.022	0.42
DYCT		ZKC1	1003	15553.68450	-0.063	-2.806
				0.023	0.023	2.54
DZCT		ZKC1	1003	18416.66330	0.034	1.519
				0.023	0.023	1.37
GROUP: 000_U2~1.ASC,obs#:		2				
DXCT		MORM	1003	-83273.23050	0.004	0.054
				0.079	0.079	0.05
DYCT		MORM	1003	-6572.43140	-0.045	-0.573
				0.079	0.079	0.53
DZCT		MORM	1003	-15762.02650	0.021	0.268
				0.079	0.079	0.25
GROUP: 000_U2~1.ASC,obs#:		3				
DXCT		MOSB	1003	-28436.12010	0.014	0.360
				0.039	0.038	0.33
DYCT		MOSB	1003	20826.81230	-0.072	-1.850
				0.039	0.039	1.71
DZCT		MOSB	1003	22738.76170	0.021	0.537
				0.039	0.039	0.49
GROUP: 000_U2~1.ASC,obs#:		4				
DXCT		ZKC1	1004	-7698.96260	-0.011	-0.340
				0.033	0.032	0.31
DYCT		ZKC1	1004	22199.72490	-0.063	-1.929
				0.033	0.033	1.77
DZCT		ZKC1	1004	26424.23610	0.057	1.743
				0.033	0.032	1.60
GROUP: 000_U2~1.ASC,obs#:		5				
DXCT		MORM	1004	-84424.50160	0.006	0.073
				0.079	0.079	0.07
DYCT		MORM	1004	73.60440	-0.040	-0.507
				0.079	0.079	0.47
DZCT		MORM	1004	-7754.45190	0.042	0.531
				0.079	0.079	0.49
GROUP: 000_U2~1.ASC,obs#:		6				
DXCT		MOSB	1004	-29587.39090	0.015	0.322
				0.047	0.047	0.30
DYCT		MOSB	1004	27472.85280	-0.071	-1.510
				0.047	0.047	1.40
DZCT		MOSB	1004	30746.33340	0.044	0.942
				0.047	0.047	0.87
GROUP: 000_U2~1.ASC,obs#:		7				
DXCT		1004	1005	2467.17370	0.004	0.162
				0.024	0.023	0.15
DYCT		1004	1005	15914.26780	0.011	0.459
				0.024	0.023	0.42
DZCT		1004	1005	19597.21840	0.009	0.393
				0.024	0.023	0.36
GROUP: 000_U2~1.ASC,obs#:		8				
DXCT		W 281	1005	21090.43970	-0.003	-0.110
				0.026	0.026	0.10

Residuals (critical value = 4.385):

TYPE	AT	FROM	TO	OBSERVATION / STD DEV	RESIDUAL / STD DEV	STD RES / PPM
DYCT		W 281	1005	-12989.19070	-0.013	-0.490
				0.026	0.026	0.45
DZCT		W 281	1005	-13497.41590	0.018	0.701
				0.026	0.026	0.64
GROUP: 000_U2~1.ASC,obs#: 9						
DXCT		MOSV	1006	-20454.16950	0.002	0.082
				0.020	0.019	0.07
DYCT		MOSV	1006	-1839.93280	-0.008	-0.407
				0.020	0.019	0.37
DZCT		MOSV	1006	-4449.61230	0.004	0.192
				0.020	0.019	0.18
GROUP: 000_U2~1.ASC,obs#: 10						
DXCT		MOMV	1006	-22978.82570	0.001	0.019
				0.051	0.051	0.02
DYCT		MOMV	1006	-30688.49250	0.020	0.395
				0.051	0.051	0.37
DZCT		MOMV	1006	-38705.63690	-0.038	-0.754
				0.051	0.051	0.70
GROUP: 000_U2~1.ASC,obs#: 11						
DXCT		MORK	1006	35243.07960	0.004	0.069
				0.065	0.065	0.06
DYCT		MORK	1006	-40454.81110	0.026	0.400
				0.065	0.065	0.37
DZCT		MORK	1006	-44020.15150	-0.028	-0.428
				0.065	0.065	0.40
GROUP: 000_U2~1.ASC,obs#: 12						
DXCT		MOSV	1007	-29918.87580	-0.001	-0.033
				0.028	0.028	0.03
DYCT		MOSV	1007	5110.41570	-0.030	-1.057
				0.028	0.028	0.98
DZCT		MOSV	1007	2804.86430	0.033	1.152
				0.028	0.028	1.07
GROUP: 000_U2~1.ASC,obs#: 13						
DXCT		MOMV	1007	-32443.53270	-0.001	-0.017
				0.048	0.047	0.02
DYCT		MOMV	1007	-23738.14790	0.002	0.038
				0.048	0.047	0.04
DZCT		MOMV	1007	-31451.17950	0.010	0.208
				0.048	0.047	0.19
GROUP: 000_U2~1.ASC,obs#: 14						
DXCT		MORK	1007	25778.36640	0.009	0.170
				0.052	0.052	0.16
DYCT		MORK	1007	-33504.48290	0.024	0.462
				0.052	0.052	0.43
DZCT		MORK	1007	-36765.65270	-0.021	-0.403
				0.052	0.052	0.37
GROUP: 000_U2~1.ASC,obs#: 15						
DXCT		MOSV	1007	-29918.86790	-0.009	-0.314
				0.028	0.028	0.29
DYCT		MOSV	1007	5110.39320	-0.007	-0.262
				0.028	0.028	0.24
DZCT		MOSV	1007	2804.87990	0.017	0.600

Residuals (critical value = 4.385):

TYPE	AT	FROM	TO	OBSERVATION / STD DEV	RESIDUAL / STD DEV	STD RES / PPM
				0.028	0.028	0.56
GROUP: 000_U2~1.ASC,obs#: 16						
DXCT		MOMV	1007	-32443.52330	-0.010	-0.216
				0.048	0.047	0.20
DYCT		MOMV	1007	-23738.14670	0.001	0.013
				0.048	0.047	0.01
DZCT		MOMV	1007	-31451.17670	0.007	0.149
				0.048	0.047	0.14
GROUP: 000_U2~1.ASC,obs#: 17						
DXCT		MORK	1007	25778.38210	-0.007	-0.132
				0.052	0.052	0.12
DYCT		MORK	1007	-33504.45380	-0.005	-0.096
				0.052	0.052	0.09
DZCT		MORK	1007	-36765.68290	0.009	0.177
				0.052	0.052	0.16
GROUP: 000_U2~1.ASC,obs#: 18						
DXCT		MOSV	1008	-37170.27660	-0.007	-0.187
				0.039	0.039	0.17
DYCT		MOSV	1008	14602.67810	-0.003	-0.089
				0.039	0.039	0.08
DZCT		MOSV	1008	13265.19260	0.007	0.186
				0.039	0.039	0.17
GROUP: 000_U2~1.ASC,obs#: 19						
DXCT		MOMV	1008	-39694.93060	-0.010	-0.230
				0.044	0.044	0.21
DYCT		MOMV	1008	-14245.86500	0.008	0.177
				0.044	0.044	0.16
DZCT		MOMV	1008	-20990.86330	-0.003	-0.076
				0.044	0.044	0.07
GROUP: 000_U2~1.ASC,obs#: 20						
DXCT		MORK	1008	18526.97360	-0.006	-0.148
				0.037	0.037	0.14
DYCT		MORK	1008	-24012.17050	0.001	0.014
				0.037	0.037	0.01
DZCT		MORK	1008	-26305.37140	0.001	0.019
				0.037	0.037	0.02
GROUP: 000_U2~1.ASC,obs#: 21						
DXCT		MORK	1008	18526.97860	-0.011	-0.282
				0.037	0.037	0.26
DYCT		MORK	1008	-24012.17700	0.007	0.189
				0.037	0.037	0.17
DZCT		MORK	1008	-26305.36530	-0.005	-0.145
				0.037	0.037	0.13
GROUP: 000_U2~1.ASC,obs#: 22						
DXCT		MOMV	1008	-39694.92890	-0.012	-0.269
				0.044	0.044	0.25
DYCT		MOMV	1008	-14245.87660	0.019	0.443
				0.044	0.044	0.41
DZCT		MOMV	1008	-20990.85300	-0.014	-0.312
				0.044	0.044	0.29
GROUP: 000_U2~1.ASC,obs#: 23						
DXCT		MOSV	1008	-37170.27450	-0.009	-0.241

Residuals (critical value = 4.385):

TYPE	AT	FROM	TO	OBSERVATION / STD DEV	RESIDUAL / STD DEV	STD RES / PPM
				0.039	0.039	0.22
DYCT		MOSV	1008	14602.65780	0.017	0.431
				0.039	0.039	0.40
DZCT		MOSV	1008	13265.20430	-0.004	-0.114
				0.039	0.039	0.11
GROUP: 000_U2~1.ASC,obs#:		24				
DXCT		MORK	1009	-2055.34860	-0.006	-0.109
				0.057	0.057	0.10
DYCT		MORK	1009	-39358.72450	0.007	0.119
				0.057	0.057	0.11
DZCT		MORK	1009	-46712.56260	-0.006	-0.103
				0.057	0.057	0.10
GROUP: 000_U2~1.ASC,obs#:		25				
DXCT		MOMV	1009	-60277.25480	-0.009	-0.119
				0.073	0.073	0.11
DYCT		MOMV	1009	-29592.42430	0.019	0.263
				0.073	0.073	0.24
DZCT		MOMV	1009	-41398.05190	-0.013	-0.171
				0.073	0.073	0.16
GROUP: 000_U2~1.ASC,obs#:		26				
DXCT		MOSV	1009	-57752.59860	-0.008	-0.151
				0.054	0.054	0.14
DYCT		MOSV	1009	-743.87730	0.004	0.077
				0.054	0.054	0.07
DZCT		MOSV	1009	-7142.00090	0.003	0.055
				0.054	0.054	0.05
GROUP: 000_U2~1.ASC,obs#:		27				
DXCT		MORK	1009	-2055.37060	0.016	0.280
				0.057	0.057	0.26
DYCT		MORK	1009	-39358.72510	0.007	0.129
				0.057	0.057	0.12
DZCT		MORK	1009	-46712.51390	-0.055	-0.959
				0.057	0.057	0.89
GROUP: 000_U2~1.ASC,obs#:		28				
DXCT		MOSV	1009	-57752.60430	-0.002	-0.045
				0.054	0.054	0.04
DYCT		MOSV	1009	-743.84930	-0.024	-0.441
				0.054	0.054	0.41
DZCT		MOSV	1009	-7142.01400	0.016	0.298
				0.054	0.054	0.28
GROUP: 000_U2~1.ASC,obs#:		29				
DXCT		MOMV	1009	-60277.26120	-0.002	-0.032
				0.073	0.073	0.03
DYCT		MOMV	1009	-29592.41110	0.006	0.083
				0.073	0.073	0.08
DZCT		MOMV	1009	-41398.04190	-0.023	-0.307
				0.074	0.073	0.29
GROUP: 000_U2~1.ASC,obs#:		30				
DXCT		MORK	1009	-2055.35710	0.002	0.042
				0.057	0.057	0.04
DYCT		MORK	1009	-39358.72730	0.010	0.168
				0.057	0.057	0.16

Residuals (critical value = 4.385):

TYPE	AT	FROM	TO	OBSERVATION / STD DEV	RESIDUAL / STD DEV	STD RES / PPM
DZCT		MORK	1009	-46712.54460	-0.024	-0.420
				0.057	0.057	0.39
GROUP: 000_U2~1.ASC,obs#:		31				
DXCT		MOSV	1009	-57752.59950	-0.007	-0.134
				0.054	0.054	0.12
DYCT		MOSV	1009	-743.88100	0.008	0.146
				0.054	0.054	0.14
DZCT		MOSV	1009	-7141.99140	-0.007	-0.121
				0.054	0.054	0.11
GROUP: 000_U2~1.ASC,obs#:		32				
DXCT		KST5	1009	50364.64920	-0.016	-0.172
				0.095	0.095	0.16
DYCT		KST5	1009	53466.73140	0.000	0.003
				0.095	0.095	0.00
DZCT		KST5	1009	70798.33860	0.016	0.168
				0.095	0.095	0.16
GROUP: 000_U2~1.ASC,obs#:		33				
DXCT		MORK	1010	14662.34830	-0.018	-0.288
				0.062	0.062	0.27
DYCT		MORK	1010	-43052.83410	-0.001	-0.014
				0.063	0.063	0.01
DZCT		MORK	1010	-49251.34060	0.001	0.021
				0.063	0.063	0.02
GROUP: 000_U2~1.ASC,obs#:		34				
DXCT		MOSV	1010	-41034.91610	-0.006	-0.141
				0.039	0.039	0.13
DYCT		MOSV	1010	-4437.98080	-0.010	-0.244
				0.040	0.039	0.23
DZCT		MOSV	1010	-9680.76440	-0.004	-0.111
				0.040	0.039	0.10
GROUP: 000_U2~1.ASC,obs#:		35				
DXCT		MOMV	1010	-43559.57420	-0.004	-0.064
				0.065	0.065	0.06
DYCT		MOMV	1010	-33286.53990	0.018	0.270
				0.066	0.065	0.25
DZCT		MOMV	1010	-43936.77650	-0.059	-0.896
				0.066	0.066	0.84
GROUP: 000_U2~1.ASC,obs#:		36				
DXCT		MOSV	1010	-41034.90990	-0.012	-0.300
				0.039	0.039	0.28
DYCT		MOSV	1010	-4437.98450	-0.006	-0.149
				0.039	0.039	0.14
DZCT		MOSV	1010	-9680.77340	0.005	0.119
				0.039	0.039	0.11
GROUP: 000_U2~1.ASC,obs#:		37				
DXCT		MORK	1010	14662.34150	-0.011	-0.179
				0.062	0.062	0.17
DYCT		MORK	1010	-43052.82930	-0.006	-0.091
				0.062	0.062	0.08
DZCT		MORK	1010	-49251.33870	-0.001	-0.009
				0.062	0.062	0.01
GROUP: 000_U2~1.ASC,obs#:		38				

Residuals (critical value = 4.385):

TYPE	AT	FROM	TO	OBSERVATION STD DEV	RESIDUAL STD DEV	STD RES PPM
DXCT		MORK	1011	-21670.89550	-0.004	-0.064
				0.062	0.062	0.06
DYCT		MORK	1011	-39521.68870	0.013	0.212
				0.062	0.062	0.20
DZCT		MORK	1011	-49154.68600	-0.025	-0.404
				0.062	0.062	0.37
GROUP: 000_U2~1.ASC,obs#: 39						
DXCT		MOSV	1011	-77368.13940	-0.012	-0.166
				0.073	0.072	0.15
DYCT		MOSV	1011	-906.84440	0.013	0.185
				0.073	0.072	0.17
DZCT		MOSV	1011	-9584.12750	-0.013	-0.179
				0.073	0.072	0.17
GROUP: 000_U2~1.ASC,obs#: 40						
DXCT		KST5	1011	30749.07420	0.014	0.164
				0.086	0.085	0.15
DYCT		KST5	1011	53303.72750	0.046	0.540
				0.086	0.086	0.50
DZCT		KST5	1011	68356.18920	0.023	0.265
				0.086	0.086	0.25
GROUP: 000_U2~1.ASC,obs#: 41						
DXCT		MORK	1011	-21670.89530	-0.004	-0.067
				0.062	0.062	0.06
DYCT		MORK	1011	-39521.66900	-0.007	-0.107
				0.062	0.062	0.10
DZCT		MORK	1011	-49154.70790	-0.003	-0.050
				0.062	0.062	0.05
GROUP: 000_U2~1.ASC,obs#: 42						
DXCT		MOSV	1011	-77368.14840	-0.003	-0.042
				0.073	0.072	0.04
DYCT		MOSV	1011	-906.82850	-0.002	-0.034
				0.073	0.072	0.03
DZCT		MOSV	1011	-9584.13810	-0.002	-0.033
				0.073	0.072	0.03
GROUP: 000_U2~1.ASC,obs#: 43						
DXCT		KST5	1011	30749.10120	-0.013	-0.152
				0.086	0.085	0.14
DYCT		KST5	1011	53303.81080	-0.037	-0.432
				0.086	0.085	0.40
DZCT		KST5	1011	68356.17860	0.033	0.391
				0.086	0.085	0.36
GROUP: 000_U2~1.ASC,obs#: 44						
DXCT		MORK	1012	-38954.17000	-0.009	-0.135
				0.068	0.068	0.13
DYCT		MORK	1012	-37755.56800	-0.003	-0.037
				0.068	0.068	0.03
DZCT		MORK	1012	-49157.40060	0.000	0.005
				0.068	0.068	0.00
GROUP: 000_U2~1.ASC,obs#: 45						
DXCT		MOSV	1012	-94651.42320	-0.008	-0.090
				0.089	0.088	0.08
DYCT		MOSV	1012	859.27240	0.002	0.019

Residuals (critical value = 4.385):

TYPE	AT	FROM	TO	OBSERVATION / STD DEV	RESIDUAL / STD DEV	STD RES / PPM
				0.089	0.088	0.02
DZCT		MOSV	1012	-9586.83020	0.000	0.005
				0.089	0.088	0.00
GROUP: 000_U2~1.ASC,obs#:		46				
DXCT		KST5	1012	13465.82690	-0.018	-0.224
				0.083	0.082	0.21
DYCT		KST5	1012	55069.91220	-0.033	-0.404
				0.083	0.083	0.37
DZCT		KST5	1012	68353.48580	0.037	0.447
				0.083	0.082	0.42
GROUP: 000_U2~1.ASC,obs#:		47				
DXCT		MORM	103	-66851.10970	0.013	0.207
				0.063	0.062	0.19
DYCT		MORM	103	-1007.44970	-0.056	-0.895
				0.063	0.062	0.83
DZCT		MORM	103	-7364.09000	0.051	0.826
				0.063	0.062	0.76
GROUP: 000_U2~1.ASC,obs#:		48				
DXCT		MOSB	103	-12013.99960	0.023	0.588
				0.040	0.039	0.54
DYCT		MOSB	103	26391.79120	-0.079	-2.030
				0.040	0.039	1.86
DZCT		MOSB	103	31136.69970	0.049	1.268
				0.040	0.039	1.16
GROUP: 000_U2~1.ASC,obs#:		49				
DXCT		ZKC1	103	9874.42740	-0.002	-0.061
				0.033	0.032	0.06
DYCT		ZKC1	103	21118.66770	-0.075	-2.330
				0.033	0.032	2.12
DZCT		ZKC1	103	26814.59970	0.064	1.996
				0.033	0.032	1.81
GROUP: 000_U2~1.ASC,obs#:		50				
DXCT		MOSV	104	-33366.62650	-0.011	-0.366
				0.031	0.031	0.34
DYCT		MOSV	104	1269.99900	-0.013	-0.424
				0.031	0.031	0.39
DZCT		MOSV	104	-2135.32740	0.007	0.221
				0.031	0.031	0.20
GROUP: 000_U2~1.ASC,obs#:		51				
DXCT		MOMV	104	-35891.28150	-0.013	-0.242
				0.054	0.054	0.23
DYCT		MOMV	104	-27578.56870	0.023	0.421
				0.054	0.054	0.39
DZCT		MOMV	104	-36391.35540	-0.032	-0.587
				0.054	0.054	0.55
GROUP: 000_U2~1.ASC,obs#:		52				
DXCT		MORK	104	22330.61270	0.001	0.027
				0.056	0.056	0.02
DYCT		MORK	104	-37344.87170	0.013	0.231
				0.056	0.056	0.22
DZCT		MORK	104	-41705.86160	-0.030	-0.527
				0.056	0.056	0.49

Residuals (critical value = 4.385):

TYPE	AT	FROM	TO	OBSERVATION / STD DEV	RESIDUAL / STD DEV	STD RES / PPM
GROUP: 000_U2~1.ASC,obs#: 53						
DXCT		1007	1101	-4871.14160	-0.002	-0.207
				0.012	0.011	0.18
DYCT		1007	1101	8022.23910	-0.010	-0.874
				0.012	0.011	0.77
DZCT		1007	1101	8983.39480	0.009	0.834
				0.012	0.011	0.73
GROUP: 000_U2~1.ASC,obs#: 54						
DXCT		1008	1101	2380.26310	0.000	0.217
				0.003	0.001	0.05
DYCT		1008	1101	-1470.06050	0.001	0.961
				0.003	0.001	0.25
DZCT		1008	1101	-1476.89800	-0.001	-0.930
				0.003	0.001	0.23
GROUP: 000_U2~1.ASC,obs#: 55						
DXCT		1007	1102	-11250.37430	0.004	0.243
				0.017	0.016	0.22
DYCT		1007	1102	9882.65790	0.013	0.764
				0.017	0.016	0.68
DZCT		1007	1102	10483.29880	-0.037	-2.277
				0.017	0.016	2.04
GROUP: 000_U2~1.ASC,obs#: 56						
DXCT		1008	1102	-3998.96300	-0.000	-0.253
				0.004	0.001	0.05
DYCT		1008	1102	390.38220	-0.001	-0.789
				0.004	0.001	0.16
DZCT		1008	1102	22.95670	0.002	2.286
				0.004	0.001	0.46
GROUP: 000_U2~1.ASC,obs#: 57						
DXCT		P 206	1103	-3134.26610	-0.000	-0.169
				0.003	0.001	0.04
DYCT		P 206	1103	32.20900	0.001	0.614
				0.003	0.001	0.20
DZCT		P 206	1103	-310.29200	0.001	0.781
				0.003	0.001	0.26
GROUP: 000_U2~1.ASC,obs#: 58						
DXCT		1008	1103	-9101.55120	0.007	0.600
				0.012	0.011	0.52
DYCT		1008	1103	6298.04330	-0.011	-1.003
				0.012	0.011	0.89
DZCT		1008	1103	6429.86000	-0.012	-1.033
				0.012	0.011	0.91
GROUP: 000_U2~1.ASC,obs#: 59						
DXCT		MORK	1103	9425.44610	-0.023	-0.862
				0.026	0.026	0.80
DYCT		MORK	1103	-17714.14140	0.003	0.127
				0.027	0.027	0.12
DZCT		MORK	1103	-19875.51940	-0.003	-0.111
				0.027	0.027	0.11
GROUP: 000_U2~1.ASC,obs#: 60						
DXCT		P 206	1104	-6402.18620	0.007	1.984
				0.007	0.003	0.88

Residuals (critical value = 4.385):

TYPE	AT	FROM	TO	OBSERVATION / STD DEV	RESIDUAL / STD DEV	STD RES / PPM
DYCT		P 206	1104	3286.28400	-0.004	-1.060
				0.007	0.004	0.47
DZCT		P 206	1104	3159.60690	0.001	0.174
				0.007	0.004	0.08
GROUP: 000_U2~1.ASC,obs#:		61				
DXCT		1008	1104	-12369.43890	-0.019	-1.194
				0.017	0.016	1.01
DYCT		1008	1104	9552.09360	0.009	0.567
				0.017	0.016	0.49
DZCT		1008	1104	9899.74770	-0.001	-0.044
				0.017	0.016	0.04
GROUP: 000_U2~1.ASC,obs#:		62				
DXCT		MORK	1104	6157.54000	-0.030	-1.461
				0.021	0.020	1.30
DYCT		MORK	1104	-14460.08500	0.018	0.863
				0.021	0.020	0.78
DZCT		MORK	1104	-16405.61960	-0.004	-0.201
				0.021	0.020	0.18
GROUP: 000_U2~1.ASC,obs#:		63				
DXCT		1009	1105	97.24550	-0.000	0.000*
				0.000	0.000	0.10
DYCT		1009	1105	1.14140	-0.000	0.000*
				0.001	0.000	1.28
DZCT		1009	1105	14.46920	0.000	0.000*
				0.000	0.000	0.46
GROUP: 000_U2~1.ASC,obs#:		64				
DXCT		917	1105	-5791.23740	-0.002	-0.098
				0.018	0.018	0.09
DYCT		917	1105	-11830.22270	0.026	1.425
				0.019	0.018	1.34
DZCT		917	1105	-14621.18230	-0.030	-1.658
				0.018	0.018	1.51
GROUP: 000_U2~1.ASC,obs#:		65				
DXCT		1009	1106	-11633.00270	0.001	0.227
				0.011	0.005	0.10
DYCT		1009	1106	3193.26250	-0.000	-0.034
				0.012	0.005	0.02
DZCT		1009	1106	2457.49050	0.001	0.095
				0.012	0.005	0.04
GROUP: 000_U2~1.ASC,obs#:		66				
DXCT		917	1106	-17521.48190	-0.004	-0.227
				0.021	0.019	0.18
DYCT		917	1106	-8638.07600	0.001	0.033
				0.022	0.019	0.03
DZCT		917	1106	-12178.18850	-0.002	-0.095
				0.022	0.019	0.08
GROUP: 000_U2~1.ASC,obs#:		67				
DXCT		1009	1107	-8924.55990	0.002	0.323
				0.012	0.006	0.17
DYCT		1009	1107	6049.99940	0.004	0.549
				0.012	0.007	0.29
DZCT		1009	1107	6155.12730	0.004	0.588

Residuals (critical value = 4.385):

TYPE	AT	FROM	TO	OBSERVATION / STD DEV	RESIDUAL / STD DEV	STD RES / PPM
				0.012	0.006	0.31
GROUP: 000_U2~1.ASC,obs#: 68						
DXCT		917	1107	-14813.03810	-0.004	-0.323
				0.017	0.014	0.24
DYCT		917	1107	-5781.32720	-0.008	-0.549
				0.017	0.014	0.42
DZCT		917	1107	-8480.54220	-0.008	-0.588
				0.017	0.014	0.44
GROUP: 000_U2~1.ASC,obs#: 69						
DXCT		1010	1108	-10752.15430	0.001	0.167
				0.010	0.008	0.13
DYCT		1010	1108	2076.71940	-0.034	-3.767
				0.011	0.009	3.04
DZCT		1010	1108	1302.97280	0.025	2.765
				0.011	0.009	2.31
GROUP: 000_U2~1.ASC,obs#: 70						
DXCT		1009	1108	5965.53260	-0.000	-0.145
				0.006	0.003	0.06
DYCT		1009	1108	-1617.44290	0.012	3.835
				0.006	0.003	1.83
DZCT		1009	1108	-1235.76350	-0.009	-2.860
				0.007	0.003	1.43
GROUP: 000_U2~1.ASC,obs#: 71						
DXCT		1010	1109	-14335.02400	-0.000	-0.000
				0.016	0.012	0.00
DYCT		1010	1109	-4825.11340	-0.007	-0.577
				0.016	0.012	0.41
DZCT		1010	1109	-7352.29730	-0.007	-0.585
				0.016	0.012	0.42
GROUP: 000_U2~1.ASC,obs#: 72						
DXCT		1009	1109	2382.66110	0.000	0.001
				0.012	0.008	0.00
DYCT		1009	1109	-8519.24190	0.004	0.569
				0.013	0.008	0.33
DZCT		1009	1109	-9891.07960	0.004	0.578
				0.013	0.008	0.33
GROUP: 000_U2~1.ASC,obs#: 73						
DXCT		1010	1110	-4968.95110	0.001	0.311
				0.009	0.004	0.14
DYCT		1010	1110	-4658.65850	0.002	0.446
				0.009	0.004	0.20
DZCT		1010	1110	-6102.27590	0.003	0.715
				0.009	0.004	0.31
GROUP: 000_U2~1.ASC,obs#: 74						
DXCT		1009	1110	11748.73940	-0.004	-0.311
				0.016	0.013	0.25
DYCT		1009	1110	-8352.76790	-0.006	-0.447
				0.016	0.013	0.36
DZCT		1009	1110	-8641.03430	-0.010	-0.715
				0.016	0.013	0.57
GROUP: 000_U2~1.ASC,obs#: 75						
DXCT		1009	1111	-10937.02510	0.002	0.197

Residuals (critical value = 4.385):

TYPE	AT	FROM	TO	OBSERVATION / STD DEV	RESIDUAL / STD DEV	STD RES / PPM
				0.015	0.011	0.14
DYCT		1009	1111	-6723.25330	0.014	1.229
				0.015	0.011	0.87
DZCT		1009	1111	-9257.04520	-0.024	-2.162
				0.015	0.011	1.53
GROUP: 000_U2~1.ASC,obs#:		76				
DXCT		1011	1111	8678.52330	-0.002	-0.206
				0.012	0.007	0.12
DYCT		1011	1111	-6560.27200	-0.010	-1.265
				0.012	0.008	0.75
DZCT		1011	1111	-6814.94330	0.016	2.182
				0.012	0.008	1.28
GROUP: 000_U2~1.ASC,obs#:		77				
DXCT		1009	1112	-14976.34750	-0.000	-0.005
				0.016	0.013	0.00
DYCT		1009	1112	5612.44130	0.025	1.904
				0.016	0.013	1.47
DZCT		1009	1112	4933.84240	-0.018	-1.415
				0.016	0.013	1.09
GROUP: 000_U2~1.ASC,obs#:		78				
DXCT		1011	1112	4639.19710	0.000	0.006
				0.010	0.005	0.00
DYCT		1011	1112	5775.43340	-0.010	-1.901
				0.010	0.005	0.92
DZCT		1011	1112	7375.95960	0.007	1.411
				0.010	0.005	0.68
GROUP: 000_U2~1.ASC,obs#:		79				
DXCT		1010	1113	3827.16760	0.003	0.281
				0.016	0.011	0.18
DYCT		1010	1113	-10915.76670	-0.002	-0.207
				0.016	0.011	0.13
DZCT		1010	1113	-12662.37540	-0.001	-0.130
				0.016	0.011	0.08
GROUP: 000_U2~1.ASC,obs#:		80				
DXCT		W 106	1113	-15504.62100	-0.003	-0.281
				0.017	0.012	0.19
DYCT		W 106	1113	-5022.67670	0.002	0.207
				0.017	0.012	0.14
DZCT		W 106	1113	-7741.84020	0.002	0.130
				0.017	0.012	0.09
GROUP: 000_U2~1.ASC,obs#:		81				
DXCT		1011	1114	-3960.52800	0.002	0.447
				0.008	0.004	0.20
DYCT		1011	1114	5442.70300	-0.005	-1.112
				0.008	0.004	0.51
DZCT		1011	1114	6026.14520	0.000	0.062
				0.008	0.004	0.03
GROUP: 000_U2~1.ASC,obs#:		82				
DXCT		1012	1114	13322.75870	-0.005	-0.447
				0.014	0.012	0.34
DYCT		1012	1114	3676.58030	0.013	1.112
				0.014	0.012	0.86

Residuals (critical value = 4.385):

TYPE	AT	FROM	TO	OBSERVATION / STD DEV	RESIDUAL / STD DEV	STD RES / PPM
DZCT		1012	1114	6028.83550	-0.001	-0.065
				0.014	0.012	0.05
GROUP: 000_U2~1.ASC,obs#: 83						
DXCT		1007	1201	-5277.15460	-0.007	-0.523
				0.014	0.013	0.47
DYCT		1007	1201	9411.21710	0.016	1.133
				0.014	0.014	1.03
DZCT		1007	1201	10578.70950	-0.016	-1.147
				0.014	0.014	1.03
GROUP: 000_U2~1.ASC,obs#: 84						
DXCT		1008	1201	1974.24540	0.000	0.519
				0.002	0.000	0.06
DYCT		1008	1201	-81.05590	-0.000	-1.163
				0.002	0.000	0.15
DZCT		1008	1201	118.39060	0.000	1.180
				0.002	0.000	0.15
GROUP: 000_U2~1.ASC,obs#: 85						
DXCT		1007	1202	-9210.85780	0.000	0.035
				0.012	0.010	0.03
DYCT		1007	1202	6040.06460	-0.008	-0.797
				0.012	0.010	0.65
DZCT		1007	1202	6158.07050	-0.009	-0.915
				0.012	0.010	0.74
GROUP: 000_U2~1.ASC,obs#: 86						
DXCT		1008	1202	-1959.45020	-0.000	-0.037
				0.005	0.002	0.01
DYCT		1008	1202	-3452.23420	0.002	0.783
				0.006	0.002	0.31
DZCT		1008	1202	-4302.24390	0.002	0.902
				0.006	0.002	0.35
GROUP: 000_U2~1.ASC,obs#: 87						
DXCT		P 206	1203	-5891.79800	0.005	2.176
				0.006	0.002	0.81
DYCT		P 206	1203	523.00710	-0.006	-2.433
				0.006	0.002	0.93
DZCT		P 206	1203	-37.10280	0.003	1.523
				0.006	0.002	0.58
GROUP: 000_U2~1.ASC,obs#: 88						
DXCT		1008	1203	-11859.04900	-0.023	-1.753
				0.014	0.013	1.48
DYCT		1008	1203	6788.79910	0.025	1.883
				0.014	0.013	1.63
DZCT		1008	1203	6703.05400	-0.014	-1.066
				0.014	0.013	0.91
GROUP: 000_U2~1.ASC,obs#: 89						
DXCT		MORK	1203	6667.92520	-0.029	-1.164
				0.025	0.025	1.06
DYCT		MORK	1203	-17223.38150	0.035	1.415
				0.026	0.025	1.32
DZCT		MORK	1203	-19602.30430	-0.026	-1.059
				0.025	0.025	0.98
GROUP: 000_U2~1.ASC,obs#: 90						

Residuals (critical value = 4.385):

TYPE	AT	FROM	TO	OBSERVATION STD DEV	RESIDUAL STD DEV	STD RES PPM
DXCT		P 206	1204	-7996.39340	0.017	2.076
				0.012	0.008	1.33
DYCT		P 206	1204	7105.41600	-0.007	-0.856
				0.012	0.008	0.55
DZCT		P 206	1204	7471.24060	0.010	1.174
				0.012	0.008	0.75
GROUP: 000_U2~1.ASC,obs#: 91						
DXCT		1008	1204	-13963.64020	-0.014	-0.701
				0.022	0.020	0.59
DYCT		1008	1204	13371.23360	-0.002	-0.118
				0.022	0.020	0.10
DZCT		1008	1204	14211.39370	-0.004	-0.186
				0.022	0.020	0.16
GROUP: 000_U2~1.ASC,obs#: 92						
DXCT		MORK	1204	4563.33530	-0.022	-1.678
				0.016	0.013	1.29
DYCT		MORK	1204	-10640.95210	0.013	1.016
				0.016	0.013	0.79
DZCT		MORK	1204	-12093.96610	-0.015	-1.122
				0.016	0.013	0.88
GROUP: 000_U2~1.ASC,obs#: 93						
DXCT		1009	1205	-2148.98670	0.000	0.205
				0.003	0.000	0.03
DYCT		1009	1205	1381.48260	0.000	0.042
				0.003	0.000	0.01
DZCT		1009	1205	1393.92820	0.000	0.501
				0.003	0.000	0.07
GROUP: 000_U2~1.ASC,obs#: 94						
DXCT		917	1205	-8037.46780	-0.003	-0.207
				0.017	0.017	0.18
DYCT		917	1205	-10449.85410	-0.001	-0.057
				0.018	0.017	0.05
DZCT		917	1205	-13241.74440	-0.009	-0.505
				0.018	0.017	0.46
GROUP: 000_U2~1.ASC,obs#: 95						
DXCT		1009	1206	11.62320	-0.004	-0.502
				0.011	0.008	0.34
DYCT		1009	1206	7273.80620	-0.005	-0.679
				0.011	0.008	0.46
DZCT		1009	1206	8624.37190	-0.003	-0.339
				0.011	0.008	0.23
GROUP: 000_U2~1.ASC,obs#: 96						
DXCT		917	1206	-5876.86800	0.003	0.502
				0.009	0.005	0.29
DYCT		917	1206	-4557.54050	0.004	0.678
				0.009	0.006	0.39
DZCT		917	1206	-6011.31390	0.002	0.337
				0.009	0.006	0.20
GROUP: 000_U2~1.ASC,obs#: 97						
DXCT		1009	1207	11553.42260	-0.002	-0.172
				0.014	0.010	0.12
DYCT		1009	1207	5190.81300	0.009	0.826

Residuals (critical value = 4.385):

TYPE	AT	FROM	TO	OBSERVATION / STD DEV	RESIDUAL / STD DEV	STD RES / PPM
				0.014	0.011	0.59
DZCT		1009	1207	7416.85490	-0.014	-1.311
				0.014	0.011	0.94
GROUP: 000_U2~1.ASC,obs#: 98						
DXCT		917	1207	5664.93510	0.001	0.170
				0.011	0.006	0.09
DYCT		917	1207	-6640.51070	-0.005	-0.832
				0.011	0.006	0.47
DZCT		917	1207	-7218.84850	0.008	1.315
				0.011	0.006	0.73
GROUP: 000_U2~1.ASC,obs#: 99						
DXCT		1010	1208	-6409.05920	0.001	0.409
				0.006	0.003	0.18
DYCT		1010	1208	674.68040	0.001	0.237
				0.006	0.003	0.11
DZCT		1010	1208	101.54770	0.000	0.146
				0.006	0.003	0.06
GROUP: 000_U2~1.ASC,obs#: 100						
DXCT		1009	1208	10308.63050	-0.003	-0.410
				0.010	0.008	0.31
DYCT		1009	1208	-3019.43400	-0.002	-0.236
				0.011	0.009	0.19
DZCT		1009	1208	-2437.22150	-0.001	-0.142
				0.011	0.009	0.11
GROUP: 000_U2~1.ASC,obs#: 101						
DXCT		1010	1209	-16202.26640	-0.013	-0.943
				0.016	0.014	0.77
DYCT		1010	1209	-1508.90310	-0.008	-0.585
				0.016	0.014	0.48
DZCT		1010	1209	-3650.19530	-0.005	-0.395
				0.016	0.014	0.32
GROUP: 000_U2~1.ASC,obs#: 102						
DXCT		1009	1209	515.40290	0.003	0.944
				0.008	0.003	0.37
DYCT		1009	1209	-5203.03020	0.002	0.586
				0.008	0.003	0.23
DZCT		1009	1209	-6188.97280	0.001	0.395
				0.008	0.003	0.16
GROUP: 000_U2~1.ASC,obs#: 103						
DXCT		1009	1210	-14755.49590	0.001	0.087
				0.017	0.014	0.07
DYCT		1009	1210	-5832.90110	-0.015	-1.022
				0.017	0.015	0.82
DZCT		1009	1210	-8657.00190	-0.015	-1.040
				0.017	0.014	0.83
GROUP: 000_U2~1.ASC,obs#: 104						
DXCT		1011	1210	4860.05040	-0.000	-0.085
				0.009	0.004	0.04
DYCT		1011	1210	-5669.96250	0.004	1.013
				0.009	0.004	0.45
DZCT		1011	1210	-6214.87870	0.004	1.031
				0.009	0.004	0.45

Residuals (critical value = 4.385):

TYPE	AT	FROM	TO	OBSERVATION STD DEV	RESIDUAL STD DEV	STD RES PPM
GROUP: 000_U2~1.ASC,obs#: 105						
DXCT		1009	1211	-20668.32080	-0.006	-0.271
				0.024	0.021	0.22
DYCT		1009	1211	-8325.72850	0.006	0.309
				0.024	0.021	0.25
DZCT		1009	1211	-12363.55780	-0.029	-1.409
				0.024	0.021	1.16
GROUP: 000_U2~1.ASC,obs#: 106						
DXCT		1011	1211	-1052.78320	0.001	0.271
				0.012	0.005	0.11
DYCT		1011	1211	-8162.76250	-0.002	-0.312
				0.012	0.005	0.13
DZCT		1011	1211	-9921.45230	0.008	1.409
				0.012	0.005	0.59
GROUP: 000_U2~1.ASC,obs#: 107						
DXCT		1010	1212	11149.98700	-0.005	-0.310
				0.020	0.017	0.24
DYCT		1010	1212	-12352.77070	-0.006	-0.368
				0.020	0.017	0.28
DZCT		1010	1212	-13567.86550	0.008	0.459
				0.020	0.017	0.36
GROUP: 000_U2~1.ASC,obs#: 108						
DXCT		W 106	1212	-8181.81510	0.002	0.309
				0.013	0.007	0.15
DYCT		W 106	1212	-6459.68450	0.002	0.367
				0.013	0.007	0.18
DZCT		W 106	1212	-8647.31670	-0.003	-0.458
				0.013	0.007	0.22
GROUP: 000_U2~1.ASC,obs#: 109						
DXCT		1010	1213	11080.94240	-0.009	-1.401
				0.010	0.007	0.83
DYCT		1010	1213	325.09700	-0.004	-0.648
				0.011	0.007	0.39
DZCT		1010	1213	1507.68890	-0.004	-0.633
				0.011	0.007	0.38
GROUP: 000_U2~1.ASC,obs#: 110						
DXCT		W 106	1213	-8250.87290	0.011	1.400
				0.011	0.008	0.91
DYCT		W 106	1213	6218.18220	0.005	0.643
				0.012	0.008	0.43
DZCT		W 106	1213	6428.21780	0.005	0.621
				0.012	0.008	0.41
GROUP: 000_U2~1.ASC,obs#: 111						
DXCT		1011	1214	-7466.67180	-0.002	-0.185
				0.014	0.010	0.12
DYCT		1011	1214	9022.58100	0.001	0.144
				0.015	0.010	0.10
DZCT		1011	1214	9886.90700	0.001	0.110
				0.015	0.010	0.07
GROUP: 000_U2~1.ASC,obs#: 112						
DXCT		1012	1214	9816.60420	0.002	0.185
				0.015	0.010	0.12

Residuals (critical value = 4.385):

TYPE	AT	FROM	TO	OBSERVATION / STD DEV	RESIDUAL / STD DEV	STD RES / PPM
DYCT		1012	1214	7256.47900	-0.002	-0.146
				0.015	0.011	0.10
DZCT		1012	1214	9889.59860	-0.001	-0.111
				0.015	0.011	0.08
GROUP: 000_U2~1.ASC,obs#: 113						
DXCT		1007	1401	-11628.11750	0.008	0.569
				0.016	0.015	0.50
DYCT		1007	1401	8404.28900	0.030	1.990
				0.016	0.015	1.79
DZCT		1007	1401	8687.64850	-0.023	-1.521
				0.016	0.015	1.35
GROUP: 000_U2~1.ASC,obs#: 114						
DXCT		1008	1401	-4376.70130	-0.001	-0.584
				0.005	0.001	0.15
DYCT		1008	1401	-1087.96720	-0.003	-2.010
				0.005	0.001	0.54
DZCT		1008	1401	-1772.67910	0.002	1.548
				0.005	0.001	0.40
GROUP: 000_U2~1.ASC,obs#: 115						
DXCT		1007	1402	-1644.38290	0.004	0.638
				0.009	0.006	0.43
DYCT		1007	1402	5952.79590	-0.003	-0.413
				0.009	0.006	0.28
DZCT		1007	1402	6911.00800	-0.011	-1.674
				0.009	0.006	1.15
GROUP: 000_U2~1.ASC,obs#: 116						
DXCT		1008	1402	5607.03090	-0.003	-0.635
				0.007	0.004	0.35
DYCT		1008	1402	-3539.49730	0.002	0.407
				0.007	0.004	0.23
DZCT		1008	1402	-3549.31280	0.007	1.671
				0.007	0.004	0.94
GROUP: 000_U2~1.ASC,obs#: 117						
DXCT		P 206	1403	-236.65390	-0.000	0.000*
				0.001	0.000	0.05
DYCT		P 206	1403	483.27650	-0.000	-0.519
				0.001	0.000	0.17
DZCT		P 206	1403	543.54440	0.000	0.977
				0.002	0.000	0.39
GROUP: 000_U2~1.ASC,obs#: 118						
DXCT		1008	1403	-6203.93670	0.004	0.431
				0.011	0.010	0.38
DYCT		1008	1403	6749.10650	-0.008	-0.749
				0.011	0.010	0.66
DZCT		1008	1403	7283.69320	-0.009	-0.865
				0.011	0.010	0.77
GROUP: 000_U2~1.ASC,obs#: 119						
DXCT		MORK	1403	12323.04590	-0.010	-0.380
				0.027	0.027	0.35
DYCT		MORK	1403	-17263.09320	0.022	0.811
				0.027	0.027	0.77
DZCT		MORK	1403	-19021.64970	-0.037	-1.347

Residuals (critical value = 4.385):

TYPE	AT	FROM	TO	OBSERVATION / STD DEV	RESIDUAL / STD DEV	STD RES / PPM
				0.027	0.027	1.29
GROUP: 000_U2~1.ASC,obs#: 120						
DXCT		P 206	1404	-8924.65180	0.020	2.635
				0.012	0.008	1.61
DYCT		P 206	1404	6166.89450	-0.012	-1.591
				0.012	0.008	0.97
DZCT		P 206	1404	6262.34390	0.004	0.499
				0.012	0.008	0.31
GROUP: 000_U2~1.ASC,obs#: 121						
DXCT		1008	1404	-14891.88920	-0.021	-1.054
				0.022	0.020	0.89
DYCT		1008	1404	12432.69050	0.014	0.712
				0.022	0.020	0.61
DZCT		1008	1404	13002.48290	0.004	0.217
				0.022	0.020	0.18
GROUP: 000_U2~1.ASC,obs#: 122						
DXCT		MORK	1404	3635.08770	-0.030	-2.049
				0.017	0.014	1.64
DYCT		MORK	1404	-11579.48340	0.018	1.205
				0.017	0.015	1.00
DZCT		MORK	1404	-13302.87200	-0.011	-0.765
				0.017	0.015	0.64
GROUP: 000_U2~1.ASC,obs#: 123						
DXCT		917	1405	1733.89390	-0.000	-0.405
				0.002	0.000	0.06
DYCT		917	1405	932.65680	-0.001	-1.427
				0.003	0.001	0.30
DZCT		917	1405	1340.80030	0.000	0.996
				0.002	0.000	0.17
GROUP: 000_U2~1.ASC,obs#: 124						
DXCT		1008	1405	-12959.94830	0.004	0.332
				0.013	0.012	0.28
DYCT		1008	1405	-2582.57050	0.017	1.365
				0.013	0.012	1.18
DZCT		1008	1405	-4430.70510	-0.011	-0.895
				0.013	0.012	0.76
GROUP: 000_U2~1.ASC,obs#: 125						
DXCT		1009	1406	-6882.19110	0.000	0.068
				0.007	0.002	0.02
DYCT		1009	1406	1702.44620	-0.003	-1.235
				0.007	0.002	0.38
DZCT		1009	1406	1200.47710	0.001	0.546
				0.007	0.002	0.17
GROUP: 000_U2~1.ASC,obs#: 126						
DXCT		917	1406	-12770.67430	-0.001	-0.071
				0.020	0.018	0.06
DYCT		917	1406	-10128.91720	0.023	1.229
				0.020	0.019	1.09
DZCT		917	1406	-13435.19300	-0.010	-0.531
				0.020	0.019	0.47
GROUP: 000_U2~1.ASC,obs#: 127						
DXCT		1009	1407	5352.27600	-0.007	-1.759

Residuals (critical value = 4.385):

TYPE	AT	FROM	TO	OBSERVATION / STD DEV	RESIDUAL / STD DEV	STD RES / PPM
				0.008	0.004	0.84
DYCT		1009	1407	3674.55290	0.005	1.254
				0.008	0.004	0.62
DZCT		1009	1407	4931.21860	-0.003	-0.790
				0.008	0.004	0.39
GROUP: 000_U2~1.ASC,obs#: 128						
DXCT		917	1407	-536.23210	0.017	1.755
				0.012	0.009	1.31
DYCT		917	1407	-8156.76780	-0.012	-1.244
				0.012	0.010	0.94
DZCT		917	1407	-9704.47330	0.007	0.780
				0.012	0.010	0.59
GROUP: 000_U2~1.ASC,obs#: 129						
DXCT		1009	1408	9148.87960	0.002	0.399
				0.009	0.005	0.20
DYCT		1009	1408	2111.76100	0.001	0.113
				0.009	0.005	0.06
DZCT		1009	1408	3499.09710	-0.000	-0.060
				0.009	0.005	0.03
GROUP: 000_U2~1.ASC,obs#: 130						
DXCT		917	1408	3260.40150	-0.005	-0.398
				0.014	0.011	0.30
DYCT		917	1408	-9719.57480	-0.001	-0.113
				0.014	0.012	0.09
DZCT		917	1408	-11136.58520	0.001	0.059
				0.014	0.012	0.05
GROUP: 000_U2~1.ASC,obs#: 131						
DXCT		1010	1409	-9605.90600	0.000	0.018
				0.015	0.009	0.01
DYCT		1010	1409	-7318.88300	0.003	0.335
				0.015	0.010	0.21
DZCT		1010	1409	-9811.35420	0.003	0.290
				0.015	0.010	0.18
GROUP: 000_U2~1.ASC,obs#: 132						
DXCT		1009	1409	7111.77950	-0.000	-0.018
				0.017	0.012	0.01
DYCT		1009	1409	-11012.99270	-0.004	-0.339
				0.017	0.013	0.24
DZCT		1009	1409	-12350.11850	-0.004	-0.294
				0.017	0.013	0.21
GROUP: 000_U2~1.ASC,obs#: 133						
DXCT		1009	1410	-8094.60720	-0.002	-0.134
				0.018	0.012	0.09
DYCT		1009	1410	-10581.99030	0.003	0.252
				0.018	0.012	0.17
DZCT		1009	1410	-13561.12040	-0.005	-0.431
				0.018	0.013	0.29
GROUP: 000_U2~1.ASC,obs#: 134						
DXCT		1011	1410	11520.93420	0.002	0.134
				0.018	0.012	0.09
DYCT		1011	1410	-10419.02610	-0.003	-0.253
				0.018	0.013	0.17

Residuals (critical value = 4.385):

TYPE	AT	FROM	TO	OBSERVATION / STD DEV	RESIDUAL / STD DEV	STD RES / PPM
DZCT		1011	1410	-11118.98880	0.006	0.432
				0.018	0.013	0.29
GROUP: 000_U2~1.ASC,obs#: 135						
DXCT		1010	1411	14993.96540	0.004	0.271
				0.017	0.015	0.24
DYCT		1010	1411	-6491.61320	0.025	1.413
				0.019	0.018	1.45
DZCT		1010	1411	-6110.58480	-0.018	-1.130
				0.017	0.016	1.04
GROUP: 000_U2~1.ASC,obs#: 136						
DXCT		W 106	1411	-4337.82510	-0.000	-0.285
				0.004	0.001	0.06
DYCT		W 106	1411	-598.49150	-0.002	-1.404
				0.005	0.001	0.36
DZCT		W 106	1411	-1190.06590	0.001	1.110
				0.004	0.001	0.26
GROUP: 000_U2~1.ASC,obs#: 137						
DXCT		1010	1412	5440.67260	0.000	0.062
				0.009	0.005	0.03
DYCT		1010	1412	-5664.78940	0.016	2.880
				0.010	0.005	1.56
DZCT		1010	1412	-6242.27760	-0.008	-1.434
				0.010	0.005	0.78
GROUP: 000_U2~1.ASC,obs#: 138						
DXCT		W 106	1412	-13891.12150	-0.001	-0.054
				0.013	0.010	0.04
DYCT		W 106	1412	228.35010	-0.029	-2.848
				0.013	0.010	2.08
DZCT		W 106	1412	-1321.76110	0.014	1.359
				0.013	0.010	0.99
GROUP: 000_U2~1.ASC,obs#: 139						
DXCT		1010	1413	3091.54210	0.004	0.965
				0.010	0.004	0.35
DYCT		1010	1413	6095.58090	-0.006	-1.764
				0.010	0.004	0.63
DZCT		1010	1413	7520.71350	-0.005	-1.291
				0.010	0.004	0.46
GROUP: 000_U2~1.ASC,obs#: 140						
DXCT		W 106	1413	-16240.23010	-0.019	-0.961
				0.022	0.020	0.81
DYCT		W 106	1413	11988.63310	0.036	1.736
				0.023	0.021	1.52
DZCT		W 106	1413	12441.22140	0.026	1.218
				0.023	0.021	1.08
GROUP: 000_U2~1.ASC,obs#: 141						
DXCT		1011	1414	-3467.61220	0.000	0.042
				0.003	0.001	0.01
DYCT		1011	1414	380.43460	0.000	0.104
				0.003	0.001	0.03
DZCT		1011	1414	11.52550	0.000	0.331
				0.003	0.001	0.08
GROUP: 000_U2~1.ASC,obs#: 142						

Residuals (critical value = 4.385):

TYPE	AT	FROM	TO	OBSERVATION STD DEV	RESIDUAL STD DEV	STD RES PPM
DXCT		1012	1414	13815.66800	-0.000	-0.039
				0.013	0.012	0.03
DYCT		1012	1414	-1385.66900	-0.001	-0.115
				0.013	0.012	0.10
DZCT		1012	1414	14.21900	-0.004	-0.336
				0.013	0.012	0.28
GROUP: 000_U2~1.ASC,obs#: 143						
DXCT		1007	1501	-1498.38470	-0.007	-0.533
				0.015	0.014	0.45
DYCT		1007	1501	10385.95890	0.006	0.468
				0.015	0.014	0.40
DZCT		1007	1501	12152.90490	-0.012	-0.881
				0.015	0.014	0.75
GROUP: 000_U2~1.ASC,obs#: 144						
DXCT		1008	1501	5753.01420	0.001	0.532
				0.006	0.002	0.17
DYCT		1008	1501	893.67740	-0.001	-0.468
				0.006	0.002	0.15
DZCT		1008	1501	1692.58810	0.002	0.881
				0.006	0.002	0.28
GROUP: 000_U2~1.ASC,obs#: 145						
DXCT		P 206	1502	-6538.73290	0.008	1.668
				0.009	0.005	0.85
DYCT		P 206	1502	4817.22400	-0.002	-0.385
				0.009	0.005	0.20
DZCT		P 206	1502	4944.47320	0.001	0.289
				0.009	0.005	0.15
GROUP: 000_U2~1.ASC,obs#: 146						
DXCT		1008	1502	-12505.99340	-0.010	-0.568
				0.019	0.017	0.48
DYCT		1008	1502	11083.03960	0.005	0.280
				0.019	0.017	0.24
DZCT		1008	1502	11684.61750	-0.003	-0.196
				0.019	0.017	0.17
GROUP: 000_U2~1.ASC,obs#: 147						
DXCT		MORK	1502	6020.99240	-0.027	-1.566
				0.019	0.018	1.35
DYCT		MORK	1502	-12929.12930	0.004	0.214
				0.019	0.018	0.19
DZCT		MORK	1502	-14620.75350	-0.003	-0.175
				0.019	0.018	0.15
GROUP: 000_U2~1.ASC,obs#: 148						
DXCT		917	1503	3472.44560	-0.001	-1.551
				0.003	0.001	0.36
DYCT		917	1503	300.64660	-0.002	-2.102
				0.003	0.001	0.53
DZCT		917	1503	722.09070	0.001	1.124
				0.003	0.001	0.28
GROUP: 000_U2~1.ASC,obs#: 149						
DXCT		1008	1503	-11221.40920	0.015	1.514
				0.012	0.010	1.20
DYCT		1008	1503	-3214.58720	0.022	2.050

Residuals (critical value = 4.385):

TYPE	AT	FROM	TO	OBSERVATION / STD DEV	RESIDUAL / STD DEV	STD RES / PPM
				0.012	0.011	1.72
DZCT		1008	1503	-5049.41370	-0.011	-1.053
				0.012	0.010	0.87
GROUP: 000_U2~1.ASC,obs#: 150						
DXCT		1009	1504	-9098.52660	0.001	0.228
				0.010	0.005	0.10
DYCT		1009	1504	4072.65640	-0.007	-1.546
				0.010	0.005	0.67
DZCT		1009	1504	3736.38520	0.006	1.213
				0.010	0.005	0.52
GROUP: 000_U2~1.ASC,obs#: 151						
DXCT		917	1504	-14987.00650	-0.004	-0.228
				0.019	0.016	0.18
DYCT		917	1504	-7758.71370	0.025	1.545
				0.019	0.016	1.26
DZCT		917	1504	-10899.27080	-0.020	-1.212
				0.019	0.016	0.98
GROUP: 000_U2~1.ASC,obs#: 152						
DXCT		1009	1505	-3179.56200	-0.002	-0.277
				0.011	0.008	0.18
DYCT		1009	1505	7755.01780	0.003	0.433
				0.011	0.008	0.29
DZCT		1009	1505	8780.34510	0.000	0.027
				0.011	0.008	0.02
GROUP: 000_U2~1.ASC,obs#: 153						
DXCT		917	1505	-9068.05080	0.002	0.278
				0.011	0.007	0.17
DYCT		917	1505	-4076.31330	-0.003	-0.434
				0.011	0.007	0.27
DZCT		917	1505	-5855.33580	-0.000	-0.028
				0.011	0.007	0.02
GROUP: 000_U2~1.ASC,obs#: 154						
DXCT		1010	1506	-7803.85730	0.004	0.883
				0.007	0.004	0.46
DYCT		1010	1506	-701.41120	-0.004	-0.892
				0.008	0.004	0.47
DZCT		1010	1506	-1735.99560	0.007	1.700
				0.008	0.004	0.89
GROUP: 000_U2~1.ASC,obs#: 155						
DXCT		1009	1506	8913.83820	-0.007	-0.876
				0.010	0.008	0.62
DYCT		1009	1506	-4395.53940	0.007	0.920
				0.010	0.008	0.67
DZCT		1009	1506	-4274.74580	-0.013	-1.713
				0.010	0.008	1.24
GROUP: 000_U2~1.ASC,obs#: 156						
DXCT		1010	1507	-16891.00720	-0.010	-0.621
				0.016	0.015	0.56
DYCT		1010	1507	2636.85040	0.029	1.859
				0.016	0.016	1.71
DZCT		1010	1507	1260.15580	-0.031	-1.969
				0.016	0.016	1.80

Residuals (critical value = 4.385):

TYPE	AT	FROM	TO	OBSERVATION / STD DEV	RESIDUAL / STD DEV	STD RES / PPM
GROUP: 000_U2~1.ASC,obs#: 157						
DXCT		1009	1507	-173.33170	0.000	0.583
				0.002	0.000	0.05
DYCT		1009	1507	-1057.23700	-0.001	-2.248
				0.002	0.000	0.30
DZCT		1009	1507	-1278.64640	0.001	2.335
				0.002	0.000	0.31
GROUP: 000_U2~1.ASC,obs#: 158						
DXCT		1010	1508	-9940.34590	0.002	0.141
				0.019	0.012	0.09
DYCT		1010	1508	-10814.08750	-0.004	-0.310
				0.019	0.013	0.19
DZCT		1010	1508	-14022.02350	0.006	0.459
				0.019	0.013	0.28
GROUP: 000_U2~1.ASC,obs#: 159						
DXCT		1009	1508	6777.34320	-0.002	-0.141
				0.021	0.016	0.10
DYCT		1009	1508	-14508.21350	0.005	0.306
				0.022	0.016	0.21
DZCT		1009	1508	-16560.78130	-0.007	-0.457
				0.022	0.016	0.32
GROUP: 000_U2~1.ASC,obs#: 160						
DXCT		1009	1509	-17614.04430	-0.008	-0.536
				0.017	0.016	0.48
DYCT		1009	1509	-532.06490	0.000	0.003
				0.017	0.016	0.00
DZCT		1009	1509	-2644.11940	-0.003	-0.207
				0.017	0.016	0.19
GROUP: 000_U2~1.ASC,obs#: 161						
DXCT		1011	1509	2001.49180	0.000	0.532
				0.002	0.000	0.06
DYCT		1011	1509	-369.10700	-0.000	-0.019
				0.002	0.000	0.00
DZCT		1011	1509	-201.98020	0.000	0.197
				0.002	0.000	0.02
GROUP: 000_U2~1.ASC,obs#: 162						
DXCT		1009	1510	-2251.45040	-0.001	-0.060
				0.022	0.014	0.04
DYCT		1009	1510	-14850.19160	0.004	0.302
				0.022	0.014	0.18
DZCT		1009	1510	-18057.24870	-0.006	-0.454
				0.022	0.014	0.27
GROUP: 000_U2~1.ASC,obs#: 163						
DXCT		1011	1510	17364.09230	0.001	0.060
				0.026	0.019	0.04
DYCT		1011	1510	-14687.22360	-0.006	-0.301
				0.026	0.019	0.21
DZCT		1011	1510	-15615.12140	0.009	0.454
				0.026	0.019	0.32
GROUP: 000_U2~1.ASC,obs#: 164						
DXCT		1010	1511	18742.05430	0.003	0.158
				0.019	0.018	0.14

Residuals (critical value = 4.385):

TYPE	AT	FROM	TO	OBSERVATION / STD DEV	RESIDUAL / STD DEV	STD RES / PPM
DYCT		1010	1511	-5616.89890	0.008	0.408
				0.020	0.019	0.38
DZCT		1010	1511	-4648.89980	-0.003	-0.151
				0.019	0.018	0.14
GROUP: 000_U2~1.ASC,obs#: 165						
DXCT		W 106	1511	-589.73780	-0.000	0.000*
				0.001	0.000	0.01
DYCT		W 106	1511	276.20360	-0.000	-0.425
				0.001	0.000	0.06
DZCT		W 106	1511	271.63560	0.000	0.000*
				0.001	0.000	0.02
GROUP: 000_U2~1.ASC,obs#: 166						
DXCT		1010	1512	5274.12410	-0.000	-0.294
				0.005	0.002	0.08
DYCT		1010	1512	881.03240	0.001	0.889
				0.005	0.002	0.25
DZCT		1010	1512	1606.47620	-0.001	-0.726
				0.005	0.002	0.20
GROUP: 000_U2~1.ASC,obs#: 167						
DXCT		W 106	1512	-14057.67550	0.004	0.294
				0.016	0.014	0.25
DYCT		W 106	1512	6774.14130	-0.013	-0.889
				0.016	0.014	0.76
DZCT		W 106	1512	6527.00280	0.010	0.726
				0.016	0.014	0.62
GROUP: 000_U2~1.ASC,obs#: 168						
DXCT		1011	1513	-16204.00320	-0.000	-0.021
				0.016	0.015	0.02
DYCT		1011	1513	3342.43960	0.013	0.856
				0.016	0.015	0.76
DZCT		1011	1513	2014.30900	0.003	0.226
				0.016	0.015	0.20
GROUP: 000_U2~1.ASC,obs#: 169						
DXCT		1012	1513	1079.27620	0.000	0.016
				0.003	0.000	0.00
DYCT		1012	1513	1576.34760	-0.000	-0.851
				0.003	0.000	0.13
DZCT		1012	1513	2017.00170	-0.000	-0.211
				0.003	0.000	0.03
GROUP: 000_U2~1.ASC,obs#: 170						
DXCT		1011	1514	-17925.90170	-0.014	-0.761
				0.022	0.018	0.60
DYCT		1011	1514	10437.86510	0.022	1.186
				0.022	0.018	0.94
DZCT		1011	1514	10252.79920	-0.022	-1.184
				0.022	0.018	0.94
GROUP: 000_U2~1.ASC,obs#: 171						
DXCT		1012	1514	-642.64060	0.005	0.761
				0.013	0.006	0.35
DYCT		1012	1514	8671.78920	-0.007	-1.186
				0.013	0.006	0.55
DZCT		1012	1514	10255.45940	0.007	1.185

Residuals (critical value = 4.385):

TYPE	AT	FROM	TO	OBSERVATION / STD DEV	RESIDUAL / STD DEV	STD RES / PPM
				0.013	0.006	0.55
GROUP: 000_U2~1.ASC,obs#: 172						
DXCT		1011	1515	-3252.01460	-0.001	-0.283
				0.006	0.003	0.10
DYCT		1011	1515	4002.26310	-0.000	-0.129
				0.006	0.003	0.05
DZCT		1011	1515	4403.62930	0.001	0.345
				0.006	0.003	0.13
GROUP: 000_U2~1.ASC,obs#: 173						
DXCT		1012	1515	14031.26100	0.003	0.285
				0.014	0.012	0.23
DYCT		1012	1515	2236.15620	0.002	0.125
				0.014	0.012	0.10
DZCT		1012	1515	4406.32360	-0.004	-0.344
				0.014	0.012	0.28
GROUP: 000_U2~1.ASC,obs#: 174						
DXCT		1004	1605	-815.03130	-0.000	0.000*
				0.001	0.000	0.01
DYCT		1004	1605	-19.89710	-0.000	-2.325
				0.001	0.000	0.29
DZCT		1004	1605	-110.10530	-0.000	0.000*
				0.001	0.000	0.04
GROUP: 000_U2~1.ASC,obs#: 175						
DXCT		1003	1605	-1966.30100	0.000	0.012
				0.010	0.009	0.01
DYCT		1003	1605	6626.13040	0.013	1.418
				0.010	0.009	1.27
DZCT		1003	1605	7897.47670	0.013	1.404
				0.010	0.009	1.25
GROUP: 000_U2~1.ASC,obs#: 176						
DXCT		103	1605	-18388.42530	-0.005	-0.309
				0.017	0.016	0.27
DYCT		103	1605	1061.13590	0.037	2.234
				0.017	0.016	1.99
DZCT		103	1605	-500.45380	-0.023	-1.406
				0.017	0.016	1.25
GROUP: 000_U2~1.ASC,obs#: 177						
DXCT		1003	1606	3630.35460	-0.001	-0.902
				0.004	0.001	0.34
DYCT		1003	1606	796.08330	0.001	0.348
				0.004	0.002	0.13
DZCT		1003	1606	1351.81240	0.002	1.075
				0.004	0.002	0.41
GROUP: 000_U2~1.ASC,obs#: 178						
DXCT		1004	1606	4781.61110	0.012	1.391
				0.009	0.008	1.17
DYCT		1004	1606	-5849.95450	-0.003	-0.327
				0.009	0.008	0.28
DZCT		1004	1606	-6655.77180	-0.009	-1.102
				0.009	0.008	0.93
GROUP: 000_U2~1.ASC,obs#: 179						
DXCT		103	1606	-12791.76890	-0.007	-0.561

Residuals (critical value = 4.385):

TYPE	AT	FROM	TO	OBSERVATION / STD DEV	RESIDUAL / STD DEV	STD RES / PPM
				0.014	0.013	0.47
DYCT		103	1606	-4768.88560	-0.002	-0.132
				0.015	0.013	0.11
DZCT		103	1606	-7046.15030	-0.002	-0.179
				0.015	0.013	0.15
GROUP: 000_U2~1.ASC,obs#: 180						
DXCT		1003	1607	-2154.73120	0.005	1.310
				0.008	0.004	0.58
DYCT		1003	1607	-4833.54210	-0.006	-1.571
				0.008	0.004	0.70
DZCT		1003	1607	-6269.17580	0.011	2.972
				0.008	0.004	1.32
GROUP: 000_U2~1.ASC,obs#: 181						
DXCT		1004	1607	-1003.44300	-0.014	-0.892
				0.017	0.016	0.76
DYCT		1004	1607	-11479.60180	0.013	0.823
				0.017	0.016	0.70
DZCT		1004	1607	-14276.73370	-0.026	-1.697
				0.017	0.016	1.44
GROUP: 000_U2~1.ASC,obs#: 182						
DXCT		103	1607	-18576.83630	-0.020	-0.867
				0.024	0.023	0.76
DYCT		103	1607	-10398.54950	0.030	1.343
				0.024	0.023	1.18
DZCT		103	1607	-14667.07760	-0.054	-2.384
				0.024	0.023	2.09
GROUP: 000_U2~1.ASC,obs#: 183						
DXCT		1003	1608	-299.31700	-0.000	0.000*
				0.001	0.000	0.02
DYCT		1003	1608	298.44890	0.000	0.256
				0.001	0.000	0.05
DZCT		1003	1608	333.58540	-0.000	0.000*
				0.001	0.000	0.02
GROUP: 000_U2~1.ASC,obs#: 184						
DXCT		1004	1608	851.94620	0.006	0.718
				0.009	0.009	0.64
DYCT		1004	1608	-6347.58560	-0.007	-0.737
				0.009	0.009	0.66
DZCT		1004	1608	-7674.01670	0.007	0.775
				0.009	0.009	0.69
GROUP: 000_U2~1.ASC,obs#: 185						
DXCT		103	1608	-16721.43240	-0.014	-0.819
				0.018	0.017	0.73
DYCT		103	1608	-5266.53800	0.016	0.902
				0.018	0.017	0.82
DZCT		103	1608	-8064.35560	-0.026	-1.488
				0.018	0.017	1.33
GROUP: 000_U2~1.ASC,obs#: 186						
DXCT		1004	1609	3190.69100	0.006	0.300
				0.021	0.021	0.27
DYCT		1004	1609	14102.18940	0.013	0.643
				0.021	0.021	0.58

Residuals (critical value = 4.385):

TYPE	AT	FROM	TO	OBSERVATION / STD DEV	RESIDUAL / STD DEV	STD RES / PPM
DZCT		1004	1609	17512.21770	-0.003	-0.122
				0.021	0.021	0.11
GROUP: 000_U2~1.ASC,obs#: 187						
DXCT		1005	1609	723.51980	-0.000	-0.307
				0.003	0.000	0.04
DYCT		1005	1609	-1812.07560	-0.000	-0.649
				0.003	0.000	0.08
DZCT		1005	1609	-2085.01240	0.000	0.154
				0.003	0.000	0.02
GROUP: 000_U2~1.ASC,obs#: 188						
DXCT		1004	1610	4985.68440	0.001	0.095
				0.013	0.009	0.06
DYCT		1004	1610	7803.56820	-0.014	-1.580
				0.013	0.009	1.04
DZCT		1004	1610	9925.09020	0.030	3.426
				0.013	0.009	2.25
GROUP: 000_U2~1.ASC,obs#: 189						
DXCT		1005	1610	2518.50850	-0.001	-0.090
				0.012	0.008	0.06
DYCT		1005	1610	-8110.73740	0.013	1.602
				0.012	0.008	1.01
DZCT		1005	1610	-9672.07910	-0.028	-3.436
				0.012	0.008	2.15
GROUP: 000_U2~1.ASC,obs#: 190						
DXCT		1004	1611	-4737.30260	0.000	0.020
				0.023	0.021	0.02
DYCT		1004	1611	15417.34760	0.019	0.881
				0.023	0.021	0.78
DZCT		1004	1611	18220.39700	-0.001	-0.048
				0.023	0.021	0.04
GROUP: 000_U2~1.ASC,obs#: 191						
DXCT		1005	1611	-7204.47960	-0.000	-0.022
				0.007	0.002	0.01
DYCT		1005	1611	-496.91020	-0.002	-0.881
				0.007	0.002	0.24
DZCT		1005	1611	-1376.83170	0.000	0.074
				0.007	0.002	0.02
GROUP: 000_U2~1.ASC,obs#: 192						
DXCT		1004	1612	257.54250	0.005	0.824
				0.010	0.006	0.44
DYCT		1004	1612	6861.49310	-0.005	-0.884
				0.010	0.006	0.48
DZCT		1004	1612	8333.28610	-0.019	-3.295
				0.010	0.006	1.77
GROUP: 000_U2~1.ASC,obs#: 193						
DXCT		1005	1612	-2209.62150	-0.009	-0.824
				0.014	0.011	0.60
DYCT		1005	1612	-9052.79990	0.009	0.885
				0.014	0.011	0.64
DZCT		1005	1612	-11263.99550	0.035	3.296
				0.014	0.011	2.39
GROUP: 000_U2~1.ASC,obs#: 194						

Residuals (critical value = 4.385):

TYPE	AT	FROM	TO	OBSERVATION / STD DEV	RESIDUAL / STD DEV	STD RES / PPM
DXCT		1004	1613	3444.24930	0.000	0.115
				0.004	0.001	0.02
DYCT		1004	1613	1781.60530	0.000	0.288
				0.004	0.001	0.05
DZCT		1004	1613	2482.53890	-0.000	-0.064
				0.004	0.001	0.01
GROUP: 000_U2~1.ASC,obs#: 195						
DXCT		1005	1613	977.07420	-0.002	-0.114
				0.021	0.020	0.10
DYCT		1005	1613	-14132.66720	-0.006	-0.287
				0.021	0.020	0.26
DZCT		1005	1613	-17114.68990	0.001	0.061
				0.021	0.020	0.05
GROUP: 000_U2~1.ASC,obs#: 196						
DXCT		P 340	1614	-20063.41310	-0.014	-0.659
				0.021	0.021	0.60
DYCT		P 340	1614	7942.91290	-0.043	-2.018
				0.022	0.021	1.89
DZCT		P 340	1614	7332.59210	0.019	0.899
				0.021	0.021	0.83
GROUP: 000_U2~1.ASC,obs#: 197						
DXCT		1006	1614	91.88160	-0.000	0.000*
				0.000	0.000	0.06
DYCT		1006	1614	-30.20060	0.000	0.550
				0.001	0.000	0.78
DZCT		1006	1614	-26.88080	-0.000	0.000*
				0.000	0.000	0.49
GROUP: 000_U2~1.ASC,obs#: 198						
DXCT		104	1614	13004.32330	0.028	2.359
				0.013	0.012	2.07
DYCT		104	1614	-3140.16370	0.037	2.974
				0.013	0.012	2.70
DZCT		104	1614	-2341.17380	0.005	0.411
				0.013	0.012	0.36
GROUP: 000_U2~1.ASC,obs#: 199						
DXCT		W 106	1614	1340.84780	-0.007	-0.636
				0.012	0.012	0.56
DYCT		W 106	1614	8460.97050	-0.027	-2.225
				0.013	0.012	2.00
DZCT		W 106	1614	10124.80140	0.016	1.364
				0.012	0.012	1.21
GROUP: 000_U2~1.ASC,obs#: 200						
DXCT		MOSV	1614	-20362.28750	0.001	0.061
				0.020	0.019	0.06
DYCT		MOSV	1614	-1870.14750	0.006	0.321
				0.020	0.020	0.30
DZCT		MOSV	1614	-4476.48900	-0.000	-0.023
				0.020	0.019	0.02
GROUP: 000_U2~1.ASC,obs#: 201						
DXCT		P 340	1615	-8858.08430	-0.002	-0.156
				0.013	0.011	0.13
DYCT		P 340	1615	7133.49470	-0.021	-1.798

Residuals (critical value = 4.385):

TYPE	AT	FROM	TO	OBSERVATION / STD DEV	RESIDUAL / STD DEV	STD RES / PPM
				0.013	0.011	1.51
DZCT		P 340	1615	7528.81580	0.010	0.886
				0.013	0.011	0.74
GROUP: 000_U2~1.ASC,obs#: 202						
DXCT		1006	1615	11297.22430	-0.002	-0.223
				0.011	0.008	0.17
DYCT		1006	1615	-839.61600	0.020	2.262
				0.011	0.009	1.74
DZCT		1006	1615	169.35690	-0.023	-2.640
				0.011	0.009	2.01
GROUP: 000_U2~1.ASC,obs#: 203						
DXCT		W 106	1615	12546.17730	0.004	0.249
				0.017	0.015	0.21
DYCT		W 106	1615	7651.50160	0.047	2.999
				0.017	0.016	2.59
DZCT		W 106	1615	10321.05700	-0.025	-1.589
				0.017	0.015	1.37
GROUP: 000_U2~1.ASC,obs#: 204						
DXCT		MOSV	1615	-9156.94670	0.001	0.153
				0.010	0.008	0.11
DYCT		MOSV	1615	-2679.51520	-0.022	-2.718
				0.010	0.008	2.08
DZCT		MOSV	1615	-4280.29750	0.023	2.896
				0.010	0.008	2.20
GROUP: 000_U2~1.ASC,obs#: 205						
DXCT		P 340	1616	-3998.77660	-0.006	-0.820
				0.008	0.007	0.61
DYCT		P 340	1616	5452.96930	-0.020	-2.913
				0.009	0.007	2.22
DZCT		P 340	1616	6029.80710	0.003	0.363
				0.009	0.007	0.28
GROUP: 000_U2~1.ASC,obs#: 206						
DXCT		1006	1616	16156.52660	-0.000	-0.017
				0.015	0.014	0.01
DYCT		1006	1616	-2520.14580	0.025	1.707
				0.016	0.014	1.50
DZCT		1006	1616	-1329.65810	-0.024	-1.659
				0.016	0.015	1.47
GROUP: 000_U2~1.ASC,obs#: 207						
DXCT		104	1616	29068.97790	0.018	0.678
				0.028	0.027	0.61
DYCT		104	1616	-5630.10700	0.059	2.181
				0.028	0.027	1.98
DZCT		104	1616	-3643.91600	-0.054	-1.994
				0.028	0.027	1.82
GROUP: 000_U2~1.ASC,obs#: 208						
DXCT		W 106	1616	17405.48180	0.003	0.183
				0.019	0.018	0.16
DYCT		W 106	1616	5970.97910	0.044	2.415
				0.019	0.018	2.16
DZCT		W 106	1616	8822.04650	-0.030	-1.653
				0.019	0.018	1.49

Residuals (critical value = 4.385):

TYPE	AT	FROM	TO	OBSERVATION / STD DEV	RESIDUAL / STD DEV	STD RES / PPM
GROUP: 000_U2~1.ASC,obs#: 209						
DXCT		MOSV	1616	-4297.64420	0.003	0.442
				0.008	0.006	0.31
DYCT		MOSV	1616	-4360.05910	-0.003	-0.453
				0.008	0.006	0.33
DZCT		MOSV	1616	-5779.30630	0.016	2.448
				0.008	0.006	1.85
GROUP: 000_U2~1.ASC,obs#: 210						
DXCT		P 340	1617	-1968.17730	0.000	0.129
				0.003	0.001	0.04
DYCT		P 340	1617	1642.99630	-0.003	-2.827
				0.003	0.001	0.90
DZCT		P 340	1617	1804.37700	-0.001	-0.934
				0.003	0.001	0.29
GROUP: 000_U2~1.ASC,obs#: 211						
DXCT		1006	1617	18187.13020	0.001	0.060
				0.019	0.018	0.05
DYCT		1006	1617	-6330.11600	0.039	2.138
				0.019	0.018	1.95
DZCT		1006	1617	-5555.09260	-0.023	-1.269
				0.019	0.018	1.15
GROUP: 000_U2~1.ASC,obs#: 212						
DXCT		104	1617	31099.58740	0.014	0.447
				0.031	0.031	0.41
DYCT		104	1617	-9440.04910	0.046	1.457
				0.032	0.031	1.36
DZCT		104	1617	-7869.35520	-0.049	-1.561
				0.031	0.031	1.45
GROUP: 000_U2~1.ASC,obs#: 213						
DXCT		W 106	1617	19436.09010	-0.000	-0.005
				0.019	0.018	0.00
DYCT		W 106	1617	2161.02780	0.040	2.164
				0.019	0.018	1.97
DZCT		W 106	1617	4596.59560	-0.013	-0.712
				0.019	0.018	0.65
GROUP: 000_U2~1.ASC,obs#: 214						
DXCT		MOSV	1617	-2267.03210	-0.005	-0.381
				0.012	0.012	0.35
DYCT		MOSV	1617	-8170.02280	0.005	0.425
				0.013	0.012	0.40
DZCT		MOSV	1617	-10004.76540	0.041	3.387
				0.012	0.012	3.13
GROUP: 000_U2~1.ASC,obs#: 215						
DXCT		1007	1618	-760.88960	0.001	1.502
				0.002	0.000	0.35
DYCT		1007	1618	1241.14950	0.001	2.218
				0.002	0.001	0.58
DZCT		1007	1618	1395.96590	-0.001	-1.208
				0.002	0.001	0.32
GROUP: 000_U2~1.ASC,obs#: 216						
DXCT		1006	1618	-10225.58250	-0.015	-1.081
				0.015	0.014	0.97

Residuals (critical value = 4.385):

TYPE	AT	FROM	TO	OBSERVATION / STD DEV	RESIDUAL / STD DEV	STD RES / PPM
DYCT		1006	1618	8191.48750	-0.010	-0.732
				0.015	0.014	0.66
DZCT		1006	1618	8650.45110	0.020	1.382
				0.015	0.014	1.25
GROUP: 000_U2~1.ASC,obs#: 217						
DXCT		104	1618	2686.87830	-0.006	-0.877
				0.008	0.007	0.72
DYCT		104	1618	5081.56520	-0.015	-2.074
				0.008	0.007	1.71
DZCT		104	1618	6336.18230	0.000	0.051
				0.008	0.007	0.04
GROUP: 000_U2~1.ASC,obs#: 218						
DXCT		W 106	1618	-8976.62900	-0.010	-0.407
				0.025	0.024	0.37
DYCT		W 106	1618	16682.61950	0.002	0.084
				0.025	0.025	0.08
DZCT		W 106	1618	18802.14910	0.020	0.809
				0.025	0.025	0.75
GROUP: 000_U2~1.ASC,obs#: 219						
DXCT		1007	1619	4942.78180	-0.001	-0.453
				0.005	0.003	0.23
DYCT		1007	1619	-633.87010	0.009	3.346
				0.005	0.003	1.77
DZCT		1007	1619	-109.55680	-0.005	-1.938
				0.005	0.003	1.02
GROUP: 000_U2~1.ASC,obs#: 220						
DXCT		1006	1619	-4521.93570	0.008	0.879
				0.010	0.009	0.71
DYCT		1006	1619	6316.49300	-0.028	-3.199
				0.010	0.009	2.64
DZCT		1006	1619	7144.93520	0.008	0.966
				0.010	0.009	0.79
GROUP: 000_U2~1.ASC,obs#: 221						
DXCT		104	1619	8390.54560	-0.004	-0.472
				0.010	0.008	0.38
DYCT		104	1619	3206.54330	-0.005	-0.555
				0.010	0.008	0.46
DZCT		104	1619	4830.65500	0.001	0.064
				0.010	0.008	0.05
GROUP: 000_U2~1.ASC,obs#: 222						
DXCT		W 106	1619	-3272.97130	0.002	0.090
				0.021	0.021	0.08
DYCT		W 106	1619	14807.61870	-0.009	-0.434
				0.022	0.021	0.40
DZCT		W 106	1619	17296.60570	0.036	1.731
				0.022	0.021	1.57
GROUP: 000_U2~1.ASC,obs#: 223						
DXCT		MOSV	1619	-24976.10470	0.009	0.370
				0.024	0.023	0.34
DYCT		MOSV	1619	4476.54990	-0.025	-1.070
				0.024	0.024	0.99
DZCT		MOSV	1619	2695.30130	0.034	1.429

Residuals (critical value = 4.385):

TYPE	AT	FROM	TO	OBSERVATION / STD DEV	RESIDUAL / STD DEV	STD RES / PPM
				0.024	0.024	1.32
GROUP: 000_U2~1.ASC,obs#: 224						
DXCT		1007	1620	2423.99630	-0.004	-2.190
				0.004	0.002	0.90
DYCT		1007	1620	-2543.58250	0.006	3.021
				0.004	0.002	1.28
DZCT		1007	1620	-2757.40670	-0.002	-0.854
				0.004	0.002	0.36
GROUP: 000_U2~1.ASC,obs#: 225						
DXCT		1006	1620	-7040.73260	0.016	2.171
				0.009	0.007	1.70
DYCT		1006	1620	4406.75970	-0.010	-1.325
				0.009	0.008	1.06
DZCT		1006	1620	4497.10460	-0.007	-0.995
				0.009	0.007	0.79
GROUP: 000_U2~1.ASC,obs#: 226						
DXCT		W 106	1620	-5791.76540	0.008	0.412
				0.019	0.019	0.37
DYCT		W 106	1620	12897.94340	-0.049	-2.468
				0.021	0.020	2.42
DZCT		W 106	1620	14648.74880	0.047	2.415
				0.020	0.019	2.29
GROUP: 000_U2~1.ASC,obs#: 227						
DXCT		MOSV	1620	-27494.88640	0.002	0.078
				0.026	0.025	0.07
DYCT		MOSV	1620	2566.86370	-0.055	-2.131
				0.026	0.026	1.98
DZCT		MOSV	1620	47.43970	0.049	1.916
				0.026	0.025	1.77
GROUP: 000_U2~1.ASC,obs#: 228						
DXCT		1007	1621	-2822.38860	0.001	0.095
				0.015	0.014	0.08
DYCT		1007	1621	10334.35920	0.012	0.874
				0.015	0.014	0.76
DZCT		1007	1621	11941.65940	-0.012	-0.841
				0.015	0.014	0.73
GROUP: 000_U2~1.ASC,obs#: 229						
DXCT		1008	1621	4429.02000	-0.000	-0.097
				0.004	0.001	0.02
DYCT		1008	1621	842.08370	-0.001	-0.875
				0.004	0.001	0.23
DZCT		1008	1621	1481.34360	0.001	0.843
				0.004	0.001	0.22
GROUP: 000_U2~1.ASC,obs#: 230						
DXCT		P 206	1622	-14.95350	-0.000	0.000*
				0.000	0.000	0.02
DYCT		P 206	1622	78.75140	-0.000	-0.291
				0.001	0.000	0.30
DZCT		P 206	1622	91.46370	0.000	1.025
				0.001	0.000	0.93
GROUP: 000_U2~1.ASC,obs#: 231						
DXCT		1008	1622	-5982.23380	0.002	0.202

Residuals (critical value = 4.385):

TYPE	AT	FROM	TO	OBSERVATION / STD DEV	RESIDUAL / STD DEV	STD RES / PPM
				0.010	0.010	0.17
DYCT		1008	1622	6344.58500	-0.011	-1.154
				0.010	0.010	1.02
DZCT		1008	1622	6831.62170	-0.018	-1.890
				0.010	0.010	1.66
GROUP: 000_U2~1.ASC,obs#: 232						
DXCT		MORK	1622	12544.75260	-0.016	-0.602
				0.027	0.027	0.56
DYCT		MORK	1622	-17667.60360	0.007	0.268
				0.027	0.027	0.25
DZCT		MORK	1622	-19473.74480	-0.023	-0.826
				0.027	0.027	0.77
GROUP: 000_U2~1.ASC,obs#: 233						
DXCT		1009	1623	4860.50450	-0.004	-0.414
				0.012	0.009	0.31
DYCT		1009	1623	7119.10610	0.002	0.247
				0.012	0.009	0.19
DZCT		1009	1623	8947.07020	-0.014	-1.525
				0.012	0.009	1.16
GROUP: 000_U2~1.ASC,obs#: 234						
DXCT		917	1623	-1027.98540	0.001	0.406
				0.007	0.003	0.18
DYCT		917	1623	-4712.22830	-0.001	-0.268
				0.007	0.004	0.13
DZCT		917	1623	-5688.63090	0.005	1.526
				0.007	0.003	0.72
GROUP: 000_U2~1.ASC,obs#: 235						
DXCT		1010	1624	-1507.66790	0.000	0.234
				0.002	0.000	0.03
DYCT		1010	1624	1276.13100	0.001	1.283
				0.003	0.000	0.26
DZCT		1010	1624	1357.18100	0.000	0.456
				0.002	0.000	0.07
GROUP: 000_U2~1.ASC,obs#: 236						
DXCT		1009	1624	15210.01990	-0.003	-0.192
				0.014	0.014	0.17
DYCT		1009	1624	-2417.96720	-0.018	-1.328
				0.015	0.014	1.19
DZCT		1009	1624	-1181.58150	-0.008	-0.600
				0.014	0.014	0.53
GROUP: 000_U2~1.ASC,obs#: 237						
DXCT		1010	1625	-18784.31560	-0.011	-0.660
				0.018	0.017	0.59
DYCT		1010	1625	2833.14260	-0.007	-0.408
				0.018	0.017	0.37
DZCT		1010	1625	1265.59320	-0.005	-0.273
				0.018	0.017	0.25
GROUP: 000_U2~1.ASC,obs#: 238						
DXCT		1009	1625	-2066.64200	0.000	0.669
				0.002	0.000	0.08
DYCT		1009	1625	-860.98180	0.000	0.417
				0.003	0.000	0.06

Residuals (critical value = 4.385):

TYPE	AT	FROM	TO	OBSERVATION / STD DEV	RESIDUAL / STD DEV	STD RES / PPM
DZCT		1009	1625	-1273.18240	0.000	0.268
				0.002	0.000	0.03
GROUP: 000_U2~1.ASC,obs#: 239						
DXCT		1009	1626	-11752.31200	-0.004	-0.256
				0.023	0.017	0.18
DYCT		1009	1626	-13080.57400	-0.004	-0.253
				0.023	0.017	0.18
DZCT		1009	1626	-17041.30330	-0.004	-0.237
				0.023	0.017	0.17
GROUP: 000_U2~1.ASC,obs#: 240						
DXCT		1011	1626	7863.22510	0.003	0.256
				0.020	0.013	0.15
DYCT		1011	1626	-12917.62370	0.003	0.253
				0.020	0.013	0.15
DZCT		1011	1626	-14599.16780	0.003	0.237
				0.020	0.013	0.14
GROUP: 000_U2~1.ASC,obs#: 241						
DXCT		1011	1627	-14110.27150	-0.009	-0.638
				0.017	0.014	0.50
DYCT		1011	1627	7676.52430	0.001	0.067
				0.017	0.014	0.05
DZCT		1011	1627	7442.35960	0.004	0.309
				0.017	0.014	0.24
GROUP: 000_U2~1.ASC,obs#: 242						
DXCT		1012	1627	3172.99650	0.003	0.638
				0.009	0.004	0.28
DYCT		1012	1627	5910.42050	-0.000	-0.068
				0.009	0.004	0.03
DZCT		1012	1627	7445.05460	-0.001	-0.309
				0.009	0.004	0.14
GROUP: 000_U2~1.ASC,obs#: 243						
DXCT		1003	604	14278.08580	0.000	0.003
				0.013	0.011	0.00
DYCT		1003	604	-727.64330	0.002	0.162
				0.013	0.011	0.12
DZCT		1003	604	457.48280	-0.010	-0.904
				0.013	0.011	0.69
GROUP: 000_U2~1.ASC,obs#: 244						
DXCT		1004	604	15429.34960	0.006	0.374
				0.017	0.016	0.31
DYCT		1004	604	-7373.67450	-0.008	-0.523
				0.017	0.016	0.44
DZCT		1004	604	-7550.12150	-0.001	-0.045
				0.017	0.016	0.04
GROUP: 000_U2~1.ASC,obs#: 245						
DXCT		103	604	-2144.04180	-0.002	-0.299
				0.010	0.006	0.17
DYCT		103	604	-6292.61430	0.002	0.257
				0.010	0.006	0.15
DZCT		103	604	-7940.49910	0.005	0.883
				0.010	0.006	0.52
GROUP: 000_U2~1.ASC,obs#: 246						

Residuals (critical value = 4.385):

TYPE	AT	FROM	TO	OBSERVATION / STD DEV	RESIDUAL / STD DEV	STD RES / PPM
DXCT		1003	605	20056.28390	0.011	0.663
				0.019	0.016	0.53
DYCT		1003	605	-2032.56120	-0.021	-1.263
				0.019	0.016	1.02
DZCT		1003	605	-565.93710	0.019	1.148
				0.019	0.016	0.93
GROUP: 000_U2~1.ASC,obs#: 247						
DXCT		1004	605	21207.55730	0.007	0.334
				0.023	0.021	0.28
DYCT		1004	605	-8678.61970	-0.003	-0.154
				0.023	0.021	0.13
DZCT		1004	605	-8573.50620	-0.007	-0.359
				0.023	0.021	0.30
GROUP: 000_U2~1.ASC,obs#: 248						
DXCT		103	605	3634.17090	-0.006	-0.841
				0.011	0.007	0.47
DYCT		103	605	-7597.56140	0.008	1.227
				0.012	0.007	0.69
DZCT		103	605	-8963.88010	-0.005	-0.734
				0.012	0.007	0.41
GROUP: 000_U2~1.ASC,obs#: 249						
DXCT		103	606	2797.28580	-0.000	-0.679
				0.003	0.001	0.12
DYCT		103	606	-900.27950	0.000	0.773
				0.003	0.001	0.16
DZCT		103	606	-843.89760	-0.001	-1.246
				0.003	0.001	0.24
GROUP: 000_U2~1.ASC,obs#: 250						
DXCT		1003	606	19219.40560	0.009	0.492
				0.020	0.019	0.44
DYCT		1003	606	4664.68980	0.002	0.124
				0.020	0.019	0.11
DZCT		1003	606	7554.04770	0.021	1.092
				0.020	0.019	0.98
GROUP: 000_U2~1.ASC,obs#: 251						
DXCT		1004	606	20370.67710	0.007	0.405
				0.019	0.018	0.36
DYCT		1004	606	-1981.32950	-0.019	-1.061
				0.019	0.018	0.95
DZCT		1004	606	-453.53670	0.010	0.543
				0.019	0.018	0.48
GROUP: 000_U2~1.ASC,obs#: 252						
DXCT		D 217	607	1726.51960	0.000	0.716
				0.003	0.000	0.11
DYCT		D 217	607	-1515.01730	0.002	3.674
				0.003	0.001	0.73
DZCT		D 217	607	-1594.71870	-0.002	-3.799
				0.003	0.001	0.80
GROUP: 000_U2~1.ASC,obs#: 253						
DXCT		W 281	607	17680.42030	-0.003	-0.208
				0.017	0.016	0.18
DYCT		W 281	607	1869.76210	-0.051	-3.088

Residuals (critical value = 4.385):

TYPE	AT	FROM	TO	OBSERVATION / STD DEV	RESIDUAL / STD DEV	STD RES / PPM
				0.017	0.017	2.81
DZCT		W 281	607	4084.97370	0.054	3.293
				0.017	0.016	2.97
GROUP: 000_U2~1.ASC,obs#: 254						
DXCT		D 217	608	9497.37200	0.001	0.135
				0.012	0.005	0.05
DYCT		D 217	608	5399.73720	0.005	0.969
				0.013	0.005	0.37
DZCT		D 217	608	7499.38890	-0.008	-1.538
				0.012	0.005	0.58
GROUP: 000_U2~1.ASC,obs#: 255						
DXCT		W 281	608	25451.27320	-0.003	-0.138
				0.028	0.025	0.12
DYCT		W 281	608	8784.49370	-0.025	-0.973
				0.029	0.026	0.85
DZCT		W 281	608	13179.09090	0.039	1.541
				0.028	0.025	1.31
GROUP: 000_U2~1.ASC,obs#: 256						
DXCT		D 217	609	1969.87560	0.001	0.439
				0.007	0.002	0.13
DYCT		D 217	609	4708.05710	0.001	0.349
				0.008	0.002	0.11
DZCT		D 217	609	5860.72610	0.001	0.335
				0.007	0.002	0.10
GROUP: 000_U2~1.ASC,obs#: 257						
DXCT		W 281	609	17923.78230	-0.009	-0.441
				0.021	0.020	0.38
DYCT		W 281	609	8092.79130	-0.007	-0.361
				0.021	0.020	0.32
DZCT		W 281	609	11540.48260	-0.007	-0.347
				0.021	0.020	0.30
GROUP: 000_U2~1.ASC,obs#: 258						
DXCT		D 217	610	-5036.54220	-0.002	-0.952
				0.005	0.002	0.31
DYCT		D 217	610	-9.43100	-0.000	-0.137
				0.005	0.002	0.06
DZCT		D 217	610	-543.67240	0.003	1.434
				0.006	0.002	0.63
GROUP: 000_U2~1.ASC,obs#: 259						
DXCT		W 281	610	10917.34420	0.009	0.918
				0.012	0.010	0.73
DYCT		W 281	610	3375.29580	-0.001	-0.092
				0.012	0.011	0.08
DZCT		W 281	610	5136.09500	-0.015	-1.469
				0.012	0.010	1.23
GROUP: 000_U2~1.ASC,obs#: 260						
DXCT		D 217	611	-7346.28540	0.007	0.744
				0.012	0.009	0.52
DYCT		D 217	611	-6252.86910	0.008	0.803
				0.012	0.009	0.60
DZCT		D 217	611	-8312.73160	0.008	0.865
				0.012	0.009	0.63

Residuals (critical value = 4.385):

TYPE	AT	FROM	TO	OBSERVATION / STD DEV	RESIDUAL / STD DEV	STD RES / PPM
GROUP: 000_U2~1.ASC,obs#: 261						
DXCT	W	281	611	8607.62200	-0.004	-0.744
				0.009	0.005	0.39
DYCT	W	281	611	-2868.13120	-0.004	-0.800
				0.009	0.005	0.44
DZCT	W	281	611	-2632.97030	-0.004	-0.861
				0.009	0.005	0.47
GROUP: 000_U2~1.ASC,obs#: 262						
DXCT	D	217	612	-4561.66030	-0.019	-1.678
				0.015	0.011	1.15
DYCT	D	217	612	-9643.22390	0.013	1.061
				0.016	0.012	0.82
DZCT	D	217	612	-12116.28820	-0.037	-3.285
				0.015	0.011	2.32
GROUP: 000_U2~1.ASC,obs#: 263						
DXCT	W	281	612	11392.20410	0.014	1.615
				0.014	0.009	0.97
DYCT	W	281	612	-6258.47640	-0.008	-0.922
				0.014	0.009	0.56
DZCT	W	281	612	-6436.60540	0.029	3.241
				0.014	0.009	1.97
GROUP: 000_U2~1.ASC,obs#: 264						
DXCT	D	217	613	-13592.20210	0.028	2.186
				0.014	0.013	1.87
DYCT	D	217	613	-3155.61410	-0.003	-0.240
				0.014	0.013	0.21
DZCT	D	217	613	-5183.97380	0.012	0.934
				0.014	0.013	0.83
GROUP: 000_U2~1.ASC,obs#: 265						
DXCT	W	281	613	2361.72360	-0.001	-2.148
				0.002	0.000	0.32
DYCT	W	281	613	229.10870	0.000	0.235
				0.003	0.000	0.05
DZCT	W	281	613	495.78770	-0.000	-0.907
				0.003	0.000	0.17
GROUP: 000_U2~1.ASC,obs#: 266						
DXCT	D	217	614	-6740.16090	0.001	0.145
				0.011	0.006	0.07
DYCT	D	217	614	6642.09340	-0.005	-0.884
				0.011	0.006	0.44
DZCT	D	217	614	7365.58590	-0.004	-0.693
				0.011	0.006	0.34
GROUP: 000_U2~1.ASC,obs#: 267						
DXCT	W	281	614	9213.73910	-0.002	-0.145
				0.018	0.014	0.11
DYCT	W	281	614	10026.80120	0.013	0.874
				0.018	0.015	0.69
DZCT	W	281	614	13045.32050	0.010	0.682
				0.018	0.015	0.54
GROUP: 000_U2~1.ASC,obs#: 268						
DXCT	D	217	615	-18234.82750	-0.015	-1.051
				0.018	0.015	0.80

Residuals (critical value = 4.385):

TYPE	AT	FROM	TO	OBSERVATION / STD DEV	RESIDUAL / STD DEV	STD RES / PPM
DYCT		D 217	615	4594.36610	0.039	2.454
				0.019	0.016	2.04
DZCT		D 217	615	3674.81680	0.004	0.281
				0.018	0.015	0.22
GROUP: 000_U2~1.ASC,obs#: 269						
DXCT		W 281	615	-2280.95200	0.006	1.000
				0.012	0.006	0.49
DYCT		W 281	615	7979.14630	-0.015	-2.457
				0.012	0.006	1.20
DZCT		W 281	615	9354.57250	-0.003	-0.422
				0.012	0.006	0.21
GROUP: 000_U2~1.ASC,obs#: 270						
DXCT		P 340	616	-33105.47180	-0.013	-0.386
				0.034	0.033	0.36
DYCT		P 340	616	11084.93150	-0.007	-0.206
				0.034	0.034	0.19
DZCT		P 340	616	9672.49090	0.017	0.495
				0.034	0.034	0.46
GROUP: 000_U2~1.ASC,obs#: 271						
DXCT		104	616	-37.70640	0.000	0.000*
				0.000	0.000	0.21
DYCT		104	616	1.92760	0.000	0.000*
				0.001	0.000	0.78
DZCT		104	616	-1.27230	-0.000	0.000*
				0.001	0.000	0.75
GROUP: 000_U2~1.ASC,obs#: 272						
DXCT		W 106	616	-11701.20530	-0.012	-0.653
				0.019	0.019	0.59
DYCT		W 106	616	11603.00450	-0.006	-0.314
				0.019	0.019	0.29
DZCT		W 106	616	12464.68950	0.025	1.306
				0.019	0.019	1.19
GROUP: 000_U2~1.ASC,obs#: 273						
DXCT		MOSV	616	-33404.33620	-0.008	-0.258
				0.031	0.031	0.24
DYCT		MOSV	616	1271.91810	-0.005	-0.148
				0.031	0.031	0.14
DZCT		MOSV	616	-2136.59190	-0.001	-0.032
				0.031	0.031	0.03
GROUP: 000_U2~1.ASC,obs#: 274						
DXCT		P 340	617	-8467.02350	-0.004	-0.609
				0.009	0.006	0.40
DYCT		P 340	617	-2093.35080	-0.019	-3.043
				0.009	0.006	2.02
DZCT		P 340	617	-3450.56950	0.016	2.532
				0.009	0.006	1.66
GROUP: 000_U2~1.ASC,obs#: 275						
DXCT		1006	617	11688.27710	0.004	0.255
				0.018	0.016	0.22
DYCT		1006	617	-10066.45750	0.017	1.039
				0.018	0.017	0.92
DZCT		1006	617	-10810.02840	-0.017	-1.063

Residuals (critical value = 4.385):

TYPE	AT	FROM	TO	OBSERVATION / STD DEV	RESIDUAL / STD DEV	STD RES / PPM
				0.018	0.016	0.92
GROUP: 000_U2~1.ASC,obs#: 276						
DXCT		104	617	24600.73590	0.015	0.546
				0.029	0.028	0.49
DYCT		104	617	-13176.40180	0.035	1.221
				0.030	0.029	1.14
DZCT		104	617	-13124.31720	-0.017	-0.593
				0.029	0.028	0.54
GROUP: 000_U2~1.ASC,obs#: 277						
DXCT		W 106	617	12937.23830	0.002	0.163
				0.012	0.010	0.13
DYCT		W 106	617	-1575.31010	0.014	1.366
				0.012	0.010	1.10
DZCT		W 106	617	-658.33670	-0.011	-1.042
				0.012	0.010	0.82
GROUP: 000_U2~1.ASC,obs#: 278						
DXCT		MOSV	617	-8765.88840	0.002	0.091
				0.020	0.019	0.08
DYCT		MOSV	617	-11906.40380	0.023	1.174
				0.021	0.020	1.08
DZCT		MOSV	617	-15259.63190	-0.022	-1.182
				0.020	0.019	1.05
GROUP: 000_U2~1.ASC,obs#: 279						
DXCT		P 340	618	-11067.11870	0.007	0.639
				0.013	0.011	0.53
DYCT		P 340	618	5453.04990	-0.014	-1.230
				0.013	0.011	1.04
DZCT		P 340	618	5297.85990	0.001	0.080
				0.013	0.011	0.07
GROUP: 000_U2~1.ASC,obs#: 280						
DXCT		1006	618	9088.20390	-0.007	-1.040
				0.009	0.007	0.73
DYCT		1006	618	-2520.03980	0.005	0.761
				0.009	0.007	0.55
DZCT		1006	618	-2061.62680	-0.004	-0.592
				0.009	0.007	0.43
GROUP: 000_U2~1.ASC,obs#: 281						
DXCT		104	618	22000.65280	0.014	0.677
				0.022	0.020	0.60
DYCT		104	618	-5629.99120	0.030	1.463
				0.022	0.021	1.31
DZCT		104	618	-4375.89530	-0.024	-1.147
				0.022	0.021	1.03
GROUP: 000_U2~1.ASC,obs#: 282						
DXCT		W 106	618	10337.17020	-0.015	-1.226
				0.013	0.012	1.01
DYCT		W 106	618	5971.11370	-0.004	-0.312
				0.014	0.012	0.26
DZCT		W 106	618	8090.06210	0.005	0.431
				0.014	0.012	0.36
GROUP: 000_U2~1.ASC,obs#: 283						
DXCT		MOSV	618	-11365.98650	0.015	1.342

Residuals (critical value = 4.385):

TYPE	AT	FROM	TO	OBSERVATION / STD DEV	RESIDUAL / STD DEV	STD RES / PPM
				0.013	0.011	1.12
DYCT		MOSV	618	-4359.97080	-0.004	-0.361
				0.013	0.012	0.31
DZCT		MOSV	618	-6511.25200	0.012	1.014
				0.014	0.012	0.90
GROUP: 000_U2~1.ASC,obs#: 284						
DXCT		P 340	619	-17185.75140	-0.005	-0.319
				0.016	0.016	0.28
DYCT		P 340	619	3073.70750	-0.016	-0.992
				0.017	0.016	0.90
DZCT		P 340	619	1878.44630	0.011	0.709
				0.017	0.016	0.64
GROUP: 000_U2~1.ASC,obs#: 285						
DXCT		1006	619	2969.55500	-0.003	-0.526
				0.007	0.005	0.36
DYCT		1006	619	-4899.38140	0.003	0.477
				0.008	0.006	0.34
DZCT		1006	619	-5481.04170	0.007	1.325
				0.008	0.006	0.94
GROUP: 000_U2~1.ASC,obs#: 286						
DXCT		104	619	15882.00300	0.019	1.105
				0.018	0.017	0.98
DYCT		104	619	-8009.31920	0.014	0.793
				0.019	0.018	0.72
DZCT		104	619	-7795.29810	-0.024	-1.385
				0.018	0.017	1.25
GROUP: 000_U2~1.ASC,obs#: 287						
DXCT		W 106	619	4218.51060	0.000	0.052
				0.007	0.005	0.03
DYCT		W 106	619	3591.76780	-0.002	-0.441
				0.007	0.005	0.29
DZCT		W 106	619	4670.66760	-0.004	-0.759
				0.007	0.005	0.49
GROUP: 000_U2~1.ASC,obs#: 288						
DXCT		MOSV	619	-17484.61890	0.003	0.161
				0.020	0.019	0.15
DYCT		MOSV	619	-6739.32440	0.005	0.257
				0.020	0.020	0.24
DZCT		MOSV	619	-9930.63310	-0.010	-0.500
				0.020	0.020	0.46
GROUP: 000_U2~1.ASC,obs#: 289						
DXCT		1006	620	-1945.38670	0.002	0.609
				0.005	0.003	0.34
DYCT		1006	620	-3324.86410	0.005	1.417
				0.005	0.003	0.80
DZCT		1006	620	-4147.52090	0.004	1.205
				0.005	0.003	0.67
GROUP: 000_U2~1.ASC,obs#: 290						
DXCT		104	620	10967.08920	-0.004	-0.341
				0.013	0.012	0.29
DYCT		104	620	-6434.80480	0.019	1.508
				0.014	0.012	1.31

Residuals (critical value = 4.385):

TYPE	AT	FROM	TO	OBSERVATION / STD DEV	RESIDUAL / STD DEV	STD RES / PPM
DZCT		104	620	-6461.81450	0.009	0.765
				0.013	0.012	0.66
GROUP: 000_U2~1.ASC,obs#: 291						
DXCT		W 106	620	-696.42450	-0.002	-0.275
				0.007	0.006	0.20
DYCT		W 106	620	5166.29810	-0.013	-2.266
				0.008	0.006	1.66
DZCT		W 106	620	6004.19230	-0.011	-1.939
				0.007	0.006	1.40
GROUP: 000_U2~1.ASC,obs#: 292						
DXCT		MOSV	620	-22399.54440	-0.008	-0.372
				0.023	0.022	0.34
DYCT		MOSV	620	-5164.78510	-0.015	-0.658
				0.023	0.023	0.62
DZCT		MOSV	620	-8597.13270	0.007	0.311
				0.023	0.022	0.28
GROUP: 000_U2~1.ASC,obs#: 293						
DXCT		1006	621	-9713.42910	0.005	0.469
				0.012	0.010	0.37
DYCT		1006	621	-4515.92930	0.006	0.575
				0.012	0.010	0.46
DZCT		1006	621	-6406.16480	0.003	0.338
				0.012	0.010	0.27
GROUP: 000_U2~1.ASC,obs#: 294						
DXCT		104	621	3199.05460	-0.009	-0.994
				0.011	0.009	0.77
DYCT		104	621	-7625.84450	-0.006	-0.600
				0.011	0.009	0.47
DZCT		104	621	-8720.47080	0.021	2.279
				0.011	0.009	1.77
GROUP: 000_U2~1.ASC,obs#: 295						
DXCT		W 106	621	-8464.47380	0.008	1.125
				0.009	0.007	0.80
DYCT		W 106	621	3975.21420	0.007	0.912
				0.010	0.007	0.66
DZCT		W 106	621	3745.54680	-0.010	-1.372
				0.009	0.007	0.99
GROUP: 000_U2~1.ASC,obs#: 296						
DXCT		MOSV	621	-30167.57520	-0.017	-0.578
				0.030	0.030	0.53
DYCT		MOSV	621	-6355.85310	-0.011	-0.372
				0.031	0.030	0.34
DZCT		MOSV	621	-10855.77310	0.003	0.102
				0.031	0.030	0.09
GROUP: 000_U2~1.ASC,obs#: 297						
DXCT		1007	621	-248.70640	-0.009	-0.602
				0.017	0.015	0.52
DYCT		1007	621	-11466.23340	-0.017	-1.067
				0.017	0.016	0.93
DZCT		1007	621	-13660.64320	-0.024	-1.522
				0.017	0.016	1.33
GROUP: 000_U2~1.ASC,obs#: 298						

Residuals (critical value = 4.385):

TYPE	AT	FROM	TO	OBSERVATION / STD DEV	RESIDUAL / STD DEV	STD RES / PPM
DXCT		1007	622	-8178.24670	0.006	1.056
				0.008	0.006	0.73
DYCT		1007	622	-40.48510	0.008	1.418
				0.008	0.006	0.98
DZCT		1007	622	-921.03600	-0.004	-0.620
				0.008	0.006	0.43
GROUP: 000_U2~1.ASC,obs#: 299						
DXCT		1006	622	-17642.92770	-0.022	-1.233
				0.019	0.018	1.09
DYCT		1006	622	6909.86670	-0.017	-0.973
				0.019	0.018	0.86
DZCT		1006	622	6333.44220	0.024	1.336
				0.019	0.018	1.19
GROUP: 000_U2~1.ASC,obs#: 300						
DXCT		104	622	-4730.47960	-0.000	-0.010
				0.007	0.005	0.01
DYCT		104	622	3799.92570	-0.003	-0.613
				0.007	0.005	0.38
DZCT		104	622	4019.18060	-0.003	-0.604
				0.007	0.005	0.38
GROUP: 000_U2~1.ASC,obs#: 301						
DXCT		W 106	622	-16393.97410	-0.017	-0.660
				0.026	0.025	0.60
DYCT		W 106	622	15401.00280	-0.009	-0.352
				0.026	0.025	0.32
DZCT		W 106	622	16485.13700	0.027	1.075
				0.026	0.025	0.98
GROUP: 000_U2~1.ASC,obs#: 302						
DXCT		MOSV	622	-38097.10070	-0.017	-0.473
				0.036	0.035	0.43
DYCT		MOSV	622	5069.92630	-0.017	-0.492
				0.036	0.036	0.45
DZCT		MOSV	622	1883.84440	0.013	0.363
				0.036	0.036	0.33
GROUP: 000_U2~1.ASC,obs#: 303						
DXCT		MORK	917	3833.13500	-0.005	-0.131
				0.040	0.039	0.12
DYCT		MORK	917	-27527.37690	-0.003	-0.080
				0.040	0.039	0.07
DZCT		MORK	917	-32076.88700	-0.000	-0.004
				0.040	0.039	0.00
GROUP: 000_U2~1.ASC,obs#: 304						
DXCT		MOMV	917	-54388.76090	-0.018	-0.307
				0.059	0.059	0.28
DYCT		MOMV	917	-17761.08560	0.018	0.311
				0.059	0.059	0.29
DZCT		MOMV	917	-26762.37570	-0.007	-0.126
				0.059	0.059	0.12
GROUP: 000_U2~1.ASC,obs#: 305						
DXCT		1008	917	-14693.84540	0.007	0.515
				0.015	0.014	0.44
DYCT		1008	917	-3515.20980	-0.000	-0.019

Residuals (critical value = 4.385):

TYPE	AT	FROM	TO	OBSERVATION / STD DEV	RESIDUAL / STD DEV	STD RES / PPM
				0.015	0.014	0.02
DZCT		1008	917	-5771.51420	-0.002	-0.158
				0.015	0.014	0.14
GROUP: 000_U2~1.ASC,obs#: 306						
DXCT		MOSV	917	-51864.11660	-0.005	-0.111
				0.050	0.050	0.10
DYCT		MOSV	917	11087.46630	-0.002	-0.035
				0.050	0.050	0.03
DZCT		MOSV	917	7493.68960	-0.006	-0.125
				0.050	0.050	0.12
GROUP: 000_U2~1.ASC,obs#: 307						
DXCT		MORK	917	3833.12800	0.002	0.048
				0.040	0.039	0.04
DYCT		MORK	917	-27527.39190	0.012	0.301
				0.040	0.039	0.28
DZCT		MORK	917	-32076.88270	-0.004	-0.113
				0.040	0.039	0.10
GROUP: 000_U2~1.ASC,obs#: 308						
DXCT		MOMV	917	-54388.77610	-0.003	-0.047
				0.059	0.059	0.04
DYCT		MOMV	917	-17761.08710	0.020	0.337
				0.059	0.059	0.31
DZCT		MOMV	917	-26762.37240	-0.011	-0.182
				0.059	0.059	0.17
GROUP: 000_U2~1.ASC,obs#: 309						
DXCT		MOSV	917	-51864.12050	-0.002	-0.032
				0.050	0.050	0.03
DYCT		MOSV	917	11087.46190	0.003	0.053
				0.050	0.050	0.05
DZCT		MOSV	917	7493.67640	0.007	0.141
				0.050	0.050	0.13
GROUP: 000_U2~1.ASC,obs#: 310						
DXCT		1004	A 282	7927.86610	-0.017	-3.345
				0.007	0.005	2.08
DYCT		1004	A 282	-58.71760	-0.008	-1.437
				0.008	0.006	1.07
DZCT		1004	A 282	638.74460	-0.001	-0.125
				0.008	0.006	0.09
GROUP: 000_U2~1.ASC,obs#: 311						
DXCT		103	A 282	-9645.57010	0.021	3.174
				0.009	0.006	2.13
DYCT		103	A 282	1022.38300	-0.039	-5.673
				0.009	0.007	4.03
					^^^^^^^^^^^^^^^^	
DZCT		103	A 282	248.33740	0.035	5.170
				0.009	0.007	3.61
					^^^^^^^^^^^^^^^^	
GROUP: 000_U2~1.ASC,obs#: 312						
DXCT		1003	A 282	6776.58130	-0.001	-0.128
				0.012	0.010	0.10
DYCT		1003	A 282	6587.32120	-0.006	-0.562
				0.012	0.011	0.48

Residuals (critical value = 4.385):

TYPE	AT	FROM	TO	OBSERVATION / STD DEV	RESIDUAL / STD DEV	STD RES / PPM
DZCT		1003	A 282	8646.32020	0.019	1.746
				0.012	0.011	1.48
GROUP: 000_U2~1.ASC,obs#: 313						
DXCT		1004	D 217	-2669.37060	0.008	0.178
				0.047	0.046	0.16
DYCT		1004	D 217	32288.18960	0.018	0.391
				0.047	0.047	0.36
DZCT		1004	D 217	38774.38750	-0.013	-0.284
				0.047	0.047	0.26
GROUP: 000_U2~1.ASC,obs#: 314						
DXCT		W 281	D 217	15953.89910	-0.002	-0.134
				0.016	0.015	0.12
DYCT		W 281	D 217	3384.73370	-0.008	-0.481
				0.016	0.016	0.44
DZCT		W 281	D 217	5679.73800	0.011	0.692
				0.016	0.016	0.63
GROUP: 000_U2~1.ASC,obs#: 315						
DXCT		1004	MOSV	9188.23860	0.004	0.050
				0.079	0.079	0.05
DYCT		1004	MOSV	53651.13180	0.028	0.358
				0.079	0.079	0.33
DZCT		1004	MOSV	65710.16390	-0.017	-0.210
				0.079	0.079	0.19
GROUP: 000_U2~1.ASC,obs#: 316						
DXCT		W 281	MOSV	27811.50340	-0.001	-0.030
				0.046	0.046	0.03
DYCT		W 281	MOSV	24747.67130	0.007	0.154
				0.046	0.046	0.14
DZCT		W 281	MOSV	32615.53280	-0.011	-0.238
				0.046	0.046	0.22
GROUP: 000_U2~1.ASC,obs#: 317						
DXCT		D 217	MOSV	11857.60320	0.002	0.052
				0.034	0.033	0.05
DYCT		D 217	MOSV	21362.93590	0.016	0.487
				0.034	0.034	0.45
DZCT		D 217	MOSV	26935.79560	-0.023	-0.672
				0.034	0.034	0.62
GROUP: 000_U2~1.ASC,obs#: 318						
DXCT		1005	MOSV	6721.06400	0.001	0.020
				0.056	0.055	0.02
DYCT		1005	MOSV	37736.86300	0.019	0.337
				0.056	0.056	0.31
DZCT		1005	MOSV	46112.94820	-0.028	-0.512
				0.056	0.056	0.47
GROUP: 000_U2~1.ASC,obs#: 319						
DXCT		MORK	P 206	12559.70200	-0.012	-0.450
				0.027	0.027	0.42
DYCT		MORK	P 206	-17746.34480	-0.003	-0.104
				0.027	0.027	0.10
DZCT		MORK	P 206	-19565.21870	-0.012	-0.458
				0.027	0.027	0.43
GROUP: 000_U2~1.ASC,obs#: 320						

Residuals (critical value = 4.385):

TYPE	AT	FROM	TO	OBSERVATION / STD DEV	RESIDUAL / STD DEV	STD RES / PPM
DXCT		MOMV	P 206	-45662.20580	-0.013	-0.293
				0.045	0.045	0.27
DYCT		MOMV	P 206	-7980.05400	0.019	0.422
				0.045	0.045	0.39
DZCT		MOMV	P 206	-14250.69460	-0.033	-0.720
				0.045	0.045	0.67
GROUP: 000_U2~1.ASC,obs#: 321						
DXCT		MOSV	P 206	-43137.54700	-0.015	-0.315
				0.048	0.048	0.29
DYCT		MOSV	P 206	20868.49060	0.006	0.132
				0.048	0.048	0.12
DZCT		MOSV	P 206	20005.35280	-0.013	-0.278
				0.048	0.048	0.26
GROUP: 000_U2~1.ASC,obs#: 322						
DXCT		MOSV	P 340	-298.86340	0.004	0.275
				0.014	0.014	0.26
DYCT		MOSV	P 340	-9813.02670	0.016	1.086
				0.014	0.014	1.02
DZCT		MOSV	P 340	-11809.08600	-0.014	-1.004
				0.014	0.014	0.94
GROUP: 000_U2~1.ASC,obs#: 323						
DXCT		MOMV	P 340	-2823.52590	0.010	0.172
				0.056	0.056	0.16
DYCT		MOMV	P 340	-38661.57730	0.034	0.611
				0.056	0.056	0.57
DZCT		MOMV	P 340	-46065.10400	-0.063	-1.121
				0.056	0.056	1.04
GROUP: 000_U2~1.ASC,obs#: 324						
DXCT		MORK	P 340	55398.37800	0.015	0.174
				0.084	0.084	0.16
DYCT		MORK	P 340	-48427.88440	0.029	0.343
				0.084	0.084	0.32
DZCT		MORK	P 340	-51379.63170	-0.039	-0.469
				0.084	0.084	0.44
GROUP: 000_U2~1.ASC,obs#: 325						
DXCT		1007	Q 210	708.23730	-0.000	-1.851
				0.001	0.000	0.33
DYCT		1007	Q 210	-558.29820	-0.004	-6.686
				0.002	0.001	3.32
					^^^^^^^^^^^^^^^^	
DZCT		1007	Q 210	-586.09230	0.003	6.884
				0.001	0.000	3.07
					^^^^^^^^^^^^^^^^	
GROUP: 000_U2~1.ASC,obs#: 326						
DXCT		1006	Q 210	-8756.47080	-0.001	-0.094
				0.012	0.011	0.08
DYCT		1006	Q 210	6392.06260	-0.038	-3.324
				0.012	0.011	2.98
DZCT		1006	Q 210	6668.39060	0.026	2.273
				0.012	0.011	2.03
GROUP: 000_U2~1.ASC,obs#: 327						
DXCT		104	Q 210	4156.00420	-0.006	-1.174

Residuals (critical value = 4.385):

TYPE	AT	FROM	TO	OBSERVATION / STD DEV	RESIDUAL / STD DEV	STD RES / PPM
				0.006	0.005	0.90
DYCT		104	Q 210	3282.10790	-0.010	-1.793
				0.007	0.005	1.42
DZCT		104	Q 210	4354.12320	0.005	0.964
				0.007	0.005	0.76
GROUP: 000_U2~1.ASC,obs#: 328						
DXCT		W 106	Q 210	-7507.51590	0.003	0.128
				0.022	0.022	0.12
DYCT		W 106	Q 210	14883.16770	0.001	0.063
				0.023	0.022	0.06
DZCT		W 106	Q 210	16820.12440	-0.010	-0.430
				0.023	0.022	0.41
GROUP: 000_U2~1.ASC,obs#: 329						
DXCT		MOSV	W 106	-21703.12730	0.001	0.025
				0.026	0.026	0.02
DYCT		MOSV	W 106	-10331.07570	-0.009	-0.361
				0.026	0.026	0.33
DZCT		MOSV	W 106	-14601.29650	-0.010	-0.401
				0.026	0.026	0.37
GROUP: 000_U2~1.ASC,obs#: 330						
DXCT		MOMV	W 106	-24227.78770	0.004	0.068
				0.063	0.062	0.06
DYCT		MOMV	W 106	-39179.63670	0.020	0.316
				0.063	0.062	0.29
DZCT		MOMV	W 106	-48857.31990	-0.053	-0.857
				0.063	0.062	0.80
GROUP: 000_U2~1.ASC,obs#: 331						
DXCT		MORK	W 106	33994.11870	0.007	0.088
				0.075	0.075	0.08
DYCT		MORK	W 106	-48945.94060	0.011	0.146
				0.075	0.075	0.14
DZCT		MORK	W 106	-54171.84030	-0.037	-0.496
				0.075	0.075	0.46
GROUP: 000_U2~1.ASC,obs#: 332						
DXCT		MOSV	W 106	-21703.11530	-0.011	-0.438
				0.026	0.026	0.40
DYCT		MOSV	W 106	-10331.08010	-0.005	-0.192
				0.026	0.026	0.18
DZCT		MOSV	W 106	-14601.30530	-0.002	-0.062
				0.026	0.026	0.06
GROUP: 000_U2~1.ASC,obs#: 333						
DXCT		MORK	W 106	33994.13580	-0.010	-0.140
				0.075	0.075	0.13
DYCT		MORK	W 106	-48945.92400	-0.006	-0.076
				0.075	0.075	0.07
DZCT		MORK	W 106	-54171.87080	-0.007	-0.089
				0.075	0.075	0.08
GROUP: 000_U2~1.ASC,obs#: 334						
DXCT		1009	X 108	-19335.34930	-0.005	-0.317
				0.019	0.017	0.27
DYCT		1009	X 108	5388.90910	-0.023	-1.272
				0.019	0.018	1.13

Residuals (critical value = 4.385):

TYPE	AT	FROM	TO	OBSERVATION / STD DEV	RESIDUAL / STD DEV	STD RES / PPM
DZCT		1009	X 108	4210.76860	0.028	1.570
				0.019	0.018	1.37
GROUP: 000_U2~1.ASC,obs#: 335						
DXCT		1011	X 108	280.19130	-0.001	-0.433
				0.008	0.003	0.16
DYCT		1011	X 108	5551.86400	-0.020	-3.499
				0.008	0.006	2.34
DZCT		1011	X 108	6652.92390	0.015	3.002
				0.008	0.005	1.77
GROUP: 000_U2~1.ASC,obs#: 336						
DXCT		1004	Y 341	3957.45500	-0.000	-0.006
				0.015	0.012	0.00
DYCT		1004	Y 341	9465.76220	-0.001	-0.099
				0.015	0.014	0.09
DZCT		1004	Y 341	11842.67260	0.007	0.509
				0.015	0.013	0.42
GROUP: 000_U2~1.ASC,obs#: 337						
DXCT		1005	Y 341	1490.27870	-0.001	-0.244
				0.010	0.005	0.12
DYCT		1005	Y 341	-6448.50310	-0.015	-1.886
				0.010	0.008	1.42
DZCT		1005	Y 341	-7754.55720	0.009	1.330
				0.010	0.007	0.86
GROUP: 000_U2~1.ASC,obs#: 338						
DXCT		1004	ZKC1	7698.95840	0.015	0.470
				0.033	0.032	0.43
DYCT		1004	ZKC1	-22199.68310	0.021	0.644
				0.033	0.033	0.59
DZCT		1004	ZKC1	-26424.26830	-0.024	-0.751
				0.033	0.032	0.69
GROUP: 000_U2~1.ASC,obs#: 339						
DXCT		W 281	ZKC1	26322.22380	0.009	0.120
				0.077	0.077	0.11
DYCT		W 281	ZKC1	-51103.13920	-0.005	-0.061
				0.077	0.077	0.06
DZCT		W 281	ZKC1	-59518.90220	-0.016	-0.207
				0.077	0.077	0.19
GROUP: 000_U2~1.ASC,obs#: 340						
DXCT		D 217	ZKC1	10368.36240	-0.026	-0.333
				0.080	0.080	0.31
DYCT		D 217	ZKC1	-54487.91130	0.041	0.518
				0.080	0.080	0.48
DZCT		D 217	ZKC1	-65198.62150	-0.045	-0.571
				0.080	0.080	0.53
GROUP: 000_U2~1.ASC,obs#: 341						
DXCT		1005	ZKC1	5231.78480	0.011	0.204
				0.056	0.055	0.19
DYCT		1005	ZKC1	-38113.94900	0.008	0.151
				0.056	0.056	0.14
DZCT		1005	ZKC1	-46021.48690	-0.033	-0.599
				0.056	0.056	0.56
GROUP: 020812B.ASC ,obs#: 342						

Residuals (critical value = 4.385):

TYPE	AT	FROM	TO	OBSERVATION STD DEV	RESIDUAL STD DEV	STD RES PPM
DXCT		MORK	1012	-38954.16780	-0.011	-0.168
				0.068	0.068	0.16
DYCT		MORK	1012	-37755.57720	0.007	0.098
				0.068	0.068	0.09
DZCT		MORK	1012	-49157.38690	-0.013	-0.197
				0.068	0.068	0.18
GROUP: 020812B.ASC ,obs#: 343						
DXCT		KST5	1012	13465.82840	-0.020	-0.242
				0.083	0.082	0.22
DYCT		KST5	1012	55069.92150	-0.043	-0.516
				0.083	0.083	0.48
DZCT		KST5	1012	68353.48750	0.035	0.427
				0.083	0.082	0.40
GROUP: 020812B.ASC ,obs#: 344						
DXCT		Q 109	1115	5685.55770	-0.006	-0.652
				0.014	0.009	0.41
DYCT		Q 109	1115	8543.85890	-0.008	-0.835
				0.014	0.009	0.52
DZCT		Q 109	1115	10802.14210	0.003	0.304
				0.014	0.009	0.19
GROUP: 020812B.ASC ,obs#: 345						
DXCT		1012	1115	-7771.89010	0.007	0.652
				0.015	0.011	0.43
DYCT		1012	1115	9387.46910	0.009	0.837
				0.015	0.011	0.57
DZCT		1012	1115	10104.94950	-0.003	-0.311
				0.015	0.011	0.21
GROUP: 020812B.ASC ,obs#: 346						
DXCT		Q 109	1116	-3780.60120	0.000	0.180
				0.007	0.002	0.06
DYCT		Q 109	1116	4119.21040	-0.003	-1.410
				0.007	0.002	0.48
DZCT		Q 109	1116	4446.67280	-0.001	-0.373
				0.007	0.002	0.13
GROUP: 020812B.ASC ,obs#: 347						
DXCT		1012	1116	-17238.03290	-0.003	-0.180
				0.017	0.015	0.15
DYCT		1012	1116	4962.81180	0.022	1.415
				0.017	0.016	1.21
DZCT		1012	1116	3749.46710	0.006	0.390
				0.017	0.016	0.33
GROUP: 020812B.ASC ,obs#: 348						
DXCT		Q 109	1117	-6310.71060	0.003	1.493
				0.006	0.002	0.42
DYCT		Q 109	1117	1386.47700	-0.002	-1.000
				0.006	0.002	0.29
DZCT		Q 109	1117	881.89950	0.001	0.742
				0.006	0.002	0.22
GROUP: 020812B.ASC ,obs#: 349						
DXCT		1012	1117	-19768.11700	-0.026	-1.498
				0.019	0.017	1.29
DYCT		1012	1117	2230.08480	0.017	0.997

Residuals (critical value = 4.385):

TYPE	AT	FROM	TO	OBSERVATION / STD DEV	RESIDUAL / STD DEV	STD RES / PPM
				0.019	0.017	0.87
DZCT		1012	1117	184.71490	-0.013	-0.733
				0.019	0.017	0.64
GROUP: 020812B.ASC ,obs#: 350						
DXCT		Q 109	1215	13305.44560	0.000	0.019
				0.015	0.012	0.02
DYCT		Q 109	1215	4355.22190	-0.001	-0.065
				0.015	0.013	0.05
DZCT		Q 109	1215	6847.76170	0.002	0.149
				0.015	0.013	0.12
GROUP: 020812B.ASC ,obs#: 351						
DXCT		1012	1215	-151.98900	-0.000	-0.019
				0.008	0.003	0.01
DYCT		1012	1215	5198.84780	0.000	0.063
				0.008	0.003	0.03
DZCT		1012	1215	6150.56540	-0.001	-0.149
				0.008	0.003	0.06
GROUP: 020812B.ASC ,obs#: 352						
DXCT		Q 109	1216	-6437.92280	0.003	0.562
				0.012	0.006	0.25
DYCT		Q 109	1216	7649.45220	-0.006	-1.020
				0.012	0.006	0.47
DZCT		Q 109	1216	8320.01720	0.000	0.074
				0.012	0.006	0.03
GROUP: 020812B.ASC ,obs#: 353						
DXCT		1012	1216	-19895.34410	-0.010	-0.563
				0.021	0.018	0.45
DYCT		1012	1216	8493.05430	0.019	1.020
				0.021	0.018	0.82
DZCT		1012	1216	7622.82020	-0.001	-0.070
				0.021	0.018	0.06
GROUP: 020812B.ASC ,obs#: 354						
DXCT		Q 109	1415	-402.56180	-0.002	-0.207
				0.016	0.010	0.12
DYCT		Q 109	1415	11091.96430	-0.009	-0.884
				0.016	0.010	0.51
DZCT		Q 109	1415	13108.57690	-0.001	-0.117
				0.016	0.010	0.07
GROUP: 020812B.ASC ,obs#: 355						
DXCT		1012	1415	-13860.00200	0.003	0.205
				0.021	0.016	0.15
DYCT		1012	1415	11935.56820	0.014	0.884
				0.021	0.016	0.65
DZCT		1012	1415	12411.37510	0.002	0.119
				0.021	0.016	0.09
GROUP: 020812B.ASC ,obs#: 356						
DXCT		Q 109	1416	1162.88840	-0.002	-0.904
				0.006	0.002	0.32
DYCT		Q 109	1416	3691.06500	-0.000	-0.189
				0.006	0.002	0.07
DZCT		Q 109	1416	4508.59660	-0.004	-1.579
				0.006	0.002	0.59

Residuals (critical value = 4.385):

TYPE	AT	FROM	TO	OBSERVATION STD DEV	RESIDUAL STD DEV	STD RES PPM
GROUP: 020812B.ASC ,obs#: 357						
DXCT		1012	1416	-12294.55840	0.010	0.901
				0.013	0.011	0.73
DYCT		1012	1416	4534.68890	0.003	0.230
				0.013	0.011	0.19
DZCT		1012	1416	3811.37660	0.018	1.583
				0.013	0.011	1.30
GROUP: 020812B.ASC ,obs#: 358						
DXCT		Q 109	1516	3791.60280	-0.002	-2.045
				0.004	0.001	0.64
DYCT		Q 109	1516	-560.77030	0.001	0.852
				0.004	0.001	0.28
DZCT		Q 109	1516	-233.39200	0.001	1.050
				0.004	0.001	0.33
GROUP: 020812B.ASC ,obs#: 359						
DXCT		1012	1516	-9665.85000	0.015	2.052
				0.009	0.008	1.59
DYCT		1012	1516	282.86450	-0.007	-0.876
				0.009	0.008	0.70
DZCT		1012	1516	-930.58130	-0.008	-1.066
				0.009	0.008	0.84
GROUP: 020812B.ASC ,obs#: 360						
DXCT		Q 109	1628	-5426.61710	0.000	0.066
				0.014	0.008	0.03
DYCT		Q 109	1628	9513.79200	-0.001	-0.170
				0.014	0.008	0.09
DZCT		Q 109	1628	10600.67210	-0.005	-0.599
				0.014	0.008	0.30
GROUP: 020812B.ASC ,obs#: 361						
DXCT		1012	1628	-18884.05030	-0.001	-0.066
				0.022	0.018	0.05
DYCT		1012	1628	10357.41450	0.003	0.171
				0.022	0.018	0.13
DZCT		1012	1628	9903.45780	0.011	0.599
				0.022	0.018	0.46
GROUP: 020812B.ASC ,obs#: 362						
DXCT		Q 109	1629	2763.16210	0.000	0.580
				0.003	0.001	0.13
DYCT		Q 109	1629	36.22990	0.001	1.488
				0.003	0.001	0.37
DZCT		Q 109	1629	372.46940	-0.000	-0.020
				0.003	0.001	0.00
GROUP: 020812B.ASC ,obs#: 363						
DXCT		1012	1629	-10694.26780	-0.005	-0.528
				0.010	0.009	0.43
DYCT		1012	1629	879.87110	-0.013	-1.478
				0.010	0.009	1.23
DZCT		1012	1629	-324.72890	-0.000	-0.050
				0.010	0.009	0.04
GROUP: 020812B.ASC ,obs#: 364						
DXCT		MORK	Q 109	-52411.60200	-0.012	-0.160
				0.076	0.075	0.15

Residuals (critical value = 4.385):

TYPE	AT	FROM	TO	OBSERVATION / STD DEV	RESIDUAL / STD DEV	STD RES / PPM
DYCT		MORK	Q 109	-36911.95910	0.016	0.206
				0.076	0.075	0.19
DZCT		MORK	Q 109	-49854.59200	-0.007	-0.093
				0.076	0.075	0.09
GROUP: 020812B.ASC ,obs#: 365						
DXCT		KST5	Q 109	8.39400	-0.020	-0.251
				0.082	0.081	0.23
DYCT		KST5	Q 109	55913.53810	-0.032	-0.395
				0.082	0.082	0.37
DZCT		KST5	Q 109	67656.28350	0.040	0.496
				0.082	0.082	0.46
GROUP: 020912B.ASC ,obs#: 366						
DXCT		MORK	1012	-38954.16890	-0.010	-0.151
				0.068	0.068	0.14
DYCT		MORK	1012	-37755.56320	-0.007	-0.108
				0.068	0.068	0.10
DZCT		MORK	1012	-49157.39360	-0.007	-0.099
				0.068	0.068	0.09
GROUP: 020912B.ASC ,obs#: 367						
DXCT		KST5	1012	13465.82520	-0.017	-0.203
				0.083	0.082	0.19
DYCT		KST5	1012	55069.92630	-0.047	-0.574
				0.083	0.083	0.53
DZCT		KST5	1012	68353.47900	0.044	0.530
				0.083	0.082	0.49
GROUP: 020912B.ASC ,obs#: 368						
DXCT		MORK	1013	-47429.17190	-0.013	-0.148
				0.088	0.088	0.14
DYCT		MORK	1013	-50313.65940	0.010	0.116
				0.088	0.088	0.11
DZCT		MORK	1013	-65183.41940	-0.013	-0.145
				0.088	0.088	0.13
GROUP: 020912B.ASC ,obs#: 369						
DXCT		KST5	1013	4990.82230	-0.020	-0.313
				0.063	0.062	0.29
DYCT		KST5	1013	42511.82910	-0.029	-0.459
				0.063	0.063	0.43
DZCT		KST5	1013	52327.45390	0.037	0.589
				0.063	0.063	0.55
GROUP: 020912B.ASC ,obs#: 370						
DXCT		1012	1217	-2207.56180	0.011	0.609
				0.020	0.018	0.52
DYCT		1012	1217	-13264.57030	0.003	0.173
				0.020	0.018	0.15
DZCT		1012	1217	-16070.33580	0.007	0.396
				0.020	0.018	0.34
GROUP: 020912B.ASC ,obs#: 371						
DXCT		1013	1217	6267.45590	-0.001	-0.608
				0.006	0.002	0.16
DYCT		1013	1217	-706.48830	-0.000	-0.170
				0.006	0.002	0.05
DZCT		1013	1217	-44.29610	-0.001	-0.391

Residuals (critical value = 4.385):

TYPE	AT	FROM	TO	OBSERVATION / STD DEV	RESIDUAL / STD DEV	STD RES / PPM
				0.006	0.002	0.10
GROUP: 020912B.ASC ,obs#: 372						
DXCT		1012	1218	9570.84820	-0.002	-0.177
				0.017	0.011	0.11
DYCT		1012	1218	-10304.69350	0.008	0.720
				0.017	0.011	0.45
DZCT		1012	1218	-11128.90230	-0.002	-0.148
				0.017	0.011	0.09
GROUP: 020912B.ASC ,obs#: 373						
DXCT		1013	1218	18045.84980	0.002	0.176
				0.018	0.012	0.12
DYCT		1013	1218	2253.40220	-0.009	-0.720
				0.018	0.012	0.48
DZCT		1013	1218	4897.12610	0.002	0.149
				0.018	0.012	0.10
GROUP: 020912B.ASC ,obs#: 374						
DXCT		1012	1417	4533.99680	-0.003	-0.150
				0.022	0.018	0.12
DYCT		1012	1417	-14942.14840	0.021	1.145
				0.022	0.018	0.91
DZCT		1012	1417	-17322.73510	0.004	0.233
				0.022	0.018	0.18
GROUP: 020912B.ASC ,obs#: 375						
DXCT		1013	1417	13008.99890	0.001	0.150
				0.012	0.006	0.07
DYCT		1013	1417	-2384.04170	-0.007	-1.144
				0.012	0.006	0.52
DZCT		1013	1417	-1296.69750	-0.001	-0.229
				0.012	0.006	0.10
GROUP: 020912B.ASC ,obs#: 376						
DXCT		1012	1517	-8239.82420	-0.002	-0.116
				0.020	0.019	0.10
DYCT		1012	1517	-12406.10940	0.006	0.297
				0.020	0.020	0.27
DZCT		1012	1517	-15819.76470	0.001	0.071
				0.020	0.020	0.06
GROUP: 020912B.ASC ,obs#: 377						
DXCT		1013	1517	235.17930	0.000	0.000*
				0.000	0.000	0.00
DYCT		1013	1517	151.97500	-0.000	0.000*
				0.001	0.000	0.02
DZCT		1013	1517	206.26860	-0.000	0.000*
				0.001	0.000	0.00
GROUP: 020912B.ASC ,obs#: 378						
DXCT		1012	1518	10041.80050	-0.006	-0.295
				0.024	0.019	0.22
DYCT		1012	1518	-15888.93780	0.024	1.241
				0.024	0.019	0.93
DZCT		1012	1518	-17843.28010	-0.031	-1.591
				0.024	0.019	1.18
GROUP: 020912B.ASC ,obs#: 379						
DXCT		1013	1518	18516.79760	0.003	0.294

Residuals (critical value = 4.385):

TYPE	AT	FROM	TO	OBSERVATION / STD DEV	RESIDUAL / STD DEV	STD RES / PPM
				0.018	0.010	0.16
DYCT		1013	1518	-3330.82250	-0.013	-1.239
				0.018	0.010	0.67
DZCT		1013	1518	-1817.29510	0.016	1.589
				0.018	0.010	0.86
GROUP: 020912B.ASC ,obs#: 380						
DXCT		1012	1630	452.94600	0.010	0.629
				0.018	0.016	0.51
DYCT		1012	1630	-12702.03430	0.026	1.611
				0.019	0.016	1.33
DZCT		1012	1630	-15143.50280	-0.021	-1.257
				0.019	0.016	1.04
GROUP: 020912B.ASC ,obs#: 381						
DXCT		1013	1630	8927.96400	-0.002	-0.628
				0.008	0.003	0.23
DYCT		1013	1630	-143.92410	-0.005	-1.609
				0.008	0.003	0.60
DZCT		1013	1630	882.50440	0.004	1.254
				0.008	0.003	0.47
GROUP: 021012B.ASC ,obs#: 382						
DXCT		MORK	1013	-47429.16870	-0.016	-0.184
				0.088	0.088	0.17
DYCT		MORK	1013	-50313.66000	0.011	0.123
				0.088	0.088	0.11
DZCT		MORK	1013	-65183.41850	-0.014	-0.155
				0.088	0.088	0.14
GROUP: 021012B.ASC ,obs#: 383						
DXCT		KST5	1013	4990.81590	-0.013	-0.211
				0.063	0.062	0.19
DYCT		KST5	1013	42511.79530	0.005	0.080
				0.063	0.063	0.07
DZCT		KST5	1013	52327.48460	0.006	0.099
				0.063	0.063	0.09
GROUP: 021012B.ASC ,obs#: 384						
DXCT		1013	1118	-5638.34300	-0.001	-0.889
				0.006	0.002	0.25
DYCT		1013	1118	1606.79740	-0.003	-1.832
				0.006	0.002	0.54
DZCT		1013	1118	1211.69750	0.004	2.499
				0.006	0.002	0.72
GROUP: 021012B.ASC ,obs#: 385						
DXCT		Q 109	1118	-655.92970	0.014	0.917
				0.017	0.016	0.78
DYCT		Q 109	1118	-11794.94080	0.029	1.825
				0.018	0.016	1.60
DZCT		Q 109	1118	-14117.08920	-0.042	-2.495
				0.018	0.017	2.29
GROUP: 021012B.ASC ,obs#: 386						
DXCT		1013	1119	-12261.80650	-0.021	-1.284
				0.018	0.016	1.05
DYCT		1013	1119	10630.31890	0.005	0.302
				0.018	0.016	0.25

Residuals (critical value = 4.385):

TYPE	AT	FROM	TO	OBSERVATION / STD DEV	RESIDUAL / STD DEV	STD RES / PPM
DZCT		1013	1119	11117.87240	-0.018	-1.103
				0.018	0.016	0.91
GROUP: 021012B.ASC ,obs#: 387						
DXCT		Q 109	1119	-7279.40230	0.004	1.281
				0.008	0.003	0.47
DYCT		Q 109	1119	-2771.38070	-0.001	-0.296
				0.008	0.003	0.11
DZCT		Q 109	1119	-4210.98240	0.004	1.098
				0.008	0.003	0.41
GROUP: 021012B.ASC ,obs#: 388						
DXCT		1013	1120	3236.60780	-0.005	-0.928
				0.009	0.005	0.47
DYCT		1013	1120	5748.40460	-0.007	-1.398
				0.009	0.005	0.72
DZCT		1013	1120	7234.06800	-0.003	-0.504
				0.009	0.005	0.26
GROUP: 021012B.ASC ,obs#: 389						
DXCT		Q 109	1120	8219.02310	0.009	0.926
				0.013	0.010	0.67
DYCT		Q 109	1120	-7653.32210	0.014	1.398
				0.013	0.010	1.02
DZCT		Q 109	1120	-8094.77280	0.005	0.507
				0.013	0.010	0.37
GROUP: 021012B.ASC ,obs#: 390						
DXCT		1013	1219	-10809.33810	-0.001	-0.186
				0.011	0.004	0.07
DYCT		1013	1219	-1980.71120	-0.007	-1.476
				0.011	0.004	0.57
DZCT		1013	1219	-3754.54220	0.006	1.416
				0.011	0.004	0.54
GROUP: 021012B.ASC ,obs#: 391						
DXCT		Q 109	1219	-5826.91370	0.004	0.187
				0.023	0.021	0.16
DYCT		Q 109	1219	-15382.45440	0.031	1.475
				0.024	0.021	1.23
DZCT		Q 109	1219	-19083.33940	-0.030	-1.415
				0.024	0.021	1.18
GROUP: 021012B.ASC ,obs#: 392						
DXCT		1013	1418	-13883.36230	-0.008	-1.010
				0.013	0.007	0.53
DYCT		1013	1418	2509.06390	-0.010	-1.267
				0.013	0.008	0.68
DZCT		1013	1418	1224.31700	0.008	1.061
				0.013	0.007	0.56
GROUP: 021012B.ASC ,obs#: 393						
DXCT		Q 109	1418	-8900.95560	0.015	1.010
				0.019	0.015	0.75
DYCT		Q 109	1418	-10892.67010	0.019	1.266
				0.019	0.015	0.95
DZCT		Q 109	1418	-14104.49250	-0.016	-1.060
				0.019	0.015	0.79
GROUP: 021012B.ASC ,obs#: 394						

Residuals (critical value = 4.385):

TYPE	AT	FROM	TO	OBSERVATION / STD DEV	RESIDUAL / STD DEV	STD RES / PPM
DXCT		1013	1419	-2176.16080	0.003	0.272
				0.015	0.013	0.22
DYCT		1013	1419	9986.24800	-0.010	-0.778
				0.015	0.013	0.66
DZCT		1013	1419	11611.62460	-0.009	-0.708
				0.015	0.013	0.60
GROUP: 021012B.ASC ,obs#: 395						
DXCT		Q 109	1419	2806.27230	-0.000	-0.273
				0.005	0.002	0.08
DYCT		Q 109	1419	-3415.46920	0.001	0.782
				0.005	0.002	0.24
DZCT		Q 109	1419	-3717.21910	0.001	0.712
				0.005	0.002	0.22
GROUP: 021012B.ASC ,obs#: 396						
DXCT		1013	1519	-8196.11180	-0.002	-0.223
				0.011	0.007	0.14
DYCT		1013	1519	5937.58220	0.011	1.505
				0.011	0.007	0.93
DZCT		1013	1519	6022.48210	0.003	0.389
				0.011	0.007	0.24
GROUP: 021012B.ASC ,obs#: 397						
DXCT		Q 109	1519	-3213.68600	0.002	0.221
				0.012	0.008	0.14
DYCT		Q 109	1519	-7464.10020	-0.012	-1.503
				0.012	0.008	0.99
DZCT		Q 109	1519	-9306.34520	-0.003	-0.382
				0.012	0.008	0.25
GROUP: 021012B.ASC ,obs#: 398						
DXCT		1013	1631	-7985.00520	0.008	0.978
				0.012	0.008	0.63
DYCT		1013	1631	6525.64260	-0.012	-1.492
				0.012	0.008	0.99
DZCT		1013	1631	6782.28620	0.015	1.805
				0.012	0.008	1.19
GROUP: 021012B.ASC ,obs#: 399						
DXCT		Q 109	1631	-3002.56160	-0.007	-0.980
				0.011	0.007	0.58
DYCT		Q 109	1631	-6876.08540	0.010	1.482
				0.011	0.007	0.90
DZCT		Q 109	1631	-8546.51990	-0.012	-1.794
				0.011	0.007	1.09
GROUP: 021012B.ASC ,obs#: 400						
DXCT		MORK	Q 109	-52411.59690	-0.017	-0.228
				0.076	0.075	0.21
DYCT		MORK	Q 109	-36911.94590	0.002	0.031
				0.076	0.075	0.03
DZCT		MORK	Q 109	-49854.59950	0.000	0.006
				0.076	0.075	0.01
GROUP: 021012B.ASC ,obs#: 401						
DXCT		KST5	Q 109	8.38800	-0.014	-0.177
				0.082	0.081	0.16
DYCT		KST5	Q 109	55913.50910	-0.003	-0.040

Residuals (critical value = 4.385):

TYPE	AT	FROM	TO	OBSERVATION / STD DEV	RESIDUAL / STD DEV	STD RES / PPM
				0.082	0.082	0.04
DZCT		KST5	Q 109	67656.30400	0.020	0.245
				0.082	0.082	0.23
GROUP: 021112B.ASC ,obs#: 402						
DXCT		KST5	1014	-28926.99530	0.000	0.001
				0.046	0.044	0.00
DYCT		KST5	1014	27016.19330	-0.032	-0.727
				0.046	0.044	0.65
DZCT		KST5	1014	29096.82950	0.027	0.602
				0.046	0.044	0.54
GROUP: 021112B.ASC ,obs#: 403						
DXCT		KSU1	1014	19702.15690	-0.010	-0.322
				0.033	0.031	0.28
DYCT		KSU1	1014	17691.33840	-0.007	-0.212
				0.033	0.031	0.18
DZCT		KSU1	1014	24243.30720	0.001	0.021
				0.033	0.031	0.02
GROUP: 021112B.ASC ,obs#: 404						
DXCT		KST5	1121	-32888.10390	-0.002	-0.044
				0.051	0.049	0.04
DYCT		KST5	1121	29574.41260	0.009	0.183
				0.051	0.049	0.16
DZCT		KST5	1121	31707.39470	0.006	0.129
				0.051	0.049	0.12
GROUP: 021112B.ASC ,obs#: 405						
DXCT		KSU1	1121	15741.05020	-0.014	-0.439
				0.035	0.032	0.38
DYCT		KSU1	1121	20249.56870	0.023	0.727
				0.035	0.032	0.63
DZCT		KSU1	1121	26853.87380	-0.021	-0.651
				0.035	0.032	0.56
GROUP: 021112B.ASC ,obs#: 406						
DXCT		1014	1121	-3961.11110	0.000	0.400
				0.005	0.001	0.06
DYCT		1014	1121	2558.26090	-0.001	-0.738
				0.005	0.001	0.11
DZCT		1014	1121	2610.54460	0.000	0.485
				0.005	0.001	0.07
GROUP: 021112B.ASC ,obs#: 407						
DXCT		KST5	1220	-21080.07070	0.021	0.542
				0.042	0.040	0.48
DYCT		KST5	1220	26399.84210	-0.033	-0.828
				0.042	0.040	0.73
DZCT		KST5	1220	29488.91090	0.016	0.409
				0.042	0.040	0.36
GROUP: 021112B.ASC ,obs#: 408						
DXCT		KSU1	1220	27549.07840	0.014	0.408
				0.038	0.035	0.36
DYCT		KSU1	1220	17074.99630	-0.016	-0.461
				0.038	0.036	0.40
DZCT		KSU1	1220	24635.38310	-0.004	-0.119
				0.038	0.036	0.10

Residuals (critical value = 4.385):

TYPE	AT	FROM	TO	OBSERVATION / STD DEV	RESIDUAL / STD DEV	STD RES / PPM
GROUP: 021112B.ASC ,obs#: 409						
DXCT		1014	1220	7846.94720	-0.001	-0.713
				0.007	0.002	0.15
DYCT		1014	1220	-616.35360	0.002	0.966
				0.007	0.002	0.21
DZCT		1014	1220	392.07140	-0.000	-0.213
				0.007	0.002	0.05
GROUP: 021112B.ASC ,obs#: 410						
DXCT		KST5	1221	-18975.66950	-0.005	-0.107
				0.047	0.044	0.09
DYCT		KST5	1221	30597.69360	-0.005	-0.113
				0.047	0.044	0.10
DZCT		KST5	1221	34886.11220	0.007	0.166
				0.047	0.044	0.15
GROUP: 021112B.ASC ,obs#: 411						
DXCT		1014	1221	9951.32080	0.000	0.107
				0.011	0.003	0.02
DYCT		1014	1221	3581.52710	0.000	0.114
				0.011	0.003	0.02
DZCT		1014	1221	5789.26390	-0.000	-0.167
				0.011	0.003	0.04
GROUP: 021112B.ASC ,obs#: 412						
DXCT		KST5	1420	-15871.70020	0.006	0.156
				0.044	0.041	0.13
DYCT		KST5	1420	29279.49960	0.019	0.473
				0.044	0.041	0.41
DZCT		KST5	1420	33643.05340	0.005	0.127
				0.044	0.041	0.11
GROUP: 021112B.ASC ,obs#: 413						
DXCT		1014	1420	13055.30200	-0.001	-0.156
				0.013	0.004	0.04
DYCT		1014	1420	2263.35940	-0.002	-0.473
				0.013	0.004	0.12
DZCT		1014	1420	4546.20300	-0.000	-0.125
				0.013	0.004	0.03
GROUP: 021112B.ASC ,obs#: 414						
DXCT		KST5	1520	-29225.42860	0.002	0.043
				0.047	0.045	0.04
DYCT		KST5	1520	27567.03380	0.002	0.052
				0.047	0.045	0.05
DZCT		KST5	1520	29732.59300	0.021	0.461
				0.047	0.045	0.41
GROUP: 021112B.ASC ,obs#: 415						
DXCT		1014	1520	-298.43140	0.000	0.000*
				0.001	0.000	0.01
DYCT		1014	1520	550.87490	-0.000	0.000*
				0.001	0.000	0.02
DZCT		1014	1520	635.75770	-0.000	0.000*
				0.001	0.000	0.00
GROUP: 021112B.ASC ,obs#: 416						
DXCT		KSU1	1520	19403.72650	-0.011	-0.347
				0.034	0.032	0.30

Residuals (critical value = 4.385):

TYPE	AT	FROM	TO	OBSERVATION / STD DEV	RESIDUAL / STD DEV	STD RES / PPM
DYCT		KSU1	1520	18242.18740	0.019	0.604
				0.034	0.032	0.53
DZCT		KSU1	1520	24879.07380	-0.008	-0.260
				0.034	0.032	0.23
GROUP: 021112B.ASC ,obs#: 417						
DXCT		KST5	1632	-18751.51340	0.003	0.069
				0.049	0.047	0.06
DYCT		KST5	1632	32620.01920	-0.021	-0.451
				0.049	0.047	0.40
DZCT		KST5	1632	37400.27940	0.010	0.212
				0.049	0.047	0.19
GROUP: 021112B.ASC ,obs#: 418						
DXCT		KSU1	1632	29877.62010	0.012	0.272
				0.047	0.044	0.24
DYCT		KSU1	1632	23295.14300	0.026	0.588
				0.047	0.044	0.52
DZCT		KSU1	1632	32546.77850	-0.037	-0.855
				0.047	0.044	0.75
GROUP: 021112B.ASC ,obs#: 419						
DXCT		1014	1632	10175.48630	-0.001	-0.262
				0.013	0.005	0.08
DYCT		1014	1632	5603.83750	-0.001	-0.124
				0.013	0.005	0.04
DZCT		1014	1632	8303.43090	0.002	0.506
				0.013	0.005	0.16
GROUP: 021112B.ASC ,obs#: 420						
DXCT		KSU1	X 119	35030.16660	0.010	0.196
				0.053	0.052	0.18
DYCT		KSU1	X 119	25873.65530	0.183	3.368
				0.055	0.054	3.24
DZCT		KSU1	X 119	36244.38080	-0.157	-2.974
				0.053	0.053	2.77
GROUP: 021212B.ASC ,obs#: 421						
DXCT		KSU1	1015	26759.84480	-0.001	-0.040
				0.027	0.027	0.04
DYCT		KSU1	1015	5520.37840	0.003	0.103
				0.027	0.027	0.09
DZCT		KSU1	1015	10364.73490	-0.006	-0.228
				0.027	0.027	0.21
GROUP: 021212B.ASC ,obs#: 422						
DXCT		KST5	1015	-21869.30660	0.008	0.295
				0.028	0.028	0.27
DYCT		KST5	1015	14845.23080	-0.020	-0.720
				0.028	0.028	0.66
DZCT		KST5	1015	15218.25960	0.017	0.622
				0.028	0.028	0.57
GROUP: 021212B.ASC ,obs#: 423						
DXCT		1015	1122	-9289.49390	-0.000	-0.038
				0.014	0.007	0.02
DYCT		1015	1122	7950.66140	-0.005	-0.730
				0.014	0.007	0.35
DZCT		1015	1122	8425.20950	0.004	0.554

Residuals (critical value = 4.385):

TYPE	AT	FROM	TO	OBSERVATION / STD DEV	RESIDUAL / STD DEV	STD RES / PPM
				0.014	0.007	0.26
GROUP: 021212B.ASC ,obs#: 424						
DXCT		KSU1	1122	17470.35240	-0.003	-0.118
				0.027	0.024	0.10
DYCT		KSU1	1122	13471.02160	0.016	0.653
				0.027	0.024	0.54
DZCT		KSU1	1122	18789.95820	-0.016	-0.663
				0.027	0.024	0.55
GROUP: 021212B.ASC ,obs#: 425						
DXCT		KST5	1122	-31158.80190	0.009	0.232
				0.042	0.040	0.21
DYCT		KST5	1122	22795.85700	0.010	0.243
				0.042	0.040	0.22
DZCT		KST5	1122	23643.48800	0.002	0.060
				0.042	0.040	0.05
GROUP: 021212B.ASC ,obs#: 426						
DXCT		1015	1222	-9405.73290	0.005	1.264
				0.009	0.004	0.53
DYCT		1015	1222	-314.50440	0.001	0.172
				0.009	0.004	0.07
DZCT		1015	1222	-1614.24890	0.003	0.781
				0.009	0.004	0.33
GROUP: 021212B.ASC ,obs#: 427						
DXCT		KSU1	1222	17354.13600	-0.020	-1.223
				0.019	0.016	1.00
DYCT		KSU1	1222	5205.87250	0.005	0.293
				0.019	0.017	0.25
DZCT		KSU1	1222	8750.50200	-0.019	-1.132
				0.019	0.017	0.94
GROUP: 021212B.ASC ,obs#: 428						
DXCT		KST5	1222	-31275.01790	-0.008	-0.250
				0.035	0.033	0.23
DYCT		KST5	1222	14530.73360	-0.027	-0.796
				0.035	0.034	0.72
DZCT		KST5	1222	13604.01580	0.015	0.462
				0.035	0.033	0.42
GROUP: 021212B.ASC ,obs#: 429						
DXCT		KSU1	1421	22736.38890	-0.011	-0.375
				0.031	0.029	0.32
DYCT		KSU1	1421	13850.87860	-0.002	-0.060
				0.032	0.030	0.05
DZCT		KSU1	1421	20015.83470	0.001	0.048
				0.031	0.029	0.04
GROUP: 021212B.ASC ,obs#: 430						
DXCT		KST5	1421	-25892.76750	0.003	0.092
				0.040	0.038	0.08
DYCT		KST5	1421	23175.69560	0.011	0.275
				0.041	0.039	0.25
DZCT		KST5	1421	24869.36710	0.017	0.449
				0.040	0.038	0.40
GROUP: 021212B.ASC ,obs#: 431						
DXCT		1015	1421	-4023.46700	0.001	0.251

Residuals (critical value = 4.385):

TYPE	AT	FROM	TO	OBSERVATION / STD DEV	RESIDUAL / STD DEV	STD RES / PPM
				0.012	0.006	0.10
DYCT		1015	1421	8330.49640	-0.001	-0.133
				0.013	0.006	0.06
DZCT		1015	1421	9651.10920	-0.002	-0.342
				0.013	0.006	0.14
GROUP: 021212B.ASC ,obs#: 432						
DXCT		1015	1422	-13185.08010	0.003	0.398
				0.013	0.007	0.20
DYCT		1015	1422	2250.27040	-0.001	-0.212
				0.013	0.007	0.11
DZCT		1015	1422	1016.70600	0.003	0.456
				0.013	0.007	0.23
GROUP: 021212B.ASC ,obs#: 433						
DXCT		KSU1	1422	13574.77200	-0.006	-0.392
				0.018	0.014	0.29
DYCT		KSU1	1422	7770.64660	0.004	0.227
				0.019	0.015	0.18
DZCT		KSU1	1422	11381.44480	-0.007	-0.461
				0.019	0.015	0.36
GROUP: 021212B.ASC ,obs#: 434						
DXCT		KSU1	1521	16294.24770	-0.006	-0.263
				0.025	0.022	0.21
DYCT		KSU1	1521	12288.46120	0.022	0.981
				0.025	0.022	0.81
DZCT		KSU1	1521	17211.76790	-0.014	-0.652
				0.025	0.022	0.54
GROUP: 021212B.ASC ,obs#: 435						
DXCT		KST5	1521	-32334.90420	0.004	0.101
				0.042	0.040	0.09
DYCT		KST5	1521	21613.31750	-0.005	-0.129
				0.042	0.040	0.12
DZCT		KST5	1521	22065.29000	0.012	0.292
				0.042	0.040	0.26
GROUP: 021212B.ASC ,obs#: 436						
DXCT		1015	1521	-10465.60300	0.001	0.182
				0.013	0.007	0.09
DYCT		1015	1521	6768.10730	-0.006	-0.808
				0.013	0.007	0.39
DZCT		1015	1521	6847.02190	0.003	0.412
				0.013	0.007	0.20
GROUP: 021212B.ASC ,obs#: 437						
DXCT		1015	1522	-886.96120	0.000	0.000*
				0.001	0.000	0.02
DYCT		1015	1522	-618.06650	0.000	0.391
				0.002	0.000	0.03
DZCT		1015	1522	-874.39680	0.000	0.000*
				0.001	0.000	0.02
GROUP: 021212B.ASC ,obs#: 438						
DXCT		KSU1	1522	25872.88960	-0.007	-0.277
				0.026	0.025	0.25
DYCT		KSU1	1522	4902.30530	0.009	0.364
				0.026	0.026	0.34

Residuals (critical value = 4.385):

TYPE	AT	FROM	TO	OBSERVATION STD DEV	RESIDUAL STD DEV	STD RES PPM
DZCT		KSU1	1522	9490.35330	-0.021	-0.830
				0.026	0.026	0.76
GROUP: 021212B.ASC ,obs#: 439						
DXCT		KST5	1522	-22756.25940	-0.000	-0.007
				0.028	0.028	0.01
DYCT		KST5	1522	14227.17200	-0.028	-0.992
				0.028	0.028	0.92
DZCT		KST5	1522	14343.87060	0.010	0.344
				0.028	0.028	0.32
GROUP: 021212B.ASC ,obs#: 440						
DXCT		KSU1	1633	28705.23870	-0.005	-0.145
				0.035	0.033	0.13
DYCT		KSU1	1633	13208.87960	0.015	0.444
				0.035	0.033	0.39
DZCT		KSU1	1633	20003.97930	0.004	0.129
				0.035	0.033	0.11
GROUP: 021212B.ASC ,obs#: 441						
DXCT		1015	1633	1945.38970	0.001	0.143
				0.012	0.004	0.04
DYCT		1015	1633	7688.51480	-0.002	-0.443
				0.012	0.004	0.13
DZCT		1015	1633	9639.25520	-0.000	-0.127
				0.012	0.004	0.04
GROUP: 021212B.ASC ,obs#: 442						
DXCT		KSU1	BELVUE	35816.91830	-0.005	-0.158
				0.035	0.034	0.14
DYCT		KSU1	BELVUE	4206.95410	0.006	0.180
				0.035	0.035	0.17
DZCT		KSU1	BELVUE	9941.48070	-0.008	-0.234
				0.035	0.035	0.22
GROUP: 021212B.ASC ,obs#: 443						
DXCT		KST5	BELVUE	-12812.23180	0.003	0.118
				0.022	0.021	0.11
DYCT		KST5	BELVUE	13531.81740	-0.028	-1.254
				0.022	0.022	1.16
DZCT		KST5	BELVUE	14794.99870	0.022	1.009
				0.022	0.022	0.93
GROUP: 021212B.ASC ,obs#: 444						
DXCT		1015	BELVUE	9057.09460	-0.025	-3.206
				0.009	0.008	2.78
DYCT		1015	BELVUE	-1313.41830	-0.003	-0.316
				0.009	0.008	0.28
DZCT		1015	BELVUE	-423.25340	-0.003	-0.353
				0.009	0.008	0.31
GROUP: 021412B.ASC ,obs#: 445						
DXCT		KST5	1015	-21869.30140	0.003	0.108
				0.028	0.028	0.10
DYCT		KST5	1015	14845.23080	-0.020	-0.720
				0.028	0.028	0.66
DZCT		KST5	1015	15218.25630	0.021	0.740
				0.028	0.028	0.68
GROUP: 021412B.ASC ,obs#: 446						

Residuals (critical value = 4.385):

TYPE	AT	FROM	TO	OBSERVATION / STD DEV	RESIDUAL / STD DEV	STD RES / PPM
DXCT		KSU1	1015	26759.84890	-0.005	-0.194
				0.027	0.027	0.18
DYCT		KSU1	1015	5520.37170	0.009	0.352
				0.027	0.027	0.32
DZCT		KSU1	1015	10364.73760	-0.009	-0.329
				0.027	0.027	0.30
GROUP: 021412B.ASC ,obs#: 447						
DXCT		BELVUE	1123	-3785.60010	0.004	1.241
				0.006	0.004	0.75
DYCT		BELVUE	1123	3218.12330	0.003	0.729
				0.006	0.004	0.48
DZCT		BELVUE	1123	3421.70190	-0.004	-1.080
				0.006	0.004	0.74
GROUP: 021412B.ASC ,obs#: 448						
DXCT		1015	1123	5271.47840	-0.005	-1.228
				0.006	0.004	0.77
DYCT		1015	1123	1904.70790	-0.003	-0.634
				0.006	0.004	0.40
DZCT		1015	1123	2998.43710	0.004	1.024
				0.006	0.004	0.65
GROUP: 021412B.ASC ,obs#: 449						
DXCT		BELVUE	1124	-2154.06370	-0.001	-0.078
				0.014	0.010	0.05
DYCT		BELVUE	1124	9476.05790	-0.001	-0.137
				0.014	0.010	0.09
DZCT		BELVUE	1124	11289.94860	-0.008	-0.870
				0.014	0.010	0.56
GROUP: 021412B.ASC ,obs#: 450						
DXCT		1015	1124	6903.00390	0.001	0.078
				0.014	0.010	0.05
DYCT		1015	1124	8162.63440	0.001	0.132
				0.014	0.010	0.09
DZCT		1015	1124	10866.67520	0.009	0.869
				0.014	0.010	0.58
GROUP: 021412B.ASC ,obs#: 451						
DXCT		BELVUE	1223	-7984.41220	-0.013	-1.619
				0.010	0.008	1.28
DYCT		BELVUE	1223	4552.93990	-0.006	-0.787
				0.010	0.008	0.63
DZCT		BELVUE	1223	4529.03980	0.011	1.295
				0.010	0.008	1.03
GROUP: 021412B.ASC ,obs#: 452						
DXCT		1015	1223	1072.64020	0.004	1.624
				0.005	0.002	0.67
DYCT		1015	1223	3239.51080	0.002	0.808
				0.005	0.002	0.34
DZCT		1015	1223	4105.79710	-0.003	-1.308
				0.005	0.002	0.55
GROUP: 021412B.ASC ,obs#: 453						
DXCT		BELVUE	1224	-1539.62470	0.001	1.814
				0.002	0.000	0.42
DYCT		BELVUE	1224	988.10280	0.000	0.260

Residuals (critical value = 4.385):

TYPE	AT	FROM	TO	OBSERVATION / STD DEV	RESIDUAL / STD DEV	STD RES / PPM
				0.002	0.001	0.07
DZCT		BELVUE	1224	1001.88230	0.000	0.607
				0.002	0.001	0.15
GROUP: 021412B.ASC ,obs#: 454						
DXCT		1015	1224	7517.45640	-0.011	-1.808
				0.007	0.006	1.47
DYCT		1015	1224	-325.31640	-0.001	-0.237
				0.007	0.006	0.20
DZCT		1015	1224	578.63020	-0.004	-0.611
				0.007	0.006	0.50
GROUP: 021412B.ASC ,obs#: 455						
DXCT		BELVUE	1423	-14802.22720	-0.013	-0.993
				0.015	0.013	0.82
DYCT		BELVUE	1423	5048.05040	0.026	1.918
				0.016	0.014	1.63
DZCT		BELVUE	1423	4186.66300	0.005	0.342
				0.015	0.014	0.29
GROUP: 021412B.ASC ,obs#: 456						
DXCT		1015	1423	-5745.17440	0.003	0.952
				0.007	0.003	0.39
DYCT		1015	1423	3734.66250	-0.006	-1.881
				0.008	0.003	0.83
DZCT		1015	1423	3763.41230	-0.001	-0.276
				0.008	0.003	0.11
GROUP: 021412B.ASC ,obs#: 457						
DXCT		BELVUE	1424	2480.35380	-0.006	-1.775
				0.007	0.003	0.81
DYCT		BELVUE	1424	4337.13330	-0.000	-0.067
				0.007	0.004	0.03
DZCT		BELVUE	1424	5673.90200	-0.004	-1.100
				0.007	0.003	0.51
GROUP: 021412B.ASC ,obs#: 458						
DXCT		1015	1424	11537.39860	0.018	1.777
				0.012	0.010	1.40
DYCT		1015	1424	3023.71150	0.001	0.072
				0.012	0.010	0.06
DZCT		1015	1424	5250.63060	0.011	1.103
				0.012	0.010	0.87
GROUP: 021412B.ASC ,obs#: 459						
DXCT		BELVUE	1523	2201.67870	-0.001	-1.835
				0.002	0.000	0.32
DYCT		BELVUE	1523	-202.21970	-0.000	-0.387
				0.002	0.000	0.08
DZCT		BELVUE	1523	42.37310	0.000	0.100
				0.002	0.000	0.02
GROUP: 021412B.ASC ,obs#: 460						
DXCT		1015	1523	11258.72890	0.018	1.829
				0.011	0.010	1.60
DYCT		1015	1523	-1515.64430	0.004	0.359
				0.011	0.010	0.32
DZCT		1015	1523	-380.88280	-0.000	-0.027
				0.011	0.010	0.02

Residuals (critical value = 4.385):

TYPE	AT	FROM	TO	OBSERVATION / STD DEV	RESIDUAL / STD DEV	STD RES / PPM
GROUP: 021412B.ASC ,obs#: 461						
DXCT		BELVUE	1524	13299.89120	-0.001	-0.083
				0.015	0.008	0.04
DYCT		BELVUE	1524	4974.71480	0.002	0.252
				0.015	0.009	0.13
DZCT		BELVUE	1524	7816.40630	-0.004	-0.429
				0.015	0.009	0.23
GROUP: 021412B.ASC ,obs#: 462						
DXCT		1015	1524	22356.95810	0.002	0.084
				0.022	0.018	0.06
DYCT		1015	1524	3661.30070	-0.005	-0.250
				0.022	0.018	0.19
DZCT		1015	1524	7393.13860	0.008	0.428
				0.022	0.018	0.33
GROUP: 021412B.ASC ,obs#: 463						
DXCT		BELVUE	1634	-8158.92950	-0.006	-0.806
				0.008	0.007	0.68
DYCT		BELVUE	1634	296.61480	-0.008	-1.190
				0.008	0.007	1.03
DZCT		BELVUE	1634	-717.94510	0.005	0.772
				0.008	0.007	0.65
GROUP: 021412B.ASC ,obs#: 464						
DXCT		1015	1634	898.13380	0.000	0.847
				0.002	0.000	0.16
DYCT		1015	1634	-1016.81490	0.000	1.226
				0.002	0.000	0.27
DZCT		1015	1634	-1141.19570	-0.000	-0.788
				0.002	0.000	0.15
GROUP: 021412B.ASC ,obs#: 465						
DXCT		BELVUE	1635	7710.43280	-0.003	-0.379
				0.012	0.007	0.20
DYCT		BELVUE	1635	6283.86360	-0.003	-0.453
				0.012	0.007	0.24
DZCT		BELVUE	1635	8783.62470	-0.004	-0.584
				0.012	0.007	0.31
GROUP: 021412B.ASC ,obs#: 466						
DXCT		1015	1635	16767.49370	0.006	0.380
				0.018	0.015	0.29
DYCT		1015	1635	4970.43290	0.007	0.454
				0.018	0.015	0.35
DZCT		1015	1635	8360.35580	0.009	0.585
				0.018	0.015	0.45
GROUP: 021412B.ASC ,obs#: 467						
DXCT		KST5	BELVUE	-12812.23780	0.009	0.401
				0.022	0.021	0.36
DYCT		KST5	BELVUE	13531.81400	-0.024	-1.110
				0.022	0.022	1.02
DZCT		KST5	BELVUE	14794.99960	0.021	0.978
				0.022	0.022	0.89
GROUP: 021412B.ASC ,obs#: 468						
DXCT		KSU1	BELVUE	35816.91240	0.000	0.014
				0.035	0.034	0.01

Residuals (critical value = 4.385):

TYPE	AT	FROM	TO	OBSERVATION / STD DEV	RESIDUAL / STD DEV	STD RES / PPM
DYCT		KSU1	BELVUE	4206.95540	0.005	0.143
				0.035	0.035	0.13
DZCT		KSU1	BELVUE	9941.48050	-0.008	-0.230
				0.035	0.035	0.21
GROUP: 021512B.ASC ,obs#: 469						
DXCT		KST5	1016	-563.54950	0.022	1.072
				0.022	0.021	0.94
DYCT		KST5	1016	14937.56540	-0.027	-1.268
				0.022	0.021	1.14
DZCT		KST5	1016	18224.59950	0.044	2.077
				0.022	0.021	1.85
GROUP: 021512B.ASC ,obs#: 470						
DXCT		KSU1	1016	48065.59910	0.016	0.341
				0.047	0.046	0.31
DYCT		KSU1	1016	5612.69590	0.013	0.285
				0.047	0.046	0.26
DZCT		KSU1	1016	13371.08820	0.007	0.146
				0.047	0.046	0.14
GROUP: 021512B.ASC ,obs#: 471						
DXCT		BELVUE	1125	12334.97150	0.003	0.246
				0.012	0.012	0.21
DYCT		BELVUE	1125	2250.78760	-0.016	-1.331
				0.013	0.012	1.17
DZCT		BELVUE	1125	4478.96370	0.027	2.310
				0.012	0.012	2.02
GROUP: 021512B.ASC ,obs#: 472						
DXCT		1016	1125	86.27240	-0.000	-0.044
				0.001	0.000	0.00
DYCT		1016	1125	845.02290	0.000	1.546
				0.002	0.000	0.22
DZCT		1016	1125	1049.36850	-0.000	-2.469
				0.001	0.000	0.27
GROUP: 021512B.ASC ,obs#: 473						
DXCT		BELVUE	1126	12802.96030	0.003	0.192
				0.019	0.016	0.15
DYCT		BELVUE	1126	8844.79360	0.005	0.305
				0.019	0.016	0.24
DZCT		BELVUE	1126	12485.86470	0.014	0.859
				0.019	0.016	0.68
GROUP: 021512B.ASC ,obs#: 474						
DXCT		1016	1126	554.26240	-0.001	-0.192
				0.011	0.005	0.09
DYCT		1016	1126	7439.05130	-0.002	-0.303
				0.011	0.005	0.14
DZCT		1016	1126	9056.26050	-0.005	-0.859
				0.011	0.005	0.40
GROUP: 021512B.ASC ,obs#: 475						
DXCT		BELVUE	1225	8105.40800	-0.009	-1.503
				0.008	0.006	1.07
DYCT		BELVUE	1225	403.15120	-0.000	-0.077
				0.008	0.006	0.06
DZCT		BELVUE	1225	1603.49680	-0.004	-0.710

Residuals (critical value = 4.385):

TYPE	AT	FROM	TO	OBSERVATION / STD DEV	RESIDUAL / STD DEV	STD RES / PPM
				0.008	0.006	0.50
GROUP: 021512B.ASC ,obs#: 476						
DXCT		1016	1225	-4143.30560	0.003	1.505
				0.004	0.002	0.60
DYCT		1016	1225	-1002.59820	0.000	0.088
				0.004	0.002	0.04
DZCT		1016	1225	-1826.13110	0.001	0.712
				0.004	0.002	0.29
GROUP: 021512B.ASC ,obs#: 477						
DXCT		BELVUE	1425	9378.82840	-0.013	-1.919
				0.009	0.007	1.39
DYCT		BELVUE	1425	-1595.98190	-0.006	-0.906
				0.009	0.007	0.66
DZCT		BELVUE	1425	-711.86700	-0.013	-1.889
				0.009	0.007	1.37
GROUP: 021512B.ASC ,obs#: 478						
DXCT		1016	1425	-2869.89190	0.005	1.935
				0.006	0.003	0.87
DYCT		1016	1425	-3001.73950	0.003	0.908
				0.006	0.003	0.44
DZCT		1016	1425	-4141.50770	0.005	1.881
				0.006	0.003	0.89
GROUP: 021512B.ASC ,obs#: 479						
DXCT		BELVUE	1426	5423.02580	0.009	0.654
				0.019	0.014	0.46
DYCT		BELVUE	1426	12364.79500	0.001	0.074
				0.019	0.015	0.05
DZCT		BELVUE	1426	15773.21510	0.009	0.591
				0.019	0.015	0.41
GROUP: 021512B.ASC ,obs#: 480						
DXCT		1016	1426	-6825.65970	-0.007	-0.654
				0.017	0.011	0.39
DYCT		1016	1426	10959.04810	-0.001	-0.074
				0.017	0.011	0.04
DZCT		1016	1426	12343.60760	-0.006	-0.591
				0.017	0.011	0.35
GROUP: 021512B.ASC ,obs#: 481						
DXCT		BELVUE	1525	8258.95770	0.001	0.081
				0.010	0.008	0.06
DYCT		BELVUE	1525	3688.10760	-0.005	-0.551
				0.010	0.008	0.43
DZCT		BELVUE	1525	5727.35460	0.004	0.534
				0.010	0.008	0.42
GROUP: 021512B.ASC ,obs#: 482						
DXCT		1016	1525	-3989.74350	-0.000	-0.049
				0.005	0.002	0.02
DYCT		1016	1525	2282.35280	0.001	0.606
				0.005	0.002	0.28
DZCT		1016	1525	2297.73800	-0.001	-0.596
				0.005	0.002	0.26
GROUP: 021512B.ASC ,obs#: 483						
DXCT		BELVUE	1526	12669.22980	0.018	1.776

Residuals (critical value = 4.385):

TYPE	AT	FROM	TO	OBSERVATION / STD DEV	RESIDUAL / STD DEV	STD RES / PPM
				0.012	0.010	1.37
DYCT		BELVUE	1526	-3471.55410	0.014	1.374
				0.013	0.010	1.06
DZCT		BELVUE	1526	-2581.53820	-0.017	-1.628
				0.013	0.010	1.26
GROUP: 021512B.ASC ,obs#: 484						
DXCT		1016	1526	420.55230	-0.006	-1.783
				0.007	0.003	0.80
DYCT		1016	1526	-4877.28380	-0.005	-1.389
				0.007	0.004	0.63
DZCT		1016	1526	-6011.18320	0.006	1.643
				0.007	0.004	0.74
GROUP: 021512B.ASC ,obs#: 485						
DXCT		BELVUE	1636	11133.69970	0.010	1.153
				0.011	0.009	0.86
DYCT		BELVUE	1636	-3013.74580	0.021	2.336
				0.011	0.009	1.76
DZCT		BELVUE	1636	-2225.65000	-0.004	-0.481
				0.011	0.009	0.36
GROUP: 021512B.ASC ,obs#: 486						
DXCT		1016	1636	-1114.98820	-0.004	-1.168
				0.007	0.003	0.54
DYCT		1016	1636	-4419.46560	-0.008	-2.349
				0.007	0.004	1.14
DZCT		1016	1636	-5655.27850	0.002	0.527
				0.007	0.004	0.25
GROUP: 021512B.ASC ,obs#: 487						
DXCT		KST5	BELVUE	-12812.23750	0.008	0.386
				0.022	0.021	0.35
DYCT		KST5	BELVUE	13531.80710	-0.017	-0.794
				0.022	0.022	0.73
DZCT		KST5	BELVUE	14795.00300	0.018	0.821
				0.022	0.022	0.75
GROUP: 021512B.ASC ,obs#: 488						
DXCT		KSU1	BELVUE	35816.91170	0.001	0.034
				0.035	0.034	0.03
DYCT		KSU1	BELVUE	4206.93750	0.023	0.660
				0.035	0.035	0.61
DZCT		KSU1	BELVUE	9941.49130	-0.019	-0.542
				0.035	0.035	0.50
GROUP: 021612B.ASC ,obs#: 489						
DXCT		KST5	1017	-628.00640	-0.008	-0.174
				0.049	0.048	0.16
DYCT		KST5	1017	33265.40850	0.004	0.092
				0.049	0.048	0.08
DZCT		KST5	1017	40417.08170	-0.010	-0.209
				0.049	0.048	0.19
GROUP: 021612B.ASC ,obs#: 490						
DXCT		KSU1	1017	48001.14610	-0.019	-0.315
				0.060	0.059	0.29
DYCT		KSU1	1017	23940.56490	0.019	0.312
				0.060	0.060	0.29

Residuals (critical value = 4.385):

TYPE	AT	FROM	TO	OBSERVATION / STD DEV	RESIDUAL / STD DEV	STD RES / PPM
DZCT		KSU1	1017	35563.55410	-0.031	-0.515
				0.060	0.060	0.48
GROUP: 021612B.ASC ,obs#: 491						
DXCT		X 119	1127	5764.88310	-0.003	-0.878
				0.007	0.004	0.46
DYCT		X 119	1127	-3051.08180	-0.003	-0.806
				0.007	0.004	0.46
DZCT		X 119	1127	-3018.04340	-0.005	-1.193
				0.007	0.004	0.66
GROUP: 021612B.ASC ,obs#: 492						
DXCT		1017	1127	-7206.07450	0.004	0.878
				0.007	0.004	0.49
DYCT		1017	1127	-1117.83360	0.004	0.806
				0.007	0.005	0.49
DZCT		1017	1127	-2337.35330	0.005	1.193
				0.007	0.004	0.70
GROUP: 021612B.ASC ,obs#: 493						
DXCT		X 119	1226	10555.95790	0.003	0.339
				0.012	0.010	0.26
DYCT		X 119	1226	-5648.64340	-0.020	-1.890
				0.012	0.010	1.49
DZCT		X 119	1226	-5413.90170	0.009	0.931
				0.012	0.010	0.72
GROUP: 021612B.ASC ,obs#: 494						
DXCT		1017	1226	-2414.98850	-0.001	-0.323
				0.006	0.002	0.12
DYCT		1017	1226	-3715.41270	0.005	1.893
				0.006	0.003	0.76
DZCT		1017	1226	-4733.18970	-0.002	-0.944
				0.006	0.003	0.37
GROUP: 021612B.ASC ,obs#: 495						
DXCT		X 119	1427	1462.41200	-0.000	-0.849
				0.002	0.000	0.11
DYCT		X 119	1427	87.87500	-0.001	-1.916
				0.002	0.000	0.46
DZCT		X 119	1427	284.99850	0.001	2.748
				0.002	0.000	0.58
GROUP: 021612B.ASC ,obs#: 496						
DXCT		1017	1427	-11508.54200	0.003	0.349
				0.011	0.009	0.28
DYCT		1017	1427	2021.11540	0.014	1.435
				0.011	0.010	1.21
DZCT		1017	1427	965.72420	-0.025	-2.524
				0.011	0.010	2.10
GROUP: 021612B.ASC ,obs#: 497						
DXCT		X 119	1527	13844.66650	-0.002	-0.204
				0.013	0.012	0.17
DYCT		X 119	1527	-2385.92120	-0.027	-2.244
				0.013	0.012	1.95
DZCT		X 119	1527	-1129.29450	0.034	2.819
				0.013	0.012	2.42
GROUP: 021612B.ASC ,obs#: 498						

Residuals (critical value = 4.385):

TYPE	AT	FROM	TO	OBSERVATION / STD DEV	RESIDUAL / STD DEV	STD RES / PPM
DXCT		1017	1527	873.71330	0.000	1.734
				0.001	0.000	0.19
DYCT		1017	1527	-452.69440	0.001	3.056
				0.002	0.000	0.85
DZCT		1017	1527	-448.55960	-0.001	-3.497
				0.002	0.000	0.64
GROUP: 021612B.ASC ,obs#: 499						
DXCT		KST5	X 119	-13598.93160	-0.034	-0.661
				0.052	0.051	0.60
DYCT		KST5	X 119	35198.67380	-0.006	-0.110
				0.052	0.052	0.10
DZCT		KST5	X 119	41097.80380	-0.032	-0.623
				0.052	0.051	0.57
GROUP: 021612B.ASC ,obs#: 500						
DXCT		KSU1	X 119	35030.21960	-0.043	-0.826
				0.053	0.052	0.75
DYCT		KSU1	X 119	25873.82660	0.012	0.231
				0.053	0.052	0.21
DZCT		KSU1	X 119	36244.27540	-0.052	-0.992
				0.053	0.052	0.91
GROUP: 032712B.ASC ,obs#: 501						
DXCT		W 106	1128	4335.45820	0.000	0.379
				0.004	0.001	0.07
DYCT		W 106	1128	711.09450	0.001	1.623
				0.005	0.001	0.28
DZCT		W 106	1128	1294.08060	-0.001	-1.228
				0.004	0.001	0.23
GROUP: 032712B.ASC ,obs#: 502						
DXCT		MOSV	1128	-17367.66060	-0.008	-0.348
				0.022	0.022	0.32
DYCT		MOSV	1128	-9619.94580	-0.044	-1.646
				0.027	0.026	1.82
DZCT		MOSV	1128	-13307.25570	0.028	1.293
				0.023	0.022	1.19
GROUP: 032712B.ASC ,obs#: 503						
DXCT		W 106	1129	10803.17210	-0.014	-1.427
				0.013	0.009	0.94
DYCT		W 106	1129	5603.97970	0.009	0.940
				0.013	0.009	0.62
DZCT		W 106	1129	7699.99690	-0.005	-0.545
				0.013	0.009	0.36
GROUP: 032712B.ASC ,obs#: 504						
DXCT		MOSV	1129	-10899.98050	0.012	1.418
				0.013	0.009	0.90
DYCT		MOSV	1129	-4727.08790	-0.009	-0.941
				0.013	0.009	0.63
DZCT		MOSV	1129	-6901.32020	0.005	0.565
				0.013	0.009	0.37
GROUP: 032712B.ASC ,obs#: 505						
DXCT		MOSV	1227	-20540.22240	0.004	0.164
				0.025	0.025	0.15
DYCT		MOSV	1227	-9818.06170	-0.021	-0.865

Residuals (critical value = 4.385):

TYPE	AT	FROM	TO	OBSERVATION / STD DEV	RESIDUAL / STD DEV	STD RES / PPM
				0.025	0.025	0.81
DZCT		MOSV	1227	-13868.12540	0.012	0.496
				0.025	0.025	0.46
GROUP: 032712B.ASC ,obs#: 506						
DXCT		W 106	1227	1162.90830	-0.000	0.000*
				0.001	0.000	0.01
DYCT		W 106	1227	513.00180	0.000	0.000*
				0.002	0.000	0.06
DZCT		W 106	1227	733.19380	-0.000	0.000*
				0.001	0.000	0.04
GROUP: 032712B.ASC ,obs#: 507						
DXCT		MOSV	1228	-19844.16470	-0.018	-0.838
				0.022	0.021	0.75
DYCT		MOSV	1228	-7322.54250	-0.008	-0.354
				0.022	0.021	0.32
DZCT		MOSV	1228	-10775.36770	0.015	0.706
				0.022	0.021	0.64
GROUP: 032712B.ASC ,obs#: 508						
DXCT		W 106	1228	1858.94320	0.001	0.838
				0.005	0.001	0.17
DYCT		W 106	1228	3008.53460	0.000	0.362
				0.005	0.001	0.07
DZCT		W 106	1228	3825.95510	-0.001	-0.709
				0.005	0.001	0.14
GROUP: 032712B.ASC ,obs#: 509						
DXCT		W 106	1428	6307.64750	0.003	0.586
				0.010	0.005	0.28
DYCT		W 106	1428	5457.97160	0.004	0.750
				0.010	0.005	0.36
DZCT		W 106	1428	7061.18190	-0.003	-0.623
				0.010	0.005	0.30
GROUP: 032712B.ASC ,obs#: 510						
DXCT		MOSV	1428	-15395.46780	-0.008	-0.594
				0.017	0.014	0.47
DYCT		MOSV	1428	-4873.09850	-0.011	-0.768
				0.017	0.014	0.62
DZCT		MOSV	1428	-7540.13760	0.009	0.642
				0.017	0.015	0.52
GROUP: 032712B.ASC ,obs#: 511						
DXCT		W 106	1528	11350.42390	0.000	0.002
				0.011	0.005	0.00
DYCT		W 106	1528	-2113.08480	-0.002	-0.452
				0.011	0.005	0.19
DZCT		W 106	1528	-1458.10770	0.012	2.403
				0.011	0.005	1.00
GROUP: 032712B.ASC ,obs#: 512						
DXCT		MOSV	1528	-10352.70270	-0.000	-0.003
				0.021	0.019	0.00
DYCT		MOSV	1528	-12444.18140	0.009	0.487
				0.022	0.019	0.41
DZCT		MOSV	1528	-16059.35720	-0.046	-2.410
				0.022	0.019	2.01

Residuals (critical value = 4.385):

TYPE	AT	FROM	TO	OBSERVATION / STD DEV	RESIDUAL / STD DEV	STD RES / PPM
GROUP: 032712B.ASC ,obs#: 513						
DXCT		MOSV	W 106	-21703.11850	-0.008	-0.315
				0.026	0.026	0.29
DYCT		MOSV	W 106	-10331.06280	-0.022	-0.858
				0.026	0.026	0.79
DZCT		MOSV	W 106	-14601.31030	0.003	0.131
				0.026	0.026	0.12
GROUP: 032812B.ASC ,obs#: 514						
DXCT		MOSV	1009	-57752.60510	-0.002	-0.030
				0.054	0.054	0.03
DYCT		MOSV	1009	-743.87970	0.007	0.122
				0.054	0.054	0.11
DZCT		MOSV	1009	-7141.99090	-0.007	-0.130
				0.054	0.054	0.12
GROUP: 032812B.ASC ,obs#: 515						
DXCT		MORK	1009	-2055.35220	-0.003	-0.045
				0.057	0.057	0.04
DYCT		MORK	1009	-39358.73240	0.015	0.258
				0.057	0.057	0.24
DZCT		MORK	1009	-46712.55260	-0.016	-0.280
				0.057	0.057	0.26
GROUP: 032812B.ASC ,obs#: 516						
DXCT		MOSV	1011	-77368.14690	-0.005	-0.063
				0.073	0.072	0.06
DYCT		MOSV	1011	-906.85200	0.021	0.290
				0.073	0.072	0.27
DZCT		MOSV	1011	-9584.11320	-0.027	-0.377
				0.073	0.072	0.35
GROUP: 032812B.ASC ,obs#: 517						
DXCT		MORK	1011	-21670.89380	-0.006	-0.091
				0.062	0.062	0.08
DYCT		MORK	1011	-39521.70410	0.029	0.461
				0.062	0.062	0.43
DZCT		MORK	1011	-49154.67370	-0.037	-0.603
				0.062	0.062	0.56
GROUP: 032812B.ASC ,obs#: 518						
DXCT		MOSV	1012	-94651.43190	0.001	0.009
				0.089	0.088	0.01
DYCT		MOSV	1012	859.21920	0.055	0.621
				0.089	0.088	0.58
DZCT		MOSV	1012	-9586.77630	-0.053	-0.605
				0.089	0.088	0.56
GROUP: 032812B.ASC ,obs#: 519						
DXCT		MORK	1012	-38954.17830	-0.001	-0.013
				0.068	0.068	0.01
DYCT		MORK	1012	-37755.63220	0.062	0.907
				0.068	0.068	0.84
DZCT		MORK	1012	-49157.33530	-0.065	-0.957
				0.068	0.068	0.89
GROUP: 032812B.ASC ,obs#: 520						
DXCT		1009	1130	-4311.56770	0.001	0.262
				0.009	0.004	0.11

Residuals (critical value = 4.385):

TYPE	AT	FROM	TO	OBSERVATION / STD DEV	RESIDUAL / STD DEV	STD RES / PPM
DYCT		1009	1130	-5022.44770	0.002	0.516
				0.009	0.004	0.23
DZCT		1009	1130	-6485.80970	0.008	1.987
				0.009	0.004	0.88
GROUP: 032812B.ASC ,obs#: 521						
DXCT		1011	1130	15303.98150	-0.003	-0.263
				0.015	0.013	0.21
DYCT		1011	1130	-4859.48100	-0.007	-0.509
				0.016	0.013	0.41
DZCT		1011	1130	-4043.63300	-0.026	-1.986
				0.016	0.013	1.57
GROUP: 032812B.ASC ,obs#: 522						
DXCT		1012	1131	6889.92570	-0.015	-2.711
				0.009	0.005	1.52
DYCT		1012	1131	-4877.51340	-0.012	-2.081
				0.009	0.006	1.22
DZCT		1012	1131	-4956.37630	0.002	0.294
				0.009	0.006	0.17
GROUP: 032812B.ASC ,obs#: 523						
DXCT		1011	1131	-10393.39080	0.022	2.705
				0.011	0.008	1.84
DYCT		1011	1131	-3111.43740	0.017	2.072
				0.011	0.008	1.44
DZCT		1011	1131	-4959.06170	-0.002	-0.273
				0.011	0.008	0.19
GROUP: 032812B.ASC ,obs#: 524						
DXCT		1009	1229	-10434.25670	0.008	0.996
				0.011	0.008	0.68
DYCT		1009	1229	-3145.54160	-0.010	-1.236
				0.011	0.008	0.86
DZCT		1009	1229	-4935.09530	0.028	3.445
				0.011	0.008	2.37
GROUP: 032812B.ASC ,obs#: 525						
DXCT		1011	1229	9181.30170	-0.006	-0.996
				0.009	0.006	0.56
DYCT		1011	1229	-2982.60100	0.007	1.219
				0.009	0.006	0.70
DZCT		1011	1229	-2492.90480	-0.020	-3.440
				0.009	0.006	1.96
GROUP: 032812B.ASC ,obs#: 526						
DXCT		1012	1230	1784.32180	0.001	0.464
				0.006	0.002	0.16
DYCT		1012	1230	-4361.29670	-0.001	-0.280
				0.007	0.002	0.10
DZCT		1012	1230	-4941.00120	0.003	1.372
				0.006	0.002	0.48
GROUP: 032812B.ASC ,obs#: 527						
DXCT		1011	1230	-15498.95050	-0.006	-0.465
				0.015	0.014	0.38
DYCT		1011	1230	-2595.19610	0.004	0.272
				0.016	0.014	0.23
DZCT		1011	1230	-4943.66840	-0.019	-1.370

Residuals (critical value = 4.385):

TYPE	AT	FROM	TO	OBSERVATION / STD DEV	RESIDUAL / STD DEV	STD RES / PPM
				0.015	0.014	1.14
GROUP: 032812B.ASC ,obs#: 528						
DXCT		1009	1429	-17694.37530	-0.002	-0.102
				0.017	0.016	0.09
DYCT		1009	1429	2754.69510	-0.003	-0.180
				0.017	0.016	0.16
DZCT		1009	1429	1236.22880	0.011	0.682
				0.017	0.016	0.60
GROUP: 032812B.ASC ,obs#: 529						
DXCT		1011	1429	1921.16770	0.000	0.102
				0.005	0.001	0.02
DYCT		1011	1429	2917.64990	0.000	0.182
				0.005	0.001	0.05
DZCT		1011	1429	3678.38290	-0.001	-0.683
				0.005	0.001	0.17
GROUP: 032812B.ASC ,obs#: 530						
DXCT		1009	1430	-13351.76600	0.014	1.237
				0.014	0.012	0.98
DYCT		1009	1430	-2850.48710	-0.013	-1.130
				0.014	0.012	0.90
DZCT		1009	1430	-4963.93660	0.024	2.027
				0.014	0.012	1.62
GROUP: 032812B.ASC ,obs#: 531						
DXCT		1011	1430	6263.79650	-0.004	-1.236
				0.007	0.003	0.49
DYCT		1011	1430	-2687.54570	0.003	1.133
				0.007	0.003	0.46
DZCT		1011	1430	-2521.76460	-0.006	-2.029
				0.007	0.003	0.81
GROUP: 032812B.ASC ,obs#: 532						
DXCT		1009	1529	-3767.06170	0.001	0.886
				0.004	0.001	0.22
DYCT		1009	1529	-1416.43740	-0.001	-0.864
				0.004	0.001	0.22
DZCT		1009	1529	-2109.50140	0.000	0.006
				0.004	0.001	0.00
GROUP: 032812B.ASC ,obs#: 533						
DXCT		1011	1529	15848.49610	-0.012	-0.890
				0.015	0.014	0.76
DYCT		1011	1529	-1253.49250	0.012	0.869
				0.015	0.014	0.75
DZCT		1011	1529	332.64110	0.000	0.004
				0.015	0.014	0.00
GROUP: 032812B.ASC ,obs#: 534						
DXCT		1012	1530	13372.90170	-0.018	-1.459
				0.014	0.012	1.18
DYCT		1012	1530	-5055.60150	-0.014	-1.161
				0.014	0.012	0.95
DZCT		1012	1530	-4375.20990	0.006	0.501
				0.014	0.012	0.41
GROUP: 032812B.ASC ,obs#: 535						
DXCT		1011	1530	-3910.39920	0.004	1.463

Residuals (critical value = 4.385):

TYPE	AT	FROM	TO	OBSERVATION / STD DEV	RESIDUAL / STD DEV	STD RES / PPM
				0.006	0.002	0.53
DYCT		1011	1530	-3289.51370	0.003	1.174
				0.006	0.003	0.45
DZCT		1011	1530	-4377.89170	-0.001	-0.527
				0.006	0.003	0.20
GROUP: 032912B.ASC ,obs#: 536						
DXCT		KST5	1013	4990.81270	-0.010	-0.160
				0.063	0.062	0.15
DYCT		KST5	1013	42511.78330	0.017	0.272
				0.063	0.063	0.25
DZCT		KST5	1013	52327.49600	-0.005	-0.084
				0.063	0.063	0.08
GROUP: 032912B.ASC ,obs#: 537						
DXCT		MOPL	1013	-105236.45990	0.004	0.037
				0.104	0.104	0.03
DYCT		MOPL	1013	28921.10190	-0.024	-0.235
				0.104	0.104	0.22
DZCT		MOPL	1013	23149.79870	0.029	0.275
				0.104	0.104	0.26
GROUP: 032912B.ASC ,obs#: 538						
DXCT		MORK	1013	-47429.17410	-0.011	-0.123
				0.088	0.088	0.11
DYCT		MORK	1013	-50313.61910	-0.030	-0.340
				0.088	0.088	0.32
DZCT		MORK	1013	-65183.46270	0.030	0.346
				0.088	0.088	0.32
GROUP: 032912B.ASC ,obs#: 539						
DXCT		MOSV	1013	-103126.42240	-0.015	-0.146
				0.100	0.099	0.14
DYCT		MOSV	1013	-11698.76630	-0.038	-0.385
				0.100	0.099	0.36
DZCT		MOSV	1013	-25612.90690	0.045	0.455
				0.100	0.099	0.42
GROUP: 032912B.ASC ,obs#: 540						
DXCT		KST5	1017	-628.01180	-0.003	-0.061
				0.049	0.048	0.06
DYCT		KST5	1017	33265.39160	0.021	0.441
				0.049	0.048	0.41
DZCT		KST5	1017	40417.09490	-0.023	-0.483
				0.049	0.048	0.44
GROUP: 032912B.ASC ,obs#: 541						
DXCT		MOPL	1017	-110855.26190	-0.012	-0.111
				0.105	0.105	0.10
DYCT		MOPL	1017	19674.71980	-0.030	-0.282
				0.105	0.105	0.26
DZCT		MOPL	1017	11239.40180	0.006	0.060
				0.105	0.105	0.06
GROUP: 032912B.ASC ,obs#: 542						
DXCT		MORK	1017	-53047.99670	-0.006	-0.055
				0.103	0.103	0.05
DYCT		MORK	1017	-59560.01270	-0.024	-0.231
				0.103	0.103	0.21

Residuals (critical value = 4.385):

TYPE	AT	FROM	TO	OBSERVATION STD DEV	RESIDUAL STD DEV	STD RES PPM
DZCT		MORK	1017	-77093.85230	0.001	0.009
				0.103	0.103	0.01
GROUP: 032912B.ASC ,obs#: 543						
DXCT		MOSV	1017	-108745.24050	-0.014	-0.128
				0.109	0.109	0.12
DYCT		MOSV	1017	-20945.15410	-0.038	-0.348
				0.109	0.109	0.32
DZCT		MOSV	1017	-37523.29500	0.014	0.131
				0.109	0.109	0.12
GROUP: 032912B.ASC ,obs#: 544						
DXCT		1017	1132	8533.41620	-0.004	-0.334
				0.012	0.011	0.27
DYCT		1017	1132	5887.05660	-0.013	-1.197
				0.012	0.011	0.97
DZCT		1017	1132	8242.36130	0.028	2.596
				0.012	0.011	2.09
GROUP: 032912B.ASC ,obs#: 545						
DXCT		1013	1132	2914.59450	0.001	0.343
				0.005	0.002	0.12
DYCT		1013	1132	-3359.34610	0.003	1.220
				0.005	0.002	0.44
DZCT		1013	1132	-3668.02480	-0.005	-2.606
				0.005	0.002	0.93
GROUP: 032912B.ASC ,obs#: 546						
DXCT		1017	1133	-6613.79960	0.001	0.528
				0.006	0.002	0.16
DYCT		1017	1133	746.40950	-0.002	-0.803
				0.006	0.002	0.25
DZCT		1017	1133	-4.87430	0.002	1.134
				0.006	0.002	0.34
GROUP: 032912B.ASC ,obs#: 547						
DXCT		1013	1133	-12232.60740	-0.009	-0.530
				0.018	0.016	0.45
DYCT		1013	1133	-8499.99260	0.013	0.793
				0.018	0.016	0.69
DZCT		1013	1133	-11915.27270	-0.018	-1.127
				0.018	0.016	0.97
GROUP: 032912B.ASC ,obs#: 548						
DXCT		1017	1231	1759.27740	-0.001	-0.089
				0.010	0.008	0.07
DYCT		1017	1231	6546.10310	0.001	0.076
				0.010	0.008	0.06
DZCT		1017	1231	8148.71240	0.009	1.110
				0.010	0.008	0.83
GROUP: 032912B.ASC ,obs#: 549						
DXCT		1013	1231	-3859.54100	0.000	0.090
				0.006	0.003	0.04
DYCT		1013	1231	-2700.28350	-0.000	-0.070
				0.006	0.003	0.03
DZCT		1013	1231	-3761.69510	-0.003	-1.110
				0.006	0.003	0.48
GROUP: 032912B.ASC ,obs#: 550						

Residuals (critical value = 4.385):

TYPE	AT	FROM	TO	OBSERVATION STD DEV	RESIDUAL STD DEV	STD RES PPM
DXCT		1017	1232	10790.71750	0.004	0.556
				0.010	0.006	0.33
DYCT		1017	1232	-1064.65050	0.001	0.166
				0.010	0.007	0.11
DZCT		1017	1232	106.16660	0.012	1.674
				0.010	0.007	1.08
GROUP: 032912B.ASC ,obs#: 551						
DXCT		1013	1232	5171.89580	0.008	0.593
				0.015	0.013	0.47
DYCT		1013	1232	-10311.05030	0.014	0.993
				0.016	0.014	0.83
DZCT		1013	1232	-11804.22190	-0.019	-1.403
				0.015	0.013	1.15
GROUP: 032912B.ASC ,obs#: 552						
DXCT		1017	1233	-3291.59530	0.000	0.048
				0.006	0.003	0.02
DYCT		1017	1233	3992.57000	-0.006	-1.900
				0.006	0.003	0.81
DZCT		1017	1233	4425.65800	-0.001	-0.499
				0.006	0.003	0.21
GROUP: 032912B.ASC ,obs#: 553						
DXCT		1013	1233	-8910.41210	-0.001	-0.054
				0.012	0.010	0.04
DYCT		1013	1233	-5253.84190	0.019	1.905
				0.012	0.010	1.49
DZCT		1013	1233	-7484.76770	0.005	0.517
				0.012	0.010	0.40
GROUP: 032912B.ASC ,obs#: 554						
DXCT		1017	1431	11868.62360	-0.002	-0.216
				0.013	0.010	0.15
DYCT		1017	1431	3422.40610	-0.014	-1.472
				0.013	0.010	1.05
DZCT		1017	1431	5665.57970	0.016	1.700
				0.013	0.010	1.20
GROUP: 032912B.ASC ,obs#: 555						
DXCT		1013	1431	6249.80280	0.001	0.217
				0.010	0.006	0.12
DYCT		1013	1431	-5824.00420	0.009	1.476
				0.010	0.006	0.82
DZCT		1013	1431	-6244.81310	-0.010	-1.704
				0.010	0.006	0.94
GROUP: 032912B.ASC ,obs#: 556						
DXCT		1017	1432	16242.79640	-0.005	-0.412
				0.016	0.012	0.28
DYCT		1017	1432	1977.23480	-0.013	-1.120
				0.016	0.012	0.77
DZCT		1017	1432	4447.35130	0.009	0.763
				0.016	0.012	0.53
GROUP: 032912B.ASC ,obs#: 557						
DXCT		1013	1432	10623.97050	0.004	0.409
				0.014	0.009	0.24
DYCT		1013	1432	-7269.17570	0.010	1.114

Residuals (critical value = 4.385):

TYPE	AT	FROM	TO	OBSERVATION / STD DEV	RESIDUAL / STD DEV	STD RES / PPM
				0.014	0.009	0.67
DZCT		1013	1432	-7463.05210	-0.007	-0.756
				0.014	0.009	0.45
GROUP: 032912B.ASC ,obs#: 558						
DXCT		1017	1531	10802.09380	0.001	0.094
				0.010	0.006	0.05
DYCT		1017	1531	358.53950	-0.013	-2.108
				0.010	0.006	1.18
DZCT		1017	1531	1806.55900	0.006	0.978
				0.010	0.006	0.54
GROUP: 032912B.ASC ,obs#: 559						
DXCT		1013	1531	5183.27770	-0.001	-0.079
				0.013	0.010	0.06
DYCT		1013	1531	-8887.88260	0.022	2.097
				0.014	0.010	1.51
DZCT		1013	1531	-10103.84440	-0.010	-0.954
				0.013	0.010	0.68
GROUP: 032912B.ASC ,obs#: 560						
DXCT		1017	1532	4262.44530	-0.005	-1.249
				0.007	0.004	0.68
DYCT		1017	1532	3706.40800	0.003	0.597
				0.007	0.004	0.33
DZCT		1017	1532	5020.82660	-0.014	-3.262
				0.007	0.004	1.82
GROUP: 032912B.ASC ,obs#: 561						
DXCT		1013	1532	-1356.38450	0.007	1.248
				0.008	0.006	0.80
DYCT		1013	1532	-5539.97330	-0.004	-0.600
				0.008	0.006	0.40
DZCT		1013	1532	-6889.62560	0.019	3.262
				0.008	0.006	2.16
GROUP: 033012B.ASC ,obs#: 562						
DXCT		1234	1134	-4273.07350	0.004	0.265
				0.016	0.015	0.23
DYCT		1234	1134	10915.57040	0.007	0.431
				0.016	0.015	0.38
DZCT		1234	1134	12763.28260	0.013	0.867
				0.016	0.015	0.76
GROUP: 033012B.ASC ,obs#: 563						
DXCT		Z 231	1134	-3576.45020	-0.000	-0.268
				0.003	0.001	0.05
DYCT		Z 231	1134	10.43570	-0.000	-0.417
				0.003	0.001	0.08
DZCT		Z 231	1134	-458.57030	-0.001	-0.861
				0.003	0.001	0.16
GROUP: 033012B.ASC ,obs#: 564						
DXCT		1234	1135	4110.57790	-0.003	-1.018
				0.007	0.003	0.45
DYCT		1234	1135	3543.35050	-0.009	-2.746
				0.007	0.003	1.23
DZCT		1234	1135	4872.03640	0.003	1.076
				0.007	0.003	0.48

Residuals (critical value = 4.385):

TYPE	AT	FROM	TO	OBSERVATION / STD DEV	RESIDUAL / STD DEV	STD RES / PPM
GROUP: 033012B.ASC ,obs#: 565						
DXCT		Z 231	1135	4807.18480	0.009	1.019
				0.011	0.009	0.74
DYCT		Z 231	1135	-7361.82500	0.025	2.747
				0.011	0.009	2.06
DZCT		Z 231	1135	-8349.81700	-0.010	-1.079
				0.011	0.009	0.80
GROUP: 033012B.ASC ,obs#: 566						
DXCT		KST5	1234	-21380.90620	0.000	0.020
				0.020	0.018	0.02
DYCT		KST5	1234	-944.42940	-0.053	-2.754
				0.020	0.019	2.42
DZCT		KST5	1234	-4001.64560	0.045	2.413
				0.020	0.019	2.09
GROUP: 033012B.ASC ,obs#: 567						
DXCT		KSU1	1234	27248.24810	-0.012	-0.438
				0.028	0.027	0.39
DYCT		KSU1	1234	-10269.29250	-0.019	-0.691
				0.028	0.028	0.62
DZCT		KSU1	1234	-8855.16490	0.017	0.605
				0.028	0.027	0.54
GROUP: 033012B.ASC ,obs#: 568						
DXCT		1234	1433	-6071.65700	-0.003	-0.341
				0.011	0.008	0.24
DYCT		1234	1433	6889.00620	-0.004	-0.462
				0.011	0.009	0.33
DZCT		1234	1433	7688.48790	0.002	0.226
				0.011	0.008	0.16
GROUP: 033012B.ASC ,obs#: 569						
DXCT		Z 231	1433	-5375.04220	0.002	0.344
				0.008	0.004	0.17
DYCT		Z 231	1433	-4016.14140	0.002	0.466
				0.008	0.005	0.24
DZCT		Z 231	1433	-5533.37570	-0.001	-0.231
				0.008	0.005	0.12
GROUP: 033012B.ASC ,obs#: 570						
DXCT		1234	1434	4735.78400	0.003	0.263
				0.015	0.013	0.22
DYCT		1234	1434	9377.25080	-0.011	-0.843
				0.015	0.014	0.71
DZCT		1234	1434	12160.49520	0.018	1.315
				0.015	0.013	1.10
GROUP: 033012B.ASC ,obs#: 571						
DXCT		Z 231	1434	5432.40710	-0.000	-0.261
				0.005	0.002	0.08
DYCT		Z 231	1434	-1527.90370	0.001	0.852
				0.005	0.002	0.26
DZCT		Z 231	1434	-1061.35140	-0.002	-1.321
				0.005	0.002	0.40
GROUP: 033012B.ASC ,obs#: 572						
DXCT		1234	1435	1050.11500	-0.009	-0.594
				0.016	0.015	0.52

Residuals (critical value = 4.385):

TYPE	AT	FROM	TO	OBSERVATION / STD DEV	RESIDUAL / STD DEV	STD RES / PPM
DYCT		1234	1435	10786.16300	-0.041	-2.662
				0.016	0.015	2.37
DZCT		1234	1435	13341.40650	0.052	3.403
				0.016	0.015	3.03
GROUP: 033012B.ASC ,obs#: 573						
DXCT		Z 231	1435	1746.72510	0.000	0.833
				0.002	0.000	0.08
DYCT		Z 231	1435	-119.02010	0.001	3.419
				0.002	0.000	0.45
DZCT		Z 231	1435	119.59300	-0.001	-3.917
				0.002	0.000	0.54
GROUP: 033012B.ASC ,obs#: 574						
DXCT		1234	1533	-305.99570	0.000	0.046
				0.002	0.000	0.00
DYCT		1234	1533	1079.13700	-0.001	-3.103
				0.002	0.000	0.39
DZCT		1234	1533	1282.85770	0.000	1.598
				0.002	0.000	0.19
GROUP: 033012B.ASC ,obs#: 575						
DXCT		Z 231	1533	390.62600	-0.003	-0.191
				0.014	0.013	0.16
DYCT		Z 231	1533	-9826.04600	0.041	3.001
				0.015	0.014	2.64
DZCT		Z 231	1533	-11938.99160	-0.017	-1.255
				0.015	0.014	1.10
GROUP: 033012B.ASC ,obs#: 576						
DXCT		1234	1637	-8252.19610	0.002	0.236
				0.012	0.009	0.16
DYCT		1234	1637	7072.67730	-0.013	-1.330
				0.012	0.009	0.94
DZCT		1234	1637	7700.11490	0.006	0.633
				0.012	0.009	0.44
GROUP: 033012B.ASC ,obs#: 577						
DXCT		Z 231	1637	-7555.57350	-0.001	-0.234
				0.009	0.005	0.12
DYCT		Z 231	1637	-3832.48400	0.007	1.331
				0.009	0.005	0.72
DZCT		Z 231	1637	-5521.74230	-0.003	-0.636
				0.009	0.005	0.34
GROUP: 033012B.ASC ,obs#: 578						
DXCT		KST5	Z 231	-22077.52300	-0.002	-0.090
				0.024	0.022	0.08
DYCT		KST5	Z 231	9960.72910	-0.070	-2.984
				0.024	0.023	2.69
DZCT		KST5	Z 231	9220.20180	0.065	2.817
				0.024	0.023	2.49
GROUP: 033012B.ASC ,obs#: 579						
DXCT		KSU1	Z 231	26551.63080	-0.014	-0.590
				0.025	0.023	0.51
DYCT		KSU1	Z 231	635.86540	-0.035	-1.456
				0.025	0.024	1.31
DZCT		KSU1	Z 231	4366.68340	0.035	1.455

Residuals (critical value = 4.385):

TYPE	AT	FROM	TO	OBSERVATION / STD DEV	RESIDUAL / STD DEV	STD RES / PPM
				0.025	0.024	1.29
GROUP: 033112B.ASC ,obs#: 580						
DXCT		1234	1136	-16605.56350	-0.009	-0.627
				0.017	0.014	0.47
DYCT		1234	1136	-4193.50300	0.015	1.050
				0.018	0.014	0.80
DZCT		1234	1136	-7335.23350	-0.005	-0.355
				0.017	0.014	0.27
GROUP: 033112B.ASC ,obs#: 581						
DXCT		1235	1136	-11050.08520	0.004	0.626
				0.012	0.006	0.31
DYCT		1235	1136	4325.51750	-0.007	-1.048
				0.012	0.006	0.53
DZCT		1235	1136	3706.49280	0.002	0.352
				0.012	0.006	0.18
GROUP: 033112B.ASC ,obs#: 582						
DXCT		KST5	1234	-21380.90800	0.002	0.119
				0.020	0.018	0.10
DYCT		KST5	1234	-944.42870	-0.053	-2.790
				0.020	0.019	2.45
DZCT		KST5	1234	-4001.64180	0.042	2.211
				0.020	0.019	1.91
GROUP: 033112B.ASC ,obs#: 583						
DXCT		KSU1	1234	27248.24180	-0.005	-0.204
				0.028	0.027	0.18
DYCT		KSU1	1234	-10269.30450	-0.007	-0.255
				0.028	0.028	0.23
DZCT		KSU1	1234	-8855.14980	0.001	0.052
				0.028	0.027	0.05
GROUP: 033112B.ASC ,obs#: 584						
DXCT		KST5	1235	-26936.39270	-0.004	-0.146
				0.030	0.028	0.13
DYCT		KST5	1235	-9463.43490	-0.046	-1.593
				0.030	0.029	1.43
DZCT		KST5	1235	-15043.36540	0.032	1.101
				0.030	0.029	0.98
GROUP: 033112B.ASC ,obs#: 585						
DXCT		KSU1	1235	21692.75700	-0.012	-0.377
				0.033	0.031	0.33
DYCT		KSU1	1235	-18788.31110	0.001	0.018
				0.033	0.032	0.02
DZCT		KSU1	1235	-19896.87210	-0.010	-0.313
				0.033	0.031	0.28
GROUP: 033112B.ASC ,obs#: 586						
DXCT		1234	1236	-6162.08490	0.003	1.014
				0.006	0.003	0.42
DYCT		1234	1236	-859.73820	-0.001	-0.296
				0.006	0.003	0.12
DZCT		1234	1236	-1871.47970	-0.004	-1.378
				0.006	0.003	0.57
GROUP: 033112B.ASC ,obs#: 587						
DXCT		1235	1236	-606.58210	-0.009	-1.014

Residuals (critical value = 4.385):

TYPE	AT	FROM	TO	OBSERVATION / STD DEV	RESIDUAL / STD DEV	STD RES / PPM
				0.011	0.009	0.76
DYCT		1235	1236	7659.25720	0.003	0.311
				0.011	0.009	0.24
DZCT		1235	1236	9170.23760	0.012	1.380
				0.011	0.009	1.04
GROUP: 033112B.ASC ,obs#: 588						
DXCT		1234	1237	1267.10560	0.004	0.354
				0.013	0.011	0.28
DYCT		1234	1237	-8882.18860	0.009	0.861
				0.013	0.011	0.68
DZCT		1234	1237	-10651.42450	-0.015	-1.332
				0.013	0.011	1.04
GROUP: 033112B.ASC ,obs#: 589						
DXCT		1235	1237	6822.60140	-0.001	-0.356
				0.006	0.003	0.14
DYCT		1235	1237	-363.17780	-0.002	-0.871
				0.006	0.003	0.34
DZCT		1235	1237	390.29090	0.004	1.338
				0.006	0.003	0.52
GROUP: 033112B.ASC ,obs#: 590						
DXCT		1234	1436	-10576.17450	-0.003	-0.308
				0.011	0.008	0.21
DYCT		1234	1436	-3019.34820	0.010	1.164
				0.011	0.008	0.81
DZCT		1234	1436	-5103.98240	-0.008	-0.944
				0.011	0.008	0.65
GROUP: 033112B.ASC ,obs#: 591						
DXCT		1235	1436	-5020.68770	0.002	0.314
				0.009	0.005	0.17
DYCT		1235	1436	5499.66680	-0.006	-1.166
				0.009	0.005	0.65
DZCT		1235	1436	5937.73830	0.005	0.948
				0.009	0.005	0.52
GROUP: 033112B.ASC ,obs#: 592						
DXCT		1234	1534	-18804.79470	-0.009	-0.505
				0.022	0.018	0.40
DYCT		1234	1534	-7326.26410	-0.001	-0.029
				0.022	0.018	0.02
DZCT		1234	1534	-11420.84160	0.001	0.073
				0.022	0.018	0.06
GROUP: 033112B.ASC ,obs#: 593						
DXCT		1235	1534	-13249.31600	0.003	0.505
				0.012	0.006	0.23
DYCT		1235	1534	1192.73420	0.000	0.029
				0.012	0.006	0.01
DZCT		1235	1534	-379.10630	-0.000	-0.073
				0.012	0.006	0.03
GROUP: 033112B.ASC ,obs#: 594						
DXCT		1234	1535	-223.05020	-0.000	-0.522
				0.002	0.000	0.06
DYCT		1234	1535	1444.94640	0.000	0.488
				0.002	0.000	0.07

Residuals (critical value = 4.385):

TYPE	AT	FROM	TO	OBSERVATION / STD DEV	RESIDUAL / STD DEV	STD RES / PPM
DZCT		1234	1535	1761.89940	-0.000	-0.933
				0.002	0.000	0.14
GROUP: 033112B.ASC ,obs#: 595						
DXCT		1235	1535	5332.43220	0.008	0.564
				0.016	0.015	0.49
DYCT		1235	1535	9963.95160	-0.006	-0.397
				0.016	0.015	0.35
DZCT		1235	1535	12803.61880	0.014	0.905
				0.016	0.015	0.81
GROUP: 033112B.ASC ,obs#: 596						
DXCT		1234	1638	-13649.85890	-0.010	-0.525
				0.020	0.018	0.44
DYCT		1234	1638	-9672.59680	0.013	0.735
				0.020	0.018	0.62
DZCT		1234	1638	-13590.76790	-0.019	-1.050
				0.020	0.018	0.88
GROUP: 033112B.ASC ,obs#: 597						
DXCT		1235	1638	-8094.37890	0.001	0.521
				0.008	0.003	0.17
DYCT		1235	1638	-1153.58220	-0.002	-0.739
				0.008	0.003	0.25
DZCT		1235	1638	-2549.05650	0.003	1.054
				0.008	0.003	0.36
GROUP: 033112B.ASC ,obs#: 598						
DXCT		1234	1639	135.10730	0.004	1.081
				0.007	0.004	0.59
DYCT		1234	1639	-4850.04920	0.003	0.617
				0.007	0.004	0.34
DZCT		1234	1639	-5877.08330	0.009	2.204
				0.007	0.004	1.21
GROUP: 033112B.ASC ,obs#: 599						
DXCT		1235	1639	5690.60840	-0.006	-1.081
				0.008	0.005	0.66
DYCT		1235	1639	3668.95570	-0.003	-0.617
				0.008	0.005	0.38
DZCT		1235	1639	5164.67100	-0.012	-2.204
				0.008	0.005	1.36
GROUP: 033112B.ASC ,obs#: 600						
DXCT		1234	P 215	-19081.32510	-0.002	-0.121
				0.022	0.019	0.10
DYCT		1234	P 215	-7373.55440	0.057	2.784
				0.022	0.020	2.41
DZCT		1234	P 215	-11522.35760	-0.055	-2.805
				0.022	0.020	2.36
GROUP: 033112B.ASC ,obs#: 601						
DXCT		1235	P 215	-13525.84310	0.007	1.080
				0.013	0.006	0.50
DYCT		1235	P 215	1145.46730	0.034	3.576
				0.013	0.009	2.50
DZCT		1235	P 215	-480.65510	-0.024	-2.861
				0.013	0.009	1.79
GROUP: 040112B.ASC ,obs#: 602						

Residuals (critical value = 4.385):

TYPE	AT	FROM	TO	OBSERVATION / STD DEV	RESIDUAL / STD DEV	STD RES / PPM
DXCT		KST5	1137	4491.35680	0.002	0.084
				0.028	0.023	0.06
DYCT		KST5	1137	-18868.99250	-0.012	-0.539
				0.028	0.023	0.41
DZCT		KST5	1137	-22623.28550	0.007	0.313
				0.028	0.023	0.24
GROUP: 040112B.ASC ,obs#: 603						
DXCT		KSU1	1137	53120.51020	-0.009	-0.157
				0.062	0.060	0.14
DYCT		KSU1	1137	-28193.84990	0.016	0.263
				0.062	0.060	0.24
DZCT		KSU1	1137	-27476.80950	-0.017	-0.286
				0.062	0.060	0.26
GROUP: 040112B.ASC ,obs#: 604						
DXCT		1238	1138	5624.00970	0.003	0.617
				0.009	0.005	0.32
DYCT		1238	1138	-5651.82440	0.006	1.065
				0.010	0.005	0.56
DZCT		1238	1138	-6236.49990	-0.002	-0.446
				0.010	0.005	0.24
GROUP: 040112B.ASC ,obs#: 605						
DXCT		1137	1138	-12732.75170	-0.005	-0.614
				0.012	0.009	0.41
DYCT		1137	1138	2356.40580	-0.009	-1.061
				0.012	0.009	0.71
DZCT		1137	1138	1331.22840	0.004	0.439
				0.012	0.009	0.30
GROUP: 040112B.ASC ,obs#: 606						
DXCT		1238	1139	-319.28960	0.000	0.206
				0.005	0.001	0.04
DYCT		1238	1139	-3058.71020	-0.000	-0.450
				0.005	0.001	0.10
DZCT		1238	1139	-3738.01100	0.001	0.890
				0.005	0.001	0.19
GROUP: 040112B.ASC ,obs#: 607						
DXCT		1137	1139	-18676.05590	-0.004	-0.209
				0.018	0.017	0.18
DYCT		1137	1139	4949.49710	0.007	0.440
				0.018	0.017	0.38
DZCT		1137	1139	3829.73940	-0.015	-0.885
				0.018	0.017	0.76
GROUP: 040112B.ASC ,obs#: 608						
DXCT		KST5	1238	-13865.41360	0.002	0.152
				0.022	0.015	0.10
DYCT		KST5	1238	-10860.78780	-0.002	-0.120
				0.022	0.015	0.08
DZCT		KST5	1238	-15055.54730	0.003	0.232
				0.022	0.015	0.15
GROUP: 040112B.ASC ,obs#: 609						
DXCT		KSU1	1238	34763.73950	-0.009	-0.223
				0.042	0.039	0.19
DYCT		KSU1	1238	-20185.64650	0.027	0.707

Residuals (critical value = 4.385):

TYPE	AT	FROM	TO	OBSERVATION / STD DEV	RESIDUAL / STD DEV	STD RES / PPM
				0.042	0.039	0.61
DZCT		KSU1	1238	-19909.07060	-0.021	-0.551
				0.042	0.039	0.48
GROUP: 040112B.ASC ,obs#: 610						
DXCT		1238	1437	10678.91210	-0.008	-0.631
				0.015	0.013	0.49
DYCT		1238	1437	-8235.69660	0.009	0.670
				0.015	0.013	0.53
DZCT		1238	1437	-8794.69060	0.004	0.313
				0.015	0.013	0.24
GROUP: 040112B.ASC ,obs#: 611						
DXCT		1137	1437	-7677.86770	0.002	0.630
				0.007	0.003	0.24
DYCT		1137	1437	-227.47090	-0.002	-0.667
				0.007	0.003	0.26
DZCT		1137	1437	-1226.95120	-0.001	-0.310
				0.007	0.003	0.12
GROUP: 040112B.ASC ,obs#: 612						
DXCT		1238	1438	12568.48990	0.006	0.802
				0.012	0.008	0.50
DYCT		1238	1438	-1294.53000	-0.003	-0.317
				0.012	0.008	0.20
DZCT		1238	1438	53.86570	-0.001	-0.174
				0.012	0.008	0.11
GROUP: 040112B.ASC ,obs#: 613						
DXCT		1137	1438	-5788.26830	-0.005	-0.802
				0.011	0.007	0.47
DYCT		1137	1438	6713.68050	0.002	0.316
				0.011	0.007	0.19
DZCT		1137	1438	7621.59770	0.001	0.173
				0.011	0.007	0.10
GROUP: 040112B.ASC ,obs#: 614						
DXCT		1238	1536	18833.16730	-0.002	-0.099
				0.020	0.019	0.09
DYCT		1238	1536	-7388.00900	0.008	0.399
				0.020	0.019	0.35
DZCT		1238	1536	-6769.62850	-0.009	-0.456
				0.020	0.019	0.40
GROUP: 040112B.ASC ,obs#: 615						
DXCT		1137	1536	476.39540	0.000	0.000*
				0.001	0.000	0.00
DYCT		1137	1536	620.21380	-0.000	0.000*
				0.001	0.000	0.04
DZCT		1137	1536	798.09740	0.000	0.000*
				0.001	0.000	0.04
GROUP: 040112B.ASC ,obs#: 616						
DXCT		1238	1537	6869.18170	-0.003	-1.078
				0.007	0.003	0.41
DYCT		1238	1537	-1739.11290	-0.004	-1.272
				0.007	0.003	0.49
DZCT		1238	1537	-1214.09120	0.001	0.400
				0.007	0.003	0.15

Residuals (critical value = 4.385):

TYPE	AT	FROM	TO	OBSERVATION / STD DEV	RESIDUAL / STD DEV	STD RES / PPM
GROUP: 040112B.ASC ,obs#: 617						
DXCT		1137	1537	-11487.60310	0.012	1.075
				0.014	0.011	0.81
DYCT		1137	1537	6269.08480	0.014	1.265
				0.014	0.011	0.96
DZCT		1137	1537	6353.64870	-0.004	-0.384
				0.014	0.011	0.29
GROUP: 040112B.ASC ,obs#: 618						
DXCT		1238	1640	18417.02740	0.005	0.246
				0.020	0.019	0.22
DYCT		1238	1640	-7837.98440	0.004	0.199
				0.020	0.019	0.18
DZCT		1238	1640	-7348.08270	-0.013	-0.680
				0.020	0.019	0.60
GROUP: 040112B.ASC ,obs#: 619						
DXCT		1137	1640	60.26200	-0.000	0.000*
				0.000	0.000	0.00
DYCT		1137	1640	170.23460	-0.000	0.000*
				0.001	0.000	0.05
DZCT		1137	1640	219.63900	0.000	0.000*
				0.001	0.000	0.05
GROUP: 040212B.ASC ,obs#: 620						
DXCT		KST5	1140	-12635.14610	-0.006	-0.517
				0.012	0.011	0.45
DYCT		KST5	1140	2915.24540	0.013	1.092
				0.012	0.011	0.95
DZCT		KST5	1140	1865.38580	-0.009	-0.770
				0.012	0.011	0.67
GROUP: 040212B.ASC ,obs#: 621						
DXCT		HBRK	1140	101758.10560	0.049	0.410
				0.119	0.119	0.38
DYCT		HBRK	1140	41310.57540	0.049	0.413
				0.119	0.119	0.38
DZCT		HBRK	1140	65928.81700	-0.034	-0.288
				0.119	0.119	0.27
GROUP: 040212B.ASC ,obs#: 622						
DXCT		1140	1141	5960.39170	-0.017	-2.830
				0.008	0.006	1.87
DYCT		1140	1141	-4671.45480	0.002	0.266
				0.009	0.006	0.18
DZCT		1140	1141	-4877.15810	0.003	0.578
				0.008	0.006	0.38
GROUP: 040212B.ASC ,obs#: 623						
DXCT		KST5	1141	-6674.78920	0.012	2.828
				0.007	0.004	1.59
DYCT		KST5	1141	-1756.19430	-0.001	-0.225
				0.007	0.004	0.13
DZCT		KST5	1141	-3011.77520	-0.002	-0.572
				0.007	0.004	0.33
GROUP: 040212B.ASC ,obs#: 624						
DXCT		KST5	1239	-5026.78940	-0.000	-0.141
				0.005	0.002	0.06

Residuals (critical value = 4.385):

TYPE	AT	FROM	TO	OBSERVATION / STD DEV	RESIDUAL / STD DEV	STD RES / PPM
DYCT		KST5	1239	-34.11670	-0.011	-4.178
				0.005	0.003	2.10
DZCT		KST5	1239	-715.49580	0.008	2.987
				0.005	0.003	1.48
GROUP: 040212B.ASC ,obs#: 625						
DXCT		1140	1239	7608.36220	0.000	0.019
				0.008	0.006	0.01
DYCT		1140	1239	-2949.40940	0.024	3.951
				0.008	0.006	2.82
DZCT		1140	1239	-2580.84920	-0.016	-2.628
				0.008	0.006	1.88
GROUP: 040212B.ASC ,obs#: 626						
DXCT		1140	1240	10428.38210	-0.003	-0.252
				0.015	0.013	0.20
DYCT		1140	1240	-8811.68240	-0.001	-0.067
				0.016	0.013	0.05
DZCT		1140	1240	-9369.00880	-0.037	-2.855
				0.016	0.013	2.24
GROUP: 040212B.ASC ,obs#: 627						
DXCT		KST5	1240	-2206.77430	0.001	0.245
				0.009	0.005	0.11
DYCT		KST5	1240	-5896.42540	0.000	0.008
				0.009	0.005	0.00
DZCT		KST5	1240	-7503.68240	0.013	2.852
				0.009	0.005	1.37
GROUP: 040212B.ASC ,obs#: 628						
DXCT		1140	1241	2273.17450	-0.000	-0.135
				0.007	0.003	0.05
DYCT		1140	1241	4189.89850	-0.004	-1.287
				0.007	0.003	0.52
DZCT		1140	1241	5496.17460	0.002	0.705
				0.007	0.003	0.29
GROUP: 040212B.ASC ,obs#: 629						
DXCT		KST5	1241	-10361.97960	0.002	0.143
				0.014	0.012	0.12
DYCT		KST5	1241	7105.13680	0.016	1.306
				0.014	0.012	1.09
DZCT		KST5	1241	7361.56280	-0.009	-0.741
				0.014	0.012	0.63
GROUP: 040212B.ASC ,obs#: 630						
DXCT		KST5	1439	1721.61460	-0.001	-1.252
				0.003	0.001	0.28
DYCT		KST5	1439	-1199.10770	0.001	0.987
				0.004	0.001	0.47
DZCT		KST5	1439	-1287.47270	-0.000	-0.713
				0.003	0.001	0.18
GROUP: 040212B.ASC ,obs#: 631						
DXCT		1140	1439	14356.74800	0.018	1.339
				0.014	0.013	1.18
DYCT		1140	1439	-4114.35130	-0.013	-0.990
				0.014	0.013	0.86
DZCT		1140	1439	-3152.85480	0.005	0.350

Residuals (critical value = 4.385):

TYPE	AT	FROM	TO	OBSERVATION / STD DEV	RESIDUAL / STD DEV	STD RES / PPM
				0.014	0.013	0.31
GROUP: 040212B.ASC ,obs#: 632						
DXCT		1140	1440	3943.23300	-0.002	-0.171
				0.013	0.009	0.11
DYCT		1140	1440	-8673.88110	-0.001	-0.133
				0.013	0.009	0.09
DZCT		1140	1440	-9928.40480	-0.003	-0.367
				0.013	0.009	0.24
GROUP: 040212B.ASC ,obs#: 633						
DXCT		KST5	1440	-8691.92200	0.001	0.172
				0.012	0.008	0.11
DYCT		KST5	1440	-5758.62550	0.001	0.129
				0.013	0.009	0.08
DZCT		KST5	1440	-8063.03420	0.003	0.366
				0.012	0.008	0.23
GROUP: 040212B.ASC ,obs#: 634						
DXCT		1140	1538	1808.86340	0.000	0.027
				0.002	0.000	0.00
DYCT		1140	1538	-177.90980	-0.000	-1.399
				0.002	0.000	0.25
DZCT		1140	1538	18.49290	0.001	1.852
				0.002	0.000	0.33
GROUP: 040212B.ASC ,obs#: 635						
DXCT		KST5	1538	-10826.28720	-0.001	-0.148
				0.011	0.010	0.13
DYCT		KST5	1538	2737.33580	0.012	1.207
				0.011	0.010	1.05
DZCT		KST5	1538	1883.88740	-0.017	-1.727
				0.011	0.010	1.49
GROUP: 040212B.ASC ,obs#: 636						
DXCT		KST5	1539	1359.27030	-0.001	-1.050
				0.004	0.001	0.30
DYCT		KST5	1539	2614.62080	0.001	0.922
				0.005	0.002	0.33
DZCT		KST5	1539	3314.46640	-0.003	-2.032
				0.004	0.001	0.63
GROUP: 040212B.ASC ,obs#: 637						
DXCT		1140	1539	13994.40890	0.012	1.015
				0.013	0.012	0.86
DYCT		1140	1539	-300.62640	-0.009	-0.770
				0.013	0.012	0.66
DZCT		1140	1539	1449.06300	0.024	1.968
				0.013	0.012	1.68
GROUP: 040212B.ASC ,obs#: 638						
DXCT		KST5	1641	3348.88530	-0.005	-1.308
				0.009	0.004	0.52
DYCT		KST5	1641	-5988.89460	-0.000	-0.056
				0.009	0.004	0.02
DZCT		KST5	1641	-6913.34940	0.003	0.781
				0.009	0.004	0.33
GROUP: 040212B.ASC ,obs#: 639						
DXCT		1140	1641	15984.01050	0.022	1.302

Residuals (critical value = 4.385):

TYPE	AT	FROM	TO	OBSERVATION / STD DEV	RESIDUAL / STD DEV	STD RES / PPM
				0.019	0.017	1.07
DYCT		1140	1641	-8904.15290	0.000	0.010
				0.019	0.017	0.01
DZCT		1140	1641	-8778.71030	-0.013	-0.772
				0.019	0.017	0.63
GROUP: 040312B.ASC ,obs#: 640						
DXCT		M 325	1142	11239.76080	-0.002	-0.342
				0.011	0.007	0.21
DYCT		M 325	1142	-791.82710	-0.013	-1.886
				0.011	0.007	1.17
DZCT		M 325	1142	464.42330	0.013	1.871
				0.011	0.007	1.15
GROUP: 040312B.ASC ,obs#: 641						
DXCT		1242	1142	-6112.41110	0.002	0.344
				0.010	0.007	0.21
DYCT		1242	1142	-5603.67810	0.013	1.889
				0.011	0.007	1.17
DZCT		1242	1142	-7592.76000	-0.013	-1.874
				0.011	0.007	1.15
GROUP: 040312B.ASC ,obs#: 642						
DXCT		KSU1	1242	77285.56670	-0.024	-0.330
				0.075	0.074	0.30
DYCT		KSU1	1242	7984.44000	0.065	0.881
				0.075	0.074	0.82
DZCT		KSU1	1242	19911.52970	-0.068	-0.913
				0.075	0.074	0.84
GROUP: 040312B.ASC ,obs#: 643						
DXCT		MOPL	1242	-81570.85580	-0.003	-0.038
				0.076	0.075	0.03
DYCT		MOPL	1242	3718.59040	0.022	0.286
				0.076	0.076	0.26
DZCT		MOPL	1242	-4412.61530	-0.038	-0.503
				0.076	0.076	0.47
GROUP: 040312B.ASC ,obs#: 644						
DXCT		KST5	1242	28656.41020	-0.010	-0.270
				0.039	0.037	0.24
DYCT		KST5	1242	17309.30560	0.029	0.770
				0.039	0.038	0.70
DZCT		KST5	1242	24765.04750	-0.037	-0.987
				0.039	0.038	0.90
GROUP: 040312B.ASC ,obs#: 645						
DXCT		M 325	1243	6892.13150	-0.005	-0.930
				0.009	0.005	0.52
DYCT		M 325	1243	3887.56610	0.000	0.028
				0.009	0.006	0.02
DZCT		M 325	1243	5624.21520	-0.003	-0.537
				0.009	0.006	0.31
GROUP: 040312B.ASC ,obs#: 646						
DXCT		1242	1243	-10460.04700	0.006	0.930
				0.010	0.007	0.58
DYCT		1242	1243	-924.25820	-0.000	-0.027
				0.010	0.007	0.02

Residuals (critical value = 4.385):

TYPE	AT	FROM	TO	OBSERVATION / STD DEV	RESIDUAL / STD DEV	STD RES / PPM
DZCT		1242	1243	-2433.00070	0.004	0.537
				0.010	0.007	0.34
GROUP: 040312B.ASC ,obs#: 647						
DXCT		M 325	1441	23594.71410	-0.010	-0.494
				0.023	0.021	0.43
DYCT		M 325	1441	2150.43480	-0.021	-0.972
				0.023	0.022	0.86
DZCT		M 325	1441	5571.60400	0.026	1.207
				0.023	0.021	1.05
GROUP: 040312B.ASC ,obs#: 648						
DXCT		1242	1441	6242.53550	0.001	0.505
				0.007	0.002	0.13
DYCT		1242	1441	-2661.41260	0.002	0.974
				0.007	0.002	0.25
DZCT		1242	1441	-2485.57730	-0.002	-1.206
				0.007	0.002	0.31
GROUP: 040312B.ASC ,obs#: 649						
DXCT		M 325	1442	25442.45990	0.002	0.091
				0.024	0.021	0.07
DYCT		M 325	1442	-1582.94420	-0.010	-0.498
				0.024	0.021	0.41
DZCT		M 325	1442	1195.03300	-0.002	-0.114
				0.024	0.021	0.09
GROUP: 040312B.ASC ,obs#: 650						
DXCT		1242	1442	8090.29500	-0.000	-0.091
				0.012	0.005	0.04
DYCT		1242	1442	-6394.78180	0.002	0.498
				0.012	0.005	0.20
DZCT		1242	1442	-6862.17920	0.001	0.115
				0.012	0.005	0.05
GROUP: 040312B.ASC ,obs#: 651						
DXCT		M 325	1540	18940.59920	0.002	0.141
				0.018	0.015	0.11
DYCT		M 325	1540	-1157.54800	0.004	0.236
				0.018	0.016	0.19
DZCT		M 325	1540	984.30440	-0.014	-0.873
				0.018	0.015	0.71
GROUP: 040312B.ASC ,obs#: 652						
DXCT		1242	1540	1588.43460	-0.001	-0.140
				0.009	0.004	0.06
DYCT		1242	1540	-5969.36810	-0.001	-0.229
				0.009	0.004	0.09
DZCT		1242	1540	-7072.92160	0.003	0.871
				0.009	0.004	0.35
GROUP: 040312B.ASC ,obs#: 653						
DXCT		M 325	1541	-3691.30600	0.000	0.422
				0.003	0.001	0.06
DYCT		M 325	1541	498.96170	-0.000	-0.587
				0.004	0.001	0.09
DZCT		M 325	1541	91.98500	0.001	1.327
				0.004	0.001	0.20
GROUP: 040312B.ASC ,obs#: 654						

Residuals (critical value = 4.385):

TYPE	AT	FROM	TO	OBSERVATION STD DEV	RESIDUAL STD DEV	STD RES PPM
DXCT		1242	1541	-21043.46430	-0.009	-0.431
				0.021	0.020	0.38
DYCT		1242	1541	-4312.87500	0.012	0.571
				0.021	0.021	0.51
DZCT		1242	1541	-7965.19650	-0.027	-1.321
				0.021	0.020	1.18
GROUP: 040312B.ASC ,obs#: 655						
DXCT		M 325	1642	18184.88540	0.004	0.255
				0.017	0.014	0.20
DYCT		M 325	1642	-1339.39390	-0.020	-1.376
				0.017	0.015	1.10
DZCT		M 325	1642	676.64520	-0.003	-0.235
				0.017	0.014	0.19
GROUP: 040312B.ASC ,obs#: 656						
DXCT		1242	1642	832.72280	-0.001	-0.254
				0.009	0.004	0.11
DYCT		1242	1642	-6151.24420	0.006	1.376
				0.009	0.004	0.58
DZCT		1242	1642	-7380.56840	0.001	0.239
				0.009	0.004	0.10
GROUP: 040312B.ASC ,obs#: 657						
DXCT		M 325	1643	10408.20760	-0.003	-0.271
				0.013	0.010	0.20
DYCT		M 325	1643	4990.04650	-0.029	-2.742
				0.013	0.011	2.12
DZCT		M 325	1643	7431.76820	0.025	2.375
				0.013	0.011	1.82
GROUP: 040312B.ASC ,obs#: 658						
DXCT		1242	1643	-6943.96330	0.001	0.308
				0.007	0.003	0.12
DYCT		1242	1643	178.18350	0.009	2.898
				0.007	0.003	1.32
DZCT		1242	1643	-625.40830	-0.008	-2.568
				0.007	0.003	1.11
GROUP: 040312B.ASC ,obs#: 659						
DXCT		KSU1	M 325	59933.39500	-0.020	-0.357
				0.057	0.056	0.33
DYCT		KSU1	M 325	3172.60400	0.077	1.359
				0.057	0.057	1.26
DZCT		KSU1	M 325	11854.34650	-0.094	-1.666
				0.057	0.056	1.53
GROUP: 040312B.ASC ,obs#: 660						
DXCT		MOPL	M 325	-98923.02630	0.000	0.004
				0.093	0.092	0.00
DYCT		MOPL	M 325	-1093.24630	0.034	0.364
				0.093	0.093	0.34
DZCT		MOPL	M 325	-12469.79770	-0.065	-0.702
				0.093	0.092	0.65
GROUP: 040312B.ASC ,obs#: 661						
DXCT		KST5	M 325	11304.24040	-0.008	-0.396
				0.022	0.019	0.32
DYCT		KST5	M 325	12497.46990	0.040	1.932

Residuals (critical value = 4.385):

TYPE	AT	FROM	TO	OBSERVATION / STD DEV	RESIDUAL / STD DEV	STD RES / PPM
				0.022	0.021	1.70
DZCT		KST5	M 325	16707.86380	-0.063	-3.100
				0.022	0.020	2.65
GROUP: 040412B.ASC ,obs#: 662						
DXCT		1242	1143	7217.53450	0.011	0.643
				0.019	0.017	0.54
DYCT		1242	1143	11634.50720	0.006	0.376
				0.019	0.017	0.32
DZCT		1242	1143	14919.62570	-0.005	-0.284
				0.019	0.017	0.24
GROUP: 040412B.ASC ,obs#: 663						
DXCT		SKIRT RM 2	1143	7542.27780	-0.002	-0.644
				0.007	0.002	0.20
DYCT		SKIRT RM 2	1143	-1186.36590	-0.001	-0.378
				0.007	0.002	0.12
DZCT		SKIRT RM 2	1143	-540.76500	0.001	0.286
				0.007	0.002	0.09
GROUP: 040412B.ASC ,obs#: 664						
DXCT		1242	1144	-4536.94910	-0.001	-0.101
				0.015	0.012	0.08
DYCT		1242	1144	9758.02800	-0.007	-0.570
				0.015	0.013	0.47
DZCT		1242	1144	11253.43870	-0.013	-1.046
				0.015	0.013	0.85
GROUP: 040412B.ASC ,obs#: 665						
DXCT		SKIRT RM 2	1144	-4212.21970	0.000	0.101
				0.006	0.002	0.03
DYCT		SKIRT RM 2	1144	-3062.86110	0.001	0.570
				0.006	0.002	0.20
DZCT		SKIRT RM 2	1144	-4206.96220	0.002	1.046
				0.006	0.002	0.37
GROUP: 040412B.ASC ,obs#: 666						
DXCT		MOPL	1242	-81570.86120	0.003	0.034
				0.076	0.075	0.03
DYCT		MOPL	1242	3718.58120	0.031	0.407
				0.076	0.076	0.38
DZCT		MOPL	1242	-4412.60640	-0.047	-0.621
				0.076	0.076	0.57
GROUP: 040412B.ASC ,obs#: 667						
DXCT		KST5	1242	28656.41100	-0.011	-0.291
				0.039	0.037	0.26
DYCT		KST5	1242	17309.34610	-0.011	-0.295
				0.039	0.038	0.27
DZCT		KST5	1242	24765.01290	-0.003	-0.072
				0.039	0.038	0.07
GROUP: 040412B.ASC ,obs#: 668						
DXCT		1242	1244	-6540.03550	0.001	0.150
				0.010	0.006	0.08
DYCT		1242	1244	5823.72640	-0.012	-1.929
				0.010	0.006	1.09
DZCT		1242	1244	6288.15870	0.017	2.784
				0.010	0.006	1.56

Residuals (critical value = 4.385):

TYPE	AT	FROM	TO	OBSERVATION / STD DEV	RESIDUAL / STD DEV	STD RES / PPM
GROUP: 040412B.ASC ,obs#: 669						
DXCT		SKIRT RM 2	1244	-6215.30240	-0.001	-0.152
				0.012	0.009	0.10
DYCT		SKIRT RM 2	1244	-6997.18300	0.017	1.925
				0.012	0.009	1.31
DZCT		SKIRT RM 2	1244	-9172.18490	-0.025	-2.782
				0.012	0.009	1.89
GROUP: 040412B.ASC ,obs#: 670						
DXCT		1242	1443	2908.44600	-0.002	-0.516
				0.007	0.003	0.22
DYCT		1242	1443	4378.58440	-0.004	-1.106
				0.007	0.003	0.49
DZCT		1242	1443	5652.37530	0.004	1.210
				0.007	0.003	0.53
GROUP: 040412B.ASC ,obs#: 671						
DXCT		SKIRT RM 2	1443	3233.17010	0.005	0.516
				0.012	0.010	0.38
DYCT		SKIRT RM 2	1443	-8442.31100	0.011	1.102
				0.012	0.010	0.83
DZCT		SKIRT RM 2	1443	-9807.99370	-0.012	-1.207
				0.012	0.010	0.91
GROUP: 040412B.ASC ,obs#: 672						
DXCT		1242	1542	9164.85010	-0.002	-0.355
				0.010	0.005	0.17
DYCT		1242	1542	3248.30850	-0.015	-3.280
				0.010	0.005	1.40
DZCT		1242	1542	4974.43090	0.010	1.888
				0.010	0.005	0.90
GROUP: 040412B.ASC ,obs#: 673						
DXCT		SKIRT RM 2	1542	9489.57640	0.003	0.211
				0.016	0.013	0.16
DYCT		SKIRT RM 2	1542	-9572.64360	0.056	3.400
				0.019	0.017	3.30
DZCT		SKIRT RM 2	1542	-10485.91590	-0.029	-2.137
				0.016	0.013	1.67
GROUP: 040412B.ASC ,obs#: 674						
DXCT		1242	1543	-9954.51260	-0.013	-0.679
				0.021	0.019	0.56
DYCT		1242	1543	13414.92320	0.016	0.826
				0.021	0.019	0.70
DZCT		1242	1543	14976.60010	0.004	0.218
				0.021	0.019	0.18
GROUP: 040412B.ASC ,obs#: 675						
DXCT		SKIRT RM 2	1543	-9629.79670	0.002	0.679
				0.009	0.003	0.24
DYCT		SKIRT RM 2	1543	594.06130	-0.003	-0.826
				0.009	0.004	0.30
DZCT		SKIRT RM 2	1543	-483.78020	-0.001	-0.218
				0.009	0.003	0.08
GROUP: 040412B.ASC ,obs#: 676						
DXCT		1242	1544	-671.82850	-0.012	-0.993
				0.014	0.012	0.79

Residuals (critical value = 4.385):

TYPE	AT	FROM	TO	OBSERVATION / STD DEV	RESIDUAL / STD DEV	STD RES / PPM
DYCT		1242	1544	9355.09420	-0.018	-1.522
				0.014	0.012	1.24
DZCT		1242	1544	11203.54390	-0.013	-1.112
				0.014	0.012	0.90
GROUP: 040412B.ASC ,obs#: 677						
DXCT		SKIRT RM 2	1544	-347.11090	0.002	1.004
				0.005	0.002	0.31
DYCT		SKIRT RM 2	1544	-3465.80720	0.003	1.482
				0.005	0.002	0.50
DZCT		SKIRT RM 2	1544	-4256.85630	0.002	1.048
				0.005	0.002	0.34
GROUP: 040412B.ASC ,obs#: 678						
DXCT		1242	1644	11375.51270	0.003	0.266
				0.017	0.013	0.19
DYCT		1242	1644	8151.24610	0.004	0.294
				0.017	0.013	0.22
DZCT		1242	1644	11178.64930	0.007	0.557
				0.017	0.013	0.41
GROUP: 040412B.ASC ,obs#: 679						
DXCT		SKIRT RM 2	1644	11700.24890	-0.002	-0.267
				0.012	0.007	0.14
DYCT		SKIRT RM 2	1644	-4669.62840	-0.002	-0.297
				0.012	0.007	0.16
DZCT		SKIRT RM 2	1644	-4281.72460	-0.004	-0.559
				0.012	0.007	0.30
GROUP: 040412B.ASC ,obs#: 680						
DXCT		MOPL	SKIRT RM 2	-81895.60140	0.012	0.153
				0.078	0.078	0.14
DYCT		MOPL	SKIRT RM 2	16539.46920	0.023	0.299
				0.078	0.078	0.28
DZCT		MOPL	SKIRT RM 2	11047.75380	-0.022	-0.282
				0.078	0.078	0.26
GROUP: 040412B.ASC ,obs#: 681						
DXCT		KST5	SKIRT RM 2	28331.65420	0.015	0.286
				0.054	0.053	0.26
DYCT		KST5	SKIRT RM 2	30130.22060	-0.005	-0.098
				0.054	0.053	0.09
DZCT		KST5	SKIRT RM 2	40225.38520	0.010	0.191
				0.054	0.053	0.18
GROUP: 040512B.ASC ,obs#: 682						
DXCT		SKIRT RM 2	1145	1682.99890	-0.001	-0.423
				0.006	0.002	0.10
DYCT		SKIRT RM 2	1145	3643.14080	0.001	0.885
				0.006	0.002	0.22
DZCT		SKIRT RM 2	1145	4580.30910	-0.001	-0.401
				0.006	0.002	0.10
GROUP: 040512B.ASC ,obs#: 683						
DXCT		1232	1145	19851.95410	0.007	0.423
				0.019	0.017	0.35
DYCT		1232	1145	1572.60910	-0.015	-0.884
				0.019	0.017	0.75
DZCT		1232	1145	4282.44700	0.007	0.400

Residuals (critical value = 4.385):

TYPE	AT	FROM	TO	OBSERVATION / STD DEV	RESIDUAL / STD DEV	STD RES / PPM
				0.019	0.017	0.34
GROUP: 040512B.ASC ,obs#: 684						
DXCT		MOPL	1232	-100064.53440	-0.018	-0.191
				0.095	0.095	0.18
DYCT		MOPL	1232	18610.01250	0.028	0.298
				0.095	0.095	0.28
DZCT		MOPL	1232	11345.60440	-0.018	-0.189
				0.095	0.095	0.18
GROUP: 040512B.ASC ,obs#: 685						
DXCT		KST5	1232	10162.72120	-0.015	-0.310
				0.049	0.048	0.28
DYCT		KST5	1232	32200.76370	-0.000	-0.001
				0.049	0.048	0.00
DZCT		KST5	1232	40523.24310	0.007	0.142
				0.049	0.048	0.13
GROUP: 040512B.ASC ,obs#: 686						
DXCT		SKIRT RM 2	1245	-13413.11180	-0.004	-0.395
				0.013	0.010	0.29
DYCT		SKIRT RM 2	1245	1159.90650	-0.000	-0.011
				0.013	0.010	0.01
DZCT		SKIRT RM 2	1245	-202.60420	-0.002	-0.154
				0.013	0.010	0.12
GROUP: 040512B.ASC ,obs#: 687						
DXCT		1232	1245	4755.84680	0.001	0.395
				0.005	0.001	0.10
DYCT		1232	1245	-910.64190	0.000	0.010
				0.005	0.001	0.00
DZCT		1232	1245	-500.46060	0.000	0.154
				0.005	0.001	0.04
GROUP: 040512B.ASC ,obs#: 688						
DXCT		SKIRT RM 2	1444	-4129.38520	0.000	0.088
				0.004	0.001	0.02
DYCT		SKIRT RM 2	1444	11.75960	-0.002	-1.519
				0.004	0.001	0.38
DZCT		SKIRT RM 2	1444	-502.96980	0.001	0.673
				0.004	0.001	0.16
GROUP: 040512B.ASC ,obs#: 689						
DXCT		1232	1444	14039.57910	-0.001	-0.116
				0.013	0.011	0.09
DYCT		1232	1444	-2058.80720	0.017	1.520
				0.013	0.011	1.19
DZCT		1232	1444	-800.81640	-0.007	-0.669
				0.013	0.011	0.52
GROUP: 040512B.ASC ,obs#: 690						
DXCT		SKIRT RM 2	1645	3508.99790	-0.002	-0.531
				0.009	0.003	0.18
DYCT		SKIRT RM 2	1645	5511.50420	-0.001	-0.392
				0.009	0.003	0.14
DZCT		SKIRT RM 2	1645	7061.03660	-0.004	-1.211
				0.009	0.003	0.42
GROUP: 040512B.ASC ,obs#: 691						
DXCT		1232	1645	21677.94920	0.010	0.531

Residuals (critical value = 4.385):

TYPE	AT	FROM	TO	OBSERVATION / STD DEV	RESIDUAL / STD DEV	STD RES / PPM
				0.021	0.019	0.43
DYCT		1232	1645	3440.94720	0.007	0.392
				0.021	0.019	0.32
DZCT		1232	1645	6763.15510	0.023	1.210
				0.021	0.019	1.00
GROUP: 040512B.ASC ,obs#: 692						
DXCT		MOPL	SKIRT RM 2	-81895.58460	-0.005	-0.063
				0.078	0.078	0.06
DYCT		MOPL	SKIRT RM 2	16539.47280	0.020	0.252
				0.078	0.078	0.23
DZCT		MOPL	SKIRT RM 2	11047.73650	-0.005	-0.061
				0.078	0.078	0.06
GROUP: 040512B.ASC ,obs#: 693						
DXCT		KST5	SKIRT RM 2	28331.67440	-0.005	-0.097
				0.054	0.053	0.09
DYCT		KST5	SKIRT RM 2	30130.21710	-0.002	-0.032
				0.054	0.053	0.03
DZCT		KST5	SKIRT RM 2	40225.37850	0.017	0.317
				0.054	0.053	0.29
GROUP: 041812B.ASC ,obs#: 694						
DXCT		MOID	1003	-42654.30480	0.010	0.251
				0.040	0.039	0.23
DYCT		MOID	1003	1506.42740	-0.018	-0.456
				0.040	0.039	0.42
DZCT		MOID	1003	-2389.88740	-0.001	-0.020
				0.040	0.039	0.02
GROUP: 041812B.ASC ,obs#: 695						
DXCT		MOPL	1003	-10146.99570	0.004	0.117
				0.031	0.030	0.11
DYCT		MOPL	1003	-19677.29920	-0.020	-0.657
				0.031	0.031	0.60
DZCT		MOPL	1003	-24955.05380	0.000	0.007
				0.031	0.031	0.01
GROUP: 041812B.ASC ,obs#: 696						
DXCT		MOID	1004	-43805.57040	0.006	0.142
				0.042	0.041	0.13
DYCT		MOID	1004	8152.46450	-0.014	-0.337
				0.042	0.042	0.31
DZCT		MOID	1004	5617.70120	0.006	0.141
				0.042	0.041	0.13
GROUP: 041812B.ASC ,obs#: 697						
DXCT		MOPL	1004	-11298.26220	0.000	0.021
				0.023	0.022	0.02
DYCT		MOPL	1004	-13031.26130	-0.017	-0.770
				0.023	0.022	0.70
DZCT		MOPL	1004	-16947.46590	0.008	0.344
				0.023	0.022	0.31
GROUP: 041812B.ASC ,obs#: 698						
DXCT		1003	1146	-1940.75630	-0.007	-0.797
				0.010	0.009	0.71
DYCT		1003	1146	6527.24480	-0.014	-1.534
				0.010	0.009	1.36

Residuals (critical value = 4.385):

TYPE	AT	FROM	TO	OBSERVATION / STD DEV	RESIDUAL / STD DEV	STD RES / PPM
DZCT		1003	1146	7783.26810	0.002	0.242
				0.010	0.009	0.21
GROUP: 041812B.ASC ,obs#: 699						
DXCT		1004	1146	-789.49410	0.000	0.000*
				0.001	0.000	0.07
DYCT		1004	1146	-118.81060	0.000	1.542
				0.001	0.000	0.23
DZCT		1004	1146	-224.32480	-0.000	-0.735
				0.001	0.000	0.10
GROUP: 041812B.ASC ,obs#: 700						
DXCT		1003	1147	10403.51210	-0.002	-0.336
				0.010	0.005	0.17
DYCT		1003	1147	-759.34190	-0.003	-0.535
				0.010	0.005	0.27
DZCT		1003	1147	93.65420	0.006	1.215
				0.010	0.005	0.61
GROUP: 041812B.ASC ,obs#: 701						
DXCT		1004	1147	11554.77580	0.004	0.336
				0.015	0.012	0.26
DYCT		1004	1147	-7405.39260	0.007	0.546
				0.015	0.012	0.43
DZCT		1004	1147	-7913.91960	-0.015	-1.219
				0.015	0.012	0.95
GROUP: 041812B.ASC ,obs#: 702						
DXCT		1003	1246	5943.18270	0.005	1.104
				0.007	0.005	0.65
DYCT		1003	1246	2819.84440	-0.003	-0.621
				0.007	0.005	0.37
DZCT		1003	1246	4064.02920	-0.005	-0.988
				0.007	0.005	0.58
GROUP: 041812B.ASC ,obs#: 703						
DXCT		1004	1246	7094.46410	-0.007	-1.104
				0.008	0.006	0.76
DYCT		1004	1246	-3826.20340	0.004	0.623
				0.008	0.006	0.43
DZCT		1004	1246	-3943.57660	0.006	0.989
				0.008	0.006	0.68
GROUP: 041812B.ASC ,obs#: 704						
DXCT		1003	1247	-222.20710	-0.000	0.000*
				0.001	0.000	0.01
DYCT		1003	1247	503.46400	0.000	1.151
				0.001	0.000	0.17
DZCT		1003	1247	581.11750	-0.000	0.000*
				0.001	0.000	0.33
GROUP: 041812B.ASC ,obs#: 705						
DXCT		1004	1247	929.06130	0.001	0.137
				0.009	0.009	0.12
DYCT		1004	1247	-6142.57280	-0.004	-0.486
				0.009	0.009	0.43
DZCT		1004	1247	-7426.50080	0.023	2.668
				0.009	0.009	2.36
GROUP: 041812B.ASC ,obs#: 706						

Residuals (critical value = 4.385):

TYPE	AT	FROM	TO	OBSERVATION STD DEV	RESIDUAL STD DEV	STD RES PPM
DXCT		1003	1445	1362.96740	-0.003	-0.351
				0.008	0.007	0.29
DYCT		1003	1445	5424.81320	0.004	0.524
				0.008	0.007	0.44
DZCT		1003	1445	6723.57760	-0.011	-1.551
				0.008	0.007	1.31
GROUP: 041812B.ASC ,obs#: 707						
DXCT		1004	1445	2514.23410	0.000	0.357
				0.003	0.001	0.11
DYCT		1004	1445	-1221.22350	-0.001	-0.590
				0.003	0.001	0.19
DZCT		1004	1445	-1284.03070	0.002	1.569
				0.003	0.001	0.55
GROUP: 041812B.ASC ,obs#: 708						
DXCT		1003	1446	7510.79460	0.010	1.022
				0.012	0.009	0.77
DYCT		1003	1446	6020.25120	-0.012	-1.247
				0.012	0.009	0.94
DZCT		1003	1446	8028.44680	0.027	2.847
				0.012	0.010	2.17
GROUP: 041812B.ASC ,obs#: 709						
DXCT		1004	1446	8662.07860	-0.005	-1.043
				0.008	0.005	0.55
DYCT		1004	1446	-625.80740	0.006	1.237
				0.008	0.005	0.65
DZCT		1004	1446	20.89210	-0.013	-2.852
				0.008	0.005	1.53
GROUP: 041812B.ASC ,obs#: 710						
DXCT		1003	1447	-1457.74380	-0.000	-0.035
				0.004	0.002	0.02
DYCT		1003	1447	2569.23900	0.002	0.721
				0.004	0.002	0.41
DZCT		1003	1447	2966.79900	-0.007	-2.524
				0.005	0.003	1.56
GROUP: 041812B.ASC ,obs#: 711						
DXCT		1004	1447	-306.47480	0.001	0.109
				0.006	0.005	0.08
DYCT		1004	1447	-4076.79860	-0.002	-0.367
				0.006	0.005	0.28
DZCT		1004	1447	-5040.81530	0.013	2.529
				0.007	0.005	1.94
GROUP: 041812B.ASC ,obs#: 712						
DXCT		1003	1545	11399.12130	0.001	0.095
				0.012	0.008	0.06
DYCT		1003	1545	2561.54950	-0.004	-0.566
				0.012	0.008	0.35
DZCT		1003	1545	4320.77660	0.001	0.081
				0.012	0.008	0.05
GROUP: 041812B.ASC ,obs#: 713						
DXCT		1004	1545	12550.39250	-0.001	-0.095
				0.013	0.009	0.06
DYCT		1004	1545	-4084.50130	0.005	0.566

Residuals (critical value = 4.385):

TYPE	AT	FROM	TO	OBSERVATION / STD DEV	RESIDUAL / STD DEV	STD RES / PPM
				0.013	0.009	0.39
DZCT		1004	1545	-3686.81720	-0.001	-0.082
				0.013	0.009	0.06
GROUP: 041812B.ASC ,obs#: 714						
DXCT		1003	1546	19057.62250	0.000	0.031
				0.018	0.012	0.02
DYCT		1003	1546	872.23070	0.002	0.204
				0.018	0.012	0.13
DZCT		1003	1546	2965.89200	0.000	0.041
				0.018	0.012	0.03
GROUP: 041812B.ASC ,obs#: 715						
DXCT		1004	1546	20208.89290	-0.000	-0.030
				0.020	0.015	0.02
DYCT		1004	1546	-5773.80490	-0.003	-0.204
				0.020	0.015	0.14
DZCT		1004	1546	-5041.70210	-0.001	-0.041
				0.020	0.015	0.03
GROUP: 041912B.ASC ,obs#: 716						
DXCT		MOID	1004	-43805.57160	0.007	0.171
				0.042	0.041	0.16
DYCT		MOID	1004	8152.43590	0.015	0.352
				0.042	0.042	0.33
DZCT		MOID	1004	5617.71590	-0.009	-0.214
				0.042	0.041	0.20
GROUP: 041912B.ASC ,obs#: 717						
DXCT		MOPL	1004	-11298.26110	-0.001	-0.030
				0.023	0.022	0.03
DYCT		MOPL	1004	-13031.26800	-0.010	-0.464
				0.023	0.022	0.42
DZCT		MOPL	1004	-16947.46790	0.010	0.436
				0.023	0.022	0.39
GROUP: 041912B.ASC ,obs#: 718						
DXCT		MOID	1005	-41338.39670	0.010	0.193
				0.050	0.050	0.18
DYCT		MOID	1005	24066.69800	0.031	0.619
				0.050	0.050	0.57
DZCT		MOID	1005	25214.95080	-0.016	-0.325
				0.050	0.050	0.30
GROUP: 041912B.ASC ,obs#: 719						
DXCT		MOPL	1005	-8831.07890	-0.005	-0.834
				0.009	0.006	0.56
DYCT		MOPL	1005	2883.02260	-0.022	-3.086
				0.009	0.007	2.31
DZCT		MOPL	1005	2649.74500	0.024	3.453
				0.009	0.007	2.50
GROUP: 041912B.ASC ,obs#: 720						
DXCT		1004	1148	3887.74120	-0.003	-0.169
				0.019	0.018	0.15
DYCT		1004	1148	12476.59700	0.043	2.404
				0.019	0.018	2.11
DZCT		1004	1148	15499.11250	-0.017	-0.953
				0.019	0.018	0.84

Residuals (critical value = 4.385):

TYPE	AT	FROM	TO	OBSERVATION / STD DEV	RESIDUAL / STD DEV	STD RES / PPM
GROUP: 041912B.ASC ,obs#: 721						
DXCT		1005	1148	1420.56050	0.000	0.178
				0.005	0.001	0.04
DYCT		1005	1148	-3437.63530	-0.003	-2.414
				0.005	0.001	0.59
DZCT		1005	1148	-4098.13330	0.001	0.977
				0.005	0.001	0.24
GROUP: 041912B.ASC ,obs#: 722						
DXCT		1004	1149	2108.93890	0.001	0.399
				0.007	0.003	0.15
DYCT		1004	1149	4777.41700	0.003	1.026
				0.007	0.003	0.39
DZCT		1004	1149	5963.39430	-0.002	-0.767
				0.007	0.003	0.29
GROUP: 041912B.ASC ,obs#: 723						
DXCT		1005	1149	-358.23160	-0.006	-0.399
				0.016	0.015	0.33
DYCT		1005	1149	-11136.84340	-0.015	-1.024
				0.017	0.015	0.85
DZCT		1005	1149	-13633.84670	0.011	0.765
				0.017	0.015	0.64
GROUP: 041912B.ASC ,obs#: 724						
DXCT		1004	1248	6282.48070	0.011	1.646
				0.011	0.006	0.90
DYCT		1004	1248	6123.15140	0.002	0.310
				0.011	0.007	0.17
DZCT		1004	1248	8015.41510	-0.003	-0.429
				0.011	0.007	0.23
GROUP: 041912B.ASC ,obs#: 725						
DXCT		1005	1248	3815.33260	-0.019	-1.647
				0.015	0.011	1.19
DYCT		1005	1248	-9791.12130	-0.004	-0.319
				0.015	0.012	0.24
DZCT		1005	1248	-11581.82010	0.005	0.429
				0.015	0.011	0.31
GROUP: 041912B.ASC ,obs#: 726						
DXCT		1004	1249	-3593.93820	-0.004	-0.196
				0.020	0.018	0.17
DYCT		1004	1249	13642.68090	0.029	1.586
				0.020	0.019	1.37
DZCT		1004	1249	16167.52570	-0.036	-1.957
				0.020	0.019	1.69
GROUP: 041912B.ASC ,obs#: 727						
DXCT		1005	1249	-6061.11970	0.000	0.190
				0.007	0.002	0.06
DYCT		1005	1249	-2271.56460	-0.004	-1.604
				0.007	0.002	0.48
DZCT		1005	1249	-3429.74250	0.004	1.971
				0.007	0.002	0.59
GROUP: 041912B.ASC ,obs#: 728						
DXCT		1004	1448	3596.12180	0.004	0.193
				0.021	0.021	0.17

Residuals (critical value = 4.385):

TYPE	AT	FROM	TO	OBSERVATION / STD DEV	RESIDUAL / STD DEV	STD RES / PPM
DYCT		1004	1448	14203.53920	0.030	1.430
				0.022	0.021	1.30
DZCT		1004	1448	17657.77140	-0.024	-1.162
				0.021	0.021	1.06
GROUP: 041912B.ASC ,obs#: 729						
DXCT		1005	1448	1128.94840	-0.000	-0.197
				0.003	0.000	0.02
DYCT		1005	1448	-1710.70880	-0.001	-1.527
				0.003	0.000	0.21
DZCT		1005	1448	-1939.48080	0.000	1.294
				0.003	0.000	0.16
GROUP: 041912B.ASC ,obs#: 730						
DXCT		1004	1449	3799.06900	-0.018	-1.478
				0.015	0.012	1.13
DYCT		1004	1449	9460.50930	-0.033	-2.666
				0.015	0.012	2.09
DZCT		1004	1449	11820.07300	0.014	1.136
				0.015	0.012	0.87
GROUP: 041912B.ASC ,obs#: 731						
DXCT		1005	1449	1331.86670	0.007	1.425
				0.010	0.005	0.70
DYCT		1005	1449	-6453.81490	0.013	2.623
				0.010	0.005	1.29
DZCT		1005	1449	-7777.13550	-0.005	-1.067
				0.010	0.005	0.53
GROUP: 041912B.ASC ,obs#: 732						
DXCT		1004	1547	1171.40170	-0.000	-0.015
				0.023	0.023	0.01
DYCT		1004	1547	15663.68730	0.049	2.171
				0.023	0.023	1.99
DZCT		1004	1547	19086.80560	-0.030	-1.323
				0.023	0.023	1.21
GROUP: 041912B.ASC ,obs#: 733						
DXCT		1005	1547	-1295.77610	-0.000	0.000*
				0.001	0.000	0.01
DYCT		1005	1547	-250.54180	-0.000	0.000*
				0.001	0.000	0.15
DZCT		1005	1547	-510.45200	0.000	0.000*
				0.001	0.000	0.10
GROUP: 041912B.ASC ,obs#: 734						
DXCT		1004	1548	-502.41660	-0.003	-0.270
				0.015	0.012	0.21
DYCT		1004	1548	10062.18930	0.003	0.251
				0.015	0.012	0.19
DZCT		1004	1548	12145.93680	-0.016	-1.300
				0.015	0.012	1.00
GROUP: 041912B.ASC ,obs#: 735						
DXCT		1005	1548	-2969.59860	0.001	0.270
				0.009	0.005	0.13
DYCT		1005	1548	-5852.08490	-0.001	-0.250
				0.009	0.005	0.12
DZCT		1005	1548	-7451.31270	0.006	1.300

Residuals (critical value = 4.385):

TYPE	AT	FROM	TO	OBSERVATION / STD DEV	RESIDUAL / STD DEV	STD RES / PPM
				0.009	0.005	0.63
GROUP: 041912B.ASC ,obs#: 736						
DXCT		1004	1549	69.93810	-0.003	-0.486
				0.010	0.006	0.27
DYCT		1004	1549	7123.33710	-0.012	-1.872
				0.011	0.006	1.06
DZCT		1004	1549	8616.56830	0.008	1.264
				0.010	0.006	0.71
GROUP: 041912B.ASC ,obs#: 737						
DXCT		1005	1549	-2397.24730	0.005	0.486
				0.013	0.010	0.34
DYCT		1005	1549	-8790.97230	0.019	1.870
				0.013	0.010	1.34
DZCT		1005	1549	-10980.63850	-0.013	-1.260
				0.013	0.010	0.90
GROUP: 042012B.ASC ,obs#: 738						
DXCT		MOSV	1150	-16589.37410	0.011	0.278
				0.038	0.038	0.26
DYCT		MOSV	1150	-23136.27190	0.023	0.600
				0.038	0.038	0.56
DZCT		MOSV	1150	-29568.95250	-0.001	-0.037
				0.038	0.038	0.03
GROUP: 042012B.ASC ,obs#: 739						
DXCT		MOPL	1150	-18699.39190	0.009	0.311
				0.030	0.030	0.29
DYCT		MOPL	1150	17483.60720	0.026	0.871
				0.030	0.030	0.80
DZCT		MOPL	1150	19193.73680	-0.002	-0.061
				0.030	0.030	0.06
GROUP: 042012B.ASC ,obs#: 740						
DXCT		W 281	1250	3724.69540	-0.002	-1.553
				0.004	0.002	0.57
DYCT		W 281	1250	-1371.29240	0.001	0.621
				0.004	0.002	0.24
DZCT		W 281	1250	-1351.17250	0.001	0.561
				0.004	0.002	0.21
GROUP: 042012B.ASC ,obs#: 741						
DXCT		1150	1250	-7497.45650	0.011	1.564
				0.009	0.007	1.20
DYCT		1150	1250	-2982.71600	-0.005	-0.667
				0.009	0.007	0.51
DZCT		1150	1250	-4397.73550	-0.004	-0.575
				0.009	0.007	0.44
GROUP: 042012B.ASC ,obs#: 742						
DXCT		W 281	1251	799.85610	-0.002	-0.730
				0.005	0.002	0.30
DYCT		W 281	1251	3570.24310	-0.002	-0.982
				0.005	0.002	0.42
DZCT		W 281	1251	4395.55690	-0.005	-1.803
				0.006	0.003	0.79
GROUP: 042012B.ASC ,obs#: 743						
DXCT		1150	1251	-10422.29010	0.006	0.731

Residuals (critical value = 4.385):

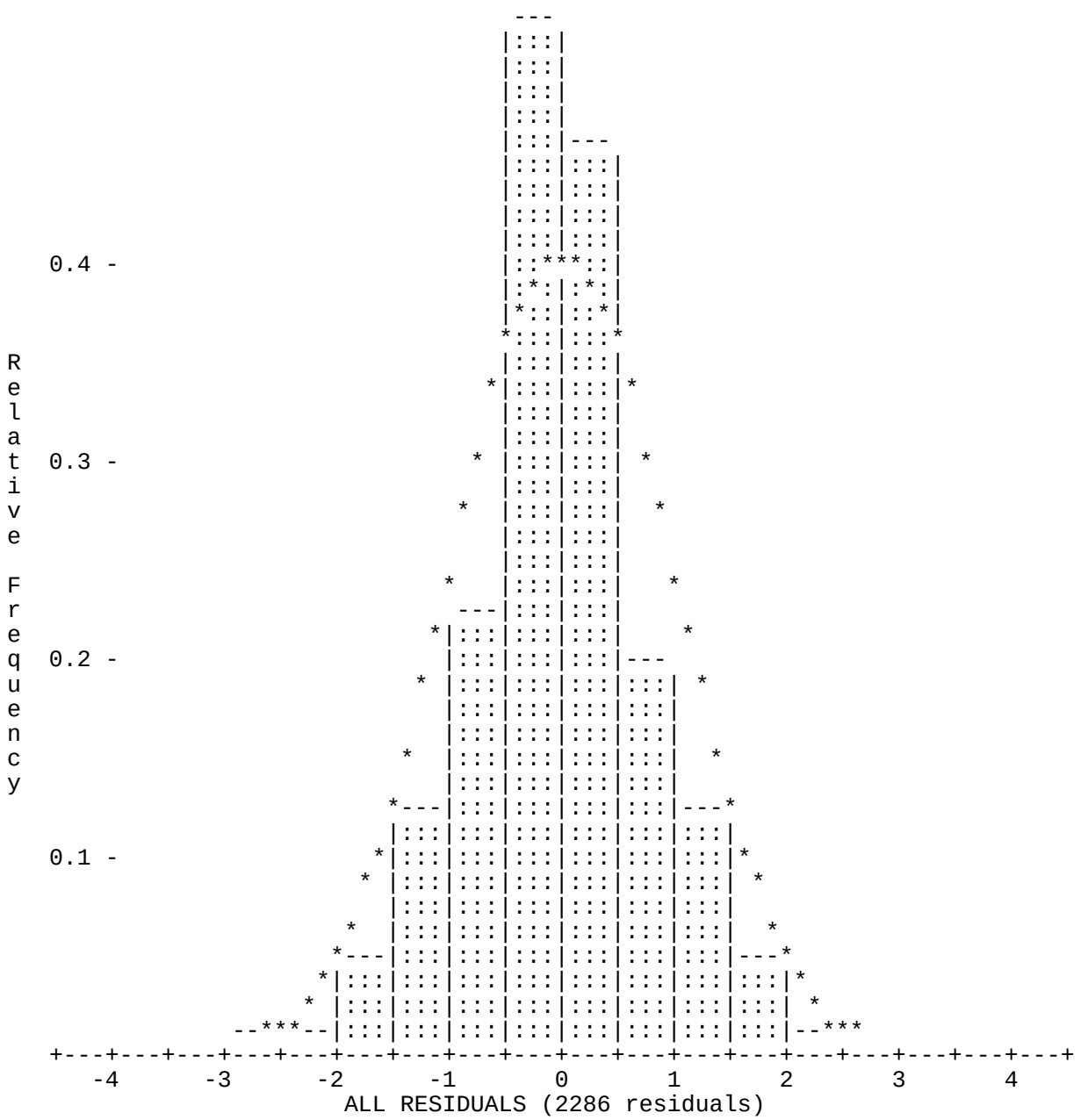
TYPE	AT	FROM	TO	OBSERVATION / STD DEV	RESIDUAL / STD DEV	STD RES / PPM
				0.010	0.008	0.56
DYCT		1150	1251	1958.80280	0.009	1.043
				0.010	0.008	0.80
DZCT		1150	1251	1348.96930	0.015	1.846
				0.010	0.008	1.42
GROUP: 042012B.ASC ,obs#: 744						
DXCT		W 281	1252	724.42830	0.003	0.972
				0.007	0.003	0.39
DYCT		W 281	1252	-4767.00580	0.002	0.804
				0.007	0.003	0.33
DZCT		W 281	1252	-5704.21550	0.006	1.831
				0.007	0.003	0.74
GROUP: 042012B.ASC ,obs#: 745						
DXCT		1150	1252	-10497.69540	-0.012	-0.971
				0.014	0.012	0.79
DYCT		1150	1252	-6378.42270	-0.010	-0.814
				0.014	0.012	0.66
DZCT		1150	1252	-8750.75540	-0.022	-1.837
				0.014	0.012	1.49
GROUP: 042012B.ASC ,obs#: 746						
DXCT		W 281	1450	10319.06420	0.022	2.580
				0.010	0.009	2.15
DYCT		W 281	1450	147.59090	0.006	0.690
				0.010	0.009	0.58
DZCT		W 281	1450	1195.12160	-0.007	-0.808
				0.010	0.009	0.67
GROUP: 042012B.ASC ,obs#: 747						
DXCT		1150	1450	-903.05060	-0.001	-2.555
				0.002	0.001	0.54
DYCT		1150	1450	-1463.83190	-0.001	-0.730
				0.003	0.001	0.21
DZCT		1150	1450	-1851.45390	0.001	0.902
				0.003	0.001	0.22
GROUP: 042012B.ASC ,obs#: 748						
DXCT		W 281	1451	7167.50170	0.005	1.041
				0.008	0.005	0.63
DYCT		W 281	1451	-2958.42910	0.007	1.469
				0.008	0.005	0.90
DZCT		W 281	1451	-2895.53360	-0.007	-1.303
				0.008	0.005	0.80
GROUP: 042012B.ASC ,obs#: 749						
DXCT		1150	1451	-4054.62600	-0.006	-1.030
				0.008	0.005	0.65
DYCT		1150	1451	-4569.84260	-0.008	-1.489
				0.008	0.006	0.98
DZCT		1150	1451	-5942.11550	0.007	1.330
				0.008	0.006	0.87
GROUP: 042012B.ASC ,obs#: 750						
DXCT		W 281	1452	1966.79450	-0.001	-2.320
				0.002	0.000	0.44
DYCT		W 281	1452	-13.80330	-0.001	-1.339
				0.002	0.001	0.36

Residuals (critical value = 4.385):

TYPE	AT	FROM	TO	OBSERVATION STD DEV	RESIDUAL STD DEV	STD RES PPM
DZCT		W 281	1452	133.87070	0.000	0.468
				0.002	0.000	0.11
GROUP: 042012B.ASC ,obs#: 751						
DXCT		1150	1452	-9255.36370	0.019	2.316
				0.009	0.008	1.92
DYCT		1150	1452	-1625.24400	0.011	1.302
				0.009	0.008	1.08
DZCT		1150	1452	-2912.69500	-0.002	-0.247
				0.009	0.008	0.20
GROUP: 042012B.ASC ,obs#: 752						
DXCT		W 281	1550	1492.59990	0.000	0.122
				0.002	0.000	0.02
DYCT		W 281	1550	-866.63340	-0.001	-1.673
				0.002	0.000	0.36
DZCT		W 281	1550	-966.97940	0.001	1.805
				0.002	0.000	0.38
GROUP: 042012B.ASC ,obs#: 753						
DXCT		1150	1550	-9729.53530	-0.003	-0.351
				0.010	0.009	0.30
DYCT		1150	1550	-2478.07690	0.013	1.471
				0.010	0.009	1.24
DZCT		1150	1550	-4013.53180	-0.015	-1.613
				0.010	0.009	1.37
GROUP: 042012B.ASC ,obs#: 754						
DXCT		MOSV	W 281	-27811.50680	0.005	0.104
				0.046	0.046	0.10
DYCT		MOSV	W 281	-24747.69210	0.014	0.297
				0.046	0.046	0.28
DZCT		MOSV	W 281	-32615.51840	-0.003	-0.074
				0.046	0.046	0.07
GROUP: 042012B.ASC ,obs#: 755						
DXCT		MOPL	W 281	-29921.52550	0.004	0.124
				0.035	0.035	0.12
DYCT		MOPL	W 281	15872.18610	0.017	0.500
				0.035	0.035	0.47
DZCT		MOPL	W 281	16147.17130	-0.004	-0.121
				0.035	0.035	0.11
GROUP: 042112B.ASC ,obs#: 756						
DXCT		MOSV	1551	-1803.27060	0.000	0.030
				0.020	0.009	0.01
DYCT		MOSV	1551	-13343.95210	-0.007	-0.756
				0.020	0.009	0.32
DZCT		MOSV	1551	-16261.58710	0.006	0.686
				0.020	0.009	0.29
GROUP: 042112B.ASC ,obs#: 757						
DXCT		MOPL	1551	-3913.28840	-0.001	-0.031
				0.040	0.036	0.03
DYCT		MOPL	1551	27275.89650	0.027	0.750
				0.040	0.036	0.63
DZCT		MOPL	1551	32501.13200	-0.024	-0.679
				0.040	0.036	0.57
GROUP: 042112B.ASC ,obs#: 758						

Residuals (critical value = 4.385):

TYPE	AT	FROM	TO	OBSERVATION / STD DEV	RESIDUAL / STD DEV	STD RES / PPM
DXCT		D 217	1552	10783.31760	0.000	0.019
				0.018	0.013	0.01
DYCT		D 217	1552	9604.39440	0.003	0.259
				0.018	0.013	0.18
DZCT		D 217	1552	12663.13790	-0.031	-2.353
				0.018	0.013	1.63
GROUP: 042112B.ASC ,obs#: 759						
DXCT		MOSV	1552	-1074.28710	0.000	0.001
				0.017	0.012	0.00
DYCT		MOSV	1552	-11758.54980	-0.005	-0.370
				0.018	0.013	0.25
DZCT		MOSV	1552	-14272.69400	0.028	2.214
				0.017	0.012	1.49
GROUP: 042112B.ASC ,obs#: 760						
DXCT		MOPL	1552	-3184.30460	-0.002	-0.041
				0.042	0.040	0.04
DYCT		MOPL	1552	28861.31950	0.008	0.198
				0.042	0.040	0.18
DZCT		MOPL	1552	34490.01390	0.009	0.214
				0.042	0.040	0.19
GROUP: 042112B.ASC ,obs#: 761						
DXCT		MOSV	D 217	-11857.61100	0.006	0.181
				0.034	0.033	0.17
DYCT		MOSV	D 217	-21362.94210	-0.010	-0.302
				0.034	0.034	0.28
DZCT		MOSV	D 217	-26935.80150	0.028	0.845
				0.034	0.034	0.78
GROUP: 042112B.ASC ,obs#: 762						
DXCT		MOPL	D 217	-13967.62920	0.005	0.172
				0.030	0.030	0.16
DYCT		MOPL	D 217	19256.91490	0.015	0.492
				0.030	0.030	0.46
DZCT		MOPL	D 217	21826.90810	0.008	0.260
				0.030	0.030	0.24


Relative Frequency
0.4
0.3
0.2
0.1
-4
-3
-2
-1
0
1
2
3
4
ALL RESIDUALS (2286 residuals)

S T A T I S T I C S S U M M A R Y

Residual Critical Value Type	Tau Max
Residual Critical Value	4.3850
Number of Flagged Residuals	4
Convergence Criterion	0.0010
Final Iteration Counter Value	2
Confidence Level Used	95.0000
Estimated Variance Factor	1.0000
Number of Degrees of Freedom	1408

Chi-Square Test on the Variance Factor:

9.3006e-01 < 1.0000 < 1.0782e+00 ?

THE TEST PASSES

NOTE: All confidence regions were computed using the following factors:

Variance factor used	=	1.0000
3-D expansion factor	=	2.7955

Note that, for relative confidence regions, precisions are computed from the ratio of the major semi-axis and the spatial distance between the two stations.

