





WELL NUMBER	LATITUDE	LONGITUDE	NORTHING	EASTING	ELEVATION	DESCRIPTION
20033	27°34'23.50923"	81°46'54.84185"	1177602.658	726820.612	84.82'	GP--1--GROUND
					87.81'	TOP OF PVC
					87.75'	TOP OF CASING
					84.87'	TOP OF CONCRETE
20031	27°34'23.49809"	81°46'58.51218"	1177601.357	726490.331	86.20'	GP--2--GROUND
					89.13'	TOP OF PVC
					89.05'	TOP OF CASING
					86.25'	TOP OF CONCRETE
20027	27°34'23.42423"	81°47'01.86132"	1177593.371	726188.964	85.27'	GP--3--GROUND
					88.11'	TOP OF PVC
					88.06'	TOP OF CASING
					85.32'	TOP OF CONCRETE
20026	27°34'20.56109"	81°47'01.70589"	1177304.268	726203.456	85.40'	GP--4--GROUND
					88.36'	TOP OF PVC
					88.39'	TOP OF CASING
					85.49'	TOP OF CONCRETE
20068	27°34'16.68982"	81°47'01.69325"	1176913.338	726205.276	85.96'	GP--5--GROUND
					88.89'	TOP OF PVC
					88.91'	TOP OF CASING
					85.96'	TOP OF CONCRETE
20021	27°34'14.50155"	81°47'01.66883"	1176692.365	726207.86	86.79'	GP--6--GROUND
					88.71'	TOP OF PVC
					85.91'	TOP OF CASING
					85.91'	TOP OF CONCRETE
20045	27°34'14.53610"	81°46'51.65803"	1176697.437	727108.717	83.51'	GP--8--GROUND
					86.26'	TOP OF PVC
					86.17'	TOP OF CASING
20047	27°34'17.74439"	81°46'53.05590"	1177021.197	726982.352	85.68'	GP--10--GROUND
					88.55'	TOP OF PVC
					88.51'	TOP OF CASING
					85.66'	TOP OF CONCRETE
20035	27°34'20.92315"	81°46'54.49379"	1177341.968	726852.393	85.51'	GP--11--GROUND
					88.44'	TOP OF PVC
					88.44'	TOP OF CASING
					85.51'	TOP OF CONCRETE
20086	27°34'04.77045"	81°46'58.47893"	1175710.195	726496.639	83.19'	GP--12--GROUND
					86.17'	TOP OF PVC
					86.15'	TOP OF CASING
					83.19'	TOP OF CONCRETE
20010	27°34'04.66648"	81°46'56.32145"	1175700.036	726890.812	81.52'	GP--13--GROUND
					84.35'	TOP OF PVC
					84.32'	TOP OF CASING
					81.52'	TOP OF CONCRETE

WELL NUMBER	LATITUDE	LONGITUDE	NORTHING	EASTING	ELEVATION	DESCRIPTION
20030	27°34'22.95129"	81°46'58.67941"	1177546.113	726475.379	86.47'	P=1-GROUND TOP OF PVC
20025	27°34'18.94357"	81°47'01.09935"	1177141.021	726258.323	89.48'	P=2-GROUND TOP OF PVC
20009	27°34'05.78188"	81°46'55.39197"	1175812.82	726774.259	91.08'	P=7-GROUND TOP OF PVC
20011	27°34'04.90918"	81°46'58.10087"	1175724.264	726530.637	84.47'	P=2-GROUND TOP OF PVC
20036	27°34'19.05828"	81°46'53.53029"	1177553.801	726939.428	85.32'	P=11-GROUND TOP OF PVC
20007	27°34'08.10869"	81°46'58.49879"	1176047.296	726494.261	88.69'	P=13-GROUND TOP OF PVC
20008	27°34'06.54739"	81°46'58.25866"	1175889.67	726516.147	87.08'	P=14-GROUND TOP OF PVC
20020	27°34'13.90272"	81°47'00.72895"	1176632.041	726292.544	87.31'	P=15-GROUND TOP OF PVC
20028 NEW	27°34'24.46321"	81°47'01.59645"	1177698.331	726212.616	89.62'	TOP OF CASING TOP OF PVC
22013 NEW	27°34'23.34751"	81°47'04.45623"	1177685.22	725955.47	88.82'	TOP OF CASING TOP OF CONCRETE
20017 NEW	27°34'24.32127"	81°46'54.06069"	1177685.19	726890.76	88.74'	TOP OF CASING TOP OF CONCRETE
20034 NEW	27°34'23.13137"	81°46'54.51835"	1177564.956	726849.789	84.14'	TOP OF CASING TOP OF CONCRETE
20042 NEW	27°34'17.53532"	81°46'51.68684"	1177000.302	727105.589	85.73'	TOP OF CASING TOP OF CONCRETE
20014 NEW	27°34'07.85808"	81°47'03.73232"	1176021.166	726023.336	84.68'	P=20-GROUND TOP OF PVC
20013 NEW	27°34'04.85082"	81°47'03.75949"	1175717.48	726021.42	87.61'	TOP OF CASING TOP OF CONCRETE
					83.72'	P=22-GROUND TOP OF PVC
					84.09'	TOP OF CASING TOP OF CONCRETE
					87.15'	P=23-GROUND TOP OF PVC
					83.71'	TOP OF CASING TOP OF CONCRETE
					86.45'	TOP OF CASING TOP OF CONCRETE
					86.63'	TOP OF CASING TOP OF CONCRETE
					83.71'	TOP OF CASING TOP OF CONCRETE

PVC	POLYVINYL CHLORIDE
100	WELL POINT NUMBER
	GPS CONTROL POINT
	MONITORING WELL
	GAS PROBE
	PIEZOMETER
MW	MONITORING WELL
GP	GAS PROBE
P	PIEZOMETER
MW	MONITORING WELL

- 1.) North and the coordinates shown hereon are referenced to the West Zone of the Florida State Plane Coordinate System, NAD 83, 1990.
- 2.) Elevations are to National Geodetic Vertical Datum of 1929 and are based on U.S. Geological Survey bench mark numbers "22RHP", "23RHP", "24RHP" and "Y6S".
- 3.) Aerial photography for this project is digital ortho-rectified imagery dated 2/23/07 prepared by Pickett & Associates, Inc.
- 4.) This survey was prepared for the specific purpose of locating the Monitoring wells, Gas probes, and Piezometers around the Hardee county Landfill.
- 5.) Wells in clouded area were resurveyed on 01-29-08.


GREGORY A. PRATHER, P.L.S.
FLORIDA REGISTRATION No. 5135
PICKETT AND ASSOCIATES, INC.
FLORIDA REGISTRATION No. LB 364

01/29/08

SURVEY DATE

SPECIFIC PURPOSE SURVEY
LOCATED IN SECTION 35,
TOWNSHIP 33 SOUTH, RANGE 25 EAST
PREPARED FOR: SCS ENGINEERS

PROJECT No.	No.
14198-2	1
DRAWING No.	OF
LD 3665	1



PICKETT^W
SURVEYING & PHOTOGRAMMETRY

WEST MAIN STREET
CHULA, FLORIDA 33873
PHONE: (863)-773-3690
FAX: (863)-773-3922

NOT VALID WITHOUT THE
SIGNATURE AND THE
ORIGINAL RAISED SEAL

No.	DATE
1	05/14/07
1	02/13/08

APPROVED	REVISION	
GAP	FIRST ISSUE	
GAP	SURVEYED NEW WELLS AND PIEZOMETERS	

IN CLOUDED AREA



well_name	lat_dd	lat_mm	lat_ss	long_dd	long_mm	long_ss	elevation	insp. date	site	comment
MW-1	27	34	23	81	46	58.4	67 ft	7/15/2002	HARDEE	
MW-2	27	34	15.1	81	46	52.3	52 ft	7/15/2002	HARDEE	
MW-3	27	34	12.3	81	47	1.6	77 ft	7/15/2002	HARDEE	
MW-5	27	34	19	81	47	1.5	78 ft	7/15/2002	HARDEE	
MW-6	27	34	8.5	81	46	56.9	61 ft	7/15/2002	HARDEE	(used these l/l coords in WACS)
MW-7	27	34	8.6	81	47	0.2	56 ft	7/15/2002	HARDEE	
well_name	lat_dd	lat_mm	lat_ss	long_dd	long_mm	long_ss	elevation	insp. date	site	comment
MW-4	27	34	23.1	81	46	47.2	97 ft	11/13/2002	HARDEE	
MW-8	27	34	13.3	81	47	1	63 ft	11/13/2002	HARDEE	
MW-9	27	34	12.8	81	46	55.5	56 ft	11/13/2002	HARDEE	
Leachate pump station (manhole 1)										
	27	34	13.6	81	46	54	61 ft	11/13/2002	HARDEE	
SW-1	27	34	15.1	81	46	52.9	77 ft	11/13/2002	HARDEE	(rechecked 7/8/03)
well_name	lat_dd	lat_mm	lat_ss	long_dd	long_mm	long_ss	elevation	insp. date	site	comment
MW-6	27	34	8.6	81	46	56.8	32.1 m	7/8/2003	HARDEE	(confirmed l/l coords from 7/15/02)
SW-1	27	34	8.7	81	46	49.8	32.6 m	7/8/2003	HARDEE	(used these l/l coords in WACS)
Manhole 9								7/8/2003	HARDEE	(used same l/l coords as MH-1)
SW-2	27	34	1.7	81	46	55.9	29.9 m	7/8/2003	HARDEE	
well_name	lat_dd	lat_mm	lat_ss	long_dd	long_mm	long_ss	elevation	insp. date	site	comment
MW-10	27	34	10.7	81	46	52.4		12/22/2005	HARDEE	(Phase II, Section I expansion well)
well_name	lat_dd	lat_mm	lat_ss	long_dd	long_mm	long_ss	elevation	surv_rec'd	site	comment
MW-10R	27	34	10.24	81	46	53.46		2/15/2008	HARDEE	(Phase II, Section I expansion well)
MW-11	27	34	9.6	81	46	56.26		2/15/2008	HARDEE	(Phase II, Section I expansion well)
MW-12R	27	34	9.64	81	46	59.5		2/15/2008	HARDEE	(Phase II, Section I expansion well)
well_name	lat_dd	lat_mm	lat_ss	long_dd	long_mm	long_ss	elevation	insp. date	site	comment
Phase II leachate	27			81					HARDEE	(Phase II, Section I expansion)

Lora Ross
Lora Ross
Lora Ross
Bret Galbraith

SUBMITTED IN SUPPORT OF
PENDING OFS PERMIT NUMBER
38444-011 - 50/01

REVISED GROUNDWATER MONITORING PLAN

**ATTACHMENT M-1
TO THE**

**CONSTRUCTION PERMIT APPLICATION
FOR
HARDEE COUNTY LANDFILL EXPANSION**

Prepared for:

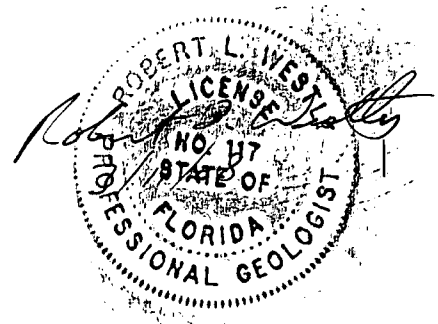
Hardee County
Board of County Commissioners
412 West Orange Street
Wauchula, Florida
863-773-5089

FLORIDA DEPARTMENT OF
ENVIRONMENTAL PROTECTION
MAR 11 2008
SOUTHWEST DISTRICT
TAMPA

Prepared by:

SCS Engineers
~~3012 U.S. Highway 301 North, Suite 700~~ 4041 Park Oaks Blvd, Suite 100
Tampa, Florida 33610
(813) 621-0080

File No. 09199033.09
November 15, 2004
Revised March 10, 2008



FIGURES

<u>Figure No.</u>	<u>Page</u>
M-1	Hardee County Solid Waste, Ground, Surface Water, and Leachate Monitoring Location Points, Hardee County, Florida M-4
M-2	Hardee County Solid Waste, Groundwater Monitoring Plan Sampling Locations Map, Hardee County, Florida M-5
M-3	Typical Monitoring Well Construction Detail M-8
M-4	Hardee County Solid Waste, Piezometer Location Map..... M-14
M-5	Typical Piezometer Construction Detail M-15
M-6	Supply Well Location Map, Hardee County Landfill, Hardee County, Florida M-20

TABLES

<u>Table No.</u>	
M-1	Groundwater Monitoring Wells at the Hardee County Landfill M-3
M-2	Well Construction Details M-7
M-3	Groundwater and Surface Water Level Monitoring Points..... M-12
M-4	Piezometer Construction Details M-13

TABLE M-2. REVISED WELL CONSTRUCTION DETAILS

FLORIDA DEPARTMENT OF
ENVIRONMENTAL PROTECTION
MAR 11 2008
SOUTHWEST DISTRICT
TAMPA

Well ID	Well Diameter	Current Permit Designation	Permit Designation Phase II Section I	Permit Designation Phase II Section II	Total Depth (ft)	Casing Length (ft)	Screen Length	TOC Elevation (NGVD)	Ground Surface Elevation (ft-NGVD)	Screen top/bottom (ft, bbs)	screen top/bottom (NGVD)	Maximum Water Level (NGVD)	Minimum Water Level (NGVD)
MW-1	4"		Background	Background	11.00'	7.80'	5'	88.22	86.46	6.0/11.0	80.46/75.46	85.44 (Feb 95)	78.27 (June 00)
MW-2	4"	Detection	Detection	Detection	10.50'	7.80'	5'	86.46	84.56	5.5/10.5	79.06/74.06	82.46 (Dec 02)	75.56 (June 00)
MW-3	2"	Piezometer	Piezometer	Abandoned	unknown	unknown	unknown	88.06	86.46	unknown	unknown	unknown	unknown
MW-4	2"	Background	Background	Background	18.90'	12.20'	10'	87.15	84.22	8.9/18.9	75.32/65.32	83.06 (Dec 02)	76.56 (June 00)
MW-5	2"	Detection	Detection	Abandoned	18.10'	11.00'	10'	89.12	86.28	8.1/18.1	78.18/68.18	82.91 (Dec 97)	76.46 (June 00)
MW-6	2"	Piezometer	Piezometer	Piezometer	13.50'	3.50'	10'	88.25	85.06	3.5/13.5	81.56/71.56	83.11 (Dec 02)	75.31 (June 01)
MW-7	2"	Piezometer	Piezometer	Piezometer	13.50'	3.50'	10'	87.88	84.98	3.5/13.5	81.48/71.48	83.11 (Dec 02)	75.31 (June 01)
MW-8	2"	Detection	Detection	Abandoned	13.50'	3.50'	10'	89.39	86.63	3.5/13.5	83.13/73.13	83.18 (Dec 02)	75.58 (June 01)
MW-9	2"	Detection/Abandoned	Abandoned	Abandoned	13.50'	3.50'	10'	88.71	85.90	3.5/13.5	82.40/72.40	83.11 (Dec 02)	75.31 (June 01)
MW-10*	2"	Proposed/Abandoned	Detection/Abandoned	Detection/Abandoned	12.00'	2.00'	10'	88.0**	85.0**	3.8/12.0	81.2/71.2**	82.5***	74.5 (MW-6 Jun 00)***
MW-10R	2"	Detection	Detection	Detection	20.00'	5.00'	15'	88.57	85.49	5/20	80.49/65.49	78.19 (Jan 08)	78.19 (Jan 08)
MW-11**	2"	Proposed/Detection	Detection	Detection	12.00'	2.00'	10'	86.1**88.11	83.1**85.17	2.0/12.0	79.1784.1/71.1**69.17	82.5**77.76 (Jan 08)	74.5 (MW-6 Jun 00)***77.76 (Jan 08)
MW-12*	2"	Proposed/Abandoned	Detection/Abandoned	Detection/Abandoned	17.00'	2.00'	15'	88.3**	85.3**	2.0/12.0	83.3/68.3**	82***	74.4 (MW-7 Jun 00)***
MW-12R	2"	Detection	Detection	Detection	17.00'	2.00'	15'	89.00	85.71	5/20	80.71/65.71	77.81 (Jan 08)	77.81 (Jan 08)
MW-13**	2"	Proposed	Phase II Section II	Detection	17.00'	2.00'	15'	87.4**	84.4**	2.0/17.0	82.4/67.4**	83***	74.4 (MW-7 Jun 00)***
MW-14**	2"	Proposed	Phase II Section II	Detection	12.00'	2.00'	10'	88.5**	85.5**	2.0/12.0	83.5/73.5**	82***	76.6 (MW-5 Jun 00)***
MW-15**	2"	Proposed	Phase II Section II	Detection	12.00'	2.00'	10'	87.0**	84**	2.0/12.00	82.0/72.0**	83.5***	76.6 (MW-5 Jun 00)***
Maintenance Supply Well	4"	Supply Well	To Be Abandoned	To Be Abandoned	197'	63'	NA	unknown	unknown	NA	NA	NM	NM
Material Recover Facility Supply Well	4"	Supply Well	Supply Well	Supply Well	200'	67'	NA	unknown	unknown	NA	NA	NM	NM
Proposed Supply Well*	4"	Proposed	Supply Well	Supply Well	197'	63'	NA	TBD	TBD	NA	NA	NM	NM

NOTES:
* = Proposed Locations: Construction specifications based on top of clay and maximum water levels observed on the site
* = Abandoned on January 22, 2008.
** = Approximate Elevation based upon March 2003 Aerial Topography Survey of the Site by I.F. Roofs and Associates
*** = Approximate based on potentiometric flow maps (Refer to Geotechnical Report attached to this Permit application)
TBD =To Be Determined
NA =Not Applicable
NM = Not Measured

REVISED MARCH 10, 2008

Table M-3.
Groundwater and Surface Water Level Monitoring Points

Monitoring Location	Current Permit Designation	Permit Designation Phase II Section I	Permit Designation Phase II Section II
MW-1	Background	Background	Background
MW-2	Detection	Detection	Detection
MW-3	Piezometer	Piezometer	Abandoned
MW-4	Background	Background	Background
MW-5	Detection	Detection	Abandoned
MW-6	Piezometer	Piezometer	Piezometer
MW-7	Piezometer	Piezometer	Piezometer
MW-8	Detection	Detection	Abandoned
MW-9	Detection/Abandoned	Abandoned	Abandoned
MW-10	Proposed Detection Phase II Section I	Detection/Abandoned	Detection/Abandoned
MW-10R	Existing Detection Phase II Section I	Detection	Detection
MW-11	Proposed Existing Detection Phase II Section II	Detection	Detection
MW-12	Proposed Detection Phase II Section I	Detection/Abandoned	Detection/Abandoned
MW-12R	Existing Detection Phase II Section I	Detection	Detection
MW-13	Proposed Detection Phase II Section II	Proposed Detection Phase II Section II	Detection
MW-14	Proposed Detection Phase II Section II	Proposed Detection Phase II Section II	Detection
MW-15	Proposed Detection Phase II Section II	Proposed Detection Phase II Section II	Detection
P-1	Leachate Level Monitoring	Leachate Level Monitoring	Leachate Level Monitoring
P-2	Leachate Level Monitoring	Leachate Level Monitoring	Leachate Level Monitoring
P-3	Piezometer/Abandoned	Abandoned	Abandoned
P-4	Piezometer/Abandoned	Abandoned	Abandoned
P-5	Piezometer/Abandoned	Abandoned	Abandoned
P-6	Abandoned	Abandoned	Abandoned
P-7	Piezometer	Piezometer	Piezometer
P-8	Piezometer	Piezometer	Piezometer
P-9	Leachate Level Monitoring	Leachate Level Monitoring	Leachate Level Monitoring
P-10	Leachate Level Monitoring	Leachate Level Monitoring	Leachate Level Monitoring
P-11	Piezometer	Piezometer	Piezometer
P-12	Piezometer/Abandoned	Abandoned	Abandoned
P-13	Piezometer	Piezometer	Piezometer
P-14	Piezometer	Piezometer	Piezometer
P-15	Leachate Level Monitoring	Leachate Level Monitoring	Leachate Level Monitoring
P-16	Leachate Level Monitoring	Abandoned	Abandoned
P-16A	Proposed Leachate Monitoring	Leachate Level Monitoring	Leachate Level Monitoring
P-17	Proposed Existing Piezometer	Piezometer	Piezometer
P-18	Proposed Existing Piezometer	Piezometer	Piezometer
P-19	Proposed Existing Piezometer	Piezometer	Piezometer
P-20	Proposed Existing Piezometer	Piezometer	Piezometer
P-21	Proposed Existing Piezometer	Piezometer	Piezometer
P-22	Proposed Existing Piezometer	Piezometer	Piezometer
P-23	Proposed Existing Piezometer	Piezometer	Piezometer
SW-2	Proposed	Surface Water	Surface Water
SG-1	Proposed	Staff Gauge	Staff Gauge
SG-2	Proposed	Staff Gauge	Staff Gauge

REVISED MARCH 10, 2008

Dept. of Environment
Protection
MAR 11 2008
Southwest District

TABLE M-4. REVISED PIEZOMETER CONSTRUCTION DETAILS

Piezometer ID	Diameter	Current Permit Designation	Permit Designation Phase II Section I	Permit Designation Phase II Section II	Total Depth (bls)	Casing Length (ft bls)	Screen Length	TOC Elevation (NGVD)	Ground Surface Elevation (Ft NGVD)	Screen top/bottom (ft. bls)	screen top/bottom (NGVD)	Maximum Water Level (NGVD)	Minimum Water Level (NGVD)	Average Water Level (NGVD)
P-1	2"	Leachate Level Monitoring	Leachate Level Monitoring	Leachate Level Monitoring	unknown	unknown	unknown	90.14	89.89	unknown	unknown	unknown	unknown	unknown
P-2	2"	Leachate Level Monitoring	Leachate Level Monitoring	Leachate Level Monitoring	unknown	unknown	unknown	90.64	unknown	unknown	unknown	unknown	unknown	unknown
P-3	2"	Piezometer Abandoned	Abandoned	Abandoned	13.50'	3.50'	10'	89.40	85.90	3.5/13.5	unknown	unknown	unknown	unknown
P-4	2"	Piezometer Abandoned	Abandoned	Abandoned	14.00'	3.50'	10'	88.36	85.90	4.0/13.5	unknown	unknown	unknown	unknown
P-5	2"	Piezometer Abandoned	Abandoned	Abandoned	13.50'	3.50'	10'	89.30	85.90	3.5/13.5	unknown	unknown	unknown	unknown
P-6	2"	Abandoned	Abandoned	Abandoned	unknown	unknown	unknown	unknown	unknown	unknown	unknown	unknown	unknown	unknown
P-7	2"	Piezometer	Piezometer	Piezometer	unknown	unknown	unknown	84.16	unknown	unknown	unknown	unknown	unknown	unknown
P-8	2"	Piezometer	Piezometer	Piezometer	unknown	unknown	unknown	84.98	unknown	unknown	unknown	unknown	unknown	unknown
P-9	2"	Leachate Level Monitoring	Leachate Level Monitoring	Leachate Level Monitoring	unknown	unknown	unknown	87.17	85.12	unknown	unknown	unknown	unknown	unknown
P-10	2"	Leachate Level Monitoring	Leachate Level Monitoring	Leachate Level Monitoring	unknown	unknown	unknown	88.66	87.01	unknown	unknown	unknown	unknown	unknown
P-11	2"	Piezometer	Piezometer	Piezometer	unknown	unknown	unknown	88.25	85.03	unknown	unknown	unknown	unknown	unknown
P-12	2"	Piezometer Abandoned	Abandoned	Abandoned	15.00'	3.50'	10'	88.75	NA	3.50/13.5	unknown	unknown	unknown	unknown
P-13	2"	Piezometer	Piezometer	Piezometer	unknown	unknown	unknown	87.65	unknown	unknown	unknown	unknown	unknown	unknown
P-14	2"	Piezometer	Piezometer	Piezometer	unknown	unknown	unknown	86.99	unknown	unknown	unknown	unknown	unknown	unknown
P-15	2"	Leachate Level Monitoring	Leachate Level Monitoring	Leachate Level Monitoring	13.50'	3.50'	NA	89.23	85.90	3.5/13.5	unknown	unknown	unknown	unknown
P-16	2"	Leachate Level Monitoring	Abandoned	Abandoned	13.50'	3.50'	NA	88.92	85.90	3.5/13.5	unknown	unknown	unknown	unknown
P-16A	2"	Proposed	Leachate Level Monitoring	Leachate Level Monitoring	20.00	2.00'	18'	95	92.00	2.0/20.0	90.0/72.0**	unknown	unknown	unknown
P-17	2"	NA Existing Piezometer	Piezometer	Piezometer	12.00'	2.00'	10'	88.7088.2**	85.8885.2**	2.0/12.0	83.8883.2/73.8873.2**	83.5***	78.3 (MW-1 Jun00)	81***
P-18	2"	NA Existing Piezometer	Piezometer	Piezometer	12.00'	2.00'	10'	87.987.1**	84.4284.1**	2.0/12.0	82.4282.1/72.4272.1**	83.5***	78.3 (MW-1 Jun00)	81***
P-19	2"	NA Existing Piezometer	Piezometer	Piezometer	12.00'	2.00'	10'	86.7987.7**	84.1784.7**	2.0/12.0	82.1782.7/72.1772.7**	82***	76.6 (MW-4 Jun00)	80***
P-20	2"	NA Existing Piezometer	Piezometer	Piezometer	12.00'	2.00'	10'	87.6186.6**	84.6883.6**	2.0/12.0	82.6881.6/72.6871.6**	81.5***	76.6 (MW-4 Jun00)	79.5***
P-21	2"	NA Existing Piezometer	Piezometer	Piezometer	12.00'	2.00'	10'	86.6884.3**	83.5781.3**	2.0/12.0	81.5779.3/71.5769.3**	80.5***	75.6 (MW-2 Jun00)	78***
P-22	2"	NA Existing Piezometer	Piezometer	Piezometer	12.00'	2.00'	10'	87.1587.2**	84.0984.2**	2.0/12.0	82.0982.2/72.0972.2**	81.5***	74.4 (MW-7 Jun00)	78.5***
P-23	2"	NA Existing Piezometer	Piezometer	Piezometer	12.00'	2.00'	10'	86.6386.7**	83.7183.7**	2.0/12.0	81.7181.7/71.7171.7**	83***	74.4 (MW-7 Jun00)	77.5***

NOTES:

* = Proposed Monitoring Locations—Construction specifications based on average water levels observed on the site.

** = Approximate Elevation based upon March 2003 Aerial Topography Survey of the Site by I.F. Rooks and Associates

*** = Approximate based on potentiometric flow maps (Refer to Geotechnical Report attached to this Permit application)

TBD=To Be Determined

NA=Not Applicable

NM=Not Measured

REVISED MARCH 10, 2008



REVISÉ MARCH 10, 2008

FLORIDA DEPARTMENT OF
ENVIRONMENTAL PROTECTION
MAR 11 2008
SOUTH WEST DISTRICT
TAMPA

G:\PROJECT\09199033.12\Ops Permit Mod RAI No. 3\93309MONWELLOC.dwg Mar 11, 2008 - 10:16am Layout Name: Piezoloc Bv. 2483srf

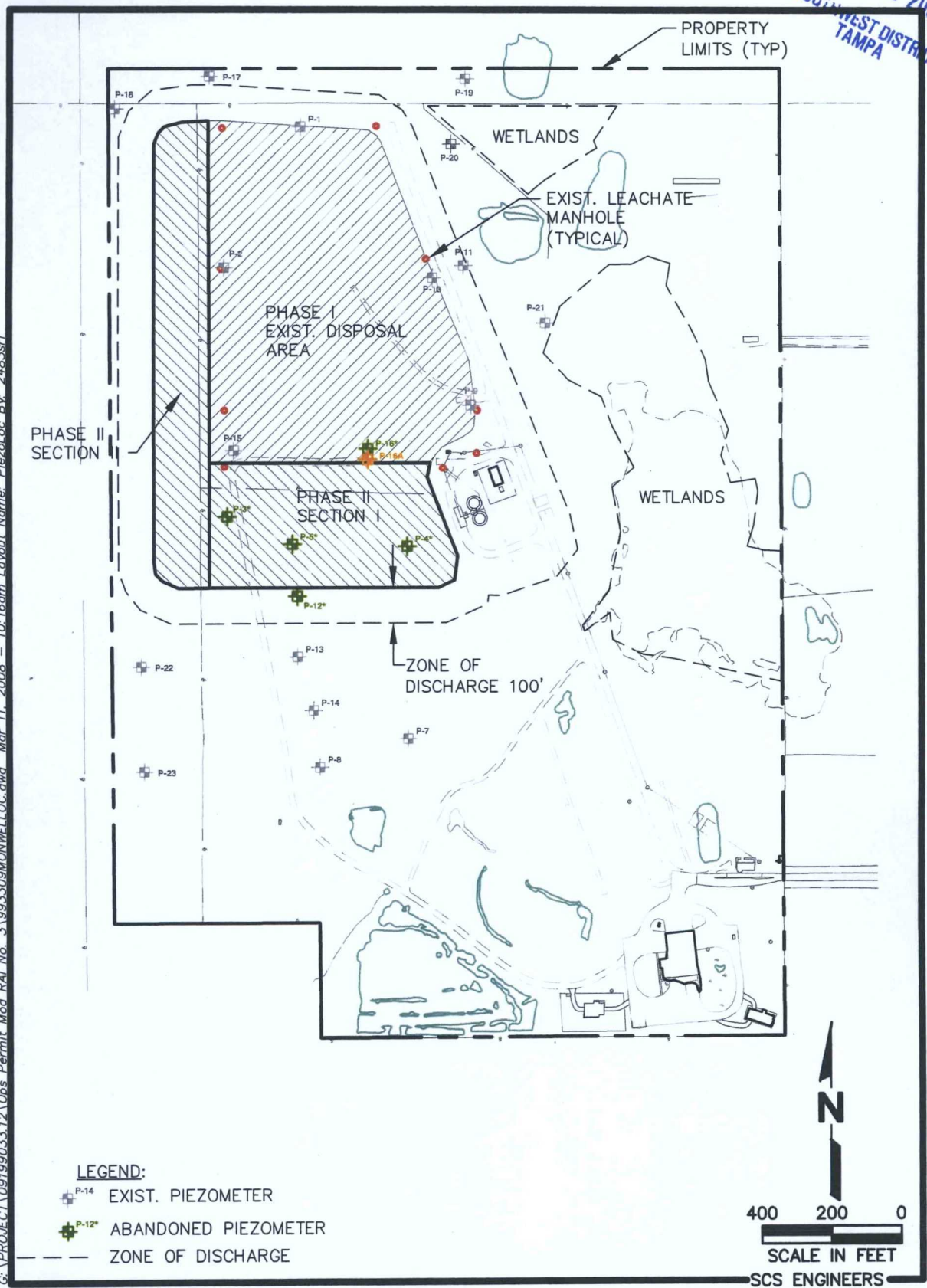


Figure M-4. Hardee County Solid Waste, Piezometer Location Map.

FLORIDA DEPARTMENT OF
ENVIRONMENTAL PROTECTION

JAN 30 2008

SOUTHWEST DISTRICT
TAMPA

Attachment E

State of Florida Permit Application to Construct, Repair,
Modify, or Abandon a Well, Monitor Well Completion
Reports, Boring Logs, Well Construction and Development
Logs, Groundwater Sampling Logs, As-Built Detail Drawings
and Survey Information for MW-10R and MW-12R

And

State of Florida Permit Application to Construct, Repair,
Modify, or Abandon a Well and Well Completion Reports to
Abandon Monitoring Wells MW-10 and MW-12



STATE OF FLORIDA PERMIT APPLICATION TO CONSTRUCT,
REPAIR, MODIFY, OR ABANDON A WELL

- ☒ Southwest
☐ Northwest
☐ St. Johns River
☐ South Florida
☐ Suwannee River

THIS FORM MUST BE FILLED OUT COMPLETELY.

The water well contractor is responsible for completing
this form and forwarding the permit to the appropriate
delegated county where applicable.

CHECK BOX FOR APPROPRIATE DISTRICT ADDRESS ON BACK OF PERMIT FORM

Permit No. **770274**

Florida Unique I.D. _____

Permit Stipulations Required (See attached)

04

62-524 Quad # _____ Delineation # _____

CUP/WUP Application No. _____

ABOVE THIS LINE FOR OFFICIAL USE ONLY

1. **HARDEE COUNTY BOCC** **412 W ORANGE ST ROOM 103** **WAUCHULA FL** **33673-0000**
Owner, Legal Name of Entity if Corporation Address City Zip Telephone Number

2. **685 AIRPORT RD, N/A**
Well Location Address, Road Name or number, City
Parcel # (Pin) **2533350000065500000**

3. **ROSS A CHINANDER** **11093** **(813) 655-3612**
Well Drilling Contractor License No. Telephone No.

