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U.S.G.S. Station Name: <b>G-2445</b>	U.S.G.S. Station Number: <b>261446080062801</b>	_			Date of Field Work: <b>09/26/19</b>		
Party Chief: <b>T. AVERY</b>	Field Book: SFWMD #1		Page(s): <b>69-71</b>		Report Prepared by: <b>DEWBERRY</b>		
	SITE S	PECIFIC DAT	·A				
Site Benchmark:	Benchmark Elevation(s) (NAVD8	<i>18)</i> :	Corpscon 6.0.2	L Conversion F	n Factor (NAVD88 to NGVD29)		
G-2445	11.27 feet		+ 1.57 feet				
Well Reference Elevation (NAVD88):		Groun	Ground Elevation (NAVD88):		Pad Elevation (NAVD88):		
11.21'		11.5'	11.5'		N/A		
	GEOG	RAPHIC DAT	A				
Section 25	Township <b>48</b> \$	Township 48 SOUTH		Range 42 EAST			
Well Latitude:	Well Longitude:	Location	Location Source:				
26°14'49.07"N	80°06'27.52"W	AVERA	AVERAGED FPRN & TRIMBLE VRSNOW RTK				
State Plane Coordinates:	Northing (Y) = <b>696460'</b>	Fastin	Easting (X) = <b>948653'</b>				

Notes: NAVD88 – North American Vertical Datum of 1988; NGVD29- National Geodetic Vertical Datum of 1929; Corpscon 6.0.1 - A U.S. Army Corps of Engineers Engineering Research and Development Center Topographic Engineering Center Alexandria, Virginia Windows-based program to convert coordinates and elevations between datum's using vertcon05.txt and vertcon05.05 files supplied by the U.S. Army Corps of Engineers South Atlantic Division, Jacksonville FI.

## **PICTURES**





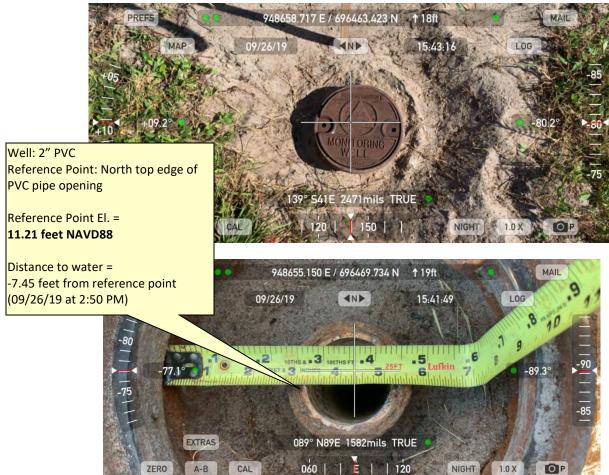
Not to scale (GoogleEarth product)



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#### Well Site and Well Head





