813 621-0080 FAX 813 623-6757 www.scsengineers.com

SCS ENGINEERS

June 10, 2011 File No. 09207049.06

Steven G. Morgan Solid Waste Section Southwest District Florida Department of Environmental Protection 13051 North Telecom Parkway Temple Terrace, Florida 33637-0926

Subject:

Citrus County Central Class I Landfill Phase 3 Expansion

Certification of Construction - Request for Additional Information No. 1

Permit No.: 21375-013-SC/01,

Citrus County WACS No.: SWD/09/39859

Dear Mr. Morgan:

On behalf of the Citrus County Solid Waste Division, SCS Engineers (SCS) submits the following responses to your request for additional information in a letter dated May 12, 2011. For ease of review, each Florida Department of Environmental Protection (FDEP) comments are reiterated in bold type, followed by our response.

We have provided revised submittals, or replacement pages to the submittals, using strikethrough and <u>underline</u> format, to facilitate review. The following documents are enclosed:

- 1. Geogrid Panel Layout Drawing
- 2. Video Inspection Tape and Report Revised
- 3. Drawings 18 & 19 of 21 Revised
- 4. Drawing 20 of 21 Revised
- 5. Boundary Survey Revised
- 6. Driller Logs Revised
- 7. Potentiometric Map

Dept. Of Environmental Protection

JUN 1 0 2011

SECTION 6 – GEOGRID INSTALLATION REPORT:

Southwest District

1. Section 6.4: Specification Section 31 32 19-1.04.D. specified that "a layout drawing reflecting as-built conditions and related installation details (i.e. panel layout, penetrations) of the actual geogrid system" be submitted with the Record Drawings. Please verify whether a panel layout drawing was prepared as specified and revise this section and provide the panel layout drawing, as applicable.

Response: The geogrid panel layout drawings are included in Attachment A.

2. Attachment 12-3 – Video Inspection Tape and Report: As indicated in the video inspection report and confirmed by the Department's review of the video provided, the inspection camera was submerged under liquid for those portions of the leachate collection, sump, and cleanout pipes that were not located on the side slopes of Phase 3. The lack of restriction in movement of the camera in the pipe does appear to be an indication that the pipes were not obstructed. However, in the sections of the pipes where the camera was submerged and vision obscured, it does not appear that the absence of potential construct defects (e.g. pipe crushing, pipe separation, pipe buckling, etc) can be confirmed. Please either conduct a video re-inspection of leachate system, with liquids removed from the system to allow the constructed pipe to be seen and its integrity confirmed, or provide alternate supporting information that the permittee relied upon to verify the integrity of the constructed leachate system piping.

Response: A video re-inspection was conducted on May 12, 2011 showing that the pipe is defect free. Please refer to Attachment B for the revised report and footage in DVD format.

CENTRAL LANDFILL PHASE 3 EXPANSION PROJECT CONSTRUCTION RECORD DRAWINGS

SCS Engineers Plan Set:

3. Drawings 18 & 19 of 21: The note on these sheets states "Actual Field Installation Differs From HT/DcR Engineering Design Documents." As appropriate, please either revise these drawings to show the noted installation differences or provide a narrative description of the revision that cannot be identified on the drawing. Please also explain how the differences "... have been determined to not significantly impact the original permitted concept or design."

Response: Drawings 18 and 19 have been revised to show the noted installation differences. Please refer to Attachment A.

4. Drawing 20 of 21: There appear to be two Repair #R-152 shown on this drawing. Please verify and revise this drawing, as appropriate.

Response: Please refer to Attachment A for the revised Drawing 20 of 21.

Berglund Construction Services, LLC Plan Set:

5. Drawing 8.1: Based on a review of the drawing scale and the elevations reported for the leachate collection pipe on this drawing, it appears that the leachate collection piping was installed at approximately a 0.5% slope, while Drawing 4 of this plan set appears to indicate that the subgrade for the leachate collection corridor was

Mr. Steven Morgan June 10, 2011 Page 3

constructed at an approximate 1% slope. The SCS record drawings (Drawings 4-6 of 21) also appear to indicate that the leachate collection corridor and piping were installed at an approximate 1% slope. Please verify this apparent inconsistency and revise this drawing, as appropriate.

Response: Please refer to Attachment A for the revised drawing 8.1.

6. Groundwater Monitoring Well Installation, Citrus County Central Landfill..., prepared by SCS Engineers, dated March 2, 2011 (submitted under separate cover March 4, 2011)

Rule 62-701.320(5)(b), F.A.C. Please address the comments in John Morris' May 10, 2011 memorandum (attached) regarding this submittal. You may call Mr. Morris at (813) 632-7600, extension 336, to discuss the items in his memorandum.

a. Part #E.3./#E.5.b./#E.5.d.

Deficiency:

- The survey drawing was not signed/sealed by a Florida Licensed Professional Surveyor and Mapper.
- The survey drawing provided top of well casing elevations for wells MW -20 and MW -21 referenced to NA VD 1988 while the top of well casing elevations for existing wells and piezometers were referenced to NGVD 1929.
- The "Log of Monitoring Well Construction" forms provide a single turbidity
 measurement that is assumed to represent conditions recorded at the end of
 well development activities. It is noted that the "Sampling Log" forms
 provided in Attachment E for the January 19, 2011 and February 17, 2011
 sampling events indicate elevated turbidity values were observed at the
 beginning of well purging activities.
- The information provided on the "Monitoring Well Completion Report" forms appears to indicate a screened interval at well MW-20 of 13.9 to (-6.1) ft NAVD and at well MW-21 of 9.79 to (-10.21) ft NAVD. This screened interval range was not compared to the target elevation of 15 to (-5) ft NGVD.
- The description provided in the "drill cuttings log" section of the two "State of Florida Well Completion Report" forms are identical [0-10 feet orange, medium clay; 10-125 feet tan, fine sand] and appear to be inconsistent with the description of lithology provided on the "Log of Monitoring Well Construction" forms.

Corrective Actions:

(1) Please provide a signed and sealed copy of the Boundary Survey.

Response: A revised boundary survey that is signed and sealed is included in Attachment C.

(2) Please provide a table that presents the elevations of the top of well casing elevations for all existing wells and piezometers at the facility that is referenced to a common datum.

Response: A revised signed and sealed boundary survey that lists the well casing elevation for all existing wells and piezometers at the facility that is referenced to a common datum is included in Attachment C.

(3) Please provide additional description of the development activities conducted at wells MW -20 and MW -21 to allow the collection of representative ground water samples [purge rate, total volume purged, turbidity measurements recorded during development, etc.]. Please provide a discussion that evaluates whether wells MW-20 and MW-21 have been appropriately constructed and adequately developed to produce water that meets the purging criterion [<20 NTU] for future sampling events.

Response: Monitoring wells MW-20 and MW-21 are scheduled to be redeveloped in June 2011 prior to the July semi-annual monitoring event. The well MW-20 and MW-21 have been appropriately constructed to produce water that meets the purging criterion of < 20 NTU. The redevelopment of these wells is associated with shortening the purge time to reach the < 20 NTU turbidity value.

(4) Please provide a discussion of the significance of the departure from the proposed well screen intervals and the ability of wells MW-20 and MW-21 to produce representative samples of the uppermost water-bearing unit at the facility.

Response: There is no significance to the departure from the proposed well screen intervals and the ability of wells MW-20 and MW-21 to produce representative samples of the uppermost water bearing unit at the facility. The top of the well screen elevation (ft NGVD) at MW-20 (13.9 ft NGVD) and MW-21 (9.8 ft NGVD) are above the high water table elevation since at least 2007. Groundwater elevation is not expected to rise above the top of the screen at these locations.

(5) Please provide revisions to the appropriate attachment(s) to provide a consistent description of the lithology encountered during the installation of wells MW -20 and MW -21.

Response: The drillers logs have been revised to more appropriately reflect

Mr. Steven Morgan June 10, 2011 Page 5

the lithology at monitoring well MW-20 and MW-21. The revised driller logs included in Attachment D.

b. Parts #E.4./#E.5.c.