12435 JESS WALDEN ROAD

Address

DOVER

FL

33527

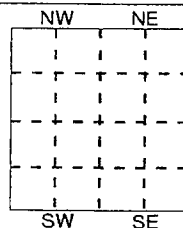
City

State

Zip

4. _____ 1/4 of _____ 1/4 of Section **35**
smallest biggest (Indicate Well on Chart)

5. Township **33** Range **25**



6. **HARDEE** _____
County Subdivision Name Lot Block Unit

7. Number of proposed wells **2** Check the use of well: (See back of permit for additional choices) _____ Domestic _____ Monitor (type) _____

_____ Irrigation (Type) Public Water Supply (type) _____ List Other **PLUGGED**

(See Back)

(See Back)

Distance from septic system **0** ft. Description of facility **LANDFILL** Estimated start of construction date **1/21/2008**

Date Stamp

8. Application for: _____ New Construction _____ Repair/Modify ☒ Abandonment **NO LONGER NEEDED.**
(Reason for Abandonment)

9. Estimated: Well Depth **17** Casing Depth _____ Screen Interval from _____ to **17**
Casing Material: ~~EXXON~~ / **EM** / PVC Casing Diameter **2** Seal Material **Cement**

10. If applicable: Proposed From **0** to **17** Seal Material **Cement**
Grouting Interval From _____ to _____ Seal Material _____
From _____ to _____ Seal Material _____

Received: Wednesday, January 16, 2008

11. Telescope Casing _____ or Liner _____ (check one) Diameter _____
Blk-Steel / Galvanized / PVC Other (specify): _____

12. Method of Construction: _____ Rotary _____ Cable Tool _____ Combination _____
Auger ☒ Other (specify): **Plugged by approved method**

13. Indicate total No. of wells on site **40**. List number of unused wells on site **0**.

14. Is this well or any other well or water withdrawal on the owner's contiguous property covered
under a Consumptive/Water Use Permit (CUP/WUP) or CUP/WUP Application? ☒ No _____ Yes _____
(IF YES, COMPLETE THE FOLLOWING) CUP/WUP No. _____

District well I.D. No. _____

Latitude **27° 34' 9.96"** Longitude **81° 46' 55.73"**

Data obtained from GPS _____ or map _____ or survey _____ (map datum NAD 27 _____ NAD 83 _____)

15. I hereby certify that I will comply with the applicable rules of Title 40, Florida Administrative Code
and that a water use permit or artificial recharge permit, if needed, has been or will be obtained
prior to commencement of well construction. I further certify that all information provided on this
application is accurate and that I will obtain necessary approval from other federal, state, or local
governments, if applicable. I agree to provide a well completion report to the District within 30 days
after drilling or the permit expiration, whichever occurs first.

I certify that I am the owner of the property, that the information provided is accurate, and that I am aware of my
responsibilities under Chapter 373, Florida Statutes, to maintain or properly abandon this well; or, I certify that I am
the agent for the owner, that the information provided is accurate, and that I have informed the owner of his re-
sponsibilities as stated above. Owner consents to personnel of the WMD or a representative access to the well site.

Digitally Signed

11093

Digitally Signed

Signature of Contractor

License No.

Owner's or Agent's Signature

Date

DO NOT WRITE BELOW THIS LINE - FOR OFFICIAL USE ONLY

Approval Granted By: **Automatically Issued** Issue Date: **1/16/2008** Hydrologist Approval _____

Initials

Owner Number: _____ Fee Received: \$ **.00** Receipt No.: _____ Check No.: _____

THIS PERMIT NOT VALID UNTIL PROPERLY SIGNED BY AN AUTHORIZED OFFICER OR REPRESENTATIVE OF THE WMD. IT SHALL BE AVAILABLE AT THE
WELL SITE DURING ALL DRILLING OPERATIONS. This permit is valid for 90 days from the date of issue.

WELL COMPLETION REPORT (Please complete in black ink or type.)PERMIT #: 770274.2 CUP/WUP#: _____ DID#: _____Indicate the number of wells drilled/abandoned for this report: 1

Indicate the number of wells permitted but not drilled/abandoned that are being cancelled: _____

WATER WELL CONTRACTOR'S

SIGNATURE Digitally Signed License # 11093*I certify that the information provided in this report is accurate and true.*

Grout	No. of Bags	From (ft.)	To (ft.)
Neat Cement:	0.5	0	17
Bentonite:			
(Other)			

WELL LOCATION: County Hardee
____ 1/4 of ____ 1/4 of Section 35, Township 33, Range 25
Latitude: 27° 34' 9.96", Longitude: -81° 46' 55.73"

DATE STAMP Jan 23 2008 Official Use Only

CHEMICAL ANALYSIS WHEN REQUIRED
Iron: ____ ppm Sulfate: ____ ppm
Chlorides: ____ ppm TDS ____ mg/l
Conductivity ____ umhos/cm
[] Lab Test [] Field Test KitPump Type
[] Centrifugal [] Jet [] Submersible [] Turbine
Horsepower: ____ Capacity: ____ GPM: ____
Pump Depth: ____ ft. Intake Depth: ____ ft.
Form LEG-R.005.00(10/05)

Sketch of well location on property

Give distances from septic tank and house, or
other reference pointsOWNER'S NAME: HARDEE COUNTY BOCCCOMPLETION DATE: 01/22/2008 Florida Unique I.D.: _____Parcel # (Pin): 2533350000065500000

WELL USE:

[] Public Supply [] Irrigation [] Domestic [] Monitor
[] Injection ☒ Other PLUGGED

DRILL METHOD:

[] Rotary [] Cable Tool [] Combination
[] Jet [] Auger ☒ Other Plugged

Measured Static Water Level: <u>7.00</u> Measured Pumping Water Level: _____ After ____ Hours at ____ GPM. Measuring Pt. (Describe): <u>GROUND SUR</u> Which is ____ ft. [] above <input checked="" type="checkbox"/> below land surface Casing: [] Black Steel [] Galvanized <input checked="" type="checkbox"/> PVC [] Other: _____		
[] Open Hole [] Screen	Depth (feet)	DRILL CUTTINGS LOG Examine cuttings every 20 ft. or at formation changes. Note cavities, depth to producing zones. Color Grain Size Type of Material
Casing Diameter and Depth (ft.)	From To	
Diameter: <u>2</u> From: <u>0</u> To: <u>17</u>	Plugged by approved method	
Diameter: _____ From: _____ To: _____		
Liner [] or Casing [] Diameter: _____ From: _____ To: _____		
MW-10		

Driller's Name (print or type): GREG J WAXEL

WELL COMPLETION REPORT (Please complete in black ink or type.)PERMIT #: 770274.1 CUP/WUP#: _____ DID#: _____Indicate the number of wells drilled/abandoned for this report: 1

Indicate the number of wells permitted but not drilled/abandoned that are being cancelled: _____

WATER WELL CONTRACTOR'S

SIGNATURE Digitally Signed License # 11093

I certify that the information provided in this report is accurate and true.

Grout	No. of Bags	From (ft.)	To (ft.)
Neat Cement:	0.3	0	12
Bentonite:			
(Other)			

WELL LOCATION: County Hardee1/4 of 1/4 of Section 35, Township 33, Range 25Latitude: 27° 34' 9.96", Longitude: -81° 46' 55.73"

DATE STAMP

Jan 23 2008

Official Use Only

CHEMICAL ANALYSIS WHEN REQUIRED

Iron: _____ ppm Sulfate: _____ ppm

Chlorides: _____ ppm TDS _____ mg/l

Conductivity _____ umhos/cm

☐ Lab Test ☐ Field Test Kit

Pump Type

☐ Centrifugal ☐ Jet ☐ Submersible ☐ Turbine

Horsepower: _____ Capacity: _____ GPM: _____

Pump Depth: _____ ft. Intake Depth: _____ ft.

Form LEG-R.005.00(10/05)

Sketch of well location on property

Give distances from septic tank and house, or other reference points

OWNER'S NAME: HARDEE COUNTY BOCCCOMPLETION DATE: 01/22/2008 Florida Unique I.D.: _____Parcel # (Pin): 2533350000065500000

WELL USE:

☐ Public Supply ☐ Irrigation ☐ Domestic ☐ Monitor☐ Injection ☒ Other PLUGGED

DRILL METHOD:

☐ Rotary ☐ Cable Tool ☐ Combination☐ Jet ☐ Auger ☒ Other PluggedMeasured Static Water Level: 7.00 Measured Pumping Water Level: _____
After _____ Hours at _____ GPM. Measuring Pt. (Describe): GROUND SUR
Which is _____ ft. ☐ above ☒ below land surface
Casing: ☐ Black Steel ☐ Galvanized ☒ PVC ☐ Other: _____

<input type="checkbox"/> Open Hole <input type="checkbox"/> Screen	Depth (feet)	DRILL CUTTINGS LOG Examine cuttings every 20 ft. or at formation changes. Note cavities, depth to producing zones. Color Grain Size Type of Material
Casing Diameter and Depth (ft.)	From To	

Diameter: <u>2</u> From: <u>0</u> To: <u>12</u>	Plugged by approved method
Diameter: _____ From: _____ To: _____	
Liner <input type="checkbox"/> or Casing <input type="checkbox"/> Diameter: _____ From: _____ To: _____	

MW-12

Driller's Name (print or type): GREG J WAXEL



STATE OF FLORIDA PERMIT APPLICATION TO CONSTRUCT,
REPAIR, MODIFY, OR ABANDON A WELL

- ☒ Southwest
☐ Northwest
☐ St. Johns River
☐ South Florida
☐ Suwannee River

THIS FORM MUST BE FILLED OUT COMPLETELY.

The water well contractor is responsible for completing
this form and forwarding the permit to the appropriate
delegated county where applicable.

CHECK BOX FOR APPROPRIATE DISTRICT ADDRESS ON BACK OF PERMIT FORM

Permit No. **770272**

Florida Unique I.D. _____

Permit Stipulations Required (See attached)

23, 39

62-524 Quad # _____ Delineation # _____

CUP/WUP Application No. _____

ABOVE THIS LINE FOR OFFICIAL USE ONLY

1. **HARDEE COUNTY BOCC** **412 W ORANGE ST ROOM 103** **WAUCHULA FL** **33873-0000**
Owner, Legal Name of Entity if Corporation Address City Zip Telephone Number

2. **685 AIRPORT RD, N/A**
Well Location Address, Road Name or number, City
Parcel # (Pin) **2533350000065500000**

3. **ROSS A CHINANDER** **11093** **(813) 655-3612**
Well Drilling Contractor License No. Telephone No.

12435 JESS WALDEN ROAD

Address

DOVER

FL

33527

City

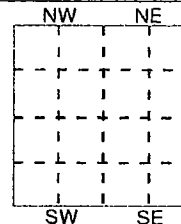
State

Zip

4. **1/4** of **1/4** of Section **35**
smallest biggest (Indicate Well on Chart)

5. Township **33**

Range **25**



6. **HARDEE**
County Subdivision Name Lot Block Unit

7. Number of proposed wells **2** Check the use of well: (See back of permit for additional choices) Domestic Monitor (type) **✓**

(See Back) Irrigation (Type) Public Water Supply (type) List Other

Distance from septic system **0** ft. Description of facility **LANDFILL** Estimated start of construction date **1/16/2008**

8. Application for: **✓** New Construction Repair/Modify Abandonment (Reason for Abandonment)

Date Stamp

9. Estimated: Well Depth **20** Casing Depth **5** Screen Interval from **5** to **20**
Casing Material: ~~XXXXXX~~ / ~~XX~~ / PVC Casing Diameter **2** Seal Material **Cement**
smallest

10. If applicable: Proposed From **0** to **3** Seal Material **Cement**
Grouting Interval From to Seal Material
From **3** to **20** Seal Material **Sand**

Received: Wednesday, January 16, 2008

11. Telescope Casing or Liner (check one) Diameter
~~XXXXXX~~ / ~~XXXXXX~~ / PVC Other (specify):

12. Method of Construction: Rotary Cable Tool Combination
✓ Auger Other (specify):

13. Indicate total No. of wells on site **40**. List number of unused wells on site **0**.

14. Is this well or any other well or water withdrawal on the owner's contiguous property covered
under a Consumptive/Water Use Permit (CUP/WUP) or CUP/WUP Application? **✓** No Yes
(IF YES, COMPLETE THE FOLLOWING) CUP/WUP No.

District well I.D. No.

Latitude **27° 34' 9.80"** Longitude **81° 46' 55.96"**

Data obtained from GPS or map or survey (map datum NAD 27, NAD 83)

15. I hereby certify that I will comply with the applicable rules of Title 40, Florida Administrative Code
and that a water use permit or artificial recharge permit, if needed, has been or will be obtained
prior to commencement of well construction. I further certify that all information provided on this
application is accurate and that I will obtain necessary approval from other federal, state, or local
governments, if applicable. I agree to provide a well completion report to the District within 30 days
after drilling or the permit expiration, whichever occurs first.

I certify that I am the owner of the property, that the information provided is accurate, and that I am aware of my
responsibilities under Chapter 373, Florida Statutes, to maintain or properly abandon this well; or, I certify that I am
the agent for the owner, that the information provided is accurate, and that I have informed the owner of his re-
sponsibilities as stated above. Owner consents to personnel of the WMD or a representative access to the well site.

Digitally Signed **11093** Digitally Signed
Signature of Contractor License No. Owner's or Agent's Signature Date

DO NOT WRITE BELOW THIS LINE - FOR OFFICIAL USE ONLY

Approval Granted By: **Automatically Issued** Issue Date: **1/16/2008** Hydrologist Approval

Initials

Owner Number: Fee Received: \$ **50.00** Receipt No.: **IN082758880** Check No.:

THIS PERMIT NOT VALID UNTIL PROPERLY SIGNED BY AN AUTHORIZED OFFICER OR REPRESENTATIVE OF THE WMD. IT SHALL BE AVAILABLE AT THE
WELL SITE DURING ALL DRILLING OPERATIONS. This permit is valid for 90 days from the date of issue.

WELL COMPLETION REPORT (Please complete in black ink or type.)PERMIT #: 770272.1 CUP/WUP#: _____ DID#: _____Indicate the number of wells drilled/abandoned for this report: 1

Indicate the number of wells permitted but not drilled/abandoned that are being cancelled: _____

WATER WELL CONTRACTOR'SSIGNATURE Digitally Signed License # 11093

I certify that the information provided in this report is accurate and true.

Grout	No. of Bags	From (ft.)	To (ft.)
Neat Cement:	1	0	5
Bentonite:			
(Other)	8	5	20

WELL LOCATION: County Hardee1/4 of 1/4 of Section 35, Township 33, Range 25Latitude: 27° 34' 9.8", Longitude: -81° 46' 55.96"

DATE STAMP

Jan 23 2008

Official Use Only

CHEMICAL ANALYSIS WHEN REQUIRED

Iron: _____ ppm Sulfate: _____ ppm

Chlorides: _____ ppm TDS _____ mg/l

Conductivity _____ umhos/cm

☐ Lab Test ☐ Field Test Kit

Pump Type

☐ Centrifugal ☐ Jet ☐ Submersible ☐ Turbine

Horsepower: _____ Capacity: _____ GPM: _____

Pump Depth: _____ ft. Intake Depth: _____ ft.

Form LEG-R.005.00(10/05)

Sketch of well location on property

Give distances from septic tank and house, or
other reference pointsOWNER'S NAME: HARDEE COUNTY BOCCCOMPLETION DATE: 01/22/2008 Florida Unique I.D.: _____Parcel # (Pin): 2533350000065500000

WELL USE: _____

☐ Public Supply ☐ Irrigation ☐ Domestic ☐ Monitor
☐ Injection ☒ Other OBSERVATION OR MONITOR WE

DRILL METHOD:

☐ Rotary ☐ Cable Tool ☐ Combination
☐ Jet ☒ Auger ☐ Other _____Measured Static Water Level: 7.00 Measured Pumping Water Level: 20.00
After 5 Hours at 2.00 GPM. Measuring Pt. (Describe): GROUND SUR
Which is _____ ft. ☐ above ☒ below land surface
Casing: ☐ Black Steel ☐ Galvanized ☒ PVC ☐ Other: _____

[] Open Hole [] Screen	Depth (feet)		DRILL CUTTINGS LOG Examine cuttings every 20 ft. or at formation changes. Note cavities, depth to producing zones. Color Grain Size Type of Material
	From	To	
Casing Diameter and Depth (ft.)	Diameter: <u>2</u>	<u>0</u> <u>10</u> brown very fine sandy clay	
	From: <u>0</u>	<u>10</u> <u>12</u> brown fine sand	
	To: <u>5</u>	<u>12</u> <u>20</u> gray soft clay	
Diameter: _____ From: _____ To: _____			
Liner <input checked="" type="checkbox"/> or Casing <input type="checkbox"/> Diameter: <u>2</u> From: <u>5</u> To: <u>20</u>			
MW-10R			

Driller's Name (print or type): GREG J WAXEL

WELL COMPLETION REPORT (Please complete in black ink or type.)PERMIT #: 770272.2 CUP/WUP#: _____ DID#: _____Indicate the number of wells drilled/abandoned for this report: 1

Indicate the number of wells permitted but not drilled/abandoned that are being cancelled: _____

WATER WELL CONTRACTOR'S

SIGNATURE Digitally Signed License # 11093

I certify that the information provided in this report is accurate and true.

Grout	No. of Bags	From (ft.)	To (ft.)
Neat Cement:	1	0	5
Bentonite:			
(Other)	8	5	20

WELL LOCATION: County Hardee
1/4 of _____ 1/4 of Section 35, Township 33, Range 25
Latitude: 27° 34' 9.8", Longitude: -81° 46' 55.96"

DATE STAMP

Jan 23 2008

Official Use Only

CHEMICAL ANALYSIS WHEN REQUIRED

Iron: _____ ppm Sulfate: _____ ppm

Chlorides: _____ ppm TDS _____ mg/l

Conductivity _____ umhos/cm

☐ Lab Test ☐ Field Test Kit

Pump Type

☐ Centrifugal ☐ Jet ☐ Submersible ☐ Turbine

Horsepower: _____ Capacity: _____ GPM: _____

Pump Depth: _____ ft. Intake Depth: _____ ft.

Form LEG-R.005.00(10/05)

Sketch of well location on property

Give distances from septic tank and house, or
other reference pointsOWNER'S NAME: HARDEE COUNTY BOCCCOMPLETION DATE: 01/22/2008 Florida Unique I.D.: _____Parcel # (Pin): 2533350000065500000

WELL USE:

☐ Public Supply ☐ Irrigation ☐ Domestic ☐ Monitor☐ Injection ☒ Other OBSERVATION OR MONITOR WE

DRILL METHOD:

☐ Rotary ☐ Cable Tool ☐ Combination☐ Jet ☒ Auger ☐ Other _____

Measured Static Water Level: <u>7.00</u>		Measured Pumping Water Level: <u>20.00</u>	
After <u>5</u> Hours at <u>2.00</u> GPM.		Measuring Pt. (Describe): <u>GROUND SUR</u>	
Which is _____ ft. <input type="checkbox"/> above <input checked="" type="checkbox"/> below land surface			
Casing: <input type="checkbox"/> Black Steel <input type="checkbox"/> Galvanized <input checked="" type="checkbox"/> PVC <input type="checkbox"/> Other: _____			
<input type="checkbox"/> Open Hole <input type="checkbox"/> Screen	Depth (feet)		DRILL CUTTINGS LOG Examine cuttings every 20 ft. or at formation changes. Note cavities, depth to producing zones. Color Grain Size Type of Material
Casing Diameter and Depth (ft.)	From	To	
Diameter: <u>2</u>	0 10 brown very fine sandy clay		
From: <u>0</u>	10 12 brown fine sand		
To: <u>5</u>	12 20 gray soft clay		
Diameter: _____	_____		
From: _____	_____		
To: _____	_____		
Liner <input checked="" type="checkbox"/> or Casing <input type="checkbox"/>	_____		
Diameter: <u>2</u>	_____		
From: <u>5</u>	_____		
To: <u>20</u>	_____		
MW-12R			

Driller's Name (print or type): GREG J WAXEL

Florida Department of Environmental Protection
Twin Towers Office Bldg. 2600 Blair Stone Road Tallahassee, Florida 32399-2400

DEP Form # 62-522.900(3)
Form Title <u>MONITOR WELL COMPLETION REPORT</u>
Effective Date _____
DEP Application No. _____ (Filled in by DEP)

MONITOR WELL COMPLETION REPORT

DATE: January 22, 2008

INSTALLATION NAME: Hardee County Landfill

DEP PERMIT NUMBER: SWWMD Permit No. 770272.1 GMS NUMBER: _____

WELL NUMBER: MW-10R WELL NAME: Replacement compliance well MW-10R

DESIGNATION: Background _____ Immediate _____ Compliance X

LATITUDE/LONGITUDE: 27° 34'9.8" 81° 46'55.96"

AQUIFER MONITORED: Surficial

INSTALLATION METHOD: Hollow Stem Auger

INSTALLED BY: Well Drilling Contractor: Ross A. Chinander, National Environmental Technology, Inc.

TOTAL DEPTH: 20 feet (bls) DEPTH OF SCREEN: 20 feet (bls)

SCREEN LENGTH: 15 feet SCREEN SLOT SIZE: 0.006 SCREEN TYPE: SCH 40 PVC

SING DIAMETER: 2-inch CASING TYPE: SCH 40 PVC

LENGTH OF CASING: 8 feet FILTER PACK MATERIAL: 30/65 sand

TOP OF CASING ELEVATION (MSL): 88.57' NGVD

GROUND SURFACE ELEVATION (MSL): 85.49' NGVD

COMPLETION DATE: January 22, 2008

DESCRIBE WELL DEVELOPMENT: Well set at 10:55 on 1/22/08. Begin well development using surge and pump method with a centrifugal pump at 11:29. Stop development at 12:32, turbidity of recovered water is at 4.34 NTUs. Recover approximately 90 gallons over a 70 minute period. Maximum drawdown during development is 17 feet below top of casing. Remobilize to the site on 1/24/08 to re-develop wells and collect stabilization parameters.

POST DEVELOPMENT WATER LEVER ELEVATION (MSL): 10.68 feet below top of casing (post stabilization parameter collection)

DATE AND TIME MEASURED: 1/24/08 at 14:40

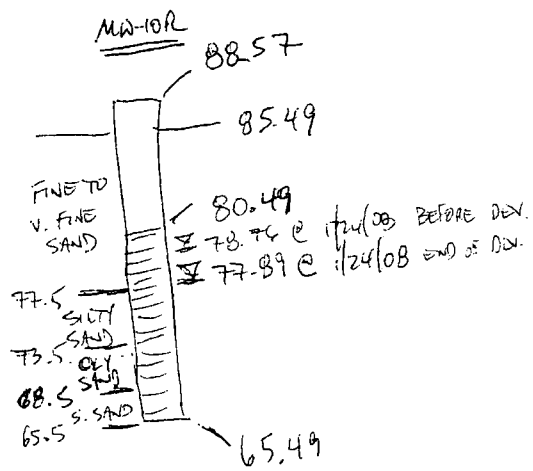
REMARKS: (soils information, stratigraphy, etc.): land surface to 8 feet: brown fine to very fine sands, 8 feet to 12 feet: brown fine to very fine sands with silts, 12 to 15 feet: light gray clay with trace sands, 15 to 17 feet: light brown clayey sands, 17 to 20 feet very light gray silts with sands.

Final stabilization parameters: pH 4.91, temperature 24.11 °C, conductivity 27 µmhos/cm, dissolved oxygen 0.26 mg/L, turbidity 2.29 NTU.

REPORT PREPARED BY: Beau Beabe, Nodarse & Associates, Inc., 407-383-1077
(name, company, phone number)

NOTE: PLEASE ATTACH BORING LOG.

(bls)= Below Land Surface



Florida Department of Environmental Protection
Twin Towers Office Bldg. 2600 Blair Stone Road Tallahassee, Florida 32399-2400

DEP Form # 62-522.900(3)
Form Title <u>MONITOR WELL COMPLETION REPORT</u>
Effective Date _____
DEP Application No. _____ (Filled in by DEP)

MONITOR WELL COMPLETION REPORT

DATE: January 22, 2008

INSTALLATION NAME: Hardee County Landfill

DEP PERMIT NUMBER: SWWMD Permit No. 770272.2 GMS NUMBER: _____

WELL NUMBER: MW-12R WELL NAME: Replacement compliance well MW-12R

DESIGNATION: Background _____ Immediate _____ Compliance X

LATITUDE/LONGITUDE: 27° 34'9.8" 81° 46'55.96"

AQUIFER MONITORED: Surficial

INSTALLATION METHOD: Hollow Stem Auger

INSTALLED BY: Well Drilling Contractor: Ross A. Chinander, National Environmental Technology, Inc.

TOTAL DEPTH: 20 feet (bls) DEPTH OF SCREEN: 20 feet (bls)

SCREEN LENGTH: 15 feet SCREEN SLOT SIZE: 0.006 SCREEN TYPE: SCH 40 PVC

SING DIAMETER: 2-inch CASING TYPE: SCH 40 PVC

LENGTH OF CASING: 8 feet FILTER PACK MATERIAL: 30/65 sand

TOP OF CASING ELEVATION (MSL): 89.00' NGVD

GROUND SURFACE ELEVATION (MSL): 85.71' NGVD

COMPLETION DATE: January 22, 2008

DESCRIBE WELL DEVELOPMENT: Well set at 12:56 on 1/22/08. Begin well development using surge and pump method with a centrifugal pump. at 14:31. Recovered water is at 50 NTU's at 15:27 and stop development, unable to get less than 50 NTUs. Recover approximately 45 gallons over 56 minutes. Well purged dry during well development. Remobilize to the site on 1/24/08 to redevelop wells and collect stabilization parameters.

POST DEVELOPMENT WATER LEVER ELEVATION (MSL): 12.79 feet below top of casing (post stabilization parameter collection)

DATE AND TIME MEASURED: 1/24/08 at 15:12

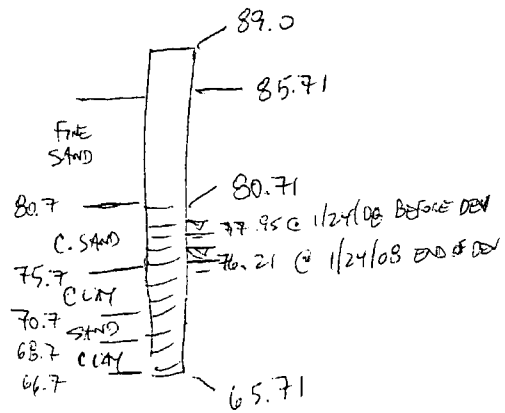
REMARKS: (soils information, stratigraphy, etc.): land surface to 5 feet: brown fine sand with silts, 5 feet to 7 feet: light brown clay with fine sands, 7 to 10 feet: brown clayey sands, 10 to 15 feet: light brown clay, soft, 15 to 17 feet: light brown fine sands with little clay, 18 to 20 feet: blue green clay, tight.
Final stabilization parameters: pH 5.02, temperature 24.02 °C, conductivity 102 µmhos/cm, dissolved oxygen 1.38 mg/L, turbidity 5.13 NTU.

REPORT PREPARED BY: Beau Beabe, Nodarse & Associates, Inc., 407-383-1077
(name, company, phone number)

NOTE: PLEASE ATTACH BORING LOG.

(bls)= Below Land Surface

MW-12R



BORING LOG

Page 1 of 2

Boring/Well Number: MW-10R		Permit Number: SWFWMD: 770272-1		FDEP Identification Number: 758079	
Site Name: Hardee County Landfill		Borehole Start Date: 01/22/08	Borehole Start Time: 9:45	<input checked="" type="checkbox"/> AM	<input type="checkbox"/> PM
		End Date: 01/22/08	End Time: 10:55	<input checked="" type="checkbox"/> AM	<input type="checkbox"/> PM
Environmental Contractor: Nodarse & Associates, Inc.		Geologist's Name: N/A		Environmental Technician's Name: Beau J. Beabe	
Drilling Company: National Env. Technology, Inc.		Pavement Thickness (inches): N/A	Borehole Diameter (inches): 8	Borehole Depth (feet): 20	
Drilling Method(s): Hollow Stem Auger	Apparent Borehole DTW (in feet from soil moisture content): 7	Measured Well DTW (in feet after water recharges in well): 7.68	OVA (list model and check type): N/A <input type="checkbox"/> FID <input type="checkbox"/> PID		
Disposition of Drill Cuttings [check method(s)]: <input type="checkbox"/> Drum <input checked="" type="checkbox"/> Spread <input type="checkbox"/> Backfill <input type="checkbox"/> Stockpile <input type="checkbox"/> Other (describe if other or multiple items are checked):					
Borehole Completion (check one): <input checked="" type="checkbox"/> Well <input type="checkbox"/> Grout <input type="checkbox"/> Bentonite <input type="checkbox"/> Backfill <input type="checkbox"/> Other (describe)					

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
							1	Brown fine to very fine sand			
							2				
							3				
							4				
							5				
							6				
							7				
							8	Brown fine to very fine sand with silts			
							9				
							10				
							11				
							12				

Sample Type Codes: PH = Post Hole; HA = Hand Auger; SS = Split Spoon; ST = Shelby Tube; DP = Direct Push; SC = Sonic Core; DC = Drill Cuttings

Moisture Content Codes: D = Dry; M = Moist; W = Wet; S = Saturated

BORING LOG

Page 2 of 2

Boring/Well Number: MW-10R		FDEP Facility Identification Number: 758079		Site Name: Hardee County Landfill		Borehole Start Date: 01/22/08		End Date: 01/22/08			
Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
							13	Light gray clay with trace sands			
							14				
							15	Light brown clayey sands			
							16				
							17	Very light gray silts with sands			
							18				
							19				
							20				
							21	End of Boring 20 feet			
							22				
							23				
							24				
							25				
							26				
							27				
							28				
							29				
							30				

Sample Type Codes: PH = Post Hole; HA = Hand Auger; SS = Split Spoon; ST = Shelby Tube; DP = Direct Push; SC = Sonic Core; DC = Drill Cuttings

Moisture Content Codes: D = Dry; M = Moist; W = Wet; S = Saturated

BORING LOG

Page 1 of 2

Boring/Well Number: MW-12R		Permit Number: SWFWMD: 770272-2		FDEP Identification Number: 758079							
Site Name: Hardee County Landfill		Borehole Start Date: 01/22/08	Borehole Start Time: 1300	<input type="checkbox"/> AM <input checked="" type="checkbox"/> PM							
		End Date: 01/22/08	End Time: 1350	<input type="checkbox"/> AM <input checked="" type="checkbox"/> PM							
Environmental Contractor: Nodarse & Associates, Inc.		Geologist's Name: N/A		Environmental Technician's Name: Beau J. Beaubé							
Drilling Company: National Env. Technology, Inc.		Pavement Thickness (inches): N/A	Borehole Diameter (inches): 8	Borehole Depth (feet): 20							
Drilling Method(s): Hollow Stem Auger	Apparent Borehole DTW (in feet from soil moisture content): 7	Measured Well DTW (in feet after water recharges in well): 9.79	OVA (list model and check type): N/A <input type="checkbox"/> FID <input type="checkbox"/> PID								
Disposition of Drill Cuttings [check method(s)]: <input type="checkbox"/> Drum <input checked="" type="checkbox"/> Spread <input type="checkbox"/> Backfill <input type="checkbox"/> Stockpile <input type="checkbox"/> Other (describe if other or multiple items are checked):											
Borehole Completion (check one): <input checked="" type="checkbox"/> Well <input type="checkbox"/> Grout <input type="checkbox"/> Bentonite <input type="checkbox"/> Backfill <input type="checkbox"/> Other (describe)											
Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
							1	Brown fine sand with silts			
							2				
							3				
							4				
							5	Light brown clay with trace sands			
							6	Brown clayey sands (moist)			
							7				
							8				
							9				
							10	Light brown clay, soft			
							11				
							12				

Sample Type Codes: PH = Post Hole; HA = Hand Auger; SS = Split Spoon; ST = Shelby Tube; DP = Direct Push; SC = Sonic Core; DC = Drill Cuttings
 Moisture Content Codes: D = Dry; M = Moist; W = Wet; S = Saturated

BORING LOG

Page 2 of 2

Boring/Well Number: MW-12R		FDEP Facility Identification Number: 758079		Site Name: Hardee County Landfill		Borehole Start Date: 01/22/08		End Date: 01/22/08			
Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
							13	Light brown clay (soft), continued			
							14				
							15	Light brown fine sands with little clay			
							16				
							17				
							18	Blue green clay, tight			
							19				
							20				
							21	End of Boring 20 feet			
							22				
							23				
							24				
							25				
							26				
							27				
							28				
							29				
							30				

Sample Type Codes: PH = Post Hole; HA = Hand Auger; SS = Split Spoon; ST = Shelby Tube; DP = Direct Push; SC = Sonic Core; DC = Drill Cuttings

