SURVEYOR'S REPORT

Specific Purpose Survey of the Key Biscayne Coastal Wetlands
Temperature and Salinity Site Wells BBCWMW8A and BBCWMW8B
(Burger King Location)

South Florida Water Management District's
Purchase Order number PC P601079

Keith and Schnars project number 16434.00,
Task 22154
Report Date: May 2, 2006
Submittal: First

Prepared for:

South Florida Water Management District

Prepared by:

KEITH and SCHNARS, P.A.
ENGINEERS, PLANNERS, SURVEYORS

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SURVEYOR'S REPORT

PURPOSE

To establish vertical (NAVD 1988 and NGVD 1929) and horizontal (NAD 1983-1999) data on the wells attached to the platform. To obtain elevations on the platform and ground (bottom of bay) surrounding the platform. Due to the wells and platform being in Biscayne Bay elevations and horizontal locations were obtained using GPS methods as described below. As a secondary vertical check an elevation was taken on the platform using a temporary benchmark and Total Station.

LOCATION OF PROJECT

The project is located in Miami-Dade County.

SURVEYOR'S REPORT

ITEMS DELIVERED TO THE DISTRICT

1. **Electronic copy of field notes.**
2. **Electronic copy of all computation sheets.**
3. **CORPSMET 95 file.**
4. **Site photographs.**
5. **Surveyor's Report.**

DATUM FOR THE PROJECT

The vertical datum for the project is National Geodetic Vertical Datum (NGVD) of 1929 and North American Vertical Datum (NAVD) of 1988. NGVD '29 elevations were derived using data provided by the South Florida Water Management District in a file named NGVD29.txt" when applicable, otherwise NGS superseded values were used. Horizontal datum for the project is North American Datum (NAD) 1983 with the 1999 adjustment applied.

LEVELING METHODS

For purposes of the second vertical check a level loop was run from Benchmark S-123 to a temporary benchmark then returning to Benchmark S-123. That level loop closed less than 0.03 of a foot times the square root in miles of the level loop. A Leica NA 2 (conventional) level and fiberglass rod were used to complete the level loop. An elevation was then established on the center of the platform using a Leica 705 total station and the temporary benchmark. The average elevation of the platform obtained by GPS is 5.9' the elevation obtained at the center of the platform by the total station is 5.5'.

SURVEYOR'S REPORT

HORIZONTAL CONTROL POINT

H084	Elevation:	**(None)**			
PID AC 3887	Latitude	25°37'09.07665"			
State/County FL/Miami-Dade	Longitude	-80°19'22.91217"			
USGS QUAD Perrine (1994)	Northing: 467885.74 (ft.)				
Horiz. Order 2nd	Easting: 879232.48 (ft.)				

DESCRIBED BY DADE COUNTY FLORIDA 1972 STATION IS ABOUT 6.0 MILES SOUTH SOUTHWEST OF THE SOUTH MIAMI CITY HALL, ABOUT 1.5 MILES EAST OF U.S. ROUTE 1, ABOUT 1.5 MILES WEST OF THE SHORE OF BISCAYNE BAY AND IN THE VICINITY OF THE INTERSECTION OF S.W. 80TH AVENUE AND S.W. 163RD STREET. TO REACH FROM THE INTERSECTION OF U.S. ROUTE 1 AND S.W. 104TH STREET AT THE SOUTHERN TERMINUS OF STATE ROAD 826 IN THE VILLAGE OF KENDAL, PROCEED SOUTHWESTERLY ON U.S. ROUTE 1 FOR 4.5 MILE TO THE INTERSECTION OF S.W. 168TH STREET (RICHMOND DRIVE), TURN LEFT AND PROCEED EAST ON S.W. 168TH STREET FOR 1.6 MILES TO THE INTERSECTION OF S.W. 80TH AVENUE (KUHN ROAD), TURN LEFT AND PROCEED NORTH ON S.W. 80TH AVENUE FOR 0.3 MILE TO THE NTERSECTION OF S.W. 163RD STREET AND THE STATION IN THE SOUTHWEST QUADRANT OF THE INTERSECTION. STATION MARK IS A BRASS DISK IN A CONCRETE MONUMENT WITH UNDERGROUND MARK, FLUSH WITH THE GROUND, MARKED FLORIDA-DADE AND STAMPED H-084. IT IS 0.7 FEET SOUTH OF THE SOUTH EDGE OF PAVING ON S.W. 163RD STREET, 80.0 FEET WEST OF THE CENTERLINE OF S.W. 80TH AVENUE AND DIRECTLY IN FRONT OF RESIDENCE 8000 S.W. 163RD STREET. REFERENCE MARKS ARE SPIKES, CENTER PUNCHED AND DRIVEN THROUGH DADE COUNTY BRASS WASHERS INTO THE ASPHALT PAVING NEAR THE NORTH EDGE OF S.W. 163RD STREET.

SURVEYOR'S REPORT

VERTICAL CONTROL POINTS

D 270	Elevation:	**NAVD 1988**	**9.94**	**NGVD 1929**	**11.47**
PID AC2044	Latitude	25°36'52" (Scaled)			
State/County FL/Miami-Dade	Longitude	-80°19'43" (Scaled)			
USGS QUAD Perrine (1994)					
Horiz. Order 1st Class 2nd		4.1 KM (2.55 MI) NORTHEASTERLY ALONG U.S. HIGHWAY 1 FROM THE FLORIDA TURNPIKE (STATE HIGHWAY 821) IN CUTLER RIDGE, THENCE 1.8 KM (1.10 MI) EASTERLY ALONG SOUTHWEST 168TH STREET, IN TOP OF AND 0.6 M (2.0 FT) SOUTH OF THE NORTH END OF THE WEST CONCRETE ABUTMENT OF THE BRIDGE SPANNING CUTLER DRAIN CANAL NUMBER C-100, 5.3 M (17.4 FT) NORTH OF THE CENTERLINE OF THE STREET, AND 0.3 M (1.0 FT) ABOVE THE LEVEL OF THE STREET.			

SURVEYOR'S REPORT

VERTICAL CONTROL POINTS (CONTINUED)

CD18 2 DADE CO	**Elevation:**	**NAVD 1988**	**14.636'**	**NGVD 1929**	**16.155'**
PID AC2047	Latitude	(Scaled) 25°36'38"			
State/County FL/Miami-Dade	Longitude	(Scaled) -80°18'37"			
USGS QUAD Perrine (1994)					
Vertical Order 2nd Class 0					

DESCRIBED BY NATIONAL GEODETIC SURVEY 1970 2.6 MI SE FROM PERRINE. ABOUT 2.3 MILES EAST ALONG RICHMOND DRIVE FROM THE INTERSECTION OF U.S. HIGHWAY 1 AT PERRINE, THENCE 0.3 MILE SOUTHWEST ALONG OLD CUTLER ROAD, IN SECTION 35, R 40 E, T 55 S, SET ON THE TOP OF THE WEST WALKWAY OF THE BRIDGE OVER CUTLER CANAL, 17.7 FEET WEST OF THE CENTER LINE OF OLD CUTLER ROAD, 3.8 FEET WEST OF THE EAST EDGE OF THE WALKWAY, 1.4 FEET SOUTH OF THE NORTH END OF THE WALKWAY AND 1 FOOT ABOVE THE BRIDGE FLOOR.

