

July 30, 2014

Mr. F. Thomas Lubozynski, P.E. Waste & Air Resource Programs Administrator Florida Department of Environmental Protection, Central District 3319 Maguire Boulevard, Suite 232 Orlando, Florida 32803-3767

Subject: J.E.D. Solid Waste Management Facility

Abandonment and Installation Water Quality Monitoring Wells MW-17R, 24, 25, 26

Omni Waste of Osceola County, LLC.

1501 Omni Way St. Cloud, Florida

WACS Facility ID 89544

Dear Mr. Lubozynski:

Weibu, LLC (Weibu) was retained by Omni Waste of Osceola County, LLC (Omni) to prepare a summary report to document well plugging, abandonment and installation activities at the above referenced site. Omni is currently constructing an additional disposal area within the Phase IV and Cell 10 disposal areas. Abandonment of the MW-17, 18, 19 & 21 well clusters was necessary to facilitate the construction of Cell 10 and installation of MW-17R, MW-24, MW-25 & MW-26 was necessary to accommodate development of the Phase IV area.

Abandonment and subsequent construction of replacement wells including, monitor wells noted in the Monitoring Plan Implementation Schedule (MPIS) was overseen by Weibu, LLC. All construction and abandonment tasks were completed by National Environmental Technology, Inc. (NET) a Florida licensed drilling contractor.

I certify that the information contained in the accompanying Plugging/Abandonment Well Construction Report is accurate and provide pertinent information as it relates to activities completed at the facility. Furthermore, the information submitted is, to the best of my knowledge and belief, true, accurate and complete.

Should you have any questions or comments regarding activities completed as part of the plugging, abandonment and installation of select monitor well clusters, please contact Mr. Mike Kaiser at (904) 673-0446, michael.kaiser@progressivewaste.com or me at (813) 412-0003.

Sincerely,

Weibu, LLC

Donald Thompson, PG (1946)

Attachment

cc: Mike Kaiser, Progressive Waste Solutions

Joe Terry, Progressive Waste Solutions

Prepared for:



1099 Miller Drive Altamonte Springs, Florida 32701

Well Abandonment and Installation Phase IV & Cell 10 Development

Monitor Well Clusters MW-17, 18, 19, and 21 (abandonment) Monitor Well Clusters MW-17R, 24, 25, and 26 (installation)

> J.E.D. Solid Waste Management Facility 1501 Omni Way Osceola County, Florida

> > Prepared by:



12310 Vera Avenue Tampa, Florida, 33618

July 2014



TABLE OF CONTENTS

| 1. | INTRODUCTION | 1 |
|-----|--|---|
| 1.1 | Background | 1 |
| 2. | PLUGGING AND ABANDONMENT | 2 |
| 2.1 | Well Plugging Clusters MW-17, 18, 19, and 21 | 3 |
| 2.2 | Wellhead/Casing Removal | 3 |
| 3. | MW-17 R WELL CLUSTER REPLACEMENT DRILLING | 4 |
| 3.1 | MW-17 R Well Construction Specifications and Details | 4 |
| 3.2 | MW-17 R Surface Completions | 5 |
| 3.3 | MW-24, 25, and 26 Well Construction Specifications and Details | 5 |
| 3.4 | MW-24, 25, and 26 Surface Completions | 5 |
| 4. | MW-17 R, MW-24, 25, 26 (CLUSTER), WELL DEVELOPMENT. | 6 |
| 5. | REFERENCES | 7 |



LIST OF TABLES

- Type I/II Portland Cement Calcualtion Results. 1
- 2 Survey Elevation Data MW-17 R, 24, 25, and 26 Clusters

LIST OF FIGURES

Site Map 1

LIST OF APPENDICES

Appendix A. Permits Supporting Documentation

Appendix B. Soil Boring Logs MW-17R, MW-24, 25, and 26 (A, B)

Appendix C. Well Completion Forms/Details

Appendix D. Specific Purpose Survey

Appendix E. Well Construction and Development Logs



1. INTRODUCTION

Weibu, LLC (Weibu) has prepared this Abandonment and Installation Report on behalf of Omni Waste of Osceola County, LLC (Omni) to provide a summary of recent work to support planned construction activities as part of the planned Phase IV and Cell 10 disposal area of the facility. Plugging, abandonment and installation of select monitor well clusters site(s) were completed in general conformance with a permit modification issued by Florida Department of Environmental Protection (FDEP) Central District-Solid Waste Permitting (Department) January 23, 2014. Locations, designations and the proposed monitoring schedule is included in the revised Monitoring Plan Implementation Schedule (MPIS) dated January 23, 2014.

Section 1.0 of this report presents background information relative to the facility and objectives of the well plugging, abandonment and installation program. Section 2.0 provides a description of the plugging and abandonment methodology and regulatory requirements. Section 3.0 presents a summary of all well drilling and installation activities. Section 4.0 provides an overall description of initial well development and Section 5.0 provides a listing of select references.

1.1 Background

Omni has initiated construction as part of the permitted development activities for the Phase IV & Cell 10 areas of the landfill as noted in the modified permit. As with previous construction efforts within the Cell 9 disposal area, well site abandonment and eventual replacement wells were installed in temporary locations along the general alignment of the Phase 4 stormwater berm. Planned activities for the Phase IV and Cell 10 development included removal of the previous Phase III stormwater berm followed by the construction of a new Phase IV berm to control stormwater along the southern edge of the expansion area. As with the previous construction activities (i.e., Cells 8 and 9) the MW-17 cluster was determined to have been installed in an area that is impeding construction activities along the eastern boundary of the Cell 10 disposal area. The monitor well cluster was abandoned and eventually replaced as part of the construction/installation activities for the Phase IV area. The replacement well cluster was constructed to be consistent with previous efforts and as such, the wells were placed at the mandated horizontal spacing. The only deviation from previous work efforts was the elimination of the deep zone "C" designated monitor well as authorized by current permit conditions.

This report summarizes field activities associated with plugging, abandonment (i.e., MW-17, 18, 19, and 21 ABC wells) and installation for monitor well clusters MW-17R, MW-24, MW-25, and MW-26. **Figure 1** presents a site map showing the locations and designations of site monitor well clusters.



2. PLUGGING AND ABANDONMENT

Monitoring well clusters MW-17, 18, 19, and 21 (Zones A, B, and C) were plugged and abandoned on March 5, 2014. All plugging and abandonment (PA) work activities conformed to specific permitting and well construction guidelines noted in Chapter 62-532 and 40E-3.512 Florida Administrative Codes (FAC). Specific guidelines include;

40D-3.531 Abandoned Well Plugging.

- (1) The form entitled "State of Florida Permit Application to Construct, Repair, Modify or Abandon a Well," adopted by reference in Rule 40D-3.101, F.A.C., shall be submitted to the District and a Well Construction Permit shall be issued prior to the abandonment of any well, including an incomplete well.
- (2) All abandoned wells as defined by subsection 373.303(1), F.S., and subsection 40D-3.021(1), F.A.C., abandoned artesian wells as defined by subsection 373.203(1), F.S., and incomplete wells as defined by subsection 40D-3.021(17), F.A.C., shall be plugged in accordance with subsection (3) of this rule and Rule 40D-3.517, F.A.C., unless they can be repaired in accordance with this chapter.
- (3) All abandoned and incomplete wells shall be plugged by filling them from bottom to top with grout. The work shall be performed by a licensed water well contractor except for wells exempted under subsection 40D-3.051(1) and wells permitted to be constructed or abandoned pursuant to paragraph 40D-3.301(1)(a), F.A.C.
 - (a) Use of clean aggregate to bridge cavernous or lost circulation zones shall be allowed if measurements indicate loss of grout and the borehole or screened portion does not connect two (2) or more aquifers of differing water quality. Prior approval to use aggregate or other material must be obtained from the District.
 - (b) Obstructions shall be cleared from all wells prior to plugging.
- (4) The contractor must notify the District at least 24 hours in advance of a well abandonment. A District representative must be on site to observe the abandonment procedure unless the following criteria are met and the District authorizes the contractor to proceed without a District representative on site:
 - (a) The contractor is currently in compliance with all other District rules;
 - (b) The contractor has not violated any conditions of his license or any District rule within the past two years;
 - (c) The District has observed the abandonment of at least ten prior wells by the requesting contractor; and
- (d) A District representative cannot be at the well site at the time of abandonment. (5) The "Well Grouting/Abandonment Form," Form No. LEG-R.041.00 (4/09) incorporated herein by reference, will be used to document the well abandonment. Copies of this form can be obtained at the District's website at www.watermatters.org or from District offices.

Permits and supporting documentation are presented in **Appendix A**.

Monitoring well clusters MW-17, MW-18, MW-19, and MW-21 were abandoned to accommodate construction activities within the vicinity of the Cell 10 disposal area and



along the interim Phase III stormwater berm. The overall physical location of the well clusters (installed during prior construction and landfill phasing activities) conflicted with either planned expansion of stormwater management systems or encroached within the perimeter service road.

2.1 Well Plugging Clusters MW-17, 18, 19, and 21

Initial well plugging activities at the facility included the removal of the above ground protective covers and individual concrete well pads. Once the polyvinyl-chloride (PVC) casing was exposed, the well casing was cut-off to extend approximately 1.5-feet above land surface (als). NET was then directed to prepare for cementing operations to seal the well, screen and filter pack using neat Type I/II portland cement. No additives or cement modifiers were utilized during any of the plugging operations.

Theoretical cement volumes were calculated based on the total internal volume of the PVC well and screen. In addition, a theoretical fill-volume was estimated based on the filter pack/well screen interval. Cement volumes were estimated based on;

$$C_{vol} = (W_c * W_{Total}) + (n_{Filt} * L_{Filt} * B_c)$$

where;

C_{vol} = cement volume required to backplug the well including the well-screen filter pack;

 W_c = well capacity gallons-per-ft (gal/ft) (0.1632 gal/ft [2" PVC casing]);

 W_{Total} = well length total includes casing and screen (ft);

 n_{Filt} = porosity of the filter pack (0.20);

 L_{Filt} = length of the well filter pack (ft);

B_c = borehole capacity gallons-per-ft (gal/ft) (1.02 gal/ft [5" borehole]);

A summary of theoretical cement volumes required to backplug the wells is shown on **Table 1**.

2.2 Wellhead/Casing Removal

Subsequent to the completion of all cementing and back-plugging operations, Progressive personal excavated and removed approximately 6-ft of the cemented well casing. The final step of the abandonment program was implemented to ensure that any potential obstructions (i.e., the abandoned well casing) would not interfere with remaining grading and liner operations. Excavation of the upper section of the abandoned well casing completed June 26, 2013 using a tracked excavator. The excavation and surrounding area was restored as part of ongoing construction operations.



3. MW-17 R WELL CLUSTER REPLACEMENT DRILLING

Several drilling methods are available for use in creating a borehole for well installation. These methods include hollow stem, air rotary, mud rotary, and cable tool, among others. The drilling method selected will be based on the physical properties of the subsurface materials and as a result, it is not uncommon to adapt a hybridized approach to constructing wells. Based on previous drilling operations and experience, water was introduced into the borehole while advancing auger flights to the targeted monitoring zone depths.

Both monitor well zones A & B were constructed using hollow-stem-auger (HSA). HSA uses continuous flight hollow stem auger with a bit on the bottom to drill and maintain an open borehole. The continuous flight auger drives the drill cuttings to the surface as drilling progresses. The walls of the auger minimize the amount of unconsolidated materials entering into the space inside the casing. Intact soil samples are collected by pounding a sampler ahead of the auger. The well casing, filter pack and seal are installed inside the auger. The auger is removed slightly ahead of backfilling as filter pack and grout are added.

Initial well construction activities for the MW-17 AR well was completed using standard HSA drilling techniques. A hybridized approach was adopted to complete well construction activities for the MW-17 BR monitor well. Water was added to the HSA flights while advancing drill tooling within the borehole. The intent of hydraulically loading the HSA flights was to increase the hydrostatic pressure within the annulus to exclude silty fine materials from sloughing into the annulus and borehole. A continuous drilling log describing lithologic materials encountered during drilling for the A&B zone wells are presented in **Appendix B**.

3 1 MW-17 R Well Construction Specifications and Details

All drilling and well completion activities were completed to ensure as well as maintain conformance with the existing disposal cell monitoring network. The wells were constructed to monitor zones that are consistent with the distribution of monitoring intervals both horizontally and vertically. MW-17 R monitoring intervals included:

- A-Zone the discrete interval for the surficial-aquifer-system (SAS) at a depth of approximately 10 to 20-ft below land surface; and,
- B-Zone SAS water column depth of approximately 34 to 44-ft bls.

Well completion forms and specific construction details are presented in **Appendix C**.

A specific purpose survey was completed July, 2014. Replacement well information is summarized on **Table 2** and the survey is provided in **Appendix D**.

Monitor well components consisted of factory-sealed commercially available PVC. Well riser and casing connections consisted of flush-threaded joints with a secondary



rubberized o-ring seal. PVC materials (packing) were clearly marked with American Society for Testing Materials (ASTM) Standard F-480-94 standards and National Science Foundation (NSF) International Standard Number 14-1990.

3.2 MW-17 R Surface Completions

Surface completions for the replacement cluster were constructed to be consistent with the current monitoring network. Individual wellheads received a 6-in anodized aluminum cover with a vented and locking protective cap. In addition a common monolithic concrete pad was placed around all well locations and then a concrete bulkhead was placed adjacent to the edge of the perimeter berm and elevated roadway. Typical construction details for the protective headwall/bulkhead assemblies have been provided in previous submittals.

3.3 MW-24, 25, and 26 Well Construction Specifications and Details

All drilling and well completion activities were completed to ensure as well as maintain conformance with the existing disposal cell monitoring network. The wells were constructed to monitor zones that are consistent with the distribution of monitoring intervals both horizontally and vertically. Monitoring intervals included:

- A-Zone the discrete interval for the surficial-aquifer-system (SAS) at a depth of approximately 10 to 20-ft below land surface; and,
- B-Zone SAS water column depth of approximately 34 to 44-ft bls.

Well completion forms and specific construction details are presented in **Appendix C**.

As with the MW-17 R A&B survey specific elevation data is shown on **Table 2** and is provided in **Appendix D**.

3.4 MW-24, 25, and 26 Surface Completions

Individual wellheads received a 6-in anodized aluminum cover with a vented and locking protective cap. Typical construction details for the protective wellhead assemblies have been provided in previous submittals.



4. MW-17 R, MW-24, 25, 26 (CLUSTER), WELL DEVELOPMENT

Well development of the MW-17 R replacement well and newly completed clusters was conducted June 19 and July 1 and 7, 2014. As with previous well development activities, an initial over-pumping effort was completed as a means of pre-conditioning individual well filter packs. Over-pumping mechanical surging and multiple development events will likely be required due to the presence of a significant percentage of silt sized particles within formation materials.

Development activities began with slowly advancing a submersible electric pump into the screen interval. The pump was advanced downhole to the sediment trap/sump to remove any sand particles introduced during initial well construction. Mechanical surging of the screen interval was repeated within all of the well screens; however, the results of the development program vary considerably with final turbidity readings ranging from 2 Nephelometric Turbidity Units (NTU) to 402 NTU. The variability in turbidity is consistent with previous monitoring well installation activities and as such, turbidity levels will likely decrease during subsequent well sampling and monitoring events. **Appendix E** contains well development records subsequent to construction activities.



5. REFERENCES

ASTM F480-12 Standard Specification for Thermoplastic Well Casing Pipe and Couplings Made in Standard Dimension Ratios (SDR), SCH 40 and SCH 80

Florida Department of Environmental Protection (FDEP) Standard Operating Procedures FS 2200 Ground Water Sampling (2008)

National Sanitation Foundation NSF Standard 14 (1990)

St. Johns River Water Management District (SJRWMD) Chapter 40C-3

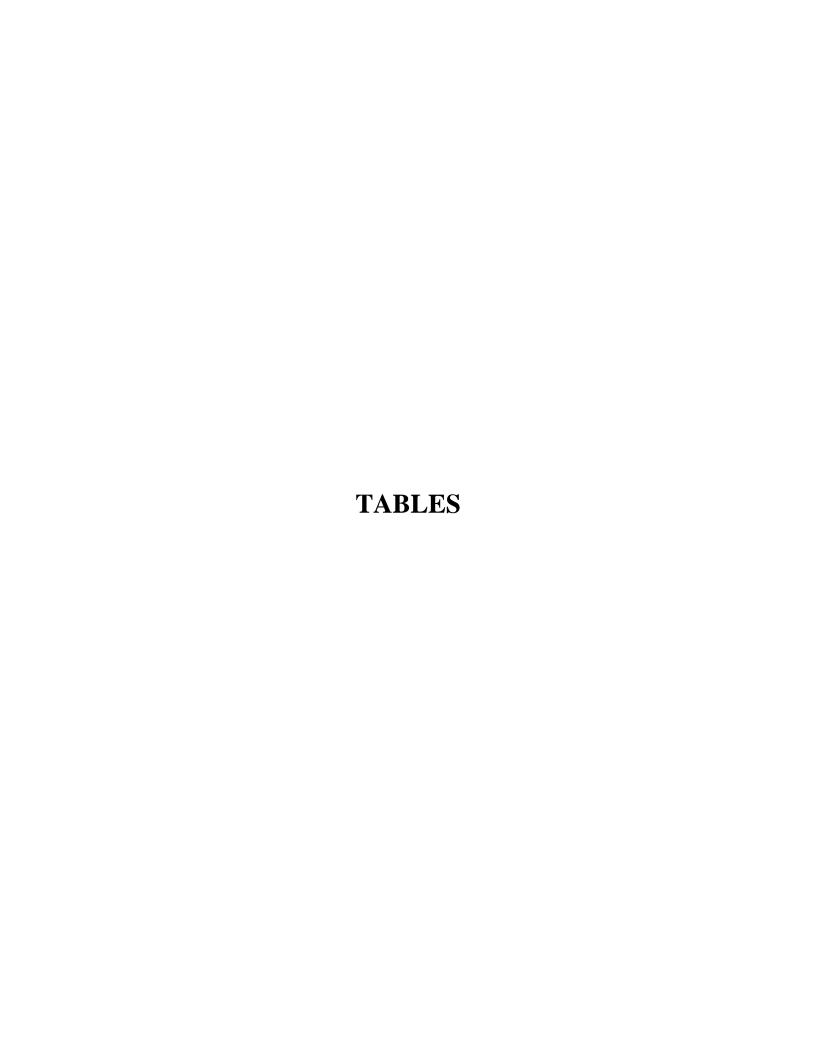


Table 1. Type I/II Portland Cement Calculation Results.

| Location | Well Length ^{/a} | Filter Pack Length ^{/b} | Theoretical Volume ^{/c} | Type I/II Portland Cement ^{/d} |
|----------|---------------------------|----------------------------------|----------------------------------|---|
| | | (feet) | (gallons) | (94 pounds-per-sack) |
| MW-17 A | 20 | 10 | 5.30 | 1.06 |
| MW-17 B | 40 | 10 | 8.57 | 1.71 |
| MW-17 C | 70 | 10 | 13.46 | 2.69 |
| MW-18 A | 20 | 10 | 5.30 | 1.06 |
| MW-18 B | 40 | 10 | 8.57 | 1.71 |
| MW-18 C | 70 | 10 | 13.46 | 2.69 |
| MW-19 A | 20 | 10 | 5.30 | 1.06 |
| MW-19 B | 40 | 10 | 8.57 | 1.71 |
| MW-19 C | 70 | 10 | 13.46 | 2.69 |
| MW-21 A | 20 | 10 | 5.30 | 1.06 |
| MW-21 B | 40 | 10 | 8.57 | 1.71 |
| MW-21 C | 70 | 10 | 13.46 | 2.69 |

notes:

- a. Total casing and screen length.
- b. Approximate assume a nominal Length of the screen interval.
- c. Portland cement volume required to backplug/abandon the well casing, screen interval, and filter pack.
- d. Total number sacks required Type I/II Portland Cement. Assume an ideal mix ratio of 6:1 to yield 10 gallons cement slurry.