Moisture Content Codes: D = Dry; M = Moist; W = Wet; S = Saturated

WELL CONSTRUCTION AND DEVELOPMENT LOG

WELL CONSTRUCTION DATA				
Well Number: MW-10R		Site Name: Hardee County Landfill		FDEP Facility I.D. Number: 758079
Well Install Date(s): 1/22/08				
Well Location and Type (check appropriate boxes): <input checked="" type="checkbox"/> On-Site <input type="checkbox"/> Right-of-Way <input type="checkbox"/> Off-Site Private Property <input checked="" type="checkbox"/> Above Grade (AG) <input type="checkbox"/> Flush-to-Grade		Well Purpose: <input type="checkbox"/> Perched Monitoring <input checked="" type="checkbox"/> Shallow (Water-Table) Monitoring <input type="checkbox"/> Intermediate or Deep Monitoring <input type="checkbox"/> Remediation or Other (describe)		Well Install Method: Hollow stem auger
If AG, list feet of riser above land surface:				Surface Casing Install Method: N/A
Borehole Depth (feet): 20	Well Depth (feet): 20	Borehole Diameter (inches): 8	Manhole Diameter (inches): 8	Well Pad Size: 2 feet by 2 feet
Riser Diameter and Material: 2-inch SCH 40 PVC		Riser/Screen Connections: <input checked="" type="checkbox"/> Flush-Threaded <input type="checkbox"/> Other (describe)	Riser Length: 8 feet from +3 feet to 5 feet	
Screen Diameter and Material: 2-inch SCH 40 PVC		Screen Slot Size: 0.006	Screen Length: 15 feet from 5 feet to 20 feet	
1 st Surface Casing Material: N/A also check: <input type="checkbox"/> Permanent <input type="checkbox"/> Temporary		1 st Surface Casing I.D. (inches):	1 st Surface Casing Length: _____ feet from 0 feet to _____ feet	
2 nd Surface Casing Material: N/A also check: <input type="checkbox"/> Permanent <input type="checkbox"/> Temporary		2 nd Surface Casing I.D. (inches):	2 nd Surface Casing Length: _____ feet from 0 feet to _____ feet	
3 rd Surface Casing Material: N/A also check: <input type="checkbox"/> Permanent <input type="checkbox"/> Temporary		3 rd Surface Casing I.D. (inches):	3 rd Surface Casing Length: _____ feet from 0 feet to _____ feet	
Filter Pack Material and Size: 30/65 Sand	Prepacked Filter Around Screen (check one): <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Filter Pack Length: 18 feet from 2 feet to 20 feet	
Filter Pack Seal Material and Size: included above			Filter Pack Seal Length: _____ feet from _____ feet to _____ feet	
Surface Seal Material: Portland Type I			Surface Seal Length: 2 feet from 0 feet to 2 feet	

WELL DEVELOPMENT DATA			
Well Development Date: 01/22/08		Well Development Method (check one): <input checked="" type="checkbox"/> Surge/Pump <input type="checkbox"/> Pump <input type="checkbox"/> Compressed Air <input type="checkbox"/> Other (describe)	
Development Pump Type (check): <input checked="" type="checkbox"/> Centrifugal <input type="checkbox"/> Peristaltic <input type="checkbox"/> Submersible <input type="checkbox"/> Other (describe)		Depth to Groundwater (before developing in feet): 10.22 feet below top of casing (BTOC)	
Pumping Rate (gallons per minute): 1.25	Maximum Drawdown of Groundwater During Development (feet): 17 feet BTOC	Well Purged Dry (check one): <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Pumping Condition (check one): <input checked="" type="checkbox"/> Continuous <input type="checkbox"/> Intermittent	Total Development Water Removed (gallons): 90	Development Duration (minutes): 70	Development Water Drummed (check one): <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Water Appearance (color and odor) At Start of Development: color: brown silty, odor: none		Water Appearance (color and odor) At End of Development: color: clear (4.34 NTU's), odor: none	

WELL CONSTRUCTION OR DEVELOPMENT REMARKS
Begin development at 11:29

WELL CONSTRUCTION AND DEVELOPMENT LOG

WELL CONSTRUCTION DATA				
Well Number: MW-12R	Site Name: Hardee County Landfill	FDEP Facility I.D. Number: 758079	Well Install Date(s): 1/22/08	
Well Location and Type (check appropriate boxes): <input checked="" type="checkbox"/> On-Site <input type="checkbox"/> Right-of-Way <input type="checkbox"/> Off-Site Private Property <input checked="" type="checkbox"/> Above Grade (AG) <input type="checkbox"/> Flush-to-Grade		Well Purpose: <input type="checkbox"/> Perched Monitoring <input checked="" type="checkbox"/> Shallow (Water-Table) Monitoring <input type="checkbox"/> Intermediate or Deep Monitoring <input type="checkbox"/> Remediation or Other (describe)	Well Install Method: Hollow stem auger	
If AG, list feet of riser above land surface:		Surface Casing Install Method: N/A		
Borehole Depth (feet): 20	Well Depth (feet): 20	Borehole Diameter (inches): 8	Manhole Diameter (inches): 8	Well Pad Size: 2 feet by 2 feet
Riser Diameter and Material: 2-inch SCH 40 PVC	Riser/Screen Connections: <input checked="" type="checkbox"/> Flush-Threaded <input type="checkbox"/> Other (describe)	Riser Length: 8 feet from +3 feet to 5 feet		
Screen Diameter and Material: 2-inch SCH 40 PVC	Screen Slot Size: 0.006	Screen Length: 15 feet from 5 feet to 20 feet		
1 st Surface Casing Material: N/A also check: <input type="checkbox"/> Permanent <input type="checkbox"/> Temporary	1 st Surface Casing I.D. (inches):	1 st Surface Casing Length: _____ feet from 0 feet to _____ feet		
2 nd Surface Casing Material: N/A also check: <input type="checkbox"/> Permanent <input type="checkbox"/> Temporary	2 nd Surface Casing I.D. (inches):	2 nd Surface Casing Length: _____ feet from 0 feet to _____ feet		
3 rd Surface Casing Material: N/A also check: <input type="checkbox"/> Permanent <input type="checkbox"/> Temporary	3 rd Surface Casing I.D. (inches):	3 rd Surface Casing Length: _____ feet from 0 feet to _____ feet		
Filter Pack Material and Size: 30/65 Sand	Prepacked Filter Around Screen (check one): <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Filter Pack Length: 18 feet from 2 feet to 20 feet		
Filter Pack Seal Material and Size: included above		Filter Pack Seal Length: _____ feet from _____ feet to _____ feet		
Surface Seal Material: Portland Type I		Surface Seal Length: 2 feet from 0 feet to 2 feet		

WELL DEVELOPMENT DATA			
Well Development Date: 01/22/08	Well Development Method (check one): <input checked="" type="checkbox"/> Surge/Pump <input type="checkbox"/> Pump <input type="checkbox"/> Compressed Air <input type="checkbox"/> Other (describe)		
Development Pump Type (check): <input checked="" type="checkbox"/> Centrifugal <input type="checkbox"/> Peristaltic <input type="checkbox"/> Submersible <input type="checkbox"/> Other (describe)	Depth to Groundwater (before developing in feet): 10.25 feet below top of casing (BTOC)		
Pumping Rate (gallons per minute): 1.25	Maximum Drawdown of Groundwater During Development (feet): 23 feet BTOC	Well Purged Dry (check one): <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
Pumping Condition (check one): <input checked="" type="checkbox"/> Continuous <input type="checkbox"/> Intermittent	Total Development Water Removed (gallons): 45	Development Duration (minutes): 56	Development Water Drummed (check one): <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Water Appearance (color and odor) At Start of Development: color: silty, light gray, odor: sulfur		Water Appearance (color and odor) At End of Development: color: white (50.2 NTU's), odor: sulfur	

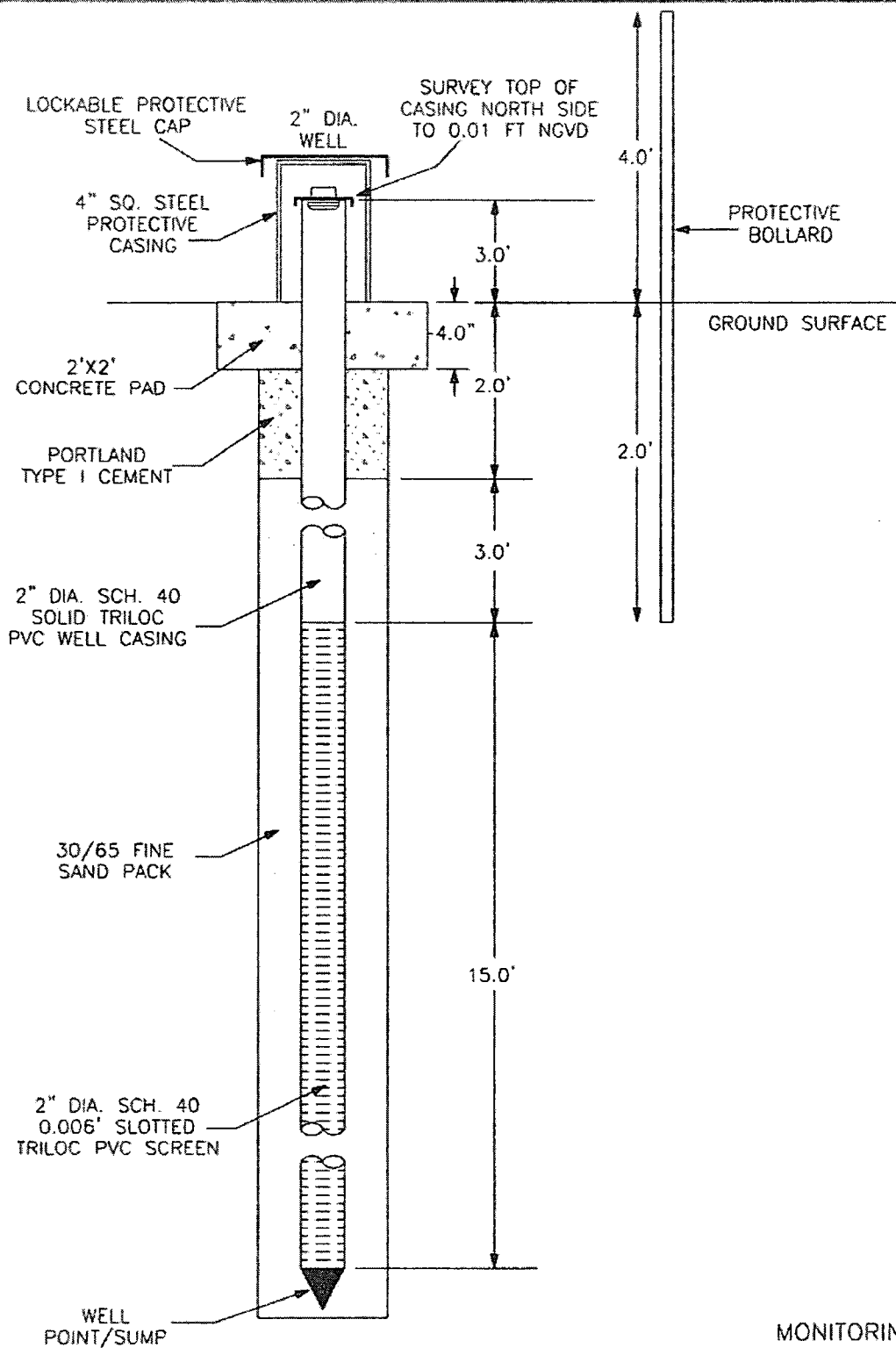
WELL CONSTRUCTION OR DEVELOPMENT REMARKS
Begin development at 14:31

3 Standard decontamination procedures includes DI water rinse, Liquinox solution wash, DI water rinse, isopropanol, DI water final rinse, & air dry.

3 Standard decontamination procedures includes DI water rinse, Liquinox solution wash, DI water rinse, isopropanol, DI water final rinse, & air dry.



MODARSE
 & ASSOCIATES, INC.



INSTALLATION REPORT

INSTALLATION DATE: 01-22-08
 INSTALLED BY: NATIONAL ENVIRONMENTAL TECH. INC.
 DEPTH TO GROUNDWATER: 10.25'
 INSTALLATION METHOD: HOLLOW STEM AUGER

MONITORING NO. MW-12R

MONITORING WELL DETAIL
 HARDEE COUNTY LANDFILL
 HARDEE COUNTY, FLORIDA

DRAWN: TMB

CHKD: BB

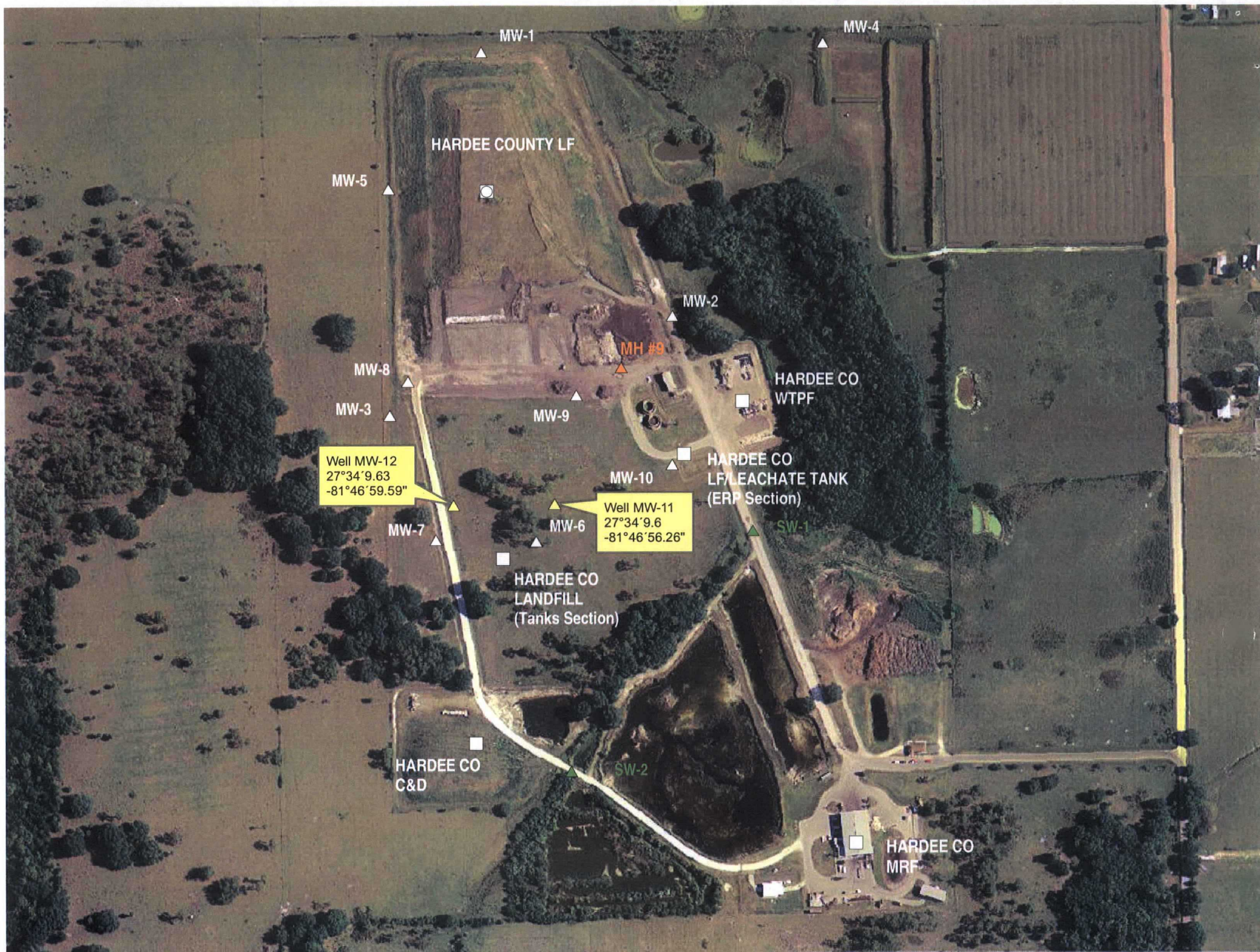
SCALE: -

DATE: 01-24-08

PROJ. NO: 04-07-0048-302A

DETAIL: 2

NODARSE
 & ASSOCIATES, INC.



MW-1

MW-4

HARDEE COUNTY LF

MW-5

MW-2

MH #9

HARDEE CO
WTPF

MW-8

MW-3

MW-9

Well MW-12
27°34'9.63
-81°46'59.59"

HARDEE CO
LF/LEACHATE TANK
(ERP Section)

MW-10

Well MW-11
27°34'9.6
-81°46'56.26"

MW-7

MW-6

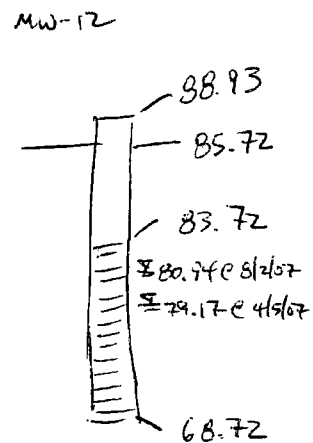
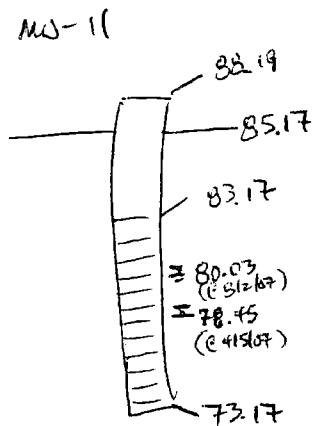
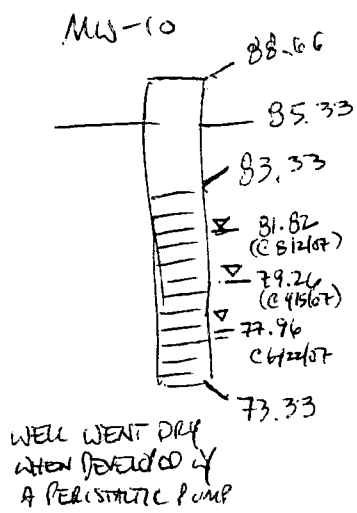
SW-1

HARDEE CO
LANDFILL
(Tanks Section)

HARDEE CO
C&D

SW-2

HARDEE CO
MRF



REC'D 10/1/07

ATTACHMENT J

Department Form #62-522.900(3) for the Newly Installed Monitoring Wells MW-10, MW-11 and MW-12 and Piezometers P-17, P-18, P-19, P-20, P-21, P-22 and P-23

Florida Department of Environmental Protection
Twin Towers Office Bldg. 2600 Blair Stone Road Tallahassee, Florida 32399-2400

DEP Form # <u>62-522.900(3)</u>
Form Title <u>MONITOR WELL COMPLETION REPORT</u>
Effective Date _____
DEP Application No. _____ (Filled in by DEP)

MONITOR WELL COMPLETION REPORT

DATE: 04/03/2007

INSTALLATION NAME: Groundwater Monitoring Well

DEP PERMIT NUMBER: 758079 GMS NUMBER: _____

WELL NUMBER: 10 WELL NAME: MW-10

DESIGNATION: Background _____ Immediate _____ Compliance _____ Detection _____

LATITUDE/LONGITUDE: 27° 34' 10.04" / 81° 46' 52.32"

AQUIFER MONITORED: Surficial

INSTALLATION METHOD: Hollow Stem Auger

INSTALLED BY: Spoon R², Inc.

TOTAL DEPTH: 12.0 feet (bls) DEPTH OF SCREEN: 2 – 12 feet (bls)

SCREEN LENGTH: 10.0 feet SCREEN SLOT SIZE: 0.01 inch SCREEN TYPE: 2-inch diameter Sch.40 PVC

CASING DIAMETER: 2.0 inches CASING TYPE: 2-inch diameter Sch. 40 PVC

LENGTH OF CASING: 5.0 feet FILTER PACK MATERIAL: 20/30 Silica Sand

TOP OF CASING ELEVATION (MSL): 88.66' NGVD

GROUND SURFACE ELEVATION (MSL): 85.33' NGVD

COMPLETION DATE: 04/03/2007

DESCRIBE WELL DEVELOPMENT: Start time at 1:15 PM; cloudy dark brown; sulfuric odor. End time at 2:15 PM; cloudy; sulfuric odor. Well got dry Intermittently.

POST DEVELOPMENT WATER LEVEL ELEVATION (MSL): _____

DATE AND TIME MEASURED: 04/03/2007 2:15 PM

REMARKS: (soils information, stratigraphy, etc.): 0 – 2 feet: brown fine sand, dry; 2 – 12 feet: orange clayey sand, wet.

REPORT PREPARED BY: John Hunt, Nodarse & Associates, Inc., 813-221-0050
(name, company, phone number)

NOTE: PLEASE ATTACH BORING LOG.

(bls)= Below Land Surface

Florida Department of Environmental Protection
Twin Towers Office Bldg. 2600 Blair Stone Road Tallahassee, Florida 32399-2400

DEP Form # <u>62-522.900(3)</u>
Form Title <u>MONITOR WELL COMPLETION REPORT</u>
Effective Date _____
DEP Application No. _____ (Filled in by DEP)

MONITOR WELL COMPLETION REPORT

DATE: 04/03/2007

INSTALLATION NAME: Groundwater Monitoring Well

DEP PERMIT NUMBER: 758079 GMS NUMBER: _____

WELL NUMBER: 11 WELL NAME: MW-11

DESIGNATION: Background _____ Immediate _____ Compliance _____ Detection _____

LATITUDE/LONGITUDE: 27° 34' 9.60" / 81° 46' 56.26"

AQUIFER MONITORED: Surficial

INSTALLATION METHOD: Hollow Stem Auger

INSTALLED BY: Spoon R², Inc.

TOTAL DEPTH: 12.0 feet (bls) DEPTH OF SCREEN: 2 – 12 feet (bls)

SCREEN LENGTH: 10.0 feet SCREEN SLOT SIZE: 0.01 inch SCREEN TYPE: 2-inch diameter Sch.40 PVC

CASING DIAMETER: 2.0 inches CASING TYPE: 2-inch diameter Sch. 40 PVC

LENGTH OF CASING: 5.0 feet FILTER PACK MATERIAL: 20/30 Silica Sand

TOP OF CASING ELEVATION (MSL): 88.19' NGVD

GROUND SURFACE ELEVATION (MSL): 85.17' NGVD

COMPLETION DATE: 04/03/2007

DESCRIBE WELL DEVELOPMENT: Start time at 12:10 PM; cloudy dark brown; sulfuric odor. End time at 1:10 PM; slightly cloudy; sulfuric odor.

POST DEVELOPMENT WATER LEVER ELEVATION (MSL): _____

DATE AND TIME MEASURED: 04/03/2007 1:10 PM

REMARKS: (soils information, stratigraphy, etc.): 0 – 5 feet: brown fine sand, dry; 5 – 8 feet: light brown fine sand, dry;
8 – 12 feet: orange, clayey sand, moist; 12 feet: orange, clayey sand, wet.

REPORT PREPARED BY: John Hunt, Nodarse & Associates, Inc., 813-221-0050
(name, company, phone number)

NOTE: PLEASE ATTACH BORING LOG.

(bls)= Below Land Surface

Florida Department of Environmental Protection
Twin Towers Office Bldg. 2600 Blair Stone Road Tallahassee, Florida 32399-2400

DEP Form # 62-522.900(3)
Form Title <u>MONITOR WELL COMPLETION REPORT</u>
Effective Date _____
DEP Application No. _____ (Filled in by DEP)

MONITOR WELL COMPLETION REPORT

DATE: 04/03/2007

INSTALLATION NAME: Groundwater Monitoring Well

DEP PERMIT NUMBER: 758074 GMS NUMBER: _____

WELL NUMBER: 12 WELL NAME: MW-12

DESIGNATION: Background _____ Immediate _____ Compliance _____ Detection _____

LATITUDE/LONGITUDE: 27° 34' 9.63" / 81° 46' 59.59"

AQUIFER MONITORED: Surficial

INSTALLATION METHOD: Hollow Stem Auger

INSTALLED BY: Spoon R², Inc.

TOTAL DEPTH: 17.0 feet (bls) DEPTH OF SCREEN: 2 – 17 feet (bls)

SCREEN LENGTH: 15.0 feet SCREEN SLOT SIZE: 0.01 inch SCREEN TYPE: 2-inch diameter Sch.40 PVC

CASING DIAMETER: 2.0 inches CASING TYPE: 2-inch diameter Sch.40 PVC

LENGTH OF CASING: 5.0 feet FILTER PACK MATERIAL: 20/30 Silica Sand

TOP OF CASING ELEVATION (MSL): 88.93' NGVD

GROUND SURFACE ELEVATION (MSL): 85.72' NGVD

COMPLETION DATE: 04/03/2007

DESCRIBE WELL DEVELOPMENT: Start time at 10:45 AM; cloudy; sulfuric odor. End time at 11:45 AM; slightly cloudy; sulfuric odor.

POST DEVELOPMENT WATER LEVER ELEVATION (MSL): _____

DATE AND TIME MEASURED: 04/03/2007 11:45 AM

REMARKS: (soils information, stratigraphy, etc.): 0 – 5 feet: brown fine sand, dry; 5 – 11 feet: light brown fine sand, dry;
11 – 17 feet: light brown fine sand, wet.

REPORT PREPARED BY: John Hunt, Nodarse & Associates, Inc., 813-221-0050
(name, company, phone number)

NOTE: PLEASE ATTACH BORING LOG.

(bls)= Below Land Surface

DEP Form # 62-522.900(3)

Form Title MONITOR WELL COMPLETION REPORT

Effective Date _____

DEP Application No. _____
(Filled in by DEP)

Florida Department of Environmental Protection

Twin Towers Office Bldg. 2600 Blair Stone Road Tallahassee, Florida 32399-2400

MONITOR WELL COMPLETION REPORT

DATE: 03/30/2007

INSTALLATION NAME: Piezometer

DEP PERMIT NUMBER: 758082 GMS NUMBER: _____

WELL NUMBER: 17 WELL NAME: P-17

DESIGNATION: Background _____ Immediate _____ Compliance Piezometer

LATITUDE/LONGITUDE: 27° 34' 24.46" / 81° 47' 01.60"

AQUIFER MONITORED: Surficial

INSTALLATION METHOD: Hollow Stem Auger

INSTALLED BY: Spoon R², Inc.

TOTAL DEPTH: 12.0 feet (bls) DEPTH OF SCREEN: 2 – 12 feet (bls)

SCREEN LENGTH: 10.0 feet SCREEN SLOT SIZE: 0.01 inch SCREEN TYPE: 2-inch diameter Sch.40 PVC

CASING DIAMETER: 2.0 inches CASING TYPE: 2-inch diameter Sch.40 PVC

LENGTH OF CASING: 5.0 feet FILTER PACK MATERIAL: 20/30 Silica Sand

TOP OF CASING ELEVATION (MSL): 88.70' NGVD

GROUND SURFACE ELEVATION (MSL): 85.88' NGVD

COMPLETION DATE: 03/30/2007

DESCRIBE WELL DEVELOPMENT: Start time at 10:30 AM; cloudy dark brown; sulfuric odor. End time at 11:00 AM; cloudy; sulfuric odor.

POST DEVELOPMENT WATER LEVER ELEVATION (MSL): _____

DATE AND TIME MEASURED: 03/30/2007 11:00 AM

REMARKS: (soils information, stratigraphy, etc.): 0 – 2 feet: dark gray fine sand, dry; 2 – 4 feet: brown fine sand, dry;

4 – 5 feet: light brown fine sand, moist; 5 – 6 feet: gray, clayey sand, moist; 6 – 8 feet: greenish clay, moist; 8 – 10 feet: light brown clayey sand, moist;

10 – 12 feet: brown clayey sand, wet.

REPORT PREPARED BY: John Hunt, Nodarse & Associates, Inc., 813-221-0050

(name, company, phone number)

NOTE: PLEASE ATTACH BORING LOG.

(bls)= Below Land Surface

Florida Department of Environmental Protection
Twin Towers Office Bldg. 2600 Blair Stone Road Tallahassee, Florida 32399-2400

DEP Form # 62-522.900(3)
Form Title <u>MONITOR WELL COMPLETION REPORT</u>
Effective Date _____
DEP Application No. _____ (Filled in by DEP)

MONITOR WELL COMPLETION REPORT

DATE: 03/30/2007

INSTALLATION NAME: Piezometer

DEP PERMIT NUMBER: 758082 GMS NUMBER: _____

WELL NUMBER: 18 WELL NAME: P-18

DESIGNATION: Background _____ Immediate _____ Compliance _____ Piezometer _____

LATITUDE/LONGITUDE: 27° 34' 23.33" / 81° 47' 04.46"

AQUIFER MONITORED: Surficial

INSTALLATION METHOD: Hollow Stem Auger

INSTALLED BY: Spoon R², Inc.

TOTAL DEPTH: 12.0 feet (bls) DEPTH OF SCREEN: 2 - 12 feet (bls)

SCREEN LENGTH: 10.0 feet SCREEN SLOT SIZE: 0.01 inch SCREEN TYPE: 2-inch diameter Sch.40 PVC

CASING DIAMETER: 2.0 inches CASING TYPE: 2-inch diameter Sch.40 PVC

LENGTH OF CASING: 5.0 feet FILTER PACK MATERIAL: 20/30 Silica Sand

TOP OF CASING ELEVATION (MSL): 87.90' NGVD

GROUND SURFACE ELEVATION (MSL): 84.42' NGVD

COMPLETION DATE: 03/30/2007

DESCRIBE WELL DEVELOPMENT: Start time at 3:30 PM; cloudy dark brown; sulfuric odor. End time at 4:00 PM; slightly cloudy; sulfuric odor.

POST DEVELOPMENT WATER LEVER ELEVATION (MSL): _____

DATE AND TIME MEASURED: 03/30/2007 4:00 PM

REMARKS: (soils information, stratigraphy, etc.): 0 - 5 feet: dark brown fine sand, dry; 5 - 6 feet: brown fine sand, wet;
6 - 9 feet: brown clayey sand, wet; 9 - 11 feet: green clay, wet; 11 - 12 feet: brown clayey sand, wet.

REPORT PREPARED BY: John Hunt, Nodarse & Associates, Inc., 813-221-0050
(name, company, phone number)

NOTE: PLEASE ATTACH BORING LOG.

(bls)= Below Land Surface

Florida Department of Environmental Protection

Twin Towers Office Bldg. 2600 Blair Stone Road Tallahassee, Florida 32399-2400

DEP Form # 62-522.900(3)

Form Title MONITOR WELL COMPLETION REPORT

Effective Date _____

DEP Application No. _____
(Filled in by DEP)

MONITOR WELL COMPLETION REPORT

DATE: 03/30/2007

INSTALLATION NAME: Piezometer

DEP PERMIT NUMBER: 758082 GMS NUMBER: _____

WELL NUMBER: 19 WELL NAME: P-19

DESIGNATION: Background _____ Immediate _____ Compliance Piezometer

LATITUDE/LONGITUDE: 27° 34' 24.31" / 81° 46' 54.07"

AQUIFER MONITORED: Surficial

INSTALLATION METHOD: Hollow Stem Auger

INSTALLED BY: Spoon R², Inc.

TOTAL DEPTH: 12.0 feet (bls) DEPTH OF SCREEN: 2 - 12 feet (bls)

SCREEN LENGTH: 10.0 feet SCREEN SLOT SIZE: 0.01 inch SCREEN TYPE: 2-inch diameter Sch.40 PVC

CASING DIAMETER: 2.0 inches CASING TYPE: 2-inch diameter Sch 40 PVC

LENGTH OF CASING: 5.0 feet FILTER PACK MATERIAL: 20/30 Silica Sand

TOP OF CASING ELEVATION (MSL): 86.79' NGVD

GROUND SURFACE ELEVATION (MSL): 84.17' NGVD

COMPLETION DATE: 03/30/2007

DESCRIBE WELL DEVELOPMENT: Start time at 11:05 AM; cloudy dark brown; sulfuric odor. End time at 11:35 AM; cloudy; sulfuric odor.

POST DEVELOPMENT WATER LEVER ELEVATION (MSL): _____

DATE AND TIME MEASURED: 03/30/2007 11:35 AM

REMARKS: (soils information, stratigraphy, etc.): 0 - 5 feet: dark brown fine sand, dry; 5 - 8 feet: green clay, moist; 8 - 10 feet: brown clayey sand, wet; 10 - 12 feet: brown fine sand, wet.

REPORT PREPARED BY: John Hunt, Nodarse & Associates, Inc., 813-221-0050
(name, company, phone number)

NOTE: PLEASE ATTACH BORING LOG.

(bls)= Below Land Surface

Florida Department of Environmental Protection

Twin Towers Office Bldg. 2600 Blair Stone Road Tallahassee, Florida 32399-2400

DEP Form # 62-522.900(3)

Form Title MONITOR WELL COMPLETION REPORT

Effective Date _____

DEP Application No. _____
(Filled in by DEP)

MONITOR WELL COMPLETION REPORT

DATE: 04/02/2007

INSTALLATION NAME: Piezometer

DEP PERMIT NUMBER: 758082 GMS NUMBER: _____

WELL NUMBER: 20 WELL NAME: P-20

DESIGNATION: Background _____ Immediate _____ Compliance Piezometer

LATITUDE/LONGITUDE: 27° 34' 23.13" / 81° 46' 54.52"

AQUIFER MONITORED: Surficial

INSTALLATION METHOD: Hollow Stem Auger

INSTALLED BY: Spoon R², Inc.

TOTAL DEPTH: 12.0 feet (bls) DEPTH OF SCREEN: 2 - 12 feet (bls)

SCREEN LENGTH: 10.0 feet SCREEN SLOT SIZE: 0.01 inch SCREEN TYPE: 2-inch diameter Sch.40 PVC

CASING DIAMETER: 2.0 inches CASING TYPE: 2-inch diameter Sch.40 PVC

LENGTH OF CASING: 5.0 feet FILTER PACK MATERIAL: 20/30 Silica Sand

TOP OF CASING ELEVATION (MSL): 87.61' NGVD

GROUND SURFACE ELEVATION (MSL): 84.68' NGVD

COMPLETION DATE: 04/02/2007

DESCRIBE WELL DEVELOPMENT: Start time at 11:40 AM; cloudy dark brown; sulfuric odor. End time at 12:10 PM; cloudy; sulfuric odor.