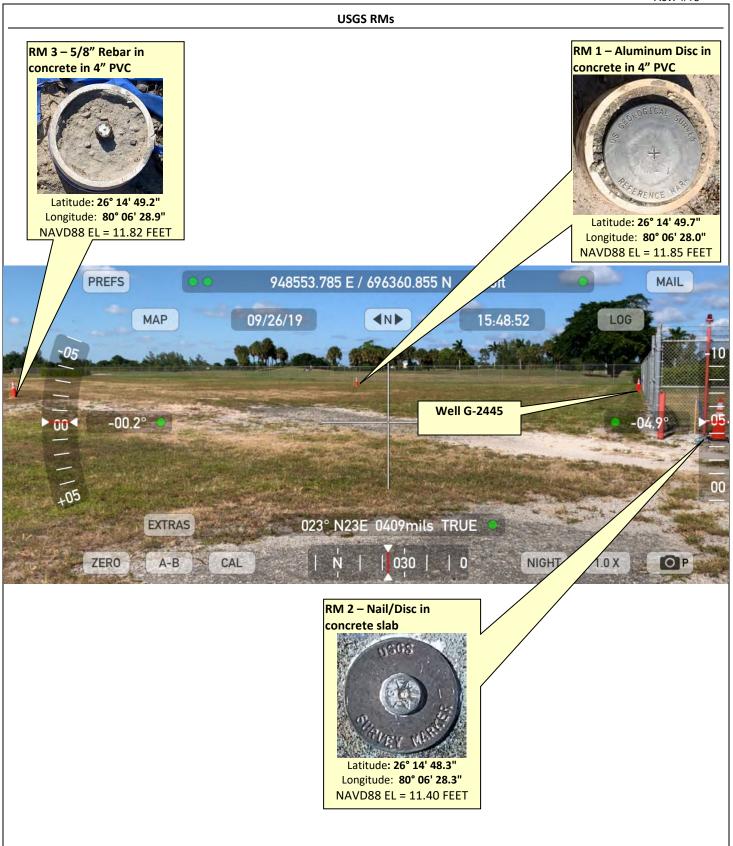


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### **New Aluminum Tag**









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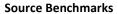




Latitude: 26°14'49.0" Longitude: 80°06'27.6" NAVD88 EL = 11.27 FEET



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## NGS Benchmark "015" (DO2654)



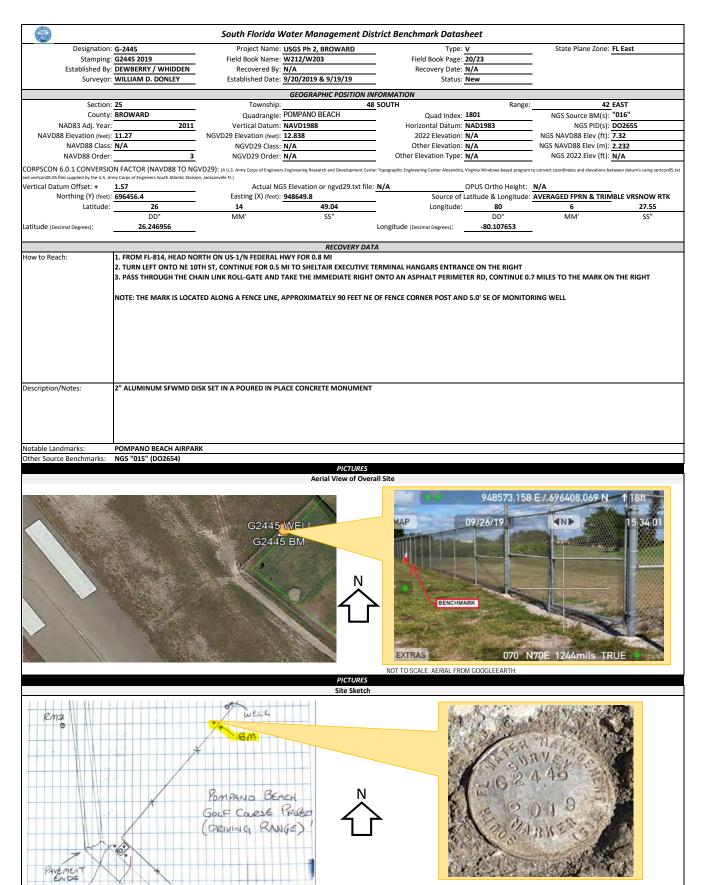
Latitude: **26°14'59.4**" Longitude: **80°06'04.8**" NAVD88 EL = 6.77 FEET



## NGS Benchmark "016" (DO2655)



Latitude: 26°14'34.8" Longitude: 80°06'08.5" NAVD88 EL = 7.32 FEET



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#### "015" Benchmark Datasheet (1 of 2)