Cement Volume = (0.1632 gallons/ft * Well Length) + (0.3 * Filter Pack Length * 1.47 gallons/ft)

assumptions:

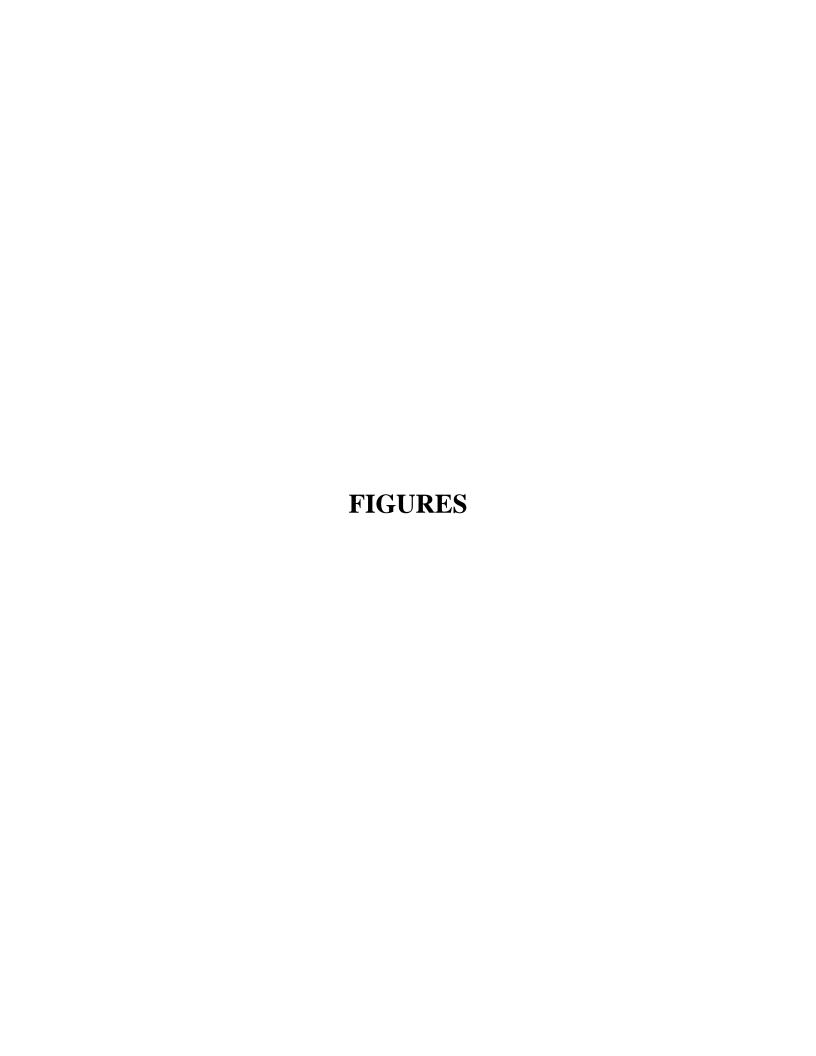
0.1632 capacity of 2" pipe

1.02 capacity of 5-in borehole

0.2 porosity of filter pack

Table 2. Survey Elevation Data MW-17R, MW-24, MW-25, AND MW-26 Clusters.

| Designation | Latitude | Longitude | Northing | Easting | Protective Casing Elevation | TOC (PVC) | Ground Elevation |
|-------------------|--------------|--------------|------------|-----------|--------------------------------|-----------|------------------|
| | | | | | | NGVD1929 | |
| MW-17 AR | 28° 03'42.3" | 81° 05'35.2" | 1355161.64 | 626134.43 | 95.09 | 94.84 | 91.9 |
| X-Mark (MW-17 AR) | 28° 03'42.3" | 81° 05'35.2" | 1355161.92 | 626134.73 | | | 91.97 |
| MW-17 BR | 28° 03'42.2" | 81° 05'35.2" | 1355159.94 | 626137.50 | 94.93 | 94.78 | 91.9 |
| X-Mark (MW-17 BR) | 28° 03'42.3" | 81° 05'35.2" | 1355160.34 | 626138.07 | | | 91.97 |
| MW-24A | 28° 03'26.5" | 81° 05'58.5" | 1353576.17 | 624060.36 | 87.29 | 86.99 | 83.9 |
| X-Mark (MW-24A) | 28° 03'26.5" | 81° 05'58.4" | 1353575.67 | 624061.00 | | | 84.34 |
| MW-24B | 28° 03'26.5" | 81° 05'58.5" | 1353575.75 | 624053.53 | 87.27 | 87.05 | 84 |
| X-Mark (MW-24B) | 28° 03'26.5" | 81° 05'58.4" | 1353575.23 | 624054.04 | | | 84.24 |
| MW-25A | 28° 03'26.6" | 81° 05'42.6" | 1353578.36 | 625469.63 | 87.14 | 86.99 | 84 |
| X-Mark (MW-25A) | 28° 03'26.6" | 81° 05'42.6" | 1353577.85 | 625470.41 | | | 84.34 |
| MW-25B | 28° 03'26.6" | 81° 05'42.7" | 1353576.16 | 625463.45 | 86.87 | 86.67 | 84 |
| X-Mark (MW-25B) | 28° 03'26.6" | 81° 05'42.7" | 1353575.67 | 625464.29 | | | 84.34 |
| MW-26A | 28° 03'26.9" | 81° 05'25.9" | 1353614.23 | 626973.10 | 87.21 | 87.06 | 83.9 |
| X-Mark (MW-26A) | 28° 03'26.9" | 81° 05'25.9" | 1353614.09 | 626972.40 | | | 84.27 |
| MW-26B | 28° 03'27.0" | 81° 05'25.9" | 1353615.78 | 626967.44 | 87.21 | 86.83 | 83.8 |
| X-Mark (MW-26B) | 28° 03'27.0" | 81° 05'25.9" | 1353615.51 | 626966.79 | | | 84.27 |





Legend

- Plugged and Abandoned Monitor Well Clusters (A,B,C Zones)
- Monitor Well Cluster Locations/Phase IV Construction
- Monitor Well Cluster Locations

Aerial Images Acquired from LABINS (2011)
WACS FACILITY ID 89544
Monitoring well clusters MW-16 and MW-20 were abandoned; however, a replacement cluster
MW-16 was re-installed approximately
8-ft north and east from the previous location.

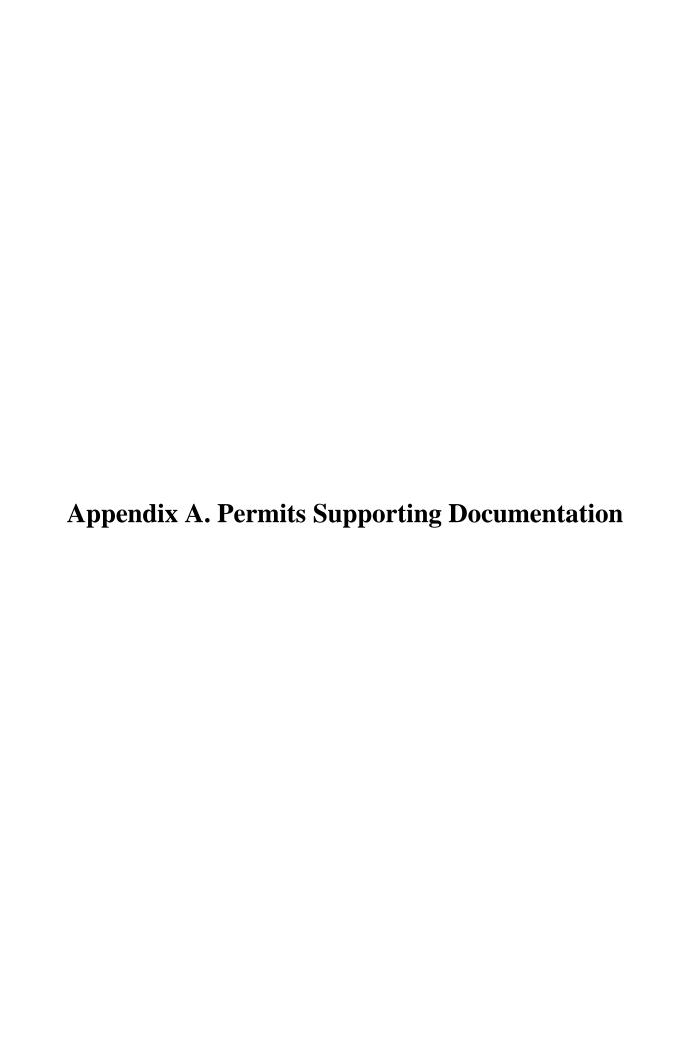
1 in = 500 ft

Site Well Locations and Designations
PROGRESSIVE WASTE SOLUTIONS
J.E.D. SOLID WASTE DISPOSAL FACILITY 1501 OMNI WAY ST. CLOUD, FLORIDA



Figure

Tampa, Florida



STATE OF FLORIDA WELL COMPLETION REPORT



☐ Southwest ☐ Northwest

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

☐St. Johns River ☐South Florida

Suwannee River

DEP

Delegated Authority (If Applicable) MW-17RA MW-24A

Date Stamp

| | 0-11/24, MO-214, 234, 20X | Official Use Only |
|---|---|---|
| 1.*Permit Number /541571 *CUP/WUP Number | *DID Number62-524 De | elineation No. |
| 2.*Number of permitted wells constructed, repaired, or abandoned | *Number of permitted wells not constructed, repa | ired, or abandoned 💋 |
| 3. Owner's Name One; waste Of Osceola Con | wty.*Completion Date 6-20-201/5. Florida Un | ique ID |
| 6. JEO Solid Waste Facility 150 *Well Location - Address, Road Name or Number, City, ZIP | of omi way, Sticloud, | FL |
| 7.*County Oscola *Section Lan | d Grant*Township 2 | -85 *Range32E |
| 8. Latitude Longitude | | |
| 9. Data Obtained From:GPSMapSurvey | Datum:NAD 27NAD 83 | WGS 84 |
| 10.*Type of Work: Construction Repair Modification 11.*Specify Intended Use(s) of Well(s): Domestic Landscape Irrigati Bottled Water Supply Recreation Area In Public Water Supply (Limited Use/DOH) Public Water Supply (Community or Non-Community/DEP) | on Agricultural Irrigation Site Livestock Mon rrigation Nursery Irrigation Test Commercial/Industrial Eart Golf Course Irrigation HVA | n-Coupled Geothermal C Supply |
| Class I Injection Class V Injection:RechargeCommercial/Industrial Disposa Remediation:RecoveryAir SpargeOther (Describe)Other (Describe) | alAquifer Storage and Recovery Drainage | C Return |
| 12.*Drill Method:AugerCable ToolRotary | Combination (Two or More Methods) Jette | ed Sonic |
| Horizontal Drilling Hydraulic Poi 13.*Measured Static Water Level ft. Measured Pumping 14.*Measuring Point (Describe) Grand Serfece White 15.*Casing Material: Black Steel Galvanized | Water Level 6 ft. After 6 Hours at this 6 ft. Above Below Land Surface Stainless Steel Not Cased Other | Flowing: Yes No |
| 16.*Total Well Depth 20 ft. Cased Depth 16 ft. *Open Hole: | From MTo ft. *Screen: From 10 To 2 | 0 ft. Slot Size 006 |
| From ft. To ft. No. of Bags Seal Material From ft. To ft. No. of Bags Seal Material From ft. To ft. No. of Bags Seal Material | (Check One): Neat Cement Bentonite | Other Other Other Other Other |
| 18.*Surface Casing Diameter and Depth: Dia in. From ft. To ft. No. of Bags Dia in. From ft. To ft. No. of Bags | Seal Material (Check One):Neat CementBer | atonite Other |
| 19.*Primary Casing Diameter and Depth: Dia in. From ft. To ft. No. of Bags Dia in. From ft. To ft. No. of Bags Dia in. From ft. To ft. No. of Bags Dia in. From ft. To ft. No. of Bags | Seal Material (Check One): Neat Cement Ber | ntonite Other |
| 20.*Liner Casing Diameter and Depth: Dia in. From ft. To ft. No. of Bags Dia in. From ft. To ft. No. of Bags Dia in. From ft. To ft. No. of Bags | Seal Material (Check One): Neat Cement Ber Seal Material (Check One): Neat Cement Ber | ntonite Other ntonite Other ntonite Other |
| 21.*Tolescope Casing Diameter and Depth: Dia 2 in. From 6 ft. To 6t. No. of Bags Dia in. From ft. To ft. No. of Bags Dia in. From ft. To ft. No. of Bags | Seal Material (Check One): Neat Cement Ber | ntonite Other Sauch ntonite Other ntonite Other |
| 22. Pump Type (If Known): CentrifugalJetSubmersibleTurbine HorsepowerPump Capacity (GPM) Pump Depthft. Intake Depthft. 24. Water Well Contractor: | Laboratory TestField Test K | |
| *Contractor Name Ross Chimander *License Number | er 11093 E-mail Address Tangaba | UST. COM |
| *Contractor's Signature | er 11093 E-mail Address Taypaba | Tennant |

SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT 2379 BROAD STREET, BROOKSVILLE, FL 34604-6899

PHONE: (352) 796-7211 or (800) 423-1476 WWW.SWFWMD.STATE.FL.US

ST. JOHNS RIVER WATER MANAGEMENT DISTRICT 4049 REID STREET, PALATKA, FL 32178-1429

PHONE: (386) 329-4500 WWW.SJRWMD.COM

NORTHWEST FLORIDA WATER MANAGEMENT DISTRICT

152 WATER MANAGEMENT DR., HAVANA, FL 32333-4712

(U.S. Highway 90, 10 miles west of Tallahassee) PHONE: (850) 539-5999

WWW.NWFWMD.STATE.FL.US

SOUTH FLORIDA WATER MANAGEMENT DISTRICT

P.O. BOX 24680 3301 GUN CLUB ROAD WEST PALM BEACH, FL 33416-4680

PHONE: (561) 686-8800 WWW.SFWMD.GOV

SUWANNEE RIVER WATER MANAGEMENT DISTRICT

9225 CR 49

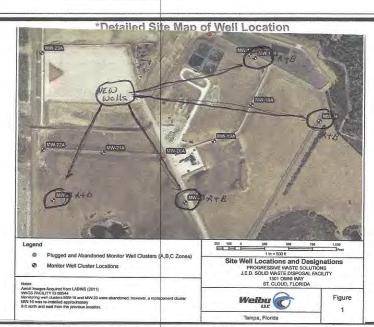
LIVE OAK, FL 32060

PHONE: (386) 362-1001 or (800) 226-1066 (Florida only)

WWW.MYSUWANNEERIVER.COM

| M=Medium, an From ╭╮ | ft. | To 20 | ft. | Color Dark Brown | Grain Size (F.M, C) | Material S: Ity Sard |
|-------------------------|-----|-------|------|------------------|----------------------|----------------------|
| From | ft. | To | ft. | Color | Grain Size (F, M, C) | Material |
| From | ft. | To | ft. | Color | Grain Size (F, M, C) | Material |
| From | ft. | To | ft. | Color | Grain Size (F, M, C) | Material |
| From | ft. | To | ft. | Color | Grain Size (F, M, C) | Material |
| From | ft. | To | ft. | Color | Grain Size (F, M, C) | Material |
| From | ft. | To | ft. | Color | Grain Size (F, M, C) | Material |
| From | ft. | To | ft. | Color | Grain Size (F, M, C) | Material |
| From | ft. | To | ft. | Color | Grain Size (F, M, C) | Material |
| From | ft. | To | ft. | Color | Grain Size (F, M, C) | Material |
| -rom | ft. | To | ft. | Color | Grain Size (F, M, C) | Material |
| -rom | ft. | To | ft. | Color | Grain Size (F, M, C) | Material |
| -rom | ft. | To | ft. | Color | Grain Size (F, M, C) | Material |
| From | ft. | To | ft. | Color | Grain Size (F, M, C) | Material |
| From | ft. | To | ft. | Color | Grain Size (F, M, C) | Material |
| -rom | ft. | To | ft. | Color | Grain Size (F, M, C) | Material |
| -rom_ | ft. | To | ft. | Color | Grain Size (F, M, C) | Material |
| -rom | ft. | To | ft. | Color | Grain Size (F, M, C) | Material |
| From_ | ft. | To | ft. | Color | Grain Size (F, M, C) | Material |
| From | ft. | То | ft. | Color | Grain Size (F, M, C) | Material |
| From | ft. | To | ft. | Color | Grain Size (F, M, C) | Material |
| rom | ft. | То | ft. | Color | Grain Size (F, M, C) | Material |
| rom | ft. | То | ft. | Color | Grain Size (F, M, C) | Material |
| -rom | ft. | To | ft. | Color | Grain Size (F, M, C) | Material |
| -rom | ft. | To | _ft. | Color | Grain Size (F, M, C) | Material |
| rom | ft. | To | ft. | Color | Grain Size (F, M, C) | Material |

10 of 1006 statted sorteen MW-17RA, 248, 25/26A



49WP1541571



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

| ☐ Southwest ☐ Northwest ☐ St. Johns River | PLEASE FILL OUT ALL APPLICABLE FIELDS ("Denotes Required Fields Where Applicable) |
|---|--|
| - AL OCH HIS 1 61 A CT | |

South Florida

Suwannee River

DEP

Delegated Authority (If Applicable)

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

| Permit No | 16/5/19/19/19/19 | U |
|------------------------|-----------------------|---|
| Florida Unique ID | | |
| Permit Stipulations Re | quired (See Attached) | |
| | | |
| 52-524 Quad No | Delineation No. | - |

| 1 But have done to | 3903 Bellair Blad 713 |
|---|--|
| 1. Owner, Legal Name if Corporation "Address" | "City "City "State "ZIP "Telephone Number |
| 2. JEA Solid Waste Faullit | Telephone number |
| "Well Location - Address, Road Name or Number, City | 1501 BMNI WAY, ST. Cloud, FL |
| 3. 11 28 32 000 000 10 | 0 008 |
| "Parcel ID No. (PIN) or Alternate Key (Circle One) | Lot Block Unit |
| *Section or Land Grant *Township *Range *County | |
| 5. ROSS Chinander 1/193 | Subdivision Check if 62-524: Yes 1/No |
| vvater Well Contractor . *License Numb | er Telephone Number E-meil Address |
| 6. 1243 JESS Walden Rock | Dover & 3253 |
| *Water Well Contractor's Address | City State ZIP |
| 7. *Type of Work:ConstructionRepairModification 8. *Number of Proposed Wells | |
| 9. *Specify Intended Use(s) of Well(s): | *Reason for Repair. Modification, or Abandonment Date Stamp |
| DomesticLandscape Irrigation | |
| Bottled Water Supply Recreation Area Irrigation | Agricultural IrrigationSite InvestigationLivestockMonitoring |
| Public Water Supply (Limited Use/DOH) | Nursery Irrigation Test |
| Public Water Supply (Community or Non-Community/DEP) | Commercial/Industrial Earth-Coupled Geothermal Golf Course Irrigation HVAC Supply |
| Class I Injection | HVAC Return |
| Class V Injection:RechargeCommercial/Industrial Dispo | salAquifer Storage and Recovery Drainage |
| Remediation:RecoveryAir SpargeOther (Describe) | |
| Other (Describe) | (Note: Not all types of wells are permitted by a given permitting authority) |
| 10. Distance from Septic System if ≤200 ft. N/6 11. Facility D | Description Land Fill 12 Estimated Start Date & 4.30% |
| it. Estimated Casing Depth | ft. *Primary Casing Diameter in. Open Hole: From white ft. |
| 14. Estimated Screen Interval: From 10 To > 0 ft. | |
| 15.*Primary Casing Material:Black SteelGalva | anized PVC Stainless Steel |
| Not CasedOthe | |
| 16. Secondary Casing: MA Telescope Casing Liner | Surface Casing Diameterin. |
| 17. Secondary Casing Material:Black SteelGalvaniz | ed MA PVC Stainless Steel Other |
| 18.*Method of Construction, Repair, or Abandonment: Augus | Cable Tool Jetted Rotary Sonic |
| Combination (Two or More Methods)Hand DriveHorizontal DrillingPlugged by Approved Method | Well Point Sand Point) Linder We Point (Diseast Point) |
| 19. Proposed Grouting Interval for the Primary, Secondary, and Add | |
| From Seal Material (Bentonite N | lest Cement Other) |
| From To Seal Material (Bentonite N | leat Cement Other) |
| From To Seal Material (Bentonite N | eat Cement Other |
| 20. Indicate total number of existing wells on site | List number of existing unused wells on site |
| 21. is this well or any existing well or water withdrawal on the owner's | contiguous property covered under a Consumptive/Water Use Permit (CUP/WUP) |
| or CUP/WUP Application?YesNo If yes, complete | te the following: CUP/WUP No District Well ID No. |
| 22. Latitude Longitude | |
| 23. Data Obtained From:Survey | Datum:NAD 27NAD 83WGS 84 |
| hereby certify that I will compty with the applicable rules of Title 40, Florida Administrative Code, and that a see permit or areficial rechange permit, if needed, has been or will be obtained prior to commencement of re- | rescurable des under Charles 373 Floreta Stati des la manufaia de manufación de manufación de la contra del contra de la contra del la con |
| abstitution. I Surber coeffy that all information provided in this applicable is accurate prior to Commencement of your exclusions approved from prior federal, making to local governments, it applicable, lagree to provide a well- combineous report to the Statence within 30 days gather completion of the contraction, repair, involvations, hasticons report to the Statence within 30 days gather completion of the contraction. | responsibilities as stated above. Owner comments to accommendation provided as occurring that there interested the treater of their |
| bendonment authorized by this permit, or the permit expiration, whichever occurs first. | to the well site during the construction, repair, modification, or abandonment authorized by this permit. |
| Ang (1100) | R-C- |
| Signature of Contractor "License No. | *Signature of Owner or Agent *Date |
| | The state of the s |
| Approval Granted By | Issue Date 6/2/14 Expiration Date Hydrologist Approval |
| ee Received S Received No. | Tryuroughst repproved tribals |
| nccapt No. | Check No. |
| PERMIT SHALL BE AVAILABLE AT THE WELL SITE DURING ALL CONSTR | ZED OFFICER OR REPRESENTATIVE OF THE WMD OR DELEGATED AUTHORITY. THE UCTION, REPAIR, MODIFICATION, OR ABANDONMENT ACTIVITIES. |

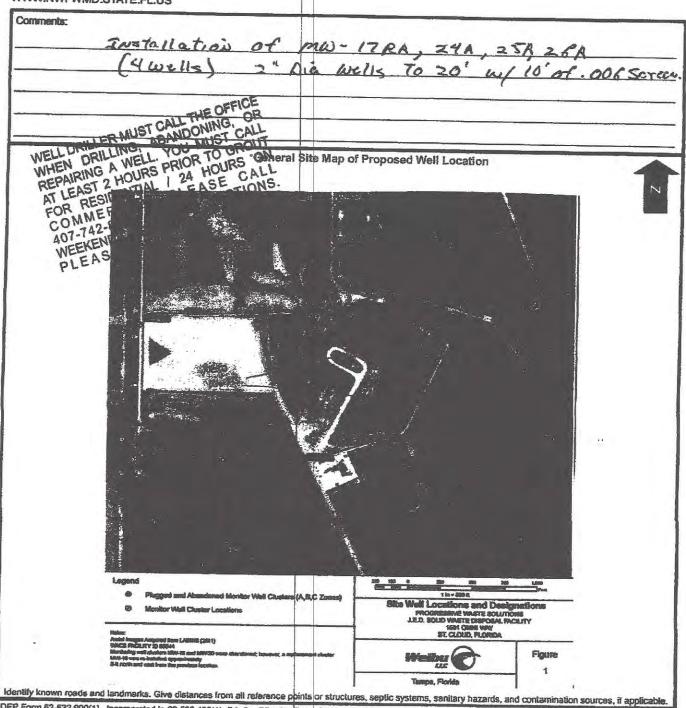
| Permit . | No. | | | |
|----------|-----|--|--|--|
| | | | | |

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

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

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

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



STATE OF FLORIDA WELL COMPLETION REPORT

□Southwest □Northwest

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

☐St. Johns River ☐ South Florida

☐Suwannee River DEP

Delegated Authority (If Applicable) MW-17RB (1well)