POST DEVELOPMENT WATER LEVER ELEVATION (MSL): _____

DATE AND TIME MEASURED: 04/02/2007 12:10 PM

REMARKS: (soils information, stratigraphy, etc.): 0 - 2 feet: dark brown fine sand, dry; 2 - 3 feet: brown fine sand, dry; 3 - 5 feet: light brown sand, dry;

5 - 9 feet: tan fine sand, moist; 9 - 12 feet: light tan fine sand, moist; 12 feet: light tan fine sand, wet.

REPORT PREPARED BY: John Hunt, Nodarse & Associates, Inc., 813-221-0050

(name, company, phone number)

NOTE: PLEASE ATTACH BORING LOG.

(bls)= Below Land Surface

Florida Department of Environmental Protection
Twin Towers Office Bldg. 2600 Blair Stone Road Tallahassee, Florida 32399-2400

DEP Form # 62-522,900(3)
Form Title <u>MONITOR WELL COMPLETION REPORT</u>
Effective Date _____
DEP Application No. _____ (Filled in by DEP)

MONITOR WELL COMPLETION REPORT

DATE: 04/02/2007

INSTALLATION NAME: Piezometer

DEP PERMIT NUMBER: 758082 GMS NUMBER: _____

WELL NUMBER: 21 WELL NAME: P-21

DESIGNATION: Background _____ Immediate _____ Compliance Piezometer

LATITUDE/LONGITUDE: 27° 34' 17.54" / 81° 46' 51.69"

AQUIFER MONITORED: Surficial

INSTALLATION METHOD: Hollow Stem Auger

INSTALLED BY: Spoon R², Inc.

TOTAL DEPTH: 12.0 feet (bls) DEPTH OF SCREEN: 2 - 12 feet (bls)

SCREEN LENGTH: 10.0 feet SCREEN SLOT SIZE: 0.01 inch SCREEN TYPE: 2-inch diameter Sch.40 PVC

CASING DIAMETER: 2.0 inches CASING TYPE: 2-inch diameter Sch.40 PVC

LENGTH OF CASING: 5.0 feet FILTER PACK MATERIAL: 20/30 Silica Sand

TOP OF CASING ELEVATION (MSL): 86.68' NGVD

GROUND SURFACE ELEVATION (MSL): 83.57' NGVD

COMPLETION DATE: 04/02/2007

DESCRIBE WELL DEVELOPMENT: Start time at 12:15 PM; cloudy; sulfuric odor. End time at 12:45 PM; clear; sulfuric odor.

POST DEVELOPMENT WATER LEVER ELEVATION (MSL): _____

DATE AND TIME MEASURED: 04/02/2007 12:45 PM

REMARKS: (soils information, stratigraphy, etc.): 0 - 2 feet: brown fine sand, dry; 2 - 4 feet: gray fine sand, dry; 4 - 5 feet: light gray fine sand, dry;
5 - 6 feet: light brown fine sand, dry; 6 - 9 feet: green clay, moist; 9 - 12 feet: gray fine sand, moist; 12 feet: gray fine sand, wet.

REPORT PREPARED BY: John Hunt, Nodarse & Associates, Inc., 813-221-0050
(name, company, phone number)

NOTE: PLEASE ATTACH BORING LOG.

(bls)= Below Land Surface

Florida Department of Environmental Protection
Twin Towers Office Bldg. 2600 Blair Stone Road Tallahassee, Florida 32399-2400

DEP Form # <u>62-522.900(3)</u>
Form Title <u>MONITOR WELL COMPLETION REPORT</u>
Effective Date _____
DEP Application No. _____ (Filled in by DEP)

MONITOR WELL COMPLETION REPORT

DATE: 03/30/2007

INSTALLATION NAME: Piezometer

DEP PERMIT NUMBER: 758082 GMS NUMBER: _____

WELL NUMBER: 22 WELL NAME: P-22

DESIGNATION: Background _____ Immediate _____ Compliance Piezometer

LATITUDE/LONGITUDE: 27° 34' 07.86" / 81° 47' 03.73"

AQUIFER MONITORED: Surficial

INSTALLATION METHOD: Hollow Stem Auger

INSTALLED BY: Spoon R², Inc.

TOTAL DEPTH: 12.0 feet (bls) DEPTH OF SCREEN: 2 - 12 feet (bls)

SCREEN LENGTH: 10.0 feet SCREEN SLOT SIZE: 0.01 inch SCREEN TYPE: 2-inch diameter Sch.40 PVC

CASING DIAMETER: 2.0 inches CASING TYPE: 2-inch diameter Sch 40 PVC

LENGTH OF CASING: 5.0 feet FILTER PACK MATERIAL: 20/30 Silica Sand

TOP OF CASING ELEVATION (MSL): 87.15' NGVD

GROUND SURFACE ELEVATION (MSL): 84.09' NGVD

COMPLETION DATE: 03/30/2007

DESCRIBE WELL DEVELOPMENT: Start time at 2:55 PM; cloudy; sulfuric odor. End time at 3:25 PM; slightly cloudy; sulfuric odor.

POST DEVELOPMENT WATER LEVER ELEVATION (MSL): _____

DATE AND TIME MEASURED: 03/30/2007 2:35 PM

REMARKS: (soils information, stratigraphy, etc.): 0 - 5 feet: brown fine sand, dry; 5 - 6 feet: green clay, moist; 6 - 12 feet: brown clayey sand, moist; 12 feet: brown, clayey sand, wet.

REPORT PREPARED BY: John Hunt, Nodarse & Associates, Inc., 813-221-0050
(name, company, phone number)

NOTE: PLEASE ATTACH BORING LOG.

(bls)= Below Land Surface

Florida Department of Environmental Protection

Twin Towers Office Bldg. 2600 Blair Stone Road Tallahassee, Florida 32399-2400

DEP Form # 62-522.900(3)

Form Title MONITOR WELL COMPLETION REPORT

Effective Date _____

DEP Application No. _____
(Filled in by DEP)

MONITOR WELL COMPLETION REPORT

DATE: 03/30/2007

INSTALLATION NAME: Piezometer

DEP PERMIT NUMBER: 758082 GMS NUMBER: _____

WELL NUMBER: 23 WELL NAME: P-23

DESIGNATION: Background _____ Immediate _____ Compliance Piezometer

LATITUDE/LONGITUDE: 27° 34' 04.85" / 81° 47' 03.76"

AQUIFER MONITORED: Surficial

INSTALLATION METHOD: Hollow Stem Auger

INSTALLED BY: Spoon R², Inc.

TOTAL DEPTH: 12.0 feet (bls) DEPTH OF SCREEN: 2 - 12 feet (bls)

SCREEN LENGTH: 10.0 feet SCREEN SLOT SIZE: 0.01 inch SCREEN TYPE: 2-inch diameter Sch.40 PVC

CASING DIAMETER: 2.0 inches CASING TYPE: 2-inch diameter Sch 40 PVC

LENGTH OF CASING: 5.0 feet FILTER PACK MATERIAL: 20/30 Silica Sand

TOP OF CASING ELEVATION (MSL): 86.63' NGVD

GROUND SURFACE ELEVATION (MSL): 83.71' NGVD

COMPLETION DATE: 03/30/2007

DESCRIBE WELL DEVELOPMENT: Start time at 2:20 PM; cloudy; sulfuric odor. End time at 2:50 PM; clear; sulfuric odor.

POST DEVELOPMENT WATER LEVER ELEVATION (MSL): _____

DATE AND TIME MEASURED: 03/30/2007 2:50 PM

REMARKS: (soils information, stratigraphy, etc.): 0 - 4 feet: light brown fine sand, dry; 4 - 5 feet: brown fine sand, dry;
5 - 7 feet: hard, green clay, moist; 7 - 12 feet: orange clayey sand, moist; 12 feet: orange clayey sand, wet.

REPORT PREPARED BY: John Hunt, Nodarse & Associates, Inc., 813-221-0050
(name, company, phone number)

NOTE: PLEASE ATTACH BORING LOG.

(bls)= Below Land Surface

Florida Department of Environmental Protection
Twin Towers Office Bldg. 2600 Blair Stone Road Tallahassee, Florida 32399-2400

DEP Form # 62-522.900(3)
Form Title <u>MONITOR WELL COMPLETION REPORT</u>
Effective Date _____
DEP Application No. _____ (Filled in by DEP)

MONITOR WELL COMPLETION REPORT

DATE: 04/04/2007

INSTALLATION NAME: Gas Monitoring Probe

DEP PERMIT NUMBER: 758080 GMS NUMBER: _____

WELL NUMBER: 12 WELL NAME: GP-12

DESIGNATION: Background _____ Immediate _____ Compliance _____ Detection _____

LATITUDE/LONGITUDE: 27° 34' 04.77" / 81° 46' 58.48"

AQUIFER MONITORED: Surficial

INSTALLATION METHOD: Hollow Stem Auger

INSTALLED BY: Spoon B², Inc

TOTAL DEPTH: 8.45 feet (bls) DEPTH OF SCREEN: 2.5 – 8.45 feet (bls)

SCREEN LENGTH: 5.95 feet SCREEN SLOT SIZE: 1/8-inch SCREEN TYPE: 1-inch diameter Sch.40 PVC

SCREENING DIAMETER: 1.0 inches CASING TYPE: 1-inch diameter Sch.40 PVC

LENGTH OF CASING: 5.5 feet FILTER PACK MATERIAL: 3/4-inch Gravel

TOP OF CASING ELEVATION (MSL): 86.15' NGVD

GROUND SURFACE ELEVATION (MSL): 83.19' NGVD

COMPLETION DATE: 04/04/2007

DESCRIBE WELL DEVELOPMENT: _____

POST DEVELOPMENT WATER LEVEL ELEVATION (MSL): _____

DATE AND TIME MEASURED: _____

REMARKS: (soils information, stratigraphy, etc.): 0 – 2 feet: brown fine sand, dry; 2 – 8.45 feet: light brown fine sand, dry;

8.45 feet: light brown fine sand, wet.

REPORT PREPARED BY: John Hunt, Nodarse & Associates, Inc., 813-221-0050
(name, company, phone number)

NOTE: PLEASE ATTACH BORING LOG.

(bls)= Below Land Surface

Florida Department of Environmental Protection

Twin Towers Office Bldg. 2600 Blair Stone Road Tallahassee, Florida 32399-2400

DEP Form # 62-522.900(3)

Form Title MONITOR WELL COMPLETION REPORT

Effective Date _____

DEP Application No. _____
(Filled in by DEP)

MONITOR WELL COMPLETION REPORT

DATE: 04/04/2007

INSTALLATION NAME: Gas Monitoring Probe

DEP PERMIT NUMBER: 758080 GMS NUMBER: _____

WELL NUMBER: 13 WELL NAME: GP-13

DESIGNATION: Background _____ Immediate _____ Compliance _____ Detection _____

LATITUDE/LONGITUDE: 27° 34' 04.67" / 81° 46' 56.32"

AQUIFER MONITORED: Surficial

INSTALLATION METHOD: Hollow Stem Auger

INSTALLED BY: Spoon B², Inc

TOTAL DEPTH: 7.56 feet (bls) DEPTH OF SCREEN: 2.5 – 7.56 feet

SCREEN LENGTH: 5.06 feet SCREEN SLOT SIZE: 1/8-inch SCREEN TYPE: 1-inch diameter Sch.40

CASING DIAMETER: 1.0 inches CASING TYPE: 1-inch diameter Sch.40 PVC

LENGTH OF CASING: 5.5 feet FILTER PACK MATERIAL: 3/4-inch Gravel

TOP OF CASING ELEVATION (MSL): 84.32' NGVD

GROUND SURFACE ELEVATION (MSL): 81.52' NGVD

COMPLETION DATE: 04/04/2007

DESCRIBE WELL DEVELOPMENT: _____

POST DEVELOPMENT WATER LEVER ELEVATION (MSL): _____

DATE AND TIME MEASURED: _____

REMARKS: (soils information, stratigraphy, etc.): 0 – 2 feet: dark brown fine sand, dry; 2 – 3 feet: brown fine sand, dry;

3 – 7.56 feet: light brown fine sand, dry; 7.56 feet: light brown fine sand, wet.

REPORT PREPARED BY: John Hunt, Nodarse & Associates, Inc., 813-221-0050

(name, company, phone number)

NOTE: PLEASE ATTACH BORING LOG.

(bls)= Below Land Surface

MAN. WELL CONSTRUCTION DETAILS

FROM: OPERATION PERMIT MODIFICATION TO
INWIDE PHASE II, SECTION I LANDFILL
EXPANSION, DATED 6/4/07, PREPARED BY
SCS ENGINEERS

FLORIDA DEPARTMENT OF
ENVIRONMENTAL PROTECTION

JUN 05 2007

SOUTHWEST DISTRICT
TAMPA

(ATT. F-5 FILED OF ENVIRONMENTAL DATA)

Attachment F-1

Well Completion Report MW-10 and MW-11

WELL COMPLETION REPORT (Please complete in black ink or type.)

PERMIT #: 758079 CUP/WUP#: _____ DID#: _____

Indicate the number of wells drilled/abandoned for this report: 2

Indicate the number of wells permitted but not drilled/abandoned that are being cancelled: _____

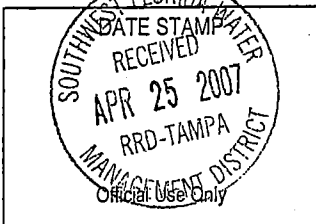
WATER WELL CONTRACTOR'S

SIGNATURE [Signature] License # 9239

I certify that the information provided in this report is accurate and true.

Grout	No. of Bags	From (ft.)	To (ft.)
Neat Cement:	<u>1/2 94 lb Bags</u>	<u>0.0</u>	<u>1.0'</u>
Bentonite:	<u>0</u>	<u>0</u>	<u>0</u>
(Other)	<u>SAND</u>	<u>1.0'</u>	<u>12.0'</u>

WELL LOCATION: County HARDEE
 1/4 of _____ 1/4 of Section 35, Township 33S, Range 25E
 Latitude: _____ Longitude: _____



Sketch of well location on property

MW-10
MW-11

Give distances from septic tank and house, or other reference points

CHEMICAL ANALYSIS WHEN REQUIRED
 Iron: _____ ppm Sulfate: _____ ppm
 Chlorides: _____ ppm TDS _____ mg/l
 Conductivity _____ umhos/cm
☐ Lab Test ☐ Field Test Kit

Pump Type
☐ Centrifugal ☐ Jet ☐ Submersible ☐ Turbine
 Horsepower: _____ Capacity: _____ GPM: _____
 Pump Depth: _____ ft. Intake Depth: _____ ft.
 Form LEG-R.005.00(10/05)

OWNER'S NAME: HARDEE CO. REGIONAL SANITARY

COMPLETION DATE: 4/2/07 Florida Unique I.D.: _____

Parcel # (Pin): _____

WELL USE:
☐ Public Supply ☐ Irrigation ☐ Domestic ☒ Monitor
☐ Injection ☐ Other _____

DRILL METHOD:
☐ Rotary ☐ Cable Tool ☐ Combination
☐ Jet ☒ Auger ☐ Other _____

Measured Static Water Level: _____		Measured Pumping Water Level: _____	
After _____ Hours at: _____ GPM.		Measuring Pt. (Describe): _____	
Which is _____ ft. <input type="checkbox"/> above <input type="checkbox"/> below land surface			
Casing: <input type="checkbox"/> Black Steel <input type="checkbox"/> Galvanized <input checked="" type="checkbox"/> PVC <input type="checkbox"/> Other: _____			
<input type="checkbox"/> Open Hole <input checked="" type="checkbox"/> Screen →	Depth (feet) <u>2.0'</u> <u>12.0'</u>	DRILL CUTTINGS LOG Examine cuttings every 20 ft. or at formation changes. Note cavities, depth to producing zones.	
Casing Diameter and Depth (ft.)	From <u>2.0'</u>	To	Color Grain Size Type of Material
Diameter: <u>2"</u>	<u>0.0 - 2.0' BLN. FN. SAND</u>		
From: <u>0.0'</u>			
To: <u>2.0'</u>	<u>2.0 - 12.0' ORANGE FD. CLAY SAND</u>		
Diameter: <u>2"</u>	<u>0.0 - 8.0' BLN. FN. SAND</u>		
From: <u>0.0'</u>			
To: <u>2.0'</u>	<u>5.0 - 12.0' ORANGE FN. CLAY SAND</u>		
Liner <input type="checkbox"/> or Casing <input type="checkbox"/>			
Diameter: _____			
From: _____			
To: _____			

Driller's Name (print or type): TOM CLAWAY
TRK SC

BORING LOG

Page 1 of 1

Boring/Well Number: MW-10		Permit Number: 758074		FDEP Facility Identification Number:							
Site Name: HARDEE CO LANDFILL		Borehole Start Date: 4-3-07 End Date: 4-3-07		Borehole Start Time: 1:15P <input type="checkbox"/> AM <input checked="" type="checkbox"/> PM End Time: 1:56 <input type="checkbox"/> AM <input checked="" type="checkbox"/> PM							
Environmental Contractor:		Geologist's Name:		Environmental Technician's Name: JOHN F. HENOT							
Drilling Company: SPOONER		Pavement Thickness (inches):		Borehole Diameter (inches):							
Drilling Method(s): HOLLOW STEM		Apparent Borehole DTW (in feet from soil moisture content):		Measured Well DTW (in feet after water recharges in well):							
				OVA (list model and check type): <input type="checkbox"/> FID <input type="checkbox"/> PID							
Disposition of Drill Cuttings [check method(s)]: <input type="checkbox"/> Drum <input checked="" type="checkbox"/> Spread <input type="checkbox"/> Backfill <input type="checkbox"/> Stockpile <input type="checkbox"/> Other (describe if other or multiple items are checked):											
Borehole Completion (check one): <input checked="" type="checkbox"/> Well <input type="checkbox"/> Grout <input type="checkbox"/> Bentonite <input type="checkbox"/> Backfill <input type="checkbox"/> Other (describe)											
Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
							1	BECK FLS 0-2'		D	
							2	ORANGE CLAYEY SAND 2'-12'		D	
							3				
							4				
							5				
							6				
							7				
							8				
							9				
							10				
							11				
							12	ORANGE CLAYEY SAND 2'-12'		W	

Sample Type Codes: PH = Post Hole; HA = Hand Auger; SS = Split Spoon; ST = Shelby Tube; DP = Direct Push; SC = Sonic Core; DC = Drill Cuttings
 Moisture Content Codes: D = Dry; M = Moist; W = Wet; S = Saturated

BORING LOG

Page 1 of 1

Boring/Well Number: MW-11		Permit Number: 758079		FDEP Facility Identification Number:							
Site Name: HARDEE CO LANDFILL		Borehole Start Date: 4-3-07 End Date: 4-3-07		Borehole Start Time: 11:27 <input checked="" type="checkbox"/> AM <input type="checkbox"/> PM End Time: 12:33 <input type="checkbox"/> AM <input checked="" type="checkbox"/> PM							
Environmental Contractor:		Geologist's Name:		Environmental Technician's Name: JOHN F. HUNT							
Drilling Company: SPOONER		Pavement Thickness (inches):		Borehole Diameter (inches): Borehole Depth (feet):							
Drilling Method(s): HOLLOW STEM		Apparent Borehole DTW (in feet from soil moisture content):		Measured Well DTW (in feet after water recharges in well): OVA (list model and check type): <input type="checkbox"/> FID <input type="checkbox"/> PID							
Disposition of Drill Cuttings [check method(s)]: <input type="checkbox"/> Drum <input checked="" type="checkbox"/> Spread <input type="checkbox"/> Backfill <input type="checkbox"/> Stockpile <input type="checkbox"/> Other (describe if other or multiple items are checked):											
Borehole Completion (check one): <input checked="" type="checkbox"/> Well <input type="checkbox"/> Grout <input type="checkbox"/> Bentonite <input type="checkbox"/> Backfill <input type="checkbox"/> Other (describe)											
Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
							1	BRN FLS 0-5'		D	
							2				
							3				
							4				
							5	LT BRN FLS 5-8'		D	
							6				
							7				
							8	ORANGE CLAYEY SAND 8'-12'		M	
							9				
							10				
							11				
							12	ORANGE CLAYEY SAND 12'		W	

Sample Type Codes: PH = Post Hole; HA = Hand Auger; SS = Split Spoon; ST = Shelby Tube; DP = Direct Push; SC = Sonic Core; DC = Drill Cuttings
 Moisture Content Codes: D = Dry; M = Moist; W = Wet; S = Saturated

WELL CONSTRUCTION AND DEVELOPMENT LOG

WELL CONSTRUCTION DATA					
Well Number: MW-10		Site Name: Hardee County Landfill, Hardee County		FDEP Facility I.D. Number: 758079	Well Install Date(s): 04/03/2007
Well Location and Type (check appropriate boxes): <input checked="" type="checkbox"/> On-Site <input type="checkbox"/> Right-of-Way <input type="checkbox"/> Off-Site Private Property <input checked="" type="checkbox"/> Above Grade (AG) <input type="checkbox"/> Flush-to-Grade		Well Purpose: <input type="checkbox"/> Perched Monitoring <input checked="" type="checkbox"/> Shallow (Water-Table) Monitoring <input type="checkbox"/> Intermediate or Deep Monitoring <input type="checkbox"/> Remediation or Other (describe)		Well Install Method: Hollow stem auger	
If AG, list feet of riser above land surface: 3'				Surface Casing Install Method: Protective casing	
Borehole Depth (feet):	Well Depth (feet):	Borehole Diameter (inches):	Manhole Diameter (inches):	Well Pad Size: 2 feet by 2 feet	
Riser Diameter and Material: 2" sch. 40 PVC		Riser/Screen Connections: <input checked="" type="checkbox"/> Flush-Threaded <input type="checkbox"/> Other (describe)	Riser Length: 5 feet from -2 feet to +3 feet		
Screen Diameter and Material: 2" sch. 40 PVC		Screen Slot Size: 0.010"	Screen Length: 10 feet from 2 feet to 12 feet		
1 st Surface Casing Material: also check: <input type="checkbox"/> Permanent <input type="checkbox"/> Temporary		1 st Surface Casing I.D. (inches):	1 st Surface Casing Length: _____ feet from 0 feet to _____ feet		
2 nd Surface Casing Material: also check: <input type="checkbox"/> Permanent <input type="checkbox"/> Temporary		2 nd Surface Casing I.D. (inches):	2 nd Surface Casing Length: _____ feet from 0 feet to _____ feet		
3 rd Surface Casing Material: also check: <input type="checkbox"/> Permanent <input type="checkbox"/> Temporary		3 rd Surface Casing I.D. (inches):	3 rd Surface Casing Length: _____ feet from 0 feet to _____ feet		
Filter Pack Material and Size: 20/30 silica sand pack	Prepacked Filter Around Screen (check one): <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Filter Pack Length: 11 feet from 1 feet to 11 feet		
Filter Pack Seal Material and Size: 30/65 fine sand		Filter Pack Seal Length: 0.5 feet from 0.5 feet to 1 feet			
Surface Seal Material: Cement		Surface Seal Length: 0.17 feet from 0.3 feet to 0.5 feet			

WELL DEVELOPMENT DATA			
Well Development Date: 04/03/07		Well Development Method (check one): <input checked="" type="checkbox"/> Surge/Pump <input type="checkbox"/> Pump <input type="checkbox"/> Compressed Air <input type="checkbox"/> Other (describe)	
Development Pump Type (check): <input type="checkbox"/> Submersible <input type="checkbox"/> Centrifugal <input checked="" type="checkbox"/> Peristaltic <input type="checkbox"/> Other (describe)		Depth to Groundwater (before developing in feet): 10.21	
Pumping Rate (gallons per minute):	Maximum Drawdown of Groundwater During Development (feet):	Well Purged Dry (check one): <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
Pumping Condition (check one): <input checked="" type="checkbox"/> Continuous <input type="checkbox"/> Intermittent	Total Development Water Removed (gallons):	Development Duration (minutes): 60	Development Water Drummed (check one): <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Water Appearance (color and odor) At Start of Development: dark brown; sulfuric odor		Water Appearance (color and odor) At End of Development: cloudy; sulfuric odor	

WELL CONSTRUCTION OR DEVELOPMENT REMARKS

ELEVATIONS OF
SCHOOL & GW
NOT PROVIDED

WLL FOUNDING
NOT PROVIDED NOT
PROVIDED

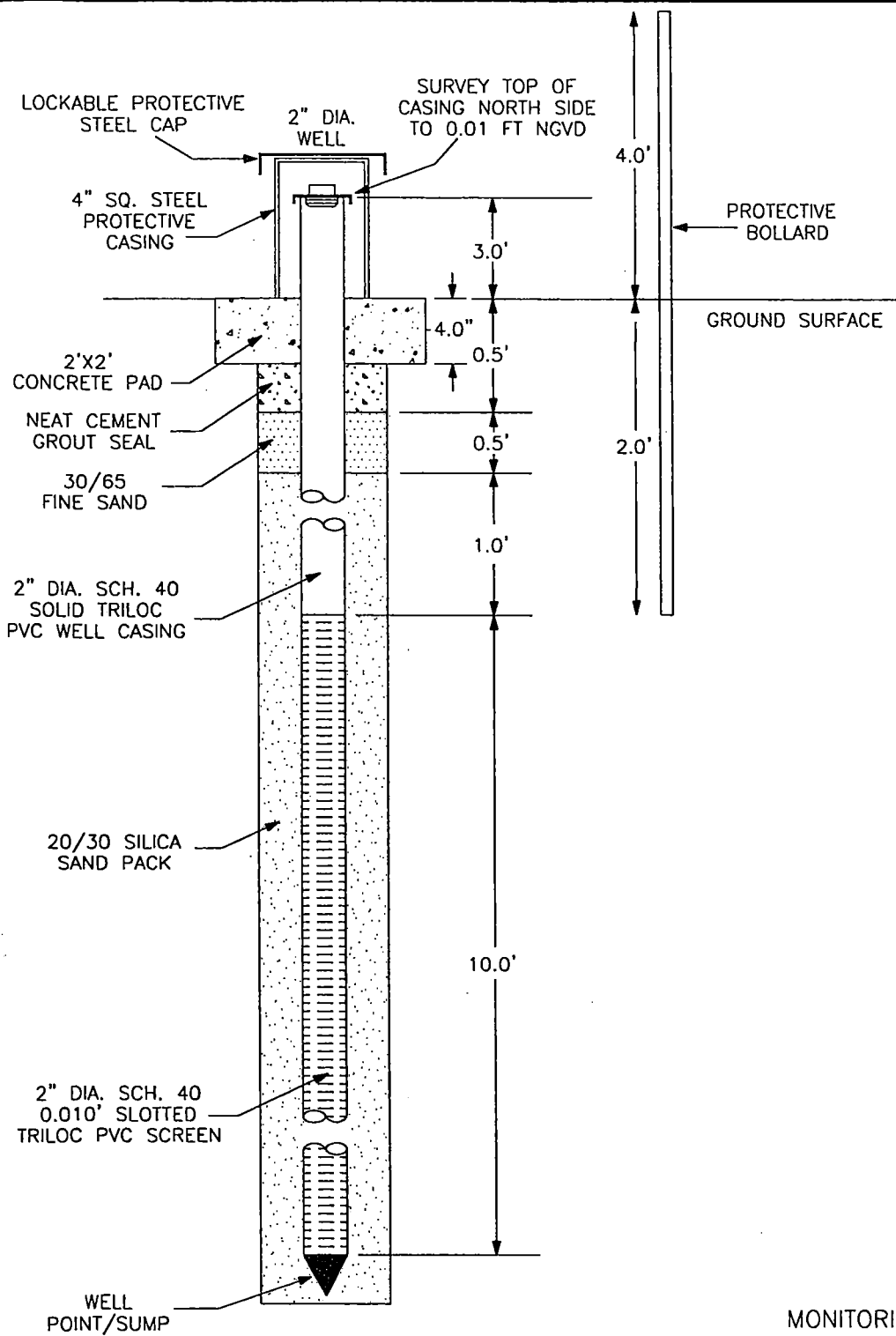
VOLUME PROVIDED AT
NOT PROVIDED

WELL CONSTRUCTION AND DEVELOPMENT LOG

WELL CONSTRUCTION DATA					
Well Number: MW-11		Site Name: Hardee County Landfill, Hardee County		FDEP Facility I.D. Number: 758079	Well Install Date(s): 04/03/2007
Well Location and Type (check appropriate boxes): <input checked="" type="checkbox"/> On-Site <input type="checkbox"/> Right-of-Way <input type="checkbox"/> Off-Site Private Property <input checked="" type="checkbox"/> Above Grade (AG) <input type="checkbox"/> Flush-to-Grade		Well Purpose: <input type="checkbox"/> Perched Monitoring <input checked="" type="checkbox"/> Shallow (Water-Table) Monitoring <input type="checkbox"/> Intermediate or Deep Monitoring <input type="checkbox"/> Remediation or Other (describe)		Well Install Method: Hollow stem auger	
If AG, list feet of riser above land surface: 3'				Surface Casing Install Method: Protective casing	
Borehole Depth (feet):	Well Depth (feet):	Borehole Diameter (inches):	Manhole Diameter (inches):	Well Pad Size: 2 feet by 2 feet	
Riser Diameter and Material: 2" sch. 40 PVC		Riser/Screen Connections: <input checked="" type="checkbox"/> Flush-Threaded <input type="checkbox"/> Other (describe)	Riser Length: 5 feet from -2 feet to +3 feet		
Screen Diameter and Material: 2" sch. 40 PVC		Screen Slot Size: 0.010"	Screen Length: 10 feet from 2 feet to 12 feet		
1 st Surface Casing Material: also check: <input type="checkbox"/> Permanent <input type="checkbox"/> Temporary		1 st Surface Casing I.D. (inches):	1 st Surface Casing Length: _____ feet from 0 feet to _____ feet		
2 nd Surface Casing Material: also check: <input type="checkbox"/> Permanent <input type="checkbox"/> Temporary		2 nd Surface Casing I.D. (inches):	2 nd Surface Casing Length: _____ feet from 0 feet to _____ feet		
3 rd Surface Casing Material: also check: <input type="checkbox"/> Permanent <input type="checkbox"/> Temporary		3 rd Surface Casing I.D. (inches):	3 rd Surface Casing Length: _____ feet from 0 feet to _____ feet		
Filter Pack Material and Size: 20/30 silica sand pack	Prepacked Filter Around Screen (check one): <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Filter Pack Length: 11 feet from 1 feet to 11 feet		
Filter Pack Seal Material and Size:		30/65 fine sand	Filter Pack Seal Length: 0.5 feet from 0.5 feet to 1 feet		
Surface Seal Material:		Cement	Surface Seal Length: 0.17 feet from 0.3 feet to 0.5 feet		

WELL DEVELOPMENT DATA			
Well Development Date: 04/03/07		Well Development Method (check one): <input checked="" type="checkbox"/> Surge/Pump <input type="checkbox"/> Pump <input type="checkbox"/> Compressed Air <input type="checkbox"/> Other (describe)	
Development Pump Type (check): <input type="checkbox"/> Submersible <input type="checkbox"/> Centrifugal <input checked="" type="checkbox"/> Peristaltic <input type="checkbox"/> Other (describe)		Depth to Groundwater (before developing in feet): 9.58	
Pumping Rate (gallons per minute):	Maximum Drawdown of Groundwater During Development (feet):	Well Purged Dry (check one): <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Pumping Condition (check one): <input checked="" type="checkbox"/> Continuous <input type="checkbox"/> Intermittent	Total Development Water Removed (gallons):	Development Duration (minutes): 60	Development Water Drummed (check one): <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Water Appearance (color and odor) At Start of Development: dark brown; sulfuric odor		Water Appearance (color and odor) At End of Development: partly cloudy; sulfuric odor	

WELL CONSTRUCTION OR DEVELOPMENT REMARKS



INSTALLATION REPORT

INSTALLATION DATE: 04-02-07
INSTALLED BY: SPOON R, INC.
DEPTH TO GROUNDWATER: 10.21'
INSTALLATION METHOD: HOLLOW STEM AUGER

MONITORING No. MW-10

MONITORING WELL DETAIL
 HARDEE COUNTY LANDFILL
 PHASE II SECTION I
 HARDEE COUNTY, FLORIDA

DRAWN: TMB

CHKD: YL

SCALE: -

DATE: 04-16-07



NODARSE
 & ASSOCIATES, INC.

PROJ. NO: 04-07-0048-201A



MONITORING WELL DETAIL
HARDEE COUNTY LANDFILL
PHASE II SECTION I
HARDEE COUNTY, FLORIDA

PROJ. NO:
04-07-0048-201A



NODARSE
ASSOCIATES, INC.

ATT F2

FLORIDA DEPARTMENT OF
ENVIRONMENTAL PROTECTION

JUN 05 2007

SOUTHWEST DISTRICT
TAMPA

Attachment F-2

Well Completion Report MW-12

WELL COMPLETION REPORT (Please complete in black ink or type.)