3D Station Confidence Regions (95.000 percent):

STATION	MAJ-SEMI	(AZ,VANG)	MED-SEMI	(AZ,VANG)	MIN-SEMI	(AZ,VANG)
1003	0.019	(0, 0)	0.019	(90, 0)	0.012	(0, 90)
1004	0.018	(0, 0)	0.018	(90, 0)	0.011	(0, 90)
1005	0.018	(0, 0)	0.018	(90, 0)	0.013	(0, 90)
1006	0.011	(0, 0)	0.011	(90, 0)	0.009	(0, 90)
1007	0.011	(0, 0)	0.011	(90, 0)	0.004	(0, 90)
1008	0.011	(0, 0)	0.011	(90, 0)	0.009	(0, 90)
1009	0.015	(0, 0)	0.015	(90, 0)	0.010	(0, 90)
1010	0.016	(0, 0)	0.015	(90, 0)	0.013	(0, 90)
1011	0.018	(0, 0)	0.018	(90, 0)	0.011	(0, 90)
1012	0.020	(0, 0)	0.020	(90, 0)	0.011	(0, 90)
1013	0.022	(0, 0)	0.022	(90, 0)	0.012	(0, 90)
1014	0.034	(0, 90)	0.034	(0, 0)	0.034	(90, 0)
1015	0.017	(0, 0)	0.017	(90, 0)	0.009	(0, 90)
1016	0.021	(0, 0)	0.020	(90, 0)	0.012	(0, 90)
1017	0.024	(0, 0)	0.024	(90, 0)	0.012	(0, 90)
103	0.023	(0, 0)	0.022	(90, 0)	0.016	(0, 90)
104	0.013	(0, 0)	0.013	(90, 0)	0.010	(0, 90)
1101	0.013	(0, 0)	0.013	(90, 0)	0.013	(0, 90)
1102	0.015	(0, 0)	0.015	(90, 0)	0.014	(0, 90)
1103	0.010	(0, 90)	0.008	(0, 0)	0.008	(90, 0)
1104	0.018	(0, 90)	0.018	(0, 0)	0.018	(90, 0)
1105	0.015	(0, 0)	0.015	(90, 0)	0.011	(0, 90)
1106	0.032	(0, 5)	0.032	(90, 0)	0.030	(180, 85)
1107	0.030	(0, 0)	0.030	(90, 0)	0.028	(0, 90)
1108	0.021	(0, 17)	0.020	(90, 0)	0.019	(180, 73)
1109	0.031	(0, 0)	0.031	(90, 0)	0.029	(0, 90)
1110	0.026	(0, 0)	0.026	(90, 0)	0.024	(0, 90)
1111	0.031	(0, 0)	0.030	(90, 0)	0.028	(0, 90)
1112	0.028	(0, 0)	0.028	(90, 0)	0.025	(0, 90)
1113	0.034	(0, 0)	0.034	(90, 0)	0.034	(0, 90)
1114	0.027	(0, 0)	0.027	(90, 0)	0.023	(0, 90)
1115	0.035	(0, 0)	0.035	(90, 0)	0.029	(0, 90)
1116	0.028	(0, 0)	0.028	(90, 0)	0.018	(0, 90)
1117	0.027	(0, 0)	0.027	(90, 0)	0.017	(0, 90)
1118	0.026	(0, 0)	0.026	(90, 0)	0.019	(0, 90)
1119	0.030	(0, 0)	0.030	(90, 0)	0.021	(0, 90)
1120	0.030	(0, 0)	0.030	(90, 0)	0.022	(0, 90)
1121	0.036	(0, 90)	0.036	(0, 0)	0.036	(90, 0)
1122	0.035	(0, 0)	0.035	(90, 0)	0.034	(0, 90)
1123	0.020	(0, 0)	0.020	(90, 0)	0.013	(0, 90)
1124	0.032	(0, 0)	0.032	(90, 0)	0.029	(0, 90)
1125	0.021	(0, 0)	0.021	(90, 0)	0.013	(0, 90)
1126	0.033	(0, 0)	0.032	(90, 0)	0.028	(0, 90)
1127	0.029	(0, 0)	0.028	(90, 0)	0.015	(0, 90)
1128	0.016	(180, 54)	0.016	(90, 0)	0.016	(0, 36)
1129	0.027	(0, 90)	0.027	(0, 0)	0.026	(90, 0)
1130	0.026	(0, 0)	0.026	(90, 0)	0.023	(0, 90)
1131	0.027	(0, 0)	0.027	(90, 0)	0.022	(0, 90)
1132	0.026	(0, 0)	0.026	(90, 0)	0.018	(0, 90)
1133	0.029	(0, 0)	0.028	(90, 0)	0.020	(0, 90)
1134	0.029	(0, 0)	0.029	(90, 0)	0.010	(0, 90)
1135	0.030	(0, 0)	0.030	(90, 0)	0.019	(0, 90)
1136	0.038	(0, 0)	0.038	(90, 0)	0.031	(0, 90)

3D Station Confidence Regions (95.000 percent):

STATION	MAJ-SEMI	(AZ,VANG)	MED-SEMI	(AZ,VANG)	MIN-SEMI	(AZ,VANG)
1137	0.044	(0, 90)	0.044	(0, 0)	0.044	(90, 0)
1138	0.048	(0, 90)	0.048	(0, 0)	0.048	(90, 0)
1139	0.045	(0, 90)	0.045	(0, 0)	0.045	(90, 0)
1140	0.012	(0, 90)	0.012	(0, 0)	0.012	(90, 0)
1141	0.017	(0, 90)	0.016	(0, 0)	0.016	(90, 0)
1142	0.036	(0, 0)	0.036	(90, 0)	0.022	(0, 90)
1143	0.034	(0, 0)	0.034	(90, 0)	0.019	(0, 90)
1144	0.033	(0, 0)	0.033	(90, 0)	0.016	(0, 90)
1145	0.032	(0, 0)	0.032	(90, 0)	0.015	(0, 90)
1146	0.018	(0, 0)	0.018	(90, 0)	0.012	(0, 90)
1147	0.029	(0, 0)	0.029	(90, 0)	0.026	(0, 90)
1148	0.022	(0, 0)	0.022	(90, 0)	0.019	(0, 90)
1149	0.025	(0, 0)	0.025	(90, 0)	0.022	(0, 90)
1150	0.011	(0, 90)	0.011	(0, 0)	0.011	(90, 0)
1201	0.012	(0, 0)	0.012	(90, 0)	0.011	(0, 90)
1202	0.017	(0, 0)	0.017	(90, 0)	0.016	(0, 90)
1203	0.015	(0, 90)	0.014	(0, 0)	0.014	(90, 0)
1204	0.025	(0, 90)	0.025	(0, 0)	0.025	(90, 0)
1205	0.017	(0, 0)	0.017	(90, 0)	0.013	(0, 90)
1206	0.024	(0, 0)	0.024	(90, 0)	0.020	(0, 90)
1207	0.028	(0, 0)	0.028	(90, 0)	0.024	(0, 90)
1208	0.021	(0, 0)	0.021	(90, 0)	0.019	(0, 90)
1209	0.024	(0, 0)	0.024	(90, 0)	0.022	(0, 90)
1210	0.028	(0, 0)	0.028	(90, 0)	0.025	(0, 90)
1211	0.034	(0, 0)	0.034	(90, 0)	0.032	(0, 90)
1212	0.032	(0, 0)	0.032	(90, 0)	0.031	(0, 90)
1213	0.024	(0, 0)	0.024	(90, 0)	0.024	(0, 90)
1214	0.034	(0, 4)	0.034	(270, 4)	0.032	(134, 84)
1215	0.027	(0, 0)	0.027	(90, 0)	0.021	(0, 90)
1216	0.036	(0, 0)	0.036	(90, 0)	0.030	(0, 90)
1217	0.027	(0, 0)	0.027	(90, 0)	0.019	(0, 90)
1218	0.039	(0, 0)	0.039	(90, 0)	0.035	(0, 90)
1219	0.035	(0, 0)	0.035	(90, 0)	0.029	(0, 90)
1220	0.038	(0, 90)	0.038	(0, 0)	0.038	(90, 0)
1221	0.045	(0, 90)	0.044	(0, 0)	0.044	(90, 0)
1222	0.026	(0, 0)	0.025	(90, 0)	0.023	(0, 90)
1223	0.021	(0, 0)	0.021	(90, 0)	0.014	(0, 90)
1224	0.018	(0, 0)	0.018	(90, 0)	0.006	(0, 90)
1225	0.022	(0, 0)	0.022	(90, 0)	0.014	(0, 90)
1226	0.028	(0, 0)	0.028	(90, 0)	0.018	(0, 90)
1227	0.011	(0, 0)	0.011	(90, 0)	0.011	(0, 90)
1228	0.017	(0, 0)	0.017	(90, 0)	0.016	(0, 90)
1229	0.025	(0, 0)	0.025	(90, 0)	0.022	(0, 90)
1230	0.025	(0, 0)	0.025	(90, 0)	0.020	(0, 90)
1231	0.026	(0, 0)	0.026	(90, 0)	0.018	(0, 90)
1232	0.027	(0, 0)	0.027	(90, 0)	0.017	(0, 90)
1233	0.028	(0, 0)	0.028	(90, 0)	0.019	(0, 90)
1234	0.025	(0, 0)	0.025	(90, 0)	0.013	(0, 90)
1235	0.028	(0, 0)	0.028	(90, 0)	0.017	(0, 90)
1236	0.029	(0, 0)	0.029	(90, 0)	0.020	(0, 90)
1237	0.031	(0, 0)	0.031	(90, 0)	0.022	(0, 90)
1238	0.043	(0, 90)	0.043	(0, 0)	0.043	(90, 0)
1239	0.013	(0, 90)	0.012	(0, 0)	0.012	(90, 0)

3D Station Confidence Regions (95.000 percent):

STATION	MAJ-SEMI	(AZ,VANG)	MED-SEMI	(AZ,VANG)	MIN-SEMI	(AZ,VANG)
1240	0.023	(0, 90)	0.022	(0, 0)	0.022	(90, 0)
1241	0.020	(0, 90)	0.019	(0, 0)	0.019	(90, 0)
1242	0.030	(0, 0)	0.030	(90, 0)	0.012	(0, 90)
1243	0.035	(0, 0)	0.035	(90, 0)	0.020	(0, 90)
1244	0.036	(0, 0)	0.036	(90, 0)	0.023	(0, 90)
1245	0.029	(0, 0)	0.029	(90, 0)	0.019	(0, 90)
1246	0.024	(0, 0)	0.023	(90, 0)	0.019	(0, 90)
1247	0.019	(0, 0)	0.019	(90, 0)	0.013	(0, 90)
1248	0.030	(180, 3)	0.030	(90, 0)	0.027	(0, 87)
1249	0.025	(0, 0)	0.025	(90, 0)	0.022	(0, 90)
1250	0.011	(0, 90)	0.010	(0, 0)	0.010	(90, 0)
1251	0.014	(0, 90)	0.013	(0, 0)	0.013	(90, 0)
1252	0.018	(0, 90)	0.018	(0, 0)	0.018	(90, 0)
1401	0.016	(0, 0)	0.016	(90, 0)	0.015	(0, 90)
1402	0.018	(0, 0)	0.018	(90, 0)	0.017	(0, 90)
1403	0.006	(0, 90)	0.003	(0, 0)	0.002	(90, 0)
1404	0.025	(0, 90)	0.025	(0, 0)	0.025	(90, 0)
1405	0.017	(0, 0)	0.017	(90, 0)	0.007	(0, 90)
1406	0.023	(0, 0)	0.023	(90, 0)	0.021	(0, 90)
1407	0.023	(0, 0)	0.023	(90, 0)	0.019	(0, 90)
1408	0.026	(0, 0)	0.026	(90, 0)	0.023	(0, 90)
1409	0.034	(321, 21)	0.034	(222, 22)	0.034	(90, 59)
1410	0.039	(0, 14)	0.038	(90, 0)	0.038	(180, 76)
1411	0.017	(214, 69)	0.015	(0, 17)	0.015	(93, 11)
1412	0.025	(0, 90)	0.025	(0, 0)	0.024	(90, 0)
1413	0.028	(0, 0)	0.028	(90, 0)	0.028	(0, 90)
1414	0.020	(0, 0)	0.020	(90, 0)	0.014	(0, 90)
1415	0.041	(0, 0)	0.041	(90, 0)	0.036	(0, 90)
1416	0.026	(0, 0)	0.026	(90, 0)	0.015	(0, 90)
1417	0.037	(0, 0)	0.036	(90, 0)	0.032	(0, 90)
1418	0.037	(0, 0)	0.037	(90, 0)	0.031	(0, 90)
1419	0.026	(0, 0)	0.026	(90, 0)	0.014	(0, 90)
1420	0.047	(0, 90)	0.047	(0, 0)	0.047	(90, 0)
1421	0.034	(180, 6)	0.034	(90, 0)	0.032	(0, 84)
1422	0.031	(0, 0)	0.031	(90, 0)	0.030	(0, 90)
1423	0.025	(180, 3)	0.025	(270, 4)	0.021	(50, 85)
1424	0.024	(0, 0)	0.024	(90, 0)	0.017	(0, 90)
1425	0.023	(0, 0)	0.023	(90, 0)	0.016	(0, 90)
1426	0.040	(0, 0)	0.040	(90, 0)	0.036	(0, 90)
1427	0.028	(0, 0)	0.028	(90, 0)	0.006	(0, 90)
1428	0.026	(0, 90)	0.026	(0, 0)	0.025	(90, 0)
1429	0.022	(0, 0)	0.022	(90, 0)	0.017	(0, 90)
1430	0.024	(0, 0)	0.024	(90, 0)	0.020	(0, 90)
1431	0.031	(0, 0)	0.031	(90, 0)	0.024	(0, 90)
1432	0.037	(0, 0)	0.037	(90, 0)	0.031	(0, 90)
1433	0.032	(0, 0)	0.032	(90, 0)	0.019	(0, 90)
1434	0.030	(0, 0)	0.030	(90, 0)	0.015	(0, 90)
1435	0.028	(0, 0)	0.028	(90, 0)	0.006	(0, 90)
1436	0.033	(0, 0)	0.033	(90, 0)	0.024	(0, 90)
1437	0.047	(0, 90)	0.047	(0, 0)	0.047	(90, 0)
1438	0.048	(0, 90)	0.048	(0, 0)	0.048	(90, 0)
1439	0.012	(180, 70)	0.008	(90, 0)	0.008	(0, 20)
1440	0.026	(0, 90)	0.026	(0, 0)	0.025	(90, 0)

3D Station Confidence Regions (95.000 percent):

STATION	MAJ-SEMI	(AZ,VANG)	MED-SEMI	(AZ,VANG)	MIN-SEMI	(AZ,VANG)
1441	0.035	(0, 0)	0.035	(90, 0)	0.021	(0, 90)
1442	0.041	(0, 0)	0.041	(90, 0)	0.031	(0, 90)
1443	0.033	(0, 0)	0.033	(90, 0)	0.020	(0, 90)
1444	0.030	(0, 0)	0.030	(90, 0)	0.011	(0, 90)
1445	0.019	(0, 0)	0.019	(90, 0)	0.014	(0, 90)
1446	0.026	(0, 0)	0.026	(90, 0)	0.022	(0, 90)
1447	0.020	(0, 3)	0.020	(90, 0)	0.016	(180, 87)
1448	0.019	(0, 0)	0.019	(90, 0)	0.015	(0, 90)
1449	0.028	(90, 0)	0.028	(0, 0)	0.025	(0, 90)
1450	0.013	(0, 90)	0.012	(0, 0)	0.012	(90, 0)
1451	0.017	(0, 90)	0.017	(0, 0)	0.016	(90, 0)
1452	0.007	(0, 90)	0.005	(0, 0)	0.005	(90, 0)
1501	0.018	(0, 0)	0.018	(90, 0)	0.017	(0, 90)
1502	0.021	(0, 90)	0.021	(0, 0)	0.021	(90, 0)
1503	0.018	(0, 0)	0.018	(90, 0)	0.009	(0, 90)
1504	0.029	(0, 0)	0.029	(90, 0)	0.026	(0, 90)
1505	0.026	(0, 0)	0.026	(90, 0)	0.022	(0, 90)
1506	0.022	(0, 0)	0.022	(90, 0)	0.021	(0, 90)
1507	0.016	(0, 0)	0.016	(90, 0)	0.012	(0, 90)
1508	0.042	(0, 0)	0.042	(90, 0)	0.042	(0, 90)
1509	0.019	(0, 0)	0.019	(90, 0)	0.013	(0, 90)
1510	0.049	(0, 0)	0.049	(90, 0)	0.048	(0, 90)
1511	0.011	(0, 0)	0.011	(90, 0)	0.010	(0, 90)
1512	0.020	(0, 0)	0.020	(90, 0)	0.019	(0, 90)
1513	0.021	(0, 0)	0.021	(90, 0)	0.013	(0, 90)
1514	0.036	(0, 0)	0.036	(90, 0)	0.032	(0, 90)
1515	0.024	(0, 0)	0.024	(90, 0)	0.019	(0, 90)
1516	0.023	(0, 0)	0.023	(90, 0)	0.010	(0, 90)
1517	0.022	(0, 0)	0.022	(90, 0)	0.012	(0, 90)
1518	0.045	(0, 0)	0.045	(90, 0)	0.041	(0, 90)
1519	0.031	(0, 0)	0.031	(90, 0)	0.023	(0, 90)
1520	0.034	(0, 90)	0.034	(0, 0)	0.034	(90, 0)
1521	0.034	(0, 0)	0.034	(90, 0)	0.032	(0, 90)
1522	0.017	(0, 0)	0.017	(90, 0)	0.009	(0, 90)
1523	0.018	(0, 0)	0.018	(90, 0)	0.007	(0, 90)
1524	0.039	(0, 0)	0.039	(90, 0)	0.035	(0, 90)
1525	0.023	(0, 0)	0.023	(90, 0)	0.017	(0, 90)
1526	0.026	(0, 0)	0.026	(90, 0)	0.020	(0, 90)
1527	0.024	(0, 0)	0.024	(90, 0)	0.013	(0, 90)
1528	0.028	(0, 90)	0.028	(0, 0)	0.028	(90, 0)
1529	0.019	(0, 0)	0.019	(90, 0)	0.015	(0, 90)
1530	0.024	(0, 0)	0.024	(90, 0)	0.020	(0, 90)
1531	0.032	(0, 0)	0.032	(90, 0)	0.025	(0, 90)
1532	0.027	(0, 0)	0.027	(90, 0)	0.019	(0, 90)
1533	0.026	(0, 0)	0.026	(90, 0)	0.014	(0, 90)
1534	0.040	(0, 0)	0.040	(90, 0)	0.034	(0, 90)
1535	0.026	(0, 0)	0.026	(90, 0)	0.015	(0, 90)
1536	0.044	(0, 90)	0.044	(0, 0)	0.044	(90, 0)
1537	0.046	(0, 90)	0.046	(0, 0)	0.046	(90, 0)
1538	0.013	(0, 90)	0.012	(0, 0)	0.012	(90, 0)
1539	0.013	(0, 90)	0.012	(0, 0)	0.011	(90, 0)
1540	0.037	(0, 0)	0.037	(90, 0)	0.024	(0, 90)
1541	0.033	(0, 0)	0.033	(90, 0)	0.010	(0, 90)

3D Station Confidence Regions (95.000 percent):

STATION	MAJ-SEMI	(AZ,VANG)	MED-SEMI	(AZ,VANG)	MIN-SEMI	(AZ,VANG)
1542	0.038	(180, 2)	0.037	(90, 1)	0.027	(332, 87)
1543	0.037	(0, 0)	0.037	(90, 0)	0.024	(0, 90)
1544	0.032	(0, 0)	0.031	(90, 0)	0.014	(0, 90)
1545	0.030	(0, 0)	0.030	(90, 0)	0.027	(0, 90)
1546	0.042	(0, 0)	0.042	(90, 0)	0.039	(0, 90)
1547	0.018	(0, 0)	0.018	(90, 0)	0.014	(0, 90)
1548	0.028	(0, 0)	0.028	(90, 0)	0.025	(0, 90)
1549	0.028	(0, 0)	0.028	(90, 0)	0.026	(0, 90)
1550	0.006	(0, 90)	0.005	(90, 0)	0.005	(0, 0)
1551	0.050	(0, 90)	0.049	(0, 0)	0.049	(90, 0)
1552	0.034	(0, 0)	0.034	(90, 0)	0.034	(0, 90)
1605	0.018	(0, 0)	0.018	(90, 0)	0.011	(0, 90)
1606	0.021	(0, 0)	0.021	(90, 0)	0.015	(0, 90)
1607	0.026	(0, 0)	0.026	(90, 0)	0.022	(0, 90)
1608	0.019	(0, 0)	0.019	(90, 0)	0.013	(0, 90)
1609	0.019	(0, 0)	0.019	(90, 0)	0.015	(0, 90)
1610	0.029	(0, 0)	0.029	(90, 0)	0.027	(0, 90)
1611	0.025	(0, 0)	0.025	(90, 0)	0.023	(0, 90)
1612	0.028	(0, 0)	0.028	(90, 0)	0.025	(0, 90)
1613	0.021	(0, 0)	0.021	(90, 0)	0.016	(0, 90)
1614	0.011	(0, 0)	0.011	(90, 0)	0.010	(0, 90)
1615	0.017	(0, 90)	0.017	(0, 0)	0.017	(90, 0)
1616	0.015	(0, 90)	0.014	(0, 0)	0.014	(90, 0)
1617	0.008	(0, 90)	0.008	(0, 0)	0.008	(90, 0)
1618	0.012	(0, 0)	0.012	(90, 0)	0.007	(0, 90)
1619	0.014	(0, 0)	0.014	(90, 0)	0.011	(0, 90)
1620	0.014	(0, 0)	0.014	(90, 0)	0.011	(0, 90)
1621	0.016	(0, 0)	0.016	(90, 0)	0.015	(0, 90)
1622	0.004	(0, 90)	0.001	(0, 0)	0.001	(90, 0)
1623	0.022	(0, 0)	0.022	(90, 0)	0.017	(0, 90)
1624	0.017	(0, 0)	0.017	(90, 0)	0.015	(0, 90)
1625	0.017	(0, 0)	0.017	(90, 0)	0.012	(0, 90)
1626	0.044	(0, 0)	0.044	(90, 0)	0.043	(0, 90)
1627	0.030	(0, 0)	0.029	(90, 0)	0.025	(0, 90)
1628	0.039	(0, 0)	0.039	(90, 0)	0.034	(0, 90)
1629	0.023	(0, 0)	0.023	(90, 0)	0.008	(0, 90)
1630	0.030	(0, 0)	0.030	(90, 0)	0.024	(0, 90)
1631	0.030	(0, 0)	0.030	(90, 0)	0.023	(0, 90)
1632	0.046	(0, 90)	0.046	(0, 0)	0.046	(90, 0)
1633	0.035	(180, 4)	0.034	(90, 0)	0.032	(0, 86)
1634	0.017	(0, 0)	0.017	(90, 0)	0.009	(0, 90)
1635	0.033	(0, 0)	0.033	(90, 0)	0.029	(0, 90)
1636	0.025	(0, 0)	0.025	(90, 0)	0.019	(0, 90)
1637	0.033	(0, 0)	0.033	(90, 0)	0.022	(0, 90)
1638	0.034	(0, 0)	0.034	(90, 0)	0.026	(0, 90)
1639	0.029	(0, 0)	0.029	(90, 0)	0.020	(0, 90)
1640	0.044	(0, 90)	0.044	(0, 0)	0.044	(90, 0)
1641	0.024	(0, 77)	0.023	(180, 13)	0.023	(90, 0)
1642	0.037	(0, 0)	0.037	(90, 0)	0.024	(0, 90)
1643	0.034	(0, 0)	0.034	(90, 0)	0.020	(0, 90)
1644	0.040	(0, 0)	0.040	(90, 0)	0.028	(0, 90)
1645	0.036	(0, 0)	0.036	(90, 0)	0.023	(0, 90)
604	0.028	(0, 0)	0.028	(90, 0)	0.023	(0, 90)

3D Station Confidence Regions (95.000 percent):

STATION	MAJ-SEMI (AZ,VANG)	MED-SEMI (AZ,VANG)	MIN-SEMI (AZ,VANG)
605	0.032 (0, 0)	0.032 (90, 0)	0.028 (0, 90)
606	0.024 (0, 0)	0.023 (90, 0)	0.018 (0, 90)
607	0.016 (0, 0)	0.016 (90, 0)	0.010 (0, 90)
608	0.034 (180, 10)	0.034 (90, 0)	0.032 (0, 80)
609	0.023 (0, 0)	0.023 (90, 0)	0.020 (0, 90)
610	0.018 (0, 8)	0.017 (90, 0)	0.015 (180, 82)
611	0.020 (0, 0)	0.020 (90, 0)	0.020 (0, 90)
612	0.030 (142, 49)	0.029 (0, 34)	0.029 (256, 19)
613	0.007 (0, 90)	0.007 (0, 0)	0.006 (90, 0)
614	0.028 (0, 0)	0.028 (90, 0)	0.027 (0, 90)
615	0.028 (90, 69)	0.028 (0, 0)	0.028 (270, 21)
616	0.013 (0, 0)	0.013 (90, 0)	0.010 (0, 90)
617	0.018 (0, 90)	0.018 (0, 0)	0.017 (90, 0)
618	0.017 (0, 90)	0.017 (0, 0)	0.017 (90, 0)
619	0.015 (0, 0)	0.015 (90, 0)	0.015 (0, 90)
620	0.014 (0, 0)	0.014 (90, 0)	0.014 (0, 90)
621	0.018 (0, 0)	0.018 (90, 0)	0.017 (0, 90)
622	0.017 (0, 0)	0.017 (90, 0)	0.015 (0, 90)
917	0.016 (0, 0)	0.016 (90, 0)	0.000 (0, 90)
A 282	0.023 (0, 0)	0.023 (90, 0)	0.000 (0, 90)
BELVUE	0.017 (0, 0)	0.017 (90, 0)	0.000 (0, 90)
D 217	0.014 (0, 0)	0.014 (90, 0)	0.000 (0, 90)
M 325	0.032 (0, 0)	0.032 (90, 0)	0.000 (0, 90)
P 215	0.041 (0, 0)	0.040 (90, 0)	0.000 (0, 90)
Q 109	0.022 (0, 0)	0.022 (90, 0)	0.000 (0, 90)
Q 210	0.012 (0, 0)	0.011 (90, 0)	0.000 (0, 90)
SKIRT RM 2	0.029 (0, 0)	0.029 (90, 0)	0.000 (0, 90)
W 106	0.010 (0, 0)	0.010 (90, 0)	0.010 (0, 90)
X 108	0.027 (0, 0)	0.027 (90, 0)	0.000 (0, 90)
X 119	0.028 (0, 0)	0.028 (90, 0)	0.000 (0, 90)
Y 341	0.028 (0, 0)	0.028 (90, 0)	0.000 (0, 90)
Z 231	0.027 (0, 0)	0.027 (90, 0)	0.000 (0, 90)

3D Relative Confidence Regions (95.000 percent):

FROM	TO	MAJ-SEMI (AZ,VANG)	MED-SEMI (AZ,VANG)	MIN-SEMI (AZ,VANG)	DISTANCE	PPM
1003	1146	0.009 (0, 90)	0.008 (0, 0)	0.008 (90, 0)	10341.692	0.84
1003	1147	0.023 (0, 90)	0.023 (0, 0)	0.023 (90, 0)	10431.606	2.21
1003	1246	0.016 (0, 90)	0.016 (0, 0)	0.016 (90, 0)	7732.353	2.04
1003	1247	0.003 (0, 90)	0.002 (0, 0)	0.002 (90, 0)	800.343	4.00
1003	1445	0.011 (0, 90)	0.011 (0, 0)	0.010 (90, 0)	8746.008	1.24
1003	1446	0.020 (0, 0)	0.020 (0, 90)	0.019 (90, 0)	12534.427	1.57
1003	1447	0.012 (0, 78)	0.010 (180, 12)	0.010 (90, 0)	4186.630	2.83
1003	1545	0.025 (0, 90)	0.024 (0, 0)	0.024 (90, 0)	12456.750	1.97
1003	1546	0.038 (0, 90)	0.038 (0, 0)	0.038 (90, 0)	19306.742	1.96
1003	1605	0.008 (0, 90)	0.008 (0, 0)	0.008 (90, 0)	10494.878	0.80
1003	1606	0.010 (0, 90)	0.010 (0, 0)	0.009 (90, 0)	3954.822	2.46
1003	1607	0.019 (0, 90)	0.019 (0, 0)	0.019 (90, 0)	8204.173	2.32
1003	1608	0.003 (0, 90)	0.002 (0, 0)	0.002 (90, 0)	538.462	5.36
1003	604	0.022 (0, 90)	0.022 (0, 0)	0.022 (90, 0)	14303.932	1.54
1003	605	0.027 (0, 90)	0.027 (0, 0)	0.027 (90, 0)	20166.968	1.35
1003	606	0.017 (0, 90)	0.017 (0, 0)	0.017 (90, 0)	21170.952	0.80
1003	A 282	0.016 (0, 0)	0.016 (90, 0)	0.012 (0, 90)	12809.135	1.27
1003	MOID	0.019 (0, 0)	0.019 (90, 0)	0.012 (0, 90)	42747.745	0.44
1003	MOPL	0.019 (0, 0)	0.019 (90, 0)	0.012 (0, 90)	33360.351	0.56
1003	MORM	0.019 (0, 0)	0.019 (90, 0)	0.012 (0, 90)	85006.285	0.22
1003	MOSB	0.019 (0, 0)	0.019 (90, 0)	0.012 (0, 90)	41945.411	0.45
1003	ZKC1	0.019 (0, 0)	0.019 (90, 0)	0.012 (0, 90)	24979.237	0.75
1004	1005	0.012 (0, 0)	0.012 (90, 0)	0.012 (0, 90)	25365.381	0.49
1004	1146	0.003 (0, 90)	0.002 (0, 0)	0.002 (90, 0)	829.300	4.09
1004	1147	0.024 (0, 90)	0.023 (0, 0)	0.023 (90, 0)	15842.444	1.49
1004	1148	0.018 (0, 0)	0.018 (90, 0)	0.018 (0, 90)	20273.209	0.90

3D Relative Confidence Regions (95.000 percent):

FROM	TO	MAJ-SEMI (AZ,VANG)	MED-SEMI (AZ,VANG)	MIN-SEMI (AZ,VANG)	DISTANCE	PPM
1004	1149	0.019	0.019	0.019	7926.753	2.43
		(0, 90)	(0, 0)	(90, 0)		
1004	1246	0.016	0.016	0.016	8973.454	1.79
		(0, 90)	(0, 0)	(90, 0)		
1004	1247	0.009	0.008	0.008	9682.303	0.88
		(0, 90)	(0, 0)	(90, 0)		
1004	1248	0.026	0.025	0.025	11883.162	2.15
		(180, 62)	(0, 28)	(90, 0)		
1004	1249	0.021	0.021	0.021	21457.579	0.99
		(0, 0)	(90, 0)	(0, 90)		
1004	1445	0.008	0.008	0.008	3075.954	2.70
		(0, 90)	(0, 0)	(90, 0)		
1004	1446	0.019	0.019	0.019	8684.675	2.21
		(0, 0)	(0, 90)	(90, 0)		
1004	1447	0.013	0.011	0.011	6490.294	1.94
		(0, 78)	(180, 12)	(90, 0)		
1004	1448	0.014	0.014	0.014	22944.924	0.63
		(0, 0)	(90, 0)	(0, 90)		
1004	1449	0.024	0.024	0.024	15609.224	1.55
		(0, 90)	(90, 0)	(0, 0)		
1004	1545	0.025	0.024	0.024	13703.579	1.80
		(0, 90)	(0, 0)	(90, 0)		
1004	1546	0.038	0.038	0.038	21613.768	1.76
		(0, 90)	(0, 0)	(90, 0)		
1004	1547	0.013	0.013	0.013	24719.017	0.53
		(0, 0)	(90, 0)	(0, 90)		
1004	1548	0.024	0.024	0.024	15780.480	1.50
		(0, 90)	(0, 0)	(90, 0)		
1004	1549	0.024	0.023	0.023	11179.984	2.12
		(0, 90)	(0, 0)	(90, 0)		
1004	1605	0.003	0.003	0.002	822.676	3.28
		(0, 90)	(0, 0)	(90, 0)		
1004	1606	0.012	0.012	0.012	10069.029	1.17
		(0, 90)	(0, 0)	(90, 0)		
1004	1607	0.020	0.020	0.020	18347.037	1.09
		(0, 90)	(0, 0)	(90, 0)		
1004	1608	0.008	0.008	0.008	9995.408	0.85
		(0, 90)	(0, 0)	(90, 0)		
1004	1609	0.014	0.014	0.014	22709.697	0.63
		(0, 0)	(90, 0)	(0, 90)		
1004	1610	0.025	0.025	0.025	13574.260	1.87
		(0, 90)	(0, 0)	(90, 0)		
1004	1611	0.022	0.022	0.022	24333.517	0.90
		(0, 90)	(0, 0)	(90, 0)		
1004	1612	0.023	0.023	0.023	10797.670	2.14
		(0, 0)	(0, 90)	(90, 0)		
1004	1613	0.012	0.012	0.012	4604.343	2.59
		(0, 90)	(0, 0)	(90, 0)		
1004	604	0.022	0.022	0.022	18693.329	1.18
		(0, 90)	(0, 0)	(90, 0)		
1004	605	0.027	0.027	0.027	24465.985	1.12
		(0, 90)	(0, 0)	(90, 0)		

3D Relative Confidence Regions (95.000 percent):

FROM	TO	MAJ-SEMI (AZ,VANG)	MED-SEMI (AZ,VANG)	MIN-SEMI (AZ,VANG)	DISTANCE	PPM
1004	606	0.017 (0, 90)	0.017 (0, 0)	0.017 (90, 0)	20471.840	0.83
1004	A 282	0.016 (0, 0)	0.016 (90, 0)	0.011 (0, 90)	7953.756	1.97
1004	D 217	0.023 (0, 0)	0.023 (90, 0)	0.011 (0, 90)	50528.269	0.45
1004	MOID	0.018 (0, 0)	0.018 (90, 0)	0.011 (0, 90)	44910.451	0.39
1004	MOPL	0.018 (0, 0)	0.018 (90, 0)	0.011 (0, 90)	24180.184	0.73
1004	MORM	0.018 (0, 0)	0.018 (90, 0)	0.011 (0, 90)	84779.902	0.21
1004	MOSB	0.018 (0, 0)	0.018 (90, 0)	0.011 (0, 90)	50749.446	0.35
1004	MOSV	0.018 (0, 0)	0.018 (90, 0)	0.011 (0, 90)	85326.984	0.21
1004	Y 341	0.024 (0, 0)	0.024 (90, 0)	0.011 (0, 90)	15668.795	1.54
1004	ZKC1	0.018 (0, 0)	0.018 (90, 0)	0.011 (0, 90)	35360.182	0.50
1005	1148	0.014 (0, 90)	0.014 (0, 0)	0.014 (90, 0)	5534.441	2.57
1005	1149	0.022 (0, 90)	0.022 (0, 0)	0.022 (90, 0)	17607.936	1.22
1005	1248	0.026 (180, 57)	0.026 (90, 0)	0.026 (0, 33)	15638.452	1.68
1005	1249	0.018 (0, 90)	0.018 (0, 0)	0.018 (90, 0)	7325.319	2.51
1005	1448	0.008 (0, 90)	0.007 (0, 0)	0.007 (90, 0)	2821.814	2.94
1005	1449	0.023 (0, 90)	0.023 (90, 0)	0.023 (0, 0)	10193.594	2.25
1005	1547	0.004 (0, 90)	0.004 (0, 0)	0.004 (90, 0)	1415.051	3.09
1005	1548	0.022 (0, 90)	0.022 (0, 0)	0.022 (90, 0)	9929.118	2.26
1005	1549	0.024 (0, 90)	0.024 (0, 0)	0.024 (90, 0)	14268.929	1.71
1005	1609	0.008 (0, 90)	0.007 (0, 0)	0.007 (90, 0)	2855.587	2.73
1005	1610	0.025 (0, 90)	0.025 (0, 0)	0.025 (90, 0)	12871.534	1.97
1005	1611	0.019 (0, 90)	0.018 (0, 0)	0.018 (90, 0)	7351.674	2.60
1005	1612	0.024 (0, 0)	0.024 (90, 0)	0.024 (0, 90)	14618.902	1.65
1005	1613	0.017 (0, 0)	0.017 (90, 0)	0.016 (0, 90)	22217.103	0.76
1005	MOID	0.018 (0, 0)	0.018 (90, 0)	0.013 (0, 90)	54072.753	0.32
1005	MOPL	0.018 (0, 0)	0.018 (90, 0)	0.013 (0, 90)	9660.280	1.82

3D Relative Confidence Regions (95.000 percent):

FROM	TO	MAJ-SEMI (AZ,VANG)	MED-SEMI (AZ,VANG)	MIN-SEMI (AZ,VANG)	DISTANCE	PPM
1005	MOSV	0.018 (0, 0)	0.018 (90, 0)	0.013 (0, 90)	59963.708	0.29
1005	W 281	0.018 (0, 0)	0.018 (90, 0)	0.013 (0, 90)	28208.256	0.62
1005	Y 341	0.023 (0, 0)	0.023 (90, 0)	0.013 (0, 90)	10194.966	2.24
1005	ZKC1	0.018 (0, 0)	0.018 (90, 0)	0.013 (0, 90)	59983.535	0.29
1006	1614	0.003 (0, 90)	0.002 (0, 0)	0.001 (90, 0)	100.384	28.98
1006	1615	0.018 (0, 90)	0.018 (0, 0)	0.018 (90, 0)	11329.644	1.60
1006	1616	0.017 (0, 90)	0.017 (0, 0)	0.017 (90, 0)	16405.865	1.05
1006	1617	0.013 (0, 0)	0.013 (90, 0)	0.012 (0, 90)	20042.478	0.64
1006	1618	0.012 (0, 0)	0.012 (90, 0)	0.011 (0, 90)	15700.121	0.74
1006	1619	0.013 (0, 0)	0.013 (90, 0)	0.013 (0, 90)	10554.420	1.28
1006	1620	0.013 (0, 0)	0.013 (90, 0)	0.013 (0, 90)	9445.370	1.42
1006	617	0.019 (0, 90)	0.019 (0, 0)	0.019 (90, 0)	18836.301	1.01
1006	618	0.017 (0, 90)	0.017 (0, 0)	0.017 (90, 0)	9653.819	1.78
1006	619	0.014 (0, 90)	0.014 (0, 0)	0.014 (90, 0)	7928.675	1.80
1006	620	0.012 (0, 90)	0.012 (0, 0)	0.012 (90, 0)	5660.487	2.16
1006	621	0.017 (0, 90)	0.017 (0, 0)	0.017 (90, 0)	12481.309	1.39
1006	622	0.016 (0, 0)	0.016 (90, 0)	0.016 (0, 90)	19978.300	0.82
1006	MOMV	0.011 (0, 0)	0.011 (90, 0)	0.009 (0, 90)	54478.785	0.20
1006	MORK	0.011 (0, 0)	0.011 (90, 0)	0.009 (0, 90)	69400.582	0.15
1006	MOSV	0.011 (0, 0)	0.011 (90, 0)	0.009 (0, 90)	21013.267	0.51
1006	Q 210	0.011 (0, 0)	0.011 (90, 0)	0.009 (0, 90)	12727.983	0.87
1007	1101	0.013 (0, 0)	0.013 (90, 0)	0.013 (0, 90)	12991.757	1.02
1007	1102	0.015 (0, 0)	0.015 (90, 0)	0.014 (0, 90)	18279.409	0.81
1007	1201	0.012 (0, 0)	0.012 (90, 0)	0.011 (0, 90)	15110.543	0.80
1007	1202	0.017 (0, 0)	0.017 (90, 0)	0.016 (0, 90)	12619.188	1.32
1007	1401	0.016 (0, 0)	0.016 (90, 0)	0.016 (0, 90)	16772.607	0.95

3D Relative Confidence Regions (95.000 percent):

FROM	TO	MAJ-SEMI (AZ,VANG)	MED-SEMI (AZ,VANG)	MIN-SEMI (AZ,VANG)	DISTANCE	PPM
1007	1402	0.017 (0, 0)	0.017 (90, 0)	0.016 (0, 90)	9268.312	1.80
1007	1501	0.018 (0, 0)	0.018 (90, 0)	0.017 (0, 90)	16056.346	1.10
1007	1618	0.006 (0, 90)	0.005 (0, 0)	0.005 (90, 0)	2016.960	2.85
1007	1619	0.011 (0, 90)	0.011 (0, 0)	0.011 (90, 0)	4984.462	2.20
1007	1620	0.011 (0, 90)	0.011 (0, 0)	0.010 (90, 0)	4466.410	2.39
1007	1621	0.016 (0, 0)	0.016 (90, 0)	0.015 (0, 90)	16042.695	0.98
1007	621	0.018 (0, 0)	0.018 (90, 0)	0.017 (0, 90)	17836.776	0.99
1007	622	0.014 (0, 90)	0.014 (0, 0)	0.014 (90, 0)	8230.041	1.76
1007	MOMV	0.011 (0, 0)	0.011 (90, 0)	0.004 (0, 90)	51041.733	0.22
1007	MORK	0.011 (0, 0)	0.011 (90, 0)	0.004 (0, 90)	56024.889	0.20
1007	MOSV	0.011 (0, 0)	0.011 (90, 0)	0.004 (0, 90)	30481.514	0.37
1007	Q 210	0.004 (0, 90)	0.004 (0, 0)	0.003 (90, 0)	1075.547	4.03
1008	1101	0.009 (0, 90)	0.008 (0, 0)	0.008 (90, 0)	3163.536	2.96
1008	1102	0.010 (0, 90)	0.010 (0, 0)	0.010 (90, 0)	4018.038	2.61
1008	1103	0.013 (0, 90)	0.013 (0, 0)	0.013 (90, 0)	12800.245	1.04
1008	1104	0.020 (0, 0)	0.020 (90, 0)	0.020 (0, 90)	18500.031	1.09
1008	1201	0.005 (0, 90)	0.005 (0, 0)	0.005 (90, 0)	1979.452	2.77
1008	1202	0.014 (0, 90)	0.014 (0, 0)	0.014 (90, 0)	5853.771	2.44
1008	1203	0.017 (0, 0)	0.017 (90, 0)	0.017 (0, 90)	15220.265	1.11
1008	1204	0.026 (0, 0)	0.026 (90, 0)	0.026 (0, 90)	23994.522	1.10
1008	1401	0.013 (0, 90)	0.012 (0, 0)	0.012 (90, 0)	4845.780	2.66
1008	1402	0.016 (0, 0)	0.016 (0, 90)	0.016 (90, 0)	7520.929	2.12
1008	1403	0.011 (0, 0)	0.011 (90, 0)	0.011 (0, 90)	11708.594	0.93
1008	1404	0.026 (0, 90)	0.026 (0, 0)	0.026 (90, 0)	23353.925	1.13
1008	1405	0.017 (0, 0)	0.017 (90, 0)	0.011 (0, 90)	13937.754	1.20
1008	1501	0.015 (0, 90)	0.015 (0, 0)	0.015 (90, 0)	6063.060	2.47

3D Relative Confidence Regions (95.000 percent):

FROM	TO	MAJ-SEMI (AZ,VANG)	MED-SEMI (AZ,VANG)	MIN-SEMI (AZ,VANG)	DISTANCE	PPM
1008	1502	0.023 (0, 0)	0.023 (90, 0)	0.022 (0, 90)	20390.297	1.11
1008	1503	0.017 (0, 0)	0.017 (90, 0)	0.013 (0, 90)	12718.090	1.36
1008	1621	0.012 (0, 90)	0.012 (0, 0)	0.012 (90, 0)	4745.493	2.53
1008	1622	0.011 (0, 0)	0.011 (90, 0)	0.010 (0, 90)	11077.523	0.97
1008	917	0.016 (0, 0)	0.016 (90, 0)	0.009 (0, 90)	16173.311	0.99
1008	MOMV	0.011 (0, 0)	0.011 (90, 0)	0.009 (0, 90)	47108.908	0.23
1008	MORK	0.011 (0, 0)	0.011 (90, 0)	0.009 (0, 90)	40147.296	0.27
1008	MOSV	0.011 (0, 0)	0.011 (90, 0)	0.009 (0, 90)	42081.274	0.25
1009	1105	0.003 (0, 90)	0.002 (0, 0)	0.001 (90, 0)	98.323	31.50
1009	1106	0.030 (0, 82)	0.028 (180, 8)	0.028 (90, 0)	12311.089	2.40
1009	1107	0.027 (0, 90)	0.027 (0, 0)	0.027 (90, 0)	12415.148	2.18
1009	1108	0.017 (0, 78)	0.015 (180, 12)	0.015 (90, 0)	6303.237	2.72
1009	1109	0.028 (0, 90)	0.028 (0, 0)	0.028 (90, 0)	13269.810	2.11
1009	1110	0.023 (0, 90)	0.023 (0, 0)	0.023 (90, 0)	16806.822	1.37
1009	1111	0.028 (0, 90)	0.027 (0, 0)	0.027 (90, 0)	15827.626	1.75
1009	1112	0.025 (0, 0)	0.025 (90, 0)	0.025 (0, 90)	16737.186	1.49
1009	1130	0.021 (0, 90)	0.021 (0, 0)	0.021 (90, 0)	9267.156	2.31
1009	1205	0.008 (0, 90)	0.008 (0, 0)	0.008 (90, 0)	2910.270	2.75
1009	1206	0.020 (0, 0)	0.020 (90, 0)	0.020 (0, 90)	11282.201	1.81
1009	1207	0.025 (0, 0)	0.025 (90, 0)	0.024 (0, 90)	14677.728	1.68
1009	1208	0.018 (0, 90)	0.017 (0, 0)	0.017 (90, 0)	11014.756	1.62
1009	1209	0.019 (0, 90)	0.019 (0, 0)	0.019 (90, 0)	8101.883	2.39
1009	1210	0.025 (0, 0)	0.025 (90, 0)	0.024 (0, 90)	18074.609	1.36
1009	1211	0.032 (0, 0)	0.032 (90, 0)	0.031 (0, 90)	25482.458	1.25
1009	1229	0.021 (0, 0)	0.021 (90, 0)	0.021 (0, 90)	11963.399	1.79
1009	1406	0.019 (0, 90)	0.018 (0, 0)	0.018 (90, 0)	7190.550	2.62

3D Relative Confidence Regions (95.000 percent):

FROM	TO	MAJ-SEMI (AZ,VANG)	MED-SEMI (AZ,VANG)	MIN-SEMI (AZ,VANG)	DISTANCE	PPM
1009	1407	0.018 (0, 90)	0.018 (0, 0)	0.018 (90, 0)	8152.671	2.25
1009	1408	0.022 (0, 90)	0.022 (0, 0)	0.022 (90, 0)	10020.242	2.22
1009	1409	0.033 (318, 79)	0.032 (181, 8)	0.032 (90, 7)	18010.803	1.82
1009	1410	0.037 (0, 77)	0.036 (180, 13)	0.036 (90, 0)	19010.662	1.94
1009	1429	0.018 (0, 0)	0.018 (90, 0)	0.017 (0, 90)	17950.142	0.99
1009	1430	0.020 (0, 0)	0.020 (90, 0)	0.019 (0, 90)	14527.046	1.37
1009	1504	0.025 (0, 90)	0.025 (0, 0)	0.025 (90, 0)	10645.668	2.34
1009	1505	0.023 (0, 0)	0.023 (90, 0)	0.023 (0, 90)	12138.552	1.88
1009	1506	0.019 (0, 90)	0.019 (0, 0)	0.019 (90, 0)	10818.995	1.76
1009	1507	0.006 (0, 90)	0.004 (0, 0)	0.004 (90, 0)	1668.152	3.63
1009	1508	0.041 (0, 90)	0.040 (0, 0)	0.040 (90, 0)	23036.497	1.77
1009	1509	0.014 (0, 0)	0.014 (90, 0)	0.013 (0, 90)	17819.353	0.79
1009	1510	0.047 (0, 90)	0.047 (0, 0)	0.047 (90, 0)	23487.477	2.01
1009	1529	0.012 (0, 90)	0.012 (0, 0)	0.011 (90, 0)	4543.901	2.58
1009	1623	0.019 (0, 0)	0.019 (90, 0)	0.019 (0, 90)	12424.008	1.53
1009	1624	0.014 (0, 90)	0.013 (0, 0)	0.013 (90, 0)	15446.276	0.89
1009	1625	0.007 (0, 90)	0.007 (0, 0)	0.007 (90, 0)	2575.518	2.74
1009	1626	0.042 (0, 0)	0.042 (90, 0)	0.042 (0, 90)	24487.234	1.73
1009	KST5	0.015 (0, 0)	0.015 (90, 0)	0.010 (0, 90)	102018.109	0.15
1009	MOMV	0.015 (0, 0)	0.015 (90, 0)	0.010 (0, 90)	78885.098	0.19
1009	MORK	0.015 (0, 0)	0.015 (90, 0)	0.010 (0, 90)	61117.896	0.25
1009	MOSV	0.015 (0, 0)	0.015 (90, 0)	0.010 (0, 90)	58197.294	0.26
1009	X 108	0.024 (0, 0)	0.024 (90, 0)	0.010 (0, 90)	20509.189	1.16
1010	1108	0.019 (0, 78)	0.017 (180, 12)	0.017 (90, 0)	11028.110	1.73
1010	1109	0.029 (0, 90)	0.028 (0, 0)	0.028 (90, 0)	16817.582	1.70
1010	1110	0.021 (0, 90)	0.021 (0, 0)	0.021 (90, 0)	9145.014	2.33

3D Relative Confidence Regions (95.000 percent):

FROM	TO	MAJ-SEMI (AZ,VANG)	MED-SEMI (AZ,VANG)	MIN-SEMI (AZ,VANG)	DISTANCE	PPM
1010	1113	0.033 (0, 90)	0.033 (0, 0)	0.033 (90, 0)	17150.424	1.95
1010	1208	0.016 (0, 90)	0.015 (0, 0)	0.015 (90, 0)	6445.272	2.43
1010	1209	0.022 (0, 90)	0.021 (0, 0)	0.021 (90, 0)	16676.769	1.29
1010	1212	0.032 (0, 90)	0.032 (0, 0)	0.032 (90, 0)	21470.910	1.48
1010	1213	0.023 (0, 90)	0.023 (0, 0)	0.023 (90, 0)	11187.756	2.04
1010	1409	0.033 (318, 79)	0.031 (181, 8)	0.031 (90, 7)	15559.629	2.09
1010	1411	0.019 (212, 67)	0.018 (94, 11)	0.018 (0, 20)	17444.177	1.09
1010	1412	0.023 (0, 90)	0.022 (0, 0)	0.022 (90, 0)	10032.782	2.29
1010	1413	0.025 (0, 90)	0.025 (0, 0)	0.025 (90, 0)	10162.418	2.48
1010	1506	0.018 (0, 90)	0.017 (0, 0)	0.017 (90, 0)	8025.321	2.22
1010	1507	0.013 (0, 90)	0.013 (0, 0)	0.013 (90, 0)	17141.980	0.77
1010	1508	0.041 (0, 90)	0.040 (0, 0)	0.040 (90, 0)	20306.945	1.99
1010	1511	0.015 (0, 0)	0.015 (90, 0)	0.014 (0, 90)	20110.357	0.74
1010	1512	0.014 (0, 90)	0.014 (0, 0)	0.014 (90, 0)	5583.311	2.51
1010	1624	0.007 (0, 90)	0.007 (0, 0)	0.006 (90, 0)	2396.563	3.11
1010	1625	0.014 (0, 90)	0.014 (0, 0)	0.014 (90, 0)	19038.889	0.72
1010	MOMV	0.016 (0, 0)	0.015 (90, 0)	0.013 (0, 90)	70255.782	0.22
1010	MORK	0.016 (0, 0)	0.015 (90, 0)	0.013 (0, 90)	67038.981	0.23
1010	MOSV	0.016 (0, 0)	0.015 (90, 0)	0.013 (0, 90)	42394.314	0.37
1011	1111	0.027 (0, 90)	0.027 (0, 0)	0.027 (90, 0)	12837.339	2.12
1011	1112	0.024 (0, 90)	0.023 (0, 0)	0.023 (90, 0)	10453.830	2.25
1011	1114	0.021 (0, 90)	0.021 (0, 0)	0.021 (90, 0)	9034.554	2.28
1011	1130	0.023 (0, 0)	0.023 (90, 0)	0.023 (0, 90)	16558.307	1.41
1011	1131	0.021 (0, 0)	0.021 (0, 90)	0.021 (90, 0)	11928.762	1.80
1011	1210	0.023 (0, 90)	0.023 (0, 0)	0.023 (90, 0)	9715.615	2.36
1011	1211	0.030 (0, 90)	0.030 (0, 0)	0.030 (90, 0)	12890.855	2.34

3D Relative Confidence Regions (95.000 percent):

FROM	TO	MAJ-SEMI (AZ,VANG)	MED-SEMI (AZ,VANG)	MIN-SEMI (AZ,VANG)	DISTANCE	PPM
1011	1214	0.032 (320, 83)	0.030 (180, 5)	0.030 (90, 5)	15326.747	2.06
1011	1229	0.021 (0, 90)	0.021 (0, 0)	0.021 (90, 0)	9970.293	2.09
1011	1230	0.020 (0, 0)	0.020 (90, 0)	0.020 (0, 90)	16474.002	1.23
1011	1410	0.037 (0, 77)	0.036 (180, 13)	0.036 (90, 0)	19102.877	1.94
1011	1414	0.009 (0, 90)	0.009 (0, 0)	0.009 (90, 0)	3488.438	2.72
1011	1429	0.013 (0, 90)	0.013 (0, 0)	0.013 (90, 0)	5072.875	2.55
1011	1430	0.017 (0, 90)	0.017 (0, 0)	0.017 (90, 0)	7267.552	2.37
1011	1509	0.007 (0, 90)	0.006 (0, 0)	0.005 (90, 0)	2045.240	3.20
1011	1510	0.047 (0, 90)	0.047 (0, 0)	0.047 (90, 0)	27587.283	1.72
1011	1513	0.015 (0, 0)	0.015 (90, 0)	0.014 (0, 90)	16667.308	0.91
1011	1514	0.032 (0, 0)	0.032 (90, 0)	0.032 (0, 90)	23138.872	1.38
1011	1515	0.017 (0, 90)	0.016 (0, 0)	0.016 (90, 0)	6781.273	2.45
1011	1529	0.017 (0, 0)	0.017 (90, 0)	0.016 (0, 90)	15901.456	1.05
1011	1530	0.017 (0, 90)	0.016 (0, 0)	0.016 (90, 0)	6728.895	2.50
1011	1626	0.042 (0, 0)	0.042 (0, 90)	0.042 (90, 0)	21019.774	2.00
1011	1627	0.025 (0, 0)	0.025 (90, 0)	0.025 (0, 90)	17703.611	1.42
1011	KST5	0.018 (0, 0)	0.018 (90, 0)	0.011 (0, 90)	91974.836	0.20
1011	MORK	0.018 (0, 0)	0.018 (90, 0)	0.011 (0, 90)	66691.651	0.27
1011	MOSV	0.018 (0, 0)	0.018 (90, 0)	0.011 (0, 90)	77964.793	0.23
1011	X 108	0.021 (0, 0)	0.021 (90, 0)	0.011 (0, 90)	8669.664	2.42
1012	1114	0.023 (0, 0)	0.023 (90, 0)	0.022 (0, 90)	15078.460	1.50
1012	1115	0.029 (0, 90)	0.029 (0, 0)	0.029 (90, 0)	15831.514	1.84
1012	1116	0.020 (0, 0)	0.020 (90, 0)	0.020 (0, 90)	18325.887	1.12
1012	1117	0.020 (0, 0)	0.020 (90, 0)	0.019 (0, 90)	19894.395	0.99
1012	1131	0.021 (0, 90)	0.021 (0, 0)	0.021 (90, 0)	9789.115	2.13
1012	1214	0.032 (320, 83)	0.030 (180, 5)	0.030 (90, 5)	15710.708	2.01

3D Relative Confidence Regions (95.000 percent):

FROM	TO	MAJ-SEMI (AZ,VANG)	MED-SEMI (AZ,VANG)	MIN-SEMI (AZ,VANG)	DISTANCE	PPM
1012	1215	0.019 (0, 90)	0.019 (0, 0)	0.019 (90, 0)	8054.848	2.41
1012	1216	0.031 (0, 0)	0.031 (90, 0)	0.031 (0, 90)	22936.102	1.35
1012	1217	0.021 (0, 0)	0.021 (90, 0)	0.021 (0, 90)	20954.176	1.02
1012	1218	0.035 (0, 90)	0.035 (0, 0)	0.035 (90, 0)	17934.329	1.94
1012	1230	0.017 (0, 90)	0.017 (0, 0)	0.017 (90, 0)	6827.751	2.48
1012	1414	0.016 (0, 0)	0.016 (90, 0)	0.014 (0, 90)	13884.990	1.13
1012	1415	0.036 (0, 0)	0.036 (0, 90)	0.036 (90, 0)	22104.298	1.65
1012	1416	0.018 (0, 0)	0.018 (90, 0)	0.017 (0, 90)	13647.200	1.30
1012	1417	0.032 (0, 0)	0.032 (90, 0)	0.032 (0, 90)	23321.691	1.39
1012	1513	0.007 (0, 90)	0.007 (0, 0)	0.007 (90, 0)	2778.129	2.68
1012	1514	0.031 (0, 90)	0.031 (0, 0)	0.030 (90, 0)	13445.720	2.27
1012	1515	0.020 (0, 0)	0.020 (90, 0)	0.019 (0, 90)	14875.901	1.33
1012	1516	0.014 (0, 0)	0.014 (90, 0)	0.013 (0, 90)	9714.647	1.46
1012	1517	0.016 (0, 0)	0.016 (90, 0)	0.015 (0, 90)	21727.196	0.73
1012	1518	0.041 (0, 0)	0.041 (0, 90)	0.041 (90, 0)	25916.770	1.59
1012	1530	0.020 (0, 0)	0.020 (90, 0)	0.019 (0, 90)	14951.110	1.31
1012	1627	0.023 (0, 0)	0.023 (0, 90)	0.023 (90, 0)	10021.467	2.30
1012	1628	0.035 (0, 0)	0.035 (90, 0)	0.034 (0, 90)	23705.742	1.46
1012	1629	0.014 (0, 0)	0.014 (90, 0)	0.012 (0, 90)	10735.318	1.27
1012	1630	0.025 (0, 0)	0.025 (90, 0)	0.025 (0, 90)	19770.495	1.26
1012	KST5	0.020 (0, 0)	0.020 (90, 0)	0.011 (0, 90)	88804.412	0.23
1012	MORK	0.020 (0, 0)	0.020 (90, 0)	0.011 (0, 90)	73207.658	0.28
1012	MOSV	0.020 (0, 0)	0.020 (90, 0)	0.011 (0, 90)	95139.577	0.21
1013	1118	0.016 (0, 90)	0.015 (0, 0)	0.015 (90, 0)	5986.730	2.67
1013	1119	0.024 (0, 0)	0.024 (90, 0)	0.023 (0, 90)	19671.372	1.24
1013	1120	0.021 (0, 0)	0.021 (90, 0)	0.021 (0, 90)	9790.372	2.19

3D Relative Confidence Regions (95.000 percent):

FROM	TO	MAJ-SEMI (AZ,VANG)	MED-SEMI (AZ,VANG)	MIN-SEMI (AZ,VANG)	DISTANCE	PPM
1013	1132	0.014 (0, 90)	0.014 (0, 0)	0.014 (90, 0)	5764.937	2.44
1013	1133	0.020 (0, 0)	0.020 (90, 0)	0.020 (0, 90)	19075.133	1.06
1013	1217	0.016 (0, 90)	0.016 (0, 0)	0.016 (90, 0)	6307.304	2.55
1013	1218	0.035 (0, 0)	0.035 (0, 90)	0.035 (90, 0)	18833.810	1.85
1013	1219	0.028 (0, 0)	0.028 (0, 90)	0.028 (90, 0)	11612.992	2.38
1013	1231	0.014 (0, 90)	0.014 (0, 0)	0.014 (90, 0)	6028.097	2.34
1013	1232	0.023 (0, 0)	0.023 (90, 0)	0.018 (0, 90)	16504.732	1.39
1013	1233	0.019 (0, 0)	0.019 (90, 0)	0.018 (0, 90)	12767.920	1.47
1013	1417	0.031 (0, 90)	0.030 (0, 0)	0.030 (90, 0)	13289.063	2.30
1013	1418	0.031 (0, 90)	0.031 (0, 0)	0.030 (90, 0)	14161.295	2.16
1013	1419	0.019 (0, 0)	0.019 (90, 0)	0.018 (0, 90)	15469.008	1.24
1013	1431	0.022 (0, 90)	0.022 (0, 0)	0.022 (90, 0)	10581.909	2.12
1013	1432	0.030 (0, 90)	0.030 (0, 0)	0.030 (90, 0)	14879.746	2.01
1013	1517	0.002 (0, 90)	0.002 (0, 0)	0.001 (90, 0)	347.782	6.17
1013	1518	0.040 (0, 90)	0.040 (0, 0)	0.040 (90, 0)	18901.557	2.13
1013	1519	0.023 (0, 0)	0.023 (90, 0)	0.023 (0, 90)	11777.165	1.98
1013	1531	0.024 (0, 0)	0.024 (0, 90)	0.024 (90, 0)	14420.413	1.68
1013	1532	0.017 (0, 0)	0.017 (90, 0)	0.017 (0, 90)	8944.148	1.90
1013	1630	0.022 (0, 90)	0.021 (0, 0)	0.021 (90, 0)	8972.627	2.41
1013	1631	0.023 (0, 0)	0.023 (90, 0)	0.023 (0, 90)	12342.757	1.89
1013	KST5	0.022 (0, 0)	0.022 (90, 0)	0.012 (0, 90)	67604.198	0.33
1013	MOPL	0.022 (0, 0)	0.022 (90, 0)	0.012 (0, 90)	111566.370	0.20
1013	MORK	0.022 (0, 0)	0.022 (90, 0)	0.012 (0, 90)	95025.632	0.23
1013	MOSV	0.022 (0, 0)	0.022 (90, 0)	0.012 (0, 90)	106901.556	0.21
1014	1121	0.014 (0, 90)	0.014 (0, 0)	0.014 (90, 0)	5389.809	2.61
1014	1220	0.020 (0, 90)	0.020 (0, 0)	0.020 (90, 0)	7880.874	2.59

3D Relative Confidence Regions (95.000 percent):

FROM	TO	MAJ-SEMI (AZ,VANG)	MED-SEMI (AZ,VANG)	MIN-SEMI (AZ,VANG)	DISTANCE	PPM
1014	1221	0.031 (0, 90)	0.031 (0, 0)	0.031 (90, 0)	12057.019	2.57
1014	1420	0.035 (0, 90)	0.035 (0, 0)	0.035 (90, 0)	14008.270	2.53
1014	1520	0.003 (0, 90)	0.003 (0, 0)	0.002 (90, 0)	892.587	3.39
1014	1632	0.035 (0, 90)	0.035 (0, 0)	0.035 (90, 0)	14279.023	2.46
1014	KST5	0.034 (0, 90)	0.034 (0, 0)	0.034 (90, 0)	49125.055	0.70
1014	KSU1	0.034 (0, 90)	0.034 (0, 0)	0.034 (90, 0)	35901.195	0.95
1015	1122	0.033 (0, 0)	0.033 (90, 0)	0.033 (0, 90)	14848.968	2.25
1015	1123	0.013 (0, 90)	0.012 (0, 0)	0.012 (90, 0)	6356.649	2.07
1015	1124	0.029 (0, 90)	0.028 (0, 0)	0.028 (90, 0)	15243.521	1.87
1015	1222	0.022 (0, 0)	0.022 (90, 0)	0.022 (0, 90)	9548.425	2.33
1015	1223	0.013 (0, 90)	0.013 (0, 0)	0.013 (90, 0)	5338.778	2.40
1015	1224	0.010 (0, 0)	0.010 (90, 0)	0.010 (0, 90)	7546.696	1.30
1015	1421	0.032 (180, 50)	0.031 (0, 40)	0.031 (90, 0)	13368.968	2.38
1015	1422	0.030 (0, 90)	0.029 (0, 0)	0.029 (90, 0)	13414.309	2.20
1015	1423	0.020 (227, 77)	0.018 (90, 10)	0.018 (358, 9)	7817.795	2.58
1015	1424	0.018 (0, 90)	0.018 (0, 0)	0.018 (90, 0)	13031.656	1.41
1015	1521	0.032 (0, 0)	0.032 (90, 0)	0.032 (0, 90)	14220.329	2.24
1015	1522	0.004 (0, 90)	0.004 (0, 0)	0.004 (90, 0)	1390.423	3.05
1015	1523	0.010 (0, 90)	0.010 (0, 0)	0.010 (90, 0)	11366.689	0.92
1015	1524	0.036 (0, 90)	0.036 (0, 0)	0.035 (90, 0)	23830.597	1.50
1015	1633	0.031 (180, 62)	0.031 (0, 28)	0.031 (90, 0)	12482.508	2.52
1015	1634	0.005 (0, 90)	0.005 (0, 0)	0.005 (90, 0)	1772.818	2.79
1015	1635	0.029 (0, 90)	0.029 (0, 0)	0.029 (90, 0)	19384.272	1.51
1015	BELVUE	0.009 (0, 0)	0.009 (90, 0)	0.009 (0, 90)	9161.589	0.96
1015	KST5	0.017 (0, 0)	0.017 (90, 0)	0.009 (0, 90)	30499.876	0.55
1015	KSU1	0.017 (0, 0)	0.017 (90, 0)	0.009 (0, 90)	29223.132	0.58

3D Relative Confidence Regions (95.000 percent):

FROM	TO	MAJ-SEMI (AZ,VANG)	MED-SEMI (AZ,VANG)	MIN-SEMI (AZ,VANG)	DISTANCE	PPM
1016	1125	0.005 (0, 90)	0.004 (0, 0)	0.004 (90, 0)	1350.067	3.33
1016	1126	0.027 (0, 90)	0.027 (0, 0)	0.027 (90, 0)	11732.964	2.28
1016	1225	0.011 (0, 90)	0.011 (0, 0)	0.011 (90, 0)	4637.554	2.42
1016	1425	0.014 (0, 90)	0.014 (0, 0)	0.014 (90, 0)	5865.042	2.40
1016	1426	0.036 (0, 90)	0.036 (0, 0)	0.036 (90, 0)	17862.109	2.01
1016	1525	0.014 (0, 90)	0.012 (0, 0)	0.012 (90, 0)	5138.754	2.79
1016	1526	0.018 (0, 90)	0.018 (0, 0)	0.018 (90, 0)	7752.358	2.33
1016	1636	0.017 (0, 90)	0.017 (0, 0)	0.017 (90, 0)	7263.409	2.36
1016	KST5	0.021 (0, 0)	0.020 (90, 0)	0.012 (0, 90)	23570.856	0.87
1016	KSU1	0.021 (0, 0)	0.020 (90, 0)	0.012 (0, 90)	50205.498	0.41
1017	1127	0.016 (0, 0)	0.016 (90, 0)	0.015 (0, 90)	7657.689	2.13
1017	1132	0.018 (0, 0)	0.018 (90, 0)	0.017 (0, 90)	13244.372	1.34
1017	1133	0.017 (0, 90)	0.017 (0, 0)	0.016 (90, 0)	6655.785	2.53
1017	1226	0.016 (0, 90)	0.016 (0, 0)	0.016 (90, 0)	6483.790	2.43
1017	1231	0.017 (0, 0)	0.017 (90, 0)	0.016 (0, 90)	10599.443	1.60
1017	1232	0.022 (0, 0)	0.022 (90, 0)	0.018 (0, 90)	10843.635	2.03
1017	1233	0.016 (0, 90)	0.016 (0, 0)	0.016 (90, 0)	6808.936	2.37
1017	1427	0.016 (0, 0)	0.016 (90, 0)	0.013 (0, 90)	11724.504	1.40
1017	1431	0.023 (0, 0)	0.023 (90, 0)	0.023 (0, 90)	13589.552	1.71
1017	1432	0.030 (0, 90)	0.030 (0, 0)	0.030 (90, 0)	16956.317	1.78
1017	1527	0.006 (0, 90)	0.003 (0, 0)	0.003 (90, 0)	1081.440	5.70
1017	1531	0.024 (0, 90)	0.023 (0, 0)	0.023 (90, 0)	10957.986	2.15
1017	1532	0.016 (0, 90)	0.016 (0, 0)	0.016 (90, 0)	7557.409	2.14
1017	KST5	0.024 (0, 0)	0.024 (90, 0)	0.012 (0, 90)	52349.993	0.46
1017	KSU1	0.024 (0, 0)	0.024 (90, 0)	0.012 (0, 90)	64358.558	0.37
1017	MOPL	0.024 (0, 0)	0.024 (90, 0)	0.012 (0, 90)	113147.291	0.21

3D Relative Confidence Regions (95.000 percent):

FROM	TO	MAJ-SEMI (AZ,VANG)	MED-SEMI (AZ,VANG)	MIN-SEMI (AZ,VANG)	DISTANCE	PPM
1017	MORK	0.024 (0, 0)	0.024 (90, 0)	0.012 (0, 90)	110927.681	0.21
1017	MOSV	0.024 (0, 0)	0.024 (90, 0)	0.012 (0, 90)	116928.303	0.20
103	1605	0.016 (0, 0)	0.016 (90, 0)	0.015 (0, 90)	18425.822	0.85
103	1606	0.017 (0, 90)	0.017 (0, 0)	0.017 (90, 0)	15362.945	1.12
103	1607	0.023 (0, 90)	0.023 (0, 0)	0.023 (90, 0)	25852.534	0.91
103	1608	0.016 (0, 90)	0.015 (0, 0)	0.015 (90, 0)	19297.079	0.81
103	604	0.021 (0, 90)	0.021 (0, 0)	0.021 (90, 0)	10355.933	2.05
103	605	0.026 (0, 90)	0.026 (0, 0)	0.026 (90, 0)	12299.642	2.12
103	606	0.009 (0, 90)	0.008 (0, 0)	0.008 (90, 0)	3057.364	2.81
103	A 282	0.018 (0, 0)	0.018 (90, 0)	0.016 (0, 90)	9702.757	1.83
103	MORM	0.023 (0, 0)	0.022 (90, 0)	0.016 (0, 90)	67263.016	0.33
103	MOSB	0.023 (0, 0)	0.022 (90, 0)	0.016 (0, 90)	42548.270	0.53
103	ZKC1	0.023 (0, 0)	0.022 (90, 0)	0.016 (0, 90)	35532.034	0.63
104	1614	0.012 (0, 90)	0.012 (0, 0)	0.012 (90, 0)	13581.407	0.89
104	1616	0.018 (0, 0)	0.018 (90, 0)	0.018 (0, 90)	29832.574	0.61
104	1617	0.015 (0, 0)	0.015 (90, 0)	0.013 (0, 90)	33439.892	0.44
104	1618	0.011 (0, 90)	0.011 (0, 0)	0.011 (90, 0)	8555.036	1.28
104	1619	0.013 (0, 90)	0.013 (0, 0)	0.013 (90, 0)	10198.937	1.31
104	616	0.002 (0, 90)	0.001 (0, 0)	0.001 (90, 0)	37.777	56.37
104	617	0.020 (0, 0)	0.020 (90, 0)	0.020 (0, 90)	30839.289	0.66
104	618	0.019 (0, 90)	0.019 (0, 0)	0.019 (90, 0)	23127.353	0.81
104	619	0.016 (0, 0)	0.016 (90, 0)	0.016 (0, 90)	19420.470	0.84
104	620	0.015 (0, 0)	0.015 (90, 0)	0.015 (0, 90)	14263.182	1.07
104	621	0.018 (0, 0)	0.018 (0, 90)	0.018 (90, 0)	12018.058	1.48
104	622	0.014 (0, 90)	0.014 (0, 0)	0.014 (90, 0)	7278.093	1.97
104	MOMV	0.013 (0, 0)	0.013 (90, 0)	0.010 (0, 90)	58078.346	0.22

3D Relative Confidence Regions (95.000 percent):

FROM	TO	MAJ-SEMI (AZ,VANG)	MED-SEMI (AZ,VANG)	MIN-SEMI (AZ,VANG)	DISTANCE	PPM
104	MORK	0.013 (0, 0)	0.013 (90, 0)	0.010 (0, 90)	60271.686	0.21
104	MOSV	0.013 (0, 0)	0.013 (90, 0)	0.010 (0, 90)	33459.004	0.38
104	Q 210	0.010 (0, 0)	0.010 (90, 0)	0.010 (0, 90)	6855.868	1.50
1103	MORK	0.010 (0, 90)	0.008 (0, 0)	0.008 (90, 0)	28242.976	0.37
1103	P 206	0.010 (0, 90)	0.008 (0, 0)	0.008 (90, 0)	3149.753	3.29
1104	MORK	0.018 (0, 90)	0.018 (0, 0)	0.018 (90, 0)	22719.000	0.80
1104	P 206	0.018 (0, 90)	0.018 (0, 0)	0.018 (90, 0)	7859.431	2.32
1105	917	0.013 (0, 0)	0.012 (90, 0)	0.011 (0, 90)	19679.224	0.64
1106	917	0.030 (0, 75)	0.030 (180, 15)	0.030 (90, 0)	23020.146	1.32
1107	917	0.028 (0, 0)	0.028 (90, 0)	0.028 (0, 90)	18021.370	1.56
1113	W 106	0.034 (0, 90)	0.033 (0, 0)	0.033 (90, 0)	18043.190	1.86
1115	Q 109	0.029 (0, 90)	0.029 (0, 0)	0.029 (90, 0)	14899.974	1.95
1116	Q 109	0.018 (0, 90)	0.017 (0, 0)	0.017 (90, 0)	7143.787	2.50
1117	Q 109	0.017 (0, 90)	0.016 (0, 0)	0.016 (90, 0)	6521.127	2.54
1118	Q 109	0.020 (0, 0)	0.020 (90, 0)	0.019 (0, 90)	18407.704	1.08
1119	Q 109	0.021 (0, 90)	0.021 (0, 0)	0.021 (90, 0)	8854.521	2.41
1120	Q 109	0.023 (0, 0)	0.023 (90, 0)	0.022 (0, 90)	13843.803	1.66
1121	KST5	0.036 (0, 90)	0.036 (0, 0)	0.036 (90, 0)	54420.889	0.66
1121	KSU1	0.036 (0, 90)	0.036 (0, 0)	0.036 (90, 0)	37134.292	0.97
1122	KST5	0.035 (0, 0)	0.035 (90, 0)	0.034 (0, 90)	45271.807	0.78
1122	KSU1	0.035 (0, 0)	0.035 (90, 0)	0.034 (0, 90)	28978.335	1.22
1123	BELVUE	0.013 (0, 90)	0.012 (0, 0)	0.012 (90, 0)	6032.834	2.20
1124	BELVUE	0.029 (0, 90)	0.028 (0, 0)	0.028 (90, 0)	14896.254	1.91
1125	BELVUE	0.013 (0, 90)	0.013 (0, 0)	0.013 (90, 0)	13314.613	0.98
1126	BELVUE	0.028 (0, 90)	0.028 (0, 0)	0.028 (90, 0)	19951.027	1.41
1127	X 119	0.016 (0, 0)	0.016 (90, 0)	0.015 (0, 90)	7186.903	2.20

3D Relative Confidence Regions (95.000 percent):

FROM	TO	MAJ-SEMI (AZ,VANG)	MED-SEMI (AZ,VANG)	MIN-SEMI (AZ,VANG)	DISTANCE	PPM
1128	MOSV	0.016 (180, 54)	0.016 (90, 0)	0.016 (0, 36)	23901.096	0.68
1128	W 106	0.013 (0, 90)	0.012 (0, 0)	0.012 (90, 0)	4580.011	2.81
1129	MOSV	0.027 (0, 90)	0.027 (0, 0)	0.026 (90, 0)	13739.829	1.96
1129	W 106	0.027 (0, 90)	0.027 (0, 0)	0.027 (90, 0)	14401.486	1.88
1134	1234	0.017 (0, 0)	0.017 (90, 0)	0.016 (0, 90)	17329.474	1.00
1134	Z 231	0.010 (0, 90)	0.009 (0, 0)	0.009 (90, 0)	3605.745	2.66
1135	1234	0.017 (0, 90)	0.017 (0, 0)	0.017 (90, 0)	7293.070	2.31
1135	Z 231	0.020 (0, 0)	0.020 (90, 0)	0.019 (0, 90)	12125.379	1.63
1136	1234	0.029 (0, 90)	0.029 (0, 0)	0.029 (90, 0)	18631.589	1.55
1136	1235	0.028 (0, 90)	0.027 (0, 0)	0.027 (90, 0)	12431.912	2.21
1137	1138	0.024 (0, 90)	0.024 (0, 0)	0.024 (90, 0)	13017.215	1.84
1137	1139	0.021 (0, 90)	0.021 (0, 0)	0.021 (90, 0)	19696.690	1.07
1137	1437	0.019 (0, 90)	0.019 (0, 0)	0.019 (90, 0)	7778.610	2.43
1137	1438	0.024 (0, 90)	0.024 (0, 0)	0.024 (90, 0)	11690.441	2.06
1137	1536	0.004 (0, 90)	0.003 (0, 0)	0.003 (90, 0)	1117.398	3.54
1137	1537	0.022 (0, 90)	0.022 (0, 0)	0.022 (90, 0)	14547.685	1.53
1137	1640	0.003 (0, 90)	0.002 (0, 0)	0.001 (90, 0)	284.346	8.92
1137	KST5	0.044 (0, 90)	0.044 (0, 0)	0.044 (90, 0)	29799.738	1.48
1137	KSU1	0.044 (0, 90)	0.044 (0, 0)	0.044 (90, 0)	66118.499	0.67
1138	1238	0.022 (0, 90)	0.022 (0, 0)	0.022 (90, 0)	10122.576	2.20
1139	1238	0.013 (0, 90)	0.012 (0, 0)	0.012 (90, 0)	4840.493	2.61
1140	1141	0.017 (0, 90)	0.017 (0, 0)	0.017 (90, 0)	9007.507	1.91
1140	1239	0.015 (0, 90)	0.014 (0, 0)	0.014 (90, 0)	8558.441	1.78
1140	1240	0.024 (0, 90)	0.024 (0, 0)	0.024 (90, 0)	16558.257	1.48
1140	1241	0.018 (0, 90)	0.017 (0, 0)	0.017 (90, 0)	7275.335	2.47
1140	1439	0.016 (180, 71)	0.014 (90, 0)	0.014 (0, 19)	15263.852	1.06

3D Relative Confidence Regions (95.000 percent):

FROM	TO	MAJ-SEMI (AZ,VANG)	MED-SEMI (AZ,VANG)	MIN-SEMI (AZ,VANG)	DISTANCE	PPM
1140	1440	0.026	0.026	0.026	13760.763	1.89
		(0, 90)	(0, 0)	(90, 0)		
1140	1538	0.006	0.005	0.005	1817.686	3.20
		(0, 90)	(0, 0)	(90, 0)		
1140	1539	0.017	0.016	0.015	14072.457	1.18
		(0, 90)	(0, 0)	(90, 0)		
1140	1641	0.026	0.025	0.025	20293.822	1.27
		(0, 79)	(180, 11)	(90, 0)		
1140	HBRK	0.012	0.012	0.012	128093.302	0.09
		(0, 90)	(0, 0)	(90, 0)		
1140	KST5	0.012	0.012	0.012	13100.589	0.92
		(0, 90)	(0, 0)	(90, 0)		
1141	KST5	0.017	0.016	0.016	7530.450	2.21
		(0, 90)	(0, 0)	(90, 0)		
1142	1242	0.022	0.022	0.022	11243.345	1.99
		(0, 0)	(90, 0)	(0, 90)		
1142	M 325	0.022	0.022	0.022	11277.184	1.99
		(0, 0)	(90, 0)	(0, 90)		
1143	1242	0.024	0.023	0.022	20249.690	1.16
		(0, 0)	(90, 0)	(0, 90)		
1143	SKIRT RM 2	0.019	0.019	0.019	7654.138	2.47
		(0, 90)	(0, 0)	(90, 0)		
1144	1242	0.021	0.021	0.019	15570.564	1.36
		(0, 0)	(90, 0)	(0, 90)		
1144	SKIRT RM 2	0.016	0.016	0.016	6694.954	2.45
		(0, 90)	(0, 0)	(90, 0)		
1145	1232	0.024	0.024	0.022	20369.409	1.20
		(0, 0)	(90, 0)	(0, 90)		
1145	SKIRT RM 2	0.015	0.015	0.015	6089.679	2.53
		(0, 90)	(0, 0)	(90, 0)		
1150	1250	0.014	0.014	0.014	9189.582	1.52
		(0, 90)	(0, 0)	(90, 0)		
1150	1251	0.016	0.016	0.016	10690.215	1.51
		(0, 90)	(0, 0)	(90, 0)		
1150	1252	0.020	0.020	0.020	15081.856	1.32
		(0, 90)	(0, 0)	(90, 0)		
1150	1450	0.008	0.007	0.007	2527.091	3.13
		(0, 90)	(0, 0)	(90, 0)		
1150	1451	0.017	0.017	0.017	8522.454	2.01
		(0, 90)	(0, 0)	(90, 0)		
1150	1452	0.013	0.012	0.012	9838.018	1.27
		(0, 90)	(0, 0)	(90, 0)		
1150	1550	0.013	0.012	0.012	10812.644	1.16
		(0, 90)	(0, 0)	(90, 0)		
1150	MOPL	0.011	0.011	0.011	31995.997	0.35
		(0, 90)	(0, 0)	(90, 0)		
1150	MOSV	0.011	0.011	0.011	41046.511	0.28
		(0, 90)	(0, 0)	(90, 0)		
1203	MORK	0.015	0.014	0.014	26932.431	0.54
		(0, 90)	(0, 0)	(90, 0)		
1203	P 206	0.015	0.014	0.014	5915.077	2.46
		(0, 90)	(0, 0)	(90, 0)		

3D Relative Confidence Regions (95.000 percent):

FROM	TO	MAJ-SEMI (AZ,VANG)	MED-SEMI (AZ,VANG)	MIN-SEMI (AZ,VANG)	DISTANCE	PPM
1204	MORK	0.025 (0, 90)	0.025 (0, 0)	0.025 (90, 0)	16742.693	1.49
1204	P 206	0.025 (0, 90)	0.025 (0, 0)	0.025 (90, 0)	13047.929	1.91
1205	917	0.014 (0, 0)	0.014 (90, 0)	0.013 (0, 90)	18685.407	0.76
1206	917	0.020 (0, 0)	0.020 (90, 0)	0.020 (0, 90)	9562.665	2.07
1207	917	0.024 (0, 90)	0.024 (0, 0)	0.024 (90, 0)	11326.942	2.11
1212	W 106	0.030 (0, 90)	0.030 (0, 0)	0.030 (90, 0)	13544.213	2.24
1213	W 106	0.023 (0, 90)	0.023 (0, 0)	0.023 (90, 0)	12168.181	1.91
1215	Q 109	0.021 (0, 0)	0.021 (0, 90)	0.021 (90, 0)	15585.080	1.35
1216	Q 109	0.030 (0, 90)	0.030 (0, 0)	0.030 (90, 0)	13007.057	2.30
1219	Q 109	0.030 (0, 0)	0.030 (90, 0)	0.029 (0, 90)	25194.182	1.19
1220	KST5	0.038 (0, 90)	0.038 (0, 0)	0.038 (90, 0)	44843.229	0.84
1220	KSU1	0.038 (0, 90)	0.038 (0, 0)	0.038 (90, 0)	40711.293	0.93
1221	KST5	0.045 (0, 90)	0.044 (0, 0)	0.044 (90, 0)	50133.184	0.89
1222	KST5	0.026 (0, 0)	0.025 (90, 0)	0.023 (0, 90)	37072.070	0.69
1222	KSU1	0.026 (0, 0)	0.025 (90, 0)	0.023 (0, 90)	20120.573	1.27
1223	BELVUE	0.014 (0, 90)	0.014 (0, 0)	0.014 (90, 0)	10246.587	1.40
1224	BELVUE	0.006 (0, 90)	0.006 (0, 0)	0.005 (90, 0)	2085.799	2.75
1225	BELVUE	0.014 (0, 90)	0.014 (0, 0)	0.014 (90, 0)	8272.316	1.73
1226	X 119	0.020 (0, 0)	0.020 (90, 0)	0.018 (0, 90)	13139.480	1.52
1227	MOSV	0.011 (0, 0)	0.011 (90, 0)	0.011 (0, 90)	26657.455	0.42
1227	W 106	0.005 (0, 90)	0.004 (0, 0)	0.004 (90, 0)	1467.344	3.09
1228	MOSV	0.017 (0, 0)	0.017 (90, 0)	0.016 (0, 90)	23738.567	0.70
1228	W 106	0.014 (0, 90)	0.013 (0, 0)	0.013 (90, 0)	5210.075	2.60
1232	1245	0.012 (0, 90)	0.012 (0, 0)	0.012 (90, 0)	4868.040	2.51
1232	1444	0.022 (0, 0)	0.022 (90, 0)	0.019 (0, 90)	14212.307	1.54
1232	1645	0.029 (0, 0)	0.029 (90, 0)	0.027 (0, 90)	22967.687	1.27

3D Relative Confidence Regions (95.000 percent):

FROM	TO	MAJ-SEMI (AZ,VANG)	MED-SEMI (AZ,VANG)	MIN-SEMI (AZ,VANG)	DISTANCE	PPM
1232	KST5	0.027 (0, 0)	0.027 (90, 0)	0.017 (0, 90)	52747.546	0.52
1232	MOPL	0.027 (0, 0)	0.027 (90, 0)	0.017 (0, 90)	102410.793	0.27
1234	1236	0.016 (0, 90)	0.015 (0, 0)	0.015 (90, 0)	6497.142	2.39
1234	1237	0.020 (0, 0)	0.020 (90, 0)	0.020 (0, 90)	13926.659	1.42
1234	1433	0.021 (0, 0)	0.021 (90, 0)	0.021 (0, 90)	11976.489	1.75
1234	1434	0.020 (0, 0)	0.020 (90, 0)	0.018 (0, 90)	16069.797	1.22
1234	1435	0.016 (0, 0)	0.016 (90, 0)	0.014 (0, 90)	17188.300	0.92
1234	1436	0.022 (0, 90)	0.022 (0, 0)	0.022 (90, 0)	12125.289	1.79
1234	1533	0.005 (0, 90)	0.005 (0, 0)	0.005 (90, 0)	1704.081	3.12
1234	1534	0.032 (0, 90)	0.032 (0, 0)	0.032 (90, 0)	23189.015	1.38
1234	1535	0.007 (0, 90)	0.006 (0, 0)	0.006 (90, 0)	2289.522	3.13
1234	1637	0.023 (0, 0)	0.023 (90, 0)	0.023 (0, 90)	13319.653	1.74
1234	1638	0.024 (0, 0)	0.024 (0, 90)	0.024 (90, 0)	21554.287	1.13
1234	1639	0.016 (0, 90)	0.016 (0, 0)	0.016 (90, 0)	7621.103	2.13
1234	KST5	0.025 (0, 0)	0.025 (90, 0)	0.013 (0, 90)	21772.643	1.16
1234	KSU1	0.025 (0, 0)	0.025 (90, 0)	0.013 (0, 90)	30435.814	0.83
1234	P 215	0.032 (0, 0)	0.032 (90, 0)	0.013 (0, 90)	23478.320	1.38
1235	1236	0.019 (0, 0)	0.019 (90, 0)	0.019 (0, 90)	11963.516	1.56
1235	1237	0.016 (0, 90)	0.016 (0, 0)	0.016 (90, 0)	6843.399	2.41
1235	1436	0.021 (0, 90)	0.020 (0, 0)	0.020 (90, 0)	9524.198	2.17
1235	1534	0.030 (0, 90)	0.030 (0, 0)	0.030 (90, 0)	13308.292	2.29
1235	1535	0.015 (0, 0)	0.015 (90, 0)	0.015 (0, 90)	17077.709	0.90
1235	1638	0.021 (0, 90)	0.021 (0, 0)	0.021 (90, 0)	8564.308	2.47
1235	1639	0.017 (0, 90)	0.017 (0, 0)	0.017 (90, 0)	8515.743	1.99
1235	KST5	0.028 (0, 0)	0.028 (90, 0)	0.017 (0, 90)	32271.177	0.86
1235	KSU1	0.028 (0, 0)	0.028 (90, 0)	0.017 (0, 90)	34920.792	0.80

3D Relative Confidence Regions (95.000 percent):

FROM	TO	MAJ-SEMI (AZ,VANG)	MED-SEMI (AZ,VANG)	MIN-SEMI (AZ,VANG)	DISTANCE	PPM
1235	P 215	0.031	0.031	0.017	13582.764	2.27
		(0, 0)	(90, 0)	(0, 90)		
1238	1437	0.024	0.023	0.023	16100.064	1.47
		(0, 90)	(0, 0)	(90, 0)		
1238	1438	0.025	0.024	0.024	12635.102	1.94
		(0, 90)	(0, 0)	(90, 0)		
1238	1536	0.018	0.018	0.018	21333.042	0.86
		(0, 90)	(0, 0)	(90, 0)		
1238	1537	0.017	0.017	0.017	7189.169	2.43
		(0, 90)	(0, 0)	(90, 0)		
1238	1640	0.018	0.018	0.018	21321.715	0.85
		(0, 90)	(0, 0)	(90, 0)		
1238	KST5	0.043	0.043	0.043	23170.580	1.87
		(0, 90)	(0, 0)	(90, 0)		
1238	KSU1	0.043	0.043	0.043	44859.204	0.96
		(0, 90)	(0, 0)	(90, 0)		
1239	KST5	0.013	0.012	0.012	5077.569	2.62
		(0, 90)	(0, 0)	(90, 0)		
1240	KST5	0.023	0.022	0.022	9795.036	2.36
		(0, 90)	(0, 0)	(90, 0)		
1241	KST5	0.020	0.019	0.019	14561.808	1.40
		(0, 90)	(0, 0)	(90, 0)		
1242	1243	0.021	0.021	0.020	10778.969	1.95
		(0, 0)	(90, 0)	(0, 90)		
1242	1244	0.023	0.023	0.022	10780.949	2.10
		(0, 0)	(90, 0)	(0, 90)		
1242	1441	0.018	0.018	0.018	7227.065	2.53
		(0, 90)	(0, 0)	(90, 0)		
1242	1442	0.029	0.029	0.029	12386.911	2.36
		(0, 90)	(0, 0)	(90, 0)		
1242	1443	0.018	0.018	0.018	7718.835	2.32
		(0, 0)	(90, 0)	(0, 90)		
1242	1540	0.022	0.022	0.022	9390.562	2.38
		(0, 90)	(0, 0)	(90, 0)		
1242	1541	0.019	0.019	0.015	22910.114	0.84
		(0, 0)	(90, 0)	(0, 90)		
1242	1542	0.025	0.025	0.024	10922.038	2.33
		(157, 58)	(0, 30)	(264, 10)		
1242	1543	0.027	0.027	0.026	22435.504	1.20
		(0, 0)	(90, 0)	(0, 90)		
1242	1544	0.020	0.020	0.018	14611.226	1.35
		(0, 0)	(90, 0)	(0, 90)		
1242	1642	0.023	0.023	0.022	9643.855	2.34
		(0, 0)	(90, 0)	(0, 90)		
1242	1643	0.018	0.017	0.017	6974.347	2.57
		(0, 90)	(0, 0)	(90, 0)		
1242	1644	0.030	0.030	0.029	17911.103	1.66
		(0, 0)	(90, 0)	(0, 90)		
1242	KST5	0.030	0.030	0.012	41642.623	0.71
		(0, 0)	(90, 0)	(0, 90)		
1242	KSU1	0.030	0.030	0.012	80207.691	0.37
		(0, 0)	(90, 0)	(0, 90)		

3D Relative Confidence Regions (95.000 percent):

FROM	TO	MAJ-SEMI (AZ,VANG)	MED-SEMI (AZ,VANG)	MIN-SEMI (AZ,VANG)	DISTANCE	PPM
1242	MOPL	0.030 (0, 0)	0.030 (90, 0)	0.012 (0, 90)	81774.718	0.36
1243	M 325	0.020 (0, 0)	0.020 (90, 0)	0.020 (0, 90)	9708.055	2.09
1244	SKIRT RM 2	0.024 (0, 0)	0.024 (90, 0)	0.023 (0, 90)	13104.189	1.82
1245	SKIRT RM 2	0.022 (0, 0)	0.022 (90, 0)	0.019 (0, 90)	13464.698	1.63
1250	W 281	0.011 (0, 90)	0.010 (0, 0)	0.010 (90, 0)	4192.785	2.55
1251	W 281	0.014 (0, 90)	0.013 (0, 0)	0.013 (90, 0)	5719.027	2.44
1252	W 281	0.018 (0, 90)	0.018 (0, 0)	0.018 (90, 0)	7469.078	2.40
1403	MORK	0.006 (0, 90)	0.003 (0, 0)	0.002 (90, 0)	28490.268	0.20
1403	P 206	0.006 (0, 90)	0.003 (0, 0)	0.002 (90, 0)	764.854	7.33
1404	MORK	0.025 (0, 90)	0.025 (0, 0)	0.025 (90, 0)	18007.342	1.40
1404	P 206	0.025 (0, 90)	0.025 (0, 0)	0.025 (90, 0)	12525.833	2.02
1405	917	0.007 (0, 90)	0.007 (0, 0)	0.006 (90, 0)	2382.012	3.05
1406	917	0.021 (0, 0)	0.021 (90, 0)	0.021 (0, 90)	21123.194	1.00
1407	917	0.020 (0, 0)	0.020 (90, 0)	0.019 (0, 90)	12688.469	1.57
1408	917	0.024 (0, 0)	0.023 (90, 0)	0.023 (0, 90)	15136.838	1.55
1411	W 106	0.014 (217, 75)	0.012 (0, 12)	0.012 (92, 9)	4537.750	3.03
1412	W 106	0.024 (0, 90)	0.023 (0, 0)	0.023 (90, 0)	13955.731	1.73
1413	W 106	0.028 (0, 90)	0.027 (0, 0)	0.027 (90, 0)	23711.991	1.17
1415	Q 109	0.036 (0, 90)	0.036 (0, 0)	0.036 (90, 0)	17176.388	2.10
1416	Q 109	0.015 (0, 90)	0.015 (0, 0)	0.014 (90, 0)	5941.689	2.55
1418	Q 109	0.032 (0, 0)	0.032 (90, 0)	0.031 (0, 90)	19920.184	1.59
1419	Q 109	0.014 (0, 90)	0.014 (0, 0)	0.014 (90, 0)	5775.664	2.49
1420	KST5	0.047 (0, 90)	0.047 (0, 0)	0.047 (90, 0)	47339.796	1.00
1421	KST5	0.034 (180, 6)	0.034 (90, 0)	0.032 (0, 84)	42732.129	0.80
1421	KSU1	0.034 (180, 6)	0.034 (90, 0)	0.032 (0, 84)	33308.008	1.02
1422	KSU1	0.031 (0, 0)	0.031 (90, 0)	0.030 (0, 90)	19344.105	1.60

3D Relative Confidence Regions (95.000 percent):

FROM	TO	MAJ-SEMI (AZ,VANG)	MED-SEMI (AZ,VANG)	MIN-SEMI (AZ,VANG)	DISTANCE	PPM
1423	BELVUE	0.021 (227, 76)	0.020 (358, 9)	0.020 (90, 10)	16190.046	1.31
1424	BELVUE	0.017 (0, 90)	0.017 (0, 0)	0.017 (90, 0)	7560.157	2.31
1425	BELVUE	0.016 (0, 90)	0.016 (0, 0)	0.016 (90, 0)	9540.237	1.70
1426	BELVUE	0.036 (0, 90)	0.036 (0, 0)	0.036 (90, 0)	20762.757	1.74
1427	X 119	0.006 (0, 90)	0.005 (0, 0)	0.004 (90, 0)	1492.513	4.22
1428	MOSV	0.026 (0, 90)	0.026 (0, 0)	0.025 (90, 0)	17821.936	1.46
1428	W 106	0.025 (0, 90)	0.025 (0, 0)	0.024 (90, 0)	10928.687	2.30
1433	Z 231	0.019 (0, 90)	0.019 (0, 0)	0.019 (90, 0)	8697.051	2.23
1434	Z 231	0.015 (0, 90)	0.014 (0, 0)	0.014 (90, 0)	5742.125	2.53
1435	Z 231	0.006 (0, 90)	0.005 (0, 0)	0.005 (90, 0)	1754.855	3.52
1439	KST5	0.012 (180, 70)	0.008 (90, 0)	0.008 (0, 20)	2461.584	4.81
1440	KST5	0.026 (0, 90)	0.026 (0, 0)	0.025 (90, 0)	13180.429	1.97
1441	M 325	0.024 (0, 0)	0.024 (90, 0)	0.021 (0, 90)	24338.804	0.98
1442	M 325	0.032 (0, 0)	0.032 (90, 0)	0.031 (0, 90)	25519.653	1.26
1443	SKIRT RM 2	0.021 (0, 0)	0.021 (90, 0)	0.020 (0, 90)	13338.772	1.60
1444	SKIRT RM 2	0.011 (0, 90)	0.011 (0, 0)	0.011 (90, 0)	4159.920	2.62
1450	W 281	0.013 (0, 90)	0.012 (0, 0)	0.012 (90, 0)	10389.111	1.26
1451	W 281	0.017 (0, 90)	0.017 (0, 0)	0.016 (90, 0)	8277.051	2.05
1452	W 281	0.007 (0, 90)	0.005 (0, 0)	0.005 (90, 0)	1971.393	3.43
1502	MORK	0.021 (0, 90)	0.021 (0, 0)	0.021 (90, 0)	20425.005	1.02
1502	P 206	0.021 (0, 90)	0.021 (0, 0)	0.021 (90, 0)	9508.332	2.20
1503	917	0.009 (0, 90)	0.009 (0, 0)	0.009 (90, 0)	3559.448	2.66
1504	917	0.026 (0, 0)	0.026 (90, 0)	0.026 (0, 90)	20089.855	1.31
1505	917	0.023 (0, 0)	0.023 (90, 0)	0.022 (0, 90)	11538.233	1.96
1511	W 106	0.004 (0, 90)	0.003 (0, 0)	0.002 (90, 0)	705.595	5.46
1512	W 106	0.019 (0, 0)	0.019 (90, 0)	0.019 (0, 90)	16914.752	1.13

3D Relative Confidence Regions (95.000 percent):

FROM	TO	MAJ-SEMI (AZ,VANG)	MED-SEMI (AZ,VANG)	MIN-SEMI (AZ,VANG)	DISTANCE	PPM
1516	Q 109	0.010 (0, 90)	0.010 (0, 0)	0.010 (90, 0)	3839.944	2.54
1519	Q 109	0.024 (0, 0)	0.023 (90, 0)	0.023 (0, 90)	12355.115	1.91
1520	KST5	0.034 (0, 90)	0.034 (0, 0)	0.034 (90, 0)	49980.950	0.69
1520	KSU1	0.034 (0, 90)	0.034 (0, 0)	0.034 (90, 0)	36445.167	0.94
1521	KST5	0.034 (0, 0)	0.034 (90, 0)	0.032 (0, 90)	44716.424	0.76
1521	KSU1	0.034 (0, 0)	0.034 (90, 0)	0.032 (0, 90)	26697.445	1.26
1522	KST5	0.017 (0, 0)	0.017 (90, 0)	0.009 (0, 90)	30430.345	0.56
1522	KSU1	0.017 (0, 0)	0.017 (90, 0)	0.009 (0, 90)	27991.162	0.61
1523	BELVUE	0.007 (0, 90)	0.006 (0, 0)	0.006 (90, 0)	2211.351	2.95
1524	BELVUE	0.035 (0, 90)	0.035 (0, 0)	0.035 (90, 0)	16208.980	2.18
1525	BELVUE	0.017 (0, 90)	0.016 (0, 0)	0.016 (90, 0)	10705.846	1.58
1526	BELVUE	0.020 (0, 90)	0.020 (0, 0)	0.020 (90, 0)	13387.526	1.50
1527	X 119	0.016 (0, 0)	0.016 (90, 0)	0.013 (0, 90)	14094.066	1.16
1528	MOSV	0.028 (0, 90)	0.028 (0, 0)	0.028 (90, 0)	22802.199	1.25
1528	W 106	0.027 (0, 90)	0.027 (0, 0)	0.027 (90, 0)	11637.152	2.36
1533	Z 231	0.016 (0, 0)	0.016 (90, 0)	0.014 (0, 90)	15467.478	1.02
1538	KST5	0.013 (0, 90)	0.012 (0, 0)	0.012 (90, 0)	11324.777	1.14
1539	KST5	0.013 (0, 90)	0.012 (0, 0)	0.011 (90, 0)	4435.034	2.92
1540	M 325	0.026 (0, 0)	0.026 (90, 0)	0.024 (0, 90)	19001.450	1.36
1541	M 325	0.010 (0, 90)	0.010 (0, 0)	0.010 (90, 0)	3726.012	2.65
1542	SKIRT RM 2	0.028 (159, 34)	0.027 (66, 5)	0.026 (328, 56)	17077.517	1.62
1543	SKIRT RM 2	0.024 (0, 90)	0.023 (0, 0)	0.023 (90, 0)	9660.222	2.44
1544	SKIRT RM 2	0.014 (0, 90)	0.014 (0, 0)	0.014 (90, 0)	5500.281	2.59
1550	W 281	0.006 (0, 90)	0.005 (90, 0)	0.005 (0, 0)	1978.372	3.24
1551	MOPL	0.050 (0, 90)	0.049 (0, 0)	0.049 (90, 0)	42609.997	1.17
1551	MOSV	0.050 (0, 90)	0.049 (0, 0)	0.049 (90, 0)	21112.841	2.36

3D Relative Confidence Regions (95.000 percent):

FROM	TO	MAJ-SEMI (AZ,VANG)	MED-SEMI (AZ,VANG)	MIN-SEMI (AZ,VANG)	DISTANCE	PPM
1552	D 217	0.034 (0, 0)	0.034 (90, 0)	0.034 (0, 90)	19206.214	1.79
1552	MOPL	0.034 (0, 0)	0.034 (90, 0)	0.034 (0, 90)	45085.227	0.75
1552	MOSV	0.034 (0, 0)	0.034 (90, 0)	0.034 (0, 90)	18523.679	1.84
1614	MOSV	0.011 (0, 0)	0.011 (90, 0)	0.010 (0, 90)	20932.250	0.51
1614	P 340	0.011 (0, 0)	0.011 (90, 0)	0.010 (0, 90)	22790.293	0.47
1614	W 106	0.011 (0, 90)	0.011 (0, 0)	0.011 (90, 0)	13262.630	0.84
1615	MOSV	0.017 (0, 90)	0.017 (0, 0)	0.017 (90, 0)	10457.070	1.66
1615	P 340	0.017 (0, 90)	0.017 (0, 0)	0.017 (90, 0)	13639.478	1.27
1615	W 106	0.019 (0, 90)	0.018 (0, 0)	0.018 (90, 0)	17957.632	1.05
1616	MOSV	0.015 (0, 90)	0.014 (0, 0)	0.014 (90, 0)	8419.030	1.82
1616	P 340	0.015 (0, 90)	0.014 (0, 0)	0.014 (90, 0)	9059.995	1.69
1616	W 106	0.017 (0, 90)	0.017 (0, 0)	0.017 (90, 0)	20406.666	0.86
1617	MOSV	0.008 (0, 90)	0.008 (0, 0)	0.008 (90, 0)	13114.235	0.63
1617	P 340	0.008 (0, 90)	0.008 (0, 0)	0.008 (90, 0)	3135.111	2.64
1617	W 106	0.013 (0, 0)	0.013 (90, 0)	0.013 (0, 90)	20088.812	0.64
1618	W 106	0.013 (0, 0)	0.013 (90, 0)	0.012 (0, 90)	26691.037	0.48
1619	MOSV	0.014 (0, 0)	0.014 (90, 0)	0.011 (0, 90)	25516.847	0.56
1619	W 106	0.015 (0, 0)	0.015 (90, 0)	0.014 (0, 90)	23003.292	0.64
1620	MOSV	0.014 (0, 0)	0.014 (90, 0)	0.011 (0, 90)	27614.479	0.52
1620	W 106	0.015 (0, 0)	0.015 (90, 0)	0.014 (0, 90)	20358.962	0.72
1622	MORK	0.004 (0, 90)	0.001 (0, 0)	0.001 (90, 0)	29133.177	0.12
1622	P 206	0.004 (0, 90)	0.001 (0, 0)	0.001 (90, 0)	121.618	29.76
1623	917	0.017 (0, 90)	0.017 (0, 0)	0.017 (90, 0)	7458.037	2.31
1628	Q 109	0.034 (0, 90)	0.034 (0, 0)	0.034 (90, 0)	15242.524	2.21
1629	Q 109	0.008 (0, 90)	0.007 (0, 0)	0.007 (90, 0)	2788.389	2.75
1631	Q 109	0.023 (0, 0)	0.023 (90, 0)	0.023 (0, 90)	11372.732	2.01

3D Relative Confidence Regions (95.000 percent):

FROM	TO	MAJ-SEMI (AZ,VANG)	MED-SEMI (AZ,VANG)	MIN-SEMI (AZ,VANG)	DISTANCE	PPM
1632	KST5	0.046 (0, 90)	0.046 (0, 0)	0.046 (90, 0)	53051.532	0.86
1632	KSU1	0.046 (0, 90)	0.046 (0, 0)	0.046 (90, 0)	49946.252	0.92
1633	KSU1	0.035 (180, 4)	0.034 (90, 0)	0.032 (0, 86)	37398.191	0.92
1634	BELVUE	0.010 (0, 0)	0.010 (90, 0)	0.009 (0, 90)	8195.830	1.18
1635	BELVUE	0.029 (0, 90)	0.029 (0, 0)	0.029 (90, 0)	13269.877	2.17
1636	BELVUE	0.019 (0, 90)	0.019 (0, 0)	0.018 (90, 0)	11747.152	1.62
1637	Z 231	0.022 (0, 0)	0.022 (90, 0)	0.022 (0, 90)	10112.579	2.15
1641	KST5	0.024 (0, 77)	0.023 (180, 13)	0.023 (90, 0)	9740.442	2.47
1642	M 325	0.026 (0, 0)	0.026 (90, 0)	0.024 (0, 90)	18246.700	1.42
1643	M 325	0.021 (0, 0)	0.021 (90, 0)	0.020 (0, 90)	13728.166	1.55
1644	SKIRT RM 2	0.028 (0, 0)	0.028 (90, 0)	0.028 (0, 90)	13305.429	2.14
1645	SKIRT RM 2	0.023 (0, 90)	0.023 (0, 0)	0.023 (90, 0)	9620.182	2.43
607	D 217	0.010 (0, 90)	0.008 (0, 0)	0.008 (90, 0)	2796.297	3.42
607	W 281	0.016 (0, 0)	0.016 (90, 0)	0.010 (0, 90)	18242.270	0.87
608	D 217	0.032 (180, 64)	0.032 (90, 0)	0.032 (0, 26)	13251.340	2.45
608	W 281	0.034 (180, 10)	0.034 (90, 0)	0.032 (0, 80)	29977.049	1.13
609	D 217	0.020 (0, 90)	0.019 (0, 0)	0.019 (90, 0)	7771.380	2.59
609	W 281	0.023 (0, 0)	0.023 (90, 0)	0.020 (0, 90)	22802.136	1.02
610	D 217	0.015 (0, 76)	0.013 (180, 14)	0.012 (90, 0)	5065.811	2.94
610	W 281	0.018 (0, 8)	0.017 (90, 0)	0.015 (180, 82)	12528.389	1.40
611	D 217	0.022 (0, 0)	0.022 (90, 0)	0.020 (0, 90)	12734.499	1.72
611	W 281	0.020 (0, 0)	0.020 (90, 0)	0.020 (0, 90)	9447.214	2.17
612	D 217	0.030 (145, 37)	0.029 (47, 11)	0.029 (303, 51)	16143.289	1.88
612	W 281	0.030 (142, 49)	0.029 (0, 34)	0.029 (256, 19)	14504.509	2.07
613	D 217	0.015 (0, 0)	0.015 (90, 0)	0.007 (0, 90)	14885.516	1.04
613	W 281	0.007 (0, 90)	0.007 (0, 0)	0.006 (90, 0)	2424.053	3.06

3D Relative Confidence Regions (95.000 percent):

FROM	TO	MAJ-SEMI (AZ,VANG)	MED-SEMI (AZ,VANG)	MIN-SEMI (AZ,VANG)	DISTANCE	PPM
614	D 217	0.027 (0, 90)	0.027 (0, 0)	0.027 (90, 0)	11991.617	2.24
614	W 281	0.028 (0, 0)	0.028 (90, 0)	0.027 (0, 90)	18857.641	1.50
615	D 217	0.029 (0, 0)	0.029 (90, 8)	0.028 (270, 82)	19160.437	1.52
615	W 281	0.028 (90, 69)	0.028 (0, 0)	0.028 (270, 21)	12505.088	2.24
616	MOSV	0.013 (0, 0)	0.013 (90, 0)	0.010 (0, 90)	33496.761	0.38
616	P 340	0.013 (0, 0)	0.013 (90, 0)	0.010 (0, 90)	36227.146	0.35
616	W 106	0.013 (0, 0)	0.013 (90, 0)	0.013 (0, 90)	20661.974	0.63
617	MOSV	0.018 (0, 90)	0.018 (0, 0)	0.017 (90, 0)	21247.582	0.84
617	P 340	0.018 (0, 90)	0.018 (0, 0)	0.017 (90, 0)	9379.716	1.89
617	W 106	0.019 (0, 90)	0.019 (0, 0)	0.019 (90, 0)	13049.412	1.44
618	MOSV	0.017 (0, 90)	0.017 (0, 0)	0.017 (90, 0)	13805.467	1.23
618	P 340	0.017 (0, 90)	0.017 (0, 0)	0.017 (90, 0)	13426.984	1.27
618	W 106	0.018 (0, 90)	0.017 (0, 0)	0.017 (90, 0)	14420.823	1.25
619	MOSV	0.015 (0, 0)	0.015 (90, 0)	0.015 (0, 90)	21207.260	0.70
619	P 340	0.015 (0, 0)	0.015 (90, 0)	0.015 (0, 90)	17559.226	0.84
619	W 106	0.014 (0, 90)	0.014 (0, 0)	0.014 (90, 0)	7246.497	1.93
620	MOSV	0.014 (0, 0)	0.014 (90, 0)	0.014 (0, 90)	24542.325	0.58
620	W 106	0.014 (0, 90)	0.013 (0, 0)	0.013 (90, 0)	7951.459	1.71
621	MOSV	0.018 (0, 0)	0.018 (90, 0)	0.017 (0, 90)	32685.293	0.55
621	W 106	0.017 (0, 0)	0.017 (0, 90)	0.017 (90, 0)	10073.659	1.70
622	MOSV	0.017 (0, 0)	0.017 (90, 0)	0.015 (0, 90)	38479.127	0.44
622	W 106	0.017 (0, 0)	0.017 (90, 0)	0.017 (0, 90)	27887.527	0.61
917	MOMV	0.016 (0, 0)	0.016 (90, 0)	0.000 (0, 90)	63165.021	0.26
917	MORK	0.016 (0, 0)	0.016 (90, 0)	0.000 (0, 90)	42442.623	0.38
917	MOSV	0.016 (0, 0)	0.016 (90, 0)	0.000 (0, 90)	53562.807	0.30
BELVUE	KST5	0.017 (0, 0)	0.017 (90, 0)	0.000 (0, 90)	23794.016	0.73

3D Relative Confidence Regions (95.000 percent):

FROM	TO	MAJ-SEMI (AZ,VANG)	MED-SEMI (AZ,VANG)	MIN-SEMI (AZ,VANG)	DISTANCE	PPM
BELVUE	KSU1	0.017 (0, 0)	0.017 (90, 0)	0.000 (0, 90)	37408.323	0.46
D 217	MOPL	0.014 (0, 0)	0.014 (90, 0)	0.000 (0, 90)	32285.262	0.44
D 217	MOSV	0.014 (0, 0)	0.014 (90, 0)	0.000 (0, 90)	36366.391	0.39
D 217	W 281	0.014 (0, 0)	0.014 (90, 0)	0.000 (0, 90)	17269.706	0.83
D 217	ZKC1	0.014 (0, 0)	0.014 (90, 0)	0.000 (0, 90)	85599.629	0.17
KST5	M 325	0.032 (0, 0)	0.032 (90, 0)	0.000 (0, 90)	23730.235	1.34
KST5	Q 109	0.022 (0, 0)	0.022 (90, 0)	0.000 (0, 90)	87770.715	0.25
KST5	SKIRT RM 2	0.029 (0, 0)	0.029 (90, 0)	0.000 (0, 90)	57693.984	0.50
KST5	X 119	0.028 (0, 0)	0.028 (90, 0)	0.000 (0, 90)	55793.413	0.50
KST5	Z 231	0.027 (0, 0)	0.027 (90, 0)	0.000 (0, 90)	25916.118	1.05
KSU1	M 325	0.032 (0, 0)	0.032 (90, 0)	0.000 (0, 90)	61176.782	0.52
KSU1	X 119	0.028 (0, 0)	0.028 (90, 0)	0.000 (0, 90)	56658.738	0.50
KSU1	Z 231	0.027 (0, 0)	0.027 (90, 0)	0.000 (0, 90)	26915.811	1.02
M 325	MOPL	0.032 (0, 0)	0.032 (90, 0)	0.000 (0, 90)	99711.873	0.32
MOMV	W 106	0.010 (0, 0)	0.010 (90, 0)	0.010 (0, 90)	67149.615	0.16
MOPL	SKIRT RM 2	0.029 (0, 0)	0.029 (90, 0)	0.000 (0, 90)	84276.300	0.34
MORK	Q 109	0.022 (0, 0)	0.022 (90, 0)	0.000 (0, 90)	81209.297	0.27
MORK	W 106	0.010 (0, 0)	0.010 (90, 0)	0.010 (0, 90)	80535.066	0.13
MOSV	W 106	0.010 (0, 0)	0.010 (90, 0)	0.010 (0, 90)	28123.926	0.37
Q 210	W 106	0.012 (0, 0)	0.012 (90, 0)	0.010 (0, 90)	23680.957	0.52

11:41:44, Thu Apr 19, 2012

INI file: C:\WINNT\GEOLAB.INI
Input file: Y:\1120103\GEOMAT~1\SURVEY\GEO\C3_ALL.IOB
Output file: Y:\1120103\GEOMAT~1\SURVEY\GEO\C3_ALL.LST

Geoid File: C:\GEOLAB2\G2009U06.GEO

PARAMETERS		OBSERVATIONS	
Description	Number	Description	Number
No. of Stations	160	Directions	0
Coord Parameters	457	Distances	0
Free Latitudes	153	Azimuths	0
Free Longitudes	153	Vertical Angles	0
Free Heights	151	Zenithal Angles	0
Fixed Coordinates	23	Angles	0
Astro. Latitudes	0	Heights	0
Astro. Longitudes	0	Height Differences	0
Geoid Records	0	Auxiliary Params.	0
All Aux. Pars.	0	2-D Coords.	0
Direction Pars.	0	2-D Coord. Diffs.	0
Scale Parameters	0	3-D Coords.	0
Constant Pars.	0	3-D Coord. Diffs.	1218
Rotation Pars.	0		
Translation Pars.	0		
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Total Parameters	457	Total Observations	1218
Degrees of Freedom =	761		

SUMMARY OF SELECTED OPTIONS

OPTION	SELECTION
Computation Mode	Adjustment
Maximum Iterations	5
Convergence Criterion	0.00100
Confidence Level for Statistics	95.000
Covariance Matrix Computation	Connected Portion Only
Residual Rejection Criterion	Tau Max
Confidence Region Types	3D Station Relative
Relative Confidence Regions	Connected Only
Variance Factor (VF) Known	Yes
CMULT (Multiply Parm Cov With VF)	Yes
RMULT (Multiply Res Cov With VF)	No
Force Convergence in Max Iters	Yes
Distances Affect 3D	No
Full Inverse Computed	No
Normals Reordered	Yes
Coordinates Generated	No
Geoid Interpolation Method	Bi-Linear

Adjusted NEO Coordinates:

CODE	FFF	STATION	NORTHING STD DEV	EASTING STD DEV	O-HEIGHT STD DEV	MAPPROJ
NEO	000	1001	4180745.686	349425.764	293.052	UTM 15
			0.006	0.006	0.006	
SFMC		1001	0.99987926	-1 2 49.269033		UTM 15
NEO	000	1002	4200601.912	349453.744	283.917	UTM 15
			0.006	0.006	0.003	
SFMC		1002	0.99987915	-1 3 12.896051		UTM 15
NEO	000	101	4177984.416	325549.042	281.142	UTM 15
			0.008	0.008	0.008	
SFMC		101	0.99997486	-1 12 42.615203		UTM 15
NEO	000	102	4207012.217	325436.637	318.880	UTM 15
			0.007	0.007	0.006	
SFMC		102	0.99997532	-1 13 26.672102		UTM 15
NEO	000	123	4107982.851	340485.519	256.831	UTM 15
			0.009	0.009	0.004	
SFMC		123	0.99991346	-1 4 59.514341		UTM 15
NEO	000	124	4108352.264	325311.412	254.108	UTM 15
			0.010	0.010	0.006	
SFMC		124	0.99997593	-1 11 10.699958		UTM 15
NEO	000	125	4103272.097	333268.220	273.613	UTM 15
			0.011	0.011	0.007	
SFMC		125	0.99994247	-1 7 49.563729		UTM 15
NEO	000	126	4127702.906	345621.249	282.499	UTM 15
			0.007	0.007	0.003	
SFMC		126	0.99989358	-1 3 18.390243		UTM 15
NEO	000	127	4127906.644	350453.271	265.865	UTM 15
			0.008	0.008	0.005	
SFMC		127	0.99987549	-1 1 19.815300		UTM 15
NEO	000	128	4122709.229	339116.206	278.488	UTM 15
			0.009	0.009	0.006	
SFMC		128	0.99991885	-1 5 51.902112		UTM 15
NEO	000	129	4139089.992	329752.681	269.824	UTM 15
			0.007	0.007	0.006	
SFMC		129	0.99995704	-1 10 4.107397		UTM 15
NEO	000	130	4124334.679	327897.120	268.332	UTM 15
			0.008	0.008	0.006	
SFMC		130	0.99996487	-1 10 29.521151		UTM 15
NEO	000	131	4121465.090	322977.933	259.506	UTM 15
			0.009	0.009	0.008	
SFMC		131	0.99998603	-1 12 26.250001		UTM 15
NEO	000	132	4145115.619	349128.014	284.059	UTM 15
			0.009	0.009	0.007	
SFMC		132	0.99988039	-1 2 13.262578		UTM 15
NEO	000	133	4142651.871	318830.138	286.461	UTM 15
			0.017	0.017	0.017	
SFMC		133	1.00000432	-1 14 38.796058		UTM 15
NEO	000	134	4163063.676	331343.130	306.069	UTM 15
			0.009	0.009	0.009	
SFMC		134	0.99995038	-1 9 57.450444		UTM 15
NEO	000	135	4167834.361	340115.825	291.452	UTM 15
			0.012	0.012	0.012	
SFMC		135	0.99991487	-1 6 25.438219		UTM 15
NEO	000	136	4177614.517	343629.764	287.065	UTM 15

Adjusted NEO Coordinates:

CODE	FFF	STATION	NORTHING STD DEV	EASTING STD DEV	O-HEIGHT STD DEV	MAPPROJ
			0.008	0.008	0.008	
SFMC		136	0.99990118	-1 5 10.293914		UTM 15
NEO	000	137	4177341.660	353028.510	265.704	UTM 15
			0.007	0.007	0.007	
SFMC		137	0.99986606	-1 1 15.074200		UTM 15
NEO	000	138	4189083.230	334419.048	259.683	UTM 15
			0.006	0.006	0.005	
SFMC		138	0.99993770	-1 9 15.888034		UTM 15
NEO	000	139	4191182.629	339594.195	275.752	UTM 15
			0.007	0.007	0.006	
SFMC		139	0.99991692	-1 7 8.826707		UTM 15
NEO	000	140	4198573.778	343915.382	273.767	UTM 15
			0.009	0.009	0.008	
SFMC		140	0.99990006	-1 5 29.761545		UTM 15
NEO	000	141	4194085.134	328368.890	270.476	UTM 15
			0.009	0.009	0.008	
SFMC		141	0.99996282	-1 11 54.611849		UTM 15
NEO	000	142	4198311.771	355762.168	252.080	UTM 15
			0.008	0.008	0.006	
SFMC		142	0.99985624	-1 0 31.354788		UTM 15
NEO	000	143	4219959.930	323473.568	338.852	UTM 15
			0.007	0.007	0.002	
SFMC		143	0.99998380	-1 14 34.887599		UTM 15
NEO	000	144	4223555.974	332823.098	282.983	UTM 15
			0.010	0.009	0.010	
SFMC		144	0.99994421	-1 10 42.988416		UTM 15
NEO	000	145	4236367.257	353186.655	249.142	UTM 15
			0.007	0.007	0.006	
SFMC		145	0.99986545	-1 2 21.925097		UTM 15
NEO	000	146	4225177.398	342214.246	253.909	UTM 15
			0.008	0.008	0.007	
SFMC		146	0.99990662	-1 6 46.899130		UTM 15
NEO	000	147	4221930.332	343609.591	275.916	UTM 15
			0.007	0.007	0.006	
SFMC		147	0.99990123	-1 6 7.322326		UTM 15
NEO	000	148	4244393.609	329124.169	305.430	UTM 15
			0.010	0.010	0.008	
SFMC		148	0.99995960	-1 12 46.076501		UTM 15
NEO	000	149	4182690.912	331620.313	284.123	UTM 15
			0.008	0.008	0.007	
SFMC		149	0.99994921	-1 10 17.333346		UTM 15
NEO	000	1601	4199987.801	352686.745	262.030	UTM 15
			0.006	0.006	0.004	
SFMC		1601	0.99986729	-1 1 50.752013		UTM 15
NEO	000	1602	4184341.953	344494.154	276.993	UTM 15
			0.007	0.007	0.007	
SFMC		1602	0.99989785	-1 4 57.185558		UTM 15
NEO	000	1603	4177308.203	354650.008	262.606	UTM 15
			0.007	0.007	0.007	
SFMC		1603	0.99986022	-1 0 34.511076		UTM 15
NEO	000	219	4108384.090	321064.360	249.514	UTM 15
			0.010	0.010	0.005	

Adjusted NEO Coordinates:

CODE	FFF	STATION	NORTHING STD DEV	EASTING STD DEV	O-HEIGHT STD DEV	MAPPROJ
SFMC		219	0.99999444	-1 12 54.490962		UTM 15
NEO	000	220	4103325.958	331369.838	266.913	UTM 15
			0.011	0.011	0.008	
SFMC		220	0.99995031	-1 8 35.937963		UTM 15
NEO	000	221	4107789.398	349134.610	261.749	UTM 15
			0.011	0.011	0.008	
SFMC		221	0.99988038	-1 1 27.971506		UTM 15
NEO	000	222	4122535.437	346535.197	271.612	UTM 15
			0.008	0.008	0.004	
SFMC		222	0.99989012	-1 2 49.563786		UTM 15
NEO	000	223	4122809.864	335347.478	269.670	UTM 15
			0.010	0.010	0.008	
SFMC		223	0.99993397	-1 7 24.544833		UTM 15
NEO	000	224	4127936.520	326352.118	271.128	UTM 15
			0.008	0.008	0.006	
SFMC		224	0.99997145	-1 11 12.472107		UTM 15
NEO	000	225	4127270.411	329496.880	272.722	UTM 15
			0.008	0.008	0.006	
SFMC		225	0.99995812	-1 9 54.245873		UTM 15
NEO	000	226	4150038.925	346002.234	293.332	UTM 15
			0.010	0.010	0.009	
SFMC		226	0.99989212	-1 3 36.668050		UTM 15
NEO	000	227	4138406.145	348991.155	269.465	UTM 15
			0.010	0.010	0.009	
SFMC		227	0.99988090	-1 2 8.497992		UTM 15
NEO	000	228	4138935.899	336166.424	289.219	UTM 15
			0.009	0.009	0.008	
SFMC		228	0.99993064	-1 7 25.634749		UTM 15
NEO	000	229	4153728.274	325127.383	295.690	UTM 15
			0.013	0.013	0.014	
SFMC		229	0.99997669	-1 12 18.844004		UTM 15
NEO	000	230	4142367.193	328551.445	267.926	UTM 15
			0.008	0.008	0.007	
SFMC		230	0.99996209	-1 10 38.265743		UTM 15
NEO	000	231	4163019.068	345573.558	285.910	UTM 15
			0.010	0.010	0.010	
SFMC		231	0.99989374	-1 4 3.464370		UTM 15
NEO	000	232	4158777.249	318753.705	277.762	UTM 15
			0.013	0.013	0.014	
SFMC		232	1.00000465	-1 15 4.235975		UTM 15
NEO	000	233	4163261.260	335003.908	309.698	UTM 15
			0.009	0.009	0.010	
SFMC		233	0.99993533	-1 8 26.671472		UTM 15
NEO	000	234	4190826.839	351639.926	241.973	UTM 15
			0.006	0.006	0.005	
SFMC		234	0.99987110	-1 2 6.032242		UTM 15
NEO	000	235	4182750.564	325763.483	277.016	UTM 15
			0.010	0.010	0.009	
SFMC		235	0.99997393	-1 12 43.996924		UTM 15
NEO	000	236	4185290.025	333794.592	269.837	UTM 15
			0.007	0.007	0.006	
SFMC		236	0.99994025	-1 9 26.424116		UTM 15

Adjusted NEO Coordinates:

CODE	FFF	STATION	NORTHING STD DEV	EASTING STD DEV	O-HEIGHT STD DEV	MAPPROJ
NEO	000	237	4188893.467	343734.646	269.115	UTM 15
			0.007	0.007	0.006	
SFMC		237	0.99990077	-1 5 21.989990		UTM 15
NEO	000	238	4198544.197	346174.257	274.833	UTM 15
			0.009	0.009	0.008	
SFMC		238	0.99989144	-1 4 32.887999		UTM 15
NEO	000	239	4200061.697	329985.472	333.313	UTM 15
			0.010	0.010	0.009	
SFMC		239	0.99995602	-1 11 22.284451		UTM 15
NEO	000	240	4221049.127	346547.021	271.661	UTM 15
			0.007	0.007	0.005	
SFMC		240	0.99989002	-1 4 51.743403		UTM 15
NEO	000	241	4220404.099	321155.541	303.436	UTM 15
			0.008	0.008	0.004	
SFMC		241	0.99999394	-1 15 34.250630		UTM 15
NEO	000	242	4221004.251	349736.643	273.978	UTM 15
			0.007	0.007	0.006	
SFMC		242	0.99987809	-1 3 30.844305		UTM 15
NEO	000	243	4232508.902	338678.246	284.077	UTM 15
			0.011	0.011	0.010	
SFMC		243	0.99992052	-1 8 26.347597		UTM 15
NEO	000	244	4231824.616	332317.268	298.001	UTM 15
			0.013	0.013	0.013	
SFMC		244	0.99994629	-1 11 7.201224		UTM 15
NEO	000	245	4245777.530	337791.090	278.617	UTM 15
			0.011	0.011	0.009	
SFMC		245	0.99992404	-1 9 6.636315		UTM 15
NEO	000	246	4250187.807	338126.663	278.386	UTM 15
			0.011	0.011	0.004	
SFMC		246	0.99992270	-1 9 3.955104		UTM 15
NEO	000	247	4246085.424	324296.223	317.996	UTM 15
			0.011	0.011	0.009	
SFMC		247	0.99998021	-1 14 51.787660		UTM 15
NEO	000	248	4237998.781	325806.190	283.574	UTM 15
			0.012	0.012	0.010	
SFMC		248	0.99997371	-1 14 1.611042		UTM 15
NEO	000	249	4230415.918	323793.719	285.871	UTM 15
			0.015	0.015	0.013	
SFMC		249	0.99998240	-1 14 41.895761		UTM 15
NEO	000	401	4102056.741	322580.472	242.931	UTM 15
			0.011	0.011	0.008	
SFMC		401	0.99998778	-1 12 8.506650		UTM 15
NEO	000	402	4108318.517	327788.739	250.937	UTM 15
			0.011	0.011	0.008	
SFMC		402	0.99996534	-1 10 10.135517		UTM 15
NEO	000	404	4129247.271	338974.642	280.871	UTM 15
			0.009	0.009	0.006	
SFMC		404	0.99991941	-1 6 3.812430		UTM 15
NEO	000	406	4132796.011	325639.496	259.023	UTM 15
			0.009	0.008	0.007	
SFMC		406	0.99997450	-1 11 36.787178		UTM 15
NEO	000	407	4123788.347	326300.269	268.468	UTM 15

Adjusted NEO Coordinates:

CODE	FFF	STATION	NORTHING / STD DEV	EASTING / STD DEV	O-HEIGHT / STD DEV	MAPPROJ
			0.009	0.008	0.009	
SFMC		407	0.99997168	-1 11 7.974341		UTM 15
NEO	000	408	4126776.759	331117.494	270.498	UTM 15
			0.008	0.008	0.007	
SFMC		408	0.99995134	-1 9 13.741339		UTM 15
NEO	000	409	4150291.151	352566.607	294.761	UTM 15
			0.010	0.010	0.009	
SFMC		409	0.99986775	-1 0 54.370524		UTM 15
NEO	000	410	4138496.699	347851.392	269.314	UTM 15
			0.010	0.010	0.009	
SFMC		410	0.99988516	-1 2 36.733385		UTM 15
NEO	000	411	4152296.893	321398.415	287.357	UTM 15
			0.014	0.014	0.014	
SFMC		411	0.99999293	-1 13 49.228120		UTM 15
NEO	000	412	4152117.263	328531.628	281.956	UTM 15
			0.012	0.012	0.013	
SFMC		412	0.99996217	-1 10 52.217374		UTM 15
NEO	000	413	4159958.820	337383.502	305.291	UTM 15
			0.010	0.010	0.010	
SFMC		413	0.99992573	-1 7 23.146034		UTM 15
NEO	000	414	4166742.705	324208.003	289.514	UTM 15
			0.011	0.011	0.011	
SFMC		414	0.99998065	-1 13 0.116008		UTM 15
NEO	000	417	4187375.062	350288.494	264.193	UTM 15
			0.008	0.008	0.008	
SFMC		417	0.99987607	-1 2 35.749422		UTM 15
NEO	000	418	4195133.158	355396.268	268.173	UTM 15
			0.007	0.007	0.006	
SFMC		418	0.99985755	-1 0 36.815495		UTM 15
NEO	000	419	4182750.309	328290.758	264.094	UTM 15
			0.009	0.009	0.009	
SFMC		419	0.99996316	-1 11 40.746520		UTM 15
NEO	000	420	4188979.936	340380.299	264.985	UTM 15
			0.007	0.007	0.007	
SFMC		420	0.99991382	-1 6 46.235063		UTM 15
NEO	000	421	4188881.918	344773.601	257.050	UTM 15
			0.007	0.007	0.006	
SFMC		421	0.99989678	-1 4 55.915928		UTM 15
NEO	000	422	4200110.065	347220.442	285.015	UTM 15
			0.006	0.006	0.004	
SFMC		422	0.99988749	-1 4 8.515212		UTM 15
NEO	000	423	4198385.043	352530.503	265.161	UTM 15
			0.006	0.006	0.005	
SFMC		423	0.99986785	-1 1 52.757913		UTM 15
NEO	000	424	4221426.957	328517.564	318.131	UTM 15
			0.008	0.008	0.003	
SFMC		424	0.99996217	-1 12 29.186448		UTM 15
NEO	000	425	4215570.410	346482.146	262.870	UTM 15
			0.016	0.016	0.016	
SFMC		425	0.99989027	-1 4 46.496890		UTM 15
NEO	000	426	4225043.811	349310.666	265.331	UTM 15
			0.008	0.008	0.007	

Adjusted NEO Coordinates:

CODE	FFF	STATION	NORTHING STD DEV	EASTING STD DEV	O-HEIGHT STD DEV	MAPPROJ
SFMC		426	0.99987966	-1 3 46.634026		UTM 15
NEO	000	427	4228091.785	354747.437	246.294	UTM 15
			0.009	0.009	0.008	
SFMC		427	0.99985984	-1 1 32.284613		UTM 15
NEO	000	429	4232537.427	335013.181	299.201	UTM 15
			0.012	0.012	0.012	
SFMC		429	0.99993525	-1 9 59.611918		UTM 15
NEO	000	430	4223069.474	341398.525	269.753	UTM 15
			0.008	0.008	0.007	
SFMC		430	0.99990980	-1 7 4.857491		UTM 15
NEO	000	431	4239001.324	352925.273	250.584	UTM 15
			0.007	0.007	0.006	
SFMC		431	0.99986640	-1 2 31.772472		UTM 15
NEO	000	432	4193922.744	333814.871	279.013	UTM 15
			0.007	0.007	0.006	
SFMC		432	0.99994016	-1 9 37.586890		UTM 15
NEO	000	433	4197388.444	323248.683	334.307	UTM 15
			0.012	0.012	0.011	
SFMC		433	0.99998479	-1 14 7.980722		UTM 15
NEO	000	434	4200262.333	339941.252	262.131	UTM 15
			0.008	0.008	0.007	
SFMC		434	0.99991554	-1 7 11.956313		UTM 15
NEO	000	435	4242533.159	338414.969	300.458	UTM 15
			0.011	0.011	0.010	
SFMC		435	0.99992156	-1 8 46.376768		UTM 15
NEO	000	460	4231646.790	341045.942	297.502	UTM 15
			0.010	0.010	0.009	
SFMC		460	0.99991118	-1 7 24.993433		UTM 15
NEO	000	519	4108388.731	322626.879	252.837	UTM 15
			0.010	0.010	0.005	
SFMC		519	0.99998758	-1 12 16.329134		UTM 15
NEO	000	520	4103358.984	330709.313	264.914	UTM 15
			0.011	0.011	0.008	
SFMC		520	0.99995306	-1 8 52.092858		UTM 15
NEO	000	521	4104574.349	346940.757	252.034	UTM 15
			0.011	0.011	0.007	
SFMC		521	0.99988860	-1 2 17.644594		UTM 15
NEO	000	522	4129268.110	337977.570	278.503	UTM 15
			0.009	0.009	0.007	
SFMC		522	0.99992338	-1 6 28.366963		UTM 15
NEO	000	523	4122585.782	343959.774	277.401	UTM 15
			0.008	0.008	0.004	
SFMC		523	0.99989994	-1 3 52.847614		UTM 15
NEO	000	524	4122838.152	334295.846	271.302	UTM 15
			0.010	0.010	0.009	
SFMC		524	0.99993825	-1 7 50.396599		UTM 15
NEO	000	525	4121465.450	322976.344	259.552	UTM 15
			0.009	0.009	0.008	
SFMC		525	0.99998604	-1 12 26.289498		UTM 15
NEO	000	526	4127623.664	329516.054	273.007	UTM 15
			0.008	0.008	0.006	
SFMC		526	0.99995804	-1 9 54.257238		UTM 15

Adjusted NEO Coordinates:

CODE	FFF	STATION	NORTHING STD DEV	EASTING STD DEV	O-HEIGHT STD DEV	MAPPROJ
NEO	000	527	4149937.653 0.010	349165.136 0.010	287.464 0.008	UTM 15
SFMC		527	0.99988025	-1 2 18.202527		UTM 15
NEO	000	528	4138843.728 0.010	339423.283 0.010	292.686 0.009	UTM 15
SFMC		528	0.99991762	-1 6 5.146461		UTM 15
NEO	000	529	4153921.787 0.013	318663.181 0.013	289.424 0.013	UTM 15
SFMC		529	1.00000506	-1 14 59.378946		UTM 15
NEO	000	530	4147286.331 0.010	328218.836 0.010	282.252 0.009	UTM 15
SFMC		530	0.99996349	-1 10 53.282098		UTM 15
NEO	000	531	4159863.355 0.018	341364.143 0.018	310.331 0.018	UTM 15
SFMC		531	0.99990998	-1 5 44.118216		UTM 15
NEO	000	532	4160122.980 0.017	331532.295 0.017	290.104 0.017	UTM 15
SFMC		532	0.99994960	-1 9 48.743060		UTM 15
NEO	000	533	4169652.348 0.011	326262.336 0.011	303.393 0.012	UTM 15
SFMC		533	0.99997180	-1 12 13.060669		UTM 15
NEO	000	534	4184130.622 0.009	341064.149 0.009	275.885 0.009	UTM 15
SFMC		534	0.99991114	-1 6 22.817084		UTM 15
NEO	000	535	4184707.976 0.007	351478.697 0.007	285.188 0.007	UTM 15
SFMC		535	0.99987170	-1 2 2.688519		UTM 15
NEO	000	536	4189711.511 0.009	349928.733 0.009	256.189 0.009	UTM 15
SFMC		536	0.99987739	-1 2 47.621307		UTM 15
NEO	000	537	4195129.271 0.007	355767.341 0.007	257.543 0.006	UTM 15
SFMC		537	0.99985623	-1 0 27.483445		UTM 15
NEO	000	538	4182752.101 0.010	325763.209 0.010	277.084 0.010	UTM 15
SFMC		538	0.99997393	-1 12 44.005965		UTM 15
NEO	000	539	4184289.072 0.007	333801.788 0.007	256.955 0.006	UTM 15
SFMC		539	0.99994022	-1 9 24.892100		UTM 15
NEO	000	540	4190665.992 0.006	336463.012 0.006	268.102 0.005	UTM 15
SFMC		540	0.99992941	-1 8 26.728881		UTM 15
NEO	000	541	4198702.225 0.009	336497.042 0.009	283.180 0.008	UTM 15
SFMC		541	0.99992927	-1 8 36.577324		UTM 15
NEO	000	542	4219940.756 0.007	324039.046 0.007	317.952 0.002	UTM 15
SFMC		542	0.99998134	-1 14 20.536983		UTM 15
NEO	000	543	4223553.807 0.010	332823.431 0.010	282.918 0.007	UTM 15
SFMC		543	0.99994421	-1 10 42.976999		UTM 15
NEO	000	544	4221006.652	349735.890	274.198	UTM 15

Adjusted NEO Coordinates:

CODE	FFF	STATION	NORTHING / STD DEV	EASTING / STD DEV	O-HEIGHT / STD DEV	MAPPROJ
			0.007	0.007	0.006	
SFMC		544	0.99987809	-1 3 30.866336		UTM 15
NEO	000	545	4228161.032	354753.538	247.117	UTM 15
			0.009	0.009	0.008	
SFMC		545	0.99985982	-1 1 32.212212		UTM 15
NEO	000	546	4228614.810	330720.177	302.009	UTM 15
			0.014	0.014	0.013	
SFMC		546	0.99995293	-1 11 43.349427		UTM 15
NEO	000	547	4228432.182	340256.633	269.687	UTM 15
			0.010	0.010	0.009	
SFMC		547	0.99991428	-1 7 40.846910		UTM 15
NEO	000	601	4209216.793	325489.473	270.375	UTM 15
			0.008	0.008	0.007	
SFMC		601	0.99997509	-1 13 28.482976		UTM 15
NEO	000	602	4192181.631	334769.093	274.021	UTM 15
			0.012	0.012	0.012	
SFMC		602	0.99993627	-1 9 11.274398		UTM 15
NEO	000	603	4197483.084	318801.708	321.532	UTM 15
			0.011	0.011	0.010	
SFMC		603	1.00000440	-1 15 59.934357		UTM 15
NEO	000	628	4100326.419	322552.359	247.221	UTM 15
			0.011	0.011	0.008	
SFMC		628	0.99998791	-1 12 6.746504		UTM 15
NEO	000	629	4102310.668	345211.954	254.981	UTM 15
			0.011	0.011	0.007	
SFMC		629	0.99989516	-1 2 57.042808		UTM 15
NEO	000	630	4115870.952	336357.868	273.204	UTM 15
			0.011	0.011	0.008	
SFMC		630	0.99992988	-1 6 50.659128		UTM 15
NEO	000	631	4128855.145	350459.122	262.433	UTM 15
			0.008	0.008	0.005	
SFMC		631	0.99987547	-1 1 20.808620		UTM 15
NEO	000	632	4129646.945	321571.670	255.511	UTM 15
			0.009	0.009	0.007	
SFMC		632	0.99999218	-1 13 12.442731		UTM 15
NEO	000	633	4141688.032	351847.007	280.847	UTM 15
			0.009	0.009	0.008	
SFMC		633	0.99987037	-1 1 1.934842		UTM 15
NEO	000	634	4152122.775	328276.358	287.440	UTM 15
			0.014	0.014	0.014	
SFMC		634	0.99996325	-1 10 58.550585		UTM 15
NEO	000	635	4142659.247	318478.416	282.919	UTM 15
			0.016	0.016	0.017	
SFMC		635	1.00000589	-1 14 47.494534		UTM 15
NEO	000	636	4164772.845	347995.452	281.280	UTM 15
			0.022	0.022	0.022	
SFMC		636	0.99988460	-1 3 5.378674		UTM 15
NEO	000	637	4166802.703	318985.103	285.350	UTM 15
			0.013	0.013	0.014	
SFMC		637	1.00000361	-1 15 10.230812		UTM 15
NEO	000	638	4216700.044	324015.341	318.018	UTM 15
			0.008	0.007	0.003	

Adjusted NEO Coordinates:

CODE	FFF	STATION	NORTHING / STD DEV	EASTING / STD DEV	O-HEIGHT / STD DEV	MAPPROJ
SFMC		638	0.99998145	-1 14 16.465750		UTM 15
NEO	000	639	4214666.486	346475.418	262.930	UTM 15
			0.015	0.015	0.014	
SFMC		639	0.99989029	-1 4 45.531052		UTM 15
NEO	000	641	4245979.788	329147.771	308.724	UTM 15
			0.010	0.010	0.008	
SFMC		641	0.99995950	-1 12 47.708538		UTM 15
NEO	000	642	4243891.585	349275.097	252.728	UTM 15
			0.010	0.010	0.009	
SFMC		642	0.99987978	-1 4 10.903772		UTM 15
NEO	001	801.25	4100986.271	314751.182	244.965	UTM 15
			0.012	0.012	0.000	
SFMC		801.25	1.00002277	-1 15 17.774248		UTM 15
NEO	001	922 RESET	4115400.760	336391.107	278.380	UTM 15
			0.011	0.011	0.000	
SFMC		922 RESET	0.99992975	-1 6 49.230170		UTM 15
NEO	000	A 277	4224045.717	338000.817	262.076	UTM 15
			0.010	0.010	0.009	
SFMC		A 277	0.99992322	-1 8 32.319960		UTM 15
NEO	000	C 233 RESET	4189406.553	349756.579	258.180	UTM 15
			0.006	0.006	0.004	
SFMC		C 233 RESET	0.99987803	-1 2 51.568014		UTM 15
NEO	001	C 252 RESET	4255272.026	339066.588	284.705	UTM 15
			0.012	0.012	0.000	
SFMC		C 252 RESET	0.99991896	-1 8 46.669671		UTM 15
NEO	001	C 253	4153117.346	337211.123	303.497	UTM 15
			0.012	0.012	0.000	
SFMC		C 253	0.99992643	-1 7 18.440405		UTM 15
NEO	001	D 277	4219035.270	325651.902	319.987	UTM 15
			0.007	0.007	0.000	
SFMC		D 277	0.99997438	-1 13 38.391107		UTM 15
NEO	001	G 251	4204819.165	349583.060	258.233	UTM 15
			0.006	0.006	0.000	
SFMC		G 251	0.99987866	-1 3 14.817413		UTM 15
NEO	111	G 253	4140478.433	338660.247	298.001	UTM 15
			0.000	0.000	0.000	
SFMC		G 253	0.99992065	-1 6 26.095655		UTM 15
NEO	001	H 274	4251489.986	317073.642	277.701	UTM 15
			0.014	0.014	0.000	
SFMC		H 274	1.00001211	-1 18 4.427670		UTM 15
NEO	110	K 56	4231296.979	312215.138	314.401	UTM 15
			0.000	0.000	0.016	
SFMC		K 56	1.00003431	-1 19 37.496243		UTM 15
NEO	110	MOBT	4235302.005	378093.848	262.564	UTM 15
			0.000	0.000	0.007	
SFMC		MOBT	0.99978302	0-51 46.306084		UTM 15
NEO	110	MOCA	4115431.282	379487.320	301.051	UTM 15
			0.000	0.000	0.009	
SFMC		MOCA	0.99977891	0-49 13.652987		UTM 15
NEO	110	MOHV	4274236.079	385049.112	274.931	UTM 15
			0.000	0.000	0.027	
SFMC		MOHV	0.99976272	0-49 26.148076		UTM 15

Adjusted NEO Coordinates:

CODE	FFF	STATION	NORTHING STD DEV	EASTING STD DEV	O-HEIGHT STD DEV	MAPPROJ
NEO	110	MONE	4191778.684	381294.970	253.863	UTM 15
			0.000	0.000	0.006	
SFMC		MONE	0.99977355	0-49 42.480800		UTM 15
NEO	001	P 18	4115166.938	347049.766	269.801	UTM 15
			0.007	0.007	0.000	
SFMC		P 18	0.99988818	-1 2 27.916728		UTM 15
NEO	000	X 274	4231478.910	349891.804	244.151	UTM 15
			0.008	0.008	0.007	
SFMC		X 274	0.99987751	-1 3 39.818679		UTM 15
NEO	110	ZKC1	4305001.211	344662.784	338.760	UTM 15
			0.000	0.000	0.035	
SFMC		ZKC1	0.99989713	-1 7 27.525553		UTM 15

Adjusted PLH Coordinates:

CODE	FFF	STATION	LATITUDE	STD DEV	LONGITUDE	STD DEV	ELIP-HEIGHT	STD DEV
PLH	000	1001	N 37 45 41.93327	0.006	W 94 42 33.97863	0.006	261.833	0.006
PLH	000	1002	N 37 56 25.94198	0.006	W 94 42 47.72394	0.006	252.362	0.003
PLH	000	101	N 37 43 57.11622	0.008	W 94 58 46.93663	0.008	250.024	0.008
PLH	000	102	N 37 59 38.34348	0.007	W 94 59 16.77751	0.007	287.352	0.006
PLH	000	123	N 37 06 16.52606	0.009	W 94 47 42.57908	0.009	226.994	0.004
PLH	000	124	N 37 06 18.75907	0.010	W 94 57 57.33813	0.010	224.251	0.006
PLH	000	125	N 37 03 39.21101	0.011	W 94 52 31.07552	0.011	243.868	0.007
PLH	000	126	N 37 16 59.26256	0.007	W 94 44 29.27670	0.007	252.233	0.003
PLH	000	127	N 37 17 8.71243	0.008	W 94 41 13.27614	0.008	235.591	0.005
PLH	000	128	N 37 14 13.32891	0.009	W 94 48 49.44006	0.009	248.327	0.006
PLH	000	129	N 37 22 58.60068	0.007	W 94 55 22.78977	0.007	239.369	0.006
PLH	000	130	N 37 14 58.83007	0.008	W 94 56 25.88613	0.008	238.152	0.006
PLH	000	131	N 37 13 22.44812	0.009	W 94 59 42.99937	0.009	229.404	0.008
PLH	000	132	N 37 26 26.12498	0.009	W 94 42 19.69797	0.009	253.427	0.007
PLH	000	133	N 37 24 46.65660	0.017	W 95 02 49.82580	0.017	255.978	0.017
PLH	000	134	N 37 35 57.14293	0.009	W 94 54 37.93202	0.009	275.218	0.009
PLH	000	135	N 37 38 37.50706	0.012	W 94 48 44.10056	0.012	260.448	0.012
PLH	000	136	N 37 43 56.88085	0.008	W 94 46 28.33305	0.008	255.902	0.008
PLH	000	137	N 37 43 53.63692	0.007	W 94 40 4.31326	0.007	234.516	0.007
PLH	000	138	N 37 50 2.98228	0.006	W 94 52 53.87177	0.006	228.373	0.005
PLH	000	139	N 37 51 14.39668	0.007	W 94 49 23.93465	0.007	244.394	0.006
PLH	000	140	N 37 55 16.80313	0.009	W 94 46 32.94347	0.009	242.267	0.008
PLH	000	141	N 37 52 41.16007	0.009	W 94 57 5.52906	0.009	239.121	0.008
PLH	000	142	N 37 55 15.34865	0.008	W 94 38 27.72236	0.008	220.550	0.006
PLH	000	143	N 38 06 36.81951	0.007	W 95 00 48.71092	0.007	307.236	0.002
PLH	000	144	N 38 08 39.83522	0.010	W 94 54 28.02787	0.009	251.244	0.010

Adjusted PLH Coordinates:

CODE	FFF	STATION	LATITUDE	STD DEV	LONGITUDE	STD DEV	ELIP-HEIGHT	STD DEV
PLH	000	145	N 38 15 48.08196	0.007	W 94 40 41.33084	0.007	217.134	0.006
PLH	000	146	N 38 09 38.50683	0.008	W 94 48 3.69143	0.008	222.064	0.007
PLH	000	147	N 38 07 54.08022	0.007	W 94 47 3.81371	0.007	244.103	0.006
PLH	000	148	N 38 19 53.02638	0.010	W 94 57 17.98416	0.010	273.588	0.008
PLH	000	149	N 37 46 33.83889	0.008	W 94 54 42.96080	0.008	252.904	0.007
PLH	000	1601	N 37 56 7.93223	0.006	W 94 40 34.87147	0.006	230.478	0.004
PLH	000	1602	N 37 47 35.59718	0.007	W 94 45 58.22248	0.007	245.728	0.007
PLH	000	1603	N 37 43 53.48373	0.007	W 94 38 58.07050	0.007	231.415	0.007
PLH	000	219	N 37 06 16.90431	0.010	W 95 00 49.33495	0.010	219.664	0.005
PLH	000	220	N 37 03 39.73604	0.011	W 94 53 47.94757	0.011	237.163	0.008
PLH	000	221	N 37 06 15.41168	0.011	W 94 41 52.17341	0.011	231.954	0.008
PLH	000	222	N 37 14 12.19652	0.008	W 94 43 48.34106	0.008	241.460	0.004
PLH	000	223	N 37 14 14.22322	0.010	W 94 51 22.40084	0.010	239.508	0.008
PLH	000	224	N 37 16 54.61089	0.008	W 94 57 31.59261	0.008	240.883	0.006
PLH	000	225	N 37 16 35.10135	0.008	W 94 55 23.40474	0.008	242.482	0.006
PLH	000	226	N 37 29 3.95518	0.010	W 94 44 30.55187	0.010	262.620	0.009
PLH	000	227	N 37 22 48.42101	0.010	W 94 42 20.32763	0.010	238.970	0.009
PLH	000	228	N 37 22 57.76346	0.009	W 94 51 1.99080	0.009	258.760	0.008
PLH	000	229	N 37 30 50.22260	0.013	W 94 58 43.26516	0.013	265.028	0.014
PLH	000	230	N 37 24 44.08721	0.008	W 94 56 14.34658	0.008	237.416	0.007
PLH	000	231	N 37 36 4.69320	0.010	W 94 44 57.83182	0.010	254.958	0.010
PLH	000	232	N 37 33 29.52388	0.013	W 95 03 7.22791	0.013	247.053	0.014
PLH	000	233	N 37 36 5.94094	0.009	W 94 52 8.87721	0.009	278.816	0.010
PLH	000	234	N 37 51 10.20244	0.006	W 94 41 10.95498	0.006	210.568	0.005
PLH	000	235	N 37 46 31.82188	0.010	W 94 58 42.29673	0.010	245.810	0.009
PLH	000	236	N 37 47 59.56059	0.007	W 94 53 16.27080	0.007	238.579	0.006

Adjusted PLH Coordinates:

CODE	FFF	STATION	LATITUDE	STD DEV	LONGITUDE	STD DEV	ELIP-HEIGHT	STD DEV
PLH	000	237	N 37 50 2.74463	0.007	W 94 46 32.79891	0.007	237.777	0.006
PLH	000	238	N 37 55 17.22957	0.009	W 94 45 0.44129	0.009	243.323	0.008
PLH	000	239	N 37 55 56.06221	0.010	W 94 56 4.46497	0.010	301.878	0.009
PLH	000	240	N 38 07 27.31754	0.007	W 94 45 2.52702	0.007	239.842	0.005
PLH	000	241	N 38 06 49.58017	0.008	W 95 02 24.24164	0.008	271.834	0.004
PLH	000	242	N 38 07 27.79385	0.007	W 94 42 51.54543	0.007	242.146	0.006
PLH	000	243	N 38 13 34.00414	0.011	W 94 50 34.91444	0.011	252.200	0.010
PLH	000	244	N 38 13 7.62679	0.013	W 94 54 55.81708	0.013	266.190	0.013
PLH	000	245	N 38 20 43.70241	0.011	W 94 51 22.33671	0.011	246.696	0.009
PLH	000	246	N 38 23 6.93480	0.011	W 94 51 12.16645	0.011	246.451	0.004
PLH	000	247	N 38 20 44.52176	0.011	W 95 00 38.24110	0.011	286.190	0.009
PLH	000	248	N 38 16 23.37364	0.012	W 94 59 28.89545	0.012	251.792	0.010
PLH	000	249	N 38 12 16.08554	0.015	W 95 00 44.88784	0.015	254.162	0.013
PLH	000	401	N 37 02 52.73561	0.011	W 94 59 42.56502	0.011	213.190	0.008
PLH	000	402	N 37 06 19.31658	0.011	W 94 56 16.99642	0.011	221.079	0.008
PLH	000	404	N 37 17 45.29668	0.009	W 94 49 0.27678	0.009	250.581	0.006
PLH	000	406	N 37 19 31.72977	0.009	W 94 58 4.62276	0.008	228.686	0.007
PLH	000	407	N 37 14 40.04464	0.009	W 94 57 30.21131	0.008	238.303	0.009
PLH	000	408	N 37 16 20.15485	0.008	W 94 54 17.22834	0.008	240.264	0.007
PLH	000	409	N 37 29 15.99249	0.010	W 94 40 3.54856	0.010	264.011	0.009
PLH	000	410	N 37 22 50.68731	0.010	W 94 43 6.72079	0.010	238.821	0.009
PLH	000	411	N 37 30 1.23322	0.014	W 95 01 13.82371	0.014	256.743	0.014
PLH	000	412	N 37 30 0.27676	0.012	W 94 56 23.31751	0.012	251.293	0.013
PLH	000	413	N 37 34 20.36213	0.010	W 94 50 29.23888	0.010	274.448	0.010
PLH	000	414	N 37 37 51.64085	0.011	W 94 59 31.93260	0.011	258.625	0.011
PLH	000	417	N 37 49 17.45550	0.008	W 94 42 3.66177	0.008	232.858	0.008

Adjusted PLH Coordinates:

CODE	FFF	STATION	LATITUDE	STD DEV	LONGITUDE	STD DEV	ELIP-HEIGHT	STD DEV
PLH	000	418	N 37 53 32.04571	0.007	W 94 38 40.40770	0.007	236.692	0.006
PLH	000	419	N 37 46 33.53526	0.009	W 94 56 59.04399	0.009	232.881	0.009
PLH	000	420	N 37 50 3.45798	0.007	W 94 48 50.03102	0.007	233.659	0.007
PLH	000	421	N 37 50 3.00870	0.007	W 94 45 50.30504	0.007	225.708	0.006
PLH	000	422	N 37 56 8.64857	0.006	W 94 44 18.80564	0.006	253.475	0.004
PLH	000	423	N 37 55 15.85893	0.006	W 94 40 40.08787	0.006	233.635	0.005
PLH	000	424	N 38 07 27.88879	0.008	W 94 57 22.97165	0.008	286.456	0.003
PLH	000	425	N 38 04 29.59920	0.016	W 94 45 0.94948	0.016	231.124	0.016
PLH	000	426	N 38 09 38.54520	0.008	W 94 43 12.10950	0.008	233.444	0.007
PLH	000	427	N 38 11 20.60912	0.009	W 94 39 31.03098	0.009	214.363	0.008
PLH	000	429	N 38 13 32.53584	0.012	W 94 53 5.60227	0.012	267.358	0.012
PLH	000	430	N 38 08 29.63287	0.008	W 94 48 35.50545	0.008	237.941	0.007
PLH	000	431	N 38 17 13.35322	0.007	W 94 40 54.05284	0.007	218.567	0.006
PLH	000	432	N 37 52 39.53003	0.007	W 94 53 22.58260	0.007	247.642	0.006
PLH	000	433	N 37 54 24.75113	0.012	W 95 00 37.91585	0.012	302.891	0.011
PLH	000	434	N 37 56 9.07660	0.008	W 94 49 16.99312	0.008	230.626	0.007
PLH	000	435	N 38 18 58.90096	0.011	W 94 50 53.97415	0.011	268.540	0.010
PLH	000	460	N 38 13 7.56438	0.010	W 94 48 56.88511	0.010	265.608	0.009
PLH	000	519	N 37 06 18.12502	0.010	W 94 59 46.07072	0.010	222.983	0.005
PLH	000	520	N 37 03 40.37883	0.011	W 94 54 14.70604	0.011	235.161	0.008
PLH	000	521	N 37 04 29.84418	0.011	W 94 43 18.65867	0.011	222.297	0.007
PLH	000	522	N 37 17 45.34909	0.009	W 94 49 40.77192	0.009	248.214	0.007
PLH	000	523	N 37 14 12.28989	0.008	W 94 45 32.85750	0.008	247.247	0.004
PLH	000	524	N 37 14 14.46966	0.010	W 94 52 5.08323	0.010	241.140	0.009
PLH	000	525	N 37 13 22.45871	0.009	W 94 59 43.06413	0.009	229.450	0.008
PLH	000	526	N 37 16 46.57072	0.008	W 94 55 22.91814	0.008	242.760	0.006

Adjusted PLH Coordinates:

CODE	FFF	STATION	LATITUDE	STD DEV	LONGITUDE	STD DEV	ELIP-HEIGHT	STD DEV
PLH	000	527	N 37 29 2.54943	0.010	W 94 42 21.74146	0.010	256.738	0.008
PLH	000	528	N 37 22 56.82554	0.010	W 94 48 49.54588	0.010	262.220	0.009
PLH	000	529	N 37 30 52.00620	0.013	W 95 03 6.59812	0.013	258.803	0.013
PLH	000	530	N 37 27 23.39729	0.010	W 94 56 31.99229	0.010	251.661	0.009
PLH	000	531	N 37 34 19.76593	0.018	W 94 47 46.96331	0.018	279.463	0.018
PLH	000	532	N 37 34 21.89892	0.017	W 94 54 27.78652	0.017	259.300	0.017
PLH	000	533	N 37 39 27.40488	0.011	W 94 58 10.65791	0.011	272.438	0.012
PLH	000	534	N 37 47 26.61820	0.009	W 94 48 18.23626	0.009	244.630	0.009
PLH	000	535	N 37 47 51.65303	0.007	W 94 41 13.02943	0.007	253.898	0.007
PLH	000	536	N 37 50 33.02072	0.009	W 94 42 20.11583	0.009	224.808	0.009
PLH	000	537	N 37 53 32.13159	0.007	W 94 38 25.21805	0.007	226.062	0.006
PLH	000	538	N 37 46 31.87153	0.010	W 94 58 42.30926	0.010	245.878	0.010
PLH	000	539	N 37 47 27.10449	0.007	W 94 53 15.15043	0.007	225.711	0.006
PLH	000	540	N 37 50 55.63906	0.006	W 94 51 31.58296	0.006	236.765	0.005
PLH	000	541	N 37 55 16.27564	0.009	W 94 51 36.74621	0.009	251.724	0.008
PLH	000	542	N 38 06 36.59500	0.007	W 95 00 25.48682	0.007	286.331	0.002
PLH	000	543	N 38 08 39.76519	0.010	W 94 54 28.01236	0.010	251.179	0.007
PLH	000	544	N 38 07 27.87124	0.007	W 94 42 51.57815	0.007	242.366	0.006
PLH	000	545	N 38 11 22.85848	0.009	W 94 39 30.83121	0.009	215.185	0.008
PLH	000	546	N 38 11 22.46642	0.014	W 94 55 58.70800	0.014	270.244	0.013
PLH	000	547	N 38 11 22.81513	0.010	W 94 49 26.72714	0.010	237.828	0.009
PLH	000	601	N 38 00 49.86754	0.008	W 94 59 16.54307	0.008	238.822	0.007
PLH	000	602	N 37 51 43.69134	0.012	W 94 52 42.10794	0.012	242.670	0.012
PLH	000	603	N 37 54 24.67076	0.011	W 95 03 39.99676	0.011	290.173	0.010
PLH	000	628	N 37 01 56.59867	0.011	W 94 59 42.23344	0.011	217.510	0.008
PLH	000	629	N 37 03 15.39616	0.011	W 94 44 26.96458	0.011	225.288	0.007

Adjusted PLH Coordinates:

CODE	FFF	STATION	LATITUDE	STD DEV	LONGITUDE	STD DEV	ELIP-HEIGHT	STD DEV
PLH	000	630	N 37 10 29.80749	0.011	W 94 50 35.93595	0.011	243.189	0.008
PLH	000	631	N 37 17 39.48163	0.008	W 94 41 13.72575	0.008	232.138	0.005
PLH	000	632	N 37 17 46.82450	0.009	W 95 00 47.09011	0.009	225.246	0.007
PLH	000	633	N 37 24 36.53075	0.009	W 94 40 26.61631	0.009	250.275	0.008
PLH	000	634	N 37 30 0.28468	0.014	W 94 56 33.71297	0.014	256.779	0.014
PLH	000	635	N 37 24 46.64787	0.016	W 95 03 4.13168	0.016	252.437	0.017
PLH	000	636	N 37 37 3.02743	0.022	W 94 43 20.41510	0.022	250.283	0.022
PLH	000	637	N 37 37 49.93588	0.013	W 95 03 4.94569	0.013	254.464	0.014
PLH	000	638	N 38 04 51.49519	0.008	W 95 00 23.58482	0.007	286.419	0.003
PLH	000	639	N 38 04 0.28005	0.015	W 94 45 0.52678	0.015	231.194	0.014
PLH	000	641	N 38 20 44.47544	0.010	W 94 57 18.39518	0.010	276.874	0.008
PLH	000	642	N 38 19 49.76432	0.010	W 94 43 27.99852	0.010	220.723	0.009
PLH	001	801.25	N 37 02 12.57334	0.012	W 95 04 58.38663	0.012	215.249	0.000
PLH	001	922 RESET	N 37 10 14.57815	0.011	W 94 50 34.21816	0.011	248.375	0.000
PLH	000	A 277	N 38 08 59.11785	0.010	W 94 50 55.81955	0.010	230.280	0.009
PLH	000	C 233 RESET	N 37 50 23.02800	0.006	W 94 42 26.92850	0.006	226.808	0.004
PLH	001	C 252 RESET	N 38 25 52.41321	0.012	W 94 50 37.63192	0.012	252.762	0.000
PLH	001	C 253	N 37 30 38.36878	0.012	W 94 50 30.80024	0.012	272.781	0.000
PLH	001	D 277	N 38 06 8.35946	0.007	W 94 59 18.49885	0.007	288.358	0.000
PLH	001	G 251	N 37 58 42.79361	0.006	W 94 42 45.60457	0.006	226.610	0.000
PLH	111	G 253	N 37 23 49.36756	0.000	W 94 49 21.84289	0.000	267.508	0.000
PLH	001	H 274	N 38 23 34.54681	0.014	W 95 05 40.65172	0.014	245.922	0.000
PLH	110	K 56	N 38 12 36.22504	0.000	W 95 08 41.49224	0.000	282.787	0.016
PLH	110	MOBT	N 38 15 26.94381	0.000	W 94 23 36.05494	0.000	230.482	0.007
PLH	110	MOCA	N 37 10 39.16622	0.000	W 94 21 27.24398	0.000	271.137	0.009
PLH	110	MOHV	N 38 36 33.08859	0.000	W 94 19 12.88460	0.000	242.664	0.027

Adjusted PLH Coordinates:

CODE	FFF	STATION	LATITUDE	STD DEV	LONGITUDE	STD DEV	ELIP-HEIGHT	STD DEV
PLH	110	MONE	N 37 51 56.71994	0.000	W 94 20 58.36961	0.000	222.417	0.006
PLH	001	P 18	N 37 10 13.49565	0.007	W 94 43 22.02966	0.007	239.828	0.000
PLH	000	X 274	N 38 13 7.58984	0.008	W 94 42 53.13172	0.008	212.189	0.007
PLH	110	ZKC1	N 38 52 48.55019	0.000	W 94 47 26.96407	0.000	306.621	0.035

Geoid Values:

CODE	NAME	N/S DEFLECTION	E/W DEFLECTION	UNDULATION
GEOI	1001	+ 0 0 3.1	+ 0 0 0.5	-31.220
GEOI	1002	+ 0 0 3.3	+ 0 0 0.4	-31.554
GEOI	101	+ 0 0 3.9	+ 0 0 0.5	-31.118
GEOI	102	+ 0 0 2.4	+ 0 0 0.8	-31.528
GEOI	123	+ 0 0 4.5	- 0 0 0.4	-29.837
GEOI	124	+ 0 0 4.0	+ 0 0 0.1	-29.857
GEOI	125	+ 0 0 4.5	- 0 0 0.3	-29.744
GEOI	126	+ 0 0 4.3	+ 0 0 0.1	-30.266
GEOI	127	+ 0 0 4.4	+ 0 0 0.0	-30.275
GEOI	128	+ 0 0 4.3	- 0 0 0.1	-30.160
GEOI	129	+ 0 0 3.6	+ 0 0 0.1	-30.455
GEOI	130	+ 0 0 4.1	+ 0 0 0.4	-30.180
GEOI	131	+ 0 0 4.2	+ 0 0 0.8	-30.102
GEOI	132	+ 0 0 3.9	+ 0 0 0.6	-30.632
GEOI	133	+ 0 0 2.9	+ 0 0 0.5	-30.483
GEOI	134	+ 0 0 3.8	+ 0 0 1.1	-30.852
GEOI	135	+ 0 0 3.6	+ 0 0 1.1	-31.004
GEOI	136	+ 0 0 2.6	+ 0 0 0.4	-31.164
GEOI	137	+ 0 0 2.8	+ 0 0 0.3	-31.188
GEOI	138	+ 0 0 2.6	+ 0 0 0.3	-31.309
GEOI	139	+ 0 0 3.2	+ 0 0 0.7	-31.358
GEOI	140	+ 0 0 3.3	+ 0 0 0.8	-31.500
GEOI	141	+ 0 0 2.2	+ 0 0 0.3	-31.355
GEOI	142	+ 0 0 3.0	- 0 0 0.1	-31.530
GEOI	143	+ 0 0 1.8	+ 0 0 1.4	-31.616
GEOI	144	+ 0 0 2.0	+ 0 0 1.8	-31.739
GEOI	145	+ 0 0 0.9	+ 0 0 0.7	-32.007
GEOI	146	+ 0 0 2.2	+ 0 0 1.2	-31.845
GEOI	147	+ 0 0 2.8	+ 0 0 1.1	-31.812
GEOI	148	+ 0 0 1.0	+ 0 0 1.6	-31.842
GEOI	149	+ 0 0 3.0	+ 0 0 0.3	-31.218
GEOI	1601	+ 0 0 3.3	+ 0 0 0.2	-31.552
GEOI	1602	+ 0 0 3.5	+ 0 0 0.4	-31.265
GEOI	1603	+ 0 0 2.8	+ 0 0 0.3	-31.191
GEOI	219	+ 0 0 3.7	+ 0 0 0.3	-29.850
GEOI	220	+ 0 0 4.3	- 0 0 0.5	-29.750
GEOI	221	+ 0 0 4.6	- 0 0 1.1	-29.794
GEOI	222	+ 0 0 4.7	- 0 0 0.2	-30.151
GEOI	223	+ 0 0 4.1	- 0 0 0.0	-30.162
GEOI	224	+ 0 0 4.0	+ 0 0 0.4	-30.245
GEOI	225	+ 0 0 3.9	+ 0 0 0.3	-30.240
GEOI	226	+ 0 0 3.9	+ 0 0 0.8	-30.711
GEOI	227	+ 0 0 4.2	+ 0 0 0.2	-30.494
GEOI	228	+ 0 0 3.8	+ 0 0 0.3	-30.459
GEOI	229	+ 0 0 2.8	+ 0 0 1.2	-30.662
GEOI	230	+ 0 0 3.6	+ 0 0 0.3	-30.510
GEOI	231	+ 0 0 3.8	+ 0 0 0.7	-30.952
GEOI	232	+ 0 0 4.6	+ 0 0 0.3	-30.710
GEOI	233	+ 0 0 3.7	+ 0 0 1.2	-30.882
GEOI	234	+ 0 0 3.6	+ 0 0 0.5	-31.405
GEOI	235	+ 0 0 3.3	+ 0 0 0.3	-31.206
GEOI	236	+ 0 0 2.8	+ 0 0 0.2	-31.258
GEOI	237	+ 0 0 3.5	+ 0 0 0.5	-31.338

Geoid Values:

CODE	NAME	N/S DEFLECTION	E/W DEFLECTION	UNDULATION
GEOI	238	+ 0 0 3.4	+ 0 0 0.6	-31.510
GEOI	239	+ 0 0 3.5	+ 0 0 1.0	-31.434
GEOI	240	+ 0 0 3.0	+ 0 0 0.8	-31.818
GEOI	241	+ 0 0 1.8	+ 0 0 1.2	-31.602
GEOI	242	+ 0 0 2.9	+ 0 0 0.4	-31.832
GEOI	243	+ 0 0 1.3	+ 0 0 1.4	-31.877
GEOI	244	+ 0 0 1.5	+ 0 0 1.6	-31.811
GEOI	245	+ 0 0 0.7	+ 0 0 1.5	-31.921
GEOI	246	+ 0 0 0.4	+ 0 0 1.3	-31.934
GEOI	247	+ 0 0 1.0	+ 0 0 1.3	-31.807
GEOI	248	+ 0 0 1.1	+ 0 0 1.5	-31.782
GEOI	249	+ 0 0 1.8	+ 0 0 1.5	-31.709
GEOI	401	+ 0 0 3.6	- 0 0 0.1	-29.741
GEOI	402	+ 0 0 4.0	- 0 0 0.1	-29.858
GEOI	404	+ 0 0 3.6	+ 0 0 0.1	-30.290
GEOI	406	+ 0 0 3.7	+ 0 0 0.3	-30.337
GEOI	407	+ 0 0 4.0	+ 0 0 0.4	-30.165
GEOI	408	+ 0 0 3.8	+ 0 0 0.2	-30.235
GEOI	409	+ 0 0 4.0	+ 0 0 0.8	-30.750
GEOI	410	+ 0 0 4.3	+ 0 0 0.5	-30.492
GEOI	411	+ 0 0 2.8	+ 0 0 1.1	-30.615
GEOI	412	+ 0 0 2.9	+ 0 0 0.8	-30.663
GEOI	413	+ 0 0 3.6	+ 0 0 1.0	-30.843
GEOI	414	+ 0 0 4.4	+ 0 0 0.4	-30.889
GEOI	417	+ 0 0 4.0	+ 0 0 0.6	-31.335
GEOI	418	+ 0 0 3.1	+ 0 0 0.0	-31.482
GEOI	419	+ 0 0 3.1	+ 0 0 0.3	-31.213
GEOI	420	+ 0 0 3.3	+ 0 0 0.6	-31.326
GEOI	421	+ 0 0 3.6	+ 0 0 0.6	-31.342
GEOI	422	+ 0 0 3.2	+ 0 0 0.4	-31.540
GEOI	423	+ 0 0 3.1	+ 0 0 0.3	-31.527
GEOI	424	+ 0 0 1.6	+ 0 0 1.6	-31.675
GEOI	425	+ 0 0 2.5	+ 0 0 0.9	-31.746
GEOI	426	+ 0 0 2.5	+ 0 0 0.3	-31.887
GEOI	427	+ 0 0 2.6	- 0 0 0.0	-31.931
GEOI	429	+ 0 0 1.1	+ 0 0 1.7	-31.842
GEOI	430	+ 0 0 2.5	+ 0 0 1.2	-31.812
GEOI	431	+ 0 0 0.6	+ 0 0 0.7	-32.017
GEOI	432	+ 0 0 2.8	+ 0 0 0.7	-31.371
GEOI	433	+ 0 0 3.1	+ 0 0 1.0	-31.416
GEOI	434	+ 0 0 3.2	+ 0 0 0.9	-31.505
GEOI	435	+ 0 0 0.6	+ 0 0 1.4	-31.918
GEOI	460	+ 0 0 1.6	+ 0 0 1.8	-31.893
GEOI	519	+ 0 0 3.8	+ 0 0 0.3	-29.854
GEOI	520	+ 0 0 4.2	- 0 0 0.5	-29.752
GEOI	521	+ 0 0 4.5	- 0 0 1.2	-29.737
GEOI	522	+ 0 0 3.6	+ 0 0 0.1	-30.290
GEOI	523	+ 0 0 4.7	- 0 0 0.2	-30.154
GEOI	524	+ 0 0 4.1	+ 0 0 0.0	-30.162
GEOI	525	+ 0 0 4.2	+ 0 0 0.8	-30.102
GEOI	526	+ 0 0 3.9	+ 0 0 0.3	-30.247
GEOI	527	+ 0 0 3.9	+ 0 0 0.8	-30.727
GEOI	528	+ 0 0 4.0	+ 0 0 0.6	-30.465

Geoid Values:

CODE	NAME	N/S DEFLECTION	E/W DEFLECTION	UNDULATION
GEOI	529	+ 0 0 3.7	+ 0 0 0.7	-30.621
GEOI	530	+ 0 0 3.2	+ 0 0 0.7	-30.590
GEOI	531	+ 0 0 3.9	+ 0 0 1.0	-30.868
GEOI	532	+ 0 0 3.5	+ 0 0 1.1	-30.804
GEOI	533	+ 0 0 4.2	+ 0 0 0.5	-30.955
GEOI	534	+ 0 0 3.2	+ 0 0 0.3	-31.255
GEOI	535	+ 0 0 3.8	+ 0 0 0.5	-31.290
GEOI	536	+ 0 0 3.4	+ 0 0 0.3	-31.382
GEOI	537	+ 0 0 3.2	+ 0 0 0.3	-31.481
GEOI	538	+ 0 0 3.3	+ 0 0 0.3	-31.206
GEOI	539	+ 0 0 2.8	+ 0 0 0.2	-31.244
GEOI	540	+ 0 0 3.0	+ 0 0 0.7	-31.337
GEOI	541	+ 0 0 3.3	+ 0 0 1.1	-31.456
GEOI	542	+ 0 0 1.8	+ 0 0 1.5	-31.621
GEOI	543	+ 0 0 2.0	+ 0 0 1.8	-31.739
GEOI	544	+ 0 0 2.9	+ 0 0 0.4	-31.832
GEOI	545	+ 0 0 2.6	+ 0 0 0.0	-31.932
GEOI	546	+ 0 0 2.1	+ 0 0 1.7	-31.765
GEOI	547	+ 0 0 1.9	+ 0 0 1.6	-31.860
GEOI	601	+ 0 0 2.3	+ 0 0 1.0	-31.553
GEOI	602	+ 0 0 2.9	+ 0 0 0.8	-31.351
GEOI	603	+ 0 0 2.2	+ 0 0 0.9	-31.359
GEOI	628	+ 0 0 3.6	- 0 0 0.3	-29.711
GEOI	629	+ 0 0 4.8	- 0 0 1.0	-29.693
GEOI	630	+ 0 0 4.5	- 0 0 0.2	-30.015
GEOI	631	+ 0 0 4.3	- 0 0 0.0	-30.295
GEOI	632	+ 0 0 4.0	+ 0 0 0.5	-30.265
GEOI	633	+ 0 0 4.3	+ 0 0 0.3	-30.573
GEOI	634	+ 0 0 2.9	+ 0 0 1.0	-30.661
GEOI	635	+ 0 0 2.9	+ 0 0 0.5	-30.482
GEOI	636	+ 0 0 3.7	+ 0 0 0.5	-30.996
GEOI	637	+ 0 0 4.4	- 0 0 0.3	-30.886
GEOI	638	+ 0 0 1.4	+ 0 0 1.4	-31.599
GEOI	639	+ 0 0 2.3	+ 0 0 1.0	-31.736
GEOI	641	+ 0 0 1.0	+ 0 0 1.4	-31.850
GEOI	642	- 0 0 0.0	+ 0 0 0.9	-32.005
GEOI	801.25	+ 0 0 3.0	+ 0 0 0.3	-29.716
GEOI	922 RESET	+ 0 0 4.4	- 0 0 0.1	-30.005
GEOI	A 277	+ 0 0 2.1	+ 0 0 1.3	-31.796
GEOI	C 233 RESET	+ 0 0 4.0	+ 0 0 0.5	-31.372
GEOI	C 252 RESET	+ 0 0 0.1	+ 0 0 1.1	-31.943
GEOI	C 253	+ 0 0 3.7	+ 0 0 0.7	-30.716
GEOI	D 277	+ 0 0 1.6	+ 0 0 1.5	-31.629
GEOI	G 251	+ 0 0 3.2	+ 0 0 0.5	-31.623
GEOI	G 253	+ 0 0 4.0	+ 0 0 0.6	-30.493
GEOI	H 274	+ 0 0 1.5	+ 0 0 1.0	-31.779
GEOI	K 56	+ 0 0 0.8	+ 0 0 1.9	-31.614
GEOI	MOBT	+ 0 0 1.4	+ 0 0 0.7	-32.081
GEOI	MOCA	+ 0 0 5.4	+ 0 0 0.0	-29.915
GEOI	MOHV	+ 0 0 0.8	+ 0 0 1.4	-32.267
GEOI	MONE	+ 0 0 3.4	+ 0 0 0.1	-31.446
GEOI	P 18	+ 0 0 4.9	- 0 0 0.7	-29.973
GEOI	X 274	+ 0 0 1.7	+ 0 0 0.5	-31.962

Geoid Values:

CODE	NAME	N/S DEFLECTION	E/W DEFLECTION	UNDULATION
GEOI	ZKC1	+ 0 0 2.2	+ 0 0 1.7	-32.139

Residuals (critical value = 4.238):

TYPE	AT	FROM	TO	OBSERVATION / STD DEV	RESIDUAL / STD DEV	STD RES / PPM
GROUP: 012412C.ASC ,obs#:		1				
DXCT		MOBT	1001	-30363.98170	0.000	0.001
				0.052	0.051	0.00
DYCT		MOBT	1001	-31606.84540	-0.013	-0.260
				0.052	0.051	0.22
DZCT		MOBT	1001	-43345.67540	0.005	0.090
				0.052	0.051	0.07
GROUP: 012412C.ASC ,obs#:		2				
DXCT		MONE	1001	-32154.05830	0.002	0.063
				0.028	0.028	0.05
DYCT		MONE	1001	-4590.87540	0.003	0.106
				0.028	0.028	0.09
DZCT		MONE	1001	-9104.87060	-0.007	-0.243
				0.028	0.028	0.20
GROUP: 012412C.ASC ,obs#:		3				
DXCT		MOBT	1002	-29697.51680	0.001	0.027
				0.038	0.037	0.02
DYCT		MOBT	1002	-19428.73750	-0.002	-0.041
				0.038	0.037	0.03
DZCT		MOBT	1002	-27672.56530	0.013	0.349
				0.038	0.037	0.29
GROUP: 012412C.ASC ,obs#:		4				
DXCT		MONE	1002	-31487.59260	0.002	0.069
				0.028	0.027	0.06
DYCT		MONE	1002	7587.23450	0.013	0.468
				0.028	0.027	0.38
DZCT		MONE	1002	6568.24040	0.001	0.029
				0.028	0.027	0.02
GROUP: 012412C.ASC ,obs#:		5				
DXCT		MOBT	101	-54265.53220	-0.004	-0.069
				0.065	0.065	0.06
DYCT		MOBT	101	-31557.18050	-0.001	-0.018
				0.065	0.064	0.02
DZCT		MOBT	101	-45908.30470	-0.005	-0.072
				0.065	0.065	0.06
GROUP: 012412C.ASC ,obs#:		6				
DXCT		MONE	101	-56055.60890	-0.003	-0.056
				0.048	0.047	0.05
DYCT		MONE	101	-4541.21240	0.017	0.358
				0.048	0.047	0.30
DZCT		MONE	101	-11667.49690	-0.019	-0.399
				0.048	0.047	0.33
GROUP: 012412C.ASC ,obs#:		7				
DXCT		MOBT	102	-53447.32850	0.002	0.044
				0.050	0.050	0.04
DYCT		MOBT	102	-13778.17560	0.006	0.130
				0.050	0.049	0.11
DZCT		MOBT	102	-22974.12050	-0.017	-0.340
				0.050	0.049	0.28
GROUP: 012412C.ASC ,obs#:		8				
DXCT		MONE	102	-55237.40430	0.003	0.063
				0.049	0.048	0.05

Residuals (critical value = 4.238):

TYPE	AT	FROM	TO	OBSERVATION / STD DEV	RESIDUAL / STD DEV	STD RES / PPM
DYCT		MONE	102	13237.79450	0.023	0.470
				0.049	0.048	0.39
DZCT		MONE	102	11266.68460	-0.028	-0.592
				0.049	0.048	0.49
GROUP: 012412C.ASC ,obs#: 9						
DXCT		1002	1601	3206.75430	0.000	0.330
				0.003	0.001	0.06
DYCT		1002	1601	-588.58450	0.000	0.137
				0.003	0.001	0.03
DZCT		1002	1601	-451.40490	-0.000	-0.285
				0.003	0.001	0.06
GROUP: 012412C.ASC ,obs#: 10						
DXCT		1001	1601	3873.22210	-0.002	-0.114
				0.016	0.015	0.09
DYCT		1001	1601	11589.53510	0.000	0.010
				0.016	0.015	0.01
DZCT		1001	1601	15221.71390	-0.001	-0.033
				0.016	0.015	0.03
GROUP: 012412C.ASC ,obs#: 11						
DXCT		MONE	1601	-28280.83150	-0.005	-0.195
				0.025	0.024	0.16
DYCT		MONE	1601	6998.65040	0.012	0.507
				0.025	0.024	0.42
DZCT		MONE	1601	6116.84720	-0.011	-0.457
				0.025	0.024	0.37
GROUP: 012412C.ASC ,obs#: 12						
DXCT		102	1601	26956.56970	-0.005	-0.208
				0.024	0.022	0.17
DYCT		102	1601	-6239.14820	-0.006	-0.268
				0.024	0.023	0.21
DZCT		102	1601	-5149.84070	0.021	0.919
				0.024	0.022	0.73
GROUP: 012412C.ASC ,obs#: 13						
DXCT		101	1601	27774.77910	-0.004	-0.133
				0.029	0.028	0.11
DYCT		101	1601	11539.87570	-0.017	-0.620
				0.029	0.028	0.50
DZCT		101	1601	17784.34680	0.005	0.182
				0.029	0.028	0.15
GROUP: 012412C.ASC ,obs#: 14						
DXCT		1002	1602	-5469.35130	-0.005	-0.384
				0.014	0.013	0.29
DYCT		1002	1602	-9613.06040	-0.004	-0.276
				0.014	0.013	0.21
DZCT		1002	1602	-12913.01210	-0.002	-0.151
				0.014	0.013	0.11
GROUP: 012412C.ASC ,obs#: 15						
DXCT		1001	1602	-4802.89020	-0.000	-0.082
				0.005	0.002	0.03
DYCT		1001	1602	2565.05660	-0.001	-0.436
				0.005	0.002	0.15
DZCT		1001	1602	2760.10330	0.001	0.548

Residuals (critical value = 4.238):

TYPE	AT	FROM	TO	OBSERVATION / STD DEV	RESIDUAL / STD DEV	STD RES / PPM
				0.005	0.002	0.19
GROUP: 012412C.ASC ,obs#:		16				
DXCT		101	1602	19098.65780	0.007	0.480
				0.017	0.014	0.34
DYCT		101	1602	2515.36870	0.010	0.691
				0.017	0.014	0.50
DZCT		101	1602	5322.74830	-0.005	-0.373
				0.017	0.014	0.27
GROUP: 012412C.ASC ,obs#:		17				
DXCT		MOBT	1602	-35166.87500	0.003	0.059
				0.051	0.051	0.05
DYCT		MOBT	1602	-29041.81310	0.010	0.200
				0.051	0.051	0.17
DZCT		MOBT	1602	-40585.56120	-0.005	-0.102
				0.051	0.051	0.08
GROUP: 012412C.ASC ,obs#:		18				
DXCT		MONE	1602	-36956.95190	0.005	0.162
				0.031	0.031	0.13
DYCT		MONE	1602	-2025.82930	0.013	0.405
				0.032	0.031	0.33
DZCT		MONE	1602	-6344.76040	-0.012	-0.405
				0.032	0.031	0.33
GROUP: 012412C.ASC ,obs#:		19				
DXCT		1002	1603	4436.87060	-0.000	-0.004
				0.020	0.019	0.00
DYCT		1002	1603	-14625.47970	-0.019	-0.988
				0.020	0.019	0.78
DZCT		1002	1603	-18335.71820	-0.003	-0.179
				0.020	0.019	0.14
GROUP: 012412C.ASC ,obs#:		20				
DXCT		1001	1603	5103.33660	-0.000	-0.146
				0.005	0.002	0.04
DYCT		1001	1603	-2447.37950	0.001	0.501
				0.005	0.002	0.13
DZCT		1001	1603	-2662.60350	0.000	0.254
				0.005	0.002	0.07
GROUP: 012412C.ASC ,obs#:		21				
DXCT		MONE	1603	-27050.72570	0.006	0.226
				0.025	0.024	0.18
DYCT		MONE	1603	-7038.26260	0.011	0.466
				0.026	0.025	0.38
DZCT		MONE	1603	-11767.47610	-0.004	-0.176
				0.026	0.024	0.14
GROUP: 012412C.ASC ,obs#:		22				
DXCT		1002	601	-23622.72260	-0.003	-0.166
				0.021	0.020	0.13
DYCT		1002	601	7040.86580	0.027	1.339
				0.021	0.020	1.06
DZCT		1002	601	6406.32430	-0.045	-2.251
				0.021	0.020	1.78
GROUP: 012412C.ASC ,obs#:		23				
DXCT		1001	601	-22956.25620	-0.004	-0.129

Residuals (critical value = 4.238):

TYPE	AT	FROM	TO	OBSERVATION / STD DEV	RESIDUAL / STD DEV	STD RES / PPM
				0.031	0.030	0.10
DYCT		1001	601	19218.98480	0.028	0.919
				0.031	0.030	0.74
DZCT		1001	601	22079.42600	-0.028	-0.946
				0.031	0.030	0.77
GROUP: 012412C.ASC ,obs#:		24				
DXCT		102	601	127.08460	0.000	0.163
				0.002	0.000	0.02
DYCT		102	601	1390.32350	-0.001	-2.090
				0.002	0.000	0.23
DZCT		102	601	1707.86330	0.001	2.897
				0.002	0.000	0.32
GROUP: 012412C.ASC ,obs#:		25				
DXCT		101	601	945.29550	-0.001	-0.022
				0.026	0.025	0.02
DYCT		101	601	19169.32190	0.014	0.547
				0.026	0.025	0.43
DZCT		101	601	24642.05450	-0.018	-0.745
				0.026	0.025	0.59
GROUP: 012412C.ASC ,obs#:		26				
DXCT		MOBT	601	-53320.23690	-0.005	-0.099
				0.049	0.049	0.08
DYCT		MOBT	601	-12387.86270	0.016	0.340
				0.049	0.048	0.28
DZCT		MOBT	601	-21266.24730	-0.026	-0.535
				0.049	0.049	0.44
GROUP: 012412C.ASC ,obs#:		27				
DXCT		MONE	601	-55110.31390	-0.003	-0.056
				0.049	0.048	0.05
DYCT		MONE	601	14628.11190	0.028	0.580
				0.049	0.048	0.48
DZCT		MONE	601	12974.55580	-0.036	-0.734
				0.049	0.048	0.61
GROUP: 012412C.ASC ,obs#:		28				
DXCT		1002	C 233 RESET	-56.24510	-0.008	-0.918
				0.009	0.009	0.73
DYCT		1002	C 233 RESET	-6870.57450	0.008	0.843
				0.009	0.009	0.67
DZCT		1002	C 233 RESET	-8846.50820	0.014	1.570
				0.009	0.009	1.25
GROUP: 012412C.ASC ,obs#:		29				
DXCT		1001	C 233 RESET	610.21260	-0.000	-0.005
				0.007	0.005	0.00
DYCT		1001	C 233 RESET	5307.56930	-0.017	-3.175
				0.007	0.005	1.91
DZCT		1001	C 233 RESET	6826.62310	0.001	0.235
				0.007	0.005	0.14
GROUP: 012412C.ASC ,obs#:		30				
DXCT		102	C 233 RESET	23693.55890	-0.002	-0.067
				0.025	0.024	0.05
DYCT		102	C 233 RESET	-12521.13040	-0.006	-0.263
				0.025	0.024	0.21

Residuals (critical value = 4.238):

TYPE	AT	FROM	TO	OBSERVATION / STD DEV	RESIDUAL / STD DEV	STD RES / PPM
DZCT		102	C 233 RESET	-13544.91510	0.006	0.245
				0.025	0.024	0.20
GROUP: 012412C.ASC ,obs#: 31						
DXCT		101	C 233 RESET	24511.76060	0.007	0.334
				0.022	0.021	0.26
DYCT		101	C 233 RESET	5257.87990	-0.004	-0.200
				0.023	0.021	0.16
DZCT		101	C 233 RESET	9389.26680	-0.004	-0.188
				0.023	0.021	0.15
GROUP: 012412C.ASC ,obs#: 32						
DXCT		MONE	C 233 RESET	-31543.84280	-0.001	-0.046
				0.027	0.026	0.04
DYCT		MONE	C 233 RESET	716.66070	0.020	0.751
				0.027	0.026	0.62
DZCT		MONE	C 233 RESET	-2278.22490	-0.028	-1.080
				0.027	0.026	0.89
GROUP: 012412C.ASC ,obs#: 33						
DXCT		MOBT	C 233 RESET	-29753.76770	-0.001	-0.030
				0.045	0.045	0.03
DYCT		MOBT	C 233 RESET	-26299.31540	0.009	0.210
				0.045	0.045	0.17
DZCT		MOBT	C 233 RESET	-36519.02890	-0.018	-0.392
				0.045	0.045	0.33
GROUP: 012412C.ASC ,obs#: 34						
DXCT		1002	D 277	-23147.23950	0.008	0.340
				0.025	0.024	0.27
DYCT		1002	D 277	13037.04980	0.063	2.558
				0.025	0.025	2.09
DZCT		1002	D 277	14169.26850	-0.037	-1.525
				0.025	0.024	1.23
GROUP: 012412C.ASC ,obs#: 35						
DXCT		MOBT	D 277	-52844.74820	0.001	0.023
				0.046	0.045	0.02
DYCT		MOBT	D 277	-6391.69870	0.072	1.591
				0.046	0.046	1.32
DZCT		MOBT	D 277	-13503.28570	-0.035	-0.774
				0.046	0.046	0.64
GROUP: 012412C.ASC ,obs#: 36						
DXCT		102	D 277	602.58110	-0.002	-0.292
				0.010	0.007	0.16
DYCT		102	D 277	7386.53730	0.006	0.770
				0.010	0.007	0.47
DZCT		102	D 277	9470.84590	-0.030	-4.194
				0.010	0.007	2.46
GROUP: 012412C.ASC ,obs#: 37						
DXCT		101	D 277	1420.79130	-0.002	-0.055
				0.034	0.033	0.04
DYCT		101	D 277	25165.50370	0.052	1.544
				0.035	0.033	1.26
DZCT		101	D 277	32405.01990	-0.032	-0.942
				0.035	0.033	0.77
GROUP: 012412C.ASC ,obs#: 38						

Residuals (critical value = 4.238):

TYPE	AT	FROM	TO	OBSERVATION / STD DEV	RESIDUAL / STD DEV	STD RES / PPM
DXCT		1002	G 251	266.48700	0.000	0.519
				0.004	0.001	0.12
DYCT		1002	G 251	2602.70580	-0.008	-5.441
				0.004	0.001	1.86
					^^^^^^^^^^^^^^^	
DZCT		1002	G 251	3311.06930	0.005	3.634
				0.004	0.001	1.08
GROUP: 012412C.ASC ,obs#:		39				
DXCT		1001	G 251	932.96160	-0.008	-0.428
				0.020	0.019	0.34
DYCT		1001	G 251	14780.80150	0.016	0.829
				0.020	0.019	0.67
DZCT		1001	G 251	18984.18910	0.003	0.168
				0.020	0.019	0.14
GROUP: 012412C.ASC ,obs#:		40				
DXCT		102	G 251	24016.31430	-0.016	-0.866
				0.020	0.019	0.67
DYCT		102	G 251	-3047.87350	0.002	0.085
				0.021	0.019	0.07
DZCT		102	G 251	-1387.36410	0.023	1.205
				0.020	0.019	0.95
GROUP: 012412C.ASC ,obs#:		41				
DXCT		101	G 251	24834.52110	-0.013	-0.440
				0.030	0.029	0.35
DYCT		101	G 251	14731.15540	-0.015	-0.506
				0.030	0.029	0.41
DZCT		101	G 251	21546.80920	0.022	0.745
				0.030	0.029	0.60
GROUP: 012412C.ASC ,obs#:		42				
DXCT		MONE	G 251	-31221.09420	-0.009	-0.321
				0.029	0.028	0.26
DYCT		MONE	G 251	10189.93470	0.010	0.362
				0.030	0.029	0.30
DZCT		MONE	G 251	9879.31700	-0.002	-0.069
				0.029	0.028	0.06
GROUP: 012512C.ASC ,obs#:		54				
DXCT		MONE	101	-56055.61770	0.006	0.129
				0.048	0.047	0.11
DYCT		MONE	101	-4541.19650	0.001	0.022
				0.048	0.047	0.02
DZCT		MONE	101	-11667.50190	-0.014	-0.293
				0.048	0.047	0.24
GROUP: 012512C.ASC ,obs#:		55				
DXCT		MOBT	101	-54265.54410	0.007	0.115
				0.065	0.065	0.10
DYCT		MOBT	101	-31557.20780	0.026	0.405
				0.065	0.064	0.34
DZCT		MOBT	101	-45908.27260	-0.037	-0.569
				0.065	0.065	0.47
GROUP: 012512C.ASC ,obs#:		56				
DXCT		MONE	102	-55237.39720	-0.004	-0.085
				0.049	0.048	0.07

Residuals (critical value = 4.238):

TYPE	AT	FROM	TO	OBSERVATION / STD DEV	RESIDUAL / STD DEV	STD RES / PPM
DYCT		MONE	102	13237.84210	-0.025	-0.524
				0.049	0.048	0.43
DZCT		MONE	102	11266.66020	-0.004	-0.083
				0.049	0.048	0.07
GROUP: 012512C.ASC ,obs#:		57				
DXCT		MOBT	102	-53447.32380	-0.003	-0.051
				0.050	0.050	0.04
DYCT		MOBT	102	-13778.16540	-0.004	-0.077
				0.050	0.049	0.06
DZCT		MOBT	102	-22974.11440	-0.023	-0.463
				0.050	0.049	0.38
GROUP: 012512C.ASC ,obs#:		78				
DXCT		101	602	9650.86380	-0.006	-0.702
				0.014	0.009	0.37
DYCT		101	602	8022.82340	-0.017	-1.891
				0.014	0.009	1.02
DZCT		101	602	11362.80230	0.008	0.863
				0.014	0.009	0.46
GROUP: 012512C.ASC ,obs#:		79				
DXCT		102	602	8832.64040	0.007	0.702
				0.015	0.010	0.39
DYCT		102	602	-9756.22480	0.018	1.891
				0.015	0.010	1.05
DZCT		102	602	-11571.35350	-0.008	-0.861
				0.015	0.010	0.48
GROUP: 012512C.ASC ,obs#:		80				
DXCT		101	603	-6104.81820	-0.007	-0.477
				0.017	0.014	0.32
DYCT		101	603	12414.66500	-0.001	-0.079
				0.017	0.014	0.05
DZCT		101	603	15309.41680	-0.005	-0.333
				0.018	0.014	0.22
GROUP: 012512C.ASC ,obs#:		81				
DXCT		102	603	-6923.03710	0.002	0.478
				0.010	0.004	0.18
DYCT		102	603	-5364.34890	0.000	0.080
				0.010	0.004	0.03
DZCT		102	603	-7624.76130	0.001	0.334
				0.010	0.004	0.13
GROUP: 020712M.ASC ,obs#:		387				
DXCT		123	219	-19354.64890	-0.004	-0.228
				0.016	0.016	0.18
DYCT		123	219	1673.69360	0.022	1.366
				0.016	0.016	1.11
DZCT		123	219	4.89160	-0.014	-0.858
				0.016	0.016	0.70
GROUP: 020712M.ASC ,obs#:		388				
DXCT		123	401	-18042.20460	0.018	1.237
				0.016	0.015	0.97
DYCT		123	401	-2245.19730	-0.007	-0.375
				0.020	0.018	0.36
DZCT		123	401	-5020.76130	-0.007	-0.384

Residuals (critical value = 4.238):

TYPE	AT	FROM	TO	OBSERVATION / STD DEV	RESIDUAL / STD DEV	STD RES / PPM
				0.019	0.018	0.37
GROUP: 020712M.ASC ,obs#: 389						
DXCT		219	401	1312.46840	-0.002	-1.230
				0.006	0.002	0.33
DYCT		219	401	-3918.92010	0.001	0.402
				0.006	0.002	0.11
DZCT		219	401	-5025.64700	0.001	0.413
				0.006	0.002	0.10
GROUP: 020712M.ASC ,obs#: 390						
DXCT		123	519	-17796.71510	-0.003	-0.199
				0.015	0.014	0.16
DYCT		123	519	1557.38600	0.026	1.784
				0.015	0.014	1.45
DZCT		123	519	36.89630	-0.003	-0.180
				0.015	0.014	0.15
GROUP: 020712M.ASC ,obs#: 391						
DXCT		219	519	1557.93450	0.000	0.213
				0.001	0.000	0.02
DYCT		219	519	-116.30310	-0.000	-1.791
				0.001	0.000	0.16
DZCT		219	519	32.01560	0.000	0.277
				0.001	0.000	0.02
GROUP: 020712M.ASC ,obs#: 392						
DXCT		123	628	-18125.08610	-0.006	-0.414
				0.016	0.015	0.31
DYCT		123	628	-3287.91360	0.044	2.921
				0.017	0.015	2.25
DZCT		123	628	-6399.51760	-0.045	-3.023
				0.017	0.015	2.30
GROUP: 020712M.ASC ,obs#: 393						
DXCT		219	628	1229.55920	0.001	0.422
				0.007	0.003	0.13
DYCT		219	628	-4961.57740	-0.008	-2.899
				0.007	0.003	0.92
DZCT		219	628	-6404.44840	0.008	3.001
				0.007	0.003	0.95
GROUP: 020712M.ASC ,obs#: 394						
DXCT		123	801.25	-25882.45240	0.016	0.758
				0.022	0.021	0.59
DYCT		123	801.25	-2304.29190	-0.003	-0.157
				0.023	0.022	0.13
DZCT		123	801.25	-6007.80420	0.007	0.349
				0.023	0.021	0.28
GROUP: 020712M.ASC ,obs#: 395						
DXCT		219	801.25	-6527.77930	-0.005	-1.760
				0.008	0.003	0.51
DYCT		219	801.25	-3977.97770	-0.033	-5.696
				0.008	0.006	3.37
					^^^^^^^^^^^^^^^^	
DZCT		219	801.25	-6012.69930	0.024	5.088
				0.008	0.005	2.51
					^^^^^^^^^^^^^^^^	

Residuals (critical value = 4.238):

TYPE	AT	FROM	TO	OBSERVATION / STD DEV	RESIDUAL / STD DEV	STD RES / PPM
GROUP: 020712M.ASC ,obs#: 396						
DXCT		123	MOCA	39143.51760	0.011	0.343
				0.033	0.032	0.28
DYCT		123	MOCA	1735.91950	-0.009	-0.289
				0.033	0.032	0.23
DZCT		123	MOCA	6481.11040	0.037	1.147
				0.033	0.032	0.92
GROUP: 020712M.ASC ,obs#: 397						
DXCT		219	MOCA	58498.16750	0.014	0.280
				0.049	0.048	0.23
DYCT		219	MOCA	62.23000	-0.035	-0.722
				0.049	0.048	0.59
DZCT		219	MOCA	6476.21620	0.053	1.092
				0.049	0.048	0.90
GROUP: 020712M.ASC ,obs#: 398						
DXCT		123	MONE	43385.06870	0.002	0.027
				0.078	0.078	0.02
DYCT		123	MONE	48109.59440	-0.007	-0.093
				0.078	0.078	0.08
DZCT		123	MONE	67034.24690	0.026	0.329
				0.078	0.078	0.27
GROUP: 020712M.ASC ,obs#: 399						
DXCT		219	MONE	62739.69700	0.026	0.307
				0.086	0.086	0.26
DYCT		219	MONE	46435.89080	-0.019	-0.219
				0.086	0.086	0.18
DZCT		219	MONE	67029.36530	0.029	0.339
				0.086	0.086	0.28
GROUP: 020812M.ASC ,obs#: 400						
DXCT		123	124	-15121.07990	0.011	0.919
				0.013	0.012	0.71
DYCT		123	124	1335.03030	0.008	0.636
				0.013	0.012	0.50
DZCT		123	124	53.26070	-0.013	-1.081
				0.013	0.012	0.85
GROUP: 020812M.ASC ,obs#: 401						
DXCT		219	124	4233.58420	-0.001	-0.943
				0.004	0.001	0.21
DYCT		219	124	-338.67670	-0.001	-0.683
				0.004	0.001	0.15
DZCT		219	124	48.36870	0.001	1.115
				0.004	0.001	0.26
GROUP: 020812M.ASC ,obs#: 402						
DXCT		123	125	-7347.99520	-0.003	-0.898
				0.007	0.004	0.39
DYCT		123	125	-2326.64830	-0.009	-2.429
				0.007	0.004	1.07
DZCT		123	125	-3858.85170	0.009	2.283
				0.007	0.004	1.00
GROUP: 020812M.ASC ,obs#: 403						
DXCT		219	125	12006.64590	0.008	0.905
				0.011	0.009	0.61

Residuals (critical value = 4.238):

TYPE	AT	FROM	TO	OBSERVATION / STD DEV	RESIDUAL / STD DEV	STD RES / PPM
DYCT		219	125	-4000.39480	0.022	2.449
				0.011	0.009	1.67
DZCT		219	125	-3863.70030	-0.021	-2.304
				0.011	0.009	1.57
GROUP: 020812M.ASC ,obs#: 404						
DXCT		123	219	-19354.64210	-0.010	-0.659
				0.016	0.016	0.53
DYCT		123	219	1673.72430	-0.009	-0.579
				0.016	0.016	0.47
DZCT		123	219	4.87040	0.008	0.487
				0.016	0.016	0.40
GROUP: 020812M.ASC ,obs#: 405						
DXCT		123	220	-9239.06350	0.003	0.526
				0.009	0.005	0.28
DYCT		123	220	-2149.83130	-0.010	-1.919
				0.009	0.005	1.02
DZCT		123	220	-3849.98300	0.015	2.792
				0.009	0.005	1.48
GROUP: 020812M.ASC ,obs#: 406						
DXCT		219	220	10115.59540	-0.004	-0.520
				0.010	0.007	0.31
DYCT		219	220	-3823.57090	0.014	1.967
				0.010	0.007	1.22
DZCT		219	220	-3854.82630	-0.020	-2.826
				0.010	0.007	1.71
GROUP: 020812M.ASC ,obs#: 407						
DXCT		123	221	8620.67600	-0.002	-1.023
				0.007	0.002	0.25
DYCT		123	221	-740.55930	0.002	0.784
				0.007	0.002	0.19
DZCT		123	221	-24.40530	-0.002	-0.884
				0.007	0.002	0.22
GROUP: 020812M.ASC ,obs#: 408						
DXCT		219	221	27975.30360	0.023	1.025
				0.024	0.022	0.81
DYCT		219	221	-2414.25540	-0.017	-0.782
				0.024	0.022	0.62
DZCT		219	221	-29.30490	0.020	0.883
				0.024	0.022	0.70
GROUP: 020812M.ASC ,obs#: 409						
DXCT		219	402	6703.10520	0.000	0.013
				0.006	0.001	0.00
DYCT		219	402	-539.70210	0.001	1.412
				0.006	0.001	0.19
DZCT		219	402	60.16400	-0.000	-0.571
				0.006	0.001	0.06
GROUP: 020812M.ASC ,obs#: 410						
DXCT		MOCA	402	-51795.07710	0.001	0.030
				0.044	0.042	0.02
DYCT		MOCA	402	-601.83700	-0.059	-1.383
				0.044	0.043	1.13
DZCT		MOCA	402	-6416.12440	0.019	0.447

Residuals (critical value = 4.238):

TYPE	AT	FROM	TO		OBSERVATION / STD DEV	RESIDUAL / STD DEV	STD RES / PPM
					0.044	0.042	0.36
GROUP: 020812M.ASC ,obs#: 411							
DXCT		123	520		-9896.60420	0.007	1.123
					0.009	0.006	0.63
DYCT		123	520		-2079.87090	-0.006	-1.061
					0.009	0.006	0.60
DZCT		123	520		-3835.37020	0.009	1.524
					0.009	0.006	0.85
GROUP: 020812M.ASC ,obs#: 412							
DXCT		219	520		9458.06200	-0.007	-1.125
					0.009	0.006	0.64
DYCT		219	520		-3753.59960	0.007	1.087
					0.010	0.007	0.65
DZCT		219	520		-3840.22950	-0.010	-1.542
					0.009	0.006	0.88
GROUP: 020812M.ASC ,obs#: 413							
DXCT		123	521		6331.41390	-0.001	-0.875
					0.006	0.002	0.20
DYCT		123	521		-2513.54480	-0.000	-0.244
					0.006	0.002	0.06
DZCT		123	521		-2626.32980	0.000	0.022
					0.006	0.002	0.00
GROUP: 020812M.ASC ,obs#: 414							
DXCT		219	521		25686.04680	0.018	0.874
					0.022	0.021	0.69
DYCT		219	521		-4187.26540	0.005	0.240
					0.022	0.021	0.19
DZCT		219	521		-2631.20740	-0.000	-0.021
					0.022	0.021	0.02
GROUP: 020812M.ASC ,obs#: 415							
DXCT		123	629		4535.34310	-0.001	-0.827
					0.006	0.002	0.19
DYCT		123	629		-3755.32270	-0.001	-0.473
					0.006	0.002	0.11
DZCT		123	629		-4455.93820	0.002	1.370
					0.006	0.002	0.32
GROUP: 020812M.ASC ,obs#: 416							
DXCT		219	629		23889.97790	0.016	0.826
					0.021	0.020	0.65
DYCT		219	629		-5429.04800	0.009	0.468
					0.021	0.020	0.37
DZCT		219	629		-4460.78690	-0.027	-1.368
					0.021	0.020	1.08
GROUP: 020812M.ASC ,obs#: 417							
DXCT		123	630		-3868.51730	0.001	0.334
					0.007	0.003	0.13
DYCT		123	630		5044.35250	-0.009	-2.658
					0.008	0.003	1.01
DZCT		123	630		6234.36920	0.001	0.159
					0.007	0.003	0.06
GROUP: 020812M.ASC ,obs#: 419							
DXCT		123	922	RESET	-3850.58880	0.000	0.010

Residuals (critical value = 4.238):

TYPE	AT	FROM	TO	OBSERVATION / STD DEV	RESIDUAL / STD DEV	STD RES / PPM
				0.007	0.003	0.00
DYCT		123	922 RESET	4753.97540	-0.002	-0.337
				0.007	0.005	0.20
DZCT		123	922 RESET	5863.39080	0.000	0.052
				0.007	0.004	0.03
GROUP: 020812M.ASC ,obs#: 420						
DXCT		219	922 RESET	15504.06230	0.001	0.115
				0.014	0.012	0.08
DYCT		219	922 RESET	3080.19900	0.060	4.268
				0.015	0.014	3.53
					^^^^^^^^^^^^^^^^	
DZCT		219	922 RESET	5858.55590	-0.043	-3.138
				0.015	0.014	2.55
GROUP: 020812M.ASC ,obs#: 421						
DXCT		123	MOCA	39143.52260	0.006	0.186
				0.033	0.032	0.15
DYCT		123	MOCA	1735.89150	0.019	0.587
				0.033	0.032	0.47
DZCT		123	MOCA	6481.13150	0.016	0.487
				0.033	0.032	0.39
GROUP: 020812M.ASC ,obs#: 422						
DXCT		219	MOCA	58498.16460	0.016	0.340
				0.049	0.048	0.28
DYCT		219	MOCA	62.16560	0.029	0.610
				0.049	0.048	0.50
DZCT		219	MOCA	6476.26150	0.007	0.155
				0.049	0.048	0.13
GROUP: 020812M.ASC ,obs#: 423						
DXCT		123	MONE	43385.05920	0.012	0.149
				0.078	0.078	0.12
DYCT		123	MONE	48109.55950	0.028	0.356
				0.078	0.078	0.30
DZCT		123	MONE	67034.26200	0.010	0.134
				0.078	0.078	0.11
GROUP: 020812M.ASC ,obs#: 424						
DXCT		219	MONE	62739.70950	0.014	0.161
				0.086	0.086	0.13
DYCT		219	MONE	46435.83130	0.041	0.474
				0.086	0.086	0.40
DZCT		219	MONE	67029.38640	0.008	0.093
				0.086	0.086	0.08
GROUP: 020812M.ASC ,obs#: 425						
DXCT		123	P 18	6773.72400	-0.004	-0.935
				0.008	0.004	0.39
DYCT		123	P 18	3851.62030	0.015	2.543
				0.008	0.006	1.58
DZCT		123	P 18	5831.65350	-0.019	-3.650
				0.008	0.005	1.99
GROUP: 020812M.ASC ,obs#: 426						
DXCT		219	P 18	26128.34910	0.024	1.118
				0.023	0.021	0.88
DYCT		219	P 18	2177.92920	-0.009	-0.398

Residuals (critical value = 4.238):

TYPE	AT	FROM	TO	OBSERVATION / STD DEV	RESIDUAL / STD DEV	STD RES / PPM
				0.023	0.022	0.32
DZCT		219	P 18	5826.74440	0.012	0.542
				0.023	0.021	0.43
GROUP: 020912M.ASC ,obs#: 427						
DXCT		P 18	126	-1028.65920	0.004	0.381
				0.011	0.010	0.30
DYCT		P 18	126	7669.05810	0.008	0.815
				0.011	0.010	0.65
DZCT		P 18	126	9968.22630	0.004	0.436
				0.011	0.010	0.35
GROUP: 020912M.ASC ,obs#: 428						
DXCT		P 18	127	3798.86760	0.013	1.303
				0.011	0.010	0.98
DYCT		P 18	127	7461.32640	0.006	0.549
				0.011	0.010	0.42
DZCT		P 18	127	10189.93430	0.014	1.407
				0.011	0.010	1.07
GROUP: 020912M.ASC ,obs#: 429						
DXCT		126	127	4827.53770	-0.002	-1.303
				0.004	0.001	0.36
DYCT		126	127	-207.73360	-0.001	-0.537
				0.004	0.001	0.15
DZCT		126	127	221.71960	-0.002	-1.402
				0.004	0.001	0.39
GROUP: 020912M.ASC ,obs#: 430						
DXCT		P 18	128	-7675.00870	-0.009	-1.225
				0.009	0.007	0.78
DYCT		P 18	128	5119.67370	-0.001	-0.120
				0.009	0.007	0.08
DZCT		P 18	128	5894.31630	0.001	0.096
				0.009	0.007	0.06
GROUP: 020912M.ASC ,obs#: 431						
DXCT		126	128	-6646.36670	0.005	1.225
				0.007	0.004	0.59
DYCT		126	128	-2549.39390	0.000	0.120
				0.007	0.004	0.06
DZCT		126	128	-4073.91330	-0.000	-0.096
				0.007	0.004	0.05
GROUP: 020912M.ASC ,obs#: 432						
DXCT		P 18	222	-280.10270	-0.005	-1.102
				0.006	0.005	0.67
DYCT		P 18	222	4486.65050	-0.008	-1.666
				0.006	0.005	1.06
DZCT		P 18	222	5862.37950	-0.012	-2.601
				0.006	0.005	1.60
GROUP: 020912M.ASC ,obs#: 433						
DXCT		126	222	748.54520	0.003	1.102
				0.004	0.002	0.48
DYCT		126	222	-3182.42750	0.004	1.657
				0.005	0.002	0.75
DZCT		126	222	-4105.86900	0.006	2.596
				0.004	0.002	1.15

Residuals (critical value = 4.238):

TYPE	AT	FROM	TO	OBSERVATION / STD DEV	RESIDUAL / STD DEV	STD RES / PPM
GROUP: 020912M.ASC ,obs#: 434						
DXCT		P 18	223	-11430.00010	0.006	0.659
				0.012	0.009	0.42
DYCT		P 18	223	5461.07850	0.007	0.774
				0.012	0.009	0.49
DZCT		P 18	223	5910.93280	-0.002	-0.246
				0.012	0.009	0.16
GROUP: 020912M.ASC ,obs#: 435						
DXCT		126	223	-10401.33500	-0.004	-0.659
				0.010	0.006	0.34
DYCT		126	223	-2207.97630	-0.005	-0.774
				0.010	0.006	0.40
DZCT		126	223	-4057.30150	0.001	0.245
				0.010	0.006	0.13
GROUP: 020912M.ASC ,obs#: 436						
DXCT		P 18	404	-7609.06170	-0.014	-1.151
				0.014	0.012	0.87
DYCT		P 18	404	9083.35720	0.012	0.926
				0.014	0.012	0.71
DZCT		P 18	404	11096.32970	0.013	1.083
				0.014	0.012	0.82
GROUP: 020912M.ASC ,obs#: 437						
DXCT		126	404	-6580.42290	0.003	1.155
				0.006	0.002	0.37
DYCT		126	404	1414.30460	-0.002	-0.910
				0.006	0.002	0.31
DZCT		126	404	1128.11480	-0.002	-1.063
				0.006	0.002	0.35
GROUP: 020912M.ASC ,obs#: 438						
DXCT		P 18	522	-8602.70630	-0.005	-0.369
				0.014	0.012	0.27
DYCT		P 18	522	9170.05520	0.015	1.168
				0.014	0.013	0.89
DZCT		P 18	522	11096.19320	0.001	0.062
				0.014	0.013	0.05
GROUP: 020912M.ASC ,obs#: 439						
DXCT		126	522	-7574.05650	0.001	0.371
				0.007	0.003	0.13
DYCT		126	522	1501.00700	-0.003	-1.169
				0.007	0.003	0.41
DZCT		126	522	1127.96350	-0.000	-0.068
				0.007	0.003	0.02
GROUP: 020912M.ASC ,obs#: 440						
DXCT		P 18	523	-2847.80360	0.005	0.925
				0.007	0.005	0.58
DYCT		P 18	523	4696.89020	-0.007	-1.416
				0.007	0.005	0.91
DZCT		P 18	523	5868.16890	-0.008	-1.545
				0.007	0.005	0.99
GROUP: 020912M.ASC ,obs#: 441						
DXCT		126	523	-1819.14140	-0.002	-0.925
				0.005	0.002	0.39

Residuals (critical value = 4.238):

TYPE	AT	FROM	TO	OBSERVATION / STD DEV	RESIDUAL / STD DEV	STD RES / PPM
DYCT		126	523	-2972.18670	0.003	1.414
				0.005	0.002	0.61
DZCT		126	523	-4100.07330	0.004	1.545
				0.005	0.002	0.66
GROUP: 020912M.ASC ,obs#: 442						
DXCT		P 18	524	-12478.00850	-0.013	-1.358
				0.012	0.009	0.85
DYCT		P 18	524	5553.52580	0.020	2.153
				0.013	0.009	1.34
DZCT		P 18	524	5917.97420	-0.007	-0.795
				0.013	0.009	0.49
GROUP: 020912M.ASC ,obs#: 443						
DXCT		126	524	-11449.37440	0.009	1.305
				0.010	0.007	0.70
DYCT		126	524	-2115.50460	-0.016	-2.192
				0.011	0.007	1.29
DZCT		126	524	-4050.27050	0.007	0.932
				0.011	0.007	0.54
GROUP: 020912M.ASC ,obs#: 444						
DXCT		P 18	631	3835.01480	0.014	1.349
				0.012	0.011	1.03
DYCT		P 18	631	8037.74320	0.023	2.090
				0.012	0.011	1.62
DZCT		P 18	631	10942.56040	-0.011	-1.028
				0.012	0.011	0.81
GROUP: 020912M.ASC ,obs#: 445						
DXCT		126	631	4863.68650	-0.002	-1.359
				0.004	0.001	0.37
DYCT		126	631	368.70280	-0.003	-2.119
				0.004	0.001	0.60
DZCT		126	631	974.31680	0.002	1.089
				0.004	0.001	0.31
GROUP: 020912M.ASC ,obs#: 446						
DXCT		P 18	G 253	-7567.05650	0.010	0.452
				0.022	0.021	0.36
DYCT		P 18	G 253	15899.51770	0.046	2.086
				0.022	0.022	1.72
DZCT		P 18	G 253	20029.78070	-0.001	-0.027
				0.022	0.022	0.02
GROUP: 020912M.ASC ,obs#: 447						
DXCT		126	G 253	-6538.39720	0.006	0.559
				0.012	0.010	0.39
DYCT		126	G 253	8230.50010	-0.003	-0.243
				0.012	0.011	0.19
DZCT		126	G 253	10061.54840	0.001	0.098
				0.012	0.011	0.07
GROUP: 020912M.ASC ,obs#: 448						
DXCT		P 18	MOCA	32369.80860	-0.000	-0.009
				0.027	0.026	0.01
DYCT		P 18	MOCA	-2115.73390	0.008	0.326
				0.027	0.026	0.26
DZCT		P 18	MOCA	649.50060	0.012	0.474

Residuals (critical value = 4.238):

TYPE	AT	FROM	TO	OBSERVATION / STD DEV	RESIDUAL / STD DEV	STD RES / PPM
				0.027	0.026	0.38
GROUP: 020912M.ASC ,obs#: 449						
DXCT		126	MOCA	33398.47040	-0.007	-0.226
				0.030	0.029	0.18
DYCT		126	MOCA	-9784.78740	-0.004	-0.149
				0.030	0.029	0.12
DZCT		126	MOCA	-9318.71700	-0.001	-0.024
				0.030	0.029	0.02
GROUP: 020912M.ASC ,obs#: 450						
DXCT		P 18	MONE	36611.35180	-0.001	-0.018
				0.070	0.070	0.01
DYCT		P 18	MONE	44257.94900	0.002	0.035
				0.070	0.070	0.03
DZCT		P 18	MONE	61202.61730	0.021	0.300
				0.070	0.070	0.25
GROUP: 020912M.ASC ,obs#: 451						
DXCT		126	MONE	37640.00560	0.000	0.006
				0.061	0.061	0.00
DYCT		126	MONE	36588.89640	-0.011	-0.183
				0.061	0.061	0.15
DZCT		126	MONE	51234.40190	0.006	0.094
				0.061	0.061	0.08
GROUP: 021012M.ASC ,obs#: 452						
DXCT		126	129	-15464.26560	-0.011	-0.781
				0.016	0.015	0.59
DYCT		126	129	8059.98520	0.038	2.528
				0.017	0.015	1.95
DZCT		126	129	8800.95120	-0.043	-2.842
				0.017	0.015	2.18
GROUP: 021012M.ASC ,obs#: 453						
DXCT		224	129	3745.36220	-0.001	-0.113
				0.010	0.007	0.06
DYCT		224	129	6508.12920	0.010	1.507
				0.010	0.007	0.90
DZCT		224	129	8921.91050	-0.021	-3.107
				0.010	0.007	1.81
GROUP: 021012M.ASC ,obs#: 454						
DXCT		126	130	-17782.95790	-0.002	-0.117
				0.015	0.014	0.09
DYCT		126	130	-738.93670	-0.012	-0.848
				0.015	0.014	0.67
DZCT		126	130	-2963.34450	-0.012	-0.858
				0.015	0.014	0.67
GROUP: 021012M.ASC ,obs#: 455						
DXCT		224	130	1426.67890	0.000	0.122
				0.003	0.001	0.02
DYCT		224	130	-2290.83300	0.001	0.844
				0.003	0.001	0.15
DZCT		224	130	-2842.37650	0.001	0.854
				0.003	0.001	0.15
GROUP: 021012M.ASC ,obs#: 456						
DXCT		126	131	-22778.56830	-0.010	-0.554

Residuals (critical value = 4.238):

TYPE	AT	FROM	TO	OBSERVATION / STD DEV	RESIDUAL / STD DEV	STD RES / PPM
				0.020	0.018	0.43
DYCT		126	131	-2102.51610	0.010	0.565
				0.020	0.018	0.45
DZCT		126	131	-5334.32010	-0.006	-0.307
				0.020	0.018	0.24
GROUP: 021012M.ASC ,obs#: 457						
DXCT		224	131	-3568.94090	0.001	0.552
				0.006	0.002	0.13
DYCT		224	131	-3654.38830	-0.001	-0.567
				0.006	0.002	0.14
DZCT		224	131	-5213.34560	0.001	0.312
				0.006	0.002	0.08
GROUP: 021012M.ASC ,obs#: 458						
DXCT		126	224	-19209.63230	-0.006	-0.404
				0.016	0.015	0.32
DYCT		126	224	1551.87140	0.012	0.797
				0.016	0.015	0.64
DZCT		126	224	-120.97310	-0.008	-0.494
				0.016	0.015	0.40
GROUP: 021012M.ASC ,obs#: 459						
DXCT		126	225	-16094.85870	-0.002	-0.141
				0.014	0.012	0.11
DYCT		126	225	915.63330	0.028	2.184
				0.014	0.013	1.71
DZCT		126	225	-598.58570	-0.016	-1.236
				0.014	0.013	0.97
GROUP: 021012M.ASC ,obs#: 460						
DXCT		224	225	3114.77800	0.000	0.134
				0.003	0.000	0.02
DYCT		224	225	-636.22170	-0.001	-2.194
				0.003	0.001	0.35
DZCT		224	225	-477.62120	0.001	1.254
				0.003	0.001	0.20
GROUP: 021012M.ASC ,obs#: 461						
DXCT		224	406	-555.58050	0.000	0.374
				0.004	0.001	0.07
DYCT		224	406	3004.65950	0.001	1.042
				0.005	0.001	0.28
DZCT		224	406	3845.65590	-0.001	-1.188
				0.004	0.001	0.23
GROUP: 021012M.ASC ,obs#: 462						
DXCT		126	406	-19765.21280	-0.006	-0.362
				0.017	0.016	0.28
DYCT		126	406	4556.56080	-0.016	-0.976
				0.018	0.017	0.79
DZCT		126	406	3724.65600	0.018	1.109
				0.017	0.016	0.87
GROUP: 021012M.ASC ,obs#: 463						
DXCT		126	407	-19392.66820	-0.001	-0.082
				0.017	0.016	0.06
DYCT		126	407	-951.47720	-0.034	-2.278
				0.017	0.015	1.70

Residuals (critical value = 4.238):

TYPE	AT	FROM	TO	OBSERVATION / STD DEV	RESIDUAL / STD DEV	STD RES / PPM
DZCT		126	407	-3424.28820	0.003	0.183
				0.017	0.015	0.14
GROUP: 021012M.ASC ,obs#: 464						
DXCT		224	407	-183.03090	-0.000	-0.070
				0.004	0.001	0.01
DYCT		224	407	-2503.40190	0.008	2.275
				0.008	0.003	1.81
DZCT		224	407	-3303.30290	-0.002	-1.486
				0.004	0.001	0.42
GROUP: 021012M.ASC ,obs#: 465						
DXCT		224	408	4715.43880	-0.001	-0.958
				0.004	0.001	0.24
DYCT		224	408	-1052.17230	0.000	0.329
				0.004	0.001	0.09
DZCT		224	408	-845.64120	0.000	0.281
				0.004	0.001	0.08
GROUP: 021012M.ASC ,obs#: 466						
DXCT		126	408	-14494.21120	0.010	0.957
				0.012	0.011	0.71
DYCT		126	408	499.71560	-0.004	-0.342
				0.013	0.011	0.26
DZCT		126	408	-966.61830	-0.003	-0.299
				0.012	0.011	0.22
GROUP: 021012M.ASC ,obs#: 467						
DXCT		126	525	-22780.15350	-0.001	-0.076
				0.020	0.018	0.06
DYCT		126	525	-2102.22770	0.021	1.162
				0.020	0.018	0.91
DZCT		126	525	-5334.02590	-0.012	-0.646
				0.020	0.018	0.51
GROUP: 021012M.ASC ,obs#: 468						
DXCT		224	525	-3570.51650	0.000	0.074
				0.006	0.002	0.02
DYCT		224	525	-3654.08790	-0.002	-1.169
				0.006	0.002	0.29
DZCT		224	525	-5213.05830	0.001	0.658
				0.006	0.002	0.16
GROUP: 021012M.ASC ,obs#: 469						
DXCT		126	526	-16064.56860	0.012	1.003
				0.014	0.012	0.78
DYCT		126	526	1127.77950	0.010	0.805
				0.014	0.013	0.63
DZCT		126	526	-317.06140	-0.012	-0.922
				0.014	0.013	0.72
GROUP: 021012M.ASC ,obs#: 470						
DXCT		224	526	3145.08290	-0.000	-1.008
				0.003	0.000	0.15
DYCT		224	526	-424.09360	-0.000	-0.820
				0.003	0.001	0.13
DZCT		224	526	-196.09280	0.000	0.936
				0.003	0.001	0.15
GROUP: 021012M.ASC ,obs#: 471						

Residuals (critical value = 4.238):

TYPE	AT	FROM	TO	OBSERVATION STD DEV	RESIDUAL STD DEV	STD RES PPM
DXCT		126	632	-23921.13790	-0.019	-1.000
				0.020	0.019	0.80
DYCT		126	632	2954.34090	0.009	0.459
				0.020	0.019	0.37
DZCT		126	632	1150.23040	0.001	0.073
				0.020	0.019	0.06
GROUP: 021012M.ASC ,obs#: 472						
DXCT		224	632	-4711.51950	0.001	0.999
				0.004	0.001	0.17
DYCT		224	632	1402.46650	-0.000	-0.456
				0.004	0.001	0.08
DZCT		224	632	1271.21260	-0.000	-0.070
				0.004	0.001	0.01
GROUP: 021012M.ASC ,obs#: 473						
DXCT		126	MOCA	33398.46680	-0.003	-0.104
				0.030	0.029	0.08
DYCT		126	MOCA	-9784.79470	0.003	0.103
				0.030	0.029	0.08
DZCT		126	MOCA	-9318.71190	-0.006	-0.199
				0.030	0.029	0.16
GROUP: 021012M.ASC ,obs#: 474						
DXCT		224	MOCA	52608.09960	0.003	0.059
				0.046	0.045	0.05
DYCT		224	MOCA	-11336.66580	-0.010	-0.214
				0.046	0.045	0.18
DZCT		224	MOCA	-9197.74010	0.003	0.069
				0.046	0.045	0.06
GROUP: 021012M.ASC ,obs#: 475						
DXCT		126	MONE	37640.00320	0.003	0.045
				0.061	0.061	0.04
DYCT		126	MONE	36588.87890	0.006	0.103
				0.061	0.061	0.09
DZCT		126	MONE	51234.40950	-0.002	-0.031
				0.061	0.061	0.03
GROUP: 021012M.ASC ,obs#: 476						
DXCT		224	MONE	56849.63560	0.009	0.127
				0.071	0.070	0.11
DYCT		224	MONE	35037.00600	-0.004	-0.064
				0.071	0.070	0.05
DZCT		224	MONE	51355.38250	0.006	0.083
				0.071	0.070	0.07
GROUP: 021112M.ASC ,obs#: 477						
DXCT		MOCA	129	-48862.74430	0.003	0.077
				0.046	0.046	0.06
DYCT		MOCA	129	17844.78850	0.027	0.586
				0.046	0.045	0.48
DZCT		MOCA	129	18119.63640	-0.010	-0.221
				0.046	0.045	0.18
GROUP: 021112M.ASC ,obs#: 478						
DXCT		MONE	129	-53104.28100	-0.002	-0.033
				0.062	0.061	0.03
DYCT		MONE	129	-28528.88420	0.022	0.365

Residuals (critical value = 4.238):

TYPE	AT	FROM	TO	OBSERVATION / STD DEV	RESIDUAL / STD DEV	STD RES / PPM
				0.062	0.061	0.30
DZCT		MONE	129	-42433.48510	-0.014	-0.226
				0.062	0.061	0.19
GROUP: 021112M.ASC ,obs#: 479						
DXCT		MOCA	132	-29347.27540	0.007	0.213
				0.036	0.034	0.17
DYCT		MOCA	132	20090.78180	0.017	0.509
				0.036	0.034	0.41
DZCT		MOCA	132	23210.08600	0.004	0.107
				0.036	0.034	0.09
GROUP: 021112M.ASC ,obs#: 480						
DXCT		MONE	132	-33588.81190	0.002	0.035
				0.047	0.047	0.03
DYCT		MONE	132	-26282.89010	0.012	0.266
				0.047	0.047	0.22
DZCT		MONE	132	-37343.03590	0.000	0.005
				0.047	0.047	0.00
GROUP: 021112M.ASC ,obs#: 481						
DXCT		132	226	-2961.79670	0.000	0.141
				0.005	0.001	0.03
DYCT		132	226	3207.22050	0.003	2.171
				0.005	0.001	0.52
DZCT		132	226	3868.00990	-0.000	-0.159
				0.005	0.001	0.04
GROUP: 021112M.ASC ,obs#: 482						
DXCT		129	226	16553.67830	-0.002	-0.137
				0.016	0.015	0.10
DYCT		129	226	5453.24060	-0.033	-2.170
				0.017	0.015	1.68
DZCT		129	226	8958.47100	0.002	0.135
				0.016	0.015	0.10
GROUP: 021112M.ASC ,obs#: 483						
DXCT		132	227	-348.99750	-0.002	-1.000
				0.006	0.002	0.26
DYCT		132	227	-4051.16090	0.002	1.106
				0.006	0.002	0.30
DZCT		132	227	-5340.08780	0.000	0.215
				0.006	0.002	0.06
GROUP: 021112M.ASC ,obs#: 484						
DXCT		129	227	19166.45900	0.014	1.004
				0.016	0.014	0.75
DYCT		129	227	-1805.15860	-0.016	-1.110
				0.016	0.015	0.84
DZCT		129	227	-249.62090	-0.003	-0.219
				0.016	0.015	0.17
GROUP: 021112M.ASC ,obs#: 485						
DXCT		132	228	-13125.29870	0.009	0.854
				0.012	0.010	0.59
DYCT		132	228	-2823.50480	-0.018	-1.786
				0.012	0.010	1.25
DZCT		132	228	-5099.20070	0.000	0.038
				0.012	0.010	0.03

Residuals (critical value = 4.238):

TYPE	AT	FROM	TO	OBSERVATION / STD DEV	RESIDUAL / STD DEV	STD RES / PPM
GROUP: 021112M.ASC ,obs#: 486						
DXCT		129	228	6390.18430	-0.002	-0.855
				0.005	0.002	0.27
DYCT		129	228	-577.54220	0.004	1.786
				0.005	0.002	0.56
DZCT		129	228	-8.73690	-0.000	-0.046
				0.005	0.002	0.01
GROUP: 021112M.ASC ,obs#: 487						
DXCT		MOCA	409	-25752.96770	0.022	0.616
				0.037	0.036	0.50
DYCT		MOCA	409	22983.96210	0.013	0.368
				0.037	0.036	0.30
DZCT		MOCA	409	27373.39220	0.039	1.083
				0.037	0.036	0.88
GROUP: 021112M.ASC ,obs#: 488						
DXCT		132	409	3594.32270	-0.000	-0.613
				0.005	0.001	0.07
DYCT		132	409	2893.17620	-0.000	-0.277
				0.006	0.001	0.04
DZCT		132	409	4163.34220	-0.001	-1.043
				0.006	0.001	0.14
GROUP: 021112M.ASC ,obs#: 489						
DXCT		132	410	-1483.04160	-0.000	-0.205
				0.006	0.002	0.06
DYCT		132	410	-3914.99760	-0.004	-1.852
				0.006	0.002	0.52
DZCT		132	410	-5284.66100	0.004	2.091
				0.006	0.002	0.58
GROUP: 021112M.ASC ,obs#: 490						
DXCT		129	410	18032.42800	0.003	0.207
				0.015	0.013	0.15
DYCT		129	410	-1669.04370	0.027	1.923
				0.016	0.014	1.48
DZCT		129	410	-194.16300	-0.031	-2.150
				0.016	0.014	1.70
GROUP: 021112M.ASC ,obs#: 491						
DXCT		132	527	190.38220	-0.001	-1.656
				0.004	0.001	0.29
DYCT		132	527	2924.96230	-0.001	-1.070
				0.004	0.001	0.19
DZCT		132	527	3830.03860	-0.000	-0.544
				0.004	0.001	0.09
GROUP: 021112M.ASC ,obs#: 492						
DXCT		129	527	19705.82470	0.029	1.645
				0.019	0.018	1.30
DYCT		129	527	5170.92680	0.019	1.063
				0.019	0.018	0.84
DZCT		129	527	8920.49190	0.010	0.548
				0.019	0.017	0.43
GROUP: 021112M.ASC ,obs#: 493						
DXCT		132	528	-9880.17820	0.011	1.673
				0.010	0.007	0.97

Residuals (critical value = 4.238):

TYPE	AT	FROM	TO	OBSERVATION / STD DEV	RESIDUAL / STD DEV	STD RES / PPM
DYCT		132	528	-3118.22690	-0.009	-1.349
				0.010	0.007	0.79
DZCT		132	528	-5120.07650	0.000	0.041
				0.010	0.007	0.02
GROUP: 021112M.ASC ,obs#: 494						
DXCT		129	528	9635.31360	-0.008	-1.673
				0.008	0.005	0.81
DYCT		129	528	-872.25820	0.006	1.349
				0.008	0.005	0.66
DZCT		129	528	-29.61270	-0.000	-0.041
				0.008	0.005	0.02
GROUP: 021112M.ASC ,obs#: 495						
DXCT		132	633	2603.46090	-0.000	-0.054
				0.004	0.001	0.01
DYCT		132	633	-2271.38410	0.001	1.601
				0.004	0.001	0.26
DZCT		132	633	-2685.21660	0.001	0.749
				0.004	0.001	0.12
GROUP: 021112M.ASC ,obs#: 496						
DXCT		129	633	22118.93240	0.001	0.070
				0.019	0.018	0.05
DYCT		129	633	-25.37050	-0.028	-1.610
				0.019	0.018	1.27
DZCT		129	633	2405.26070	-0.013	-0.768
				0.019	0.018	0.60
GROUP: 021112M.ASC ,obs#: 497						
DXCT		132	C 253	-11632.82230	-0.002	-0.204
				0.012	0.008	0.11
DYCT		132	C 253	5704.12800	0.031	2.716
				0.014	0.011	2.13
DZCT		132	C 253	6183.63850	-0.022	-2.232
				0.013	0.010	1.51
GROUP: 021112M.ASC ,obs#: 498						
DXCT		129	C 253	7882.64130	0.008	0.803
				0.013	0.009	0.48
DYCT		129	C 253	7950.09060	0.052	4.104
				0.015	0.013	3.29
DZCT		129	C 253	11274.11990	-0.040	-3.523
				0.014	0.011	2.51
GROUP: 021212M.ASC ,obs#: 499						
DXCT		MOCA	129	-48862.75750	0.017	0.366
				0.046	0.046	0.30
DYCT		MOCA	129	17844.79850	0.017	0.366
				0.046	0.045	0.30
DZCT		MOCA	129	18119.62880	-0.002	-0.054
				0.046	0.045	0.04
GROUP: 021212M.ASC ,obs#: 500						
DXCT		MONE	129	-53104.29590	0.013	0.210
				0.062	0.061	0.17
DYCT		MONE	129	-28528.87040	0.009	0.140
				0.062	0.061	0.12
DZCT		MONE	129	-42433.49440	-0.005	-0.075

Residuals (critical value = 4.238):

TYPE	AT	FROM	TO	OBSERVATION / STD DEV	RESIDUAL / STD DEV	STD RES / PPM
				0.062	0.061	0.06
GROUP: 021212M.ASC ,obs#: 501						
DXCT		229	133	-6631.32380	0.001	0.738
				0.011	0.002	0.11
DYCT		229	133	-6255.24690	0.001	0.602
				0.011	0.002	0.10
DZCT		229	133	-8902.57660	-0.000	-0.232
				0.011	0.002	0.04
GROUP: 021212M.ASC ,obs#: 502						
DXCT		MOCA	133	-59642.16310	-0.039	-0.734
				0.056	0.053	0.59
DYCT		MOCA	133	20802.85800	-0.032	-0.596
				0.056	0.053	0.47
DZCT		MOCA	133	20776.29260	0.012	0.228
				0.056	0.053	0.18
GROUP: 021212M.ASC ,obs#: 503						
DXCT		MOCA	229	-53010.87980	0.000	0.000
				0.056	0.054	0.00
DYCT		MOCA	229	27058.05970	0.012	0.231
				0.056	0.054	0.19
DZCT		MOCA	229	29678.86610	0.016	0.290
				0.056	0.054	0.24
GROUP: 021212M.ASC ,obs#: 504						
DXCT		MONE	229	-57252.41920	-0.003	-0.050
				0.057	0.055	0.04
DYCT		MONE	229	-19315.60830	0.004	0.064
				0.057	0.055	0.05
DZCT		MONE	229	-30874.25920	0.016	0.283
				0.057	0.055	0.23
GROUP: 021212M.ASC ,obs#: 505						
DXCT		229	529	-6439.06830	-0.001	-0.729
				0.005	0.001	0.12
DYCT		229	529	603.64550	0.000	0.270
				0.006	0.001	0.05
DZCT		229	529	39.82640	0.001	0.898
				0.005	0.001	0.15
GROUP: 021212M.ASC ,obs#: 506						
DXCT		129	529	-10587.21190	0.004	0.419
				0.016	0.009	0.21
DYCT		129	529	9816.90530	-0.002	-0.254
				0.016	0.010	0.13
DZCT		129	529	11599.08980	-0.007	-0.754
				0.016	0.009	0.38
GROUP: 021212M.ASC ,obs#: 507						
DXCT		MOCA	529	-59449.97030	0.021	0.364
				0.060	0.059	0.30
DYCT		MOCA	529	27661.71520	0.003	0.047
				0.060	0.059	0.04
DZCT		MOCA	529	29718.71490	-0.006	-0.098
				0.060	0.059	0.08
GROUP: 021212M.ASC ,obs#: 508						
DXCT		MONE	529	-63691.50880	0.018	0.296

Residuals (critical value = 4.238):

TYPE	AT	FROM	TO	OBSERVATION / STD DEV	RESIDUAL / STD DEV	STD RES / PPM
				0.061	0.060	0.24
DYCT		MONE	529	-18711.95550	-0.003	-0.058
				0.061	0.060	0.05
DZCT		MONE	529	-30834.40710	-0.009	-0.152
				0.061	0.060	0.12
GROUP: 021212M.ASC ,obs#: 509						
DXCT		229	634	3089.55980	0.000	0.115
				0.003	0.000	0.01
DYCT		229	634	-1202.54340	-0.000	-0.025
				0.003	0.000	0.00
DZCT		229	634	-1226.38450	-0.000	-0.582
				0.003	0.000	0.04
GROUP: 021212M.ASC ,obs#: 510						
DXCT		MOCA	634	-49921.31770	-0.002	-0.044
				0.053	0.051	0.04
DYCT		MOCA	634	25855.52180	0.007	0.136
				0.053	0.051	0.11
DZCT		MOCA	634	28452.47660	0.021	0.403
				0.053	0.051	0.33
GROUP: 021212M.ASC ,obs#: 511						
DXCT		MONE	634	-54162.85630	-0.006	-0.109
				0.055	0.054	0.09
DYCT		MONE	634	-20518.14500	-0.003	-0.059
				0.055	0.054	0.05
DZCT		MONE	634	-32100.64960	0.021	0.398
				0.055	0.054	0.32
GROUP: 021212M.ASC ,obs#: 512						
DXCT		229	635	-6981.53670	0.001	0.473
				0.011	0.003	0.09
DYCT		229	635	-6221.64210	-0.002	-0.641
				0.011	0.003	0.13
DZCT		229	635	-8904.94180	-0.001	-0.206
				0.011	0.003	0.04
GROUP: 021212M.ASC ,obs#: 513						
DXCT		MOCA	635	-59992.39630	-0.019	-0.354
				0.056	0.054	0.28
DYCT		MOCA	635	20836.40140	0.027	0.505
				0.056	0.053	0.40
DZCT		MOCA	635	20773.93110	0.008	0.156
				0.056	0.053	0.12
GROUP: 021212M.ASC ,obs#: 514						
DXCT		MONE	635	-64233.93860	-0.019	-0.291
				0.067	0.065	0.24
DYCT		MONE	635	-25537.27240	0.024	0.369
				0.067	0.065	0.30
DZCT		MONE	635	-39779.19470	0.009	0.136
				0.067	0.065	0.11
GROUP: 021312M.ASC ,obs#: 515						
DXCT		MOCA	129	-48862.74880	0.008	0.175
				0.046	0.046	0.15
DYCT		MOCA	129	17844.81690	-0.002	-0.040
				0.046	0.045	0.03

Residuals (critical value = 4.238):

TYPE	AT	FROM	TO	OBSERVATION / STD DEV	RESIDUAL / STD DEV	STD RES / PPM
DZCT		MOCA	129	18119.60710	0.019	0.424
				0.046	0.045	0.35
GROUP: 021312M.ASC ,obs#: 516						
DXCT		MONE	129	-53104.28580	0.003	0.045
				0.062	0.061	0.04
DYCT		MONE	129	-28528.85990	-0.002	-0.031
				0.062	0.061	0.03
DZCT		MONE	129	-42433.51590	0.017	0.276
				0.062	0.061	0.23
GROUP: 021312M.ASC ,obs#: 517						
DXCT		MONE	134	-50756.63780	-0.005	-0.102
				0.048	0.047	0.08
DYCT		MONE	134	-14096.14310	-0.029	-0.617
				0.048	0.047	0.51
DZCT		MONE	134	-23366.43390	0.025	0.518
				0.048	0.047	0.43
GROUP: 021312M.ASC ,obs#: 518						
DXCT		MOCA	134	-46515.10140	0.001	0.017
				0.057	0.056	0.01
DYCT		MOCA	134	32277.51220	-0.008	-0.136
				0.057	0.056	0.11
DZCT		MOCA	134	37186.70190	0.014	0.252
				0.057	0.056	0.21
GROUP: 021312M.ASC ,obs#: 519						
DXCT		129	134	2347.64540	-0.005	-0.289
				0.020	0.017	0.21
DYCT		129	134	14432.71170	-0.022	-1.261
				0.020	0.018	0.92
DZCT		129	134	19067.08120	0.008	0.480
				0.020	0.018	0.35
GROUP: 021312M.ASC ,obs#: 520						
DXCT		MOCA	230	-49956.31950	0.010	0.200
				0.048	0.048	0.17
DYCT		MOCA	230	19923.23030	0.000	0.010
				0.048	0.048	0.01
DZCT		MOCA	230	20702.10860	-0.001	-0.014
				0.048	0.048	0.01
GROUP: 021312M.ASC ,obs#: 521						
DXCT		MONE	230	-54197.85820	0.006	0.100
				0.061	0.060	0.08
DYCT		MONE	230	-26450.45310	0.007	0.116
				0.061	0.060	0.10
DZCT		MONE	230	-39851.02110	0.004	0.062
				0.061	0.060	0.05
GROUP: 021312M.ASC ,obs#: 522						
DXCT		129	230	-1093.56910	-0.000	-0.221
				0.003	0.000	0.01
DYCT		129	230	2078.41570	-0.000	-0.081
				0.003	0.000	0.01
DZCT		129	230	2582.48160	-0.000	-0.025
				0.003	0.000	0.00
GROUP: 021312M.ASC ,obs#: 523						

Residuals (critical value = 4.238):

TYPE	AT	FROM	TO	OBSERVATION / STD DEV	RESIDUAL / STD DEV	STD RES / PPM
DXCT		MOCA	231	-32322.02030	-0.005	-0.111
				0.049	0.048	0.09
DYCT		MOCA	231	31236.84210	0.010	0.216
				0.049	0.048	0.18
DZCT		MOCA	231	37358.78570	0.002	0.046
				0.049	0.048	0.04
GROUP: 021312M.ASC ,obs#: 524						
DXCT		MONE	231	-36563.56180	-0.006	-0.162
				0.038	0.037	0.13
DYCT		MONE	231	-15136.85000	0.025	0.687
				0.039	0.037	0.56
DZCT		MONE	231	-23194.31950	-0.018	-0.483
				0.038	0.037	0.39
GROUP: 021312M.ASC ,obs#: 525						
DXCT		129	231	16540.73960	-0.024	-1.138
				0.024	0.021	0.85
DYCT		129	231	13392.04310	-0.006	-0.269
				0.024	0.022	0.20
DZCT		129	231	19239.17500	-0.013	-0.624
				0.024	0.022	0.47
GROUP: 021312M.ASC ,obs#: 526						
DXCT		MOCA	530	-50132.41470	0.002	0.033
				0.051	0.050	0.03
DYCT		MOCA	530	22923.78470	-0.017	-0.340
				0.051	0.049	0.28
DZCT		MOCA	530	24610.83370	0.007	0.137
				0.051	0.049	0.11
GROUP: 021312M.ASC ,obs#: 527						
DXCT		MONE	530	-54373.95840	0.003	0.054
				0.058	0.057	0.04
DYCT		MONE	530	-23449.87900	-0.030	-0.525
				0.058	0.057	0.43
DZCT		MONE	530	-35942.29520	0.010	0.181
				0.058	0.057	0.15
GROUP: 021312M.ASC ,obs#: 528						
DXCT		129	530	-1269.67220	-0.000	-0.060
				0.007	0.001	0.01
DYCT		129	530	5078.95200	0.001	0.613
				0.007	0.001	0.10
DZCT		129	530	6491.21440	-0.000	-0.233
				0.007	0.001	0.03
GROUP: 021312M.ASC ,obs#: 529						
DXCT		MOCA	531	-36623.11910	0.003	0.057
				0.049	0.046	0.04
DYCT		MOCA	531	29596.37020	-0.012	-0.258
				0.049	0.046	0.20
DZCT		MOCA	531	34810.15680	0.014	0.309
				0.049	0.046	0.24
GROUP: 021312M.ASC ,obs#: 530						
DXCT		MONE	531	-40864.65090	-0.008	-0.200
				0.043	0.039	0.15
DYCT		MONE	531	-16777.30240	-0.016	-0.410

Residuals (critical value = 4.238):

TYPE	AT	FROM	TO	OBSERVATION / STD DEV	RESIDUAL / STD DEV	STD RES / PPM
				0.043	0.039	0.31
DZCT		MONE	531	-25742.97350	0.019	0.489
				0.043	0.039	0.37
GROUP: 021312M.ASC ,obs#: 531						
DXCT		129	531	12239.62310	0.001	0.118
				0.020	0.010	0.05
DYCT		129	531	11751.53800	0.005	0.521
				0.020	0.010	0.23
DZCT		129	531	16690.55100	-0.006	-0.626
				0.020	0.010	0.27
GROUP: 021312M.ASC ,obs#: 532						
DXCT		MOCA	532	-46419.29190	0.005	0.098
				0.055	0.052	0.08
DYCT		MOCA	532	30484.19980	0.011	0.209
				0.055	0.052	0.17
DZCT		MOCA	532	34849.98620	0.013	0.250
				0.055	0.052	0.20
GROUP: 021312M.ASC ,obs#: 533						
DXCT		MONE	532	-50660.82750	-0.001	-0.032
				0.049	0.046	0.02
DYCT		MONE	532	-15889.47550	0.009	0.200
				0.049	0.046	0.16
DZCT		MONE	532	-25703.13970	0.014	0.294
				0.049	0.046	0.23
GROUP: 021312M.ASC ,obs#: 534						
DXCT		129	532	2443.45440	-0.000	-0.046
				0.018	0.008	0.02
DYCT		129	532	12639.39790	-0.002	-0.305
				0.018	0.008	0.11
DZCT		129	532	16730.37600	-0.003	-0.409
				0.018	0.008	0.15
GROUP: 021312M.ASC ,obs#: 535						
DXCT		MONE	636	-34091.38850	-0.002	-0.057
				0.036	0.029	0.04
DYCT		MONE	636	-14236.55600	-0.001	-0.019
				0.036	0.029	0.01
DZCT		MONE	636	-21772.41150	0.001	0.023
				0.036	0.029	0.02
GROUP: 021312M.ASC ,obs#: 536						
DXCT		129	636	19012.89200	0.001	0.057
				0.026	0.015	0.03
DYCT		129	636	14292.30500	0.000	0.019
				0.026	0.015	0.01
DZCT		129	636	20661.08850	-0.000	-0.023
				0.026	0.015	0.01
GROUP: 021412M.ASC ,obs#: 537						
DXCT		134	101	-5298.96220	-0.007	-0.726
				0.013	0.009	0.42
DYCT		134	101	9554.98560	-0.009	-0.931
				0.013	0.009	0.55
DZCT		134	101	11698.89320	0.000	0.037
				0.013	0.009	0.02

Residuals (critical value = 4.238):

TYPE	AT	FROM	TO	OBSERVATION STD DEV	RESIDUAL STD DEV	STD RES PPM
GROUP: 021412M.ASC ,obs#: 538						
DXCT		MOCA	101	-51814.07080	0.001	0.021
				0.069	0.069	0.02
DYCT		MOCA	101	41832.48290	-0.001	-0.021
				0.069	0.068	0.02
DZCT		MOCA	101	48885.60910	0.000	0.006
				0.069	0.069	0.01
GROUP: 021412M.ASC ,obs#: 539						
DXCT		MONE	101	-56055.60970	-0.002	-0.040
				0.048	0.047	0.03
DYCT		MONE	101	-4541.19780	0.002	0.050
				0.048	0.047	0.04
DZCT		MONE	101	-11667.50160	-0.014	-0.300
				0.048	0.047	0.25
GROUP: 021412M.ASC ,obs#: 540						
DXCT		MOCA	134	-46515.10950	0.009	0.162
				0.057	0.056	0.13
DYCT		MOCA	134	32277.49680	0.008	0.140
				0.057	0.056	0.12
DZCT		MOCA	134	37186.72090	-0.005	-0.088
				0.057	0.056	0.07
GROUP: 021412M.ASC ,obs#: 541						
DXCT		MONE	134	-50756.64670	0.004	0.085
				0.048	0.047	0.07
DYCT		MONE	134	-14096.17660	0.004	0.090
				0.048	0.047	0.07
DZCT		MONE	134	-23366.39780	-0.012	-0.244
				0.048	0.047	0.20
GROUP: 021412M.ASC ,obs#: 542						
DXCT		134	135	8902.84870	-0.002	-0.743
				0.008	0.002	0.15
DYCT		134	135	2283.64320	-0.002	-1.104
				0.009	0.002	0.23
DZCT		134	135	3907.16550	-0.000	-0.127
				0.008	0.002	0.03
GROUP: 021412M.ASC ,obs#: 543						
DXCT		MOCA	135	-37612.28050	0.027	0.508
				0.055	0.054	0.42
DYCT		MOCA	135	34561.11630	0.029	0.546
				0.055	0.053	0.45
DZCT		MOCA	135	41093.87170	0.010	0.178
				0.055	0.053	0.15
GROUP: 021412M.ASC ,obs#: 544						
DXCT		MONE	135	-41853.81530	0.020	0.520
				0.040	0.038	0.42
DYCT		MONE	135	-11812.56690	0.035	0.931
				0.040	0.038	0.74
DZCT		MONE	135	-19459.24540	0.001	0.034
				0.040	0.038	0.03
GROUP: 021412M.ASC ,obs#: 545						
DXCT		MOCA	231	-32322.02110	-0.005	-0.094
				0.049	0.048	0.08

Residuals (critical value = 4.238):

TYPE	AT	FROM	TO	OBSERVATION / STD DEV	RESIDUAL / STD DEV	STD RES / PPM
DYCT		MOCA	231	31236.84890	0.003	0.073
				0.049	0.048	0.06
DZCT		MOCA	231	37358.78740	0.001	0.011
				0.049	0.048	0.01
GROUP: 021412M.ASC ,obs#: 546						
DXCT		MONE	231	-36563.55920	-0.009	-0.232
				0.038	0.037	0.19
DYCT		MONE	231	-15136.82120	-0.003	-0.090
				0.038	0.037	0.07
DZCT		MONE	231	-23194.33140	-0.006	-0.162
				0.038	0.037	0.13
GROUP: 021412M.ASC ,obs#: 547						
DXCT		231	232	-26881.95270	0.000	0.010
				0.023	0.020	0.01
DYCT		231	232	-617.16260	0.038	1.943
				0.023	0.020	1.42
DZCT		231	232	-3796.19750	-0.033	-1.675
				0.023	0.020	1.23
GROUP: 021412M.ASC ,obs#: 548						
DXCT		134	232	-12688.87760	-0.000	-0.012
				0.011	0.005	0.00
DYCT		134	232	-1657.76700	-0.009	-1.956
				0.011	0.005	0.70
DZCT		134	232	-3624.16700	0.008	1.691
				0.011	0.005	0.61
GROUP: 021412M.ASC ,obs#: 549						
DXCT		134	411	-10259.18810	-0.004	-0.698
				0.012	0.006	0.28
DYCT		134	411	-5806.73870	0.002	0.372
				0.013	0.006	0.15
DZCT		134	411	-8711.03960	-0.000	-0.020
				0.012	0.006	0.01
GROUP: 021412M.ASC ,obs#: 550						
DXCT		231	411	-24452.28010	0.013	0.698
				0.022	0.019	0.50
DYCT		231	411	-4766.07720	-0.007	-0.373
				0.023	0.019	0.27
DZCT		231	411	-8883.11200	0.000	0.018
				0.022	0.019	0.01
GROUP: 021412M.ASC ,obs#: 551						
DXCT		231	412	-17344.53960	0.008	0.559
				0.017	0.014	0.39
DYCT		231	412	-5399.11660	-0.014	-0.664
				0.023	0.021	0.68
DZCT		231	412	-8909.82140	-0.002	-0.165
				0.018	0.015	0.12
GROUP: 021412M.ASC ,obs#: 552						
DXCT		134	412	-3151.45450	-0.002	-0.535
				0.010	0.004	0.21
DYCT		134	412	-6439.78520	0.003	0.652
				0.010	0.004	0.23
DZCT		134	412	-8737.75270	0.001	0.194

Residuals (critical value = 4.238):

TYPE	AT	FROM	TO	OBSERVATION / STD DEV	RESIDUAL / STD DEV	STD RES / PPM
				0.010	0.004	0.07
GROUP: 021412M.ASC ,obs#: 553						
DXCT		231	413	-8267.97260	-0.010	-2.243
				0.007	0.004	1.09
DYCT		231	413	-1290.81460	-0.014	-3.262
				0.008	0.004	1.62
DZCT		231	413	-2537.10950	0.004	0.887
				0.008	0.004	0.44
GROUP: 021412M.ASC ,obs#: 554						
DXCT		134	413	5925.08700	0.006	2.242
				0.006	0.003	0.84
DYCT		134	413	-2331.48940	0.008	3.261
				0.006	0.003	1.24
DZCT		134	413	-2365.03130	-0.002	-0.892
				0.006	0.003	0.35
GROUP: 021412M.ASC ,obs#: 555						
DXCT		231	414	-21189.70450	0.014	0.857
				0.018	0.016	0.64
DYCT		231	414	3822.65770	0.045	2.734
				0.019	0.016	2.06
DZCT		231	414	2614.13960	-0.000	-0.009
				0.018	0.016	0.01
GROUP: 021412M.ASC ,obs#: 556						
DXCT		134	414	-6996.61390	-0.002	-0.878
				0.007	0.002	0.24
DYCT		134	414	2782.05650	-0.006	-2.740
				0.007	0.002	0.79
DZCT		134	414	2786.21140	0.000	0.002
				0.007	0.002	0.00
GROUP: 021412M.ASC ,obs#: 557						
DXCT		134	533	-4855.96600	0.000	0.184
				0.007	0.001	0.03
DYCT		134	533	4394.65210	-0.001	-0.798
				0.007	0.001	0.12
DZCT		134	533	5132.54830	-0.000	-0.001
				0.007	0.001	0.00
GROUP: 021412M.ASC ,obs#: 558						
DXCT		MOCA	533	-51371.06480	-0.001	-0.023
				0.064	0.063	0.02
DYCT		MOCA	533	36672.12380	0.032	0.511
				0.064	0.062	0.42
DZCT		MOCA	533	42319.26120	0.003	0.049
				0.064	0.063	0.04
GROUP: 021412M.ASC ,obs#: 559						
DXCT		MONE	533	-55612.59800	-0.010	-0.215
				0.050	0.048	0.18
DYCT		MONE	533	-9701.55000	0.029	0.596
				0.050	0.048	0.49
DZCT		MONE	533	-18233.85970	-0.001	-0.028
				0.050	0.048	0.02
GROUP: 021412M.ASC ,obs#: 560						
DXCT		231	637	-26395.40470	0.011	0.555

Residuals (critical value = 4.238):

TYPE	AT	FROM	TO	OBSERVATION / STD DEV	RESIDUAL / STD DEV	STD RES / PPM
				0.023	0.020	0.40
DYCT		231	637	4251.18160	0.044	2.253
				0.023	0.020	1.65
DZCT		231	637	2569.97810	-0.010	-0.525
				0.023	0.020	0.38
GROUP: 021412M.ASC ,obs#: 561						
DXCT		134	637	-12202.31640	-0.003	-0.565
				0.011	0.005	0.20
DYCT		134	637	3210.58410	-0.011	-2.259
				0.011	0.005	0.81
DZCT		134	637	2742.03730	0.002	0.541
				0.011	0.005	0.19
GROUP: 021512M.ASC ,obs#: 562						
DXCT		1001	136	-5881.46500	0.000	0.524
				0.006	0.001	0.07
DYCT		1001	136	-1497.06570	0.002	1.709
				0.006	0.001	0.24
DZCT		1001	136	-2564.78040	-0.000	-0.347
				0.006	0.001	0.05
GROUP: 021512M.ASC ,obs#: 563						
DXCT		MONE	136	-38035.50420	-0.017	-0.516
				0.034	0.033	0.42
DYCT		MONE	136	-6087.88090	-0.056	-1.697
				0.034	0.033	1.38
DZCT		MONE	136	-11669.66680	0.009	0.267
				0.034	0.033	0.22
GROUP: 021512M.ASC ,obs#: 564						
DXCT		1001	137	3486.61300	0.000	0.448
				0.004	0.001	0.06
DYCT		1001	137	-2315.19560	0.001	0.929
				0.005	0.001	0.14
DZCT		1001	137	-2656.96940	-0.000	-0.656
				0.004	0.001	0.08
GROUP: 021512M.ASC ,obs#: 565						
DXCT		MONE	137	-28667.43180	-0.011	-0.448
				0.027	0.026	0.36
DYCT		MONE	137	-6906.04400	-0.023	-0.909
				0.027	0.026	0.74
DZCT		MONE	137	-11761.86300	0.016	0.620
				0.027	0.026	0.50
GROUP: 021512M.ASC ,obs#: 566						
DXCT		1001	417	1075.19160	-0.001	-0.629
				0.006	0.001	0.11
DYCT		1001	417	4020.29310	0.000	0.403
				0.006	0.001	0.07
DZCT		1001	417	5233.48600	0.000	0.130
				0.006	0.001	0.02
GROUP: 021512M.ASC ,obs#: 567						
DXCT		MONE	417	-31078.88150	0.016	0.631
				0.026	0.025	0.50
DYCT		MONE	417	-570.56850	-0.010	-0.408
				0.027	0.025	0.33

Residuals (critical value = 4.238):

TYPE	AT	FROM	TO	OBSERVATION / STD DEV	RESIDUAL / STD DEV	STD RES / PPM
DZCT		MONE	417	-3871.38770	-0.003	-0.135
				0.027	0.026	0.11
GROUP: 021512M.ASC ,obs#: 568						
DXCT		1001	534	-8230.83100	0.001	0.637
				0.008	0.002	0.11
DYCT		1001	534	2682.66880	0.001	0.473
				0.008	0.002	0.09
DZCT		1001	534	2540.65840	-0.000	-0.213
				0.008	0.002	0.04
GROUP: 021512M.ASC ,obs#: 569						
DXCT		MONE	534	-40384.86570	-0.021	-0.631
				0.034	0.033	0.51
DYCT		MONE	534	-1908.18760	-0.015	-0.462
				0.034	0.033	0.37
DZCT		MONE	534	-6564.22610	0.007	0.208
				0.034	0.033	0.17
GROUP: 021512M.ASC ,obs#: 570						
DXCT		1001	535	2175.51550	0.000	0.317
				0.004	0.001	0.04
DYCT		1001	535	2286.00910	0.001	1.354
				0.004	0.001	0.17
DZCT		1001	535	3156.29510	-0.000	-0.077
				0.004	0.001	0.01
GROUP: 021512M.ASC ,obs#: 571						
DXCT		MONE	535	-29978.53350	-0.007	-0.299
				0.026	0.025	0.24
DYCT		MONE	535	-2304.82920	-0.033	-1.350
				0.026	0.025	1.09
DZCT		MONE	535	-5948.58370	0.001	0.059
				0.026	0.025	0.05
GROUP: 021512M.ASC ,obs#: 572						
DXCT		1001	536	791.86840	-0.000	-0.102
				0.008	0.002	0.02
DYCT		1001	536	5483.83270	0.001	0.668
				0.008	0.002	0.15
DZCT		1001	536	7068.71060	-0.001	-0.449
				0.008	0.002	0.10
GROUP: 021512M.ASC ,obs#: 573						
DXCT		MONE	536	-31362.19090	0.003	0.102
				0.026	0.025	0.08
DYCT		MONE	536	892.97800	-0.016	-0.662
				0.026	0.025	0.52
DZCT		MONE	536	-2036.17850	0.011	0.440
				0.026	0.025	0.35
GROUP: 021512M.ASC ,obs#: 574						
DXCT		1001	MOCA	27912.50750	0.007	0.114
				0.060	0.060	0.10
DYCT		1001	MOCA	-41782.87020	0.066	1.103
				0.060	0.060	0.91
DZCT		1001	MOCA	-51448.21650	-0.032	-0.528
				0.060	0.060	0.44
GROUP: 021512M.ASC ,obs#: 575						

Residuals (critical value = 4.238):

TYPE	AT	FROM	TO	OBSERVATION / STD DEV	RESIDUAL / STD DEV	STD RES / PPM
DXCT		1001	MONE	32154.04660	0.010	0.361
				0.028	0.028	0.30
DYCT		1001	MONE	4590.83690	0.036	1.289
				0.028	0.028	1.05
DZCT		1001	MONE	9104.88180	-0.005	-0.163
				0.028	0.028	0.13
GROUP: 032812M.ASC ,obs#: 576						
DXCT		1002	234	1869.15620	-0.001	-0.191
				0.008	0.008	0.15
DYCT		1002	234	-6120.46620	-0.012	-1.499
				0.008	0.008	1.15
DZCT		1002	234	-7707.89180	0.002	0.265
				0.008	0.008	0.20
GROUP: 032812M.ASC ,obs#: 577						
DXCT		C 233 RESET	234	1925.40790	0.000	0.236
				0.002	0.000	0.04
DYCT		C 233 RESET	234	750.08850	0.001	1.520
				0.002	0.000	0.31
DZCT		C 233 RESET	234	1138.60460	-0.000	-0.401
				0.002	0.001	0.09
GROUP: 032812M.ASC ,obs#: 578						
DXCT		1002	418	5753.18880	-0.006	-1.348
				0.007	0.005	0.77
DYCT		1002	418	-3764.35190	0.014	2.817
				0.007	0.005	1.71
DZCT		1002	418	-4239.59110	0.023	4.949
				0.007	0.005	2.88
					^^^^^^^^^^^^^^^^	
GROUP: 032812M.ASC ,obs#: 579						
DXCT		C 233 RESET	418	5809.42970	0.006	1.351
				0.007	0.005	0.76
DYCT		C 233 RESET	418	3106.24240	-0.014	-2.915
				0.007	0.005	1.68
DZCT		C 233 RESET	418	4606.94910	-0.023	-5.008
				0.007	0.005	2.84
					^^^^^^^^^^^^^^^^	
GROUP: 032812M.ASC ,obs#: 580						
DXCT		1002	537	6123.92540	0.001	0.175
				0.007	0.005	0.10
DYCT		1002	537	-3784.39520	-0.001	-0.204
				0.007	0.005	0.12
DZCT		1002	537	-4244.02270	0.016	3.404
				0.007	0.005	1.95
GROUP: 032812M.ASC ,obs#: 581						
DXCT		C 233 RESET	537	6180.18030	-0.001	-0.172
				0.007	0.005	0.10
DYCT		C 233 RESET	537	3086.16970	0.001	0.224
				0.007	0.005	0.13
DZCT		C 233 RESET	537	4602.50390	-0.016	-3.405
				0.007	0.005	1.95
GROUP: 032812M.ASC ,obs#: 582						
DXCT		1002	C 233 RESET	-56.25160	-0.002	-0.187

Residuals (critical value = 4.238):

TYPE	AT	FROM	TO	OBSERVATION / STD DEV	RESIDUAL / STD DEV	STD RES / PPM
				0.009	0.009	0.15
DYCT		1002	C 233 RESET	-6870.55850	-0.008	-0.950
				0.009	0.009	0.75
DZCT		1002	C 233 RESET	-8846.50440	0.010	1.152
				0.009	0.009	0.91
GROUP: 032812M.ASC ,obs#: 583						
DXCT		1002	MOBT	29697.52010	-0.004	-0.116
				0.038	0.037	0.10
DYCT		1002	MOBT	19428.72840	0.011	0.287
				0.038	0.037	0.24
DZCT		1002	MOBT	27672.57750	-0.025	-0.678
				0.038	0.037	0.56
GROUP: 032812M.ASC ,obs#: 584						
DXCT		C 233 RESET	MOBT	29753.76230	0.007	0.151
				0.045	0.045	0.13
DYCT		C 233 RESET	MOBT	26299.25090	0.055	1.234
				0.045	0.045	1.02
DZCT		C 233 RESET	MOBT	36519.08480	-0.038	-0.857
				0.045	0.045	0.71
GROUP: 032812M.ASC ,obs#: 585						
DXCT		1002	MONE	31487.59160	-0.001	-0.032
				0.028	0.027	0.03
DYCT		1002	MONE	-7587.26160	0.014	0.532
				0.028	0.027	0.44
DZCT		1002	MONE	-6568.22560	-0.016	-0.575
				0.028	0.027	0.47
GROUP: 032812M.ASC ,obs#: 586						
DXCT		C 233 RESET	MONE	31543.83660	0.007	0.285
				0.027	0.026	0.23
DYCT		C 233 RESET	MONE	-716.72780	0.048	1.839
				0.027	0.026	1.50
DZCT		C 233 RESET	MONE	2278.27530	-0.022	-0.863
				0.027	0.026	0.71
GROUP: 033012M.ASC ,obs#: 587						
DXCT		C 233 RESET	1002	56.25490	-0.002	-0.184
				0.009	0.009	0.15
DYCT		C 233 RESET	1002	6870.55820	0.009	0.980
				0.009	0.009	0.78
DZCT		C 233 RESET	1002	8846.48670	0.007	0.834
				0.009	0.009	0.67
GROUP: 033012M.ASC ,obs#: 588						
DXCT		138	1002	15364.85170	-0.002	-0.114
				0.016	0.016	0.09
DYCT		138	1002	5968.21100	0.023	1.455
				0.016	0.016	1.20
DZCT		138	1002	9333.65380	0.000	0.030
				0.016	0.016	0.02
GROUP: 033012M.ASC ,obs#: 589						
DXCT		C 233 RESET	149	-18306.59680	0.005	0.337
				0.016	0.015	0.26
DYCT		C 233 RESET	149	-2827.50290	0.020	1.338
				0.016	0.015	1.05

Residuals (critical value = 4.238):

TYPE	AT	FROM	TO	OBSERVATION / STD DEV	RESIDUAL / STD DEV	STD RES / PPM
DZCT		C 233 RESET	149	-5567.01820	0.002	0.152
				0.016	0.015	0.12
GROUP: 033012M.ASC ,obs#: 590						
DXCT		138	149	-2997.99440	-0.001	-0.337
				0.006	0.002	0.09
DYCT		138	149	-3729.81330	-0.003	-1.337
				0.006	0.002	0.38
DZCT		138	149	-5079.85550	-0.000	-0.151
				0.006	0.002	0.04
GROUP: 033012M.ASC ,obs#: 591						
DXCT		C 233 RESET	138	-15308.59850	0.002	0.146
				0.013	0.013	0.12
DYCT		C 233 RESET	138	902.32240	0.011	0.867
				0.013	0.013	0.71
DZCT		C 233 RESET	138	-487.16490	0.005	0.383
				0.013	0.013	0.31
GROUP: 033012M.ASC ,obs#: 592						
DXCT		C 233 RESET	139	-10080.75340	0.003	0.424
				0.009	0.007	0.30
DYCT		C 233 RESET	139	1801.59700	-0.021	-2.855
				0.009	0.007	2.03
DZCT		C 233 RESET	139	1261.46480	0.005	0.730
				0.009	0.007	0.52
GROUP: 033012M.ASC ,obs#: 593						
DXCT		138	139	5227.84730	-0.001	-0.442
				0.005	0.002	0.17
DYCT		138	139	899.23630	0.007	2.873
				0.005	0.002	1.17
DZCT		138	139	1748.63200	-0.002	-0.801
				0.005	0.002	0.32
GROUP: 033012M.ASC ,obs#: 594						
DXCT		C 233 RESET	140	-5532.87330	-0.004	-0.657
				0.009	0.006	0.34
DYCT		C 233 RESET	140	6027.49910	0.013	2.316
				0.009	0.006	1.23
DZCT		C 233 RESET	140	7158.84860	0.000	0.024
				0.009	0.006	0.01
GROUP: 033012M.ASC ,obs#: 595						
DXCT		138	140	9775.71400	0.006	0.662
				0.011	0.009	0.42
DYCT		138	140	5125.19910	-0.020	-2.318
				0.011	0.009	1.48
DZCT		138	140	7646.00930	-0.000	-0.052
				0.011	0.009	0.03
GROUP: 033012M.ASC ,obs#: 596						
DXCT		C 233 RESET	235	-24144.85060	0.004	0.192
				0.021	0.019	0.15
DYCT		C 233 RESET	235	-2354.94350	0.004	0.205
				0.021	0.019	0.16
DZCT		C 233 RESET	235	-5620.53270	0.016	0.813
				0.021	0.019	0.63
GROUP: 033012M.ASC ,obs#: 597						

Residuals (critical value = 4.238):

TYPE	AT	FROM	TO	OBSERVATION / STD DEV	RESIDUAL / STD DEV	STD RES / PPM
DXCT		138	235	-8836.24960	-0.001	-0.192
				0.009	0.004	0.06
DYCT		138	235	-3257.27210	-0.001	-0.205
				0.009	0.004	0.07
DZCT		138	235	-5133.35410	-0.003	-0.813
				0.009	0.004	0.27
GROUP: 033012M.ASC ,obs#: 598						
DXCT		C 233 RESET	236	-16053.84380	0.006	0.455
				0.014	0.013	0.36
DYCT		C 233 RESET	236	-1383.84990	0.025	1.882
				0.014	0.013	1.52
DZCT		C 233 RESET	236	-3487.06650	-0.001	-0.064
				0.014	0.013	0.05
GROUP: 033012M.ASC ,obs#: 599						
DXCT		138	236	-745.24080	-0.000	-0.459
				0.003	0.001	0.09
DYCT		138	236	-2286.15670	-0.001	-1.883
				0.003	0.001	0.36
DZCT		138	236	-2999.90730	0.000	0.080
				0.003	0.001	0.02
GROUP: 033012M.ASC ,obs#: 600						
DXCT		138	237	9284.54910	-0.005	-0.826
				0.008	0.006	0.55
DYCT		138	237	-796.30550	0.013	1.996
				0.008	0.006	1.35
DZCT		138	237	-0.00430	-0.015	-2.361
				0.008	0.006	1.58
GROUP: 033012M.ASC ,obs#: 601						
DXCT		C 233 RESET	237	-6024.05490	0.002	0.825
				0.005	0.003	0.36
DYCT		C 233 RESET	237	106.04570	-0.005	-2.000
				0.005	0.003	0.89
DZCT		C 233 RESET	237	-487.18540	0.006	2.366
				0.005	0.003	1.03
GROUP: 033012M.ASC ,obs#: 602						
DXCT		C 233 RESET	238	-3280.72340	-0.002	-0.396
				0.008	0.004	0.18
DYCT		C 233 RESET	238	5847.13380	-0.001	-0.261
				0.008	0.004	0.12
DZCT		C 233 RESET	238	7169.86810	0.002	0.475
				0.008	0.004	0.21
GROUP: 033012M.ASC ,obs#: 603						
DXCT		138	238	12027.86740	0.004	0.396
				0.013	0.010	0.27
DYCT		138	238	4944.79660	0.003	0.264
				0.013	0.011	0.19
DZCT		138	238	7657.03530	-0.005	-0.476
				0.013	0.010	0.33
GROUP: 033012M.ASC ,obs#: 604						
DXCT		138	419	-6315.14650	-0.000	-0.032
				0.007	0.003	0.01
DYCT		138	419	-3433.50610	-0.002	-0.602

Residuals (critical value = 4.238):

TYPE	AT	FROM	TO	OBSERVATION / STD DEV	RESIDUAL / STD DEV	STD RES / PPM
				0.008	0.003	0.20
DZCT		138	419	-5099.52140	0.000	0.048
				0.008	0.003	0.02
GROUP: 033012M.ASC ,obs#: 605						
DXCT		C 233 RESET	419	-21623.74380	0.001	0.031
				0.019	0.017	0.02
DYCT		C 233 RESET	419	-2531.18510	0.010	0.602
				0.019	0.017	0.47
DZCT		C 233 RESET	419	-5586.68110	-0.000	-0.016
				0.019	0.017	0.01
GROUP: 033012M.ASC ,obs#: 606						
DXCT		C 233 RESET	420	-9366.71890	-0.015	-2.316
				0.008	0.006	1.56
DYCT		C 233 RESET	420	403.23680	-0.005	-0.774
				0.008	0.006	0.53
DZCT		C 233 RESET	420	-472.34490	0.011	1.580
				0.008	0.007	1.12
GROUP: 033012M.ASC ,obs#: 607						
DXCT		138	420	5941.85670	0.006	2.327
				0.005	0.003	1.08
DYCT		138	420	-499.10430	0.003	0.843
				0.006	0.003	0.49
DZCT		138	420	14.83030	-0.005	-1.619
				0.005	0.003	0.77
GROUP: 033012M.ASC ,obs#: 608						
DXCT		C 233 RESET	421	-4987.31280	-0.001	-0.558
				0.004	0.002	0.20
DYCT		C 233 RESET	421	34.11250	-0.005	-2.547
				0.004	0.002	0.96
DZCT		C 233 RESET	421	-488.15830	0.007	3.308
				0.005	0.002	1.41
GROUP: 033012M.ASC ,obs#: 609						
DXCT		138	421	10321.27890	0.004	0.534
				0.009	0.007	0.38
DYCT		138	421	-868.24290	0.017	2.322
				0.009	0.007	1.68
DZCT		138	421	-0.96740	-0.024	-3.167
				0.009	0.007	2.29
GROUP: 033012M.ASC ,obs#: 610						
DXCT		C 233 RESET	538	-24145.08300	0.007	0.374
				0.021	0.019	0.29
DYCT		C 233 RESET	538	-2354.04250	0.010	0.528
				0.021	0.019	0.41
DZCT		C 233 RESET	538	-5619.26400	-0.001	-0.071
				0.021	0.019	0.05
GROUP: 033012M.ASC ,obs#: 611						
DXCT		138	538	-8836.47790	-0.001	-0.374
				0.009	0.004	0.12
DYCT		138	538	-3256.36370	-0.002	-0.528
				0.009	0.004	0.18
DZCT		138	538	-5132.10550	0.000	0.070
				0.009	0.004	0.02

Residuals (critical value = 4.238):

TYPE	AT	FROM	TO	OBSERVATION / STD DEV	RESIDUAL / STD DEV	STD RES / PPM
GROUP: 033012M.ASC ,obs#: 612						
DXCT		C 233 RESET	539	-16077.91660	0.004	0.323
				0.014	0.013	0.25
DYCT		C 233 RESET	539	-1987.06890	-0.002	-0.128
				0.014	0.013	0.10
DZCT		C 233 RESET	539	-4285.72000	0.009	0.692
				0.014	0.013	0.55
GROUP: 033012M.ASC ,obs#: 613						
DXCT		138	539	-769.31530	-0.000	-0.322
				0.004	0.001	0.07
DYCT		138	539	-2889.40400	0.000	0.130
				0.004	0.001	0.03
DZCT		138	539	-3798.54990	-0.001	-0.692
				0.004	0.001	0.16
GROUP: 033012M.ASC ,obs#: 614						
DXCT		C 233 RESET	540	-13219.79470	-0.007	-0.640
				0.011	0.011	0.51
DYCT		C 233 RESET	540	1717.33990	-0.015	-1.403
				0.011	0.011	1.13
DZCT		C 233 RESET	540	800.10120	0.021	1.948
				0.011	0.011	1.57
GROUP: 033012M.ASC ,obs#: 615						
DXCT		138	540	2088.79490	0.000	0.666
				0.002	0.000	0.10
DYCT		138	540	814.99090	0.001	1.499
				0.002	0.000	0.26
DZCT		138	540	1287.28310	-0.001	-2.020
				0.002	0.000	0.34
GROUP: 033012M.ASC ,obs#: 616						
DXCT		C 233 RESET	MOBT	29753.75840	0.011	0.238
				0.045	0.045	0.20
DYCT		C 233 RESET	MOBT	26299.26980	0.036	0.811
				0.045	0.045	0.67
DZCT		C 233 RESET	MOBT	36519.06280	-0.016	-0.365
				0.045	0.045	0.30
GROUP: 033012M.ASC ,obs#: 617						
DXCT		138	MOBT	45062.35670	0.009	0.171
				0.053	0.053	0.14
DYCT		138	MOBT	25396.94680	0.026	0.492
				0.053	0.053	0.41
DZCT		138	MOBT	37006.22940	-0.023	-0.432
				0.053	0.053	0.36
GROUP: 033012M.ASC ,obs#: 618						
DXCT		C 233 RESET	MONE	31543.88460	-0.041	-1.569
				0.027	0.026	1.28
DYCT		C 233 RESET	MONE	-716.68140	0.001	0.045
				0.027	0.026	0.04
DZCT		C 233 RESET	MONE	2278.24850	0.004	0.173
				0.027	0.026	0.14
GROUP: 033012M.ASC ,obs#: 619						
DXCT		138	MONE	46852.43480	0.006	0.151
				0.039	0.039	0.12

Residuals (critical value = 4.238):

TYPE	AT	FROM	TO	OBSERVATION / STD DEV	RESIDUAL / STD DEV	STD RES / PPM
DYCT		138	MONE	-1619.03220	0.019	0.482
				0.039	0.039	0.40
DZCT		138	MONE	2765.42360	-0.011	-0.271
				0.039	0.039	0.22
GROUP: 033112M.ASC ,obs#: 620						
DXCT		1002	138	-15364.85610	0.006	0.398
				0.016	0.015	0.33
DYCT		1002	138	-5968.25990	0.026	1.691
				0.016	0.015	1.38
DZCT		1002	138	-9333.62000	-0.034	-2.212
				0.016	0.015	1.81
GROUP: 033112M.ASC ,obs#: 621						
DXCT		1002	141	-21238.54230	0.003	0.169
				0.019	0.017	0.13
DYCT		1002	141	-2467.50320	0.025	1.443
				0.019	0.017	1.13
DZCT		1002	141	-5476.32280	-0.038	-2.209
				0.019	0.017	1.72
GROUP: 033112M.ASC ,obs#: 622						
DXCT		138	141	-5873.68910	-0.000	-0.169
				0.007	0.002	0.05
DYCT		138	141	3500.75860	-0.003	-1.460
				0.007	0.002	0.41
DZCT		138	141	3857.28860	0.005	2.220
				0.007	0.002	0.62
GROUP: 033112M.ASC ,obs#: 623						
DXCT		138	142	21586.33730	0.004	0.232
				0.019	0.018	0.18
DYCT		138	142	4141.97820	-0.023	-1.228
				0.020	0.019	0.98
DZCT		138	142	7597.26940	0.016	0.847
				0.020	0.019	0.68
GROUP: 033112M.ASC ,obs#: 624						
DXCT		1002	142	6221.49200	-0.000	-0.226
				0.006	0.002	0.05
DYCT		1002	142	-1826.28020	0.002	1.239
				0.006	0.002	0.29
DZCT		1002	142	-1736.36780	-0.001	-0.864
				0.006	0.002	0.20
GROUP: 033112M.ASC ,obs#: 625						
DXCT		1002	239	-19438.41780	-0.003	-0.194
				0.016	0.014	0.14
DYCT		1002	239	1032.85320	0.005	0.358
				0.016	0.014	0.25
DZCT		1002	239	-696.16200	-0.015	-1.077
				0.016	0.014	0.76
GROUP: 033112M.ASC ,obs#: 626						
DXCT		138	239	-4073.57150	0.001	0.192
				0.010	0.005	0.08
DYCT		138	239	7001.09370	-0.002	-0.363
				0.010	0.005	0.16
DZCT		138	239	8637.47190	0.006	1.079

Residuals (critical value = 4.238):

TYPE	AT	FROM	TO	OBSERVATION / STD DEV	RESIDUAL / STD DEV	STD RES / PPM
				0.010	0.005	0.47
GROUP: 033112M.ASC ,obs#: 627						
DXCT		1002	432	-15813.19530	-0.006	-0.473
				0.014	0.013	0.37
DYCT		1002	432	-2972.26970	-0.010	-0.691
				0.015	0.014	0.56
DZCT		1002	432	-5510.77890	-0.020	-1.479
				0.015	0.014	1.20
GROUP: 033112M.ASC ,obs#: 628						
DXCT		138	432	-448.35220	0.001	0.458
				0.004	0.001	0.10
DYCT		138	432	2995.95380	0.001	0.539
				0.005	0.001	0.14
DZCT		138	432	3822.85310	0.002	1.388
				0.005	0.001	0.38
GROUP: 033112M.ASC ,obs#: 629						
DXCT		1002	433	-26242.54360	-0.008	-0.389
				0.022	0.019	0.29
DYCT		1002	433	-112.70940	-0.006	-0.327
				0.023	0.020	0.25
DZCT		1002	433	-2916.55410	-0.022	-1.108
				0.022	0.020	0.82
GROUP: 033112M.ASC ,obs#: 630						
DXCT		138	433	-10877.70330	0.002	0.385
				0.012	0.005	0.15
DYCT		138	433	5855.51610	0.002	0.319
				0.012	0.005	0.12
DZCT		138	433	6417.07260	0.006	1.104
				0.012	0.005	0.43
GROUP: 033112M.ASC ,obs#: 631						
DXCT		138	434	5866.92870	-0.015	-1.903
				0.010	0.008	1.22
DYCT		138	434	6456.71810	0.007	0.878
				0.011	0.008	0.57
DZCT		138	434	8910.16350	0.006	0.713
				0.010	0.008	0.46
GROUP: 033112M.ASC ,obs#: 632						
DXCT		1002	434	-9497.94540	0.009	1.903
				0.008	0.005	0.93
DYCT		1002	434	488.49560	-0.004	-0.877
				0.008	0.005	0.43
DZCT		1002	434	-423.48170	-0.003	-0.709
				0.008	0.005	0.35
GROUP: 033112M.ASC ,obs#: 633						
DXCT		1002	422	-2243.67640	0.000	0.574
				0.002	0.000	0.07
DYCT		1002	422	-144.33870	0.001	2.374
				0.002	0.000	0.42
DZCT		1002	422	-419.84640	-0.001	-2.646
				0.002	0.000	0.38
GROUP: 033112M.ASC ,obs#: 634						
DXCT		138	422	13121.18350	-0.010	-0.718

Residuals (critical value = 4.238):

TYPE	AT	FROM	TO	OBSERVATION / STD DEV	RESIDUAL / STD DEV	STD RES / PPM
				0.014	0.014	0.58
DYCT		138	422	5823.92550	-0.030	-2.153
				0.014	0.014	1.75
DZCT		138	422	8913.77350	0.033	2.456
				0.014	0.014	1.98
GROUP: 033112M.ASC ,obs#: 635						
DXCT		138	423	18363.94190	0.014	0.827
				0.017	0.017	0.67
DYCT		138	423	4403.96940	-0.038	-2.284
				0.017	0.017	1.86
DZCT		138	423	7617.68200	0.056	3.383
				0.017	0.017	2.76
GROUP: 033112M.ASC ,obs#: 636						
DXCT		1002	423	2999.10610	-0.000	-0.819
				0.003	0.001	0.13
DYCT		1002	423	-1564.30370	0.001	2.342
				0.003	0.001	0.38
DZCT		1002	423	-1715.91390	-0.002	-3.434
				0.003	0.001	0.56
GROUP: 033112M.ASC ,obs#: 637						
DXCT		1002	541	-12984.74010	0.008	0.983
				0.011	0.009	0.64
DYCT		1002	541	-237.21960	0.014	1.691
				0.011	0.009	1.10
DZCT		1002	541	-1694.64050	-0.023	-2.639
				0.011	0.009	1.72
GROUP: 033112M.ASC ,obs#: 638						
DXCT		138	541	2380.12290	-0.005	-0.981
				0.008	0.005	0.48
DYCT		138	541	5731.03670	-0.008	-1.687
				0.008	0.005	0.83
DZCT		138	541	7638.97850	0.013	2.637
				0.008	0.005	1.29
GROUP: 033112M.ASC ,obs#: 639						
DXCT		1002	MOBT	29697.51270	0.003	0.083
				0.038	0.037	0.07
DYCT		1002	MOBT	19428.71210	0.027	0.727
				0.038	0.037	0.60
DZCT		1002	MOBT	27672.58770	-0.035	-0.952
				0.038	0.037	0.79
GROUP: 033112M.ASC ,obs#: 640						
DXCT		138	MOBT	45062.36960	-0.004	-0.073
				0.053	0.053	0.06
DYCT		138	MOBT	25396.97080	0.002	0.037
				0.053	0.053	0.03
DZCT		138	MOBT	37006.20740	-0.001	-0.015
				0.053	0.053	0.01
GROUP: 033112M.ASC ,obs#: 641						
DXCT		1002	MONE	31487.58870	0.002	0.075
				0.028	0.027	0.06
DYCT		1002	MONE	-7587.26290	0.016	0.580
				0.028	0.027	0.48

Residuals (critical value = 4.238):

TYPE	AT	FROM	TO	OBSERVATION / STD DEV	RESIDUAL / STD DEV	STD RES / PPM
DZCT		1002	MONE	-6568.21650	-0.025	-0.911
				0.028	0.027	0.75
GROUP: 033112M.ASC ,obs#: 642						
DXCT		138	MONE	46852.44490	-0.004	-0.109
				0.039	0.039	0.09
DYCT		138	MONE	-1619.00510	-0.008	-0.216
				0.039	0.039	0.18
DZCT		138	MONE	2765.40470	0.008	0.216
				0.039	0.039	0.18
GROUP: 040112M.ASC ,obs#: 643						
DXCT		240	143	-23051.76480	0.006	0.336
				0.019	0.018	0.27
DYCT		240	143	951.12600	0.010	0.516
				0.019	0.018	0.41
DZCT		240	143	-1183.41820	-0.006	-0.343
				0.019	0.018	0.27
GROUP: 040112M.ASC ,obs#: 644						
DXCT		D 277	143	-2143.62670	-0.000	-0.345
				0.002	0.000	0.03
DYCT		D 277	143	716.29330	-0.000	-0.526
				0.002	0.000	0.05
DZCT		D 277	143	702.16320	0.000	0.349
				0.002	0.000	0.03
GROUP: 040112M.ASC ,obs#: 645						
DXCT		D 277	144	7300.14820	0.005	1.381
				0.007	0.003	0.55
DYCT		D 277	144	2291.55590	-0.028	-2.089
				0.017	0.013	3.31
DZCT		D 277	144	3651.40370	0.007	1.737
				0.008	0.004	0.80
GROUP: 040112M.ASC ,obs#: 646						
DXCT		240	144	-13607.96710	-0.012	-1.305
				0.012	0.009	0.85
DYCT		240	144	2526.35600	0.014	2.002
				0.013	0.007	1.02
DZCT		240	144	1765.83240	-0.010	-1.044
				0.012	0.009	0.70
GROUP: 040112M.ASC ,obs#: 647						
DXCT		240	241	-25346.40830	0.015	0.721
				0.021	0.020	0.57
DYCT		240	241	1424.68040	0.039	1.903
				0.021	0.020	1.52
DZCT		240	241	-895.67610	-0.017	-0.819
				0.021	0.020	0.65
GROUP: 040112M.ASC ,obs#: 648						
DXCT		D 277	241	-4438.26140	-0.001	-0.733
				0.004	0.001	0.11
DYCT		D 277	241	1189.87800	-0.001	-1.918
				0.004	0.001	0.29
DZCT		D 277	241	989.89450	0.001	0.851
				0.004	0.001	0.13
GROUP: 040112M.ASC ,obs#: 649						

Residuals (critical value = 4.238):

TYPE	AT	FROM	TO	OBSERVATION / STD DEV	RESIDUAL / STD DEV	STD RES / PPM
DXCT		240	424	-17972.99290	-0.007	-0.514
				0.015	0.014	0.39
DYCT		240	424	1500.28340	-0.021	-1.557
				0.015	0.014	1.19
DZCT		240	424	42.61470	0.020	1.424
				0.015	0.014	1.09
GROUP: 040112M.ASC ,obs#: 650						
DXCT		D 277	424	2935.13160	0.000	0.533
				0.003	0.001	0.08
DYCT		D 277	424	1265.41860	0.001	1.605
				0.003	0.001	0.27
DZCT		D 277	424	1928.22310	-0.001	-1.478
				0.003	0.001	0.25
GROUP: 040112M.ASC ,obs#: 651						
DXCT		D 277	425	20666.99370	-0.006	-0.697
				0.018	0.009	0.29
DYCT		D 277	425	-3600.75910	0.003	0.290
				0.018	0.009	0.13
DZCT		D 277	425	-2432.03160	-0.009	-0.981
				0.018	0.009	0.41
GROUP: 040112M.ASC ,obs#: 652						
DXCT		MOBT	425	-32177.77750	0.018	0.677
				0.031	0.027	0.48
DYCT		MOBT	425	-9992.37650	-0.006	-0.234
				0.031	0.027	0.17
DZCT		MOBT	425	-15935.38680	0.026	0.961
				0.031	0.027	0.68
GROUP: 040112M.ASC ,obs#: 653						
DXCT		240	542	-22487.07210	0.012	0.652
				0.019	0.018	0.52
DYCT		240	542	913.80990	0.041	2.286
				0.019	0.018	1.82
DZCT		240	542	-1201.75310	-0.020	-1.115
				0.019	0.018	0.89
GROUP: 040112M.ASC ,obs#: 654						
DXCT		D 277	542	-1578.92850	-0.000	-0.667
				0.002	0.000	0.05
DYCT		D 277	542	679.00900	-0.000	-2.329
				0.002	0.000	0.17
DZCT		D 277	542	683.81450	0.000	1.203
				0.002	0.000	0.08
GROUP: 040112M.ASC ,obs#: 655						
DXCT		D 277	543	7300.41920	0.000	0.041
				0.007	0.001	0.01
DYCT		D 277	543	2290.21820	-0.001	-0.552
				0.008	0.001	0.09
DZCT		D 277	543	3649.67280	-0.001	-0.430
				0.007	0.001	0.06
GROUP: 040112M.ASC ,obs#: 656						
DXCT		MOBT	543	-45544.32640	-0.002	-0.040
				0.039	0.038	0.03
DYCT		MOBT	543	-4101.43040	0.022	0.559

Residuals (critical value = 4.238):

TYPE	AT	FROM	TO	OBSERVATION / STD DEV	RESIDUAL / STD DEV	STD RES / PPM
				0.040	0.039	0.46
DZCT		MOBT	543	-9853.66540	0.017	0.440
				0.039	0.038	0.36
GROUP: 040112M.ASC ,obs#: 657						
DXCT		240	638	-22615.41330	0.019	1.063
				0.019	0.018	0.84
DYCT		240	638	-1082.09350	0.046	2.493
				0.019	0.018	1.99
DZCT		240	638	-3752.04230	-0.031	-1.691
				0.019	0.018	1.35
GROUP: 040112M.ASC ,obs#: 658						
DXCT		D 277	638	-1707.26180	-0.000	-1.061
				0.002	0.000	0.11
DYCT		D 277	638	-1316.88930	-0.001	-2.606
				0.003	0.000	0.29
DZCT		D 277	638	-1866.48610	0.001	1.869
				0.003	0.000	0.20
GROUP: 040112M.ASC ,obs#: 659						
DXCT		D 277	639	20631.08560	0.002	0.191
				0.018	0.011	0.09
DYCT		D 277	639	-4157.19770	-0.004	-0.348
				0.018	0.011	0.17
DZCT		D 277	639	-3143.68180	-0.006	-0.598
				0.018	0.011	0.30
GROUP: 040112M.ASC ,obs#: 660						
DXCT		MOBT	639	-32213.65460	-0.005	-0.177
				0.032	0.028	0.13
DYCT		MOBT	639	-10548.81550	-0.012	-0.438
				0.032	0.028	0.32
DZCT		MOBT	639	-16647.03590	0.027	0.963
				0.032	0.028	0.71
GROUP: 040112M.ASC ,obs#: 661						
DXCT		MONE	639	-34003.73280	-0.002	-0.053
				0.035	0.032	0.04
DYCT		MONE	639	16467.12950	0.029	0.921
				0.035	0.032	0.70
DZCT		MONE	639	17593.79280	-0.008	-0.266
				0.035	0.032	0.20
GROUP: 040112M.ASC ,obs#: 662						
DXCT		240	D 277	-20908.14190	0.010	0.606
				0.018	0.017	0.48
DYCT		240	D 277	234.82830	0.014	0.845
				0.018	0.017	0.67
DZCT		240	D 277	-1885.58340	-0.004	-0.265
				0.018	0.017	0.21
GROUP: 040112M.ASC ,obs#: 663						
DXCT		240	MOBT	31936.60970	0.006	0.199
				0.029	0.028	0.16
DYCT		240	MOBT	6626.51550	-0.047	-1.669
				0.029	0.028	1.35
DZCT		240	MOBT	11617.70980	0.023	0.829
				0.029	0.028	0.67

Residuals (critical value = 4.238):

TYPE	AT	FROM	TO	OBSERVATION / STD DEV	RESIDUAL / STD DEV	STD RES / PPM
GROUP: 040112M.ASC ,obs#: 664						
DXCT		D 277	MOBT	52844.75090	-0.004	-0.082
				0.046	0.045	0.07
DYCT		D 277	MOBT	6391.66260	-0.036	-0.800
				0.046	0.045	0.66
DZCT		D 277	MOBT	13503.31320	0.008	0.171
				0.046	0.045	0.14
GROUP: 040112M.ASC ,obs#: 665						
DXCT		240	MONE	33726.68270	0.008	0.201
				0.038	0.037	0.17
DYCT		240	MONE	-20389.48150	-0.036	-0.966
				0.038	0.037	0.79
DZCT		240	MONE	-22623.07940	0.019	0.509
				0.038	0.037	0.42
GROUP: 040112M.ASC ,obs#: 666						
DXCT		D 277	MONE	54634.82310	-0.001	-0.020
				0.052	0.051	0.02
DYCT		D 277	MONE	-20624.31940	-0.041	-0.787
				0.052	0.052	0.65
DZCT		D 277	MONE	-20737.48470	0.012	0.236
				0.052	0.051	0.20
GROUP: 040212M.ASC ,obs#: 667						
DXCT		145	240	-7120.68520	-0.028	-2.054
				0.014	0.014	1.67
DYCT		145	240	-9010.49060	-0.005	-0.372
				0.014	0.014	0.30
DZCT		145	240	-12121.27810	0.022	1.588
				0.014	0.014	1.29
GROUP: 040212M.ASC ,obs#: 668						
DXCT		145	242	-3940.57320	-0.024	-1.904
				0.013	0.013	1.52
DYCT		145	242	-9266.48480	-0.001	-0.054
				0.013	0.013	0.04
DZCT		145	242	-12108.30520	0.024	1.911
				0.013	0.013	1.53
GROUP: 040212M.ASC ,obs#: 669						
DXCT		240	242	3180.11500	0.001	1.901
				0.003	0.001	0.31
DYCT		240	242	-255.98990	0.000	0.136
				0.003	0.001	0.02
DZCT		240	242	12.97650	-0.001	-1.907
				0.003	0.001	0.33
GROUP: 040212M.ASC ,obs#: 670						
DXCT		145	544	-3941.25650	-0.028	-2.225
				0.013	0.013	1.77
DYCT		145	544	-9265.09830	-0.026	-2.002
				0.014	0.013	1.65
DZCT		145	544	-12106.31880	0.051	3.919
				0.014	0.013	3.24
GROUP: 040212M.ASC ,obs#: 671						
DXCT		240	544	3179.42750	0.001	2.247
				0.003	0.001	0.37

Residuals (critical value = 4.238):

TYPE	AT	FROM	TO	OBSERVATION / STD DEV	RESIDUAL / STD DEV	STD RES / PPM
DYCT		240	544	-254.62990	0.001	2.242
				0.003	0.001	0.40
DZCT		240	544	14.99100	-0.002	-4.028
				0.003	0.001	0.73
GROUP: 040212M.ASC ,obs#: 672						
DXCT		145	A 277	-15547.48150	-0.020	-1.367
				0.016	0.015	1.02
DYCT		145	A 277	-6541.19970	-0.000	-0.020
				0.016	0.015	0.01
DZCT		145	A 277	-9900.79580	-0.004	-0.241
				0.016	0.015	0.18
GROUP: 040212M.ASC ,obs#: 673						
DXCT		240	A 277	-8426.79270	0.004	1.367
				0.008	0.003	0.48
DYCT		240	A 277	2469.29560	0.000	0.023
				0.008	0.003	0.01
DZCT		240	A 277	2220.45640	0.001	0.242
				0.008	0.003	0.08
GROUP: 040212M.ASC ,obs#: 674						
DXCT		145	MOBT	24815.91810	-0.016	-0.807
				0.021	0.020	0.64
DYCT		145	MOBT	-2384.00480	-0.022	-1.135
				0.021	0.020	0.89
DZCT		145	MOBT	-503.53930	0.016	0.811
				0.021	0.020	0.64
GROUP: 040212M.ASC ,obs#: 675						
DXCT		240	MOBT	31936.60390	0.011	0.405
				0.029	0.028	0.33
DYCT		240	MOBT	6626.48530	-0.017	-0.594
				0.029	0.028	0.48
DZCT		240	MOBT	11617.74190	-0.009	-0.311
				0.029	0.028	0.25
GROUP: 040212M.ASC ,obs#: 676						
DXCT		145	MONE	26605.99590	-0.019	-0.430
				0.044	0.044	0.36
DYCT		145	MONE	-29399.96800	-0.045	-1.040
				0.044	0.044	0.86
DZCT		145	MONE	-34744.35160	0.035	0.797
				0.044	0.044	0.66
GROUP: 040212M.ASC ,obs#: 677						
DXCT		240	MONE	33726.68340	0.007	0.183
				0.038	0.037	0.15
DYCT		240	MONE	-20389.47670	-0.041	-1.095
				0.038	0.037	0.90
DZCT		240	MONE	-22623.07440	0.014	0.375
				0.038	0.037	0.31
GROUP: 040312M.ASC ,obs#: 678						
DXCT		MOBT	145	-24815.89170	-0.011	-0.534
				0.021	0.020	0.42
DYCT		MOBT	145	2384.02170	0.005	0.274
				0.021	0.020	0.22
DZCT		MOBT	145	503.49680	0.027	1.353

Residuals (critical value = 4.238):

TYPE	AT	FROM	TO	OBSERVATION / STD DEV	RESIDUAL / STD DEV	STD RES / PPM
				0.021	0.020	1.07
GROUP: 040312M.ASC ,obs#: 679						
DXCT		MONE	145	-26605.96910	-0.008	-0.184
				0.044	0.044	0.15
DYCT		MONE	145	29399.98570	0.028	0.634
				0.044	0.044	0.52
DZCT		MONE	145	34744.31520	0.002	0.038
				0.044	0.044	0.03
GROUP: 040312M.ASC ,obs#: 680						
DXCT		145	146	-11307.86190	0.011	0.915
				0.013	0.012	0.70
DYCT		145	146	-6139.60290	0.013	1.080
				0.013	0.012	0.83
DZCT		145	146	-8950.81620	-0.025	-2.063
				0.013	0.012	1.60
GROUP: 040312M.ASC ,obs#: 681						
DXCT		240	146	-4187.13630	-0.002	-0.910
				0.005	0.002	0.26
DYCT		240	146	2870.90770	-0.002	-1.059
				0.005	0.002	0.31
DZCT		240	146	3170.41160	0.004	2.052
				0.005	0.002	0.60
GROUP: 040312M.ASC ,obs#: 682						
DXCT		145	147	-10022.54510	0.017	1.206
				0.015	0.014	0.97
DYCT		145	147	-8260.60980	0.035	2.506
				0.015	0.014	2.03
DZCT		145	147	-11469.43770	-0.053	-3.792
				0.015	0.014	3.07
GROUP: 040312M.ASC ,obs#: 683						
DXCT		240	147	-2901.81460	-0.001	-1.267
				0.003	0.000	0.19
DYCT		240	147	749.92270	-0.002	-2.961
				0.003	0.001	0.53
DZCT		240	147	651.76350	0.002	4.076
				0.003	0.001	0.70
GROUP: 040312M.ASC ,obs#: 684						
DXCT		MOBT	240	-31936.61770	0.002	0.085
				0.029	0.028	0.07
DYCT		MOBT	240	-6626.45840	-0.010	-0.363
				0.029	0.028	0.29
DZCT		MOBT	240	-11617.74490	0.012	0.418
				0.029	0.028	0.34
GROUP: 040312M.ASC ,obs#: 685						
DXCT		MONE	240	-33726.69500	0.005	0.127
				0.038	0.037	0.10
DYCT		MONE	240	20389.49980	0.018	0.477
				0.038	0.037	0.39
DZCT		MONE	240	22623.07690	-0.017	-0.442
				0.038	0.037	0.36
GROUP: 040312M.ASC ,obs#: 686						
DXCT		145	243	-14599.34410	0.001	0.090

Residuals (critical value = 4.238):

TYPE	AT	FROM	TO	OBSERVATION / STD DEV	RESIDUAL / STD DEV	STD RES / PPM
				0.013	0.009	0.05
DYCT		145	243	-1379.87350	0.014	1.472
				0.013	0.009	0.92
DZCT		145	243	-3225.22030	-0.013	-1.368
				0.013	0.009	0.85
GROUP: 040312M.ASC ,obs#: 687						
DXCT		240	243	-7478.62940	-0.001	-0.100
				0.012	0.008	0.06
DYCT		240	243	7630.64720	-0.011	-1.447
				0.012	0.008	0.80
DZCT		240	243	8896.01310	0.010	1.341
				0.012	0.008	0.74
GROUP: 040312M.ASC ,obs#: 688						
DXCT		145	244	-20966.53830	-0.003	-0.207
				0.018	0.014	0.13
DYCT		145	244	-1352.37640	-0.030	-2.213
				0.018	0.014	1.41
DZCT		145	244	-3855.56250	0.014	1.013
				0.018	0.014	0.65
GROUP: 040312M.ASC ,obs#: 689						
DXCT		240	244	-13845.83000	0.002	0.209
				0.015	0.010	0.11
DYCT		240	244	7658.06800	0.021	2.215
				0.015	0.010	1.18
DZCT		240	244	8265.71750	-0.010	-1.018
				0.015	0.010	0.54
GROUP: 040312M.ASC ,obs#: 690						
DXCT		145	426	-4234.34160	0.009	1.009
				0.010	0.009	0.74
DYCT		145	426	-6736.90340	-0.004	-0.502
				0.010	0.009	0.37
DZCT		145	426	-8942.88790	0.008	0.921
				0.010	0.009	0.68
GROUP: 040312M.ASC ,obs#: 691						
DXCT		240	426	2886.38190	-0.001	-1.006
				0.004	0.001	0.31
DYCT		240	426	2273.58690	0.001	0.557
				0.004	0.002	0.18
DZCT		240	426	3178.37830	-0.002	-0.948
				0.004	0.002	0.31
GROUP: 040312M.ASC ,obs#: 692						
DXCT		145	427	1289.09770	0.007	1.612
				0.007	0.004	0.80
DYCT		145	427	-5223.30750	0.003	0.769
				0.007	0.004	0.38
DZCT		145	427	-6480.66870	-0.001	-0.160
				0.007	0.004	0.08
GROUP: 040312M.ASC ,obs#: 693						
DXCT		240	427	8409.82860	-0.011	-1.616
				0.009	0.007	1.03
DYCT		240	427	3787.19680	-0.005	-0.777
				0.009	0.007	0.50

Residuals (critical value = 4.238):

TYPE	AT	FROM	TO	OBSERVATION / STD DEV	RESIDUAL / STD DEV	STD RES / PPM
DZCT		240	427	5640.58610	0.001	0.149
				0.009	0.007	0.10
GROUP: 040312M.ASC ,obs#: 694						
DXCT		145	429	-18254.83870	-0.000	-0.010
				0.016	0.012	0.01
DYCT		145	429	-1108.84620	-0.010	-0.833
				0.016	0.012	0.52
DZCT		145	429	-3251.41650	-0.004	-0.365
				0.016	0.012	0.23
GROUP: 040312M.ASC ,obs#: 695						
DXCT		240	429	-11134.12580	0.000	0.010
				0.014	0.009	0.01
DYCT		240	429	7901.63230	0.007	0.833
				0.014	0.009	0.46
DZCT		240	429	8869.83250	0.003	0.366
				0.014	0.009	0.20
GROUP: 040312M.ASC ,obs#: 696						
DXCT		145	430	-12190.69870	-0.002	-0.166
				0.015	0.014	0.13
DYCT		145	430	-7394.41670	0.013	0.932
				0.015	0.014	0.73
DZCT		145	430	-10611.02090	-0.039	-2.810
				0.015	0.014	2.20
GROUP: 040312M.ASC ,obs#: 697						
DXCT		240	430	-5069.98810	0.000	0.143
				0.005	0.001	0.04
DYCT		240	430	1616.09340	-0.001	-1.003
				0.005	0.001	0.26
DZCT		240	430	1510.19260	0.004	2.833
				0.005	0.001	0.71
GROUP: 040312M.ASC ,obs#: 698						
DXCT		145	460	-12266.60250	0.005	0.596
				0.011	0.008	0.36
DYCT		145	460	-2093.74480	0.007	0.919
				0.011	0.008	0.56
DZCT		145	460	-3857.41880	-0.002	-0.250
				0.011	0.008	0.15
GROUP: 040312M.ASC ,obs#: 699						
DXCT		240	460	-5145.88080	-0.004	-0.596
				0.010	0.007	0.33
DYCT		240	460	6916.76420	-0.006	-0.919
				0.010	0.007	0.51
DZCT		240	460	8263.83410	0.002	0.247
				0.010	0.007	0.14
GROUP: 040312M.ASC ,obs#: 700						
DXCT		145	545	1297.37760	0.003	0.642
				0.007	0.004	0.32
DYCT		145	545	-5181.60150	-0.002	-0.507
				0.007	0.004	0.26
DZCT		145	545	-6425.65040	0.003	0.648
				0.007	0.004	0.32
GROUP: 040312M.ASC ,obs#: 701						

Residuals (critical value = 4.238):

TYPE	AT	FROM	TO	OBSERVATION / STD DEV	RESIDUAL / STD DEV	STD RES / PPM
DXCT		240	545	8418.09780	-0.004	-0.645
				0.009	0.007	0.41
DYCT		240	545	3828.88850	0.004	0.504
				0.009	0.007	0.32
DZCT		240	545	5695.61330	-0.004	-0.645
				0.009	0.007	0.41
GROUP: 040312M.ASC ,obs#: 702						
DXCT		145	546	-22663.52220	0.005	0.338
				0.020	0.016	0.23
DYCT		145	546	-3222.25820	-0.001	-0.080
				0.020	0.016	0.05
DZCT		145	546	-6401.08780	-0.021	-1.298
				0.020	0.016	0.87
GROUP: 040312M.ASC ,obs#: 703						
DXCT		240	546	-15542.80080	-0.003	-0.339
				0.015	0.009	0.17
DYCT		240	546	5788.23560	0.001	0.069
				0.015	0.009	0.03
DZCT		240	546	5720.13670	0.011	1.298
				0.015	0.009	0.65
GROUP: 040312M.ASC ,obs#: 704						
DXCT		145	547	-13156.12310	-0.008	-0.718
				0.013	0.010	0.50
DYCT		145	547	-4001.51720	0.018	1.721
				0.013	0.011	1.21
DZCT		145	547	-6412.68140	-0.018	-1.689
				0.013	0.011	1.17
GROUP: 040312M.ASC ,obs#: 705						
DXCT		240	547	-6035.42060	0.003	0.717
				0.008	0.004	0.32
DYCT		240	547	5009.00430	-0.008	-1.722
				0.008	0.004	0.77
DZCT		240	547	5708.55000	0.007	1.690
				0.008	0.004	0.75
GROUP: 040312M.ASC ,obs#: 706						
DXCT		145	X 274	-3444.94080	0.004	1.962
				0.005	0.002	0.74
DYCT		145	X 274	-2786.52850	0.001	0.295
				0.005	0.002	0.11
DZCT		145	X 274	-3889.85330	0.001	0.239
				0.005	0.002	0.09
GROUP: 040312M.ASC ,obs#: 707						
DXCT		240	X 274	3675.79170	-0.015	-1.962
				0.009	0.008	1.37
DYCT		240	X 274	6223.97010	-0.002	-0.293
				0.009	0.008	0.21
DZCT		240	X 274	8231.40570	-0.002	-0.254
				0.009	0.008	0.18
GROUP: 040412M.ASC ,obs#: 708						
DXCT		145	148	-23743.79250	-0.007	-0.348
				0.021	0.020	0.27
DYCT		145	148	6653.70620	-0.005	-0.233

Residuals (critical value = 4.238):

TYPE	AT	FROM	TO	OBSERVATION / STD DEV	RESIDUAL / STD DEV	STD RES / PPM
				0.021	0.020	0.18
DZCT		145	148	5962.52400	0.005	0.226
				0.021	0.020	0.18
GROUP: 040412M.ASC ,obs#: 709						
DXCT		145	245	-15053.36310	-0.008	-0.629
				0.015	0.012	0.43
DYCT		145	245	6901.82600	0.020	1.594
				0.015	0.012	1.10
DZCT		145	245	7171.50560	-0.004	-0.363
				0.015	0.012	0.25
GROUP: 040412M.ASC ,obs#: 710						
DXCT		148	245	8690.42680	0.002	0.630
				0.007	0.003	0.21
DYCT		148	245	248.14910	-0.005	-1.595
				0.007	0.003	0.54
DZCT		148	245	1208.97150	0.001	0.365
				0.007	0.003	0.12
GROUP: 040412M.ASC ,obs#: 711						
DXCT		148	435	9205.87280	-0.001	-0.268
				0.008	0.004	0.10
DYCT		148	435	-1824.26740	0.010	2.528
				0.009	0.004	1.06
DZCT		148	435	-1312.46720	-0.006	-1.557
				0.008	0.004	0.63
GROUP: 040412M.ASC ,obs#: 712						
DXCT		145	435	-14537.93030	0.003	0.261
				0.013	0.010	0.17
DYCT		145	435	4829.47170	-0.028	-2.493
				0.014	0.011	1.72
DZCT		145	435	4650.03980	0.016	1.496
				0.014	0.010	0.97
GROUP: 040412M.ASC ,obs#: 713						
DXCT		145	431	-175.41340	0.000	1.859
				0.002	0.000	0.17
DYCT		145	431	1647.38850	-0.000	-0.548
				0.003	0.000	0.07
DZCT		145	431	2065.02620	0.000	0.713
				0.002	0.000	0.07
GROUP: 040412M.ASC ,obs#: 714						
DXCT		148	431	23568.42200	-0.036	-1.866
				0.020	0.019	1.45
DYCT		148	431	-5006.32290	0.010	0.504
				0.021	0.019	0.40
DZCT		148	431	-3897.48950	-0.013	-0.660
				0.021	0.019	0.52
GROUP: 040412M.ASC ,obs#: 715						
DXCT		145	641	-23668.96280	-0.004	-0.207
				0.022	0.020	0.16
DYCT		145	641	7632.41210	-0.005	-0.241
				0.022	0.021	0.19
DZCT		145	641	7208.91560	0.003	0.161
				0.022	0.021	0.13

Residuals (critical value = 4.238):

TYPE	AT	FROM	TO	OBSERVATION / STD DEV	RESIDUAL / STD DEV	STD RES / PPM
GROUP: 040412M.ASC ,obs#: 716						
DXCT		148	641	74.83240	0.000	0.000*
				0.001	0.000	0.01
DYCT		148	641	978.70560	0.000	0.000*
				0.001	0.000	0.02
DZCT		148	641	1246.39040	-0.000	0.000*
				0.001	0.000	0.01
GROUP: 040412M.ASC ,obs#: 717						
DXCT		148	642	20085.67920	0.018	1.265
				0.017	0.014	0.90
DYCT		148	642	-1721.67550	0.019	1.304
				0.017	0.015	0.95
DZCT		148	642	-111.68670	-0.004	-0.286
				0.017	0.015	0.21
GROUP: 040412M.ASC ,obs#: 718						
DXCT		145	642	-3658.09890	-0.003	-1.264
				0.007	0.003	0.38
DYCT		145	642	4932.04850	-0.003	-1.303
				0.007	0.003	0.40
DZCT		145	642	5850.83690	0.001	0.281
				0.007	0.003	0.09
GROUP: 040412M.ASC ,obs#: 719						
DXCT		145	H 274	-35527.65890	0.003	0.099
				0.033	0.030	0.08
DYCT		145	H 274	11967.26490	-0.003	-0.086
				0.033	0.032	0.07
DZCT		145	H 274	11301.31690	0.015	0.491
				0.033	0.031	0.39
GROUP: 040412M.ASC ,obs#: 720						
DXCT		148	H 274	-11783.85410	-0.002	-0.609
				0.012	0.004	0.17
DYCT		148	H 274	5313.58260	-0.022	-2.939
				0.012	0.007	1.57
DZCT		148	H 274	5338.78790	0.016	2.469
				0.012	0.006	1.12
GROUP: 040412M.ASC ,obs#: 721						
DXCT		145	MOBT	24815.91450	-0.012	-0.625
				0.021	0.020	0.49
DYCT		145	MOBT	-2384.03500	0.008	0.405
				0.021	0.020	0.32
DZCT		145	MOBT	-503.52360	0.000	0.012
				0.021	0.020	0.01
GROUP: 040412M.ASC ,obs#: 722						
DXCT		148	MOBT	48559.70850	-0.007	-0.169
				0.042	0.041	0.14
DYCT		148	MOBT	-9037.74220	0.014	0.335
				0.042	0.041	0.27
DZCT		148	MOBT	-6466.04870	-0.003	-0.079
				0.042	0.041	0.06
GROUP: 040412M.ASC ,obs#: 723						
DXCT		145	MONE	26605.99390	-0.017	-0.384
				0.044	0.044	0.32

Residuals (critical value = 4.238):

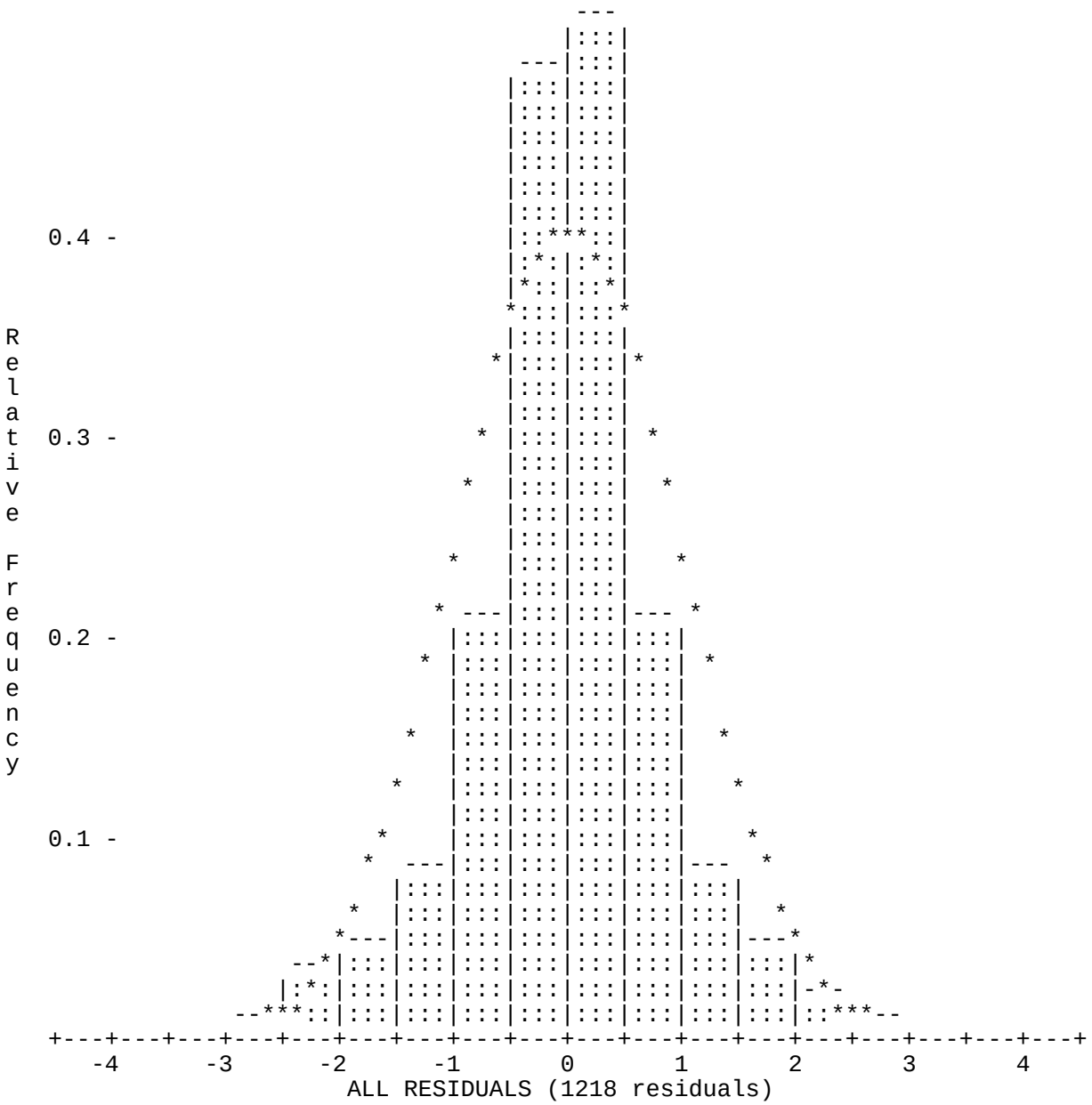
TYPE	AT	FROM	TO	OBSERVATION / STD DEV	RESIDUAL / STD DEV	STD RES / PPM
DYCT		145	MONE	-29399.98800	-0.025	-0.581
				0.044	0.044	0.48
DZCT		145	MONE	-34744.34960	0.033	0.751
				0.044	0.044	0.62
GROUP: 040412M.ASC ,obs#: 724						
DXCT		148	MONE	50349.78860	-0.012	-0.196
				0.062	0.061	0.16
DYCT		148	MONE	-36053.69400	-0.021	-0.339
				0.062	0.061	0.28
DZCT		148	MONE	-40706.87460	0.029	0.476
				0.062	0.061	0.39
GROUP: 021412~1.ASC,obs#: 725						
DXCT		134	233	3656.98390	-0.000	-0.543
				0.003	0.000	0.03
DYCT		134	233	-149.60990	0.000	2.105
				0.003	0.000	0.12
DZCT		134	233	217.10810	-0.000	-0.342
				0.003	0.000	0.02
GROUP: 021412~1.ASC,obs#: 726						
DXCT		MONE	233	-47099.68300	0.024	0.541
				0.046	0.045	0.44
DYCT		MONE	233	-14245.68810	-0.094	-2.101
				0.046	0.045	1.72
DZCT		MONE	233	-23149.31520	0.014	0.311
				0.046	0.045	0.26
GROUP: 041712B.ASC ,obs#: 727						
DXCT		ZKC1	246	-8307.21450	-0.013	-0.280
				0.046	0.045	0.23
DYCT		ZKC1	246	-33674.03270	-0.001	-0.030
				0.046	0.037	0.02
DZCT		ZKC1	246	-42954.37680	-0.003	-0.063
				0.046	0.040	0.05
GROUP: 041712B.ASC ,obs#: 728						
DXCT		MOBT	246	-39391.24200	0.003	0.099
				0.036	0.034	0.08
DYCT		MOBT	246	11996.63700	-0.011	-0.329
				0.036	0.034	0.27
DZCT		MOBT	246	11137.81480	0.006	0.189
				0.036	0.034	0.15
GROUP: 041712B.ASC ,obs#: 729						
DXCT		MOHV	246	-47598.76070	0.002	0.054
				0.044	0.043	0.04
DYCT		MOHV	246	-11707.77780	-0.011	-0.297
				0.044	0.038	0.22
DZCT		MOHV	246	-19452.99210	0.002	0.046
				0.044	0.040	0.03
GROUP: 041712B.ASC ,obs#: 730						
DXCT		ZKC1	247	-22236.11190	-0.021	-0.407
				0.052	0.051	0.33
DYCT		ZKC1	247	-35239.09760	0.003	0.070
				0.052	0.044	0.05
DZCT		ZKC1	247	-46372.86030	0.001	0.032

Residuals (critical value = 4.238):

TYPE	AT	FROM	TO	OBSERVATION / STD DEV	RESIDUAL / STD DEV	STD RES / PPM
				0.052	0.047	0.02
GROUP: 041712B.ASC ,obs#: 731						
DXCT		MOBT	247	-53320.14050	-0.004	-0.085
				0.046	0.045	0.07
DYCT		MOBT	247	10431.57220	-0.007	-0.164
				0.046	0.045	0.13
DZCT		MOBT	247	7719.33160	0.010	0.228
				0.046	0.045	0.19
GROUP: 041712B.ASC ,obs#: 732						
DXCT		MOHV	247	-61527.65870	-0.005	-0.097
				0.056	0.055	0.08
DYCT		MOHV	247	-13272.84110	-0.009	-0.171
				0.056	0.051	0.13
DZCT		MOHV	247	-22871.47750	0.008	0.147
				0.056	0.053	0.12
GROUP: 041712B.ASC ,obs#: 733						
DXCT		247	248	1245.60970	-0.000	-0.051
				0.007	0.002	0.02
DYCT		247	248	-5092.83340	-0.005	-1.947
				0.007	0.002	0.58
DZCT		247	248	-6339.97860	0.004	1.807
				0.007	0.002	0.54
GROUP: 041712B.ASC ,obs#: 734						
DXCT		246	248	-12683.29660	0.001	0.051
				0.015	0.011	0.03
DYCT		246	248	-6657.92000	0.021	1.944
				0.015	0.011	1.22
DZCT		246	248	-9758.43420	-0.020	-1.804
				0.015	0.011	1.13
GROUP: 041712B.ASC ,obs#: 735						
DXCT		247	249	-1007.10360	0.003	0.431
				0.013	0.007	0.18
DYCT		247	249	-9635.06230	0.000	0.034
				0.013	0.007	0.01
DZCT		247	249	-12327.53710	-0.003	-0.380
				0.013	0.007	0.16
GROUP: 041712B.ASC ,obs#: 736						
DXCT		246	249	-14935.99950	-0.007	-0.430
				0.020	0.016	0.28
DYCT		246	249	-11200.12230	-0.001	-0.032
				0.021	0.016	0.02
DZCT		246	249	-15746.02520	0.006	0.380
				0.021	0.016	0.25
GROUP: 041712B.ASC ,obs#: 737						
DXCT		246	C 252 RESET	1102.43700	0.000	0.434
				0.004	0.001	0.09
DYCT		246	C 252 RESET	3082.97990	-0.002	-1.983
				0.004	0.001	0.43
DZCT		246	C 252 RESET	4002.37240	0.002	1.531
				0.004	0.001	0.33
GROUP: 041712B.ASC ,obs#: 738						
DXCT		247	C 252 RESET	15031.34450	-0.001	-0.125

Residuals (critical value = 4.238):

TYPE	AT	FROM	TO	OBSERVATION / STD DEV	RESIDUAL / STD DEV	STD RES / PPM
				0.015	0.011	0.08
DYCT		247	C 252 RESET	4648.01760	0.021	1.840
				0.015	0.011	1.20
DZCT		247	C 252 RESET	7420.86920	-0.016	-1.376
				0.015	0.011	0.90
GROUP: 041712B.ASC ,obs#: 739						
DXCT		MOBT	C 252 RESET	-38288.78680	-0.014	-0.413
				0.037	0.035	0.33
DYCT		MOBT	C 252 RESET	15079.58430	0.019	0.534
				0.037	0.036	0.43
DZCT		MOBT	C 252 RESET	15140.20800	-0.013	-0.357
				0.037	0.035	0.29
GROUP: 041712B.ASC ,obs#: 740						
DXCT		MOHV	C 252 RESET	-46496.30740	-0.014	-0.338
				0.042	0.040	0.27
DYCT		MOHV	C 252 RESET	-8624.82230	0.011	0.306
				0.042	0.035	0.22
DZCT		MOHV	C 252 RESET	-15450.60360	-0.013	-0.338
				0.042	0.037	0.25
GROUP: 041712B.ASC ,obs#: 741						
DXCT		247	K 56	-12525.39270	-0.005	-0.404
				0.016	0.012	0.24
DYCT		247	K 56	-8248.38060	-0.001	-0.105
				0.016	0.009	0.05
DZCT		247	K 56	-11821.86970	0.001	0.053
				0.016	0.010	0.03
GROUP: 041712B.ASC ,obs#: 742						
DXCT		246	K 56	-26454.29330	-0.010	-0.398
				0.027	0.024	0.30
DYCT		246	K 56	-9813.44500	0.003	0.116
				0.027	0.023	0.08
DZCT		246	K 56	-15240.34440	-0.004	-0.182
				0.027	0.023	0.13
GROUP: 020812~1.ASC,obs#: 743						
DXCT		219	630	15486.14040	-0.004	-0.333
				0.014	0.012	0.24
DYCT		219	630	3370.59510	0.033	2.658
				0.015	0.013	1.95
DZCT		219	630	6229.49370	-0.002	-0.166
				0.014	0.012	0.12


Relative Frequency
0.4
0.3
0.2
0.1
-4
-3
-2
-1
0
1
2
3
4
ALL RESIDUALS (1218 residuals)

S T A T I S T I C S S U M M A R Y

Residual Critical Value Type	Tau Max
Residual Critical Value	4.2380
Number of Flagged Residuals	6
Convergence Criterion	0.0010
Final Iteration Counter Value	2
Confidence Level Used	95.0000
Estimated Variance Factor	1.0000
Number of Degrees of Freedom	761

Chi-Square Test on the Variance Factor:

9.0667e-01 < 1.0000 < 1.1086e+00 ?

THE TEST PASSES

NOTE: All confidence regions were computed using the following factors:

Variance factor used	=	1.0000
3-D expansion factor	=	2.7955

Note that, for relative confidence regions, precisions are computed from the ratio of the major semi-axis and the spatial distance between the two stations.