Date Stamp

| HEWP | Official Use Only |
|---|--|
| 1.*Permit Number /541572 *CUP/WUP Number | *DID Number62-524 Delineation No |
| 2.*Number of permitted wells constructed, repaired, or abandoned | *Number of permitted wells not constructed, repaired, or abandoned 💍 |
| | 2007. Completion Date 6-20-201/5. Florida Unique ID |
| | 501 Omi way, St. Cloud, FL |
| 7.*County Osceola *Section_11 | Land Grant*Township 285_*Range 32. |
| 8. Latitude Longitude | |
| 9. Data Obtained From:GPSiviapSurvey | Datum:NAD 27NAD 83WGS 84 |
| 10.*Type of Work:ConstructionRepairModification:RepairModification:RepairModification:RepairModification:Recreation | Livestock Nursery Irrigation Nursery Irrigation Commercial/Industrial Golf Course Irrigation HVAC Supply HVAC Return Desired Adulter Storage and Recovery |
| | |
| totaly | Combination (Two or More Methods)JettedSonic Point (Direct Push) Other |
| 13. Measured Static Water Level 6 ft. Measured Pumpir 14. Measuring Point (Describe) Gracul Screen W 15. Casing Material: Black Steel Galvanized | ng Water Level / 5 ft. After O. 7 Hours at 3 GPM |
| 17.*Abandonment: Other (Explain) | it. Screen, From 7 10 77 ft. Slot Size008 |
| Fromft. 10ft. No. of Bags Seal Mater Fromft. Toft. No. of Bags Seal Mater Fromft. Toft. No. of Bags Seal Mater Fromft. Toft. No. of Bags Seal Mater 18.*Surface Casing Diameter and Depth: Diain. Fromft. Toft. No. of Bags Diain. Fromft. Toft. No. of Bags | ial (Check One): Neat Cement Bentonite Other Seal Material (Check One): Neat Cement Bentonite Other Seal Material (Check One): Neat Cement Bentonite Other |
| 19. Primary Casing Diameter and Depth: Dia in. From of ft. To ft. No. of Bags Dia in. From ft. To ft. No. of Bags Dia in. From ft. To ft. No. of Bags Dia in. From ft. To ft. No. of Bags Dia in. From ft. To ft. No. of Bags Dia in. From ft. To ft. No. of Bags Dia in. From ft. To ft. No. of Bags | Seal Material (Check One): Neat Cement Bentonite Other Seal Material (Check One): Neat Cement Bentonite Other Seal Material (Check One): Neat Cement Bentonite Other |
| 20.*Liner Casing Diameter and Depth: Diain. Fromft. Toft. No. of Bags Diain. Fromft. Toft. No. of Bags Diain. Fromft. Toft. No. of Bags | Seal Material (Check One): Neat Cement Bentonite Other Seal Material (Check One): Neat Cement Bentonite Other Seal Material (Check One): Neat Cement Bentonite Other Seal Material (Check One): Neat Cement Bentonite Other |
| 21. Tolescope Casing Diameter and Depth: Diain. Fromft. Toft. No. of Bags Diain. Fromft. Toft. No. of Bags Diain. Fromft. Toft. No. of Bags | Seal Material (Check One): Neat Cement Bentonite Other Seal Material (Check One): Neat Cement Bentonite Other |
| 22. Pump Type (If Known): NONE | Control Delitation Office |
| Centrifugal Jet Submersible Turbine Horsepower Pump Capacity (GPM) Pump Depth ft. Intake Depth ft. 24. Water Well Contractor: *Contractor Name Ross Chimander** License Num | ppm Sulfateppm ChlorideppmLaboratory TestField Test Kit |
| *Contractor's Signature (Vertify that the information provided in this report is accur | *Driller's Name (Print or Type) William Tennant |

SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT 2379 BROAD STREET, BROOKSVILLE, FL 34604-6899

PHONE: (352) 796-7211 or (800) 423-1476 WWW.SWFWMD.STATE.FL.US

ST. JOHNS RIVER WATER MANAGEMENT DISTRICT 4049 REID STREET, PALATKA, FL 32178-1429

PHONE: (386) 329-4500 WWW.SJRWMD.COM

NORTHWEST FLORIDA WATER MANAGEMENT DISTRICT

152 WATER MANAGEMENT DR., HAVANA, FL 32333-4712

(U.S. Highway 90, 10 miles west of Tallahassee)

PHONE: (850) 539-5999

WWW.NWFWMD.STATE.FL.US

SOUTH FLORIDA WATER MANAGEMENT DISTRICT

P.O. BOX 24680 3301 GUN CLUB ROAD

WEST PALM BEACH, FL 33416-4680

PHONE: (561) 686-8800 WWW,SFWMD.GOV

SUWANNEE RIVER WATER MANAGEMENT DISTRICT

9225 CR 49

LIVE OAK, FL 32060

PHONE: (386) 362-1001 or (800) 226-1066 (Florida only)

WWW.MYSUWANNEERIVER.COM

| *DRILL CUT M=Medium, | | | ine cut | tings every 20 ft. or at forma | tion c | hanges. Note cavities and de | epth to producing zone. Grain Size: F=Fine, |
|-------------------------|-----|----------------|---------|--|--------|--|---|
| From | ft. | To 20 | ft. | Color Dark BYBS | لادر | Grain Size (FM, C) | Material S: Ity Sarol |
| From | ft. | To | ft. | Color | - | Grain Size (F, M, C) | Material |
| From 20 | | To 44' | ft. | Color Tan | | Grain Size (F) M, C) | Material Silty Sand |
| From | ft. | To | ft. | Color | | Grain Size (F, M, C) | Material |
| From | ft. | To | ft. | Color | - | Grain Size (F. M. C) | Material |
| From | ft. | To | ft. | Color | | Grain Size (F, M, C) | Material |
| From | ft. | To | ft. | Color | | Grain Size (F, M, C) | Material |
| From | ft. | То | ft. | Color | _ | Grain Size (F, M, C) | Material |
| From | ft. | To | ft. | Color | - | Grain Size (F, M, C) | Material |
| From | | | | 2.37.37 | - | Grain Size (F, M, C) | _0 |
| | ft. | To | ft. | Color | - | | _ Material |
| From | ft. | To | ft. | Color | - | Grain Size (F, M, C) | Material |
| From | ft. | To | ft. | Color | _ | Grain Size (F, M, C) | Material |
| -rom | ft. | То | ft. | Color | _ | Grain Size (F, M, C) | Material |
| rom | ft. | To | ft. | Color_ | _ | Grain Size (F, M, C) | Material |
| rom | ft. | To | ft. | Color | | Grain Size (F, M, C) | Material |
| rom | ft. | To | ft. | Color | - | Grain Size (F, M, C) | Material |
| -rom | ft. | To | ft. | Color | | Grain Size (F, M, C) | Material |
| -rom_ | ft. | To | ft. | Color | | Grain Size (F, M, C) | Material |
| rom | ft. | To | ft. | Color | | Grain Size (F, M, C) | Material |
| rom | ft. | To | ft. | Color | | Grain Size (F, M, C) | Material |
| rom | ft. | To | ft. | Color | | Grain Size (F, M, C) | Material |
| rom | ft. | To | ft. | Color | _ | Grain Size (F, M, C) | Material |
| rom | ft. | To | ft. | Color | _ | Grain Size (F. M. C) | Material |
| rom | ft. | To | ft. | Color | - | Grain Size (F, M, C) | Material |
| rom | ft. | To | ft. | Color | | Grain Size (F, M, C) | Material |
| rom | ft. | To | ft. | Color | | Grain Size (F, M, C) | Material |
| | - | lusta : :00 | | ion of 1- siotted sor | | monitoring , | |
| Comments: | , - | | | siotted sor | ec | w mw. | |
| Comments: | , - | | Log | *Detailed Sir | te Ma | ab of Well Location | |
| comments: | , - | | Log | *Detailed Signal | te Ma | ab of Well Location The Son The | New Well |

STATE OF FLORIDA WELL COMPLETION REPORT



□Southwest □Northwest ☐St. Johns River

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

☐South Florida

□Suwannee River
□DEP
□Delegated Authority (If Applicable) / 248 258+268

Official Use Only

Date Stamp

| | , |
|---|---|
| 1.*Permit Number /541572 *CUP/WUP Number | *DID Number62-524 Delineation No |
| 2.*Number of permitted wells constructed, repaired, or abandoned 3 | *Number of permitted wells not constructed, repaired, or abandoned 6 |
| 3. Owner's Name Omu; waste Of Osceola Con | ~ Ky.*Completion Date 6-20-201/5. Florida Unique ID |
| 6. JED Solid Waste Facility 150 *Well Location - Address, Road Name or Number, City, ZIP | 1 Omi way, St. Cloud, FL |
| 7.*County Osceola *Section !! Land | Grant*Township 285 *Range 32. |
| 8. Latitude Longitude | |
| 9. Data Obtained From:GPSMapSurvey | Datum:NAD 27NAD 83WGS 84 |
| 10.*Type of Work:ConstructionRepairModification 11.*Specify Intended Use(s) of Well(s): DomesticLandscape Irrigatio Bottled Water SupplyRecreation Area Irr Public Water Supply (Limited Use/DOH) Public Water Supply (Community or Non-Community/DEP) Class I Injection Class V Injection:RechargeCommercial/Industrial Disposal Remediation:RecoveryAir SpargeOther (Describe) | Agricultural Irrigation Livestock igation Nursery Irrigation Commercial/Industrial Golf Course Irrigation HVAC Supply HVAC Return Aquifer Storage and Recovery Drainage |
| Other (Describe) | |
| 12.*Drill Method:AugerCable ToolRotary Horizontal DrillingHydraulic Poin | Combination (Two or More Methods)JettedSonic |
| 13. Measured Static Water Level ft. Measured Pumping W 14. Measuring Point (Describe) 6 round Scrife Which 15. Casing Material: Black Steel Galvanized PVC | Vater Level 10 ft. After 0.5 Hours at 3 GPM his 6 ft. Above Below Land Surface *Flowing: Yes No |
| 17.*Abandonment: Other (Explain) | |
| From ft. To ft. No. of Bags Seal Material (From ft. To ft. No. of Bags Seal Material (From ft. To ft. No. of Bags Seal Material (From ft. To ft. No. of Bags Seal Material (| Check One): Neat Cement Bentonite Other |
| 18.*Surface Casing Diameter and Depth: Diain. Fromft. Toft. No. of Bags Diain. Fromft. Toft. No. of Bags | Seal Material (Check One):Neat CementBentoniteOther |
| 19.*Primary Casing Diameter and Depth: Diain. From0 ft. To3_0 ft. No. of Bags6 Diain. Fromft. Toft. No. of Bags Diain. Fromft. Toft. No. of Bags | Seal Material (Check One): Neat Cement Bentonite Other |
| 20. Liner Casing Diameter and Depth: | Seal Material (Check One): Neat Cement Bentonite Other Seal Material (Check One): Neat Cement Bentonite Other |
| 21. Telescope Casing Diameter and Depth: Diain. Fromft. Toft. No. of Bags Diain. Fromft. Toft. No. of Bags Diain. Fromft. Toft. No. of Bags | Seal Material (Check One): Neat Cement Bentonite Other Seal Material (Check One): Neat Cement Bentonite Other Seal Material (Check One): Neat Cement Bentonite Other Seal Material (Check One): Neat Cement Bentonite Other |
| 22. Pump Type (If Known): NONE | 23. Chemical Analysis (When Required): NA |
| CentrifugalJetSubmersibleTurbine Horsepower Pump Capacity (GPM) Pump Depthft. Intake Depthft. 24. Water Well Contractor: | Ironppm Sulfateppm ChlorideppmLaboratory TestField Test Kit |
| *Contractor Name Ross Chwarder *License Number | *Driller's Name (Print or Type) is Clian Tennant |
| *Contractor's Signature | *Driller's Name (Print or Type) is lan Tennant |

SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT 2379 BROAD STREET, BROOKSVILLE, FL 34604-6899

PHONE: (352) 796-7211 or (800) 423-1476

WWW.SWFWMD.STATE.FL.US

ST. JOHNS RIVER WATER MANAGEMENT DISTRICT 4049 REID STREET, PALATKA, FL 32178-1429

PHONE: (386) 329-4500 WWW.SJRWMD.COM

NORTHWEST FLORIDA WATER MANAGEMENT DISTRICT

152 WATER MANAGEMENT DR., HAVANA, FL 32333-4712

(U.S. Highway 90, 10 miles west of Tallahassee)

PHONE: (850) 539-5999

WWW.NWFWMD.STATE.FL.US

SOUTH FLORIDA WATER MANAGEMENT DISTRICT

P.O. BOX 24680 3301 GUN CLUB ROAD WEST PALM BEACH, FL 33416-4680 PHONE: (561) 686, 8800

PHONE: (561) 686-8800 WWW.SFWMD.GOV

SUWANNEE RIVER WATER MANAGEMENT DISTRICT

9225 CR 49

LIVE OAK, FL 32060

PHONE: (386) 362-1001 or (800) 226-1066 (Florida only)

WWW.MYSUWANNEERIVER.COM

| *DRILL CUTTII M=Medium, an | NGS L d C=C | .OG (Examir oarse) | ne cutt | ings every 20 ft. or at form | ation | 0 | depth to producing zone. Grain Size: F=Fine, |
|-------------------------------|----------------|-----------------------|------------|------------------------------|-------|---|--|
| From O | ft. | To 20 | ft. | Color Dark Bro | win | Grain Size (F.M, C) | Material S: Ity Sarol |
| From_ | ft. | То | ft. | Color | | Grain Size (F, M, C) | Material |
| From 20 | ft. | To 40 | ft. | Color Tan | | Grain Size (F)M, C) | Material Silk Sand |
| From | _ft. | To | ft. | Color | | Grain Size (F, M, C) | Material Material |
| From | _ft. | То | ft. | Color | | Grain Size (F, M, C) | Material |
| From | _ft. | То | _ft. | Color | | Grain Size (F, M, C) | Material |
| From | _ ft. | То | ft. | Color | | Grain Size (F, M, C) | Material |
| From | _ft. | То | ft. | Color | | Grain Size (F, M, C) | Material |
| From | _ft. | То | ft. | Color | | Grain Size (F, M, C) | Material |
| From | _ft. | То | ft. | Color | | Grain Size (F, M, C) | Material |
| From | _ft. | То | ft. | Color | | Grain Size (F, M, C) | Material |
| From | _ft. | То | _ft. | Color | | Grain Size (F, M, C) | Material |
| From | _ft. | To | ft. | Color | | Grain Size (F, M, C) | Material |
| From | _ft. | То | _ft. | Color | | Grain Size (F, M, C) | Material |
| -rom | _ft. | To | ft. | Color | | Grain Size (F, M, C) | Material |
| -rom | _ft. | То | _ft. | Color | | Grain Size (F, M, C) | Material |
| From | _ft. | To | _ft. | Golor | - | Grain Size (F, M, C) | Material |
| From | _ft. | To | _ft. | Color | | Grain Size (F, M, C) | Material |
| From | _ ft. | To | _ft. | Color | | Grain Size (F, M, C) | Material |
| From | | To | ft. | Color | | Grain Size (F, M, C) | Material |
| From | | To | _ft. | Color | | Grain Size (F, M, C) | Material |
| From | | To | _ft. | Color | _ | Grain Size (F, M, C) | Material |
| From | | To | _ft. | Color | | Grain Size (F, M, C) | Material |
| From | | To | _ft. | Color | - | Grain Size (F, M, C) | Material |
| | ft. | To | ft. ft. | Color | - | Grain Size (F, M, C) | Material |
| From | _ft. | instal ioo | lat | | 2 | | Material Weils to 40' with 2-248, 258 + 268 |
| From_ From_ Comments: | _ft. | ustal | lat | ion of 3- | | " monitoring | wells to 40' with |
| comments: | _ft. | ustal | lat C | *Detailed S | ite W | ap of Well Location The soon Site Well Cocation and Desired | Meils to 40' with -248, 258 & 268 NEW Wells |
| omments: | _ft. | ustal | Lege G | *Detailed Som | ite W | ap of Well Location Market Market | Weils to 40' with 2-248, 258 +268 NEW Wells Institute |

☐ Northwest ☐St. Johns River

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

□ Southwest PLEASE FILL OUTALL APPLICABLE FIELDS (*Denotes Required Fields Where Applicable)

USt. Johns River

☐ South Florida
☐ Suwannee River
☐ DEP
☐ Delegated Authority (If Applicable) → 2 € 8 /4 € € US)
☐ CUPMUP Application No.

| Permit No. | |
|------------------------|-----------------------|
| Florida Unique IO | |
| Permit Stipulations Re | quired (See Atlached) |
| | |

| | | 45 (5) 5 % | |
|---|---|---|------------------------------|
| 1 Brui Waste of Osceola C | 2203 Bellair Ai | 27025 | 13 112-0003 |
| *Owner, Legal Name of Corporation Address 2. JED Soild Waste Faellit | ' 'City 'Sta | 27025 Te | lephone Number |
| "Well Location - Address, Road Name or Number, City | , | , 57. ((000) | FL |
| 3. // 28 32 000 000 Parcel ID No. (PIN) or Alternate Key (Circle One) | _ | ot Block | Unit |
| 4. il 283 32E Bs | cesia | | |
| *Section or Land Grant *Township *Range *County 5. Ross China nder !! Gontestor | 3 (813)655-3612 | MCTEOTS C TRANCABOUR | 524: Yes 1 No |
| 6. 12435Jess Walden Ros "Water Well Contractor's Address | ad Doute | mail Address 'Y | 33727 |
| 7. *Type of Work: Construction Repair Modific | City ation Abandonment | State | ZIP |
| 8. *Number of Proposed Wells 4 | | odification, or Ahandonment | |
| 9. *Specify Intended Use(s) of Well(s): | | | Date Stamp |
| DomesticLandscape InfigationRecreation Area Infigation | LivestockMonitoria | estigation ng | |
| Public Water Supply (Limited Use/DOH)Public Water Supply (Community or Non-Community/DEP | Nursery Irrigation Test Commercial/Industrial Earth-Co | oupled Geothermal | |
| Class I Injection | Golf Course Irrigation HVAC S | | |
| Class V Injection:RechargeCommercial/Industrial Di | | | |
| Remediation:RecoveryAir SpargeOther (Desc | | | 120 100 1207 |
| Other (Describe) | (Note: Not all types of wells are permitted by a gi | men pornities enthropy | Official Use Only |
| 10.*Distance from Septic System if ≤200 ft. N/A 11. Facilit | ty Description (A a OF 1) | 12 Felimated Chart | Date & 4-201 |
| 13. Estimated Well Depth 44 ft. Estimated Casing Depth | 34 6 "Primary Caring Diameter | in Open Union En | Date G- [-ac- |
| 14. Estimated Screen Interval: From 34 To . 44 ft. | Times y Cooning Diameter | _in. Open noie: Prof | п_уда 10п. |
| (P4D) | | | |
| | ialvanizedPVCStainles | s Steel | |
| 16. Secondary Casing: A/A Telescope Casing Liner | Other: | | |
| | 1.1. | 1. | |
| 17. Secondary Casing Material: Black Steel Galva | | Other | - |
| 18. "Method of Construction, Repair, or Abandonment: | | RotarySonic | |
| Plugged by Approved Meti | | nulic Point (Direct Push) | |
| Proposed Grouting Interval for the Primary, Secondary, and From 7 To 30 Seal Material (Bentonite 2 | | | 1.24 |
| From To Seal Material (Bentonite a | Neat Cement Other Neat Cement Other | | |
| From To Seal Material (Bentonite | Neat Cement Other | | |
| From To Seal Material (Bentonite | Neat Cement Other | \supset | |
| 20. Indicate total number of existing wells on site | List number of existing unused wells or | | |
| 21.*Is this well or any existing well or water withdrawal on the own or CUP/WUP Application? Yes No if yes com- | er's contiguous property covered under a Cor aplete the following: CUP/WUP No. | nsumptive/Water Use Per District Well ID | |
| 22. Latitude Longitude | | DISUICE TYER IL | 140 |
| 23. Data Obtained From: GPS Map Survey | Datum:NAD 27 | NAD 83 WG | S 84 |
| I harmby certify that I will concelly with the explicable rules of Tritle 40, Florade Administrative Code, and can permit or artificial rechange permit, if needed, has been or will be obtained prior to commencement construction. I familier certify that off information provided in this polytection is accurate and that I will be | that a water I certly that I am the come: of the property, if of yell responsibilities under Creater \$73. Force to | nul the information provided is accurate | , and that I am aware of say |
| reconstancy experient from other federal, status, or four governments, application to executive error test two completion report to the Colonic which 30 days effect completion report to the construction, repair, modification shows a federal status of the control of the period explanation, which were course for the shows a federal status of the control of the period explanation, which were control fed. | and agent for this praner, that the elegatetion y | Provided is accurate, and that I have int | ground the owner of their |
| for c | 6-C. | | |
| "Signature of Contractor "License No | *Signature of Owner or Ageni | IESI 0 | 1-31/-20/4 |
| Approval Granted By Shr A-Shrus | Issue Date 6/2//4/ Expiration Date | Hydrologist | Approval |
| Fee Received S Receipt No | Check No. | C | builds |
| THIS PERMIT IS NOT VALID UNTIL PROPERLY SIGNED BY AN AUTHOR PERMIT SHALL BE AVAILABLE AT THE WELL SITE DURING ALL COM- | ORIZED OFFICER OR REPRESENTATIVE OF TH | E WMD OR DELEGATED A | UTHORITY, THE |

| Permit No. | |
|----------------|----------------|
| . William Lam. | and the second |

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

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

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

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

| (4 | Installation of ma wells) 2"Dia lucils | - 17RB, 24B, 2 to 44' w/ 10' of | SB 26B . ABB SCTEEN |
|------|--|--|------------------------|
| 1000 | *General Site Ma | p of Proposed Well Location | |
| | | | |
| | Legend Plugged and Abendoned Monitor Well Clusters (A.B.C Zone Monitor Well Clusters Locations | Site Well Lorstlone and Deei | mations ons |
| | Nation: Annual imaginal Adoptived from LASTINIS (2011) INVCST INCLIFY (1) 89564 Ricelloring with Customs SIRN-18 and SIRN-20 merr sitendamics; however, a replacement charitate size in the Arman advantagement of the Arman and Arman and Train the previous Socialism. | PROGRESSIVE WASTE SOLUTI LED. SOLUD WASTE BISPOSAL FI 1501 OUNT WAY ST. CLOUD, FLORIDA WINESPER LLE Tampa, Florida | Figure 1 |

Appendix B. Soil Boring Logs MW-17 R, 24, 25, 26 (A, B)