SURVEYOR'S REPORT

VERTICAL CONTROL POINTS (CONTINUED)

CD18 1 DADE CO	**Elevation:**	**NAVD 1988**	**16.00'**	**NGVD 1929**	**17.52'**
PID AC2047	Latitude	(Scaled) 25°36'37"			
State/County FL/Miami-Dade	Longitude	(Scaled) -80°18'35"			
USGS QUAD Perrine (1994)					
Vertical Order 2nd Class 0		DESCRIBED BY NATIONAL GEODETIC SURVEY 1970 2.6 MI SE FROM PERRINE. ABOUT 2.3 MILES EAST ALONG RICHMOND DRIVE FROM THE INTERSECTION OF U.S. HIGHWAY 1 AT PERRINE, THENCE 0.3 MILE SOUTHWEST ALONG OLD CUTLER ROAD, IN SECTION 35, R 40 E, T 55 S, SET ON THE TOP OF THE EAST CONCRETE WALKWAY OF A BRIDGE OVER CUTLER CANAL, 17.7 FEET EAST OF THE CENTER LINE OF OLD CUTLER ROAD, 3.8 FEET EAST OF THE WEST EDGE OF THE WALKWAY, 1.4 FEET NORTH OF THE SOUTH END OF THE WALKWAY AND 1 FOOT ABOVE THE LEVEL OF THE BRIDGE FLOOR.			

SURVEYOR'S REPORT

GPS METHODS

Due to the remote location of the wells the District staff and the Surveyor decided it was appropriate to perform a GPS survey to establish the orthometric heights for the required data. The RTK survey was completed on April 6, 2006. Each RTK session started with the base station set on one control point and then an observation was done to another control point as a check. Since the vertical control points for this project did not have accurate horizontal locations the vertical control points were observed as a part of the RTK session. These horizontal coordinates along with the published vertical points were then used to complete the topographic observations at the platform. As the platform observations progressed addition vertical control points were located as checks. Observations to the control points, platform corners and wells were occupied for 3 minutes. Once the first observations were completed the base was moved to another control point and the points were occupied again for one minute. All points except for natural ground observations were observed at least 2 times.
The following instrumentation was used for the GPS observations: (1) Trimble 5700 receiver as the base unit, (1) Trimble 5800 receiver/antenna, (1) Trimble Trimmark 3 radio repeater and (1) Trimble TSCe data collector.

DATA PROCESSING

Adjustment

Elevations were generated by using FDOT Vector Software. Initial Geoid separations were generated using the latitudes and longitudes from the horizontal adjustment and NGS Geoid Model 2003. Then the SMOOTH routine within the FDOT Vector software was used along with the published elevations of the NGS Vertical control points to compute geoid separations for each observation Two vertical control points were used to compute the geoid separations and the subsequent elevations. Initial error estimates were determined using standard error constants of 5 mm and 5 parts per million for all vectors in the network. The constrained adjustment held all control points fixed and the standard error for the final adjustment was 2.219 with 36 degrees of freedom. Overall network precision, based on 95% confidence level, was 8.98 parts per million (1:111,358). The average standard deviation in latitude, longitude and ellipsoid height was 3.9 cm. All points pass a Positional Tolerance Test with the settings of 0.03 m for constant error and 1/50,000 for proportional error. NGS vertical control point "CD 18 2 DADE CO" was not held fixed in the vertical adjustment for the north site and the result computed elevations was 14.63 feet compared to the published 14.64 feet however , the typical vertical error using these methods is 3.0 cm or 0.10 feet.The resulting vertical error from the above data is +/- 0.26'.

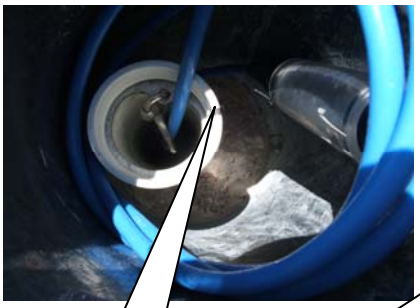
SURVEYOR'S REPORT

PROJECT RESULTS

The following table lists the Vertical and Horizontal Data established at the platform and well pipes.

NGVD 1929 ELEV.	NORTHING (NAD '83-'99)	EASTING (NAD '83-'99)	LATITUDE (NAD '83-'99)	LONGITUDE (NAD '83-'99)	DESCRIPTION
5.9'	461363	884953	25°36'04.5"	- 80°18'20.8"	N.W. COR. PLATFORM
7.4'	461363	884955	25°36'04.5"	- 80°18'20.8"	BBCWMW8B 2" PVC
8.3'	461363	884955	25°36'04.5"	- 80°18'20.8"	BBCWMW8B 6" PVC
5.9'	461361	884957	25°36'04.5"	- 80°18'20.7"	N.E. COR. PLATFORM
6.0'	461356	884955	25°36'04.4"	- 80°18'20.8"	S.E. COR. PLATFORM
7.8'	461356	884953	25°36'04.4"	- 80°18'20.8"	BBCWMW 8A 2" PVC
8.4'	461356	884953	25°36'04.4"	- 80°18'20.8"	BBCWMW 8A 6" PVC
5.8'	461358	884951	25°36'04.4"	- 80°18'20.8"	S.W. COR. PLATFORM

BBCWMW 8A 2" PVC



BBCWMW 8A 6"PVC

BBCWMW 8B REFERENCE BENCHMARK

BENCHMARK LOCATION

BENCHMARK LOCATION

TYPICAL WELL LOCATION

REFERENCE BENCHMARK LOCATION

WELL LOCATION

WELL LOCATION

SURVEY NOTES:

1. ELEVATIONS SHOWN HEREON WERE DERIVED USING GPS AND REFERENCE THE NATIONAL GEODETIC VERTICAL DATUM OF 1929.
2. CORDINATES SHOWN HEREON WERE DERIVED USING GPS AND REFERENCE THE NORTH AMERICAN DATUM OF 1983 WITH THE 1999 ADJUSTMENT APPLIED.
3. NGS MONUMENTS USED FOR THE VERTICAL DATA WERE D270 AND CD 18–2 DADE CO..
4. THE NGS MONUMENT USED FOR THE HORIZONTAL DATA WAS H084.
5. THIS SKETCH IS NOT A BOUNDARY SURVEY.