## The NGS Data Sheet

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

```
PROGRAM = datasheet95, VERSION = 8.12.5.2
        National Geodetic Survey, Retrieval Date = MAY 20, 2019
DO2654 DESIGNATION - 015

    D02654

D02654 PID
 DO2654 STATE/COUNTY- FL/BROWARD
                 - US
 DO2654 COUNTRY
 DO2654 USGS QUAD - POMPANO BEACH (1983)
 D02654
 D02654
                               *CURRENT SURVEY CONTROL
 D02654
 DO2654* NAD 83(1986) POSITION- 26 14 59.
                                            (N) 080 06 04.
                                                                     SCALED
                                                               (W)
 DO2654* NAVD 88 ORTHO HEIGHT -
                                                      6.77 (feet) ADJUSTED
                                 2.063 (meters)
 D02654
DO2654 GEOID HEIGHT
                                -25.873 (meters)
                                                                     GEOID12B
 DO2654 DYNAMIC HEIGHT -
                                  2.060 (meters)
                                                        6.76 (feet) COMP
 DO2654 MODELED GRAVITY -
                             979,072.1
                                       (mgal)
                                                                     NAVD 88
D02654
DO2654 VERT ORDER
                                    CLASS II

    SECOND

D02654
 DO2654. The horizontal coordinates were scaled from a topographic map and have
 DO2654.an estimated accuracy of +/- 6 seconds.
 D02654.
 DO2654. The orthometric height was determined by differential leveling and
 DO2654.adjusted by the NATIONAL GEODETIC SURVEY
 DO2654.in December 2012.
D02654
 DO2654. Significant digits in the geoid height do not necessarily reflect accuracy.
 DO2654.GEOID12B height accuracy estimate available <a href="here">here</a>.
 D02654
DO2654. Photographs are available for this station.
 DO2654. The dynamic height is computed by dividing the NAVD 88
 DO2654.geopotential number by the normal gravity value computed on the
 DO2654.Geodetic Reference System of 1980 (GRS 80) ellipsoid at 45
 DO2654.degrees latitude (g = 980.6199 gals.).
 DO2654. The modeled gravity was interpolated from observed gravity values.
 D02654
 D02654;
                           North
                                        East
                                                Units Estimated Accuracy
 DO2654;SPC FL E
                   - 212,590.
                                      289,800.
                                                  MT (+/- 180 meters Scaled)
 D02654
 DO2654_U.S. NATIONAL GRID SPATIAL ADDRESS: 17RNK897036(NAD 83)
 D02654