Page 1 of Boring/Well Number: Permit Number: FDEP Facility Identification Number: MW-17 R A (replacement) 49WP1541571 89544 Borehole Start Date: Site Name: Borehole Start Time: 06/19/14 1240 AM **✓** PM AM 🔽 PM 06/19/14 1340 J.E.D. Solid Waste Disposal Facility End Date: End Time: Environmental Contractor: Geologist/Engineer Name: Environmental Technician's Name: WEIBU, LLC Pavement Thickness (inches): Borehole Diameter (inches): Borehole Depth (feet): Drilling Company: NA 6 20 National Environmental Technologies Drilling Method(s): Apparent Borehole DTW (in feet Measured Well DTW (in feet after OVA (list model and check type): ☐ FID ☐ PID Hollow Stem Auger from soil moisture content): 12.5 water recharges in well): NA Disposition of Drill Cuttings [check method(s)]: Drum ✓ Spread □ Backfill ☐ Stockpile Other (describe if other or multiple items are checked): Borehole Completion (check one): **▼** Well ☐ Backfill ☐ Grout Bentonite Other (describe) Sample Depth Interval (feet Moisture Content Lithologic Symbol Lab Soil and SPT Blows (per six inches) Unfiltered OVA Filtered OVA Depth USCS Symbol Net OVA Groundwater Samples Sample Description (list sample number and (feet (include grain size based on USCS, odors, staining, and other remarks) depth or temporary screen interval) Drilling on perimeter berm, roadway soil materials DC D to ~12-ft below land surface SM were placed as backfill. DC SM D Sand; fine to medium, dark brown to tan, silty DC SM D non-plastic some iron staining (backfill material to 12 ft) DC SM D as-above DC D SM as-above DC SM D as-above DC SM D as-above DC SM D as-above DC SM D as-above DC D SM 10 as-above DC SM D 11 as-above DC

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

12

J.E.D. Solid Waste Disposal Facility Well Abandonment/Replacement

BORING LOG

Page 2 of 2 Boring/Well Number: Borehole Start Date: FDEP Facility Identification Number: Site Name: 06/19/14 End Date: J.E.D. Solid Waste Disposal MW-17 R A 89544 06/19/14 Facility Sample Depth Interval (feet) Lithologic Symbol Unfiltered OVA SPT Blows (per six inches) Lab Soil and USCS Symbol Depth (feet) Net OVA Groundwater Samples list sample number and (include grain size based on USCS, odors, staining, and other remarks) depth or temporary screen interval) Sand; fine to medium grained, silty DC 13 trace organics noted within cuttings samples DC 14 silt increasing with depth. DC SM W 15 as-above DC SM W 16 as-above, silty fine SM DC W 17 as-above, silty fine SM DC W SL 18 as-above, silty fine SM DC W SL 19 as-above, silty fine SM DC 20 21 22 23 24 25 26 27 28 29 30

Page 1 of 3

| Boring/ | Well Nu | mber: | | | | Permit N | lumber: | | | | FDEP Facilit | ty Identifi | cation N | Number: | : | | |
|-------------|------------------------------|-------------------|-------------------------------|----------------|--------------|-----------|--------------|-----------------------|---|------------------------|--------------|-------------|------------------|---------|-------------|-----|--|
| | MV | V-17 R | B (replacer | nent) | | | | 49W | VP1541572 | | | | | 8954 | 14 | | |
| Site Na | me: | | | | | Borehole | e Start Date |): | 06/19/14 | Borehole Start Tir | ne: | 1029 | | ам Г | | | |
| | J.E.D. S | olid Wa | aste Dispos | al Facility | y | | End Date | : | 06/19/14 | End Tir | ne: | 1240 | | ам Г | ✓ Pi | М | |
| Environ | nmental (| Contract | or: | | | Geologis | st/Engineer | | | • | Environmen | tal Techni | ician's l | Name: | | | |
| | _ | | BU, LLC | | _ | | | | hompson | | | | | NA | | | |
| Drilling | Compai | ıy: | | | Pavemer | nt Thickn | ess (inches |): | Borehole Diame | eter (inches): | В | orehole D | epth (fe | et): | | | |
| Natio | onal Env | ironmer | ital Techno | logies | | N | NA | | | 6 | | | | | 40 | | |
| Drilling | Method | (s): | | Apparen | t Borehol | le DTW (| in feet | Mea | asured Well DTW | V (in feet after | OVA (list m | odel and | check ty | /pe): | | | |
| | | | | ** | | ` | | | | | ` | | - | FID | | | |
|] | Hollow S | tem Au | ger | from so | oil moistu | re conten | it): 12. | 5 w | ater recharges in | well): NA | | | | 1 FID | | PID | |
| Disposi | tion of D | rill Cut | tings [chec | k method | (s)]: | | □ I | Drum | ✓ Spread | ☐ Backfill | ☐ Sto | ckpile | | Other | er | | |
| (describ | be if othe | r or mu | ltiple items | are chec | ked): | | | | | | | | | | | | |
| Boreho | le Compl | letion (c | heck one): | | ~ | Well | ☐ Gro | out | ☐ Bentonite | e 🔲 Backfi | 11 🗆 | Other (| descril | be) | | | |
| Sample Type | Sample Depth Interval (feet) | Lithologic Symbol | 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 | | | | Samples (list sample rary screen interval |
| DC | Ð | | | | | | 1 | _ | on perimeter ber | m, roadway soil ma | aterials | SM | D | | | | |
| D.C. | | | | | | | | were pla | iced as backfill. | | | G) (| ъ | | | | |
| DC | | | | | | | 2 | | | | | SM | D | | | | |
| DC | | | | | | | | Sand; fii non-plas | | ark brown to tan, si | lty | SM | D | | | | |
| 50 | | | | | | | 3 | - | | en | | 51.1 | | | | | |
| DC | | | | | | | | some iro | n staining (back) | fill material to 12 ft |) | SM | D | | | | |
| | | | | | | | 4 | as-above | 3 | | | | | | | | |
| DC | | | | | | | 5 | us-u00v | , | | | SM | D | | | | |
| | | | | | | | _ 3 | as-above | e | | | | | | | | |
| DC | | | | | | | 6 | | | | | SM | D | | | | |
| | | | | | | | _ | as-above | : | | | | | | | | |
| DC | | | | | | | 7 | | | | | SM | D | | | | |
| D.G. | | | | | | | | as-above | ; | | | a | _ | | | | |
| DC | | | | | | | 8 | | | | | SM | D | | | | |
| DC | | | | | | | | as-above | ; | | | SM | D | | | | |
| ЪС | | | | | | | 9 | | | | | SIVI | D | | | | |
| DC | | | | | | | | as-above | ; | | | SM | D | | | | |
| | | | | | | | 10 | | | | | 5111 | | | | | |
| DC | | | | | | | | as-above | ; | | | SM | D | | | | |
| | | | | | | | 11 | og -1- | | | | | | | | | |
| DC | | | | | | | 12 | as-above | ; | | | SM | M | | | | |

Page 2 of 3

| Boring | Well Nu | mber: | | FDEP Fa | acility Ide | entificatio | n Number: | | Site Name: | Borehole Start Date: | | | 06/19/14 |
|-------------|------------------------------|-------------------|----------------------------|----------------|--------------|-------------|--------------|------------|--|----------------------|----------|------------------|---|
| | MW- | 17 R B | | | | 89544 | | | J.E.D. Solid Waste Disposal Facility | F | and Date |): | 06/19/14 |
| Sample Type | Sample Depth Interval (feet) | Lithologic Symbol | SPT Blows (per six inches) | Unfiltered OVA | Filtered OVA | Net OVA | Depth (feet) | (include ş | Sample Description te grain size based on USCS, odors, staining, and other remarks) | | | Moisture Content | Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval) |
| DC | | | | | | | | Sand; f | ine to medium grained, silty | | SM | М | |
| DC | | | | | | | 13 | trace or | rganics noted within cuttings sample | es | SM | w | |
| DC | | | | | | | 15 | silt incre | easing with depth. | | SM | W | |
| DC | | | | | | | 16 | as-abov | ve | | SM | W | |
| DC | | | | | | | | as-abov | ve, silty fine | | SM SL | W | |
| DC | | | | | | | | as-abov | ve, silty fine | | SM SL | W | |
| DC | | | | | | | 19 | as-abov | ve, silty fine | | SM SL | W | |
| DC | | | | | | | | as-abov | ve, silty fine | | SM SL | W | |
| DC | | | | | | | 21 | Sand; f | ine to medium, dk. Brown, silty | | SM SL | W | |
| DC | | | | | | | 22 | as-abov | ve, silty fine | | SM SL | W | |
| DC | | | | | | | 23 | as-abov | ve, silty fine | | SM SL | W | |
| DC | | | | | | | 24 | as-abov | ve, silty fine | | SM SL | W | |
| DC | | | | | | | | as-abov | ve, silty fine | | SM SL | W | |
| DC | | | | | | | | as-abov | ve, silty fine | | SM SL | W | |
| DC | | | | | | | | as-abov | ve, silty fine | | SM SL | W | |
| DC | | | | | | | | as-abov | ve, silty fine | | SM SL | W | |
| DC | | | | | | | | as-abov | ve, silty fine | | SM SL | W | |
| DC | | | | | | | | as-abov | ve, silty fine | | SM SL | W | |

J.E.D. Solid Waste Disposal Facility Well Abandonment/Replacement

BORING LOG

Page 3 of ______3

| Boring/Well Number: | FDEP Facility Identification Numb | er: Site Name: Bo | orehole Start Date: | 06/19/14 |
|--|---|---|---|---|
| MW-17 R B | 89544 | J.E.D. Soild Waste Disposal Facility | End Date: | 06/19/14 |
| SPT Blows (per six inches) Lithologic Symbol Sample Depth Interval (feet) Sample Type | Depth (feet) Net OVA Filtered OVA Unfiltered OVA | Sample Description (include grain size USCS, odors, staining, and other remarks) | Mosture Content USCS Symbol a based on | Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval) |
| | | as-above, silty-fine | SM SL | |

Page 1 of 2

| | | | | | | | | | | | | _ | | |
|-------------|------------------------------|-------------------|-------------------------------|----------------|--------------|-----------|--------------|--|---|--------------------------------------|-------------|------------------|-------|---|
| Boring/ | Well Nu | | | | | Permit N | Number: | | | FDEP Facility Identification Number: | | | | |
| Site Na | ma: | M | W-24 A | | | Dorohol | e Start Dat | 49WP1541571 e: 06/18/14 | Borehole Start Ti | ma: | 1254 | _ | 8954 | |
| | | alid W | aste Dispos | al Facilit | ** | | | | | 'ime: 1254 | | | | |
| | mental (| | | ai raciiii | - | Geologie | st/Engineer | | Eng 11 | Environmenta | | | | 1111 |
| Liiviioi | mentare | | BU, LLC | | | Geologi | 50 Engineer | Thompson | | Environmenta | ii reeiiii | ician s | NA | A |
| Drilling | Compai | ny: | | | Pavemer | nt Thickn | ess (inches | Borehole Diame | eter (inches): | Bo | rehole D | epth (fe | eet): | |
| Natio | onal Envi | ironmen | ital Techno | logies | | N | NA | | 6 | | | | | 20 |
| Drilling | Method | l(s): | | A | t Boreho | la DTW/ | (in fact | Measured Well DTV | V (in fact often | OVA (list mo | dal and | ah a alr ta | | |
| | | | | Арраген | i Boreno | ic DI W (| (III ICCI | Weasured Well DTV | w (iii leet altei | OVA (list illo | uci anu | - | | _ |
|] | Hollow S | Stem Au | iger | from so | il moistu | re conten | nt): 6.5 | 5 water recharges in | well): NA | | | | FID [| □ PID |
| Disposi | ition of E | Orill Cut | tings [chec | k method | l(s)]: | | □ I | Drum 🔽 Spread | ☐ Backfill | ☐ Stoo | kpile | | Other | |
| (descri | be if othe | er or mi | ıltiple item. | s are che | cked): | | | | | | | | | |
| Boreho | le Comp | letion (c | check one): | | ~ | Well | ☐ Gro | out Bentonite | e 🗖 Backfi | 11 🗆 | Other (| descril | be) | |
| | Sam | | | | | | | | | | | | | |
| Sa | Sample Depth Interval (feet) | Litho | S (per | Unf | Fil | - | Đ | | | | US | Mois | | |
| Sample Type | epth I | Lithologic Symbol | SPT Blows (per six inches) | Unfiltered OVA | Filtered OVA | Net OVA | Depth (feet) | Sam (include grain size based on US | ple Description SCS, odors, staining, an | d other remarks) | USCS Symbol | Moisture Content | | nd Groundwater Samples (list sample number d depth or temporary screen interval) |
| Гуре | iterval | Symbo | ows iches) | OVA | OVA | VA. | eet) | (| · · · · · · · · · · · · · · · · · · · | , | mbol | onten | | a depth of temporary serven meet vary |
| | l (feet) | 2 | | | | | | | | | | - | | |
| DC | | | | | | | | Sand; fine to medium, da | ark brown | | SM | D | | |
| DC | | | | | | | 1 | | | | SIVI | D | | |
| DC | | | | | | | | as-above | | | SM | D | | |
| | | | | | | | 2 | , | | | | | | |
| DC | | | | | | | _ | as-above | | | SM | D | | |
| | | | | | | | _ 3 | as-above | | | | | | |
| DC | | | | | | | 4 | 45 450 76 | | | SM | D | | |
| | | | | | | | _ * | as-above | | | | | | |
| DC | | | | | | | 5 | | | | SM | M | | |
| D.C. | | | | | | | | as-above | | | | *** | | |
| DC | | | | | | | 6 | | | | SM | W | | |
| DC | | | | | | | | Sand; fine to medium, br | own, silty | | SM | W | | |
| ВС | | | | | | | 7 | | | | SL | | | |
| DC | | | | | | | | as-above | | | SM | W | | |
| | | | | | | | 8 | as-above | | | SL | | | |
| DC | | | | | | | | as-above | | | SM SL | W | | |
| | | | | | | | 9 | as-above | | | | | | |
| DC | | | | | | | 10 | | | SM SL | W | | | |
| | | | | | | | | as-above | as-above | | | | | |
| DC | | | | | | | 11 | | | | SM SL | W | | |
| DC | | | | | | | | as-above | | | SM | W 7 | | |
| DC | | | | | | | 12 | | | | SL | W | | |

Page 2 of Boring/Well Number: FDEP Facility Identification Number: Site Name: Borehole Start Date: 06/18/14 End Date: J.E.D. Solid Waste Disposal MW-24 A 89544 06/18/14 Facility nple Depth Interval Filtered OVA Sample Description (include grain size based on USCS, odors, staining, and other remarks) and depth or temporary screen interval) as-above DC W 13 as-above SM DC W SL 14 as-above SM DC W SL 15 Sand; fine to medium, brown, silty, trace organics SM DC W SL 16 as-above SM DC W SL 17 as-above SM DC W SL 18 as-above SM DC W SL 19 as-above SM DC W SL 21 22 23 24 26 27 28 29 30

Page 1 of _____3

| Boring/ | Well Nu | | W-24 B | | | Permit N | lumber: | 49WP1541572 | | FDEP Facil | ity Identifi | cation N | Number: 89544 |
|-------------|------------------------------|-------------------|-------------------------------|----------------|--------------|---------------------------|--------------|---------------------------------------|---|------------------|--------------|------------------|---|
| Site Na | me: | IVI | W-24 D | | | Borehole | Start Date | | Borehole Start Tir | ne: | 1131 | | |
| | | olid Wa | ste Dispos | al Facility | J | End Date: 06/18/14 End Ti | | | | | | | |
| | mental C | | | ar r acrirc | ' | | | | | Environmer | | | |
| WEIBU, LLC | | | | | | Thompson | | | | 231 / 11 0311110 | | | NA |
| Drilling | Compar | ny: | | | Pavemer | nt Thickn | ess (inches |): Borehole Diam | eter (inches): | В | orehole D | epth (fe | et): |
| Natio | onal Envi | ronmer | tal Techno | logies | | N | NA | | 6 | | | | 40 |
| Drilling | Method | (s): | | Annaren | t Rorehol | le DTW (| in feet | Measured Well DTV | V (in feet after | OVA (list n | nodel and o | check ts | ine). |
| | | | | тършен | t Borenoi | сы (| III ICCI | Wicusarea Well DT | w (in feet after | O VII (IISI II | iodei and v | - | · · |
| I | Hollow S | tem Au | ger | from so | oil moistu | re conten | t): 6.5 | water recharges in | well): NA | | | | FID PID |
| Disposi | tion of D | rill Cut | ings [chec | k method | (s)]: | | | Drum V Spread | ☐ Backfill | □ St | ockpile | | Other |
| (describ | e if othe | r or mu | ltiple items | are chec | ked): | | | | | | | | |
| Borehol | e Compl | etion (c | heck one): | | ~ | Well | ☐ Gro | ut 🗆 Bentonite | e 🔲 Backfi | 1 | Other (| descril | be) |
| Sample Type | Sample Depth Interval (feet) | Lithologic Symbol | SPT Blows (per six inches) | Unfiltered OVA | Filtered OVA | Net OVA | Depth (feet) | San (include grain size based on U | uple Description (SCS, odors, staining, an | d other remark | USCS Symbol | Moisture Content | Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval) |
| DC | | | | | | | | Sand; fine to medium, da | ark brown | | SM | D | |
| ВС | | | | | | | 1 | | | | 5141 | D | |
| DC | | | | | | | | as-above | | | SM | D | |
| | | | | | | | 2 | as-above | | | | | |
| DC | | | | | | | 3 | | | | SM | D | |
| | | | | | | | _ | as-above | | | | | |
| DC | | | | | | | 4 | | | | SM | D | |
| DC | | | | | | | | as-above | | | SM | M | |
| 50 | | | | | | | 5 | | | | 51.1 | | |
| DC | | | | | | | | as-above | | | SM | W | |
| | | | | | | | 6 | Sand; fine to medium, b | rown, siltv | | G) 4 | | |
| DC | | | | | | | 7 | , | ,, | | SM SL | W | |
| | | | | | | | _ | as-above | | | SM | | |
| DC | | | | | | | 8 | | | | SL | W | |
| DC | | | | | | | | as-above | | | SM | W | |
| DC | | | | | | | 9 | | | | SL | ** | |
| DC | | | | | | | | as-above | | | SM | W | |
| | | | | | | | 10 | as-above | | | SL | | |
| DC | | | | | | | | u5 u50vc | | | SM SL | W | |
| | | | | | | | 11 | as-above | | | SM | | |
| DC | | | | | | | 12 | | | | SL | W | |

J.E.D. Solid Waste Disposal Facility Well Abandonment/Replacement

BORING LOG

Page 2 of Boring/Well Number: FDEP Facility Identification Number: Borehole Start Date: Site Name: 06/18/14 End Date: J.E.D. Solid Waste Disposal MW-24 B 89544 06/18/14 Facility Sample Depth Interval (feet) Lithologic Symbol SPT Blows (per six inches) Unfiltered OVA USCS Symbol Depth (feet) Net OVA Sample Description Lab Soil and Groundwater Samples (list sample (include grain size based on USCS, odors, staining, and other remarks) number and depth or temporary screen interval) as-above DC W SL 13 as-above SM DC W SL 14 as-above SM DC W SL 15 Sand; fine to medium, brown, silty, trace organics SM DC W SL 16 as-above SM DC W SL 17 as-above SM DC W SL 18 as-above SM DC W SL 19 as-above SM DC W SL 20 as-above SM W SL 21 as-above SM W

SL

SM

SL

SM

SL

SM

SL

SM

SM

SL

SM

SL

SM

SL

SM

SL

W

W

W

W

W

W

W

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

22

23

24

25

26

27

28

29

30

as-above

as-above

as-above

as-above

as-above

as-above

as-above

Sand; fine to medium, tan-brown, silty

J.E.D. Solid Waste Disposal Facility Well Abandonment/Replacement

BORING LOG

Page 3 of 3

| | | | Page 3 of | 3 |
|--|---|---|---|---|
| Boring/Well Number: | FDEP Facility Identification Number: | Site Name: Bo | orehole Start Date: | 06/18/14 |
| MW-24 B | 89544 | J.E.D. Soild Waste Disposal Facility | End Date: | 06/18/14 |
| SPT Blows (per six inches) Lithologic Symbol Sample Depth Interval (feet) Sample Type | Depth (feet) Net OVA Filtered OVA Unfiltered OVA | ple Description (include grain size USCS, odors, staining, and other remarks) | Mosture Content USCS Symbol | Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval) |
| 69 | | above, silty-fine | SM W W SL SM W SL SM SL | |

Page 1 of 2

| Boring/ | Well Nu | mber: | | | | Permit N | lumber: | | | | FDEP Facil | ity Identifi | ication | Number: | | |
|-------------|------------------------------|-------------------|-------------------------------|----------------|--------------|-----------|--------------|-------------|-------------------|---|----------------|----------------|------------------|--|--|--|
| | | M | W-25 A | | | | | 491 | WP1541571 | | | | | 89544 | | |
| Site Na | me: | | | | | Borehole | e Start Dat | e: | 06/19/14 | Borehole Start Ti | me: | 0650 | ~ | AM PM | | |
| | J.E.D. S | olid Wa | aste Dispos | al Facilit | y | | End Dat | e: | 06/19/14 | End Ti | me: | 0729 | V | AM PM | | |
| Enviror | mental (| | | | | Geologis | st/Engineer | | | - | Environmer | ntal Techni | ician's | | | |
| | ~ | | BU, LLC | | - | | | | Thompson | | | | | NA | | |
| Drilling | Compai | ny: | | | Pavemer | nt Thickn | ess (inches |): | Borehole Diame | eter (inches): | В | Borehole D | epth (fe | eet): | | |
| Natio | onal Envi | ironmen | ital Techno | logies | | N | ΙA | | | 6 | | | | 20 | | |
| Drilling | Method | (s): | | Annaren | t Boreho | le DTW (| in feet | Me | asured Well DTV | W (in feet after | OVA (list n | nodel and | check t | tyne): | | |
| | | | | rpparen | t Boreno | ic D1 W (| iii icci | 1410 | asarca wen bi | (in feet unter | O VII (list li | nouer una | | | | |
|] | Hollow S | Stem Au | iger | from so | il moistu | re conten | t): 6.0 |) w | ater recharges in | ges in well): NA | | | ☐ FID ☐ PID | | | |
| Disposi | tion of E | rill Cut | tings [chec | k method | l(s)]: | | □ I | Orum | ▼ Spread | ☐ Backfill | ☐ St | ockpile | | Other | | |
| (descri | be if othe | er or mi | ıltiple item. | s are che | cked): | | | | | | | | | | | |
| | | | | V | Well | ☐ Gro | out | ☐ Bentonite | e 🔲 Backfi | 11 🗆 | Other (| descri | ibe) | | | |
| Sample Type | Sample Depth Interval (feet) | Lithologic Symbol | SPT Blows (per six inches) | Unfiltered OVA | Filtered OVA | Net OVA | Depth (feet) | (include | | ple Description SCS, odors, staining, an | d other remark | USCS Symbol | Moisture Content | Lab Soil and Groundwater Samples (list sample num and depth or temporary screen interval) | | |
| DC | 0 | | | | | | | Sand; fi | ine to medium, da | ark brown | | SM | D | | | |
| D.C. | | | | | | | 1 | as-abov | ve . | | | | | | | |
| DC | | | | | | | 2 | as-abov | 7A | | | SM | D | | | |
| DC | | | | | | | 3 | us-uoov | C | | | SM | D | | | |
| DC | | | | | | | | as-abov | re | | | SM | D | | | |
| DC | | | | | | | _ 4 | as-abov | re e | | | SM | М | | | |
| ЪС | | | | | | | 5 | | | | | Sivi | 141 | | | |
| DC | | | | | | | 6 | as-abov | ve . | | | SM | W | | | |
| DC | | | | | | | 7 | Sand; fi | ine to medium, da | ark brown, silty | | SM SL | W | | | |
| DC | | | | | | | _ ′ | as-abov | re | | | SM | W | | | |
| DC | | | | | | | | as-abov | ve . | | | SL SM SL | W | | | |
| DC | | | | | | | | as-abov | re . | | | SM SL | W | | | |
| DC | | | | | | | | as-abov | ve . | | SM SL | W | | | | |
| DC | | | | | | | 11 | as-abov | ve . | | | SM SL | W | | | |