COASTAL WETLANDS TEMPERATURE AND SALINITY SITES BBCWMW8A AND BBCWMW8B PLATFORM AND WELL INFORMATION

LOCATION	NGVD 1929 ELEV.	NORTHING	EASTING	LAT.	LONG.	DESCRIPTION
Ⓐ	5.9'	461363	884953	25°36'04.5"	80°18'20.8"	NW COR. PLATFORM
Ⓑ	7.4'	461363	884955	25°36'04.5"	80°18'20.8"	BBCWMW8B 2" PVC
Ⓒ	8.3'	461363	884955	25°36'04.5"	80°18'20.8"	BBCWMW8B 6" PVC
Ⓓ	5.9'	461361	884957	25°36'04.5"	80°18'20.7"	NE COR. PLATFORM
Ⓔ	6.0'	461356	884955	25°36'04.4"	80°18'20.8"	SE COR. PLATFORM
Ⓕ	7.8'	461356	884953	25°36'04.4"	80°18'20.8"	BBCWMW8A 2" PVC
Ⓖ	8.4'	461356	884953	25°36'04.4"	80°18'20.8"	BBCWMW8A 6" PVC
Ⓗ	5.8'	461358	884951	25°36'04.4"	80°18'20.8"	SW COR. PLATFORM

LEGEND:

COR. CORNER
ELEV. ELEVATION
GPS GLOBAL POSITIONING SYSTEM
LAT. LATITUDE
LONG. LONGITUDE
NGVD NATIONAL GEODETIC VERTICAL DATUM
PVC POLYVINYL CHLORIDE
NGS NATIONAL GEODETIC SURVEY
× -4.5 SAND EXISTING ELEVATION

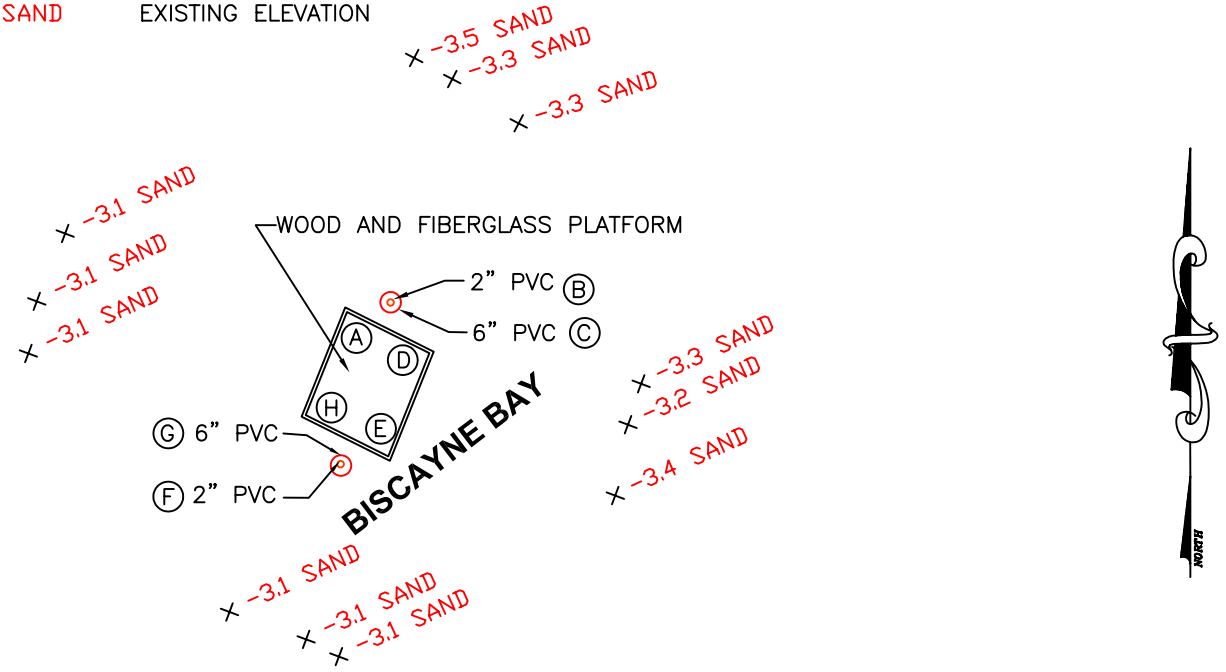


EXHIBIT A
COASTAL WETLANDS TEMPERATURE AND SALINITY SITES
BBCWMW8A & BBCWMW8B
BURGER KING SITE

MIAMI–DADE COUNTY, FLORIDA

DATE 5/2/06
SCALE 1"=10'
FIELD BK. 1182
DWNG. BY MMM
CHECK BY AML

DATE	REVISIONS

KEITH and SCHNARS, P.A.
ENGINEERS, PLANNERS, SURVEYORS
LB 1337
6500 N. ANDREWS AVE, FT. LAUDERDALE, FL. 33309–2132 (954)776–1616

SHEET NO. 9 OF 10 SHEETS
DRAWING NO. 16434.00

L:/Projects/ISURV/16434/WORK ORDER 154/KEY BISCAYNE SITES/BURGER KING SITE/BURGER KING SITE.DWG

SURVEYOR'S REPORT

Comments:

Due to a solar panel obstructing the northerly well (BBCWMW8B) a reference elevation mark was set near the well. Direct measurements were taken to obtain the elevations shown on the 6-inch and 2-inch PVC pipes at well BBCWMW8B.
See Exhibit "A" for ground elevations and sketch of platform and wells.
Party Chief: D. Ferels Field Book: 1182 Page 60,64
Offset: 1.52' SFWMD VALUE (subtract this value to convert to NAVD 1988)
Offset: 1.52' NGS VALUE (subtract this value to convert to NAVD 1988)
NAVD 88 - North American Vertical Datum of 1988
NGVD29 -National Geodetic Vertical Datum of 1929
NAD 83-99 (Horizontal Datum) North American Datum of 1983 with the 1999 adjustment applied.
NGS- National Geodetic Survey
SFWMD- South Florida Water Management District
FDOT - Florida Department of Transportation
GPS - Global Positioning System
RTK- Real Time Kinematic

SURVEYOR'S CERTIFICATION

I hereby certify that this Specific Purpose Survey meets applicable portions of the Minimum Technical Standards set forth by the Florida Board of Professional Surveyors and Mappers in Chapter 61-G17, Florida Administrative Code. This report is prepared for the sole and specific use of the South Florida Water Management District and is not assignable.