                                SUPERSEDED SURVEY CONTROL
 D02654
 D02654
 DO2654.No superseded survey control is available for this station.
 DO2654 MARKER: DB = BENCH MARK DISK
 DO2654 SETTING: 7 = SET IN TOP OF CONCRETE MONUMENT
 DO2654 STAMPING: 015 2011
 D02654 MARK LOGO: FL2570
 DO2654 PROJECTION: RECESSED 5 CENTIMETERS
 DO2654_MAGNETIC: R = STEEL ROD IMBEDDED IN MONUMENT
 DO2654_STABILITY: C = MAY HOLD, BUT OF TYPE COMMONLY SUBJECT TO
DO2654+STABILITY: SURFACE MOTION
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#### "015" Benchmark Datasheet (2 of 2)

DO2654 SATELLITE: THE SITE LOCATION WAS REPORTED AS SUITABLE FOR DO2654+SATELLITE: SATELLITE OBSERVATIONS - December 22, 2011

DO2654 HISTORY - Date Condition Report By 20111222 MONUMENTED DO2654 HISTORY STONER

D02654

D02654 STATION DESCRIPTION

DO2654'DESCRIBED BY STONER AND ASSOCIATES INC 2011 (DWS)

DO2654'THE MARK IS ABOUT 7.7 MI (12.4 KM) SOUTHEAST OF WEST DIXIE BEND, 7.6 DO2654'MI (12.2 KM) SOUTH OF BOCA RATON, 1.7 MI (2.7 KM) EAST-NORTHEAST OF

DO2654'POMPANO BEACH, IN SECTION 30, TOWNSHIP 48 SOUTH, RANGE 43 EAST.

DO2654'OWNERSHIP IS THE FLORIDA DEPARTMENT OF TRANSPORTATION.

D026541

DO2654'TO REACH THE MARK FROM THE INTERSECTION OF WEST ATLANTIC BOULEVARD AND DO2654'NORTH DIXIE HIGHWAY IN POMPANO BEACH, GO EAST ON EAST ATLANTIC DO2654'BOULEVARD FOR 1.5 MI (2.4 KM) TO THE INTERSECTION OF FEDERAL HIGHWAY DO2654'(U.S. HIGHWAY 1). TURN LEFT ON NORTH FEDERAL HIGHWAY (U.S. HIGHWAY 1) DO2654'AND GO NORTH FOR 1.2 MI (1.9 KM) TO THE MARK ON THE LEFT, SET IN THE DO2654'TOP OF A 10-INCH (25 CM) ROUND CONCRETE MONUMENT RECESSED 0.2 FT (6 DO2654'CM) BELOW THE LEVEL OF THE GROUND AND 0.5 FT (15 CM) BELOW THE LEVEL DO2654'OF NORTH FEDERAL HIGHWAY (U.S. HIGHWAY 1).

DO2654'LOCATED 80.0 FT (24.4 M) WEST OF THE CENTERLINE OF FEDERAL HIGHWAY DO2654'(U.S. HIGHWAY 1), 77.0 FT (23.5 M) SOUTH OF THE CENTERLINE OF DO2654'NORTHEAST 14TH STREET, 46.6 FT (14.2 M) SOUTHWEST OF A METAL LIGHT DO2654'POLE, 30.9 FT (9.4 M) WEST OF THE WEST EDGE OF A CONCRETE SIDEWALK, D02654'12.9 FT (3.9 M) SOUTH OF A SIGN POST, 4.0 FT (1.2 M) EAST OF A FENCE DO2654'LINE AND 1.0 FT (0.3 M) EAST OF A CARSONITE WITNESS POST.

DO2654'NOTE REBAR ROD IS IMBEDDED IN THE MONUMENT.

\*\*\* retrieval complete. Elapsed Time = 00:00:04





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#### "016" Benchmark Datasheet (1 of 2)

## The NGS Data Sheet

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

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PROGRAM = datasheet95, VERSION = 8.12.5.2
        National Geodetic Survey, Retrieval Date = MAY 20, 2019
DO2655 DESIGNATION - 016

    D02655

D02655 PID