Page 2 of Boring/Well Number: FDEP Facility Identification Number: Site Name: Borehole Start Date: 06/19/14 End Date: J.E.D. Solid Waste Disposal MW-25 A 89544 06/19/14 Facility ıple Depth Interval Filtered OVA Sample Description (include grain size based on USCS, odors, staining, and other remarks) and depth or temporary screen interval) as-above DC W 13 as-above SM DC W SL 14 as-above SM DC W SL 15 Sand; fine to medium, tan brown, silty, trace SM DC W organics SL 16 as-above SM DC W SL 17 as-above SM DC W SL 18 as-above SM DC W SL 19 as-above SM DC W SL 21 22 23 24 25 26 27 28 29 30

Page 1 of _____3

| Boring/ | Well Nu | mber: | | | | | | | | | FDEP Facil | ity Identifi | cation N | Number: |
|-------------|------------------------------|-------------------|-------------------------------|----------------|--------------|--|---------------------------------------|----------|-------------------------|---|----------------|--------------|------------------|--|
| | | M | W-25 B | | | Permit Number: FDE 49WP1541572 Borehole Start Date: 06/19/14 Borehole Start Time: | | | | | | | | 89544 |
| Site Na | me: | | | | | Borehole | End Date: 06/19/14 End Time: | | | | | | V | АМ 🔲 РМ |
| | J.E.D. S | olid Wa | ste Dispos | al Facility | y | | End Date | : | 06/19/14 | End Tir | ne: | 0936 | ~ | AM PM |
| Environ | mental (| | | | | Geologis | st/Engineer | | | • | Environme | ntal Techn | ician's l | |
| D.::11: | C | | BU, LLC | | D | 4 TL: -1 | ess (inches | | - | -4 (i1). | | l1- D | 41- (6- | NA |
| | Compai | | | | Pavemer | | |): | Borehole Diam | | | Borehole D | epin (ie | |
| | | | tal Techno | logies | | N | ΙA | | | 6 | | | | 40 |
| Drilling | Method | (s): | | Apparen | t Borehol | e DTW (| in feet | M | leasured Well DT | W (in feet after | OVA (list n | nodel and | check ty | /pe): |
| I | Hollow S | tem Au | ger | from so | oil moistu | re conten | t): 6.5 | ; | water recharges in | n well): NA | | | | FID PID |
| - | | | ings [check | | | | ☐ Drum 🔽 Spread ☐ Backfill ☐ | | | | | ockpile | | Other |
| | | | heck one): | | | | ell Grout Bentonite Backfill | | | | | | | |
| Borello | e Comp | etion (c | neck one). | | • | Well | Vell ☐ Grout ☐ Bentonite ☐ Backfill ☐ | | | | Other (| descri | be) | |
| Sample Type | Sample Depth Interval (feet) | Lithologic Symbol | SPT Blows (per six inches) | Unfiltered OVA | Filtered OVA | Net OVA | Depth (feet) | | e grain size based on U | nple Description USCS, odors, staining, an | d other remark | USCS Symbol | Moisture Content | Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval) |
| DC | | | | | | | | Sand; | fine to medium, d | ark brown | | SM | D | |
| | | | | | | | 1 | as-abo | w.o | | | | | |
| DC | | | | | | | | as-auu | ive | | | SM | D | |
| | | | | | | | 2 | as-abo | ove | | | | | |
| DC | | | | | | | 3 | | | | | SM | D | |
| DC | | | | | | | _ | as-abo | ve | | | G) A | D. | |
| DC | | | | | | | 4 | | | | | SM | D | |
| DC | | | | | | | | as-abo | ove | | | SM | M | |
| | | | | | | | 5 | as-abo | *** | | | | | |
| DC | | | | | | | | as-abo | ive | | | SM | W | |
| DC | | | | | | | | Sand; | fine to medium, d | ark brown, silty | | SM SL | W | |
| | | | | | | | 7 | as-abo | ove | | | SM | | |
| DC | | | | | | | 8 | | | | | SL | W | |
| DC | | | | | | | | as-abo | ove | | | SM SL | W | |
| | | | | | | | 9 | as-abo | ove | | | SM | | |
| DC | | | | | | | 10 | | | | | SL | W | |
| DC. | | | | | | | | as-above | | | | SM | 117 | |
| DC | | | | | | | 11 | | | | | SL | W | |
| DC | | | | | | | 12 | as-abo | ove | | | SM SL | W | |

Page 2 of 3

| Boring | /Well Nu | mber: | | FDEP Fa | acility Ide | entificatio | n Number: | | Site Name: | Borehole S | tart Dat | | 06/19/14 |
|-------------|------------------------------|-------------------|----------------------------|----------------|--------------|-------------|--------------|--------------------|--|--------------|-------------|------------------|---|
| | MW | -25 B | | | | 89544 | | | J.E.D. Solid Waste Disposal Facility | E | and Date |): : | 06/19/14 |
| Sample Type | Sample Depth Interval (feet) | Lithologic Symbol | SPT Blows (per six inches) | Unfiltered OVA | Filtered OVA | Net OVA | Depth (feet) | (include | Sample Description grain size based on USCS, odors, staining, and oth | her remarks) | USCS Symbol | Moisture Content | Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval) |
| DC | | | | | | | 13 | as-abo | ve | | SM SL | W | |
| DC | | | | | | | _ | as-abo | ve | | SM SL | W | |
| DC | | | | | | | 15 | as-abo | ve | | SM SL | W | |
| DC | | | | | | | | Sand; f organic | ine to medium, tan brown, silty, traces | e | SM SL | w | |
| DC | | | | | | | 17 | as-abo | ve | | SM SL | W | |
| DC | | | | | | | | as-abo | ve | | SM SL | W | |
| DC | | | | | | | | as-abo | ve | | SM SL | W | |
| DC | | | | | | | | as-abo | ve | | SM SL | W | |
| DC | | | | | | | | Sand; f | ine to medium, brown, silty, trace or | rganics | SM SL | W | |
| DC | | | | | | | | as-abo | ve | | SM SL | W | |
| DC | | | | | | | | as-abo | ve | | SM SL | W | |
| DC | | | | | | | 23 | as-abo | ve | | SM SL | W | |
| DC | | | | | | | 24 | as-abo | ve | | SM | W | |
| DC | | | | | | | 25 | as-abo | ve | | SL | W | |
| DC | | | | | | | 26 | as-abo | ve | | SL SM | w | |
| | | | | | | | 27 | as-abo | ve | | SL SM | | |
| DC | | | | | | | 28 | | | | SL SM | W | |
| DC | | | | | | | 29 | as-abo | ve | | SL | W | |
| DC | | | | | | | 30 | | | | SM SL | W | |

J.E.D. Solid Waste Disposal Facility Well Abandonment/Replacement

BORING LOG

Page 3 of 3

| | | | Page 3 of | 3 |
|--|---|---|--|---|
| Boring/Well Number: | FDEP Facility Identification Number: | Site Name: | Borehole Start Date: | 06/19/14 |
| MW-25 B | 89544 | J.E.D. Soild Waste Disposal Facility | End Date: | 06/19/14 |
| SPT Blows (per six inches) Lithologic Symbol Sample Depth Interval (feet) Sample Type | Depth (Reet) Net OVA Filtered OVA Unfiltered OVA | mple Description (include grain s USCS, odors, staining, and other remarks) | Mosture Content USCS Symbol | Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval) |
| 60 | 31 | a-above, silty-fine -above, silty-fine | SM W SM W SM W SM W SM SL SM S | |

Page 1 of 2

| Boring/ | Well Nu | mber: | | | | Permit N | lumber: | | | | FDEP Facil | ity Identifi | ication | Number: | |
|-------------|------------------------------|-------------------|-------------------------------|----------------|--------------|-----------|--------------|-------------|-------------------|---|-----------------|--------------|------------------|--|--|
| | | M | W-26 A | | | | | 491 | WP1541571 | | | | | 89544 | |
| Site Na | me: | | | | | Borehole | e Start Dat | e: | 06/19/14 | Borehole Start Ti | me: | 0936 | | AM PM | |
| | J.E.D. S | Solid Wa | aste Dispos | al Facilit | y | | End Dat | e: | 06/19/14 | End Ti | me: | 1029 | ~ | ам 🔲 РМ | |
| Enviro | nmental (| | | | | Geologis | st/Engineer | | | - | Environmen | ntal Techni | ician's | | |
| | | | BU, LLC | | - | | | | Thompson | | | | 1.0 | NA | |
| Drilling | Compai | ny: | | | Pavemer | nt Thickn | ess (inches |): | Borehole Diame | eter (inches): | В | orehole D | epth (fe | feet): | |
| Natio | onal Envi | ironmer | ntal Techno | logies | | N | IΑ | | | 6 | | | | 20 | |
| Drilling | Method | l(s): | | Apparen | t Borehol | le DTW (| in feet | Me | asured Well DTV | W (in feet after | OVA (list n | nodel and | check t | tyne): | |
| | | | | rpparen | t Boreno | ic D1 W (| iii icci | 1410 | asarca wen bi | (in feet unter | O VII (IISt II | nouci una | | | |
|] | Hollow S | Stem Au | iger | from so | il moistu | re conten | t): 6.0 |) w | ater recharges in | well): NA | | ☐ FID ☐ PID | | | |
| Dispos | ition of E | Drill Cut | tings [chec | k method | l(s)]: | | □ I | Orum | ▼ Spread | ☐ Backfill | ☐ Sto | ockpile | | Other | |
| (descri | be if othe | er or mi | ıltiple item. | s are che | cked): | | | | | | | | | | |
| | | | | ~ | Well | ☐ Gro | out | ☐ Bentonite | e 🔲 Backfi | 11 🗆 | Other (| descri | ibe) | | |
| Sample Type | Sample Depth Interval (feet) | Lithologic Symbol | SPT Blows (per six inches) | Unfiltered OVA | Filtered OVA | Net OVA | Depth (feet) | (include | | ple Description SCS, odors, staining, an | d other remark: | USCS Symbol | Moisture Content | Lab Soil and Groundwater Samples (list sample numbe and depth or temporary screen interval) | |
| DC | Ü | | | | | | | Sand; fi | ine to medium, da | ark brown | | SM | D | | |
| | | | | | | | 1 | as-abov | ve . | | | | | | |
| DC | | | | | | | 2 | , | | | | SM | D | | |
| DC | | | | | | | 3 | as-abov | re | | | SM | D | | |
| DC | | | | | | | | as-abov | ve . | | | SM | D | | |
| | | | | | | | 4 | as-abov | re | | | | | | |
| DC | | | | | | | 5 | | | | | SM | M | | |
| DC | | | | | | | | as-abov | re . | | | SM | W | | |
| DC | | | | | | | 6 7 | Sand; fi | ine to medium, da | ark brown, silty | | SM SL | W | | |
| DC | | | | | | | _ ′ | as-abov | re e | | | SM | W | | |
| DC | | | | | | | 8 | as-abov | ve . | | | SL SM | w | | |
| DC | | | | | | | 9 | as-abov | øe. | | | SL SM | W | | |
| | | | | | | | 10 | as-abov | ve e | | SL SM | | | | |
| DC | | | | | | | 11 | aa ch - | 70 | | SL | W | | | |
| DC | | | | | | | 12 | as-abov | C | | | SM SL | W | | |

Page 2 of Boring/Well Number: FDEP Facility Identification Number: Site Name: Borehole Start Date: 06/19/14 End Date: J.E.D. Solid Waste Disposal MW-26 A 89544 06/19/14 Facility ıple Depth Interval Filtered OVA Sample Description (include grain size based on USCS, odors, staining, and other remarks) and depth or temporary screen interval) as-above DC W 13 as-above SM DC W SL 14 as-above SM DC W SL 15 Sand; fine to medium, tan brown, silty, trace SM DC W organics SL 16 as-above SM DC W SL 17 as-above SM DC W SL 18 as-above SM DC W SL 19 as-above SM DC W SL 21 22 23 24 25 26 27 28 29 30

Page 1 of _____3

| Boring/ | Well Nu | mber: | | | | | | | | | FDEP Facili | ty Identifi | cation N | Number: | | |
|-------------|------------------------------|-------------------|-------------------------------|----------------|--------------|--|---------------------------------------|---|--------------------|------------------|----------------|-------------|------------------|--|--|--|
| | | | W-26 B | | | Permit Number: FDI 49WP1541572 Borehole Start Date: 06/19/14 Borehole Start Time: | | | | | | - | | 89544 | | |
| Site Na | me: | | | | | Borehole | Start Date | 5/19/14 | Borehole Start Tir | ne: | 1029 | | AM PM | | | |
| | J.E.D. S | olid Wa | aste Dispos | al Facility | y | | End Date | : 06 | 5/19/14 | End Tir | ne: | 1140 | . | AM PM | | |
| Environ | mental (| | | | | Geologis | st/Engineer | Name: | | | Environmen | tal Techni | ician's l | | | |
| D 1111 | | | BU, LLC | 1 | - | | | Thomps | | | - | | 1.0 | NA | | |
| | Compai | | | | Pavemer | it Thickn | ess (inches |): Boreh | iole Diame | ter (inches): | В | orehole D | epth (fe | et): | | |
| Natio | onal Env | ironmer | ital Techno | logies | | N | NΑ | | | 6 | | | | 40 | | |
| Drilling | Method | (s): | | Apparen | t Borehol | le DTW (| in feet | Measured | Well DTW | / (in feet after | OVA (list m | odel and | check ty | rpe): | | |
| | | | | | | | | | | | | □ FID □ PID | | | | |
| I | Hollow S | tem Au | ger | from so | oil moistu | re conten | t): 6.5 | water rec | charges in | well): NA | | L FID L PID | | | | |
| Disposi | tion of D | rill Cut | tings [chec | k method | (s)]: | | ☐ Drum 🔽 Spread ☐ Backfill ☐ St | | | | | ockpile | | Other | | |
| (describ | e if othe | r or mu | ltiple items | are chec | ked): | | E Blain & Speace & Backini E S | | | | | • | | | | |
| Borehol | e Comp | letion (c | heck one): | | ~ | Well | fell Grout Bentonite Backfill | | | | | Other (| descril | ne) | | |
| | | | | | | | Vell ☐ Grout ☐ Bentonite ☐ Backfill ☐ | | | | | other (| deserie | 50) | | |
| | Sam | | | | | | | | | | | | | | | |
| Sa | Sample Depth Interval (feet) | Litho | Si (pei | Unfi | Fil | 9 | Do | | | | | us | Mois | | | |
| Sample Type | epth L | Lithologic Symbol | SPT Blows (per six inches) | Unfiltered OVA | Filtered OVA | Net OVA | Depth (feet) | (include grain size | | | d other remark | USCS Symbol | Moisture Content | Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval) | | |
| Гуре | ıterva | Symbo | ows iches) | OVA | OVA | VA | eet) | Sample Description (include grain size based on USCS, odors, staining, and other remarks) | | | | | onten | | | |
| | l (feet) | 51 | | | | | | | | | | | ıt | | | |
| DC | | | | | | | | Sand; fine to m | nedium, da | rk brown | | CM | Б | | | |
| DC | | | | | | | 1 | | | | | SM | D | | | |
| DC | | | | | | | | as-above | | | | SM | D | | | |
| 50 | | | | | | | 2 | | | | | 51.1 | 2 | | | |
| DC | | | | | | | | as-above | | | | SM | D | | | |
| | | | | | | | 3 | 1 | | | | | | | | |
| DC | | | | | | | | as-above | | | | SM | D | | | |
| | | | | | | | 4 | as-above | | | | | | | | |
| DC | | | | | | | 5 | | | | | SM | M | | | |
| | | | | | | | _ | as-above | | | | | | | | |
| DC | | | | | | | 6 | | | | | SM | W | | | |
| D.C. | | | | | | | | Sand; fine to m | nedium, da | rk brown, silty | | SM | *** | | | |
| DC | | | | | | | 7 | | | | | SL | W | | | |
| DC | | | | | | | | as-above | | | | SM | W | | | |
| DC | | | | | | | 8 | | | | | SL | W | | | |
| DC | | | | | | | | as-above | | | | SM | W | | | |
| | | | | | | | 9 | 1 | | | | SL | | | | |
| DC | | | | | | | | as-above | | | | SM | W | | | |
| | | | | | | | 10 | as-ahove | | | SL | | | | | |
| DC | | | | | | | | as-above | | | | SM SL | W | | | |
| | | | | | | | 11 | as-above | | | | | | | | |
| DC | | | | | | | 12 | | | | | SM SL | W | | | |

Page 2 of ______3

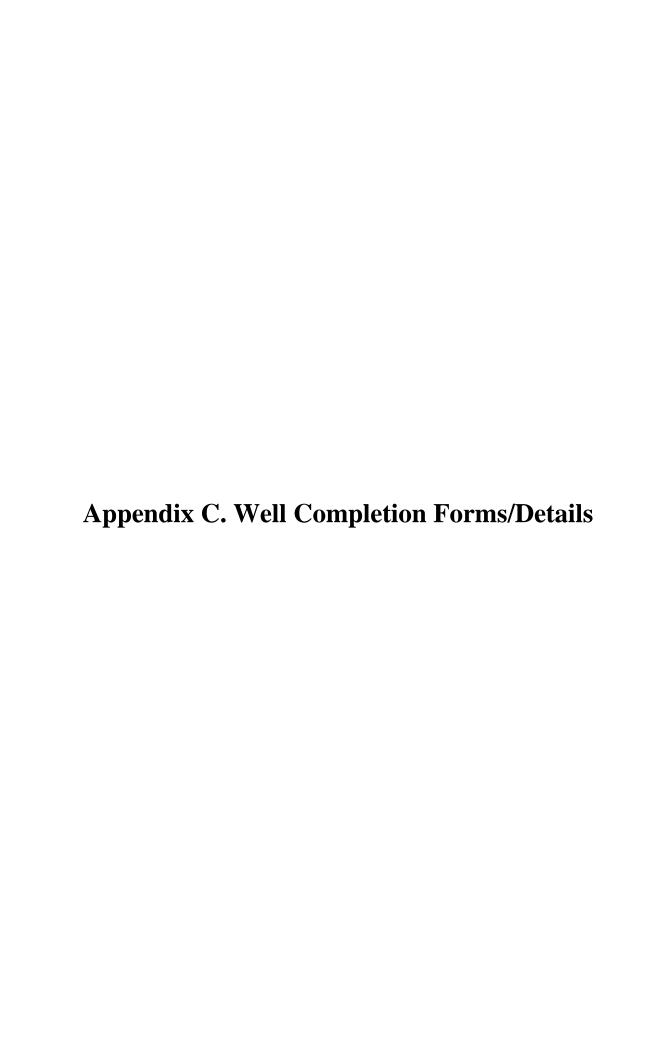
| Boring | /Well Nu | mber: | | FDEP Fa | acility Ide | entificatio | n Number: | | Site Name: | Borehole S | | e: | 06/19/14 |
|-------------|------------------------------|-------------------|-------------------------------|----------------|--------------|-------------|--------------|----------------|---|--------------|-------------|------------------|---|
| | MW | -26 B | | | | 89544 | | | J.E.D. Solid Waste Disposal Facility | F | End Date | : : | 06/19/14 |
| Sample Type | Sample Depth Interval (feet) | Lithologic Symbol | SPT Blows (per six inches) | Unfiltered OVA | Filtered OVA | Net OVA | Depth (feet) | (include | Sample Description grain size based on USCS, odors, staining, and ot | her remarks) | USCS Symbol | Moisture Content | Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval) |
| DC | | | | | | | | as-abo | ve | | SM SL | W | |
| DC | | | | | | | 13 | as-abo | ve | | SM SL | W | |
| DC | | | | | | | 15 | as-abo | ve | | SM SL | W | |
| DC | | | | | | | | Sand; forganic | ine to medium, tan brown, silty, traces | e | SM SL | W | |
| DC | | | | | | | 17 | as-abo | ve | | SM SL | W | |
| DC | | | | | | | | as-abo | ve | | SM SL | W | |
| DC | | | | | | | | as-abo | ve | | SM SL | W | |
| DC | | | | | | | | as-abo | ve | | SM SL | W | |
| DC | | | | | | | | Sand; f | ine to medium, tan to grey, silty, org | ganics | SM SL | W | |
| DC | | | | | | | | as-abo | ve | | SM SL | W | |
| DC | | | | | | | | as-abo | ve | | SM SL | W | |
| DC | | | | | | | 23 | as-abo | ve | | SM | W | |
| DC | | | | | | | 24 | as-abo | ve | | SL | W | |
| DC | | | | | | | 25 | as-abo | ve | | SL SM | W | |
| DC | | | | | | | 26 | as-abo | ve | | SL SM | W | |
| | | | | | | | 27 | as-abo | ve | | SL SM | | |
| DC | | | | | | | 28 | as-abo | ve | | SL | W | |
| DC | | | | | | | 29 | as-abo | | | SL | W | |
| DC | | | | | | | 30 | นอ-สม0 | •• | | SM SL | W | |