3D Station Confidence Regions (95.000 percent):

STATION	MAJ-SEMI	(AZ,VANG)	MED-SEMI	(AZ,VANG)	MIN-SEMI	(AZ,VANG)
1001	0.017	(0, 0)	0.017	(90, 0)	0.016	(0, 90)
1002	0.016	(0, 0)	0.016	(90, 0)	0.009	(0, 90)
101	0.022	(0, 0)	0.022	(90, 0)	0.022	(0, 90)
102	0.021	(0, 0)	0.021	(90, 0)	0.018	(0, 90)
123	0.025	(0, 0)	0.025	(90, 0)	0.012	(0, 90)
124	0.028	(0, 0)	0.028	(90, 0)	0.017	(0, 90)
125	0.031	(0, 0)	0.030	(90, 0)	0.021	(0, 90)
126	0.019	(0, 0)	0.019	(90, 0)	0.009	(0, 90)
127	0.022	(0, 0)	0.022	(90, 0)	0.014	(0, 90)
128	0.024	(0, 0)	0.024	(90, 0)	0.017	(0, 90)
129	0.020	(0, 0)	0.020	(90, 0)	0.017	(0, 90)
130	0.023	(0, 0)	0.023	(90, 0)	0.018	(0, 90)
131	0.026	(0, 0)	0.026	(90, 0)	0.022	(0, 90)
132	0.025	(0, 0)	0.025	(90, 0)	0.021	(0, 90)
133	0.048	(180, 80)	0.047	(0, 10)	0.046	(90, 0)
134	0.026	(0, 90)	0.025	(0, 0)	0.025	(90, 0)
135	0.034	(0, 90)	0.033	(0, 0)	0.033	(90, 0)
136	0.022	(0, 90)	0.022	(0, 0)	0.022	(90, 0)
137	0.020	(180, 36)	0.020	(90, 0)	0.020	(0, 54)
138	0.017	(0, 0)	0.017	(90, 0)	0.013	(0, 90)
139	0.020	(0, 0)	0.020	(90, 0)	0.017	(0, 90)
140	0.026	(0, 0)	0.025	(90, 0)	0.023	(0, 90)
141	0.024	(0, 0)	0.024	(90, 0)	0.021	(0, 90)
142	0.022	(0, 0)	0.022	(90, 0)	0.018	(0, 90)
143	0.021	(0, 0)	0.021	(90, 0)	0.006	(0, 90)
144	0.032	(167, 46)	0.025	(76, 1)	0.023	(346, 44)
145	0.020	(0, 0)	0.020	(90, 0)	0.016	(0, 90)
146	0.023	(0, 0)	0.023	(90, 0)	0.020	(0, 90)
147	0.020	(0, 0)	0.020	(90, 0)	0.017	(0, 90)
148	0.028	(0, 0)	0.028	(90, 0)	0.021	(0, 90)
149	0.023	(0, 0)	0.023	(90, 0)	0.020	(0, 90)
1601	0.017	(0, 0)	0.017	(90, 0)	0.012	(0, 90)
1602	0.020	(0, 0)	0.020	(90, 0)	0.019	(0, 90)
1603	0.021	(0, 0)	0.021	(90, 0)	0.020	(0, 90)
219	0.027	(0, 0)	0.027	(90, 0)	0.014	(0, 90)
220	0.031	(0, 0)	0.031	(90, 0)	0.022	(0, 90)
221	0.032	(0, 0)	0.032	(90, 0)	0.023	(0, 90)
222	0.021	(0, 0)	0.021	(90, 0)	0.012	(0, 90)
223	0.028	(0, 0)	0.028	(90, 0)	0.022	(0, 90)
224	0.021	(0, 0)	0.021	(90, 0)	0.016	(0, 90)
225	0.022	(0, 0)	0.022	(90, 0)	0.017	(0, 90)
226	0.027	(0, 0)	0.027	(90, 0)	0.024	(0, 90)
227	0.028	(0, 0)	0.028	(90, 0)	0.025	(0, 90)
228	0.025	(0, 0)	0.025	(90, 0)	0.022	(0, 90)
229	0.039	(180, 82)	0.037	(0, 8)	0.037	(90, 0)
230	0.022	(0, 0)	0.022	(90, 0)	0.019	(0, 90)
231	0.029	(0, 90)	0.028	(0, 0)	0.028	(90, 0)
232	0.038	(0, 90)	0.037	(0, 0)	0.037	(90, 0)
233	0.028	(0, 90)	0.027	(0, 0)	0.027	(90, 0)
234	0.017	(0, 0)	0.017	(90, 0)	0.013	(0, 90)
235	0.029	(0, 0)	0.028	(90, 0)	0.027	(0, 90)
236	0.019	(0, 0)	0.019	(90, 0)	0.016	(0, 90)
237	0.020	(0, 0)	0.020	(90, 0)	0.017	(0, 90)

3D Station Confidence Regions (95.000 percent):

STATION	MAJ-SEMI	(AZ,VANG)	MED-SEMI	(AZ,VANG)	MIN-SEMI	(AZ,VANG)
238	0.025	(0, 0)	0.025	(90, 0)	0.023	(0, 90)
239	0.029	(0, 0)	0.029	(90, 0)	0.027	(0, 90)
240	0.019	(0, 0)	0.019	(90, 0)	0.015	(0, 90)
241	0.023	(0, 0)	0.022	(90, 0)	0.011	(0, 90)
242	0.020	(0, 0)	0.020	(90, 0)	0.017	(0, 90)
243	0.031	(0, 0)	0.030	(90, 0)	0.029	(0, 90)
244	0.037	(0, 0)	0.037	(90, 0)	0.036	(0, 90)
245	0.031	(0, 0)	0.031	(90, 0)	0.027	(0, 90)
246	0.032	(0, 0)	0.032	(90, 0)	0.012	(0, 90)
247	0.031	(0, 0)	0.031	(90, 0)	0.026	(0, 90)
248	0.034	(0, 0)	0.034	(90, 0)	0.028	(0, 90)
249	0.042	(0, 0)	0.042	(90, 0)	0.037	(0, 90)
401	0.030	(180, 1)	0.030	(90, 2)	0.021	(297, 88)
402	0.031	(180, 2)	0.031	(90, 0)	0.022	(0, 88)
404	0.024	(0, 0)	0.024	(90, 0)	0.017	(0, 90)
406	0.024	(180, 6)	0.024	(90, 0)	0.020	(0, 84)
407	0.026	(166, 42)	0.023	(75, 1)	0.022	(344, 48)
408	0.023	(0, 0)	0.023	(90, 0)	0.019	(0, 90)
409	0.028	(0, 5)	0.028	(90, 0)	0.026	(180, 85)
410	0.028	(0, 0)	0.028	(90, 0)	0.025	(0, 90)
411	0.040	(180, 84)	0.039	(0, 6)	0.039	(90, 0)
412	0.037	(169, 69)	0.034	(0, 21)	0.034	(269, 4)
413	0.029	(0, 90)	0.028	(0, 0)	0.028	(90, 0)
414	0.032	(0, 90)	0.031	(0, 0)	0.031	(90, 0)
417	0.022	(0, 90)	0.022	(0, 0)	0.022	(90, 0)
418	0.020	(0, 0)	0.020	(90, 0)	0.017	(0, 90)
419	0.026	(0, 0)	0.026	(90, 0)	0.024	(0, 90)
420	0.021	(180, 5)	0.020	(90, 0)	0.018	(0, 85)
421	0.019	(0, 5)	0.019	(90, 0)	0.016	(180, 85)
422	0.017	(0, 0)	0.017	(90, 0)	0.011	(0, 90)
423	0.018	(0, 0)	0.018	(90, 0)	0.013	(0, 90)
424	0.022	(0, 0)	0.021	(90, 0)	0.009	(0, 90)
425	0.046	(90, 28)	0.046	(0, 0)	0.045	(270, 62)
426	0.022	(0, 0)	0.022	(90, 0)	0.019	(0, 90)
427	0.025	(0, 0)	0.024	(90, 0)	0.022	(0, 90)
429	0.034	(0, 0)	0.034	(90, 0)	0.033	(0, 90)
430	0.023	(0, 0)	0.023	(90, 0)	0.020	(0, 90)
431	0.021	(0, 0)	0.021	(90, 0)	0.018	(0, 90)
432	0.020	(0, 0)	0.020	(90, 0)	0.018	(0, 90)
433	0.033	(0, 0)	0.033	(90, 0)	0.031	(0, 90)
434	0.024	(0, 0)	0.024	(90, 0)	0.020	(0, 90)
435	0.031	(180, 3)	0.031	(90, 4)	0.027	(313, 85)
460	0.028	(0, 0)	0.028	(90, 0)	0.026	(0, 90)
519	0.027	(0, 0)	0.027	(90, 0)	0.014	(0, 90)
520	0.031	(0, 0)	0.031	(90, 0)	0.022	(0, 90)
521	0.030	(0, 0)	0.030	(90, 0)	0.021	(0, 90)
522	0.025	(0, 0)	0.025	(90, 0)	0.018	(0, 90)
523	0.021	(0, 0)	0.021	(90, 0)	0.012	(0, 90)
524	0.029	(0, 0)	0.029	(90, 0)	0.024	(0, 90)
525	0.026	(0, 0)	0.026	(90, 0)	0.022	(0, 90)
526	0.022	(0, 0)	0.022	(90, 0)	0.017	(0, 90)
527	0.027	(0, 0)	0.027	(90, 0)	0.023	(0, 90)
528	0.027	(0, 0)	0.027	(90, 0)	0.025	(0, 90)

3D Station Confidence Regions (95.000 percent):

STATION	MAJ-SEMI	(AZ,VANG)	MED-SEMI	(AZ,VANG)	MIN-SEMI	(AZ,VANG)
529	0.038	(180, 81)	0.037	(0, 9)	0.036	(90, 0)
530	0.028	(180, 5)	0.028	(90, 0)	0.026	(0, 85)
531	0.050	(0, 0)	0.050	(90, 0)	0.050	(0, 90)
532	0.048	(0, 0)	0.048	(90, 0)	0.047	(0, 90)
533	0.032	(0, 90)	0.031	(0, 0)	0.031	(90, 0)
534	0.027	(180, 46)	0.026	(90, 0)	0.026	(0, 44)
535	0.019	(0, 0)	0.019	(90, 0)	0.019	(0, 90)
536	0.026	(0, 90)	0.025	(0, 0)	0.025	(90, 0)
537	0.021	(0, 0)	0.021	(90, 0)	0.017	(0, 90)
538	0.029	(0, 0)	0.028	(90, 0)	0.027	(0, 90)
539	0.020	(0, 0)	0.020	(90, 0)	0.017	(0, 90)
540	0.018	(0, 0)	0.018	(90, 0)	0.014	(0, 90)
541	0.024	(0, 0)	0.024	(90, 0)	0.022	(0, 90)
542	0.020	(0, 0)	0.020	(90, 0)	0.005	(0, 90)
543	0.028	(180, 3)	0.028	(90, 0)	0.021	(0, 87)
544	0.020	(0, 0)	0.020	(90, 0)	0.017	(0, 90)
545	0.025	(0, 0)	0.024	(90, 0)	0.022	(0, 90)
546	0.038	(0, 0)	0.038	(90, 0)	0.037	(0, 90)
547	0.027	(0, 0)	0.027	(90, 0)	0.025	(0, 90)
601	0.021	(0, 0)	0.021	(90, 0)	0.019	(0, 90)
602	0.034	(0, 0)	0.034	(90, 0)	0.033	(0, 90)
603	0.030	(0, 0)	0.030	(90, 0)	0.029	(0, 90)
628	0.032	(0, 0)	0.032	(90, 0)	0.022	(0, 90)
629	0.030	(0, 0)	0.030	(90, 0)	0.021	(0, 90)
630	0.031	(0, 0)	0.031	(90, 0)	0.022	(0, 90)
631	0.022	(0, 0)	0.022	(90, 0)	0.014	(0, 90)
632	0.024	(0, 0)	0.024	(90, 0)	0.019	(0, 90)
633	0.026	(0, 0)	0.026	(90, 0)	0.023	(0, 90)
634	0.039	(180, 83)	0.038	(0, 7)	0.038	(90, 0)
635	0.047	(180, 81)	0.046	(0, 9)	0.046	(90, 0)
636	0.061	(0, 90)	0.061	(0, 0)	0.061	(90, 0)
637	0.038	(0, 90)	0.037	(0, 0)	0.037	(90, 0)
638	0.021	(0, 0)	0.021	(90, 0)	0.007	(0, 90)
639	0.042	(0, 0)	0.042	(90, 0)	0.040	(0, 90)
641	0.028	(0, 0)	0.028	(90, 0)	0.021	(0, 90)
642	0.027	(0, 0)	0.027	(90, 0)	0.024	(0, 90)
801.25	0.034	(0, 0)	0.034	(90, 0)	0.000	(0, 90)
922 RESET	0.031	(0, 0)	0.031	(90, 0)	0.000	(0, 90)
A 277	0.027	(0, 0)	0.027	(90, 0)	0.025	(0, 90)
C 233 RESET	0.016	(0, 0)	0.016	(90, 0)	0.012	(0, 90)
C 252 RESET	0.032	(0, 0)	0.032	(90, 0)	0.000	(0, 90)
C 253	0.033	(0, 0)	0.033	(90, 0)	0.000	(0, 90)
D 277	0.020	(0, 0)	0.020	(90, 0)	0.000	(0, 90)
G 251	0.018	(0, 0)	0.018	(90, 0)	0.000	(0, 90)
H 274	0.040	(0, 0)	0.040	(90, 0)	0.000	(0, 90)
K 56	0.044	(0, 90)	0.000	(0, 0)	0.000	(90, 0)
MOBT	0.020	(0, 90)	0.000	(0, 0)	0.000	(90, 0)
MOCA	0.024	(0, 90)	0.000	(0, 0)	0.000	(90, 0)
MOHV	0.075	(0, 90)	0.000	(0, 0)	0.000	(90, 0)
MONE	0.016	(0, 90)	0.000	(0, 0)	0.000	(90, 0)
P 18	0.020	(0, 0)	0.020	(90, 0)	0.000	(0, 90)
X 274	0.023	(0, 0)	0.023	(90, 0)	0.020	(0, 90)
ZKC1	0.098	(0, 90)	0.000	(0, 0)	0.000	(90, 0)

3D Relative Confidence Regions (95.000 percent):

FROM	TO	MAJ-SEMI (AZ,VANG)	MED-SEMI (AZ,VANG)	MIN-SEMI (AZ,VANG)	DISTANCE	PPM
1001	136	0.016 (0, 90)	0.015 (0, 0)	0.015 (90, 0)	6588.697	2.45
1001	137	0.013 (180, 64)	0.012 (0, 26)	0.012 (90, 0)	4957.428	2.56
1001	1601	0.016 (0, 0)	0.016 (0, 90)	0.016 (90, 0)	19519.726	0.81
1001	1602	0.013 (0, 90)	0.013 (0, 0)	0.013 (90, 0)	6104.543	2.17
1001	1603	0.014 (0, 90)	0.014 (0, 0)	0.014 (90, 0)	6254.851	2.27
1001	417	0.016 (0, 90)	0.016 (0, 0)	0.015 (90, 0)	6686.417	2.43
1001	534	0.022 (180, 63)	0.021 (0, 27)	0.021 (90, 0)	9022.096	2.39
1001	535	0.011 (0, 90)	0.011 (0, 0)	0.010 (90, 0)	4463.284	2.43
1001	536	0.021 (0, 90)	0.020 (0, 0)	0.020 (90, 0)	8981.434	2.31
1001	601	0.023 (0, 0)	0.023 (90, 0)	0.022 (0, 90)	37200.270	0.62
1001	C 233 RESET	0.014 (0, 90)	0.014 (0, 0)	0.014 (90, 0)	8668.637	1.65
1001	G 251	0.017 (0, 0)	0.017 (90, 0)	0.016 (0, 90)	24077.843	0.70
1001	MOBT	0.024 (0, 90)	0.017 (0, 0)	0.017 (90, 0)	61642.616	0.39
1001	MOCA	0.028 (0, 90)	0.017 (0, 0)	0.017 (90, 0)	71915.460	0.39
1001	MONE	0.017 (0, 90)	0.017 (0, 0)	0.017 (90, 0)	33732.155	0.51
1002	138	0.010 (0, 90)	0.010 (0, 0)	0.010 (90, 0)	18942.427	0.52
1002	141	0.020 (0, 90)	0.019 (0, 0)	0.019 (90, 0)	22071.577	0.89
1002	142	0.016 (0, 90)	0.015 (0, 0)	0.015 (90, 0)	6712.468	2.31
1002	1601	0.008 (0, 90)	0.008 (0, 0)	0.008 (90, 0)	3291.424	2.33
1002	1602	0.018 (0, 0)	0.018 (90, 0)	0.018 (0, 90)	17002.082	1.04
1002	1603	0.019 (0, 90)	0.019 (0, 0)	0.019 (90, 0)	23870.268	0.81
1002	234	0.010 (0, 90)	0.010 (0, 0)	0.010 (90, 0)	10018.261	1.00
1002	239	0.025 (0, 90)	0.025 (0, 0)	0.025 (90, 0)	19478.287	1.29
1002	418	0.015 (0, 90)	0.014 (0, 0)	0.014 (90, 0)	8077.332	1.82
1002	422	0.007 (0, 90)	0.006 (0, 0)	0.006 (90, 0)	2287.179	2.98
1002	423	0.009 (0, 90)	0.009 (0, 0)	0.009 (90, 0)	3792.894	2.44

3D Relative Confidence Regions (95.000 percent):

FROM	TO	MAJ-SEMI (AZ,VANG)	MED-SEMI (AZ,VANG)	MIN-SEMI (AZ,VANG)	DISTANCE	PPM
1002	432	0.016 (0, 90)	0.014 (0, 0)	0.014 (90, 0)	17007.666	0.93
1002	433	0.030 (0, 90)	0.030 (0, 0)	0.030 (90, 0)	26404.367	1.14
1002	434	0.018 (0, 90)	0.018 (0, 0)	0.018 (90, 0)	9519.914	1.92
1002	537	0.015 (0, 90)	0.015 (0, 0)	0.014 (90, 0)	8356.777	1.77
1002	541	0.020 (0, 90)	0.019 (0, 0)	0.019 (90, 0)	13097.000	1.50
1002	601	0.021 (0, 0)	0.021 (90, 0)	0.019 (0, 90)	25468.564	0.83
1002	C 233 RESET	0.008 (0, 90)	0.008 (0, 0)	0.008 (90, 0)	11201.264	0.76
1002	D 277	0.023 (0, 0)	0.023 (90, 0)	0.009 (0, 90)	30108.599	0.75
1002	G 251	0.010 (0, 0)	0.010 (90, 0)	0.009 (0, 90)	4219.984	2.28
1002	MOBT	0.021 (0, 90)	0.016 (0, 0)	0.016 (90, 0)	45002.094	0.47
1002	MONE	0.016 (0, 0)	0.016 (0, 90)	0.016 (90, 0)	33048.093	0.48
101	134	0.027 (0, 0)	0.027 (90, 0)	0.027 (0, 90)	16007.522	1.70
101	1601	0.023 (0, 0)	0.023 (90, 0)	0.023 (0, 90)	34941.231	0.67
101	1602	0.025 (0, 90)	0.025 (0, 0)	0.025 (90, 0)	19985.438	1.24
101	601	0.024 (0, 0)	0.024 (90, 0)	0.024 (0, 90)	31234.387	0.76
101	602	0.031 (0, 90)	0.031 (0, 0)	0.031 (90, 0)	16929.794	1.84
101	603	0.030 (0, 90)	0.030 (0, 0)	0.030 (90, 0)	20634.216	1.45
101	C 233 RESET	0.023 (0, 0)	0.023 (90, 0)	0.022 (0, 90)	26769.951	0.85
101	D 277	0.026 (0, 0)	0.026 (90, 0)	0.022 (0, 90)	41053.710	0.64
101	G 251	0.024 (0, 0)	0.024 (90, 0)	0.022 (0, 90)	36028.117	0.66
101	MOBT	0.028 (0, 90)	0.022 (0, 0)	0.022 (90, 0)	77770.027	0.36
101	MOCA	0.031 (0, 90)	0.022 (0, 0)	0.022 (90, 0)	82610.272	0.37
101	MONE	0.024 (0, 90)	0.022 (0, 0)	0.022 (90, 0)	57436.791	0.41
102	1601	0.022 (0, 0)	0.022 (90, 0)	0.020 (0, 90)	28144.344	0.77
102	601	0.006 (0, 90)	0.005 (0, 0)	0.005 (90, 0)	2205.889	2.52
102	602	0.032 (0, 90)	0.031 (0, 0)	0.031 (90, 0)	17524.144	1.80

3D Relative Confidence Regions (95.000 percent):

FROM	TO	MAJ-SEMI (AZ,VANG)	MED-SEMI (AZ,VANG)	MIN-SEMI (AZ,VANG)	DISTANCE	PPM
102	603	0.025	0.024	0.024	11612.132	2.12
		(0, 90)	(0, 0)	(90, 0)		
102	C 233 RESET	0.021	0.021	0.020	30027.123	0.71
		(0, 0)	(90, 0)	(0, 90)		
102	D 277	0.021	0.021	0.018	12025.826	1.78
		(0, 0)	(90, 0)	(0, 90)		
102	G 251	0.022	0.022	0.018	24248.646	0.91
		(0, 0)	(90, 0)	(0, 90)		
102	MOBT	0.026	0.021	0.021	59785.162	0.43
		(0, 90)	(0, 0)	(90, 0)		
102	MONE	0.022	0.021	0.021	57908.098	0.38
		(0, 90)	(0, 0)	(90, 0)		
123	124	0.015	0.014	0.014	15179.983	0.96
		(0, 90)	(0, 0)	(90, 0)		
123	125	0.018	0.017	0.017	8619.576	2.05
		(0, 90)	(0, 0)	(90, 0)		
123	219	0.011	0.011	0.011	19426.887	0.59
		(0, 0)	(90, 0)	(0, 90)		
123	220	0.019	0.019	0.019	10237.398	1.86
		(0, 90)	(0, 0)	(90, 0)		
123	221	0.020	0.019	0.019	8652.459	2.26
		(0, 90)	(0, 0)	(90, 0)		
123	401	0.020	0.018	0.018	18861.854	1.06
		(118, 76)	(2, 7)	(270, 13)		
123	519	0.012	0.012	0.012	17864.772	0.67
		(0, 0)	(90, 0)	(0, 90)		
123	520	0.019	0.019	0.019	10815.661	1.78
		(0, 90)	(0, 0)	(90, 0)		
123	521	0.017	0.017	0.017	7300.843	2.30
		(0, 90)	(0, 0)	(90, 0)		
123	628	0.020	0.020	0.020	19500.858	1.05
		(0, 90)	(0, 0)	(90, 0)		
123	629	0.017	0.017	0.017	7384.250	2.29
		(0, 90)	(0, 0)	(90, 0)		
123	630	0.019	0.019	0.019	8903.830	2.13
		(0, 90)	(0, 0)	(90, 0)		
123	801.25	0.024	0.024	0.012	26670.282	0.91
		(0, 0)	(90, 0)	(0, 90)		
123	922 RESET	0.018	0.018	0.012	8473.881	2.14
		(0, 0)	(90, 0)	(0, 90)		
123	MOCA	0.026	0.025	0.025	39714.411	0.66
		(0, 90)	(0, 0)	(90, 0)		
123	MONE	0.025	0.025	0.020	93222.264	0.27
		(0, 0)	(90, 0)	(0, 90)		
123	P 18	0.020	0.020	0.012	9732.746	2.04
		(0, 0)	(90, 0)	(0, 90)		
124	219	0.010	0.010	0.010	4247.384	2.41
		(0, 90)	(0, 0)	(90, 0)		
125	219	0.019	0.019	0.019	13232.198	1.44
		(0, 90)	(0, 0)	(90, 0)		
126	127	0.011	0.011	0.011	4837.088	2.27
		(0, 90)	(0, 0)	(90, 0)		

3D Relative Confidence Regions (95.000 percent):

FROM	TO	MAJ-SEMI (AZ,VANG)	MED-SEMI (AZ,VANG)	MIN-SEMI (AZ,VANG)	DISTANCE	PPM
126	128	0.016 (0, 90)	0.016 (0, 0)	0.016 (90, 0)	8201.848	1.94
126	129	0.021 (0, 0)	0.020 (90, 0)	0.018 (0, 90)	19533.659	1.05
126	130	0.016 (0, 90)	0.016 (0, 0)	0.016 (90, 0)	18043.314	0.88
126	131	0.021 (0, 90)	0.020 (0, 0)	0.020 (90, 0)	23489.129	0.89
126	222	0.011 (0, 90)	0.011 (0, 0)	0.011 (90, 0)	5248.453	2.05
126	223	0.021 (0, 90)	0.021 (0, 0)	0.021 (90, 0)	11380.892	1.86
126	224	0.013 (0, 90)	0.013 (0, 0)	0.013 (90, 0)	19272.602	0.70
126	225	0.015 (0, 90)	0.015 (0, 0)	0.015 (90, 0)	16131.996	0.93
126	404	0.016 (0, 90)	0.015 (0, 0)	0.015 (90, 0)	6824.575	2.30
126	406	0.018 (180, 65)	0.017 (0, 25)	0.017 (90, 0)	20622.783	0.90
126	407	0.023 (165, 67)	0.016 (0, 22)	0.016 (268, 5)	19715.647	1.18
126	408	0.017 (0, 90)	0.016 (0, 0)	0.016 (90, 0)	14534.990	1.16
126	522	0.017 (0, 90)	0.017 (0, 0)	0.017 (90, 0)	7803.309	2.17
126	523	0.011 (0, 90)	0.011 (0, 0)	0.011 (90, 0)	5380.867	2.05
126	524	0.024 (0, 90)	0.023 (0, 0)	0.023 (90, 0)	12327.532	1.97
126	525	0.021 (0, 90)	0.020 (0, 0)	0.020 (90, 0)	23490.566	0.88
126	526	0.015 (0, 90)	0.015 (0, 0)	0.015 (90, 0)	16107.216	0.93
126	631	0.012 (0, 90)	0.011 (0, 0)	0.011 (90, 0)	4973.999	2.38
126	632	0.018 (0, 90)	0.017 (0, 0)	0.017 (90, 0)	24130.333	0.73
126	G 253	0.019 (0, 0)	0.019 (90, 0)	0.009 (0, 90)	14550.822	1.30
126	MOCA	0.025 (0, 90)	0.019 (0, 0)	0.019 (90, 0)	36028.295	0.69
126	MONE	0.019 (0, 0)	0.019 (90, 0)	0.018 (0, 90)	73351.763	0.26
126	P 18	0.010 (0, 0)	0.010 (90, 0)	0.009 (0, 90)	12618.967	0.77
127	P 18	0.014 (0, 0)	0.014 (90, 0)	0.014 (0, 90)	13188.556	1.04
128	P 18	0.017 (0, 0)	0.017 (0, 90)	0.017 (90, 0)	10948.055	1.52
129	134	0.028 (0, 0)	0.028 (90, 0)	0.027 (0, 90)	24028.480	1.18

3D Relative Confidence Regions (95.000 percent):

FROM	TO	MAJ-SEMI (AZ,VANG)	MED-SEMI (AZ,VANG)	MIN-SEMI (AZ,VANG)	DISTANCE	PPM
129	224	0.020 (0, 0)	0.020 (90, 0)	0.019 (0, 90)	11661.206	1.75
129	226	0.020 (0, 90)	0.019 (0, 0)	0.019 (90, 0)	19596.324	1.00
129	227	0.021 (0, 90)	0.020 (0, 0)	0.020 (90, 0)	19252.913	1.07
129	228	0.014 (0, 90)	0.014 (0, 0)	0.014 (90, 0)	6416.234	2.21
129	230	0.008 (0, 90)	0.008 (0, 0)	0.008 (90, 0)	3490.690	2.43
129	231	0.031 (0, 0)	0.030 (90, 0)	0.030 (0, 90)	28689.497	1.06
129	410	0.021 (0, 90)	0.020 (0, 0)	0.020 (90, 0)	18110.546	1.14
129	527	0.019 (0, 90)	0.019 (0, 0)	0.018 (90, 0)	22240.384	0.84
129	528	0.019 (0, 90)	0.019 (0, 0)	0.019 (90, 0)	9674.752	1.94
129	529	0.036 (180, 70)	0.035 (0, 20)	0.035 (90, 0)	18520.240	1.93
129	530	0.020 (180, 65)	0.019 (0, 25)	0.019 (90, 0)	8339.286	2.38
129	531	0.048 (0, 90)	0.048 (0, 0)	0.048 (90, 0)	23800.871	2.01
129	532	0.045 (0, 90)	0.045 (0, 0)	0.045 (90, 0)	21109.954	2.13
129	633	0.018 (0, 90)	0.018 (0, 0)	0.018 (90, 0)	22249.339	0.82
129	636	0.060 (0, 90)	0.060 (0, 0)	0.060 (90, 0)	31506.200	1.90
129	C 253	0.027 (0, 0)	0.026 (90, 0)	0.017 (0, 90)	15888.543	1.69
129	MOCA	0.025 (0, 90)	0.020 (0, 0)	0.020 (90, 0)	55084.714	0.46
129	MONE	0.021 (0, 90)	0.020 (0, 0)	0.020 (90, 0)	73719.486	0.29
130	224	0.009 (0, 90)	0.009 (0, 0)	0.009 (90, 0)	3919.493	2.36
131	224	0.017 (0, 90)	0.016 (0, 0)	0.016 (90, 0)	7298.689	2.31
132	226	0.014 (0, 90)	0.013 (0, 0)	0.013 (90, 0)	5832.668	2.34
132	227	0.015 (0, 90)	0.015 (0, 0)	0.015 (90, 0)	6711.946	2.27
132	228	0.019 (0, 90)	0.019 (0, 0)	0.019 (90, 0)	14361.315	1.32
132	409	0.016 (0, 78)	0.015 (180, 12)	0.015 (90, 0)	6214.743	2.61
132	410	0.016 (0, 90)	0.015 (0, 0)	0.015 (90, 0)	6741.977	2.31
132	527	0.011 (0, 90)	0.011 (0, 0)	0.011 (90, 0)	4822.949	2.36

3D Relative Confidence Regions (95.000 percent):

FROM	TO	MAJ-SEMI (AZ,VANG)	MED-SEMI (AZ,VANG)	MIN-SEMI (AZ,VANG)	DISTANCE	PPM
132	528	0.020 (0, 90)	0.020 (0, 0)	0.020 (90, 0)	11556.655	1.72
132	633	0.010 (0, 90)	0.010 (0, 0)	0.010 (90, 0)	4375.794	2.37
132	C 253	0.026 (0, 0)	0.026 (90, 0)	0.021 (0, 90)	14356.083	1.84
132	MOCA	0.028 (0, 90)	0.025 (0, 0)	0.025 (90, 0)	42468.937	0.65
132	MONE	0.025 (0, 0)	0.025 (90, 0)	0.024 (0, 90)	56687.742	0.44
133	229	0.030 (180, 64)	0.029 (0, 26)	0.029 (90, 0)	12741.994	2.35
133	MOCA	0.049 (180, 85)	0.047 (0, 5)	0.046 (90, 0)	66495.148	0.74
134	135	0.023 (0, 90)	0.023 (0, 0)	0.023 (90, 0)	9987.074	2.32
134	232	0.029 (0, 90)	0.028 (0, 0)	0.028 (90, 0)	13300.014	2.16
134	233	0.009 (0, 90)	0.009 (0, 0)	0.009 (90, 0)	3666.476	2.40
134	411	0.031 (180, 75)	0.030 (90, 0)	0.030 (0, 15)	14657.811	2.13
134	412	0.027 (169, 63)	0.024 (0, 27)	0.024 (268, 4)	11302.689	2.37
134	413	0.015 (0, 90)	0.014 (0, 0)	0.014 (90, 0)	6792.342	2.22
134	414	0.018 (0, 90)	0.018 (0, 0)	0.018 (90, 0)	8028.413	2.28
134	533	0.020 (0, 90)	0.019 (0, 0)	0.019 (90, 0)	8320.842	2.34
134	637	0.028 (0, 90)	0.028 (0, 0)	0.028 (90, 0)	12912.132	2.16
134	MOCA	0.032 (0, 90)	0.025 (0, 0)	0.025 (90, 0)	67737.314	0.47
134	MONE	0.027 (0, 90)	0.025 (0, 0)	0.025 (90, 0)	57627.493	0.47
135	MOCA	0.038 (0, 90)	0.033 (0, 0)	0.033 (90, 0)	65558.077	0.58
135	MONE	0.034 (0, 90)	0.033 (0, 0)	0.033 (90, 0)	47643.869	0.72
136	MONE	0.023 (0, 90)	0.022 (0, 0)	0.022 (90, 0)	40248.537	0.58
137	MONE	0.021 (180, 73)	0.020 (0, 17)	0.020 (90, 0)	31746.765	0.66
138	139	0.012 (0, 90)	0.012 (0, 0)	0.012 (90, 0)	5585.403	2.19
138	140	0.021 (0, 90)	0.020 (0, 0)	0.020 (90, 0)	13427.346	1.55
138	141	0.018 (0, 90)	0.017 (0, 0)	0.017 (90, 0)	7850.747	2.25
138	142	0.018 (0, 90)	0.018 (0, 0)	0.018 (90, 0)	23256.068	0.77

3D Relative Confidence Regions (95.000 percent):

FROM	TO	MAJ-SEMI (AZ,VANG)	MED-SEMI (AZ,VANG)	MIN-SEMI (AZ,VANG)	DISTANCE	PPM
138	149	0.016 (0, 90)	0.015 (0, 0)	0.015 (90, 0)	6978.856	2.22
138	235	0.023 (0, 90)	0.023 (0, 0)	0.023 (90, 0)	10725.693	2.19
138	236	0.009 (0, 90)	0.009 (0, 0)	0.009 (90, 0)	3844.652	2.35
138	237	0.014 (0, 90)	0.013 (0, 0)	0.013 (90, 0)	9318.629	1.45
138	238	0.020 (0, 90)	0.020 (0, 0)	0.020 (90, 0)	15091.416	1.36
138	239	0.024 (0, 90)	0.024 (0, 0)	0.024 (90, 0)	11841.253	2.04
138	419	0.021 (0, 90)	0.019 (90, 0)	0.019 (0, 0)	8813.352	2.34
138	420	0.014 (180, 72)	0.013 (0, 18)	0.013 (90, 0)	5962.806	2.38
138	421	0.014 (0, 65)	0.013 (180, 25)	0.013 (90, 0)	10357.736	1.31
138	422	0.012 (0, 90)	0.011 (0, 0)	0.011 (90, 0)	16897.897	0.69
138	423	0.013 (0, 90)	0.013 (0, 0)	0.013 (90, 0)	20363.188	0.65
138	432	0.013 (0, 90)	0.011 (0, 0)	0.011 (90, 0)	4877.600	2.67
138	433	0.029 (0, 90)	0.029 (0, 0)	0.029 (90, 0)	13920.861	2.09
138	434	0.019 (0, 90)	0.019 (0, 0)	0.019 (90, 0)	12470.008	1.52
138	538	0.024 (0, 90)	0.023 (0, 0)	0.023 (90, 0)	10725.008	2.21
138	539	0.011 (0, 90)	0.011 (0, 0)	0.011 (90, 0)	4834.200	2.30
138	540	0.006 (0, 90)	0.006 (0, 0)	0.006 (90, 0)	2585.415	2.51
138	541	0.019 (0, 90)	0.019 (0, 0)	0.019 (90, 0)	9841.943	1.93
138	C 233 RESET	0.008 (0, 90)	0.008 (0, 0)	0.008 (90, 0)	15342.903	0.55
138	MOBT	0.023 (0, 90)	0.017 (0, 0)	0.017 (90, 0)	63600.962	0.36
138	MONE	0.017 (0, 90)	0.017 (0, 0)	0.017 (90, 0)	46961.898	0.37
139	C 233 RESET	0.014 (0, 90)	0.013 (0, 0)	0.013 (90, 0)	10317.873	1.33
140	C 233 RESET	0.020 (0, 90)	0.020 (0, 0)	0.020 (90, 0)	10871.649	1.88
143	240	0.018 (180, 14)	0.017 (90, 0)	0.016 (0, 76)	23101.704	0.76
143	D 277	0.006 (0, 90)	0.006 (0, 0)	0.006 (90, 0)	2366.695	2.46
144	240	0.029 (166, 61)	0.021 (267, 6)	0.021 (0, 29)	13952.698	2.08

3D Relative Confidence Regions (95.000 percent):

FROM	TO	MAJ-SEMI (AZ,VANG)	MED-SEMI (AZ,VANG)	MIN-SEMI (AZ,VANG)	DISTANCE	PPM
144	D 277	0.030 (168, 60)	0.018 (0, 29)	0.018 (267, 5)	8477.979	3.59
145	146	0.016 (0, 90)	0.015 (0, 0)	0.015 (90, 0)	15674.170	1.00
145	147	0.012 (0, 90)	0.012 (0, 0)	0.012 (90, 0)	17327.359	0.71
145	148	0.020 (0, 0)	0.020 (90, 0)	0.019 (0, 90)	25369.105	0.80
145	240	0.009 (0, 0)	0.009 (90, 0)	0.009 (0, 90)	16697.858	0.56
145	242	0.012 (0, 90)	0.012 (0, 0)	0.012 (90, 0)	15748.223	0.76
145	243	0.025 (0, 90)	0.025 (0, 0)	0.024 (90, 0)	15014.891	1.66
145	244	0.033 (0, 90)	0.033 (0, 0)	0.033 (90, 0)	21360.948	1.53
145	245	0.025 (0, 0)	0.025 (90, 0)	0.024 (0, 90)	18046.326	1.37
145	426	0.014 (0, 90)	0.013 (0, 0)	0.013 (90, 0)	11970.405	1.16
145	427	0.016 (0, 90)	0.016 (0, 0)	0.016 (90, 0)	8422.813	1.92
145	429	0.029 (0, 90)	0.029 (0, 0)	0.029 (90, 0)	18575.264	1.58
145	430	0.015 (0, 90)	0.015 (0, 0)	0.015 (90, 0)	17773.154	0.87
145	431	0.007 (0, 90)	0.007 (0, 0)	0.006 (90, 0)	2647.450	2.80
145	435	0.025 (135, 46)	0.024 (18, 24)	0.024 (270, 35)	16009.306	1.56
145	460	0.021 (0, 90)	0.021 (0, 0)	0.021 (90, 0)	13028.156	1.64
145	544	0.012 (0, 90)	0.012 (0, 0)	0.012 (90, 0)	15746.046	0.78
145	545	0.016 (0, 90)	0.016 (0, 0)	0.016 (90, 0)	8355.906	1.95
145	546	0.034 (0, 90)	0.034 (0, 0)	0.034 (90, 0)	23769.563	1.43
145	547	0.021 (0, 90)	0.020 (0, 0)	0.020 (90, 0)	15172.952	1.36
145	641	0.021 (0, 0)	0.021 (90, 0)	0.019 (0, 90)	25892.898	0.80
145	642	0.019 (0, 90)	0.019 (0, 0)	0.019 (90, 0)	8481.691	2.23
145	A 277	0.021 (0, 90)	0.021 (0, 0)	0.021 (90, 0)	19558.577	1.07
145	H 274	0.036 (0, 0)	0.036 (90, 0)	0.016 (0, 90)	39155.457	0.91
145	MOBT	0.021 (0, 90)	0.020 (0, 0)	0.020 (90, 0)	24935.239	0.83
145	MONE	0.021 (0, 90)	0.020 (0, 0)	0.020 (90, 0)	52720.075	0.40

3D Relative Confidence Regions (95.000 percent):

FROM	TO	MAJ-SEMI (AZ,VANG)	MED-SEMI (AZ,VANG)	MIN-SEMI (AZ,VANG)	DISTANCE	PPM
145	X 274	0.013	0.012	0.012	5896.039	2.16
		(0, 90)	(0, 0)	(90, 0)		
146	240	0.013	0.013	0.013	5985.462	2.24
		(0, 90)	(0, 0)	(90, 0)		
147	240	0.008	0.007	0.007	3067.199	2.74
		(0, 90)	(0, 0)	(90, 0)		
148	245	0.019	0.019	0.019	8777.627	2.16
		(0, 90)	(0, 0)	(90, 0)		
148	431	0.021	0.021	0.020	24407.428	0.87
		(0, 0)	(90, 0)	(0, 90)		
148	435	0.021	0.020	0.020	9476.211	2.25
		(128, 74)	(2, 10)	(270, 13)		
148	641	0.004	0.004	0.004	1586.491	2.69
		(0, 90)	(0, 0)	(90, 0)		
148	642	0.025	0.025	0.024	20159.658	1.25
		(0, 0)	(90, 0)	(0, 90)		
148	H 274	0.031	0.031	0.021	13985.565	2.21
		(0, 0)	(90, 0)	(0, 90)		
148	MOBT	0.028	0.028	0.026	49815.008	0.56
		(0, 0)	(90, 0)	(0, 90)		
148	MONE	0.028	0.028	0.025	74108.148	0.37
		(0, 0)	(90, 0)	(0, 90)		
149	C 233 RESET	0.017	0.017	0.017	19342.120	0.89
		(0, 90)	(0, 0)	(90, 0)		
1601	MONE	0.017	0.017	0.017	29769.156	0.58
		(0, 90)	(0, 0)	(90, 0)		
1602	MOBT	0.026	0.020	0.020	61051.809	0.43
		(0, 90)	(0, 0)	(90, 0)		
1602	MONE	0.020	0.020	0.020	37552.310	0.54
		(0, 90)	(0, 0)	(90, 0)		
1603	MONE	0.021	0.021	0.021	30327.414	0.71
		(0, 90)	(0, 0)	(90, 0)		
219	220	0.019	0.019	0.019	11480.619	1.69
		(0, 90)	(0, 0)	(90, 0)		
219	221	0.022	0.022	0.022	28079.324	0.79
		(0, 0)	(0, 90)	(90, 0)		
219	401	0.017	0.015	0.015	6506.736	2.64
		(124, 75)	(2, 8)	(270, 12)		
219	402	0.018	0.016	0.016	6725.066	2.71
		(180, 74)	(0, 16)	(90, 0)		
219	519	0.004	0.004	0.004	1562.598	2.60
		(0, 90)	(0, 0)	(90, 0)		
219	520	0.019	0.019	0.019	10876.199	1.78
		(0, 90)	(0, 0)	(90, 0)		
219	521	0.020	0.020	0.020	26157.797	0.75
		(0, 0)	(0, 90)	(90, 0)		
219	628	0.018	0.018	0.018	8194.266	2.21
		(0, 90)	(0, 0)	(90, 0)		
219	629	0.020	0.020	0.020	24901.910	0.79
		(0, 90)	(0, 0)	(90, 0)		
219	630	0.021	0.021	0.021	17029.038	1.22
		(0, 90)	(0, 0)	(90, 0)		

3D Relative Confidence Regions (95.000 percent):

FROM	TO	MAJ-SEMI (AZ,VANG)	MED-SEMI (AZ,VANG)	MIN-SEMI (AZ,VANG)	DISTANCE	PPM
219	801.25	0.022 (0, 0)	0.022 (90, 0)	0.014 (0, 90)	9725.677	2.27
219	922 RESET	0.020 (0, 0)	0.020 (90, 0)	0.014 (0, 90)	16857.822	1.20
219	MOCA	0.027 (0, 0)	0.027 (90, 0)	0.027 (0, 90)	58855.612	0.46
219	MONE	0.027 (0, 0)	0.027 (90, 0)	0.021 (0, 90)	102885.873	0.26
219	P 18	0.022 (0, 0)	0.022 (90, 0)	0.014 (0, 90)	26858.635	0.82
222	P 18	0.012 (0, 0)	0.012 (0, 90)	0.012 (90, 0)	7387.542	1.63
223	P 18	0.022 (0, 90)	0.022 (0, 0)	0.021 (90, 0)	13978.817	1.55
224	225	0.008 (0, 90)	0.007 (0, 0)	0.007 (90, 0)	3214.770	2.38
224	406	0.014 (180, 66)	0.011 (0, 24)	0.011 (90, 0)	4911.794	2.78
224	407	0.021 (165, 67)	0.010 (0, 22)	0.010 (268, 5)	4148.772	4.97
224	408	0.012 (0, 90)	0.011 (0, 0)	0.011 (90, 0)	4904.847	2.47
224	525	0.017 (0, 90)	0.016 (0, 0)	0.016 (90, 0)	7299.104	2.30
224	526	0.008 (0, 90)	0.007 (0, 0)	0.007 (90, 0)	3179.599	2.41
224	632	0.012 (0, 90)	0.012 (0, 0)	0.012 (90, 0)	5077.529	2.35
224	MOCA	0.027 (0, 90)	0.021 (0, 0)	0.021 (90, 0)	54596.071	0.49
224	MONE	0.022 (0, 90)	0.021 (0, 0)	0.021 (90, 0)	84242.801	0.26
229	529	0.015 (0, 90)	0.015 (0, 0)	0.015 (90, 0)	6467.425	2.37
229	634	0.009 (0, 90)	0.008 (0, 0)	0.008 (90, 0)	3534.899	2.49
229	635	0.030 (180, 74)	0.030 (0, 16)	0.029 (90, 0)	12913.121	2.34
229	MOCA	0.040 (180, 87)	0.037 (0, 3)	0.037 (90, 0)	66506.606	0.61
229	MONE	0.040 (180, 86)	0.037 (0, 4)	0.037 (90, 0)	67853.897	0.59
230	MOCA	0.027 (0, 90)	0.022 (0, 0)	0.022 (90, 0)	57629.379	0.46
230	MONE	0.023 (0, 90)	0.022 (0, 0)	0.022 (90, 0)	72285.108	0.32
231	232	0.032 (0, 90)	0.032 (0, 0)	0.032 (90, 0)	27155.691	1.19
231	411	0.034 (180, 75)	0.033 (0, 15)	0.033 (90, 0)	26448.792	1.29
231	412	0.031 (168, 62)	0.027 (0, 27)	0.027 (268, 5)	20232.853	1.53

3D Relative Confidence Regions (95.000 percent):

FROM	TO	MAJ-SEMI (AZ,VANG)	MED-SEMI (AZ,VANG)	MIN-SEMI (AZ,VANG)	DISTANCE	PPM
231	413	0.018 (0, 90)	0.017 (0, 0)	0.017 (90, 0)	8744.294	2.03
231	414	0.025 (180, 69)	0.024 (0, 21)	0.024 (90, 0)	21689.854	1.13
231	637	0.032 (180, 74)	0.031 (0, 16)	0.031 (90, 0)	26858.788	1.18
231	MOCA	0.034 (0, 90)	0.028 (0, 0)	0.028 (90, 0)	58447.697	0.58
231	MONE	0.030 (0, 90)	0.028 (0, 0)	0.028 (90, 0)	45869.328	0.65
233	MONE	0.028 (0, 90)	0.027 (0, 0)	0.027 (90, 0)	54380.238	0.52
234	C 233 RESET	0.006 (0, 90)	0.006 (0, 0)	0.005 (90, 0)	2359.290	2.59
235	C 233 RESET	0.024 (0, 90)	0.024 (0, 0)	0.024 (90, 0)	24902.000	0.98
236	C 233 RESET	0.012 (0, 90)	0.012 (0, 0)	0.012 (90, 0)	16486.368	0.73
237	C 233 RESET	0.012 (0, 90)	0.012 (0, 0)	0.012 (90, 0)	6044.650	2.05
238	C 233 RESET	0.020 (0, 90)	0.020 (0, 0)	0.019 (90, 0)	9816.270	2.01
240	241	0.020 (180, 14)	0.019 (90, 0)	0.018 (0, 76)	25402.200	0.77
240	242	0.008 (0, 90)	0.007 (0, 0)	0.007 (90, 0)	3190.429	2.49
240	243	0.025 (0, 90)	0.024 (0, 0)	0.024 (90, 0)	13903.084	1.78
240	244	0.032 (0, 90)	0.032 (0, 0)	0.032 (90, 0)	17851.476	1.82
240	424	0.018 (180, 14)	0.018 (90, 0)	0.017 (0, 76)	18035.557	1.01
240	426	0.012 (0, 90)	0.011 (0, 0)	0.011 (90, 0)	4858.238	2.37
240	427	0.017 (0, 90)	0.017 (0, 0)	0.017 (90, 0)	10811.294	1.55
240	429	0.029 (0, 90)	0.029 (0, 0)	0.029 (90, 0)	16281.236	1.79
240	430	0.013 (0, 90)	0.013 (90, 0)	0.013 (0, 0)	5531.476	2.34
240	460	0.021 (0, 90)	0.021 (0, 0)	0.021 (90, 0)	11942.054	1.78
240	542	0.017 (180, 14)	0.017 (90, 0)	0.016 (0, 76)	22537.686	0.76
240	544	0.008 (0, 90)	0.007 (0, 0)	0.007 (90, 0)	3189.644	2.61
240	545	0.017 (0, 90)	0.017 (0, 0)	0.017 (90, 0)	10861.154	1.56
240	546	0.034 (0, 90)	0.033 (0, 0)	0.033 (90, 0)	17544.302	1.91
240	547	0.020 (0, 90)	0.019 (0, 0)	0.019 (90, 0)	9700.719	2.04

3D Relative Confidence Regions (95.000 percent):

FROM	TO	MAJ-SEMI (AZ,VANG)	MED-SEMI (AZ,VANG)	MIN-SEMI (AZ,VANG)	DISTANCE	PPM
240	638	0.018 (180, 14)	0.017 (90, 0)	0.017 (0, 76)	22950.053	0.77
240	A 277	0.020 (0, 90)	0.019 (0, 0)	0.019 (90, 0)	9057.517	2.16
240	D 277	0.017 (180, 13)	0.016 (90, 0)	0.015 (0, 77)	20994.299	0.80
240	MOBT	0.021 (0, 90)	0.019 (0, 0)	0.019 (90, 0)	34624.113	0.60
240	MONE	0.021 (0, 90)	0.019 (0, 0)	0.019 (90, 0)	45442.545	0.46
240	X 274	0.014 (0, 90)	0.014 (0, 0)	0.014 (90, 0)	10954.685	1.32
241	D 277	0.011 (0, 90)	0.011 (0, 0)	0.011 (90, 0)	4700.411	2.38
246	248	0.028 (0, 90)	0.027 (0, 0)	0.027 (90, 0)	17332.658	1.59
246	249	0.036 (0, 90)	0.036 (0, 0)	0.036 (90, 0)	24422.616	1.48
246	C 252 RESET	0.012 (0, 90)	0.012 (0, 0)	0.012 (90, 0)	5170.988	2.29
246	K 56	0.043 (0, 90)	0.032 (0, 0)	0.032 (90, 0)	32068.708	1.34
246	MOBT	0.032 (0, 0)	0.032 (90, 0)	0.023 (0, 90)	42657.236	0.75
246	MOHV	0.075 (0, 90)	0.032 (0, 0)	0.032 (90, 0)	52736.448	1.42
246	ZKC1	0.097 (0, 90)	0.032 (0, 0)	0.032 (90, 0)	55208.960	1.77
247	248	0.018 (0, 90)	0.018 (0, 0)	0.018 (90, 0)	8227.017	2.21
247	249	0.032 (0, 90)	0.032 (0, 0)	0.032 (90, 0)	15678.549	2.04
247	C 252 RESET	0.026 (0, 90)	0.026 (0, 0)	0.026 (90, 0)	17395.821	1.52
247	K 56	0.039 (0, 90)	0.031 (0, 0)	0.031 (90, 0)	19096.543	2.05
247	MOBT	0.033 (0, 90)	0.031 (0, 0)	0.031 (90, 0)	54876.621	0.59
247	MOHV	0.077 (0, 90)	0.031 (0, 0)	0.031 (90, 0)	66969.591	1.15
247	ZKC1	0.098 (0, 90)	0.031 (0, 0)	0.031 (90, 0)	62343.255	1.57
402	MOCA	0.032 (180, 70)	0.031 (0, 20)	0.031 (90, 0)	52194.430	0.61
404	P 18	0.017 (0, 90)	0.017 (0, 0)	0.017 (90, 0)	16233.744	1.07
409	MOCA	0.032 (0, 87)	0.028 (180, 3)	0.028 (90, 0)	44054.308	0.72
417	MONE	0.023 (0, 90)	0.022 (0, 0)	0.022 (90, 0)	31324.258	0.74
418	C 233 RESET	0.015 (0, 90)	0.014 (0, 0)	0.014 (90, 0)	8038.779	1.82

3D Relative Confidence Regions (95.000 percent):

FROM	TO	MAJ-SEMI (AZ,VANG)	MED-SEMI (AZ,VANG)	MIN-SEMI (AZ,VANG)	DISTANCE	PPM
419	C 233 RESET	0.022 (0, 90)	0.021 (0, 0)	0.021 (90, 0)	22476.746	0.97
420	C 233 RESET	0.015 (0, 90)	0.014 (0, 0)	0.014 (90, 0)	9387.300	1.58
421	C 233 RESET	0.012 (0, 63)	0.011 (180, 27)	0.011 (90, 0)	5011.263	2.40
424	D 277	0.009 (0, 90)	0.009 (0, 0)	0.009 (90, 0)	3732.871	2.41
425	D 277	0.045 (90, 72)	0.043 (0, 0)	0.043 (270, 18)	21118.822	2.15
425	MOBT	0.047 (90, 73)	0.046 (0, 0)	0.046 (270, 17)	37271.861	1.27
522	P 18	0.018 (0, 90)	0.018 (0, 0)	0.018 (90, 0)	16769.685	1.10
523	P 18	0.013 (0, 0)	0.012 (90, 0)	0.012 (0, 90)	8037.785	1.56
524	P 18	0.024 (0, 90)	0.023 (0, 0)	0.023 (90, 0)	14885.067	1.65
529	MOCA	0.040 (180, 87)	0.037 (0, 3)	0.036 (90, 0)	71990.754	0.55
529	MONE	0.039 (180, 86)	0.037 (0, 4)	0.036 (90, 0)	73194.977	0.53
530	MOCA	0.032 (0, 90)	0.028 (0, 0)	0.028 (90, 0)	60369.292	0.52
530	MONE	0.029 (180, 81)	0.028 (0, 9)	0.028 (90, 0)	69269.568	0.41
531	MOCA	0.052 (0, 90)	0.050 (0, 0)	0.050 (90, 0)	58557.195	0.89
531	MONE	0.051 (0, 90)	0.050 (0, 0)	0.050 (90, 0)	51128.255	0.99
532	MOCA	0.050 (0, 90)	0.048 (0, 0)	0.048 (90, 0)	65563.402	0.76
532	MONE	0.048 (0, 90)	0.048 (0, 0)	0.048 (90, 0)	58988.519	0.82
533	MOCA	0.037 (0, 90)	0.031 (0, 0)	0.031 (90, 0)	75991.799	0.48
533	MONE	0.033 (0, 90)	0.031 (0, 0)	0.031 (90, 0)	59324.155	0.55
534	MONE	0.027 (180, 72)	0.026 (0, 18)	0.026 (90, 0)	40959.361	0.66
535	MONE	0.020 (0, 90)	0.019 (0, 0)	0.019 (90, 0)	30649.811	0.65
536	MONE	0.026 (0, 90)	0.025 (0, 0)	0.025 (90, 0)	31440.900	0.83
537	C 233 RESET	0.015 (0, 90)	0.014 (0, 0)	0.014 (90, 0)	8300.721	1.78
538	C 233 RESET	0.025 (0, 90)	0.024 (0, 0)	0.024 (90, 0)	24901.853	0.99
539	C 233 RESET	0.014 (0, 90)	0.013 (0, 0)	0.013 (90, 0)	16757.537	0.81
540	C 233 RESET	0.010 (0, 90)	0.010 (0, 0)	0.010 (90, 0)	13354.870	0.78

3D Relative Confidence Regions (95.000 percent):

FROM	TO	MAJ-SEMI (AZ,VANG)	MED-SEMI (AZ,VANG)	MIN-SEMI (AZ,VANG)	DISTANCE	PPM
542	D 277	0.005 (0, 90)	0.004 (0, 0)	0.004 (90, 0)	1849.776	2.52
543	D 277	0.021 (180, 62)	0.020 (90, 0)	0.020 (0, 28)	8477.106	2.47
543	MOBT	0.029 (180, 64)	0.028 (0, 26)	0.028 (90, 0)	46778.219	0.61
601	MOBT	0.026 (0, 90)	0.021 (0, 0)	0.021 (90, 0)	58726.155	0.45
601	MONE	0.023 (0, 90)	0.021 (0, 0)	0.021 (90, 0)	58476.214	0.39
631	P 18	0.014 (0, 90)	0.014 (0, 0)	0.014 (90, 0)	14108.597	1.02
634	MOCA	0.041 (180, 88)	0.038 (0, 2)	0.038 (90, 0)	63009.453	0.65
634	MONE	0.040 (180, 86)	0.038 (0, 4)	0.038 (90, 0)	66219.788	0.61
635	MOCA	0.048 (180, 86)	0.046 (0, 4)	0.046 (90, 0)	66819.183	0.73
635	MONE	0.048 (180, 84)	0.046 (0, 6)	0.046 (90, 0)	79752.969	0.60
636	MONE	0.061 (0, 90)	0.061 (0, 0)	0.061 (90, 0)	42882.867	1.43
638	D 277	0.007 (0, 90)	0.007 (0, 0)	0.007 (90, 0)	2851.791	2.56
639	D 277	0.040 (0, 0)	0.040 (90, 0)	0.040 (0, 90)	21279.259	1.90
639	MOBT	0.043 (0, 90)	0.042 (0, 0)	0.042 (90, 0)	37764.011	1.14
639	MONE	0.042 (0, 90)	0.042 (0, 0)	0.042 (90, 0)	41676.882	1.01
C 233 RESET	MOBT	0.022 (0, 90)	0.016 (0, 0)	0.016 (90, 0)	53949.801	0.41
C 233 RESET	MONE	0.016 (0, 90)	0.016 (0, 0)	0.016 (90, 0)	31634.130	0.52
C 252 RESET	MOBT	0.032 (0, 0)	0.032 (90, 0)	0.020 (0, 90)	43848.059	0.74
C 252 RESET	MOHV	0.075 (0, 90)	0.032 (0, 0)	0.032 (90, 0)	49749.540	1.51
D 277	MOBT	0.020 (0, 90)	0.020 (0, 0)	0.020 (90, 0)	54915.935	0.37
D 277	MONE	0.020 (0, 0)	0.020 (90, 0)	0.016 (0, 90)	61970.725	0.32
G 251	MONE	0.018 (0, 0)	0.018 (90, 0)	0.016 (0, 90)	34295.672	0.52
G 253	P 18	0.020 (0, 0)	0.020 (90, 0)	0.000 (0, 90)	26669.241	0.74
MOCA	P 18	0.024 (0, 90)	0.020 (0, 0)	0.020 (90, 0)	32445.380	0.75
MONE	P 18	0.020 (0, 0)	0.020 (90, 0)	0.016 (0, 90)	83934.023	0.24

The NGS Data Sheet

See file dsdata.txt for more information about the datasheet.

```
DATABASE = NGSIDB , PROGRAM = datasheet95, VERSION = 7.87.6
1        National Geodetic Survey,   Retrieval Date = FEBRUARY 23, 2012
 HE0446 ***********************************************************************
 HE0446  DESIGNATION -  801.25
 HE0446  PID         -  HE0446
 HE0446  STATE/COUNTY-  KS/LABETTE
 HE0446  USGS QUAD   -  CHETOPA (1974)
 HE0446
 HE0446                        *CURRENT SURVEY CONTROL
 HE0446  ______________________________________________________________________
 HE0446* NAD 83(1986)-  37 02 10.      (N)    095 04 55.      (W)      SCALED
 HE0446* NAVD 88     -       244.965   (meters)     803.69    (feet)   ADJUSTED
 HE0446  ______________________________________________________________________
 HE0446  GEOID HEIGHT-         -29.71   (meters)                       GEOID09
 HE0446  DYNAMIC HT  -         244.769  (meters)     803.05    (feet)   COMP
 HE0446  MODELED GRAV-     979,824.3    (mgal)                         NAVD 88
 HE0446
 HE0446  VERT ORDER  -  SECOND    CLASS 0
 HE0446
 HE0446.The horizontal coordinates were scaled from a topographic map and have
 HE0446.an estimated accuracy of +/- 6 seconds.
 HE0446.
 HE0446.The orthometric height was determined by differential leveling and
 HE0446.adjusted in June 1991.
 HE0446
 HE0446.The geoid height was determined by GEOID09.
 HE0446
 HE0446.The dynamic height is computed by dividing the NAVD 88
 HE0446.geopotential number by the normal gravity value computed on the
 HE0446.Geodetic Reference System of 1980 (GRS 80) ellipsoid at 45
 HE0446.degrees latitude (g = 980.6199 gals.).
 HE0446
 HE0446.The modeled gravity was interpolated from observed gravity values.
 HE0446
 HE0446;                    North         East     Units  Estimated Accuracy
 HE0446;SPC KS S     -   446,580.      704,050.      MT  (+/- 180 meters Scaled)
 HE0446
 HE0446                          SUPERSEDED SURVEY CONTROL
 HE0446
 HE0446  NGVD 29 (??/??/92)  244.851  (m)          803.32    (f) ADJ UNCH    2 0
 HE0446
 HE0446.Superseded values are not recommended for survey control.
 HE0446.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.
 HE0446.See file dsdata.txt to determine how the superseded data were derived.
 HE0446
 HE0446_U.S. NATIONAL GRID SPATIAL ADDRESS: 15SUB148009(NAD 83)
 HE0446
 HE0446_MARKER: DD = SURVEY DISK
 HE0446_SETTING: 17 = SET INTO TOP OF METAL PIPE DRIVEN INTO GROUND
 HE0446_SP_SET: METAL PIPE DRIVEN INTO GROUND
 HE0446_STAMPING: ELEV 801.25
 HE0446_STABILITY: D = MARK OF QUESTIONABLE OR UNKNOWN STABILITY
```

HE0446_SATELLITE: THE SITE LOCATION WAS REPORTED AS SUITABLE FOR
HE0446+SATELLITE: SATELLITE OBSERVATIONS - August 07, 2009
HE0446
HE0446 HISTORY   - Date   Condition   Report By
HE0446 HISTORY   - UNK   MONUMENTED   USDA
HE0446 HISTORY   - 1936   GOOD   CGS
HE0446 HISTORY   - 20090807 GOOD   KSDT
HE0446
HE0446   STATION DESCRIPTION
HE0446
HE0446'DESCRIBED BY COAST AND GEODETIC SURVEY 1936
HE0446'AT CHETOPA.
HE0446'AT CHETOPA, LABETTE COUNTY, ON THE CORNER OF FIRST AND MAIN
HE0446'STREETS, AT THE DIESEL ELECTRIC POWER PLANT, 1 FOOT EAST OF THE
HE0446'NORTHEAST CORNER OF THE BRICK BUILDING, 1 FOOT NORTH OF THE
HE0446'BRICK WALL, AND 12 FEET SOUTH OF THE CURB. A UNITED STATES
HE0446'DEPARTMENT OF AGRICULTURE STANDARD CAP, STAMPED ELEV. 801.25
HE0446'AND MOUNTED ON THE TOP OF AN IRON PIPE.
HE0446
HE0446   STATION RECOVERY (2009)
HE0446
HE0446'RECOVERY NOTE BY KANSAS DEPARTMENT OF TRANSPORTATION 2009 (KH)
HE0446'RECOVERED IN GOOD CONDITION.

*** retrieval complete.
Elapsed Time = 00:00:03

The NGS Data Sheet

See file dsdata.txt for more information about the datasheet.

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DATABASE = NGSIDB , PROGRAM = datasheet95, VERSION = 7.87.5
1        National Geodetic Survey,   Retrieval Date = JANUARY 31, 2012
 LF0400 ***********************************************************************
 LF0400  DESIGNATION -  917
 LF0400  PID         -  LF0400
 LF0400  STATE/COUNTY-  NE/RICHARDSON
 LF0400  USGS QUAD   -  RULO (1965)
 LF0400
 LF0400                        *CURRENT SURVEY CONTROL
 LF0400  ______________________________________________________________________
 LF0400* NAD 83(1995)-  40 02 34.25722(N)    095 27 50.80755(W)      ADJUSTED
 LF0400* NAVD 88     -       279.384  (meters)     916.61   (feet)  ADJUSTED
 LF0400  ______________________________________________________________________
 LF0400  X           -    -465,621.532 (meters)                      COMP
 LF0400  Y           -  -4,867,619.118 (meters)                      COMP
 LF0400  Z           -   4,081,789.067 (meters)                      COMP
 LF0400  LAPLACE CORR-          -3.53  (seconds)                     DEFLEC09
 LF0400  ELLIP HEIGHT-         248.661 (meters)          (06/27/02) ADJUSTED
 LF0400  GEOID HEIGHT-         -30.71  (meters)                      GEOID09
 LF0400  DYNAMIC HT  -         279.230 (meters)     916.11  (feet)  COMP
 LF0400  MODELED GRAV-     980,065.9   (mgal)                       NAVD 88
 LF0400
 LF0400  HORZ ORDER  -  FIRST
 LF0400  VERT ORDER  -  SECOND    CLASS 0
 LF0400  ELLP ORDER  -  FOURTH    CLASS I
 LF0400
 LF0400.The horizontal coordinates were established by GPS observations
 LF0400.and adjusted by the National Geodetic Survey in August 1997.
 LF0400
 LF0400.The orthometric height was determined by differential leveling and
 LF0400.adjusted in June 1991.
 LF0400
 LF0400.Photographs are available for this station.
 LF0400
 LF0400.The X, Y, and Z were computed from the position and the ellipsoidal ht.
 LF0400
 LF0400.The Laplace correction was computed from DEFLEC09 derived deflections.
 LF0400
 LF0400.The ellipsoidal height was determined by GPS observations
 LF0400.and is referenced to NAD 83.
 LF0400
 LF0400.The geoid height was determined by GEOID09.
 LF0400
 LF0400.The dynamic height is computed by dividing the NAVD 88
 LF0400.geopotential number by the normal gravity value computed on the
 LF0400.Geodetic Reference System of 1980 (GRS 80) ellipsoid at 45
 LF0400.degrees latitude (g = 980.6199 gals.).
 LF0400
 LF0400.The modeled gravity was interpolated from observed gravity values.
 LF0400
 LF0400;                   North         East     Units Scale Factor Converg.
 LF0400;SPC NE       -    33,415.531   886,909.718   MT  0.99998091   +3 00 21.3
```

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LF0400;SPC NE       -   109,630.79  2,909,802.97   sFT  0.99998091   +3 00 21.3
LF0400;SPC MO W     -   430,670.755   767,726.301   MT  1.00002448   -0 37 13.1
LF0400;UTM  15      - 4,435,422.284   289,784.277   MT  1.00014404   -1 35 09.2
LF0400
LF0400!             -  Elev Factor  x  Scale Factor =   Combined Factor
LF0400!SPC NE       -   0.99996099  x   0.99998091  =   0.99994190
LF0400!SPC MO W     -   0.99996099  x   1.00002448  =   0.99998547
LF0400!UTM  15      -   0.99996099  x   1.00014404  =   1.00010503
LF0400
LF0400                          SUPERSEDED SURVEY CONTROL
LF0400
LF0400  ELLIP H (08/18/97)  248.806  (m)                        GP(       ) 4 1
LF0400  NAD 83(1986)-  40 02 34.26558(N)    095 27 50.80573(W) AD(       ) 1
LF0400  NGVD 29 (??/??/92)  279.319  (m)          916.40   (f) ADJ UNCH    2 0
LF0400
LF0400.Superseded values are not recommended for survey control.
LF0400.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.
LF0400.See file dsdata.txt to determine how the superseded data were derived.
LF0400
LF0400_U.S. NATIONAL GRID SPATIAL ADDRESS: 15TTE8978435422(NAD 83)
LF0400
LF0400_MARKER: DO = NOT SPECIFIED OR SEE DESCRIPTION
LF0400_SETTING: 17 = SET INTO TOP OF METAL PIPE DRIVEN INTO GROUND
LF0400_SP_SET: METAL PIPE IN CONCRETE
LF0400_STAMPING: 917
LF0400_MARK LOGO: USGS
LF0400_MAGNETIC: O = OTHER; SEE DESCRIPTION
LF0400_STABILITY: C = MAY HOLD, BUT OF TYPE COMMONLY SUBJECT TO
LF0400+STABILITY: SURFACE MOTION
LF0400_SATELLITE: THE SITE LOCATION WAS REPORTED AS SUITABLE FOR
LF0400+SATELLITE: SATELLITE OBSERVATIONS - November 19, 2007
LF0400
LF0400  HISTORY     - Date     Condition        Report By
LF0400  HISTORY     - UNK      MONUMENTED       USGS
LF0400  HISTORY     - 1934     GOOD             CGS
LF0400  HISTORY     - 1982     GOOD             LOCSUR
LF0400  HISTORY     - 19890316 GOOD             NGS
LF0400  HISTORY     - 19910424 GOOD             NGS
LF0400  HISTORY     - 20050604 GOOD             GEOCAC
LF0400  HISTORY     - 20061028 GOOD             GEOCAC
LF0400  HISTORY     - 20071119 GOOD             INDIV
LF0400  HISTORY     - 20100513 GOOD             INDIV
LF0400
LF0400                          STATION DESCRIPTION
LF0400
LF0400'DESCRIBED BY COAST AND GEODETIC SURVEY 1934
LF0400'2.2 MI W FROM RULO.
LF0400'2.2 MILES WEST ALONG THE CHICAGO, BURLINGTON AND QUINCY RAILROAD
LF0400'FROM THE STATION AT RULO, RICHARDSON COUNTY, 150 FEET SOUTH OF
LF0400'A SECTION CORNER AT A ROAD CROSSING, 50 FEET SOUTH OF THE TRACK,
LF0400'AND 30 FEET WEST OF THE CENTERLINE OF THE ROAD.  A U.S. GEOLOGICAL
LF0400'SURVEY STANDARD CAP, STAMPED 917 AND RIVETED ON THE TOP OF A
LF0400'3-1/2 INCH IRON PIPE.
LF0400
LF0400                          STATION RECOVERY (1982)
LF0400
LF0400'RECOVERY NOTE BY LOCAL SURVEYOR (INDIVIDUAL OR FIRM) 1982
LF0400'RECOVERED IN GOOD CONDITION.
LF0400
LF0400                          STATION RECOVERY (1989)
LF0400
```

LF0400'RECOVERY NOTE BY NATIONAL GEODETIC SURVEY 1989
LF0400'THE STATION IS LOCATED ABOUT 13 KM (8.10 MI) EAST OF FALLS CITY, 3 KM
LF0400'(1.85 MI) SOUTHWEST OF RULO, 4.8 KM (3.00 MI) NORTH OF THE
LF0400'KANSAS-NEBRASKA STATE LINE, NEAR A RAILROAD CROSSING.
LF0400'OWNERSHIP--BURLINGTON NORTHERN RAILROAD.
LF0400'TO REACH THE STATION FROM THE JUNCTION OF US HIGHWAY 73 AND STATE
LF0400'HIGHWAY 159 IN FALLS CITY ABOUT 0.4 KM (0.25 MI) SOUTH OF THE
LF0400'COURTHOUSE, GO EAST ON STATE HIGHWAY 159 FOR 0.48 KM (0.30 MI) TO A
LF0400'SLANTED CROSSROAD. CONTINUE AHEAD ON STATE HIGHWAY 159 FOR 5.15 KM
LF0400'(3.20 MI) TO A BRIDGE OVER MUDDY CREEK. CONTINUE AHEAD FOR 5.95 KM
LF0400'(3.70 MI) TO A GRAVEL CROSSROAD WITH AN OLD SCHOOLHOUSE ON THE LEFT.
LF0400'TURN RIGHT AND GO SOUTH FOR 1.77 KM (1.10 MI) TO THE RAILROAD TRACKS
LF0400'AND THE STATION ON THE RIGHT, ON THE SOUTH SIDE OF THE TRACKS.
LF0400'THE STATION MARK IS A US GEOLOGICAL SURVEY DISK WITH NO STAMPING,
LF0400'ATTACHED TO A 10 CM PIPE THAT IS IMBEDDED IN A 30 CM ROUND CONCRETE
LF0400'POST WHICH PROJECTS 15 CM ABOVE THE SURFACE. THE STATION MARK IS SET
LF0400'20.3 M (66.6 FT) WEST-SOUTHWEST OF A CROSSING SIGNAL POST ON THE SOUTH
LF0400'SIDE OF THE TRACK, 18.2 M (59.7 FT) SOUTH-SOUTHWEST OF A SIGNAL POST
LF0400'ACROSS THE TRACK, 12.3 M (40.4 FT) SOUTH OF THE SOUTH RAIL, 9.3 M
LF0400'(30.5 FT) SOUTH OF THE APPROXIMATE ROAD CENTER, 4.3 M (14.1 FT)
LF0400'NORTH-NORTHEAST OF A CONCRETE FENCE-CORNER POST AND 0.2 M (0.7 FT)
LF0400'NORTHEAST OF A METAL WITNESS POST.
LF0400'DESCRIBED BY R.D.BALL.
LF0400
LF0400 STATION RECOVERY (1991)
LF0400
LF0400'RECOVERY NOTE BY NATIONAL GEODETIC SURVEY 1991
LF0400'THE STATION IS LOCATED ABOUT 13 KM (8.1 MI) EAST OF FALLS CITY, 3 KM
LF0400'(1.9 MI) SOUTHWEST OF RULO, 4.8 KM (3.0 MI) NORTH OF THE
LF0400'KANSAS-NEBRASKA STATE LINE AND IN THE SOUTHWEST ANGLE OF A GRAVEL
LF0400'ROAD AND RAILROAD TRACKS. OWNERSHIP--BURLINGTON NORTHERN RAILROAD.
LF0400'TO REACH THE STATION FROM THE JUNCTION OF U.S. HIGHWAYS 73 AND 156,
LF0400'LOCATED IN THE MIDDLE OF FALLS CITY, GO EAST ON HIGHWAY 156 FOR 0.48
LF0400'KM (0.30 MI) TO A JOG IN HIGHWAY TO THE RIGHT, SOUTH, THEN LEFT,
LF0400'EAST, AT JUNCTION OF CROSSROAD. CONTINUE EAST ON HIGHWAY 156 FOR
LF0400'5.15 KM (3.20 MI) TO A BRIDGE OVER MUDDY CREEK. CONTINUE EAST ON
LF0400'HIGHWAY 156 FOR 5.95 KM (3.70 MI) TO THE JUNCTION OF A GRAVEL ROAD
LF0400'AND AN OLD SHCOOL ON THE LEFT. TURN RIGHT, SOUTH, ON GRAVEL ROAD FOR
LF0400'1.77 KM (1.10 MI) TO THE STATION ON THE RIGHT JUST AFTER CROSSING
LF0400'RAILROAD TRACKS.
LF0400'THE STATION IS ATTACHED TO A 10 CM PIPE THAT IS EMBEDDED IN A 30 CM
LF0400'ROUND CONCRETE POST, LOCATED 20.3 M (66.6 FT) WEST-SOUTHWEST OF
LF0400'CROSSING SIGNAL POST ON THE SOUTH SIDE OF TRACKS, 12.3 M (40.4 FT)
LF0400'SOUTH OF THE SOUTH RAIL, 9.3 M (30.5 FT) WEST OF THE CENTER OF GRAVEL
LF0400'ROAD, 4.3 M (14.1 FT) NORTH-NORTHEAST OF A CONCRETE FENCE CORNER
LF0400'POST, AND 0.2 M (0.7 FT) NORTHEAST OF A METAL WITNESS POST.
LF0400
LF0400 STATION RECOVERY (2005)
LF0400
LF0400'RECOVERY NOTE BY GEOCACHING 2005 (CB)
LF0400'GOOD.
LF0400
LF0400 STATION RECOVERY (2006)
LF0400
LF0400'RECOVERY NOTE BY GEOCACHING 2006 (RCF)
LF0400'RECOVERED IN GOOD CONDITION.
LF0400
LF0400 STATION RECOVERY (2007)
LF0400
LF0400'RECOVERY NOTE BY INDIVIDUAL CONTRIBUTORS 2007 (BAJ)
LF0400'RECOVERED IN GOOD CONDITION.

```
LF0400
LF0400                          STATION RECOVERY (2010)
LF0400
LF0400'RECOVERY NOTE BY INDIVIDUAL CONTRIBUTORS 2010 (JDB)
LF0400'RECOVERED IN GOOD CONDITION.

*** retrieval complete.
Elapsed Time = 00:00:02
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The NGS Data Sheet

See file dsdata.txt for more information about the datasheet.

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DATABASE = NGSIDB , PROGRAM = datasheet95, VERSION = 7.87.6
1        National Geodetic Survey,   Retrieval Date = FEBRUARY 23, 2012
 HE0258 ***********************************************************************
 HE0258  DESIGNATION -  922 RESET
 HE0258  PID         -  HE0258
 HE0258  STATE/COUNTY-  KS/CHEROKEE
 HE0258  USGS QUAD   -  COLUMBUS (1977)
 HE0258
 HE0258                        *CURRENT SURVEY CONTROL
 HE0258  ______________________________________________________________________
 HE0258* NAD 83(1986)-  37 10 14.     (N)    094 50 34.     (W)     SCALED
 HE0258* NAVD 88     -       278.38   (meters)     913.3    (feet)  RESET
 HE0258  ______________________________________________________________________
 HE0258  GEOID HEIGHT-         -30.00  (meters)                     GEOID09
 HE0258  VERT ORDER  -  THIRD
 HE0258
 HE0258.The horizontal coordinates were scaled from a topographic map and have
 HE0258.an estimated accuracy of +/- 6 seconds.
 HE0258.
 HE0258.The orthometric height was computed from unverified reset data.
 HE0258
 HE0258.No vertical observational check was made to the station.
 HE0258
 HE0258.The geoid height was determined by GEOID09.
 HE0258
 HE0258;                    North         East    Units  Estimated Accuracy
 HE0258;SPC KS S     -   462,290.      724,730.      MT  (+/- 180 meters Scaled)
 HE0258
 HE0258                          SUPERSEDED SURVEY CONTROL
 HE0258
 HE0258  NGVD 29 (??/??/??)  278.27   (m)          913.0    (f) RESET       3
 HE0258
 HE0258.Superseded values are not recommended for survey control.
 HE0258.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.
 HE0258.See file dsdata.txt to determine how the superseded data were derived.
 HE0258
 HE0258_U.S. NATIONAL GRID SPATIAL ADDRESS: 15SUB363153(NAD 83)
 HE0258
 HE0258_MARKER: DD = SURVEY DISK
 HE0258_SETTING: 7 = SET IN TOP OF CONCRETE MONUMENT
 HE0258_SP_SET: SET IN TOP OF CONCRETE MONUMENT
 HE0258_STAMPING: 922 RESET 1955
 HE0258_STABILITY: C = MAY HOLD, BUT OF TYPE COMMONLY SUBJECT TO
 HE0258+STABILITY: SURFACE MOTION
 HE0258_SATELLITE: THE SITE LOCATION WAS REPORTED AS NOT SUITABLE FOR
 HE0258+SATELLITE: SATELLITE OBSERVATIONS - August 02, 2005
 HE0258
 HE0258  HISTORY     - Date     Condition        Report By
 HE0258  HISTORY     - 1955     MONUMENTED       LOCSUR
 HE0258  HISTORY     - 20050802 GOOD             GEOCAC
 HE0258
 HE0258                          STATION DESCRIPTION
```

HE0258
HE0258'DESCRIBED BY LOCAL SURVEYOR (INDIVIDUAL OR FIRM) 1955
HE0258'AT COLUMBUS.
HE0258'AT COLUMBUS, CHEROKEE COUNTY, ON THE COUNTY COURTHOUSE YARD,
HE0258'32.5 FEET WEST OF THE WEST EDGE OF THE KANSAS AVENUE SIDEWALK,
HE0258'6.3 FEET SOUTH OF THE SOUTH EDGE OF THE MAPLE STREET SIDEWALK,
HE0258'AND 3 FEET EAST OF NORTH MERIDIAN (U.S.G.S.). A U.S. GEOLOGICAL
HE0258'SURVEY STANDARD DISK, STAMPED 922 RESET 1955 AND SET IN THE TOP
HE0258'OF A CONCRETE POST PROJECTING 4 INCHES ABOVE THE GROUND.
HE0258
HE0258 STATION RECOVERY (2005)
HE0258
HE0258'RECOVERY NOTE BY GEOCACHING 2005 (RCF)
HE0258'HANDHELD GPS (NAD 83) N37 10 14.8 W94 50 34.3

*** retrieval complete.
Elapsed Time = 00:00:03

The NGS Data Sheet

See file dsdata.txt for more information about the datasheet.

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DATABASE = NGSIDB , PROGRAM = datasheet95, VERSION = 7.87.5
1        National Geodetic Survey,   Retrieval Date = FEBRUARY  9, 2012
 KE0193 ***********************************************************************
 KE0193  DESIGNATION -  A 282
 KE0193  PID         -  KE0193
 KE0193  STATE/COUNTY-  KS/WYANDOTTE
 KE0193  USGS QUAD   -  WOLCOTT (1975)
 KE0193
 KE0193                        *CURRENT SURVEY CONTROL
 KE0193  ______________________________________________________________________
 KE0193* NAD 83(1986)-  39 11 41.2     (N)     094 48 34.5     (W)      HD_HELD2
 KE0193* NAVD 88     -       231.830   (meters)      760.60    (feet)   ADJUSTED
 KE0193  ______________________________________________________________________
 KE0193  GEOID HEIGHT-         -32.40  (meters)                         GEOID09
 KE0193  DYNAMIC HT  -         231.681 (meters)      760.11    (feet)   COMP
 KE0193  MODELED GRAV-     979,980.7   (mgal)                           NAVD 88
 KE0193
 KE0193  VERT ORDER  -  FIRST     CLASS II
 KE0193
 KE0193.The horizontal coordinates were established by autonomous hand held GPS
 KE0193.observations and have an estimated accuracy of +/- 10 meters.
 KE0193.
 KE0193.The orthometric height was determined by differential leveling and
 KE0193.adjusted in June 1991.
 KE0193
 KE0193.The geoid height was determined by GEOID09.
 KE0193
 KE0193.The dynamic height is computed by dividing the NAVD 88
 KE0193.geopotential number by the normal gravity value computed on the
 KE0193.Geodetic Reference System of 1980 (GRS 80) ellipsoid at 45
 KE0193.degrees latitude (g = 980.6199 gals.).
 KE0193
 KE0193.The modeled gravity was interpolated from observed gravity values.
 KE0193
 KE0193;                    North         East     Units  Estimated Accuracy
 KE0193;SPC KS N     -   100,484.      675,546.      MT   (+/- 10 meters HH2 GPS)
 KE0193
 KE0193                          SUPERSEDED SURVEY CONTROL
 KE0193
 KE0193  NGVD 29 (??/??/92)  231.744   (m)           760.31    (f) ADJ UNCH    1 2
 KE0193
 KE0193.Superseded values are not recommended for survey control.
 KE0193.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.
 KE0193.See file dsdata.txt to determine how the superseded data were derived.
 KE0193
 KE0193_U.S. NATIONAL GRID SPATIAL ADDRESS: 15SUD4373039951(NAD 83)
 KE0193
 KE0193_MARKER: DB = BENCH MARK DISK
 KE0193_SETTING: 7 = SET IN TOP OF CONCRETE MONUMENT
 KE0193_SP_SET: SET IN TOP OF CONCRETE MONUMENT
 KE0193_STAMPING: A 282 1948
 KE0193_STABILITY: C = MAY HOLD, BUT OF TYPE COMMONLY SUBJECT TO
```

KE0193+STABILITY: SURFACE MOTION
KE0193
KE0193 HISTORY   - Date   Condition   Report By
KE0193 HISTORY   - 1948   MONUMENTED   CGS
KE0193 HISTORY   - 1951   GOOD   CGS
KE0193 HISTORY   - 20071112 GOOD   GEOCAC
KE0193
KE0193   STATION DESCRIPTION
KE0193
KE0193'DESCRIBED BY COAST AND GEODETIC SURVEY 1948
KE0193'0.6 MI NW FROM WOLCOTT.
KE0193'0.6 MILE NORTHWEST ALONG THE MISSOURI PACIFIC RAILROAD FROM THE
KE0193'STATION AT WOLCOTT, AT THE LOWELL ANDREWS FARM HOUSE, 97.0 FEET
KE0193'NORTH OF THE NORTH CORNER OF THE ANDREWS HOME WHICH IS LOCATED ON
KE0193'A HIGH TERRACE, 97.7 FEET SOUTHWEST OF THE SOUTHWEST RAIL OF
KE0193'THE RAILROAD (MEASURED FROM THE CROSSING OF RAILROAD AND A FARM
KE0193'ROAD), ABOUT 90.0 FEET SOUTHEAST OF A CULVERT UNDER STATE
KE0193'HIGHWAY 5 FOR A DITCH AT THE MOUTH OF A RAVINE RUNNING UP BLUFF,
KE0193'28.0 FEET SOUTHWEST OF THE CENTER LINE OF THE HIGHWAY, 20.0
KE0193'FEET NORTHWEST OF CENTER LINE OF DRIVE TO THE ANDREWS HOME, 1.0
KE0193'FOOT NORTHEAST OF A ROCK FENCE, AND SET IN THE TOP OF A CONCRETE
KE0193'POST PROJECTING 0.4 FOOT ABOVE THE GROUND.
KE0193
KE0193   STATION RECOVERY (1951)
KE0193
KE0193'RECOVERY NOTE BY COAST AND GEODETIC SURVEY 1951
KE0193'RECOVERED IN GOOD CONDITION.
KE0193
KE0193   STATION RECOVERY (2007)
KE0193
KE0193'RECOVERY NOTE BY GEOCACHING 2007 (RCF)
KE0193'HD HELD2 N39 11 41.2 W94 48 34.5

*** retrieval complete.
Elapsed Time = 00:00:02

The NGS Data Sheet

See file dsdata.txt for more information about the datasheet.

```
DATABASE = NGSIDB , PROGRAM = datasheet95, VERSION = 7.87.6
1        National Geodetic Survey,   Retrieval Date = FEBRUARY 24, 2012
 KF0780 ***********************************************************************
 KF0780  DESIGNATION -  BELVUE
 KF0780  PID         -  KF0780
 KF0780  STATE/COUNTY-  KS/POTTAWATOMIE
 KF0780  USGS QUAD   -  BELVUE (1978)
 KF0780
 KF0780                        *CURRENT SURVEY CONTROL
 KF0780  ______________________________________________________________________
 KF0780* NAD 83(1997)-  39 13 00.06971(N)    096 12 11.21394(W)      ADJUSTED
 KF0780* NAVD 88     -       294.315  (meters)     965.60   (feet)  ADJUSTED
 KF0780  ______________________________________________________________________
 KF0780  LAPLACE CORR-          -2.55  (seconds)                     DEFLEC09
 KF0780  GEOID HEIGHT-         -30.48  (meters)                      GEOID09
 KF0780  DYNAMIC HT  -         294.124 (meters)     964.97   (feet)  COMP
 KF0780  MODELED GRAV-     979,970.8   (mgal)                        NAVD 88
 KF0780
 KF0780  HORZ ORDER  -  THIRD
 KF0780  VERT ORDER  -  FIRST     CLASS II
 KF0780
 KF0780.The horizontal coordinates were established by classical geodetic methods
 KF0780.and adjusted by the National Geodetic Survey in October 1998.
 KF0780.
 KF0780.The orthometric height was determined by differential leveling and
 KF0780.adjusted in June 1991.
 KF0780
 KF0780.The Laplace correction was computed from DEFLEC09 derived deflections.
 KF0780
 KF0780.The geoid height was determined by GEOID09.
 KF0780
 KF0780.The dynamic height is computed by dividing the NAVD 88
 KF0780.geopotential number by the normal gravity value computed on the
 KF0780.Geodetic Reference System of 1980 (GRS 80) ellipsoid at 45
 KF0780.degrees latitude (g = 980.6199 gals.).
 KF0780
 KF0780.The modeled gravity was interpolated from observed gravity values.
 KF0780
 KF0780;                   North         East     Units Scale Factor Converg.
 KF0780;SPC KS N     -    99,601.641   555,164.948   MT  0.99995703   +1 08 12.9
 KF0780;SPC KS N     -   326,776.38  1,821,403.67   sFT  0.99995703   +1 08 12.9
 KF0780;UTM  14      - 4,344,550.792   741,466.179   MT  1.00031797   +1 46 09.1
 KF0780
 KF0780!             -  Elev Factor  x  Scale Factor =   Combined Factor
 KF0780!SPC KS N     -   0.99995861  x   0.99995703  =   0.99991564
 KF0780!UTM  14      -   0.99995861  x   1.00031797  =   1.00027657
 KF0780
 KF0780:                Primary Azimuth Mark                     Grid Az
 KF0780:SPC KS N     -  BELVUE AZ MK                             270 30 26.5
 KF0780:UTM  14      -  BELVUE AZ MK                             269 52 30.3
 KF0780
 KF0780|----------------------------------------------------------------------|
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KF0780| PID    Reference Object                          Distance      Geod. Az  |
KF0780|                                                                dddmmss.s |
KF0780| CL6852 BELVUE RM 1                               21.181 METERS 02814     |
KF0780| KF1016 ST MARYS MUNICIPAL TANK                  APPROX.11.9 KM 0991152.6 |
KF0780| KF1015 ST MARYS CATHOLIC COLLEGE TANK           APPROX.12.9 KM 1020012.8 |
KF0780| KF1017 ST MARY ST MARYS COLLEGE STACK           APPROX.12.5 KM 1022958.8 |
KF0780| KF1014 ST MARYS CATHOLIC CHURCH SPIRE           APPROX.12.2 KM 1025833.1 |
KF0780| CL6853 BELVUE RM 2                               22.004 METERS 26914     |
KF0780| CL6851 BELVUE AZ MK                                            2713839.4 |
KF0780|--------------------------------------------------------------------------|
KF0780
KF0780                            SUPERSEDED SURVEY CONTROL
KF0780
KF0780  NAD 83(1986)-  39 13 00.07575(N)    096 12 11.20998(W) AD(       ) 3
KF0780  NAD 27      -  39 13 00.09000(N)    096 12 10.22300(W) AD(       ) 3
KF0780
KF0780.Superseded values are not recommended for survey control.
KF0780.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.
KF0780.See file dsdata.txt to determine how the superseded data were derived.
KF0780
KF0780_U.S. NATIONAL GRID SPATIAL ADDRESS: 14SQJ4146644550(NAD 83)
KF0780
KF0780_MARKER: DS = TRIANGULATION STATION DISK
KF0780_SETTING: 7 = SET IN TOP OF CONCRETE MONUMENT
KF0780_SP_SET: CONCRETE POST
KF0780_STAMPING: BELVUE 1947
KF0780_MARK LOGO: CGS
KF0780_PROJECTION: PROJECTING 8 CENTIMETERS
KF0780_STABILITY: C = MAY HOLD, BUT OF TYPE COMMONLY SUBJECT TO
KF0780+STABILITY: SURFACE MOTION
KF0780_SATELLITE: THE SITE LOCATION WAS REPORTED AS SUITABLE FOR
KF0780+SATELLITE: SATELLITE OBSERVATIONS - February 22, 2010
KF0780
KF0780  HISTORY     - Date     Condition        Report By
KF0780  HISTORY     - 1947     MONUMENTED       CGS
KF0780  HISTORY     - 1965     SEE DESCRIPTION  CGS
KF0780  HISTORY     - 1986     GOOD             NGS
KF0780  HISTORY     - 20081210 GOOD             INDIV
KF0780  HISTORY     - 20100222 GOOD             KSDT
KF0780  HISTORY     - 20100928 GOOD             INDIV
KF0780
KF0780                            STATION DESCRIPTION
KF0780
KF0780'DESCRIBED BY COAST AND GEODETIC SURVEY 1947 (RLE)
KF0780'THE STATION IS LOCATED ABOUT 1.4 MILES WEST OF BELVUE,
KF0780'AT THE WEST END OF A ROAD SIDE PARK.  IT IS 106 FEET SOUTH
KF0780'OF THE CENTER OF U.S. HIGHWAY 40 AND 24, 58 FEET EAST OF A
KF0780'SIDE ROAD LEADING SOUTH AND 60 FEET NORTH OF THE NORTH RAIL
KF0780'OF THE RAILROAD TRACKS.  IT IS STAMPED BELVUE 1947 AND IS
KF0780'FLUSH WITH THE SURFACE OF THE GROUND.
KF0780'
KF0780'REFERENCE MARK NO. 1 IS 91 FEET EAST OF A SIDE ROAD LEADING
KF0780'SOUTH AND 44 FEET SOUTH OF U.S. HIGHWAY 24 AND 40.  IT IS
KF0780'STAMPED BELVUE NO 1 1947 AND IS FLUSH WITH THE SURFACE OF
KF0780'THE GROUND.
KF0780'
KF0780'REFERENCE MARK NO. 2 IS A STANDARD DISK SET IN A DRILL HOLE
KF0780'IN THE NORTHWEST END OF A CONCRETE CULVERT.  IT IS 11 FEET
KF0780'WEST OF THE CENTER OF A SIDE ROAD LEADING SOUTH AND 60 FEET
KF0780'NORTH OF THE NORTH RAIL OF THE RAILROAD TRACKS.  IT IS STAMPED
KF0780'BELVUE NO 2 1947.
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KF0780'
KF0780'AZIMUTH MARK IS SET IN A DRILL HOLE IN THE CONCRETE ABUTMENT
KF0780'AT THE NORTHEAST CORNER OF THE BRIDGE OVER THE VERMILLION
KF0780'RIVER.  IT IS 13 FEET NORTH OF THE CENTER OF U.S. HIGHWAY
KF0780'24 AND 40.  IT IS STAMPED BELVUE 1947
KF0780'
KF0780'TO REACH THE STATION FROM THE POST OFFICE IN BELVUE, GO WEST
KF0780'ON U.S. HIGHWAY 24 AND 40 FOR 1.4 MILES TO THE STATION ON
KF0780'THE LEFT AS DESCRIBED.
KF0780'
KF0780'TO REACH THE AZIMUTH MARK FROM THE STATION, CONTINUE WEST ON
KF0780'U.S. HIGHWAY 24 AND 40 FOR 0.5 MILE TO THE BRIDGE AND THE
KF0780'AZIMUTH MARK AS DESCRIBED.
KF0780'
KF0780'A 47 FOOT SIGNAL AT SHAW IS VISIBLE AT 64 FEET.
KF0780'
KF0780'A 4 FOOT SIGNAL AT BEL IS VISIBLE AT 37 FEET.
KF0780'
KF0780'HEIGHT OF LIGHT ABOVE STATION MARK 22 METERS.
KF0780
KF0780                          STATION RECOVERY (1965)
KF0780
KF0780'RECOVERY NOTE BY COAST AND GEODETIC SURVEY 1965 (CFO)
KF0780'THE STATION MARK, REFERENCE MARKS AND THE AZIMUTH MARK WERE ALL
KF0780'RECOVERED AS DESCRIBED AND FOUND TO BE IN GOOD CONDITION.  THE
KF0780'STATION MARK IS NOW ABOUT 1 INCH BELOW THE SURFACE OF THE GROUND
KF0780'AND A GRADER HAS SCRAPED THE NAME AND NUMBER OFF THE TOP OF
KF0780'REFERENCE MARK NO. 1.
KF0780
KF0780                          STATION RECOVERY (1986)
KF0780
KF0780'RECOVERY NOTE BY NATIONAL GEODETIC SURVEY 1986
KF0780'32.1 KM (19.95 MI) EAST FROM MANHATTAN.
KF0780'32.1 KM (19.95 MI) EASTERLY ALONG THE UNION PACIFIC RAILROAD FROM THE
KF0780'STATION IN MANHATTAN, NEAR THE SOUTHWEST CORNER OF A ROADSIDE PARK,
KF0780'32.4 M (106.3 FT) SOUTH OF THE CENTERLINE OF U.S. HIGHWAY 24, 18.3 M
KF0780'(60.0 FT) NORTH OF THE NEAR RAIL, 17.7 M (58.1 FT) EAST OF THE CENTER
KF0780'OF A GRAVELED ROAD LEADING SOUTH, 10.0 M (32.8 FT) SOUTHWEST OF A SIGN
KF0780'(THIS PARK PATROLLED BY KANSAS HIGHWAY PATROL), AND 6.4 M (21.0 FT)
KF0780'SOUTHEAST OF THE CENTER OF A 36-INCH PINE TREE.
KF0780'THE MARK IS ABOVE LEVEL WITH THE ROAD.
KF0780
KF0780                          STATION RECOVERY (2008)
KF0780
KF0780'RECOVERY NOTE BY INDIVIDUAL CONTRIBUTORS 2008 (MAM)
KF0780'RECOVERED IN GOOD CONDITION.
KF0780
KF0780                          STATION RECOVERY (2010)
KF0780
KF0780'RECOVERY NOTE BY KANSAS DEPARTMENT OF TRANSPORTATION 2010 (KLH)
KF0780'RECOVERED IN GOOD CONDITION.
KF0780
KF0780                          STATION RECOVERY (2010)
KF0780
KF0780'RECOVERY NOTE BY INDIVIDUAL CONTRIBUTORS 2010 (RJH)
KF0780'RECOVERED IN GOOD CONDITION.

*** retrieval complete.
Elapsed Time = 00:00:02
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The NGS Data Sheet

See file dsdata.txt for more information about the datasheet.

```
DATABASE = NGSIDB , PROGRAM = datasheet95, VERSION = 7.87.6
1        National Geodetic Survey,   Retrieval Date = APRIL 14, 2012
 JE0718 ***********************************************************************
 JE0718  DESIGNATION -  C 252 RESET
 JE0718  PID         -  JE0718
 JE0718  STATE/COUNTY-  KS/MIAMI
 JE0718  USGS QUAD   -  FONTANA (1978)
 JE0718
 JE0718                        *CURRENT SURVEY CONTROL
 JE0718  ______________________________________________________________________
 JE0718* NAD 83(1986)-  38 25 48.     (N)    094 50 37.     (W)     SCALED
 JE0718* NAVD 88     -       284.705  (meters)     934.07   (feet)  ADJUSTED
 JE0718  ______________________________________________________________________
 JE0718  GEOID HEIGHT-         -31.94  (meters)                     GEOID09
 JE0718  DYNAMIC HT  -         284.505 (meters)     933.41  (feet)  COMP
 JE0718  MODELED GRAV-     979,920.2   (mgal)                       NAVD 88
 JE0718
 JE0718  VERT ORDER  -  SECOND    CLASS 0
 JE0718
 JE0718.The horizontal coordinates were scaled from a topographic map and have
 JE0718.an estimated accuracy of +/- 6 seconds.
 JE0718.
 JE0718.The orthometric height was determined by differential leveling and
 JE0718.adjusted in June 1991.
 JE0718
 JE0718.The geoid height was determined by GEOID09.
 JE0718
 JE0718.The dynamic height is computed by dividing the NAVD 88
 JE0718.geopotential number by the normal gravity value computed on the
 JE0718.Geodetic Reference System of 1980 (GRS 80) ellipsoid at 45
 JE0718.degrees latitude (g = 980.6199 gals.).
 JE0718
 JE0718.The modeled gravity was interpolated from observed gravity values.
 JE0718
 JE0718;                    North         East     Units  Estimated Accuracy
 JE0718;SPC KS S     -   601,970.      719,180.      MT  (+/- 180 meters Scaled)
 JE0718
 JE0718                          SUPERSEDED SURVEY CONTROL
 JE0718
 JE0718  NGVD 29 (??/??/92)  284.548  (m)          933.55   (f) ADJ UNCH    2 0
 JE0718
 JE0718.Superseded values are not recommended for survey control.
 JE0718.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.
 JE0718.See file dsdata.txt to determine how the superseded data were derived.
 JE0718
 JE0718_U.S. NATIONAL GRID SPATIAL ADDRESS: 15SUC390551(NAD 83)
 JE0718
 JE0718_MARKER: DB = BENCH MARK DISK
 JE0718_SETTING: 7 = SET IN TOP OF CONCRETE MONUMENT
 JE0718_SP_SET: SET IN TOP OF CONCRETE MONUMENT
 JE0718_STAMPING: C 252 RESET 1949
 JE0718_STABILITY: C = MAY HOLD, BUT OF TYPE COMMONLY SUBJECT TO
```

JE0718+STABILITY: SURFACE MOTION
JE0718
JE0718 HISTORY   - Date   Condition   Report By
JE0718 HISTORY   - 1949   MONUMENTED   CGS
JE0718 HISTORY   - 20060919 GOOD   INDIV
JE0718
JE0718   STATION DESCRIPTION
JE0718
JE0718'DESCRIBED BY COAST AND GEODETIC SURVEY 1949
JE0718'0.7 MI NW FROM FONTANA.
JE0718'0.7 MILE NORTHWEST ALONG THE ST. LOUIS-SAN FRANCISCO RAILROAD
JE0718'FROM THE RAILROAD STATION AT FONTANA, AT THE ENTRANCE TO THE
JE0718'FONTANA CEMETERY, 1 POLE SOUTHEAST OF MILE POST 53-40, 89.0 FEET
JE0718'SOUTHWEST OF THE SOUTHWEST RAIL OF THE MAIN TRACK, 25.0 FEET
JE0718'SOUTHWEST OF THE CENTER LINE OF THE ROAD, 14.0 FEET SOUTHEAST
JE0718'OF THE CENTER OF THE CEMETERY GATE, AND SET IN THE TOP OF A
JE0718'CONCRETE POST PROJECTING 0.5 FOOT ABOVE THE GROUND.
JE0718
JE0718   STATION RECOVERY (2006)
JE0718
JE0718'RECOVERY NOTE BY INDIVIDUAL CONTRIBUTORS 2006 (SGK)
JE0718'RECOVERED IN GOOD CONDITION.

*** retrieval complete.
Elapsed Time = 00:00:00

The NGS Data Sheet

See file dsdata.txt for more information about the datasheet.

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DATABASE = NGSIDB , PROGRAM = datasheet95, VERSION = 7.87.6
1        National Geodetic Survey,   Retrieval Date = FEBRUARY 23, 2012
 HE0312 ***********************************************************************
 HE0312  DESIGNATION -  C 253
 HE0312  PID         -  HE0312
 HE0312  STATE/COUNTY-  KS/CRAWFORD
 HE0312  USGS QUAD   -  GIRARD (1964)
 HE0312
 HE0312                        *CURRENT SURVEY CONTROL
 HE0312  ______________________________________________________________________
 HE0312* NAD 83(1986)-  37 30 38.6     (N)     094 50 30.9     (W)      HD_HELD2
 HE0312* NAVD 88     -       303.497   (meters)      995.72    (feet)   ADJUSTED
 HE0312  ______________________________________________________________________
 HE0312  GEOID HEIGHT-         -30.72  (meters)                         GEOID09
 HE0312  DYNAMIC HT  -         303.259 (meters)      994.94    (feet)   COMP
 HE0312  MODELED GRAV-     979,837.4   (mgal)                           NAVD 88
 HE0312
 HE0312  VERT ORDER  -  SECOND    CLASS 0
 HE0312
 HE0312.The horizontal coordinates were established by autonomous hand held GPS
 HE0312.observations and have an estimated accuracy of +/- 10 meters.
 HE0312.
 HE0312.The orthometric height was determined by differential leveling and
 HE0312.adjusted in June 1991.
 HE0312
 HE0312.The geoid height was determined by GEOID09.
 HE0312
 HE0312.The dynamic height is computed by dividing the NAVD 88
 HE0312.geopotential number by the normal gravity value computed on the
 HE0312.Geodetic Reference System of 1980 (GRS 80) ellipsoid at 45
 HE0312.degrees latitude (g = 980.6199 gals.).
 HE0312
 HE0312.The modeled gravity was interpolated from observed gravity values.
 HE0312
 HE0312;                    North         East     Units  Estimated Accuracy
 HE0312;SPC KS S     -   500,021.      723,326.      MT   (+/- 10 meters HH2 GPS)
 HE0312
 HE0312                          SUPERSEDED SURVEY CONTROL
 HE0312
 HE0312  NGVD 29 (??/??/92)  303.375  (m)           995.32    (f) ADJ UNCH    2 0
 HE0312
 HE0312.Superseded values are not recommended for survey control.
 HE0312.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.
 HE0312.See file dsdata.txt to determine how the superseded data were derived.
 HE0312
 HE0312_U.S. NATIONAL GRID SPATIAL ADDRESS: 15SUB3720853124(NAD 83)
 HE0312
 HE0312_MARKER: DB = BENCH MARK DISK
 HE0312_SETTING: 7 = SET IN TOP OF CONCRETE MONUMENT
 HE0312_SP_SET: SET IN TOP OF CONCRETE MONUMENT
 HE0312_STAMPING: C 253 1934
 HE0312_STABILITY: C = MAY HOLD, BUT OF TYPE COMMONLY SUBJECT TO
```

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HE0312+STABILITY: SURFACE MOTION
HE0312_SATELLITE: THE SITE LOCATION WAS REPORTED AS SUITABLE FOR
HE0312+SATELLITE: SATELLITE OBSERVATIONS - August 03, 2005
HE0312
HE0312  HISTORY     - Date     Condition        Report By
HE0312  HISTORY     - 1934     MONUMENTED       CGS
HE0312  HISTORY     - UNK      SEE DESCRIPTION  GEOCAC
HE0312  HISTORY     - 20050803 GOOD             GEOCAC
HE0312
HE0312                          STATION DESCRIPTION
HE0312
HE0312'DESCRIBED BY COAST AND GEODETIC SURVEY 1934
HE0312'AT GIRARD.
HE0312'AT GIRARD, CRAWFORD COUNTY, IN THE NORTHEAST CORNER OF THE
HE0312'COUNTY COURTHOUSE YARD, 18 INCHES WEST OF THE NORTH-AND-SOUTH
HE0312'CONCRETE CURB, AND 10 FEET SOUTH OF THE EAST-AND-WEST CONCRETE
HE0312'CURB.  A STANDARD DISK, STAMPED C 253 1934 AND SET IN THE TOP
HE0312'OF A CONCRETE POST.
HE0312
HE0312                          STATION RECOVERY (UNK )
HE0312
HE0312'RECOVERY NOTE BY GEOCACHING UNK
HE0312'
HE0312
HE0312                          STATION RECOVERY (2005)
HE0312
HE0312'RECOVERY NOTE BY GEOCACHING 2005 (RCF)
HE0312'THE MARK PROJECTS ABOUT 6 INCHES ABOVE THE SIDEWALK AND IS SCRAPED BY
HE0312'VEHICLE UNDERCARRIAGES.  THE DESIGNATION STAMPING NOT LEGIBLE, BUT THE
HE0312'+ IS VISIBLE.  MARK APPEARS STABLE.
HE0312'
HE0312'N37 30.644 W94 50.515

*** retrieval complete.
Elapsed Time = 00:00:01
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The NGS Data Sheet

See file dsdata.txt for more information about the datasheet.

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DATABASE = NGSIDB , PROGRAM = datasheet95, VERSION = 7.87.5
1        National Geodetic Survey,   Retrieval Date = FEBRUARY  3, 2012
 HF0336 ***********************************************************************
 HF0336  DESIGNATION -  C 334
 HF0336  PID         -  HF0336
 HF0336  STATE/COUNTY-  KS/BUTLER
 HF0336  USGS QUAD   -  EL DORADO NW (1961)
 HF0336
 HF0336                        *CURRENT SURVEY CONTROL
 HF0336  ______________________________________________________________________
 HF0336* NAD 83(1986)-  37 59 04.      (N)    096 59 11.      (W)      SCALED
 HF0336* NAVD 88     -       420.690   (meters)    1380.21    (feet)   ADJUSTED
 HF0336  ______________________________________________________________________
 HF0336  GEOID HEIGHT-         -29.19  (meters)                        GEOID09
 HF0336  DYNAMIC HT  -         420.367 (meters)    1379.15   (feet)   COMP
 HF0336  MODELED GRAV-     979,849.5   (mgal)                          NAVD 88
 HF0336
 HF0336  VERT ORDER  -  SECOND    CLASS 0
 HF0336
 HF0336.The horizontal coordinates were scaled from a topographic map and have
 HF0336.an estimated accuracy of +/- 6 seconds.
 HF0336.
 HF0336.The orthometric height was determined by differential leveling and
 HF0336.adjusted in June 1991.
 HF0336
 HF0336.The geoid height was determined by GEOID09.
 HF0336
 HF0336.The dynamic height is computed by dividing the NAVD 88
 HF0336.geopotential number by the normal gravity value computed on the
 HF0336.Geodetic Reference System of 1980 (GRS 80) ellipsoid at 45
 HF0336.degrees latitude (g = 980.6199 gals.).
 HF0336
 HF0336.The modeled gravity was interpolated from observed gravity values.
 HF0336
 HF0336;                    North         East     Units  Estimated Accuracy
 HF0336;SPC KS S     -   547,330.      532,960.      MT  (+/- 180 meters Scaled)
 HF0336
 HF0336                          SUPERSEDED SURVEY CONTROL
 HF0336
 HF0336  NGVD 29 (??/??/92)  420.552  (m)          1379.76   (f) ADJ UNCH    2 0
 HF0336
 HF0336.Superseded values are not recommended for survey control.
 HF0336.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.
 HF0336.See file dsdata.txt to determine how the superseded data were derived.
 HF0336
 HF0336_U.S. NATIONAL GRID SPATIAL ADDRESS: 14SPH768060(NAD 83)
 HF0336
 HF0336_MARKER: DB = BENCH MARK DISK
 HF0336_SETTING: 30 = SET IN A LIGHT STRUCTURE
 HF0336_SP_SET: CULVERT
 HF0336_STAMPING: C 334 1962
 HF0336_STABILITY: D = MARK OF QUESTIONABLE OR UNKNOWN STABILITY
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HF0336
HF0336  HISTORY     - Date     Condition        Report By
HF0336  HISTORY     - 1962     MONUMENTED       CGS
HF0336  HISTORY     - 20060613 GOOD             INDIV
HF0336  HISTORY     - 20060613 GOOD             INDIV
HF0336
HF0336                          STATION DESCRIPTION
HF0336
HF0336'DESCRIBED BY COAST AND GEODETIC SURVEY 1962
HF0336'7.5 MI W FROM DE GRAFF.
HF0336'0.3 MILE NORTH ALONG A GRAVEL ROAD FROM THE SCHOOLHOUSE AT
HF0336'DE GRAFF, THENCE 7.2 MILES WEST ALONG A BLACKTOP ROAD, 0.1
HF0336'MILE EAST OF A ROAD CROSSING, 93.5 FEET SOUTHEAST OF A FENCE
HF0336'CORNER, 24 FEET NORTH OF A FENCE LINE, 15 1/2 FEET SOUTH OF
HF0336'THE CENTER OF ROAD, SET IN THE SOUTH HEADWALL OF A CONCRETE
HF0336'CULVERT, SECTION 10, TOWNSHIP 24 SOUTH, RANGE 4 EAST.
HF0336
HF0336                          STATION RECOVERY (2006)
HF0336
HF0336'RECOVERY NOTE BY INDIVIDUAL CONTRIBUTORS 2006
HF0336'RECOVERED IN GOOD CONDITION.
HF0336
HF0336                          STATION RECOVERY (2006)
HF0336
HF0336'RECOVERY NOTE BY INDIVIDUAL CONTRIBUTORS 2006 (BCC)
HF0336'SCHOOLHOUSE IN DEGRAFF NO LONGER EXISTS.

*** retrieval complete.
Elapsed Time = 00:00:01
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The NGS Data Sheet

See file dsdata.txt for more information about the datasheet.

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DATABASE = NGSIDB , PROGRAM = datasheet95, VERSION = 7.87.5
1        National Geodetic Survey,   Retrieval Date = FEBRUARY  3, 2012
 HF0292 ***********************************************************************
 HF0292  DESIGNATION -  D 40
 HF0292  PID         -  HF0292
 HF0292  STATE/COUNTY-  KS/BUTLER
 HF0292  USGS QUAD   -  LEON (1979)
 HF0292
 HF0292                        *CURRENT SURVEY CONTROL
 HF0292  ______________________________________________________________________
 HF0292* NAD 83(1986)-  37 41 29.     (N)    096 48 27.     (W)     SCALED
 HF0292* NAVD 88     -       421.096  (meters)    1381.55   (feet)  ADJUSTED
 HF0292  ______________________________________________________________________
 HF0292  GEOID HEIGHT-         -29.27  (meters)                     GEOID09
 HF0292  DYNAMIC HT  -         420.765 (meters)    1380.46  (feet)  COMP
 HF0292  MODELED GRAV-     979,831.6   (mgal)                       NAVD 88
 HF0292
 HF0292  VERT ORDER  -  SECOND    CLASS 0
 HF0292
 HF0292.The horizontal coordinates were scaled from a topographic map and have
 HF0292.an estimated accuracy of +/- 6 seconds.
 HF0292.
 HF0292.The orthometric height was determined by differential leveling and
 HF0292.adjusted in June 1991.
 HF0292
 HF0292.The geoid height was determined by GEOID09.
 HF0292
 HF0292.The dynamic height is computed by dividing the NAVD 88
 HF0292.geopotential number by the normal gravity value computed on the
 HF0292.Geodetic Reference System of 1980 (GRS 80) ellipsoid at 45
 HF0292.degrees latitude (g = 980.6199 gals.).
 HF0292
 HF0292.The modeled gravity was interpolated from observed gravity values.
 HF0292
 HF0292;                    North         East     Units  Estimated Accuracy
 HF0292;SPC KS S     -   515,080.      549,260.      MT  (+/- 180 meters Scaled)
 HF0292
 HF0292                          SUPERSEDED SURVEY CONTROL
 HF0292
 HF0292  NGVD 29 (??/??/92)  420.961  (m)          1381.10   (f) ADJ UNCH    2 0
 HF0292
 HF0292.Superseded values are not recommended for survey control.
 HF0292.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.
 HF0292.See file dsdata.txt to determine how the superseded data were derived.
 HF0292
 HF0292_U.S. NATIONAL GRID SPATIAL ADDRESS: 14SPG933738(NAD 83)
 HF0292
 HF0292_MARKER: DB = BENCH MARK DISK
 HF0292_SETTING: 7 = SET IN TOP OF CONCRETE MONUMENT
 HF0292_SP_SET: SET IN TOP OF CONCRETE MONUMENT
 HF0292_STAMPING: D 40 1934
 HF0292_STABILITY: C = MAY HOLD, BUT OF TYPE COMMONLY SUBJECT TO
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HF0292+STABILITY: SURFACE MOTION
HF0292_SATELLITE: THE SITE LOCATION WAS REPORTED AS NOT SUITABLE FOR
HF0292+SATELLITE: SATELLITE OBSERVATIONS - August 17, 2006
HF0292
HF0292 HISTORY   - Date   Condition   Report By
HF0292 HISTORY   - 1934   MONUMENTED   CGS
HF0292 HISTORY   - 1962   GOOD   CGS
HF0292 HISTORY   - 19910129 POOR   USPSQD
HF0292 HISTORY   - 20060817 GOOD   INDIV
HF0292 HISTORY   - 20061227 GOOD   INDIV
HF0292
HF0292   STATION DESCRIPTION
HF0292
HF0292'DESCRIBED BY COAST AND GEODETIC SURVEY 1962
HF0292'1.8 MI W FROM LEON.
HF0292'1.8 MILES WEST ALONG THE ST. LOUIS-SAN FRANCISCO RAILWAY FROM
HF0292'LEON, AT MILEAGE 474.50, AT A ROAD CROSSING, 28 FEET WEST OF THE
HF0292'CENTERLINE OF THE ROAD, AND 41 FEET SOUTH OF THE CENTERLINE
HF0292'OF THE TRACK. A STANDARD DISK, STAMPED D 40 1934 AND SET IN
HF0292'THE TOP OF A CONCRETE POST.
HF0292
HF0292   STATION RECOVERY (1991)
HF0292
HF0292'RECOVERY NOTE BY US POWER SQUADRON 1991 (RC)
HF0292'MARK RECOVERED IN POOR CONDITION.
HF0292
HF0292   STATION RECOVERY (2006)
HF0292
HF0292'RECOVERY NOTE BY INDIVIDUAL CONTRIBUTORS 2006 (BCC)
HF0292'RAILROAD TRACKS AND MARKERS NO LONGER PRESENT. NEW SITE LOCATION AS
HF0292'FOLLOWS -
HF0292'
HF0292'T 27 S, R 6 E, 0.1 MILE S OF CORNER SECTIONS 17, 18, 19 AND 20, 28 FT.
HF0292'W OF CENTERLINE OF ROAD AND 41 FT. S OF CENTERLINE OF ABANDONED
HF0292'RAILROAD TRACK BED, UNDERNEATH LARGE CEDAR TREE, IN CONCRETE POST
HF0292'PROJECTING 1 FT. ABOVE GROUND, STANDARD TABLET STAMPED 'D 40 1934'
HF0292
HF0292   STATION RECOVERY (2006)
HF0292
HF0292'RECOVERY NOTE BY INDIVIDUAL CONTRIBUTORS 2006 (BCC)
HF0292'LARGE CEDAR TREE THAT WAS NEXT TO BENCHMARK HAS BEEN CUT DOWN SO
HF0292'BENCHMARK IS NOW OUT IN OPEN SPACE. CONCRETE POST LOOKS LIKE IT IS
HF0292'LEANING SLIGHTLY TO THE EAST.

*** retrieval complete.
Elapsed Time = 00:00:01

The NGS Data Sheet

See file dsdata.txt for more information about the datasheet.

```
DATABASE = NGSIDB , PROGRAM = datasheet95, VERSION = 7.87.5
1        National Geodetic Survey,   Retrieval Date = FEBRUARY  9, 2012
 KE0363 ***********************************************************************
 KE0363  DESIGNATION -  D 217
 KE0363  PID         -  KE0363
 KE0363  STATE/COUNTY-  MO/BUCHANAN
 KE0363  USGS QUAD   -  HALLS (1972)
 KE0363
 KE0363                        *CURRENT SURVEY CONTROL
 KE0363  ______________________________________________________________________
 KE0363* NAD 83(1986)-  39 38 21.3     (N)     094 57 51.1     (W)      HD_HELD2
 KE0363* NAVD 88     -       244.750   (meters)      802.98    (feet)   ADJUSTED
 KE0363  ______________________________________________________________________
 KE0363  GEOID HEIGHT-         -31.93  (meters)                         GEOID09
 KE0363  DYNAMIC HT  -         244.604 (meters)      802.51    (feet)   COMP
 KE0363  MODELED GRAV-     980,025.1   (mgal)                           NAVD 88
 KE0363
 KE0363  VERT ORDER  -  FIRST     CLASS II
 KE0363
 KE0363.The horizontal coordinates were established by autonomous hand held GPS
 KE0363.observations and have an estimated accuracy of +/- 10 meters.
 KE0363.
 KE0363.The orthometric height was determined by differential leveling and
 KE0363.adjusted in June 1991.
 KE0363
 KE0363.The geoid height was determined by GEOID09.
 KE0363
 KE0363.The dynamic height is computed by dividing the NAVD 88
 KE0363.geopotential number by the normal gravity value computed on the
 KE0363.Geodetic Reference System of 1980 (GRS 80) ellipsoid at 45
 KE0363.degrees latitude (g = 980.6199 gals.).
 KE0363
 KE0363.The modeled gravity was interpolated from observed gravity values.
 KE0363
 KE0363;                    North         East     Units  Estimated Accuracy
 KE0363;SPC MO W     -   385,519.      810,155.      MT   (+/- 10 meters HH2 GPS)
 KE0363
 KE0363                          SUPERSEDED SURVEY CONTROL
 KE0363
 KE0363  NGVD 29 (??/??/92)  244.642   (m)           802.63    (f) ADJ UNCH    1 2
 KE0363
 KE0363.Superseded values are not recommended for survey control.
 KE0363.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.
 KE0363.See file dsdata.txt to determine how the superseded data were derived.
 KE0363
 KE0363_U.S. NATIONAL GRID SPATIAL ADDRESS: 15SUD3145189562(NAD 83)
 KE0363
 KE0363_MARKER: DB = BENCH MARK DISK
 KE0363_SETTING: 7 = SET IN TOP OF CONCRETE MONUMENT
 KE0363_SP_SET: CONCRETE POST
 KE0363_STAMPING: D 217 1948
 KE0363_MARK LOGO: CGS
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KE0363_STABILITY: C = MAY HOLD, BUT OF TYPE COMMONLY SUBJECT TO
KE0363+STABILITY: SURFACE MOTION
KE0363_SATELLITE: THE SITE LOCATION WAS REPORTED AS SUITABLE FOR
KE0363+SATELLITE: SATELLITE OBSERVATIONS - August 20, 1989
KE0363
KE0363  HISTORY     - Date     Condition        Report By
KE0363  HISTORY     - 1948     MONUMENTED       CGS
KE0363  HISTORY     - 1958     GOOD             CGS
KE0363  HISTORY     - 19890820 GOOD             NGS
KE0363  HISTORY     - 20060409 GOOD             GEOCAC
KE0363
KE0363                          STATION DESCRIPTION
KE0363
KE0363'DESCRIBED BY COAST AND GEODETIC SURVEY 1948
KE0363'0.7 MI NE FROM HALLS.
KE0363'0.6 MILE NORTHEAST ALONG THE CHICAGO, BURLINGTON AND QUINCY
KE0363'RAILROAD FROM THE STATION AT HALLS, THENCE 0.1 MILE NORTH ALONG
KE0363'A COUNTY ROAD, IN THE SOUTHEAST CORNER OF THE HALLS SCHOOL DIST.
KE0363'NO. 39 YARD, 513.0 FEET NORTH ALONG A COUNTY ROAD FROM THE
KE0363'NORTHWEST RAIL OF THE CHICAGO, BURLINGTON AND QUINCY RAILROAD
KE0363'TRACK, 444.0 FEET NORTH ALONG A COUNTY ROAD FROM THE CENTER LINE
KE0363'OF U.S. HIGHWAY NO. 59, 214.0 FEET SOUTH OF THE CENTER LINE OF
KE0363'A GRAVEL ROAD LEADING WEST, 136.8 FEET SOUTH OF THE SOUTHEAST
KE0363'CORNER OF THE SCHOOL BUILDING, 51.8 FEET EAST-NORTHEAST OF THE
KE0363'NORTHEAST CORNER OF THE MISSOURI VALLEY BAPTIST CHURCH, 26.0
KE0363'FEET WEST OF THE CENTER LINE OF THE COUNTY ROAD, 1.3 FEET
KE0363'NORTHWEST OF A CORNER FENCE POST, 1.2 FEET SOUTHEAST OF A
KE0363'REFERENCE POST, SET IN THE TOP OF A CONCRETE POST PROJECTING 0.2
KE0363'FOOT ABOVE THE GROUND.
KE0363
KE0363                          STATION RECOVERY (1958)
KE0363
KE0363'RECOVERY NOTE BY COAST AND GEODETIC SURVEY 1958
KE0363'RECOVERED IN GOOD CONDITION.
KE0363
KE0363                          STATION RECOVERY (1989)
KE0363
KE0363'RECOVERY NOTE BY NATIONAL GEODETIC SURVEY 1989
KE0363'RECOVERED IN GOOD CONDITION.  A NEW TO REACH FOLLOWS.  10.9 KM (6.75
KE0363'MI) SOUTHEASTERLY ALONG U.S. HIGHWAY 59 FROM THE JUNCTION OF STATE
KE0363'HIGHWAY 752 IN SOUTHWEST ST JOSEPH, THENCE 0.2 KM (0.10 MI) NORTH
KE0363'ALONG A GRAVELED ROAD.  NOTE--THE SCHOOL HAS BEEN REMOVED.  ADD--0.9
KE0363'M (3.0 FT) NORTH OF A WITNESS POST AND FENCE.
KE0363
KE0363                          STATION RECOVERY (2006)
KE0363
KE0363'RECOVERY NOTE BY GEOCACHING 2006 (RCF)
KE0363'HH2 (NAD 83) N39 38 21.3 W94 57 51.1

*** retrieval complete.
Elapsed Time = 00:00:01
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The NGS Data Sheet

See file dsdata.txt for more information about the datasheet.

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DATABASE = NGSIDB , PROGRAM = datasheet95, VERSION = 7.87.5
1        National Geodetic Survey,   Retrieval Date = JANUARY 31, 2012
 JE0742 ***********************************************************************
 JE0742  DESIGNATION -  D 277
 JE0742  PID         -  JE0742
 JE0742  STATE/COUNTY-  KS/LINN
 JE0742  USGS QUAD   -  MAPLETON (1966)
 JE0742
 JE0742                        *CURRENT SURVEY CONTROL
 JE0742  ______________________________________________________________________
 JE0742* NAD 83(1986)-  38 06 08.     (N)    094 59 18.     (W)     SCALED
 JE0742* NAVD 88     -       319.987  (meters)    1049.82   (feet)  ADJUSTED
 JE0742  ______________________________________________________________________
 JE0742  GEOID HEIGHT-         -31.63  (meters)                     GEOID09
 JE0742  DYNAMIC HT  -         319.749 (meters)    1049.04  (feet)  COMP
 JE0742  MODELED GRAV-     979,877.3   (mgal)                       NAVD 88
 JE0742
 JE0742  VERT ORDER  -  SECOND    CLASS 0
 JE0742
 JE0742.The horizontal coordinates were scaled from a topographic map and have
 JE0742.an estimated accuracy of +/- 6 seconds.
 JE0742.
 JE0742.The orthometric height was determined by differential leveling and
 JE0742.adjusted in June 1991.
 JE0742
 JE0742.The geoid height was determined by GEOID09.
 JE0742
 JE0742.The dynamic height is computed by dividing the NAVD 88
 JE0742.geopotential number by the normal gravity value computed on the
 JE0742.Geodetic Reference System of 1980 (GRS 80) ellipsoid at 45
 JE0742.degrees latitude (g = 980.6199 gals.).
 JE0742
 JE0742.The modeled gravity was interpolated from observed gravity values.
 JE0742
 JE0742;                   North         East     Units  Estimated Accuracy
 JE0742;SPC KS S     -   565,130.      707,920.      MT  (+/- 180 meters Scaled)
 JE0742
 JE0742                          SUPERSEDED SURVEY CONTROL
 JE0742
 JE0742  NGVD 29 (??/??/92)  319.846  (m)          1049.36   (f) ADJ UNCH    2 0
 JE0742
 JE0742.Superseded values are not recommended for survey control.
 JE0742.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.
 JE0742.See file dsdata.txt to determine how the superseded data were derived.
 JE0742
 JE0742_U.S. NATIONAL GRID SPATIAL ADDRESS: 15SUC256190(NAD 83)
 JE0742
 JE0742_MARKER: DB = BENCH MARK DISK
 JE0742_SETTING: 7 = SET IN TOP OF CONCRETE MONUMENT
 JE0742_SP_SET: SET IN TOP OF CONCRETE MONUMENT
 JE0742_STAMPING: D 277 1945
 JE0742_STABILITY: C = MAY HOLD, BUT OF TYPE COMMONLY SUBJECT TO
```

JE0742+STABILITY: SURFACE MOTION
JE0742
JE0742 HISTORY   - Date   Condition   Report By
JE0742 HISTORY   - 1945   MONUMENTED   CGS
JE0742 HISTORY   - 1951   GOOD   CGS
JE0742 HISTORY   - 20070317 GOOD   INDIV
JE0742
JE0742   STATION DESCRIPTION
JE0742
JE0742'DESCRIBED BY COAST AND GEODETIC SURVEY 1951
JE0742'1.3 MI E FROM BLUE MOUND.
JE0742'1.3 MILES EAST ALONG AN ABANDONED BRANCH OF THE MISSOURI PACIFIC
JE0742'RAILROAD FROM THE FARMERS CO-OP ELEVATOR AT BLUE MOUND, LINN
JE0742'COUNTY, AT THE CROSSING OF A NORTH-AND-SOUTH GRAVEL ROAD, 36.5
JE0742'FEET NORTHWEST OF THE CENTERLINE OF THE OLD ROADBED, 24.5 FEET
JE0742'WEST OF THE CENTERLINE OF THE GRAVEL ROAD, 8 FEET NORTH OF THE
JE0742'NORTH END OF A WIRE GATE, 1 FOOT WEST OF THE FENCE, 1 FOOT SOUTH
JE0742'OF A WHITE WOODEN WITNESS POST, AND LEVEL WITH THE ROADBED.
JE0742'A STANDARD DISK, STAMPED D 277 1945 AND SET IN THE TOP OF A
JE0742'CONCRETE POST PROJECTING 4 INCHES ABOVE GROUND. TO REACH THE
JE0742'STATION FROM WHERE STATE HIGHWAY 52 TURNS EAST AT THE NORTHSIDE
JE0742'OF BLUE MOUND, GO EAST ON STATE HIGHWAY 52 FOR 0.9 MILE TO
JE0742'CROSSROADS. TURN LEFT AND GO NORTH FOR 0.5 MILE TO ROADBED
JE0742'AND THE STATION.
JE0742
JE0742   STATION RECOVERY (2007)
JE0742
JE0742'RECOVERY NOTE BY INDIVIDUAL CONTRIBUTORS 2007 (SGK)
JE0742'FOUND IN GOOD CONDITION. THE FENCE GATE AND THE WITNESS POST HAVE
JE0742'BEEN REMOVED.
JE0742'

*** retrieval complete.
Elapsed Time = 00:00:02

The NGS Data Sheet

See file dsdata.txt for more information about the datasheet.

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DATABASE = NGSIDB , PROGRAM = datasheet95, VERSION = 7.87.5
1        National Geodetic Survey,   Retrieval Date = FEBRUARY  3, 2012
 HF0363 ***********************************************************************
 HF0363  DESIGNATION -  ELDORADO
 HF0363  PID         -  HF0363
 HF0363  STATE/COUNTY-  KS/BUTLER
 HF0363  USGS QUAD   -  EL DORADO (1979)
 HF0363
 HF0363                        *CURRENT SURVEY CONTROL
 HF0363  ______________________________________________________________________
 HF0363* NAD 83(1997)-  37 48 49.09935(N)    096 51 47.43048(W)      ADJUSTED
 HF0363* NAVD 88     -       409.690  (meters)    1344.12   (feet)  ADJUSTED
 HF0363  ______________________________________________________________________
 HF0363  LAPLACE CORR-          -1.67  (seconds)                     DEFLEC09
 HF0363  GEOID HEIGHT-         -29.20  (meters)                      GEOID09
 HF0363  DYNAMIC HT  -         409.377 (meters)    1343.10  (feet)  COMP
 HF0363  MODELED GRAV-     979,852.6   (mgal)                        NAVD 88
 HF0363
 HF0363  HORZ ORDER  -  FIRST
 HF0363  VERT ORDER  -  SECOND    CLASS 0
 HF0363
 HF0363.The horizontal coordinates were established by classical geodetic methods
 HF0363.and adjusted by the National Geodetic Survey in October 1998.
 HF0363.
 HF0363.The orthometric height was determined by differential leveling and
 HF0363.adjusted in June 1991.
 HF0363
 HF0363.The Laplace correction was computed from DEFLEC09 derived deflections.
 HF0363
 HF0363.The geoid height was determined by GEOID09.
 HF0363
 HF0363.The dynamic height is computed by dividing the NAVD 88
 HF0363.geopotential number by the normal gravity value computed on the
 HF0363.Geodetic Reference System of 1980 (GRS 80) ellipsoid at 45
 HF0363.degrees latitude (g = 980.6199 gals.).
 HF0363
 HF0363.The modeled gravity was interpolated from observed gravity values.
 HF0363
 HF0363;                   North         East     Units Scale Factor Converg.
 HF0363;SPC KS S     -   528,561.252   544,113.010   MT  0.99993756   +1 00 21.1
 HF0363;SPC KS S     - 1,734,121.37  1,785,144.10   sFT  0.99993756   +1 00 21.1
 HF0363;UTM  14      - 4,187,289.120   688,092.214   MT  1.00003577   +1 18 37.7
 HF0363
 HF0363!             -  Elev Factor  x  Scale Factor =   Combined Factor
 HF0363!SPC KS S     -   0.99994030  x   0.99993756  =   0.99987786
 HF0363!UTM  14      -   0.99994030  x   1.00003577  =   0.99997607
 HF0363
 HF0363:                Primary Azimuth Mark                     Grid Az
 HF0363:SPC KS S     -  ERWIN                                    355 50 54.4
 HF0363:UTM  14      -  ERWIN                                    355 32 37.8
 HF0363
 HF0363|----------------------------------------------------------------------|
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HF0363| PID    Reference Object                          Distance      Geod. Az  |
HF0363|                                                                dddmmss.s |
HF0363| HF1168 AIKMAN ATSF RR STANDPIPE                APPROX.25.1 KM 0390835.2 |
HF0363| HF1191 ELDORADO ST JOHNS CHURCH CROSS           APPROX. 0.9 KM 0394906.1 |
HF0363| HF1165 PHILLIPS PETROLEM CO TANK                APPROX.27.7 KM 0495806.2 |
HF0363| HF1188 ELDORADO COURTHOUSE CLOCKTOWER           APPROX. 1.1 KM 0692804.1 |
HF0363| HF0364 ELDORADO RM 1                            11.825 METERS 07627     |
HF0363| HF0365 ELDORADO RM 2                            18.170 METERS 17431     |
HF0363| CL5135 ELDORADO RM 3                            22.713 METERS 21639     |
HF0363| HF1190 ELDORADO MUNICIPAL TANK                  12.612 METERS 25121     |
HF0363| JF1442 BURNS MUN WATER TANK                     APPROX.31.2 KM 3560757.8 |
HF0363| HF1185 ERWIN                                    APPROX.12.0 KM 3565115.5 |
HF0363|-----------------------------------------------------------------------|
HF0363
HF0363                          SUPERSEDED SURVEY CONTROL
HF0363
HF0363  NAD 83(1993)-  37 48 49.10627(N)    096 51 47.41961(W) AD(       ) 1
HF0363  NAD 83(1986)-  37 48 49.11118(N)    096 51 47.42284(W) AD(       ) 1
HF0363  NAD 27      -  37 48 49.03809(N)    096 51 46.30788(W) AD(       ) 1
HF0363  NGVD 29 (??/??/92)  409.551  (m)          1343.67   (f) ADJ UNCH    2 0
HF0363
HF0363.Superseded values are not recommended for survey control.
HF0363.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.
HF0363.See file dsdata.txt to determine how the superseded data were derived.
HF0363
HF0363_U.S. NATIONAL GRID SPATIAL ADDRESS: 14SPG8809287289(NAD 83)
HF0363
HF0363_MARKER: DS = TRIANGULATION STATION DISK
HF0363_SETTING: 7 = SET IN TOP OF CONCRETE MONUMENT
HF0363_SP_SET: CONCRETE POST
HF0363_STAMPING: ELDORADO 1935
HF0363_MARK LOGO: CGS
HF0363_MAGNETIC: N = NO MAGNETIC MATERIAL
HF0363_STABILITY: C = MAY HOLD, BUT OF TYPE COMMONLY SUBJECT TO
HF0363+STABILITY: SURFACE MOTION
HF0363_SATELLITE: THE SITE LOCATION WAS REPORTED AS SUITABLE FOR
HF0363+SATELLITE: SATELLITE OBSERVATIONS - September 20, 2009
HF0363
HF0363  HISTORY     - Date     Condition        Report By
HF0363  HISTORY     - 1935     MONUMENTED       CGS
HF0363  HISTORY     - 1935     GOOD             CGS
HF0363  HISTORY     - 1940     GOOD             CGS
HF0363  HISTORY     - 1975     GOOD             KSHC
HF0363  HISTORY     - 1975     GOOD             NGS
HF0363  HISTORY     - 1987     GOOD             NOS
HF0363  HISTORY     - 1987     GOOD             NOSAMC
HF0363  HISTORY     - 20060605 GOOD             INDIV
HF0363  HISTORY     - 20090920 GOOD             KSDT
HF0363
HF0363                          STATION DESCRIPTION
HF0363
HF0363'DESCRIBED BY COAST AND GEODETIC SURVEY 1935 (CIA)
HF0363'STATION IS IN THE TOWN OF ELDORADO, AT THE MUNICIPAL WATER
HF0363'TANK, T. 26 S., R. 5 E., SOUTHEAST QUARTER OF SECTION 3.
HF0363'
HF0363'TO REACH FROM THE INTERSECTION OF CENTRAL AVENUE AND MAIN STREET,
HF0363'GO 0.75 MILE WEST ON CENTRAL AVENUE, THENCE LEFT 0.25 MILE TO WATER
HF0363'TANK AND STATION.  MARK IS 37 FEET SOUTH OF CENTER LINE OF
HF0363'EAST-WEST CINDER ROAD, ON LINE WITH NORTH LEGS OF TANK,
HF0363'24 FEET EAST OF NORTHEAST CORNER LEG TO TANK, AND 6.6 FEET
HF0363'WEST OF BASE TO OLD FLAGPOLE, AND IS FLUSH WITH GROUND.
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HF0363'
HF0363'REFERENCE MARK NO. 1 IS 28 FEET SOUTH OF CENTER LINE OF
HF0363'CINDER ROAD, 15 FEET NORTH AND 15 FEET WEST FROM NORTHWEST
HF0363'CORNER OF BUNGALOW, AND 15 FEET SOUTHWEST OF WATER METER
HF0363'COVER AND PROJECTS 6 INCHES.
HF0363'
HF0363'REFERENCE MARK NO. 2 IS 85 FEET SOUTH OF CENTER LINE OF
HF0363'CINDER ROAD, 42 FEET SOUTHEAST OF SOUTHEAST CORNER LEG OF
HF0363'TANK, IN MIDDLE OF OLD FOUNDATION AND PROJECTS 6 INCHES.
HF0363'
HF0363'REFERENCE MARK NO. 3 IS 33 FEET SOUTH FROM MIDDLE POINT
HF0363'OF LINE JOINING SOUTH LEGS OF TANK AND PROJECTS 6 INCHES.
HF0363'
HF0363'DISTANCE TO SOUTHEAST CORNER OF SQUARE FEED PIPE OF ELDORADO
HF0363'MUNICIPAL WATER TANK, 41.35 FEET (12.603 METERS).
HF0363'
HF0363'SURFACE, UNDERGROUND AND REFERENCE MARKS ARE SET AS DESCRIBED.
HF0363'
HF0363'HEIGHT OF LIGHT ABOVE STATION MARK - 23 METERS.
HF0363
HF0363 STATION RECOVERY (1935)
HF0363
HF0363'RECOVERY NOTE BY COAST AND GEODETIC SURVEY 1935
HF0363'AT ELDORADO.
HF0363'AT ELDORADO, BUTLER COUNTY, NEAR THE INTERSECTION OF SUMMIT AND
HF0363'LOCUST STREEETS, 144 FEET EAST OF THE CENTERLINE OF SUMMIT STREET,
HF0363'30 FEET SOUTH OF THE CENTERLINE OF LOCUST STREET, AT THE CITY
HF0363'WATER TOWER, AND 18 FEET EAST OF THE NORTHEAST LEG. A STANDARD
HF0363'TRIANGULATION-STATION DISK, STAMPED ELDORADO 1935 AND SET IN THE TOP
HF0363'OF A CONCRETE POST PROJECTING 0.5 FOOT ABOVE GROUND.
HF0363
HF0363 STATION RECOVERY (1940)
HF0363
HF0363'RECOVERY NOTE BY COAST AND GEODETIC SURVEY 1940 (DHK)
HF0363'STATION IS IN THE TOWN OF ELDORADO, AT THE MUNICIPAL WATER
HF0363'TANK, T. 26 S., R. 5 E., IN THE SOUTHEAST QUARTER OF SECTION
HF0363'NO. 3.
HF0363'
HF0363'TO REACH THE STATION FROM THE INTERSECTION OF CENTRAL AVENUE
HF0363'AND MAIN STREET, GO 0.75 MILE WEST ON CENTRAL AVENUE, THENCE
HF0363'LEFT 0.25 MILE TO WATER TANK AND THE STATION.
HF0363'
HF0363'STATION MARK IS 48 YARDS EAST OF THE CENTER LINE OF SUMMIT
HF0363'STREET, 30 FEET SOUTH OF CENTER LINE OF LOCUST STREET, 18
HF0363'FEET EAST OF THE NORTHEAST LEG OF THE CITY WATER TOWER,
HF0363'6.6 FEET WEST OF THE BASE TO OLD FLAGPOLE. STANDARD DISK
HF0363'IN TOP OF CIRCULAR CONCRETE POST 12 INCHES IN DIAMETER
HF0363'PROJECTING 0.5 FOOT, STAMPED ELDORADO 1935.
HF0363'
HF0363'STATION UNDERGROUND MARK IS STANDARD DISK STAMPED ELDORADO
HF0363'1935.
HF0363'
HF0363'REFERENCE MARK NO. 1 IS 177 FEET EAST OF CENTER LINE OF
HF0363'SUMMIT STREET, 51 FEET EAST OF THE NORTHEAST LEG OF THE
HF0363'CITY WATER TOWER, 24 FEET SOUTH OF THE CENTER LINE OF LOCUST
HF0363'STREET, 19 FEET NORTHWEST OF THE NORTHWEST CORNER OF A WHITE
HF0363'BUNGALOW. STANDARD DISK IN TOP OF CIRCULAR CONCRETE POST PROJECTING
HF0363'0.5 FOOT, STAMPED ELDORADO NO 1 1935.
HF0363'
HF0363'REFERENCE MARK NO. 2 IS 50 YARDS EAST OF THE CENTER LINE
HF0363'OF SUMMIT STREET, 29 YARDS SOUTH OF THE CENTER LINE OF LOCUST

HF0363'STREET, 42 FEET SOUTHEAST OF THE SOUTHEAST CORNER OF LEG
HF0363'OF CITY WATER TANK. STANDARD DISK IN MIDDLE OF OLD CONCRETE
HF0363'FOUNDATION PROJECTING 0.5 FOOT, STAMPED ELDORADO NO 2 1935.
HF0363'
HF0363'REFERENCE MARK NO. 3 IS LOST. HOLES TO A DEPTH OF THREE
HF0363'FEET WERE DUG IN AN EFFORT TO LOCATE IT, BUT NOTHING WAS
HF0363'FOUND. A RESIDENT STATED THAT AN EARTH FILL HAD BEEN MADE
HF0363'IN THE AREA.
HF0363'
HF0363'HEIGHT OF LIGHT ABOVE STATION MARK - 23 METERS.
HF0363
HF0363   STATION RECOVERY (1975)
HF0363
HF0363'RECOVERY NOTE BY KS HIGHWAY COMM 1975 (LJG)
HF0363'ELDORADO RECOVERED IN GOOD CONDITION.
HF0363'
HF0363'WE MISSED THE NEW WATER TOWER BY 10 MINUTES - .
HF0363'
HF0363'DISTANCE AND DIRECTION FROM NEAREST TOWN--IN ELDORADO, KANS.
HF0363
HF0363   STATION RECOVERY (1975)
HF0363
HF0363'RECOVERY NOTE BY NATIONAL GEODETIC SURVEY 1975 (MSB)
HF0363'STATION, RM 1 AND RM 2 WERE RECOVERED AS DESCRIBED AND IN GOOD
HF0363'CONDITION.
HF0363
HF0363   STATION RECOVERY (1987)
HF0363
HF0363'RECOVERY NOTE BY NATIONAL OCEAN SERVICE 1987 (RDC)
HF0363'THE STATION WAS RECOVERED AT THIS DATE.
HF0363'RECOVERD AS DESCRIBED. RM NO 1 AND NO 2 WERE ALSO RECOVERD IN GOOD
HF0363'CONDITION. THE STATION CAN NOT BE USED AS A GROUND VISIBLE STATION
HF0363'DUE TO TREES AND BUILDINGS SURROUNDING THE STATION.
HF0363'
HF0363'RECOVERD BY R DECROIX.
HF0363
HF0363   STATION RECOVERY (1987)
HF0363
HF0363'RECOVERY NOTE BY NOS ATLANTIC MARINE CENTER 1987
HF0363'RECOVERED IN GOOD CONDITION.
HF0363
HF0363   STATION RECOVERY (2006)
HF0363
HF0363'RECOVERY NOTE BY INDIVIDUAL CONTRIBUTORS 2006
HF0363'EL DORADO, 144 FT. E OF CENTERLINE OF SUMMIT STREET, 30 FT. S OF
HF0363'CENTERLINE OF LOCUST STREET, NEAR NE CORNER OF PARK, IN CONCRETE POST
HF0363'PROJECTING 4 INCHES ABOVE GROUND, STANDARD TABLET STAMPED ELDORADO
HF0363'1935
HF0363
HF0363   STATION RECOVERY (2009)
HF0363
HF0363'RECOVERY NOTE BY KANSAS DEPARTMENT OF TRANSPORTATION 2009 (KIL)
HF0363'RM 1 AND RM 2 RECOVERED IN GOOD CONDITION.
HF0363'

*** retrieval complete.
Elapsed Time = 00:00:02

The NGS Data Sheet

See file dsdata.txt for more information about the datasheet.

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DATABASE = NGSIDB , PROGRAM = datasheet95, VERSION = 7.87.5
1        National Geodetic Survey,   Retrieval Date = JANUARY 31, 2012
 HE0288 ***********************************************************************
 HE0288  DESIGNATION -  G 251
 HE0288  PID         -  HE0288
 HE0288  STATE/COUNTY-  KS/BOURBON
 HE0288  USGS QUAD   -  HAMMOND (1977)
 HE0288
 HE0288                        *CURRENT SURVEY CONTROL
 HE0288  ______________________________________________________________________
 HE0288* NAD 83(1986)-  37 58 43.      (N)    094 42 45.      (W)      SCALED
 HE0288* NAVD 88     -       258.233   (meters)     847.22    (feet)   ADJUSTED
 HE0288  ______________________________________________________________________
 HE0288  GEOID HEIGHT-         -31.62  (meters)                        GEOID09
 HE0288  DYNAMIC HT  -         258.042 (meters)     846.59    (feet)   COMP
 HE0288  MODELED GRAV-     979,886.2   (mgal)                          NAVD 88
 HE0288
 HE0288  VERT ORDER  -  SECOND    CLASS 0
 HE0288
 HE0288.The horizontal coordinates were scaled from a topographic map and have
 HE0288.an estimated accuracy of +/- 6 seconds.
 HE0288.
 HE0288.The orthometric height was determined by differential leveling and
 HE0288.adjusted in June 1991.
 HE0288
 HE0288.The geoid height was determined by GEOID09.
 HE0288
 HE0288.The dynamic height is computed by dividing the NAVD 88
 HE0288.geopotential number by the normal gravity value computed on the
 HE0288.Geodetic Reference System of 1980 (GRS 80) ellipsoid at 45
 HE0288.degrees latitude (g = 980.6199 gals.).
 HE0288
 HE0288.The modeled gravity was interpolated from observed gravity values.
 HE0288
 HE0288;                    North         East     Units  Estimated Accuracy
 HE0288;SPC KS S     -   552,360.      732,650.      MT  (+/- 180 meters Scaled)
 HE0288
 HE0288                          SUPERSEDED SURVEY CONTROL
 HE0288
 HE0288  NGVD 29 (??/??/92)  258.109  (m)           846.81    (f) ADJ UNCH    2 0
 HE0288
 HE0288.Superseded values are not recommended for survey control.
 HE0288.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.
 HE0288.See file dsdata.txt to determine how the superseded data were derived.
 HE0288
 HE0288_U.S. NATIONAL GRID SPATIAL ADDRESS: 15SUC495048(NAD 83)
 HE0288
 HE0288_MARKER: DB = BENCH MARK DISK
 HE0288_SETTING: 30 = SET IN A LIGHT STRUCTURE
 HE0288_SP_SET: CULVERT
 HE0288_STAMPING: G 251 1934
 HE0288_STABILITY: D = MARK OF QUESTIONABLE OR UNKNOWN STABILITY
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HE0288_SATELLITE: THE SITE LOCATION WAS REPORTED AS SUITABLE FOR
HE0288+SATELLITE: SATELLITE OBSERVATIONS - April 29, 2008
HE0288
HE0288  HISTORY     - Date     Condition        Report By
HE0288  HISTORY     - 1934     MONUMENTED       CGS
HE0288  HISTORY     - 1975     GOOD             KSDT
HE0288  HISTORY     - 1975     GOOD             KSDT
HE0288  HISTORY     - 20070615 GOOD             INDIV
HE0288  HISTORY     - 20080429 GOOD             USDA
HE0288
HE0288                          STATION DESCRIPTION
HE0288
HE0288'DESCRIBED BY COAST AND GEODETIC SURVEY 1934
HE0288'3 MI N FROM HAMMOND.
HE0288'ABOUT 3 MILES NORTH ALONG THE ST. LOUIS-SAN FRANCISCO RAILWAY
HE0288'FROM HAMMOND, BOURBON COUNTY, 27 POLES SOUTH OF MILEPOST 88,
HE0288'10-1/2 RAILS SOUTH OF U.S. HIGHWAY 73 E, IN THE EAST CONCRETE
HE0288'RETAINING WALL OF A CULVERT, 1 FOOT SOUTH OF THE NORTH END OF
HE0288'THE WALL, AND 12 FEET EAST OF THE CENTERLINE OF THE MAIN TRACK.
HE0288'A STANDARD DISK, STAMPED G 251 1934.
HE0288
HE0288                          STATION RECOVERY (1975)
HE0288
HE0288'RECOVERY NOTE BY KANSAS DEPARTMENT OF TRANSPORTATION 1975
HE0288'RECOVERED IN GOOD CONDITION.
HE0288
HE0288                          STATION RECOVERY (1975)
HE0288
HE0288'RECOVERY NOTE BY KANSAS DEPARTMENT OF TRANSPORTATION 1975
HE0288'RECOVERED IN GOOD CONDITION.
HE0288
HE0288                          STATION RECOVERY (2007)
HE0288
HE0288'RECOVERY NOTE BY INDIVIDUAL CONTRIBUTORS 2007 (SGK)
HE0288'RECOVERED IN GOOD CONDITION.
HE0288
HE0288                          STATION RECOVERY (2008)
HE0288
HE0288'RECOVERY NOTE BY US DEPARTMENT OF AGRICULTURE 2008 (JJW)
HE0288'RECOVERED IN GOOD CONDITION

*** retrieval complete.
Elapsed Time = 00:00:02
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The NGS Data Sheet

See file dsdata.txt for more information about the datasheet.

```
DATABASE = NGSIDB , PROGRAM = datasheet95, VERSION = 7.87.6
1        National Geodetic Survey,   Retrieval Date = FEBRUARY 23, 2012
 HE0224 ***********************************************************************
 HE0224  DESIGNATION -  G 253
 HE0224  PID         -  HE0224
 HE0224  STATE/COUNTY-  KS/CRAWFORD
 HE0224  USGS QUAD   -  RADLEY (1977)
 HE0224
 HE0224                        *CURRENT SURVEY CONTROL
 HE0224  ______________________________________________________________________
 HE0224* NAD 83(2007)-  37 23 49.36756(N)    094 49 21.84289(W)      NO CHECK
 HE0224* NAVD 88     -       298.001  (meters)     977.69   (feet)  ADJUSTED
 HE0224  ______________________________________________________________________
 HE0224  EPOCH DATE  -        2002.00
 HE0224  X           -    -426,551.007 (meters)                      COMP
 HE0224  Y           -  -5,055,602.520 (meters)                      COMP
 HE0224  Z           -   3,852,655.152 (meters)                      COMP
 HE0224  LAPLACE CORR-          -0.42  (seconds)                     DEFLEC09
 HE0224  ELLIP HEIGHT-         267.512 (meters)          (02/10/07) NO CHECK
 HE0224  GEOID HEIGHT-         -30.49  (meters)                      GEOID09
 HE0224  DYNAMIC HT  -         297.766 (meters)     976.92  (feet)  COMP
 HE0224
 HE0224  ------- Accuracy Estimates (at 95% Confidence Level in cm) --------
 HE0224  Type    PID    Designation                        North   East  Ellip
 HE0224  ----------------------------------------------------------------------
 HE0224  NETWORK HE0224 G 253                               1.04   0.76   2.23
 HE0224  ----------------------------------------------------------------------
 HE0224  MODELED GRAV-     979,832.5   (mgal)                       NAVD 88
 HE0224
 HE0224  VERT ORDER  -  SECOND    CLASS 0
 HE0224
 HE0224.The horizontal coordinates were established by GPS observations
 HE0224.and adjusted by the National Geodetic Survey in February 2007.
 HE0224
 HE0224.The datum tag of NAD 83(2007) is equivalent to NAD 83(NSRS2007).
 HE0224.See National Readjustment for more information.
 HE0224
 HE0224.The horizontal coordinates are valid at the epoch date displayed above
 HE0224.which is a decimal equivalence of Year/Month/Day.
 HE0224
 HE0224.No horizontal observational check was made to the station.
 HE0224.
 HE0224.The orthometric height was determined by differential leveling and
 HE0224.adjusted in June 1991.
 HE0224
 HE0224.The X, Y, and Z were computed from the position and the ellipsoidal ht.
 HE0224
 HE0224.The Laplace correction was computed from DEFLEC09 derived deflections.
 HE0224
 HE0224.The ellipsoidal height was determined by GPS observations
 HE0224.and is referenced to NAD 83.
 HE0224
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HE0224.The geoid height was determined by GEOID09.
HE0224
HE0224.The dynamic height is computed by dividing the NAVD 88
HE0224.geopotential number by the normal gravity value computed on the
HE0224.Geodetic Reference System of 1980 (GRS 80) ellipsoid at 45
HE0224.degrees latitude (g = 980.6199 gals.).
HE0224
HE0224.The modeled gravity was interpolated from observed gravity values.
HE0224
HE0224;                    North         East     Units Scale Factor Converg.
HE0224;SPC KS S     -   487,481.381   725,517.857   MT  0.99997693   +2 15 35.2
HE0224;SPC KS S     - 1,599,345.16  2,380,303.17   sFT  0.99997693   +2 15 35.2
HE0224;UTM  15      - 4,140,478.433   338,660.247   MT  0.99992065   -1 06 26.1
HE0224
HE0224!             -  Elev Factor  x  Scale Factor =   Combined Factor
HE0224!SPC KS S     -   0.99995802  x   0.99997693  =   0.99993495
HE0224!UTM  15      -   0.99995802  x   0.99992065  =   0.99987868
HE0224
HE0224                          SUPERSEDED SURVEY CONTROL
HE0224
HE0224  ELLIP H (08/16/04)  267.512  (m)                        GP(       ) 4 2
HE0224  NAD 83(1997)-  37 23 49.36733(N)    094 49 21.84339(W) AD(       ) 1
HE0224  ELLIP H (12/22/97)  267.572  (m)                        GP(       ) 4 1
HE0224  NAD 83(1993)-  37 23 49.37960(N)    094 49 21.84693(W) AD(       ) 3
HE0224  NAD 83(1986)-  37 23 49.39023(N)    094 49 21.84987(W) AD(       ) 3
HE0224  NAVD 88 (12/22/97)  298.00   (m)          977.7    (f) LEVELING    3
HE0224  NGVD 29 (??/??/92)  297.885  (m)          977.31   (f) ADJ UNCH    2 0
HE0224
HE0224.Superseded values are not recommended for survey control.
HE0224.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.
HE0224.See file dsdata.txt to determine how the superseded data were derived.
HE0224
HE0224_U.S. NATIONAL GRID SPATIAL ADDRESS: 15SUB3866040478(NAD 83)
HE0224
HE0224_MARKER: DB = BENCH MARK DISK
HE0224_SETTING: 7 = SET IN TOP OF CONCRETE MONUMENT
HE0224_SP_SET: CONCRETE POST
HE0224_STAMPING: G 253 1934
HE0224_MARK LOGO: CGS
HE0224_MAGNETIC: N = NO MAGNETIC MATERIAL
HE0224_STABILITY: C = MAY HOLD, BUT OF TYPE COMMONLY SUBJECT TO
HE0224+STABILITY: SURFACE MOTION
HE0224_SATELLITE: THE SITE LOCATION WAS REPORTED AS SUITABLE FOR
HE0224+SATELLITE: SATELLITE OBSERVATIONS - January 22, 2004
HE0224
HE0224  HISTORY     - Date     Condition        Report By
HE0224  HISTORY     - 1934     MONUMENTED       CGS
HE0224  HISTORY     - 19881125 GOOD             NGS
HE0224  HISTORY     - 19890701 GOOD             NGS
HE0224  HISTORY     - 19900105 GOOD
HE0224  HISTORY     - 19970311 GOOD             NGS
HE0224  HISTORY     - 20040122 GOOD             SKW
HE0224  HISTORY     - 20060331 GOOD             KSDT
HE0224
HE0224                          STATION DESCRIPTION
HE0224
HE0224'DESCRIBED BY COAST AND GEODETIC SURVEY 1934
HE0224'3 MI S FROM BEULAH.
HE0224'3 MILES SOUTH ALONG THE ST. LOUIS-SAN FRANCISCO RAILWAY FROM
HE0224'THE STATION AT BEULAH, CRAWFORD COUNTY, 16 POLES SOUTH OF MILEPOST
HE0224'132, 42 FEET NORTH OF THE CENTERLINE OF A ROAD, AND 43 FEET
```

HE0224'WEST OF THE CENTERLINE OF THE MAIN TRACK. A STANDARD DISK SET
HE0224'IN THE TOP OF A CONCRETE POST.
HE0224
HE0224 STATION RECOVERY (1988)
HE0224
HE0224'RECOVERY NOTE BY NATIONAL GEODETIC SURVEY 1988
HE0224'STATION IS LOCATED ABOUT 6.5 KM (4.05 MI) NORTH OF CHEROKEE, 13 KM
HE0224'(8.10 MI) SOUTH OF GIRARD AT THE JUNCTION OF A GRAVEL ROAD AND A
HE0224'RAILROAD TRACK, INSIDE A PASTURE FENCE BUT ON RAILROAD RIGHT-OF-WAY,
HE0224'ON THE SOUTH CENTRAL EDGE OF SECTION 30, T30S R23E. OWNERSHIP--ST
HE0224'LOUIS-SAN FRANCISCO RAILROAD.
HE0224'TO REACH THE STATION FROM THE COURTHOUSE IN GIRARD, GO SOUTH ON STATE
HE0224'HIGHWAY 7 FOR 11.62 KM (7.20 MI) TO ITS JUNCTION WITH STATE HIGHWAY
HE0224'126. CONTINUE SOUTH ON HIGHWAY 7 FOR 1.61 KM (1.00 MI) TO A GRAVEL
HE0224'CROSSROAD. TURN LEFT AND GO EAST FOR 0.87 KM (0.55 MI) TO THE RAILROAD
HE0224'TRACK AND STATION ON THE LEFT.
HE0224'STATION MARK IS SET IN THE TOP OF A 25-CM SQUARE CONCRETE POST
HE0224'PROJECTING 25 CM. IT IS 9.4 M (30.8 FT) NORTH OF THE ROAD CENTER, 14.4
HE0224'M (47.2 FT) WEST OF AND 1.0 M (3.3 FT) LOWER THAN THE WEST RAIL OF
HE0224'TRACK, 2.7 M (8.9 FT) NORTH OF A FENCE CORNER, AND 0.3 M (1.0 FT) WEST
HE0224'OF A FIBERGLASS WITNESS POST IN THE FENCE LINE.
HE0224'NOTE---TRIPOD WILL HAVE TO STRADDLE FENCE. STAY OUT OF THE PASTURE AS
HE0224'NO PERMISSION WAS ASKED FOR.
HE0224'DESCRIBED BY GRH.
HE0224
HE0224 STATION RECOVERY (1989)
HE0224
HE0224'RECOVERY NOTE BY NATIONAL GEODETIC SURVEY 1989
HE0224'THE STATION IS LOCATED ABOUT 13 KM (8.10 MI) SOUTH OF GIRARD, 6.4 KM
HE0224'(4.00 MI) NORTH OF CHEROKEE, AT THE JUNCTION OF A GRAVEL ROAD AND A
HE0224'RAILROAD TRACK, INSIDE A PASTURE FENCE BUT ON RAILROAD RIGHT-OF-WAY,
HE0224'ON THE SOUTH CENTRAL EDGE OF SECTION 30, T 30 S, R 23 E.
HE0224'OWNERSHIP--ST LOUIS-SAN FRANCISCO RAILROAD.
HE0224'TO REACH THE STATION FROM THE COURTHOUSE IN GIRARD, GO SOUTH ON STATE
HE0224'HIGHWAY 7 FOR 11.6 KM (7.20 MI) TO THE JUNCTION OF STATE HIGHWAY 126.
HE0224'CONTINUE SOUTH FOR 1.6 KM (1.00 MI) TO A GRAVEL CROSSROAD. TURN LEFT
HE0224'AND GO EAST FOR 0.9 KM (0.55 MI) TO THE RAILROAD TRACK AND THE STATION
HE0224'ON THE LEFT.
HE0224'THE STATION IS A STANDARD CGS DISK SET IN THE TOP OF A 25 CM SQUARE
HE0224'CONCRETE POST PROJECTING 25 CM ABOVE THE GROUND AND 1 METER BELOW THE
HE0224'TRACK. LOCATED 14.4 M (47.2 FT) WEST OF THE WEST RAIL, 9.4 M
HE0224'(30.8 FT) NORTH OF THE ROAD CENTER, 2.7 M (8.9 FT) NORTH OF A FENCE
HE0224'CORNER AND 0.3 M (1.0 FT) WEST OF A CARSONITE WITNESS POST IN FENCE
HE0224'LINE.
HE0224'DESCRIBED BY G.R. HEID, TYPED BY HJS.
HE0224
HE0224 STATION RECOVERY (1990)
HE0224
HE0224'RECOVERED 1990
HE0224'RECOVERED IN GOOD CONDITION.
HE0224
HE0224 STATION RECOVERY (1997)
HE0224
HE0224'RECOVERY NOTE BY NATIONAL GEODETIC SURVEY 1997 (CSM)
HE0224'THE STATION IS LOCATED ABOUT 13 KM (8.05 MI) SOUTH OF GIRARD, 6 KM
HE0224'(3.70 MI) NORTH OF CHEROKEE, IN THE NORTHWEST QUADRANT OF THE JUNCTION
HE0224'OF A GRAVEL ROAD AND A RAILROAD TRACK, JUST INSIDE A PASTURE FENCE BUT
HE0224'ON RAILROAD RIGHT-OF-WAY. OWNERSHIP--ST LOUIS-SAN FRANCISCO RAILROAD.
HE0224'TO REACH FROM THE JUNCTION OF STATE HIGHWAYS 7 AND 57 IN GIRARD, ABOUT
HE0224'0.32 KM (0.20 MI) NORTH OF THE COURTHOUSE, GO SOUTH ON HIGHWAY 7 FOR
HE0224'11.6 KM (7.20 MI) TO THE JUNCTION OF STATE HIGHWAY 126. CONTINUE

HE0224'AHEAD, SOUTH ON HIGHWAY 7 FOR 1.6 KM (1.00 MI) TO A GRAVEL CROSSROAD
HE0224'(540 AVENUE). TURN LEFT, EAST ON THE GRAVEL ROAD FOR 0.9 KM (0.55 MI)
HE0224'TO THE STATION ON THE LEFT JUST BEFORE THE RAILROAD TRACK. THE
HE0224'STATION IS SET IN THE TOP OF A 15 CM SQUARE CONCRETE POST PROJECTING
HE0224'25 CM ABOVE GROUND. IT IS 14.4 M (47.2 FT) WEST OF THE WEST RAIL OF
HE0224'THE TRACKS, 9.4 M (30.8 FT) NORTH OF THE CENTER OF ROAD, 2.7 M (8.9
HE0224'FT) NORTH OF A FENCE CORNER AND 0.3 M (1.0 FT) WEST OF A FIBERGLASS
HE0224'WITNESS POST IN A FENCE LINE.
HE0224
HE0224 STATION RECOVERY (2004)
HE0224
HE0224'RECOVERY NOTE BY SHAFER, KLINE AND WARREN INC 2004 (CMC)
HE0224'RECOVERED IN GOOD CONDITION.
HE0224
HE0224 STATION RECOVERY (2006)
HE0224
HE0224'RECOVERY NOTE BY KANSAS DEPARTMENT OF TRANSPORTATION 2006 (KRH)
HE0224'RECOVERED IN GOOD CONDITION.

*** retrieval complete.
Elapsed Time = 00:00:03

The NGS Data Sheet

See file dsdata.txt for more information about the datasheet.

```
DATABASE = NGSIDB , PROGRAM = datasheet95, VERSION = 7.87.6
1        National Geodetic Survey,   Retrieval Date = APRIL 14, 2012
 JE1112 ***********************************************************************
 JE1112  DESIGNATION -  H 274
 JE1112  PID         -  JE1112
 JE1112  STATE/COUNTY-  KS/FRANKLIN
 JE1112  USGS QUAD   -  LANE (1983)
 JE1112
 JE1112                        *CURRENT SURVEY CONTROL
 JE1112  ______________________________________________________________________
 JE1112* NAD 83(1986)-  38 23 34.6     (N)     095 05 40.7     (W)      HD_HELD2
 JE1112* NAVD 88     -       277.701   (meters)      911.09    (feet)   ADJUSTED
 JE1112  ______________________________________________________________________
 JE1112  GEOID HEIGHT-         -31.78  (meters)                         GEOID09
 JE1112  DYNAMIC HT  -         277.502 (meters)      910.44    (feet)   COMP
 JE1112  MODELED GRAV-     979,905.2   (mgal)                           NAVD 88
 JE1112
 JE1112  VERT ORDER  -  SECOND    CLASS 0
 JE1112
 JE1112.The horizontal coordinates were established by autonomous hand held GPS
 JE1112.observations and have an estimated accuracy of +/- 10 meters.
 JE1112.
 JE1112.The orthometric height was determined by differential leveling and
 JE1112.adjusted in June 1991.
 JE1112
 JE1112.Photographs are available for this station.
 JE1112
 JE1112.The geoid height was determined by GEOID09.
 JE1112
 JE1112.The dynamic height is computed by dividing the NAVD 88
 JE1112.geopotential number by the normal gravity value computed on the
 JE1112.Geodetic Reference System of 1980 (GRS 80) ellipsoid at 45
 JE1112.degrees latitude (g = 980.6199 gals.).
 JE1112
 JE1112.The modeled gravity was interpolated from observed gravity values.
 JE1112
 JE1112;                    North         East     Units  Estimated Accuracy
 JE1112;SPC KS S     -   597,027.      697,423.      MT  (+/- 10 meters HH2 GPS)
 JE1112
 JE1112                         SUPERSEDED SURVEY CONTROL
 JE1112
 JE1112  NGVD 29 (??/??/92)  277.567  (m)           910.65    (f) ADJ UNCH    2 0
 JE1112
 JE1112.Superseded values are not recommended for survey control.
 JE1112.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.
 JE1112.See file dsdata.txt to determine how the superseded data were derived.
 JE1112
 JE1112_U.S. NATIONAL GRID SPATIAL ADDRESS: 15SUC1707251491(NAD 83)
 JE1112
 JE1112_MARKER: DB = BENCH MARK DISK
 JE1112_SETTING: 36 = SET IN A MASSIVE STRUCTURE
 JE1112_SP_SET: BRIDGE FOOTING
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JE1112_STAMPING: H 274 1945
JE1112_STABILITY: B = PROBABLY HOLD POSITION/ELEVATION WELL
JE1112_SATELLITE: THE SITE LOCATION WAS REPORTED AS SUITABLE FOR
JE1112+SATELLITE: SATELLITE OBSERVATIONS - April 17, 2010
JE1112
JE1112  HISTORY     - Date     Condition        Report By
JE1112  HISTORY     - 1945     MONUMENTED       CGS
JE1112  HISTORY     - 1950     GOOD             CGS
JE1112  HISTORY     - 20100417 GOOD             GEOCAC
JE1112
JE1112                          STATION DESCRIPTION
JE1112
JE1112'DESCRIBED BY COAST AND GEODETIC SURVEY 1945
JE1112'3.2 MI NE FROM GREELEY.
JE1112'FROM THE HIGHWAY BRIDGE ACROSS THE SOUTH FORK POTTAWATOMIE
JE1112'CREEK AT GREELEY GO 3.2 MILES NORTHEAST ALONG HIGHWAY 169 TO
JE1112'A CONCRETE BRIDGE.  THE MARK IS AN IRON DISK SET IN THE SOUTHWEST
JE1112'END OF THE NORTH RAIL FOOTING, 87 FEET NORTHEAST OF AN IRON
JE1112'GATE, 15 FEET NORTH OF THE CENTERLINE OF THE HIGHWAY AND 1
JE1112'FOOT ABOVE THE FLOORLEVEL OF THE BRIDGE.  STAMPED H--274-1945.
JE1112
JE1112                          STATION RECOVERY (1950)
JE1112
JE1112'RECOVERY NOTE BY COAST AND GEODETIC SURVEY 1950
JE1112'RECOVERED IN GOOD CONDITION.
JE1112
JE1112                          STATION RECOVERY (2010)
JE1112
JE1112'RECOVERY NOTE BY GEOCACHING 2010 (RCF)
JE1112'THE DISK IS ABOUT 12 INCHES BELOW THE SURFACE OF THE ROAD.

*** retrieval complete.
Elapsed Time = 00:00:01
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ITRF 00

HILLSBORO (HBRK), KANSAS

Retrieved from NGS DataBase on 10/29/02 at 15:33:13.

Antenna Reference Point(ARP): HILLSBORO CORS ARP

PID = AF9527

ITRF00 POSITION (EPOCH 1997.0)
Computed in Aug. 2001 using every third day of data through 2000.

X =	-636268.510 m	latitude	= 38 18 16.73916 N
Y =	-4971311.202 m	longitude	= 097 17 36.68500 W
Z =	3932291.561 m	ellipsoid height	= 412.608 m

ITRF00 VELOCITY
Computed in Aug. 2001 using every third day of data through 2000.

VX =	-0.0152 m/yr	northward	= -0.0049 m/yr
VY =	-0.0002 m/yr	eastward	= -0.0151 m/yr
VZ =	-0.0046 m/yr	upward	= -0.0012 m/yr

NAD_83 POSITION (EPOCH 2002.0)
Transformed from ITRF00 (epoch 1997.0) position in Mar. 2002.

X =	-636267.968 m	latitude	= 38 18 16.71508 N
Y =	-4971312.571 m	longitude	= 097 17 36.65570 W
Z =	3932291.633 m	ellipsoid height	= 413.664 m

NAD_83 VELOCITY
Transformed from ITRF00 velocity in Mar. 2002.

VX =	0.0013 m/yr	northward	= 0.0000 m/yr
VY =	0.0011 m/yr	eastward	= 0.0011 m/yr
VZ =	-0.0009 m/yr	upward	= -0.0015 m/yr

L1 Phase Center of the current GPS antenna: HILLSBORO CORS L1 PC C

The Geodetic L1/L2 compact +groundplane antenna
(Antenna Code = TRM22020.00+GP) was installed on 04/23/95.
The L2 phase center is 0.004 m below the L1 phase center.

PID = AB4137

ITRF00 POSITION (EPOCH 1997.0)
Computed in Aug. 2001 using every third day of data through 2000.

X =	-636268.518 m	latitude	= 38 18 16.73916 N
Y =	-4971311.259 m	longitude	= 097 17 36.68502 W
Z =	3932291.607 m	ellipsoid height	= 412.682 m

The ITRF00 VELOCITY of the L1 PC is the same as that for the ARP.

NAD_83 POSITION (EPOCH 2002.0)
Transformed from ITRF00 (epoch 1997.0) position in Mar. 2002.

X =	-636267.976 m	latitude	= 38 18 16.71508 N
Y =	-4971312.628 m	longitude	= 097 17 36.65573 W
Z =	3932291.679 m	ellipsoid height	= 413.738 m

| The NAD_83 VELOCITY of the L1 PC is the same as that for the ARP. |
|_____|

* Latitude, longitude and ellipsoid height are computed from their corresponding cartesian coordinates using dimensions for the GRS 80 ellipsoid: semi-major axis = 6,378,137.0 meters
flattening = 1/298.257222101...

* WARNING: Mixing of antenna types can lead to errors of up to 10 cm. in height unless antenna-phase-center variation is properly modeled.

* For additional information about the interpretation and/or derivation of these positions and velocities, consult http://www.ngs.noaa.gov/CORS/Derivation.html.
For additional information on the relation of the GPS antenna to other relevant points at the site and on GPS equipment, consult the link ftp://www.ngs.noaa.gov/cors/.html/hbrk.log.txt

* The NAD_83 position & velocity were revised in July 2000.
* The NAD_83 position & velocity were revised in Mar. 2002.

ITRF 00

WICHITA ICT1 (ICT1), KANSAS

Retrieved from NGS DataBase on 09/09/08 at 12:46:16.

Antenna Reference Point(ARP): WICHITA ICT1 CORS ARP

PID = DK6487

ITRF00 POSITION (EPOCH 1997.0)
Computed in Sep. 2008 using 26 days of data.

X =	-643821.952 m	latitude =	37 35 15.79734 N
Y =	-5019639.773 m	longitude =	097 18 31.98878 W
Z =	3869505.287 m	ellipsoid height =	363.333 m

ITRF00 VELOCITY
Predicted with HTDP_3.0 Sep. 2008.

VX =	-0.0144 m/yr	northward =	-0.0050 m/yr
VY =	-0.0007 m/yr	eastward =	-0.0142 m/yr
VZ =	-0.0044 m/yr	upward =	-0.0007 m/yr

NAD_83 (CORS96) POSITION (EPOCH 2002.0)
Transformed from ITRF00 (epoch 1997.0) position in Sep. 2008.

X =	-643821.406 m	latitude =	37 35 15.77368 N
Y =	-5019641.152 m	longitude =	097 18 31.95958 W
Z =	3869505.366 m	ellipsoid height =	364.410 m

NAD_83 (CORS96) VELOCITY
Transformed from ITRF00 velocity in Sep. 2008.

VX =	0.0019 m/yr	northward =	-0.0000 m/yr
VY =	0.0006 m/yr	eastward =	0.0018 m/yr
VZ =	-0.0007 m/yr	upward =	-0.0011 m/yr

L1 Phase Center of the current GPS antenna: WICHITA ICT1 CORS L1 PC C

The GNSS, H/W Rev. 1.00 antenna
(Antenna Code = LEIAX1202GG NONE) was installed on 07/19/06.
The L2 phase center is 0.011 m below the L1 phase center.

PID = DK6488

ITRF00 POSITION (EPOCH 1997.0)
Computed in Sep. 2008 using 26 days of data.

X =	-643821.959 m	latitude =	37 35 15.79738 N
Y =	-5019639.839 m	longitude =	097 18 31.98875 W
Z =	3869505.339 m	ellipsoid height =	363.418 m

The ITRF00 VELOCITY of the L1 PC is the same as that for the ARP.

NAD_83 (CORS96) POSITION (EPOCH 2002.0)
Transformed from ITRF00 (epoch 1997.0) position in Sep. 2008.

X =	-643821.414 m	latitude =	37 35 15.77372 N
Y =	-5019641.218 m	longitude =	097 18 31.95955 W
Z =	3869505.419 m	ellipsoid height =	364.495 m

| The NAD_83 (CORS96) VELOCITY of the L1 PC is the same as that for the ARP. |

* Latitude, longitude and ellipsoid height are computed from their corresponding cartesian coordinates using dimensions for the GRS 80 ellipsoid: semi-major axis = 6,378,137.0 meters
flattening = 1/298.257222101...

* WARNING: Mixing of antenna types can lead to errors of up to 10 cm. in height unless antenna-phase-center variation is properly modeled.

* For additional information about the interpretation and/or derivation of these positions and velocities, consult http://www.ngs.noaa.gov/CORS/Derivation.html.
For additional information on the relation of the GPS antenna to other relevant points at the site and on GPS equipment, consult the link ftp://www.ngs.noaa.gov/cors/.html/ict1.log.txt

ITRF 00
WICHITA ICT3 (ICT3), KANSAS

Retrieved from NGS DataBase on 09/09/08 at 12:46:16.

Antenna Reference Point(ARP): WICHITA ICT3 CORS ARP
PID = DK6491

ITRF00 POSITION (EPOCH 1997.0)
Computed in Sep. 2008 using 26 days of data.
X = -634302.153 m latitude = 37 45 09.33660 N
Y = -5009609.209 m longitude = 097 12 58.41099 W
Z = 3884013.902 m ellipsoid height = 401.258 m

ITRF00 VELOCITY
Predicted with HTDP_3.0 Sep. 2008.
VX = -0.0145 m/yr northward = -0.0050 m/yr
VY = -0.0007 m/yr eastward = -0.0143 m/yr
VZ = -0.0044 m/yr upward = -0.0007 m/yr

NAD_83 (CORS96) POSITION (EPOCH 2002.0)
Transformed from ITRF00 (epoch 1997.0) position in Sep. 2008.
X = -634301.608 m latitude = 37 45 09.31281 N
Y = -5009610.587 m longitude = 097 12 58.38183 W
Z = 3884013.980 m ellipsoid height = 402.333 m

NAD_83 (CORS96) VELOCITY
Transformed from ITRF00 velocity in Sep. 2008.
VX = 0.0018 m/yr northward = -0.0001 m/yr
VY = 0.0006 m/yr eastward = 0.0017 m/yr
VZ = -0.0007 m/yr upward = -0.0011 m/yr

L1 Phase Center of the current GPS antenna: WICHITA ICT3 CORS L1 PC C
The GNSS, H/W Rev. 1.00 antenna
(Antenna Code = LEIAX1202GG NONE) was installed on 04/20/07.
The L2 phase center is 0.011 m below the L1 phase center.
PID = DK6492

ITRF00 POSITION (EPOCH 1997.0)
Computed in Sep. 2008 using 26 days of data.
X = -634302.160 m latitude = 37 45 09.33663 N
Y = -5009609.275 m longitude = 097 12 58.41095 W
Z = 3884013.955 m ellipsoid height = 401.343 m

The ITRF00 VELOCITY of the L1 PC is the same as that for the ARP.

NAD_83 (CORS96) POSITION (EPOCH 2002.0)
Transformed from ITRF00 (epoch 1997.0) position in Sep. 2008.
X = -634301.615 m latitude = 37 45 09.31285 N
Y = -5009610.653 m longitude = 097 12 58.38180 W
Z = 3884014.032 m ellipsoid height = 402.417 m

| The NAD_83 (CORS96) VELOCITY of the L1 PC is the same as that for the ARP. |

* Latitude, longitude and ellipsoid height are computed from their corresponding cartesian coordinates using dimensions for the GRS 80 ellipsoid: semi-major axis = 6,378,137.0 meters
flattening = 1/298.257222101...

* WARNING: Mixing of antenna types can lead to errors of up to 10 cm. in height unless antenna-phase-center variation is properly modeled.

* For additional information about the interpretation and/or derivation of these positions and velocities, consult http://www.ngs.noaa.gov/CORS/Derivation.html.
For additional information on the relation of the GPS antenna to other relevant points at the site and on GPS equipment, consult the link ftp://www.ngs.noaa.gov/cors/.html/ict3.log.txt

The NGS Data Sheet

See file dsdata.txt for more information about the datasheet.

```
DATABASE = NGSIDB , PROGRAM = datasheet95, VERSION = 7.87.6
1        National Geodetic Survey,   Retrieval Date = APRIL 14, 2012
 JE1044 ***********************************************************************
 JE1044  FBN          -  This is a Federal Base Network Control Station.
 JE1044  DESIGNATION -  K 56
 JE1044  PID          -  JE1044
 JE1044  STATE/COUNTY-  KS/ANDERSON
 JE1044  USGS QUAD    -  BUSH CITY (1983)
 JE1044
 JE1044                         *CURRENT SURVEY CONTROL
 JE1044  ______________________________________________________________________
 JE1044* NAD 83(2007)-  38 12 36.22504(N)     095 08 41.49224(W)      ADJUSTED
 JE1044* NAVD 88      -       314.327  (meters)    1031.25   (feet)  ADJUSTED
 JE1044  ______________________________________________________________________
 JE1044  EPOCH DATE   -        2002.00
 JE1044  X            -    -450,008.221 (meters)                      COMP
 JE1044  Y            -  -4,998,044.901 (meters)                      COMP
 JE1044  Z            -   3,923,966.228 (meters)                      COMP
 JE1044  LAPLACE CORR-          -1.81  (seconds)                      DEFLEC09
 JE1044  ELLIP HEIGHT-         282.713 (meters)          (02/10/07) ADJUSTED
 JE1044  GEOID HEIGHT-         -31.61  (meters)                      GEOID09
 JE1044  DYNAMIC HT   -         314.095 (meters)    1030.49  (feet)  COMP
 JE1044
 JE1044  ------- Accuracy Estimates (at 95% Confidence Level in cm) --------
 JE1044  Type    PID    Designation                        North   East  Ellip
 JE1044  ----------------------------------------------------------------------
 JE1044  NETWORK JE1044 K 56                                0.45   0.33   1.08
 JE1044  ----------------------------------------------------------------------
 JE1044  MODELED GRAV-     979,884.4   (mgal)                        NAVD 88
 JE1044
 JE1044  VERT ORDER   -  SECOND    CLASS 0
 JE1044
 JE1044.The horizontal coordinates were established by GPS observations
 JE1044.and adjusted by the National Geodetic Survey in February 2007.
 JE1044
 JE1044.The datum tag of NAD 83(2007) is equivalent to NAD 83(NSRS2007).
 JE1044.See National Readjustment for more information.
 JE1044
 JE1044.The horizontal coordinates are valid at the epoch date displayed above
 JE1044.which is a decimal equivalence of Year/Month/Day.
 JE1044
 JE1044.The orthometric height was determined by differential leveling and
 JE1044.adjusted in June 1991.
 JE1044
 JE1044.WARNING-Repeat measurements at this control monument indicate possible
 JE1044.vertical movement.
 JE1044
 JE1044.The X, Y, and Z were computed from the position and the ellipsoidal ht.
 JE1044
 JE1044.The Laplace correction was computed from DEFLEC09 derived deflections.
 JE1044
 JE1044.The ellipsoidal height was determined by GPS observations
```

JE1044.and is referenced to NAD 83.
JE1044
JE1044.The geoid height was determined by GEOID09.
JE1044
JE1044.The dynamic height is computed by dividing the NAVD 88
JE1044.geopotential number by the normal gravity value computed on the
JE1044.Geodetic Reference System of 1980 (GRS 80) ellipsoid at 45
JE1044.degrees latitude (g = 980.6199 gals.).
JE1044
JE1044.The modeled gravity was interpolated from observed gravity values.
JE1044

JE1044;		North	East	Units	Scale Factor	Converg.
JE1044;SPC KS S	-	576,581.586	693,769.285	MT	0.99994890	+2 03 42.6
JE1044;SPC KS S	-	1,891,668.09	2,276,141.40	sFT	0.99994890	+2 03 42.6
JE1044;UTM 15	-	4,231,296.979	312,215.138	MT	1.00003431	-1 19 37.5

JE1044

JE1044!		Elev Factor	x	Scale Factor	=	Combined Factor
JE1044!SPC KS S	-	0.99995564	x	0.99994890	=	0.99990454
JE1044!UTM 15	-	0.99995564	x	1.00003431	=	0.99998995

JE1044
JE1044 SUPERSEDED SURVEY CONTROL
JE1044

JE1044 ELLIP H (08/12/03)	282.724	(m)			GP( )	4	1
JE1044 NAD 83(1997)-	38 12 36.22486(N)		095 08 41.49218(W)		AD( )	B	
JE1044 ELLIP H (12/22/97)	282.748	(m)			GP( )	4	1
JE1044 NAVD 88 (12/22/97)	314.33	(m)	1031.3	(f)	LEVELING	3	
JE1044 NGVD 29 (??/??/92)	314.164	(m)	1030.72	(f)	ADJ UNCH	2	0

JE1044
JE1044.Superseded values are not recommended for survey control.
JE1044.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.
JE1044.See file dsdata.txt to determine how the superseded data were derived.
JE1044
JE1044_U.S. NATIONAL GRID SPATIAL ADDRESS: 15SUC1221531296(NAD 83)
JE1044
JE1044_MARKER: DB = BENCH MARK DISK
JE1044_SETTING: 7 = SET IN TOP OF CONCRETE MONUMENT
JE1044_SP_SET: SET IN TOP OF CONCRETE MONUMENT
JE1044_STAMPING: K 56 1934
JE1044_MARK LOGO: CGS
JE1044_MAGNETIC: N = NO MAGNETIC MATERIAL
JE1044_STABILITY: C = MAY HOLD, BUT OF TYPE COMMONLY SUBJECT TO
JE1044+STABILITY: SURFACE MOTION
JE1044_SATELLITE: THE SITE LOCATION WAS REPORTED AS SUITABLE FOR
JE1044+SATELLITE: SATELLITE OBSERVATIONS - April 01, 2005
JE1044

JE1044 HISTORY	- Date	Condition	Report By
JE1044 HISTORY	- 1934	MONUMENTED	CGS
JE1044 HISTORY	- 1950	GOOD	CGS
JE1044 HISTORY	- 19970427	GOOD	NGS
JE1044 HISTORY	- 20010611	GOOD	SKW
JE1044 HISTORY	- 20020702	GOOD	NGS
JE1044 HISTORY	- 20030723	GOOD	KSDT
JE1044 HISTORY	- 20050401	GOOD	USGS
JE1044 HISTORY	- 20080111	GOOD	

JE1044
JE1044 STATION DESCRIPTION
JE1044
JE1044'DESCRIBED BY COAST AND GEODETIC SURVEY 1934
JE1044'AT BUSH CITY.
JE1044'AT BUSH CITY, ANDERSON COUNTY, ON THE ABANDONED MISSOURI PACIFIC
JE1044'RAILROAD, 107 FEET SOUTH OF THE SOUTHWEST CORNER OF A BRICK

JE1044'STORE BUILDING, 80 FEET NORTHEAST OF THE CENTER LINE OF THE OLD
JE1044'ROADBED, 75 FEET EAST OF A POWER-TRANSMISSION LINE POLE, 60 FEET
JE1044'SOUTH OF THE CENTER LINE OF A GRAVEL ROAD, 15 FEET WEST OF THE
JE1044'CENTER OF THE CONCRETE COVER OF AN ABANDONED WELL, AND 9 FEET
JE1044'NORTH OF THE WEST END OF THE FENCE AROUND A BALL FIELD. A
JE1044'STANDARD DISK, STAMPED K 56 1934 AND SET IN THE TOP OF A CONCRETE
JE1044'POST FLUSH WITH THE GROUND.
JE1044
JE1044 STATION RECOVERY (1950)
JE1044
JE1044'RECOVERY NOTE BY COAST AND GEODETIC SURVEY 1950
JE1044'RECOVERED IN GOOD CONDITION.
JE1044
JE1044 STATION RECOVERY (1997)
JE1044
JE1044'RECOVERY NOTE BY NATIONAL GEODETIC SURVEY 1997 (CSM)
JE1044'THE STATION IS LOCATED ABOUT 11.26 KM (7.00 MI) SOUTHEAST OF GARNETT,
JE1044'9.65 KM (6.00 MI) EAST OF U.S. HIGHWAY 59, NEAR THE SOUTH EDGE OF BUSH
JE1044'CITY, NEAR THE NORTH EDGE OF A BALL FIELD, IN THE GRASS JUST
JE1044'NORTH-NORTHEAST OF THE WEST END OF PIPE FENCE OF BALL FIELD. TO REACH
JE1044'THE STATION FROM THE CROSSROADS JUNCTION OF COUNTY ROADS 1156 (TEXAS
JE1044'RD) SOUTH, 1144 EAST AND 1300 RD WEST, NEAR THE NORTHWEST CORNER OF
JE1044'BUSH CITY AND NEAR THE SANDSTONE BUSH CITY SIGN (EAST OF OLD BUSH CITY
JE1044'SITE), GO SOUTH FOR 0.16 KM (0.10 MI) ON TEXAS ROAD TO A PAVED ROAD
JE1044'LEFT. TURN LEFT, EAST FOR 0.32 KM (0.20 MI) ON THE PAVED ROAD TO THE
JE1044'BALL FIELD AND STATION ON THE RIGHT. STATION IS 32.5 M (106.6 FT)
JE1044'SOUTH OF THE SOUTHWEST CORNER OF AN ABANDONED BRICK BUILDING, 18.0 M
JE1044'(59.1 FT) SOUTH OF THE PAVED ROAD CENTER, 9.6 M (31.5 FT)
JE1044'WEST-NORTHWEST OF A METAL MULTIPLE LIGHT POLE FOR THE BALL FIELD, 5.4
JE1044'M (17.7 FT) WEST OF A 7 FT (2.1 M) BY 8 FT (2.4 M) ABANDONED CONCRETE
JE1044'WELL COVER CENTER, 2.8 M (9.2 FT) NORTH-NORTHEAST OF THE WEST END OF
JE1044'THE PIPE BALL FIELD FENCE, ABOUT LEVEL WITH THE PAVED ROAD AND
JE1044'PROJECTING 4 CM ABOVE GROUND.
JE1044
JE1044 STATION RECOVERY (2001)
JE1044
JE1044'RECOVERY NOTE BY SHAFER, KLINE AND WARREN INC 2001 (CMC)
JE1044'RECOVERED IN GOOD CONDITION.
JE1044
JE1044 STATION RECOVERY (2002)
JE1044
JE1044'RECOVERY NOTE BY NATIONAL GEODETIC SURVEY 2002 (GMR)
JE1044'THE STATION IS LOCATED ABOUT 11.26 KM (7.0 MI) SOUTHEAST OF GARNETT,
JE1044'9.65 KM (6.0 MI) EAST
JE1044'OF U.S. HIGHWAY 59, NEAR THE SOUTH EDGE OF THE SMALL COMMUNITY OF BUSH
JE1044'CITY, AND IN
JE1044'THE GRASS AT THE NORTH EDGE OF THE REMAINS OF AN ABANDONED BALL FIELD.
JE1044'TO REACH THE
JE1044'STATION FROM THE CROSSROADS JUNCTION OF COUNTY ROADS 1156 SOUTH (TEXAS
JE1044'RD), 1144 EAST,
JE1044'AND 1300 RD WEST, AT THE NORTHWEST EDGE OF BUSH CITY AND NEAR THE
JE1044'LIMESTONE BUSH CITY
JE1044'SIGN, GO SOUTH ON COUNTY ROAD 1156 FOR 0.16 KM (0.10 MI) TO A PAVED
JE1044'STREET ON THE LEFT
JE1044'(THIRD ST). TURN LEFT AND GO EAST ON THIRD STREET FOR 0.32 KM (0.20
JE1044'MI) TO THE ABANDONED
JE1044'BALL FIELD AND STATION ON THE RIGHT. LOCATED 32.5 M (106.6 FT) SOUTH
JE1044'FROM THE SOUTHWEST
JE1044'CORNER OF AN ABANDONED BRICK BUILDING, 18.0 M (59.0 FT) SOUTH FROM THE
JE1044'CENTER OF THIRD
JE1044'STREET, 9.6 M (31.5 FT) WEST-NORTHWEST FROM A METAL LIGHT POLE AT THE

```
JE1044'EDGE OF THE
JE1044'ABANDONED BALL FIELD, 5.4 M (17.7 FT)  WEST FROM A 7 FT BY 8 FT
JE1044'CONCRETE WELL COVER CENTER,
JE1044'AND 0.52 M (1.7 FT) NORTH FROM A FIBERGLASS WITNESS POST.
JE1044
JE1044                          STATION RECOVERY (2003)
JE1044
JE1044'RECOVERY NOTE BY KANSAS DEPARTMENT OF TRANSPORTATION 2003 (MRD)
JE1044'RECOVERED AS DESCRIBED.
JE1044
JE1044                          STATION RECOVERY (2005)
JE1044
JE1044'RECOVERY NOTE BY US GEOLOGICAL SURVEY 2005 (SES)
JE1044'RECOVERED IN GOOD CONDITION.
JE1044
JE1044                          STATION RECOVERY (2008)
JE1044
JE1044'RECOVERY NOTE BY   2008
JE1044'SITE HAS BEEN FENCED INTO PASTURE, ACCESS GATE IS AVAILABLE.
JE1044'
JE1044'

*** retrieval complete.
Elapsed Time = 00:00:01
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The NGS Data Sheet

See file dsdata.txt for more information about the datasheet.

```
DATABASE = NGSIDB , PROGRAM = datasheet95, VERSION = 7.87.5
1        National Geodetic Survey,   Retrieval Date = JANUARY 31, 2012
 HF0307 ***********************************************************************
 HF0307  DESIGNATION -  K 334
 HF0307  PID         -  HF0307
 HF0307  STATE/COUNTY-  KS/BUTLER
 HF0307  USGS QUAD   -  BEAUMONT (1964)
 HF0307
 HF0307                        *CURRENT SURVEY CONTROL
 HF0307  ______________________________________________________________________
 HF0307* NAD 83(1986)-  37 40 07.      (N)    096 37 28.      (W)      SCALED
 HF0307* NAVD 88     -       469.828   (meters)    1541.43    (feet)   ADJUSTED
 HF0307  ______________________________________________________________________
 HF0307  GEOID HEIGHT-         -29.57  (meters)                        GEOID09
 HF0307  DYNAMIC HT  -         469.449 (meters)    1540.18    (feet)   COMP
 HF0307  MODELED GRAV-     979,808.9   (mgal)                          NAVD 88
 HF0307
 HF0307  VERT ORDER  -  SECOND    CLASS 0
 HF0307
 HF0307.The horizontal coordinates were scaled from a topographic map and have
 HF0307.an estimated accuracy of +/- 6 seconds.
 HF0307.
 HF0307.The orthometric height was determined by differential leveling and
 HF0307.adjusted in June 1991.
 HF0307
 HF0307.The geoid height was determined by GEOID09.
 HF0307
 HF0307.The dynamic height is computed by dividing the NAVD 88
 HF0307.geopotential number by the normal gravity value computed on the
 HF0307.Geodetic Reference System of 1980 (GRS 80) ellipsoid at 45
 HF0307.degrees latitude (g = 980.6199 gals.).
 HF0307
 HF0307.The modeled gravity was interpolated from observed gravity values.
 HF0307
 HF0307;                    North         East     Units  Estimated Accuracy
 HF0307;SPC KS S     -   512,870.      565,450.      MT  (+/- 180 meters Scaled)
 HF0307
 HF0307                          SUPERSEDED SURVEY CONTROL
 HF0307
 HF0307  NGVD 29 (??/??/92)  469.652  (m)          1540.85    (f) ADJ UNCH    2 0
 HF0307
 HF0307.Superseded values are not recommended for survey control.
 HF0307.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.
 HF0307.See file dsdata.txt to determine how the superseded data were derived.
 HF0307
 HF0307_U.S. NATIONAL GRID SPATIAL ADDRESS: 14SQG095717(NAD 83)
 HF0307
 HF0307_MARKER: DB = BENCH MARK DISK
 HF0307_SETTING: 0 = UNSPECIFIED SETTING
 HF0307_STAMPING: K 334 1962
 HF0307_STABILITY: D = MARK OF QUESTIONABLE OR UNKNOWN STABILITY
 HF0307
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HF0307  HISTORY     - Date     Condition        Report By
HF0307  HISTORY     - 1962     MONUMENTED       CGS
HF0307  HISTORY     - 20061228 GOOD             INDIV
HF0307
HF0307                          STATION DESCRIPTION
HF0307
HF0307'DESCRIBED BY COAST AND GEODETIC SURVEY 1962
HF0307'1.2 MI E FROM KEIGHLY.
HF0307'1.2 MILE EAST ALONG THE ST. LOUIS AND SAN FRANCISCO RAILROAD
HF0307'FROM THE STATION SIGN AT KEIGHLY, 7 POLES EAST OF MILE POST
HF0307'464, 51.3 FEET SOUTHWEST OF THE CENTER OF ROAD CROSSING, 46.5
HF0307'FEET SOUTH OF THE SOUTH RAIL, 21.2 FEET WEST OF THE CENTER OF
HF0307'THE ROAD, 1.9 FEET SOUTH OF A METAL WITNESS POST, 1.0 FEET
HF0307'NORTHWEST OF A FENCE CORNER POST, AND PROJECTS 0.3 FEET ABOVE
HF0307'THE GROUND.
HF0307
HF0307                          STATION RECOVERY (2006)
HF0307
HF0307'RECOVERY NOTE BY INDIVIDUAL CONTRIBUTORS 2006 (BCC)
HF0307'RAILROAD NO LONGER EXISTS AT LOCATION.  NEW DESCRIPTION AS FOLLOWS-
HF0307'
HF0307'T 27 S, R 7 E, NEAR S 16TH CORNER BETWEEN SECTIONS 25 AND 26, 47.6 FT.
HF0307'S OF CENTER OF OLD RR TRACK BED, 21.2 FT. W OF CENTER OF ROAD, 1.9 FT.
HF0307'S OF METAL WITNESS POST AND 1 FT. N OF FENCE CORNER POST, IN CONCRETE
HF0307'POST, STANDARD TABLET STAMPED 'K 334 1962'

*** retrieval complete.
Elapsed Time = 00:00:02
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ITRF 00

TOPEKA 5 (KST5), KANSAS

Retrieved from NGS DataBase on 10/30/07 at 13:45:55.

Antenna Reference Point(ARP): TOPEKA 5 CORS ARP

PID = DJ3671

ITRF00 POSITION (EPOCH 1997.0)
Computed in Oct. 2007 using 20 days of data.

X = -521875.197 m	latitude = 39 02 40.57890 N	
Y = -4932915.831 m	longitude = 096 02 20.80464 W	
Z = 3996354.962 m	ellipsoid height = 302.908 m	

ITRF00 VELOCITY
Predicted with HTDP_2.9 Oct. 2007.

VX = -0.0167 m/yr	northward = -0.0045 m/yr
VY = -0.0014 m/yr	eastward = -0.0165 m/yr
VZ = -0.0032 m/yr	upward = 0.0004 m/yr

NAD_83 (CORS96) POSITION (EPOCH 2002.0)
Transformed from ITRF00 (epoch 1997.0) position in Oct. 2007.

X = -521874.661 m	latitude = 39 02 40.55410 N	
Y = -4932917.204 m	longitude = 096 02 20.77650 W	
Z = 3996355.039 m	ellipsoid height = 303.974 m	

NAD_83 (CORS96) VELOCITY
Transformed from ITRF00 velocity in Oct. 2007.

VX = -0.0000 m/yr	northward = 0.0000 m/yr
VY = -0.0000 m/yr	eastward = 0.0000 m/yr
VZ = 0.0000 m/yr	upward = 0.0000 m/yr

L1 Phase Center of the current GPS antenna: TOPEKA 5 CORS L1 PC C

The Zephyr Geodetic L1/L2 +RD w/ USCG mount antenna
(Antenna Code = TRM41249USCG SCIT) was installed on 10/01/07.
The L2 phase center is 0.012 m below the L1 phase center.

PID = DJ3672

ITRF00 POSITION (EPOCH 1997.0)
Computed in Oct. 2007 using 20 days of data.

X = -521875.205 m	latitude = 39 02 40.57879 N	
Y = -4932915.895 m	longitude = 096 02 20.80472 W	
Z = 3996355.010 m	ellipsoid height = 302.990 m	

The ITRF00 VELOCITY of the L1 PC is the same as that for the ARP.

NAD_83 (CORS96) POSITION (EPOCH 2002.0)
Transformed from ITRF00 (epoch 1997.0) position in Oct. 2007.

X = -521874.670 m	latitude = 39 02 40.55399 N	
Y = -4932917.269 m	longitude = 096 02 20.77658 W	
Z = 3996355.088 m	ellipsoid height = 304.055 m	

| The NAD_83 (CORS96) VELOCITY of the L1 PC is the same as that for the ARP. |

* Latitude, longitude and ellipsoid height are computed from their corresponding cartesian coordinates using dimensions for the GRS 80 ellipsoid: semi-major axis = 6,378,137.0 meters
flattening = 1/298.257222101...

* WARNING: Mixing of antenna types can lead to errors of up to 10 cm. in height unless antenna-phase-center variation is properly modeled.

* For additional information about the interpretation and/or derivation of these positions and velocities, consult http://www.ngs.noaa.gov/CORS/Derivation.html.
For additional information on the relation of the GPS antenna to other relevant points at the site and on GPS equipment, consult the link ftp://www.ngs.noaa.gov/cors/.html/kst5.log.txt

ITRF 00

KSU1_KSUN_KS2006 (KSU1), KANSAS

Retrieved from NGS DataBase on 01/30/07 at 11:49:29.

Antenna Reference Point(ARP): KSU1_KSUN_KS2006 CORS ARP

PID = DI3428

ITRF00 POSITION (EPOCH 1997.0)
Computed in Jan. 2007 using 33 days of data.

X =	-570504.339 m	latitude =	39 06 02.70202 N
Y =	-4923591.004 m	longitude =	096 36 34.12212 W
Z =	4001208.514 m	ellipsoid height =	325.568 m

ITRF00 VELOCITY
Predicted with HTDP_2.8 Jan. 2007.

VX =	-0.0167 m/yr	northward =	-0.0047 m/yr
VY =	-0.0014 m/yr	eastward =	-0.0164 m/yr
VZ =	-0.0034 m/yr	upward =	0.0004 m/yr

NAD_83 (CORS96) POSITION (EPOCH 2002.0)
Transformed from ITRF00 (epoch 1997.0) position in Jan. 2007.

X =	-570503.804 m	latitude =	39 06 02.67730 N
Y =	-4923592.374 m	longitude =	096 36 34.09342 W
Z =	4001208.587 m	ellipsoid height =	326.622 m

NAD_83 (CORS96) VELOCITY
Transformed from ITRF00 velocity in Jan. 2007.

VX =	0.0000 m/yr	northward =	-0.0001 m/yr
VY =	-0.0001 m/yr	eastward =	0.0000 m/yr
VZ =	0.0000 m/yr	upward =	0.0001 m/yr

L1 Phase Center of the current GPS antenna: KSU1_KSUN_KS2006 CORS L1 PC C

The D/M element, CR, +SCIT radome SCIGN mt antenna
(Antenna Code = TRM29659.00 SCIT) was installed on 06/28/06.
The L2 phase center is 0.018 m above the L1 phase center.

PID = DI3429

ITRF00 POSITION (EPOCH 1997.0)
Computed in Jan. 2007 using 33 days of data.

X =	-570504.348 m	latitude =	39 06 02.70205 N
Y =	-4923591.086 m	longitude =	096 36 34.12208 W
Z =	4001208.582 m	ellipsoid height =	325.674 m

The ITRF00 VELOCITY of the L1 PC is the same as that for the ARP.

NAD_83 (CORS96) POSITION (EPOCH 2002.0)
Transformed from ITRF00 (epoch 1997.0) position in Jan. 2007.

X =	-570503.812 m	latitude =	39 06 02.67733 N
Y =	-4923592.456 m	longitude =	096 36 34.09338 W
Z =	4001208.655 m	ellipsoid height =	326.729 m

The NAD_83 (CORS96) VELOCITY of the L1 PC is the same as that for the ARP.

Monument: KSU1_KSUN_KS2006 GRP

PID = DI3430

Inscribed: UNKNOWN

ITRF00 POSITION (EPOCH 1997.0)
Computed in Jan. 2007 using 33 days of data.

X =	-570504.338 m	latitude =	39 06 02.70202 N
Y =	-4923590.998 m	longitude =	096 36 34.12212 W
Z =	4001208.508 m	ellipsoid height =	325.559 m

The ITRF00 VELOCITY of the monument is the same as that for the ARP.

NAD_83 (CORS96) POSITION (EPOCH 2002.0)
Transformed from ITRF00 (epoch 1997.0) position in Jan. 2007.

X =	-570503.803 m	latitude =	39 06 02.67730 N
Y =	-4923592.368 m	longitude =	096 36 34.09342 W
Z =	4001208.582 m	ellipsoid height =	326.614 m

The NAD_83 (CORS96) VELOCITY of the monument is the same as that for the ARP

* Latitude, longitude and ellipsoid height are computed from their corresponding cartesian coordinates using dimensions for the GRS 80 ellipsoid: semi-major axis = 6,378,137.0 meters
  flattening = 1/298.257222101...

* WARNING: Mixing of antenna types can lead to errors of up to 10 cm. in height unless antenna-phase-center variation is properly modeled.

* For additional information about the interpretation and/or derivation of these positions and velocities, consult http://www.ngs.noaa.gov/CORS/Derivation.html.
  For additional information on the relation of the GPS antenna to other relevant points at the site and on GPS equipment, consult the link ftp://www.ngs.noaa.gov/cors/.html/ksu1.log.txt

The NGS Data Sheet

See file dsdata.txt for more information about the datasheet.

```
DATABASE = NGSIDB , PROGRAM = datasheet95, VERSION = 7.87.6
1        National Geodetic Survey,   Retrieval Date = APRIL 14, 2012
 KE0823 ***********************************************************************
 KE0823  DESIGNATION -  M 325
 KE0823  PID         -  KE0823
 KE0823  STATE/COUNTY-  KS/JACKSON
 KE0823  USGS QUAD   -  ROSSVILLE (1982)
 KE0823
 KE0823                        *CURRENT SURVEY CONTROL
 KE0823  ______________________________________________________________________
 KE0823* NAD 83(1986)-  39 14 19.3     (N)     095 55 26.9     (W)      HD_HELD2
 KE0823* NAVD 88     -       327.605   (meters)    1074.82     (feet)   ADJUSTED
 KE0823  ______________________________________________________________________
 KE0823  GEOID HEIGHT-         -30.80  (meters)                         GEOID09
 KE0823  DYNAMIC HT  -         327.399 (meters)     1074.14   (feet)   COMP
 KE0823  MODELED GRAV-     979,987.8   (mgal)                           NAVD 88
 KE0823
 KE0823  VERT ORDER  -  SECOND    CLASS 0
 KE0823
 KE0823.The horizontal coordinates were established by autonomous hand held GPS
 KE0823.observations and have an estimated accuracy of +/- 10 meters.
 KE0823.
 KE0823.The orthometric height was determined by differential leveling and
 KE0823.adjusted in June 1991.
 KE0823
 KE0823.The geoid height was determined by GEOID09.
 KE0823
 KE0823.The dynamic height is computed by dividing the NAVD 88
 KE0823.geopotential number by the normal gravity value computed on the
 KE0823.Geodetic Reference System of 1980 (GRS 80) ellipsoid at 45
 KE0823.degrees latitude (g = 980.6199 gals.).
 KE0823
 KE0823.The modeled gravity was interpolated from observed gravity values.
 KE0823
 KE0823;                    North         East     Units  Estimated Accuracy
 KE0823;SPC KS N     -   102,559.      579,195.      MT  (+/- 10 meters HH2 GPS)
 KE0823
 KE0823                          SUPERSEDED SURVEY CONTROL
 KE0823
 KE0823  NGVD 29 (??/??/92)  327.495  (m)          1074.46    (f) ADJ UNCH    2 0
 KE0823
 KE0823.Superseded values are not recommended for survey control.
 KE0823.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.
 KE0823.See file dsdata.txt to determine how the superseded data were derived.
 KE0823
 KE0823_U.S. NATIONAL GRID SPATIAL ADDRESS: 15STD4762447340(NAD 83)
 KE0823
 KE0823_MARKER: DB = BENCH MARK DISK
 KE0823_SETTING: 7 = SET IN TOP OF CONCRETE MONUMENT
 KE0823_SP_SET: SET IN TOP OF CONCRETE MONUMENT
 KE0823_STAMPING: M 325 1960
 KE0823_STABILITY: C = MAY HOLD, BUT OF TYPE COMMONLY SUBJECT TO
```

KE0823+STABILITY: SURFACE MOTION
KE0823_SATELLITE: THE SITE LOCATION WAS REPORTED AS SUITABLE FOR
KE0823+SATELLITE: SATELLITE OBSERVATIONS - July 04, 2008
KE0823
KE0823 HISTORY   - Date   Condition   Report By
KE0823 HISTORY   - 1960   MONUMENTED   CGS
KE0823 HISTORY   - 1961   GOOD   CGS
KE0823 HISTORY   - 20080704 GOOD   GEOCAC
KE0823
KE0823   STATION DESCRIPTION
KE0823
KE0823'DESCRIBED BY COAST AND GEODETIC SURVEY 1961
KE0823'2 MI NE FROM DELIA.
KE0823'0.3 MILE EAST ALONG A GRAVELED ROAD FROM THE RAILROAD DEPOT
KE0823'AT DELIA, THENCE 2.0 MILES EAST ALONG THE ROAD 50 FEET NORTH OF
KE0823'THE CENTER OF THE ROAD, 47 FEET WEST OF THE CENTER OF THE ROAD,
KE0823'3 FEET WEST OF THE WITNESS POST AND FENCE CORNER, SET IN THE
KE0823'TOP OF A CONCRETE POST THAT PROJECTS 5 INCHES.
KE0823
KE0823   STATION RECOVERY (2008)
KE0823
KE0823'RECOVERY NOTE BY GEOCACHING 2008 (RCF)
KE0823'IN THE NORTHWEST CORNER AT THE INTERSECTION OF 106TH ROAD AND G ROAD.
KE0823'
KE0823'
KE0823'
KE0823'
KE0823'

*** retrieval complete.
Elapsed Time = 00:00:00

ITRF 00

MODOT BUTLER (MOBT), MISSOURI

Retrieved from NGS DataBase on 04/08/10 at 13:35:58.

Antenna Reference Point(ARP): MODOT BUTLER CORS ARP

PID = DL6888

ITRF00 POSITION (EPOCH 1997.0)
Computed in Apr. 2010 using 30 days of data.

X =	-384163.226 m	latitude =	38 15 26.96849 N
Y =	-5000226.726 m	longitude =	094 23 36.08161 W
Z =	3928068.689 m	ellipsoid height =	229.338 m

ITRF00 VELOCITY
Predicted with HTDP_3.0 Apr. 2010.

VX =	-0.0146 m/yr	northward =	-0.0039 m/yr
VY =	-0.0008 m/yr	eastward =	-0.0145 m/yr
VZ =	-0.0035 m/yr	upward =	-0.0007 m/yr

NAD_83 (CORS96) POSITION (EPOCH 2002.0)
Transformed from ITRF00 (epoch 1997.0) position in Apr. 2010.

X =	-384162.682 m	latitude =	38 15 26.94381 N
Y =	-5000228.112 m	longitude =	094 23 36.05494 W
Z =	3928068.777 m	ellipsoid height =	230.445 m

NAD_83 (CORS96) VELOCITY
Transformed from ITRF00 velocity in Apr. 2010.

VX =	0.0018 m/yr	northward =	-0.0001 m/yr
VY =	0.0006 m/yr	eastward =	0.0017 m/yr
VZ =	-0.0007 m/yr	upward =	-0.0010 m/yr

L1 Phase Center of the current GPS antenna: MODOT BUTLER CORS L1 PC C

The CONVERTED FROM ABSOLUTE igs05_1480.atx antenna
(Antenna Code = TRM57971.00 NONE) was installed on 08/02/09.
The L2 phase center is 0.020 m below the L1 phase center.

PID = DL6889

ITRF00 POSITION (EPOCH 1997.0)
Computed in Apr. 2010 using 30 days of data.

X =	-384163.231 m	latitude =	38 15 26.96851 N
Y =	-5000226.793 m	longitude =	094 23 36.08160 W
Z =	3928068.743 m	ellipsoid height =	229.423 m

The ITRF00 VELOCITY of the L1 PC is the same as that for the ARP.

NAD_83 (CORS96) POSITION (EPOCH 2002.0)
Transformed from ITRF00 (epoch 1997.0) position in Apr. 2010.

X =	-384162.687 m	latitude =	38 15 26.94383 N
Y =	-5000228.179 m	longitude =	094 23 36.05493 W
Z =	3928068.831 m	ellipsoid height =	230.530 m

| The NAD_83 (CORS96) VELOCITY of the L1 PC is the same as that for the ARP. |

* Latitude, longitude and ellipsoid height are computed from their corresponding cartesian coordinates using dimensions for the GRS 80 ellipsoid: semi-major axis = 6,378,137.0 meters
flattening = 1/298.257222101...

* WARNING: Mixing of antenna types can lead to errors of up to 10 cm. in height unless antenna-phase-center variation is properly modeled.

* For additional information about the interpretation and/or derivation of these positions and velocities, consult http://www.ngs.noaa.gov/CORS/Coords.html
For additional information on the relation of the GPS antenna to other relevant points at the site and on GPS equipment, consult the link http://www.ngs.noaa.gov/cors/Logfiles.html

ITRF 00
MODOT CARTHAGE (MOCA), MISSOURI

Retrieved from NGS DataBase on 12/04/09 at 10:40:32.

Antenna Reference Point(ARP): MODOT CARTHAGE CORS ARP
PID = DL6014

ITRF00 POSITION (EPOCH 1997.0)
Computed in Dec. 2009 using 16 days of data.
X = -386614.691 m latitude = 37 10 39.19024 N
Y = -5073616.351 m longitude = 094 21 27.27027 W
Z = 3833274.743 m ellipsoid height = 269.931 m

ITRF00 VELOCITY
Predicted with HTDP_3.0 Dec. 2009.
VX = -0.0143 m/yr northward = -0.0040 m/yr
VY = -0.0008 m/yr eastward = -0.0142 m/yr
VZ = -0.0036 m/yr upward = -0.0007 m/yr

NAD_83 (CORS96) POSITION (EPOCH 2002.0)
Transformed from ITRF00 (epoch 1997.0) position in Dec. 2009.
X = -386614.147 m latitude = 37 10 39.16622 N
Y = -5073617.750 m longitude = 094 21 27.24398 W
Z = 3833274.840 m ellipsoid height = 271.067 m

NAD_83 (CORS96) VELOCITY
Transformed from ITRF00 velocity in Dec. 2009.
VX = 0.0018 m/yr northward = -0.0002 m/yr
VY = 0.0006 m/yr eastward = 0.0017 m/yr
VZ = -0.0008 m/yr upward = -0.0011 m/yr

L1 Phase Center of the current GPS antenna: MODOT CARTHAGE CORS L1 PC C
The CONVERTED FROM ABSOLUTE igs05_1480.atx antenna
(Antenna Code = TRM57971.00 NONE) was installed on 08/02/09.
The L2 phase center is 0.020 m below the L1 phase center.
PID = DL6015

ITRF00 POSITION (EPOCH 1997.0)
Computed in Dec. 2009 using 16 days of data.
X = -386614.696 m latitude = 37 10 39.19026 N
Y = -5073616.419 m longitude = 094 21 27.27027 W
Z = 3833274.795 m ellipsoid height = 270.016 m

The ITRF00 VELOCITY of the L1 PC is the same as that for the ARP.

NAD_83 (CORS96) POSITION (EPOCH 2002.0)
Transformed from ITRF00 (epoch 1997.0) position in Dec. 2009.
X = -386614.153 m latitude = 37 10 39.16624 N
Y = -5073617.818 m longitude = 094 21 27.24398 W
Z = 3833274.892 m ellipsoid height = 271.153 m

| The NAD_83 (CORS96) VELOCITY of the L1 PC is the same as that for the ARP. |

* Latitude, longitude and ellipsoid height are computed from their corresponding cartesian coordinates using dimensions for the GRS 80 ellipsoid: semi-major axis = 6,378,137.0 meters
flattening = 1/298.257222101...

* WARNING: Mixing of antenna types can lead to errors of up to 10 cm. in height unless antenna-phase-center variation is properly modeled.

* For additional information about the interpretation and/or derivation of these positions and velocities, consult http://www.ngs.noaa.gov/CORS/Coords.html
For additional information on the relation of the GPS antenna to other relevant points at the site and on GPS equipment, consult the link http://www.ngs.noaa.gov/cors/Logfiles.html

ITRF 00
MODOT HARISONVILE (MOHV), MISSOURI

Retrieved from NGS DataBase on 12/16/10 at 11:23:52.

Antenna Reference Point(ARP): MODOT HARISONVILE CORS ARP
PID = DM4676

ITRF00 POSITION (EPOCH 1997.0)
Computed in Dec. 2010 using 11 days of data.
X = -375955.705 m latitude = 38 36 33.11351 N
Y = -4976522.304 m longitude = 094 19 12.91131 W
Z = 3958659.494 m ellipsoid height = 241.513 m

ITRF00 VELOCITY
Predicted with HTDP_3.0 Dec. 2010.
VX = -0.0147 m/yr northward = -0.0039 m/yr
VY = -0.0008 m/yr eastward = -0.0146 m/yr
VZ = -0.0035 m/yr upward = -0.0007 m/yr

NAD_83 (CORS96) POSITION (EPOCH 2002.0)
Transformed from ITRF00 (epoch 1997.0) position in Dec. 2010.
X = -375955.161 m latitude = 38 36 33.08859 N
Y = -4976523.686 m longitude = 094 19 12.88460 W
Z = 3958659.579 m ellipsoid height = 242.611 m

NAD_83 (CORS96) VELOCITY
Transformed from ITRF00 velocity in Dec. 2010.
VX = 0.0018 m/yr northward = -0.0002 m/yr
VY = 0.0006 m/yr eastward = 0.0017 m/yr
VZ = -0.0008 m/yr upward = -0.0011 m/yr

L1 Phase Center of the current GPS antenna: MODOT HARISONVILE CORS L1 PC C
The CONVERTED FROM ABSOLUTE igs05_1480.atx antenna
(Antenna Code = TRM57971.00 NONE) was installed on 12/08/08.
The L2 phase center is 0.020 m below the L1 phase center.
PID = DM4677

ITRF00 POSITION (EPOCH 1997.0)
Computed in Dec. 2010 using 11 days of data.
X = -375955.710 m latitude = 38 36 33.11353 N
Y = -4976522.370 m longitude = 094 19 12.91131 W
Z = 3958659.548 m ellipsoid height = 241.598 m

The ITRF00 VELOCITY of the L1 PC is the same as that for the ARP.

NAD_83 (CORS96) POSITION (EPOCH 2002.0)
Transformed from ITRF00 (epoch 1997.0) position in Dec. 2010.
X = -375955.166 m latitude = 38 36 33.08861 N
Y = -4976523.753 m longitude = 094 19 12.88460 W
Z = 3958659.633 m ellipsoid height = 242.697 m

| The NAD_83 (CORS96) VELOCITY of the L1 PC is the same as that for the ARP. |

* Latitude, longitude and ellipsoid height are computed from their corresponding cartesian coordinates using dimensions for the GRS 80 ellipsoid: semi-major axis = 6,378,137.0 meters
flattening = 1/298.257222101...

* WARNING: Mixing of antenna types can lead to errors of up to 10 cm. in height unless antenna-phase-center variation is properly modeled.

* For additional information about the interpretation and/or derivation of these positions and velocities, consult http://www.ngs.noaa.gov/CORS/Coords.html
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ITRF 00
MODOT INDEPENDENC (MOID), MISSOURI

Retrieved from NGS DataBase on 02/02/12 at 11:11:31.

Antenna Reference Point(ARP): MODOT INDEPENDENC CORS ARP
PID = DN5830

ITRF00 POSITION (EPOCH 1997.0)
Computed in Feb 2012 using 12 days of data.
X = -379140.644 m latitude = 39 07 17.60039 N
Y = -4940508.833 m longitude = 094 23 18.04743 W
Z = 4002967.457 m ellipsoid height = 272.752 m

ITRF00 VELOCITY
Predicted with HTDP_3.1.2 Feb 2012.
VX = -0.0148 m/yr northward = -0.0039 m/yr
VY = -0.0008 m/yr eastward = -0.0147 m/yr
VZ = -0.0035 m/yr upward = -0.0007 m/yr

NAD_83 (CORS96) POSITION (EPOCH 2002.0)
Transformed from ITRF00 (epoch 1997.0) position in Feb 2012.
X = -379140.100 m latitude = 39 07 17.57517 N
Y = -4940510.210 m longitude = 094 23 18.02046 W
Z = 4002967.537 m ellipsoid height = 273.836 m

NAD_83 (CORS96) VELOCITY
Transformed from ITRF00 velocity in Feb 2012.
VX = 0.0019 m/yr northward = -0.0002 m/yr
VY = 0.0006 m/yr eastward = 0.0018 m/yr
VZ = -0.0008 m/yr upward = -0.0011 m/yr

L1 Phase Center of the current GPS antenna: MODOT INDEPENDENC CORS L1 PC C
The CONVERTED FROM ABSOLUTE igs05_1480.atx antenna
(Antenna Code = TRM57971.00 NONE) was installed on 06/16/11.
The L2 phase center is 0.020 m below the L1 phase center.
PID = DN5831

ITRF00 POSITION (EPOCH 1997.0)
Computed in Feb 2012 using 12 days of data.
X = -379140.649 m latitude = 39 07 17.60041 N
Y = -4940508.898 m longitude = 094 23 18.04743 W
Z = 4002967.511 m ellipsoid height = 272.838 m

The ITRF00 VELOCITY of the L1 PC is the same as that for the ARP.

NAD_83 (CORS96) POSITION (EPOCH 2002.0)
Transformed from ITRF00 (epoch 1997.0) position in Feb 2012.
X = -379140.105 m latitude = 39 07 17.57519 N
Y = -4940510.276 m longitude = 094 23 18.02046 W
Z = 4002967.592 m ellipsoid height = 273.922 m

| The NAD_83 (CORS96) VELOCITY of the L1 PC is the same as that for the ARP. |

* Latitude, longitude and ellipsoid height are computed from their corresponding cartesian coordinates using dimensions for the GRS 80 ellipsoid: semi-major axis = 6,378,137.0 meters
flattening = 1/298.257222101...

* WARNING: Mixing of antenna types can lead to errors of up to 10 cm. in height unless antenna-phase-center variation is properly modeled.

* For additional information about the interpretation and/or derivation of these positions and velocities, consult http://www.ngs.noaa.gov/CORS/Coords.html
For additional information on the relation of the GPS antenna to other relevant points at the site and on GPS equipment, consult the link http://www.ngs.noaa.gov/cors/Logfiles.html

ITRF 00
MODOT MARYVILLE (MOMV), MISSOURI

Retrieved from NGS DataBase on 11/09/10 at 13:43:24.

Antenna Reference Point(ARP): MODOT MARYVILLE CORS ARP
PID = DM4124

ITRF00 POSITION (EPOCH 1997.0)
Computed in Nov. 2010 using 19 days of data.
X = -411233.309 m latitude = 40 21 29.41180 N
Y = -4849856.705 m longitude = 094 50 48.05029 W
Z = 4108551.390 m ellipsoid height = 277.886 m

ITRF00 VELOCITY
Predicted with HTDP_3.0 Nov. 2010.
VX = -0.0152 m/yr northward = -0.0041 m/yr
VY = -0.0008 m/yr eastward = -0.0151 m/yr
VZ = -0.0036 m/yr upward = -0.0007 m/yr

NAD_83 (CORS96) POSITION (EPOCH 2002.0)
Transformed from ITRF00 (epoch 1997.0) position in Nov. 2010.
X = -411232.765 m latitude = 40 21 29.38595 N
Y = -4849858.067 m longitude = 094 50 48.02244 W
Z = 4108551.458 m ellipsoid height = 278.928 m

NAD_83 (CORS96) VELOCITY
Transformed from ITRF00 velocity in Nov. 2010.
VX = 0.0019 m/yr northward = -0.0001 m/yr
VY = 0.0006 m/yr eastward = 0.0018 m/yr
VZ = -0.0008 m/yr upward = -0.0011 m/yr

L1 Phase Center of the current GPS antenna: MODOT MARYVILLE CORS L1 PC C
The CONVERTED FROM ABSOLUTE igs05_1480.atx antenna
(Antenna Code = TRM57971.00 NONE) was installed on 02/01/10.
The L2 phase center is 0.020 m below the L1 phase center.
PID = DM4125

ITRF00 POSITION (EPOCH 1997.0)
Computed in Nov. 2010 using 19 days of data.
X = -411233.315 m latitude = 40 21 29.41182 N
Y = -4849856.770 m longitude = 094 50 48.05029 W
Z = 4108551.446 m ellipsoid height = 277.971 m

The ITRF00 VELOCITY of the L1 PC is the same as that for the ARP.

NAD_83 (CORS96) POSITION (EPOCH 2002.0)
Transformed from ITRF00 (epoch 1997.0) position in Nov. 2010.
X = -411232.770 m latitude = 40 21 29.38597 N
Y = -4849858.132 m longitude = 094 50 48.02244 W
Z = 4108551.514 m ellipsoid height = 279.014 m

| The NAD_83 (CORS96) VELOCITY of the L1 PC is the same as that for the ARP. |

* Latitude, longitude and ellipsoid height are computed from their corresponding cartesian coordinates using dimensions for the GRS 80 ellipsoid: semi-major axis = 6,378,137.0 meters
flattening = 1/298.257222101...

* WARNING: Mixing of antenna types can lead to errors of up to 10 cm. in height unless antenna-phase-center variation is properly modeled.

* For additional information about the interpretation and/or derivation of these positions and velocities, consult http://www.ngs.noaa.gov/CORS/Coords.html
For additional information on the relation of the GPS antenna to other relevant points at the site and on GPS equipment, consult the link http://www.ngs.noaa.gov/cors/Logfiles.html

ITRF 00

MODOT NEVADA (MONE), MISSOURI

Retrieved from NGS DataBase on 12/16/10 at 11:23:53.

Antenna Reference Point(ARP): MODOT NEVADA CORS ARP

PID = DM4686

ITRF00 POSITION (EPOCH 1997.0)
Computed in Dec. 2010 using 11 days of data.

X =	-382373.150 m	latitude =	37 51 56.74439 N
Y =	-5027242.692 m	longitude =	094 20 58.39611 W
Z =	3893827.880 m	ellipsoid height =	221.241 m

ITRF00 VELOCITY
Predicted with HTDP_3.0 Dec. 2010.

VX =	-0.0145 m/yr	northward =	-0.0039 m/yr
VY =	-0.0008 m/yr	eastward =	-0.0144 m/yr
VZ =	-0.0035 m/yr	upward =	-0.0007 m/yr

NAD_83 (CORS96) POSITION (EPOCH 2002.0)
Transformed from ITRF00 (epoch 1997.0) position in Dec. 2010.

X =	-382372.606 m	latitude =	37 51 56.71994 N
Y =	-5027244.083 m	longitude =	094 20 58.36961 W
Z =	3893827.972 m	ellipsoid height =	222.360 m

NAD_83 (CORS96) VELOCITY
Transformed from ITRF00 velocity in Dec. 2010.

VX =	0.0018 m/yr	northward =	-0.0001 m/yr
VY =	0.0006 m/yr	eastward =	0.0017 m/yr
VZ =	-0.0007 m/yr	upward =	-0.0010 m/yr

L1 Phase Center of the current GPS antenna: MODOT NEVADA CORS L1 PC C

The CONVERTED FROM ABSOLUTE igs05_1480.atx antenna
(Antenna Code = TRM57971.00 NONE) was installed on 08/02/09.
The L2 phase center is 0.020 m below the L1 phase center.

PID = DM4687

ITRF00 POSITION (EPOCH 1997.0)
Computed in Dec. 2010 using 11 days of data.

X =	-382373.155 m	latitude =	37 51 56.74441 N
Y =	-5027242.759 m	longitude =	094 20 58.39611 W
Z =	3893827.933 m	ellipsoid height =	221.327 m

The ITRF00 VELOCITY of the L1 PC is the same as that for the ARP.

NAD_83 (CORS96) POSITION (EPOCH 2002.0)
Transformed from ITRF00 (epoch 1997.0) position in Dec. 2010.

X =	-382372.611 m	latitude =	37 51 56.71996 N
Y =	-5027244.150 m	longitude =	094 20 58.36960 W
Z =	3893828.025 m	ellipsoid height =	222.445 m

| The NAD_83 (CORS96) VELOCITY of the L1 PC is the same as that for the ARP. |

* Latitude, longitude and ellipsoid height are computed from their corresponding cartesian coordinates using dimensions for the GRS 80 ellipsoid: semi-major axis = 6,378,137.0 meters
flattening = 1/298.257222101...

* WARNING: Mixing of antenna types can lead to errors of up to 10 cm. in height unless antenna-phase-center variation is properly modeled.

* For additional information about the interpretation and/or derivation of these positions and velocities, consult http://www.ngs.noaa.gov/CORS/Coords.html
For additional information on the relation of the GPS antenna to other relevant points at the site and on GPS equipment, consult the link http://www.ngs.noaa.gov/cors/Logfiles.html

ITRF 00
MODOT PLATTE CITY (MOPL), MISSOURI

Retrieved from NGS DataBase on 02/02/12 at 11:11:39.

Antenna Reference Point(ARP): MODOT PLATTE CITY CORS ARP
PID = DN5836

ITRF00 POSITION (EPOCH 1997.0)
Computed in Feb 2012 using 12 days of data.
X = -411647.947 m latitude = 39 23 04.09754 N
Y = -4919325.109 m longitude = 094 47 00.07098 W
Z = 4025532.626 m ellipsoid height = 211.986 m

ITRF00 VELOCITY
Predicted with HTDP_3.1.2 Feb 2012.
VX = -0.0149 m/yr northward = -0.0041 m/yr
VY = -0.0008 m/yr eastward = -0.0148 m/yr
VZ = -0.0036 m/yr upward = -0.0007 m/yr

NAD_83 (CORS96) POSITION (EPOCH 2002.0)
Transformed from ITRF00 (epoch 1997.0) position in Feb 2012.
X = -411647.403 m latitude = 39 23 04.07225 N
Y = -4919326.481 m longitude = 094 47 00.04354 W
Z = 4025532.703 m ellipsoid height = 213.056 m

NAD_83 (CORS96) VELOCITY
Transformed from ITRF00 velocity in Feb 2012.
VX = 0.0019 m/yr northward = -0.0001 m/yr
VY = 0.0006 m/yr eastward = 0.0018 m/yr
VZ = -0.0008 m/yr upward = -0.0011 m/yr

L1 Phase Center of the current GPS antenna: MODOT PLATTE CITY CORS L1 PC C
The CONVERTED FROM ABSOLUTE igs05_1480.atx antenna
(Antenna Code = TRM57971.00 NONE) was installed on 05/12/11.
The L2 phase center is 0.020 m below the L1 phase center.
PID = DN5837

ITRF00 POSITION (EPOCH 1997.0)
Computed in Feb 2012 using 12 days of data.
X = -411647.952 m latitude = 39 23 04.09756 N
Y = -4919325.174 m longitude = 094 47 00.07098 W
Z = 4025532.681 m ellipsoid height = 212.072 m

The ITRF00 VELOCITY of the L1 PC is the same as that for the ARP.

NAD_83 (CORS96) POSITION (EPOCH 2002.0)
Transformed from ITRF00 (epoch 1997.0) position in Feb 2012.
X = -411647.408 m latitude = 39 23 04.07227 N
Y = -4919326.547 m longitude = 094 47 00.04353 W
Z = 4025532.757 m ellipsoid height = 213.142 m

| The NAD_83 (CORS96) VELOCITY of the L1 PC is the same as that for the ARP. |

* Latitude, longitude and ellipsoid height are computed from their corresponding cartesian coordinates using dimensions for the GRS 80 ellipsoid: semi-major axis = 6,378,137.0 meters
flattening = 1/298.257222101...

* WARNING: Mixing of antenna types can lead to errors of up to 10 cm. in height unless antenna-phase-center variation is properly modeled.

* For additional information about the interpretation and/or derivation of these positions and velocities, consult http://www.ngs.noaa.gov/CORS/Coords.html
For additional information on the relation of the GPS antenna to other relevant points at the site and on GPS equipment, consult the link http://www.ngs.noaa.gov/cors/Logfiles.html

ITRF 00
MODOT ROCK PORT (MORK), MISSOURI

Retrieved from NGS DataBase on 10/22/10 at 11:04:40.

Antenna Reference Point(ARP): MODOT ROCK PORT CORS ARP
PID = DM3987

ITRF00 POSITION (EPOCH 1997.0)
Computed in Oct. 2010 using 23 days of data.

X =	-469455.218 m	latitude =	40 25 14.24763 N
Y =	-4840090.396 m	longitude =	095 32 23.87088 W
Z =	4113865.898 m	ellipsoid height =	327.432 m

ITRF00 VELOCITY
Predicted with HTDP_3.0 Oct. 2010.

VX =	-0.0152 m/yr	northward =	-0.0044 m/yr
VY =	-0.0008 m/yr	eastward =	-0.0151 m/yr
VZ =	-0.0038 m/yr	upward =	-0.0007 m/yr

NAD_83 (CORS96) POSITION (EPOCH 2002.0)
Transformed from ITRF00 (epoch 1997.0) position in Oct. 2010.

X =	-469454.674 m	latitude =	40 25 14.22189 N
Y =	-4840091.754 m	longitude =	095 32 23.84233 W
Z =	4113865.962 m	ellipsoid height =	328.462 m

NAD_83 (CORS96) VELOCITY
Transformed from ITRF00 velocity in Oct. 2010.

VX =	0.0019 m/yr	northward =	-0.0001 m/yr
VY =	0.0006 m/yr	eastward =	0.0018 m/yr
VZ =	-0.0008 m/yr	upward =	-0.0011 m/yr

L1 Phase Center of the current GPS antenna: MODOT ROCK PORT CORS L1 PC C
The CONVERTED FROM ABSOLUTE igs05_1480.atx antenna
(Antenna Code = TRM57971.00 NONE) was installed on 02/01/10.
The L2 phase center is 0.020 m below the L1 phase center.
PID = DM3988

ITRF00 POSITION (EPOCH 1997.0)
Computed in Oct. 2010 using 23 days of data.

X =	-469455.225 m	latitude =	40 25 14.24765 N
Y =	-4840090.461 m	longitude =	095 32 23.87088 W
Z =	4113865.954 m	ellipsoid height =	327.517 m

The ITRF00 VELOCITY of the L1 PC is the same as that for the ARP.

NAD_83 (CORS96) POSITION (EPOCH 2002.0)
Transformed from ITRF00 (epoch 1997.0) position in Oct. 2010.

X =	-469454.680 m	latitude =	40 25 14.22191 N
Y =	-4840091.819 m	longitude =	095 32 23.84233 W
Z =	4113866.018 m	ellipsoid height =	328.548 m

| The NAD_83 (CORS96) VELOCITY of the L1 PC is the same as that for the ARP. |

* Latitude, longitude and ellipsoid height are computed from their corresponding cartesian coordinates using dimensions for the GRS 80 ellipsoid: semi-major axis = 6,378,137.0 meters
flattening = 1/298.257222101...

* WARNING: Mixing of antenna types can lead to errors of up to 10 cm. in height unless antenna-phase-center variation is properly modeled.

* For additional information about the interpretation and/or derivation of these positions and velocities, consult http://www.ngs.noaa.gov/CORS/Coords.html
For additional information on the relation of the GPS antenna to other relevant points at the site and on GPS equipment, consult the link http://www.ngs.noaa.gov/cors/Logfiles.html

ITRF 00
MODOT RICHMOND (MORM), MISSOURI

Retrieved from NGS DataBase on 02/03/10 at 13:19:10.

Antenna Reference Point(ARP): MODOT RICHMOND CORS ARP
PID = DL6302

ITRF00 POSITION (EPOCH 1997.0)
Computed in Feb. 2010 using 19 days of data.
X = -338521.712 m latitude = 39 16 39.09698 N
Y = -4932429.946 m longitude = 093 55 34.16751 W
Z = 4016339.573 m ellipsoid height = 197.971 m

ITRF00 VELOCITY
Predicted with HTDP_3.0 Feb. 2010.
VX = -0.0149 m/yr northward = -0.0038 m/yr
VY = -0.0008 m/yr eastward = -0.0148 m/yr
VZ = -0.0034 m/yr upward = -0.0007 m/yr

NAD_83 (CORS96) POSITION (EPOCH 2002.0)
Transformed from ITRF00 (epoch 1997.0) position in Feb. 2010.
X = -338521.169 m latitude = 39 16 39.07157 N
Y = -4932431.324 m longitude = 093 55 34.14095 W
Z = 4016339.654 m ellipsoid height = 199.058 m

NAD_83 (CORS96) VELOCITY
Transformed from ITRF00 velocity in Feb. 2010.
VX = 0.0018 m/yr northward = -0.0002 m/yr
VY = 0.0006 m/yr eastward = 0.0018 m/yr
VZ = -0.0008 m/yr upward = -0.0011 m/yr

L1 Phase Center of the current GPS antenna: MODOT RICHMOND CORS L1 PC C
The CONVERTED FROM ABSOLUTE igs05_1480.atx antenna
(Antenna Code = TRM57971.00 NONE) was installed on 12/08/08.
The L2 phase center is 0.020 m below the L1 phase center.
PID = DL6303

ITRF00 POSITION (EPOCH 1997.0)
Computed in Feb. 2010 using 19 days of data.
X = -338521.716 m latitude = 39 16 39.09700 N
Y = -4932430.012 m longitude = 093 55 34.16750 W
Z = 4016339.628 m ellipsoid height = 198.057 m

The ITRF00 VELOCITY of the L1 PC is the same as that for the ARP.

NAD_83 (CORS96) POSITION (EPOCH 2002.0)
Transformed from ITRF00 (epoch 1997.0) position in Feb. 2010.
X = -338521.173 m latitude = 39 16 39.07159 N
Y = -4932431.389 m longitude = 093 55 34.14094 W
Z = 4016339.709 m ellipsoid height = 199.143 m

| The NAD_83 (CORS96) VELOCITY of the L1 PC is the same as that for the ARP. |

* Latitude, longitude and ellipsoid height are computed from their corresponding cartesian coordinates using dimensions for the GRS 80 ellipsoid: semi-major axis = 6,378,137.0 meters
flattening = 1/298.257222101...

* WARNING: Mixing of antenna types can lead to errors of up to 10 cm. in height unless antenna-phase-center variation is properly modeled.

* For additional information about the interpretation and/or derivation of these positions and velocities, consult http://www.ngs.noaa.gov/CORS/Coords.html
For additional information on the relation of the GPS antenna to other relevant points at the site and on GPS equipment, consult the link http://www.ngs.noaa.gov/cors/Logfiles.html

ITRF 00

SEILER BELTON (MOSB), MISSOURI

Retrieved from NGS DataBase on 05/11/09 at 12:40:46.

Antenna Reference Point(ARP): SEILER BELTON CORS ARP

PID = DL2740

ITRF00 POSITION (EPOCH 1997.0)
Computed in May. 2009 using 21 days of data.

X =	-393358.832 m	latitude =	38 49 48.71225 N
Y =	-4959829.161 m	longitude =	094 32 04.47549 W
Z =	3977838.784 m	ellipsoid height =	301.149 m

ITRF00 VELOCITY
Predicted with HTDP_3.0 May. 2009.

VX =	-0.0148 m/yr	northward =	-0.0040 m/yr
VY =	-0.0008 m/yr	eastward =	-0.0147 m/yr
VZ =	-0.0035 m/yr	upward =	-0.0007 m/yr

NAD_83 (CORS96) POSITION (EPOCH 2002.0)
Transformed from ITRF00 (epoch 1997.0) position in May. 2009.

X =	-393358.289 m	latitude =	38 49 48.68725 N
Y =	-4959830.541 m	longitude =	094 32 04.44850 W
Z =	3977838.867 m	ellipsoid height =	302.239 m

NAD_83 (CORS96) VELOCITY
Transformed from ITRF00 velocity in May. 2009.

VX =	0.0018 m/yr	northward =	-0.0001 m/yr
VY =	0.0006 m/yr	eastward =	0.0017 m/yr
VZ =	-0.0007 m/yr	upward =	-0.0010 m/yr

L1 Phase Center of the current GPS antenna: SEILER BELTON CORS L1 PC C

The Zephyr GNSS Geodetic Model 2 antenna
(Antenna Code = TRM55971.00) was installed on 10/23/08.
The L2 phase center is 0.015 m below the L1 phase center.

PID = DL2741

ITRF00 POSITION (EPOCH 1997.0)
Computed in May. 2009 using 21 days of data.

X =	-393358.837 m	latitude =	38 49 48.71230 N
Y =	-4959829.226 m	longitude =	094 32 04.47546 W
Z =	3977838.839 m	ellipsoid height =	301.234 m

The ITRF00 VELOCITY of the L1 PC is the same as that for the ARP.

NAD_83 (CORS96) POSITION (EPOCH 2002.0)
Transformed from ITRF00 (epoch 1997.0) position in May. 2009.

X =	-393358.293 m	latitude =	38 49 48.68730 N
Y =	-4959830.606 m	longitude =	094 32 04.44847 W
Z =	3977838.921 m	ellipsoid height =	302.324 m

| The NAD_83 (CORS96) VELOCITY of the L1 PC is the same as that for the ARP. |

* Latitude, longitude and ellipsoid height are computed from their corresponding cartesian coordinates using dimensions for the GRS 80 ellipsoid: semi-major axis = 6,378,137.0 meters
flattening = 1/298.257222101...

* WARNING: Mixing of antenna types can lead to errors of up to 10 cm. in height unless antenna-phase-center variation is properly modeled.

* For additional information about the interpretation and/or derivation of these positions and velocities, consult http://www.ngs.noaa.gov/CORS/Coords.html
For additional information on the relation of the GPS antenna to other relevant points at the site and on GPS equipment, consult the link http://www.ngs.noaa.gov/cors/Logfiles.html

ITRF 00

MODOT SAVANNAH (MOSV), MISSOURI

Retrieved from NGS DataBase on 02/03/11 at 12:39:40.

Antenna Reference Point(ARP): MODOT SAVANNAH CORS ARP

PID = DM5403

ITRF00 POSITION (EPOCH 1997.0)
Computed in Feb. 2011 using 13 days of data.

X =	-413757.966 m	latitude =	39 57 15.17337 N
Y =	-4878705.233 m	longitude =	094 50 51.34576 W
Z =	4074295.320 m	ellipsoid height =	319.864 m

ITRF00 VELOCITY
Predicted with HTDP_3.0 Feb. 2011.

VX =	-0.0151 m/yr	northward =	-0.0041 m/yr
VY =	-0.0008 m/yr	eastward =	-0.0150 m/yr
VZ =	-0.0036 m/yr	upward =	-0.0007 m/yr

NAD_83 (CORS96) POSITION (EPOCH 2002.0)
Transformed from ITRF00 (epoch 1997.0) position in Feb. 2011.

X =	-413757.422 m	latitude =	39 57 15.14775 N
Y =	-4878706.599 m	longitude =	094 50 51.31806 W
Z =	4074295.391 m	ellipsoid height =	320.918 m

NAD_83 (CORS96) VELOCITY
Transformed from ITRF00 velocity in Feb. 2011.

VX =	0.0018 m/yr	northward =	-0.0001 m/yr
VY =	0.0006 m/yr	eastward =	0.0017 m/yr
VZ =	-0.0008 m/yr	upward =	-0.0011 m/yr

L1 Phase Center of the current GPS antenna: MODOT SAVANNAH CORS L1 PC C

The CONVERTED FROM ABSOLUTE igs05_1480.atx antenna
(Antenna Code = TRM57971.00 NONE) was installed on 02/01/10.
The L2 phase center is 0.020 m below the L1 phase center.

PID = DM5404

ITRF00 POSITION (EPOCH 1997.0)
Computed in Feb. 2011 using 13 days of data.

X =	-413757.971 m	latitude =	39 57 15.17339 N
Y =	-4878705.298 m	longitude =	094 50 51.34575 W
Z =	4074295.376 m	ellipsoid height =	319.950 m

The ITRF00 VELOCITY of the L1 PC is the same as that for the ARP.

NAD_83 (CORS96) POSITION (EPOCH 2002.0)
Transformed from ITRF00 (epoch 1997.0) position in Feb. 2011.

X =	-413757.427 m	latitude =	39 57 15.14777 N
Y =	-4878706.664 m	longitude =	094 50 51.31805 W
Z =	4074295.447 m	ellipsoid height =	321.004 m

| The NAD_83 (CORS96) VELOCITY of the L1 PC is the same as that for the ARP. |

* Latitude, longitude and ellipsoid height are computed from their corresponding cartesian coordinates using dimensions for the GRS 80 ellipsoid: semi-major axis = 6,378,137.0 meters
flattening = 1/298.257222101...

* WARNING: Mixing of antenna types can lead to errors of up to 10 cm. in height unless antenna-phase-center variation is properly modeled.

* For additional information about the interpretation and/or derivation of these positions and velocities, consult http://www.ngs.noaa.gov/CORS/Coords.html
For additional information on the relation of the GPS antenna to other relevant points at the site and on GPS equipment, consult the link http://www.ngs.noaa.gov/cors/Logfiles.html

The NGS Data Sheet

See file dsdata.txt for more information about the datasheet.

```
DATABASE = NGSIDB , PROGRAM = datasheet95, VERSION = 7.87.6
1        National Geodetic Survey,   Retrieval Date = FEBRUARY 23, 2012
 HE0264 ***********************************************************************
 HE0264  DESIGNATION -  P 18
 HE0264  PID         -  HE0264
 HE0264  STATE/COUNTY-  KS/CHEROKEE
 HE0264  USGS QUAD   -  CRESTLINE (1978)
 HE0264
 HE0264                        *CURRENT SURVEY CONTROL
 HE0264  ______________________________________________________________________
 HE0264* NAD 83(1986)-  37 10 13.     (N)    094 43 22.     (W)     SCALED
 HE0264* NAVD 88     -       269.801  (meters)     885.17   (feet)  ADJUSTED
 HE0264  ______________________________________________________________________
 HE0264  GEOID HEIGHT-         -29.97  (meters)                     GEOID09
 HE0264  DYNAMIC HT  -         269.585 (meters)     884.46  (feet)  COMP
 HE0264  MODELED GRAV-     979,823.3   (mgal)                       NAVD 88
 HE0264
 HE0264  VERT ORDER  -  FIRST     CLASS II
 HE0264
 HE0264.The horizontal coordinates were scaled from a topographic map and have
 HE0264.an estimated accuracy of +/- 6 seconds.
 HE0264.
 HE0264.The orthometric height was determined by differential leveling and
 HE0264.adjusted in June 1991.
 HE0264
 HE0264.The geoid height was determined by GEOID09.
 HE0264
 HE0264.The dynamic height is computed by dividing the NAVD 88
 HE0264.geopotential number by the normal gravity value computed on the
 HE0264.Geodetic Reference System of 1980 (GRS 80) ellipsoid at 45
 HE0264.degrees latitude (g = 980.6199 gals.).
 HE0264
 HE0264.The modeled gravity was interpolated from observed gravity values.
 HE0264
 HE0264;                   North         East     Units  Estimated Accuracy
 HE0264;SPC KS S     -   462,690.      735,380.      MT  (+/- 180 meters Scaled)
 HE0264
 HE0264                          SUPERSEDED SURVEY CONTROL
 HE0264
 HE0264  NGVD 29 (??/??/92)  269.698  (m)          884.83   (f) ADJ UNCH    1 2
 HE0264
 HE0264.Superseded values are not recommended for survey control.
 HE0264.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.
 HE0264.See file dsdata.txt to determine how the superseded data were derived.
 HE0264
 HE0264_U.S. NATIONAL GRID SPATIAL ADDRESS: 15SUB470151(NAD 83)
 HE0264
 HE0264_MARKER: DB = BENCH MARK DISK
 HE0264_SETTING: 7 = SET IN TOP OF CONCRETE MONUMENT
 HE0264_SP_SET: SET IN TOP OF CONCRETE MONUMENT
 HE0264_STAMPING: P 18 1933
 HE0264_STABILITY: C = MAY HOLD, BUT OF TYPE COMMONLY SUBJECT TO
```

HE0264+STABILITY: SURFACE MOTION
HE0264_SATELLITE: THE SITE LOCATION WAS REPORTED AS SUITABLE FOR
HE0264+SATELLITE: SATELLITE OBSERVATIONS - March 30, 2010
HE0264
HE0264 HISTORY   - Date   Condition   Report By
HE0264 HISTORY   - 1933   MONUMENTED   CGS
HE0264 HISTORY   - 1944   GOOD   CGS
HE0264 HISTORY   - 20100330 GOOD   USGS
HE0264
HE0264   STATION DESCRIPTION
HE0264
HE0264'DESCRIBED BY COAST AND GEODETIC SURVEY 1933
HE0264'6.5 MI E FROM COLUMBUS.
HE0264'6.5 MILES EAST ALONG THE ST. LOUIS-SAN FRANCISCO RAILWAY FROM
HE0264'COLUMBUS, CHEROKEE COUNTY, 4 POLES WEST OF MILEPOST 337, 1-1/2
HE0264'RAILS WEST OF THE CENTER OF A GRADE CROSSING, 3 FEET NORTH OF A
HE0264'FENCE CORNER, AND 1 FOOT WEST OF THE FENCE AND CATTLEGUARD.
HE0264'A STANDARD DISK SET IN THE TOP OF A CONCRETE POST. NOTE-- 45
HE0264'FEET SOUTH OF THE CENTERLINE OF THE FRISCO TRACK.
HE0264
HE0264   STATION RECOVERY (1944)
HE0264
HE0264'RECOVERY NOTE BY COAST AND GEODETIC SURVEY 1944
HE0264'RECOVERED IN GOOD CONDITION.
HE0264
HE0264   STATION RECOVERY (2010)
HE0264
HE0264'RECOVERY NOTE BY US GEOLOGICAL SURVEY 2010 (SES)
HE0264'MARK IS 30 FT WEST OF THE COUNTY ROAD, 20 FEET SOUTH OF THE OLD
HE0264'RAILROAD BED AND ON THE SOUTH SIDE OF A SMALL DRAINAGE DITCH. MARK IS
HE0264'1 FT NORTH OF A WITNESS MARKER.

*** retrieval complete.
Elapsed Time = 00:00:03

The NGS Data Sheet

See file dsdata.txt for more information about the datasheet.

```
DATABASE = NGSIDB , PROGRAM = datasheet95, VERSION = 7.87.5
1        National Geodetic Survey,   Retrieval Date = FEBRUARY  9, 2012
 LF0382 ***********************************************************************
 LF0382  DESIGNATION -  P 206
 LF0382  PID         -  LF0382
 LF0382  STATE/COUNTY-  MO/HOLT
 LF0382  USGS QUAD   -  CRAIG (1981)
 LF0382
 LF0382                        *CURRENT SURVEY CONTROL
 LF0382  ______________________________________________________________________
 LF0382* NAD 83(2007)-  40 11 25.08593(N)    095 22 22.95315(W)      ADJUSTED
 LF0382* NAVD 88     -       264.632  (meters)     868.21   (feet)  ADJUSTED
 LF0382  ______________________________________________________________________
 LF0382  EPOCH DATE  -        2002.00
 LF0382  X           -    -456,894.986 (meters)                      COMP
 LF0382  Y           -  -4,857,838.117 (meters)                      COMP
 LF0382  Z           -   4,094,300.744 (meters)                      COMP
 LF0382  LAPLACE CORR-          -3.42  (seconds)                     DEFLEC09
 LF0382  ELLIP HEIGHT-         233.859 (meters)          (04/14/09) ADJUSTED
 LF0382  GEOID HEIGHT-         -30.79  (meters)                     GEOID09
 LF0382  DYNAMIC HT  -         264.488 (meters)     867.74  (feet)  COMP
 LF0382  MODELED GRAV-     980,077.4   (mgal)                       NAVD 88
 LF0382
 LF0382  HORZ ORDER  -  FIRST
 LF0382  VERT ORDER  -  FIRST     CLASS II
 LF0382  ELLP ORDER  -  THIRD     CLASS I
 LF0382
 LF0382.The horizontal coordinates were established by GPS observations
 LF0382.and adjusted by the MO DEPT OF NAT RES in April 2009.
 LF0382
 LF0382.The datum tag of NAD 83(2007) is equivalent to NAD 83(NSRS2007).
 LF0382.See National Readjustment for more information.
 LF0382
 LF0382.The horizontal coordinates are valid at the epoch date displayed above
 LF0382.which is a decimal equivalence of Year/Month/Day.
 LF0382
 LF0382.The orthometric height was determined by differential leveling and
 LF0382.adjusted in June 1991.
 LF0382
 LF0382.The X, Y, and Z were computed from the position and the ellipsoidal ht.
 LF0382
 LF0382.The Laplace correction was computed from DEFLEC09 derived deflections.
 LF0382
 LF0382.The ellipsoidal height was determined by GPS observations
 LF0382.and is referenced to NAD 83.
 LF0382
 LF0382.The geoid height was determined by GEOID09.
 LF0382
 LF0382.The dynamic height is computed by dividing the NAVD 88
 LF0382.geopotential number by the normal gravity value computed on the
 LF0382.Geodetic Reference System of 1980 (GRS 80) ellipsoid at 45
 LF0382.degrees latitude (g = 980.6199 gals.).
```

```
LF0382
LF0382.The modeled gravity was interpolated from observed gravity values.
LF0382
LF0382;                    North         East     Units Scale Factor Converg.
LF0382;SPC MO W      -   446,962.605   775,658.786   MT  1.00000919   -0 33 48.3
LF0382;UTM  15       - 4,451,579.656   297,991.465   MT  1.00010237   -1 31 54.9
LF0382
LF0382!              -  Elev Factor  x  Scale Factor =   Combined Factor
LF0382!SPC MO W      -   0.99996331  x   1.00000919  =   0.99997250
LF0382!UTM  15       -   0.99996331  x   1.00010237  =   1.00006568
LF0382
LF0382                          SUPERSEDED SURVEY CONTROL
LF0382
LF0382  NAVD 88 (04/14/09)  264.63   (m)           868.2    (f) LEVELING    3
LF0382  NGVD 29 (??/??/92)  264.555  (m)           867.96   (f) ADJ UNCH    1 2
LF0382
LF0382.Superseded values are not recommended for survey control.
LF0382.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.
LF0382.See file dsdata.txt to determine how the superseded data were derived.
LF0382
LF0382_U.S. NATIONAL GRID SPATIAL ADDRESS: 15TTE9799151579(NAD 83)
LF0382
LF0382_MARKER: DB = BENCH MARK DISK
LF0382_SETTING: 7 = SET IN TOP OF CONCRETE MONUMENT
LF0382_SP_SET: CONCRETE POST
LF0382_STAMPING: P 206 1948
LF0382_MARK LOGO: CGS
LF0382_PROJECTION: FLUSH
LF0382_MAGNETIC: O = OTHER; SEE DESCRIPTION
LF0382_STABILITY: C = MAY HOLD, BUT OF TYPE COMMONLY SUBJECT TO
LF0382+STABILITY: SURFACE MOTION
LF0382_SATELLITE: THE SITE LOCATION WAS REPORTED AS SUITABLE FOR
LF0382+SATELLITE: SATELLITE OBSERVATIONS - 2008
LF0382
LF0382  HISTORY     - Date     Condition        Report By
LF0382  HISTORY     - 1948     MONUMENTED       CGS
LF0382  HISTORY     - 1961     GOOD             CGS
LF0382  HISTORY     - 19890731 GOOD             NGS
LF0382  HISTORY     - 20060117 GOOD             GEOCAC
LF0382  HISTORY     - 2008     GOOD             MODNR
LF0382
LF0382                          STATION DESCRIPTION
LF0382
LF0382'DESCRIBED BY COAST AND GEODETIC SURVEY 1948
LF0382'AT CRAIG.
LF0382'AT CRAIG, ABOUT 0.15 MILE SOUTHEAST ALONG THE CHICAGO, BURLINGTON
LF0382'AND QUINCY RAILROAD FROM THE STATION, IN THE CITY PARK, 62.8
LF0382'FEET SOUTHWEST OF THE SOUTHWEST RAIL OF THE MAIN TRACK, 19.2
LF0382'FEET WEST OF A 36-INCH ELM TREE, 3.0 FEET NORTHEAST OF THE
LF0382'NORTH CORNER OF A BAND STAND, 1.2 FEET NORTHWEST OF A
LF0382'REFERENCE POST, SET IN THE TOP OF A CONCRETE POST PROJECTING
LF0382'0.3 FOOT ABOVE THE GROUND.  NOTE-- WITNESS POST IS GONE.
LF0382
LF0382                          STATION RECOVERY (1961)
LF0382
LF0382'RECOVERY NOTE BY COAST AND GEODETIC SURVEY 1961
LF0382'RECOVERED IN GOOD CONDITION.
LF0382
LF0382                          STATION RECOVERY (1989)
LF0382
LF0382'RECOVERY NOTE BY NATIONAL GEODETIC SURVEY 1989
```

LF0382'RECOVERED IN GOOD CONDITION. A NEW TO REACH FOLLOWS. 0.2 KM (0.10
LF0382'MI) NORTHWESTERLY ALONG THE BURLINGTON NORTHERN RAILROAD FROM THE
LF0382'JUNCTION OF STATE HIGHWAY SPUR 111 IN CRAIG.
LF0382
LF0382 STATION RECOVERY (2006)
LF0382
LF0382'RECOVERY NOTE BY GEOCACHING 2006 (RCF)
LF0382'HH2 (NAD83) N40 11 25.2 W95 22 23.1
LF0382
LF0382 STATION RECOVERY (2008)
LF0382
LF0382'RECOVERY NOTE BY MO DEPT OF NAT RES 2008 (MJC)
LF0382'THE STATION IS LOCATED IN T62N R40W, IN THE NORTHEAST 1/4 OF SECTION
LF0382'14, AND SITUATED IN CRAIG, MO IN THE CITY PARK. IT IS 111 FT (33.8 M)
LF0382'NORTHEAST OF THE CENTER OF WEST STREET, 2.7 FT (0.8 M) EAST OF THE
LF0382'NORTH MOST CORNER OF A CONCRETE STAGE, 10.9 FT (3.3 M) SOUTH OF A
LF0382'CARSONITE WITNESS POST AT LIGHT POLE, 62.8 FT (19.1 M) SOUTHWEST OF
LF0382'THE SOUTHWEST RAIL OF RAILROAD AND 18.6 FT (5.7 M) NORTHWEST OF THE
LF0382'MOST EAST CORNER OF THE CONCRETE STAGE.
LF0382'
LF0382'TO REACH THE STATION FROM THE Y-JUNCTION OF MISSOURI HIGHWAY 111 AND
LF0382'MISSOURI 111 SPUR AT THE SOUTH EDGE OF CRAIG, MO GO NORTH ON 111 SPUR
LF0382'FOR 0.2 MI (0.3 KM) TO THE T-JUNCTION WITH WEST STREET. TURN LEFT ON
LF0382'WEST STREET AND GO NORTHWEST FOR 0.2 MI (0.3 KM) TO A PARK ON THE
LF0382'RIGHT AND THE STATION AS DESCRIBED.

*** retrieval complete.
Elapsed Time = 00:00:01

The NGS Data Sheet

See file dsdata.txt for more information about the datasheet.

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DATABASE = NGSIDB , PROGRAM = datasheet95, VERSION = 7.88.2
1        National Geodetic Survey,   Retrieval Date = MAY 11, 2012
 JF0094 ***********************************************************************
 JF0094  DESIGNATION -  P 215
 JF0094  PID         -  JF0094
 JF0094  STATE/COUNTY-  KS/WABAUNSEE
 JF0094  COUNTRY     -  US
 JF0094  USGS QUAD   -  ALTA VISTA (1971)
 JF0094
 JF0094                        *CURRENT SURVEY CONTROL
 JF0094  ______________________________________________________________________
 JF0094* NAD 83(1986) POSITION- 38 51 50.     (N) 096 29 33.     (W)    SCALED
 JF0094* NAVD 88 ORTHO HEIGHT -   438.054   (meters)    1437.18   (feet) ADJUSTED
 JF0094  ______________________________________________________________________
 JF0094  GEOID HEIGHT    -        -29.95   (meters)                      GEOID09
 JF0094  DYNAMIC HEIGHT  -        437.750  (meters)     1436.18   (feet) COMP
 JF0094  MODELED GRAVITY -    979,921.5    (mgal)                        NAVD 88
 JF0094
 JF0094  VERT ORDER      -  SECOND    CLASS 0
 JF0094
 JF0094.The horizontal coordinates were scaled from a topographic map and have
 JF0094.an estimated accuracy of +/- 6 seconds.
 JF0094.
 JF0094.The orthometric height was determined by differential leveling and
 JF0094.adjusted in June 1991.
 JF0094
 JF0094.The dynamic height is computed by dividing the NAVD 88
 JF0094.geopotential number by the normal gravity value computed on the
 JF0094.Geodetic Reference System of 1980 (GRS 80) ellipsoid at 45
 JF0094.degrees latitude (g = 980.6199 gals.).
 JF0094
 JF0094.The modeled gravity was interpolated from observed gravity values.
 JF0094
 JF0094;                    North         East     Units  Estimated Accuracy
 JF0094;SPC KS N     -    59,990.      530,830.      MT   (+/- 180 meters Scaled)
 JF0094
 JF0094                          SUPERSEDED SURVEY CONTROL
 JF0094
 JF0094  NGVD 29 (??/??/92)  437.897  (m)          1436.67    (f) ADJ UNCH    2 0
 JF0094
 JF0094.Superseded values are not recommended for survey control.
 JF0094.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.
 JF0094.See file dsdata.txt to determine how the superseded data were derived.
 JF0094
 JF0094_U.S. NATIONAL GRID SPATIAL ADDRESS: 14SQJ175046(NAD 83)
 JF0094
 JF0094_MARKER: DB = BENCH MARK DISK
 JF0094_SETTING: 0 = UNSPECIFIED SETTING
 JF0094_STABILITY: D = MARK OF QUESTIONABLE OR UNKNOWN STABILITY
 JF0094_SATELLITE: THE SITE LOCATION WAS REPORTED AS SUITABLE FOR
 JF0094+SATELLITE: SATELLITE OBSERVATIONS - June 10, 2008
 JF0094
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JF0094  HISTORY     - Date     Condition        Report By
JF0094  HISTORY     - UNK      MONUMENTED       CGS
JF0094  HISTORY     - 1935     GOOD             CGS
JF0094  HISTORY     - 1960     GOOD             CGS
JF0094  HISTORY     - 20080610 GOOD             USDA
JF0094
JF0094                          STATION DESCRIPTION
JF0094
JF0094'DESCRIBED BY COAST AND GEODETIC SURVEY 1935
JF0094'IN ALTA VISTA.
JF0094'ON THE ROCK ISLAND R.R. 45 FEET SOUTH OF THE SOUTH TRACK, 6
JF0094'POLES SOUTHWEST OF THE DEPOT, 45 FEET WEST OF THE CENTERLINE
JF0094'OF STREET AT UNION OIL COS. STORAGE TANKS.
JF0094
JF0094                          STATION RECOVERY (1960)
JF0094
JF0094'RECOVERY NOTE BY COAST AND GEODETIC SURVEY 1960
JF0094'RECOVERED IN GOOD CONDITION.
JF0094
JF0094                          STATION RECOVERY (2008)
JF0094
JF0094'RECOVERY NOTE BY US DEPARTMENT OF AGRICULTURE 2008 (JJW)
JF0094'RECOVERED AS DESCRIBED

*** retrieval complete.
Elapsed Time = 00:00:02
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The NGS Data Sheet

See file dsdata.txt for more information about the datasheet.

```
DATABASE = NGSIDB , PROGRAM = datasheet95, VERSION = 7.87.5
1        National Geodetic Survey,   Retrieval Date = FEBRUARY  9, 2012
 KE1588 ***********************************************************************
 KE1588  CBN         -  This is a Cooperative Base Network Control Station.
 KE1588  DESIGNATION -  P 340
 KE1588  PID         -  KE1588
 KE1588  STATE/COUNTY-  MO/BUCHANAN
 KE1588  USGS QUAD   -  ST JOSEPH NORTH (1978)
 KE1588
 KE1588                        *CURRENT SURVEY CONTROL
 KE1588  ______________________________________________________________________
 KE1588* NAD 83(2007)-  39 48 57.54967(N)    094 50 28.97368(W)     ADJUSTED
 KE1588* NAVD 88     -       302.550  (meters)     992.62   (feet)  ADJUSTED
 KE1588  ______________________________________________________________________
 KE1588  EPOCH DATE  -        2002.00
 KE1588  X           -    -414,056.281 (meters)                      COMP
 KE1588  Y           -  -4,888,519.606 (meters)                      COMP
 KE1588  Z           -   4,062,486.288 (meters)                      COMP
 KE1588  LAPLACE CORR-          -3.31  (seconds)                     DEFLEC09
 KE1588  ELLIP HEIGHT-         270.631 (meters)          (02/10/07) ADJUSTED
 KE1588  GEOID HEIGHT-         -31.91  (meters)                     GEOID09
 KE1588  DYNAMIC HT  -         302.374 (meters)     992.04  (feet)  COMP
 KE1588
 KE1588  ------- Accuracy Estimates (at 95% Confidence Level in cm) --------
 KE1588  Type    PID    Designation                      North   East  Ellip
 KE1588  ----------------------------------------------------------------
 KE1588  NETWORK KE1588 P 340                             0.53   0.47   1.39
 KE1588  ----------------------------------------------------------------
 KE1588  MODELED GRAV-     980,036.3   (mgal)                       NAVD 88
 KE1588
 KE1588  VERT ORDER  -  FIRST     CLASS II
 KE1588
 KE1588.The horizontal coordinates were established by GPS observations
 KE1588.and adjusted by the National Geodetic Survey in February 2007.
 KE1588
 KE1588.The datum tag of NAD 83(2007) is equivalent to NAD 83(NSRS2007).
 KE1588.See National Readjustment for more information.
 KE1588
 KE1588.The horizontal coordinates are valid at the epoch date displayed above
 KE1588.which is a decimal equivalence of Year/Month/Day.
 KE1588
 KE1588.The orthometric height was determined by differential leveling and
 KE1588.adjusted in June 1991.
 KE1588
 KE1588.Photographs are available for this station.
 KE1588
 KE1588.The X, Y, and Z were computed from the position and the ellipsoidal ht.
 KE1588
 KE1588.The Laplace correction was computed from DEFLEC09 derived deflections.
 KE1588
 KE1588.The ellipsoidal height was determined by GPS observations
 KE1588.and is referenced to NAD 83.
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KE1588
KE1588.The geoid height was determined by GEOID09.
KE1588
KE1588.The dynamic height is computed by dividing the NAVD 88
KE1588.geopotential number by the normal gravity value computed on the
KE1588.Geodetic Reference System of 1980 (GRS 80) ellipsoid at 45
KE1588.degrees latitude (g = 980.6199 gals.).
KE1588
KE1588.The modeled gravity was interpolated from observed gravity values.
KE1588
KE1588;                    North         East     Units Scale Factor Converg.
KE1588;SPC MO W     -   405,093.265   820,771.698   MT  0.99995169   -0 13 06.9
KE1588;UTM  15      - 4,408,955.771   342,394.180   MT  0.99990581   -1 10 45.6
KE1588
KE1588!             -  Elev Factor  x  Scale Factor =   Combined Factor
KE1588!SPC MO W     -   0.99995754  x   0.99995169  =   0.99990924
KE1588!UTM  15      -   0.99995754  x   0.99990581  =   0.99986336
KE1588
KE1588                          SUPERSEDED SURVEY CONTROL
KE1588
KE1588  NAD 83(1997)-  39 48 57.54967(N)    094 50 28.97375(W) AD(       ) B
KE1588  ELLIP H (12/22/97)  270.663  (m)                       GP(       ) 4 1
KE1588  NAVD 88 (12/22/97)  302.55   (m)          992.6    (f) LEVELING    3
KE1588
KE1588.Superseded values are not recommended for survey control.
KE1588.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.
KE1588.See file dsdata.txt to determine how the superseded data were derived.
KE1588
KE1588_U.S. NATIONAL GRID SPATIAL ADDRESS: 15SUE4239408955(NAD 83)
KE1588
KE1588_MARKER: F = FLANGE-ENCASED ROD
KE1588_SETTING: 49 = STAINLESS STEEL ROD W/O SLEEVE (10 FT.+)
KE1588_SP_SET: STAINLESS STEEL ROD
KE1588_STAMPING: P 340 1989
KE1588_MARK LOGO: NGS
KE1588_PROJECTION: RECESSED 5 CENTIMETERS
KE1588_MAGNETIC: I = MARKER IS A STEEL ROD
KE1588_STABILITY: B = PROBABLY HOLD POSITION/ELEVATION WELL
KE1588_SATELLITE: THE SITE LOCATION WAS REPORTED AS SUITABLE FOR
KE1588+SATELLITE: SATELLITE OBSERVATIONS - January 20, 2009
KE1588_ROD/PIPE-DEPTH: 4.4  meters
KE1588
KE1588  HISTORY     - Date     Condition        Report By
KE1588  HISTORY     - 1989     MONUMENTED       NGS
KE1588  HISTORY     - 19970206 GOOD             NGS
KE1588  HISTORY     - 19970523 GOOD             NGS
KE1588  HISTORY     - 20060704 GOOD             GEOCAC
KE1588  HISTORY     - 20080429 GOOD
KE1588  HISTORY     - 20090120 GOOD             MODNR
KE1588
KE1588                          STATION DESCRIPTION
KE1588
KE1588'DESCRIBED BY NATIONAL GEODETIC SURVEY 1989
KE1588'IN ST JOSEPH, AT 5507 HIGHWAY K, 21.4 M (70.2 FT) WEST OF THE
KE1588'SOUTHWEST CORNER OF A BUILDING AT 5507 HIGHWAY K, 20.7 M (67.9 FT)
KE1588'NORTHEAST OF THE CENTERLINE OF STATE HIGHWAY K, 9.9 M (32.5 FT)
KE1588'SOUTHEAST OF THE CENTER OF A DRIVEWAY, 1.1 M (3.6 FT) NORTHWEST OF A
KE1588'UTILITY POLE, AND 0.9 M (3.0 FT) ABOVE THE LEVEL OF THE HIGHWAY.
KE1588'NOTE--ACCESS TO DATUM POINT IS HAD THROUGH A 5-INCH LOGO CAP.
KE1588
KE1588                          STATION RECOVERY (1997)
```

KE1588
KE1588'RECOVERY NOTE BY NATIONAL GEODETIC SURVEY 1997 (CSM)
KE1588'THE STATION IS LOCATED NEAR THE NORTHWEST CORNER OF SAINT JOSEPH, MO.,
KE1588'ABOUT 3.0 KM (1.85 MI) SOUTH-SOUTHEAST OF THE JUNCTION OF INTERSTATE
KE1588'HIGHWAY 229 (EXIT 11) AND STATE HIGHWAY K, ALONG THE NORTHEAST SIDE OF
KE1588'HIGHWAY K, JUST NORTHWEST OF THE JUNCTION OF U.S. HIGHWAY 59 AND
KE1588'STATE HIGHWAY K, NEAR THE NORTHWEST CORNER OF A GRASS MEDIAN,
KE1588'SOUTHWEST OF THE SOUTHWEST CORNER OF THE BARTLOW ELECTRICAL
KE1588'CONTRACTORS TAN METAL BUILDING AT 5507 HIGHWAY K. OWNERSHIP--STATE OF
KE1588'MISSOURI. TO REACH THE STATION FROM THE JUNCTION OF INTERSTATE
KE1588'HIGHWAY 229 AND STATE HIGHWAY K (EXIT 11) , NEAR THE NORTHWEST CORNER
KE1588'OF SAINT JOSEPH, GO SOUTH-SOUTHEAST 3.0 KM (1.85 MI) ALONG HIGHWAY K
KE1588'TO THE STATION ON THE LEFT, JUST SOUTHWEST OF THE TAN METAL BUILDING.
KE1588'THE STATION IS 21.4 M (70.2 FT) SOUTHWEST OF THE SOUTHWEST CORNER OF
KE1588'THE BUILDING, 20.7 M (67.9 FT) NORTHEAST OF THE HIGHWAY K CENTERLINE,
KE1588'9.9 M (32.5 FT) SOUTHEAST OF THE DRIVEWAY CENTER, 1.1 M (3.6 FT)
KE1588'NORTHWEST OF A UTILITY POLE, 0.8 M (2.6 FT) SOUTHWEST OF A CURB, AND
KE1588'THE STATION IS ABOUT 1.1 M (3.6 FT) ABOVE THE HIGHWAY K LEVEL AND
KE1588'RECESSED 5-CM BELOW THE GROUND SURFACE. BY R.G. HAYES. NOTE--THE
KE1588'DATUM POINT IS A PUNCH MARK ON THE TOP CENTER OF A STAINLESS STEEL
KE1588'ROD, DRIVEN TO A DEPTH OF 4.4 M, (14.4 FT) ENCASED IN A 5-INCH PVC
KE1588'PIPE WITH LOGO CAP SURROUNDED BY CONCRETE. ACCESS TO THE DATUM POINT
KE1588'IS THROUGH A 5-INCH LOGO CAP.
KE1588
KE1588 STATION RECOVERY (1997)
KE1588
KE1588'RECOVERY NOTE BY NATIONAL GEODETIC SURVEY 1997 (CSM)
KE1588'THE STATION IS LOCATED NEAR THE NORTHWEST CORNER OF SAINT JOSEPH, 3.0
KE1588'KM (1.85 MI) SOUTH-SOUTHEAST OF THE JUNCTION OF INTERSTATE HIGHWAY 229
KE1588'(EXIT 11) AND STATE HIGHWAY K, JUST NORTHWEST OF THE JUNCTION OF U.S.
KE1588'HIGHWAY 59 AND STATE HIGHWAY K, NEAR THE NORTHWEST CORNER OF A GRASS
KE1588'MEDIAN, NEAR THE BARTLOW ELECTRICAL CONTRACTORS TAN METAL BUILDING AT
KE1588'5507 HIGHWAY K. OWNERSHIP--STATE OF MISSOURI. TO REACH THE STATION
KE1588'FROM THE JUNCTION OF INTERSTATE HIGHWAY 229 AND STATE HIGHWAY K (EXIT
KE1588'11) NEAR THE NORTHWEST CORNER OF SAINT JOSEPH, GO SOUTH-SOUTHEAST FOR
KE1588'3.0 KM (1.85 MI) ON HIGHWAY K TO THE STATION ON THE LEFT. LOCATED
KE1588'21.4 M (70.2 FT) SOUTHWEST OF THE SOUTHWEST CORNER OF THE METAL
KE1588'BUILDING, 20.7 M (67.9 FT) NORTHEAST OF CENTERLINE OF HIGHWAY K, 9.9 M
KE1588'(32.5 FT) SOUTHEAST OF THE CENTER OF DRIVEWAY, 1.1 M (3.6 FT)
KE1588'NORTHWEST OF A UTILITY POLE, 0.8 M (2.6 FT) SOUTHWEST OF A CURB, ABOUT
KE1588'1.1 M (3.6 FT) HIGHER THAN HIGHWAY K AND RECESSED 5 CM BELOW GROUND.
KE1588'NOTE--THE DATUM POINT IS A PUNCH MARK ON THE TOP CENTER OF A STAINLESS
KE1588'STEEL ROD, DRIVEN TO A DEPTH OF 4.4 M (14.4 FT) ENCASED IN A 5-INCH
KE1588'PVC PIPE WITH LOGO CAP SURROUNDED BY CONCRETE. ACCESS TO THE DATUM
KE1588'POINT IS THROUGH A 5-INCH LOGO CAP.
KE1588
KE1588 STATION RECOVERY (2006)
KE1588
KE1588'RECOVERY NOTE BY GEOCACHING 2006 (RCF)
KE1588'
KE1588'
KE1588'
KE1588
KE1588 STATION RECOVERY (2008)
KE1588
KE1588'RECOVERY NOTE BY 2008
KE1588'RECOVERED IN GOOD CONDITION.
KE1588
KE1588 STATION RECOVERY (2009)
KE1588
KE1588'RECOVERY NOTE BY MO DEPT OF NAT RES 2009 (MJC)

KE1588'RECOVERED IN GOOD CONDITION. PLACED A CARSONITE WITNESS POST - 1.1 M
KE1588'(3.6 FT) SOUTHEAST.

*** retrieval complete.
Elapsed Time = 00:00:01

The NGS Data Sheet

See file dsdata.txt for more information about the datasheet.

```
DATABASE = NGSIDB , PROGRAM = datasheet95, VERSION = 7.87.6
1        National Geodetic Survey,   Retrieval Date = FEBRUARY 24, 2012
 KF0019 ***********************************************************************
 KF0019  DESIGNATION -  Q 109
 KF0019  PID         -  KF0019
 KF0019  STATE/COUNTY-  KS/NEMAHA
 KF0019  USGS QUAD   -  SENECA (1966)
 KF0019
 KF0019                        *CURRENT SURVEY CONTROL
 KF0019  ______________________________________________________________________
 KF0019* NAD 83(1986)-  39 49 59.98    (N)     096 06 27.80    (W)      HD_HELD1
 KF0019* NAVD 88     -       372.177   (meters)     1221.05    (feet)   ADJUSTED
 KF0019  ______________________________________________________________________
 KF0019  GEOID HEIGHT-         -29.53  (meters)                         GEOID09
 KF0019  DYNAMIC HT  -         371.958 (meters)     1220.33   (feet)   COMP
 KF0019  MODELED GRAV-     980,027.4   (mgal)                           NAVD 88
 KF0019
 KF0019  VERT ORDER  -  SECOND    CLASS 0
 KF0019
 KF0019.The horizontal coordinates were established by differentially corrected
 KF0019.hand held GPS obs and have an estimated accuracy of +/- 3 meters.
 KF0019.
 KF0019.The orthometric height was determined by differential leveling and
 KF0019.adjusted in June 1991.
 KF0019
 KF0019.Photographs are available for this station.
 KF0019
 KF0019.The geoid height was determined by GEOID09.
 KF0019
 KF0019.The dynamic height is computed by dividing the NAVD 88
 KF0019.geopotential number by the normal gravity value computed on the
 KF0019.Geodetic Reference System of 1980 (GRS 80) ellipsoid at 45
 KF0019.degrees latitude (g = 980.6199 gals.).
 KF0019
 KF0019.The modeled gravity was interpolated from observed gravity values.
 KF0019
 KF0019;                    North         East     Units  Estimated Accuracy
 KF0019;SPC KS N     -   168,215.6     561,970.7     MT  (+/- 3 meters HH1 GPS)
 KF0019
 KF0019                         SUPERSEDED SURVEY CONTROL
 KF0019
 KF0019  NGVD 29 (??/??/92)  372.067  (m)          1220.69    (f) ADJ UNCH    2 0
 KF0019
 KF0019.Superseded values are not recommended for survey control.
 KF0019.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.
 KF0019.See file dsdata.txt to determine how the superseded data were derived.
 KF0019
 KF0019_U.S. NATIONAL GRID SPATIAL ADDRESS: 14SQK4750213261(NAD 83)
 KF0019
 KF0019_MARKER: DB = BENCH MARK DISK
 KF0019_SETTING: 7 = SET IN TOP OF CONCRETE MONUMENT
 KF0019_SP_SET: SET IN TOP OF CONCRETE MONUMENT
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KF0019_STAMPING: Q 109 1934
KF0019_STABILITY: C = MAY HOLD, BUT OF TYPE COMMONLY SUBJECT TO
KF0019+STABILITY: SURFACE MOTION
KF0019_SATELLITE: THE SITE LOCATION WAS REPORTED AS SUITABLE FOR
KF0019+SATELLITE: SATELLITE OBSERVATIONS - May 27, 2010
KF0019
KF0019  HISTORY     - Date     Condition        Report By
KF0019  HISTORY     - 1934     MONUMENTED       CGS
KF0019  HISTORY     - UNK      SEE DESCRIPTION
KF0019  HISTORY     - 1950     GOOD             CGS
KF0019  HISTORY     - 20100527 GOOD             JORSUR
KF0019
KF0019                          STATION DESCRIPTION
KF0019
KF0019'DESCRIBED UNK
KF0019'
KF0019
KF0019                          STATION RECOVERY (1950)
KF0019
KF0019'RECOVERY NOTE BY COAST AND GEODETIC SURVEY 1950
KF0019'2.1 MI W FROM SENECA.
KF0019'2.1 MILES WEST ALONG THE UNION PACIFIC RAILROAD FROM THE STATION
KF0019'AT SENECA, NEMAHA COUNTY, 3-1/2 POLES WEST OF THE
KF0019'ONE-MILE-TO-YARD-LIMIT SIGN, AT THE CROSSING OF A TRACK ROAD,
KF0019'44 FEET NORTH OF THE NORTH RAIL, 44 FEET EAST OF THE CENTER LINE
KF0019'OF THE TRACK ROAD, 20 FEET EAST OF A FENCE CORNER, 6 FEET
KF0019'WEST-SOUTHWEST OF A CONCRETE GATEPOST IN THE RIGHT-OF-WAY
KF0019'FENCE, AND 3 FEET SOUTH OF THE FENCE.  A STANDARD DISK, STAMPED
KF0019'Q 109 1934 AND SET IN THE TOP OF A CONCRETE POST FLUSH WITH THE
KF0019'GROUND.
KF0019
KF0019                          STATION RECOVERY (2010)
KF0019
KF0019'RECOVERY NOTE BY JORGENSEN SURVEYING 2010 (BAJ)
KF0019'MARK IS APPROXIMATELY 3/8 MILE SOUTH OF US HIGHWAY 36 ON H ROAD 3
KF0019'MILES WEST OF SENECA KANSAS.  MARK LIES ON THE NORTH SIDE OF RAILROAD
KF0019'RIGHT OF WAY, 2.5 FEET SOUTH OF NORTH RIGHT OF WAY FENCE ON EAST SIDE
KF0019'OF ROAD CROSSING.

*** retrieval complete.
Elapsed Time = 00:00:02
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The NGS Data Sheet

See file dsdata.txt for more information about the datasheet.

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DATABASE = NGSIDB , PROGRAM = datasheet95, VERSION = 7.87.5
1        National Geodetic Survey,   Retrieval Date = FEBRUARY  9, 2012
 KE0533 ***********************************************************************
 KE0533  DESIGNATION -  Q 210
 KE0533  PID         -  KE0533
 KE0533  STATE/COUNTY-  MO/HOLT
 KE0533  USGS QUAD   -  OREGON (1959)
 KE0533
 KE0533                        *CURRENT SURVEY CONTROL
 KE0533  ______________________________________________________________________
 KE0533* NAD 83(1986)-  39 58 51.5     (N)     095 11 34.2     (W)      HD_HELD2
 KE0533* NAVD 88     -       261.009   (meters)      856.33    (feet)   ADJUSTED
 KE0533  ______________________________________________________________________
 KE0533  GEOID HEIGHT-         -31.16  (meters)                         GEOID09
 KE0533  DYNAMIC HT  -         260.864 (meters)      855.85    (feet)   COMP
 KE0533  MODELED GRAV-     980,065.1   (mgal)                           NAVD 88
 KE0533
 KE0533  VERT ORDER  -  FIRST     CLASS II
 KE0533
 KE0533.The horizontal coordinates were established by autonomous hand held GPS
 KE0533.observations and have an estimated accuracy of +/- 10 meters.
 KE0533.
 KE0533.The orthometric height was determined by differential leveling and
 KE0533.adjusted in June 1991.
 KE0533
 KE0533.WARNING-Repeat measurements at this control monument indicate possible
 KE0533.vertical movement.
 KE0533
 KE0533.The geoid height was determined by GEOID09.
 KE0533
 KE0533.The dynamic height is computed by dividing the NAVD 88
 KE0533.geopotential number by the normal gravity value computed on the
 KE0533.Geodetic Reference System of 1980 (GRS 80) ellipsoid at 45
 KE0533.degrees latitude (g = 980.6199 gals.).
 KE0533
 KE0533.The modeled gravity was interpolated from observed gravity values.
 KE0533
 KE0533;                    North         East     Units  Estimated Accuracy
 KE0533;SPC MO W     -   423,585.      790,823.      MT  (+/- 10 meters HH2 GPS)
 KE0533
 KE0533                         SUPERSEDED SURVEY CONTROL
 KE0533
 KE0533  NGVD 29 (??/??/92)  260.957  (m)           856.16   (f) ADJ UNCH    1 2
 KE0533
 KE0533.Superseded values are not recommended for survey control.
 KE0533.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.
 KE0533.See file dsdata.txt to determine how the superseded data were derived.
 KE0533
 KE0533_U.S. NATIONAL GRID SPATIAL ADDRESS: 15SUE1276027948(NAD 83)
 KE0533
 KE0533_MARKER: DB = BENCH MARK DISK
 KE0533_SETTING: 7 = SET IN TOP OF CONCRETE MONUMENT
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KE0533_SP_SET: CONCRETE POST
KE0533_STAMPING: Q 210 1948
KE0533_MARK LOGO: CGS
KE0533_STABILITY: C = MAY HOLD, BUT OF TYPE COMMONLY SUBJECT TO
KE0533+STABILITY: SURFACE MOTION
KE0533_SATELLITE: THE SITE LOCATION WAS REPORTED AS SUITABLE FOR
KE0533+SATELLITE: SATELLITE OBSERVATIONS - July 20, 2007
KE0533
KE0533 HISTORY   - Date   Condition   Report By
KE0533 HISTORY   - 1948   MONUMENTED   CGS
KE0533 HISTORY   - 1959   GOOD   CGS
KE0533 HISTORY   - 19890814 GOOD   NGS
KE0533 HISTORY   - 20051125 GOOD   GEOCAC
KE0533 HISTORY   - 20060610 GOOD   INDIV
KE0533 HISTORY   - 20070720 GOOD   INDIV
KE0533
KE0533   STATION DESCRIPTION
KE0533
KE0533'DESCRIBED BY COAST AND GEODETIC SURVEY 1948
KE0533'AT FOREST CITY.
KE0533'AT FOREST CITY, IN THE CITY PARK, 89.6 FEET SOUTH-SOUTHWEST
KE0533'OF THE WEST CORNER OF THE CHICAGO, BURLINGTON AND QUINCY RAILROAD
KE0533'STATION, 92.5 FEET WEST-SOUTHWEST OF THE SOUTH CORNER OF THE
KE0533'STATION, 54.3 FEET SOUTHWEST OF THE SOUTHWEST RAIL OF THE MOST
KE0533'SOUTHWESTERLY MAIN TRACK, 27.0 FEET NORTHWEST OF THE CENTER
KE0533'LINE OF A GATE LEADING SOUTHWEST TO A BAND STAND, 84.0 FEET
KE0533'NORTHEAST OF THE NORTHEAST FACE OF THE BAND STAND, IN LINE
KE0533'WITH A ROW OF YOUNG WALNUT TREES, 1.3 FEET SOUTHEAST OF A
KE0533'REFERENCE POST, SET IN THE TOP OF A CONCRETE POST PROJECTING
KE0533'0.5 FOOT ABOVE THE GROUND.
KE0533
KE0533   STATION RECOVERY (1959)
KE0533
KE0533'RECOVERY NOTE BY COAST AND GEODETIC SURVEY 1959
KE0533'RECOVERED IN GOOD CONDITION.
KE0533
KE0533   STATION RECOVERY (1989)
KE0533
KE0533'RECOVERY NOTE BY NATIONAL GEODETIC SURVEY 1989
KE0533'RECOVERED IN GOOD CONDITION.
KE0533
KE0533   STATION RECOVERY (2005)
KE0533
KE0533'RECOVERY NOTE BY GEOCACHING 2005 (RCF)
KE0533'THE C B AND Q STATION HAS BEEN REMOVED, AND THE DISK IS 3 FEET
KE0533'SOUTHEAST OF A CARSONITE WITNESS POST SET IN LINE WITH A WIRE FENCE.
KE0533'
KE0533'HH2 (NAD83) N39 58 51.5 W95 11 34.2
KE0533'
KE0533'
KE0533'
KE0533
KE0533   STATION RECOVERY (2006)
KE0533
KE0533'RECOVERY NOTE BY INDIVIDUAL CONTRIBUTORS 2006 (TLG)
KE0533'RECOVERED IN GOOD CONDITION.
KE0533
KE0533   STATION RECOVERY (2007)
KE0533
KE0533'RECOVERY NOTE BY INDIVIDUAL CONTRIBUTORS 2007 (CLB)
KE0533'RECOVERED IN GOOD CONDITION.

```
*** retrieval complete.
Elapsed Time = 00:00:01
```

The NGS Data Sheet

See file dsdata.txt for more information about the datasheet.

```
DATABASE = NGSIDB , PROGRAM = datasheet95, VERSION = 7.87.6
1        National Geodetic Survey,   Retrieval Date = APRIL 14, 2012
 KE0998 ***********************************************************************
 KE0998  CBN          -  This is a Cooperative Base Network Control Station.
 KE0998  DESIGNATION -  SKIRT RM 2
 KE0998  PID          -  KE0998
 KE0998  STATE/COUNTY-  KS/JACKSON
 KE0998  USGS QUAD    -  NETAWAKA (1961)
 KE0998
 KE0998                         *CURRENT SURVEY CONTROL
 KE0998  ______________________________________________________________________
 KE0998* NAD 83(2007)-  39 30 45.14763(N)     095 44 54.09863(W)      NO CHECK
 KE0998* NAVD 88      -       349.382  (meters)     1146.26   (feet)  ADJUSTED
 KE0998  ______________________________________________________________________
 KE0998  EPOCH DATE   -        2002.00
 KE0998  X            -    -493,542.996 (meters)                      COMP
 KE0998  Y            -  -4,902,786.984 (meters)                      COMP
 KE0998  Z            -   4,036,580.436 (meters)                      COMP
 KE0998  LAPLACE CORR-          -4.22  (seconds)                      DEFLEC09
 KE0998  ELLIP HEIGHT-         318.474 (meters)          (02/10/07) NO CHECK
 KE0998  GEOID HEIGHT-         -30.91  (meters)                      GEOID09
 KE0998  DYNAMIC HT   -         349.165 (meters)    1145.55  (feet)  COMP
 KE0998
 KE0998  ------- Accuracy Estimates (at 95% Confidence Level in cm) --------
 KE0998  Type    PID    Designation                      North   East  Ellip
 KE0998  ----------------------------------------------------------------------
 KE0998  NETWORK KE0998 SKIRT RM 2                        1.82   1.22   3.98
 KE0998  ----------------------------------------------------------------------
 KE0998  MODELED GRAV-     979,997.7   (mgal)                       NAVD 88
 KE0998
 KE0998  VERT ORDER   -  SECOND    CLASS 0
 KE0998
 KE0998.The horizontal coordinates were established by GPS observations
 KE0998.and adjusted by the National Geodetic Survey in February 2007.
 KE0998
 KE0998.The datum tag of NAD 83(2007) is equivalent to NAD 83(NSRS2007).
 KE0998.See National Readjustment for more information.
 KE0998
 KE0998.The horizontal coordinates are valid at the epoch date displayed above
 KE0998.which is a decimal equivalence of Year/Month/Day.
 KE0998
 KE0998.No horizontal observational check was made to the station.
 KE0998.
 KE0998.The orthometric height was determined by differential leveling and
 KE0998.adjusted in June 1991.
 KE0998
 KE0998.The X, Y, and Z were computed from the position and the ellipsoidal ht.
 KE0998
 KE0998.The Laplace correction was computed from DEFLEC09 derived deflections.
 KE0998
 KE0998.The ellipsoidal height was determined by GPS observations
 KE0998.and is referenced to NAD 83.
```

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KE0998
KE0998.The geoid height was determined by GEOID09.
KE0998
KE0998.The dynamic height is computed by dividing the NAVD 88
KE0998.geopotential number by the normal gravity value computed on the
KE0998.Geodetic Reference System of 1980 (GRS 80) ellipsoid at 45
KE0998.degrees latitude (g = 980.6199 gals.).
KE0998
KE0998.The modeled gravity was interpolated from observed gravity values.
KE0998
KE0998;                    North         East     Units Scale Factor Converg.
KE0998;SPC KS N     -   133,314.512   593,610.092   MT  0.99996727   +1 25 28.7
KE0998;SPC KS N     -   437,382.69  1,947,535.78   sFT  0.99996727   +1 25 28.7
KE0998;UTM  15      - 4,377,263.358   263,723.687   MT  1.00028739   -1 44 58.0
KE0998
KE0998!             -  Elev Factor  x  Scale Factor =   Combined Factor
KE0998!SPC KS N     -   0.99995004  x   0.99996727  =   0.99991731
KE0998!UTM  15      -   0.99995004  x   1.00028739  =   1.00023741
KE0998
KE0998                          SUPERSEDED SURVEY CONTROL
KE0998
KE0998  ELLIP H (08/12/03)  318.483  (m)                       GP(       ) 4 1
KE0998  NAVD 88 (08/12/03)  349.38   (m)          1146.3    (f) LEVELING    3
KE0998  NGVD 29 (??/??/92)  349.284  (m)          1145.94   (f) ADJ UNCH    2 0
KE0998
KE0998.Superseded values are not recommended for survey control.
KE0998.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.
KE0998.See file dsdata.txt to determine how the superseded data were derived.
KE0998
KE0998_U.S. NATIONAL GRID SPATIAL ADDRESS: 15STD6372377263(NAD 83)
KE0998
KE0998_MARKER: DR = REFERENCE MARK DISK
KE0998_SETTING: 7 = SET IN TOP OF CONCRETE MONUMENT
KE0998_SP_SET: SET IN TOP OF CONCRETE MONUMENT
KE0998_STAMPING: SKIRT NO 2 1960
KE0998_MARK LOGO: CGS
KE0998_MAGNETIC: N = NO MAGNETIC MATERIAL
KE0998_STABILITY: C = MAY HOLD, BUT OF TYPE COMMONLY SUBJECT TO
KE0998+STABILITY: SURFACE MOTION
KE0998_SATELLITE: THE SITE LOCATION WAS REPORTED AS SUITABLE FOR
KE0998+SATELLITE: SATELLITE OBSERVATIONS - August 10, 2002
KE0998
KE0998  HISTORY     - Date     Condition        Report By
KE0998  HISTORY     - 1960     MONUMENTED       CGS
KE0998  HISTORY     - 1961     GOOD             CGS
KE0998  HISTORY     - 20020810 GOOD             NGS
KE0998  HISTORY     - 20080128 GOOD
KE0998
KE0998                          STATION DESCRIPTION
KE0998
KE0998'DESCRIBED BY COAST AND GEODETIC SURVEY 1961
KE0998'3.5 MI N FROM HOLTON.
KE0998'3.5 MILES NORTH ALONG U.S. HIGHWAY 75 FROM THE JUNCTION OF U.S.
KE0998'HIGHWAY 75 AND STATE HIGHWAY 16 IN THE WEST EDGE OF HOLTON, 88
KE0998'FEET SOUTH OF THE WITNESS POST, 71 FEET WEST OF THE CENTER OF
KE0998'THE HIGHWAY, SET IN THE TOP OF A SQUARE CONCRETE POST THAT PROJECTS
KE0998'6 INCHES.
KE0998
KE0998                          STATION RECOVERY (2002)
KE0998
KE0998'RECOVERY NOTE BY NATIONAL GEODETIC SURVEY 2002 (GMR)
```

KE0998'THE STATION IS LOCATED ABOUT 5.63 KM (3.5 MI) NORTH OF HOLTON, ON THE
KE0998'WEST RIGHT-OF-WAY
KE0998'OF U.S. HIGHWAY 75, AND JUST SOUTH OF HIGHWAY MILE MARKER 192. TO
KE0998'REACH STATION FROM
KE0998'THE STOP LIGHT AT THE INTERSECTION OF U.S. HIGHWAY 75 AND STATE
KE0998'HIGHWAYS 16 AND 116, ON
KE0998'THE WEST EDGE OF HOLTON, GO NORTH ON U.S. HIGHWAY 75 FOR 4.83 KM (3.0
KE0998'MI) TO A PAVED CROSS
KE0998'ROAD (254 RD). CONTINUE NORTH ON THE HIGHWAY FOR 0.72 KM (0.45 MI) TO
KE0998'THE STATION ON THE
KE0998'LEFT. THE STATION PROJECTS 10 CM ABOVE GROUND. LOCATED 42.67 M
KE0998'(140.0 FT) NORTH FROM THE
KE0998'CENTER OF A GRAVEL ROAD LEADING WEST TO A RESIDENTIAL AREA, 22.25 M
KE0998'(73.0 FT) WEST FROM
KE0998'THE CENTER OF THE HIGHWAY, 0.30 M (1.0 FT) WEST FROM A FIBERGLASS
KE0998'WITNESS POST, AND 0.18 M
KE0998'(0.6 FT) EAST FROM THE NORTH-SOUTH FENCE LINE.
KE0998
KE0998   STATION RECOVERY (2008)
KE0998
KE0998'RECOVERY NOTE BY   2008
KE0998'RECOVERED IN GOOD CONDITION.

*** retrieval complete.
Elapsed Time = 00:00:00

The NGS Data Sheet

See file dsdata.txt for more information about the datasheet.

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DATABASE = NGSIDB , PROGRAM = datasheet95, VERSION = 7.87.5
1        National Geodetic Survey,   Retrieval Date = FEBRUARY  9, 2012
 KE0493 ***********************************************************************
 KE0493  DESIGNATION -  W 281
 KE0493  PID         -  KE0493
 KE0493  STATE/COUNTY-  KS/ATCHISON
 KE0493  USGS QUAD   -  ATCHISON WEST (1978)
 KE0493
 KE0493                        *CURRENT SURVEY CONTROL
 KE0493  ______________________________________________________________________
 KE0493* NAD 83(2007)-  39 34 20.78252(N)    095 08 44.71960(W)      NO CHECK
 KE0493* NAVD 88     -       304.385  (meters)     998.64   (feet)  ADJUSTED
 KE0493  ______________________________________________________________________
 KE0493  EPOCH DATE  -        2002.00
 KE0493  X           -    -441,568.924 (meters)                      COMP
 KE0493  Y           -  -4,903,454.274 (meters)                      COMP
 KE0493  Z           -   4,041,679.867 (meters)                      COMP
 KE0493  LAPLACE CORR-          -3.51  (seconds)                     DEFLEC09
 KE0493  ELLIP HEIGHT-         272.615 (meters)          (02/10/07) NO CHECK
 KE0493  GEOID HEIGHT-         -31.77  (meters)                     GEOID09
 KE0493  DYNAMIC HT  -         304.202 (meters)     998.04  (feet)  COMP
 KE0493
 KE0493  ------- Accuracy Estimates (at 95% Confidence Level in cm) --------
 KE0493  Type    PID    Designation                        North   East  Ellip
 KE0493  ----------------------------------------------------------------------
 KE0493  NETWORK KE0493 W 281                               0.84   0.55   1.84
 KE0493  ----------------------------------------------------------------------
 KE0493  MODELED GRAV-     980,015.5   (mgal)                       NAVD 88
 KE0493
 KE0493  VERT ORDER  -  FIRST     CLASS II
 KE0493
 KE0493.The horizontal coordinates were established by GPS observations
 KE0493.and adjusted by the National Geodetic Survey in February 2007.
 KE0493
 KE0493.The datum tag of NAD 83(2007) is equivalent to NAD 83(NSRS2007).
 KE0493.See National Readjustment for more information.
 KE0493
 KE0493.The horizontal coordinates are valid at the epoch date displayed above
 KE0493.which is a decimal equivalence of Year/Month/Day.
 KE0493
 KE0493.No horizontal observational check was made to the station.
 KE0493.
 KE0493.The orthometric height was determined by differential leveling and
 KE0493.adjusted in June 1991.
 KE0493
 KE0493.The X, Y, and Z were computed from the position and the ellipsoidal ht.
 KE0493
 KE0493.The Laplace correction was computed from DEFLEC09 derived deflections.
 KE0493
 KE0493.The ellipsoidal height was determined by GPS observations
 KE0493.and is referenced to NAD 83.
 KE0493
```

KE0493.The geoid height was determined by GEOID09.
KE0493
KE0493.The dynamic height is computed by dividing the NAVD 88
KE0493.geopotential number by the normal gravity value computed on the
KE0493.Geodetic Reference System of 1980 (GRS 80) ellipsoid at 45
KE0493.degrees latitude (g = 980.6199 gals.).
KE0493
KE0493.The modeled gravity was interpolated from observed gravity values.
KE0493

		North	East	Units	Scale Factor	Converg.
KE0493;SPC KS N	-	141,422.046	645,200.962	MT	0.99997258	+1 48 21.3
KE0493;SPC KS N	-	463,982.16	2,116,796.82	sFT	0.99997258	+1 48 21.3
KE0493;UTM 15	-	4,382,503.105	315,693.513	MT	1.00001823	-1 22 02.4

KE0493

		Elev Factor	x	Scale Factor	=	Combined Factor
KE0493!SPC KS N	-	0.99995723	x	0.99997258	=	0.99992981
KE0493!UTM 15	-	0.99995723	x	1.00001823	=	0.99997546

KE0493

KE0493 SUPERSEDED SURVEY CONTROL
KE0493

KE0493 ELLIP H (08/16/04)	272.641	(m)				GP( )	4	2
KE0493 NAD 83(1997)-	39 34 20.78228(N)		095 08 44.71947(W)			AD( )	1	
KE0493 ELLIP H (12/22/97)	272.671	(m)				GP( )	4	1
KE0493 NAVD 88 (12/22/97)	304.39	(m)		998.7	(f)	LEVELING	3	
KE0493 NGVD 29 (??/??/92)	304.283	(m)		998.30	(f)	ADJ UNCH	1	2

KE0493
KE0493.Superseded values are not recommended for survey control.
KE0493.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.
KE0493.See file dsdata.txt to determine how the superseded data were derived.
KE0493
KE0493_U.S. NATIONAL GRID SPATIAL ADDRESS: 15SUD1569382503(NAD 83)
KE0493
KE0493_MARKER: DB = BENCH MARK DISK
KE0493_SETTING: 7 = SET IN TOP OF CONCRETE MONUMENT
KE0493_STAMPING: W 281 1948
KE0493_MARK LOGO: CGS
KE0493_MAGNETIC: N = NO MAGNETIC MATERIAL
KE0493_STABILITY: C = MAY HOLD, BUT OF TYPE COMMONLY SUBJECT TO
KE0493+STABILITY: SURFACE MOTION
KE0493_SATELLITE: THE SITE LOCATION WAS REPORTED AS SUITABLE FOR
KE0493+SATELLITE: SATELLITE OBSERVATIONS - October 28, 2006
KE0493

		Date	Condition	Report By
KE0493 HISTORY	-	1948	MONUMENTED	CGS
KE0493 HISTORY	-	1964	GOOD	CGS
KE0493 HISTORY	-	19970321	GOOD	NGS
KE0493 HISTORY	-	20020826	GOOD	SKW
KE0493 HISTORY	-	20060710	GOOD	KSDT
KE0493 HISTORY	-	20061028	GOOD	GEOCAC

KE0493

KE0493 STATION DESCRIPTION
KE0493
KE0493'DESCRIBED BY COAST AND GEODETIC SURVEY 1964
KE0493'AT ATCHISON.
KE0493'AT ATCHISON, AT THE NORTHWEST EDGE OF TOWN, 0.7 MILE WEST ALONG
KE0493'DIVISION STREET FROM THE MARTIN SCHOOL, THENCE 100 YARDS NORTH
KE0493'ALONG STATE HIGHWAY 7, THENCE 0.6 MILE WEST ALONG A HARD-SURFACED
KE0493'ROAD LEADING TO BELLEVIEW COUNTRY CLUB, SOUTH OF AND ACROSS THE
KE0493'ROAD FROM THE GOLF COURSE, ON THE TOP OF A RIDGE WHICH IS
KE0493'MIDWAY BETWEEN THE DIRT ROAD ALONG EAST SIDE OF GOLF COURSE
KE0493'AND THE DRIVEWAY TO THE CLUBHOUSE, 144 FEET SOUTH OF THE CENTER

KE0493'OF HARD-SURFACED ROAD, 111 FEET SOUTH OF A FENCE CORNER, 94
KE0493'FEET WEST OF THE SOUTHWEST CORNER OF MR. GLEN ALLENS NEW HOUSE,
KE0493'AND 2 FEET EAST OF A FENCE. THE MARK PROJECTS 4 INCHES AND
KE0493'THE DISK IS STAMPED W 281 1948. NOTE-- THE AREA HAS BEEN
KE0493'SUB-DIVIDED AND THERE ARE SOME CHANGE.
KE0493
KE0493 STATION RECOVERY (1997)
KE0493
KE0493'RECOVERY NOTE BY NATIONAL GEODETIC SURVEY 1997 (CSM)
KE0493'THE STATION IS LOCATED NEAR THE NORTHWEST EDGE OF ATCHISON, NEAR THE
KE0493'SOUTHWEST CORNER OF THE PROPERTY OWNED BY MR. LARRY SCHULTZ, AT 1710
KE0493'COUNTRY CLUB ROAD. OWNERSHIP--CITY OF ATCHISON, CITY HALL, ATCHISON
KE0493'KS 66002. TO REACH THE STATION FROM THE JUNCTION OF U.S. HIGHWAYS 59
KE0493'AND 73 AND STATE HIGHWAY 7 NEAR THE SOUTH SIDE OF ATCHISON, JUST
KE0493'SOUTHEAST OF THE MIDWEST GRAIN ELEVATORS, GO NORTH FOR 0.2 KM (0.10
KE0493'MI) ON HIGHWAY 7 TO THE INTERSECTION OF MAIN ST. TURN LEFT, WEST FOR
KE0493'1.3 KM (0.80 MI) ON HIGHWAY 7 (MAIN ST) TO SEVENTEENTH STREET ON THE
KE0493'RIGHT, WHERE HIGHWAY 7 TURNS NORTH. TURN RIGHT, NORTHERLY FOR 1.28 KM
KE0493'(0.80 MI) ON HIGHWAY 7 (SEVENTEENTH STREET) TO THE INTERSECTION OF
KE0493'COUNTRY CLUB ROAD. TURN LEFT, WEST FOR 0.24 KM (0.15 MI) ON COUNTRY
KE0493'CLUB ROAD TO A DIM TRACK ROAD ON THE LEFT, JUST PAST THE DRIVEWAY AT
KE0493'1710 COUNTRY CLUB ROAD. TURN LEFT, SOUTH FOR ABOUT 45.0 M (147.6 FT)
KE0493'ON THE TRACK ROAD TO THE STATION ON THE LEFT, NEAR THE SOUTHWEST
KE0493'CORNER OF THE PROPERTY LINE OF 1710 COUNTRY CLUB ROAD. STATION IS
KE0493'44.8 M (147.0 FT) SOUTH OF THE CENTER OF COUNTRY CLUB ROAD, 36.1 M
KE0493'(118.4 FT) SOUTH-SOUTHWEST OF BENCH MARK V 281 RESET 1980, 30.0 M
KE0493'(98.4 FT) NORTHWEST OF A UTILITY POLE WITH A TRANSFORMER AND 2 GUY
KE0493'WIRES, 28.6 M (93.8 FT) WEST-SOUTHWEST OF THE SOUTHWEST CORNER OF A
KE0493'HOUSE, 0.4 M (1.3 FT) NORTH OF A METAL WITNESS POST AND FLUSH WITH
KE0493'GROUND.
KE0493
KE0493 STATION RECOVERY (2002)
KE0493
KE0493'RECOVERY NOTE BY SHAFER, KLINE AND WARREN INC 2002 (CMC)
KE0493'RECOVERED IN GOOD CONDITION.
KE0493
KE0493 STATION RECOVERY (2006)
KE0493
KE0493'RECOVERY NOTE BY KANSAS DEPARTMENT OF TRANSPORTATION 2006
KE0493'RECOVERED IN GOOD CONDITION.
KE0493
KE0493 STATION RECOVERY (2006)
KE0493
KE0493'RECOVERY NOTE BY GEOCACHING 2006 (RCF)
KE0493'RECOVERED IN GOOD CONDITION.

*** retrieval complete.
Elapsed Time = 00:00:01

The NGS Data Sheet

See file dsdata.txt for more information about the datasheet.

```
DATABASE = NGSIDB , PROGRAM = datasheet95, VERSION = 7.87.5
1        National Geodetic Survey,   Retrieval Date = FEBRUARY  9, 2012
 KE0975 ***********************************************************************
 KE0975  DESIGNATION -  X 108
 KE0975  PID         -  KE0975
 KE0975  STATE/COUNTY-  KS/BROWN
 KE0975  USGS QUAD   -  SABETHA (1960)
 KE0975
 KE0975                        *CURRENT SURVEY CONTROL
 KE0975  ______________________________________________________________________
 KE0975* NAD 83(1986)-  39 55 10.5     (N)     095 45 02.2     (W)      HD_HELD2
 KE0975* NAVD 88     -       382.069   (meters)     1253.50    (feet)   ADJUSTED
 KE0975  ______________________________________________________________________
 KE0975  GEOID HEIGHT-         -30.25  (meters)                         GEOID09
 KE0975  DYNAMIC HT  -         381.844 (meters)     1252.77    (feet)   COMP
 KE0975  MODELED GRAV-     980,026.9   (mgal)                           NAVD 88
 KE0975
 KE0975  VERT ORDER  -  SECOND    CLASS 0
 KE0975
 KE0975.The horizontal coordinates were established by autonomous hand held GPS
 KE0975.observations and have an estimated accuracy of +/- 10 meters.
 KE0975.
 KE0975.The orthometric height was determined by differential leveling and
 KE0975.adjusted in June 1991.
 KE0975
 KE0975.The geoid height was determined by GEOID09.
 KE0975
 KE0975.The dynamic height is computed by dividing the NAVD 88
 KE0975.geopotential number by the normal gravity value computed on the
 KE0975.Geodetic Reference System of 1980 (GRS 80) ellipsoid at 45
 KE0975.degrees latitude (g = 980.6199 gals.).
 KE0975
 KE0975.The modeled gravity was interpolated from observed gravity values.
 KE0975
 KE0975;                    North         East     Units  Estimated Accuracy
 KE0975;SPC KS N     -   178,489.      592,294.      MT  (+/- 10 meters HH2 GPS)
 KE0975
 KE0975                          SUPERSEDED SURVEY CONTROL
 KE0975
 KE0975  NGVD 29 (??/??/92)  381.952  (m)          1253.12    (f) ADJ UNCH    2 0
 KE0975
 KE0975.Superseded values are not recommended for survey control.
 KE0975.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.
 KE0975.See file dsdata.txt to determine how the superseded data were derived.
 KE0975
 KE0975_U.S. NATIONAL GRID SPATIAL ADDRESS: 15STE6491722454(NAD 83)
 KE0975
 KE0975_MARKER: DB = BENCH MARK DISK
 KE0975_SETTING: 7 = SET IN TOP OF CONCRETE MONUMENT
 KE0975_SP_SET: SET IN TOP OF CONCRETE MONUMENT
 KE0975_STAMPING: X 108 1934
 KE0975_STABILITY: C = MAY HOLD, BUT OF TYPE COMMONLY SUBJECT TO
```

KE0975+STABILITY: SURFACE MOTION
KE0975_SATELLITE: THE SITE LOCATION WAS REPORTED AS SUITABLE FOR
KE0975+SATELLITE: SATELLITE OBSERVATIONS - April 22, 2005
KE0975
KE0975 HISTORY   - Date   Condition   Report By
KE0975 HISTORY   - 1934   MONUMENTED   CGS
KE0975 HISTORY   - 1950   GOOD   CGS
KE0975 HISTORY   - 20050422 GOOD   GEOCAC
KE0975
KE0975   STATION DESCRIPTION
KE0975
KE0975'DESCRIBED BY COAST AND GEODETIC SURVEY 1950
KE0975'3.2 MI W FROM MORRILL.
KE0975'IN BROWN COUNTY, 3.2 MILES WEST ALONG THE UNION PACIFIC RAILROAD
KE0975'FROM THE CITY WATER TOWER AT MORRILL, BROWN COUNTY, 3.3 MILES
KE0975'EAST OF SABETHA, NEMAHA COUNTY, AT THE CROSSING OF A GRAVEL ROAD,
KE0975'34 FEET SOUTH OF THE SOUTH RAIL, 24 FEET EAST OF THE CENTER LINE
KE0975'OF THE GRAVEL ROAD, 14 FEET NORTH OF A CONCRETE POST AT A FENCE
KE0975'CORNER, 6 FEET NORTH OF A POWER-TRANSMISSION LINE POLE, 2 FEET
KE0975'SOUTH OF A STEEL POST IN THE FENCE LINE, AND 2 INCHES UNDER
KE0975'GROUND. A STANDARD DISK, STAMPED X 108 1934 AND SET IN THE TOP
KE0975'OF A CONCRETE POST.
KE0975
KE0975   STATION RECOVERY (2005)
KE0975
KE0975'RECOVERY NOTE BY GEOCACHING 2005 (RCF)
KE0975'3.2 MILES WEST ALONG THE UNION PACIFIC RAILROAD FROM THE CITY WATER
KE0975'TOWER AT MORRILL, BROWN COUNTY, 3.3 MILES EAST OF SABETHA, NEMAHA
KE0975'COUNTY, AT THE CROSSING OF A GRAVEL ROAD, 34 FEET SOUTH OF THE SOUTH
KE0975'RAIL, 24 FEET EAST OF THE CENTER LINE OF THE GRAVEL ROAD, 13.25 FEET
KE0975'NORTH OF A CONCRETE POST AT A FENCE CORNER, 8.5 FEET NORTH OF A
KE0975'POWER-TRANSMISSION LINE POLE, AND 1 INCH ABOVE GROUND.
KE0975'A STANDARD DISK, STAMPED X 108 1934 AND SET IN THE TOP OF A 12 INCH
KE0975'CONCRETE POST.
KE0975'
KE0975'HANDHELD GPS COORDINATES N39 55 10.5 W95 45 02.2
KE0975'
KE0975'

*** retrieval complete.
Elapsed Time = 00:00:02

The NGS Data Sheet

See file dsdata.txt for more information about the datasheet.

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DATABASE = NGSIDB , PROGRAM = datasheet95, VERSION = 7.87.6
1        National Geodetic Survey,   Retrieval Date = FEBRUARY 24, 2012
 KF0031 ***********************************************************************
 KF0031  DESIGNATION -  X 119
 KF0031  PID         -  KF0031
 KF0031  STATE/COUNTY-  KS/POTTAWATOMIE
 KF0031  USGS QUAD   -  DULUTH (1969)
 KF0031
 KF0031                        *CURRENT SURVEY CONTROL
 KF0031  ______________________________________________________________________
 KF0031* NAD 83(1986)-  39 31 21.      (N)    096 14 21.      (W)      SCALED
 KF0031* NAVD 88     -       392.674   (meters)    1288.30    (feet)   ADJUSTED
 KF0031  ______________________________________________________________________
 KF0031  GEOID HEIGHT-         -29.97  (meters)                        GEOID09
 KF0031  DYNAMIC HT  -         392.425 (meters)    1287.48    (feet)   COMP
 KF0031  MODELED GRAV-     979,982.6   (mgal)                          NAVD 88
 KF0031
 KF0031  VERT ORDER  -  SECOND    CLASS 0
 KF0031
 KF0031.The horizontal coordinates were scaled from a topographic map and have
 KF0031.an estimated accuracy of +/- 6 seconds.
 KF0031.
 KF0031.The orthometric height was determined by differential leveling and
 KF0031.adjusted in June 1991.
 KF0031
 KF0031.The geoid height was determined by GEOID09.
 KF0031
 KF0031.The dynamic height is computed by dividing the NAVD 88
 KF0031.geopotential number by the normal gravity value computed on the
 KF0031.Geodetic Reference System of 1980 (GRS 80) ellipsoid at 45
 KF0031.degrees latitude (g = 980.6199 gals.).
 KF0031
 KF0031.The modeled gravity was interpolated from observed gravity values.
 KF0031
 KF0031;                    North         East     Units  Estimated Accuracy
 KF0031;SPC KS N     -   133,490.      551,390.      MT  (+/- 180 meters Scaled)
 KF0031
 KF0031                          SUPERSEDED SURVEY CONTROL
 KF0031
 KF0031  NGVD 29 (??/??/92)  392.556  (m)          1287.91   (f) ADJ UNCH    2 0
 KF0031
 KF0031.Superseded values are not recommended for survey control.
 KF0031.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.
 KF0031.See file dsdata.txt to determine how the superseded data were derived.
 KF0031
 KF0031_U.S. NATIONAL GRID SPATIAL ADDRESS: 14SQJ373784(NAD 83)
 KF0031
 KF0031_MARKER: DD = SURVEY DISK
 KF0031_SETTING: 7 = SET IN TOP OF CONCRETE MONUMENT
 KF0031_SP_SET: SET IN TOP OF CONCRETE MONUMENT
 KF0031_STAMPING: X 119 1934
 KF0031_STABILITY: C = MAY HOLD, BUT OF TYPE COMMONLY SUBJECT TO
```

KF0031+STABILITY: SURFACE MOTION
KF0031_SATELLITE: THE SITE LOCATION WAS REPORTED AS SUITABLE FOR
KF0031+SATELLITE: SATELLITE OBSERVATIONS - March 28, 2008
KF0031
KF0031 HISTORY   - Date   Condition   Report By
KF0031 HISTORY   - 1934   MONUMENTED   CGS
KF0031 HISTORY   - 1965   GOOD   CGS
KF0031 HISTORY   - 20080328 GOOD   NGS
KF0031
KF0031   STATION DESCRIPTION
KF0031
KF0031'DESCRIBED BY COAST AND GEODETIC SURVEY 1965
KF0031'6 MI E FROM WHEATON.
KF0031'6 MILES EAST ALONG STATE HIGHWAY 16 FROM THE PUBLIC SCHOOL AT
KF0031'WHEATON, 1 MILE WEST OF DULUTH, POTTAWATOMIE COUNTY, AT A T-ROAD
KF0031'JUNCTION, IN SOUTHWEST CORNER OF A PASTURE, 26 FEET SOUTH OF
KF0031'A POWER LINE POLE, 20 FEET EAST OF CENTER LINE OF THE GRAVELED
KF0031'ROAD, 3 FEET NORTHEAST OF THE FENCE CORNER AND 3 FEET NORTH OF
KF0031'A METAL WITNESS POST AND SIGN. A STATE SURVEY STANDARD DISK
KF0031'SET IN THE TOP OF A 6 INCH SQUARE CONCRETE POST AND PROJECTS 10
KF0031'INCHES.
KF0031
KF0031   STATION RECOVERY (2008)
KF0031
KF0031'RECOVERY NOTE BY NATIONAL GEODETIC SURVEY 2008
KF0031'AT THE JUNCTION OF GOLDENBELT RD AND DUTCH CREEK RD.

*** retrieval complete.
Elapsed Time = 00:00:03

The NGS Data Sheet

See file dsdata.txt for more information about the datasheet.

```
DATABASE = NGSIDB , PROGRAM = datasheet95, VERSION = 7.87.5
1        National Geodetic Survey,   Retrieval Date = JANUARY 31, 2012
 HF0316 ***********************************************************************
 HF0316  DESIGNATION -  X 240 RESET
 HF0316  PID         -  HF0316
 HF0316  STATE/COUNTY-  KS/BUTLER
 HF0316  USGS QUAD   -  ROSALIA NW (1961)
 HF0316
 HF0316                        *CURRENT SURVEY CONTROL
 HF0316  ______________________________________________________________________
 HF0316* NAD 83(1986)-  37 57 08.     (N)    096 43 24.     (W)      SCALED
 HF0316* NAVD 88     -       428.77   (meters)    1406.7    (feet)   RESET
 HF0316  ______________________________________________________________________
 HF0316  GEOID HEIGHT-         -29.60   (meters)                     GEOID09
 HF0316  VERT ORDER  -  THIRD
 HF0316
 HF0316.The horizontal coordinates were scaled from a topographic map and have
 HF0316.an estimated accuracy of +/- 6 seconds.
 HF0316.
 HF0316.The orthometric height was computed from unverified reset data.
 HF0316
 HF0316.The geoid height was determined by GEOID09.
 HF0316
 HF0316;                    North         East    Units  Estimated Accuracy
 HF0316;SPC KS S     -   544,170.      556,130.      MT  (+/- 180 meters Scaled)
 HF0316
 HF0316                          SUPERSEDED SURVEY CONTROL
 HF0316
 HF0316.No superseded survey control is available for this station.
 HF0316
 HF0316_U.S. NATIONAL GRID SPATIAL ADDRESS: 14SQH000029(NAD 83)
 HF0316
 HF0316_MARKER: DB = BENCH MARK DISK
 HF0316_SETTING: 36 = SET IN A MASSIVE STRUCTURE
 HF0316_SP_SET: ABUTMENT
 HF0316_STAMPING: X 240 RESET 1970
 HF0316_STABILITY: B = PROBABLY HOLD POSITION/ELEVATION WELL
 HF0316_SATELLITE: THE SITE LOCATION WAS REPORTED AS SUITABLE FOR
 HF0316+SATELLITE: SATELLITE OBSERVATIONS - November 20, 2006
 HF0316
 HF0316  HISTORY     - Date     Condition        Report By
 HF0316  HISTORY     - 1970     MONUMENTED       NGS
 HF0316  HISTORY     - 20061120 GOOD             INDIV
 HF0316
 HF0316                          STATION DESCRIPTION
 HF0316
 HF0316'DESCRIBED BY NATIONAL GEODETIC SURVEY 1970
 HF0316'3.1 MI S FROM AIKMAN.
 HF0316'ABOUT 3.1 MILES SOUTH ALONG THE ATCHISON, TOPEKA AND SANTA FE
 HF0316'RAILROAD FROM THE STATION AT AIKMAN, 14.5 FEET WEST OF THE
 HF0316'CENTER OF STATE HIGHWAY 177, 3 FEET SOUTH OF THE NORTH END
 HF0316'OF THE WEST CONCRETE BRIDGE ABUTMENT, AND CEMENTED IN A DRILL
```

HF0316'HOLE IN THE TOP OF THE WEST ABUTMENT OF BRIDGE.
HF0316
HF0316 STATION RECOVERY (2006)
HF0316
HF0316'RECOVERY NOTE BY INDIVIDUAL CONTRIBUTORS 2006 (BCC)
HF0316'RR STATION NO LONGER EXISTS AT AIKMAN. BENCHMARK IS LOCATED ALONG
HF0316'KANSAS HIGHWAY 177 APPROXIMATELY 1000 FEET SOUTH OF NE 90TH STREET IN
HF0316'FIRST CONCRETE BOX CULVERT SOUTH OF THE INTERSECTION OF NE 90TH AND
HF0316'THE HIGHWAY. BENCHMARK IS IN THE WEST HUBWALL OF THE CULVERT AS
HF0316'ORIGINALLY DESCRIBED.

*** retrieval complete.
Elapsed Time = 00:00:02

The NGS Data Sheet

See file dsdata.txt for more information about the datasheet.

```
DATABASE = NGSIDB , PROGRAM = datasheet95, VERSION = 7.87.5
1        National Geodetic Survey,   Retrieval Date = FEBRUARY  9, 2012
 KE1650 ***********************************************************************
 KE1650  DESIGNATION -  Y 341
 KE1650  PID         -  KE1650
 KE1650  STATE/COUNTY-  MO/PLATTE
 KE1650  USGS QUAD   -  PLATTE CITY (1975)
 KE1650
 KE1650                        *CURRENT SURVEY CONTROL
 KE1650  ______________________________________________________________________
 KE1650* NAD 83(1986)-  39 19 30.3     (N)     094 51 53.1     (W)      HD_HELD2
 KE1650* NAVD 88     -       232.929   (meters)      764.20    (feet)   ADJUSTED
 KE1650  ______________________________________________________________________
 KE1650  GEOID HEIGHT-         -32.36  (meters)                         GEOID09
 KE1650  DYNAMIC HT  -         232.782 (meters)      763.72    (feet)   COMP
 KE1650  MODELED GRAV-     979,992.3   (mgal)                           NAVD 88
 KE1650
 KE1650  VERT ORDER  -  FIRST     CLASS II
 KE1650
 KE1650.The horizontal coordinates were established by autonomous hand held GPS
 KE1650.observations and have an estimated accuracy of +/- 10 meters.
 KE1650.
 KE1650.The orthometric height was determined by differential leveling and
 KE1650.adjusted in June 1991.
 KE1650
 KE1650.The geoid height was determined by GEOID09.
 KE1650
 KE1650.The dynamic height is computed by dividing the NAVD 88
 KE1650.geopotential number by the normal gravity value computed on the
 KE1650.Geodetic Reference System of 1980 (GRS 80) ellipsoid at 45
 KE1650.degrees latitude (g = 980.6199 gals.).
 KE1650
 KE1650.The modeled gravity was interpolated from observed gravity values.
 KE1650
 KE1650;                    North         East     Units  Estimated Accuracy
 KE1650;SPC MO W     -   350,601.      818,550.      MT  (+/- 10 meters HH2 GPS)
 KE1650
 KE1650                           SUPERSEDED SURVEY CONTROL
 KE1650
 KE1650.No superseded survey control is available for this station.
 KE1650
 KE1650_U.S. NATIONAL GRID SPATIAL ADDRESS: 15SUD3926354510(NAD 83)
 KE1650
 KE1650_MARKER: I = METAL ROD
 KE1650_SETTING: 49 = STAINLESS STEEL ROD W/O SLEEVE (10 FT.+)
 KE1650_SP_SET: STAINLESS STEEL ROD
 KE1650_STAMPING: Y 341 1989
 KE1650_MARK LOGO: NGS
 KE1650_PROJECTION: FLUSH
 KE1650_MAGNETIC: I = MARKER IS A STEEL ROD
 KE1650_STABILITY: B = PROBABLY HOLD POSITION/ELEVATION WELL
 KE1650_SATELLITE: THE SITE LOCATION WAS REPORTED AS SUITABLE FOR
```

KE1650+SATELLITE: SATELLITE OBSERVATIONS - July 04, 2005
KE1650_ROD/PIPE-DEPTH: 25.3 meters
KE1650
KE1650 HISTORY   - Date   Condition   Report By
KE1650 HISTORY   - 1989   MONUMENTED   NGS
KE1650 HISTORY   - 20020904 GOOD   SKW
KE1650 HISTORY   - 20050704 GOOD   GEOCAC
KE1650
KE1650   STATION DESCRIPTION
KE1650
KE1650'DESCRIBED BY NATIONAL GEODETIC SURVEY 1989
KE1650'5.1 KM (3.15 MI) NORTHERLY ALONG STATE HIGHWAY 45 FROM ITS JUNCTION
KE1650'WITH MAIN STREET IN FARLEY, THENCE 0.9 KM (0.55 MI) WESTERLY ALONG
KE1650'STATE HIGHWAY 45 SPUR, 63.4 M (208.0 FT) NORTH OF THE CENTERLINE OF
KE1650'THE HIGHWAY, 44.4 M (145.7 FT) WEST OF THE WEST CORNER OF A BUILDING,
KE1650'9.6 M (31.5 FT) EAST OF THE CENTER OF A GRAVELED ROAD LEADING NORTH,
KE1650'1.2 M (3.9 FT) SOUTH OF A UTILITY POLE, AND LEVEL WITH THE ROAD.
KE1650'NOTE--ACCESS TO DATUM POINT IS HAD THROUGH A 5-INCH LOGO CAP.
KE1650
KE1650   STATION RECOVERY (2002)
KE1650
KE1650'RECOVERY NOTE BY SHAFER, KLINE AND WARREN INC 2002 (CMC)
KE1650'RECOVERED IN GOOD CONDITION.
KE1650
KE1650   STATION RECOVERY (2005)
KE1650
KE1650'RECOVERY NOTE BY GEOCACHING 2005 (RCF)
KE1650'HANDHELD GPS COORDINATES N39 19 30.3 W94 51 53.1.

*** retrieval complete.
Elapsed Time = 00:00:01

The NGS Data Sheet

See file dsdata.txt for more information about the datasheet.

```
DATABASE = NGSIDB , PROGRAM = datasheet95, VERSION = 7.88.2
1        National Geodetic Survey,   Retrieval Date = MAY 11, 2012
 KF0062 ***********************************************************************
 KF0062  DESIGNATION -  Z 231
 KF0062  PID         -  KF0062
 KF0062  STATE/COUNTY-  KS/WABAUNSEE
 KF0062  COUNTRY     -  US
 KF0062  USGS QUAD   -  WAMEGO (1978)
 KF0062
 KF0062                        *CURRENT SURVEY CONTROL
 KF0062  ______________________________________________________________________
 KF0062* NAD 83(1986) POSITION- 39 09 06.     (N) 096 18 19.     (W)    SCALED
 KF0062* NAVD 88 ORTHO HEIGHT -   305.918   (meters)    1003.67   (feet) ADJUSTED
 KF0062  ______________________________________________________________________
 KF0062  GEOID HEIGHT    -        -30.37   (meters)                      GEOID09
 KF0062  DYNAMIC HEIGHT  -        305.715  (meters)     1003.00   (feet) COMP
 KF0062  MODELED GRAVITY -    979,956.6    (mgal)                        NAVD 88
 KF0062
 KF0062  VERT ORDER      -  SECOND    CLASS 0
 KF0062
 KF0062.The horizontal coordinates were scaled from a topographic map and have
 KF0062.an estimated accuracy of +/- 6 seconds.
 KF0062.
 KF0062.The orthometric height was determined by differential leveling and
 KF0062.adjusted in June 1991.
 KF0062
 KF0062.The dynamic height is computed by dividing the NAVD 88
 KF0062.geopotential number by the normal gravity value computed on the
 KF0062.Geodetic Reference System of 1980 (GRS 80) ellipsoid at 45
 KF0062.degrees latitude (g = 980.6199 gals.).
 KF0062
 KF0062.The modeled gravity was interpolated from observed gravity values.
 KF0062
 KF0062;                    North         East     Units  Estimated Accuracy
 KF0062;SPC KS N     -    92,220.      546,480.      MT   (+/- 180 meters Scaled)
 KF0062
 KF0062                         SUPERSEDED SURVEY CONTROL
 KF0062
 KF0062  NGVD 29 (??/??/92)  305.796  (m)          1003.27    (f) ADJ UNCH    2 0
 KF0062
 KF0062.Superseded values are not recommended for survey control.
 KF0062.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.
 KF0062.See file dsdata.txt to determine how the superseded data were derived.
 KF0062
 KF0062_U.S. NATIONAL GRID SPATIAL ADDRESS: 14SQJ328370(NAD 83)
 KF0062
 KF0062_MARKER: DB = BENCH MARK DISK
 KF0062_SETTING: 7 = SET IN TOP OF CONCRETE MONUMENT
 KF0062_SP_SET: SET IN TOP OF CONCRETE MONUMENT
 KF0062_STAMPING: Z 231 1934
 KF0062_STABILITY: C = MAY HOLD, BUT OF TYPE COMMONLY SUBJECT TO
 KF0062+STABILITY: SURFACE MOTION
```

KF0062_SATELLITE: THE SITE LOCATION WAS REPORTED AS SUITABLE FOR
KF0062+SATELLITE: SATELLITE OBSERVATIONS - March 12, 2009
KF0062
KF0062 HISTORY   - Date   Condition   Report By
KF0062 HISTORY   - 1934   MONUMENTED   CGS
KF0062 HISTORY   - 1970   GOOD   NGS
KF0062 HISTORY   - 20090312 GOOD   NGS
KF0062
KF0062   STATION DESCRIPTION
KF0062
KF0062'DESCRIBED BY NATIONAL GEODETIC SURVEY 1970
KF0062'3.4 MI S FROM WAMEGO.
KF0062'ABOUT 3.35 MILES SOUTH ALONG STATE HIGHWAY 99 FROM THE CROSSING
KF0062'OF THE HIGHWAY AND THE UNION PACIFIC RAILROAD AT WAMEGO, 135
KF0062'FEET SOUTHEAST OF THE CENTER OF AN INTERSECTION OF THE HIGHWAY
KF0062'AND STATE HIGHWAY 18 WHICH LEADS WEST AND A GRAVELED ROAD WHICH
KF0062'LEADS EAST, 78 1/2 FEET EAST OF THE CENTER LINE OF THE HIGHWAY,
KF0062'113 FEET SOUTH OF THE CENTER LINE OF THE ROAD, 150 FEET NORTHEAST
KF0062'OF THE NORTHEAST CORNER OF A 6-FOOT CONCRETE BOX CULVERT UNDER
KF0062'STATE HIGHWAY 99, 0.4 FOOT NORTH OF METAL HIGHWAY RIGHT-OF-WAY
KF0062'MARKER WHICH IS 2 FEET HIGH, 0.7 FOOT SOUTH OF A METAL WITNESS
KF0062'POST, ABOUT 2 FEET BELOW THE LEVEL OF THE HIGHWAY, AND SET IN
KF0062'THE TOP OF A CONCRETE POST WHICH PROJECTS 0.1 FOOT. SEC 28,
KF0062'T10S, R 10E
KF0062
KF0062   STATION RECOVERY (2009)
KF0062
KF0062'RECOVERY NOTE BY NATIONAL GEODETIC SURVEY 2009
KF0062'RECOVERED IN GOOD CONDITION.

*** retrieval complete.
Elapsed Time = 00:00:03

ITRF 00
KANSAS CTY WAAS 1 (ZKC1), KANSAS

Retrieved from NGS DataBase on 03/26/07 at 18:57:08.

Antenna Reference Point(ARP): KANSAS CTY WAAS 1 CORS ARP
PID = DF9221

ITRF00 POSITION (EPOCH 1997.0)
Computed in December, 2003 using 22 days of data.
X = -415247.226 m latitude = 38 52 48.57516 N
Y = -4954556.041 m longitude = 094 47 26.99096 W
Z = 3982160.867 m ellipsoid height = 305.452 m

ITRF00 VELOCITY
Predicted with HTDP_2.7 November 2003.
VX = -0.0166 m/yr northward = -0.0040 m/yr
VY = -0.0014 m/yr eastward = -0.0164 m/yr
VZ = -0.0029 m/yr upward = 0.0003 m/yr

NAD_83 (CORS96) POSITION (EPOCH 2002.0)
Transformed from ITRF00 (epoch 1997.0) position in Dec. 2003.
X = -415246.691 m latitude = 38 52 48.55019 N
Y = -4954557.421 m longitude = 094 47 26.96407 W
Z = 3982160.951 m ellipsoid height = 306.542 m

NAD_83 (CORS96) VELOCITY
Transformed from ITRF00 velocity in Dec. 2003.
VX = 0.0000 m/yr northward = 0.0000 m/yr
VY = -0.0000 m/yr eastward = 0.0000 m/yr
VZ = -0.0000 m/yr upward = 0.0000 m/yr

L1 Phase Center of the current GPS antenna: KANSAS CTY WAAS 1 CORS L1 PC C

The WAAS L1/L2/L5 antenna
(Antenna Code = MPL_WAAS_2225NW) was installed on 03/21/07.
The L2 phase center is 0.002 m above the L1 phase center.
PID = DI4057

ITRF00 POSITION (EPOCH 1997.0)
Computed in December, 2003 using 22 days of data.
X = -415247.259 m latitude = 38 52 48.57517 N
Y = -4954556.399 m longitude = 094 47 26.99111 W
Z = 3982161.158 m ellipsoid height = 305.915 m

The ITRF00 VELOCITY of the L1 PC is the same as that for the ARP.

NAD_83 (CORS96) POSITION (EPOCH 2002.0)
Transformed from ITRF00 (epoch 1997.0) position in Dec. 2003.
X = -415246.724 m latitude = 38 52 48.55020 N
Y = -4954557.780 m longitude = 094 47 26.96422 W
Z = 3982161.242 m ellipsoid height = 307.004 m

| The NAD_83 (CORS96) VELOCITY of the L1 PC is the same as that for the ARP. |

* Latitude, longitude and ellipsoid height are computed from their corresponding cartesian coordinates using dimensions for the GRS 80 ellipsoid: semi-major axis = 6,378,137.0 meters
flattening = 1/298.257222101...

* WARNING: Mixing of antenna types can lead to errors of up to 10 cm. in height unless antenna-phase-center variation is properly modeled.