DO2655 STATE/COUNTY- FL/BROWARD
DO2655 COUNTRY - US
DO2655 USGS QUAD - POMPANO BEACH (1983)
D02655
D02655
                               *CURRENT SURVEY CONTROL
D02655
DO2655* NAD 83(1986) POSITION- 26 14 34. (N) 080 06 08.
                                                              (W)
                                                                    SCALED
DO2655* NAVD 88 ORTHO HEIGHT -
                                  2.232 (meters)
                                                       7.32 (feet) ADJUSTED
D02655
DO2655 GEOID HEIGHT
                                -25.867 (meters)
                                                                    GEOTD12B
DO2655 DYNAMIC HEIGHT -
                                                        7.31 (feet) COMP
                                  2.229 (meters)
DO2655 MODELED GRAVITY -
                            979,071.4 (mgal)
                                                                    NAVD 88
DO2655 VERT ORDER

    SECOND

                                    CLASS II
D02655
D02655. The horizontal coordinates were scaled from a topographic map and have
DO2655.an estimated accuracy of +/- 6 seconds.
D02655. The orthometric height was determined by differential leveling and
DO2655.adjusted by the NATIONAL GEODETIC SURVEY
D02655.in December 2012.
D02655.Significant digits in the geoid height do not necessarily reflect accuracy.
DO2655.GEOID12B height accuracy estimate available <a href="here">here</a>.
DO2655. Photographs are available for this station.
D02655
DO2655. The dynamic height is computed by dividing the NAVD 88
D02655.geopotential number by the normal gravity value computed on the
D02655.Geodetic Reference System of 1980 (GRS 80) ellipsoid at 45
D02655.degrees latitude (g = 980.6199 gals.).
D02655
DO2655. The modeled gravity was interpolated from observed gravity values.
D02655
D02655:
                          North
                                        East
                                                Units Estimated Accuracy
D02655;SPC FL E
                  - 211,820.
                                     289,700.
                                                 MT (+/- 180 meters Scaled)
DO2655_U.S. NATIONAL GRID SPATIAL ADDRESS: 17RNK896028(NAD 83)
D02655
                               SUPERSEDED SURVEY CONTROL
D02655
D02655.No superseded survey control is available for this station.
DO2655 MARKER: DB = BENCH MARK DISK
DO2655_SETTING: 7 = SET IN TOP OF CONCRETE MONUMENT
DO2655_STAMPING: 016 2011
DO2655 MARK LOGO: FL2570
DO2655 PROJECTION: RECESSED 5 CENTIMETERS
DO2655_MAGNETIC: R = STEEL ROD IMBEDDED IN MONUMENT
DO2655_STABILITY: C = MAY HOLD, BUT OF TYPE COMMONLY SUBJECT TO