J.E.D. Solid Waste Disposal Facility Well Abandonment/Replacement

BORING LOG

Page 3 of 3

| Boring/Well Number: | FDEP Facility Identification Numb | er: Site Name: B | Borehole Start Date: | 06/19/14 |
|--|---|---|---|---|
| MW-26 B | 89544 | J.E.D. Soild Waste Disposal Facility | End Date: | 06/19/14 |
| SPT Blows (per six inches) Lithologic Symbol Sample Depth Interval (feet) Sample Type | Depth (feet) Net OVA Filtered OVA Unfiltered OVA | Sample Description (include grain siz USCS, odors, staining, and other remarks) | USCS Symbol | Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval) |
| | 3132333435363738 | Sand; fine to medium, tan to grey, silty, organas-above, silty-fine as-above, silty-fine | SM SL | |



| Boring/Well Number: | Permit Number: | VD1541571 | | FDEP Fac | - | fication Numb | ber: | |
|--------------------------------------|--------------------------|--|--|--|--|-------------------------|------|--|
| MW-17 R A (replacement) Site Name: | Borehole Start Date: | WP1541571 06/19/14 | Borehole Start Tir | me. | 1240 | 89544 | | |
| J.E.D. Solid Waste Disposal Facility | | 06/19/14 | End Tir | | 1340 | ☐ AM ☐ AM | ▼ P | |
| Environmental Contractor: | Geologist/Engineer Name: | 00/19/14 | Eng In | | | nician's Name | | |
| WEIBU, LLC | | hompson | | LIIVIIOIIII | entar recini | NA | J. | |
| Drilling Company: | Drilling Method | Borehole Diamet | ter (inches): | | Borehole D | Depth (feet): | | |
| National Environmental Technologies | Hollow Stem Auger | | 6 | | | 20 | | |
| LAND SURFACE | MP-TOC = - | ELEV = ~92.0' We Pro Dia De Gr Co wit Pla Se Ty | ell Completion otective Structuotective Casin ameter/Type - 6 opth BGS: ~2.0 out omposition/Prop h 3% bentonite acement Metho al pe: fine sand 3 acement Metho | ure, Typiong or Cor or Grandiz or Anodiz ft portion: For by dry water or by dry water or by dry water or core | ver zed Alumi Portland T weight ed from lai | Type I/II nd surface | | |
| 9.0' | 84.0' 83.0' 82.0' | Fili Tyl So An Pla We Ca Ca Sc Sc Sc Sc | ter Pack pe: 30/45 Silica urce: 50# bag nount Used: 4.5 acement Metho ell Riser Pipe | a Sand 5 bags od; Poure SCH 40 l (inside): SCH 40 l ameter: 2 0.006 in | ngs Poured into augers. H 40 PVC flush threaded ide): 2-in H 40 PVC ter: 2-in | | | |
| 20.0' | | E TD = ~71.0' | | Notes: Not to s Dimensi | ions as no | oted. Weib u | | |

| Boring/Well Number: | Permit Number: | WD1541572 | | FDEP Fac | cility Identification | | |
|---|-------------------------|---|--|---|--|----------------|----------|
| MW-17 R B (replacement) Site Name: | Borehole Start Date: | WP1541572 06/19/14 | Borehole Start Tir | me: | 8954 1029 | | |
| | | | | | 1240 | AM □ | PM PM |
| J.E.D. Solid Waste Disposal Facilit | | 06/19/14 | End Tir | | | | 1 101 |
| Environmental Contractor: WEIBU, LLC | Geologist/Engineer Name | Гhompson | | Environm | ental Technician NA | | |
| Drilling Company: | Drilling Method | Borehole Diame | ter (inches): | | Borehole Depth | | |
| National Environmental Technologies | Hollow Stem Auger | | 6 | | | 44 | |
| LAND SURFACE | MP-TOC = GROUND | ELEV = ~92.0' We Pro Pro Dia De Gr Co with Pla Se Ty | ell Completion otective Structu otective Casin ameter/Type - 6 epth BGS: ~2.0 out omposition/Prop th 3% bentonite accement Metho accement Metho accement Metho | ure, Typiong or Co 6" Anodiz ft coortion: For by dry word: pod: poure | ver zed Aluminum Portland Type weight ed from land s | I/II urface | |
| 31.0' 33.0' 34.0' | 61.0' 59.0' 58.0' | Fill Ty So An Pla We Ca So So So So | ter Pack pe: 30/45 Silica purce: 50# bag mount Used: 5 h accement Metho ell Riser Pipe asing Material: 3 asing Diameter breen Material: 4 breen Inside Dia breen Slot Size: amp/Bottom Ca pe/Length: 0.5 | a Sand bags od; Poure SCH 40 (inside): SCH 40 ameter: 2 | ed into augers PVC flush thro 2-in PVC 2-in | | |
| 44.0' 44.5' | 48.0' BOREHOL | E TD = ~47.0' | | Notes: Not to s Dimens | cale. ions as noted | | 0 |

| Boring/Well Number: | | Permit Number: | /P1541571 | | FDEP Fac | - | fication Num 89544 | ber: | |
|------------------------------------|--------|--------------------------|---|--|---|---|-------------------------|------|--|
| MW-24 A Site Name: | | Borehole Start Date: | 06/18/14 | Borehole Start Tir | me· | 1254 | _ | | |
| J.E.D. Solid Waste Disposal Faci | ility | End Date: | 06/18/14 | End Tir | | 1354 | ☐ AM ☐ AM | | |
| Environmental Contractor: | ility | Geologist/Engineer Name: | 00/18/14 | Eng Th | | | nician's Name | | |
| WEIBU, LLC | | | nompson | | Elivirolili | ientai Tecini | NA | J. | |
| Drilling Company: | Drilli | | Borehole Diame | ter (inches): | | Borehole D | Depth (feet): | | |
| National Environmental Technologie | es . | Hollow Stem Auger | | 6 | | | 20 | | |
| LAND SURFACE | | MP-TOC = ~ GROUND E | LEV = ~84.0' We Pro Pro Dia De Gr Co wit Pla Se Ty Pla | ell Completion otective Structuotective Casin ameter/Type - 6 pth BGS: ~2.0 out imposition/Prop h 3% bentonite acement Metho al pe: fine sand 3 acement Metho ter Pack | ure, Typi ng or Co 6" Anodi: ft cortion: I e by dry od: poure | ver zed Alumi Portland T weight ed from lai | Гуре I/II nd surface | | |
| 9.0' | | 76.0'75.0'74.0' | Ty So An Pla We Ca Sc Sc Sc Sc Sc | pe: 30/45 Silica urce: 50# bag nount Used: 4.9 acement Metho ell Riser Pipe sing Material: 9 sing Diameter reen Material: 9 reen Inside Dia reen Slot Size: mp/Bottom Ca pe/Length: 0.5 | 5 bags od; Poure SCH 40 (inside): SCH 40 ameter: 2 0.006 in | PVC flush : 2-in PVC 2-in | _ | | |
| 20.0' | 0.5' | 64.0' BOREHOLE | TD = ~63.5' | | | ions as no | oted. Weib u | | |
| | | | | | | | | | |

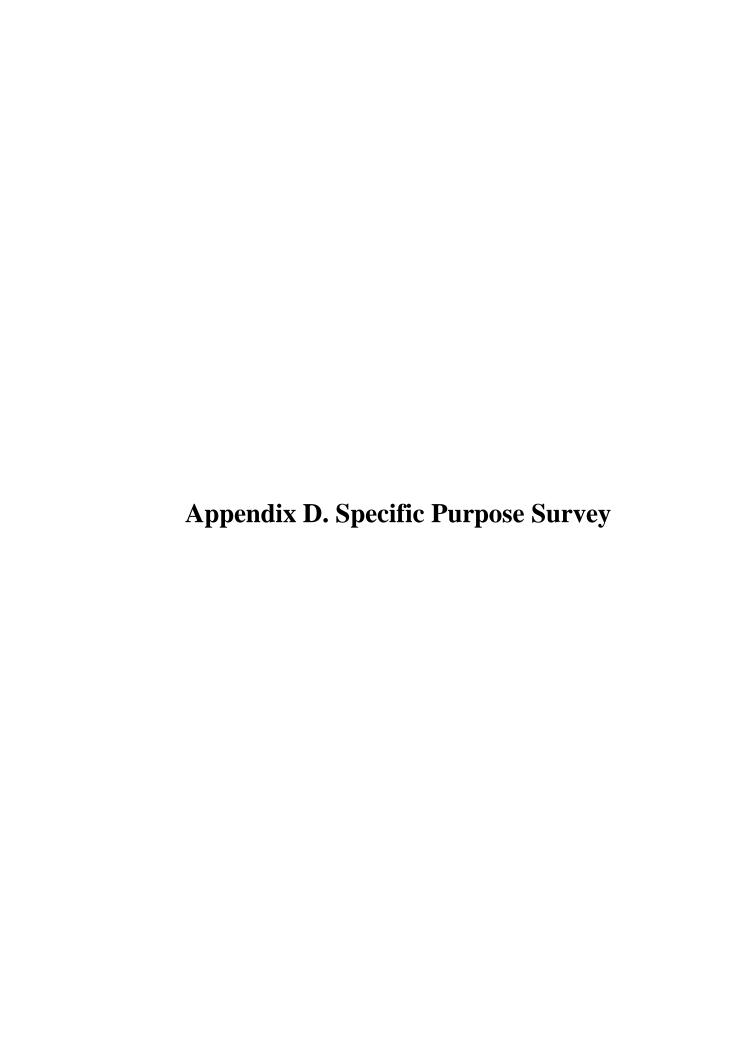
| Boring/Well Number: MW-24 B | Permit Number: | WP1541572 | | FDEP Facility Identification Number: 89544 | | | |
|--------------------------------------|---------------------------|--|---|--|--|---------------------|----------|
| Site Name: | Borehole Start Date: | | Borehole Start Tir | me: | | AM C | 1 pv (|
| J.E.D. Solid Waste Disposal Facility | | 06/18/14 | End Tir | | 1245 | AM AM | PM PM |
| Environmental Contractor: | Geologist/Engineer Name: | 00/10/11 | Ziiu III | | nental Technicia | | |
| WEIBU, LLC | | hompson | | NA | | | |
| Drilling Company: | Drilling Method | Borehole Diamer | ter (inches): | | Borehole Dept | th (feet): | |
| National Environmental Technologies | Hollow Stem Auger | | 6 | | | 38 | |
| LAND SURFACE | MP-TOC = - | ELEV = ~84.0' We Pro Pro Dia De Gr Co wit Pla Se Ty Pla | pe: fine sand 3 acement Metho | ure, Typiong or Cor or Grandiz or Anodiz ft portion: For by dry water or by dry water or by dry water or core | ver zed Aluminu Portland Typ weight ed from land | oe I/II surface | |
| 25.0' | 59.0' 58.0' 57.0' | Fill Ty So An Pla We Ca Sc Sc Sc Sc | ter Pack pe: 30/45 Silica purce: 50# bag nount Used: 5 l acement Metho ell Riser Pipe using Material: 3 asing Diameter areen Material: 3 areen Inside Dia areen Slot Size: amp/Bottom Ca pe/Length: 0.5 | a Sand bags bd; Poure SCH 40 l (inside): SCH 40 l ameter: 2 0.006 in | ed into auge PVC flush th 2-in PVC 2-in | rs. | |
| 37.0' 37.5' | 47.0' BOREHOLE 0.5' | E TD = ~46.5' | | Notes: Not to s Dimensi | ions as note | ed. (eibu | |

| Boring/Well Number: | Permit Number: | VD1541571 | | FDEP Facility Identification Number: 89544 | | |
|--------------------------------------|---------------------------|--|---|--|---|--|
| MW-25 A Site Name: | Borehole Start Date: | WP1541571 06/19/14 | Borehole Start Tir | me. | | |
| | | | | | 0650 | |
| J.E.D. Solid Waste Disposal Facility | | 06/19/14 | End Tir | | V/2 | |
| Environmental Contractor: WEIBU, LLC | Geologist/Engineer Name: | hompson | | Environmental Technician's Name: NA | | |
| Drilling Company: | Drilling Method | Borehole Diamet | ter (inches): | | Borehole Depth (feet): | |
| National Environmental Technologies | Hollow Stem Auger | | 6 | | 20 | |
| LAND SURFACE | MP-TOC = 4 | ELEV = ~84.0' We Pro Pro Dia De Gr Co wit Pla Se Tyl Pla | h 3% bentonite acement Metho al pe: fine sand 3 acement Metho | ure, Typiong or Cor 6" Anodiz ft coortion: Fee by dry void: poure 0/65 | ver zed Aluminum Portland Type I/II | |
| 9.0' | | Tyl So Am Pla We Ca Ca Sc Sc Sc Sc | sing Diameter reen reen Material: reen Inside Dia reen Slot Size: mp/Bottom Ca pe/Length: 0.5 | 5 bags od; Poure SCH 40 l (inside): SCH 40 l ameter: 2 0.006 in | PVC flush threaded 2-in PVC 2-in | |
| 20.0' | 64.0' BOREHOLE 0.5' | E TD = ~63.5′ | | Not to s | icale. ions as noted. | |

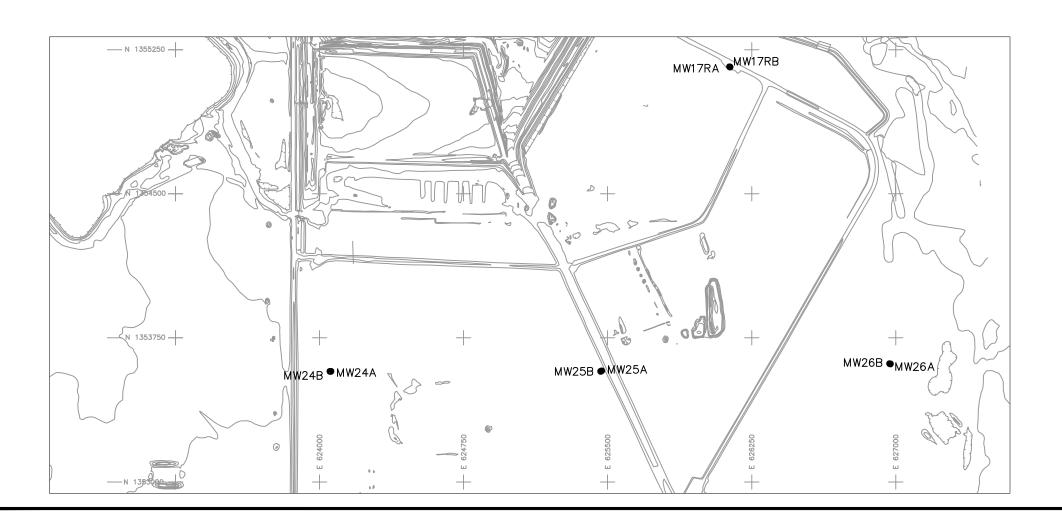
| Boring/Well Number: | Permit Number: | · | | | | | | |
|---|------------------------------------|--|---|---|--|--|--|--|
| MW-25 B | | 9WP1541572 | | 89544 | | | | |
| Site Name: | Borehole Start Date: | 06/19/14 | Borehole Start Ti | AWI | | | | |
| J.E.D. Solid Waste Disposal Facilit | | 06/19/14 | End Tir | | | | | |
| Environmental Contractor: WEIBU, LLC | Geologist/Engineer Name | e: Thompson | | Environmental Technician's Name: NA | | | | |
| Drilling Company: | Drilling Method | Borehole Diam | eter (inches): | Borehole Depth (feet): | | | | |
| National Environmental Technologies | Hollow Stem Auger | | 6 | 40 | | | | |
| Translat Environmental Teemlologies | Tronow Stem riager | | | | | | | |
| 27.0' | MP-TOC = GROUND 57.0' 56.0' 54.0' | DELEV = ~84.0 WP P D D G C WP F T S A P W C C S S S S | Vell Completion rotective Structurotective Casin iameter/Type - 6 repth BGS: ~2.0 frout iomposition/Propith 3% bentonite lacement Methologies fine sand 3 lacement Methologies 30/45 Silica ource: 50# bag mount Used: 5 blacement Methologies Riser Pipe | are, Typical ag or Cover 6" Anodized Aluminum ft coortion: Portland Type I/II by dry weight ad: poured from land surface 0/65 ad: poured from land surface a Sand coags ad; Poured into augers. SCH 40 PVC flush threaded (inside): 2-in SCH 40 PVC cameter: 2-in 0.006 in p | | | | |
| 40.0' | 44.0' BOREHO | LE TD = ~43.5 | , | Dimensions as noted. | | | | |

| Boring/Well Number: | Permit Number: | VD1541571 | | FDEP Facility Identification Number: 89544 | | |
|--------------------------------------|--------------------------|--|--|--|---|----|
| MW-26 A Site Name: | Borehole Start Date: | WP1541571 06/19/14 | Borehole Start Tir | me: | | |
| | | | | | 0936 | |
| J.E.D. Solid Waste Disposal Facility | | 06/19/14 | End Tir | | 102) | VI |
| Environmental Contractor: WEIBU, LLC | Geologist/Engineer Name: | hompson | | Environmental Technician's Name: NA | | |
| Drilling Company: | Drilling Method | Borehole Diamet | ter (inches): | | Borehole Depth (feet): | |
| National Environmental Technologies | Hollow Stem Auger | | 6 | | 20 | |
| LAND SURFACE | MP-TOC = 4 | ELEV = ~84.0' We Pro Pro Dia De Gr Co wit Pla Se Tyl Pla | th 3% bentonite acement Methonical alpe: fine sand 3 | ure, Typic ng or Cor 6" Anodiz ft portion: F e by dry v od: poure | ver zed Aluminum Portland Type I/II | |
| 9.0' | | Tyl So Am Pla We Ca Ca Sc Sc Sc Sc | pe: 30/45 Silica ource: 50# bag nount Used: 4.5 acement Metho ell Riser Pipe | 5 bags od; Poure SCH 40 I (inside): SCH 40 I ameter: 2 0.006 in p | PVC flush threaded 2-in PVC 2-in | |
| 20.0' | 64.0' BOREHOLE | E TD = ~63.5′ | | Not to so Dimensi | ions as noted. Weibu | 1 |

| Boring/Well Number: | Permit Number: | VD1541570 | | FDEP Facility Identification Number: 89544 | | | |
|--|---------------------------|---|---|--|---|--------------------------|---|
| MW-26 B Site Name: | Borehole Start Date: | WP1541572 06/19/14 | Borehole Start Tir | me: | | | |
| | | | | | | ✓ AM □ PM ✓ AM □ PM | |
| J.E.D. Solid Waste Disposal Facility Environmental Contractor: | | 06/19/14 | End Tir | | 11.0 | | |
| WEIBU, LLC | Geologist/Engineer Name: | hompson | | Environme | ental Technicia N. | | |
| Drilling Company: | Drilling Method | Borehole Diamet | ter (inches): | | Borehole Dept | | _ |
| National Environmental Technologies | Hollow Stem Auger | | 6 | | | 40 | |
| 27.0' | MP-TOC = | ELEV = ~84.0' We Pro Dia De Gr. Co with Pla Se Fill Tyll So Am Pla Ca Sc | ell Completion otective Structu otective Casin ameter/Type - 6 epth BGS: ~2.0 out omposition/Prop th 3% bentonite acement Metho | ure, Typic ng or Cov 6" Anodiz ft portion: P e by dry w od: poured 60/65 od: poured a Sand bags od; Poure (inside): SCH 40 F ameter: 2 c 0.006 in | ver zed Aluminu Portland Typ weight ed from land ed into auger PVC flush th 2-in PVC 2-in | m e I/II surface surface | |
| 40.0' | 44.0' BOREHOLE 0.5' | TD = ~43.5′ | pe/Lengin. 0.3 | Notes: Not to so | ions as note | d. | |



| MONITOR WELL NO. | POINT NO | NORTHING | EASTING | I.ATITUDE | LONGITUDE | TOP OF PROTECTIVE CASING ELEVATION | 2" PVC ELEVATION NGVD1929 | GROUND ELEVATION NGVD1929 | PK NAIL ELEVATION NGVD1929 | TOP OF CASING ELEVATION NAVD1988 | 2" PVC ELEVATION NAVD1988 | GROUND ELEVATION NAVD1988 | PK NAIL ELEVATION NAVD1988 |
|---------------------|----------|----------------|-----------|---------------|--------------|---|---------------------------------|---------------------------------|----------------------------------|---|---------------------------------|---------------------------------|----------------------------------|
| MW17RB | 151046 | 1355159.94 | 626137.50 | 28°03'42.2" | -81°05'35.2" | 94.93 | 94.78 | 91.9 | | 93,97 | 93.82 | 90,942 | |
| PK & DISC | 151045 | 1355160.34 | 626138.07 | 28°03'42.3" | -81°05'35.2" | | | | 91.97 | | | | 91.01 |
| | | | | | | | | | | | | | |
| MW17RA | 151047 | 1355161.64 | 626134.43 | 28°03'42.3" | -81°05'35.2" | 95.09 | 94.84 | 91.9 | | 94.13 | 93.88 | 90.942 | |
| PK & DISC | 151040 | 1355161,92 | 626134,73 | 28°03'42,3" | -81°05'35,2" | | | | 91,97 | | | | 91,01 |
| | | | | | | | | | | | | | |
| MW26A | 151055 | 1353614,23 | 626973,10 | 28°03'26,9" | -81°05'25,9" | 87,21 | 87,06 | 83,9 | | 86,25 | 86,10 | 82,942 | |
| PK & DISC | 151049 | 1353614.09 | 626972.40 | 28°03'26.9" | -81°05'25.9" | | | | 84.37 | | | | 83.41 |
| | | | | | | | | | | | | | |
| MW26B | 151056 | 1353615.78 | 626967.44 | 28"03"27.0" | -81°05'25.9" | 87.21 | 86.83 | 83.8 | | 86.25 | 85.87 | 82.842 | |
| PK & DISC | 8039 |] 1353615.51] | 626966,79 | 28°03'27.0" [| -81°05'25.9" |] | | | 84.27 | | | | 83.31 |
| | |]] | |] [| | | | | | | | | |
| MW25B | 151064 | 1353576.16 | 625463.45 | 28°03'26,6" | -81°05'42.7" | 86.87 | 86,67 | 83.9 | | 85.91 | 85.71 | 82.942 | |
| PK & DISC | 151062 | 1353575.67 | 625464.29 | 28°03'26.6" | -81°05'42.7" | | | | 84.34 | | | | 83.38 |
| | | | | | | | | | | | | | |
| MW25A | 151065 | 1353578.36 | 625469.63 | 28°03'26.6" | -81°05'42.6" | 87.14 | 86.99 | 84.0 | | 86.18 | 86.03 | 83.042 | |
| PK & DISC | 151076 | 1353577,85 | 625470,41 | 28°03'26,6" | -81°05'42,6° | | | | 84,36 | | | | 83,40 |
| | | | | | | | | | | | | | |
| MW24A | 151095 | 1353576,17 | 624060,36 | 28°03'26,5" | -81°05'58,4" | 87,29 | 87,06 | 83,9 | | 86,33 | 86,10 | 82,942 | |
| PK & DISC | 151081 | 1353575,67 | 624061,00 | 28°03'26,5" | -81°05'58,4" | | | | 84,34 | | | | 83,38 |
| | | | | | | | | | | | | | |
| MW24B | 151096 | 1353575.75 | 624053.53 | 28°03'26.5" | -81°05'58.5 | 87.27 | 87.05 | 84.0 | | 86.31 | 86.09 | 83,042 | |
| PK & DISC | 151097 | 1353575.23 | 624054.04 | 28°03'26.5" | -81°05'58.4" | | | | 84.24 | | | | 83.28 |





(IN FEET) 1 inch = 500 ft.