* For additional information about the interpretation and/or derivation of these positions and velocities, consult http://www.ngs.noaa.gov/CORS/Derivation.html.
For additional information on the relation of the GPS antenna to other relevant points at the site and on GPS equipment, consult the link ftp://www.ngs.noaa.gov/cors/.html/zkc1.log.txt

AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

BOURBON — BASE

PROJECT 120103
OPERATOR WJM
DATE 1/24/12

SITE NUMBER 1
SITE NAME 1001

TRACKING TIMES (LOCAL) MEASURE CST
START 11:30
STOP 16:20

SENSOR TYPE 500 (9500) 399 299
MEMORY CARD 107
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 ~~0.389~~
500 0.360

OBSTRUCTIONS: No

HEIGHT READINGS MTS FT
1.200
1.589

STATION DESCRIPTIONS SET REBAR AND CAP, ±11' S. OF WHITE PIPELINE POST, ±50' NE'ly of ℄ GRAND RD ±49' NW OF ℄ R×R

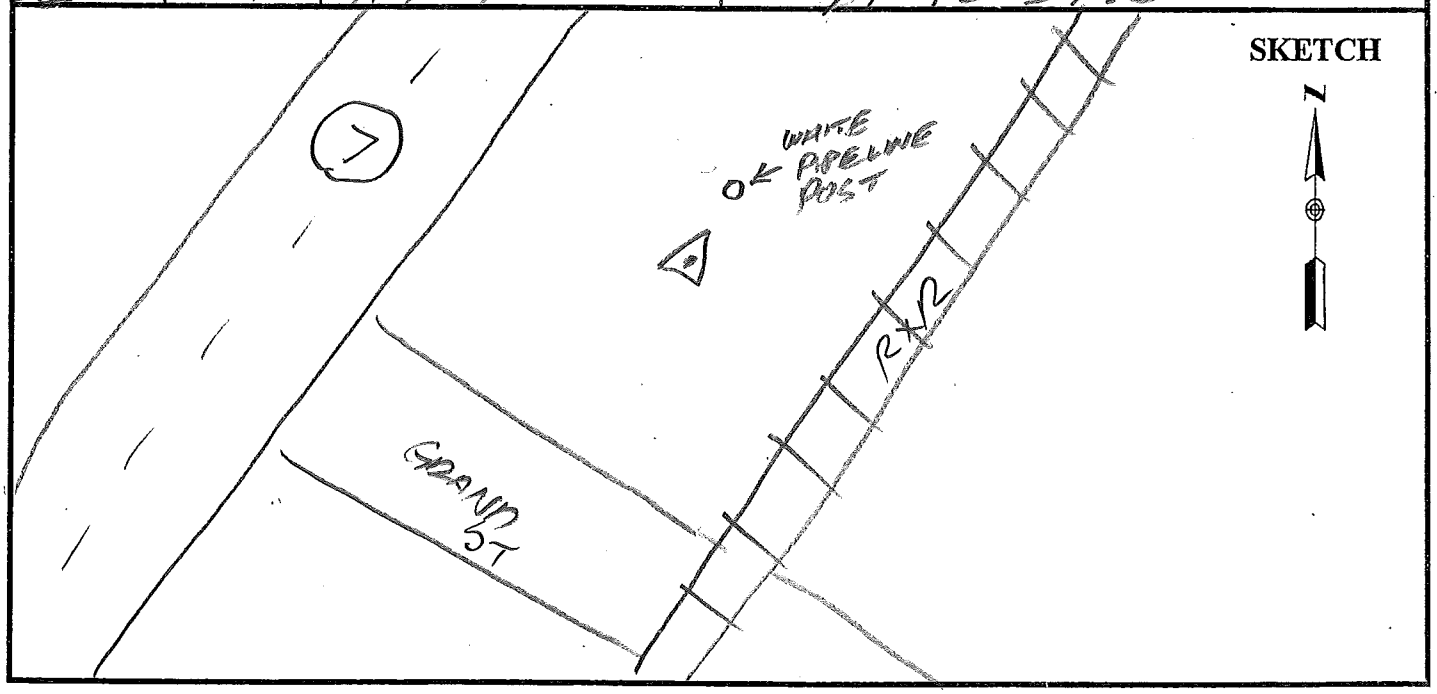
SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
17:30	2.0	9/9-9
22:20	2.1	9/9-9

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
MC

APPROX LAT LONG
37 45 42.1
94 42 34.0

SKETCH



39 45 20.8
94 42 34.0

MONE MOST

AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

BOURBON — BASE

PROJECT 1120103
OPERATOR WJN
DATE 1/24/12

SITE NUMBER 1
SITE NAME 1002

TRACKING TIMES (LOCAL) MEASURE CST
START 12:09
STOP 16:42

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 14
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
500 (0.360)

OBSTRUCTIONS: NO

HEIGHT READINGS MTS FT
1.209

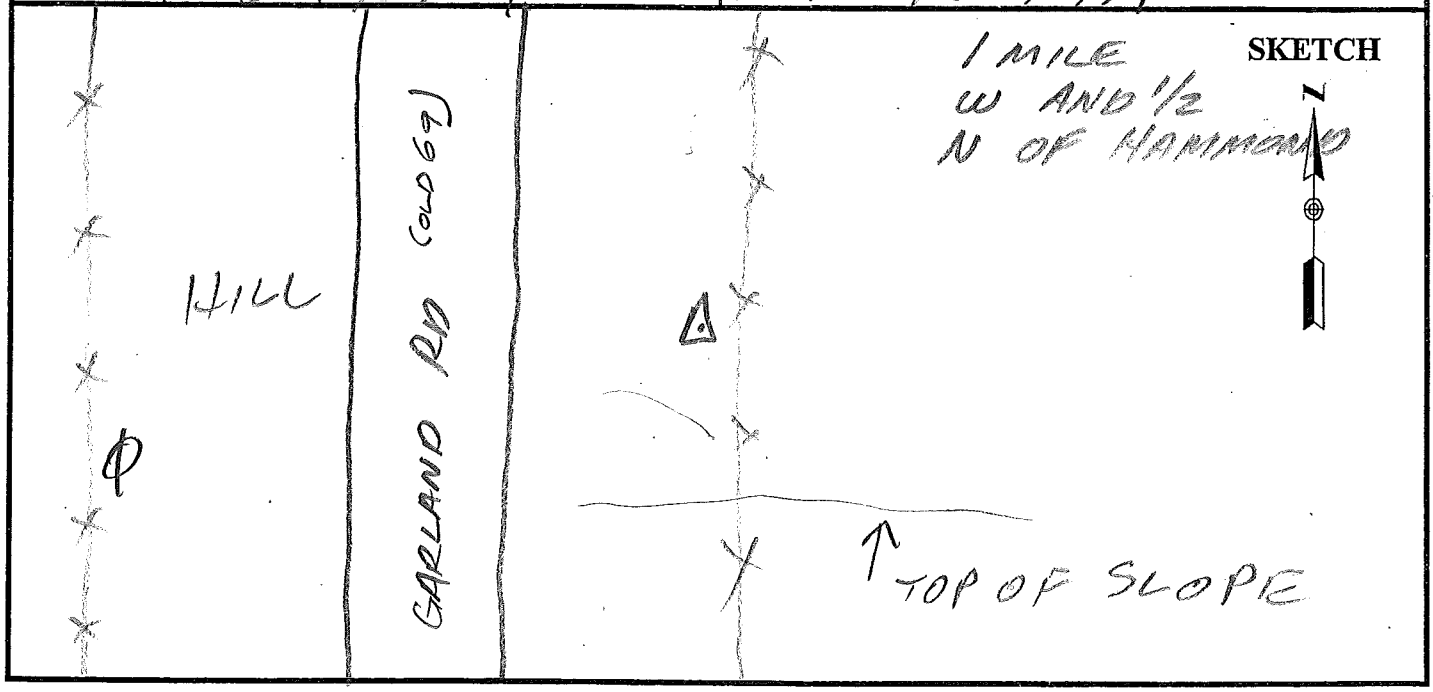
STATION DESCRIPTIONS Set Rebar AND CAP, 3' W OF E. R/W FENCE, ±42' E OF ℄ RD, ±20' N. OPP LONE PPL W.

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
18:09	4.2	6/6-6
22:42	1.9	9/9-9

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
MC
APPROX COORDS
37 56 26.0
94 42 47.9

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

BOURBON

V control

PROJECT 1120103
OPERATOR WJN
DATE 1/24/12

SITE NUMBER 1
SITE NAME G 251

TRACKING TIMES (LOCAL) MEASURE CST
START 12:36
STOP 13:00

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 14
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
500 (0.360)

OBSTRUCTIONS: NO

HEIGHT READINGS MTS FT
1.007
1.367

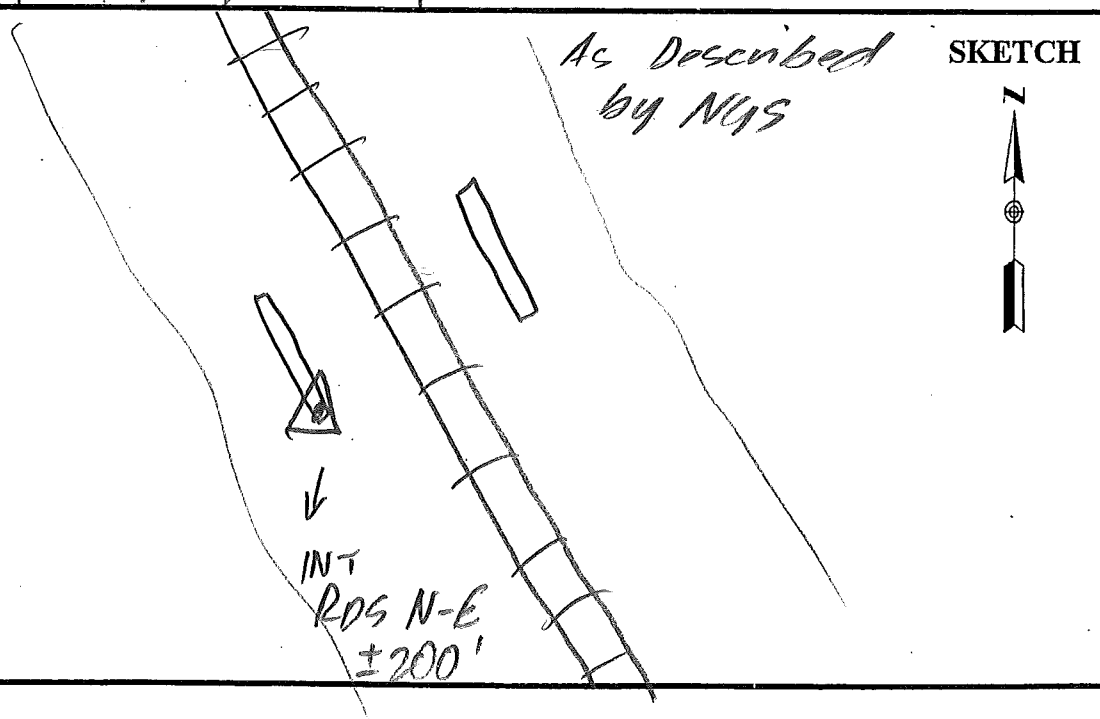
STATION DESCRIPTIONS BRASS DISK IN NE COR CONC CULV MKD "G 251 1934" USCGS

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
12:36	5.4	6/6-9
13:00	2.9	7/7-7

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
MC

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

ANE

PROJECT 1120103
OPERATOR MJM
DATE 1

SITE NUMBER 2
SITE NAME 1601

TRACKING TIMES (LOCAL) MEASURE CST
START 13:20
STOP 13:44

SENSOR TYPE (500) 9500 399 299
MEMORY CARD
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
500 (0.360)

OBSTRUCTIONS: TRAFFIC

HEIGHT READINGS MTS FT
1.266
1.626

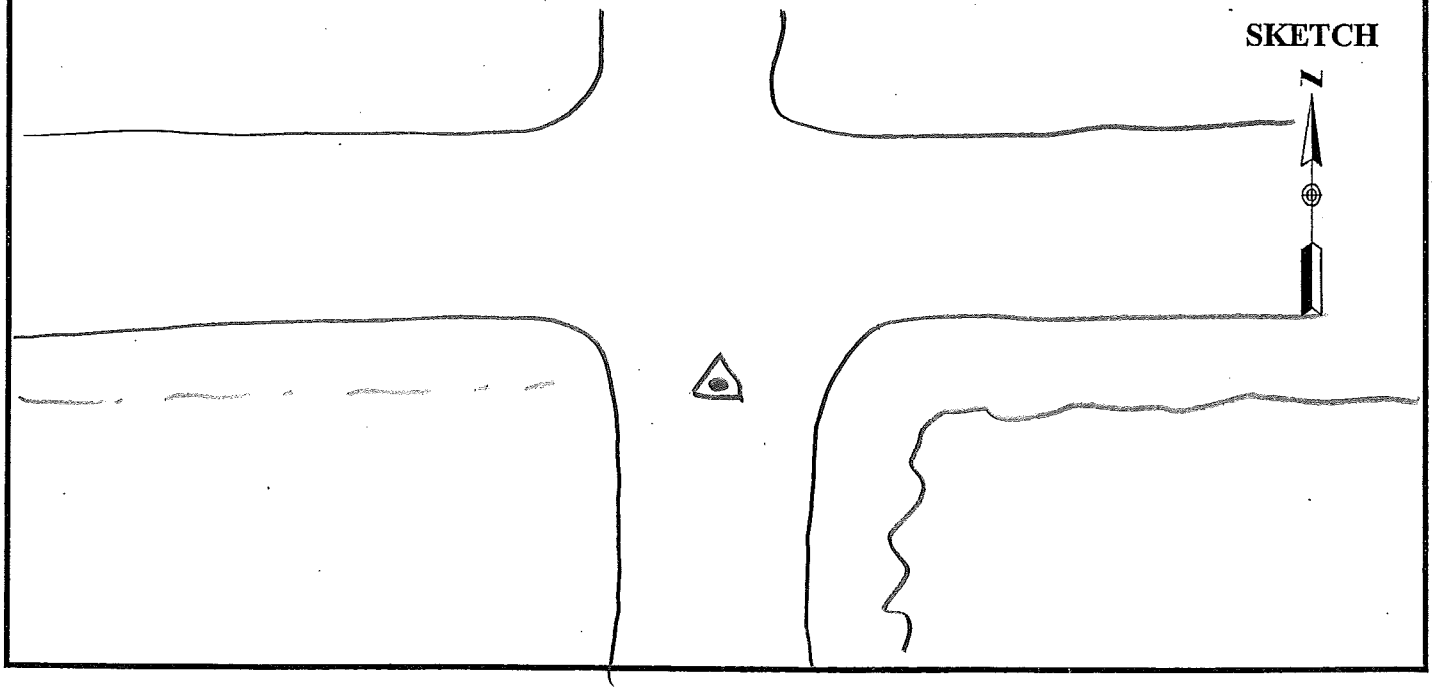
STATION DESCRIPTIONS G RD
JUST S. OF INT OPP E
DITCH W/ AMP N. TREE
LINE E

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
19:20	1.7	10/10-10
19:44	1.9	9/9-9

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
ML

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

BOUNDBROOK

1/ CONTROL

PROJECT 1120103
OPERATOR WJN
DATE 1/24/12

SITE NUMBER 3
SITE NAME C233 RESET

TRACKING TIMES (LOCAL) MEASURE CST
START 14:00
STOP 14:22

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 14
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
500 (0.360)

OBSTRUCTIONS: BLGS SW

HEIGHT READINGS MTS FT
1.139
1.499

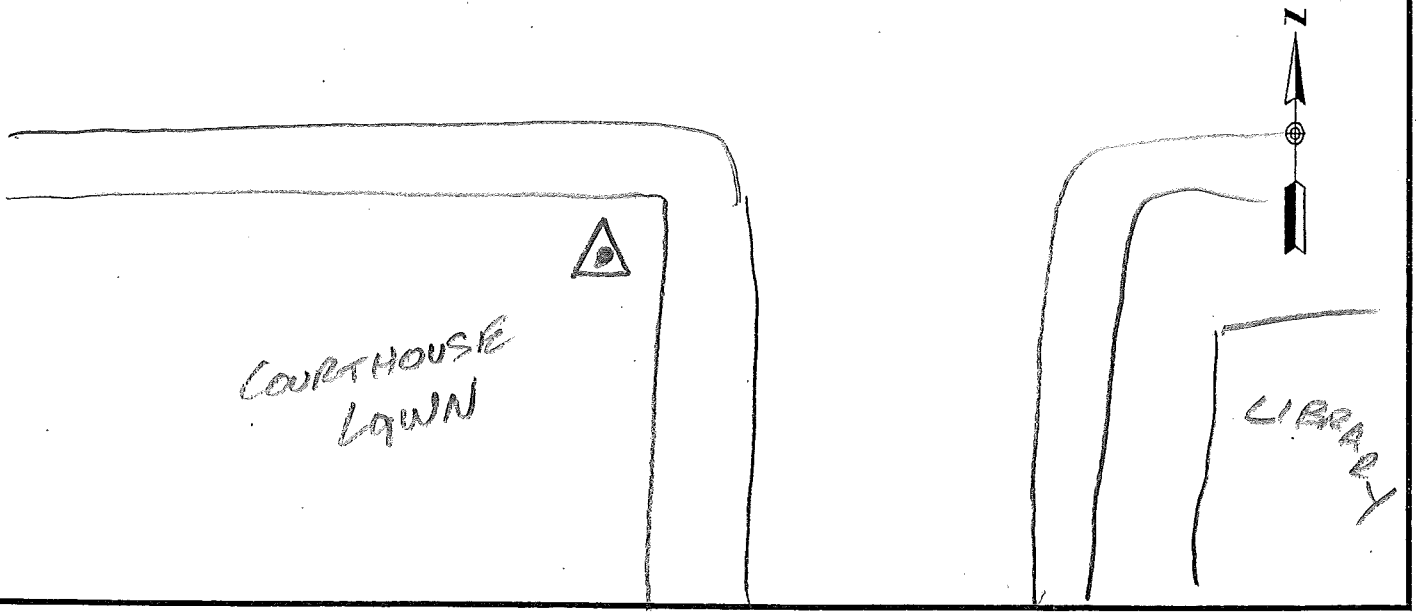
STATION DESCRIPTIONS ALUM TABLET FLUSH, MKD "C233 1975" NGS
AG DES

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
2000	2.0	9/9-9
2022	2.0	

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
MC

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

BOURBON

ANNE

PROJECT 1120103
OPERATOR WJN
DATE 1/24/12

SITE NUMBER 4
SITE NAME 1602

TRACKING TIMES (LOCAL) MEASURE CST
START 14:56
STOP 15:18

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 14
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
500 (0.360)

OBSTRUCTIONS: NO

HEIGHT READINGS MTS FT
1.272
1.632

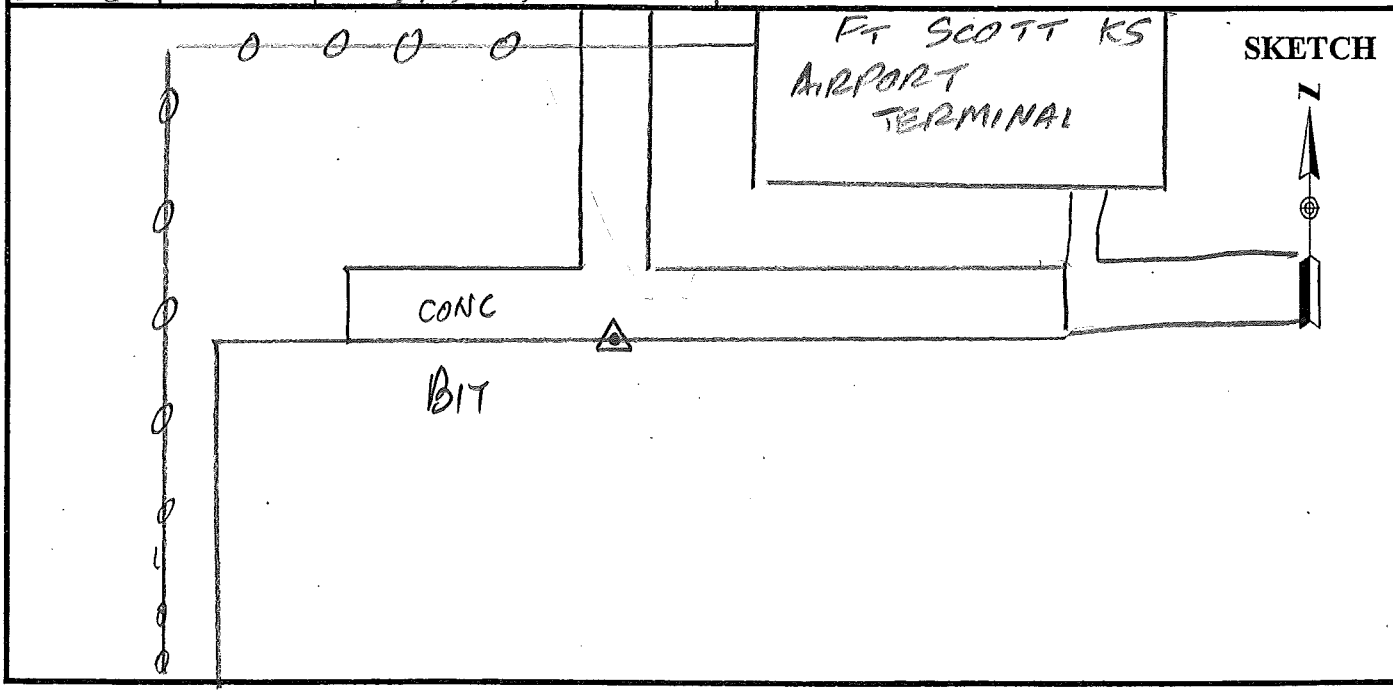
STATION DESCRIPTIONS S. EDGE CONC OPP E CONC W/A

SATELLITE OBSERVATIONS

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
MC

TIME	GDOP	SATELLITES
20:56	2.0	8/9-9
21:18	2.0	9/9-9

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

BARRON

AMC

PROJECT 1120103
OPERATOR WJN
DATE 1/24/12

SITE NUMBER X 5
SITE NAME 1603

TRACKING TIMES (LOCAL) MEASURE CST
START 15:36
STOP 16:08

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 14
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
500 (0.360)

OBSTRUCTIONS: TREES SW, SE AND TRAFFIC

HEIGHT READINGS MTS FT
1.282
1.642

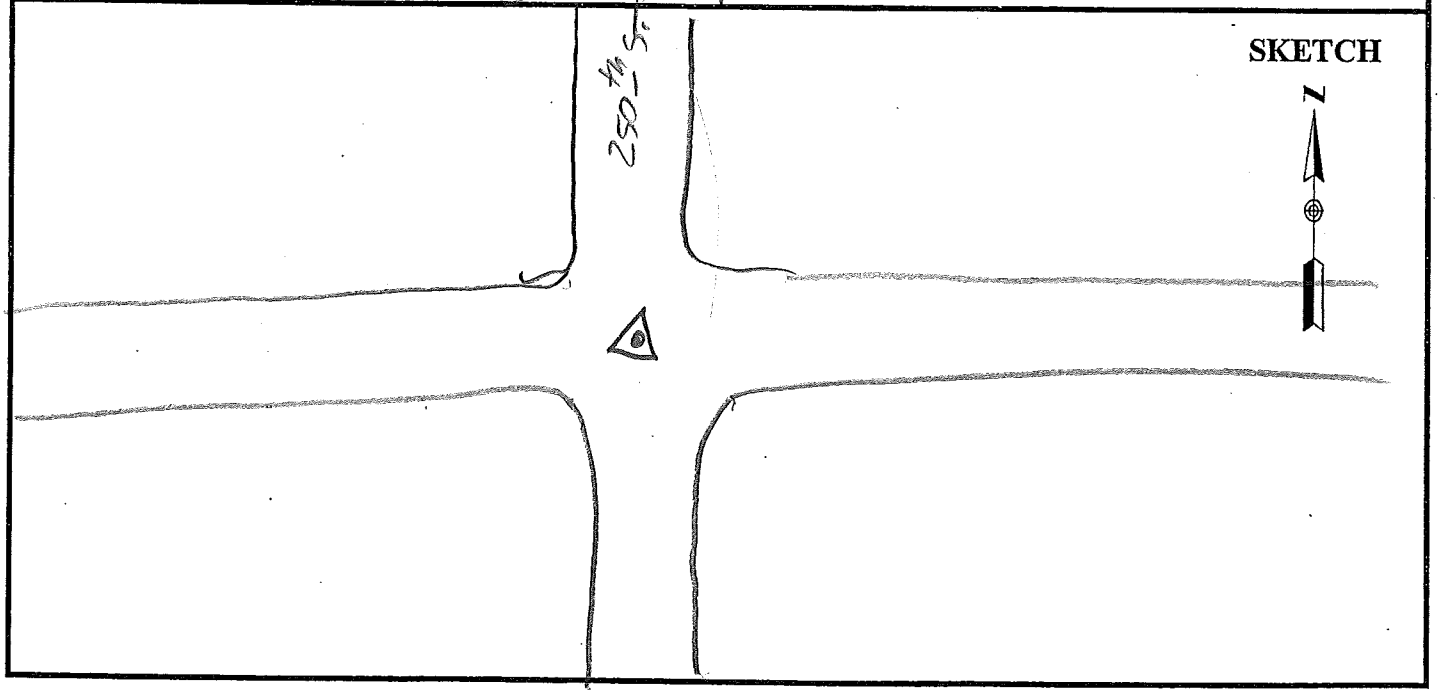
STATION DESCRIPTIONS ℄ ℄ INT RDS N-S, E-W

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
21 36	2.4	7/7-8
22:08	2.2	8/8-8

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
MC

SKETCH



Bourbon Co.

AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

Base

low 9?55 pt

PROJECT	1120103	SITE NUMBER	1
OPERATOR	NB	SITE NAME	101
DATE	1.24.12		

TRACKING TIMES (LOCAL) MEASURE ✓

START 11:35a.

STOP

SENSOR TYPE 500 9500 399 299

MEMORY CARD 603

BATTERY NO. CB

CONTROLLER NO.

SENSOR NO.

SENSOR CONSTANT

299/399	0.441
399E/9500	0.389
500	0.360

HEIGHT READINGS

MTS	FT
1.343	

1703

OBSTRUCTIONS: none

STATION DESCRIPTIONS set 5/8" rebar w/cap

SATELLITE OBSERVATIONS

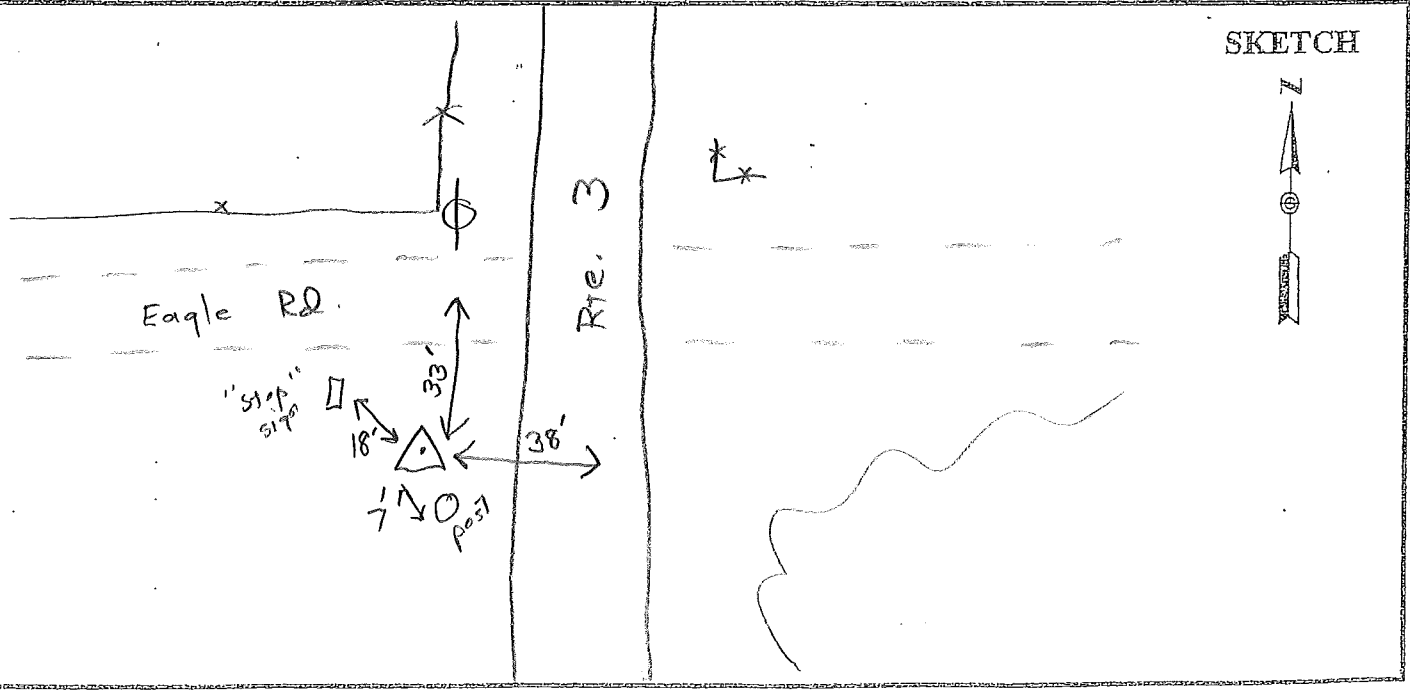
TIME	GDOP	SATELLITES
1235	4.4	6/6

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

37 43 57.3

94 58 46.8

SKETCH



Bourbon Co.

AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

Base — low grass

PROJECT 112010 3
OPERATOR MB
DATE 1.24.12

SITE NUMBER 1
SITE NAME 102

TRACKING TIMES (LOCAL) MEASURE ✓
START 12:15
STOP

SENSOR TYPE 500 9500 399 299
MEMORY CARD 66
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
500 0.360

OBSTRUCTIONS: trees SE

HEIGHT READINGS MTS FT
1.354
1.743

STATION DESCRIPTIONS set 5/8" rebar w/cap

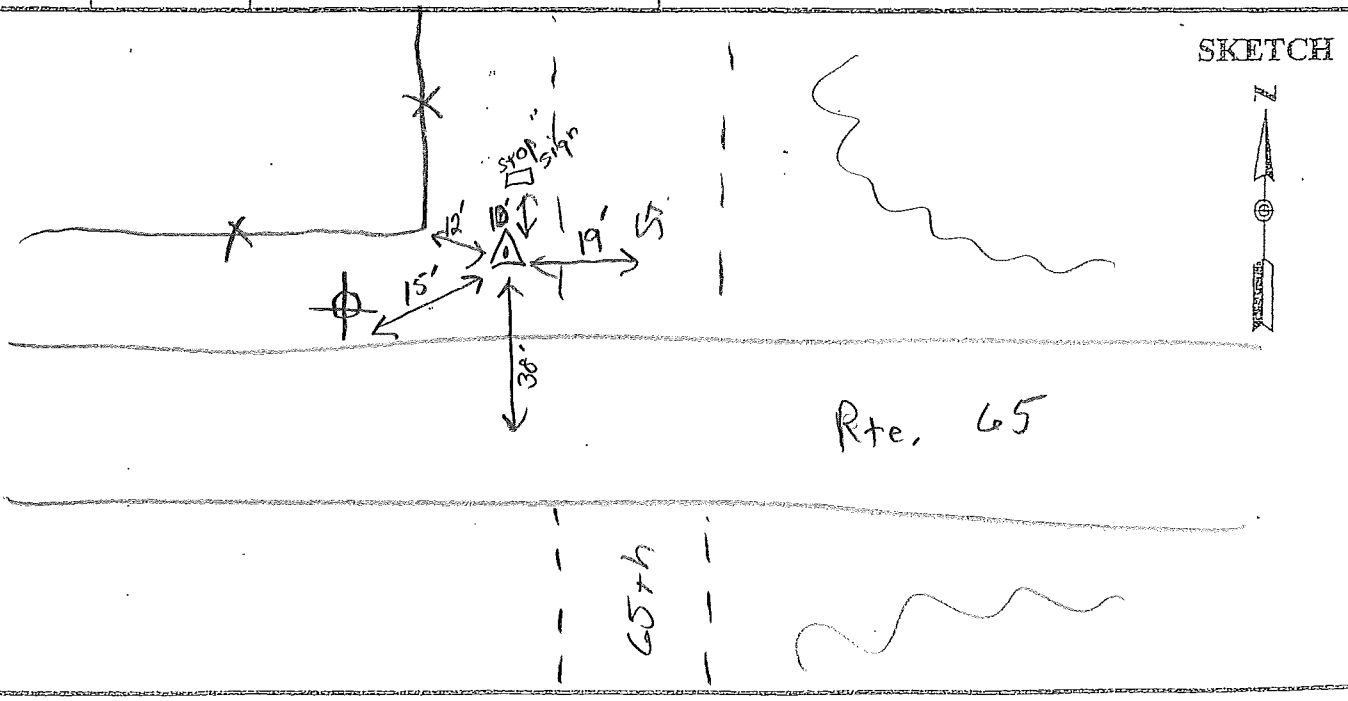
SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1315	2.9	7/7

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

37 59 38.8
94 59 16.8

SKETCH



For Bourbon Co.

AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

VERT Control

PROJECT 1120103
OPERATOR MB
DATE 1.24.12

SITE NUMBER 1
SITE NAME D 277

TRACKING TIMES (LOCAL) MEASURE ✓
START 1:00 p
STOP 1:50 p

SENSOR TYPE 500 9500 399 299
MEMORY CARD 731
BATTERY NO. CB
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
500 0.360

OBSTRUCTIONS: none

HEIGHT READINGS MTS FT
1.138

1.478

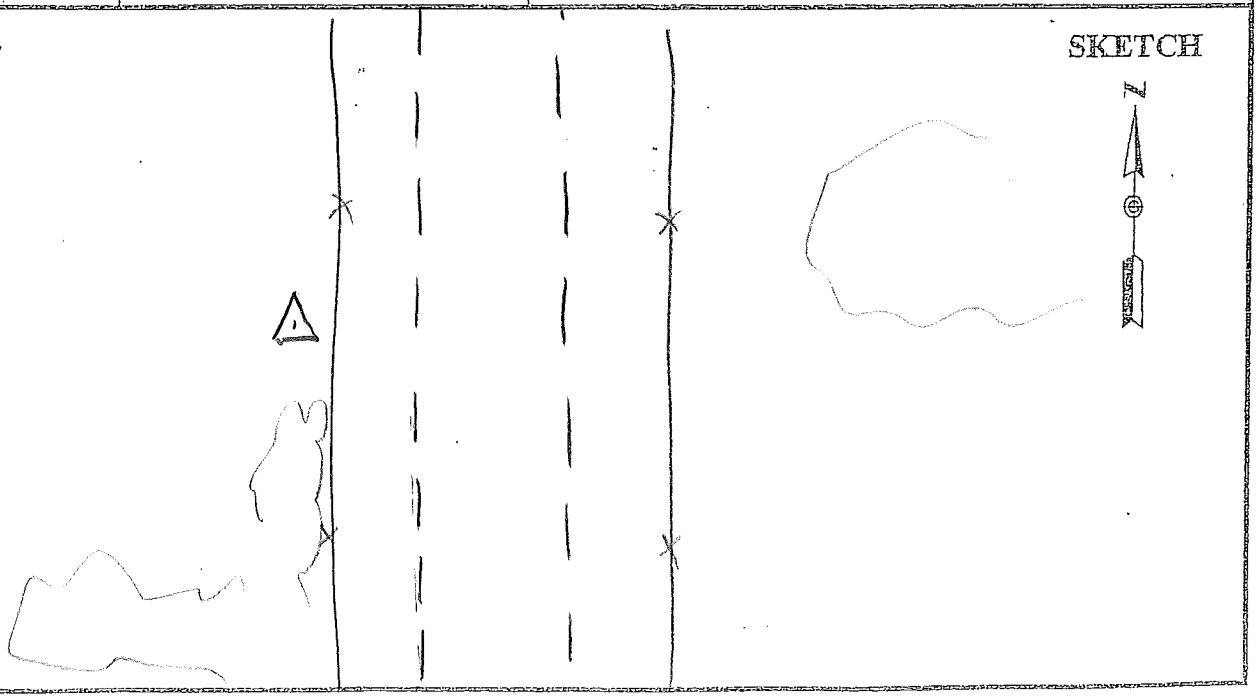
STATION DESCRIPTIONS fnd use + GS
cap/conc mon "D 277 1945"

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1400	2.1	6/7
1450		

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

Bourbon Co. AME V/PT

PROJECT 1120103
OPERATOR NB
DATE 1.24.12

SITE NUMBER 2
SITE NAME 601

TRACKING TIMES (LOCAL) MEASURE V
START 2:09 p
STOP 2:49 p

SENSOR TYPE 500 9500 399 299
MEMORY CARD 731
BATTERY NO. CB
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
500 0.360

OBSTRUCTIONS: tree E.

HEIGHT READINGS MTS FT
1.415
1.775

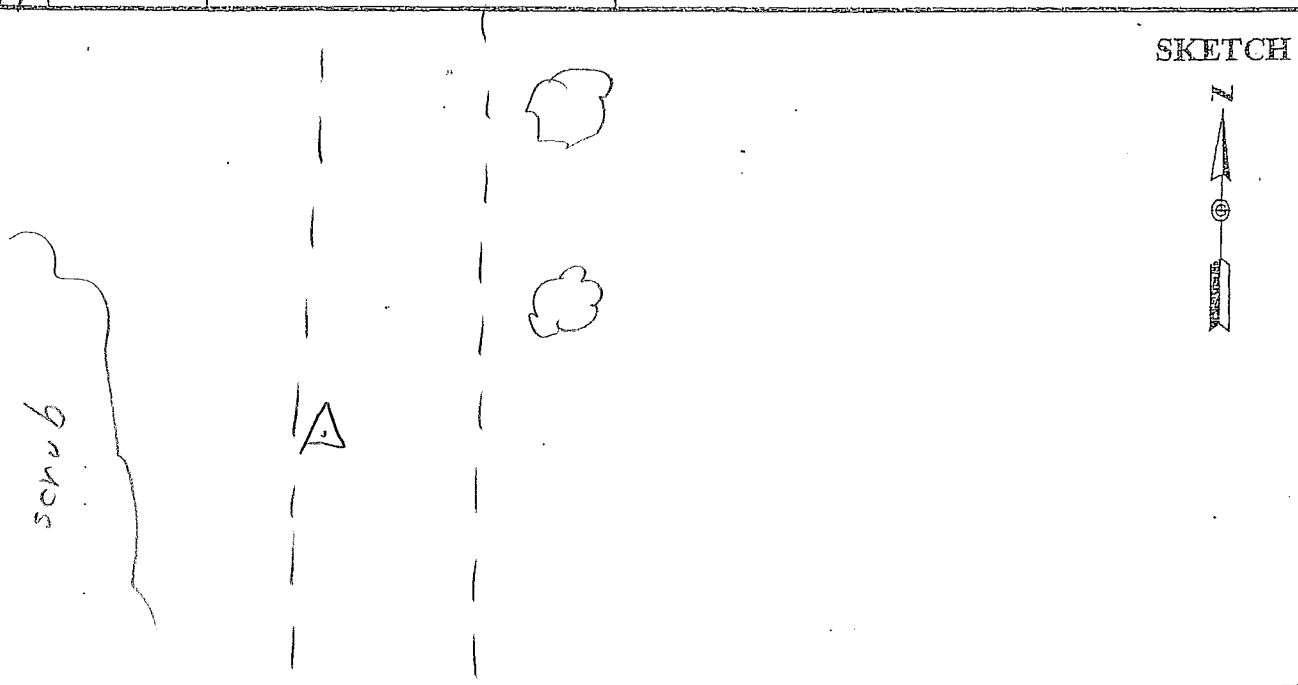
STATION DESCRIPTIONS W. side road

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1509	2.4	9/9
1549		

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

BOURBON — BASE

PROJECT 120103
OPERATOR WJN
DATE 1/24/12
25

SITE NUMBER 1
SITE NAME 101

TRACKING TIMES (LOCAL) MEASURE CST
START 7:56
STOP 9:10

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 11
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
500 (0.360)

OBSTRUCTIONS: NO

HEIGHT READINGS MTS FT
1.157

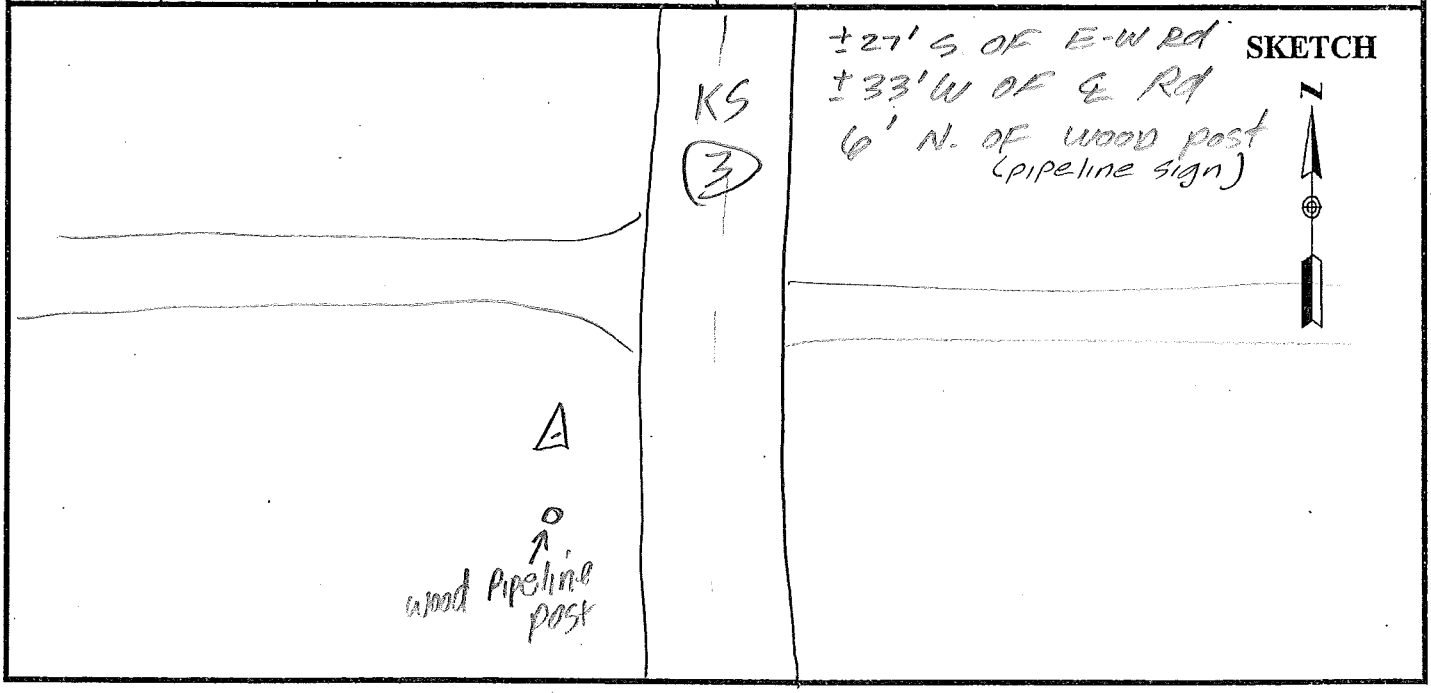
STATION DESCRIPTIONS Fd Rebar AND CAP Set by MB ON 1/24/12

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
13:56	2.4	8/8-8
15:10		

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
OVC

SKETCH



2KC1 MOSB MORM

AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

Mo R. BASE

PROJECT 112003
OPERATOR WJN
DATE 1/25/12

SITE NUMBER 2
SITE NAME 1003

TRACKING TIMES (LOCAL) MEASURE CST
START 12:21
STOP 15:51

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 11
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
500 (0.360)

OBSTRUCTIONS: NO

HEIGHT READINGS MTS FT
1.189
1.549

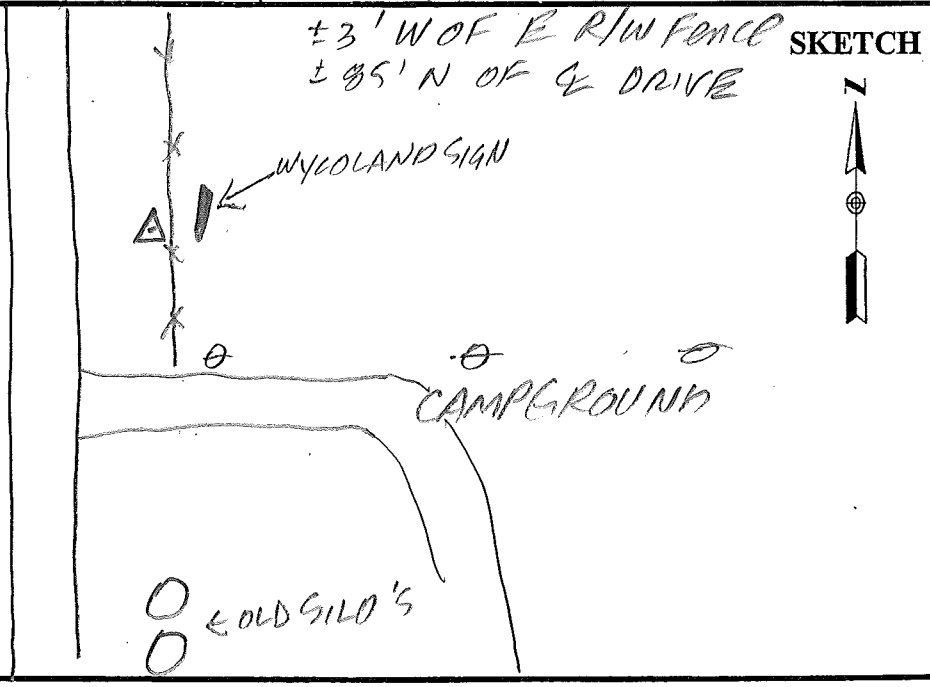
STATION DESCRIPTIONS Set Rebar AND CAP

SATELLITE OBSERVATIONS

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
OVC

TIME	GDOP	SATELLITES	
18:21	2.0	8/8-8	39 05 37-8
21:51	1.9	9/9-9	9 4 52 52-6

SKETCH



MD R

AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

BASE

PROJECT 1120103
OPERATOR WJN
DATE 1/25/12

SITE NUMBER 1
SITE NAME 1004

TRACKING TIMES (LOCAL) MEASURE CST
START 12:57
STOP 16:09

SENSOR TYPE 500 (9500) 399 299
MEMORY CARD 07
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
500 0.360

OBSTRUCTIONS: NO

HEIGHT READINGS MTS 1.199 FT

STATION DESCRIPTIONS Set Rebar AND CAP

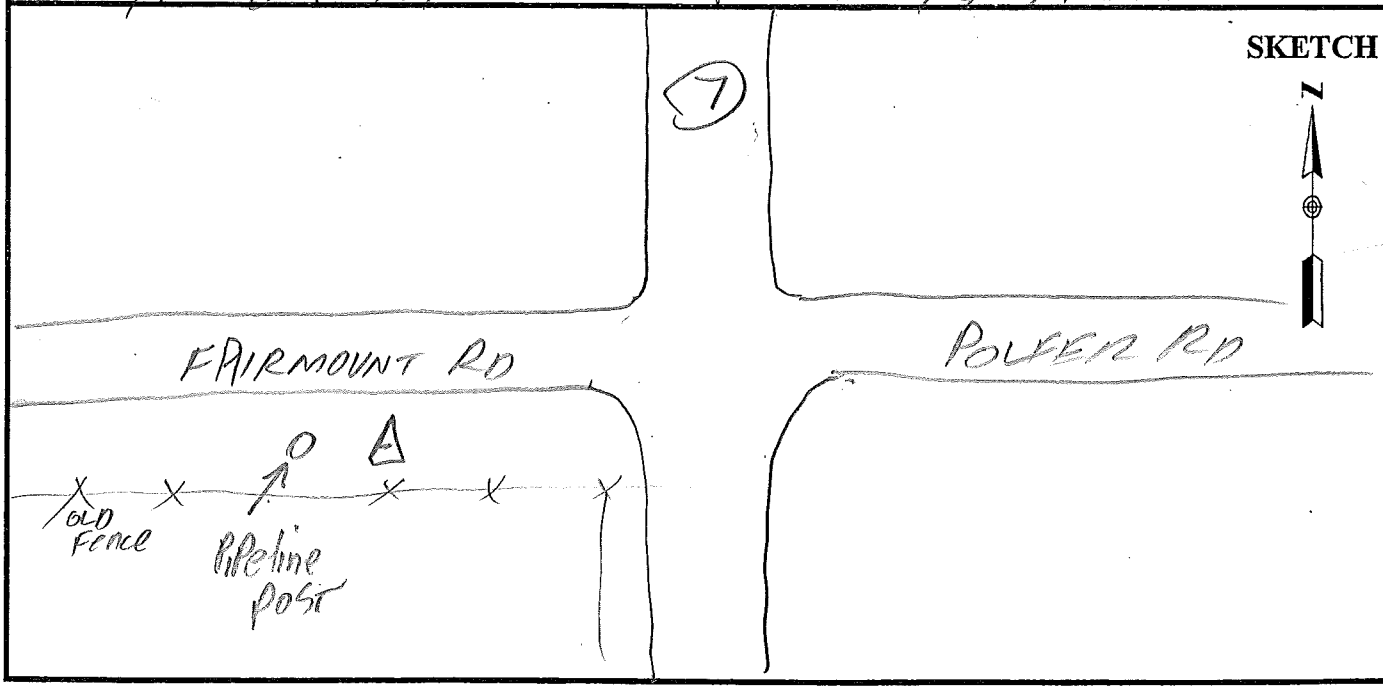
SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
16:57	2.0	9/9-9
22:09	1.9	10/10-10

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
MC/OVC

Approx 39 11 12.5
9 4 54 04.0

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

BOURBON

AMB

PROJECT 1120103
OPERATOR WJW
DATE 11/25/12

SITE NUMBER 1
SITE NAME 1604

TRACKING TIMES (LOCAL) MEASURE CST
START 8:12
STOP 8:47

SENSOR TYPE (500) 9500 399 299
MEMORY CARD
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
500 ~~0.360~~

OBSTRUCTIONS: NO

HEIGHT READINGS MTS FT
1.307
1.667

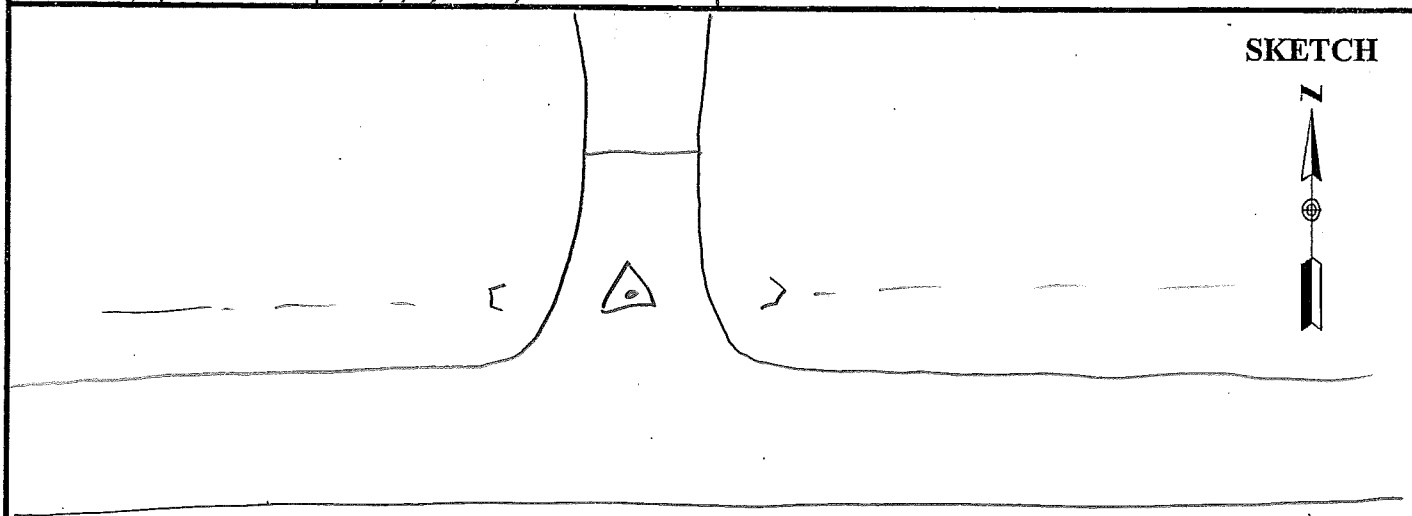
STATION DESCRIPTIONS ℄ N-S RD JUST N OF INT @ ℄ DITCH E-W

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
12:12	3.2	7/7-7
14:47	3.0	7/7-7

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
OVC

SKETCH



NO R.

AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

AME

PROJECT 1120103	SITE NUMBER 2
OPERATOR MVN	SITE NAME 1605
DATE 1/25/12	

TRACKING TIMES (LOCAL) MEASURE CST

START 13:21

STOP 13:41

SENSOR TYPE (500) 9500 399 299

MEMORY CARD 14

BATTERY NO.

CONTROLLER NO.

SENSOR NO.

SENSOR CONSTANT

299/399	0.441
399E/9500	0.389
500	(0.360)

HEIGHT READINGS

MTS	FT
1.298	

OBSTRUCTIONS: NO

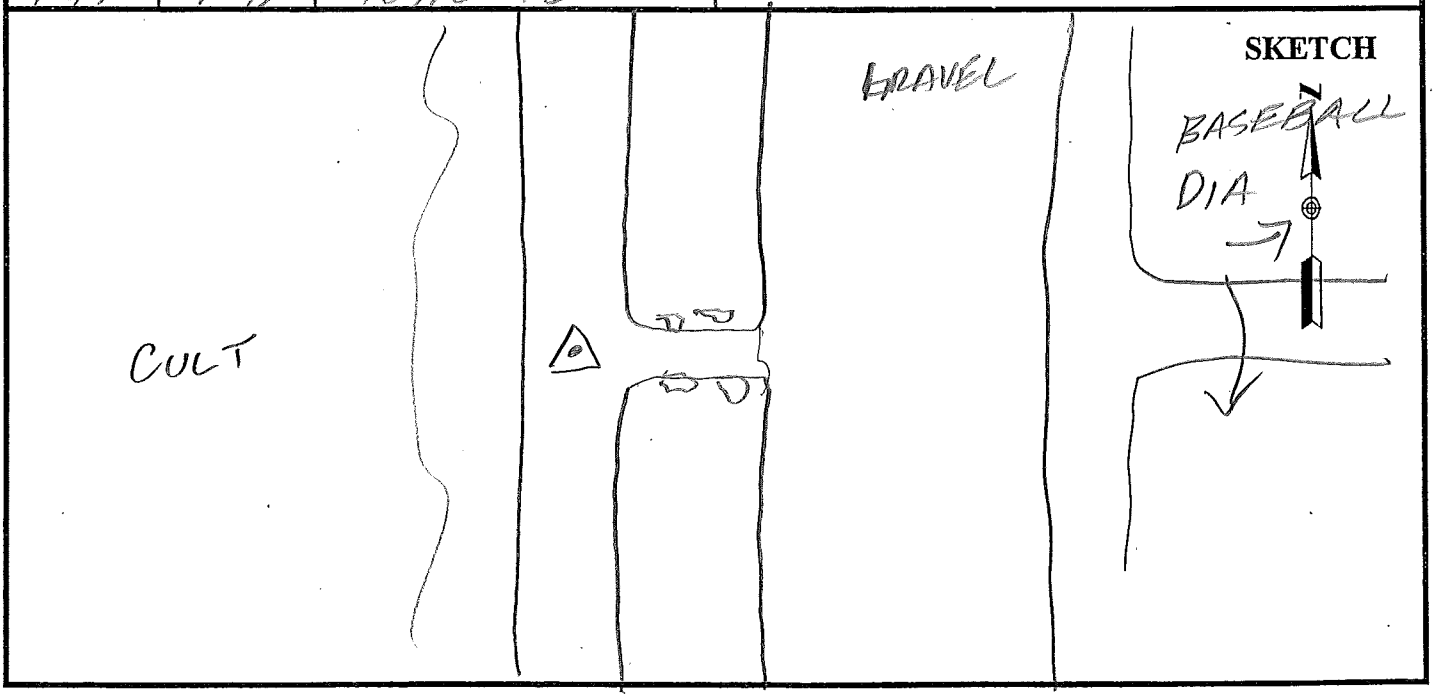
STATION DESCRIPTIONS 4 N-S RD @ G DRIVE E

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1921	2.0	10/9-10
1941	1.9	10/10-10

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH



MO R.

AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

AMK

PROJECT 1120103
OPERATOR WJN
DATE 11/25/12

SITE NUMBER 3
SITE NAME 1606

TRACKING TIMES (LOCAL) MEASURE CST
START 14:05
STOP 14:25

SENSOR TYPE (500) 9500 399 299
MEMORY CARD
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
500 (0.360)

OBSTRUCTIONS: TRAFFIC

HEIGHT READINGS MTS FT
1.316

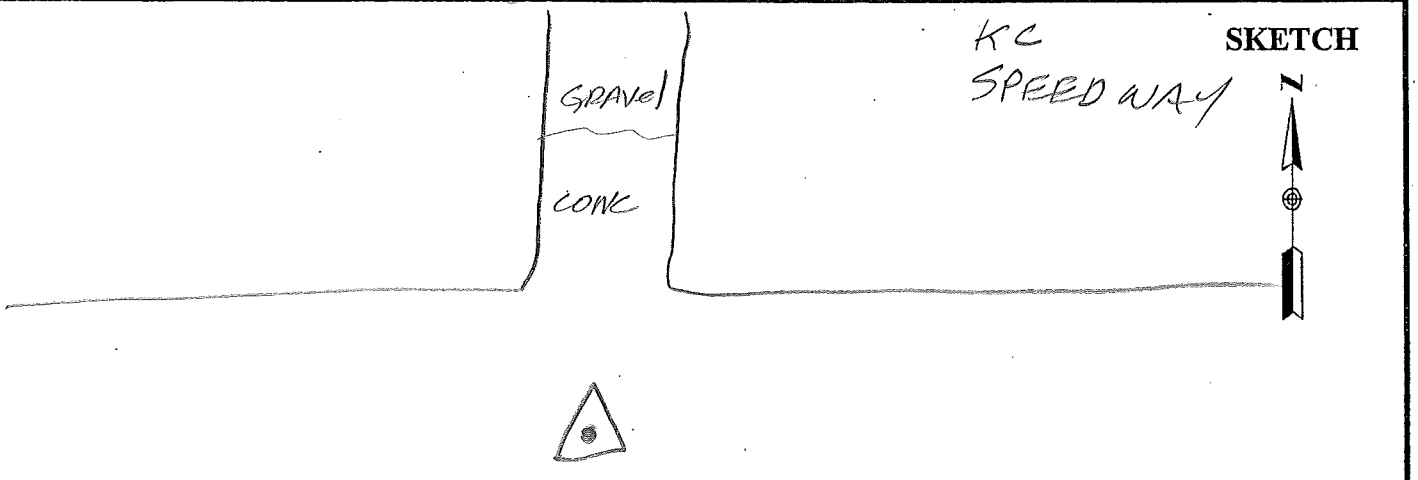
STATION DESCRIPTIONS ℄ ℄
INT. RDS E-W -N

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
20:05	2.1	3/8-9
20:25	2.0	3/8-9

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
OVC

SKETCH



MOR

AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

ANKE

PROJECT 1120103	SITE NUMBER 4
OPERATOR WJW	SITE NAME 1607
DATE 1/25/12	

TRACKING TIMES (LOCAL) MEASURE CST

START 14:45

STOP 15:10

SENSOR TYPE (500) 9500 399 299

MEMORY CARD 14

BATTERY NO.

CONTROLLER NO.

SENSOR NO.

SENSOR CONSTANT

299/399	0.441
399E/9500	0.389
500	(0.360)

HEIGHT READINGS

MTS	FT
1.330	

OBSTRUCTIONS:

STATION DESCRIPTIONS E-W RD @ E DITCH/CVL NE-SW

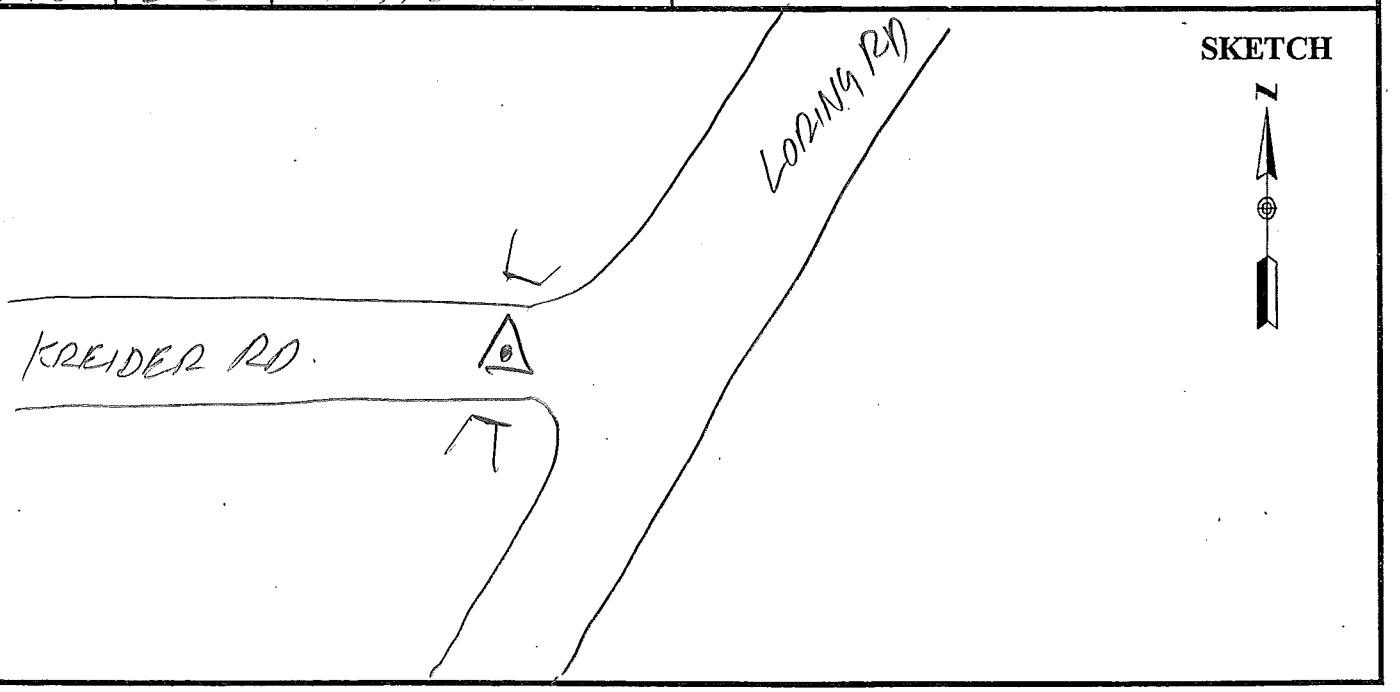
SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
2045	2.4	10/10-10
2110	2.2	10/10-10

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

OVC

SKETCH



Bourbon Co.

AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

Base

low gross

PROJECT 120103
OPERATOR MS
DATE 1·25·12

SITE NUMBER 1
SITE NAME 102

TRACKING TIMES (LOCAL) MEASURE ✓
START 7:31a.
STOP

SENSOR TYPE 500 9500 399 299
MEMORY CARD 731
BATTERY NO. CB
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
500 ~~0.360~~

OBSTRUCTIONS:

HEIGHT READINGS MTS FT
1.349
1.704

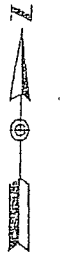
STATION DESCRIPTIONS

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
831	2.4	7/7

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH



see previous

Platte Co, Mo.

AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

Base

low grass

PROJECT 1120103
OPERATOR MD
DATE 1.25.12

SITE NUMBER 2
SITE NAME 103

TRACKING TIMES (LOCAL) MEASURE ✓
START 12:18 p
STOP

SENSOR TYPE 500 9500 399 299
MEMORY CARD 731
BATTERY NO. CB
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
500 0.360

OBSTRUCTIONS: none

HEIGHT READINGS MTS FT
1.344
1.704

STATION DESCRIPTIONS set 5/8" rebar w/cap

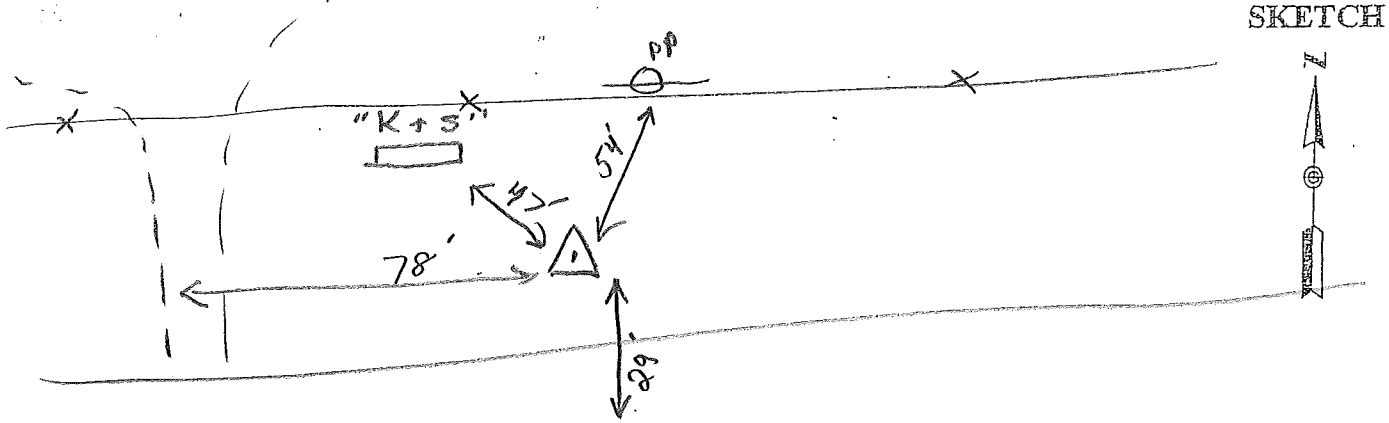
SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1318	2.9	6/7

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

39 11 30.4'
94 41 50.6'

SKETCH



Bourbon Co.

AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

AME √PT

PROJECT 112003
OPERATOR MB
DATE 1.25.12

SITE NUMBER 1
SITE NAME 602

TRACKING TIMES (LOCAL) MEASURE √
START 7:57a.
STOP 8:22a.

SENSOR TYPE 500 9500 399 299
MEMORY CARD 603
BATTERY NO. CB
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
500 0.360

OBSTRUCTIONS: none

HEIGHT READINGS MTS FT
1.397

STATION DESCRIPTIONS in field cntr.
w.

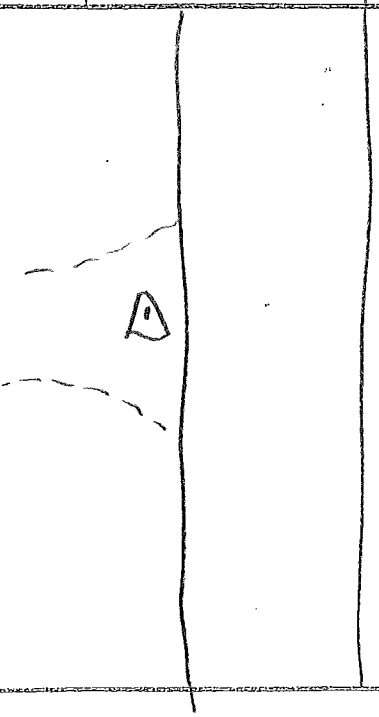
1.757

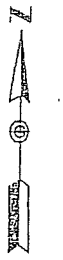
SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
857	2.6	7/7
922		

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH





AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

Bourbon Co.

AME ✓PT

PROJECT 1112013
OPERATOR MB
DATE 1-25-12

SITE NUMBER 2
SITE NAME 603

TRACKING TIMES (LOCAL) MEASURE ✓
START 8:38 a.
STOP 9:08 a.

SENSOR TYPE 500 9500 399 299
MEMORY CARD 603
BATTERY NO. CB
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
500 0.360

OBSTRUCTIONS: none

HEIGHT READINGS MTS FT
1.438
1.798

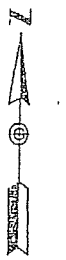
STATION DESCRIPTIONS N. side road

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
938	3.8	7/7
1008		

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083 VERT. CONTROL

PROJECT 1120103
OPERATOR MB
DATE 1.25.12

SITE NUMBER 3
SITE NAME A 282

TRACKING TIMES (LOCAL) MEASURE ✓
START 1:17 p
STOP 1:40 p

SENSOR TYPE 500 9500 399 299
MEMORY CARD 603
BATTERY NO. CB
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
(500) (0.360)

OBSTRUCTIONS: trees SW ⇔ NW

HEIGHT READINGS MTS FT
1.384

STATION DESCRIPTIONS Fnd brass cap
conc. mon. "A 282 1948"

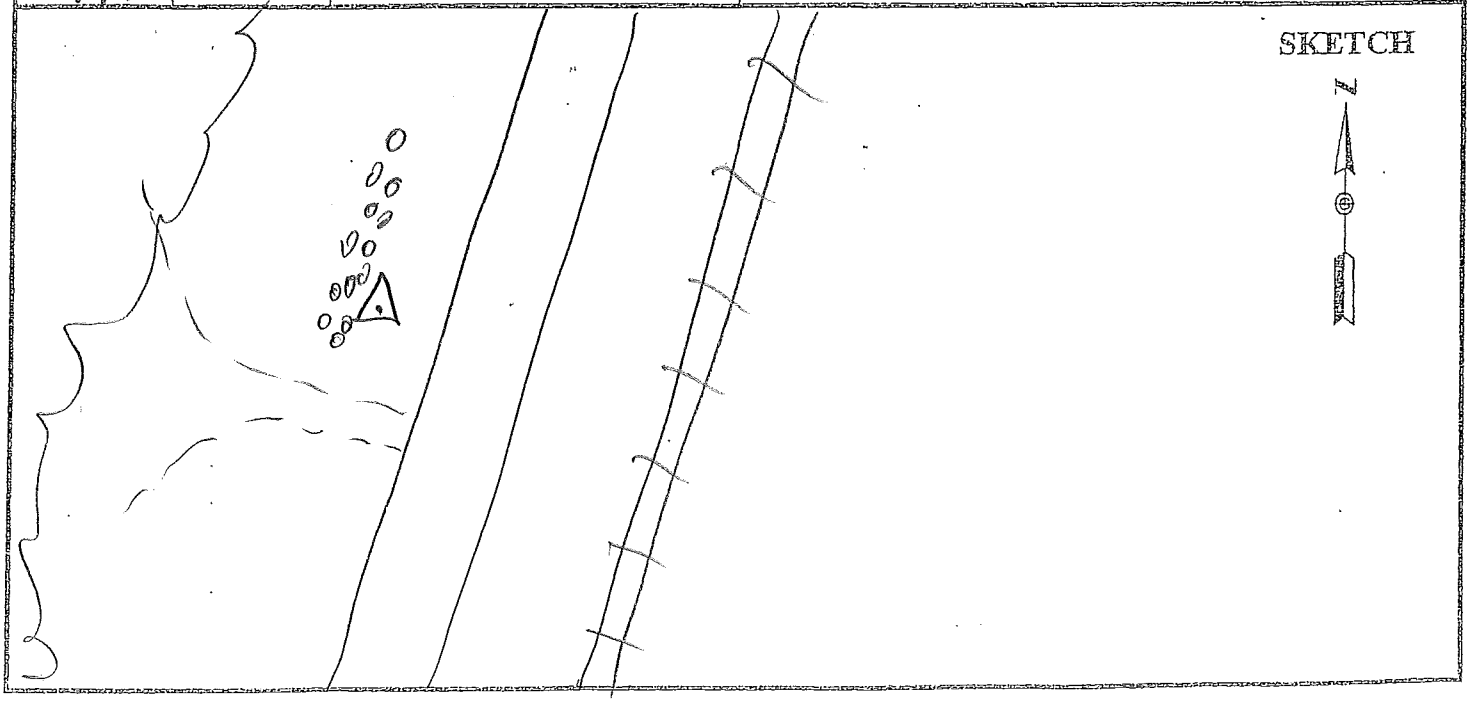
1.744

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1417	1.9	9/9
1440		

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

Wyandotte Co.

AME VPT

PROJECT 1120103
OPERATOR MB
DATE 1.25.12

SITE NUMBER 4
SITE NAME 604

TRACKING TIMES (LOCAL) MEASURE ✓
START 2:06 p
STOP 2:32 p

SENSOR TYPE 500 9500 399 299
MEMORY CARD 603
BATTERY NO. CN
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
(500) (0.360)

OBSTRUCTIONS: trees S

HEIGHT READINGS MTS FT
1.436
1.796

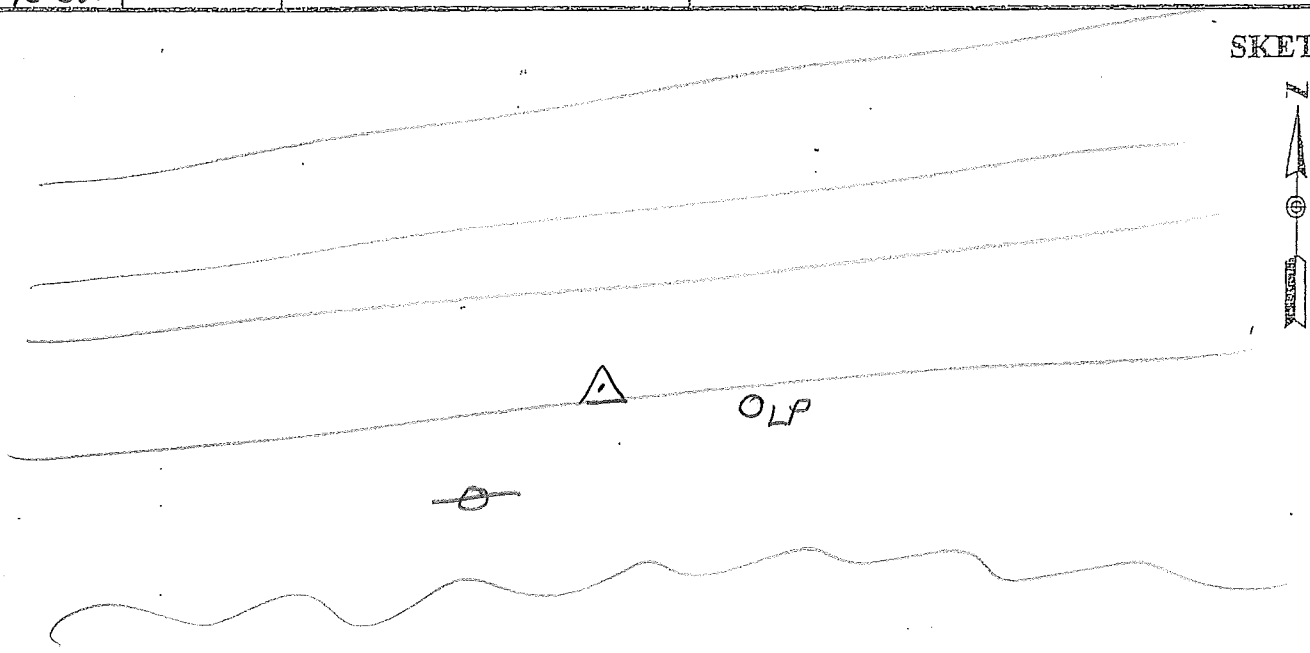
STATION DESCRIPTIONS S. shoulder

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1506	2.4.	9/9
1532		

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

Wyandotte Co

AME 1/pt

PROJECT 1120103
OPERATOR MB
DATE 1.25.12

SITE NUMBER 5
SITE NAME 605

TRACKING TIMES (LOCAL) MEASURE ✓
START 2:42 p
STOP 3:15 p

SENSOR TYPE 500 9500 399 299
MEMORY CARD 603
BATTERY NO. CB
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
500 0.360

OBSTRUCTIONS: billboard NW
bldg NE

HEIGHT READINGS MTS FT
1.438
1.798

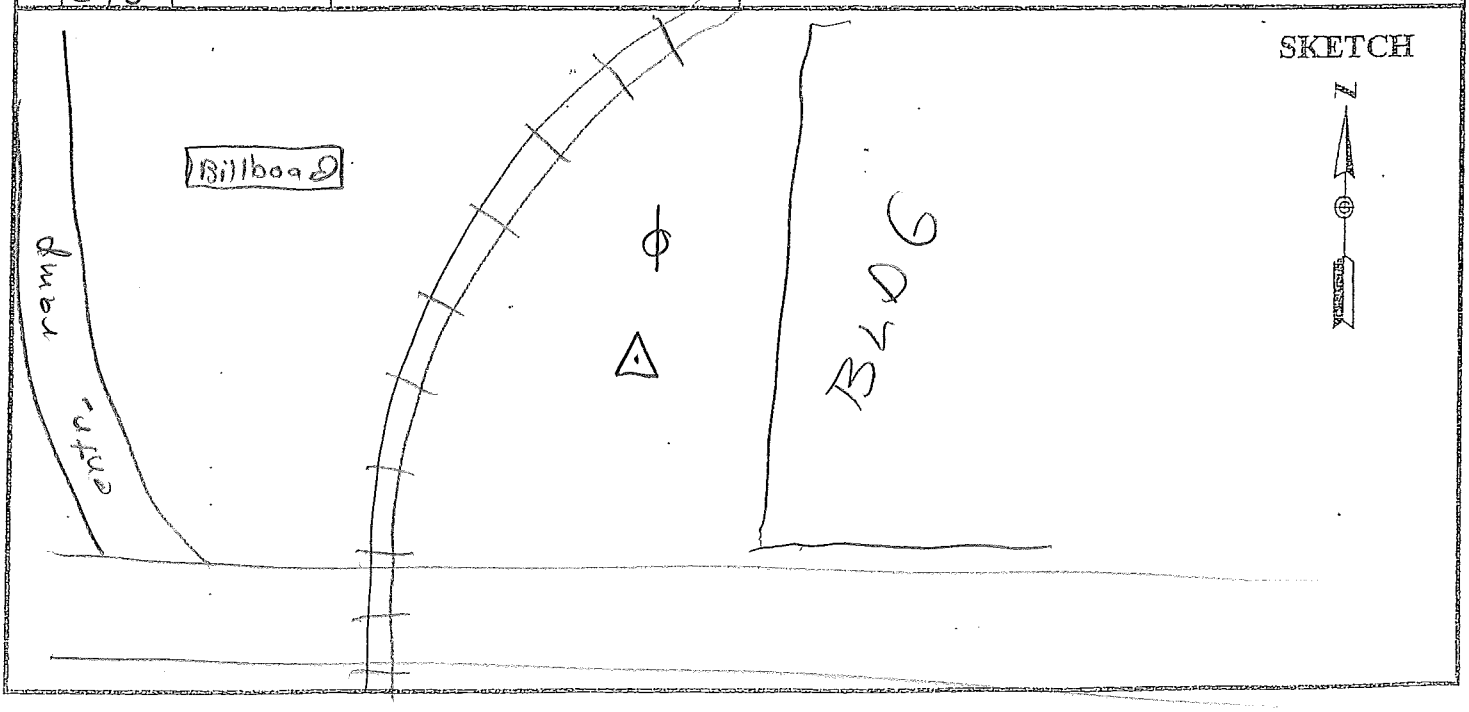
STATION DESCRIPTIONS in gravel area

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1542	2.5	9/9
1615		

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH



Platte Co, Mo.

AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

AME ✓PT

PROJECT 1120103
OPERATOR MB
DATE 1.25.12

SITE NUMBER 6
SITE NAME 606

TRACKING TIMES (LOCAL) MEASURE ✓
START 3:28 p
STOP 3:58 p

SENSOR TYPE 500 9500 399 299
MEMORY CARD 603
BATTERY NO. CB
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 ~~0.389~~
(500) (0.360)

OBSTRUCTIONS: trees NW ↔ NE

HEIGHT READINGS MTS FT
1.420
1.780

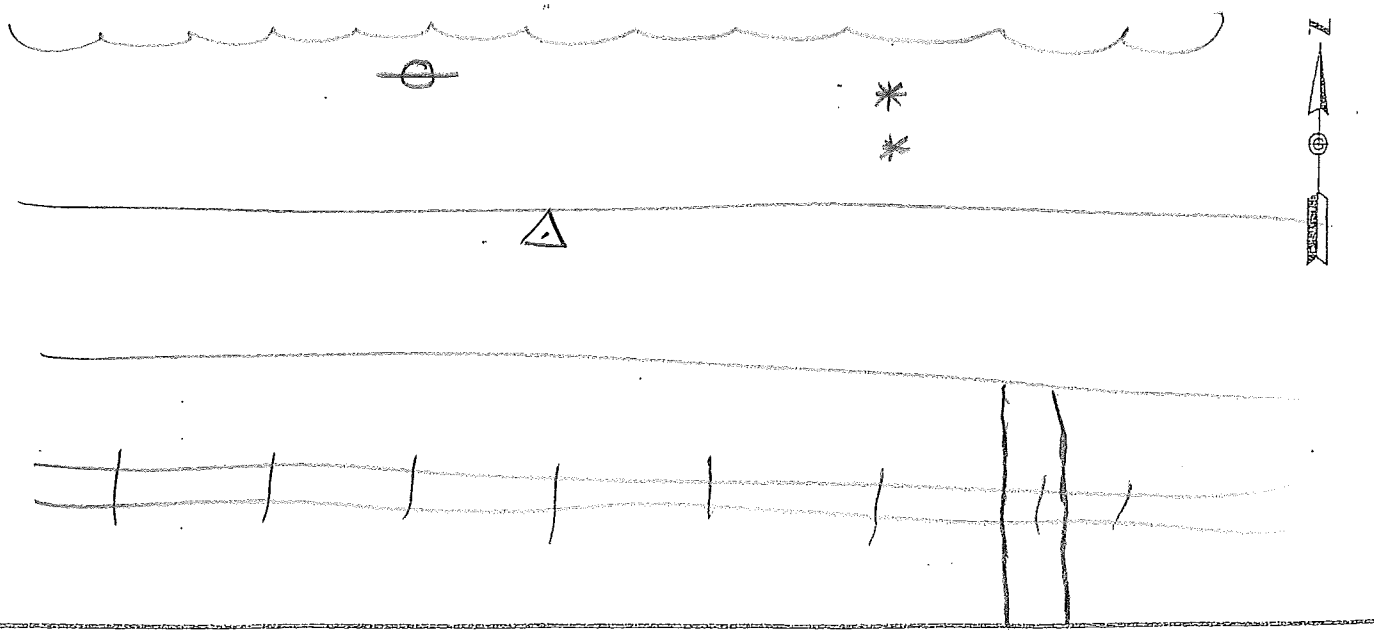
STATION DESCRIPTIONS N. shoulder

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1628	2.7	6/6
1658		

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

Atchison Co, Ks. Base Vert + Hoz, Control

PROJECT 1120103
OPERATOR MB
DATE 1.26.12

SITE NUMBER 1
SITE NAME W 281

TRACKING TIMES (LOCAL) MEASURE ✓
START 7:57a.
STOP

SENSOR TYPE 500 9500 399 299
MEMORY CARD 732
BATTERY NO. CK
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 ~~0.389~~
500 0.360

OBSTRUCTIONS: Trees E

HEIGHT READINGS MTS FT
1.174

STATION DESCRIPTIONS Fnd brass cap/ conc. mon. USC+GS " W 281 1948 "

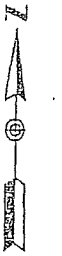
1534

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
857	4.1	6/6

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH



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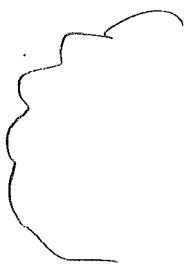


AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

Buchanan Co., Mo. Base Vert. Control

PROJECT 1120103	SITE NUMBER 1
OPERATOR NG	SITE NAME D 217
DATE 1.26.12	

TRACKING TIMES (LOCAL) MEASURE ✓

START 8:33 a.

STOP

SENSOR TYPE 500 9500 399 299

MEMORY CARD 66

BATTERY NO. CB

CONTROLLER NO.

SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
500 0.360

HEIGHT READINGS MTS FT

1.378

1.761

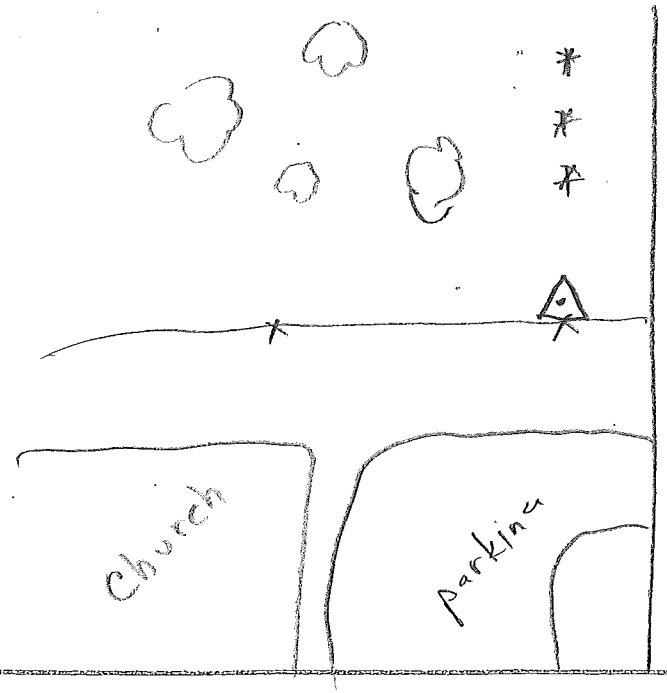
OBSTRUCTIONS: trees NW

STATION DESCRIPTIONS fnd USC + GS cap/conc. mon. "D 217 1948"

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
933	3.9	6/7

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS



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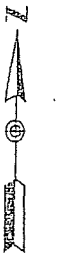


AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

Buchanan Co, Mo.

AME VPT

PROJECT 1120103
OPERATOR MB
DATE 1.26.12

SITE NUMBER 1
SITE NAME 607

TRACKING TIMES (LOCAL) MEASURE V
START 9:01a.
STOP 9:28a.

SENSOR TYPE 500 9500 399 299
MEMORY CARD 603
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 ~~0.389~~
500 0.360

OBSTRUCTIONS: trees all quads

HEIGHT READINGS MTS FT
1.374

STATION DESCRIPTIONS in gravel parking lot

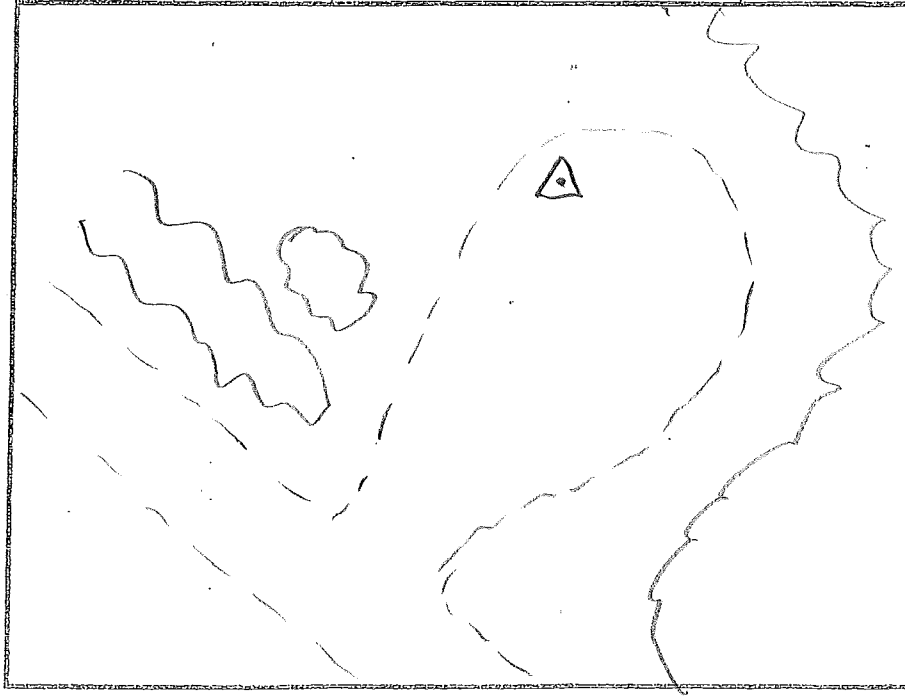
1734

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1001	5.2	6/6
1028		

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

Buchanan Co., Mo.

AME √PT

PROJECT	1120103	SITE NUMBER	2
OPERATOR	MB	SITE NAME	608
DATE	1-26-12		

TRACKING TIMES (LOCAL) MEASURE √

START 9:50 a.

STOP 10:30 a.

SENSOR TYPE 500 9500 399 299

MEMORY CARD 603

BATTERY NO.

CONTROLLER NO.

SENSOR NO.

SENSOR CONSTANT

299/399	0.441
399E/9500	0.389
500	0.360

HEIGHT READINGS

MTS	FT
1.395	
1.755	

OBSTRUCTIONS: trees SW

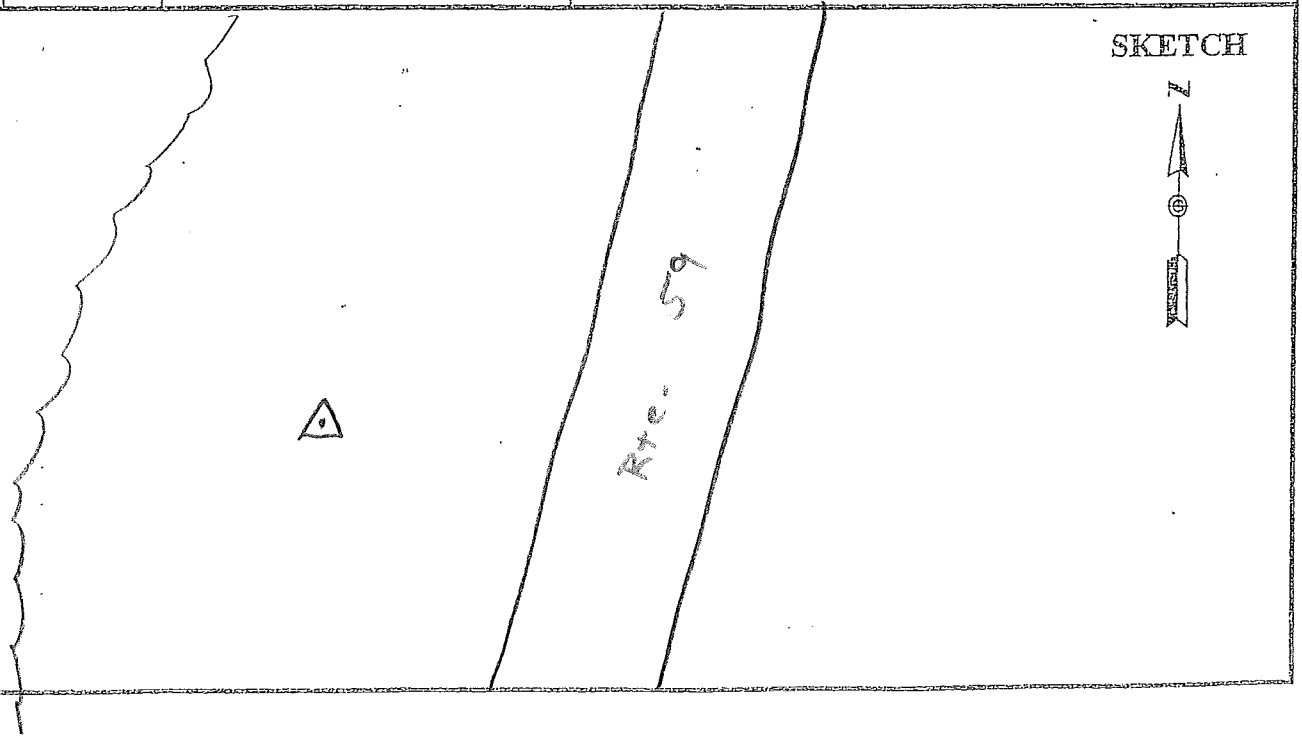
STATION DESCRIPTIONS in parking lot

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1050	2.9	7/7
1130		

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

Buchanan Co., Mo.

AME ✓PT

PROJECT 1120103
OPERATOR MB
DATE 1.26.12

SITE NUMBER 3
SITE NAME 609

TRACKING TIMES (LOCAL) MEASURE ✓
START 10:47 a.
STOP 11:18 a.

SENSOR TYPE 500 9500 399 299
MEMORY CARD 603
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 ~~0.389~~
500 0.360

OBSTRUCTIONS: none

HEIGHT READINGS MTS FT
1.376
1.736

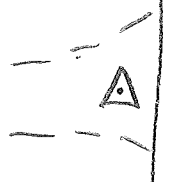
STATION DESCRIPTIONS in field
entrance

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1147	2.4	8/8
1218		

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

Buchanan Co, Mo.

AME VPT

PROJECT 1120103
OPERATOR MB
DATE 1.26.12

SITE NUMBER 4
SITE NAME 610

TRACKING TIMES (LOCAL) MEASURE ✓
START 11:30a.
STOP 11:51a.

SENSOR TYPE 500 9500 399 299
MEMORY CARD 603
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 ~~0.389~~ 0.360
500

OBSTRUCTIONS: trees SW

HEIGHT READINGS MTS FT
1.314
1.674

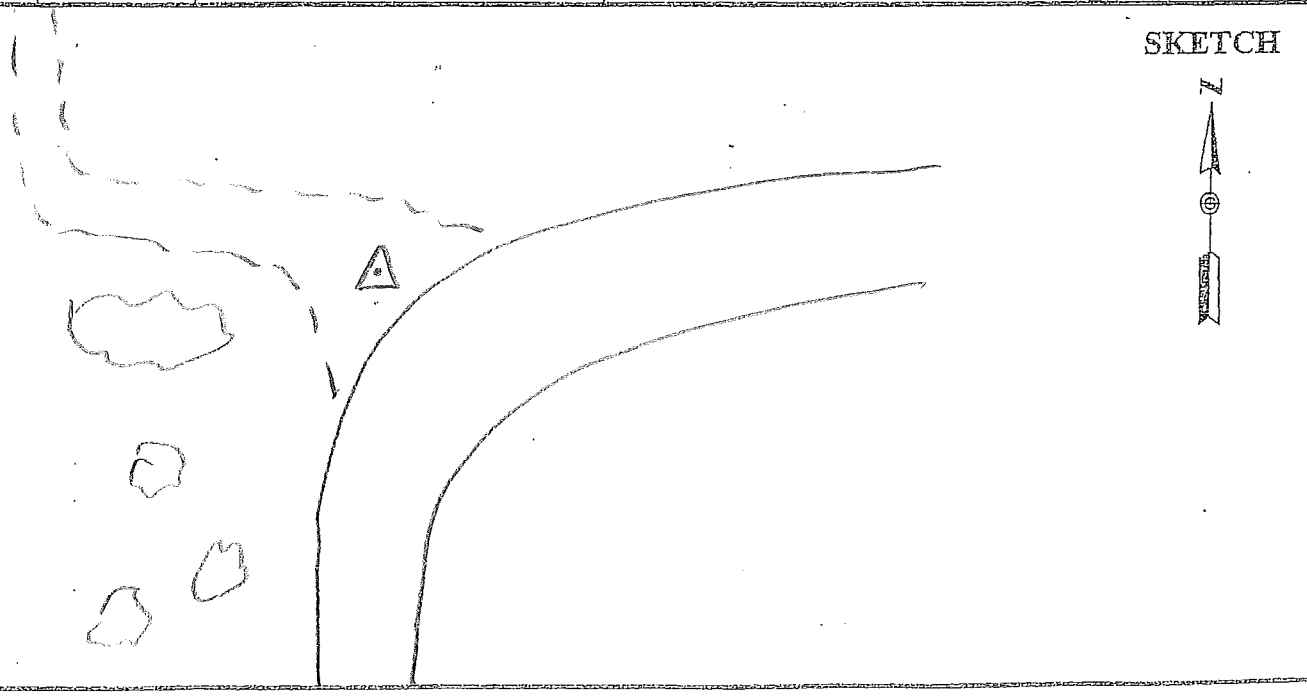
STATION DESCRIPTIONS in gravel

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1230	5.7	5/5
1251		

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

Buchanan Co., Mo

AME VPT

PROJECT 1120103
OPERATOR MB
DATE 1·26·12

SITE NUMBER 5
SITE NAME 611

TRACKING TIMES (LOCAL) MEASURE ✓
START 12:08 p
STOP 12:29 p

SENSOR TYPE 500 9500 399 299
MEMORY CARD 603
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 ~~0.389~~
~~500~~ 0.360

OBSTRUCTIONS: none

HEIGHT READINGS MTS FT
1.330

1.690

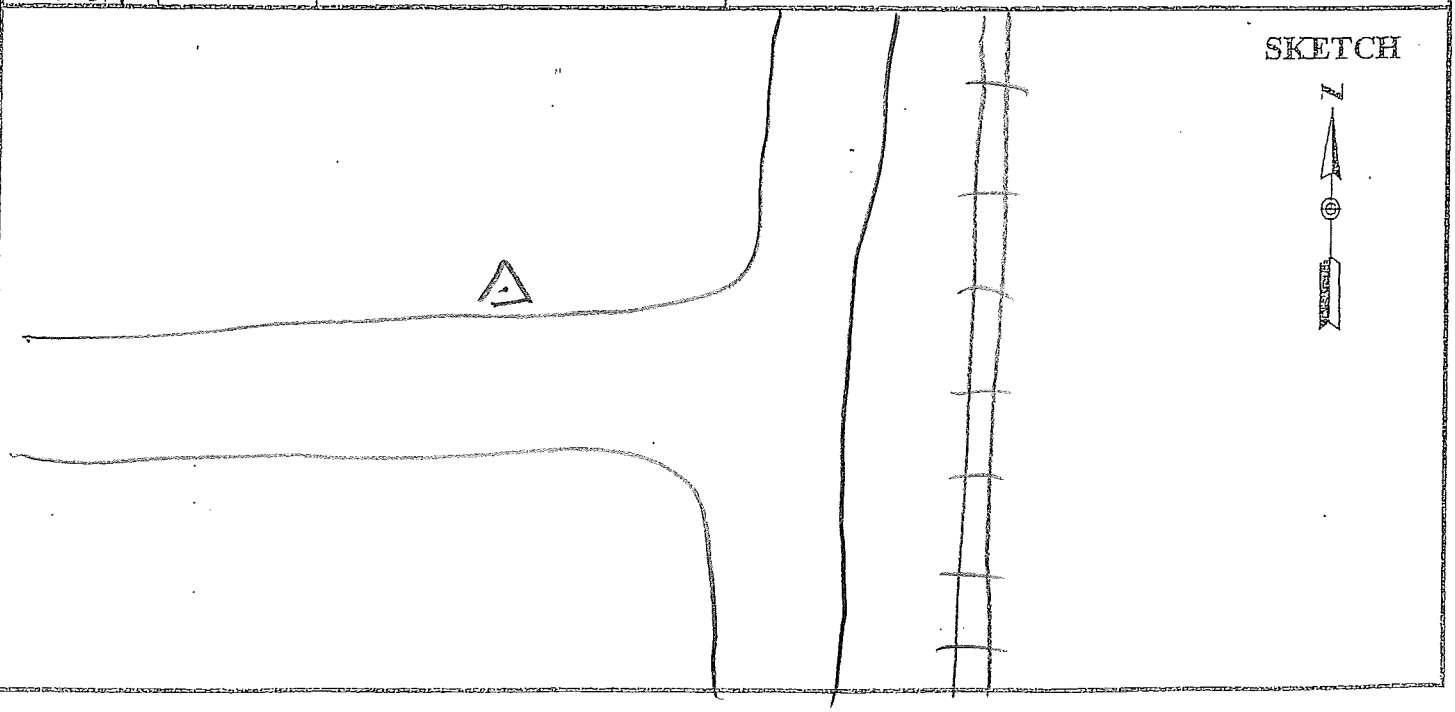
STATION DESCRIPTIONS N. side road

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1308	2.9	7/7
1329		

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

Platte Co, Mo.

AME VPT

PROJECT 1120103
OPERATOR NM
DATE 1.26.12

SITE NUMBER 6
SITE NAME 612

TRACKING TIMES (LOCAL) MEASURE ✓
START 12:53 p
STOP 1:17 p

SENSOR TYPE 500 9500 399 299
MEMORY CARD 603
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
500 0.360

OBSTRUCTIONS: trees NW

HEIGHT READINGS MTS FT
1.315
1.675

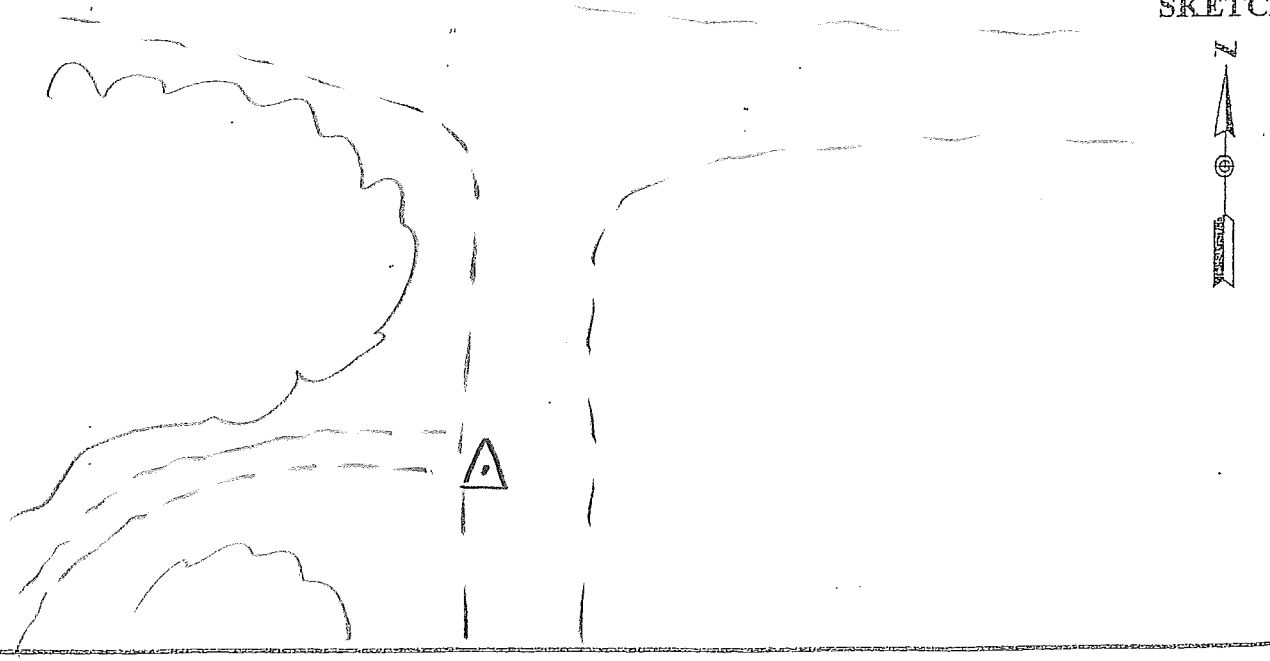
STATION DESCRIPTIONS west side road @ trail

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1352	2.1	6/7
1417		

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH



Atchison Co, Ks.

AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

AME √FT

PROJECT 1120103
OPERATOR MD
DATE 1·26·12

SITE NUMBER 7
SITE NAME 613

TRACKING TIMES (LOCAL) MEASURE √

START 1:41 p
STOP 2:03 p

SENSOR TYPE 500 9500 399 299
MEMORY CARD 603
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
500 0.360

HEIGHT READINGS MTS FT
1.294

1654

OBSTRUCTIONS: none

STATION DESCRIPTIONS S. side road

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1441	3.2	6/6
1503		

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH

BERM

△

Doniphan Co., Ks

AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

AME V/PT

PROJECT 1120103
OPERATOR MB
DATE 1·26·12

SITE NUMBER 8
SITE NAME 614

TRACKING TIMES (LOCAL) MEASURE ✓
START 2:28 p
STOP 2:53 p

SENSOR TYPE 500 9500 399 299
MEMORY CARD 603
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
500 0.360

OBSTRUCTIONS: trees E.

HEIGHT READINGS MTS FT
1.394
1.754

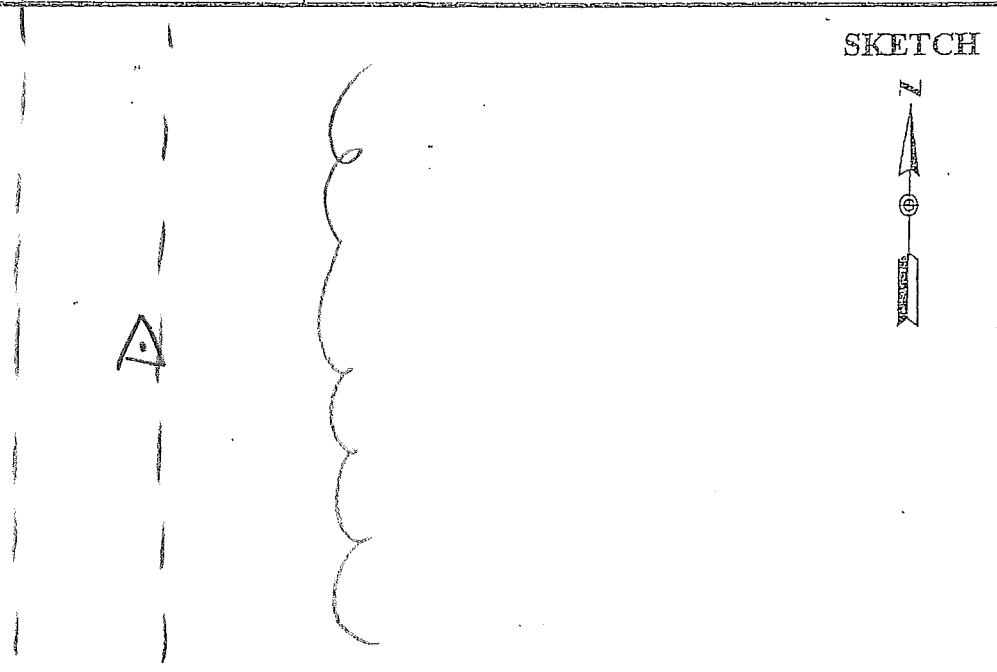
STATION DESCRIPTIONS east side road

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1528	2.7	6/6
1553		

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

Doniphan Co, Ks.

AME VRS

PROJECT 1120103
OPERATOR MB
DATE 1-26-12

SITE NUMBER 9
SITE NAME 615

TRACKING TIMES (LOCAL) MEASURE ✓
START 3:14 p
STOP 3:41 p

SENSOR TYPE 500 9500 399 299
MEMORY CARD 609
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
500 0.360

OBSTRUCTIONS: none

HEIGHT READINGS MTS FT
1.305
1.665

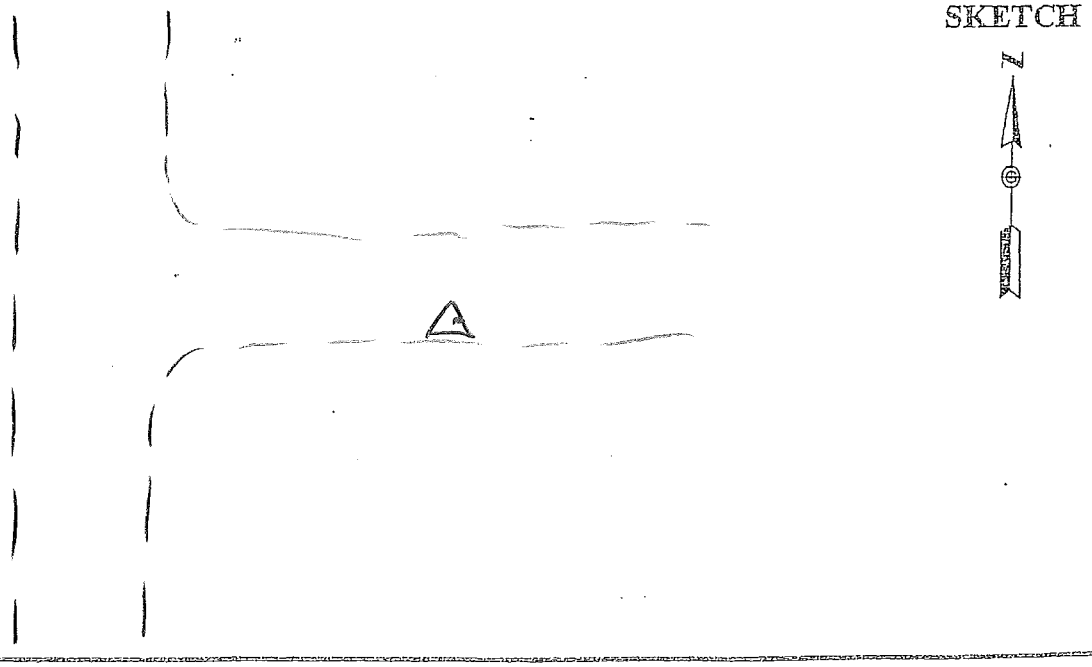
STATION DESCRIPTIONS S. side road

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1614	2.5	9/9
1641		

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

short grass VRT

Doniphan Co., Ks Base Vert. Control

PROJECT	1120103	SITE NUMBER	1
OPERATOR	MB	SITE NAME	W 106
DATE	1.27.12		

TRACKING TIMES (LOCAL) MEASURE ✓

START 8:34 a.

STOP

SENSOR TYPE 500 9500 399 299

MEMORY CARD 66

BATTERY NO. CB

CONTROLLER NO.

SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
500 0.360

HEIGHT READINGS MTS FT

1.335

1.724

OBSTRUCTIONS: none

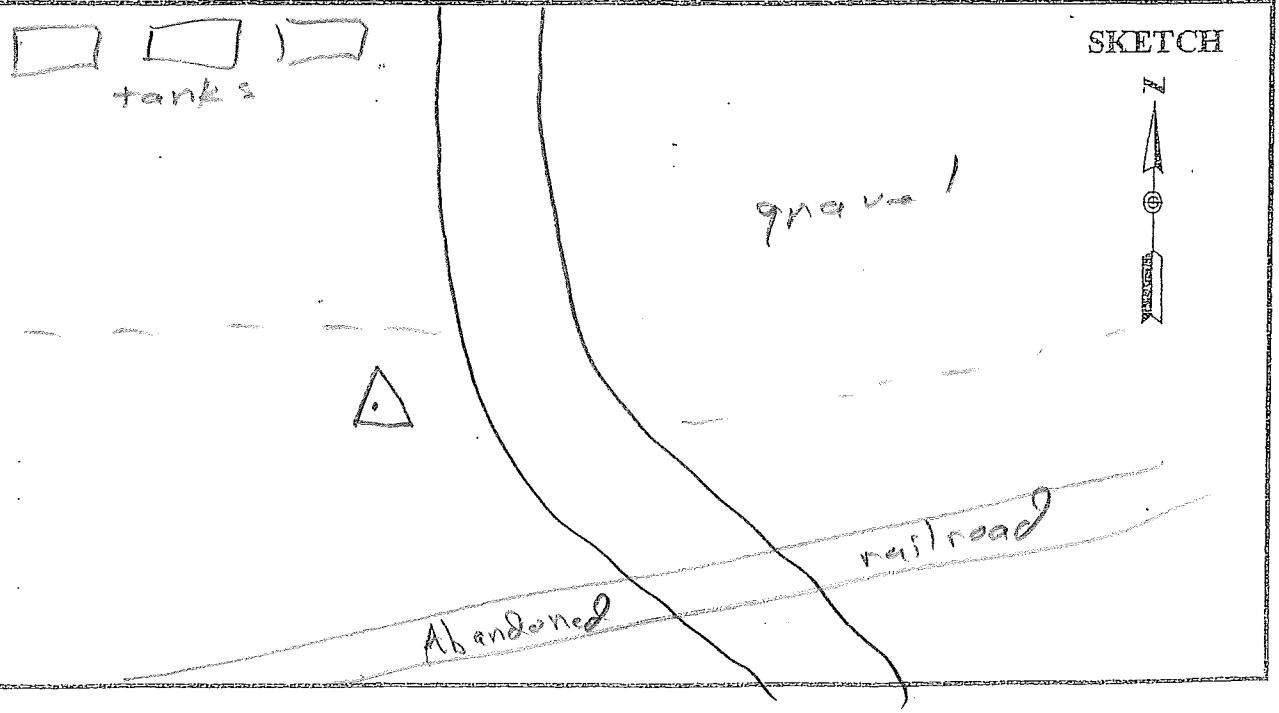
STATION DESCRIPTIONS Final

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
934	3.8	8/8

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

Doniphan Co, Ks. Base short grass VT

PROJECT 1120103
OPERATOR MB
DATE 1.27.12

SITE NUMBER 1
SITE NAME 104

TRACKING TIMES (LOCAL) MEASURE ✓
START 9:10 a.
STOP

SENSOR TYPE 500 9500 399 299
MEMORY CARD 603
BATTERY NO. C15
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
500 0.360

OBSTRUCTIONS: PP northeast

HEIGHT READINGS MTS FT
1.305
1.668

STATION DESCRIPTIONS set 5/8" rebar w/cap

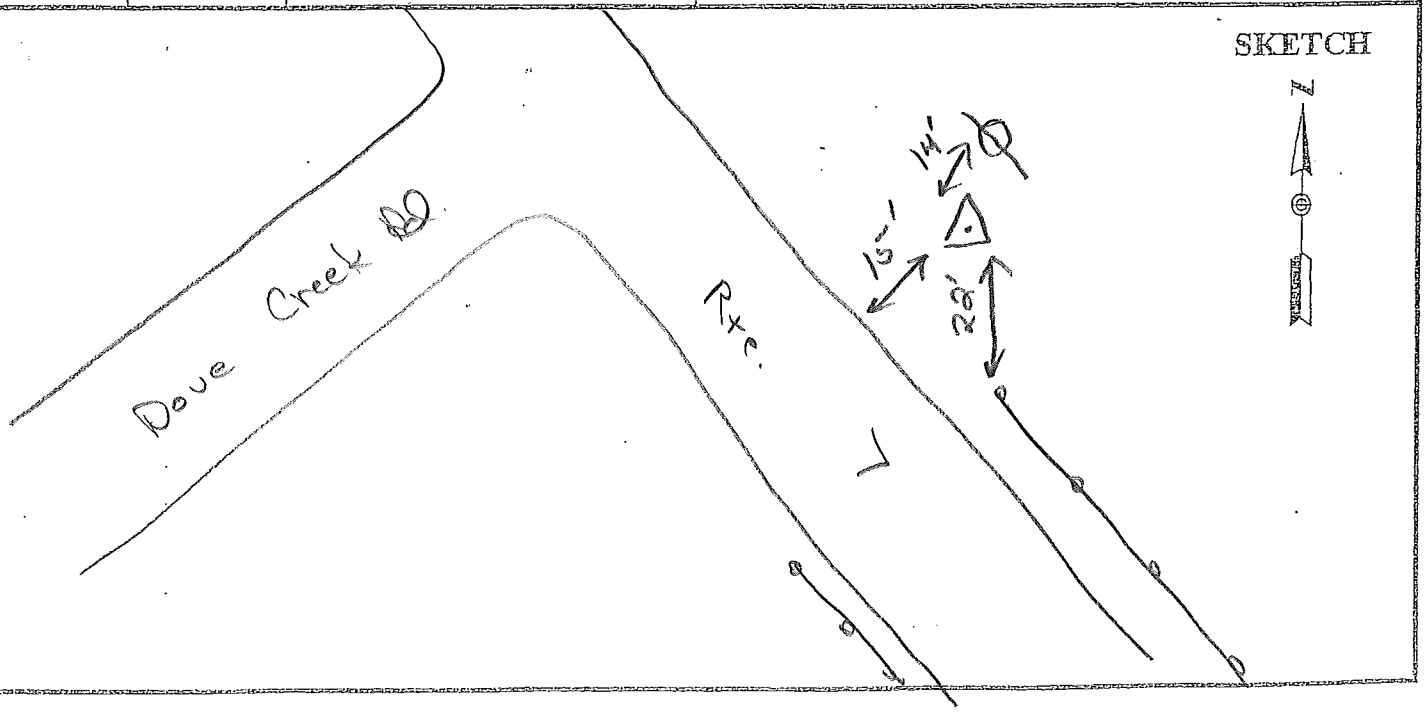
SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1010	2.5	7/7

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

39 55 47.4
95 14 16.0

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

Doniphan Co, Ks.

AME VPT

PROJECT 1120103
OPERATOR NM
DATE 1-27-12

SITE NUMBER 1
SITE NAME 616

TRACKING TIMES (LOCAL) MEASURE ✓
START 9:18 a.
STOP 9:46 a.

SENSOR TYPE 500 9500 399 299
MEMORY CARD 731
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
500 0.360

OBSTRUCTIONS: trees W.

HEIGHT READINGS MTS FT
1.395
1.755

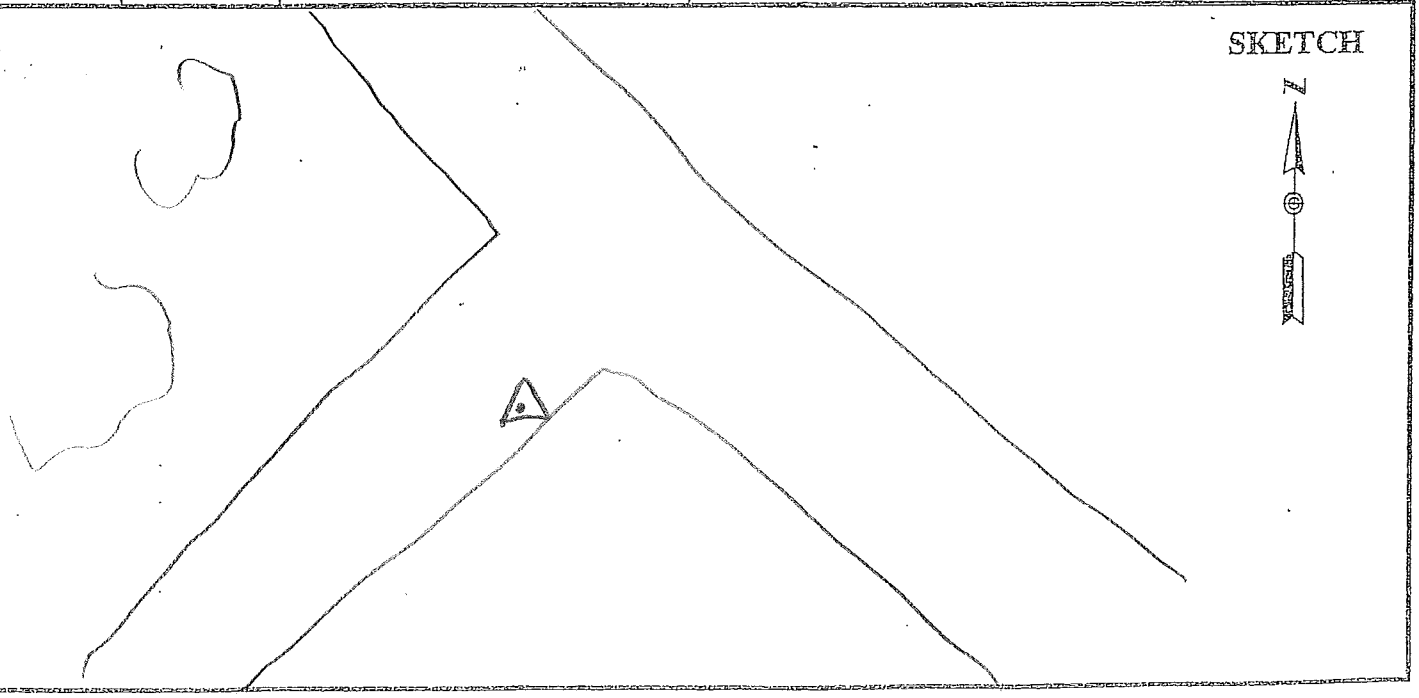
STATION DESCRIPTIONS SE side road

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1018	2.3	8/8
1046		

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

Ponaphin Co, Ks.

AME VPT

PROJECT 1120103
OPERATOR MB
DATE 1.27.12

SITE NUMBER 2
SITE NAME 617

TRACKING TIMES (LOCAL) MEASURE ✓
START 10:16 a.
STOP 10:56 a.

SENSOR TYPE 500 9500 399 299
MEMORY CARD 781
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
500 0.360

OBSTRUCTIONS: trees NW ⇔ SW

HEIGHT READINGS MTS FT
1.392
1.752

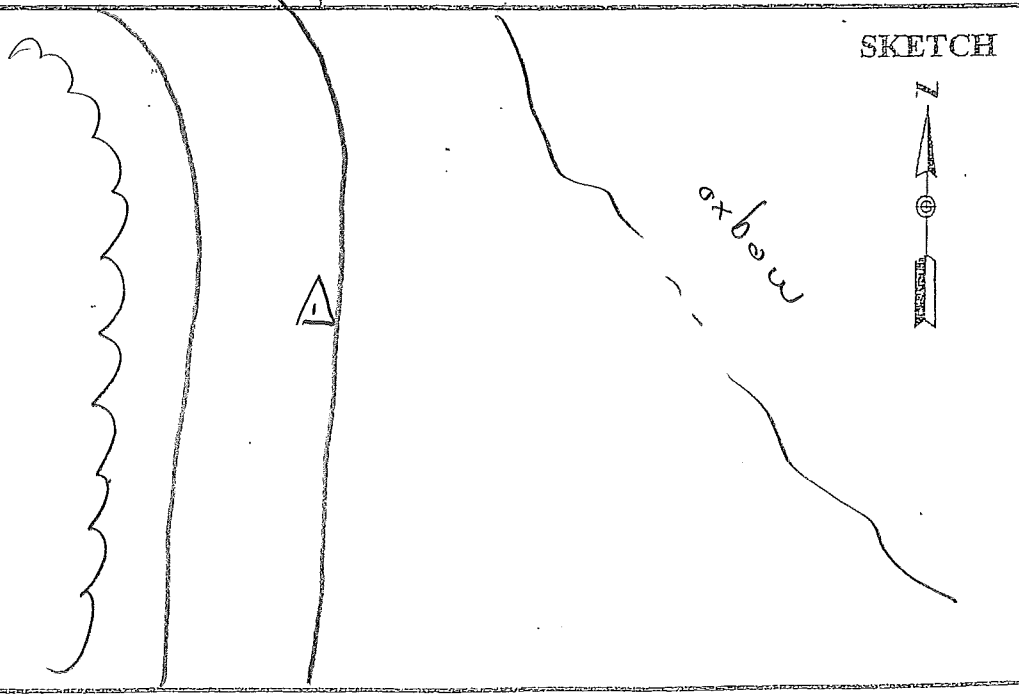
STATION DESCRIPTIONS E. side road

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1116	6.6	7/7
1156		

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

Donaphin Co, Rs

AME VPT

PROJECT 1120103
OPERATOR MB
DATE 1.27.12

SITE NUMBER 3
SITE NAME 618

TRACKING TIMES (LOCAL) MEASURE ✓
START 11:16 a.
STOP 11:46 a.

SENSOR TYPE 500 9500 399 299
MEMORY CARD 731
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
500 0.360

OBSTRUCTIONS: none

HEIGHT READINGS MTS FT
1.368
1.728

STATION DESCRIPTIONS N. side road

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1216	2.5	7/7
1246		

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH

AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

Donaphin Co, Ks

AME VRT

PROJECT 1120103
OPERATOR MB
DATE 1·27·12

SITE NUMBER 4
SITE NAME 619

TRACKING TIMES (LOCAL) MEASURE ✓
START 12:01 p
STOP 12:28 p

SENSOR TYPE 500 9500 399 299
MEMORY CARD 731
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 ~~0.389~~
500 0.360

OBSTRUCTIONS: trees SW, NW + E

HEIGHT READINGS MTS FT
1.402
1.762

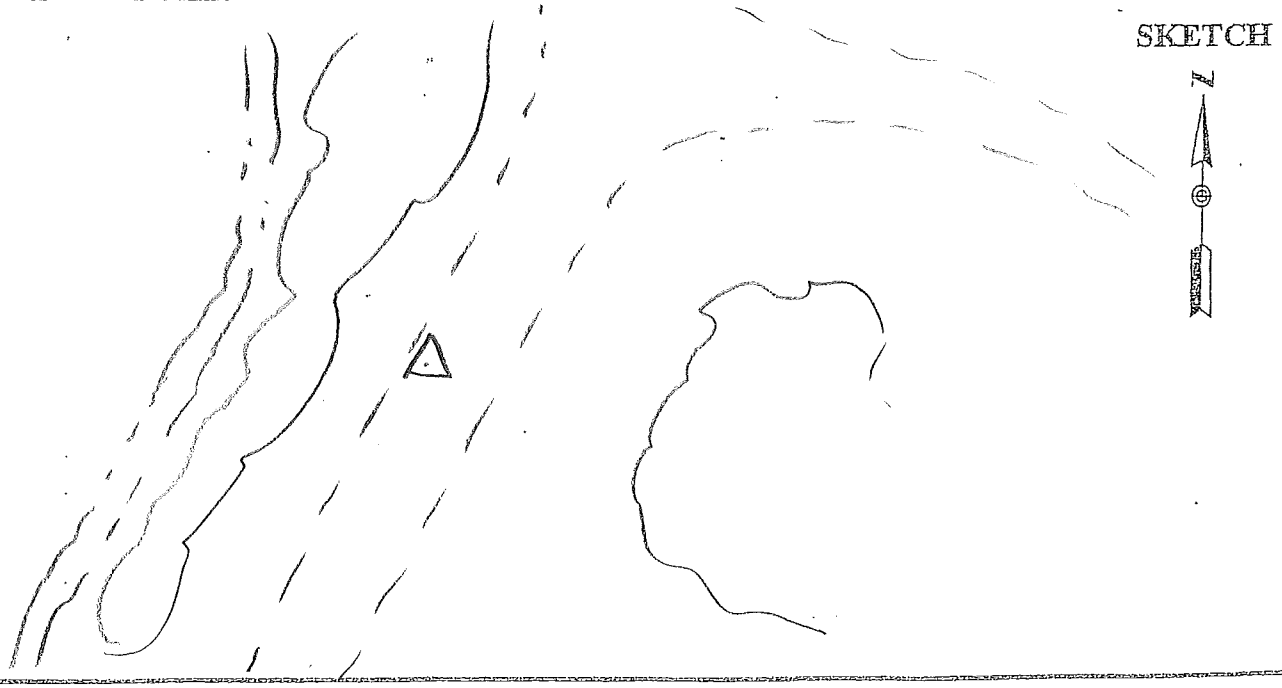
STATION DESCRIPTIONS NW side of road

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1301	4.0	6/6
1328		

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH



Donaphin Co, Ks

AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

AME VPT

PROJECT 1120103
OPERATOR NB
DATE 1·27·12

SITE NUMBER 6
SITE NAME 621

TRACKING TIMES (LOCAL) MEASURE ✓
START 1:24 p
STOP 1:44 p

SENSOR TYPE 500 9500 399 299
MEMORY CARD 731
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
500 0.360

OBSTRUCTIONS: none

HEIGHT READINGS MTS FT
1.465

1825

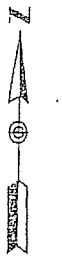
STATION DESCRIPTIONS N. side road

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1424	3.6	10/10
1444		

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH



Donaphin Co. Ks

AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

AME VPT

PROJECT 1120103
OPERATOR MB
DATE 1.27.12

SITE NUMBER 5
SITE NAME 620

TRACKING TIMES (LOCAL) MEASURE ✓
START 12:41 p
STOP 1:04 p

SENSOR TYPE 500 9500 399 299
MEMORY CARD 731
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
500 0.360

OBSTRUCTIONS: trees NW ↔ SW

HEIGHT READINGS MTS FT
1.403
1.763

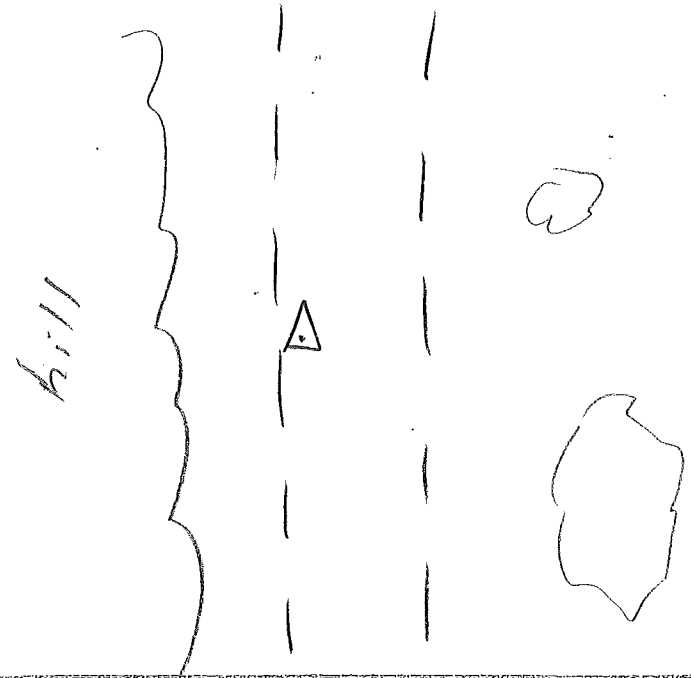
STATION DESCRIPTIONS W. side road

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1341	3.6	7/7
1404		

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH



Donaphin Co, Ks.

AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

AME VPT

PROJECT	1120103	SITE NUMBER	7
OPERATOR	MD	SITE NAME	622
DATE	1.27.12		

TRACKING TIMES (LOCAL) MEASURE ✓

START 2:05 p

STOP 2:45 p

SENSOR TYPE 500 9500 399 299

MEMORY CARD 731

BATTERY NO.

CONTROLLER NO.

SENSOR NO.

SENSOR CONSTANT

299/399	0.441
399E/9500	0.389
500	0.360

HEIGHT READINGS

MTS	FT
1.443	
1.803	

OBSTRUCTIONS: none

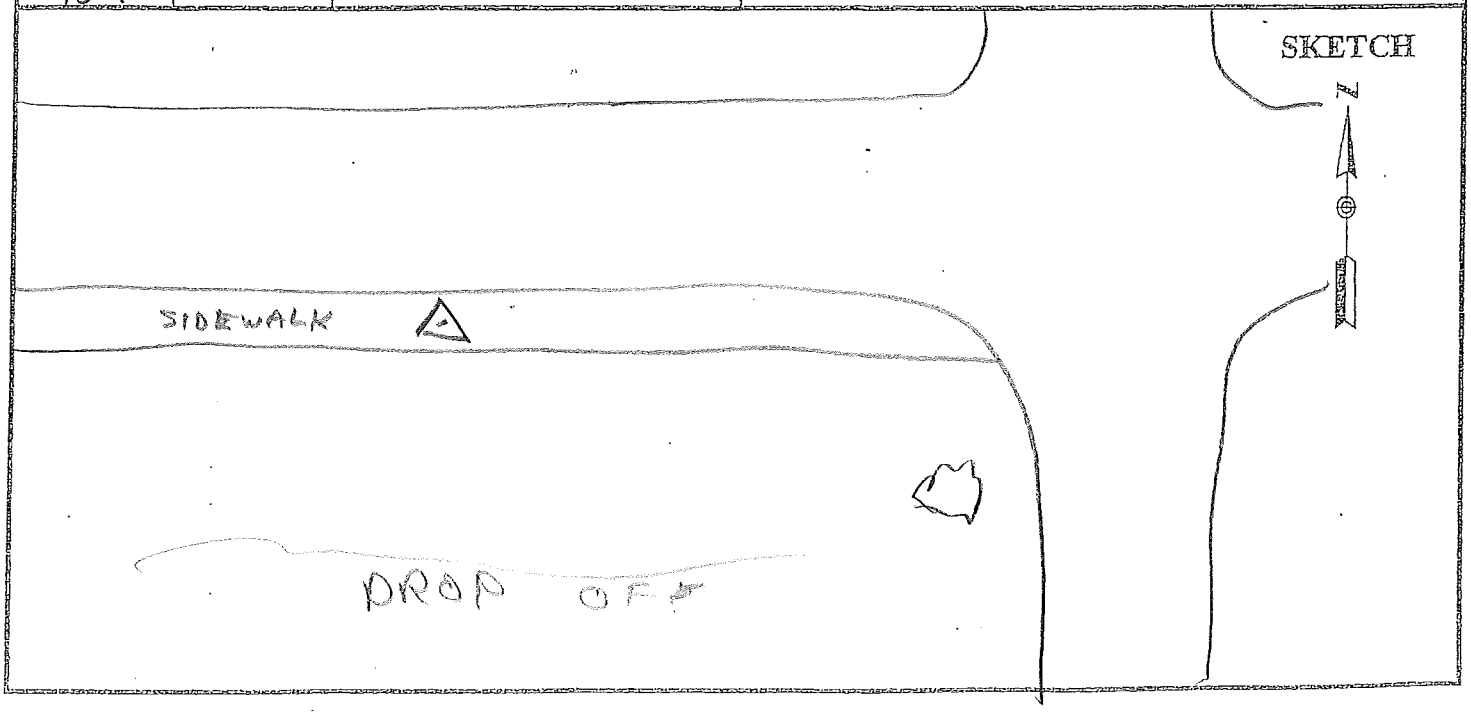
STATION DESCRIPTIONS on sidewalk

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1505	2.5	9/9
1545		

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH



NO R

AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

AMK

PROJECT 1120103
OPERATOR WJN
DATE 11/25/12

SITE NUMBER 1
SITE NAME 1608

TRACKING TIMES (LOCAL) MEASURE CST
START 15:26
STOP 15:42

SENSOR TYPE (500) 9500 399 299
MEMORY CARD
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
500 0.360

OBSTRUCTIONS: NO

HEIGHT READINGS MTS FT
1.310

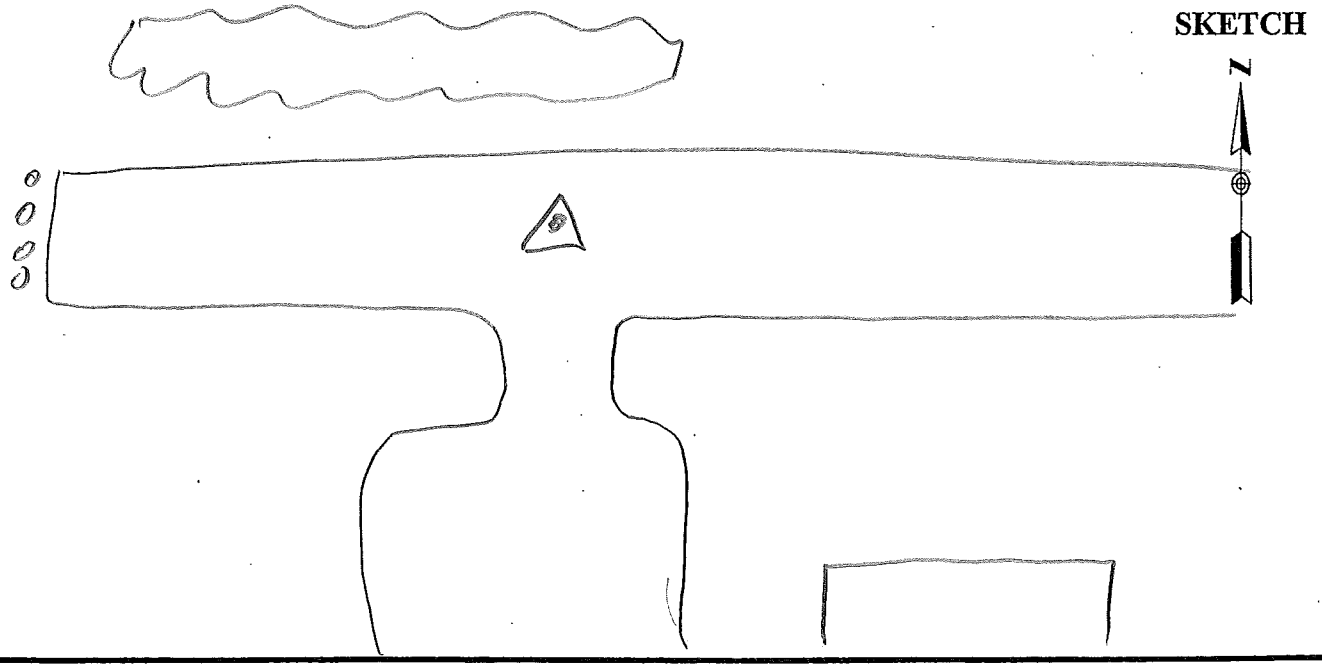
STATION DESCRIPTIONS ℄ E-W RD @ ℄ DRIVE S

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
21 26	1.9	9/9-9
21 42	2.0	9/9-9

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
OVC

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

MO R. BASE

PROJECT 1120103
OPERATOR WJN
DATE 1/26/12

SITE NUMBER 1
SITE NAME 1004

TRACKING TIMES (LOCAL) MEASURE CST
START 7:38
STOP 14:56

SENSOR TYPE 500 (9500) 399 299
MEMORY CARD 67
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 (0.389)
500 0.360

OBSTRUCTIONS:

HEIGHT READINGS MTS FT
1.200
1.589

STATION DESCRIPTIONS Rebar
AND CAP SET 1/26/12

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
13:38	2.5	7/7-7
20:56	1.8	10/10-10

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
FOG

AS BEFORE DESCRIBED

SKETCH

26 MOSV KST6 ZKC1 14 22 (8)

AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

MO R. BASE

PROJECT 1120103
OPERATOR WW
DATE 11/26/12

SITE NUMBER 1
SITE NAME 1005

TRACKING TIMES (LOCAL) MEASURE CST
START 8:40
STOP 16:00

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 11
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
500 (0.360)

OBSTRUCTIONS: PPL E

HEIGHT READINGS MTS FT
1.180
1.540

STATION DESCRIPTIONS Set 60d Spike 3' W of S end of conc walk, W. of West Platte Fire House West for MO

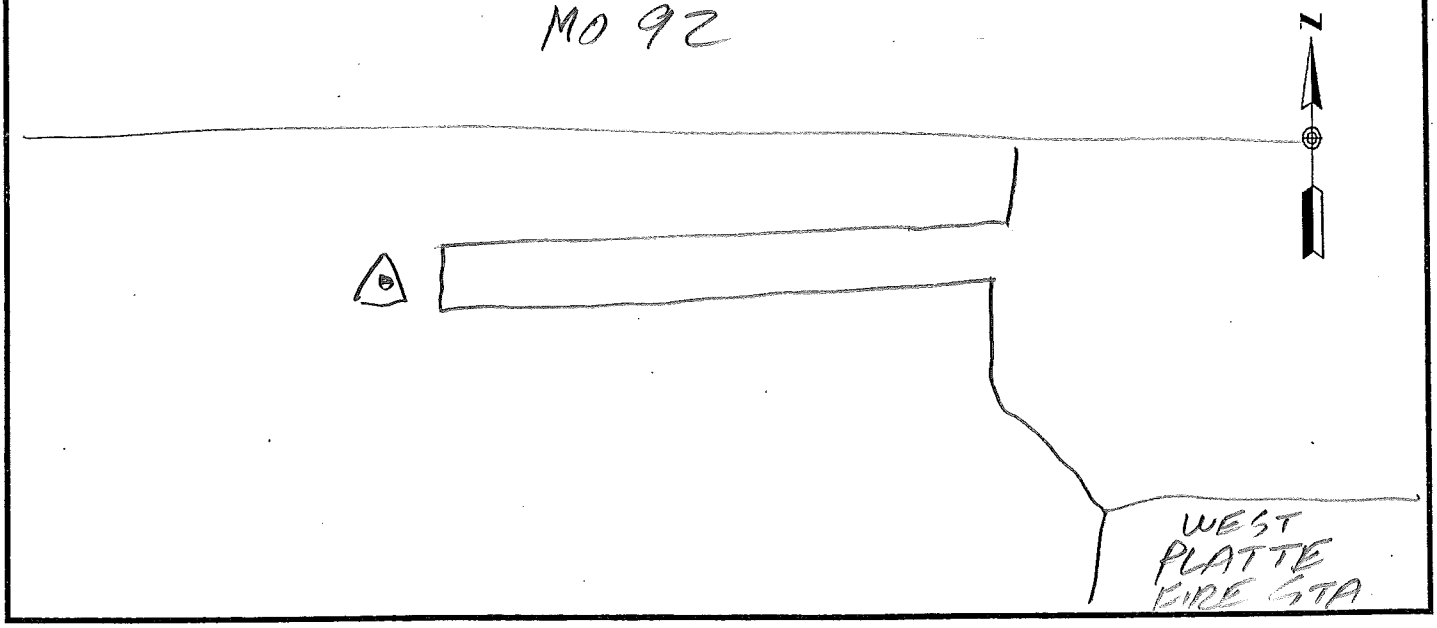
SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
14:00	3.8	7/7-7
22:00	1.8	10/10-10

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
FOG

PD 39 24 54.3 lat
KX 94 53 19.1 long

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

MO R

AME

PROJECT 120103
OPERATOR WJN
DATE 11/26/12

SITE NUMBER 1
SITE NAME 1609

TRACKING TIMES (LOCAL) MEASURE CST
START 9:01
STOP 9:28

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 14
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
500 (0.360)

OBSTRUCTIONS: TREES ALL QUADRANTS

HEIGHT READINGS MTS FT
1.354

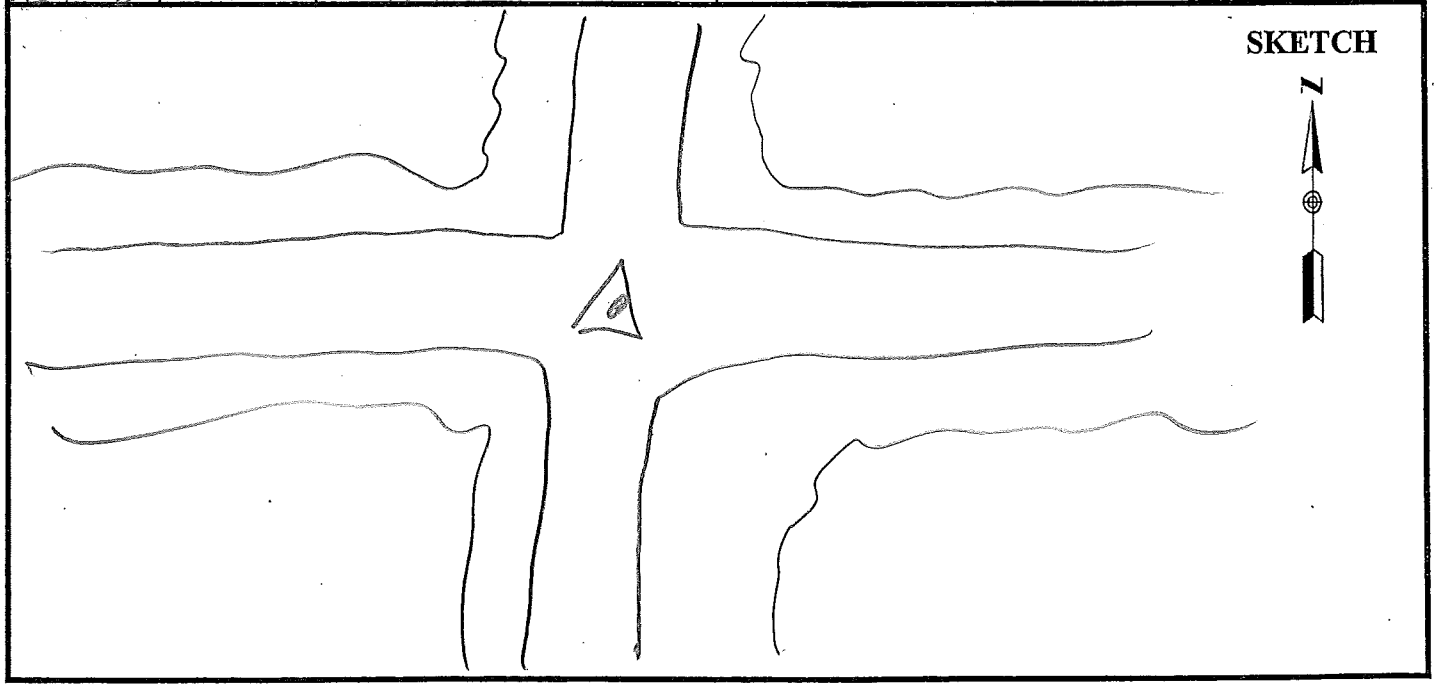
STATION DESCRIPTIONS GE INT

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
16:01	3.2	7/7-7
16:28	3.0	7/7-7

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

V CONTROL (FUTURE BASE)

PROJECT 120103
OPERATOR WVN
DATE 1/25/12

SITE NUMBER 1
SITE NAME Y341

TRACKING TIMES (LOCAL) MEASURE CST
START 10:01
STOP 10:34

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 14
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
500 (0.360)

OBSTRUCTIONS: NO

HEIGHT READINGS MTS FT
1.334
1.694

STATION DESCRIPTIONS Fd steel Rod
W COLLAR MKd
" Y341 1999 "
AS DESCRIBED BY NGS

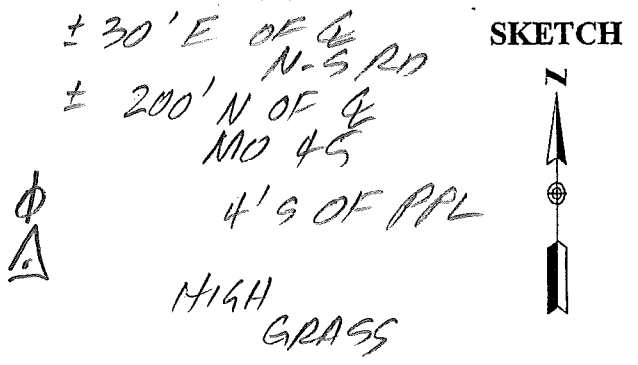
SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
16:01	2.4	8/9-9
16:34	2.6	7/7-7

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
FOG CLEARING

HAND HELD 39 19 30.3
COORDS 94 51 53.1

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

AME

PROJECT 1120103
OPERATOR WJN
DATE 11/26/12

SITE NUMBER 3
SITE NAME 1610

TRACKING TIMES (LOCAL) MEASURE CST
START 10:46
STOP 11:05

SENSOR TYPE (500) 9500 399 299
MEMORY CARD
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
500 (0.360)

OBSTRUCTIONS: PPL SE

HEIGHT READINGS MTS FT
1.380

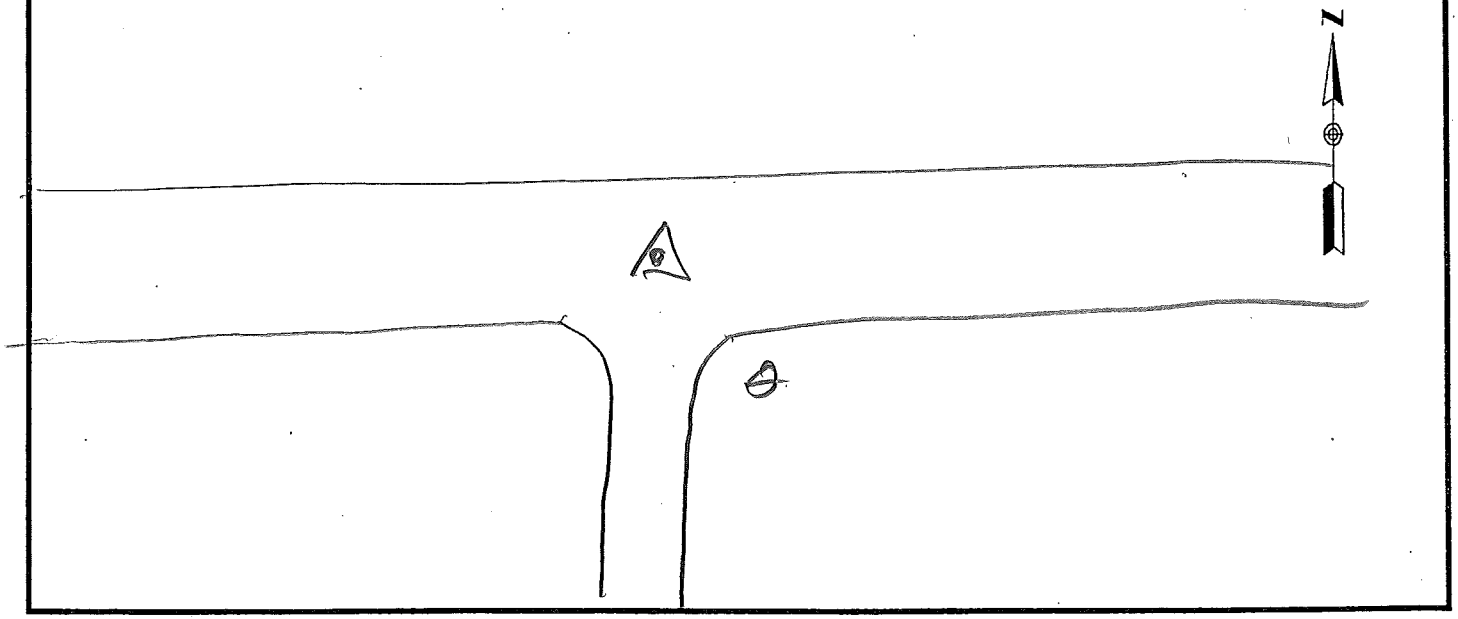
STATION DESCRIPTIONS E E-W RD OPP E ONE LANE RD S.

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
16:46	2.6	8/9-8
17:05	2.4	8/9-8

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
WINDY

SKETCH



MOR.

AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

AME

PROJECT 1120103	SITE NUMBER 4
OPERATOR WJW	SITE NAME 1611
DATE 1/26/12	

TRACKING TIMES (LOCAL) MEASURE CST

START 11:40

STOP 12:16

SENSOR TYPE 500 9500 399 299

MEMORY CARD

BATTERY NO.

CONTROLLER NO.

SENSOR NO.

SENSOR CONSTANT

299/399	0.441
399E/9500	0.389
500	0.360

HEIGHT READINGS

MTS	FT
1.363	

OBSTRUCTIONS: TREES NE, SE
PPL SW

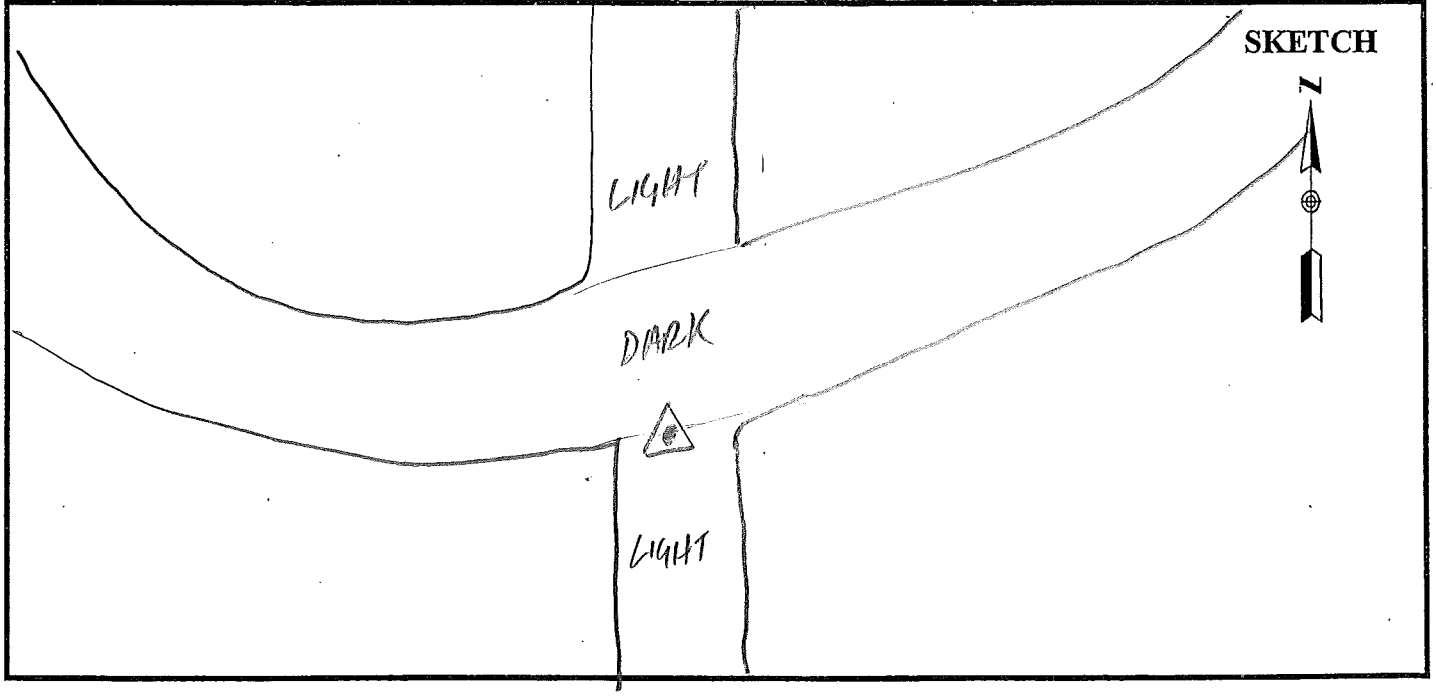
STATION DESCRIPTIONS 4 N-S RD @ S. EDGE E-W RD

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
17:40	5.2	6/6-6
18:16	2.1	8/8-8

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH



MO R.

AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

AME

PROJECT 1120103
OPERATOR WJN
DATE 1/26/12

SITE NUMBER 5
SITE NAME 1612

TRACKING TIMES (LOCAL) MEASURE CST

START 13:21
STOP 13:41

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 14
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
500 (0.360)

OBSTRUCTIONS: NO

HEIGHT READINGS MTS FT
1.315
1.675

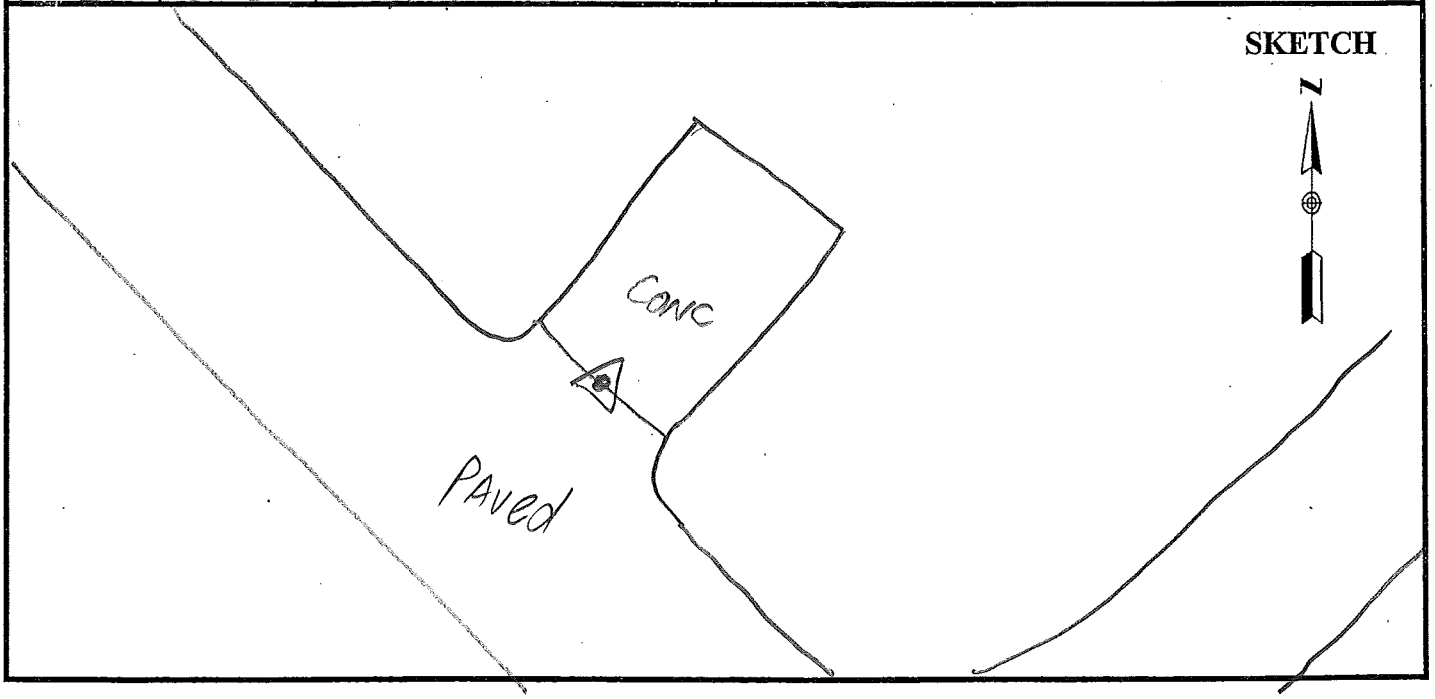
STATION DESCRIPTIONS 4 SW EDGE CONCRETE TURNOUT

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
19:21	1.7	10/10-10
19:41	2.0	9/9-9

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
SUNNY, WINDY

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

MO R. AME

PROJECT 1120103
OPERATOR WN
DATE 1/26/12

SITE NUMBER 6
SITE NAME 1613

TRACKING TIMES (LOCAL) MEASURE CST
START 13:59
STOP 14:30

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 14
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
500 (0.360)

OBSTRUCTIONS: TRAFFIC

HEIGHT READINGS MTS FT
1.317

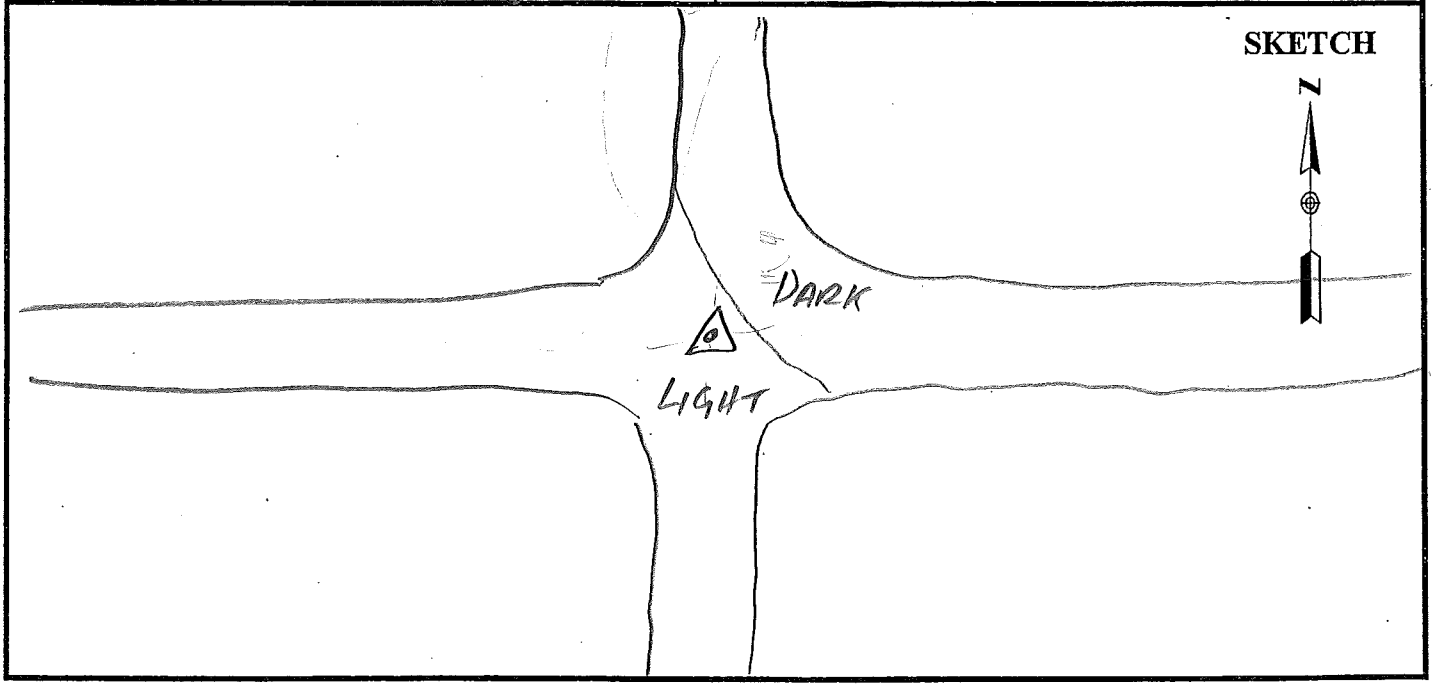
STATION DESCRIPTIONS G G INT
RDS

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
19:59	2.4	8/8-9
20:30	2.2	9/9-9

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
SKC, WINDY

SKETCH



MO R.

AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

H+V cont. BASE

PROJECT 112013
OPERATOR WJN
DATE 1/27/12

SITE NUMBER 1
SITE NAME P340

TRACKING TIMES (LOCAL) MEASURE CST
START 8:27
STOP 12:39

SENSOR TYPE 500 (9500) 399 299
MEMORY CARD 67
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 (0.389)
500 0.360

OBSTRUCTIONS: PPL ESE

HEIGHT READINGS MTS FT
1.374
1.763

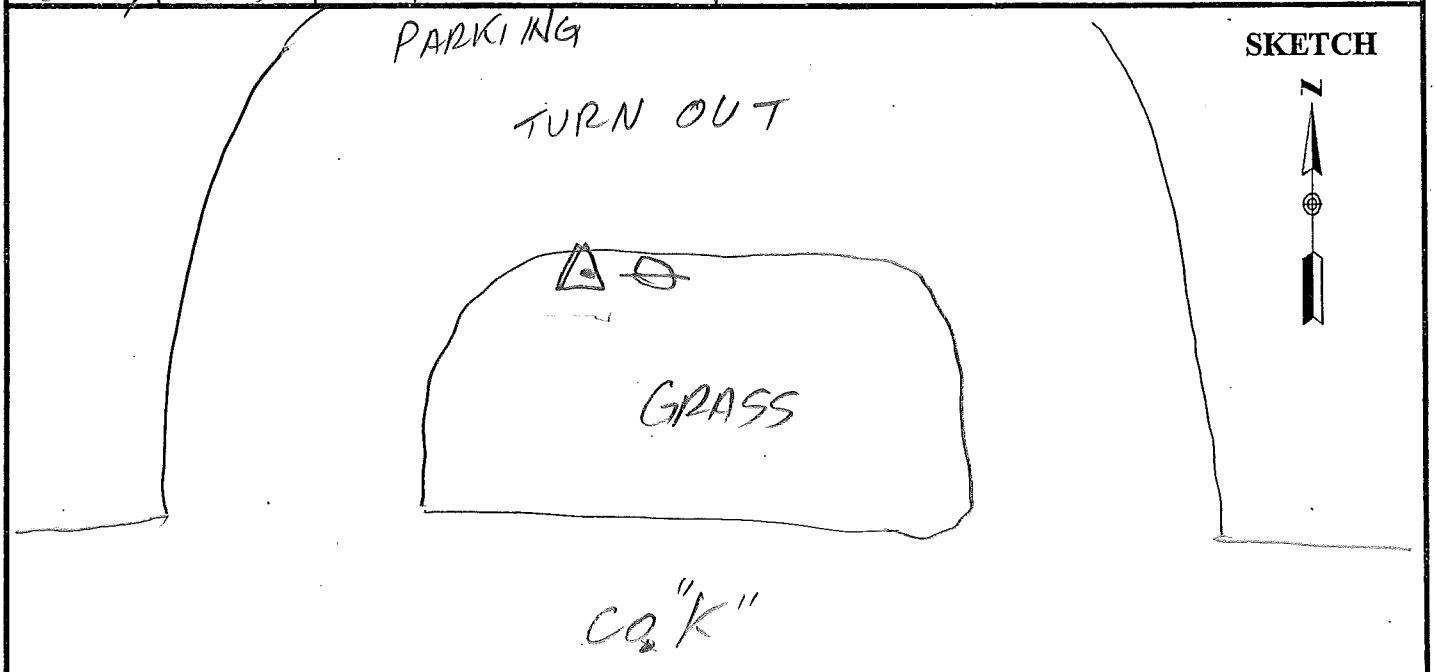
STATION DESCRIPTIONS Steel Rod
W/ COLLAR MKD

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
14:27	2.5	8/8-8
18:39	1.5	10/10-10

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
ORC

SKETCH



MOSV MOMV MORK

MO R

AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

BASE

PROJECT 112103	SITE NUMBER 1
OPERATOR WJN	SITE NAME 1006
DATE 11/27/12	

TRACKING TIMES (LOCAL) MEASURE CST

START 9:46

STOP

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 11
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
500 0.360

OBSTRUCTIONS: PPL ESE

HEIGHT READINGS

	MTS	FT
	1.251	
	1.611	

STATION DESCRIPTIONS Set Rebar AND CAP @ ℄ BERM OPP W. EDGE WESTERMOST GRAIN BIN, ±33' WNW OF PPL # 112030

SATELLITE OBSERVATIONS

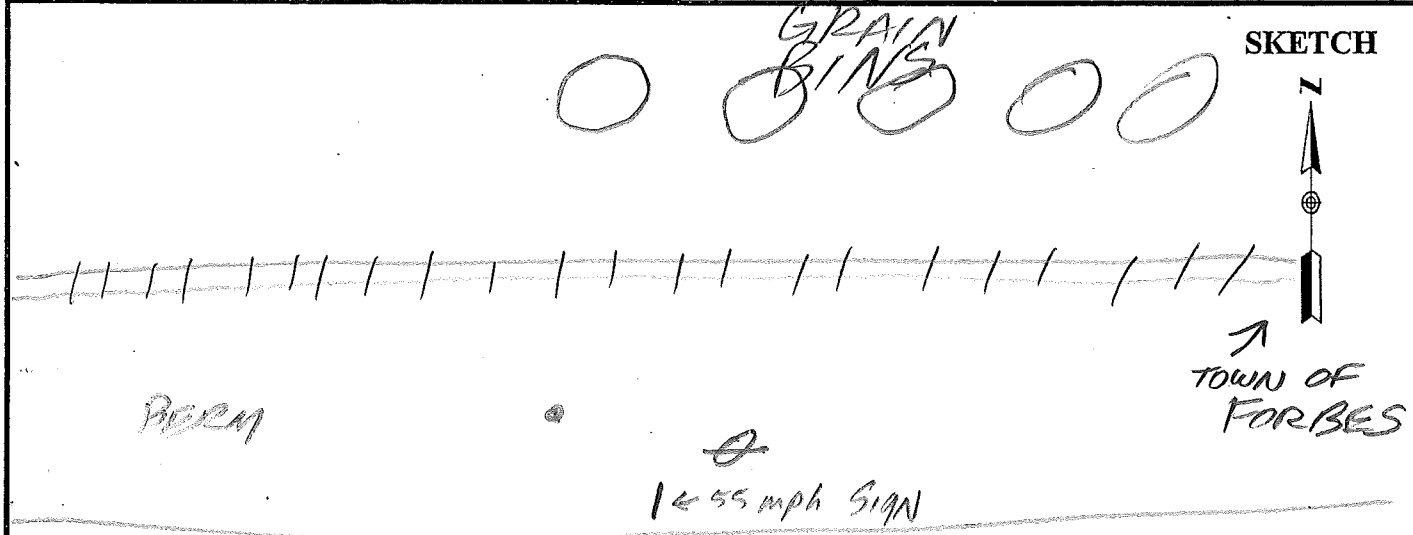
TIME	GDOP	SATELLITES
16:46	4.0	6/6-8

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

OVC

APPROX 39 54 09.6 LAT
95 05 02.8 LONG

SKETCH



MO R.

AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

ARMY E

PROJECT 1120103
OPERATOR WJN
DATE 1/27/12

SITE NUMBER 1
SITE NAME 1614

TRACKING TIMES (LOCAL) MEASURE CST
START 10:04
STOP 10:32

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 14
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
500 (0.360)

HEIGHT READINGS MTS FT
1.320

OBSTRUCTIONS: GRAIN BINS S. PPL'S E-W

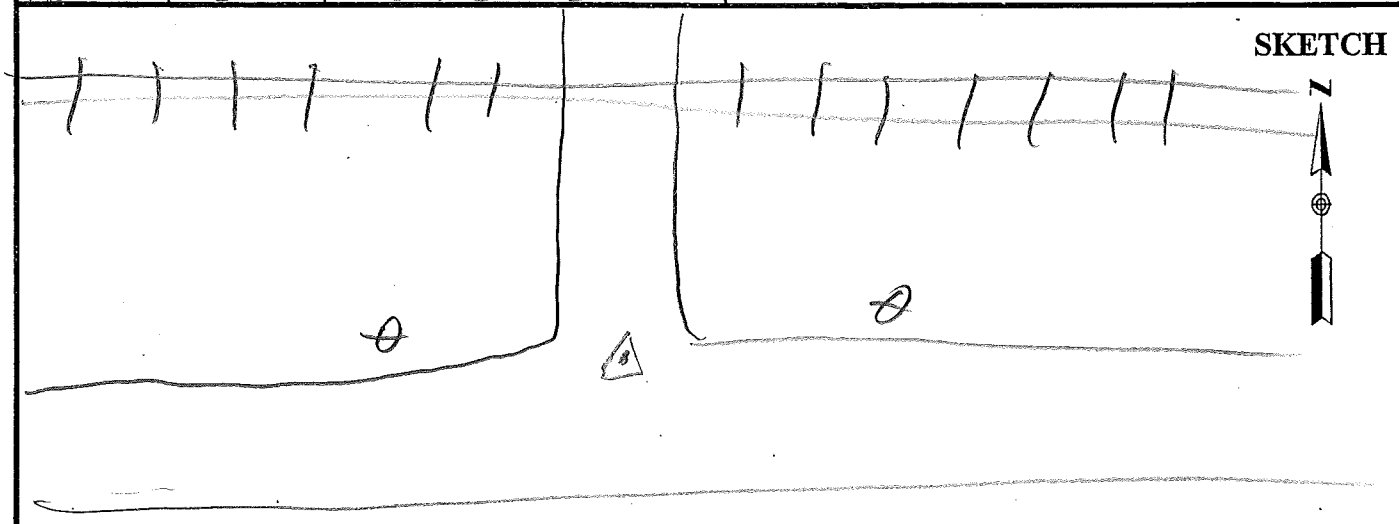
STATION DESCRIPTIONS @ RD N.
@ N. EDGE E-W RD.

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1604	2.3	9/8-8
16:32	2.0	9/8-8

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
OVC

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

BASE

PROJECT 112010.3
OPERATOR WJW
DATE 1/27/12

SITE NUMBER 2
SITE NAME 1615

TRACKING TIMES (LOCAL) MEASURE CST
START 10:52
STOP 11:10

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 14
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
500 (0.360)

HEIGHT READINGS MTS FT
1.329

OBSTRUCTIONS: TRAFFIC

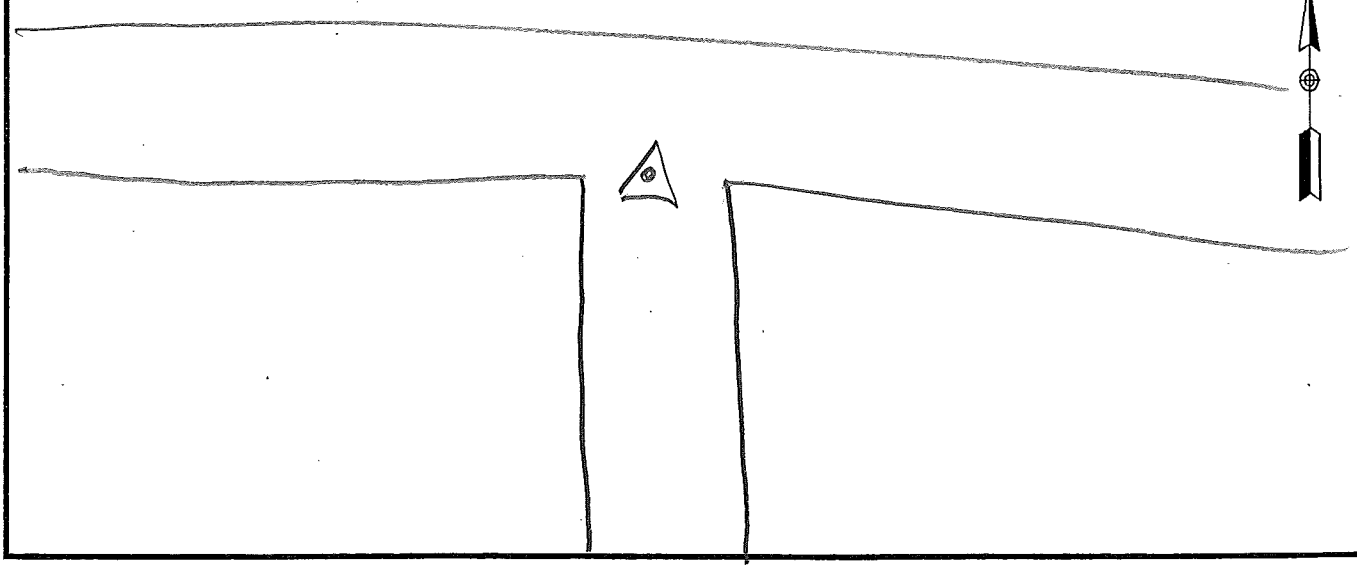
STATION DESCRIPTIONS S. EDGE RD @ 4 RDS.

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
16:52	1.8	9/9-9
17:10	2.0	8/8-8

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
OVC

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

AME

PROJECT 1120103
OPERATOR WJN
DATE 1/27/12

SITE NUMBER 3
SITE NAME 1616

TRACKING TIMES (LOCAL) MEASURE CST
START 11:24
STOP 11:54

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 14
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
500 (0.360)

OBSTRUCTIONS: TERRAIN, TREES W

HEIGHT READINGS MTS FT
1.320

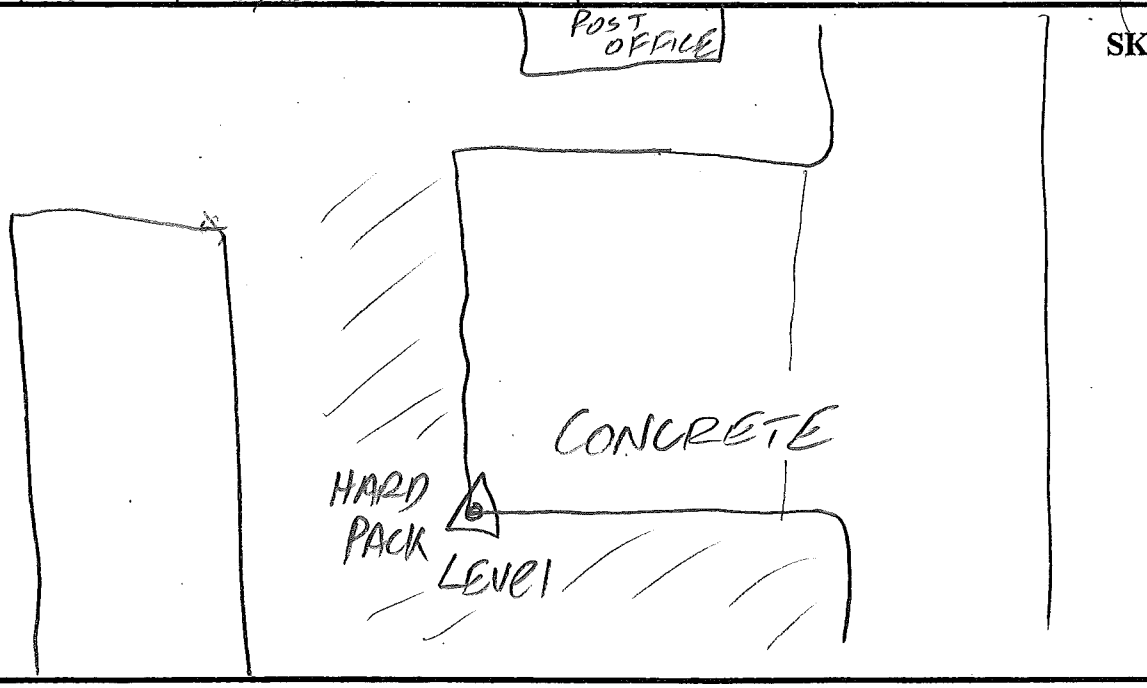
STATION DESCRIPTIONS SW COR CONC

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
17:24	4.5	6/6-6
17:54	5.0	6/6-6

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
OVC
POOR PDOP

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

MO R.

PROJECT 1120103
OPERATOR WJN
DATE 11/27/12

SITE NUMBER 4
SITE NAME 1617

TRACKING TIMES (LOCAL) MEASURE CST
START 12:08
STOP 12:30

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 14
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
500 (0.360)

OBSTRUCTIONS: TRAFFIC

HEIGHT READINGS MTS FT
1.311

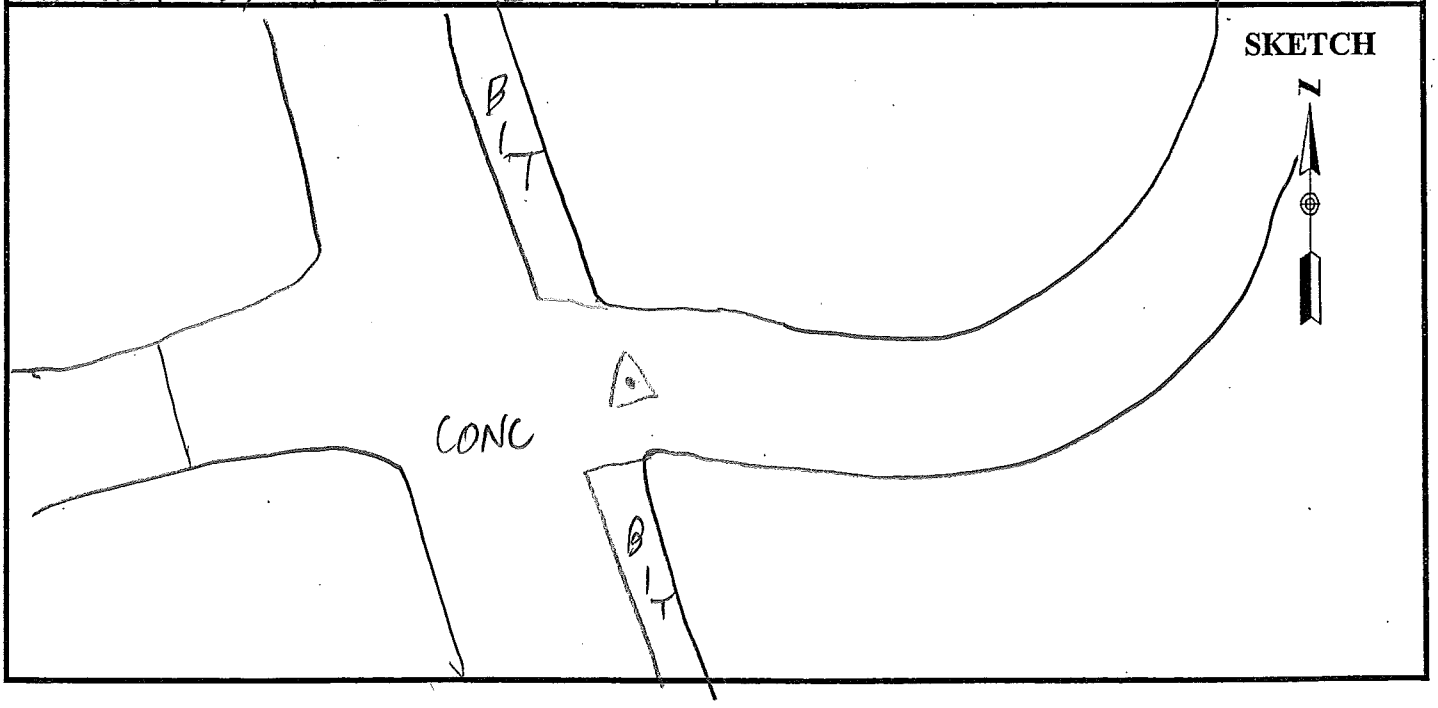
STATION DESCRIPTIONS 4 OFF RAMP @ E. EDGE BIT. N-S RD

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
18:08	2.8	3/3-8
19:30	2.4	8/8-8

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
ORC LIGHT SNOW

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

MO R

BASE

PROJECT 1120103
OPERATOR WJN
DATE 1/22/12

SITE NUMBER 2
SITE NAME 1007

TRACKING TIMES (LOCAL) MEASURE CST
START 13:34
STOP 15:45

SENSOR TYPE 500 (9500) 399 299
MEMORY CARD 6
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 (0.389)
500 0.360

OBSTRUCTIONS: NO

HEIGHT READINGS MTS FT
1.227
1.616

STATION DESCRIPTIONS Set 7" SPIKE

SATELLITE OBSERVATIONS

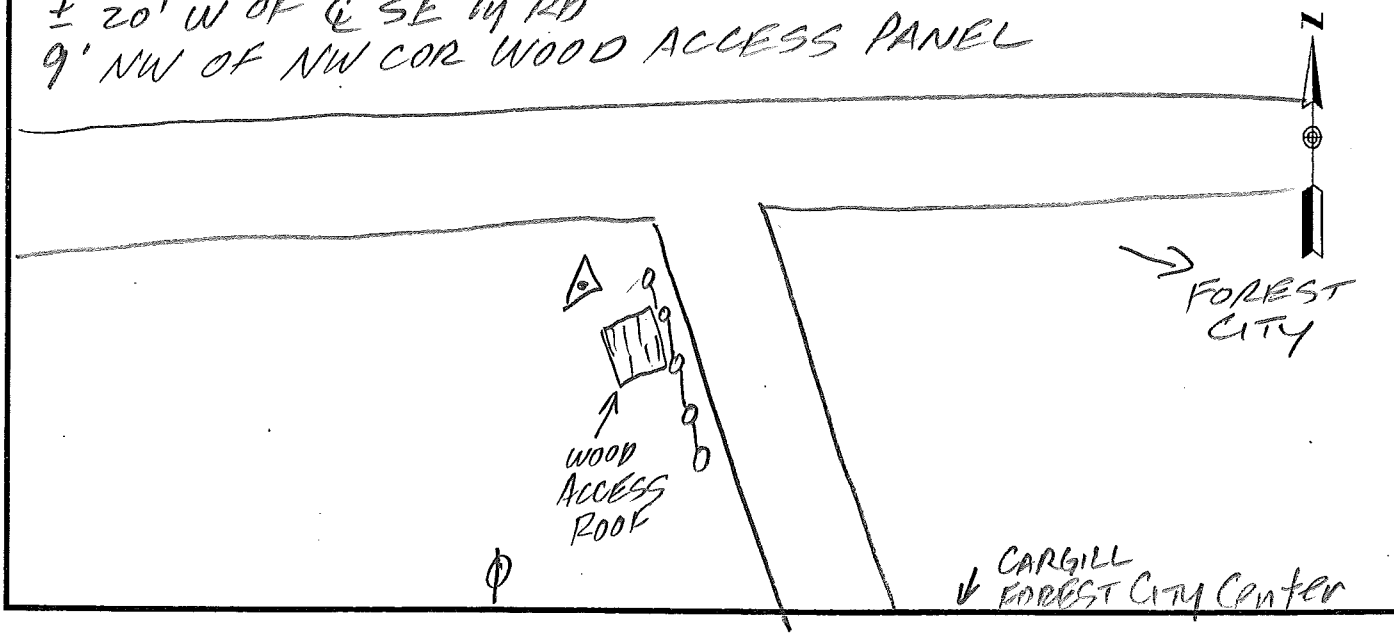
TIME	GDOP	SATELLITES
19:34	2.0	8/8-8
21:45	1.5	10/10-10

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
OVC LIGHT SNOW

39 59 16.2 LAT APPROX
95 12 06.1 LONG

± 30' S OF ℄ E-W RD
± 20' W OF ℄ SE'LY RD
9' NW OF NW COR WOOD ACCESS PANEL

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

MO R. V CONT.

PROJECT 1120103
OPERATOR WJN
DATE 1/27/12

SITE NUMBER 5
SITE NAME Q210

TRACKING TIMES (LOCAL) MEASURE CST
START 13:42
STOP 14 01

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 14
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
500 (0.360)

OBSTRUCTIONS: TREES
SEVERE OBSTRUCTION

HEIGHT READINGS MTS FT
1.039
1.399

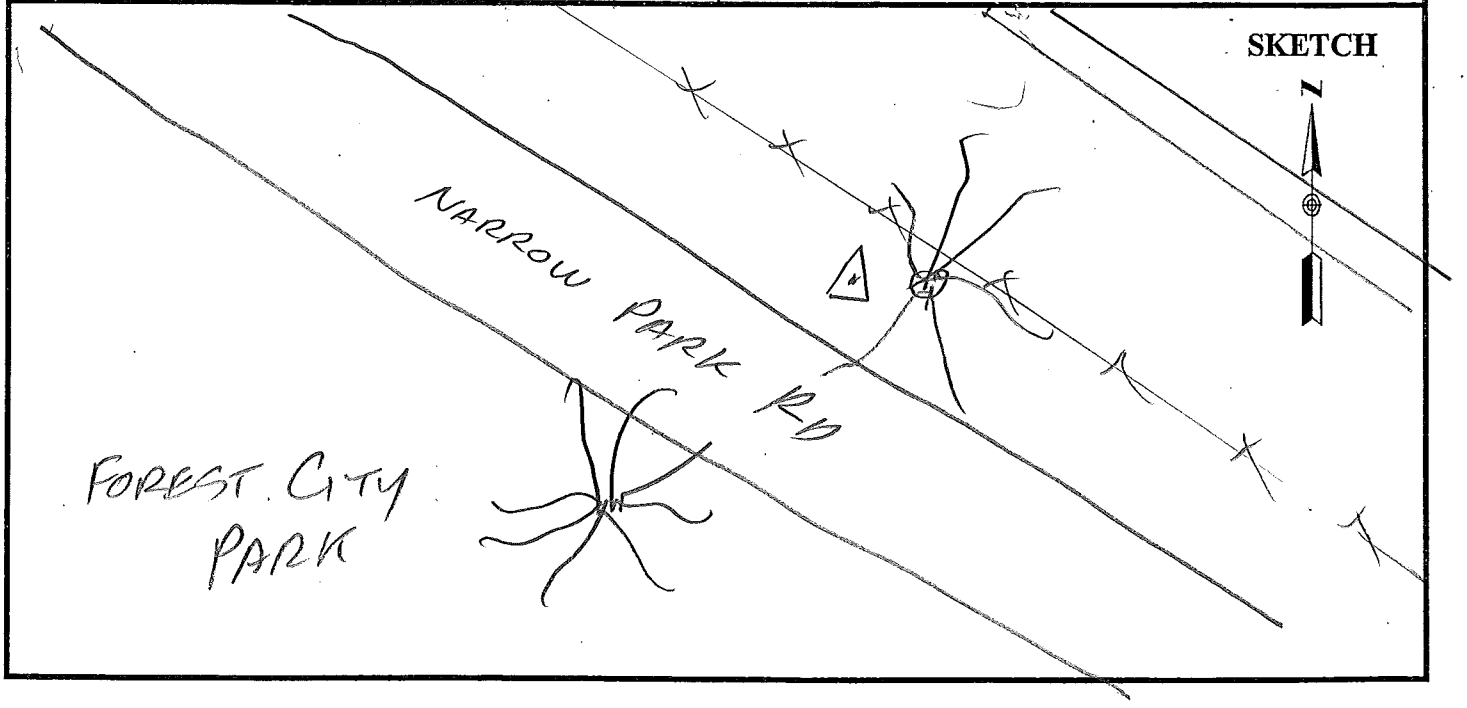
STATION DESCRIPTIONS Fd BRASS
DISK IN CONC MON MKD
Q210 1948
VSCGS
As Described (HOWEVER NOT SUITABLE/GPS)

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
19:42	2.8	9/9-9
20:01	2.4	9/9-9

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
OVC LIGHT SNOW

SKETCH



MO R-

AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

NAME

PROJECT 1120103
OPERATOR WJW
DATE 1/27/12

SITE NUMBER 6
SITE NAME 1619

TRACKING TIMES (LOCAL) MEASURE CST
START 14:14
STOP 14:36

SENSOR TYPE (500) 9500 399 299
MEMORY CARD
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
500 (0.360)

OBSTRUCTIONS: TREES, TERRAIN E

HEIGHT READINGS MTS FT
1.298

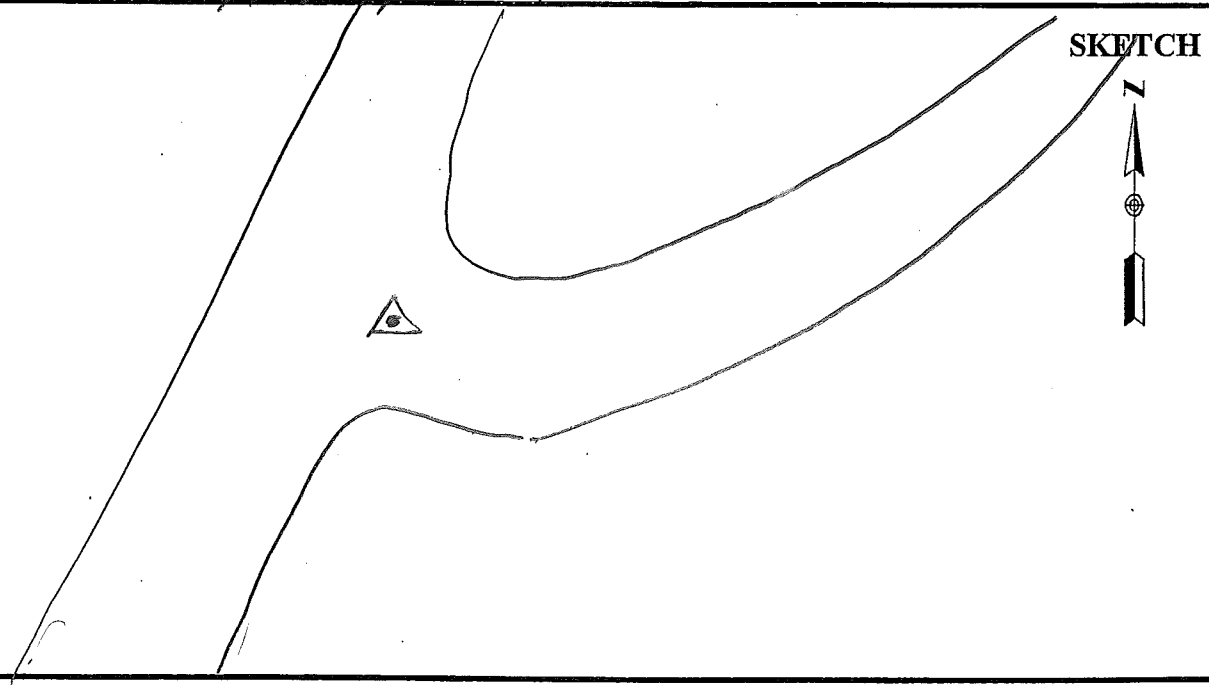
STATION DESCRIPTIONS SE EDGE RD @ ℄ OF RD NE.

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
2014	2.4	10/9-10
20:36	2.2	9/9-9

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
OVC SNOW

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

NOR

ANE

PROJECT 1120103
OPERATOR WJN
DATE 1/27/12

SITE NUMBER 7
SITE NAME 1619

TRACKING TIMES (LOCAL) MEASURE CST
START 14:51
STOP 15:08

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 14
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
500 (0.360)

OBSTRUCTIONS: TREES, BLDGS W

HEIGHT READINGS MTS FT
1.315

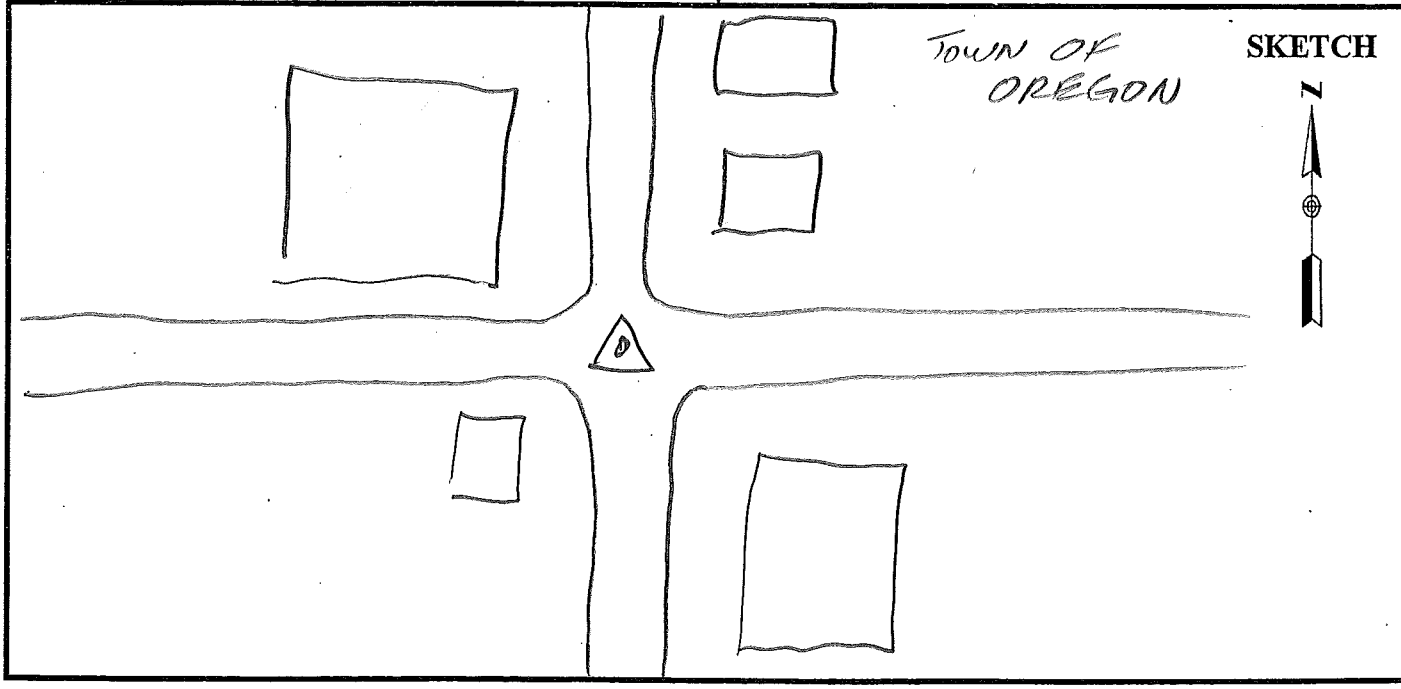
STATION DESCRIPTIONS ℄ ℄ INT STREETS N-S-E-W

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
20:51	2.4	8 8 -9
21:08		

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

MO R. AME

PROJECT 1120103
OPERATOR WJW
DATE 1/27/12

SITE NUMBER 9
SITE NAME 1620

TRACKING TIMES (LOCAL) MEASURE CST
START 1521
STOP 15:36

SENSOR TYPE (500) 9500 399 299
MEMORY CARD
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
500 ~~0.360~~

OBSTRUCTIONS:

HEIGHT READINGS MTS FT
1.270

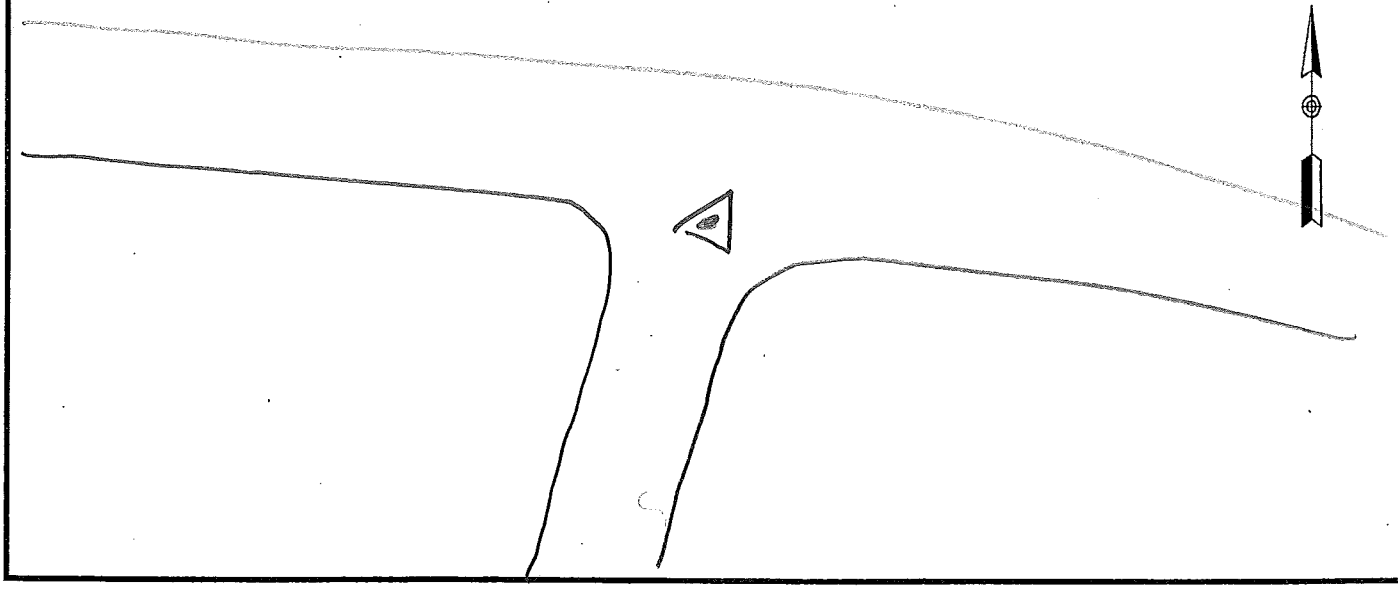
STATION DESCRIPTIONS ℄ RD S.
@ S. EDGE E-W RD

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
2121	2.4	8/9-8
2136	2.2	8/8-8

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
SNOW

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

MOR

BASE

PROJECT 120103
OPERATOR WJN
DATE 1/28/12

SITE NUMBER 1
SITE NAME 1007

TRACKING TIMES (LOCAL) MEASURE CST
START 10:55
STOP 16:11

SENSOR TYPE 500 (9500) 399 299
MEMORY CARD 67
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 (0.389)
500 0.360

OBSTRUCTIONS: PPL W

HEIGHT READINGS MTS FT
1.193

STATION DESCRIPTIONS 7" SPIKE
Set 1/27/12

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
16:55	2.2	9/9-9
22:11	2.0	9/9-9

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
SKC

As BEFORE DESCRIBED

SKETCH

MO R

AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

BASE

PROJECT 1120103
OPERATOR MW
DATE 1/28/12

SITE NUMBER 1
SITE NAME 1008

TRACKING TIMES (LOCAL) MEASURE CST
START 11:41
STOP 16:49

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 11
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
500 (0.360)

OBSTRUCTIONS: NO

HEIGHT READINGS MTS FT
1.155
1.515

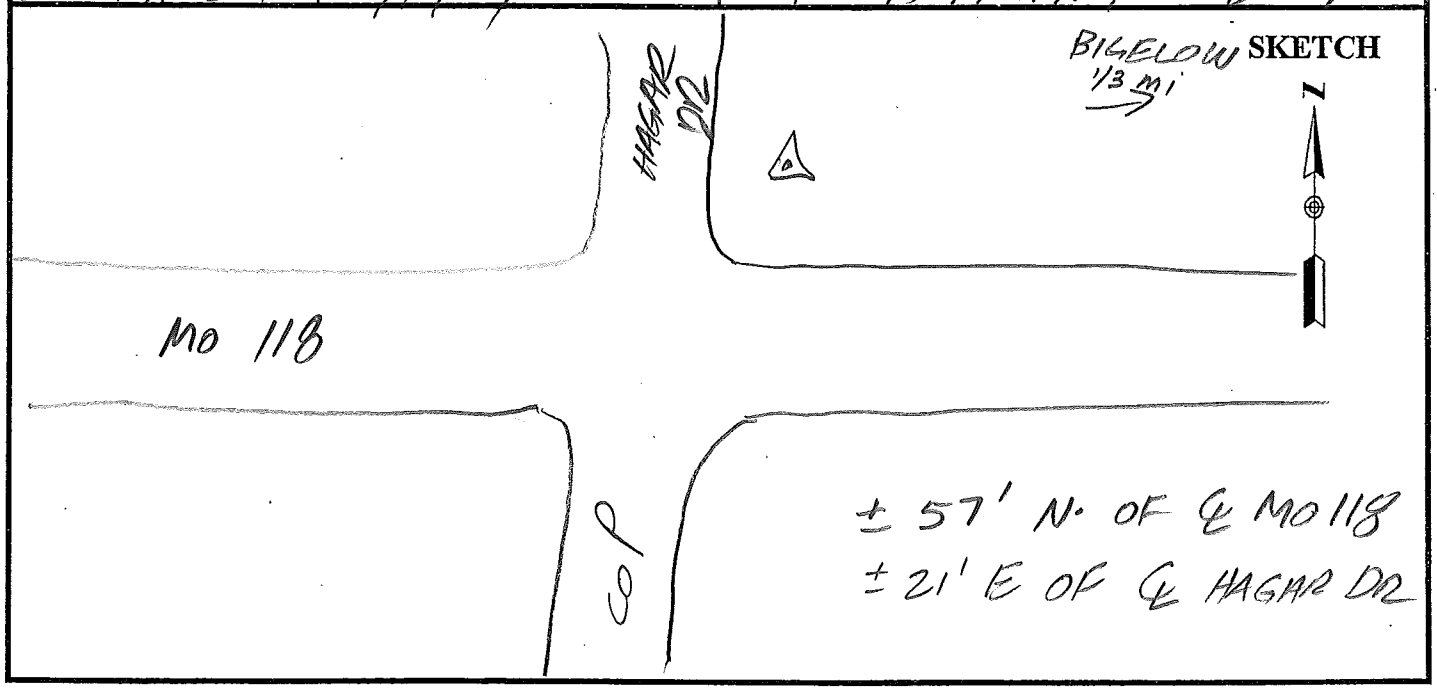
STATION DESCRIPTIONS Set Rebar AND CAP

SATELLITE OBSERVATIONS

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
WINDY

TIME	GDOP	SATELLITES
17:41	5.1	6/6-6
22:49	2.1	9/9-9

APPROX 40 06 39.1 LAT
95 17 47.4 LONG



56764270

AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

PROJECT 1120103
OPERATOR MJK
DATE 11/28/12

SITE NUMBER 1
SITE NAME 1101

TRACKING TIMES (LOCAL) MEASURE CST
START 12:00
STOP 12:19

SENSOR TYPE 500 9500 399 299
MEMORY CARD 14
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
500 0.360

OBSTRUCTIONS: NO

HEIGHT READINGS MTS FT
1.285

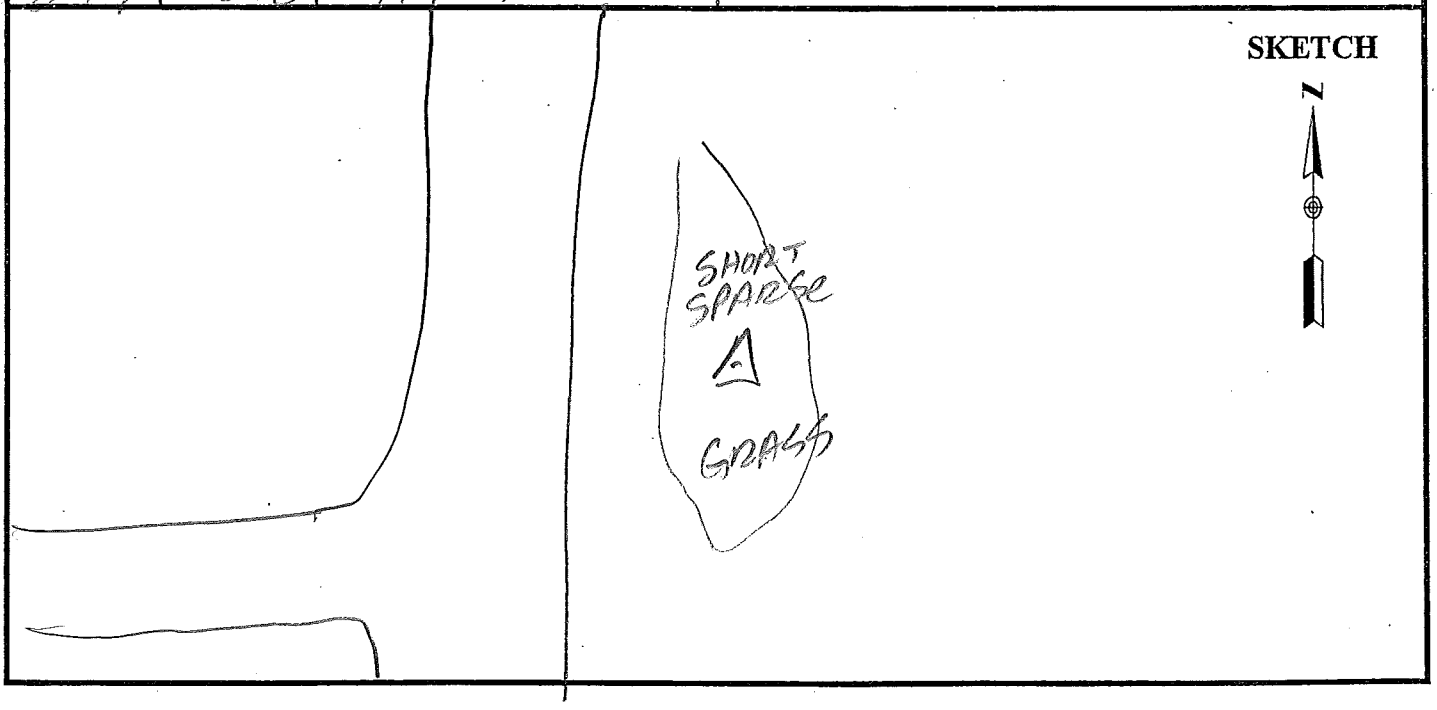
STATION DESCRIPTIONS POINT IN SPARSE GRASS / BARE EARTH

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
18:00	3.6	7/6-7
19:19	2.8	7/7-7

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
WINDY

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

MOR 2

PROJECT 1120103
OPERATOR
DATE

SITE NUMBER 2
SITE NAME 1201

TRACKING TIMES (LOCAL) MEASURE CST
START 12:28
STOP 12:48

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 14
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
500 (0.360)

OBSTRUCTIONS: TREES E.

HEIGHT READINGS MTS FT
1.230

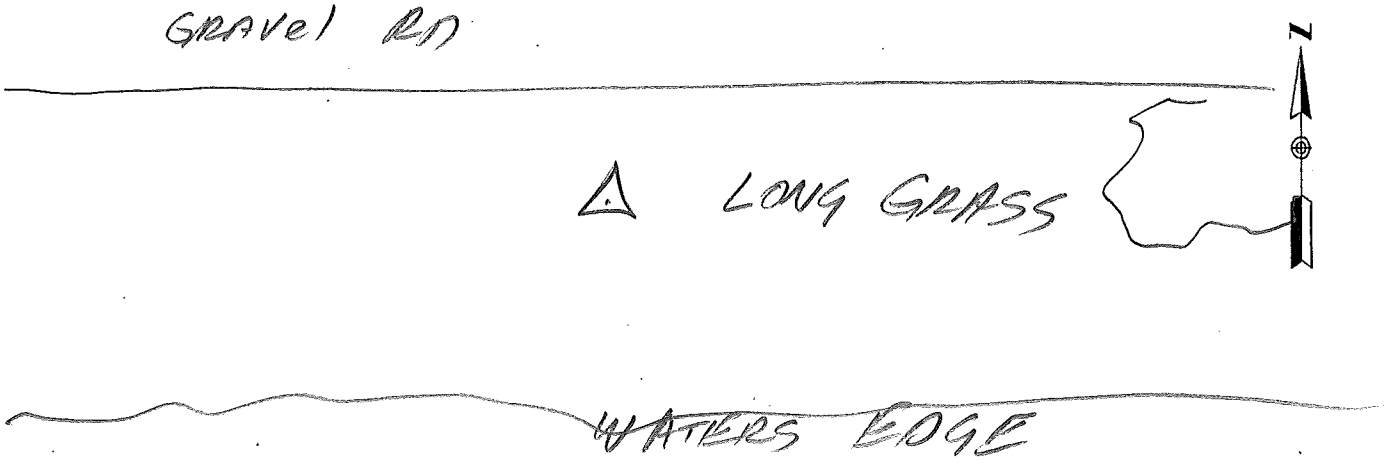
STATION DESCRIPTIONS POINT IN LONG GRASS

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1228	2.0	9/9-9
1840	2.1	9/9-9

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH



MO R.

AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

ANE

PROJECT 1120103
OPERATOR WJN
DATE 1/28/12

SITE NUMBER 3
SITE NAME 1621

TRACKING TIMES (LOCAL) MEASURE CST
START 12:59
STOP 13:18

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 14
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
500 (0.360)

HEIGHT READINGS MTS 1.314 FT

OBSTRUCTIONS: NO

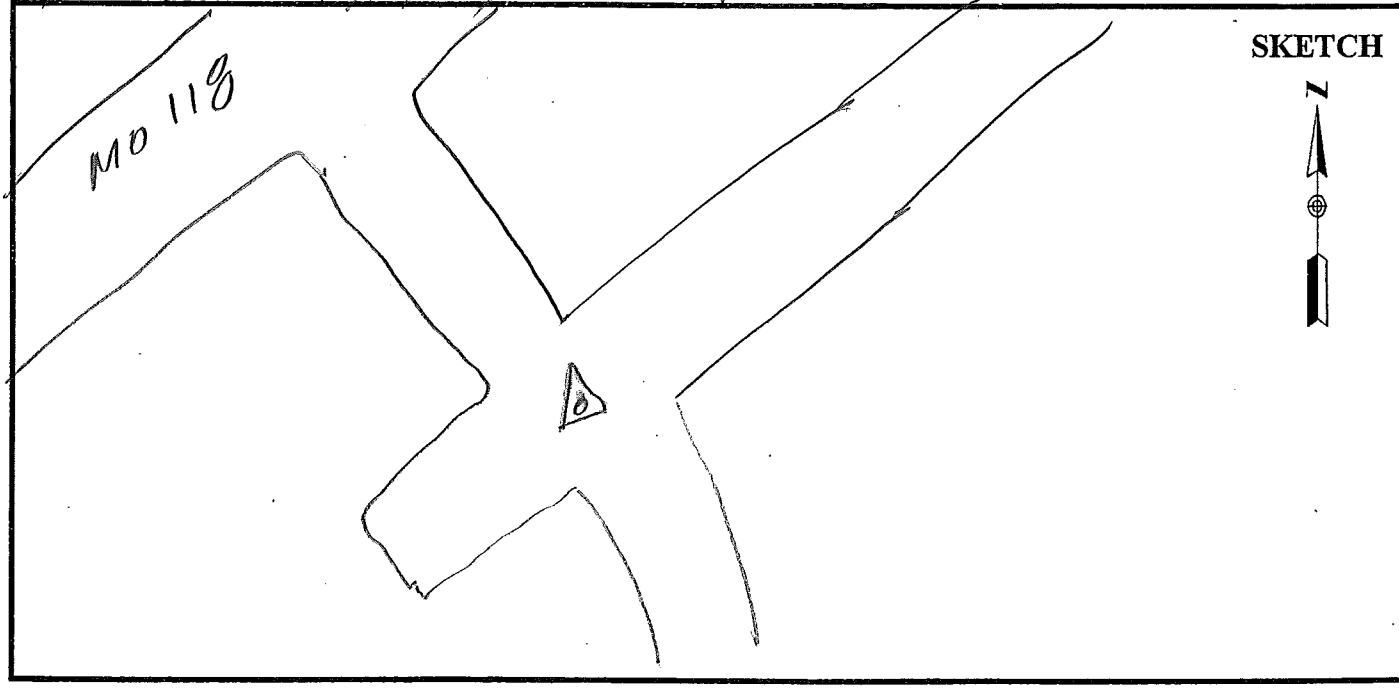
STATION DESCRIPTIONS GG INT
RDS NW-SW-NE-SW

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
18:59	1.8	9/9-9
19:18	2.0	9/9-9

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
SKC

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

MO R. 5

PROJECT 1120103
OPERATOR WJN
DATE 1/28/12

SITE NUMBER 4
SITE NAME 1501

TRACKING TIMES (LOCAL) MEASURE CST
START 13:29
STOP 13:49

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 14
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
500 (0.360)

OBSTRUCTIONS: BLDGS

HEIGHT READINGS MTS FT
1.328

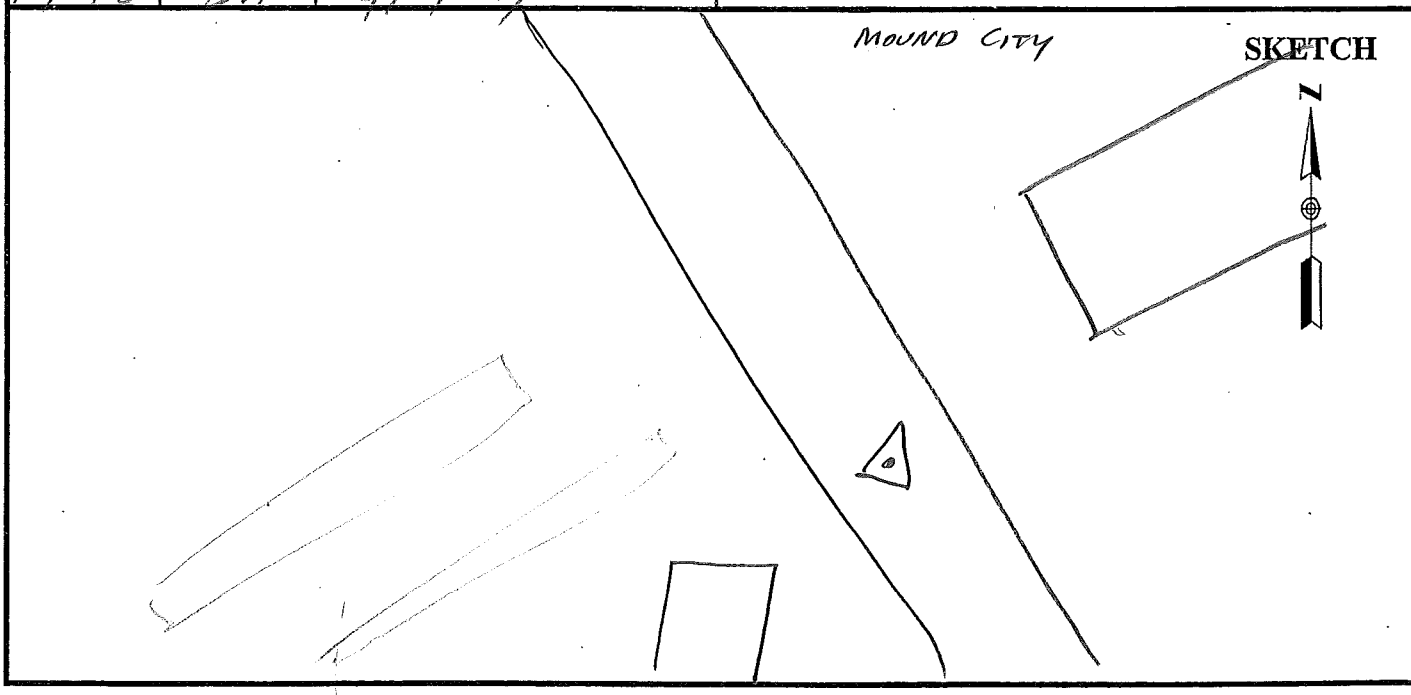
STATION DESCRIPTIONS @ STREET
OPP SE EDGE BLDG
NE

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
19 28	2.0	9/9-9
19 48	2.1	9/9-9

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH



MO R

AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

1

PROJECT 1120103
OPERATOR WJN
DATE 1/29/12

SITE NUMBER 5
SITE NAME 1102

TRACKING TIMES (LOCAL) MEASURE CST
START 14:03
STOP 14:24

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 14
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
500 (0.360)

OBSTRUCTIONS: No

HEIGHT READINGS MTS FT
1.295

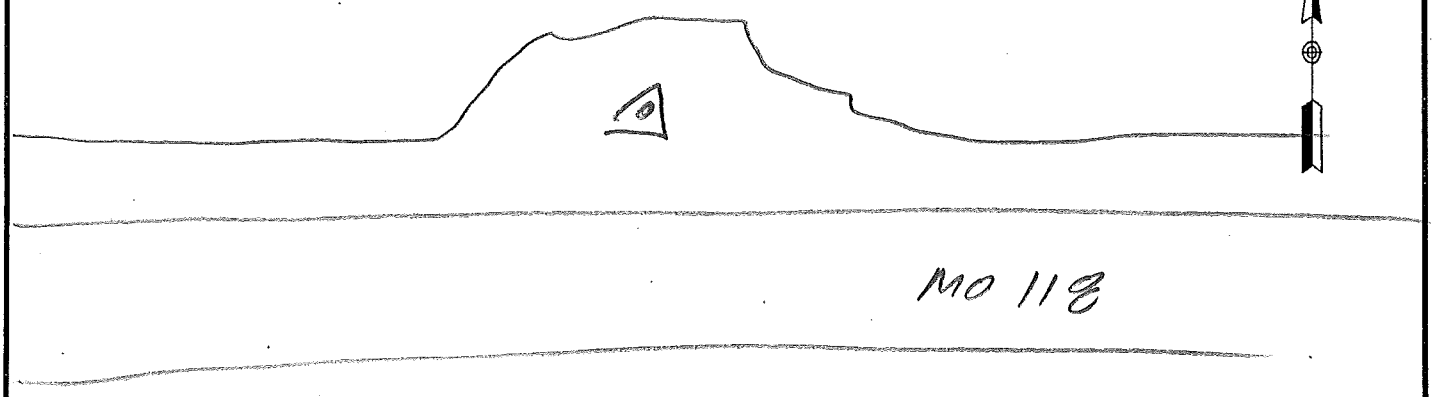
STATION DESCRIPTIONS POINT
IN SHORT GRASS

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
20:03	2.3	8/8-8
20:24	2.4	8/8-8

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
WINDY (EXTREMELY)

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

MD R

4

PROJECT 1120103
OPERATOR MLNT
DATE

SITE NUMBER 6
SITE NAME 1401

TRACKING TIMES (LOCAL) MEASURE CST
START 14:35
STOP 14:56

SENSOR TYPE (500) 9500 399 299
MEMORY CARD
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
500 0.360

OBSTRUCTIONS: TREES !!

HEIGHT READINGS MTS FT
1.260

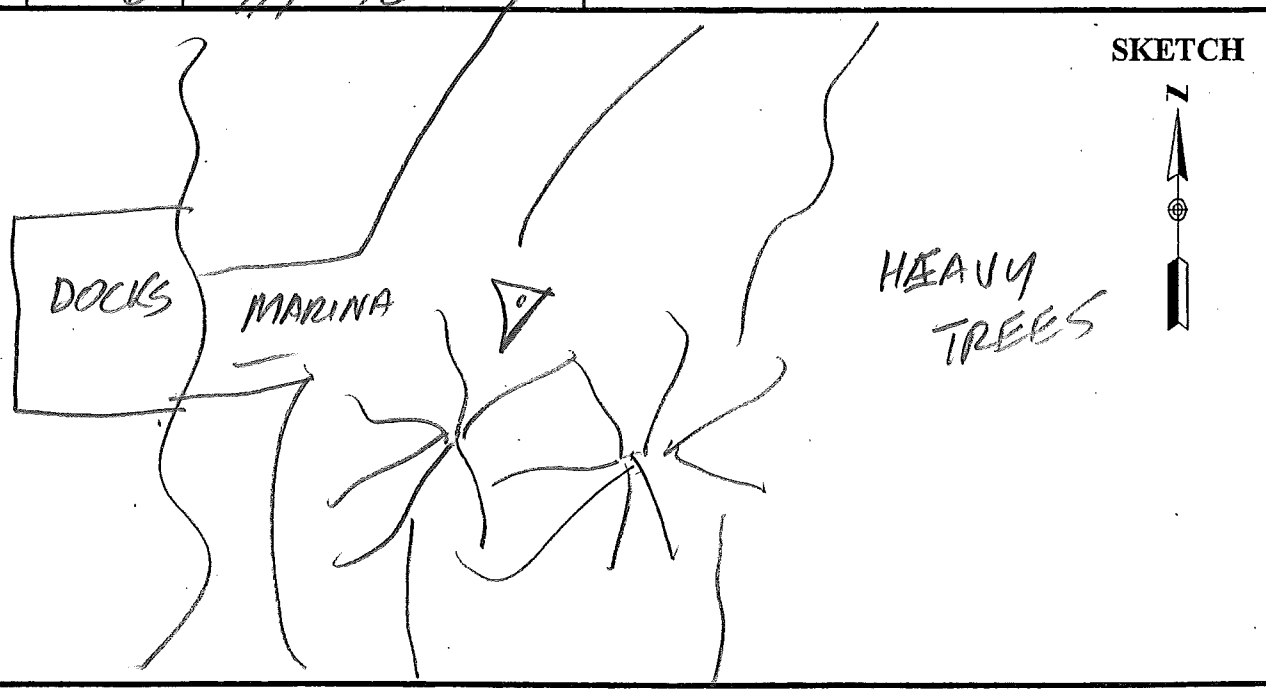
STATION DESCRIPTIONS POINT IN TREES JUST EAST OF MARINA

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
2035	2.8	9/9-10
2056	2.6	9/9-10

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
WINDY

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

MO R.

PROJECT 1120103
OPERATOR WJN
DATE 1/28/12

SITE NUMBER 7
SITE NAME 1202

TRACKING TIMES (LOCAL) MEASURE CST
START 15:09
STOP 15:26

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 1, 4
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
500 (0.360)

OBSTRUCTIONS: NO

HEIGHT READINGS MTS FT
1.210

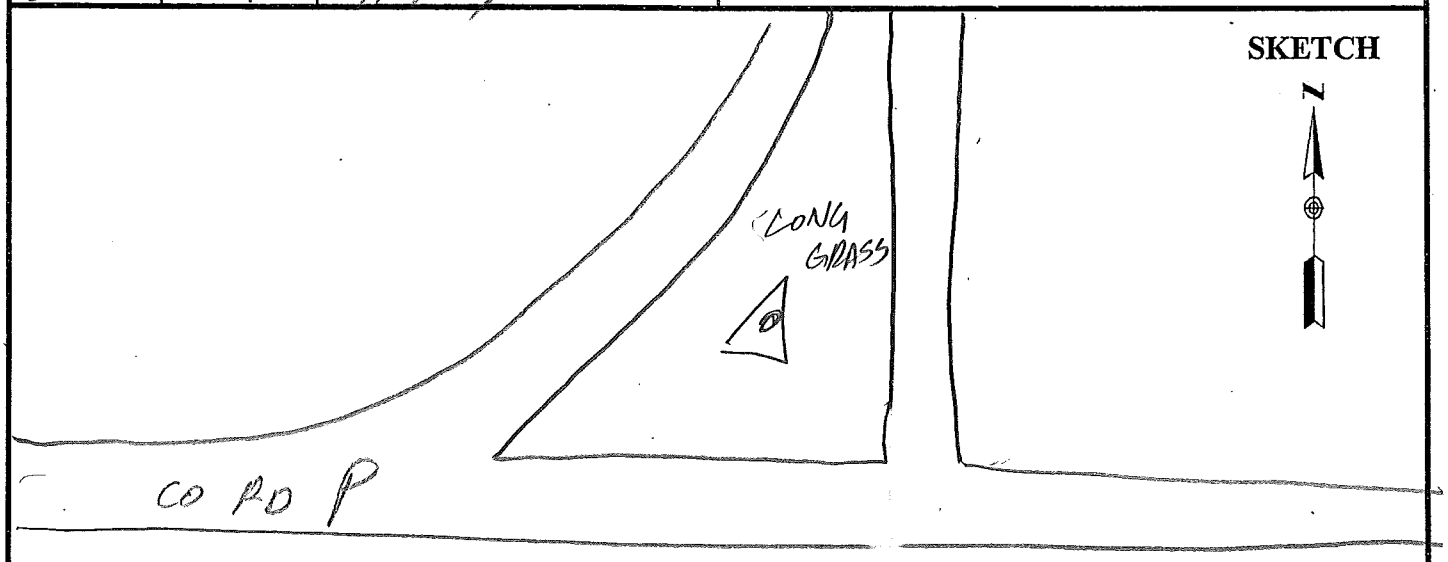
STATION DESCRIPTIONS POINT IN LONG GRASS IN INT ISLAND

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
21:09	1.9	9/9-9
21:26	1.9	9/9-9

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH



MD R

AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

4

PROJECT 1120103
OPERATOR MWN
DATE 1/28/12

SITE NUMBER 8
SITE NAME 1402

TRACKING TIMES (LOCAL) MEASURE CST
START 15:42
STOP 15:57

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 14
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
500 (0.360)

OBSTRUCTIONS: TREES / /
TERRAIN

HEIGHT READINGS MTS FT
1.332

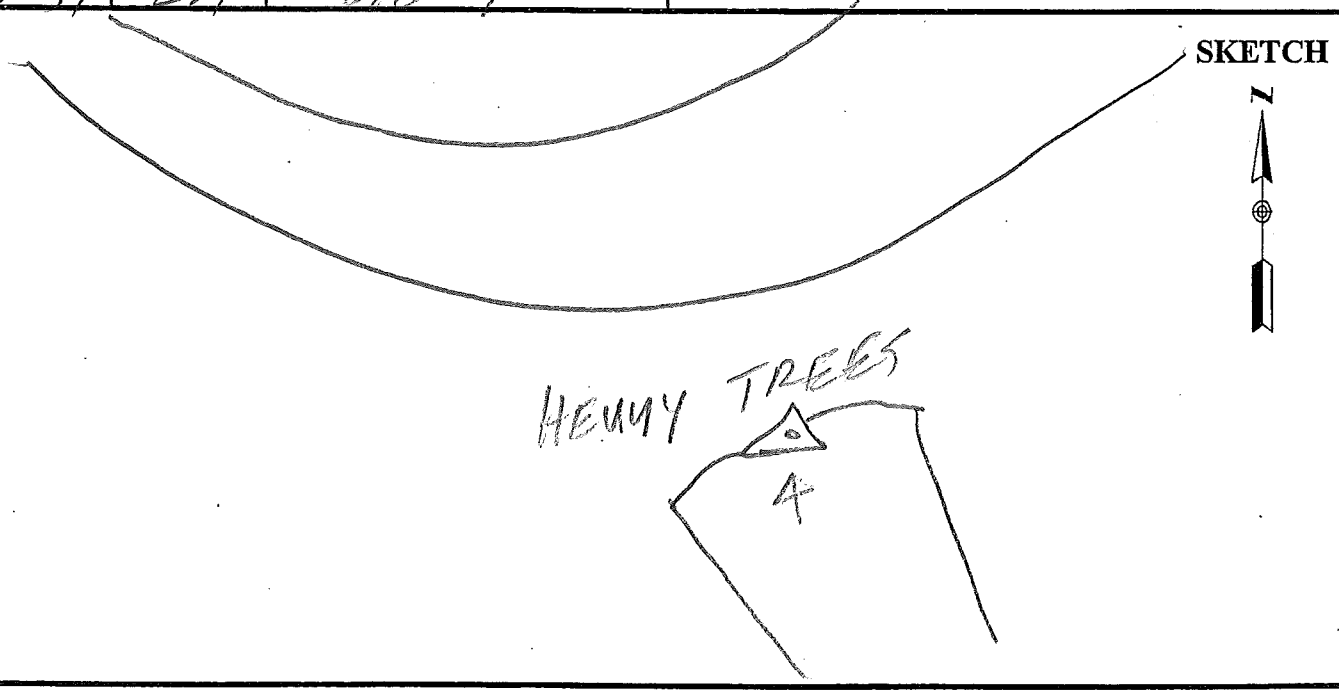
STATION DESCRIPTIONS POINT @
START OF TRAIL HEAD
IN HEAVY TREES

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
21 42	3.3	7/7-9
21 57	2.9	8/8-9

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
SKC

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

MO R. BASE

PROJECT 1120103
OPERATOR WVN
DATE 1/29/12

SITE NUMBER 1
SITE NAME 1008

TRACKING TIMES (LOCAL) MEASURE CST
START 10:00
STOP

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 11
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
500 (0.360)

OBSTRUCTIONS: NO

HEIGHT READINGS MTS FT
1.228

STATION DESCRIPTIONS REBAR AND CAP

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
16:00	2.8	8/7-9

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
OVC

AS BEFORE DESCRIBED

SKETCH

MO R.

AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

HORIZ – VERT CONT – BASE

PROJECT 120103
OPERATOR WJN
DATE 1/29/12

SITE NUMBER 1
SITE NAME P 206

TRACKING TIMES (LOCAL) MEASURE CST
START 10:37
STOP

SENSOR TYPE 500 (9500) 399 299
MEMORY CARD 67
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 (0.389)
500 0.360

OBSTRUCTIONS: TREES ALL QUADRANTS

HEIGHT READINGS MTS FT
1.185
1.574

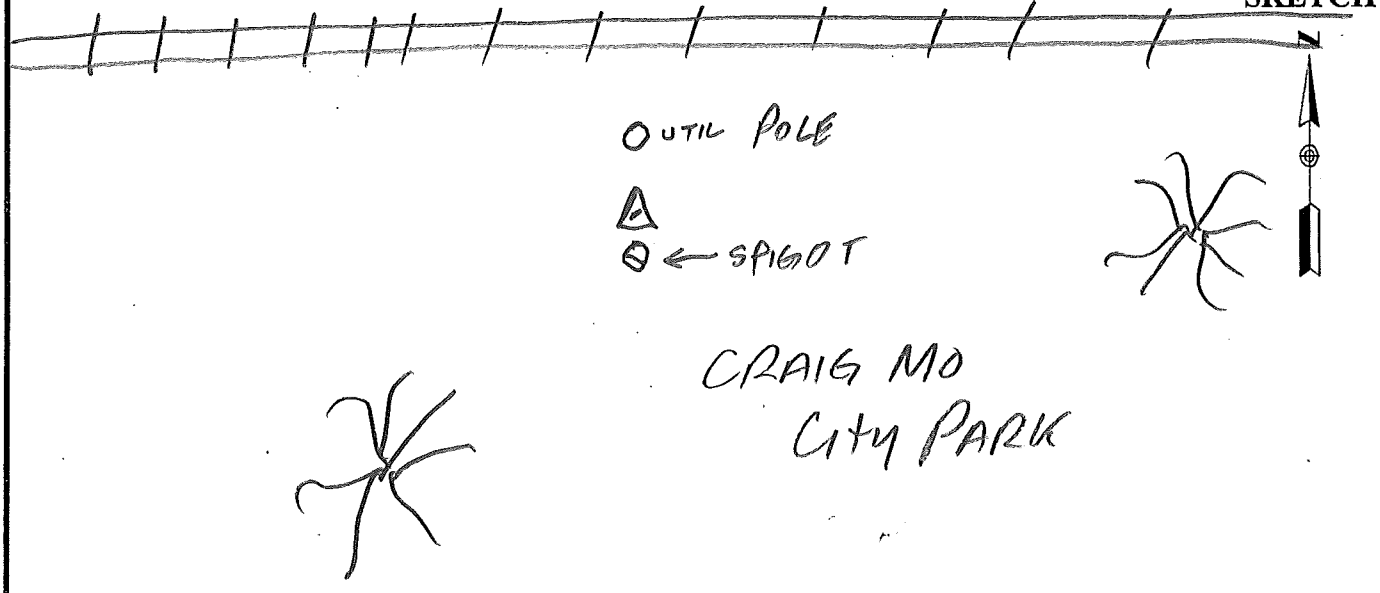
STATION DESCRIPTIONS Fd BRASS DISK IN CONC MON MKd " P 206 1948 " USCGS AS DESCRIBED BY NGS

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
16:37	2.5	9/8-9

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
OVC

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

DNE

PROJECT 1120108
OPERATOR WJN
DATE 1/29/12

SITE NUMBER 1
SITE NAME 1622

TRACKING TIMES (LOCAL) MEASURE CST
START 10:44
STOP 11:00

SENSOR TYPE 500 9500 399 299
MEMORY CARD
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
500 0.360

OBSTRUCTIONS: TREES, BLDGS E-W-S

HEIGHT READINGS MTS FT
1.308

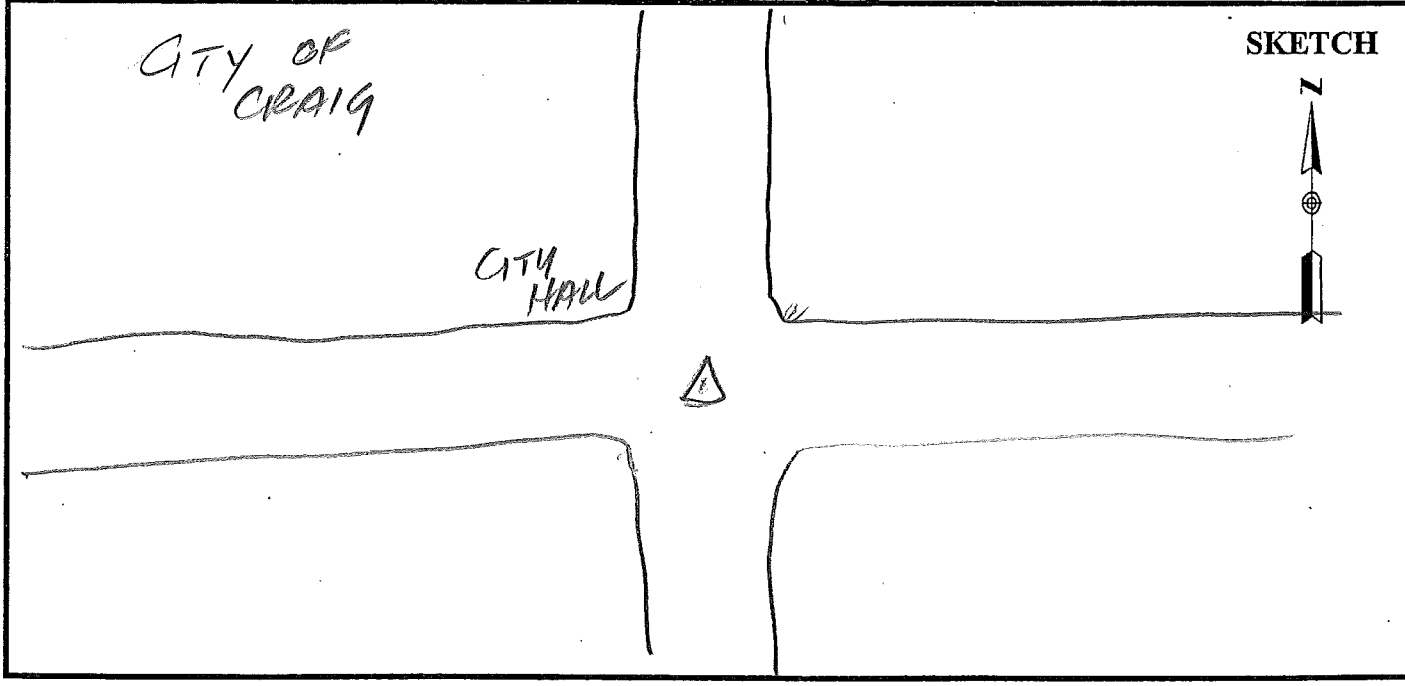
STATION DESCRIPTIONS ℄ ℄ INT

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1644	2.9	8/7-9
1700	2.5	8/8-9

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
OVC

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

4

PROJECT 120103
OPERATOR WJN
DATE 1/29/12

SITE NUMBER 2
SITE NAME 1403

TRACKING TIMES (LOCAL) MEASURE CST
START 11:09
STOP 11:29

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 14
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
500 (0.360)

HEIGHT READINGS MTS FT
1.250

OBSTRUCTIONS: TREES ALL QUADRANTS

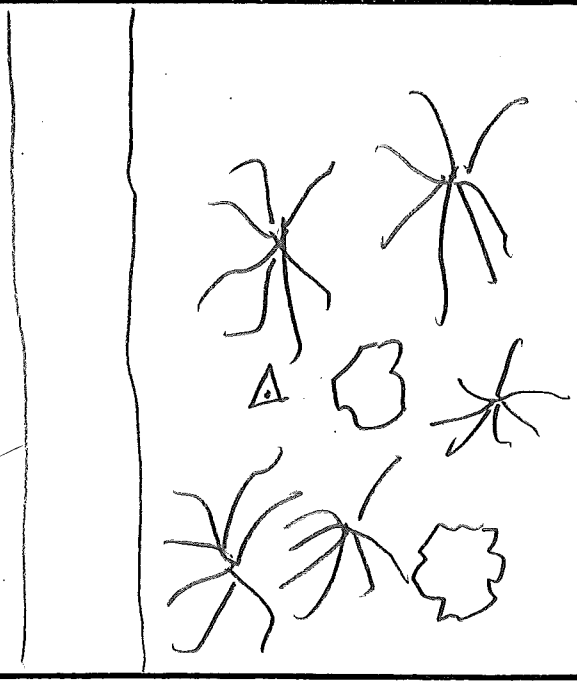
STATION DESCRIPTIONS POINT IN FORESTED PARK

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
17:09	3.2	7/7-7
17:-	5.1	6/6-6

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
OVC

SKETCH



40 15 50
95 29 22

40 16 52

AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

MOR

PROJECT 1120103
OPERATOR WJN
DATE 1/29/12

SITE NUMBER 3
SITE NAME 1103

TRACKING TIMES (LOCAL) MEASURE CST
START 11:40
STOP 11:57

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 14
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
500 (0.360)

HEIGHT READINGS MTS FT
1.225

OBSTRUCTIONS:

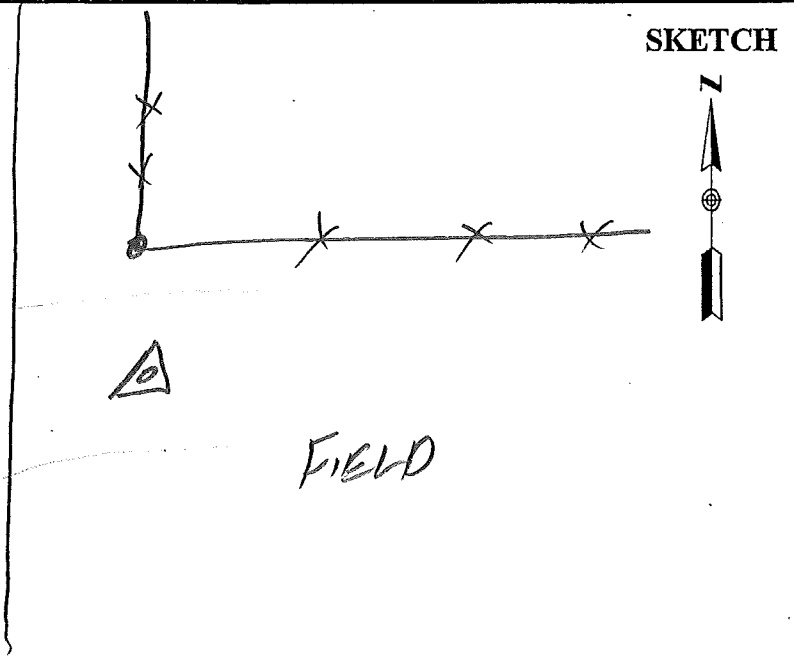
STATION DESCRIPTIONS POINT IN BARE EARTH / SPARSE GRASS & GRASS FIELD ENT OPP FENCE NORTH

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
11:40	4.9	6/6-6
11:57	2.8	7/7-8

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

MOR

2

PROJECT 1120103
OPERATOR WJN
DATE 11/29/12

SITE NUMBER 4
SITE NAME 1203

TRACKING TIMES (LOCAL) MEASURE CST
START 12:05
STOP 12:25

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 14
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
500 (0.360)

OBSTRUCTIONS: TREES (W

HEIGHT READINGS MTS FT
1.245

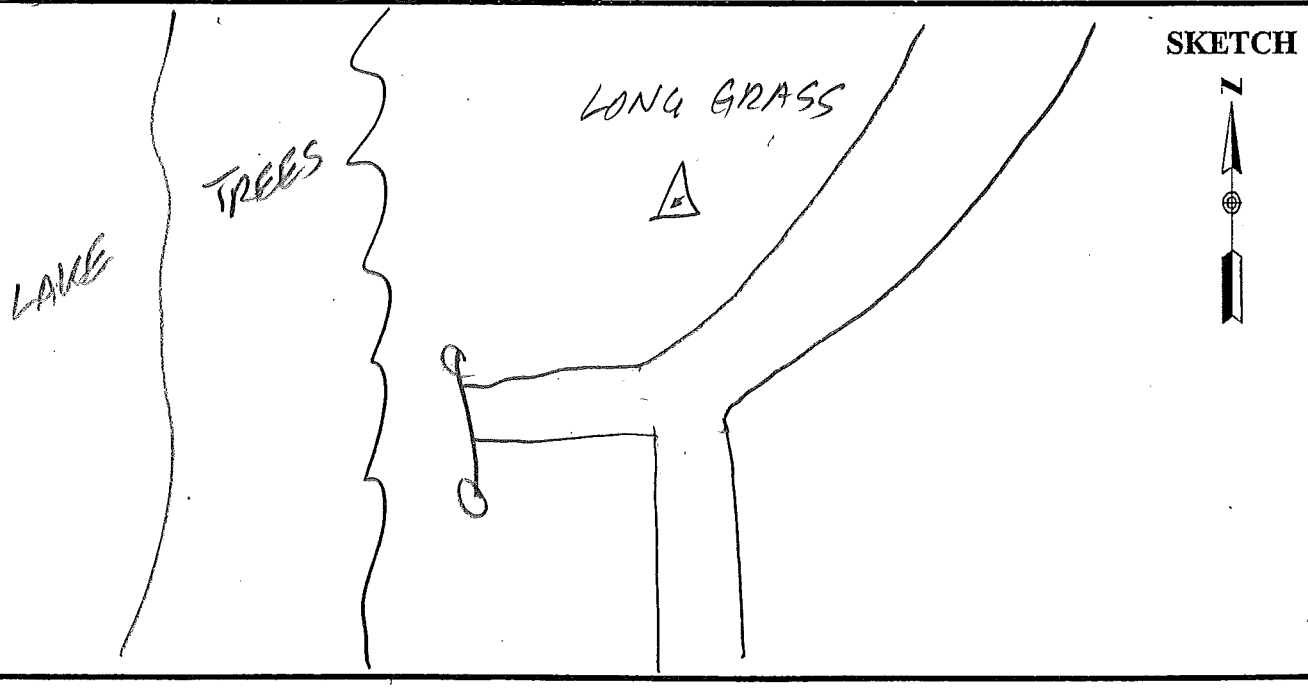
STATION DESCRIPTIONS POINT IN THICK MARSH GRASS

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
12:05	2.4	8/8-8
12:25	2.2	8/8-8

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

1

PROJECT 1120103
OPERATOR WNN
DATE 1/29/12

SITE NUMBER 5
SITE NAME 1104

TRACKING TIMES (LOCAL) MEASURE CST
START 12:37
STOP 13 00

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 14
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
500 (0.360)

OBSTRUCTIONS: TREES NE

HEIGHT READINGS MTS FT
1.245

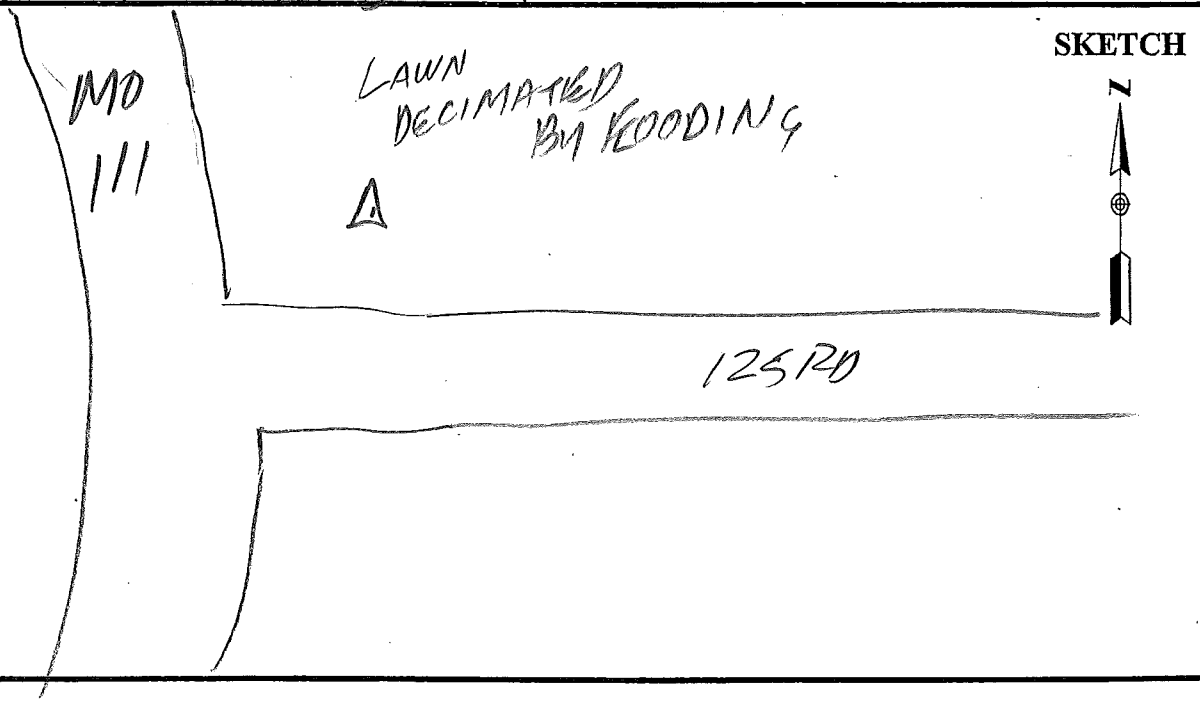
STATION DESCRIPTIONS POINT IN DEAD SHORT GRASS/ BARE EARTH AREA

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1837	2.0	8/8-8
1900	2.1	8/8-8

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
OVC

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

MO R. 5

PROJECT 1120103
OPERATOR WJN
DATE 1/29/12

SITE NUMBER 6
SITE NAME 1502

TRACKING TIMES (LOCAL) MEASURE CST
START 13:07
STOP 13:29

SENSOR TYPE (500) 9500 399 299
MEMORY CARD
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
500 (0.360)

OBSTRUCTIONS: BLDGS, TREES, POWER POLES, URBAN STUFF ALL QUADS

HEIGHT READINGS MTS FT
1.304

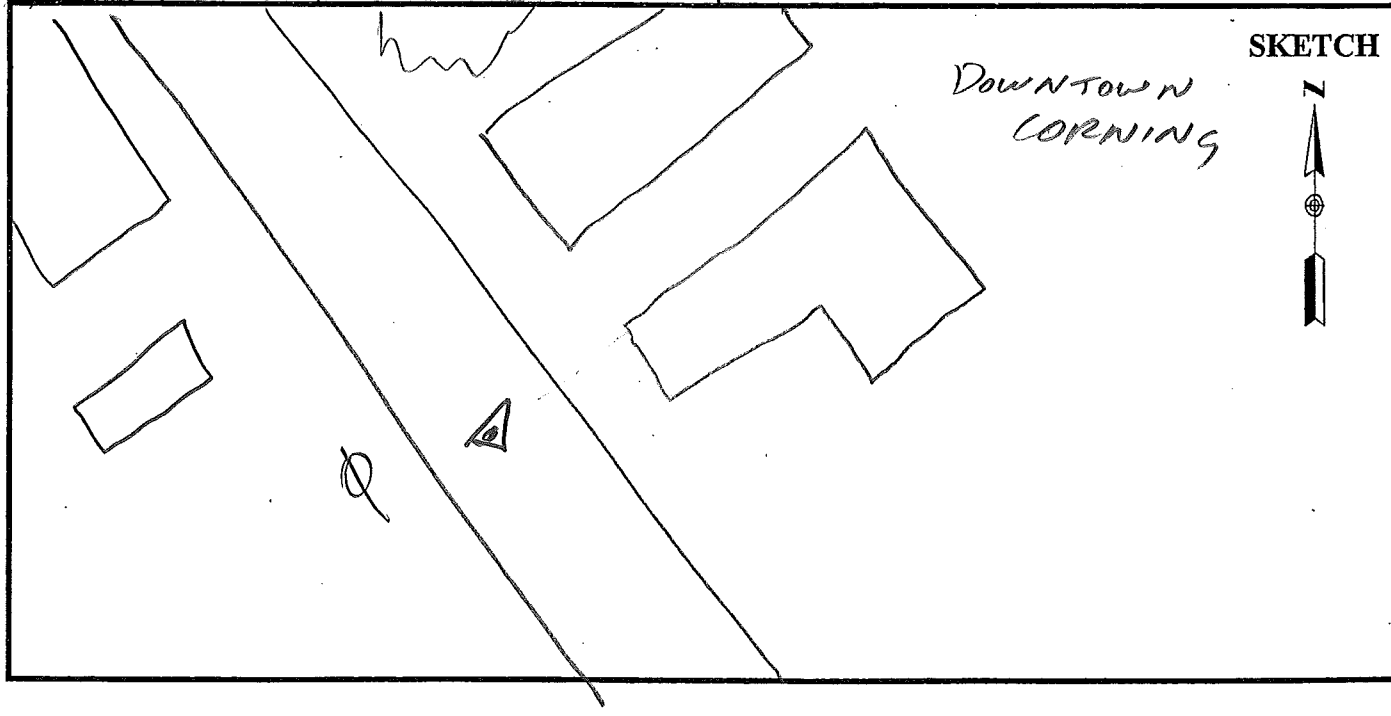
STATION DESCRIPTIONS ℄ STREET OPP NW EDGE L SHAPED BLDG NF

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
19:07	2.0	8/8-8
19:29	2.3	8/8-8

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

2

PROJECT 120103
OPERATOR WJN
DATE 1/29/12

SITE NUMBER 7
SITE NAME 1204

TRACKING TIMES (LOCAL) MEASURE CST
START 13 43
STOP 14:04

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 14
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
500 (0.360)

OBSTRUCTIONS: NO

HEIGHT READINGS MTS FT
1.284

STATION DESCRIPTIONS POINT IN WEEDS, LONG GRASS

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
19 43	2.1	9/9-9
20 04	2.0	9/9-9

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
CLEARING TO MC

SKETCH

AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

MO R. 4

PROJECT 1120103
OPERATOR WJN
DATE 1/29/12

SITE NUMBER 8
SITE NAME 1404

TRACKING TIMES (LOCAL) MEASURE CST
START 14:15
STOP 14:37

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 14
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
500 (0.360)

OBSTRUCTIONS: TREES ++

HEIGHT READINGS MTS FT
1.271

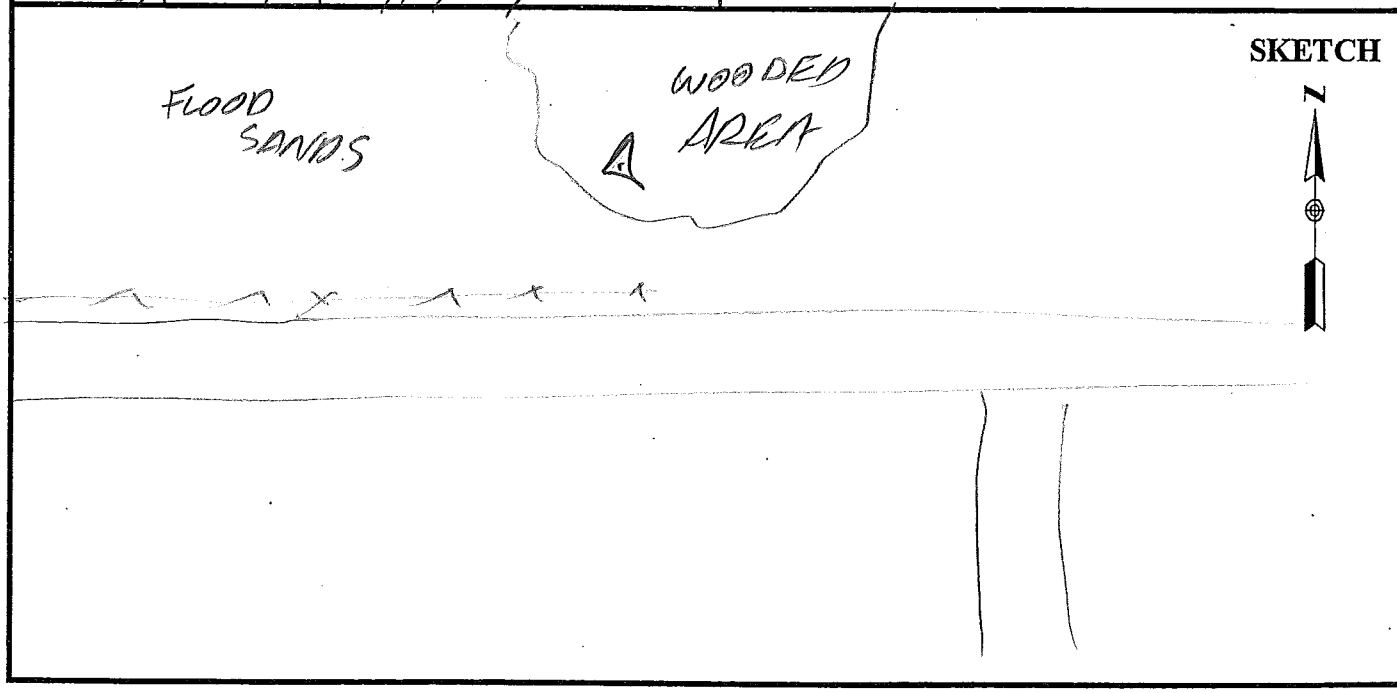
STATION DESCRIPTIONS POINT IN WOODS

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
20 15	2.5	9/8-9
20:37	2.4	9/9-9

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
MC

SKETCH



MO R

AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

H+V cont
BASE

PROJECT 1120103
OPERATOR WVN
DATE 11/29/12

SITE NUMBER 2
SITE NAME 971

TRACKING TIMES (LOCAL) MEASURE CST
START 13:50
STOP

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 14
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
500 0.360

OBSTRUCTIONS: SIGN NE

HEIGHT READINGS MTS FT
0.971
1.460

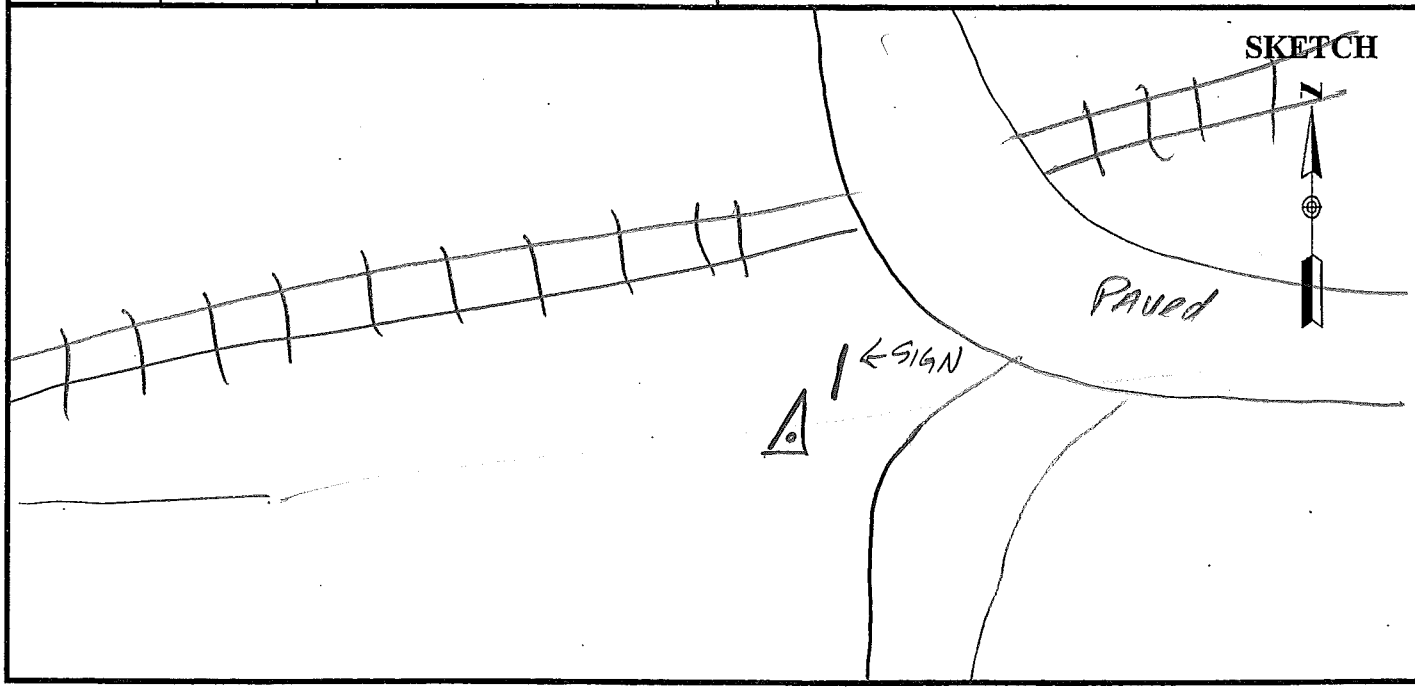
STATION DESCRIPTIONS FD METAL PIPE IN CONC COLLAR W/ ZINC CAP MKD 971 USGS Fd, AS described by NGS

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
19:50	1.5	10/10-10

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
OVC

SKETCH



MO R

AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

4

PROJECT 1120103
OPERATOR WJN
DATE 1/29/12

SITE NUMBER 9
SITE NAME 1405

TRACKING TIMES (LOCAL) MEASURE CST
START 16:04
STOP 16:22

SENSOR TYPE (500) 9500 399 299
MEMORY CARD
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
500 (0.360)

OBSTRUCTIONS: TREES !

HEIGHT READINGS MTS FT
1.285

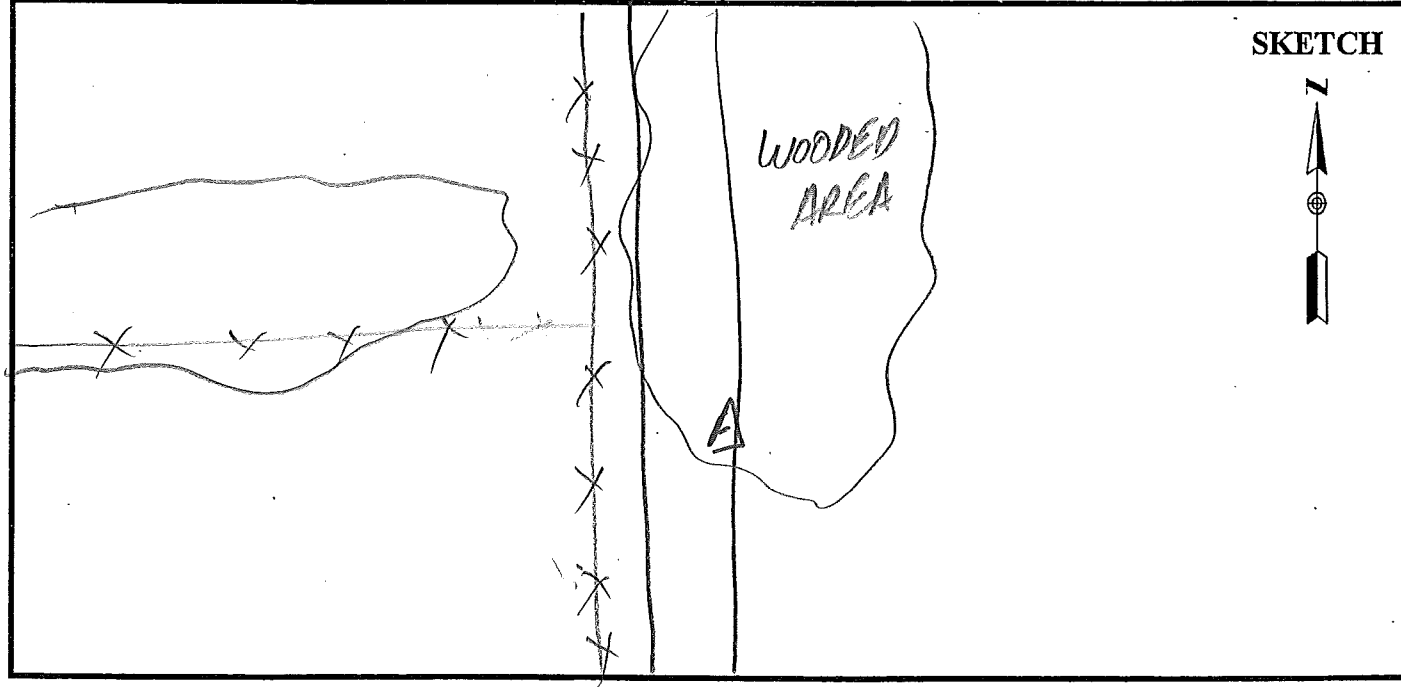
STATION DESCRIPTIONS POINT IN WOODED AREA

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
22:04	2.0	8/5 -10
22:22	2.3	8/8 -10

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
OVC

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

MO R 5

PROJECT 1170103
OPERATOR WJN
DATE 1/29/12

SITE NUMBER 10
SITE NAME 1503

TRACKING TIMES (LOCAL) MEASURE CST
START 16:33
STOP 16:48

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 14
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
500 (0.360)

HEIGHT READINGS MTS FT
1.286

OBSTRUCTIONS: TREES SW, PRL SE

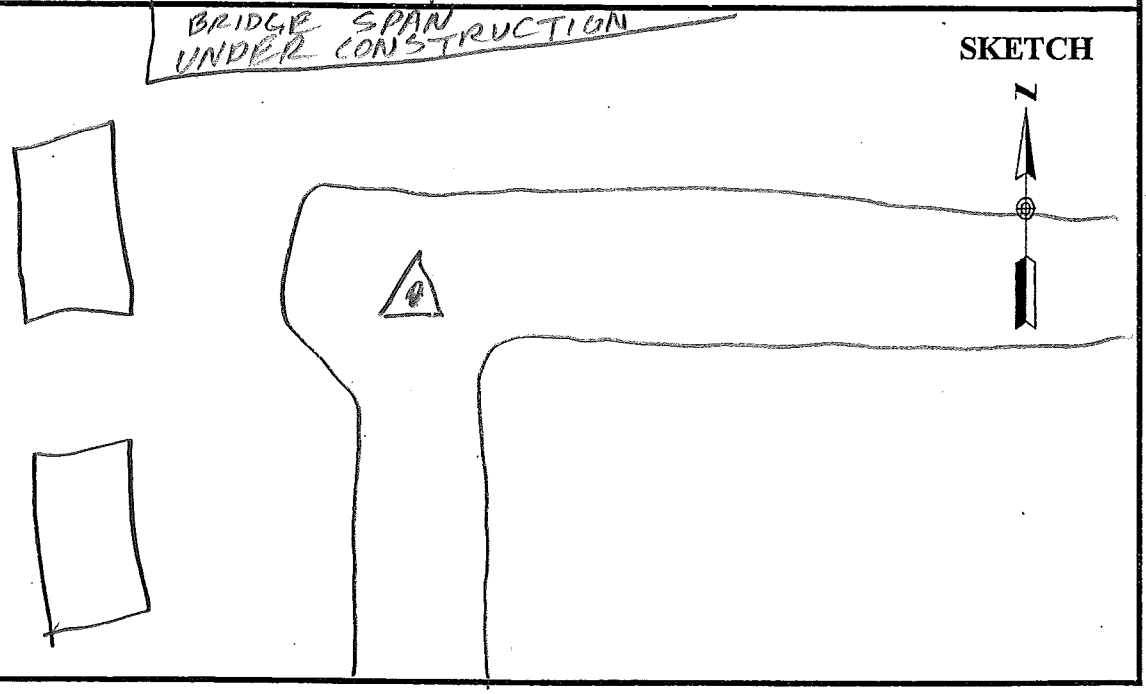
STATION DESCRIPTIONS C C INT

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
2233	2.0	9/9-9
2248		

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

H+V cont
BASE

BROWN Co

PROJECT 1120103
OPERATOR WJN
DATE 1/30/12

SITE NUMBER 1
SITE NAME 917

TRACKING TIMES (LOCAL) MEASURE CST
START 8:31
STOP 17:00

SENSOR TYPE 500 (9500) 399 299
MEMORY CARD 6
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 (0.389)
500 0.360

OBSTRUCTIONS: SIGN NE

HEIGHT READINGS MTS FT
0.896

STATION DESCRIPTIONS IRON PIPE IN CONC Ed 1/29/12 AND AS DESCRIBED BY NGS

1.285

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
14:31	3.0	8/8-8
2300	1.9	9/9-9

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
WINDY

AS BEFORE DESCRIBED

SKETCH

AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

BROWN CO — BASE

PROJECT 112010I
OPERATOR WNN
DATE 11/30/12

SITE NUMBER 1
SITE NAME 1009

TRACKING TIMES (LOCAL) MEASURE CST
START 9:45
STOP 16:29

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 11
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
500 (0.360)

OBSTRUCTIONS: NO

HEIGHT READINGS MTS FT
1.135
1.495

STATION DESCRIPTIONS 30+ Rebar ANA CAP, OPP S OF RD to AIRPORT HANGAR N., ± 22' E OF TEL PEDESTAL, S. R/W

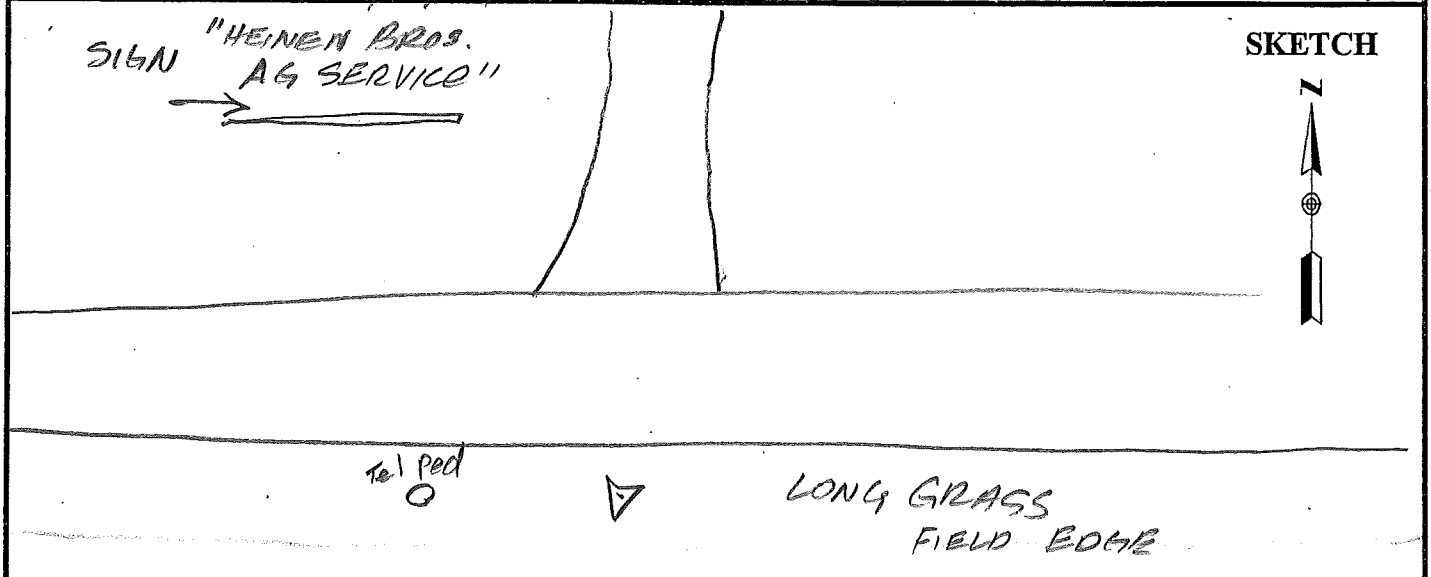
SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
15:45	2.0	9/9-9
22:29	2.1	9/9-9

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
WINDY

APPROX 44 52 13.5 LAT
88 31 09.9 LONG

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

1

PROJECT 1120103
OPERATOR MVN
DATE 1/30/12

SITE NUMBER 1
SITE NAME 1105

TRACKING TIMES (LOCAL) MEASURE CST
START 9:57
STOP 10:17

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 14
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
500 (0.360)

OBSTRUCTIONS: NO

HEIGHT READINGS MTS FT
1.227

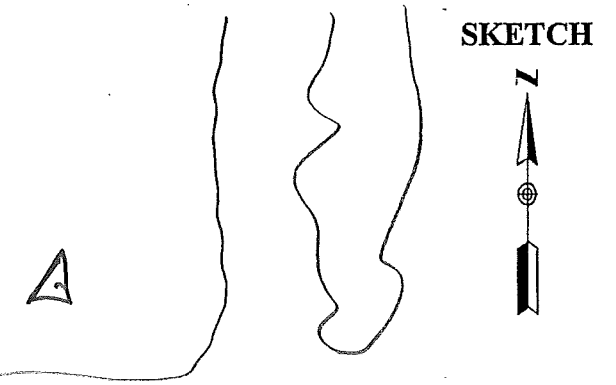
STATION DESCRIPTIONS POINT IN SHORT GRASS

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
15:57	2.8	8/8-8
16:17	2.4	8/8-8

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
CLOUDY

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

BROWN Co. 2

PROJECT 1120103
OPERATOR WJN
DATE 1/30/12

SITE NUMBER 2
SITE NAME 1205

TRACKING TIMES (LOCAL) MEASURE CST
START 10:27
STOP 10:47

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 14
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
500 (0.360)

OBSTRUCTIONS: NO

HEIGHT READINGS MTS FT
1.255

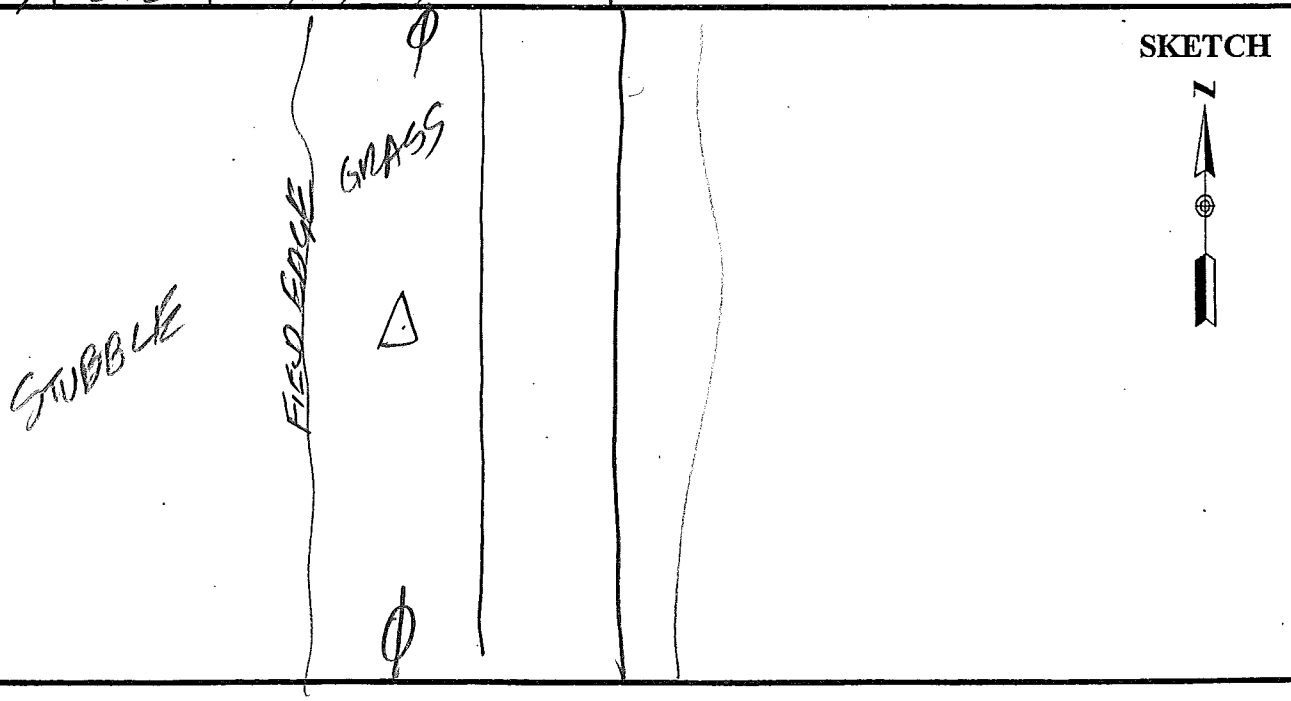
STATION DESCRIPTIONS POINT IN LONG GRASS, WEEDS IN W. R/W OF N-S RD.

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
16:27	2.8	9/8-9
16:47	2.2	9/9-9

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
WINDY

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

BROWN Co 4

PROJECT 1120103
OPERATOR WJN
DATE 1/30/12

SITE NUMBER 3
SITE NAME 1406

TRACKING TIMES (LOCAL) MEASURE CST
START 10:59
STOP 11:20

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 14
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
500 (0.360)

OBSTRUCTIONS: TREES

HEIGHT READINGS MTS FT
1.183

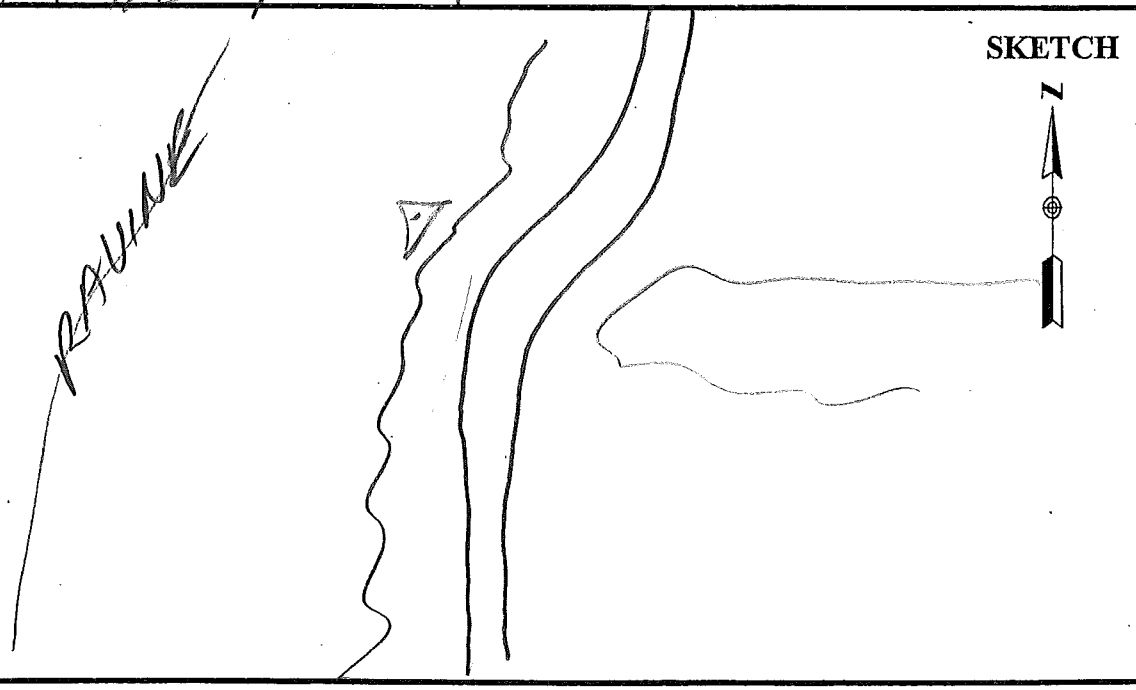
STATION DESCRIPTIONS POINT IN FOREST AREA W. OF ROAD

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
10:59	2.1	9/8-9
17:20	2.4	9/8-9

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
WINDY

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

BROWN Co. 1

PROJECT 1120103
OPERATOR WJN
DATE 1/30/12

SITE NUMBER 4
SITE NAME 1106

TRACKING TIMES (LOCAL) MEASURE CST
START 11:34
STOP 11:57

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 14
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
500 (0.360)

OBSTRUCTIONS: NO

HEIGHT READINGS MTS FT
1.269

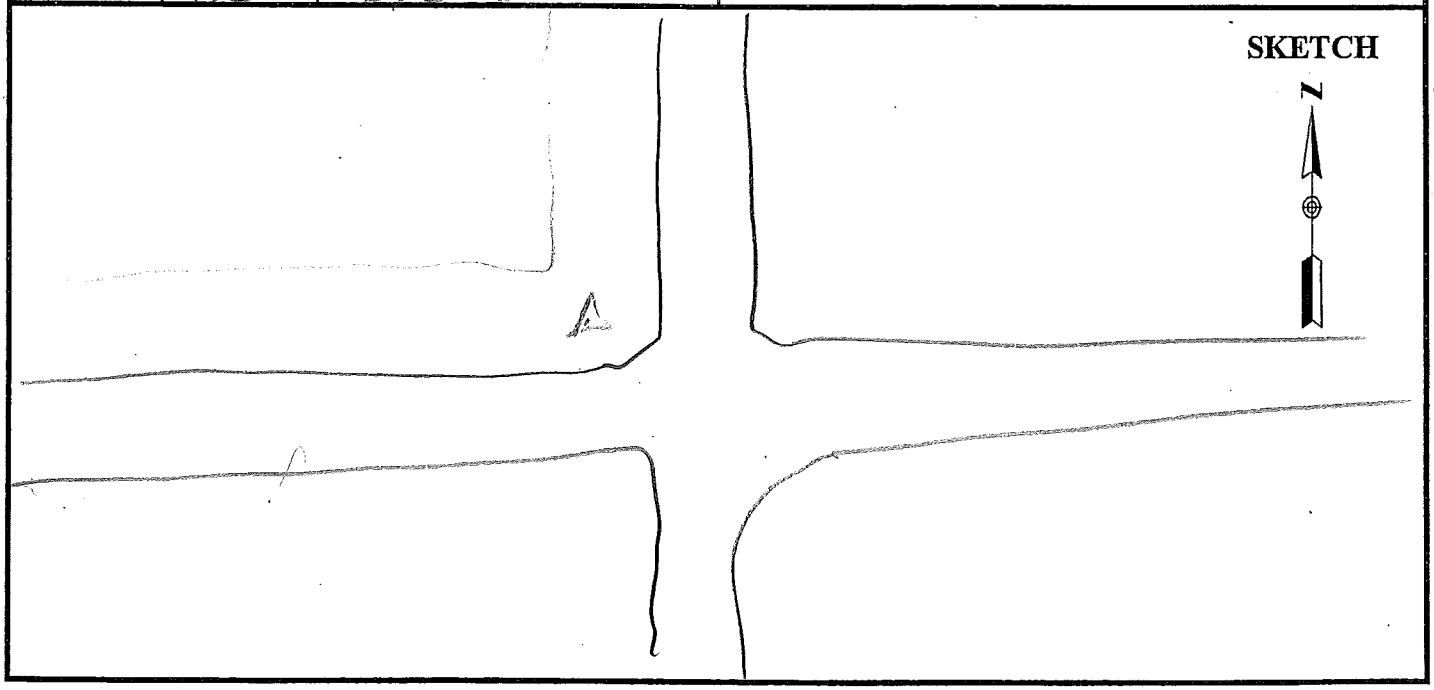
STATION DESCRIPTIONS POINT IN SHORT GRASS NE OF INT.

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
17:34	5.0	6/6-6
1757	4.0	6/6-6

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
WINDY
POOP PDOP

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

BROWN CO. 5

PROJECT 1120103
OPERATOR WHN
DATE 1/30/12

SITE NUMBER 5
SITE NAME 1504

TRACKING TIMES (LOCAL) MEASURE CST
START 12:10
STOP 12:33

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 14
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
500 (0.360)

HEIGHT READINGS MTS FT
1.307

OBSTRUCTIONS: PPLS NE, S

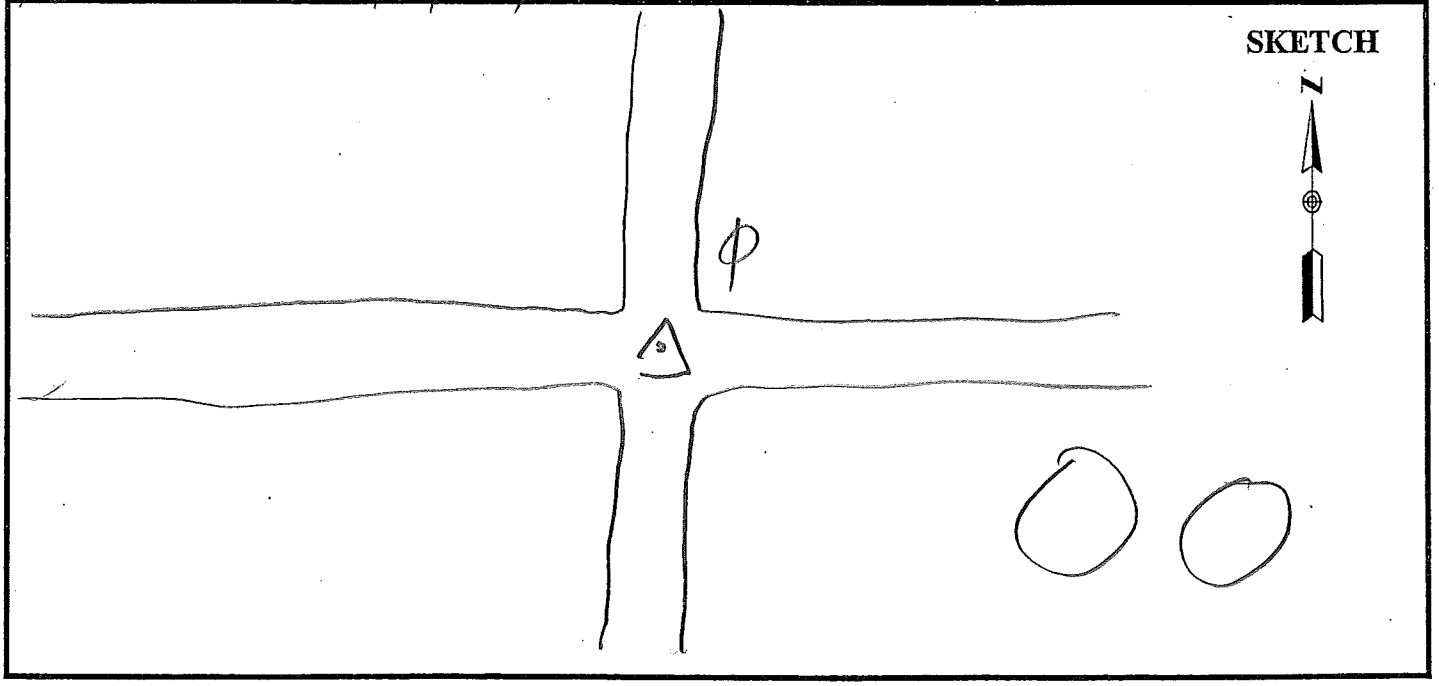
STATION DESCRIPTIONS C & G INT
IN City of HAMLIN KS

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
12:10	2.1	9 9 9
12:33	2.0	9 9 9

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
WINDY

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

BROWN CO. 1

PROJECT 1120103
OPERATOR WJM
DATE 1/30/12

SITE NUMBER 6
SITE NAME 1107

TRACKING TIMES (LOCAL) MEASURE CST
START 12 45
STOP 13:05

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 14
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
500 (0.360)

OBSTRUCTIONS: NO

HEIGHT READINGS MTS FT
1.220

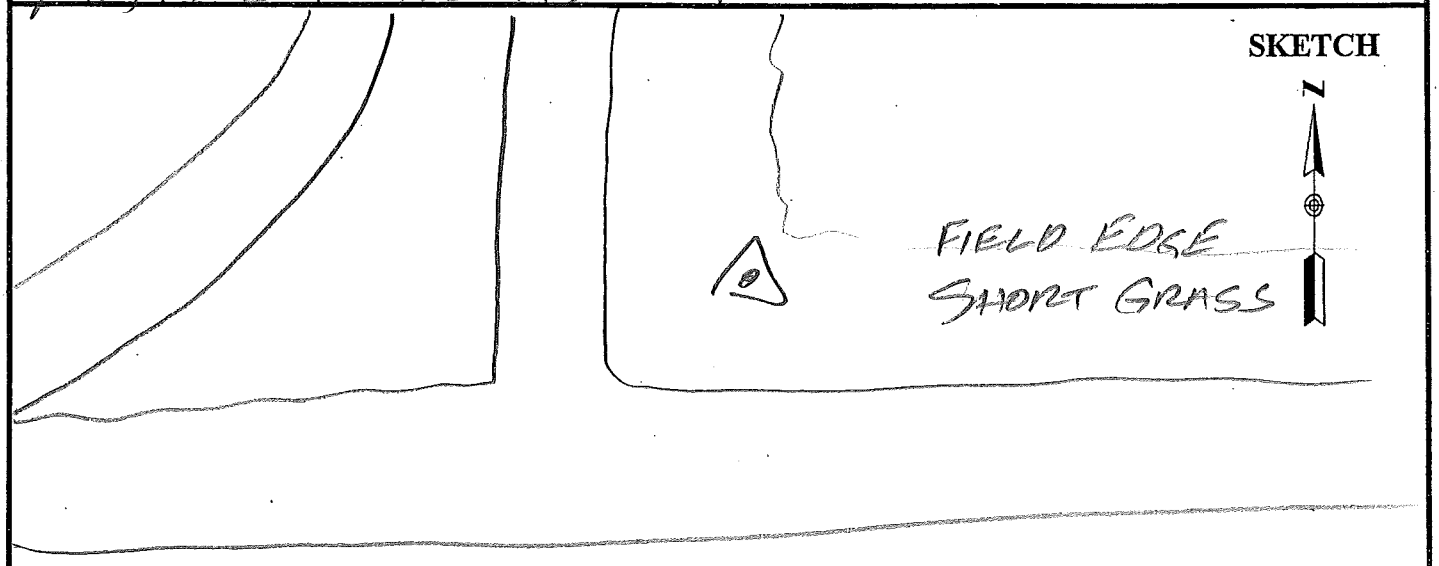
STATION DESCRIPTIONS POINT IN SHORT GRASS @ CORNER OF FIELD

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1845	1.7	10/10-10
19:05	1.8	10/10-10

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
WINDY

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

BROWN Co

PROJECT 1120103
OPERATOR WJN
DATE 1/30/12

SITE NUMBER 1
SITE NAME 1505

TRACKING TIMES (LOCAL) MEASURE CST
START 13:19
STOP 13 36

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 14
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
500 (0.360)

OBSTRUCTIONS: TREES, POLS E, W

HEIGHT READINGS MTS FT
1.275

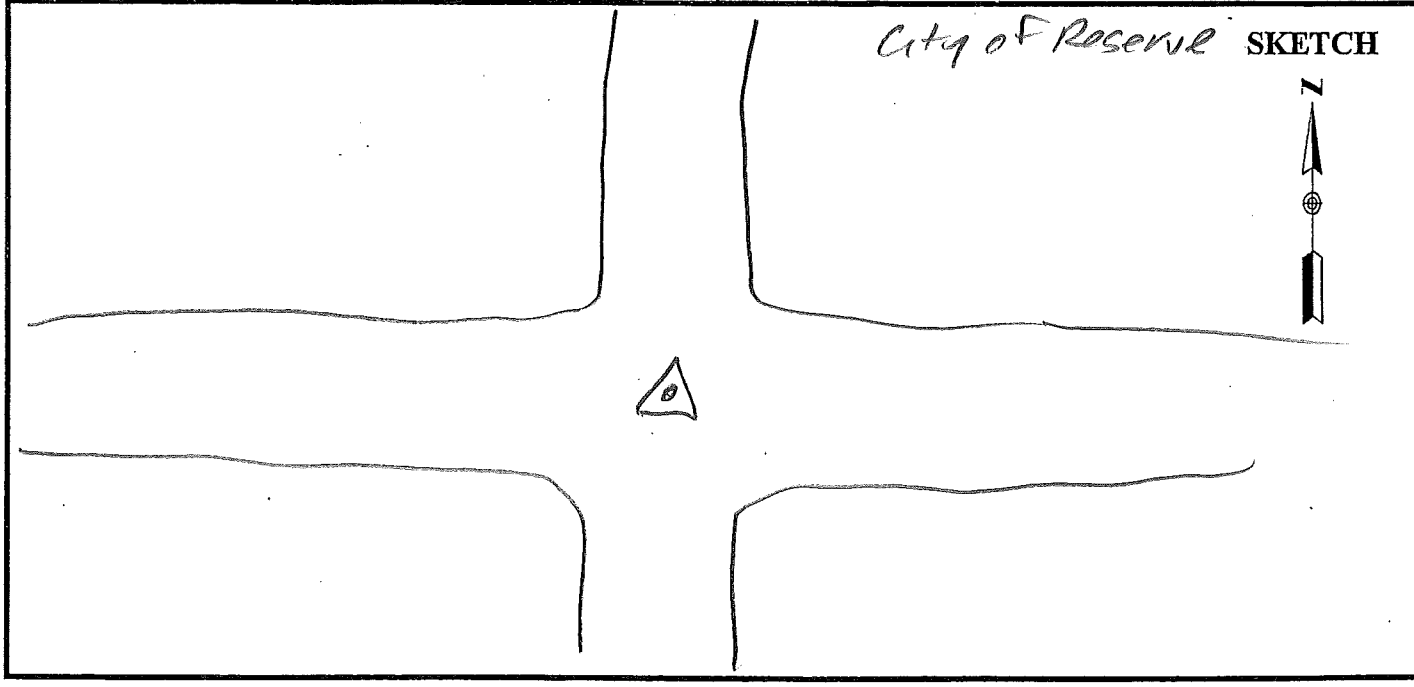
STATION DESCRIPTIONS ℄ ℄ INT STREET

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
19:19	2.1	8/8-8
1936	2.2	8/8-8

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
WINDY

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

BROWN CO

PROJECT 1120103
OPERATOR WJN
DATE 1/30/12

SITE NUMBER 8
SITE NAME 1206

TRACKING TIMES (LOCAL) MEASURE CST
START 13 47
STOP 14 02

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 14
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
500 (0.360)

HEIGHT READINGS MTS FT
1.229

OBSTRUCTIONS:

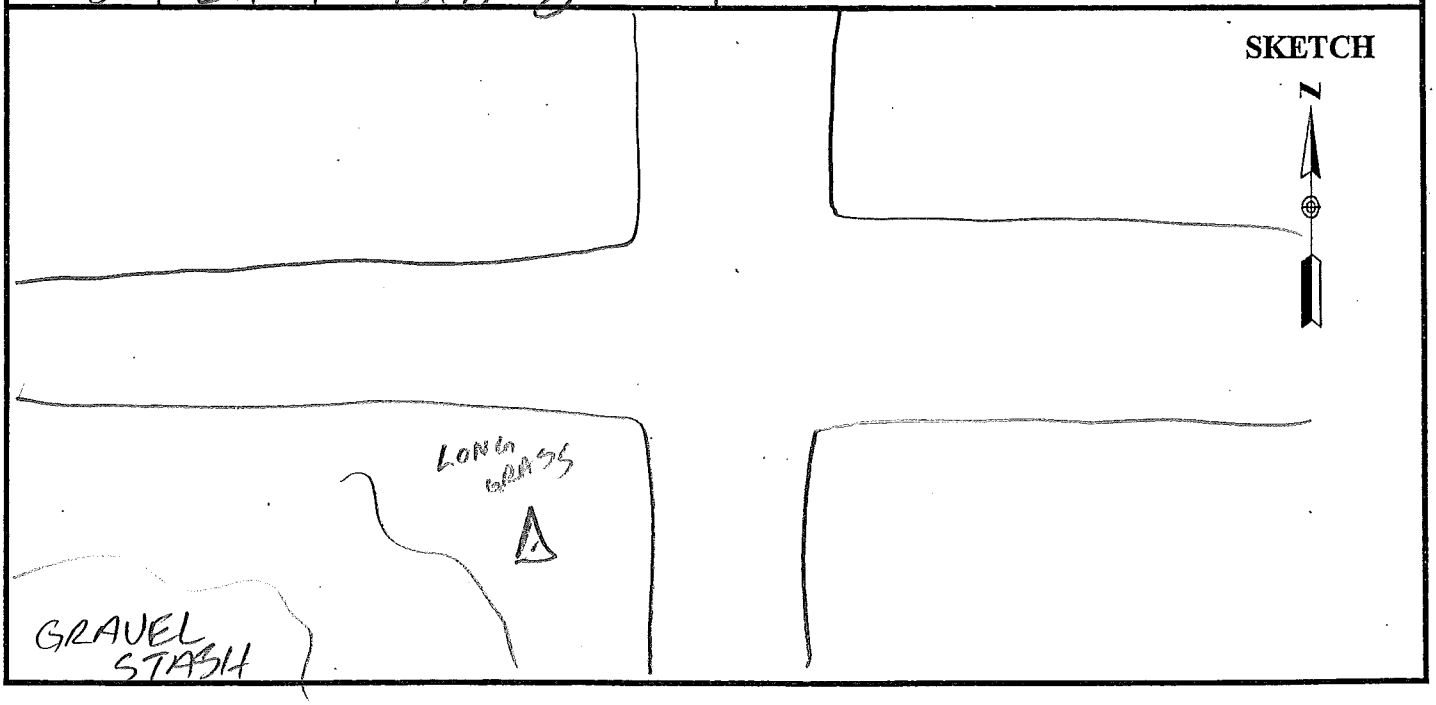
STATION DESCRIPTIONS POINT IN LONG GRASS SW OF INT

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1947	2.2	8 18 -8
2002	2.1	8 18 -8

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
WINDY

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

BROWN CO

AME

PROJECT 1120103
OPERATOR WJN
DATE 1/30/12

SITE NUMBER 9
SITE NAME 1623

TRACKING TIMES (LOCAL) MEASURE CST
START 14 12
STOP 14 29

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 14
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
500 (0.360)

OBSTRUCTIONS: NO

HEIGHT READINGS MTS FT
1.294

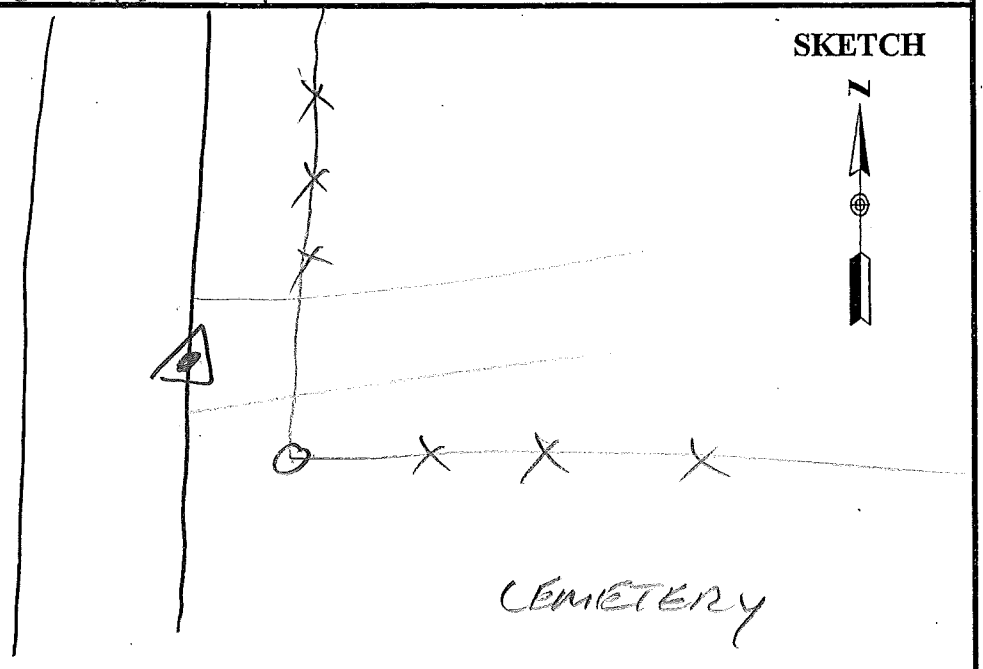
STATION DESCRIPTIONS E EDGE RD @ C FIELD ACCESS E

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
2012	2.4	10/10 - 10
2029	2.3	10/10 - 10

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
WINDY

SKETCH



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4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

Brown Co

PROJECT 120103
OPERATOR WVN
DATE 1/30/12

SITE NUMBER 10
SITE NAME 1207

TRACKING TIMES (LOCAL) MEASURE CST
START 14:44
STOP 15:03

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 14
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
500 (0.360)

OBSTRUCTIONS:

HEIGHT READINGS MTS FT
1.256

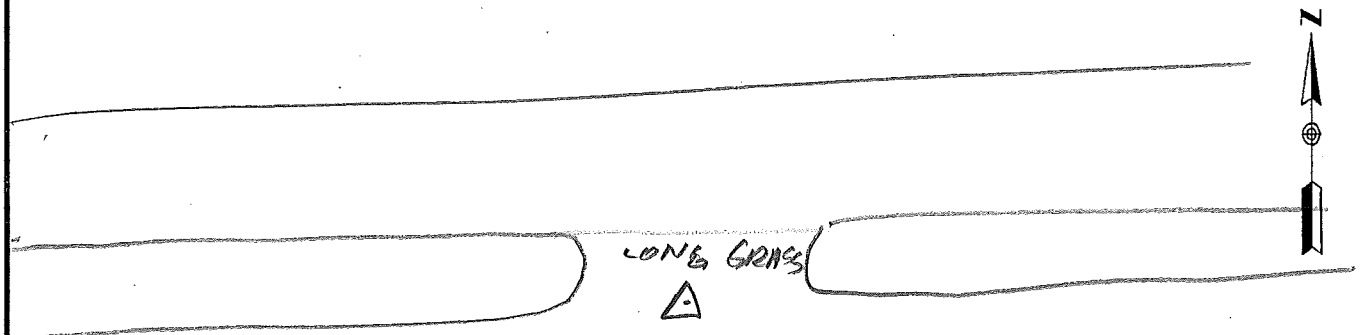
STATION DESCRIPTIONS POINT IN LONG GRASS

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
2044	2.4	10/9-10
2103	2.0	10/10-10

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
WINDY

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

BROWN CO

4

PROJECT 1120103
OPERATOR WJW
DATE 11/30/12

SITE NUMBER 11
SITE NAME 1407

TRACKING TIMES (LOCAL) MEASURE CST

START 15:20
STOP 15:37

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 14
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
500 (0.360)

OBSTRUCTIONS: TREES

HEIGHT READINGS MTS FT
1.200

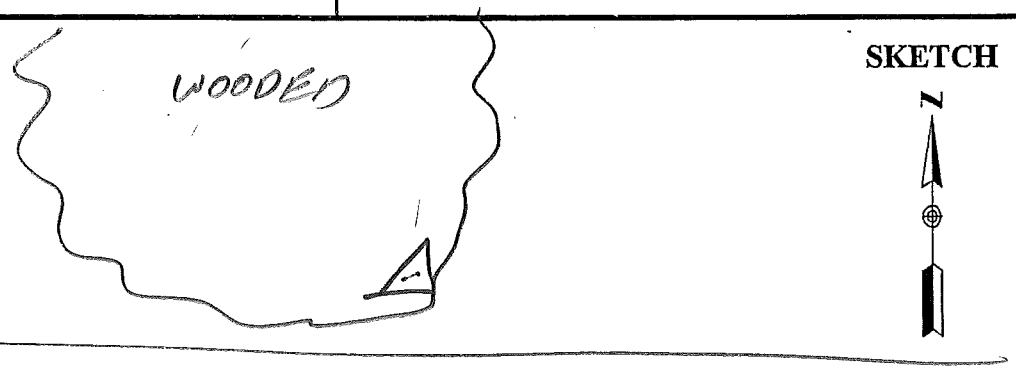
STATION DESCRIPTIONS POINT IN TREES

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
21 20	2.1	7/7-7
21 37		

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
WINDY

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

BROWN CO 4

PROJECT 1120103
OPERATOR WKW
DATE 11/30/12

SITE NUMBER 12
SITE NAME 1408

TRACKING TIMES (LOCAL) MEASURE CST
START 15:51
STOP 16:11

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 14
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
500 (0.360)

OBSTRUCTIONS: TREES

HEIGHT READINGS
MTS 1.199
FT

STATION DESCRIPTIONS POINT 14
WOODED / DEAD FALL AREA
WEST OF N-S 12

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
21:51	2.0	10/9-10
22:11	2.1	9/9-9

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH

AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

BROWN CO. BASE

PROJECT 1120103
OPERATOR WJN
DATE 1/31/12

SITE NUMBER 1
SITE NAME 1009

TRACKING TIMES (LOCAL) MEASURE CST
START 8:58
STOP 16:58

SENSOR TYPE 500 (9500) 399 299
MEMORY CARD 14
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 (0.389)
500 0.360

OBSTRUCTIONS: NO

HEIGHT READINGS MTS FT
1.173
1.562

STATION DESCRIPTIONS Rebar AND CAP SET 1/30/12

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
14:58	2.0	8/8-9
22:58	1.9	9/9-9

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
WINDY

AS BEFORE DESCRIBED

SKETCH

DONIPHAN
BROWN CO'S

AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

BASE

PROJECT 1120103
OPERATOR WN
DATE 1/31/12

SITE NUMBER 1
SITE NAME 1010

TRACKING TIMES (LOCAL) MEASURE CST
START 9:32
STOP 16:30

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 11
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
500 (0.360)

OBSTRUCTIONS: PPLS S

HEIGHT READINGS MTS FT
1.201
1.561

STATION DESCRIPTIONS Set Rebar AND CAP

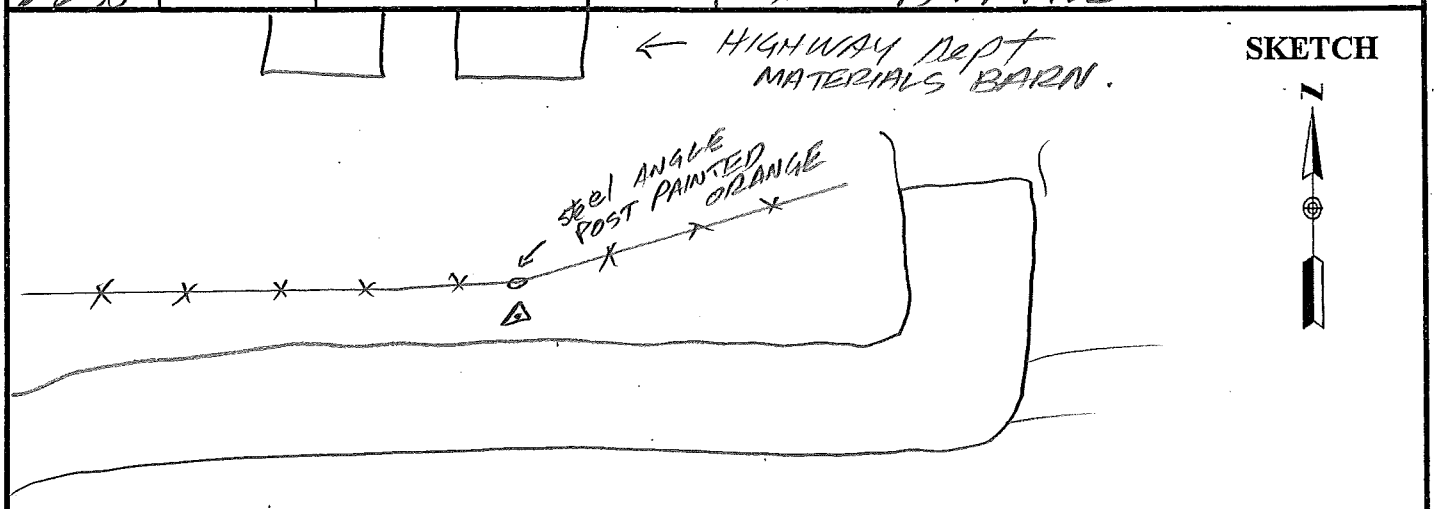
SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
15:32	1.8	9/9-9
22:30		

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
M.C. / WINDY

APPROX LAT 39 50 26.9
APPROX LONG 95 19 14.6

SKETCH



± 6' S. OF FENCE ANGLE POINT
± 30' N OF ℄ E-W RD
± 90' W OF INT.

AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

BROWN Co.

ANNE

PROJECT 1120103
OPERATOR WJN
DATE 1/31/12

SITE NUMBER 1
SITE NAME 1624

TRACKING TIMES (LOCAL) MEASURE CST
START 9:46
STOP 10:02

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 14
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
500 (0.360)

OBSTRUCTIONS: NO

HEIGHT READINGS MTS FT
1.307

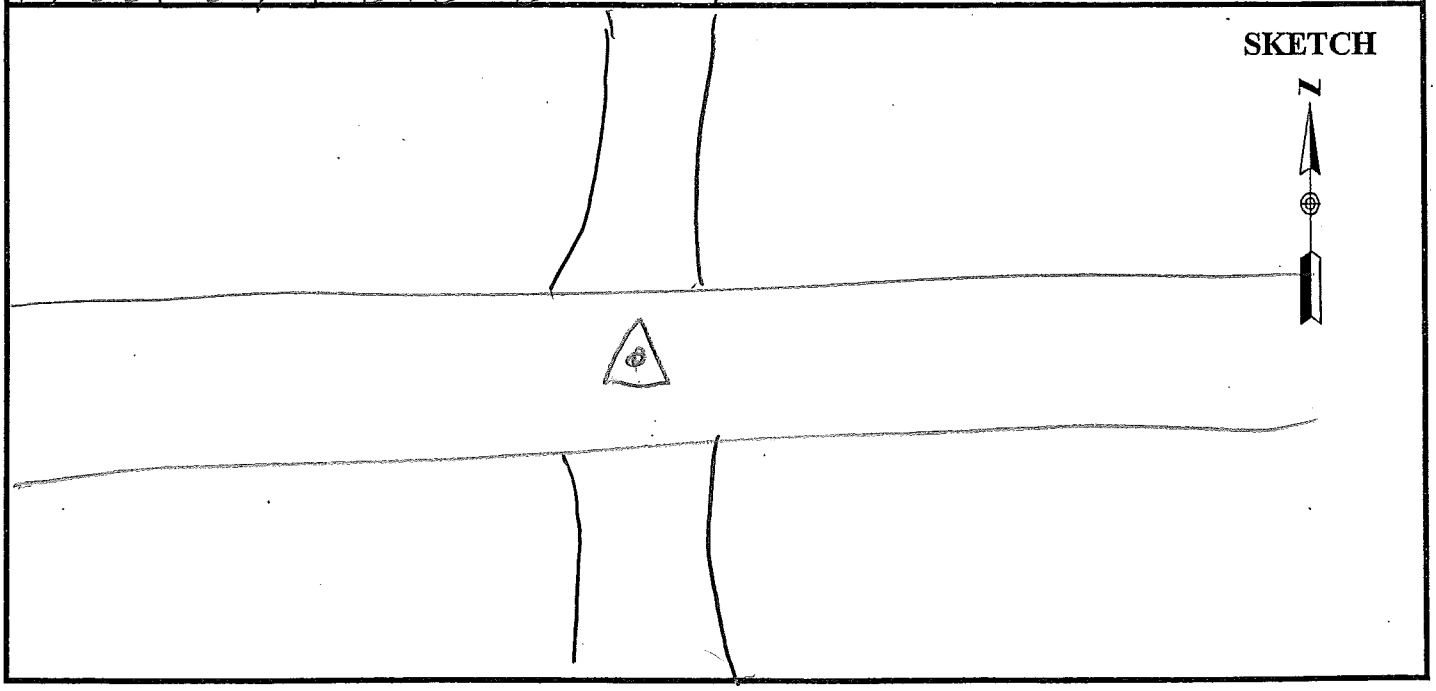
STATION DESCRIPTIONS GG INT

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
16:46	2.0	8/8-8
17:02	2.1	8/8-8

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
WINDY

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

BROWN Co. 2

PROJECT 120103
OPERATOR WNN
DATE 1/31/12

SITE NUMBER 2
SITE NAME 1208

TRACKING TIMES (LOCAL) MEASURE CST
START 10:18
STOP 10:33

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 14
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
500 (0.360)

OBSTRUCTIONS: NO

HEIGHT READINGS MTS FT
1.225

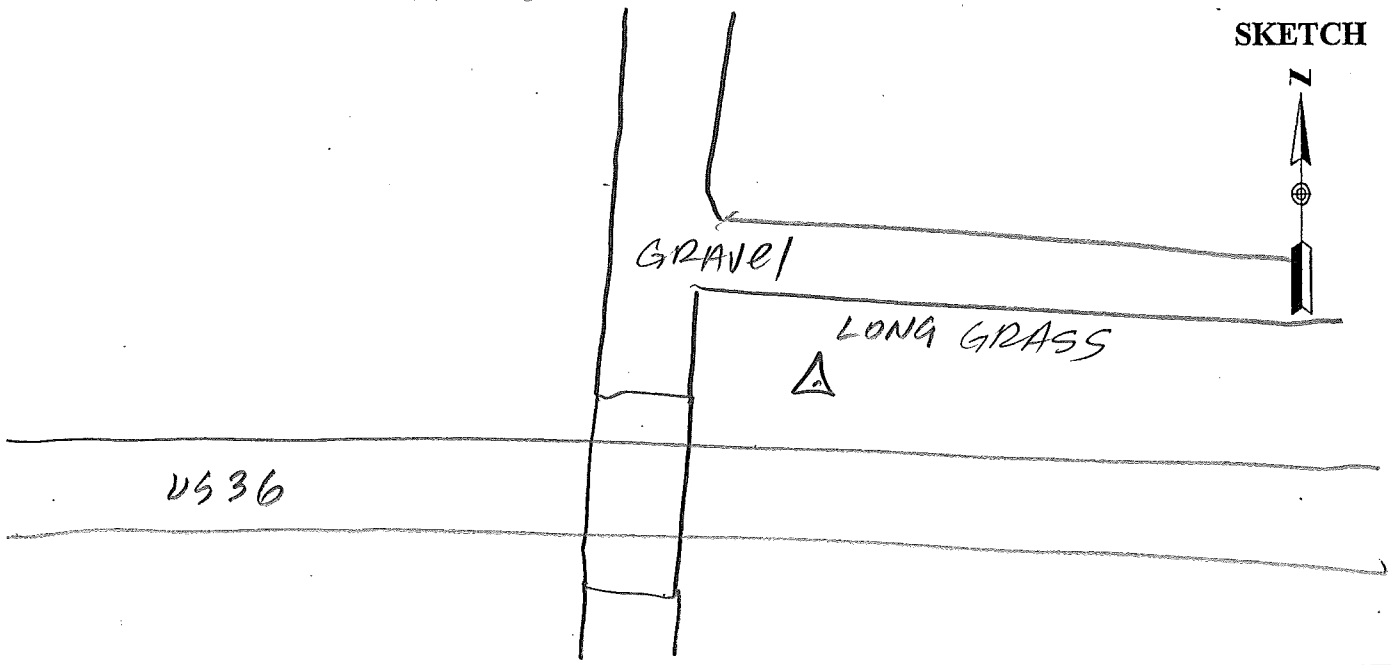
STATION DESCRIPTIONS POINT IN LONG GRASS

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
16:18	2.8	8/8-8
16:33	2.5	9/9-8

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
MC

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

BROWN CO S

PROJECT 1120103
OPERATOR WIN
DATE 1/31/12

SITE NUMBER 3
SITE NAME 1506

TRACKING TIMES (LOCAL) MEASURE CST
START 10:46
STOP 11:01

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 14
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
500 (0.360)

HEIGHT READINGS MTS 1.293 FT

OBSTRUCTIONS: TREES, POWER POLES

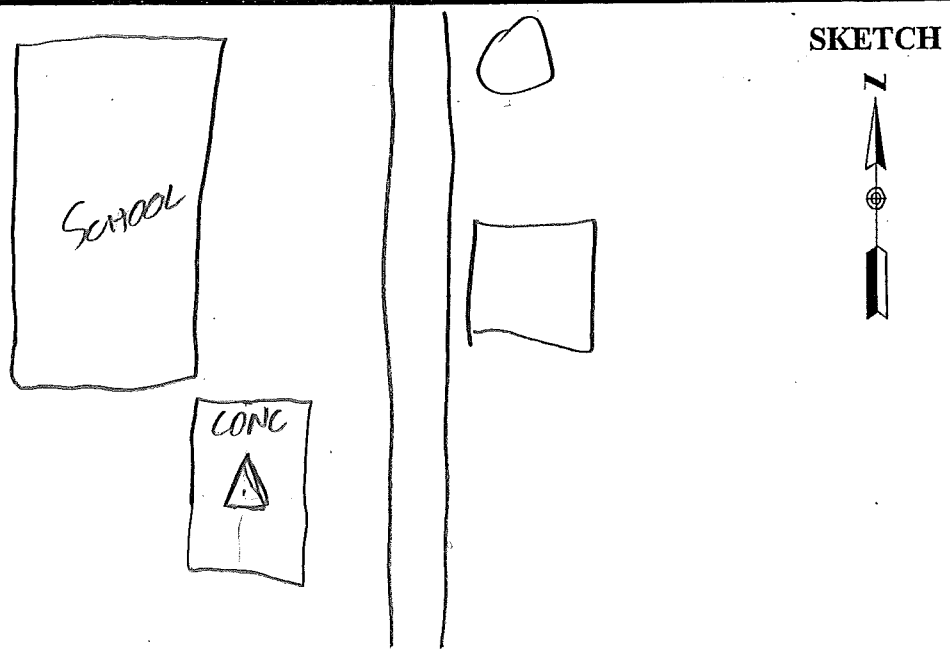
STATION DESCRIPTIONS CENTER OF 20x12 CONC SLAB SE OF SCHOOL

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
16 46	2.2	8 18 -8
17 01	2.1	8 18 -8

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
SKC

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

BROWN 1

PROJECT 1120103
OPERATOR WJN
DATE 1/31/12

SITE NUMBER 4
SITE NAME 1108

TRACKING TIMES (LOCAL) MEASURE CST
START 11:14
STOP 11:30

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 14
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
500 (0.360)

OBSTRUCTIONS: NO

HEIGHT READINGS MTS FT
1.221

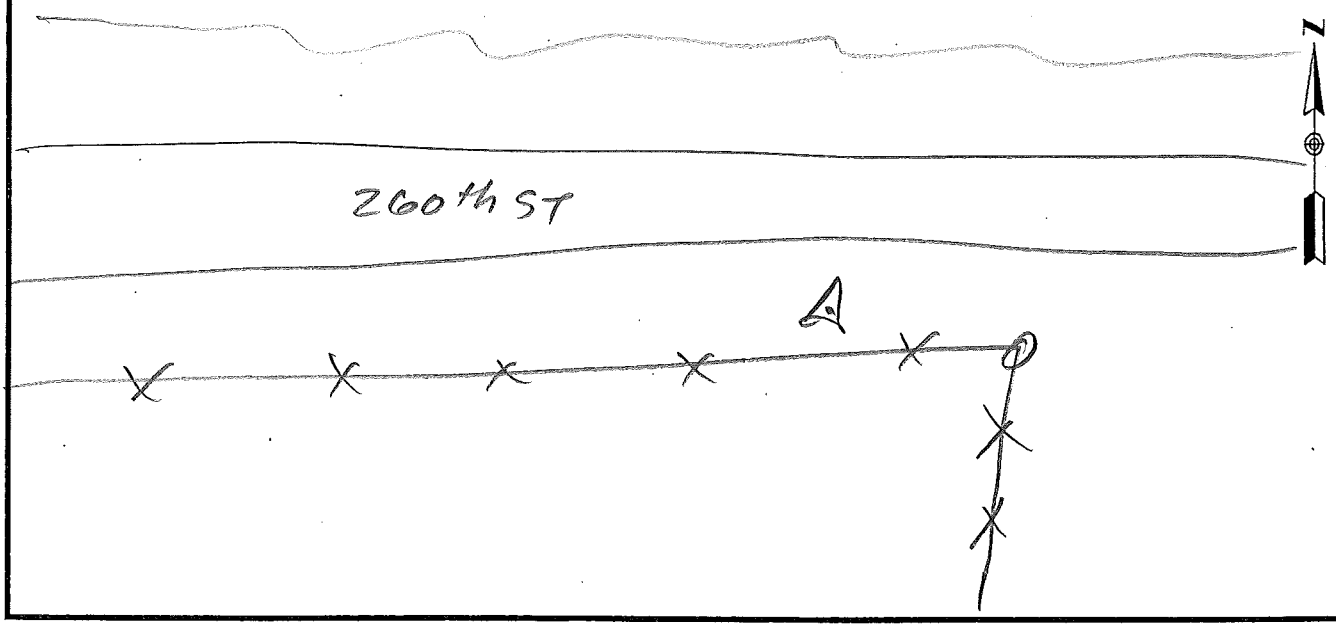
STATION DESCRIPTIONS POINT IN SHORT GRASS IN S R/W, E-WRD

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1714	4.6	6/6-6
1730	3.8	6/6-6

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
Rest of TODAY, PC AND VERY WINDY.