Deficiency:

• Six semi-volatile organic compounds referenced in Rule 62-701.510(8)(d), F.A.C. [the parameters listed in 40 CFR Part 258, Appendix II] were reported at elevated detection limits that do not demonstrate compliance with Class G-II ground water standards or ground water minimum criteria. Please refer to the attached table for these parameters.

Corrective Actions:

(1) Please coordinate with Test America to determine if the results for the January 19, 2011 initial sampling event can be reported at lower detection limits to demonstrate compliance with ground water standards or minimum criteria. In the event that the laboratory can report at lower detection limits, please submit revised reports of results. For any parameter that cannot be reported at sufficiently lower detection limits, please conduct a supplemental sampling event using an appropriate analytical method and submit the results with the responses to these comments. Please submit the results of any supplemental sampling event in a manner that meets the reporting requirements of Specific Condition #E.10.a., of the referenced permits.

Response: The six semi-volatile organic compounds with elevated detection limits will be re-sampled during the July 2011 semi-annual groundwater monitoring event. The detection limits will demonstrate compliance with the Class G-II groundwater standards or groundwater minimum criteria.

c. <u>Part #E.I0.</u>

Deficiency:

- Table 1 summarized results for Equipment Blank sample #39332 collected January 19, 2011, however the chain of custody form and Test America report of results do not include this sample.
- Table 1 summarized results for Trip Blank sample #39821 collected February 17, 2011, however the chain of custody form and Test America report of results do not include this sample.
- Table 1 indicated a trihalomethanes concentration of 2.1 ug/L for the sample collected from MW -21 on January 19, 2011; however the Test America report of results indicates trihalomethanes were not detected in this sample.

- A ground water surface elevation contour map was not provided for the January 19, 2011 or February 17, 2011 sampling events.
- Ground Water Monitoring Report Certification [Department Form #62-701.900(31)] was not provided for the January 19, 2011 or February 17, 2011 sampling events.

Corrective Actions:

(1) Please submit a revised Table 1 and/or Test America report of results, as appropriate.

Response: Equipment Blank Sample #39332 and Trip Blank Sample #39821 were part of the 1st Semi-Annual Groundwater monitoring event at the facility that occurred at the same time as the initial sampling event.

(2) Please submit ground water surface elevation contour maps using water levels measured at all existing monitor wells and piezometers during the January 19, 2011 and February 17, 2011 sampling events. If ground water levels were not measured at all wells during these initial sampling events, please conduct a supplemental round of ground water level measurements at all existing monitor wells and piezometers and submit a ground water surface elevation contour map constructed using this supplemental water level data.

Response: The groundwater elevation contour maps were submitted during the 1st 2011 Semi-Annual Groundwater Monitoring reports for the facility.

(3) Please provide a discussion of the available water level data and indicate whether wells MW-20 and MW-21 were appropriately located to be downgradient from Phase 3 and the 7-acre closed cell, respectively.

Response: Based on the potentiometric maps that were submitted with the 1st 2011 Semi-Annual Groundwater Monitoring Report, Monitoring Wells MW-20 and MW-21 are located downgradient from Phase 3 and the 7-acre closed cell. Attachment E contains the potentiometric map from the 1st 2011 Semi-Annual Groundwater Monitoring Report.

(4) Please provide a signed Department Form #62-701.900(31) for the January 19, 2011 and February 17, 2011 sampling events.

Response: The signed Department Form #62-701.900(31) was submitted during the 1st 2011 Semi-Annual Groundwater Monitoring reports for the facility.

Mr. Steven Morgan June 10, 2011 Page 7

Dominique H. Bramlett, P.E. Project Manager

C. Ed Hilton, P.E.
Project Director
SCS ENGINEERS

DHB/CEH:dhb

cc: Susan Pelz, P.E., FDEP Tampa Casey Stephens, Citrus County, P.O. Box 340, Lecanto, FL 34460-0340

Dept. Of Environmental Protection

JUN 1 0 2011

Southwest District

Attachment A

Revised Record Drawings (Bound Separately)

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION JUN 10 2011 SOUTHWEST DISTRICT TAMPA Attachment B

Video Inspection Tape and Report - Revised

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

JUN 10 2011

SOUTHWEST DISTRICT

HIGH PRESSURE WATER JETTING VIDEO PIPELINE INSPECTION NO DIG POINT REPAIRS WWW.FLORIDAJETCLEAN.COM

19019 FERN MEADOW LOOP LUTZ, FL 33558 TEL: 800-226-8013 FAX: 813-926-4616 FLORIDAJETCLEAN@YAHOO,COM

Citrus County Solid Waste Phase 3 Expansion REVIDEO - LCS Lateral 1

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

SOUTHWEST DISTRICT
TAMPA

Work Performed May 2011

Conducted By: Florida Jetclean 800-226-8013

FLORIDA JETCLEAN

HIGH PRESSURE WATER JETTING VIDEO PIPELINE INSPECTION NO DIG POINT REPAIRS WWW.FLORIDAJETCLEAN.COM 19019 FERN MEADOW LOOP LUTZ, FL 33558

TEL: 800-226-8013 FAX: 813-926-4616 FLORIDAJETCLEAN@YAHOO.COM

DATE

: 5/24/2011

TO

: Casey Stevens - Citrus County Solid Waste

FROM

: Ralph Calistri (floridajetclean@yahoo.com)

SUBJECT

: Citrus County Landfill - Phase 3 Expansion - LCS Lateral 1 Revideo

Florida Jetclean was remobilized to the Citrus County Landfill - Phase 3 Expansion to provide explosion-proof video-inspection services on Leachate Collection Lateral 1 on 5/12/2011. Please find included with this report the applicable CCTV survey list, pipe graphic reports, and the video-inspection footage in DVD format for further reference.

Explosion-Proof Video-Inspection:

The explosion-proof video-inspection of the Leachate Collection Lateral 1 after it was dewatered show that the pipe is defect free. There is a 37.4' long segment of this pipe beginning at the 150.3' mark downstream of the East cleanout, and continuing to the 187.7' mark downstream of the East cleanout, that has approximately 1" deep new sand that was not present during the initial inspection conducted after construction in January 2011. This sand did not stop the camera from passing through this area, and would not affect leachate flow through this area, but can be flushed from the pipe if required.

Please call us with questions or concerns.

Regards,

Ralph Calistri – Florida Jetclean

CCTV Surveys List for SWM

Number of surveys in this list is

as of Thursday, May 12, 2011

Unit of measure: ft

1,210.7

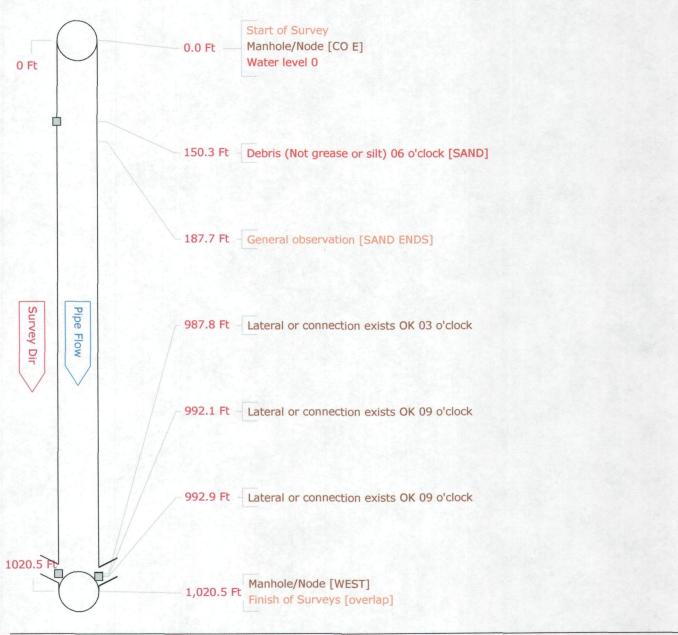
Setu	o Date	Street	Start MH	Finish MH	Dir	Size inch	Pre Clean	Vid Cassette	Scheduled Length	Surveyed Length
1	5/12/2011	CITRUS COUNTY PHASE 3	CO E	WEST	D	8		1	1,020.5	1020.5
2	5/12/2011	CITRUS COUNTY PHASE 3	CO W	EAST	U	8	,	1	190.2	190.2