LEGEND:

NO. NUMBER ELEVATION ELEV. CONCRETE CONC. MW MONITORING WELL **(**

MW17A

Peavey & Associates SURVEYING & MAPPING PA

SPECIFIC PURPOSE SURVEY
PHASE 4 & MW-17 REPLACEMENT CONVEY
MW-17RA/B, 24A/B, 25A/B, 26A/B
JED SOLID WASTE MANGEMENT FACILITY
1501 OMNI WAY ST. CLOUD, FLORIDA

DEBORAH L. PEAVEY, P.S.M. FLORIDA REGISTRATION NUMBER 6345 FLORIDA BUSINESS NUMBER 7779

7/17/2014

SURVEY DATES

PROJECT | DRAWING NO. | SHEET | |

SURVEYOR'S NOTES:

- North and coordinate basis is the East Zone of the Florida State Plane NAD83 Coordinate System.
- 2.) Vertical information depicted on this report are GPS derived elevations based on the National Geodetic Vertical Datum of 1929 (NGVD29) utilizing site control as provided PK13 with an elevation of 92.92 and OC1406 with an elevation of 80.91.

Appendix E. Well Construction and Development Logs

| | WELL CONSTRUCTION DATA | | | | | | | |
|---|---------------------------|--|---|----------------------------|-----------------|-------------|-------------------|-------|
| Well Number: | Site Name: | | | FDEP Faci | lity I.D. Numbe | r: We | ll Install Date(s | s): |
| MW-17 R A | | d Waste Disposal Fa | cility | | 89544 | | 06/19/1 | 4 |
| Well Location and Type (check ap | | Well Purpose: | Perched Mon | itoring | | Well Inst | all Method: | |
| | Right-of-Way | | Shallow (Wat | | _ | Н | ollow Stem Au | uger |
| Off-Site Private Property Above Grade (AG) | Eluch to Grada | | Intermediate or Deep Monitoring Remodiation on Other (describe) Surface Casing Install Method | | | | Method: | |
| | | . " | Remediation of Other (describe) | | | | | |
| If AG, list feet of riser above land surf | | | | | | | NA | |
| Borehole Depth Well De | | Diameter Manhole Dia | | Well Pad S | | | | |
| (feet): 21 (feet): | 20 (inches): | 4.25 (inches): | NA | | | by | feet | |
| Riser Diameter and Material: | Riser/Screen Connections: | Flush-Threaded | | Riser Lengt | | eet | | |
| 2-in PVC | Connections. | Other (describe) | | | from LS | | 10 feet | |
| Screen Diameter and Material: | | Screen Slot Size: | | Screen Len | gth: 10 f | eet | | |
| 2-in PVC | | 0.006 | | | from 10 | feet to | 20 feet | |
| 1 st Surface Casing Material: | NA | 1 st Surface Casing I.D | O. (inches): | 1st Surface | Casing Length: | | feet | |
| also check: Permanent | ☐ Temporary | | | | from 0 | feet to | feet | |
| 2 nd Surface Casing Material: | | 2 nd Surface Casing I.I | D. (inches): | 2 nd Surface | Casing Length | | feet | |
| also check: Permanent | Temporary | | | | from 0 | feet to | feet | |
| 3 rd Surface Casing Material: | | 3 rd Surface Casing I.I. | D. (inches): | 3 rd Surface | Casing Length: | | feet | |
| also check: Permanent | Temporary | | | | from 0 | feet to | feet | |
| Filter Pack Material and Size: F | Prepacked Filter Arc | ound Screen (check one) |): | Filter Pack | Length: | 1 | 1 feet | |
| 30/45 Silica Sand | ☐ Yes | ▼ No | | | from 9 | feet to | 21 feet | |
| Filter Pack Seal Material and | 2 | 0/65 Silca Sand | | Filter Pack | Seal Length: | 1 | feet | |
| Size: | 3 | 0/65 Silca Sariu | | | from 8 | feet to | 9 feet | |
| Surface Seal Material: | Type | I/II Portland Cement | | Surface Sea | al Length: | _ 8 | feet | |
| | Туре | i/ii i ortiana cement | | | from LS | feet to | 8 feet | |
| | | | | | | | | |
| | 1 | WELL DEVELO | PMENT | DATA | | | | |
| Well Development Date: | Well Deve | elopment Method (check | k one): | Surge/Pu | ump 🔲 P | ump | Compresse | d Air |
| 07/07/14 | ☐ Oth | ner (describe) | | | | | | |
| Development Pump Type (check) | - Centinuga | 1 Peristaltic | Depth to Gro | oundwater (b | efore developin | g in feet): | | |
| Submersible Other (desc | eribe) | | | | 15.19' b | toc | | |
| Pumping Rate (gallons per minute | · | ximum Drawdown of G | | - | Well Purged D | ry (check | | |
| 1.2 | Dev | velopment (feet): | 18.52 | btoc | ☐ Yes | | ▼ No | |
| Pumping Condition (check one): | Total Developr | | Development | t Duration | Development V | | | |
| Continuous Intermittent Removed (gallons): 60 | | | | (minutes): 90 (check one): | | | | No |
| Water Appearance (color and odo | opment: | Water Appearance (color and odor) At End of Development: | | | | | | |
| Turbid l | brown, no-odor | | | | Turbid, no | -odor | | |

WELL CONSTRUCTION OR DEVELOPMENT REMARKS

Combination of purge/development techniques, continuous and surge. Attempted to surge/block with pump. Still turbid after development phase and is consistent with previous well construction and purging activities noted at the site.

| | | WELL CONSTR | UCTION | DATA | | | | |
|--|--|--|---------------------------------|-------------------------|--|------------|--------------|---------------|
| Well Number: | Site Name: | | | FDEP Faci | lity I.D. Numbe | er: W | Vell Install | Date(s): |
| MW-17 R B | | Solid Waste Disposal Fa | acility | | 89544 | | | 19/14 |
| Well Location and Type (check a | | Well Purpose: | Perched Mon | itoring | | Well In | nstall Meth | iod: |
| | Right-of-Way | ~ | ✓ Shallow (Water- | | er-Table) Monitoring | | lollow Ste | m Auger |
| Off-Site Private Property | | | Intermediate or Deep Monitoring | | | | | |
| . , | Flush-to-Grade | | Remediation of | or Other (de | scribe) | Surface | _ | stall Method: |
| If AG, list feet of riser above land su | | | | _ | | | NA | 1 |
| Borehole Depth Well D | • | ole Diameter Manhole Di | ameter | Well Pad S | ize: | | | |
| (feet): 41 (feet): | | | NA | | feet | by _ | feet | |
| Riser Diameter and Material: | Riser/Scree | 1 Iusii I iii caaca | | Riser Leng | th: <u>3</u> f | eet | | |
| 2-in PVC | Connection | Other (describe) | | | from LS | feet t | to <u>34</u> | feet |
| Screen Diameter and Material: | | Screen Slot Size: | | Screen Len | gth: 10 f | eet | | |
| 2-in PVC | | 0.006 | | | from <u>34</u> | feet t | to <u>44</u> | feet |
| 1 st Surface Casing Material: | NA | 1 st Surface Casing I.I | D. (inches): | 1 st Surface | Casing Length: | | feet | |
| also check: Permanent | Tempora | ту | | | from 0 | feet t | to | feet |
| 2 nd Surface Casing Material: | | 2 nd Surface Casing I. | D. (inches): | 2 nd Surface | Casing Length | : <u> </u> | feet | |
| also check: Permanent | Tempora | ту | | | from 0 | feet t | to | feet |
| 3 rd Surface Casing Material: | | 3 rd Surface Casing I.I | D. (inches): | 3 rd Surface | Casing Length | : <u> </u> | feet | |
| also check: Permanent | Temporar | y | | | from 0 | feet t | to | feet |
| Filter Pack Material and Size: | Prepacked Filter | Around Screen (check on | e): | Filter Pack | Length: | | 11 feet | |
| 30/45 Silica Sand | Yes | ▼ No | | | from 33 | feet t | to <u>45</u> | feet |
| Filter Pack Seal Material and | | 00/05 0:1 0 | | Filter Pack | Seal Length: | | 2 feet | |
| Size: | | 30/65 Silca Sand | | | from 31 | | | feet |
| Surface Seal Material: | т. | ing I/II Dortland Compat | | Surface Sea | al Length: | | 31 feet | |
| | 1 y | pe I/II Portland Cement | | | from LS | feet t | to <u>31</u> | feet |
| | | | | | | | | |
| | | WELL DEVELO | PMENT I | DATA | | | | |
| Well Development Date: | Well I | Development Method (chec | ck one): | Surge/P | ump 🔲 P | ump | Com | pressed Air |
| 07/07/14 | | Other (describe) | | | | | | |
| Development Pump Type (check | - Contin | fugal Peristaltic | Depth to Gro | oundwater (b | efore developin | ng in fee | et): | |
| Submersible Other (des | scribe) | | | | 14.84' bto | ос | | |
| Pumping Rate (gallons per minu | ute): | Maximum Drawdown of C | Groundwater I | Ouring | Well Purged D | ry (che | ck one): | |
| 1.2 | | Development (feet): | 32.10' | btoc | ☐ Yes | | ✓ No | |
| Pumping Condition (check one) | | lopment Water | Developmen | t Duration | Development V | Water D | rummed | |
| Continuous Intermitt | gallons): 138 | (minutes): 115 (check one): ☐ Yes ✓ No | | | | | ▼ No | |
| Water Appearance (color and or | Water Appearance (color and odor) At Start of Development: | | | | Water Appearance (color and odor) At End of Development: | | | |
| Turbio | d brown, no-odo | r | | | Turbid, no- | odor | | |
| | | | | | | | | |

WELL CONSTRUCTION OR DEVELOPMENT REMARKS

Initial turbidity as measured with Lamotte >3,000 ntu. Attempted to develop with a combination of techniques, continuous pumping as well as surging/block with submerisible pump. Final turbidity noted was 95 ntu after 115 minutes of development.

| (feet): 21 (feet): 20 (inches): 4.25 (inches): NA | | | | WELL | CONST | RUCTION | N DATA | | | |
|--|--|----------------|--------------------|-----------------------|--|---------------------------------|-------------------------|-----------------|----------------|------------------|
| Well Lossin and Type (check appropriate boxes): On-Site Private Property On-Site Private Private Private Property On-Site Private Private Private Property On-Site Private Private Private Private Private Private Private Property On-Site Private Private Private Private Private Private Property On-Site Private Property On-Site Private Private Private Private Property On-Site Private Private Private Private Property On-Site Private Property On-Site Private Pri | Well Number: | Site | Name: | | | | FDEP Faci | lity I.D. Numbe | er: Well | Install Date(s): |
| Filter Pack Seal Material: Surface Casing Material: also check: Permanent Temporary Temporary Titler Pack Material and Size: Prepacked Filter Around Screen (check one): Programs Temporary Titler Pack Seal Material and Size: Prepacked Filter Around Screen (check one): Surface Seal Material: Surface Seal Material: Type III Portland Cement Permissing Permissin | MW-24 A | | J.E.D. Soli | d Waste D | isposal Fac | cility | | | | |
| Surface Casing Material: Surface Casing Length: from 0 feet to feet feet from 0 feet to feet feet from 0 feet to feet feet from 0 from 0 feet to feet feet from 0 from 0 feet to from 0 from 0 from 0 feet to from 0 fro | On-Site | Righ | | Well Pur | ~ | Shallow (Wate | er-Table) M | Monitoring | | |
| Borchole Depth (Geet): 21 (Feet): 20 (Inches): 4.25 (Inches): NA Riser Diameter and Material: 2-in PVC | | | h-to-Grade | | _ | Intermediate or Deep Monitoring | | | | |
| Riser Diameter and Material: Riser/Screen Plauk-Threaded Plauk-Threaded Connections: Other (describe) Plauk-Threaded Riser Length: 3 feet 10 feet | If AG, list feet of riser abov | e land surface | : : | | | | | | | NA |
| Riser Diameter and Material: 2-in PVC Screen Diameter and Material: 2-in PVC Screen Sol Size: Screen Sol Size: Screen Length: 2-in PVC 0.006 From 10 feet to 20 feet Screen Length: 2-in PVC 0.006 Screen Length: 1st Surface Casing Material: 2-in PVC 0.006 1st Surface Casing Length: 2st Surface Casing Length: 2st Surface Casing Material: 2st Surface Casing Lo. (inches): 2st Surface Casing Length: 3st Surface Casing Material: 2st Surface Casing Lo. (inches): 2st Surface Casing Length: 3st Sur | Borehole Depth | Well Depth | Borehole D | iameter | Manhole Di | ameter | Well Pad S | ize: | | |
| Connections: Other (describe) O | (feet): 21 | (feet): 2 | (inches): | 4.25 | (inches): | NA | | feet | by | feet |
| Screen Diameter and Material: Screen Slot Size: Screen Length: 2-in PVC 0.006 from 10 feet to 20 feet Surface Casing Material: NA 1 | Riser Diameter and Mat | erial: | Riser/Screen | ▼ Flush | -Threaded | | Riser Leng | th: 3 f | eet | |
| 2-in PVC 0.006 from 10 feet to 20 feet 1st Surface Casing Material: Also check: Permanent Temporary 2nd Surface Casing I.D. (inches): 2nd Surface Casing Material: Also check: Permanent Temporary 2nd Surface Casing Material: Also check: Permanent Temporary 3nd Surface Casing I.D. (inches): 3nd Surface Casing Material: Also check: Permanent Temporary 3nd Surface Casing I.D. (inches): 3nd Surface Casing Length: feet 3nd Surface Casing Length: feet 3nd Surface Casing Length: feet 4nd | 2-in PVC | | Connections: | Other (| describe) | | | | | 10 feet |
| 1st Surface Casing Material: | Screen Diameter and Ma | aterial: | | Screen S | lot Size: | | Screen Len | gth: 10 f | eet | |
| also check: Permanent Temporary from 0 feet to feet 2 nd Surface Casing Material: 2 nd Surface Casing L.D. (inches): 2 nd Surface Casing Length: from 0 feet to feet 3 nd Surface Casing Material: also check: Permanent Temporary 7 nd Surface Casing L.D. (inches): 3 nd Surface Casing Length: from 0 feet to feet 3 nd Surface Casing Material: also check: Permanent Temporary 7 nd Surface Casing Length: from 0 feet to feet 3 nd Surface Casing Material: also check: Permanent Temporary 7 nd Surface Casing Length: from 0 feet to feet 3 nd Surface Casing Length: from 0 feet to feet 7 nd Surface Casing Length: from 0 feet to feet 3 nd Surface Casing Material: Filter Pack Length: 11 feet 7 nd Form 0 from | 2 | -in PVC | | | 0.006 | | | from 10 | feet to | 20 feet |
| 2rd Surface Casing Material: also check: Permanent Temporary 3rd Surface Casing LD. (inches): 3rd Surface Casing LD. (inches): 3rd Surface Casing Length: from 0 feet to feet 3rd Surface Casing Material: also check: Permanent Temporary 3rd Surface Casing LD. (inches): 3rd Surface Casing Length: from 0 feet to feet Filter Pack Material and Size: Prepacked Filter Around Screen (check one): 3rd Surface Casing Length: from 0 feet to feet Filter Pack Length: 1 feet 30/45 Silica Sand Yes No from 9 feet to 21 feet Filter Pack Seal Length: 1 feet 30/45 Silica Sand Size: 30/65 Silca Sand Filter Pack Seal Length: from 8 feet to 9 feet Surface Seal Material: Type I/II Portland Cement Surface Seal Length: 6 feet to 8 feet WELL DEVELOPMENT DATA Well Development Date: Well Development Method (check one): Surges/Pump Pump Compressed Air 06/19/14 Other (describe) Development Pump Type (check): Centrifugal Peristaltic Depth to Groundwater (before developing in feet): 3 Surface Casing Length: feet of 21 feet 5 Filter Pack Length: 1 feet 5 from 8 feet to 9 feet 5 Surface Seal Length: 6 feet to 8 feet WELL DEVELOPMENT DATA Well Development Date: Well Development Method (check one): Surges/Pump Pump Compressed Air 06/19/14 Other (describe) Development Pump Type (check): Centrifugal Peristaltic Depth to Groundwater (before developing in feet): 3 Surface Casing Length: feet to 21 feet 5 filter Pack Length: 1 feet from 8 feet to 21 feet 5 feet to 9 feet to 21 feet 6 from LS Surface Casing Length: feet to 21 feet 6 from 9 feet to 21 feet 6 from 8 feet to 9 feet to 21 feet 6 from LS Surface Casing Length: feet to 21 feet 6 from 9 feet to 21 feet 6 from 9 feet to 21 feet 6 from LS Surface Casing Length: feet to 21 feet 6 from 9 feet to 21 feet 6 from 9 feet to 21 feet 6 from 9 feet to 21 feet 6 from LS Surface Casing Length: feet to 21 feet 6 from 9 feet to 21 feet 6 from LS Surface Casing Length: feet to 21 feet 6 from 9 feet to 21 feet 6 from LS Surface Casing Length: feet to 21 feet 6 from 9 feet to 21 feet 6 from LS Surf | 1 st Surface Casing Mater | rial: | NA | 1 st Surfa | ce Casing I.I | O. (inches): | 1 st Surface | Casing Length: | | feet |
| also check: Permanent Temporary from 0 feet to feet 3rd Surface Casing I.D. (inches): 3rd Surface Casing Length: feet | also check: | nanent | Temporary | | | | | from 0 | feet to | feet |
| 3rd Surface Casing Material: also check: | 2 nd Surface Casing Mate | erial: | | 2 nd Surfa | ce Casing I. | D. (inches): | 2 nd Surface | Casing Length | - | — feet |
| Surface Casing Material: also check: Permanent Temporary from 0 feet to feet | also check: Perm | nanent | Temporary | | | | | from 0 | feet to | feet |
| Filter Pack Material and Size: 30/45 Silica Sand Yes No from 9 feet to 21 feet Filter Pack Seal Length: Filter Pack Seal Length: Type I/II Portland Cement WELL DEVELOPMENT DATA Well Development Date: 06/19/14 Development Pump Type (check): Surface Seal Length: Other (describe) Development Pump Type (check): Surface Gallons per minute): 1.7 Maximum Drawdown of Groundwater During Development (feet): 8.40' btoc Well Development Water Appearance (color and odor) At Start of Development: Water Appearance (color and odor) At Start of Development: Water Appearance (color and odor) At End of Development: Well of the check one): Filter Pack Length: 1 feet 1 feet Surface Seal Length: 1 feet 1 feet Surface Seal Length: 2 feet to 9 feet Surface Seal Length: Surface Seal Length: Surface Seal Length: Surface Seal Le | | | | 3 rd Surfa | ce Casing I. | D. (inches): | 3 rd Surface | Casing Length: | · - | feet |
| Filter Pack Length: | also check: | nanent | Temporary | | | | | from 0 | feet to | feet |
| Filter Pack Seal Material and Size: 30/65 Silca Sand Filter Pack Seal Length: Type I/II Portland Cement Type I/II Portland Cement Type I/II Portland Cement Filter Pack Seal Length: Type I/II Portland Cement Surface Seal Length: From LS feet to 9 feet Surface Seal Length: Surface Seal Length: Surface Seal Length: Surface Seal Length: Surface Seal Length: Surface Seal Length: Surface Seal Length: Surface Seal Length: Surface Seal Length: Surface Seal Length: Surface Seal Length: Surface Seal Length: Surface Seal Length: Surface Seal Le | Filter Pack Material and | Size: Prep | oacked Filter Arou | ind Screen | (check one): | | Filter Pack | Length: | 11 | — feet |
| Size: Surface Seal Material: Type I/II Portland Cement WELL DEVELOPMENT DATA Well Development Date: 06/19/14 Development Pump Type (check): Submersible Other (describe) Development Mater Other (describe) Maximum Drawdown of Groundwater During 1.7 Pumping Rate (gallons per minute): 1.7 Maximum Drawdown of Groundwater During Development Well Purged Dry (check one): 8.40' btoc Well Purged Dry (check one): Yes No No Well Purged Dry (check one): Yes No No Well Purged Dry (check one): Yes No Well Purged Dry (check one): Well Purged Dry (check one): Yes No Well Purged Dry (check one): Well Purged Dry (check one): Yes No Well Purged Dry (check one): Well Purged Dry (check one): Yes No Well Purged Dry (check one): Well Purged Dry (check one): Yes No Well Purged Dry (check one): Well Purged Dry (check one): Yes No Well Purged Dry (check one): Well Purged Dry (check one): Well Purged Dry (check one): Yes No | 30/45 Silica San | d [| Yes | ▽ N | o | | | from 9 | feet to | 21 feet |
| Surface Seal Material: Type I/II Portland Cement WELL DEVELOPMENT DATA Well Development Date: 06/19/14 Development Pump Type (check): Submersible Other (describe) Pumping Rate (gallons per minute): 1.7 Development (feet): Maximum Drawdown of Groundwater During Development Water Removed (gallons): 246.5 Water Appearance (color and odor) At Start of Development: Well Development Pimp Type (check): Development Pimp Type (check): Centrifugal Peristaltic Depth to Groundwater (before developing in feet): 6.10' btoc Well Purged Dry (check one): Yes No No Water Appearance (color and odor) At End of Development: | Filter Pack Seal Materia | l and | _ | | | | Filter Pack | Seal Length: | 1 | feet |
| WELL DEVELOPMENT DATA Well Development Date: | Size: | | 31 | 0/65 Silca | Sand | | | from 8 | feet to | 9feet |
| WELL DEVELOPMENT DATA Well Development Date: 06/19/14 Development Pump Type (check): Submersible Other (describe) Other (describe) Development (feet): Maximum Drawdown of Groundwater During Development (feet): 1.7 Maximum Drawdown of Groundwater During Development (feet): 8.40' btoc Pumping Condition Intermittent Continuous Well Development Water Removed (gallons): 246.5 Well Development Duration (minutes): 145 Well Pump Compressed Air Other (describe) Development (before developing in feet): 6.10' btoc Well Purged Dry (check one): Yes No No Water Appearance (color and odor) At Start of Development: Water Appearance (color and odor) At End of Development: | Surface Seal Material: | | _ | | | | Surface Sea | al Length: | 8 | feet |
| Well Development Date: | | | Туре | I/II Portlan | d Cement | | | from LS | feet to | |
| Well Development Date: | | | | | | | • | | | |
| Well Development Date: | | | | WELL | DEVEL | OPMENT | Γ DATA | | | |
| Development Pump Type (check): Submersible Other (describe) Maximum Drawdown of Groundwater During Development (feet): 8.40' btoc Pumping Condition Intermittent Continuous Continuous Contrifugal Peristaltic Depth to Groundwater (before developing in feet): 6.10' btoc Well Purged Dry (check one): Yes No Development Water Appearance (color and odor) At Start of Development: Water Appearance (color and odor) At Start of Development: Continuous Other (describe) Depth to Groundwater (before developing in feet): 6.10' btoc Well Purged Dry (check one): Yes No Water Appearance (color and odor) At End of Development: | Well Development Date | : | Well Develo | | | | | ump P | итр Г | Compressed Air |
| Submersible Other (describe) Maximum Drawdown of Groundwater During 1.7 Maximum Drawdown of Groundwater During Development (feet): 8.40' btoc Well Purged Dry (check one): Yes No Pumping Condition Intermittent Continuous Total Development Water Removed (gallons): 246.5 Water Appearance (color and odor) At Start of Development: Water Appearance (color and odor) At End of Development: | 06/19/1 | 4 | Othe | er (describe) | | | | · · | | r |
| Pumping Rate (gallons per minute): 1.7 Maximum Drawdown of Groundwater During Development (feet): S.40' btoc Yes No | | | Centrifugal | ☐ Pe | ristaltic | Depth to Gro | undwater (b | • | • | |
| 1.7 Development (feet): 8.40' btoc Yes No Pumping Condition Intermittent Removed (gallons): 246.5 Development Duration (minutes): 145 Development Water Drummed (check one): Yes No Water Appearance (color and odor) At Start of Development: Water Appearance (color and odor) At End of Development: | | | - | mum Draw | down of Gro | undwater Du | ring | | | one): |
| ✓ Continuous Removed (gallons): 246.5 (minutes): 145 (check one): ✓ Yes ✓ No Water Appearance (color and odor) At Start of Development: Water Appearance (color and odor) At End of Development: | | | | | | | - | | | |
| | Pumping Condition In Continuous | ntermittent | - | | 246.5 | | | 1 | | |
| Turbid brown, no-odor Turbid, no-odor | Water Appearance (color and odor) At Start of Development: | | | | Water Appearance (color and odor) At End of Development: | | | | | |
| | | Turbid br | own, no-odor | | | | | Turbid, | no-odor | |

