



**COMPLETION REPORT FOR
MONITORING OF STAGE 4 GROUTING
SOUTHEAST COUNTY LANDFILL
GEOTECHNICAL SINKHOLE REMEDIATION
HILLSBOROUGH COUNTY, FLORIDA**

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CERTIFICATION

Engineering Certification

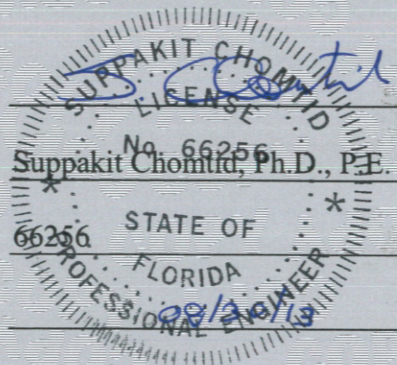
We hereby certify that we are registered professional engineers in the State of Florida practicing with AMEC Environment & Infrastructure, Inc., a corporation authorized to operate as a business providing engineering consulting services (5392) by the State of Florida Department of Professional Regulation, Board of Professional Engineers. We further certify that we, or others under our direct supervision, have prepared the geotechnical engineering evaluations, findings, opinions, calculations, conclusions, or technical advice hereby represented in this Report.

SIGNATURE:

NAME:

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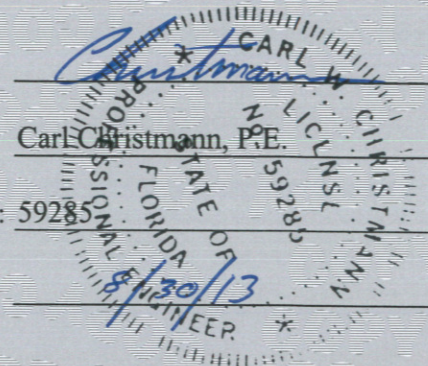
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**Report Title: Completion Report for Monitoring of
Stage 4 Grouting
Southeast County Landfill
Geotechnical Sinkhole Remediation
Hillsborough County, Florida**

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1.0 INTRODUCTION

On December 14, 2010, a cover-collapse sinkhole occurred on the west side of the Phase VI disposal area at the Southeast County Landfill. HDR Engineering, Inc. (HDR) was contracted by Hillsborough County to design and implement a remediation plan to stabilize the area. The design and implementation of the remediation plan was divided into five stages. An overview of each stage is presented below:

- Stage 1 - Provide initial stabilization of the sinkhole to minimize further movement and enlargement of the sinkhole.
- Stage 2 - Provide additional stabilization of the sinkhole by placing a plug of Controlled Low-Strength Material (CLSM) into the surface opening of the sinkhole and then backfilling with soils to allow for personnel and equipment access the top of the sinkhole to conduct geotechnical and geophysical investigations of the sinkhole feature.
- Stage 3 - Conduct geophysical and geotechnical investigations to define the lateral and vertical configuration of the sinkhole as well as characterize the subsurface conditions and outline a remedial methodology for mitigating the mechanism that created the cover-collapse and the potential for soils and wastes to migrate away from the area.

The geotechnical and geophysical investigations were conducted by SDII Global, Inc. (SDII) from November 2011 through March 2012. SDII's testing identified several anomalies surrounding the area as well as waste debris ranging from 5 to 80 feet in thickness within the sinkhole. SDII also identified several limestone and dolostone formations, emplaced grout, and sand and clay sediments along with raveling zones and deep subsurface cavities. A Site Characterization Report (Stage 3 Report) prepared by SDII was submitted to Florida Department of Environmental Protection (FDEP) in March 2012. According to the findings, SDII concluded and recommended:

- *“Based on (1) the shape of the sinkhole and rock-collapse shaft that caused it, (2) the fact that the landfill debris does not appear to have penetrated the feeder conduits past the flared bottom of the shaft, and (3) the waste volume is stable, SDII recommends additional remediation of the sinkhole to contain the waste mass.”*
- *“Grouting should begin with a circular array of grout holes spaced approximately 5 feet apart centered on the sinkhole shaft.”*
- *“The radius of this circle of grout points should be set to encompass the known lateral extent of the debris and flare of the bottom of the sinkhole shaft.”*
- *Care should be taken to avoid extending the circular grout-point array into the geosynthetic liner west of the sinkhole.”*

- *“Once the grout points on the circular grout-point array have been installed, it should be determined if landfill debris was encountered in any of the grout points. If debris was encountered, the grouting point array should be expanded near the point(s) of detection until landfill waste was no longer detected.”*
- *“Test grout point holes should be advanced near existing SPT boreholes prior to initiating placement of the grout circle.”*

Stage 4 - Prepare a detailed geotechnical Sinkhole Remediation Plan to mitigate the mechanism that created the subsidence occurrence and the potential for soils and wastes to migrate away from the area already impacted. The geotechnical sinkhole remediation plan dated March 26, 2012, was prepared by AMEC Environment & Infrastructure, Inc. (AMEC) based on the findings outlined in the Stage 3 Site Characterization Report.

The grouting plan design focused on sealing of the conduits suspected as the mechanism for the initial subsurface erosion and subsequent failure. As discussed in the following sections of the report, the design consisted of drilling calibration points, a series of sequential primary, secondary and tertiary grout injection points at the proposed depths around the perimeter of the sinkhole feature. Stage 4 was executed in a manner that identified the likely feeder conduits through a systematic approach of primary, secondary, and tertiary points. The primary and secondary grout points were installed in sequential order around the circumference. The tertiary point locations were selected to augment the primary and secondary points in areas that experienced increased grout takes.

Stage 5 - Will be implemented by HDR after completion of the Stage 4 grouting and will consist of a system designed to isolate the upper impacted portion of the waste phosphatic clay liner system (clay liner) in the Phase VI disposal area.

The Stage 4 stabilization plan summarized in this report is for the monitoring of the activities related to Stage 4 of the Plan. Observations and testing completed by AMEC are described in the following sections.

1.1 Site Description

The project site is located at the Southeast County Landfill within Sections 14, 15, 22, and 23 of Township 31 South, Range 21 East in southeastern Hillsborough County, Florida. A site location map of the landfill is enclosed as **Plan Sheet 1**. The current landfill was built on a previous phosphate mining area, which was used to store mine tailings and phosphatic clays.

Prior to initiating any subsurface activities, the Contractor, Earth Tech, Inc. (ET), constructed an earthen platform to level the work area and provide a level access platform for the drilling equipment. The job site, view of the SM-20 drill rig and platform are depicted in **Photographs 1 through 3 (Appendix A - Photographs)**.

The platform consisted of a lightly compacted sandy fill with varying amounts of clay and silt. The earthen platform tapered from approximately 9 to 10 feet high along the western edge to meet the existing ground surface along the eastern edge of the work area.

A water collection ditch was installed along the western and northern edges of the platform surface to collect runoff and water associated with drilling operations and limit runoff from the work area. The collected water was pumped to the infiltration basin located east of the drilling platform. Silt fencing was placed in accordance with the plans along the western boundary of the work area. Water for the remedial operations was obtained from on-site sources located along the southern boundary of the landfill.

1.2 Scope of Services

AMEC was contracted by HDR and Hillsborough County to oversee conformance with the remedial program design, ensure ET conformance with the specifications, and provide guidance and recommendations to ET when conditions dictated changes from the initial plan. The work was executed by ET from February 11, 2013, through May 8, 2013. AMEC performed the following activities as part of the monitoring program which are summarized in this report:

- Attended on-site pre-construction meetings with ET to convey AMEC's project expectations.
- Reviewed the technical specifications with ET's superintendent.
- Verified and completed all underground and above ground utility clearances within the project area.
- Conducted daily on-site discussions with ET's superintendent in order to provide guidance and technical support.
- Monitored the installation of grout casings.
- Monitored the injection of cement grout in accordance with AMEC's project specifications.
- Monitored daily tests on cement grout material prepared by Tierra, Inc. (Tierra) to ensure compliance with project specifications. Documented daily field activities including grout point locations, installation depth, and quantity of injected grout (**Appendix B - Daily Field Reports**).

2.0 CONTRACTOR MOBILIZATION AND ON-SITE EQUIPMENT

Earth Tech's on-site equipment consisted of:

- Two SM-20 hydraulic drilling rigs
- Over 500 feet of 4-inch casing (in 10-foot sections)
- Over 500 feet of 5-inch casing (in 10-foot sections) and two plastic water tanks (~2,000 gallons) feeding the drilling rigs
- Two large water tank (Frack Tanks) trailers (~25,000 gallons) used to maintain a steady water flow into the smaller plastic tanks
- Several small- to medium-sized water pumps used to fill the tank trailer with water from on-site stormwater ponds and to pump effluent from the platform ditch to designated areas
- A hydraulic jack used for extracting tight casings
- A forklift
- A small excavator
- A small skid steer mainly used for flattening the work platform
- A power generator/arc welder
- Portable lights
- Two large 2-way Schwing grout pumps
- On-site office trailer and material storage trailer

Equipment was staged within the work area. An earthen work platform was constructed over the sinkhole area prior to drilling to provide a level working surface. A small berm (~2 feet high) was constructed around the platform's northern and western edges in order to prevent runoff and refuse water (water from drilling processes) from discharging outside of the work area as seen in **Photographs 4 and 5 (Appendix A)**. In addition, to help with the collection of the refuse water, a 2- to 3-feet deep ditch/trench was excavated around the northern and western edges. The water within the ditch/trench was continuously pumped and conveyed to a sedimentation basin which was located on the east side of the work area. In order to minimize mitigation of sediments outside of the work area, a silt fence was installed along the toe of the earthen platform in accordance with the design drawings as depicted in **Photograph 6 (Appendix A)**.

3.0 COMPACTION GROUT INJECTION POINTS

As discussed in the Stage 4 stabilization plan, the drilling and grouting protocols of Stage 4 were divided into four stages: calibration; primary grouting; secondary grouting; and tertiary grouting. Each stage encompasses both the drilling and grouting of the respective sequence of points and is discussed in the following sections.

The locations of all injection points were marked in the field by a survey team from Pickett & Associates, Inc. (Pickett). The surveyors were coordinated by ET, and the points were located in multiple phases as needed.

3.1 Calibration Points

Three calibration points (C-1 through C-3) were initially identified at the project area to define the drilling characteristic of the SM-20 hydraulic drilling rig with respect to the known geologic formations as identified in the Stage 3 subsurface investigation data. In addition, these points were used to allow ET the opportunity to demonstrate alternative drilling methods, which they believe would be effective and for which they requested consideration. As discussed in further detail below, difficulties were encountered during the execution of the initial three calibration points. As a result, three of the proposed primary points (P-9, P-14 and P-21) were selected based on their proximity to known subsurface conditions to further evaluate ET's means and methods. In addition, this allowed validation that the drilling/grouting system being used was capable of achieving the expected results before initiating the primary, secondary and tertiary stages of the remediation. The results of these three additional calibration points, P-9, P-14 and P-21, are also included in this section.

3.1.1 Drilling of Calibration Points

The calibration process consisted of drilling at the three predetermined locations which corresponded with standard penetration test borings (B-S3-2, B-S3-6, and B-S3-9) performed during previous activities at the site. The calibration borings were identified on the drawings as calibration points C-1 through C-3. The depths of the calibration borings are shown in **Table 1 - Summary of Calibration Points, Depths, Ground Surface Elevations and Grout Quantities and Completion Date** and the locations are illustrated on **Plan Sheet 2**.

As mentioned previously, in lieu of using the duplex system (5-in outer casing with a 4-in inner casing) recommended in the design documents, ET proposed using an alternative drilling method which ET felt was capable of achieving the depths required. It was decided to allow ET the opportunity to demonstrate their proposed method. Points C-1 and C-2 were completed using an open-ended, simplex or single 4-inch diameter casing with cutter teeth along the leading edge of the pipe. Point C-3 was completed using a similar system but with a simplex or single 5-inch diameter casing.

During the drilling process, the pressure, resistance and time were documented at each interval depth and used for interpretation of the soil strata, particularly along the anticipated remediation grout zones. Due to the high capacity of the drilling rigs and a manual operation process, it was difficult to interpret the soil strata by using torque and pressure gauge readings, only.

Therefore, additional observations of drilling resistance (level of compression noted along the spring supporting the drilling rod), and the time required to drill through a casing section were also recorded in 5-foot and 10-foot increments from the existing ground surface elevation extending to the termination depths. ET was allowed to manually control the casing until the casing was advanced to within 20 feet of the projected termination depth at which time ET was required to abandon the manual advancement and engage the automatic advancement with a fixed pressure and torque to the termination depths.

A discussion of the results of the Calibration borings is provided below in **Section 3.1.3**. The drilling logs are presented in **Appendix C - Drilling Logs**.

3.1.2 Grouting of Calibration Points

Grouting of the calibration points was initiated after the pump system was calibrated using a 50-gallon container provided on-site by ET. By pumping grout into a container with a known volume, the quantity of grout being injected per individual stroke of the concrete pump was able to be calculated. The results indicated that the pump capacity was approximately 30 strokes per cubic yard.

Grout material conforming to the specifications outlined in the design documents was delivered in 5, 6, and 10 cubic yard batches with a design slump of 3 to 5 inches. The material was prepared by Hicks Industries in Mulberry Florida and was delivered to the site by ready-mix trucks operated by ET personnel. The slump of the grout material was checked on-site from every truck by a representative of Tierra who provided the quality control oversight for ET as specified. Once the grout material was deemed to be within specifications, grout was pumped through the system to the top of the casing. The initial line pressure was recorded to establish an initial baseline pressure for each grout injection point. The compaction grouting process began at the bottom of the injection point and was continuously pumped until an increase of at least 200 pounds per square inch (psi) was observed over the initial baseline pressure recorded. Then, the grout casing was extracted upward 5 feet with continuous pumping. This process was repeated throughout the remediation grout zone until the upper limit of the zone was reached.

The compaction grouting process was limited to the remediation grout zone which was defined as the range of depths which would have the highest probability of intersecting potential conduits in the subsurface. SDII identified this zone as the suspected mechanism which led to a surface collapse by allowing migration of soil from the area. Given the geologic profile consisting of variable sediments overlying a very dense dolomitic limestone layer, it is likely that most if not all of the potential conduits would be located near the bottom of the remediation grout zone. A remediation grout zone was defined for each individual point as shown on **Plan Sheet 2**.

The findings and results of the initial calibration points (C-1 through C-3) and three additional calibration points (P-9, P-14, and P-21) are discussed in **Section 3.1.3**.

Once the upper limit of the zone was reached, ET extracted the casing while ensuring that the overlying portion of the borehole was fully grouted to the surface by controlling the casing extraction and pump rate.

During the grouting of calibration points C-1 and C-3, the line pressure reached higher than expected values (increases in line pressures greater than 400 psi), and did not recede during subsequent pumping intervals. Calibration point C-2 encountered pressures within the expected ranges (increases in line pressure of up to 200 psi). Therefore, casings for points C-1 and C-3 were extracted in order to evaluate the cause of the high pressures. Obstructions consisting of pieces of very hard rock/soil material were observed in the casing; suspected as a result of the drilling system employed. **Photographs 7 and 8 (Appendix A)** show typical materials observed in the casing.

Based on observations and data collected during the drilling and grouting of the initial three calibration points, ET was asked to complete three additional calibration points to further demonstrate the adequacy of their proposed system. Three primary points P-9, P-14 and P-21 were selected as the additional calibration locations because of their proximity to known subsurface conditions.

3.1.3 Calibration Boring Results

As mentioned above, difficulties were encountered during the execution of the initial three calibration points that resulted in the execution of three of the primary points to further evaluate the methodology during the calibration stage. Although ET was able to demonstrate that their proposed drilling method was capable of achieving the desired depths while maintaining the borehole integrity, upon initiating the grout injection, it was observed that the method resulted in occasional blockage of the casing by residual cuttings because of the drilling/cutting system employed by ET. The presence of a very dense layer of material at depths of approximately 100 to 140 feet and 200 to 240 feet below grade was suspected of being the origin of the blockage material. The blockages were initially indicated by rapid pressure increases in the grout line pressure. ET extracted the casing when these conditions occurred. Because of the exploratory nature of the calibration points, ET was allowed to clear the casing and reinstall it to complete the affected points. An inspection of the cuttings blocking the casing showed that the very hard soil/rock layer identified above had a tendency to create a core/plug, which would restrict or impede the flow of grout. Additionally, it was observed that small residues of the grout material (from the previous grouting borehole) accumulated along the inner portion of the casings, particularly along the casing joints, would restrict the flow of grout, and could result in blockages in the casings.

Prior to executing the additional three calibration points, ET was directed to verify the casing was clear of obstructions at 2 difference stages; (i) prior to drilling the injection point, and (ii) before the introduction of grout into the borehole. This was verified by two methods: by forcing pressurized water through the casing and by lowering a measuring tape to the bottom of the casing with a sounding weight equal to the approximate diameter of the inner pipe.

Through careful observation, it was also determined that obstructions in the casing were sometimes indicated during the drilling process by an unexpected increase in the water pressure. When this condition was observed, ET halted drilling, lifted the casing a few feet and advanced a thin rod inside the casing to clear the possible obstructions. Once cleared, the inner rod was removed and the drilling activities continued. On occasion, obstructions were observed that could not be cleared by the inner rod. Samples are depicted in **Photographs 9 and 10 (Appendix A)**. In those instances, ET was allowed to extract the casing, clear the obstruction and re-advance the casing to the intended depths. The modifications were employed during the installation of the additional three calibration points (P-9, P-14, and P-21) and were found to be effective in preventing blockages during grouting.

Grouting of the additional calibration points was performed once the initial line pressure was determined at the top of the casing. A copy of the grout logs is presented in **Appendix D - Grout Logs**. Implementing the additional measures resulted in effective execution of the grout installation. Results of the grouting from the calibration points showed that the amount of grout pumped (within the remediation grout zone), to reach the required increase in line pressure, varied between 3.8 and 21.4 cubic yards. A copy of the drilling logs is presented in **Appendix C**. This variance is indicative of variability in the soil types and densities, and in some instances, may also be indicative of possible subsurface conduits suspected of causing the subsidence.

Upon completion of the six calibration points (C-1, C-2, C-3, P-9, P-14, and P-21) it was determined that the down pressure and the torque exhibited by the drill rig were highly dependent upon the drill operator; who, to drill effectively, had to manually adjust and change the approach in response to the variable subsurface conditions. During the drilling process, chattering of the rig and drilling effort (compression of the springs supporting the drive head) changed noticeably depending on the type of material being penetrated. Therefore, a general correlation between SDII's previous SPT borings and drilling was achieved; such that advancement of the rod by its own weight (observed by high compression of the upper spring) occurred on very loose or very soft zones; while very slow penetrations with high amounts of chattering and significant compressions of the lower spring occurred within harder zones.

With an understanding of the response of the drill rig to the subsurface conditions, the drill operators were allowed to advance the casing at their own pace until approaching 20 feet from the anticipated termination depth of the point. Thereafter, the operators had to constantly adjust (increase or decrease) the downward pressure and rotational speed depending on the consistency/densification of the layer in order to allow AMEC to determine the competency of the critical layer and the termination depth.

It was found that during the execution of the calibration points, a very dense soil zone was present along the west side of the work area, which at times had a tendency to prevent rotation and extraction of the casing (grabbing or tightening around the casing). This area also corresponded to the zones where drilling to install the casing was the most difficult. Because of the difficulties experienced during the calibration stage, ET was advised that the original duplex drilling system specified for the project would be best suited in that area.

To minimize delays associated with the duplex system, ET was advised to advance the grout casing along the west side of the project area to a depth of 100 feet before implementing the inner drill rod (duplex drilling system). Once the termination depth was achieved, the inner rod was then removed, leaving the casing in place for grouting purposes.

In addition to the difficulties experienced in penetrating the very dense to very hard soil layer along the west side of the project area, it was observed that there was occasionally higher resistances on the casing through these areas when being extracted during grouting. When this condition was experienced, the AMEC Engineer allowed ET to lift the casing when it became difficult for the rig to rotate the casing and the torque pressure exceeded 240 ft-lb prior to reaching the specified 200 psi increase in grout line pressure.

These modifications were taken into consideration and based upon the ongoing calibration data, were deemed acceptable. However, the use of the 4-inch casing drilling method was restricted to the north, east and south sides of the work area, where it proved to adequately identify the softer layers as well as the competent strata. The west side of the work area encountered subsurface conditions which proved to hinder the advancement of a solitary 4-inch casing; therefore, a 5-inch duplex system was selected in order to properly advance and identify the appropriate layers.

Elevations, total installation lengths and grout quantities for each individual calibration point and the dates each point was drilled and grouted are shown in **Table 1 - Summary of Calibration Grout Point Elevations, Total Installation Lengths, Grout Quantities and Dates** provided below.

The grout material used for the calibration points was tested by Tierra to determine the specified 3-day compressive strength capacity. The test results indicated that the grout material achieved the project requirement of 150 psi or greater at the 3-day break. A copy of Tierra's report is presented in **Appendix E - Grout Compressive Strength Test Report**.

Table 1
Summary of Calibration Grout Point Elevations,
Total Installation Lengths, Grout Quantities and Dates

Point No.	Pre-Const. Ground Surface Elev.* (ft)	Elev. on Top of Platform (ft)	Estimated Elev. at Bottom of Grout Casing** (ft)	Final Installation Elev. at Bottom of Grout Casing (ft)	Total Installation Length*** (ft)	Quantity of Grout in Remediation Grouting Zone (cy)	Total Grout Quantity (cy)	Date Drilled	Date Grouted
C-1	143.00	155.66	N/A	15.66	140	5	5	2/12/13	2/13/13
C-2	146.50	151.47	N/A	-148.53	300	2.7	3.8	2/11/13	2/11/13
C-3	150.00	147.87	N/A	-107.13	255	14.4	18.1	2/13/13	2/14/13
P-9	153.00	152.80	-66.0 to -96.0	-92.20	245	6.8	13.5	2/19/13	2/19/13
P-14	154.50	150.97	-74.0 to -104.0	-129.00	280	3.2	4.1	2/18/13	2/18/13
P-21	140.00	146.52	-79.5 to -109.5	-83.48	230	19.7	21.4	2/19/13	2/21/13

Notes: All elevations are in North Geodetic Vertical Datum of 1929 (NGVD 29)
* = Elevations approximated from 01/08/2012 topographic map by Pickett
** = Elevations approximated from 01/08/2012 topographic map by Pickett and depth of Dolostone bedrock (220' – 250' bls)
*** = Depth measured from top of work platform

3.2 Primary Points

3.2.1 Drilling of Primary Grout Points

Prior to initiating the primary stage, AMEC reviewed the findings of the subsurface investigation data presented by SDII within the Site Characterization Report for Stage 3 of the remediation plan and the findings of the calibration points with HDR and Hillsborough County. Given the existing subsurface conditions, AMEC proposed that the grout casing should be embedded into a firm Dolostone bedrock stratum. The depth of the Dolostone bedrock stratum was estimated to occur at depths of 220 to 250 feet below preconstruction ground surface elevation as shown in **Table 1**. Once all members of the design team were in agreement with the findings and recommendations resulting from the calibration stage, ET was allowed to proceed with the primary stage. Due to the magnitude of the work area, the number of grout points and the project timeframe, ET was allowed to introduce a second drill rig on-site.

ET proceeded to drill sixty primary points (P-1 through P-63 – excluding the three points executed during the calibration stage) in a sequence of three sets:

- Drilling Set No. 1: Points P-1 to P-21 (excluding Points P-9, P-14 and P-21)
- Drilling Set No. 2: Points P-22 to P-42
- Drilling Set No. 3: Points P-43 to P-63

By following this drilling pattern, at any given time, the space between two consecutive points would be greater than 15 feet on center for each drilling set allowing a minimum of 3 days for the grout to set prior to drilling an adjacent borehole. The two drill rigs worked on opposite quadrants to reduce the potential for adverse interaction between points. **Photographs 11 and 12** show a typical view of a new bit and a worn bit, respectively.

During grouting procedures, points P-1 and P-2 lost all rotation and were locked in the ground. The drill rig was unable to extract the casing from the ground. However, given the previous difficulties during the installation of the calibration points, ET was prepared for this type of condition and brought in a hydraulic jack to assist in removing the casing as seen in **Photograph 13 (Appendix A)**. Unfortunately, during the extraction process, the casings sheared off at one of the threaded connections, resulting in points P-1 and P-2 being grouted in place and abandoned without meeting the project specification. This area was later addressed during the secondary and tertiary stages of the project.

In general, the installation of casing during the primary stage went as planned. However, on a few occasions, the drill rig on the east side of the work zone was obstructed by core residual of very hard limestone or debris. The obstructions were initially indicated by high water pressure during the drilling process and/or rapid pressure increases in the grout line pressure. Thus, production had to be stopped in order to clear the obstruction. All the primary grout injection points, with exception of points P-1 and P-2, were successfully cleared of the obstructions prior to the grouting process to ensure that the grout pressure readings were reflective of the grout injection pressure during the compaction grouting process. **Photographs 7 through 10 (Appendix A)** show samples of (limestone cores and debris) obstructions removed from the casings.

Drilling became difficult whenever a layer of very hard limestone/highly consolidated clays was encountered. These layers were found usually between 100 to 140 feet below grade and again between 200 to 240 feet below grade. These layers became thicker and deeper toward the western portion of the work zone. In general, a very soft layer of unconsolidated clay was found between the very hard zones. Although the drilling depths were adjusted accordingly, based on the differences between the platform and the original ground elevations, final drilling depths were determined by encountering a competent soil layer at or below the target depths identified in the plans. This typically occurred within 10 feet of the anticipated target depth. Similarly, the upper limit of the remediation grout zone was encountered at approximately 140 feet below grade.

3.2.2 Grouting of Primary Points

Grout casing was installed at each proposed location and grouting was initiated following the grouting procedures and pumping criteria established during the calibration stage. These criteria consisted of either an increase in grout line pressure of at least 200 pounds psi over the baseline pressure measurement, or torque greater than 240 lb-ft causing difficulty in extracting the casing (tight casing/pipe getting stuck).

Grout was pumped within the remediation grout zone (range of depths which would encompass possible conduits in the limestone and loose soils in the overlying sand strata) until an increase of at least 200 pounds per square inch above the initial line pressure was observed or until the casings experienced difficulty in rotating (torque >240 lb-ft). Adherence to the grouting criteria was monitored to ensure that the remediation grout zone (soft materials/possible subsurface conduits) was adequately mitigated. Once the criteria were met, the grout casing was then extracted upward in increments of 5 feet with continuous pumping. This process was repeated throughout the remediation grout zone until the upper limit of the zone was reached.

Once the upper limit of the zone was reached, ET extracted the casing while ensuring that the overlying portion of the borehole was fully grouted to the surface by controlling the casing extraction and pump rate. The number of pump strokes corresponding to each interval depth was recorded and used to calculate the grout quantity within the remediation grout zone and the total grout quantity in each point.

Grout quantities were recorded as grout taken within the remediation grout zone and total amount of grout taken for the entire point. The amount of grout pumped within the remediation grout zone was used to evaluate the presence of possible subsurface conduits which would require additional grouting. A copy of the grout logs is presented in **Appendix D**.

The grout material tested by Tierra for the primary stage was found to be in compliance with the project specification of 150 psi compressive strength at the 3-day break. The results of their testing are presented in **Appendix E**.

3.2.3 Findings

Installation of the grout casing typically went as expected. Along the western boundary of the project area, ET implemented the 5-inch duplex system and was able to successfully penetrate the very hard subsurface formation with limited obstructions. The 4-inch casing was used for the primary points located on the north, south and east sides of the primary stage with similar results. As mentioned previously, the installation of points P-1 and P-2 encountered very tight conditions during drilling. Efforts to grout these points resulted in the casing becoming stuck and abandoned. It was unclear whether the casing becoming stuck as a result of cuttings from the drilling operation or as a result of the landfill debris binding the casing; however, the area around points P-1 and P-2 was addressed during subsequent stages of the remedial program. A photograph of a typical duplex bit system is shown on **Photograph 14 (Appendix A)**.

It was observed that the majority of the primary points along the northern, southern and eastern portions of the work zone (with the exception of a few points along the east) accepted grout quantities of less than 8 cubic yards within the remediation grout zone. However, along the western portion and at the discrete locations along the northern, southern and eastern portions of the work zone, the grout takes within the remediation grout zone were generally greater than 20 cubic yards. Due to the high grout intake quantities, a total of 46 secondary grout injection points were selected and located as the Outer Grout Ring around the primary grout injection points.

The purpose of the secondary grout injection points (Outer Grout Ring) was to mitigate the possible subsurface conduits and/or consolidate the soft soils that might exist within the vicinity of the high grout intake points. Additionally, these points were also proposed and installed to ensure the efficiency of the primary compaction grout points.

Upon reaching the upper limit of the remediation grout zone, it typically required between approximately 1 and 2 cubic yards of grout material to backfill the remaining borehole to the ground surface. Several points had higher than expected takes above the remediation grout zone. These instances appeared to correlate with the displacement of the unconsolidated landfill debris.

The total installation length of each grout casing is based on the estimated depth of the Dolostone bedrock stratum which occurred between 220 and 250 feet below the preconstruction ground surface elevation and the existing ground surface condition encountered during the grout casing installation process. Elevations, total installation lengths and grout quantities for each individual primary point and the dates each point was drilled and grouted are shown in **Table 2 - Summary of Primary Grout Point Elevations, Total Installation Lengths, Grout Quantities and Dates** provided below.

Table 2
Summary of Primary Grout Point Elevations,
Total Installation Lengths, Grout Quantities and Dates

Point No.	Pre-Const. Ground Surface Elev.* (ft)	Elev. on Top of Platform (ft)	Estimated Elev. at Bottom of Grout Casing** (ft)	Final Installation Elev. at Bottom of Grout Casing (ft)	Total Installation Length*** (ft)	Quantity of Grout in Remediation Grouting Zone (cy)	Total Grout Quantity (cy)	Date Drilled	Date Grouted
P-1	141.00	146.90	-79.0 to -109.0	-78.10	225	NA	NA	2/22/13	AB
P-2	142.50	146.75	-77.5 to -107.5	-83.25	230	1.9	1.9	3/7/13	AB
P-3	144.50	148.00	-77.5 to -105.5	-82.00	230	7.3	8.6	3/8/13	3/8/13
P-4	147.00	149.00	-73.0 to -103.0	-88.00	237	5.9	7.1	3/8/13	3/12/13
P-5	149.20	150.58	-70.8 to -100.8	-89.42	240	1.9	3.2	2/27/13	2/28/13
P-6	151.00	151.33	-69.0 to -99.0	-88.67	240	2.5	3.7	2/27/13	2/28/13
P-7	153.00	151.58	-67.0 to -97.0	-88.42	240	6.6	8.3	2/28/13	2/28/13
P-8	154.00	150.58	-66.0 to -96.0	-89.42	240	2.4	4	2/26/13	2/26/13
P-9	154.00	152.80	-66.0 to -96.0	-92.20	245	6.8	13.5	2/19/13	2/19/13
P-10	154.00	152.83	-66.0 to -96.0	-112.20	265	14.4	16.5	2/20/13	2/20/13
P-11	153.00	152.79	-67.0 to -97.0	-97.21	250	11.6	13.2	2/21/13	2/21/13
P-12	151.00	152.32	-69.0 to -99.0	-87.68	240	3.2	4.6	2/21/13	2/22/13
P-13	148.50	151.85	-71.5 to -101.5	-88.15	240	2.9	4.5	2/21/13	2/21/13
P-14	146.00	150.97	-74.0 to -104.0	-129.00	280	3.2	4.1	2/18/13	2/18/13

Point No.	Pre-Const. Ground Surface Elev.* (ft)	Elev. on Top of Platform (ft)	Estimated Elev. at Bottom of Grout Casing** (ft)	Final Installation Elev. at Bottom of Grout Casing (ft)	Total Installation Length*** (ft)	Quantity of Grout in Remediation Grouting Zone (cy)	Total Grout Quantity (cy)	Date Drilled	Date Grouted
P-15	143.50	150.00	-76.5 to -106.5	-90.00	240	2.7	4	2/25/13	2/25/13
P-16	141.50	148.93	-78.5 to -108.5	-91.07	240	2.2	3.1	2/25/13	2/25/13
P-17	140.50	148.58	-79.5 to -109.5	-81.42	230	2.5	3.8	2/25/13	2/26/13
P-18	140.50	148.06	-79.5 to -109.5	-81.94	230	77.8	79.8	2/27/13	3/1/13
P-19	140.50	147.70	-79.5 to -109.5	-82.30	230	46.9	49	2/19/13	3/1/13
P-20	140.50	145.00	-79.5 to -109.5	-86.00	230	24.6	26.3	3/6/13	3/6/13
P-21	140.50	146.52	-79.5 to -109.5	-83.48	230	19.7	21.4	2/19/13	2/21/13
P-22	141.00	145.82	-79.0 to -109.0	-104.20	250	5.1	6	3/19/13	3/21/13
P-23	143.00	146.75	-77.0 to -107.0	-83.25	230	2.5	3.4	3/21/13	3/21/13
P-24	145.50	147.82	-74.5 to -104.5	-87.18	235	2.4	4.6	3/22/13	3/22/13
P-25	148.00	149.70	-72.0 to -102.0	-87.30	237	2.1	5	3/18/13	3/18/13
P-26	150.00	150.50	-70.0 to -100.0	-84.50	235	2.8	3.3	3/5/13	3/5/13
P-27	152.00	151.50	-68.0 to -98.0	-83.50	235	3.3	5	3/4/13	3/4/13
P-28	153.50	152.26	-66.5 to -96.5	-87.74	240	1	2.8	3/4/13	3/4/13
P-29	154.00	152.67	-66.0 to -96.0	-97.33	250	2.2	3.5	3/1/13	3/1/13
P-30	154.00	152.78	-66.0 to -96.0	-97.22	250	1.9	3.2	3/1/13	3/1/13
P-31	154.00	152.54	-66.0 to -96.0	-89.46	242	5.3	7.3	3/1/13	3/1/13
P-32	152.00	152.28	-68.0 to -98.0	-87.72	240	2.2	3.2	3/5/13	3/5/13
P-33	150.00	152.11	-70.0 to -100.0	-87.89	240	4.4	5.4	3/6/13	3/6/13
P-34	148.00	151.24	-72.0 to -102.0	-88.76	240	2.2	3.5	3/6/13	3/6/13
P-35	146.00	150.57	-74.0 to -104.0	-84.43	235	3.6	5.4	3/7/13	3/7/13
P-36	144.00	149.32	-76.0 to -106.0	-90.68	240	4.4	5.3	3/11/13	3/11/13
P-37	140.50	149.00	-79.5 to -109.5	-88.00	237	11.6	13	3/7/13	3/7/13
P-38	140.50	148.14	-79.5 to -109.5	-81.86	230	30.7	33.1	3/13/13	3/14/13
P-39	140.50	147.67	-79.5 to -109.5	-82.33	230	23.9	25.5	3/18/13	3/21/13
P-40	140.50	147.32	-79.5 to -109.5	-77.68	225	45.7	47.7	3/13/13	3/15/13
P-41	140.50	146.45	-79.5 to -109.5	-83.55	230	31.5	32.9	3/18/13	3/21/13
P-42	141.00	146.21	-79.0 to -109.0	-93.79	240	3.9	5.3	3/11/13	3/12/13
P-43	142.00	146.75	-78.0 to -108.0	-86.25	233	1.9	3.9	3/25/13	3/25/13
P-44	144.00	147.23	-76.0 to -106.0	-84.77	232	2.6	4	3/26/13	3/26/13
P-45	146.00	145.85	-74.0 to -104.0	-84.15	230	2.9	4.2	3/27/13	3/28/13

Point No.	Pre-Const. Ground Surface Elev.* (ft)	Elev. on Top of Platform (ft)	Estimated Elev. at Bottom of Grout Casing** (ft)	Final Installation Elev. at Bottom of Grout Casing (ft)	Total Installation Length*** (ft)	Quantity of Grout in Remediation Grouting Zone (cy)	Total Grout Quantity (cy)	Date Drilled	Date Grouted
P-46	148.50	149.74	-71.5 to -101.5	-85.26	235	4.2	4.8	3/6/13	3/6/13
P-47	151.00	150.59	-69.0 to -99.0	-86.41	237	2.5	4	3/15/13	3/15/13
P-48	152.50	151.50	-67.5 to -97.5	-83.50	235	13.5	15	3/14/13	3/14/13
P-49	154.00	152.34	-66.0 to -96.0	-79.66	232	4.2	5	3/13/13	3/14/13
P-50	154.00	152.62	-66.0 to -96.0	-87.38	240	4.2	5.1	3/13/13	3/13/13
P-51	154.00	152.73	-66.0 to -96.0	-97.27	250	4.9	5.8	3/13/13	3/13/13
P-52	153.00	152.62	-67.0 to -97.0	-87.38	240	3	4.2	3/13/13	3/13/13
P-53	151.50	152.48	-68.5 to -98.5	-88.52	241	4.2	5.4	3/11/13	3/12/13
P-54	149.00	152.00	-71.0 to -101.0	-88.00	240	3.7	5.7	3/12/13	3/12/13
P-55	147.00	151.17	-73.0 to -103.0	-88.83	240	4.2	5.4	3/11/13	3/11/13
P-56	144.50	150.03	-75.5 to -105.5	-87.97	238	3.7	5	3/18/13	3/18/13
P-57	142.00	149.07	-78.0 to -108.0	-86.93	236	4.8	6	3/19/13	3/19/13
P-58	141.00	148.22	-79.0 to -109.0	-86.78	235	3	4	3/19/13	3/19/13
P-59	140.50	147.87	-79.5 to -109.5	-83.13	231	2.9	4.7	3/25/13	3/25/13
P-60	140.00	147.47	-80.0 to -110.0	-82.53	230	2.4	4	3/25/13	3/26/13
P-61	140.00	147.00	-80.0 to -110.0	-113.00	260	19.5	20.3	3/28/13	3/28/13
P-62	140.50	146.21	-79.5 to -109.5	-84.79	231	4.9	6.3	3/27/13	3/27/13
P-63	140.50	146.50	-79.5 to -109.5	-85.50	232	2.1	3.4	3/27/13	3/27/13
Totals					15,001	539.1	631.2		

Notes: All elevations are in North Geodetic Vertical Datum of 1929 (NGVD 29)
 * = Elevations approximated from 01/08/2012 topographic map by Pickett
 ** = Elevations approximated from 01/08/2012 topographic map by Pickett and depth of Dolostone bedrock (220' – 250' bls)
 *** = Depth measured from top of work platform
 AB = Abandoned: casing backfill with grout and left in place

3.3 Secondary Points

3.3.1 Drilling of Secondary Grout Points

As outlined in the design drawings, the secondary grout points were subsequently installed following the completion of all primary points. Due to the slower drilling of primary points along the west side of the project area compared to the north, south and east sides of the sinkhole feature, ET was allowed to proceed with the installation of secondary points along the north, south and east sides of the work zone while the primary points were still being completed along the west side of the project area. Upon completion of the primary points along the west side, the secondary points were initiated on the west side.