Total Scheduled Length 1,210.7
Total Length Surveyed



FLORIDA JETCLEAN Phone: 1-800-226-8013 Fax: 813-926-4616

Pipe Graphic Report of PLR CO	E A	fo	r SWM		
Work Order Co	ntract	Vide	o 1	Setup	1
Facility	Operator BMN	Van Ref 4		Surveyed On 05/12/2011	
Street Name CITRUS COUNTY PH Location type Berm	ASE 3 City	CITRUS COUNTY			
Surface Survey purpose Other (state in comme	nts)		Weather Dr	у	
Pipe Use Other (state in comments)	Schedule length	1020.5 Ft	From COE	Depth	Ft
Shape Circular Material Other (state in comments)	Size 8 by Joint spacing	ins Ft	To WEST Direction Down	Depth nstream	Ft
Lining	Year laid		Pre-clean	Last cleaned	
General note HDPE LEACHATE COLL Location note 1210.7 = TOTAL END TO			Structural Miscellaneous	Service Co	onstructional





FLORIDA JETCLEAN Phone: 1-800-226-8013 Fax: 813-926-4616 CCTV pictures of COE

for SWM

Work Order

Video 1

Surveyed On 05/12/2011

Direction Downstream

Setup 1

Street Name CITRUS COUNTY PHASE 3

City Name CITRUS COUNTY

Weather Dry

Location Berm

From Manhole CO F

To Manhole WEST

Date: 05/12/2011

Distance: 150.3 Ft

Obs: Debris (Not grease

or silt)

Comments:

SAND



Date: 05/12/2011

Distance: 187.7 Ft

Obs: General observation

Comments:

SAND ENDS



Date: 05/12/2011

Distance: 987.8 Ft

Obs: Lateral or

connection exists

OK

Comments:



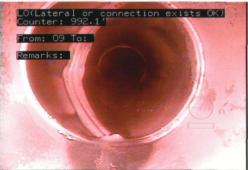
Date: 05/12/2011 Distance: 992.1 Ft

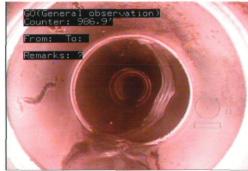
Obs: Lateral or

connection exists

OK

Comments:



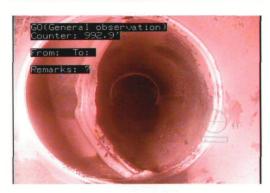


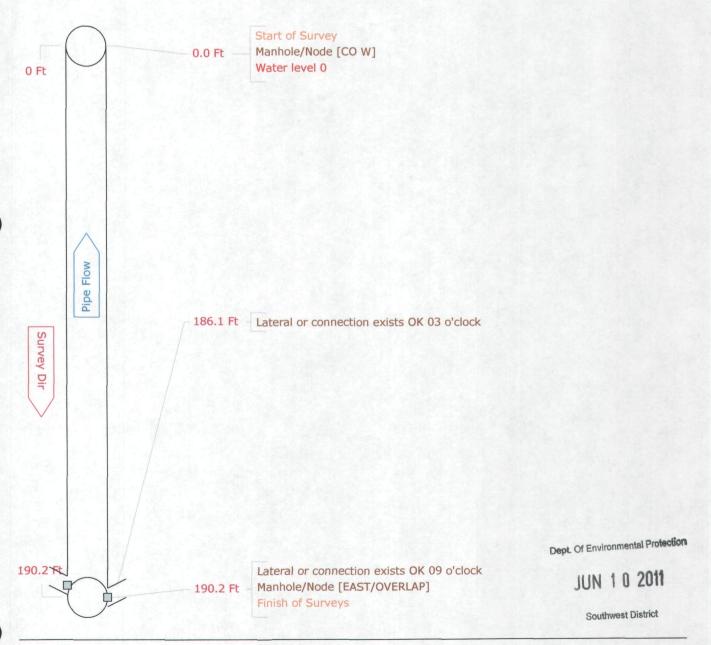
Date: 05/12/2011 Distance: 992.9 Ft Obs: Lateral or

connection exists

OK

Comments:







FLORIDA JETCLEAN Phone: 1-800-226-8013 Fax: 813-926-4616 В

Work Order Surveyed On 05/12/2011 Setup 2
Street Name CITRUS COUNTY PHASE 3 Video 1

City Name CITRUS COUNTY

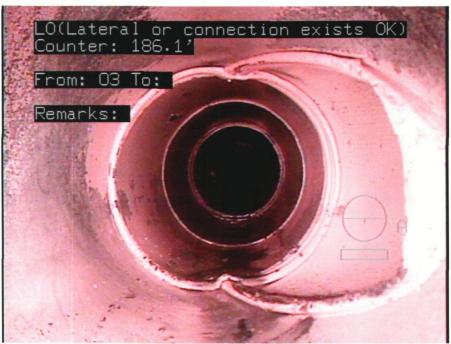
Location Berm

Weather Dry

From Manhole CO W

To Manhole EAST

Direction Upstream



Date: 05/12/2011

Distance: 186.1 Ft

Obs: Lateral or connection exists OK

Comments:



Date: 05/12/2011

Distance: 190.2 Ft

Obs: Lateral or connection exists OK

Comments:



FLORIDA JETCLEAN Phone: 1-800-226-8013 Fax: 813-926-4616

ATTENTION



A DVD CONTAINING VIDEO IS ALSO AVAILABLE WITH THIS REPORT

To view this dvd please contact:

State of Florida

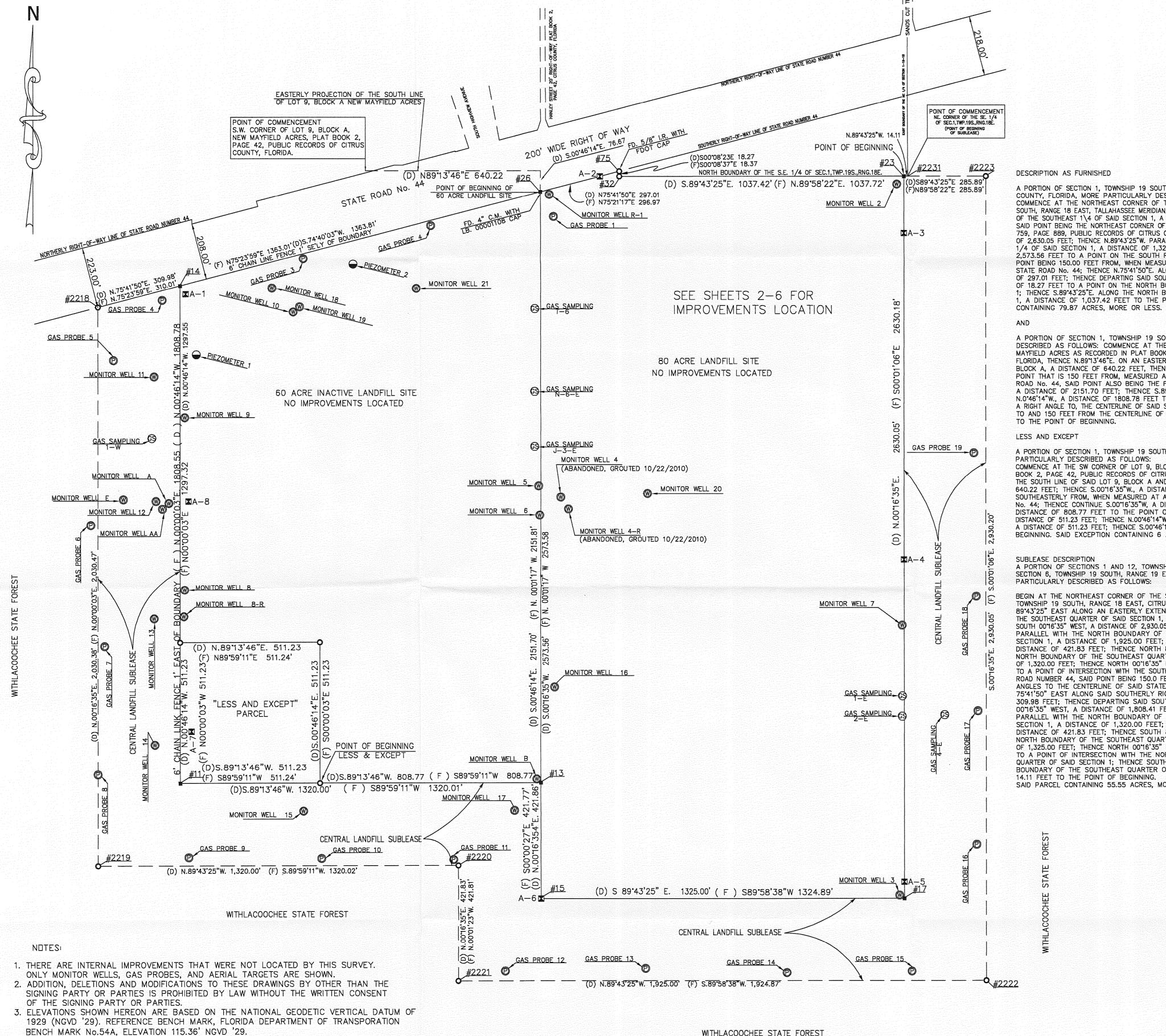
Department of Environmental Protection Solid Waste Program 13051 North Telecom Parkway Temple Terrace, FL 33637-0926 Phone: (813) 632-7600 Attachment C