KEITH and SCHNARS, PA.
L.B. number 1337

By:

Date of Survey
April 6, 2006

Michael M. Mossey, PSM
Professional Surveyor and Mapper
State of Florida
Certificate No. 5660

4-03-06
FERELS
LALONDE

S.F.W.M.
WELL PLAT FORM
MOWERY SITE
NAVD 1988 DATUM

	+	HI	−	ELEV	NAVD 1988 BM EL
					5.259
BM	4.850				
	3.750				
	2.650				
	3.750	9.009			
			6.740		
TP 1	7.170		5.640		
	5.990		4.540		
	4.810		5.640	3.369	
	5.990	9.359			
			6.100		
TP 2	5.650		4.915		
	4.450		3.730		
	3.250		4.915	4.444	
	4.450	8.894			
			6.015		
TP3	6.705		4.815		
	5.440		3.615		
	4.180		4.815	4.079	
	5.442	9.521			
			6.390		
TP4	6.560		5.130		
	5.300		3.870		
*	4.040		5.130	4.391	
	5.300	9.691			
			6.460		
TP5	5.620		5.180		
	4.410		3.910		
	3.200		5.183	4.508	
	4.410	8.918			
			5.180		
TP 6	5.630		3.960		
	4.440		2.750		
	3.250		3.963	4.955	
	4.440	9.395			

R-725 BRASS DISC IN CONC. HEADWALL AT THE SOUTH WEST CORNER OF STRUCTURE S-20.F STAMPED (R-725 DCBM)

SET 60d NL

SET 60d NL

SET 60d NL

SET 60d NL

SET 60d NL

SET 60d NL

4.03-06
FERELS
LALONDE

SFWM
WELL PLATFORMS
MOWERY SITE
NAVD 1988 DATUM

	+	HI	-	ELEV	BM EL
TP7	5.840		6.270		
	4.740		5.065		
	3.640		3.860		
	4.740	9.070	5.065	4.330	
BM			4.910		5.259
			3.810		
			2.710		
			3.810	5.260	

SET 60d NL

R-725

```
Identification_Information:
        Citation:
                Citation_Information:
                        Originator: Michael M. Mossey, P.S.M.(ed.)
                        Publication_Date: 20060505
                        Publication_Time: Unknown
                        Title: Key Biscayne Coastal Wetlands Temperature and Salinity site
Wells
                        Edition: 1
                        Publication_Information:
                                Publication_Place: Not Published
                                Publisher: None
                        Online_Linkage: mmossey@keithandschnars.com
        Description:
                Abstract:
                        South Florida Water Management District Key Biscayne
                        Coastal Wetlands Temperature and Salinity site Wells
                        BBCWMW 8 A and B.
                Purpose:
                        To establish NAVD 88 and NGVD 29 elevations on the
                        wells.
        Time_Period_of_Content:
                Time_Period_Information:
                        Range_of_Dates/Times:
                                Beginning_Date: 20060328
                                Ending_Date: 20060406
                Currentness_Reference: Publication Date
        Status:
                Progress: Complete
                Maintenance_and_Update_Frequency: Unknown
        Spatial_Domain:
                Bounding_Coordinates:
                        West_Bounding_Coordinate: -80°18'21"
                        East_Bounding_Coordinate: -80°18'21"
                        North_Bounding_Coordinate: 25°36'04"
                        South_Bounding_Coordinate: 25°36'04"
        Keywords:
                Theme:
                        Theme_Keyword_Thesaurus: None
                        Theme_Keyword: Specific Purpose Survey
                        Theme_Keyword: Well
                Place:
                        Place_Keyword_Thesaurus: None
                        Place_Keyword: Wells BBCMWM 8 A and B
                        Place_Keyword: Attached to platform in Biscayne Bay
                        Place_Keyword: Miami-Dade County, Florida
        Access_Constraints: Need boat and motor to get to site.
        Use_Constraints: Need key to gain access to wells.
        Point_of_Contact:
                Contact_Information:
                        Contact_Person_Primary:
                                Contact_Person: Howard J. Ehmke
                                Contact_Organization: South Florida Water Management
District
                        Contact_Position: P.S.M.
                        Contact_Address:
                                Address_Type: mailing and physical address
                                Address:
                                        Acceler 8
                                        Suite 150
                                        2301 Centerpark W. Drive
                                City: West Palm Beach
                                State_or_Province: Florida
                                Postal_Code: 33409
                                Country: USA
                        Contact_Voice_Telephone: (561) 242-5520 ext. 4064
                        Contact_Electronic_Mail_Address: hehmke@sfwmd.gov
                        Hours_of_Service: 8:00 am to 5:00 pm EST
Data_Quality_Information:
        Attribute_Accuracy:
```

Attribute_Accuracy_Report:
The RTK survey was performed using a Trimble brand 5700 receiver for the base unit, a Trimble 5800 rover unit, Trimble Trimmark 3 radio repeater, and Trimble TSCe data collector. Additional vertical data was collected using a conventional Leica NA2 Level. Coordinates are based on the Florida State Plane Coordinate System, East Zone, NAD 83/99. Elevations are based on NGVD 1929 with an offset supplied to convert to NAVD 1988 datum.

Logical_Consistency_Report:
Horizontal and vertical positions were established on the wells, platform and ground surronding the platform using first, and second order monuments.