PERMIT #: 758074 CUPWUP#: _____ DID#: _____

Indicate the number of wells drilled/abandoned for this report: 1

Indicate the number of wells permitted but not drilled/abandoned that are being cancelled: _____

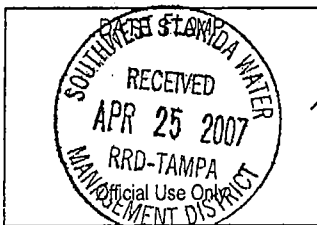
WATER WELL CONTRACTOR'S

SIGNATURE [Signature] License # 9239

I certify that the information provided in this report is accurate and true.

Grout	No. of Bags	From (ft.)	To (ft.)
Neat Cement:	<u>1/2 94165</u>	<u>0.0</u>	<u>1.0'</u>
Bentonite:	<u>0</u>	<u>0</u>	<u>0</u>
(Other)	<u>SAND</u>	<u>1.0'</u>	<u>17.0'</u>

WELL LOCATION: County HARDEE
 _____ 1/4 of _____ 1/4 of Section 35, Township 33S, Range 25E
 Latitude: _____ Longitude: _____



Sketch of well location on property

AW-12

Give distances from septic tank and house, or other reference points

CHEMICAL ANALYSIS WHEN REQUIRED
 Iron: _____ ppm Sulfate: _____ ppm
 Chlorides: _____ ppm TDS _____ mg/l
 Conductivity _____ umhos/cm
☐ Lab Test ☐ Field Test Kit
 Pump Type

☐ Centrifugal ☐ Jet ☐ Submersible ☐ Turbine
 Horsepower: _____ Capacity: _____ GPM: _____
 Pump Depth: _____ ft. Intake Depth: _____ ft.
 Form LEG-R.005.00(10/05)

OWNER'S NAME: HARDEE CO. REGIONAL SANITARY

COMPLETION DATE: 4/24/07 Florida Unique I.D.: _____

Parcel # (Pin): _____

WELL USE:

☐ Public Supply ☐ Irrigation ☐ Domestic ☒ Monitor
☐ Injection ☐ Other

DRILL METHOD:

☐ Rotary ☐ Cable Tool ☐ Combination
☐ Jet ☒ Auger ☐ Other _____

Measured Static Water Level: _____		Measured Pumping Water Level: _____	
After _____ Hours at _____ GPM.		Measuring Pt. (Describe): _____	
Which is _____ ft. <input type="checkbox"/> above <input type="checkbox"/> below land surface			
Casing: <input type="checkbox"/> Black Steel <input type="checkbox"/> Galvanized <input checked="" type="checkbox"/> PVC <input type="checkbox"/> Other: _____			
<input type="checkbox"/> Open Hole <input checked="" type="checkbox"/> Screen	Depth (feet) <u>2.0'</u> <u>17.0'</u>		DRILL CUTTINGS LOG Examine cuttings every 20 ft. or at formation changes. Note cavities, depth to producing zones. Color Grain Size Type of Material
Casing Diameter and Depth (ft.)	From	To	
Diameter: <u>2"</u>	<u>0.0</u>		<u>17.0</u>
From: <u>0.0'</u>			<u>REN FR. SAND</u>
To: <u>2.0'</u>			
Diameter: _____			
From: _____			
To: _____			
Liner <input type="checkbox"/> or Casing <input type="checkbox"/>			
Diameter: _____			
From: _____			
To: _____			

Driller's Name (print or type): TOM CARNEY
JAMES SPOON

BORING LOG

Page 1 of 2

Boring/Well Number: MW-12		Permit Number: 758074		FDEP Facility Identification Number:	
Site Name: HARDEE CO LANDFILL		Borehole Start Date: 4/3/07 End Date: 4/3/07		Borehole Start Time: 10:25 <input checked="" type="checkbox"/> AM <input type="checkbox"/> PM End Time: 11:15 <input checked="" type="checkbox"/> AM <input type="checkbox"/> PM	
Environmental Contractor:		Geologist's Name:		Environmental Technician's Name: JOHN F HUNT	
Drilling Company: SPOONER		Pavement Thickness (inches):		Borehole Diameter (inches):	
Drilling Method(s): HOLLOW STEM		Apparent Borehole DTW (in feet from soil moisture content):		Measured Well DTW (in feet after water recharges in well):	
Disposition of Drill Cuttings [check method(s)]:		<input type="checkbox"/> Drum <input checked="" type="checkbox"/> Spread <input type="checkbox"/> Backfill		<input type="checkbox"/> Stockpile <input type="checkbox"/> Other	
(describe if other or multiple items are checked):					
Borehole Completion (check one): <input checked="" type="checkbox"/> Well <input type="checkbox"/> Grout <input type="checkbox"/> Bentonite <input type="checkbox"/> Backfill <input type="checkbox"/> Other (describe)					

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
							1	BRU FLS 0-5'		D	
						2					
						3					
						4					
							5	LT BRU FLS 5'-11'		D	
						6					
						7					
						8					
							9	LT BRU FLS 11-17'		W	
						10					
						11					
						12					

Sample Type Codes: PH = Post Hole; HA = Hand Auger; SS = Split Spoon; ST = Shelby Tube; DP = Direct Push; SC = Sonic Core; DC = Drill Cuttings.
Moisture Content Codes: D = Dry; M = Moist; W = Wet; S = Saturated

BORING LOG

Page 2 of 2

Boring/Well Number: NW-12		FDEP Facility Identification Number:		Site Name: HARDEE CO LANDFILL		Borehole Start Date: 4-3-07 End Date: 4-3-07					
Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
							13	LT BRN F/S		W	
							14				
							15				
							16				
							17				
							18				
							19				
							20				
							21				
							22				
							23				
							24				
							25				
							26				
							27				
							28				
							29				
							30				

Sample Type Codes: PH = Post Hole; HA = Hand Auger; SS = Split Spoon; ST = Shelby Tube; DP = Direct Push; SC = Sonic Core; DC = Drill Cuttings

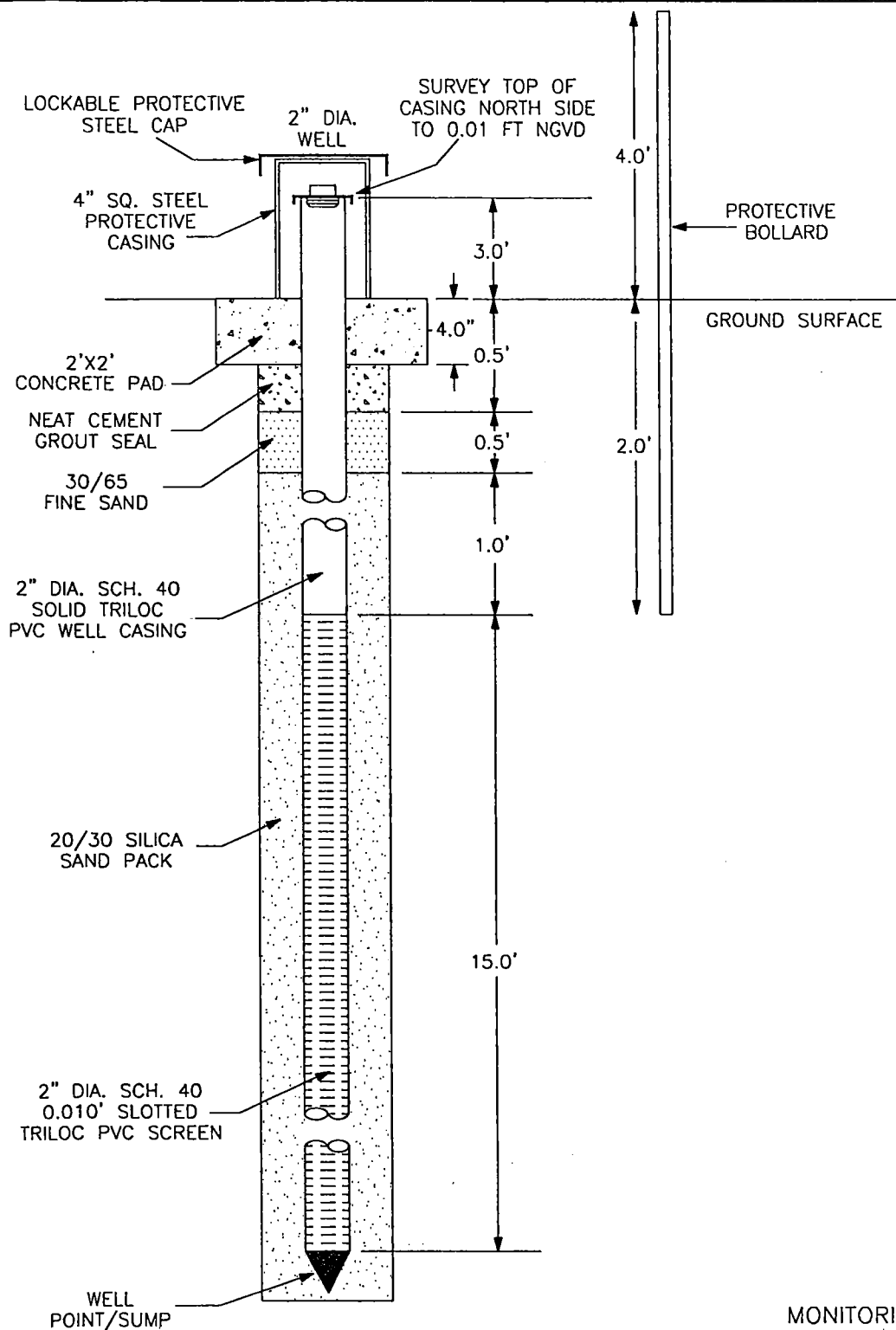
Moisture Content Codes: D = Dry; M = Moist; W = Wet; S = Saturated

WELL CONSTRUCTION AND DEVELOPMENT LOG

WELL CONSTRUCTION DATA					
Well Number: MW-12		Site Name: Hardee County Landfill, Hardee County		FDEP Facility I.D. Number: 758074	Well Install Date(s): 04/03/2007
Well Location and Type (check appropriate boxes): <input checked="" type="checkbox"/> On-Site <input type="checkbox"/> Right-of-Way <input type="checkbox"/> Off-Site Private Property <input checked="" type="checkbox"/> Above Grade (AG) <input type="checkbox"/> Flush-to-Grade		Well Purpose: <input type="checkbox"/> Perched Monitoring <input checked="" type="checkbox"/> Shallow (Water-Table) Monitoring <input type="checkbox"/> Intermediate or Deep Monitoring <input type="checkbox"/> Remediation or Other (describe)		Well Install Method: Hollow stem auger	
If AG, list feet of riser above land surface: 3'				Surface Casing Install Method: Protective casing	
Borehole Depth (feet):	Well Depth (feet):	Borehole Diameter (inches):	Manhole Diameter (inches):	Well Pad Size: 2 feet by 2 feet	
Riser Diameter and Material: 2" sch. 40 PVC		Riser/Screen Connections: <input checked="" type="checkbox"/> Flush-Threaded <input type="checkbox"/> Other (describe)	Riser Length: 5 feet from -2 feet to +3 feet		
Screen Diameter and Material: 2" sch. 40 PVC		Screen Slot Size: 0.010"	Screen Length: 15 feet from 2 feet to 17 feet		
1 st Surface Casing Material: also check: <input type="checkbox"/> Permanent <input type="checkbox"/> Temporary		1 st Surface Casing I.D. (inches):	1 st Surface Casing Length: _____ feet from 0 feet to _____ feet		
2 nd Surface Casing Material: also check: <input type="checkbox"/> Permanent <input type="checkbox"/> Temporary		2 nd Surface Casing I.D. (inches):	2 nd Surface Casing Length: _____ feet from 0 feet to _____ feet		
3 rd Surface Casing Material: also check: <input type="checkbox"/> Permanent <input type="checkbox"/> Temporary		3 rd Surface Casing I.D. (inches):	3 rd Surface Casing Length: _____ feet from 0 feet to _____ feet		
Filter Pack Material and Size: 20/30 silica sand pack	Prepacked Filter Around Screen (check one): <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Filter Pack Length: 16 feet from 1 feet to 16 feet		
Filter Pack Seal Material and Size: 30/65 fine sand		Filter Pack Seal Length: 0.5 feet from 0.5 feet to 1 feet			
Surface Seal Material: Cement		Surface Seal Length: 0.17 feet from 0.3 feet to 0.5 feet			

WELL DEVELOPMENT DATA			
Well Development Date: 04/03/07		Well Development Method (check one): <input checked="" type="checkbox"/> Surge/Pump <input type="checkbox"/> Pump <input type="checkbox"/> Compressed Air <input type="checkbox"/> Other (describe)	
Development Pump Type (check): <input type="checkbox"/> Centrifugal <input checked="" type="checkbox"/> Peristaltic <input type="checkbox"/> Submersible <input type="checkbox"/> Other (describe)		Depth to Groundwater (before developing in feet): 9.75	
Pumping Rate (gallons per minute):	Maximum Drawdown of Groundwater During Development (feet):		Well Purged Dry (check one): <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Pumping Condition (check one): <input checked="" type="checkbox"/> Continuous <input type="checkbox"/> Intermittent	Total Development Water Removed (gallons):	Development Duration (minutes): 60	Development Water Drummed (check one): <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Water Appearance (color and odor) At Start of Development: cloudy; sulfuric odor		Water Appearance (color and odor) At End of Development: partly cloudy; sulfuric odor	

WELL CONSTRUCTION OR DEVELOPMENT REMARKS



INSTALLATION REPORT

INSTALLATION DATE: 04-03-07
 INSTALLED BY: SPOON R, INC.
 DEPTH TO GROUNDWATER: 9.75'
 INSTALLATION METHOD: HOLLOW STEM AUGER

MONITORING No. MW-12

MONITORING WELL DETAIL
 HARDEE COUNTY LANDFILL
 PHASE II SECTION I
 HARDEE COUNTY, FLORIDA

DRAWN: TMB

CHKD: YL

SCALE: -

DATE: 04-16-07

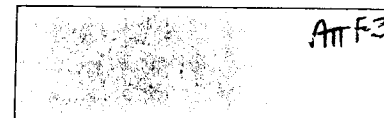
PROJ. NO: 04-07-0048-201A

NODARSE
 & ASSOCIATES, INC.

FLORIDA DEPARTMENT OF
ENVIRONMENTAL PROTECTION

JUN 05 2007

SOUTHWEST DISTRICT
TAMPA



Attachment F-3

Well Completion Report
P-17, P-18, P-19, P-20, P-21, P-22 and P-23

WELL COMPLETION REPORT (Please complete in black ink or type.)

PERMIT #: 758082 CUP/WUP#: _____ DID#: _____

Indicate the number of wells drilled/abandoned for this report: 7

Indicate the number of wells permitted but not drilled/abandoned that are being cancelled: _____

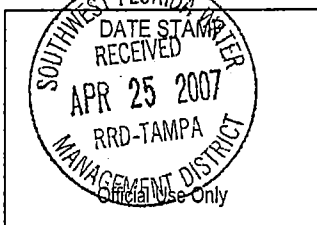
WATER WELL CONTRACTOR'S

SIGNATURE [Signature] License # 9239

I certify that the information provided in this report is accurate and true.

Grout	No. of Bags	From (ft.)	To (ft.)
Neat Cement:	<u>1/2 9410 BAG</u>	<u>0.0</u>	<u>1.0'</u>
Bentonite:	<u>0</u>	<u>0</u>	<u>0</u>
(Other)	<u>SAND</u>	<u>1.0</u>	<u>12.0'</u>

WELL LOCATION: County HARDEE
 1/4 of _____ 1/4 of Section 35, Township 33S, Range 25E
 Latitude: _____ Longitude: _____



CHEMICAL ANALYSIS WHEN REQUIRED
 Iron: _____ ppm Sulfate: _____ ppm
 Chlorides: _____ ppm TDS _____ mg/l

Conductivity _____ umhos/cm

[] Lab Test [] Field Test Kit

Pump Type

[] Centrifugal [] Jet [] Submersible [] Turbine

Horsepower: _____ Capacity: _____ GPM: _____

Pump Depth: _____ ft. Intake Depth: _____ ft.

Form LEG-R.005.00(10/05)

Sketch of well location on property

P-17
P-18
P-19
P-20
P-21
P-22
P-23

Give distances from septic tank and house, or other reference points

OWNER'S NAME: HARDEE CO. REGIONAL SANITARY

COMPLETION DATE: 4/2/07 Florida Unique I.D.: _____

Parcel # (Pin): _____

WELL USE:

[] Public Supply [] Irrigation [] Domestic ☒ Monitor
 [] Injection [] Other

DRILL METHOD:

[] Rotary [] Cable Tool [] Combination
☒ Jet ☒ Auger [] Other _____

Measured Static Water Level: _____		Measured Pumping Water Level: _____	
After _____ Hours at _____ GPM.		Measuring Pt. (Describe): _____	
Which is _____ ft. [] above [] below land surface			
Casing: [] Black Steel [] Galvanized <input checked="" type="checkbox"/> PVC [] Other: _____			
[] Open Hole <input checked="" type="checkbox"/> Screen	Depth (feet) → <u>2.0</u> / <u>12.0'</u>	DRILL CUTTINGS LOG Examine cuttings every 20 ft. or at formation changes. Note cavities, depth to producing zones.	
Casing Diameter and Depth (ft.)	From	To	Color Grain Size Type of Material
Diameter: <u>2"</u>	<u>0.0 - 12.0' BLK FV SAND</u>		
From: <u>0.0'</u>			
To: <u>2.0'</u>	<u>10.0' - 12.0' BLK FV CLAYY SAND</u>		
Diameter: _____	<u>6.25'</u>		
From: _____			
To: _____			
Liner [] or Casing []			
Diameter: _____			
From: _____			
To: _____			

Driller's Name (print or type): Tom CARNEY
JAMES BOON

BORING LOG

Page 1 of 1

Boring/Well Number: P-17		Permit Number: 758082		FDEP Facility Identification Number:	
Site Name: HARDEE CO LANDFILL		Borehole Start Date: 3-30-07	Borehole Start Time: 10:15 <input checked="" type="checkbox"/> AM <input type="checkbox"/> PM		
		End Date: 3-30-07	End Time: 11:20 AM <input checked="" type="checkbox"/> AM <input type="checkbox"/> PM		
Environmental Contractor:		Geologist's Name:		Environmental Technician's Name:	
Drilling Company: SPOONER		Pavement Thickness (inches): —	Borehole Diameter (inches): —	Borehole Depth (feet): —	
Drilling Method(s): HOLLOW STEM	Apparent Borehole DTW (in feet from soil moisture content):	Measured Well DTW (in feet after water recharges in well):	OVA (list model and check type): <input type="checkbox"/> FID <input type="checkbox"/> PID		
Disposition of Drill Cuttings [check method(s)]:		<input type="checkbox"/> Drum <input checked="" type="checkbox"/> Spread <input type="checkbox"/> Backfill <input type="checkbox"/> Stockpile <input type="checkbox"/> Other			
(describe if other or multiple items are checked):					
Borehole Completion (check one):		<input checked="" type="checkbox"/> Well <input type="checkbox"/> Grout <input type="checkbox"/> Bentonite <input type="checkbox"/> Backfill <input type="checkbox"/> Other (describe)			

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
							1	DRK GRAY FIS 0-2		D	
							2	BRN FIS 2-4		D	
							3				
							4	LT BRN FIS 4-5		M	
							5	GRAY CLAYEY SAND 5-6		M	
							6	BRN CLAYEY SAND 6-8 GRN CLAY		M	
							7				
							8	LT BRN CLAYEY SAND 8-10		M	
							9				
							10	BRN CLAYEY SAND 10-12		W	
							11				
							12				

Sample Type Codes: PH = Post Hole; HA = Hand Auger; SS = Split Spoon; ST = Shelby Tube; DP = Direct Push; SC = Sonic Core; DC = Drill Cuttings

Moisture Content Codes: D = Dry; M = Moist; W = Wet; S = Saturated

BORING LOG

Page 1 of 1

Boring/Well Number: P-18		Permit Number: 758082		FDEP Facility Identification Number:	
Site Name: WADDEE CO LANDFILL		Borehole Start Date: 3-30-07 End Date: 3-30-07		Borehole Start Time: 12:35 <input type="checkbox"/> AM <input checked="" type="checkbox"/> PM End Time: 1:10P <input type="checkbox"/> AM <input checked="" type="checkbox"/> PM	
Environmental Contractor:		Geologist's Name:		Environmental Technician's Name: JOHN F. HUNT	
Drilling Company: SPANNER		Pavement Thickness (inches):		Borehole Diameter (inches):	
Drilling Method(s): HOLLOW STEM		Apparent Borehole DTW (in feet from soil moisture content):		Measured Well DTW (in feet after water recharges in well):	
Disposition of Drill Cuttings [check method(s)]:		<input type="checkbox"/> Drum <input checked="" type="checkbox"/> Spread <input type="checkbox"/> Backfill <input type="checkbox"/> Stockpile <input type="checkbox"/> Other		(describe if other or multiple items are checked):	
Borehole Completion (check one):		<input checked="" type="checkbox"/> Well <input type="checkbox"/> Grout <input type="checkbox"/> Bentonite <input type="checkbox"/> Backfill <input type="checkbox"/> Other (describe)			

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
							1	DRY BRN F/S 0-5'		D	
							2				
							3				
							4				
							5	BRN F/S 5-6		W	
							6	BRN CLAYEY SAND 6-9		W	
							7				
							8				
							9	GRY CLAY 9-11		W	
							10				
							11	BRN CLAYEY SAND 11-12		W	
							12				

Sample Type Codes: PH = Post Hole; HA = Hand Auger; SS = Split Spoon; ST = Shelby Tube; DP = Direct Push; SC = Sonic Core; DC = Drill Cuttings

Moisture Content Codes: D = Dry; M = Moist; W = Wet; S = Saturated

BORING LOG

Page 1 of 1

Boring/Well Number: P-19		Permit Number: 758082		FDEP Facility Identification Number:	
Site Name: HARDEE CO LANDFILL		Borehole Start Date: 3-30-07		Borehole Start Time: 11:43 <input checked="" type="checkbox"/> AM <input type="checkbox"/> PM	
		End Date: 3-30-07		End Time: 12:25 <input type="checkbox"/> AM <input checked="" type="checkbox"/> PM	
Environmental Contractor:		Geologist's Name:		Environmental Technician's Name: JOHN F HUNT	
Drilling Company: SPOONER		Pavement Thickness (inches):		Borehole Diameter (inches):	
				Borehole Depth (feet):	
Drilling Method(s): HOLLOW STEM		Apparent Borehole DTW (in feet from soil moisture content):		Measured Well DTW (in feet after water recharges in well):	
				OVA (list model and check type): <input type="checkbox"/> FID <input type="checkbox"/> PID	
Disposition of Drill Cuttings [check method(s)]: <input type="checkbox"/> Drum <input checked="" type="checkbox"/> Spread <input type="checkbox"/> Backfill <input type="checkbox"/> Stockpile <input type="checkbox"/> Other					
(describe if other or multiple items are checked):					
Borehole Completion (check one): <input checked="" type="checkbox"/> Well <input type="checkbox"/> Grout <input type="checkbox"/> Bentonite <input type="checkbox"/> Backfill <input type="checkbox"/> Other (describe)					

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
							1	DRY BRU FIS 0-5		D	
							2				
							3				
							4				
							5	GRN CLAY 5-8'		M	
							6				
							7				
							8	BRN CLAYEY 8-10 SAND		W	
							9				
							10	BRU FIS 10-12		W	
							11				
							12				

Sample Type Codes: PH = Post Hole; HA = Hand Auger; SS = Split Spoon; ST = Shelby Tube; DP = Direct Push; SC = Sonic Core; DC = Drill Cuttings
 Moisture Content Codes: D = Dry; M = Moist; W = Wet; S = Saturated

BORING LOG

Page 1 of 1

Boring/Well Number: P-20		Permit Number: 758082		FDEP Facility Identification Number:	
Site Name: HARDEE CO. LANDFILL		Borehole Start Date: 4-2-07 End Date: 4-2-07		Borehole Start Time: 8:08 <input checked="" type="checkbox"/> AM <input type="checkbox"/> PM End Time: 8:59 <input checked="" type="checkbox"/> AM <input type="checkbox"/> PM	
Environmental Contractor:		Geologist's Name:		Environmental Technician's Name: JOHN F. HART	
Drilling Company: SPOONER		Pavement Thickness (inches):		Borehole Diameter (inches):	
Drilling Method(s): HOLLOW STEM		Apparent Borehole DTW (in feet from soil moisture content):		Measured Well DTW (in feet after water recharges in well):	
Disposition of Drill Cuttings [check method(s)]:		<input type="checkbox"/> Drum <input checked="" type="checkbox"/> Spread <input type="checkbox"/> Backfill		<input type="checkbox"/> Stockpile <input type="checkbox"/> Other	
(describe if other or multiple items are checked):					
Borehole Completion (check one): <input checked="" type="checkbox"/> Well <input type="checkbox"/> Grout <input type="checkbox"/> Bentonite <input type="checkbox"/> Backfill <input type="checkbox"/> Other (describe)					

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
							1	DRK BRN FLS 0-2'		D	
							2	BRN FLS 2'-3'		D	
							3	LT BRN FLS 3'-5'		D	
							4				
							5	TAN FLS 5'-9'		M	
							6				
							7				
							8				
							9	LT TAN FLS 9'-12'		M	
							10				
							11				
							12	LT TAN FLS 12'		W	

Sample Type Codes: PH = Post Hole; HA = Hand Auger; SS = Split Spoon; ST = Shelby Tube; DP = Direct Push; SC = Sonic Core; DC = Drill Cuttings
Moisture Content Codes: D = Dry; M = Moist; W = Wet; S = Saturated

BORING LOG

Page 1 of 1

Boring/Well Number: P-21		Permit Number: 758082		FDEP Facility Identification Number:	
Site Name: HINDEE GO LANDFILL		Borehole Start Date: 4-2-07	Borehole Start Time: 9:10	<input checked="" type="checkbox"/> AM <input type="checkbox"/> PM	
		End Date: 4-2-07	End Time: 9:50	<input checked="" type="checkbox"/> AM <input type="checkbox"/> PM	
Environmental Contractor:		Geologist's Name:		Environmental Technician's Name: JOHN HUNT	
Drilling Company: SPOONET		Pavement Thickness (inches):	Borehole Diameter (inches):	Borehole Depth (feet):	
Drilling Method(s): HOLLOW STEM	Apparent Borehole DTW (in feet from soil moisture content):	Measured Well DTW (in feet after water recharges in well):	OVA (list model and check type): <input type="checkbox"/> FID <input type="checkbox"/> PID		
Disposition of Drill Cuttings [check method(s)]: (describe if other or multiple items are checked):					
<input type="checkbox"/> Drum <input checked="" type="checkbox"/> Spread <input type="checkbox"/> Backfill <input type="checkbox"/> Stockpile <input type="checkbox"/> Other					
Borehole Completion (check one): <input checked="" type="checkbox"/> Well <input type="checkbox"/> Grout <input type="checkbox"/> Bentonite <input type="checkbox"/> Backfill <input type="checkbox"/> Other (describe)					

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
							1	BROWN FLS 0'-2'		D	
							2	GRAY FLS 2'-4'		D	
							3				
							4	LT GRAY FLS 4'-5'		D	
							5	LT BROWN FLS 5'-6'		D	
							6	GEN CLAY 6'-9'		M	
							7				
							8				
							9	GRAY FLS 9'-12'		M	
							10				
							11				
							12	GRAY FLS 12'		M	

Sample Type Codes: PH = Post Hole; HA = Hand Auger; SS = Split Spoon; ST = Shelby Tube; DP = Direct Push; SC = Sonic Core; DC = Drill Cuttings
 Moisture Content Codes: D = Dry; M = Moist; W = Wet; S = Saturated

BORING LOG

Page 1 of 1

Boring/Well Number: P-22		Permit Number: 758082		FDEP Facility Identification Number:	
Site Name: HARDEE CO LANDFILL		Borehole Start Date: 3-30-07	Borehole Start Time: 2:10	<input type="checkbox"/> AM <input checked="" type="checkbox"/> PM	
		End Date: 3-30-07	End Time: 2:41	<input type="checkbox"/> AM <input checked="" type="checkbox"/> PM	
Environmental Contractor:		Geologist's Name:		Environmental Technician's Name: John E. Hunt	
Drilling Company: SPOONER		Pavement Thickness (inches):	Borehole Diameter (inches):	Borehole Depth (feet):	
Drilling Method(s): HOLLOW STEM	Apparent Borehole DTW (in feet from soil moisture content):	Measured Well DTW (in feet after water recharges in well):	OVA (list model and check type): <input type="checkbox"/> FID <input type="checkbox"/> PID		
Disposition of Drill Cuttings [check method(s)]:		<input type="checkbox"/> Drum	<input checked="" type="checkbox"/> Spread	<input type="checkbox"/> Backfill	<input type="checkbox"/> Stockpile
(describe if other or multiple items are checked):		<input type="checkbox"/> Other			
Borehole Completion (check one):		<input checked="" type="checkbox"/> Well	<input type="checkbox"/> Grout	<input type="checkbox"/> Bentonite	<input type="checkbox"/> Backfill
		<input type="checkbox"/> Other (describe)			

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
							1	BRN F/S 0-5		D	
							2				
							3				
							4				
							5	GRN CLAY 5-6		M	
							6	BRN CLAYEY SAND 6-12		M	
							7				
							8				
							9				
							10				
							11				
							12	BRN CLAYEY SAND 12'		W	

Sample Type Codes: PH = Post Hole; HA = Hand Auger; SS = Split Spoon; ST = Shelby Tube; DP = Direct Push; SC = Sonic Core; DC = Drill Cuttings

Moisture Content Codes: D = Dry; M = Moist; W = Wet; S = Saturated

BORING LOG

Page 1 of 1

Boring/Well Number: P-23		Permit Number: 758082		FDEP Facility Identification Number:	
Site Name: HADEE CO LANDFILL		Borehole Start Date: 3-30-07	Borehole Start Time: 2:46	<input type="checkbox"/> AM <input checked="" type="checkbox"/> PM	
		End Date: 3-30-07	End Time: 3:27	<input type="checkbox"/> AM <input checked="" type="checkbox"/> PM	
Environmental Contractor:		Geologist's Name:		Environmental Technician's Name: John F. Hunt	
Drilling Company: SPOONER		Pavement Thickness (inches):	Borehole Diameter (inches): 7"	Borehole Depth (feet):	
Drilling Method(s): HOLLOW STEM	Apparent Borehole DTW (in feet from soil moisture content):	Measured Well DTW (in feet after water recharges in well):	OVA (list model and check type): <input type="checkbox"/> FID <input type="checkbox"/> PID		
Disposition of Drill Cuttings [check method(s)]: <input type="checkbox"/> Drum <input checked="" type="checkbox"/> Spread <input type="checkbox"/> Backfill <input type="checkbox"/> Stockpile <input type="checkbox"/> Other (describe if other or multiple items are checked):					
Borehole Completion (check one): <input checked="" type="checkbox"/> Well <input type="checkbox"/> Grout <input type="checkbox"/> Bentonite <input type="checkbox"/> Backfill <input type="checkbox"/> Other (describe)					

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
							1	LT BRN FIS 0-4'		D	
							2				
							3				
							4	BRN FIS 4'-5'		S	
							5	HARD GRN CLAY 5'-7'		M	
							6				
							7	ORANGEISH CLAYEY SAND		M	
							8	7' 12'			
							9				
							10				
							11				
							12	ORANGEISH CLAYEY SAND		W	

Sample Type Codes: PH = Post Hole; HA = Hand Auger; SS = Split Spoon; ST = Shelby Tube; DP = Direct Push; SC = Sonic Core; DC = Drill Cuttings

Moisture Content Codes: D = Dry; M = Moist; W = Wet; S = Saturated

WELL CONSTRUCTION AND DEVELOPMENT LOG

WELL CONSTRUCTION DATA					
Well Number: P-17		Site Name: Hardee County Landfill, Hardee County		FDEP Facility I.D. Number: 758082	Well Install Date(s): 03/30/2007
Well Location and Type (check appropriate boxes): <input checked="" type="checkbox"/> On-Site <input type="checkbox"/> Right-of-Way <input type="checkbox"/> Off-Site Private Property <input checked="" type="checkbox"/> Above Grade (AG) <input type="checkbox"/> Flush-to-Grade		Well Purpose: <input type="checkbox"/> Perched Monitoring <input checked="" type="checkbox"/> Shallow (Water-Table) Monitoring <input type="checkbox"/> Intermediate or Deep Monitoring <input type="checkbox"/> Remediation or Other (describe)		Well Install Method: Hollow stem auger	
If AG, list feet of riser above land surface: 3'				Surface Casing Install Method: Protective casing	
Borehole Depth (feet):	Well Depth (feet):	Borehole Diameter (inches):	Manhole Diameter (inches):	Well Pad Size: 2 feet by 2 feet	
Riser Diameter and Material: 2" sch. 40 PVC		Riser/Screen Connections: <input checked="" type="checkbox"/> Flush-Threaded <input type="checkbox"/> Other (describe)	Riser Length: 5 feet from -2 feet to +3 feet		
Screen Diameter and Material: 2" sch. 40 PVC		Screen Slot Size: 0.010"	Screen Length: 10 feet from 2 feet to 12 feet		
1 st Surface Casing Material: also check: <input type="checkbox"/> Permanent <input type="checkbox"/> Temporary		1 st Surface Casing I.D. (inches):	1 st Surface Casing Length: _____ feet from 0 feet to _____ feet		
2 nd Surface Casing Material: also check: <input type="checkbox"/> Permanent <input type="checkbox"/> Temporary		2 nd Surface Casing I.D. (inches):	2 nd Surface Casing Length: _____ feet from 0 feet to _____ feet		
3 rd Surface Casing Material: also check: <input type="checkbox"/> Permanent <input type="checkbox"/> Temporary		3 rd Surface Casing I.D. (inches):	3 rd Surface Casing Length: _____ feet from 0 feet to _____ feet		
Filter Pack Material and Size: 20/30 silica sand pack	Prepacked Filter Around Screen (check one): <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Filter Pack Length: 11 feet from 1 feet to 12 feet		
Filter Pack Seal Material and Size: 30/65 fine sand		Filter Pack Seal Length: 0.5 feet from 0.5 feet to 1 feet			
Surface Seal Material: Cement		Surface Seal Length: 0.17 feet from 0.3 feet to 0.5 feet			