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

BROWN CO 5

PROJECT 1120103
OPERATOR WJN
DATE 1/31/12

SITE NUMBER 5
SITE NAME 1507

TRACKING TIMES (LOCAL) MEASURE CST
START 11:43
STOP 12:00

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 14
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
500 (0.360)

HEIGHT READINGS MTS FT
1.305

OBSTRUCTIONS: NO

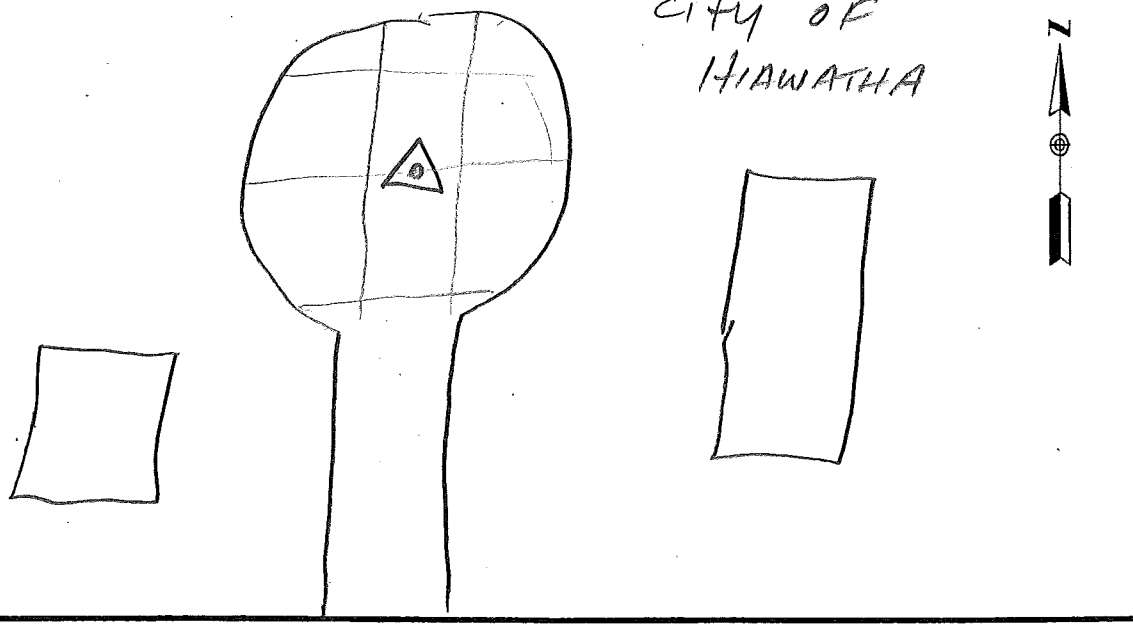
STATION DESCRIPTIONS CENTER OF SMALL CUL-DE-SAC

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
17 43	4.2	6/6-6
18 00	3.0	7/7-7

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

BROWN CO — ANNE

PROJECT 1120103
OPERATOR WJN
DATE 1/31/12

SITE NUMBER 6
SITE NAME 1625

TRACKING TIMES (LOCAL) MEASURE CST
START 12:37
STOP 12:59

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 14
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
500 (0.360)

OBSTRUCTIONS: NO

HEIGHT READINGS MTS FT
1.324

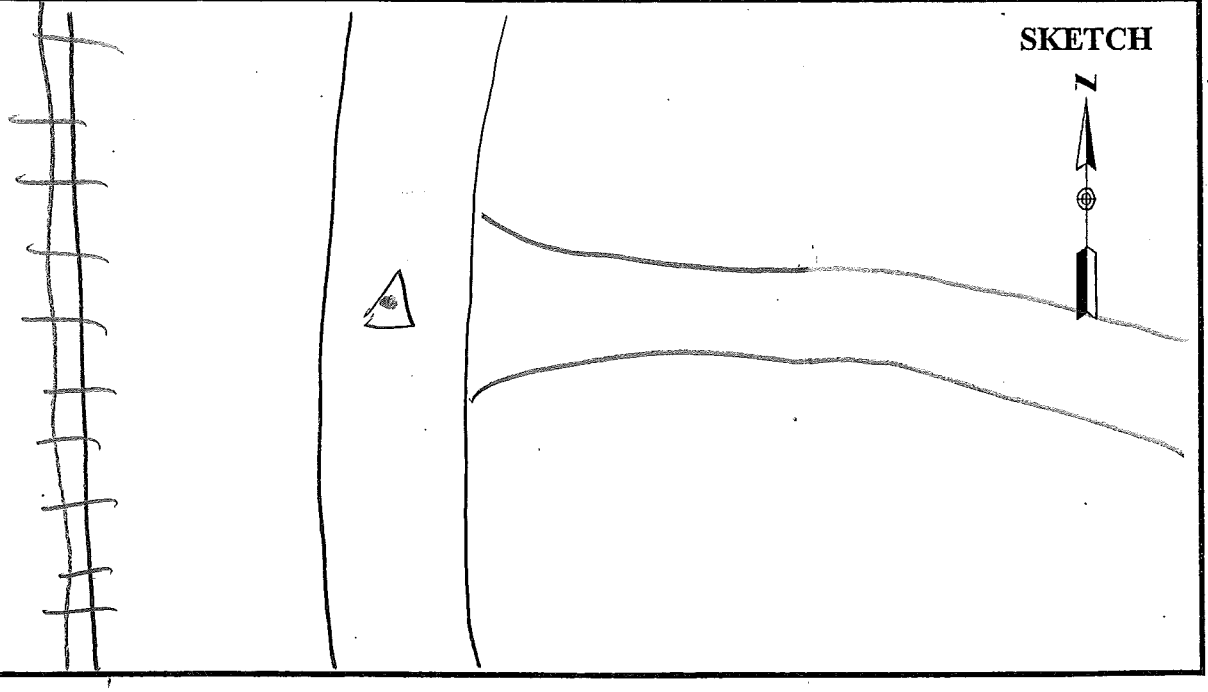
STATION DESCRIPTIONS ℄ ℄ INT

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1237	1.7	10/10-10
12:59	1.8	10/10-10

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
PC

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

BROWN Co 2

PROJECT 1120103
OPERATOR WJN
DATE

SITE NUMBER 7
SITE NAME 1209

TRACKING TIMES (LOCAL) MEASURE CST
START 13:18
STOP 13 38

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 14
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
500 (0.360)

HEIGHT READINGS MTS FT
1.267

OBSTRUCTIONS: NO

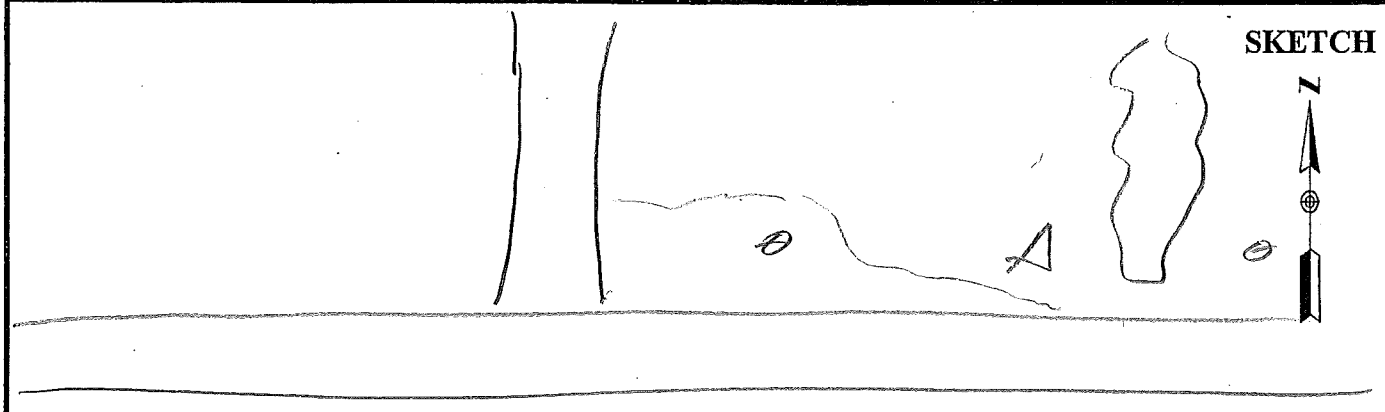
STATION DESCRIPTIONS POINT IN LONG GRASS IN N R/W OF E-W RD.

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
19 18	2.3	8/8-8
19.38	2.1	9/9-9

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

BROWN CO

PROJECT 1120103
OPERATOR WJN
DATE 1/31/12

SITE NUMBER 8
SITE NAME 1109

TRACKING TIMES (LOCAL) MEASURE CST
START 13:54
STOP 14:14

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 1
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
500 (0.360)

OBSTRUCTIONS:

HEIGHT READINGS MTS FT
1.257

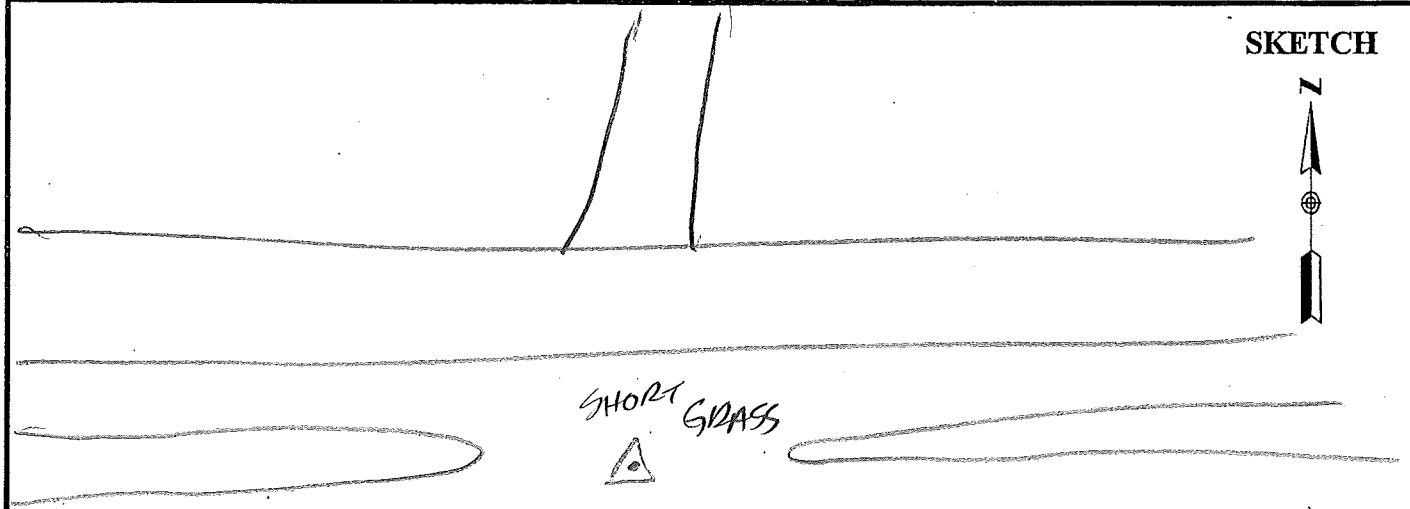
STATION DESCRIPTIONS SHORT GRASS AREA @ S R/W OPP & DR. N.

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
19:54	2.6	8/8-8
20:14	2.2	8/8-8

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

BROWN CO.

PROJECT 1120103
OPERATOR WJN
DATE 1/31/12

SITE NUMBER 9
SITE NAME 1409

TRACKING TIMES (LOCAL) MEASURE CST
START 14:31
STOP 14:52

SENSOR TYPE (500) 9500 399 299
MEMORY CARD
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
500 (0.360)

OBSTRUCTIONS: TREES

HEIGHT READINGS MTS FT
1.280

STATION DESCRIPTIONS POINT IN WOODED AREA

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
20:31	2.6	6/7-10
20:52	2.1	3/8-10

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
PC WINDY

SKETCH

AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

BROWN CO. 5

PROJECT 1120103
OPERATOR WNW
DATE 1/31/12

SITE NUMBER 10
SITE NAME 1508

TRACKING TIMES (LOCAL) MEASURE CST
START 15:10
STOP 15:35

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 14
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
500 (0.360)

OBSTRUCTIONS: PPS S., TREES E-W

HEIGHT READINGS MTS 1.288 FT

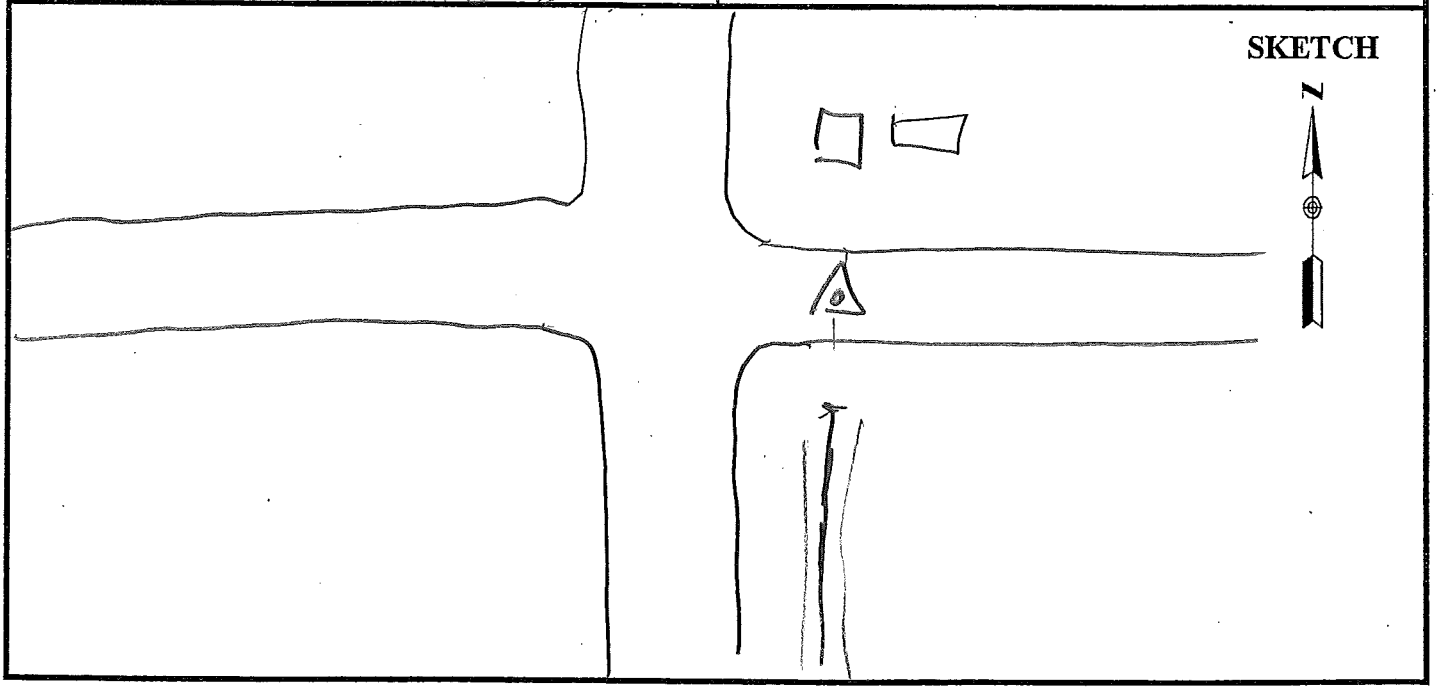
STATION DESCRIPTIONS ℄ STREET OPP DITCH S

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
21:10	2.1	8/7-8
21:35	2.0	8/9-8

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
PC WINDY

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

BROWN 1

PROJECT 1120103
OPERATOR WJN
DATE 11/3/12

SITE NUMBER 11
SITE NAME 1110

TRACKING TIMES (LOCAL) MEASURE CST
START 15:51
STOP 16:11

SENSOR TYPE (500) 9500 399 299
MEMORY CARD
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
500 (0.360)

HEIGHT READINGS MTS FT
1.305

OBSTRUCTIONS: NO

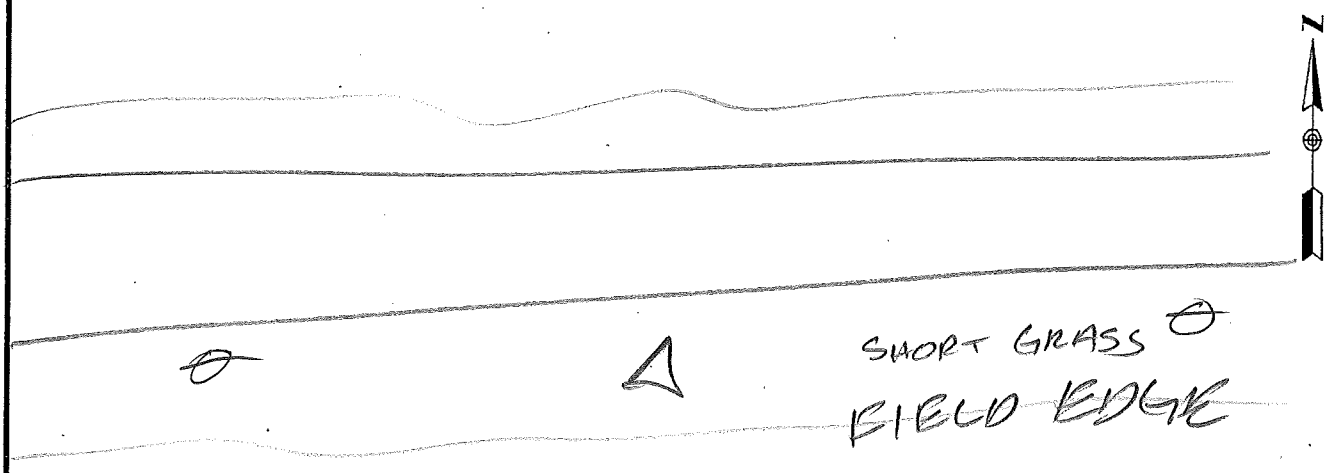
STATION DESCRIPTIONS POINT IN SHORT GRASS IN S R/W OF E-W RD.

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
21:51	1.8	9/9-9
22:11	2.0	9/9-9

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
PC

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

BROWN

BASE

PROJECT 1120103
OPERATOR WJM
DATE 2/1/12

SITE NUMBER 1
SITE NAME 1009

TRACKING TIMES (LOCAL) MEASURE CST
START 8:23
STOP 16:12

SENSOR TYPE 500 (9500) 399 299
MEMORY CARD 67
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 (0.389)
500 0.360

OBSTRUCTIONS: NO

HEIGHT READINGS MTS FT
1.153
1.542

STATION DESCRIPTIONS Rebar AND CAP Set 1/30/12

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
14:23	2.9	8/8-8
22:12	1.7	10/10-10

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
SKC

AS BEFORE DESCRIBED

SKETCH

MOSV MOVE KST 5° 15 3

AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

BROWN Co. BASE

PROJECT 1120103
OPERATOR LWW
DATE 2/1/12

SITE NUMBER 1
SITE NAME 1011

TRACKING TIMES (LOCAL) MEASURE CST
START 8:56
STOP 15:47

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 11
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
500 (0.360)

OBSTRUCTIONS: NO

HEIGHT READINGS MTS FT
1.149
1.509

STATION DESCRIPTIONS Set 7"
SPIKE

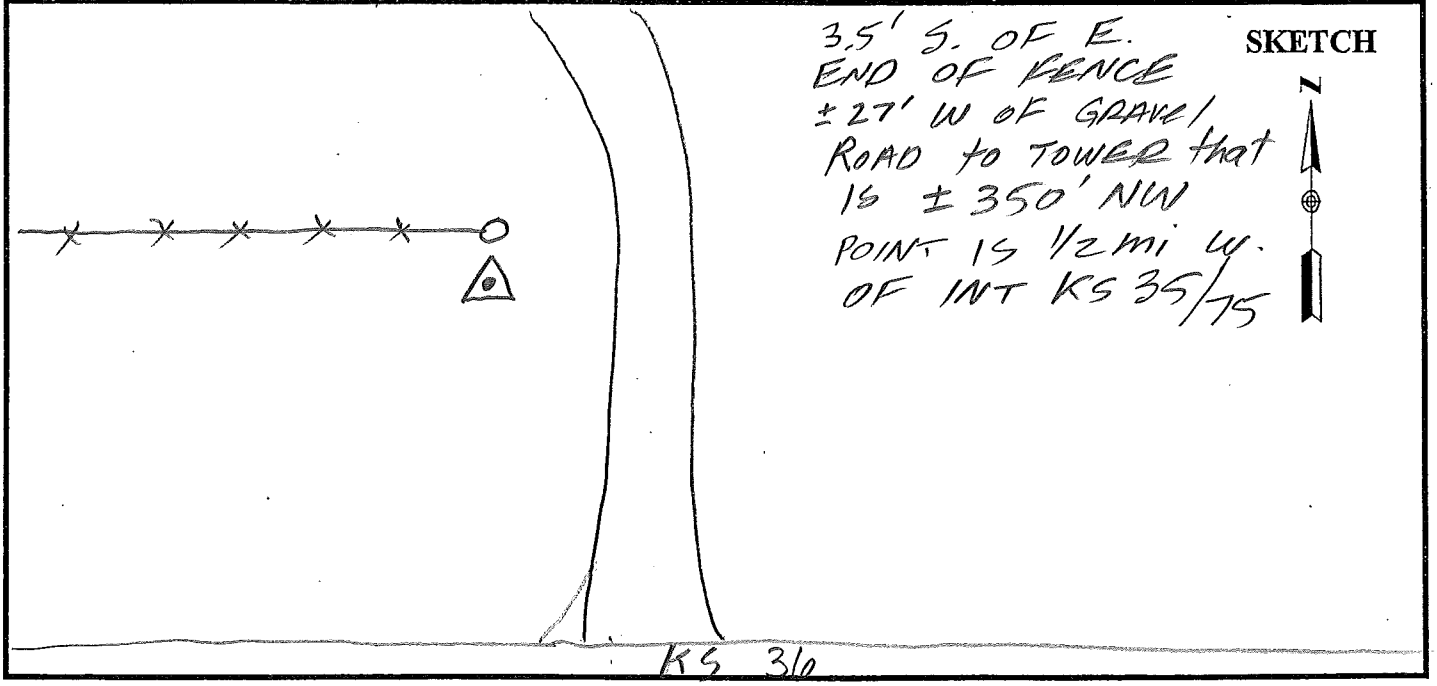
SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
14:56	2.3	8/8-9
21:47	1.9	9/9-9

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
SKC

APPROX 39 50 29.6 LAT
95 44 50.5 LONG

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

BROWN Co

5

PROJECT 1120103
OPERATOR WJN
DATE 2/1/12

SITE NUMBER 1
SITE NAME 1509

TRACKING TIMES (LOCAL) MEASURE CST
START 9:15
STOP 9:35

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 14
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
500 (0.360)

OBSTRUCTIONS: PPLS ALL QUADS, TREES, BLDGS

HEIGHT READINGS MTS FT
1.347

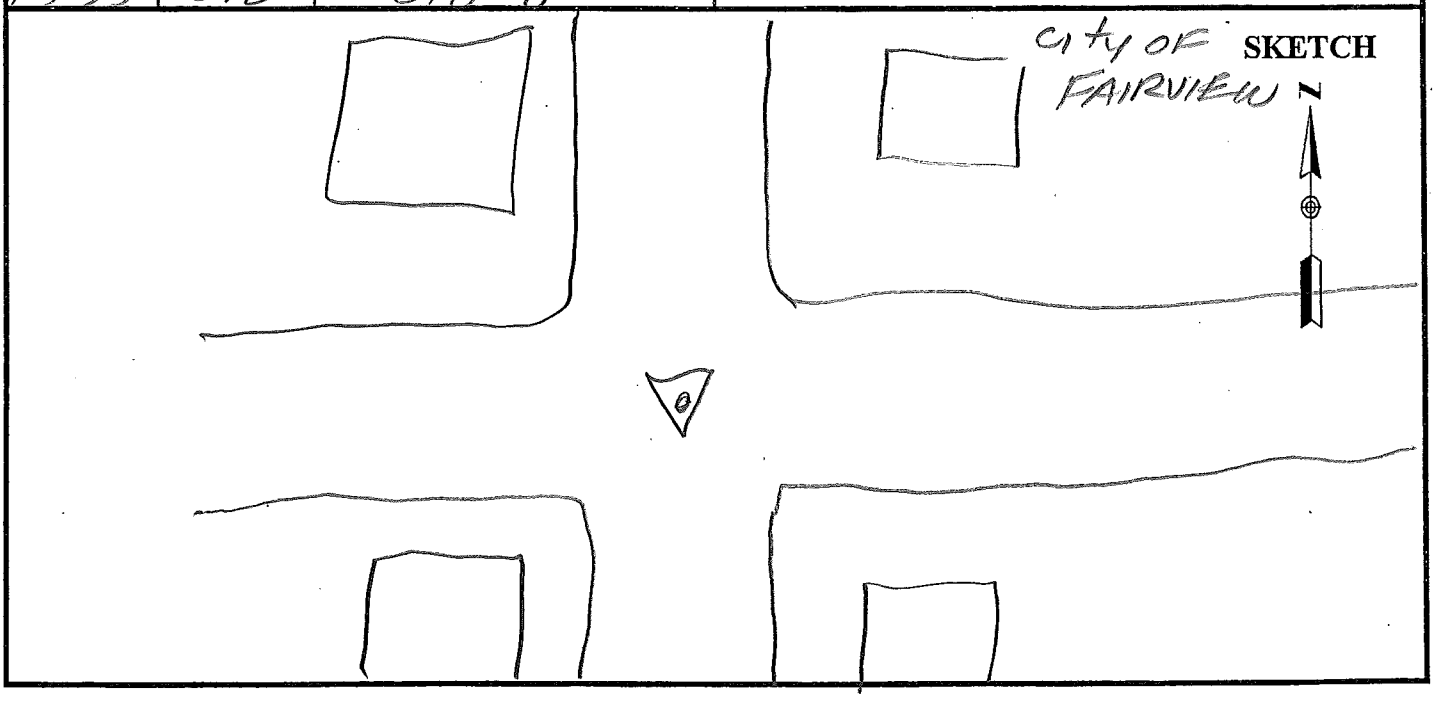
STATION DESCRIPTIONS C & G INT STRS

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
15 15	2.3	8/8-8
15 35	2.2	8/8-8

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
SKC

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

BROWN CO. 2

PROJECT 1120103
OPERATOR WJW
DATE 2/1/12

SITE NUMBER 2
SITE NAME 1210

TRACKING TIMES (LOCAL) MEASURE CST
START 9:55
STOP 10:16

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 14
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
500 (0.360)

HEIGHT READINGS MTS 1.284 FT

OBSTRUCTIONS: NO

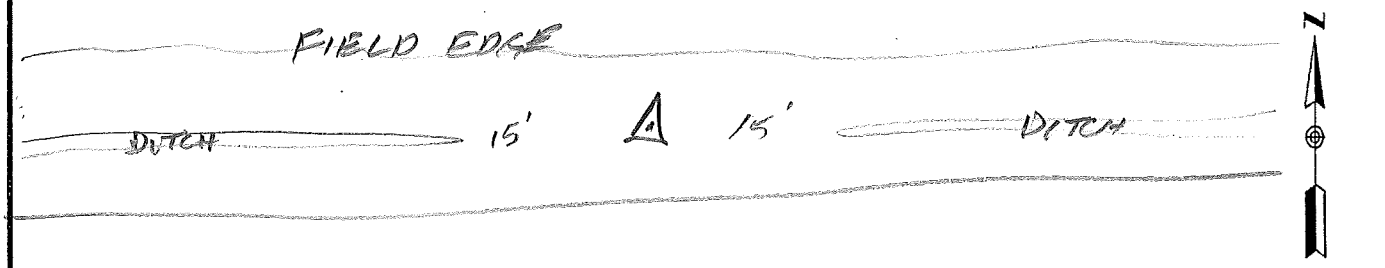
STATION DESCRIPTIONS POINT IN LONG GRASS IN N. R/W OF E-W RD

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
16:55	2.4	8/8-8
17:16	2.7	8/8-8

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

BROWN Co

1

PROJECT 1120103
OPERATOR WJN
DATE 2/1/12

SITE NUMBER 3
SITE NAME 1111

TRACKING TIMES (LOCAL) MEASURE CST
START 10:27
STOP 10:47

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 14
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
500 (0.360)

OBSTRUCTIONS: NO

HEIGHT READINGS MTS FT
1.283

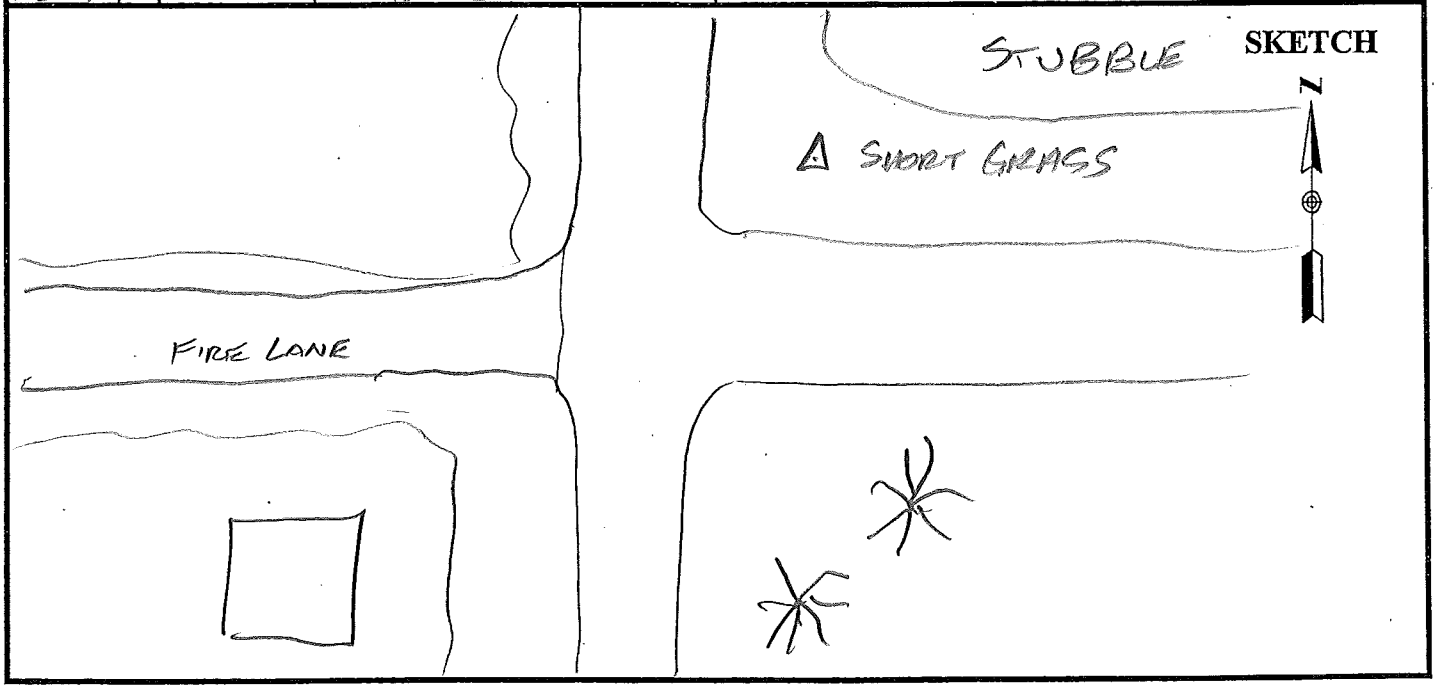
STATION DESCRIPTIONS POINT IN SHORT GRASS IN NW QUAD OF EC INT

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
16:27	2.0	8 18 - 8
16:47	2.1	8 18 - 8

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
SKC

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

BROWN CO.

PROJECT 1120103
OPERATOR WHN
DATE 2/1/12

SITE NUMBER 4
SITE NAME 1410

TRACKING TIMES (LOCAL) MEASURE CST
START 11:01
STOP 11:25

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 14
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
500 ~~0.360~~

HEIGHT READINGS MTS FT
1.364

OBSTRUCTIONS: TREES

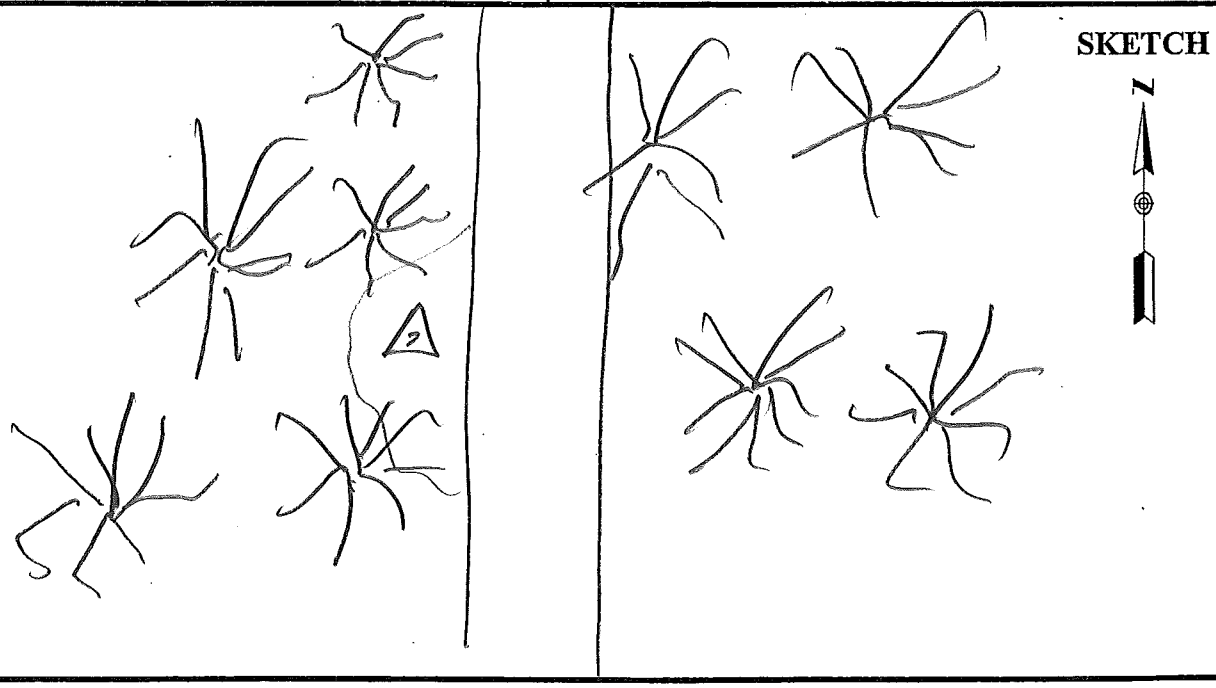
STATION DESCRIPTIONS POINT IN WOODED AREA W. OF N-S RD

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
17:01	3.2	7/7-7
17:25	3.0	7/7-7

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
SKC

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

BROWN CO. 5

PROJECT 1120103
OPERATOR WJN
DATE 2/1/12

SITE NUMBER 5
SITE NAME 1510

TRACKING TIMES (LOCAL) MEASURE CST
START 11:43
STOP 12:13

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 14
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
500 (0.360)

OBSTRUCTIONS: PPLS ALL QUADS TREES ALL QUADS!

HEIGHT READINGS MTS FT
1.325

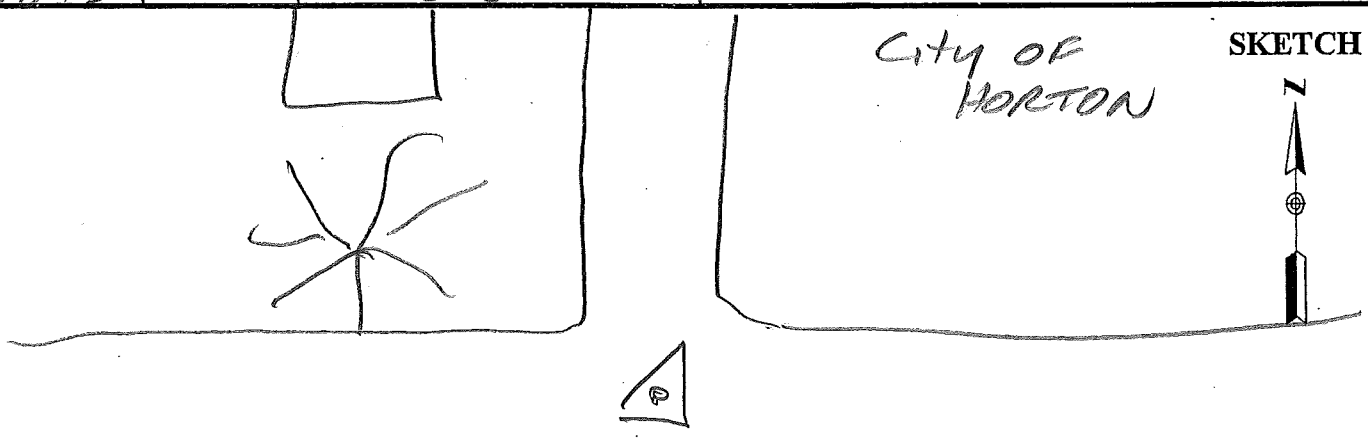
STATION DESCRIPTIONS E&E INT OF STREETS E-W-N

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
17 43	3.0	7/7-7
18 13	2.0	8/8-8

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
SKC

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

BROWN CO.

PROJECT 1120103
OPERATOR LWM
DATE 2/1/12

SITE NUMBER 6
SITE NAME 1626

TRACKING TIMES (LOCAL) MEASURE CST
START 12:42
STOP 13:10

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 14
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
500 (0.360)

OBSTRUCTIONS: TRAFFIC

HEIGHT READINGS MTS FT
1.346

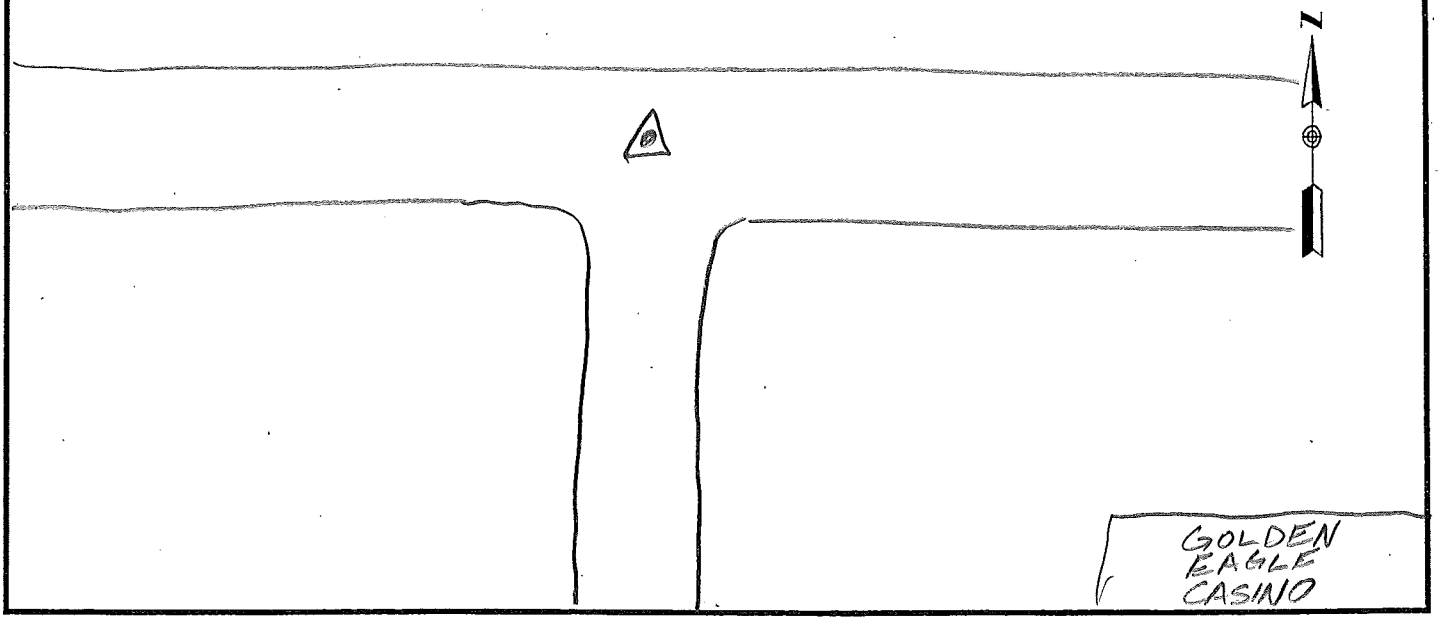
STATION DESCRIPTIONS E E INT

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
18:42	1.9	9/9-9
19:10	2.0	9/9-9

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
SKC

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

BROWN CO. 2

PROJECT 1120103
OPERATOR WJM
DATE 2/1/12

SITE NUMBER 7
SITE NAME 1211

TRACKING TIMES (LOCAL) MEASURE CST
START 13:33
STOP 14:03

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 14
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
500 (0.360)

HEIGHT READINGS MTS FT
1.272

OBSTRUCTIONS: NO

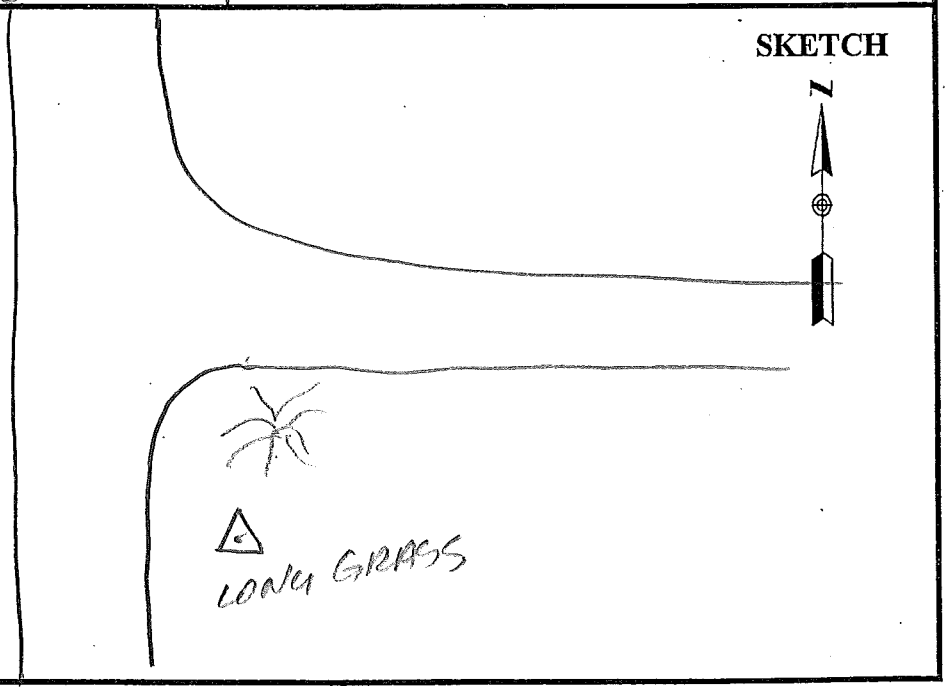
STATION DESCRIPTIONS POINT IN LONG GRASS SE OF INT.

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
19:33	2.1	8/8-8
20:03	2.0	8/8-8

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
SKC

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

BROWN CO

PROJECT 1120103
OPERATOR WJN
DATE 2/1/12

SITE NUMBER 8
SITE NAME 1112

TRACKING TIMES (LOCAL) MEASURE CST
START 14:30
STOP 14:50

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 14
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
500 (0.360)

OBSTRUCTIONS: TREES E

HEIGHT READINGS MTS 1.265 FT

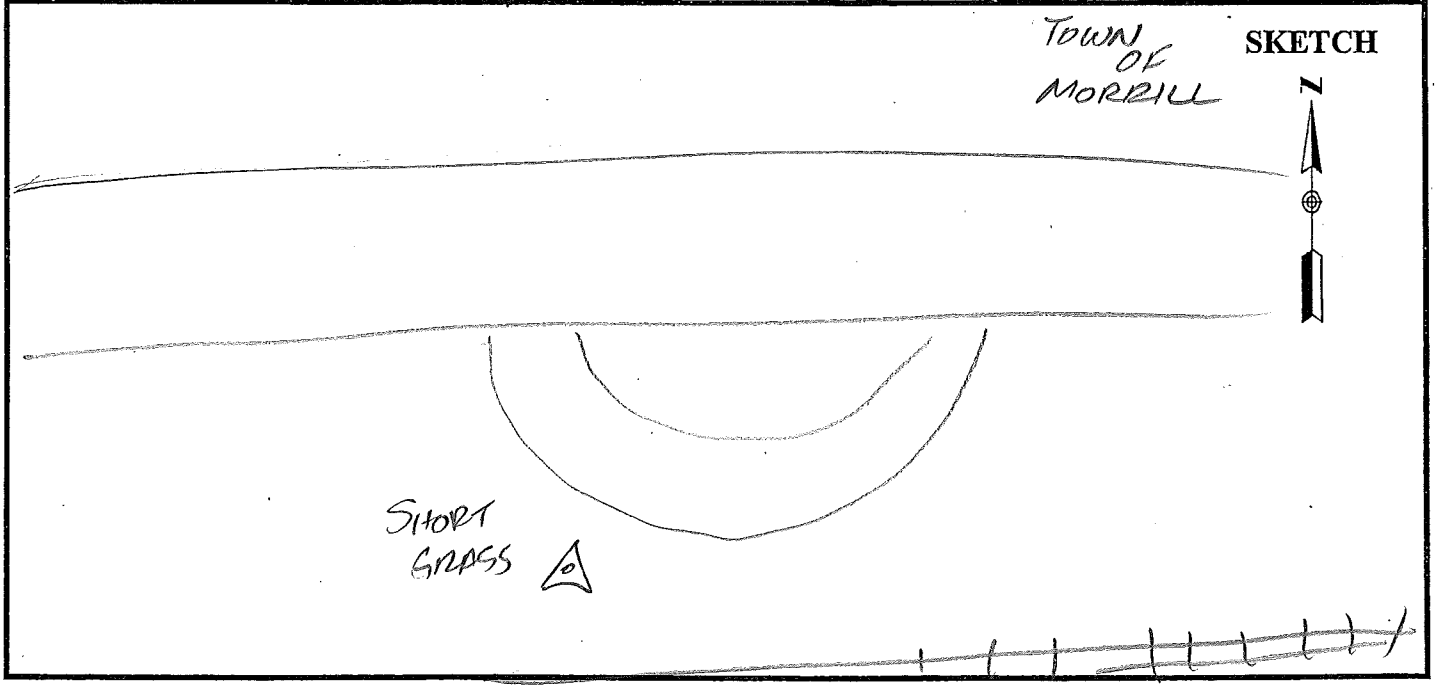
STATION DESCRIPTIONS POINT 101 SHORT

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
20:30	1.8	9/9-9
20:50	1.8	9/9-9

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
SKC

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

BROWN CO. V. cont.

PROJECT 1120103
OPERATOR WJW
DATE 2/1/12

SITE NUMBER 9
SITE NAME X108

TRACKING TIMES (LOCAL) MEASURE CST
START 15:03
STOP 15:25

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 14
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
500 (0.360)

HEIGHT READINGS MTS FT
1.230
1.590

OBSTRUCTIONS: PPL SW, KIOSK SE

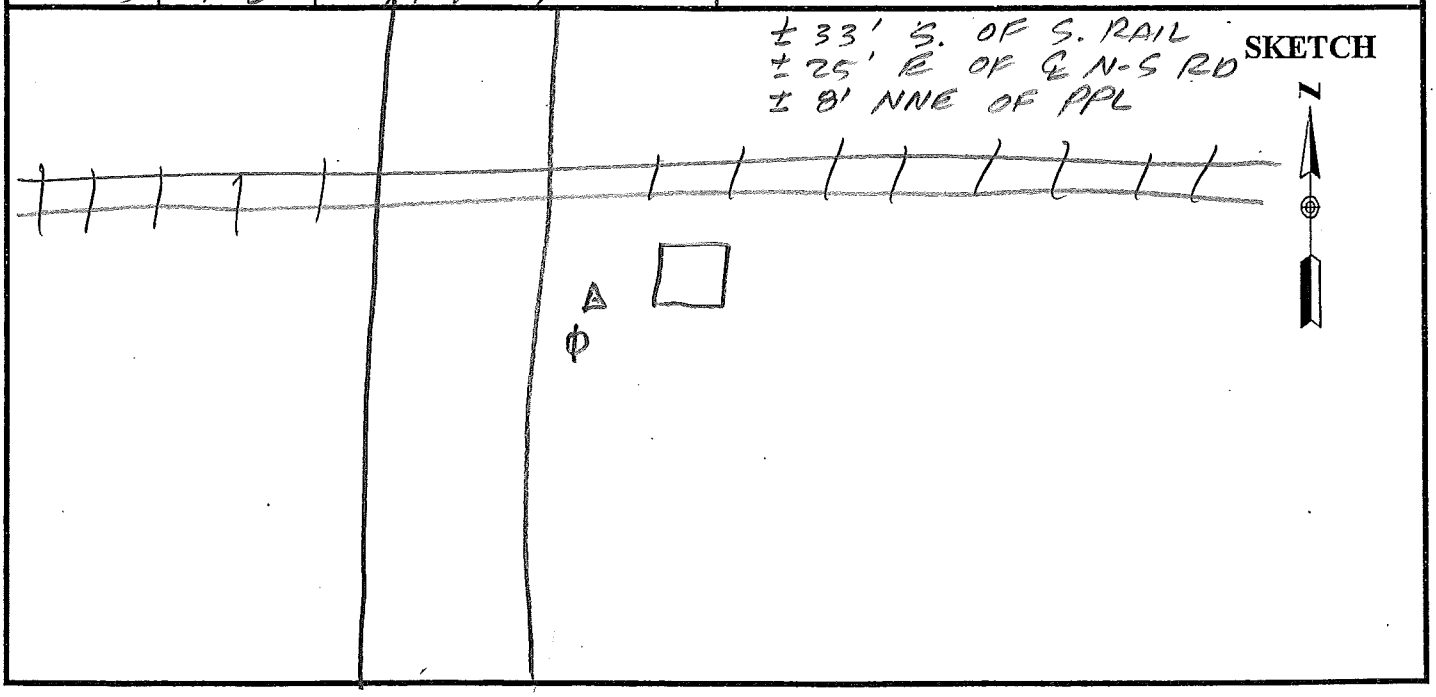
STATION DESCRIPTIONS BRASS DISK IN CONC MKD X108 1934 USCGS AS DESCRIBED BY NGS

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
21:03	1.9	9/9-9
21:25	1.8	9/9-9

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
Becoming MC

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

BROWN / DONAHANCO

BASE

PROJECT 1120103
OPERATOR
DATE 2/2/12

SITE NUMBER 1
SITE NAME 1010

TRACKING TIMES (LOCAL) MEASURE CST
START 8:37
STOP 15:07

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 11
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
500 (0.360)

OBSTRUCTIONS: PPLS S.

HEIGHT READINGS MTS FT
1.207
1.567

STATION DESCRIPTIONS REBAR AND CAP SET 1/31/12

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
14:37	3.0	7/7-7
21:07	2.2	7/7-7

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
OKC

As BEFORE DESCRIBED

SKETCH

AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

DONIPHAN Co. BASE

PROJECT 1120103
OPERATOR WJN
DATE 2/2/12

SITE NUMBER 1
SITE NAME W 106

TRACKING TIMES (LOCAL) MEASURE CST
START 9:09
STOP 15:42

SENSOR TYPE 500 (9500) 399 299
MEMORY CARD 67
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 (0.389)
500 0.360

OBSTRUCTIONS: NO

HEIGHT READINGS MTS FT
1.191
1.580

STATION DESCRIPTIONS BRASS DSK
IN CONC MKD
W 106 1934

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
15:09	2.1	9/9-9
21:42	2.0	9/9-9

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
OVC

AS BEFORE DESCRIBED

SKETCH

AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

DONI PAAN CO — BASE

PROJECT	1120103	SITE NUMBER	1
OPERATOR	WJN	SITE NAME	1511
DATE	2/2/12		

TRACKING TIMES (LOCAL) MEASURE CST

START 9:22

STOP 9:44

SENSOR TYPE (500) 9500 399 299

MEMORY CARD 14

BATTERY NO.

CONTROLLER NO.

SENSOR NO.

SENSOR CONSTANT

299/399	0.441
399E/9500	0.389
500	(0.360)

HEIGHT READINGS

MTS	FT
1.360	

OBSTRUCTIONS: PPLs S, E

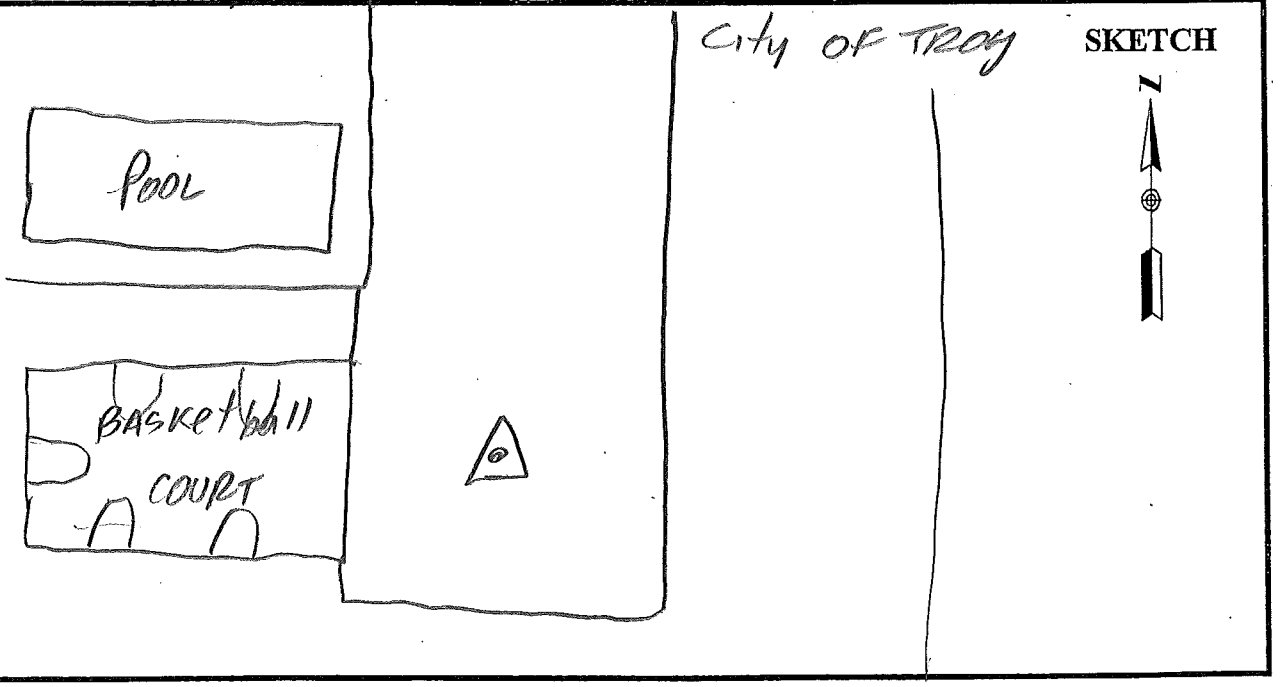
STATION DESCRIPTIONS POINT IN ℄ NARROW PARKING LOT OPP ℄ COURT W.

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1522	2.0	9/9-9
1544	2.1	9/9-9

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

DONIPHAN CO 4

PROJECT 1120103
OPERATOR WJN
DATE 2/2/12

SITE NUMBER 2
SITE NAME 1411

TRACKING TIMES (LOCAL) MEASURE CST
START 10:00
STOP 10:20

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 14
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
500 (0.360)

HEIGHT READINGS MTS FT
1.310

OBSTRUCTIONS: TREES

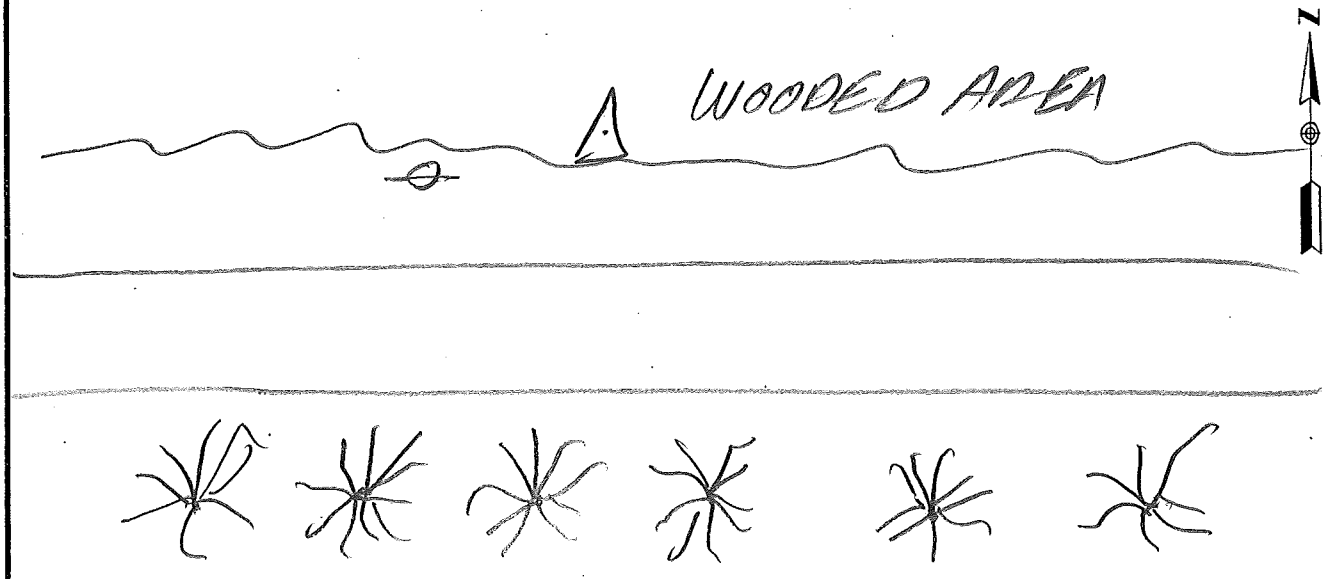
STATION DESCRIPTIONS POINT IN WOODED AREA N. OF E-W ROAD

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
10:00	2.8	7/7-9
10:20	2.7	7/7-9

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
OVC

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

DONIPHAN CO 1

PROJECT 1120103
OPERATOR WJN
DATE 2/2/12

SITE NUMBER 3
SITE NAME 1212

TRACKING TIMES (LOCAL) MEASURE CST
START 1042
STOP 11:06

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 14
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
500 (0.360)

OBSTRUCTIONS: NO

HEIGHT READINGS MTS FT
1.260

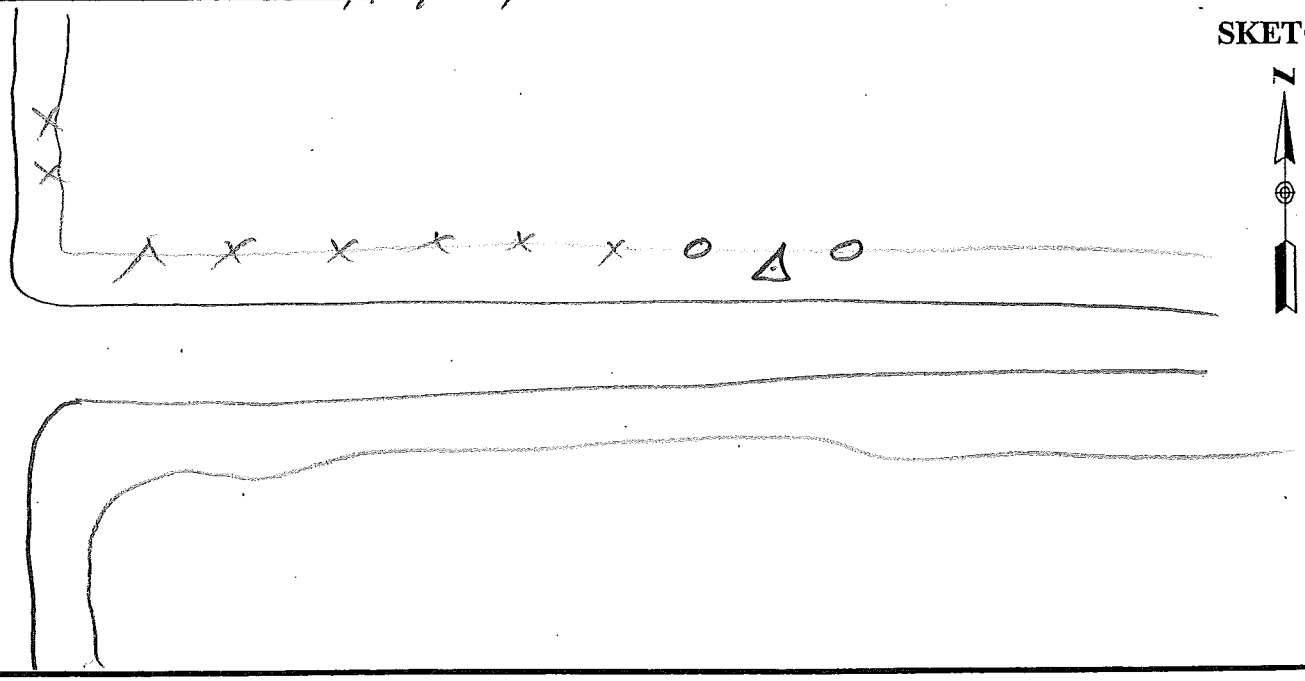
STATION DESCRIPTIONS POINT IN LONG GRASS IN NE R/W OF E-W RD.

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1642	2.0	9/9-9
17:06	2.1	9/9-9

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
OVC

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

DONIPHAN CO. 1L

PROJECT 1120103
OPERATOR WJN
DATE 2/2/12

SITE NUMBER 4
SITE NAME 1412

TRACKING TIMES (LOCAL) MEASURE CST
START 11:29
STOP 11:49

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 14
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
500 (0.360)

OBSTRUCTIONS: TREES

HEIGHT READINGS MTS FT
1.330

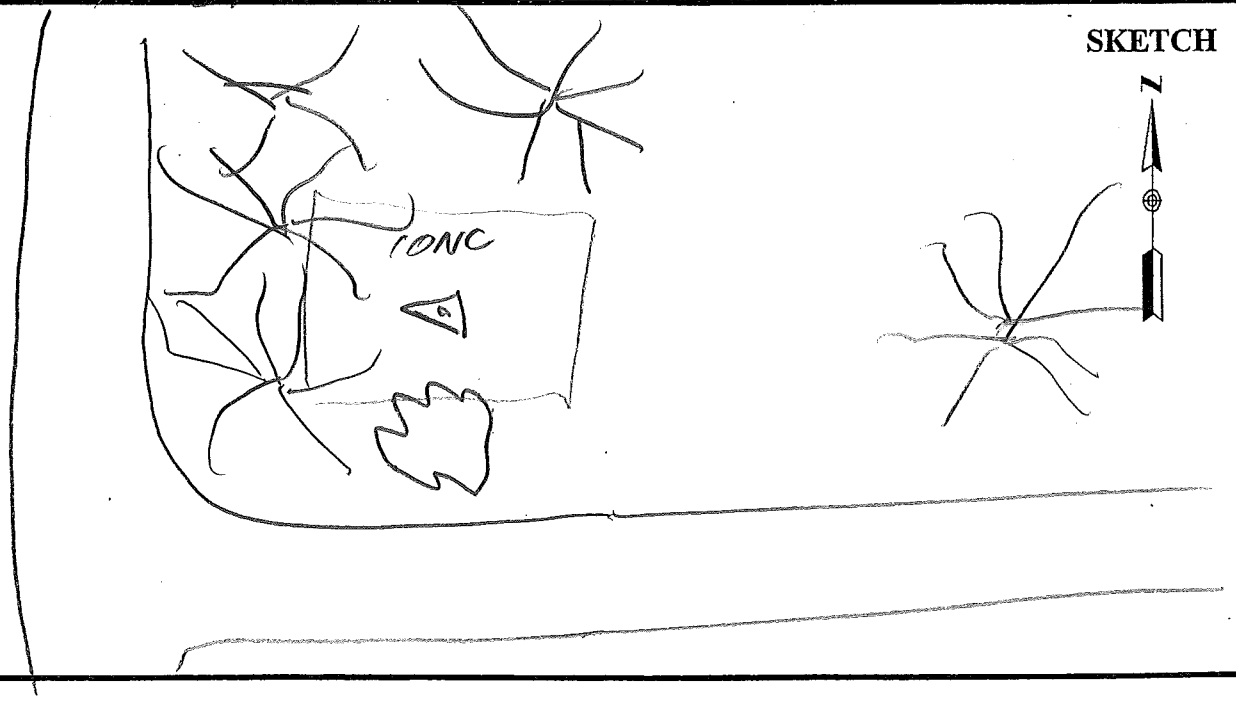
STATION DESCRIPTIONS POINT IN WOOPED PARK

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1729	4.2	6/6-6
1749	4.1	6/6-6

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

DONIPHAN CO

1

PROJECT 120103
OPERATOR WJN
DATE 2/2/12

SITE NUMBER 5
SITE NAME 1113

TRACKING TIMES (LOCAL) MEASURE CST
START 12:05
STOP 12:26

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 4
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
500 0.360

OBSTRUCTIONS: NO

HEIGHT READINGS MTS FT
1.279

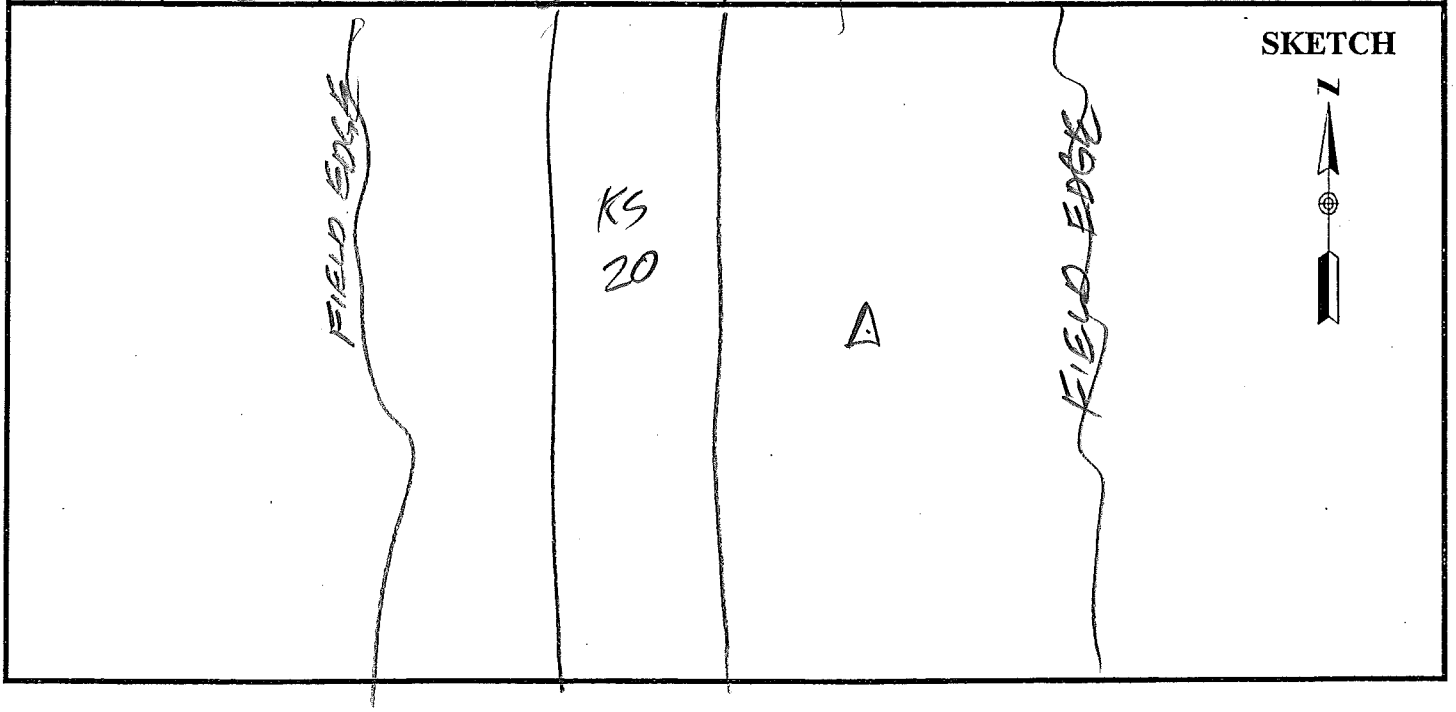
STATION DESCRIPTIONS POINT IN SHORT GRASS IN EAST R/W.

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1805	1.9	8/9-8
19:26	2.0	8/9-9

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
OVC

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

DONIPHAN CO

PROJECT 1120103
OPERATOR WJM
DATE 2/2/12

SITE NUMBER 6
SITE NAME 15/2

TRACKING TIMES (LOCAL) MEASURE CST
START 13:05
STOP 13:25

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 14
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
500 (0.360)

HEIGHT READINGS MTS FT
1.316

OBSTRUCTIONS: PPLS SE, SW
TREES W

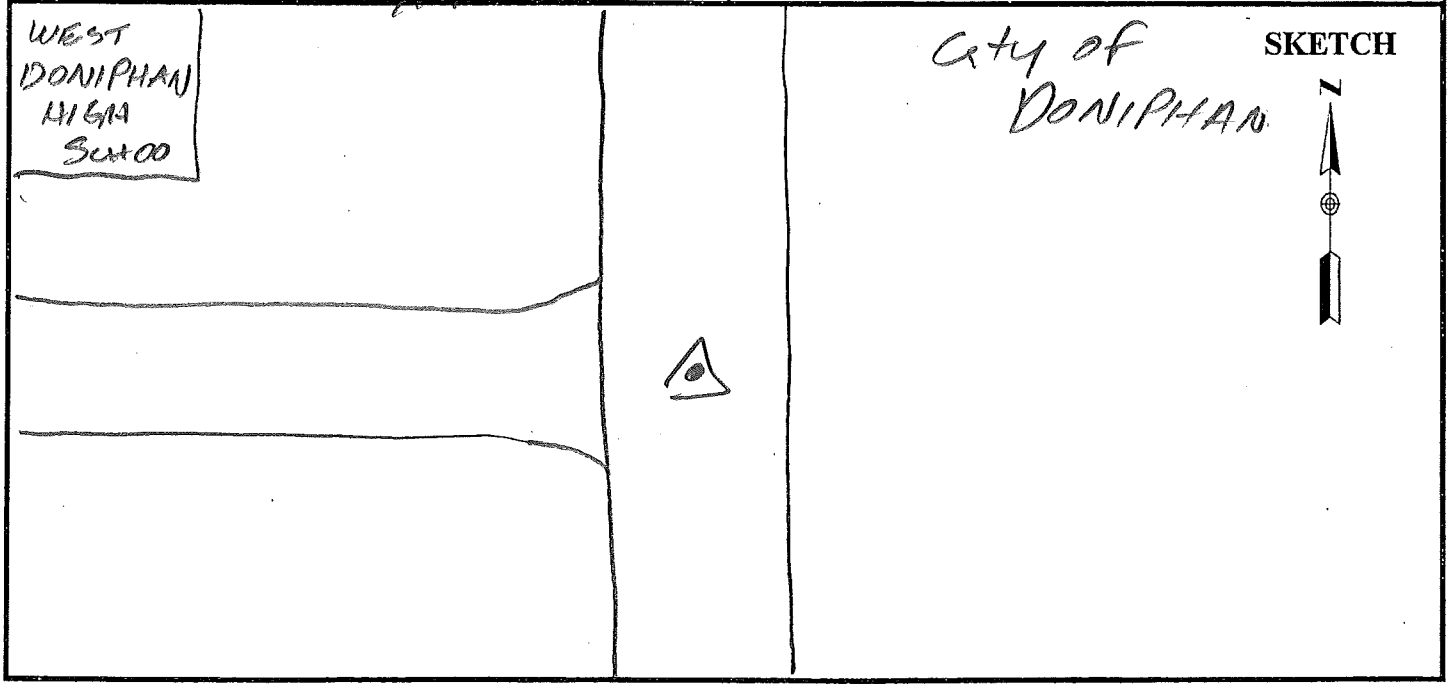
STATION DESCRIPTIONS ℄ ℄ INT

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
19:05	2.3	9/9-9
19:25	2.1	9/9-9

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
OVC

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

DONIPHAN CO. 2

PROJECT 1120103
OPERATOR WJN
DATE 2/2/12

SITE NUMBER 7
SITE NAME 1213

TRACKING TIMES (LOCAL) MEASURE CST
START 13:37
STOP 13:54

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 14
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
500 (0.360)

OBSTRUCTIONS: TREES W

HEIGHT READINGS MTS FT
1.261

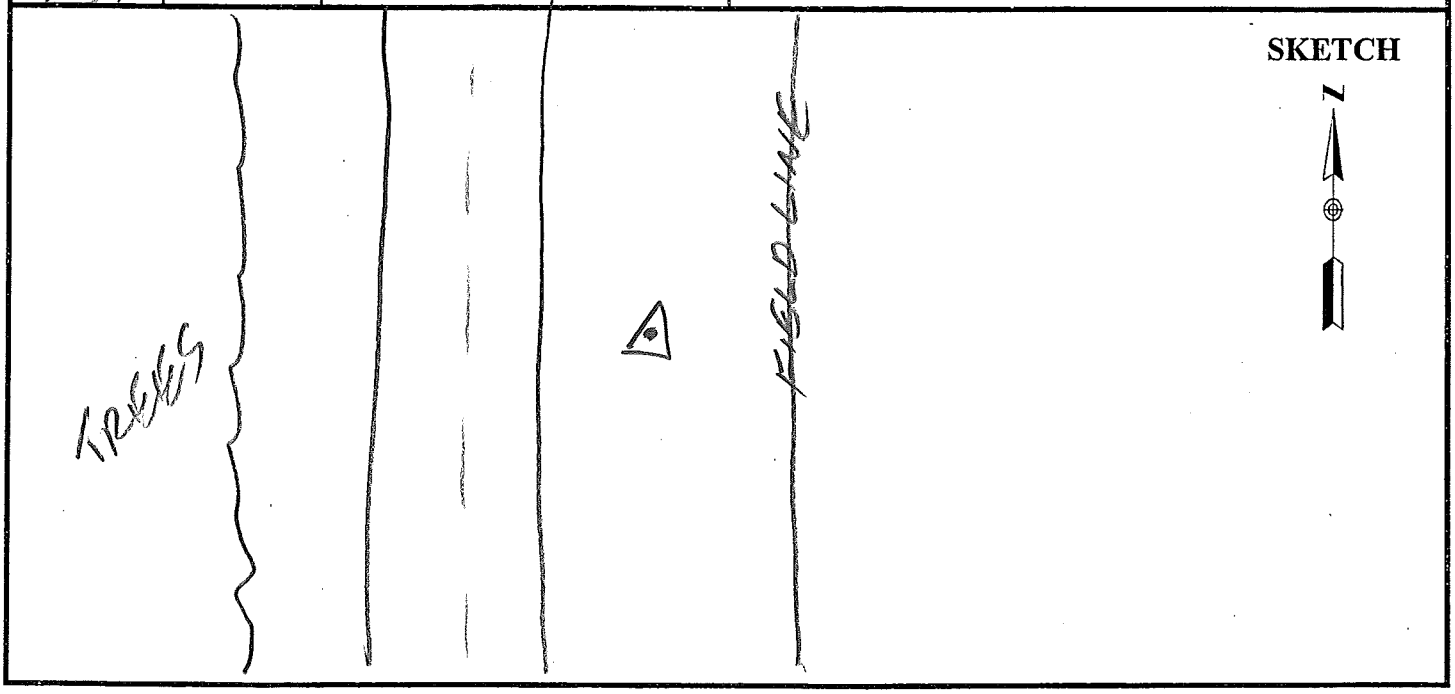
STATION DESCRIPTIONS POINT IN LONG GRASS IN E. R/W OF N-S ROAD.

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1937	2.6	8/8-10
1954		

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
OVC

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

DONIPHAN CO

4

PROJECT 1120103
OPERATOR WJW
DATE 2/2/12

SITE NUMBER 8
SITE NAME 1413

TRACKING TIMES (LOCAL) MEASURE CST
START 14:18
STOP 14:48

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 14
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
500 (0.360)

OBSTRUCTIONS: TREES S, W

HEIGHT READINGS MTS FT
1.278

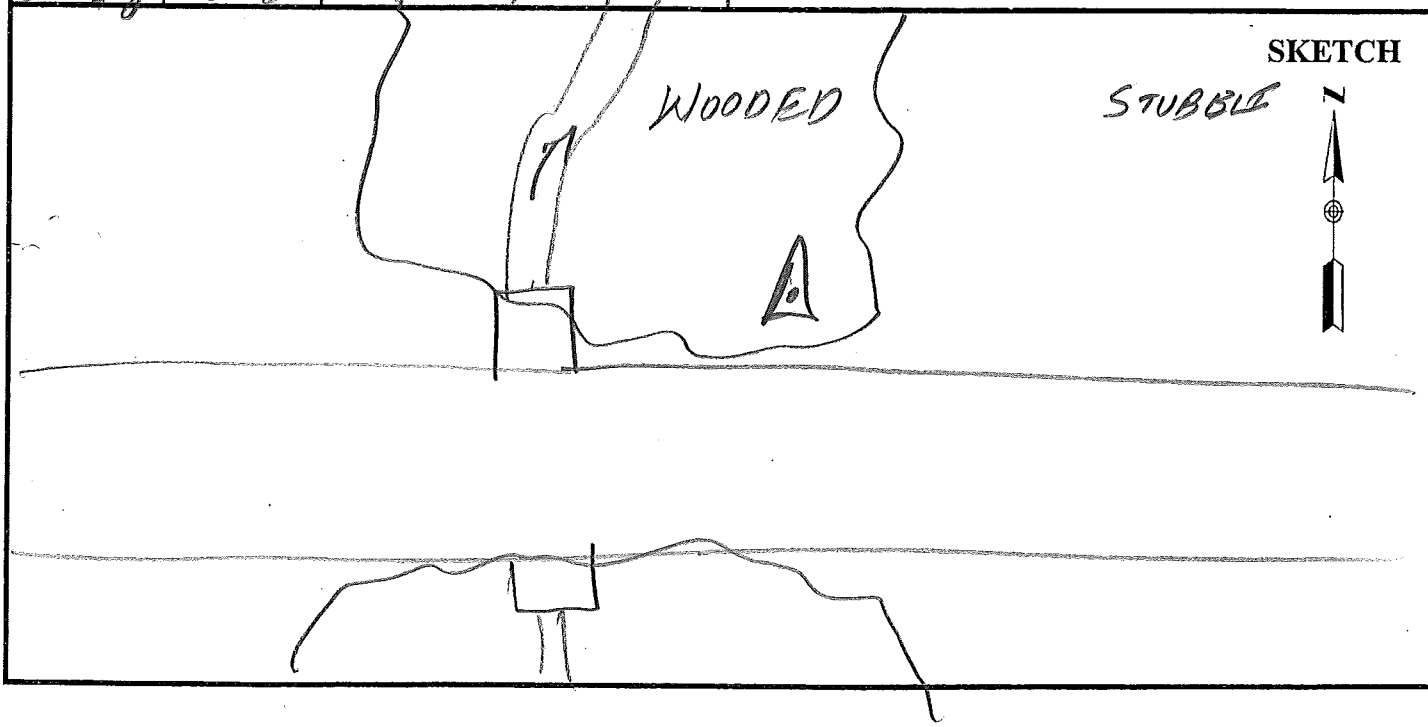
STATION DESCRIPTIONS POINT IN WOODED AREA JUST NE OF INT OF CREEK (N-S) AND E-W PRIMITIVE RD.

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
20 18	2.5	8/8-10
20 48	2.8	7/7-9

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
OVC

SKETCH



BROWN/NEMEHA CO

AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

BASE

PROJECT 1120103
OPERATOR WJN
DATE 2/7

SITE NUMBER 1
SITE NAME 1011

TRACKING TIMES (LOCAL) MEASURE CST
START 11:04
STOP 15:57

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 11
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
500 (0.360)

OBSTRUCTIONS: NO

HEIGHT READINGS MTS FT
1.192
1.552

STATION DESCRIPTIONS 7" SPIKE Set 2/1/12

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
17:04	4.7	6/6-6
See	note @ Right *	

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
LIGHT RAIN/SNOW
*UNIT POWERED DOWN INADVERTANTLY @ 21:01 AND RE OPENED @ 21:25-21:57

As BEFORE Described

SKETCH

MORK MOSV KSTS

AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

NEMAHA CO — BASE

PROJECT 1120103
OPERATOR WJN
DATE 2/7/12

SITE NUMBER 1
SITE NAME 1012

TRACKING TIMES (LOCAL) MEASURE CST
START 11:41
STOP 16:10

SENSOR TYPE 500 (9500) 399 299
MEMORY CARD 67
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 (0.389)
500 0.360

OBSTRUCTIONS: NO

HEIGHT READINGS MTS FT
1.176
1.565

STATION DESCRIPTIONS Set Rebar AND CAP

SATELLITE OBSERVATIONS

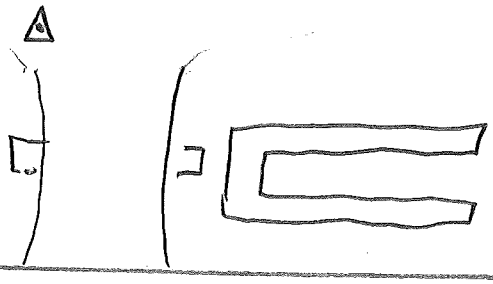
TIME	GDOP	SATELLITES
17 41	1.7	10/10-11
23 10	1.9	10/10-10

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
WINTERY MIX ALL AFTERNOON

APPROX 39 50 29.2
95 57 01.2

FIELDLINE

±21' N. OF ℄ CMP SKETCH
±14' W. OF ℄ FIELD ACCESS



KS 36

AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

NEMAHA CO. 5

PROJECT 1120103
OPERATOR WJN
DATE 2/7/12

SITE NUMBER 1
SITE NAME 1513

TRACKING TIMES (LOCAL) MEASURE CST
START 11:54
STOP 12:14

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 14
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
500 (0.360)

OBSTRUCTIONS: TRAFFIC

HEIGHT READINGS MTS FT
1.329

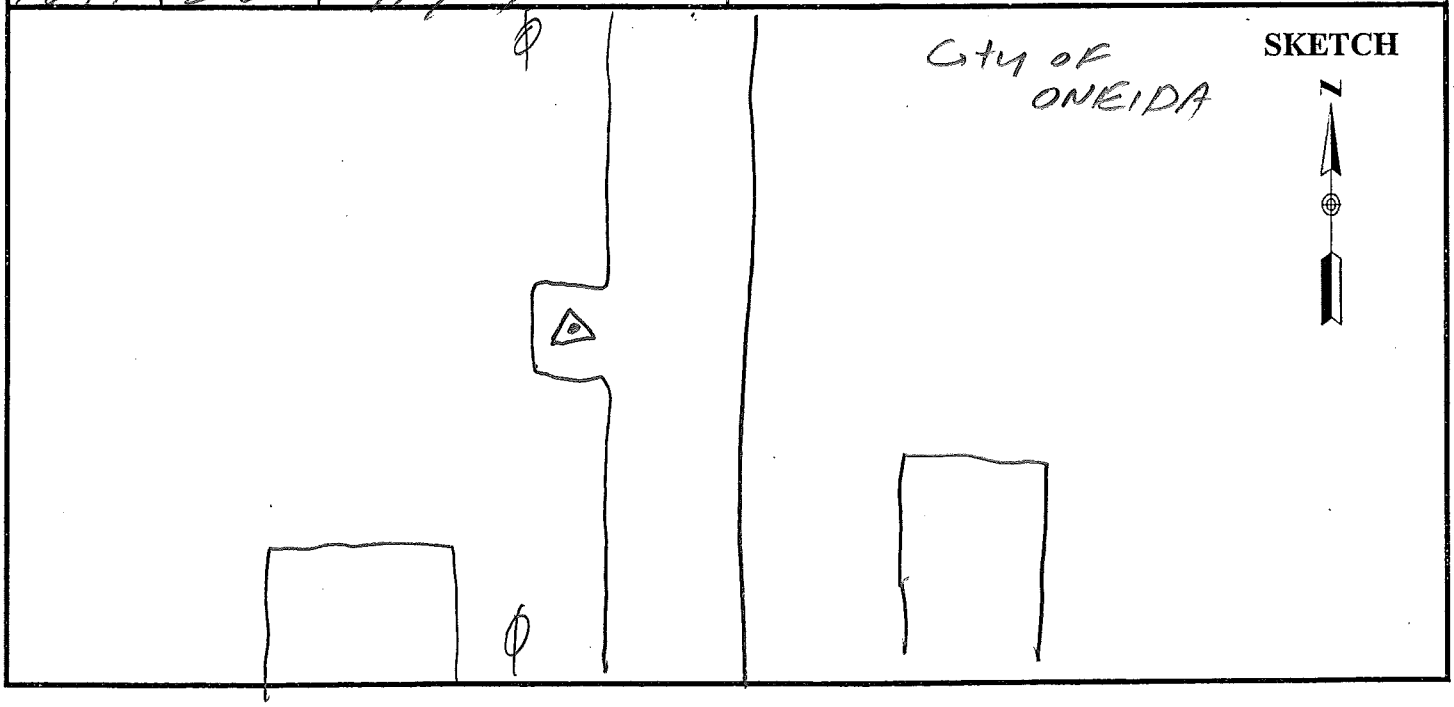
STATION DESCRIPTIONS CENTER OF 8x8 BIT APRON ON W. EDGE OF STREET.

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1754	1.8	9/9-10
1914	2.0	9/9-9

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

NEMAHA CO AME

PROJECT 1120103
OPERATOR WJN
DATE 2/7/12

SITE NUMBER 2
SITE NAME 1627

TRACKING TIMES (LOCAL) MEASURE CST
START 12:27
STOP 12:48

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 14
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
500 (0.360)

OBSTRUCTIONS: NO

HEIGHT READINGS MTS FT
1.330

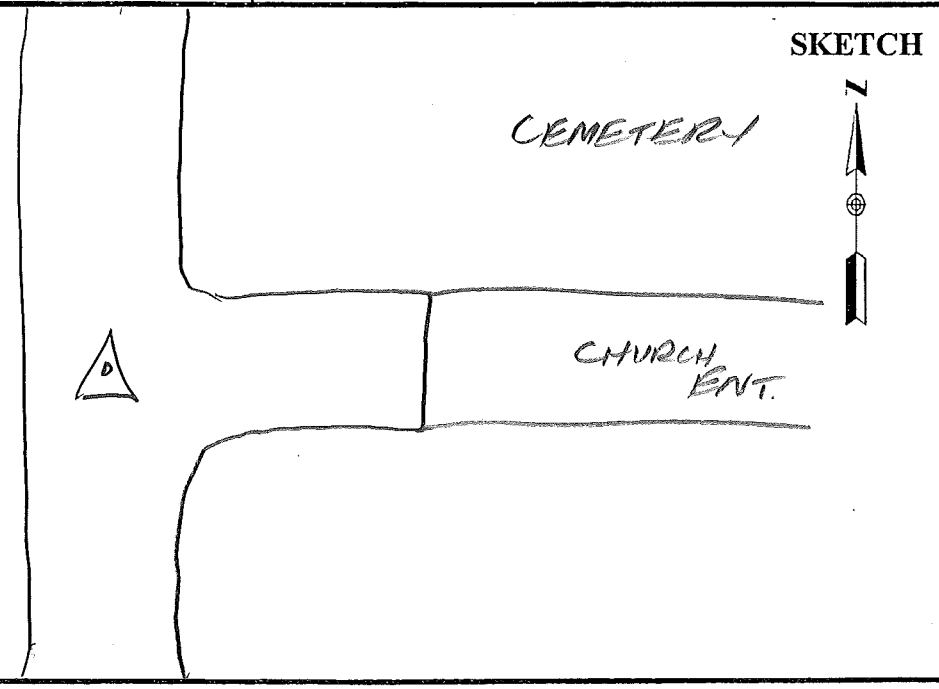
STATION DESCRIPTIONS E G 1AFT

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
18:27	1.8	10/10-10
18:48	1.9	10/10-10

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

NEMAHA CO 5

PROJECT 1120103
OPERATOR WLW
DATE 2/7/12

SITE NUMBER 3
SITE NAME 1514

TRACKING TIMES (LOCAL) MEASURE CST
START 13:03
STOP 13:31

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 14
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
500 0.360

HEIGHT READINGS MTS FT
1.373

OBSTRUCTIONS: TRAFFIC

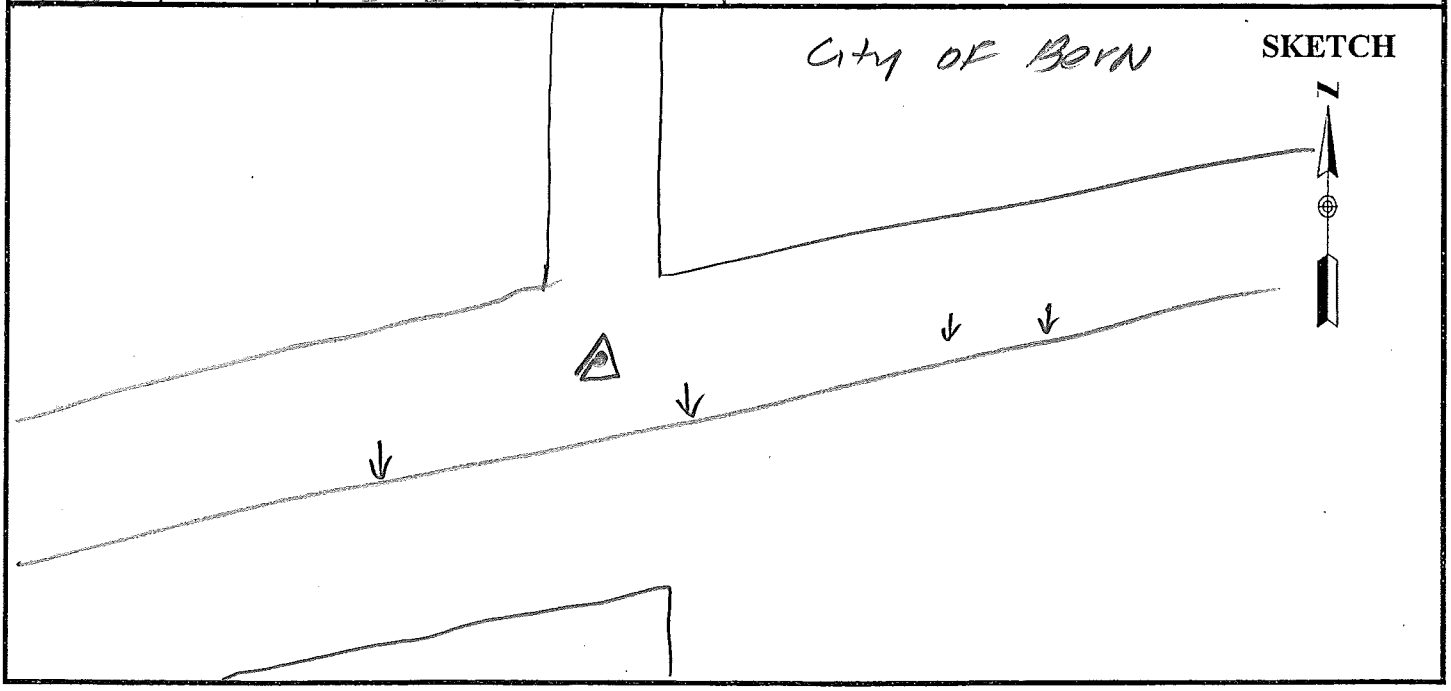
STATION DESCRIPTIONS EQ INT

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
19:03	2.5	9/9-9
19:31	2.3	8/8-8

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
SNOW

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

NEMAHA

2

PROJECT 1120103
OPERATOR WJW
DATE 2/7/12

SITE NUMBER 4
SITE NAME 1214

TRACKING TIMES (LOCAL) MEASURE CST
START 13:43
STOP 14:03

SENSOR TYPE (500) 9500 399 299
MEMORY CARD
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
500 0.360

HEIGHT READINGS MTS FT
1.280

OBSTRUCTIONS: No

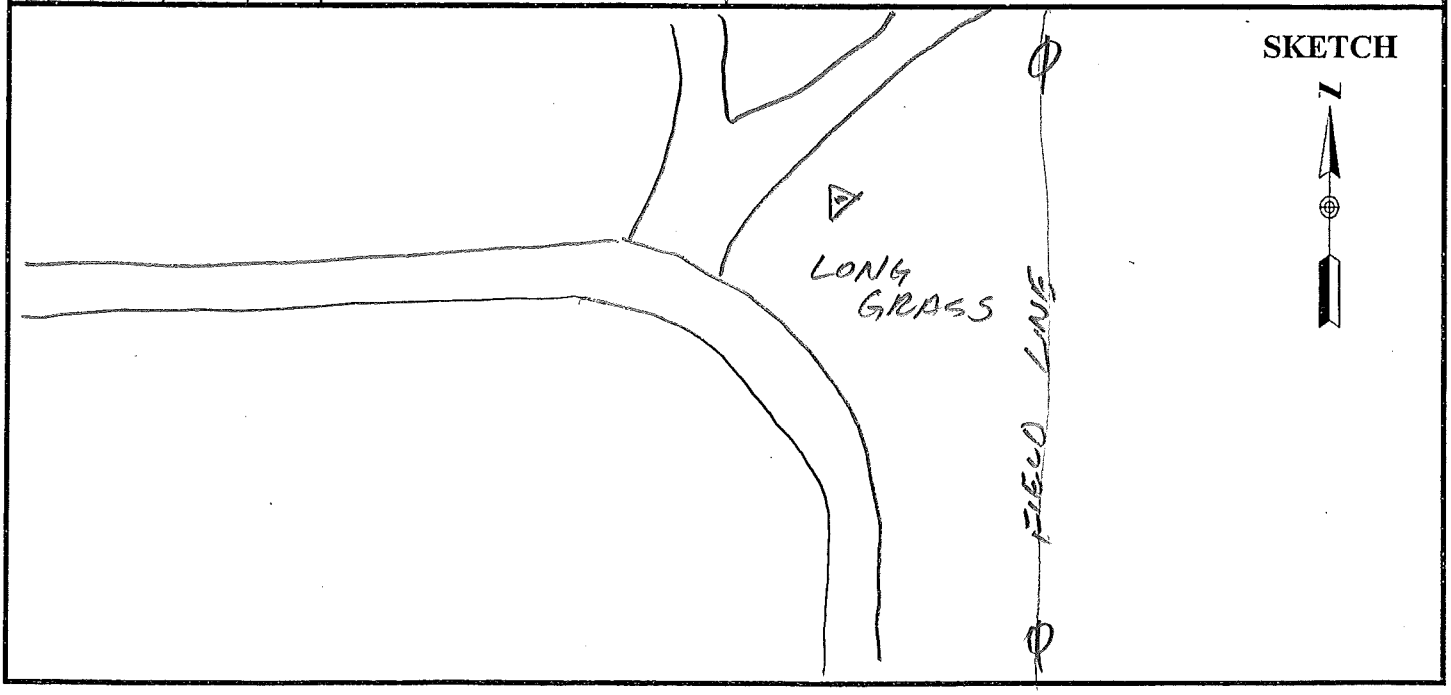
STATION DESCRIPTIONS POINT IN LONG GRASS

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
19:43	2.6	9/9-10
20:03	2.4	10/10-10

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
SNOW

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

NEMAHA

1

PROJECT 1120103
OPERATOR WJN
DATE 2/7/12

SITE NUMBER 5
SITE NAME 1114

TRACKING TIMES (LOCAL) MEASURE CST
START 1416
STOP 1435

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 14
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
500 (0.360)

OBSTRUCTIONS: NO

HEIGHT READINGS MTS FT
1.302

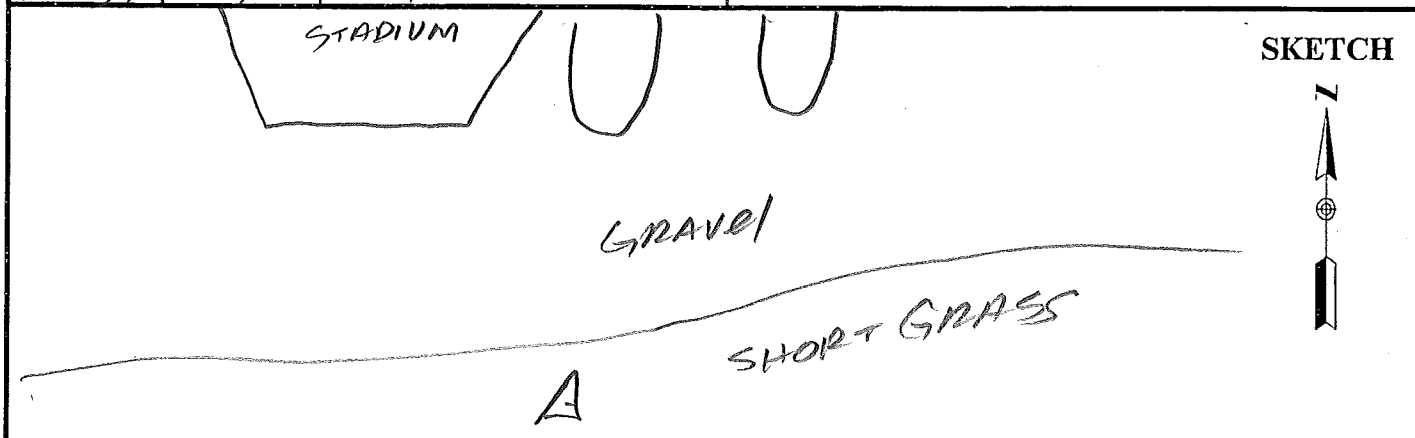
STATION DESCRIPTIONS POINT IN
SHORT GRASS

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
20:16	1.8	9/9-10
20:35	1.9	10/10-10

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
SNOW

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

NEMAHA CO 5

PROJECT 1120103
OPERATOR WJN
DATE 2/7/12

SITE NUMBER 6
SITE NAME 1515

TRACKING TIMES (LOCAL) MEASURE CST
START 1450
STOP 1509

SENSOR TYPE (500) 9500 399 299
MEMORY CARD
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
500 (0.360)

HEIGHT READINGS MTS FT
1.361

OBSTRUCTIONS: NO

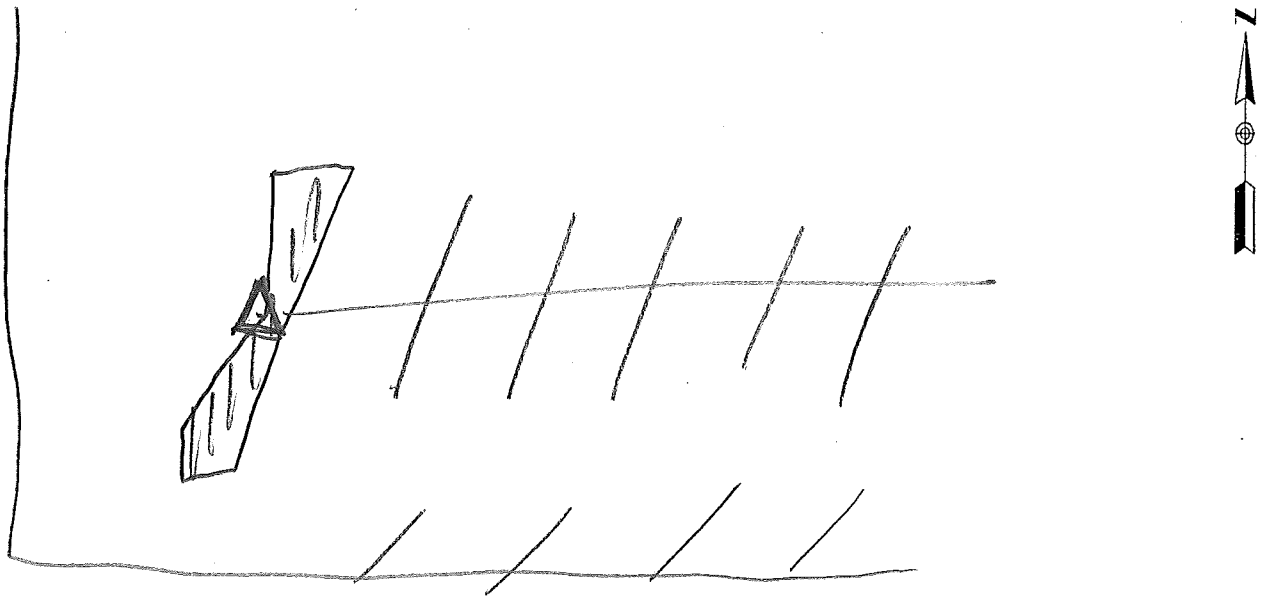
STATION DESCRIPTIONS CENTER
END OF HEAVILY
HATCHED NO PARKING
AREA, SOUTH WEST
AREA OF PARKING LOT

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
2050	1.8	10/10-10
2109	1.9	10/10-10

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
HEAVY SNOW

CITY OF SABETHA SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

NEMAHA Co 4

PROJECT 11Z0103
OPERATOR NJN
DATE 2/7/12

SITE NUMBER 7
SITE NAME 1414

TRACKING TIMES (LOCAL) MEASURE CST
START 15:32
STOP 15:50

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 14
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
500 (0.360)

OBSTRUCTIONS: TREES

HEIGHT READINGS MTS FT
1.2m

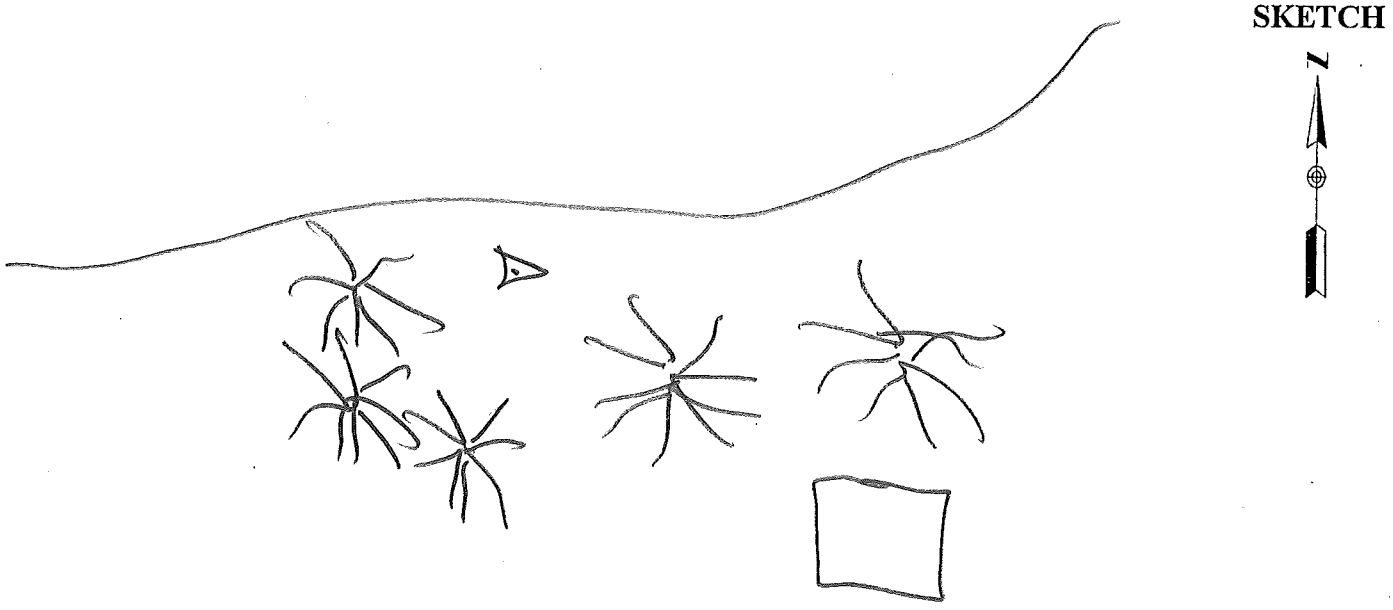
STATION DESCRIPTIONS POINT IN WOODED PARK

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
21 32	1.8	10/10-10
2150	2.0	9/9-9

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
SNOW

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

Cherokee Co.

Base short grass VRT

PROJECT 1120103
OPERATOR MB
DATE 2.7.12

SITE NUMBER 1
SITE NAME 123

TRACKING TIMES (LOCAL) MEASURE ✓
START 12:09 P
STOP

SENSOR TYPE 500 9500 399 299
MEMORY CARD 732
BATTERY NO. CB
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
500 0.360

OBSTRUCTIONS: none

HEIGHT READINGS MTS FT
1.315
1.675

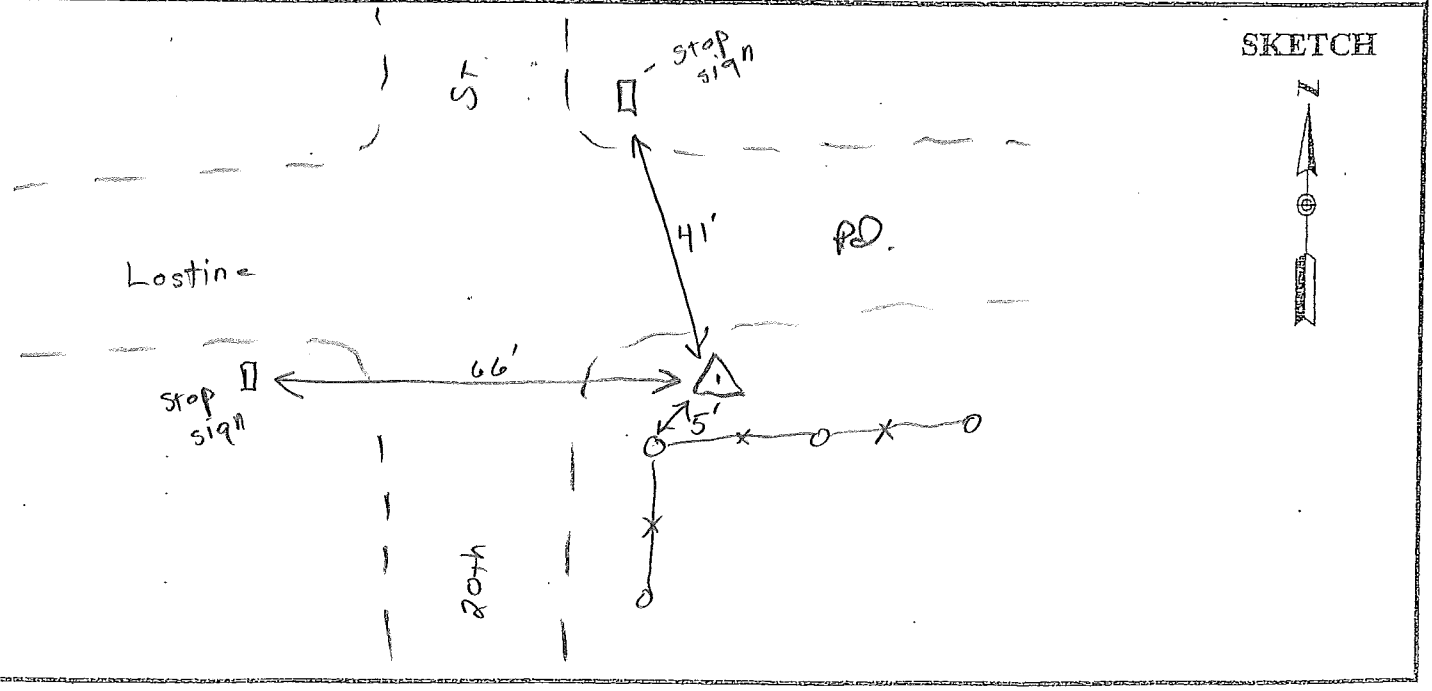
STATION DESCRIPTIONS set 5/8" rebar w/cap

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1309	1.7	8/10

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
37 06 16.7
94 47 48.5

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

Cherokee Co.

Base tall grass VRT

PROJECT 1120103
OPERATOR MB
DATE 2.7.12

SITE NUMBER 1
SITE NAME 219

TRACKING TIMES (LOCAL) MEASURE ✓
START 12:48
STOP

SENSOR TYPE 500 9500 399 299
MEMORY CARD 66
BATTERY NO. CD
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
500 0.360

OBSTRUCTIONS: tree NE

HEIGHT READINGS MTS FT
1.315
1.704

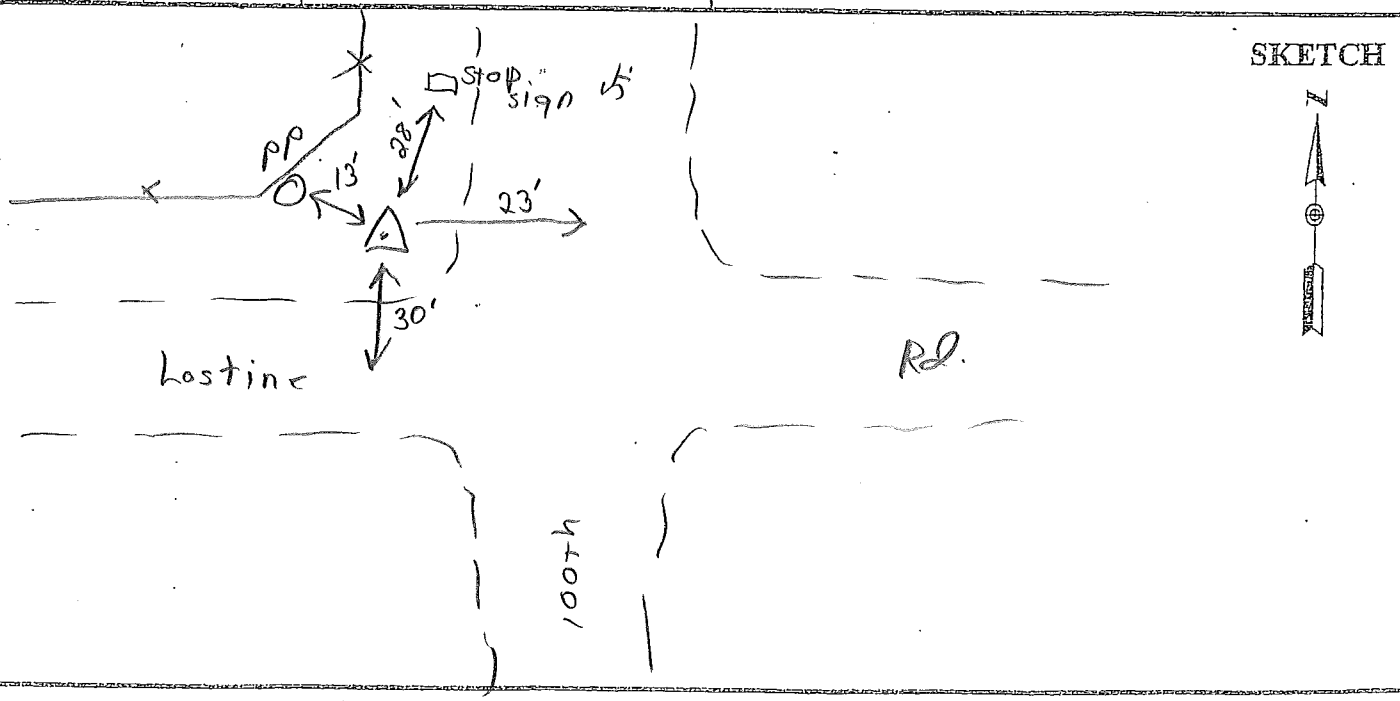
STATION DESCRIPTIONS set 5/8" rebar w/cap

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1348	2.7	7/9

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
97 06 16.9
95 00 49.4

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

Cherokee Co. VERTICAL CONTROL

PROJECT 1120103
OPERATOR MB
DATE 2.7.12

SITE NUMBER 1
SITE NAME 801.25

TRACKING TIMES (LOCAL) MEASURE ____
START 1:18 p
STOP 1:53 p

SENSOR TYPE 500 9500 399 299
MEMORY CARD 603
BATTERY NO. ~~69~~
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
(500) (0.360)

OBSTRUCTIONS:

HEIGHT READINGS MTS FT
1.260

1.620

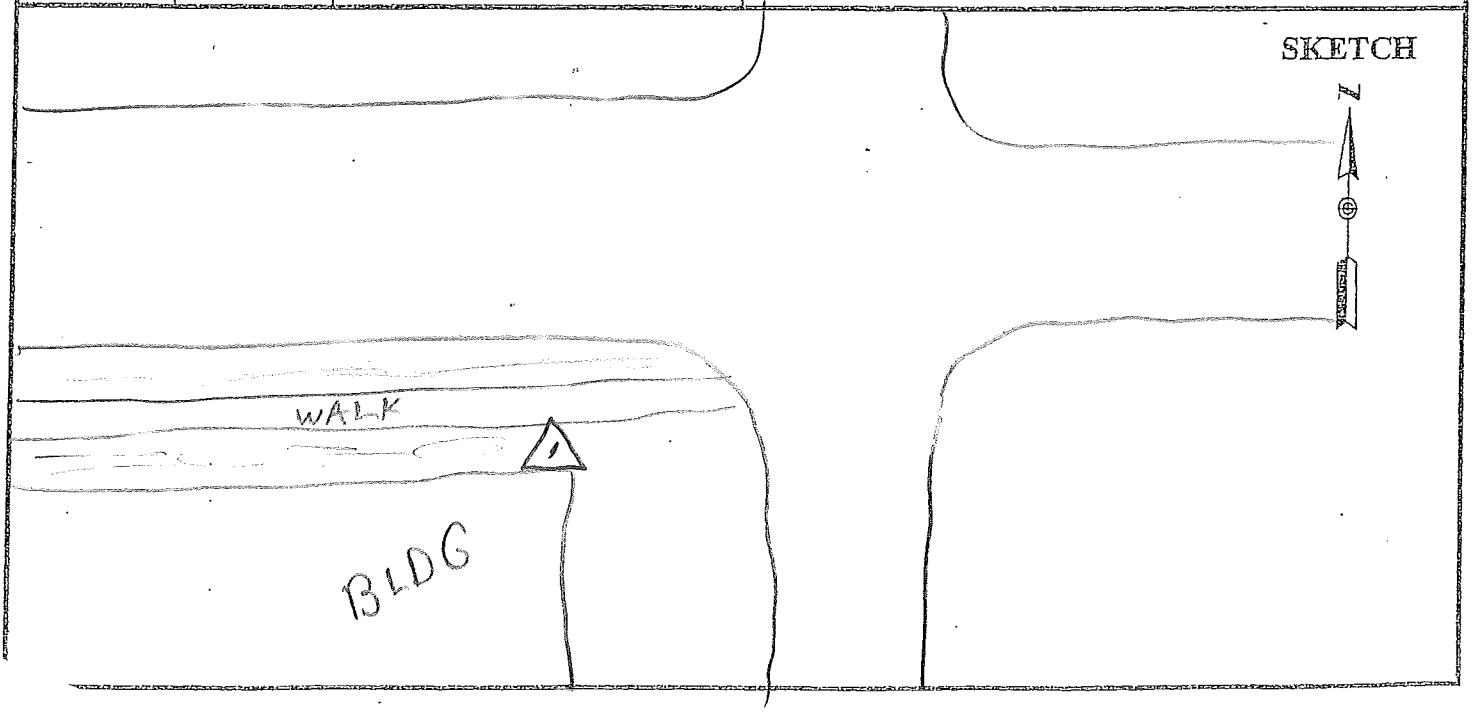
STATION DESCRIPTIONS Find cap on I.P.
Dept. of Ag. "801.25"

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1418	3.9	7/7

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

CHEROKEE Co.

AME √PT

PROJECT 1120103
OPERATOR MB
DATE 2.7.12

SITE NUMBER 2
SITE NAME 628

TRACKING TIMES (LOCAL) MEASURE _____
START 2:00 p
STOP 2:26 p

SENSOR TYPE 500 9500 399 299
MEMORY CARD 603
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 ~~0.389~~
(500) (0.360)

OBSTRUCTIONS: trees W.

HEIGHT READINGS MTS FT
1.362 _____
1.722

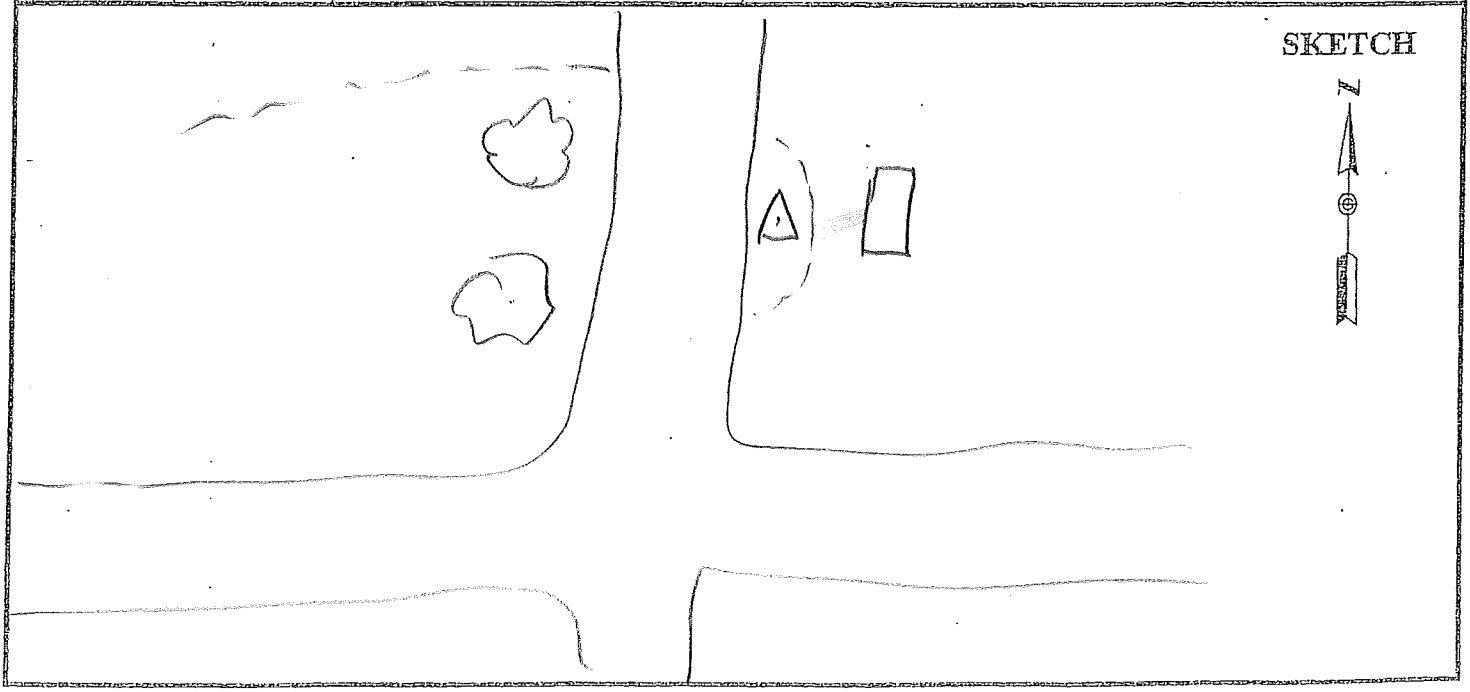
STATION DESCRIPTIONS in pull-off - E. side road

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1500	2.2	7/9
1526		

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

Cherokee Co.

woods VPT

PROJECT 1120103
OPERATOR MB
DATE 2.7.12

SITE NUMBER 3
SITE NAME 401

TRACKING TIMES (LOCAL) MEASURE ✓
START 2:32p
STOP 2:58p

SENSOR TYPE 500 9500 399 299
MEMORY CARD 603
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 ~~0.389~~
500 ~~0.360~~

OBSTRUCTIONS: trees above

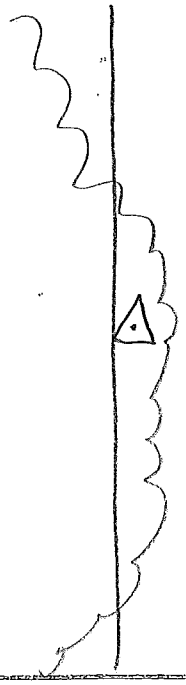
HEIGHT READINGS MTS FT
1.348
1.708

STATION DESCRIPTIONS W. side road

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1532	2.8	6/7
1558		

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS



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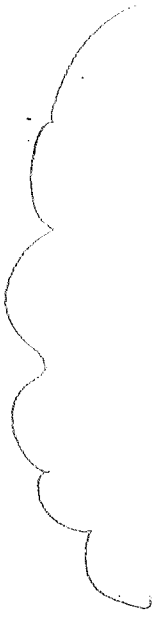


AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

Cherokee Co.

hand VRT

PROJECT 1120103
OPERATOR MB
DATE 2.7.12

SITE NUMBER 4
SITE NAME 519

TRACKING TIMES (LOCAL) MEASURE _____
START 3:09 p
STOP 3:33 p

SENSOR TYPE 500 9500 399 299
MEMORY CARD 603
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 ~~0.389~~
500 0.360

HEIGHT READINGS MTS FT
1.353

1713

OBSTRUCTIONS: none

STATION DESCRIPTIONS N. side road

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1609	1.8	8/8
1633		

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH

AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

NEMAHA CO

Vert control
BASE

PROJECT 1120103
OPERATOR WJN
DATE 2/8/12

SITE NUMBER 1
SITE NAME Q 109

TRACKING TIMES (LOCAL) MEASURE CST
START 9:17
STOP

SENSOR TYPE 500 (9500) 399 299
MEMORY CARD 67
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 (0.389)
500 0.360

OBSTRUCTIONS: NO

HEIGHT READINGS MTS FT
1.239

1.627

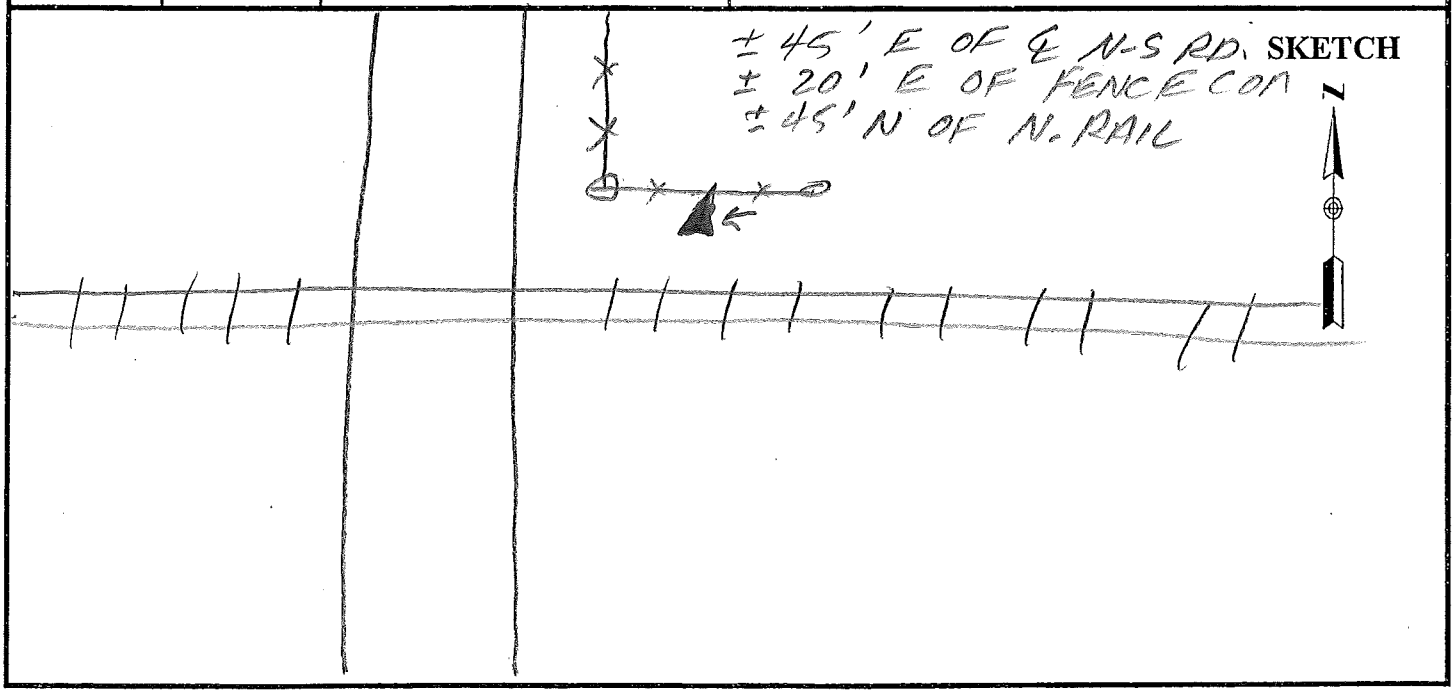
STATION DESCRIPTIONS BRASS DISK
IN CONC. MONUMENT MKD
Q 109 1934
USCGS
AS DESCRIBED BY NGS

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
15:17	1.8	9/9-9

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
OVC

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

NEMAHA CO

BASE

PROJECT 1120103
OPERATOR WJN
DATE 2/8/12

SITE NUMBER 1
SITE NAME 1012

TRACKING TIMES (LOCAL) MEASURE CST
START 10:08
STOP

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 11
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
500 (0.360)

OBSTRUCTIONS: NO

HEIGHT READINGS MTS FT
1.177
1.537

STATION DESCRIPTIONS REBAR AND CAP SET 2/7/12

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
16:08	2.0	9/9-G

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
OVC

SKETCH

AS BEFORE DESCRIBED

AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

NEMAHA CO. 2

PROJECT 1120103
OPERATOR WJN
DATE 2/9/12

SITE NUMBER
SITE NAME 1215

TRACKING TIMES (LOCAL) MEASURE CST
START 10:43
STOP 11:03

SENSOR TYPE (500) 9500 399 299
MEMORY CARD
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
500 (0.360)

OBSTRUCTIONS: APL SSE

HEIGHT READINGS MTS FT
1.120

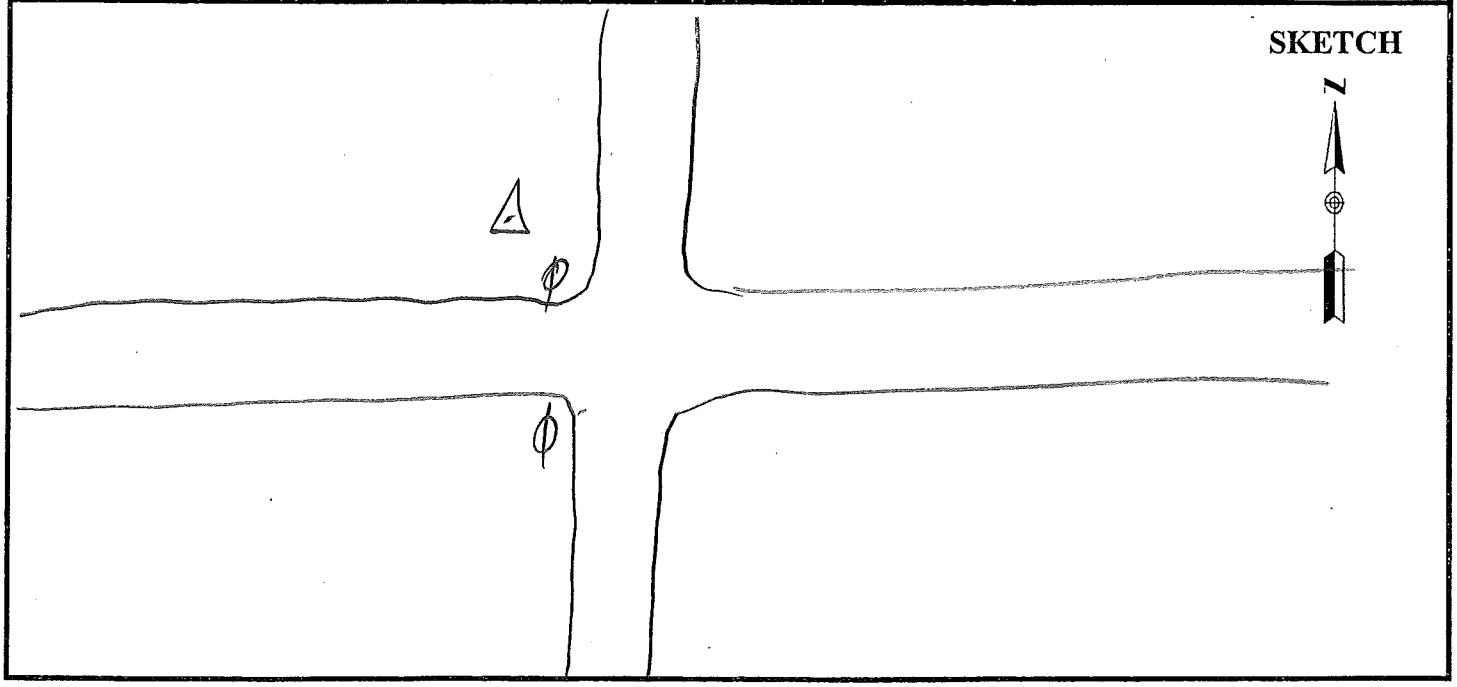
STATION DESCRIPTIONS POINT IN LONG GRASS NW QUAD OF INT. IN R/W

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
16:43	4.6	6/6-6
17:02	2.6	7/7-7

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
OVC

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

NEMAHA CO. 1

PROJECT 1120103
OPERATOR WJN
DATE 2/8/12

SITE NUMBER 2
SITE NAME 1115

TRACKING TIMES (LOCAL) MEASURE CST
START 11:24
STOP 11:44

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 14
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
500 (0.360)

OBSTRUCTIONS: NO

HEIGHT READINGS MTS FT
1.266

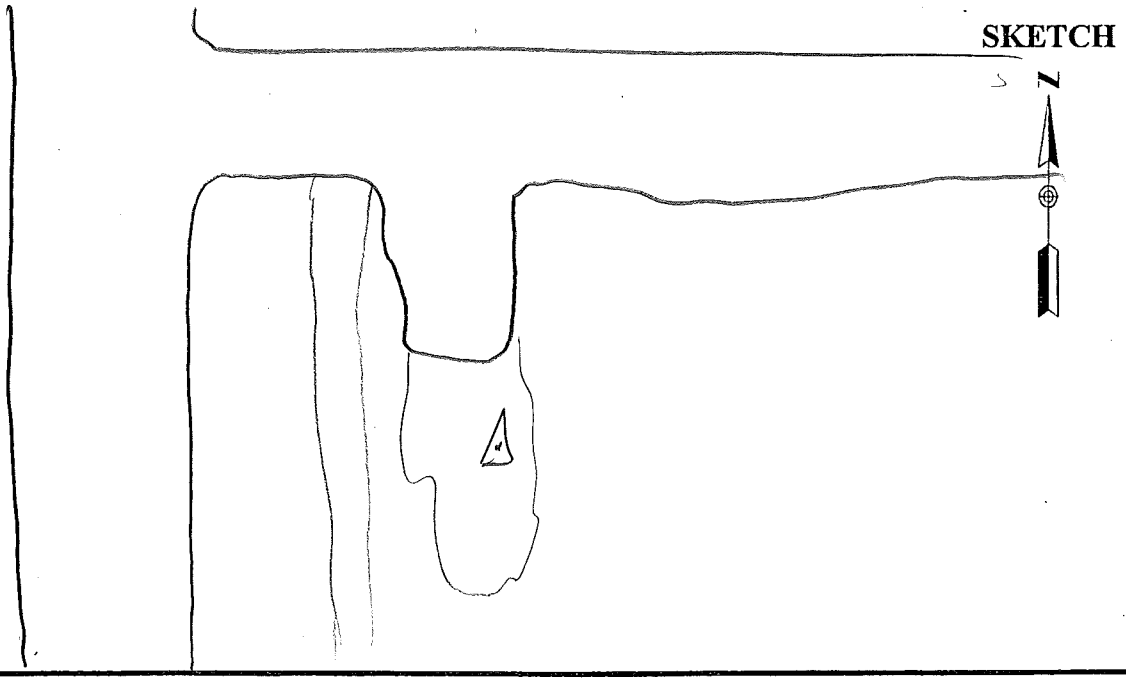
STATION DESCRIPTIONS POINT IN SHORT, SPARSE GRASS IN KDOT LAYDOWN AREA

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
17:24	2.0	9/9-9
17:44	2.1	9/9-9

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
OVC

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

NEMAHA CO

4

PROJECT 120103
OPERATOR IRVIN
DATE 2/8/12

SITE NUMBER 3
SITE NAME 1415

TRACKING TIMES (LOCAL) MEASURE CST
START 12:04
STOP 12:29

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 14
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
500 ~~0.360~~

OBSTRUCTIONS: TREES

HEIGHT READINGS MTS FT
1.263

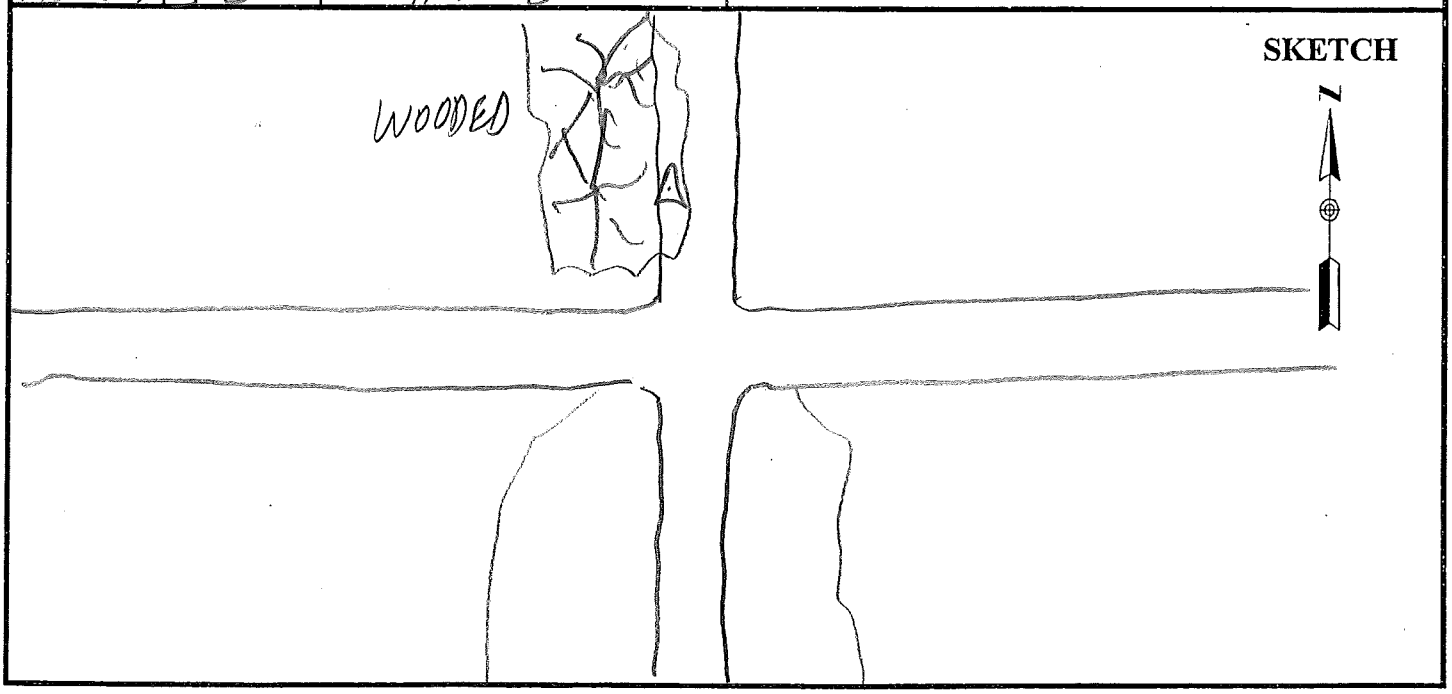
STATION DESCRIPTIONS POINT IN WOODED AREA

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
13:04	1.7	9/9-9
13:29	2.0	7/7-9

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
OVC

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

NEMAHA CO. AME

PROJECT 1120103
OPERATOR WJN
DATE 2/8/12

SITE NUMBER 4
SITE NAME 1628

TRACKING TIMES (LOCAL) MEASURE CST
START 12:47
STOP 13:15

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 14
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
500 (0.360)

OBSTRUCTIONS: NO

HEIGHT READINGS MTS FT
1.285

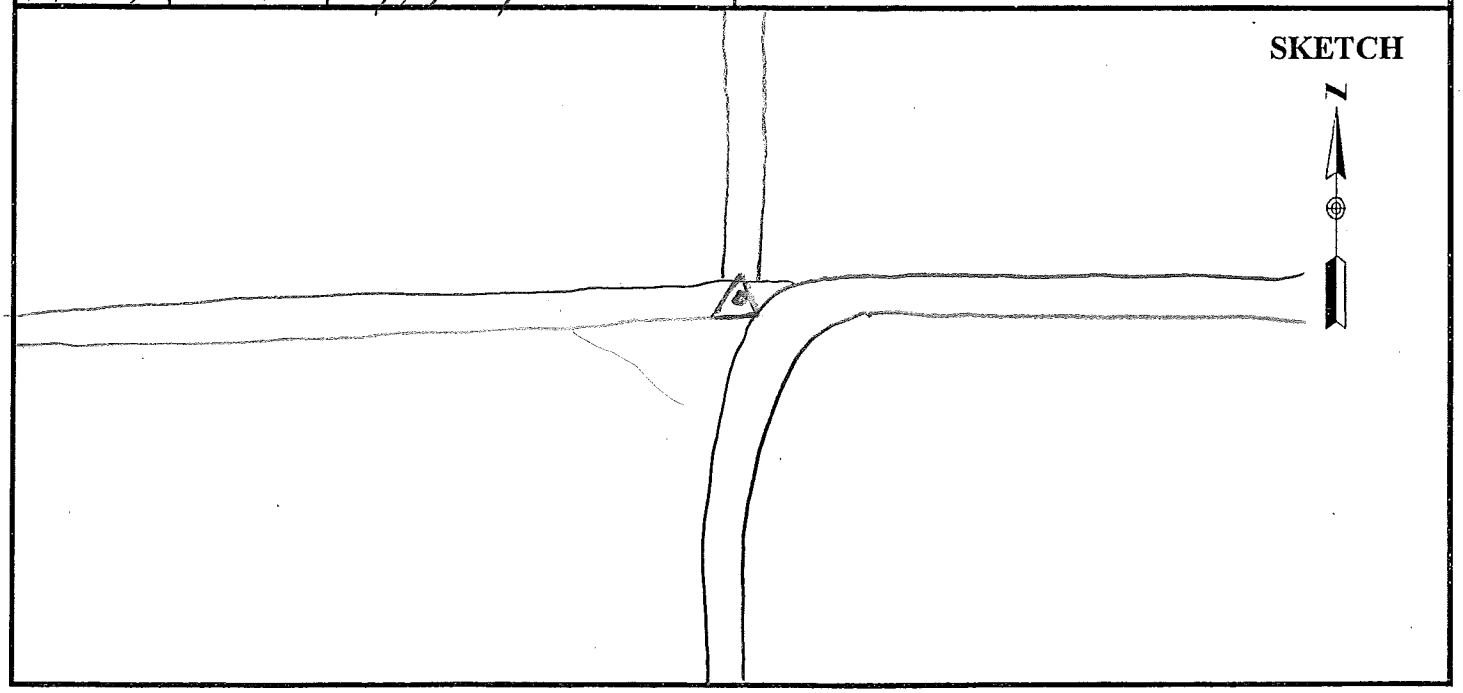
STATION DESCRIPTIONS QQ INT
RDS W-N

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
19:47	2.3	9/9-9
19:15	2.1	9/9-9

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
OVC

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

2

PROJECT 1120103
OPERATOR WJN
DATE 2/8/12

SITE NUMBER 5
SITE NAME 1216

TRACKING TIMES (LOCAL) MEASURE CST
START 13:27
STOP 13:55

SENSOR TYPE 500 9500 399 299
MEMORY CARD
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
500 0.360

OBSTRUCTIONS:

HEIGHT READINGS MTS FT
1.234

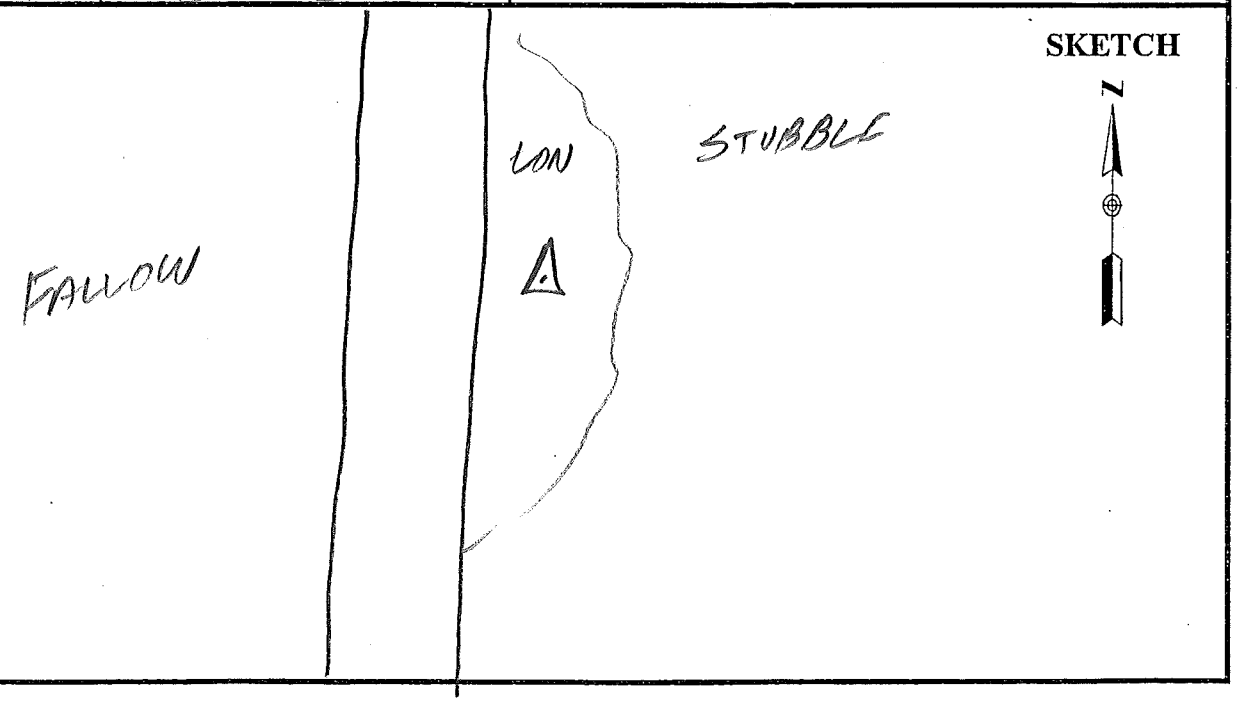
STATION DESCRIPTIONS POINT IN LONG GRASS IN E R/W OF Co. RD

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
19:27	2.8	8/8-8
19:55	2.4	8/8-8

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

NEMAHA CO

1

PROJECT 1120103
OPERATOR WJN
DATE 2/8/12

SITE NUMBER 6
SITE NAME 1116

TRACKING TIMES (LOCAL) MEASURE CST
START 14:08
STOP 14:30

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 14
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
500 (0.360)

OBSTRUCTIONS: NO

HEIGHT READINGS MTS FT
1.236

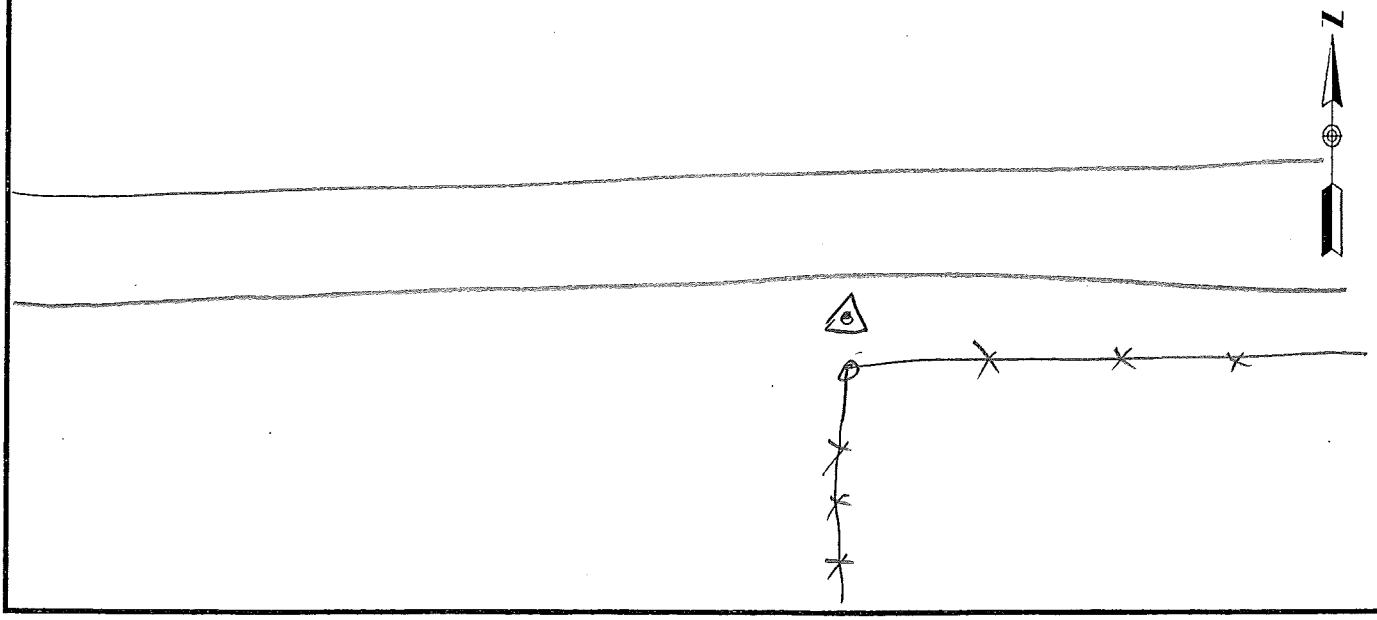
STATION DESCRIPTIONS POINT IN SHORT GRASS, N. OF FENCE COR, MID DIST TO S. EDGE RD.

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
20:08	2.3	9/9-10
20:30	2.0	10/10-10

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
OVC

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

NEMAHA CO

4

PROJECT 1120103
OPERATOR WJN
DATE 2/8/12

SITE NUMBER 7
SITE NAME 1416

TRACKING TIMES (LOCAL) MEASURE CST
START 14:40
STOP 14:58

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 14
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
500 (0.360)

OBSTRUCTIONS: TREES

HEIGHT READINGS MTS FT
1.309

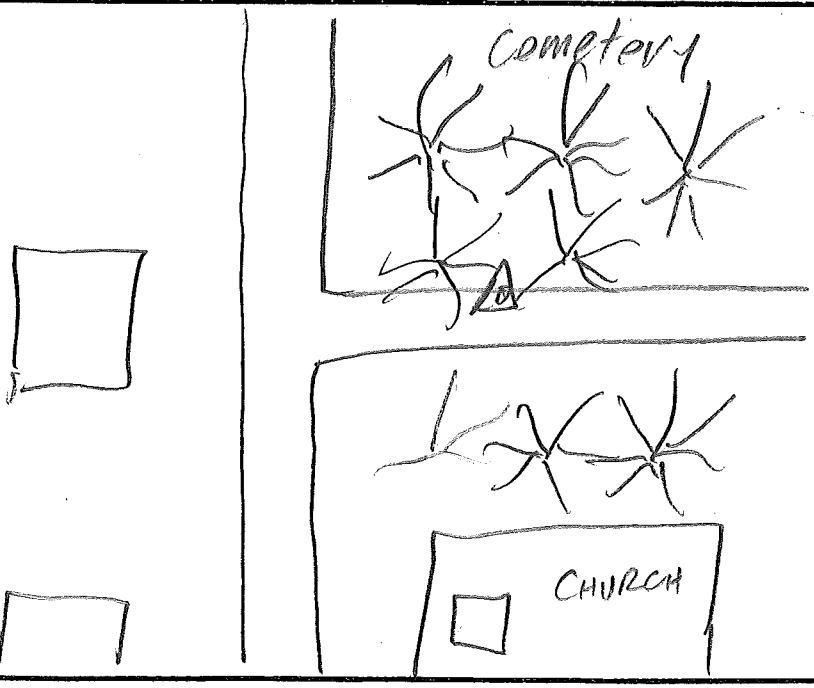
STATION DESCRIPTIONS POINT IN WOODED AREA BETWEEN CHURCH AND CEMETERY

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
2040	2.1	7/7-7
2058	2.4	7/7-7

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
OVC

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

NEMAHA Co

5

PROJECT 1120103
OPERATOR WJN
DATE 2/8/12

SITE NUMBER 8
SITE NAME 1516

TRACKING TIMES (LOCAL) MEASURE CST
START 15:20
STOP 15:35

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 14
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
500 (0.360)

OBSTRUCTIONS: TREES, BLDGS, PPLS ALL QUADRANTS

HEIGHT READINGS MTS 1.307 FT

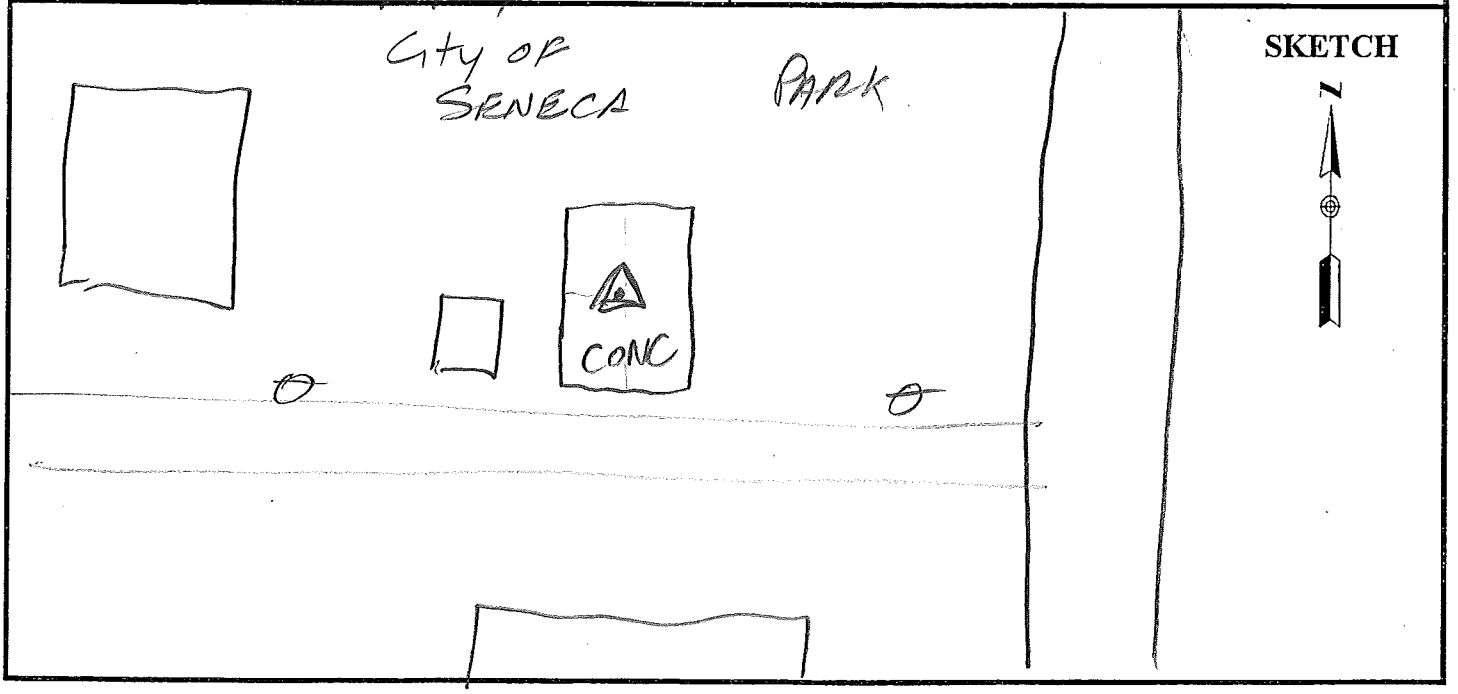
STATION DESCRIPTIONS CENTER OF 30 x 20 CONC SLAB

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
21 20	2.0	9/9-9
21 35	2.1	9/9-9

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
OVC

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

NEMAHA CO

PROJECT 1120103
OPERATOR WYN
DATE 2/8/12

SITE NUMBER 9
SITE NAME 1629

TRACKING TIMES (LOCAL) MEASURE CST
START 15:47
STOP 16:02

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 14
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
500 (0.360)

HEIGHT READINGS MTS FT
1.311

OBSTRUCTIONS: LAMPS

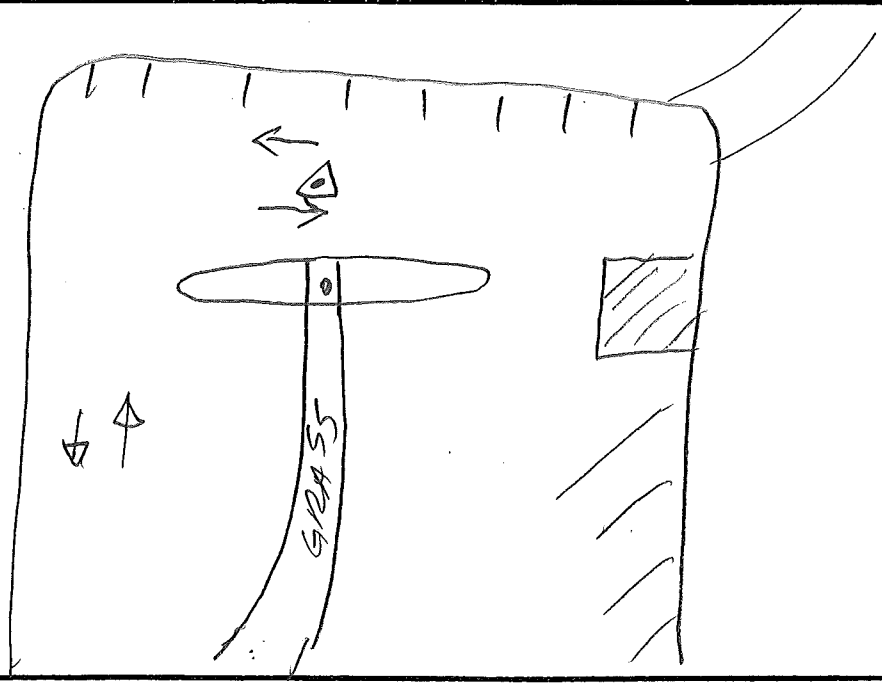
STATION DESCRIPTIONS E PARKING
LANE OPP E PARKING
MEDIAN

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
21:47	1.9	9/9-9
22:02	2.0	9/9-9

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
OVC

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

Nemaha Co 1

PROJECT 1120103
OPERATOR WJN
DATE 2/8/12

SITE NUMBER 10
SITE NAME 1117

TRACKING TIMES (LOCAL) MEASURE CST
START 16:15
STOP 1639

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 14
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
500 (0.360)

HEIGHT READINGS MTS 1.263 FT

OBSTRUCTIONS: PPL, BLDGS SW

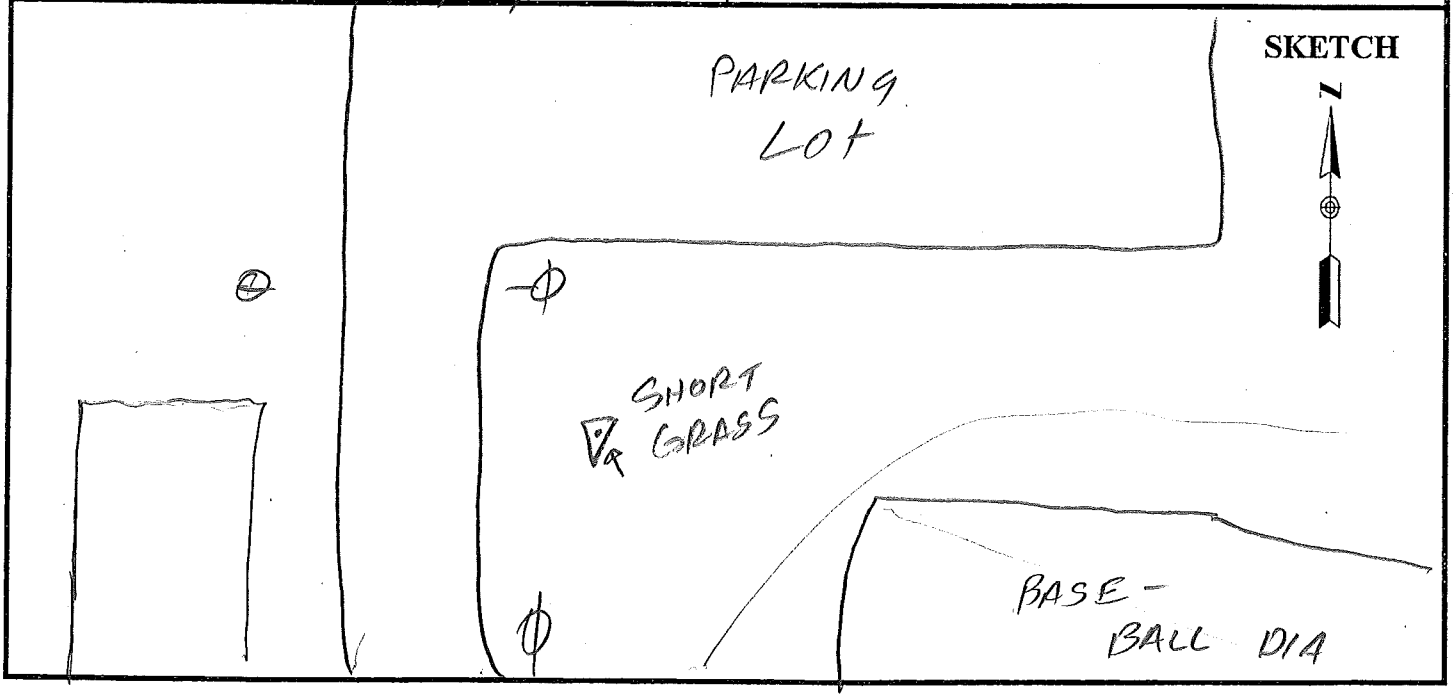
STATION DESCRIPTIONS POINT IN SHORT GRASS

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
22:15	1.9	9/9-9
2239	2.1	9/9-9

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
OVC

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

Cherokee Co — Base — short grass ✓

PROJECT 1120103
OPERATOR MB
DATE 2.8.12

SITE NUMBER 1
SITE NAME 123

TRACKING TIMES (LOCAL) MEASURE ✓
START 7:21 a.
STOP

SENSOR TYPE 500 9500 399 299
MEMORY CARD 732
BATTERY NO. CO
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
500 0.360

OBSTRUCTIONS:

HEIGHT READINGS MTS FT
1.370
1.730

STATION DESCRIPTIONS

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
821	3.1	6/6

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH

see previous

AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

Cherokee Co. Base tall grass √PT

PROJECT 1120103
OPERATOR MB
DATE 2 · 8 · 12

SITE NUMBER 1
SITE NAME 219

TRACKING TIMES (LOCAL) MEASURE ✓
START 7:51a.
STOP

SENSOR TYPE 500 9500 399 299
MEMORY CARD 66
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
500 0.360

HEIGHT READINGS MTS FT
1.328

1,717

OBSTRUCTIONS:

STATION DESCRIPTIONS

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
851	3.9	7/7

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH

see previous

AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

Cherokee Co.

short 9'455 ✓PT

PROJECT 1120103
OPERATOR MB
DATE 2.8.12

SITE NUMBER 1
SITE NAME 124

TRACKING TIMES (LOCAL) MEASURE ✓
START 8:03a.
STOP 8:25a.

SENSOR TYPE 500 9500 399 299
MEMORY CARD 603
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
500 0.360

HEIGHT READINGS MTS FT
1.374
1.734

OBSTRUCTIONS: none

STATION DESCRIPTIONS S. side road

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
903	7.9	7/7
925		

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH

AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

Cherokee Co.

trees √PT

PROJECT 1120103
OPERATOR MB
DATE 2.8.12

SITE NUMBER 2
SITE NAME 402

TRACKING TIMES (LOCAL) MEASURE √
START 8:34a.
STOP 8:57a.

SENSOR TYPE 500 9500 399 299
MEMORY CARD 603
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
(500) (0.360)

OBSTRUCTIONS: trees above

HEIGHT READINGS MTS FT
1.375

STATION DESCRIPTIONS N. side road

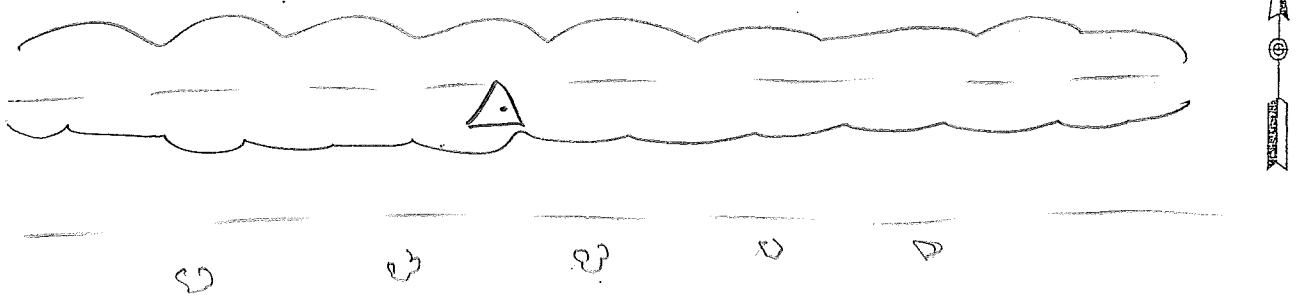
1735

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
934	3.0	5/6
957		

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

Cherokee Co.

hard VRT

PROJECT 1120103
OPERATOR MB
DATE 2·8·12

SITE NUMBER 3
SITE NAME 520

TRACKING TIMES (LOCAL) MEASURE ✓
START 9:12 a.
STOP 9:32 a.

SENSOR TYPE 500 9500 399 299
MEMORY CARD 603
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
500 0.360

HEIGHT READINGS MTS FT
1.341

1701

OBSTRUCTIONS: none

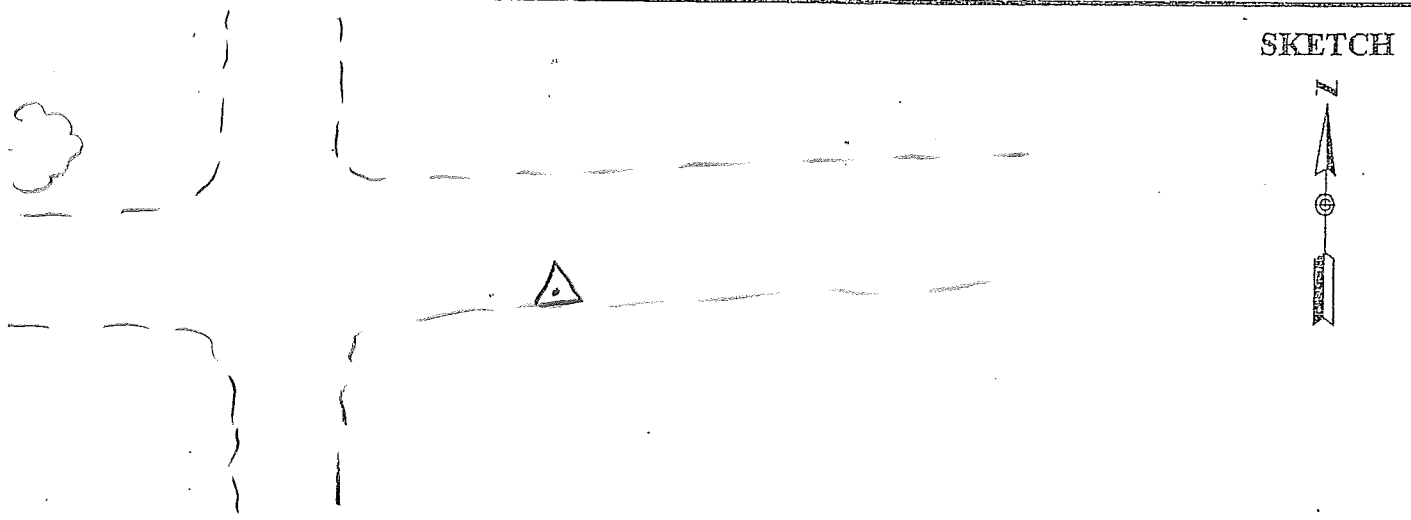
STATION DESCRIPTIONS S. side road

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1012	5.4	7/8
1032		

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

Cherokee Co.

tall grass ✓PT

PROJECT 1120103
OPERATOR MB
DATE 2.8.12

SITE NUMBER 4
SITE NAME 220

TRACKING TIMES (LOCAL) MEASURE ✓
START 9:45a.
STOP 10:05a.

SENSOR TYPE 500 9500 399 299
MEMORY CARD 603
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
(500) (0.360)

OBSTRUCTIONS: none

HEIGHT READINGS MTS FT
1.400
1.760

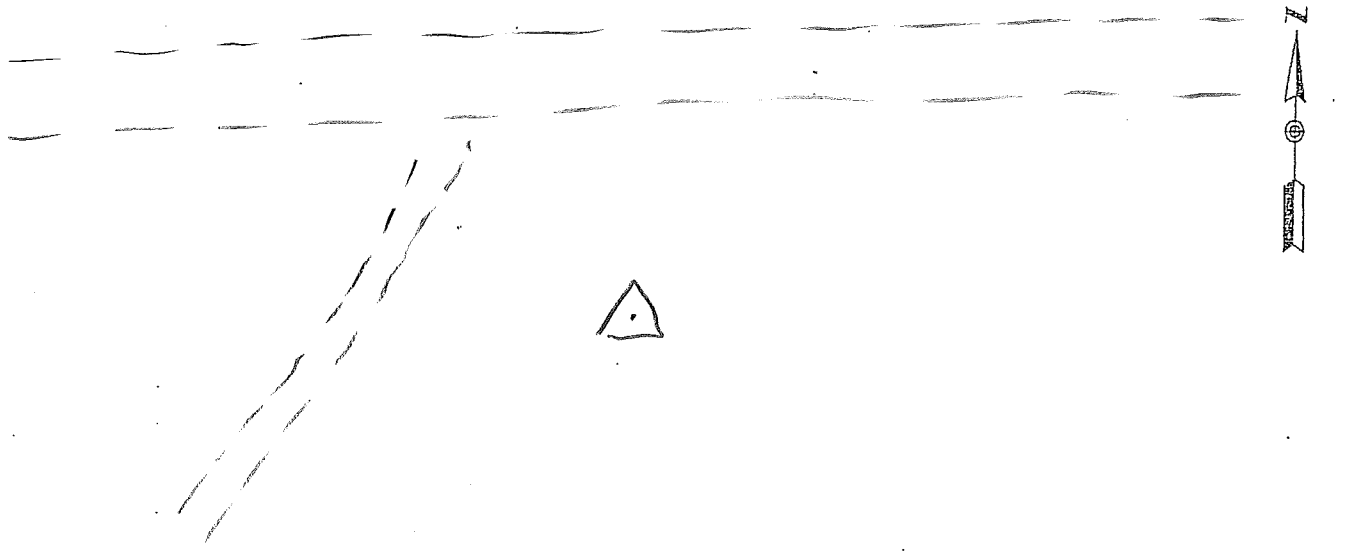
STATION DESCRIPTIONS in field

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1045	3.6	6/6
1105		

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

Cherokee Co.

short grass VRT

PROJECT 1120103
OPERATOR MB
DATE 2.8.12

SITE NUMBER 5
SITE NAME 125

TRACKING TIMES (LOCAL) MEASURE ✓
START 10:12 a.
STOP 10:32 a.

SENSOR TYPE 500 9500 399 299
MEMORY CARD 603
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
(500) (0.360)

OBSTRUCTIONS: trees SE

HEIGHT READINGS MTS FT
1.374
1.734

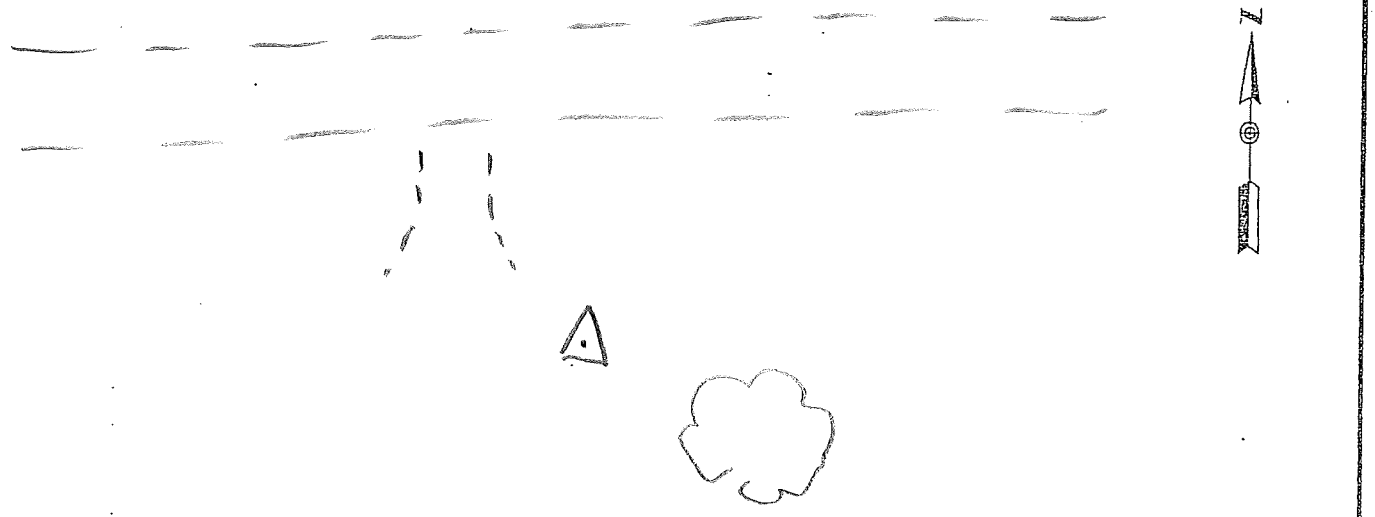
STATION DESCRIPTIONS in field

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1112	2.4	7/7
1132		

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

Cherokee Co.

woods
VFT

PROJECT 1120103
OPERATOR MS
DATE 2.8.12

SITE NUMBER 6
SITE NAME ~~327~~ 403

TRACKING TIMES (LOCAL) MEASURE V
START 10:49 a
STOP 11:21 a

SENSOR TYPE 500 9500 399 299
MEMORY CARD 603
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

CHANGE

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
(500) 0.360

OBSTRUCTIONS: trees above

HEIGHT READINGS MTS FT
1.290
1.650

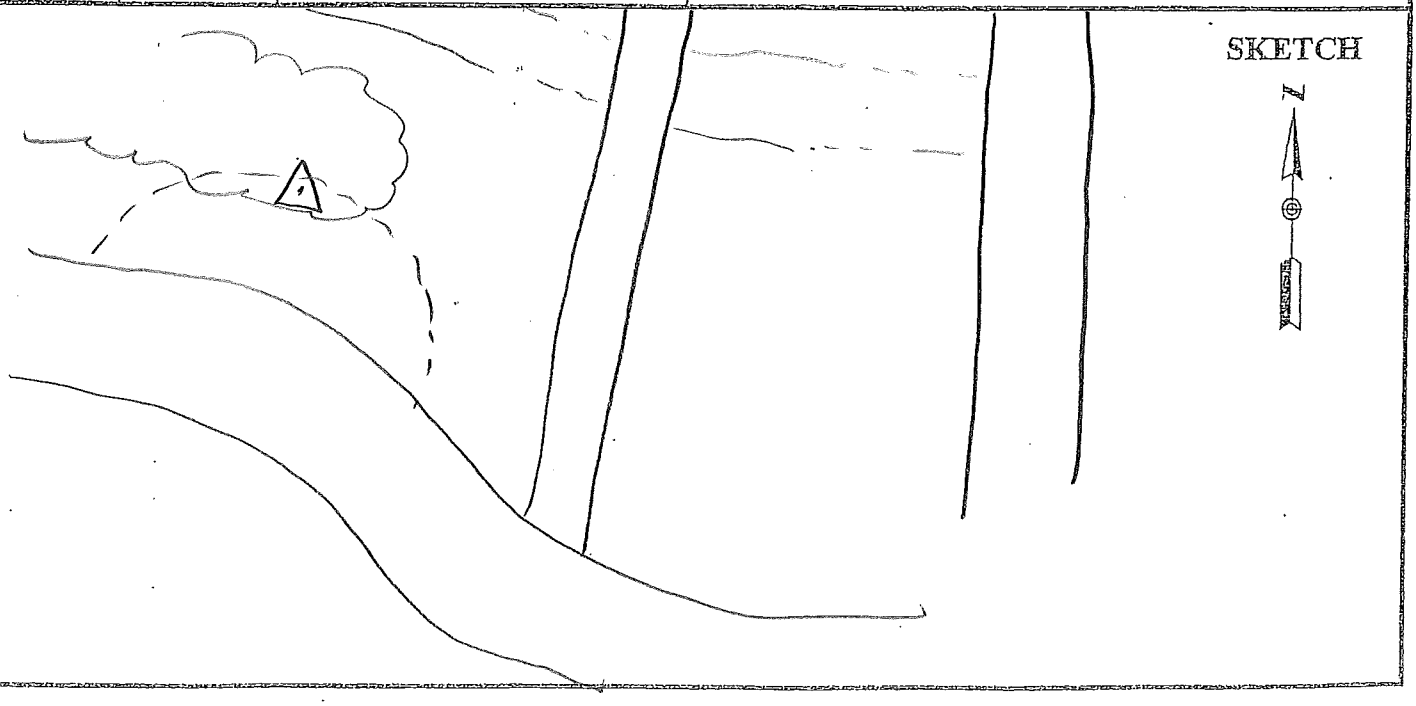
STATION DESCRIPTIONS in parking area

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1149	5.1	5/6
1221		

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

Cherokee Co.

AME JPT

PROJECT 120103
OPERATOR MD
DATE 2-8-12

SITE NUMBER 7
SITE NAME 629

TRACKING TIMES (LOCAL) MEASURE ✓
START 11:29 a
STOP 12:01 p

SENSOR TYPE 500 9500 399 299
MEMORY CARD 603
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
500 0.360

HEIGHT READINGS MTS FT
1.391

1751

OBSTRUCTIONS: none

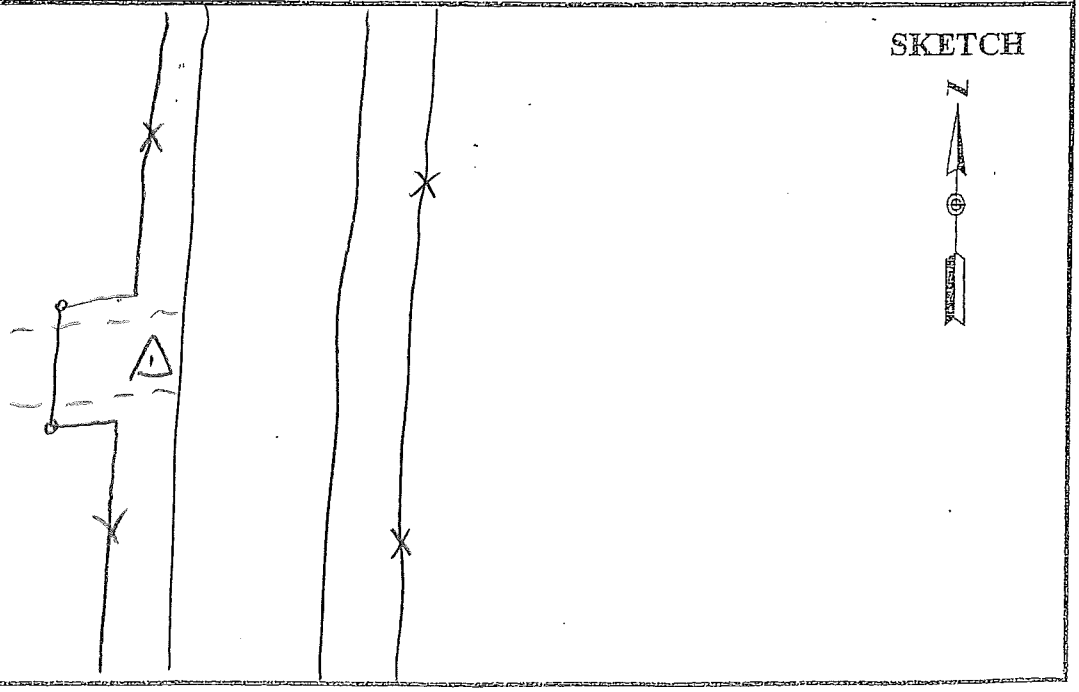
STATION DESCRIPTIONS in file
entrance

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1229	2.1	7/7
1301		

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

Cherokee Co.

hand √PT

PROJECT 1120103
OPERATOR MB
DATE 2·8·12

SITE NUMBER 8
SITE NAME 521

TRACKING TIMES (LOCAL) MEASURE ✓
START 12:06 p
STOP 12:38 p

SENSOR TYPE 500 9500 399 299
MEMORY CARD 603
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
500 0.360

OBSTRUCTIONS: tree S.

HEIGHT READINGS MTS FT
1.405
1.765

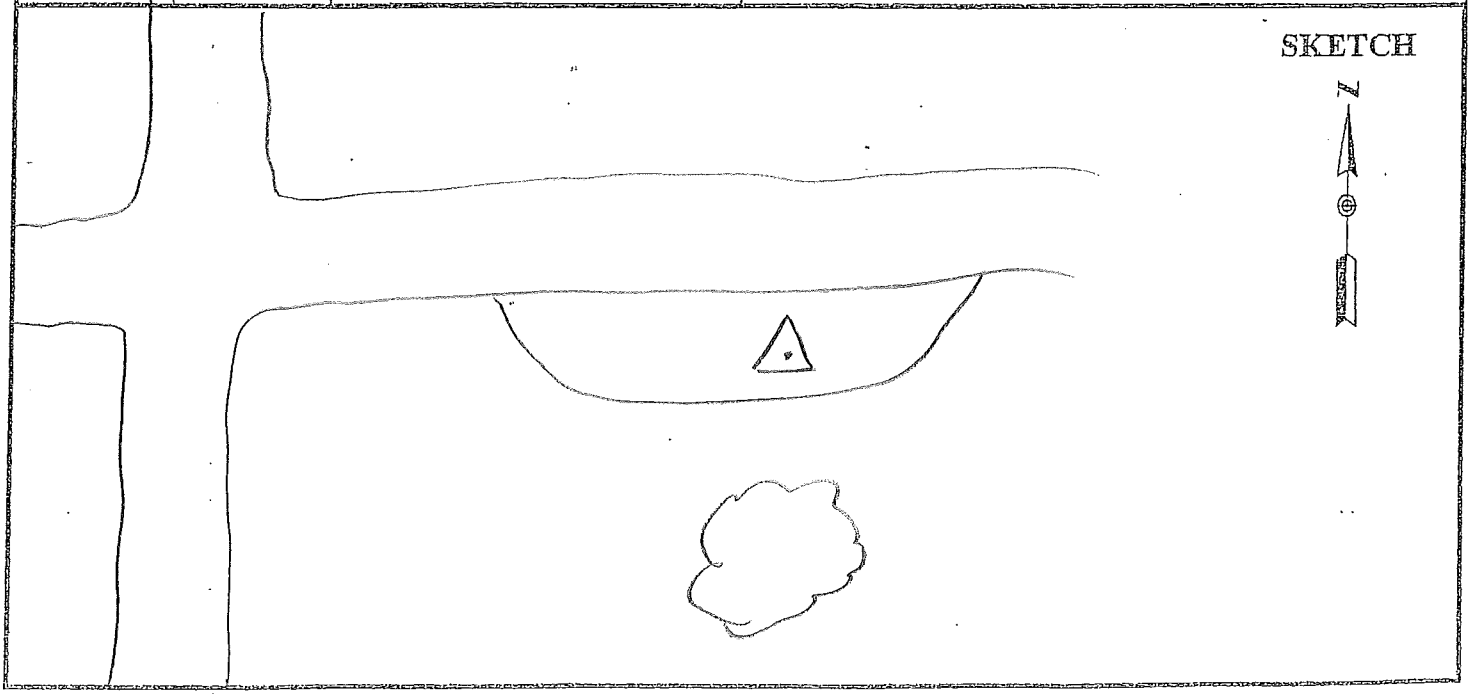
STATION DESCRIPTIONS in pull-off

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1306	1.8	9/9
1338		

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

Cherokee Co.

tall grass ✓PT

PROJECT 1120103
OPERATOR MB
DATE 2·8·12

SITE NUMBER 9
SITE NAME 221

TRACKING TIMES (LOCAL) MEASURE ✓
START 12:46 p
STOP 1:22 p

SENSOR TYPE 500 9500 399 299
MEMORY CARD 603
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
(500) (0.360)

OBSTRUCTIONS: trees SW

HEIGHT READINGS MTS FT
1.384

STATION DESCRIPTIONS in field

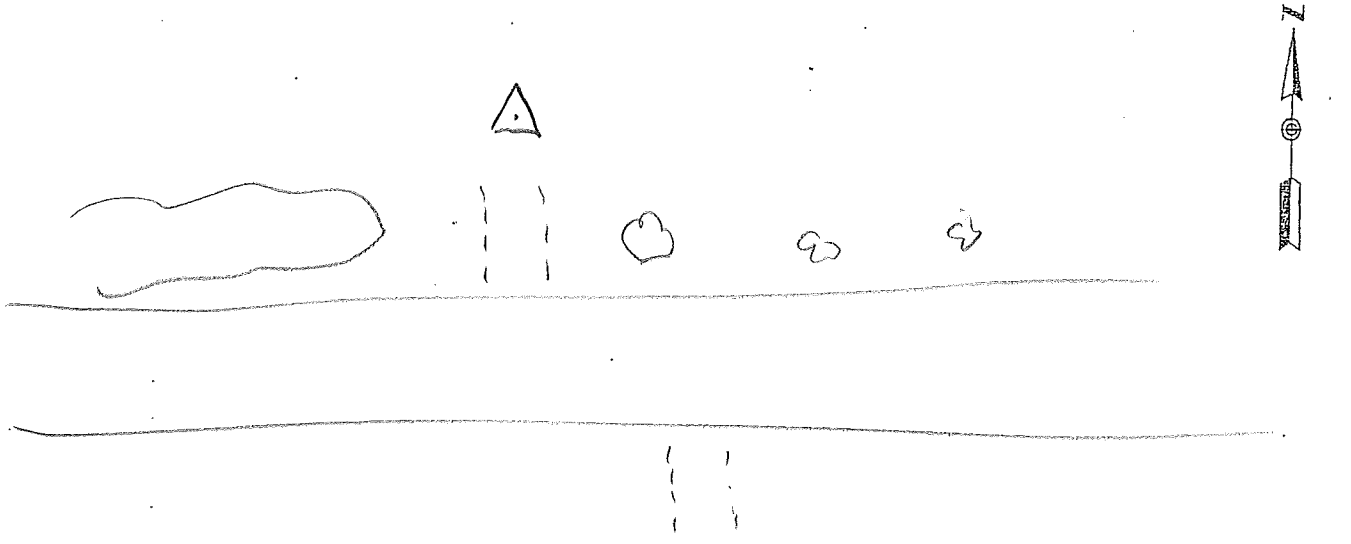
1744

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1346	2.5	8/9
1422		

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

Cherokee Co. Vert. Control tall grass ✓PT

PROJECT 1120103
OPERATOR MB
DATE 2.8.12

SITE NUMBER 10
SITE NAME P 18

TRACKING TIMES (LOCAL) MEASURE ✓
START 1:39 p
STOP 2:13 p

SENSOR TYPE 500 9500 399 299
MEMORY CARD 603
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
(500) (0.360)

OBSTRUCTIONS: tree W

HEIGHT READINGS MTS FT
1.350
1.710

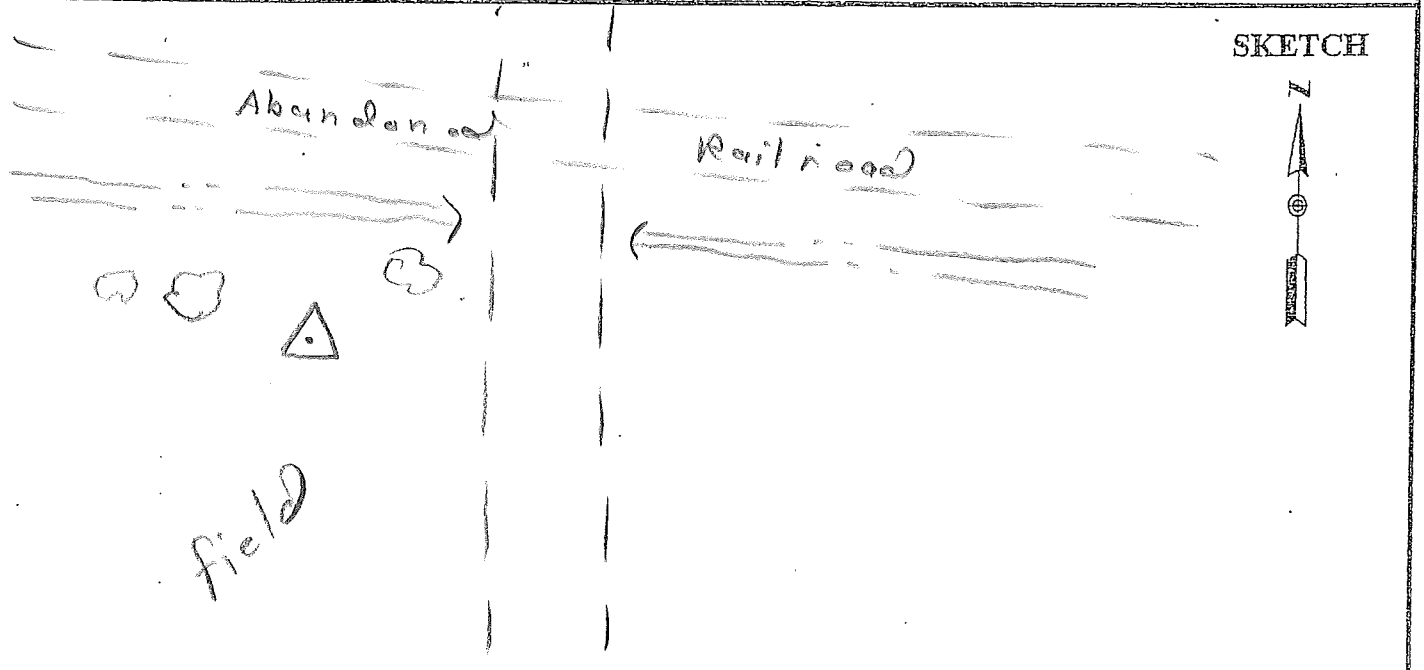
STATION DESCRIPTIONS USC +65 cap/ conc. mon. "P 18 1933" flush

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1439	2.8	8/9
1513		

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

Cherokee Co. VERT. CONTROL

PROJECT 1120103
OPERATOR MD
DATE 2.8.12

SITE NUMBER 11
SITE NAME 922 RESET

TRACKING TIMES (LOCAL) MEASURE ✓
START 2:32 p
STOP 3:07 p

SENSOR TYPE 500 9500 399 299
MEMORY CARD 603
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
(500) (0.360)

OBSTRUCTIONS: trees SE + SW

HEIGHT READINGS MTS FT
1.332
1.692

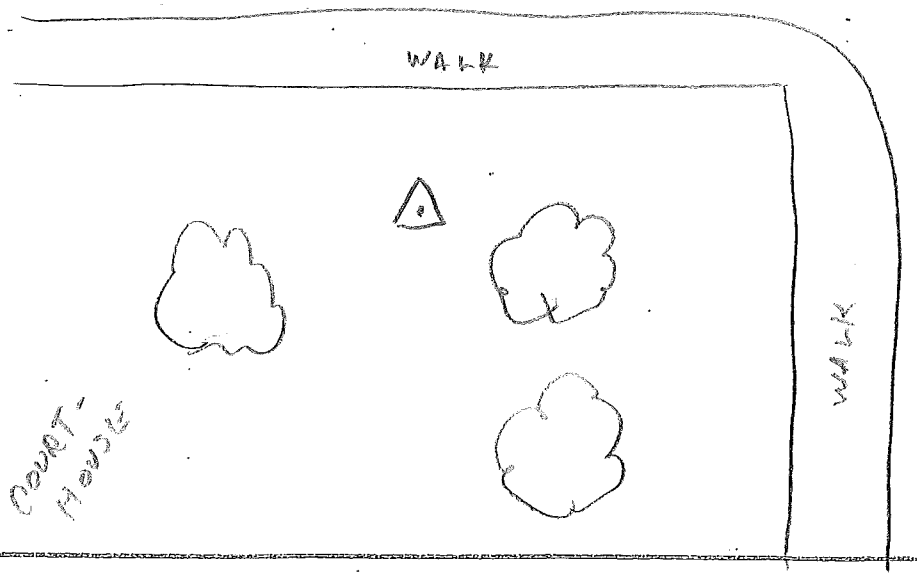
STATION DESCRIPTIONS fnd USCS cap / conc mon "922 RESET 1955"

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1532	4.1	6/6
1607		

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

CHEROKEE Co.

AME V/PT

PROJECT 1120103
OPERATOR MB
DATE 2 · 8 · 12

SITE NUMBER 12
SITE NAME 630

TRACKING TIMES (LOCAL) MEASURE ✓
START 3:13 p
STOP 3:38 p

SENSOR TYPE 500 9500 399 299
MEMORY CARD 603
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
500 0.360

HEIGHT READINGS MTS FT
1.398

1758

OBSTRUCTIONS: tree SW

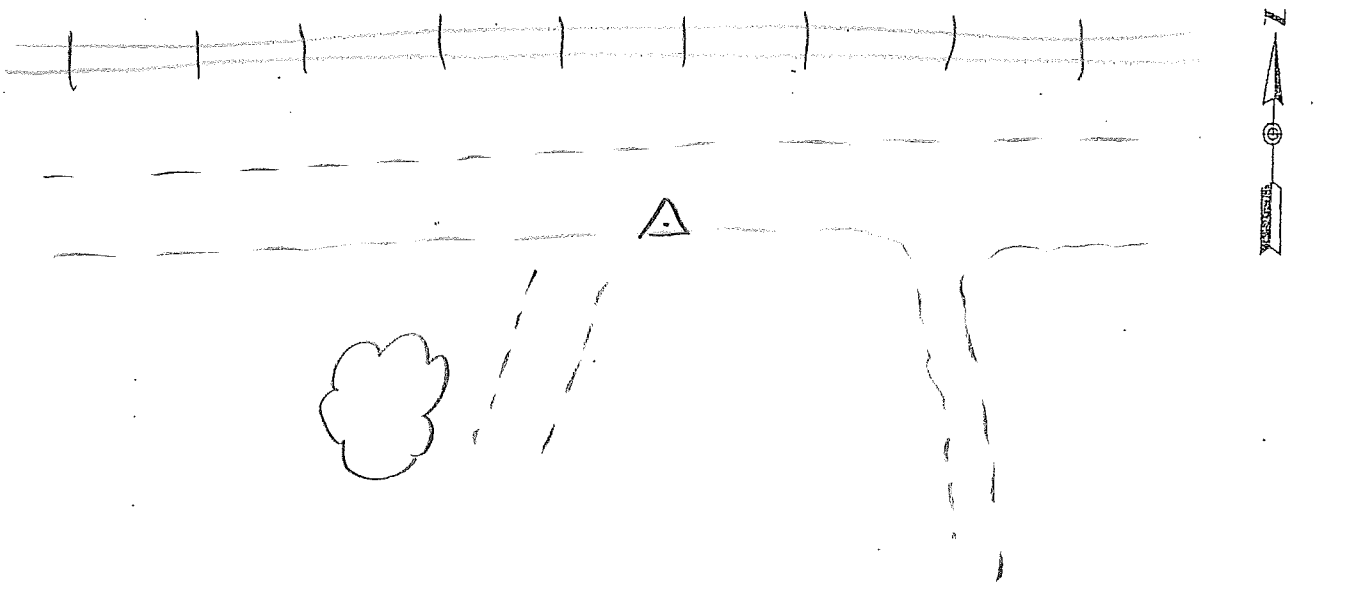
STATION DESCRIPTIONS S. side road

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1613	1.5	10/10
1638		

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

NEMAHA — BASE

PROJECT 1120103
OPERATOR MJN
DATE 2/9/12

SITE NUMBER 1
SITE NAME 1012

TRACKING TIMES (LOCAL) MEASURE CST
START 11:09
STOP 17:08

SENSOR TYPE 500 (9500) 399 299
MEMORY CARD
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 (0.389)
500 0.360

OBSTRUCTIONS: NO

HEIGHT READINGS MTS FT
1.180

STATION DESCRIPTIONS Rebar AND Cap set 2/6/12

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
17:09	1.7	10/10-10
23:08	1.5	10/10-10

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
OVC

AS BEFORE DESCRIBED

SKETCH

AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

NEMAHA CO. BASE

PROJECT 1120103
OPERATOR WJW
DATE 2/9/12

SITE NUMBER 1
SITE NAME 1013

TRACKING TIMES (LOCAL) MEASURE CST
START 12:06
STOP 16:47

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 11
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
500 (0.360)

OBSTRUCTIONS: NO

HEIGHT READINGS MTS FT
1.115
1.475

STATION DESCRIPTIONS Set Rebar AND CAP

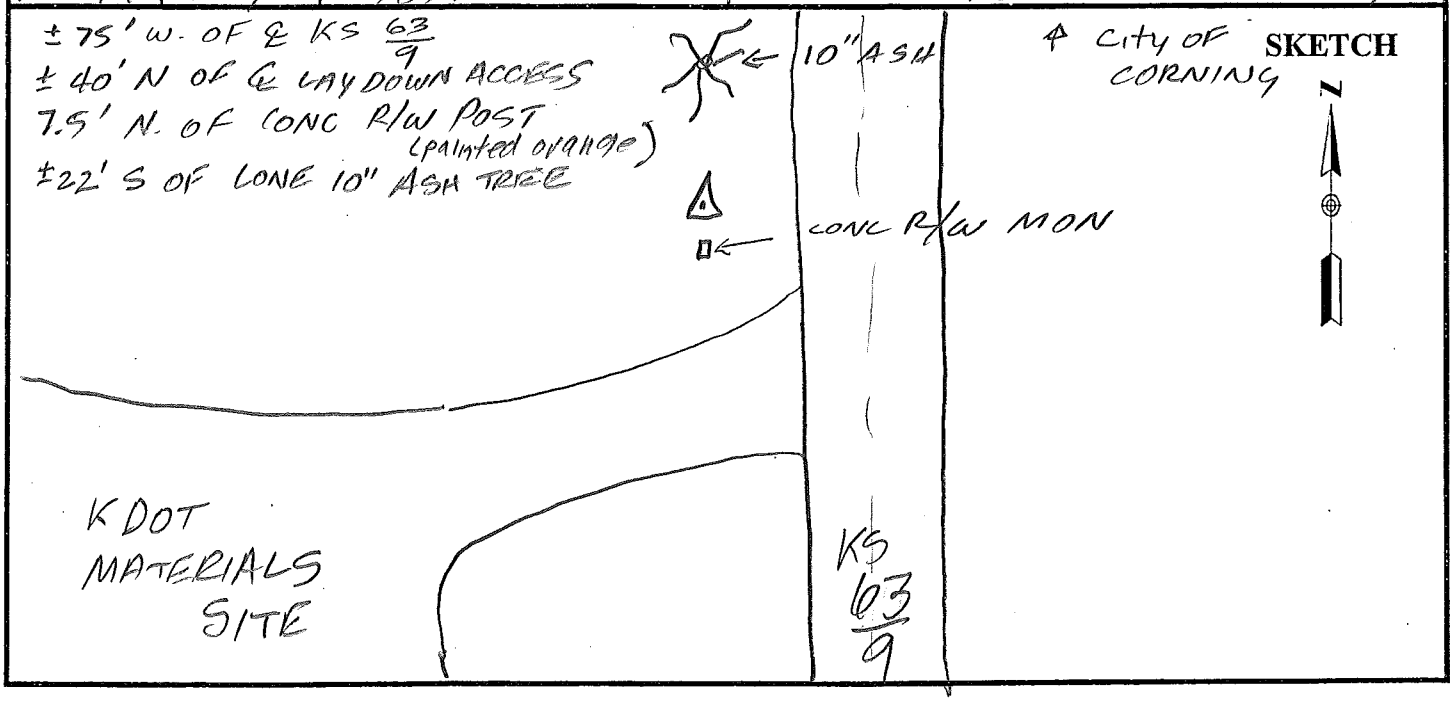
SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
18:06	1.8	10/10-10
22:47	1.9	10/10-10

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
OVC WINDY

Approx 39 39 12.7 lat
96 02 00.2 long

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

NEMAHA Co. 5

PROJECT 1120103
OPERATOR WJN
DATE 2/9/12

SITE NUMBER 1
SITE NAME 1517

TRACKING TIMES (LOCAL) MEASURE CST
START 12:26
STOP 12:53

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 14
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
500 (0.360)

OBSTRUCTIONS: No

HEIGHT READINGS MTS FT
1.304

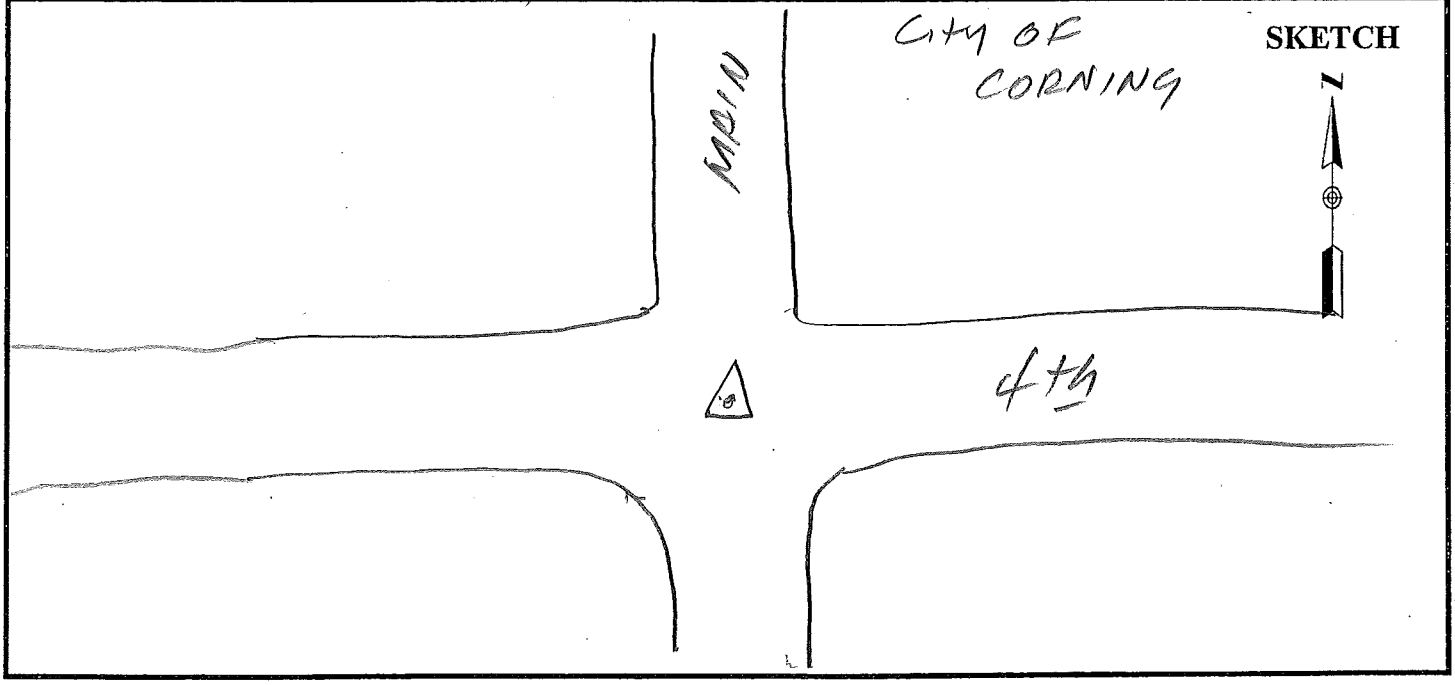
STATION DESCRIPTIONS 4th INT
STREETS

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
18:26	1.9	10/10-10
1853	2.0	9/9-9

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
OVC WINDY

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

NEMAHA CO. 2

PROJECT 1120103
OPERATOR WJN
DATE 2/9/12

SITE NUMBER 2
SITE NAME 1217

TRACKING TIMES (LOCAL) MEASURE CST
START 13:07
STOP 13:32

SENSOR TYPE (500) 9500 399 299
MEMORY CARD
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
500 (0.360)

OBSTRUCTIONS: NO

HEIGHT READINGS MTS FT
1.202

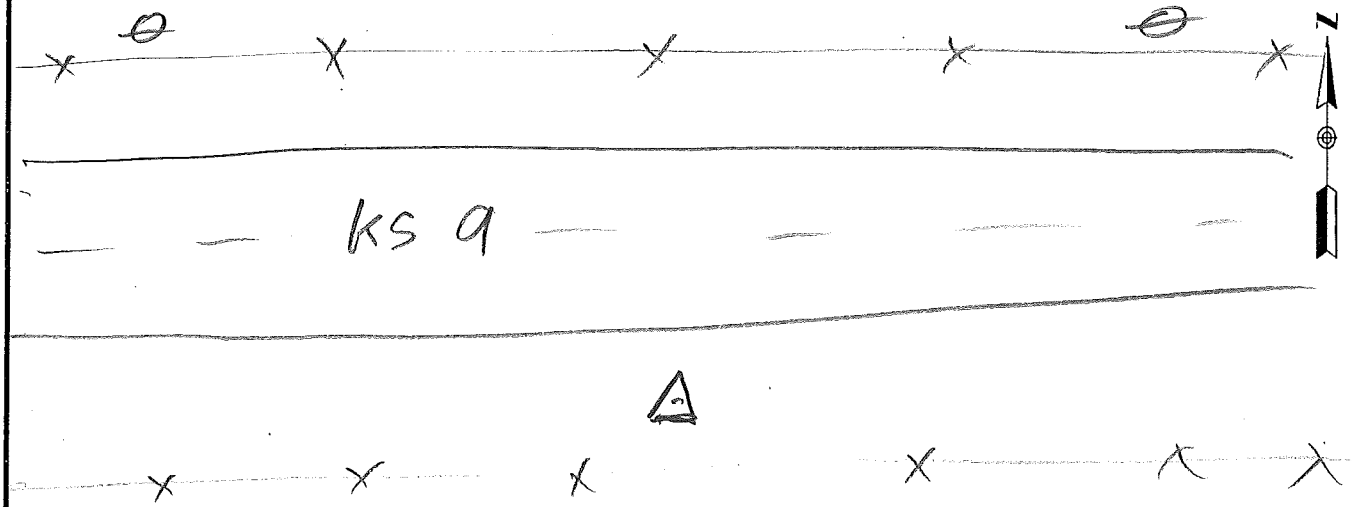
STATION DESCRIPTIONS POINT IN LONG GRASS

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
19:07	2.4	8/8-9
19:32	2.2	8/8-8

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
WINDY

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

NEMAHA CO

4

PROJECT 1120103
OPERATOR WJN
DATE 2/9/12

SITE NUMBER 3
SITE NAME 1417

TRACKING TIMES (LOCAL) MEASURE CST
START 13:54
STOP 14:22

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 14
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
500 (0.360)

OBSTRUCTIONS: TREES

HEIGHT READINGS MTS FT
1.240

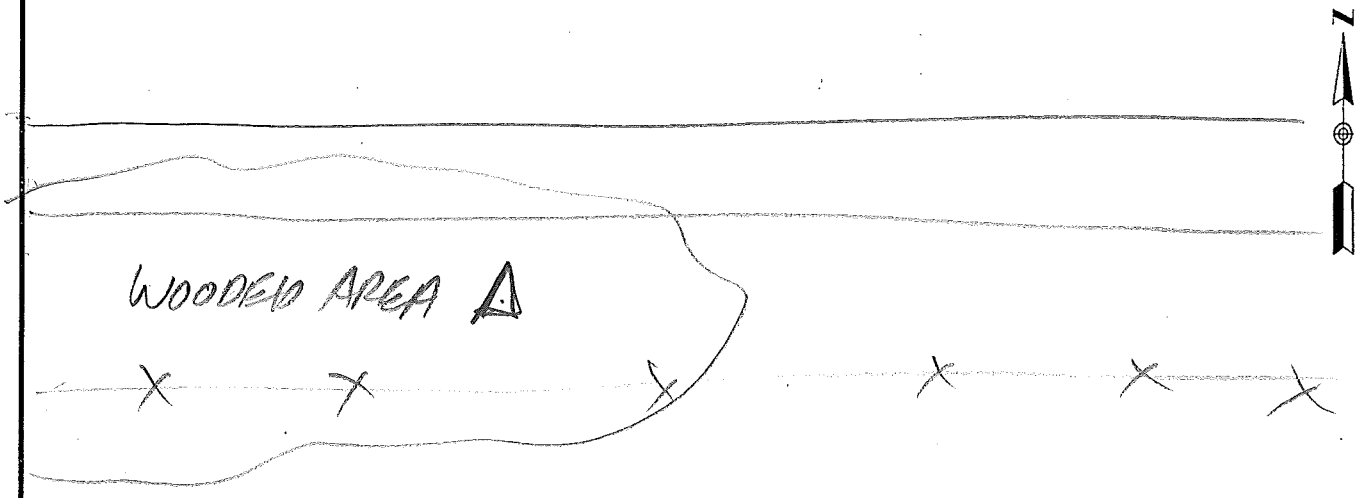
STATION DESCRIPTIONS POINT IN WOODED AREA

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
19:54	2.4	9/9-9
20:22	2.4	9/9-9

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
WINDY

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

NEMAHA CO. 5

PROJECT 120103
OPERATOR WJN
DATE 2/9/12

SITE NUMBER 4
SITE NAME 1518

TRACKING TIMES (LOCAL) MEASURE CST
START 14:39
STOP 15:08

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 14
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
500 (0.360)

HEIGHT READINGS MTS FT
1.344

OBSTRUCTIONS: No

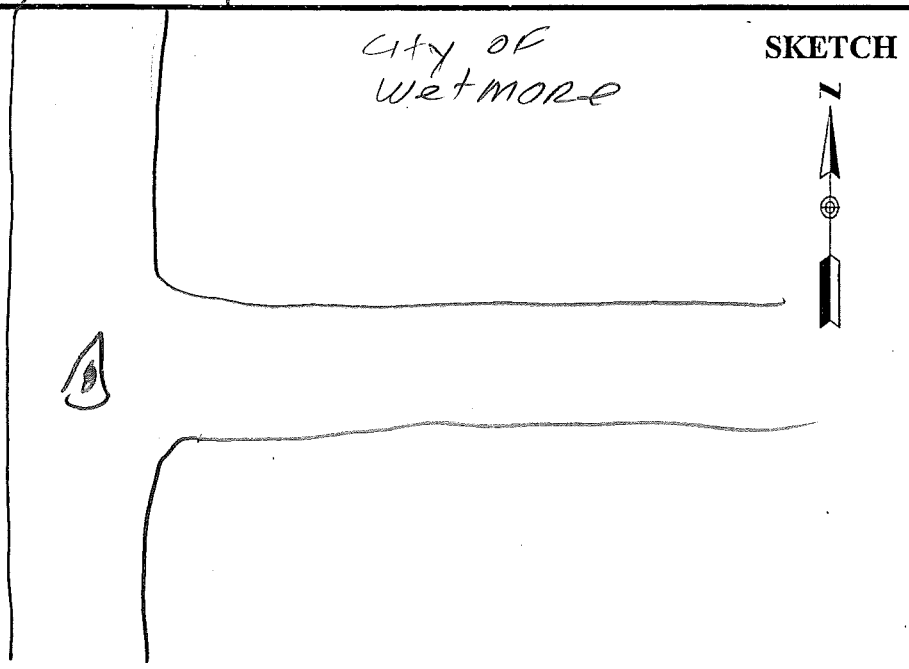
STATION DESCRIPTIONS E E INT
STREETS N-S-E

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
20:38	1.8	9/9-9
21:08	2.0	9/9-9

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

NEMAHA CO 2

PROJECT 1120103
OPERATOR WJN
DATE 2/9/12

SITE NUMBER 5
SITE NAME 1218

TRACKING TIMES (LOCAL) MEASURE CST
START 1529
STOP 15:52

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 14
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
500 (0.360)

HEIGHT READINGS MTS FT
1.205

OBSTRUCTIONS: PPLS E-W

STATION DESCRIPTIONS POINT IN LONG GRASS SW OF INT.

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
2129	2.4	8/8-8
2152	2.2	8/8-8

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
WINDY

SKETCH

AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

NEMAHA CO

AME

PROJECT 1120103
OPERATOR WJN
DATE 2/9/12

SITE NUMBER 6
SITE NAME 1630

TRACKING TIMES (LOCAL) MEASURE CST
START 16:10
STOP 16:35

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 14
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
500 ~~0.360~~

OBSTRUCTIONS: TREES NW, E

HEIGHT READINGS MTS FT
1.329

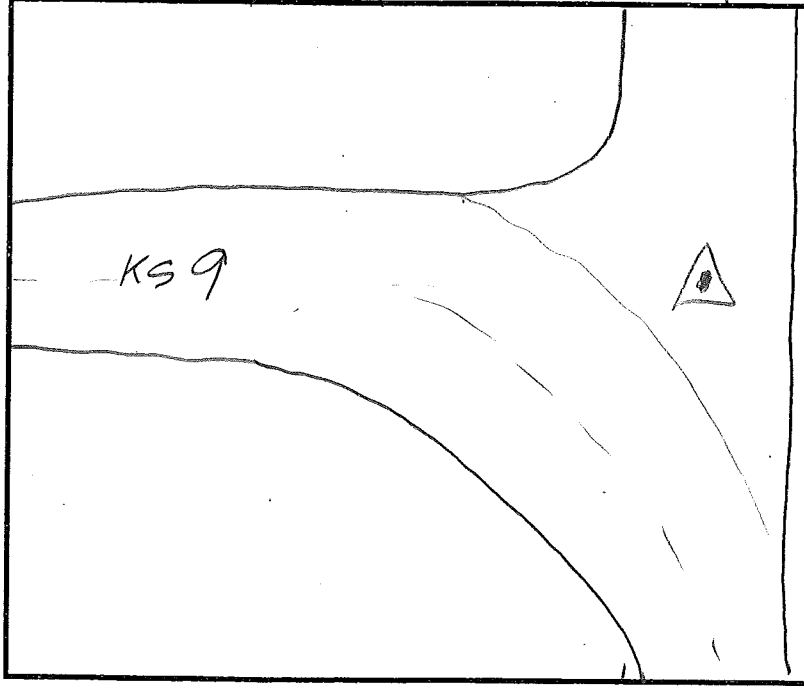
STATION DESCRIPTIONS E & E INT

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
22:10	2.0	9/9-9
23:35	1.9	9/9-9

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
OVC

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

Cherokee Co. Base Vert. Control

PROJECT 1120103
OPERATOR MB
DATE 2.9.12

SITE NUMBER 1
SITE NAME P 18

TRACKING TIMES (LOCAL) MEASURE _____
START 7:11a.
STOP _____

SENSOR TYPE 500 9500 399 299
MEMORY CARD 732
BATTERY NO. CB
CONTROLLER NO. _____
SENSOR NO. _____

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
500 0.360

OBSTRUCTIONS: _____

HEIGHT READINGS MTS FT
1.337 _____
1.697

STATION DESCRIPTIONS _____

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
811	4.7	5/6

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH

See previous

AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

Cherokee Co. Base short grass VRT

PROJECT 1120103
OPERATOR MB
DATE 8.9.12

SITE NUMBER 1
SITE NAME 126

TRACKING TIMES (LOCAL) MEASURE V
START 7:37 a.
STOP

SENSOR TYPE 500 9500 399 299
MEMORY CARD 66
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
500 0.360

OBSTRUCTIONS: PP northeast

HEIGHT READINGS MTS FT
1.209

STATION DESCRIPTIONS set 5/8" rebar + cap

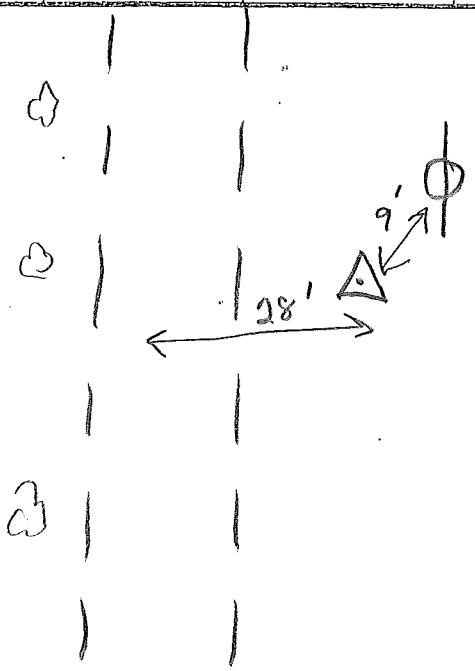
1598

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
837	4.0	7/7

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
37 16 59.4
94 44 29.3

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

Cherokee Co. Vert. Control

PROJECT 1120103
OPERATOR MB
DATE 2.9.12

SITE NUMBER 1
SITE NAME G 253

TRACKING TIMES (LOCAL) MEASURE ✓
START 8:26 a.
STOP 9:00 a.

SENSOR TYPE 500 9500 399 299
MEMORY CARD 603
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
500 0.360

OBSTRUCTIONS: none

HEIGHT READINGS MTS FT
1.136

STATION DESCRIPTIONS fnd USC+GS
cap/con mon "G 253 1934"

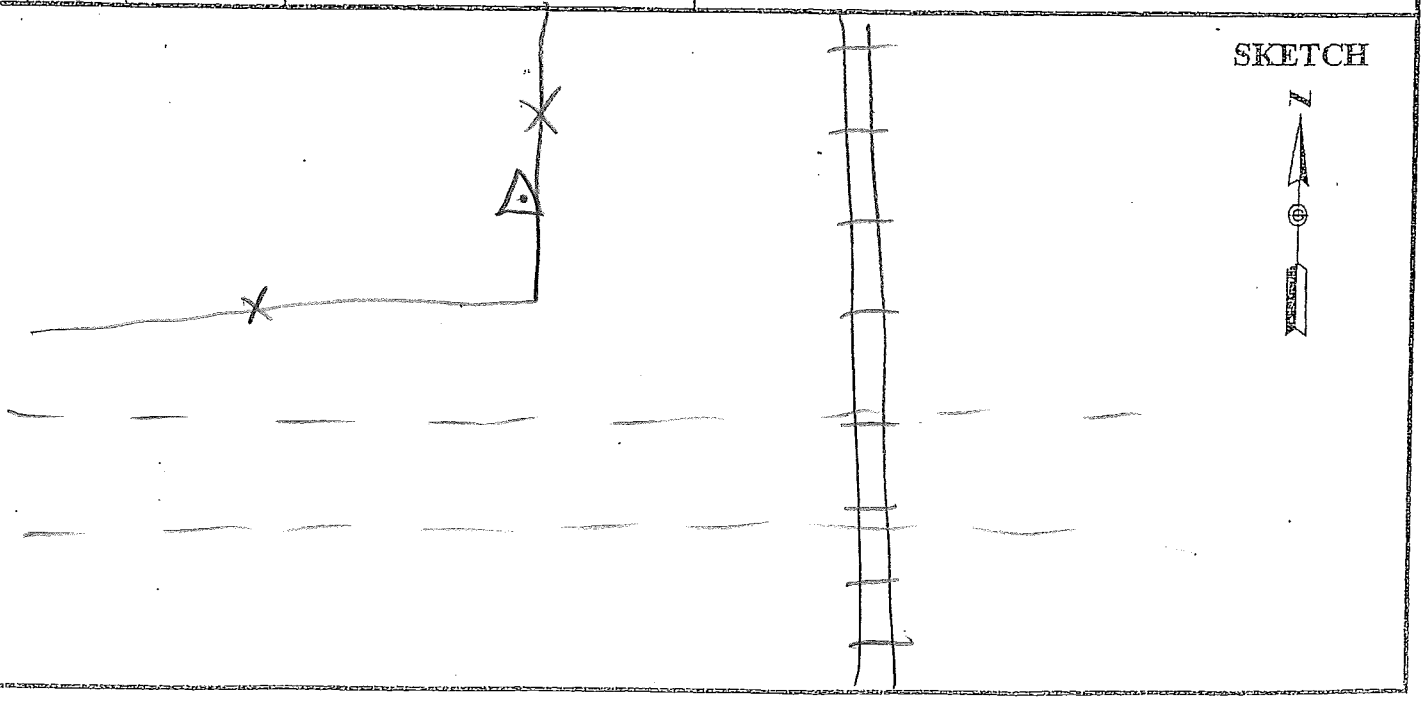
1.496

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
926	2.3	8/8
1000		

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

Cherokee Co.

hand √PT

PROJECT 1120103
OPERATOR MB
DATE 2.9.12

SITE NUMBER 2
SITE NAME 522

TRACKING TIMES (LOCAL) MEASURE √
START 9:18 a.
STOP 9:41 a.

SENSOR TYPE 500 9500 399 299
MEMORY CARD 603
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
500 0.360

OBSTRUCTIONS: none

HEIGHT READINGS MTS FT
1.380
1.740

STATION DESCRIPTIONS S. side road

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1018	2.9	8/8
1041		

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH

AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

Cherokee Co. woods 1/PT

PROJECT 1120103
OPERATOR MB
DATE 2.9.12

SITE NUMBER 3
SITE NAME 404

TRACKING TIMES (LOCAL) MEASURE ✓
START 9:57a.
STOP 10:20a.

SENSOR TYPE 500 9500 399 299
MEMORY CARD 603
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
500 0.360

HEIGHT READINGS MTS FT
1.421
1.781

OBSTRUCTIONS: trees above

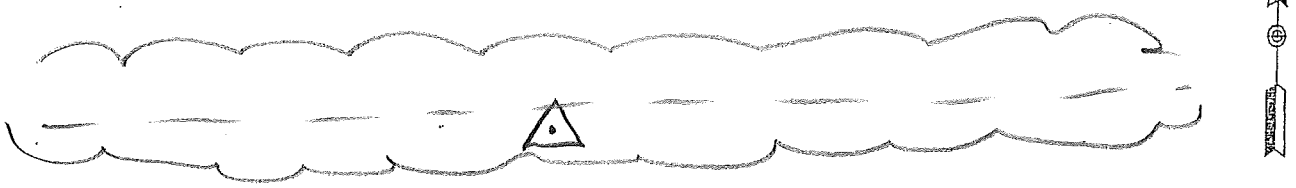
STATION DESCRIPTIONS N. side road

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1057	2.9	5/7
1120		

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

Cherokee Co.

AME VPT

PROJECT 1120103
OPERATOR MB
DATE 2.9.12

SITE NUMBER 4
SITE NAME 631

TRACKING TIMES (LOCAL) MEASURE ✓
START 10:35 am
STOP 10:57 a

SENSOR TYPE 500 9500 399 299
MEMORY CARD 603
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
500 0.360

HEIGHT READINGS MTS FT
1.385
1.745

OBSTRUCTIONS: none

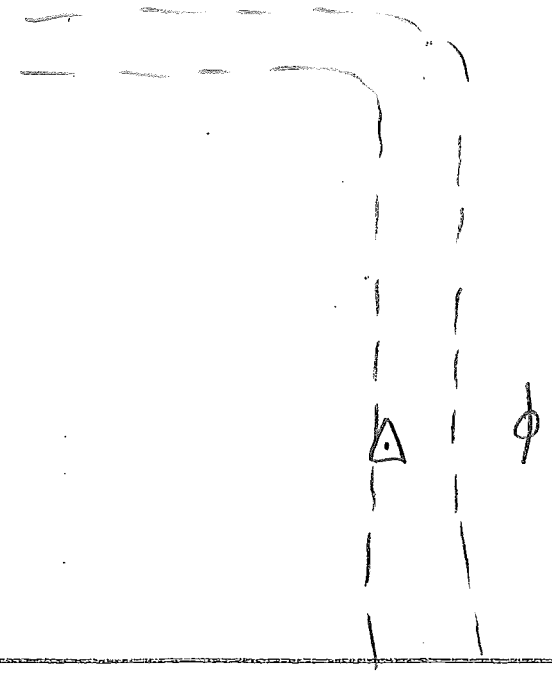
STATION DESCRIPTIONS W. side road

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1135	6.0	5/5
1157		

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

Cherokee Co.

woods ✓PT

PROJECT 1120103
OPERATOR MB
DATE 2·9·12

SITE NUMBER 5
SITE NAME 405 ~~5~~

TRACKING TIMES (LOCAL) MEASURE ✓
START 11:03a.
STOP 11:25a.

SENSOR TYPE 500 9500 399 299
MEMORY CARD 603
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
(500) (0.360)

HEIGHT READINGS MTS FT
1.350
1.710

OBSTRUCTIONS: trees above

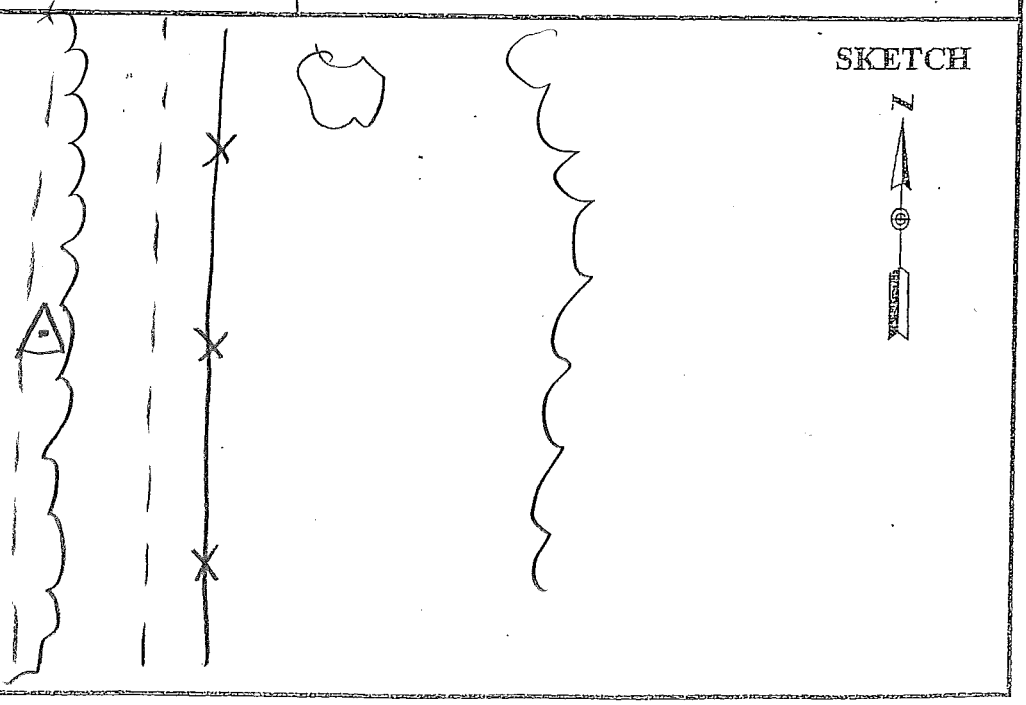
STATION DESCRIPTIONS W. side road

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1203	4.3	5/6
1225		

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

Cherokee Co.

short grass √PT

PROJECT 1120103
OPERATOR MB
DATE 2.9.12

SITE NUMBER 6
SITE NAME 127

TRACKING TIMES (LOCAL) MEASURE √
START 11:30 a.
STOP 11:52 a.

SENSOR TYPE 500 9500 399 299
MEMORY CARD 603
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
500 0.360

OBSTRUCTIONS: none

HEIGHT READINGS MTS FT
1.462
1.822

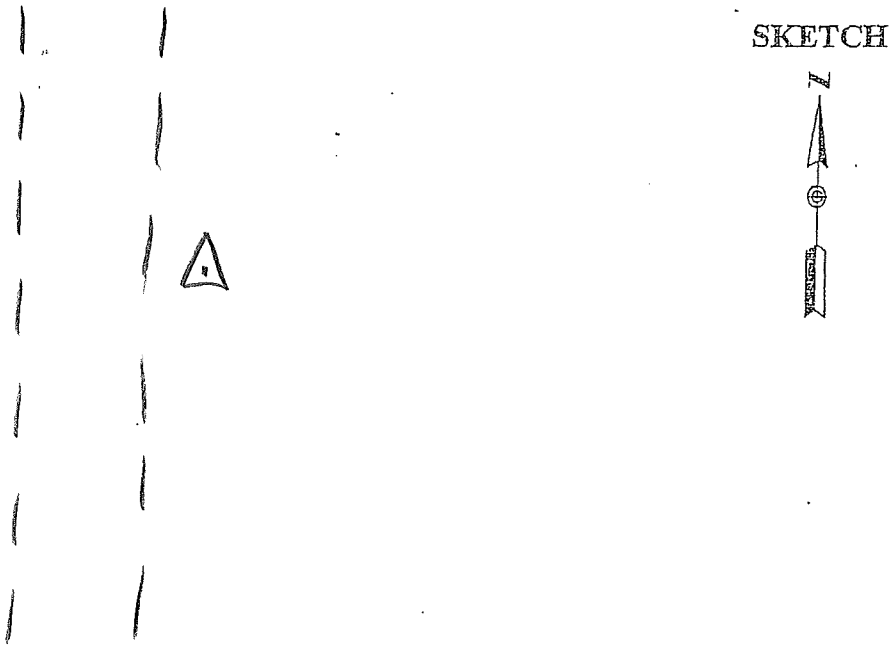
STATION DESCRIPTIONS E. of road

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1230	2.2	9/9
1252		

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

Cherokee Co.

tall grass ✓PT

PROJECT 1120103
OPERATOR MB
DATE 2·9·12

SITE NUMBER 7
SITE NAME 222

TRACKING TIMES (LOCAL) MEASURE ✓
START 12:05 p
STOP 12:25 p

SENSOR TYPE 500 9500 399 299
MEMORY CARD 603
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 ~~0.389~~
500 0.360

HEIGHT READINGS MTS FT
1.373
1.733

OBSTRUCTIONS: none

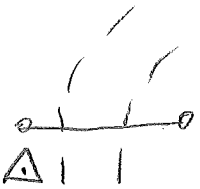
STATION DESCRIPTIONS N. of road

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1305	3.2	6/6
1325		

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

Cherokee Co.

hand VRT

PROJECT 1120103
OPERATOR MB
DATE 2.9.12

SITE NUMBER 8
SITE NAME 523

TRACKING TIMES (LOCAL) MEASURE ✓
START 12:30 p
STOP 12:50 p

SENSOR TYPE 500 9500 399 299
MEMORY CARD 603
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
(500) (0.360)

OBSTRUCTIONS: none

HEIGHT READINGS MTS FT
1.420
1.780

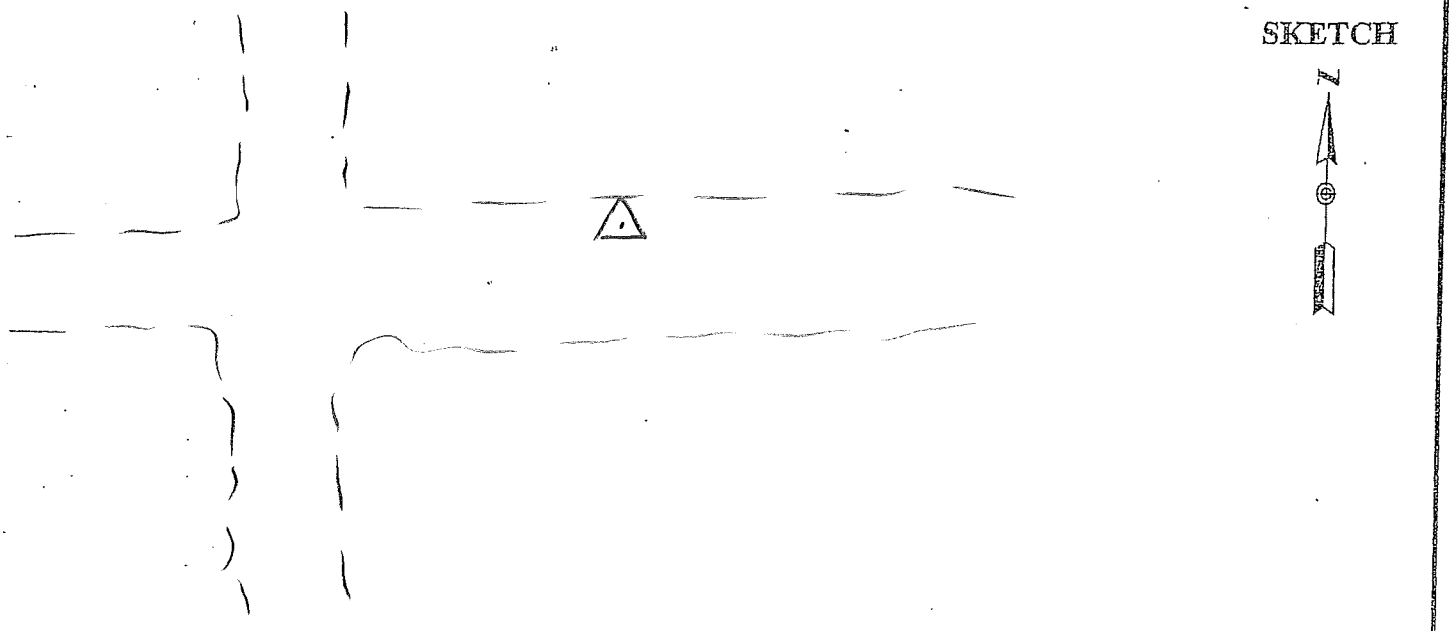
STATION DESCRIPTIONS N. side road

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1330	2.1	10/10
1350		

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

Cherokee Co.

short grass √PT

PROJECT 1120103
OPERATOR MB
DATE 2·9·12

SITE NUMBER 9
SITE NAME 128

TRACKING TIMES (LOCAL) MEASURE ✓
START 12:57p
STOP 1:17p

SENSOR TYPE 500 9500 399 299
MEMORY CARD 603
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
(500) (0.360)

OBSTRUCTIONS: trees S.

HEIGHT READINGS MTS FT
1.420
1.780

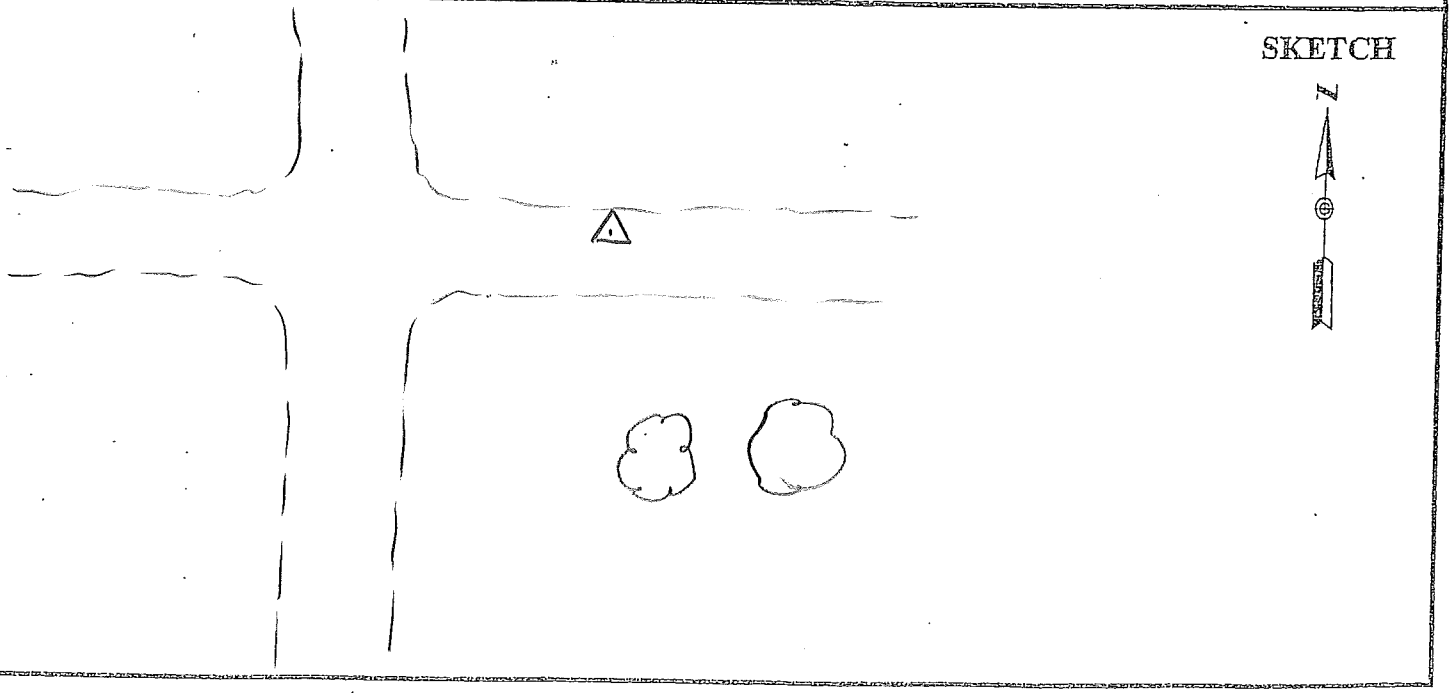
STATION DESCRIPTIONS N. side road

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1358	3.0	7/7
1417		

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

Cherokee Co.

tall grass √PT

PROJECT 1120103
OPERATOR MB
DATE 2.9.12

SITE NUMBER 10
SITE NAME 223

TRACKING TIMES (LOCAL) MEASURE ✓
START 1:24 p
STOP 1:46 p

SENSOR TYPE 500 9500 399 299
MEMORY CARD 603
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
(500) (0.360)

OBSTRUCTIONS: none

HEIGHT READINGS MTS FT
1.382

STATION DESCRIPTIONS N. of road

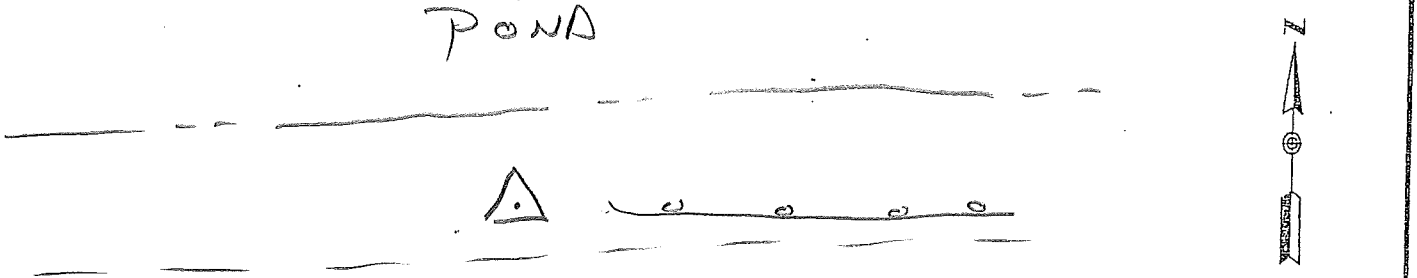
1.742

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1424	2.6	9/9
1446		

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

Cherokee Co.

hard ✓ 107

PROJECT 1120103
OPERATOR MB
DATE 2.9.12

SITE NUMBER 11
SITE NAME 524

TRACKING TIMES (LOCAL) MEASURE ✓
START 1:52 p
STOP 2:14 p

SENSOR TYPE 500 9500 399 299
MEMORY CARD 603
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
(500) (0.360)

OBSTRUCTIONS: none

HEIGHT READINGS MTS FT
1.364
1.724

STATION DESCRIPTIONS N. side road

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1452	2.2	10/10
1514		

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH

AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

NEMAHA Co

BASE

PROJECT 1120103
OPERATOR WJN
DATE 2/10/12

SITE NUMBER 1
SITE NAME Q 109

TRACKING TIMES (LOCAL) MEASURE CST
START 9:13
STOP 1635

SENSOR TYPE 500 (9500) 399 299
MEMORY CARD 67
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 (0.389)
500 0.360

OBSTRUCTIONS: NO

HEIGHT READINGS MTS FT
1.253
1.642

STATION DESCRIPTIONS BRASS DISK IN CONC "Q 109 1934"

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
15:13	2.3	9/9-9
22:35	2.0	9/9-9

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
WINDY

AS BEFORE DESCRIBED

SKETCH

AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

NEMAHA CO — BASE

PROJECT 1120103
OPERATOR WJN
DATE 2/10/12

SITE NUMBER 1
SITE NAME 1013

TRACKING TIMES (LOCAL) MEASURE CST
START 10:19
STOP 16:00

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 11
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
500 (0.360)

OBSTRUCTIONS: NO

HEIGHT READINGS MTS FT
1.146
1.506

STATION DESCRIPTIONS Rebar and CAP SET 2/9/12

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
16:19	2.3	9/9-9
22:00	2.0	9/9-9

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
Very Windy

As Before described

SKETCH

AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

NEMAHA CO

1

PROJECT 1120103
OPERATOR WJN
DATE 2/10/12

SITE NUMBER 1
SITE NAME 1118

TRACKING TIMES (LOCAL) MEASURE CST
START 10:44
STOP 11:07

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 14
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
500 (0.360)

HEIGHT READINGS MTS FT
1.290

OBSTRUCTIONS: PPLS E-W OH Power lines.

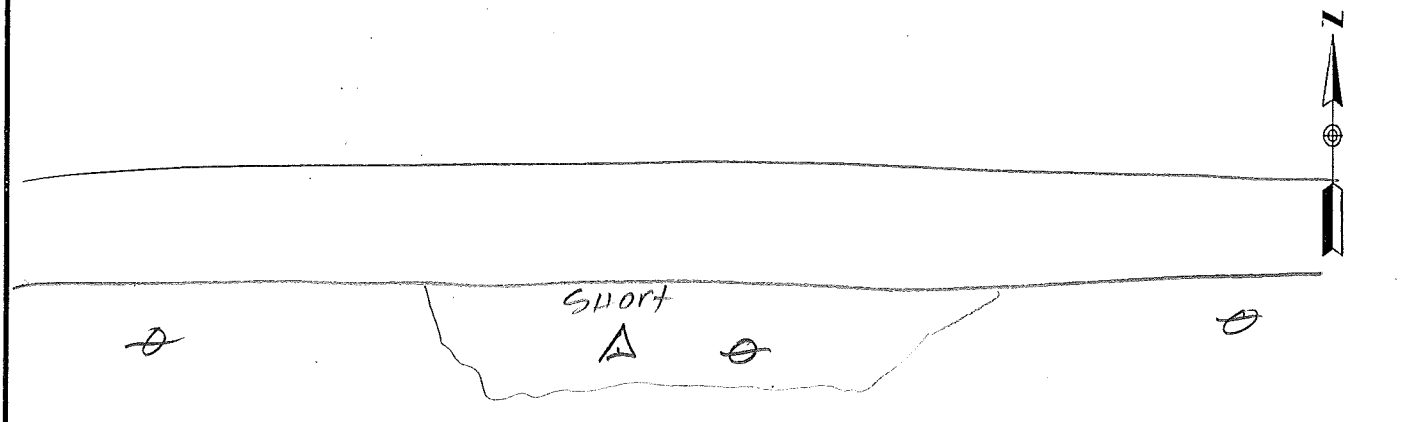
STATION DESCRIPTIONS POINT IN SHORT GRASS IN S. R/W

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1644	5.5	5/5-5
1707	4.0	6/6-6

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
VERY WINDY

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

NEMAHA CO.

PROJECT 112003
OPERATOR WJN
DATE 2/10/12

SITE NUMBER 2
SITE NAME 1418

TRACKING TIMES (LOCAL) MEASURE CST
START 11:19
STOP 11:43

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 14
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
500 (0.360)

OBSTRUCTIONS: TREES

HEIGHT READINGS
MTS 1.289
FT

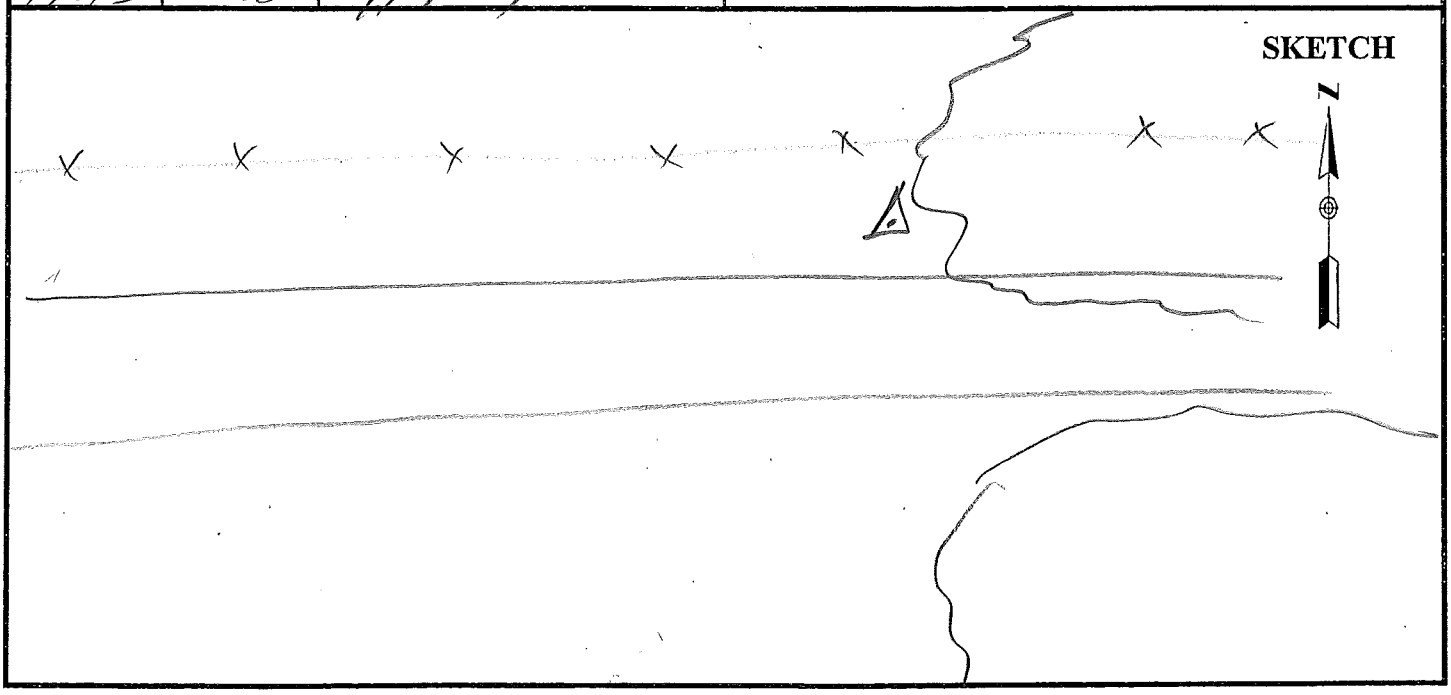
STATION DESCRIPTIONS POINT IN WOODED AREA

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1719	1.7	8/8-8
1743	2.0	9/9-9

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
VERY WINDY

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

NEMAHA CO

2

PROJECT 1120103
OPERATOR WJN
DATE 2/10/12

SITE NUMBER 3
SITE NAME 1219

TRACKING TIMES (LOCAL) MEASURE CST
START 12:00
STOP 12:29

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 14
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
500 0.360

HEIGHT READINGS MTS FT
1.275

OBSTRUCTIONS: NO

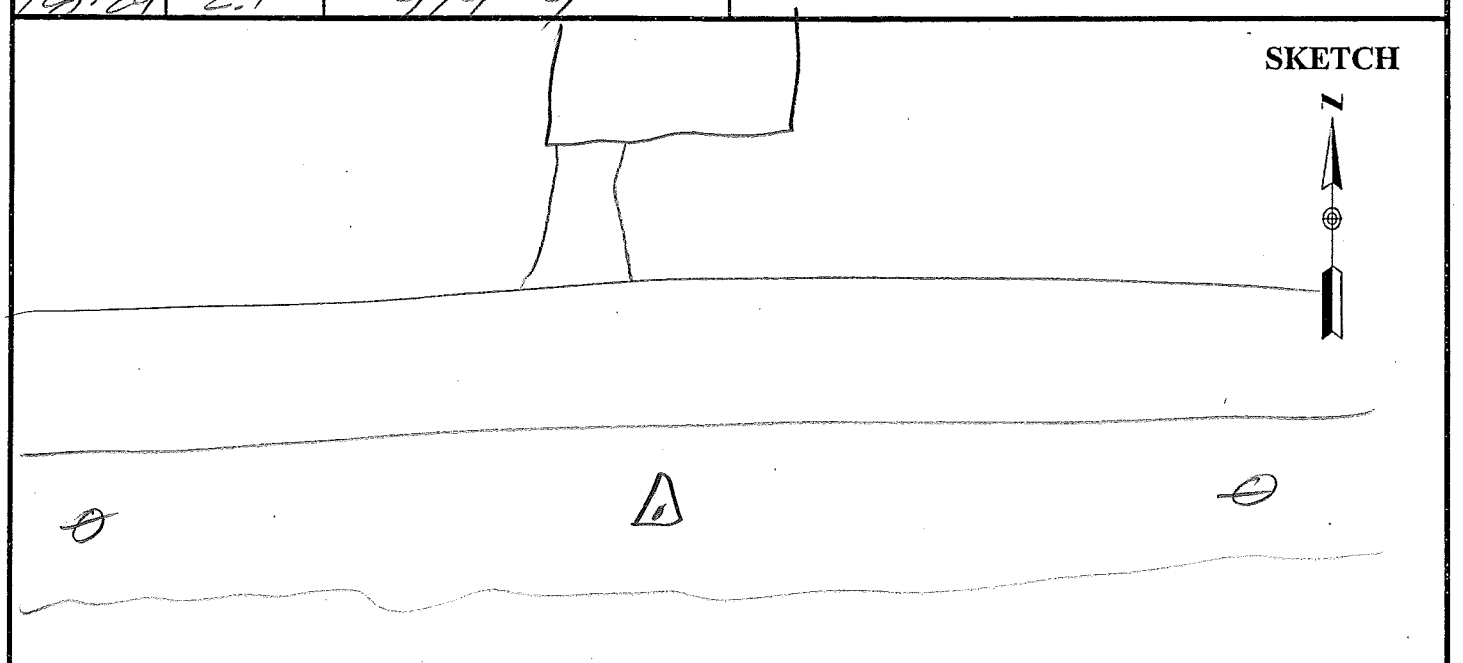
STATION DESCRIPTIONS POINT IN LONG GRASS IN S. R/W

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
16:00	2.0	9/9-9
19:29	2.1	9/9-9

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
VERY WINDY

SKETCH



NEM

AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

5

PROJECT 112010 3
OPERATOR MJN
DATE 2/10/12

SITE NUMBER 4
SITE NAME 1519

TRACKING TIMES (LOCAL) MEASURE CST
START 13 03
STOP 13:20

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 14
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
500 (0.360)

HEIGHT READINGS MTS FT
1.336

OBSTRUCTIONS: NO

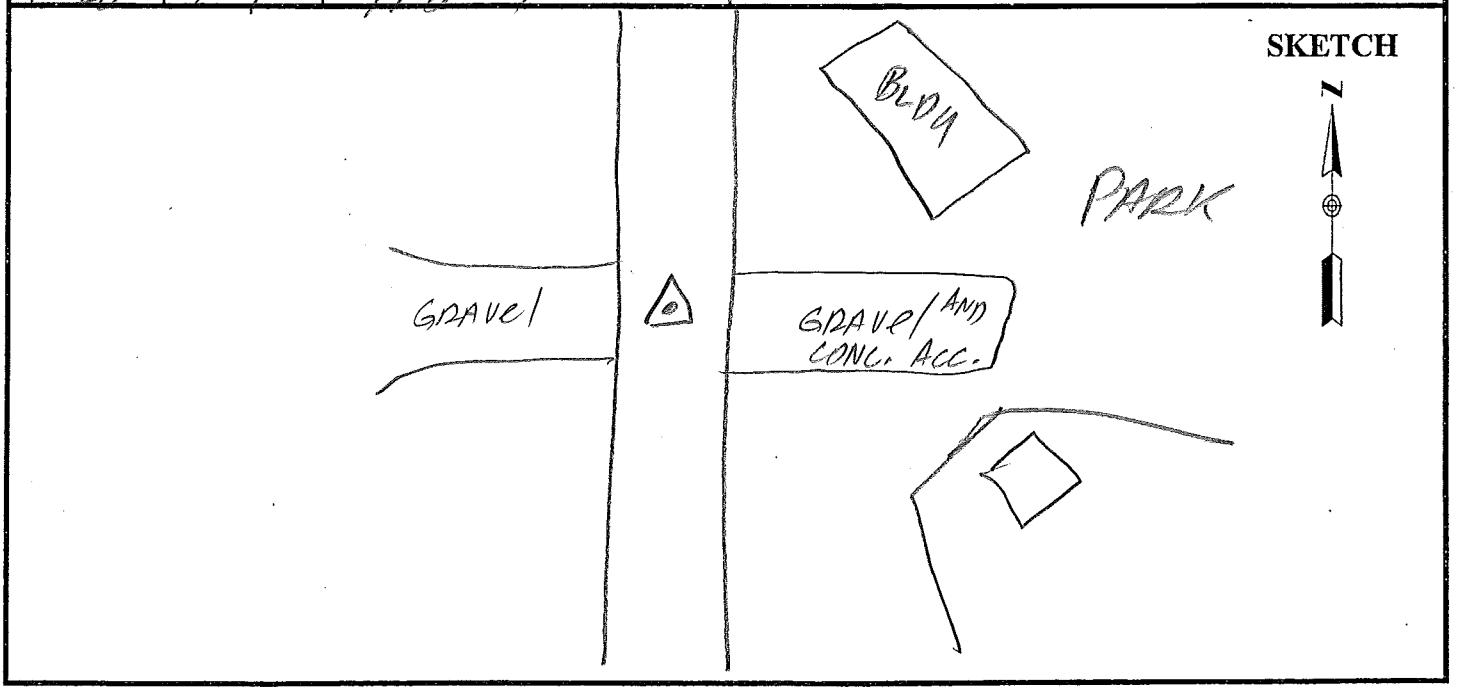
STATION DESCRIPTIONS E & E INT STREET AND PARK ACCESS

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
19 03	2.0	8/9-9
19 20	1.9	9/9-9

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

AME

PROJECT 1120103
OPERATOR WVN
DATE 2/10/12

SITE NUMBER 5
SITE NAME 1631

TRACKING TIMES (LOCAL) MEASURE CST
START 13:36
STOP 13:53

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 14
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
500 (0.360)

OBSTRUCTIONS: TREES W

HEIGHT READINGS MTS FT
1.302

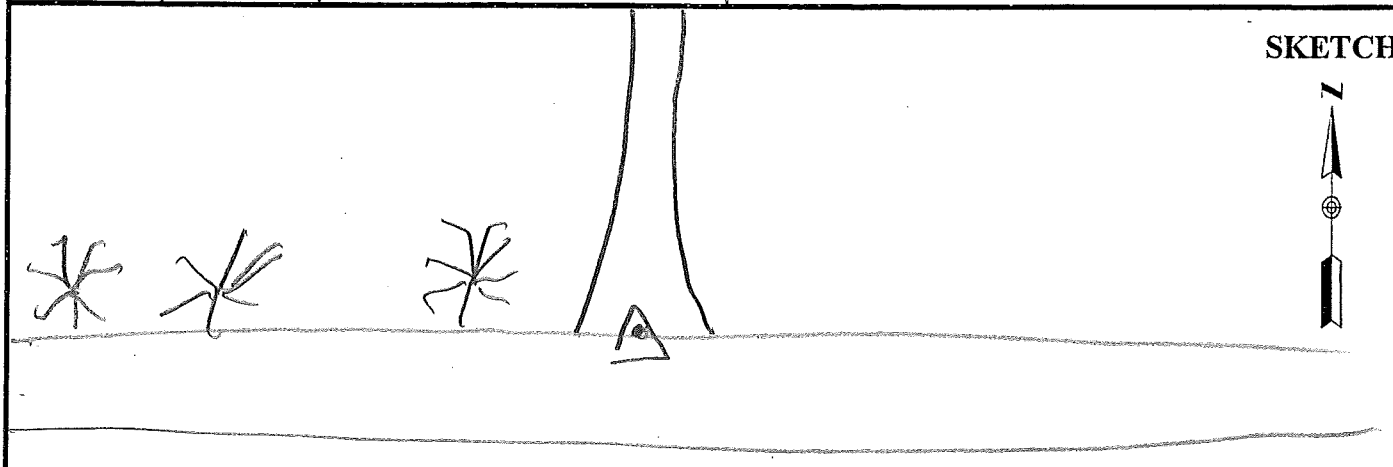
STATION DESCRIPTIONS N EDGE RD @ E CEMETERY ACCESS N.

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
	2.6	8 18 - 8

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
WINDY

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

NEMAHA Co. 1

PROJECT 1120103
OPERATOR WJN
DATE 2/10/12

SITE NUMBER 6
SITE NAME 1119

TRACKING TIMES (LOCAL) MEASURE CST
START 14:11
STOP 14:36

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 14
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
500 (0.360)

HEIGHT READINGS MTS 1.323 FT

OBSTRUCTIONS: NO

STATION DESCRIPTIONS POINT IN SHORT GRASS IN S. R/W OF E-W RD

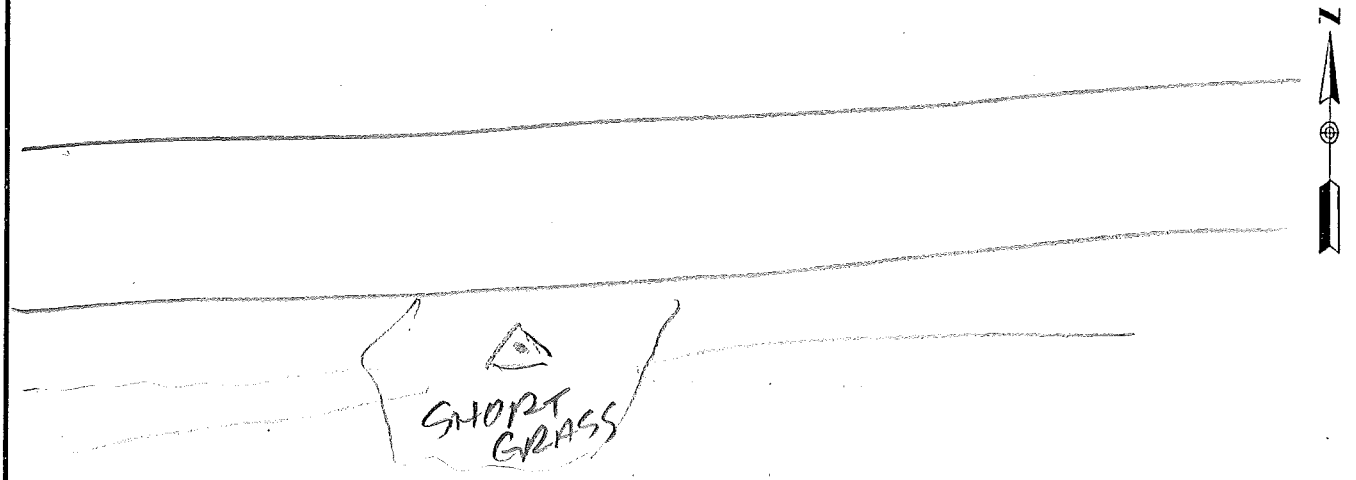
SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
20:11	2.0	9/9-9
20:36	2.1	9/9-9

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

VERY WIND

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

NEMAHA CO

4

PROJECT 1120103
OPERATOR WJN
DATE 2/10/12

SITE NUMBER 7
SITE NAME 1419

TRACKING TIMES (LOCAL) MEASURE CST
START 1452
STOP 1512

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 14
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
500 (0.360)

OBSTRUCTIONS: TREES

HEIGHT READINGS MTS FT
1.253
1.613

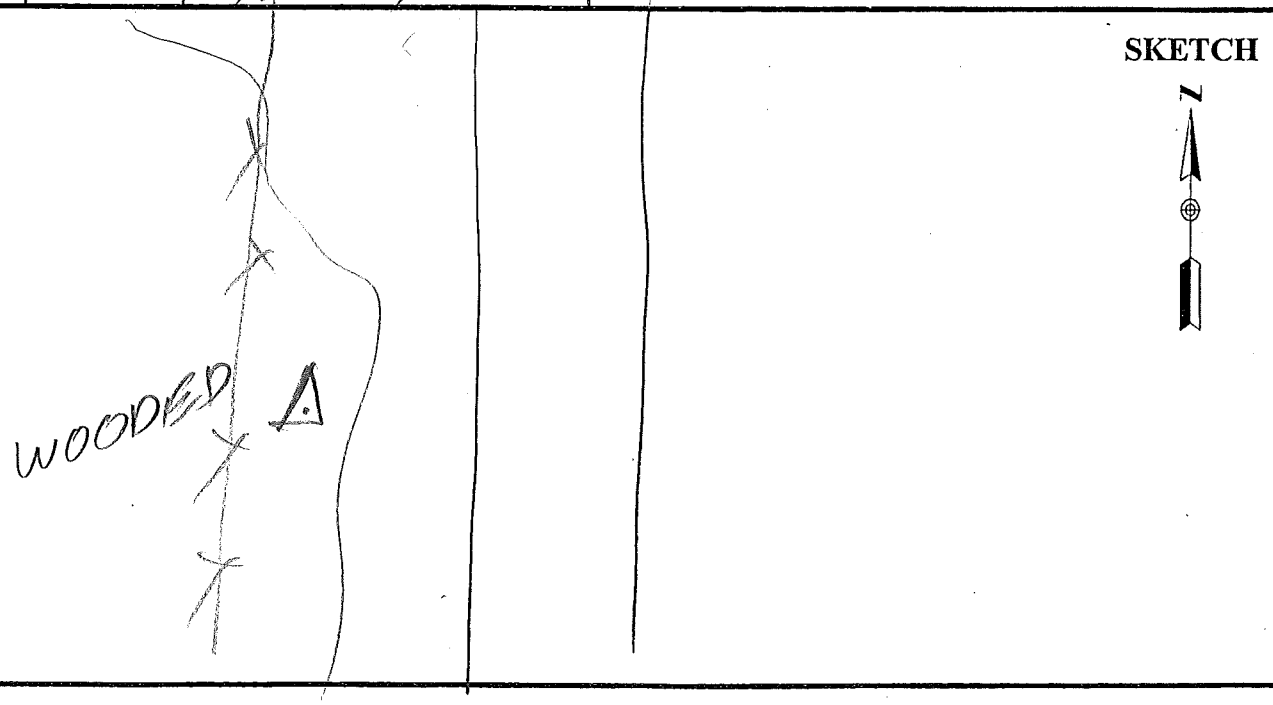
STATION DESCRIPTIONS POINT IN WOODED AREA

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
20:52	1.9	9/9-9
21:12	2.0	9/9-9

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
Very Windy

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

NEMAHA CO. 1

PROJECT 1120103
OPERATOR LWM
DATE 2/10/12

SITE NUMBER 8
SITE NAME 1120

TRACKING TIMES (LOCAL) MEASURE CST
START 15:27
STOP 15:45

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 14
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
500 (0.360)

HEIGHT READINGS MTS FT
1.280

OBSTRUCTIONS: TREES E

STATION DESCRIPTIONS POINT IN SHORT GRASS

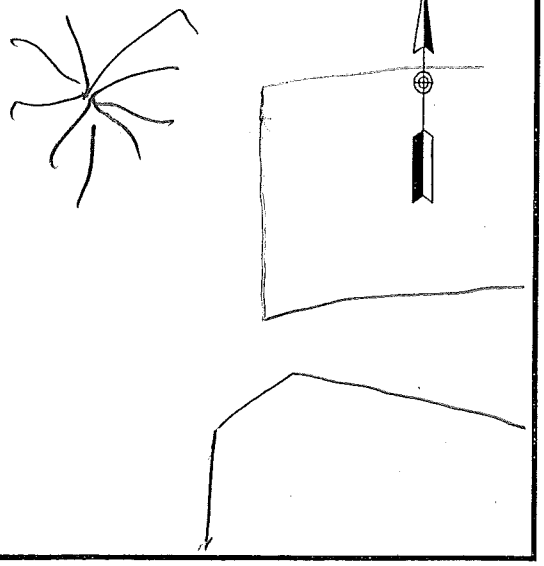
SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
2127	1.8	9/8-9
2145	1.8	9/9-9

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
WINDY

PARK
SHORT GRASS

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

Cherokee Co. Base

PROJECT 1120103
OPERATOR MB
DATE 2·10·12

SITE NUMBER 1
SITE NAME 126

TRACKING TIMES (LOCAL) MEASURE ✓
START 7:14 a.
STOP

SENSOR TYPE 500 9500 399 299
MEMORY CARD 603
BATTERY NO. CB
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
500 0.360

OBSTRUCTIONS:

HEIGHT READINGS MTS FT
1.227

STATION DESCRIPTIONS

1587

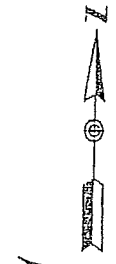
SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
814	3.1	6/7

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

see previous

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

Cherokee Co. Base tall grass √pt

PROJECT 1120163
OPERATOR MB
DATE 2-10-12

SITE NUMBER 1
SITE NAME 224

TRACKING TIMES (LOCAL) MEASURE √
START 7:41a.
STOP

SENSOR TYPE 500 9500 399 299
MEMORY CARD 777
BATTERY NO. C10
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
500 0.360

HEIGHT READINGS MTS FT
1.270
1.659

OBSTRUCTIONS: none

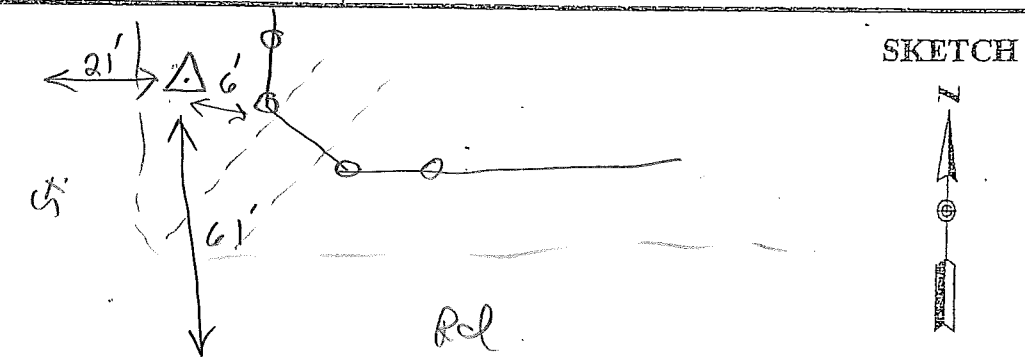
STATION DESCRIPTIONS ø⅝" rebar w/cap

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
841	3.9	7/7

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
37 16 54.6
94 57 31.7

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

Crawford Co.

short grass VRT

PROJECT 1120103
OPERATOR MS
DATE 2·10·12

SITE NUMBER 1
SITE NAME 129

TRACKING TIMES (LOCAL) MEASURE ✓
START 8:08 a.
STOP 8:36 a.

SENSOR TYPE 500 9500 399 299
MEMORY CARD 704
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
500 0.360?

OBSTRUCTIONS: none

HEIGHT READINGS MTS FT
1.320
1.680

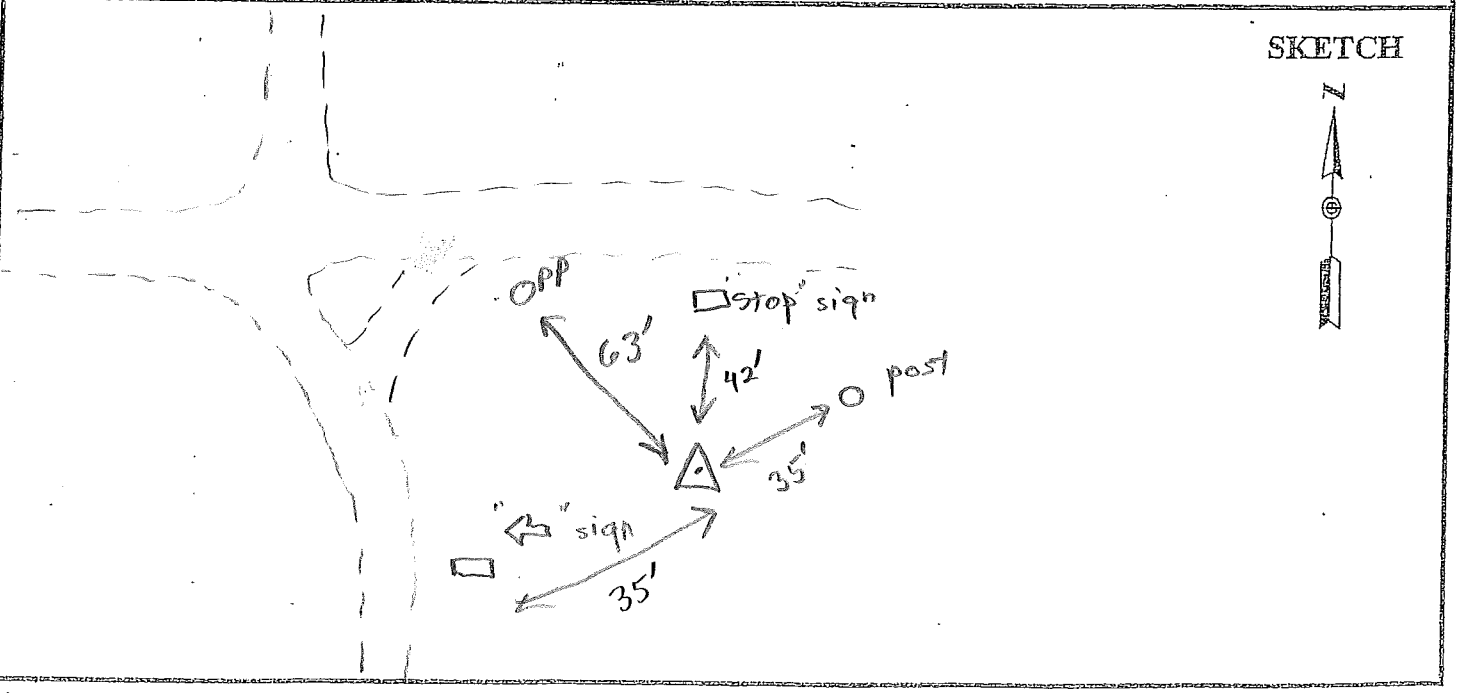
STATION DESCRIPTIONS set 5/8" rebar + cap

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
908	4.3	6/6
936		

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

Cherokee Co.

trees ✓ PT

PROJECT 1120103
OPERATOR MB
DATE 2·10·12

SITE NUMBER 2
SITE NAME 406

TRACKING TIMES (LOCAL) MEASURE ✓
START 8:52 a.
STOP 9:22 a.

SENSOR TYPE 500 9500 399 299
MEMORY CARD 704
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
500 0.360

OBSTRUCTIONS: trees above

HEIGHT READINGS MTS FT
1.390
1.750

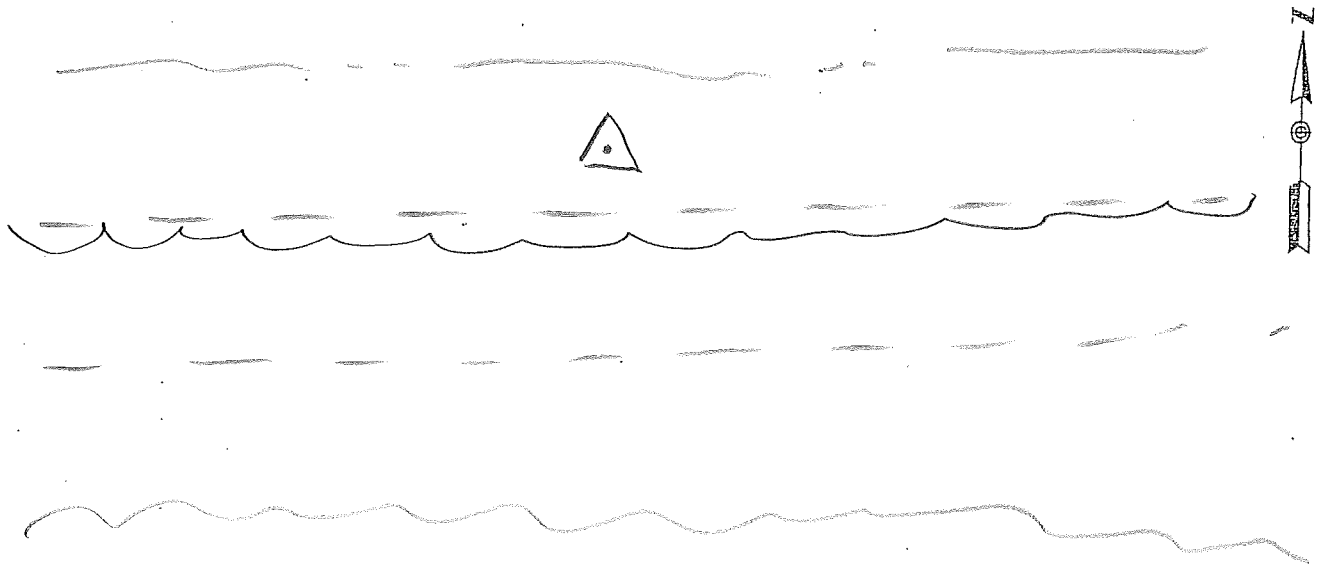
STATION DESCRIPTIONS N. of road

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
952	5.1	5/5
1022		

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

Cherokee Co.

AME VRT

PROJECT 1120103
OPERATOR MB
DATE 2·10·12

SITE NUMBER 3
SITE NAME 632

TRACKING TIMES (LOCAL) MEASURE ✓
START 9:34a.
STOP 10:05a.

SENSOR TYPE 500 9500 399 299
MEMORY CARD 704
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
500 0.360

OBSTRUCTIONS: none

HEIGHT READINGS MTS FT
1.387

STATION DESCRIPTIONS S. side road

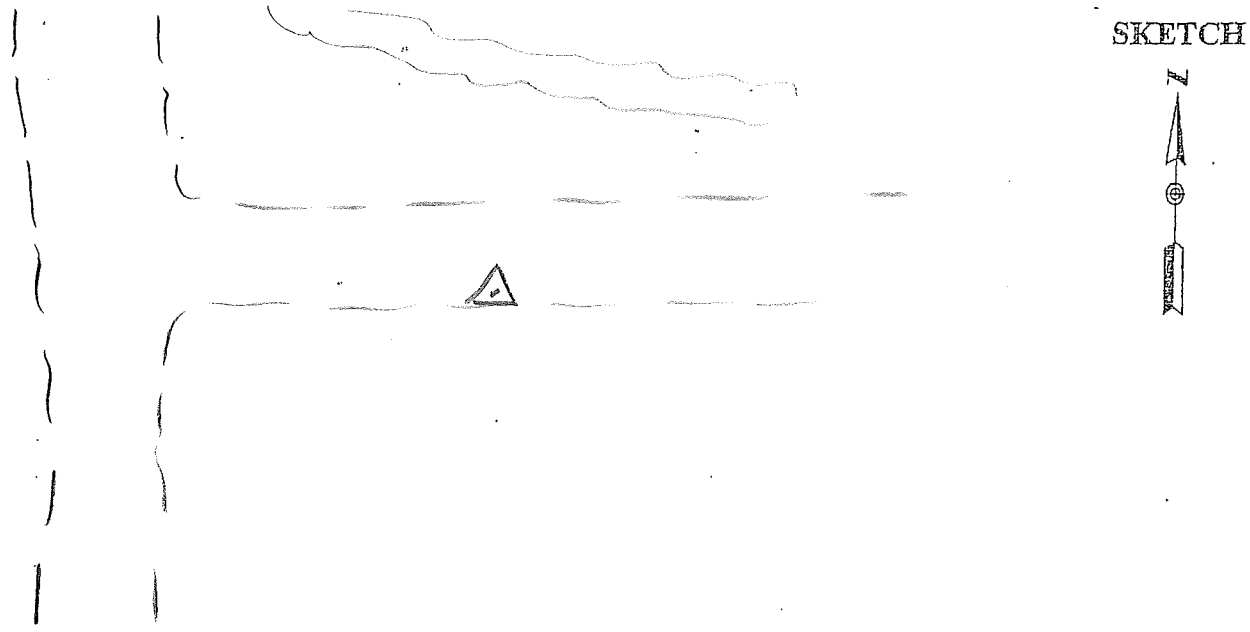
1747

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1034		7/7
1105		

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

Cherokee Co.

hand VRT

PROJECT 1120103
OPERATOR MB
DATE 2.10.12

SITE NUMBER 4
SITE NAME 525

TRACKING TIMES (LOCAL) MEASURE V
START 10:18 a.
STOP 10:50 a.

SENSOR TYPE 500 9500 399 299
MEMORY CARD 704
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 ~~0.389~~
500 0.360

OBSTRUCTIONS: none

HEIGHT READINGS MTS FT
1.363
1.723

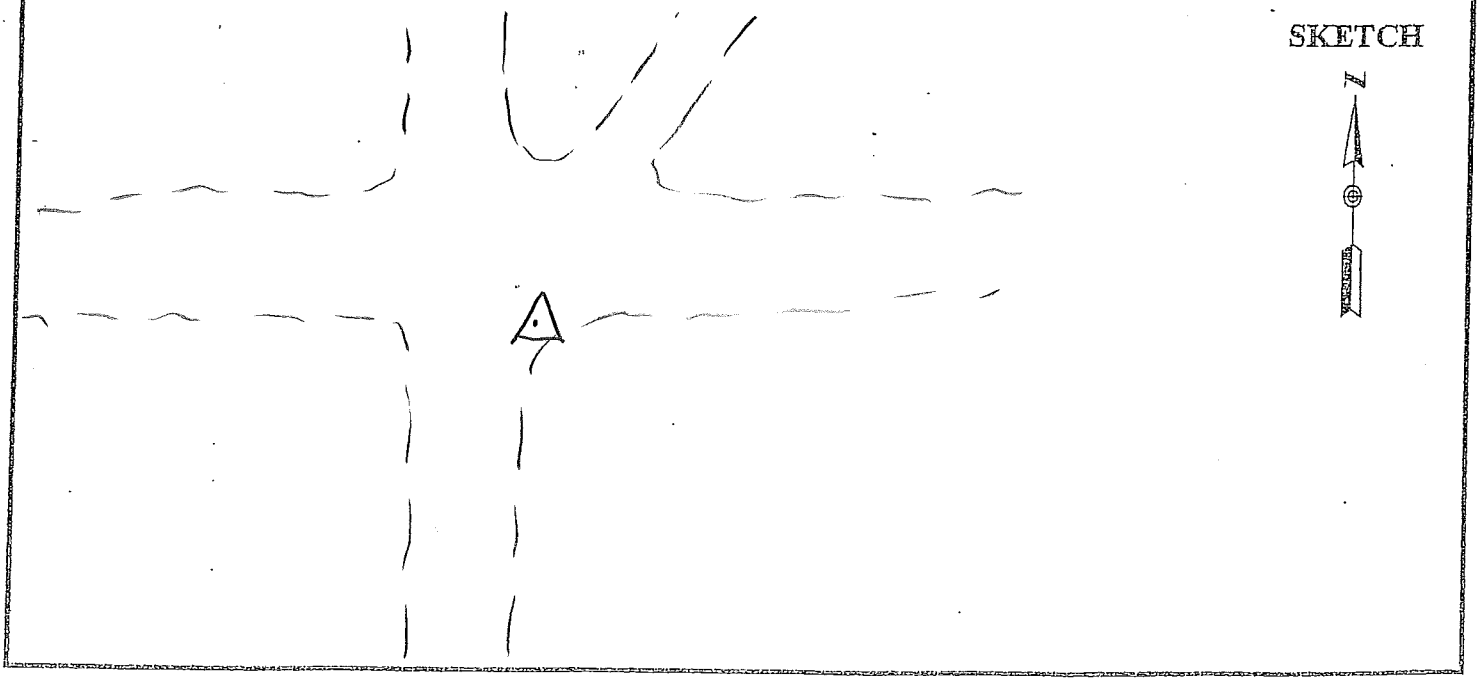
STATION DESCRIPTIONS SE corner at intersection

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1118	3.0	5/5
1150		

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

Cherokee Co.

short grass √pt

PROJECT 1120103
OPERATOR MB
DATE 2·10·12

SITE NUMBER 5
SITE NAME ~~129~~ 131

TRACKING TIMES (LOCAL) MEASURE ✓
START 10:51a.
STOP 11:23a.

SENSOR TYPE 500 9500 399 299
MEMORY CARD 70H
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
500 0.360

HEIGHT READINGS MTS FT
1.375
1.735

OBSTRUCTIONS: none

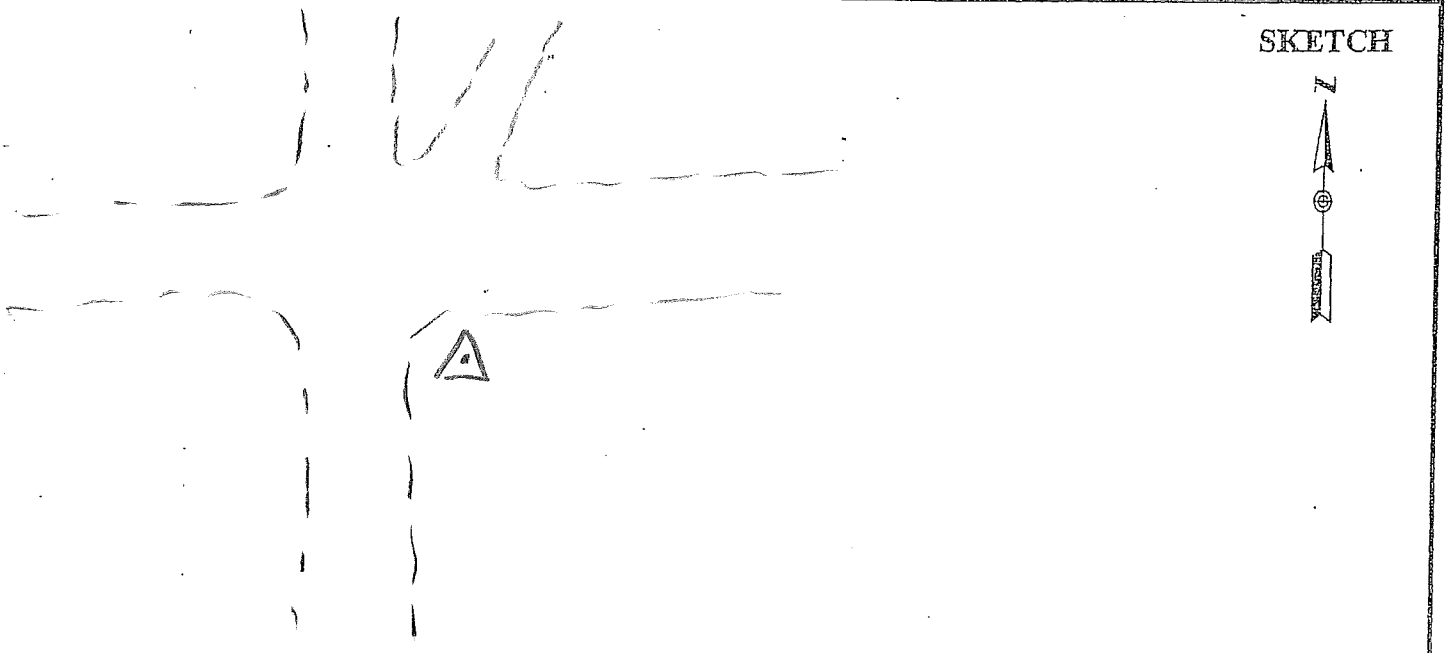
STATION DESCRIPTIONS SE corner of intersection

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1151	5.4	5/5
1223		

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

Cherokee Co.

woods VPT

PROJECT 1120103
OPERATOR MB
DATE 2.10.12

SITE NUMBER 6
SITE NAME 407

TRACKING TIMES (LOCAL) MEASURE ✓
START 11:37 a.
STOP 12:04 p

SENSOR TYPE 500 9500 399 299
MEMORY CARD 704
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
(500) (0.360)

OBSTRUCTIONS: trees above

HEIGHT READINGS MTS FT
1.380
1.740

STATION DESCRIPTIONS N of road

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1237	2.8	5/6
1304		

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH

AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
Cherokee Co. SHEBOYGAN, WISCONSIN 53083

short grass ✓PT

PROJECT 1120103
OPERATOR MD
DATE 2·10·12

SITE NUMBER 7
SITE NAME 130

TRACKING TIMES (LOCAL) MEASURE ✓
START 12:22 p
STOP 12:47 p

SENSOR TYPE 500 9500 399 299
MEMORY CARD 704
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
500 0.360

HEIGHT READINGS MTS FT
1.364
1.724

OBSTRUCTIONS: none

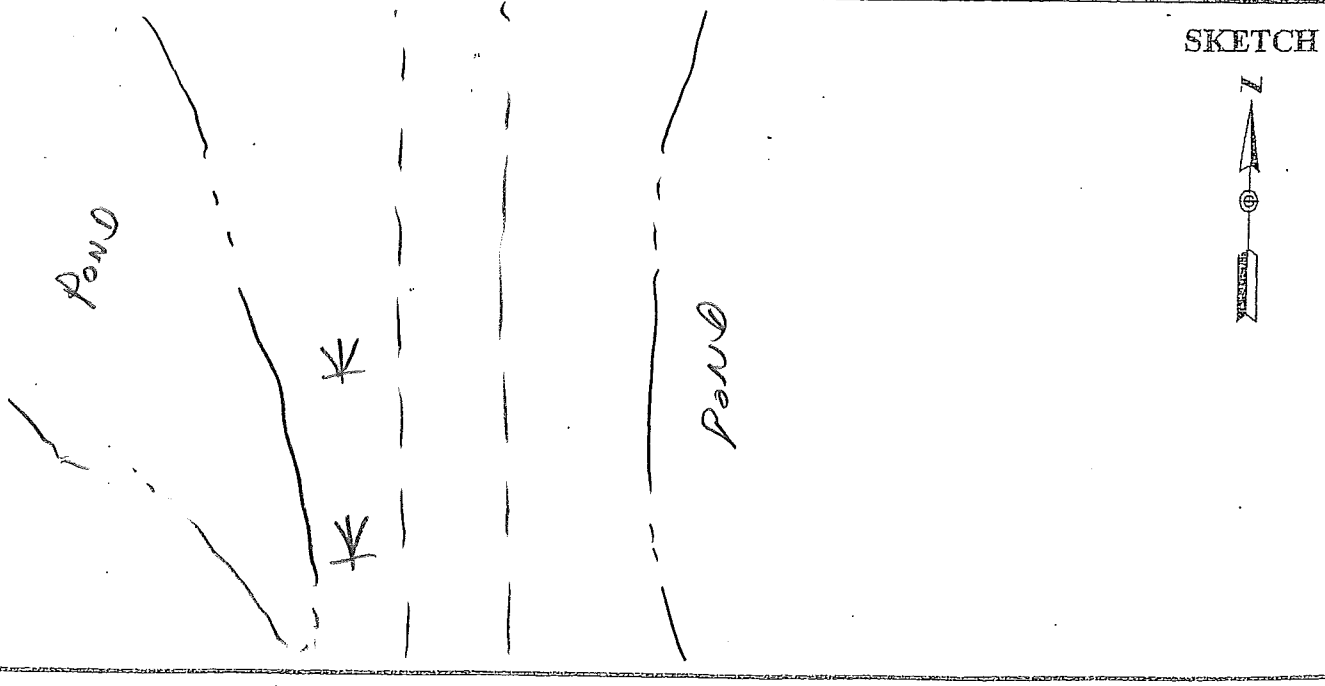
STATION DESCRIPTIONS E. of road

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1322	2.2	9/9
1347		

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

Cherokee Co.

hand VRT

PROJECT 1120103
OPERATOR MB
DATE 2-10-12

SITE NUMBER 8
SITE NAME 526

TRACKING TIMES (LOCAL) MEASURE ✓
START 1:02 p
STOP 1:25 p

SENSOR TYPE 500 9500 399 299
MEMORY CARD 704
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
(500) (0.360)

OBSTRUCTIONS: trees SE + W

HEIGHT READINGS MTS FT
1.408
1.768

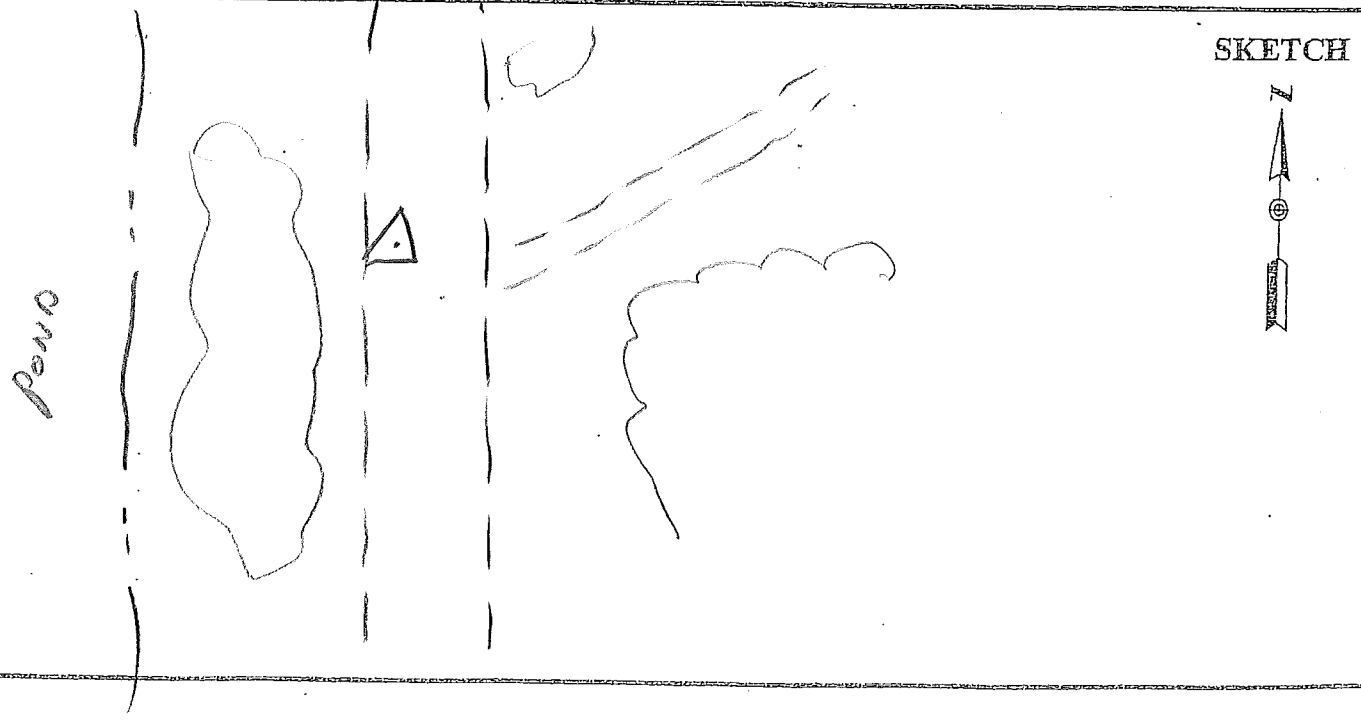
STATION DESCRIPTIONS W. side road

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1402	3.3	9/9
1425		

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

Cherokee Co.

tall grass VRT

PROJECT 1120103
OPERATOR MB
DATE 2.10.12

SITE NUMBER 9
SITE NAME 225 ~~HCB~~

TRACKING TIMES (LOCAL) MEASURE _____
START 1:31 p
STOP 1:54 p

SENSOR TYPE 500 9500 399 299
MEMORY CARD 704
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
(500) (0.360)

OBSTRUCTIONS: trees SE

HEIGHT READINGS MTS FT
1.380
1.740

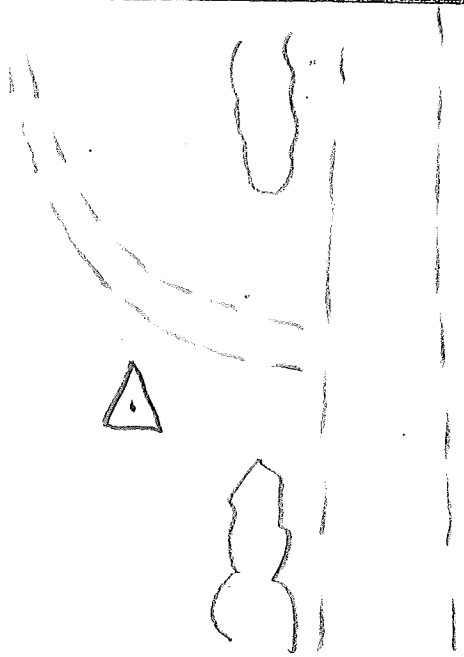
STATION DESCRIPTIONS in field

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1431	2.4	10/10
1454		

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

Cherokee Co.

woods VPT

PROJECT 1120103
OPERATOR MB
DATE 2·10·12

SITE NUMBER 10
SITE NAME 408

TRACKING TIMES (LOCAL) MEASURE ✓
START 2:09 p
STOP 2:31 p

SENSOR TYPE 500 9500 399 299
MEMORY CARD 704
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
500 0.360

OBSTRUCTIONS: under trees

HEIGHT READINGS MTS FT
1.349

STATION DESCRIPTIONS E. side road

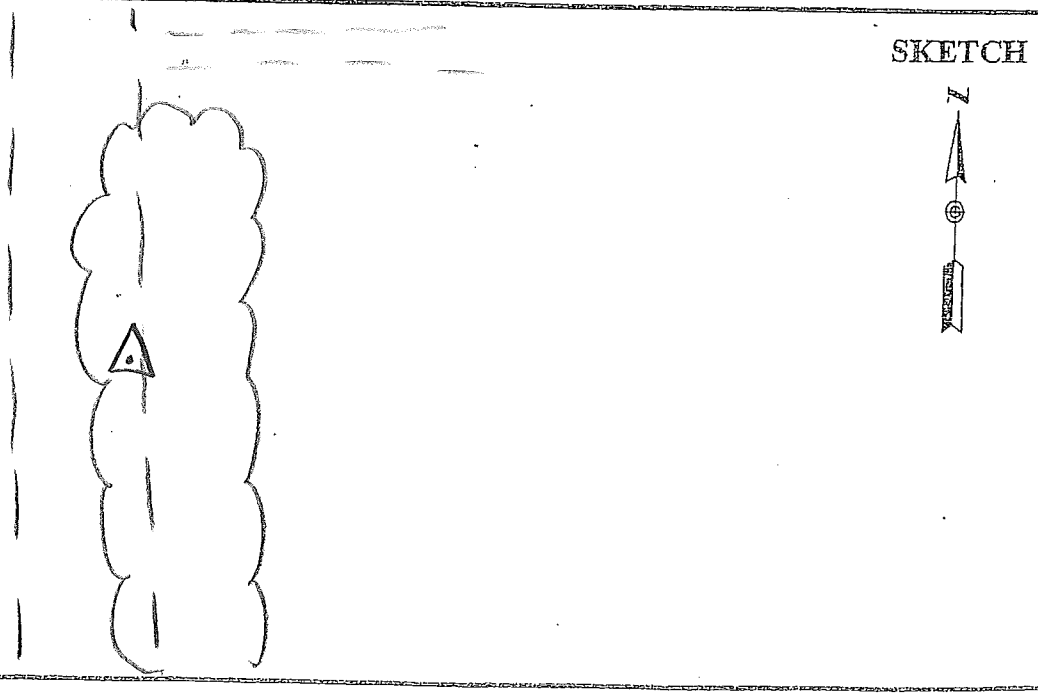
1709

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1509	4.6	5/5
1531		

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

Pott. Co. BASE

PROJECT 1120103
OPERATOR WJN
DATE 2/11/12

SITE NUMBER 1
SITE NAME 1014

TRACKING TIMES (LOCAL) MEASURE CST
START 11:43
STOP 16:43

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 11
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
500 (0.360)

OBSTRUCTIONS: No

HEIGHT READINGS MTS FT
1-150
1.510

STATION DESCRIPTIONS Se + Rebar AND CAP

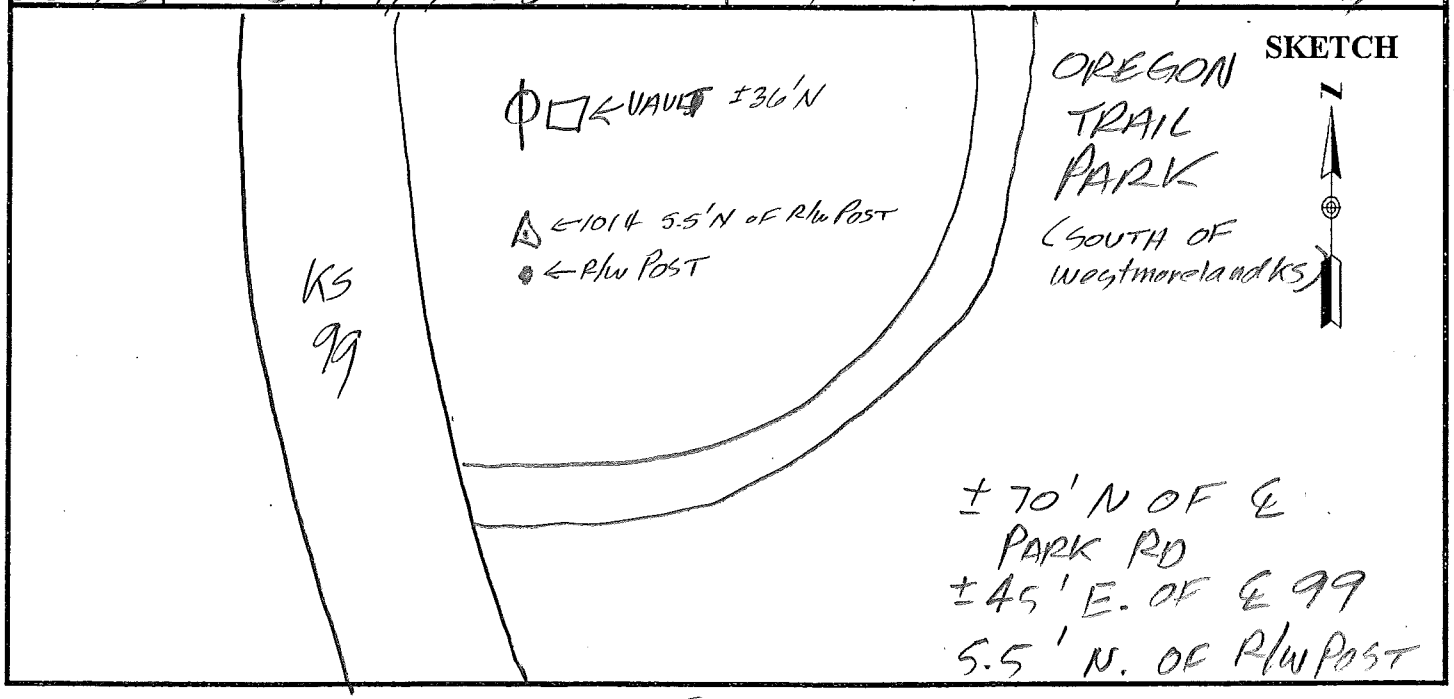
SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
17:42	2.1	9/9-9
2243	2.3	9/9-10

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
SKC

APPROX 39 22 58.0 lat
96 24 21.4 long

SKETCH



KSUI KST 5

AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

Vert cont

POTT Co.

PROJECT 1120103
OPERATOR WJN
DATE 2/11/12

SITE NUMBER 1
SITE NAME X 119

TRACKING TIMES (LOCAL) MEASURE CST
START 11:03
STOP TERMINATED IN Advertantly @ 11:20

SENSOR TYPE 500 (9500) 399 299
MEMORY CARD 67
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 (0.389)
500 0.360

OBSTRUCTIONS: GUY WIRES WEST

HEIGHT READINGS MTS FT
0.825

1.314

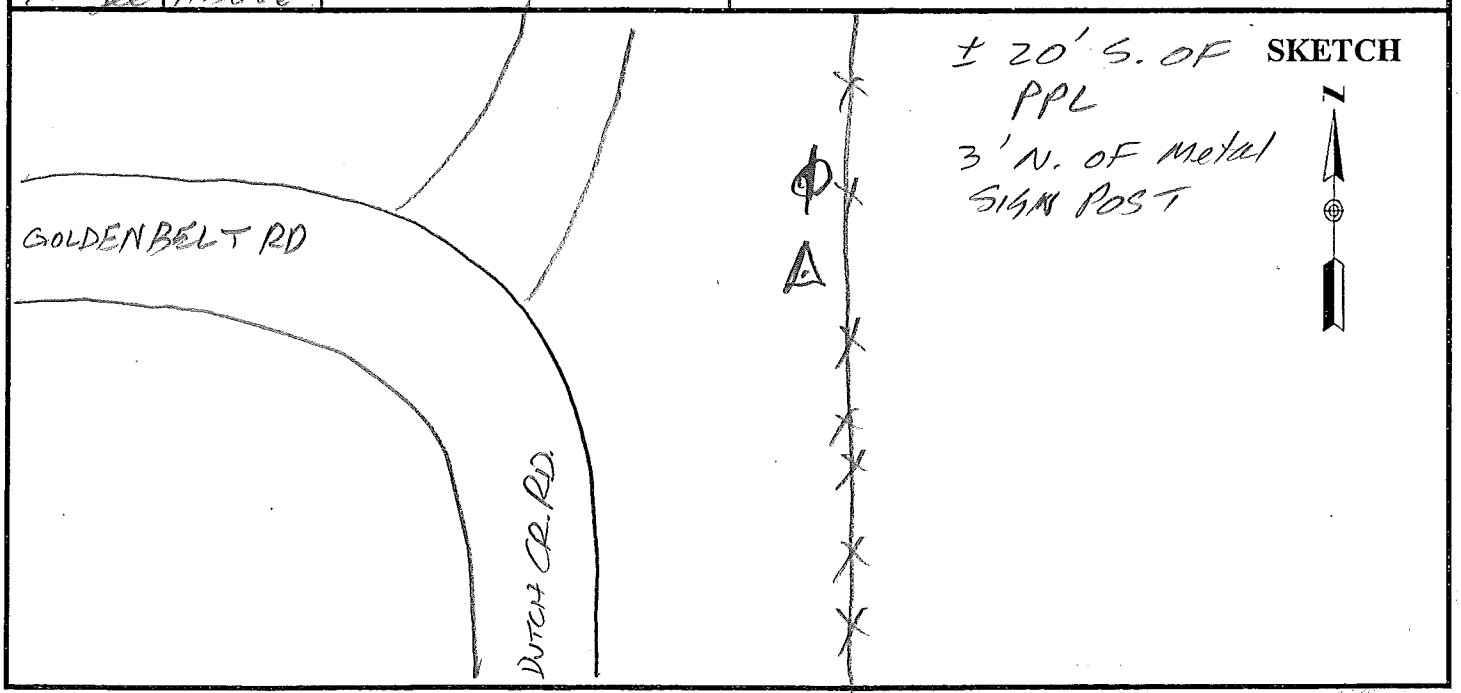
STATION DESCRIPTIONS FOUND
BRASS DISK IN CONC POST
Mkd "X119 A34"
As DESCRIBED By NGS

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
17:03	2.2	9/9-9
* See	ABOVE	

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
SKC

SKETCH



392.674
366.4431
20.632
21.970

AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

POTT. Co.

5

PROJECT 1120103
OPERATOR WJN
DATE 2/11/12

SITE NUMBER 1
SITE NAME 1520

TRACKING TIMES (LOCAL) MEASURE CST
START 11:53
STOP 12:18

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 14
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
500 (0.360)

OBSTRUCTIONS: NO

HEIGHT READINGS MTS FT
1.317
1.677

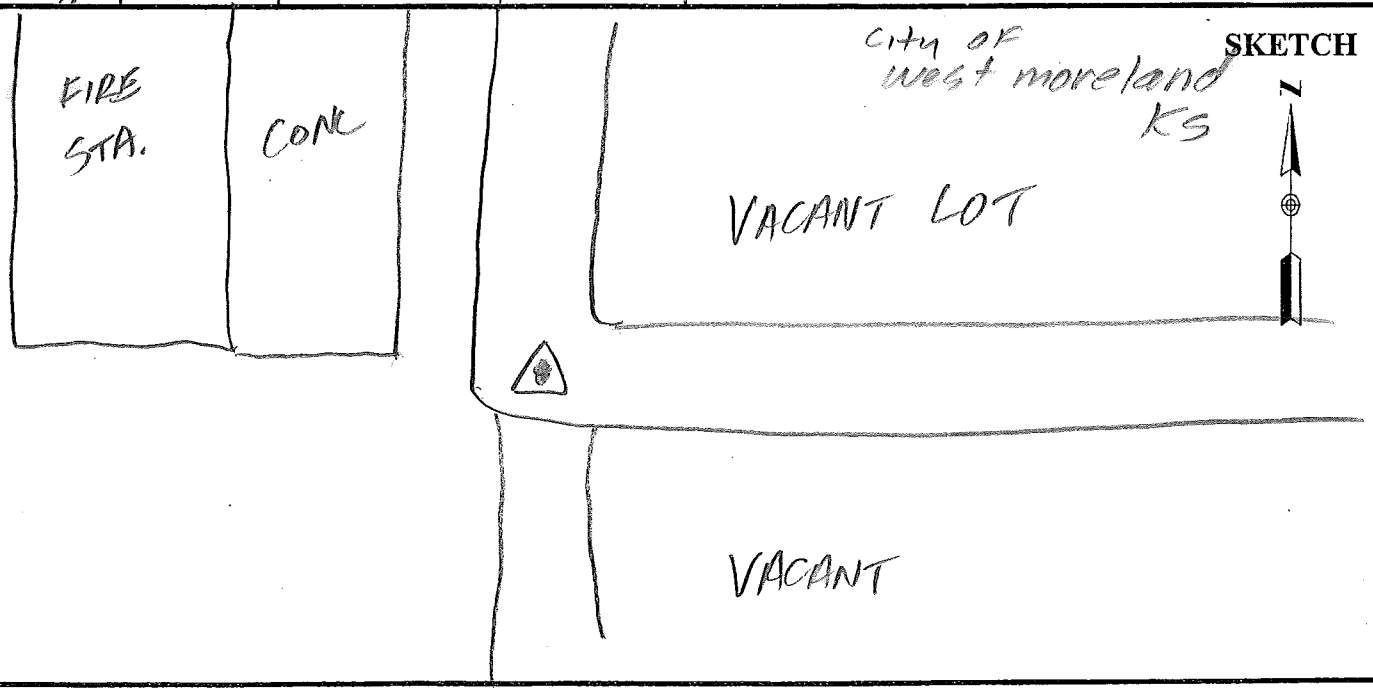
STATION DESCRIPTIONS E & E INT STREETS N AND E, IRD S

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
17:53	2.1	9/9-9
18:18		

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
SKC

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

POTT. CO

1

PROJECT 120103
OPERATOR WJN
DATE

SITE NUMBER 2
SITE NAME 1121

TRACKING TIMES (LOCAL) MEASURE CST
START 12 33
STOP 12 59

SENSOR TYPE (500) 9500 399 299
MEMORY CARD
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
500 (0.360)

OBSTRUCTIONS: NO

HEIGHT READINGS MTS FT
1.294
1.654

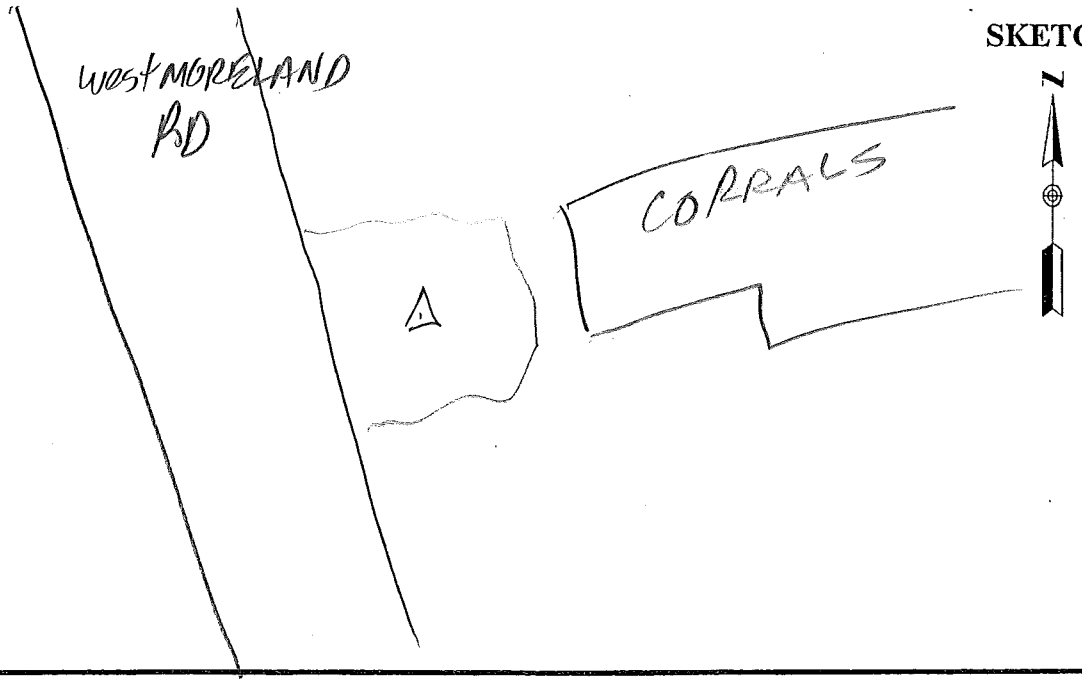
STATION DESCRIPTIONS POINT IN CENTER OF SPARSE GRASS/BARE EARTH TURNOUT.

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1833	2.3	9/9-9
1859	2.1	9/9-9

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
SKC

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

POTT. CO. 2

PROJECT 1120103
OPERATOR WJN
DATE 2/11/12

SITE NUMBER 3
SITE NAME 1220

TRACKING TIMES (LOCAL) MEASURE CST
START 13:48
STOP 14:09

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 14
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
500 (0.360)

OBSTRUCTIONS: NO

HEIGHT READINGS MTS FT
1.290
1.650

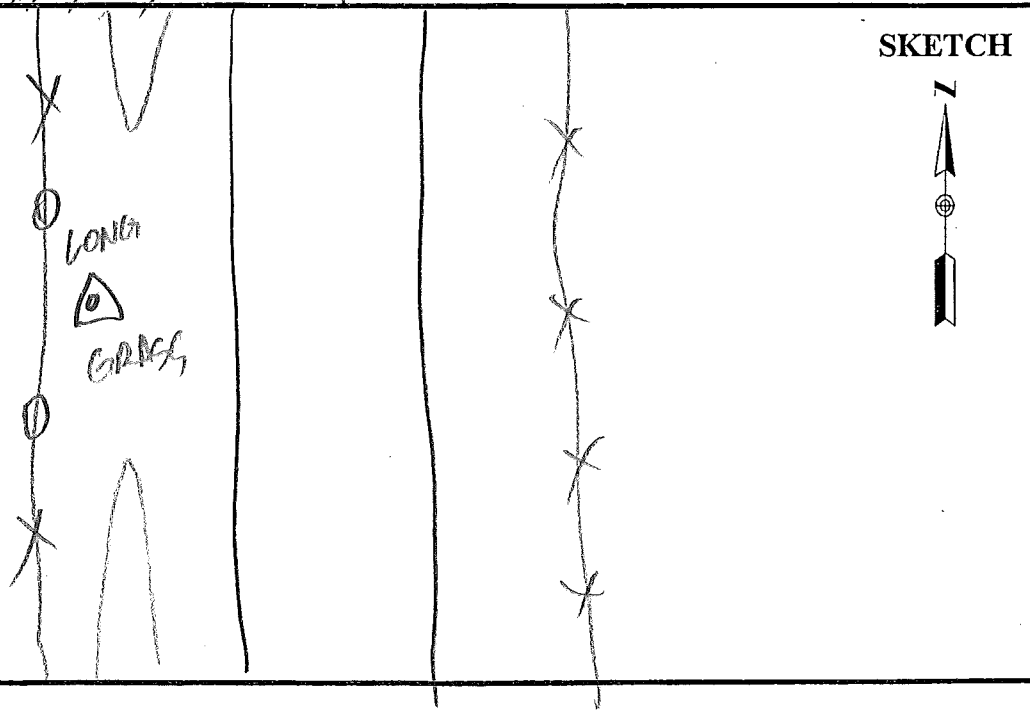
STATION DESCRIPTIONS POINT IN LONG GRASS IN W. R/W OF N-S RD.

SATELLITE OBSERVATIONS

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
SKC

TIME	GDOP	SATELLITES
19:48	2.1	10/10-10
20:09	2.0	9/9-9

SKETCH



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4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

POTT. CO.

PROJECT 1120103
OPERATOR WJN
DATE 2/11/12

SITE NUMBER 4
SITE NAME 1420

TRACKING TIMES (LOCAL) MEASURE CST
START 14:24
STOP 14:42

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 14
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
500 (0.360)

HEIGHT READINGS MTS FT
1.267
1.627

OBSTRUCTIONS:

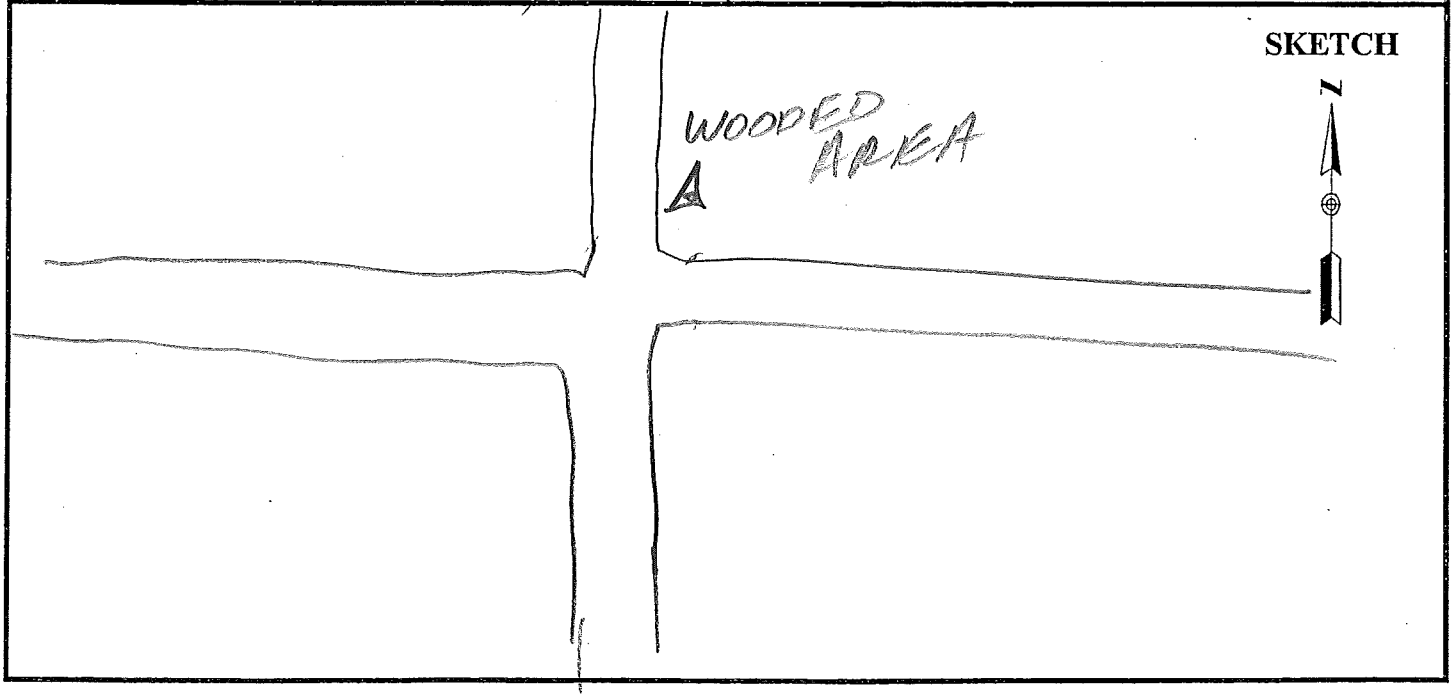
STATION DESCRIPTIONS POINT IN WOODED AREA NE OF INT.

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
20:24	2.0	9/9-9
20:42	2.0	9/9-9

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
SKC

SKETCH



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SHEBOYGAN, WISCONSIN 53083

POTT. CO.

PROJECT 1120103
OPERATOR WJN
DATE 2/11/12

SITE NUMBER 5
SITE NAME 1221

TRACKING TIMES (LOCAL) MEASURE CST
START 15:04
STOP 15:20

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 14
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
500 (0.360)

HEIGHT READINGS MTS FT
1.235
1.595

OBSTRUCTIONS: NO

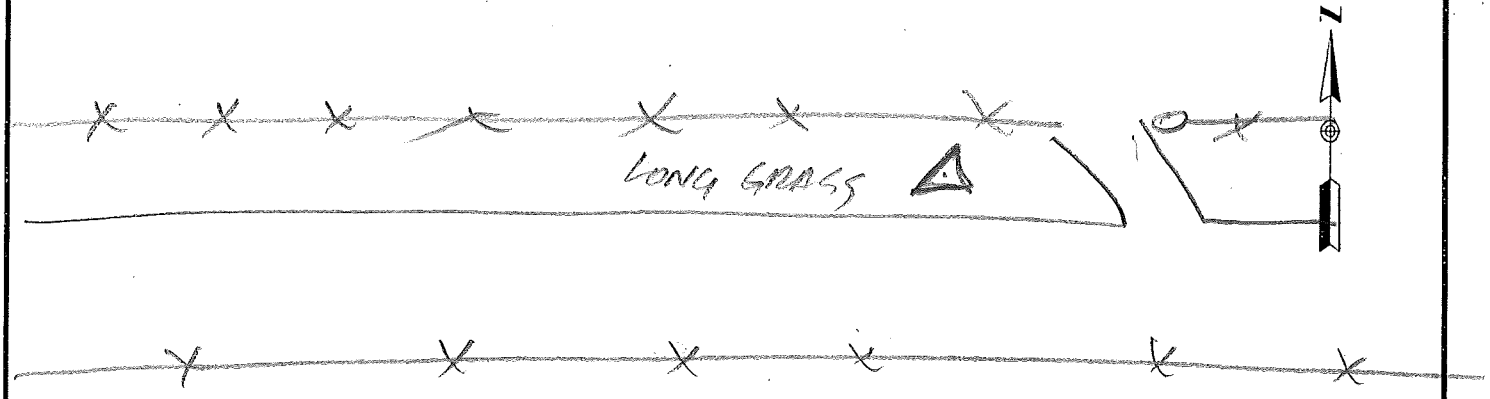
STATION DESCRIPTIONS POINT IN LONG GRASS IN N. R/W OF E-W RD

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
21:04	1.9	7/7-9
21:20	1.7	9/9-9

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
SKC

SKETCH



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SHEBOYGAN, WISCONSIN 53083

Pott. Co.