Drilling criteria defined in the calibration and primary stages were maintained during the secondary stage. Drill rigs were again required to stay in opposite quadrants of the work area.

Once the survey crew from Pickett completed locating the secondary points, ET proceeded to drill forty-six secondary points (S-1 through S-46) in a sequence of three sets around the entire circumference:

- Drilling Set No. 1: Points S-1 to S-16
- Drilling Set No. 2: Points S-17 to S-31
- Drilling Set No. 3: Points S-32 to S-46

By following this drilling pattern, at any given time the space between the two consecutive points would be greater than 15 feet on center for each drilling set allowing a minimum of 3 days for grout to set prior to drilling an adjacent borehole. Drilling conditions encountered during the secondary stage were similar to those encountered during the primary stage, corresponding to the layer of very hard limestone/highly consolidated clays encountered in the subsurface. The depths of these layers remained relatively consistent with the primary points. A copy of the drilling logs is presented in **Appendix C**.

3.3.2 Grouting of Secondary Points

Grout casings were installed and grouting was initiated following the same criteria used for the primary points. Grout was injected within the remediation grout zone until an increase of at least 200 pounds psi above the initial line pressure was observed or until the casings experienced difficulty in rotating (torque >240 lb-ft). Adherence to the grouting criteria was monitored to ensure that the remediation grout zone (soft materials/possible subsurface conduits) was adequately mitigated. Once the criteria were met, the grout casing was then extracted upward in increments of 5 feet with continuous pumping. This process was repeated throughout the remediation grout zone until the upper limit of the zone was reached. Similar to the primary points, the upper limit of the remediation grout zone for the secondary points was encountered at approximately 140 feet below grade.

Once the upper limit of the zone was reached, ET extracted the casing while ensuring that the overlying portion of the borehole was fully grouted to the surface by controlling the casing extraction and pump rate. The number of pump strokes corresponding to each interval depth was recorded and used to calculate the grout quantity within the remediation grout zone and the total grout quantity in each point.

Grout quantities were recorded as grout taken within the remediation grout zone and total amount of grout taken for the entire point. The amount of grout pumped within the remediation grout zone was used to evaluate the presence of possible conduits which would require additional grouting during the tertiary stage. Similar to the primary stage, adherence to the grouting criteria was monitored to ensure that the remediation grout zone (soft materials/possible subsurface conduits) was mitigated. A copy of the grout logs is presented in **Appendix D**.

The grout material tested by Tierra for the secondary stage was found to be in compliance with the project specification of 150 psi compressive strength at the 3-day break. The results of their testing are presented in **Appendix E**.

3.3.3 Findings

It was observed that the majority of the secondary points (with the exception of a few points along the southwest and southeast portions) had an intake grout quantity of less than 8 cubic yards. However, points near the west, southwest and southeast portions of the work zone had intake grout quantities greater than 20 cubic yards compared to points completed nearby. Due to a high increase noted along S-13, S-15, S-21, S-28, S-29, S-37, S-38, S-39, S-40, S-41, S-42, S-43, and S-44, these zones were selected for tertiary points in order to further consolidate the soft soils and/or fill the possible subsurface conduits and to ensure the efficiency of the compaction grouting program.

Similar to the primary points, the majority of the grout pumped in the secondary points was allocated within the remediation grout zone and an additional 1 to 2 cubic yards was used to back fill the zones above the remediation grout zone. Several points encountered higher takes, above the remediation grout zone, as a result of displacement of the landfill debris due to gravity loading.

The total installation length of each grout casing for the secondary points is based on the estimated depth to the Dolostone bedrock stratum which occurred between 220 and 250 feet below preconstruction ground surface elevation and the existing ground surface condition encountered during the grout casing installation process. Elevations, total installation lengths and grout quantities for each individual secondary point and the dates each point was drilled and grouted are shown in **Table 3 - Summary of Secondary Grout Point Elevations, Total Installation Lengths, Grout Quantities and Dates** provided below.

Table 3
Summary of Secondary Grout Point Elevations,
Total Installation Lengths, Grout Quantities and Dates

Point No.	Pre-Const. Ground Surface Elev.* (ft)	Elev. on Top of Platform (ft)	Estimated Elev. at Bottom of Grout Casing** (ft)	Final Installation Elev. at Bottom of Grout Casing (ft)	Total Installation Length*** (ft)	Quantity of Grout in Remediation Grouting Zone (cy)	Total Grout Quantity (cy)	Date Drilled	Date Grouted
S-1	140.00	145.46	-80.0 to -110.0	-84.54	230	2.1	6.3	4/3/13	4/3/13
S-2	142.50	146.21	-77.5 to -107.5	-83.79	230	2.6	4.2	4/4/13	4/5/13
S-3	146.00	148.50	-74.0 to -104.0	-76.50	225	2.9	5.5	4/8/13	4/8/13
S-4	149.50	150.12	-70.5 to -100.5	-80.88	231	2.1	3.5	3/27/13	3/27/13
S-5	153.00	151.91	-67.0 to -97.0	-81.09	233	2.6	3.9	3/26/13	3/27/13
S-6	155.00	152.85	-65.0 to -95.0	-87.15	240	4.2	5	3/26/13	3/26/13
S-7	155.50	153.18	-64.5 to -94.5	-94.82	248	3.6	5	3/25/13	3/25/13
S-8	154.50	153.07	-65.5 to -95.5	-91.93	245	3.4	5	3/22/13	3/22/13
S-9	152.50	152.67	-67.5 to -97.5	-89.33	242	2.7	4	3/21/13	3/22/13
S-10	148.50	151.60	-71.5 to -101.5	-89.40	241	3.5	4.3	3/20/13	3/20/13
S-11	144.50	150.27	-75.5 to -105.5	-89.73	240	2.9	4.7	3/20/13	3/20/13
S-12	141.00	148.51	-79.0 to -109.0	-91.49	240	4.3	4.7	3/28/13	3/28/13
S-13	139.50	147.72	-80.5 to -110.5	-87.28	235	14.3	17.8	4/4/13	4/5/13
S-14	139.00	147.05	-81.0 to -111.0	-92.95	240	4	6.1	4/8/13	4/8/13
S-15	139.00	146.06	-81.0 to -111.0	-83.94	230	6.5	8.2	4/1/13	4/2/13
S-16	140.00	145.05	-80.0 to -110.0	-85.95	231	2.7	4	3/29/13	4/1/13
S-17	141.50	145.43	-78.5 to -108.5	-94.57	240	2.6	4.7	4/9/13	4/10/13
S-18	145.00	146.86	-75.0 to -105.0	-83.14	230	1.7	4.3	4/11/13	4/11/13
S-19	148.50	149.52	-71.5 to -101.5	-79.48	229	2.3	3.6	4/18/13	4/18/13
S-20	152.00	151.49	-68.0 to -98.0	-77.51	229	1.7	2.5	4/18/13	4/18/13
S-21	154.50	152.60	-65.5 to -95.5	-80.40	233	10	11.2	4/3/13	4/3/13
S-22	155.50	153.09	-64.5 to -94.5	-86.91	240	3.5	5.2	4/2/13	4/2/13
S-23	155.00	153.05	-65.0 to -95.0	-94.95	248	3	4.3	4/1/13	4/1/13
S-24	153.00	152.78	-67.0 to -97.0	-94.22	247	3.1	4.5	4/1/13	4/1/13
S-25	150.00	151.96	-70.0 to -100.0	-89.04	241	3.6	4.7	3/29/13	4/1/13
S-26	146.00	150.62	-74.0 to -104.0	-91.38	242	2.9	4.2	3/29/13	3/29/13
S-27	142.00	148.98	-78.0 to -108.0	-96.02	245	3.7	6	4/10/13	4/10/13
S-28	140.00	147.63	-80.0 to -110.0	-92.37	240	8.1	10.8	4/8/13	4/9/13

Point No.	Pre-Const. Ground Surface Elev.* (ft)	Elev. on Top of Platform (ft)	Estimated Elev. at Bottom of Grout Casing** (ft)	Final Installation Elev. at Bottom of Grout Casing (ft)	Total Installation Length*** (ft)	Quantity of Grout in Remediation Grouting Zone (cy)	Total Grout Quantity (cy)	Date Drilled	Date Grouted
S-29	139.00	147.25	-81.0 to -111.0	-87.75	235	13.3	15.5	4/9/13	4/9/13
S-30	139.00	146.16	-81.0 to -111.0	-83.84	230	3.8	6	4/16/13	4/16/13
S-31	139.50	145.66	-80.5 to -110.5	-84.34	230	6.1	7.5	4/15/13	4/15/13
S-32	140.50	145.89	-79.5 to -109.5	-84.11	230	2.1	5.2	4/11/13	4/12/13
S-33	143.50	146.20	-76.5 to -106.5	-83.80	230	2.8	4	4/12/13	4/12/13
S-34	147.00	148.82	-73.0 to -103.0	-79.18	228	2.1	3	4/19/13	4/19/13
S-35	151.00	150.93	-69.0 to -99.0	-79.07	230	2.3	3.8	4/22/13	4/22/13
S-36	154.00	152.14	-66.0 to -96.0	-78.86	231	5.3	7.1	4/19/13	4/19/13
S-37	155.50	152.88	-64.5 to -94.5	-77.12	230	10	11.8	4/22/13	4/23/13
S-38	155.50	153.27	-64.5 to -94.5	-86.73	240	16.5	18.5	4/17/13	4/17/13
S-39	154.00	153.03	-66.0 to -96.0	-94.97	248	50.3	51.8	4/15/13	4/16/13
S-40	151.00	152.41	-69.0 to -99.0	-92.59	245	49	50.7	4/12/13	4/16/13
S-41	147.00	151.00	-73.0 to -103.0	-95.00	246	47.3	48.8	4/10/13	4/11/13
S-42	143.50	149.51	-76.5 to -106.5	-96.49	246	23.3	24.8	4/11/13	4/12/13
S-43	140.00	147.46	-80.0 to -110.0	-102.50	250	4.9	7.5	4/18/13	4/18/13
S-44	139.50	147.22	-80.5 to -110.5	-102.80	250	11.8	14.9	4/19/13	4/19/13
S-45	139.00	146.00	-81.0 to -111.0	-96.00	242	3.8	5.3	4/22/13	4/22/13
S-46	139.50	145.62	-80.5 to -110.5	-104.40	250	3.1	4.7	4/22/13	4/22/13
Totals					10,936	368.3	449.2		

Notes: All elevations are in North Geodetic Vertical Datum of 1929 (NGVD 29)

* = Elevations approximated from 01/08/2012 topographic map by Pickett

** = Elevations approximated from 01/08/2012 topographic map by Pickett and depth of Dolostone bedrock (220' – 250' bls)

*** = Depth measured from top of work platform

3.4 Tertiary Points

3.4.1 Drilling of Tertiary Grout Points

Tertiary points were installed to ensure the conditions encountered during the primary and secondary stages were effective in mitigating the subsurface conditions. Tertiary points were installed between the primary and secondary points in areas which had experienced higher than anticipated grout takes, representing a higher probability of subsurface conduits or unconsolidated sediments in the area, to augment the results of the primary and secondary stages.

Based on the observations and findings from the primary and secondary points, tertiary points were located along the western, southern and eastern portions of the work area. Once the surveyor crew from Pickett completed locating the tertiary points, ET proceeded to drill twenty-nine tertiary points (T-1 through T-29):

- Drilling Set No.1: Points T-1 to T-26
- Drilling Set No.2: Points T-27 to T-29

It should be noted that tertiary points T-27 to T-29 were added based on the results of tertiary points T-1 to T-26 to address the higher than expected grout quantities experienced within tertiary points T-13, T-14, T-16 and T-19. Points T-27 to T-29 were added to further consolidate the soft material and further ensure complete grouting within this area.

Similar to the primary and secondary points, drilling became difficult whenever a layer of highly consolidated clays was encountered. The depths of these layers remained relatively consistent with the primary and secondary points. A copy of the drilling logs is presented in **Appendix C**.

3.4.2 Grouting of Tertiary Points

Grout casings were installed and grouting was initiated following the same criteria used for the primary and secondary points. Grout was injected within the remediation grout zone until an increase of at least 200 pounds psi above the initial line pressure was observed or until the casings experienced difficulty in rotating (torque >240 lb-ft). Adherence to the grouting criteria was monitored to ensure that the remediation grout zone (soft materials/possible subsurface conduits) was adequately mitigated. Once the criteria were met, the grout casing was then extracted upward in increments of 5 feet with continuous pumping. This process was repeated throughout the remediation grout zone until the upper limit of the zone was reached. Similar to the primary points, the upper limit of the remediation grout zone for the tertiary points was encountered at approximately 140 feet below grade.

Once the upper limit of the zone was reached, ET extracted the casing while ensuring that the overlying portion of the borehole was fully grouted to the surface by controlling the casing extraction and pump rate. The number of pump strokes corresponding to each interval depth was recorded and used to calculate the grout quantity within the remediation grout zone and the total grout quantity in each point.

Grout quantities were recorded as grout taken within the remediation grout zone and total amount of grout taken for the entire point. The amount of grout pumped within the remediation grout zone was used to evaluate the presence of possible conduits which would require additional grouting during the tertiary stage. A copy of the grout logs is presented in **Appendix D**.

The grout material tested by Tierra for the tertiary stage was found to be in compliance with the project specification of 150 psi compressive strength at the 3-day break. The results of their testing are presented in **Appendix E**.

3.4.3 Findings

SPT boring B-S3-08 (installed during Stage 3) encountered the presence of very loose clayey sands and very soft limestone between 190 and 235 feet below grade. This zone was found between two very hard layers of limestone. These findings were consistent with the observations collected during drilling and grouting of the primary, secondary and tertiary points in the area which showed a layer of soft drilling between two very hard and difficult to penetrate layers.

It was observed that the majority of the tertiary points had an intake grout quantity of less than 8 cubic yards within the remediation grout zone, with the exception of points T-16, T-19, T-27 and T-29 along the southwest corner of the work area, which had a grout take greater than 8 cubic yards. It should be noted that even though the grout takes in these points were greater than 20 cy, the grout quantities remained consistent with nearby primary and/or secondary points. Given the consistency of injection results in this area and the subsurface data collected during the subsurface evaluation stage, we interpreted the consistent grout takes as an indication that the material was being injected into the highly compressible unconsolidated clay strata.

Similar to the primary and secondary points, the total installation length of each grout casing for the tertiary points is based on the estimated depth of the Dolostone bedrock stratum occurring between 220 and 250 feet below the preconstruction ground surface elevation and the existing ground surface condition encountered during the grout casing installation process. Elevations, total installation lengths and grout quantities for each individual tertiary point and the dates each point was drilled and grouted are shown in **Table 4 - Summary of Tertiary Grout Point Elevations, Total Installation Lengths, Grout Quantities and Dates** provided below.

Table 4
Summary of Tertiary Grout Point Elevations,
Total Installation Lengths, Grout Quantities and Dates

Point No.	Pre-Const. Ground Surface Elev.* (ft)	Elev. on Top of Platform (ft)	Estimated Elev. at Bottom of Grout Casing** (ft)	Final Installation Elev. at Bottom of Grout Casing (ft)	Total Installation Length*** (ft)	Quantity of Grout in Remediation Grouting Zone (cy)	Total Grout Quantity (cy)	Date Drilled	Date Grouted
T-1	143.00	149.06	-77.0 to -107.0	-90.94	240	3.6	5.3	4/30/13	4/30/13
T-2	146.50	150.76	-73.5 to -103.5	-89.24	240	5.9	7.2	4/30/13	4/30/13
T-3	150.00	152.00	-70.0 to -100.0	-88.00	240	3.2	4.5	4/29/13	4/29/13
T-4	153.00	152.60	-67.0 to -97.0	-97.40	250	5.2	7.2	4/26/13	4/26/13
T-5	154.50	152.85	-65.5 to -95.5	-87.15	240	3.7	5.0	4/25/13	4/25/13
T-6	144.00	149.70	-76.0 to -106.0	-90.30	240	2.5	3.9	5/3/13	5/3/13
T-7	147.50	151.13	-72.5 to -102.5	-88.87	240	3.1	4.4	4/29/13	4/29/13
T-8	151.00	152.30	-69.0 to -99.0	-87.70	240	3.9	5.2	4/25/13	4/25/13
T-9	153.50	152.70	-66.5 to -96.5	-92.30	245	3.0	4.3	4/24/13	4/25/13
T-10	155.00	152.80	-65.0 to -95.0	-92.20	245	4.0	5.1	4/24/13	4/24/13
T-11	154.30	152.70	-65.7 to -95.7	-87.30	240	3.7	5.2	4/24/13	4/24/13
T-12	155.00	153.00	-65.0 to -95.0	-92.00	245	3.8	5.1	4/23/13	4/23/13
T-13	140.30	147.95	-79.7 to -109.7	-97.05	245	7.6	9.7	4/23/13	4/24/13
T-14	139.30	147.15	-80.7 to -110.3	-92.85	240	4.0	4.9	4/24/13	4/24/13
T-15	139.50	146.12	-80.5 to -110.5	-85.88	232	3.8	3.9	4/25/13	4/25/13
T-16	140.00	147.70	-80.0 to -110.0	-87.30	235	11.2	12.8	4/25/13	4/26/13
T-17	139.50	146.85	-80.5 to -110.5	-83.15	230	3.5	5.5	4/29/13	4/29/13
T-18	140.00	146.00	-80.0 to -110.0	-84.00	230	3.4	5.6	4/29/13	4/29/13
T-19	140.00	147.50	-80.0 to -110.0	-92.5	240	13.0	17.8	4/30/13	4/30/13
T-20	139.50	146.46	-80.5 to -110.5	-83.54	230	5.6	7.1	5/3/13	5/3/13
T-21	140.00	145.70	-80.0 to -110.0	-84.30	230	2.2	4.6	5/1/13	5/1/13
T-22	140.50	147.65	-79.5 to -109.5	-92.35	240	3.2	4.0	5/2/13	5/2/13
T-23	155.00	152.60	-65.0 to -95.0	-87.40	240	4.4	6.2	5/2/13	5/2/13
T-24	154.00	152.20	-65.0 to -95.0	-87.80	240	4.5	6.0	5/2/13	5/2/13
T-25	154.50	152.43	-66.0 to -96.0	-87.57	240	6.6	7.8	5/1/13	5/1/13
T-26	153.50	151.60	-65.5 to -95.5	-88.40	240	3.2	4.6	5/1/13	5/1/13
T-27	140.00	147.14	-80.0 to -110.0	-92.86	240	21.4	24.3	5/6/13	5/7/13
T-28	140.00	147.50	-80.0 to -110.0	-92.50	240	4.2	6.6	5/8/13	5/8/13

Point No.	Pre-Const. Ground Surface Elev.* (ft)	Elev. on Top of Platform (ft)	Estimated Elev. at Bottom of Grout Casing** (ft)	Final Installation Elev. at Bottom of Grout Casing (ft)	Total Installation Length*** (ft)	Quantity of Grout in Remediation Grouting Zone (cy)	Total Grout Quantity (cy)	Date Drilled	Date Grouted
T-29	140.00	147.70	-81.0 to -111.0	-92.30	240	15.3	17.7	5/7/13	5/7/13
Totals					6,937	162.4	211.6		

Notes: All elevations are in North Geodetic Vertical Datum of 1929 (NGVD 29)

* = Elevations approximated from 01/08/2012 topographic map by Pickett

** = Elevations approximated from 01/08/2012 topographic map by Pickett and depth of Dolostone bedrock (220' – 250' bls)

*** = Depth measured from top of work platform

4.0 CONCLUSIONS

Based on the previous subsurface investigation data collected by SDII from the Stage 3 remedial plan and information gathered during the calibration point process of the Stage 4 remedial plan, all grout casings were proposed to terminate within the Dolostone bedrock stratum, which occurs at elevations from -65 to -110 feet (NGVD 29). The final installation elevation of the primary, secondary and tertiary grout casings was determined during the installation process and varied between the elevation of -76 and -129 feet (NGVD 29) with an approximate installation length of 238 feet per grout injection point. Given these data, it is AMEC's opinion that all grout casings were installed and embedded within the Dolostone bedrock stratum.

In helping to discuss the subsurface conditions within the project area and the effectiveness of the grouting program, grout injection points were divided into 3 different rings. These rings are as follows: (i). Inner Grout Ring – Primary Points, (ii). Middle Grout Ring – Tertiary Points and (iii). Outer Grout Ring – Secondary Points.

During the grouting process, it appeared that the grout injection points located along the west side and southwest corner of the grout rings (points P-18, P-19, P-20, P-37, P-38, P-39, P-40, P-41, P-61 S-13, S-28, S-29, S-44, T-13, T-16, T-19, T-27 and T-29) and at the southeast corner of the grout rings (P-10, P-11, P-31, S-38 and S-39) had experienced higher grout quantities (as shown in **Plan Sheet 3 - Grout Point Locations (Zoomed) - As-Built**).

The previous subsurface investigation data collected by SDII were reviewed to determine the potential cause of the high intake grout quantities. Given the existing subsurface data, it is AMEC's opinion that the high intake grout quantity within the southwest and southeast corners and along the west side of the grout rings can be attributed to the presence of possible subsurface conduits. It also should be noted that high intake grout quantities were observed within other points as well (specifically P-21, P-48, S-21, S-40, S-41 and S-42); however, the surrounding grout injection points had minimal intake grout quantities which appear to indicate the presence of a compressible clay layer as observed during the subsurface investigation and grout pipe installation and not a potential subsurface conduit.

Based on our observations and information collected during the grouting program, it is AMEC's opinion that the potential conduits identified were successfully mitigated.

On the west side and southwest corner of the grout rings where subsurface conduit was suspected, it was observed that the grout takes within this area were reduced from the Inner Grout Ring (primary points) to the Middle Grout Ring (tertiary points) and from the Middle Grout Ring to the Outer Grout Ring (secondary points). Primary points P-18, P-19, P-38 and P-39 (Inner Grout Ring) had grout intakes (within the remediation grout zone) of approximately 78, 47, 31 and 24 cubic yards, respectively. Tertiary points T-13, T-14, T-16, T-19, T-22, T-27 and T-29 (Middle Grout Ring) along the same conduit had grout takes of approximately 8, 4, 11, 3, 21 and 15 cubic yards, respectively; and the secondary points S-13, S-28, S-29, S-43 and S-44 (Outer Grout Ring) along the same conduit had grout takes of approximately 14, 8, 13, 5 and 12 cubic yards, respectively. It was observed that the grout intake reduced within the remediation grout zone when the injection point moved outward from the Inner Grout Ring (primary point). Given these conditions, the suspected subsurface conduit along the west side and southwest corner of the grout rings has been mitigated.

Similar to the subsurface conduit encountered on the west side and southwest corner of the grout rings, the grout takes within the remediation grout zone of the southeast conduit area were reduced from the Inner Grout Ring (primary points) to the Middle Grout Ring (tertiary points) and from the Middle Grout Ring to the Outer Grout Ring (secondary points). The primary points P-10, P-11, P-31 and P-52 (Inner Grout Ring) had grout intakes (within the remediation grout zone) of approximately 14, 12, 5 and 3 cubic yards, respectively. Tertiary points T-4, T-5, T-9 and T-11 (Middle Grout Ring) along the same conduit had grout takes of approximately 5, 4, 3 and 4 cubic yards, respectively; and the secondary points S-8, S-23, S-38 and S-39 (Outer Grout Ring) along the same conduit had grout takes of approximately 3, 3, 17 and 50 cubic yards, respectively. It was observed that the grout intake reduced within the remediation grout zone when the injection point moved outward from the Inner Grout Ring (primary point) with the exception of grout injection points S-38 and S-39.

Based on the grout quantity of each injection point located surrounding points S-38 and S-39, the grout intake quantity within the remediation grout zone varied from 3 to 5 cubic yards. Given these conditions, it is AMEC's opinion that the high grout intakes within the remediation grout zone of points S-38 and S-39 can be attributed to the presence of a compressible clay layer, and the southeast conduit identified was successfully mitigated.

The overall data for the primary, secondary and tertiary points show a significant reduction between the primary points and secondary points and relatively consistent quantities between the secondary points and tertiary points.

Originally anticipated quantities were estimated based on the assumption that potentially large conduits and large soft zones may exist. No data was available during the design that would allow the design team to quantify the magnitude of the potential conduits, resulting in a conservative quantity estimate in the original design documents.

However, based on our findings (drilling and grouting procedures) the conditions encountered were consistent with SDII's findings. The possible conduit areas found were limited and the relative densities of the materials were comparable to SDII's borings. In addition, the presence of highly consolidated clays significantly reduced the standard grout takes. It is AMEC's opinion that the grouting procedures were successful in mitigating the presence of subsurface conduits that could lead to further erosion of sediments and migration of waste from the area.

Table 5 - Summary of Grout Points, Total Drilling Depths and Total Grout Quantities show a general summary of the quantities used.

Table 5
Summary of Grout Points, Total Drilling
Depths and Total Grout Quantities

Totals	Drilling Depth (ft)	Total Grout Quantity Used (cy)
Primary Points*	15,696.0	658.1
Secondary Points	10,936.0	449.2
Tertiary Points	6,937.0	211.6
Totals	33,569.0	1,318.9

* including the calibration totals

5.0 POST REMEDIATION MONITORING

It is our understanding that plans exist to implement further remedial measures at the site (Stage 5). If delays are expected before initiating that effort, we recommend that the area be visually monitored for changes monthly before that effort is initiated. It is expected that over the life of the landfill, differential settlement of the central area is likely to occur due to the consolidation of waste and the long-term settlement of the soils affected by the sinkhole collapse. If any significant ground subsidence is noted during this monitoring period, AMEC should be contacted in order to conduct an evaluation.

6.0 LIMITATIONS

The remedial operations described in this report for the Southeast County Landfill within Sections 14, 15, 22, and 23 of Township 31 South, Range 21 East in southeastern Hillsborough County, Florida, is of sufficient scope and was completed in general accordance with our recommendations described in a report provided to HDR dated March 2012, and current industry standards. AMEC's professional services have been performed using the degree of care and skill ordinarily exercised, under similar conditions by reputable consulting engineers practicing in this or similar locations. Based on AMEC's monitoring of the remedial activities, it is our opinion that at the time the work was completed, the subsurface conduits have been sufficiently mitigated.

The findings presented in the report are based on the site data available and our professional judgment. No warranty regarding the remedial operations is intended nor should be implied.

This report and information contained herein was prepared for the exclusive and specific use of HDR and Hillsborough County. Any other use of this report or parts of this report shall be authorized in writing by AMEC.

LIST OF FIGURES

Plan Sheet 1 – Site Location Map - As-Built Plans Cover Sheet

Plan Sheet 2 – Grout Point Locations - As-Built

Plan Sheet 3 – Grout Point Locations (Zoomed) - As-Built

AS-BUILT DRAWINGS FOR:

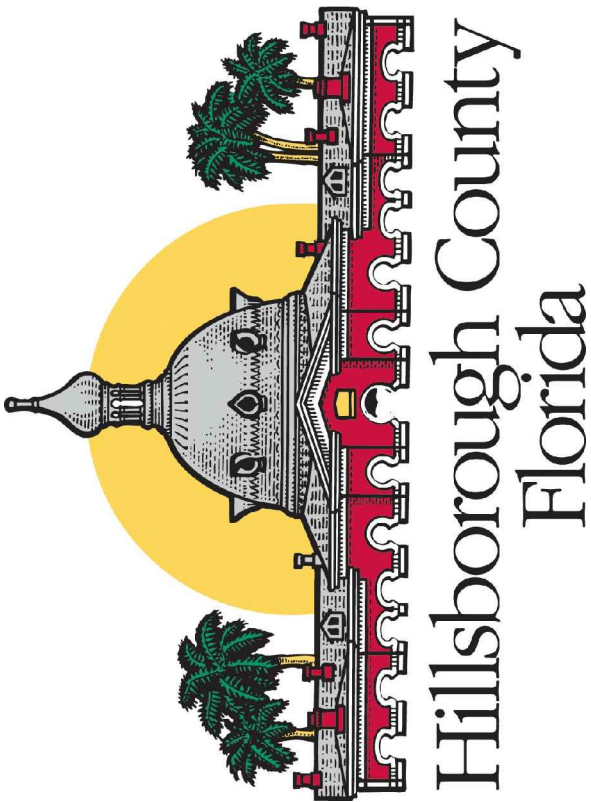
SOUTHEAST COUNTY LANDFILL

STAGE 4 GEOTECHNICAL SINKHOLE REMEDIATION PLAN

HILLSBOROUGH COUNTY

AMEC PROJECT NUMBER: 13354.8
CIP NO. 54061

PLANS PREPARED FOR:



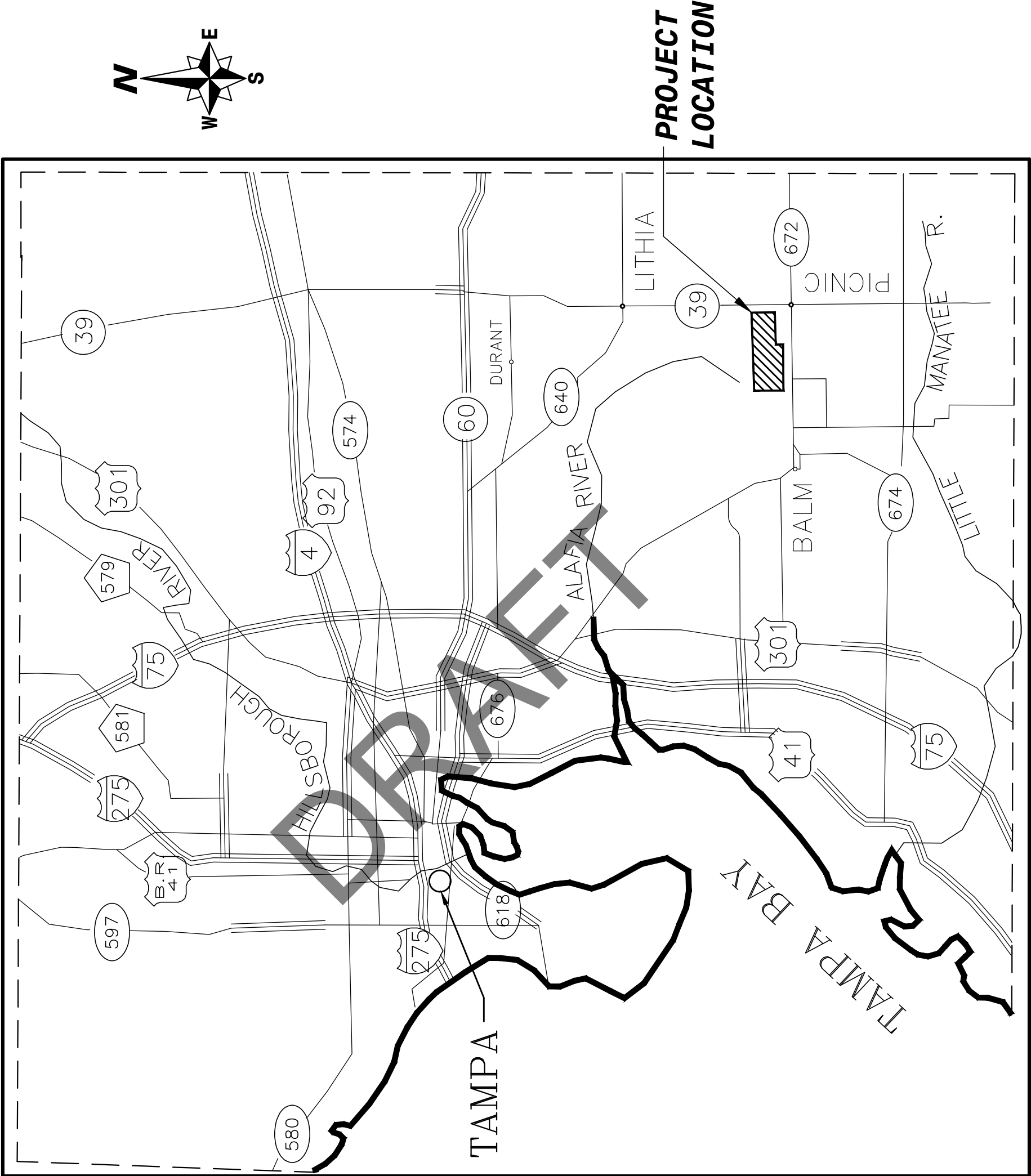
BOARD OF COUNTY COMMISSIONERS:
District 1: Sandra L. Murman
District 2: Victor Crist
District 3: Lesley "Les" Miller, Jr.
District 4: Al Higginbotham
District 5: Ken Hagan
District 6: Kevin Beckner
District 7: Mark Sharpe

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PLANS PREPARED BY:



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NOT TO SCALE

S I T E L O C A T I O N M A P

INDEX OF DRAWINGS	
Sheet Number	Sheet Title
PLAN SHEET 1	COVER SHEET
PLAN SHEET 2	GROUT POINT LOCATIONS
PLAN SHEET 3	GROUT POINTS LOCATION (ZOOMED)

ATTENTION IS DIRECTED TO THE FACT THAT THESE PLANS MAY HAVE BEEN REDUCED IN SIZE BY REPRODUCTION. THIS MUST BE CONSIDERED WHEN OBTAINING SCALED DATA.



Know what's below.
Call before you dig.

CONTRACTOR IS TO VERIFY EXISTING CONDITIONS PRIOR TO CONSTRUCTION.

NOTE:
CONSTRUCTION PLANS ARE AVAILABLE IN AUTODESK CIVIL 3D FORMAT ONLY.
ANY FILE CONVERSIONS WILL BE AT THE CONTRACTOR'S EXPENSE.

ENGINEER CERTIFICATION

I hereby certify that I am a registered professional engineer in the State of Florida practicing with AMEC Environment & Infrastructure, Inc., (AMEC) 2000 E. Edgewood Drive, Suite 215, Lakeland, FL 33803, a Corporation authorized to operate as a business providing engineering consulting and design services in the State of Florida. I am a member of the Florida Board of Professional Engineers. I further certify that I or others under my direct supervision, have prepared the engineering evaluations, findings, opinions, calculations or technical advice hereby represented in these plans.