WELL CONSTRUCTION OR DEVELOPMENT REMARKS

Initial turbidity reading with Lamotte 2,007 ntu. Purged ~247 gallons of water using Pro-Active Water Spout submersible pump. Final turbidity reading noted 15 ntu. As with previous well construction and development activities, turbidity levels vary significantly between well locations.

| l W | ELL CONSTR | UCTION | DATA | | | |
|--|------------------------------------|--|--|----------------------------|--------------------------------|--|
| Well Number: Site Name: | | | FDEP Facility I.D. Number: Well Install Date(s): | | | |
| | Waste Disposal Fac | | | 89544 | 06/18/14 | |
| Well Location and Type (check appropriate boxes): ✓ On-Site ✓ Right-of-Way | | Perched Moni | - | | Well Install Method: | |
| ✓ On-Site ☐ Right-of-Way ☐ Off-Site Private Property | | Shallow (Water-Table) Monitoring Intermediate or Deep Monitoring Hollow Stem Auge | | | | |
| Above Grade (AG) Flush-to-Grade | | Remediation of | | | Surface Casing Install Method: | |
| If AG, list feet of riser above land surface: | | | | | NA | |
| Borehole Depth Well Depth Borehole Dia | meter Manhole Di | ameter | Well Pad S | ize: | | |
| (feet): 37.5 (feet): 37.5 (inches): | 4.25 (inches): | NA | | feet | by feet | |
| Riser Diameter and Material: Riser/Screen | Flush-Threaded | | Riser Leng | th: 3 f | eet | |
| 2-in PVC Connections: | Other (describe) | | | from LS | feet to 27 feet | |
| Screen Diameter and Material: | Screen Slot Size: | | Screen Len | gth: 10 f | eet | |
| 2-in PVC | 0.006 | | | from <u>27</u> | feet to 37 feet | |
| 1 st Surface Casing Material: NA | 1st Surface Casing I.I | D. (inches): | 1 st Surface | Casing Length: | feet | |
| also check: Permanent Temporary | | | | from 0 | feet to feet | |
| 2 nd Surface Casing Material: | 2 nd Surface Casing I. | D. (inches): | 2 nd Surface | Casing Length | : <u>—</u> feet | |
| also check: Permanent Temporary | | | | from 0 | feet tofeet | |
| 3 rd Surface Casing Material: | 3 rd Surface Casing I.1 | D. (inches): | | | feet | |
| also check: Permanent Temporary | | | | from 0 | feet tofeet | |
| Filter Pack Material and Size: Prepacked Filter Aroun | d Screen (check one): | | Filter Pack | Length: | 11 feet | |
| 30/45 Silica Sand | ▼ No | | | from 26 | feet to 37 feet | |
| Filter Pack Seal Material and Size: 30/ | 65 Silca Sand | | | Seal Length: | 1000 | |
| SIZC. | | | from 25 feet to 26 feet | | | |
| Surface Seal Material: Type I/I | I Portland Cement | | | al Length: | 25 feet | |
| | | | | Irom L3 | feet to 25 feet | |
| V | VELL DEVELO |)PMENT | DATA | | | |
| | oment Method (check | | Surge/P | ump 🔽 Pi | ump Compressed Air | |
| 06/19/14 | | | 20280 | | | |
| Development Pump Type (check): Centrifugal Submersible Other (describe) | Peristaltic | Depth to Gro | undwater (b | efore developin | • | |
| | num Drawdown of Gro | oundwater Du | ring | 6.4' bt | ry (check one): | |
| | opment (feet): | 13.20' | • | Yes | No | |
| Pumping Condition (check one): Total Developmer ✓ Continuous ☐ Intermittent Removed (gallons) | | Development (minutes): | t Duration 170 | Development V (check one): | Vater Drummed ☐ Yes | |
| Water Appearance (color and odor) At Start of Developm | ent: | Water Appearance (color and odor) At End of Development: | | | | |
| Turbid brown, no-odor | | | | Turbid, no | o-odor | |

WELL CONSTRUCTION OR DEVELOPMENT REMARKS

Initial turbidity reading with Lamotte . 3,000 ntu. Pumped and surged to develop well location final turbidity reading 165 ntu.

| Well Number: MW-25 A Well Location and Type (check appropriate b ✓ On-Site Right-of | | d Waste Dispo | ocal Eaci | | FDEP Facility I | .D. Numbe | r: Well Install Date(s): |
|---|--------------------|--------------------------------|---------------------------------|--|------------------------------|--------------------------------|--------------------------------|
| Well Location and Type (check appropriate b | | d Waste Dispo | scal Eaci | | | | (-)- |
| | oxes): | • | | ility | 898 | 544 | 06/19/14 |
| ✓ On-Site ☐ Dight of | | Well Purpose | e: 🔲 F | Perched Moni | itoring | | Well Install Method: |
| | -Way | | V S | Shallow (Wate | er-Table) Monit | toring | Hollow Stem Auger |
| Off-Site Private Property | | | | | or Deep Monito | | Surface Casing Install Method: |
| Above Grade (AG) Flush-to | -Grade | | Remediation or Other (describe) | | | Surface Casing instant Method. | |
| If AG, list feet of riser above land surface: | | | | | | | NA |
| Borehole Depth Well Depth | Borehole Di | ameter Mar | nhole Dia | ımeter | Well Pad Size: | | |
| | 20 (inches): | 4.25 (inc | ches): | NA | | | by feet |
| Riser Diameter and Material: | Riser/Screen | ✓ Flush-Th | readed | | Riser Length: | | |
| 2-in PVC | Connections: | Other (descr | ribe) | | fron | n LS | feet to feet |
| Screen Diameter and Material: | | Screen Slot S | Size: | | Screen Length: | | eet |
| 2-in PVC | | | 0.006 | | fron | n 10 | feet to 20 feet |
| 1 st Surface Casing Material: | NA | 1 st Surface C | Casing I.D | O. (inches): | 1 st Surface Casi | ing Length: | feet |
| also check: Permanent | Temporary | | | | fron | n <u>0</u> | feet tofeet |
| 2 nd Surface Casing Material: | | 2 nd Surface C | Casing I.I | O. (inches): | 2 nd Surface Cas | ing Length: | feet |
| also check: Permanent | Temporary | | | | fron | n <u>0</u> | feet to feet |
| 3 rd Surface Casing Material: | | 3 rd Surface C | Casing I.D | O. (inches): | 3 rd Surface Cas | ing Length: | feet |
| | Temporary | | | | fron | n 0 | feet to feet |
| Filter Pack Material and Size: Pre | oacked Filter Arou | nd Screen (che | ck one): | | Filter Pack Len | | 11 feet |
| 30/45 Silica Sand | Yes | ▼ No | | | fron | n <u>9</u> | |
| Filter Pack Seal Material and Size: | 3(| 0/65 Silca San | GE Cilco Cond | | | Length: | 1 feet |
| | 30 | 705 Olica Gail | iu | | fron | n 8 | feet to 9 feet 8 feet |
| Surface Seal Material: | Type I | /II Portland Ce | omont | | Surface Seal Le | ngth: | 8 feet |
| | турет | /II FUILIANU C | emem | | fron | n LS | feet to 8 feet |
| | | | | | | | |
| | | VELL DEV | | | DATA | | |
| Well Development Date: | | pment Method | l (check c | one): | ▼ Surge/Pump | ☐ Pu | ımp Compressed Air |
| 07/01/14 | Othe | r (describe) | | | | | |
| Development Pump Type (check): | Centrifugal | Perista | ıltic | Depth to Gro | undwater (befor | • | • |
| Submersible Other (describe) | | | | | | 6.8' k | |
| Pumping Rate (gallons per minute): 1.5-6.0 | Deve | mum Drawdow lopment (feet): | | undwater Dur 8.45' I | btoc [| Yes | ry (check one): No |
| Pumping Condition (check one): | Total Developme | | | Development | | - | Vater Drummed |
| Continuous Intermittent | Removed (gallor | <u>'</u> | 127.5 | (minutes): | 85 (che | eck one): | Yes No |
| Water Appearance (color and odor) At Star | t of Development: | | | Water Appearance (color and odor) At End of Development: | | | |
| Turbid brow | n, no-odor | | | | | Turbid, r | no-odor |

WELL CONSTRUCTION OR DEVELOPMENT REMARKS

Well location purged at varying rates between 1.5-6.0 gpm. Turbidity measurnents varied significantly with high levels exceeding 3,000 ntu and dropping to a low of 14 ntu at the end of the development cycle.

| | ELL CONSTRUCTI | | | | |
|--|---|--|-------------------------------|--|--|
| Well Number: Site Name: | | FDEP Facility I.D. N | Number: Well Install Date(s): | | |
| | aste Disposal Facility | 89544 | 06/19/14 | | |
| Well Location and Type (check appropriate boxes): | Well Purpose: Perche | d Monitoring | Well Install Method: | | |
| On-Site Right-of-Way | | Shallow (Water-Table) Monitoring | | | |
| Off-Site Private Property | | Intermediate or Deep Monitoring | | | |
| Above Grade (AG) Flush-to-Grade | Remed | Surface Casing Install Method: | | | |
| If AG, list feet of riser above land surface: | | | | | |
| Borehole Depth Well Depth Borehole Dian | meter Manhole Diameter | Well Pad Size: | | | |
| (feet): 40 (feet): 40 (inches): | 4.25 (inches): N | IAfe | eet by feet | | |
| | ▼ Flush-Threaded | Riser Length: | 3 feet | | |
| | Other (describe) | | LS feet to 30 feet | | |
| Screen Diameter and Material: | Screen Slot Size: | Screen Length: | 10 feet | | |
| 2-in PVC | 0.006 | from | 30 feet to 40 feet | | |
| 1 st Surface Casing Material: NA | 1st Surface Casing I.D. (inch | nes): 1 st Surface Casing L | ength:feet | | |
| also check: Permanent Temporary | | from | 0 feet to feet | | |
| 2 nd Surface Casing Material: | 2 nd Surface Casing I.D. (incl | | Length: ———feet | | |
| also check: Permanent Temporary | | from | 0 feet to feet | | |
| 3 rd Surface Casing Material: | 3 rd Surface Casing I.D. (incl | | ength: ——feet | | |
| also check: Permanent Temporary | | from | 0 feet to feet | | |
| Filter Pack Material and Size: Prepacked Filter Around Scr | een (check one): | Filter Pack Length: | | | |
| 30/45 Silica Sand | ▼ No | | 28 feet to 40 feet | | |
| Filter Pack Seal Material and | | | gth: 1 feet | | |
| Size: 30/65 | Silca Sand | | 27 feet to 28 feet | | |
| Surface Seal Material: | | Surface Seal Length | | | |
| Type I/II F | ortland Cement | from | | | |
| | | | <u> </u> | | |
| WI | ELL DEVELOPME | NT DATA | | | |
| • | ment Method (check one): | ✓ Surge/Pump | Pump Compressed Air | | |
| 06/19/2014,07/01/2014 | (describe) | | | | |
| Development Pump Type (check): Centrifugal | Peristaltic Depth | to Groundwater (before dev | veloping in feet): | | |
| Submersible Other (describe) | | 6 | 6.51' btoc | | |
| | um Drawdown of Groundwa | _ | rged Dry (check one): | | |
| | | 25.03' btoc | | | |
| Pumping Condition (check one): Total Developmen | | | ment Water Drummed | | |
| Continuous Intermittent Removed (gallons) |): 546 ^{(minu} | (minutes): 200 (check one): Yes No | | | |
| Water Appearance (color and odor) At Start of Development: | Water | Water Appearance (color and odor) At End of Development: | | | |
| Turbid brown, no-odor | | Tur | bid, no-odor | | |

WELL CONSTRUCTION OR DEVELOPMENT REMARKS

Well location developed in two (2) discrete phases. Well discharge is turbid and exceeded 3,000 ntu. Attempted to reduce turbidity by surging and overpumping during mutltiple site visits. Final turbidity reading was 331 ntu.

| | W | ELL CONSTRU | JCTION I | DATA | | | | |
|--|---|--|--|---|---------------------------|--|--|--|
| Well Number: | | | FDEP Facility I.D. Numb | Well Install Date(s): | | | | |
| MW-26 A | Waste Disposal Fac | | 89544 | 06/19/14 | | | | |
| Well Location and Type (check appropriate of the Constitution of | ▼ | | itoring er-Table) Monitoring or Deep Monitoring | Well Install Method: Hollow Stem Auger | | | | |
| Above Grade (AG) | | | or Other (describe) | Surface Casing Install Method: | | | | |
| If AG, list feet of riser above land surface: | | | | NA | | | | |
| Borehole Depth Well Depth | Borehole Dia | meter Manhole Di | ameter | Well Pad Size: | | | | |
| (feet): 21 (feet): | 20 (inches): | 4.25 (inches): | NA | feet | by feet | | | |
| Riser Diameter and Material: 2-in PVC | Connections: | | | Riser Length: 3 feet feet to 10 feet | | | | |
| Screen Diameter and Material: | Screen Slot Size: | | Screen Length: 10 feet | | | | | |
| 2-in PVC | | 0.006 | | from10 | feet to 20 feet | | | |
| 1 st Surface Casing Material: | NA | 1 st Surface Casing I.I | D. (inches): | 1 st Surface Casing Length | | | | |
| also check: Permanent | Temporary | | | from 0 | feet tofeet | | | |
| 2 nd Surface Casing Material: | 2 nd Surface Casing I.D. (inches): | | 2 nd Surface Casing Length: ——feet | | | | | |
| also check: Permanent | ☐ Temporary | | | from 0 | feet to feet | | | |
| 3 rd Surface Casing Material: | | 3 rd Surface Casing I.D. (inches): | | 3 rd Surface Casing Length: feet | | | | |
| also check: Permanent | Temporary | | | from 0 | feet to feet | | | |
| Filter Pack Material and Size: | d Screen (check one): | | Filter Pack Length: 11 feet | | | | | |
| 30/45 Silica Sand | ☐ Yes | ▼ No | | from 9 | feet to 21 feet | | | |
| Filter Pack Seal Material and Size: | 65 Silca Sand | | Filter Pack Seal Length: from 8 | | | | | |
| Surface Seal Material: | I Portland Cement | | Surface Seal Length: from LS | 8 feet feet to 8 feet | | | | |
| | | | | | | | | |
| | W | ELL DEVELO | PMENT D | ATA | | | | |
| Well Development Date: 07/01/14 | Well Develop Other | one): | Surge/Pump | Pump Compressed Air | | | | |
| Development Pump Type (check): ✓ Submersible ☐ Other (describe) | Centrifugal | Peristaltic | Depth to Gro | undwater (before developi 7.61 | ng in feet): ' btoc | | | |
| Pumping Rate (gallons per minute): 1.6 | Maxim Develo | oundwater Dur 10.52' | | | | | | |
| Pumping Condition (check one): ✓ Continuous ✓ Intermittent | | | | | Water Drummed ✓ Yes ✓ No | | | |
| Water Appearance (color and odor) At | | Water Appearance (color and odor) At End of Development: | | | | | | |
| Turbid brown, no-odor | | | | Turbid, no-odor | | | | |
| | | | | | | | | |

WELL CONSTRUCTION OR DEVELOPMENT REMARKS

| | W | ELL CONSTR | UCTION I | DATA | | | | | |
|--|--|--|--|-------------------------------------|--------------------------------|--|----------------|--|--|
| Well Number: Site Name: | | | | FDEP Facili | ty I.D. Numbe | r: Well Install Date(s): | | | |
| MW-25 B | Waste Disposal Fac | cility | | 89544 | | 06/19/14 | | | |
| Well Location and Type (check app | | Perched Monit | toring | | Well Install Method: | | | | |
| ✓ On-Site ✓ Right-of-Way | | | | er-Table) Monitoring | | Hollow Stem Auger | | | |
| Off-Site Private Property Above Grade (AG) Flush-to-Grade | | | or Deep Monitoring or Other (describe) | | Surface Casing Install Method: | | | | |
| Above Grade (AG) Flush-to-Grade | | | of Other (describe) | | | | | | |
| If AG, list feet of riser above land surface: | | | | | NA | | | | |
| Borehole Depth Well Dep | | meter Manhole Di | ameter | Well Pad Siz | ze: | • | | | |
| (feet): 40 (feet): | 40 (inches): | 4.25 (inches): | NA | _ | | | feet | | |
| Riser Diameter and Material: | | | | | Riser Length: 3 feet | | | | |
| 2-in PVC | Connections: | Other (describe) | | 1 | from LS | feet to | 30 feet | | |
| Screen Diameter and Material: | Screen Slot Size: | Screen Length: 10 feet | | | | | | | |
| 2-in PVC | 0.006 | | f | from 30 | feet to | 40 feet | | | |
| 1 st Surface Casing Material: | 1 st Surface Casing I.l | D. (inches): | 1 st Surface Casing Length:feet | | | | | | |
| also check: Permanent | Temporary | | | í | from 0 | feet to | feet | | |
| 2 nd Surface Casing Material: | | 2 nd Surface Casing I. | D. (inches): | | Casing Length | | | | |
| also check: Permanent | ☐ Temporary | | | f | from 0 | feet to | feet | | |
| ard a garden | | 3 rd Surface Casing I. | D. (inches): | | Casing Length | | | | |
| 3 rd Surface Casing Material: also check: Permanent | | | | | | | | | |
| Filter Pack Material and Size: | Temporary Prepacked Filter Aroun | nd Saraan (ahaak ana): | | | <u>0</u> | | | | |
| | | | | Length: | | | | | |
| 30/45 Silica Sand | ▼ No | | | From 28 | | | | | |
| Filter Pack Seal Material and Size: | 65 Silca Sand | | | Seal Length: | | | | | |
| | | | | From <u>27</u> | | | | | |
| Surface Seal Material: | Portland Cement | | Surface Seal | | 27 | | | | |
| | | | 1 | from LS | feet to | 27 feet | | | |
| | | | | | | | | | |
| WELL DEVELOPMENT DATA | | | | | | | | | |
| Well Development Method (check one): Surge/Pump Pump Compressed Ai | | | | | | | Compressed Air | | |
| 07/01/14 | | (describe) | • | | | | | | |
| Development Pump Type (check): | Continugai | Peristaltic | Depth to Grou | undwater (be | • | | | | |
| Submersible Other (descr | | | | | 7.60' b | | | | |
| Pumping Rate (gallons per minute 1.7 to 3.5 | um Drawdown of Groundwater Du pment (feet): 24.89 | | btoc | Well Purged Dry (check one): ☐ Yes | | | | | |
| Pumping Condition (check one): Continuous Intermitten | Total Development Removed (gallons | | / · · · · | | | Development Water Drummed (check one): | | | |
| Water Appearance (color and odor | | Water Appearance (color and odor) At End of Development: | | | | | | | |
| Turbio | Turbid, no-odor | | | | | | | | |
| | | | | | | | | | |

WELL CONSTRUCTION OR DEVELOPMENT REMARKS

Utilized two pumps to stress the well during the development cycle. Initial turbidity reading with Lamotte > 3,000 ntu. Final turbidity reading at the end of development 408 ntu.