PROJECT 1120103
OPERATOR WJN
DATE 2/11/12

SITE NUMBER 6
SITE NAME 1632

TRACKING TIMES (LOCAL) MEASURE CST
START 15:37
STOP 15:56

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 14
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
500 (0.360)

HEIGHT READINGS MTS FT
1.318
1.678

OBSTRUCTIONS: No

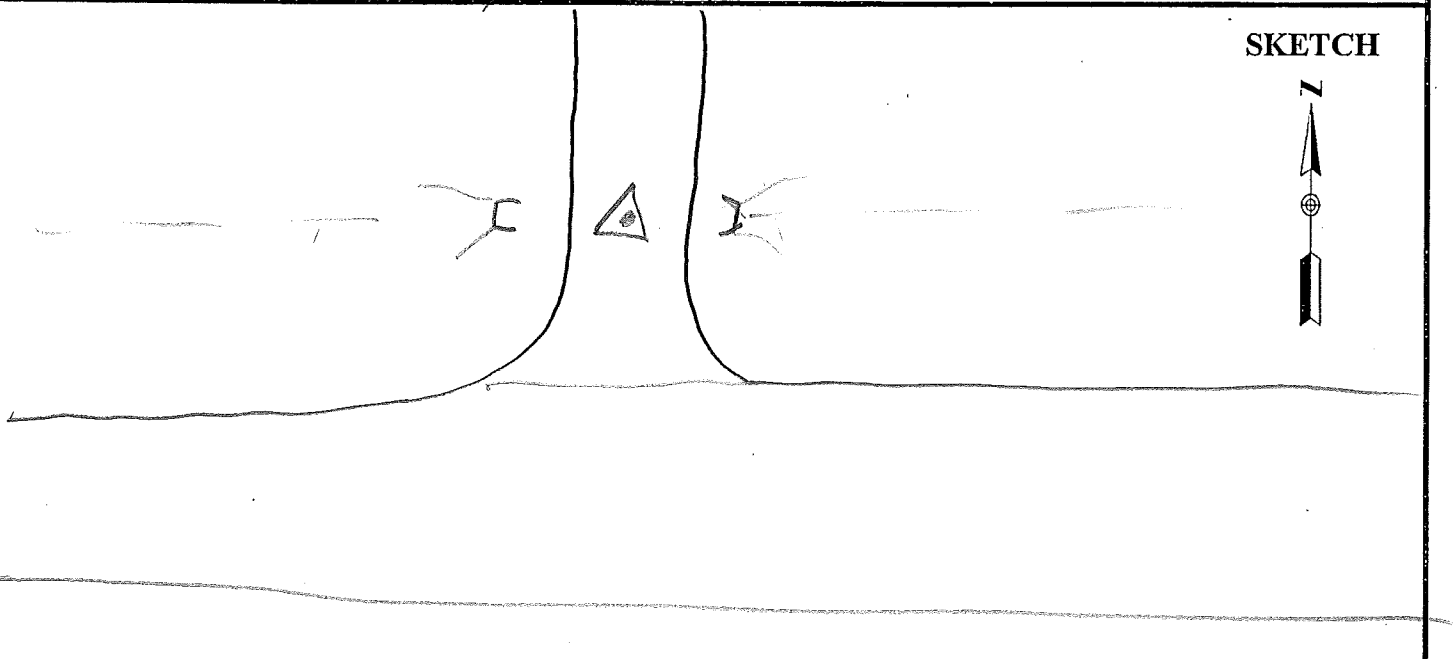
STATION DESCRIPTIONS @ RD & Culvert Ditches E-W

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
21:37	2.1	9/9-9
21:56	2.0	9/9-9

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
SKC

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

Crawford Co. Base short grass ✓PT

PROJECT 1120103
OPERATOR MB
DATE 2·11·12

SITE NUMBER 1
SITE NAME 132

TRACKING TIMES (LOCAL) MEASURE ____
START 7:15a
STOP

SENSOR TYPE 500 9500 399 299
MEMORY CARD 704
BATTERY NO. CB
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
500 0.360

OBSTRUCTIONS: PP north

HEIGHT READINGS MTS FT
1.331
1.691

STATION DESCRIPTIONS Set 6" nail

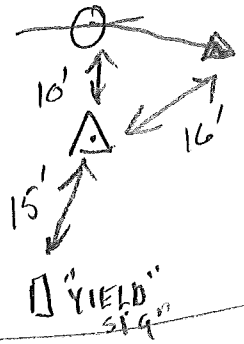
SATELLITE OBSERVATIONS

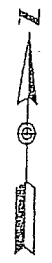
TIME	GDOP	SATELLITES
815	3.4	7/7

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
37 17 45.5
94 50 14.7

Hatfield Used Cars

SKETCH





AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

Crawford Co. Base

PROJECT 112010 3
OPERATOR MB
DATE 2·11·12

SITE NUMBER 1
SITE NAME 129

TRACKING TIMES (LOCAL) MEASURE ✓
START 7:49 a.
STOP

SENSOR TYPE 500 9500 399 299
MEMORY CARD 777
BATTERY NO. CD
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
500 0.360

OBSTRUCTIONS:

HEIGHT READINGS MTS FT
1.425
1.814

STATION DESCRIPTIONS

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
849	3.6	6/7

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH

see previous

AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

Crawford Co. Vert. Control

PROJECT 1120103
OPERATOR MB
DATE 2-11-12

SITE NUMBER 1
SITE NAME C 253

TRACKING TIMES (LOCAL) MEASURE _____
START 8:32 a.
STOP 8:55 a.

SENSOR TYPE 500 9500 399 299
MEMORY CARD 603
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
500 0.360

OBSTRUCTIONS: trees S + W

HEIGHT READINGS MTS FT
1.350
1.710

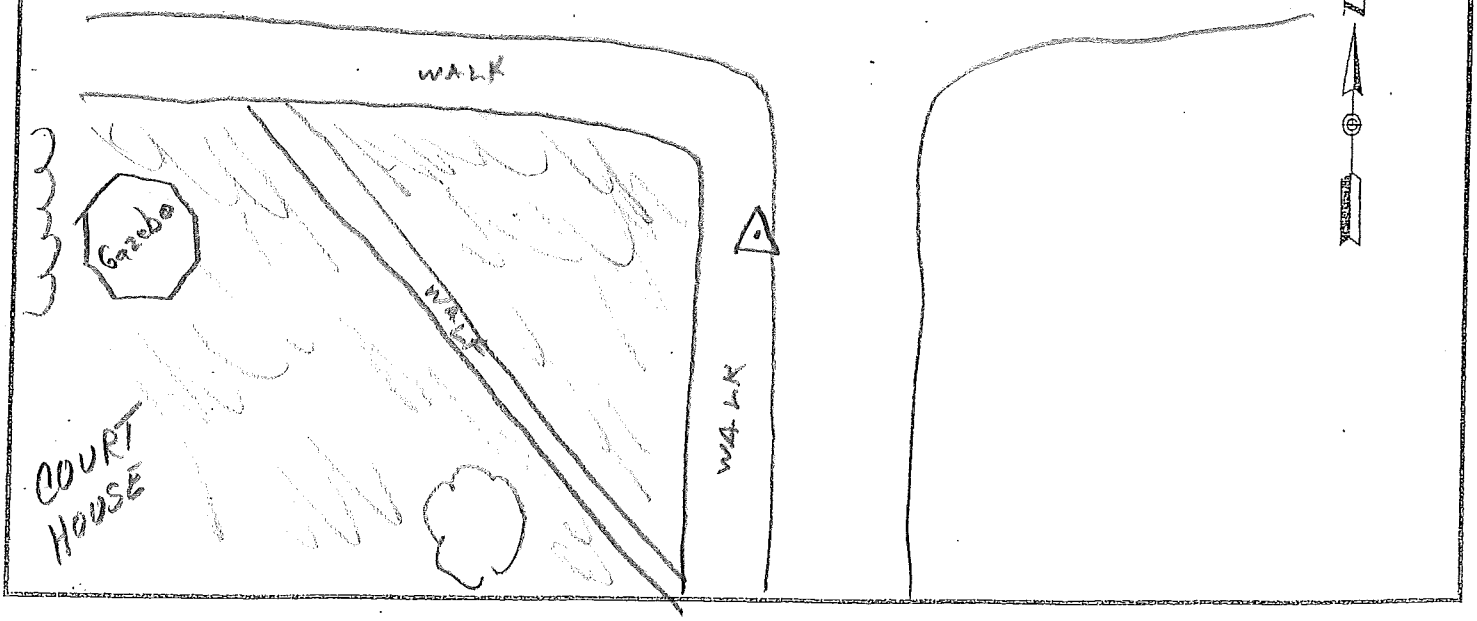
STATION DESCRIPTIONS Ind cap/conc. mon. "C 253 1984"
illegible

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
932	3.9	5/5
955		

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

Crawford Co.

tall grass VPT

PROJECT 1120103
OPERATOR MB
DATE 2·11·12

SITE NUMBER 2
SITE NAME 226

TRACKING TIMES (LOCAL) MEASURE ✓
START 9:12 a.
STOP 9:38 a.

SENSOR TYPE 500 9500 399 299
MEMORY CARD 603
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
(500) (0.360)

OBSTRUCTIONS: none

HEIGHT READINGS MTS FT
1.318
1.678

STATION DESCRIPTIONS SE corner of intersection

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1012	2.9	6/0
1038		

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH

AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

Crawford Co.

hard VRT

PROJECT 1120103
OPERATOR MB
DATE 2.11.12

SITE NUMBER 3
SITE NAME 527

TRACKING TIMES (LOCAL) MEASURE _____
START 9:45a.
STOP 10:15a.

SENSOR TYPE 500 9500 399 299
MEMORY CARD 603
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
500 0.360

OBSTRUCTIONS: none

HEIGHT READINGS MTS FT
1.370
1.730

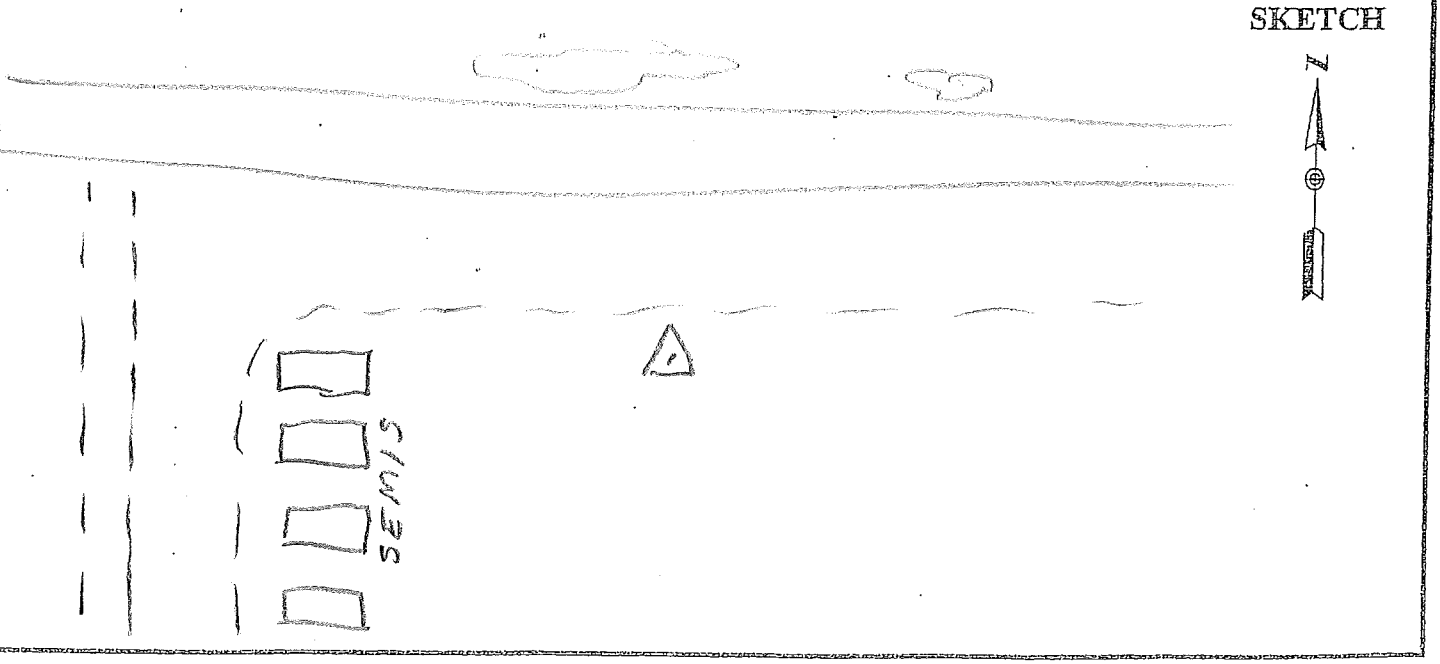
STATION DESCRIPTIONS N. side parking area

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1045	2.5	7/7
1115		

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

Crawford Co. woods V PT

PROJECT 1120103
OPERATOR MB
DATE 2-11-12

SITE NUMBER 4
SITE NAME 409

TRACKING TIMES (LOCAL) MEASURE ✓
START 10:35 a.
STOP 11:08 a.

SENSOR TYPE 500 9500 399 299
MEMORY CARD 603
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
(500) (0.360)

OBSTRUCTIONS: trees above

HEIGHT READINGS MTS FT
1.418
1.778

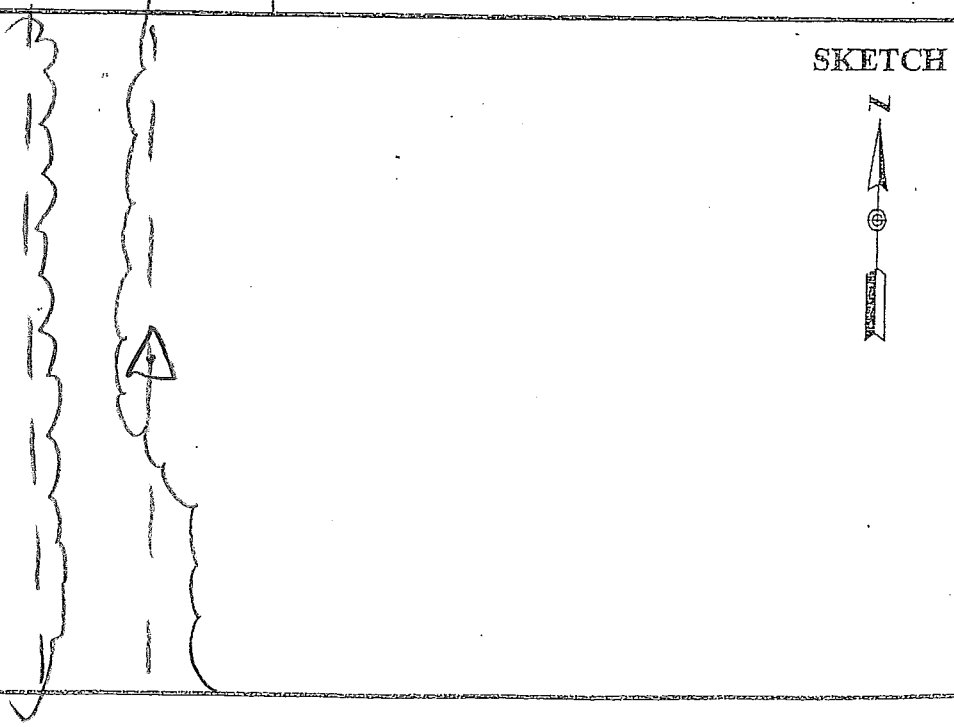
STATION DESCRIPTIONS E. side road

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1135	5.5	5/5
1208		

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

Crawford Co.

AME √PT

PROJECT 1120103
OPERATOR MB
DATE 2.11.12

SITE NUMBER 5
SITE NAME 633

TRACKING TIMES (LOCAL) MEASURE ✓
START 11:29 a.
STOP 12:00 p

SENSOR TYPE 500 9500 399 299
MEMORY CARD 603
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 ~~0.389~~
(500) (0.360)

OBSTRUCTIONS: none

HEIGHT READINGS MTS FT
1.363
1.723

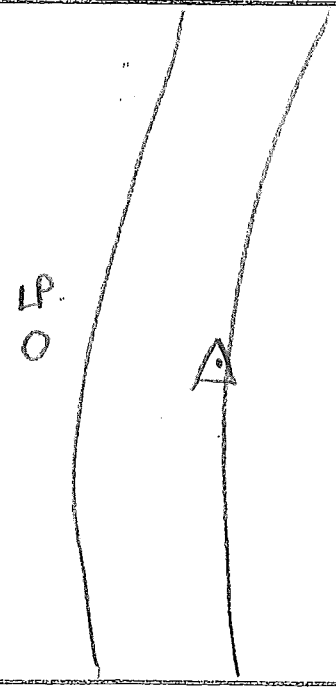
STATION DESCRIPTIONS E. side driveway

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1229	2.1	7/7
1300		

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

Crawford Co.

tall grass ✓PT

PROJECT 1120103
OPERATOR MB
DATE 2.11.12

SITE NUMBER 6
SITE NAME 227

TRACKING TIMES (LOCAL) MEASURE ✓
START 12:12 p
STOP 12:38 p

SENSOR TYPE 500 9500 399 299
MEMORY CARD 603
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
500 0.360

OBSTRUCTIONS: trees ws.

HEIGHT READINGS MTS FT
1.430
1.790

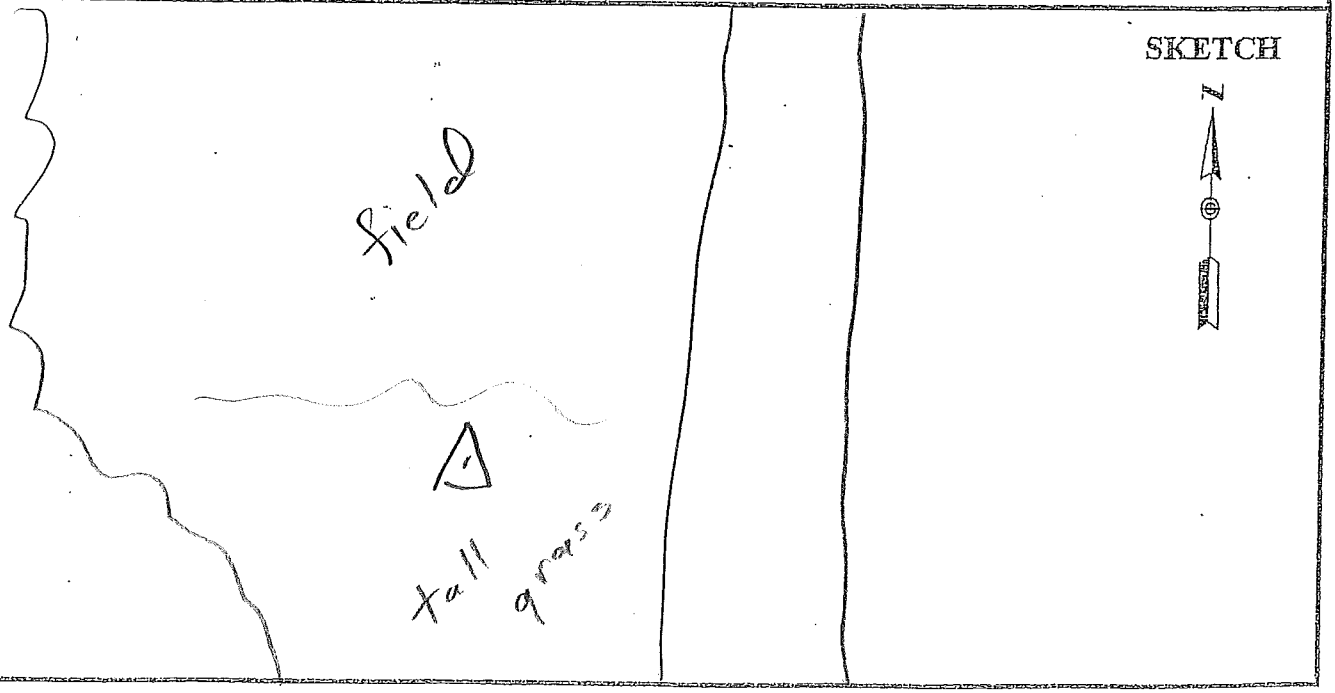
STATION DESCRIPTIONS in field

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1312	2.7	7/7
1338		

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

Crawford Co.

woods VPT

PROJECT 1120103
OPERATOR MB
DATE 2-11-12

SITE NUMBER 7
SITE NAME 410

TRACKING TIMES (LOCAL) MEASURE ✓
START 12:52 p
STOP 1:19 p

SENSOR TYPE 500 9500 399 299
MEMORY CARD 603
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
(500) (0.360)

OBSTRUCTIONS: trees above

HEIGHT READINGS MTS FT
1.348
1.708

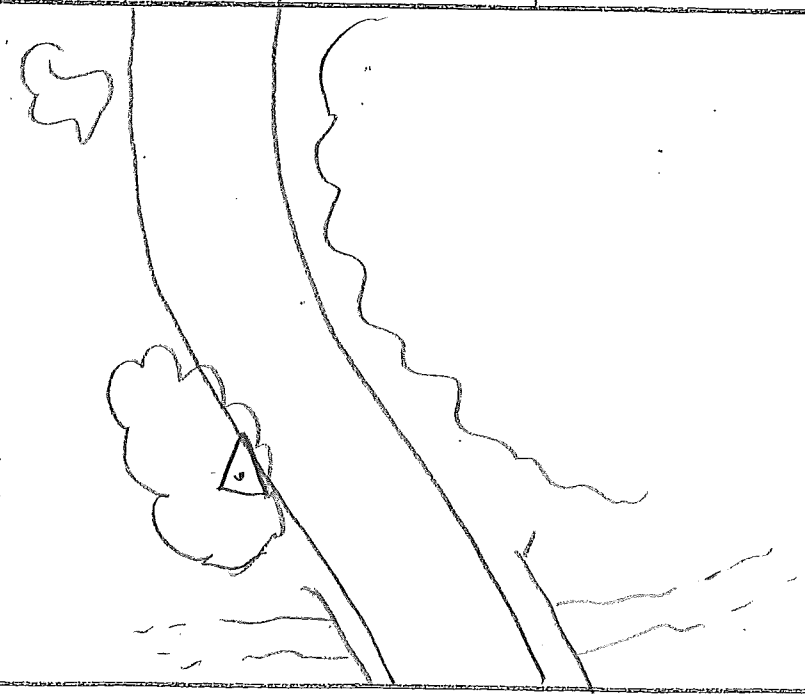
STATION DESCRIPTIONS W. side road

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1352	3.2	8/8
1419		

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

Crawford Co. hard √FT

PROJECT 1120103
OPERATOR MB
DATE 2.11.12

SITE NUMBER 8
SITE NAME 528

TRACKING TIMES (LOCAL) MEASURE ✓
START 1:33 p
STOP 1:53 p

SENSOR TYPE 500 9500 399 299
MEMORY CARD 603
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
(500) (0.360)

HEIGHT READINGS MTS FT
1.400
1.760

OBSTRUCTIONS: none

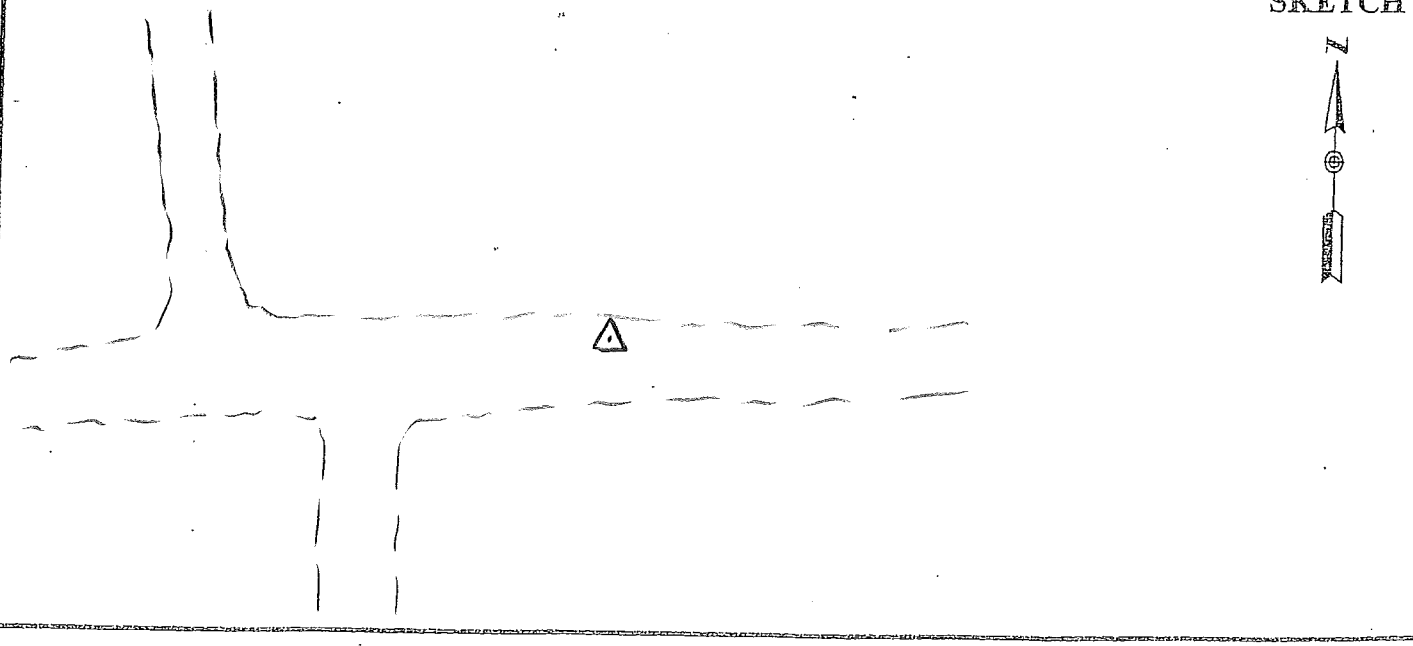
STATION DESCRIPTIONS N. side road

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1433	2.4	10/10
1453		

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

Crawford Co

tall grass ✓MT

PROJECT 1120103
OPERATOR MB
DATE 2-11-12

SITE NUMBER 9
SITE NAME 228

TRACKING TIMES (LOCAL) MEASURE ✓
START 2:02 p
STOP 2:24 p

SENSOR TYPE 500 9500 399 299
MEMORY CARD 603
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
(500) (0.360)

OBSTRUCTIONS: none

HEIGHT READINGS MTS FT
1.310

STATION DESCRIPTIONS N. of road

1.620

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1502	1.8	10/10
1524		

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH

AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

PATT CO

BASE

PROJECT 1120103
OPERATOR WJN
DATE 2/12/12

SITE NUMBER 1
SITE NAME 1015

TRACKING TIMES (LOCAL) MEASURE CST
START 10:45
STOP 16:24

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 14
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
500 (0.360)

OBSTRUCTIONS:

HEIGHT READINGS MTS FT
1.194
1.554

STATION DESCRIPTIONS 50 + 12"
SPIKE
6' W OF NW COR CEMETERY
FENCE, ± 9' S. OF ℄
FIELD ACCESS

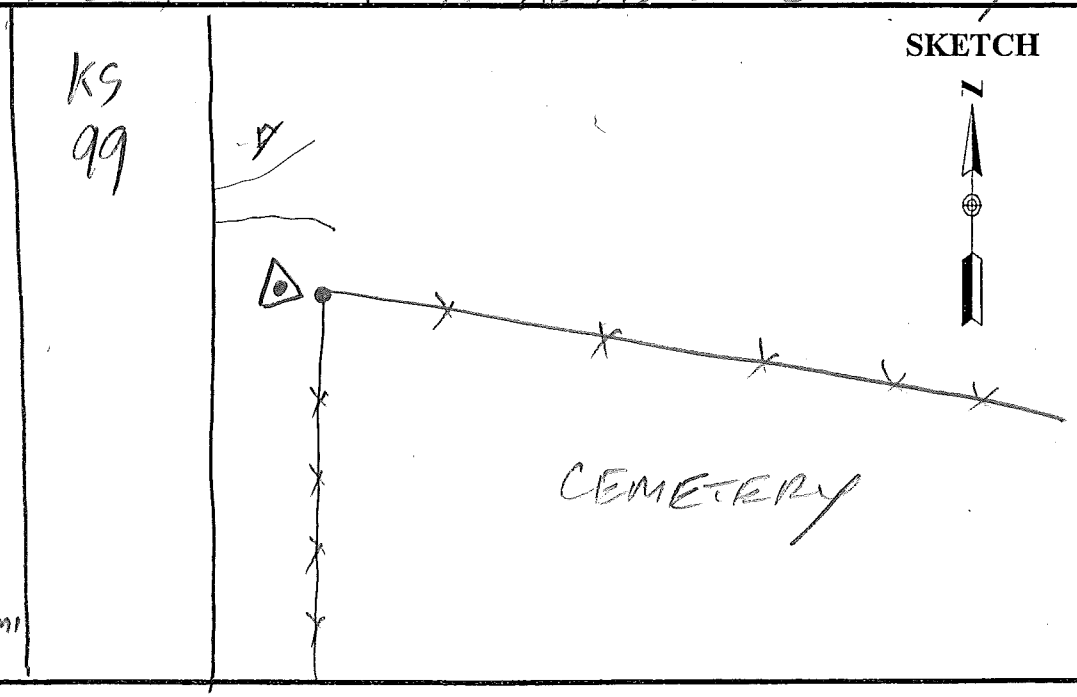
SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
16:45	5.2	5/5-5
22:24	2.6	9/8-9

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
SKC

App Pos 39 13 17.3 lat
96 18 32.6 long

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

POTT. CO. BASE

PROJECT 1120103
OPERATOR WJN
DATE 2/12/12

SITE NUMBER 1
SITE NAME 1014

TRACKING TIMES (LOCAL) MEASURE CST
START 11:13
STOP 16:40

SENSOR TYPE 500 (9500) 399 299
MEMORY CARD 6T
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 (0.389)
500 0.360

OBSTRUCTIONS: NO

HEIGHT READINGS MTS FT
I-128
I-517

STATION DESCRIPTIONS Rebar and CAP set 2/11/12

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
17:13	1.9	8/8-9
22:40	2.2	9/9-9

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
SKC
upon download
DATA FILE CORRUPT

AS BEFORE DESCRIBED

SKETCH

AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

POTT CO

ANNE

PROJECT 1120103
OPERATOR WJN
DATE 2/12/12

SITE NUMBER 1
SITE NAME 1633

TRACKING TIMES (LOCAL) MEASURE CST
START 11:36
STOP 11:53

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 14
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
500 (0.360)

OBSTRUCTIONS: NO

HEIGHT READINGS MTS FT
1.309
1.669

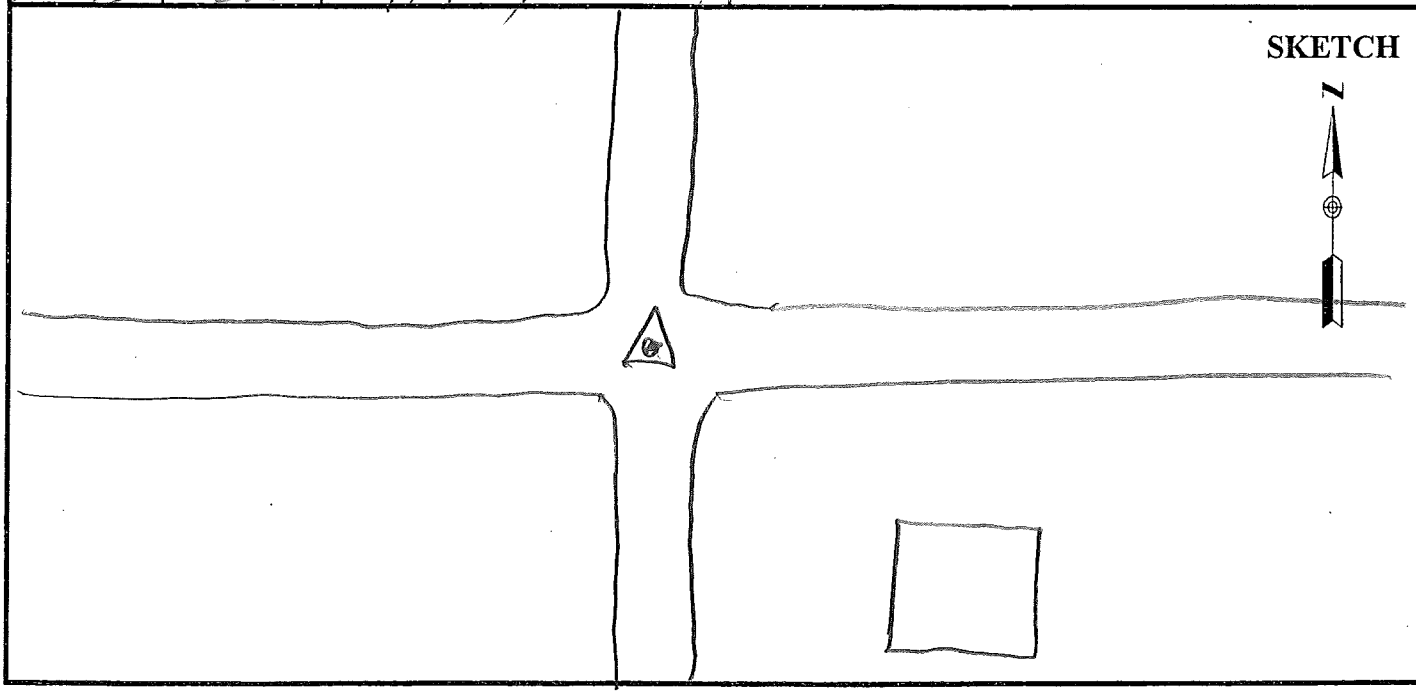
STATION DESCRIPTIONS GG INT
RDS E-W-N-S

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1736	2.1	9/9-9
1753	2.0	9/9-9

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
SKC

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

POTT CO

4

PROJECT 1120103
OPERATOR WJN
DATE 2/12/12

SITE NUMBER 2
SITE NAME 1421

TRACKING TIMES (LOCAL) MEASURE CST
START 12:06
STOP 12:24

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 14
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
500 (0.360)

OBSTRUCTIONS: TREES

HEIGHT READINGS MTS FT
1.232
1.592

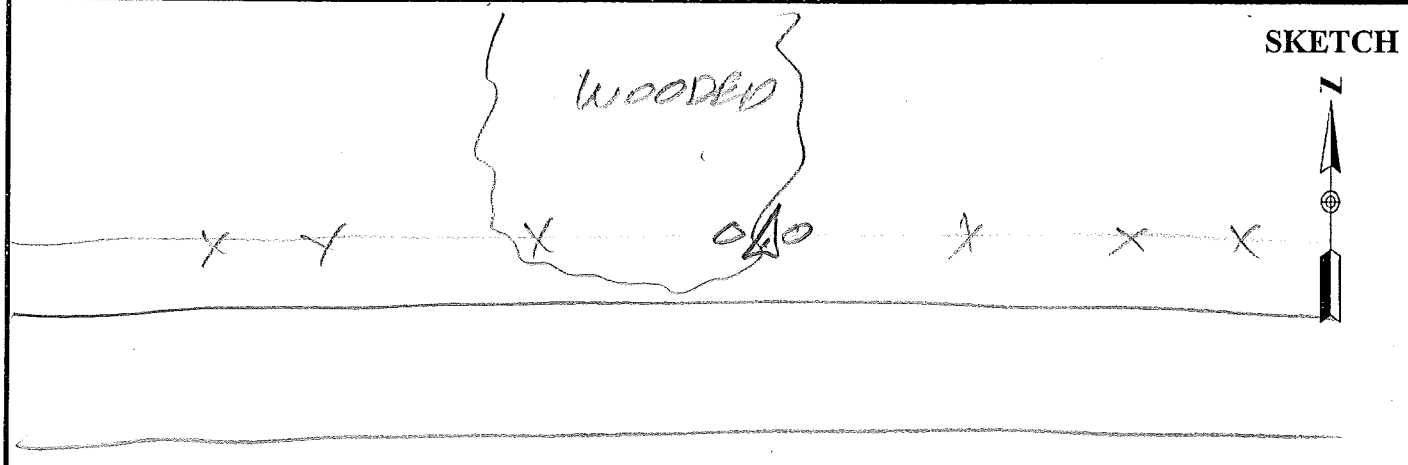
STATION DESCRIPTIONS POINT IN WOODED AREA IN N. R/W E-W RD

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
18:06	3.2	7/7-9
18:24	2.7	8/8-9

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
SKC

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

POTT. CO.

PROJECT 1120103
OPERATOR WJW
DATE 2/12/12

SITE NUMBER 3
SITE NAME 1122

TRACKING TIMES (LOCAL) MEASURE CST
START 12:40
STOP 13:00

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 14
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
500 (0.360)

OBSTRUCTIONS: NO

HEIGHT READINGS MTS FT
I-235
I-595

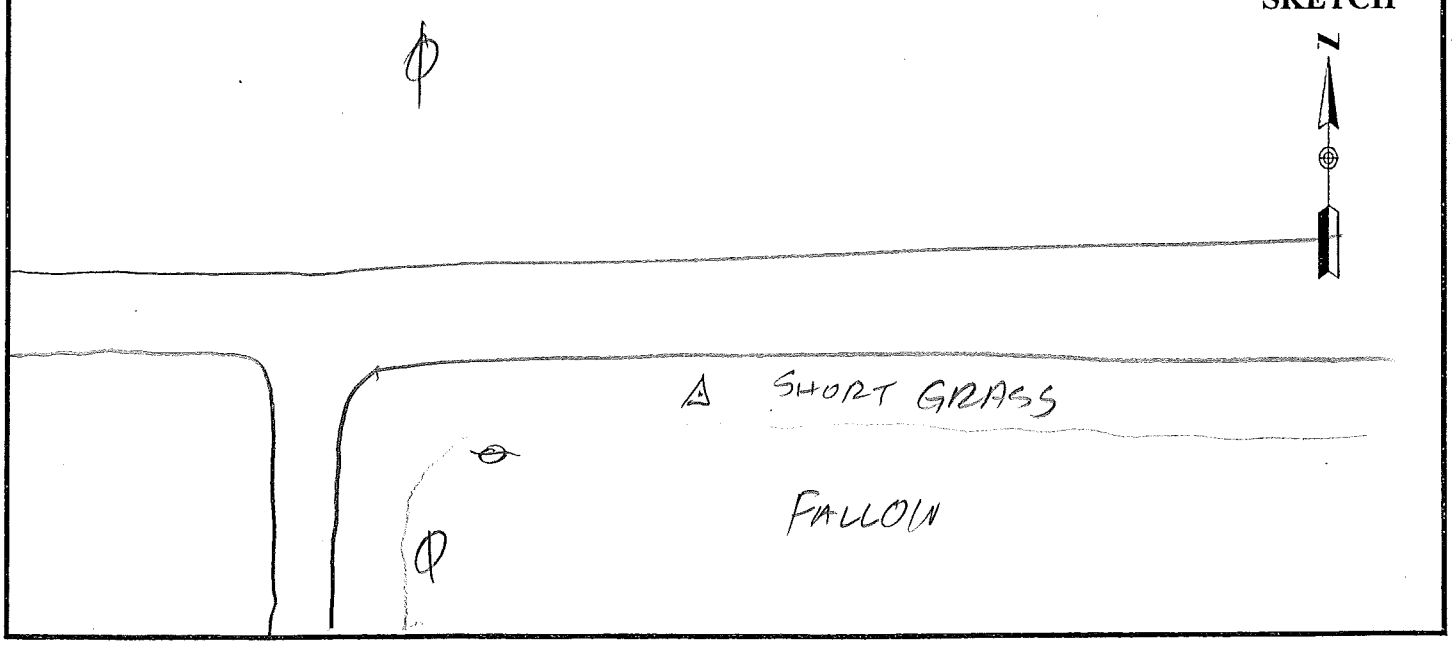
STATION DESCRIPTIONS POINT IN SHORT GRASS

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1240	2.3	9/9-9
13:00	2.1	9/9-9

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
WINDY

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

POTT CO

5

PROJECT 1120103
OPERATOR WJN
DATE 1120103

SITE NUMBER 4
SITE NAME 1521

TRACKING TIMES (LOCAL) MEASURE CST
START 13:12
STOP 13:31

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 14
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
500 (0.360)

OBSTRUCTIONS:

HEIGHT READINGS MTS FT
1.284
1.644

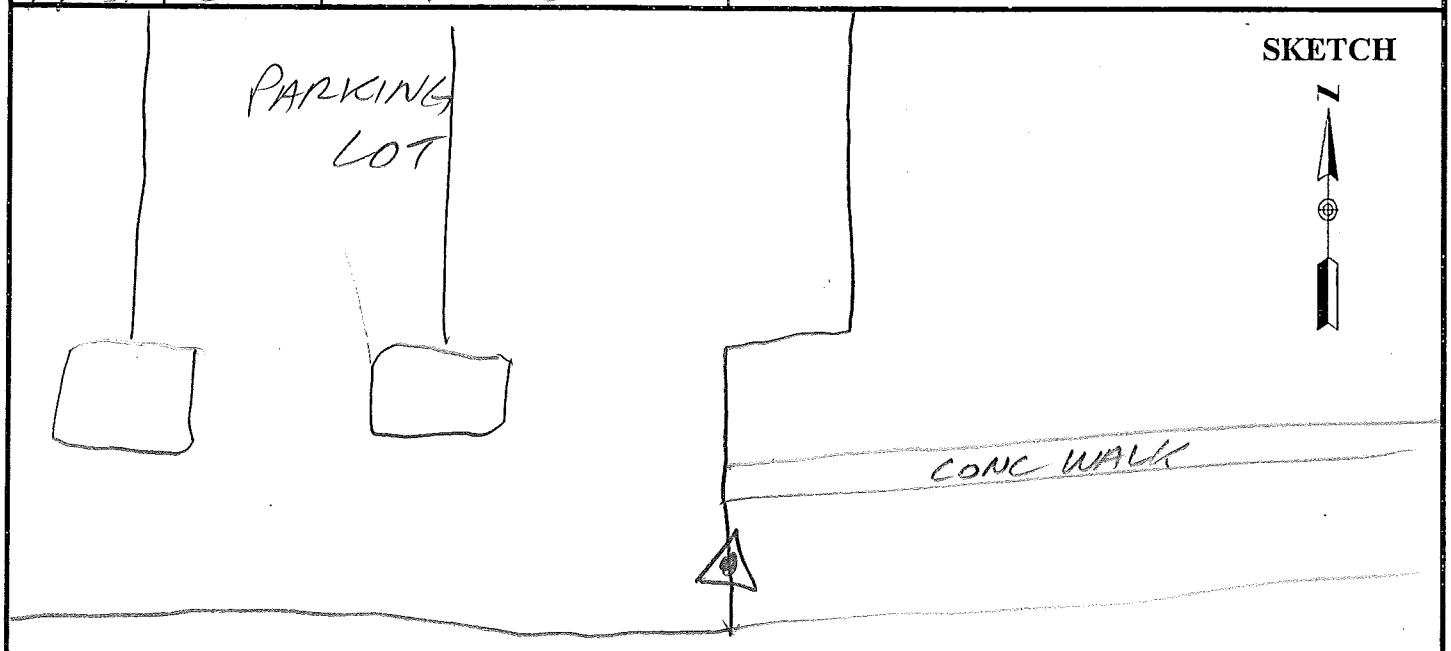
STATION DESCRIPTIONS E. EDGE
PARKING LOT @
& DR. E.

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
19:12	2.4	10/10-10
19:31	2.0	10/10-10

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

Pott Co

4

PROJECT 120103
OPERATOR WJW
DATE 2/12/12

SITE NUMBER 5
SITE NAME 1422

TRACKING TIMES (LOCAL) MEASURE CST
START 13:45
STOP 14:07

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 14
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
500 (0.360)

OBSTRUCTIONS: TREES

HEIGHT READINGS MTS FT
1.280

1-640

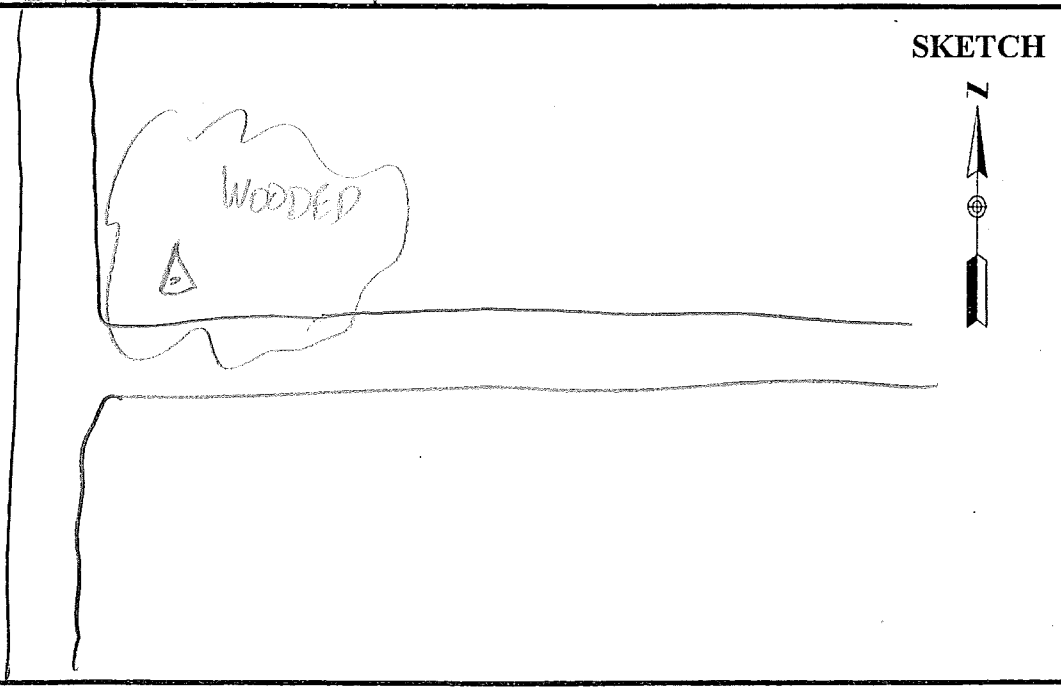
STATION DESCRIPTIONS POINT IN WOODED AREA

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
19:45	2.2	9/8-10
20:07	2.3	8/8-10

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
WINDY

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

Pott. Co.

PROJECT 1120103
OPERATOR MVW
DATE 2/12/12

SITE NUMBER 6
SITE NAME 1222

TRACKING TIMES (LOCAL) MEASURE CST
START 14:22
STOP 14:47

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 14
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
500 (0.360)

OBSTRUCTIONS: NO

HEIGHT READINGS MTS FT
1.239
1.598

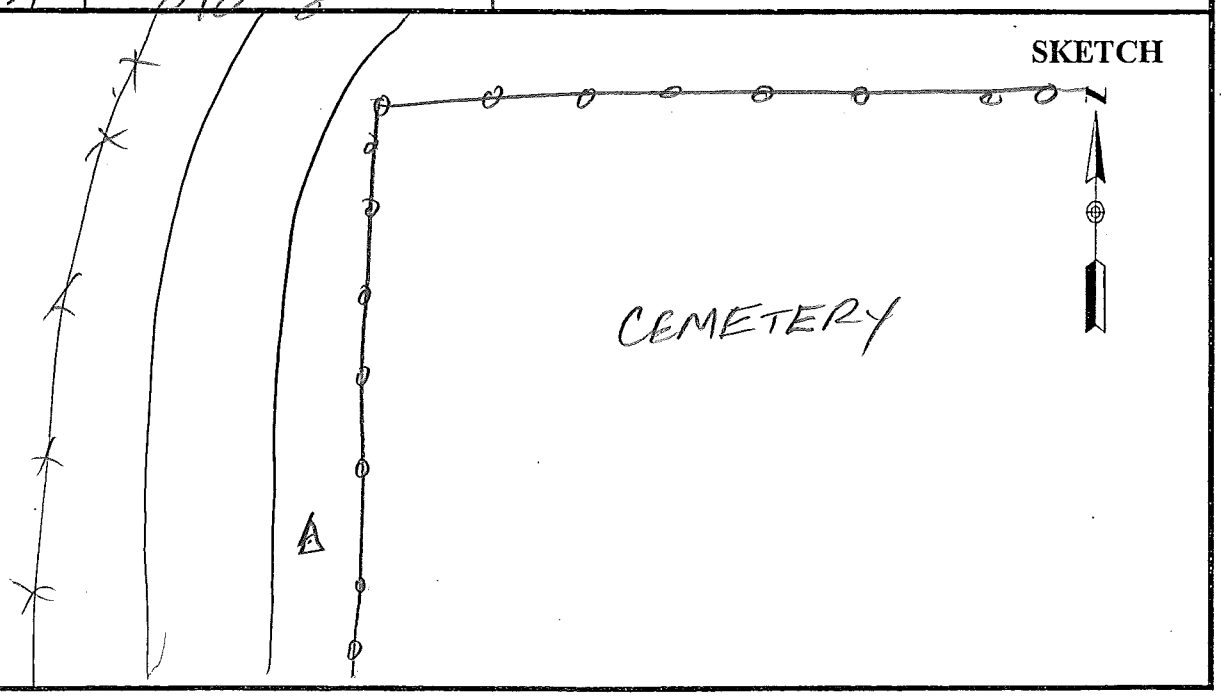
STATION DESCRIPTIONS POINT IN LONG GRASS IN E. R/W OF N-S RD.

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
2022	2.2	9 10 8
2047	2.1	9 10 6

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

POTT. CO. 5

PROJECT 1120103
OPERATOR WJN
DATE 2/12/12

SITE NUMBER 7
SITE NAME 1522

TRACKING TIMES (LOCAL) MEASURE CST
START 15:02
STOP 15:27

SENSOR TYPE (500) 9500 399 299
MEMORY CARD
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
500 (0.360)

OBSTRUCTIONS: NO

HEIGHT READINGS MTS FT
1.341
1.701

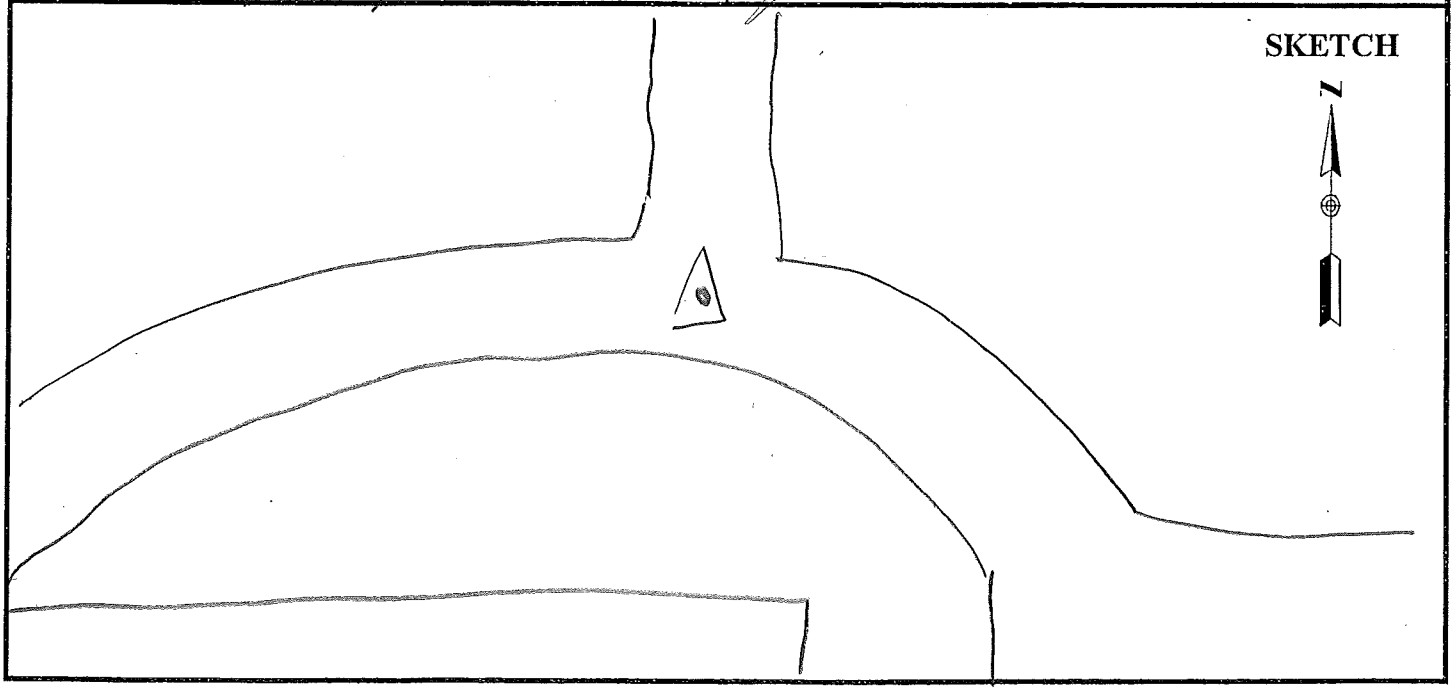
STATION DESCRIPTIONS ℄ STREET @ ℄ DR. N

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
21:02	1.6	10/10-10
21:27	1.9	9/9-9

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
OVC

SKETCH



Port Co.

AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

H + V cont.

PROJECT 1120103
OPERATOR WNN
DATE 2/12/12

SITE NUMBER 8
SITE NAME BELVUE

TRACKING TIMES (LOCAL) MEASURE CST
START 1544
STOP 16:13

SENSOR TYPE (500) 9500 399 299
MEMORY CARD
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
500 ~~0.360~~

OBSTRUCTIONS: TREES E

HEIGHT READINGS MTS FT
1.262
1.622

STATION DESCRIPTIONS BRASS DISK IN CONC MKD "BELVUE 1947" AS DESCRIBED BY NGS

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
2144	2.3	9/9-9
2213	2.4	8/8-8

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
OVC WINDY

SKETCH

AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

Crawford Co. Base

PROJECT 1120103
OPERATOR MB
DATE 12.12.12

SITE NUMBER 1
SITE NAME 129

TRACKING TIMES (LOCAL) MEASURE ✓
START 7:52a.
STOP

SENSOR TYPE 500 9500 399 299
MEMORY CARD 777
BATTERY NO. CB
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
500 0.360

OBSTRUCTIONS:

HEIGHT READINGS MTS FT
1.323
1.712

STATION DESCRIPTIONS

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
852	3.2	7/7

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH

see previous

AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

Crawford Co. Base tall grass √PT

PROJECT 1120103
OPERATOR MD
DATE 2·12·12

SITE NUMBER 1
SITE NAME 229

TRACKING TIMES (LOCAL) MEASURE ____
START 8:20 a.
STOP

SENSOR TYPE 500 9500 399 299
MEMORY CARD 704
BATTERY NO. CB
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
500 0.360

OBSTRUCTIONS: PP north

HEIGHT READINGS MTS FT
1.405
1.765

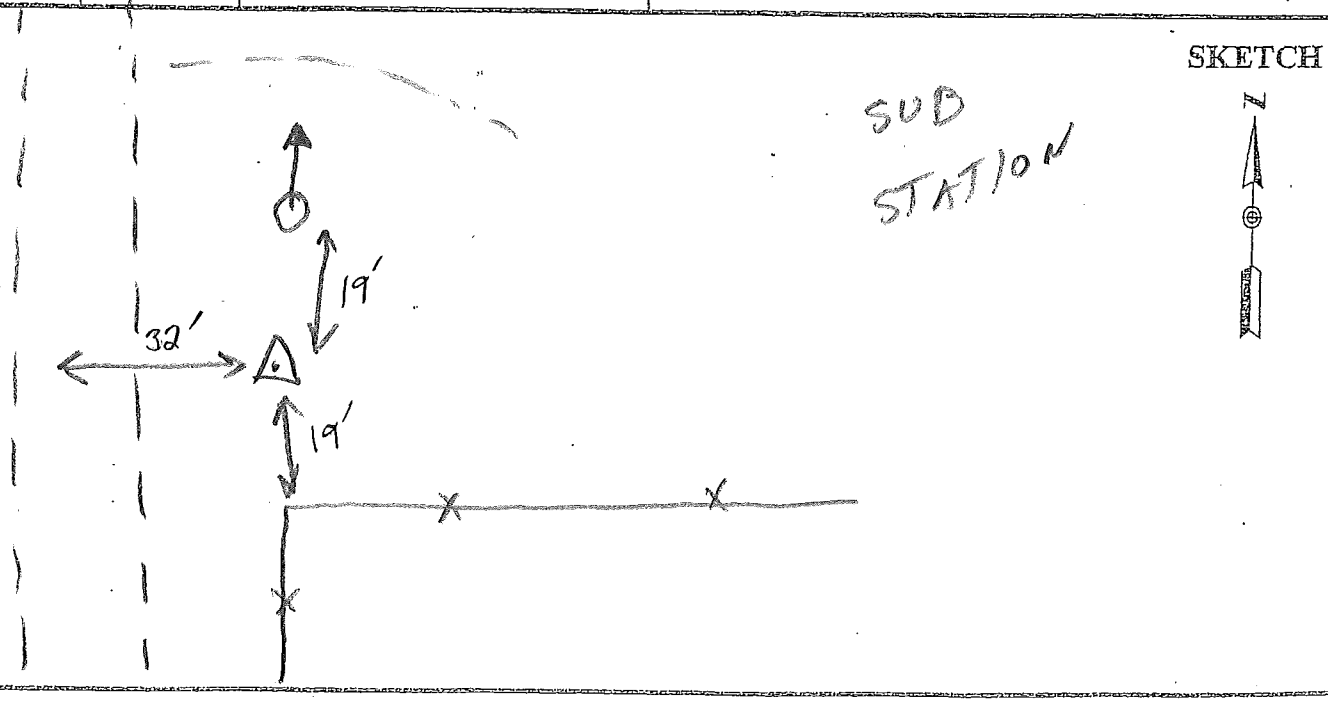
STATION DESCRIPTIONS set #5 rebar w/cap

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
920	3.1	6/6

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
37 30 50.2
94 58 43.3

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

Crawford Co.

hard VRS

PROJECT 1120103
OPERATOR MS
DATE 2.12.12

SITE NUMBER 1
SITE NAME 529

TRACKING TIMES (LOCAL) MEASURE ✓
START 8:38 a.
STOP 9:04 a.

SENSOR TYPE 500 9500 399 299
MEMORY CARD 731
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
500 0.360

HEIGHT READINGS MTS FT
1.405
1.765

OBSTRUCTIONS: none

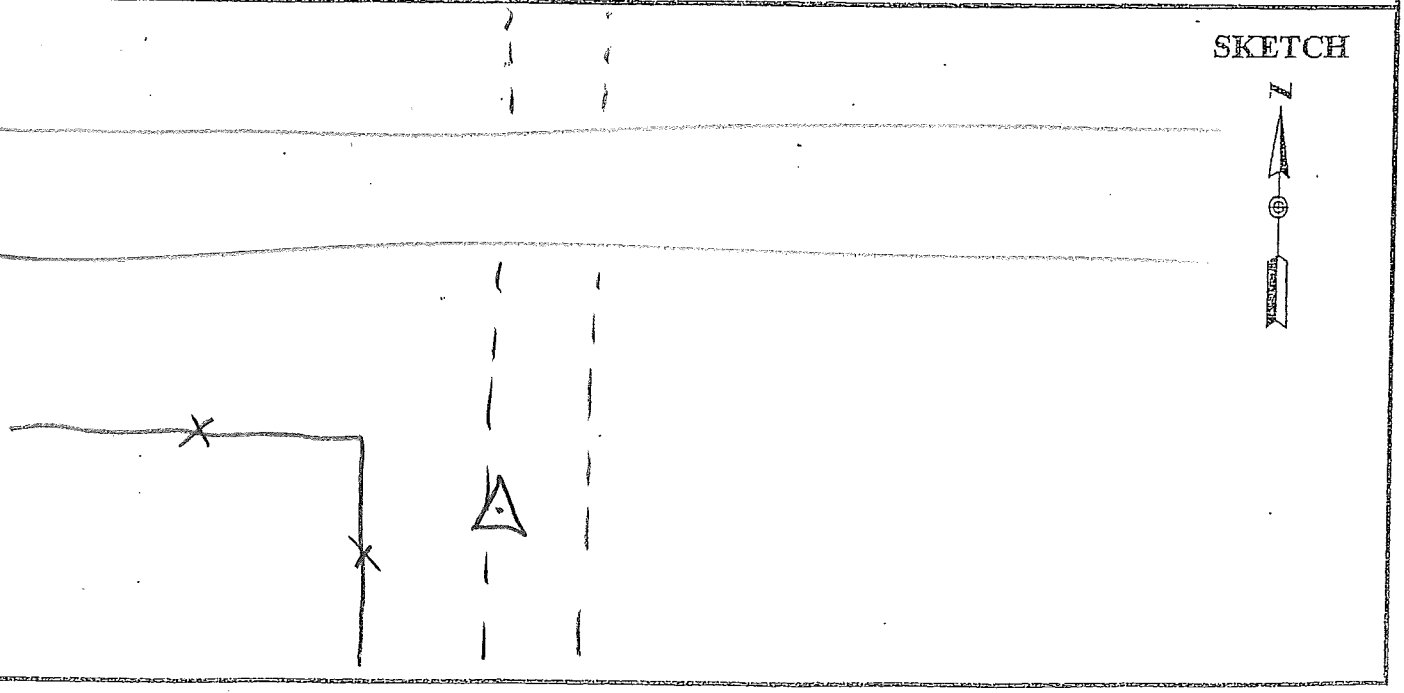
STATION DESCRIPTIONS W side of road

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
938	2.6	6/6
1004		

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

Crawford Co

woods √PT

PROJECT 120103
OPERATOR MB
DATE 2.12.12

SITE NUMBER 2
SITE NAME 411

TRACKING TIMES (LOCAL) MEASURE ✓
START 9:12 a.
STOP 9:42 a

SENSOR TYPE 500 9500 399 299
MEMORY CARD 731
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
500 0.360

OBSTRUCTIONS: trees above

HEIGHT READINGS MTS FT
1.377

1737

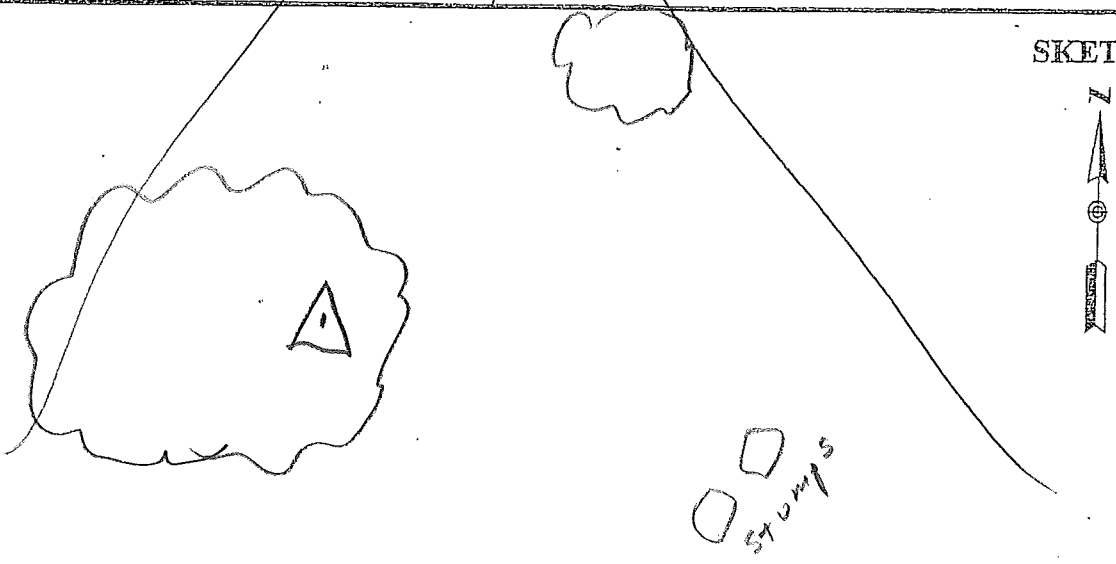
STATION DESCRIPTIONS under trees

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1012	5.7	6/6
1042		

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

Crawford Co.

AME VRS

PROJECT 1120103
OPERATOR MB
DATE 2·12·12

SITE NUMBER 3
SITE NAME 634

TRACKING TIMES (LOCAL) MEASURE ✓
START 9:58 a.
STOP 10:18 a.

SENSOR TYPE 500 9500 399 299
MEMORY CARD 731
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
(500) (0.360)

OBSTRUCTIONS: none

HEIGHT READINGS MTS FT
1.413
1.773

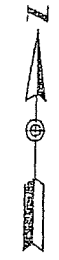
STATION DESCRIPTIONS N. side road

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1058	2.2.	7/7
1118		

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

Crawford Co. trees √pt

PROJECT 120103
OPERATOR MG
DATE 2.12.12

SITE NUMBER 4
SITE NAME 412

TRACKING TIMES (LOCAL) MEASURE √
START 10:23a.
STOP 10:48a.

SENSOR TYPE 500 9500 399 299
MEMORY CARD 731
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 ~~0.389~~
500 0.360

OBSTRUCTIONS: trees above

HEIGHT READINGS MTS FT
1.385
1.745

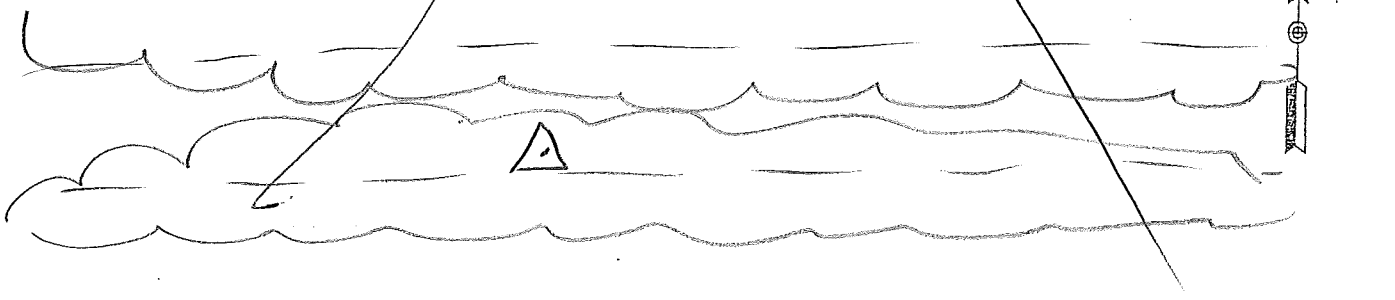
STATION DESCRIPTIONS S. side road

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1123	5.0	5/5
1148		

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

Crawford Co. AME 1/PT

PROJECT 1120103
OPERATOR MS
DATE 2.12.12

SITE NUMBER 5
SITE NAME 635

TRACKING TIMES (LOCAL) MEASURE ✓
START 11:12 a.
STOP 11:32 a.

SENSOR TYPE 500 9500 399 299
MEMORY CARD 731
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
500 0.360

OBSTRUCTIONS: trees N.

HEIGHT READINGS MTS FT
1.332
1.692

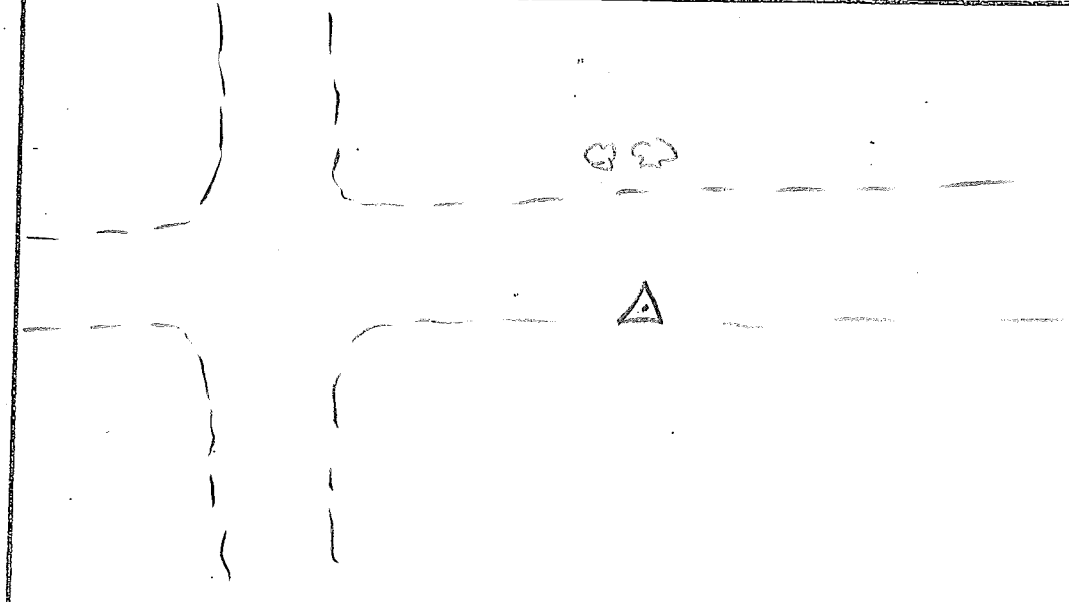
STATION DESCRIPTIONS S. side road

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1212	1.7	7/8
1232		

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

Crawford Co

short grass ✓PT

PROJECT 112o103
OPERATOR MS
DATE 2·12·12

SITE NUMBER 6
SITE NAME 133

TRACKING TIMES (LOCAL) MEASURE ✓
START 11:41 a.
STOP 12:01 p

SENSOR TYPE 500 9500 399 299
MEMORY CARD 731
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
500 0.360

OBSTRUCTIONS: none

HEIGHT READINGS MTS FT
1.329
1.689

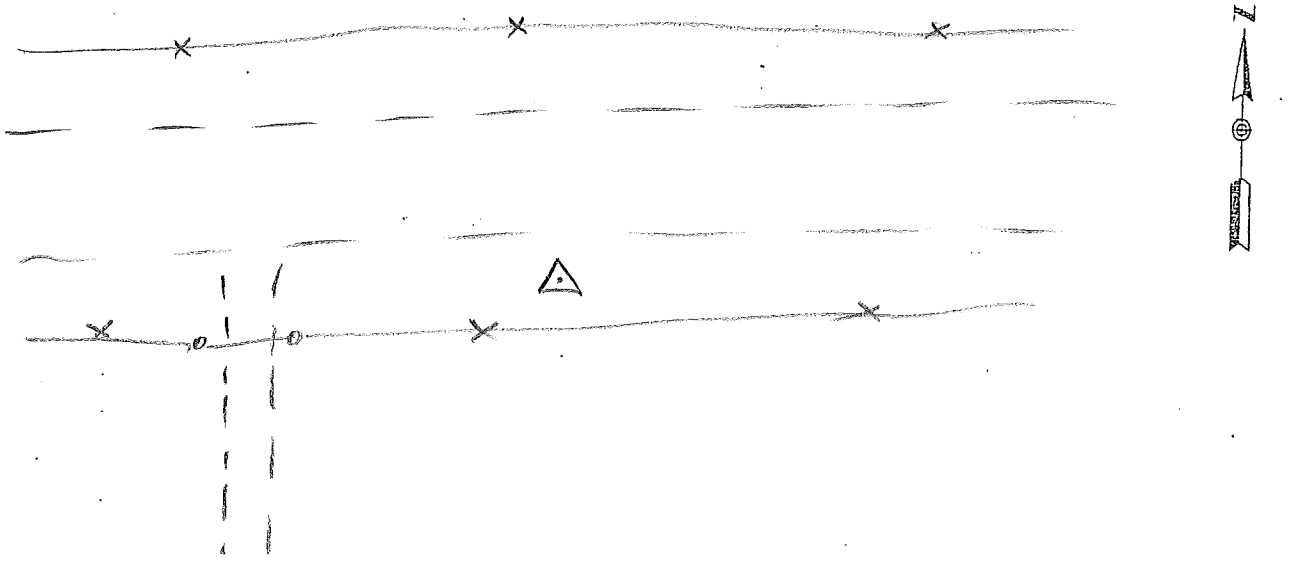
STATION DESCRIPTIONS S. of road

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1341	2.0	8/8
1301		

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

Crawford Co. tall grass √PT

PROJECT 1120103
OPERATOR MB
DATE 2.12.12

SITE NUMBER 7
SITE NAME 230

TRACKING TIMES (LOCAL) MEASURE √
START 12:18p
STOP 12:38p

SENSOR TYPE 500 9500 399 299
MEMORY CARD 731
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
(500) (0.360)

OBSTRUCTIONS: trees SE ↔ SW

HEIGHT READINGS MTS FT
1.403
1.763

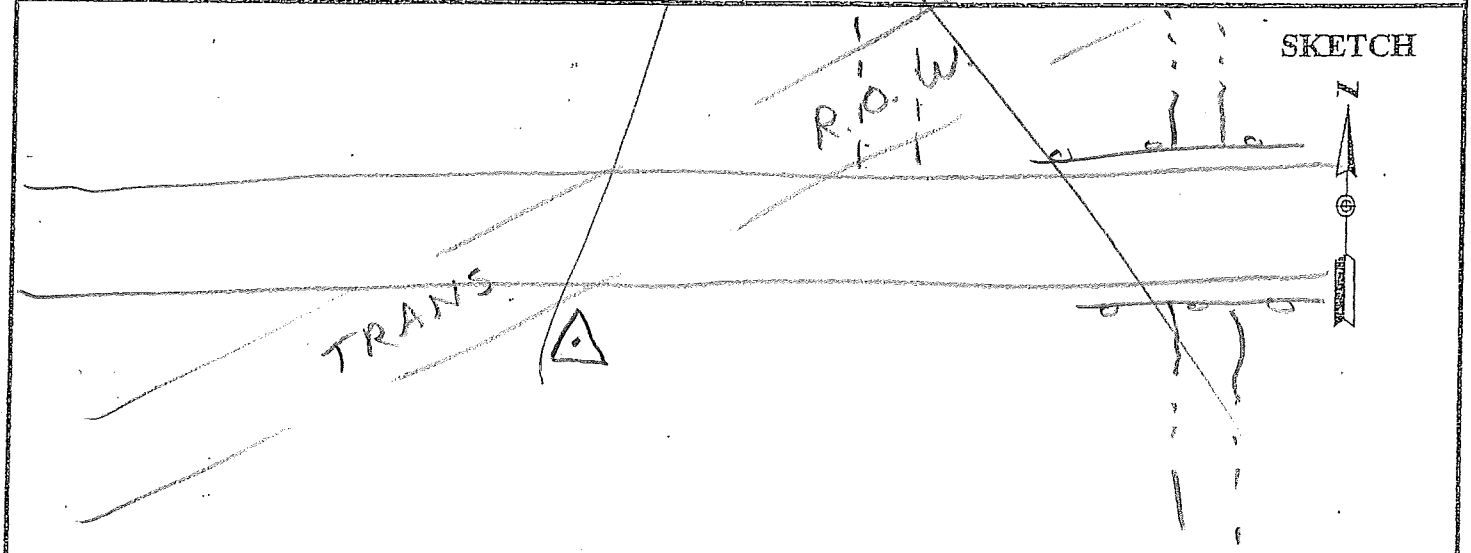
STATION DESCRIPTIONS S. of rock

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1318	2.6	8/8
1338		

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

Crawford Co. hand VRT

PROJECT 120103
OPERATOR MB
DATE 2.12.12

SITE NUMBER 8
SITE NAME 530

TRACKING TIMES (LOCAL) MEASURE ✓
START 12:48 p
STOP 1:08 p

SENSOR TYPE 500 9500 399 299
MEMORY CARD 731
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
500 0.360

OBSTRUCTIONS: trees W.

HEIGHT READINGS MTS FT
1.431
1.791

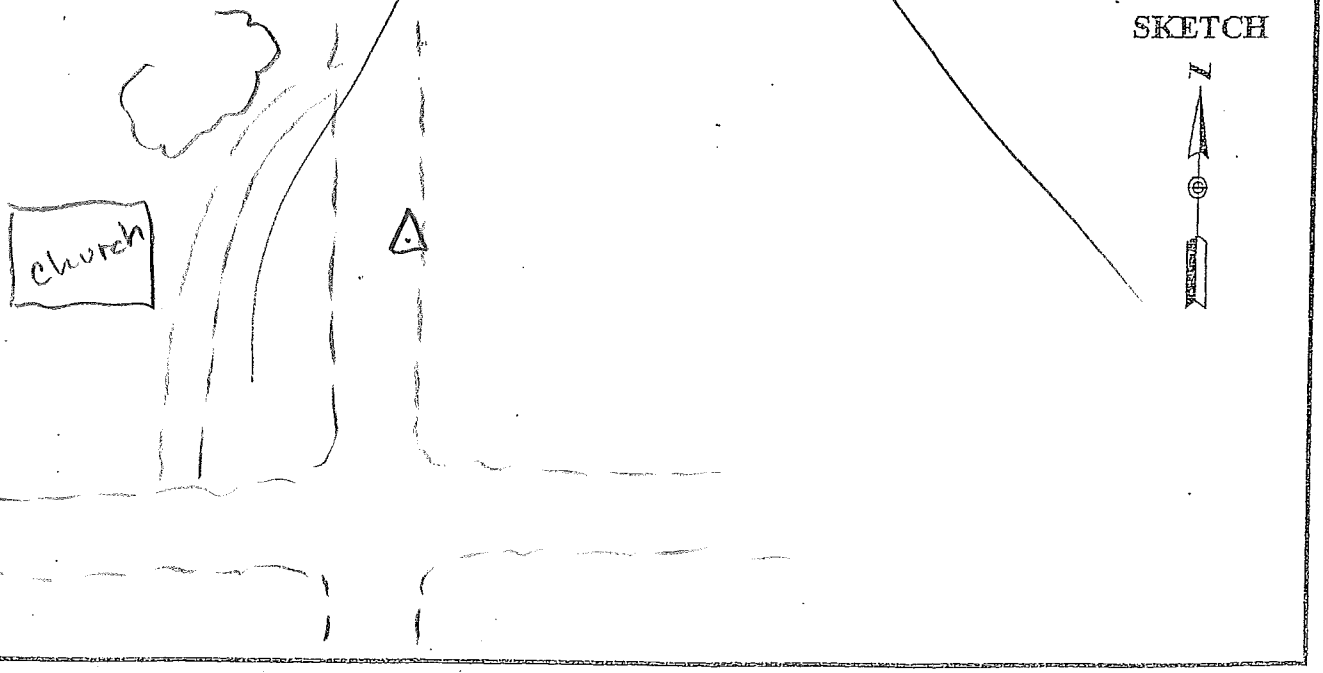
STATION DESCRIPTIONS E. side road

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1348	3.2	8/8
1408		

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

Crawford Co. Base tall grass √PT

PROJECT 1120103
OPERATOR MB
DATE 2·12·12

SITE NUMBER 9
SITE NAME 231

TRACKING TIMES (LOCAL) MEASURE ✓
START 1:52 p
STOP 2:28 p

SENSOR TYPE 500 9500 399 299
MEMORY CARD 731
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
(500) (0.360)

OBSTRUCTIONS: tree SSW

HEIGHT READINGS MTS FT
1.313
1.673

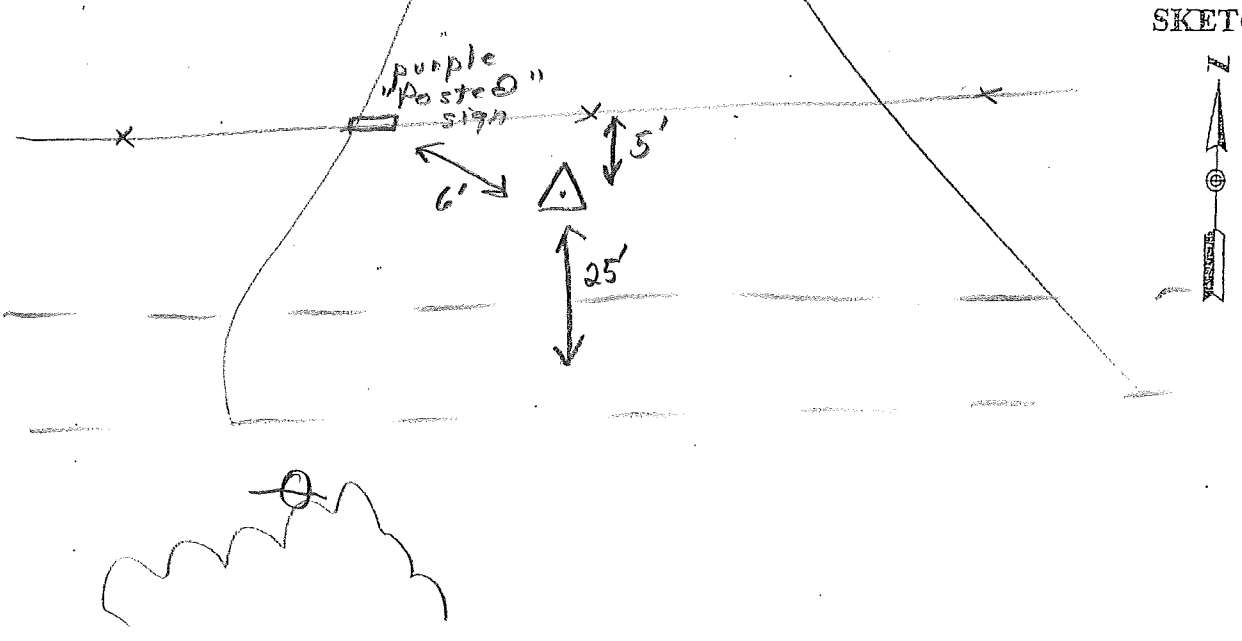
STATION DESCRIPTIONS set 5/8" rebar w/cap

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1452	2.6	10/10
1528		

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
37 36 04.5
94 44 57.9

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

Crawford Co. Dense short grass ✓PT

PROJECT 1120103
OPERATOR MD
DATE 2.12.12

SITE NUMBER 10
SITE NAME 134

TRACKING TIMES (LOCAL) MEASURE ✓
START 2:43 p
STOP 3:15 p

SENSOR TYPE 500 9500 399 299
MEMORY CARD 731
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
500 0.360

OBSTRUCTIONS: none

HEIGHT READINGS MTS FT
1.330
1.690

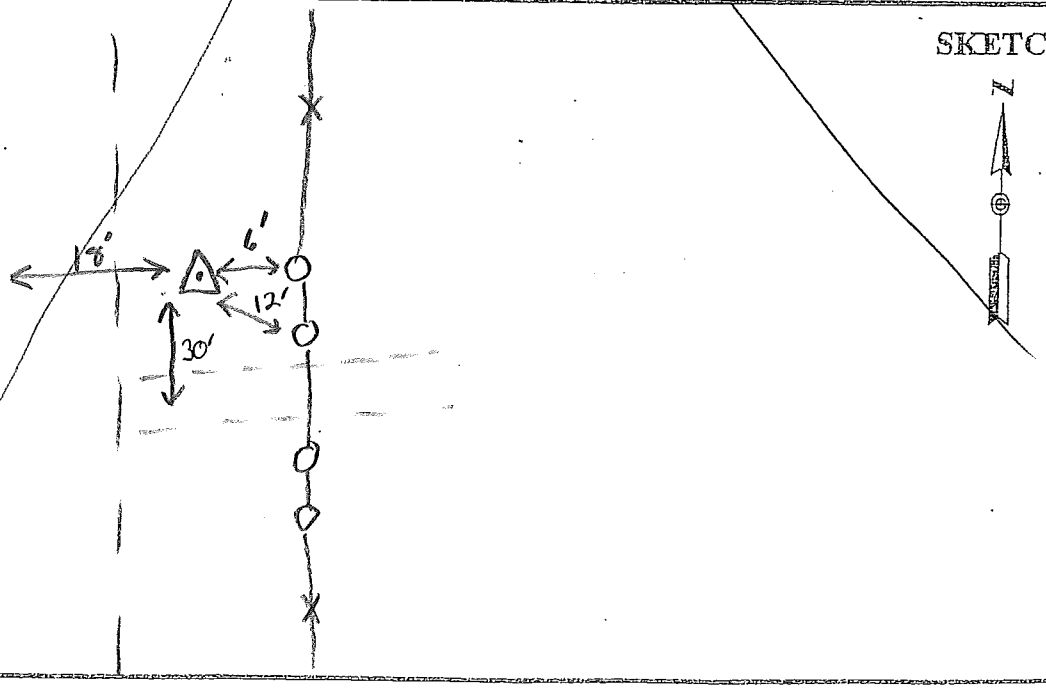
STATION DESCRIPTIONS set 5/8" rebar w/cap

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1543	1.8	8/8
1615		

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
37 35 52.0
94 54 38.0

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

Crawford Co. Base tall grass ✓

PROJECT 1120103
OPERATOR MB
DATE 2·13·12

SITE NUMBER 1
SITE NAME 229

TRACKING TIMES (LOCAL) MEASURE ✓
START 7:28 a.
STOP

SENSOR TYPE 500 9500 399 299
MEMORY CARD 704
BATTERY NO. CB
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
(500) 0.360

OBSTRUCTIONS:

HEIGHT READINGS MTS FT
1.286

1648

STATION DESCRIPTIONS

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
828	3.9	7/7

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH

See previous

AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

Crawford Co. Base short grass VRT

PROJECT 1120103
OPERATOR MB
DATE 2·13·12

SITE NUMBER 1
SITE NAME 129

TRACKING TIMES (LOCAL) MEASURE ✓
START 8:00a
STOP

SENSOR TYPE 500 9500 399 299
MEMORY CARD 777
BATTERY NO. CB
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
500 0.360

OBSTRUCTIONS:

HEIGHT READINGS MTS FT
1.320
1.719

STATION DESCRIPTIONS

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
900	3.4	6/8

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH

see previous

AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

Crawford Co

tall 9155 √pt

PROJECT 1120103
OPERATOR NG
DATE 2·13·12

SITE NUMBER 1
SITE NAME 236

TRACKING TIMES (LOCAL) MEASURE ✓
START 8:18a.
STOP 8:40a.

SENSOR TYPE 500 9500 399 299
MEMORY CARD 603
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
500 0.360

OBSTRUCTIONS:

HEIGHT READINGS MTS FT
1.332

1.692

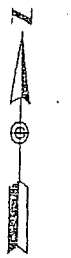
STATION DESCRIPTIONS

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
918	2.5	7/7
940		

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH



see previous

AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
Crawford Co. SHEBOYGAN, WISCONSIN 53083 hard √RT

PROJECT 1120103
OPERATOR MB
DATE 2.13.12

SITE NUMBER 2
SITE NAME 530

TRACKING TIMES (LOCAL) MEASURE √
START 8:55a.
STOP 9:17a.

SENSOR TYPE 500 9500 399 299
MEMORY CARD 603
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
500 0.360

OBSTRUCTIONS:

HEIGHT READINGS MTS FT
1.320
1.680

STATION DESCRIPTIONS

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
955	2.9	6/7
1017		

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH

See previous

AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

Crawford Co. Base short grass √PT

PROJECT 1120103
OPERATOR NB
DATE 2·13·12

SITE NUMBER 3
SITE NAME 134

TRACKING TIMES (LOCAL) MEASURE √
START 9:44 a.
STOP 10:18 a.

SENSOR TYPE 500 9500 399 299
MEMORY CARD 603
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
(500) 0.360

OBSTRUCTIONS:

HEIGHT READINGS MTS FT
1.248
1.608

STATION DESCRIPTIONS

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1044	3.1	7/7
1118		

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH

See previous

AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
Crawford Co. SHEBOYGAN, WISCONSIN 53083 Base tall grass VRT

PROJECT 1120103
OPERATOR MB
DATE 2.13.12

SITE NUMBER 4
SITE NAME 231

TRACKING TIMES (LOCAL) MEASURE ✓
START 10:39 a.
STOP 11:17 a.

SENSOR TYPE 500 9500 399 299
MEMORY CARD 6013
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
500 0.360

HEIGHT READINGS MTS FT
1.296

1656

OBSTRUCTIONS:

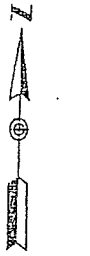
STATION DESCRIPTIONS

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1139	5.4	5/5
1217		

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH



See previous

AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

Crawford Co. AME √PT

PROJECT 1120103
OPERATOR MB
DATE 2.13.12

SITE NUMBER 5
SITE NAME 636

TRACKING TIMES (LOCAL) MEASURE _____
START 11:27 a.
STOP 12:06 p

SENSOR TYPE 500 9500 399 299
MEMORY CARD 603
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
500 0.360

OBSTRUCTIONS: Tree NE + N

HEIGHT READINGS MTS FT
1.370 _____
1.730

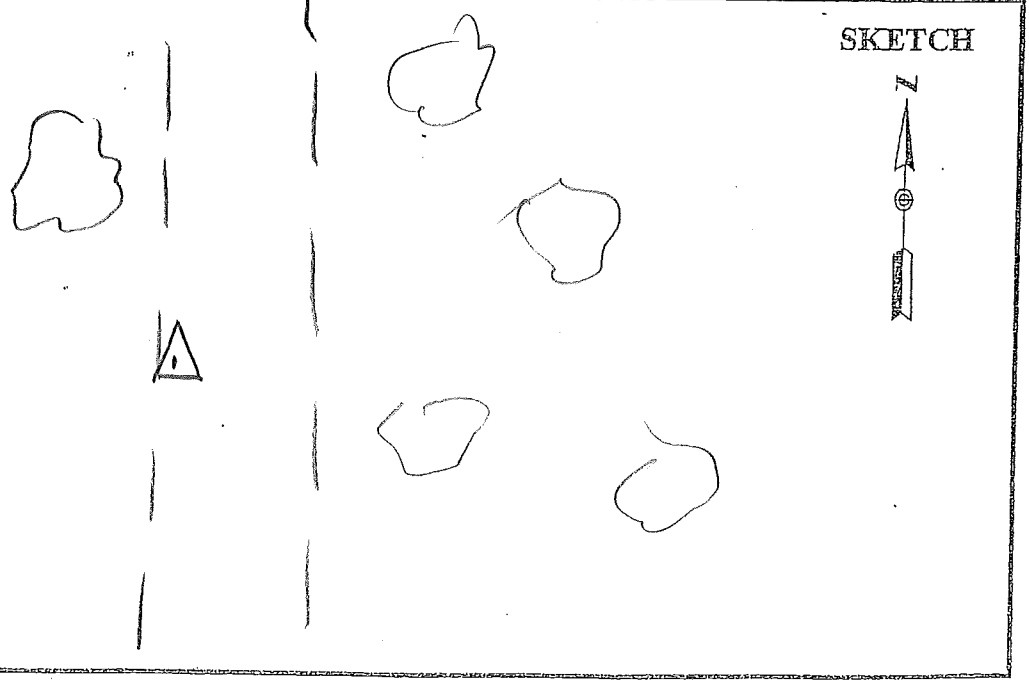
STATION DESCRIPTIONS W. side road

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1227	2.2	7/7
1306		

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

Crawford Co.

hard √ PT

PROJECT 1120103
OPERATOR MD
DATE 2.13.12

SITE NUMBER 6
SITE NAME 531

TRACKING TIMES (LOCAL) MEASURE √
START 12:23 p
STOP 12:53 p

SENSOR TYPE 500 9500 399 299
MEMORY CARD 603
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
500 0.360

HEIGHT READINGS MTS FT
1.256
1.616

OBSTRUCTIONS: none

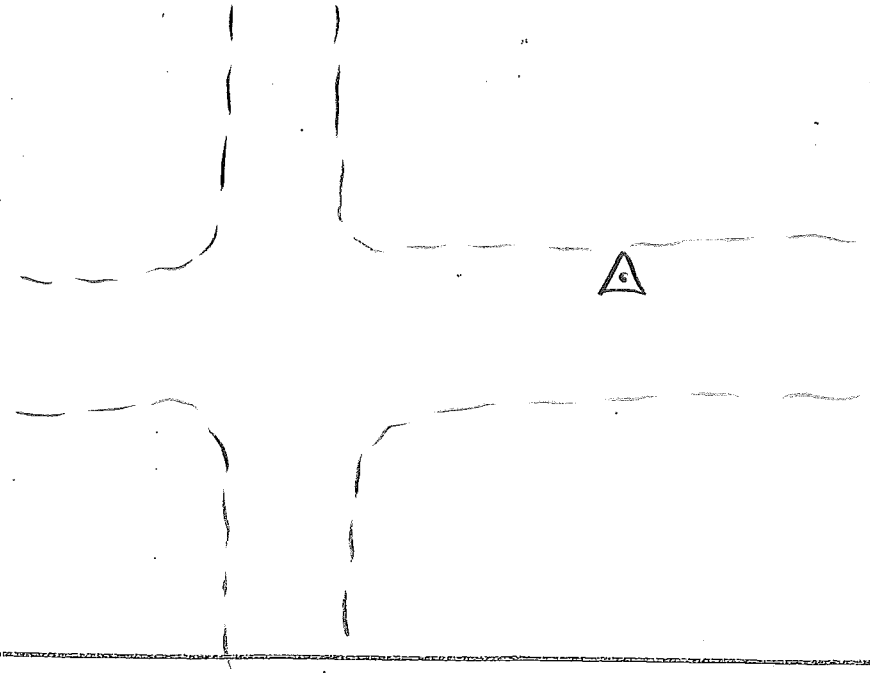
STATION DESCRIPTIONS N. side road

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1323	2.1	10/10
1353		

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

Crawford Co.

trees ✓PT

PROJECT 120103
OPERATOR MB
DATE 2·13·12

SITE NUMBER 7
SITE NAME 413

TRACKING TIMES (LOCAL) MEASURE ✓
START 1:07 p
STOP 1:35 p

SENSOR TYPE 500 9500 399 299
MEMORY CARD 603
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
500 0.360

OBSTRUCTIONS: trees above

HEIGHT READINGS MTS FT
1.345
1.705

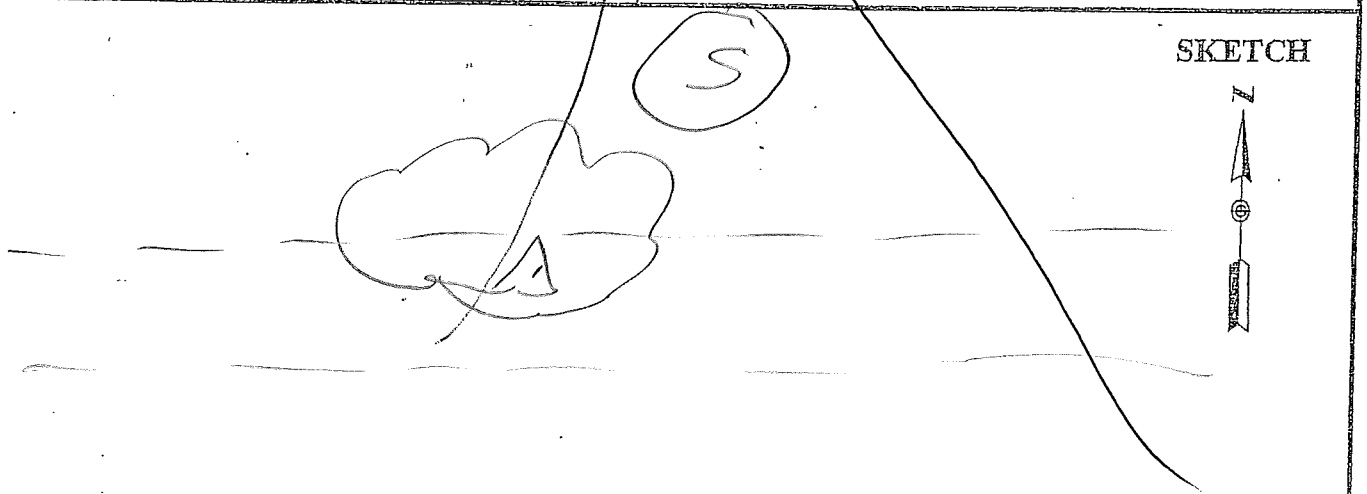
STATION DESCRIPTIONS N. side road

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1407	3.5	9/10
1435		

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

Crawford Co.

hard ✓FT

PROJECT 120103
OPERATOR MB
DATE 2.13.12

SITE NUMBER 8
SITE NAME 532

TRACKING TIMES (LOCAL) MEASURE ✓
START 1:48 p
STOP 2:16 p

SENSOR TYPE 500 9500 399 299
MEMORY CARD 603
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
500 0.360

OBSTRUCTIONS: none

HEIGHT READINGS MTS FT
1.247
1.607

STATION DESCRIPTIONS N. side road

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1448	1.9	7/7
1516		

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH

AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

POTT CO. BASE

PROJECT 1120103
OPERATOR WJW
DATE 2/14/12

SITE NUMBER 1
SITE NAME BELVUE

TRACKING TIMES (LOCAL) MEASURE CST
START 8:51
STOP 16:21

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 11
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
500 (0.360)

OBSTRUCTIONS: TREES E

HEIGHT READINGS MTS FT
1.711
1.571

STATION DESCRIPTIONS BRASS DISK IN CONC "BELVUE 1948"

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1451	2.8	7/7-7
2221	2.7	9/9-9

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
SKC

AS BEFORE DESCRIBED

SKETCH

15

AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

POTT CO. BASE

PROJECT 1120103
OPERATOR WJW
DATE 2/14/12

SITE NUMBER 1
SITE NAME 1015

TRACKING TIMES (LOCAL) MEASURE CST
START 9:20
STOP 1633

SENSOR TYPE 500 (9500) 399 299
MEMORY CARD 101
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 (0.389)
500 0.360

OBSTRUCTIONS: NO

HEIGHT READINGS MTS FT
1.200
1.589

STATION DESCRIPTIONS SPIKE SET ON 2/12/12

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1520	2.0	7/7-8
2233	2.0	9/9-9

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
SKC

AS BEFORE DESCRIBED

SKETCH

AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

POTT CO. 2

PROJECT 1120103
OPERATOR WJN
DATE 2/14/12

SITE NUMBER 1
SITE NAME 1223

TRACKING TIMES (LOCAL) MEASURE CST
START 9:37
STOP 9:53

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 14
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
500 (0.360)

HEIGHT READINGS MTS FT
1.294

OBSTRUCTIONS: BPL S

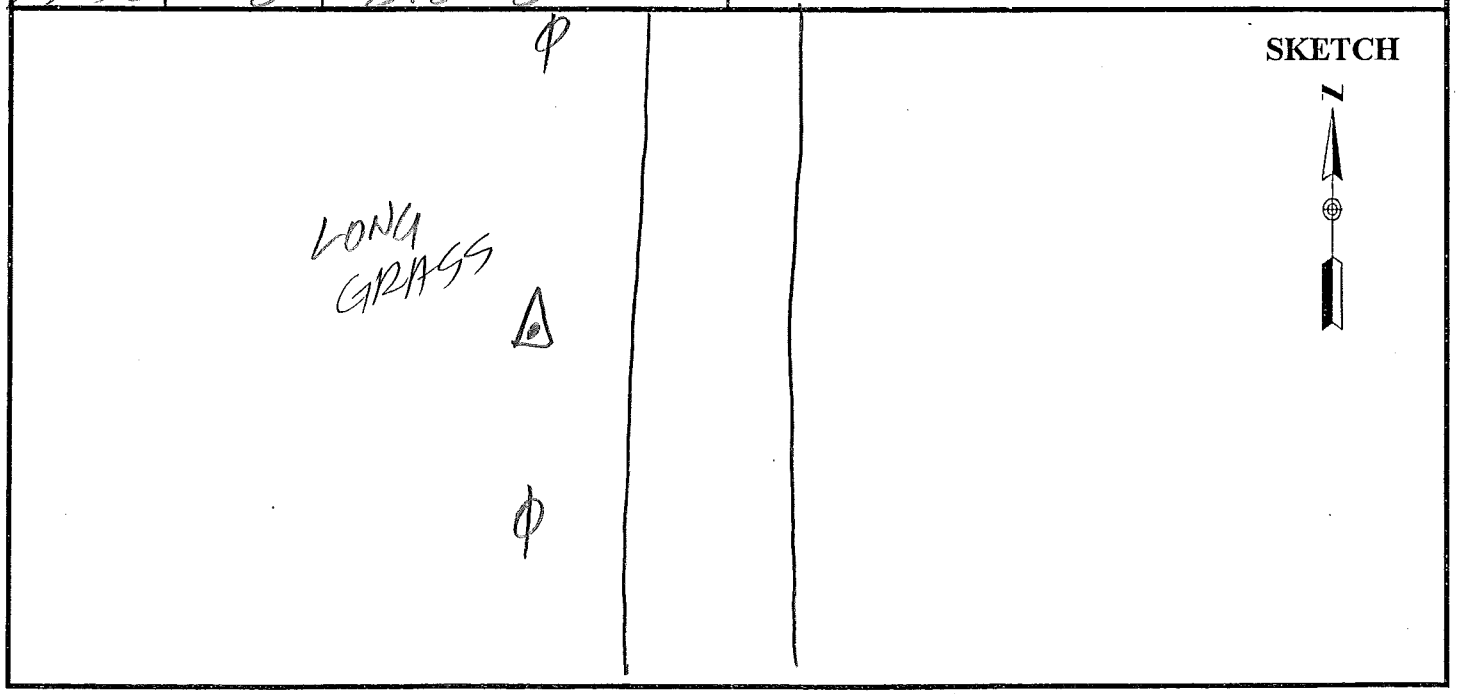
STATION DESCRIPTIONS POINT IN LONG GRASS

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
15:37	2.4	7/7-8
15:53	2.0	8/8-8

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
SKC

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

POTT Co. 1

PROJECT 1120103
OPERATOR WJN
DATE 2/14/12

SITE NUMBER 2
SITE NAME 1123

TRACKING TIMES (LOCAL) MEASURE CST
START 10:07
STOP 10:23

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 14
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
500 (0.360)

OBSTRUCTIONS: NO

HEIGHT READINGS MTS FT
1.264

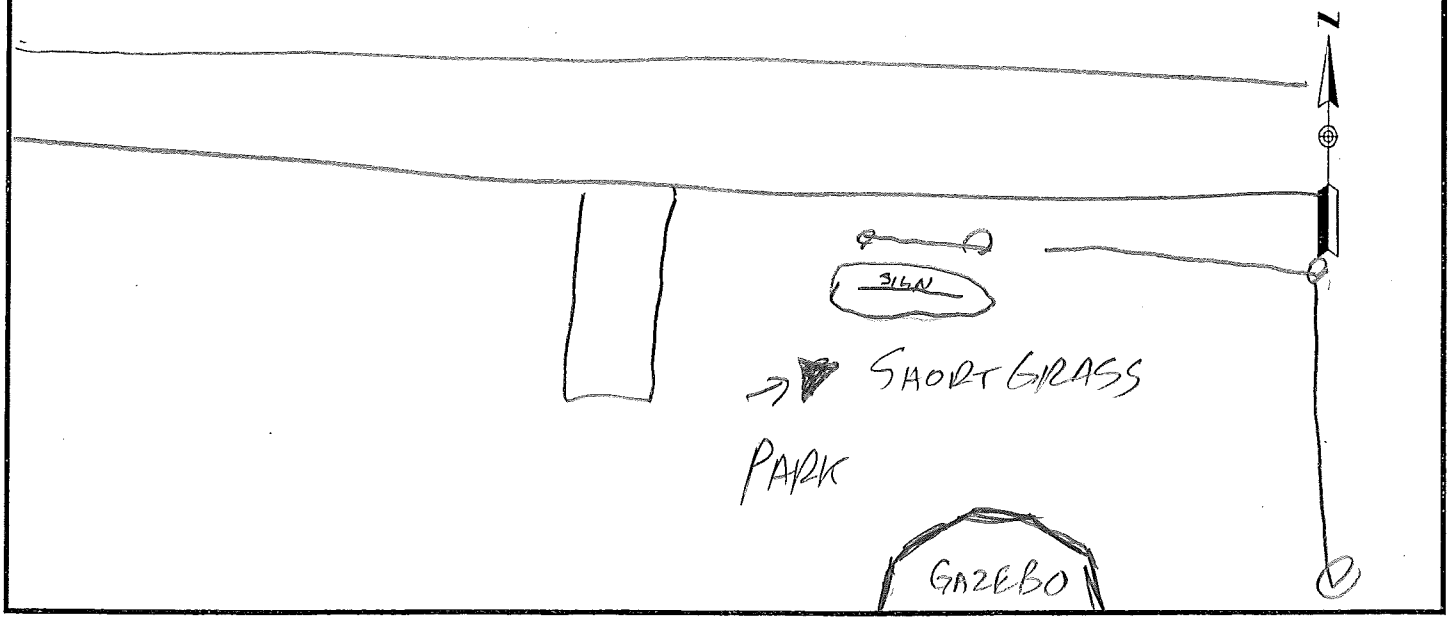
STATION DESCRIPTIONS POINT IN SHORT GRASS

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
16:07	3.6	6/6-6
16:23	5.5	5/5-5

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
SKC

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

POTT CO. 4

PROJECT 1120103
OPERATOR WJN
DATE 2/14/12

SITE NUMBER 3
SITE NAME 1423

TRACKING TIMES (LOCAL) MEASURE CST
START 10:52
STOP 11:13

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 14
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
500 0.360

HEIGHT READINGS MTS FT
1.275

OBSTRUCTIONS: TREES

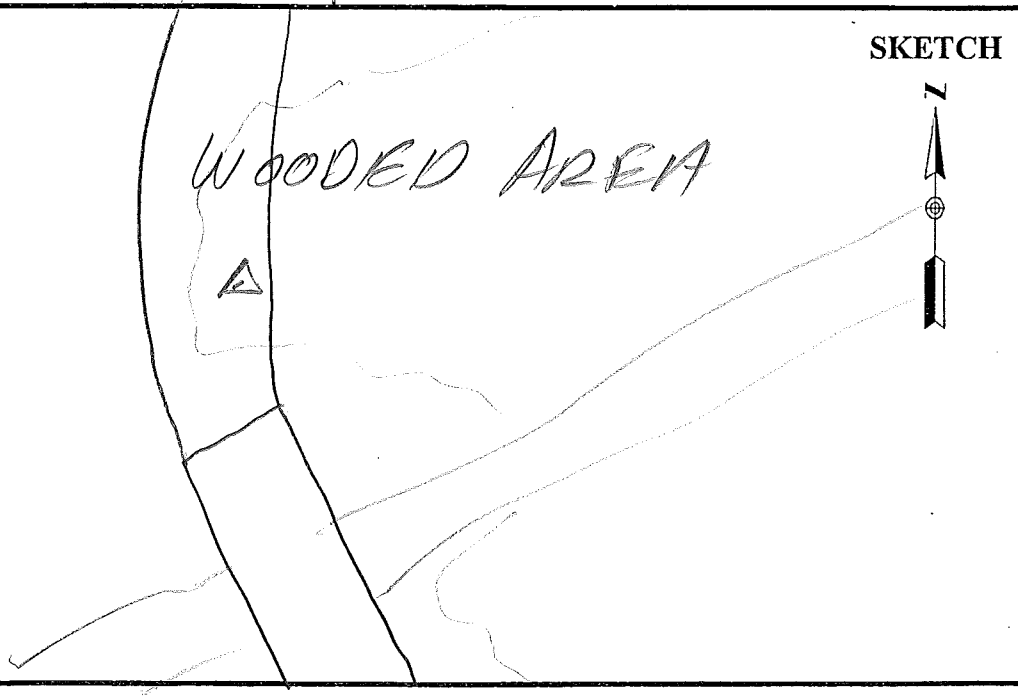
STATION DESCRIPTIONS POINT IN WOODED AREA

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1652	3.1	6/6-7
17:13	2.4	7/7-8

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
SKC

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

POTT CO. ANNE

PROJECT 1120103
OPERATOR WJM
DATE 2/14/12

SITE NUMBER 4
SITE NAME 1634

TRACKING TIMES (LOCAL) MEASURE CST
START 11:43
STOP 12:00

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 14
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
500 (0.360)

OBSTRUCTIONS: NO

HEIGHT READINGS MTS FT
1.322

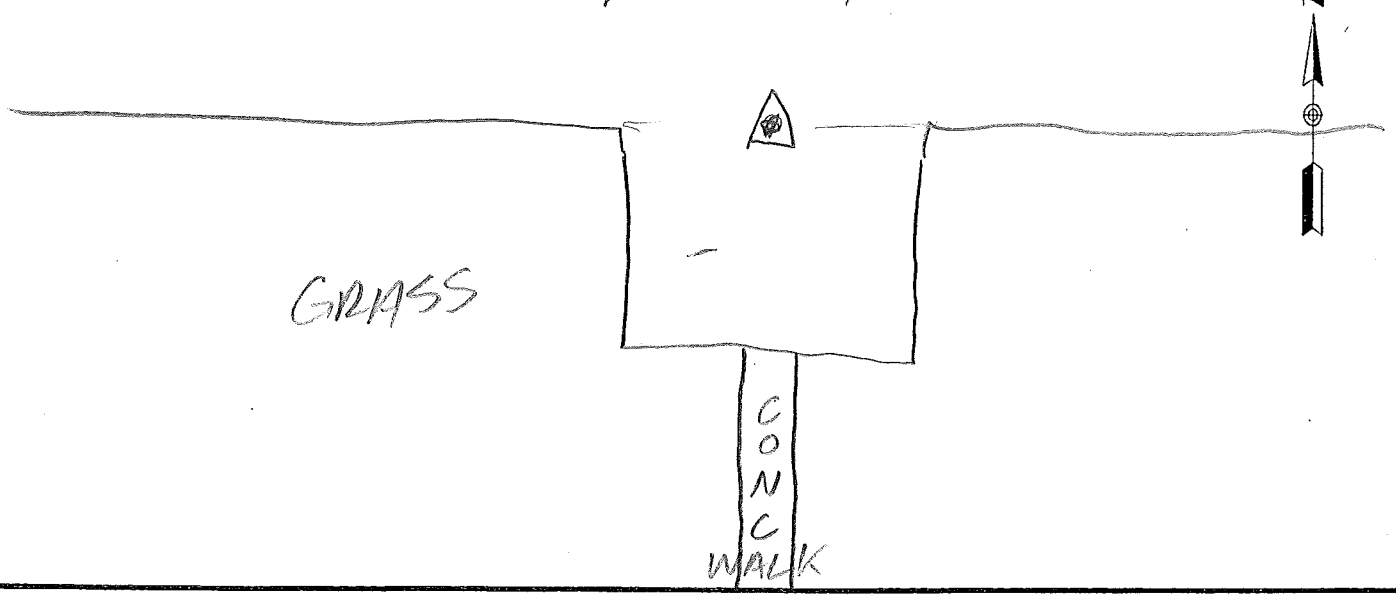
STATION DESCRIPTIONS S EDGE PARKING LOT @ & TURNOUT S, OPP & CONC WALK S.

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
17:41	1.9	9/9-9
18:00	1.8	9/9-9

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
SKC becoming PC

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

FOTT CO. 2

PROJECT 1120103
OPERATOR WJN
DATE 2/14/12

SITE NUMBER 5
SITE NAME 1224

TRACKING TIMES (LOCAL) MEASURE CST
START 12:13
STOP 12:29

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 14
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
500 (0.360)

OBSTRUCTIONS: SHED W

HEIGHT READINGS MTS FT
1.269

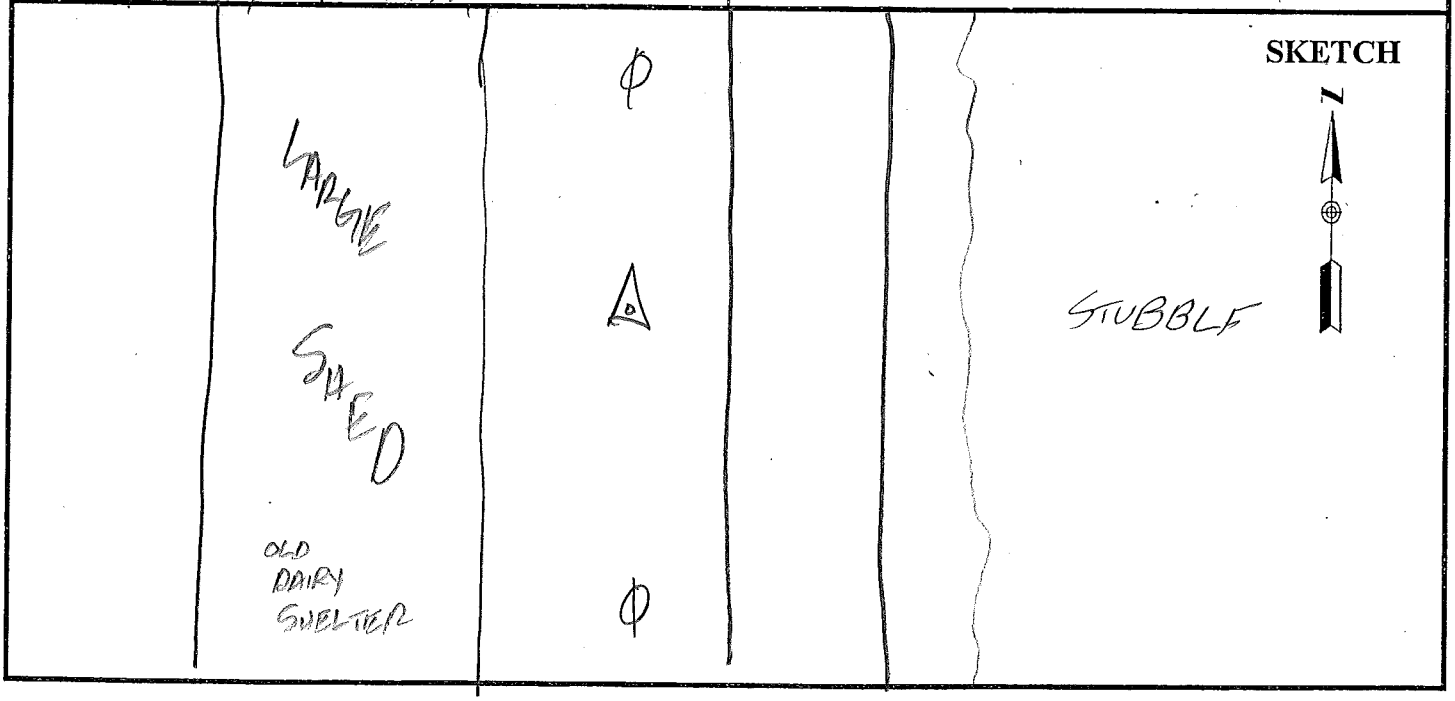
STATION DESCRIPTIONS POINT W
LONG GRASS

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
12:13	2.0	10/10 -10
12:29	1.9	10/10 -10

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
PC becoming MC

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

POTT CO. 5

PROJECT 1120103
OPERATOR WJN
DATE 2/14/12

SITE NUMBER 6
SITE NAME 1523

TRACKING TIMES (LOCAL) MEASURE CST
START 12:46
STOP 13:03

SENSOR TYPE (500) 9500 399 299
MEMORY CARD
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
500 (0.360)

HEIGHT READINGS MTS 1.340 FT

OBSTRUCTIONS: TREES E-W
WATER TOWER SSW

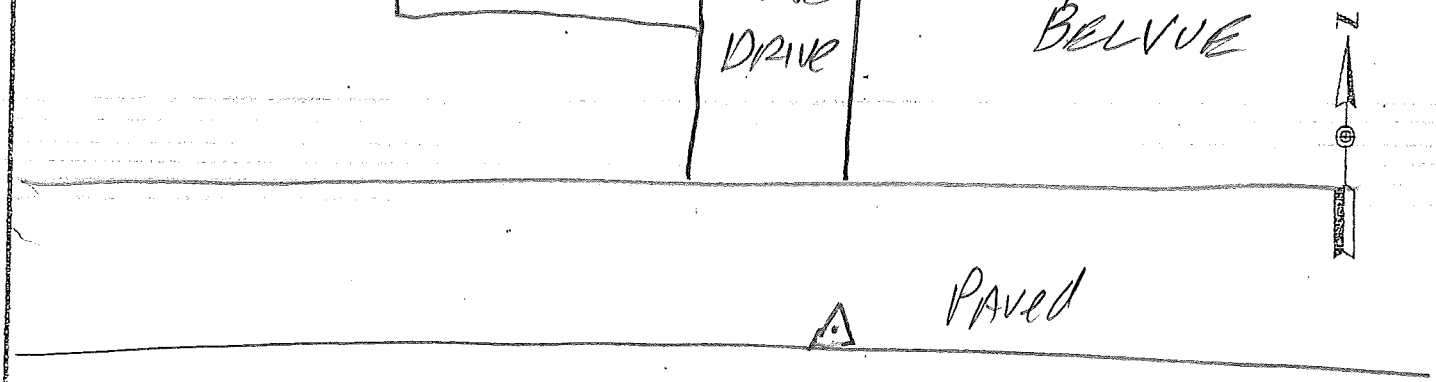
STATION DESCRIPTIONS POINT @
S. EDGE RD OPP
E. EDGE CONC. DR. N.

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1946	2.1	9/9-9
1903	2.4	9/8-10

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
MC

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

POTT Co. 4

PROJECT 1120103
OPERATOR MJN
DATE 2/14/12

SITE NUMBER 7
SITE NAME 1424

TRACKING TIMES (LOCAL) MEASURE CST
START 13:23
STOP 13:43

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 14
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
500 (0.360)

OBSTRUCTIONS: TREES

HEIGHT READINGS MTS FT
1.250

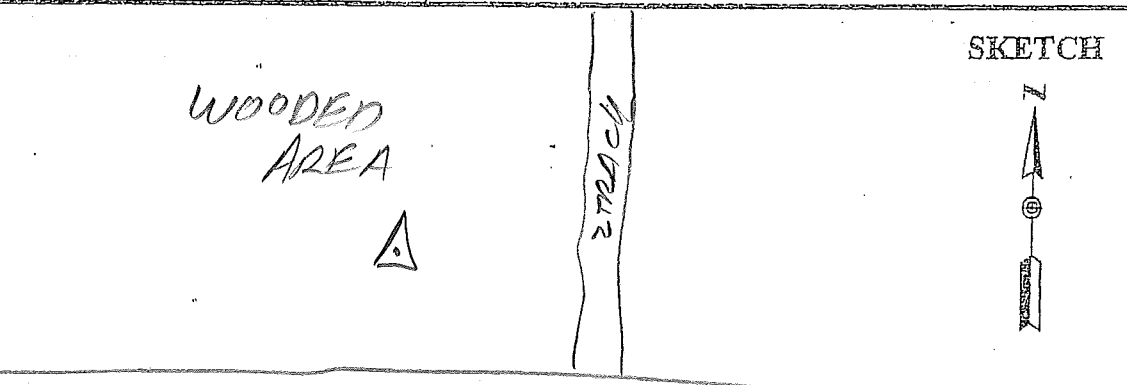
STATION DESCRIPTIONS POINT IN WOODED AREA ± 35' N OF & GRAVEL RD. ± 30' W OF 2-TRACK

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
19:23	2.8	9/13-10
19:43	2.5	8/8-9

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
MC

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

POTT Co. 1

PROJECT 1120103
OPERATOR WNN
DATE 2/14/12

SITE NUMBER 8
SITE NAME 1124

TRACKING TIMES (LOCAL) MEASURE CST
START 14:08
STOP 14:28

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 14
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
500 (0.360)

OBSTRUCTIONS: NO

HEIGHT READINGS MTS FT
1.310

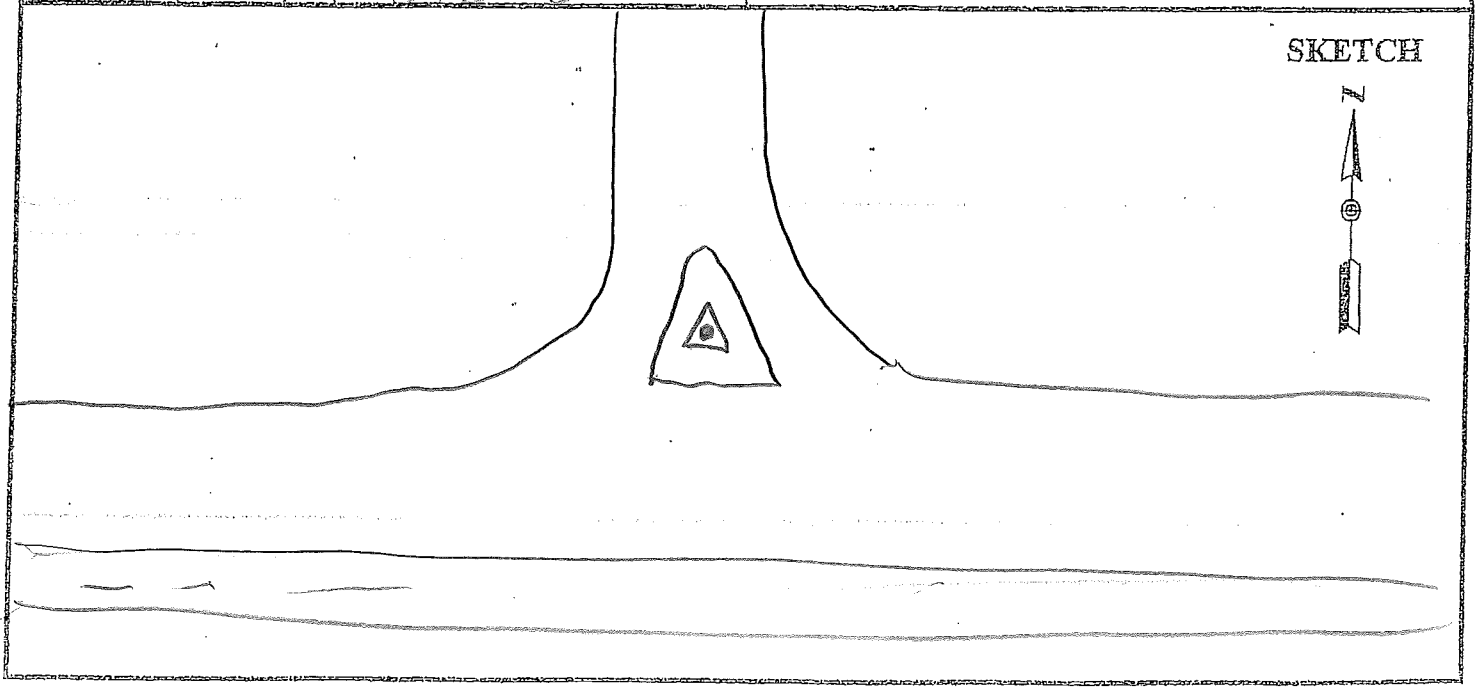
STATION DESCRIPTIONS POINT IN SHORT GRASS IN CENTER OF INTO ISLAND

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
20:08	2.0	9/9-9
20:28	2.4	8/8-8

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
OVC

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

POTTS CO. AME

PROJECT 1120103
OPERATOR WJN
DATE 2/14/12

SITE NUMBER 9
SITE NAME 1635

TRACKING TIMES (LOCAL) MEASURE CST

START 14:50

STOP 15:17

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 14
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
500 (0.360)

OBSTRUCTIONS: NO

HEIGHT READINGS MTS 1.311 FT

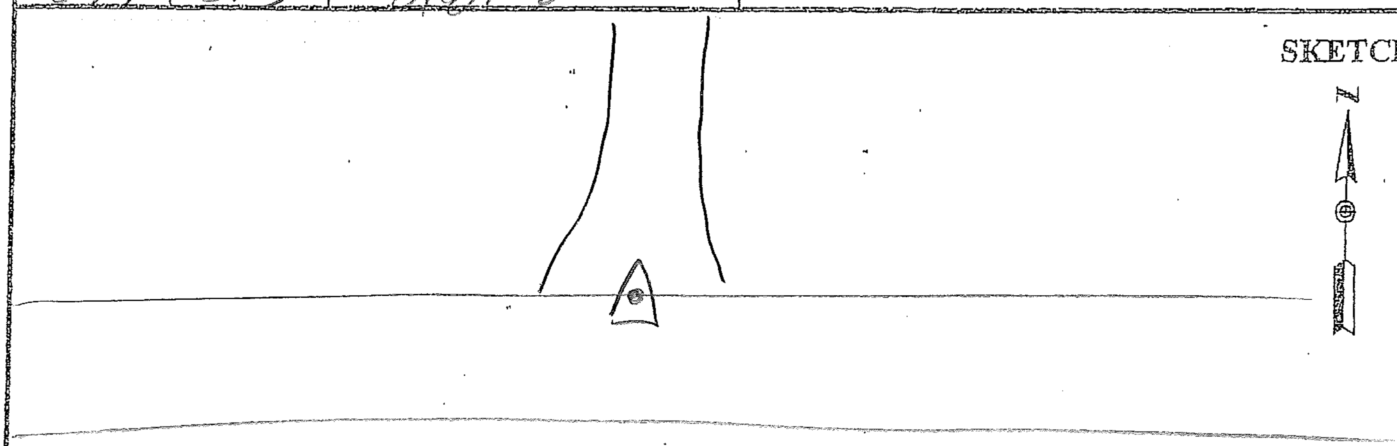
STATION DESCRIPTIONS N EDGE RD OPP ℄ RD N.

SATELLITE OBSERVATIONS

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

TIME	GDOP	SATELLITES
20:50	2.2	8/8-8
20:15	2.3	9/8-8

SKETCH



1800-250-4134

AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

POTT CO. 5

PROJECT 120103
OPERATOR WJN
DATE 7/14/12

SITE NUMBER 10
SITE NAME 1524

TRACKING TIMES (LOCAL) MEASURE CST
START 15:33
STOP 16:00

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 14
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
500 (0.360)

OBSTRUCTIONS: TRAFFIC, PPLS SW, SE, TREES BLDGS W.

HEIGHT READINGS MTS 1.325 FT

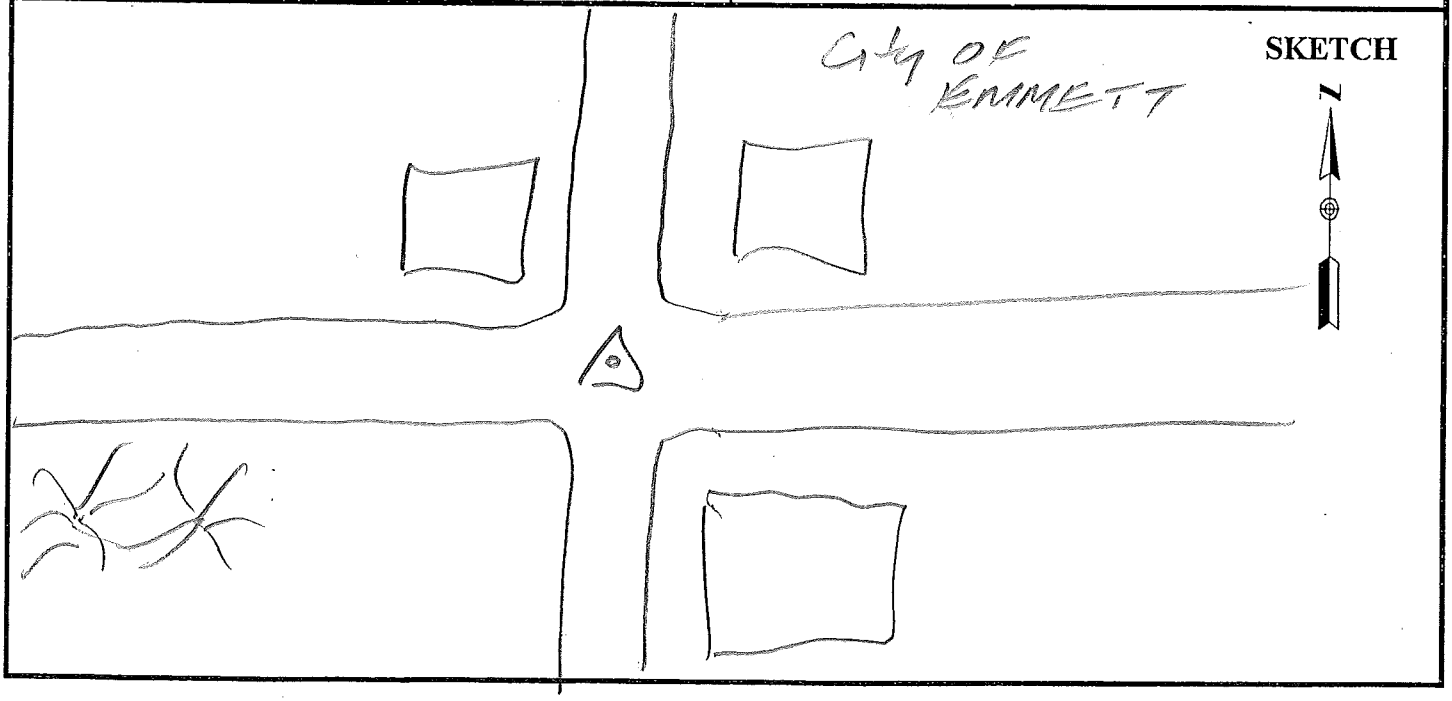
STATION DESCRIPTIONS C & C INT OF STREETS

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
2133	2.2	9/9-9
2200	2.3	8/8-8

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

Crawford Co. Base tall 9503 √PT

PROJECT 112 0103
OPERATOR MB
DATE 2.14.12

SITE NUMBER 1
SITE NAME 23

TRACKING TIMES (LOCAL) MEASURE ✓
START 7:14 a.
STOP

SENSOR TYPE 500 9500 399 299
MEMORY CARD 777
BATTERY NO. CB
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
500 0.360

OBSTRUCTIONS:

HEIGHT READINGS MTS FT
1.230
1.619

STATION DESCRIPTIONS

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
714	4.0	6/8

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH

See previous

AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

Crawford Co. Base short gross ✓FC

PROJECT 1120103
OPERATOR MB
DATE 2.14.12

SITE NUMBER 1
SITE NAME 134

TRACKING TIMES (LOCAL) MEASURE _____
START 7:32a.
STOP _____

SENSOR TYPE 500 9500 399 299
MEMORY CARD 603
BATTERY NO. CB
CONTROLLER NO. _____
SENSOR NO. _____

SENSOR CONSTANT 299/399 0.441
399E/9500 ~~0.389~~
500 0.360

HEIGHT READINGS MTS FT
1.325 _____
1.685

OBSTRUCTIONS: _____

STATION DESCRIPTIONS _____

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
832	3.7	7/7

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH

See previous

AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

Crawford Co.

trees VPT

PROJECT 1120103
OPERATOR MD
DATE 2.14.12

SITE NUMBER 1
SITE NAME 413

TRACKING TIMES (LOCAL) MEASURE ✓
START 7:47 a.
STOP 8:07 a.

SENSOR TYPE 500 9500 399 299
MEMORY CARD 704
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
500 0.360

OBSTRUCTIONS:

HEIGHT READINGS MTS FT
1.390
1.750

STATION DESCRIPTIONS

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
847	3.1	6/7
907		

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH

See previous

AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

Crawford Co.

trees VPT

PROJECT 1120103
OPERATOR MS
DATE 2.14.12

SITE NUMBER 2
SITE NAME 412

TRACKING TIMES (LOCAL) MEASURE ✓
START 8:36 a.
STOP 9:08 a.

SENSOR TYPE 500 9500 399 299
MEMORY CARD 704
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
500 0.360

OBSTRUCTIONS: under trees

HEIGHT READINGS MTS FT
1.359

STATION DESCRIPTIONS N. side road

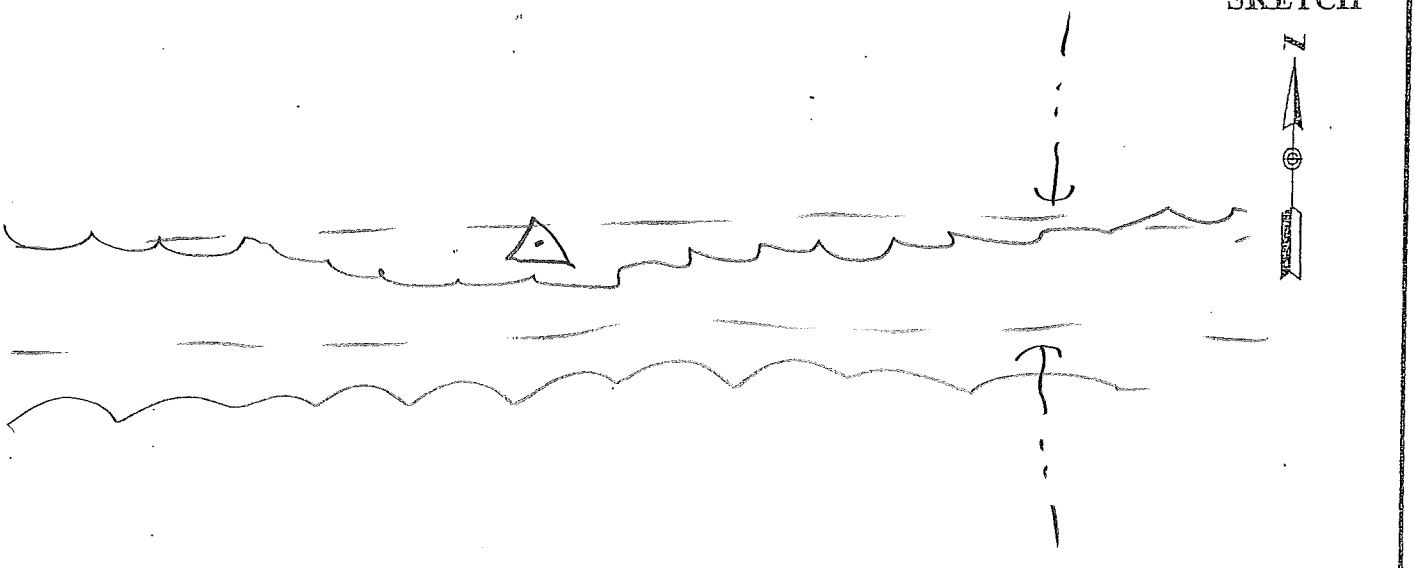
1719

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
936	2.8	5/6
1008		

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

Crawford Co.

trees VDT

PROJECT 112o103
OPERATOR MB
DATE 2·14·12

SITE NUMBER 3/
SITE NAME 411

TRACKING TIMES (LOCAL) MEASURE _____
START 9:19a.
STOP 9:56a.

SENSOR TYPE 500 9500 399 299
MEMORY CARD 704
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
500 0.360

OBSTRUCTIONS: trees above

HEIGHT READINGS MTS FT
1.432
1.792

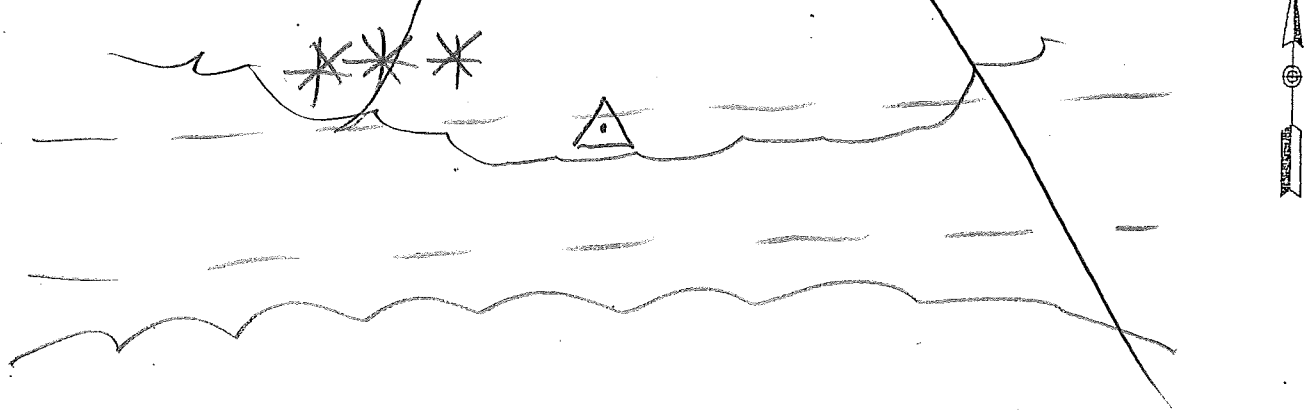
STATION DESCRIPTIONS N. side road

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1019	4.5	4/5
1056		

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

Crawford Co

tall grass VPT

PROJECT 1120103
OPERATOR MB
DATE 2.14.12

SITE NUMBER 4
SITE NAME 232

TRACKING TIMES (LOCAL) MEASURE ✓
START 10:09a.
STOP 10:42a.

SENSOR TYPE 500 9500 399 299
MEMORY CARD 704
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
(500) (0.360)

OBSTRUCTIONS: trees N

HEIGHT READINGS MTS FT
1.423
1.783

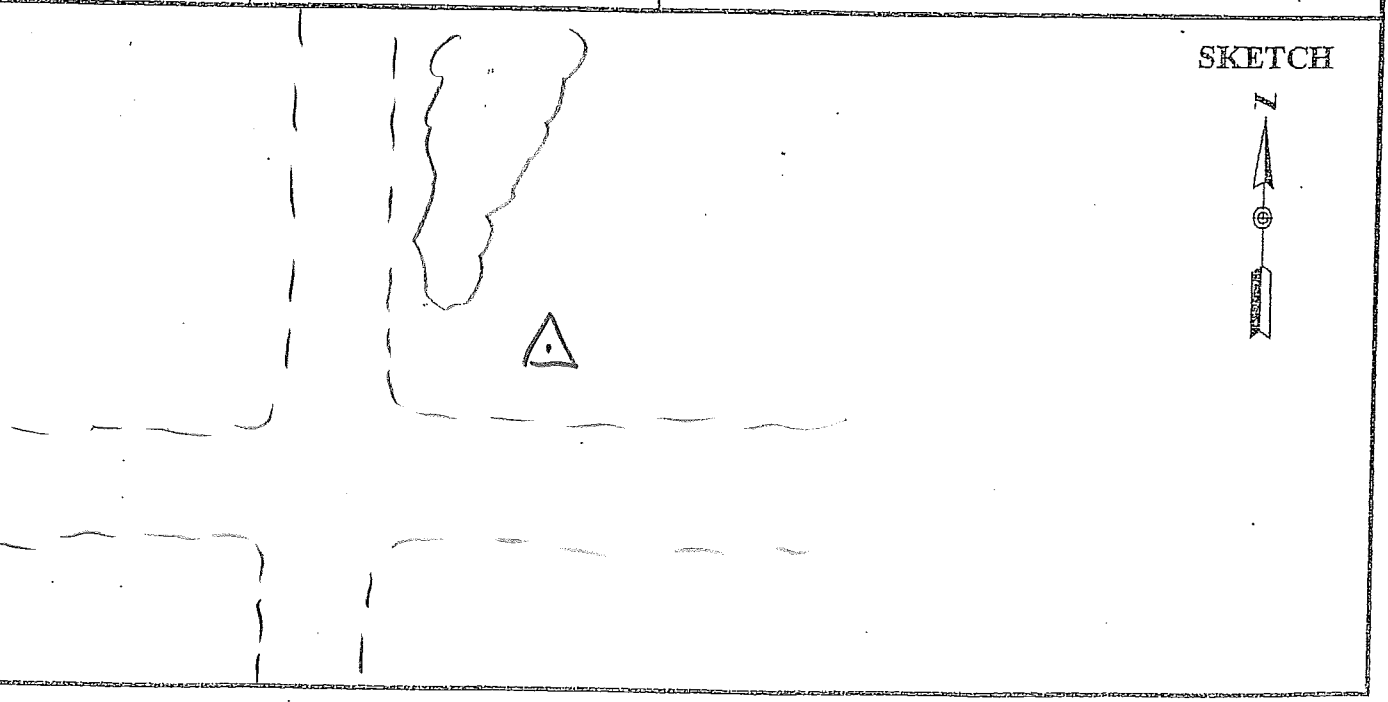
STATION DESCRIPTIONS in field

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1109	4.4	5/5
1142		

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

Crawford Co. AME √PT

PROJECT 1120103
OPERATOR MD
DATE 2·14·12

SITE NUMBER 5
SITE NAME 637

TRACKING TIMES (LOCAL) MEASURE ✓
START 11:03 a.
STOP 11:37 a.

SENSOR TYPE 500 9500 399 299
MEMORY CARD 704
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
500 0.360

HEIGHT READINGS MTS FT
1.399
1.759

OBSTRUCTIONS: Trees NE

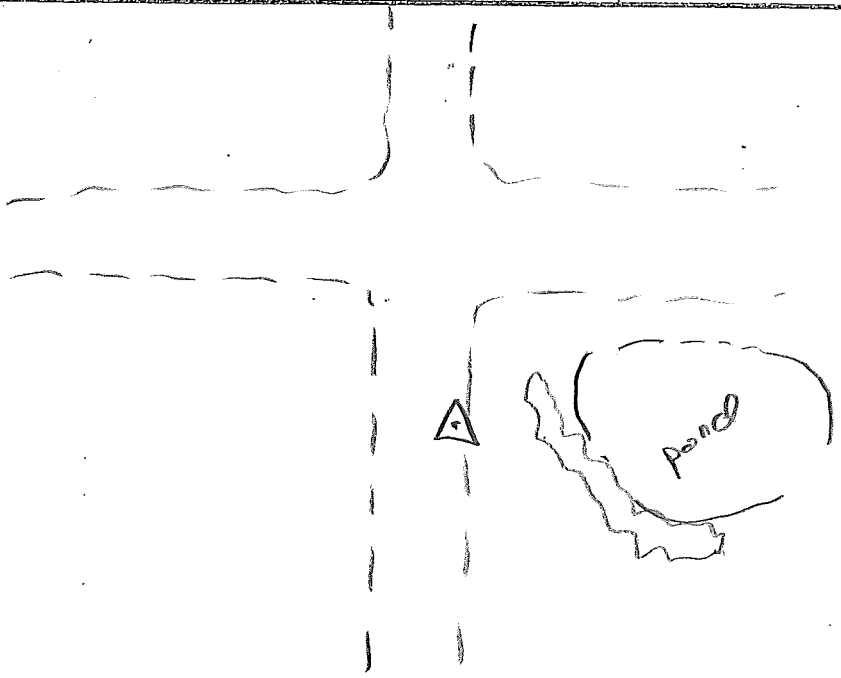
STATION DESCRIPTIONS E. side road

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1203	2.0	7/7
1237		

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

Crawford Co. woods VRT

PROJECT 1120103
OPERATOR MB
DATE 2.14.12

SITE NUMBER 6
SITE NAME 414 [redacted]

TRACKING TIMES (LOCAL) MEASURE ✓
START 11:45 a.
STOP 12:17 p

SENSOR TYPE 500 9500 399 299
MEMORY CARD 704
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
(500) (0.360)

OBSTRUCTIONS: trees above
trees S

HEIGHT READINGS MTS FT
1.368

STATION DESCRIPTIONS N. side road

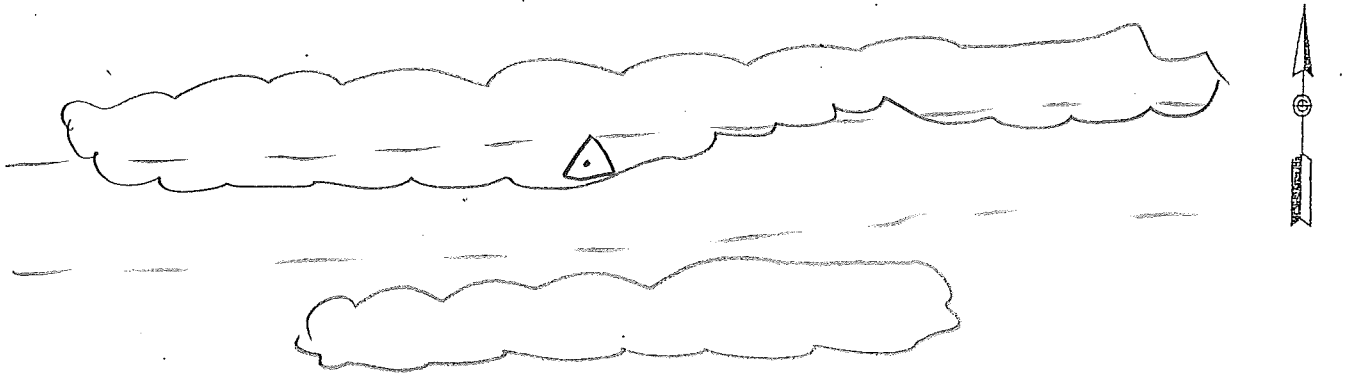
1728

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1245	5.2	6/6
1317		

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

Crawford Co

hard ✓FT

PROJECT 1120103
OPERATOR MB
DATE 2-14-12

SITE NUMBER 7
SITE NAME 533

TRACKING TIMES (LOCAL) MEASURE ✓
START 12:25 p
STOP 12:53 p

SENSOR TYPE 500 9500 399 299
MEMORY CARD 704
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
(500) (0.360)

OBSTRUCTIONS: trees SE

HEIGHT READINGS MTS FT
1.430
1.790

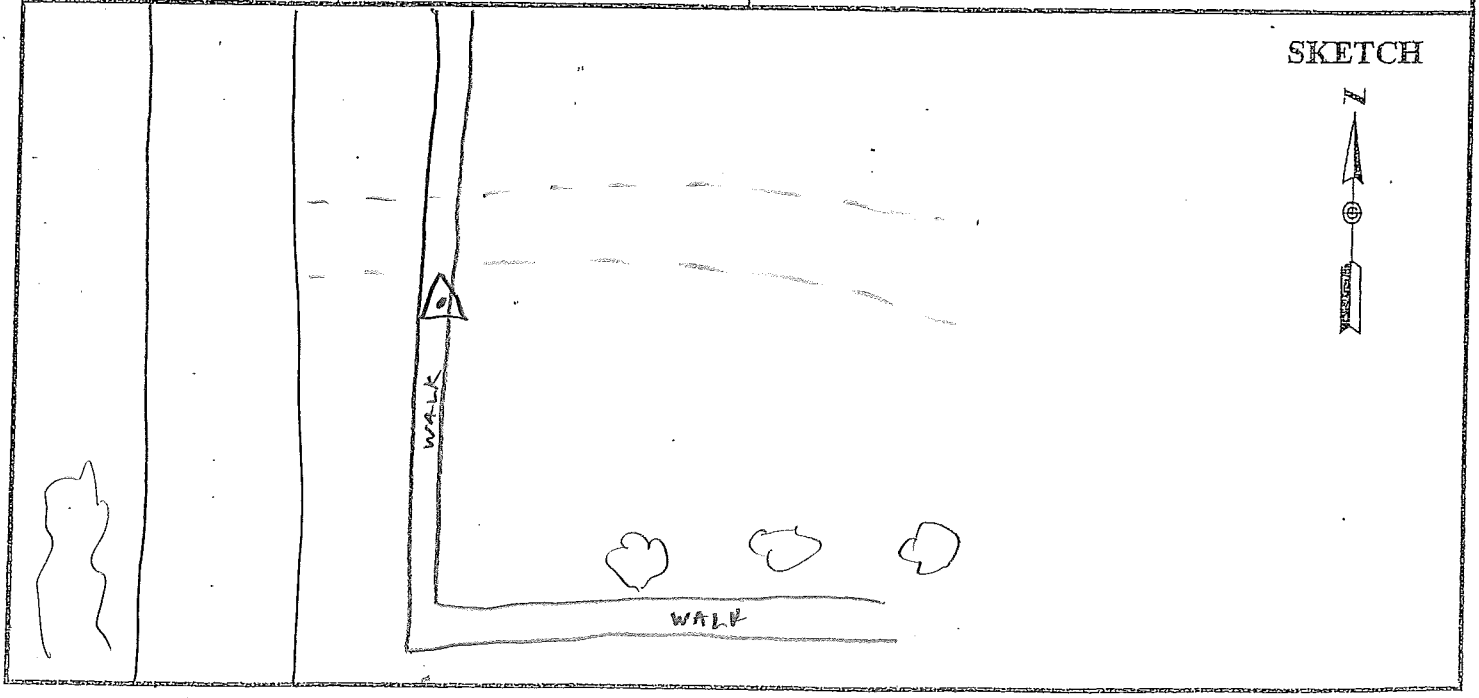
STATION DESCRIPTIONS on sidewalk

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1325	3.0	7/7
1353		

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

Bourbon Co. Base short grass ✓MT

PROJECT 1120103
OPERATOR MB
DATE 2.14.12

SITE NUMBER 8
SITE NAME 101

TRACKING TIMES (LOCAL) MEASURE ✓
START 1:03 p
STOP 1:36 p

SENSOR TYPE 500 9500 399 299
MEMORY CARD 704
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
500 0.360

OBSTRUCTIONS: none

HEIGHT READINGS MTS FT
1.381
1.741

STATION DESCRIPTIONS fnd 5/8" rebar w/cap

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1403	2.4	10/10
1436		

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH

see previous

AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

Crawford Co. woods VBT

PROJECT 1120103
OPERATOR MD
DATE 2-14-12

SITE NUMBER 9
SITE NAME 415

TRACKING TIMES (LOCAL) MEASURE _____
START 1:59 p
STOP 2:21 p

SENSOR TYPE 500 9500 399 299
MEMORY CARD 704
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
(500) (0.360)

OBSTRUCTIONS: trees above

HEIGHT READINGS MTS FT
1.389

STATION DESCRIPTIONS W. side road

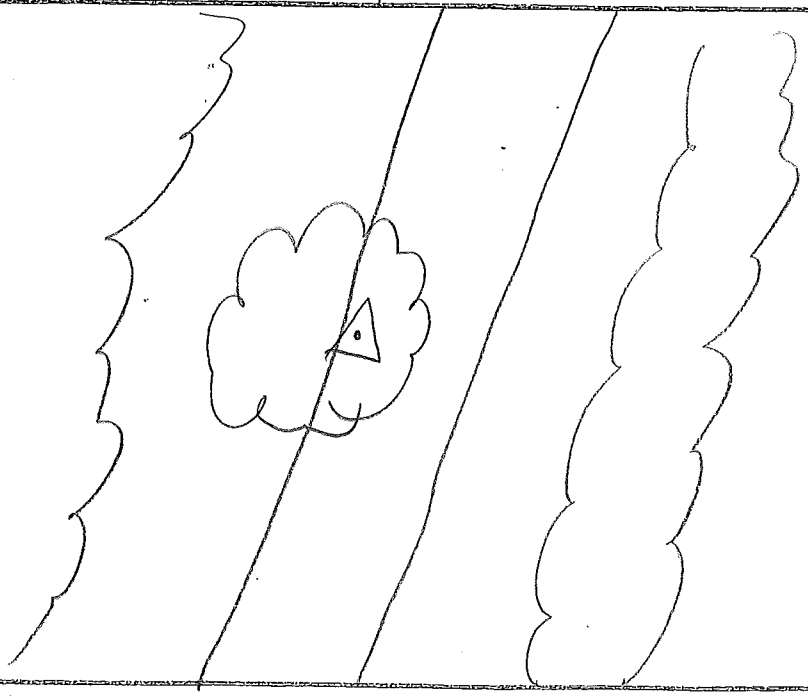
1749

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1459	2.4	7/7

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

Crawford Co.

short grass ✓ PT

PROJECT 1120103
OPERATOR MB
DATE 2-14-12

SITE NUMBER 10
SITE NAME 135

TRACKING TIMES (LOCAL) MEASURE ✓
START 2:25 p
STOP 2:45 p

SENSOR TYPE 500 9500 399 299
MEMORY CARD 704
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
(500) (0.360)

OBSTRUCTIONS: none

HEIGHT READINGS MTS FT
1.380
1.740

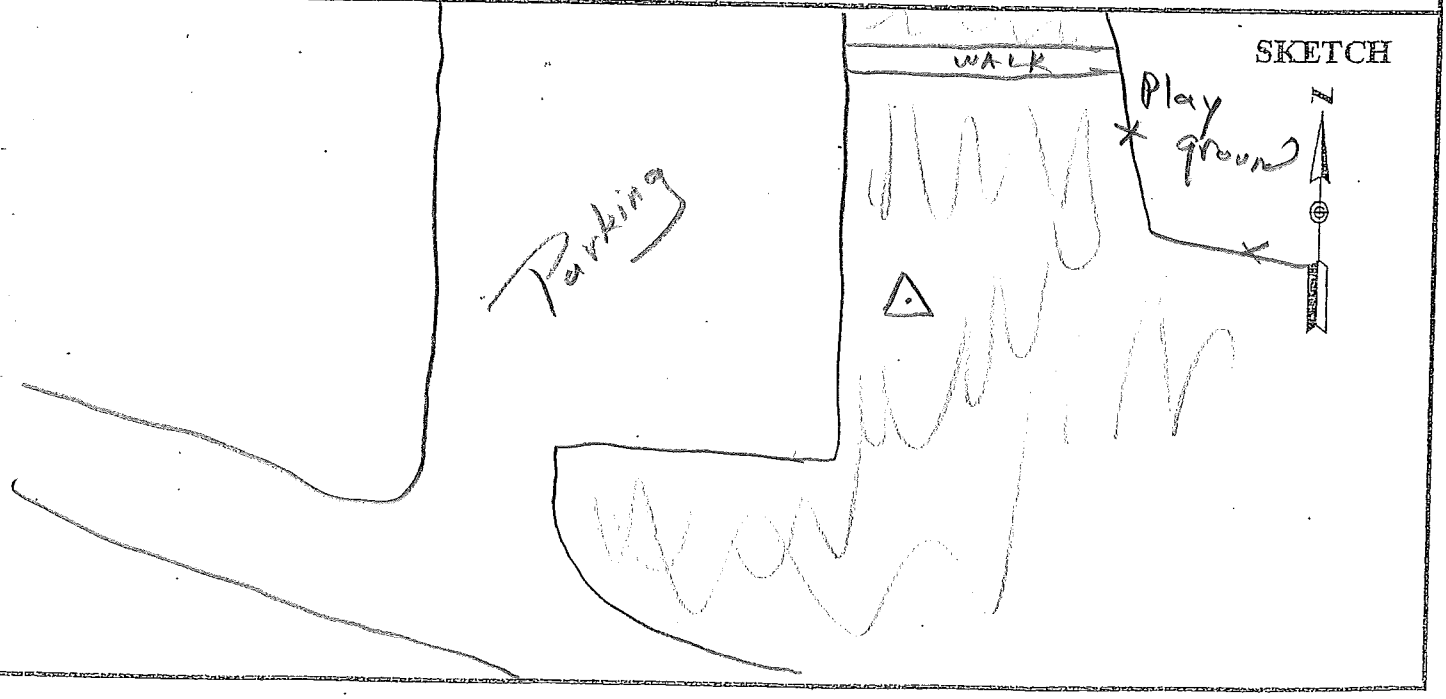
STATION DESCRIPTIONS by playground

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1525	1.7	8/8
1545		

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

Crawford Co.

tall grass ✓PT

PROJECT 1120103
OPERATOR MB
DATE 2·14·12

SITE NUMBER 11
SITE NAME 233

TRACKING TIMES (LOCAL) MEASURE ✓
START 2:58 p
STOP 3:18 p

SENSOR TYPE 500 9500 399 299
MEMORY CARD 704
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
500 0.360

OBSTRUCTIONS: none

HEIGHT READINGS MTS FT
1.410
1.770

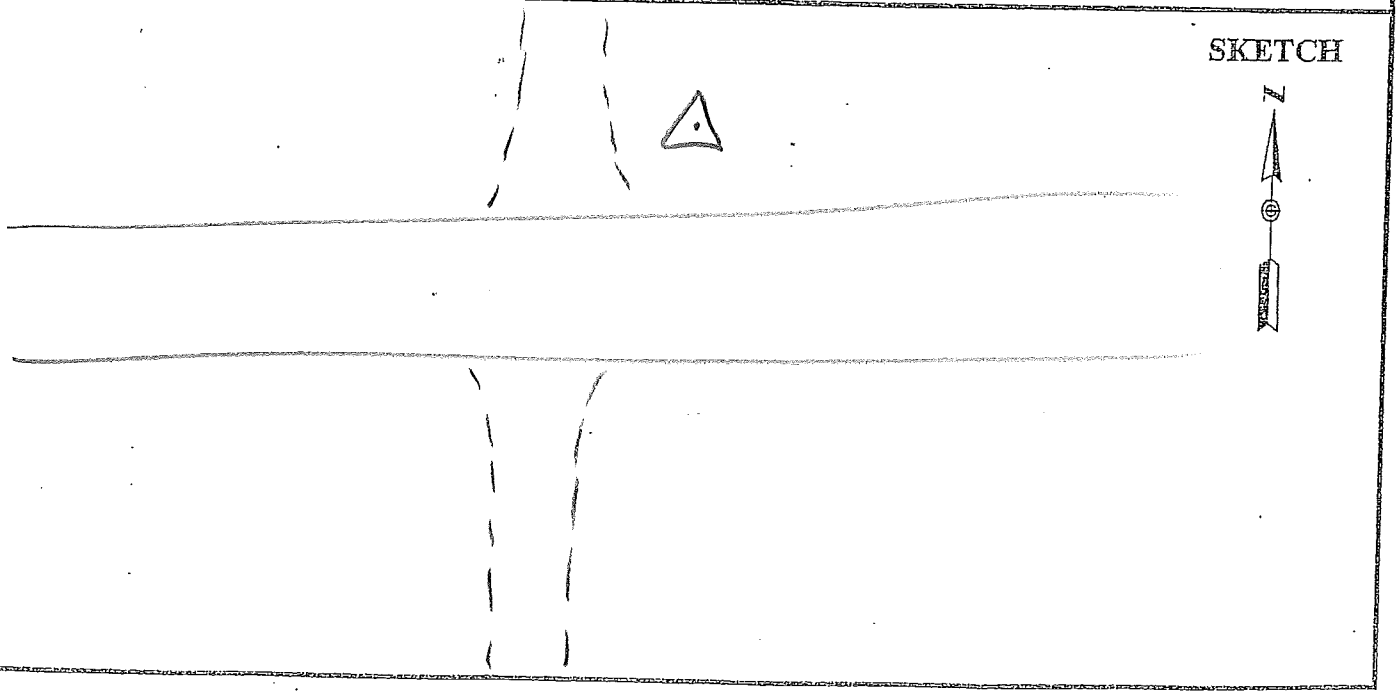
STATION DESCRIPTIONS N. side road

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1558	1.7	9/9
1618		

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

POTT CO.

BASE

PROJECT 1120103
OPERATOR WJW
DATE 2/15/12

SITE NUMBER 1
SITE NAME BELVUE

TRACKING TIMES (LOCAL) MEASURE CST
START 9:19
STOP 15:50

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 14
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
500 (0.360)

OBSTRUCTIONS: TREES E

HEIGHT READINGS MTS FT
1.160
1.520

STATION DESCRIPTIONS BRASS DISK IN CONC MKD BELVUE 1948

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
15:19	3.1	7/7-7
4:50	2.0	9/9-9

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
RAIN

AS BEFORE DESCRIBED

SKETCH

806-539-8117

AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

POTT CO

BASE

PROJECT 1120103
OPERATOR WJN
DATE 2/15/12

SITE NUMBER 1
SITE NAME 1016

TRACKING TIMES (LOCAL) MEASURE CST
START 10 11
STOP 15:27

SENSOR TYPE 500 (9500) 399 299
MEMORY CARD 101
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 (0.389)
500 0.360

OBSTRUCTIONS: NO

HEIGHT READINGS MTS FT
1.112
1.501

STATION DESCRIPTIONS Set Rebar AND CAP

SATELLITE OBSERVATIONS

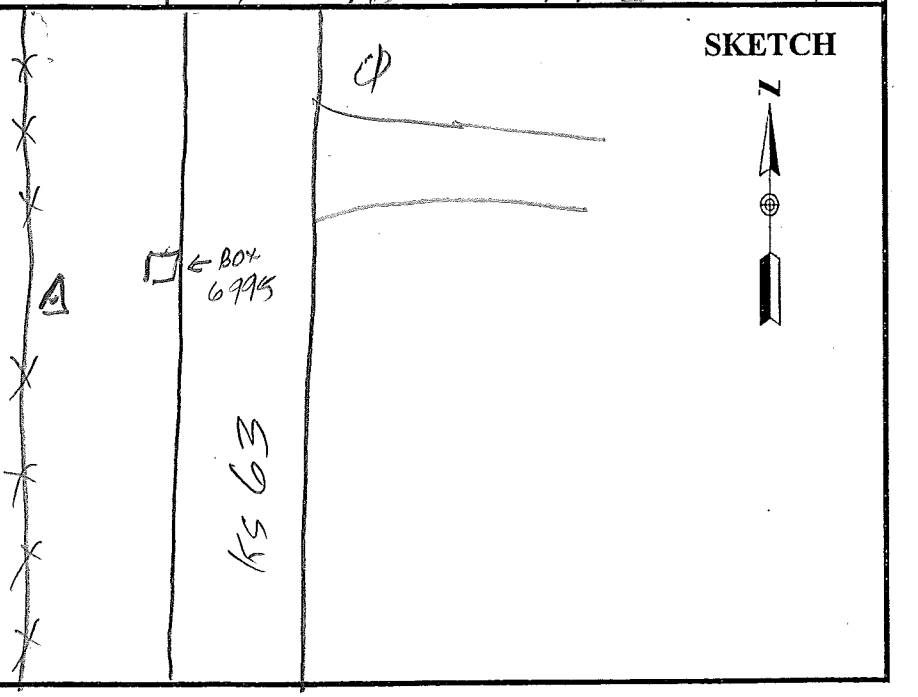
WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
RAIN

TIME	GDOP	SATELLITES
1611	3.2	7/7-7
2127	2.0	9/9-9

Approx 39 15 21.7 lat
96 03 49.8 long

±33' W AND 6' SOUTH OF MAILBOX #6995
3' E OF R/W FENCE
± 45' W. OF ℄ KS63

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

POTT CO. 5

PROJECT 1120103
OPERATOR WJN
DATE 2/15/12

SITE NUMBER 1
SITE NAME 1525

TRACKING TIMES (LOCAL) MEASURE CST
START 10:38
STOP 10:57

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 14
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
500 (0.360)

OBSTRUCTIONS: NO

HEIGHT READINGS MTS FT
1.333

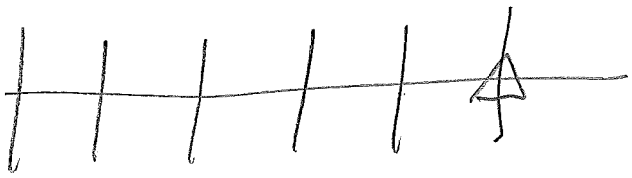
STATION DESCRIPTIONS E END PARKING LOT

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
16:39	4.5	5/5-5
16:57	2.9	7/7-8

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
RAIN.

JEFFREY ENERGY CENTER



SKETCH

AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

POTT. CO. 1

PROJECT 1120103
OPERATOR WJN
DATE 2/15/12

SITE NUMBER 2
SITE NAME 1125

TRACKING TIMES (LOCAL) MEASURE CST
START 11:06
STOP 11 24

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 14
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
500 (0.360)

HEIGHT READINGS MTS FT
1.338

OBSTRUCTIONS: NO

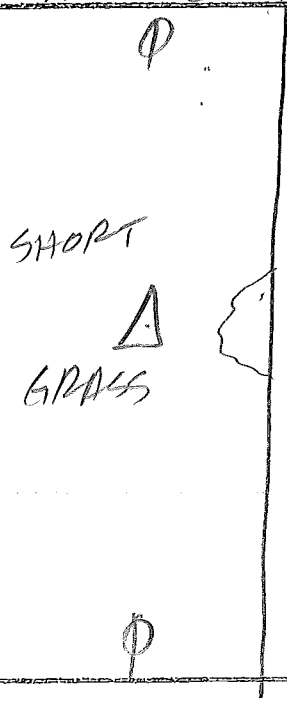
STATION DESCRIPTIONS POINT IN SHORT GRASS IN W. R/W OF KS 63

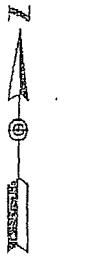
SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
17 06	2.1	7/7-7
17 24	2.0	7/7-8

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
RAIN, HEAVY FOG

SKETCH





AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

Pott Co. 2

PROJECT 1120103
OPERATOR WJN
DATE 2/15/12

SITE NUMBER 3
SITE NAME 1225

TRACKING TIMES (LOCAL) MEASURE CST
START 11:40
STOP 11:56

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 14
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
500 (0.360)

OBSTRUCTIONS: NO

HEIGHT READINGS MTS FT
1.265

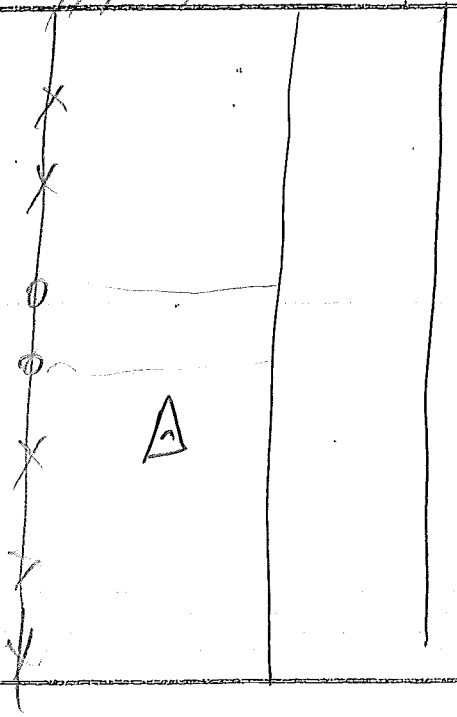
STATION DESCRIPTIONS POINT IN
Very long GRASS IN
W. R/W OF N-S Rd

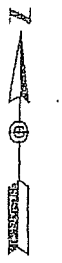
SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1740	2.0	9/9-9
1756	2.0	9/9-9

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
RAIN

SKETCH





AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

Fort Co. 4

PROJECT 1120103
OPERATOR WJN
DATE 2/15/12

SITE NUMBER 4
SITE NAME 1425

TRACKING TIMES (LOCAL) MEASURE CST
START 12:07
STOP 12:23

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 14
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
500 ~~0.360~~

OBSTRUCTIONS: TREES

HEIGHT READINGS MTS FT
1.300

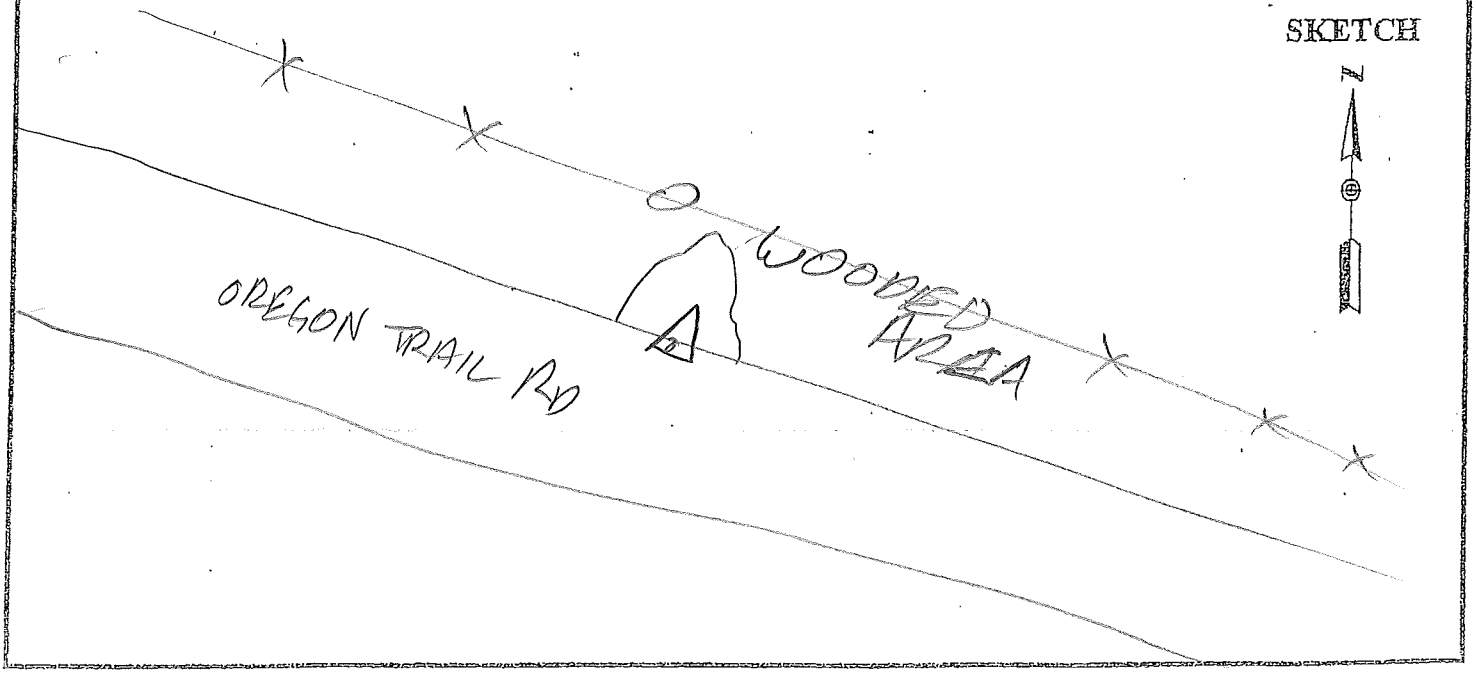
STATION DESCRIPTIONS POINT IN WOODED AREA

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1207	2.1	9/9-10
1223	2.0	10/9-10

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
RAIN

SKETCH



POTT CO

AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

AME

PROJECT 1120103
OPERATOR WJN
DATE 2/14/12

SITE NUMBER 5
SITE NAME 1636

TRACKING TIMES (LOCAL) MEASURE CST
START 12:37
STOP 12:55

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 14
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
500 ~~0.360~~

OBSTRUCTIONS: TREES E, W, S

HEIGHT READINGS MTS FT
1.316

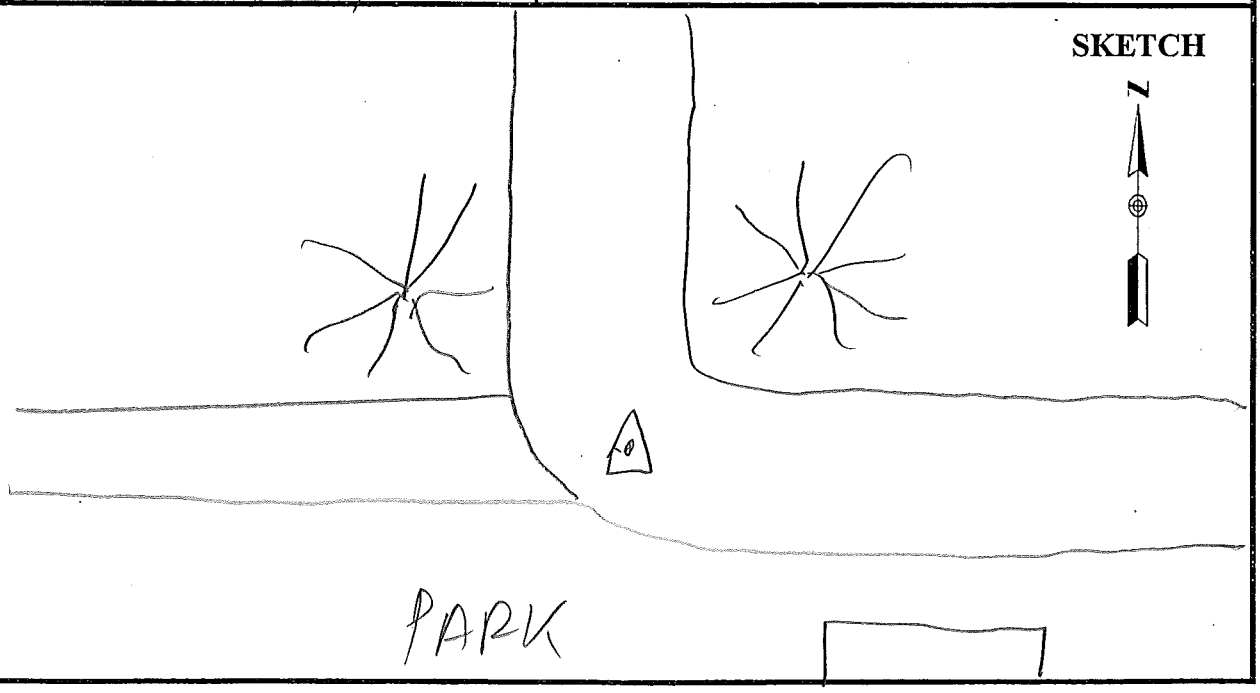
STATION DESCRIPTIONS E & C INT
RDS E, N TRAIL W

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
12:37	2.8	9/8-9
12:55	2.5	9/8-9

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
RAIN, FOG

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

POTT Co.

PROJECT 1120103
OPERATOR WJN
DATE 2/14/12

SITE NUMBER 6
SITE NAME 1526

TRACKING TIMES (LOCAL) MEASURE CST
START 13:07
STOP 13:26

SENSOR TYPE (500) 9500 399 299
MEMORY CARD
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
500 (0.360)

OBSTRUCTIONS: TRAFFIC

HEIGHT READINGS MTS FT
1.305

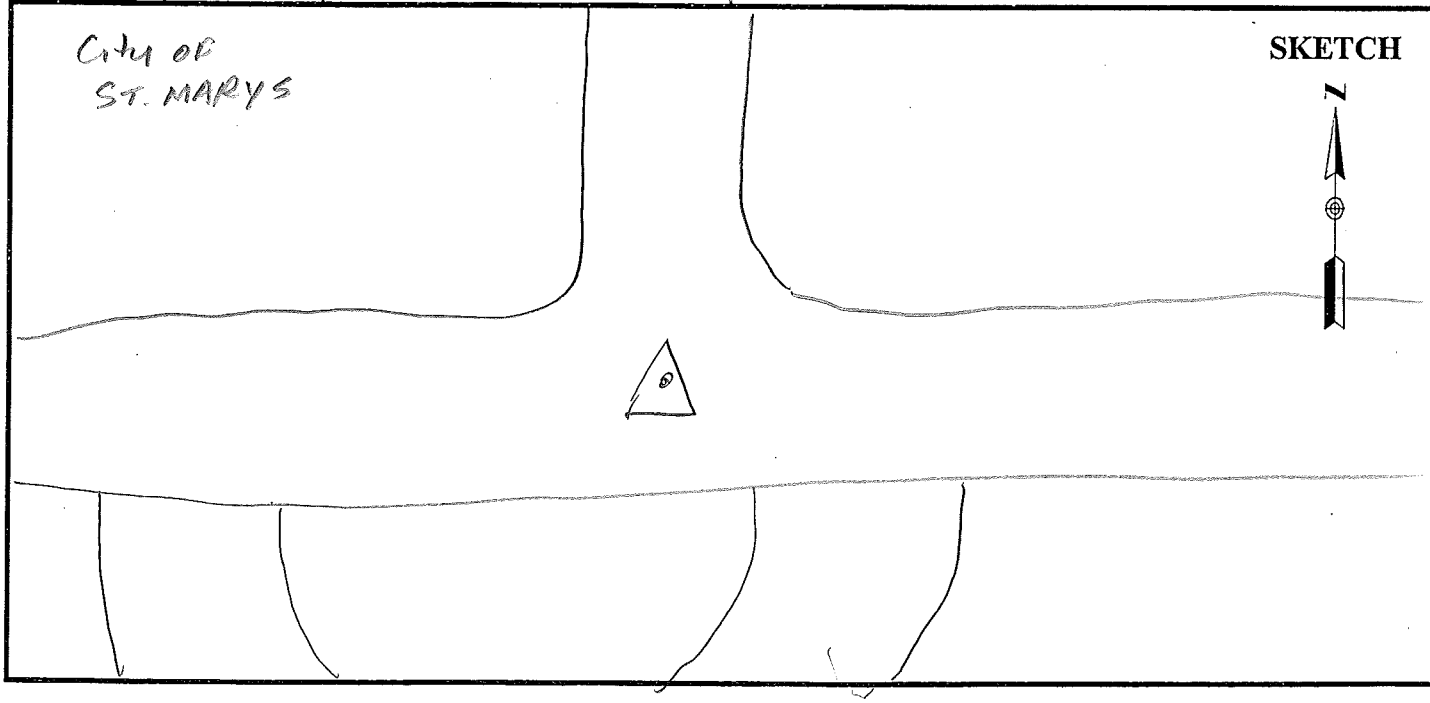
STATION DESCRIPTIONS 4 4 INT
STREETS E-W-N

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1907	2.8	9/8-9
1926		

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
RAIN

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

POTT CO. 1

PROJECT 1120103
OPERATOR WJN
DATE 2/15/12

SITE NUMBER 7
SITE NAME 1126

TRACKING TIMES (LOCAL) MEASURE CST
START 13:56
STOP 14:21

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 14
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
500 ~~0.360~~

HEIGHT READINGS MTS 1.330 FT

OBSTRUCTIONS: NO

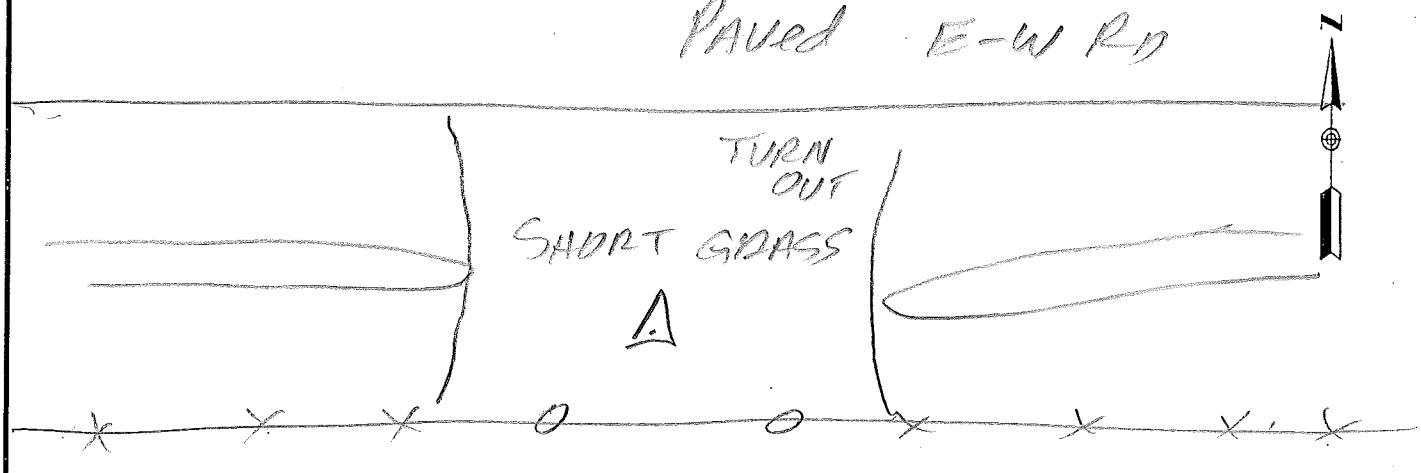
STATION DESCRIPTIONS POINT IN SHORT GRASS

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1356	2.0	9/9-9
14:21	2.2	9/9-9

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
RAIN

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

POTT CO

4

PROJECT 11'20103
OPERATOR WJN
DATE 2/15/12

SITE NUMBER 8
SITE NAME 1426

TRACKING TIMES (LOCAL) MEASURE CST
START 14:34
STOP 14:59

SENSOR TYPE (500) 9500 399 299
MEMORY CARD
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
500 (0.360)

OBSTRUCTIONS: TREES

HEIGHT READINGS MTS FT
1.279

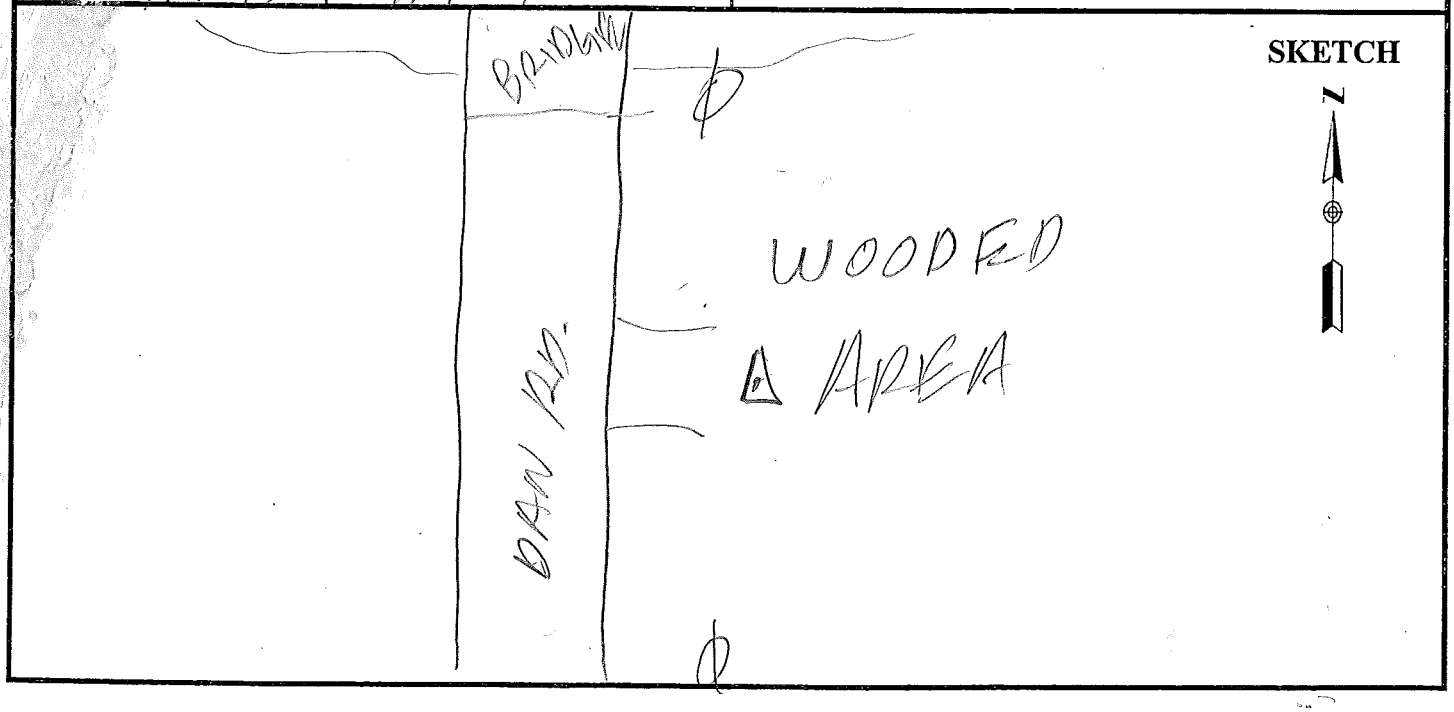
STATION DESCRIPTIONS POINT IN WOODED AREA

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
2037	1.9	8/8-8
2059	1.8	9/9-9

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
RAIN

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

Bourbon Co. Base tall gross VRT

PROJECT 1120103
OPERATOR MB
DATE 2·15·12

SITE NUMBER 1
SITE NAME 1001

TRACKING TIMES (LOCAL) MEASURE ✓
START 8:27 a.
STOP

SENSOR TYPE 500 9500 399 299
MEMORY CARD ~~737~~ 704
BATTERY NO. CB
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
500 0.360

HEIGHT READINGS MTS FT
1.297 ~~1.358~~
1.657
~~1.718~~

OBSTRUCTIONS: none

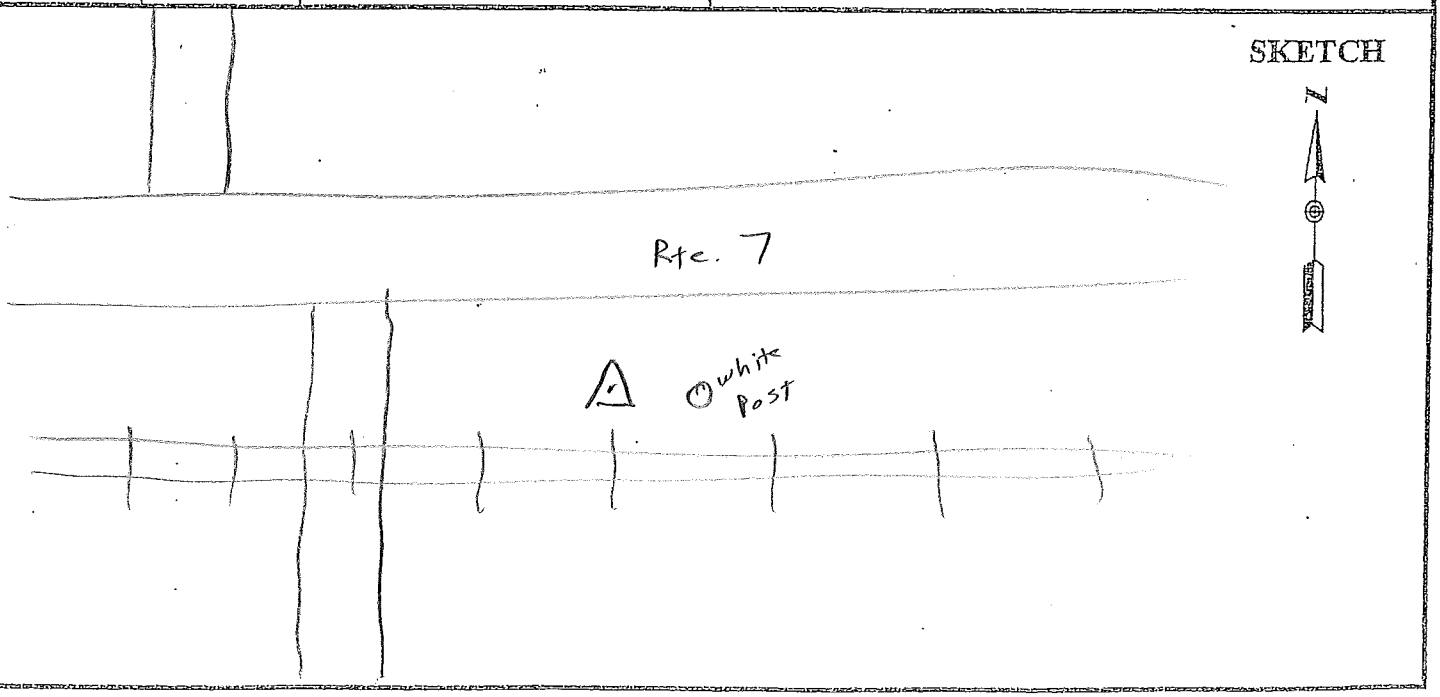
STATION DESCRIPTIONS Fnd 5/8" rebar + cap

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
927		6/6

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

Bourbon Co.

short grass V/FT

PROJECT 1120103
OPERATOR MB
DATE 2.15.12

SITE NUMBER 1
SITE NAME 135

TRACKING TIMES (LOCAL) MEASURE ✓
START 8:45 a.
STOP 9:07 a.

SENSOR TYPE 500 9500 399 299
MEMORY CARD 603
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
500 0.360

OBSTRUCTIONS: none

HEIGHT READINGS MTS FT
1.397
1.757

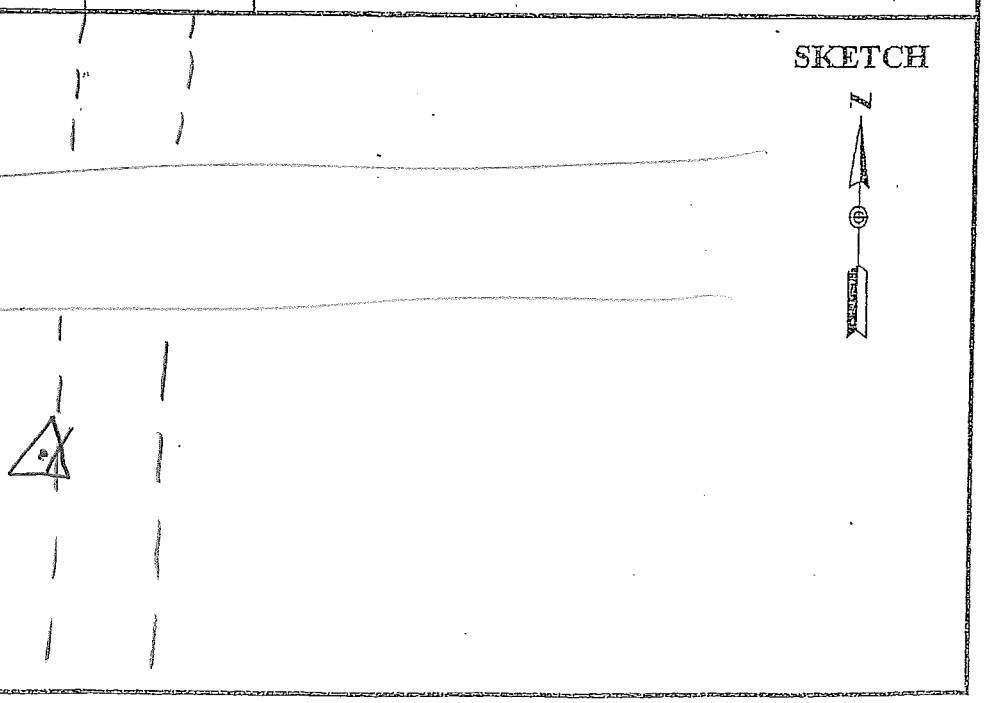
STATION DESCRIPTIONS W. of road

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
945	3.6	7/7
1007		

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

Bourbon Co.

woods √PT

PROJECT 1120103
OPERATOR MB
DATE 2·15·12

SITE NUMBER 2
SITE NAME 411

TRACKING TIMES (LOCAL) MEASURE √
START 9:20 a.
STOP 9:50 a.

SENSOR TYPE 500 9500 399 299
MEMORY CARD 603
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
(500) (0.360)

OBSTRUCTIONS: trees above

HEIGHT READINGS MTS FT
1.422
1.782

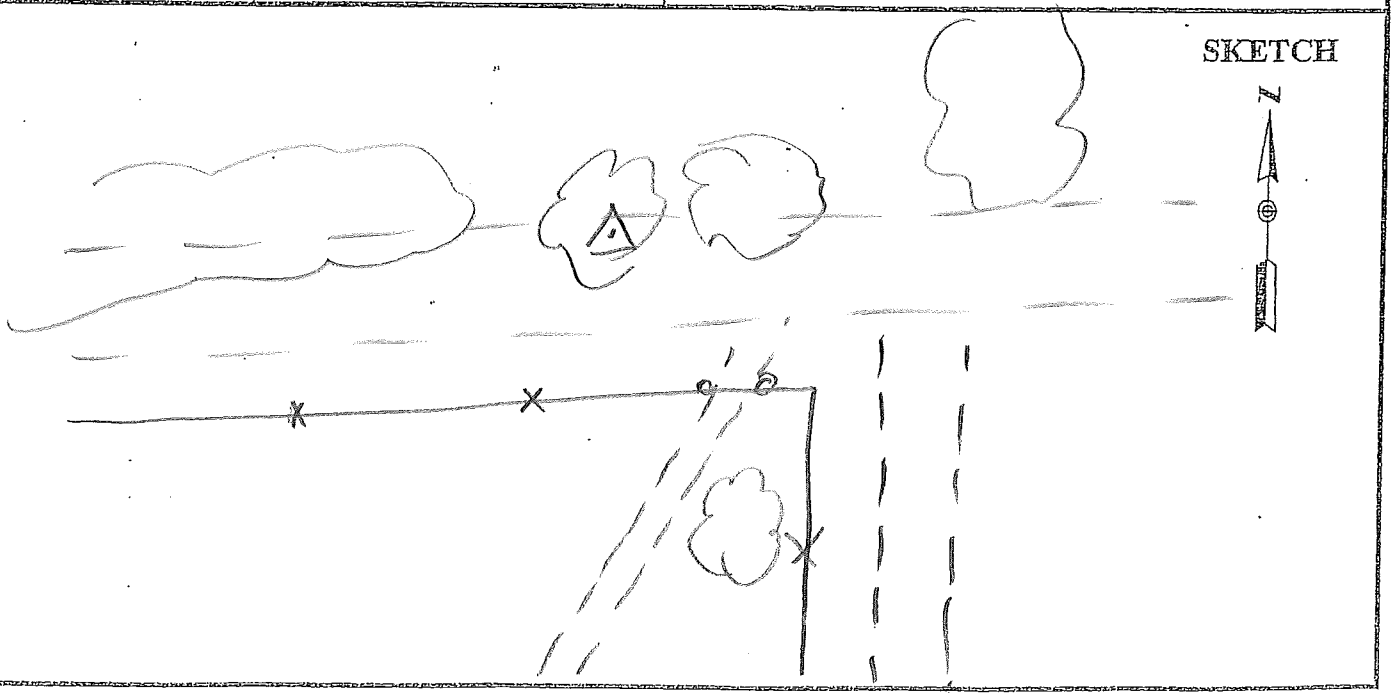
STATION DESCRIPTIONS N. side road

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1020	3.2	6/6
1050		

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

Bourbon Co.

short grass ✓PT

PROJECT 1120103
OPERATOR MB
DATE 2·15·12

SITE NUMBER 3
SITE NAME 136

TRACKING TIMES (LOCAL) MEASURE _____
START 10:01a
STOP 10:21a

SENSOR TYPE 500 9500 399 299
MEMORY CARD 609
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
500 0.360

OBSTRUCTIONS: none

HEIGHT READINGS MTS FT
1.358 _____
1.718

STATION DESCRIPTIONS N side road

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1101	2.6	5
1121		

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH

AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

Bourbon Co. woods VPT

PROJECT 1120103
OPERATOR NS
DATE 2.15.12

SITE NUMBER 4
SITE NAME 416

TRACKING TIMES (LOCAL) MEASURE ✓
START 10:49 a.
STOP 11:11 a.

SENSOR TYPE 500 9500 399 299
MEMORY CARD 603
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
500 0.360

OBSTRUCTIONS: trees above

HEIGHT READINGS MTS FT
1.314
1.674

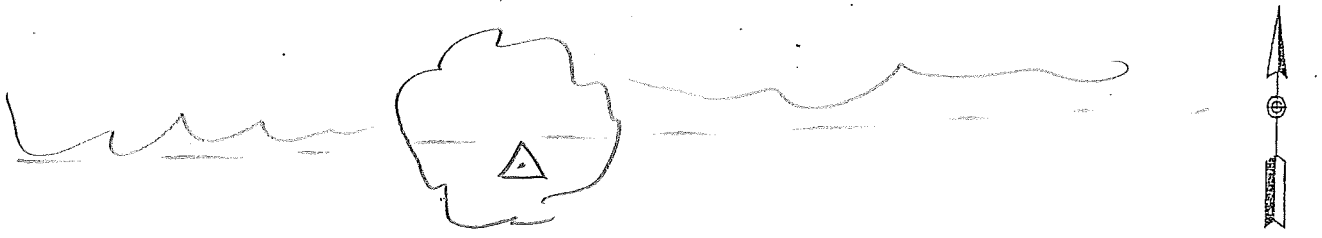
STATION DESCRIPTIONS N. side road

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1149	3.4	5/5
1211		

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

Bourbon Co. hand JPT

PROJECT 1120103
OPERATOR MB
DATE 2·15·12

SITE NUMBER 5
SITE NAME 534

TRACKING TIMES (LOCAL) MEASURE ✓
START 11:26 a.
STOP 11:46 a.

SENSOR TYPE 500 9500 399 299
MEMORY CARD 603
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
(500) (0.360)

OBSTRUCTIONS: none

HEIGHT READINGS MTS FT
1.398

STATION DESCRIPTIONS N. side road

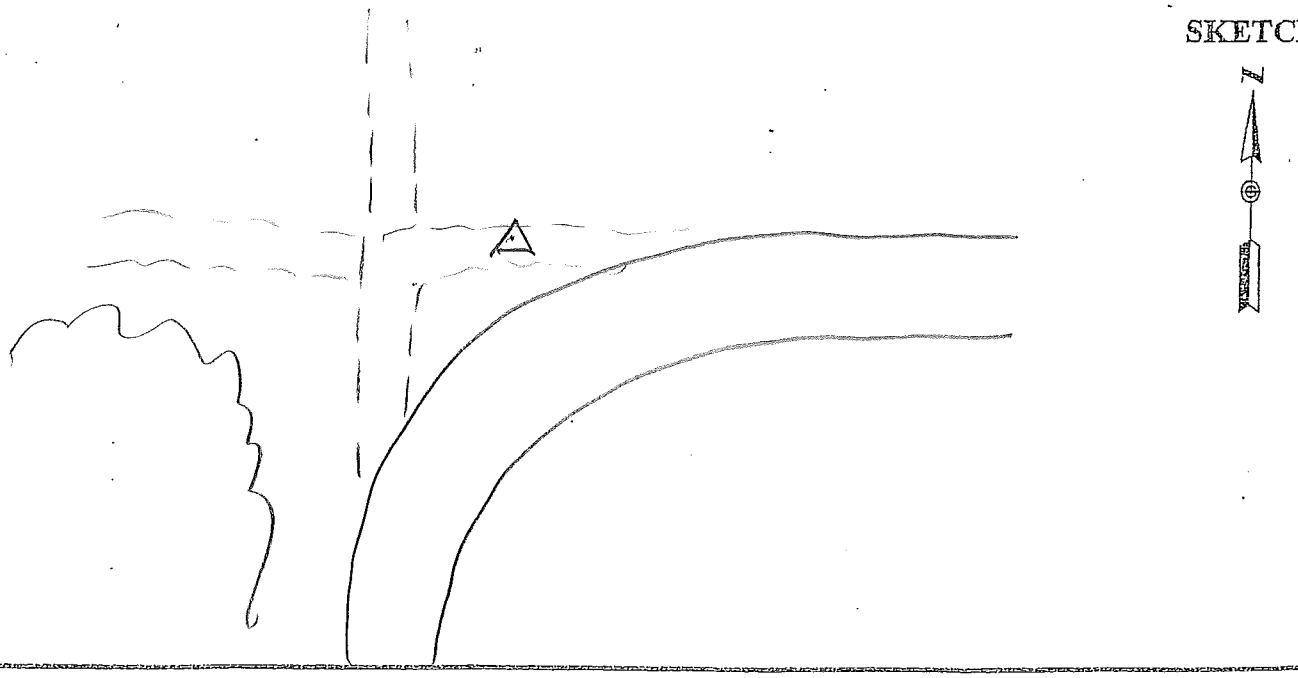
1758

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1226	1.7	9/9
1246		

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

Bourbon Co. hand √PT

PROJECT 1120103
OPERATOR MB
DATE 2·15·12

SITE NUMBER 6
SITE NAME 535

TRACKING TIMES (LOCAL) MEASURE √
START 12:06 p
STOP 12:26 p

SENSOR TYPE 500 9500 399 299
MEMORY CARD 603
BATTERY NO. CD
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
(500) (0.360)

OBSTRUCTIONS: none

HEIGHT READINGS MTS FT
1.401
1.761

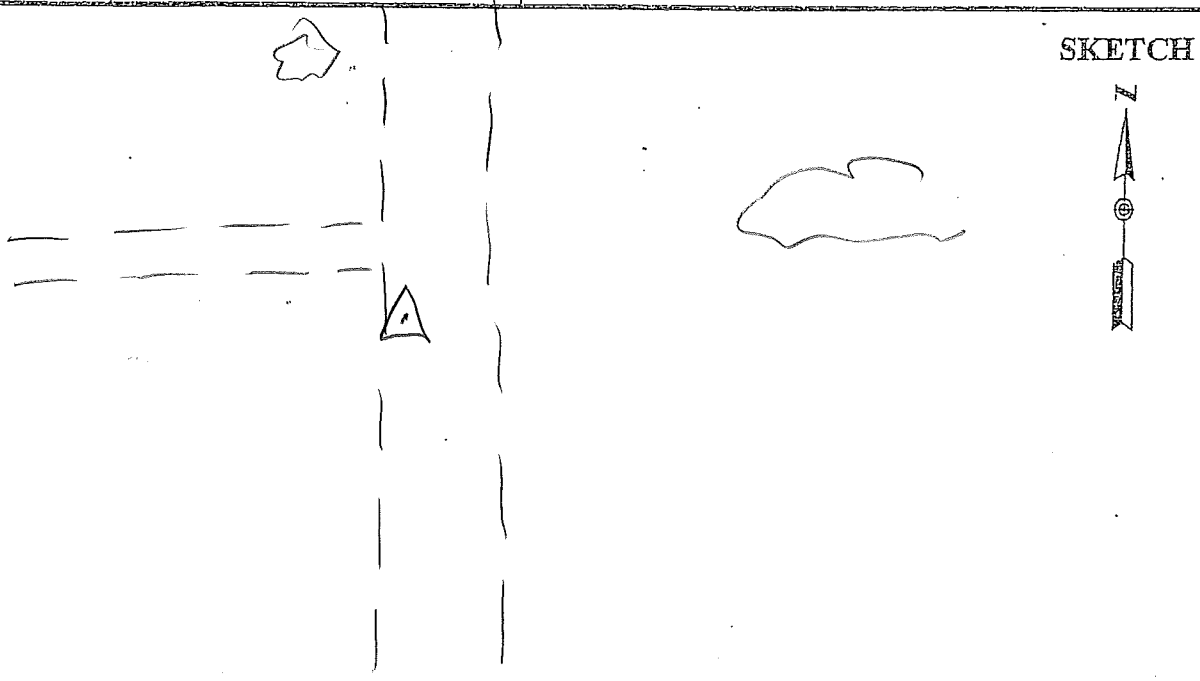
STATION DESCRIPTIONS W. side road

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1306	2.1	10/10
1326		

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

Bourbon Co. woods /PT

PROJECT 1120103
OPERATOR MD
DATE 2-15-12

SITE NUMBER 7
SITE NAME 417

TRACKING TIMES (LOCAL) MEASURE ✓
START 12:42 p
STOP 1:06

SENSOR TYPE 500 9500 399 299
MEMORY CARD 603
BATTERY NO. CB
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
500 0.360

OBSTRUCTIONS: trees above

HEIGHT READINGS MTS FT
1.381
1.741

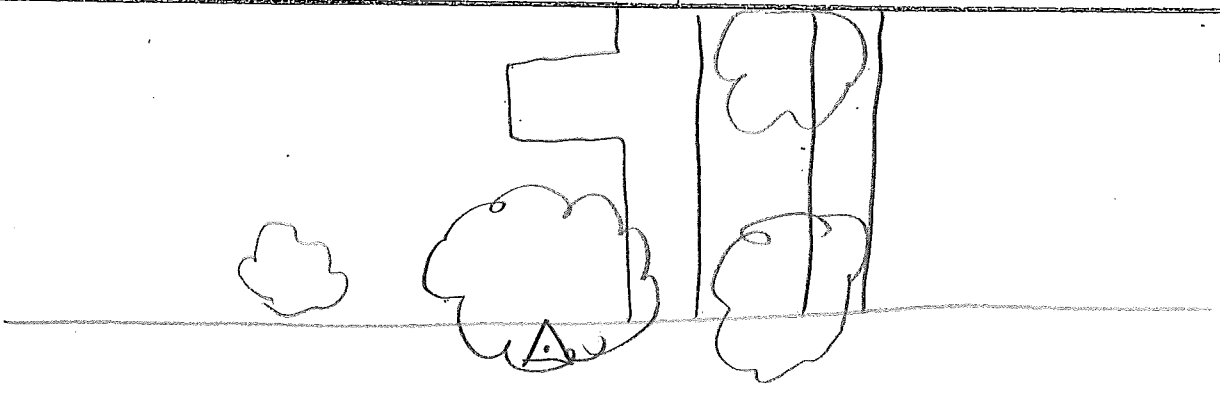
STATION DESCRIPTIONS N. side street

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1342	2.4	9/9
1406		

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH



OPEN

AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

Bourbon Co. hard √PT

PROJECT 1120103
OPERATOR MB
DATE 2.15.12

SITE NUMBER 8
SITE NAME 536

TRACKING TIMES (LOCAL) MEASURE √
START 1:20p
STOP

SENSOR TYPE 500 9500 399 299
MEMORY CARD 603
BATTERY NO. CB
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
500 0.360

OBSTRUCTIONS: tree E

HEIGHT READINGS MTS FT
1.429
1.789

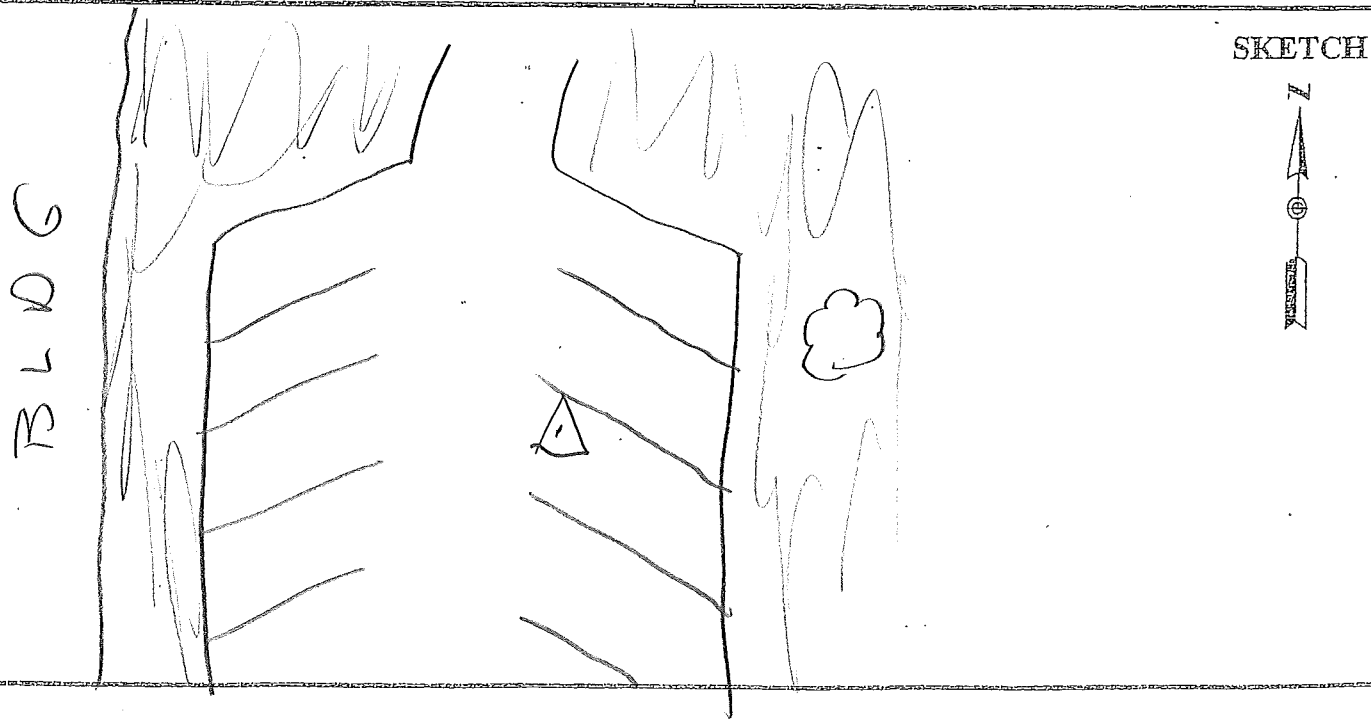
STATION DESCRIPTIONS in parking lot

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1420	2.3	10/10

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

POTT CO. BASE

PROJECT 112003
OPERATOR WM
DATE 2/16/12

SITE NUMBER 1
SITE NAME X 119

TRACKING TIMES (LOCAL) MEASURE CST
START 9:53
STOP 13:00

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 11
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
500 (0.360)

OBSTRUCTIONS: GUY WIRES W.

HEIGHT READINGS MTS FT
0.807
1.267

STATION DESCRIPTIONS BRASS DISK IN CONC POST
11 X 119 1934'

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
15:53	2.1	9/9-9
19:06	1.9	10/10-10

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
SKC

AS BEFORE DESCRIBED

SKETCH

362.651
392.621

AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

ROTT CO

BASE

PROJECT 11.20103
OPERATOR WJN
DATE 2/16/12

SITE NUMBER 1
SITE NAME 1017

TRACKING TIMES (LOCAL) MEASURE LST
START 10:36
STOP 13:26

SENSOR TYPE 500 (9500) 399 299
MEMORY CARD 101
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 (0.389)
500 0.360

OBSTRUCTIONS: NO

HEIGHT READINGS MTS FT
1.158
1.547

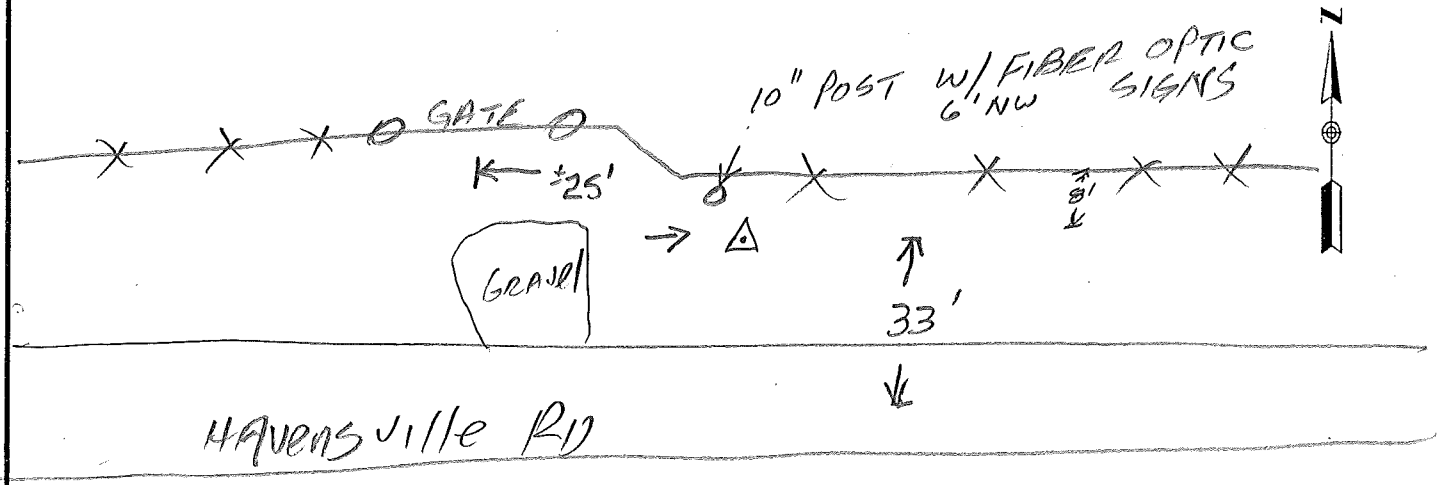
STATION DESCRIPTIONS SO + 8"
SPIKE

SATELLITE OBSERVATIONS

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
SKC

TIME	GDOP	SATELLITES	
10:36	2.5	9/9-9	ϕ_{PP} 39 30 52.7 lat
19 26	2.1	10/10-10	ϕ_{x} 96 05 13.5 long

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

POTT CO 5

PROJECT 1120103
OPERATOR WJN
DATE 2/16/12

SITE NUMBER 1
SITE NAME 1527

TRACKING TIMES (LOCAL) MEASURE CST
START 10:44
STOP 11:02

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 14
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
500 (0.360)

HEIGHT READINGS MTS FT
1.303

OBSTRUCTIONS: BLG SE, W.

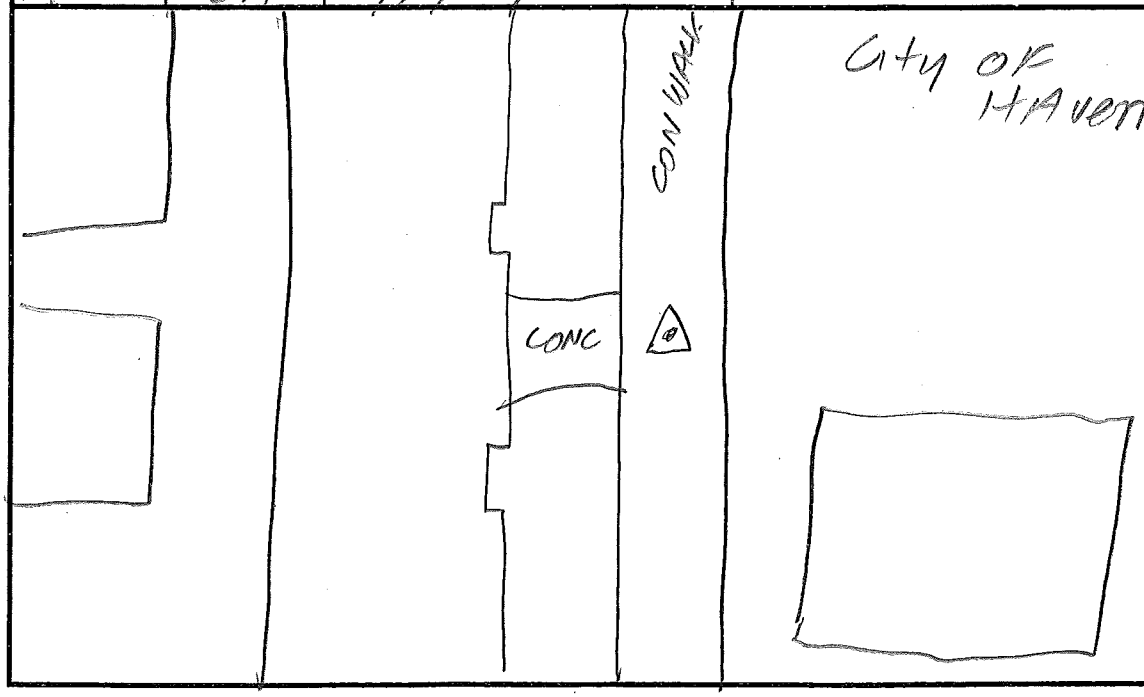
STATION DESCRIPTIONS 4 WIDE CONC WALK OFF 4 CONC. APPROACH W

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1644	2.0	9 9 - 9
1702	2.1	9 9 - 9

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
SKY

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

Pott Co

2

PROJECT 1120103
OPERATOR WJN
DATE 2/16/12

SITE NUMBER 2
SITE NAME 1226

TRACKING TIMES (LOCAL) MEASURE CST
START 11:14
STOP 11:32

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 14
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
500 (0.360)

HEIGHT READINGS MTS FT
1.279

OBSTRUCTIONS: NO

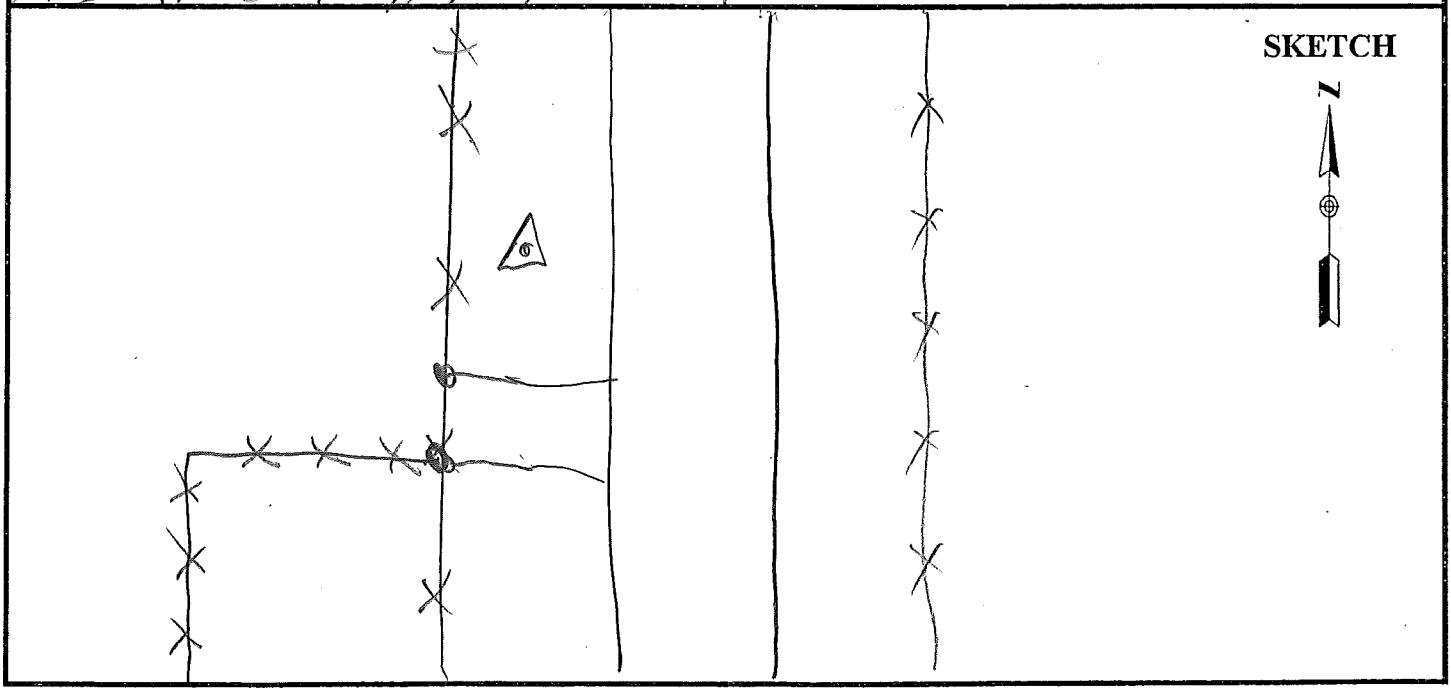
STATION DESCRIPTIONS POINT IN LONG GRASS IN W. R/W N-S RD.

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1714	1.6	9/9-9
1732	1.8	9/9-9

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
SKC

SKETCH



POTT CO.

AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

1

PROJECT 120103
OPERATOR WJN
DATE 2/16/12

SITE NUMBER 3
SITE NAME 1127

TRACKING TIMES (LOCAL) MEASURE CST
START 11:46
STOP 12:02

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 14
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
500 (0.360)

OBSTRUCTIONS: NO

HEIGHT READINGS MTS FT
1.290

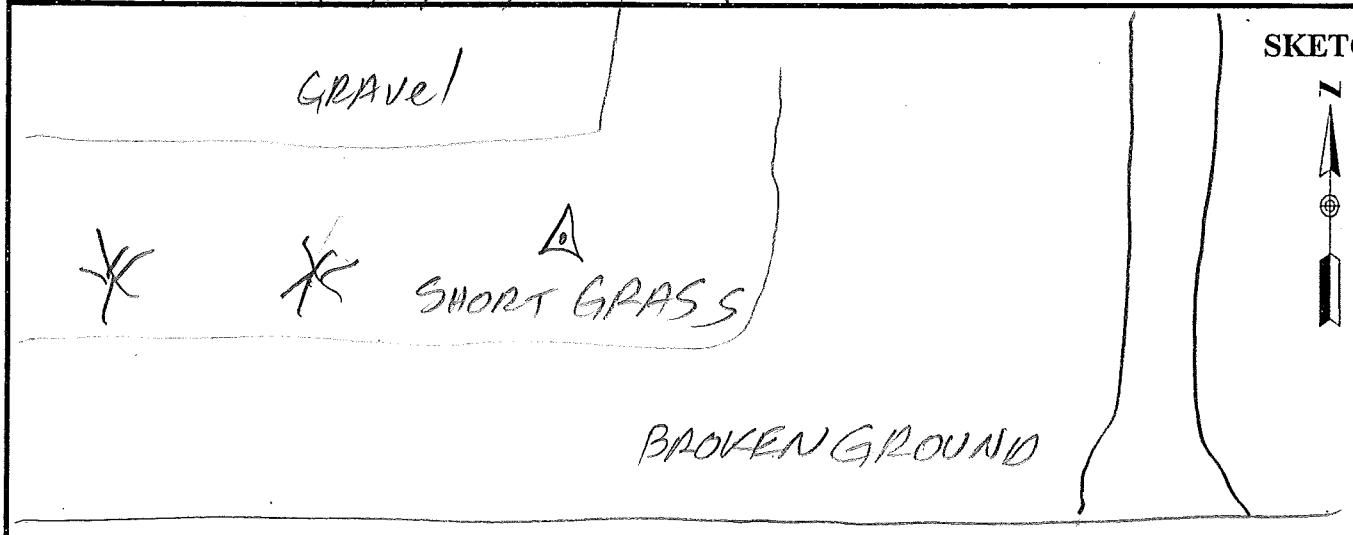
STATION DESCRIPTIONS POINT IN SHORT GRASS

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
17:46	2.1	9/9-9
18:02	2.0	9/9-9

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
SKC

SKETCH



ONAGA BYPASS

AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

POTT CO. 4

PROJECT 1120103
OPERATOR WJN
DATE 2/16/12

SITE NUMBER 4
SITE NAME 1427

TRACKING TIMES (LOCAL) MEASURE CST
START 12:23
STOP 12:43

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 14
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
500 (0.360)

OBSTRUCTIONS: TREES

HEIGHT READINGS MTS FT
1.180

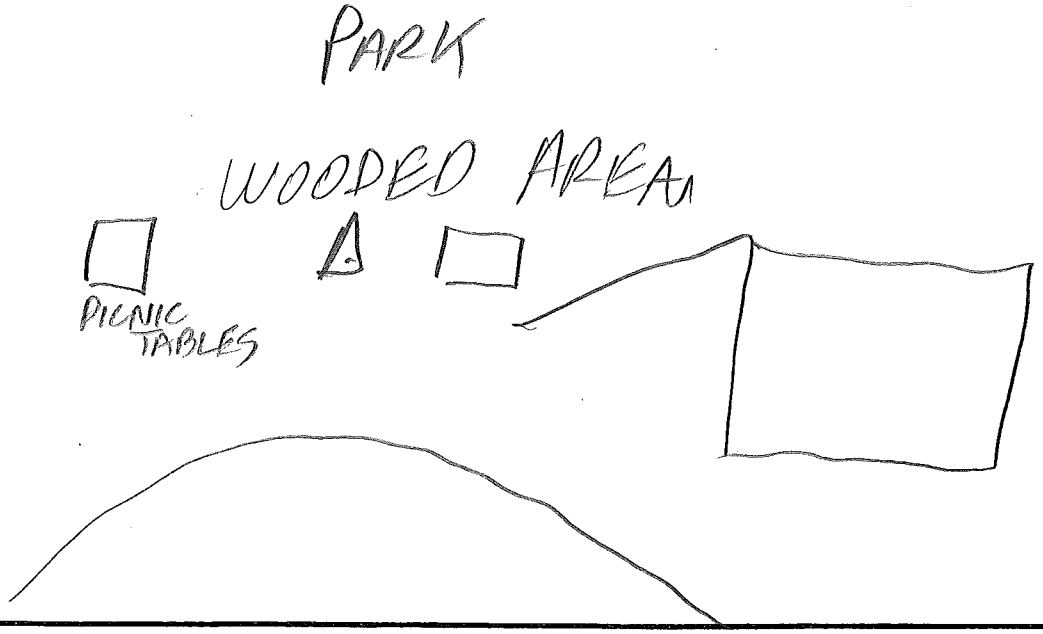
STATION DESCRIPTIONS POINT IN WOODED AREA

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
12:23	2.6	6/6-9
12:43	2.9	7/7-9

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
SKC

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

Base

PROJECT 1120103
OPERATOR MWW
DATE 3/27/12

SITE NUMBER 1
SITE NAME W 106

TRACKING TIMES (LOCAL) MEASURE CDT
START 11:53
STOP 16:48

SENSOR TYPE 500 (9500) 399 299
MEMORY CARD
BATTERY NO.
CONTROLLER NO. 273330
SENSOR NO. 1573
ANT NO Serial #

SENSOR CONSTANT
299/399 0.441
399E/9500 ~~0.389~~
500 0.360

OBSTRUCTIONS: NO

HEIGHT READINGS MTS FT
1.338
1.577

STATION DESCRIPTIONS BRASS DISK IN CONC "W 106 1934"

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1653	2.0	10/10-10
21:48	2.8	7/7-7

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
WINDY, OVC

As Recd Described

SKETCH

27 17 5

AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

2

PROJECT 1120203
OPERATOR MJN
DATE 3/27/10

SITE NUMBER 1
SITE NAME 1227

TRACKING TIMES (LOCAL) MEASURE CDT
START 1211
STOP 1242

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 11
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
500 ~~0.360~~

OBSTRUCTIONS: TREE E

HEIGHT READINGS MTS FT
1.235
1.595

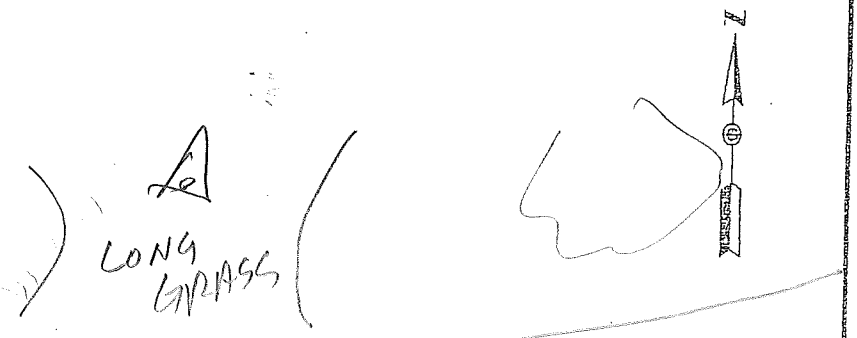
STATION DESCRIPTIONS POINT IN LONG GRASS IN C OF FIELD ACC

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1211	1.9	9/9-9
1242	1.9	9/9-9

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

1

PROJECT 1120103
OPERATOR WSM
DATE 3/27/12

SITE NUMBER 2
SITE NAME 1128

TRACKING TIMES (LOCAL) MEASURE CDT
START 1254
STOP 1323

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 11
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
500 (0.360)

OBSTRUCTIONS: TREES SW, E

HEIGHT READINGS MTS FT
1.348
1.708

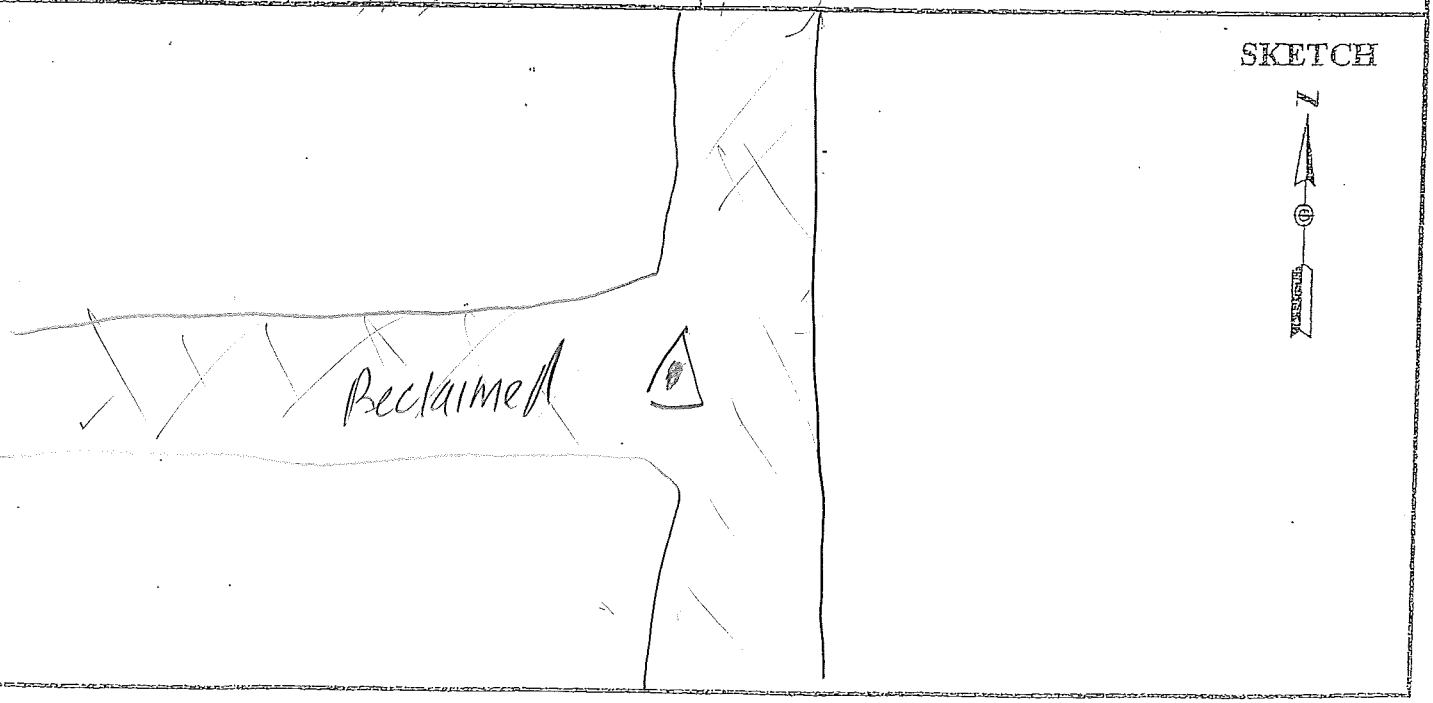
STATION DESCRIPTIONS POINT IN SHORT SPARSE GRASS / BARE EARTH @ INT OF RECLAIMED RDS

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1254	1.6	9/9-9
1323	1.8	9/9-9

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
MC

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

PROJECT 120103
OPERATOR WJN
DATE 3/27/12

SITE NUMBER 3
SITE NAME 1228

TRACKING TIMES (LOCAL) MEASURE CDT
START 13:38
STOP 1409

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 11
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 ~~0.389~~
500 0.360

OBSTRUCTIONS: NO

HEIGHT READINGS MTS FT
1.305

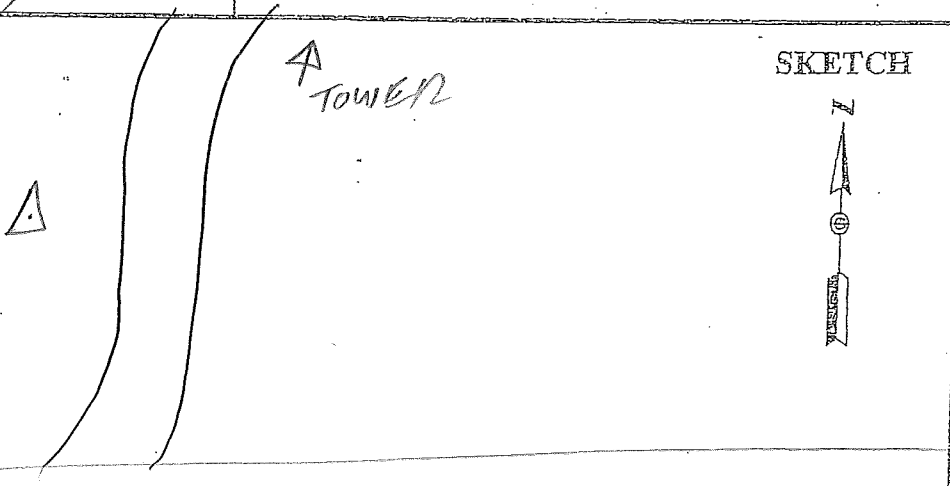
STATION DESCRIPTIONS POINT IN LONG GRASS IN W. R/W OF TOWER ACC.

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1838	2.0	9/9-9
1908	2.0	9/9-9

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
MC CLEARING

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

PROJECT 120103
OPERATOR WJW
DATE 3/27/12

SITE NUMBER 4
SITE NAME 1428

TRACKING TIMES (LOCAL) MEASURE CNT
START 1422
STOP 1449

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 11
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
500 0.560

OBSTRUCTIONS: TREES S

HEIGHT READINGS MTS FT
1.320

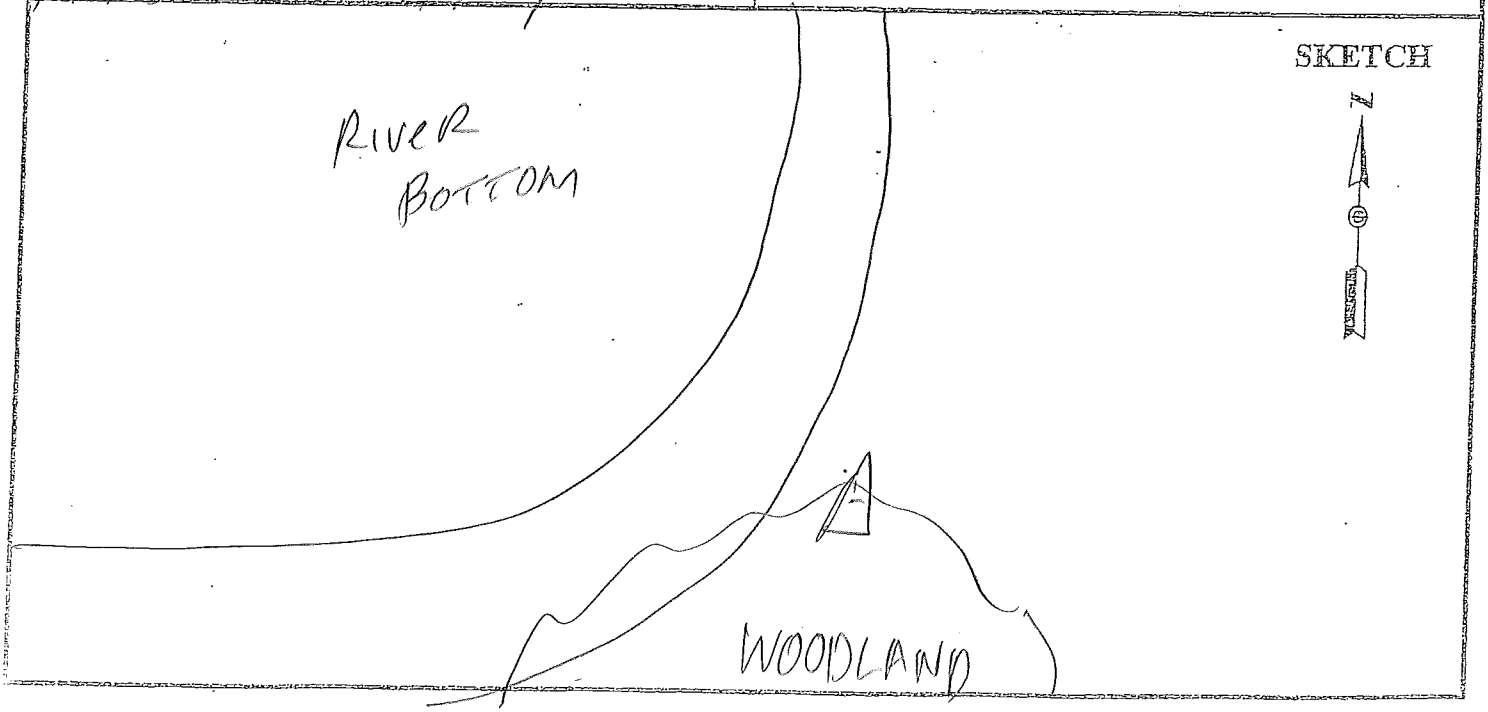
STATION DESCRIPTIONS POINT 11
FORESTED AREA

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1922	2.8	8/8-8
1949	2.0	9/9-9

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
PC

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

1

PROJECT 1120103
OPERATOR WVN
DATE 3/27/12

SITE NUMBER 5
SITE NAME 1129

TRACKING TIMES (LOCAL) MEASURE CDT
START 1459
STOP

SENSOR TYPE (500) 9500 399 299
MEMORY CARD
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
500 (0.360)

OBSTRUCTIONS: TREE E.

HEIGHT READINGS MTS FT
1.314

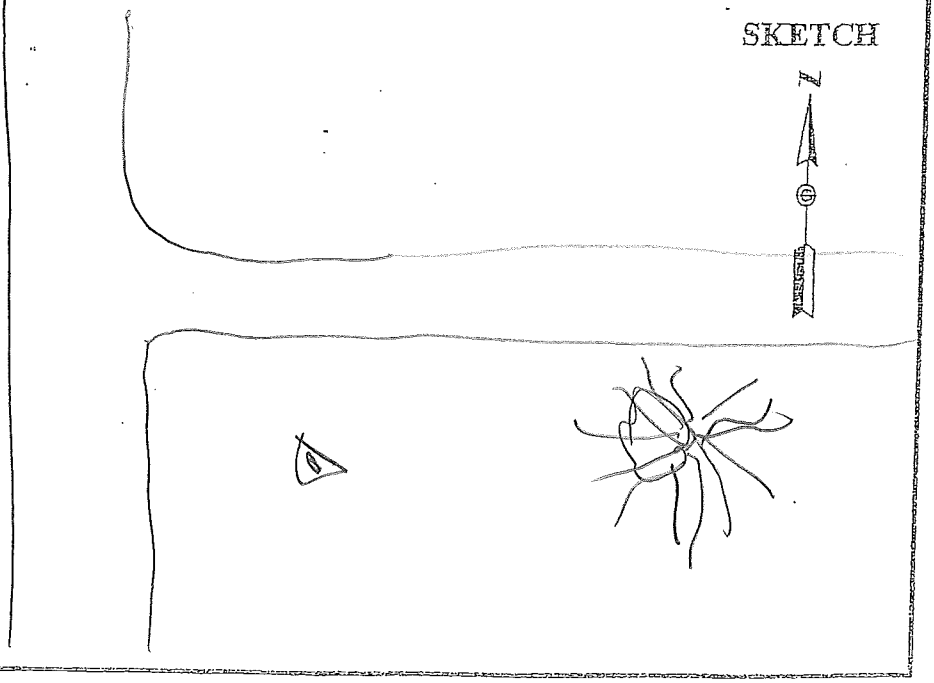
STATION DESCRIPTIONS POINT 101
SPARSE GRASS RIVER
BOTTOM LAND SE OF
INT RDS

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1459	2.3	8 10 9

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
PC

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

5

PROJECT 1120103
OPERATOR WJN
DATE 3/27/12

SITE NUMBER 6
SITE NAME 1528

TRACKING TIMES (LOCAL) MEASURE CDT
START 15:57
STOP 16:28

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 11
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
500 (0.360)

OBSTRUCTIONS: TRAFFIC

HEIGHT READINGS MTS 1.373 FT

STATION DESCRIPTIONS POINT NEAR SW COR PARKING LOT

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
20:57	2.8	3/9-6
21:28	2.2	9/5-3

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
PC

SKETCH

1 CONC

AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

BASE

PROJECT 1120103
OPERATOR WJN
DATE 3/28/12

SITE NUMBER 1
SITE NAME 1009

TRACKING TIMES (LOCAL) MEASURE CDT
START 9:14
STOP 14:04

SENSOR TYPE 500 (9500) 399 299
MEMORY CARD 101
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 (0.389)
500 0.360

OBSTRUCTIONS: NO

HEIGHT READINGS MTS FT
1.160

STATION DESCRIPTIONS Rebar and Cap Set PREVIOUSLY

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
14:14	1.6	10/10-10
1904	1.9	8/8-8

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
SKC

AS BEFORE DESCRIBED

SKETCH

KSTG MARK MOSV 16 22 7

AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

BASE

PROJECT 1120103
OPERATOR WVH
DATE 3/28/12

SITE NUMBER 1
SITE NAME 1011

TRACKING TIMES (LOCAL) MEASURE CDT
START 10:00
STOP 17:00

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 11
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
500 (0.360)

OBSTRUCTIONS: NO

HEIGHT READINGS MTS FT
1.197

STATION DESCRIPTIONS SPIKE
Previously SET

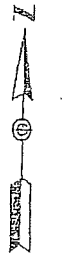
SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1500	1.7	10/10-10
2200	7.2	6/6-6

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
PC

As Before described

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

4

PROJECT 1120103
OPERATOR WJN
DATE 3/28/12

SITE NUMBER 1
SITE NAME 1429

TRACKING TIMES (LOCAL) MEASURE CDT
START 10:19
STOP 10:43

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 14
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
500 (0.360)

OBSTRUCTIONS: TREES

HEIGHT READINGS MTS FT
1.265

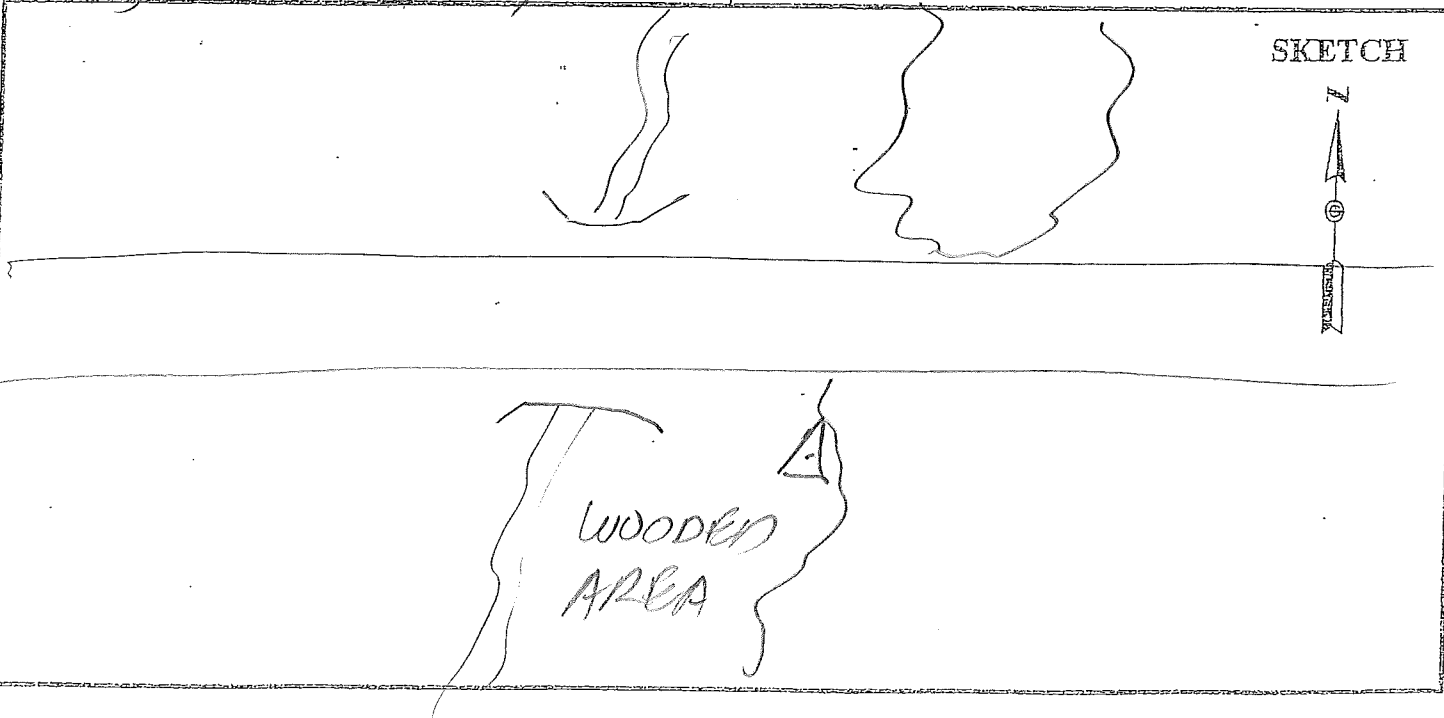
STATION DESCRIPTIONS POINT IN WOODED AREA SE OF INT E-W TRAIL AND CREEK

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
15 19	2.8	9/9-10
15 43	2.0	9/9-9

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
PC

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

PROJECT 112010 3
OPERATOR WJN
DATE 3/28/12

SITE NUMBER 2
SITE NAME 1430

TRACKING TIMES (LOCAL) MEASURE CDT
START 11:09
STOP 11:32

SENSOR TYPE (500) 9500 399 299
MEMORY CARD
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
500 (0.360)

OBSTRUCTIONS: TREES

HEIGHT READINGS MTS FT
1.266

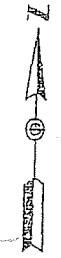
STATION DESCRIPTIONS POINT IN WOODED LAMP

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1609	2.9	10/10-10
1632	2.3	10/10-10

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH



WOODED

PRIMITIVE RD

AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

2

PROJECT 1120103
OPERATOR WJN
DATE 3/28/12

SITE NUMBER 3
SITE NAME 1229

TRACKING TIMES (LOCAL) MEASURE CDT
START 11:52
STOP 12:09

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 14
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
500 (0.360)

OBSTRUCTIONS: NO

HEIGHT READINGS
MTS 1.276
FT

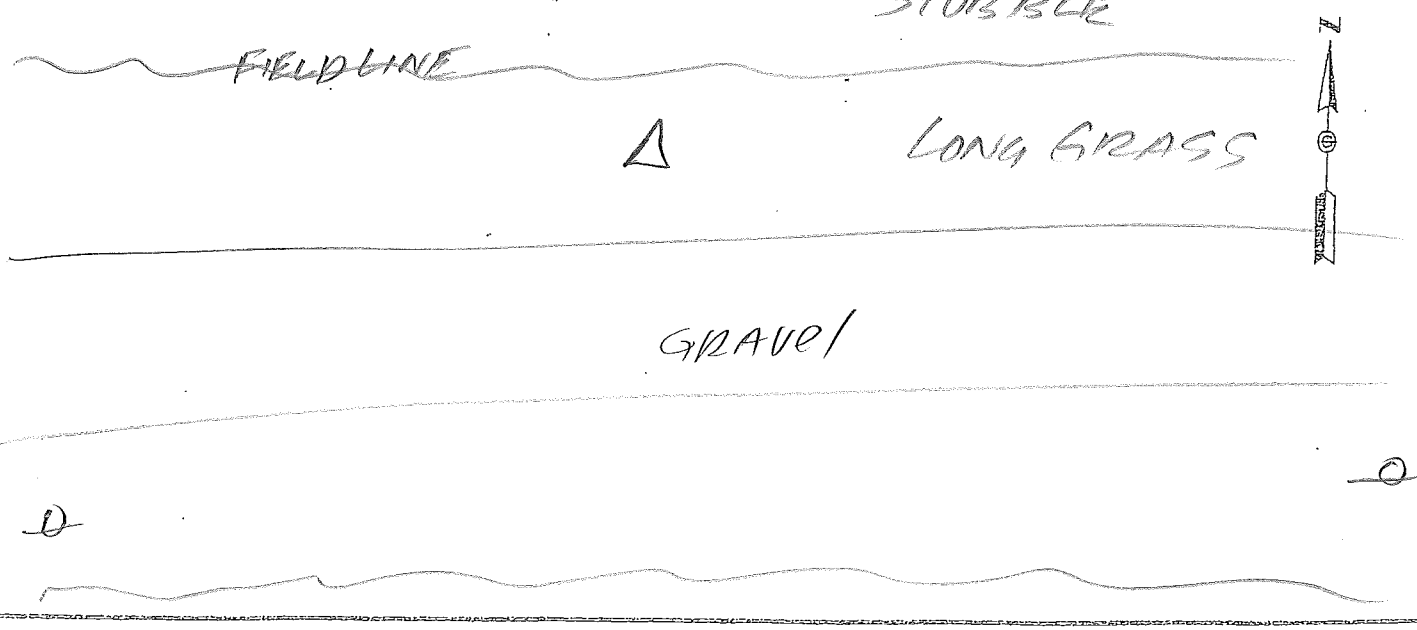
STATION DESCRIPTIONS POINT (A) LONG GRASS IN N. R/W OF E-W RD

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
16:52	1.8	9/9-9
17:09	2.0	9/9-9

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
PC

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

PROJECT 1120103
OPERATOR WJN
DATE 3/28/12

SITE NUMBER 4
SITE NAME 1130

TRACKING TIMES (LOCAL) MEASURE CDT
START 1247
STOP 1309

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 14
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
500 (0.360)

OBSTRUCTIONS: PPL S. STREET SIGN S.

HEIGHT READINGS
MTS 1.210
FT

STATION DESCRIPTIONS POINT IN SHORT GRASS IN P/W NE OF INT

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1747	2.0	9/9-9
1809	2.1	9/9-9

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
MC

SKETCH

AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

5

PROJECT 1120103
OPERATOR WAN
DATE 3/28/12

SITE NUMBER 5
SITE NAME 1529

TRACKING TIMES (LOCAL) MEASURE CDT
START 13:31
STOP 13:53

SENSOR TYPE (500) 9500 399 299
MEMORY CARD
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
500 (0.360)

OBSTRUCTIONS: NO

HEIGHT READINGS MTS FT
1.356

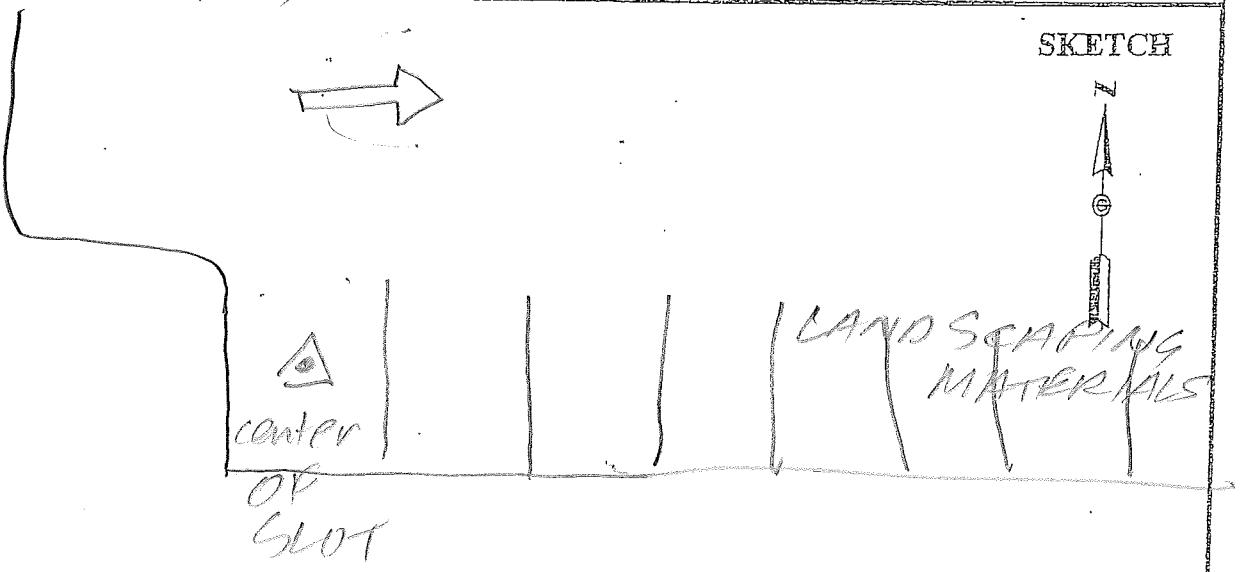
STATION DESCRIPTIONS POINT NEAR SW COR PARKING LOT

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
13:31	2.0	9/9-9
13:53	2.0	9/9-9

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
MC, WINDY

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

BASE

PROJECT 120103
OPERATOR WJN
DATE 3/28/12

SITE NUMBER 1
SITE NAME 1012

TRACKING TIMES (LOCAL) MEASURE CDT
START 14:47
STOP 17:16

SENSOR TYPE 500 (9500) 399 299
MEMORY CARD 101
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 (0.389)
500 0.360

OBSTRUCTIONS: NO

HEIGHT READINGS MTS FT
1.192
1.581

STATION DESCRIPTIONS Rebar
AND CAP SET PREVIOUSLY

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
14:47	2.0	9/9-9
22:16	2.2	9/9-9

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
MC, WINDY

AS BEFORE DESCRIBED SKETCH

AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

1

PROJECT 112010 3
OPERATOR WJN
DATE 3/28/12

SITE NUMBER 6
SITE NAME 1131

TRACKING TIMES (LOCAL) MEASURE CDT
START 1507
STOP 15:25

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 14
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
500 (0.360)

OBSTRUCTIONS: OH Power lines, BLDG SW

HEIGHT READINGS MTS FT
1.275

STATION DESCRIPTIONS POINT 1N SHORT GRASS

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
2007	2.2	9/9-9
20:25	2.0	9/9-9

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
MC

SKETCH

SHORT GRASS

WOODLAWN COMM. CNTR

AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

2

PROJECT 1120103
OPERATOR WJN
DATE 3/28/12

SITE NUMBER 7
SITE NAME 1230

TRACKING TIMES (LOCAL) MEASURE CDT
START 15:44
STOP 16:06

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 14
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
500 (0.360)

HEIGHT READINGS MTS 1.284 FT

OBSTRUCTIONS: OH POWER LINES

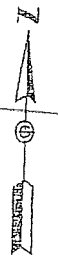
STATION DESCRIPTIONS POINT IN LONG GRASS IN S. R/W

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
2044	2.0	9/9-9
2106	2.	

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH



GRAVEL RD

LONG GRASS

FIELD LINE

1346

AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

5

PROJECT 112003
OPERATOR MJN
DATE 3/28/12

SITE NUMBER 8
SITE NAME 1530

TRACKING TIMES (LOCAL) MEASURE CDT
START 16:27
STOP 16:48

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 14
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
500 ~~0.360~~

OBSTRUCTIONS: TREE E

HEIGHT READINGS MTS FT
1.346

STATION DESCRIPTIONS POINT IN
CENTER PAVED PARKING LANE
OPP TREE EAST

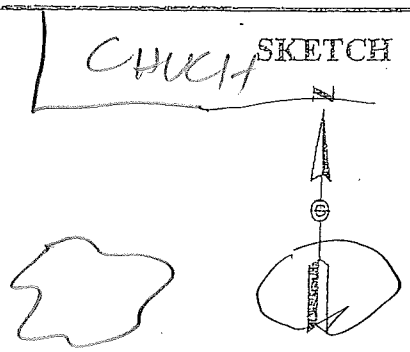
SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
21:27	2.6	8/8-9
21:48	2.2	9/9-9

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
MC

TOWN OF
FIDELITY
CEMETERY

CHUCK SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

PROJECT 1120103
OPERATOR WJN
DATE 3/28/2

SITE NUMBER 9
SITE NAME 1133

TRACKING TIMES (LOCAL) MEASURE CDT
START 1529
STOP 1555

SENSOR TYPE (500) 9500 399 299
MEMORY CARD
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
500 (0.360)

OBSTRUCTIONS: TREES W
PPL W

HEIGHT READINGS MTS FT
1.305

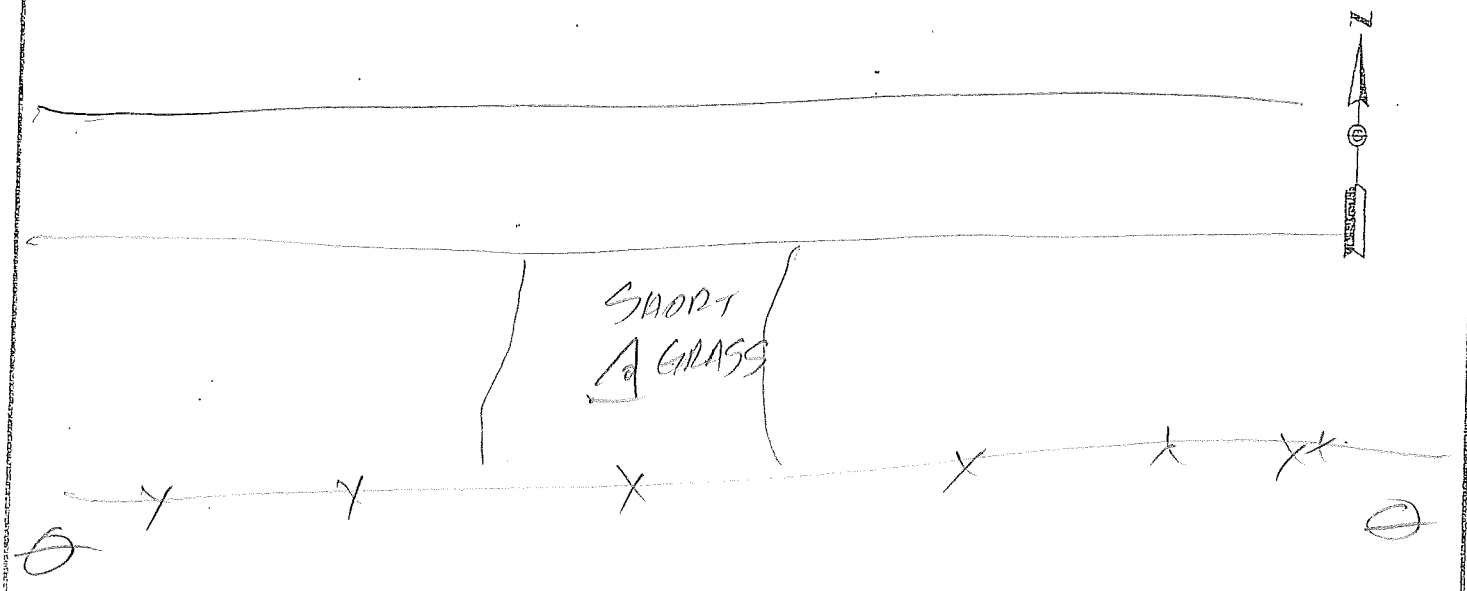
STATION DESCRIPTIONS POINT W
SHORT GRASS, 1

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
2029	2.0	9/9-9
2055	2.1	9/9-9

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
MC

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
Bourbon Co. SHEBOYGAN, WISCONSIN 53083 Base short V PT

PROJECT 1120103
OPERATOR MO
DATE 3·28·12

SITE NUMBER 1
SITE NAME 1002

TRACKING TIMES (LOCAL) MEASURE V
START 1:13 p
STOP

SENSOR TYPE 500 9500 399 299
MEMORY CARD 603
BATTERY NO. CB
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 ~~0.389~~
500 0.360

OBSTRUCTIONS:

HEIGHT READINGS MTS FT
1.347

1.707

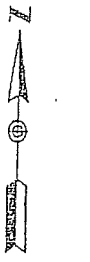
STATION DESCRIPTIONS

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1313	1.9	6/6

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH



see previous

AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

Bourbon Co. Base/Control

PROJECT 1120103
OPERATOR MB
DATE 3.28.12

SITE NUMBER 1
SITE NAME C233 RESET

TRACKING TIMES (LOCAL) MEASURE ✓
START 1:43 p
STOP

SENSOR TYPE 500 9500 399 299
MEMORY CARD 704
BATTERY NO. CD
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 ~~0.389~~
500 0.360

OBSTRUCTIONS:

HEIGHT READINGS MTS FT
1.348
1.708

STATION DESCRIPTIONS

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1343	2.7	5/5

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH

See Previous

AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSEN 53083

Bourbon Co.

tall grass ✓PT

PROJECT 1120103
OPERATOR MB
DATE 3.28.12

SITE NUMBER 1
SITE NAME 234

TRACKING TIMES (LOCAL) MEASURE ✓
START 1:58 p
STOP 2:18 p

SENSOR TYPE 500 9500 399 299
MEMORY CARD 67
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
(500) 0.360

OBSTRUCTIONS: none

HEIGHT READINGS MTS FT
1.448
1.808

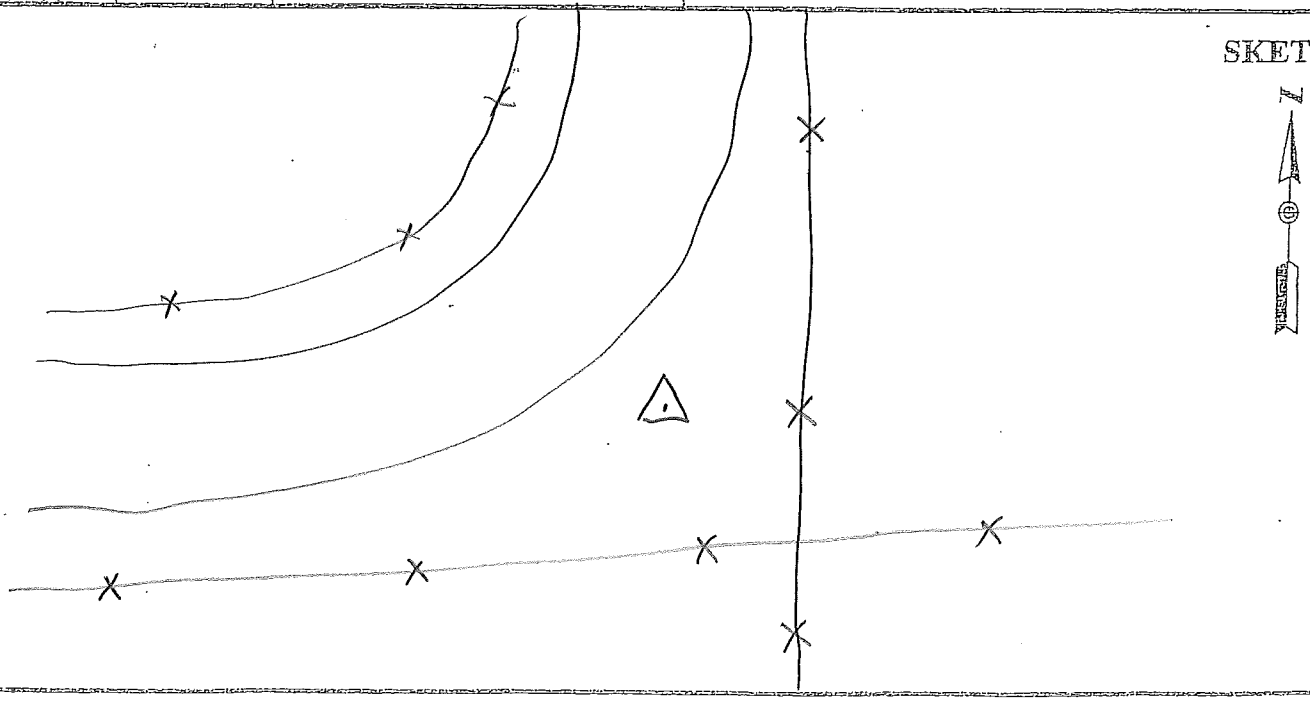
STATION DESCRIPTIONS tall grass
SE side road

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1358	3.5	5/5
1418		

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

Bourbon Co.

hand V PT

PROJECT 1120103
OPERATOR MB
DATE 3·28·12

SITE NUMBER 2
SITE NAME 537

TRACKING TIMES (LOCAL) MEASURE ✓
START 2:34 p
STOP 2:54 p

SENSOR TYPE 500 9500 399 299
MEMORY CARD 67
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
500 0.360

HEIGHT READINGS MTS FT
1.380
1.740

OBSTRUCTIONS: tree SW

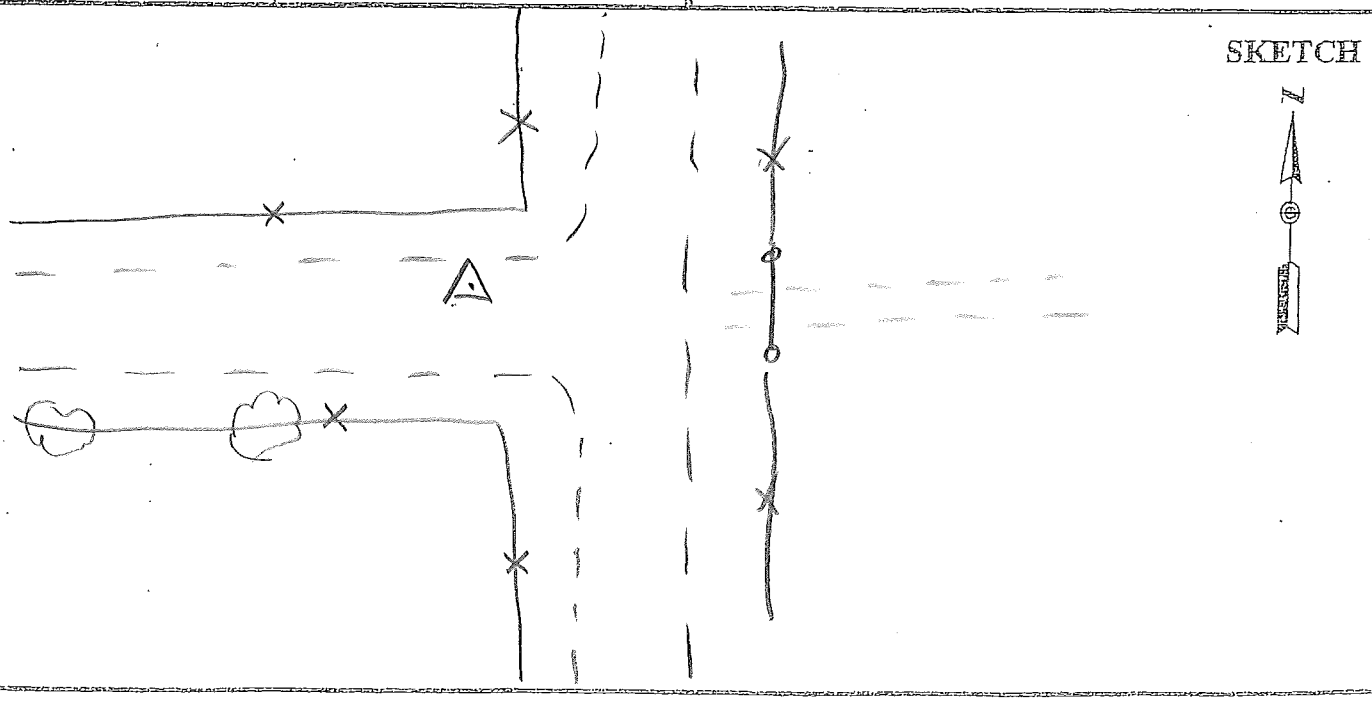
STATION DESCRIPTIONS N. side road

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1434	1.7	9/9
1454		

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

Bourbon Co. trees √PT

PROJECT 1120103
OPERATOR MB
DATE 3·28·12

SITE NUMBER 3
SITE NAME 418

TRACKING TIMES (LOCAL) MEASURE _____
START 2:59 p
STOP 3:19 p

SENSOR TYPE 500 9500 399 299
MEMORY CARD 67
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 ~~0.389~~
(500) (0.360)

OBSTRUCTIONS: trees above

HEIGHT READINGS MTS FT
1.378
1.738

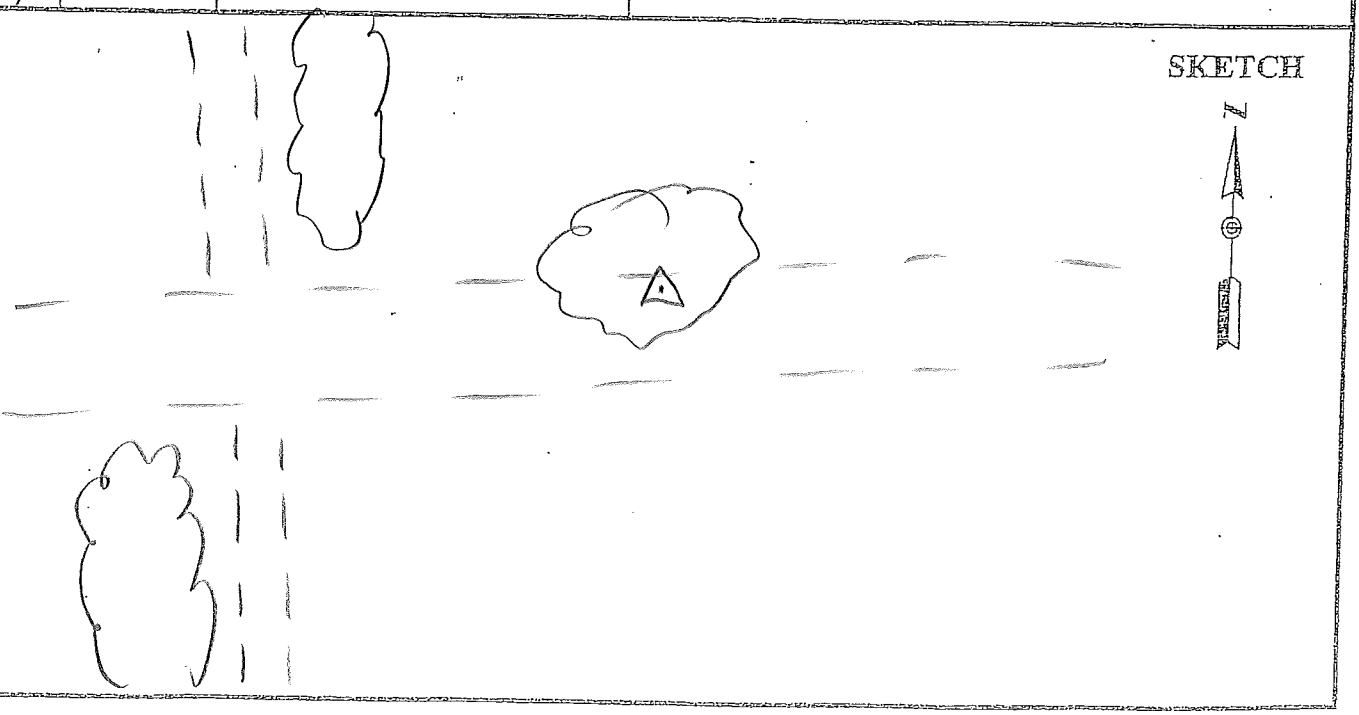
STATION DESCRIPTIONS N. side road

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1459	2.8	7/8
1519		

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

BASE

PROJECT 112010 3
OPERATOR WJN
DATE 3/29/12

SITE NUMBER 1
SITE NAME 1017

TRACKING TIMES (LOCAL) MEASURE CDT
START 9:41
STOP 16:03

SENSOR TYPE 500 (9500) 399 299
MEMORY CARD 101
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 ~~0.389~~
500 0.360

OBSTRUCTIONS: NO

HEIGHT READINGS MTS FT
1.163
1.552

STATION DESCRIPTIONS SPIKE
PREVIOUSLY SET

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1541	1.9	10/10 - 10
2103	1.8	10/10 - 10

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
OVC

AS BEFORE DESCRIBED

SKETCH

KSU1 KST5 MOAR

AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

BASE

PROJECT 1120103
OPERATOR WVH
DATE 3/29/12

SITE NUMBER 1
SITE NAME 1013

TRACKING TIMES (LOCAL) MEASURE CDT
START 1005
STOP 16:20

SENSOR TYPE (500) 9500 399 299
MEMORY CARD
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
500 ~~0.360~~

OBSTRUCTIONS: N/O

HEIGHT READINGS MTS FT
1.121

1:481

STATION DESCRIPTIONS Rebar and CAP Previously Set

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1505	1.7	10/10-10
2:20	2.0	9/9-9

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
OVC

AS BEFORE DESCRIBED

SKETCH

AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

PROJECT 1120103
OPERATOR WJN
DATE 3/29/12

SITE NUMBER 1
SITE NAME 1231

TRACKING TIMES (LOCAL) MEASURE CDT
START 10:25
STOP 10 43

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 14
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
500 (0.360)

OBSTRUCTIONS: NO

HEIGHT READINGS MTS FT
1.280

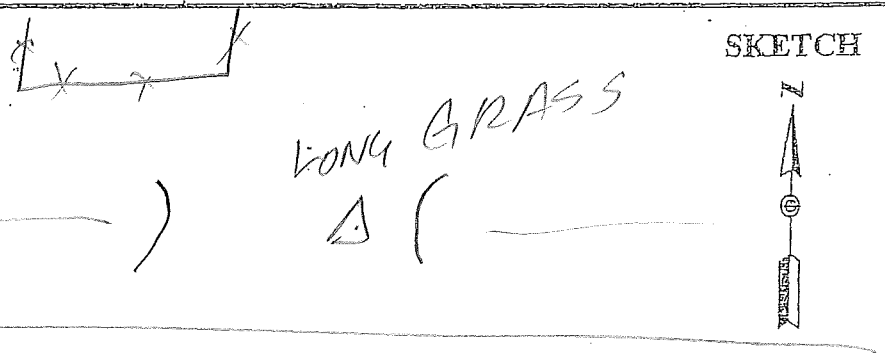
STATION DESCRIPTIONS POINT 10
LONG GRASS

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1525	2.7	9/9-9
1543	2.0	9/9-9

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
OVC

SKETCH



15 7

AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

PROJECT 1120103
OPERATOR WJN
DATE 3/29/12

SITE NUMBER 2
SITE NAME 1132

TRACKING TIMES (LOCAL) MEASURE CDT
START 10:56
STOP 11:15

SENSOR TYPE (500) 9500 399 299
MEMORY CARD
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
500 (0.360)

HEIGHT READINGS MTS FT
1.295

OBSTRUCTIONS: NO

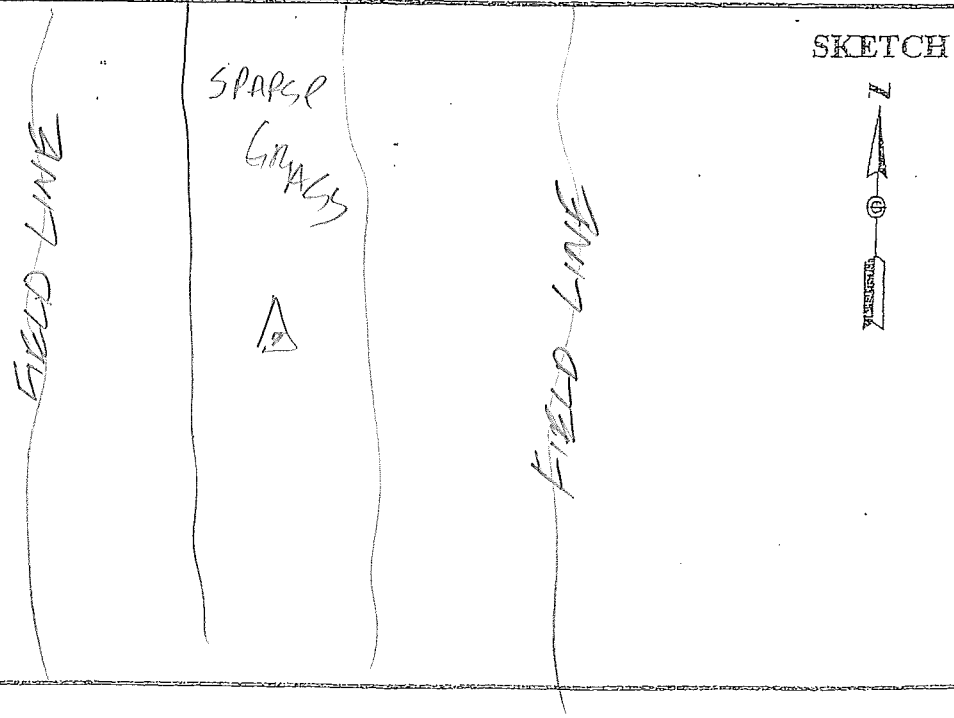
STATION DESCRIPTIONS POINT ON ℄ OF RECLAIMED Co Rd, SPARSE GRASS

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
15:56	2.3	10/10-10
16:15	2.5	10/10-10

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
OVC

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

PROJECT 1120103
OPERATOR WJN
DATE 3/29/12

SITE NUMBER 3
SITE NAME 1431

TRACKING TIMES (LOCAL) MEASURE CDT
START 11:32
STOP 11:53

SENSOR TYPE (500) 9500 399 299
MEMORY CARD
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
500 0.360

OBSTRUCTIONS: TREES

HEIGHT READINGS MTS FT
1.242

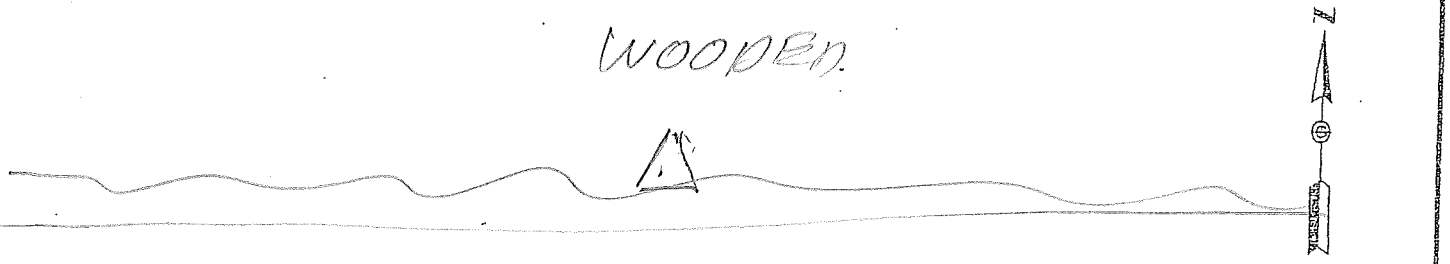
STATION DESCRIPTIONS POINT IN WOODED AREA

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
16:32	2.4	9/8-10
1653	2.4	9/9-10

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
OVC

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

PROJECT 1120103
OPERATOR WN
DATE 3/29/12

SITE NUMBER 4
SITE NAME 1531

TRACKING TIMES (LOCAL) MEASURE CDT
START 17:11
STOP 12:32

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 14
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
500 (0.360)

OBSTRUCTIONS: TREES E-W
BLDS E-W, TRAFFIC

HEIGHT READINGS MTS FT
1.330

STATION DESCRIPTIONS POINT IN
C OF P

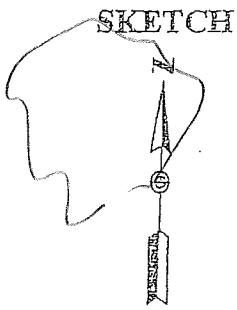
SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1711	2.1	7/7-8
1732	2.4	8/8-8

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

CITY OF SOLDIER

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

PROJECT 120103
OPERATOR WJN
DATE 3/29/12

SITE NUMBER 5
SITE NAME 1232

TRACKING TIMES (LOCAL) MEASURE GD7
START 1245
STOP 1312

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 14
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
500 (0.360)

HEIGHT READINGS MTS FT
1.207

OBSTRUCTIONS: NO

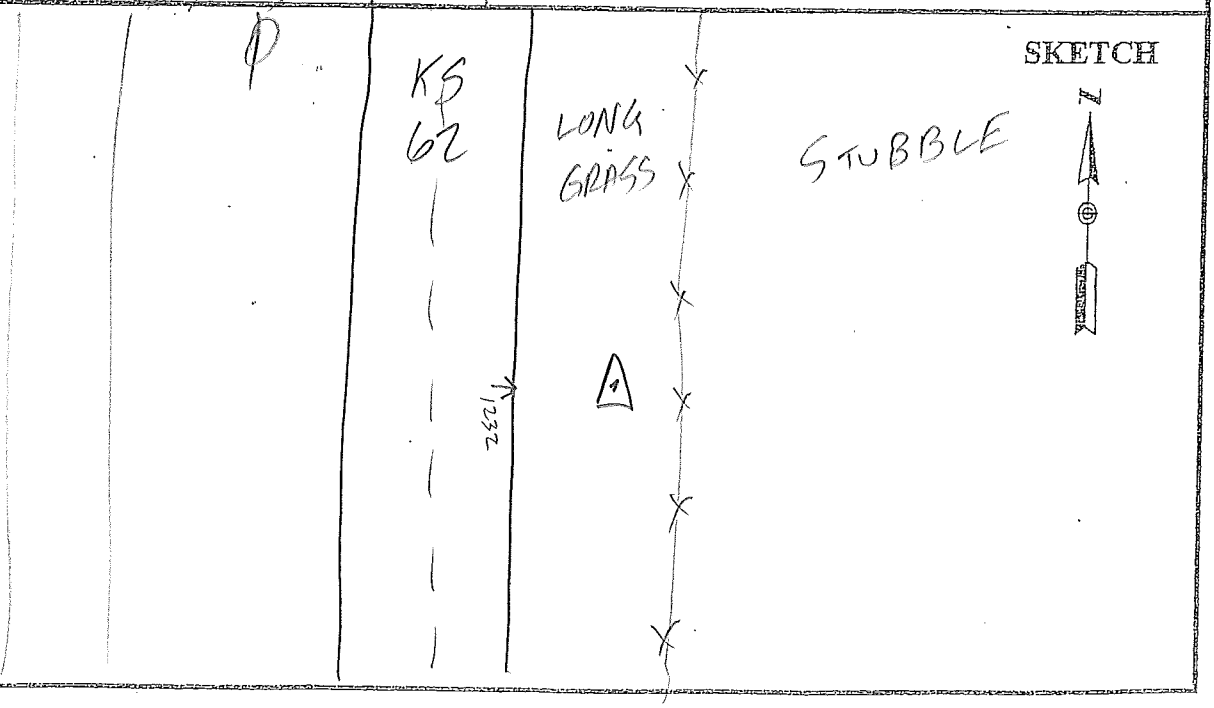
STATION DESCRIPTIONS Set 10" SPIKE IN TALL GRASS IN R/W, ±5' W OF N-S FENCE

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1245	2.1	9/9-9
18:17	2.0	9/9-9

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
OVC

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

PROJECT 1120103
OPERATOR WJN
DATE 3/29/12

SITE NUMBER 6
SITE NAME 1432

TRACKING TIMES (LOCAL) MEASURE CDT
START 13:40
STOP 14:04

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 14
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
500 (0.360)

OBSTRUCTIONS: TREES OVER-
HEAD

HEIGHT READINGS MTS FT
1.250

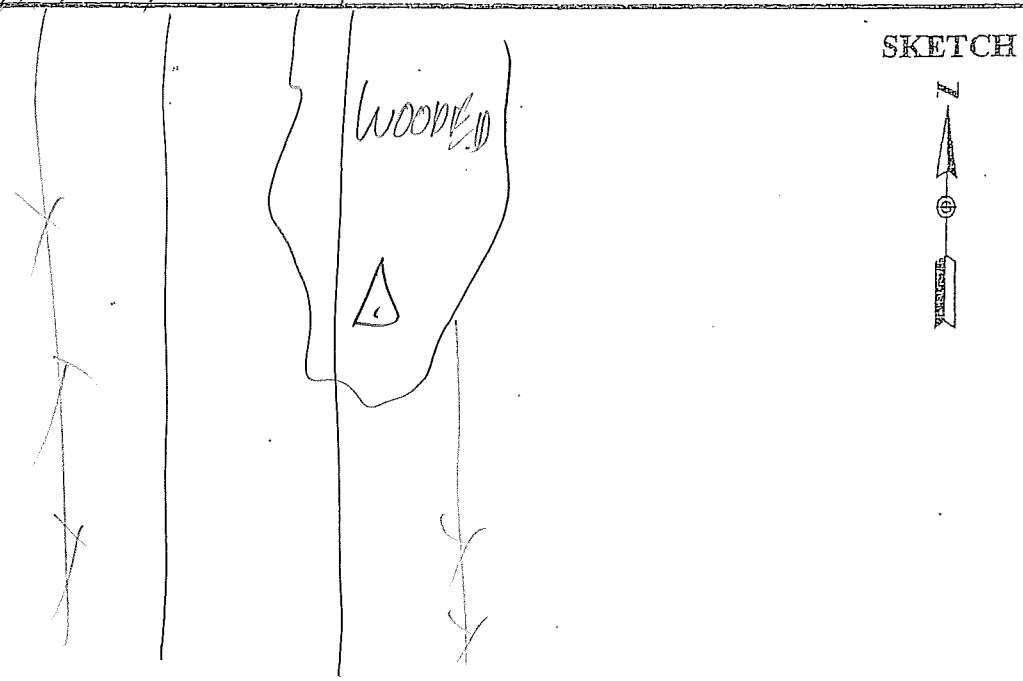
STATION DESCRIPTIONS POINT IN
WOODED AREA

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1040	2.1	9/9-9
14:04	2.0	9/9-9

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
OVC

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

PROJECT 11201103
OPERATOR WJA
DATE 3/29/12

SITE NUMBER 7
SITE NAME 1532

TRACKING TIMES (LOCAL) MEASURE CDT
START 1422
STOP 1439

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 17
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
500 ~~0.360~~

HEIGHT READINGS MTS 1.247 FT

OBSTRUCTIONS: TREES W

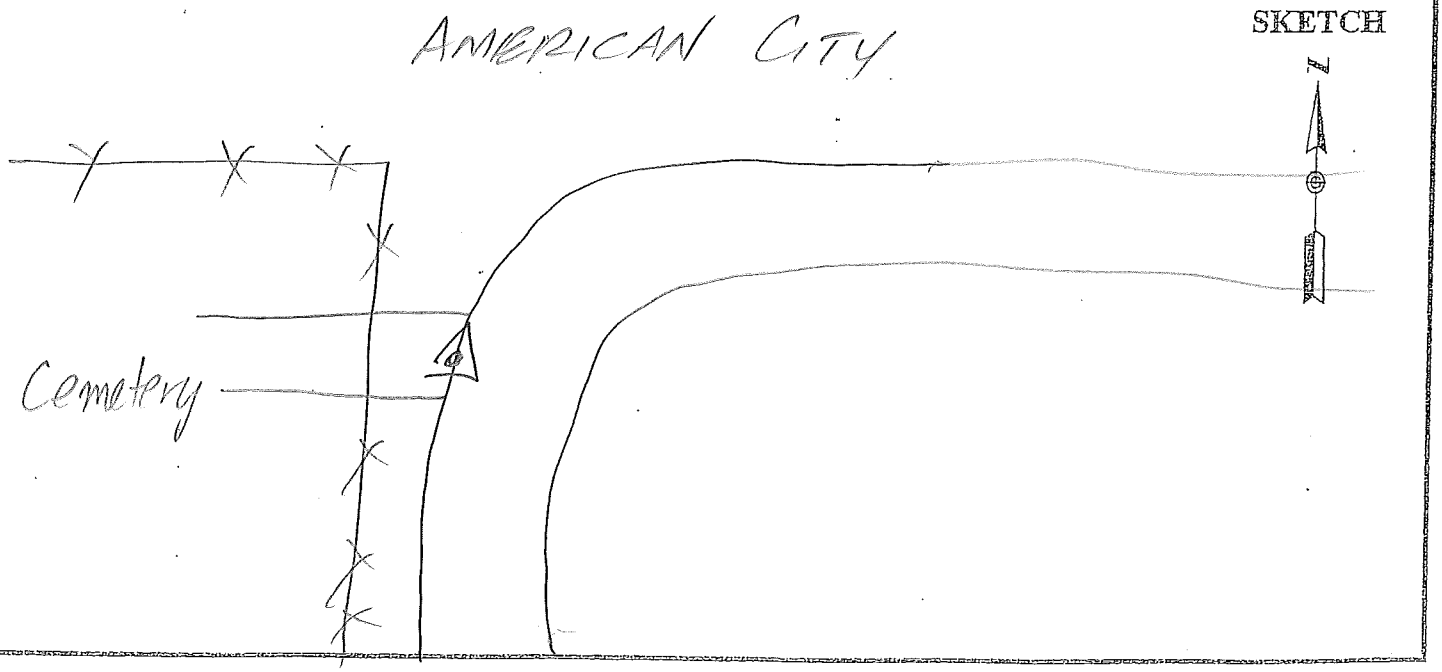
STATION DESCRIPTIONS W EDGE RD @ CEMETERY ACC W.

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1922	2.4	8/8-8
1939	2.2	8/8-8

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

PROJECT 112093
OPERATOR WDN
DATE 3/29/12

SITE NUMBER 8
SITE NAME 1233

TRACKING TIMES (LOCAL) MEASURE CDT
START 1456
STOP 15:16

SENSOR TYPE 500 9500 399 299
MEMORY CARD 94
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
500 0.360

OBSTRUCTIONS: NO

HEIGHT READINGS MTS FT
1.270

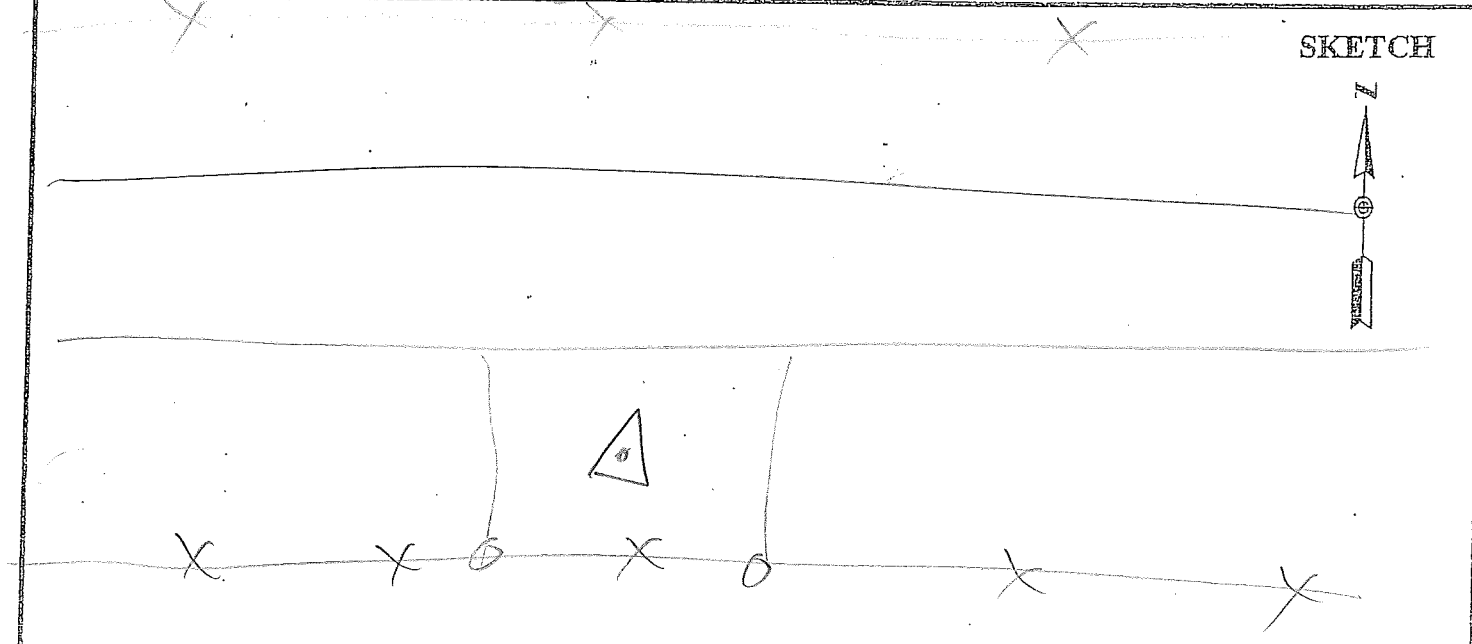
STATION DESCRIPTIONS POINT W
LONG GRASS/WEEDS

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
19:46	2.2	8 12 9
20:16	2.1	8 10 9

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
WINDY

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
Bourbon Co. SHEBOYGAN, WISCONSIN 53083 Base / Control

PROJECT 1120103
OPERATOR MB
DATE 3.29.12

SITE NUMBER 1
SITE NAME C233 RESET

TRACKING TIMES (LOCAL) MEASURE ✓
START 7:21 a.
STOP

SENSOR TYPE 500 9500 399 299
MEMORY CARD 603
BATTERY NO. CB
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
500 0.360

OBSTRUCTIONS:

HEIGHT READINGS MTS FT
1.359

STATION DESCRIPTIONS

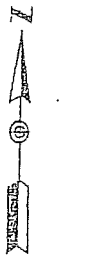
1219

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
721	6.8	5/5

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH



see previous

AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

Bourbon Co. Base / short √PT

PROJECT 1120103
OPERATOR MS
DATE 3.29.12

SITE NUMBER 1
SITE NAME 101

TRACKING TIMES (LOCAL) MEASURE ✓
START 7:55 a
STOP

SENSOR TYPE 500 9500 399 299
MEMORY CARD 704
BATTERY NO. 018
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
500 0.360

OBSTRUCTIONS:

HEIGHT READINGS MTS FT
1.317
1.677

STATION DESCRIPTIONS

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
755	2.4	7/7

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH

See previous

AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

tall grass V/T

PROJECT 120103
OPERATOR MB
DATE 3.29.12

SITE NUMBER 1
SITE NAME 235

TRACKING TIMES (LOCAL) MEASURE ✓
START 8:05 a.
STOP 8:35 a.

SENSOR TYPE 500 9500 399 299
MEMORY CARD 60
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
500 0.360

HEIGHT READINGS MTS FT
1.388
1.748

OBSTRUCTIONS: trees NW ⟺ NE

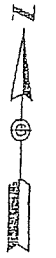
STATION DESCRIPTIONS S. of road

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
805	2.5	7/7
835		

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

Bourbon Co. hand √PT

PROJECT 1120103
OPERATOR MB
DATE 3.29.12

SITE NUMBER 2
SITE NAME 538

TRACKING TIMES (LOCAL) MEASURE √
START 8:43a.
STOP 9:13a.

SENSOR TYPE 500 9500 399 299
MEMORY CARD 40
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 ~~0.389~~
500 0.360

OBSTRUCTIONS: trees NW ⇔ NE

HEIGHT READINGS MTS FT
1,405
1,765

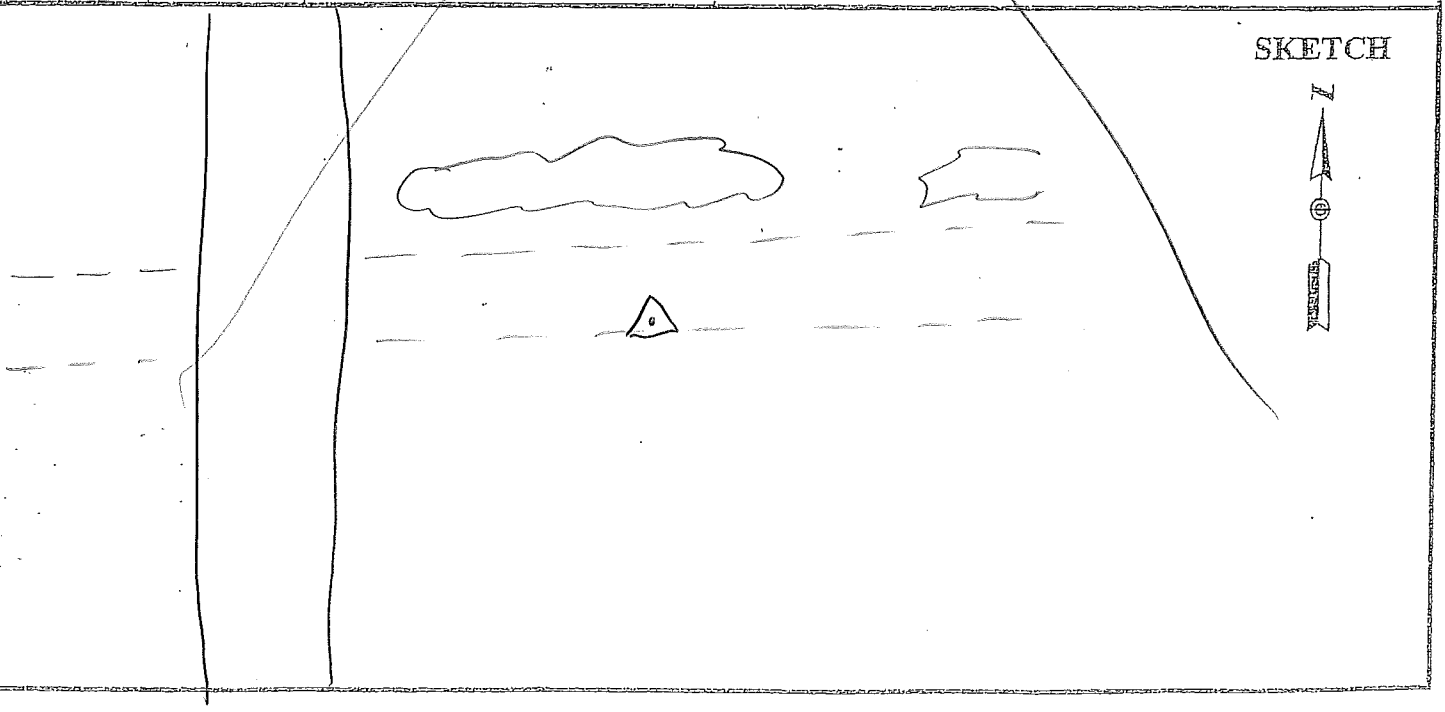
STATION DESCRIPTIONS S. side road

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
843	4.2	6/6
913		

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

Bourbon Co. trees √RT

PROJECT 1120103
OPERATOR MB
DATE 3.29.12

SITE NUMBER 3
SITE NAME 419

TRACKING TIMES (LOCAL) MEASURE ____
START 9:25 a.
STOP 9:55 a.

SENSOR TYPE 500 9500 399 299
MEMORY CARD 60
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
500 0.360

HEIGHT READINGS MTS FT
1.422
1.782

OBSTRUCTIONS: trees above

STATION DESCRIPTIONS N. of road

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
925	4.9	4/5
955		

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH

AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

Bourbon Co.

short grass √PT

PROJECT 1120103
OPERATOR MD
DATE 3.29.12

SITE NUMBER 4
SITE NAME 149

TRACKING TIMES (LOCAL) MEASURE √
START 10:07 a.
STOP 10:33 a.

SENSOR TYPE 500 9500 399 299
MEMORY CARD 60
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 ~~0.389~~
500 0.360

HEIGHT READINGS MTS FT
1.360
1.720

OBSTRUCTIONS: none

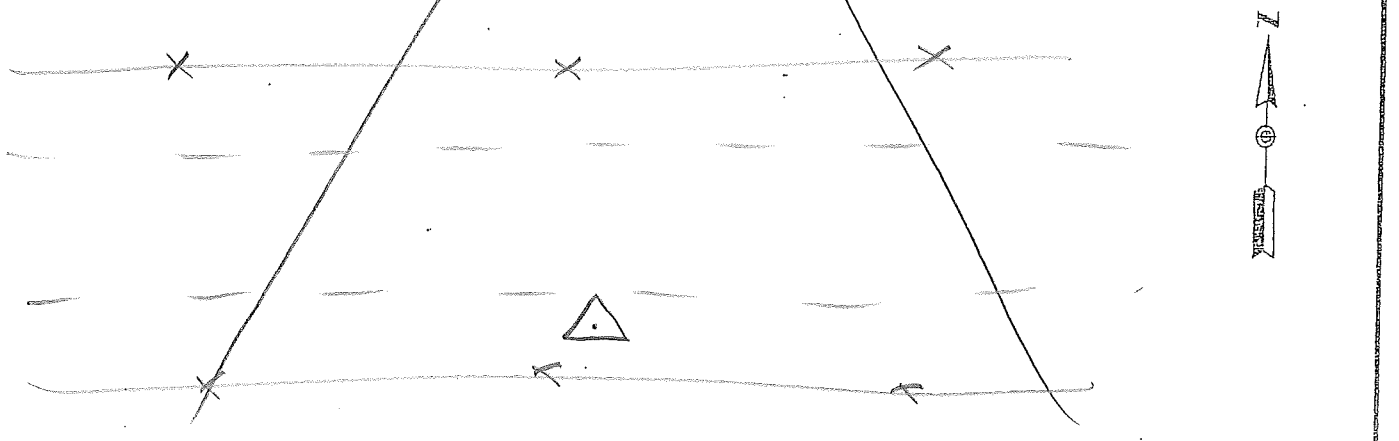
STATION DESCRIPTIONS S. of road

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
10 07	3.7	11/11
1033		

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

Bourbon Co.

hand V/PT

PROJECT 1120103
OPERATOR MB
DATE 3.29.12

SITE NUMBER 5
SITE NAME 539

TRACKING TIMES (LOCAL) MEASURE ✓
START 10:43 a.
STOP 11:08 a.

SENSOR TYPE 500 9500 399 299
MEMORY CARD 60
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 ~~0.389~~
500 0.360

OBSTRUCTIONS: trees ESE

HEIGHT READINGS MTS FT
1.298

1.658

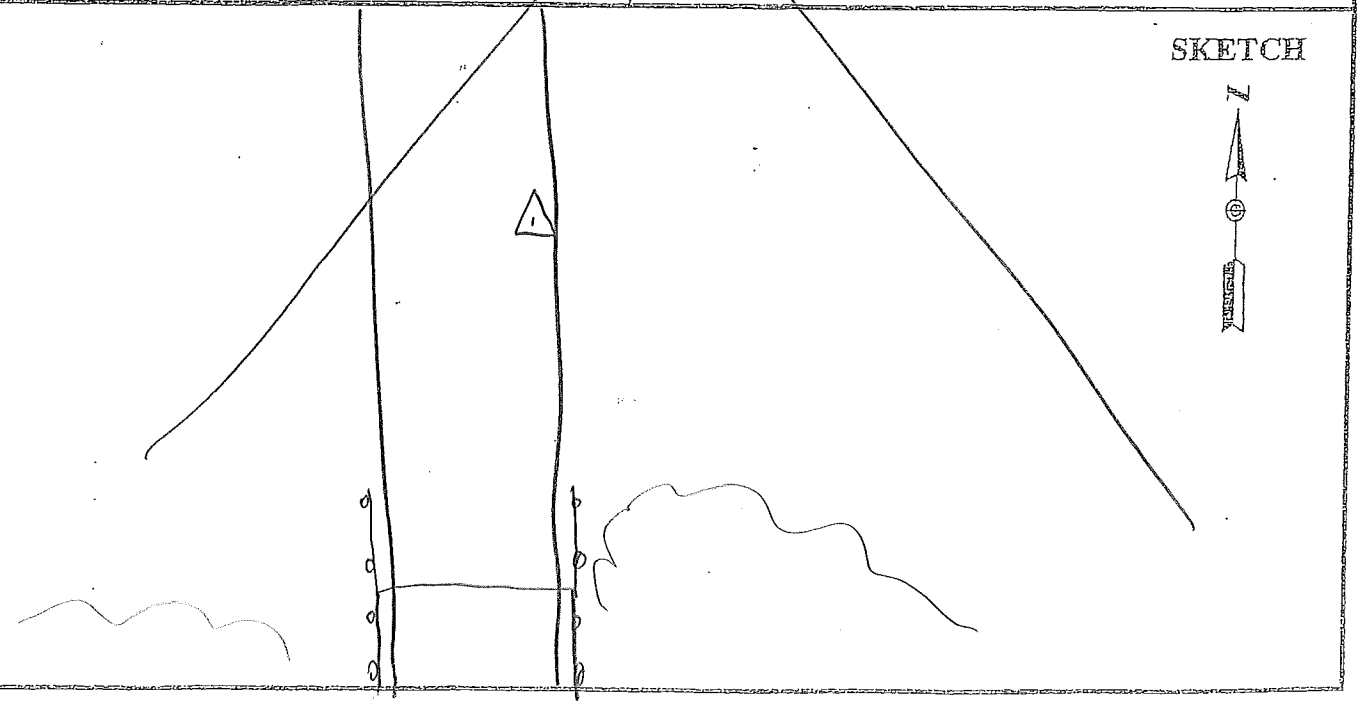
STATION DESCRIPTIONS E. side road

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1043	4.2	9/10
1108		

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

Bourbon Co.

tall grass √M

PROJECT 1120103
OPERATOR MB
DATE 3.29.12

SITE NUMBER 6
SITE NAME 236

TRACKING TIMES (LOCAL) MEASURE ✓
START 11:14 a.
STOP 11:39 a.