WELL DEVELOPMENT DATA			
Well Development Date: 04/02/07		Well Development Method (check one): <input checked="" type="checkbox"/> Surge/Pump <input type="checkbox"/> Pump <input type="checkbox"/> Compressed Air <input type="checkbox"/> Other (describe)	
Development Pump Type (check): <input type="checkbox"/> Submersible <input type="checkbox"/> Other (describe)		Depth to Groundwater (before developing in feet): 6.64	
Pumping Rate (gallons per minute):	Maximum Drawdown of Groundwater During Development (feet):	Well Purged Dry (check one): <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Pumping Condition (check one): <input checked="" type="checkbox"/> Continuous <input type="checkbox"/> Intermittent	Total Development Water Removed (gallons):	Development Duration (minutes): 30	Development Water Drummed (check one): <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Water Appearance (color and odor) At Start of Development: dark brown; sulfuric odor		Water Appearance (color and odor) At End of Development: cloudy; sulfuric odor	

WELL CONSTRUCTION OR DEVELOPMENT REMARKS

--

WELL CONSTRUCTION AND DEVELOPMENT LOG

WELL CONSTRUCTION DATA				
Well Number: P-18	Site Name: Hardee County Landfill, Hardee County		FDEP Facility I.D. Number: 758082	Well Install Date(s): 03/30/2007
Well Location and Type (check appropriate boxes): <input checked="" type="checkbox"/> On-Site <input type="checkbox"/> Right-of-Way <input type="checkbox"/> Off-Site Private Property <input checked="" type="checkbox"/> Above Grade (AG) <input type="checkbox"/> Flush-to-Grade		Well Purpose: <input type="checkbox"/> Perched Monitoring <input checked="" type="checkbox"/> Shallow (Water-Table) Monitoring <input type="checkbox"/> Intermediate or Deep Monitoring <input type="checkbox"/> Remediation or Other (describe)		Well Install Method: Hollow stem auger
If AG, list feet of riser above land surface: 3'				Surface Casing Install Method: Protective casing
Borehole Depth (feet):	Well Depth (feet):	Borehole Diameter (inches):	Manhole Diameter (inches):	Well Pad Size: 2 feet by 2 feet
Riser Diameter and Material: 2" sch. 40 PVC	Riser/Screen Connections: <input checked="" type="checkbox"/> Flush-Threaded <input type="checkbox"/> Other (describe)	Riser Length: 5 feet from -2 feet to +3 feet		
Screen Diameter and Material: 2" sch. 40 PVC		Screen Slot Size: 0.010"	Screen Length: 10 feet from 2 feet to 12 feet	
1 st Surface Casing Material: also check: <input type="checkbox"/> Permanent <input type="checkbox"/> Temporary		1 st Surface Casing I.D. (inches):	1 st Surface Casing Length: _____ feet from 0 feet to _____ feet	
2 nd Surface Casing Material: also check: <input type="checkbox"/> Permanent <input type="checkbox"/> Temporary		2 nd Surface Casing I.D. (inches):	2 nd Surface Casing Length: _____ feet from 0 feet to _____ feet	
3 rd Surface Casing Material: also check: <input type="checkbox"/> Permanent <input type="checkbox"/> Temporary		3 rd Surface Casing I.D. (inches):	3 rd Surface Casing Length: _____ feet from 0 feet to _____ feet	
Filter Pack Material and Size: 20/30 silica sand pack	Prepacked Filter Around Screen (check one): <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Filter Pack Length: 11 feet from 1 feet to 12 feet	
Filter Pack Seal Material and Size: 30/65 fine sand		Filter Pack Seal Length: 0.5 feet from 0.5 feet to 1 feet		
Surface Seal Material: Cement		Surface Seal Length: 0.17 feet from 0.3 feet to 0.5 feet		

WELL DEVELOPMENT DATA			
Well Development Date: 04/02/07	Well Development Method (check one): <input checked="" type="checkbox"/> Surge/Pump <input type="checkbox"/> Pump <input type="checkbox"/> Compressed Air <input type="checkbox"/> Other (describe)		
Development Pump Type (check): <input type="checkbox"/> Centrifugal <input checked="" type="checkbox"/> Peristaltic <input type="checkbox"/> Submersible <input type="checkbox"/> Other (describe)	Depth to Groundwater (before developing in feet): 7.89		
Pumping Rate (gallons per minute):	Maximum Drawdown of Groundwater During Development (feet):	Well Purged Dry (check one): <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Pumping Condition (check one): <input checked="" type="checkbox"/> Continuous <input type="checkbox"/> Intermittent	Total Development Water Removed (gallons):	Development Duration (minutes): 30	Development Water Drummed (check one): <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Water Appearance (color and odor) At Start of Development: dark brown; sulfuric odor		Water Appearance (color and odor) At End of Development: cloudy; sulfuric odor	

WELL CONSTRUCTION OR DEVELOPMENT REMARKS

WELL CONSTRUCTION AND DEVELOPMENT LOG

WELL CONSTRUCTION DATA					
Well Number: P-19		Site Name: Hardee County Landfill, Hardee County		FDEP Facility I.D. Number: 758082	Well Install Date(s): 03/30/2007
Well Location and Type (check appropriate boxes): <input checked="" type="checkbox"/> On-Site <input type="checkbox"/> Right-of-Way <input type="checkbox"/> Off-Site Private Property <input checked="" type="checkbox"/> Above Grade (AG) <input type="checkbox"/> Flush-to-Grade		Well Purpose: <input type="checkbox"/> Perched Monitoring <input checked="" type="checkbox"/> Shallow (Water-Table) Monitoring <input type="checkbox"/> Intermediate or Deep Monitoring <input type="checkbox"/> Remediation or Other (describe)		Well Install Method: Hollow stem auger	
If AG, list feet of riser above land surface: 3'				Surface Casing Install Method: Protective casing	
Borehole Depth (feet):	Well Depth (feet):	Borehole Diameter (inches):	Manhole Diameter (inches):	Well Pad Size: 2 feet by 2 feet	
Riser Diameter and Material: 2" sch. 40 PVC		Riser/Screen Connections: <input checked="" type="checkbox"/> Flush-Threaded <input type="checkbox"/> Other (describe)	Riser Length: 5 feet from -2 feet to +3 feet		
Screen Diameter and Material: 2" sch. 40 PVC		Screen Slot Size: 0.010"	Screen Length: 10 feet from 2 feet to 12 feet		
1 st Surface Casing Material: also check: <input type="checkbox"/> Permanent <input type="checkbox"/> Temporary		1 st Surface Casing I.D. (inches):	1 st Surface Casing Length: _____ feet from 0 feet to _____ feet		
2 nd Surface Casing Material: also check: <input type="checkbox"/> Permanent <input type="checkbox"/> Temporary		2 nd Surface Casing I.D. (inches):	2 nd Surface Casing Length: _____ feet from 0 feet to _____ feet		
3 rd Surface Casing Material: also check: <input type="checkbox"/> Permanent <input type="checkbox"/> Temporary		3 rd Surface Casing I.D. (inches):	3 rd Surface Casing Length: _____ feet from 0 feet to _____ feet		
Filter Pack Material and Size: 20/30 silica sand pack	Prepacked Filter Around Screen (check one): <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Filter Pack Length: 11 feet from 1 feet to 12 feet		
Filter Pack Seal Material and Size:	30/65 fine sand		Filter Pack Seal Length: 0.5 feet from 0.5 feet to 1 feet		
Surface Seal Material:	Cement		Surface Seal Length: 0.17 feet from 0.3 feet to 0.5 feet		

WELL DEVELOPMENT DATA			
Well Development Date: 04/02/07		Well Development Method (check one): <input checked="" type="checkbox"/> Surge/Pump <input type="checkbox"/> Pump <input type="checkbox"/> Compressed Air <input type="checkbox"/> Other (describe)	
Development Pump Type (check): <input type="checkbox"/> Centrifugal <input checked="" type="checkbox"/> Peristaltic <input type="checkbox"/> Submersible <input type="checkbox"/> Other (describe)		Depth to Groundwater (before developing in feet): 6.98	
Pumping Rate (gallons per minute):	Maximum Drawdown of Groundwater During Development (feet):	Well Purged Dry (check one): <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Pumping Condition (check one): <input checked="" type="checkbox"/> Continuous <input type="checkbox"/> Intermittent	Total Development Water Removed (gallons):	Development Duration (minutes): 30	Development Water Drummed (check one): <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Water Appearance (color and odor) At Start of Development: dark brown; sulfuric odor		Water Appearance (color and odor) At End of Development: cloudy; sulfuric odor	

WELL CONSTRUCTION OR DEVELOPMENT REMARKS

WELL CONSTRUCTION AND DEVELOPMENT LOG

WELL CONSTRUCTION DATA				
Well Number: P-20	Site Name: Hardee County Landfill, Hardee County		FDEP Facility I.D. Number: 758082	Well Install Date(s): 04/02/2007
Well Location and Type (check appropriate boxes): <input checked="" type="checkbox"/> On-Site <input type="checkbox"/> Right-of-Way <input type="checkbox"/> Off-Site Private Property <input checked="" type="checkbox"/> Above Grade (AG) <input type="checkbox"/> Flush-to-Grade If AG, list feet of riser above land surface: 3'		Well Purpose: <input type="checkbox"/> Perched Monitoring <input checked="" type="checkbox"/> Shallow (Water-Table) Monitoring <input type="checkbox"/> Intermediate or Deep Monitoring <input type="checkbox"/> Remediation or Other (describe)		Well Install Method: Hollow stem auger Surface Casing Install Method: Protective casing
Borehole Depth (feet):	Well Depth (feet):	Borehole Diameter (inches):	Manhole Diameter (inches):	Well Pad Size: 2 feet by 2 feet
Riser Diameter and Material: 2" sch. 40 PVC		Riser/Screen Connections: <input checked="" type="checkbox"/> Flush-Threaded <input type="checkbox"/> Other (describe)	Riser Length: 5 feet from -2 feet to +3 feet	
Screen Diameter and Material: 2" sch. 40 PVC		Screen Slot Size: 0.010"	Screen Length: 10 feet from 2 feet to 12 feet	
1 st Surface Casing Material: also check: <input type="checkbox"/> Permanent <input type="checkbox"/> Temporary		1 st Surface Casing I.D. (inches):	1 st Surface Casing Length: _____ feet from 0 feet to _____ feet	
2 nd Surface Casing Material: also check: <input type="checkbox"/> Permanent <input type="checkbox"/> Temporary		2 nd Surface Casing I.D. (inches):	2 nd Surface Casing Length: _____ feet from 0 feet to _____ feet	
3 rd Surface Casing Material: also check: <input type="checkbox"/> Permanent <input type="checkbox"/> Temporary		3 rd Surface Casing I.D. (inches):	3 rd Surface Casing Length: _____ feet from 0 feet to _____ feet	
Filter Pack Material and Size: 20/30 silica sand pack	Prepacked Filter Around Screen (check one): <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Filter Pack Length: 11 feet from 1 feet to 12 feet	
Filter Pack Seal Material and Size: 30/65 fine sand		Filter Pack Seal Length: 0.5 feet from 0.5 feet to 1 feet		
Surface Seal Material: Cement		Surface Seal Length: 0.17 feet from 0.3 feet to 0.5 feet		

WELL DEVELOPMENT DATA			
Well Development Date: 04/02/07	Well Development Method (check one): <input checked="" type="checkbox"/> Surge/Pump <input type="checkbox"/> Pump <input type="checkbox"/> Compressed Air <input type="checkbox"/> Other (describe)		
Development Pump Type (check): <input type="checkbox"/> Submersible <input type="checkbox"/> Other (describe)		Depth to Groundwater (before developing in feet): 8.6	
Pumping Rate (gallons per minute):	Maximum Drawdown of Groundwater During Development (feet):	Well Purged Dry (check one): <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Pumping Condition (check one): <input checked="" type="checkbox"/> Continuous <input type="checkbox"/> Intermittent	Total Development Water Removed (gallons):	Development Duration (minutes): 30	Development Water Drummed (check one): <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Water Appearance (color and odor) At Start of Development: dark brown; sulfuric odor		Water Appearance (color and odor) At End of Development: cloudy; sulfuric odor	

WELL CONSTRUCTION OR DEVELOPMENT REMARKS

WELL CONSTRUCTION AND DEVELOPMENT LOG

WELL CONSTRUCTION DATA				
Well Number: P-21	Site Name: Hardee County Landfill, Hardee County		FDEP Facility I.D. Number: 758082	Well Install Date(s): 04/02/2007
Well Location and Type (check appropriate boxes): <input checked="" type="checkbox"/> On-Site <input type="checkbox"/> Right-of-Way <input type="checkbox"/> Off-Site Private Property <input checked="" type="checkbox"/> Above Grade (AG) <input type="checkbox"/> Flush-to-Grade		Well Purpose: <input type="checkbox"/> Perched Monitoring <input checked="" type="checkbox"/> Shallow (Water-Table) Monitoring <input type="checkbox"/> Intermediate or Deep Monitoring <input type="checkbox"/> Remediation or Other (describe)		Well Install Method: Hollow stem auger
If AG, list feet of riser above land surface: 3'				Surface Casing Install Method: Protective casing
Borehole Depth (feet):	Well Depth (feet):	Borehole Diameter (inches):	Manhole Diameter (inches):	Well Pad Size: 2 feet by 2 feet
Riser Diameter and Material: 2" sch. 40 PVC	Riser/Screen Connections: <input checked="" type="checkbox"/> Flush-Threaded <input type="checkbox"/> Other (describe)	Riser Length: 5 feet from -2 feet to +3 feet		
Screen Diameter and Material: 2" sch. 40 PVC	Screen Slot Size: 0.010"	Screen Length: 10 feet from 2 feet to 12 feet		
1 st Surface Casing Material: also check: <input type="checkbox"/> Permanent <input type="checkbox"/> Temporary	1 st Surface Casing I.D. (inches):	1 st Surface Casing Length: feet from 0 feet to feet		
2 nd Surface Casing Material: also check: <input type="checkbox"/> Permanent <input type="checkbox"/> Temporary	2 nd Surface Casing I.D. (inches):	2 nd Surface Casing Length: feet from 0 feet to feet		
3 rd Surface Casing Material: also check: <input type="checkbox"/> Permanent <input type="checkbox"/> Temporary	3 rd Surface Casing I.D. (inches):	3 rd Surface Casing Length: feet from 0 feet to feet		
Filter Pack Material and Size: 20/30 silica sand pack	Prepacked Filter Around Screen (check one): <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Filter Pack Length: 11 feet from 1 feet to 12 feet		
Filter Pack Seal Material and Size:	30/65 fine sand	Filter Pack Seal Length: 0.5 feet from 0.5 feet to 1 feet		
Surface Seal Material:	Cement	Surface Seal Length: 0.17 feet from 0.3 feet to 0.5 feet		

WELL DEVELOPMENT DATA			
Well Development Date: 04/02/07	Well Development Method (check one): <input checked="" type="checkbox"/> Surge/Pump <input type="checkbox"/> Pump <input type="checkbox"/> Compressed Air <input type="checkbox"/> Other (describe)		
Development Pump Type (check): <input type="checkbox"/> Submersible <input type="checkbox"/> Other (describe) <input type="checkbox"/> Centrifugal <input checked="" type="checkbox"/> Peristaltic	Depth to Groundwater (before developing in feet): 9.2		
Pumping Rate (gallons per minute):	Maximum Drawdown of Groundwater During Development (feet):	Well Purged Dry (check one): <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Pumping Condition (check one): <input checked="" type="checkbox"/> Continuous <input type="checkbox"/> Intermittent	Total Development Water Removed (gallons):	Development Duration (minutes): 30	Development Water Drummed (check one): <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Water Appearance (color and odor) At Start of Development: cloudy; sulfuric odor		Water Appearance (color and odor) At End of Development: clear; sulfuric odor	

WELL CONSTRUCTION OR DEVELOPMENT REMARKS

WELL CONSTRUCTION AND DEVELOPMENT LOG

WELL CONSTRUCTION DATA					
Well Number: P-22		Site Name: Hardee County Landfill, Hardee County		FDEP Facility I.D. Number: 758082	Well Install Date(s): 03/30/2007
Well Location and Type (check appropriate boxes): <input checked="" type="checkbox"/> On-Site <input type="checkbox"/> Right-of-Way <input type="checkbox"/> Off-Site Private Property <input checked="" type="checkbox"/> Above Grade (AG) <input type="checkbox"/> Flush-to-Grade If AG, list feet of riser above land surface: 3'			Well Purpose: <input type="checkbox"/> Perched Monitoring <input checked="" type="checkbox"/> Shallow (Water-Table) Monitoring <input type="checkbox"/> Intermediate or Deep Monitoring <input type="checkbox"/> Remediation or Other (describe)		Well Install Method: Hollow stem auger
					Surface Casing Install Method: Protective casing
Borehole Depth (feet):	Well Depth (feet):	Borehole Diameter (inches):	Manhole Diameter (inches):	Well Pad Size: 2 feet by 2 feet	
Riser Diameter and Material: 2" sch. 40 PVC		Riser/Screen Connections: <input checked="" type="checkbox"/> Flush-Threaded <input type="checkbox"/> Other (describe)	Riser Length: 5 feet from -2 feet to +3 feet		
Screen Diameter and Material: 2" sch. 40 PVC		Screen Slot Size: 0.010"	Screen Length: 10 feet from 2 feet to 12 feet		
1 st Surface Casing Material: also check: <input type="checkbox"/> Permanent <input type="checkbox"/> Temporary		1 st Surface Casing I.D. (inches):	1 st Surface Casing Length: _____ feet from 0 feet to _____ feet		
2 nd Surface Casing Material: also check: <input type="checkbox"/> Permanent <input type="checkbox"/> Temporary		2 nd Surface Casing I.D. (inches):	2 nd Surface Casing Length: _____ feet from 0 feet to _____ feet		
3 rd Surface Casing Material: also check: <input type="checkbox"/> Permanent <input type="checkbox"/> Temporary		3 rd Surface Casing I.D. (inches):	3 rd Surface Casing Length: _____ feet from 0 feet to _____ feet		
Filter Pack Material and Size: 20/30 silica sand pack	Prepacked Filter Around Screen (check one): <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Filter Pack Length: 11 feet from 1 feet to 12 feet		
Filter Pack Seal Material and Size:		30/65 fine sand	Filter Pack Seal Length: 0.5 feet from 0.5 feet to 1 feet		
Surface Seal Material:		Cement	Surface Seal Length: 0.17 feet from 0.3 feet to 0.5 feet		

WELL DEVELOPMENT DATA			
Well Development Date: 04/02/07		Well Development Method (check one): <input checked="" type="checkbox"/> Surge/Pump <input type="checkbox"/> Pump <input type="checkbox"/> Compressed Air <input type="checkbox"/> Other (describe)	
Development Pump Type (check): <input type="checkbox"/> Submersible <input type="checkbox"/> Other (describe)		<input type="checkbox"/> Centrifugal <input checked="" type="checkbox"/> Peristaltic	Depth to Groundwater (before developing in feet): 7.79
Pumping Rate (gallons per minute):	Maximum Drawdown of Groundwater During Development (feet):		Well Purged Dry (check one): <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Pumping Condition (check one): <input checked="" type="checkbox"/> Continuous <input type="checkbox"/> Intermittent	Total Development Water Removed (gallons):	Development Duration (minutes): 30	Development Water Drummed (check one): <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Water Appearance (color and odor) At Start of Development: cloudy; sulfuric odor		Water Appearance (color and odor) At End of Development: partly cloudy; sulfuric odor	

WELL CONSTRUCTION OR DEVELOPMENT REMARKS

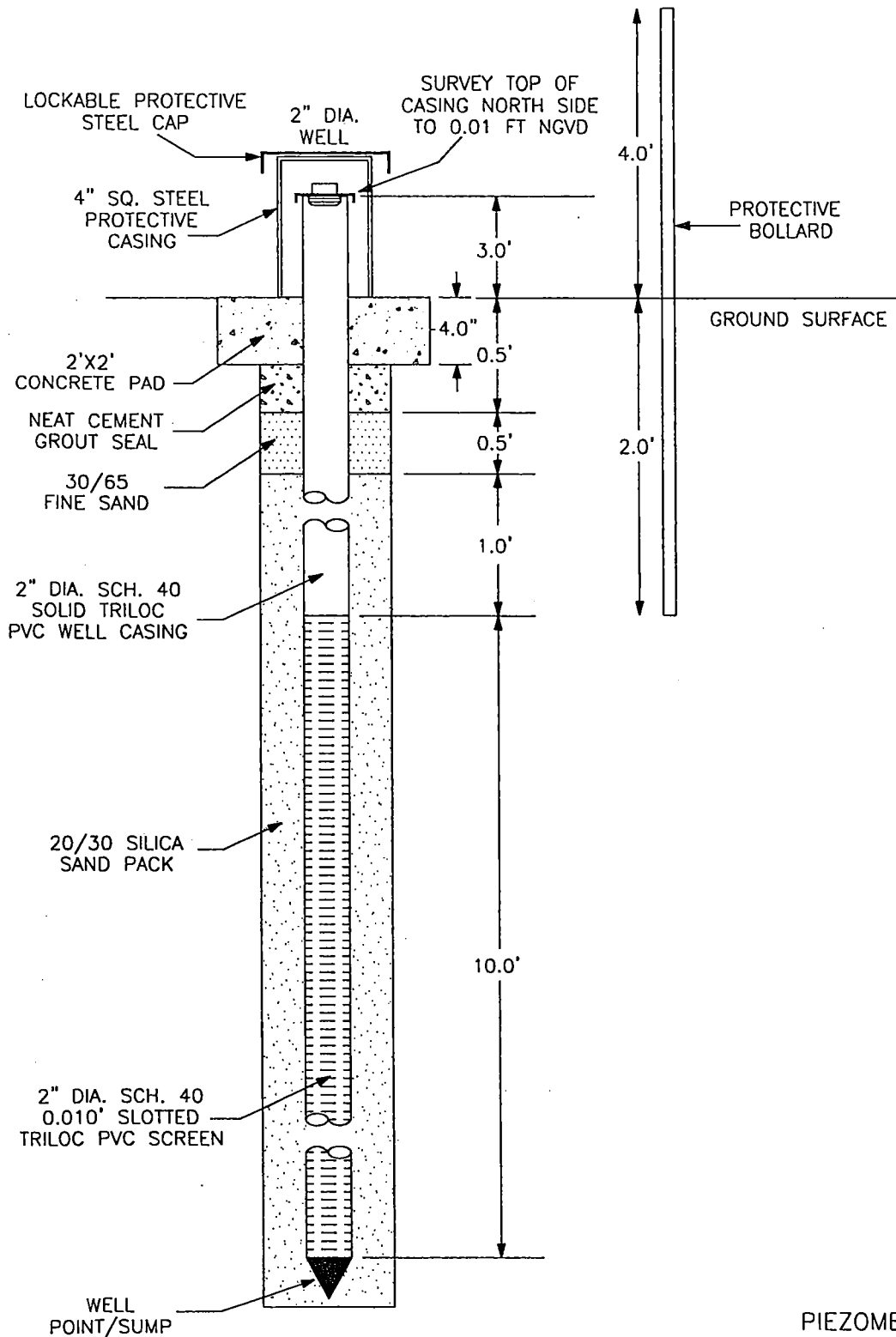
WELL CONSTRUCTION AND DEVELOPMENT LOG

WELL CONSTRUCTION DATA				
Well Number: P-23	Site Name: Hardee County Landfill, Hardee County		FDEP Facility I.D. Number: 758082	Well Install Date(s): 03/30/2007
Well Location and Type (check appropriate boxes): <input checked="" type="checkbox"/> On-Site <input type="checkbox"/> Right-of-Way <input type="checkbox"/> Off-Site Private Property <input checked="" type="checkbox"/> Above Grade (AG) <input type="checkbox"/> Flush-to-Grade If AG, list feet of riser above land surface: 3'		Well Purpose: <input type="checkbox"/> Perched Monitoring <input checked="" type="checkbox"/> Shallow (Water-Table) Monitoring <input type="checkbox"/> Intermediate or Deep Monitoring <input type="checkbox"/> Remediation or Other (describe)		Well Install Method: Hollow stem auger Surface Casing Install Method: Protective casing
Borehole Depth (feet):	Well Depth (feet):	Borehole Diameter (inches):	Manhole Diameter (inches):	Well Pad Size: 2 feet by 2 feet
Riser Diameter and Material: 2" sch. 40 PVC	Riser/Screen Connections: <input checked="" type="checkbox"/> Flush-Threaded <input type="checkbox"/> Other (describe)	Riser Length: 5 feet from -2 feet to +3 feet		
Screen Diameter and Material: 2" sch. 40 PVC	Screen Slot Size: 0.010"	Screen Length: 10 feet from 2 feet to 12 feet		
1 st Surface Casing Material: also check: <input type="checkbox"/> Permanent <input type="checkbox"/> Temporary	1 st Surface Casing I.D. (inches):	1 st Surface Casing Length: _____ feet from 0 feet to _____ feet		
2 nd Surface Casing Material: also check: <input type="checkbox"/> Permanent <input type="checkbox"/> Temporary	2 nd Surface Casing I.D. (inches):	2 nd Surface Casing Length: _____ feet from 0 feet to _____ feet		
3 rd Surface Casing Material: also check: <input type="checkbox"/> Permanent <input type="checkbox"/> Temporary	3 rd Surface Casing I.D. (inches):	3 rd Surface Casing Length: _____ feet from 0 feet to _____ feet		
Filter Pack Material and Size: 20/30 silica sand pack	Prepacked Filter Around Screen (check one): <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Filter Pack Length: 11 feet from 1 feet to 12 feet		
Filter Pack Seal Material and Size: 30/65 fine sand		Filter Pack Seal Length: 0.5 feet from 0.5 feet to 1 feet		
Surface Seal Material: Cement		Surface Seal Length: 0.17 feet from 0.3 feet to 0.5 feet		

WELL DEVELOPMENT DATA			
Well Development Date: 04/02/07	Well Development Method (check one): <input checked="" type="checkbox"/> Surge/Pump <input type="checkbox"/> Pump <input type="checkbox"/> Compressed Air <input type="checkbox"/> Other (describe)		
Development Pump Type (check): <input type="checkbox"/> Submersible <input type="checkbox"/> Other (describe) <input type="checkbox"/> Centrifugal <input checked="" type="checkbox"/> Peristaltic	Depth to Groundwater (before developing in feet): 9.89		
Pumping Rate (gallons per minute):	Maximum Drawdown of Groundwater During Development (feet):	Well Purged Dry (check one): <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Pumping Condition (check one): <input checked="" type="checkbox"/> Continuous <input type="checkbox"/> Intermittent	Total Development Water Removed (gallons):	Development Duration (minutes): 30	Development Water Drummed (check one): <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Water Appearance (color and odor) At Start of Development: cloudy; sulfuric odor		Water Appearance (color and odor) At End of Development: clear; sulfuric odor	

WELL CONSTRUCTION OR DEVELOPMENT REMARKS

--



PIEZOMETER No. P-17

INSTALLATION REPORT

INSTALLATION DATE: 03-30-07
 INSTALLED BY: SPOON R, INC.
 DEPTH TO GROUNDWATER: 6.64'
 INSTALLATION METHOD: HOLLOW STEM AUGER

MONITORING WELL DETAIL
 HARDEE COUNTY LANDFILL
 PHASE II SECTION I
 HARDEE COUNTY, FLORIDA

DRAWN: TMB

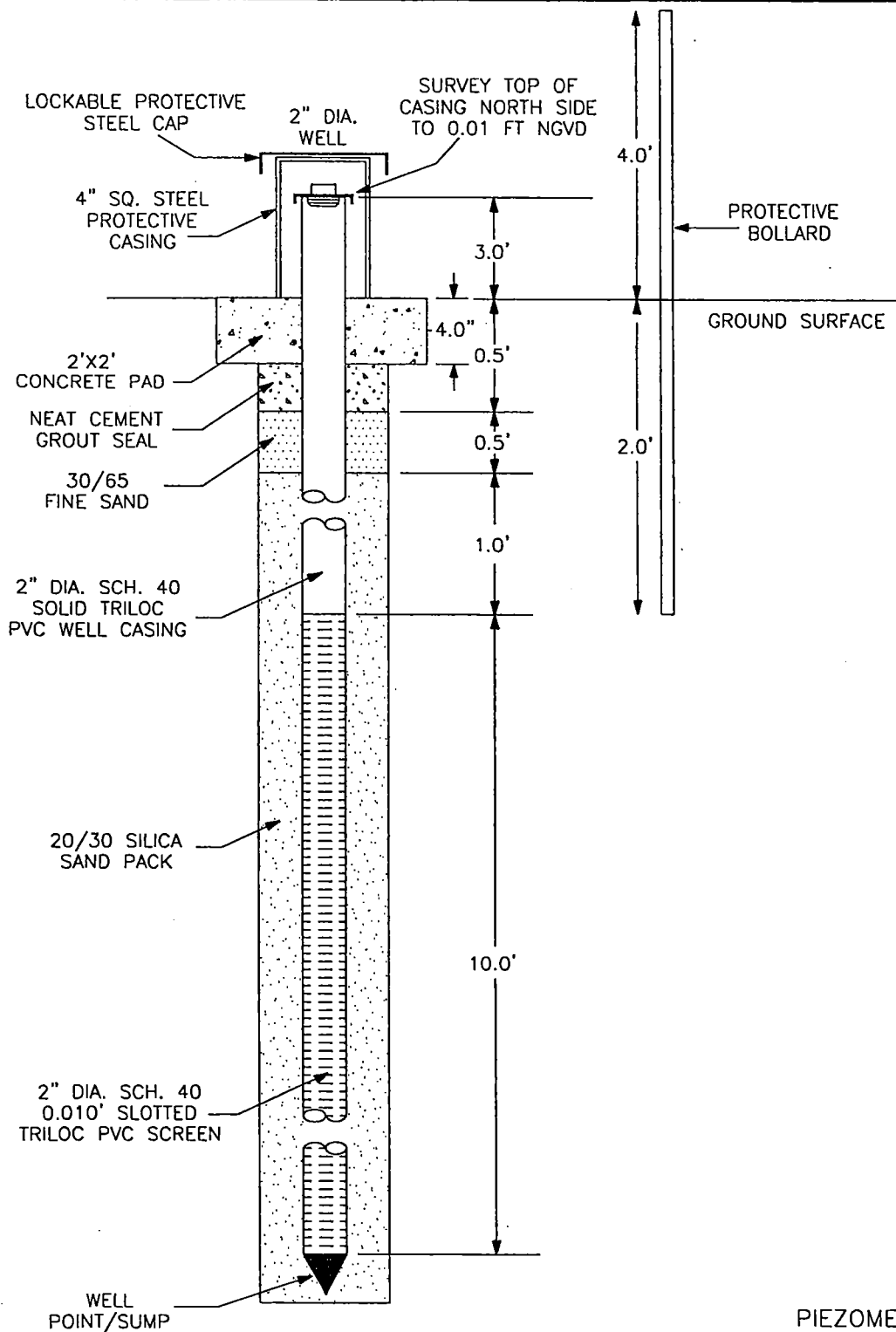
CHKD: YL

SCALE: -

DATE: 04-16-07

PROJ. NO: 04-07-0048-201A

NODARSE
 & ASSOCIATES, INC.