Completeness_Report:
Horizontal locations were established using NGS monument H084. Vertical data was established using NGS monuments D 270, CD18 1 DADE CO and CD18 2 DADE CO. H 084 has horizontal values of Latitude 25°37'09.07665", Longitude -80°19'22.91217", Northing 467885.74 (ft.), Easting 879232.48 (ft.).
DESCRIBED BY DADE COUNTY FLORIDA 1972
STATION IS ABOUT 6.0 MILES SOUTH SOUTHWEST OF THE SOUTH MIAMI CITY HALL, ABOUT 1.5 MILES EAST OF U.S. ROUTE 1, ABOUT 1.5 MILES WEST OF THE SHORE OF BISCAYNE BAY AND IN THE VICINITY OF THE INTERSECTION OF S.W. 80TH AVENUE AND S.W. 163RD STREET. TO REACH FROM THE INTERSECTION OF U.S. ROUTE 1 AND S.W. 104TH STREET AT THE SOUTHERN TERMINUS OF STATE ROAD 826 IN THE VILLAGE OF KENDAL, PROCEED SOUTHWESTERLY ON U.S. ROUTE 1 FOR 4.5 MILE TO THE INTERSECTION OF S.W. 168TH STREET (RICHMOND DRIVE), TURN LEFT AND PROCEED EAST ON S.W. 168TH STREET FOR 1.6 MILES TO THE INTERSECTION OF S.W. 80TH AVENUE (KUHN ROAD), TURN LEFT AND PROCEED NORTH ON S.W. 80TH AVENUE FOR 0.3 MILE TO THE NTERSECTION OF S.W. 163RD STREET AND THE STATION IN THE SOUTHWEST QUADRANT OF THE INTERSECTION.
STATION MARK IS A BRASS DISK IN A CONCRETE MONUMENT WITH UNDERGROUND MARK, FLUSH WITH THE GROUND, MARKED FLORIDA-DADE AND STAMPED H-084. IT IS 0.7 FEET SOUTH OF THE SOUTH EDGE OF PAVING ON S.W. 163RD STREET, 80.0 FEET WEST OF THE CENTERLINE OF S.W. 80TH AVENUE AND DIRECTLY IN FRONT OF RESIDENCE 8000 S.W. 163RD STREET. REFERENCE MARKS ARE SPIKES, CENTER PUNCHED AND DRIVEN THROUGH DADE COUNTY BRASS WASHERS INTO THE ASPHALT PAVING NEAR THE NORTH EDGE OF S.W. 163RD STREET.
D 270 has values of NAVD 1988 9.94' and NGVD 1929 11.47'. LOCATED 4.1 KM (2.55 MI) NORTHEASTERLY ALONG U.S. HIGHWAY 1 FROM THE FLORIDA TURNPIKE (STATE HIGHWAY 821) IN CUTLER RIDGE, THENCE 1.8 KM (1.10 MI) EASTERLY ALONG SOUTHWEST 168TH STREET, IN TOP OF AND 0.6 M (2.0 FT) SOUTH OF THE NORTH END OF THE WEST CONCRETE ABUTMENT OF THE BRIDGE SPANNING CUTLER DRAIN CANAL NUMBER C-100, 5.3 M (17.4 FT) NORTH OF THE CENTERLINE OF THE STREET, AND 0.3 M (1.0 FT) ABOVE THE LEVEL OF THE STREET.
CD18 2 DADE CO has values of NAVD 1988 14.636', NGVD 1929 16.155' DESCRIBED BY NATIONAL GEODETIC SURVEY 1970 2.6 MI SE FROM PERRINE. ABOUT 2.3 MILES EAST ALONG RICHMOND DRIVE FROM THE INTERSECTION OF U.S. HIGHWAY 1 AT PERRINE, THENCE 0.3 MILE SOUTHWEST ALONG OLD CUTLER ROAD, IN SECTION 35, R 40 E, T 55 S,

SET ON THE TOP OF THE WEST WALKWAY OF THE
BRIDGE OVER CUTLER CANAL, 17.7 FEET WEST OF
THE CENTER LINE OF OLD CUTLER ROAD, 3.8 FEET
WEST OF THE EAST EDGE OF THE WALKWAY, 1.4
FEET SOUTH OF THE NORTH END OF THE
WALKWAY AND 1 FOOT ABOVE THE BRIDGE FLOOR.
CD18 1 DADE CO has values of NAVD 1988 16.00',
NGVD 1929 17.52'. DESCRIBED BY NATIONAL
GEODETIC SURVEY 1970 2.6 MI SE FROM PERRINE.
ABOUT 2.3 MILES EAST ALONG RICHMOND DRIVE
FROM THE INTERSECTION OF U.S. HIGHWAY 1 AT
PERRINE, THENCE 0.3 MILE SOUTHWEST ALONG
OLD CUTLER ROAD, IN SECTION 35, R 40 E, T 55 S,
SET ON THE TOP OF THE EAST CONCRETE
WALKWAY OF A BRIDGE OVER CUTLER CANAL, 17.7
FEET EAST OF THE CENTER LINE OF OLD CUTLER
ROAD, 3.8 FEET EAST OF THE WEST EDGE OF THE
WALKWAY, 1.4 FEET NORTH OF THE SOUTH END OF
THE WALKWAY AND 1 FOOT ABOVE THE LEVEL OF
THE BRIDGE FLOOR.

Positional_Accuracy:

Horizontal_Positional_Accuracy:

Horizontal_Positional_Accuracy_Report:

The horizontal position of the structure
was established using GPS.

Vertical_Positional_Accuracy:

Vertical_Positional_Accuracy_Report:

Elevations were generated by using FDOT Vector
Software. Initial Geoid separations were generated using
the latitudes and longitudes from the horizontal
adjustment
and NGS Geoid Model 2003. Then the SMOOTH routine
within the FDOT Vector software was used along with the
published elevations of the NGS Vertical control points to
compute geoid separations for each observation. Two
vertical control points were used to compute the geoid
separations and the subsequent elevations. Initial error
estimates were determined using standard error constants
of 5 mm and 5 parts per million for all vectors in the
network. The constrained adjustment held all control
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fixed and the standard error for the final adjustment was
2.219 with 36 degrees of freedom. Overall network
precision, based on 95% confidence level, was 8.98 parts
111,358). The average standard deviation in
latitude, longitude and ellipsoid height was 3.9 cm. All
points pass a Positional Tolerance Test with the settings
of
0.03 m for constant error and 1/50,000 for proportional
error.

Lineage:

Process_Step:

Process_Description:

Real Time Kinematic (RTK) methods were used to
establish the horizontal and vertical positions. The
positions established are North American Datum of 1983,
Adjustment of 1999 Zone, 0901 Florida East State Plane
coordinates. The vertical positions are National Geodetic
Vertical Datum of 1929. Since the vertical control points
for
this project did not have accurate horizontal locations
the
vertical control points were observed as a part of the RTK
session. These horizontal coordinates along with the
published elevation data were then used to complete the
topographic observations at each platform. As the
platform
observations progressed addition vertical control points
were located as checks. Observations to the control
points, platform corners and drainage pipes were occupied

```
                                for 3 minutes.  Once the first observations were completed
                                the base was moved to another control point and the
                                points were occupied again for one minute. All points
                                except for natural ground observations were observed at
                                least 2 times.Florida Department of Transportation (FDOT)
                                Vector software was then used to do a least square
                                adjustment on the observations.  35 vectors were
                                measured and used in the adjustment for both sites.
Initial
                                error estimates were determined using standard error
                                constants of 5 mm and 5 parts per million for all vectors
in
                                the network.
                        Process_Date: 20060406
Metadata_Reference_Information:
        Metadata_Date: 20060505
        Metadata_Contact:
                Contact_Information:
                        Contact_Person_Primary:
                                Contact_Person: Michael M.Mossey, P.S.M.
                                Contact_Organization: Keith and Schnars
                        Contact_Position: PSM
                        Contact_Address:
                                Address_Type: mailing and physical address
                                Address: 6500 North Andrews Avenue
                                City: Ft. Lauderdale
                                State_or_Province: FL
                                Postal_Code: 34994
                                Country: USA
                        Contact_Voice_Telephone: (954)776-1616
                        Contact_Facsimile_Telephone: (954)351-7643
                        Contact_Electronic_Mail_Address: mmossey@keithandschnars.com
                        Hours_of_Service: 8:00 am to 5:00 pm EST
        Metadata_Standard_Name: FGDC Content Standards for Digital Geospatial Metadata
        Metadata_Standard_Version: 19940608
```