Boundary Survey - Revised

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

JUN 10 2011

SOUTHWEST DISTRICT TAMPA



4. THIS SURVEY WAS CONDUCTED WITHOUT THE BENEFIT OF A TITLE REPORT OR TITLE ABSTRACT AND THEREFORE MAY NOT NECESSARILY AHOWN ALL RIGHTS-OF-WAY,

5. BEARINGS SHOWN HEREON ARE BASED ON THE NORTH BOUNDARY OF THE SE 1/4 OF SECTION 1, TOWNSHIP 18 SOUTH, RANGE 18 EAST HAVING AN ASSUMED BEARING

NORTH AMERICAN DATUM OF 1983, (NSRS 2007) AND ARE BASED ON NATIONAL

GEODETIC SURVEY CONTROL STATIONS "CITRUS 13" AND "CITRUS 14".

6. HORIZONTAL COORDINATES SHOWN ON TABLES REFLECT FLORIDA STATE PLANE, WEST ZONE,

EASEMENTS OR OTHER ENCUMBRANCES OF RECORD.

OF N.89°58'22"E.

WITHLACOOCHEE STATE FOREST

DESCRIPTION AS FURNISHED

A PORTION OF SECTION 1, TOWNSHIP 19 SOUTH, RANGE 18 EAST, TALLAHASSEE MERIDIAN, CITRUS COUNTY, FLORIDA, MORE PARTICULARLY DESCRIBED AS FOLLOWS: COMMENCE AT THE NORTHEAST CORNER OF THE SOUTHEAST 1/4 OF SECTION 1, TOWNSHIP 19, SOUTH, RANGE 18 EAST, TALLAHASSEE MERIDIAN; THENCE N.89 43'25"W. ALONG THE NORTH BOUNDARY OF THE SOUTHEAST 1/4 OF SAID SECTION 1, A DISTANCE OF 14.11 FEET TO THE POINT OF BEGINNING SAID POINT BEING THE NORTHEAST CORNER OF THOSE LANDS DESCRIBED IN OFFICIAL RECORD BOOK 759, PAGE 889, PUBLIC RECORDS OF CITRUS COUNTY, FLORIDA; THENCE S.0016'35"E., A DISTANCE OF 2,630.05 FEET; THENCE N.89'43'25"W. PARALLEL WITH THE NORTH BOUNDARY OF THE SOUTHEAST 1/4 OF SAID SECTION 1, A DISTANCE OF 1,325.00 FEET; THENCE N.0016'35"E., A DISTANCE OF 2,573.56 FEET TO A POINT ON THE SOUTH RIGHT-OF-WAY LINE OF STATE ROAD No. 44, SAID POINT BEING 150.00 FEET FROM, WHEN MEASURED AT RIGHT ANGLES TO THE CENTERLINE OF SAID STATE ROAD No. 44; THENCE N.75'41'50"E. ALONG SAID SOUTH RIGHT-OF-WAY LINE, A DISTANCE OF 297.01 FEET; THENCE DEPARTING SAID SOUTH RIGHT-OF-WAY LINE S.00°08'23"E., A DISTANCE OF 18.27 FEET TO A POINT ON THE NORTH BOUNDARY OF THE SOUTHEAST 1/4 OF SAID SECTION 1: THENCE S.89°43'25"E. ALONG THE NORTH BOUNDARY OF THE SOUTHEAST 1/4 OF SAID SECTION 1, A DISTANCE OF 1,037.42 FEET TO THE POINT OF BEGINNING.

A PORTION OF SECTION 1, TOWNSHIP 19 SOUTH, RANGE 18 EAST BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS: COMMENCE AT THE SOUTHWEST CORNER OF LOT 9, BLOCK A. NEW MAYFIELD ACRES AS RECORDED IN PLAT BOOK 2, PAGE 49, PUBLIC RECORDS OF CITRUS COUNTY, FLORIDA, THENCE N.89"13'46"E. ON AN EASTERLY PROJECTION OF THE SOUTH LINE OF SAID LOT 9, BLOCK A, A DISTANCE OF 640.22 FEET, THENCE S.O'46'14"E., A DISTANCE OF 76.67 FEET TO A POINT THAT IS 150 FEET FROM, MEASURED AT A RIGHT ANGLE TO, THE CENTERLINE OF STATE ROAD No. 44, SAID POINT ALSO BEING THE POINT OF BEGINNING; THENCE CONTINUE SO 46'14"E. A DISTANCE OF 2151.70 FEET; THENCE S.89"13"46"W., A DISTANCE OF 1320 FEET; THENCE N.0'46'14"W., A DISTANCE OF 1808.78 FEET TO A POINT THAT IS 150 FEET FROM, MEASURED AT A RIGHT ANGLE TO, THE CENTERLINE OF SAID STATE ROAD No. 44; THENCE N.74°40'03"E. PARALLEL TO AND 150 FEET FROM THE CENTERLINE OF STATE ROAD No. 44 A DISTANCE OF 1363.81 FEET TO THE POINT OF BEGINNING.

LESS AND EXCEPT

A PORTION OF SECTION 1, TOWNSHIP 19 SOUTH, RANGE 18 EAST, CITRUS COUNTY, FLORIDA, MORE PARTICULARLY DESCRIBED AS FOLLOWS: COMMENCE AT THE SW CORNER OF LOT 9, BLOCK A, NEW MAYFIELD ACRES AS RECORDED IN PLAT BOOK 2, PAGE 42, PUBLIC RECORDS OF CITRUS COUNTY, FLORIDA; THENCE S.89'43'25"E. ALONG THE SOUTH LINE OF SAID LOT 9, BLOCK A AND A EASTERLY PROJECTION THEREOF, A DISTANCE OF 640.22 FEET; THENCE S.00'16'35"W., A DISTANCE OF 76.49 FEET TO A POINT THAT IS 150 FEET SOUTHEASTERLY FROM, WHEN MEASURED AT A RIGHT ANGLE TO THE CENTERLINE OF STATE ROAD No. 44; THENCE CONTINUE S.00°16'35"W, A DISTANCE OF 2,151.70 FEET; THENCE S.89°13'48"W, A DISTANCE OF 808.77 FEET TO THE POINT OF BEGINNING; THENCE CONTINUE S.89"13'46"W, A DISTANCE OF 511.23 FEET; THENCE N.00'46'14"W., A DISTANCE OF 511.23 FEET; THENCE N.89'13'46"E., A DISTANCE OF 511.23 FEET; THENCE S.00'46'14"E., A DISTANCE OF 511.23 FEET TO THE POINT OF BEGINNING. SAID EXCEPTION CONTAINING 6 ACRES, MORE OR LESS.