SIGNATURE: _____
NAME: CARL W. CHRISTMANN, P.E.
P.E. NUMBER: 59285
DATE: _____

AS-BUILT/RECORD DRAWING

AS-BUILT PLANS
JULY 30, 2013

LEGEND

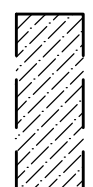
- P-01 ● GROUT POINT LOCATION - PRIMARY
(OFFSET 5' O.C.)
- S-01 ● GROUT POINT LOCATION - SECONDARY
(OFFSET 8' O.C.)
- T-01 ● TERTIARY POINT LOCATION

CALIBRATION POINTS

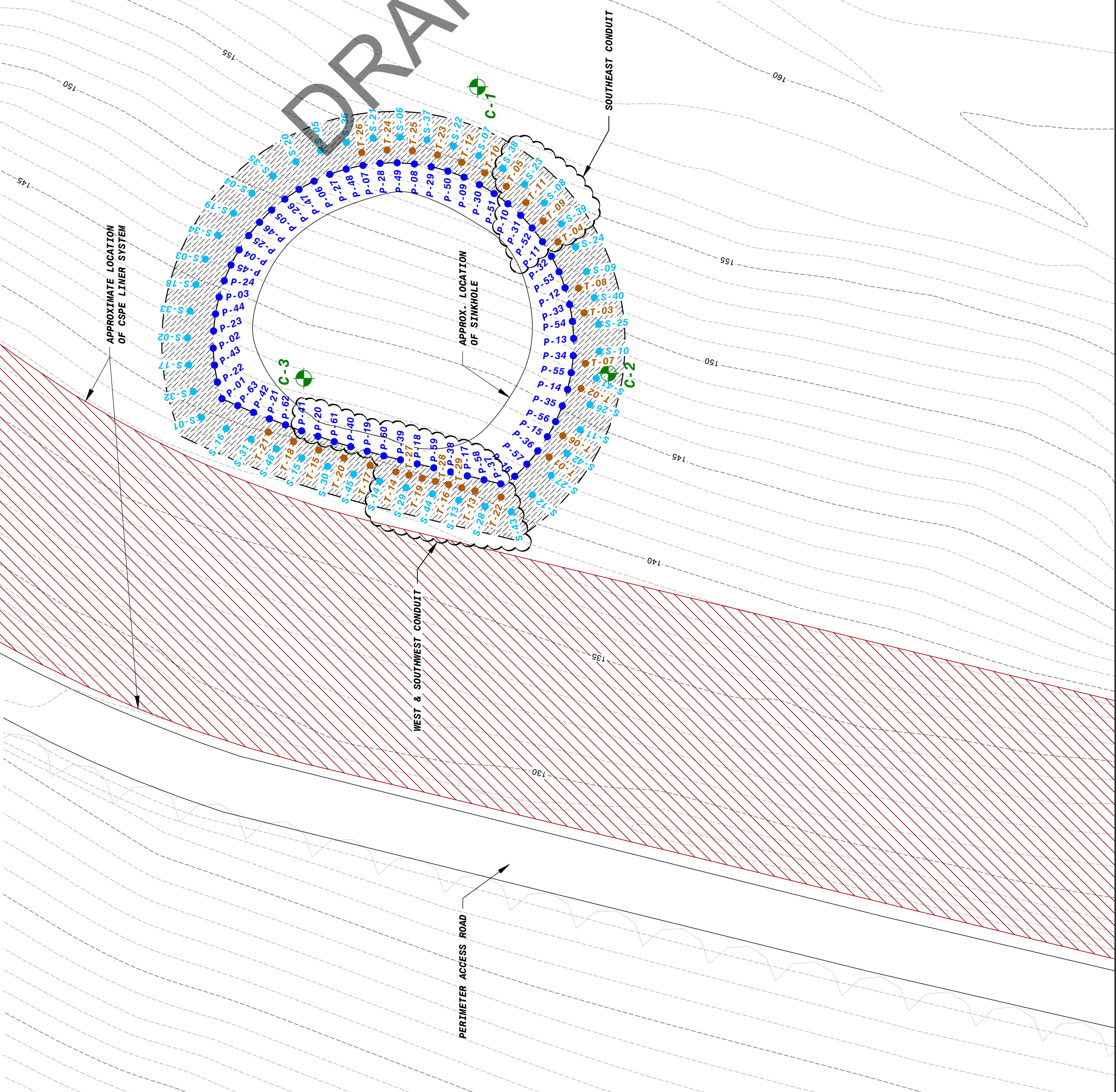


C-1

APPROX. LIMITS OF TERTIARY GROUT
POINT LOCATIONS



APPROX. LIMITS OF CSPE LINER SYSTEM



SUMMARY OF PRIMARY GROUT POINTS

Point No.	Pre-Const. Ground Surface Elev. (ft)	Elev. on Top of Platform (ft)	Estimated Elev. at Bottom of Grout Casing* (ft)	Final Installation Elev. at Bottom of Grout Casing (ft)	Total Installation Length*** (ft)	Quantity of Grout in Remediation Zone (cy)	Total Grout Quantity (cy)	Date Drilled	Date Grouted
P-1	141	146.9	-79.0 to -109.0	-78.0	225	NA	NA	2/22/2013	AB
P-2	142.5	148.75	-77.5 to -107.5	-83.25	230	1.9	1.9	3/7/2013	AB
P-3	141.5	148	-77.5 to -105.5	-82.0	230	1.3	8.6	3/8/2013	3/8/2013
P-4	141.5	148	-77.5 to -105.5	-82.0	230	1.3	8.6	3/8/2013	3/8/2013
P-5	149.2	150.38	-70.8 to -100.8	-89.42	240	1.9	3.1	2/22/2013	2/26/2013
P-6	151	151.33	-69.0 to -99.0	-88.67	240	2.5	3.7	2/27/2013	2/26/2013
P-7	153	151.38	-67.0 to -97.0	-88.42	240	6.6	8.3	2/28/2013	2/28/2013
P-8	154	152.38	-66.0 to -96.0	-89.42	240	6.4	13.5	2/28/2013	2/28/2013
P-9	153	151.38	-67.0 to -97.0	-88.42	240	6.6	8.3	2/28/2013	2/28/2013
P-10	154	152.38	-66.0 to -96.0	-89.42	240	6.4	13.5	2/28/2013	2/28/2013
P-11	153	152.38	-67.0 to -97.0	-88.42	240	6.6	8.3	2/28/2013	2/28/2013
P-12	151	152.38	-66.0 to -96.0	-89.42	240	3.2	4.6	2/21/2013	2/22/2013
P-13	148	150.38	-70.8 to -100.8	-89.42	240	1.9	3.1	2/22/2013	2/26/2013
P-14	148	150.38	-70.8 to -100.8	-89.42	240	1.9	3.1	2/22/2013	2/26/2013
P-15	143.5	150	-76.5 to -106.5	-90.00	240	2.7	4	2/25/2013	2/25/2013
P-16	141.5	148.99	-78.5 to -108.5	-91.07	240	2.2	3.1	2/25/2013	2/25/2013
P-17	140.5	148.38	-79.5 to -109.5	-91.42	230	2.5	3.8	2/25/2013	2/26/2013
P-18	140.5	148.38	-79.5 to -109.5	-91.42	230	2.5	3.8	2/25/2013	2/26/2013
P-19	140.5	148.38	-79.5 to -109.5	-91.42	230	2.5	3.8	2/25/2013	2/26/2013
P-20	140.5	145	-79.5 to -109.5	-88.00	230	24.6	26.5	3/6/2013	3/6/2013
P-21	140.5	146.52	-79.5 to -109.5	-88.48	230	19.7	21.4	2/19/2013	2/21/2013
P-22	141	145.82	-79.0 to -109.0	-89.42	230	5.1	6	3/18/2013	3/17/2013
P-23	141	145.82	-79.0 to -109.0	-89.42	230	5.1	6	3/18/2013	3/17/2013
P-24	145.5	147.82	-74.5 to -104.5	-87.12	235	2.4	4.6	3/22/2013	3/22/2013
P-25	148	149.7	-72.0 to -102.0	-87.30	237	2.1	5	3/18/2013	3/18/2013
P-26	139	150.5	-70.0 to -100.0	-84.50	235	2.8	3.3	3/12/2013	3/12/2013
P-27	152	151.5	-68.0 to -98.0	-85.50	235	3.3	5	3/20/2013	3/20/2013
P-28	152	151.5	-68.0 to -98.0	-85.50	235	3.3	5	3/20/2013	3/20/2013
P-29	154	152.67	-66.0 to -96.0	-87.33	230	2.2	3.5	3/12/2013	3/12/2013
P-30	154	152.67	-66.0 to -96.0	-87.33	230	2.2	3.5	3/12/2013	3/12/2013
P-31	154	152.67	-66.0 to -96.0	-87.33	230	2.2	3.5	3/12/2013	3/12/2013
P-32	154	152.67	-66.0 to -96.0	-87.33	230	2.2	3.5	3/12/2013	3/12/2013
P-33	154	152.67	-66.0 to -96.0	-87.33	230	2.2	3.5	3/12/2013	3/12/2013
P-34	148	151.24	-72.0 to -102.0	-88.76	240	2.2	3.5	3/6/2013	3/6/2013
P-35	146	150.57	-74.0 to -104.0	-88.43	235	3.6	5.4	3/7/2013	3/7/2013
P-36	144	149.27	-76.0 to -106.0	-89.68	240	4.4	5.3	3/17/2013	3/17/2013
P-37	144	149.27	-76.0 to -106.0	-89.68	240	4.4	5.3	3/17/2013	3/17/2013
P-38	144	149.27	-76.0 to -106.0	-89.68	240	4.4	5.3	3/17/2013	3/17/2013
P-39	144	149.27	-76.0 to -106.0	-89.68	240	4.4	5.3	3/17/2013	3/17/2013
P-40	140.5	147.82	-79.5 to -109.5	-88.48	230	23.9	25.5	3/18/2013	3/14/2013
P-41	140.5	147.82	-79.5 to -109.5	-88.48	230	23.9	25.5	3/18/2013	3/14/2013
P-42	140.5	147.82	-79.5 to -109.5	-88.48	230	23.9	25.5	3/18/2013	3/14/2013
P-43	144	147.23	-76.0 to -106.0	-89.77	232	2.6	4	3/26/2013	3/26/2013
P-44	144	147.23	-76.0 to -106.0	-89.77	232	2.6	4	3/26/2013	3/26/2013
P-45	146	147.82	-74.0 to -104.0	-88.15	230	2.9	4.2	3/27/2013	3/26/2013
P-46	145.5	149.71	-71.5 to -101.5	-85.26	235	4.2	4.8	3/26/2013	3/26/2013
P-47	145.5	149.71	-71.5 to -101.5	-85.26	235	4.2	4.8	3/26/2013	3/26/2013
P-48	153.5	151.5	-67.5 to -97.5	-85.50	232	13.5	15	3/14/2013	3/14/2013
P-49	154	152.34	-66.0 to -96.0	-87.66	232	4.2	5	3/13/2013	3/14/2013
P-50	154	152.62	-66.0 to -96.0	-87.38	240	4.2	5.1	3/13/2013	3/13/2013
P-51	154	152.73	-66.0 to -96.0	-87.27	230	4.9	5.8	3/13/2013	3/13/2013
P-52	151.5	152.48	-68.5 to -98.5	-85.53	241	4.2	5.4	3/12/2013	3/12/2013
P-53	151.5	152.48	-68.5 to -98.5	-85.53	241	4.2	5.4	3/12/2013	3/12/2013
P-54	149	152	-71.0 to -101.0	-88.00	240	3.7	5.7	3/12/2013	3/12/2013
P-55	147	151.17	-73.0 to -103.0	-88.83	240	4.2	5.4	3/11/2013	3/11/2013
P-56	144.5	150.03	-75.5 to -105.5	-87.97	238	3.7	5	3/18/2013	3/18/2013
P-57	144.5	150.03	-75.5 to -105.5	-87.97	238	3.7	5	3/18/2013	3/18/2013
P-58	144	148.22	-70.0 to -100.0	-86.38	235	3	4	3/18/2013	3/18/2013
P-59	140.5	147.87	-79.5 to -109.5	-88.13	231	2.9	4.7	3/25/2013	3/25/2013
P-60	140	147.47	-80.0 to -110.0	-85.33	230	2.4	4	3/25/2013	3/26/2013
P-61	140	147.47	-80.0 to -110.0	-85.33	230	2.4	4	3/25/2013	3/26/2013
P-62	140	147.47	-80.0 to -110.0	-85.33	230	2.4	4	3/25/2013	3/26/2013
P-63	140.5	146.5	-79.5 to -109.5	-85.50	232	2.1	3.4	3/27/2013	3/27/2013
Totals					15,001	539.1	631.2		

SUMMARY OF CALIBRATION GROUT POINTS

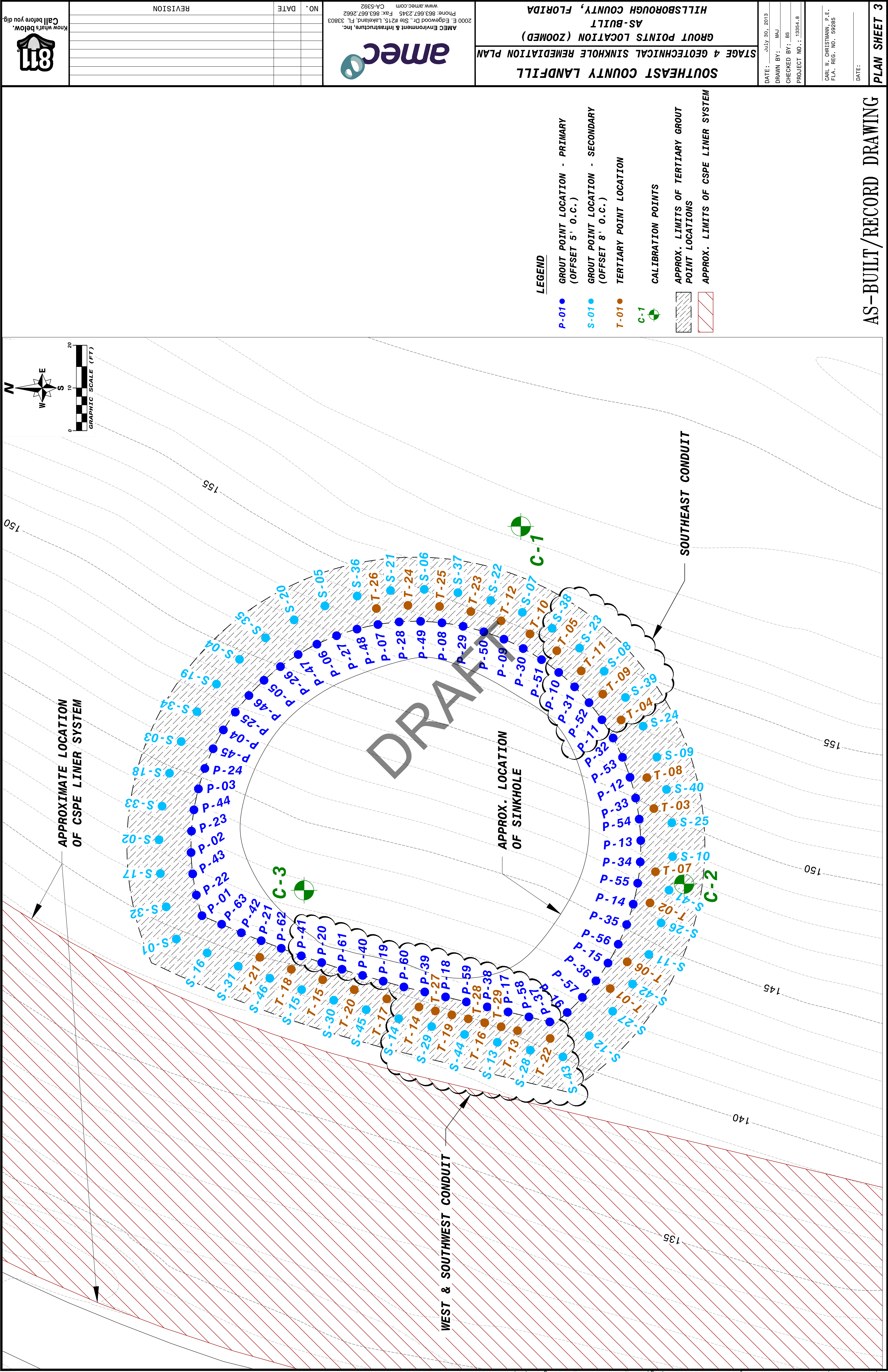
Point No.	Pre-Const. Ground Surface Elev. (ft)	Elev. on Top of Platform (ft)	Estimated Elev. at Bottom of Grout Casing* (ft)	Final Installation Elev. at Bottom of Grout Casing (ft)	Total Installation Length*** (ft)	Quantity of Grout in Remediation Zone (cy)	Total Grout Quantity (cy)	Date Drilled	Date Grouted
C-1	143	153.66	N/A	15.66	140	5	5	2/12/2013	2/13/2013
C-2	146.5	151.47	N/A	148.53	300	2.7	3.8	2/17/2013	2/17/2013
C-3	150	178.87	-66.0 to -96.0	-107.13	255	14.4	18.1	2/19/2013	2/19/2013
P-64	154.5	150.97	-74.0 to -104.0	-129.00	280	3.3	4.1	2/18/2013	2/18/2013
Totals					280	19.7	31.4	2/19/2013	2/21/2013

NOTES:

1. ALL ELEVATIONS ARE IN NORTH GEODETIC VERTICAL DATUM OF 1929 (NGVD 29).
2. * = ELEVATIONS ARE APPROXIMATED FROM 01/08/2012 TOPOGRAPHIC MAP BY PICKETT.
3. ** = ELEVATIONS ARE APPROXIMATED FROM 01/08/2012 TOPOGRAPHIC MAP BY PICKETT AND DEPTH OF DOLOSTONE BEDROCK (220' - 250' LBS).
4. *** = DEPTH MEASURED FROM TOP OF WORK PLATFORM.
5. AB = ABANDONED: CASING BACKFILL WITH GROUT AND LEFT IN PLACE.

SUMMARY OF SECONDARY GROUT POINTS

Point No.	Pre-Const. Ground Surface Elev. (ft)	Elev. on Top of Platform (ft)	Estimated Elev. at Bottom of Grout Casing* (ft)	Final Installation Elev. at Bottom of Grout Casing (ft)	Total Installation Length*** (ft)	Quantity of Grout in Remediation Zone (cy)	Total Grout Quantity (cy)	Date Drilled	Date Grouted
S-1	140	145.46	-80.0 to -110.0	-84.54	230	2.1	6.3	4/3/2013	4/3/2013
S-2	142.5	146.21	-77.5 to -107.5	-85.79	230	2.6	4.2	4/3/2013	4/3/2013
S-3	146	148.5	-74.0 to -104.0	-86.50	225	2.9	5.5	4/8/2013	4/8/2013
S-4	149.5	150.12	-70.5 to -100.5	-86.88	231	2.1	3.5	3/27/2013	3/27/2013
S-5	153	151.91	-67.0 to -97.0	-81.09	233	2.6	3.9	3/26/2013	3/27/2013
S-6	155	152.85	-65.0 to -95.0	-87.15	240	4.2	5	3/26/2013	3/26/2013
S-7	155.5	153.18	-64.5 to -94.5	-86.82	238	3.6	5	3/25/2013	3/25/2013
S-8	154.5	153.07	-65.5 to -95.5	-89.93	245	3.4	5	3/22/2013	3/22/2013
S-9	152	152.67	-67.5 to -97.5	-89.33	242	2.7	4	3/21/2013	3/22/2013
S-10	148.5	151.6	-71.5 to -101.5	-89.40	241	3.5	4.3	3/20/2013	3/20/2013
S-11	144.5	150.27	-75.5 to -105.5	-89.73	240	2.9	4.7	3/20/2013	3/20/2013
S-12	141	148.51	-79.0 to -109.0	-91.49	240	4.3	4.7	3/28/2013	3/28/2013
S-13	139.5	147.72	-80.5 to -110.5	-87.28	235	14.3	17.8	4/4/2013	4/5/2013
S-14	139	147.08	-81.0 to -111.0	-86.98	240	4	6.1	4/8/2013	4/8/2013
S-15	140	147.08	-81.0 to -111.0	-86.98	240	4	6.2	4/8/2013	4/8/2013
S-16	140	145.03	-80.0 to -110.0	-88.05	231	2.7	4	3/29/2013	4/10/2013
S-17	141.5	145.03	-78.5 to -108.5	-89.57	240	2.6	4.7	4/9/2013	4/10/2013
S-18	145	146.86	-75.0 to -105.0	-85.14	250	1.7	4.3	4/11/2013	4/11/2013
S-19	148.5	149.52	-71.5 to -101.5	-79.48	229	2.3	3.6	4/18/2013	4/18/2013
S-20	152	151.49	-68.0 to -98.0	-77.51	229	1.7	2.5	4/18/2013	4/18/2013
S-21	152	151.49	-68.0 to -98.0	-77.51	229	1.7	2.5	4/18/2013	4/18/2013
S-22	154.5	153.09	-64.5 to -94.5	-86.89	240	3.6	5.2	4/22/2013	4/22/2013
S-23	155	153.05	-65.0 to -95.0	-86.95	248	3	4.3	4/1/2013	4/1/2013
S-24	153	152.78	-67.0 to -97.0	-89.22	247	3.1	4.5	4/1/2013	4/1/2013
S-25	150	151.96	-70.0 to -100.0	-89.04	241	3.6	4.7	3/29/2013	4/1/2013
S-26	146	150.62	-74.0 to -104.0	-91.38	242	2.9	4.2	3/29/2013	3/29/2013
S-27	142	148.98	-78.0 to -108.0	-90.02	245	3.7	6	4/10/2013	4/10/2013
S-28	142	148.98	-78.0 to -108.0	-90.02	245	3.7	6	4/10/2013	4/10/2013
S-29	139	147.23	-81.0 to -111.0	-87.24	235	13.3	15.5	4/9/2013	4/9/2013
S-30	139	146.16	-81.0 to -111.0	-83.84	230	3.8	6	4/16/2013	4/16/2013
S-31	139.5	145.66	-80.5 to -110.5	-84.34	230	6.1	7.5	4/15/2013	4/15/2013
S-32	140.5	145.89	-79.5 to -109.5	-84.11	230	2.1	5.2	4/11/2013	4/12/2013
S-33	143.5	146.2	-76.5 to -106.5	-85.80	230	2.8	4	4/12/2013	4/12/2013
S-34	143.5	146.2	-76.5 to -106.5	-85.80	230	2.8	4	4/12/2013	4/12/2013
S-35	141	150.93	-69.0 to -99.0	-79.07	220	2.3	3.8	4/22/2013	4/22/2013
S-36	141	150.93	-69.0 to -99.0	-79.07	220	2.3	3.8	4/22/2013	4/22/2013
S-37	145.5	152.88	-64.5 to -94.5	-87.32	250	3.0	11.8	4/23/2013	4/23/2013
S-38	155.5	153.27	-64.5 to -94.5	-86.73	240	16.5	18.5	4/17/2013	4/17/2013
S-39	154	153.21	-66.0 to -96.0	-90.97	248	50.3	51.8	4/15/2013	4/16/2013
S-40	151	152.41	-69.0 to -99.0	-92.59	245	49	50.7	4/12/2013	4/12/2013
S-41	147	151	-73.0 to -103.0	-95.00	246	47.3	48.8	4/10/2013	4/11/2013
S-42	143.5	149.51	-75.5 to -105.5	-96.49	246	23.3	24.8	4/11/2013	4/12/2013
S-43	146	147.46	-80.0 to -110.0	-106.50	242	17.5	18.5	4/18/2013	4/18/2013
S-44	146	147.46	-80.0 to -110.0	-106.50	242	17.5	18.5	4/18/2013	4/18/2013
S-45	139	146	-81.0 to -111.0	-96.00	242	3.8	5.3	4/22/2013	4/22/2013
S-46	139.5	145.62	-80.5 to -110.5	-104.40	250	3.1	4.7	4/22/2013	4/22/2013
Totals						1036.2	368.3	440.2	



APPENDIX A

Photographs



Photograph 1: Job Site View



Photograph 2: View of a SM-20 Drill Rig



Photograph 3: Typical View of Drilling Operation and Platform



Photograph 4: View of Water Collection Berm and Ditch Along the Western Edge of the Work Platform



Photograph 5: Close-up of Photograph 4



Photograph 6: Silt Fence Around Earthen Work Platform



Photograph 7: Typical Consolidated Clay with Phosphates Plug (extracted from casing)



Photograph 8: Typical Limestone/Rock Plugs (extracted from casing)



Photograph 9: Debris Plug/Rubber Tire (extracted from casing)



**Photograph 10: Debris Plug/Rubber Tire
(extracted from casing)**



Photograph 11: Typical View of New Bit



Photograph 12: Typical View of Worn Bit



Photograph 13: Hydraulic Jack (RAM)



Photograph 14: Typical View of Duplex Bit System

APPENDIX B

Daily Field Reports



2000 E Edgewood Dr, Ste. 215
Lakeland FL 33803
863-667-2345
www.amec.com

DAILY FIELD REPORT

Route To:	Carl Christmann, P.E.	Copy To:	Richard Siemering, P.E.
Date:	02/11/2013	Page:	
Project No:	13354.8	Client:	HDR Engineering, Inc.
Location:	Hillsborough County Southeast Landfill		
AMEC Staff:	Ricardo Kiriakidis, P.E		
Inspector			
Reviewed by	Carl Christmann, P.E.		

Contractor Earth Tech, Inc.

Contractor Supvr

Hours Worked:

Onsite 7:50 am – 5:00 pm

Lunch

Day: ☒ Monday ☐ Tuesday ☐ Wednesday ☐ Thursday

☐ Friday ☐ Saturday ☐ Sunday

Weather: Wind Dir Wind Speed

☐ Cloudy ☒ Sunny ☐ Overcast ☐ Rainy ☐ Stormy

Work Performed:

C2 – Grout (completed);

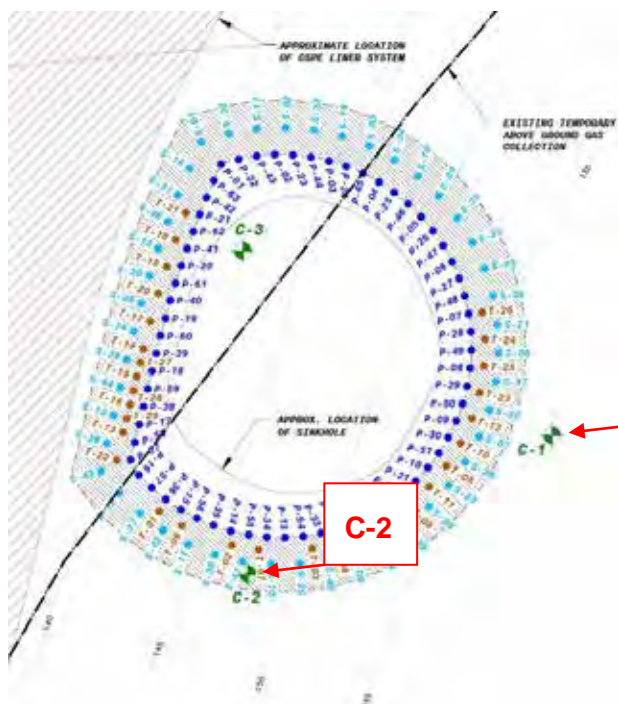
C1 – Drill (incomplete)

Qty	Equipment Onsite	Qty	Equipment Onsite
2	SM-20 Drill Rigs	2	Schwing Pumps
1	Skid Steer	2	Frack Tanks
1	Small Excavator	2	Water Tanks
1	Forklift		

Other: RAM, arc welder, lights, water pumps

Total Grout Order = 5 cu.yd.; Return = 1.2 cu.yd.

WORK AREA



Implement:

Implement



2000 E Edgewood Dr, Ste. 215
Lakeland FL 33803
863-667-2345
www.amec.com

DAILY FIELD REPORT

Route To:	Carl Christmann, P.E.	Copy To:	Richard Siemering, P.E.
Date:	02/11/2013	Page:	
Project No:	13354.8	Client:	HDR Engineering, Inc.
Location:	Hillsborough County Southeast Landfill		
AMEC Staff:	Ricardo Kiriakidis, P.E		

Other Activities / Comments:

WORK ACTIVITIES

- AMEC's staff arrived onsite at 7:50 am and performed a daily site inspection prior to starting the work activity

Calibration Point "C-2"

- Started drilling at 8:10 am
- Observed soft drilling from 0 to 80 feet, hard drilling from 80 to 180 feet, soft drilling from 180 to 220 feet, medium drilling from 220 to 270 feet and hard drilling from 270 to 290 feet
- Finished 300 feet of 4 inch casing and calibration at 10:15 am
- 5 cu.yd. grout truck arrived at 12:55 pm. Slump test was performed and deemed within specifications
- Line pressure 150 psi.
- Finished Point C-2 at 2:15 pm, 1.2 cu.yd. was returned
- Total grout quantity for Point C-2 = 3.8 cu.yd. (COMPLETED)**

Calibration Point "C-1"

- Started drilling at 3:45 pm
- Target drilling depth = 226 feet
- Stopped drilling at 100 feet
- Left site at 5:00 pm
- No grouting was conducted and drilling activities were stopped at 100 feet (INCOMPLETE)**



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DAILY FIELD REPORT

Route To:	Carl Christmann, P.E.	Copy To:	Richard Siemering, P.E.
Date:	02/12/2013	Page:	
Project No:	13354.8	Client:	HDR Engineering, Inc.
Location:	Hillsborough County Southeast Landfill		
AMEC Staff:	Mark Chomtid, P.E.; Ricardo Kiriakidis, P.E., Kevin Jobes		
Inspector			
Reviewed by	Carl Christmann, P.E.		

Contractor Earth Tech, Inc.

Contractor Supvr

Hours Worked:

Onsite 7:00 am – 5:30 pm

Lunch

Day: ☐ Monday ☒ Tuesday ☐ Wednesday ☐ Thursday

☐ Friday ☐ Saturday ☐ Sunday

Weather: Wind Dir Wind Speed

☐ Cloudy ☒ Sunny ☒ Overcast ☐ Rainy ☐ Stormy

Work Performed:

C1 - Drill (completed)

C1 – Grout (completed)

C3 – Drill (incomplete)

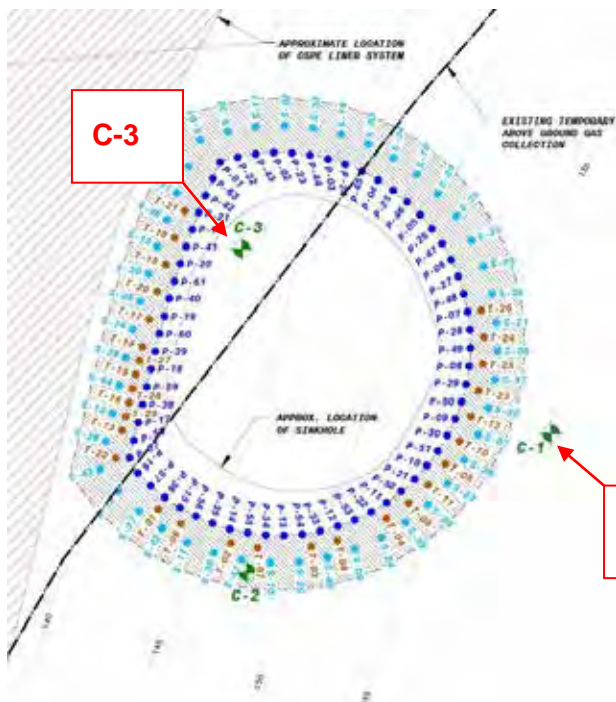
Qty	Equipment Onsite	Qty	Equipment Onsite
2	SM-20 Drill Rigs	2	Schwing Pumps
1	Skid Steer	1	Dump Trucks
1	Small Excavator	2	Water Trucks
1	Forklift		
Other: RAM, arc welder, lights, water pumps			

Total Grout Order = 1 cu.yd.; Return = 4 cu.yd.

WORK AREA

Implement:

Implement





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DAILY FIELD REPORT

Route To:	Carl Christmann, P.E.	Copy To:	Richard Siemering, P.E.
Date:	02/12/2013	Page:	
Project No:	13354.8	Client:	HDR Engineering, Inc.
Location:	Hillsborough County Southeast Landfill		
AMEC Staff:	Mark Chomtid, P.E.; Ricardo Kiriakidis, P.E., Kevin Jobes		

Other Activities / Comments:

WORK ACTIVITIES

- AMEC's staff arrived onsite at 7:00 am and performed a daily site inspection prior to starting the work activity

Calibration Point "C-1" Continued

- Started drilling at 7:20 am
- Observed slight compression of the lower spring from 100 to 120 feet, compression of lower spring from 120 to 125 feet, less compression from 125 to 135 feet, compression of lower spring with chatter from 135 to 155 feet, slight compression with minor chattering from 155 to 160 feet, some compression with chatter from 160 to 165 feet, slight compression with chatter from 165 to 170 feet, heavier compression with chatter from 170-180 feet
- Finished 300 feet of 4 inch casing and calibration at 8:45 am
- Started grouting at 11:30 am with Truck #2
- Line pressure ranged from 200 to 500+ psi
- Grouting halted after determination of clogged casing
- Started redrilling at 2:00 pm
- Truck# 2 sent back due to excessive wait time at 2:45 pm
- 4 cu.yds. returned
- Drilling concluded at 3:10 pm
- Redrilled to a depth of 140 feet
- Total grout quantity for Point C-1 = 1 cu.yd. (INCOMPLETE)**

Calibration Point "C-3"

- Started drilling at 10:00 am
- Target drilling depth = 226feet
- Observed soft drilling from 0 to 10 feet, medium firm drilling from 10 to 60 feet, soft drilling from 60 to 75 feet, medium firm drilling from 75 to 115 feet, hard drilling from 115 to 150 feet, soft drilling from 150 to 155 feet, hard drilling from 155 to 160 feet, soft drilling from 160 to 165 feet, very hard drilling from 165 to 180 feet, hard drilling from 180 to 185 feet, very hard drilling from 185 to 190 feet, soft drilling from 190 to 195 feet, hard drilling from 195 to 200 feet, soft drilling from 200 to 205 feet, hard drilling from 205 to 215 feet, soft drilling from 215 to 220 feet, hard drilling from 220 to 225 feet, soft drilling from 225 to 230 feet
- Drilling stopped at 12:40 p.m. due to hydraulic oil leak
- Drilling resumed at 1:00 pm
- Drilling stopped at 3:40 pm due to a clog within drill bit. 190 feet of casing extracted to clear casing
- Drilling resumed at 4:50 p.m.
- Stopped drilling at 235 feet of 5" casing due to hydraulic oil leak at 5:26 pm
- Left site at 5:30 pm
- No grouting was conducted and drilling activities were stopped at 230 feet (INCOMPLETE)**



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DAILY FIELD REPORT

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Date:	02/13/2013	Page:	
Project No:	13354.8	Client:	HDR Engineering, Inc.
Location:	Hillsborough County Southeast Landfill		
AMEC Staff:	Mark Chomtid, P.E.; Ricardo Kiriakidis, P.E., Kevin Jobes		
Inspector			
Reviewed by	Carl Christmann, P.E.		

Contractor Earth Tech, Inc.

Contractor Supvr

Hours Worked:

Onsite 7:10 am – 4:00 pm

Lunch

Day: ☐ Monday ☐ Tuesday ☒ Wednesday ☐ Thursday

☐ Friday ☐ Saturday ☐ Sunday

Weather: Wind Dir Wind Speed

☐ Cloudy ☐ Sunny ☒ Overcast ☐ Rainy ☐ Stormy

Work Performed:

Qty	Equipment Onsite	Qty	Equipment Onsite
2	SM-20 Drill Rigs	2	Schwing Pumps
1	Skid Steer	1	Dump Trucks
1	Small Excavator	2	Water Trucks
1	Forklift		
Other: RAM, arc welder, lights, water pumps			

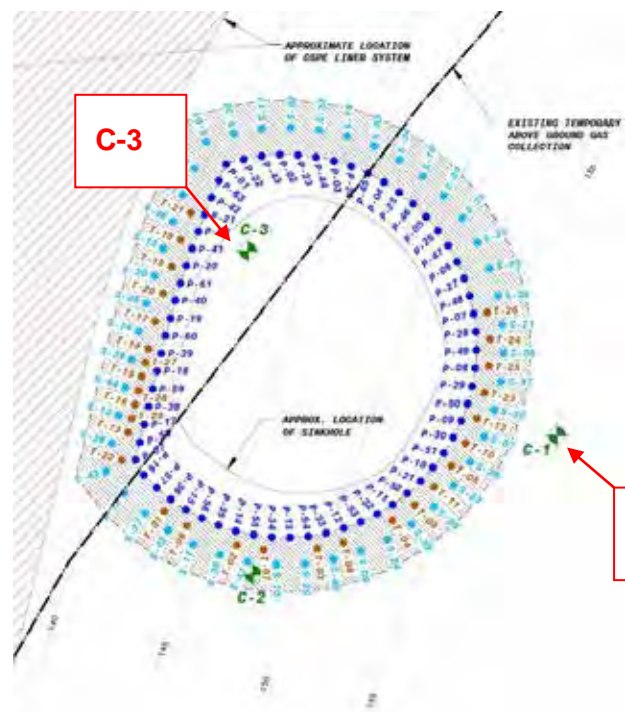
C3 – Drill (Completed)

C3 – Grout (Completed)

C1 – Grout (Completed)

Total Grout Order = 1 cu.yd.; Return = 4 cu.yd.

WORK AREA



Implement:

Implement



2000 E Edgewood Dr, Ste. 215
Lakeland FL 33803
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DAILY FIELD REPORT

Route To:	Carl Christmann, P.E.	Copy To:	Richard Siemering, P.E.
Date:	02/13/2013	Page:	
Project No:	13354.8	Client:	HDR Engineering, Inc.
Location:	Hillsborough County Southeast Landfill		
AMEC Staff:	Mark Chomtid, P.E.; Ricardo Kiriakidis, P.E., Kevin Jobes		

Other Activities / Comments:

WORK ACTIVITIES

- AMEC's staff arrived onsite at 7:00 am and performed a daily site inspection prior to starting the work activity.
- Earth Tech drilling crew made repairs to drilling rig from 7:50 am until 9:50 am (existing Hydraulic fluid leak)

Calibration Point "C-1" Contued

- Started grouting at 9:00 am with Truck # 3
- Line pressure ranged from 300 to 400+ psi
- Performed calibration test: 8 strokes = 50 gal
- Finished truck # 3 at 9:50 p.m. (5 cu.yd.)
- Finished Point C-1 at 9:50 am
- **Total grout quantity for Point C-1 = 6 cu.yd. (COMPLETE).**

Calibration Point "C-3" Cont'd

- Started drilling at 9:30 am
- Target drilling depth = 226'
- Observed soft drilling from 230 to 255 feet, very hard drilling from 255 to 260 feet
- Truck # 4 arrived at 11:40 am
- Started grouting at 11:47 am
- Finished truck # 4 at 12:00 pm (5 cu.yd.)
- Truck # 5 arrived at 1:45 pm
- Started grouting at 2:00 pm
- Finished truck # 5 at 3:15pm
- Finished Point C-3 at 3:15 pm
- Left site at 4:00 pm
- Decided that points need to be redrilled to the top of the grout, will continue on 02/14/2013
- **Total grout quantity for Point C-3 = 10 cu.yd. (INCOMPLETE)**



Route To:	Carl Christmann, P.E.	Copy To:	Richard Siemering, P.E.
Date:	02/14/2013	Page:	
Project No:	13354.8	Client:	HDR Engineering, Inc.
Location:	Hillsborough County Southeast Landfill		
AMEC Staff:	Mark Chomtid, P.E.; Ricardo Kiriakidis, P.E., Kevin Jobes		
Inspector			
Reviewed by	Carl Christmann, P.E.		