Wells BBCWMW8A&B	*16434.00*	PARTY CHIEF	D. Ferels	DATE:	April 3, 2006			Datum:	*NAVD88*	FIELD BOOK 1182	PAGE 60		
STATION	**3 WIRE**	**AVG.(ENG)**	**HI**	**3 WIRE**	**AVG.(ENG)**	**ELEV.**	**BM EL.**	**DIST.**	**ERROR**	**ACCUM.**	**ADJ. ELEV.**	**METRIC**	**DESCRIPTION**
	3.130												
BM	2.750	2.750	11.273			8.523	**8.523**						BM S-123
	2.370												
STADIA		76.000											
	6.740			8.200									
TP1	5.850	5.850	9.300	7.820	7.823	3.450		151.00	0.000000000	0.000000000	**3.450**	1.051	
	4.960			7.450				1.00					
	17.550			23.470				1.00					
STADIA		178.000			75.000								
	7.660			7.530									
TP2	7.170	7.170	9.423	7.050	7.047	2.253		275.00	0.000000000	0.000000000	**2.253**	0.687	
	6.680			6.560				81.00					
	21.510			21.140				82.00					
STADIA		98.000			97.000								
	8.500			6.990									
TP3	8.130	8.132	11.475	6.080	6.080	3.343		182.00	0.000000000	0.000000000	**3.343**	1.019	
	7.765			5.170				-182.00					
	24.395			18.240				-2.00					
STADIA		73.500			182.000								
				3.330									
BM				2.950	2.952	8.523	**8.523**	149.00	0.000000000	0.000000000	**8.523**	2.598	BM S-123
				2.575				-2.00					
				8.855				-4.00					
					75.500								
							LOR=	855.00	**CHECK VALUES TO VERIFY SAME**				
									OR TO SEE THEY ARE WITHIN				
	TOTAL + =	425.500		**TOTAL - =**	429.500			855.00	**THIRD ORDER SPECS(MAX DIFF. 33 FT.)**				
					-4.00								
							RAW CLOSURE=	0.000					
							ERROR PER FOOT=	0.000					
							MTS ALLOWABLE ERROR FOR THIRD ORDER=	0.012					
							ACTUAL ERROR=	0.000	RED IF BAD-----GREEN IF GOOD				

Wells BBCWMW8A&B	*16434.00*	PARTY CHIEF	D. Ferels	DATE:	April 3, 2006			Datum:	*NGVD29*	FIELD BOOK 1182	PAGE 60		
STATION	**3 WIRE**	**AVG.(ENG)**	**HI**	**3 WIRE**	**AVG.(ENG)**	**ELEV.**	**BM EL.**	**DIST.**	**ERROR**	**ACCUM.**	**ADJ. ELEV.**	**METRIC**	**DESCRIPTION**
	3.130												
BM	2.750	2.750	12.804			10.054	**10.054**						BM S-123
	2.370												
STADIA		76.000											
	6.740			8.200									
TP1	5.850	5.850	10.831	7.820	7.823	4.981		151.00	0.000000000	0.000000000	**4.981**	1.518	
	4.960			7.450				1.00					
	17.550			23.470				1.00					
STADIA		178.000			75.000								
	7.660			7.530									
TP2	7.170	7.170	10.954	7.050	7.047	3.784		275.00	0.000000000	0.000000000	**3.784**	1.153	
	6.680			6.560				81.00					
	21.510			21.140				82.00					
STADIA		98.000			97.000								
	8.500			6.990									
TP3	8.130	8.132	13.006	6.080	6.080	4.874		182.00	0.000000000	0.000000000	**4.874**	1.486	
	7.765			5.170				-182.00					
	24.395			18.240				-2.00					
STADIA		73.500			182.000								
				3.330									
BM				2.950	2.952	10.054	**10.054**	149.00	0.000000000	0.000000000	**10.054**	3.064	BM S-123
				2.575				-2.00					
				8.855				-4.00					
					75.500								
							LOR=	855.00	**CHECK VALUES TO VERIFY SAME**				
									OR TO SEE THEY ARE WITHIN				
	TOTAL + =	425.500		**TOTAL - =**	429.500			855.00	**THIRD ORDER SPECS(MAX DIFF. 33 FT.)**				
					-4.00								
							RAW CLOSURE=	0.000					
							ERROR PER FOOT=	0.000					
							MTS ALLOWABLE ERROR FOR THIRD ORDER=	0.012					
							ACTUAL ERROR=	0.000	RED IF BAD-----GREEN IF GOOD				

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D8KI
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0000000.000000000000000.000000000000000.000000000000000.00000000000000
50KI
81KI1
C8NM4US State Plane 1983             Florida East 0901               NAD 1983
(Conus) Mol
69KI        h106    411184.510000000875646.6100000004.30000000000000base pt.
12
69KI        h098    418071.070000000863456.03000000013.0000000000000base pt.
12
69KI        h084    467855.740000000879232.4800000008.80000000000000base pt.
12
69KI        h072    477163.910000000886189.96000000010.9000000000000base pt.
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82KI9
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66FD        h106    25.4633152910027-80.3347740567954.29991219676756base pt.
14
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57KI0.000000000000001
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57KI0.000000000000001
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66FD        h098    25.4824257631436-80.37162245235612.9999120736568base pt.
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71KI21368318510.000000000410000
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13TSTime Date 03/29/2006 Time 11:48:45
69KI   r724 base420698.085000000871584.8970000005.33000000000000base pt.
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E2BA5700   04401034100861Zephyr Geodetic
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E2BA5700   04401034100861Zephyr Geodetic
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13NMReceiver firmware version=1.240