A PORTION OF SECTIONS 1 AND 12, TOWNSHIP 19 SOUTH, RANGE 18 EAST AND SECTION 6, TOWNSHIP 19 SOUTH, RANGE 19 EAST, CITRUS COUNTY, FLORIDA, MORE

BEGIN AT THE NORTHEAST CORNER OF THE SOUTHEAST QUARTER OF SECTION 1 TOWNSHIP 19 SOUTH, RANGE 18 EAST, CITRUS COUNTY, FLORIDA; THENCE SOUTH 89°43'25" EAST ALONG AN EASTERLY EXTENSION OF THE NORTH BOUNDARY OF THE SOUTHEAST QUARTER OF SAID SECTION 1, A DISTANCE OF 285.89 FEET; THENCE SOUTH 0016'35" WEST, A DISTANCE OF 2,930.05 FEET; THENCE NORTH 89'43'25" WEST PARALLEL WITH THE NORTH BOUNDARY OF THE SOUTHEAST QUARTER OF SAID SECTION 1, A DISTANCE OF 1,925.00 FEET; THENCE NORTH 0016'35" EAST. A DISTANCE OF 421.83 FEET; THENCE NORTH 89'43'25" WEST PARALLEL WITH THE NORTH BOUNDARY OF THE SOUTHEAST QUARTER OF SAID SECTION 1, A DISTANCE OF 1,320.00 FEET; THENCE NORTH 00"6"35" EAST, A DISTANCE OF 2,030.38 FEET TO A POINT OF INTERSECTION WITH THE SOUTHERLY RIGHT-OF-WAY LINE OF STATE ROAD NUMBER 44, SAID POINT BEING 150.0 FEET FROM, WHEN MEASURED AT RIGHT ANGLES TO THE CENTERLINE OF SAID STATE ROAD NUMBER 44; THENCE NORTH 75'41'50" EAST ALONG SAID SOUTHERLY RIGHT-OF-WAY LINE, A DISTANCE OF 309.98 FEET; THENCE DEPARTING SAID SOUTHERLY RIGHT-OF-WAY LINE SOUTH 00"6"35" WEST, A DISTANCE OF 1,808.41 FEET; THENCE SOUTH 89"43"25" EAST PARALLEL WITH THE NORTH BOUNDARY OF THE SOUTHEAST QUARTER OF SAID SECTION 1, A DISTANCE OF 1,320.00 FEET; THENCE SOUTH 00"16'35" WEST, A DISTANCE OF 421.83 FEET; THENCE SOUTH 89'43'25" EAST PARALLEL WITH THE NORTH BOUNDARY OF THE SOUTHEAST QUARTER OF SAID SECTION 1, A DISTANCE OF 1,325.00 FEET; THENCE NORTH 00"16"35" EAST, A DISTANCE OF 2,630.05 FEET TO A POINT OF INTERSECTION WITH THE NORTH BOUNDARY OF THE SOUTHEAST QUARTER OF SAID SECTION 1; THENCE SOUTH 89'43'25" EAST ALONG THE NORTH BOUNDARY OF THE SOUTHEAST QUARTER OF SAID SECTION 1, A DISTANCE OF

14.11 FEET TO THE POINT OF BEGINNING. SAID PARCEL CONTAINING 55.55 ACRES, MORE OR LESS.

ROUNDWATER MONITOR WELL No.	X COORDINATE	Y COORDINATE	LONGITUDE	LATITUDE	ELEVATION TOP OF WELL CASING
A ABANDONED 3-22-94		Lasty N. J. Vijyan ranje en ses	and the second s		
B ACTIVE	515703.188	1641952.201	82°26'19.59919" W.	28°50'59.45064" N.	113.46'
C ABANDONED 04-27-07				4.15	all Alexander and Alexander and Alexander and Alexander
D ABANDONED 04-27-07	and the second s	Lance Control Service			
R-1 ABANDONED 9-26-94	and the first section of the section		and the second s		118.25
2 ACTIVE	517016.947	1644134.0121	82°26'04.91534" W.	28°51'21.09969" N.	136.19'
3 ACTIVE	517026.689	1641528.493	82°26'04.69852" W.	28°50'55.30387" N.	120.47
AA ACTIVE	514330.1915	1642944.6946	82°26'35.08066" W.	28°51'09.22643" N.	
5 ACTIVE	515706.7199	1643027.5870	82°26'19.60416" W.	28°51'10.09772" N.	121.14'
6 ACTIVE	515710.8712	1642921.8127	82°26'19.55309" W.	28°51'09.05065" N.	118.48'
4 ABANDONED	Jan Grander (1985)			. A to the course of the course	u metapatak 1745 eti maalem entite selausea
4-R ABANDONED	jastalias samma menerali	A Company remain agreems	versetet i inner i 1914) e i niversore		
R-1 ACTIVE	515734.4675	1644075.0314	82°26'19.33566" W.	28°51'20.46904" N.	118.08'
1 ABANDONED 2-09-94	Paga sampa a pagin Alais	Leed Admiration are results	gert aus de la completa del completa de la completa de la completa del completa de la completa del la completa del la completa de la completa del la completa del la completa de la completa del la		
E ACTIVE	514187.411	1642978.872	82°26'36.68776" W.	28°51'09.55952" N.	109.51'
7 ACTIVE	517032.495	1642518.150	82°26'04.67396" W.	28'51'05.10226" N.	128.66'
8 ABANDONED 10-22-97	Gergagoga (Asumi Nagureng gas				month (Continue to Anno Anno Anno Anno Anno Anno Anno A
9 ACTIVE	514411.959	1643276.437	82°26'34.17505" W.	28°51'12.51388" N.	113.46'
8-R ACTIVE	514408.379	1642551.088	82°26'34.18489" W.	28°51'05.33238" N.	118.08'
10 ACTIVE	514808.4751	1643659.0352	82'26'29.73194" W.	28 ' 51'09.22643" N.	114.20'
11 ACTIVE	514299.5523	1643424.8999	82°26'35.44538" W.	28°51'13.97960" N.	105.21
12 ACTIVE	514306.5574	1642972.8677	82°26'3534763" W.		104.01
13 ACTIVE	514299.7062	1642543.8233	82°26'35.40666" W.	28 ' 51'05.25644" N.	112.61
14 ACTIVE	514302.3733	1642085.7341	82°26'35.35744" W.	28'51'00.72119" N.	109.12
15 ACTIVE	514845.7153	1641844,4367	82°26'29.23727" W.	28 * 50 ' 58.35224" N.	124.21'
16 ACTIVE	515765.2792	1642292.6040	82°26'18.91510" W.	28°51'02.82310" N.	120.31
17 ACTIVE	515619.9611	1641846.2474	82°26'20.53070" W.	28°50'58.39859" N.	
18 ACTIVE	514730.9420	1643746.0676	82°26'30.60751" W.	28°51'30.60751" N.	116.41
19 ACTIVE	514816.3731	1643660.2048	82°26'29.64317" W.	28'51'016.32832" N.	114.16
PIEZOMETER 1	514454.2759	1643505.5893	82°26'33.70877" W.	28'51'14.78419" N.	111.56'
PIEZOMETER 2	515020.7612	1643833,4593	82'26'27.35189" W.	28'51'18.05116" N.	117.32
20 ACTIVE	516104.004	1642999.189	82°26'15.135" W.	28'51'09.831" N.	119.74
21 ACTIVE	515259.800	1643743.909	82°26'24.660" W.	28°51'17.173" N.	115.63'