INSTALLATION REPORT

INSTALLATION DATE: 03-30-07
INSTALLED BY: SPOON R, INC.
DEPTH TO GROUNDWATER: 7.89'
INSTALLATION METHOD: HOLLOW STEM AUGER

PIEZOMETER No. P-18

MONITORING WELL DETAIL
 HARDEE COUNTY LANDFILL
 PHASE II SECTION I
 HARDEE COUNTY, FLORIDA

DRAWN: TMB

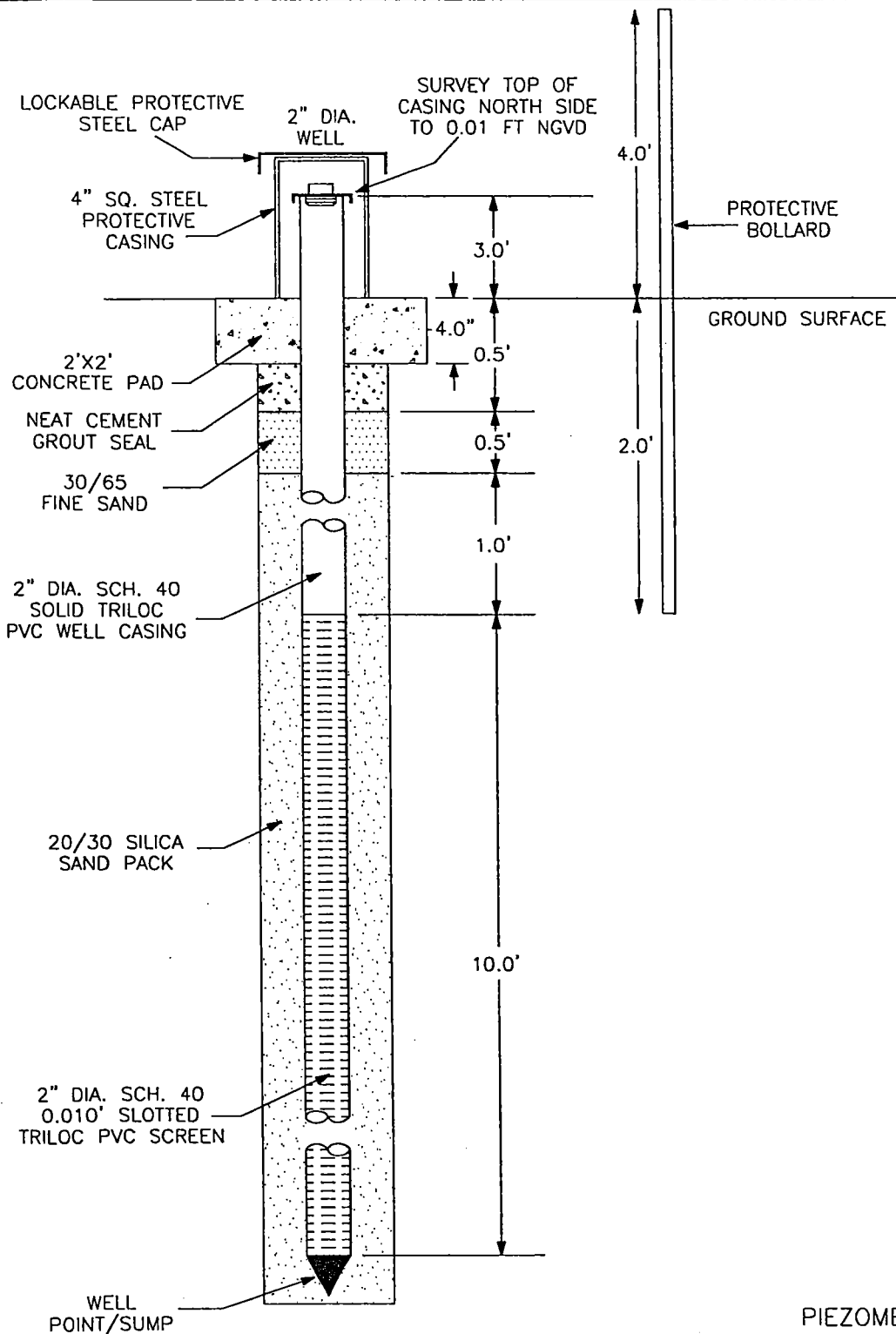
CHKD: YL

SCALE: -

DATE: 04-16-07

NODARSE
 & ASSOCIATES, INC.

PROJ. NO: 04-07-0048-201A



INSTALLATION REPORT

INSTALLATION DATE: 03-30-07
 INSTALLED BY: SPOON R, INC.
 DEPTH TO GROUNDWATER: 6.98'
 INSTALLATION METHOD: HOLLOW STEM AUGER

PIEZOMETER No. P-19

MONITORING WELL DETAIL
 HARDEE COUNTY LANDFILL
 PHASE II SECTION I
 HARDEE COUNTY, FLORIDA

DRAWN: TMB

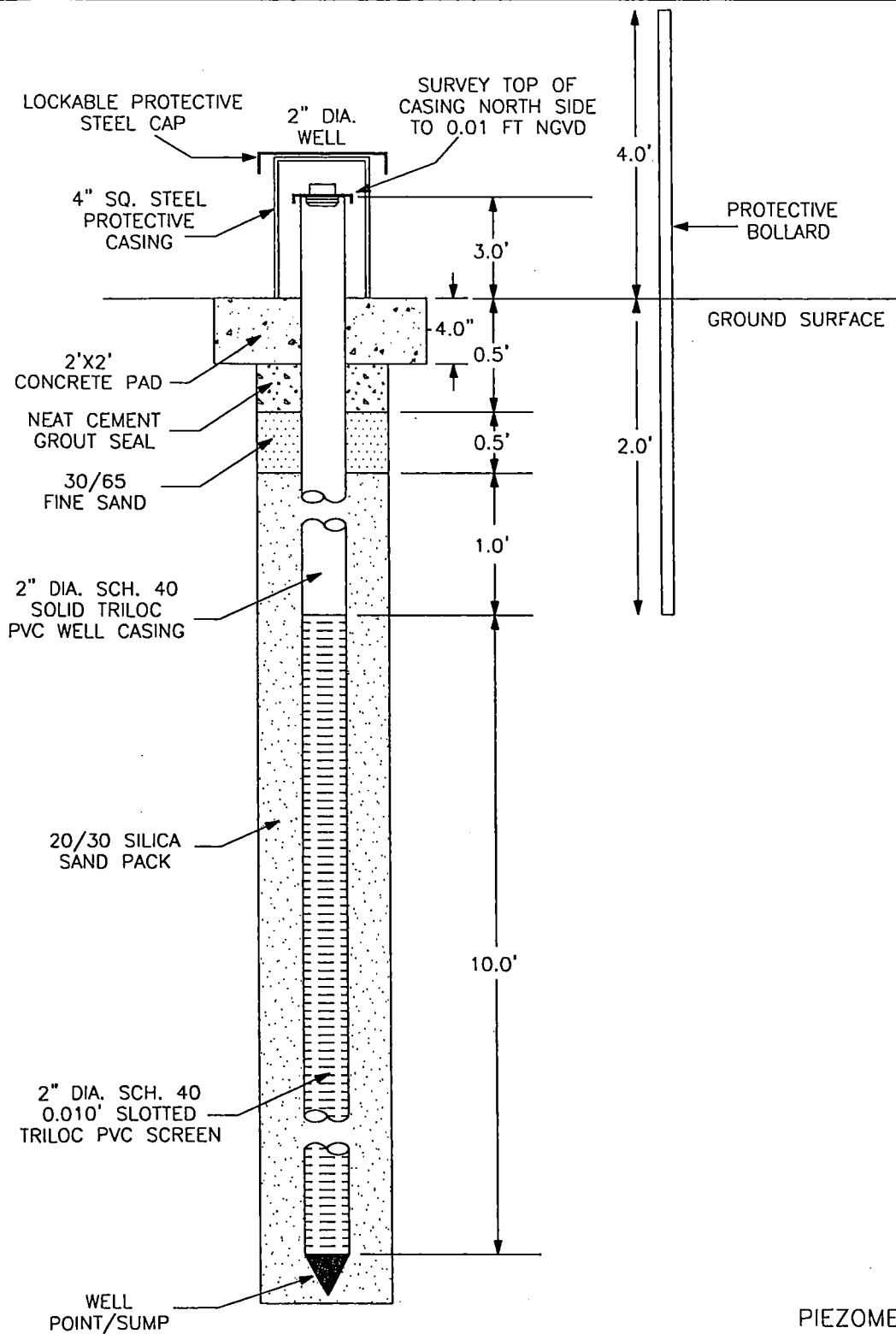
CHKD: YL

SCALE: -

DATE: 04-16-07

PROJ. NO: 04-07-0048-201A

NODARSE
 & ASSOCIATES, INC.



PIEZOMETER No. P-20

INSTALLATION REPORT

INSTALLATION DATE: 04-02-07

INSTALLED BY: SPOON R, INC.

DEPTH TO GROUNDWATER: 8.6'

INSTALLATION METHOD: HOLLOW STEM AUGER

MONITORING WELL DETAIL
HARDEE COUNTY LANDFILL
PHASE II SECTION I
HARDEE COUNTY, FLORIDA

DRAWN: TMB

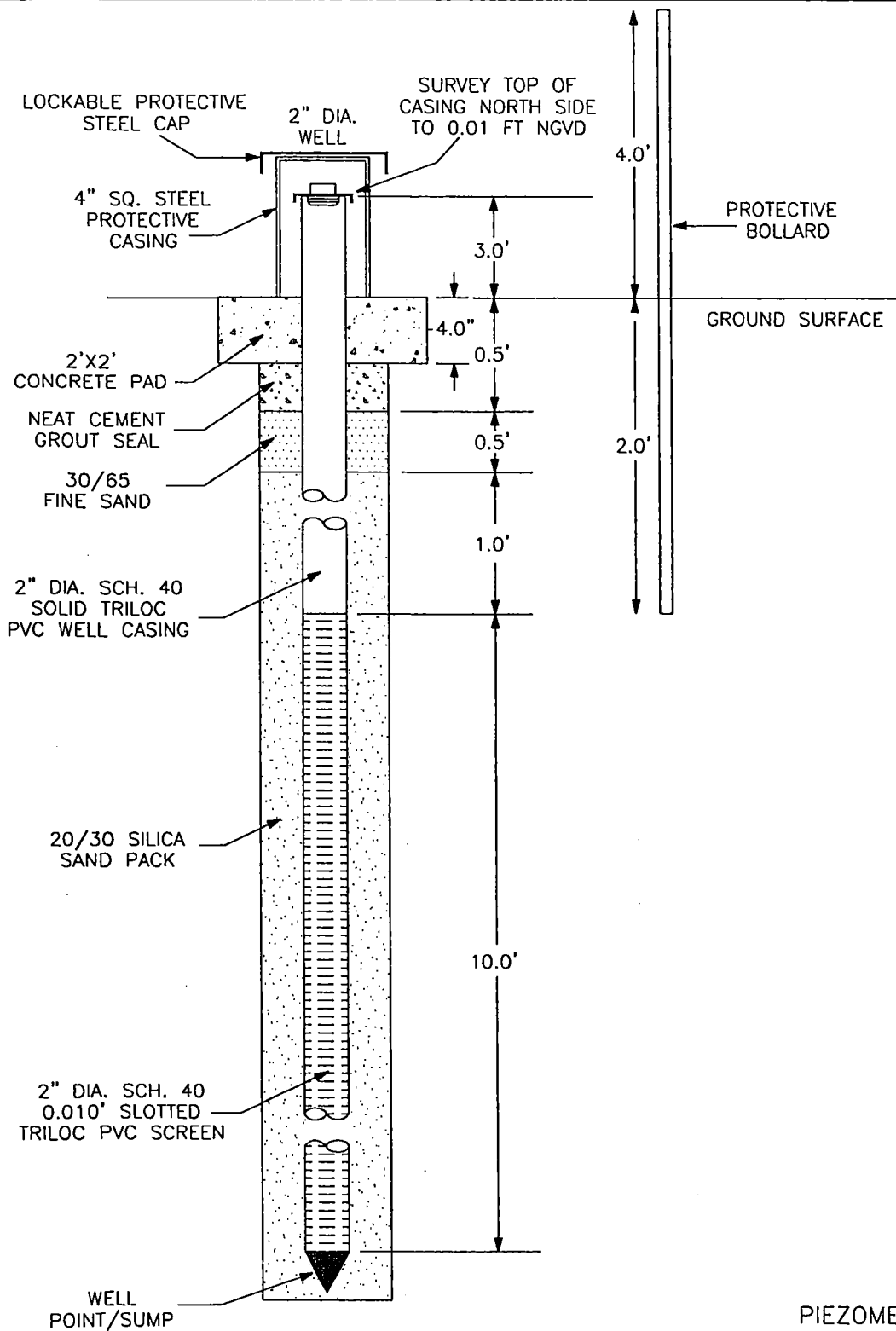
CHKD: YL

SCALE: -

DATE: 04-16-07

NODARSE
& ASSOCIATES, INC.

PROJ. NO: 04-07-0048-201A



INSTALLATION REPORT

INSTALLATION DATE: 04-02-07
 INSTALLED BY: SPOON R, INC.
 DEPTH TO GROUNDWATER: 9.2'
 INSTALLATION METHOD: HOLLOW STEM AUGER

PIEZOMETER No. P-21

MONITORING WELL DETAIL
 HARDEE COUNTY LANDFILL
 PHASE II SECTION I
 HARDEE COUNTY, FLORIDA

DRAWN: TMB

CHKD: YL

SCALE: -

DATE: 04-16-07

NODARSE
 & ASSOCIATES, INC.

PROJ. NO: 04-07-0048-201A



MONITORING WELL DETAIL
HARDEE COUNTY LANDFILL
PHASE II SECTION I
HARDEE COUNTY, FLORIDA

DRAWN: TMB

CHKD: YL

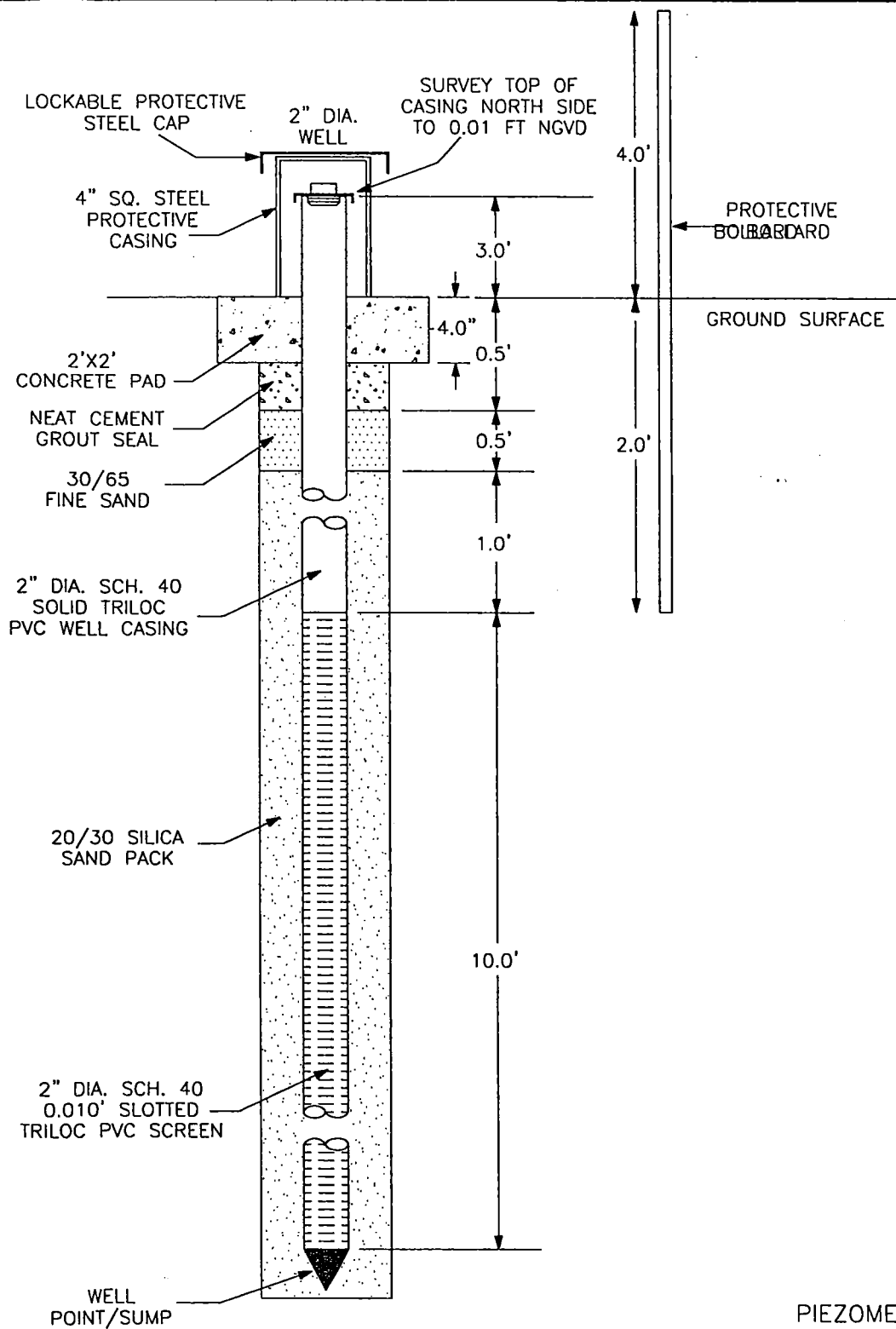
SCALE:

DATE: 04-16-07

PROJ. NO:
04-07-0048-201A



NODARSE
 & ASSOCIATES, INC.



INSTALLATION REPORT

INSTALLATION DATE: 03-30-07
 INSTALLED BY: SPOON R, INC.
 DEPTH TO GROUNDWATER: 9.89'
 INSTALLATION METHOD: HOLLOW STEM AUGER

PIEZOMETER No. P-23

MONITORING WELL DETAIL
 HARDEE COUNTY LANDFILL
 PHASE II SECTION I
 HARDEE COUNTY, FLORIDA

DRAWN: TMB

CHKD: YL

SCALE: -

DATE: 04-16-07

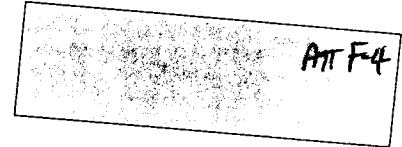
PROJ. NO: 04-07-0048-201A

NODARSE
 & ASSOCIATES, INC.

FLORIDA DEPARTMENT OF
ENVIRONMENTAL PROTECTION

JUN 05 2007

SOUTHWEST DISTRICT
TAMPA



Attachment F-4

Well Completion Report
Abandon Monitoring Well MW-9



STATE OF FLORIDA PERMIT APPLICATION TO CONSTRUCT,
REPAIR, MODIFY, OR ABANDON A WELL

- ☒ Southwest
☐ Northwest
☐ St. Johns River
☐ South Florida
☐ Suwannee River

THIS FORM MUST BE FILLED OUT COMPLETELY.

The water well contractor is responsible for completing
this form and forwarding the permit to the appropriate
delegated county where applicable.

CHECK BOX FOR APPROPRIATE DISTRICT ADDRESS ON BACK OF PERMIT FORM

Permit No. 738034.05
Florida Unique I.D. 04
Permit Stipulations Required (See attached)
62-524 Quad # _____ Delineation # _____
CUP/WUP Application No. _____
ABOVE THIS LINE FOR OFFICIAL USE ONLY

1. **Hardee County BCC** **412 West Orange Street** **Wauchula FL** **33873**
Owner, Legal Name of Entity if Corporation Address City Zip Telephone Number

2. **685 Airport Rd. Wauchula**
Well Location Address, Road Name or number, City
Parcel # (Pin) **35-33-25-0000-06550-0000**

3. **Gregory Campbell** **2613** **(727) 561-7477**
Well Drilling Contractor License No. Telephone No.

4150 116th Terrace North
Address
Clearwater FL 33762
City State Zip

4. **4** 1/4 of **2** 1/4 of Section **35**
smallest biggest (Indicate Well on Chart)

5. Township **33** Range **25**

6. **HARDEE**
County Subdivision Name Lot Block Unit

7. Number of proposed wells **5** Check the use of well: (See back of permit for additional choices) Domestic Monitor (type) _____
Irrigation (Type) Public Water Supply (type) List Other **Plugged**
(See Back) (See Back)
Distance from septic system _____ ft. Description of facility **Landfill** Estimated start of construction date **4/12/2006**

8. Application for: _____ New Construction _____ Repair/Modify ☒ Abandonment **NO LONGER IN USE**
(Reason for Abandonment)

9. Estimated: Well Depth **15** Casing Depth _____ Screen Interval from _____ to _____
Casing Material: ~~EXXON~~ / ~~50~~ / **PVC** Casing Diameter **2** Seal Material _____
smallest

10. If applicable: Proposed From **0** to **15** Seal Material **Cement** **SWFWMD Rec'd Date 04/07/2006**
Grouting Interval From _____ to _____ Seal Material _____
From _____ to _____ Seal Material _____

11. Telescope Casing _____ or Liner _____ (check one) Diameter _____
Blk-Steel / Galvanized / PVC Other (specify): _____

12. Method of Construction: _____ Rotary _____ Cable Tool _____ Combination _____
Auger ☒ Other (specify): **Plugged by approved method**

13. Indicate total No. of wells on site **30** List number of unused wells on site **5**

14. Is this well or any other well or water withdrawal on the owner's contiguous property covered
under a Consumptive/Water Use Permit (CUP/WUP) or CUP/WUP Application? ☒ No _____ Yes _____
(If YES, COMPLETE THE FOLLOWING) CUP/WUP No. _____
District well I.D. No. _____
Latitude _____ Longitude _____
Data obtained from GPS _____ or map _____ or survey _____ (map datum NAD 27 _____ NAD 83 _____)

15. I hereby certify that I will comply with the applicable rules of Title 40, Florida Administrative Code
and that a water use permit or artificial recharge permit, if needed, has been or will be obtained
prior to commencement of well construction. I further certify that all information provided on this
application is accurate and that I will obtain necessary approval from other federal, state, or local
governments, if applicable. I agree to provide a well completion report to the District within 30 days
after drilling or the permit expiration, whichever occurs first.

I certify that I am the owner of the property, that the information provided is accurate, and that I am aware of my
responsibilities under Chapter 373, Florida Statutes, to maintain or properly abandon this well; or, I certify that I am
the agent for the owner, that the information provided is accurate, and that I have informed the owner of his
responsibilities as stated above. Owner consents to personnel of the WMD or a representative access to the well site.

Digitally Signed **2613** **Digitally Signed** **4/7/2006**
Signature of Contractor License No. Owner's or Agent's Signature Date

Approval Granted By: **Nicki Callihan** Issue Date: **04/10/06** Hydrologist Approval _____
Owner Number: **303367** Fee Received: \$ **00.00** Receipt No.: _____ Check No.: _____

THIS PERMIT NOT VALID UNTIL PROPERLY SIGNED BY AN AUTHORIZED OFFICER OR REPRESENTATIVE OF THE WMD. IT SHALL BE AVAILABLE AT THE
WELL SITE DURING ALL DRILLING OPERATIONS. This permit is valid for 90 days from the date of issue.

WELL COMPLETION REPORT (Please complete in black ink or type.)PERMIT #: 738034.05 CUP/WUP#: _____ DID#: _____Indicate the number of wells drilled/abandoned for this report: 3Indicate the number of wells permitted but not drilled/abandoned that are being cancelled: 0**WATER WELL CONTRACTOR'S**SIGNATURE Digitally Signed License # 2813

I certify that the information provided in this report is accurate and true.

Grout	No. of Bags	From (ft.)	To (ft.)
Neat Cement:			
Bentonite:			
(Other)			

WELL LOCATION: County Hardee4 1/4 of 2 1/4 of Section 35, Township 33, Range 25

Latitude: _____ Longitude: _____

DATE STAMP
Official Use Only

Sketch of well location on property

CHEMICAL ANALYSIS WHEN REQUIRED

Iron: _____ ppm Sulfate: _____ ppm

Chlorides: _____ ppm TDS _____ mg/l

Conductivity _____ umhos/cm

☐ Lab Test ☐ Field Test Kit

Pump Type

☐ Centrifugal ☐ Jet ☐ Submersible ☐ Turbine

Horsepower: _____ Capacity: _____ GPM: _____

Pump Depth: _____ ft. Intake Depth: _____ ft.

Form LEG-R.005.00(10/05)

Give distances from septic tank and house, or other reference points

OWNER'S NAME: Hardee County BCCCOMPLETION DATE: 04/12/2006 Florida Unique I.D.: _____Parcel # (Pin): 35-33-25-0000-06550-0000

WELL USE:

☐ Public Supply ☐ Irrigation ☐ Domestic ☐ Monitor☐ Injection ☒ Other Plugged

DRILL METHOD:

☐ Rotary ☐ Cable Tool ☐ Combination☐ Jet ☐ Auger ☒ Other Plugged

Measured Static Water Level: _____	Measured Pumping Water Level: _____
After _____ Hours at _____ GPM.	Measuring Pt. (Describe): _____
Which is _____ ft. <input type="checkbox"/> above <input type="checkbox"/> below land surface	
Casing: <input type="checkbox"/> Black Steel <input type="checkbox"/> Galvanized <input type="checkbox"/> PVC <input type="checkbox"/> Other: _____	

<input type="checkbox"/> Open Hole <input type="checkbox"/> Screen	Depth (feet)		DRILL CUTTINGS LOG Examine cuttings every 20 ft. or at formation changes. Note cavities, depth to producing zones. Color Grain Size Type of Material
	From	To	
Casing Diameter and Depth (ft.)			
Diameter: _____	Plugged		
From: _____			
To: _____			
Diameter: _____			
From: _____			
To: _____			
Liner <input type="checkbox"/> or Casing <input type="checkbox"/>			
Diameter: _____			
From: _____			
To: _____			
FINISH: <u>Plugged</u>			

Driller's Name (print or type): _____

WELL COMPLETION REPORT (Please complete in black ink or type.)

PERMIT #: 738034.05 CUP/WUP#: DID#:

Indicate the number of wells drilled/abandoned for this report: 1

Indicate the number of wells permitted but not drilled/abandoned that are being cancelled: 0

WATER WELL CONTRACTOR'S

SIGNATURE: Digitally Signed License # 2613

I certify that the information provided in this report is accurate and true.

Grout	No. of Bags	From (ft.)	To (ft.)
Neat Cement:			
Bentonite:			
(Other)			

WELL LOCATION: County Hardee

4 1/4 of 2 1/4 of Section 35 Township 33 Range 25

Latitude: Longitude:

DATE STAMP
Official Use Only

CHEMICAL ANALYSIS WHEN REQUIRED

Iron: ppm Sulfate: ppm

Chlorides: ppm TDS mg/l

Conductivity umhos/cm

☐ Lab Test ☐ Field Test Kit

Pump Type

☐ Centrifugal ☐ Jet ☐ Submersible ☐ Turbine

Horsepower: Capacity: GPM:

Pump Depth: ft. Intake Depth: ft.

Form LEG-R.005.00(10/05)

Sketch of well location on property

Give distances from septic tank and house, or other reference points

OWNER'S NAME: Hardee County BCC

COMPLETION DATE: 04/12/2006 Florida Unique I.D.:

Parcel # (Pin): 35-33-25-0000-06550-0000

WELL USE:

☐ Public Supply ☐ Irrigation ☐ Domestic ☐ Monitor☐ Injection ☒ Other Plugged

DRILL METHOD:

☐ Rotary ☐ Cable Tool ☐ Combination☐ Jet ☐ Auger ☒ Other Plugged

Measured Static Water Level: Measured Pumping Water Level:		
After Hours at GPM. Measuring PL (Describe):		
Which is ft. <input type="checkbox"/> above <input type="checkbox"/> below land surface		
Casing: <input type="checkbox"/> Black Steel <input type="checkbox"/> Galvanized <input type="checkbox"/> PVC <input type="checkbox"/> Other:		
<input type="checkbox"/> Open Hole <input type="checkbox"/> Screen	Depth (feet)	DRILL CUTTINGS LOG Examine cuttings every 20 ft. or at formation changes. Note cavities, depth to producing zones. Color Grain Size Type of Material
Casing Diameter and Depth (ft.)	From To	
Diameter: From: To:	Plugged	
Diameter: From: To:		
Line <input type="checkbox"/> or Casing <input type="checkbox"/> Diameter: From: To:		
FINISH: Plugged		

Driller's Name (print or type):

WELL COMPLETION REPORT (Please complete in black ink or type.)

PERMIT #: 738034.05 CUP/WUP#: _____ DID#: _____
 Indicate the number of wells drilled/abandoned for this report: 1
 Indicate the number of wells permitted but not drilled/abandoned that are being cancelled: 0

WATER WELL CONTRACTOR'S

SIGNATURE Digitally Signed License # 2613
 I certify that the information provided in this report is accurate and true.

Grout	No. of Bags	From (ft.)	To (ft.)
Neat Cement:			
Bentonite:			
(Other)			

WELL LOCATION: County Hardee
4 1/4 of 2 1/4 of Section 35, Township 33, Range 25
 Latitude: _____ Longitude: _____

DATE STAMP
Official Use Only

Sketch of well location on property
Give distances from septic tank and house, or other reference points

CHEMICAL ANALYSIS WHEN REQUIRED
 Iron: _____ ppm Sulfate: _____ ppm
 Chlorides: _____ ppm TDS _____ mg/l
 Conductivity _____ umhos/cm
☐ Lab Test ☐ Field Test Kit
 Pump Type
☐ Centrifugal ☐ Jet ☐ Submersible ☐ Turbine
 Horsepower: _____ Capacity: _____ GPM: _____
 Pump Depth: _____ ft Intake Depth: _____ ft
 Form LEG-R.005.00(10/05)

OWNER'S NAME: Hardee County BCC
 COMPLETION DATE: 04/12/2006 Florida Unique I.D.: _____
 Parcel # (Pin): 35-33-25-0000-06550-0000
 WELL USE:

☐ Public Supply ☐ Irrigation ☐ Domestic ☐ Monitor
☐ Injection ☒ Other Plugged

DRILL METHOD:

☐ Rotary ☐ Cable Tool ☐ Combination
☐ Jet ☐ Auger ☒ Other Plugged

Measured Static Water Level: _____ Measured Pumping Water Level: _____ After _____ Hours at _____ GPM. Measuring Pt. (describe): _____ Which is _____ ft. <input type="checkbox"/> above <input type="checkbox"/> below land surface Casing: <input type="checkbox"/> Black Steel <input type="checkbox"/> Galvanized <input type="checkbox"/> PVC <input type="checkbox"/> Other: _____		
<input type="checkbox"/> Open Hole <input type="checkbox"/> Screen	Depth (feet)	DRILL CUTTINGS LOG Examine cuttings every 20 ft. or at formation changes. Note cavities, depth to producing zones. Color Grain Size Type of Material
Casing Diameter and Depth (ft.)	From To	
Diameter: _____ From: _____ To: _____	Plugged	
Diameter: _____ From: _____ To: _____		
Liner <input type="checkbox"/> or Casing <input type="checkbox"/> Diameter: _____ From: _____ To: _____		
FINISH: <u>Plugged</u>		

Driller's Name (print or type): _____



STATE OF FLORIDA PERMIT APPLICATION TO CONSTRUCT,
REPAIR, MODIFY, OR ABANDON A WELL

- ☒ Southwest
☐ Northwest
☐ St. Johns River
☐ South Florida
☐ Suwannee River

THIS FORM MUST BE FILLED OUT COMPLETELY.

The water well contractor is responsible for completing
this form and forwarding the permit to the appropriate
delegated county where applicable.

CHECK BOX FOR APPROPRIATE DISTRICT ADDRESS ON BACK OF PERMIT FORM

Permit No. 738035.02
Florida Unique I.D. _____
Permit Stipulations Required (See attached)
04
62-524 Quad # _____ Delineation # _____
CUP/WUP Application No. _____

ABOVE THIS LINE FOR OFFICIAL USE ONLY

Fold at this line in order that address
is visible through envelope window

1. **Hardee County BCC** **412 West Orange Street** **Wauchula FL** **33873**
Owner, Legal Name of Entity if Corporation Address City Zip Telephone Number

2. **685 Airport Rd, Wauchula**
Well Location Address, Road Name or number, City
Parcel # (Pln) **35-33-25-0000-06550-0000**

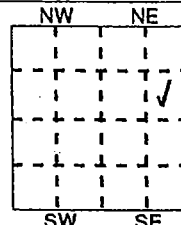
3. **Gregory Campbell** **2613** **(727) 561-7477**
Well Drilling Contractor License No. Telephone No.