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E2BA5700   04401034100861Zephyr Geodetic
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57KI0.000000000000001
66FD   r725 base25.4701515845012-80.3465887810625.25991215273544base pt.
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E2SI5700   086 Zephyr Geodetic
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71KI11368400796.000000000410004
13TSTime Date 03/30/2006 Time 10:23:14
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67CN   platfrom 24654.090084682951106.64836407416653.051269442852dack shot
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67CN   platfrom 34656.255439482121109.09000456894657.950692606708dack shot
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67CN   platfrom 44660.715680406231109.07476783516655.761813129121dack shot
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13TSTime Date 03/30/2006 Time 10:59:40
67CN   pipe 1 4655.909595684901105.40692157055652.5412237869936" pvc pipe
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67CN   pipe 3 4658.667126784711109.14539620660657.8624639711422" pvc pipe
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67CN   pipe 4 4658.645107553531108.62535601591657.7839523686126" pvc pipe
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69KI        look7   465254.975000000884086.158333333100.000000000000
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69KI        look8   466173.608333333884086.158333333100.000000000000
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67CN	jh 2	6878.335113687422908.276532189443583.238074671255/8irc kstp
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69KI	jh2 base471863.476000000886481.41400000015.2630000000000base pt.
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67CN	cd 182	-78.103400995421-24.349271937873-16.568089593915copper disc
cd18410.010056571281500.03505087132618
B6CNcopper disc cd182
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67TP	d270	-6124.8437126992-444.144521067121230.96683474752
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B6CNcopper disc cd18-1
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67TP	ground3 1635.44458103129-1229.9797623101-3143.4026073560sand
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67TP	ground8 1638.96269980078-1217.0346906604-3118.2024981098sand
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67TP ground111619.85580633760-1225.2009969450-3127.7278694055sand
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67CN platform 31635.74757747432-1230.9918323472-3124.7007115024deck grate
410.020266550359700.03746390732626
C6NM0622.527053833007811.198425769805912.2248094081878710.83292851322580186
1369318410.0000000001369318598.0000000001
59NM060.023527311161160.00000398713792-0.0000032808282-
0.00000084129570.000011022669240.000001346383900.00000371825536
67CN platform 41640.15413464880-1230.8654500550-3125.9968228068deck grate
410.024669708578180.04378896638558
C6NM0622.522440433502201.230670809745792.2018525600433319.60358901047390183
1369319004.0000000001369319188.0000000001
59NM060.027581099420790.00000517041599-0.0000054562151-
0.00000099352120.000017122076310.000001812893630.00000378310210
13TSTime Date 04/05/2006 Time 12:46:23
67CN platform 51637.65266472046-1230.7485188988-3124.9152555633deck grate
shot 410.029535753930000.05039105721775
B6CNdeck grate shot for pipe
C6NM0622.499381780624391.254603028297422.1616845130920421.59088310834610181
1369319402.0000000001369319583.0000000001
59NM060.032124236226080.00000644219881-0.0000073000974-
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82KI6
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56KI136.00000000000000
82KI4
57KI0.000000000000001
66FD jh1 base25.6107654817797-80.31003933408514.0139112451564base pt.
14
E2SI5700 086 Zephyr Geodetic
0.000000000000000.000000000000000.00000000000000

13NMReceiver firmware version=0.000
57KI4.727680783271791
73KI jh1 base
71KI11369319922.000000000410001
E2NM5800 43501296400970R8/5800 Internal
0.000000000000000.000000000000000.21292608333333
13NMReceiver firmware version=2.020
57KI6.562000000000002
67CN 6" pipe a11636.65441447212-1236.1116227632-3129.5830818097pipe shot
410.019792550596350.04329540062482
C6NM0822.178607702255250.899764478206631.9841259717941317.96318438688390181
1369320050.0000000001369320232.0000000001
59NM080.030149208381770.00000395419329-
0.00000215178330.000000029809740.00001734601392-0.00000121241870.00000209325276
67CN 2" pipe a21636.53921824720-1235.7432562079-3130.0312519108pipe shot
410.017680110316340.03771227637208
C6NM0822.154973268508910.906299948692321.9551291465759316.51268501422910183
1369320277.0000000001369320461.0000000001
59NM080.026872484013440.00000286186855-
0.00000174046100.000000039000180.00001339704977-0.00000095340430.00000164875235
82KI6
13TSTime Date 04/05/2006 Time 13:44:27
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82KI3
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56KI136.00000000000000
56KI136.00000000000000
82KI3
82KI6
56KI136.00000000000000
56KI136.00000000000000
56KI136.00000000000000
82KI3
57KI0.000000000000001
66FD d270 25.6145235261242-80.32858743677410.8105784867648brass disc
d270 410.020391373272100.04536627747579
E2BA5700 04401034100861Zephyr Geodetic
0.000000000000000.557118308333330.02923222500000
13NMReceiver firmware version=1.240
57KI4.561000000000002
73BA d270
69KI d270 base466151.126000000877410.183000000100.000000000000base pt.
12
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56KI136.00000000000000
56KI136.00000000000000
82KI3
57KI0.000000000000001
66FD d270 base25.6145235250810-80.32858743545799.9999112208510base pt.
14
E2BA5700 04401034100861Zephyr Geodetic
0.000000000000000.557118308333330.02923222500000
13NMReceiver firmware version=1.240
57KI4.561000000000002
73BA d270 base
13TSTime Date 04/05/2006 Time 14:21:09
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56KI136.00000000000000
56KI136.00000000000000
82KI4
57KI0.000000000000001
66SI   d270 base25.6145235250810-80.32858743545799.9999112208510base pt.
14
57KI0.000000000000001
66FD   d270 base25.6145235250810-80.32858743545799.9999112208510base pt.
14
E2SI5700   086 Zephyr Geodetic
0.000000000000000.000000000000000.00000000000000
13NMReceiver firmware version=0.000
57KI4.557077690859641
73KI   d270 base
71KI11369325509.000000000410001
E2NM5800   43501296400970R8/5800 Internal
0.000000000000000.000000000000000.21292608333333
13NMReceiver firmware version=2.020
57KI6.562000000000002
67TP   2" pipe a27761.69180464339-793.38545620470-4360.2067258007
440.025593341043130.02890099072588
C6NM0721.972330331802371.306886553764341.4772049188613932.87579472127710061
1369325789.0000000001369325849.0000000001
67TP   6" pipe a17761.85663155711-793.75249260614-4359.6421875235
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C6NM0622.260523796081541.573642015457151.6228425502777131.57496991518300062
1369325992.0000000001369326074.0000000001
67TP   platform 57762.84910297494-788.55136396048-4354.8007264455
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C6NM0621.590776562690741.101231455802921.1479805707931530.61652624685510062
1369326283.0000000001369326344.0000000001
67TP   platform 37760.93588533985-788.90886545280-4354.5718211488
440.038209282558330.04051313410686
C6NM0622.241434812545781.539950728416441.6286748647689828.58085116665610060
1369326486.0000000001369326545.0000000001
67TP   platform 47765.34524189237-788.71610778063-4355.9055940682
440.032808096694820.03512849639504
C6NM0621.582044482231141.081549048423771.1546066999435416.46597305998990062
1369326591.0000000001369326652.0000000001
67TP   platform 17764.05930682009-791.12916349140-4360.4400715325
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C6NM0622.227992773056031.497314572334291.6498485803604135.16032164426230060
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56KI136.00000000000000
56KI136.00000000000000
56KI136.00000000000000
82KI4
13TSTime Date 04/05/2006 Time 14:51:27
57KI0.000000000000001
66FD   d270 base25.6145235250810-80.32858743545799.9999112208510base pt.
14
E2SI5700   086 Zephyr Geodetic
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13NMReceiver firmware version=0.000
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71KI11369327101.000000000410001
E2NM5800   43501296400970R8/5800 Internal
0.000000000000000.000000000000000.21292608333333
13NMReceiver firmware version=2.020
57KI6.562000000000002