Contractor	Earth Tech, Inc.
-------------------	------------------

Contractor Supvr

Day: ☐ Monday ☐ Tuesday ☐ Wednesday ☒ Thursday

Onsite	7:00 am – 3:00 pm
--------	-------------------

Lunch

Weather:	Wind Dir	Wind Speed
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☐ Cloudy ☐ Sunny ☒ Overcast ☒ Rainy ☐ Stormy

Work Performed:

Qty	Equipment Onsite	Qty	Equipment Onsite
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C – 3 Re-grout (Completed)

2	SM-20 Drill Rigs	2	Schwing Pumps
---	------------------	---	---------------

1	Skid Steer	1	Dump Trucks
---	------------	---	-------------

1	Small Excavator	2	Water Trucks
---	-----------------	---	--------------

1	Forklift
---	----------

Other: RAM, arc welder, lights, water pumps

APPROXIMATE LOCATION OF OGP LINED SYSTEM

EXISTING TEMPORARY ABOVE GROUND GAS COLLECTION

APPROX. LOCATION OF SINKHOLE

C-3

C-3

C-1

C-2

C-4

C-5

C-6

C-7

C-8

C-9

C-10

C-11

C-12

C-13

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Implement:

Implement



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DAILY FIELD REPORT

Route To:	Carl Christmann, P.E.	Copy To:	Richard Siemering, P.E.
Date:	02/14/2013	Page:	
Project No:	13354.8	Client:	HDR Engineering, Inc.
Location:	Hillsborough County Southeast Landfill		
AMEC Staff:	Mark Chomtid, P.E.; Ricardo Kiriakidis, P.E., Kevin Jobes		

Other Activities / Comments:

WORK ACTIVITIES

- AMEC's staff arrived onsite at 7:00 am and performed a daily site inspection prior to starting the work activity.
- Inspection of platform concluded at 7:30 am
- No significant erosion due to rain was concluded
- Was informed that C-3 will be re-grouted (Upper 60 feet)
- 2/15/13 will proceed

Calibration Point "C-3" Continued

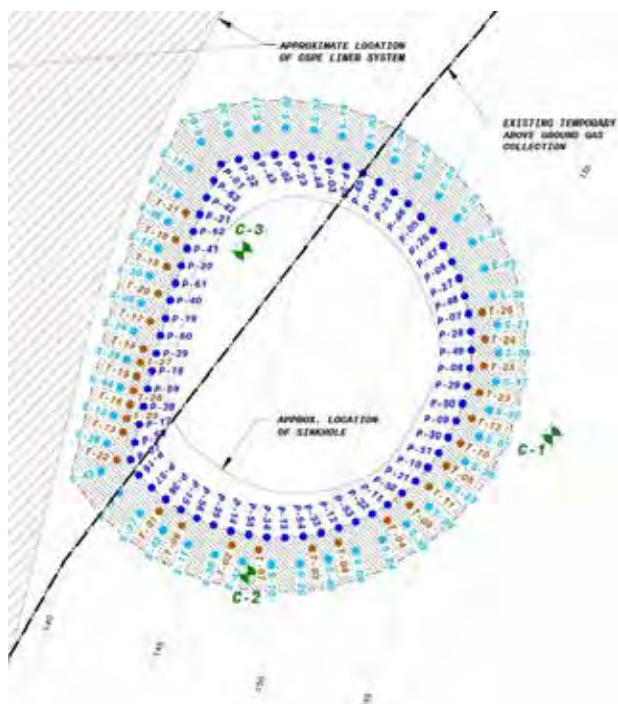
- Downtime due to HDR Engineering meeting
- Rain 9:30 a.m. – 9:35 am
- HDR Engineering meeting concluded at 11:30 am
- Began pushing casing at 12:30 pm
- Reached old grout at 80 feet
- Truck # 6 arrived at 1:30 pm
- Finished Point C-3 at 2:30 pm. 1.7 cu.yd. was returned
- Left site at 3:00 pm
- **Total grout quantity for Point C-3 = 18.3 cu.yd. (COMPLETED)**



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DAILY FIELD REPORT

Route To:		Carl Christmann, P.E.		Copy To:		Richard Siemering, P.E.	
Date:		02/15/2013		Page:			
Project No:		13354.8		Client:		HDR Engineering, Inc.	
Location:		Hillsborough County Southeast Landfill					
AMEC Staff:		Mark Chomtid, P.E.; Ricardo Kiriakidis, P.E., Kevin Jobes					
Contractor		Earth Tech, Inc.		Inspector			
Contractor Supvr				Reviewed by		Carl Christmann, P.E.	
Hours Worked:				Day: <input type="checkbox"/> Monday <input type="checkbox"/> Tuesday <input type="checkbox"/> Wednesday <input type="checkbox"/> Thursday			
Onsite		7:00 a.m. – 3:00 p.m.		<input checked="" type="checkbox"/> Friday <input type="checkbox"/> Saturday <input type="checkbox"/> Sunday			
Lunch				Weather: Wind Dir Wind Speed			
				<input type="checkbox"/> Cloudy <input type="checkbox"/> Sunny <input checked="" type="checkbox"/> Overcast <input checked="" type="checkbox"/> Rainy <input type="checkbox"/> Stormy			
Work Performed:				Qty	Equipment Onsite	Qty	Equipment Onsite
Inspection of platform				2	SM-20 Drill Rigs	2	Schwing Pumps
				1	Skid Steer	1	Dump Trucks
				1	Small Excavator	2	Water Trucks
				1	Forklift		
				Other: RAM, arc welder, lights, water pumps			
WORK AREA				Implement:			
				Implement			





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DAILY FIELD REPORT

Route To:	Carl Christmann, P.E.	Copy To:	Richard Siemering, P.E.
Date:	02/15/2013	Page:	
Project No:	13354.8	Client:	HDR Engineering, Inc.
Location:	Hillsborough County Southeast Landfill		
AMEC Staff:	Mark Chomtid, P.E.; Ricardo Kiriakidis, P.E., Kevin Jobes		

Other Activities / Comments:

WORK ACTIVITIES

- AMEC's staff arrived onsite at 7:00 am and performed a daily site inspection prior to starting the work activity.
- Inspection of platform for evidence of erosion
- No drilling or grouting was performed
- Attended safety meeting until 8:30 am
- Spoke with HDR Engineering and Earth Tech Inc. representatives
- Downtime until 11:30 am
- Surveyors arrive and begin to mark 21 point locations
- Surveying concludes at 12:00 pm
- Earth Tech personel cleaned equipment and smoothed drilling platform surface
- Left site at 12:00 pm



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DAILY FIELD REPORT

Route To:	Carl Christmann, P.E.	Copy To:	Richard Siemering, P.E.
Date:	02/18/2013	Page:	
Project No:	13354.8	Client:	HDR Engineering, Inc.
Location:	Hillsborough County Southeast Landfill		
AMEC Staff:	Mark Chomtid, P.E.; Ricardo Kiriakidis, P.E.; Kevin Jobes		
Inspector	Mark Chomtid, P.E.; Kevin Jobes		
Reviewed by	Carl Christmann, P.E.		

Contractor Earth Tech, Inc.

Contractor Supvr

Hours Worked:

Onsite 7:00 am – 5:40 pm

Lunch

Day: ☒ Monday ☐ Tuesday ☐ Wednesday ☐ Thursday

☐ Friday ☐ Saturday ☐ Sunday

Weather: Wind Dir Wind Speed

☐ Cloudy ☒ Sunny ☐ Overcast ☐ Rainy ☐ Stormy

Work Performed:

P - 14 Drill (Completed)

Qty 2

Equipment Onsite SM-20 Drill Rigs

Qty 2

Equipment Onsite Schwing Pumps

P - 14 Grout (Completed)

Qty 1

Equipment Onsite Skid Steer

Qty 1

Equipment Onsite Dump Trucks

P - 9 Drill (Incomplete)

Qty 1

Equipment Onsite Small Excavator

Qty 2

Equipment Onsite Water Trucks

P - 21 Drill (Incomplete)

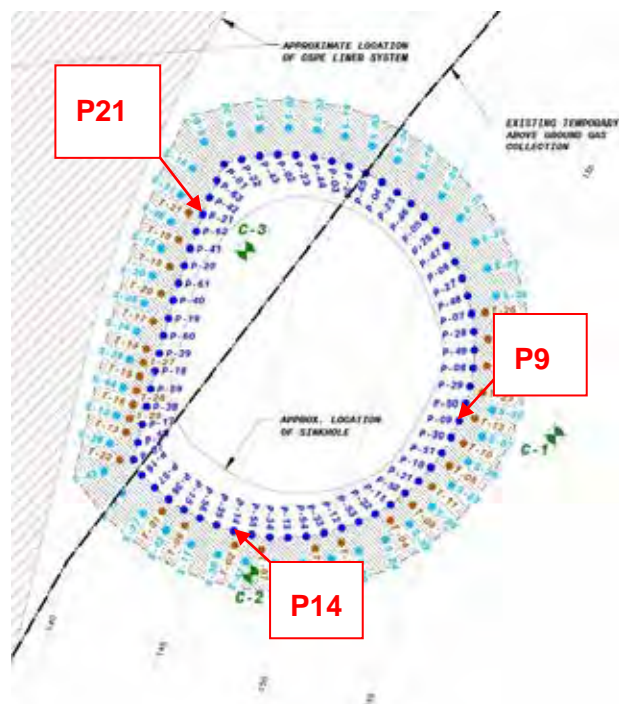
Qty 1

Equipment Onsite Forklift

Other: RAM, arc welder, lights, water pumps

Total Grout Order = 5 cu.yd.; Return = 0.9 cu.yd.

WORK AREA



Implement:

Implement



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DAILY FIELD REPORT

Route To:	Carl Christmann, P.E.	Copy To:	Richard Siemering, P.E.
Date:	02/18/2013	Page:	
Project No:	13354.8	Client:	HDR Engineering, Inc.
Location:	Hillsborough County Southeast Landfill		
AMEC Staff:	Mark Chomtid, P.E.; Ricardo Kiriakidis, P.E.; Kevin Jobes		

Other Activities / Comments:

WORK ACTIVITIES

- AMEC's staff arrived on site at 7:00 am and performed the daily site inspection prior to starting the work activity.

Point "P14"

- Start to drill Point P14 @ 8:20 am with 4" casing
- Target drilling depth 243 feet
- Finished drilling Point P14 @ 11:08 am
- (Final Depth of Point P14 = 280 feet below grade)**
- Concrete Truck #7 arrive @ 10:25 am
- Start to grout P14 @ 11:20 am and finish @ 12:05 pm
- (initial line pressure = 400 psi)
- Total grout quantity for Point P14 = 4.1 cu.yd. (COMPLETED)**

Point "P9"

- Start to drill Point P9 with 5" casing @ 12:41pm, drilling paused due to issues with water pressure pump, resumed drilling @ 1:43 pm, drilling paused due to issues with water pressure pump @ 2:17 pm, resumed drilling @ 2:57 pm, concluded drilling @ 5:27 pm due to no water pressure
- Depth of Point P9 = 220 feet below grade (INCOMPLETE)**

Point "P21"

- Start to drill Point P21 @ 5:15 pm, drilling paused due to issues with water pressure pump, concluded drilling @ 5:34 pm due to high water pressure
- Depth of Point P21 = 80 feet below grade (INCOMPLETE)**



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DAILY FIELD REPORT

Route To:	Carl Christmann, P.E.	Copy To:	Richard Siemering, P.E.
Date:	02/19/2013	Page:	
Project No:	13354.8	Client:	HDR Engineering, Inc.
Location:	Hillsborough County Southeast Landfill		
AMEC Staff:	Mark Chomtid, P.E.; Ricardo Kiriakidis, P.E.; Kevin Jobes		
Inspector	Mark Chomtid, P.E.; Kevin Jobes		
Reviewed by	Carl Christmann, P.E.		

Contractor Earth Tech, Inc.

Contractor Supvr

Hours Worked:

Onsite 7:00 am – 6:30 pm

Lunch

Day: ☐ Monday ☒ Tuesday ☐ Wednesday ☐ Thursday

☐ Friday ☐ Saturday ☐ Sunday

Weather: Wind Dir Wind Speed

☐ Cloudy ☒ Sunny ☐ Overcast ☐ Rainy ☐ Stormy

Work Performed:

P – 9 Drill (Complete)

2

SM-20 Drill Rigs

2

Schwing Pumps

P - 9 Grout (Completed)

1

Skid Steer

1

Dump Trucks

P – 9 Re-Drill (Completed)

1

Small Excavator

2

Water Trucks

P - 9 Grout (Completed)

1

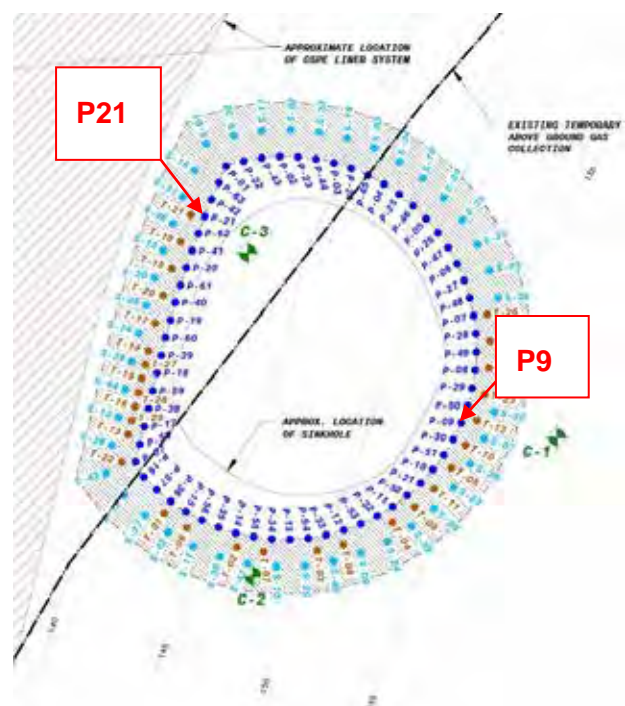
Forklift

P – 21 Drill (Incomplete)

Other: RAM, arc welder, lights, water pumps

Total Grout Order = 35cu.yd.; Return = 21.6 cu.yd.

WORK AREA



Implement:

Implement



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DAILY FIELD REPORT

Route To:	Carl Christmann, P.E.	Copy To:	Richard Siemering, P.E.
Date:	02/19/2013	Page:	
Project No:	13354.8	Client:	HDR Engineering, Inc.
Location:	Hillsborough County Southeast Landfill		
AMEC Staff:	Mark Chomtid, P.E.; Ricardo Kiriakidis, P.E.; Kevin Jobes		

Other Activities / Comments:

WORK ACTIVITIES

- AMEC's staff arrived onsite at 7:00 am and performed the daily site inspection prior to starting the work activity.

Point "P9"

- Start to drill Point P9 @ 7:40 am from 220 feet with 5" casing
- Target drilling depth 248 feet
- Finished drilling Point P9 @ 8:06 am
- (Final Depth of Point P9 = 242 feet below grade)**
- Concrete Truck # 8 arrived @ 10:24 am
- Start to grout P9 @ 10:51 am
- (initial line pressure = 425 psi; Slump = 5")
- Lost circulation at 140 feet and never regained on boring
- Finished Point P9 @ 11:40 am and 7.5 cu.yd. was returned
- Pushed 220 feet of casing into Point P9 due to point deemed clogged
- Truck # 9 arrived at 12:00 pm
- Truck # 9 was returned due to incorrect slump (High) by Tierra personel
- Truck # 10 arrived at 4:00 pm (5 cu.yd.)
- (initial line pressure = 400 psi; Slump = 3.5")
- Truck # 11 arrived at 5:30 pm
- Finished Point P9 @ 6:25 pm. 4 cu.yd. was returned
- Total grout quantity for Point P9 = 13.5 cu.yd. (COMPLETED)**


Point "P21"

- Start to drill Point P21 @ 7:48 am from 80 feet of casing
- Observed hard drilling and high water pressure from 80 to 125 feet
- Drilling paused due to hydraulic fluid leak @ 9:04 am
- Drilling resumed @ 9:22 am
- Observed hard drilling from 125 to 155 feet.
- Observed very hard drilling from 160 to 175 feet
- Drilling concluded @ 2:55 pm
- Decision was made to duplex 2/20/13
- Depth of Point P21 = 170 feet below grade (INCOMPLETE)**




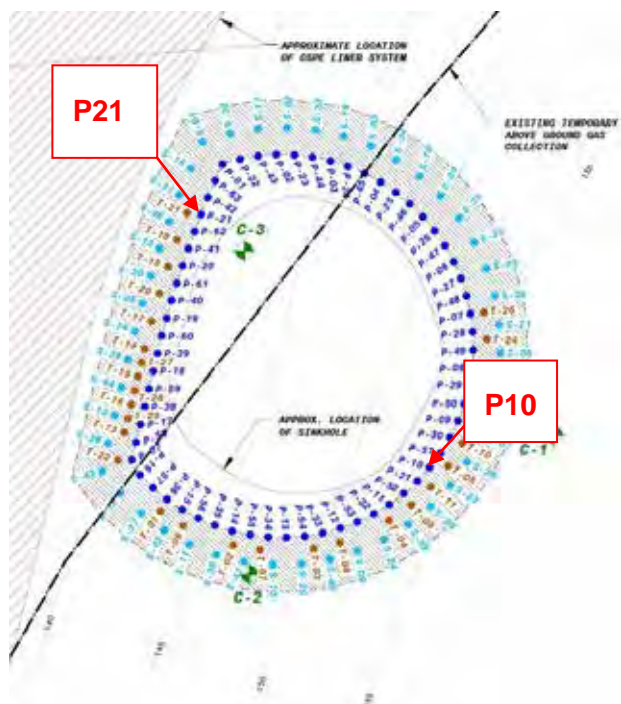
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DAILY FIELD REPORT

 2000 E Edgewood Dr, Ste. 215 Lakeland FL 33803 863-667-2345 www.amec.com		Route To:	Carl Christmann, P.E.	Copy To:	Richard Siemering, P.E.
		Date:	02/20/2013	Page:	
		Project No:	13354.8	Client:	HDR Engineering, Inc.
		Location:	Hillsborough County Southeast Landfill		
		AMEC Staff:	Mark Chomtid, P.E.; Ricardo Kiriakidis, P.E.; Kevin Jobes		
Contractor	Earth Tech, Inc.	Inspector	Mark Chomtid, P.E.; Kevin Jobes		
Contractor Supvr		Reviewed by	Carl Christmann, P.E.		

Hours Worked:		Day: <input type="checkbox"/> Monday <input type="checkbox"/> Tuesday <input checked="" type="checkbox"/> Wednesday <input type="checkbox"/> Thursday
Onsite	7:00 am – 5:30 pm	<input type="checkbox"/> Friday <input type="checkbox"/> Saturday <input type="checkbox"/> Sunday
Lunch		Weather: Wind Dir Wind Speed
		<input type="checkbox"/> Cloudy <input type="checkbox"/> Sunny <input type="checkbox"/> Overcast <input type="checkbox"/> Rainy <input type="checkbox"/> Stormy

Work Performed:	Qty	Equipment Onsite	Qty	Equipment Onsite
P – 10 Drill (Complete)	2	SM-20 Drill Rigs	2	Schwing Pumps
P - 10 Grout (Completed)	1	Skid Steer	1	Dump Trucks
P – 21 Casing extraction (Completed)	1	Small Excavator	2	Water Trucks
	1	Forklift		
		Other: RAM, arc welder, lights, water pumps		
Total Grout Order = 20 cu.yd. Return = 3.5 cu.yd.				
<u>WORK AREA</u> 			Implement:	
			Implement	





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DAILY FIELD REPORT

Route To:	Carl Christmann, P.E.	Copy To:	Richard Siemering, P.E.
Date:	02/20/2013	Page:	
Project No:	13354.8	Client:	HDR Engineering, Inc.
Location:	Hillsborough County Southeast Landfill		
AMEC Staff:	Mark Chomtid, P.E.; Ricardo Kiriakidis, P.E.; Kevin Jobes		

Other Activities / Comments:

WORK ACTIVITIES

- AMEC's staff arrived onsite at 7:00 am and performed the daily site inspection prior to starting the work activity.
- Attended safety meeting

Point "P10"

- Start to drill Point P10 @ 10:00 am with 4" casing
- Target drilling depth 245 feet
- Observed soft drilling from 0 to 40 feet with a loss of circulation at 35 feet
- Observed medium drilling from 40 to 50 feet; soft drilling from 50 to 80 feet, medium drilling from 80 to 130 feet with high water pressure at times, soft drilling from 130 to 135 feet, medium drilling from 135 to 155 feet with high water pressure, soft drilling from 155 to 210 feet, medium-hard drilling from 210 to 220 feet, soft drilling from 220 to 250 feet (with auto-drill engage from 230 to 250 feet), medium drilling from 250 to 255 feet (auto drill)
- Found that pipe was clogged @ 10 feet below grade prior to grouting and needed to extract 2 casings
- Re-drill @ 12:38 pm to a depth of 255 feet added another 5 foot casing to clean residual soil at bottom of hole
- Observed firm drilling from 255 to 260 feet (auto drill)
- Found that casing was clogged @ 27 feet below grade prior to grouting and extracted 3 casings
- Performed sounding and discovered clog at 5 feet and extracted 1 casing
- Performed sounding and discovered clog at 27 feet and extracted 3 casings
- Re-drill @ 1:18 pm to a depth of 260 feet added another 5 foot casing to clean residual soil at bottom of hole
- Observed soft drilling from 260 to 265 feet (auto drill)
- Finished drilling Point P10 @ 1:35 pm
- **(Final Depth of Point P10 = 265 feet below grade)**
- Concrete Truck # 13 arrived 1:00 pm
- Start to grout P10 @ 1:40 pm
- (initial line pressure = 400 psi; Slump = 5")
- Finished truck # 13 @ 2:55 pm **(10 cu.yd.)**
- Truck # 14 arrived at 3:35 pm
- Finished Point P9 3.5 cu.yds. were returned
- **Total grout quantity for Point P10 = 16.5 cu.yd. (COMPLETED)**

Point "P21"

- Start to extract Point P21 @ 7:48 am from 170 feet
- Extraction completed
- **Depth of Point P21 = 0 feet below grade (INCOMPLETE)**



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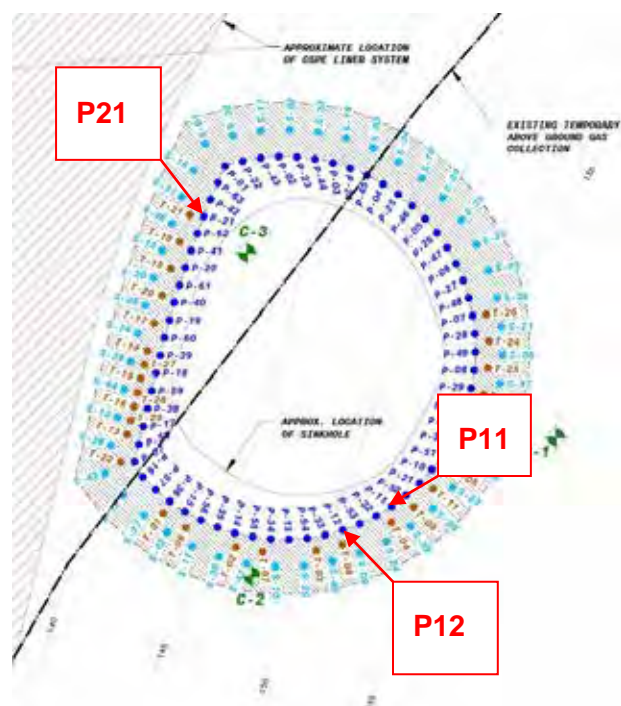
DAILY FIELD REPORT

Route To:		Carl Christmann, P.E.	Copy To:	Richard Siemering, P.E.
Date:		02/21/2013	Page:	
Project No:		13354.8	Client:	HDR Engineering, Inc.
Location:		Hillsborough County Southeast Landfill		
AMEC Staff:		Mark Chomtid, P.E.; Ricardo Kiriakidis, P.E.; Kevin Jobes		
Contractor	Earth Tech, Inc.	Inspector		
Contractor Supvr		Reviewed by		
		Carl Christmann, P.E.		

Hours Worked:		Day: <input type="checkbox"/> Monday <input type="checkbox"/> Tuesday <input type="checkbox"/> Wednesday <input checked="" type="checkbox"/> Thursday		
Onsite	7:00 am – 5:30 pm	<input type="checkbox"/> Friday <input type="checkbox"/> Saturday <input type="checkbox"/> Sunday		
Lunch		Weather: Wind Dir Wind Speed		
		<input type="checkbox"/> Cloudy <input checked="" type="checkbox"/> Sunny <input type="checkbox"/> Overcast <input type="checkbox"/> Rainy <input type="checkbox"/> Stormy		

Work Performed:	Qty	Equipment Onsite	Qty	Equipment Onsite
P – 11 Drill (Complete)	2	SM-20 Drill Rigs	2	Schwing Pumps
P - 11 Grout (Completed)	1	Skid Steer	1	Dump Trucks
P – 12 Drill (Completed)	1	Small Excavator	2	Water Trucks
P – 21 Drill (Completed)	1	Forklift		
P – 21 Grout (Incomplete)		Other: RAM, arc welder, lights, water pumps		
Total Grout Order = 30 cu.yd.; Return = 6.8 cu.yd.				

WORK AREA



Implement:	
Implement	



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DAILY FIELD REPORT

Route To:	Carl Christmann, P.E.	Copy To:	Richard Siemering, P.E.
Date:	02/21/2013	Page:	
Project No:	13354.8	Client:	HDR Engineering, Inc.
Location:	Hillsborough County Southeast Landfill		
AMEC Staff:	Mark Chomtid, P.E.; Ricardo Kiriakidis, P.E.; Kevin Jobes		

Other Activities / Comments:

WORK ACTIVITIES

- AMEC's staff arrived onsite at 7:00 am and performed the daily site inspection prior to starting the work activity

Point "P11"

- Start to drill Point P11 @ 8:00 am
- Target drilling depth 242 feet
- Observed soft drilling from 0 to 60 feet and encountered debris at 50 feet, medium drilling from 60 to 65 feet, soft drilling from 65 to 155 feet, soft drilling from 155 to 210 feet, medium from 210 to 235 feet, soft drilling from 235 to 240 feet, medium drilling from 240 to 250 feet
- Finished drilling Point P11 @ 9:45 am
- (Final Depth of Point P11 = 251 feet below grade).**
- Concrete Truck # 15 arrived 10:55 am. (1 Hour delay time)
- Finished truck # 15 @ 12:02 pm **(10 cu.yd. @ 145 feet)**
- Truck # 16 arrived at 1:15 pm. (1.25 Hour delay time)
- Grouting continued 140 LF; pump & pull rest of way
- Finished Point P11 6.8 cu.yds. were returned @ 3:50 pm
- Total grout quantity for Point P11 = 13.2 cu.yd. (COMPLETED)**

Point "P12"

- Start to drill Point P12 @ 2:27 pm
- Observed soft drilling from 0 to 45 feet, medium drilling from 45 to 50 feet, soft drilling from 50 to 80 feet, medium drilling from 80 to 155 feet, soft from 155 to 175 feet, medium drilling from 175 to 185 feet, soft drilling from 185 to 195 feet, medium drilling from 195 to 230 feet, firm drilling from 230 to 241 feet
- Finished drilling Point P12 @ 4:30 pm
- (Final Depth of Point P12 = 241 feet below grade)**

Point "P21"

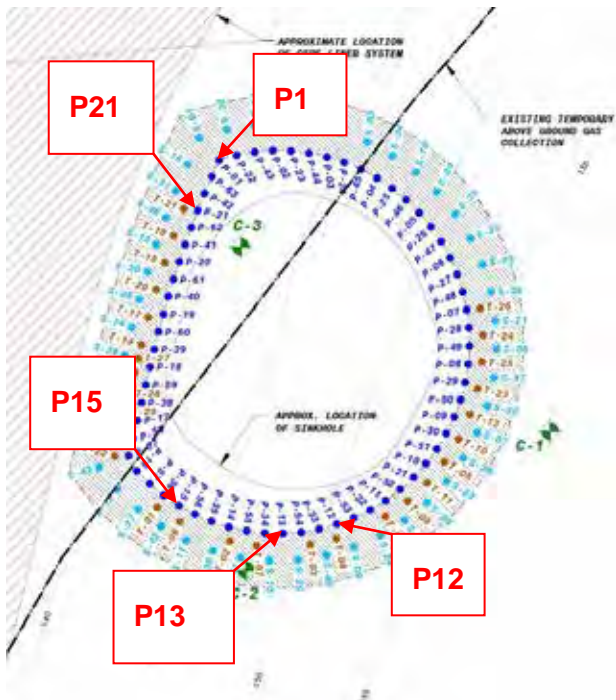
- @ 10:00 am the piece for the duplex arrived
- Start to drill Point P21 @ 2:27 am
- Observed very soft drilling from 205 to 220 feet
- Finished drilling Point P21 @ 2:40 pm
- (Final Depth of Point P11 = 230 feet below grade)**
- Concrete Truck # 17 arrived 4:10 pm
- Initial line pressure 300 psi; Slump = 4.25"
- Finished truck # 17 @ 4:45 pm **(10 cu.yd. @ 220 feet)**
- Left site @ 5:30 pm
- Total grout quantity for Point P21 = 10 cu.yd. (INCOMPLETE)**



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DAILY FIELD REPORT

Route To:		Carl Christmann, P.E.		Copy To:		Richard Siemering, P.E.	
Date:		02/22/2013		Page:			
Project No:		13354.8		Client:		HDR Engineering, Inc.	
Location:		Hillsborough County Southeast Landfill					
AMEC Staff:		Mark Chomtid, P.E.; Ricardo Kiriakidis, P.E.; Kevin Jobes					
Inspector		Mark Chomtid, P.E.; Kevin Jobes					
Reviewed by		Carl Christmann, P.E.					
Contractor				Earth Tech, Inc.			
Contractor Supvr							
Hours Worked:				Day: <input type="checkbox"/> Monday <input type="checkbox"/> Tuesday <input type="checkbox"/> Wednesday <input type="checkbox"/> Thursday			
Onsite		7:00 am – 5:30 pm		<input checked="" type="checkbox"/> Friday <input type="checkbox"/> Saturday <input type="checkbox"/> Sunday			
Lunch				Weather: Wind Dir Wind Speed			
				<input type="checkbox"/> Cloudy <input checked="" type="checkbox"/> Sunny <input type="checkbox"/> Overcast <input type="checkbox"/> Rainy <input type="checkbox"/> Stormy			
Work Performed:				Qty	Equipment Onsite	Qty	Equipment Onsite
P - 12 Grout (Completed)				2	SM-20 Drill Rigs	2	Schwing Pumps
P – 13 Drill (Complete) P – 13 Grout (Completed)				1	Skid Steer	1	Dump Trucks
P – 15 Drill (Incomplete)				1	Small Excavator	2	Water Trucks
P – 21 Grout (Completed)				1	Forklift		
P – 1 Drill (Completed)				Other: RAM, arc welder, lights, water pumps			
Total Grout Order = 30 cu.yd., Return = 11.5 cu.yd.							
WORK AREA						Implement:	
						Implement	





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DAILY FIELD REPORT

Route To:	Carl Christmann, P.E.	Copy To:	Richard Siemering, P.E.
Date:	02/22/2013	Page:	
Project No:	13354.8	Client:	HDR Engineering, Inc.
Location:	Hillsborough County Southeast Landfill		
AMEC Staff:	Mark Chomtid, P.E.; Ricardo Kiriakidis, P.E.; Kevin Jobes		

Other Activities / Comments:

WORK ACTIVITIES

- AMEC's staff arrived onsite at 7:00 am and performed the daily site inspection prior to starting the work activity
- Tierra representative was running late and Truck # 18 was onsite.

Point "P21"

- Concrete Truck # 18 arrived @ 8:15 am
- Grout began @ 9:00 am
- Initial line pressure 325-350 psi; Slump = 4"
- Finished truck # 18 @ 10:25 am (10 cu.yd. @ 110 feet)
- Concrete Truck # 19 arrived @ 10:10 am
- Grout began @ 10:45 am
- Initial line pressure 200 psi; Slump = 4.75"
- Finished Point P21 8.2 cu.yds. unused (sent to point P12)
- Left site @ 5:30 pm
- **Total grout quantity for Point P21 = 21.4 cu.yd. (COMPLETE)**

Point "P12"

- Concrete Truck # 19 Continued
- Grout start @ 10:59 am (10 cu.yd. @ 145 feet)
- Initial line pressure 300 psi; Slump = 4.75"
- Finished Point P12 4.0 cu.yds. were returned @ 12:08 pm
- **Total grout quantity for Point P12 = 4.6 cu.yd. (COMPLETED)**

Point "P13"

- Start to drill Point P13 @ 12:55 pm
- Target drilling depth 239 feet
- Observed soft drilling from 150 to 180 feet
- Finished drilling Point P13 @ 2:35 pm
- **(Final Depth of Point P13 = 240 feet below grade)**
- Concrete Truck # 20 arrived 12:10 pm
- Initial line pressure 350 psi; Slump = 4.5"
- Truck # 20 timed out @ 140 feet which was out of the grout zone
- Pump & pull continued
- Finished Point P13 5.5 cu.yds. were returned @ 3:35 pm
- **Total grout quantity for Point P13 = 4.5 cu.yd. (COMPLETED)**

Point "P15"

- Start to drill Point P15 @ 4:36 pm
- Target drilling depth 236 feet
- Finished drilling Point P15 @ 5:07 pm
- **Depth of Point P15 = 100 feet below grade (INCOMPLETE)**



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DAILY FIELD REPORT

Route To:	Carl Christmann, P.E.	Copy To:	Richard Siemering, P.E.
Date:	02/22/2013	Page:	
Project No:	13354.8	Client:	HDR Engineering, Inc.
Location:	Hillsborough County Southeast Landfill		
AMEC Staff:	Mark Chomtid, P.E.; Ricardo Kiriakidis, P.E.; Kevin Jobes		

Point "P1"

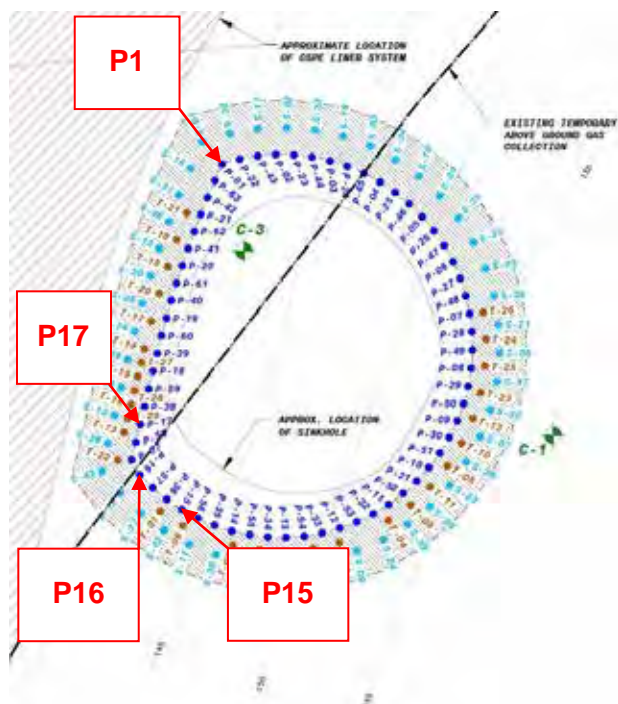
- Start to drill Point P1 @ 12:35 pm
- Target drilling depth 245 feet
- Finished drilling Point P1 @ 4:22 pm
- **Final Depth of Point P1 = 225 feet below grade (COMPLETED)**



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DAILY FIELD REPORT

Contractor Earth Tech, Inc. Contractor Supvr		Route To: Carl Christmann, P.E.		Copy To: Richard Siemering, P.E.	
		Date: 02/25/2013		Page:	
		Project No: 13354.8		Client: HDR Engineering, Inc.	
		Location: Hillsborough County Southeast Landfill			
		AMEC Staff: Mark Chomtid, P.E.; Ricardo Kiriakidis, P.E.; Kevin Jobes			
Inspector Mark Chomtid, P.E.; Kevin Jobes		Reviewed by Carl Christmann, P.E.			
Hours Worked:		Day: <input checked="" type="checkbox"/> Monday <input type="checkbox"/> Tuesday <input type="checkbox"/> Wednesday <input type="checkbox"/> Thursday <input type="checkbox"/> Friday <input type="checkbox"/> Saturday <input type="checkbox"/> Sunday			
Onsite	7:05 am – 6:05 pm	Weather: Wind Dir Wind Speed <input type="checkbox"/> Cloudy <input checked="" type="checkbox"/> Sunny <input checked="" type="checkbox"/> Overcast <input type="checkbox"/> Rainy <input type="checkbox"/> Stormy			
Lunch					
Work Performed:		Qty	Equipment Onsite	Qty	Equipment Onsite
P - 1 Grout (Incomplete)		2	SM-20 Drill Rigs	2	Schwing Pumps
P – 15 Drill (Complete)		1	Skid Steer	1	Dump Trucks
P – 15 Grout (Completed)		1	Small Excavator	2	Water Trucks
P – 16 Drill (Completed) P – 16 Grout (Completed)		1	Forklift		
P – 17 Drill (Incomplete)		Other: RAM, arc welder, lights, water pumps			
Total Grout Order = 20 cu.yd., Return = 11.4 cu.yd.					
WORK AREA				Implement:	
				Implement	





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DAILY FIELD REPORT

Route To:	Carl Christmann, P.E.	Copy To:	Richard Siemering, P.E.
Date:	02/25/2013	Page:	
Project No:	13354.8	Client:	HDR Engineering, Inc.
Location:	Hillsborough County Southeast Landfill		
AMEC Staff:	Mark Chomtid, P.E.; Ricardo Kiriakidis, P.E.; Kevin Jobes		

Other Activities / Comments:

WORK ACTIVITIES

- AMEC's staff arrived onsite at 7:05 am and performed the daily site inspection prior to starting the work activity.