4150 116th Terrace North
Address
Clearwater FL 33762
City State Zip

4. **4** 1/4 of **2** 1/4 of Section **35**
smallest biggest (Indicate Well on Chart)

5. Township **33** Range **25**

6. **HARDEE**
County Subdivision Name Lot Block Unit



7. Number of proposed wells **2** Check the use of well: (See back of permit for additional choices) Domestic Monitor (type) _____
Irrigation (Type) Public Water Supply (type) List Other **Plugged**

(See Back) Distance from septic system _____ ft. (See Back) Description of facility **Landfill** Estimated start of construction date **4/12/2006**

8. Application for: _____ New Construction _____ Repair/Modify ☒ Abandonment **NO LONGER IN USE**
(Reason for Abandonment)

9. Estimated: Well Depth **13** Casing Depth _____ Screen Interval from _____ to _____
Casing Material: ~~EXXON~~ / **50** / PVC Casing Diameter **1** Seal Material _____

10. If applicable: Proposed From **0** to **13** Seal Material **Cement** **SWFWMD Rec'd Date 04/07/2006**
Grouting Interval From _____ to _____ Seal Material _____
From _____ to _____ Seal Material _____

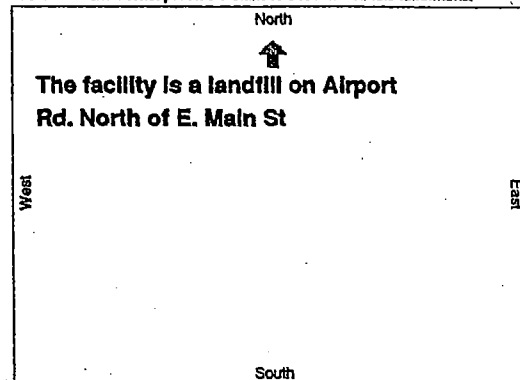
11. Telescope Casing _____ or Liner _____ (check one) Diameter _____
Blk-Steel / Galvanized / PVC Other (specify): _____

12. Method of Construction: _____ Rotary _____ Cable Tool _____ Combination _____
Auger ☒ Other (specify): **Plugged by approved method**

13. Indicate total No. of wells on site **25** List number of unused wells on site **2**

14. Is this well or any other well or water withdrawal on the owner's contiguous property covered
under a Consumptive/Water Use Permit (CUP/WUP) or CUP/WUP Application? ☒ No Yes
(IF YES, COMPLETE THE FOLLOWING) CUP/WUP No. _____
District well I.D. No. _____
Latitude _____ Longitude _____
Data obtained from GPS _____ or map _____ or survey _____ (map datum NAD 27 NAD 83)

Draw a map of well location and indicate well site with an "X" identify known
roads and landmarks: provide distances between well and landmarks.



15. I hereby certify that I will comply with the applicable rules of Title 40, Florida Administrative Code
and that a water use permit or artificial recharge permit, if needed, has been or will be obtained
prior to commencement of well construction. I further certify that all information provided on this
application is accurate and that I will obtain necessary approval from other federal, state, or local
governments, if applicable. I agree to provide a well completion report to the District within 30 days
after drilling or the permit expiration, whichever occurs first.

I certify that I am the owner of the property, that the information provided is accurate, and that I am aware of my
responsibilities under Chapter 375, Florida Statutes, to maintain or properly abandon this well, or, I certify that I am
the agent for the owner, that the information provided is accurate, and that I have informed the owner of his re-
sponsibilities as stated above. Owner consents to personnel of the WMD or a representative access to the well site.

Digitally Signed **2613** **Digitally Signed** **4/7/2006**
Signature of Contractor License No. Owner's or Agent's Signature Date

DO NOT WRITE BELOW THIS LINE - FOR OFFICIAL USE ONLY

Approval Granted By: **Nicki Callihan** Issue Date: **04/10/06** Hydrologist Approval _____
Owner Number: **303367** Fee Received: \$ **00.00** Receipt No.: _____ Check No.: _____

THIS PERMIT NOT VALID UNTIL PROPERLY SIGNED BY AN AUTHORIZED OFFICER OR REPRESENTATIVE OF THE WMD. IT SHALL BE AVAILABLE AT THE
WELL SITE DURING ALL DRILLING OPERATIONS. This permit is valid for 90 days from the date of issue.

OWNER'S NAME: Hardee County BCC

COMPLETION DATE: 04/12/2006 Florida Unique I.D.:

Parcel # (Pin): 35-33-25-0000-06550-0000

WELL USE: _____

☐ Public Supply ☐ Irrigation ☐ Domestic ☐ Monitor☐ Injection ☒ Other ☐ Plugged

DRILL METHOD:

☐ Rotary ☐ Cable Tool ☐ Combination
☐ Jet ☐ Auger ☒ Other Plugged

Measured Static Water Level: _____ Measured Pumping Water Level: _____
After _____ Hours at _____ GPM. Measuring Pt. (describe): _____
Which is _____ ft. [] above [] below land surface
Casing: [] Black Steel [] Galvanized [] PVC [] Other: _____

<input type="checkbox"/> Open Hole <input type="checkbox"/> Screen	Depth (feet)	DRILL CUTTINGS LOG Examine cuttings every 20 ft. or at formation changes. Note cavities.
---	-----------------	---

[illegible]

Sketch of well location on property

Give distances from septic tank and house, or other reference points

☐ Centrifugal ☐ Jet ☐ Submersible ☐ Turbine

Horsepower: _____ Capacity: _____ GPM: _____

Pump Depth: _____ ft. Intake Depth: _____ ft.

Form LEG-R.005.00(10/05)

FINISH: Plugged

Driller's Name (print or type): _____

Media Insert

Dep Box Number: DWM-SWD-SW-144

Pride Box Number: DEPS S11_B1733

PreIndex ID Number: 143 1218

☐ →

☐ →

☒ →

☐ →

☐ →

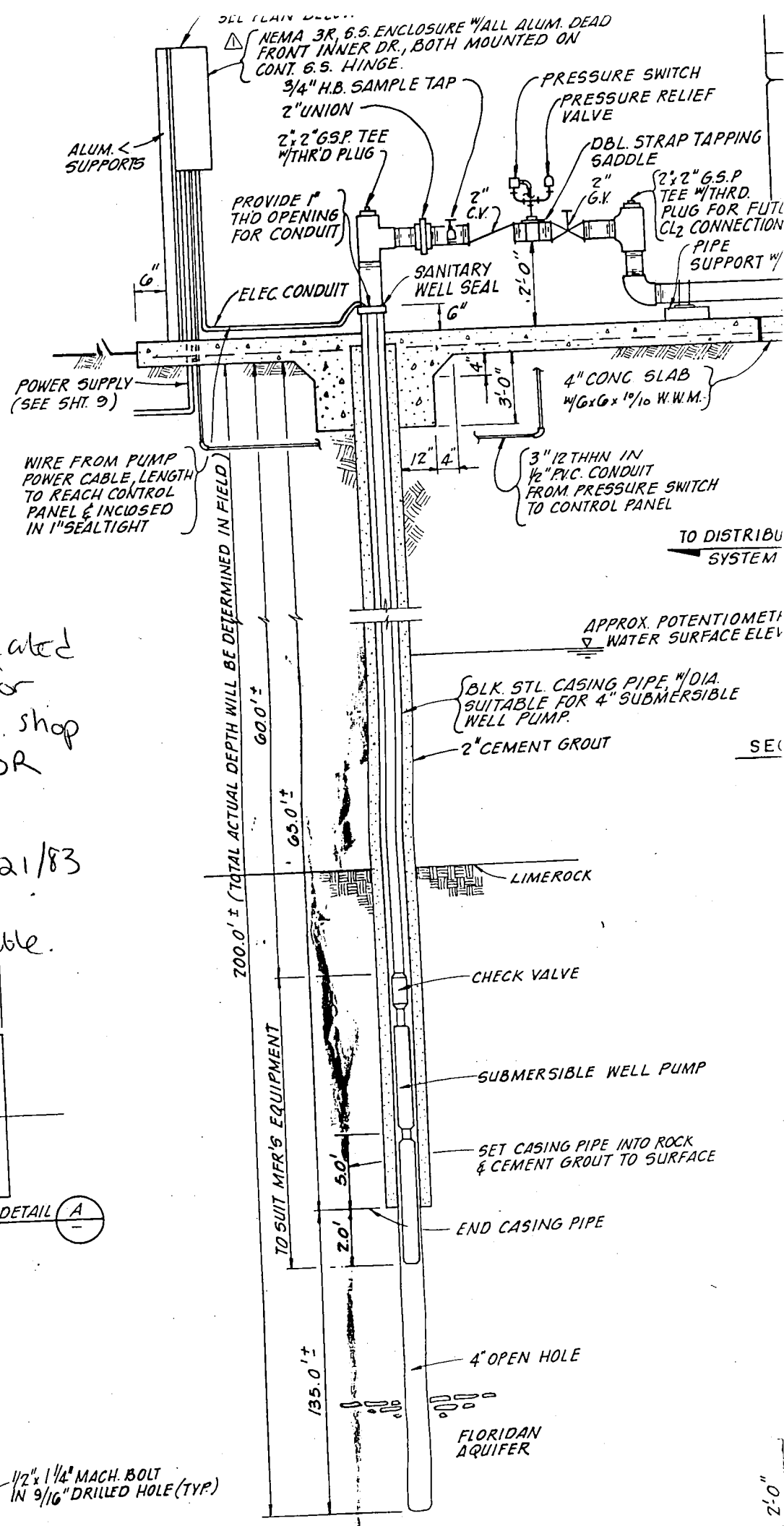
Notes:

**KIM FORD
HARDEE CO.**

X

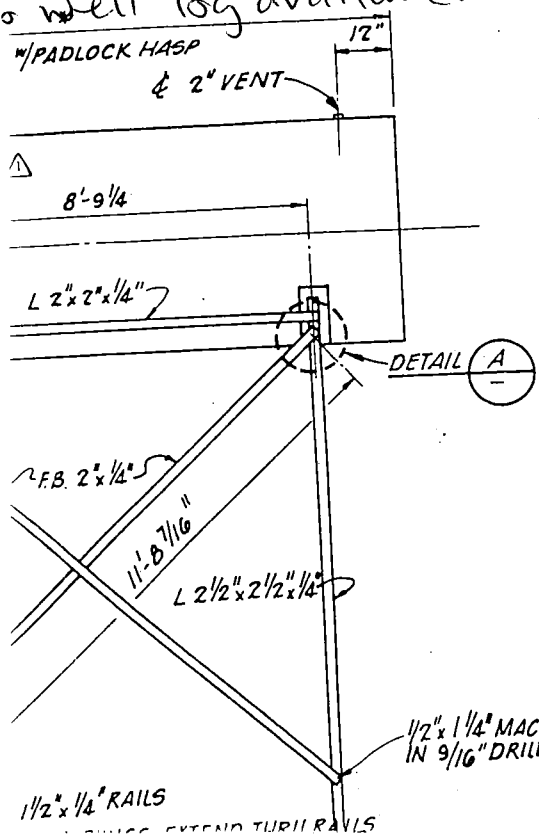
A

ALL METAL AREAS SHALL
CONFORM TO THE PAINTING
REQUIREMENTS OF THE SPECIFICATIONS
FOR STEEL METALS.



Existing well - located
S. of landfill; used for
fire control & maint. shop
restrooms. NOT FOR
POTABLE USE!

ENVIROSONS, INC. 12/21/83
record drawing.
No well log available.



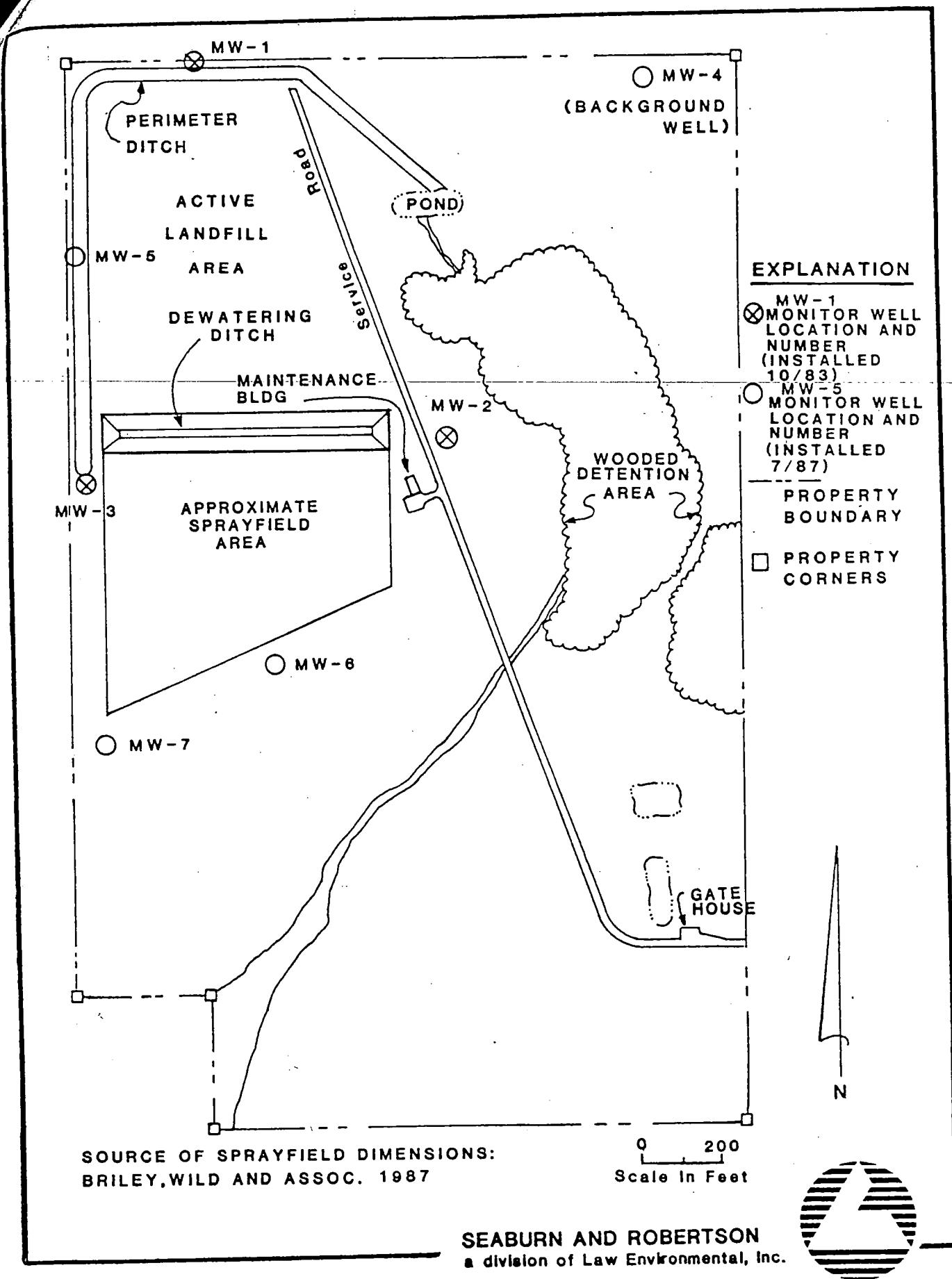


Table 1. - Monitor Well Construction Data.

Well ID.	Latitude/ Longitude	Total Depth (ft blw LS)	Height of well (ft abv LS)	Well Diam. (inch)	Casing Length (feet)	Combine Casing and Screen Materials	Screen Length (Feet)	Aquifer Monitored	SWMND Well Const. Permit No.
MW-1	27 34' 25" 81 47' 01"	11.0	1.79	4	7.8	Threaded Flush Joint Schedule 80 PVC, .010-inch Slotted Screen	5	Surficial	384054-20
MW-2	27 34' 13" 81 46' 53"	10.5	2.33	4	7.8	Threaded Flush Joint Schedule 80 PVC, .010-inch Slotted Screen	5	Surficial	384055-20
MW-3	27 34' 13" 81 47' 04"	15.2	1.82	4	12.0	Threaded Flush Joint Schedule 80 PVC, .010-inch Slotted Screen	5	Surficial	384054-20
MW-4	27 34' 25" 81 46' 50"	18.9	3.32	2	12.2	Threaded Flush Joint Schedule 40 PVC, .010-inch Slotted Screen	10	Surficial	435610-20
MW-5	27 34' 26" 81 47' 04"	18.1	2.95	2	11.0	Threaded Flush Joint Schedule 40 PVC, .010-inch Slotted Screen	10	Surficial	435611-20
MW-6	27 34' 10" 81 46' 59"	21.0	3.30	2	14.3	Threaded Flush Joint Schedule 40 PVC, .010-inch Slotted Screen	10	Surficial	435612-20
MW-7	27 34' 08" 81 47' 03"	21.0	3.16	2	14.2	Threaded Flush Joint Schedule 40 PVC, .010-inch Slotted Screen	10	Surficial	435613-20

TEST BORING RECORD

DEPTH (FT.)	DESCRIPTION	ELEVATION (FT.)	PENETRATION (BLOWS/FT.)					BLOWS PER SIX IN.	REC (IN.)
			0	10	20	30	50		
0.0	SAND - Lt. gray-tan, f. gr., w. sorted, mod. loose, quartz; no odor.	78.0						6-4-5	1E
4.5	SANDY CLAY - Mottled tan, gray-tan, and red-orange, v. sandy, mod. stiff, sticky, sl. plastic.								
6.5		73.0						9-5-16	1E
12.0	SAND and SANDY CLAY - Tan, f. to med. gr. quartz sand, with mottled green-gray and orange sandy clay seams.	68.0						11-15-16	1E
18.9		63.0							
	SAND - Med. tan-gray, med. to coarse gr., sl. clayey; no odor.	58.0							
	BORING TERMINATED AT 18.9 FEET.	53.0							
		48.0							
		43.0							

TEST BORING RECORD

DEPTH (FT.)	DESCRIPTION	ELEVATION (FT.)	PENETRATION (BLOWS/FT.)	BLOWS PER SIX IN.	REC (IN.)
0.0		80.0	0 10 20 30 50		
3.5	SAND - Lt.tan-gray to dark brown-gray, f.gr., w.sorted, quartz; no odor.			4-6-10	18
4.5				5-5-5	18
7.5	SILTY CLAY - Gray-tan to gray-brown, sl.plastic.	75.0		2-6-14	18
11.5	SANDY CLAY - Tan-gray, stiff mod.plastic, minor organic sand seams; no odor.			4-6-7	18
14.5	SAND - Lt.tan-gray, f.gr. w.sorted, quartz; no odor.	70.0		14-12-7	18
16.0					
18.0	PHOSPHATIC SAND - Med.tan-gray, coarse gr., poor.sort., sl.clayey.	65.0		3-5-8	18
	CLAY - Green, v.stiff, plast. sl.odor.	60.0			
	SILTY SANDY CLAY - Mottled orange and gray-green, very stiff, sl.plastic, minor sand seams; no odor.	55.0			
		50.0			
		45.0			
	BORING TERMINATED AT 18.0 FEET.				

JOB NUMBER 84056-002
 BORING NUMBER MW-5
 DATE 7-28-87

DEPTH
(FT.)

ELEVATION
(FT.)

PENETRATION
(BLOWS/FT.)

BLOWS PER REC
SIX IN. (IN.

0 10 20 30 50

[illegible]

64056-002
MW-6
7-28-87

TEST BORING RECORD

DEPTH (FT.)	DESCRIPTION	ELEVATION (FT.)	PENETRATION (BLOWS/FT.)					BLOWS PER SIX IN.	REC (IN.)
			0	10	20	30	50		
0.0	SAND - Tan-gray to brown-tan, f.gr., w. sorted, quartz; some organic silt; no odor.	79.0						6-6-6	18
6.0		74.0						8-13-15	18
12.0	SAND - Lt. tan-gray, med. gr., mod. w. sorted, quartz; clayey in part; no odor.	69.0						4-10-20	18
15.0		64.0							
21.0	SAND and SANDY CLAY - Lt. gray-tan sand; green, soft sandy clay.	59.0							
		54.0							
		49.0							
		44.0							
	BORING TERMINATED AT 21.0 FEET.								

JOB NUMBER 84056-002
 BORING NUMBER MW-7
 DATE 7-28-87

TYPE II MONITORING WELL INSTALLATION RECORD

JOB NAME Hardee County Landfill JOB NUMBER 84056-002
 BORING/WELL NUMBER MW-4 DATE INSTALLED 7/29/87
 LOCATION Hardee County Landfill
 DRILLING CONTRACTOR Law Engineering DRILLING METHOD Hollow Stem Auger
 BOREHOLE DIAMETER 8" LAW FIELD REPRESENTATIVE J. McAllister
 ELEVATION OF MEASURING POINT 87.16 EST SURVEYED ✓
 LOCK KEY CODE/COMBINATION DATE DEVELOPED 7/29/87

STEEL PROTECTIVE COVER
WITH LOCKING CAP

GROUND SURFACE

TOP OF CASING
(HEIGHT TO MP)

STICKUP: 3.30'

DEPTH TO TOP OF
SAND PACK 4.2'

CEMENT SEAL

DEPTH TO TOP OF
SCREEN 6.7'

TOP OF SCREEN

SCREEN SLOT
SIZE .010 INCH

SAND PACK

CASING AND SCREEN
ARE 2 INCH DIAMETER
TRI-LOC MFG. PVC

STABILIZED WATER
LEVEL UPON COMPLETION

7.26 FT. BELOW
MEASURING POINT
DATE MEAS: 7/29/87
TIME MEAS: 0935 (24H.)

PRODUCT NOTED? Y(N)

PRODUCT THICKNESS:

MEASURED BY: J. McAllister

DEPTH TO BOTTOM
OF WELL 18.9'

BOTTOM OF WELL
BOTTOM OF BOREHOLE



TYPE II MONITORING WELL INSTALLATION

RECORD

JOB NAME Hardee County Landfill JOB NUMBER 84056-002
 BORING/WELL NUMBER MW-5 DATE INSTALLED 7/28/87
 LOCATION Hardee County Landfill
 DRILLING CONTRACTOR Law Engineering DRILLING METHOD Hollow Stem Auger
 BOREHOLE DIAMETER 8" LAW FIELD REPRESENTATIVE J. McAllister
 ELEVATION OF MEASURING POINT 88.76 EST SURVEYED ✓
 LOCK KEY CODE/COMBINATION DATE DEVELOPED 7/28/87

STEEL PROTECTIVE COVER
WITH LOCKING CAP

TOP OF CASING
(HEIGHT TO MP)

GROUND SURFACE

STICKUP: 2.95'

DEPTH TO TOP OF
SAND PACK 4.5'

CEMENT SEAL

DEPTH TO TOP OF
SCREEN 7.0'

TOP OF SCREEN

SCREEN SLOT
SIZE .010 INCH

SAND PACK

CASING AND SCREEN
ARE 2 INCH DIAMETER
TRI-LOC MFG. PVC

STABILIZED WATER
LEVEL UPON COMPLETION

10.53 FT. BELOW

MEASURING POINT

DATE MEAS: 7/29/87

TIME MEAS: 12:05 (24H.)

PRODUCT NOTED? Y(N)

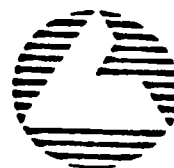
PRODUCT THICKNESS:

MEASURED BY: J. McAllister

DEPTH TO BOTTOM
OF WELL 18.1'

BOTTOM OF WELL
BOTTOM OF BOREHOLE

SEABURN AND ROBERTSON
a division of Law Environmental, Inc.



TYPE II MONITORING WELL INSTALLATION

RECORD

JOB NAME Hardee County Landfill JOB NUMBER 84056-002
 BORING/WELL NUMBER MW-6 DATE INSTALLED 7/28/87
 LOCATION Hardee County Landfill
 DRILLING CONTRACTOR Law Engineering DRILLING METHOD Hollow Stem Auger
 BOREHOLE DIAMETER 8" LAW FIELD REPRESENTATIVE J. McAllister
 ELEVATION OF MEASURING POINT 87.94 EST SURVEYED ✓
 LOCK KEY CODE/COMBINATION DATE DEVELOPED 7/28/87

STEEL PROTECTIVE COVER
WITH LOCKING CAP

TOP OF CASING
(HEIGHT TO MP)

GROUND SURFACE

STICKUP: 3.45

DEPTH TO TOP OF
SAND PACK 7.0'

CEMENT SEAL

DEPTH TO TOP OF
SCREEN 10.0'

TOP OF SCREEN

SCREEN SLOT
SIZE .010 INCH

SAND PACK

CASING AND SCREEN
ARE 2 INCH DIAMETER
TRI-LOC MFG. PVC

STABILIZED WATER
LEVEL UPON COMPLETION

10.67 FT. BELOW
MEASURING POINT
DATE MEAS: 7/29/87
TIME MEAS: 1256 (24H.)

PRODUCT NOTED? Y/N
PRODUCT THICKNESS:
MEASURED BY: J. McAllister

DEPTH TO BOTTOM
OF WELL 21.0'

BOTTOM OF WELL
BOTTOM OF BOREHOLE

SEABURN AND ROBERTSON
a division of Law Environmental, Inc.



TYPE II MONITORING WELL INSTALLATION
RECORD

JOB NAME Hardee County Landfill JOB NUMBER 84056-002
BORING/WELL NUMBER MW-7 DATE INSTALLED 7/28/87
LOCATION Hardee County Landfill
DRILLING CONTRACTOR Law Engineering DRILLING METHOD Hollow Stem Auger
BOREHOLE DIAMETER 8" LAW FIELD REPRESENTATIVE J. McAllister
ELEVATION OF MEASURING POINT 87.51' EST SURVEYED ✓
LOCK KEY CODE/COMBINATION DATE DEVELOPED 7/28/87

STEEL PROTECTIVE COVER
WITH LOCKING CAP

GROUND SURFACE

TOP OF CASING
(HEIGHT TO MP)

STICKUP: 3.16'

DEPTH TO TOP OF
SAND PACK 6.6'

CEMENT SEAL

DEPTH TO TOP OF
SCREEN 9.6'

TOP OF SCREEN

SCREEN SLOT
SIZE .010 INCH

SAND PACK

CASING AND SCREEN
ARE 2 INCH DIAMETER
TRI-LOC MFG. PVC

STABILIZED WATER
LEVEL UPON COMPLETION
12.49 FT. BELOW

MEASURING POINT

DATE MEAS: 7/29/87

TIME MEAS: 9.46 (24H.)

PRODUCT NOTED? Y(N)

PRODUCT THICKNESS:

MEASURED BY: J. McAllister

DEPTH TO BOTTOM
OF WELL 21.0'

BOTTOM OF WELL
BOTTOM OF BOREHOLE

SEABURN AND ROBERTSON
a division of Law Environmental, Inc.



Please complete in black ink or type

County's Name Hardee County

Owner's Name Hardee County
425610 30 MW-4

Permit Number: 435610-20 MW-4

Permit Number: 45561-20
 Herman Langle 8/3/87
 Well Contractor's Signature Completion Date

license No. 2825

**SURFACE CASING, CASING
AND LINER MATERIAL:**

Types	Diam. (In.)	From (Ft.)	To (Ft.)
PVC	2"	0	22
Neat Cement: No. of Bags		From (Ft.)	To (Ft.)
3		10	0

IRON: ___ ppm SULFATES: ___ ppm CHLORIDES: ___ ppm

FINISH: Screen: 10 (Ft.) Open Hole: _____ (Ft.)

WELL LOCATION

____ $\frac{1}{4}$ ____ $\frac{1}{4}$ ____ $\frac{1}{4}$ of Section 35

33
S
25
E
 Township (N-S) Range (E-W)

Latitude

--	--

--	--

--	--

 N

 Deg. Min. Sec.

Longitude

--	--

--	--

--	--

 W } Optional may be required

Locate in Section

DRILL METHOD

DRILL METHOD
☒ Rotary ☐ Cable Tool ☐ Jet ☒ Auger Other _____

Measured Static Water Level _____ + _____ = _____ Ft.

Measured Pumping Water Level _____ + _____ = _____ Ft.

After _____ Hours At _____ G.P.M.

Measuring Pt. (Describe): GL

Which is NA Ft. ☐ Above ☐ Below Land Surface

[illegible]

Driller's Name R. Swint

please complete in black ink or type

Owner's Name Hardee County

Owner's Name Hardee County

Permit Number: 435611-20 MW-5

x Herman Lange 8/3/87
Water Well Contractor's Signature Completion Date

License No. 2825

☒ Rotary ☐ Cable Tool ☐ Jet ☒ Auger Other _____

Measured Static Water Level _____ + _____ - _____ Ft.

Measured Pumping Water Level _____ + _____ - _____ Ft.

After _____ Hours At _____ G.P.M.

Measuring Pt. (Describe): GL

Which is NA Ft. ☐ Above ☐ Below Land Surface

[illegible]

Driller's Name R. Swint

1/4 1/4 1/4 of Section 35

<div>33</div>	<div>S</div>	<div>25</div>	<div>E</div>	<div></div>	Locate in Section
Township	(N-S)	Range	(E-W)		
Latitude	<div></div>	<div></div>	<div></div>	N } Optional W } may be required	
	Deg.	Min.	Sec.		
Longitude	<div></div>	<div></div>	<div></div>		

License No. 2825

Driller's Name R. Swint

Please complete in black ink or type

WELL CONTRACTOR'S REPORT

Owner's Name Hardee County

Permit Number: 435613-20 MW-7

X Herman Lange 8/4/87

Water Well Contractor's Signature Completion Date

License No. 2825

Types	Diam. (In.)	From (Ft.)	To (Ft.)
PVC	2"	21.75	0
Neat Cement: No. of Bags		From (Ft.)	To (Ft.)
4		9	0

WELL LOCATION

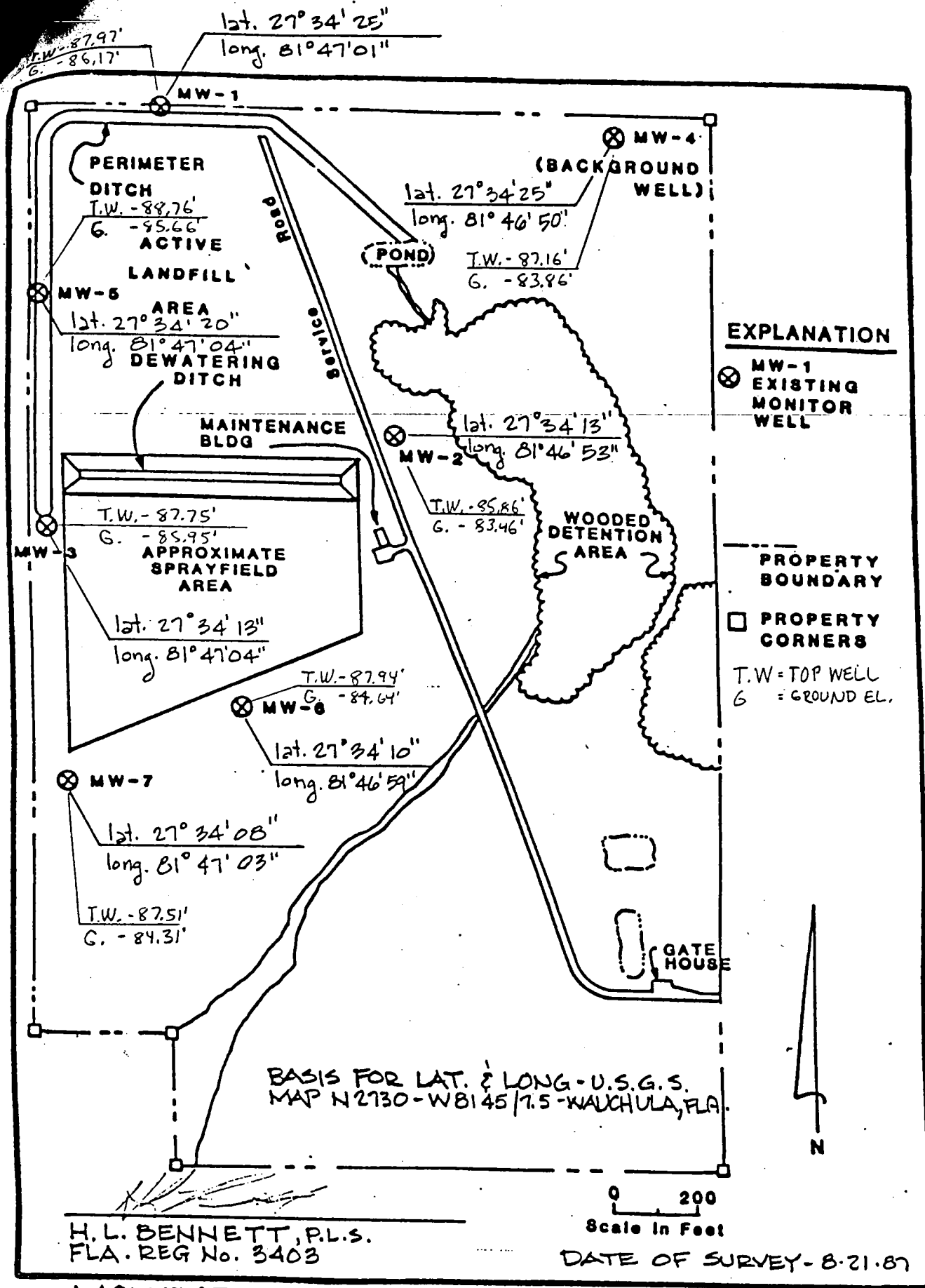
 $\frac{1}{4}$ $\frac{1}{4}$ $\frac{1}{4}$ of Section 35

<div>33</div>	<div>S</div>	<div>25</div>	<div>E</div>	<div></div>	Locate in Section
Township	(N-S)	Range	(E-W)		
Latitude	<div></div>	<div></div>	<div></div>	N } Optional W } may be required	
	Deg.	Min.	Sec.		
Longitude	<div></div>	<div></div>	<div></div>		

☐ Rotary ☐ Cable Tool ☐ Jet ☒ Auger Other _____
 Measured Static Water Level _____ + _____ - _____ Ft.
 Measured Pumping Water Level _____ + _____ - _____ Ft.
 After _____ Hours At _____ G.P.M.
 Measuring Pt. (Describe): GL
 Which is NA Ft. ☐ Above ☐ Below Land Surface

[illegible]

Dritter's Name R. Swint



MONITOR WELL LOCATION
REGIONAL SANITARY LANDFILL, HARDEE COUNTY, FLA.

REVISED 11-23-87