SENSOR TYPE 500 9500 399 299
MEMORY CARD 60
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 ~~0.389~~
(500) 0.360

OBSTRUCTIONS: trees SW

HEIGHT READINGS MTS FT
1.387
1.747

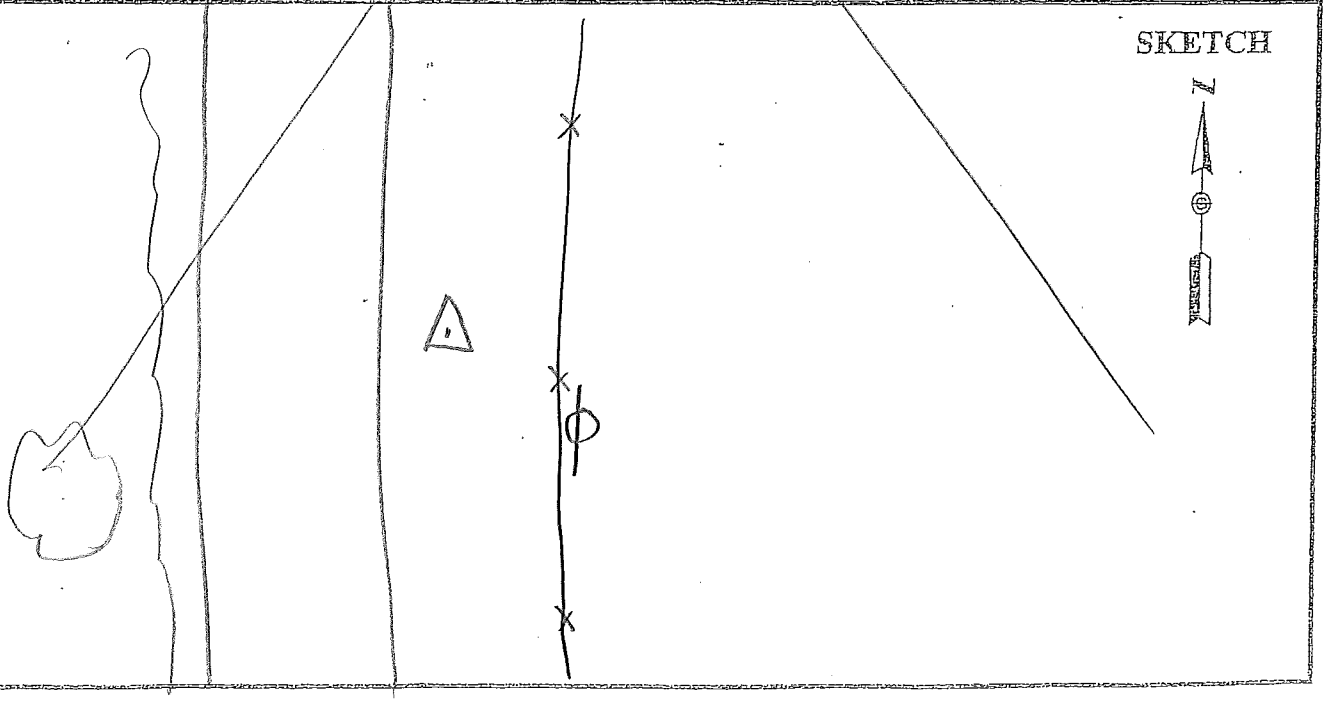
STATION DESCRIPTIONS E. of road

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1114	4.1	9/9
1139		

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

Bourbon Co. base short grass ✓PT

PROJECT 1120103
OPERATOR MB
DATE 3.29.12

SITE NUMBER 7
SITE NAME 138

TRACKING TIMES (LOCAL) MEASURE ✓
START 11:52a
STOP 12:17p

SENSOR TYPE 500 9500 399 299
MEMORY CARD 60
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
500 0.360

OBSTRUCTIONS: none

HEIGHT READINGS MTS FT
1.381
1.741

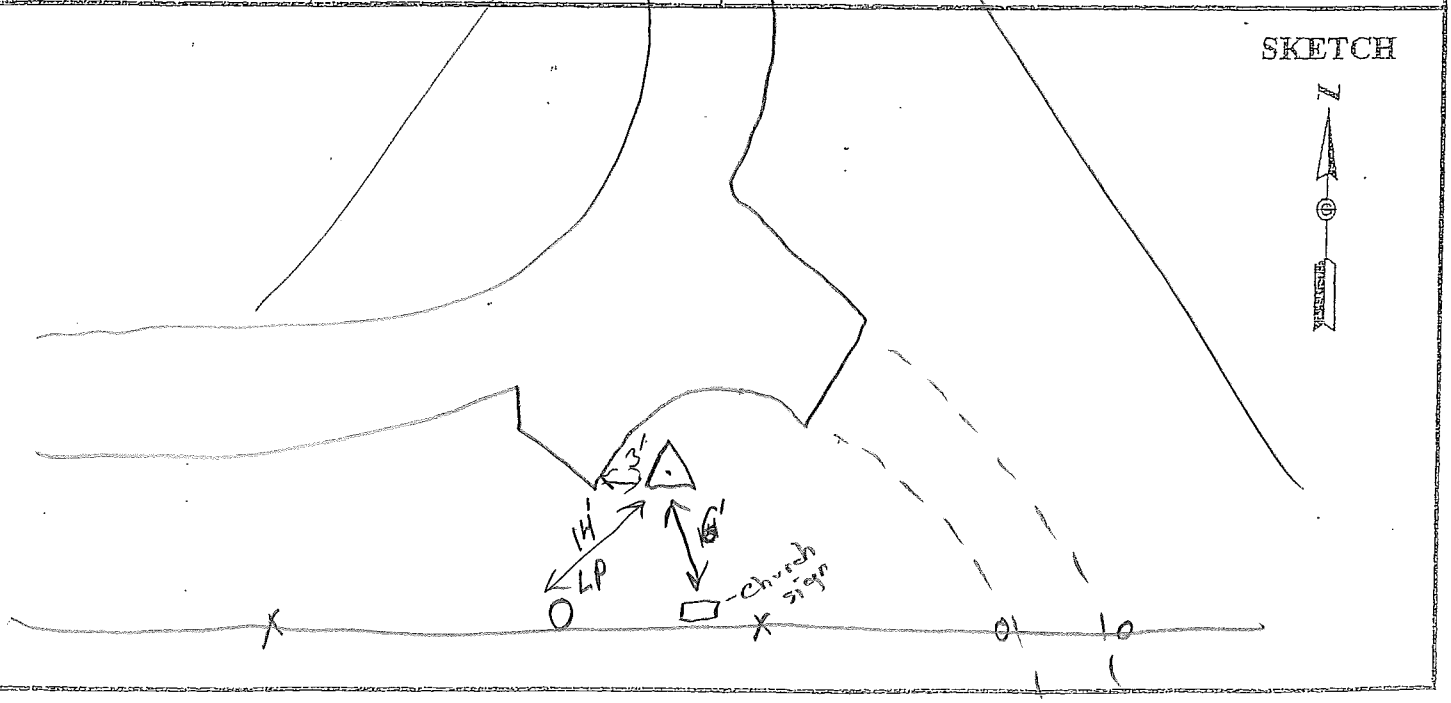
STATION DESCRIPTIONS set 6" nail SE of road

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1152	2.2	8/8
1217		

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
37 50 03.0
94 52 53.7

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

Bourbon Co. hand V PT

PROJECT 1120103
OPERATOR MB
DATE 3.29.12

SITE NUMBER 8
SITE NAME 540

TRACKING TIMES (LOCAL) MEASURE ✓
START 12:28 p
STOP 12:53 p

SENSOR TYPE 500 9500 399 299
MEMORY CARD 60
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 ~~0.389~~
500 0.360

OBSTRUCTIONS: none

HEIGHT READINGS MTS FT
1.352

STATION DESCRIPTIONS S. side road

1712

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1228	1.5	10/10
1253		

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH

AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

Bourbon Co.

short grass ✓PT

PROJECT 1120103
OPERATOR MB
DATE 3.29.12

SITE NUMBER 9
SITE NAME 139

TRACKING TIMES (LOCAL) MEASURE ✓
START 1:04 p
STOP 1:30 p

SENSOR TYPE 500 9500 399 299
MEMORY CARD 60
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 ~~0.389~~
(500) (0.360)

OBSTRUCTIONS: bush SE

HEIGHT READINGS MTS FT
1.420 ~~1.386~~
1.780
~~1746~~

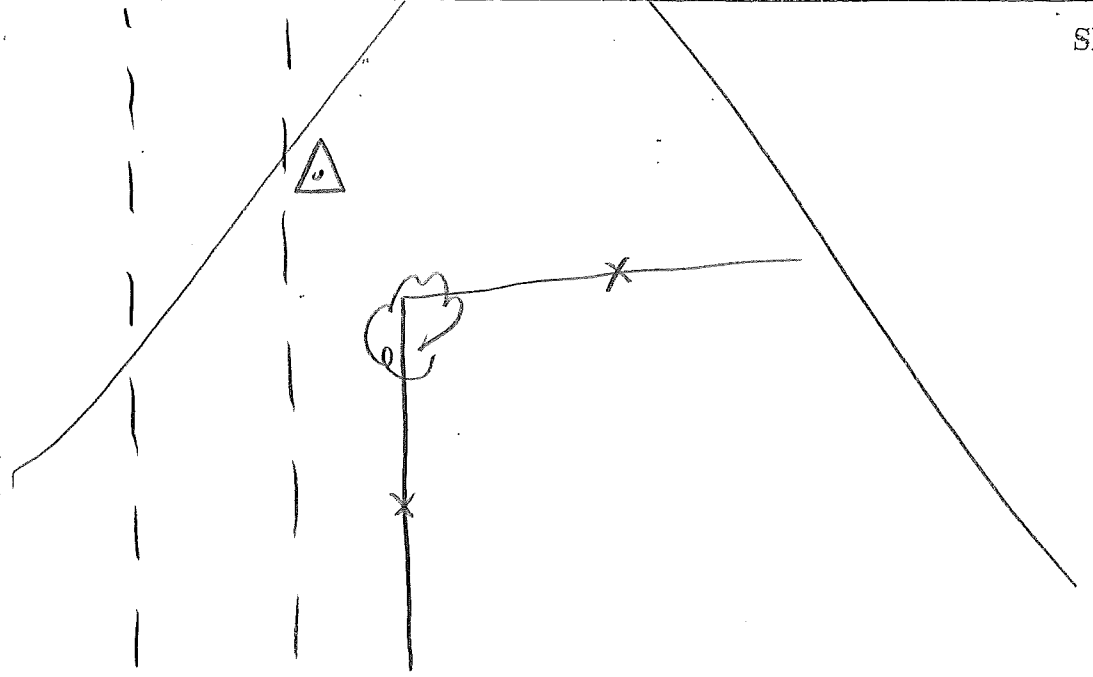
STATION DESCRIPTIONS E. side road

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1304	1.5	9/10

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

Bourbon Co

trees ✓ pt

PROJECT 1120103
OPERATOR MB
DATE 3.29.12

SITE NUMBER 10
SITE NAME 420

TRACKING TIMES (LOCAL) MEASURE ✓
START 1:44 p
STOP 2:09 p

SENSOR TYPE 500 9500 399 299
MEMORY CARD 60
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 ~~0.389~~
500 0.360

OBSTRUCTIONS: trees above

HEIGHT READINGS MTS FT
1.432
1.792

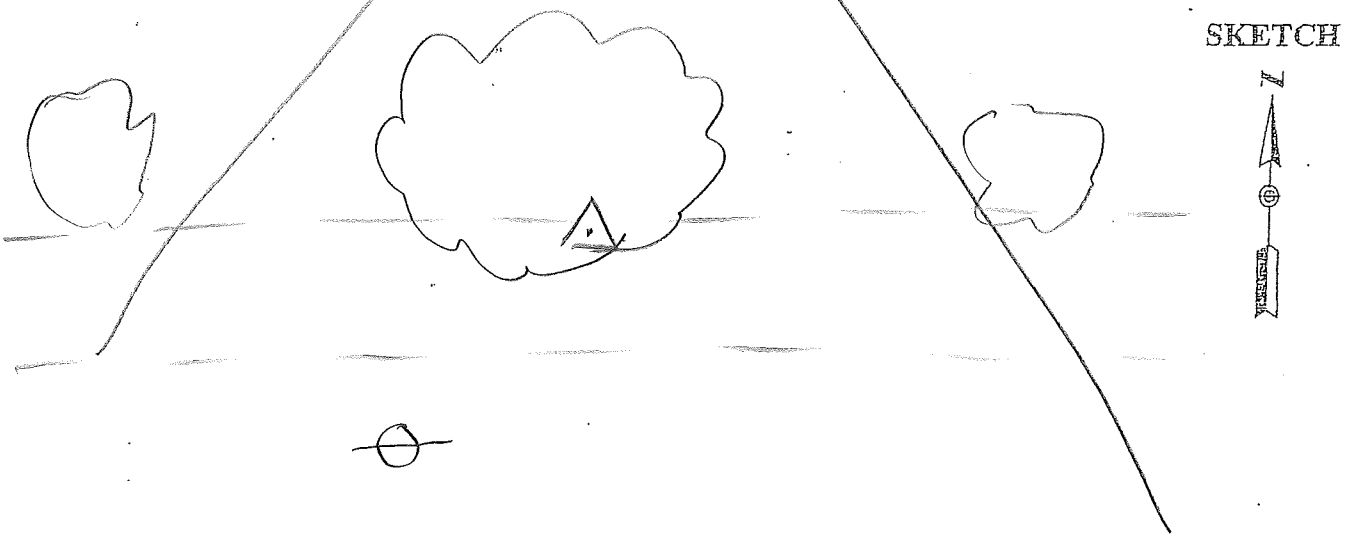
STATION DESCRIPTIONS N. side road

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1344	2.3	8/9
1409		

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

Bourbon Co.

tall grass √RT

PROJECT 112013
OPERATOR MB
DATE 3·29·12

SITE NUMBER 11
SITE NAME 237

TRACKING TIMES (LOCAL) MEASURE _____
START 2:25 p
STOP 2:52 p

SENSOR TYPE 500 9500 399 299
MEMORY CARD 60
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 ~~0.389~~
500 0.360

OBSTRUCTIONS: none

HEIGHT READINGS MTS FT
1.340
1.700

STATION DESCRIPTIONS S. of road

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1425	3.7	6/6
1452		

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH

AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

Bourbon Co.

trees √FT

PROJECT 1120103
OPERATOR MB
DATE 3.29.12

SITE NUMBER 12
SITE NAME 421

TRACKING TIMES (LOCAL) MEASURE √
START 3:01 p
STOP 3:31 p

SENSOR TYPE 500 9500 399 299
MEMORY CARD 60
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
500 0.360

OBSTRUCTIONS: under trees

HEIGHT READINGS MTS FT
1.403
1.763

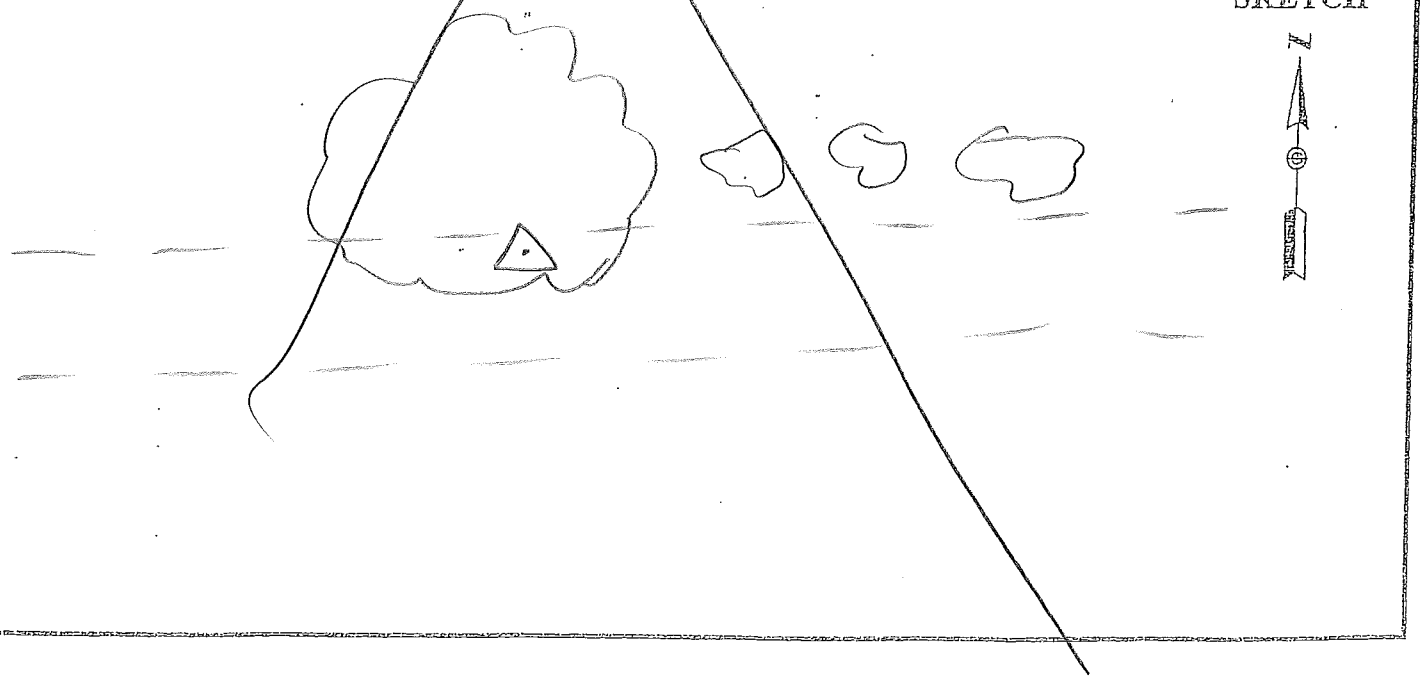
STATION DESCRIPTIONS N. side of road

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1501	6.2	5/6
1531		

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

PROJECT 120103
OPERATOR WJN
DATE 3/30/12

SITE NUMBER 1
SITE NAME 1234

TRACKING TIMES (LOCAL) MEASURE CDT
START 11:46
STOP 17:32

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 101
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 ~~0.389~~
500 0.360

OBSTRUCTIONS: NO

HEIGHT READINGS MTS FT
1.206
1.595

STATION DESCRIPTIONS Set 10" SPIKE 3' N. OF R/W FENCE, ± 12' S. OF BURIED CABLE POST

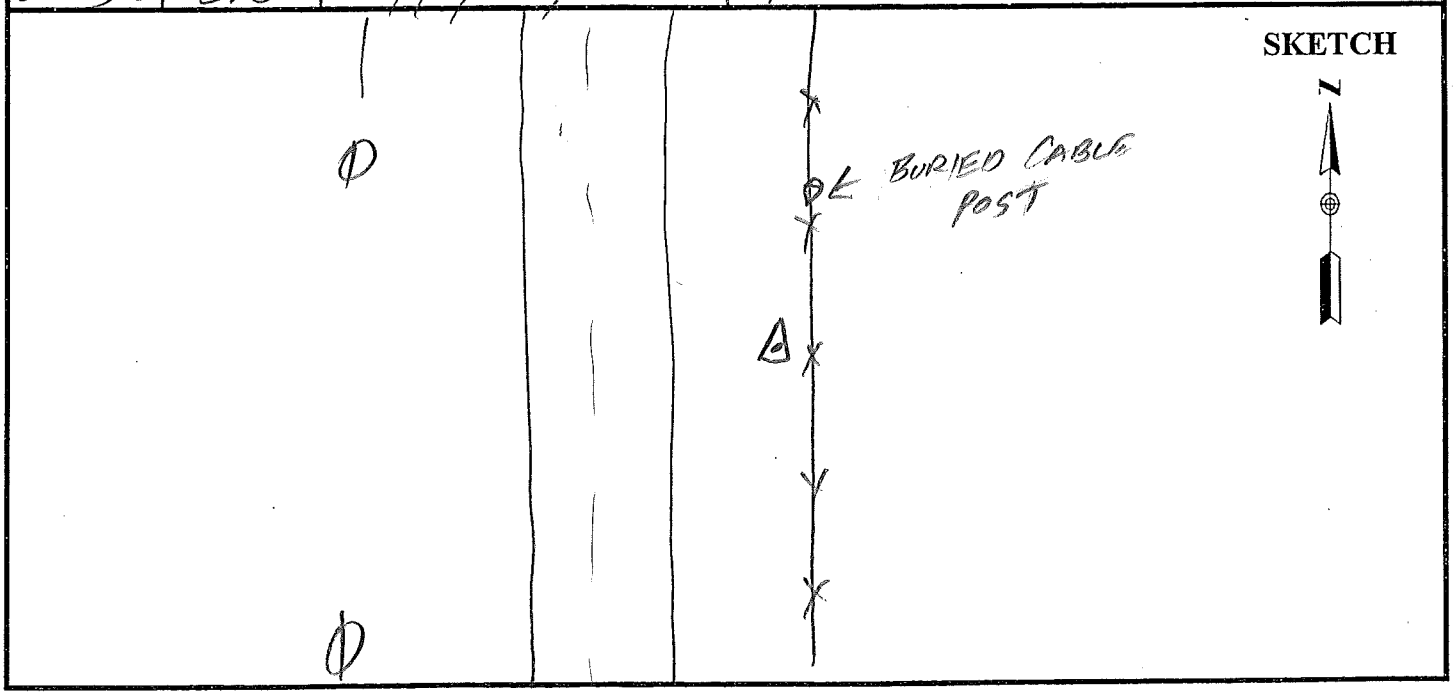
SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
16:46	1.9	10/10-10
22 32	2.0	9/9-9

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
MC

Ap 39 59 53.8 lat
Rx 96 17 00.2 long
Rx

SKETCH



175 1234 1234

AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

Vert Control BASE

PROJECT 1120103
OPERATOR WJN
DATE 3/30/12

SITE NUMBER 1
SITE NAME Z 231

TRACKING TIMES (LOCAL) MEASURE CDT
START 12:12
STOP 1656

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 11
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
500 (0.360)

OBSTRUCTIONS: NO

HEIGHT READINGS MTS FT
1.226
1.586

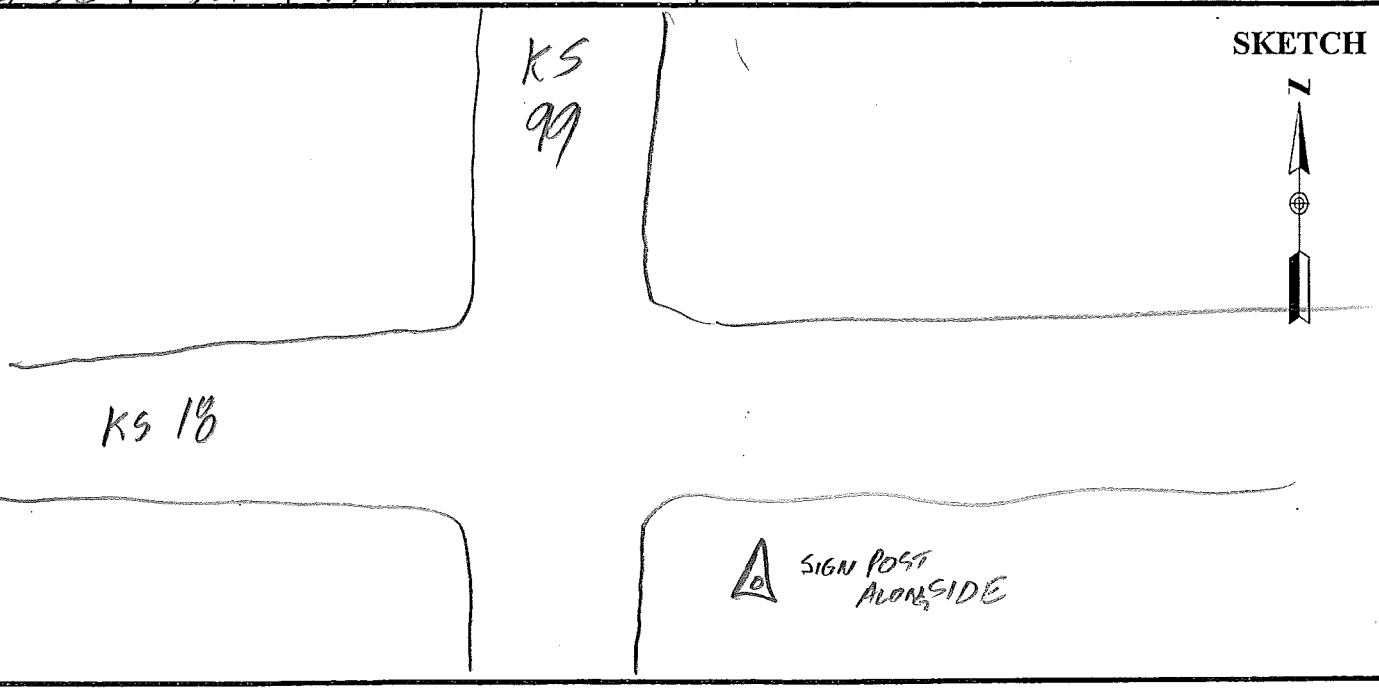
STATION DESCRIPTIONS FD BRASS DISK IN CONC MON MKD Z 231 1934 AS DESCRIBED BY NGS

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1712	2.0	8/8-8
2156	3.1	7/7-7

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
MC

SKETCH



305.853

AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

PROJECT 1120103
OPERATOR WJN
DATE 3/30/12

SITE NUMBER 1
SITE NAME 1134

TRACKING TIMES (LOCAL) MEASURE CDT
START 1228
STOP 1251

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 14
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
500 ~~0.360~~

HEIGHT READINGS MTS 1.296 FT

OBSTRUCTIONS: NO

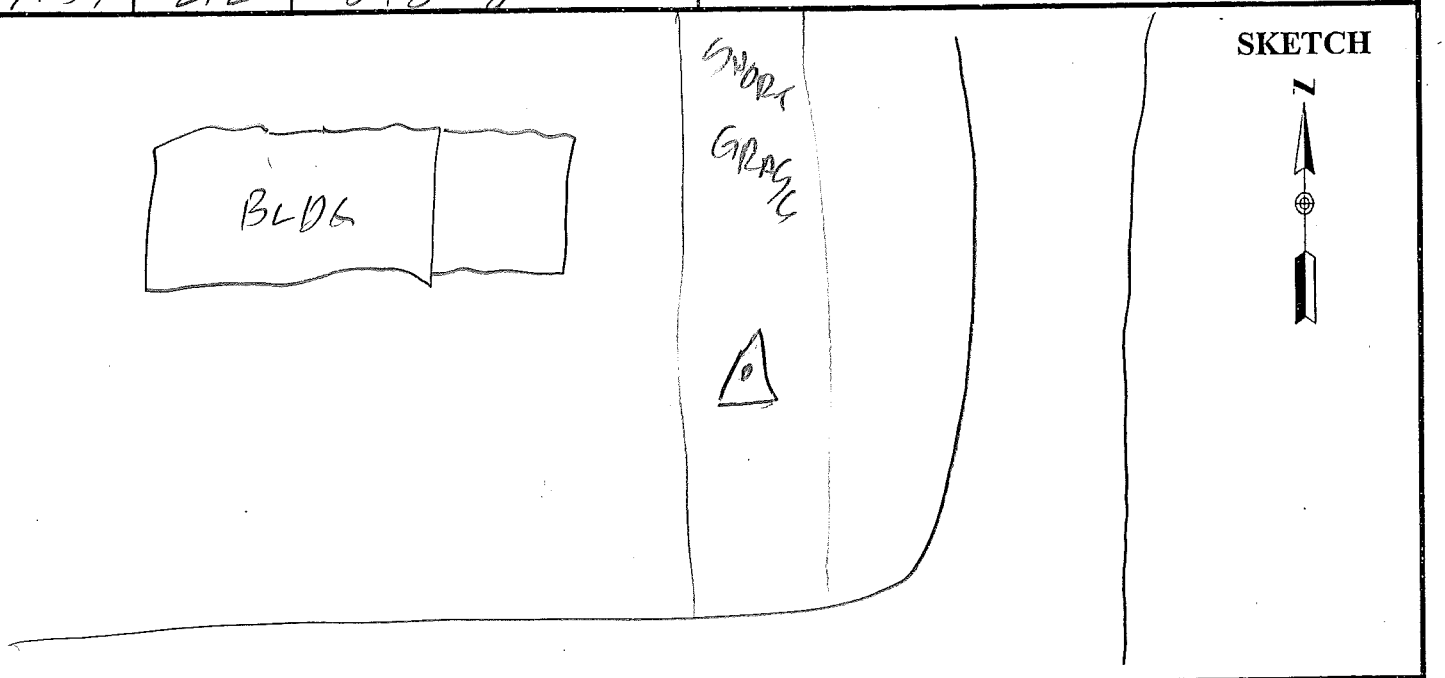
STATION DESCRIPTIONS POINT 1N5
SHORT GRASS

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1728	1.9	8 18-8
17:51	2.2	8 19-9

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
MC

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

PROJECT 1120103
OPERATOR WJN
DATE 3/30/12

SITE NUMBER 2
SITE NAME 1637

TRACKING TIMES (LOCAL) MEASURE CDT
START 13:11
STOP 13 30

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 14
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
500 (0.360)

OBSTRUCTIONS: PPL SE

HEIGHT READINGS MTS FT
1.290

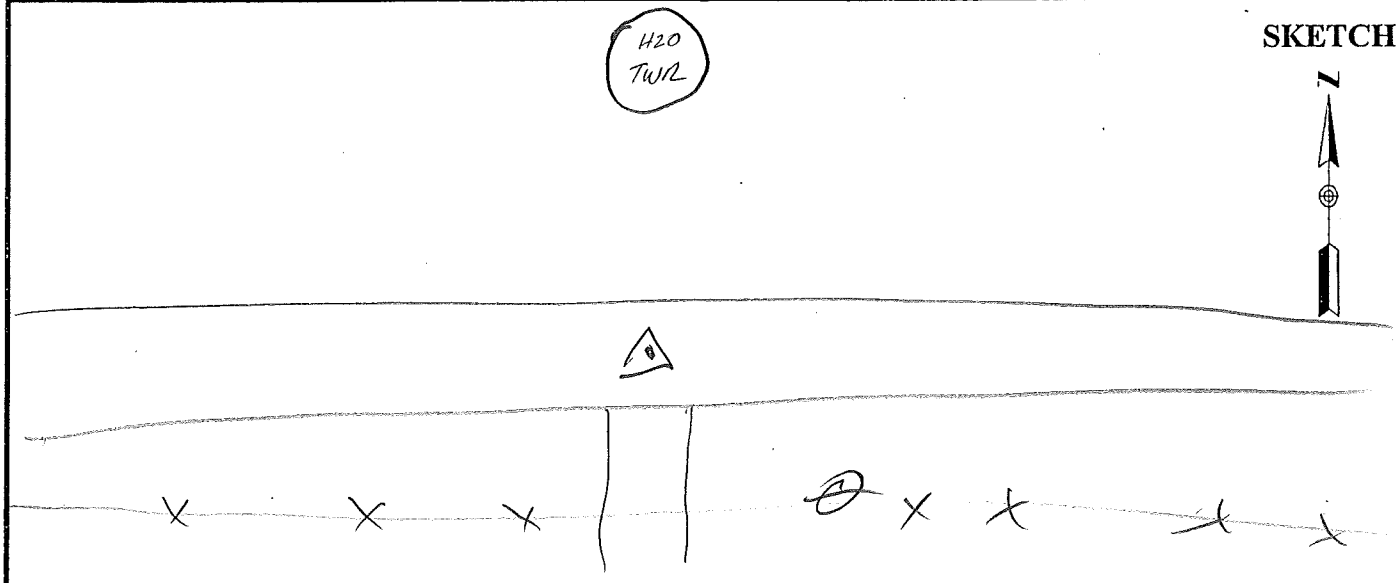
STATION DESCRIPTIONS ℄ E-W RD OPP ℄ FIELD ACC S AND WATER TOWER N.

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
13:11	2.0	8/8-8
13:30	2.1	8/9-8

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
PC

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

PROJECT 120103
OPERATOR WJN
DATE 3/30/12

SITE NUMBER 3
SITE NAME 1433

TRACKING TIMES (LOCAL) MEASURE CDT
START 13:41
STOP 14 03

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 14
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
500 (0.360)

OBSTRUCTIONS: PPL S, TREES OVERHEAD

HEIGHT READINGS MTS FT
1.315

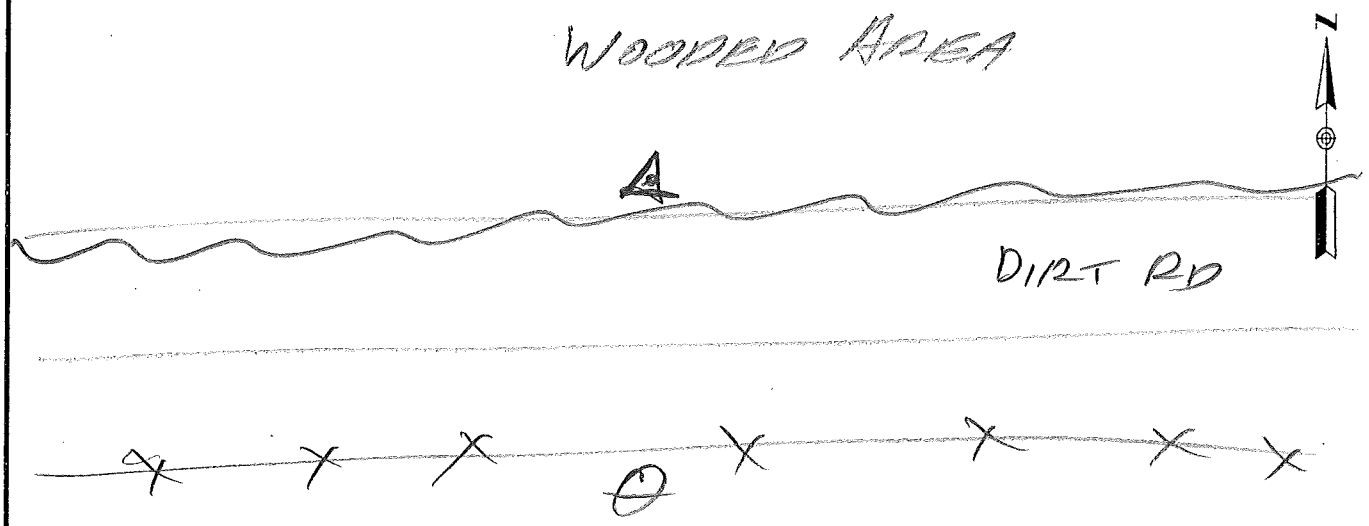
STATION DESCRIPTIONS POINT IN WOODED AREA

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1841	2.6	8/7-9
1903	2.8	7/6-8

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
PC

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

PROJECT 120103
OPERATOR WJN
DATE 3/30/12

SITE NUMBER 4
SITE NAME 1533

TRACKING TIMES (LOCAL) MEASURE CDT
START 14:29
STOP 1451

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 14
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
500 0.360

OBSTRUCTIONS: TREES S, E
W

HEIGHT READINGS MTS FT
1.314

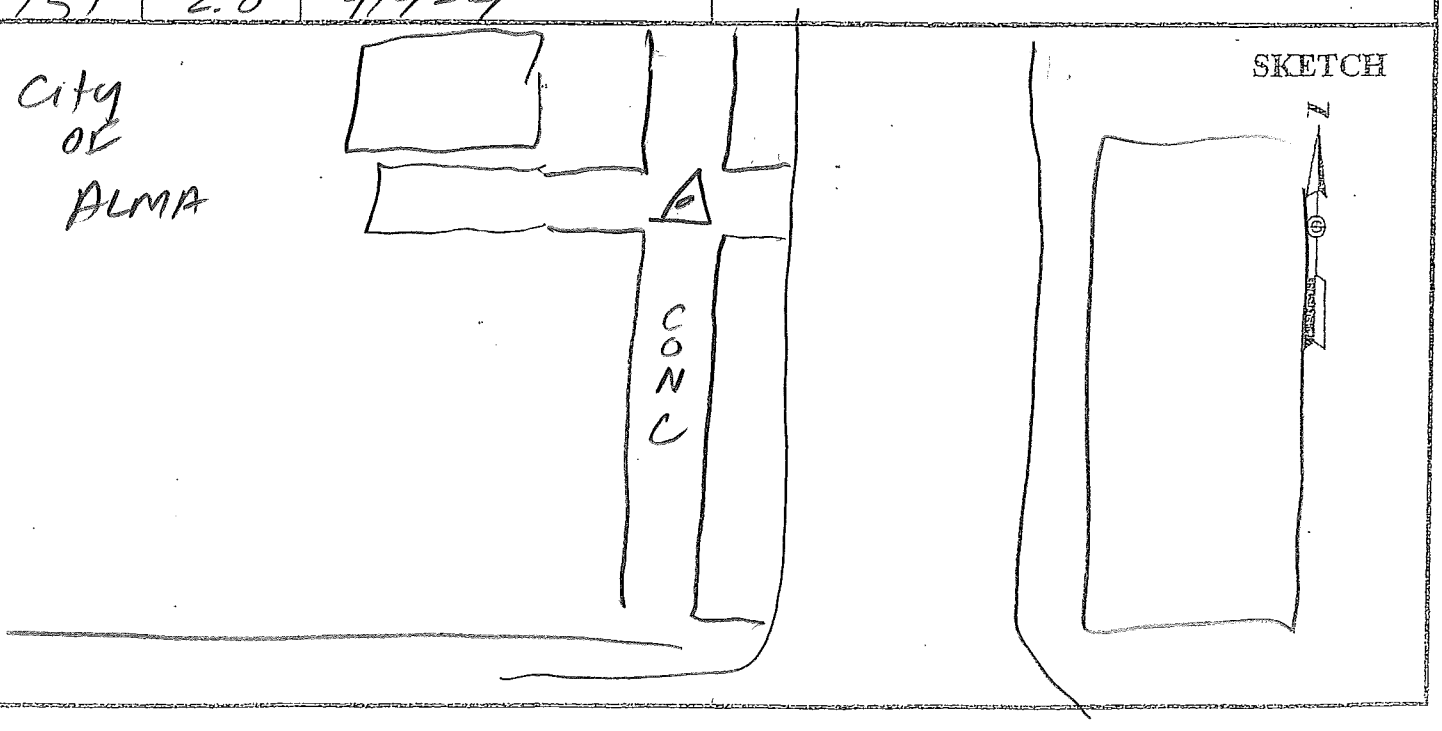
STATION DESCRIPTIONS C & G
INT WIDE CONC
WALKS

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1429	1.7	9/9-9
1951	2.0	9/9-9

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
PC

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

PROJECT 1120103
OPERATOR MJN
DATE 3/30/12

SITE NUMBER 5
SITE NAME 1135

TRACKING TIMES (LOCAL) MEASURE CDT
START 15:06
STOP 15:25

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 14
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
500 0.360

OBSTRUCTIONS: LIGHT POLES E, S

HEIGHT READINGS MTS FT
1.270

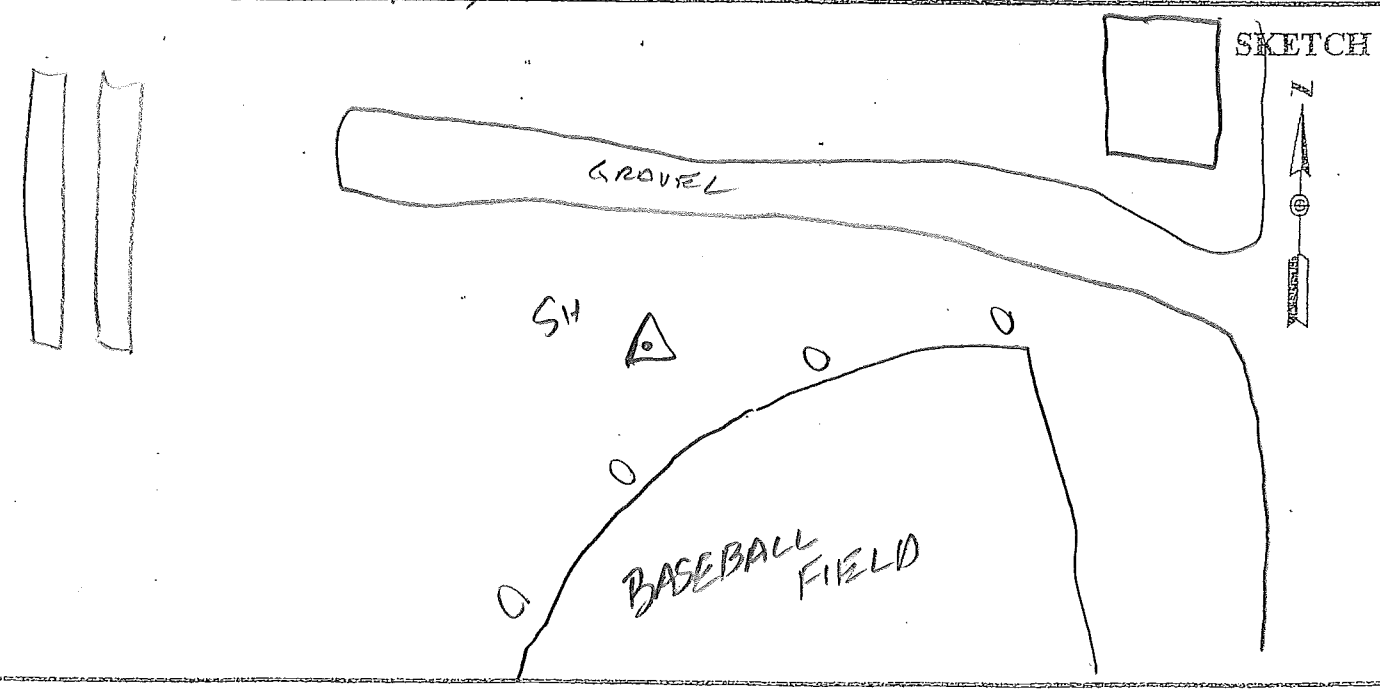
STATION DESCRIPTIONS POINT IN SHORT GRASS

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
20:06	2.0	9/9-9
20:25	2.1	9/9-9

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
PC

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

PROJECT 112013
OPERATOR WWW
DATE 3/30/12

SITE NUMBER 6
SITE NAME 1434

TRACKING TIMES (LOCAL) MEASURE CDT
START 15:41
STOP 16:03

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 14
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
500 (0.360)

OBSTRUCTIONS: TREES

HEIGHT READINGS MTS FT
1.278

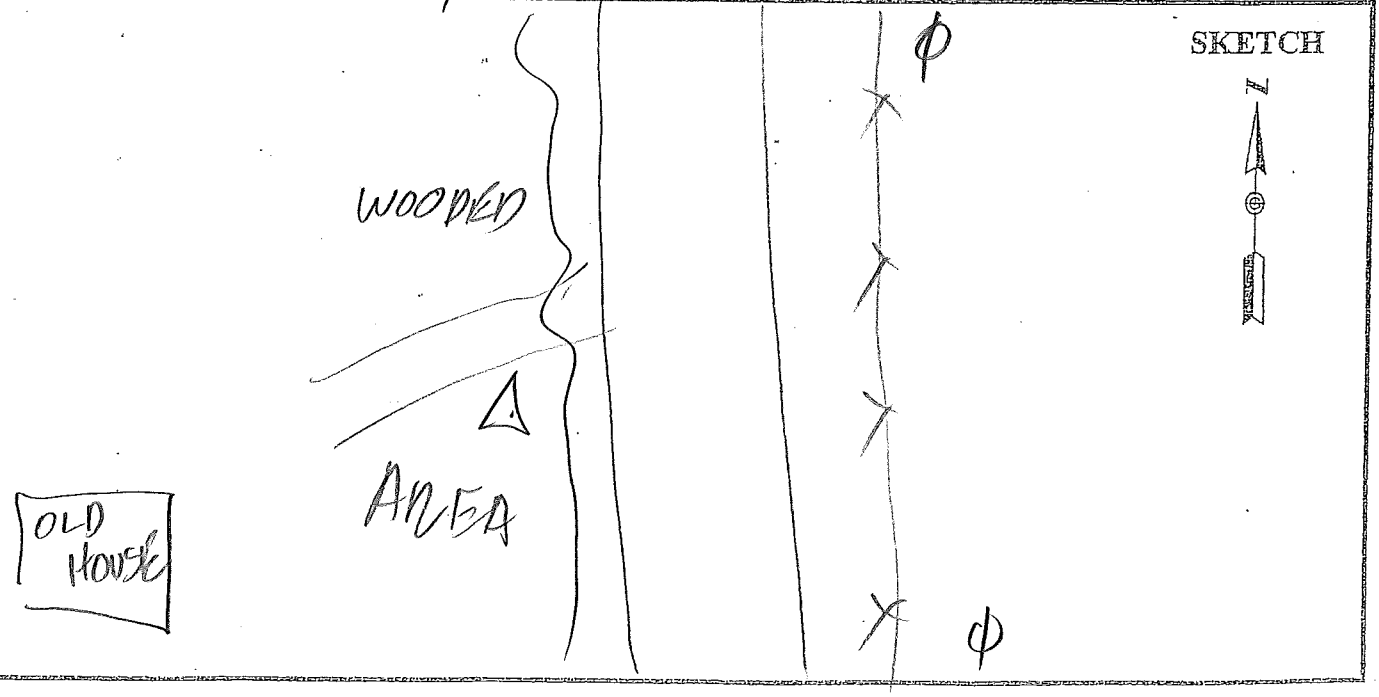
STATION DESCRIPTIONS POINT IN WOODED AREA

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
20:41	2.0	9/9-9
21:03	2.2	9/8-9

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
PC

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

PROJECT 120103
OPERATOR WJW
DATE 3/30/12

SITE NUMBER 7
SITE NAME 1435

TRACKING TIMES (LOCAL) MEASURE CDT
START 16:25
STOP 16 48

SENSOR TYPE ~~500~~ 9500 399 299
MEMORY CARD 14
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
500 0.360

HEIGHT READINGS MTS 1.303 FT

OBSTRUCTIONS: TREES

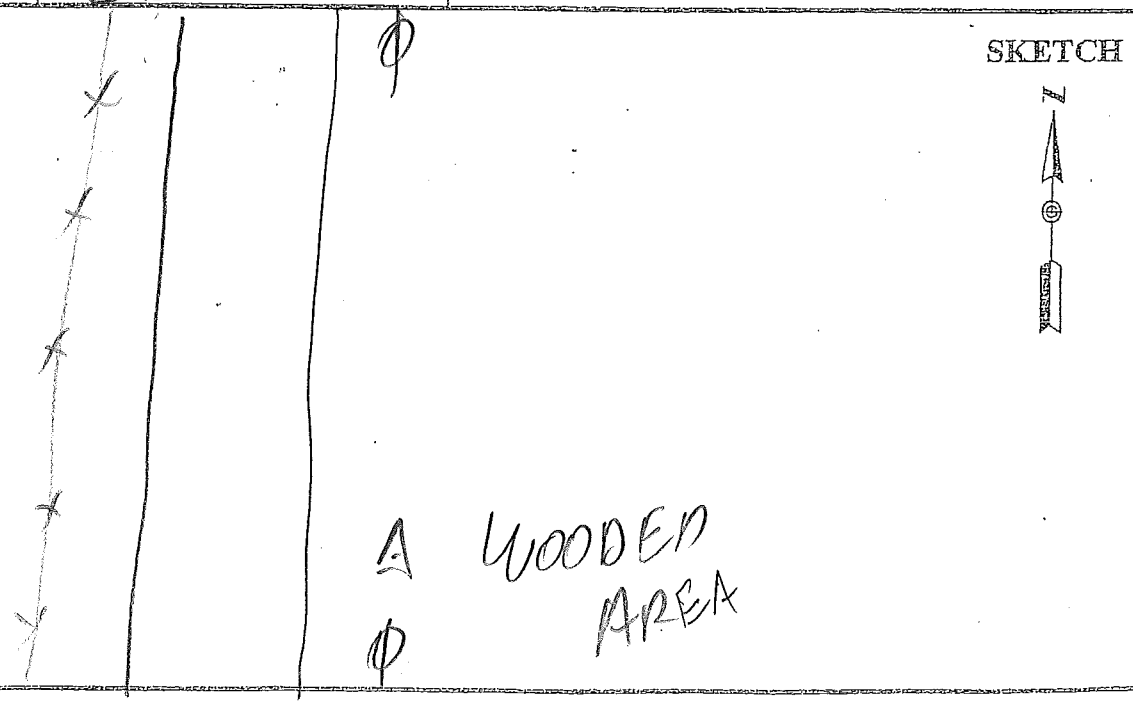
STATION DESCRIPTIONS POINT IN

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
21 25	2.8	7/7-7
21 49	6 3	66-7

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH



17 5

AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
Bourbon Co. SHEBOYGAN, WISCONSIN 53083 Base / Control

PROJECT 120103
OPERATOR MB
DATE 3.30.12

SITE NUMBER 1
SITE NAME C233 RESET

TRACKING TIMES (LOCAL) MEASURE ✓
START 7:06 a.
STOP

SENSOR TYPE 500 9500 399 299
MEMORY CARD 704
BATTERY NO. CB
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
500 0.360

OBSTRUCTIONS:

HEIGHT READINGS MTS FT
1.270
1.630

STATION DESCRIPTIONS

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
706	3.1	5/5

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH

see previous

AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

Bourbon Co. Base short grass ✓PT

PROJECT 1120103
OPERATOR MB
DATE 3.30.12

SITE NUMBER 1
SITE NAME 138

TRACKING TIMES (LOCAL) MEASURE ✓
START 7:29a.
STOP

SENSOR TYPE 500 9500 399 299
MEMORY CARD 67
BATTERY NO. CB
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 ~~0.389~~
500 0.360

OBSTRUCTIONS:

HEIGHT READINGS MTS FT
1.377
1.737

STATION DESCRIPTIONS

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
729	2.5	7/7

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH

see previous

AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

Bourbon Co.

tall grass VPT

PROJECT 1120103
OPERATOR MB
DATE 3.30.12

SITE NUMBER 1
SITE NAME 235

TRACKING TIMES (LOCAL) MEASURE 1/
START 7:48a.
STOP 8:18a.

SENSOR TYPE 500 9500 399 299
MEMORY CARD 603
BATTERY NO. CB
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
500 0.360

OBSTRUCTIONS: trees NW ⇔ NE

HEIGHT READINGS MTS FT
1.375
1.735

STATION DESCRIPTIONS S. of road

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
748	1.8	9/9
818		

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH

AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

Bourbon Co. hand VRT

PROJECT 112 0103
OPERATOR NB
DATE 3.30.12

SITE NUMBER 2
SITE NAME 538

TRACKING TIMES (LOCAL) MEASURE V
START 8:20 a.
STOP 8:50 a.

SENSOR TYPE 500 9500 399 299
MEMORY CARD 603
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 ~~0.389~~
500 0.360

OBSTRUCTIONS: trees NW ⇔ NE

HEIGHT READINGS MTS FT
1.405
1.765

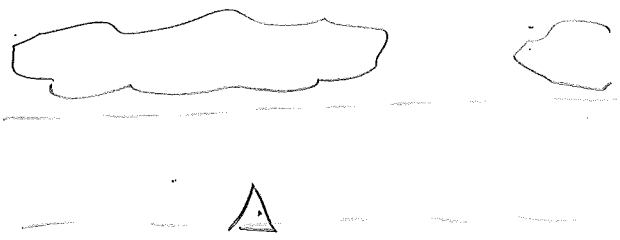
STATION DESCRIPTIONS S. side of road

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
820	2.1	7/7
850		

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

Bourbon Ca

trees √PT

PROJECT 1120103
OPERATOR MB
DATE 3.30.12

SITE NUMBER 3
SITE NAME 419

TRACKING TIMES (LOCAL) MEASURE √
START 8:57a.
STOP 9:27a.

SENSOR TYPE 500 9500 399 299
MEMORY CARD 603
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
500 0.360

OBSTRUCTIONS: trees above

HEIGHT READINGS MTS FT
1.425
1.785

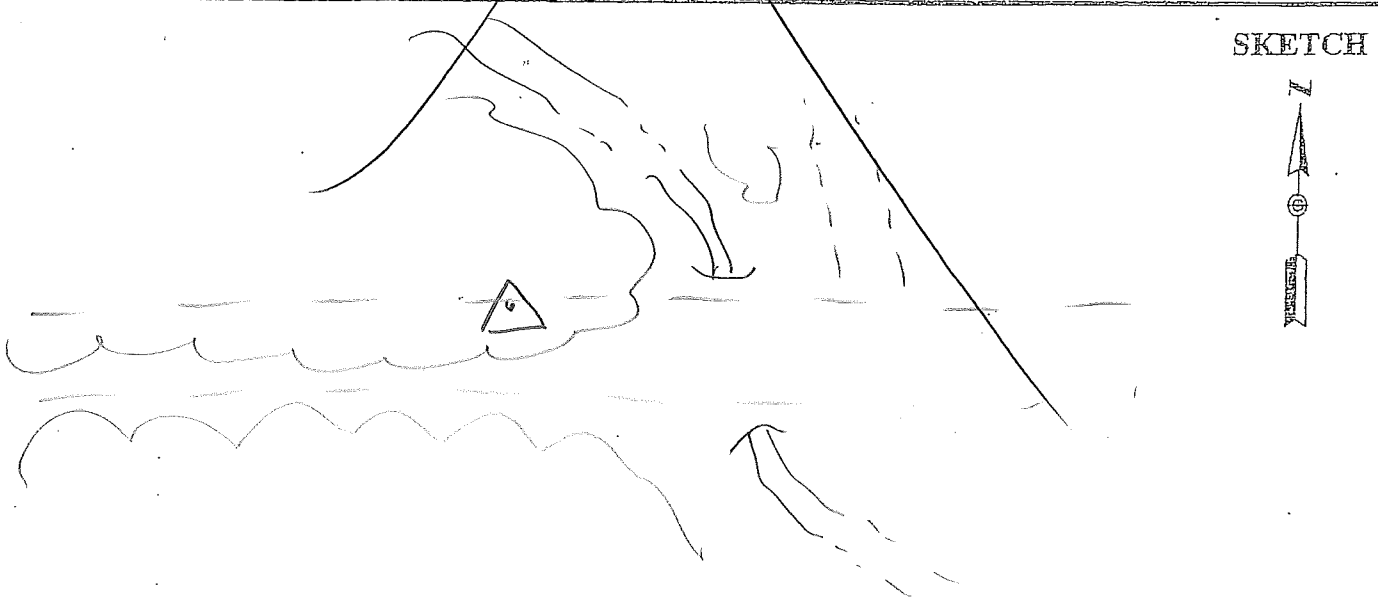
STATION DESCRIPTIONS N. side of road

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
857	3.4	5/6
927		

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

Bourbon Co.

short grass VFT

PROJECT 1120103
OPERATOR MB
DATE 3.30.12

SITE NUMBER 4
SITE NAME 137

TRACKING TIMES (LOCAL) MEASURE _____
START 9:38a
STOP 10:06a

SENSOR TYPE 500 9500 399 299
MEMORY CARD 603
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 ~~0.389~~
500 0.360

OBSTRUCTIONS: none

HEIGHT READINGS MTS FT
1.448

STATION DESCRIPTIONS S. of road

1808

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
938	2.6	10/10
1006		

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH

AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

Bourbon Co.

hard ✓PT

PROJECT 1120103
OPERATOR NB
DATE 3.30.12

SITE NUMBER 5
SITE NAME 539

TRACKING TIMES (LOCAL) MEASURE ____
START 10:11 a.
STOP 10:36 a.

SENSOR TYPE 500 9500 399 299
MEMORY CARD 603
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 ~~0.389~~
500 ~~0.360~~

OBSTRUCTIONS: none

HEIGHT READINGS MTS FT
1.350
1.710

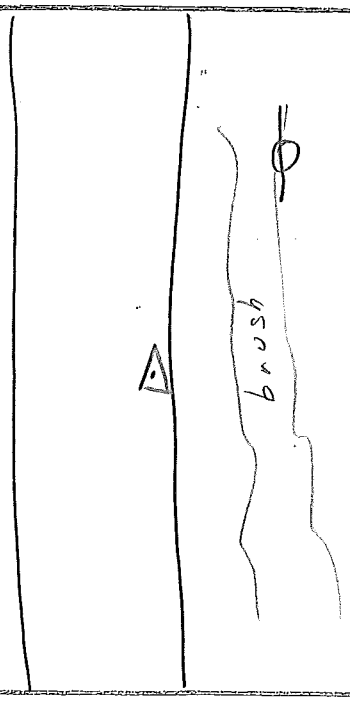
STATION DESCRIPTIONS E. side road

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1011	1.6	11/11
1036		

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

Bourbon Co.

tall grass VPT

PROJECT 1120103
OPERATOR MB
DATE 3.30.12

SITE NUMBER 6
SITE NAME 236

TRACKING TIMES (LOCAL) MEASURE ____
START 10:43 a.
STOP 11:08 a.

SENSOR TYPE 500 9500 399 299
MEMORY CARD 603
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
500 0.360

OBSTRUCTIONS: PP east

HEIGHT READINGS MTS FT
1.299
1.659

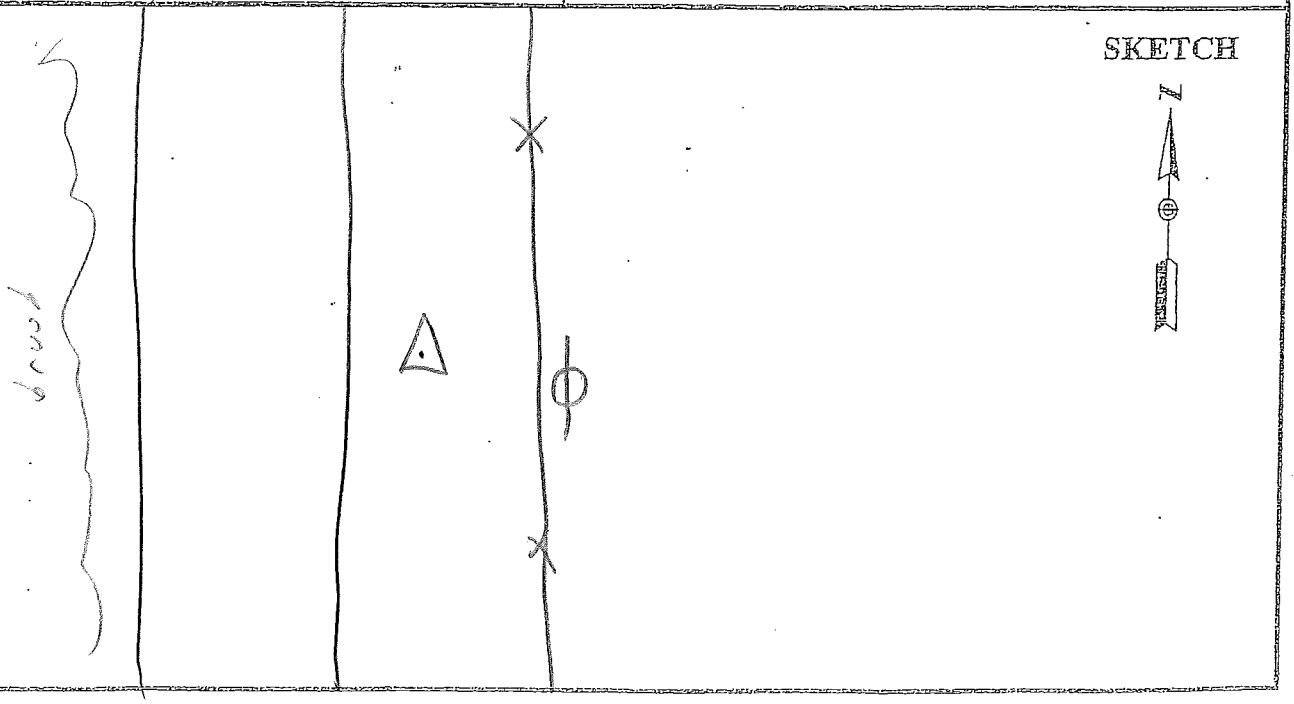
STATION DESCRIPTIONS E. of road

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1043	4.5	9/9
1108		

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

Bourbon Co.

hand VRS

PROJECT 1120103
OPERATOR MB
DATE 3.30.12

SITE NUMBER 7
SITE NAME 540

TRACKING TIMES (LOCAL) MEASURE ✓
START 11:22a.
STOP 11:47a.

SENSOR TYPE 500 9500 399 299
MEMORY CARD 609
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 ~~0.389~~
500 0.360

OBSTRUCTIONS: none

HEIGHT READINGS MTS FT
1.380

1.740

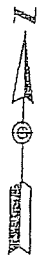
STATION DESCRIPTIONS S. side of road

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1122	3.6	9/10
1147		

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

Bourbon Co.

short grass ✓RT

PROJECT 1120103
OPERATOR MB
DATE 3.30.12

SITE NUMBER 8
SITE NAME 139

TRACKING TIMES (LOCAL) MEASURE ✓
START 11:56 a.
STOP 12:21 p

SENSOR TYPE 500 9500 399 299
MEMORY CARD 603
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 ~~0.389~~
500 0.360

OBSTRUCTIONS: free SSE

HEIGHT READINGS MTS FT
1.447

STATION DESCRIPTIONS E of road

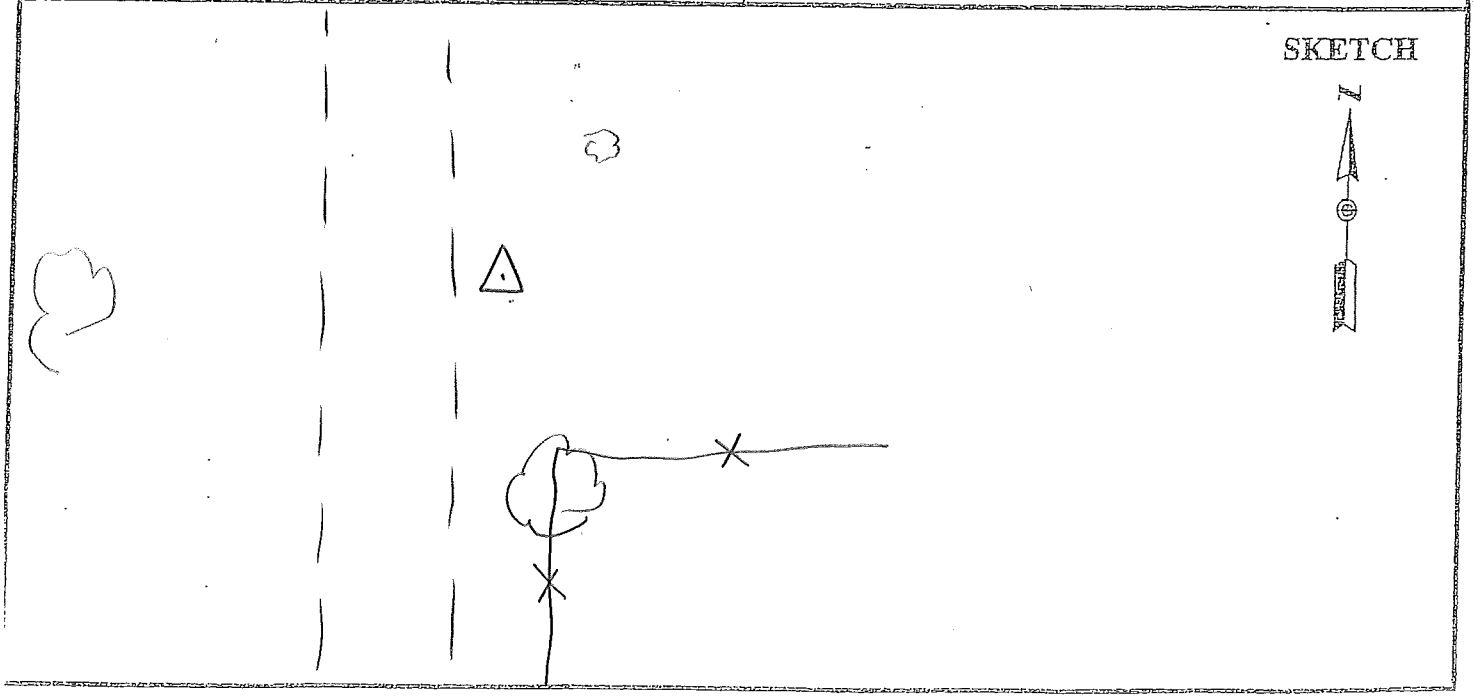
1807

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1156	2.8	8/10
1221		

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
Bourbon Co. SHEBOYGAN, WISCONSIN 53083 trees √PT

PROJECT 1120103
OPERATOR MB
DATE 3.30.12

SITE NUMBER 9
SITE NAME 420

TRACKING TIMES (LOCAL) MEASURE _____
START 12:30 p
STOP 12:51 p

SENSOR TYPE 500 9500 399 299
MEMORY CARD 603
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
500 0.360

OBSTRUCTIONS: trees above

HEIGHT READINGS MTS FT
1.391

STATION DESCRIPTIONS N. side road

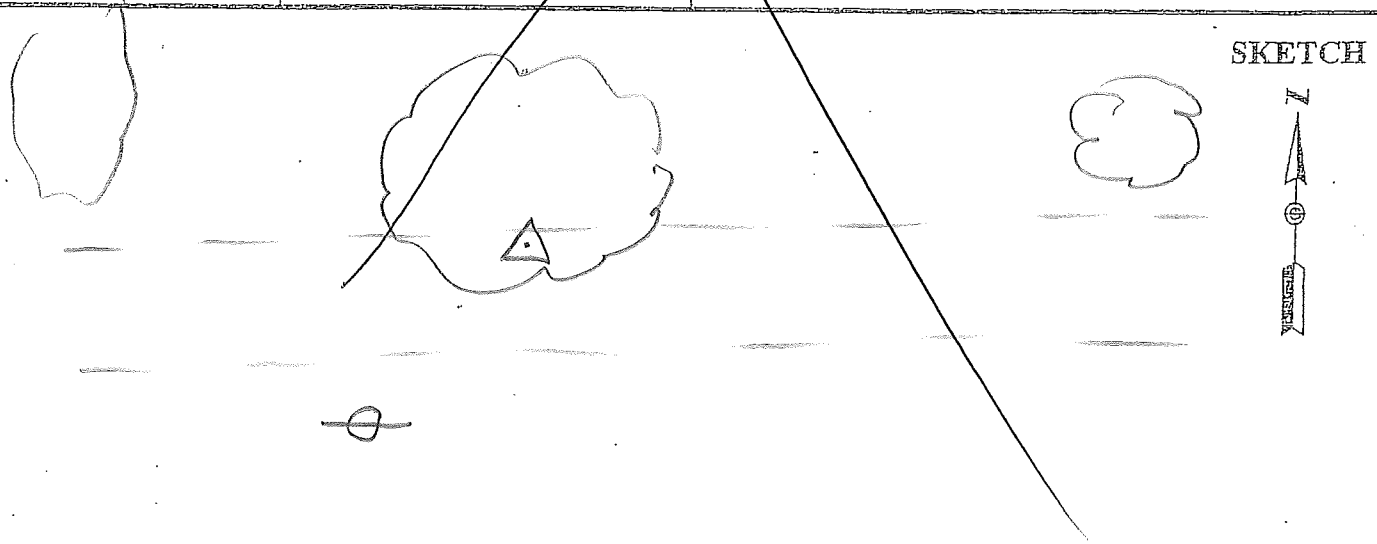
1.751

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1230	3.2	6/7
1251		

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

Bourbon Co.

tall grass √PT

PROJECT 1120103
OPERATOR MB
DATE 3.30.12

SITE NUMBER 10
SITE NAME 237

TRACKING TIMES (LOCAL) MEASURE ✓
START 1:01 p
STOP 1:21 p

SENSOR TYPE 500 9500 399 299
MEMORY CARD 603
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
500 0.360

OBSTRUCTIONS: none

HEIGHT READINGS MTS FT
1.350
1.710

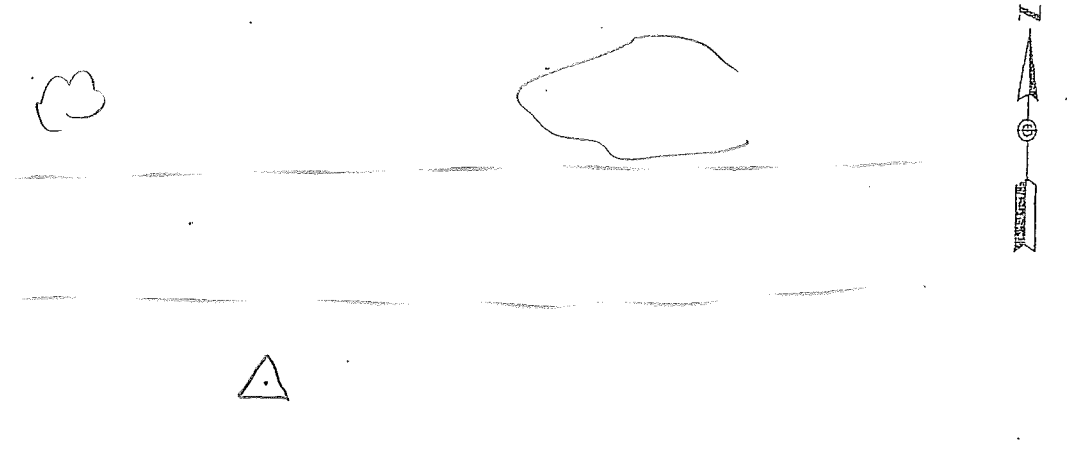
STATION DESCRIPTIONS S. of road

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1301	1.7	9/9
1321		

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

Bourbon Co. trees VpT

PROJECT 1120103
OPERATOR MB
DATE 3.30.12

SITE NUMBER 11
SITE NAME 421

TRACKING TIMES (LOCAL) MEASURE ____
START 1:27 p
STOP 1:50 p

SENSOR TYPE 500 9500 399 299
MEMORY CARD 603
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 ~~0.389~~
500 0.360

OBSTRUCTIONS: trees above

HEIGHT READINGS MTS FT
1.367
1.727

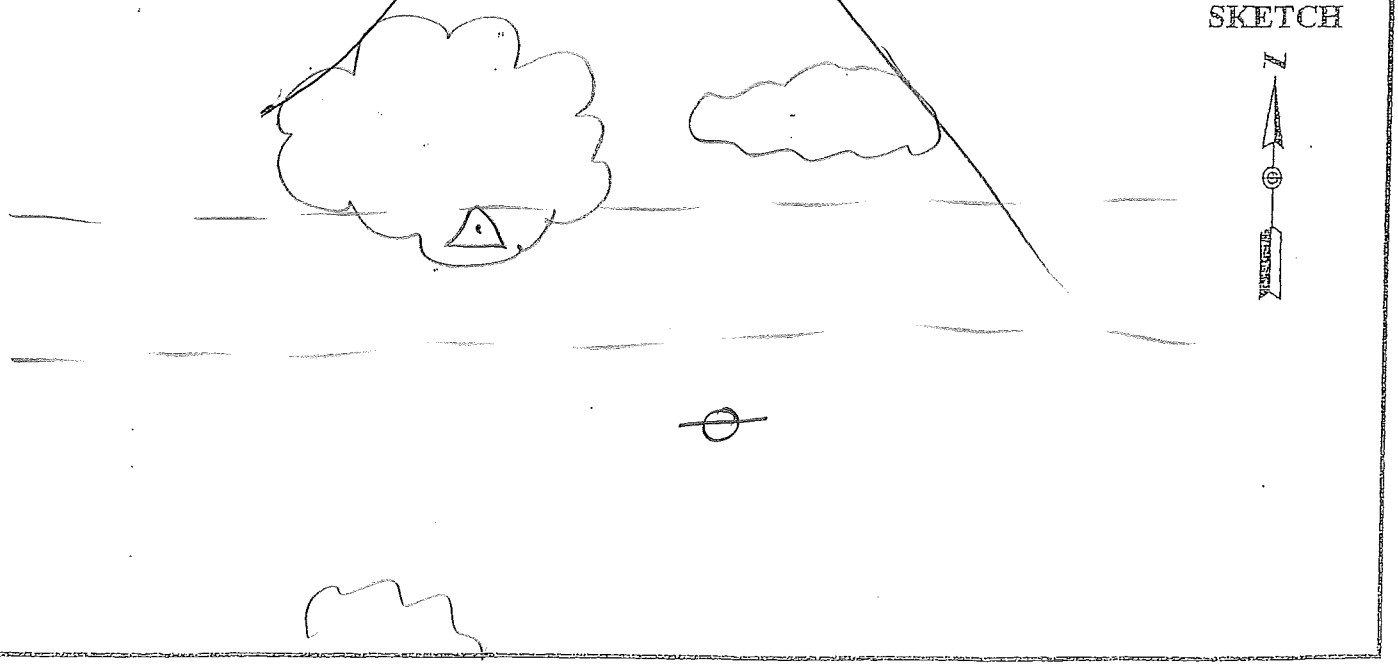
STATION DESCRIPTIONS N. side road

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1327	2.3	7/7
1350		

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

Bourbon Co. Base / short grass √PT

PROJECT 1120103
OPERATOR NB
DATE 3.30.12

SITE NUMBER 12
SITE NAME 1002

TRACKING TIMES (LOCAL) MEASURE √
START 2:11 p
STOP 2:38 p

SENSOR TYPE 500 9500 399 299
MEMORY CARD 603
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 ~~0.389~~
500 0.360

OBSTRUCTIONS:

HEIGHT READINGS MTS FT
1.372
1.732

STATION DESCRIPTIONS

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1411	3.7	5/6
1438		

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH

see Previous

AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

Bourbon Co. tall grass VRT

PROJECT 1120103
OPERATOR MB
DATE 3·30·12

SITE NUMBER 13
SITE NAME 238

TRACKING TIMES (LOCAL) MEASURE ✓
START 2:49 p
STOP 3:10 p

SENSOR TYPE 500 9500 399 299
MEMORY CARD 603
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
500 0.360

OBSTRUCTIONS: trees E

HEIGHT READINGS MTS FT
1.409
1.769

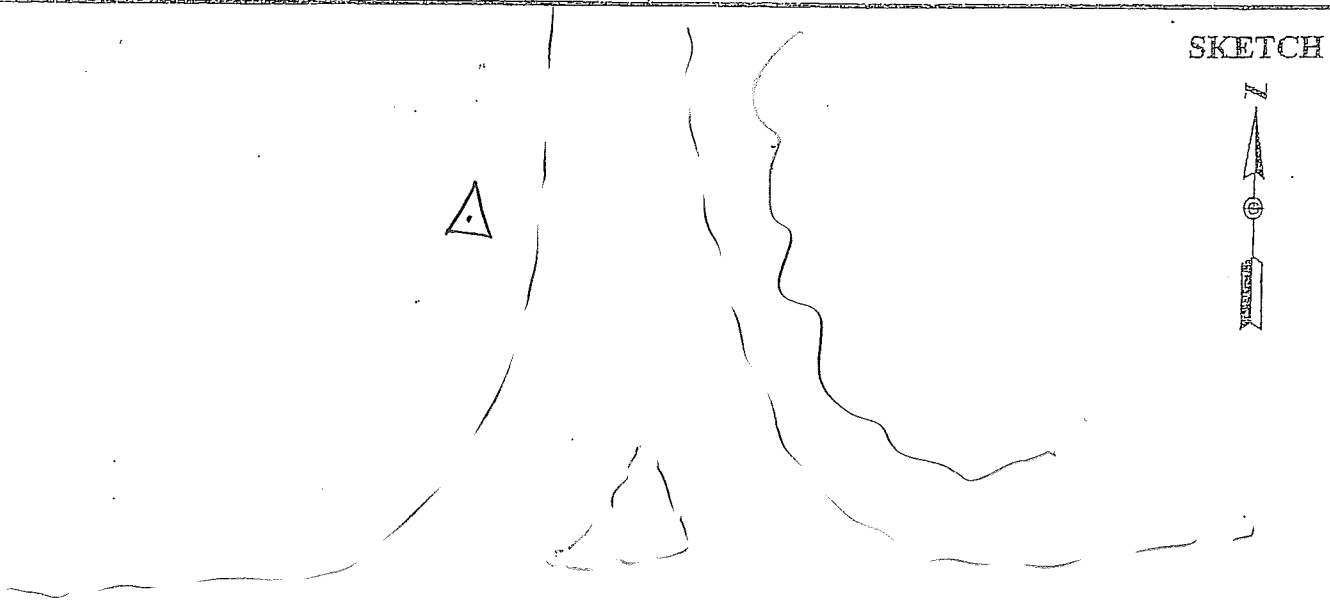
STATION DESCRIPTIONS W. of road

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1449	2.4	9/9
1510		

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

Bourbon Co. short grass √RT

PROJECT 120103
OPERATOR MB
DATE 3.30.12

SITE NUMBER 14
SITE NAME 140

TRACKING TIMES (LOCAL) MEASURE √
START 3:17 p
STOP 3:38 p

SENSOR TYPE 500 9500 399 299
MEMORY CARD 603
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 ~~0.389~~
(500) 0.360

OBSTRUCTIONS: trees SE + SW

HEIGHT READINGS MTS FT
1.360
1.720

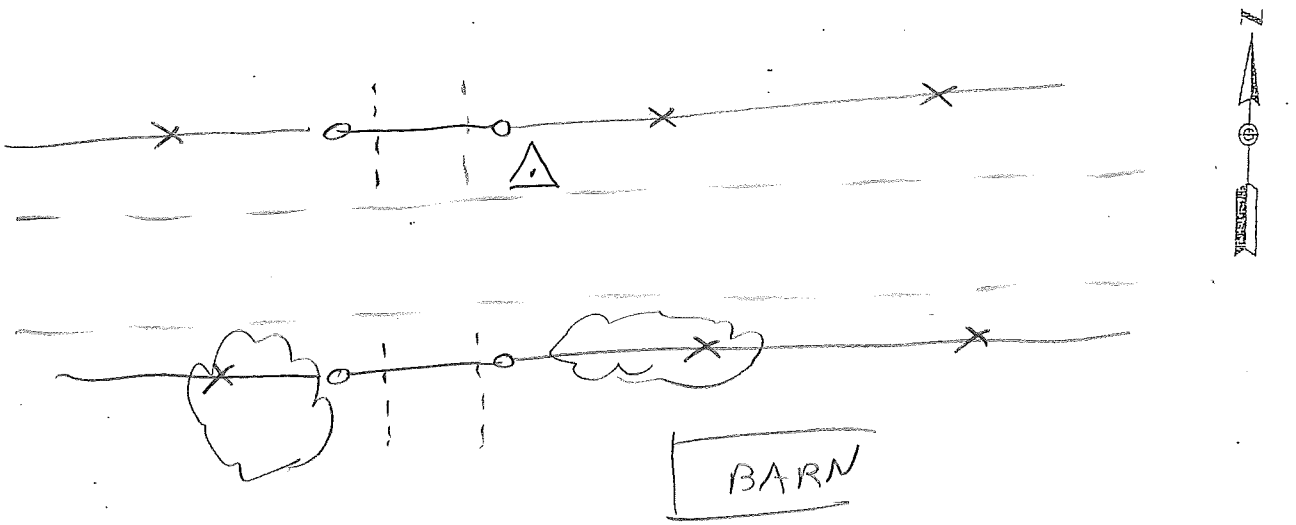
STATION DESCRIPTIONS N of road

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1517	2.0	10/10
1538		

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

BASE

PROJECT 1120103
OPERATOR WJN
DATE 3/31/12

SITE NUMBER 1
SITE NAME 1234

TRACKING TIMES (LOCAL) MEASURE CDT
START 9:09
STOP

SENSOR TYPE (500) (9500) 399 299
MEMORY CARD 101
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 (0.389)
500 0.360

OBSTRUCTIONS: NO

HEIGHT READINGS MTS FT
1.175
1.564

STATION DESCRIPTIONS: SPIKE
PREVIOUSLY SET (3/30/12)

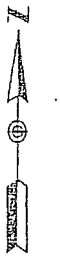
SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
14:09	1.8	10/10-10

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

AS BEFORE DESCRIBED

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

BASE

PROJECT 112010 3
OPERATOR WJN
DATE 3/31/12

SITE NUMBER 1
SITE NAME 1235

TRACKING TIMES (LOCAL) MEASURE CDT
START 9:44
STOP 15:55

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 11
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
500 (0.360)

OBSTRUCTIONS: OH Power Lines

HEIGHT READINGS MTS FT
1.136
1.596

STATION DESCRIPTIONS Set 10" Spike 5' N. of S. R/W Fence ± 250 W of Pasture Acc.

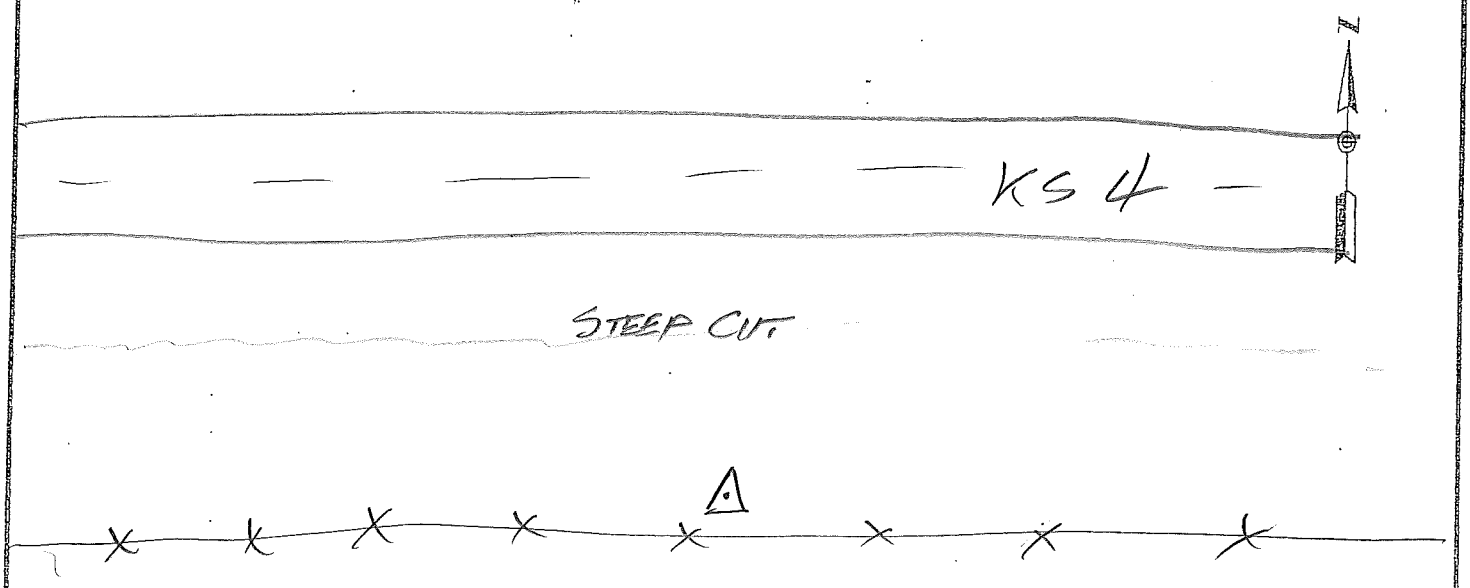
SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
14:44	1.9	10/10-10
20:55	2.0	9/9-9

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

AP 38 52 10.3 Lat
PR 96 20 10.7 long
OX

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

PROJECT 1120103
OPERATOR WJN
DATE 3/31/12

SITE NUMBER 1
SITE NAME 1638

TRACKING TIMES (LOCAL) MEASURE CDT
START 10:06
STOP 10:33

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 14
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
500 ~~0.360~~

OBSTRUCTIONS: NO

HEIGHT READINGS MTS FT
1.330

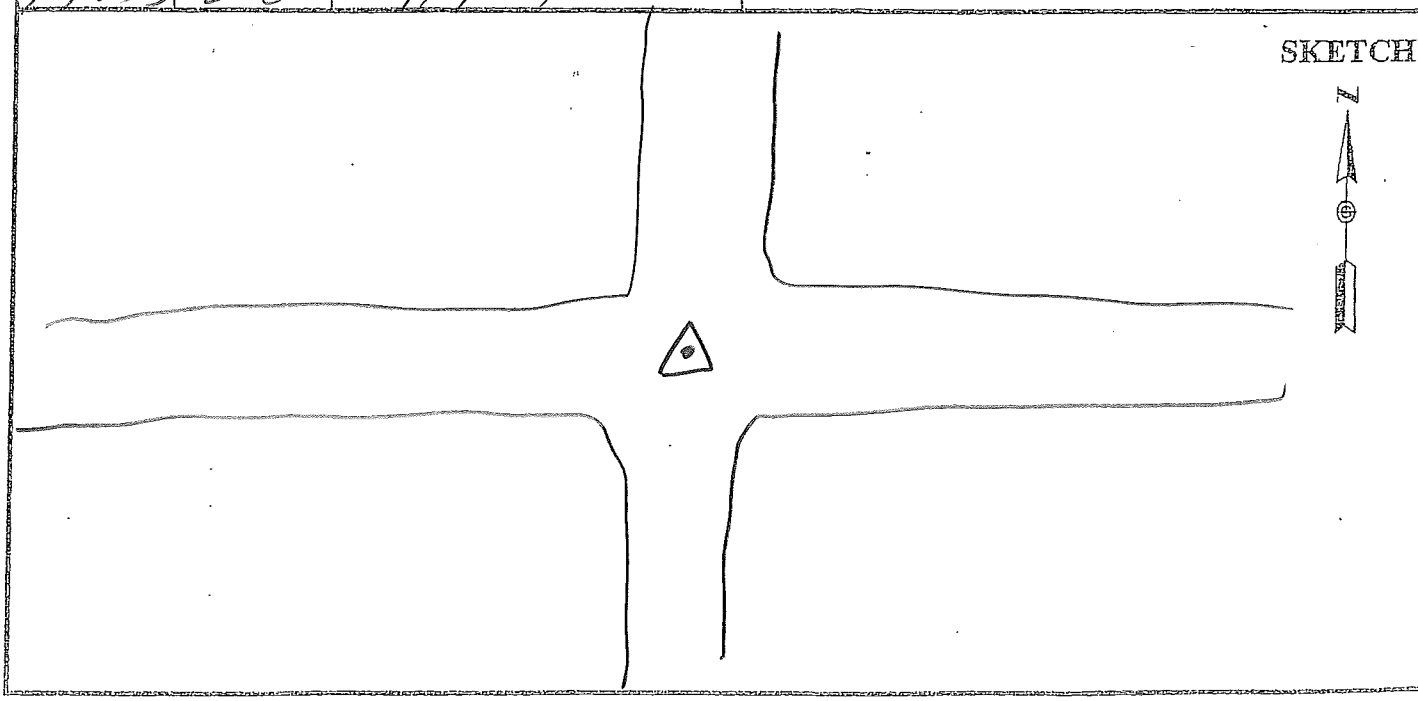
STATION DESCRIPTIONS ℄ ℄ INT
CO. RDS.

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
16:06	1.9	10/10-10
15.33	2.0	9/9-9

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
SKC

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

PROJECT 1120103
OPERATOR WNN
DATE 3/31/12

SITE NUMBER 2
SITE NAME 1534

TRACKING TIMES (LOCAL) MEASURE CDT
START 10:47
STOP 11 17

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 14
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
500 (0.360)

OBSTRUCTIONS: BLDGS NE
TREES S AND E

HEIGHT READINGS MTS FT
1.335

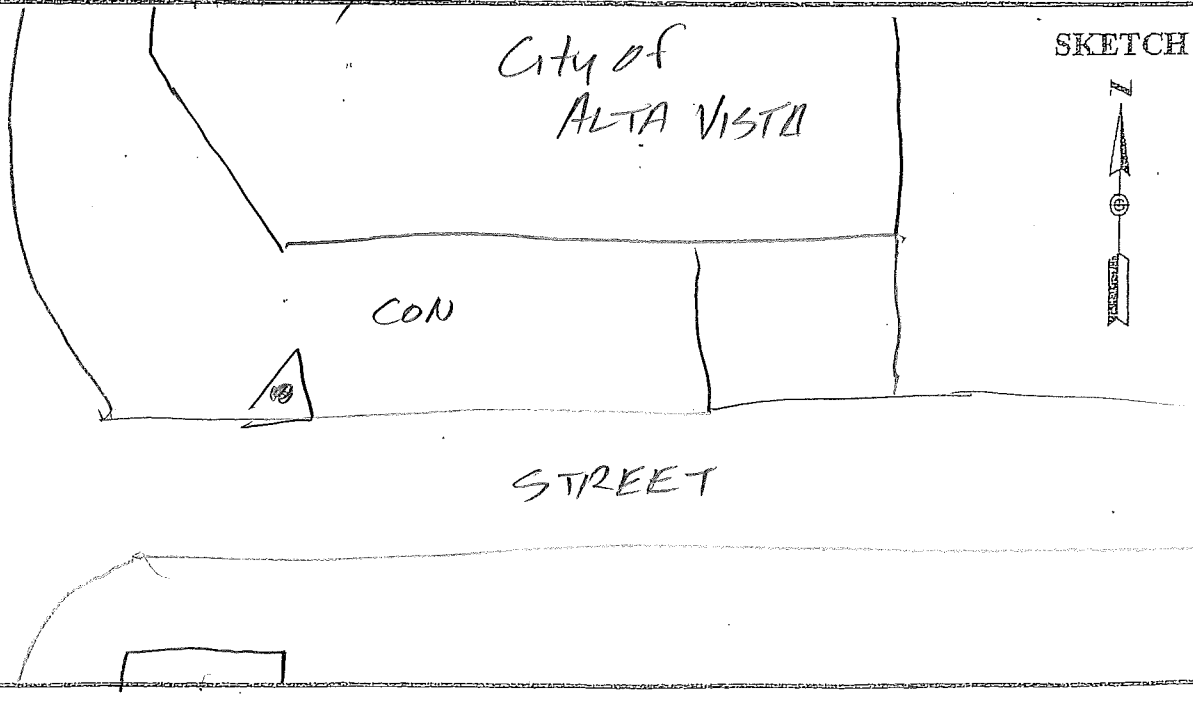
STATION DESCRIPTIONS POINT IN City OF ALTA VISTA, S'LY EDGE CONC WALK OPP ANGLE POINT OF OLD BLDG N, AND E. EDGE BLDG S

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
15 47	2.4	10/10-10
16 17	2.2	9/9-9

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
SKC

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

PROJECT 1120103
OPERATOR WJN
DATE 3/31/12

SITE NUMBER 3
SITE NAME P 215

TRACKING TIMES (LOCAL) MEASURE CDT
START 11:24
STOP 11:52

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 14
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
500 ~~0.360~~

HEIGHT READINGS MTS FT
1.089
1.449

OBSTRUCTIONS:

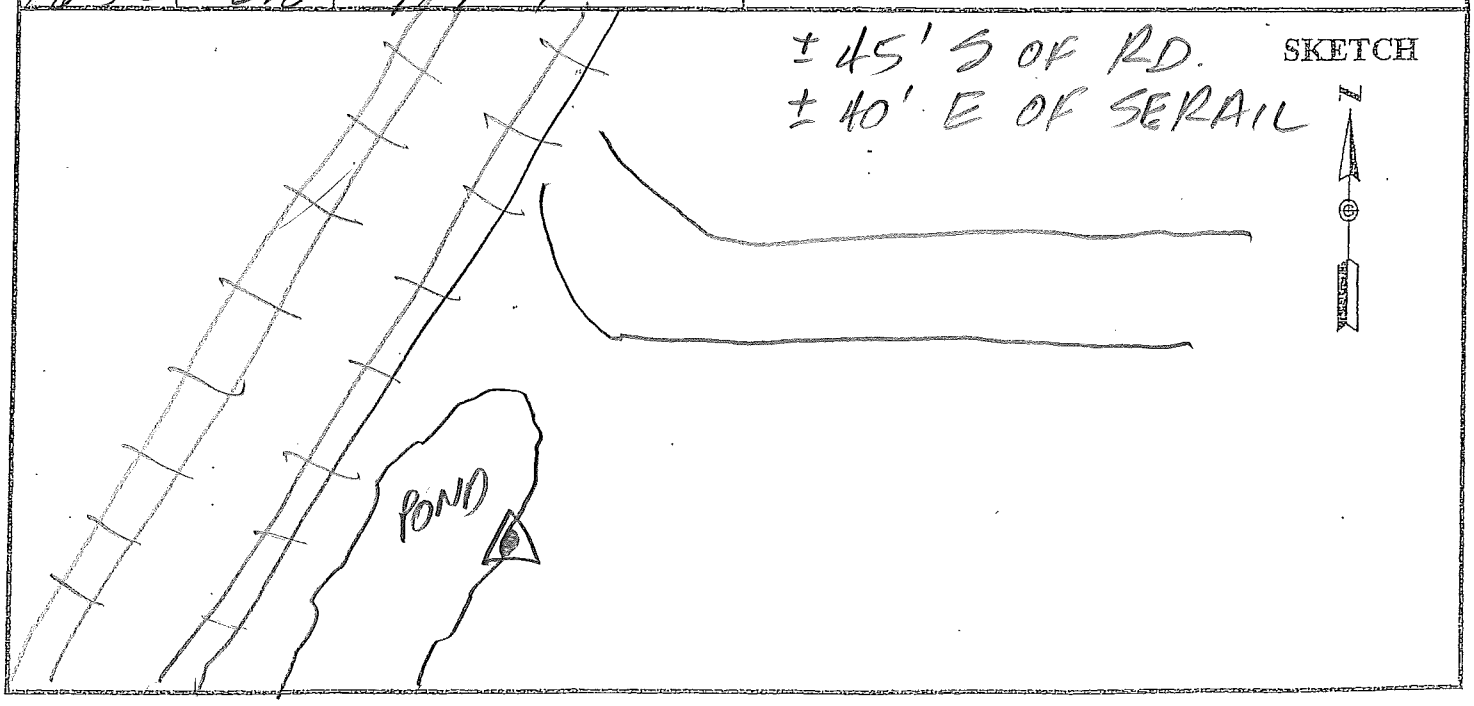
STATION DESCRIPTIONS FD BRASS DISK IN CONC MON "P 215 1934"

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1624	2.2	10/10-10
1652	2.0	9/9-9

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

PROJECT 1120103
OPERATOR WJN
DATE 3/31/12

SITE NUMBER 4
SITE NAME 1136

TRACKING TIMES (LOCAL) MEASURE CDT
START 12:06
STOP 12:30

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 14
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
500 ~~0.360~~

HEIGHT READINGS MTS FT
1.364

OBSTRUCTIONS: NO

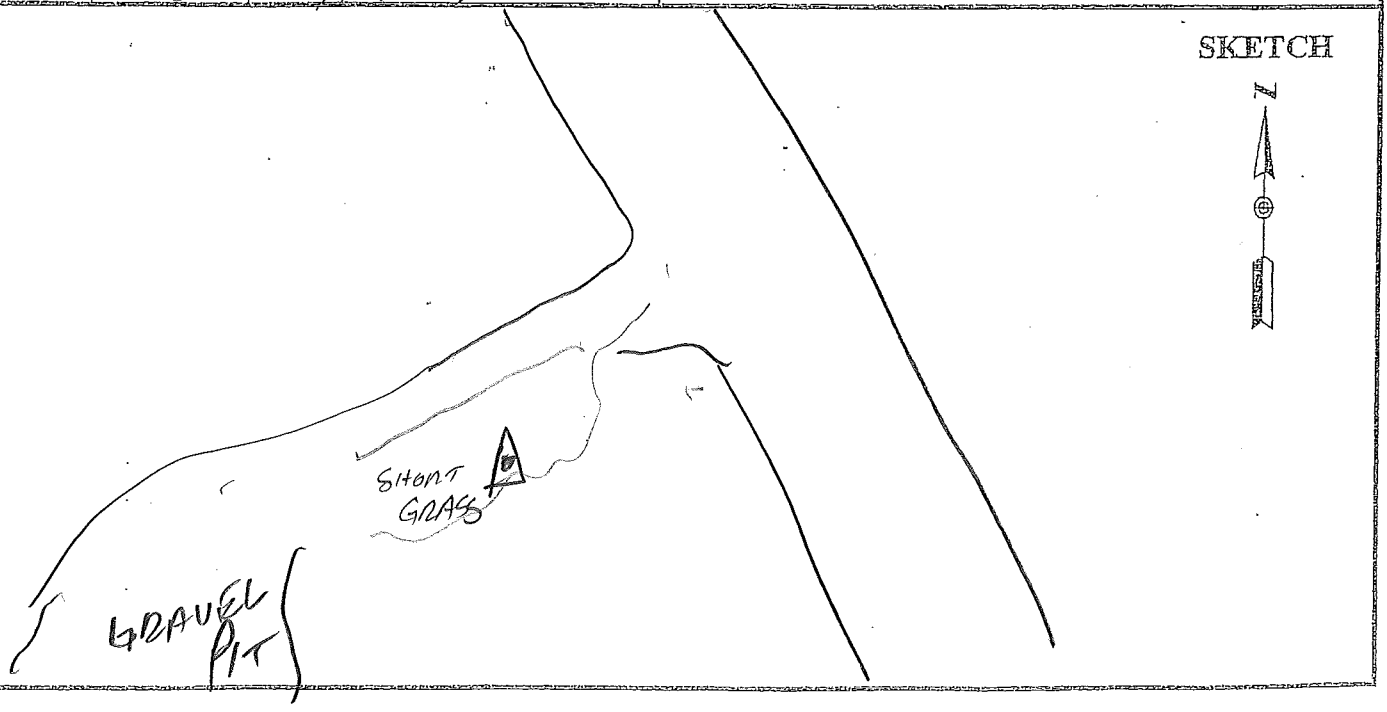
STATION DESCRIPTIONS POINT #4
SHORT GRASS/BARE EARTH

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1706	1.8	10/10-10
17:30	2.0	9/9-9

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
PC

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

PROJECT 112.0103
OPERATOR WJN
DATE 3/31/12

SITE NUMBER 5
SITE NAME 1436

TRACKING TIMES (LOCAL) MEASURE CDT
START 1250
STOP 1310

SENSOR TYPE ~~500~~ 9500 399 299
MEMORY CARD 14
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
500 ~~0.360~~

OBSTRUCTIONS: TREES

HEIGHT READINGS MTS FT
1310

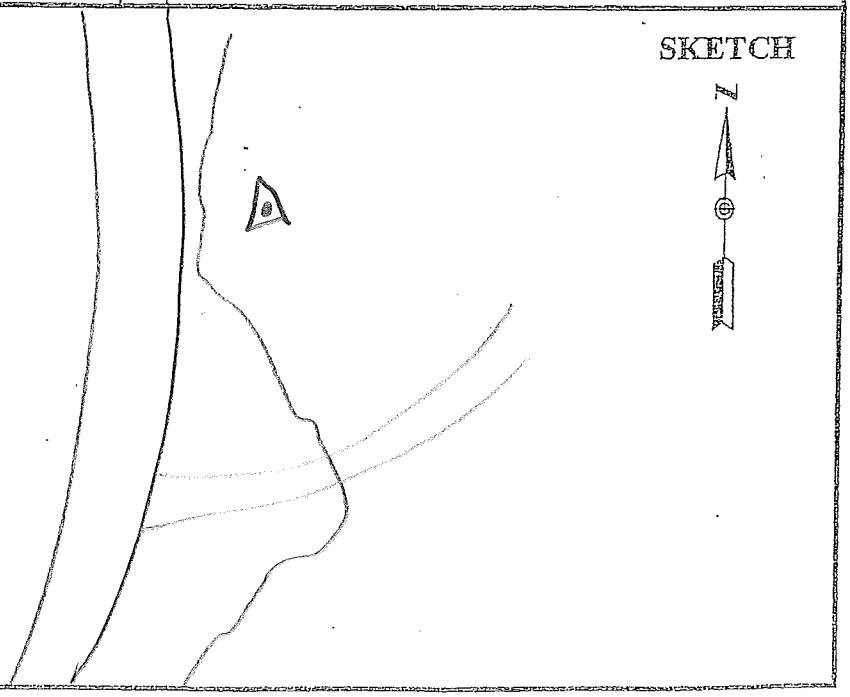
STATION DESCRIPTIONS POINT IN WOODED AREA

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1750	2.1	6/6-9
1810		

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
PC

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

PROJECT 1120103
OPERATOR WJN
DATE 3/31/12

SITE NUMBER 6
SITE NAME 1236

TRACKING TIMES (LOCAL) MEASURE CDT
START 13:26
STOP 13:43

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 14
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
500 (0.360)

OBSTRUCTIONS: No

HEIGHT READINGS MTS FT
1.264

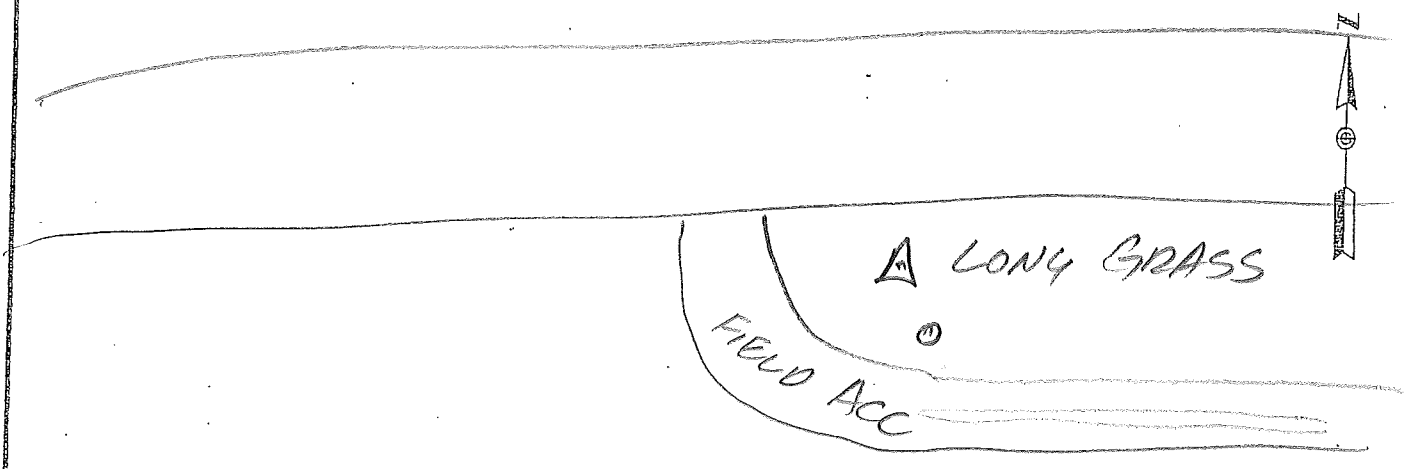
STATION DESCRIPTIONS POINT IN LONG GRASS IN S. R/W

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
18:26	2.0	9/9-9
18:43	1.9	9/9-9

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
PC

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

PROJECT 1120103
OPERATOR WJN
DATE 3/31/12

SITE NUMBER 7
SITE NAME 1535

TRACKING TIMES (LOCAL) MEASURE CDT
START 1359
STOP 1421

SENSOR TYPE (500) 9500 399 299
MEMORY CARD
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
500 (0.360)

HEIGHT READINGS MTS FT
1.315

OBSTRUCTIONS: TREES W, S

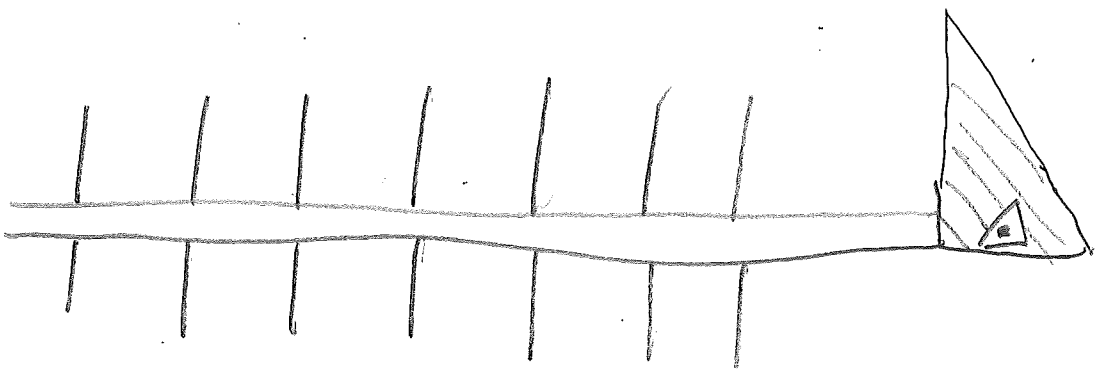
STATION DESCRIPTIONS CENTER OF HATCHED AREA OPP ℄ OF PARKING SPLITER W.

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1859	2.8	8/7-8
1924	2.4	9/8-10

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
PC

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

PROJECT 1120103
OPERATOR WVN
DATE 3/31/12

SITE NUMBER 8
SITE NAME 1639

TRACKING TIMES (LOCAL) MEASURE CDT
START 14:55
STOP 15:10

SENSOR TYPE (500) 9500 399 299
MEMORY CARD
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
500 (0.360)

OBSTRUCTIONS:

HEIGHT READINGS MTS FT
1.302

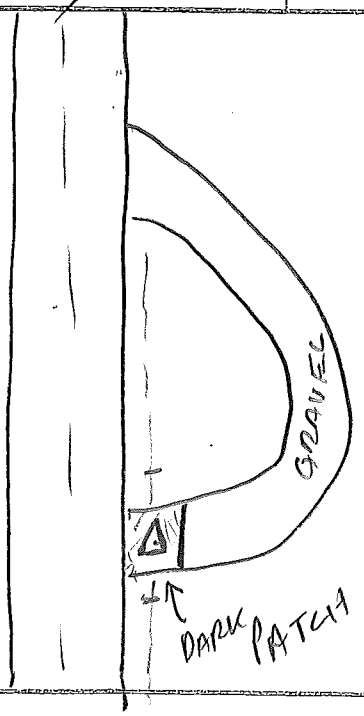
STATION DESCRIPTIONS ℄ OF DARK PATCH ENT @ ℄ CULVERT (℄ DRIVE @ ℄ CULVERT)

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
19:55	2.2	9/9-9
20:10	2.1	9/9-9

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

PROJECT 1120103
OPERATOR WJN
DATE 3/31/12

SITE NUMBER 9
SITE NAME ~~KC~~ 1237

TRACKING TIMES (LOCAL) MEASURE CDT
START 1524
STOP 1544

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 14
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
500 (0.360)

OBSTRUCTIONS: NO

HEIGHT READINGS MTS FT
1.283

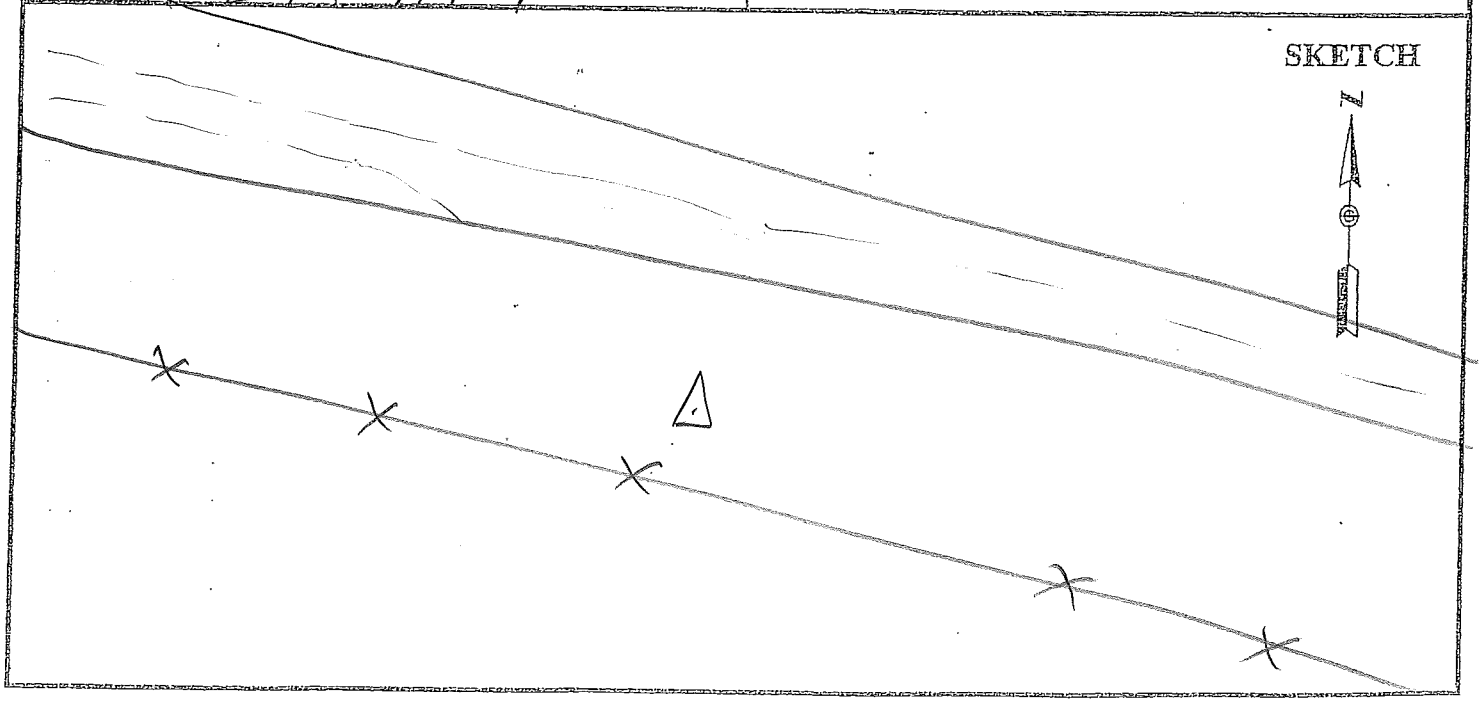
STATION DESCRIPTIONS POINT IN
LONG GRASS IN
S. R/W

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
2024	2.0	9/9-9
2044	2.1	9/9-9

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
PC

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
Bourbon Co SHEBOYGAN, WISCONSIN 53083 Base short grass CP1

PROJECT 1120103
OPERATOR MB
DATE 3.31.12

SITE NUMBER 1
SITE NAME 1002

TRACKING TIMES (LOCAL) MEASURE ✓
START 7:13a.
STOP

SENSOR TYPE 500 9500 399 299
MEMORY CARD 603
BATTERY NO. CB
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 ~~0.389~~
500 0.360

HEIGHT READINGS MTS FT
1.397
1.757

OBSTRUCTIONS:

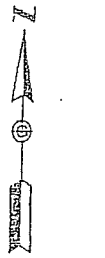
STATION DESCRIPTIONS

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
713	2.6	7/8

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH



See Previous

AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

Bourbon Co base short grass VRM

PROJECT 1120103
OPERATOR MB
DATE 3.31.12

SITE NUMBER 1
SITE NAME 138

TRACKING TIMES (LOCAL) MEASURE _____
START 7:36a
STOP _____

SENSOR TYPE 500 9500 399 299
MEMORY CARD 704
BATTERY NO. C13
CONTROLLER NO. _____
SENSOR NO. _____

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
500 0.360

OBSTRUCTIONS: _____

HEIGHT READINGS MTS FT
1.360 _____

1.725

STATION DESCRIPTIONS _____

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
736	2.4	8/8

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH

See previous

AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

Bourbon Co.

trees VPT

PROJECT 1120103
OPERATOR MB
DATE 3·31·12

SITE NUMBER 1
SITE NAME 432

TRACKING TIMES (LOCAL) MEASURE ✓
START 7:50 a.
STOP 8:30 a.

SENSOR TYPE 500 9500 399 299
MEMORY CARD 67
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
500 0.360

OBSTRUCTIONS: trees above

HEIGHT READINGS MTS FT
1.394

1754

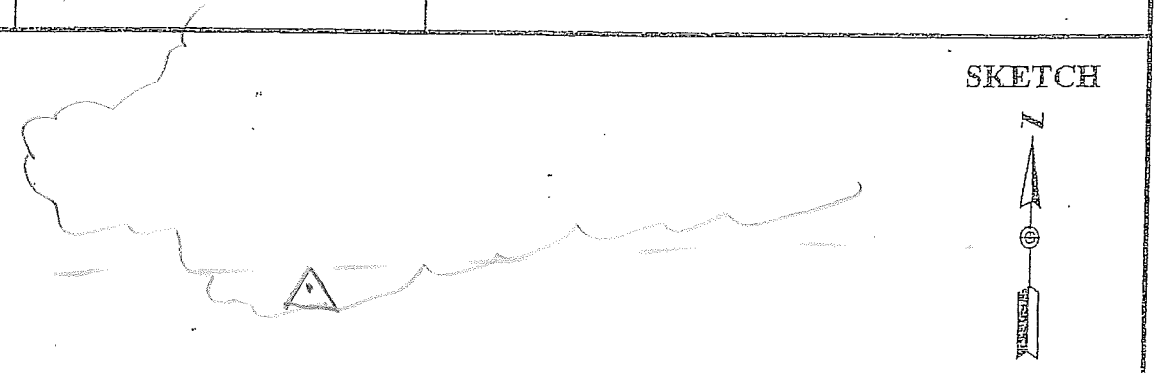
STATION DESCRIPTIONS N. side road

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
750	2.2	7/7
830		

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
Bourbon Co. SHEBOYGAN, WISCONSIN 53083

short grass √PT

PROJECT 1120103
OPERATOR MB
DATE 3·31·12

SITE NUMBER 2
SITE NAME 141

TRACKING TIMES (LOCAL) MEASURE ✓
START 8:40 a.
STOP 9:10 a.

SENSOR TYPE 500 9500 399 299
MEMORY CARD 67
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 ~~0.389~~
500 0.360

OBSTRUCTIONS: trees NW

HEIGHT READINGS MTS FT
1.355

STATION DESCRIPTIONS E. side of road

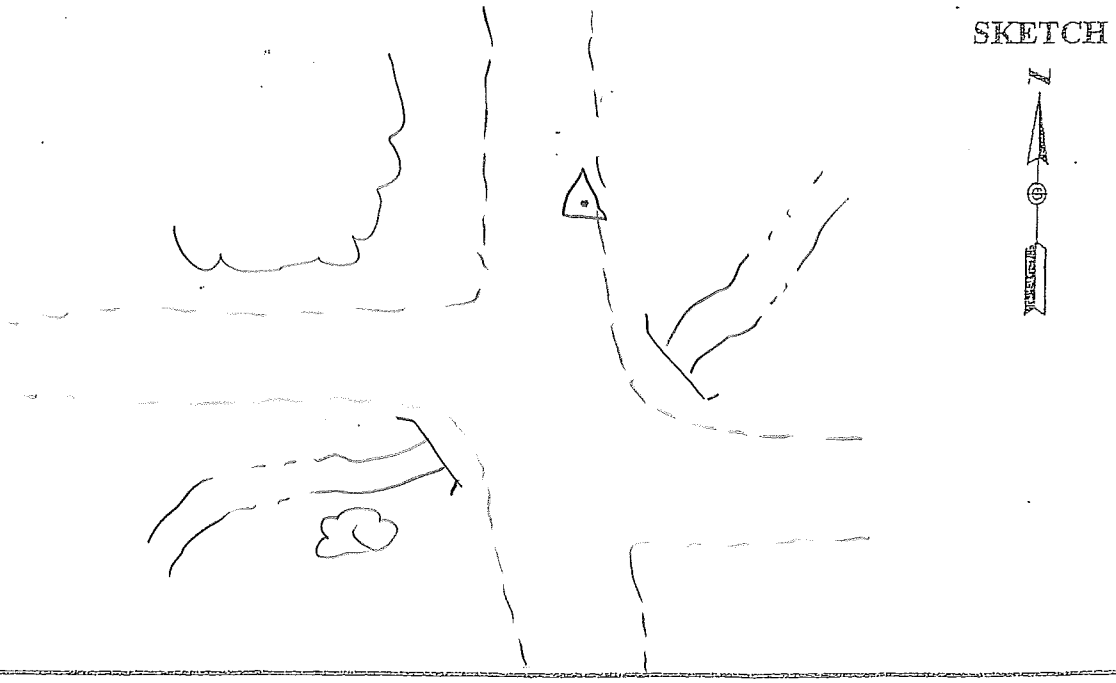
1.715

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
840	2.4	6/6
910		

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

Boonton Co. trees VPT

PROJECT 1120103
OPERATOR NB
DATE 3·31·12

SITE NUMBER 3
SITE NAME 433

TRACKING TIMES (LOCAL) MEASURE _____
START 9:26a.
STOP 10:06a.

SENSOR TYPE 500 9500 399 299
MEMORY CARD 67
BATTERY NO. _____
CONTROLLER NO. _____
SENSOR NO. _____

SENSOR CONSTANT 299/399 0.441
399E/9500 ~~0.389~~
500 0.360

OBSTRUCTIONS: trees above

HEIGHT READINGS MTS FT
1.396 _____
1.756

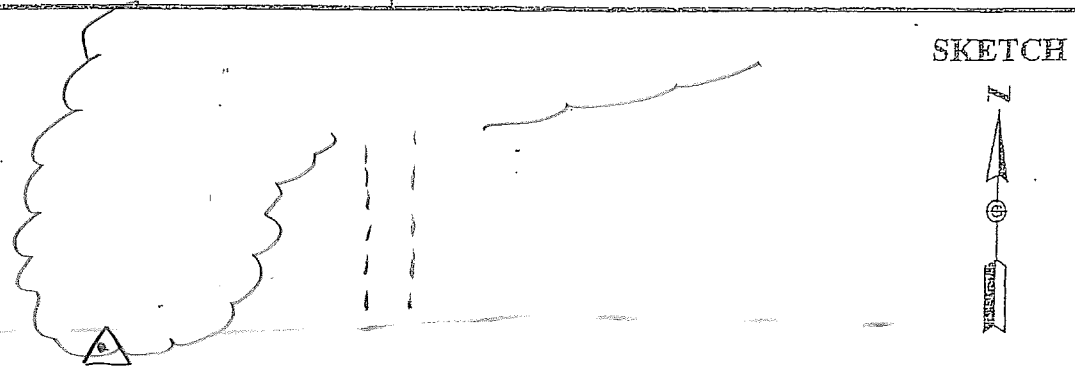
STATION DESCRIPTIONS N. side of road

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
926	3.0	8/8
1006		

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

Bourbon Co.

tall grass ✓PT

PROJECT 1120103
OPERATOR MB
DATE 3.31.12

SITE NUMBER 4
SITE NAME 239

TRACKING TIMES (LOCAL) MEASURE ✓
START 10:26 a.
STOP 10:53 a.

SENSOR TYPE 500 9500 399 299
MEMORY CARD 67
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
(500) (0.360)

OBSTRUCTIONS: trees N.

HEIGHT READINGS MTS FT
1.437

STATION DESCRIPTIONS N. of road

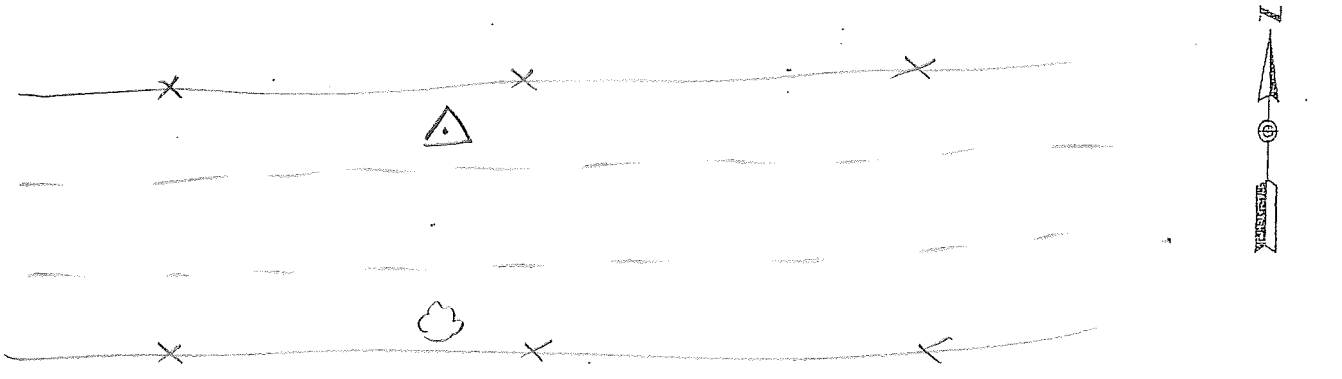
1797

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1026	3.2	9/9
1053		

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
Bourbon Co. SHEBOYGAN, WISCONSIN 53083 hand √pt

PROJECT 1120103
OPERATOR MB
DATE 3.31.12

SITE NUMBER 5
SITE NAME 541

TRACKING TIMES (LOCAL) MEASURE ____
START 11:06a.
STOP 11:28a.

SENSOR TYPE 500 9500 399 299
MEMORY CARD 67
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
500 0.360

OBSTRUCTIONS: none

HEIGHT READINGS MTS FT
1.347
1.707

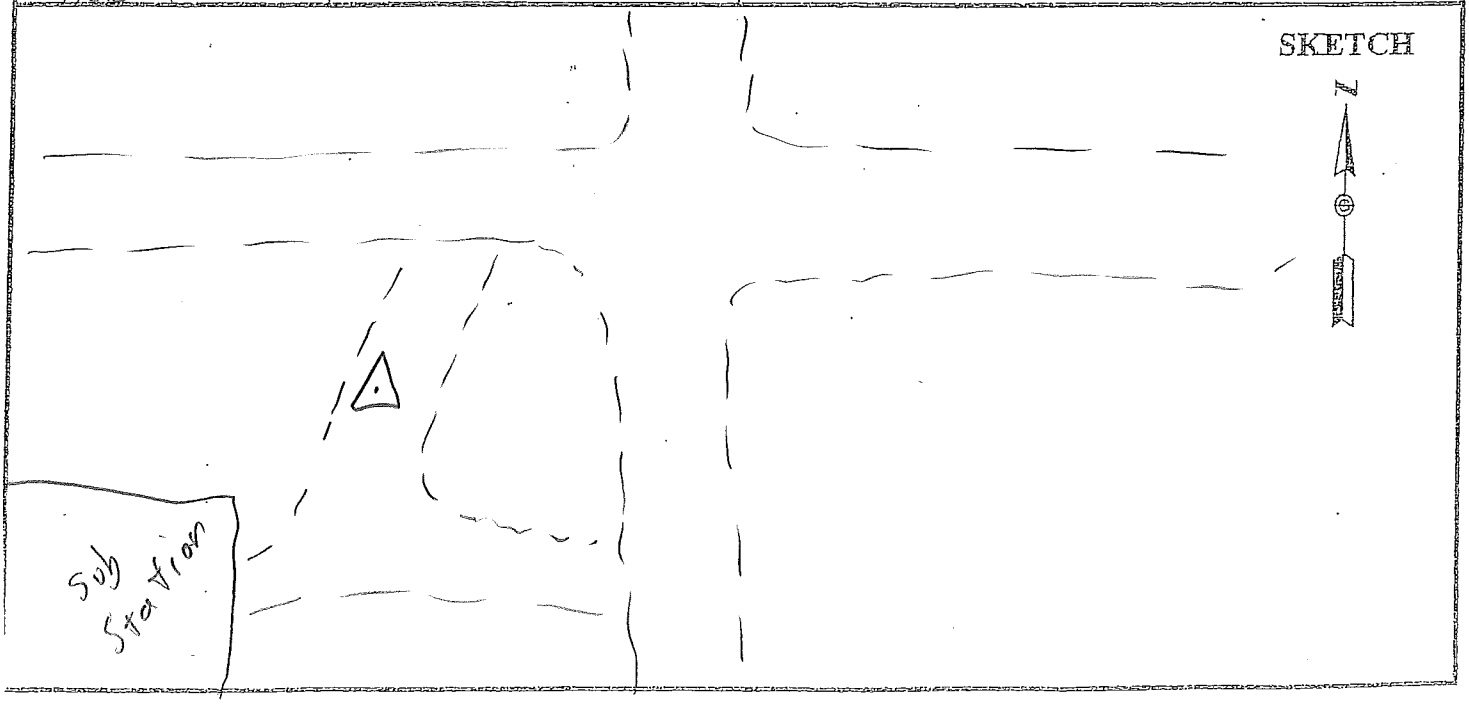
STATION DESCRIPTIONS on gravel drive

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1106	35	9/9
1128		

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

Bourbon Co. trees √PT

PROJECT 1120103
OPERATOR MB
DATE 3.31.12

SITE NUMBER 6
SITE NAME **434**

TRACKING TIMES (LOCAL) MEASURE √
START 11:39 a.
STOP 12:19 p

SENSOR TYPE 500 9500 399 299
MEMORY CARD 67
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
~~399E/9500~~ ~~0.389~~
500 0.360

HEIGHT READINGS MTS FT
1.400
1.760

OBSTRUCTIONS: trees above

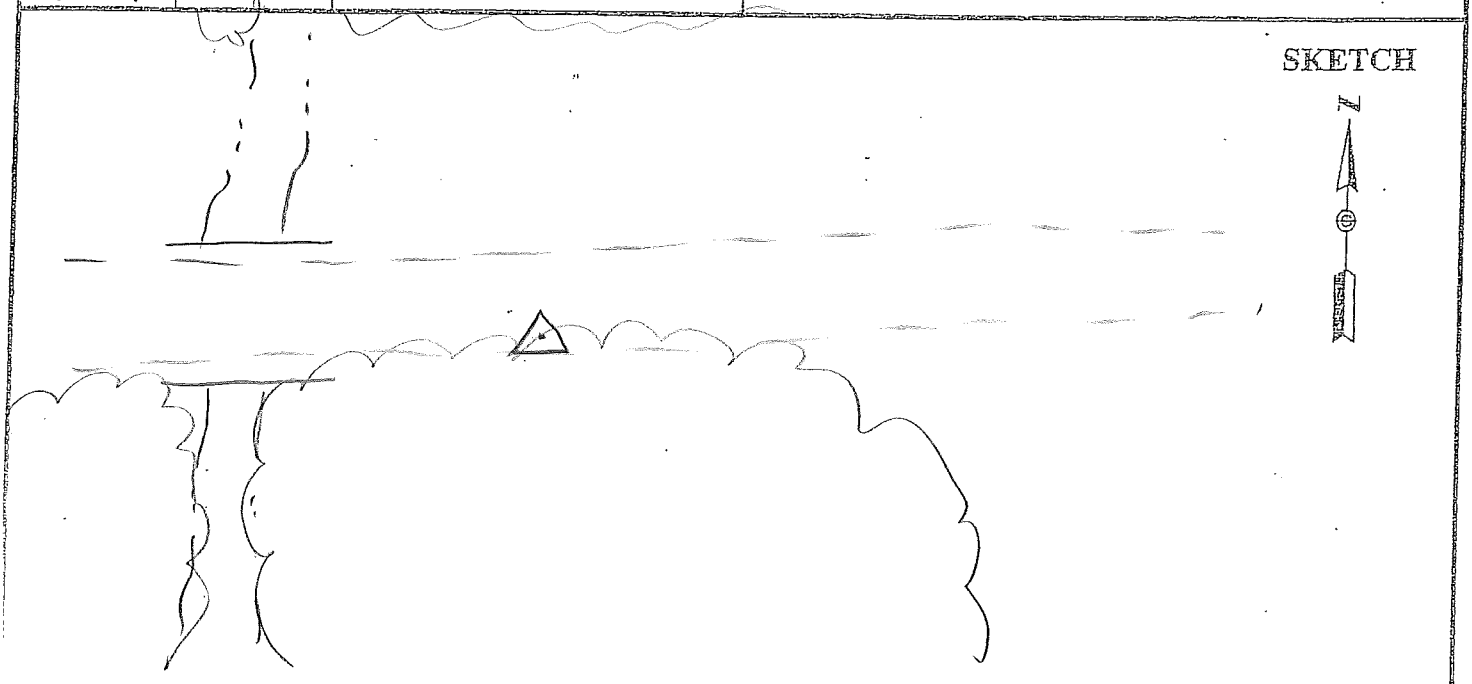
STATION DESCRIPTIONS S. side road

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1139	2.5	7/9
1219		

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

Bourbon Co. trees √PT

PROJECT 1120103
OPERATOR MB
DATE 3·31·12

SITE NUMBER 7
SITE NAME 422

TRACKING TIMES (LOCAL) MEASURE √
START 12:33 p
STOP 1:13 p

SENSOR TYPE 500 9500 399 299
MEMORY CARD 67
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
500 0.360

OBSTRUCTIONS: trees above

HEIGHT READINGS MTS FT
1.376

STATION DESCRIPTIONS S. side road

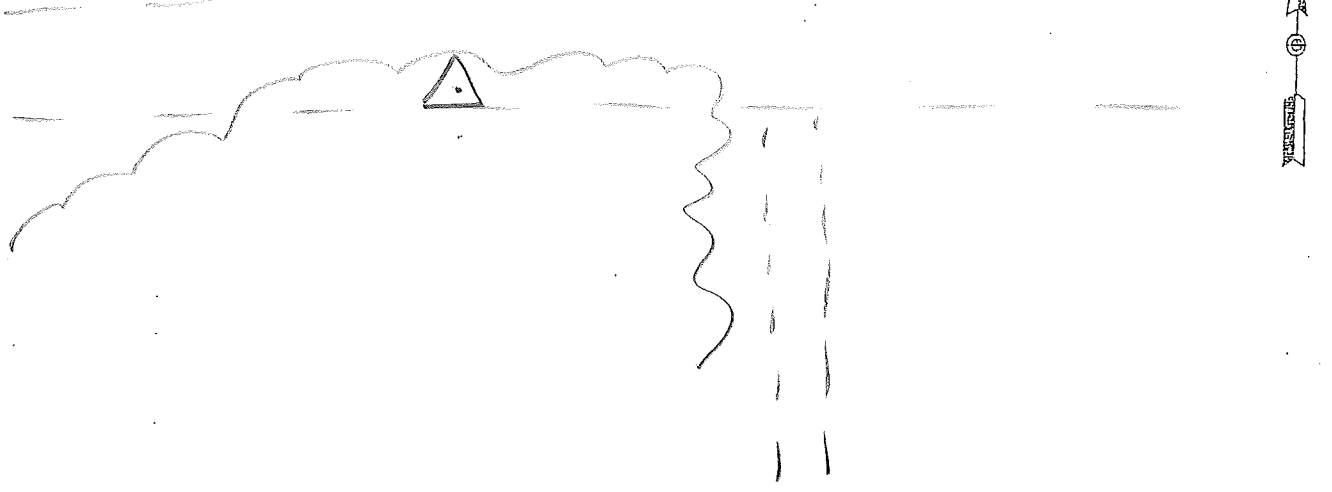
1736

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1233	1.7	8/8
1313		

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

Bourbon Co. trees √pr

PROJECT 1120103
OPERATOR MB
DATE 3·31·12

SITE NUMBER 8
SITE NAME 423

TRACKING TIMES (LOCAL) MEASURE _____
START 1:14 p
STOP 1:54 p

SENSOR TYPE 500 9500 399 299
MEMORY CARD 67
BATTERY NO. _____
CONTROLLER NO. _____
SENSOR NO. _____

SENSOR CONSTANT 299/399 0.441
399E/9500 ~~0.389~~
500 0.360

OBSTRUCTIONS: trees above

HEIGHT READINGS MTS FT
1.412 _____
1.772

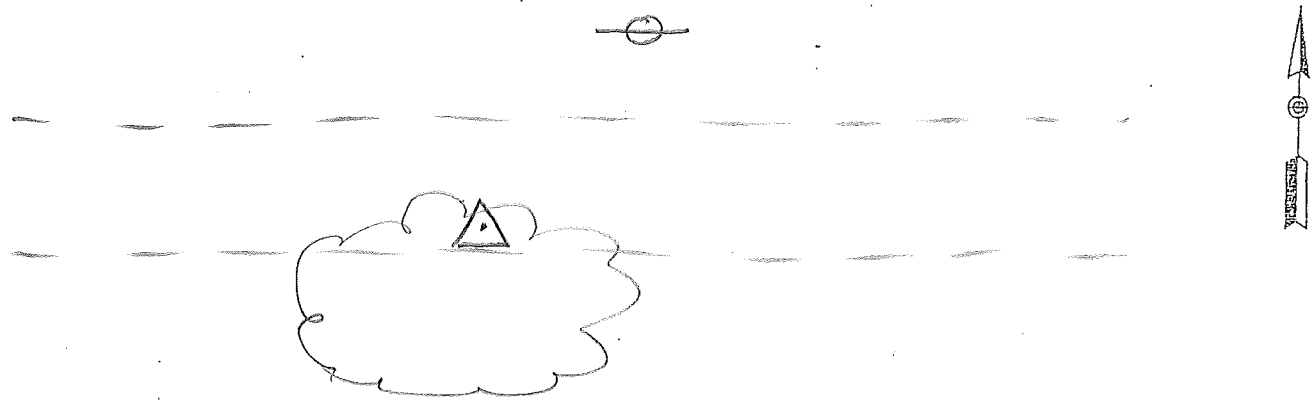
STATION DESCRIPTIONS S. side road

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1314	2.6	7/7
1354		

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

Bourbon Co.

short grass √PT

PROJECT 1120103
OPERATOR MB
DATE 3·31·12

SITE NUMBER 9
SITE NAME 142

TRACKING TIMES (LOCAL) MEASURE √
START 2:02 p
STOP 2:34 p

SENSOR TYPE 500 9500 399 299
MEMORY CARD 67
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 ~~0.389~~
500 0.360

OBSTRUCTIONS: none

HEIGHT READINGS MTS FT
1.372

STATION DESCRIPTIONS S. of road

1732

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1402	3.7	7/8
1434		

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH

AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

PROJECT 1120103
OPERATOR MJN
DATE 4/1/12

SITE NUMBER 1
SITE NAME 1239

TRACKING TIMES (LOCAL) MEASURE CDT
START 9:30
STOP 17:18

SENSOR TYPE 500 (9500) 399 299
MEMORY CARD
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 ~~0.389~~
500 0.360

OBSTRUCTIONS: NO

HEIGHT READINGS MTS FT
1.180
1.560

STATION DESCRIPTIONS Set 10"
SPIKE IN LONG GRASS

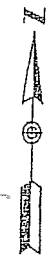
SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
14:30	2.0	9/9-9
22:18	1.7	10/10-10

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
MC

± 600' E OF TURNOUT
±50' S. OF ℄ KS 4 5'N OF RW FENCE

SKETCH



KS 4

AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

PROJECT 1120103
OPERATOR WJW
DATE 4/4/12

SITE NUMBER 1
SITE NAME 1137

TRACKING TIMES (LOCAL) MEASURE CDT
START 10:12
STOP 16:43

SENSOR TYPE (500) 9500 399 299
MEMORY CARD
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
500 0.360

OBSTRUCTIONS: NO

HEIGHT READINGS MTS FT
1.161
1.521

STATION DESCRIPTIONS POINT IN SHORT GRASS SET 10" SPIKE

SATELLITE OBSERVATIONS

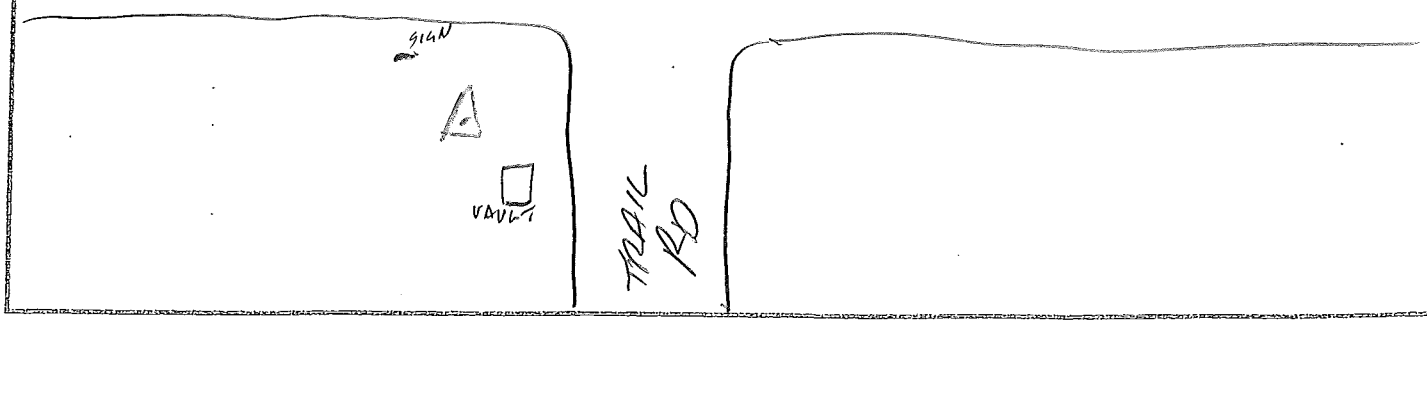
TIME	GDOP	SATELLITES
1512	2.1	10 | 10-10
2143	2.1	6 | 6-6

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH

±33' W. OF ℄ N-S RD
±30' S OF ℄ E-W RD
7' SE OF PIPELINE SIGN
±15' NW OF FIBER OPTIC VAULT

KS 99



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

PROJECT 1120103
OPERATOR WJN
DATE 4/1/12

SITE NUMBER 1
SITE NAME 1536

TRACKING TIMES (LOCAL) MEASURE CNT
START 1121
STOP 1149

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 14
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 ~~0.389~~
500 0.360

OBSTRUCTIONS: BLDGS E-W

HEIGHT READINGS MTS FT
1.351

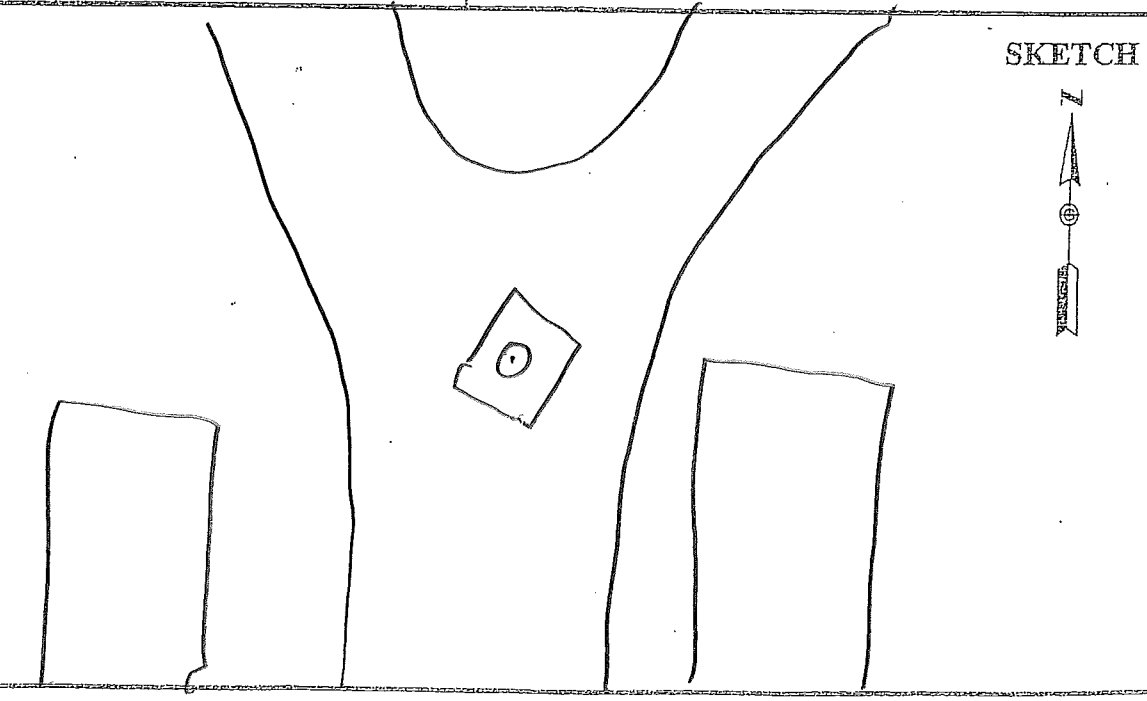
STATION DESCRIPTIONS G MH
IN LARGE CONC APRON

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1121	2.0	9/9-9
1149	1.9	

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
PC

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

PROJECT 1120103
OPERATOR WNN
DATE 4/

SITE NUMBER 2
SITE NAME 1640

TRACKING TIMES (LOCAL) MEASURE CDT
START 11:58
STOP 12:26

SENSOR TYPE (500) 9500 399 299
MEMORY CARD
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
500 (0.360)

OBSTRUCTIONS:

HEIGHT READINGS MTS FT
1.353

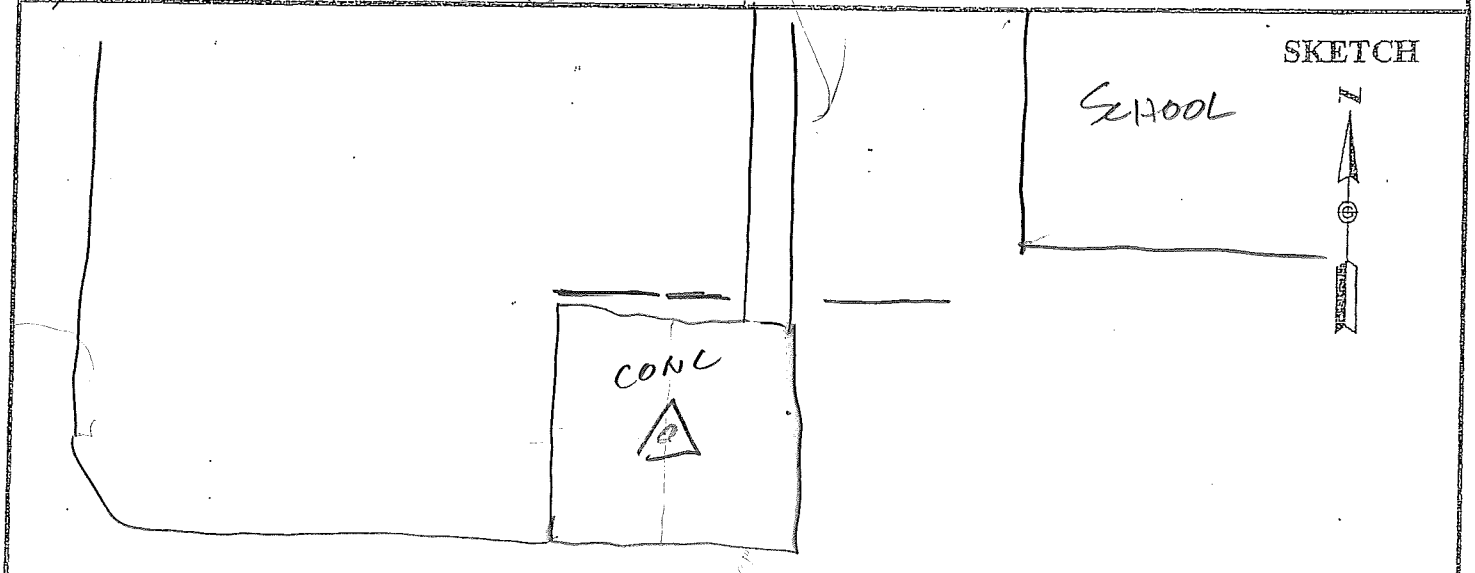
STATION DESCRIPTIONS 4 OF
20'x20' CONC SLAB

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1158	2.0	8/8-8
1726	1.9	9/9-8

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

PROJECT 112003
OPERATOR WJN
DATE 4/1/12

SITE NUMBER 3
SITE NAME 1437

TRACKING TIMES (LOCAL) MEASURE CDT
START 1240
STOP 1307

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 14
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
500 ~~0.360~~

HEIGHT READINGS MTS FT
1.210

OBSTRUCTIONS: TREES

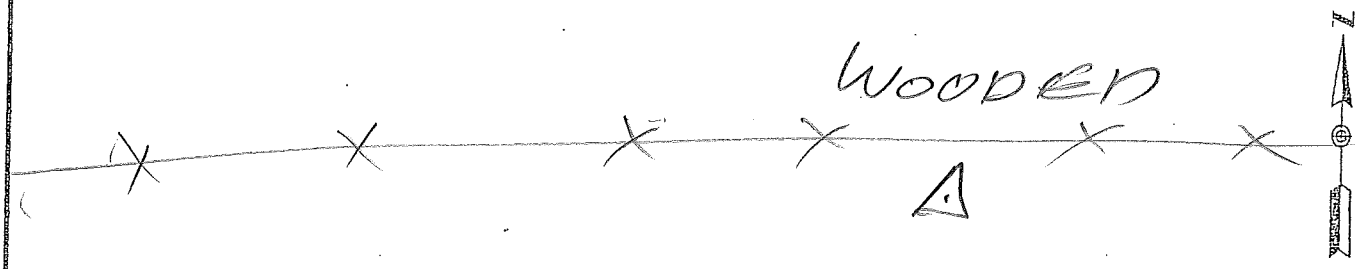
STATION DESCRIPTIONS POINT IN
WOODED AREA IN
N R/W E-W RD

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1240	2.6	5/5-9
1807	2.2	6/6-9

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
WINDY

SKETCH



2438

AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

PROJECT 112o103
OPERATOR WJN
DATE 4/1/12

SITE NUMBER 4
SITE NAME 1138

TRACKING TIMES (LOCAL) MEASURE CDT
START 13:32
STOP 13:50

SENSOR TYPE ~~500~~ 9500 399 299
MEMORY CARD 14
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
500 ~~0.360~~

HEIGHT READINGS MTS FT
1.265

OBSTRUCTIONS: NO

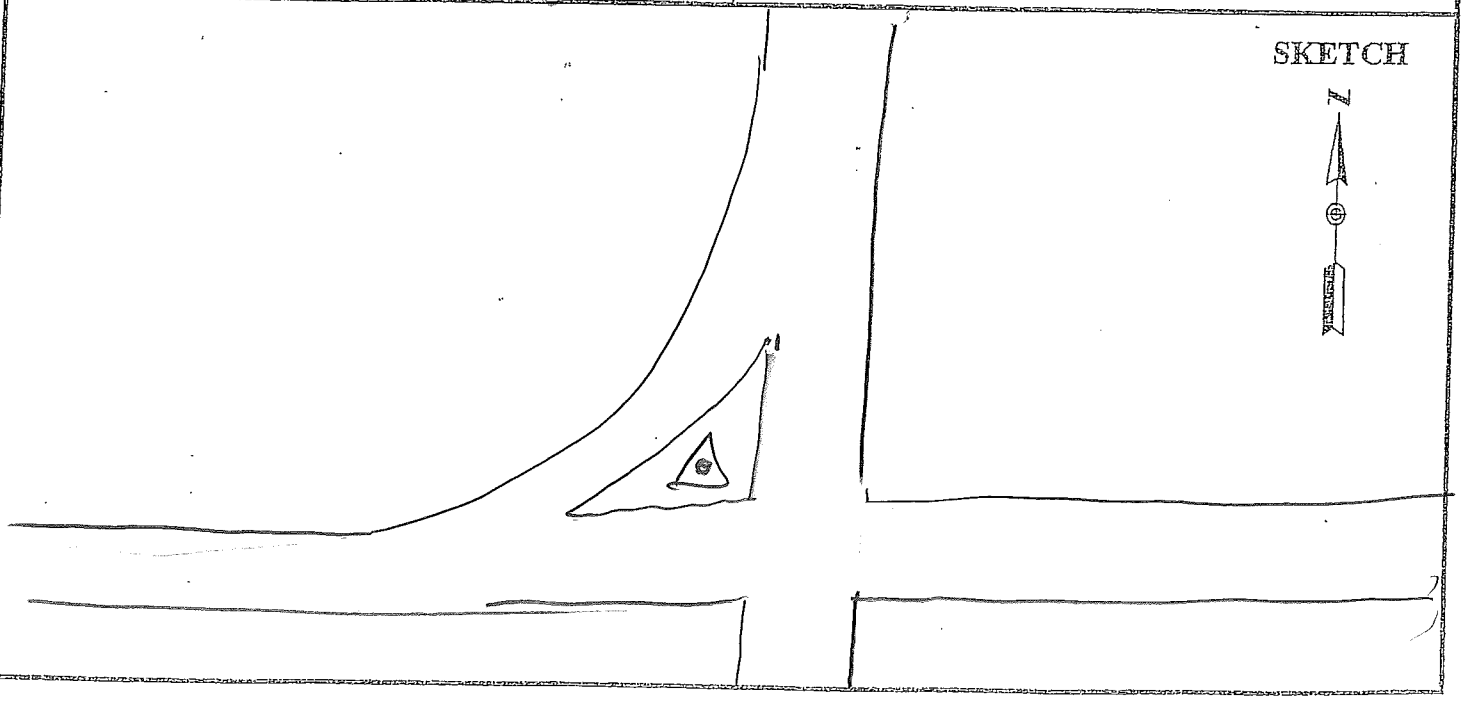
STATION DESCRIPTIONS PAVT IN
SHORT GRASS IN
INT ISLAND

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
13:32	2.2	8/8-C
13:50	2.1	8/8-C

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

PROJECT 1120103
OPERATOR WJN
DATE 4/1/12

SITE NUMBER 5
SITE NAME 1139

TRACKING TIMES (LOCAL) MEASURE CDT
START 1420
STOP 1445

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 14
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
500 (0.360)

OBSTRUCTIONS: NO

HEIGHT READINGS MTS FT
1.322

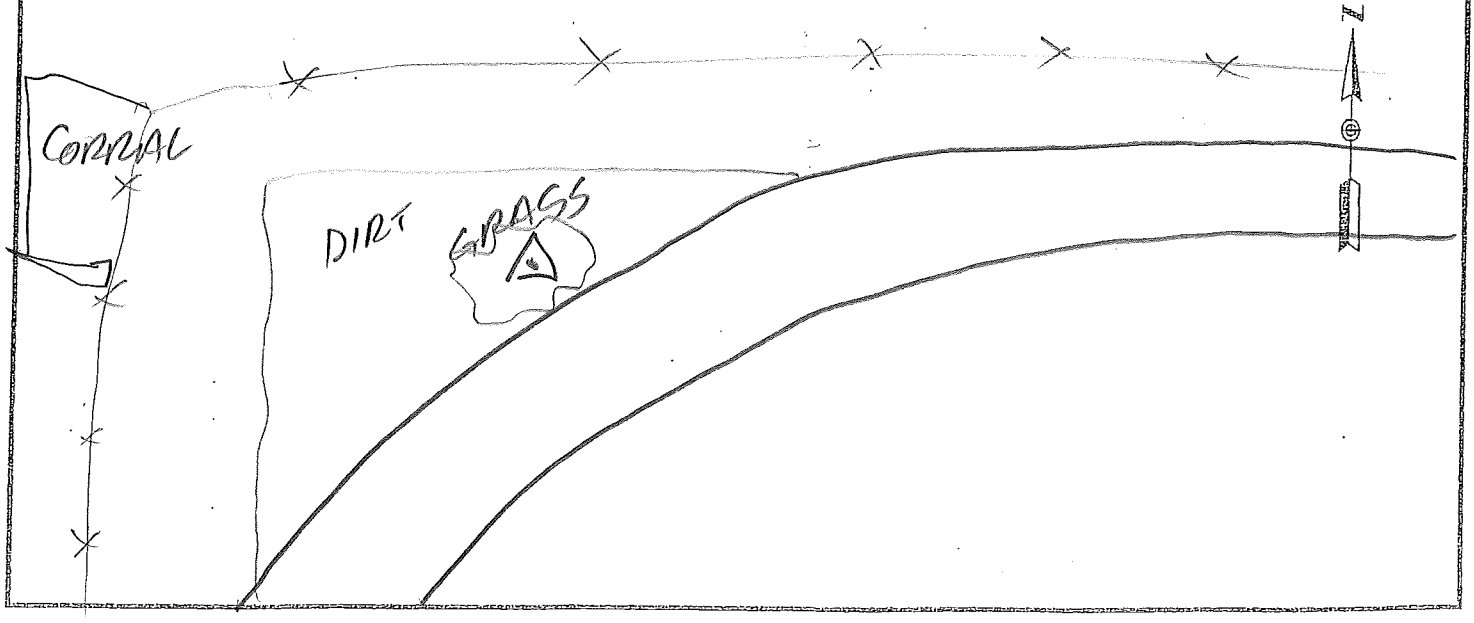
STATION DESCRIPTIONS POINT IN SHORT SPARSE GRASS IN CORRAL TURNOUT

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1920	1.7	9/9-9
1945	2.2	9/9-9

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
WINDY

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

PROJECT 1120103
OPERATOR MJN
DATE 4/1/12

SITE NUMBER 6
SITE NAME 1537

TRACKING TIMES (LOCAL) MEASURE CDT
START 1510
STOP 1530

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 14
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
500 (0.360)

OBSTRUCTIONS: TREES SE, SW
OH power lines

HEIGHT READINGS MTS FT
1.315

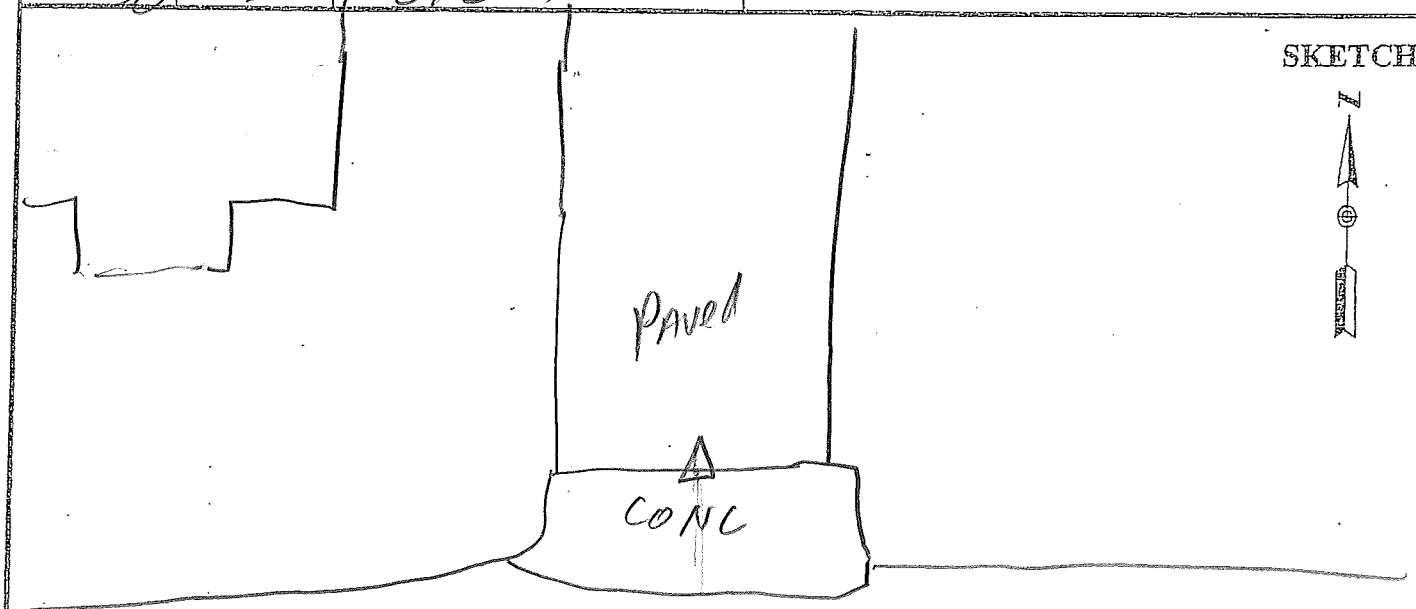
STATION DESCRIPTIONS ℄ S. EDGE
PAVEMENT

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
2010	2.8	6/6-9
20:30	2.2	8/8-9

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
WINDY

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

PROJECT 1120103
OPERATOR WJN
DATE 4/1/12

SITE NUMBER 7
SITE NAME 1438

TRACKING TIMES (LOCAL) MEASURE CDT
START 15:49
STOP 16:14

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 14
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
500 (0.360)

OBSTRUCTIONS: TREES OVERHEAD

HEIGHT READINGS MTS FT
1.202

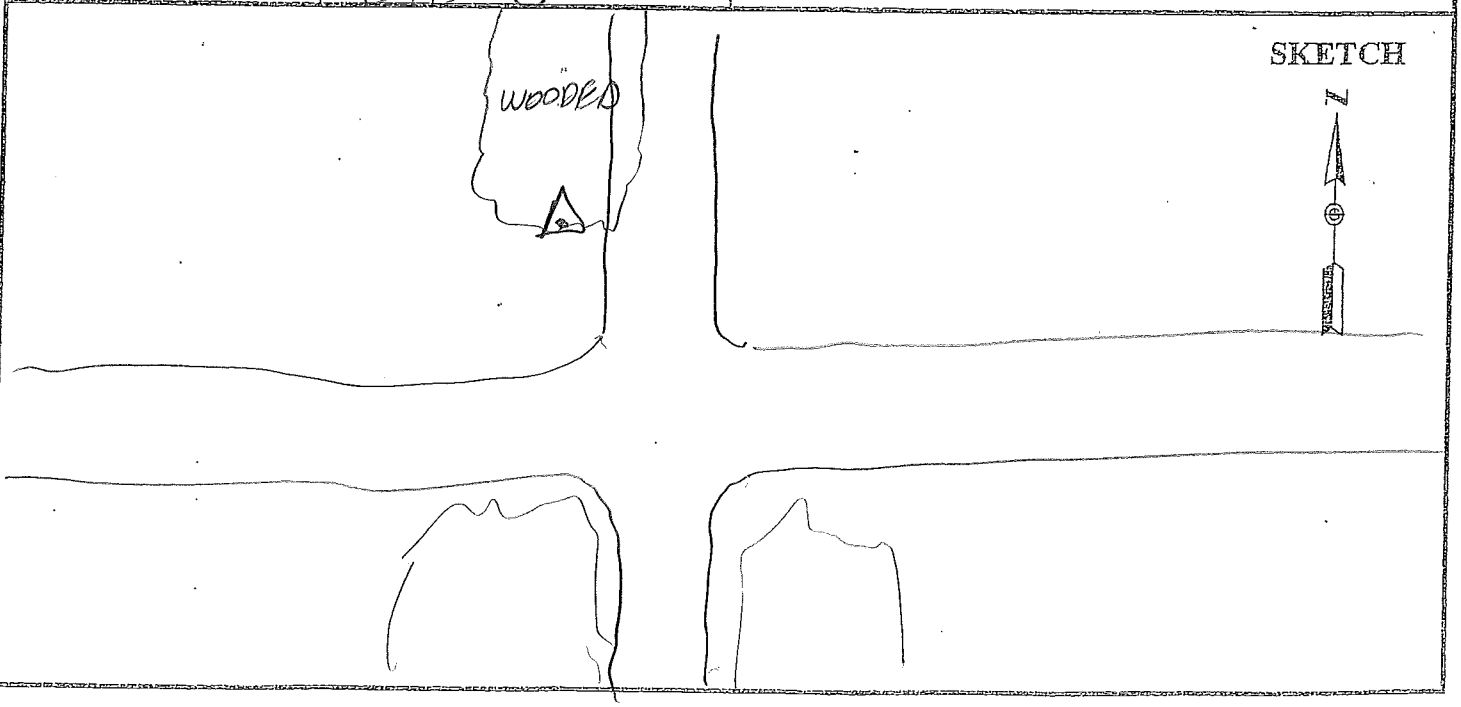
STATION DESCRIPTIONS POINT IN TREES

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
2049	2.3	8 7 -9
2114	2.2	8 3 -8

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
WINDY

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

Linn Co. Base tall grass √PT

PROJECT 1120103
OPERATOR MS
DATE 4.1.12

SITE NUMBER 1
SITE NAME 240

TRACKING TIMES (LOCAL) MEASURE √
START 7:42 a.
STOP

SENSOR TYPE 500 9500 399 299
MEMORY CARD 704
BATTERY NO. C0
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
500 0.360

OBSTRUCTIONS: none

HEIGHT READINGS MTS FT
1.247

STATION DESCRIPTIONS set 8" rebar w/cap

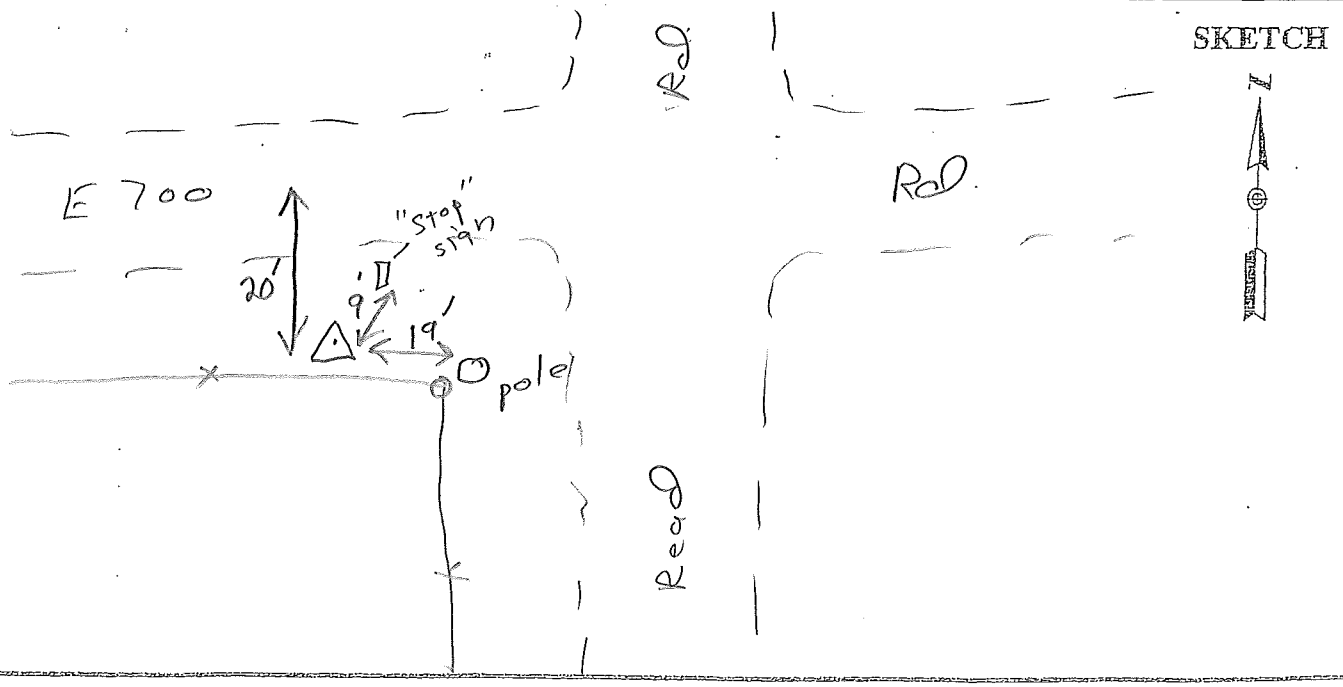
1607

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
742	2.4	7/7

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
38 07 27.5
94 45 02.8

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

Linn Co. Base Control

PROJECT 1120103
OPERATOR MB
DATE 4.1.12

SITE NUMBER 1
SITE NAME D 277

TRACKING TIMES (LOCAL) MEASURE ✓
START 8:15 q1
STOP

SENSOR TYPE 500 9500 399 299
MEMORY CARD 67
BATTERY NO. CB
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
500 0.360

OBSTRUCTIONS:

HEIGHT READINGS MTS FT
1.157

1.517

STATION DESCRIPTIONS

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
815	4.9	6/6

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH

see previous

AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

Linn Co. AME VPT

PROJECT 1120103
OPERATOR MB
DATE 4.1.12

SITE NUMBER 1
SITE NAME 638

TRACKING TIMES (LOCAL) MEASURE ✓
START 8:27 a.
STOP 8:57 a.

SENSOR TYPE 500 9500 399 299
MEMORY CARD 603
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 ~~0.389~~
500 0.360

OBSTRUCTIONS: tree SE

HEIGHT READINGS MTS FT
1.390
1.750

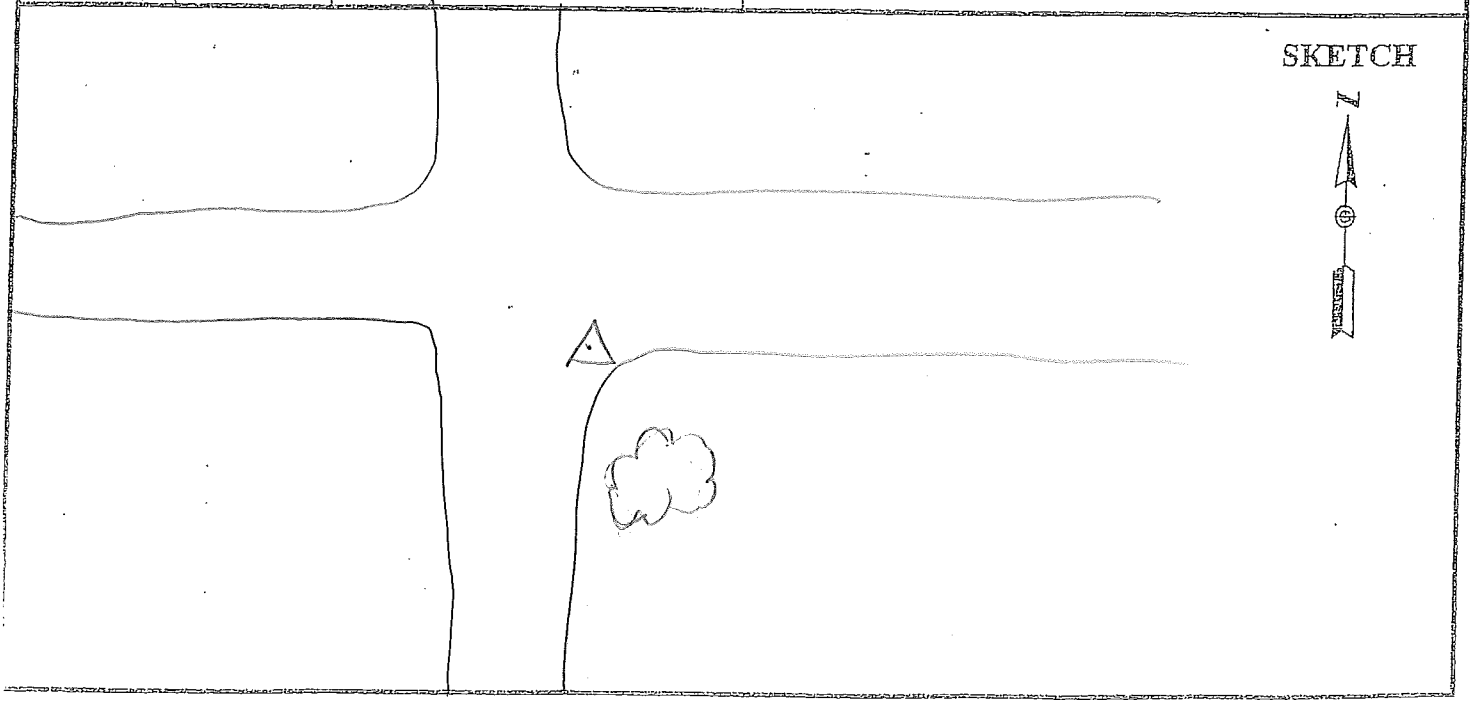
STATION DESCRIPTIONS SE corner of intersection

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
827	2.6	6/7
857		

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

Linn Co. hand V/PT

PROJECT 1120103
OPERATOR MS
DATE 4.1.12

SITE NUMBER 2
SITE NAME 542

TRACKING TIMES (LOCAL) MEASURE V
START 9:06
STOP 9:36

SENSOR TYPE 500 9500 399 299
MEMORY CARD 603
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
~~399E/9500~~ 500 ~~0.389~~ 0.360

OBSTRUCTIONS: none

HEIGHT READINGS MTS FT
1.427
1.787

STATION DESCRIPTIONS N. side of road

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
905	1.5	9/9
936		

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH

AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

Linn Co.

short grass 1/97

PROJECT 1120103
OPERATOR MB
DATE 4.1.12

SITE NUMBER 3
SITE NAME 143

TRACKING TIMES (LOCAL) MEASURE ✓
START 9:40 a.
STOP 10:10 a.

SENSOR TYPE 500 9500 399 299
MEMORY CARD 603
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 ~~0.389~~
500 0.360

OBSTRUCTIONS: none

HEIGHT READINGS MTS FT
1.407
1.767

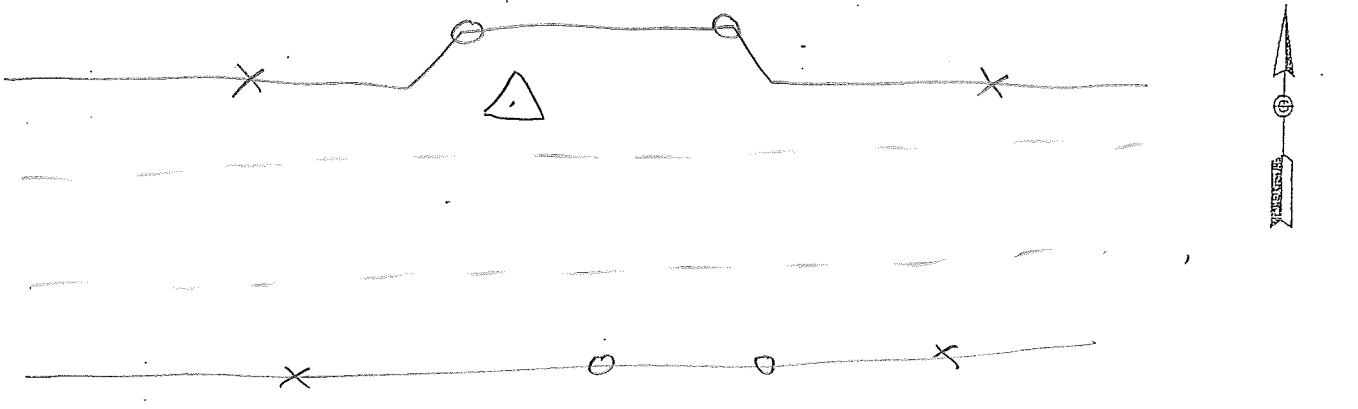
STATION DESCRIPTIONS N. of road

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
940	3.5	10/10
1010		

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

Linn Co.

tall grass √PT

PROJECT 1120103
OPERATOR MB
DATE 4. 1. 12

SITE NUMBER 4
SITE NAME 241

TRACKING TIMES (LOCAL) MEASURE _____
START 10:18 a.
STOP 10:48 a.

SENSOR TYPE 500 9500 399 299
MEMORY CARD 603
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
(500) (0.360)

OBSTRUCTIONS: tree NW

HEIGHT READINGS MTS FT
1.380
1.740

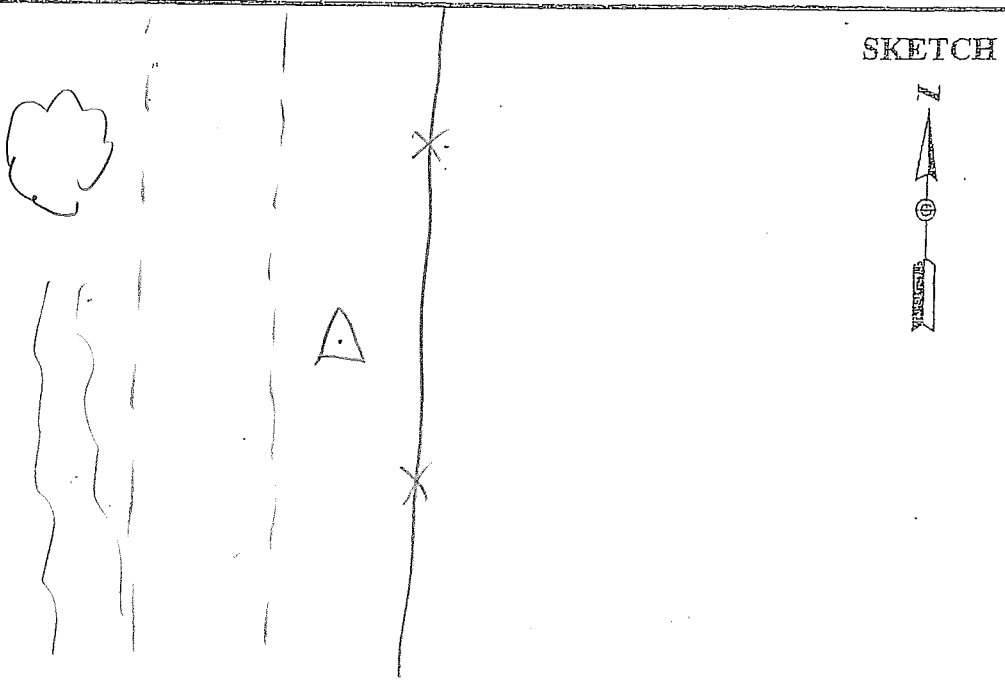
STATION DESCRIPTIONS E of road

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1018	3.1	8/8
1048		

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

Linn Co. trees √PT

PROJECT 1120103
OPERATOR MB
DATE 4.1.12

SITE NUMBER 5
SITE NAME 424

TRACKING TIMES (LOCAL) MEASURE ✓
START 11:02 a.
STOP 11:42 a.

SENSOR TYPE 500 9500 399 299
MEMORY CARD 603
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 ~~0.389~~
500 0.360

OBSTRUCTIONS: trees above

HEIGHT READINGS MTS FT
1.393
1.753

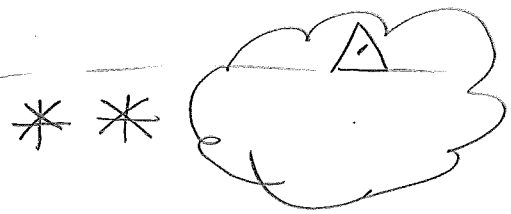
STATION DESCRIPTIONS S. side of road

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1102	3.5	9/9
1142		

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

Linn. Co.

short grass ✓PT

PROJECT 1120103
OPERATOR MB
DATE 4.1.12

SITE NUMBER 6
SITE NAME 144

TRACKING TIMES (LOCAL) MEASURE ✓
START 12:03 p
STOP 12:26 p

SENSOR TYPE 500 9500 399 299
MEMORY CARD 603
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 ~~0.389~~
500 0.360

OBSTRUCTIONS: trees NW + NE

HEIGHT READINGS MTS FT
1.412
1.772

STATION DESCRIPTIONS N. of road

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1203	2.5	6/7
1226		

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH

AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

Linn Co. hard VPT

PROJECT 1120103
OPERATOR MB
DATE 4.1.12

SITE NUMBER 7
SITE NAME 543

TRACKING TIMES (LOCAL) MEASURE ✓
START 12:29p
STOP 12:52p

SENSOR TYPE 500 9500 399 299
MEMORY CARD 603
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 ~~0.389~~
500 0.360

OBSTRUCTIONS: trees NW + NE

HEIGHT READINGS MTS FT
1.395
1.755

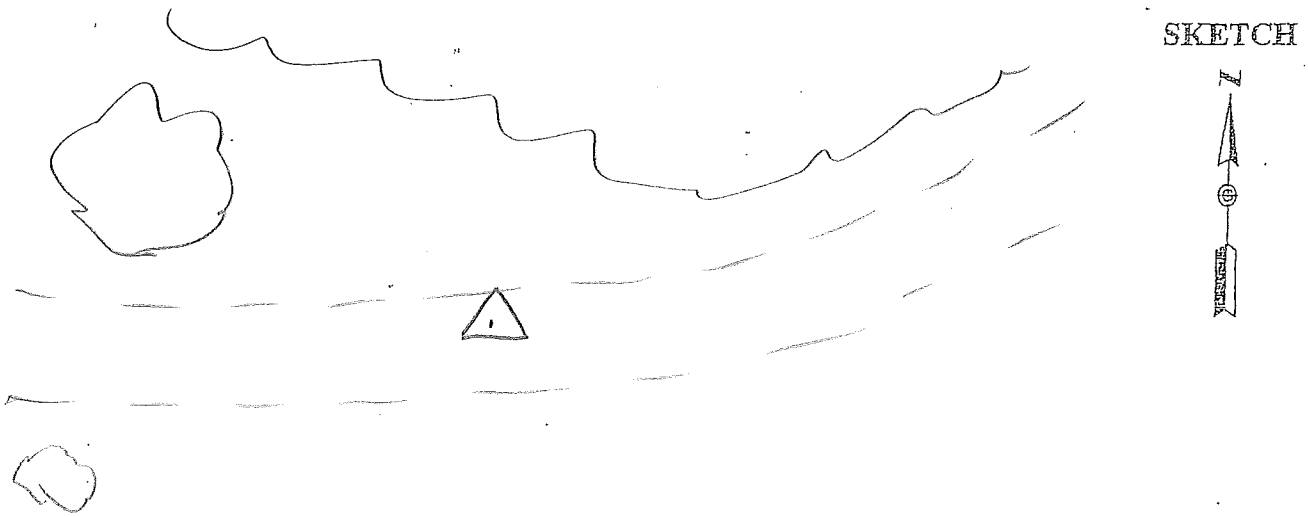
STATION DESCRIPTIONS N. side of road

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1229	4.0	7/7
1252		

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

Linn Co.

AME √PT

PROJECT 1120103
OPERATOR MB
DATE 4.1.12

SITE NUMBER 8
SITE NAME 639

TRACKING TIMES (LOCAL) MEASURE ✓
START 1:22 p
STOP 1:50 p

SENSOR TYPE 500 9500 399 299
MEMORY CARD 6003
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
(500) (0.360)

HEIGHT READINGS MTS FT
1.374
1.734

OBSTRUCTIONS: none

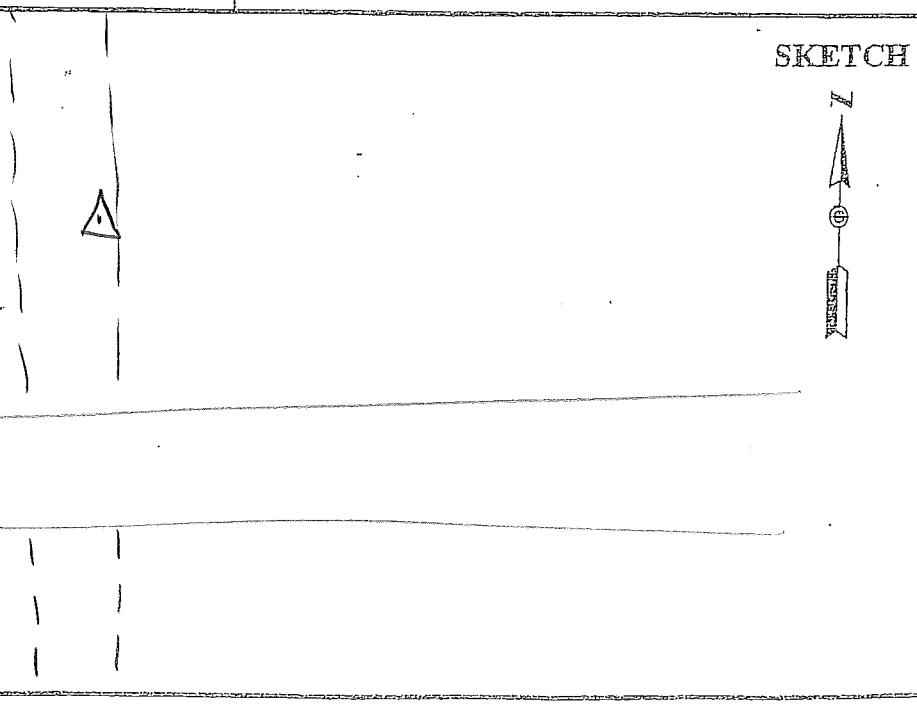
STATION DESCRIPTIONS E. side of road

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1322	2.3	7/7
1350		

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
Linn Co. SHEBOYGAN, WISCONSIN 53083

trees √PT

PROJECT 120103
OPERATOR MB
DATE 4.1.12

SITE NUMBER 9
SITE NAME 425

TRACKING TIMES (LOCAL) MEASURE ✓
START 1:56 p
STOP 2:41 p

SENSOR TYPE 500 9500 399 299
MEMORY CARD 603
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 ~~0.389~~
500 0.360

OBSTRUCTIONS: trees above

HEIGHT READINGS MTS FT
1.437
1.797

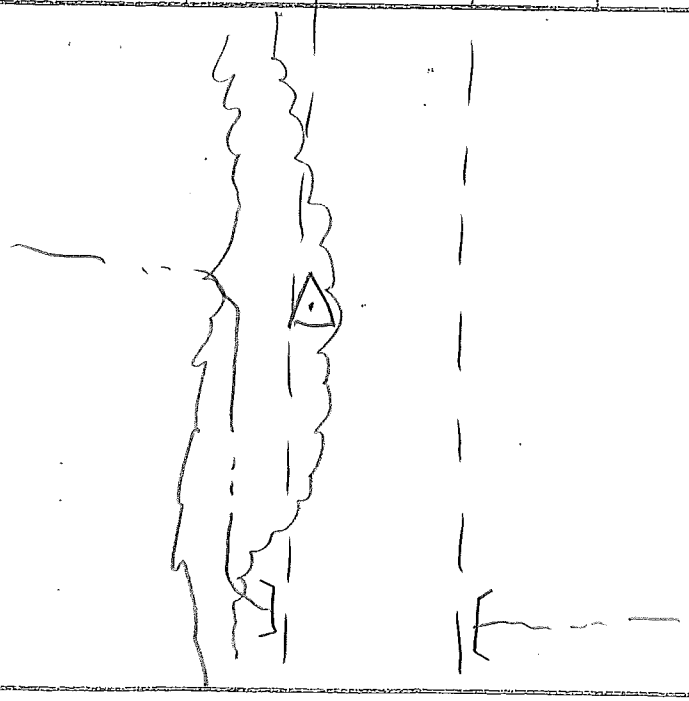
STATION DESCRIPTIONS W. side of road

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1356	3.8	5/6
1441		

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

BACO

PROJECT 1120103
OPERATOR JWJN
DATE 4/2/12

SITE NUMBER 1
SITE NAME 1140

TRACKING TIMES (LOCAL) MEASURE CDT
START 10:17
STOP 17:02

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 11
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
500 (0.360)

OBSTRUCTIONS: FENCE NW, NE

HEIGHT READINGS MTS FT
1.208
1.568

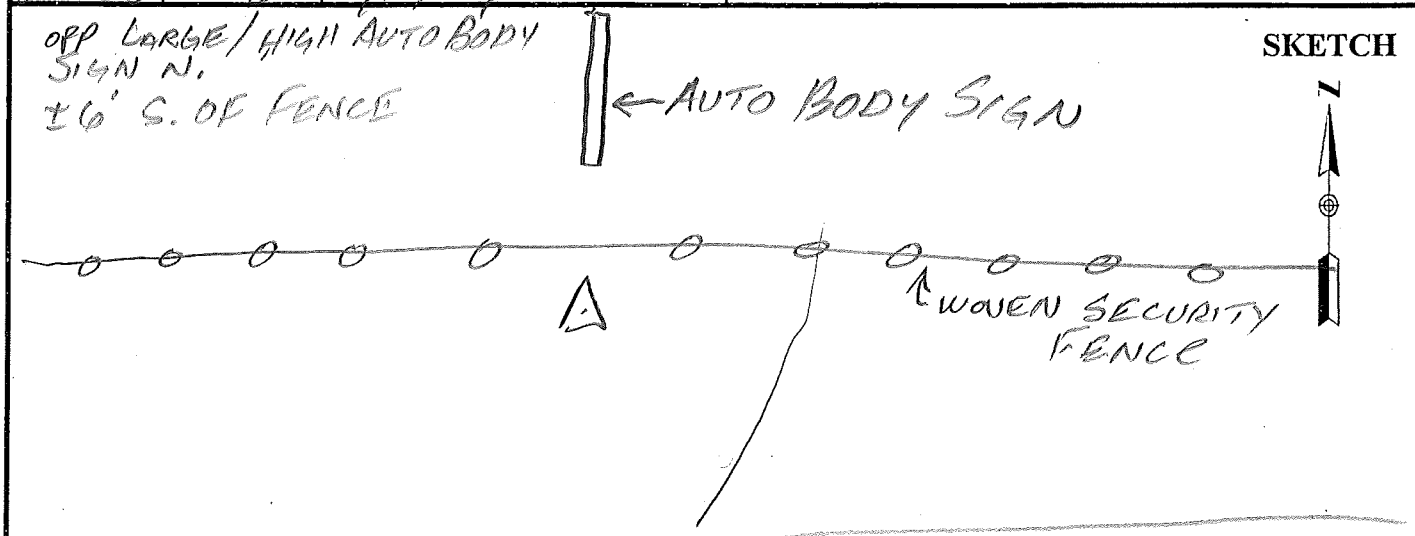
STATION DESCRIPTIONS Set 10" SPIKE IN SHORT GRASS 1/4 MILE N OF EXIT 33 I 70.

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1517	2.6	9/8-9
22:02	2.9	9/9-9

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
WIND L

SKETCH



ON RAMP

15 7

AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

PROJECT 1120103
OPERATOR WJN
DATE 4/2/12

SITE NUMBER 1
SITE NAME 1538

TRACKING TIMES (LOCAL) MEASURE CDT
START 10:28
STOP 10:46

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 14
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
500 (0.360)

HEIGHT READINGS MTS FT
1.287

OBSTRUCTIONS: TREES E-W
PPL W, S

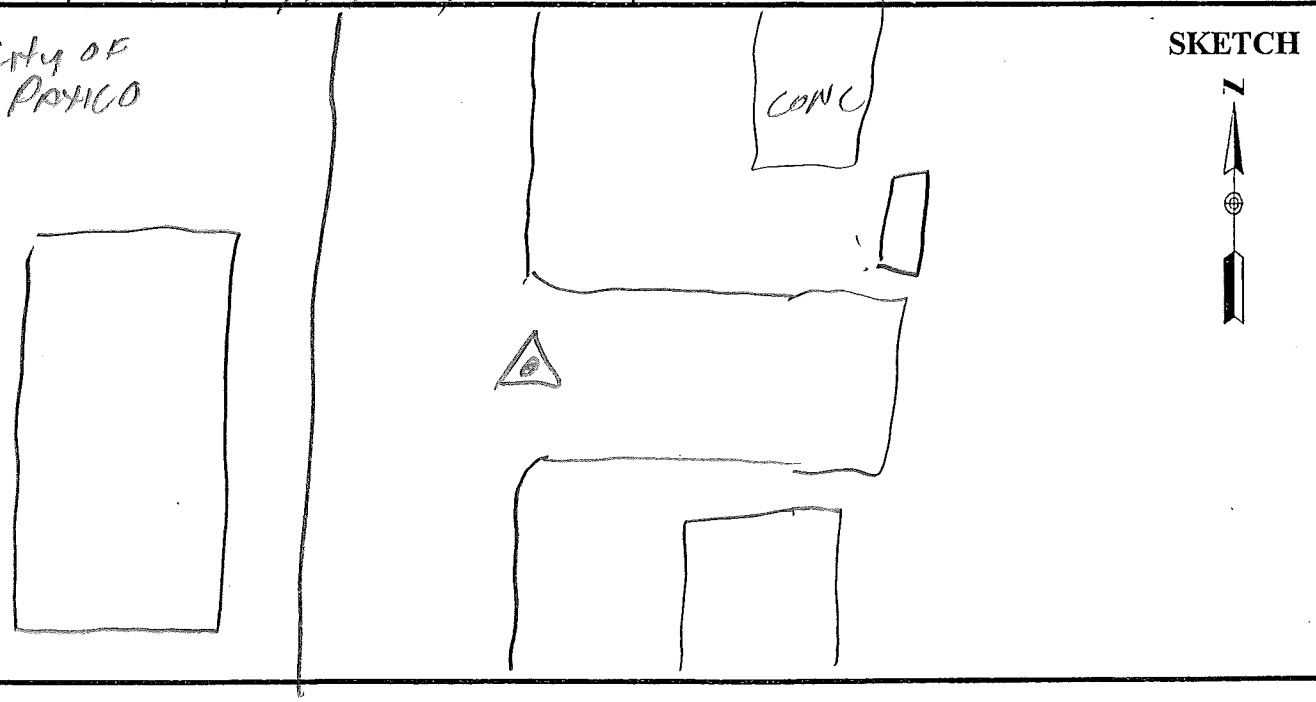
STATION DESCRIPTIONS E. EDGE
STREET OPP G DRIVE
E.

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1528	2.8	9/9-9
1546	2.2	9/9-9

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

PROJECT 120103
OPERATOR WJN
DATE 4/2/12

SITE NUMBER 2
SITE NAME 1239

TRACKING TIMES (LOCAL) MEASURE CDT
START 11:09
STOP 1126

SENSOR TYPE 500 9500 399 299
MEMORY CARD
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
500 0.360

OBSTRUCTIONS: TREES E, W

HEIGHT READINGS MTS FT
1.288

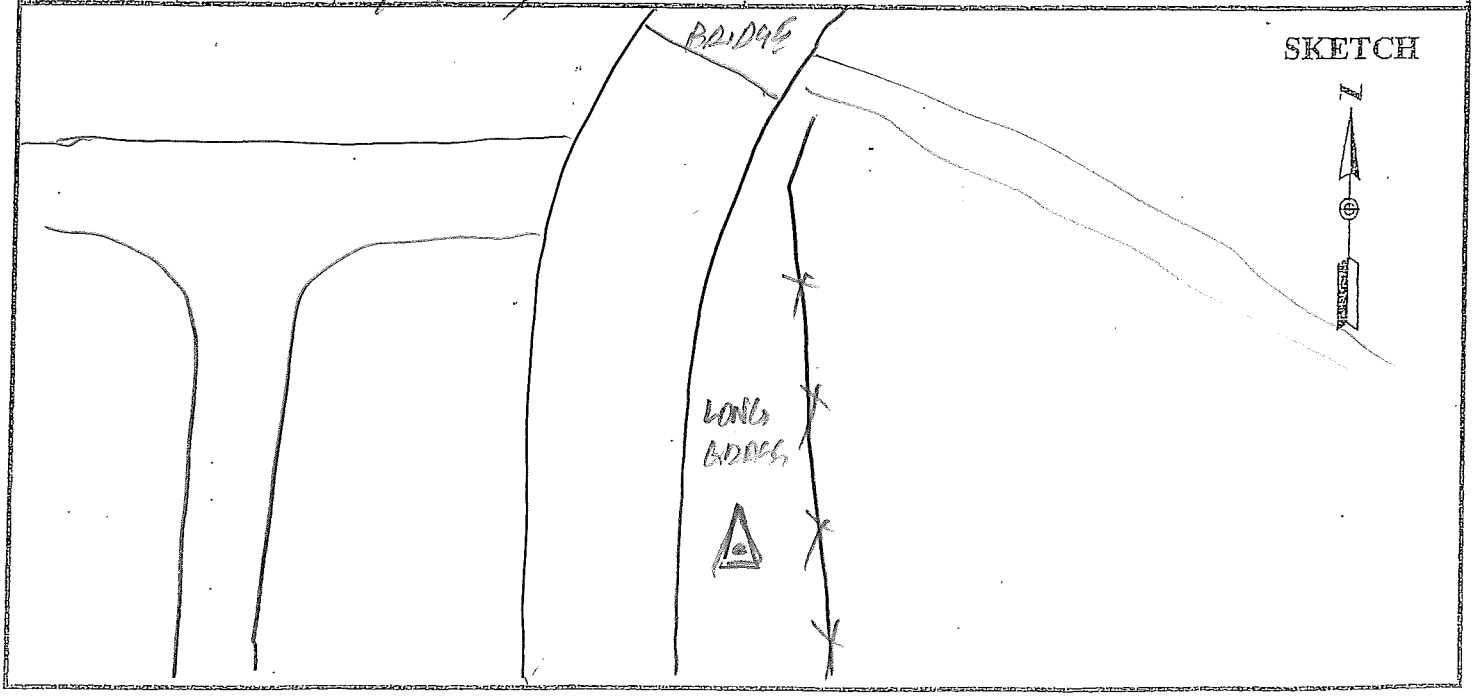
STATION DESCRIPTIONS POINT IN LONG GRASS BETWEEN E. EDGE OF RD AND E RW FENCE

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
16:09	2.4	9/9-10
1026	2.2	9/9-9

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

PROJECT 170103
OPERATOR WJN
DATE 4/2/12

SITE NUMBER 3
SITE NAME 1539

TRACKING TIMES (LOCAL) MEASURE CNT
START 11:56
STOP 12:15

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 14
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
500 (0.360)

OBSTRUCTIONS: TREES, BLDGS ALL QUADRANTS

HEIGHT READINGS MTS FT
1.286

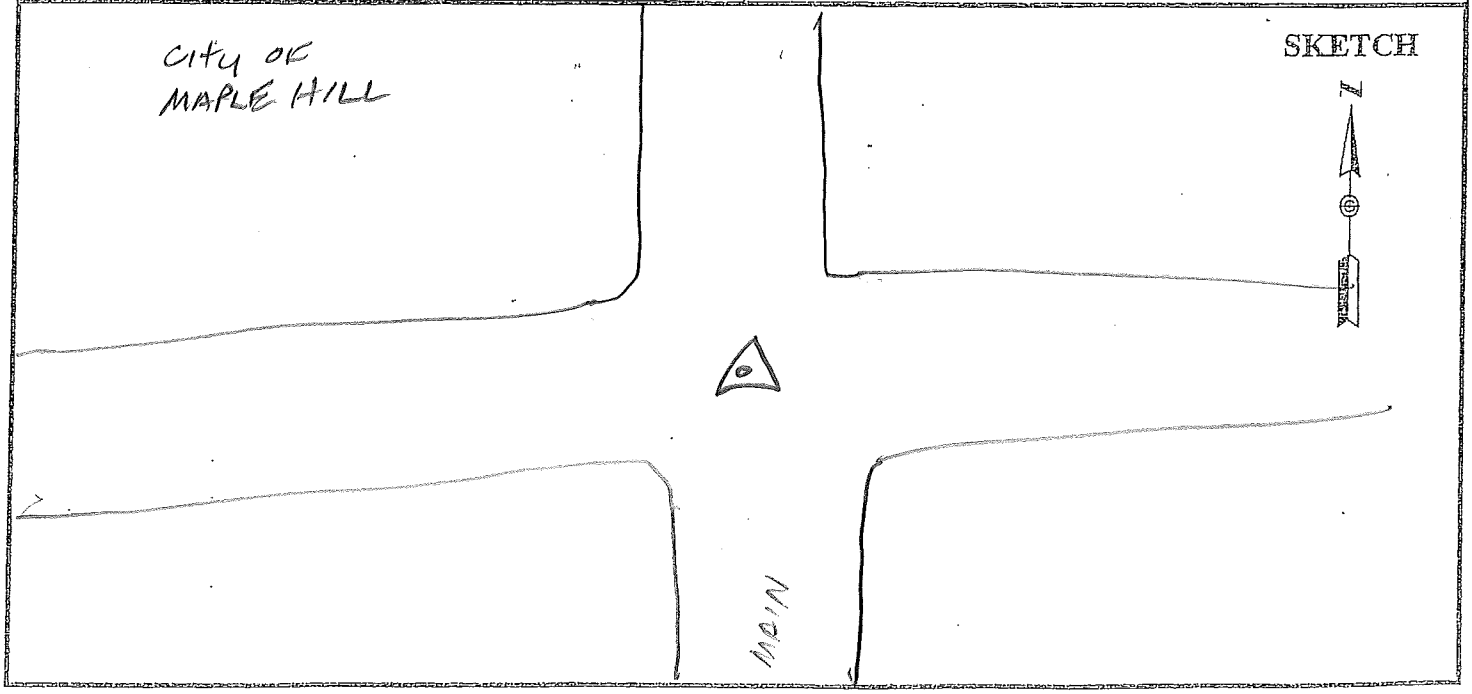
STATION DESCRIPTIONS @ @ INT STREET E-W-N-S

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
16:56	2.4	8/8-9
17:15	2.1	9/9-9

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
WINDY

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

PROJECT 1120103
OPERATOR WW
DATE 4/2/12

SITE NUMBER 4
SITE NAME 1439

TRACKING TIMES (LOCAL) MEASURE CDT
START 1247
STOP 1308

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 14
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
500 (0.360)

HEIGHT READINGS MTS FT
1.265

OBSTRUCTIONS: TREES
Overhead

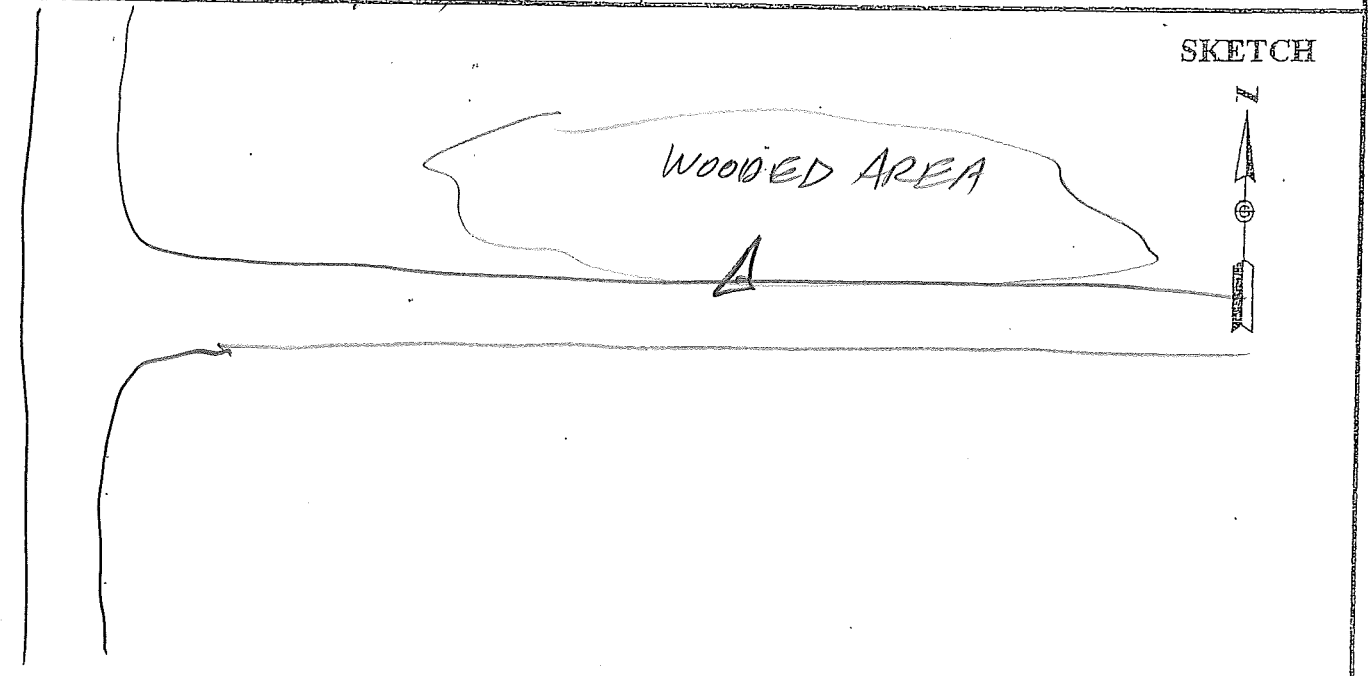
STATION DESCRIPTIONS POINT IN
WOODED AREA

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1247	1.7	9/9-10
13:08	2.0	9/9-9

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
SKC

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

PROJECT 1120103
OPERATOR WJN
DATE 4/2/12

SITE NUMBER 5
SITE NAME 1641

TRACKING TIMES (LOCAL) MEASURE CDT
START 13:26
STOP 13:55

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 14
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
500 (0.360)

HEIGHT READINGS MTS FT
1.268

OBSTRUCTIONS: TREES SW
PPL - TRAFFIC! -

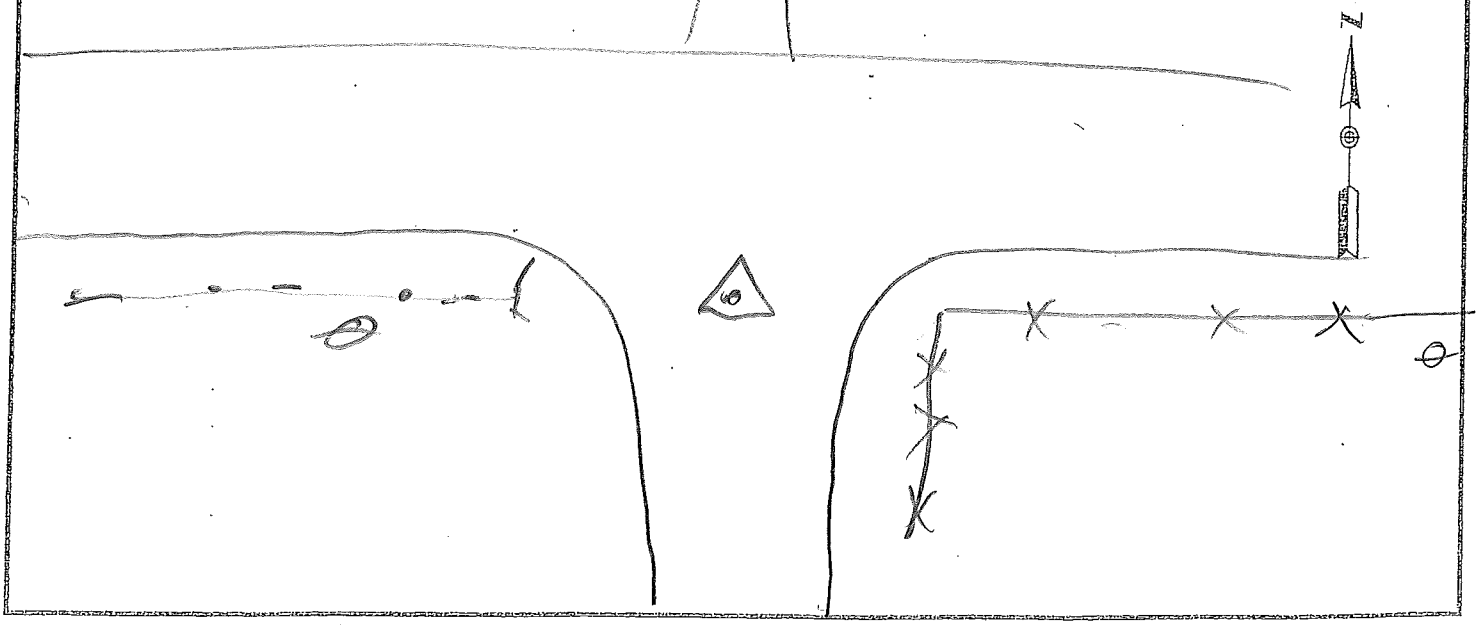
STATION DESCRIPTIONS E RD
OPP E DITCH W/ PWR
S. R/W FENCE E

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
18:26	2.2	9/8-9
18:55	2.1	9/9-9

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
SKC

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

PROJECT 1120103
OPERATOR WJW
DATE 4/2/12

SITE NUMBER 6
SITE NAME 1240

TRACKING TIMES (LOCAL) MEASURE CDT
START 1406
STOP 1430

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 14
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
500 (0.360)

HEIGHT READINGS MTS FT
1.270

OBSTRUCTIONS: No

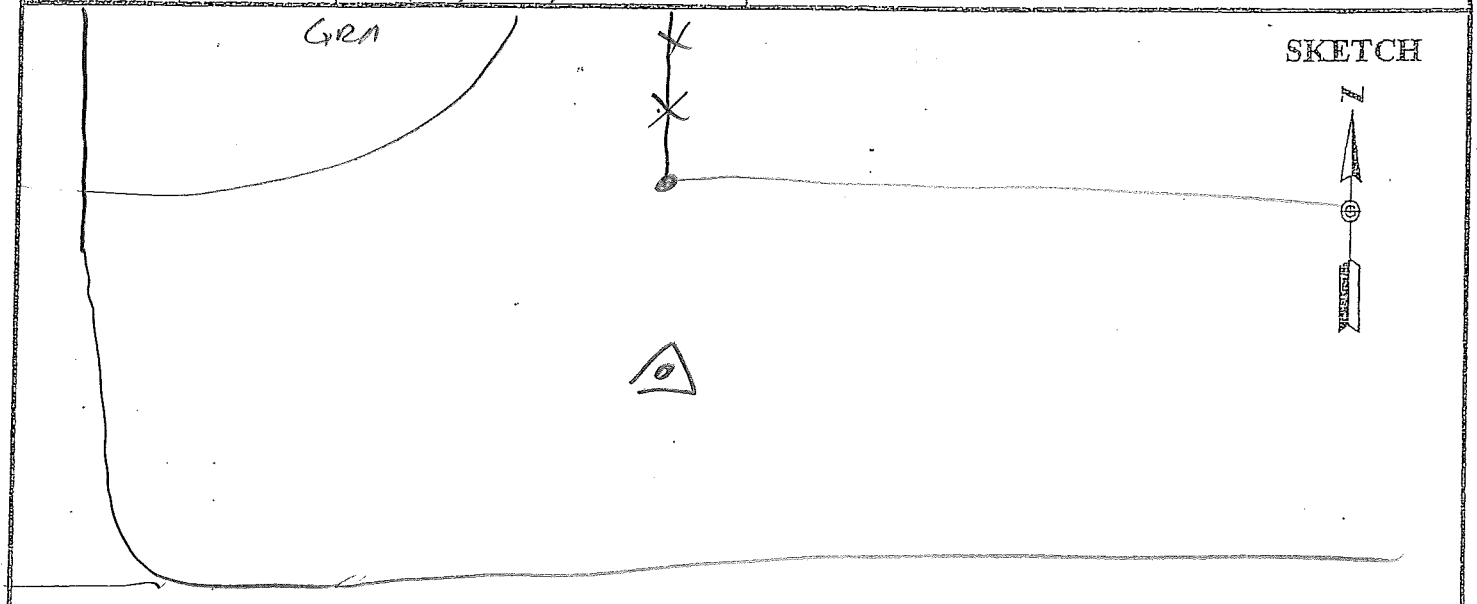
STATION DESCRIPTIONS POINT IN LONG GRASS OPP FENCE N, TREE LINE W.

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1906	2.6	8/8-8
1930	2.0	9/9-9

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
WINDY

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

PROJECT 1120103
OPERATOR HWN
DATE 4/2/12

SITE NUMBER 7
SITE NAME 1440

TRACKING TIMES (LOCAL) MEASURE CDT
START 14:59
STOP 15 26

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 14
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
500 (0.360)

OBSTRUCTIONS: TREES overhead

HEIGHT READINGS MTS FT
1.255

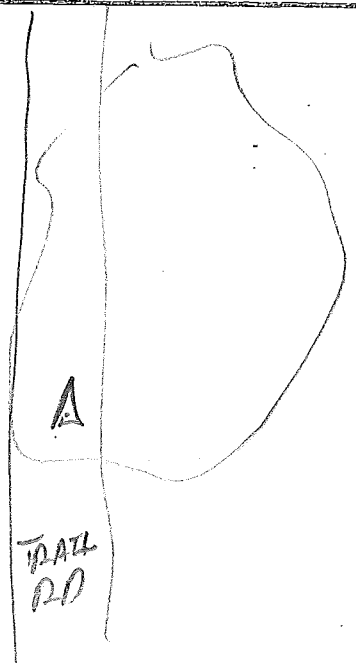
STATION DESCRIPTIONS POINT 14
WOODED AREA

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
19.59	2.7	8/8-9
2026	2.4	9/8-9

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
SKC

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

PROJECT 112.0103
OPERATOR MWM
DATE 4/2/12

SITE NUMBER 8
SITE NAME 1141

TRACKING TIMES (LOCAL) MEASURE CDT
START 1538
STOP 1556

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 14
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
500 (0.360)

HEIGHT READINGS MTS FT
1.279

OBSTRUCTIONS: SIGN W.

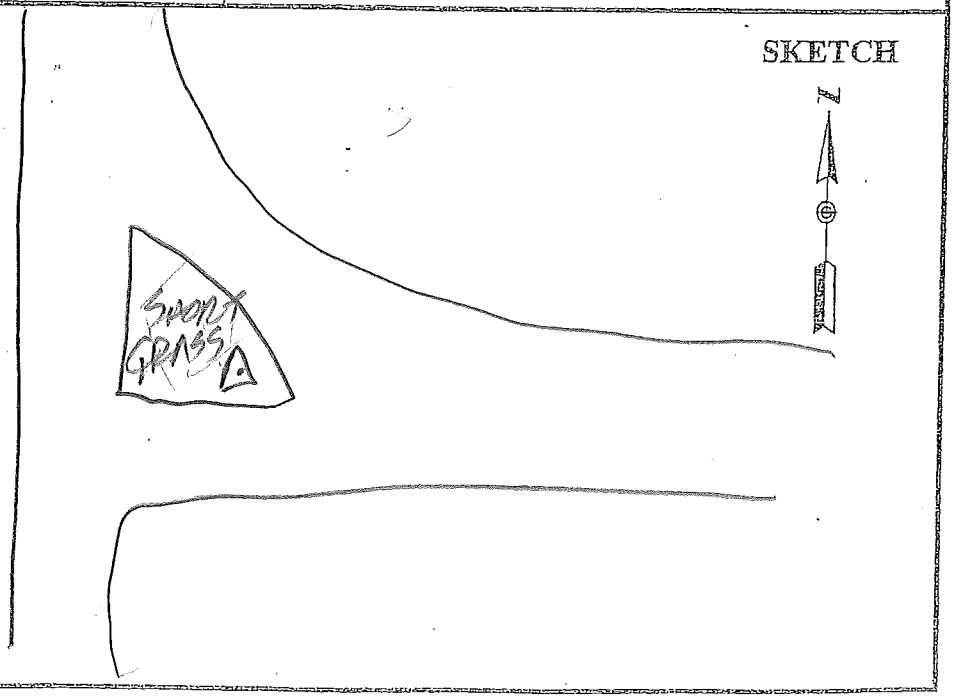
STATION DESCRIPTIONS POINT 1N
SHORT GRASS

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
2038	2.0	9/9-9
2056	2.1	9/9-9

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
WINDY

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

PROJECT 1120103
OPERATOR WJN
DATE 4/2/12

SITE NUMBER 9
SITE NAME 1241

TRACKING TIMES (LOCAL) MEASURE CDT
START 16:26
STOP 16:52

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 14
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
500 (0.360)

OBSTRUCTIONS: NO

HEIGHT READINGS MTS FT
1.207

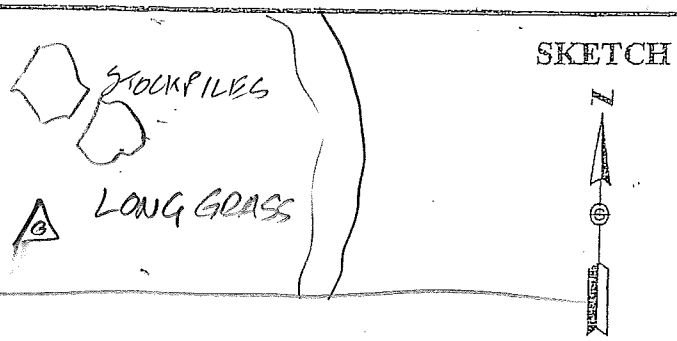
STATION DESCRIPTIONS POINT IN LONG GRASS

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
21:26	2.8	7/7-7
21:52	3.2	7/7-7

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

Linn Co. Base short grass √FI

PROJECT 1120103
OPERATOR MB
DATE 4.2.12

SITE NUMBER 1
SITE NAME 145

TRACKING TIMES (LOCAL) MEASURE ✓
START 7:39a.
STOP

SENSOR TYPE 500 9500 399 299
MEMORY CARD 704
BATTERY NO. CK
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
~~500~~ 0.360

OBSTRUCTIONS: none

HEIGHT READINGS MTS FT
1.390
1.750

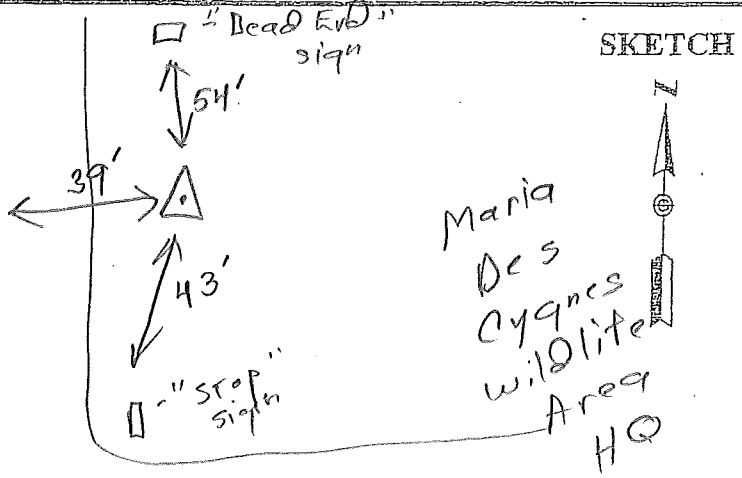
STATION DESCRIPTIONS set 6" nail

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
739	2.4	7/7

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
38 15 48.1
94 40 41.4

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
Linn. Co. SHEBOYGAN, WISCONSIN 53083 Base

PROJECT 1120103
OPERATOR MB
DATE 4.2.12

SITE NUMBER 1
SITE NAME 240

TRACKING TIMES (LOCAL) MEASURE ✓
START 8:05 a.
STOP

SENSOR TYPE 500 9500 399 299
MEMORY CARD 67
BATTERY NO. C19
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 ~~0.389~~
500 0.360

OBSTRUCTIONS:

HEIGHT READINGS MTS FT
1.272

STATION DESCRIPTIONS

1639

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
805	3.4	6/6

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH

See previous

AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

Lincoln Co. hand √pt

PROJECT 112.0103
OPERATOR MB
DATE 4.2.12

SITE NUMBER 1
SITE NAME 544

TRACKING TIMES (LOCAL) MEASURE ✓
START 8:16 a.
STOP 8:41 a.

SENSOR TYPE 500 9500 399 299
MEMORY CARD 603
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 ~~0.389~~
500 0.360

OBSTRUCTIONS: trees NW

HEIGHT READINGS MTS FT
1.340
1.700

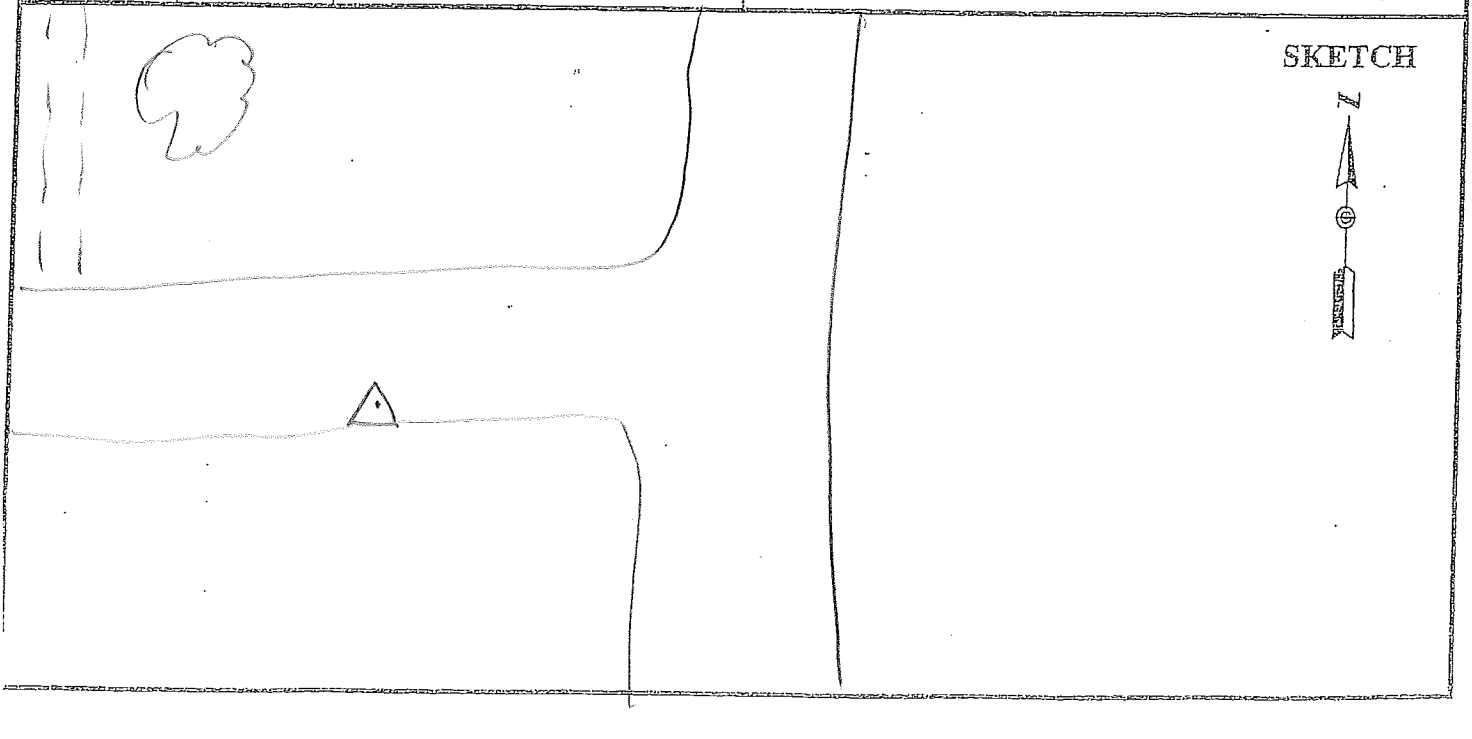
STATION DESCRIPTIONS S. side of road

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
816	4.8	6/6

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

Winn Co. tall grass √PT

PROJECT 1120103
OPERATOR MB
DATE 4.2.12

SITE NUMBER 2
SITE NAME 242

TRACKING TIMES (LOCAL) MEASURE √
START 8:41 a.
STOP 9:05 a.

SENSOR TYPE 500 9500 399 299
MEMORY CARD 603
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
500 0.360

OBSTRUCTIONS: trees NW

HEIGHT READINGS MTS FT
1.371
1.731

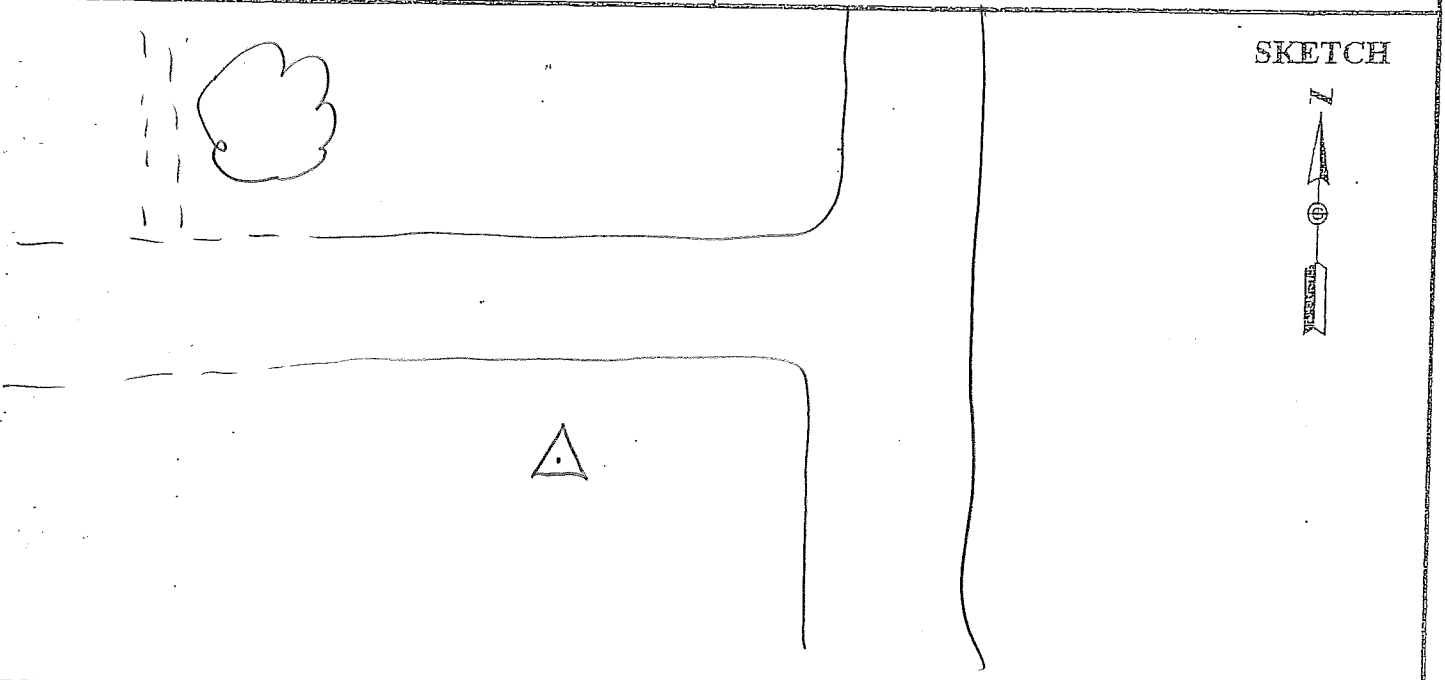
STATION DESCRIPTIONS S. of road

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
841	2.9	7/7
905		

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

Winn. Co. CONTROL

PROJECT 1120103
OPERATOR MB
DATE 4.2.12

SITE NUMBER 3
SITE NAME A 277

TRACKING TIMES (LOCAL) MEASURE ✓
START 9:30 a.
STOP 9:57 a.

SENSOR TYPE 500 9500 399 299
MEMORY CARD 603
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 ~~0.389~~
500 0.360

OBSTRUCTIONS: ~~none~~
trees SE

HEIGHT READINGS MTS FT
.930
1.290

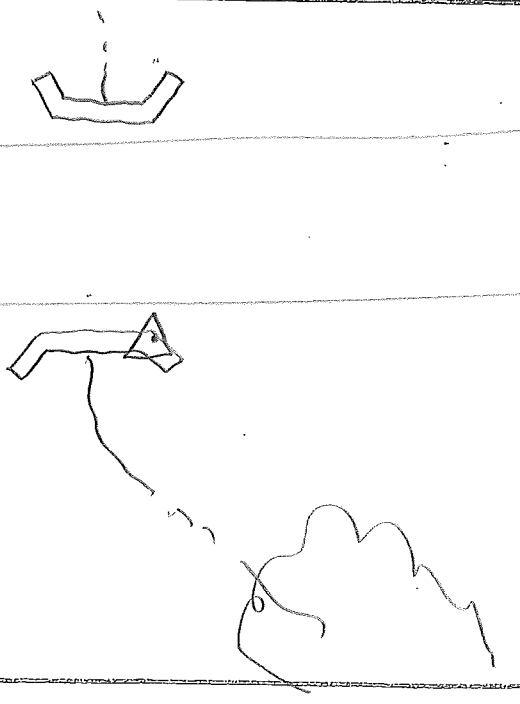
STATION DESCRIPTIONS Pnd USC+GS
cap on headwall
"A 277 1946"

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
930	2.6	9/9
957		

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

Winn. Co. short grass √ pt

PROJECT 1120103
OPERATOR MS
DATE 4.2.12

SITE NUMBER 4
SITE NAME 146

TRACKING TIMES (LOCAL) MEASURE √
START 10:08 a.
STOP 10:32 a.

SENSOR TYPE 500 9500 399 299
MEMORY CARD 603
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
500 0.360

OBSTRUCTIONS: none

HEIGHT READINGS MTS FT
1.406
1.766

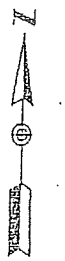
STATION DESCRIPTIONS S. of road

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1008	3.1	7/7
1032		

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

Linn. Co.

trees VRT

PROJECT 1120103
OPERATOR MB
DATE 4.2.12

SITE NUMBER 5
SITE NAME 426

TRACKING TIMES (LOCAL) MEASURE _____
START 10:47a.
STOP 11:22a.

SENSOR TYPE 500 9500 399 299
MEMORY CARD 603
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 ~~0.389~~
(500) (0.360)

OBSTRUCTIONS: trees above

HEIGHT READINGS MTS FT
1.434

STATION DESCRIPTIONS S. side of road

1794

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1047	3.8	9/10
1122		

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

OPEN

SKETCH

AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
Linn Co. SHEBOYGAN, WISCONSIN 53083 trees √PT

PROJECT 1120103
OPERATOR NB
DATE 4.2.12

SITE NUMBER 6
SITE NAME 427

TRACKING TIMES (LOCAL) MEASURE √
START 11:45a.
STOP 12:25p

SENSOR TYPE 500 9500 399 299
MEMORY CARD 609
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
(500) (0.360)

HEIGHT READINGS MTS FT
1.336

1696

OBSTRUCTIONS: trees above

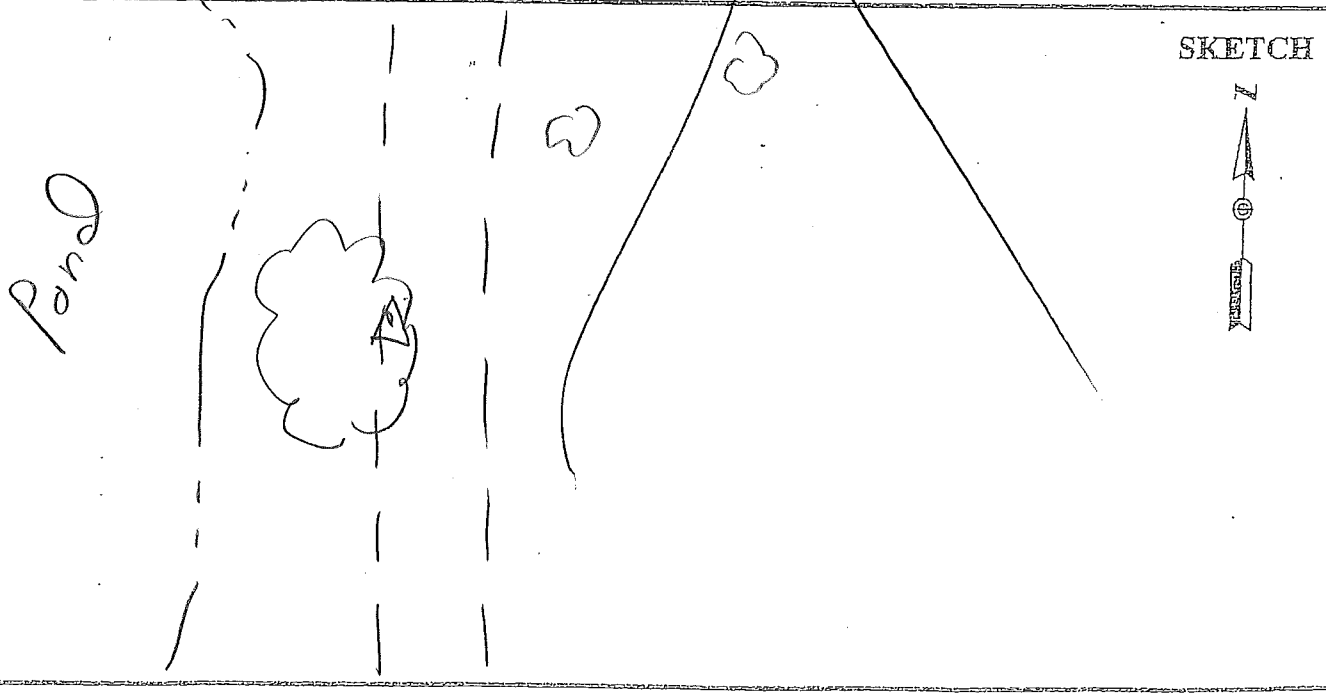
STATION DESCRIPTIONS W. side of road

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1145	2.5	8/8
1225		

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

Linn. Co.

hand VPT

PROJECT 11a0103
OPERATOR MB
DATE 4.2.12

SITE NUMBER 7
SITE NAME 545

TRACKING TIMES (LOCAL) MEASURE ✓
START 12:30 p
STOP 12:50 p

SENSOR TYPE 500 9500 399 299
MEMORY CARD 603
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
(500) 0.360

OBSTRUCTIONS: trees SE + SW

HEIGHT READINGS MTS FT
1.421

STATION DESCRIPTIONS E. side of road

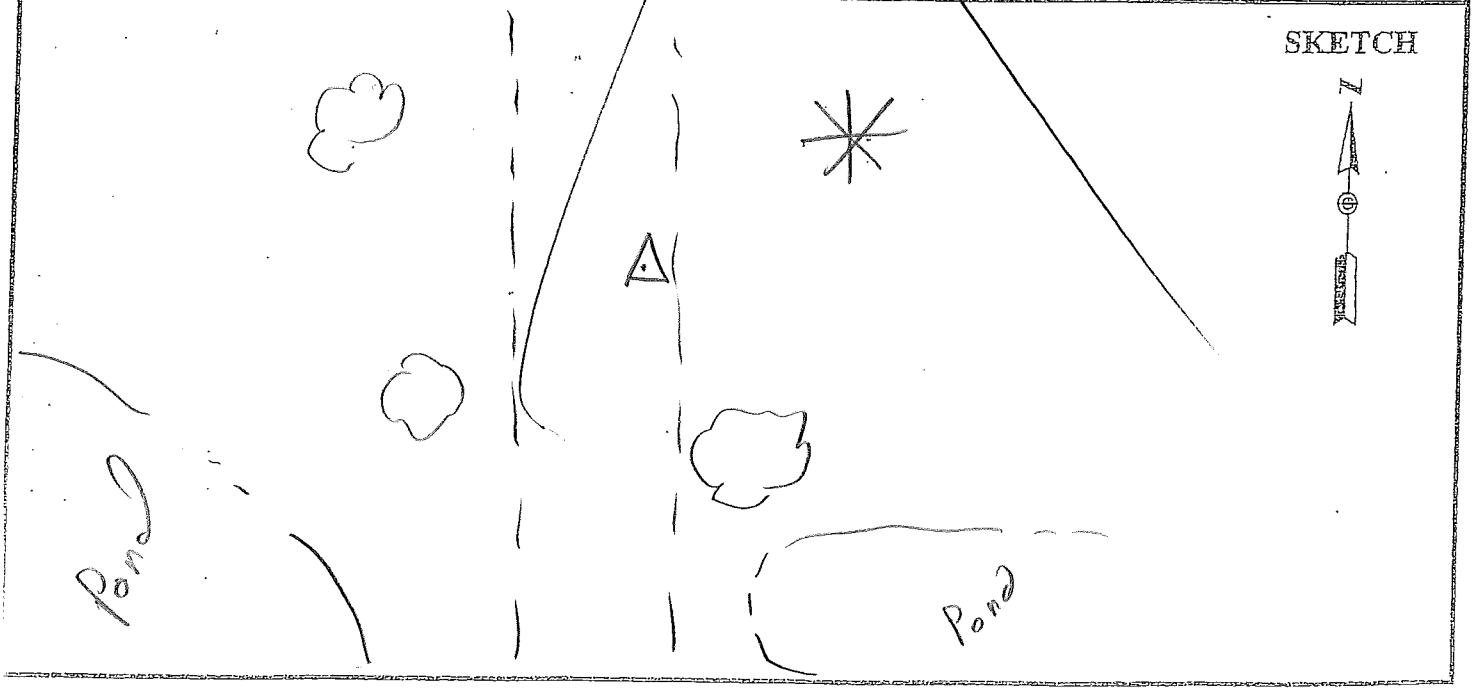
1781

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1230	1.6	6/7
1250		

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

Linn Co. CONTROL

PROJECT 1120103
OPERATOR MB
DATE 4.2.12

SITE NUMBER 8
SITE NAME X 274

TRACKING TIMES (LOCAL) MEASURE ✓
START 1:08 p
STOP 1:28 p

SENSOR TYPE 500 9500 399 299
MEMORY CARD 603
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 ~~0.389~~
500 0.360

OBSTRUCTIONS: trees SE

HEIGHT READINGS MTS FT
.967

STATION DESCRIPTIONS fnd USC+GS
cain in headwall " X 274
1946"

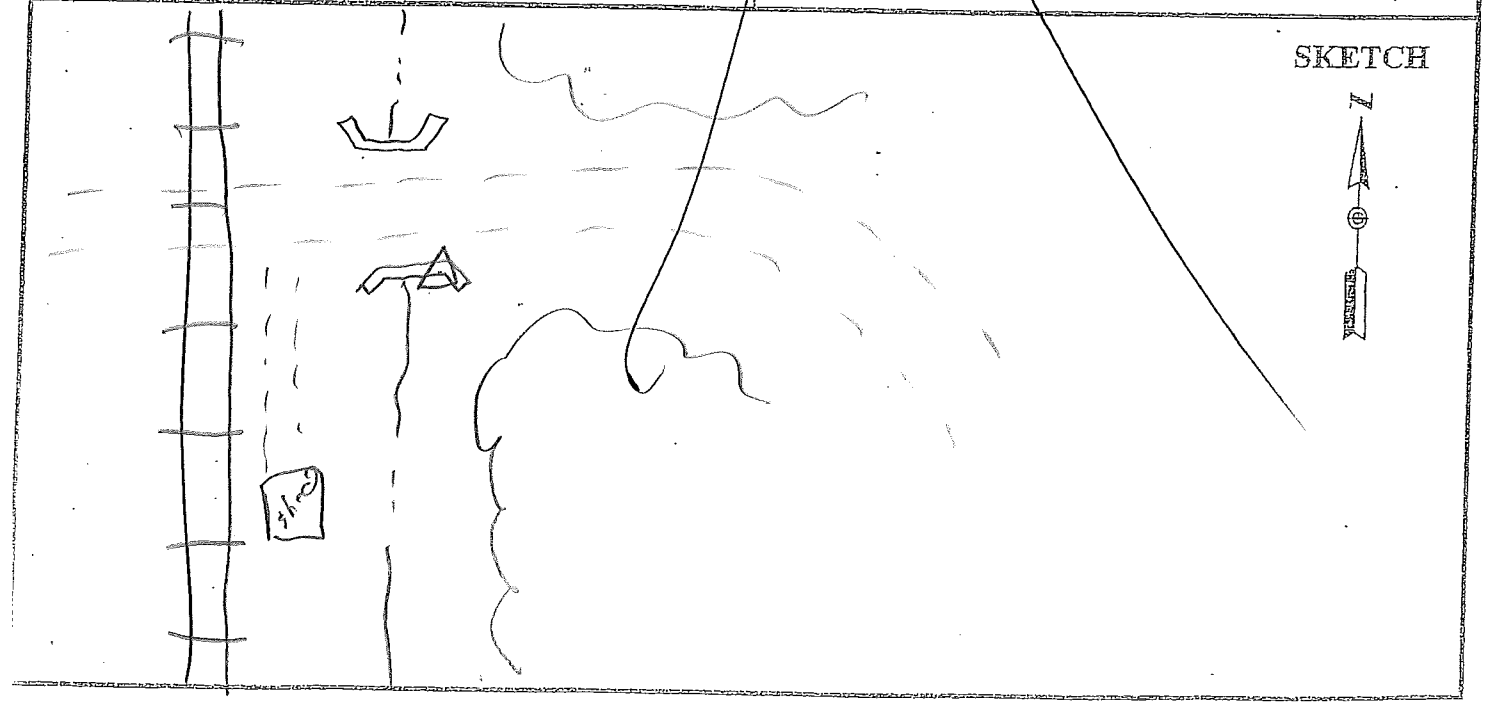
1327

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1308	2.1	7/7
1328		

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

Linn. Co. AME ✓PT

PROJECT 1120103
OPERATOR MB
DATE 4. 2. 12

SITE NUMBER 9
SITE NAME 640

TRACKING TIMES (LOCAL) MEASURE ✓
START 1:52 p
STOP 2:12 p

SENSOR TYPE 500 9500 399 299
MEMORY CARD 603
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 ~~0.389~~
500 0.360

OBSTRUCTIONS: none

HEIGHT READINGS MTS FT
1.411
1.771

STATION DESCRIPTIONS S. side of road

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1352	1.9	9/9
1412		

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH

AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

Linn Co.

trees √PT

PROJECT 1120103
OPERATOR MS
DATE 4.2.12

SITE NUMBER 10
SITE NAME 428

TRACKING TIMES (LOCAL) MEASURE
START 2:29 p
STOP 3:09 p

SENSOR TYPE 500 9500 399 299
MEMORY CARD 603
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 ~~0.389~~
500 0.360

OBSTRUCTIONS: trees above

HEIGHT READINGS MTS FT
1.960
1.820

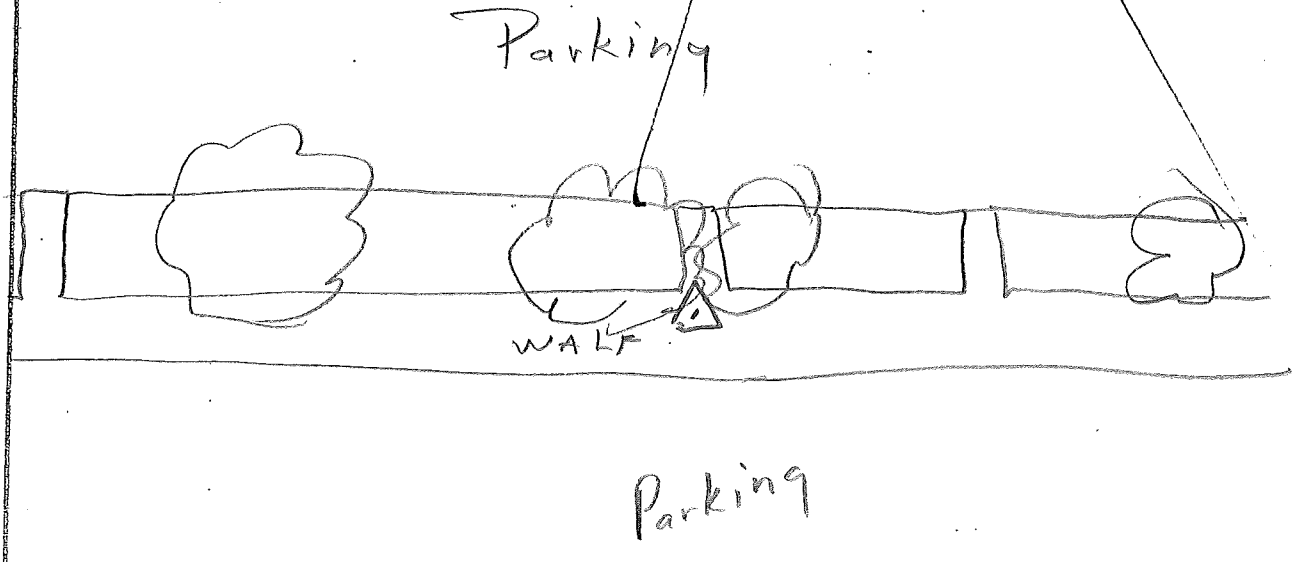
STATION DESCRIPTIONS at walk intersection

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1429	2.7	5/6
1509		

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

BASE

PROJECT 120103
OPERATOR JWJN
DATE 4/3/12

SITE NUMBER 1
SITE NAME M 325

TRACKING TIMES (LOCAL) MEASURE CDT
START 953
STOP 1635

SENSOR TYPE 500 (9500) 399 299
MEMORY CARD
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 ~~0.389~~
500 0.360

OBSTRUCTIONS: NW

HEIGHT READINGS MTS FT
1.068
1.457

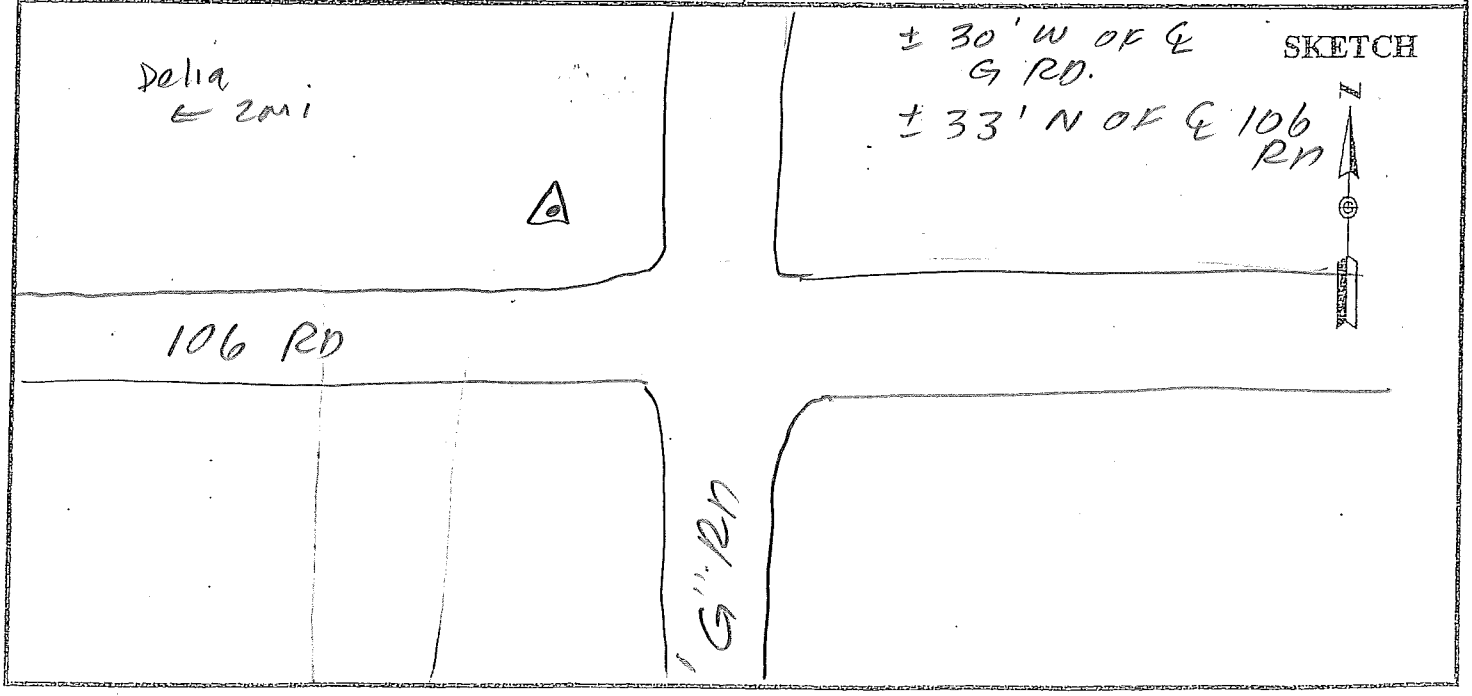
STATION DESCRIPTIONS FD BRONZE DISC IN CONC. MON MKD M 325 1960
AS Described by NGS

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1453	2.2	9/8-9
2135	1.9	10/10-10

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
OVC

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

PROJECT 1120103
OPERATOR MJN
DATE

SITE NUMBER 1
SITE NAME 1242

TRACKING TIMES (LOCAL) MEASURE CDT
START 9:30
STOP 16:10

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 11
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
500 (0.360)

OBSTRUCTIONS: NO

HEIGHT READINGS MTS FT
1.171
1.531

STATION DESCRIPTIONS Set 10" SPIKE

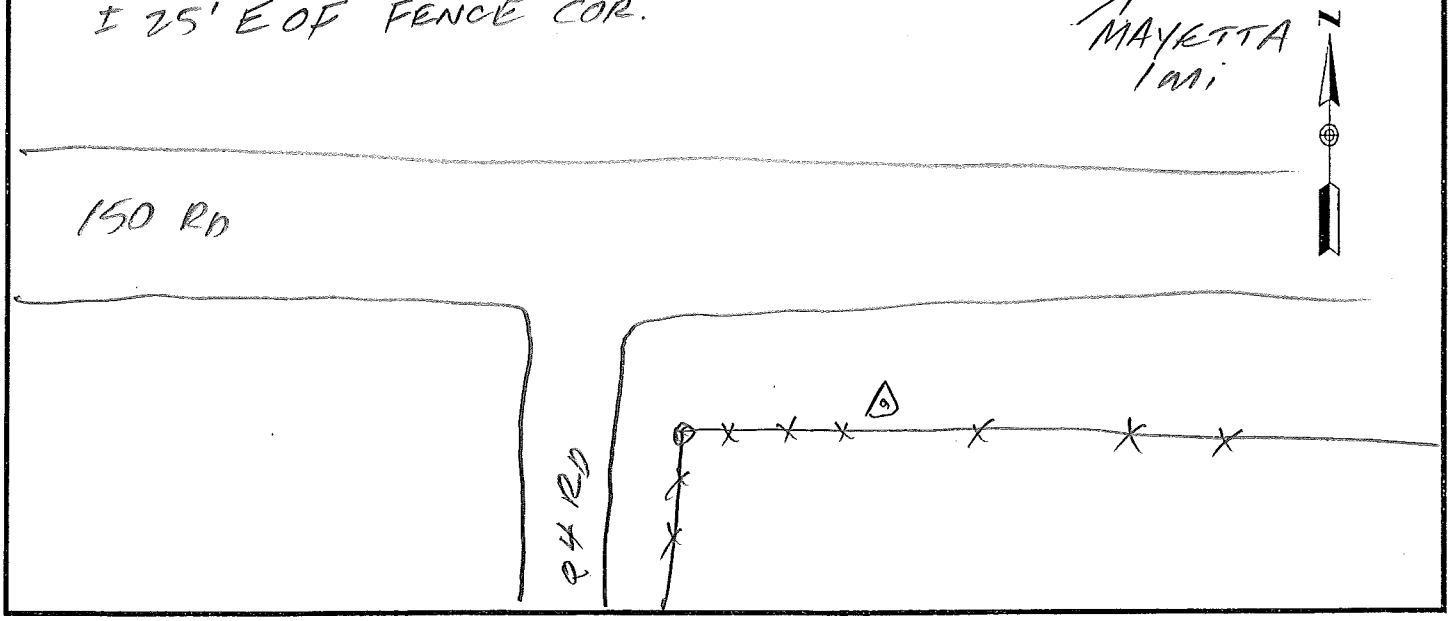
SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
14:30	2.0	9/9-9
24:10	2.0	10/10-10

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
OVC

± 3' N OF S.R/W FENCE
± 25' E OF FENCE COR.

SKETCH



150 RD

AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

PROJECT 1120103
OPERATOR WJN
DATE 4/3/12

SITE NUMBER 1
SITE NAME 1441

TRACKING TIMES (LOCAL) MEASURE CDT
START 9:53
STOP 10:25

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 14
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
500 (0.360)

HEIGHT READINGS MTS FT
1.309

OBSTRUCTIONS: TREES OVER-HEAD

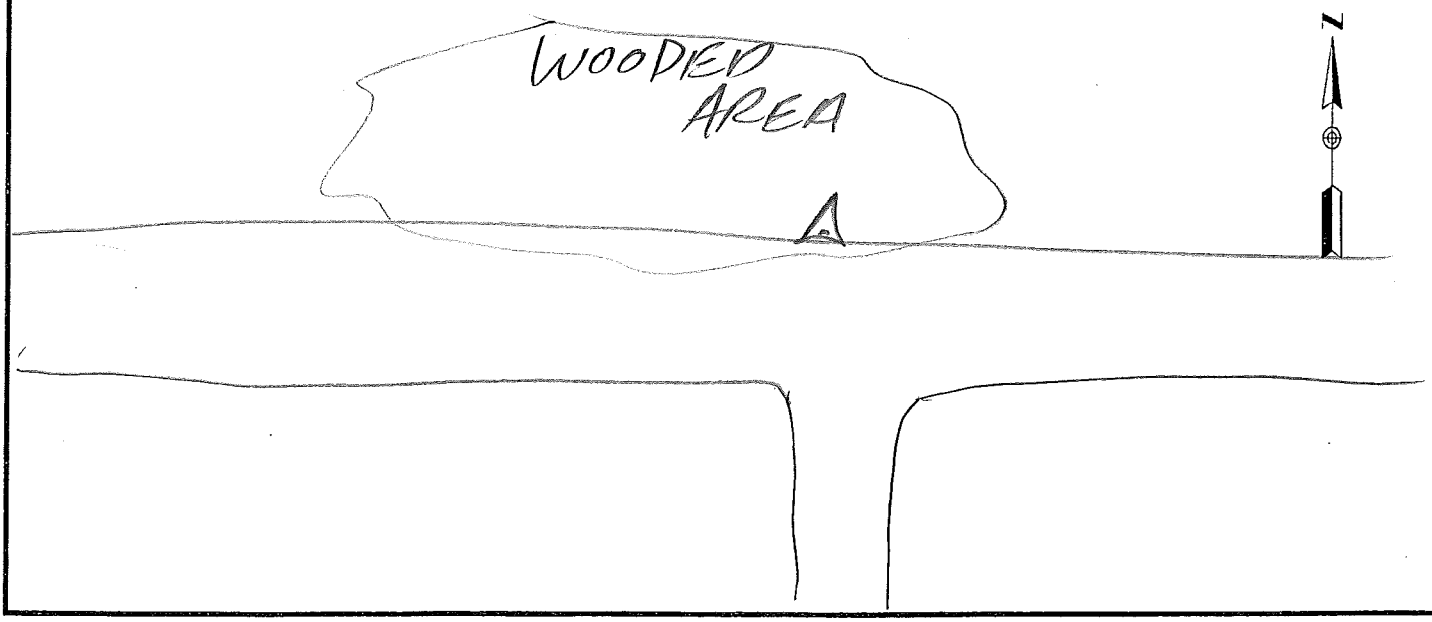
STATION DESCRIPTIONS POINT IN WOODED AREA

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1453	2.6	9/8-9
1575	2.4	9/9-8

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
OVC

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

PROJECT 1120103
OPERATOR WJN
DATE 4/3/12

SITE NUMBER 2
SITE NAME 1442

TRACKING TIMES (LOCAL) MEASURE CDT
START 10:42
STOP 10:20

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 14
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
500 (0.360)

HEIGHT READINGS MTS 1.235 FT

OBSTRUCTIONS: TREES ALL QUADRANTS

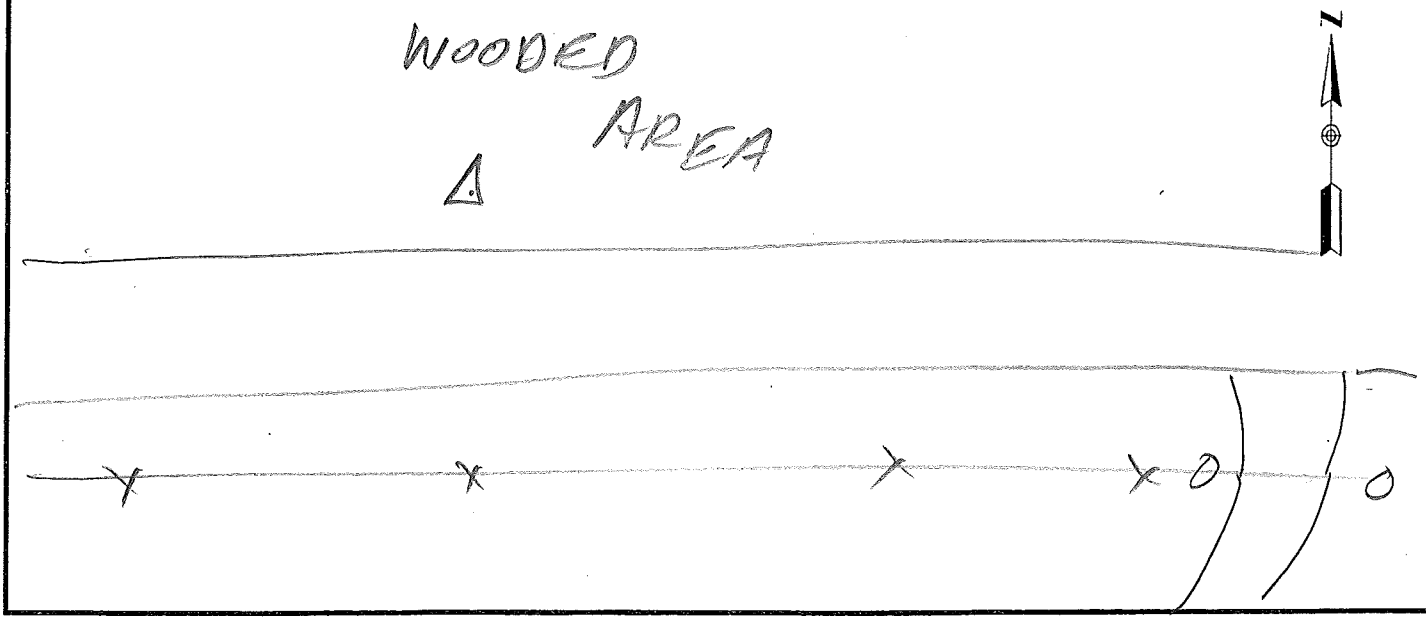
STATION DESCRIPTIONS POINT IN FORESTED AREA IN N. R/W

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
15 42	2.6	8/9-9
16 20	1.9	10/10-10

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
OVC

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

PROJECT 1120103
OPERATOR WJN
DATE 4/3/12

SITE NUMBER 3
SITE NAME 1540

TRACKING TIMES (LOCAL) MEASURE CST
START 11:42
STOP 12:06

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 14
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
500 (0.360)

OBSTRUCTIONS: PPLs E-W TREES W, WATER TWR. SW. BLDGS S.

HEIGHT READINGS MTS 1.340 FT

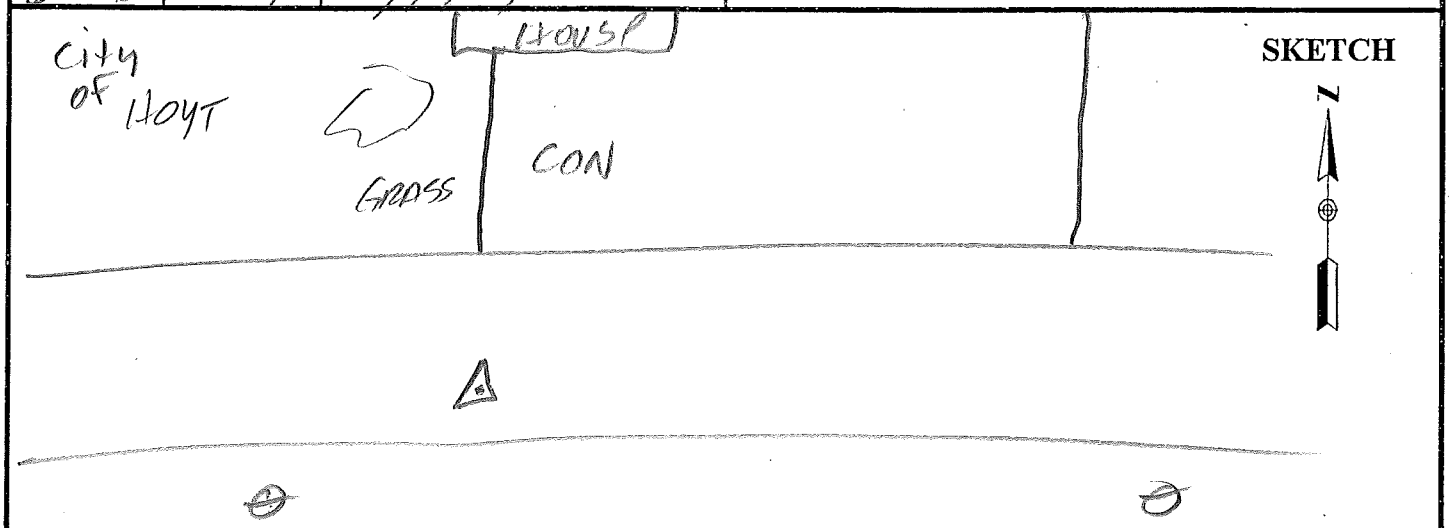
STATION DESCRIPTIONS POINT IN ℄ E-BND LANE OPP W EDGE

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
16:42	2.6	9/9-9
16:06	2.4	9/9-9

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

PROJECT 1120103
OPERATOR WJN
DATE 4/3/12

SITE NUMBER 4
SITE NAME 1642

TRACKING TIMES (LOCAL) MEASURE CNT
START 12 20
STOP 12 43

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 14
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
500 (0.360)

OBSTRUCTIONS: PPL'S

HEIGHT READINGS MTS FT
1.349

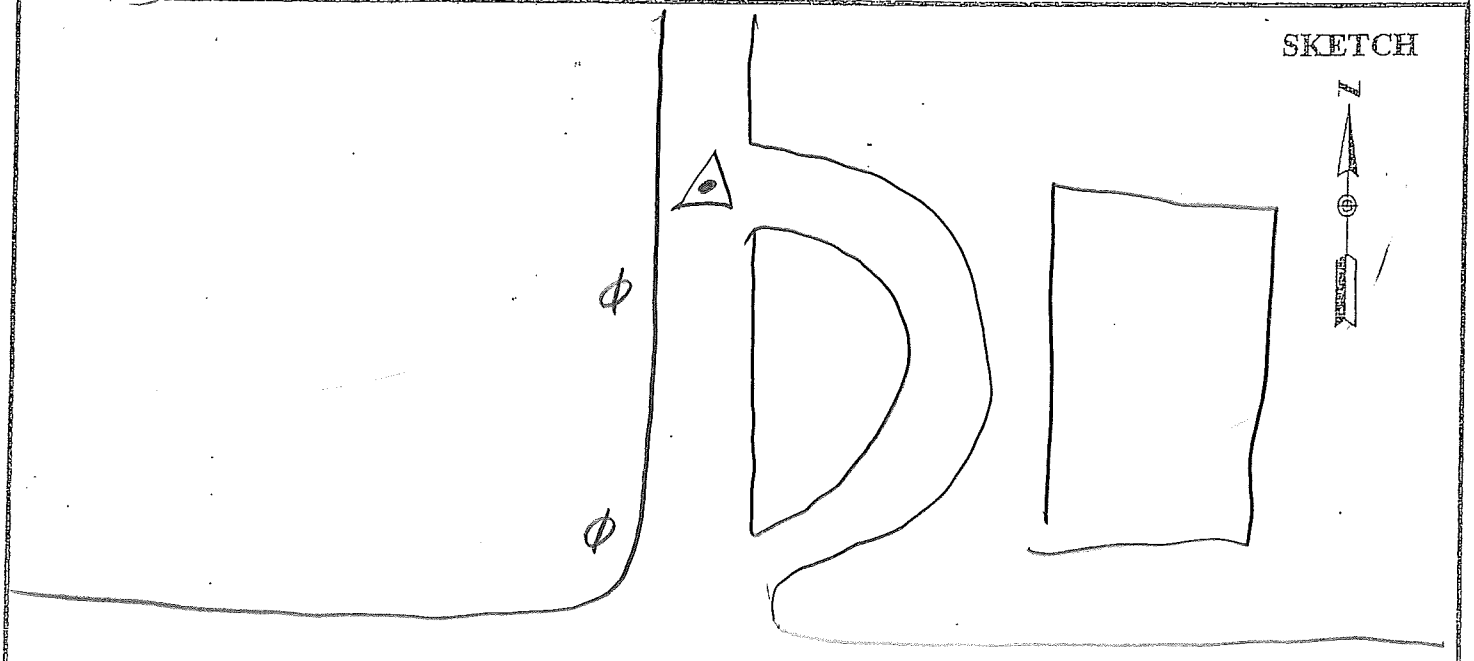
STATION DESCRIPTIONS ℄ N-S
√ TREET OPP ℄ DR. E

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1220	1.8	9/9-9
12:43	2.0	9/9-9

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

PROJECT 1120103
OPERATOR WJN
DATE 4/3/12

SITE NUMBER 5
SITE NAME 1142

TRACKING TIMES (LOCAL) MEASURE CDT
START 13:15
STOP 13:45

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 14
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
500 ~~0.360~~

HEIGHT READINGS MTS FT
1.278

OBSTRUCTIONS: TREES S.

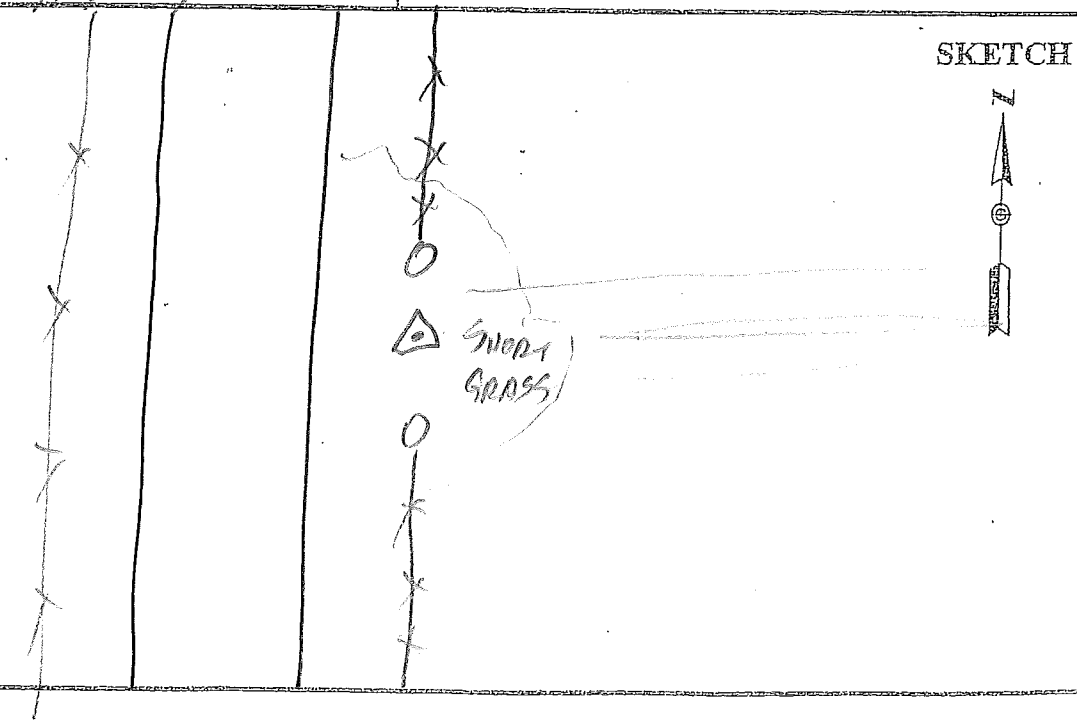
STATION DESCRIPTIONS POINT IN SPARSE GRASS / BARE EARTH @ OF FIELD ACC OPP FENCE N-S

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1315	2.0	9/9-9
13:45	2.1	9/9-9

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
OVC

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

PROJECT 1120103
OPERATOR LWN
DATE 4/3/12

SITE NUMBER 6
SITE NAME 1541

TRACKING TIMES (LOCAL) MEASURE CDT
START 14:10
STOP 14:41

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 14
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
500 (0.360)

OBSTRUCTIONS: PPLS SE, SW
TREES NE, BLDG. NW

HEIGHT READINGS MTS FT
1.310

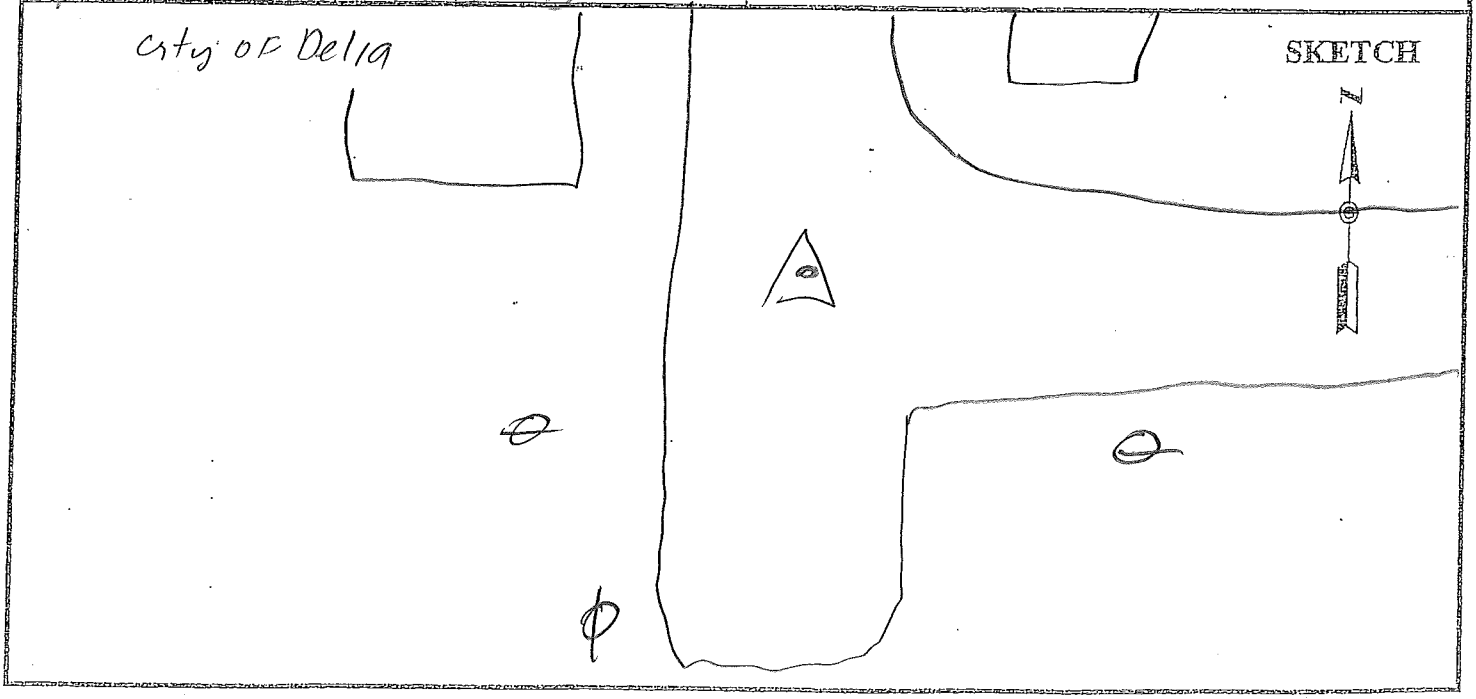
STATION DESCRIPTIONS 4 4 INT
CITY STREETS N-E

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
19:10	2.0	9/9-9
19:41	2.2	8/8-9

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
OVC

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

PROJECT 1120103
OPERATOR WJN
DATE 4/3/12

SITE NUMBER 7
SITE NAME 1243

TRACKING TIMES (LOCAL) MEASURE CDT
START 15:06
STOP 15 28

SENSOR TYPE ~~500~~ 9500 399 299
MEMORY CARD 14
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
500 ~~0.360~~

HEIGHT READINGS MTS FT
1.289

OBSTRUCTIONS:

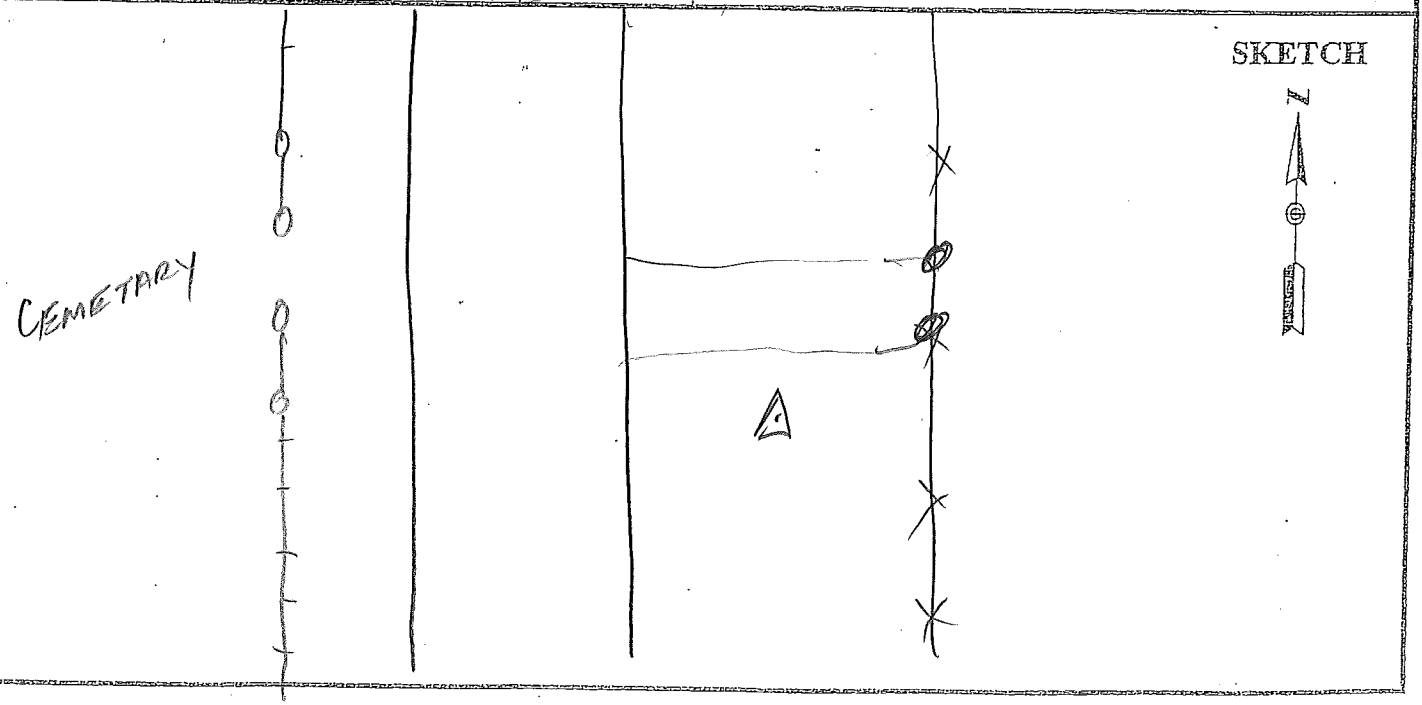
STATION DESCRIPTIONS POINT IN LONG GRASS IN E. R/W

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
2006	2.0	10/10 -10
2028	2.0	10/10 -10

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

PROJECT 1120103
OPERATOR WJW
DATE 4/3/12

SITE NUMBER 8
SITE NAME 1643

TRACKING TIMES (LOCAL) MEASURE CDT
START 15:42
STOP 16:02

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 14
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
500 (0.360)

HEIGHT READINGS MTS 1.355 FT

OBSTRUCTIONS:

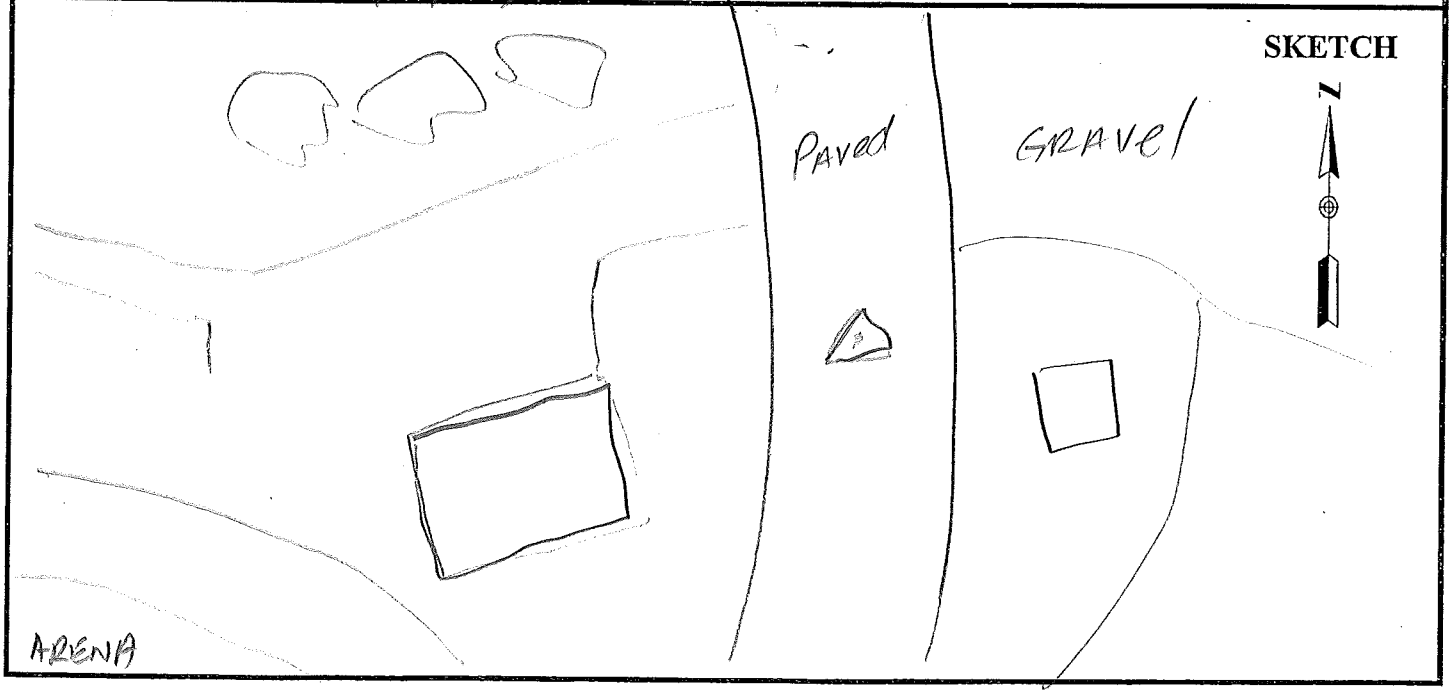
STATION DESCRIPTIONS ℄ PAVED TRAIL APP W/W EDGE BLDG SW

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
20:42	1.8	9/9-9
21:02	2.0	9/9-9

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
OVC

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
Linn Co. SHEBOYGAN, WISCONSIN 53083 Base

PROJECT 1120103
OPERATOR MB
DATE 4·3·12

SITE NUMBER 1
SITE NAME 145

TRACKING TIMES (LOCAL) MEASURE ✓
START 7:04 a.
STOP

SENSOR TYPE 500 9500 399 299
MEMORY CARD 704
BATTERY NO. CB
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
500 0.360

OBSTRUCTIONS:

HEIGHT READINGS MTS FT
1.360

1.720

STATION DESCRIPTIONS

SATELLITE OBSERVATIONS

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

TIME	GDOP	SATELLITES
704	3.4	8/8

SKETCH

See Previous

AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

Linn. Co. Base

PROJECT 1120103
OPERATOR MB
DATE 4.3.12

SITE NUMBER 1
SITE NAME 240

TRACKING TIMES (LOCAL) MEASURE ✓
START 7:22 a.
STOP

SENSOR TYPE 500 9500 399 299
MEMORY CARD 603
BATTERY NO. CB
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 ~~0.389~~
500 0.360

OBSTRUCTIONS:

HEIGHT READINGS MTS FT
1.278

STATION DESCRIPTIONS

1638

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
722	2.4	8/9

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH

see previous

AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

Linn Co.

short grass ✓MT

PROJECT 112013	SITE NUMBER 1
OPERATOR MB	SITE NAME 146
DATE 4-3-12	

TRACKING TIMES (LOCAL) MEASURE ✓

START 7:34 a.

STOP 7:58 a.

SENSOR TYPE 500 9500 399 299

MEMORY CARD 67

BATTERY NO.

CONTROLLER NO.

SENSOR NO.

SENSOR CONSTANT

299/399	0.441
399E/9500	0.389
500	0.360

HEIGHT READINGS MTS FT

1.338

1698

OBSTRUCTIONS: none

STATION DESCRIPTIONS S. of road

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
734	2.4	7/7
758		

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH

See previous

AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

Linn Co.

trees √PT

PROJECT 1120103
OPERATOR MB
DATE 4.3.12

SITE NUMBER 2
SITE NAME 426

TRACKING TIMES (LOCAL) MEASURE ✓
START 8:12 a.
STOP 8:52 a.

SENSOR TYPE 500 9500 399 299
MEMORY CARD 67
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
(500) (0.360)

OBSTRUCTIONS: trees above

HEIGHT READINGS MTS FT
1.355

STATION DESCRIPTIONS S. side of road

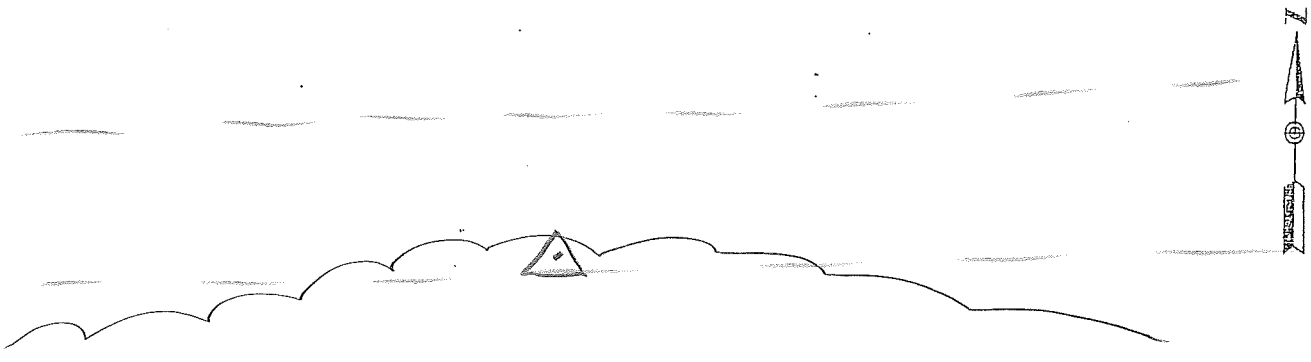
1715

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
812	4.6	6/6
852		

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

Linn Co.

trees √PT

PROJECT 1120103
OPERATOR MB
DATE 4.3.12

SITE NUMBER 3
SITE NAME 427

TRACKING TIMES (LOCAL) MEASURE √
START 9:24a.
STOP 10:00a.

SENSOR TYPE 500 9500 399 299
MEMORY CARD 67
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 ~~0.389~~
500 0.360

OBSTRUCTIONS: trees above

HEIGHT READINGS MTS FT
1.405
1.765

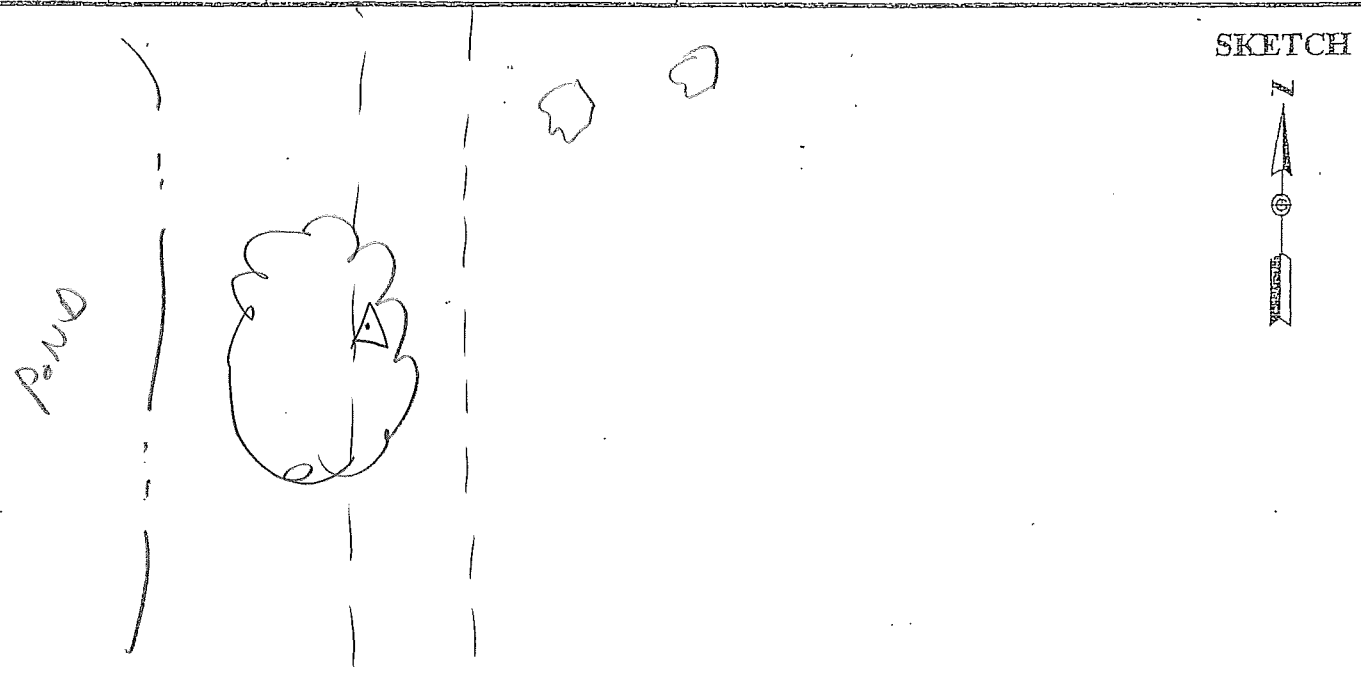
STATION DESCRIPTIONS W. side of road

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
~~984~~	2.1	6/7
1000		

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

Linn Co. hand √PT

PROJECT 1120103
OPERATOR MB
DATE 4.3.12

SITE NUMBER 4
SITE NAME 545

TRACKING TIMES (LOCAL) MEASURE √
START 10:04 a.
STOP 10:24 a.

SENSOR TYPE 500 9500 399 299
MEMORY CARD 67
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 ~~0.389~~
500 0.360

OBSTRUCTIONS: trees SE + SW

HEIGHT READINGS MTS FT
1.380
1.740

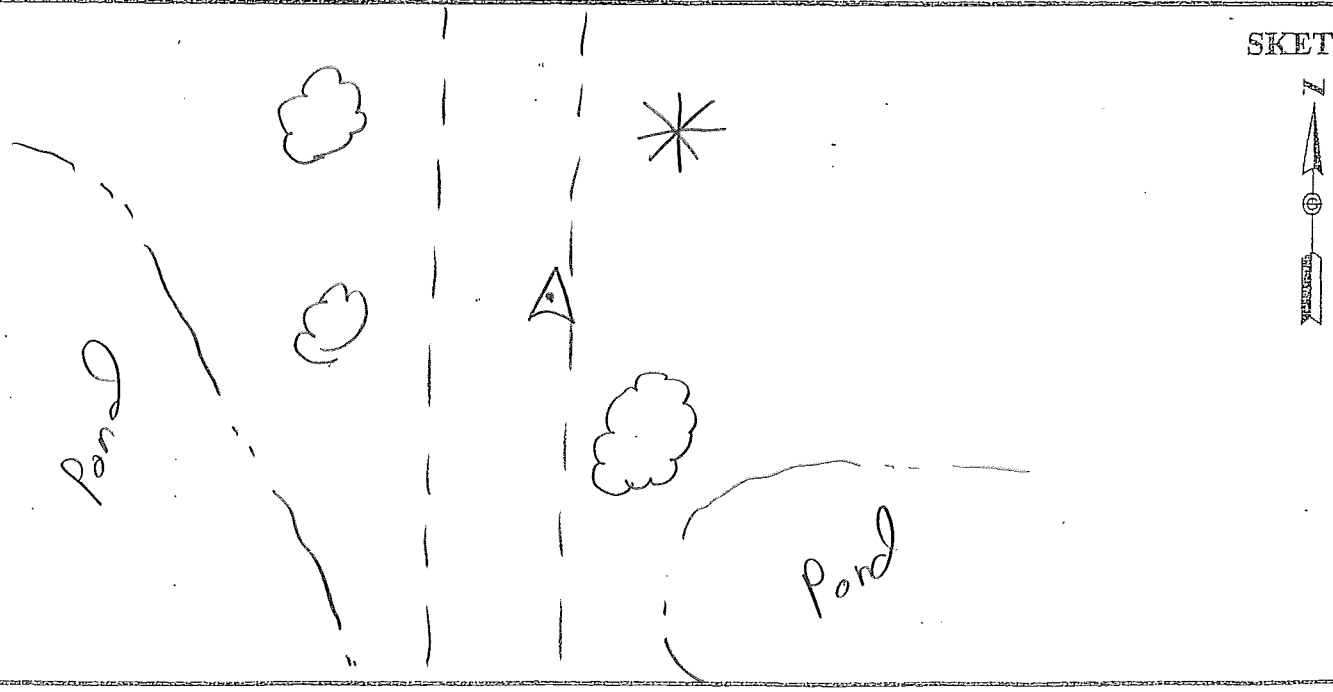
STATION DESCRIPTIONS E, side of road

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1004	2.3	9/9
1024		

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

Linn Co. CONTROL

PROJECT 1120103
OPERATOR MB
DATE 9.3.12

SITE NUMBER 5
SITE NAME X 274

TRACKING TIMES (LOCAL) MEASURE _____
START 10:39a
STOP 10:59a.

SENSOR TYPE 500 9500 399 299
MEMORY CARD 67
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
500 0.360

OBSTRUCTIONS: trees SE

HEIGHT READINGS MTS FT
1.011
1.371

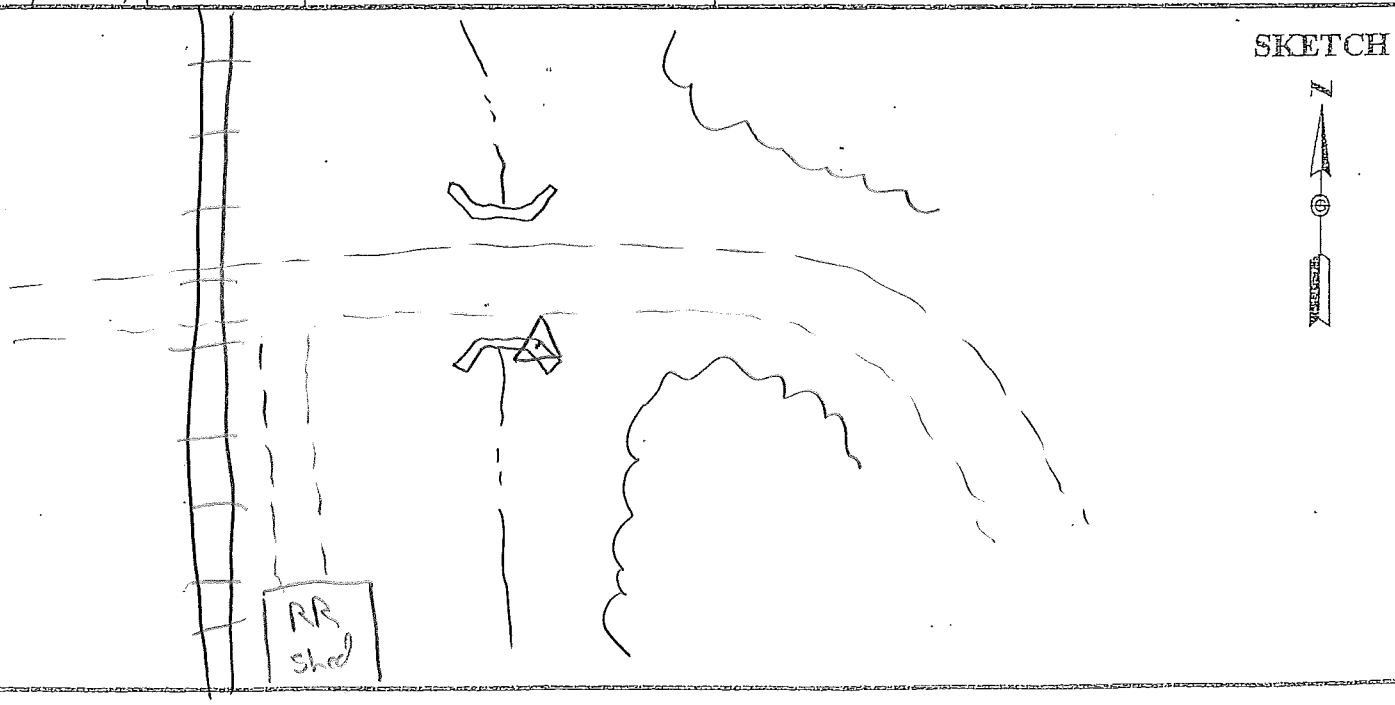
STATION DESCRIPTIONS PID USC+GS
cap on headwall "X 274
1946"

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1039	2.7	9/9
1059		

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

Linn. Co.

AME JPT

PROJECT 1120103
OPERATOR MB
DATE 4.3.12

SITE NUMBER 6
SITE NAME 460

TRACKING TIMES (LOCAL) MEASURE _____
START 11:16a
STOP 11:37a

SENSOR TYPE 500 9500 399 299
MEMORY CARD 67
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
500 0.360

OBSTRUCTIONS: none

HEIGHT READINGS MTS FT
1.405 _____
1.765

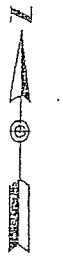
STATION DESCRIPTIONS S. side of road

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1116	2.2	10/10
1137		

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

Linn Co. tall grass √PT

PROJECT 112010.3
OPERATOR MB
DATE 4.3.12

SITE NUMBER 7
SITE NAME 243

TRACKING TIMES (LOCAL) MEASURE √
START 11:47 a.
STOP 12:10 p

SENSOR TYPE 500 9500 399 299
MEMORY CARD 67
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/~~9500~~ 0.389
500 0.360

OBSTRUCTIONS: trees N + S

HEIGHT READINGS MTS FT
1.395

STATION DESCRIPTIONS N. of road

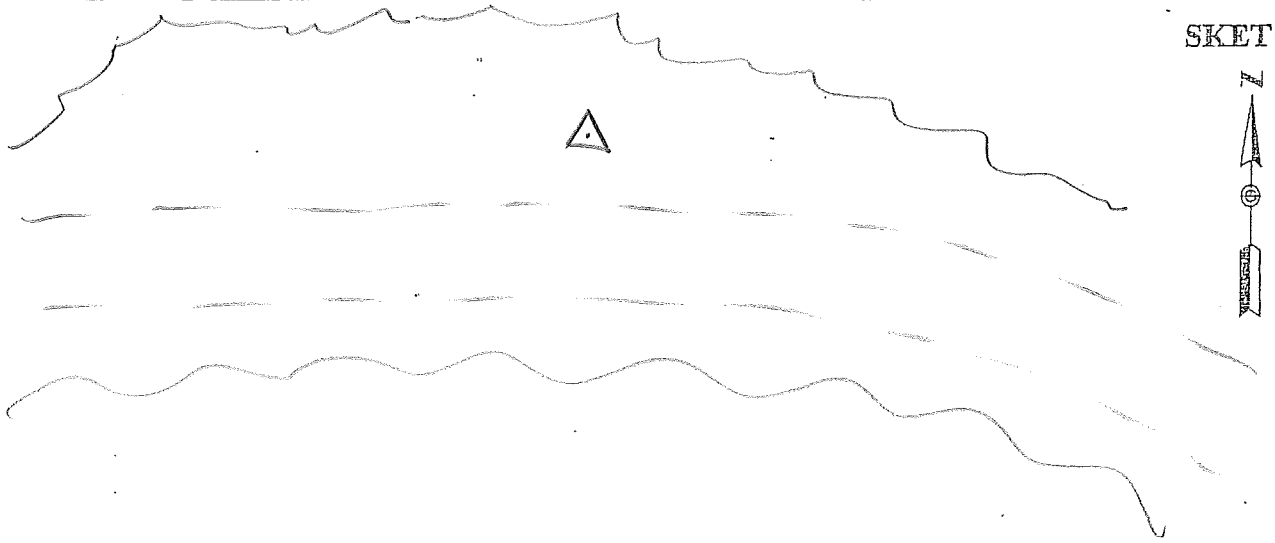
1735

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1147	1.9	8/8
1210		

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

Linn Co.

trees √PT

PROJECT 1120103
OPERATOR MB
DATE 4·3·12

SITE NUMBER 8
SITE NAME 429

TRACKING TIMES (LOCAL) MEASURE √
START 12:19 p
STOP 12:59 p

SENSOR TYPE 500 9500 399 299
MEMORY CARD 67
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 ~~0.389~~
500 0.360

OBSTRUCTIONS: trees above

HEIGHT READINGS MTS FT
1.357
1.717

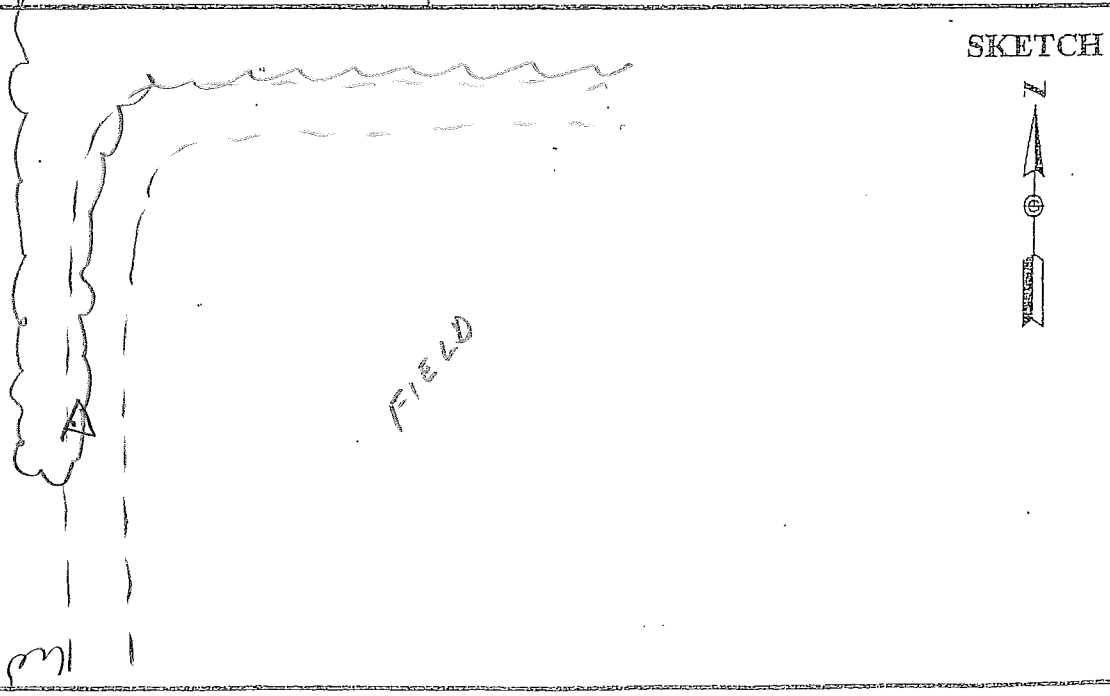
STATION DESCRIPTIONS W. side of road

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1219	1.8	8/8
1259		

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

Linn Co.

tall grass 1/17

PROJECT	1120103	SITE NUMBER	9
OPERATOR	MB	SITE NAME	244
DATE	4.3.12		

TRACKING TIMES (LOCAL) MEASURE _____
START 1:08 p
STOP 1:37 p

SENSOR TYPE 500 9500 399 299
MEMORY CARD 67
BATTERY NO. _____
CONTROLLER NO. _____
SENSOR NO. _____

SENSOR CONSTANT 299/399 0.441
399E/9500 ~~0.389~~
500 0.360

OBSTRUCTIONS: none

HEIGHT READINGS MTS FT
1.367 _____

STATION DESCRIPTIONS N. of road

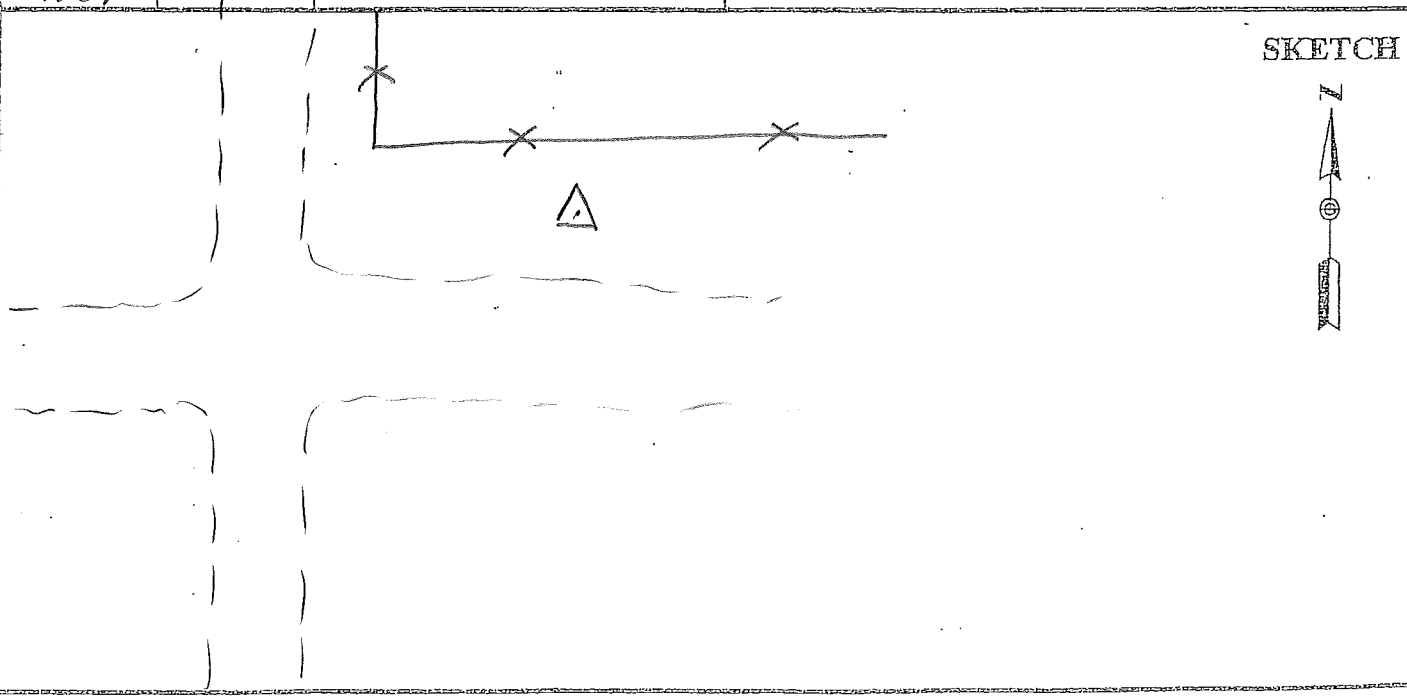
1727

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1308	2.2	9/9
1337		

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

Linn Co.

hand √PT

PROJECT 1120103
OPERATOR MB
DATE 4.3.12

SITE NUMBER 10
SITE NAME 546

TRACKING TIMES (LOCAL) MEASURE ✓
START 1:49 p
STOP 2:21 p

SENSOR TYPE 500 9500 399 299
MEMORY CARD 67
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
~~399E/9500~~ ~~0.389~~
500 0.360

HEIGHT READINGS MTS FT
1.372
1.732

OBSTRUCTIONS: none

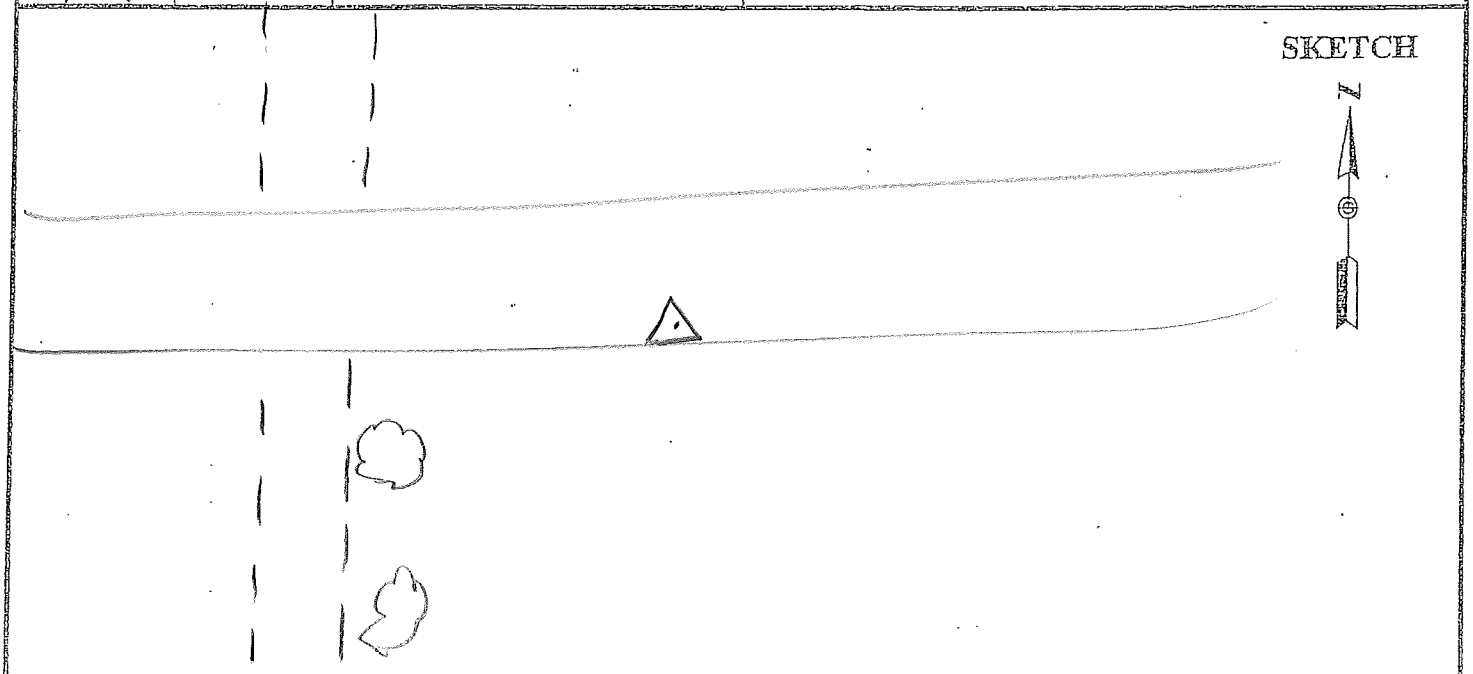
STATION DESCRIPTIONS S. side of road

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1349	3.2	8/8
1421		

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

Linn Co.

hard √PT

PROJECT 1120103
OPERATOR MB
DATE 4-3-12

SITE NUMBER 11
SITE NAME 547

TRACKING TIMES (LOCAL) MEASURE ✓
START 2:30p
STOP 2:58p

SENSOR TYPE 500 9500 399 299
MEMORY CARD 67
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 ~~0.389~~
500 0.360

OBSTRUCTIONS: none

HEIGHT READINGS MTS FT
1.406
1.766

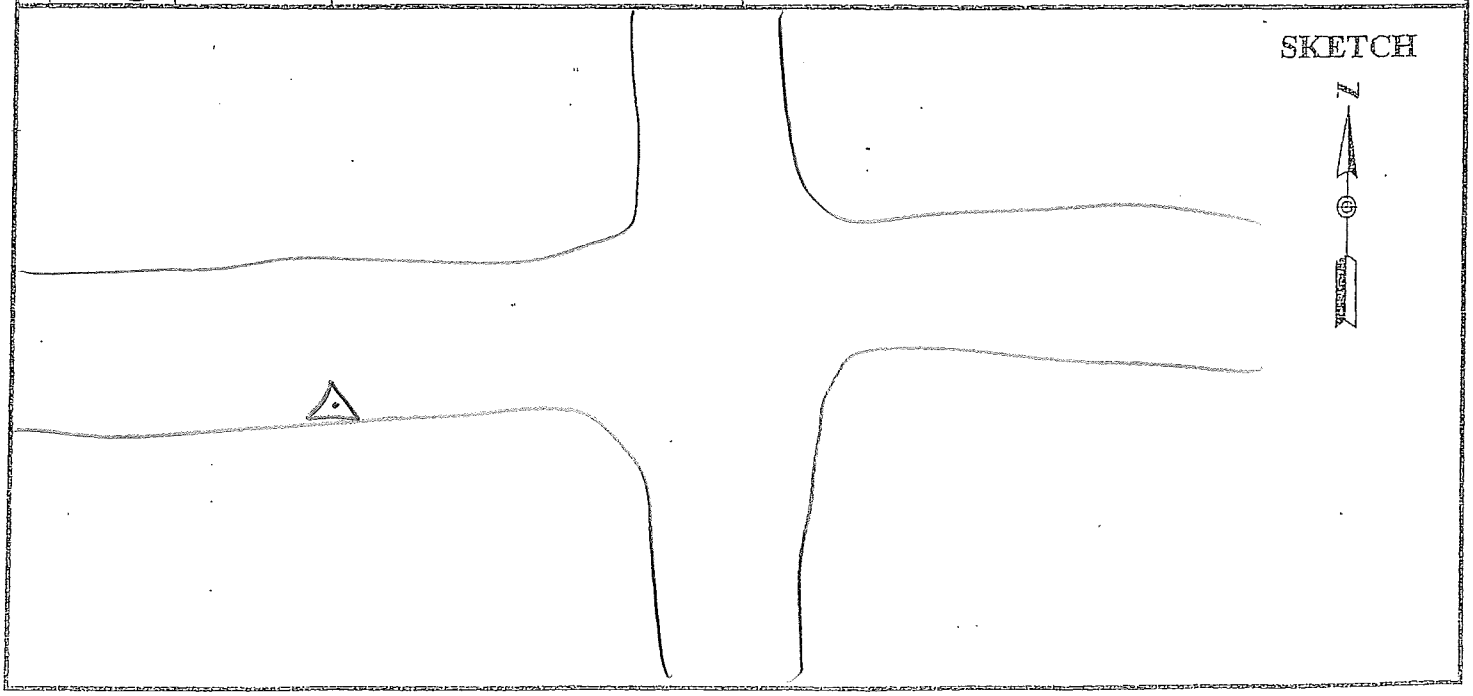
STATION DESCRIPTIONS S. side of road

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1430	2.9	7/7
1458		

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

Linn, Co.

trees √PT

PROJECT 1120103
OPERATOR MB
DATE 4·3·12

SITE NUMBER 12
SITE NAME 430

TRACKING TIMES (LOCAL) MEASURE √
START 3:03 p
STOP 3:43 p

SENSOR TYPE 500 9500 399 299
MEMORY CARD 67
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
~~500~~ 0.360

OBSTRUCTIONS: under trees

HEIGHT READINGS MTS FT
1.412
1.772

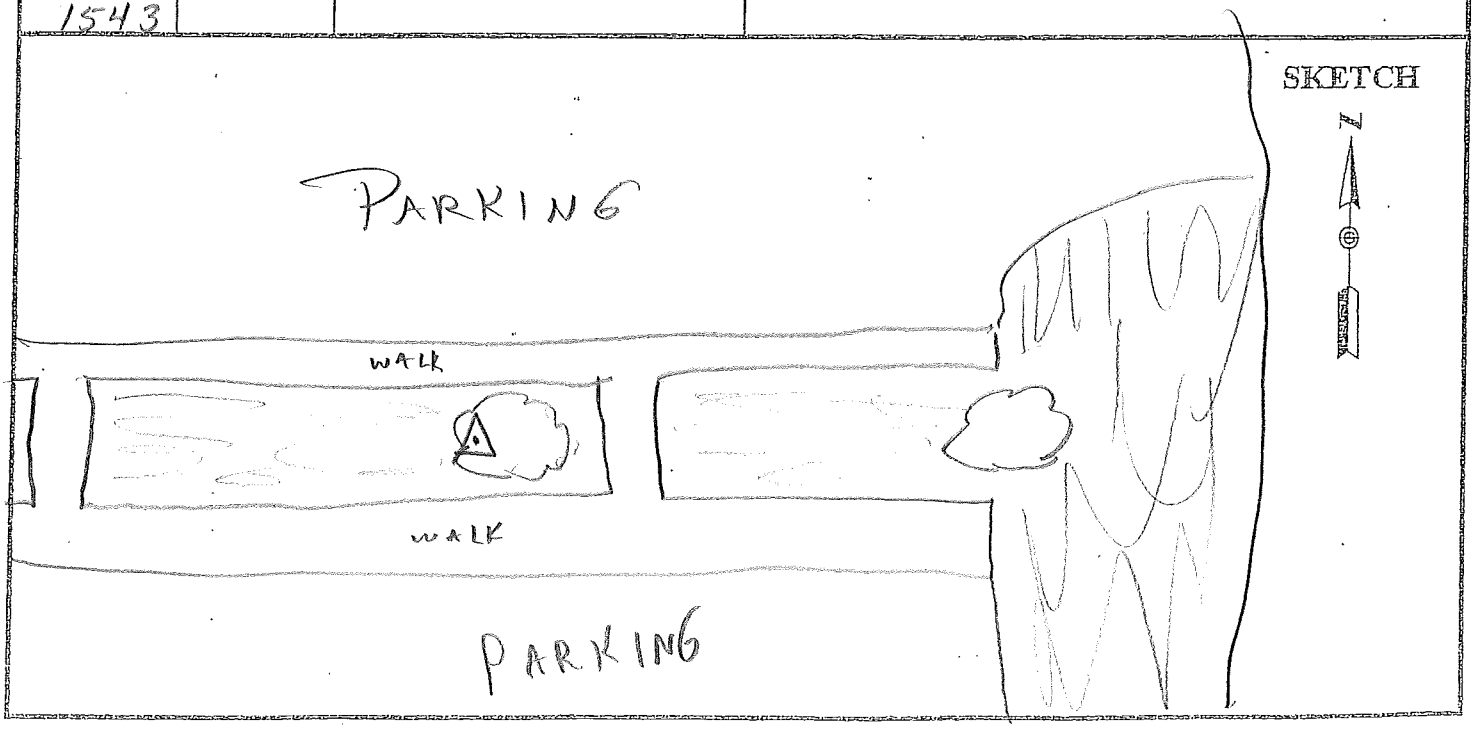
STATION DESCRIPTIONS in parking lot median

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1503		5/7
1543		

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

LINN Co.

short grass ✓PT

PROJECT 1120103
OPERATOR MB
DATE 4.3.12

SITE NUMBER 13
SITE NAME 147

TRACKING TIMES (LOCAL) MEASURE ✓
START 3:50p
STOP 4:03p

SENSOR TYPE 500 9500 399 299
MEMORY CARD 67
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
~~500~~ 0.360

OBSTRUCTIONS: none

HEIGHT READINGS MTS FT
1.407
1.767

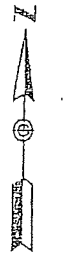
STATION DESCRIPTIONS S. of road

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1550	2.5	7/7
1613		

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

BASE

PROJECT 120103
OPERATOR WJN
DATE 4/4/12

SITE NUMBER 1
SITE NAME 1242

TRACKING TIMES (LOCAL) MEASURE CDT
START 9:03
STOP 15:56

SENSOR TYPE 500 (9500) 399 299
MEMORY CARD
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 (0.389)
500 0.360

OBSTRUCTIONS: NO

HEIGHT READINGS MTS FT
1.159

STATION DESCRIPTIONS 10" SPIKE PREVIOUSLY SET

1-548

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
14:03	1.9	10/10-10
20:56	1.9	9/9-9

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
OVC

AS BEFORE DESCRIBED

SKETCH

AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

BASE

PROJECT 1120103
OPERATOR WJN
DATE 4/4/12

SITE NUMBER 1
SITE NAME SKIRT RM 2

TRACKING TIMES (LOCAL) MEASURE CDT
START 9:49
STOP 16:20

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 14
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
500 (0.360)

OBSTRUCTIONS: TREES SW, NW

HEIGHT READINGS MTS FT
1.090
1.450

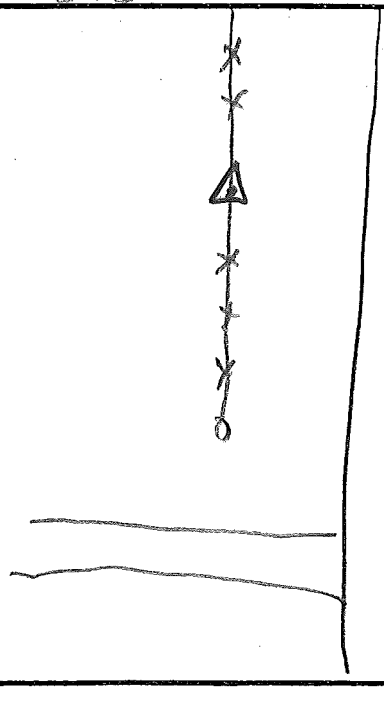
STATION DESCRIPTIONS BRONZE CAP IN CONC MON MKD: "SKIRT NO 2 1960" USC&GS
AGD

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
14:49	2.4	9/9-9
2:20	2.2	8/8-8

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
OVC

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

PROJECT 1120103
OPERATOR WJN
DATE 4/4/12

SITE NUMBER 1
SITE NAME 1143

TRACKING TIMES (LOCAL) MEASURE CDT
START 10:15
STOP 10:43

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 14
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
500 (0.360)

OBSTRUCTIONS: TREES 5

HEIGHT READINGS MTS FT
1.231

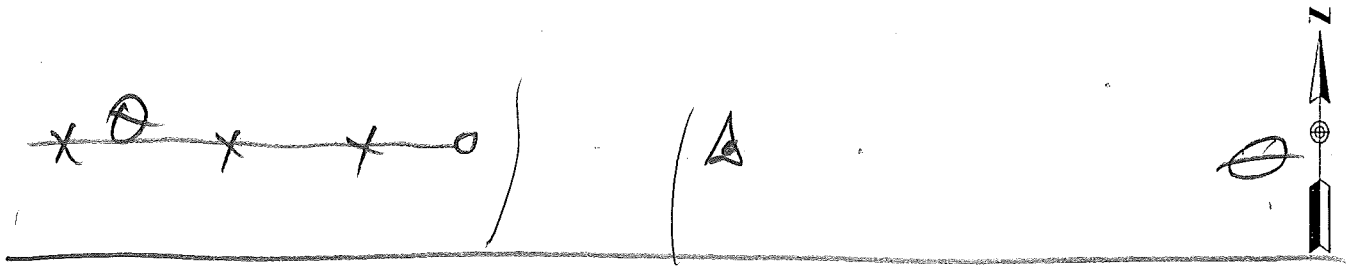
STATION DESCRIPTIONS POINT IN SHORT GRASS IN N R/W OF E-W RD

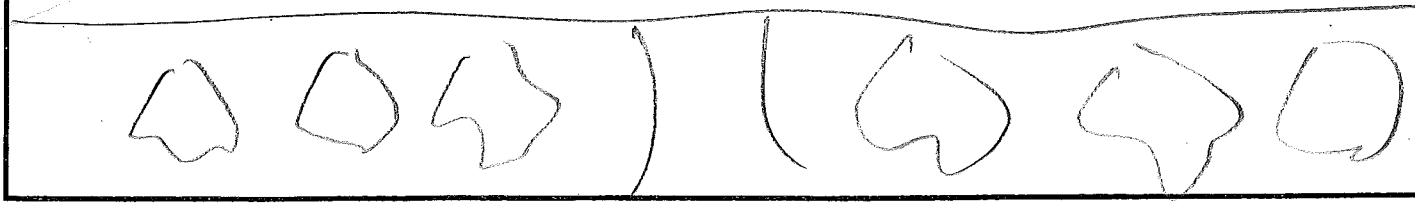
SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1515	2.5	9/9-5
15:43	2.2	9/9-9

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH





AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

PROJECT 120103
OPERATOR WVN
DATE 4/4/12

SITE NUMBER 2
SITE NAME 1644

TRACKING TIMES (LOCAL) MEASURE CDT
START 11:01
STOP 11:27

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 14
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
500 (0.360)

HEIGHT READINGS MTS FT
1.323

OBSTRUCTIONS: PPL'S E-W
TREES SW

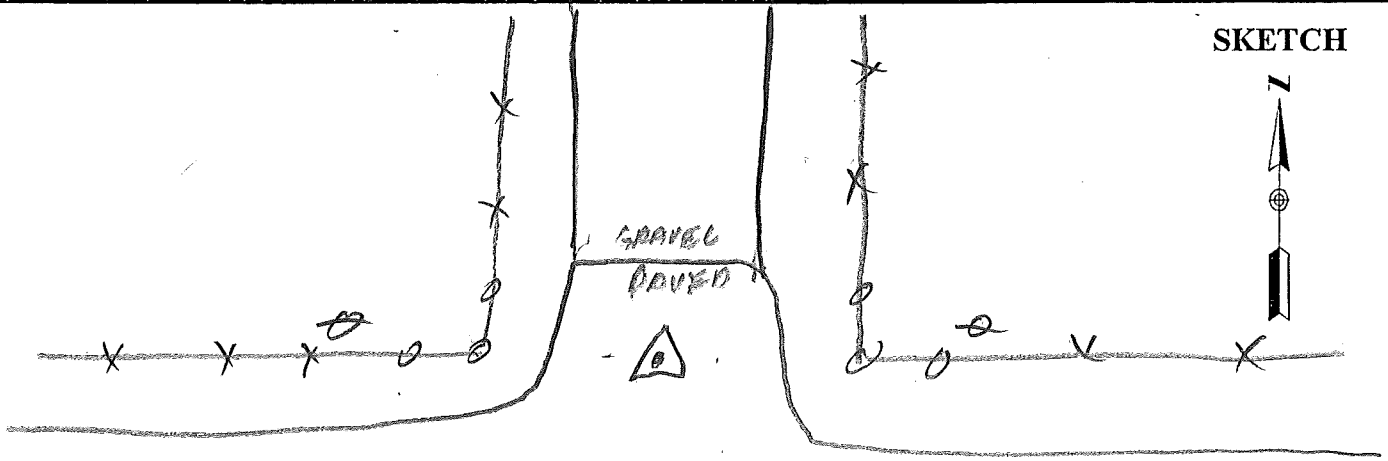
STATION DESCRIPTIONS ℄ RD
OPP N. R/W FENCE E-W
JUST N. OF INT.

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
16:01	2.4	10/10-10
16:27	2.2	10/10-10

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
RAIN

SKETCH



KS 116

AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

PROJECT 1120103
OPERATOR WJN
DATE 4/4/12

SITE NUMBER 3
SITE NAME 1547

TRACKING TIMES (LOCAL) MEASURE CDT
START 11:46
STOP 12:13

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 14
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
500 (0.360)

HEIGHT READINGS MTS 1.326 FT

OBSTRUCTIONS: BLDGS E-W

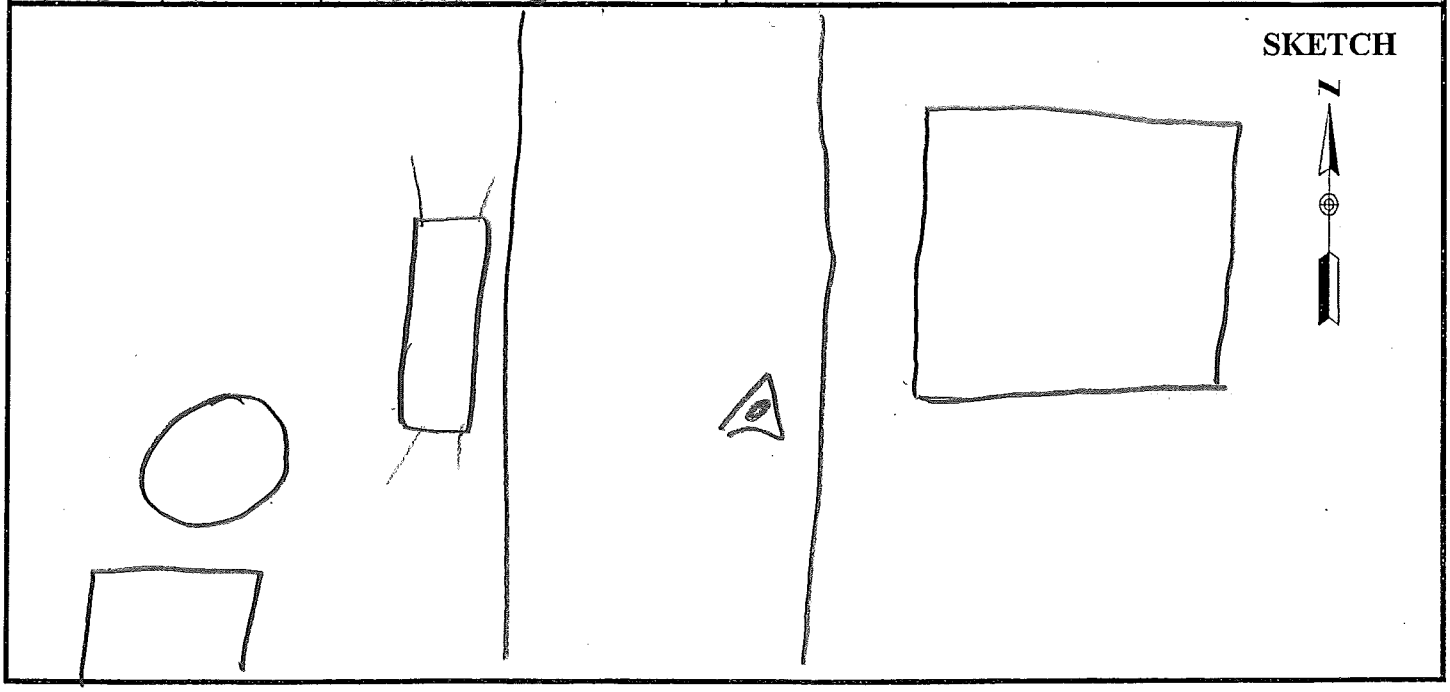
STATION DESCRIPTIONS @ PARKING LANE (E) OPP S. EDGE BLDG E

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1646	2.5	6/10-8
1713	2.3	8/13-8

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
RAIN

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

PROJECT 1120103
OPERATOR MJW
DATE 4/4/12

SITE NUMBER 4
SITE NAME 1443

TRACKING TIMES (LOCAL) MEASURE CDT
START 1229
STOP 1252

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 14
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
500 ~~0.360~~

HEIGHT READINGS MTS 1.293 FT

OBSTRUCTIONS: TREES overhead

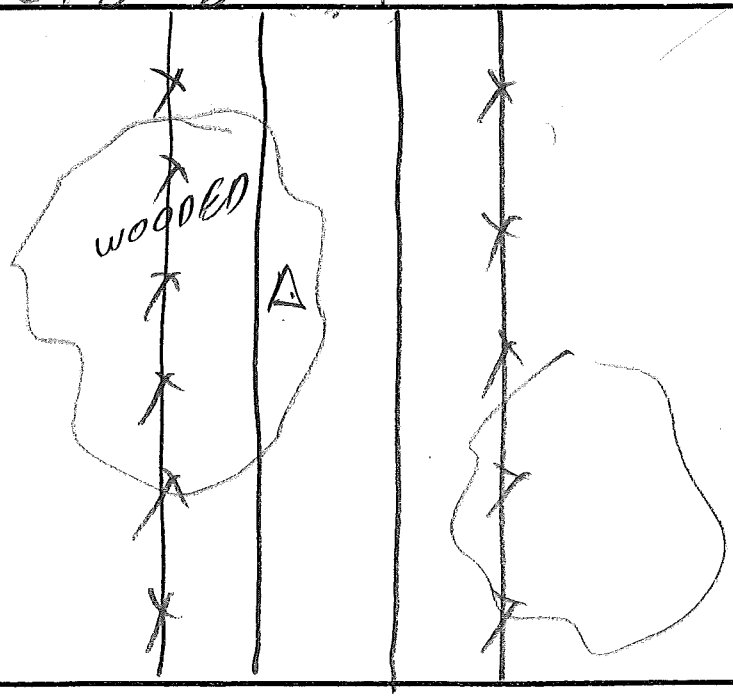
STATION DESCRIPTIONS POINT IN WOODED AREA

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1729	2.5	9/8 -10
1752	2.6	8/8 - 9

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
RAIN

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

PROJECT 120103
OPERATOR WHN
DATE 4/4/12

SITE NUMBER 5
SITE NAME 1244

TRACKING TIMES (LOCAL) MEASURE CDT
START 1312
STOP 1333

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 14
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
500 (0.360)

OBSTRUCTIONS: NO

HEIGHT READINGS MTS FT
1.200

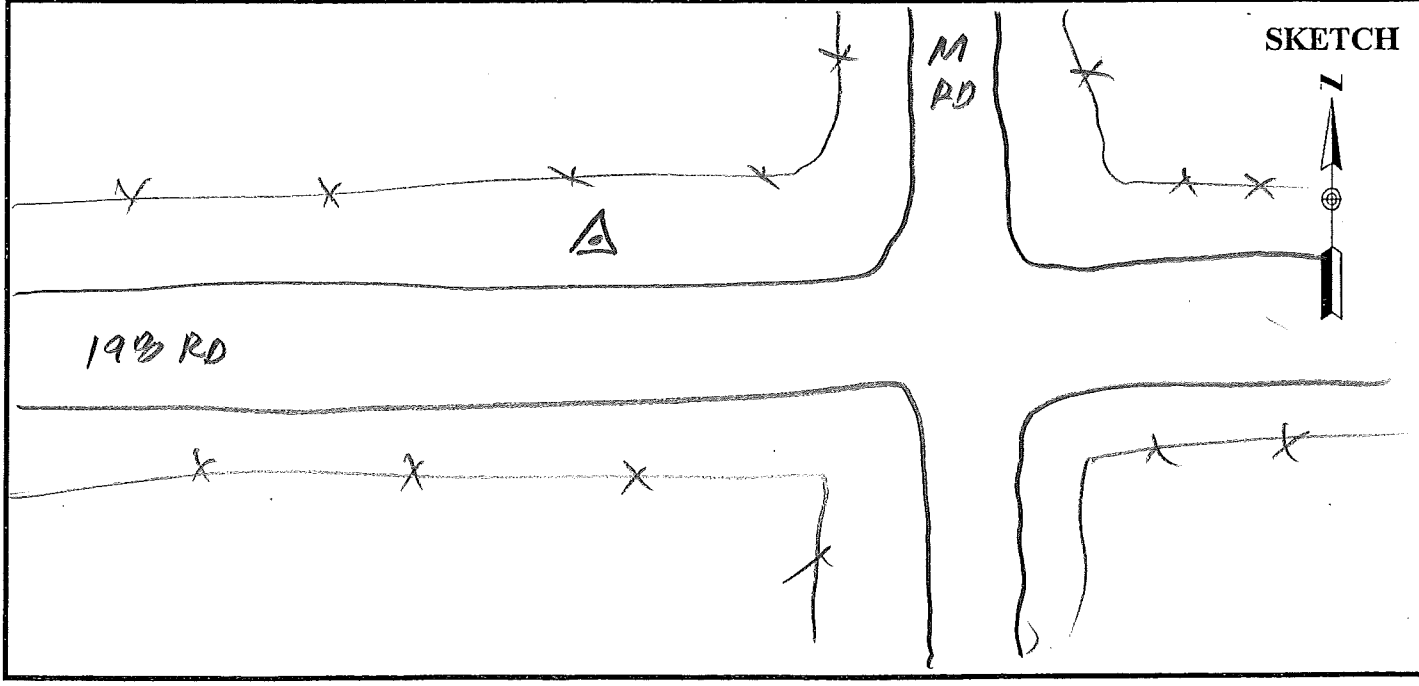
STATION DESCRIPTIONS POINT IN LONG GRASS/WEEDS IN N. R/W OF E-W RD

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1312	2.0	9/8-8
1333	2.1	8/8-8

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
RAIN

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

PROJECT 1120103
OPERATOR WJM
DATE 1120103

SITE NUMBER 10
SITE NAME 1144

TRACKING TIMES (LOCAL) MEASURE CDT
START 13:57
STOP 1420

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 14
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
500 (0.360)

OBSTRUCTIONS:

HEIGHT READINGS MTS FT
1.315

STATION DESCRIPTIONS POINT IN SHORT GRASS NE OF INT HWY E-W, RD N.