Point "P1"

- Began extracting inner rod from P1 @ 7:43 am
- Concrete Truck # 21 arrived @ 8:30 am.
- Grout began @ 9:30 am.
- Slump = 4"
- Casing became stuck @ 9:30 am
- Moved grout pump to P15
- Casing could not be extracted by drilling rig @ 9:50 am
- Hydraulic ram was on site @ 10:20 am, but missing fitting (Will bring one from office)
- Hydraulic ram was unable to free 5" casing
- Started drilling inside 5" casing to clear grout
- Water was seeping from the top of the platform
- Work was halted @ 6:05 pm
- **Total grout quantity for Point P1 = 1.5 cu.yd. (INCOMPLETE)**

Point "P15"

- Continued drilling point P1 @ 100 feet @ 7:51 am
- Observed soft drilling from 160 to 190 feet, and @ 235 feet
- Finished drilling @ 9:01 am
- **(Final Depth of Point P1 = 235 feet below grade).**
- Concrete Truck # 21 Continued
- Grout start @ 9:52 am
- Initial line pressure 300 psi; Slump = 4"
- Finished Point P1 4.5 cu.yds. were returned
- Starter bit was intact
- **Total grout quantity for Point P1 = 4 cu.yd. (COMPLETED)**

Point "P16"

- Start to drill Point P16 @ 12:21 pm
- Target drilling depth 235 feet
- Observed soft drilling from 170 to 210 feet
- Finished drilling Point P16 @ 1:55 pm
- **(Final Depth of Point P16 = 241 feet below grade).**
- Concrete Truck # 22 arrived 12:00 pm.
- Grout start @ 2:02 pm
- Initial line pressure 350 psi; Slump = 3.5"
- Grout in casing @ each break
- Finished Point P16 6.9 cu.yds. were returned @ 3:32 pm
- **Total grout quantity for Point P16 = 3.1 cu.yd. (COMPLETED)**



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DAILY FIELD REPORT

Route To:	Carl Christmann, P.E.	Copy To:	Richard Siemering, P.E.
Date:	02/25/2013	Page:	
Project No:	13354.8	Client:	HDR Engineering, Inc.
Location:	Hillsborough County Southeast Landfill		
AMEC Staff:	Mark Chomtid, P.E.; Ricardo Kiriakidis, P.E.; Kevin Jobes		

Point "P17"

- Start to drill Point P17 @ 4:16 pm
- Target drilling depth 231 feet
- Finished drilling Point P17 @ 5:07 pm
- **Depth of Point P17 = 150 feet below grade (INCOMPLETE).**



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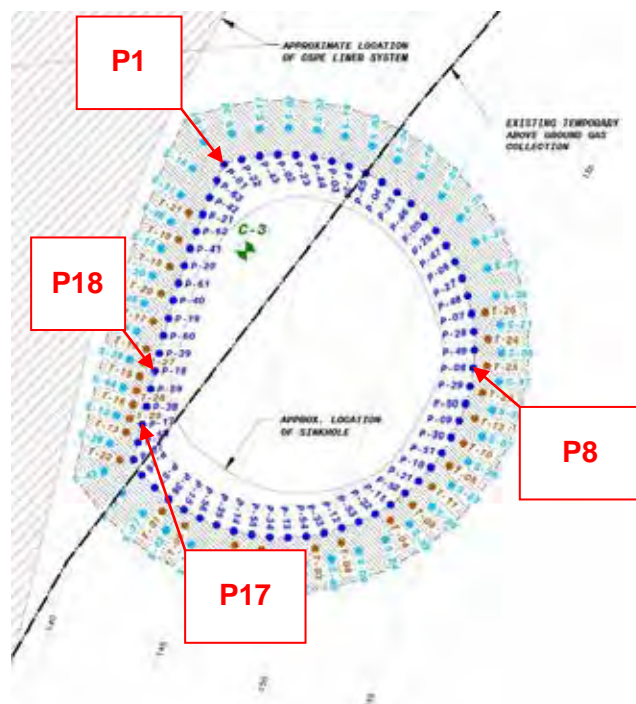
DAILY FIELD REPORT

Route To:		Carl Christmann, P.E.	Copy To:	Richard Siemering, P.E.
Date:		02/26/2013	Page:	
Project No:		13354.8	Client:	HDR Engineering, Inc.
Location:		Hillsborough County Southeast Landfill		
AMEC Staff:		Mark Chomtid, P.E.; Ricardo Kiriakidis, P.E.; Kevin Jobes		
Contractor	Earth Tech, Inc.	Inspector		
Contractor Supvr		Reviewed by		
		Carl Christmann, P.E.		

Hours Worked:		Day: <input type="checkbox"/> Monday <input checked="" type="checkbox"/> Tuesday <input type="checkbox"/> Wednesday <input type="checkbox"/> Thursday		
Onsite	7:10 am – 5:30 pm	<input type="checkbox"/> Friday <input type="checkbox"/> Saturday <input type="checkbox"/> Sunday		
Lunch		Weather: Wind Dir Wind Speed		
		<input type="checkbox"/> Cloudy <input type="checkbox"/> Sunny <input checked="" type="checkbox"/> Overcast <input checked="" type="checkbox"/> Rainy <input type="checkbox"/> Stormy		

Work Performed:	Qty	Equipment Onsite	Qty	Equipment Onsite
P - 1 Grout (Incomplete)	2	SM-20 Drill Rigs	2	Schwing Pumps
P – 17 Drill (Complete), P – 17 Grout (Completed)	1	Skid Steer	1	Dump Trucks
P – 8 Drill (Completed), P – 8 Grout (Completed)	1	Small Excavator	2	Water Trucks
P-18 Drill (Incomplete)	1	Forklift		
		Other: RAM, arc welder, lights, water pumps		
Total Grout Order = 21 cu.yd.; Return = 11 cu.yd.				

WORK AREA



Implement:

Implement



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DAILY FIELD REPORT

Route To:	Carl Christmann, P.E.	Copy To:	Richard Siemering, P.E.
Date:	02/26/2013	Page:	
Project No:	13354.8	Client:	HDR Engineering, Inc.
Location:	Hillsborough County Southeast Landfill		
AMEC Staff:	Mark Chomtid, P.E.; Ricardo Kiriakidis, P.E.; Kevin Jobes		

Other Activities / Comments:

WORK ACTIVITIES

- AMEC's staff arrived onsite at 7:10 am and performed the daily site inspection prior to starting the work activity.

Point "P1"

- Started drilling inside 5" casing to clear grout from P1 @ 7:40 am
- Began to rain very hard
- Grout began @ 11:30 am
- Casing became stuck after grouting 10 feet of casing
- Stopped work on point P1 until 2:40 pm
- 7.8 cu.yds. were returned @ 1:45 pm
- Started using hydraulic ram - casing sheared-off and was left in the ground
- Total grout quantity for Point P1 = 3.7 cu.yd. (POINT ABANDONED)**

Point "P17"

- Continued drilling point P17 @ 150 feet @ 7:52 am
- Observed soft drilling from 160 to 190 feet, and @ 215 feet
- Finished drilling @ 8:25 am
- (Final Depth of Point P17 = 231 feet below grade)**
- Concrete Truck # 23 arrived @ 8:27 am
- Grout start @ 8:37 am
- Initial line pressure 300 psi; Slump = 3.25"
- While grouting sections 220 to 230 feet casing became unconnected and fell into bore hole
- Took less than 10 minutes to reconnect
- Grout in casing @ each break
- Finished Point P17 2.2 cu.yds. were returned @ 9:45 am
- Starter bit was intact
- Total grout quantity for Point P17 = 3.8 cu.yd. (COMPLETED)**

Point "P8"

- Start to drill Point P8 @ 11:14 am
- Raining hard and wind was blowing – Rain stopped @ 3:00 pm approx.
- Drill rig moving slowly; jack plates worn out (Crew used pipe wrenches instead)
- Finished drilling Point P8 @ 1:45 pm
- (Final Depth of Point P8 = 240 feet below grade).**
- Delay waiting for Truck # 25 from 1:45 pm – 3:12 pm
- Concrete Truck # 25 arrived 3:12 pm.
- Grout start @ 3:20 pm
- Initial line pressure 300 psi; Slump = 4"
- During casing extraction: casing alignment problem @ each break, moving mast to align with casing, delayed grouting
- Grout in casing @ each break
- Finished Point P8 1 cu.yds. were returned @ 5:44 pm
- Total grout quantity for Point P8 = 4 cu.yd. (COMPLETED)**



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Date:	02/26/2013	Page:	
Project No:	13354.8	Client:	HDR Engineering, Inc.
Location:	Hillsborough County Southeast Landfill		
AMEC Staff:	Mark Chomtid, P.E.; Ricardo Kiriakidis, P.E.; Kevin Jobes		

Point "P18"

- Start to drill Point P18 @ 2:40 pm
- Drilling paused @ 2:57 pm due to water seeping from beam
- Resumed drilling at 3:30 pm
- Encountered hard layer @ 120 feet @ 4:30 pm
- Will duplex on 2/27/13
- Finished drilling Point P18 @ 4:30 pm
- **Depth of Point P18 = 120 feet below grade (INCOMPLETE).**



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DAILY FIELD REPORT

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Date:	02/27/2013	Page:	
Project No:	13354.8	Client:	HDR Engineering, Inc.
Location:	Hillsborough County Southeast Landfill		
AMEC Staff:	Mark Chomtid, P.E.; Ricardo Kiriakidis, P.E.; Kevin Jobes		
Inspector	Mark Chomtid, P.E.; Kevin Jobes		
Reviewed by	Carl Christmann, P.E.		

Contractor Earth Tech, Inc.

Contractor Supvr

Hours Worked:

Onsite 7:00 am – 5:30 pm

Lunch

Day: ☐ Monday ☐ Tuesday ☒ Wednesday ☐ Thursday

☐ Friday ☐ Saturday ☐ Sunday

Weather: Wind Dir Wind Speed

☐ Cloudy ☒ Sunny ☐ Overcast ☐ Rainy ☐ Stormy

Work Performed:

P - 5 Drill (Completed)

P - 6 Drill (Incomplete)

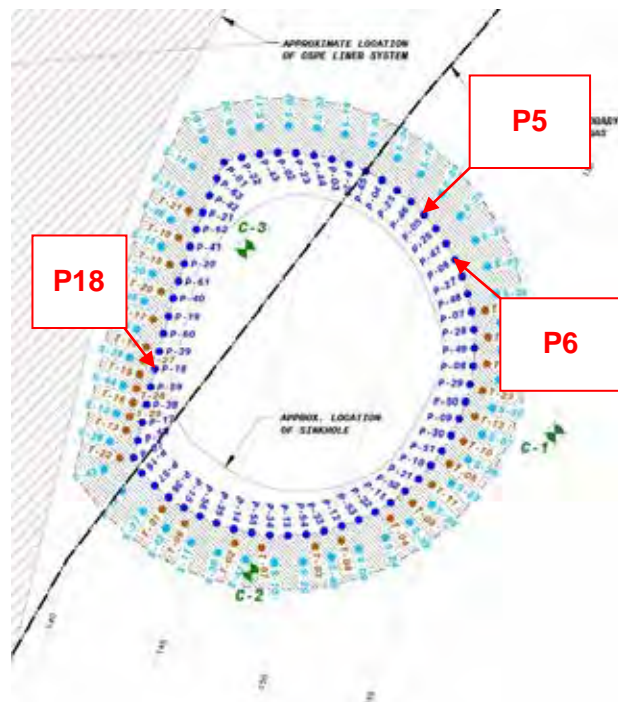
P - 18 Drill (Completed)

P - 18 Grout (Incomplete)

Qty	Equipment Onsite	Qty	Equipment Onsite
2	SM-20 Drill Rigs	2	Schwing Pumps
1	Skid Steer	1	Dump Trucks
1	Small Excavator	2	Water Trucks
1	Forklift		
Other: RAM, arc welder, lights, water pumps			
Implement:		Implement	

Total Grout Order = 35 cu.yd.; Return = 0 cu.yd.

WORK AREA





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DAILY FIELD REPORT

Route To:	Carl Christmann, P.E.	Copy To:	Richard Siemering, P.E.
Date:	02/27/2013	Page:	
Project No:	13354.8	Client:	HDR Engineering, Inc.
Location:	Hillsborough County Southeast Landfill		
AMEC Staff:	Mark Chomtid, P.E.; Ricardo Kiriakidis, P.E.; Kevin Jobes		

Other Activities / Comments:

WORK ACTIVITIES

- AMEC's staff arrived onsite at 7:00 am and performed the daily site inspection prior to starting the work activity.

Point "P18"

- Continued drilling with duplex @ 8:45 am @ 120 feet
- Observed soft drilling from 220 to 230 feet
- Finished drilling @ 10:30 am
- (Final Depth of Point P18 = 230 feet below grade).**
- Concrete truck # 26 arrived @ 11:30 am
- Grout start @ 11:45 am
- Initial line pressure 500 psi; Slump = 3"
- Pumped 5 cu.yd. had to lift due to tight casing
- Finished truck # 26 @ 12:00 pm
- Delay from 12:15 pm to 1:08 pm (waiting for next truck)
- Concrete truck # 27 arrived @ 1:08 pm
- Initial line pressure 500 psi; Slump = 3.75"
- Finished truck # 27 @ 1:37 pm
- Had to lift casing due to tight casing
- Delay from 1:46 pm to 2:40 pm (waiting for next truck)
- Concrete truck # 28 arrived @ 2:40 pm
- Initial line pressure 500 psi; Slump = 4.25"
- Finished truck # 28 @ 12:00 pm
- Concrete truck # 29 arrived @ 4:30 pm
- Initial line pressure 450 psi; Slump = 5.25"
- Finished truck # 29 @ 5:16 pm
- Total grout quantity for Point P18 = 35 cu.yd. (INCOMPLETE)**

Point "P5"

- Start to drill point P5 @ 8:00 am
- Drill rig hydraulic problem from 8:13 am to 8:19 am
- Casing plugged @ 113 feet @ 9:50 am
- Drilling resumed @ 10:10 am, water supply to rig had been shut off
- Drilling stopped @ 165 feet @ 10:45 am due to hydraulic leak and motor for cuthead was loose
- Rig was down (Delay from 10:45 am to 1:32 pm)
- Rig fixed and started drilling @ 1:32 pm
- Rig down @ 1:40 pm due to casing was plugged; resumed drilling @ 1:50 pm
- Finished drilling @ 3:36 pm
- (Final Depth of Point P5 = 240 feet below grade)**



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Date:	02/27/2013	Page:	
Project No:	13354.8	Client:	HDR Engineering, Inc.
Location:	Hillsborough County Southeast Landfill		
AMEC Staff:	Mark Chomtid, P.E.; Ricardo Kiriakidis, P.E.; Kevin Jobes		

Point "P6"

- Start to drill Point P6 @ 4:15 pm
- Started drilling 50 feet of casing, section plugged with grout and drilling stopped, casing removed
- Second section @ 50 feet, casing cracked, removed and replaced
- Drilling resumed @ 4:50 pm
- Drilling concluded for day @ 5:25 pm
- **Depth of Point P6 = 120 feet below grade (INCOMPLETE).**



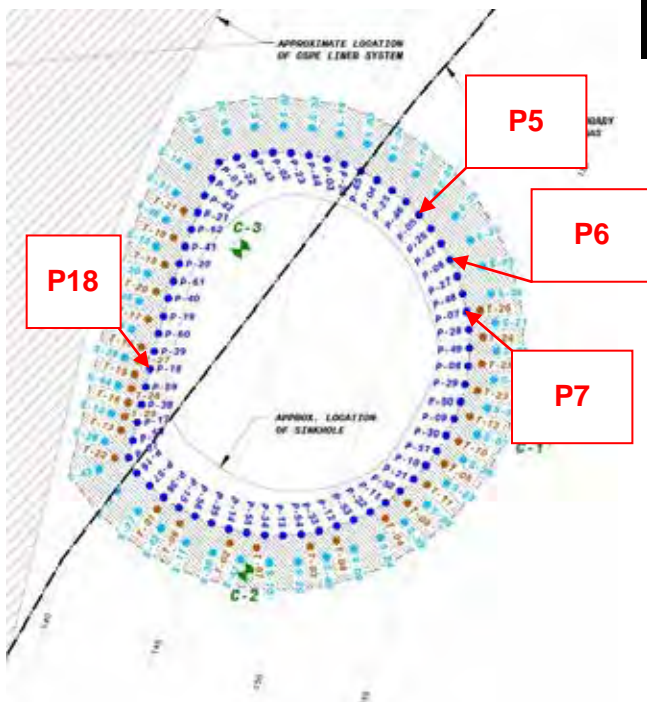
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DAILY FIELD REPORT

Route To:	Carl Christmann, P.E.	Copy To:	Richard Siemering, P.E.
Date:	02/28/2013	Page:	
Project No:	13354.8	Client:	HDR Engineering, Inc.
Location:	Hillsborough County Southeast Landfill		
AMEC Staff:	Mark Chomtid, P.E.; Ricardo Kiriakidis, P.E.; Kevin Jobes		
Inspector	Mark Chomtid, P.E.; Kevin Jobes		
Reviewed by	Carl Christmann, P.E.		

Hours Worked:		Day: <input type="checkbox"/> Monday <input type="checkbox"/> Tuesday <input type="checkbox"/> Wednesday <input checked="" type="checkbox"/> Thursday
Onsite	7:10 am – 6:30 pm	<input type="checkbox"/> Friday <input type="checkbox"/> Saturday <input type="checkbox"/> Sunday
Lunch		Weather: Wind Dir Wind Speed
		<input checked="" type="checkbox"/> Cloudy <input type="checkbox"/> Sunny <input type="checkbox"/> Overcast <input type="checkbox"/> Rainy <input type="checkbox"/> Stormy

Work Performed:	Qty	Equipment Onsite	Qty	Equipment Onsite
P - 5 Grout (Completed)	2	SM-20 Drill Rigs	2	Schwing Pumps
P – 6 Drill (Completed)	1	Skid Steer	1	Dump Trucks
P – 6 Grout (Completed)	1	Small Excavator	2	Water Trucks
P – 7 Drill (Completed) P – 7 Grout (Completed)	1	Forklift		
P – 18 Grout (Incomplete)		Other: RAM, arc welder, lights, water pumps		
Total Grout Order = 50 cu.yd., Return = 0 cu.yd.				
WORK AREA		Implement:		
		Implement		





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DAILY FIELD REPORT

Route To:	Carl Christmann, P.E.	Copy To:	Richard Siemering, P.E.
Date:	02/28/2013	Page:	
Project No:	13354.8	Client:	HDR Engineering, Inc.
Location:	Hillsborough County Southeast Landfill		
AMEC Staff:	Mark Chomtid, P.E.; Ricardo Kiriakidis, P.E.; Kevin Jobes		

Other Activities / Comments:

WORK ACTIVITIES

- AMEC's staff arrived onsite at 7:10 am and performed the daily site inspection prior to starting work activities.

Point "P18"

- Concrete truck # 30 arrived @ 8:28 am
- Grout start @ 11:45 am
- Initial line pressure 500 psi; Slump = 4.5"
- Finished truck # 30 @ 9:10 am
- Delay from 9:10 am to 10:03 am (waiting for next truck)
- Concrete truck # 31 arrived @ 10:03 am
- Initial line pressure 500 psi; Slump = 3.75"
- Finished truck # 31 @ 10:40 am
- Delay from 10:40 am to 11:33 am (waiting for next truck)
- Continued concrete truck # 32
- Initial line pressure 500 psi; Slump = 4"
- Finished truck # 32 @ 2:20 pm
- Concrete truck # 33 arrived @ 3:03 pm
- Initial line pressure 400 psi, Slump = 3.75"
- Finished truck # 33 @ 3:40 pm
- Continued concrete truck # 34 @ 6:06 pm
- Finished truck # 34 @ 6:15 pm
- Total grout quantity for Point P18 = 69.8 cu.yd. (INCOMPLETE)**

Point "P6"

- Continued to drill point P6 @ 7:36 am
- Finished drilling @ 8:40 am
- Sounded @ 8:41 am, determined 130 feet of casing clogged
- Earth Tech made decision to remove casing to check for broken joint, etc.
- Removal started @ 8:50 am
- Casing unblocked, replacement started @ 9:37 am
- Casing replaced @ 10:10 am, depth sounded again @ 10:36 am.
- (Final Depth of Point P6 = 240 feet below grade)**
- Start grout @ 11:40 am
- Grout in casing at each break
- Finished Point P6 @ 12:35 pm
- Remainder of truck sent to point P5 & P18
- Total grout quantity for Point P6 = 3.7 cu.yd. (COMPLETED)**



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DAILY FIELD REPORT

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Date:	02/28/2013	Page:	
Project No:	13354.8	Client:	HDR Engineering, Inc.
Location:	Hillsborough County Southeast Landfill		
AMEC Staff:	Mark Chomtid, P.E.; Ricardo Kiriakidis, P.E.; Kevin Jobes		

Point "P5"

- Start grout @ 1:00 pm
- Initial line pressure 325 psi; Slump = 4"
- Finished Point P5 @ 1:55 pm
- Remainder of truck sent to point P18
- Starter bit missing teeth
- **Total grout quantity for Point P5 = 3.2 cu.yd. (COMPLETED)**

Point "P7"

- Start to drill Point P7 @ 2:10 pm
- Finished drilling @ 3:46 pm
- **(Final Depth of Point P7 = 235 feet below grade)**
- Concrete truck # 34 arrived @ 4:51 pm
- Start grout @ 4:55 pm
- Initial line pressure 300 psi; Slump = 4.5"
- Grout in casing at each break
- Finished Point P7 @ 6:03 pm
- Remainder of truck sent to point P18
- **Total grout quantity for Point P7 = 8.3 cu.yd. (COMPLETED)**



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Route To:	Carl Christmann, P.E.	Copy To:	Richard Siemering, P.E.
Date:	03/01/2013	Page:	
Project No:	13354.8	Client:	HDR Engineering, Inc.
Location:	Hillsborough County Southeast Landfill		
AMEC Staff:	Mark Chomtid, P.E.; Ricardo Kiriakidis, P.E.; Kevin Jobes		
Inspector	Mark Chomtid, P.E.; Kevin Jobes		
Reviewed by	Carl Christmann, P.E.		

Contractor Earth Tech, Inc.

Contractor Supvr

Hours Worked:

Onsite 7:30 am – 7:30 pm

Lunch

Day: ☐ Monday ☐ Tuesday ☐ Wednesday ☐ Thursday

☒ Friday ☐ Saturday ☐ Sunday

Weather: Wind Dir Wind Speed

☐ Cloudy ☐ Sunny ☒ Overcast ☐ Rainy ☐ Stormy

Work Performed:

Qty	Equipment Onsite	Qty	Equipment Onsite
2	SM-20 Drill Rigs	2	Schwing Pumps
1	Skid Steer	1	Dump Trucks
1	Small Excavator	2	Water Trucks
1	Forklift		
	Other: RAM, arc welder, lights, water pumps		
		Implement:	
		Implement	

P18 – Grout (completed)

P19 – Drill (completed) P19 – Grout (incomplete)

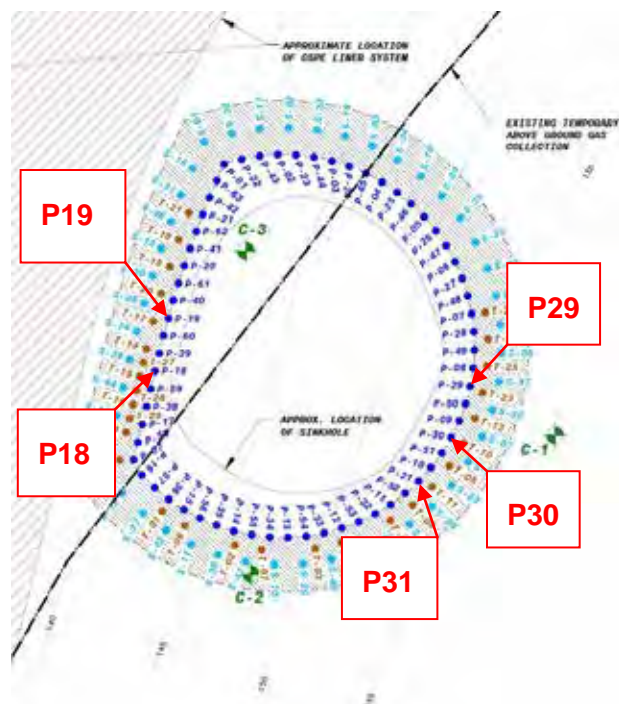
P29 – Drill (completed) P29 – Grout (completed)

P30 – Drill (completed) P30 – Grout (completed)

P31 – Drill (completed) P31 – Grout (completed)

Total Grout Order = 40 cu.yd., Return = 2.7 cu.yd.

WORK AREA





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DAILY FIELD REPORT

Route To:	Carl Christmann, P.E.	Copy To:	Richard Siemering, P.E.
Date:	03/01/2013	Page:	
Project No:	13354.8	Client:	HDR Engineering, Inc.
Location:	Hillsborough County Southeast Landfill		
AMEC Staff:	Mark Chomtid, P.E.; Ricardo Kiriakidis, P.E.; Kevin Jobes		

Other Activities / Comments:

WORK ACTIVITIES

- AMEC's staff arrived onsite at 7:30 am and performed the daily site inspection prior to starting work activities.

Point "P18"

- Concrete Truck #35 arrived @ 8:25 am. Tierra's technician performed slump test and reported slump of 4.5 inches with temperature of 71 °F
- Start to grout P18 @ 8:35 am and finish @ 9:30 pm. Used 10 cu.yd. of Truck #35 to complete Point P18.(initial line pressure = 400 psi)
- Total grout quantity for Point P18 = 79.8 cu.yd. (COMPLETED)**

Point "P19"

- Start to drill Point P19 @ 10:01 am, stopped to change drill bit coupling @10:56 am, start to drill @ 11:19 am, finish drilling @ 1:18 pm (**Final Depth of Point P19 = 230 feet below grade**).
- Double Core Drill was performed at depth ranging from 165 to 230 feet below grade
- Concrete Truck #37 arrive @ 3:07 pm. Tierra's technician performed slump test and reported slump of 5.0 inches with temperature of 77 °F
- Start to grout P19 @ 3:11 pm and finish @ 3:40 pm. Used 10 cu.yd. of Truck #37 to grout between depth ranging from 220 - 230 feet below grade. Grout casing was lifted due to the tightening of casing between depth ranging from 220 - 230 feet below grade with the recorded pressure of 500 psi (initial line pressure = 350 psi).
- Used 3.3 cu.yd. of grout from Truck #38 to grout between depth ranging from 220 - 230 feet below grade. Start to grout @ 6:30 pm; finish @ 7:10 pm
- Total grout quantity for Point P19 = 10.3 cu.yd. (INCOMPLETE)**

Point "P31"

- Start to drill Point P31 @ 7:51 am; finish drilling @ 9:47 am (**Final Depth of Point P31 = 242 feet below grade**).
- Concrete Truck #36 arrive @ 10:14 am. Tierra's technician performed slump test and reported slump of 5.75 inches with temperature of 69 °F. Mark Chomtid requested to collect one set of grouting sample for compressive strenght test and approve to start to pump the grout from Truck #36.
- Start to grout P31 @ 10:20 am and finish @ 11:45 am. Used 7.3 cu.yd. of Truck #36 to complete Point P31 (initial line pressure = 300 psi).
- 2.7 cu.yd. of Truck #36 was sent back. No point ready to perform grouting.
- Total grout quantity for Point P31 = 7.3 cu.yd. (INCOMPLETE)**

Point "P30"

- Start to drill Point P30 @ 12:05 pm; finish drilling @ 1:49 pm (**Final Depth of Point P30 = 245 feet below grade**).
- Start to grout P30 @ 5:20 pm and finish @ 11:45 am. Used 3.2 cu.yd. of Truck #38 to complete Point P30 (initial line pressure = 300 psi).
- Remaining grout within Truck #38 was moved and used for to Point P19.
- Total grout quantity for Point P30 = 3.2 cu.yd. (COMPLETED)**



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DAILY FIELD REPORT

Route To:	Carl Christmann, P.E.	Copy To:	Richard Siemering, P.E.
Date:	03/01/2013	Page:	
Project No:	13354.8	Client:	HDR Engineering, Inc.
Location:	Hillsborough County Southeast Landfill		
AMEC Staff:	Mark Chomtid, P.E.; Ricardo Kiriakidis, P.E.; Kevin Jobes		

Point "P29"

- Start to drill Point P29 @ 2:19 pm, finish drilling @ 4:03 pm (**Final Depth of Point P29 = 250 feet below grade**)
- Concrete Truck #38 arrived @ 4:02 pm. Tierra's technician performed slump test and reported slump of 3.50 inches.
- Start to grout 29 @ 4:25 pm and finish @ 5:45 pm. Used 3.5 cu.yd. of Truck #38 to complete Point P29 (initial line pressure = 400 psi)
- Remaining grout within Truck #38 was moved and used for to Point P30
- **Total grout quantity for Point P29 = 3.5 cu.yd. (COMPLETED)**



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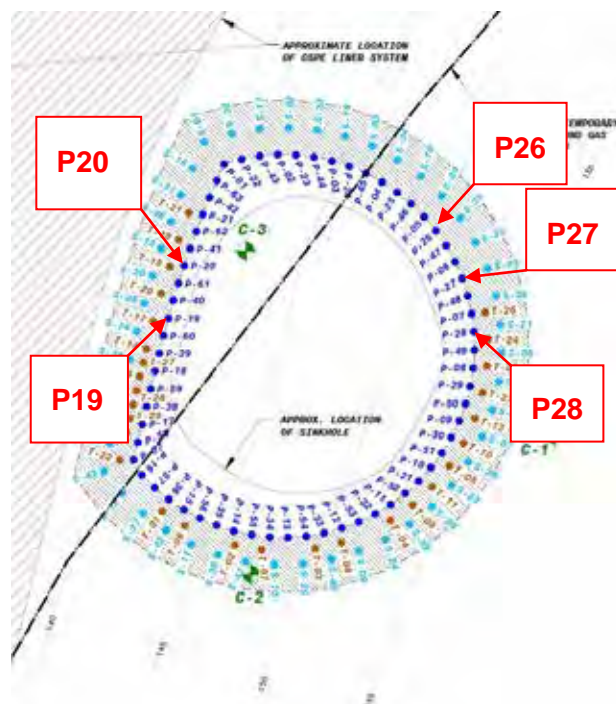
DAILY FIELD REPORT

Route To:		Carl Christmann, P.E.	Copy To:	Richard Siemering, P.E.
Date:		03/04/2013	Page:	
Project No:		13354.8	Client:	HDR Engineering, Inc.
Location:		Hillsborough County Southeast Landfill		
AMEC Staff:		Mark Chomtid, P.E.; Ricardo Kiriakidis, P.E.; Kevin Jobes		
Contractor	Earth Tech, Inc.	Inspector		
Contractor Supvr		Reviewed by		
		Carl Christmann, P.E.		

Hours Worked:		Day: <input checked="" type="checkbox"/> Monday <input type="checkbox"/> Tuesday <input type="checkbox"/> Wednesday <input type="checkbox"/> Thursday		
Onsite	7:30 am – 5:30 pm	<input type="checkbox"/> Friday <input type="checkbox"/> Saturday <input type="checkbox"/> Sunday		
Lunch		Weather: Wind Dir Wind Speed		
		<input type="checkbox"/> Cloudy <input checked="" type="checkbox"/> Sunny <input type="checkbox"/> Overcast <input type="checkbox"/> Rainy <input type="checkbox"/> Stormy		

Work Performed:	Qty	Equipment Onsite	Qty	Equipment Onsite
P19 – Grout (Incomplete)	2	SM-20 Drill Rigs	2	Schwing Pumps
P20 – Drill (Incomplete)	1	Skid Steer	1	Dump Trucks
P26 – Drill (completed)	1	Small Excavator	2	Water Trucks
P27 – Drill (completed), P27 – Grout (completed)	1	Forklift		
P28 – Drill (completed), P28 – Grout (completed)		Other: RAM, arc welder, lights, water pumps		
Total Grout Order = 40 cu.yd., Return = 0.0 cu.yd.				

WORK AREA



		Implement:
		Implement



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DAILY FIELD REPORT

Route To:	Carl Christmann, P.E.	Copy To:	Richard Siemering, P.E.
Date:	03/04/2013	Page:	
Project No:	13354.8	Client:	HDR Engineering, Inc.
Location:	Hillsborough County Southeast Landfill		
AMEC Staff:	Mark Chomtid, P.E.; Ricardo Kiriakidis, P.E.; Kevin Jobes		

Other Activities / Comments:

WORK ACTIVITIES

- AMEC's staff arrived on site at 7:30 am and performed the daily site inspection prior to starting work activities.

Point "P19"

- Continued to grout at a depth of 210 feet below grade
- Concrete Truck #39 arrived @ 8:29 am. Tierra's technical performed slump test and reported slump of 5.0 inches with temperature of 61 °F
- Started to grout P19 @ 8:38 am and finish @ 9:02 am. Used 10 cu.yd. of Truck #39. (initial line pressure = 400 psi)
- Waited for the Concrete Truck #40
- Concrete Truck #40 arrived @ 10:01 am. Tierra's technical performed slump test and reported slump of 3.75 inches with temperature of 68 °F
- Started to grout P19 @ 10:05 am and finish @ 10:34 am. Used 10 cu.yd. of Truck #40. (initial line pressure = 400 psi)
- Drill rig moved to drill Point P20 while it was waiting for Concrete Truck #41 to grout Points P27 & P28
- Drill rig moved back to Point P19 at 1:40 pm for grouting Point P19
- Start to grout Point P19 @ 2:10 pm and finish @ 2:19 pm. Used 2.2 cu.yd of grout from Concrete Truck #41 to grout Point P19
- Waited for the Concrete Truck #42
- Concrete Truck #42 arrived @ 3:25 pm. Tierra's technician performed slump test and reported slump of 4.5 inches with temperature of 76 °F
- Started to grout P19 @ 3:25 pm and finish @ 3:50 pm. Used 10 cu.yd. of Truck #42. (initial line pressure = 350 psi)
- Grout quantity pumped to Point P19 on 03/04/13 = 32.2 cu.yd**
- Total grout quantity pumped to Point P19 = 45.5 cu.yd. (INCOMPLETE)**

Point "P20"

- Target drilling depth of Point P20 = 230 feet below grade
- Started to drill Point P20 @ 11:41 am; stop to refill the water within the reservoir tank @ 12:31pm
- Re-started to drill Point P20 @ 1:22 pm. Drill rig moved back to Point P19 at 1:40 pm
- Total drilling depth for Point P20 on 03/04/13 = 120 feet (INCOMPLETE)**

Point "P26"

- Target drilling depth of Point P26 = 235 feet below grade
- Started to drill Point P26 @ 2:10 pm; finish drilling @ 4:20 pm **(Final Depth of Point P26 = 235 feet below grade)**

Point "P27"

- Target drilling depth of Point P27 = 235 feet below grade
- Started to drill Point P27 @ 9:58 am; finish drilling @ 11:37 am **(Final Depth of Point P27 = 235 feet below grade).**
- Concrete Truck #41 arrived @ 11:40 am. Tierra's technical performed slump test and reported slump of 3.75 inches .
- Started to grout P27 @ 11:46 am and finish @ 12:50 pm. Used 5.0 cu.yd. of Truck #41 to complete Point P27 (initial line pressure = 350 psi).
- Remainder of grout within Truck #41 was moved and used for Point P28.
- Total grout quantity for Point P27 = 5.0 cu.yd. (COMPLETED).**



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DAILY FIELD REPORT

Route To:	Carl Christmann, P.E.	Copy To:	Richard Siemering, P.E.
Date:	03/04/2013	Page:	
Project No:	13354.8	Client:	HDR Engineering, Inc.
Location:	Hillsborough County Southeast Landfill		
AMEC Staff:	Mark Chomtid, P.E.; Ricardo Kiriakidis, P.E.; Kevin Jobes		

Point "P28"

- Target drilling depth of Point P28 = 240 feet below grade.
- Started to drill Point P28 @ 7:51 am; finish drilling @ 9:36 am (**Final Depth of Point P27 = 235 feet below grade**).
- Started to grout Point P28 @ 12:55 pm and finish @ 1:56 pm. Used 2.8 cu.yd. of grout from Concrete Truck #41 to grout Point P28. (initial line pressure = 350 psi).
- Concrete Truck #41 arrived @ 11:40 am. Tierra's technical performed slump test and reported slump of 3.75 inches .
- Started to grout P27 @ 11:46 am and finish @ 12:50 pm. Used 5.0 cu.yd. of Truck #41 to complete Point P27 (initial line pressure = 350 psi).
- Remaininf of grout within Truck #41 was moved and used for to Point P19.
- **Total grout quantity for Point P28 = 2.8 cu.yd. (COMPLETED).**



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DAILY FIELD REPORT

Route To:	Carl Christmann, P.E.	Copy To:	Richard Siemerling, P.E.
Date:	03/05/2013	Page:	
Project No:	13354.8	Client:	HDR Engineering, Inc.
Location:	Hillsborough County Southeast Landfill		
AMEC Staff:	Mark Chomtid, P.E.; Ricardo Kiriakidis, P.E.; Kevin Jobes		
Inspector	Mark Chomtid, P.E.; Kevin Jobes		
Reviewed by	Carl Christmann, P.E.		