AS MONITORING PROBE No.	X COORDINATE	Y COORDINATE	LONGITUDE	LATITUDE	ELEVATION TOP OF WELL CASING
general elikebend	515759.6430	1644024.1637	82°26'19.05041" W.	28°51′19.96634″ N.	114.31'
	515311.3421	1643985.9194	82°26'24.09040" W.	28'51'19.57128" N.	30000000000000000000000000000000000000
3	514843.5355	1643863.4854	82'26'29.34620" W.	28'51'18.34191" N.	
4	514330.4791	1643702.6107	82°26'35.10924" W.	28 ' 51'16.73024" N.	104.54
5	514152.2632	1643484.3916	82'26'37.10426" W.	28°51′14.56316″ N.	105.17'
	514069.5702	1642886,4767	82°26'38.00907" W.	28 ' 51'08.64040" N.	112.12'
	514119.8141	1642444.1964	82°26'37.42546" W.	28 ⁻ 51'04.26342" N.	
	514095.1760	1641978.6777	82°26'37.68296" W.	28'50'59.65361" N.	106.71
9.000.000.000	514426.7014	1641676.8201	82°26'33.94218" W.	28'50'56.67730" N.	114.28'
	514912.7361	1641672.9166	82°26'28.47643" W.	28"50'56.65656" N.	125.70°
	515397.5489	1641667.9273	82°26'23.02437" W.	28 ⁻ 50'56.62497" N.	
	515586.1393	1641260.0907	82°26'20.88666" W.	28'50'52.59406" N.	117.04'
<u> </u>	516095.9861	1641269.1991	82°26'15.15374" W.	28°50'52.70287" N.	3344455 107.41' 3345
14	516611.7615	1641253.6098	82°26'09.35312" W.	28'50'52.56731" N.	127.48'
15	517067.5366	1641259.1318	82°26'04.22809" W.	28'50'52.63852" N.	124.11'
16	517305.4731	1641722.4351	82°26'01.57149" W.	28°50'57.23411" N.	120.84'
	517310.3329	1642206.6639	82°26'01.53673" W.	28'51'02.02843" N.	117.59'
	517305.2505	1642623.1043	82°26'01.61100" W.	28'51'06.15126" N.	118.01
GS-J-3-E	515692.9475	1643169.3309	82°26'19.76494" W.	28°51'11.50056" N.	125.74'
GS-N-6-E	515693.4141	1643368.8358	82°26'19.76802" W.	28'51'13.48569" N.	127.45'
GS-T-6	515693.4326	1643668.7379	82°26'19.78024" W.	28°51'16.4450" N.	126.97'
GS-2-E	517032.8076	1642187.6990	82°26'04.65684" W.	28"51'01.83062" N.	128.86'
GS-4-E	517188.9927	1642192.9295	82°26'02.90069" W.	28'51'01.88807" N.	
GS-1-E	517033.1595	1642260.5152	82°26'04.65588" W.	28'51'02.55156" N.	128.26
GS-1-W	514292.2992	1643199.9376	82°26'35.51750" W.	28'51'11.75208" N.	
GP-19	517295.633	1643146.916	82°26'01.741" W.	28"51'11.337" N.	124.88'

POINT NUMBER	X COORDINATE	Y COORDINATE
14	514395.1807	1643753.9871
26	515714.1808	1644097.5662
75	516001,5039	1644172.6504
32	516001.5501	1644154.2004
23	517039.2700	1644154.6930
2231	517053.3100	1644154.6790
2233	517339.2700	1644154.8351
17	517040.1105	1641524.5131
2222	517340.2063	1641224.6324
2221	515415.3389	1641223.8669
15	515715.2180	1641523.9862
13	515715.1632	1641945.7506
2220	515415.1689	1641645.6796
2219	514095.1490	1641645.3671
2218	514095.1795	1643675.8414
	514395.1535	1641945.4381
	and the second s	

AERIAL TARGET NUMBER	X COORDINATE	Y COORDINATE	ELEVATION
A-1	514415.7043	1643723.8932	110.16
A-2	515930.7731	1644154.1668	116.16'
A-3	517039.1853	1643947.0030	130.79'
A-4	517038.7010	1642758.8531	126.06'
A-5	517039.9417	1641584.9931	119.62'
A-6	515715.2180	1641523.9862	109.08'
A-7	514435.8577	1642134.6139	115.28'
A-8	514425.2393	1642971.9717	109.56'

→ PEIZOMETER

 GAS PROBE (S) GAS SAMPLING POINT

MONITOR WELL

X AERIAL TARGET

FOUND CONCRETE MONUMENT, NO IDENTIFICATION (UNLESS OTHERWISE INDICATED)

SET 5/8" CAPPED IRON ROD, CITRUS COUNTY (UNLESS OTHERWISE INDICATED)

JOB No. 11-001	ROLIND	ARY SURVEY
PROJ. No. 11-461	וטוטטט	ANI SUNVLI
DRAWN BY: FLH DWG. No. 00-149WellsOnly MAP DATE: 02/10/2011 SCALE: 1" = 200' SHEET No. 1 OF 1 FIELD DATE: 01/27/2011 FC2500 FILE: MW_01272011	Division of Engineering Survey Section 3600 WEST SOVEREIGN PATH, SUITE 241	I hereby certify that this map is a true and accurate depiction of a survey performed for Citrus County, Florida under my supervision and direction after that it meets the minimum technical requirements for boundary surveys as set forth by the Florida Board of Professional Surveyors and Mappers in Chapter 5J-17 Florida Administrative Code, pursuant to Chapter 472,027, Florida Statutes.
SEC. 01,TWP. 19 S, RNG 18 E	LECANTO, FLORIDA. 34461 (352) 527-5498 FAX (352) 527-5476	Francis L. Hurt, PSM Florida Registration No. 4635

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION JUN 10 2011 SOUTHWEST DISTRICT TAMPA

Attachment D

Driller Logs - Revised

STATE OF FLORIDA WELL COMPLETION REPORT

© Southwest PLEASE, FI
☐ Northwest (*Denotes)
☐ St. Johns River
☐ South Florida
☐ Suwannee River
☐ DEP
☐ Delegated Authority (If Applicable)

PLEASE, FILL OUT ALL APPLICABLE FIELDS ("Denotes Required Fields Where Applicable)

Date Stamp

Received

Jan 24, 2011 3:36 pm

d Authority (If Applicable) ______ Official Use Only

1. Permit Number 809614 CUP/WUP Number 1DID Number 62-524 Delineation No.
2. Number of permitted wells constructed, repaired, or abandoned 2 Number of permitted wells not constructed, repaired, or abandoned 0
3. Owner's Name CITRUS COUNTY 4. Completion Date 01/12/2011 5. Florida Unique ID
6. 00230 W GULF TO LAKE HWY Lecanto
'Well Location - Address, Road Name or Number, City, ZIP
7. *County_CITRUS*Section1Land Grent*Township19*Range18
8. Latitude 28 51 16.97 Longitude 82 26 13.92
9. Data Obtained From: GPS X Map Survey Datum: NAD 27 X NAD 83 WGS 84
10. Type of Work: X Construction Repair Modification Abandonment 11. Specify Intended Use(s) of Well(s): Domestic Landscape Irrigation Average Irrigation Livestock X Monitoring Bottled Water Supply Recreation Area Irrigation through the service of the servic
Public Water Supply (Limited Use/DOH) Public Water Supply (Community or Non-Community/DEP) Public Water Supply (Community or Non-Community/DEP) Restriction Full Course Impation HVAC Supply
Class I InjectionHVAC Return Class V Injection:Recharge Commercial/Industrial DisposalAquifer Storage and RecoveryDrainage
Remediation: Recovery Air Sparge Other (Describe)
Other (Describe)
12.*Drill Method: Auger Cable Tool X Rotary Combination (Two or More Methods) Jetled Sonic Horizontal Drilling Hydraulic Point (Direct Push) Other
13. Measured Stalle Water Level 0 ft. Measured Pumping Water Level ft. After Hours at GPM
14.*Measuring Point (Describe) Yes No
15. Casing Material: Black Steel Galvanized X PVC Stainless Steel Not Cased Other
16.*Total Well Depth 125 ft. Cased Depth 105 ft. *Open Hole: From To It. *Screen: From 105 To 125 ft. Slot Size 01
17. Abandonment: Other (Explain) From ft. To ft. No. of Bags Seal Material (Check One): Neat Cement Bentonite Other From ft. To ft. No. of Bags Seal Material (Check One): Neat Cement Bentonite Other From ft. To ft. No. of Bags Seal Material (Check One): Neat Cement Bentonite Other From ft. To ft. No. of Bags Seal Material (Check One): Neat Cement Bentonite Other From ft. To ft. No. of Bags Seal Material (Check One): Neat Cement Bentonite Other From ft. To ft. No. of Bags Seal Material (Check One): Neat Cement Bentonite Other
18. Surface Casing Diameter and Depth:
Diain. Fromtt. Toft. No. of Bags Seat Material (Check One); Neat CementBentoniteOther Diain. Fromft. Toft. No. of Bags Seat Material (Check One); Neat CementBentoniteOther
19.*Primary Casing Diameter and Depth: Dia 2 In. From 0 ft. To 105 ft. No. of Bags 20 Seal Material (Check One): X Neat Cement Bentonite Other Dia in From ft. To ft. No. of Bags Seal Material (Check One): Neat Cement Bentonite Other Dia in From ft. To ft. No. of Bags Seal Material (Check One): Neat Cement Bentonite Other Dia in From ft. To ft. No. of Bags Seal Material (Check One): Neat Cement Bentonite Other Dia in From ft. To ft. No. of Bags Seal Material (Check One): Neat Cement Bentonite Other Other Other
20. Liner Casing Diameter and Depth: Diain. Fromft. Toft. No. of Bags Seal Material (Check One); Neat Cement Bentonite Other Diain. Fromft. Toft. No. of Bags Seal Material (Check One); Neat Cement Bentonite Other
Ola in. From ft. To ft. No. of Bags Seal Material (Check One): Neat Cement Bentonite Other
21. Telescope Casing Diameter and Depth: Diain. Fromft. Toft. No. of Bags Seal Material (Check One): Neat Cernent Bentonite Other Diain. Fromft. Toft. No. of Bags Seal Material (Check One): Neat Cement Bentonite Other Diain. Fromft. Toft. No. of Bags Seal Material (Check One): Neat Cement Bentonite Other
22. Pump Type (If Known): 23. Chemical Analysis (When Required):
CentrifugatJetSubmersibleTurbine ron
Horsepower Pump Capacity (GPM) Laboratory Test Field Test Kit
24. Water Well Contractor:
*Contractor Name STEPHANIES STALLSMITH License Number 9342 E-mail Address stephanie@hussdrilling.com
*Contractor's Signature Digitally Signed *Driller's Name (Print or Type) Kevin Reffuse

SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT 2379 BROAD STREET, BROOKSVILLE, FL 34604-6899 PHONE: (352) 796-7211 or (800) 423-1476 WWW,SWFWMD.STATE.FL.US

ST. JOHNS RIVER WATER MANAGEMENT DISTRICT 4049 REID STREET, PALATKA, FL 32178-1429 PHONE: (386) 329-4500 WWW.SJRWMD.COM

NORTHWEST FLORIDA WATER MANAGEMENT DISTRICT 152 WATER MANAGEMENT DR., HAVANA, FL 32333-4712 (U.S. Highway 90, 10 miles west of Tallahassee) PHONE: (850) 539-5999 WWW.NWFWMD.STATE.FL.US

SOUTH FLORIDA WATER MANAGEMENT DISTRICT P.O. BOX 24680 3301 GUN CLUB ROAD WEST PALM BEACH, FL 33416-4680 PHONE: (561) 686-8800 WWW.SFWMD.GOV

SUWANNEE RIVER WATER MANAGEMENT DISTRICT 9225 CR 49 LIVE OAK, FL 32060 PHONE: (386) 362-1001 or (800) 226-1066 (Florida only) WWW.MYSUWANNEERIVER.COM

*DRILL CUTTINGS LOG (Examine cultings every 20 ft. or at formation changes. Note cavilies and depth to producing zone. Grain Size: F=Fine;								
Matterfilm and CaConcol .								
From 0 ft.		fi.	Color ORANGE / PANIO	Grain Size (F, M, C) Fine	Material Sord			
From S II.	To 15		Color OTTLICE	Grain Size (F, M, C)FINE	Material SAND			
From 15 It.	To 25		Color Light RIDION	Grain Size (F. M. C)	Material SCACICVO . 1			
From 25 %.		ft.	Color COUNTY	Grain Size (F. M. C) Fine	Malerial O.M.			
From 50 IL	TOFIC	ft.	Color Plus tild a - Ita	Grain Size (F, M, C) Fine	Material CANCE			
From 55 ft.	·	n.	Color LALIDIO	Grain Size (F. M. C) Li M. 8	Malerial Se A C			
From (OC) II.	To 125	ft.	Color Hand	Grain Size (F. M. C) C M				
From (t.	To	fi.	Color	Grain Size (F, M, C)	Material Sand			
From (1.	īa	ft.	Calar	Crain Size (F, M, C)	Malerial			
From fl.	To	fi.	Color	Grain Size (F, M, C) Grain Size (F, M, C)	Material			
From ft.		fL	Color Color	Grain Size (F, M, C)	Material			
From 11.	Ta	n.	Color	Grain Size (F, M, C)	Malerial			
From ft.		îl.	Color	Grain Size (F, M, C)	Malerial			
From II.		И.	Color		Material			
From II.		ft.	Calar	Grain Size (F, M, C) Grain Size (F, M, C)	Malerial			
From It.		11. 11.	Color		Malerial			
From fl		ль. П.	Color	Grain Size (F, M, C)	Material			
From ft.		st.	Calara	Grain Size (F, M, C)				
From ft.	To	ji. It.	Palar	Grain Size (F, M, C)	Material			
From II.	To	R.		Grain Size (F, M, C)	Material			
From (t.	APR 101 * 1	n. A	Cular	Grain Size (F, M, C)	Material			
From It.		st. It	Color	Grain Size (F, M, C)	Material			
From II.	To	n. St.	Color	Grain Size (F. M. C)	Malerial			
From It		n. R.	Color	Grain Size (F, M, C)	Malerial			
From ft.		n. A.	Calar	Grain Size (F, M, C)	Material			
From A.	***************************************	ji. H		Grain Size (F, M, C)	Material			
rroin it.	10	II.	Color	Grain Size (F, M, C)	Malerial			
Comments:								
`	i (1) .	. 4	-'allor		•			
		1	100					
					·			
					A.			
*Detailed Site Man of Well Location								



Give distances from all reference points or structures, septic systems, sanitary hazards, and contamination sources within 500 ft. of well.

STATE OF FLORIDA WELL COMPLETION REPORT

PLEASE, FILL OUT ALL APPLICABLE FIELDS (*Denotes Required Fields Where Applicable)

OXSouthwest PLEASE, F
ONorthwest (*Denote:
OSt. Johns River
OSouth Florida
OSuwannee River
ODEP
ODelegated Authority (If Applicable)