DO2655+STABILITY: SURFACE MOTION
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#### "016" Benchmark Datasheet (2 of 2)

DO2655 SATELLITE: THE SITE LOCATION WAS REPORTED AS SUITABLE FOR DO2655+SATELLITE: SATELLITE OBSERVATIONS - December 22, 2011

DO2655 HISTORY - Date Condition Report By DO2655 HISTORY - 20111222 MONUMENTED STONER

D02655 D02655

STATION DESCRIPTION

D02655

DO2655'DESCRIBED BY STONER AND ASSOCIATES INC 2011 (DWS)

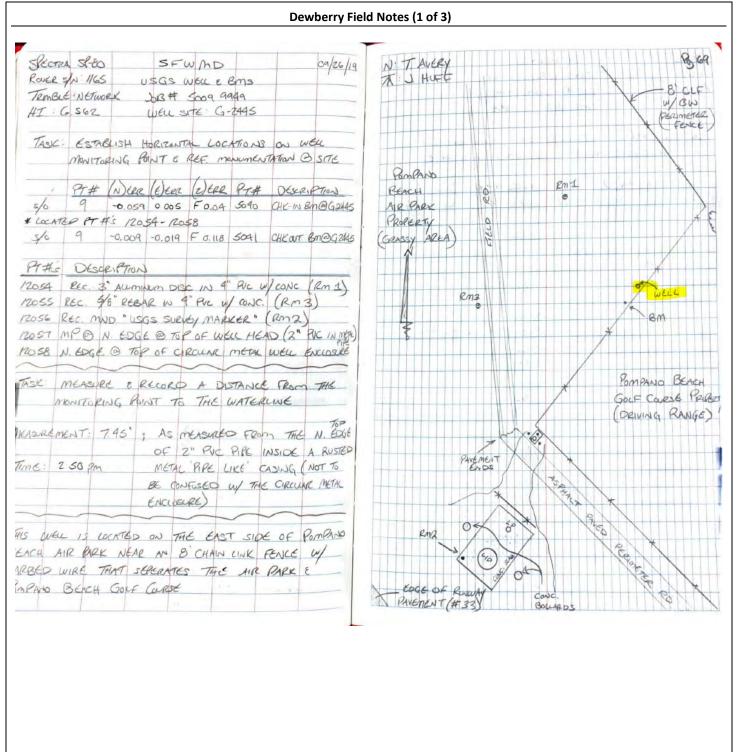
DO2655'THE MARK IS ABOUT 8.0 MI (12.9 KM) SOUTH OF BOCA RATON, 7.9 MI (12.7 DO2655'KM) SOUTHEAST OF WEST DIXIE BEND, 1.5 MI (2.4 KM) EAST-NORTHEAST OF DO2655'POMPANO BEACH, IN SECTION 31, TOWNSHIP 48 SOUTH, RANGE 43 EAST. DO2655'OWNERSHIP IS THE FLORIDA DEPARTMENT OF TRANSPORTATION.

DO2655'TO REACH THE MARK FROM THE INTERSECTION OF WEST ATLANTIC BOULEVARD AND DO2655'NORTH DIXIE HIGHWAY IN POMPANO BEACH, GO EAST ON EAST ATLANTIC DO2655'BOULEVARD FOR 1.5 MI (2.4 KM) TO THE INTERSECTION OF FEDERAL HIGHWAY DO2655'(U.S. HIGHWAY 1). TURN LEFT ON NORTH FEDERAL HIGHWAY (U.S. HIGHWAY 1) DO2655'AND GO NORTH FOR 0.8 MI (1.3 KM) TO THE MARK ON THE LEFT, SET IN THE DO2655'TOP OF A 10-INCH (25 CM) ROUND CONCRETE MONUMENT RECESSED 0.2 FT (6 DO2655'CM) BELOW THE LEVEL OF THE GROUND AND 0.5 FT (15 CM) BELOW THE LEVEL DO2655'OF NORTH FEDERAL HIGHWAY (U.S. HIGHWAY 1). D02655

DO2655'LOCATED 100.0 FT (30.5 M) WEST OF THE CENTERLINE OF FEDERAL HIGHWAY DO2655'(U.S. HIGHWAY 1), 45.0 FT (13.7 M) SOUTH OF THE CENTERLINE OF DO2655'NORTHEAST 10TH STREET, 44.6 FT (13.6 M) NORTHWEST OF A METAL SIGNAL DO2655'POLE, 24.0 FT (7.3 M) NORTH OF THE NORTH EDGE OF A CONCRETE SIDEWALK, DO2655'14.2 FT (4.3 M) SOUTHEAST OF A WIRE PULL BOX, 8.9 FT (2.7 M) EAST OF A DO2655'METAL LIGHT POLE AND 1.2 FT (0.4 M) NORTH OF A CARSONITE WITNESS POST. DO2655'NOTE REBAR ROD IS IMBEDDED IN THE MONUMENT.

\*\*\* retrieval complete. Elapsed Time = 00:00:04

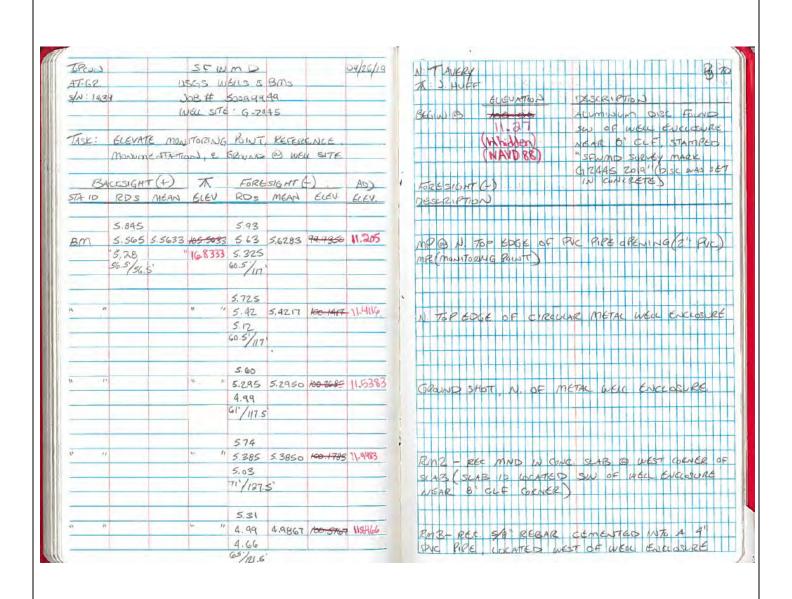




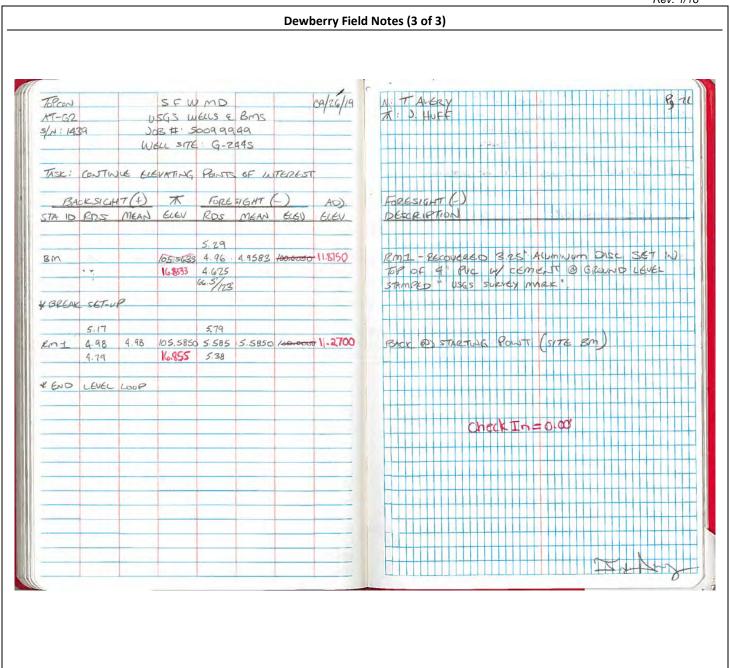


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# Dewberry Field Notes (2 of 3)









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#### Whidden Field Notes (1 of 2)

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016 (an)				7.37	
20 0					
	6.099	18 2419			
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1/ 1					
	5.248	13 - 6 2 9			
P2			3.936	9 699	
	9.639	14 33 1			
#3			5 944	8.945	
	2.2.54	15.947			
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	\$ 256	16.073			
-P 6			5.365	10.660	
	6 348	17.009			
G-2445 EM			· 5 729	11.279	
	7.125	14.302			
TP8			5 304	10.493	
	5 156	14, 100			
	5.126	19,1120			