67TP   platform 27759.37390615964-791.22350808228-4359.1746305014
440.033160845523670.04281396457788
C6NM0524.411650180816652.702897310256963.4866898059845026.09885444766600064
1369327172.0000000001369327238.0000000001
82KI6
13TSTime Date 04/05/2006 Time 16:20:10
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82KI4
57KI0.000000000000001
66FD   d270 base25.6145235250810-80.32858743545799.9999112208510base pt.
14
E2SI5700   086 Zephyr Geodetic
0.000000000000000.000000000000000.00000000000000
13NMReceiver firmware version=0.000
57KI4.557077690859641
73KI   d270 base
71KI11369332469.000000000410001
E2NM5800   43501296400970R8/5800 Internal
0.000000000000000.000000000000000.21292608333333
13NMReceiver firmware version=2.020
57KI6.562000000000002
67TP   jh1 base6125.49700489269440.383356653568-1229.1993604314
440.023588576331280.05833965725664
C6NM0623.108368158340451.236450552940372.8518664836883531.97926929906790060
1369332545.0000000001369332606.0000000001
67TP   cd 182 6047.02924191900417.721593424721-1246.6307596734
440.015922579755900.03744033128558
C6NM0722.830566883087161.097627639770512.6090846061706514.31565462170460060
1369332697.0000000001369332756.0000000001
67TP   cd18-1 6086.36265199425383.564049744371-1327.5356268079
440.021188572343340.04599357978762
C6NM0722.708158493041991.096963286399842.4760439395904519.25403791430750061
1369332839.0000000001369332911.0000000001
71KI21369332963.000000000410000
71KI11369333532.000000000410002
82KI6
13TSTime Date 04/06/2006 Time 09:22:36
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82KI6
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56KI136.00000000000000
82KI3
57KI0.000000000000001
66FD   r725   25.4701515855855-80.34658878056116.8179362257662cqpper disc
r725410.027431711096950.03799732052907
E2BA5700   04401034100861Zephyr Geodetic
0.000000000000000.557118308333330.02923222500000
13NMReceiver firmware version=1.240
57KI5.037000000000002
73BA   r725
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82KI4
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66FD	r725	25.4701515855855-80.34658878056116.8179362257662cqpper disc
r725410.027431711096950.03799732052907
E2SI5700	086 Zephyr Geodetic
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13NMReceiver firmware version=0.000
57KI5.036079057157041
73KI	r725
71KI11369395384.000000000410001
13TSTime Date 04/06/2006 Time 09:55:18
E2NM5800	43501296400970R8/5800 Internal
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13NMReceiver firmware version=2.020
57KI6.562000000000002
67TP	r724	-623.312174873532968.340866600276364.13692391653
440.020612175854130.03903823390441
C6NM0621.685421228408810.790436923503881.488574624061586.919272709637880062
1369395657.00000000001369395718.0000000001
82KI6
13TSTime Date 04/06/2006 Time 10:26:02
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82KI4
57KI0.000000000000001
66FD	r725	25.4701515855855-80.34658878056116.8179362257662cqpper disc
r725410.027431711096950.03799732052907
E2SI5700	086 Zephyr Geodetic
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13NMReceiver firmware version=0.000
57KI5.036079057157041
73KI	r725
71KI11369398256.000000000410001
E2NM5800	43501296400970R8/5800 Internal
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13NMReceiver firmware version=2.020
57KI6.562000000000002
67TP	ground134642.035058032531116.76302650468652.702858740665sand
410.042710015971050.05782527978514
C6NM0623.491483926773072.074852943420412.8081035614013711.56027918975600005
1369398531.00000000001369398535.0000000001
67TP	ground144643.198260619231118.27302743236655.573357109070sand
410.046479943675100.06340407795215
C6NM0623.491607904434202.064956188201902.815542936325078.105693728123840006
1369398571.00000000001369398576.0000000001
71KI51369398650.000000000410001
71KI61369398653.000000000410001
71KI51369398654.000000000410001
71KI61369398663.000000000410001
71KI51369398668.000000000410001
71KI61369398669.000000000410001
67TP	ground154644.200165818211120.25920827069659.924911091877sand
410.040998535033010.06300512282375
C6NM0522.315828800201421.263281941413881.9409229755401614.97371857495680005
1369398786.00000000001369398790.0000000001
67TP	ground164657.963762827881123.20132329827661.201862848288sand
410.043380398561660.06214047772202
C6NM0623.266409397125241.870269060134892.677970170974738.257170894036170006
1369398850.00000000001369398855.0000000001
71KI51369398960.000000000410001

71KI61369398964.000000000410001
67TP	ground174660.662021793941123.16301229024660.207324919017sand
410.035080455642010.05525733532808
C6NM0523.512250661849981.883291482925422.9646446704864515.96882939338680005
1369398975.0000000001369398979.0000000001
67TP	ground184663.001334954011123.09523527876659.456179491958sand
410.044689640363660.04982736101969
C6NM0623.518972635269162.350520610809332.6188206672668517.56983662122170005
1369399053.0000000001369399057.0000000001
71KI51369399229.000000000410001
71KI61369399232.000000000410001
67TP	ground194668.011524403761117.29300885257645.688686594042sand
410.057985797639680.06485210466662
C6NM0524.062006950378422.709264993667603.0265140533447314.19254970785820007
1369399257.0000000001369399263.0000000001
71KI21369399300.000000000410000
13TSTime Date 04/06/2006 Time 11:10:36
71KI11369400237.000000000410002
67TP	ground204667.809334471331117.01740321817644.106462643463sand
410.030011230272850.05954462470442
C6NM0423.911955118179321.761082768440253.4931333065033035.68745512319240007
1369400273.0000000001369400279.0000000001
67TP	ground214666.734498728731115.78062043780643.050059957590sand
410.030722537072710.06102703621665
C6NM0422.764668941497801.243342041969302.4693105220794742.71330115826510005
1369400287.0000000001369400291.0000000001
71KI51369400382.000000000410002
71KI61369400384.000000000410002
67TP	ground224654.625082661901112.06910589555639.485501100031sand
410.027566477094950.04790423838332
C6NM0621.692414760589600.844037234783171.4669250249862719.66584424831370005
1369400752.0000000001369400756.0000000001
67TP	ground234651.455694441241111.48077792447639.083737055477sand
410.089974209608360.19098769974072
C6NM0523.421924352645871.457599163055423.0959603786468522.08854267863850007
1369400977.0000000001369400983.0000000001
67TP	ground244648.908741911821111.86808891198640.917572771046sand
410.054928402089080.11477901237315
C6NM0522.396896600723271.033990859985352.1624007225036614.19303620136100009
1369401053.0000000001369401061.0000000001