Received: Jan 24, 2011 3:36 pm

Consider Application	Official Use Only
1. Permit Number_809614*CUPWUP Number	*DID Number62-524 Delineation No;
2. Number of permitted wells constructed, repaired, or abandoned 2	Number of permitted wells not constructed, repaired, or abandoned0
3. Owner's Name CITRUS COUNTY 4	*Completion Date 01/12/2011 5. Florida Unique ID
6, 00230 W GULF TO LAKE HWY Lecanto 'Well Location - Address, Road Name or Number, City, ZIP	
7. County CITRUS Section 1 Land Gran	nt*Township19*Range18
8. Letitude 28 51 16.97 Longitude 82 28 13.92	·
9. Date Obtained From: GPS X Map Survey	Datum: NAD 27 X NAD 83 WGS 84
To Type of Work: X Construction Repair Modification Specify Intended Use(s) of Well(s): Domestic Landscape Irrigation Bottled Water Supply Recreation Area Irrigatic Public Water Supply (Limited Use/DOH) Public Water Supply (Community or Non-Community/DEP) Class I Injection	Agricultural IrrigationSite Investigation
Class V Injection:Recharge Commercial/Industrial Disposal	Anuiter Storage and Recovery Drainage
Remediation:RecoveryAir SpargeOther (Describe)	
Other (Describe)	
12. Drill Method: Auger Cable Tool X Rotary C Horizontal Drilling Hydraulic Point (Dir	ect Push) Other
13. Measured Static Water Level 0 It. Measured Pumping Water	Level It. After Hours at GPM fl. Above Below Land Surface "Flowing: Yes No Stainless Steel No Cased Other
16. Total Well Depth 125 ft. Cased Depth 105 ft. Open Hole: From	To II Sergen From DV To () If Slot Size 10
17. Abandonment: Other (Explain)	a. decentrony of the second
From ft. To ft. No. of Bags Seal Material (Chec From ft. To ft. No. of Bags Seal Material (Chec From ft. To ft. No. of Bags Seal Material (Chec From ft. To ft. No. of Bags Seal Material (Chec From ft. To ft. No. of Bags Seal Material (Chec From ft. To ft. No. of Bags Seal Material (Chec Its Surface Casing Diameter and Depth:	k One): Neat Cement Bentonite Other k One): Neat Cement Bentonite Other
Dia in From tt To tt No. of Bags Seal Dia in From tt To tt No. of Bags Seal	Material (Check One): Neat Cement Bentonite Other Material (Check One): Neat Cement Bentonite Other Other
Dia in. From ft. To tt. No. of Bags Seal	Material (Check One): X Neat Cement Bentonile Other Material (Check One): Neat Cement Bentonile Other
20. Liner Casing Diameter and Depth: Diain. Fromft_Toft. No. of BagsSeal Diain. Fromft_Toft. No. of BagsSeal Diain. Fromft. Toft. No. of BagsSeal	Material (Check One): Neat Cement Bentonite Other Material (Check One): Neat Cement Bentonite Other Material (Check One): Neat Cement Bentonite Other Meterial (Check One): Neat Cement Bentonite Other
Dia in. From ft. To ft. No. of Bags Sea	Material (Check One): Neat Cement Bentonite Other Material (Check One): Neat Cement Bentonite Other Material (Check One): Neat Cement Bentonite Other
22. Pump Type (If Known):	23. Chemical Analysis (When Required):
Centrifugal Jet Submersible Turbine Horsepower Pump Capacity (GPM) Pump Depth ft. Intake Depth ft. 24: Water Well Contractor:	Ironppm Sulfateppm Chlorideppm
24. YYDEI YYCH COHDUCUY.	
*Contractor Name STEPHANIE S STALLSMITH *License Number 93	42 E-mail Address stephanie@hussdrliling.com
*Contractor's Signature Digitally Signed (I contry that the information provided in this report is necurate and to	*Driller's Name (Print or Type) Kevin Reffuse

SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT 2379 BROAD STREET, BROOKSVILLE, FL 34604-6899 PHONE: (352) 796-7211 or (800) 423-1476 WWW.SWFWMD.STATE.FL.US

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NORTHWEST FLORIDA WATER MANAGEMENT DISTRICT 152: WATER MANAGEMENT DR., HAVANA, FL 32333-4712 (U.S. Highway 90, 10 miles west of Tallahassee) PHONE: (850) 539-5999 WWW.NWFWMD.STATE.FL.US SOUTH FLORIDA WATER MANAGEMENT DISTRICT P.O. BOX 24680 3301 GUN CLUB ROAD WEST PALM BEACH, FL 33416-4680 PHONE: (561) 686-8800 WWW.SFWMD.GOV

SUWANNEE RIVER WATER MANAGEMENT DISTRICT 9225 CR 49 LIVE OAK, FL 32060 PHONE: (386) 362-1001 or (800) 226-1066 (Florida only) WWW.MYSUWANNEERIVER.COM

*DRILL CUTTINGS LOG (Examine cultings every 20 ft. or at formation changes. Note cavilies and depth to producing zone. Grain Size: F=Fine,								
M=Medium, and C=0	Coarse'	· ·	~	Servedelisis Briefis				
From 0 fL	To5n.	Color Bittle to The Use	LiGrain Size (F. M. C)	Material Mer Mulich Colo.				
From 5 11.	To 1	Colord ack Chin	Grain Size (F, M, C)	Malerial Lind Stime Contu				
From 7 ft.	To 10 ft.	Color DUDULL HOLF	Grain Size (F. M. C)	Malerial Chock				
From / 12 ft.	To_47_11	Color Livetto lozur Ham	Grain Size (F, M, C)	Material Xt Ind				
From 47 ft.	To 57 ft.	Color linking the later with	Grain Size (F. M, C)	Material Olaycy Same				
From ft.	To1L	Color Value	Grain Size (F, M, C)	Material 0 1				
From 57 II.	To 75 ft.	Color Burn 1000 Aug	Grain Size (F. M, C)	Material Claucu Sand				
From 7 5 ft.	To /25 ft.	Color Par 1 Bridge	Grain Size (F, M, C)	Material availuli Sand				
FromIL	Toft.	Color	Grain Size (F, M, C)	Material //				
Fromft.	Toft	Color	Grain Size (F, M, C)	Material				
From ft.	Toft.	Color	Grain Size (F, M, C)	Material				
From ft.	ToII.	Color	Grain Size (F. M. C)	Material				
From ft.	Toft,	Color	Grain Size (F, M, C)	Material				
From fl.	Tofl.	Color	Grain Size (F, M, C)	Meterial				
Fròmfl.	To	Color	Grain Size (F, M, C)	Material				
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Fromft.	Toft.	Color	Grain Size (F, M, C)	Material				
FromR	Toft.	Color	Grain Size (F, M, C)	Material				
From ft.	Toft.	Color	Grain Size (F, M, C)	Material				
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From ft.	Toft.	Color	Grain Size (F, M, C)	Material				
From (1.	Toft.	Color	Grain Size (F, M, C)	Malerial				
Comments:		2 ()	<i>)</i>					
		(1) of (1)	115					
			1, -1					
	*Detailed Site Man of Well Leasting							

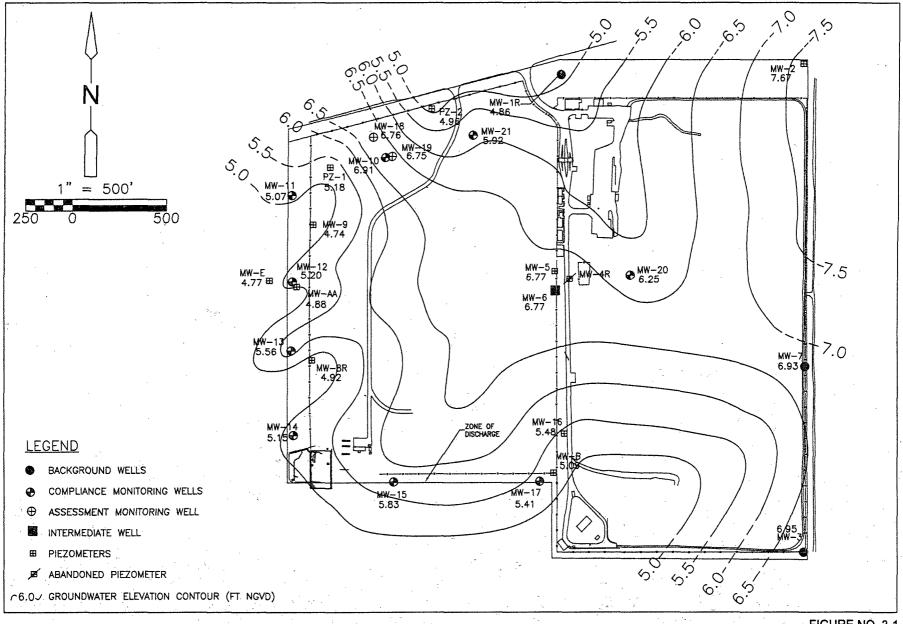
'Detailed Site Map of Well Location

Give distances from all reference points or structures, septic systems, sanitary hazards, and contamination sources within 500 ft. of well.

FLORIDA DEPARTMENT DI ENVIRONMENTAL PROTECTION JUN 10 2011 SOUTHWEST DISTRICT TAMPA

Attachment E

Potentiometric Map





Source: Survey obtained from Jones Edmunds, May 2009. Monitor wells MW-20 and MW-21 located based on boundary survey map dated February 8, 2011. FIGURE NO. 3-1 GROUNDWATER CONTOUR MAP FLORIDAN AQUIFER CITRUS COUNTY CENTRAL LANDFILL WATER LEVEL DATA COLLECTED - JANUARY 18, 2011