Contractor Earth Tech, Inc.

Contractor Supvr

Hours Worked:

Onsite 7:30 am – 5:30 pm

Lunch

Day: ☐ Monday ☒ Tuesday ☐ Wednesday ☐ Thursday

☐ Friday ☐ Saturday ☐ Sunday

Weather: Wind Dir Wind Speed

☐ Cloudy ☒ Sunny ☐ Overcast ☐ Rainy ☐ Stormy

Work Performed:

P19 – Grout (completed) P20 – Drill (completed) + Grout (incomplete)

P26 – Grout (completed)

P32 – Drill (completed) P32 – Grout (completed)

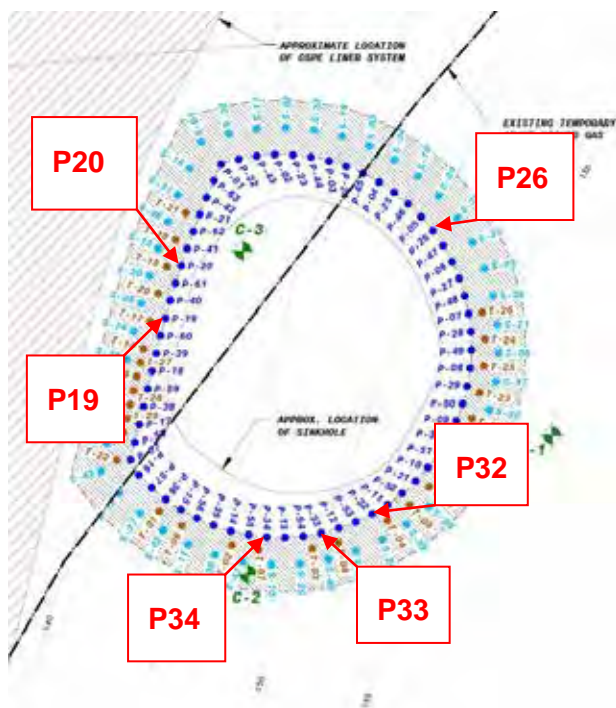
P33 – Drill (completed)

P34 – Drill (completed)

Total Grout Order = 20 cu.yd.; Return = 0.0 cu.yd.

Qty	Equipment Onsite	Qty	Equipment Onsite
2	SM-20 Drill Rigs	2	Schwing Pumps
1	Skid Steer	1	Dump Trucks
1	Small Excavator	2	Water Trucks
1	Forklift		
	Other: RAM, arc welder, lights, water pumps		
	Farm Tractors -	Implement:	
		Implement	

WORK AREA





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DAILY FIELD REPORT

Route To:	Carl Christmann, P.E.	Copy To:	Richard Siemering, P.E.
Date:	03/05/2013	Page:	
Project No:	13354.8	Client:	HDR Engineering, Inc.
Location:	Hillsborough County Southeast Landfill		
AMEC Staff:	Mark Chomtid, P.E.; Ricardo Kiriakidis, P.E.; Kevin Jobes		

Other Activities / Comments:

WORK ACTIVITIES

- AMEC's staff arrived on site at 7:30 am and performed the daily site inspection prior to starting work activity.

Point "P19"

- Continued to grout at a depth of 160 feet below grade.
- Concrete Truck #43 arrived @ 8:09 am. Tierra's technician performed slump test and reported slump of 3.0 inches with temperature of 68 °F.
- Started to grout P19 @ 8:30 am and finished @ 9:15 am. Used 3.5 cu.yd. of Truck #43. (initial line pressure = 400 psi)
- Remaining of grout within Truck #43 was moved and used for to Point P32.
- Total grout quantity for Point P19 = 3.5 cu.yd. (COMPLETED).**

Point "P20"

- Continued to drill Point P20 from 120 feet below grade to a depth of 230 feet below grade.
- Started to drill Point P20 @ 11:58 am; finished drilling @ 2:24 pm, **(Final Depth of Point P20 = 230 feet below grade).**
- Concrete Truck #44 arrived @ 3:43 pm. Tierra's technician performed slump test and reported slump of 4.0 inches with temperature of 79 °F.
- Started to grout P19 @ 4:20 pm and finished @ 4:40 pm. Used 10.0 cu.yd. of Truck #44. (initial line pressure = 400 psi).
- Grout quantity pumped to Point P20 on 03/05/13 = 10.0 cu.yd.**
- Total grout quantity pumped to Point P20 = 10.0 cu.yd. (INCOMPLETE)**

Point "P26"

- Five (5) gallons of water was added to remaining of grout (approximately 3.3 cu.yd.) within Truck #43 prior to grout Point P26. One set of cylinder sample was collected for compressive strength test.
- Started to grout P26 @ 10:50 am and finished @ 11:44 am. Used 3.3 cu.yd. of Truck #43 to complete Point P26 (initial line pressure = 400 psi).
- Total grout quantity for Point P26 = 3.3 cu.yd. (COMPLETED).**

Point "P32"

- Target drilling depth of Point P32 = 241 feet below grade.
- Started to drill Point P32 @ 7:27 am; finished drilling @ 9:06 am **(Final Depth of Point P32 = 240 feet below grade).**
- Started to grout P32 @ 9:15 am and finished @ 10:14 am. Used 3.2 cu.yd. of Truck #43. (initial line pressure = 500 psi).
- Remaining grout within Truck #43 was moved and used for Point P26.
- Total grout quantity for Point P32 = 3.2 cu.yd. (COMPLETED).**

Point "P33"

- Target drilling depth of Point P33 = 240 feet below grade.
- Started to drill Point P33 @ 2:43 pm; finished drilling @ 4:40 pm **(Final Depth of Point P27 = 240 feet below grade).**

Point "P34"

- Target drilling depth of Point P34 = 239 feet below grade.
- Started to drill Point P34 @ 1:12 pm; finished drilling @ 2:15 am **(Final Depth of Point P27 = 240 feet below grade).**



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DAILY FIELD REPORT

Route To:	Carl Christmann, P.E.	Copy To:	Richard Siemering, P.E.
Date:	03/06/2013	Page:	
Project No:	13354.8	Client:	HDR Engineering, Inc.
Location:	Hillsborough County Southeast Landfill		
AMEC Staff:	Mark Chomtid, P.E.; Ricardo Kiriakidis, P.E.; Kevin Jobes		
Inspector	Mark Chomtid, P.E.; Kevin Jobes		
Reviewed by	Carl Christmann, P.E.		

Contractor Earth Tech, Inc.

Contractor Supvr

Hours Worked:

Onsite 7:15 am – 5:30 pm

Lunch

Day: ☐ Monday ☐ Tuesday ☒ Wednesday ☐ Thursday

☐ Friday ☐ Saturday ☐ Sunday

Weather: Wind Dir Wind Speed

☐ Cloudy ☒ Sunny ☐ Overcast ☐ Rainy ☐ Stormy

Work Performed:

P2 – Drill (Incomplete)

P20 – Grout (completed)

P33 – Grout (completed)

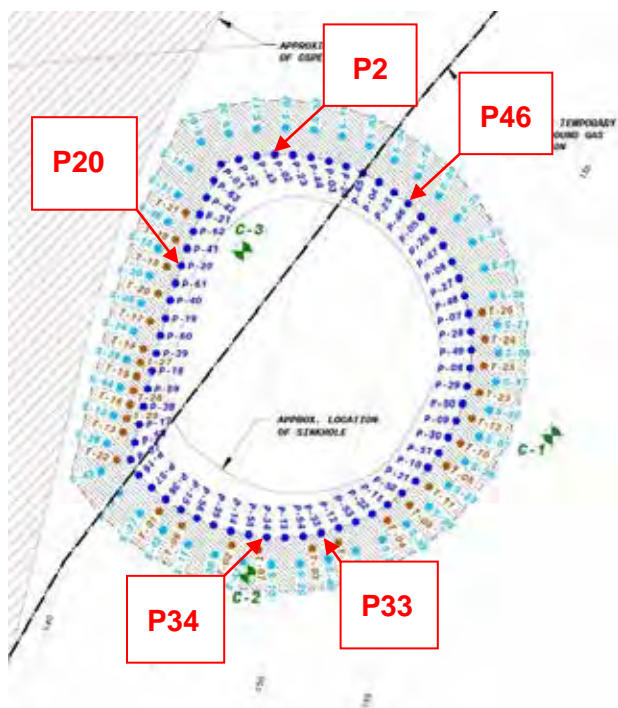
P34 – Grout (completed)

P46 – Grout (Incomplete)

Total Grout Order = 30 cu.yd., Return = 0.0 cu.yd.

Qty	Equipment Onsite	Qty	Equipment Onsite
2	SM-20 Drill Rigs	2	Schwing Pumps
1	Skid Steer	1	Dump Trucks
1	Small Excavator	2	Water Trucks
1	Forklift		
	Other: RAM, arc welder, lights, water pumps		
	Farm Tractors -	Implement:	
		Implement	

WORK AREA





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DAILY FIELD REPORT

Route To:	Carl Christmann, P.E.	Copy To:	Richard Siemering, P.E.
Date:	03/06/2013	Page:	
Project No:	13354.8	Client:	HDR Engineering, Inc.
Location:	Hillsborough County Southeast Landfill		
AMEC Staff:	Mark Chomtid, P.E.; Ricardo Kiriakidis, P.E.; Kevin Jobes		

Other Activities / Comments:

WORK ACTIVITIES

- AMEC's staff arrived on site at 7:15 am and performed the daily site inspection prior to starting work activity.

Point "P33"

- Concrete Truck #45 arrived @ 8:00 am.
- Started to grout P33 @ 8:06 am
- Plugged possibly @ 160 feet @ 8:22 am (small inner rod utilized to clean blockage)
- Casing reinstalled to 210 feet; start @ 9:19 am (1 Hour delay)
- Truck # 45 slump continued to get tight; Earth Tech requested that 10 gallons of water be added
- Requested sample to be taken @ 9:21 am
- @ 10:03 am last 10 foot section of casing; collar pin came loose at the top of the casing (was unable to connect to rig)
- Delay due to casing having to be welded in place
- Finished @ 10:06 am. Used 5.4 cu.yd. of Truck #45.
- Starter had no teeth- worn smooth
- Remainder of grout within Truck #43 was moved and used for to Point P34 & P20
- Total grout quantity for Point P33 = 5.4 cu.yd. (COMPLETED).**

Point "P34"

- Continued concrete Truck #45
- Started to grout P34 @ 10:22 am
- Line pressure: 700 psi – Grout very tight (Earth Tech added additional 5 gallons [15 gallons total]) @ 10:36 am
- Flushed lines & pumped; resumed 10:40 am
- Finished @ 11:14 am. Used 3.5 cu.yd. of Truck #45.
- Starter had all teeth and in good condition
- Remainder of grout within Truck #45 was moved and used for to Point P20
- Total grout quantity for Point P34 = 3.5 cu.yd. (COMPLETED).**

Point "P20"

- Continued concrete Truck #45
- Started to grout P20 @ 11:28 am
- Truck # 45 finished @ 11:35 am **(1.1 cu.yd.)**
- Truck # 46 arrived @ 11:36 am
- Start to grout @ 11:55 am
- Weld on rig broke @ 11:36 am; repaired @ 11:45 am
- Truck # 46 finished @ 12:18 pm -190 feet **(10 cu.yd.)**
- Delay (waited from 12:30 pm to 1:50 pm for truck # 47)
- Truck # 47 arrived @ 1:50 pm
- Start grout @ 1:56 pm; Line pressure = 400 psi
- Finished @ 2:37 pm. Used 5.2 cu.yd. of Truck #47.
- Remainder of grout within Truck #47 was moved and used for to Point P46
- Total grout quantity for Point P20 = 26.3 cu.yd. (COMPLETED).**



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DAILY FIELD REPORT

Route To:	Carl Christmann, P.E.	Copy To:	Richard Siemerling, P.E.
Date:	03/06/2013	Page:	
Project No:	13354.8	Client:	HDR Engineering, Inc.
Location:	Hillsborough County Southeast Landfill		
AMEC Staff:	Mark Chomtid, P.E.; Ricardo Kiriakidis, P.E.; Kevin Jobes		

Point "P46"

- Continued truck # 47
- Started to grout P46 @ 2:45 pm
- High pressure / line plugged – Grouting paused to clear blockage @ 4:00
- Reinstalled casing to 210 feet @ 4:14 pm
- Grouting resumed @ 4:27 pm
- Finished grout @ 5:07 am. Used 4.8 cu.yd. of Truck #47.
- Total grout quantity for Point P46 = 4.8 cu.yd. (COMPLETED).**

Point "P2"

- Target drilling depth of Point P2 = 230 feet below grade.
- Started to drill Point P2 @ 4:00 pm; changed heads @ 4:02 pm
- Drilling resumed @ 4:33 pm
- Finished drilling @ 5:15 pm
- Will resume 6/76/13
- Depth of Point P2 = 40 feet below grade (INCOMPLETE).**



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DAILY FIELD REPORT

Route To:	Carl Christmann, P.E.	Copy To:	Richard Siemering, P.E.
Date:	03/07/2013	Page:	
Project No:	13354.8	Client:	HDR Engineering, Inc.
Location:	Hillsborough County Southeast Landfill		
AMEC Staff:	Mark Chomtid, P.E.; Ricardo Kiriakidis, P.E.; Kevin Jobes		
Inspector	Mark Chomtid, P.E.; Kevin Jobes		
Reviewed by	Carl Christmann, P.E.		

Contractor Earth Tech, Inc.

Contractor Supvr

Hours Worked:

Onsite 7:10 am – 5:40 pm

Lunch

Day: ☐ Monday ☐ Tuesday ☐ Wednesday ☒ Thursday

☐ Friday ☐ Saturday ☐ Sunday

Weather: Wind Dir Wind Speed

☐ Cloudy ☒ Sunny ☐ Overcast ☐ Rainy ☐ Stormy

Work Performed:

P2 – Drill (Complete);

P3 – Drill (completed);

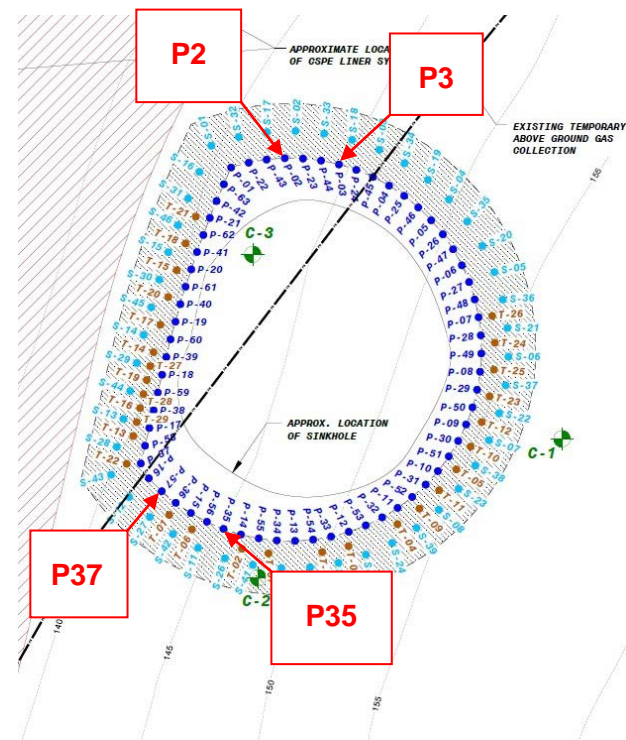
P35 – Drill (completed); P35 – Grout (completed);

P37 – Drill (completed); P37 – Grout (Incomplete)

Qty	Equipment Onsite	Qty	Equipment Onsite
2	SM-20 Drill Rigs	2	Schwing Pumps
1	Skid Steer	1	Dump Trucks
1	Small Excavator	2	Water Trucks
1	Forklift		
Other: RAM, arc welder, lights, water pumps,			
Farm Tractors -		Implement:	
		Implement	

Total Grout Order = 20 cu.yd.; Return = 1.6 cu.yd.

WORK AREA





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DAILY FIELD REPORT

Route To:	Carl Christmann, P.E.	Copy To:	Richard Siemering, P.E.
Date:	03/07/2013	Page:	
Project No:	13354.8	Client:	HDR Engineering, Inc.
Location:	Hillsborough County Southeast Landfill		
AMEC Staff:	Mark Chomtid, P.E.; Ricardo Kiriakidis, P.E.; Kevin Jobes		

Other Activities / Comments:

WORK ACTIVITIES

- AMEC's staff arrived onsite at 7:10 am and performed the daily site inspection prior to starting work activities.

Point "P2"

- Continue drilling @ 8:05 am @ 50 feet below grade
- Paused drilling @ 8:35 am to use double core
- Resume drilling @ 9:07 am
- Finished drilling @ 11:32 am
- (Final Depth of Point P2 = 230 feet below grade COMPLETED).
- Ready for grout

Point "P35"

- Start drilling P35 @ 8:00 am
- Observed soft drilling from 155 to 230 feet
- Finished drilling @ 10:03 am
- (Final Depth of Point P35 = 235 feet below grade COMPLETE).
- Continued concrete Truck # 49 @ 3:30 pm
- Line pressure: 360 psi; Slump = 5"
- Finished @ 4:32 pm and returned 1.6 cu.yd.
- (Total grout quantity for Point P35 = 5.4 cu.yd. COMPLETED).

Point "P37"

- Start drilling P37 @ 10:26 am
- Observed soft drilling from 175 to 225 feet
- Finished drilling @ 12:33 pm
- (Final Depth of Point P37 = 237 feet below grade COMPLETED).
- Concrete Truck # 48 arrived @ 12:50 pm
- Started to grout P37 @ 12:52 pm
- Line pressure = 380 psi; Slump = 4"
- Truck # 48 finished @ 1:32 pm (10 cu.yd.)
- Truck # 49 arrived @ 2:20 pm
- Line pressure = 350 psi; Slump = 5"
- Start to grout @ 2:36 pm
- Finished @ 3:13 pm. Used 3 cu.yd. of Truck #49.
- Remainder of grout within Truck # 49 was moved and used for to Point P35
- (Total grout quantity for Point P37 = 13 cu.yd. COMPLETED).

Point "P3"

- Target drilling depth of Point P3 = 230 to 235 feet below grade.
- Started to drill Point P3 @ 1:50 pm; changed heads @ 2:43 pm
- Drilling resumed @ 3:08 pm
- Finished drilling @ 5:13 pm
- (Final Depth of Point P3 = 230 feet below grade COMPLETED).



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DAILY FIELD REPORT

Route To:	Carl Christmann, P.E.	Copy To:	Richard Siemerling, P.E.
Date:	03/08/2013	Page:	
Project No:	13354.8	Client:	HDR Engineering, Inc.
Location:	Hillsborough County Southeast Landfill		
AMEC Staff:	Mark Chomtid, P.E.; Ricardo Kiriakidis, P.E.; Kevin Jobes		
Inspector	Mark Chomtid, P.E.; Kevin Jobes		
Reviewed by	Carl Christmann, P.E.		

Contractor Earth Tech, Inc.

Contractor Supvr

Hours Worked:

Onsite 7:30 am – 5:40 pm

Lunch

Day: ☐ Monday ☐ Tuesday ☐ Wednesday ☐ Thursday

☒ Friday ☐ Saturday ☐ Sunday

Weather: Wind Dir Wind Speed

☐ Cloudy ☒ Sunny ☐ Overcast ☐ Rainy ☐ Stormy

Work Performed:

P2 – Grout (Incomplete)

P3 – Grout (completed)

P4 – Drill (Incomplete)

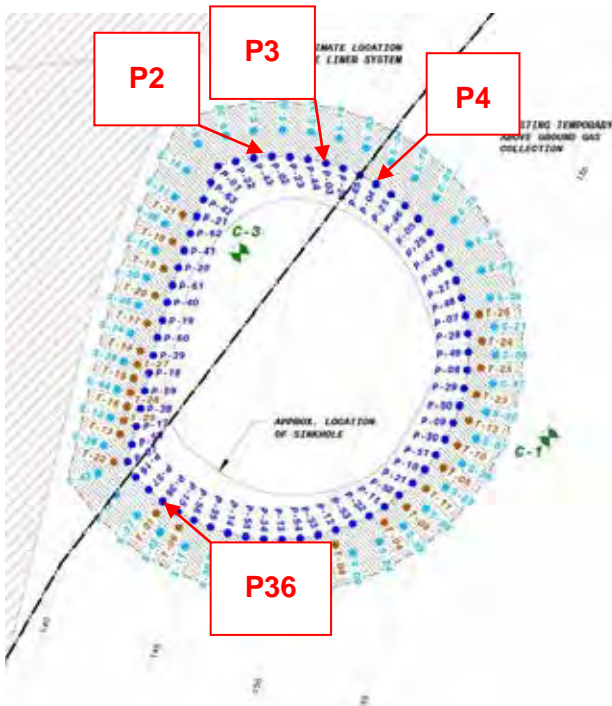
P36 – Drill (completed)

P36 – Grout (Incomplete)

Total Grout Order = 20 cu.yd.; Return = 8.8 cu.yd.

Qty	Equipment Onsite	Qty	Equipment Onsite
2	SM-20 Drill Rigs	2	Schwing Pumps
1	Skid Steer	1	Dump Trucks
1	Small Excavator	2	Water Trucks
1	Forklift		
	Other: RAM, arc welder, lights, water pumps		

WORK AREA



Implement:

Implement



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DAILY FIELD REPORT

Route To:	Carl Christmann, P.E.	Copy To:	Richard Siemerling, P.E.
Date:	03/08/2013	Page:	
Project No:	13354.8	Client:	HDR Engineering, Inc.
Location:	Hillsborough County Southeast Landfill		
AMEC Staff:	Mark Chomtid, P.E.; Ricardo Kiriakidis, P.E.; Kevin Jobes		

Other Activities / Comments:

WORK ACTIVITIES

- AMEC's staff arrived onsite at 7:30 am and performed the daily site inspection prior to starting work activities.

Point "P3"

- Concrete Truck # 50 arrived @ 8:15 am
- Start grout @ 8:35 am
- Line pressure: 360 psi; Slump = 5.25"
- Finished @ 9:29 am and remainder of truck # 50 was moved and used for point P2
- (Total grout quantity for Point P3 = 8.6 cu.yd. COMPLETED).**

Point "P2"

- Continued concrete Truck # 50 @ 9:59 am
- Line pressure: 360 psi
- Finished @ 10:08 am **(1.4 cu.yd.)**
- Truck # 51 arrived @ 8:40 am; Start grout @ 10:20 am
- Line pressure: 380 psi; Slump = 5"
- Stopped pumping @ 10:38 am due to casing locking up @ 160 feet below grade
- An attempt was made to pull the casing up with the ramp and that resulted in the first section of casing shearing off at the joint
- Point was abandoned
- 160 feet of casing lost
- (Total grout quantity for Point P2 = 1.9 cu.yd. INCOMPLETE - ABANDONED).**

Point "P4"

- Start drilling P4 @ 11:36 am
- Target drilling depth of Point P4 = 235 feet below grade.
- Stopped drilling @ 4:00 pm @ 190 feet
- Double core drill will be needed to continue 3/11/13
- Depth of Point P4 = 190 feet below grade (INCOMPLETE).**

Point "P36"

- Started to drill Point P36 @ 8:13 am
- Observed soft drilling from 160 to 230 feet; Finished drilling @ 10:03 am
- (Final Depth of Point P36 = 240 feet below grade COMPLETED).**
- Continued concrete Truck # 51 @ 10:45 am
- Grouting stopped due to back pressure not dropping and casing was plugged
- Start to drill inside casing to clear plug @ 11:54 am
- Driller dropped inner rods @ 12:25pm and will try to retrieve them; Driller retrieved the inner rods @ 12:45 pm
- Casing was cleared @ 1:20 pm and needed to extract inner rods, but did not have any clamps
- One of the inner rods joint was sheared off and retrieved
- All of the inner rods extracted and reinserting 20 feet of casing @ 2:50 pm
- Casing was still clogged at last couple of feet and will need to clear it again
- PVC pipe was used to attempt to clear the pipe and was unsuccessful
- Work stopped @ 5:40 pm
- (Total grout quantity for Point P36 = 0.7 cu.yd. INCOMPLETE).**



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DAILY FIELD REPORT

Route To:	Carl Christmann, P.E.	Copy To:	Richard Siemering, P.E.
Date:	03/11/2013	Page:	
Project No:	13354.8	Client:	HDR Engineering, Inc.
Location:	Hillsborough County Southeast Landfill		
AMEC Staff:	Mark Chomtid, P.E.; Ricardo Kiriakidis, P.E.; Kevin Jobes		
Inspector	Mark Chomtid, P.E.; Kevin Jobes		
Reviewed by	Carl Christmann, P.E.		

Contractor Earth Tech, Inc.

Contractor Supvr

Hours Worked:

Onsite 7:05 am – 5:30 pm

Lunch

Day: ☒ Monday ☐ Tuesday ☐ Wednesday ☐ Thursday

☐ Friday ☐ Saturday ☐ Sunday

Weather: Wind Dir Wind Speed

☒ Cloudy ☒ Sunny ☐ Overcast ☐ Rainy ☐ Stormy

Work Performed:

P4 – Drill (Completed)

P36 – Grout (completed)

P42 – Drill (completed)

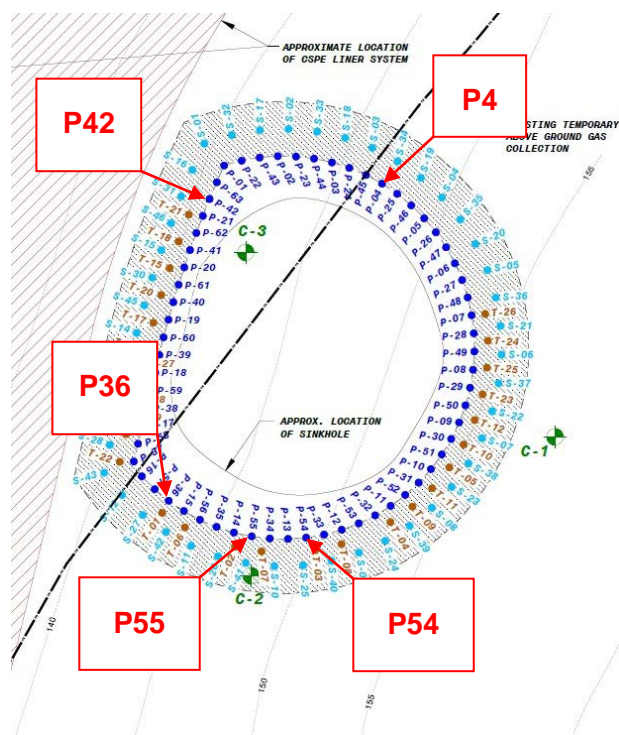
P54 – Drill (Incomplete)

P55 – Drill (completed) P55 – Grout (completed)

Total Grout Order = 10 cu.yd.; Return = 0 cu.yd.

Qty	Equipment Onsite	Qty	Equipment Onsite
2	SM-20 Drill Rigs	2	Schwing Pumps
1	Skid Steer	1	Dump Trucks
1	Small Excavator	2	Water Trucks
1	Forklift		
Other: RAM, arc welder, lights, water pumps			
		Implement:	
		Implement	

WORK AREA





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DAILY FIELD REPORT

Route To:	Carl Christmann, P.E.	Copy To:	Richard Siemering, P.E.
Date:	03/11/2013	Page:	
Project No:	13354.8	Client:	HDR Engineering, Inc.
Location:	Hillsborough County Southeast Landfill		
AMEC Staff:	Mark Chomtid, P.E.; Ricardo Kiriakidis, P.E.; Kevin Jobes		

Other Activities / Comments:

WORK ACTIVITIES

- AMEC's staff arrived onsite at 7:05 am and performed the daily site inspection prior to starting work activities.

Point "P4"

- Continued drilling from 190 feet @ 8:45 am
- Finished drilling point P4 @ 9:15 am
- Earth Tech decided to grout point 3/12/13
- **(Final Depth of Point P4 = 237 feet below grade COMPLETED).**

Point "P42"

- Started drilling point P42 @ 10:04 am
- Observed soft drilling from 50 to 90 feet; medium to very hard drilling from 90 to 160 feet
- Finished drilling point P42 @ 2:35 pm
- Earth Tech decided to grout point 3/12/13
- **(Final Depth of Point P42 = 240 feet below grade COMPLETED).**

Point "P36"

- Location clogged
- Crew worked on clearing blockage @ 7:30 am
- Removed 10 feet of 4" casing @ 9:40 am
- Blockage was removed @ 10:00 am; @ 10:51 reinstalled casing
- Sounded @ 11:05 am; 230 feet
- **(Final Depth of Point P36 = 233 feet below grade COMPLETED).**
- Moved to point P55
- Continued truck # 52 @ 3:05 pm
- Line pressure: 400 psi
- Finished grout @ 4:00 pm **(4.6 cu.yd).**
- **(Total grout quantity for Point P36 = 5.3 cu.yd. COMPLETED).**

Point "55"

- Start drilling P55 @ 11:25 am
- Target drilling depth of Point P55 = 239 feet below grade.
- Finished drilling point P55 @ 1:05 pm
- **(Final Depth of Point P55 = 240 feet below grade COMPLETED).**
- Truck # 52 arrived @ 1:45 pm
- Start grout 1:52 pm
- Line pressure 300 psi; Slump = 4.75"
- Grout in pipe @ each break
- Finished grout @ 2:49 pm
- Starter bit in good shape
- Moved to point P36 with the remainder of truck # 52
- **(Total grout quantity for Point P55 = 5.4 cu.yd. COMPLETED).**



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Date:	03/11/2013	Page:	
Project No:	13354.8	Client:	HDR Engineering, Inc.
Location:	Hillsborough County Southeast Landfill		
AMEC Staff:	Mark Chomtid, P.E.; Ricardo Kiriakidis, P.E.; Kevin Jobes		

Point "54"

- Start drilling P54 @ 4:22 pm
- Target drilling depth of Point P55 = 241 feet below grade.
- New starter installed
- First section of casing installed had a crack at top and it was removed
- First section uninstalled was a different casing
- Stopped drilling point P54 @ 5:15 pm
- **Depth of Point P54 = 110 feet below grade (INCOMPLETE).**



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DAILY FIELD REPORT

Route To:	Carl Christmann, P.E.	Copy To:	Richard Siemering, P.E.
Date:	03/12/2013	Page:	
Project No:	13354.8	Client:	HDR Engineering, Inc.
Location:	Hillsborough County Southeast Landfill		
AMEC Staff:	Mark Chomtid, P.E.; Ricardo Kiriakidis, P.E.; Kevin Jobes		
Inspector	Mark Chomtid, P.E.; Kevin Jobes		
Reviewed by	Carl Christmann, P.E.		

Contractor Earth Tech, Inc.

Contractor Supvr

Hours Worked:

Onsite 7:05 am – 5:40 pm

Lunch

Day: ☐ Monday ☒ Tuesday ☐ Wednesday ☐ Thursday

☐ Friday ☐ Saturday ☐ Sunday

Weather: Wind Dir Wind Speed

☒ Cloudy ☐ Sunny ☐ Overcast ☒ Rainy ☐ Stormy

Work Performed:

P4 – Grout (completed) P40 – Drill (incomplete);

P42 – Grout (complete)

P52 – Drill (incomplete)

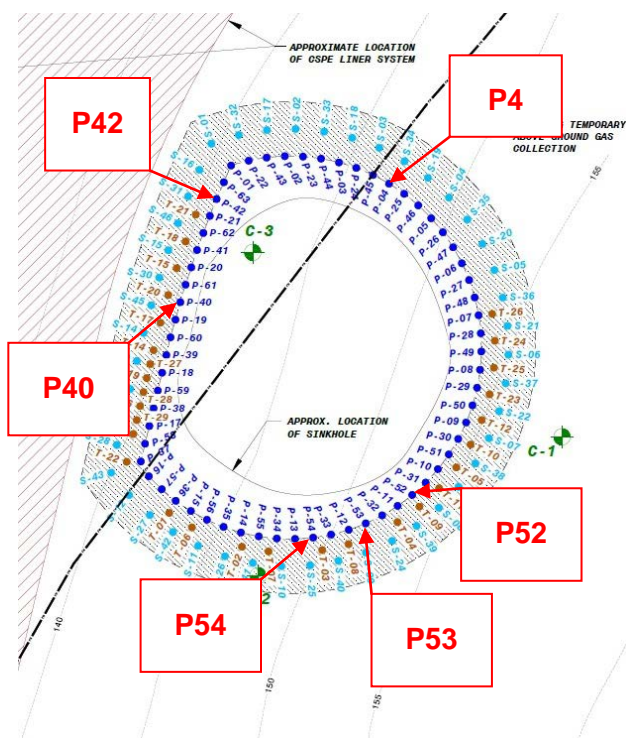
P53 – Drill (completed) P53 – Grout (completed)

P54 – Drill (Completed) P54 – Grout (completed)

Total Grout Order = 25 cu.yd.; Return = 1.5 cu.yd.

Qty	Equipment Onsite	Qty	Equipment Onsite
2	SM-20 Drill Rigs	2	Schwing Pumps
1	Skid Steer	1	Dump Trucks
1	Small Excavator	2	Water Trucks
1	Forklift		
	Other: RAM, arc welder, lights, water pumps		

WORK AREA



Implement:

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DAILY FIELD REPORT

Route To:	Carl Christmann, P.E.	Copy To:	Richard Siemerling, P.E.
Date:	03/12/2013	Page:	
Project No:	13354.8	Client:	HDR Engineering, Inc.
Location:	Hillsborough County Southeast Landfill		
AMEC Staff:	Mark Chomtid, P.E.; Ricardo Kiriakidis, P.E.; Kevin Jobes		

Other Activities / Comments:

WORK ACTIVITIES

- AMEC's staff arrived on site at 7:05 am and performed the daily site inspection prior to starting work activity.

Point "P42"

- Truck # 53 arrived @ 8:13 am
- Start grout 8:45 am
- Line pressure 380 psi; Slump = 4.75"
- Finished grout @ 9:15 am
- Moved to point P4 with the remainder of truck # 53
- (Total grout quantity for Point P42 = 5.3 cu.yd. COMPLETED).

Point "P4"

- Continued truck # 53 @ 9:53 am
- Line pressure: 400 psi
- Finish truck # 53 @ 10:30 am (4.7 cu.yd.)
- Start truck # 54 @ 12:15 pm
- Finished grout @ 12:40 pm (2.4 cu.yd.)
- (Total grout quantity for Point P4 = 7.1 cu.yd. COMPLETED).

Point "P54"

- Resumed drilling from 110 feet @ 7:40 am
- Finished drilling @ 9:05 am
- (Final Depth of Point P54 = 242 feet below grade COMPLETED).
- Moved to point P53
- Continued truck # 54 @ 1:45 pm; Line pressure: 450 psi
- Finished truck # 54 @ 2:35 pm (2.2 cu.yd.)
- Truck # 55 arrived @ 2:49 pm
- Finished grout # 55 @ 3:35 pm (2.2 cu.yd.)
- Returned 1.5 cu.yd.
- (Total grout quantity for Point P54 = 5.7 cu.yd. COMPLETED).

Point "P53"

- Delay - welded drilling head from 9:05 am to 9:55 am
- Start drilling P53 @ 9:59 am
- Target drilling depth of Point P55 = 241 feet below grade.
- Finished drilling point P53 @ 11:51 am
- (Final Depth of Point P53 = 241 feet below grade COMPLETED).
- Continue truck # 54 @ 12:46 pm
- Line pressure 300 psi; Slump = 4.75"
- Grout in pipe @ each break
- Finished grout @ 2:49 pm
- Starter in good shape
- Moved to point P36 with the remainder of truck # 52
- (Total grout quantity for Point P55 = 5.4 cu.yd. COMPLETED).