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
18:57	2.7	8 13 -8
19:20	2.5	8 13 -8

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH

KS 116

AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

PROJECT 1120103
OPERATOR WJN
DATE 4/4/12

SITE NUMBER 7
SITE NAME 1543

TRACKING TIMES (LOCAL) MEASURE CDT
START 1434
STOP 1504

SENSOR TYPE (500) 9500 399 299
MEMORY CARD
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
500 (0.360)

HEIGHT READINGS MTS 1.320 FT

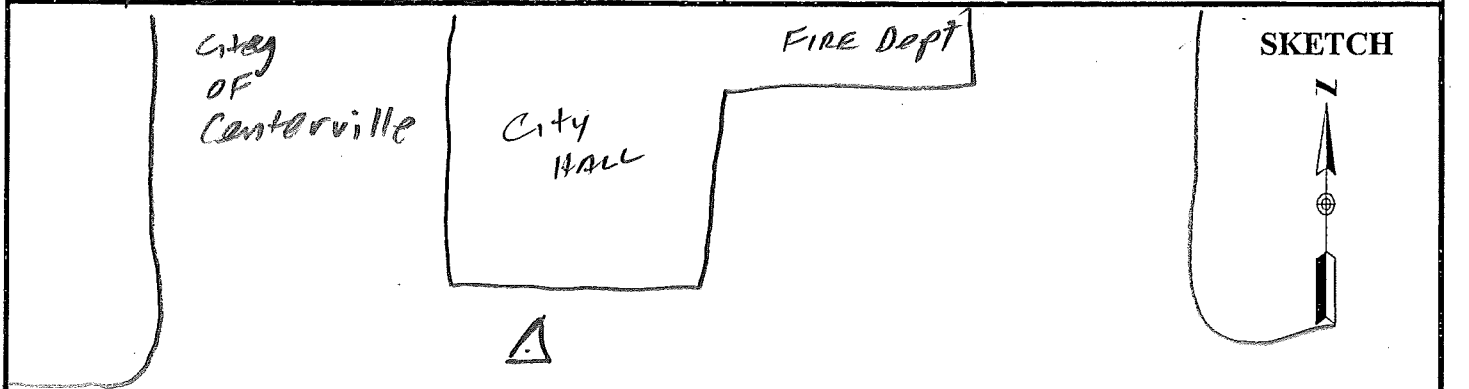
OBSTRUCTIONS: BLDG NE, NW

STATION DESCRIPTIONS POINT JUST S. OF City HALL, Centerville KS

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1934	2.8	8/8-9
2004	2.6	8/8-8

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

PROJECT 1120103
OPERATOR WJW
DATE 4/4/12

SITE NUMBER 8
SITE NAME 1544

TRACKING TIMES (LOCAL) MEASURE CDT
START 1520
STOP 1542

SENSOR TYPE (500) 9500 399 299
MEMORY CARD
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
500 (0.360)

HEIGHT READINGS MTS 1.302 FT

OBSTRUCTIONS: TRAFFIC

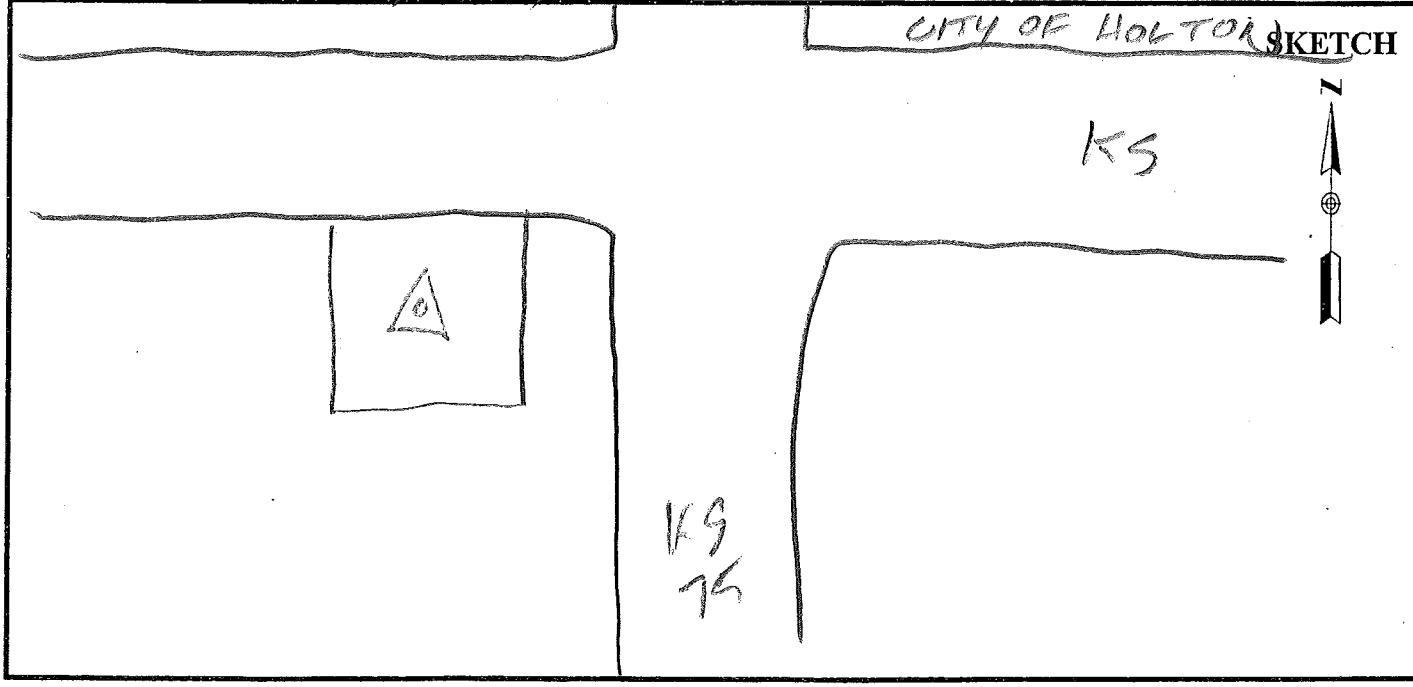
STATION DESCRIPTIONS CENTER OF 30 x 30 BIT PAD S. OF STREET

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
2020	2.2	9/9-9
2042	2.2	9/9-9

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

Linn Co. Base

PROJECT 1120103
OPERATOR MB
DATE 4.4.12

SITE NUMBER 1
SITE NAME 145

TRACKING TIMES (LOCAL) MEASURE ✓
START 8:10 a.
STOP

SENSOR TYPE 500 9500 399 299
MEMORY CARD 603
BATTERY NO. CB
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 ~~0.389~~
~~500~~ 0.360

OBSTRUCTIONS:

HEIGHT READINGS MTS FT
1.351

1.711

STATION DESCRIPTIONS

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
810	4.6	6/6

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH

See previous

AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

Linn Co. Base short grass 1/02

PROJECT 1120103
OPERATOR MB
DATE 4.4.12

SITE NUMBER 1
SITE NAME 148

TRACKING TIMES (LOCAL) MEASURE _____
START 8:42a
STOP _____

SENSOR TYPE 500 9500 399 299
MEMORY CARD 66
BATTERY NO. CB
CONTROLLER NO. _____
SENSOR NO. _____

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
500 0.360

OBSTRUCTIONS: PP north

HEIGHT READINGS MTS FT
1.350 _____
1.710

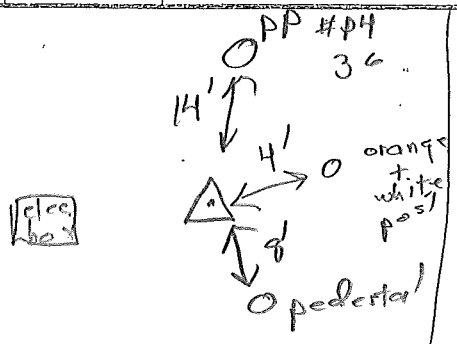
STATION DESCRIPTIONS set 6" nail

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
842	1.7	9/9

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
38 19 53.1
94 57 18.0

SKETCH



W 2100 RD.

AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

Winn. Co. CONTROL

PROJECT 1120103
OPERATOR MB
DATE 4.4.12

SITE NUMBER 1
SITE NAME H 274

TRACKING TIMES (LOCAL) MEASURE ✓
START 9:14 a.
STOP 10:04 a.

SENSOR TYPE 500 9500 399 299
MEMORY CARD 704
BATTERY NO. CB
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 ~~0.389~~
500 0.360

HEIGHT READINGS MTS FT
1.409
1.769

OBSTRUCTIONS: none

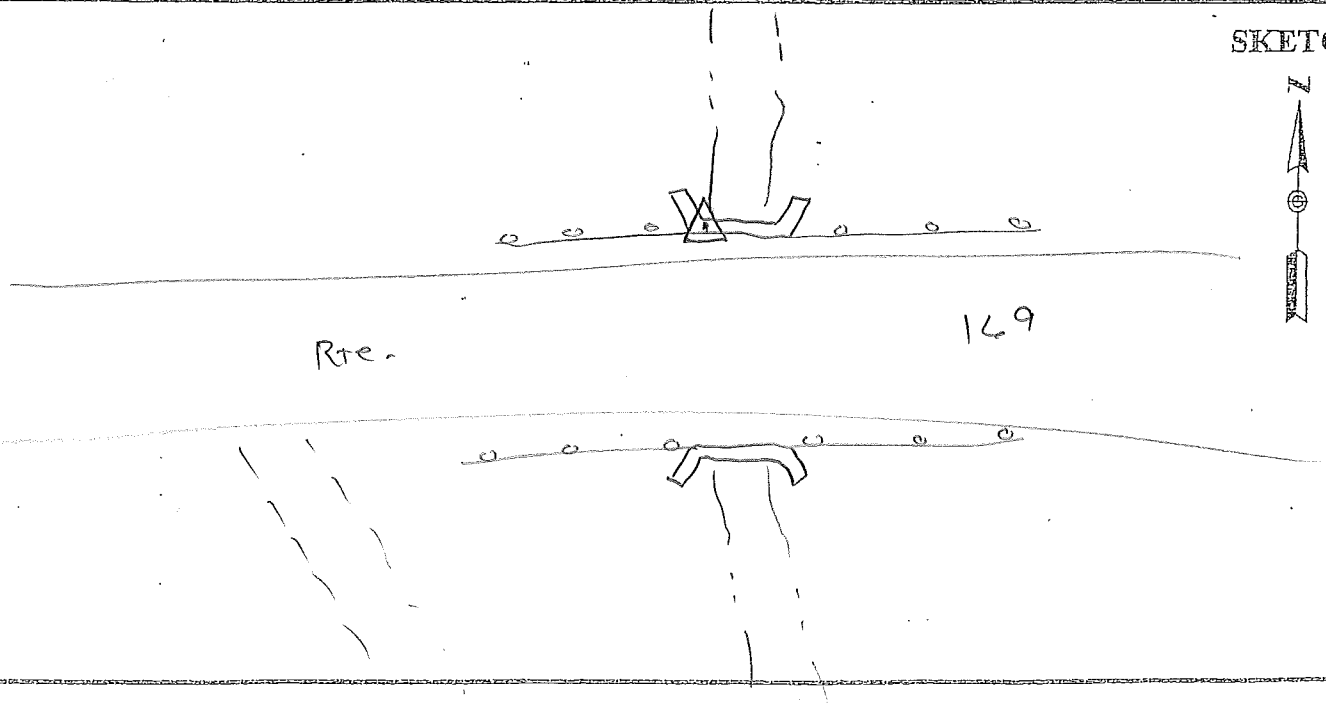
STATION DESCRIPTIONS fnd USGS
cap in headwall "H 274
1945"

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
914	1.7	10/10
1004		

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

Linn Co.

AME Spot

PROJECT 1120103
OPERATOR MB
DATE 4-4-12

SITE NUMBER 2
SITE NAME 641

TRACKING TIMES (LOCAL) MEASURE ✓
START 10:50 a.
STOP 10:20 a.

SENSOR TYPE 500 9500 399 299
MEMORY CARD 704
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
500 0.360

HEIGHT READINGS MTS FT
1.358

1718

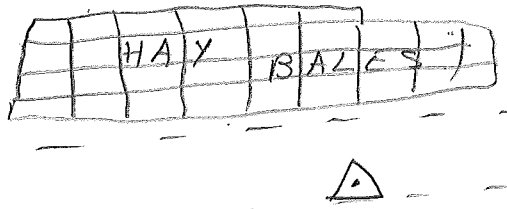
OBSTRUCTIONS: none

STATION DESCRIPTIONS S. side of road

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1050	4.5	10/10
1120		

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS



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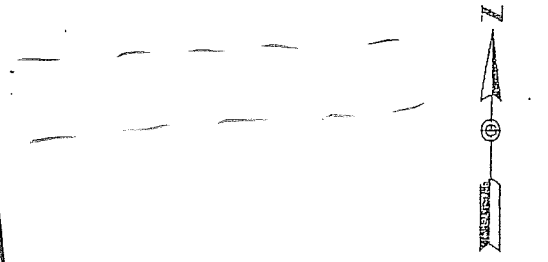


AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

Linn Co. tall grass JP7

PROJECT 1120103
OPERATOR MB
DATE 4.4.12

SITE NUMBER 3
SITE NAME 245

TRACKING TIMES (LOCAL) MEASURE ✓
START 11:32a
STOP 11:57a

SENSOR TYPE 500 9500 399 299
MEMORY CARD 704
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 ~~0.389~~
500 0.360

OBSTRUCTIONS: none

HEIGHT READINGS MTS FT
1.308
1.668

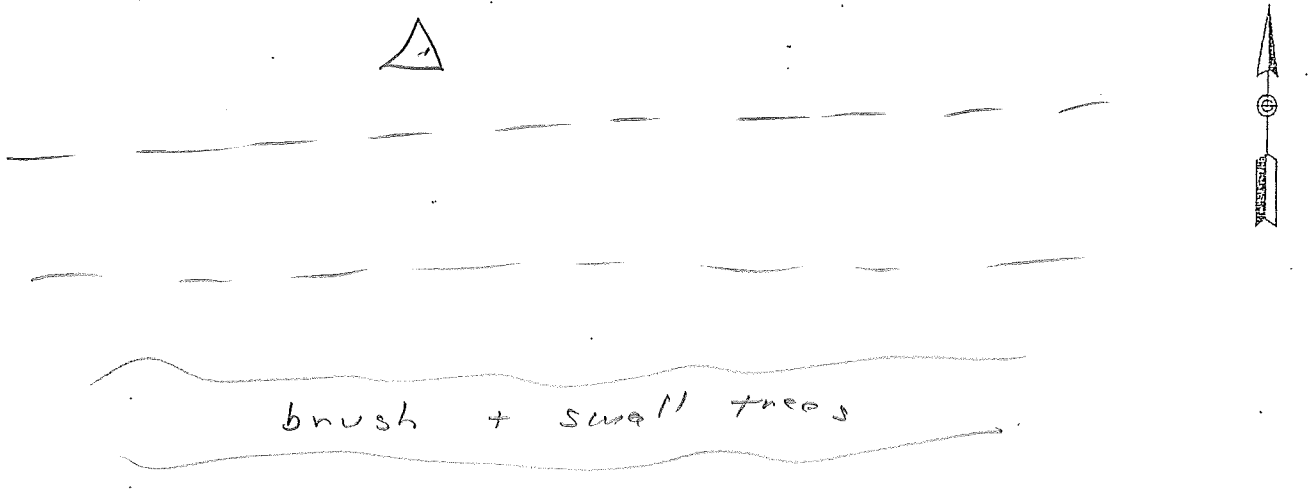
STATION DESCRIPTIONS N. of road

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1132	2.3	10/10
1157		

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

Linn Co. trees √PT

PROJECT 1120103
OPERATOR MB
DATE 4.4.12

SITE NUMBER 4
SITE NAME 435

TRACKING TIMES (LOCAL) MEASURE √
START 12:05 p
STOP 12:45 p

SENSOR TYPE 500 9500 399 299
MEMORY CARD 704
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 ~~0.389~~
500 0.360

OBSTRUCTIONS: trees above

HEIGHT READINGS MTS FT
1.442
1.802

STATION DESCRIPTIONS N. side of road

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1205	2.9	6/8
1245		

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH

AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

Linn Co. AME JPT

PROJECT 120103
OPERATOR MC
DATE 4.4.12

SITE NUMBER 5
SITE NAME 642

TRACKING TIMES (LOCAL) MEASURE ✓
START 1:37 p
STOP 2:00 p

SENSOR TYPE 500 9500 399 299
MEMORY CARD 704
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
500 0.360

OBSTRUCTIONS: tree w.

HEIGHT READINGS MTS FT
1.404
1.764

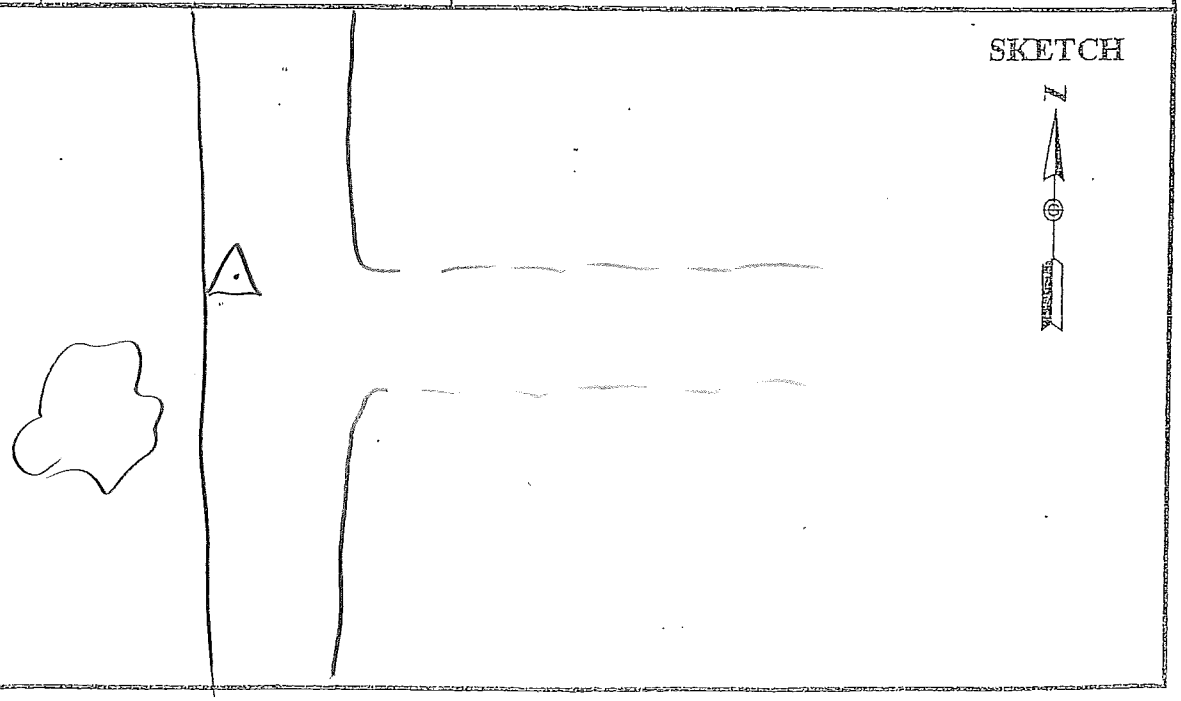
STATION DESCRIPTIONS w. side of road

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1337	2.4	7/7
1400		

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

Linn Co.

trees √PT

PROJECT 1120103
OPERATOR MB
DATE 4.4.12

SITE NUMBER 6
SITE NAME 431

TRACKING TIMES (LOCAL) MEASURE ____
START 2:24 p
STOP 3:04 p

SENSOR TYPE 500 9500 399 299
MEMORY CARD 704
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 ~~0.389~~
500 0.360

OBSTRUCTIONS: trees above

HEIGHT READINGS MTS FT
1.403

1763

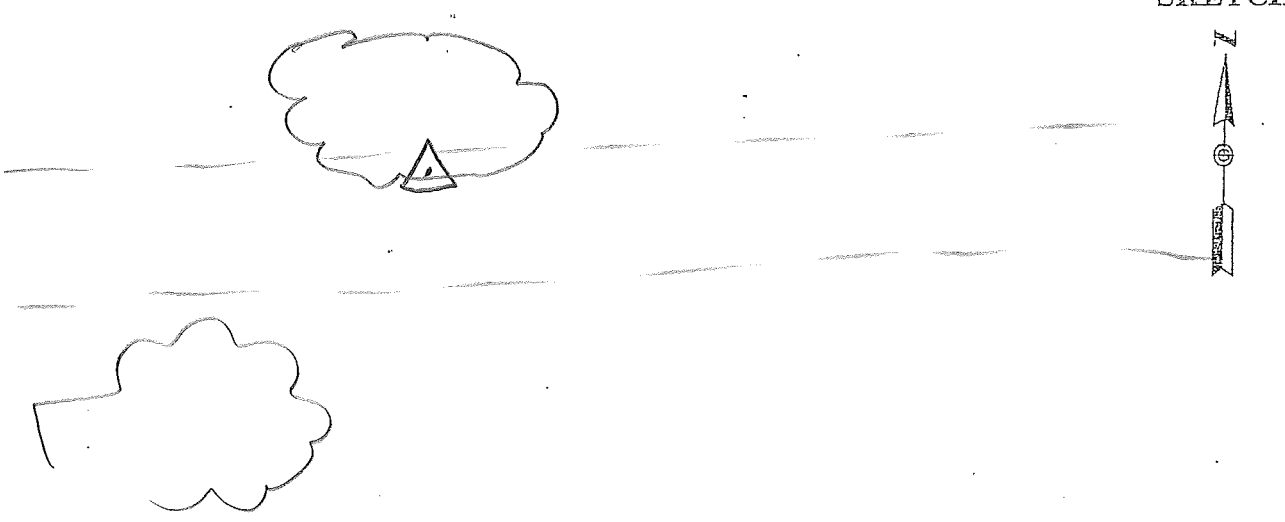
STATION DESCRIPTIONS N. side of road

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1424		6/7
1504		

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

PROJECT 112103
OPERATOR WJW
DATE 4/5/12

SITE NUMBER 1
SITE NAME SKIRT RM 2

TRACKING TIMES (LOCAL) MEASURE CDT
START 8 05
STOP 11:36

SENSOR TYPE 500 (9500) 399 299
MEMORY CARD 101
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 (0.389)
500 0.360

OBSTRUCTIONS: TREES W

HEIGHT READINGS MTS FT
1.100
1.499

STATION DESCRIPTIONS BRASS DISK "SKIRT RM 2" 1960

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1305	4.6	6/6-8
17:36	1.7	10/10-10

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
RAIN

AS BEFORE DESCRIBED

SKETCH

AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

PROJECT 1120103
OPERATOR WJM
DATE 4/5/12

SITE NUMBER 1
SITE NAME 1232

TRACKING TIMES (LOCAL) MEASURE CDT
START 8:32
STOP 12:03

SENSOR TYPE (500) 9500 399 299
MEMORY CARD
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
500 (0.360)

OBSTRUCTIONS: NO

HEIGHT READINGS MTS FT
1.182
1.542

STATION DESCRIPTIONS 10" SPIKE PREVIOUSLY SET

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
13:32	1.9	9/9-9
17:03	1.6	10/10-10

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
RAIN

AS BEFORE DESCRIBED

SKETCH

AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

PROJECT 1120103
OPERATOR WJN
DATE 4/5/12

SITE NUMBER 1
SITE NAME 1245

TRACKING TIMES (LOCAL) MEASURE CDT
START 9:49
STOP

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 14
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
500 (0.360)

HEIGHT READINGS MTS FT
1.267

OBSTRUCTIONS: NO

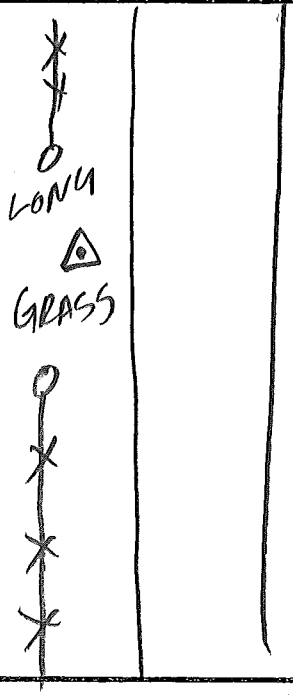
STATION DESCRIPTIONS POINT IN LONG GRASS @ FIELD ENT W. IN W. R/W

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1349	1.9	9/9-9

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
RAIN

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

PROJECT 1120103
OPERATOR MJN
DATE 4/5/12

SITE NUMBER 2
SITE NAME 1444

TRACKING TIMES (LOCAL) MEASURE CDT
START 9:26
STOP 9:51

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 14
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
500 (0.360)

HEIGHT READINGS MTS FT
1.235

OBSTRUCTIONS: TREES

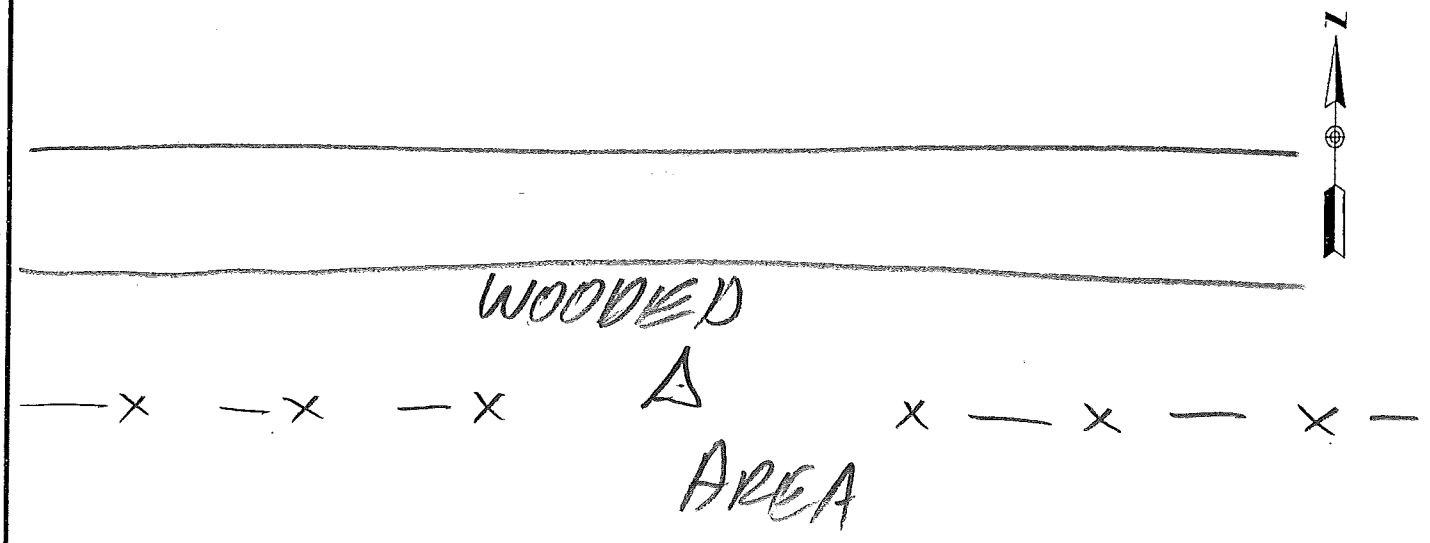
STATION DESCRIPTIONS POINT IN WOODED AREA S R/W OF E-W RD.

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
14:26	2.0	9/8-10
14:51	2.5	9/9-9

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH



27018418

125

AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

PROJECT 1120103
OPERATOR WJN
DATE 4/5/12

SITE NUMBER 3
SITE NAME 1145

TRACKING TIMES (LOCAL) MEASURE UT
START 10:06
STOP 10:32

SENSOR TYPE (500) 9500 399 299
MEMORY CARD
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
500 (0.360)

OBSTRUCTIONS: PPLS SE, SW, SIGN SW

HEIGHT READINGS MTS FT
1.284

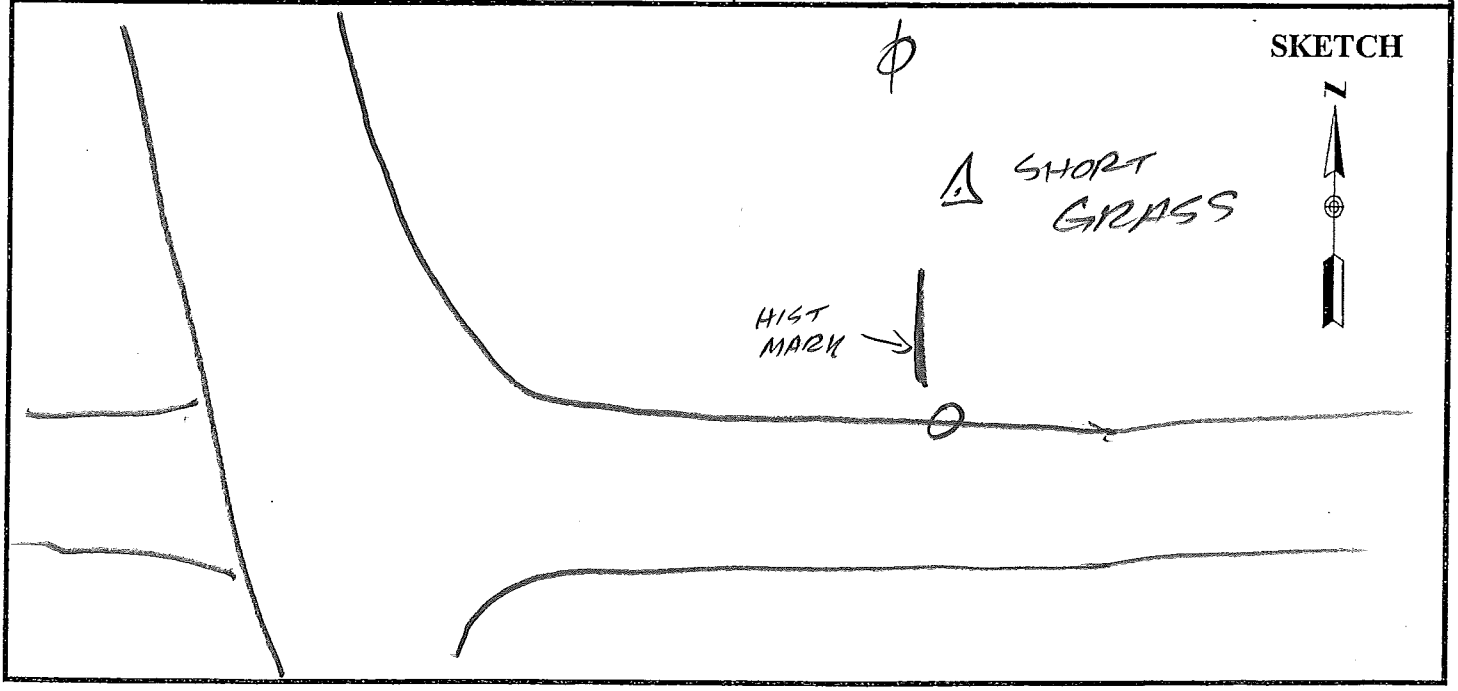
STATION DESCRIPTIONS POINT IN SHORT GRASS

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
15:06	2.0	8/9-9
15:32	2.2	8/9-9

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
RAIN

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

PROJECT 1120103
OPERATOR MWM
DATE 4/5/12

SITE NUMBER 4
SITE NAME 1

TRACKING TIMES (LOCAL) MEASURE CST
START 10:50
STOP 11:20

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 14
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
500 (0.360)

HEIGHT READINGS MTS FT
1.340

OBSTRUCTIONS: PAL SSE, SW TREES SE

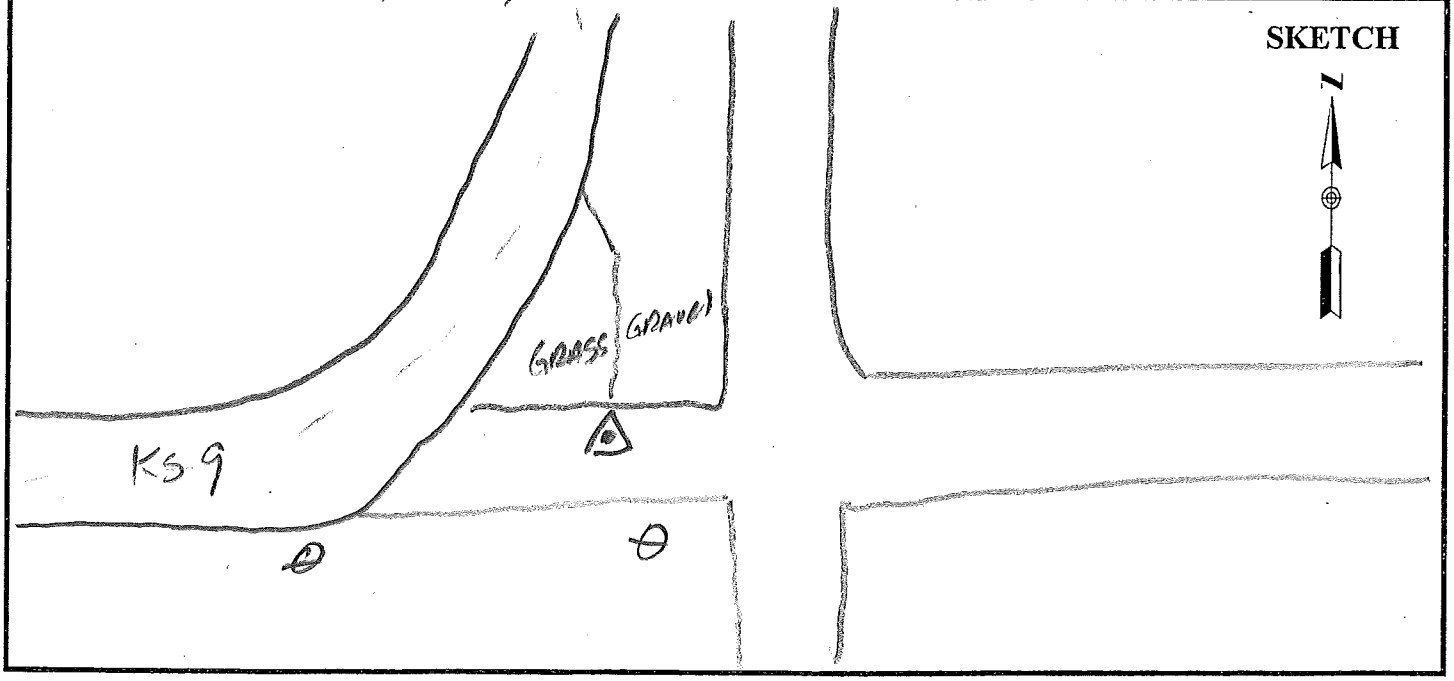
STATION DESCRIPTIONS POINT IN E BND LANE (SUMMIT) OPP GRASS LINE N.

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
15 50	2.5	10/10-16
16 20	2.2	9/9-9

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
RAIN

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

PROJECT 120103
OPERATOR WL
DATE 4/17/12

SITE NUMBER 1
SITE NAME 246

TRACKING TIMES (LOCAL) MEASURE CDT
START 10:41
STOP 15:40

SENSOR TYPE 500 (9500) 399 299
MEMORY CARD
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 (0.389)
500 0.360

OBSTRUCTIONS: NO

HEIGHT READINGS MTS FT
1.257

STATION DESCRIPTIONS POINT IN LONG GRASS, SET NAIL, 12' S. OF LARGE BRACE POST 15' N. OF OPTICS PED

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
15:41	1.7	10/10-10
20:40	2.0	9/9-9

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

38 23 07.0
94 51 12.1

(7)

Pad → □
LONE POST → ○
△
Pad → □

SKETCH

AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

PROJECT 1120103
OPERATOR WJN
DATE 4/17/12

SITE NUMBER 1
SITE NAME 247

TRACKING TIMES (LOCAL) MEASURE _____
START 11:13
STOP 15 19

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 11
BATTERY NO. _____
CONTROLLER NO. _____
SENSOR NO. _____

SENSOR CONSTANT 299/399 0.441
399E/9500 ~~0.389~~
500 (0.360)

OBSTRUCTIONS: TRAFFIC

HEIGHT READINGS MTS FT
I.286 _____

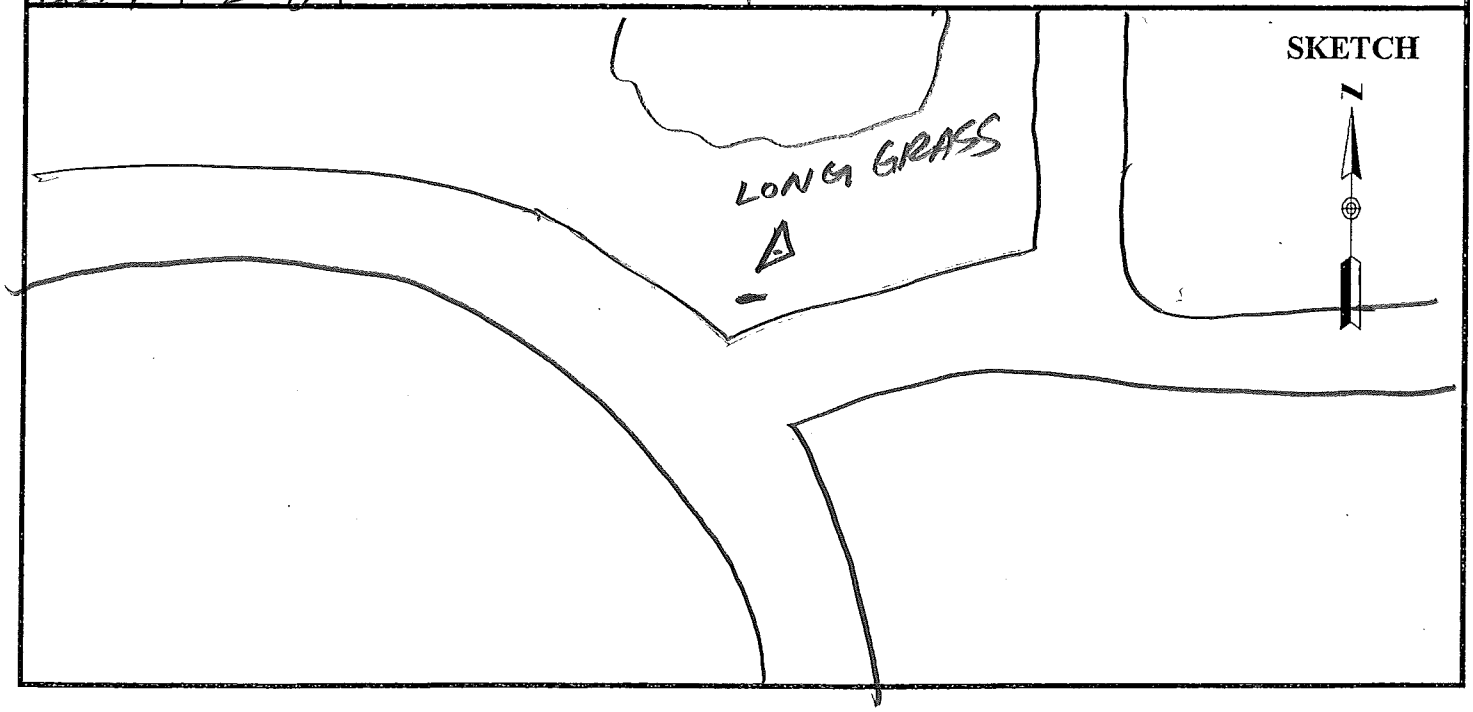
STATION DESCRIPTIONS Set NAIC
IN TALL GRASS
33' NW OF ROAD
15' N. OF STOP SIGN
3' N. OF LARGE, FLUSH ROCK

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1613	1.8	9/9-9
2019	2-8	

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
PC

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

PROJECT 1120103
OPERATOR WJM
DATE 4/17/12

SITE NUMBER /
SITE NAME 248

TRACKING TIMES (LOCAL) MEASURE CDT
START 11:33
STOP 11:55

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 14
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
500 ~~0.360~~

HEIGHT READINGS MTS FT
1.340

OBSTRUCTIONS: NO

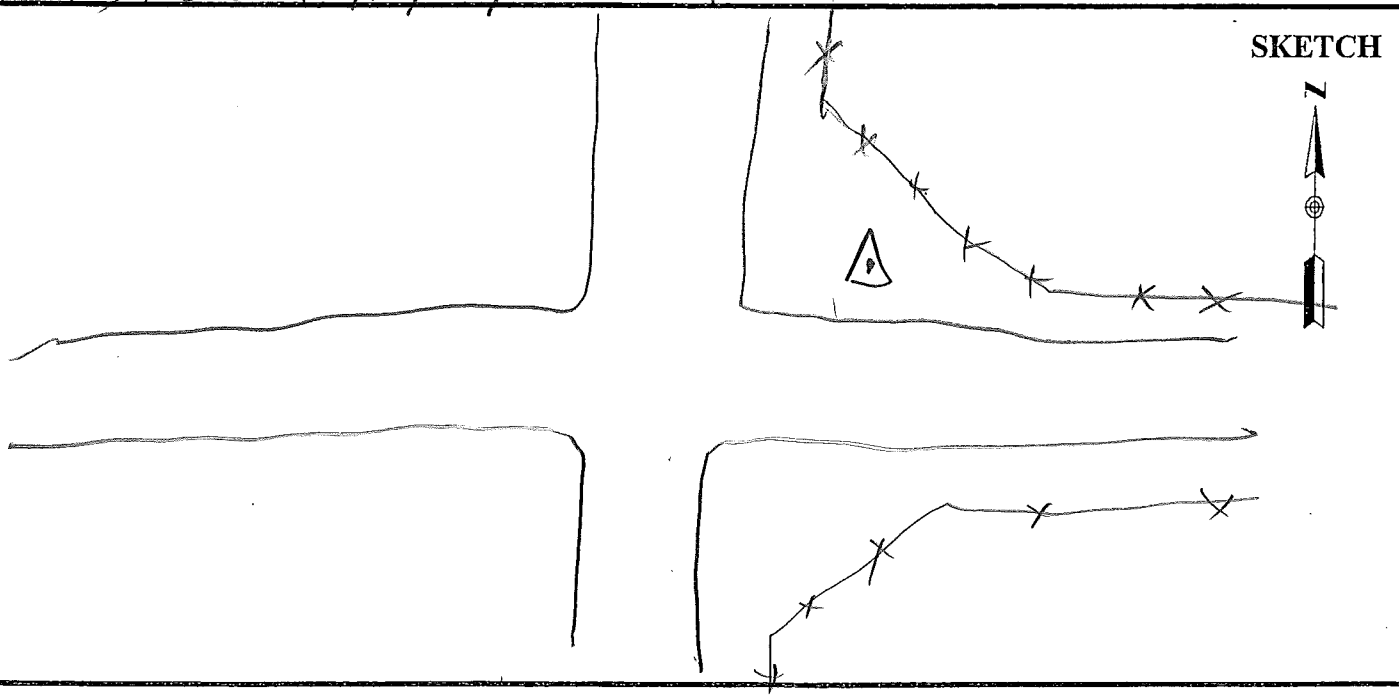
STATION DESCRIPTIONS POINT IN LONG GRASS IN NE QUAD OF INT

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
10:33	1.7	9/9-9
1655	2.0	9/9-9

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
SKC

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

PROJECT 1120103
OPERATOR WJN
DATE 4/17/12

SITE NUMBER 2
SITE NAME 249

TRACKING TIMES (LOCAL) MEASURE CDT
START 12:14
STOP 12:53

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 14
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
500 (0.360)

OBSTRUCTIONS: NO

HEIGHT READINGS MTS FT
1.258

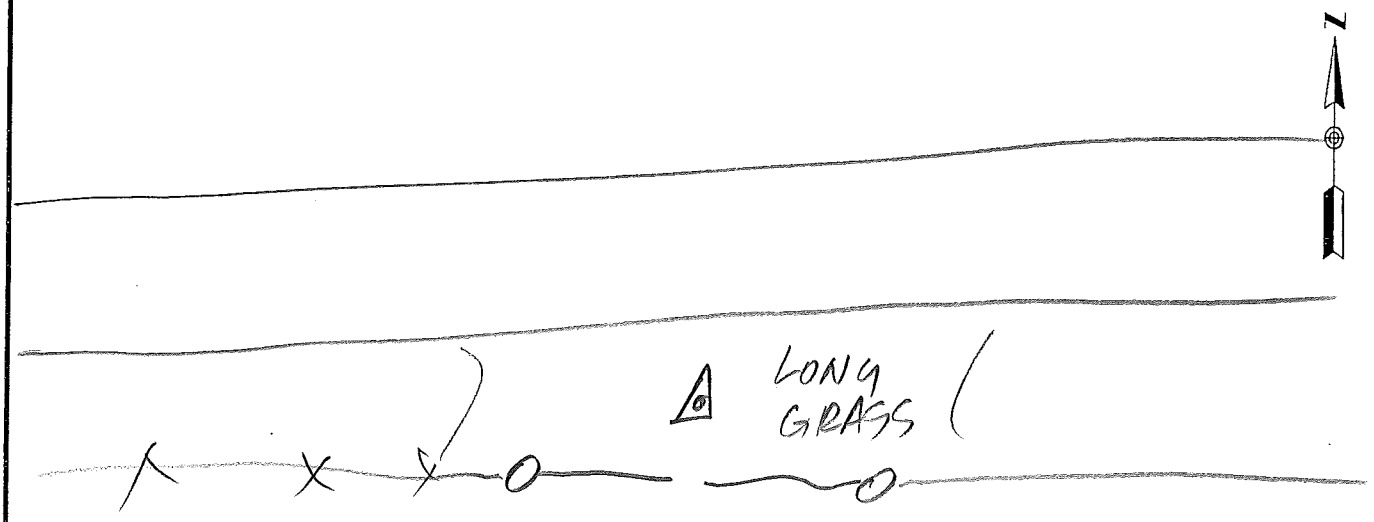
STATION DESCRIPTIONS POINT 101
LONG GRASS

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1714	2.0	9/9-9
1753	2.8	8/8-8

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

PROJECT 1120103
OPERATOR WJN
DATE 4/17/12

SITE NUMBER 3
SITE NAME K56

TRACKING TIMES (LOCAL) MEASURE CDT
START 13:16
STOP 14:00

SENSOR TYPE ~~300~~ 9500 399 299
MEMORY CARD 14
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 ~~0.389~~
500 0.360

HEIGHT READINGS MTS FT
1.171
1.531

OBSTRUCTIONS: LAMP POSTS

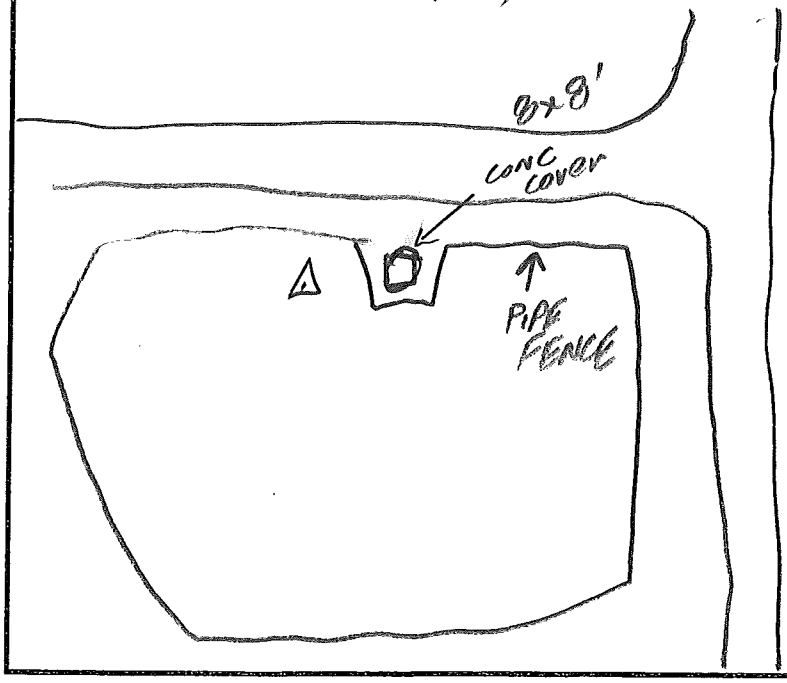
STATION DESCRIPTIONS FD BRASS DISK IN CONC MKD: K56 1934

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1816	2.4	8/8-9
1900	2.0	9/9-9

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
PC

SKETCH



±17' W OF 8x8 CONC COVER
± 50' SOUTH OF ℄ RD.

N

AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

PROJECT 1120103
OPERATOR WJN
DATE 4/17/12

SITE NUMBER 4
SITE NAME C 252 Reset

TRACKING TIMES (LOCAL) MEASURE CDT
START 14:49
STOP 1551

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 14
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
500 (0.360)

OBSTRUCTIONS: TREES S, SW

HEIGHT READINGS MTS FT
0.992
1.352

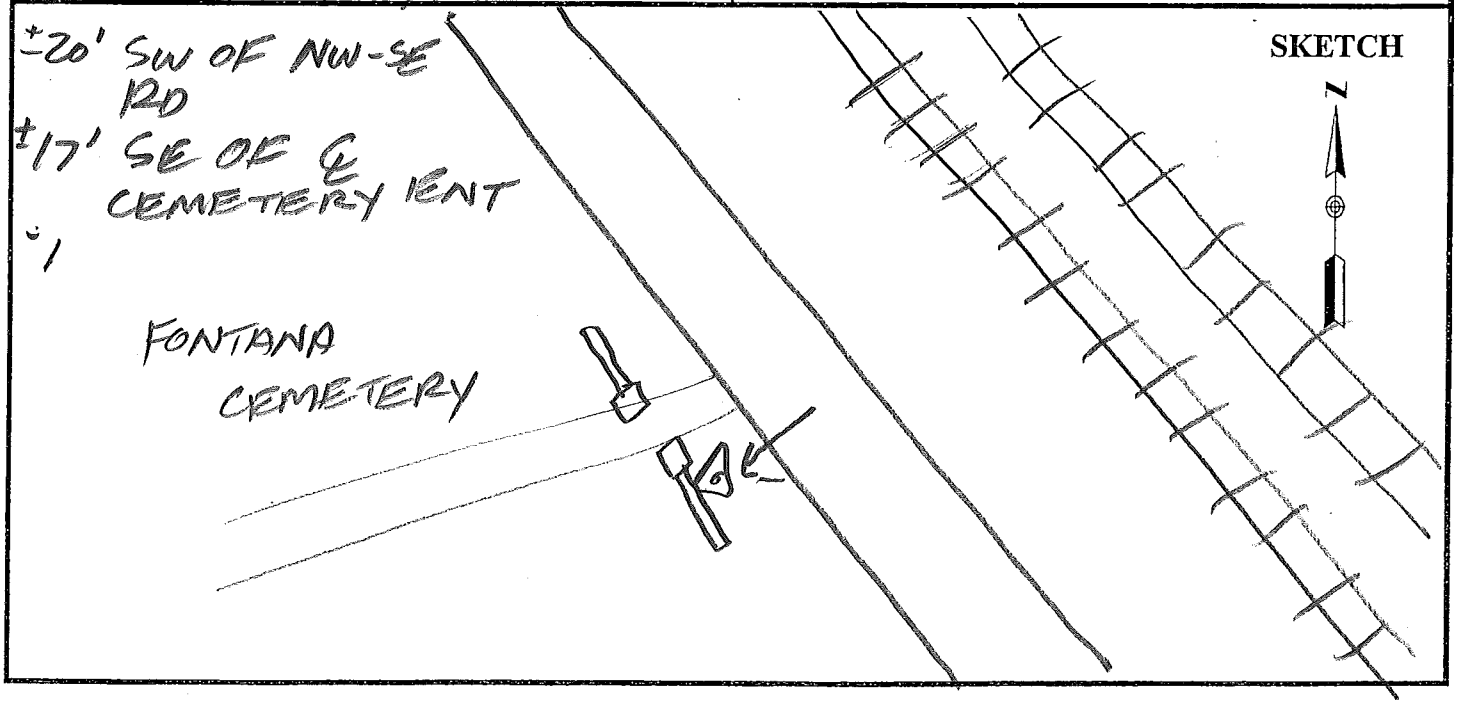
STATION DESCRIPTIONS BRASS DISK IN CONC MKD C 252 RESET 1948

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1949	1.9	9/9-9
2051	2.0	9/9-5

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

PROJECT 1120103
OPERATOR WJN
DATE 4/18/12

SITE NUMBER 1
SITE NAME 1023

TRACKING TIMES (LOCAL) MEASURE UT
START 9:27
STOP 15:53

SENSOR TYPE 500 (9500) 399 299
MEMORY CARD 101
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 (0.389)
500 0.360

OBSTRUCTIONS: NO

HEIGHT READINGS MTS FT
1.254

STATION DESCRIPTIONS Rebar AND CAP PREVIOUSLY Set

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1427	2.3	10/10-10
2053	2.7	818-8

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
ML

As BEFORE DESCRIBED

SKETCH

MOPL MOID ZKC1 14 7

AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

PROJECT 1120103
OPERATOR WJN
DATE 4/18/12

SITE NUMBER 1
SITE NAME 1004

TRACKING TIMES (LOCAL) MEASURE CDT
START 10:02
STOP 16:19

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 11
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
500 (0.360)

HEIGHT READINGS MTS 1.203 FT

OBSTRUCTIONS: N

STATION DESCRIPTIONS Rebar AND CAP PREVIOUSLY SET

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
15:02	2.4	10/10-10
21:09	2.2	9/9-9

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
MC

AS BEFORE DESCRIBED

SKETCH

AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

PROJECT 112D103
OPERATOR WJN
DATE 4/18/12

SITE NUMBER 1
SITE NAME 1146

TRACKING TIMES (LOCAL) MEASURE CDT
START 10:15
STOP 10:31

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 14
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
500 (0.360)

HEIGHT READINGS MTS 1.270 FT

OBSTRUCTIONS: NO

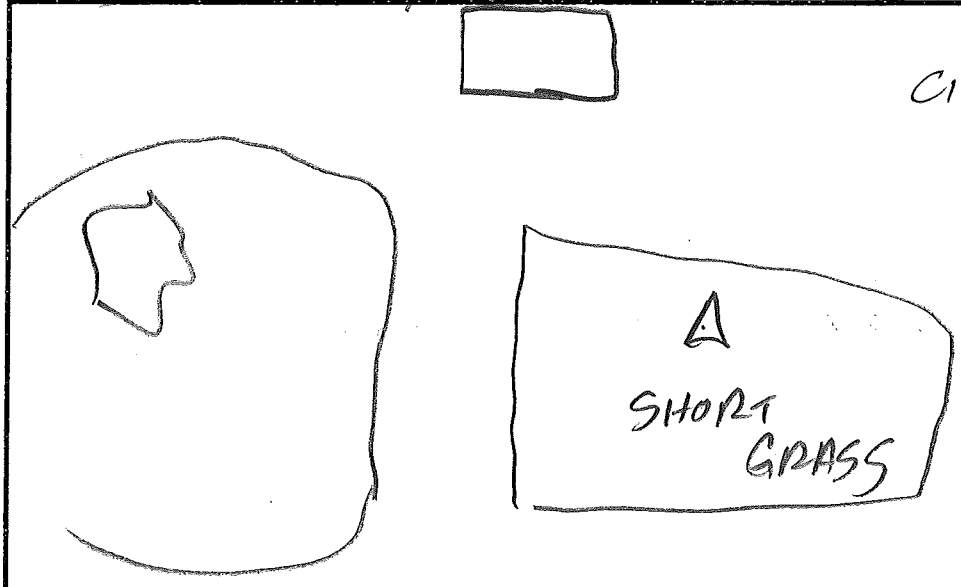
STATION DESCRIPTIONS POINT IN SHORT GRASS

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
15:15	2.3	10/10 -10
15:31	2.0	9/9-9

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
WINDY

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

PROJECT 1120103
OPERATOR NJN
DATE 4/18/12

SITE NUMBER 2
SITE NAME 1445

TRACKING TIMES (LOCAL) MEASURE CDT
START 10:45
STOP 11:03

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 14
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
500 (0.360)

OBSTRUCTIONS: TREES OVERHEAD

HEIGHT READINGS MTS FT
1.298

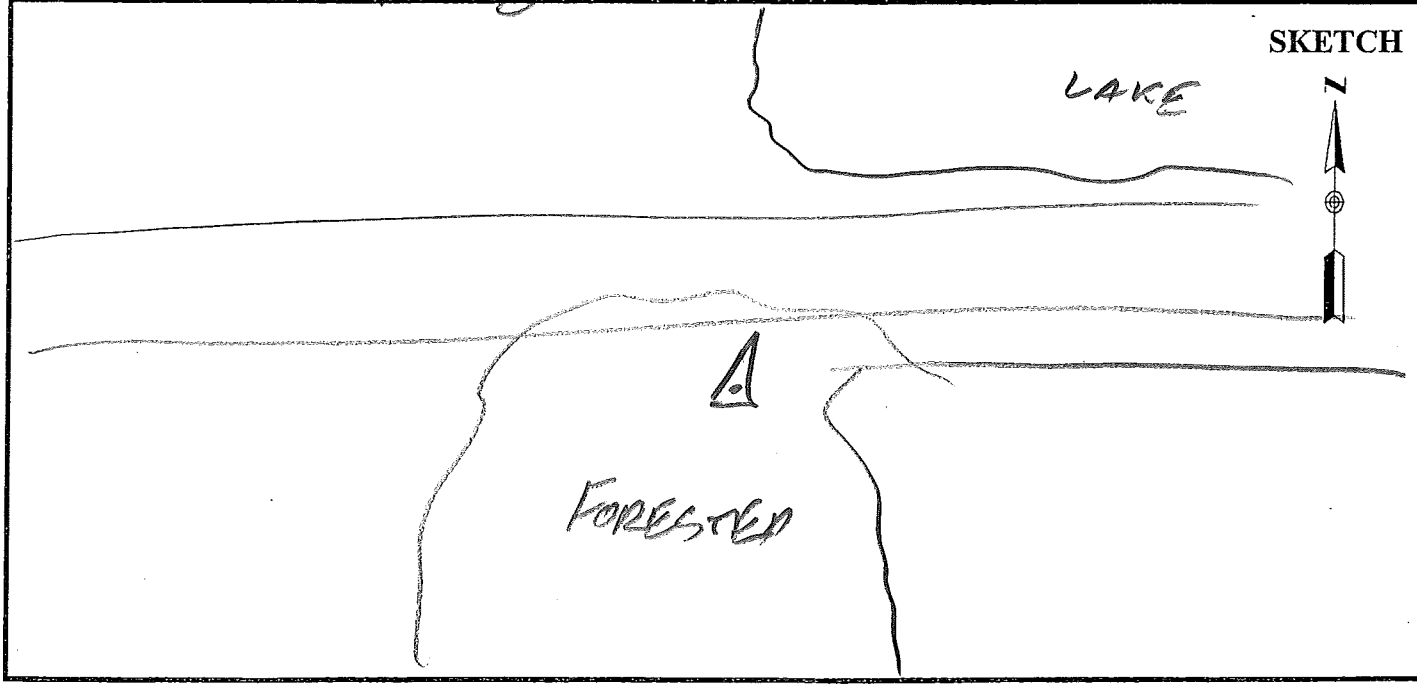
STATION DESCRIPTIONS POINT IN WOODED AREA

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1545	2.5	7/7-8
1603	2.9	7/7-9

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
MC

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

PROJECT 1120103
OPERATOR WJN
DATE 4/19/12

SITE NUMBER 3
SITE NAME 1446

TRACKING TIMES (LOCAL) MEASURE UDT
START 11:23
STOP 11.43

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 14
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
500 0.360

HEIGHT READINGS MTS FT
1.310

OBSTRUCTIONS: TREES

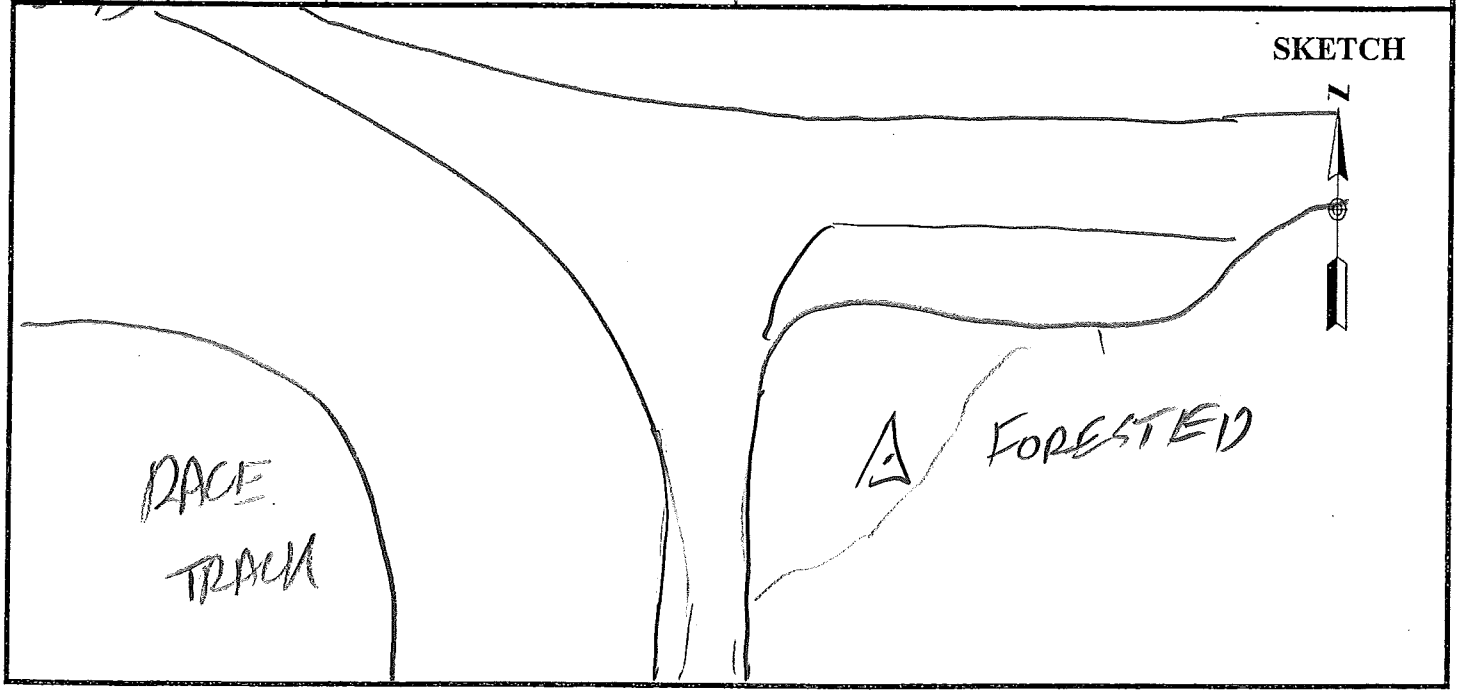
STATION DESCRIPTIONS POINT IN FORESTED AREA

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1623	2.0	8/8-9
1643		

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
MC

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

PROJECT 1120103
OPERATOR WJN
DATE 4/18/12

SITE NUMBER 4
SITE NAME 1246

TRACKING TIMES (LOCAL) MEASURE CDT
START 11:59
STOP 12:14

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 14
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
500 (0.360)

OBSTRUCTIONS: NO

HEIGHT READINGS MTS FT
1.283

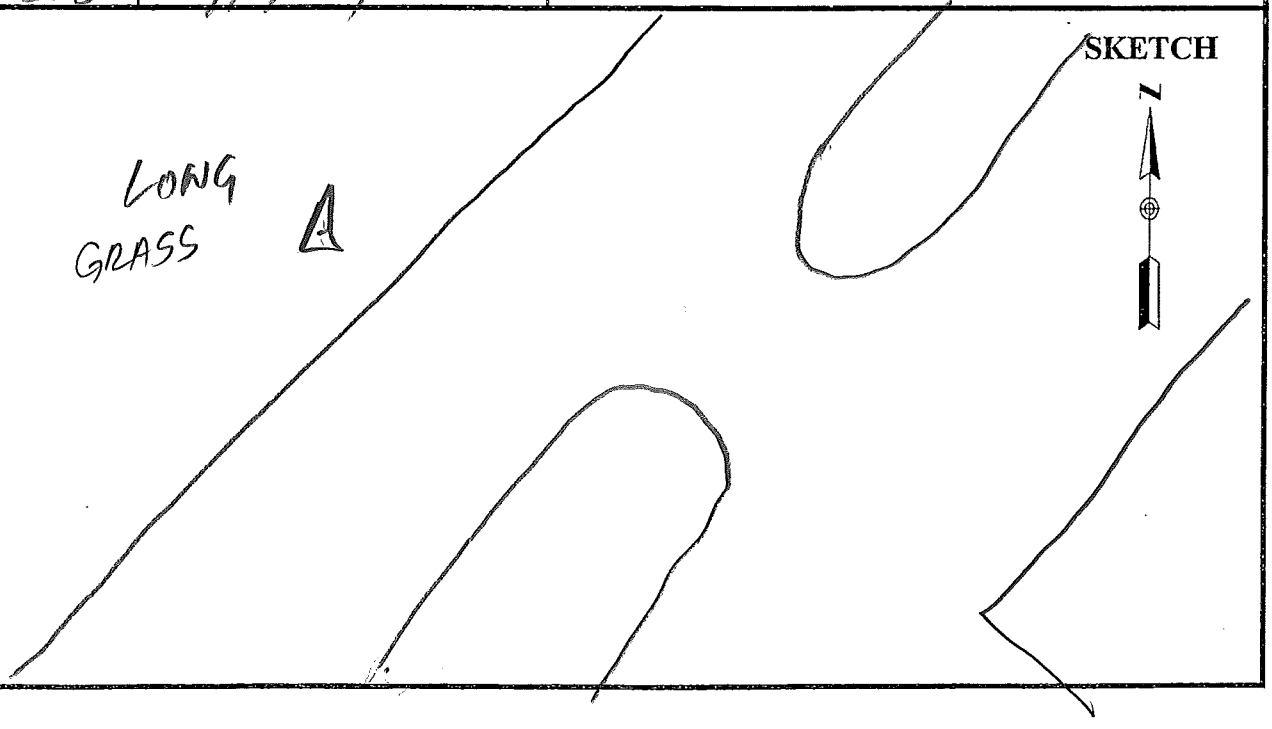
STATION DESCRIPTIONS POINT IN LONG GRASS

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1659	2.0	8/8-9
1714	2.0	9/9-9

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
MC

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

PROJECT 1120103
OPERATOR YW
DATE 4/18/12

SITE NUMBER 5
SITE NAME 1545

TRACKING TIMES (LOCAL) MEASURE CDT
START 12:33
STOP 12:53

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 14
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
500 (0.360)

HEIGHT READINGS MTS FT
1.360

OBSTRUCTIONS: PPL W, E

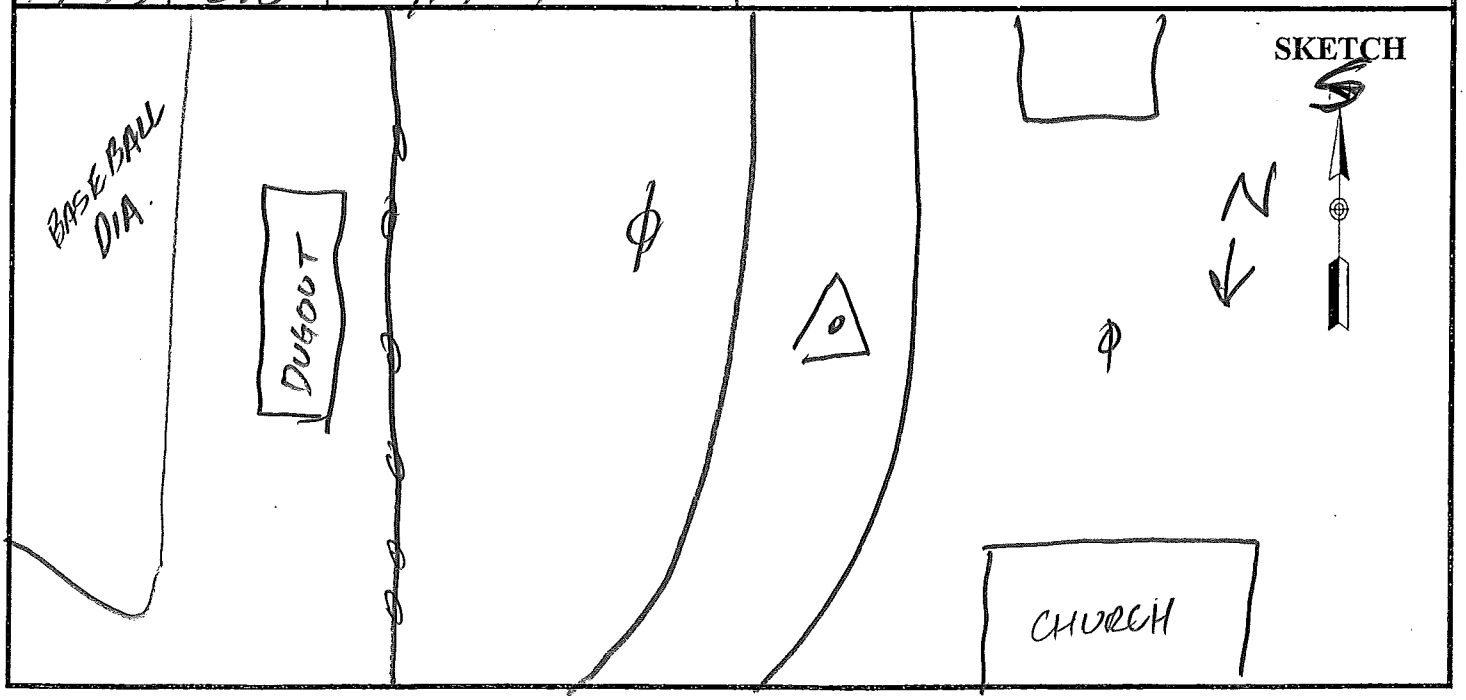
STATION DESCRIPTIONS POINT IN ℄ STREET

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1733	1.9	9/9-9
1753	2.0	9/9-9

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
MC, CLEARING

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

PROJECT 1120103
OPERATOR WJN
DATE 4/18/12

SITE NUMBER 6
SITE NAME 1546

TRACKING TIMES (LOCAL) MEASURE CDT
START 13:13
STOP 13:40

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 14
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
500 (0.360)

OBSTRUCTIONS: TREES S.

HEIGHT READINGS MTS FT
1.337

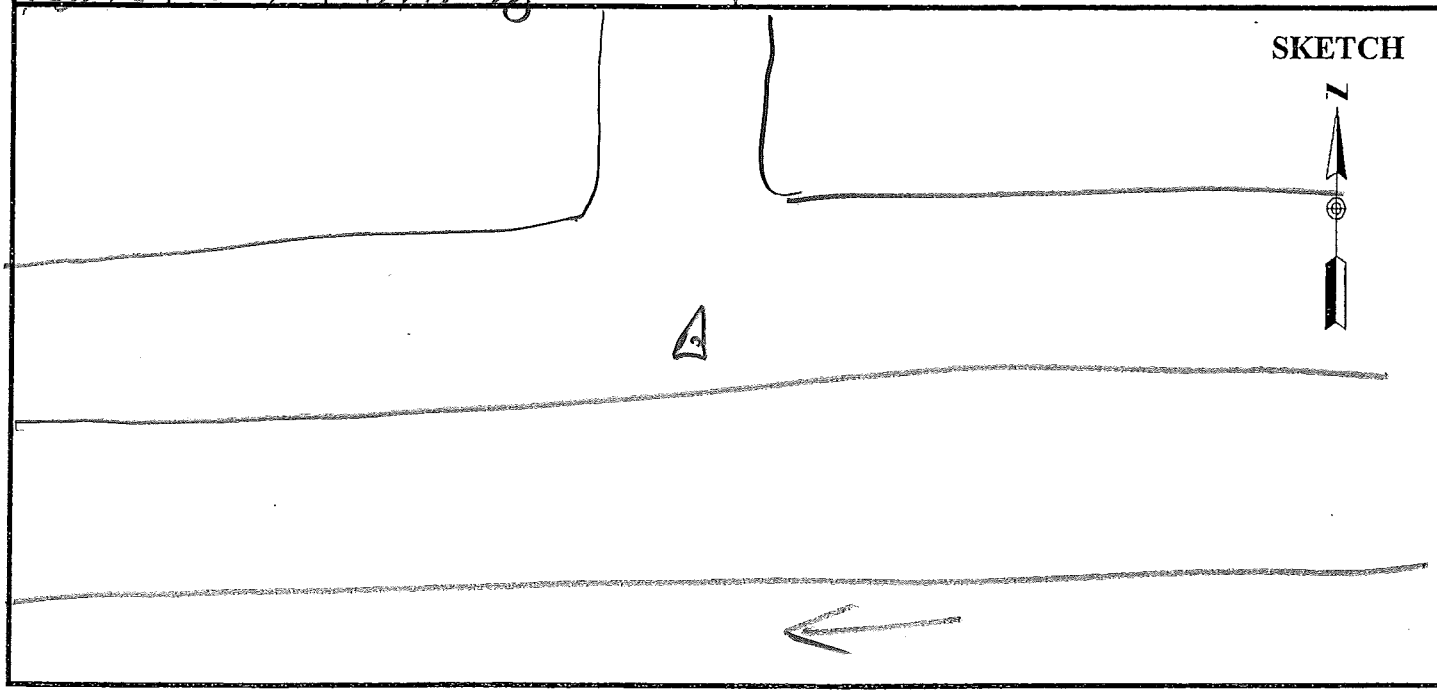
STATION DESCRIPTIONS E & W BND LANE OPP & STREET N.

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1813	2.9	7/7-10
10:40	2.4	8/8-6

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
PC, WINDY

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

PROJECT 1120103
OPERATOR WJN
DATE 4/18/12

SITE NUMBER 7
SITE NAME 1147

TRACKING TIMES (LOCAL) MEASURE CDT
START 13:58
STOP 14:20

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 14
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
500 (0.360)

OBSTRUCTIONS: TREES SW

HEIGHT READINGS MTS FT
1.310

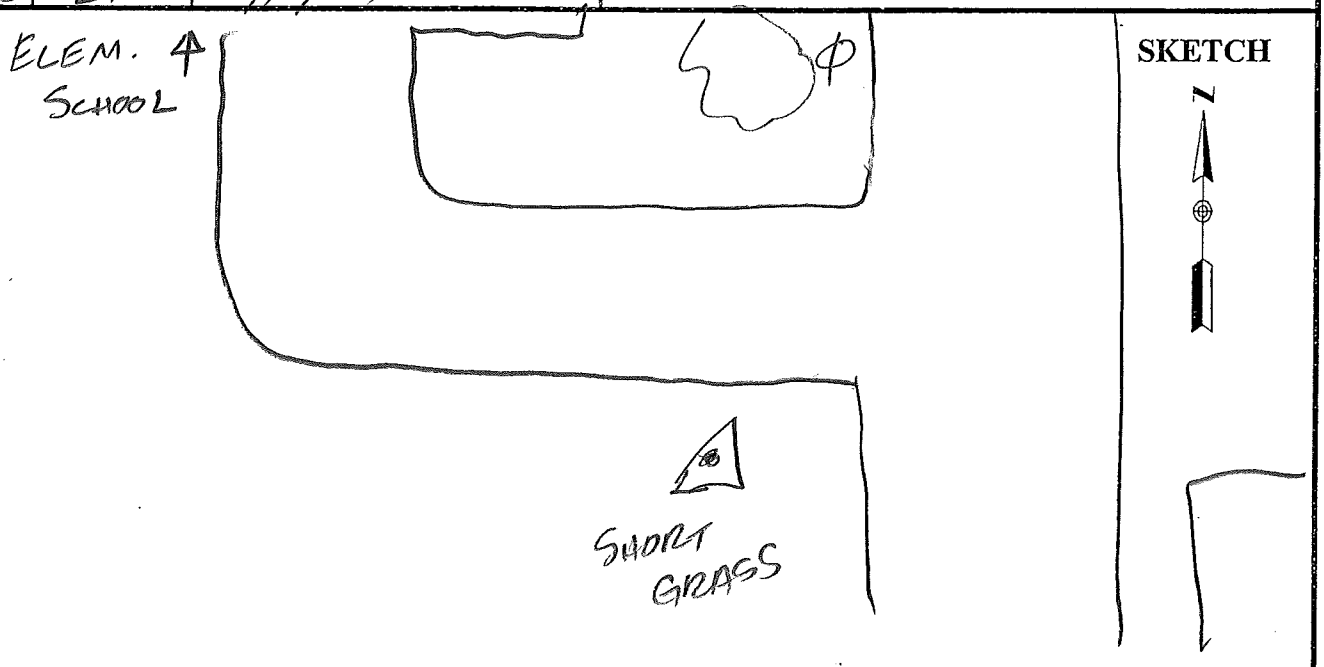
STATION DESCRIPTIONS POINT IN SHORT GRASS

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
18:58	2.0	9/9-9
19:20	2.1	9/9-9

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
PC becoming SKC

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

PROJECT 1120103
OPERATOR WJN
DATE 4/19/12

SITE NUMBER 8
SITE NAME 1247

TRACKING TIMES (LOCAL) MEASURE CDT
START 1439
STOP

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 14
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
500 (0.360)

OBSTRUCTIONS: NO

HEIGHT READINGS MTS FT
T·260

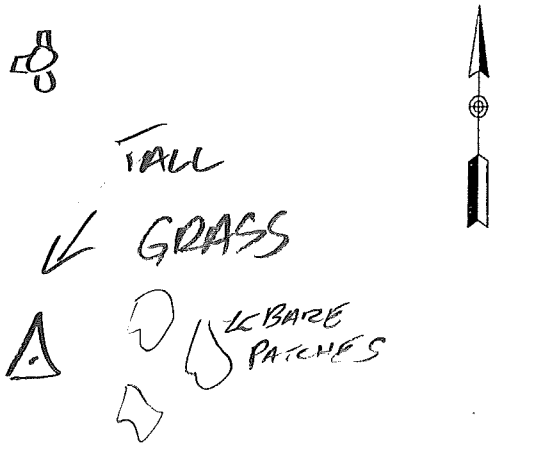
STATION DESCRIPTIONS POINT IN LONG GRASS

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1939	2.0	9/9-9

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
PC WINDY

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

PROJECT 1120103
OPERATOR WJW
DATE 4/18/12

SITE NUMBER 9
SITE NAME 1447

TRACKING TIMES (LOCAL) MEASURE CDT
START 15:20
STOP 1545

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 12
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
500 (0.360)

HEIGHT READINGS MTS FT
1.257

OBSTRUCTIONS: TREES OVERHEAD

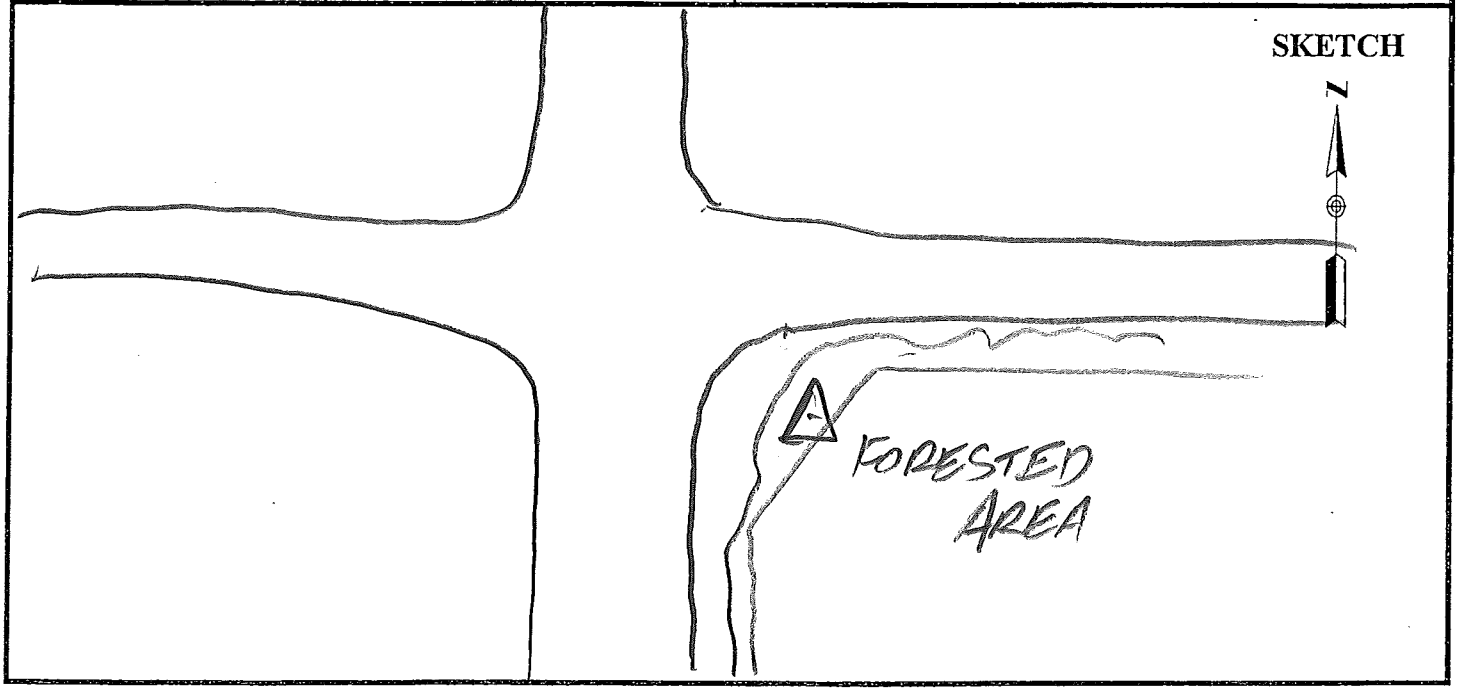
STATION DESCRIPTIONS POINT IN WOODED AREA

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
2020	5.1	6/6-7
2045	3.9	7/7-7

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
PC WINDY

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

PROJECT 1120103
OPERATOR WJN
DATE 4/19/12

SITE NUMBER 1
SITE NAME 1004

TRACKING TIMES (LOCAL) MEASURE CDT
START 8:32
STOP 15:25

SENSOR TYPE 500 (9500) 399 299
MEMORY CARD 101
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 (0.389)
500 0.360

OBSTRUCTIONS: NO

HEIGHT READINGS MTS FT
1.183

STATION DESCRIPTIONS REBAR AND CAP PREVIOUSLY SET

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1332	1.9	11/11-11
2025	2.0	9/9-9

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
RAIN

AS BEFORE DESCRIBED

SKETCH

AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

PROJECT 1120103
OPERATOR WJN
DATE 4/19/12

SITE NUMBER 1
SITE NAME 1005

TRACKING TIMES (LOCAL) MEASURE CDT

START 9:08
STOP 1605

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 11
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
500 (0.360)

OBSTRUCTIONS: TREES E
TERRAIN SE

HEIGHT READINGS MTS FT
1.185

STATION DESCRIPTIONS SPIKE
PREVIOUSLY SET

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1403	2.4	9/9-9
2105	1.9	9/9-9

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
RAIN

AS BEFORE DESCRIBED

SKETCH

AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

PROJECT 1120103
OPERATOR WJN
DATE 4/19/12

SITE NUMBER 1
SITE NAME 1547

TRACKING TIMES (LOCAL) MEASURE CDT
START 9:23
STOP 9:48

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 14
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
500 (0.360)

OBSTRUCTIONS: TREES ALL QUADRANTS

HEIGHT READINGS MTS FT
1.317

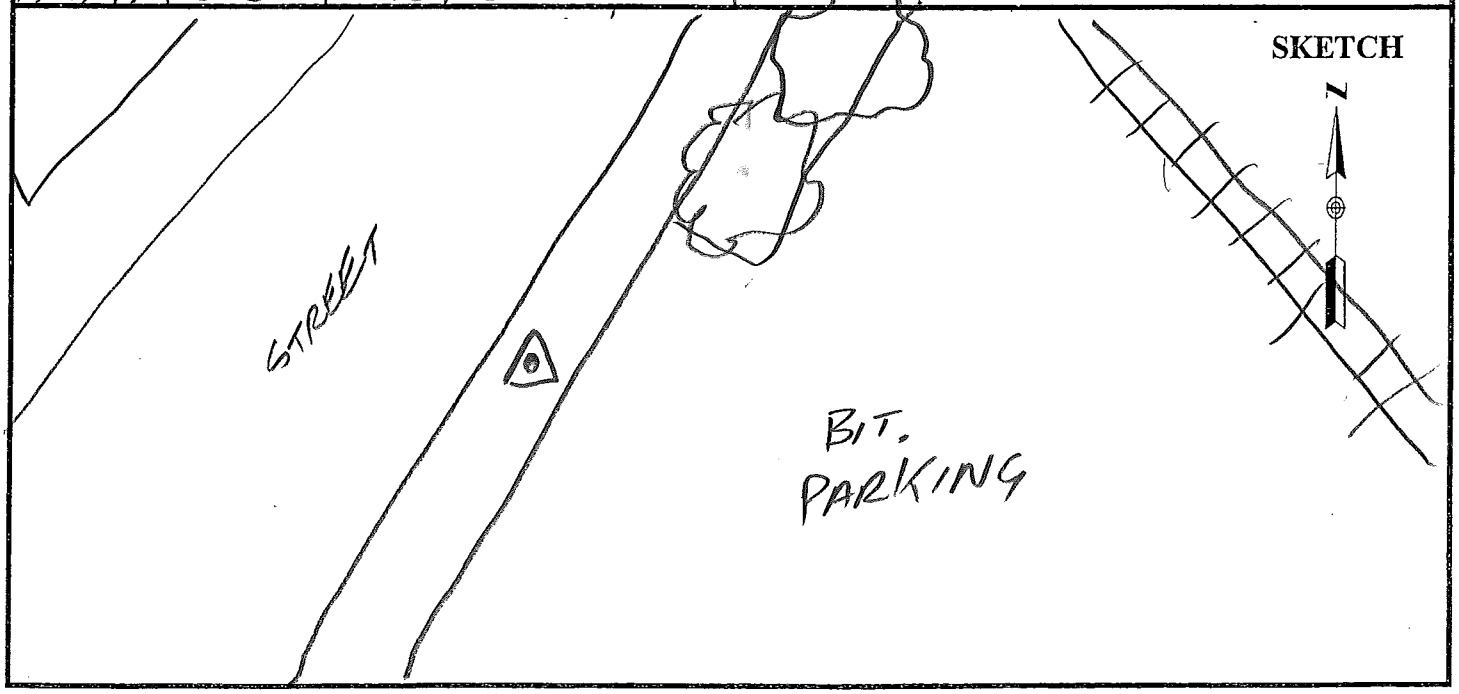
STATION DESCRIPTIONS POINT IN City OF WESTON @ OF CONC WALK @ DRIVE

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
14:23	3.1	7/7-9
14:48	2.6	10/10-10

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
OVC

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

PROJECT 120103
OPERATOR WJN
DATE 4/19/12

SITE NUMBER 2
SITE NAME 1448

TRACKING TIMES (LOCAL) MEASURE CDT
START 10:03
STOP 10:29

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 14
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
500 (0.360)

OBSTRUCTIONS: TREES OVERHEAD

HEIGHT READINGS MTS FT
1.273

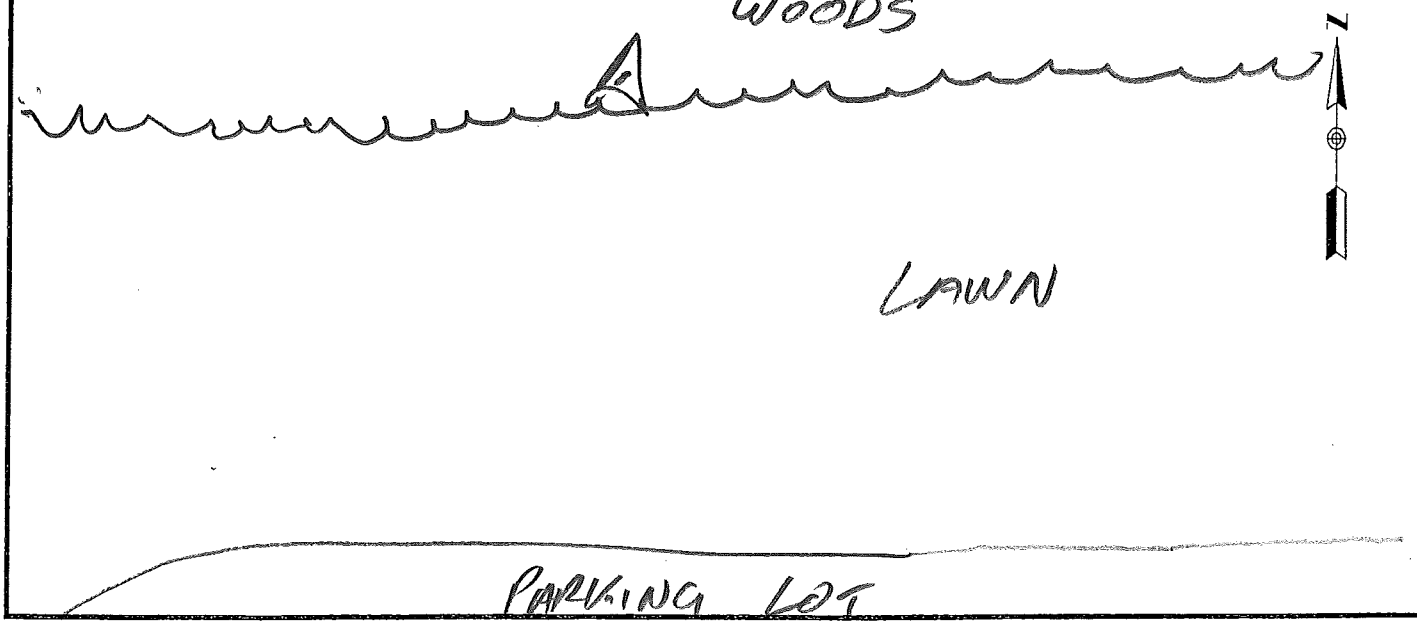
STATION DESCRIPTIONS POINT IN WOODED AREA

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1503	2.8	9/9-10
1529	2.5	9/8-9

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
OVC

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

PROJECT 1120/03
OPERATOR WDN
DATE 4/19/12

SITE NUMBER 3
SITE NAME 1143

TRACKING TIMES (LOCAL) MEASURE CDT
START 10:40
STOP 11:01

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 14
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
500 (0.360)

OBSTRUCTIONS: TERRAIN E.

HEIGHT READINGS MTS FT
1.317

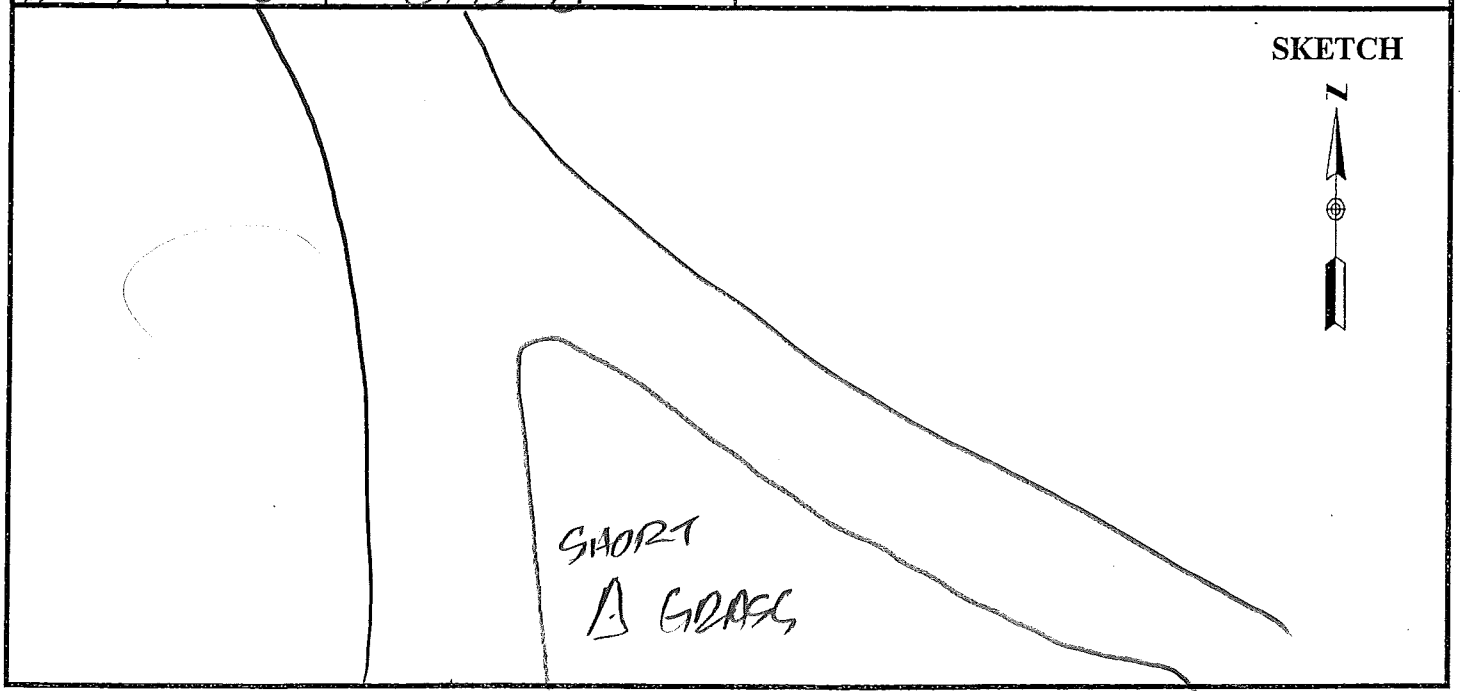
STATION DESCRIPTIONS POINT IN SHORT GRASS S. OF INT.

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1540	1.9	8/8-8
11:01	2.0	8/8-8

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
DVC

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

PROJECT 1120103
OPERATOR WJN
DATE 4/19/12

SITE NUMBER 4
SITE NAME 1248

TRACKING TIMES (LOCAL) MEASURE CDT
START 11:16
STOP 11:37

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 14
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
500 (0.360)

OBSTRUCTIONS: TREES, TERMINAL E.

HEIGHT READINGS MTS FT
1.225

STATION DESCRIPTIONS POINT 1A1
LONG GRASS 1A1
RxR / HWY R/W JUST S. OF TERMINAL

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1616	1.9	9/9-9
1637		

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
RAIN

SKETCH

AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

PROJECT 1120103
OPERATOR WJM
DATE 4/19/12

SITE NUMBER 5
SITE NAME 1249

TRACKING TIMES (LOCAL) MEASURE CDT
START 11:48
STOP 12:11

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 14
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
500 (0.360)

HEIGHT READINGS MTS FT
1.260

OBSTRUCTIONS: TREES OVERHEAD

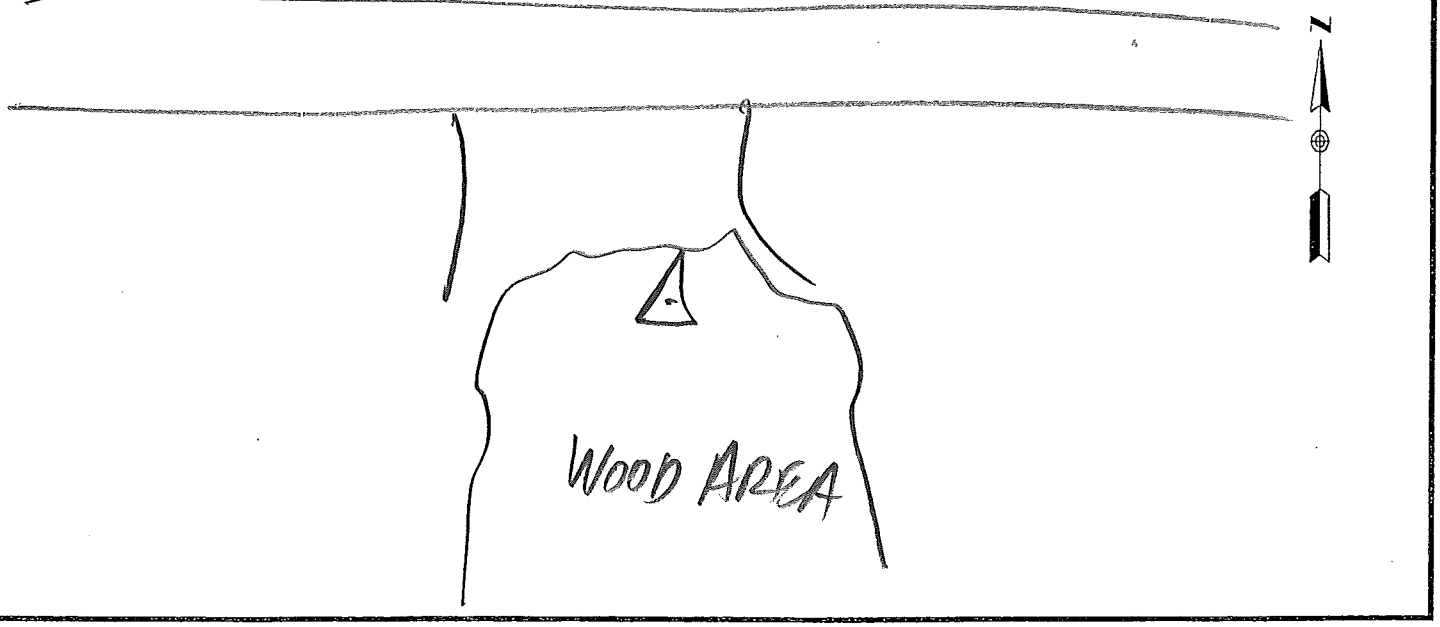
STATION DESCRIPTIONS POINT IN WOODED AREA

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1648	2.6	7/7-9
17:11	2.1	8/8-9

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
RAIN

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

PROJECT 120103
OPERATOR MWM
DATE 4/19/12

SITE NUMBER 6
SITE NAME 1249

TRACKING TIMES (LOCAL) MEASURE CDT
START 12:50
STOP 13 16

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 14
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
500 0.360

OBSTRUCTIONS: NO

HEIGHT READINGS MTS FT
1.245

STATION DESCRIPTIONS POINT IN LONG GRASS/WEEDS W S R/W OF E-W RD

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1750	2.5	6/8-9
1816	2.4	3/8-8

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
WINDY

SKETCH

LONG GRASS/WEEDS

A

STUBBLE

AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

PROJECT 1120103
OPERATOR WJN
DATE 4/19/12

SITE NUMBER 7
SITE NAME 1548

TRACKING TIMES (LOCAL) MEASURE CST
START 1332
STOP 1353

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 14
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
500 (0.360)

HEIGHT READINGS MTS 1.305 FT

OBSTRUCTIONS: TRAFFIC N, TREES S.

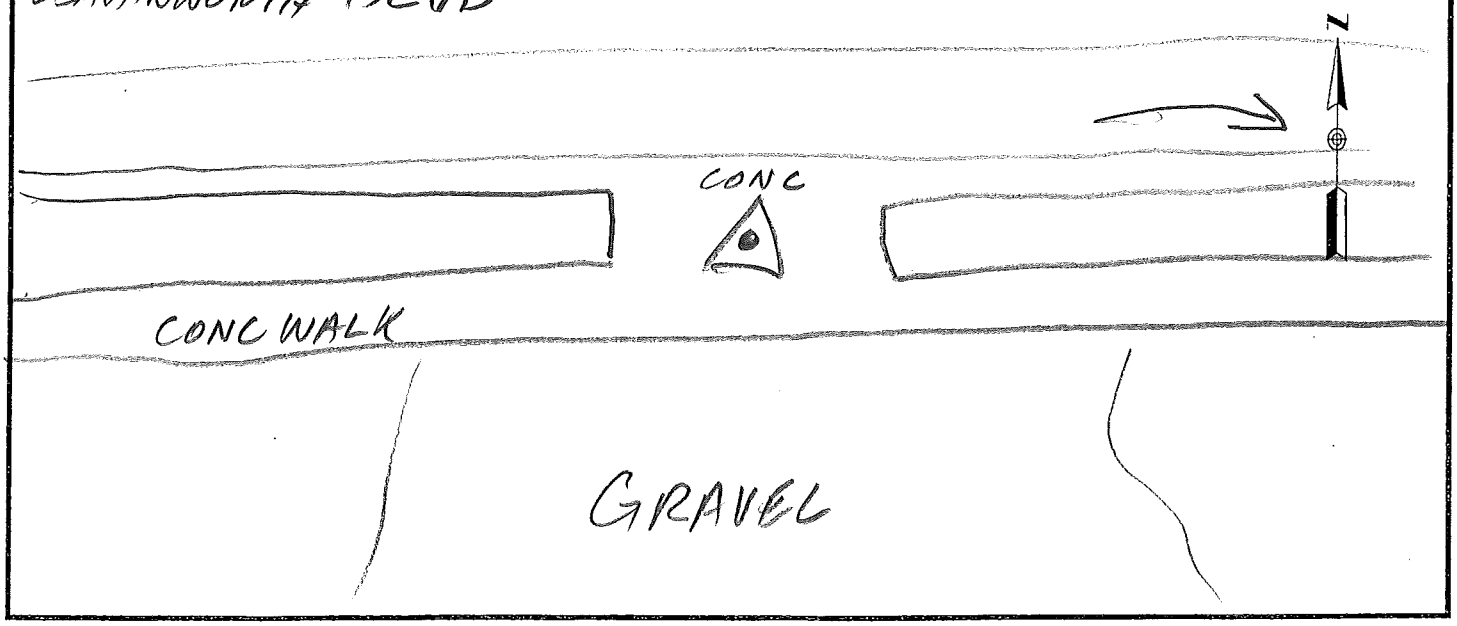
STATION DESCRIPTIONS CENTER OF CONCRETE STREET APRON @ & WALK

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1332	2.5	8/8-9
1353	2.4	8/8-9

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

PROJECT 1120107
OPERATOR WJN
DATE 4/19/12

SITE NUMBER 8
SITE NAME 1549

TRACKING TIMES (LOCAL) MEASURE CDT
START 14:07
STOP 14:27

SENSOR TYPE (500) 9500 399 299
MEMORY CARD
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
500 (0.360)

OBSTRUCTIONS: PRLS ALL QUADRANTS

HEIGHT READINGS MTS 1.328 FT

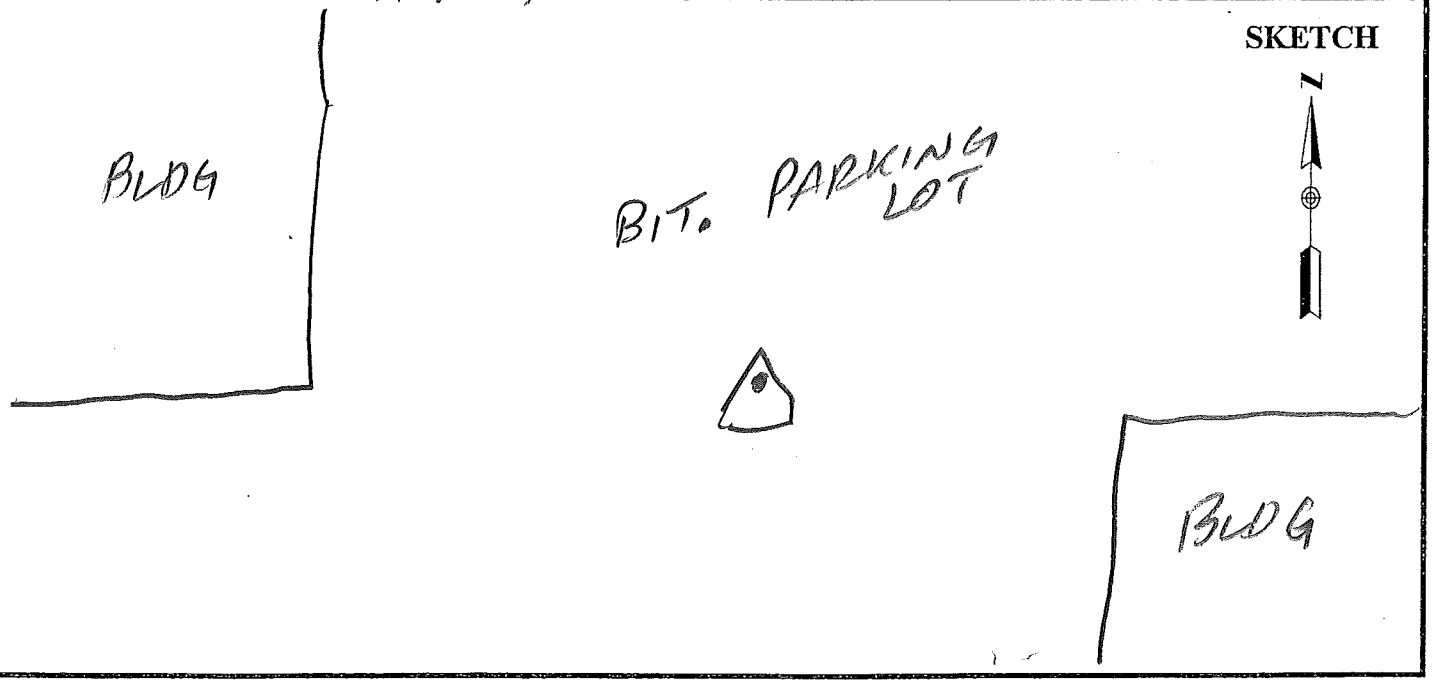
STATION DESCRIPTIONS POINT IN LARGE PARKING LOT MIDWAY BETWEEN SE COR AND NW COR OF 2 BLDGS

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1907	2.4	9/9-9
1921	2.1	9/9-9

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

PROJECT 1120103
OPERATOR WJN
DATE 4/19/12

SITE NUMBER 9
SITE NAME 1149

TRACKING TIMES (LOCAL) MEASURE CDT
START 1448
STOP 1510

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 14
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
500 (0.360)

HEIGHT READINGS MTS FT
1.317

OBSTRUCTIONS: PPLS S, N

STATION DESCRIPTIONS POINT IN SHORT GRASS SW OF INT.

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1948	1.9	9/9-9
2018	2.0	9/9-9

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
MC WINDY

SKETCH

AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

PROJECT 1120103
OPERATOR MKN
DATE 4/20/12

SITE NUMBER 1
SITE NAME 1150

TRACKING TIMES (LOCAL) MEASURE CDT
START 9:55
STOP 15:11

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 11
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
500 (0.360)

OBSTRUCTIONS: TREES E

HEIGHT READINGS MTS FT
1.225
1.585

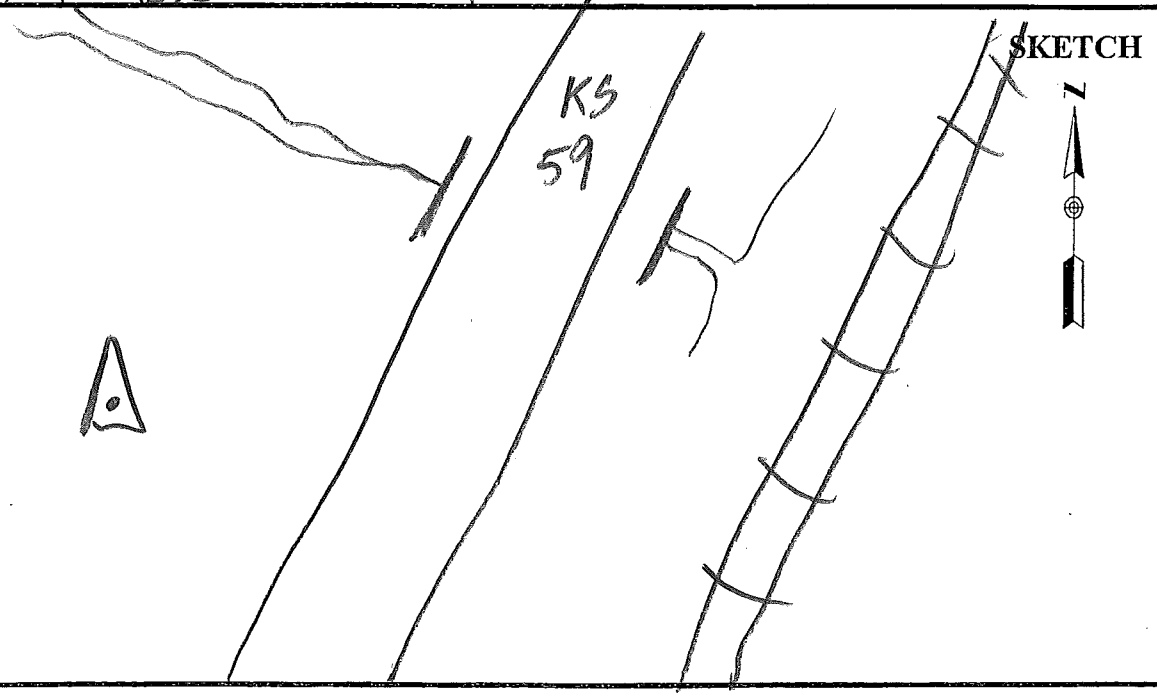
STATION DESCRIPTIONS Sq + SPIKE
IN SHORT GRASS
±40' SW OF S DITCH
±21' NW OF NW EDGE OF
PAVEMENT

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
14:55	2.4	9/9-10
20:11	5.1	6/6-7

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
MC

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

PROJECT 1120103
OPERATOR WJN
DATE 4/20/13

SITE NUMBER 1
SITE NAME W281

TRACKING TIMES (LOCAL) MEASURE CDT
START 9:29
STOP 14:49

SENSOR TYPE 500 (9500) 399 299
MEMORY CARD 101
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 ~~0.389~~
500 0.360

OBSTRUCTIONS: TREES E

HEIGHT READINGS MTS FT
1.131

1-510

STATION DESCRIPTIONS BRASS DISK IN CONC MKD W281 1949

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1429	2.5	10/10-10
1949	2.7	8/8-9

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
MC

AS BEFORE DESCRIBED

SKETCH

AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

PROJECT 112012 3
OPERATOR MWN
DATE 4/20/12

SITE NUMBER 1
SITE NAME 1450

TRACKING TIMES (LOCAL) MEASURE CDT
START 10:06
STOP 10:26

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 14
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
500 (0.360)

HEIGHT READINGS MTS 1.291 FT

OBSTRUCTIONS: TREES OVERHEAD

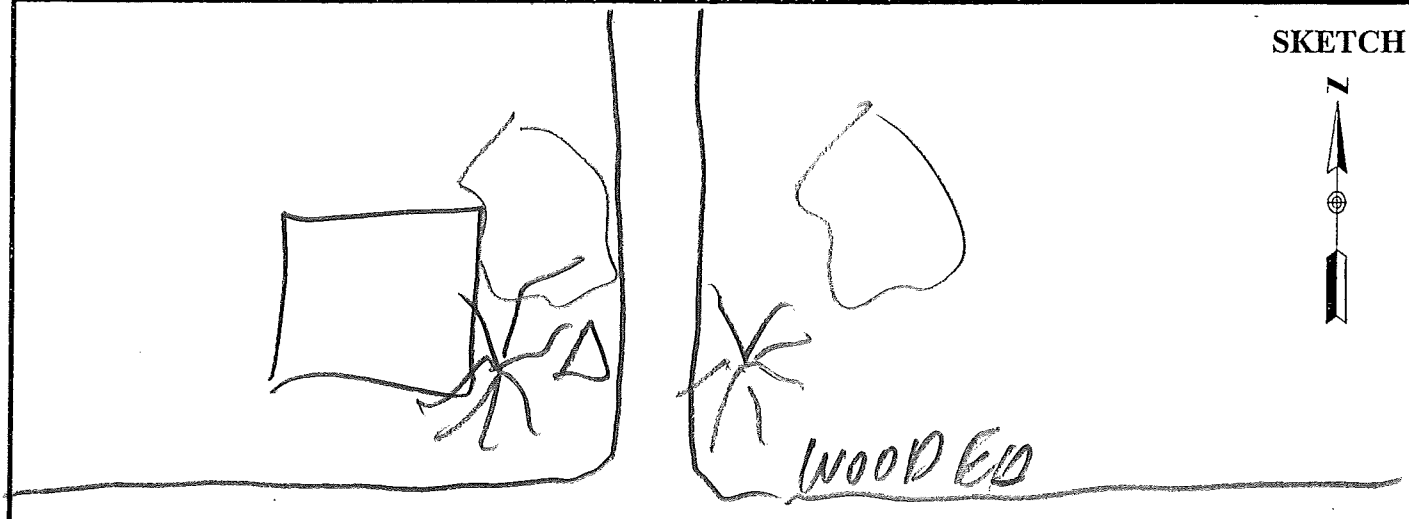
STATION DESCRIPTIONS TREES

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
15 06	2.4	3/8-9
15:26	2.6	3/8-9

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
OVC

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

PROJECT 1120103
OPERATOR WJAT
DATE 4/20/12

SITE NUMBER 2
SITE NAME 451

TRACKING TIMES (LOCAL) MEASURE CDT
START 10:38
STOP 11 03

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 14
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
500 (0.360)

OBSTRUCTIONS: TREES OVERHEAD

HEIGHT READINGS MTS FT
1.265

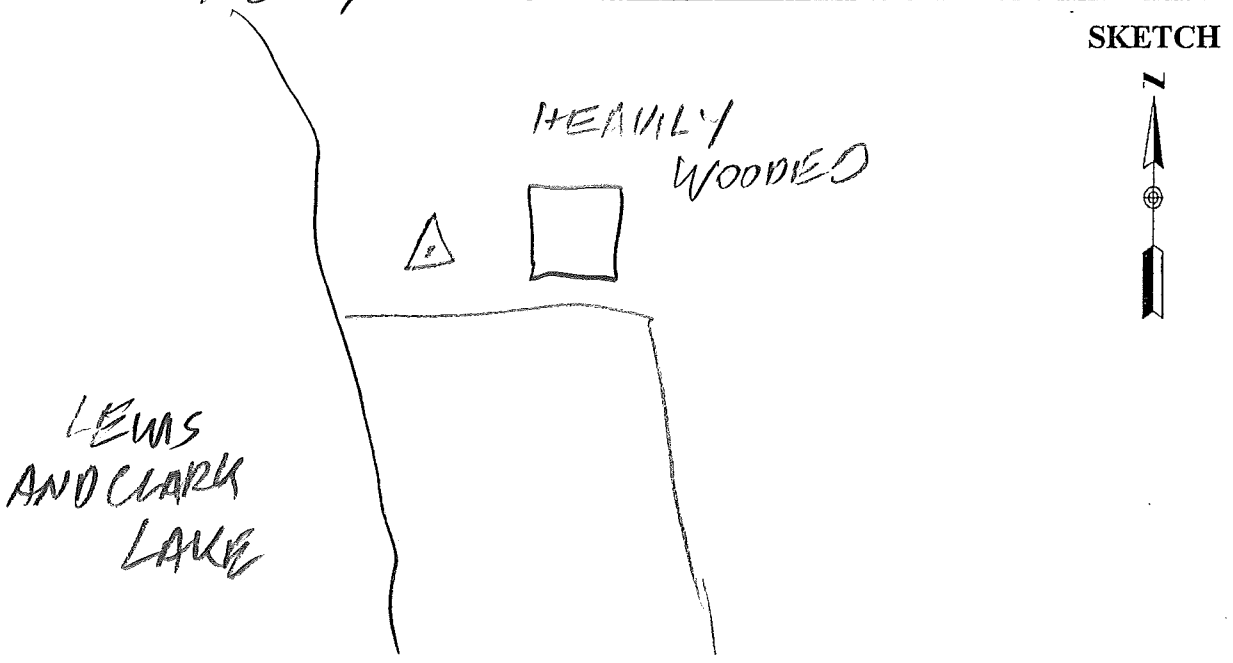
STATION DESCRIPTIONS POINT

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
15:38	2.7	7/7-8
16:03	1.7	9/9-9

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
WINDY

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

PROJECT 1120
OPERATOR WJN
DATE 4/20/12

SITE NUMBER 3
SITE NAME 1250

TRACKING TIMES (LOCAL) MEASURE CDT
START 11:26
STOP 11:41

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 14
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
500 (0.360)

HEIGHT READINGS MTS FT
1.268

OBSTRUCTIONS: NO

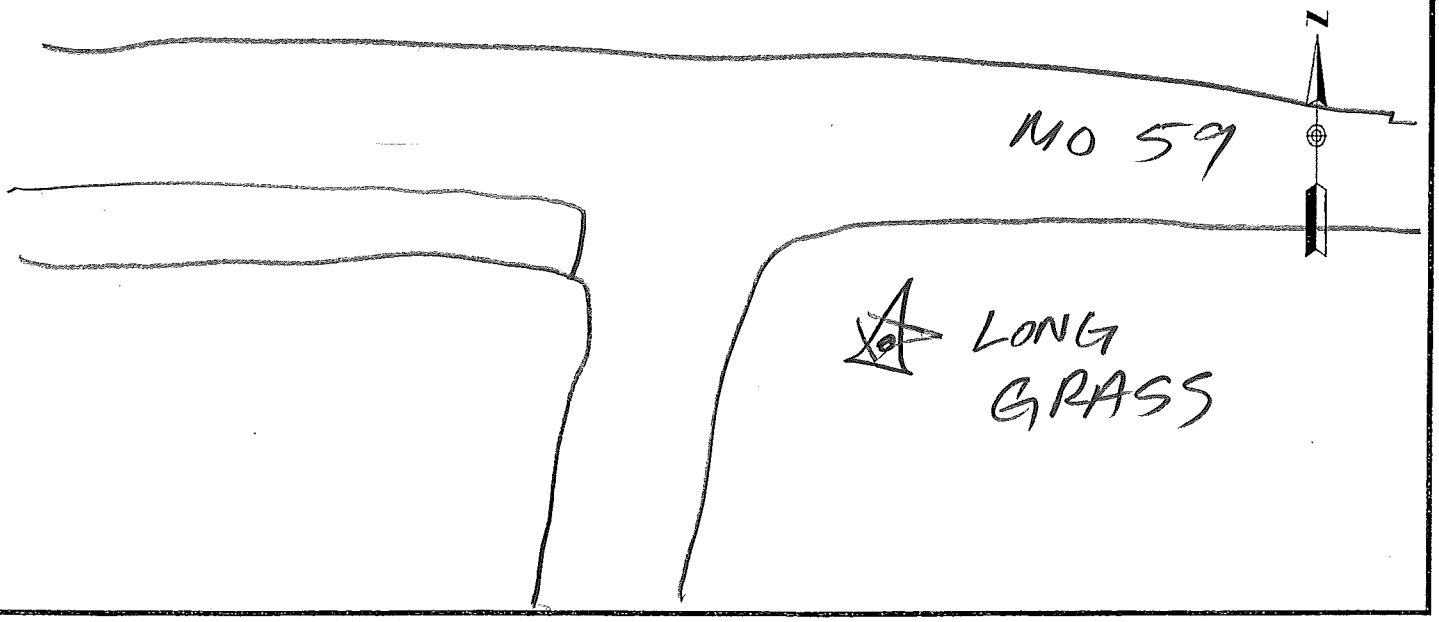
STATION DESCRIPTIONS POINT IN LONG GRASS / WEEDS E OF INT

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
16 26	2.0	9/9-9
16 41	1.9	9/9-9

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
PC

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

PROJECT 1120
OPERATOR
DATE

SITE NUMBER 4
SITE NAME 1550

TRACKING TIMES (LOCAL) MEASURE CDT
START 11:57
STOP

SENSOR TYPE (500) 9500 399 299
MEMORY CARD
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
500 (0.360)

HEIGHT READINGS MTS FT
1.375

OBSTRUCTIONS: BLDGS ALL QUADRANTS

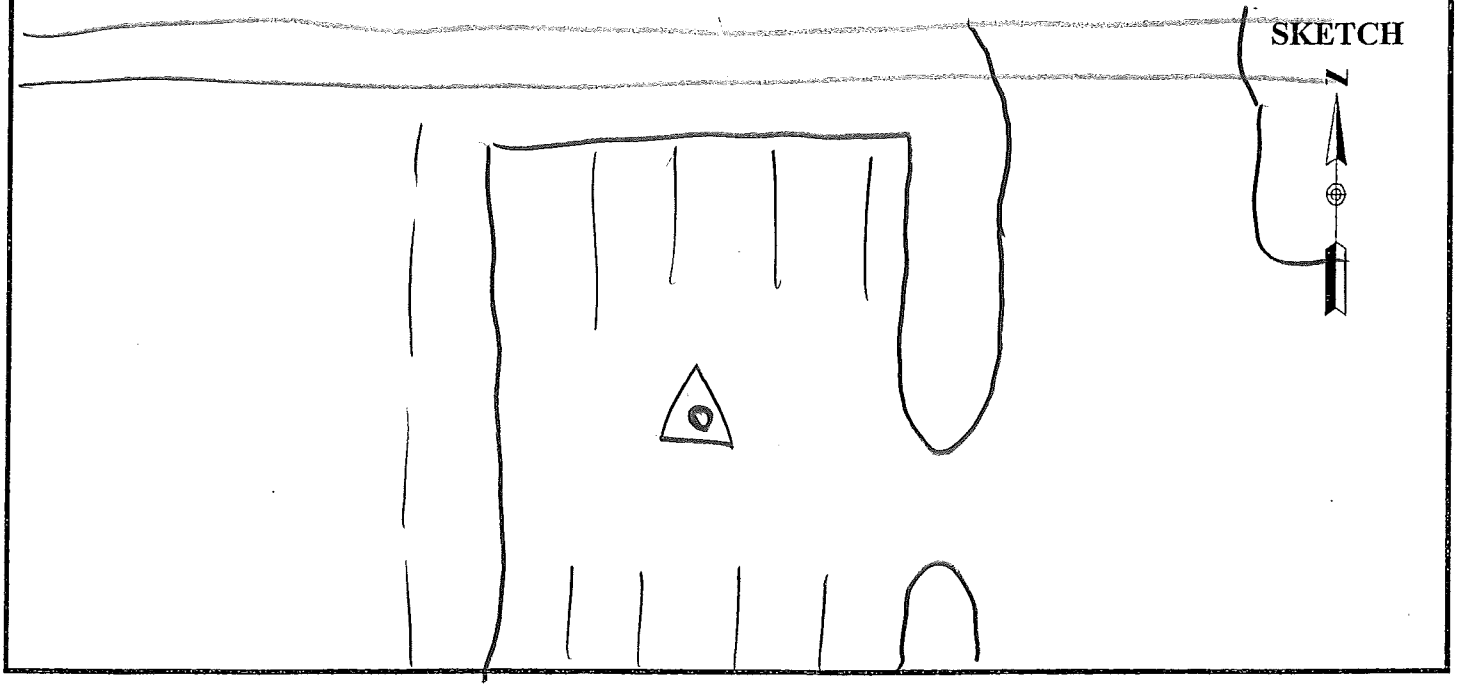
STATION DESCRIPTIONS POINT IN CENTER OF 30 x 40' PARKING AREA

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
11:57	2.0	9/9-9

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

PROJECT 1120103
OPERATOR WJN
DATE 4/20/12

SITE NUMBER 5
SITE NAME 1251

TRACKING TIMES (LOCAL) MEASURE CDT
START 1230
STOP 1249

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 14
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
500 (0.360)

HEIGHT READINGS MTS FT
1.346

OBSTRUCTIONS: NO

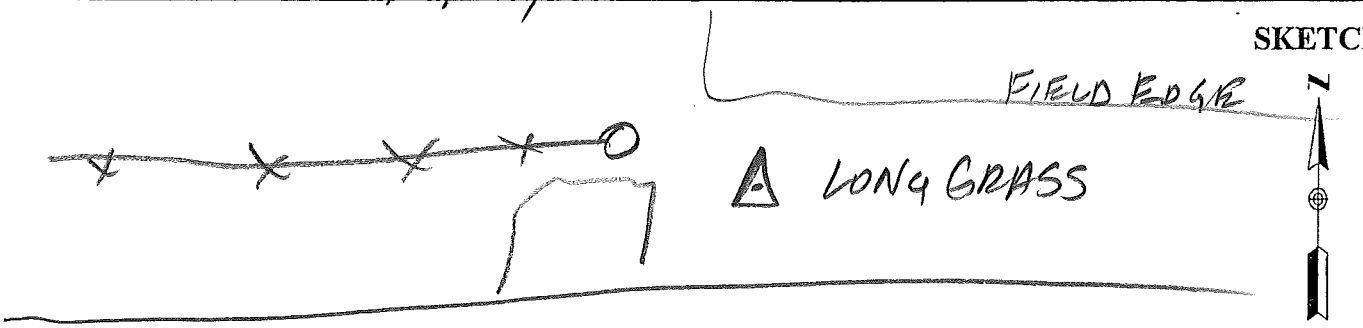
STATION DESCRIPTIONS POINT IN LONG GRASS IN N. R/W OF E-W RD

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1730	2.0	9/9-9
1749	2.1	9/9-9

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
WINDY

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

PROJECT 1120103
OPERATOR WJN
DATE 4/20/12

SITE NUMBER 6
SITE NAME 1252

TRACKING TIMES (LOCAL) MEASURE CDT
START 13:09
STOP 1337

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 11
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
500 (0.360)

OBSTRUCTIONS: NO

HEIGHT READINGS MTS FT
1.238

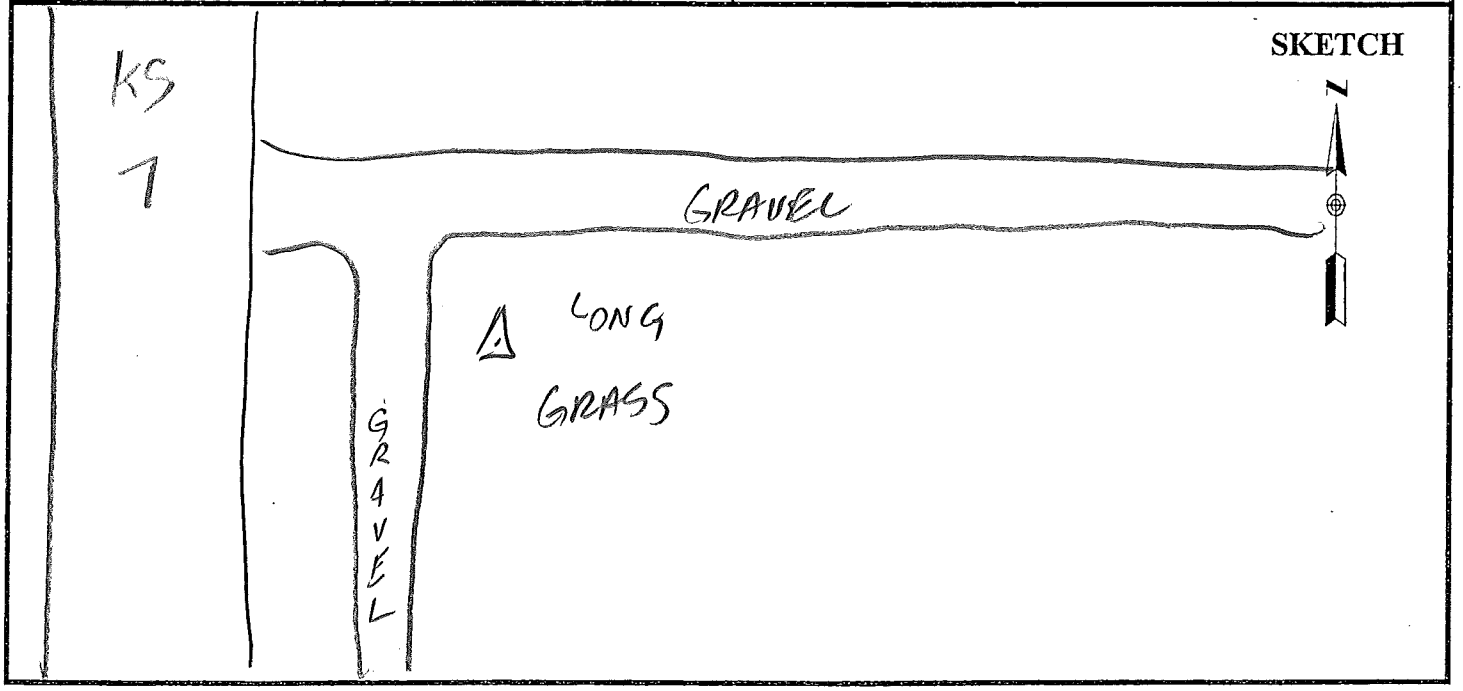
STATION DESCRIPTIONS POINT IN LONG GRASS SE OF RD INT

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
13:09	2.0	9/9-9
13:37	2.1	9/9-5

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
MC

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

PROJECT 112013
OPERATOR WJN
DATE 4/20/12

SITE NUMBER 7
SITE NAME 145C

TRACKING TIMES (LOCAL) MEASURE CDT
START 1357
STOP 1426

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 14
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
500 (0.360)

HEIGHT READINGS MTS FT
1.302

OBSTRUCTIONS: TREES

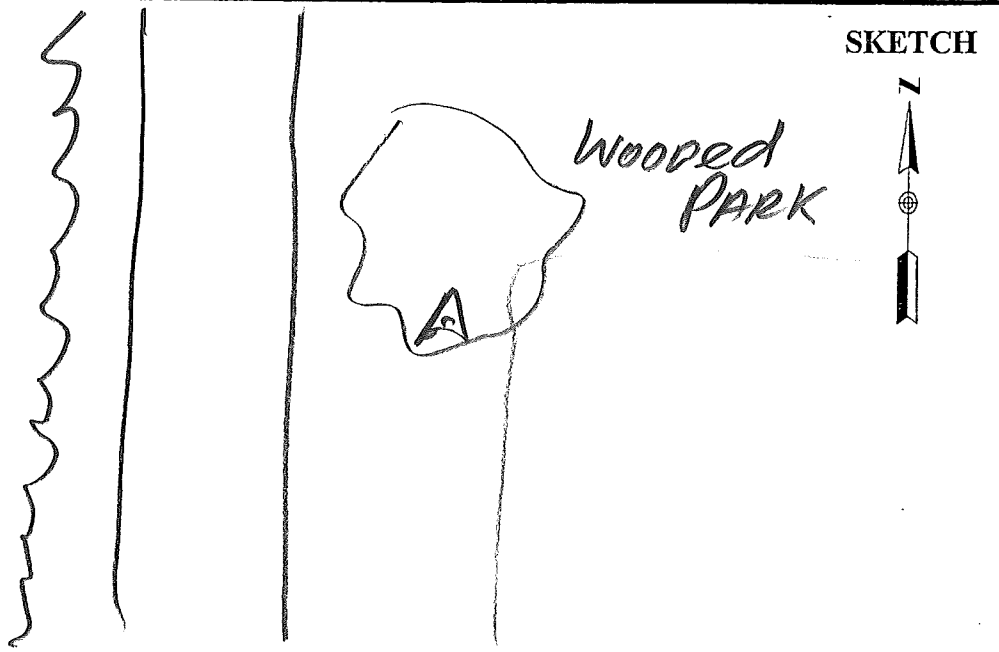
STATION DESCRIPTIONS POINT IN WOODED PARK

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
13:57	2.5	7/7-10
14 26	2.7	7/7-10

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
PC

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

PROJECT 1120103
OPERATOR WJN
DATE 4/21/12

SITE NUMBER 1
SITE NAME D 217

TRACKING TIMES (LOCAL) MEASURE CDT
START 9:26
STOP 11:29

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 11
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT 299/399 0.441
399E/9500 0.389
500 0.360

HEIGHT READINGS MTS 1.208 FT

OBSTRUCTIONS: SEVERE, NOT AS NOTED BEFORE TREES NW AND E LARGE SIGN S.

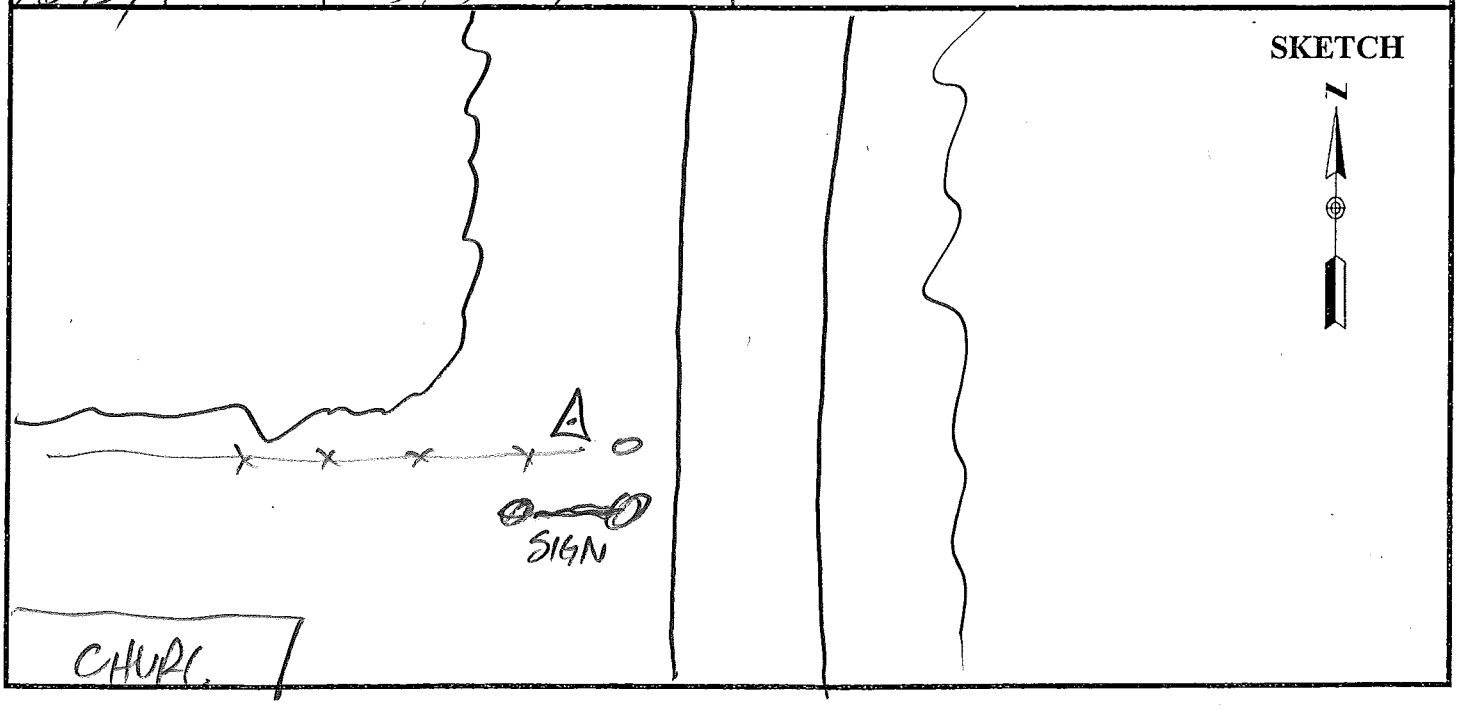
STATION DESCRIPTIONS BRASS DISK IN CONCRETE D217 1948

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1426	2.7	10/10-10
1629	3.1	5/5-9

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

PROJECT 1120103
OPERATOR MJN
DATE 4/21/12

SITE NUMBER 1
SITE NAME 1551

TRACKING TIMES (LOCAL) MEASURE CDT
START 9:49
STOP 10:24

SENSOR TYPE ~~500~~ 9500 399 299
MEMORY CARD 14
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
500 ~~0.360~~

HEIGHT READINGS MTS FT
1.365

OBSTRUCTIONS: BLDGS ALL QUADRANTS

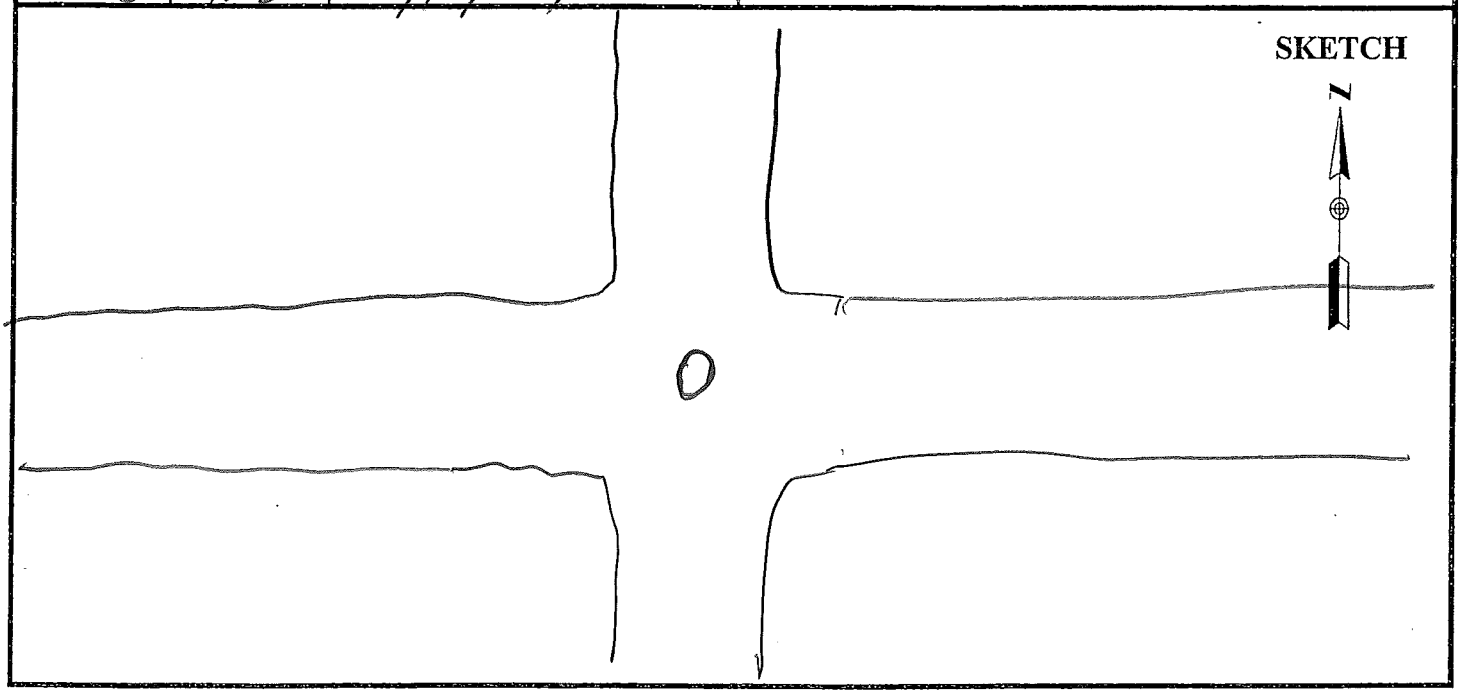
STATION DESCRIPTIONS 4 LEG INT STREETS @ MH

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
1449	2.4	10/10-10
1526	1.8	9/9-9

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS
PC

SKETCH



AERO-METRIC, INC.
4020 TECHNOLOGY PARKWAY
SHEBOYGAN, WISCONSIN 53083

PROJECT 1120103
OPERATOR WJN
DATE 4/21/12

SITE NUMBER 2
SITE NAME 1552

TRACKING TIMES (LOCAL) MEASURE CDT
START 10:38
STOP 11:13

SENSOR TYPE (500) 9500 399 299
MEMORY CARD 14
BATTERY NO.
CONTROLLER NO.
SENSOR NO.

SENSOR CONSTANT
299/399 0.441
399E/9500 0.389
500 (0.360)

HEIGHT READINGS MTS FT
1.348

OBSTRUCTIONS:

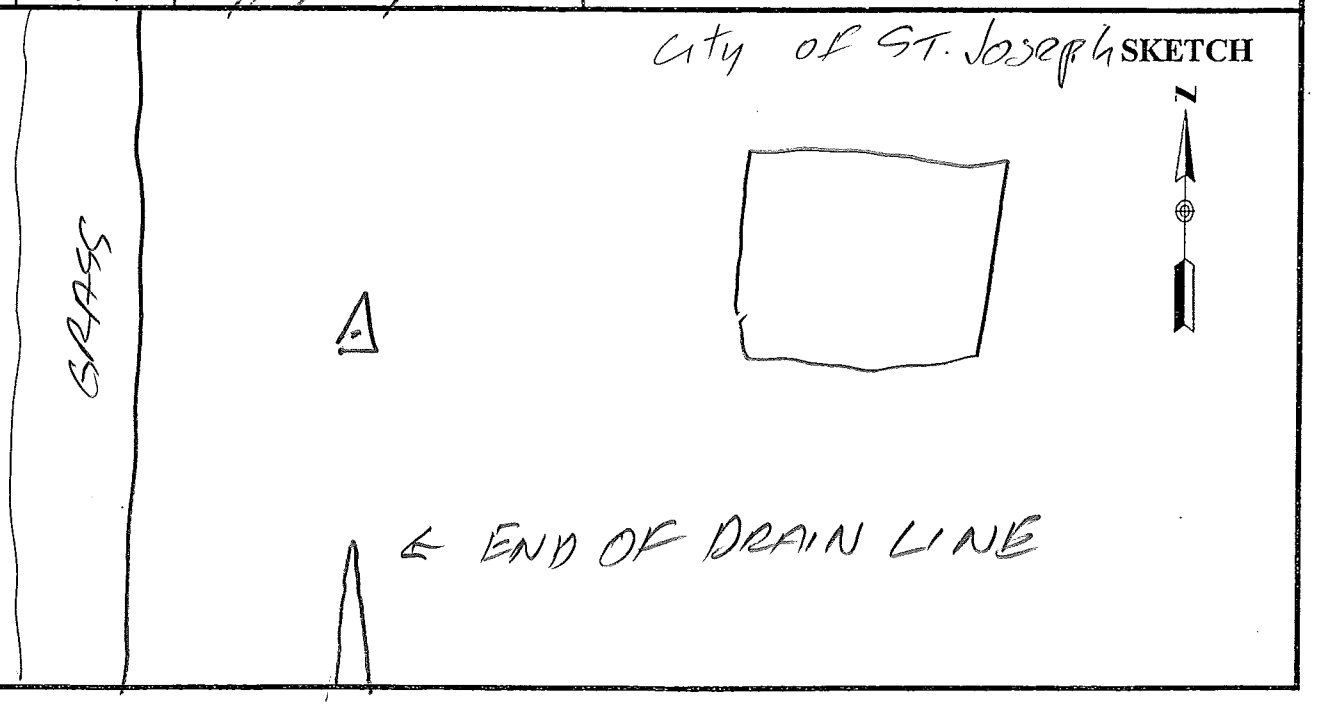
STATION DESCRIPTIONS POINT IN City PARKING LOT, VACANT SECTION OPP CHANGE IN PAVEMENTS AND S. EDGE BLDG E

SATELLITE OBSERVATIONS

TIME	GDOP	SATELLITES
15:38	1.8	8/8-8
16:13	1.7	9/9-9

WEATHER CONDITIONS/IMPORTANT OBSERVATIONS

SKETCH



S O F T W A R E V E R S I O N

TerraPOS version: 2.0.4 (1851)

N A V I G A T I O N F I L E S U M M A R Y 011512_144618

First record : 2012 01 15 14 52 21.5
Last record : 2012 01 15 17 39 18.0
Average time increment : 1.000 s (1.0 Hz)
No. recs. with valid pos. : 10018
No. recs. with valid vel. : 10018
No. recs. with valid att. : 0

N A V I G A T I O N P E R F O R M A N C E S U M M A R Y

	Min.	1%	5%	50%	95%	99%	Max.	
Pos. hor. std. dev.	0.015	0.016	0.017	0.018	0.021	0.022	0.022	[m]
Pos. vert. std. dev.	0.022	0.024	0.025	0.027	0.034	0.035	0.039	[m]
Vel. hor. std. dev.	0.047	0.048	0.048	0.049	0.051	0.052	0.069	[m/s]
Vel. vert. std. dev.	0.078	0.081	0.082	0.085	0.092	0.092	0.104	[m/s]

C Y C L E S L I P S A N D D E L E T E D O B S E R V A T I O N S

Observable used: IF Phas

Sat	#obs avbl	%obs del	#L1 slips	#L2 slips
G02	10018	0.00	0	0
G04	6169	0.00	0	0
G05	10018	0.00	0	0
G10	7790	0.00	0	0
G12	9127	0.00	1	2
G13	4345	0.00	4	11
G15	4353	0.00	0	0
G17	445	0.00	0	0
G18	2633	0.00	0	3
G21	4915	0.00	2	4
G25	10018	0.00	0	0
G26	6711	0.00	0	0
G29	10014	0.00	1	1
G30	2366	0.00	2	8
R04	4530	0.00	0	0
R05	10018	0.00	0	0
R06	10018	0.00	0	0
R07	6189	0.00	0	0
R10	1702	0.00	8	9

R11	4236	0.00	0	1
R12	4831	0.00	1	2
R19	5248	0.00	1	2
R20	10018	0.00	0	0
R21	10018	0.00	0	0
R22	5515	0.00	0	0
TOT	161245	0.00	20	43
Si			0.45	0.96

Observable used: IF Code

Sat	#obs avbl	%obs del
G02	10018	0.00
G04	6169	0.00
G05	10018	0.00
G10	7790	0.00
G12	9132	0.00
G13	4348	0.00
G15	4353	0.00
G17	445	0.00
G18	2633	0.00
G21	4916	0.00
G25	10018	0.00
G26	6711	0.00
G29	10016	0.00
G30	2370	0.00
R04	4530	0.00
R05	10018	0.00
R06	10018	0.00
R07	6189	0.00
R10	1730	0.00
R11	4236	0.00
R12	4832	0.00
R19	5253	0.00
R20	10018	0.00
R21	10018	0.00
R22	5515	0.00
TOT	161294	0.00

Observable used: L1 Dopp

Sat	#obs avbl	%obs del
G02	10018	0.00
G04	6170	0.00
G05	10018	0.00
G10	7790	0.00
G12	9133	0.00
G13	4371	0.00
G15	4353	0.00
G17	445	0.00
G18	2642	0.00
G21	4936	0.00
G25	10018	0.00
G26	6711	0.00
G29	10016	0.00
G30	2398	0.00
R04	4530	0.00

R05	10018	0.00
R06	10018	0.00
R07	6189	0.00
R10	1733	0.00
R11	4240	0.00
R12	4842	0.00
R19	5253	0.00
R20	10018	0.00
R21	10018	0.00
R22	5519	0.00
TOT	161397	0.00

S O F T W A R E V E R S I O N

TerraPOS version: 2.0.4 (1851)

N A V I G A T I O N F I L E S U M M A R Y 011512_183028

First record : 2012 01 15 18 34 22.0
Last record : 2012 01 15 21 24 20.0
Average time increment : 1.000 s (1.0 Hz)
No. recs. with valid pos. : 10199
No. recs. with valid vel. : 10199
No. recs. with valid att. : 0

N A V I G A T I O N P E R F O R M A N C E S U M M A R Y

	Min.	1%	5%	50%	95%	99%	Max.	
Pos. hor. std. dev.	0.014	0.014	0.015	0.016	0.020	0.026	0.028	[m]
Pos. vert. std. dev.	0.018	0.019	0.020	0.024	0.034	0.040	0.043	[m]
Vel. hor. std. dev.	0.049	0.049	0.050	0.051	0.060	0.066	0.111	[m/s]
Vel. vert. std. dev.	0.084	0.084	0.085	0.090	0.105	0.121	0.203	[m/s]

C Y C L E S L I P S A N D D E L E T E D O B S E R V A T I O N S

Observable used: IF Phas

Sat	#obs avbl	%obs del	#L1 slips	#L2 slips
G03	8093	0.00	0	0
G05	3589	0.00	0	0
G06	9953	0.00	8	8
G09	8411	0.00	0	3
G14	5093	0.00	0	0
G15	10199	0.00	0	0
G16	2695	0.04	8	9
G18	10199	0.00	0	0
G19	3671	0.00	0	0
G21	10199	0.00	0	0
G22	9451	0.00	5	5
G26	6878	0.00	0	2
G27	10015	0.00	2	2
G29	7320	0.00	0	0
G30	756	0.00	1	1
TOT	106522	0.00	24	30
Si			0.81	1.01

Observable used: IF Code

Sat	#obs avbl	%obs del
G03	8093	0.00
G05	3589	0.00
G06	9965	0.00
G09	8411	0.00
G14	5093	0.00
G15	10199	0.00
G16	2702	0.00
G18	10199	0.00
G19	3671	0.00
G21	10199	0.00
G22	9457	0.00
G26	6878	0.00
G27	10016	0.00
G29	7320	0.00
G30	756	0.00
TOT	106548	0.00

Observable used: L1 Dopp

Sat	#obs avbl	%obs del
G03	8098	0.00
G05	3589	0.00
G06	9972	0.00
G09	8422	0.00
G14	5093	0.00
G15	10199	0.00
G16	2707	0.00
G18	10199	0.00
G19	3678	0.00
G21	10199	0.00
G22	9458	0.00
G26	6889	0.00
G27	10016	0.00
G29	7320	0.00
G30	757	0.00
TOT	106596	0.00

S O F T W A R E V E R S I O N

TerraPOS version: 2.0.4 (1851)

N A V I G A T I O N F I L E S U M M A R Y 011512_220146

First record : 2012 01 15 22 05 30.0
Last record : 2012 01 16 00 53 13.0
Average time increment : 1.000 s (1.0 Hz)
No. recs. with valid pos. : 10064
No. recs. with valid vel. : 10064
No. recs. with valid att. : 0

N A V I G A T I O N P E R F O R M A N C E S U M M A R Y

	Min.	1%	5%	50%	95%	99%	Max.	
Pos. hor. std. dev.	0.011	0.013	0.013	0.015	0.017	0.017	0.018	[m]
Pos. vert. std. dev.	0.017	0.017	0.018	0.022	0.025	0.025	0.029	[m]
Vel. hor. std. dev.	0.045	0.046	0.046	0.047	0.049	0.050	0.064	[m/s]
Vel. vert. std. dev.	0.073	0.073	0.074	0.081	0.086	0.087	0.105	[m/s]

C Y C L E S L I P S A N D D E L E T E D O B S E R V A T I O N S

Observable used: IF Phas

Sat	#obs avbl	%obs del	#L1 slips	#L2 slips
G01	7344	0.00	0	0
G03	1532	0.00	0	3
G06	1874	0.00	2	6
G09	5361	0.00	0	0
G11	9669	0.00	2	4
G12	9041	0.01	8	8
G14	10064	0.01	0	0
G15	151	0.00	0	0
G18	8203	0.00	2	7
G19	4877	0.00	3	4
G20	2432	0.00	2	10
G21	3594	0.00	0	5
G22	10064	0.00	0	0
G25	8309	0.00	0	3
G27	2657	0.00	0	2
G30	1865	0.00	2	7
G31	9602	0.03	0	0
G32	6764	0.00	0	2
R01	10064	0.07	0	0

R02	9820	0.00	3	3
R03	2615	0.00	2	3
R07	159	0.00	0	0
R08	8273	0.24	5	7
R09	1040	0.00	1	7
R10	6931	0.46	0	0
R11	10064	0.00	0	0
R12	9080	0.36	1	6
R13	3568	0.45	0	0
R17	7130	0.17	0	0
R18	4833	0.87	8	11
R23	1329	0.00	6	7
R24	4642	0.00	0	0
TOT	182951	0.09	47	105
Si			0.92	2.07

Observable used: IF Code

Sat	#obs avbl	%obs del
G01	7344	0.00
G03	1532	0.00
G06	1877	0.00
G09	5361	0.00
G11	9673	0.00
G12	9050	0.00
G14	10064	0.00
G15	151	0.00
G18	8208	0.00
G19	4880	0.00
G20	2435	0.00
G21	3594	0.00
G22	10064	0.00
G25	8309	0.00
G27	2657	0.00
G30	1865	0.00
G31	9602	0.00
G32	6764	0.00
R01	10064	0.00
R02	9830	0.00
R03	2621	0.00
R07	159	0.00
R08	8286	0.00
R09	1040	0.00
R10	6931	0.00
R11	10064	0.00
R12	9080	0.00
R13	3568	0.00
R17	7130	0.00
R18	4864	0.00
R23	1338	0.00
R24	4642	0.00
TOT	183047	0.00

Observable used: L1 Dopp

Sat	#obs avbl	%obs del
G01	7351	0.00

G03	1535	0.00
G06	1887	0.00
G09	5361	0.00
G11	9680	0.00
G12	9055	0.00
G14	10064	0.00
G15	151	0.00
G18	8227	0.00
G19	4886	0.00
G20	2459	0.00
G21	3600	0.00
G22	10064	0.00
G25	8319	0.00
G27	2661	0.00
G30	1913	0.00
G31	9602	0.00
G32	6781	0.00
R01	10064	0.00
R02	9834	0.00
R03	2626	0.00
R07	159	0.00
R08	8290	0.00
R09	1051	0.00
R10	6931	0.00
R11	10064	0.00
R12	9085	0.00
R13	3568	0.00
R17	7130	0.00
R18	4872	0.02
R23	1345	0.00
R24	4642	0.00
TOT	183257	0.00

S O F T W A R E V E R S I O N

TerraPOS version: 2.0.4 (1851)

N A V I G A T I O N F I L E S U M M A R Y 012812_181737

First record : 2012 01 28 18 30 42.0
Last record : 2012 01 28 22 57 56.0
Average time increment : 1.000 s (1.0 Hz)
No. recs. with valid pos. : 16035
No. recs. with valid vel. : 16035
No. recs. with valid att. : 0

N A V I G A T I O N P E R F O R M A N C E S U M M A R Y

	Min.	1%	5%	50%	95%	99%	Max.	
Pos. hor. std. dev.	0.012	0.012	0.013	0.014	0.016	0.017	0.017	[m]
Pos. vert. std. dev.	0.016	0.016	0.017	0.020	0.026	0.028	0.028	[m]
Vel. hor. std. dev.	0.044	0.044	0.044	0.046	0.051	0.052	0.072	[m/s]
Vel. vert. std. dev.	0.074	0.074	0.075	0.081	0.092	0.092	0.100	[m/s]

C Y C L E S L I P S A N D D E L E T E D O B S E R V A T I O N S

Observable used: IF Phas

Sat	#obs avbl	%obs del	#L1 slips	#L2 slips
G01	3607	0.00	0	0
G03	11158	0.00	1	2
G05	449	0.00	0	0
G06	11542	0.00	0	0
G09	14998	0.00	0	1
G11	6035	0.00	0	1
G12	5267	0.00	0	0
G14	13794	0.00	0	0
G15	9939	0.00	0	0
G18	16035	0.00	0	0
G19	10956	0.00	1	4
G21	13444	0.00	3	5
G22	16033	0.00	1	1
G25	4477	0.00	0	0
G26	3889	0.00	0	0
G27	12229	0.00	0	0
G29	4344	0.00	0	0
G31	5876	0.00	0	0
G32	2882	0.00	2	2

R03	1615	0.00	4	4
R04	9875	0.00	0	0
R05	16029	0.00	2	2
R06	14852	0.00	2	2
R07	6565	0.00	0	0
R09	5135	0.00	0	0
R10	210	0.00	1	1
R13	4769	0.00	0	0
R14	4878	0.00	0	0
R16	9830	0.00	0	0
R18	1760	0.00	5	5
R19	6635	0.00	0	0
R20	11108	0.00	0	1
R21	13192	0.00	4	6
R22	8912	0.00	7	9
R23	2452	0.00	4	5
TOT	284771	0.00	37	51
Si			0.47	0.64

Observable used: IF Code

Sat	#obs avbl	%obs del
G01	3607	0.00
G03	11161	0.00
G05	449	0.00
G06	11542	0.00
G09	14998	0.00
G11	6035	0.00
G12	5267	0.00
G14	13794	0.00
G15	9939	0.00
G18	16035	0.00
G19	10958	0.00
G21	13445	0.00
G22	16034	0.00
G25	4477	0.00
G26	3889	0.00
G27	12229	0.00
G29	4344	0.00
G31	5876	0.00
G32	2884	0.00
R03	1625	0.00
R04	9875	0.00
R05	16033	0.00
R06	14858	0.00
R07	6565	0.00
R09	5135	0.00
R10	210	0.00
R13	4769	0.00
R14	4878	0.00
R16	9830	0.00
R18	1772	0.00
R19	6635	0.00
R20	11108	0.00
R21	13202	0.00
R22	8940	0.00
R23	2467	0.00
TOT	284865	0.00

Observable used: L1 Dopp

Sat	#obs avbl	%obs del
G01	3614	0.00
G03	11162	0.00
G05	449	0.00
G06	11542	0.00
G09	14999	0.00
G11	6043	0.00
G12	5271	0.00
G14	13794	0.00
G15	9939	0.00
G18	16035	0.00
G19	10971	0.00
G21	13447	0.00
G22	16034	0.00
G25	4477	0.00
G26	3889	0.00
G27	12229	0.00
G29	4344	0.00
G31	5876	0.00
G32	2893	0.00
R03	1626	0.00
R04	9875	0.00
R05	16035	0.00
R06	14864	0.00
R07	6569	0.00
R09	5135	0.00
R10	213	0.00
R13	4769	0.00
R14	4883	0.00
R16	9830	0.00
R18	1772	0.00
R19	6635	0.00
R20	11109	0.00
R21	13214	0.00
R22	8952	0.00
R23	2472	0.00
TOT	284961	0.00

S O F T W A R E V E R S I O N

TerraPOS version: 2.0.4 (1851)

N A V I G A T I O N F I L E S U M M A R Y 012912_41208

First record : 2012 01 29 04 23 42.5
Last record : 2012 01 29 06 17 24.0
Average time increment : 1.000 s (1.0 Hz)
No. recs. with valid pos. : 6823
No. recs. with valid vel. : 6823
No. recs. with valid att. : 0

N A V I G A T I O N P E R F O R M A N C E S U M M A R Y

	Min.	1%	5%	50%	95%	99%	Max.	
Pos. hor. std. dev.	0.013	0.013	0.014	0.015	0.017	0.018	0.019	[m]
Pos. vert. std. dev.	0.021	0.022	0.023	0.025	0.030	0.032	0.033	[m]
Vel. hor. std. dev.	0.043	0.044	0.044	0.045	0.048	0.048	0.062	[m/s]
Vel. vert. std. dev.	0.079	0.081	0.081	0.087	0.095	0.095	0.105	[m/s]

C Y C L E S L I P S A N D D E L E T E D O B S E R V A T I O N S

Observable used: IF Phas

Sat	#obs avbl	%obs del	#L1 slips	#L2 slips
G03	6823	0.00	0	0
G06	6823	0.00	0	0
G07	6823	0.00	0	0
G08	6680	0.00	5	23
G10	6455	0.00	4	7
G11	3161	0.00	2	2
G13	6823	0.00	0	0
G16	6771	0.00	3	11
G19	6823	0.00	0	0
G20	920	0.00	2	2
G23	6823	0.00	0	0
G28	3362	0.00	0	2
G30	2998	0.00	0	1
R01	4306	0.00	0	1
R02	6483	0.00	0	1
R03	6263	0.00	13	19
R08	77	0.00	0	0
R11	6823	0.00	0	0
R12	6823	0.00	0	0

R13	4306	0.00	1	1
R20	4102	0.00	9	9
R21	6823	0.00	0	0
R22	6823	0.00	0	0
R23	2871	0.00	0	1
TOT	126985	0.00	39	80
Si			1.11	2.27

Observable used: IF Code

Sat	#obs avbl	%obs del
G03	6823	0.00
G06	6823	0.00
G07	6823	0.00
G08	6689	0.00
G10	6461	0.00
G11	3162	0.00
G13	6823	0.00
G16	6774	0.00
G19	6823	0.00
G20	921	0.00
G23	6823	0.00
G28	3362	0.00
G30	2998	0.00
R01	4306	0.00
R02	6483	0.00
R03	6301	0.00
R08	77	0.00
R11	6823	0.00
R12	6823	0.00
R13	4310	0.00
R20	4133	0.00
R21	6823	0.00
R22	6823	0.00
R23	2871	0.00
TOT	127078	0.00

Observable used: L1 Dopp

Sat	#obs avbl	%obs del
G03	6823	0.00
G06	6823	0.00
G07	6823	0.00
G08	6759	0.00
G10	6473	0.00
G11	3164	0.00
G13	6823	0.00
G16	6802	0.01
G19	6823	0.00
G20	923	0.00
G23	6823	0.00
G28	3366	0.00
G30	2999	0.00
R01	4308	0.00
R02	6484	0.00
R03	6332	0.00
R08	77	0.00

R11	6823	0.00
R12	6823	0.00
R13	4314	0.00
R20	4133	0.00
R21	6823	0.00
R22	6823	0.00
R23	2873	0.00
TOT	127237	0.00

S O F T W A R E V E R S I O N

TerraPOS version: 2.0.4 (1851)

N A V I G A T I O N F I L E S U M M A R Y 012912_131704

First record : 2012 01 29 13 19 37.5
Last record : 2012 01 29 16 52 35.0
Average time increment : 1.000 s (1.0 Hz)
No. recs. with valid pos. : 12779
No. recs. with valid vel. : 12779
No. recs. with valid att. : 0

N A V I G A T I O N P E R F O R M A N C E S U M M A R Y

	Min.	1%	5%	50%	95%	99%	Max.	
Pos. hor. std. dev.	0.013	0.014	0.014	0.016	0.019	0.019	0.019	[m]
Pos. vert. std. dev.	0.020	0.021	0.022	0.025	0.030	0.032	0.034	[m]
Vel. hor. std. dev.	0.046	0.047	0.047	0.049	0.051	0.051	0.069	[m/s]
Vel. vert. std. dev.	0.079	0.080	0.083	0.087	0.094	0.094	0.106	[m/s]

C Y C L E S L I P S A N D D E L E T E D O B S E R V A T I O N S

Observable used: IF Phas

Sat	#obs avbl	%obs del	#L1 slips	#L2 slips
G02	12779	0.00	0	0
G04	8339	0.00	0	0
G05	12779	0.00	0	0
G09	1092	0.00	12	14
G10	9894	0.00	0	0
G12	11281	0.00	0	0
G13	5067	0.00	2	8
G15	5001	0.00	0	0
G17	2490	0.00	0	0
G18	3280	0.00	0	0
G21	5668	0.00	0	0
G25	12779	0.00	0	0
G26	7394	0.00	0	0
G29	11677	0.00	0	1
G30	3303	0.00	0	3
R01	573	0.00	6	6
R02	6854	0.00	0	0
R03	12774	0.00	1	1
R04	12291	0.00	1	3

R05	6810	0.00	0	0
R06	557	0.00	3	3
R09	6670	0.00	0	0
R16	4177	0.00	0	0
R17	7561	0.00	0	2
R18	12779	0.00	0	0
R19	12774	0.00	1	1
R20	5806	0.00	0	0
TOT	202449	0.00	26	42
Si			0.46	0.75

Observable used: IF Code

Sat	#obs avbl	%obs del
G02	12779	0.00
G04	8339	0.00
G05	12779	0.00
G09	1105	0.00
G10	9894	0.00
G12	11281	0.00
G13	5067	0.00
G15	5001	0.00
G17	2490	0.00
G18	3280	0.00
G21	5668	0.00
G25	12779	0.00
G26	7394	0.00
G29	11677	0.00
G30	3303	0.00
R01	588	0.00
R02	6854	0.00
R03	12778	0.00
R04	12298	0.00
R05	6810	0.00
R06	560	0.00
R09	6670	0.00
R16	4177	0.00
R17	7561	0.00
R18	12779	0.00
R19	12778	0.00
R20	5806	0.00
TOT	202495	0.00

Observable used: L1 Dopp

Sat	#obs avbl	%obs del
G02	12779	0.00
G04	8339	0.00
G05	12779	0.00
G09	1112	0.00
G10	9894	0.00
G12	11281	0.00
G13	5097	0.00
G15	5001	0.00
G17	2490	0.00
G18	3280	0.00
G21	5674	0.00

G25	12779	0.00
G26	7394	0.00
G29	11683	0.00
G30	3313	0.00
R01	589	0.00
R02	6854	0.00
R03	12778	0.00
R04	12303	0.00
R05	6810	0.00
R06	570	0.00
R09	6670	0.00
R16	4177	0.00
R17	7563	0.00
R18	12779	0.00
R19	12778	0.00
R20	5810	0.00
TOT	202576	0.00

S O F T W A R E V E R S I O N

TerraPOS version: 2.0.4 (1851)

N A V I G A T I O N F I L E S U M M A R Y 012912_174001

```
 First record              : 2012 01 29 17 42 16.0
 Last  record              : 2012 01 29 21 03 22.0
 Average time increment    :  1.000 s  (1.0 Hz)
 No. recs. with valid pos. :  12067
 No. recs. with valid vel. :  12067
 No. recs. with valid att. :      0
```

N A V I G A T I O N P E R F O R M A N C E S U M M A R Y

	Min.	1%	5%	50%	95%	99%	Max.	
Pos. hor. std. dev.	0.013	0.013	0.014	0.015	0.016	0.017	0.019	[m]
Pos. vert. std. dev.	0.018	0.018	0.019	0.023	0.028	0.029	0.030	[m]
Vel. hor. std. dev.	0.043	0.044	0.044	0.046	0.050	0.052	0.072	[m/s]
Vel. vert. std. dev.	0.076	0.077	0.077	0.084	0.092	0.093	0.114	[m/s]

C Y C L E S L I P S A N D D E L E T E D O B S E R V A T I O N S

Observable used: IF Phas

Sat	#obs avbl	%obs del	#L1 slips	#L2 slips
G03	10217	0.00	1	2
G05	3085	0.00	0	0
G06	12064	0.00	1	1
G09	10639	0.00	0	1
G14	7167	0.00	0	0
G15	12067	0.00	0	0
G16	2439	0.00	4	11
G18	12067	0.00	0	0
G19	5622	0.00	2	2
G21	12067	0.00	0	0
G22	11620	0.00	3	4
G26	6425	0.00	0	0
G27	12065	0.00	2	2
G29	7021	0.00	0	0
G30	455	0.00	0	0
R04	4345	0.00	0	0
R05	12025	0.00	8	8
R06	12067	0.00	0	0
R07	8371	0.00	0	0

R09	3181	0.00	0	0
R14	3319	0.00	0	0
R16	7021	0.00	0	0
R19	4188	0.00	0	0
R20	9569	0.00	0	0
R21	12067	0.00	0	0
R22	8440	0.00	0	1
R23	2180	0.00	2	3
TOT	211793	0.00	23	35
Si			0.39	0.59

Observable used: IF Code

Sat	#obs avbl	%obs del
G03	10222	0.00
G05	3085	0.00
G06	12064	0.00
G09	10639	0.00
G14	7167	0.00
G15	12067	0.00
G16	2442	0.00
G18	12067	0.00
G19	5625	0.00
G21	12067	0.00
G22	11625	0.00
G26	6425	0.00
G27	12067	0.00
G29	7021	0.00
G30	455	0.00
R04	4345	0.00
R05	12025	0.03
R06	12067	0.00
R07	8371	0.00
R09	3181	0.00
R14	3319	0.00
R16	7021	0.00
R19	4188	0.00
R20	9569	0.00
R21	12067	0.00
R22	8440	0.00
R23	2184	0.00
TOT	211815	0.00

Observable used: L1 Dopp

Sat	#obs avbl	%obs del
G03	10228	0.00
G05	3085	0.00
G06	12066	0.00
G09	10641	0.00
G14	7167	0.00
G15	12067	0.00
G16	2472	0.04
G18	12067	0.00
G19	5631	0.00
G21	12067	0.00
G22	11627	0.00

G26	6425	0.00
G27	12067	0.00
G29	7021	0.00
G30	455	0.00
R04	4345	0.00
R05	12052	0.00
R06	12067	0.00
R07	8375	0.00
R09	3181	0.00
R14	3323	0.00
R16	7023	0.00
R19	4188	0.00
R20	9569	0.00
R21	12067	0.00
R22	8445	0.00
R23	2193	0.00
TOT	211914	0.00

S O F T W A R E V E R S I O N

TerraPOS version: 2.0.4 (1851)

N A V I G A T I O N F I L E S U M M A R Y 012912_213205

```
 First record              : 2012 01 29 21 35 30.0
 Last  record              : 2012 01 30 02 10 52.0
 Average time increment    :  1.000 s  (1.0 Hz)
 No. recs. with valid pos. :  16523
 No. recs. with valid vel. :  16523
 No. recs. with valid att. :      0
```

N A V I G A T I O N P E R F O R M A N C E S U M M A R Y

	Min.	1%	5%	50%	95%	99%	Max.	
Pos. hor. std. dev.	0.013	0.014	0.014	0.016	0.019	0.021	0.022	[m]
Pos. vert. std. dev.	0.018	0.020	0.021	0.025	0.029	0.030	0.038	[m]
Vel. hor. std. dev.	0.046	0.046	0.046	0.049	0.052	0.053	0.070	[m/s]
Vel. vert. std. dev.	0.074	0.075	0.075	0.083	0.090	0.091	0.102	[m/s]

C Y C L E S L I P S A N D D E L E T E D O B S E R V A T I O N S

Observable used: IF Phas

Sat	#obs avbl	%obs del	#L1 slips	#L2 slips
G01	14165	0.12	5	7
G03	73	0.00	0	0
G06	858	0.00	9	19
G09	3701	0.00	0	0
G11	12133	0.01	0	1
G12	9291	0.00	0	1
G13	1390	0.00	1	1
G14	16523	0.00	0	0
G16	6689	0.00	0	1
G18	6577	0.00	2	4
G19	3329	0.00	1	2
G20	10445	0.00	0	0
G21	2122	0.00	0	1
G22	12346	0.00	0	0
G23	6374	0.00	0	0
G25	13942	0.00	0	0
G27	841	0.00	0	0
G29	1987	0.00	0	4
G30	10168	0.07	0	1

G31	16523	0.02	0	0
G32	14688	0.04	0	2
R01	10581	0.00	0	0
R02	3830	0.00	0	1
R06	6631	0.00	2	2
R07	13223	0.14	0	1
R08	16523	0.28	0	0
R09	11831	0.07	0	0
R11	11837	0.08	0	0
R12	5655	0.00	0	0
R16	5571	0.00	0	0
R20	1230	0.00	13	14
R22	3106	0.00	1	2
R23	5529	0.00	0	1
R24	4647	0.00	0	1
TOT	264359	0.04	34	66
Si			0.46	0.90

Observable used: IF Code

Sat	#obs avbl	%obs del
G01	14170	0.00
G03	73	0.00
G06	862	0.00
G09	3701	0.00
G11	12133	0.00
G12	9291	0.00
G13	1393	0.00
G14	16523	0.00
G16	6689	0.00
G18	6579	0.00
G19	3330	0.00
G20	10445	0.00
G21	2122	0.00
G22	12346	0.00
G23	6374	0.00
G25	13942	0.00
G27	841	0.00
G29	1987	0.00
G30	10169	0.00
G31	16523	0.00
G32	14688	0.00
R01	10581	0.00
R02	3830	0.00
R06	6638	0.00
R07	13223	0.00
R08	16523	0.00
R09	11831	0.00
R11	11837	0.00
R12	5655	0.00
R16	5571	0.00
R20	1271	0.00
R22	3109	0.00
R23	5529	0.00
R24	4647	0.00
TOT	264426	0.00

Observable used: L1 Dopp

Sat	#obs avbl	%obs del
G01	14179	0.00
G03	73	0.00
G06	905	0.00
G09	3701	0.00
G11	12133	0.00
G12	9291	0.00
G13	1400	0.00
G14	16523	0.00
G16	6690	0.00
G18	6587	0.00
G19	3330	0.00
G20	10450	0.00
G21	2123	0.00
G22	12346	0.00
G23	6380	0.00
G25	13942	0.00
G27	841	0.00
G29	2010	0.00
G30	10173	0.00
G31	16523	0.00
G32	14700	0.00
R01	10585	0.00
R02	3835	0.00
R06	6638	0.00
R07	13224	0.00
R08	16523	0.00
R09	11831	0.00
R11	11837	0.00
R12	5655	0.00
R16	5571	0.00
R20	1278	0.00
R22	3112	0.00
R23	5529	0.00
R24	4653	0.00
TOT	264571	0.00

S O F T W A R E V E R S I O N

TerraPOS version: 2.0.4 (1851)

N A V I G A T I O N F I L E S U M M A R Y 012912_233848

First record : 2012 01 28 23 41 11.5
Last record : 2012 01 29 03 59 43.0
Average time increment : 1.000 s (1.0 Hz)
No. recs. with valid pos. : 15513
No. recs. with valid vel. : 15513
No. recs. with valid att. : 0

N A V I G A T I O N P E R F O R M A N C E S U M M A R Y

	Min.	1%	5%	50%	95%	99%	Max.	
Pos. hor. std. dev.	0.012	0.013	0.014	0.016	0.019	0.020	0.022	[m]
Pos. vert. std. dev.	0.020	0.021	0.021	0.024	0.029	0.030	0.035	[m]
Vel. hor. std. dev.	0.043	0.044	0.044	0.048	0.051	0.051	0.065	[m/s]
Vel. vert. std. dev.	0.076	0.079	0.079	0.083	0.093	0.093	0.106	[m/s]

C Y C L E S L I P S A N D D E L E T E D O B S E R V A T I O N S

Observable used: IF Phas

Sat	#obs avbl	%obs del	#L1 slips	#L2 slips
G01	7877	0.00	0	0
G03	6262	0.02	0	0
G06	6737	0.00	0	0
G07	4360	0.00	0	0
G10	3860	0.00	1	2
G11	4761	0.00	4	4
G12	1828	0.00	2	2
G13	7752	0.00	2	4
G14	9828	0.00	0	0
G16	13014	0.00	0	1
G19	2095	0.00	0	1
G20	15513	0.00	0	0
G22	5099	0.00	1	3
G23	12627	0.00	0	2
G25	6717	0.00	1	2
G29	4512	0.00	0	0
G30	15513	0.00	0	0
G31	15398	0.00	4	6
G32	15513	0.03	0	0

R01	10259	0.00	0	0
R02	3892	0.00	0	0
R06	6122	0.11	0	0
R07	11736	0.06	0	0
R08	15513	0.05	0	0
R09	11560	0.06	0	0
R11	11995	0.00	2	3
R12	4582	0.00	0	0
R16	4661	0.00	2	3
R19	6892	0.00	7	7
R20	5785	0.00	3	2
R21	3101	0.00	0	0
TOT	255364	0.01	29	42
Si			0.41	0.59

Observable used: IF Code

Sat	#obs avbl	%obs del
G01	7877	0.00
G03	6262	0.00
G06	6737	0.00
G07	4360	0.00
G10	3860	0.00
G11	4763	0.00
G12	1828	0.00
G13	7754	0.00
G14	9828	0.00
G16	13014	0.00
G19	2095	0.00
G20	15513	0.00
G22	5100	0.00
G23	12627	0.00
G25	6717	0.00
G29	4512	0.00
G30	15513	0.00
G31	15407	0.00
G32	15513	0.00
R01	10259	0.00
R02	3892	0.00
R06	6122	0.00
R07	11736	0.00
R08	15513	0.00
R09	11560	0.00
R11	11998	0.00
R12	4582	0.00
R16	4670	0.00
R19	6907	0.00
R20	5796	0.00
R21	3101	0.00
TOT	255416	0.00

Observable used: L1 Dopp

Sat	#obs avbl	%obs del
G01	7877	0.00
G03	6262	0.00
G06	6737	0.00

G07	4371	0.00
G10	3869	0.00
G11	4771	0.00
G12	1839	0.00
G13	7766	0.00
G14	9828	0.00
G16	13015	0.00
G19	2098	0.00
G20	15513	0.00
G22	5102	0.00
G23	12641	0.00
G25	6720	0.00
G29	4517	0.00
G30	15513	0.00
G31	15417	0.00
G32	15513	0.00
R01	10264	0.00
R02	3896	0.00
R06	6122	0.00
R07	11736	0.00
R08	15513	0.00
R09	11560	0.00
R11	12001	0.00
R12	4586	0.00
R16	4671	0.00
R19	6914	0.00
R20	5807	0.00
R21	3102	0.00
TOT	255541	0.00

S O F T W A R E V E R S I O N

TerraPOS version: 2.0.4 (1851)

N A V I G A T I O N F I L E S U M M A R Y 013012_024520

First record : 2012 01 30 02 48 34.0
Last record : 2012 01 30 06 10 01.0
Average time increment : 1.000 s (1.0 Hz)
No. recs. with valid pos. : 12088
No. recs. with valid vel. : 12088
No. recs. with valid att. : 0

N A V I G A T I O N P E R F O R M A N C E S U M M A R Y

	Min.	1%	5%	50%	95%	99%	Max.	
Pos. hor. std. dev.	0.013	0.014	0.014	0.016	0.017	0.017	0.018	[m]
Pos. vert. std. dev.	0.020	0.021	0.022	0.025	0.030	0.034	0.034	[m]
Vel. hor. std. dev.	0.043	0.043	0.043	0.045	0.048	0.048	0.064	[m/s]
Vel. vert. std. dev.	0.079	0.079	0.079	0.084	0.093	0.097	0.102	[m/s]

C Y C L E S L I P S A N D D E L E T E D O B S E R V A T I O N S

Observable used: IF Phas

Sat	#obs avbl	%obs del	#L1 slips	#L2 slips
G03	12088	0.00	0	0
G06	12088	0.00	0	0
G07	12081	0.00	2	2
G08	6762	0.00	0	0
G10	11349	0.00	12	13
G11	3044	0.00	0	1
G13	12088	0.00	0	0
G16	12087	0.00	0	1
G19	10245	0.00	0	0
G20	6430	0.00	0	1
G23	12088	0.00	0	0
G28	3220	0.00	0	1
G30	8454	0.00	0	3
G31	3861	0.00	0	0
G32	4523	0.00	0	0
R01	5523	0.00	0	0
R02	10017	0.00	0	0
R03	12043	0.00	10	13
R04	6141	0.00	1	1

R08	465	0.00	0	0
R11	7952	0.00	0	0
R12	12088	0.00	0	0
R13	12083	0.00	2	2
R20	3546	0.00	3	4
R21	9377	0.00	0	0
R22	11308	0.00	1	1
R23	7341	0.00	0	0
R24	2815	0.00	0	0
TOT	231107	0.00	31	43
Si			0.48	0.67

Observable used: IF Code

Sat	#obs avbl	%obs del
G03	12088	0.00
G06	12088	0.00
G07	12084	0.00
G08	6762	0.00
G10	11364	0.00
G11	3044	0.00
G13	12088	0.00
G16	12087	0.00
G19	10245	0.00
G20	6430	0.00
G23	12088	0.00
G28	3220	0.00
G30	8454	0.00
G31	3861	0.00
G32	4523	0.00
R01	5523	0.00
R02	10017	0.00
R03	12065	0.00
R04	6141	0.00
R08	465	0.00
R11	7952	0.00
R12	12088	0.00
R13	12087	0.00
R20	3555	0.00
R21	9377	0.00
R22	11308	0.00
R23	7341	0.00
R24	2815	0.00
TOT	231160	0.00

Observable used: L1 Dopp

Sat	#obs avbl	%obs del
G03	12088	0.00
G06	12088	0.00
G07	12086	0.00
G08	6769	0.00
G10	11381	0.01
G11	3045	0.00
G13	12088	0.00
G16	12088	0.00
G19	10245	0.00

G20	6432	0.00
G23	12088	0.00
G28	3224	0.03
G30	8457	0.00
G31	3861	0.00
G32	4523	0.00
R01	5523	0.00
R02	10017	0.00
R03	12074	0.00
R04	6151	0.00
R08	465	0.00
R11	7952	0.00
R12	12088	0.00
R13	12087	0.00
R20	3559	0.00
R21	9377	0.00
R22	11308	0.00
R23	7341	0.00
R24	2815	0.00
TOT	231220	0.00

S O F T W A R E V E R S I O N

TerraPOS version: 2.0.4 (1851)

N A V I G A T I O N F I L E S U M M A R Y 013012_130609

First record : 2012 01 30 13 08 32.0
Last record : 2012 01 30 17 17 00.0
Average time increment : 1.000 s (1.0 Hz)
No. recs. with valid pos. : 14903
No. recs. with valid vel. : 14903
No. recs. with valid att. : 0

N A V I G A T I O N P E R F O R M A N C E S U M M A R Y

	Min.	1%	5%	50%	95%	99%	Max.	
Pos. hor. std. dev.	0.014	0.015	0.015	0.017	0.024	0.025	0.026	[m]
Pos. vert. std. dev.	0.022	0.023	0.024	0.027	0.034	0.035	0.036	[m]
Vel. hor. std. dev.	0.047	0.047	0.048	0.049	0.051	0.053	0.075	[m/s]
Vel. vert. std. dev.	0.081	0.082	0.083	0.088	0.095	0.096	0.117	[m/s]

C Y C L E S L I P S A N D D E L E T E D O B S E R V A T I O N S

Observable used: IF Phas

Sat	#obs avbl	%obs del	#L1 slips	#L2 slips
G02	14902	0.00	4	4
G04	8728	0.00	1	2
G05	14903	0.00	1	2
G09	1198	0.00	0	1
G10	10203	0.00	1	2
G12	11577	0.00	1	2
G13	4881	0.00	0	0
G15	6578	0.00	0	0
G16	887	0.11	2	4
G17	2837	0.00	2	2
G18	5096	0.00	0	0
G21	7410	0.00	0	0
G25	14271	0.00	3	5
G26	9168	0.00	0	0
G27	376	0.00	0	1
G29	13416	0.00	0	0
G30	4432	0.36	4	8
R02	1180	0.00	1	1
R03	7020	0.00	1	2

R04	13322	0.00	2	2
R05	13972	0.00	3	4
R06	8569	0.00	2	3
R07	2424	0.00	2	2
R09	4620	0.00	0	1
R11	5443	0.00	1	1
R16	1293	0.00	0	2
R18	7930	0.00	1	3
R19	14666	0.00	2	2
R20	14841	0.00	13	12
R21	7770	0.00	2	2
R22	1140	0.00	2	2
TOT	235053	0.01	51	72
Si			0.78	1.10

Observable used: IF Code

Sat	#obs avbl	%obs del
G02	14906	0.00
G04	8731	0.00
G05	14906	0.00
G09	1198	0.00
G10	10206	0.00
G12	11580	0.00
G13	4881	0.00
G15	6578	0.00
G16	888	0.00
G17	2840	0.00
G18	5096	0.00
G21	7410	0.00
G25	14274	0.00
G26	9168	0.00
G27	376	0.00
G29	13416	0.00
G30	4443	0.00
R02	1180	0.00
R03	7026	0.00
R04	13323	0.00
R05	13982	0.00
R06	8574	0.00
R07	2425	0.00
R09	4620	0.00
R11	5448	0.00
R16	1294	0.00
R18	7935	0.00
R19	14670	0.00
R20	14886	0.00
R21	7771	0.00
R22	1143	0.00
TOT	235174	0.00

Observable used: L1 Dopp

Sat	#obs avbl	%obs del
G02	14907	0.00
G04	8731	0.00
G05	14906	0.00

G09	1206	0.00
G10	10206	0.00
G12	11580	0.00
G13	4886	0.00
G15	6578	0.00
G16	903	0.00
G17	2841	0.00
G18	5096	0.00
G21	7418	0.00
G25	14284	0.00
G26	9168	0.00
G27	377	0.00
G29	13423	0.00
G30	4455	0.00
R02	1185	0.00
R03	7026	0.00
R04	13327	0.00
R05	13983	0.00
R06	8577	0.00
R07	2430	0.00
R09	4625	0.00
R11	5452	0.00
R16	1300	0.00
R18	7936	0.00
R19	14671	0.00
R20	14891	0.00
R21	7781	0.00
R22	1151	0.00
TOT	235300	0.00

S O F T W A R E V E R S I O N

TerraPOS version: 2.0.4 (1851)

N A V I G A T I O N F I L E S U M M A R Y 013012_181746

```
 First record              : 2012 01 30 18 20 58.5
 Last  record              : 2012 01 30 20 36 43.0
 Average time increment    :  1.001 s  (1.0 Hz)
 No. recs. with valid pos. :   8136
 No. recs. with valid vel. :   8136
 No. recs. with valid att. :      0
```

N A V I G A T I O N P E R F O R M A N C E S U M M A R Y

		Min.	1%	5%	50%	95%	99%	Max.	
Pos. hor.	std. dev.	0.013	0.014	0.015	0.016	0.018	0.129	0.186	[m]
Pos. vert.	std. dev.	0.019	0.020	0.021	0.025	0.031	0.152	0.329	[m]
Vel. hor.	std. dev.	0.043	0.043	0.043	0.045	0.049	0.050	0.086	[m/s]
Vel. vert.	std. dev.	0.069	0.077	0.078	0.082	0.095	0.095	0.147	[m/s]

C Y C L E S L I P S A N D D E L E T E D O B S E R V A T I O N S

Observable used: IF Phas

Sat	#obs avbl	%obs del	#L1 slips	#L2 slips
G03	8136	0.00	3	4
G05	511	0.00	2	4
G06	8136	0.00	4	4
G09	8134	0.00	4	4
G14	5915	0.00	0	0
G15	8146	0.00	0	0
G18	8134	0.00	4	4
G19	4385	0.00	0	0
G21	8135	0.00	4	4
G22	8146	0.00	0	0
G26	3882	0.00	3	4
G27	8135	0.00	4	4
G29	4504	0.00	2	2
R05	1685	0.00	6	7
R06	8133	0.09	2	1
R07	8133	0.00	3	2
R08	6901	0.00	1	2
R09	5692	0.00	1	2
R16	8133	0.00	2	2

R20	1907	0.00	16	16
R21	6796	0.00	1	3
R22	8133	0.00	1	3
R23	6802	0.00	1	2
R24	922	0.00	0	0
TOT	147536	0.00	64	74
Si			1.56	1.81

Observable used: IF Code

Sat	#obs avbl	%obs del
G03	8141	0.00
G05	517	0.00
G06	8142	0.00
G09	8140	0.00
G14	5915	0.00
G15	8146	0.00
G18	8140	0.00
G19	4385	0.00
G21	8141	0.00
G22	8146	0.00
G26	3889	0.00
G27	8141	0.00
G29	4507	0.00
R05	1699	0.00
R06	8133	0.00
R07	8137	0.00
R08	6902	0.00
R09	5692	0.00
R16	8138	0.00
R20	1949	0.00
R21	6804	0.00
R22	8141	0.00
R23	6803	0.00
R24	922	0.00
TOT	147670	0.00

Observable used: L1 Dopp

Sat	#obs avbl	%obs del
G03	8144	0.00
G05	519	0.00
G06	8144	0.00
G09	8142	0.00
G14	5915	0.00
G15	8146	0.00
G18	8142	0.00
G19	4391	0.00
G21	8143	0.00
G22	8146	0.00
G26	3890	0.00
G27	8143	0.00
G29	4508	0.00
R05	1704	0.00
R06	8142	0.00
R07	8142	0.00
R08	6911	0.00

R09	5693	0.00
R16	8142	0.00
R20	1959	0.05
R21	6805	0.00
R22	8141	0.00
R23	6812	0.00
R24	926	0.00
TOT	147750	0.00

S O F T W A R E V E R S I O N

TerraPOS version: 2.0.4 (1851)

N A V I G A T I O N F I L E S U M M A R Y 022912_125656

First record : 2012 02 29 12 59 39.0
Last record : 2012 02 29 18 04 20.0
Average time increment : 1.000 s (1.0 Hz)
No. recs. with valid pos. : 18282
No. recs. with valid vel. : 18282
No. recs. with valid att. : 0

N A V I G A T I O N P E R F O R M A N C E S U M M A R Y

	Min.	1%	5%	50%	95%	99%	Max.	
Pos. hor. std. dev.	0.019	0.021	0.023	0.027	0.032	0.034	0.036	[m]
Pos. vert. std. dev.	0.026	0.029	0.033	0.040	0.052	0.056	0.056	[m]
Vel. hor. std. dev.	0.045	0.046	0.047	0.050	0.055	0.056	0.070	[m/s]
Vel. vert. std. dev.	0.076	0.077	0.079	0.085	0.097	0.099	0.112	[m/s]

C Y C L E S L I P S A N D D E L E T E D O B S E R V A T I O N S

Observable used: IF Phas

Sat	#obs avbl	%obs del	#L1 slips	#L2 slips
G02	7964	0.00	0	2
G03	7001	0.00	0	0
G04	2148	0.00	0	0
G05	11932	0.00	0	0
G06	8882	0.00	0	0
G09	7476	0.00	1	2
G10	3246	0.00	0	2
G12	4990	0.00	0	0
G13	122	0.00	0	0
G14	4419	0.00	0	2
G15	16884	0.00	0	0
G16	4613	0.00	4	7
G18	15456	0.00	1	4
G19	2231	0.00	0	0
G21	17573	0.00	2	5
G22	8790	0.00	0	2
G25	7862	0.00	0	1
G26	15581	0.00	1	3
G27	9090	0.00	1	6

G29	16607	0.00	0	0
G30	6897	0.00	4	14
R01	332	0.00	0	0
R02	6703	0.00	1	2
R03	13415	0.00	1	2
R04	18273	0.00	2	3
R05	12717	0.00	0	0
R09	1569	0.00	6	7
R13	6520	0.00	2	3
R14	999	0.00	0	0
R15	3659	0.00	0	0
R16	461	0.00	2	2
R17	8045	0.00	1	4
R18	14011	0.00	0	0
R19	17878	0.00	2	3
R20	10873	0.00	2	2
R21	4967	0.00	0	0
R24	963	0.00	16	19
TOT	301149	0.00	49	97
Si			0.59	1.16

Observable used: IF Code

Sat	#obs avbl	%obs del
G02	7964	0.00
G03	7001	0.00
G04	2148	0.00
G05	11932	0.00
G06	8882	0.00
G09	7480	0.00
G10	3246	0.00
G12	4990	0.00
G13	122	0.00
G14	4419	0.00
G15	16884	0.00
G16	4616	0.00
G18	15458	0.00
G19	2231	0.00
G21	17575	0.00
G22	8790	0.00
G25	7862	0.00
G26	15581	0.00
G27	9090	0.00
G29	16607	0.00
G30	6900	0.00
R01	332	0.00
R02	6705	0.00
R03	13415	0.00
R04	18278	0.00
R05	12717	0.00
R09	1582	0.00
R13	6522	0.00
R14	999	0.00
R15	3659	0.00
R16	466	0.00
R17	8045	0.00
R18	14011	0.00
R19	17883	0.00
R20	10883	0.00
R21	4967	0.00

Sat	#obs avbl	%obs del
R24	1003	0.00
TOT	301245	0.00

Observable used: L1 Dopp

Sat	#obs avbl	%obs del
G02	7967	0.00
G03	7007	0.00
G04	2148	0.00
G05	11932	0.00
G06	8888	0.00
G09	7481	0.00
G10	3252	0.00
G12	4990	0.00
G13	122	0.00
G14	4428	0.00
G15	16884	0.00
G16	4631	0.00
G18	15468	0.00
G19	2238	0.00
G21	17592	0.00
G22	8795	0.00
G25	7863	0.00
G26	15586	0.00
G27	9110	0.00
G29	16607	0.00
G30	6941	0.00
R01	332	0.00
R02	6709	0.00
R03	13420	0.00
R04	18279	0.00
R05	12717	0.00
R09	1583	0.00
R13	6531	0.00
R14	1003	0.00
R15	3663	0.00
R16	466	0.00
R17	8049	0.00
R18	14011	0.00
R19	17890	0.00
R20	10888	0.00
R21	4973	0.00
R24	1018	0.00
TOT	301462	0.00

S O F T W A R E V E R S I O N

TerraPOS version: 2.0.4 (1851)

N A V I G A T I O N F I L E S U M M A R Y 022912_183658

First record : 2012 02 29 18 39 22.0
Last record : 2012 02 29 20 54 44.0
Average time increment : 1.000 s (1.0 Hz)
No. recs. with valid pos. : 8123
No. recs. with valid vel. : 8123
No. recs. with valid att. : 0

N A V I G A T I O N P E R F O R M A N C E S U M M A R Y

	Min.	1%	5%	50%	95%	99%	Max.	
Pos. hor. std. dev.	0.013	0.014	0.015	0.016	0.020	0.020	0.021	[m]
Pos. vert. std. dev.	0.019	0.020	0.021	0.023	0.027	0.027	0.027	[m]
Vel. hor. std. dev.	0.045	0.046	0.046	0.047	0.050	0.053	0.071	[m/s]
Vel. vert. std. dev.	0.077	0.077	0.078	0.082	0.087	0.088	0.112	[m/s]

C Y C L E S L I P S A N D D E L E T E D O B S E R V A T I O N S

Observable used: IF Phas

Sat	#obs avbl	%obs del	#L1 slips	#L2 slips
G01	218	0.00	4	6
G03	3290	0.00	0	1
G06	3628	0.00	4	4
G09	6309	0.00	0	0
G11	6449	0.00	2	4
G12	5553	0.00	0	1
G14	8123	0.00	0	0
G15	1499	0.00	0	0
G18	8123	0.00	0	0
G19	6566	0.00	0	0
G21	5137	0.00	0	0
G22	8123	0.00	0	0
G25	5002	0.00	0	2
G27	3329	0.00	0	0
G31	6731	0.00	0	0
G32	3262	0.00	0	2
R04	1317	0.00	0	1
R05	8123	0.00	0	0
R07	7127	0.00	2	5

R09	5784	0.00	0	0
R10	795	0.00	0	0
R14	2067	0.00	4	4
R15	8123	0.00	0	0
R16	8123	0.00	0	0
R20	3189	0.00	2	4
R21	6360	0.00	0	0
R22	8116	0.00	1	2
R23	2482	0.00	1	1
TOT	142948	0.00	20	37
Si			0.50	0.93

Observable used: IF Code

Sat	#obs avbl	%obs del
G01	218	0.00
G03	3290	0.00
G06	3628	0.00
G09	6309	0.00
G11	6453	0.00
G12	5553	0.00
G14	8123	0.00
G15	1499	0.00
G18	8123	0.00
G19	6566	0.00
G21	5137	0.00
G22	8123	0.00
G25	5002	0.00
G27	3329	0.00
G31	6731	0.00
G32	3262	0.00
R04	1317	0.00
R05	8123	0.00
R07	7129	0.00
R09	5784	0.00
R10	795	0.00
R14	2078	0.00
R15	8123	0.00
R16	8123	0.00
R20	3194	0.00
R21	6360	0.00
R22	8120	0.00
R23	2482	0.00
TOT	142974	0.00

Observable used: L1 Dopp

Sat	#obs avbl	%obs del
G01	265	0.00
G03	3291	0.00
G06	3650	0.00
G09	6309	0.00
G11	6464	0.00
G12	5562	0.00
G14	8123	0.00
G15	1499	0.00
G18	8123	0.00

G19	6566	0.00
G21	5137	0.00
G22	8123	0.00
G25	5004	0.00
G27	3329	0.00
G31	6731	0.00
G32	3272	0.00
R04	1319	0.00
R05	8123	0.00
R07	7144	0.00
R09	5784	0.00
R10	795	0.00
R14	2078	0.00
R15	8123	0.00
R16	8123	0.00
R20	3196	0.00
R21	6360	0.00
R22	8122	0.00
R23	2494	0.00
TOT	143109	0.00

S O F T W A R E V E R S I O N

TerraPOS version: 2.0.4 (1851)

N A V I G A T I O N F I L E S U M M A R Y 022912_231310

```
 First record              : 2012 02 29 23 16 05.0
 Last  record              : 2012 03 01 02 10 27.0
 Average time increment    :  1.000 s  (1.0 Hz)
 No. recs. with valid pos. :  10463
 No. recs. with valid vel. :  10463
 No. recs. with valid att. :      0
```

N A V I G A T I O N P E R F O R M A N C E S U M M A R Y

	Min.	1%	5%	50%	95%	99%	Max.	
Pos. hor. std. dev.	0.017	0.018	0.018	0.020	0.025	0.026	0.027	[m]
Pos. vert. std. dev.	0.024	0.026	0.026	0.030	0.038	0.039	0.042	[m]
Vel. hor. std. dev.	0.050	0.050	0.051	0.055	0.059	0.060	0.083	[m/s]
Vel. vert. std. dev.	0.090	0.090	0.090	0.094	0.106	0.107	0.127	[m/s]

C Y C L E S L I P S A N D D E L E T E D O B S E R V A T I O N S

Observable used: IF Phas

Sat	#obs avbl	%obs del	#L1 slips	#L2 slips
G01	1590	0.00	0	0
G03	7422	0.00	0	1
G06	8025	0.00	0	0
G07	5759	0.00	0	0
G10	5163	0.00	1	2
G13	8873	0.00	1	2
G14	3294	0.00	1	3
G16	10463	0.00	0	0
G19	3276	0.00	0	2
G20	10463	0.00	0	0
G23	10463	0.00	0	0
G25	566	0.00	0	0
G29	4414	0.00	3	6
G30	10463	0.00	0	0
G31	8855	0.00	1	1
G32	9917	0.00	0	0
TOT	109006	0.00	7	17
Si			0.23	0.56

Observable used: IF Code

Sat	#obs avbl	%obs del
G01	1590	0.00
G03	7422	0.00
G06	8025	0.00
G07	5759	0.00
G10	5167	0.00
G13	8874	0.00
G14	3294	0.00
G16	10463	0.00
G19	3276	0.00
G20	10463	0.00
G23	10463	0.00
G25	566	0.00
G29	4414	0.00
G30	10463	0.00
G31	8855	0.00
G32	9917	0.00
TOT	109011	0.00

Observable used: L1 Dopp

Sat	#obs avbl	%obs del
G01	1590	0.00
G03	7423	0.00
G06	8025	0.00
G07	5765	0.00
G10	5174	0.00
G13	8883	0.00
G14	3303	0.00
G16	10463	0.00
G19	3278	0.00
G20	10463	0.00
G23	10463	0.00
G25	566	0.00
G29	4428	0.00
G30	10463	0.00
G31	8855	0.00
G32	9917	0.00
TOT	109059	0.00

S O F T W A R E V E R S I O N

TerraPOS version: 2.0.4 (1851)

N A V I G A T I O N F I L E S U M M A R Y 030112_171335

First record : 2012 03 01 17 16 08.5
Last record : 2012 03 01 20 44 51.0
Average time increment : 1.000 s (1.0 Hz)
No. recs. with valid pos. : 12524
No. recs. with valid vel. : 12524
No. recs. with valid att. : 0

N A V I G A T I O N P E R F O R M A N C E S U M M A R Y

	Min.	1%	5%	50%	95%	99%	Max.	
Pos. hor. std. dev.	0.014	0.016	0.017	0.018	0.021	0.024	0.027	[m]
Pos. vert. std. dev.	0.023	0.024	0.025	0.027	0.033	0.034	0.035	[m]
Vel. hor. std. dev.	0.044	0.044	0.044	0.048	0.050	0.056	0.079	[m/s]
Vel. vert. std. dev.	0.073	0.074	0.075	0.083	0.094	0.095	0.106	[m/s]

C Y C L E S L I P S A N D D E L E T E D O B S E R V A T I O N S

Observable used: IF Phas

Sat	#obs avbl	%obs del	#L1 slips	#L2 slips
G01	3743	0.00	0	0
G03	7395	0.00	1	1
G06	7735	0.00	0	0
G09	12063	0.00	3	4
G11	6062	0.00	0	0
G12	5367	0.00	20	39
G14	12524	0.00	0	0
G15	6543	0.00	0	0
G18	12524	0.00	0	0
G19	9869	0.00	6	6
G21	9573	0.00	0	0
G22	12524	0.00	0	0
G25	4754	0.00	0	0
G26	163	0.00	0	0
G27	8823	0.00	0	0
G29	720	0.00	4	5
G31	6248	0.00	0	0
G32	2624	0.00	0	0
R05	6385	0.00	0	1

R07	12518	0.00	2	2
R08	6458	0.00	0	0
R09	10037	0.00	1	1
R10	3363	0.00	0	0
R14	966	0.00	1	2
R15	8103	0.00	0	0
R16	12268	0.00	22	23
R20	3491	0.00	5	6
R21	7372	0.00	0	0
R22	10260	0.00	0	0
R23	8621	0.00	8	12
R24	3022	0.00	3	4
TOT	222118	0.00	76	106
Si			1.23	1.72

Observable used: IF Code

Sat	#obs avbl	%obs del
G01	3743	0.00
G03	7396	0.00
G06	7735	0.00
G09	12073	0.00
G11	6062	0.00
G12	5385	0.00
G14	12524	0.00
G15	6543	0.00
G18	12524	0.00
G19	9879	0.00
G21	9573	0.00
G22	12524	0.00
G25	4754	0.00
G26	163	0.00
G27	8823	0.00
G29	725	0.00
G31	6248	0.00
G32	2624	0.00
R05	6385	0.00
R07	12524	0.00
R08	6458	0.00
R09	10042	0.00
R10	3363	0.00
R14	970	0.00
R15	8103	0.00
R16	12354	0.00
R20	3502	0.00
R21	7372	0.00
R22	10260	0.00
R23	8643	0.00
R24	3037	0.00
TOT	222311	0.00

Observable used: L1 Dopp

Sat	#obs avbl	%obs del
G01	3749	0.00
G03	7396	0.00
G06	7735	0.00

G09	12075	0.00
G11	6068	0.00
G12	5518	0.00
G14	12524	0.00
G15	6543	0.00
G18	12524	0.00
G19	9887	0.00
G21	9573	0.00
G22	12524	0.00
G25	4754	0.00
G26	163	0.00
G27	8823	0.00
G29	726	0.00
G31	6248	0.00
G32	2629	0.00
R05	6386	0.00
R07	12524	0.00
R08	6464	0.00
R09	10042	0.00
R10	3363	0.00
R14	972	0.00
R15	8103	0.00
R16	12359	0.00
R20	3508	0.00
R21	7372	0.00
R22	10260	0.00
R23	8652	0.00
R24	3042	0.00
TOT	222506	0.00

S O F T W A R E V E R S I O N

TerraPOS version: 2.0.4 (1851)

N A V I G A T I O N F I L E S U M M A R Y LO11812B

First record : 2012 01 19 01 32 36.7
Last record : 2012 01 19 05 25 52.0
Average time increment : 1.000 s (1.0 Hz)
No. recs. with valid pos. : 13997
No. recs. with valid vel. : 13997
No. recs. with valid att. : 0

N A V I G A T I O N P E R F O R M A N C E S U M M A R Y

	Min.	1%	5%	50%	95%	99%	Max.	
Pos. hor. std. dev.	0.013	0.013	0.014	0.016	0.021	0.022	0.028	[m]
Pos. vert. std. dev.	0.019	0.021	0.022	0.025	0.035	0.037	0.075	[m]
Vel. hor. std. dev.	0.048	0.050	0.050	0.055	0.059	0.060	0.085	[m/s]
Vel. vert. std. dev.	0.081	0.089	0.089	0.096	0.117	0.120	0.138	[m/s]

C Y C L E S L I P S A N D D E L E T E D O B S E R V A T I O N S

Observable used: IF Phas

Sat	#obs avbl	%obs del	#L1 slips	#L2 slips
G01	3104	0.03	2	6
G03	8711	0.00	0	0
G06	9191	0.00	0	0
G07	6221	0.00	0	0
G08	382	0.00	18	5
G10	5561	0.00	1	1
G13	9628	0.03	4	8
G14	5162	0.00	3	3
G16	13997	0.00	1	1
G19	4481	0.00	0	0
G20	13027	0.05	4	3
G22	532	0.00	1	1
G23	13986	0.00	4	5
G25	1972	0.00	1	1
G30	13997	0.09	1	1
G31	10778	0.19	1	3
G32	11512	0.00	1	1
TOT	132242	0.03	42	39

Si 1.14 1.06

Observable used: IF Code

Sat	#obs avbl	%obs del
G01	3104	0.00
G03	8713	0.02
G06	9193	0.02
G07	6221	0.00
G08	382	0.00
G10	5561	0.00
G13	9632	0.05
G14	5162	0.00
G16	13999	0.01
G19	4481	0.00
G20	13028	0.02
G22	532	0.00
G23	13986	0.00
G25	1972	0.00
G30	13997	0.00
G31	10778	0.00
G32	11512	0.00
TOT	132253	0.01

Observable used: L1 Dopp

Sat	#obs avbl	%obs del
G01	3111	0.03
G03	8722	0.00
G06	9202	0.00
G07	6232	0.00
G08	487	0.00
G10	5572	0.00
G13	9663	0.00
G14	5223	0.00
G16	13997	0.00
G19	4492	0.00
G20	13042	0.00
G22	532	0.00
G23	13994	0.00
G25	1972	0.00
G30	13997	0.00
G31	10792	0.00
G32	11512	0.00
TOT	132542	0.00

S O F T W A R E V E R S I O N

TerraPOS version: 2.0.4 (1851)

N A V I G A T I O N F I L E S U M M A R Y 041312_214729

First record : 2012 04 13 21 50 43.0
Last record : 2012 04 14 01 37 40.0
Average time increment : 1.000 s (1.0 Hz)
No. recs. with valid pos. : 13618
No. recs. with valid vel. : 13618
No. recs. with valid att. : 0

N A V I G A T I O N P E R F O R M A N C E S U M M A R Y

	Min.	1%	5%	50%	95%	99%	Max.	
Pos. hor. std. dev.	0.012	0.013	0.013	0.015	0.017	0.019	0.019	[m]
Pos. vert. std. dev.	0.019	0.020	0.021	0.024	0.028	0.034	0.038	[m]
Vel. hor. std. dev.	0.042	0.043	0.043	0.045	0.047	0.048	0.063	[m/s]
Vel. vert. std. dev.	0.077	0.077	0.079	0.082	0.089	0.093	0.099	[m/s]

C Y C L E S L I P S A N D D E L E T E D O B S E R V A T I O N S

Observable used: IF Phas

Sat	#obs avbl	%obs del	#L1 slips	#L2 slips
G01	1794	0.45	0	1
G03	13618	0.06	0	0
G05	1291	0.00	0	1
G06	13608	0.07	1	6
G07	13618	0.08	0	0
G08	8491	0.08	0	0
G10	11415	0.09	0	2
G11	5245	0.23	4	7
G13	13618	0.09	0	0
G16	11926	0.00	2	5
G17	274	0.73	0	0
G19	11925	0.00	0	0
G20	5857	0.00	1	1
G23	13598	0.05	9	9
G26	1515	0.13	3	7
G28	5040	0.00	1	5
G30	7698	0.00	0	0
G31	3016	0.00	0	0
G32	4205	0.00	0	0

R04	4994	0.00	1	1
R05	9267	0.17	0	0
R06	12651	0.00	1	3
R07	8176	0.68	0	3
R08	1610	0.00	1	2
R09	6058	0.12	0	0
R14	7537	0.21	3	3
R15	13617	0.04	0	1
R16	13618	0.16	0	0
R17	13167	0.13	3	5
R18	9266	0.32	0	0
R19	4700	0.26	0	0
R23	3132	0.00	3	5
R24	8866	0.00	0	1
TOT	264411	0.10	33	68
Si			0.45	0.93

Observable used: IF Code

Sat	#obs avbl	%obs del
G01	1794	0.00
G03	13618	0.00
G05	1291	0.00
G06	13610	0.00
G07	13618	0.00
G08	8491	0.00
G10	11415	0.00
G11	5251	0.00
G13	13618	0.00
G16	11928	0.00
G17	274	0.00
G19	11925	0.00
G20	5857	0.00
G23	13613	0.00
G26	1516	0.00
G28	5040	0.00
G30	7698	0.00
G31	3016	0.00
G32	4205	0.00
R04	4997	0.00
R05	9267	0.00
R06	12655	0.00
R07	8176	0.00
R08	1613	0.00
R09	6058	0.00
R14	7541	0.00
R15	13617	0.00
R16	13618	0.00
R17	13176	0.00
R18	9266	0.00
R19	4700	0.00
R23	3138	0.00
R24	8866	0.00
TOT	264466	0.00

Observable used: L1 Dopp

Sat	#obs avbl	%obs del

G01	1796	0.00
G03	13618	0.00
G05	1298	0.00
G06	13617	0.00
G07	13618	0.00
G08	8498	0.00
G10	11425	0.00
G11	5270	0.00
G13	13618	0.00
G16	11935	0.00
G17	274	0.00
G19	11925	0.00
G20	5869	0.00
G23	13614	0.00
G26	1534	0.00
G28	5053	0.00
G30	7698	0.00
G31	3016	0.00
G32	4205	0.00
R04	4997	0.00
R05	9267	0.00
R06	12656	0.00
R07	8183	0.00
R08	1619	0.00
R09	6063	0.00
R14	7544	0.00
R15	13618	0.00
R16	13618	0.00
R17	13180	0.00
R18	9266	0.00
R19	4700	0.00
R23	3143	0.00
R24	8868	0.00
TOT	264603	0.00

S O F T W A R E V E R S I O N

TerraPOS version: 2.0.4 (1851)

N A V I G A T I O N F I L E S U M M A R Y 041512_193014

First record : 2012 04 15 19 33 45.5
Last record : 2012 04 15 22 24 07.0
Average time increment : 1.000 s (1.0 Hz)
No. recs. with valid pos. : 10223
No. recs. with valid vel. : 10223
No. recs. with valid att. : 0

N A V I G A T I O N P E R F O R M A N C E S U M M A R Y

	Min.	1%	5%	50%	95%	99%	Max.	
Pos. hor. std. dev.	0.014	0.015	0.015	0.017	0.021	0.021	0.024	[m]
Pos. vert. std. dev.	0.021	0.023	0.024	0.025	0.029	0.030	0.037	[m]
Vel. hor. std. dev.	0.043	0.043	0.044	0.049	0.051	0.052	0.063	[m/s]
Vel. vert. std. dev.	0.072	0.078	0.079	0.082	0.092	0.093	0.100	[m/s]

C Y C L E S L I P S A N D D E L E T E D O B S E R V A T I O N S

Observable used: IF Phas

Sat	#obs avbl	%obs del	#L1 slips	#L2 slips
G01	3967	0.00	5	7
G03	5373	0.00	0	1
G06	5958	0.00	0	0
G07	3888	0.00	0	0
G10	2655	0.00	2	3
G11	896	0.00	3	5
G13	6490	0.00	0	0
G14	4992	0.00	1	3
G16	10223	0.00	0	0
G19	1020	0.00	1	1
G20	10223	0.00	0	0
G22	962	0.00	0	2
G23	10223	0.00	0	0
G25	2556	0.00	0	0
G29	1423	0.00	0	0
G30	10223	0.00	0	0
G31	10221	0.00	0	1
G32	10223	0.00	0	0
R04	1898	0.00	3	4

R05	7809	0.00	0	0
R06	10223	0.00	0	0
R07	9134	0.00	2	2
R08	2800	0.00	2	2
R09	10223	0.00	0	0
R10	3982	0.00	4	5
R15	7956	0.00	1	2
R16	10223	0.00	0	0
R17	6315	0.00	4	4
R18	4756	0.00	2	2
R19	2080	0.00	2	4
TOT	178915	0.00	32	48
Si			0.64	0.97

Observable used: IF Code

Sat	#obs avbl	%obs del
G01	3975	0.00
G03	5373	0.00
G06	5958	0.00
G07	3888	0.00
G10	2657	0.00
G11	899	0.00
G13	6490	0.00
G14	4992	0.00
G16	10223	0.00
G19	1022	0.00
G20	10223	0.00
G22	962	0.00
G23	10223	0.00
G25	2556	0.00
G29	1423	0.00
G30	10223	0.00
G31	10221	0.00
G32	10223	0.00
R04	1908	0.00
R05	7809	0.00
R06	10223	0.00
R07	9138	0.00
R08	2805	0.00
R09	10223	0.00
R10	3993	0.00
R15	7958	0.00
R16	10223	0.00
R17	6325	0.00
R18	4757	0.00
R19	2088	0.00
TOT	178981	0.00

Observable used: L1 Dopp

Sat	#obs avbl	%obs del
G01	3981	0.00
G03	5374	0.00
G06	5958	0.00
G07	3895	0.00
G10	2666	0.00

G11	908	0.00
G13	6496	0.00
G14	4997	0.00
G16	10223	0.00
G19	1022	0.00
G20	10223	0.00
G22	976	0.00
G23	10223	0.00
G25	2556	0.00
G29	1428	0.00
G30	10223	0.00
G31	10223	0.00
G32	10223	0.00
R04	1908	0.00
R05	7809	0.00
R06	10223	0.00
R07	9143	0.00
R08	2809	0.00
R09	10223	0.00
R10	3998	0.00
R15	7962	0.00
R16	10223	0.00
R17	6329	0.00
R18	4768	0.00
R19	2089	0.00
TOT	179079	0.00

S O F T W A R E V E R S I O N

TerraPOS version: 2.0.4 (1851)

N A V I G A T I O N F I L E S U M M A R Y 041612_131454

First record : 2012 04 16 13 18 26.5
Last record : 2012 04 16 18 03 37.0
Average time increment : 1.000 s (1.0 Hz)
No. recs. with valid pos. : 17112
No. recs. with valid vel. : 17112
No. recs. with valid att. : 0

N A V I G A T I O N P E R F O R M A N C E S U M M A R Y

	Min.	1%	5%	50%	95%	99%	Max.	
Pos. hor. std. dev.	0.013	0.014	0.015	0.017	0.020	0.021	0.022	[m]
Pos. vert. std. dev.	0.019	0.021	0.022	0.025	0.033	0.034	0.035	[m]
Vel. hor. std. dev.	0.043	0.044	0.044	0.046	0.051	0.052	0.067	[m/s]
Vel. vert. std. dev.	0.069	0.074	0.075	0.081	0.093	0.094	0.100	[m/s]

C Y C L E S L I P S A N D D E L E T E D O B S E R V A T I O N S

Observable used: IF Phas

Sat	#obs avbl	%obs del	#L1 slips	#L2 slips
G01	5248	0.00	0	0
G03	10961	0.00	0	0
G06	11363	0.00	2	7
G09	13905	0.00	0	0
G11	7720	0.00	1	2
G12	6879	0.00	0	0
G14	16185	0.00	1	8
G15	9575	0.00	0	0
G18	17042	0.00	15	20
G19	10556	0.00	0	1
G21	12708	0.00	0	0
G22	17112	0.00	0	0
G25	6231	0.00	0	1
G26	2845	0.00	0	0
G27	11340	0.00	2	2
G29	3761	0.00	0	1
G30	408	0.00	0	1
G31	8160	0.00	0	0
G32	4347	0.00	0	2

R02	1226	0.00	1	2
R03	9160	0.00	0	1
R04	17071	0.00	6	8
R05	16767	0.04	3	5
R06	8096	0.00	0	0
R07	450	0.00	2	2
R09	1604	0.00	1	1
R12	3855	0.00	0	0
R13	10065	0.00	3	4
R14	14259	0.00	7	11
R15	11218	0.00	4	4
R16	6976	0.00	0	0
R17	1304	0.00	1	1
R18	6530	0.00	0	0
R19	10817	0.00	0	0
R20	13336	0.00	11	12
R21	9709	0.00	2	4
R22	4033	0.00	2	7
TOT	322822	0.00	64	107
Si			0.71	1.19

Observable used: IF Code

Sat	#obs avbl	%obs del
G01	5248	0.00
G03	10961	0.00
G06	11367	0.00
G09	13905	0.00
G11	7723	0.00
G12	6879	0.00
G14	16185	0.00
G15	9575	0.00
G18	17025	0.04
G19	10556	0.00
G21	12708	0.00
G22	17112	0.00
G25	6231	0.00
G26	2845	0.00
G27	11344	0.00
G29	3761	0.00
G30	408	0.00
G31	8160	0.00
G32	4347	0.00
R02	1228	0.00
R03	9160	0.00
R04	17088	0.00
R05	16781	0.00
R06	8096	0.00
R07	456	0.00
R09	1608	0.00
R12	3855	0.00
R13	10069	0.00
R14	14280	0.00
R15	11231	0.00
R16	6976	0.00
R17	1304	0.00
R18	6530	0.00
R19	10817	0.00
R20	13369	0.00
R21	9715	0.00

Sat	#obs avbl	%obs del
R22	4037	0.00
TOT	322940	0.00

Observable used: L1 Dopp

Sat	#obs avbl	%obs del
G01	5255	0.00
G03	10961	0.00
G06	11386	0.00
G09	13905	0.00
G11	7734	0.00
G12	6884	0.00
G14	16202	0.00
G15	9575	0.00
G18	17102	0.00
G19	10564	0.00
G21	12708	0.00
G22	17112	0.00
G25	6234	0.00
G26	2845	0.00
G27	11348	0.00
G29	3763	0.00
G30	409	0.00
G31	8160	0.00
G32	4355	0.00
R02	1231	0.00
R03	9162	0.00
R04	17094	0.00
R05	16788	0.00
R06	8100	0.00
R07	460	0.00
R09	1608	0.00
R12	3855	0.00
R13	10070	0.00
R14	14287	0.00
R15	11236	0.00
R16	6976	0.00
R17	1310	0.08
R18	6530	0.00
R19	10817	0.00
R20	13380	0.00
R21	9724	0.00
R22	4051	0.00
TOT	323181	0.00

S O F T W A R E V E R S I O N

TerraPOS version: 2.0.4 (1851)

N A V I G A T I O N F I L E S U M M A R Y 041712_142856

First record : 2012 04 17 14 32 09.0
Last record : 2012 04 17 17 21 20.0
Average time increment : 1.062 s (0.9 Hz)
No. recs. with valid pos. : 9556
No. recs. with valid vel. : 9556
No. recs. with valid att. : 0

N A V I G A T I O N P E R F O R M A N C E S U M M A R Y

	Min.	1%	5%	50%	95%	99%	Max.	
Pos. hor. std. dev.	0.012	0.013	0.013	0.015	0.017	0.018	0.018	[m]
Pos. vert. std. dev.	0.017	0.017	0.018	0.021	0.029	0.030	0.031	[m]
Vel. hor. std. dev.	0.042	0.043	0.044	0.046	0.052	0.055	0.070	[m/s]
Vel. vert. std. dev.	0.075	0.076	0.076	0.081	0.092	0.100	0.114	[m/s]

C Y C L E S L I P S A N D D E L E T E D O B S E R V A T I O N S

Observable used: IF Phas

Sat	#obs avbl	%obs del	#L1 slips	#L2 slips
G01	3059	6.08	0	0
G03	6213	5.01	2	4
G06	6580	5.55	1	3
G09	9226	5.80	0	3
G11	5441	6.18	0	0
G12	4635	6.30	2	3
G14	10152	5.87	0	0
G15	4922	5.26	0	0
G18	10152	5.87	0	0
G19	9694	5.65	2	3
G21	8131	5.72	1	1
G22	10152	5.87	0	0
G25	3964	6.46	0	0
G27	6822	5.41	0	0
G31	5786	6.43	0	0
G32	1981	5.65	0	2
R04	4553	5.18	0	0
R05	10146	5.84	2	2
R06	10152	5.58	0	0

R07	5930	5.43	1	3
R09	4748	6.47	0	0
R14	5167	4.70	1	1
R15	10152	5.87	0	0
R16	9289	98.98	3	5
R19	1689	3.08	2	3
R20	6241	5.11	5	7
R21	9510	5.32	1	2
R22	8150	5.15	2	5
R23	1347	3.79	9	11
TOT	193984	10.10	34	58
Si			0.63	1.08

Observable used: IF Code

Sat	#obs avbl	%obs del
G01	3059	0.00
G03	6213	0.00
G06	6580	0.00
G09	9226	0.00
G11	5441	0.00
G12	4637	0.00
G14	10152	0.00
G15	4922	0.00
G18	10152	0.00
G19	9696	0.00
G21	8135	0.00
G22	10152	0.00
G25	3964	0.00
G27	6822	0.00
G31	5786	0.00
G32	1981	0.00
R04	4553	0.00
R05	10152	0.00
R06	10152	0.00
R07	5935	0.00
R09	4748	0.00
R14	5171	0.00
R15	10152	0.00
R16	697	85.51
R19	1698	0.00
R20	6257	0.00
R21	9510	0.00
R22	8156	0.00
R23	1372	0.00
TOT	185471	0.32

Observable used: L1 Dopp

Sat	#obs avbl	%obs del
G01	3066	0.00
G03	6218	0.00
G06	6589	0.00
G09	9232	0.00
G11	5448	0.00
G12	4652	0.00
G14	10152	0.00

G15	4922	0.00
G18	10152	0.00
G19	9699	0.00
G21	8135	0.00
G22	10152	0.00
G25	3964	0.00
G27	6822	0.00
G31	5786	0.00
G32	1998	0.00
R04	4553	0.00
R05	10152	0.00
R06	10152	0.00
R07	5940	0.00
R09	4749	0.00
R14	5171	0.00
R15	10152	0.00
R16	9305	0.00
R19	1700	0.00
R20	6258	0.00
R21	9511	0.00
R22	8163	0.00
R23	1384	0.00
TOT	194177	0.00

S O F T W A R E V E R S I O N

TerraPOS version: 2.0.4 (1851)

N A V I G A T I O N F I L E S U M M A R Y 041812_155622

First record : 2012 04 18 16 00 05.0
Last record : 2012 04 18 18 36 11.0
Average time increment : 1.000 s (1.0 Hz)
No. recs. with valid pos. : 9367
No. recs. with valid vel. : 9367
No. recs. with valid att. : 0

N A V I G A T I O N P E R F O R M A N C E S U M M A R Y

	Min.	1%	5%	50%	95%	99%	Max.	
Pos. hor. std. dev.	0.013	0.014	0.014	0.015	0.018	0.018	0.019	[m]
Pos. vert. std. dev.	0.018	0.019	0.019	0.023	0.026	0.029	0.031	[m]
Vel. hor. std. dev.	0.046	0.046	0.046	0.048	0.051	0.052	0.064	[m/s]
Vel. vert. std. dev.	0.074	0.074	0.075	0.080	0.086	0.086	0.105	[m/s]

C Y C L E S L I P S A N D D E L E T E D O B S E R V A T I O N S

Observable used: IF Phas

Sat	#obs avbl	%obs del	#L1 slips	#L2 slips
G01	7826	0.00	5	9
G03	396	0.00	0	0
G06	755	0.00	3	4
G09	4074	0.00	0	1
G11	9364	0.00	1	1
G12	9076	0.00	0	0
G14	9367	0.00	0	0
G18	7044	0.00	2	4
G19	3628	0.00	3	5
G20	2379	0.00	1	3
G21	2393	0.00	1	3
G22	9367	0.00	0	0
G25	8642	0.00	0	1
G27	1593	0.00	1	3
G30	2540	0.00	0	1
G31	9367	0.00	0	0
G32	6712	0.00	0	1
R01	2779	0.00	2	2
R06	7305	0.00	4	5

R07	9367	0.00	0	0
R08	9361	0.00	2	2
R09	9367	0.00	0	0
R10	9356	0.00	3	4
R11	4051	0.00	4	4
R15	644	0.00	13	20
R16	6314	0.00	3	4
R21	336	0.00	0	0
R22	3557	0.00	3	4
R23	5946	0.00	0	0
R24	4597	0.00	12	15
TOT	167503	0.00	63	96
Si			1.35	2.06

Observable used: IF Code

Sat	#obs avbl	%obs del
G01	7827	0.00
G03	396	0.00
G06	760	0.00
G09	4074	0.00
G11	9364	0.00
G12	9076	0.00
G14	9367	0.00
G18	7045	0.00
G19	3631	0.00
G20	2381	0.00
G21	2393	0.00
G22	9367	0.00
G25	8642	0.00
G27	1597	0.00
G30	2540	0.00
G31	9367	0.00
G32	6712	0.00
R01	2781	0.00
R06	7317	0.00
R07	9367	0.00
R08	9366	0.00
R09	9367	0.00
R10	9357	0.00
R11	4058	0.00
R15	686	0.00
R16	6324	0.00
R21	336	0.00
R22	3572	0.00
R23	5946	0.00
R24	4631	0.00
TOT	167647	0.00

Observable used: L1 Dopp

Sat	#obs avbl	%obs del
G01	7861	0.00
G03	396	0.00
G06	764	0.00
G09	4076	0.00
G11	9365	0.00

G12	9076	0.00
G14	9367	0.00
G18	7055	0.00
G19	3645	0.00
G20	2392	0.00
G21	2398	0.00
G22	9367	0.00
G25	8648	0.00
G27	1610	0.00
G30	2541	0.00
G31	9367	0.00
G32	6719	0.00
R01	2792	0.00
R06	7317	0.00
R07	9367	0.00
R08	9366	0.00
R09	9367	0.00
R10	9363	0.00
R11	4063	0.00
R15	700	0.00
R16	6324	0.00
R21	336	0.00
R22	3575	0.00
R23	5946	0.00
R24	4643	0.00
TOT	167806	0.00

S O F T W A R E V E R S I O N

TerraPOS version: 2.0.99b2 (1972)

N A V I G A T I O N F I L E S U M M A R Y KAS01712A

First record : 2012 01 17 22 17 56.0
Last record : 2012 01 18 01 09 11.0
Average time increment : 1.000 s (1.0 Hz)
No. recs. with valid pos. : 10276
No. recs. with valid vel. : 10276
No. recs. with valid att. : 0

N A V I G A T I O N P E R F O R M A N C E S U M M A R Y

		Min.	1%	5%	50%	95%	99%	Max.	
Pos. hor.	std. dev.	0.013	0.014	0.014	0.015	0.017	0.018	0.019	[m]
Pos. vert.	std. dev.	0.017	0.018	0.019	0.023	0.026	0.027	0.033	[m]
Vel. hor.	std. dev.	0.083	0.085	0.085	0.085	0.086	0.086	0.257	[m/s]
Vel. vert.	std. dev.	0.171	0.171	0.171	0.172	0.173	0.173	0.654	[m/s]

G N S S G E O M E T R Y S U M M A R Y

	Min.	1%	5%	50%	95%	99%	Max.
PDOP	1.013	1.015	1.018	1.146	1.312	1.343	1.492
HDOP	0.785	0.786	0.789	0.957	1.119	1.153	1.232
VDOP	0.555	0.558	0.569	0.650	0.703	0.716	0.880
#GPS	8	9	9	10	11	12	12
#GLO	5	6	6	8	9	9	9
#TOT	14	15	15	17	20	20	20

C Y C L E S L I P S A N D D E L E T E D O B S E R V A T I O N S

Observable used: IF Phas

Sat	#obs avbl	%obs del	#L1 slips	#L2 slips
G01	8564	0.01	6	4
G03	182	0.00	0	0
G06	542	1.66	6	4
G09	4148	0.00	1	2
G11	10270	0.08	2	3

G12	8438	0.01	27	8
G14	10275	0.06	0	1
G18	6933	0.09	0	0
G19	3599	0.14	1	2
G20	3868	0.00	2	2
G21	2506	0.08	6	4
G22	10276	0.00	0	0
G25	8986	0.01	23	4
G27	1382	0.00	5	5
G30	3203	0.00	0	0
G31	10276	0.00	0	0
G32	8040	0.00	1	3
R02	7290	0.14	0	1
R03	10276	0.11	0	0
R04	10272	0.00	0	2
R05	3969	0.00	1	3
R12	5951	0.00	0	0
R13	10244	0.00	0	24
R14	10276	0.10	0	0
R15	4297	0.26	1	1
R17	148	0.00	0	0
R18	3467	0.03	1	9
R19	5927	0.00	0	1
R20	4569	0.81	2	3
TOT	178174	0.07	85	86
Si			1.72	1.74

Observable used: IF Code

Sat	#obs avbl	%obs del
G01	8570	0.00
G03	182	0.00
G06	548	0.00
G09	4148	0.00
G11	10218	0.05
G12	8441	0.00
G14	10275	0.00
G18	6933	0.00
G19	3484	0.29
G20	3868	0.00
G21	2507	0.00
G22	10276	0.00
G25	8986	0.00
G27	1390	0.00
G30	3203	0.00
G31	10276	0.00
G32	8040	0.00
R02	7290	0.00
R03	10276	0.00
R04	10276	0.00
R05	3970	0.00
R12	5951	0.00
R13	10269	0.00
R14	10276	0.00
R15	4297	0.00
R17	148	0.00
R18	3483	0.00
R19	5927	0.00
R20	4569	0.00

TOT	178077	0.01

S O F T W A R E V E R S I O N

TerraPOS version: 2.0.4 (1851)

N A V I G A T I O N F I L E S U M M A R Y KAS011812A

First record : 2012 01 18 02 24 06.2
Last record : 2012 01 18 05 52 10.0
Average time increment : 1.000 s (1.0 Hz)
No. recs. with valid pos. : 12485
No. recs. with valid vel. : 12485
No. recs. with valid att. : 0

N A V I G A T I O N P E R F O R M A N C E S U M M A R Y

	Min.	1%	5%	50%	95%	99%	Max.	
Pos. hor. std. dev.	0.012	0.012	0.012	0.014	0.017	0.018	0.019	[m]
Pos. vert. std. dev.	0.018	0.019	0.019	0.022	0.025	0.026	0.031	[m]
Vel. hor. std. dev.	0.083	0.084	0.084	0.085	0.086	0.086	0.246	[m/s]
Vel. vert. std. dev.	0.171	0.171	0.171	0.172	0.173	0.173	0.495	[m/s]

C Y C L E S L I P S A N D D E L E T E D O B S E R V A T I O N S

Observable used: IF Phas

Sat	#obs avbl	%obs del	#L1 slips	#L2 slips
G01	794	0.00	0	0
G03	10384	0.00	1	1
G06	10954	0.10	1	13
G07	8254	0.01	1	1
G08	2644	0.00	1	1
G10	7834	0.06	1	1
G13	11480	0.00	5	5
G14	2684	0.00	1	1
G16	12485	0.03	0	2
G19	5974	0.00	1	1
G20	10641	0.02	1	1
G23	12485	0.00	0	0
G29	4526	0.00	1	1
G30	12476	0.01	1	1
G31	8478	0.00	0	0
G32	8880	0.01	5	5
R04	4709	0.00	0	0
R05	9803	0.00	0	0
R06	12485	0.00	0	0

R07	8305	0.00	1	12
R08	1709	0.00	2	4
R09	8435	0.00	1	3
R10	247	0.00	0	3
R14	4223	0.00	0	0
R15	12476	0.00	1	5
R16	12483	0.00	0	3
R17	9776	0.00	2	10
R18	7111	0.01	1	36
R19	3249	0.00	1	1
R24	7188	0.00	1	2
TOT	233172	0.01	30	113
Si			0.46	1.74

Observable used: IF Code

Sat	#obs avbl	%obs del
G01	794	0.00
G03	10384	0.00
G06	10954	0.00
G07	8254	0.00
G08	2644	0.00
G10	7834	0.00
G13	11480	0.00
G14	2685	0.00
G16	12485	0.00
G19	5974	0.00
G20	10642	0.00
G23	12485	0.00
G29	4526	0.00
G30	12477	0.00
G31	8478	0.00
G32	8888	0.00
R04	4709	0.00
R05	9803	0.00
R06	12485	0.00
R07	8316	0.00
R08	1711	0.00
R09	8438	0.00
R10	248	0.00
R14	4223	0.00
R15	12480	0.00
R16	12485	0.00
R17	9783	0.00
R18	7146	0.00
R19	3250	0.00
R24	7204	0.00
TOT	233265	0.00

S O F T W A R E V E R S I O N

TerraPOS version: 2.0.4 (1851)

N A V I G A T I O N F I L E S U M M A R Y KAS011812B

First record : 2012 01 18 18 00 34.0
Last record : 2012 01 18 23 47 26.0
Average time increment : 1.000 s (1.0 Hz)
No. recs. with valid pos. : 20813
No. recs. with valid vel. : 20813
No. recs. with valid att. : 0

N A V I G A T I O N P E R F O R M A N C E S U M M A R Y

	Min.	1%	5%	50%	95%	99%	Max.	
Pos. hor. std. dev.	0.013	0.014	0.014	0.015	0.020	0.022	0.022	[m]
Pos. vert. std. dev.	0.017	0.018	0.019	0.023	0.030	0.036	0.045	[m]
Vel. hor. std. dev.	0.083	0.085	0.085	0.085	0.087	0.088	0.259	[m/s]
Vel. vert. std. dev.	0.171	0.171	0.171	0.172	0.174	0.176	0.658	[m/s]

C Y C L E S L I P S A N D D E L E T E D O B S E R V A T I O N S

Observable used: IF Phas

Sat	#obs avbl	%obs del	#L1 slips	#L2 slips
G01	4010	0.00	0	0
G02	603	0.00	2	3
G03	12003	0.00	6	5
G05	4848	0.00	5	5
G06	13965	0.00	7	8
G09	16083	0.01	2	2
G11	6351	0.00	1	1
G12	5949	0.00	3	5
G14	13905	0.00	3	5
G15	14236	0.13	3	26
G16	3658	0.27	5	5
G18	20493	0.06	5	7
G19	10726	0.00	9	12
G21	17057	0.00	14	25
G22	18618	0.02	4	9
G25	5210	0.00	1	1
G26	8198	0.00	2	3
G27	14708	0.00	17	14
G29	8571	0.00	0	4

G30	1969	0.00	1	1
G31	6320	0.00	1	1
G32	3350	0.00	2	3
R01	6092	0.00	0	2
R02	14723	0.00	1	3
R03	20494	0.00	3	33
R04	15338	0.00	2	3
R05	6804	0.00	1	1
R11	7318	0.00	3	10
R12	11327	0.00	1	1
R13	14180	0.00	2	18
R14	10671	0.00	1	1
R15	5149	0.00	1	3
R16	292	0.00	1	1
R17	11000	0.00	1	13
R18	15328	0.00	2	8
R19	13245	0.00	1	21
R20	8931	0.00	3	6
R21	3249	0.00	1	4
R23	133	0.00	1	15
R24	5737	0.00	0	1
TOT	380842	0.01	118	289
Si			1.12	2.73

Observable used: IF Code

Sat	#obs avbl	%obs del
G01	4010	0.00
G02	608	0.00
G03	12003	0.00
G05	4848	0.00
G06	13967	0.00
G09	16083	0.00
G11	6351	0.00
G12	5949	0.00
G14	13906	0.00
G15	14236	0.00
G16	3658	0.00
G18	20493	0.00
G19	10727	0.00
G21	17068	0.00
G22	18618	0.00
G25	5210	0.00
G26	8199	0.00
G27	14715	0.00
G29	8571	0.00
G30	1969	0.00
G31	6320	0.00
G32	3351	0.00
R01	6094	0.00
R02	14726	0.00
R03	20534	0.00
R04	15339	0.00
R05	6805	0.00
R11	7320	0.00
R12	11328	0.00
R13	14194	0.00
R14	10671	0.00
R15	5151	0.00
R16	292	0.00

R17	11022	0.00
R18	15334	0.00
R19	13272	0.00
R20	8935	0.00
R21	3252	0.00
R23	139	0.00
R24	5739	0.00
TOT	381007	0.00

S O F T W A R E V E R S I O N

TerraPOS version: 2.0.4 (1851)

N A V I G A T I O N F I L E S U M M A R Y KAS011912A

First record : 2012 01 20 03 00 17.0
Last record : 2012 01 20 06 57 23.0
Average time increment : 1.000 s (1.0 Hz)
No. recs. with valid pos. : 14227
No. recs. with valid vel. : 14227
No. recs. with valid att. : 0

N A V I G A T I O N P E R F O R M A N C E S U M M A R Y

	Min.	1%	5%	50%	95%	99%	Max.	
Pos. hor. std. dev.	0.012	0.012	0.013	0.014	0.016	0.016	0.018	[m]
Pos. vert. std. dev.	0.018	0.019	0.020	0.022	0.025	0.029	0.034	[m]
Vel. hor. std. dev.	0.075	0.084	0.084	0.085	0.085	0.086	0.258	[m/s]
Vel. vert. std. dev.	0.152	0.171	0.172	0.172	0.173	0.174	0.655	[m/s]

C Y C L E S L I P S A N D D E L E T E D O B S E R V A T I O N S

Observable used: IF Phas

Sat	#obs avbl	%obs del	#L1 slips	#L2 slips
G01	153	0.00	2	4
G03	14222	0.02	0	1
G06	14169	0.06	0	23
G07	12566	0.03	0	6
G08	6965	0.00	1	1
G10	11597	0.00	0	0
G11	3371	0.00	1	1
G13	14227	0.00	0	0
G14	170	0.00	0	0
G16	14226	0.00	1	1
G19	10421	0.00	1	1
G20	7909	0.08	0	0
G23	14227	0.00	0	0
G28	3401	0.00	1	1
G29	1806	0.22	4	4
G30	10390	0.00	0	0
G31	5901	0.00	0	0
G32	6213	0.03	7	8
R01	12197	0.04	10	85

R02	6287	0.00	1	2
R03	138	0.00	1	1
R06	2145	0.00	0	0
R07	7121	0.00	0	0
R08	11420	0.00	0	1
R09	10117	0.00	1	3
R10	14225	0.00	0	1
R11	12990	0.01	3	10
R12	4433	0.00	0	1
R16	1950	0.00	2	2
R18	5272	0.00	0	0
R19	11233	0.00	0	4
R20	11196	0.00	2	45
R21	7788	0.00	1	1
R22	3048	0.00	1	1
TOT	273494	0.01	40	208
Si			0.53	2.74

Observable used: IF Code

Sat	#obs avbl	%obs del
G01	154	0.00
G03	14222	0.00
G06	14169	0.00
G07	12566	0.00
G08	6965	0.00
G10	11597	0.00
G11	3371	0.00
G13	14227	0.00
G14	170	0.00
G16	14227	0.00
G19	10421	0.00
G20	7909	0.00
G23	14227	0.00
G28	3401	0.00
G29	1807	0.00
G30	10390	0.00
G31	5901	0.00
G32	6226	0.00
R01	12262	0.00
R02	6288	0.00
R03	138	0.00
R06	2145	0.00
R07	7122	0.00
R08	11420	0.00
R09	10122	0.00
R10	14227	0.00
R11	12997	0.00
R12	4434	0.00
R16	1952	0.00
R18	5272	0.00
R19	11236	0.00
R20	11217	0.00
R21	7788	0.00
R22	3048	0.00
TOT	273618	0.00

S O F T W A R E V E R S I O N

TerraPOS version: 2.0.4 (1851)

N A V I G A T I O N F I L E S U M M A R Y KAS011912B

First record : 2012 01 19 19 00 24.0
Last record : 2012 01 19 23 54 11.0
Average time increment : 1.000 s (1.0 Hz)
No. recs. with valid pos. : 17628
No. recs. with valid vel. : 17628
No. recs. with valid att. : 0

N A V I G A T I O N P E R F O R M A N C E S U M M A R Y

	Min.	1%	5%	50%	95%	99%	Max.	
Pos. hor. std. dev.	0.013	0.013	0.013	0.015	0.017	0.018	0.019	[m]
Pos. vert. std. dev.	0.016	0.017	0.018	0.022	0.029	0.030	0.032	[m]
Vel. hor. std. dev.	0.083	0.085	0.085	0.085	0.086	0.086	0.257	[m/s]
Vel. vert. std. dev.	0.171	0.171	0.171	0.172	0.174	0.174	0.654	[m/s]

C Y C L E S L I P S A N D D E L E T E D O B S E R V A T I O N S

Observable used: IF Phas

Sat	#obs avbl	%obs del	#L1 slips	#L2 slips
G01	4673	0.00	1	1
G03	11402	0.00	1	1
G05	1045	0.00	0	2
G06	11861	0.00	0	2
G09	15521	0.03	0	0
G11	7126	0.00	2	3
G12	6527	0.00	4	6
G14	14879	0.00	1	1
G15	10455	0.00	0	0
G18	17266	0.01	2	4
G19	10615	0.00	3	5
G21	13217	0.00	43	3
G22	17617	0.00	0	4
G25	5750	0.02	3	7
G26	4378	0.00	0	0
G27	12750	0.00	1	2
G29	4737	0.02	0	0
G31	6893	0.00	1	1
G32	4036	0.00	2	3

R02	2613	0.00	0	0
R03	10447	0.00	0	0
R04	17287	0.00	1	4
R05	15879	0.00	1	1
R06	7449	0.00	1	1
R09	900	0.00	4	14
R12	5418	0.00	0	0
R13	11362	0.00	1	2
R14	14440	0.00	8	40
R15	10206	0.00	1	2
R16	6246	0.00	1	1
R17	2146	0.00	0	0
R18	7218	0.00	0	0
R19	11348	0.00	0	0
R20	12945	0.00	1	9
R21	9459	0.00	4	14
R22	3907	0.00	3	9
TOT	330018	0.00	90	142
Si			0.98	1.55

Observable used: IF Code

Sat	#obs avbl	%obs del
G01	4673	0.00
G03	11402	0.00
G05	1045	0.00
G06	11861	0.00
G09	15521	0.00
G11	7126	0.00
G12	6530	0.00
G14	14879	0.00
G15	10455	0.00
G18	17266	0.00
G19	10615	0.00
G21	13220	0.00
G22	17617	0.00
G25	5750	0.00
G26	4378	0.00
G27	12750	0.00
G29	4737	0.00
G31	6893	0.00
G32	4036	0.00
R02	2613	0.00
R03	10447	0.00
R04	17288	0.00
R05	15880	0.00
R06	7450	0.00
R09	906	0.00
R12	5418	0.00
R13	11363	0.00
R14	14453	0.00
R15	10206	0.00
R16	6246	0.00
R17	2146	0.00
R18	7218	0.00
R19	11348	0.00
R20	12955	0.00
R21	9468	0.00
R22	3910	0.00

TOT	330069	0.00

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--------------------------------------------------------------------------------
 S O F T W A R E   V E R S I O N
--------------------------------------------------------------------------------

TerraPOS version: 2.0.4 (1851)

--------------------------------------------------------------------------------
 N A V I G A T I O N   F I L E   S U M M A R Y  KAS012012AB
--------------------------------------------------------------------------------

 First record              : 2012 01 19 01 30 49.0
 Last  record              : 2012 01 19 05 58 48.0
 Average time increment    :  1.000 s  (1.0 Hz)
 No. recs. with valid pos. :  16080
 No. recs. with valid vel. :  16080
 No. recs. with valid att. :      0


--------------------------------------------------------------------------------
 N A V I G A T I O N   P E R F O R M A N C E   S U M M A R Y
--------------------------------------------------------------------------------

                           Min.     1%      5%     50%     95%     99%     Max.
--------------------------------------------------------------------------------
--
Pos. hor.  std. dev.     0.011   0.012   0.013   0.015   0.017   0.018   0.019  [ m
]
Pos. vert. std. dev.     0.018   0.019   0.019   0.022   0.026   0.029   0.034  [ m
]
Vel. hor.  std. dev.     0.084   0.084   0.084   0.085   0.086   0.086   0.260
[m/s]
Vel. vert. std. dev.     0.171   0.171   0.172   0.172   0.173   0.174   0.658
[m/s]



--------------------------------------------------------------------------------
  C Y C L E   S L I P S   A N D   D E L E T E D   O B S E R V A T I O N S
--------------------------------------------------------------------------------

 Observable used: IF Phas

 Sat   #obs avbl   %obs del  #L1 slips  #L2 slips
------------------------------------------------
 G01       3702       0.00          0          0
 G03      11049       0.02          0          7
 G06      11505       0.28          1         34
 G07       8790       0.03          0          0
 G08       3180       0.00          0          0
 G10       8334       0.00          1          3
 G11        539       2.41          6          5
 G13      12225       0.00          1          1
 G14       5724       0.00          1          3
 G16      16075       0.00          0          2
 G19       6750       0.00          0          0
 G20      13633       0.01          3          3
 G22        591       0.00          9          3
 G23      16080       0.00          1          1
 G25       2697       0.07          2          2
 G29       5015       0.00          4          4
 G30      15870       0.00          7         10
 G31      11537       0.00          1          1
 G32      11831       0.03          1          3
```

R01	2382	0.00	2	4
R04	1975	0.00	1	1
R05	7702	0.01	1	12
R06	12748	0.00	1	1
R07	14869	0.00	4	8
R08	8624	0.00	1	2
R09	15930	0.08	6	48
R10	9341	0.00	1	5
R11	779	0.00	3	7
R14	94	0.00	2	2
R15	8477	0.00	1	1
R16	15713	0.00	6	7
R17	7408	0.00	1	1
R18	10191	0.00	1	1
R19	7809	0.00	1	6
R20	3582	0.00	1	3
TOT	292751	0.02	71	191
Si			0.87	2.35

Observable used: IF Code

Sat	#obs avbl	%obs del
G01	3702	0.00
G03	11049	0.00
G06	11505	0.00
G07	8790	0.00
G08	3180	0.00
G10	8334	0.00
G11	549	0.00
G13	12225	0.00
G14	5724	0.00
G16	16075	0.00
G19	6750	0.00
G20	13634	0.00
G22	593	0.00
G23	16080	0.00
G25	2697	0.00
G29	5024	0.00
G30	15878	0.00
G31	11537	0.00
G32	11835	0.00
R01	2385	0.00
R04	1981	0.00
R05	7716	0.00
R06	12749	0.00
R07	14875	0.00
R08	8624	0.00
R09	15939	0.05
R10	9348	0.00
R11	782	0.00
R14	94	0.00
R15	8478	0.00
R16	15722	0.00
R17	7408	0.00
R18	10192	0.00
R19	7814	0.00
R20	3582	0.00
TOT	292850	0.00

S O F T W A R E V E R S I O N

TerraPOS version: 2.0.4 (1851)

N A V I G A T I O N F I L E S U M M A R Y KAS012412A

First record : 2012 01 24 03 46 45.4
Last record : 2012 01 24 08 01 24.0
Average time increment : 1.000 s (1.0 Hz)
No. recs. with valid pos. : 15280
No. recs. with valid vel. : 15280
No. recs. with valid att. : 0

N A V I G A T I O N P E R F O R M A N C E S U M M A R Y

	Min.	1%	5%	50%	95%	99%	Max.	
Pos. hor. std. dev.	0.012	0.013	0.013	0.014	0.017	0.017	0.019	[m]
Pos. vert. std. dev.	0.018	0.019	0.020	0.023	0.027	0.032	0.032	[m]
Vel. hor. std. dev.	0.081	0.084	0.085	0.085	0.086	0.086	0.246	[m/s]
Vel. vert. std. dev.	0.171	0.171	0.172	0.172	0.173	0.175	0.411	[m/s]

C Y C L E S L I P S A N D D E L E T E D O B S E R V A T I O N S

Observable used: IF Phas

Sat	#obs avbl	%obs del	#L1 slips	#L2 slips
G01	4817	0.25	2	8
G03	14104	0.00	0	0
G06	12515	0.00	0	2
G07	15280	0.00	0	0
G08	11739	0.02	4	11
G10	9850	0.00	1	4
G11	8200	0.02	1	11
G13	15218	0.01	7	14
G16	10825	0.00	0	0
G17	3066	0.03	0	0
G19	15275	0.00	0	2
G20	4209	0.00	0	0
G23	12201	0.01	0	0
G26	4596	0.00	0	0
G28	8208	0.04	3	16
G30	6524	0.00	1	1
G31	2053	0.73	1	7
G32	2215	0.14	14	8
R03	3317	0.00	0	0

R04	7537	0.00	0	1
R05	10964	0.00	0	22
R06	9264	0.00	1	2
R07	4507	0.00	1	2
R09	1561	0.00	2	3
R13	6370	0.02	0	2
R14	14121	0.00	0	2
R16	9144	0.00	0	1
R17	12460	0.00	1	2
R18	7697	0.00	1	3
R19	2454	0.00	0	1
R22	1168	0.00	4	11
R23	7534	0.00	0	1
R24	12957	0.00	0	10
TOT	271950	0.02	44	147
Si			0.58	1.95

Observable used: IF Code

Sat	#obs avbl	%obs del
G01	4820	0.00
G03	14104	0.00
G06	12515	0.00
G07	15280	0.00
G08	11739	0.01
G10	9850	0.00
G11	8200	0.00
G13	15224	0.00
G16	10825	0.00
G17	3066	0.00
G19	15275	0.00
G20	4209	0.00
G23	12201	0.00
G26	4596	0.00
G28	8209	0.00
G30	6524	0.00
G31	2053	0.00
G32	2232	0.00
R03	3317	0.00
R04	7539	0.00
R05	10987	0.00
R06	9264	0.00
R07	4507	0.00
R09	1563	0.00
R13	6371	0.00
R14	14122	0.00
R16	9145	0.00
R17	12460	0.00
R18	7699	0.00
R19	2455	0.00
R22	1170	0.00
R23	7534	0.00
R24	12966	0.00
TOT	272021	0.00

S O F T W A R E V E R S I O N

TerraPOS version: 2.0.4 (1851)

N A V I G A T I O N F I L E S U M M A R Y KAS012412B

First record : 2012 01 24 19 32 15.0
Last record : 2012 01 25 01 13 09.0
Average time increment : 1.000 s (1.0 Hz)
No. recs. with valid pos. : 20455
No. recs. with valid vel. : 20455
No. recs. with valid att. : 0

N A V I G A T I O N P E R F O R M A N C E S U M M A R Y

	Min.	1%	5%	50%	95%	99%	Max.	
Pos. hor. std. dev.	0.012	0.013	0.013	0.015	0.016	0.017	0.020	[m]
Pos. vert. std. dev.	0.017	0.018	0.019	0.023	0.028	0.030	0.032	[m]
Vel. hor. std. dev.	0.083	0.084	0.085	0.085	0.086	0.086	0.259	[m/s]
Vel. vert. std. dev.	0.171	0.171	0.171	0.172	0.174	0.174	0.658	[m/s]

C Y C L E S L I P S A N D D E L E T E D O B S E R V A T I O N S

Observable used: IF Phas

Sat	#obs avbl	%obs del	#L1 slips	#L2 slips
G01	10716	0.15	2	10
G03	8335	0.00	3	4
G06	8616	0.20	7	17
G09	12469	0.01	0	0
G11	13069	0.11	8	4
G12	10061	0.00	3	7
G14	20431	0.00	2	7
G15	7354	0.00	0	0
G16	1626	0.00	2	3
G18	15112	0.00	6	12
G19	10560	0.01	1	2
G20	5814	0.00	3	3
G21	10174	0.00	50	3
G22	20134	0.05	5	3
G23	1527	0.00	2	2
G25	11602	0.00	1	3
G26	695	0.00	32	9
G27	9450	0.01	1	2
G29	1576	0.00	4	3

G30	5187	0.02	1	1
G31	12867	0.00	1	1
G32	10012	0.09	2	4
R01	15254	0.00	0	9
R02	20454	0.06	0	3
R03	13619	0.16	1	2
R04	6004	0.00	1	3
R08	7366	0.00	0	0
R09	1721	0.00	4	7
R10	7980	0.00	0	0
R11	13972	0.00	0	4
R12	17029	0.08	3	5
R13	12364	0.18	1	1
R14	7111	0.25	1	3
R17	11669	0.00	0	1
R18	9653	0.00	1	1
R19	5135	0.00	1	1
R23	3957	0.00	0	0
R24	8154	0.00	0	1
TOT	368829	0.04	149	141
Si			1.45	1.38

Observable used: IF Code

Sat	#obs avbl	%obs del
G01	10716	0.00
G03	8336	0.00
G06	8616	0.00
G09	12469	0.00
G11	13069	0.00
G12	10061	0.00
G14	20435	0.00
G15	7354	0.00
G16	1626	0.00
G18	15112	0.00
G19	10560	0.00
G20	5814	0.00
G21	10175	0.00
G22	20134	0.00
G23	1527	0.00
G25	11602	0.00
G26	709	0.14
G27	9450	0.00
G29	1576	0.00
G30	5187	0.00
G31	12867	0.00
G32	10012	0.00
R01	15256	0.00
R02	20455	0.00
R03	13619	0.00
R04	6004	0.00
R08	7366	0.00
R09	1723	0.00
R10	7980	0.00
R11	13972	0.00
R12	17034	0.00
R13	12364	0.00
R14	7115	0.00
R17	11671	0.00
R18	9653	0.00

R19	5135	0.00
R23	3957	0.00
R24	8155	0.00
TOT	368866	0.00

S O F T W A R E V E R S I O N

TerraPOS version: 2.0.4 (1851)

N A V I G A T I O N F I L E S U M M A R Y KAS012812A

First record : 2012 01 28 18 20 40.0
Last record : 2012 01 28 22 51 00.0
Average time increment : 1.000 s (1.0 Hz)
No. recs. with valid pos. : 16221
No. recs. with valid vel. : 16221
No. recs. with valid att. : 0

N A V I G A T I O N P E R F O R M A N C E S U M M A R Y

	Min.	1%	5%	50%	95%	99%	Max.	
Pos. hor. std. dev.	0.012	0.012	0.013	0.014	0.016	0.017	0.018	[m]
Pos. vert. std. dev.	0.016	0.016	0.017	0.020	0.027	0.028	0.029	[m]
Vel. hor. std. dev.	0.082	0.084	0.085	0.085	0.085	0.086	0.256	[m/s]
Vel. vert. std. dev.	0.171	0.171	0.171	0.172	0.173	0.174	0.653	[m/s]

C Y C L E S L I P S A N D D E L E T E D O B S E R V A T I O N S

Observable used: IF Phas

Sat	#obs avbl	%obs del	#L1 slips	#L2 slips
G01	3236	0.00	4	3
G03	11562	0.03	5	5
G05	1110	0.00	11	4
G06	12022	0.02	1	5
G09	15622	0.17	6	9
G11	5679	0.00	3	5
G12	4855	0.00	4	5
G14	13230	0.00	2	2
G15	10630	0.00	2	0
G18	16205	0.03	1	17
G19	10785	0.00	1	2
G21	13856	0.00	10	10
G22	16220	0.05	0	7
G25	3999	0.00	2	6
G26	4533	0.00	0	0
G27	12992	0.05	0	1
G29	4872	0.06	0	0
G31	5298	0.00	1	1
G32	2538	0.00	1	1

R03	2342	0.00	2	3
R04	10545	0.00	0	0
R05	16197	0.00	0	14
R06	14309	0.00	1	1
R07	6119	0.00	1	1
R09	4709	0.00	1	1
R13	5668	0.00	2	3
R14	11320	0.00	2	2
R16	9086	0.00	1	1
R18	2321	0.00	0	0
R19	7197	0.00	0	0
R20	11714	0.00	0	0
R21	13064	0.00	2	27
R22	8666	0.00	1	1
R23	2449	0.00	2	3
TOT	294950	0.02	69	140
Si			0.84	1.71

Observable used: IF Code

Sat	#obs avbl	%obs del
G01	3236	0.00
G03	11563	0.00
G05	1113	0.00
G06	12022	0.00
G09	15625	0.00
G11	5679	0.00
G12	4856	0.00
G14	13230	0.00
G15	10630	0.00
G18	16205	0.00
G19	10785	0.00
G21	13873	0.00
G22	16220	0.00
G25	3999	0.00
G26	4533	0.00
G27	12992	0.00
G29	4872	0.00
G31	5298	0.00
G32	2538	0.00
R03	2343	0.00
R04	10545	0.00
R05	16219	0.00
R06	14310	0.00
R07	6120	0.00
R09	4710	0.00
R13	5669	0.00
R14	11320	0.00
R16	9086	0.00
R18	2321	0.00
R19	7197	0.00
R20	11714	0.00
R21	13086	0.00
R22	8666	0.00
R23	2450	0.00
TOT	295025	0.00

S O F T W A R E V E R S I O N

TerraPOS version: 2.0.4 (1851)

N A V I G A T I O N F I L E S U M M A R Y KAS012912A

First record : 2012 01 29 00 53 09.2
Last record : 2012 01 29 03 36 07.0
Average time increment : 1.000 s (1.0 Hz)
No. recs. with valid pos. : 9779
No. recs. with valid vel. : 9779
No. recs. with valid att. : 0

N A V I G A T I O N P E R F O R M A N C E S U M M A R Y

		Min.	1%	5%	50%	95%	99%	Max.	
Pos. hor.	std. dev.	0.013	0.014	0.015	0.017	0.020	0.021	0.023	[m]
Pos. vert.	std. dev.	0.020	0.021	0.022	0.024	0.029	0.030	0.035	[m]
Vel. hor.	std. dev.	0.083	0.085	0.085	0.086	0.087	0.088	0.245	[m/s]
Vel. vert.	std. dev.	0.172	0.172	0.172	0.173	0.174	0.174	0.497	[m/s]

C Y C L E S L I P S A N D D E L E T E D O B S E R V A T I O N S

Observable used: IF Phas

Sat	#obs avbl	%obs del	#L1 slips	#L2 slips
G01	3454	0.00	0	0
G03	4758	0.00	5	5
G06	5245	0.02	2	10
G07	2809	0.00	0	0
G10	2427	0.00	2	1
G11	247	0.00	12	8
G13	6294	0.00	1	6
G14	5476	0.02	0	0
G16	9779	0.00	0	0
G19	670	0.00	13	12
G20	9779	0.01	0	0
G22	941	0.00	1	1
G23	9779	0.01	0	0
G25	2544	0.16	0	0
G29	4996	0.00	0	0
G30	9779	0.00	0	0
G31	9779	0.00	0	0
G32	9779	0.03	0	0
R01	8703	0.00	1	1

R02	2439	0.00	2	3
R06	1796	0.00	0	0
R07	7402	0.00	0	1
R08	9779	0.00	0	0
R09	7322	0.00	0	0
R10	9775	0.00	0	2
R11	9777	0.00	0	1
R12	2976	0.00	1	1
R18	575	0.00	1	1
R19	6075	0.00	1	1
R20	4353	0.00	1	1
R21	1708	0.29	1	1
TOT	171215	0.01	44	56
Si			0.93	1.18

Observable used: IF Code

Sat	#obs avbl	%obs del
G01	3454	0.00
G03	4759	0.00
G06	5247	0.00
G07	2809	0.00
G10	2427	0.00
G11	267	0.00
G13	6294	0.00
G14	5476	0.00
G16	9779	0.00
G19	693	0.00
G20	9779	0.00
G22	941	0.00
G23	9779	0.00
G25	2544	0.00
G29	4996	0.00
G30	9779	0.00
G31	9779	0.00
G32	9779	0.00
R01	8703	0.00
R02	2439	0.00
R06	1796	0.00
R07	7402	0.00
R08	9779	0.00
R09	7322	0.00
R10	9778	0.00
R11	9779	0.00
R12	2977	0.00
R18	576	0.00
R19	6076	0.00
R20	4353	0.00
R21	1710	0.00
TOT	171271	0.00

S O F T W A R E V E R S I O N

TerraPOS version: 2.0.4 (1851)

N A V I G A T I O N F I L E S U M M A R Y KAS012912B

First record : 2012 01 29 18 33 30.2
Last record : 2012 01 29 23 31 57.0
Average time increment : 1.000 s (1.0 Hz)
No. recs. with valid pos. : 17908
No. recs. with valid vel. : 17908
No. recs. with valid att. : 0

N A V I G A T I O N P E R F O R M A N C E S U M M A R Y

	Min.	1%	5%	50%	95%	99%	Max.	
Pos. hor. std. dev.	0.014	0.015	0.015	0.017	0.019	0.020	0.023	[m]
Pos. vert. std. dev.	0.019	0.020	0.021	0.025	0.032	0.033	0.035	[m]
Vel. hor. std. dev.	0.077	0.085	0.085	0.086	0.087	0.087	0.247	[m/s]
Vel. vert. std. dev.	0.156	0.172	0.172	0.173	0.175	0.175	0.494	[m/s]

C Y C L E S L I P S A N D D E L E T E D O B S E R V A T I O N S

Observable used: IF Phas

Sat	#obs avbl	%obs del	#L1 slips	#L2 slips
G01	5515	0.02	3	3
G03	10773	0.00	1	2
G05	144	0.00	0	0
G06	11291	0.00	2	2
G09	14430	0.04	0	1
G11	7914	0.00	3	3
G12	7788	0.00	2	2
G14	15969	0.00	0	0
G15	9427	0.00	2	1
G18	17566	0.02	16	30
G19	10886	0.00	1	1
G20	688	0.00	12	14
G21	13066	0.00	6	4
G22	17892	0.12	2	7
G25	7149	0.00	0	0
G26	3554	0.00	0	0
G27	11592	0.02	0	0
G29	3906	0.00	1	1
G30	472	0.00	1	4

G31	8469	0.00	0	0
G32	4875	0.00	1	1
R01	819	0.00	2	10
R04	1292	0.00	5	8
R05	9705	0.00	0	0
R06	17659	0.00	0	6
R07	17121	0.00	1	2
R08	8364	0.00	1	1
R09	12323	0.00	1	2
R10	8033	0.00	1	1
R11	2458	0.00	3	3
R14	4271	0.00	0	0
R16	14437	0.00	1	17
R19	1245	0.00	0	0
R20	6766	0.00	0	0
R21	10751	0.00	0	2
R22	13271	0.00	2	12
R23	9026	0.00	1	1
R24	3612	0.00	9	20
TOT	324519	0.01	80	161
Si			0.89	1.79

Observable used: IF Code

Sat	#obs avbl	%obs del
G01	5518	0.00
G03	10773	0.00
G05	144	0.00
G06	11292	0.00
G09	14430	0.00
G11	7916	0.00
G12	7788	0.00
G14	15969	0.00
G15	9428	0.00
G18	17573	0.00
G19	10886	0.00
G20	707	0.00
G21	13072	0.00
G22	17892	0.01
G25	7149	0.00
G26	3554	0.00
G27	11592	0.00
G29	3906	0.00
G30	472	0.00
G31	8469	0.00
G32	4875	0.00
R01	825	0.00
R04	1297	0.00
R05	9705	0.00
R06	17664	0.00
R07	17123	0.00
R08	8365	0.00
R09	12323	0.00
R10	8033	0.00
R11	2458	0.00
R14	4271	0.00
R16	14453	0.00
R19	1245	0.00
R20	6766	0.00
R21	10752	0.00

R22	13281	0.00
R23	9026	0.00
R24	3626	0.00
TOT	324618	0.00

S O F T W A R E V E R S I O N

TerraPOS version: 2.0.4 (1851)

N A V I G A T I O N F I L E S U M M A R Y KAS01302012A

First record : 2012 01 30 18 48 14.2
Last record : 2012 01 30 22 29 56.0
Average time increment : 1.000 s (1.0 Hz)
No. recs. with valid pos. : 13303
No. recs. with valid vel. : 13303
No. recs. with valid att. : 0

N A V I G A T I O N P E R F O R M A N C E S U M M A R Y

	Min.	1%	5%	50%	95%	99%	Max.	
Pos. hor. std. dev.	0.013	0.014	0.014	0.016	0.017	0.018	0.020	[m]
Pos. vert. std. dev.	0.018	0.019	0.020	0.024	0.030	0.031	0.032	[m]
Vel. hor. std. dev.	0.083	0.085	0.085	0.085	0.086	0.086	0.247	[m/s]
Vel. vert. std. dev.	0.171	0.171	0.172	0.172	0.174	0.174	0.497	[m/s]

C Y C L E S L I P S A N D D E L E T E D O B S E R V A T I O N S

Observable used: IF Phas

Sat	#obs avbl	%obs del	#L1 slips	#L2 slips
G01	2098	0.00	3	2
G03	9622	0.00	2	4
G06	10135	0.00	1	1
G09	13167	0.00	16	13
G11	4406	0.00	3	2
G12	4332	0.00	4	6
G14	12395	0.00	0	2
G15	8326	0.00	2	2
G18	13303	0.00	0	0
G19	10271	0.02	10	9
G21	10745	0.00	12	0
G22	13303	0.00	0	0
G25	3704	0.00	1	1
G26	2219	0.05	0	0
G27	10353	0.16	3	22
G29	3185	0.00	0	0
G31	4964	0.00	1	1
G32	1452	0.00	4	4
R01	4861	0.00	2	5

R05	249	0.00	0	0
R06	8597	0.00	1	3
R07	13273	0.00	2	6
R08	13266	0.00	2	7
R09	12537	0.00	3	10
R10	9152	0.00	3	8
R11	4477	0.00	2	3
R16	9176	0.00	1	5
R17	967	0.00	6	15
R20	313	0.00	2	7
R21	5395	0.00	1	2
R22	9613	0.00	1	2
R23	12718	0.00	5	33
R24	7292	0.00	2	7
TOT	249866	0.01	95	182
Si			1.37	2.62

Observable used: IF Code

Sat	#obs avbl	%obs del
G01	2098	0.00
G03	9622	0.00
G06	10135	0.00
G09	13180	0.00
G11	4406	0.00
G12	4333	0.00
G14	12395	0.00
G15	8326	0.00
G18	13303	0.00
G19	10275	0.00
G21	10745	0.00
G22	13303	0.00
G25	3704	0.00
G26	2219	0.00
G27	10353	0.00
G29	3185	0.00
G31	4964	0.00
G32	1452	0.00
R01	4863	0.00
R05	249	0.00
R06	8602	0.00
R07	13278	0.00
R08	13270	0.00
R09	12545	0.00
R10	9155	0.00
R11	4479	0.00
R16	9179	0.00
R17	977	0.00
R20	318	0.00
R21	5395	0.00
R22	9614	0.00
R23	12748	0.00
R24	7294	0.00
TOT	249964	0.00

S O F T W A R E V E R S I O N

TerraPOS version: 2.0.4 (1851)

N A V I G A T I O N F I L E S U M M A R Y LO11612B

First record : 2012 01 16 20 03 16.2
Last record : 2012 01 16 22 20 06.0
Average time increment : 1.000 s (1.0 Hz)
No. recs. with valid pos. : 8211
No. recs. with valid vel. : 8211
No. recs. with valid att. : 0

N A V I G A T I O N P E R F O R M A N C E S U M M A R Y

	Min.	1%	5%	50%	95%	99%	Max.	
Pos. hor. std. dev.	0.014	0.015	0.016	0.018	0.019	0.020	0.025	[m]
Pos. vert. std. dev.	0.020	0.021	0.023	0.028	0.032	0.033	0.037	[m]
Vel. hor. std. dev.	0.049	0.050	0.050	0.054	0.059	0.059	0.083	[m/s]
Vel. vert. std. dev.	0.084	0.088	0.089	0.098	0.104	0.104	0.112	[m/s]

C Y C L E S L I P S A N D D E L E T E D O B S E R V A T I O N S

Observable used: IF Phas

Sat	#obs avbl	%obs del	#L1 slips	#L2 slips
G03	7814	0.00	26	24
G06	8073	0.00	8	8
G09	8211	0.00	2	2
G11	194	0.00	0	0
G14	8211	0.09	3	3
G15	6605	0.02	1	3
G18	8211	0.00	1	1
G19	6304	0.00	1	8
G21	8211	0.00	3	3
G22	8211	0.00	1	1
G26	503	0.00	1	1
G27	8211	0.00	2	2
G29	1561	0.00	5	6
G31	203	0.00	0	1
TOT	80523	0.01	54	63
Si			2.41	2.82

Observable used: IF Code

Sat	#obs avbl	%obs del
G03	7814	0.00
G06	8073	0.00
G09	8211	0.00
G11	194	0.00
G14	8211	0.00
G15	6605	0.00
G18	8211	0.00
G19	6304	0.00
G21	8213	0.05
G22	8211	0.00
G26	503	0.00
G27	8211	0.00
G29	1561	0.00
G31	203	0.00
TOT	80525	0.00

Observable used: L1 Dopp

Sat	#obs avbl	%obs del
G03	7894	0.00
G06	8193	0.00
G09	8211	0.00
G11	206	0.00
G14	8211	0.00
G15	6623	0.00
G18	8211	0.00
G19	6324	0.00
G21	8211	0.00
G22	8211	0.00
G26	503	0.00
G27	8211	0.00
G29	1582	0.00
G31	206	0.00
TOT	80797	0.00

S O F T W A R E V E R S I O N

TerraPOS version: 2.0.4 (1851)

N A V I G A T I O N F I L E S U M M A R Y L011712A

First record : 2012 01 17 20 59 26.6
Last record : 2012 01 18 00 30 48.0
Average time increment : 1.000 s (1.0 Hz)
No. recs. with valid pos. : 12683
No. recs. with valid vel. : 12683
No. recs. with valid att. : 0

N A V I G A T I O N P E R F O R M A N C E S U M M A R Y

	Min.	1%	5%	50%	95%	99%	Max.	
Pos. hor. std. dev.	0.015	0.015	0.016	0.018	0.021	0.023	0.028	[m]
Pos. vert. std. dev.	0.020	0.020	0.021	0.026	0.035	0.038	0.040	[m]
Vel. hor. std. dev.	0.051	0.051	0.052	0.054	0.059	0.062	0.078	[m/s]
Vel. vert. std. dev.	0.085	0.085	0.086	0.096	0.105	0.112	0.134	[m/s]

C Y C L E S L I P S A N D D E L E T E D O B S E R V A T I O N S

Observable used: IF Phas

Sat	#obs avbl	%obs del	#L1 slips	#L2 slips
G01	5696	0.00	0	0
G03	4180	0.02	2	2
G06	4655	0.00	2	5
G09	8280	0.00	1	2
G11	8049	0.00	5	7
G12	7653	0.04	0	1
G14	12683	0.03	1	1
G15	3101	0.00	1	1
G18	11351	0.00	1	1
G19	7412	0.01	2	4
G20	1008	0.00	2	7
G21	6971	0.01	1	1
G22	12683	0.00	1	1
G25	7094	0.01	1	6
G27	5531	0.00	1	1
G30	635	0.16	0	0
G31	8375	0.01	0	1
G32	5043	0.00	1	0

TOT	120400	0.01	22	41
Si			0.66	1.23

Observable used: IF Code

Sat	#obs avbl	%obs del
G01	5696	0.00
G03	4180	0.00
G06	4655	0.00
G09	8280	0.00
G11	8049	0.00
G12	7653	0.00
G14	12683	0.00
G15	3101	0.00
G18	11351	0.00
G19	7413	0.01
G20	1008	0.00
G21	6971	0.00
G22	12683	0.00
G25	7094	0.00
G27	5531	0.00
G30	635	0.00
G31	8375	0.00
G32	5043	0.00
TOT	120401	0.00

Observable used: L1 Dopp

Sat	#obs avbl	%obs del
G01	5710	0.00
G03	4180	0.00
G06	4660	0.00
G09	8321	0.00
G11	8088	0.00
G12	7660	0.00
G14	12683	0.00
G15	3101	0.00
G18	11351	0.00
G19	7420	0.00
G20	1029	0.00
G21	6971	0.00
G22	12683	0.00
G25	7120	0.00
G27	5531	0.00
G30	640	0.00
G31	8380	0.00
G32	5110	0.00
TOT	120638	0.00

S O F T W A R E V E R S I O N

TerraPOS version: 2.0.4 (1851)

N A V I G A T I O N F I L E S U M M A R Y L011812B

First record : 2012 01 19 01 32 36.7
Last record : 2012 01 19 05 25 52.0
Average time increment : 1.000 s (1.0 Hz)
No. recs. with valid pos. : 13997
No. recs. with valid vel. : 13997
No. recs. with valid att. : 0

N A V I G A T I O N P E R F O R M A N C E S U M M A R Y

	Min.	1%	5%	50%	95%	99%	Max.	
Pos. hor. std. dev.	0.013	0.013	0.014	0.016	0.021	0.022	0.028	[m]
Pos. vert. std. dev.	0.019	0.021	0.022	0.025	0.035	0.037	0.075	[m]
Vel. hor. std. dev.	0.048	0.050	0.050	0.055	0.059	0.060	0.085	[m/s]
Vel. vert. std. dev.	0.081	0.089	0.089	0.096	0.117	0.120	0.138	[m/s]

C Y C L E S L I P S A N D D E L E T E D O B S E R V A T I O N S

Observable used: IF Phas

Sat	#obs avbl	%obs del	#L1 slips	#L2 slips
G01	3104	0.03	2	6
G03	8711	0.00	0	0
G06	9191	0.00	0	0
G07	6221	0.00	0	0
G08	382	0.00	18	5
G10	5561	0.00	1	1
G13	9628	0.03	4	8
G14	5162	0.00	3	3
G16	13997	0.00	1	1
G19	4481	0.00	0	0
G20	13027	0.05	4	3
G22	532	0.00	1	1
G23	13986	0.00	4	5
G25	1972	0.00	1	1
G30	13997	0.09	1	1
G31	10778	0.19	1	3
G32	11512	0.00	1	1
TOT	132242	0.03	42	39

Si		1.14	1.06

Observable used: IF Code

Sat	#obs avbl	%obs del
G01	3104	0.00
G03	8713	0.02
G06	9193	0.02
G07	6221	0.00
G08	382	0.00
G10	5561	0.00
G13	9632	0.05
G14	5162	0.00
G16	13999	0.01
G19	4481	0.00
G20	13028	0.02
G22	532	0.00
G23	13986	0.00
G25	1972	0.00
G30	13997	0.00
G31	10778	0.00
G32	11512	0.00
TOT	132253	0.01

Observable used: L1 Dopp

Sat	#obs avbl	%obs del
G01	3111	0.03
G03	8722	0.00
G06	9202	0.00
G07	6232	0.00
G08	487	0.00
G10	5572	0.00
G13	9663	0.00
G14	5223	0.00
G16	13997	0.00
G19	4492	0.00
G20	13042	0.00
G22	532	0.00
G23	13994	0.00
G25	1972	0.00
G30	13997	0.00
G31	10792	0.00
G32	11512	0.00
TOT	132542	0.00

S O F T W A R E V E R S I O N

TerraPOS version: 2.0.4 (1851)

N A V I G A T I O N F I L E S U M M A R Y L011912A

First record : 2012 01 19 15 21 18.7
Last record : 2012 01 19 18 48 18.0
Average time increment : 1.000 s (1.0 Hz)
No. recs. with valid pos. : 12421
No. recs. with valid vel. : 12421
No. recs. with valid att. : 0

N A V I G A T I O N P E R F O R M A N C E S U M M A R Y

	Min.	1%	5%	50%	95%	99%	Max.	
Pos. hor. std. dev.	0.013	0.015	0.016	0.019	0.028	0.030	0.043	[m]
Pos. vert. std. dev.	0.021	0.024	0.025	0.031	0.061	0.067	0.091	[m]
Vel. hor. std. dev.	0.052	0.052	0.052	0.056	0.065	0.068	0.093	[m/s]
Vel. vert. std. dev.	0.096	0.097	0.101	0.107	0.145	0.150	0.182	[m/s]

C Y C L E S L I P S A N D D E L E T E D O B S E R V A T I O N S

Observable used: IF Phas

Sat	#obs avbl	%obs del	#L1 slips	#L2 slips
G02	9199	0.01	1	1
G04	2659	0.00	1	1
G05	12421	0.07	1	1
G06	1044	0.00	1	4
G10	4369	0.02	1	1
G12	6229	0.03	1	1
G15	9275	0.00	0	1
G18	7466	0.03	0	0
G21	9566	0.02	1	1
G22	474	0.00	1	4
G25	8749	0.00	1	1
G26	11483	0.02	0	3
G27	1046	0.00	2	2
G29	12421	0.06	1	1
G30	3997	0.00	3	5
TOT	100398	0.03	15	27
Si			0.54	0.97

Observable used: IF Code

Sat	#obs avbl	%obs del
G02	9199	0.00
G04	2659	0.00
G05	12421	0.00
G06	1044	0.00
G10	4369	0.00
G12	6229	0.00
G15	9275	0.00
G18	7466	0.00
G21	9566	0.00
G22	474	0.00
G25	8749	0.00
G26	11483	0.00
G27	1046	0.00
G29	12423	0.02
G30	3997	0.00
TOT	100400	0.00

Observable used: L1 Dopp

Sat	#obs avbl	%obs del
G02	9199	0.00
G04	2659	0.00
G05	12421	0.00
G06	1059	0.00
G10	4369	0.00
G12	6229	0.00
G15	9280	0.00
G18	7480	0.00
G21	9580	0.00
G22	489	0.00
G25	8749	0.00
G26	11500	0.00
G27	1060	0.00
G29	12421	0.00
G30	4078	0.00
TOT	100573	0.00

S O F T W A R E V E R S I O N

TerraPOS version: 2.0.4 (1851)

N A V I G A T I O N F I L E S U M M A R Y LO11912B

First record : 2012 01 19 21 39 53.6
Last record : 2012 01 20 01 25 24.0
Average time increment : 1.000 s (1.0 Hz)
No. recs. with valid pos. : 13532
No. recs. with valid vel. : 13532
No. recs. with valid att. : 0

N A V I G A T I O N P E R F O R M A N C E S U M M A R Y

	Min.	1%	5%	50%	95%	99%	Max.	
Pos. hor. std. dev.	0.013	0.014	0.014	0.016	0.019	0.021	0.024	[m]
Pos. vert. std. dev.	0.018	0.019	0.020	0.025	0.029	0.035	0.040	[m]
Vel. hor. std. dev.	0.050	0.050	0.050	0.053	0.056	0.058	0.076	[m/s]
Vel. vert. std. dev.	0.084	0.085	0.085	0.095	0.100	0.110	0.116	[m/s]

C Y C L E S L I P S A N D D E L E T E D O B S E R V A T I O N S

Observable used: IF Phas

Sat	#obs avbl	%obs del	#L1 slips	#L2 slips
G01	9512	0.04	0	0
G03	1264	0.08	4	5
G06	1784	0.00	1	1
G09	5354	0.00	1	1
G11	11840	0.08	3	5
G12	8623	0.01	3	5
G14	13532	0.00	1	1
G15	224	0.00	1	1
G16	1185	0.00	3	8
G18	8504	0.00	1	1
G19	4554	0.00	1	3
G20	4652	0.17	0	0
G21	3975	0.00	4	5
G22	13532	0.04	1	1
G23	0	0.00	3	0
G25	10862	0.00	2	4
G27	2534	0.00	1	1
G30	4522	0.00	2	3
G31	12092	0.05	0	0

G32	8822	0.14	0	0
TOT	127367	0.04	32	45
Si			0.90	1.27

Observable used: IF Code

Sat	#obs avbl	%obs del
G01	9512	0.00
G03	1264	0.00
G06	1784	0.00
G09	5354	0.00
G11	11840	0.00
G12	8623	0.00
G14	13533	0.01
G15	224	0.00
G16	1185	0.00
G18	8504	0.00
G19	4554	0.00
G20	4652	0.00
G21	3975	0.00
G22	13533	0.01
G23	0	0.00
G25	10862	0.00
G27	2534	0.00
G30	4523	0.02
G31	12092	0.00
G32	8833	0.14
TOT	127381	0.01

Observable used: L1 Dopp

Sat	#obs avbl	%obs del
G01	9526	0.00
G03	1271	0.08
G06	1784	0.00
G09	5354	0.00
G11	11896	0.00
G12	8695	0.00
G14	13532	0.00
G15	224	0.00
G16	1216	0.00
G18	8504	0.00
G19	4574	0.00
G20	4666	0.00
G21	4004	0.00
G22	13532	0.00
G23	205	0.00
G25	10903	0.00
G27	2534	0.00
G30	4546	0.00
G31	12106	0.00
G32	8836	0.00
TOT	127908	0.00

S O F T W A R E V E R S I O N

TerraPOS version: 2.0.4 (1851)

N A V I G A T I O N F I L E S U M M A R Y L011912C

First record : 2012 01 20 01 58 27.8
Last record : 2012 01 20 05 10 52.0
Average time increment : 1.000 s (1.0 Hz)
No. recs. with valid pos. : 11546
No. recs. with valid vel. : 11546
No. recs. with valid att. : 0

N A V I G A T I O N P E R F O R M A N C E S U M M A R Y

	Min.	1%	5%	50%	95%	99%	Max.	
Pos. hor. std. dev.	0.012	0.014	0.014	0.016	0.021	0.022	0.038	[m]
Pos. vert. std. dev.	0.017	0.021	0.022	0.025	0.035	0.037	0.096	[m]
Vel. hor. std. dev.	0.049	0.050	0.050	0.054	0.059	0.059	0.084	[m/s]
Vel. vert. std. dev.	0.089	0.089	0.089	0.097	0.118	0.121	0.163	[m/s]

C Y C L E S L I P S A N D D E L E T E D O B S E R V A T I O N S

Observable used: IF Phas

Sat	#obs avbl	%obs del	#L1 slips	#L2 slips
G01	1348	0.00	2	2
G03	8052	0.07	2	2
G06	8550	0.02	0	2
G07	5603	0.00	3	3
G08	0	0.00	13	0
G10	4930	0.08	4	7
G13	9005	0.00	4	5
G14	3375	0.00	3	4
G16	11546	0.03	1	1
G19	3858	0.00	1	5
G20	11205	0.00	8	7
G23	11546	0.02	1	1
G30	11546	0.11	1	1
G31	8908	0.10	3	3
G32	9663	0.00	1	3
TOT	109135	0.04	47	46
Si			1.55	1.52

Observable used: IF Code

Sat	#obs avbl	%obs del
G01	1348	0.00
G03	8052	0.00
G06	8550	0.00
G07	5603	0.00
G08	0	0.00
G10	4930	0.00
G13	9005	0.00
G14	3375	0.00
G16	11547	0.01
G19	3858	0.00
G20	11206	0.01
G23	11549	0.03
G30	11546	0.00
G31	8908	0.00
G32	9663	0.00
TOT	109140	0.00

Observable used: L1 Dopp

Sat	#obs avbl	%obs del
G01	1348	0.00
G03	8076	0.00
G06	8576	0.00
G07	5632	0.00
G08	23	0.00
G10	4955	0.00
G13	9035	0.00
G14	3414	0.00
G16	11546	0.00
G19	3866	0.00
G20	11246	0.00
G23	11546	0.00
G30	11546	0.00
G31	8919	0.00
G32	9718	0.00
TOT	109446	0.00

S O F T W A R E V E R S I O N

TerraPOS version: 2.0.4 (1851)

N A V I G A T I O N F I L E S U M M A R Y LO12112A

First record : 2012 01 21 18 05 47.9
Last record : 2012 01 21 22 06 08.0
Average time increment : 1.000 s (1.0 Hz)
No. recs. with valid pos. : 14422
No. recs. with valid vel. : 14422
No. recs. with valid att. : 0

N A V I G A T I O N P E R F O R M A N C E S U M M A R Y

	Min.	1%	5%	50%	95%	99%	Max.	
Pos. hor. std. dev.	0.015	0.016	0.018	0.026	0.037	0.044	0.046	[m]
Pos. vert. std. dev.	0.021	0.023	0.027	0.039	0.080	0.100	0.106	[m]
Vel. hor. std. dev.	0.050	0.051	0.051	0.055	0.069	0.075	0.103	[m/s]
Vel. vert. std. dev.	0.087	0.088	0.088	0.098	0.155	0.168	0.254	[m/s]

C Y C L E S L I P S A N D D E L E T E D O B S E R V A T I O N S

Observable used: IF Phas

Sat	#obs avbl	%obs del	#L1 slips	#L2 slips
G03	10658	0.00	2	2
G05	2918	0.00	1	1
G06	13068	0.00	7	8
G09	11878	0.00	0	2
G11	549	0.00	1	1
G14	8838	0.01	1	2
G15	12380	0.00	2	3
G18	14422	0.00	1	1
G19	6649	0.00	4	5
G21	14422	0.00	2	2
G22	12928	0.00	0	0
G26	6398	0.00	1	1
G27	13401	0.00	3	5
G29	7358	0.00	1	1
G31	622	0.00	4	0
TOT	136489	0.00	30	34
Si			0.79	0.90

Observable used: IF Code

Sat	#obs avbl	%obs del
G03	10658	0.00
G05	2918	0.00
G06	13068	0.00
G09	11878	0.00
G11	549	0.00
G14	8838	0.00
G15	12380	0.00
G18	14422	0.00
G19	6649	0.00
G21	14422	0.01
G22	12928	0.00
G26	6398	0.00
G27	13401	0.00
G29	7358	0.00
G31	622	0.00
TOT	136489	0.00

Observable used: L1 Dopp

Sat	#obs avbl	%obs del
G03	10688	0.00
G05	2918	0.00
G06	13149	0.00
G09	11891	0.00
G11	610	0.00
G14	8861	0.00
G15	12395	0.00
G18	14422	0.00
G19	6668	0.00
G21	14422	0.00
G22	12941	0.00
G26	6398	0.00
G27	13440	0.00
G29	7358	0.00
G31	640	0.00
TOT	136801	0.00

S O F T W A R E V E R S I O N

TerraPOS version: 2.0.4 (1851)

N A V I G A T I O N F I L E S U M M A R Y L012112C

First record : 2012 01 22 00 34 59.4
Last record : 2012 01 22 02 24 04.0
Average time increment : 1.000 s (1.0 Hz)
No. recs. with valid pos. : 6546
No. recs. with valid vel. : 6546
No. recs. with valid att. : 0

N A V I G A T I O N P E R F O R M A N C E S U M M A R Y

	Min.	1%	5%	50%	95%	99%	Max.	
Pos. hor. std. dev.	0.015	0.016	0.018	0.024	0.032	0.037	0.038	[m]
Pos. vert. std. dev.	0.022	0.023	0.027	0.038	0.050	0.060	0.061	[m]
Vel. hor. std. dev.	0.049	0.051	0.052	0.055	0.062	0.068	0.099	[m/s]
Vel. vert. std. dev.	0.089	0.090	0.091	0.101	0.107	0.125	0.179	[m/s]

C Y C L E S L I P S A N D D E L E T E D O B S E R V A T I O N S

Observable used: IF Phas

Sat	#obs avbl	%obs del	#L1 slips	#L2 slips
G01	6216	0.00	6	7
G11	2974	0.00	1	1
G14	6546	0.00	1	1
G16	5238	0.00	2	2
G20	6546	0.00	1	1
G22	3394	0.00	1	1
G23	4602	0.00	1	5
G25	4504	0.00	1	1
G30	6546	0.00	1	1
G31	6546	0.00	1	1
G32	6546	0.00	1	1
TOT	59658	0.00	17	22
Si			1.03	1.33

Observable used: IF Code

Sat	#obs avbl	%obs del

Sat	#obs avbl	%obs del
G01	6216	0.00
G11	2974	0.00
G14	6546	0.00
G16	5238	0.00
G20	6546	0.00
G22	3394	0.00
G23	4602	0.00
G25	4504	0.00
G30	6546	0.00
G31	6546	0.00
G32	6546	0.00
TOT	59658	0.00

Observable used: L1 Dopp

Sat	#obs avbl	%obs del
G01	6233	0.00
G11	2974	0.00
G14	6546	0.00
G16	5261	0.00
G20	6546	0.00
G22	3394	0.00
G23	4620	0.00
G25	4504	0.00
G30	6546	0.00
G31	6546	0.00
G32	6546	0.00
TOT	59716	0.00

S O F T W A R E V E R S I O N

TerraPOS version: 2.0.4 (1851)

N A V I G A T I O N F I L E S U M M A R Y L012112D

```
 First record              : 2012 01 22 02 54 45.4
 Last  record              : 2012 01 22 05 16 56.0
 Average time increment    :  1.000 s  (1.0 Hz)
 No. recs. with valid pos. :   8532
 No. recs. with valid vel. :   8532
 No. recs. with valid att. :      0
```

N A V I G A T I O N P E R F O R M A N C E S U M M A R Y

		Min.	1%	5%	50%	95%	99%	Max.	
Pos. hor.	std. dev.	0.014	0.014	0.015	0.017	0.021	0.025	0.026	[m]
Pos. vert.	std. dev.	0.022	0.023	0.024	0.027	0.033	0.045	0.047	[m]
Vel. hor.	std. dev.	0.049	0.049	0.050	0.051	0.058	0.063	0.098	[m/s]
Vel. vert.	std. dev.	0.087	0.090	0.090	0.095	0.104	0.123	0.187	[m/s]

C Y C L E S L I P S A N D D E L E T E D O B S E R V A T I O N S

Observable used: IF Phas

Sat	#obs avbl	%obs del	#L1 slips	#L2 slips
G03	8532	0.02	1	1
G06	8532	0.00	1	1
G07	6777	0.00	0	0
G08	522	0.00	13	6
G10	5546	0.04	2	6
G13	8532	0.00	1	1
G16	8532	0.01	1	1
G19	4612	0.00	0	2
G20	7467	0.00	1	1
G23	8532	0.00	1	1
G30	8523	0.12	4	6
G31	4723	0.04	2	3
G32	5963	0.05	7	8
TOT	86793	0.02	34	37
Si			1.41	1.53

Observable used: IF Code

Sat	#obs avbl	%obs del
G03	8532	0.00
G06	8532	0.00
G07	6777	0.00
G08	522	0.00
G10	5546	0.00
G13	8532	0.00
G16	8533	0.02
G19	4612	0.00
G20	7468	0.03
G23	8534	0.02
G30	8523	0.00
G31	4723	0.00
G32	5963	0.00
TOT	86797	0.01

Observable used: L1 Dopp

Sat	#obs avbl	%obs del
G03	8532	0.00
G06	8532	0.00
G07	6792	0.00
G08	571	0.00
G10	5567	0.00
G13	8532	0.00
G16	8532	0.00
G19	4632	0.00
G20	7467	0.00
G23	8532	0.00
G30	8532	0.00
G31	4737	0.00
G32	6005	0.00
TOT	86963	0.00

S O F T W A R E V E R S I O N

TerraPOS version: 2.0.4 (1851)

N A V I G A T I O N F I L E S U M M A R Y LO12212A

First record : 2012 01 22 20 42 56.2
Last record : 2012 01 22 23 40 21.0
Average time increment : 1.000 s (1.0 Hz)
No. recs. with valid pos. : 10646
No. recs. with valid vel. : 10646
No. recs. with valid att. : 0

N A V I G A T I O N P E R F O R M A N C E S U M M A R Y

	Min.	1%	5%	50%	95%	99%	Max.	
Pos. hor. std. dev.	0.015	0.015	0.016	0.018	0.020	0.021	0.026	[m]
Pos. vert. std. dev.	0.019	0.020	0.021	0.026	0.033	0.035	0.038	[m]
Vel. hor. std. dev.	0.051	0.052	0.052	0.056	0.058	0.059	0.088	[m/s]
Vel. vert. std. dev.	0.083	0.084	0.085	0.094	0.104	0.105	0.144	[m/s]

C Y C L E S L I P S A N D D E L E T E D O B S E R V A T I O N S

Observable used: IF Phas

Sat	#obs avbl	%obs del	#L1 slips	#L2 slips
G01	4020	0.00	2	2
G03	4326	0.00	5	19
G06	4784	0.00	6	13
G09	8024	0.06	1	1
G11	6376	0.00	5	4
G12	5332	0.02	3	3
G14	10646	0.00	1	1
G15	2714	0.00	1	1
G18	10646	0.07	1	1
G19	7430	0.00	4	24
G21	6644	0.00	1	1
G22	10646	0.00	1	1
G25	5040	0.00	0	1
G27	5010	0.00	2	2
G31	6757	0.28	0	0
G32	3457	0.00	1	1
TOT	101852	0.03	34	75
Si			1.20	2.65

Observable used: IF Code

Sat	#obs avbl	%obs del
G01	4020	0.00
G03	4326	0.00
G06	4784	0.00
G09	8024	0.00
G11	6376	0.00
G12	5332	0.00
G14	10649	0.03
G15	2714	0.00
G18	10646	0.00
G19	7430	0.00
G21	6644	0.00
G22	10647	0.01
G25	5040	0.00
G27	5010	0.00
G31	6757	0.00
G32	3457	0.00
TOT	101856	0.00

Observable used: L1 Dopp

Sat	#obs avbl	%obs del
G01	4071	0.00
G03	4360	0.00
G06	4813	0.00
G09	8024	0.00
G11	6450	0.00
G12	5360	0.00
G14	10646	0.00
G15	2714	0.00
G18	10646	0.00
G19	7483	0.00
G21	6644	0.00
G22	10646	0.00
G25	5049	0.00
G27	5021	0.00
G31	6759	0.00
G32	3459	0.00
TOT	102145	0.00

S O F T W A R E V E R S I O N

TerraPOS version: 2.0.4 (1851)

N A V I G A T I O N F I L E S U M M A R Y LO12312A

First record : 2012 01 23 14 37 39.1
Last record : 2012 01 23 18 00 40.0
Average time increment : 1.000 s (1.0 Hz)
No. recs. with valid pos. : 12182
No. recs. with valid vel. : 12182
No. recs. with valid att. : 0

N A V I G A T I O N P E R F O R M A N C E S U M M A R Y

	Min.	1%	5%	50%	95%	99%	Max.	
Pos. hor. std. dev.	0.014	0.015	0.015	0.019	0.025	0.028	0.031	[m]
Pos. vert. std. dev.	0.024	0.025	0.026	0.031	0.046	0.065	0.068	[m]
Vel. hor. std. dev.	0.052	0.052	0.052	0.055	0.064	0.068	0.113	[m/s]
Vel. vert. std. dev.	0.100	0.101	0.101	0.108	0.129	0.152	0.255	[m/s]

C Y C L E S L I P S A N D D E L E T E D O B S E R V A T I O N S

Observable used: IF Phas

Sat	#obs avbl	%obs del	#L1 slips	#L2 slips
G02	10938	0.00	1	1
G04	4578	0.02	1	1
G05	12182	0.02	1	1
G10	6108	0.00	2	2
G12	7608	0.00	1	1
G13	1698	0.00	5	5
G15	7263	0.00	1	3
G18	5497	0.00	0	1
G21	7440	0.04	0	0
G25	10128	0.00	1	1
G26	9689	0.00	0	0
G29	12182	0.02	2	5
G30	3734	0.00	6	6
TOT	99045	0.01	21	27
Si			0.76	0.98

Observable used: IF Code

Sat	#obs avbl	%obs del
G02	10938	0.00
G04	4578	0.00
G05	12182	0.00
G10	6108	0.00
G12	7608	0.00
G13	1698	0.00
G15	7263	0.00
G18	5497	0.00
G21	7440	0.00
G25	10128	0.00
G26	9689	0.00
G29	12184	0.02
G30	3734	0.00
TOT	99047	0.00

Observable used: L1 Dopp

Sat	#obs avbl	%obs del
G02	10938	0.00
G04	4578	0.00
G05	12182	0.00
G10	6108	0.00
G12	7608	0.00
G13	1698	0.00
G15	7271	0.00
G18	5501	0.00
G21	7452	0.00
G25	10128	0.00
G26	9701	0.00
G29	12182	0.00
G30	3746	0.00
TOT	99093	0.00

S O F T W A R E V E R S I O N

TerraPOS version: 2.0.4 (1851)

N A V I G A T I O N F I L E S U M M A R Y L012312B

First record : 2012 01 23 19 07 06.3
Last record : 2012 01 23 22 11 17.0
Average time increment : 1.000 s (1.0 Hz)
No. recs. with valid pos. : 10659
No. recs. with valid vel. : 10659
No. recs. with valid att. : 0

Data gaps:
2012 01 23 22 06 16.0 : 394.0 s

N A V I G A T I O N P E R F O R M A N C E S U M M A R Y

	Min.	1%	5%	50%	95%	99%	Max.	
Pos. hor. std. dev.	0.015	0.015	0.016	0.019	0.024	0.226	0.226	[m]
Pos. vert. std. dev.	0.021	0.022	0.023	0.029	0.036	0.079	0.083	[m]
Vel. hor. std. dev.	0.050	0.051	0.052	0.054	0.058	0.059	0.086	[m/s]
Vel. vert. std. dev.	0.080	0.087	0.087	0.097	0.104	0.104	0.110	[m/s]

C Y C L E S L I P S A N D D E L E T E D O B S E R V A T I O N S

Observable used: IF Phas

Sat	#obs avbl	%obs del	#L1 slips	#L2 slips
G03	9515	0.00	1	1
G06	10025	0.03	1	1
G09	10659	0.00	2	2
G11	930	0.00	1	2
G12	294	0.00	0	0
G14	8991	0.00	1	1
G15	8375	0.00	1	1
G18	10659	0.00	2	2
G19	6934	0.00	3	7
G21	10652	0.00	1	2
G22	10659	0.01	2	2
G26	2405	0.00	1	1
G27	10405	0.01	2	3
G29	3182	0.00	5	8
G31	1080	0.00	1	2

TOT	104765	0.00	24	35
Si			0.82	1.20

Observable used: IF Code

Sat	#obs avbl	%obs del
G03	9515	0.00
G06	10025	0.00
G09	10659	0.00
G11	930	0.00
G12	294	0.00
G14	8991	0.00
G15	8375	0.00
G18	10659	0.00
G19	6934	0.00
G21	10652	0.00
G22	10659	0.00
G26	2405	0.00
G27	10405	0.00
G29	3182	0.00
G31	1080	0.00
TOT	104765	0.00

Observable used: L1 Dopp

Sat	#obs avbl	%obs del
G03	9515	0.00
G06	10025	0.00
G09	10659	0.00
G11	930	0.00
G12	302	0.00
G14	9000	0.00
G15	8375	0.00
G18	10659	0.00
G19	6960	0.00
G21	10659	0.00
G22	10659	0.00
G26	2405	0.00
G27	10412	0.00
G29	3213	0.00
G31	1080	0.00
TOT	104853	0.00

S O F T W A R E V E R S I O N

TerraPOS version: 2.0.4 (1851)

N A V I G A T I O N F I L E S U M M A R Y L012312C

First record : 2012 01 23 22 47 00.0
Last record : 2012 01 24 02 37 49.0
Average time increment : 1.000 s (1.0 Hz)
No. recs. with valid pos. : 13850
No. recs. with valid vel. : 13850
No. recs. with valid att. : 0

N A V I G A T I O N P E R F O R M A N C E S U M M A R Y

	Min.	1%	5%	50%	95%	99%	Max.	
Pos. hor. std. dev.	0.014	0.015	0.017	0.025	0.034	0.036	0.037	[m]
Pos. vert. std. dev.	0.021	0.023	0.026	0.039	0.056	0.059	0.060	[m]
Vel. hor. std. dev.	0.050	0.051	0.051	0.056	0.063	0.066	0.086	[m/s]
Vel. vert. std. dev.	0.087	0.088	0.092	0.099	0.122	0.127	0.128	[m/s]

C Y C L E S L I P S A N D D E L E T E D O B S E R V A T I O N S

Observable used: IF Phas

Sat	#obs avbl	%obs del	#L1 slips	#L2 slips
G01	11887	0.00	7	7
G03	29	0.00	1	2
G06	560	0.00	0	0
G09	408	0.00	1	1
G11	8524	0.00	6	11
G12	5623	0.00	4	10
G13	680	0.00	4	4
G14	13850	0.00	1	1
G16	6456	0.00	2	2
G18	3457	0.00	6	8
G20	9917	0.00	7	8
G22	9408	0.00	1	1
G23	5660	0.00	0	0
G25	10489	0.00	3	2
G30	9820	0.00	1	3
G31	13850	0.00	1	1
G32	13833	0.00	3	3
TOT	124451	0.00	48	64

Si		1.39	1.85

Observable used: IF Code

Sat	#obs avbl	%obs del
G01	11887	0.00
G03	29	0.00
G06	560	0.00
G09	408	0.00
G11	8524	0.00
G12	5623	0.00
G13	680	0.00
G14	13850	0.00
G16	6456	0.00
G18	3457	0.00
G20	9917	0.00
G22	9408	0.01
G23	5660	0.00
G25	10489	0.00
G30	9820	0.00
G31	13850	0.00
G32	13834	0.01
TOT	124452	0.00

Observable used: L1 Dopp

Sat	#obs avbl	%obs del
G01	11909	0.00
G03	30	0.00
G06	570	0.00
G09	408	0.00
G11	8580	0.00
G12	5658	0.00
G13	690	0.00
G14	13850	0.00
G16	6536	0.00
G18	3494	0.00
G20	9986	0.00
G22	9408	0.00
G23	5670	0.00
G25	10527	0.00
G30	9840	0.00
G31	13850	0.00
G32	13848	0.00
TOT	124854	0.00

S O F T W A R E V E R S I O N

TerraPOS version: 2.0.4 (1851)

N A V I G A T I O N F I L E S U M M A R Y LO12312D

First record : 2012 01 24 03 11 16.9
Last record : 2012 01 24 05 31 57.0
Average time increment : 1.000 s (1.0 Hz)
No. recs. with valid pos. : 8442
No. recs. with valid vel. : 8442
No. recs. with valid att. : 0

N A V I G A T I O N P E R F O R M A N C E S U M M A R Y

	Min.	1%	5%	50%	95%	99%	Max.	
Pos. hor. std. dev.	0.015	0.016	0.017	0.019	0.023	0.024	0.025	[m]
Pos. vert. std. dev.	0.024	0.025	0.026	0.030	0.036	0.042	0.048	[m]
Vel. hor. std. dev.	0.049	0.050	0.050	0.052	0.058	0.059	0.086	[m/s]
Vel. vert. std. dev.	0.087	0.090	0.090	0.096	0.105	0.113	0.158	[m/s]

C Y C L E S L I P S A N D D E L E T E D O B S E R V A T I O N S

Observable used: IF Phas

Sat	#obs avbl	%obs del	#L1 slips	#L2 slips
G03	8442	0.00	1	1
G06	8442	0.01	1	1
G07	7762	0.00	8	19
G08	2141	0.00	0	0
G10	7063	0.00	6	10
G13	8442	0.00	1	1
G16	8442	0.00	1	1
G19	6188	0.00	4	5
G20	6121	0.05	1	4
G23	8442	0.00	1	1
G30	8085	0.02	2	2
G31	3513	0.00	2	4
G32	4605	0.00	1	1
TOT	87688	0.01	29	50
Si			1.19	2.05

Observable used: IF Code

Sat	#obs avbl	%obs del
G03	8444	0.02
G06	8442	0.00
G07	7762	0.00
G08	2141	0.00
G10	7063	0.00
G13	8445	0.04
G16	8443	0.01
G19	6189	0.02
G20	6121	0.00
G23	8442	0.00
G30	8085	0.00
G31	3513	0.00
G32	4605	0.00
TOT	87695	0.01

Observable used: L1 Dopp

Sat	#obs avbl	%obs del
G03	8442	0.00
G06	8442	0.00
G07	7836	0.00
G08	2155	0.00
G10	7145	0.00
G13	8442	0.00
G16	8442	0.00
G19	6231	0.00
G20	6135	0.00
G23	8442	0.00
G30	8085	0.00
G31	3525	0.00
G32	4605	0.00
TOT	87927	0.00

S O F T W A R E V E R S I O N

TerraPOS version: 2.0.4 (1851)

N A V I G A T I O N F I L E S U M M A R Y L012712A

First record : 2012 01 27 00 58 47.2
Last record : 2012 01 27 04 04 28.0
Average time increment : 1.000 s (1.0 Hz)
No. recs. with valid pos. : 11142
No. recs. with valid vel. : 11142
No. recs. with valid att. : 0

N A V I G A T I O N P E R F O R M A N C E S U M M A R Y

	Min.	1%	5%	50%	95%	99%	Max.	
Pos. hor. std. dev.	0.013	0.014	0.014	0.018	0.022	0.023	0.028	[m]
Pos. vert. std. dev.	0.021	0.021	0.023	0.027	0.037	0.038	0.075	[m]
Vel. hor. std. dev.	0.049	0.049	0.049	0.054	0.059	0.061	0.079	[m/s]
Vel. vert. std. dev.	0.087	0.089	0.090	0.097	0.118	0.121	0.146	[m/s]

C Y C L E S L I P S A N D D E L E T E D O B S E R V A T I O N S

Observable used: IF Phas

Sat	#obs avbl	%obs del	#L1 slips	#L2 slips
G01	3328	0.03	5	5
G03	5600	0.00	4	4
G06	6153	0.00	2	4
G07	3716	0.00	1	1
G10	2867	0.00	0	0
G11	447	0.00	1	1
G13	6858	0.00	3	4
G14	5023	0.00	3	3
G16	11142	0.00	1	1
G19	1427	0.21	0	0
G20	11142	0.00	1	1
G22	657	0.00	1	1
G23	11142	0.01	1	1
G25	1788	0.00	2	3
G30	11142	0.01	1	1
G31	10658	0.02	1	1
G32	11142	0.02	1	1
TOT	104232	0.01	28	32

Si		0.97	1.11

Observable used: IF Code

Sat	#obs avbl	%obs del
G01	3328	0.00
G03	5600	0.00
G06	6153	0.00
G07	3716	0.00
G10	2867	0.00
G11	447	0.00
G13	6858	0.00
G14	5023	0.00
G16	11142	0.00
G19	1427	0.00
G20	11142	0.00
G22	657	0.00
G23	11142	0.00
G25	1788	0.00
G30	11142	0.00
G31	10658	0.00
G32	11142	0.00
TOT	104232	0.00

Observable used: L1 Dopp

Sat	#obs avbl	%obs del
G01	3396	0.00
G03	5641	0.00
G06	6186	0.00
G07	3721	0.00
G10	2881	0.00
G11	447	0.00
G13	6936	0.00
G14	5065	0.00
G16	11142	0.00
G19	1441	0.00
G20	11142	0.00
G22	657	0.00
G23	11142	0.00
G25	1797	0.00
G30	11142	0.00
G31	10658	0.00
G32	11142	0.00
TOT	104536	0.00

S O F T W A R E V E R S I O N

TerraPOS version: 2.0.4 (1851)

N A V I G A T I O N F I L E S U M M A R Y L012712B

First record : 2012 01 27 20 13 11.5
Last record : 2012 01 27 23 49 07.0
Average time increment : 1.000 s (1.0 Hz)
No. recs. with valid pos. : 12957
No. recs. with valid vel. : 12957
No. recs. with valid att. : 0

N A V I G A T I O N P E R F O R M A N C E S U M M A R Y

	Min.	1%	5%	50%	95%	99%	Max.	
Pos. hor. std. dev.	0.015	0.015	0.016	0.019	0.051	0.053	0.084	[m]
Pos. vert. std. dev.	0.019	0.020	0.021	0.027	0.058	0.060	0.139	[m]
Vel. hor. std. dev.	0.050	0.051	0.052	0.055	0.057	0.059	0.079	[m/s]
Vel. vert. std. dev.	0.086	0.086	0.086	0.096	0.105	0.110	0.134	[m/s]

C Y C L E S L I P S A N D D E L E T E D O B S E R V A T I O N S

Observable used: IF Phas

Sat	#obs avbl	%obs del	#L1 slips	#L2 slips
G01	5489	0.00	22	30
G03	4705	0.00	3	3
G06	5186	0.02	2	2
G09	8465	0.17	2	3
G11	7894	0.01	18	22
G12	7456	0.00	14	22
G14	12955	0.02	11	12
G15	3236	0.00	1	1
G18	11635	0.00	9	9
G19	7804	0.00	9	12
G20	889	0.00	10	14
G21	7291	0.03	5	4
G22	12957	0.01	8	8
G25	7021	0.01	11	14
G27	5631	0.00	4	3
G30	605	0.33	1	0
G31	8565	0.14	4	4
G32	4846	0.00	15	18

TOT	122630	0.03	149	181
Si			4.37	5.31

Observable used: IF Code

Sat	#obs avbl	%obs del
G01	5489	0.02
G03	4705	0.00
G06	5186	0.00
G09	8465	0.00
G11	7894	0.00
G12	7456	0.00
G14	12960	0.05
G15	3236	0.00
G18	11635	0.00
G19	7804	0.00
G20	889	0.00
G21	7291	0.00
G22	12957	0.00
G25	7026	0.09
G27	5631	0.00
G30	605	0.00
G31	8566	0.05
G32	4846	0.00
TOT	122641	0.01

Observable used: L1 Dopp

Sat	#obs avbl	%obs del
G01	5608	0.00
G03	4705	0.02
G06	5186	0.00
G09	8486	0.00
G11	7917	0.00
G12	7505	0.00
G14	12955	0.00
G15	3236	0.00
G18	11635	0.00
G19	7865	0.00
G20	926	0.00
G21	7340	0.00
G22	12957	0.00
G25	7060	0.00
G27	5661	0.00
G30	628	0.00
G31	8579	0.00
G32	4900	0.00
TOT	123149	0.00

S O F T W A R E V E R S I O N

TerraPOS version: 2.0.4 (1851)

N A V I G A T I O N F I L E S U M M A R Y LO12812A

First record : 2012 01 28 13 32 58.0
Last record : 2012 01 28 18 46 15.0
Average time increment : 1.000 s (1.0 Hz)
No. recs. with valid pos. : 18798
No. recs. with valid vel. : 18798
No. recs. with valid att. : 0

N A V I G A T I O N P E R F O R M A N C E S U M M A R Y

	Min.	1%	5%	50%	95%	99%	Max.	
Pos. hor. std. dev.	0.013	0.014	0.015	0.018	0.026	0.029	0.031	[m]
Pos. vert. std. dev.	0.019	0.020	0.022	0.031	0.058	0.063	0.087	[m]
Vel. hor. std. dev.	0.051	0.051	0.052	0.055	0.062	0.065	0.095	[m/s]
Vel. vert. std. dev.	0.088	0.088	0.090	0.108	0.143	0.146	0.159	[m/s]

C Y C L E S L I P S A N D D E L E T E D O B S E R V A T I O N S

Observable used: IF Phas

Sat	#obs avbl	%obs del	#L1 slips	#L2 slips
G02	13679	0.01	1	3
G03	736	0.00	2	2
G04	7274	0.00	1	1
G05	17714	0.01	1	1
G06	2861	0.17	1	6
G09	1874	0.00	2	3
G10	8744	0.00	1	1
G12	10466	0.00	3	3
G15	11395	0.00	0	0
G17	1514	0.00	1	1
G18	9467	0.00	0	0
G21	11314	0.04	2	2
G22	2507	0.04	0	0
G25	12932	0.00	2	4
G26	13796	0.15	0	0
G27	3431	0.00	0	4
G29	17664	0.01	1	3
G30	2611	0.00	7	10

TOT	149979	0.02	25	44
Si			0.60	1.06

Observable used: IF Code

Sat	#obs avbl	%obs del
G02	13679	0.00
G03	736	0.00
G04	7274	0.00
G05	17714	0.00
G06	2861	0.00
G09	1874	0.00
G10	8744	0.00
G12	10466	0.00
G15	11395	0.00
G17	1514	0.00
G18	9467	0.00
G21	11314	0.00
G22	2507	0.00
G25	12934	0.02
G26	13796	0.00
G27	3431	0.00
G29	17667	0.02
G30	2611	0.00
TOT	149984	0.00

Observable used: L1 Dopp

Sat	#obs avbl	%obs del
G02	13694	0.00
G03	764	0.00
G04	7274	0.00
G05	17714	0.00
G06	2882	0.00
G09	1922	0.00
G10	8744	0.00
G12	10481	0.00
G15	11402	0.00
G17	1514	0.00
G18	9482	0.00
G21	11371	0.00
G22	2522	0.00
G25	12974	0.00
G26	13832	0.00
G27	3452	0.00
G29	17672	0.00
G30	2708	0.00
TOT	150404	0.00

S O F T W A R E V E R S I O N

TerraPOS version: 2.0.4 (1851)

N A V I G A T I O N F I L E S U M M A R Y L012812B

First record : 2012 01 28 19 19 09.9
Last record : 2012 01 28 21 49 43.0
Average time increment : 1.000 s (1.0 Hz)
No. recs. with valid pos. : 9035
No. recs. with valid vel. : 9035
No. recs. with valid att. : 0

N A V I G A T I O N P E R F O R M A N C E S U M M A R Y

		Min.	1%	5%	50%	95%	99%	Max.	
Pos. hor.	std. dev.	0.011	0.014	0.015	0.017	0.019	0.019	0.024	[m]
Pos. vert.	std. dev.	0.017	0.019	0.020	0.026	0.031	0.032	0.034	[m]
Vel. hor.	std. dev.	0.050	0.050	0.051	0.052	0.057	0.058	0.086	[m/s]
Vel. vert.	std. dev.	0.077	0.086	0.088	0.098	0.103	0.104	0.111	[m/s]

C Y C L E S L I P S A N D D E L E T E D O B S E R V A T I O N S

Observable used: IF Phas

Sat	#obs avbl	%obs del	#L1 slips	#L2 slips
G03	7615	0.00	1	1
G06	8095	0.01	1	1
G09	9035	0.00	1	1
G11	1235	0.00	1	1
G12	456	0.00	0	2
G14	9035	0.06	1	1
G15	6475	0.02	1	1
G18	9035	0.00	1	1
G19	7107	0.00	0	0
G21	9035	0.01	1	1
G22	9035	0.03	1	1
G26	355	0.00	1	1
G27	8794	0.00	6	5
G29	1375	0.00	2	2
G31	1476	0.00	0	0
TOT	88158	0.01	18	19
Si			0.74	0.78

Observable used: IF Code

Sat	#obs avbl	%obs del
G03	7615	0.00
G06	8095	0.00
G09	9036	0.01
G11	1235	0.00
G12	456	0.00
G14	9035	0.00
G15	6475	0.00
G18	9035	0.00
G19	7107	0.00
G21	9041	0.10
G22	9035	0.00
G26	355	0.00
G27	8794	0.00
G29	1375	0.00
G31	1476	0.00
TOT	88165	0.01

Observable used: L1 Dopp

Sat	#obs avbl	%obs del
G03	7615	0.00
G06	8095	0.00
G09	9035	0.00
G11	1238	0.00
G12	458	0.00
G14	9035	0.00
G15	6475	0.00
G18	9034	0.00
G19	7118	0.00
G21	9035	0.00
G22	9035	0.00
G26	355	0.00
G27	8809	0.00
G29	1375	0.00
G31	1478	0.00
TOT	88190	0.00

S O F T W A R E V E R S I O N

TerraPOS version: 2.0.4 (1851)

N A V I G A T I O N F I L E S U M M A R Y L013012A

First record : 2012 01 30 15 29 37.5
Last record : 2012 01 30 18 09 11.0
Average time increment : 1.000 s (1.0 Hz)
No. recs. with valid pos. : 9575
No. recs. with valid vel. : 9575
No. recs. with valid att. : 0

N A V I G A T I O N P E R F O R M A N C E S U M M A R Y

	Min.	1%	5%	50%	95%	99%	Max.	
Pos. hor. std. dev.	0.015	0.016	0.017	0.020	0.029	0.030	0.030	[m]
Pos. vert. std. dev.	0.023	0.024	0.026	0.033	0.066	0.068	0.068	[m]
Vel. hor. std. dev.	0.052	0.052	0.052	0.056	0.063	0.068	0.085	[m/s]
Vel. vert. std. dev.	0.094	0.095	0.096	0.109	0.148	0.149	0.150	[m/s]

C Y C L E S L I P S A N D D E L E T E D O B S E R V A T I O N S

Observable used: IF Phas

Sat	#obs avbl	%obs del	#L1 slips	#L2 slips
G02	6251	0.03	1	1
G05	9575	0.00	1	1
G06	1296	0.00	0	0
G10	1360	0.44	1	1
G12	2865	0.00	2	2
G15	9366	0.00	2	2
G18	7686	0.00	0	0
G21	9541	0.00	2	4
G22	816	0.00	1	1
G25	5411	0.00	1	1
G26	9575	0.00	1	1
G27	1526	0.00	0	2
G29	9575	0.00	1	1
G30	2232	0.00	1	1
TOT	77075	0.01	14	18
Si			0.65	0.84

Observable used: IF Code

Sat	#obs avbl	%obs del
G02	6251	0.00
G05	9575	0.00
G06	1296	0.00
G10	1360	0.00
G12	2865	0.00
G15	9366	0.00
G18	7686	0.00
G21	9541	0.00
G22	816	0.00
G25	5411	0.00
G26	9575	0.00
G27	1526	0.00
G29	9575	0.00
G30	2232	0.00
TOT	77075	0.00

Observable used: L1 Dopp

Sat	#obs avbl	%obs del
G02	6251	0.00
G05	9575	0.00
G06	1311	0.00
G10	1360	0.00
G12	2891	0.00
G15	9381	0.00
G18	7701	0.00
G21	9575	0.00
G22	831	0.00
G25	5411	0.00
G26	9575	0.00
G27	1551	0.00
G29	9575	0.00
G30	2247	0.00
TOT	77235	0.00

S O F T W A R E V E R S I O N

TerraPOS version: 2.0.4 (1851)

N A V I G A T I O N F I L E S U M M A R Y L013012B

First record : 2012 01 30 18 59 19.0
Last record : 2012 01 30 21 53 17.0
Average time increment : 1.000 s (1.0 Hz)
No. recs. with valid pos. : 10439
No. recs. with valid vel. : 10439
No. recs. with valid att. : 0

N A V I G A T I O N P E R F O R M A N C E S U M M A R Y

	Min.	1%	5%	50%	95%	99%	Max.	
Pos. hor. std. dev.	0.015	0.016	0.016	0.019	0.020	0.021	0.021	[m]
Pos. vert. std. dev.	0.020	0.021	0.022	0.028	0.035	0.036	0.036	[m]
Vel. hor. std. dev.	0.050	0.050	0.051	0.053	0.057	0.058	0.084	[m/s]
Vel. vert. std. dev.	0.085	0.085	0.086	0.097	0.104	0.105	0.113	[m/s]

C Y C L E S L I P S A N D D E L E T E D O B S E R V A T I O N S

Observable used: IF Phas

Sat	#obs avbl	%obs del	#L1 slips	#L2 slips
G03	8445	0.00	2	2
G06	8895	0.00	1	1
G09	10439	0.00	1	1
G11	2161	0.00	0	0
G12	1030	0.00	0	1
G14	9935	0.00	4	8
G15	7155	0.00	1	1
G18	10439	0.00	1	1
G19	8316	0.00	0	4
G21	10439	0.00	1	1
G22	10439	0.00	1	1
G25	550	0.18	1	1
G26	1155	0.00	1	1
G27	9435	0.00	1	1
G29	1785	0.00	1	1
G31	2080	0.00	0	1
TOT	102698	0.00	16	26
Si			0.56	0.91

Observable used: IF Code

Sat	#obs avbl	%obs del
G03	8445	0.00
G06	8895	0.00
G09	10439	0.00
G11	2161	0.00
G12	1030	0.00
G14	9935	0.00
G15	7155	0.00
G18	10439	0.00
G19	8316	0.00
G21	10439	0.00
G22	10439	0.01
G25	550	0.00
G26	1155	0.00
G27	9435	0.00
G29	1785	0.00
G31	2080	0.00
TOT	102698	0.00

Observable used: L1 Dopp

Sat	#obs avbl	%obs del
G03	8445	0.00
G06	8895	0.00
G09	10439	0.00
G11	2171	0.00
G12	1031	0.00
G14	9970	0.00
G15	7155	0.00
G18	10439	0.00
G19	8321	0.00
G21	10439	0.00
G22	10439	0.00
G25	551	0.00
G26	1155	0.00
G27	9435	0.00
G29	1785	0.00
G31	2081	0.00
TOT	102751	0.00