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Date:	03/12/2013	Page:	
Project No:	13354.8	Client:	HDR Engineering, Inc.
Location:	Hillsborough County Southeast Landfill		
AMEC Staff:	Mark Chomtid, P.E.; Ricardo Kiriakidis, P.E.; Kevin Jobes		

Point "P52"

- Start drilling P52 @ 3:54 pm
- Target drilling depth of Point P52 = 245 feet below grade.
- Stopped drilling point P52 @ 5:40 pm
- To resume 3/13/13
- **Depth of Point P52 = 240 feet below grade (INCOMPLETE).**

Point "P40"

- Start drilling P40 @ 12:57 pm
- Stopped drilling point P40 @ 4:37 pm
- To resume 3/13/13
- **Depth of Point P40 = 220 feet below grade (INCOMPLETE).**



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DAILY FIELD REPORT

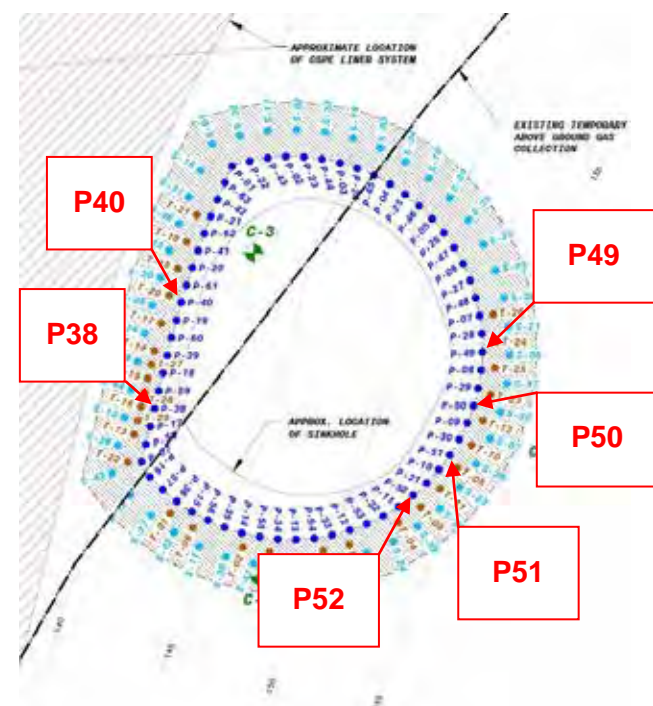
Route To:	Carl Christmann, P.E.	Copy To:	Richard Siemerling, P.E.
Date:	03/13/2013	Page:	
Project No:	13354.8	Client:	HDR Engineering, Inc.
Location:	Hillsborough County Southeast Landfill		
AMEC Staff:	Mark Chomtid, P.E.; Ricardo Kiriakidis, P.E.; Kevin Jobes		
Inspector	Mark Chomtid, P.E.; Kevin Jobes		
Reviewed by	Carl Christmann, P.E.		

Contractor	Earth Tech, Inc.
Contractor Supvr	

Hours Worked:	Day: <input type="checkbox"/> Monday <input type="checkbox"/> Tuesday <input checked="" type="checkbox"/> Wednesday <input type="checkbox"/> Thursday
Onsite	7:10 am – 6:00 pm
Lunch	<input type="checkbox"/> Friday <input type="checkbox"/> Saturday <input type="checkbox"/> Sunday
	Weather: Wind Dir Wind Speed
	<input checked="" type="checkbox"/> Cloudy <input type="checkbox"/> Sunny <input type="checkbox"/> Overcast <input type="checkbox"/> Rainy <input type="checkbox"/> Stormy

Work Performed:	Qty	Equipment Onsite	Qty	Equipment Onsite
P38 – Drill (completed) P38 – Grout (Incomplete)	2	SM-20 Drill Rigs	2	Schwing Pumps
P40 – Drill (completed) P49 – Drill (Incomplete)	1	Skid Steer	1	Dump Trucks
P50 – Drill (Incomplete)	1	Small Excavator	2	Water Trucks
P51 – Drill (completed) P51 – Grout (completed)	1	Forklift		
P52 – Drill (completed) P52 – Grout (completed)		Other: RAM, arc welder, lights, water pumps		
Total Grout Order = 30 cu.yd.; Return = 0 cu.yd.				

WORK AREA



Implement:

Implement



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DAILY FIELD REPORT

Route To:	Carl Christmann, P.E.	Copy To:	Richard Siemerling, P.E.
Date:	03/13/2013	Page:	
Project No:	13354.8	Client:	HDR Engineering, Inc.
Location:	Hillsborough County Southeast Landfill		
AMEC Staff:	Mark Chomtid, P.E.; Ricardo Kiriakidis, P.E.; Kevin Jobes		

Other Activities / Comments:

WORK ACTIVITIES

- AMEC's staff arrived onsite at 7:10 am and performed the daily site inspection prior to starting work activities.

Point "P40"

- Continued drilling P40 @ 8:30 am
- Started extracting inner rod out @ 8:31 am
- Finished extracting inner rod @ 9:45 am
- (Final Depth of Point P40 = 225 feet below grade COMPLETED).**

Point "P38"

- New starter bit installed @ 10:08 am
- Started drilling P38 @ 10:15 am
- Encountered a zone that was unable to penetrate; will have to duplex from 120 feet
- Started duplex from 129 feet @ 12:16 pm
- Target depth for P38 = 231 feet
- Encountered a very hard layer @ 225 feet and drilled for almost 10 minutes
- Decided to terminate @ 230 feet based on nearby boring
- (Final Depth of Point P38 = 230 feet below grade COMPLETED).**
- Truck # 57 arrived @ 3:00 pm; Line pressure: 440 psi
- Finished truck # 57 @ 3:38 pm **(10 cu.yd).**
- Truck # 58 arrived @ 4:38 pm
- Finished truck # 58 @ 5:15 pm @ 185 feet **(10 cu.yd).**
- (Total grout quantity for Point P38 = 20 cu.yd. INCOMPLETE).**

Point "P52"

- Casing checked for clog and deemed clear @ 7:35 am
- Sounded @ 243 feet
- Maintenance performed on drill rig
- Continued truck # 56 @ 12:05 pm
- Line pressure: 350 psi
- Finished grout @ 12:55 pm
- (Total grout quantity for Point P52 = 4.2 cu.yd. COMPLETED).**

Point "P51"

- Started drilling P51 @ 8:10 am
- Finished drilling @ 10:05 am
- (Final Depth of Point P51 = 250 feet below grade COMPLETED).**
- Truck # 56 arrived @ 10:42 am
- Started grout @ 10:05 am
- Line pressure: 350 psi
- Finished grout @ 11:45 am
- Moved to P52 with remainder of truck # 56
- (Total grout quantity for Point P51 = 5.8 cu.yd. COMPLETED).**



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DAILY FIELD REPORT

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Date:	03/13/2013	Page:	
Project No:	13354.8	Client:	HDR Engineering, Inc.
Location:	Hillsborough County Southeast Landfill		
AMEC Staff:	Mark Chomtid, P.E.; Ricardo Kiriakidis, P.E.; Kevin Jobes		

Point "P49"

- Start drilling P49 @ 1:18 pm
- Target drilling depth of Point P49 = 233 feet below grade
- Delay – Weld head joint pin @ 2:47 pm
- Resumed drilling @ 2:50 pm
- Finished drilling point P49 @ 3:22 pm
- Sounded @ 230.5 feet and then 229.5 feet
- Obstruction possible @ end of casing
- Revisit 3/14/13
- **(Final Depth of Point P49 = 230 feet below grade COMPLETED).**

Point "P50"

- Start drilling P50 @ 3:55 pm
- Target drilling depth of Point P50 = 240 feet below grade.
- Finished drilling point P50 @ 5:35 pm
- **(Final Depth of Point P50 = 240 feet below grade COMPLETED).**



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DAILY FIELD REPORT

Route To:	Carl Christmann, P.E.	Copy To:	Richard Siemerling, P.E.
Date:	03/14/2013	Page:	
Project No:	13354.8	Client:	HDR Engineering, Inc.
Location:	Hillsborough County Southeast Landfill		
AMEC Staff:	Mark Chomtid, P.E.; Ricardo Kiriakidis, P.E.; Kevin Jobes		
Inspector	Mark Chomtid, P.E.; Kevin Jobes		
Reviewed by	Carl Christmann, P.E.		

Contractor Earth Tech, Inc.

Contractor Supvr

Hours Worked:

Onsite 7:10 am – 6:30 pm

Lunch

Day: ☐ Monday ☐ Tuesday ☐ Wednesday ☒ Thursday

☐ Friday ☐ Saturday ☐ Sunday

Weather: Wind Dir Wind Speed

☐ Cloudy ☒ Sunny ☐ Overcast ☐ Rainy ☐ Stormy

Work Performed:

P38 – Grout (completed)

P40 – Grout (Incomplete)

P48 – Drill (completed) P48 – Grout (completed)

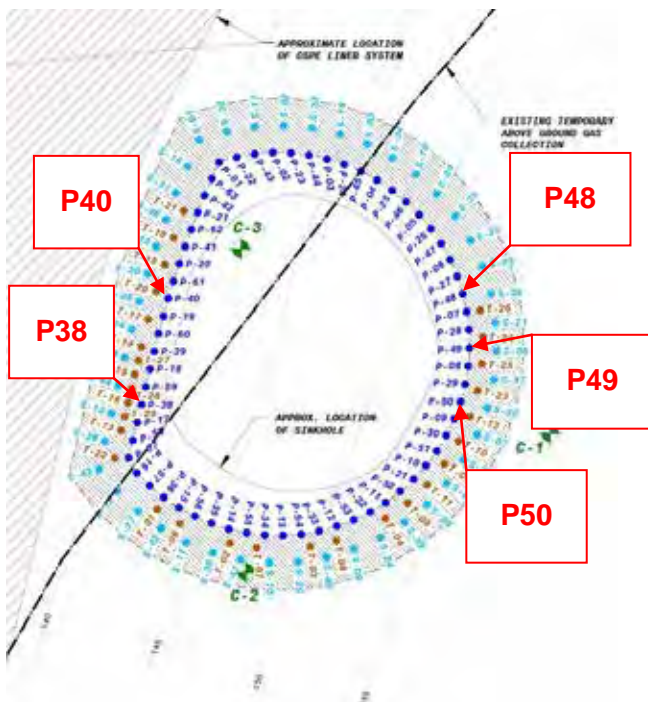
P49 – Grout (completed)

P50 – Grout (completed)

Total Grout Order = 50 cu.yd.; Return = 0 cu.yd.

Qty	Equipment Onsite	Qty	Equipment Onsite
2	SM-20 Drill Rigs	2	Schwing Pumps
1	Skid Steer	1	Dump Trucks
1	Small Excavator	2	Water Trucks
1	Forklift		
	Other: RAM, arc welder, lights, water pumps		
		Implement:	
		Implement	

WORK AREA





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DAILY FIELD REPORT

Route To:	Carl Christmann, P.E.	Copy To:	Richard Siemering, P.E.
Date:	03/14/2013	Page:	
Project No:	13354.8	Client:	HDR Engineering, Inc.
Location:	Hillsborough County Southeast Landfill		
AMEC Staff:	Mark Chomtid, P.E.; Ricardo Kiriakidis, P.E.; Kevin Jobes		

Other Activities / Comments:

WORK ACTIVITIES

- AMEC's staff arrived on site at 7:10 am and performed the daily site inspection prior to starting work activity.

Point "P50"

- Truck # 59 arrived @ 7:25 am
- Started grout @ 7:55 am
- Line pressure: 350 psi
- Finished grout @ 8:52 am
- One carbide tip on starter missing
- Moved to P38 with remainder of truck # 59
- (Total grout quantity for Point P50 = 5.1 cu.yd. COMPLETED).

Point "P38"

- Continued truck # 59 @ 9:50 am
- Line pressure: 380 psi
- Finished truck # 59 @ 10:10 am (4.9 cu.yd).
- Truck # 60 arrived @ 11:13 am
- Finished grout @ 12:07 pm (8.2 cu.yd).
- Moved to P40 with remainder of truck # 60
- (Total grout quantity for Point P38 = 33.1 cu.yd. COMPLETED).

Point "P40"

- Casing drilled to 230 feet to check for clog and deemed clear
- Continued truck # 60 @ 12:25 pm
- Line pressure: 450 psi
- Finished truck # 60 @ 12:45 pm (1.8 cu.yd).
- Truck # 61 arrived @ 1:15 pm
- Finished truck # 61 @ 1:52 pm (10 cu.yd).
- Will continue 3/15/13
- (Total grout quantity for Point P40 = 11.8 cu.yd. INCOMPLETE).

Point "P48"

- Started drilling P48 @ 11:52 am
- Finished drilling @ 1:58 pm
- (Final Depth of Point P48 = 235 feet below grade COMPLETED).
- Truck # 62 arrived @ 2:51 pm
- Started grout @ 2:59 pm
- Line pressure: 500 psi
- Finished truck # 62 @ 3:35 pm (10 cu.yd). @ 210 feet
- Truck # 63 arrived @ 4:31 pm
- Started grout @ 4:35 pm
- Finished grout @ 5:20 pm (5 cu.yd).
- Moved to P49 with remainder of truck # 63
- (Total grout quantity for Point P48 = 15 cu.yd. COMPLETED).



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DAILY FIELD REPORT

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Date:	03/14/2013	Page:	
Project No:	13354.8	Client:	HDR Engineering, Inc.
Location:	Hillsborough County Southeast Landfill		
AMEC Staff:	Mark Chomtid, P.E.; Ricardo Kiriakidis, P.E.; Kevin Jobes		

Point "P49"

- Continued truck # 59 @ 9:05 am
- Casing plugged – started efforts to remove blockage @ 9:15 am
- 9:50 am efforts were unsuccessful
- Started to drill inner rod
- Moved truck # 59 to P38
- Blockage removed @ 10:55 am; inner rod removed; casing reinstalled to 232 feet
- Moved to P48
- Continued truck # 63 @ 5:28 pm
- Finished grout @ 6:05 pm **(5 cu.yd).**
- **(Total grout quantity for Point P49 = 5 cu.yd. COMPLETED).**



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DAILY FIELD REPORT

Route To:	Carl Christmann, P.E.	Copy To:	Richard Siemerling, P.E.
Date:	03/15/2013	Page:	
Project No:	13354.8	Client:	HDR Engineering, Inc.
Location:	Hillsborough County Southeast Landfill		
AMEC Staff:	Mark Chomtid, P.E.; Ricardo Kiriakidis, P.E.; Kevin Jobes		
Inspector	Mark Chomtid, P.E.; Kevin Jobes		
Reviewed by	Carl Christmann, P.E.		

Contractor Earth Tech, Inc.

Contractor Supvr

Hours Worked:

Onsite 7:00 am – 4:30 pm

Lunch

Day: ☐ Monday ☐ Tuesday ☐ Wednesday ☐ Thursday

☒ Friday ☐ Saturday ☐ Sunday

Weather: Wind Dir Wind Speed

☐ Cloudy ☒ Sunny ☐ Overcast ☐ Rainy ☐ Stormy

Work Performed:

P25 – Drill (incomplete)

P40 – Grout (completed)

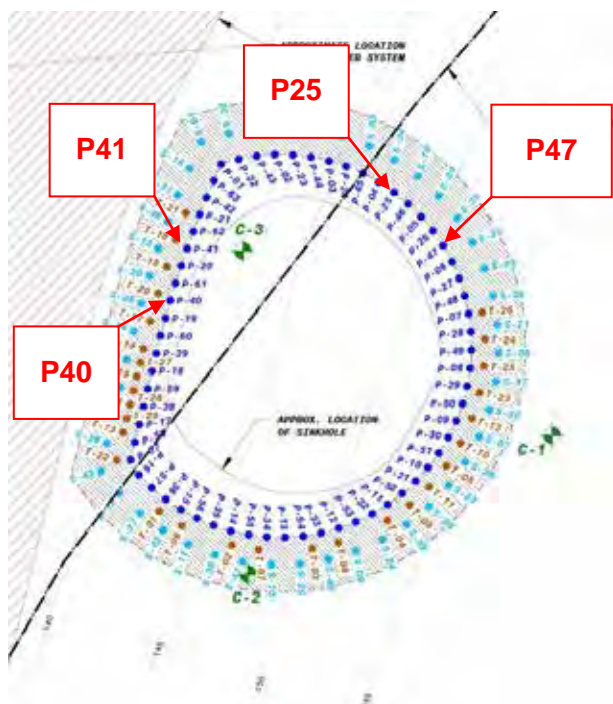
P41 – Drill (Incomplete)

P47 – Drill (completed) P47 – Grout (completed)

Qty	Equipment Onsite	Qty	Equipment Onsite
2	SM-20 Drill Rigs	2	Schwing Pumps
1	Skid Steer	1	Dump Trucks
1	Small Excavator	2	Water Trucks
1	Forklift		
Other: RAM, arc welder, lights, water pumps			

Total Grout Order = 40 cu.yd.; Return = 0 cu.yd.

WORK AREA



Implement:

Implement



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DAILY FIELD REPORT

Route To:	Carl Christmann, P.E.	Copy To:	Richard Siemerling, P.E.
Date:	03/15/2013	Page:	
Project No:	13354.8	Client:	HDR Engineering, Inc.
Location:	Hillsborough County Southeast Landfill		
AMEC Staff:	Mark Chomtid, P.E.; Ricardo Kiriakidis, P.E.; Kevin Jobes		

Other Activities / Comments:

WORK ACTIVITIES

- AMEC's staff arrived on site at 7:00 am and performed the daily site inspection prior to starting work activity.

Point "P40"

- Truck # 64 arrived @ 7:36 am
- Checked Slump = 5"; Line pressure = 480 psi
- Started grout @ 7:50 am @ 200 feet
- Finished truck # 64 @ 8:18 am
- Truck # 65 arrived @ 9:18 am
- Start grout @ 9:52 am
- Checked Slump = 5"; Line pressure = 450 psi
- Finished truck # 65 @ 10:20 am
- Truck # 66 arrived @ 11:30 am
- Checked Slump = 4.25"; Line pressure = 460 psi
- Finished truck # 66 @ 12:05 pm
- Truck # 67 arrived @ 1:15 pm
- Checked Slump = 4.5"; Line pressure = 480 psi
- Finished grout @ 2:00 pm
- Drill bit completely worn out
- Moved to P47 with remainder of truck # 67
- (Total grout quantity for Point P40 = 47.7 cu.yd. COMPLETED).**

Point "P47"

- Drill rig maintenance began @ 7:30 am
- Started drilling P47 @ 8:12 am
- Short delay @ 9:48 am due to water pump plug was loose
- Resumed drilling @ 9:53 am
- Finished drilling @ 10:52 am
- (Final Depth of Point P47 = 237 feet below grade COMPLETED).**
- Continued truck # 67 @ 2:40 pm
- Line pressure: 300 psi
- Finished grout and truck # 67 @ 3:20 pm
- (Total grout quantity for Point P38 = 4 cu.yd. COMPLETED).**

Point "P41"

- New Drill bit installed
- Started drilling P41 @ 2:58 pm
- Finished drilling @ 3:47 pm
- (Depth of Point P41 = 80 feet below grade INCOMPLETE).**



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DAILY FIELD REPORT

Route To:	Carl Christmann, P.E.	Copy To:	Richard Siemering, P.E.
Date:	03/15/2013	Page:	
Project No:	13354.8	Client:	HDR Engineering, Inc.
Location:	Hillsborough County Southeast Landfill		
AMEC Staff:	Mark Chomtid, P.E.; Ricardo Kiriakidis, P.E.; Kevin Jobes		

Point "P25"

- New Drill bit installed
- Started drilling P25 @ 11:18 am
- Waited from 12:30 pm to 1:00 pm on water tank to fill up
- Resumed drilling @ 1:03 pm
- Delay due @ 2:27 pm due to drilling slowing down – starter may not have any teeth left
- Moved to P47 to grout to avoid delay
- Started removing casing @ 1:25 pm
- Finished removing casing and discovered that starter had worn down – no teeth
- To resume 3/18/13
- **(Depth of Point P25 = 200 feet below grade INCOMPLETE).**



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DAILY FIELD REPORT

Route To:	Carl Christmann, P.E.	Copy To:	Richard Siemerling, P.E.
Date:	03/18/2013	Page:	
Project No:	13354.8	Client:	HDR Engineering, Inc.
Location:	Hillsborough County Southeast Landfill		
AMEC Staff:	Mark Chomtid, P.E.; Ricardo Kiriakidis, P.E.; Kevin Jobes		
Inspector	Mark Chomtid, P.E.; Kevin Jobes		
Reviewed by	Carl Christmann, P.E.		

Contractor Earth Tech, Inc.

Contractor Supvr

Hours Worked:

Onsite 7:10 am – 6:00 pm

Lunch

Day: ☒ Monday ☐ Tuesday ☐ Wednesday ☐ Thursday

☐ Friday ☐ Saturday ☐ Sunday

Weather: Wind Dir Wind Speed

☐ Cloudy ☒ Sunny ☒ Overcast ☐ Rainy ☐ Stormy

Work Performed:

P25 – Drill (completed) P25 – Grout (completed);

P39 – Drill (completed);

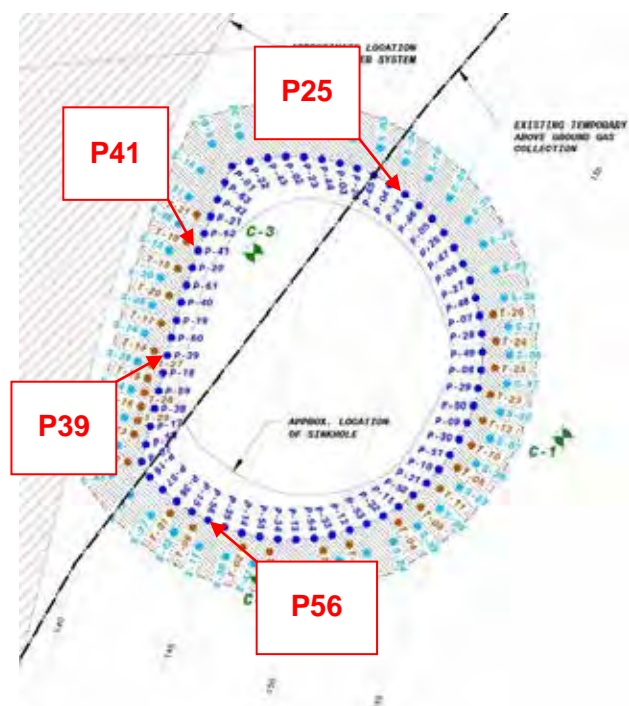
P41 – Drill (completed) P41 – Grout (Incomplete);

P56 – Drill (completed) P56 – Grout (completed)

Qty	Equipment Onsite	Qty	Equipment Onsite
2	SM-20 Drill Rigs	2	Schwing Pumps
1	Skid Steer	1	Dump Trucks
1	Small Excavator	2	Water Trucks
1	Forklift		
Other: RAM, arc welder, lights, water pumps			

Total Grout Order = 20 cu.yd.; Return = 0 cu.yd.

WORK AREA



Implement:

Implement



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DAILY FIELD REPORT

Route To:	Carl Christmann, P.E.	Copy To:	Richard Siemering, P.E.
Date:	03/18/2013	Page:	
Project No:	13354.8	Client:	HDR Engineering, Inc.
Location:	Hillsborough County Southeast Landfill		
AMEC Staff:	Mark Chomtid, P.E.; Ricardo Kiriakidis, P.E.; Kevin Jobes		

Other Activities / Comments:

WORK ACTIVITIES

- AMEC's staff arrived on site at 7:10 am and performed the daily site inspection prior to starting work activity.

Point "P41"

- Continued drilling P41 from 80 feet @ 7:49 am
- At 115 feet casing could not be advanced
- Started inserting inner rod
- Continued drilling using duplex @ 9:14 am
- Finished drilling @ 10:43 am
- (Final Depth of Point P40 = 230 feet below grade COMPLETED).**
- Continued truck # 68 @ 11:45 am
- Line pressure: 440 psi; Slump = 4"
- Finished truck # 68 @ 12:18 pm @ 200 feet **(10 cu.yd.)**
- (Total grout quantity for Point P41 = 10 cu.yd. INCOMPLETE).**

Point "P56"

- New starter installed
- Started drilling P56 @ 9:14 am
- Finished drilling @ 10:40 am
- (Final Depth of Point P56 = 238 feet below grade COMPLETED).**
- Truck # 68 arrived @ 11:14 am
- Start grout @ 11:25 am
- Casing became clogged 17 strokes into truck # 68
- Pressure spiked – casing removed to 190 feet to allow inner rod
- Start inner rod @ 11:45 am; blockage removed @ 12:30 pm
- Start process of removing the inner rod; completed @ 1:00 pm; reinstalled casing
- Truck # 69 arrived @ 1:37 pm
- Start grout @ 1:42 pm
- Line pressure: 360 psi
- Finished grout @ 2:26 pm
- Moved to point P25 with remainder of truck # 69
- (Total grout quantity for Point P56 = 5 cu.yd. COMPLETED).**

Point "P25"

- New starter installed and reinstalled casing depth from 3/15/13
- Started drilling P25 @ 7:33 am
- Finished drilling @ 8:46 am
- (Final Depth of Point P25 = 237 feet below grade COMPLETED).**
- Moved to point P56
- Continued truck # 69 @ 2:44 pm
- Line pressure: 440 psi
- Finished grout @ 3:30 pm
- (Total grout quantity for Point P25 = 5 cu.yd. COMPLETED).**



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DAILY FIELD REPORT

Route To:	Carl Christmann, P.E.	Copy To:	Richard Siemering, P.E.
Date:	03/18/2013	Page:	
Project No:	13354.8	Client:	HDR Engineering, Inc.
Location:	Hillsborough County Southeast Landfill		
AMEC Staff:	Mark Chomtid, P.E.; Ricardo Kiriakidis, P.E.; Kevin Jobes		

Point "P39"

- Started drilling P39 @ 2:25 pm
- Had to duplex after 90 feet drilling @ 3:40 pm
- Finished drilling @ 5:28 pm
- **(Final Depth of Point P39 = 230 feet below grade COMPLETED).**



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DAILY FIELD REPORT

Route To:	Carl Christmann, P.E.	Copy To:	Richard Siemering, P.E.
Date:	03/19/2013	Page:	
Project No:	13354.8	Client:	HDR Engineering, Inc.
Location:	Hillsborough County Southeast Landfill		
AMEC Staff:	Mark Chomtid, P.E.; Ricardo Kiriakidis, P.E.; Kevin Jobes		
Inspector	Mark Chomtid, P.E.; Kevin Jobes		
Reviewed by	Carl Christmann, P.E.		

Contractor Earth Tech, Inc.

Contractor Supvr

Hours Worked:

Onsite 7:20 am – 7:30 pm

Lunch

Day: ☐ Monday ☒ Tuesday ☐ Wednesday ☐ Thursday

☐ Friday ☐ Saturday ☐ Sunday

Weather: Wind Dir Wind Speed

☒ Cloudy ☒ Sunny ☒ Overcast ☒ Rainy ☐ Stormy

Work Performed:

P22 – Drill (completed) P22 – Grout (incomplete)

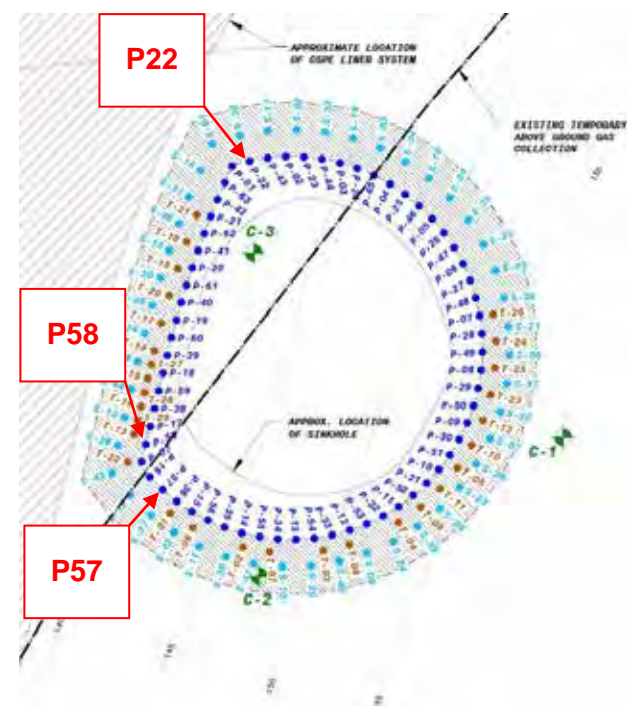
P57 – Drill (completed) P57 – Grout (completed)

P58 – Drill (completed) P58 – Grout (completed)

Qty	Equipment Onsite	Qty	Equipment Onsite
2	SM-20 Drill Rigs	2	Schwing Pumps
1	Skid Steer	1	Dump Trucks
1	Small Excavator	2	Water Trucks
1	Forklift		
Other: RAM, arc welder, lights, water pumps			

Total Grout Order = 20 cu.yd.; Return = 7.0 cu.yd.

WORK AREA



Implement:

Implement



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DAILY FIELD REPORT

Route To:	Carl Christmann, P.E.	Copy To:	Richard Siemering, P.E.
Date:	03/19/2013	Page:	
Project No:	13354.8	Client:	HDR Engineering, Inc.
Location:	Hillsborough County Southeast Landfill		
AMEC Staff:	Mark Chomtid, P.E.; Ricardo Kiriakidis, P.E.; Kevin Jobes		

Other Activities / Comments:

WORK ACTIVITIES

- AMEC's staff arrived on site at 7:20 am and performed the daily site inspection prior to starting work activity.
- Ricardo Kiriakidis contacted Carl Christmann via phone to have meeting to discuss secondary points S-04 through S-11.
- Some delay in the morning due to moving equipment & preparing for the day

Point "P58"

- Rig checked for plumb
- Started drilling @ 8:25 am
- Starter in good condition
- Finished drilling @ 10:10 am
- **(Final Depth of Point P58 = 236 feet below grade COMPLETED).**
- Continued truck # 70 @ 1:48 pm
- Line pressure: 300 psi; Slump = 3.5"
- Finished truck # 70 and point @ 2:30 pm
- **(Total grout quantity for Point P58 = 4 cu.yd. COMPLETED).**

Point "P57"

- Started drilling P57 @ 10:29 am
- Finished drilling @ 11:59 am
- **(Final Depth of Point P57 = 236 feet below grade COMPLETED).**
- Truck # 70 arrived @ 12:34 pm
- Start grout @ 12:40 pm
- Line pressure: 360 psi
- Finished grout @ 1:35 pm
- Moved to point P58 with remainder of truck # 70
- **(Total grout quantity for Point P57 = 6 cu.yd. COMPLETED).**

Point "P22"

- New starter installed
- Started drilling P22 @ 8:41 am
- Finished drilling @ 12:20 pm
- Observed soft drilling from 230 to 245 feet which made it hard to advance to 250 feet
- On several cassions the casing developed very high torque and a few few ares where it was stuck
- **(Final Depth of Point P22 = 250 feet below grade COMPLETED).**
- Truck # 71 was ordered @ 2:30 pm
- Was informed that the truck would be late
- Truck # 71 arrived @ 4:30 pm
- Start grout @ 4:35 pm
- Line pressure: 300 psi
- Developed high torque between 245 and 230 feet below grade
- Observed high pressure between 230 and 220 feet below grade
- Casing became stuck; started to extract with hydraulic ram; casing unstuck but will be removed (John's decision)
- Finished extracting casing @ 7:30 pm
- **(Total grout quantity for Point P22 = 3 cu.yd. INCOMPLETE).**



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DAILY FIELD REPORT

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Date:	03/20/2013	Page:	
Project No:	13354.8	Client:	HDR Engineering, Inc.
Location:	Hillsborough County Southeast Landfill		
AMEC Staff:	Mark Chomtid, P.E.; Ricardo Kiriakidis, P.E.; Kevin Jobes		
Inspector	Mark Chomtid, P.E.; Kevin Jobes		
Reviewed by	Carl Christmann, P.E.		

Contractor Earth Tech, Inc.

Contractor Supvr

Hours Worked:

Onsite 7:15 am – 4:30 pm

Lunch

Day: ☐ Monday ☐ Tuesday ☒ Wednesday ☐ Thursday

☐ Friday ☐ Saturday ☐ Sunday

Weather: Wind Dir Wind Speed

☒ Cloudy ☐ Sunny ☒ Overcast ☐ Rainy ☐ Stormy

Work Performed:

P22 – Grout (incomplete)

P41 – Grout (incomplete)

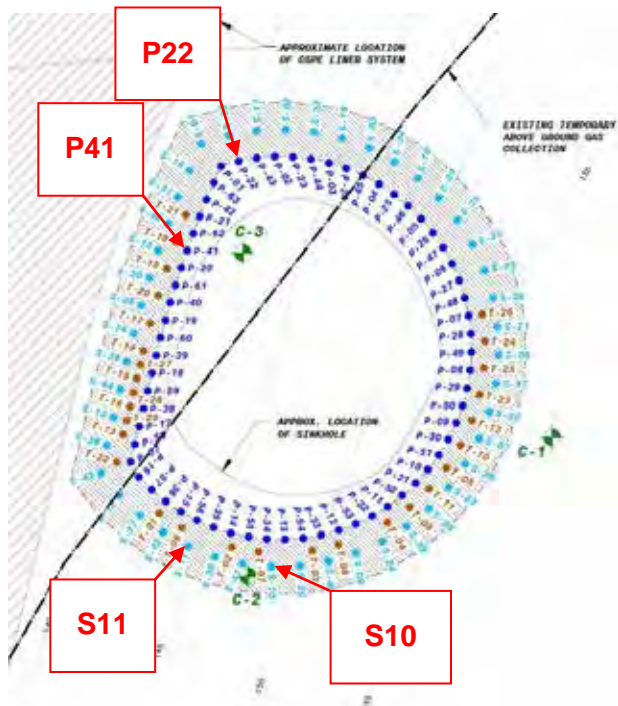
S10 – Drill (completed) S10 – Grout (completed);

S11 – Drill (completed) S11 – Grout (completed)

Qty	Equipment Onsite	Qty	Equipment Onsite
2	SM-20 Drill Rigs	2	Schwing Pumps
1	Skid Steer	1	Dump Trucks
1	Small Excavator	2	Water Trucks
1	Forklift		
Other: RAM, arc welder, lights, water pumps			

Total Grout Order = 30 cu.yd.; Return = 1 cu.yd.

WORK AREA



Implement:

Implement



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DAILY FIELD REPORT

Route To:	Carl Christmann, P.E.	Copy To:	Richard Siemering, P.E.
Date:	03/20/2013	Page:	
Project No:	13354.8	Client:	HDR Engineering, Inc.
Location:	Hillsborough County Southeast Landfill		
AMEC Staff:	Mark Chomtid, P.E.; Ricardo Kiriakidis, P.E.; Kevin Jobes		

Other Activities / Comments:

WORK ACTIVITIES

- AMEC's staff arrived on site at 7:15 am and performed the daily site inspection prior to starting work activity.
- Some delay in the morning due to surveying of points & moving equipment (7:30 am to 9:51 am)

Point "P41"

- Continued grout @ 200 feet below grade
- Truck # 72 arrived @ 8:31 am
- Line pressure: 350 psi; Slump = 3.25"
- Finished truck # 72 @ 9:02 am
- Encountered tight casing @ 190 feet
- Truck # 73 arrived @ 11:24 am; Slump = 4.25"
- Start grout @ 11:30 am
- Finished truck # 73 @ 11:59 am
- Encountered tight casing @ 170 feet
- **(Total grout quantity for Point P41 = 30 cu.yd. INCOMPLETE).**

Point "P22"

- Started fixing the drill rig (changed drill head to 4",etc) @ 12:30 pm
- Finished fixing rig and setting up @ 3:11 pm
- Started pushing 4" casing into boring opening @ 3:20 pm
- Finished pushing to 150 feet below grade @ 4:10 pm
- Foreman afraid the casing will be locked by morning if they continued to push casing any farther
- Will continue to push 3/21/13 to 220 feet or deeper

Point "S11"

- New starter installed
- Started drilling S11 @ 10:13 am
- Finished drilling @ 11:55 am
- **(Final Depth of Point S11 = 240 feet below grade COMPLETED).**
- Moved to S10
- Continued truck # 74 @ 2:55 pm
- Line pressure: 340 psi; Slump = 4.75"
- Finished grout @ 3:40 pm; 1 cu.yd. returned
- **(Total grout quantity for Point S11 = 4.7 cu.yd. COMPLETED).**

Point "S10"

- New starter installed
- Started drilling S10 @ 12:10 pm
- Finished drilling @ 1:32 pm
- **(Final Depth of Point S10 = 241 feet below grade COMPLETED).**
- Truck # 74 arrived @ 1:54 pm
- Start grout @ 2:01 pm; Line pressure: 340 psi; Slump = 4.75"
- Finished grout # 74 @ 2:45 pm; moved remainder of truck # 74 to S11
- **(Total grout quantity for Point S10 = 4.3 cu.yd. COMPLETED).**



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DAILY FIELD REPORT

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Date:	03/21/2013	Page:	
Project No:	13354.8	Client:	HDR Engineering, Inc.
Location:	Hillsborough County Southeast Landfill		
AMEC Staff:	Mark Chomtid, P.E.; Ricardo Kiriakidis, P.E.; Kevin Jobes		
Inspector	Mark Chomtid, P.E.; Kevin Jobes		
Reviewed by	Carl Christmann, P.E.		

Contractor Earth Tech, Inc.

Contractor Supvr

Hours Worked:

Onsite 7:15 am – 5:15 pm

Lunch

Day: ☐ Monday ☐ Tuesday ☐ Wednesday ☒ Thursday

☐ Friday ☐ Saturday ☐ Sunday

Weather: Wind Dir Wind Speed

☐ Cloudy ☒ Sunny ☐ Overcast ☐ Rainy ☐ Stormy

Work Performed:

P22 – Drill (completed) P22 – Grout (completed);

P39 – Grout (complete)

P41 – Grout (completed)

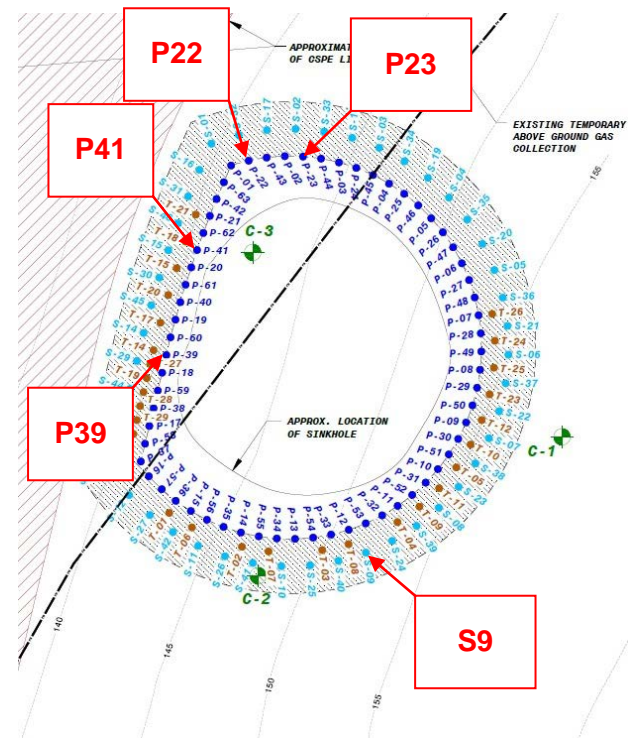
P23 – Drill (completed) P23 – Grout (completed)

S9 – Drill (completed)

Total Grout Order = 40 cu.yd.; Return = 5.2 cu.yd.

Qty	Equipment Onsite	Qty	Equipment Onsite
2	SM-20 Drill Rigs	2	Schwing Pumps
1	Skid Steer	1	Dump Trucks
1	Small Excavator	2	Water Trucks
1	Forklift		
Other: RAM, arc welder, lights, water pumps			
		Implement:	
		Implement	

WORK AREA





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DAILY FIELD REPORT

Route To:	Carl Christmann, P.E.	Copy To:	Richard Siemering, P.E.
Date:	03/21/2013	Page:	
Project No:	13354.8	Client:	HDR Engineering, Inc.
Location:	Hillsborough County Southeast Landfill		
AMEC Staff:	Mark Chomtid, P.E.; Ricardo Kiriakidis, P.E.; Kevin Jobes		

Other Activities / Comments:

WORK ACTIVITIES

- AMEC's staff arrived on site at 7:15 am and performed the daily site inspection prior to starting work activity.

Point "P22"

- Drilling started to reinstall casing to 200 feet below grade
- Extremely hard material encountered @ 200 feet; believed to be grout
- Truck # 75 arrived @ 8:32 am
- Line pressure: 250 psi; Slump = 5"
- Finished grout @ 9:10 am (3 cu.yd.)
- Remainder of truck # 75 sent to P39
- (Total grout quantity for Point P22 = 6 cu.yd. INCOMPLETE).

Point "P39"

- Continued truck # 75 @ 9:20 am
- Line pressure: 350 psi; Slump = 5"
- Finished truck # 75 @ 9:35 am @ 220 feet (7 cu.yd.)
- Truck # 76 arrived @ 10:52 am
- Start grout @ 11:00 am
- Finished truck # 76 @ 11:16 am (10 cu.yd.)
- Moved to point P41
- Continued truck # 77 @ 1:15 pm
- Finished truck # 77 @ 1:58 pm (7.1 cu.yd.)
- Truck # 78 arrived @ 2:00 pm
- Start grout @ 2:00 pm
- Finished grout @ 2:20 pm (1.4 cu.yd.)
- (Total grout quantity for Point P39 = 25.5 cu.yd. COMPLETED).

Point "P41"

- Truck # 77 arrived @ 12:00 pm
- Start grout @ 12:06 pm
- Line pressure: 300 psi; Slump = 5"
- Finished grout @ 12:54 pm (2.9 cu.yd.); moved remainder of truck # 77 to point P39
- (Total grout quantity for Point P41 = 32.9 cu.yd. COMPLETED).

Point "P23"

- New tri-cone bit installed
- Started drilling P23 @ 10:25 am; minor delay for repairs
- Finished tri-cone @ 2:35 pm; removed and reinstalled open end casing @ 3:05 pm
- Reinstalled casing @ 3:15 pm with open starter
- Finished drilling @ 3:46 pm
- (Final Depth of Point P23 = 230 feet below grade COMPLETED).
- Continued truck # 78 @ 3:55 pm
- Line pressure: 300 psi; Slump = 4"
- Finished grout @ 4:30 pm; returned 5.2 cu.yd @ 5:00 pm; no point ready for grout
- (Total grout quantity for Point P23 = 3.4 cu.yd. COMPLETED).



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Date:	03/21/2013	Page:	
Project No:	13354.8	Client:	HDR Engineering, Inc.
Location:	Hillsborough County Southeast Landfill		
AMEC Staff:	Mark Chomtid, P.E.; Ricardo Kiriakidis, P.E.; Kevin Jobes		

Point "S9"

- Started drilling S9 @ 3:22 pm
- Target drilling depth = 242 feet
- Finished drilling @ 5:04 pm
- **(Final Depth of Point S9 = 245 feet below grade COMPLETED).**



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DAILY FIELD REPORT

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Date:	03/22/2013	Page:	
Project No:	13354.8	Client:	HDR Engineering, Inc.
Location:	Hillsborough County Southeast Landfill		
AMEC Staff:	Mark Chomtid, P.E.; Ricardo Kiriakidis, P.E.; Kevin Jobes		
Inspector	Mark Chomtid, P.E.; Kevin Jobes		
Reviewed by	Carl Christmann, P.E.		

Contractor Earth Tech, Inc.

Contractor Supvr

Hours Worked:

Onsite 7:10 am – 5:00 pm

Lunch

Day: ☐ Monday ☐ Tuesday ☐ Wednesday ☐ Thursday

☒ Friday ☐ Saturday ☐ Sunday

Weather: Wind Dir Wind Speed

☐ Cloudy ☒ Sunny ☐ Overcast ☐ Rainy ☐ Stormy

Work Performed:

P24 – Drill (completed) P24 – Grout (completed)

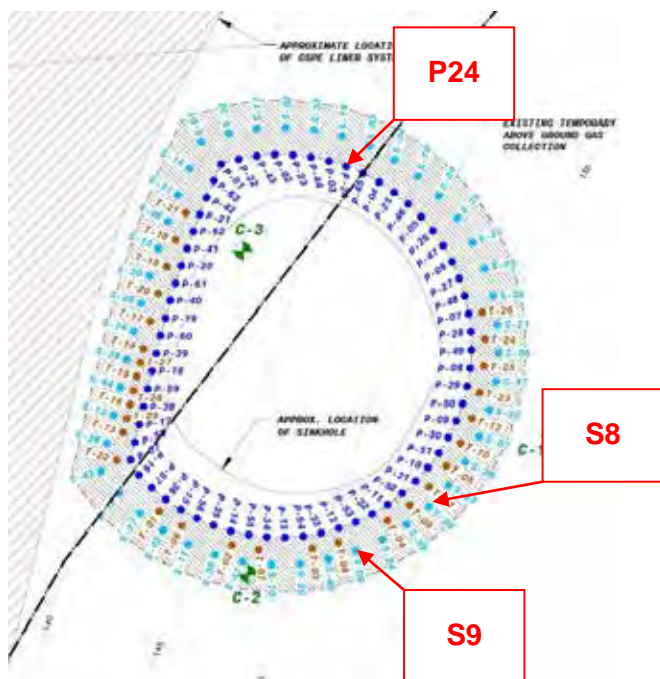
S8 – Drill (completed) S8– Grout (completed)

S9 – Drill (completed) S9– Grout (completed)

Qty	Equipment Onsite	Qty	Equipment Onsite
2	SM-20 Drill Rigs	2	Schwing Pumps
1	Skid Steer	1	Dump Trucks
1	Small Excavator	2	Water Trucks
1	Forklift		
Other: RAM, arc welder, lights, water pumps			
Implement:		Implement	

Total Grout Order = 15 cu.yd.; Return = 1.4 cu.yd.

WORK AREA





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DAILY FIELD REPORT

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Date:	03/22/2013	Page:	
Project No:	13354.8	Client:	HDR Engineering, Inc.
Location:	Hillsborough County Southeast Landfill		
AMEC Staff:	Mark Chomtid, P.E.; Ricardo Kiriakidis, P.E.; Kevin Jobes		

Other Activities / Comments:

WORK ACTIVITIES

- AMEC's staff arrived on site at 7:10 am and performed the daily site inspection prior to starting work activity.

Point "S9"

- Truck # 79 arrived @ 8:06 am
- Line pressure: 500 psi; Slump = 5"
- Start grout @ 8:15 am
- Finished grout @ 8:55 am; returned 1 cu.yd.
- (Total grout quantity for Point S9 = 4 cu.yd. COMPLETED).**

Point "S8"

- New starter installed
- Started drilling S8 @ 9:42 am
- @ 11:36 am unable to advance 200 foot due to firm material; possibly no teeth on starter
- Decision was made to extract casing and change starter bit, then reinstall casing and continue with 200 feet to end of boring
- @ 12:15 pm all casing removed – starter head pin was broken off and at the bottom of the hole
- Location of boring moved over 1 to 1.5 feet to South and redrilled.
- Earth Tech informed the original hole must be grouted
- Redrill started @ 12:31 pm; with new starter installed
- Finished drilling @ 2:45 pm
- (Final Depth of Point S8 = 245 feet below grade COMPLETED).**
- Truck # 81 arrived @ 3:22 pm
- Start grout @ 3:30 pm
- Line pressure: 420 psi; Slump = 4.5"
- Finished truck # 81 @ 4:18 pm
- (Total grout quantity for Point S8 = 5 cu.yd. COMPLETED).**

Point "P24"

- 4" casing with roller bit
- Started drilling P24 @ 8:25 am
- Finished drilling @ 12:08 pm
- (Final Depth of Point P24 = 235 feet below grade COMPLETED).**
- Truck # 80 arrived @ 11:30 am
- Start grout @ 1:20 pm
- Line pressure: 300 psi; Slump = 4"
- Finished grout @ 1:55 pm; returned 0.4 cu.yd.
- (Total grout quantity for Point P24 = 4.6 cu.yd. COMPLETED).**



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DAILY FIELD REPORT

Route To:	Carl Christmann, P.E.	Copy To:	Richard Siemerling, P.E.
Date:	03/25/2013	Page:	
Project No:	13354.8	Client:	HDR Engineering, Inc.
Location:	Hillsborough County Southeast Landfill		
AMEC Staff:	Mark Chomtid, P.E.; Ricardo Kiriakidis, P.E.; Kevin Jobes		
Inspector	Mark Chomtid, P.E.; Kevin Jobes		
Reviewed by	Carl Christmann, P.E.		

Contractor Earth Tech, Inc.

Contractor Supvr

Hours Worked:

Onsite 7:10 am – 5:30 pm

Lunch

Day: ☒ Monday ☐ Tuesday ☐ Wednesday ☐ Thursday

☐ Friday ☐ Saturday ☐ Sunday

Weather: Wind Dir Wind Speed

☐ Cloudy ☒ Sunny ☐ Overcast ☐ Rainy ☐ Stormy

Work Performed:

P43 – Drill (completed) P43 – Grout (completed);

P44 – Drill (incomplete)

P59 – Drill (completed) P59– Grout (completed);

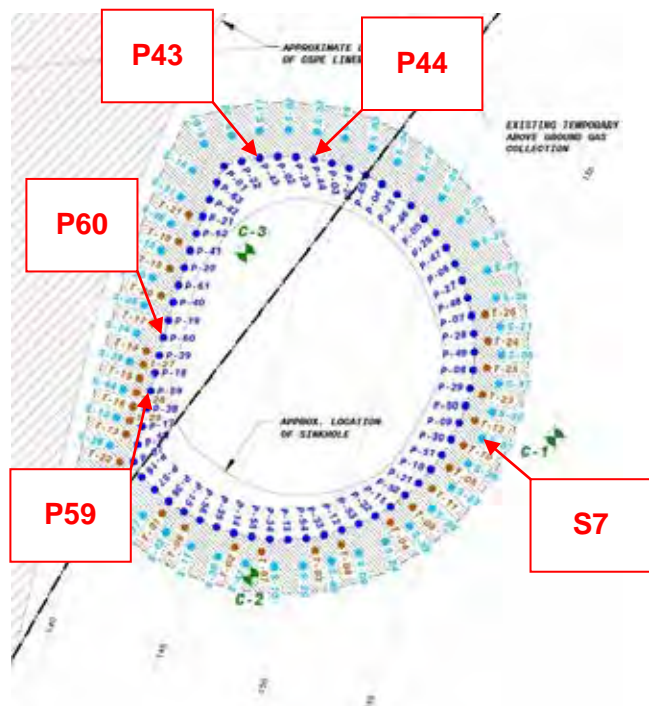
P60 – Drill (completed)

S7 – Drill (completed) S7– Grout (completed)

Total Grout Order = 16 cu.yd.; Return = 2.4 cu.yd.

Qty	Equipment Onsite	Qty	Equipment Onsite
2	SM-20 Drill Rigs	2	Schwing Pumps
1	Skid Steer	1	Dump Trucks
1	Small Excavator	2	Water Trucks
1	Forklift		
	Other: RAM, arc welder, lights, water pumps		
		Implement:	
		Implement	

WORK AREA





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DAILY FIELD REPORT

Route To:	Carl Christmann, P.E.	Copy To:	Richard Siemerling, P.E.
Date:	03/25/2013	Page:	
Project No:	13354.8	Client:	HDR Engineering, Inc.
Location:	Hillsborough County Southeast Landfill		
AMEC Staff:	Mark Chomtid, P.E.; Ricardo Kiriakidis, P.E.; Kevin Jobes		

Other Activities / Comments:

WORK ACTIVITIES

- AMEC's staff arrived on site at 7:10 am and performed the daily site inspection prior to starting work activity.

Point "S7"

- New starter installed
- Started drilling S8 @ 7:46 am
- Last 10 foot section of casing became plugged ; waterfed line was kinked restricting flow (10 minute delay: obstruction removed)
- Decision was made to extract casing and change starter bit, then reinstall casing and continue with 200 feet to end of boring
- @ 12:15 pm all casing removed – starter head pin was broken off and at the bottom of the hole
- Location of boring moved over 1 to 1.5 feet to South and redrilled.
- Earth Tech informed the original hole must be grouted
- Redrill started @ 12:31 pm; with new starter installed
- Finished drilling @ 9:52 am
- (Final Depth of Point S7 = 248 feet below grade COMPLETED).**
- Truck # 82 arrived @ 9:36 am
- Start grout @ 9:56 pm
- Line pressure: 375 psi; Slump = 4.75"
- Finished point and truck # 82 @ 10:40 am
- (Total grout quantity for Point S7 = 5 cu.yd. COMPLETED).**

Point "P59"

- New starter installed
- Started drilling P59 @ 10:56 am
- Finished drilling @ 12:45 pm
- (Final Depth of Point P59 = 231 feet below grade COMPLETED).**
- Truck # 83 arrived @ 1:00 pm
- Start grout @ 1:05 pm
- Line pressure: 340 psi; Slump = 4.75"
- Finished grout @ 1:50 pm; returned 0.3 cu.yd.
- (Total grout quantity for Point P59 = 4.7 cu.yd. COMPLETED).**

Point "P60"

- Started drilling P60 @ 2:30 pm; using same bit from P59 (some wear)
- Finished drilling @ 4:35 pm
- (Final Depth of Point P60 = 230 feet below grade COMPLETED).**



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DAILY FIELD REPORT

Route To:	Carl Christmann, P.E.	Copy To:	Richard Siemering, P.E.
Date:	03/25/2013	Page:	
Project No:	13354.8	Client:	HDR Engineering, Inc.
Location:	Hillsborough County Southeast Landfill		
AMEC Staff:	Mark Chomtid, P.E.; Ricardo Kiriakidis, P.E.; Kevin Jobes		

Point "P43"

- Started drilling P43 @ 8:49 am
- Finished drilling @ 12:17 pm; will start to extract casing in order to change bit
- **(Final Depth of Point P43 = 233 feet below grade COMPLETED).**
- Truck # 84 arrived @ 2:57 pm
- Start grout @ 3:02 pm
- Line pressure: 360 psi; Slump = 3"
- Could not pump between 230 to 220 feet because of high torque: casing getting stuck
- Finished grout @ 3:40 pm; returned 2.1 cu.yd.
- **(Total grout quantity for Point P43 = 3.9 cu.yd. COMPLETED).**

Point "P44"

- Started drilling P44 @ 4:20 pm
- Stopped drilling for the day @ 4:56 pm
- **(Depth of Point P44 = 40 feet below grade INCOMPLETE).**



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DAILY FIELD REPORT

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Date:	03/26/2013	Page:	
Project No:	13354.8	Client:	HDR Engineering, Inc.
Location:	Hillsborough County Southeast Landfill		
AMEC Staff:	Mark Chomtid, P.E.; Ricardo Kiriakidis, P.E.; Kevin Jobes		
Inspector	Mark Chomtid, P.E.; Kevin Jobes		
Reviewed by	Carl Christmann, P.E.		

Contractor Earth Tech, Inc.

Contractor Supvr

Hours Worked:

Onsite 7:15 am – 6:10 pm

Lunch

Day: ☐ Monday ☒ Tuesday ☐ Wednesday ☐ Thursday

☐ Friday ☐ Saturday ☐ Sunday

Weather: Wind Dir Wind Speed

☐ Cloudy ☒ Sunny ☒ Overcast ☐ Rainy ☐ Stormy

Work Performed:

P44 – Drill (completed) P44 – Grout (completed);

P63 – Drill (completed)

P60 – Grout (completed)

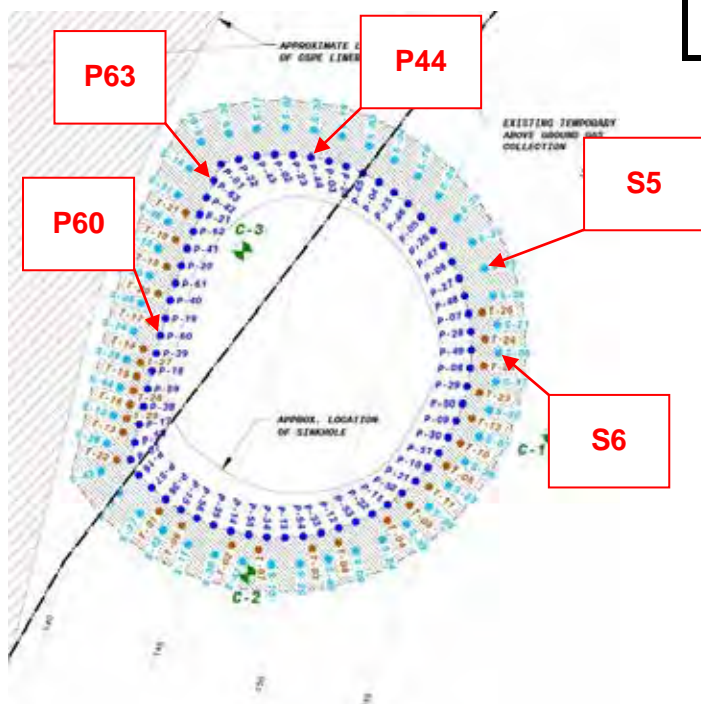
S5 – Drill (completed)

S6 – Drill (completed) S6– Grout (completed)

Total Grout Order = 15 cu.yd.; Return = 2 cu.yd.

Qty	Equipment Onsite	Qty	Equipment Onsite
2	SM-20 Drill Rigs	2	Schwing Pumps
1	Skid Steer	1	Dump Trucks
1	Small Excavator	2	Water Trucks
1	Forklift		
	Other: RAM, arc welder, lights, water pumps		
		Implement:	
		Implement	

WORK AREA





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DAILY FIELD REPORT

Route To:	Carl Christmann, P.E.	Copy To:	Richard Siemering, P.E.
Date:	03/26/2013	Page:	
Project No:	13354.8	Client:	HDR Engineering, Inc.
Location:	Hillsborough County Southeast Landfill		
AMEC Staff:	Mark Chomtid, P.E.; Ricardo Kiriakidis, P.E.; Kevin Jobes		

Other Activities / Comments:

WORK ACTIVITIES

- AMEC's staff arrived on site at 7:10 am and performed the daily site inspection prior to starting work activity.

Point "P44"

- Continued drilling P44 @ 7:28 am from 40 feet
- Possible soft zone found between 200 to 225 feet
- Finished drilling @ 10:22 am
- (Final Depth of Point P44 = 232 feet below grade COMPLETED).
- Will extract casing in order to install the grouting head
- Truck # 87 arrived @ 12:50 pm
- Start grout @ 12:59 pm
- Line pressure: 500 psi; Slump = 4"
- Finished grout @ 1:45 pm; returned 1 cu.yd.
- (Total grout quantity for Point P44 = 4 cu.yd. COMPLETED).

Point "P63"

- Started drilling P63 @ 2:38 pm
- Possible soft zone between 200 to 220 feet
- Finished drilling @ 5:55 pm
- (Final Depth of Point P63 = 232 feet below grade COMPLETED).

Point "P60"

- Truck # 85 arrived @ 7:28 am
- Start grout @ 7:47 am; Line pressure: 390 psi; Slump = 4.25"
- Finished grout @ 8:45 am; returned 1 cu.yd.
- (Total grout quantity for Point P60 = 4 cu.yd. COMPLETED).

Point "S6"

- Started drilling S6 @ 9:05 am
- Finished drilling @ 11:20 am
- (Final Depth of Point S6 = 233 feet below grade COMPLETED).
- Truck # 86 arrived @ 11:12 am
- Start grout @ 11:26 am; Line pressure: 360 psi; Slump = 5"
- Finished grout @ 12:02 pm
- (Total grout quantity for Point S6 = 5 cu.yd. COMPLETED).

Point "S5"

- Performed maintenance from 12:15 pm to 2:00 pm;
- New starter installed
- Started drilling S5 @ 2:01 pm
- Finished drilling @ 4:45 pm
- (Final Depth of Point S5 = 233 feet below grade COMPLETED).



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Date:	03/27/2013	Page:	
Project No:	13354.8	Client:	HDR Engineering, Inc.
Location:	Hillsborough County Southeast Landfill		
AMEC Staff:	Mark Chomtid, P.E.; Ricardo Kiriakidis, P.E.; Kevin Jobes		
Inspector	Mark Chomtid, P.E.; Kevin Jobes		
Reviewed by	Carl Christmann, P.E.		

Contractor Earth Tech, Inc.

Contractor Supvr

Hours Worked:

Onsite 7:20 am – 6:00 pm

Lunch

Day: ☐ Monday ☐ Tuesday ☒ Wednesday ☐ Thursday

☐ Friday ☐ Saturday ☐ Sunday

Weather: Wind Dir Wind Speed

☐ Cloudy ☒ Sunny ☐ Overcast ☐ Rainy ☐ Stormy

Work Performed:

Qty	Equipment Onsite	Qty	Equipment Onsite
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P45 – Drill (incomplete)

2	SM-20 Drill Rigs	2	Schwing Pumps
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P62 – Drill (completed) P62 – Grout (completed)

1	Skid Steer	1	Dump Trucks
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P63 – Grout (completed)

1	Small Excavator	2	Water Trucks
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S4 – Drill (completed) S4 – Grout (completed)

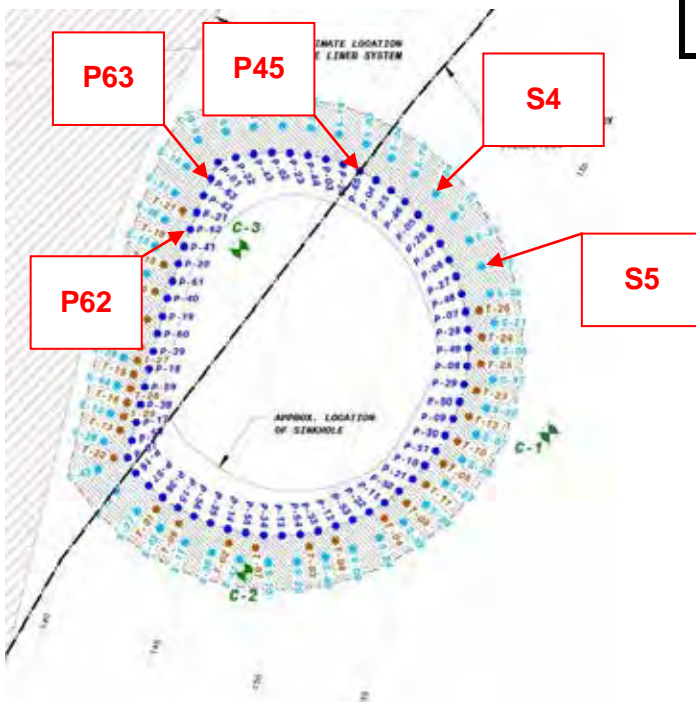
1	Forklift		
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S5 – Grout (completed)

Other: RAM, arc welder, lights, water pumps

Total Grout Order = 25 cu.yd.; Return = 7.9 cu.yd.

WORK AREA



Implement:

Implement



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DAILY FIELD REPORT

Route To:	Carl Christmann, P.E.	Copy To:	Richard Siemerling, P.E.
Date:	03/27/2013	Page:	
Project No:	13354.8	Client:	HDR Engineering, Inc.
Location:	Hillsborough County Southeast Landfill		
AMEC Staff:	Mark Chomtid, P.E.; Ricardo Kiriakidis, P.E.; Kevin Jobes		

Other Activities / Comments:

WORK ACTIVITIES

- AMEC's staff arrived on site at 7:20 am and performed the daily site inspection prior to starting work activity.

Point "S5"

- Truck # 88 arrived @ 7:20 am
- Start grout @ 7:40 am
- Line pressure: 375 psi; Slump = 5"
- Finished grout @ 8:27 am
- Sent remainder of truck # 88 to P63
- (Total grout quantity for Point S5 = 3.9 cu.yd. COMPLETED).

Point "P63"

- Continued truck # 88 @ 8:40 am
- Line pressure: 380 psi; Slump = 5"
- Finished grout @ 9:30 am; returned 1.5 cu.yd.
- (Total grout quantity for Point P63 = 3.4 cu.yd. COMPLETED).

Point "P62"

- Needed to change 4" head to a Duplex 5.5" head @ 10:00 am
- Finished changing @ 10:45am
- Started drilling P62 @ 11:05 am
- Observed very hard drilling @ 115 feet - will need to duplex – started @ (12:18 pm)
- Finished drilling @ 2:36 pm
- (Final Depth of Point P62 = 231 feet below grade COMPLETED).
- Truck # 90 arrived @ 4:02 pm
- Start grout @ 4:10 pm
- Line pressure: 300 psi; Slump = 5"
- Had to lift without grouting between 195 and 190 feet & 175 to 170 feet due to high torque
- Finished grout @ 4:50 pm
- (Total grout quantity for Point P62 = 6.3 cu.yd. COMPLETED).

Point "S4"

- Started drilling S4 @ 8:56 am; with same starter from S5
- Finished drilling @ 12:05 pm
- (Final Depth of Point S4 = 230 feet below grade COMPLETED).
- Truck # 89 arrived @ 11:37 am
- Start grout @ 12:10 pm; Line pressure: 380 psi; Slump = 3.75"
- Finished grout @ 1:04 pm; returned 1.5 cu.yd.
- (Total grout quantity for Point S4= 3.5cu.yd. COMPLETED).



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DAILY FIELD REPORT

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Date:	03/27/2013	Page:	
Project No:	13354.8	Client:	HDR Engineering, Inc.
Location:	Hillsborough County Southeast Landfill		
AMEC Staff:	Mark Chomtid, P.E.; Ricardo Kiriakidis, P.E.; Kevin Jobes		

Point "P45"

- New starter installed
- Started drilling P45 @ 1:35 pm
- Ran out of fuel @4:34 pm
- Resumed drilling @ 5:00 pm
- Drilling ceased @ 5:30 pm after no progress
- Drilling to begin again on 3/28/13 – Decision made @ 5:40 pm
- **(Depth of Point P45 = 233 feet below grade INCOMPLETE).**



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Date:	03/28/2013	Page:	
Project No:	13354.8	Client:	HDR Engineering, Inc.
Location:	Hillsborough County Southeast Landfill		
AMEC Staff:	Mark Chomtid, P.E.; Ricardo Kiriakidis, P.E.; Kevin Jobes		
Inspector	Mark Chomtid, P.E.; Kevin Jobes		
Reviewed by	Carl Christmann, P.E.		

Contractor Earth Tech, Inc.

Contractor Supvr

Hours Worked:

Onsite 7:30 am – 7:00 pm

Lunch

Day: ☐ Monday ☐ Tuesday ☐ Wednesday ☒ Thursday

☐ Friday ☐ Saturday ☐ Sunday

Weather: Wind Dir Wind Speed

☐ Cloudy ☒ Sunny ☐ Overcast ☐ Rainy ☐ Stormy

Work Performed:

P45 – Drill (completed) P45 – Grout (completed)

P61 – Drill (completed) P61 – Grout (completed)

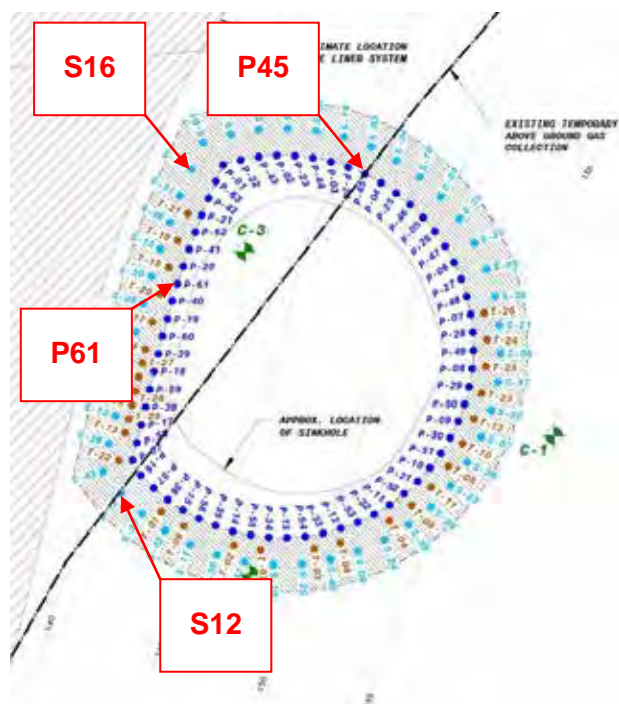
S12 – Drill (completed) S12 – Grout (completed)

S16– Drill (incomplete)

Qty	Equipment Onsite	Qty	Equipment Onsite
2	SM-20 Drill Rigs	2	Schwing Pumps
1	Skid Steer	2	Frack Tanks
1	Small Excavator	2	Water Tanks
1	Forklift		
Other: RAM, arc welder, lights, water pumps			
Farm Tractors -		Implement:	
		Implement	

Total Grout Order = 30 cu.yd.; Return = 0.8 cu.yd.

WORK AREA





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DAILY FIELD REPORT

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Date:	03/28/2013	Page:	
Project No:	13354.8	Client:	HDR Engineering, Inc.
Location:	Hillsborough County Southeast Landfill		
AMEC Staff:	Mark Chomtid, P.E.; Ricardo Kiriakidis, P.E.; Kevin Jobes		

Other Activities / Comments:

WORK ACTIVITIES

- AMEC's staff arrived on site at 7:30 am and performed the daily site inspection prior to starting work activity.

Point "P45"

- Started to advance casing @ 7:30 am; no progress was made
- @ 7:40 am began process of removing casing
- @ 8:20 am casing all out – starter worn smooth – no teeth
- New starter installed / reinstalled casing
- Start drilling @ 8:35 am
- @ 9:21 am casing clogged – working to get it open (210 feet)
- Resumed drilling @ 10:55 am
- Finished drilling @ 11:35 am
- (Final Depth of Point P45 = 230 feet below grade COMPLETED).**
- Truck # 91 arrived @ 10:03 am
- Start grout @ 11:36 am; Line pressure: 500 psi; Slump = 3.5"
- Finished grout @ 12:19 pm; returned 0.8 cu.yd.
- (Total grout quantity for Point P45= 4.2 cu.yd. COMPLETED).**

Point "P61"

- Started drilling P61 @ 7:48 am
- Could not advance past 43 feet – will check bit or start duplex
- @ 8:20 am discovered the bit was missing one tooth – will replace bit
- Resumed drilling @ 9:02 am with no advancement
- Duplex began @ 9:29 am
- Encountered a very soft zone from 220 to 245 feet
- Finished drilling @ 12:30 pm
- (Final Depth of Point P61 = 260 feet below grade COMPLETED).**
- Rig needed maintenance @ 12:30 pm
- Started to remove inner rod @ 12:50 pm
- Finished removing inner rod @ 1:20 pm
- Truck # 92 arrived @ 1:10 pm
- Start grout @ 1:35 pm; Line pressure: 365 psi; Slump = 3.5"
- Finished truck # 92 @ 1:50 pm **(5 cu.yd.)**
- Truck # 93 arrived @ 3:20 pm; Line pressure: 365 psi; Slump = 3.5"
- Finished truck # 93 @ 3:55 pm **(10 cu.yd.)**
- Continued truck # 94 @ 6:15 pm;
- Line pressure: 420 psi; Slump = 4"
- Finished grout @ 6:50 pm **(5.3 cu.yd.)**
- (Total grout quantity for Point P61 = 20.3 cu.yd. COMPLETED).**



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Location:	Hillsborough County Southeast Landfill		
AMEC Staff:	Mark Chomtid, P.E.; Ricardo Kiriakidis, P.E.; Kevin Jobes		

Point "S12"

- Started drilling S12 @ 1:02 pm with same starter as P45
- Finished drilling @ 4:20 pm
- **(Final Depth of Point S12 = 240 feet below grade COMPLETED).**
- Truck # 94 arrived @ 5:18 pm
- Start grout @ 5:28 pm
- Line pressure: 380 psi; Slump = 5"
- Finished grout @ 6:10 pm; sent remainder of grout to P61
- **(Total grout quantity for Point S12 = 4.7 cu.yd. COMPLETED).**

Point "S16"

- Started drilling S16 @ 4:28 pm; with new 5" bit
- Drilled to 140 feet and stopped to move drill rig to P61 to pump further
- Will finish drilling 3/29/13
- **(Depth of Point S16 = 140 feet below grade INCOMPLETE).**



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Date:	03/29/2013	Page:	
Project No:	13354.8	Client:	HDR Engineering, Inc.
Location:	Hillsborough County Southeast Landfill		
AMEC Staff:	Mark Chomtid, P.E.; Ricardo Kiriakidis, P.E.; Kevin Jobes		
Inspector	Mark Chomtid, P.E.; Kevin Jobes		
Reviewed by	Carl Christmann, P.E.		

Contractor Earth Tech, Inc.

Contractor Supvr

Hours Worked:

Onsite 7:10 am – 3:30 pm

Lunch

Day: ☐ Monday ☐ Tuesday ☐ Wednesday ☐ Thursday

☒ Friday ☐ Saturday ☐ Sunday

Weather: Wind Dir Wind Speed

☐ Cloudy ☒ Sunny ☐ Overcast ☐ Rainy ☐ Stormy

Work Performed:

S16– Drill (completed)

S25 – Drill (completed)

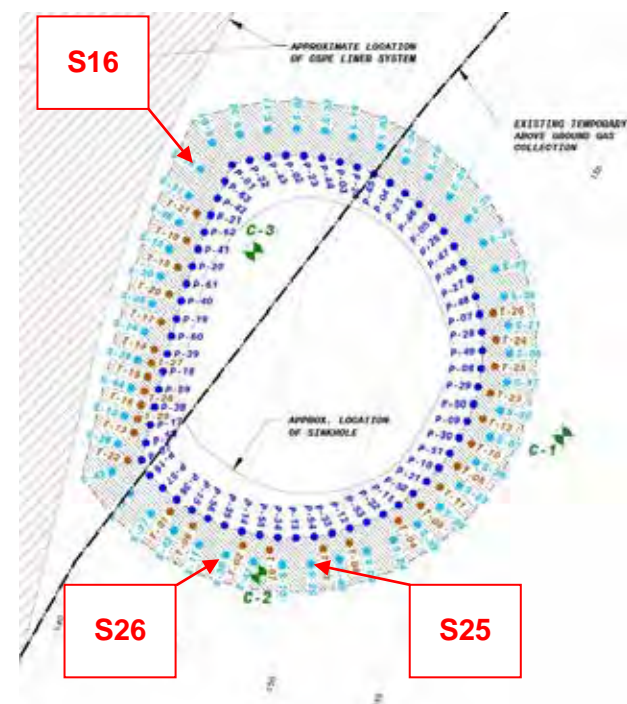
S26 – Drill (completed)

S26 – Grout (completed)

Qty	Equipment Onsite	Qty	Equipment Onsite
2	SM-20 Drill Rigs	2	Schwing Pumps
1	Skid Steer	2	Frack Tanks
1	Small Excavator	2	Water Tanks
1	Forklift		
Other: RAM, arc welder, lights, water pumps			
Farm Tractors -		Implement:	
		Implement	

Total Grout Order = 5 cu.yd.; Return = 0.8 cu.yd.

WORK AREA





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DAILY FIELD REPORT

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Date:	03/29/2013	Page:	
Project No:	13354.8	Client:	HDR Engineering, Inc.
Location:	Hillsborough County Southeast Landfill		
AMEC Staff:	Mark Chomtid, P.E.; Ricardo Kiriakidis, P.E.; Kevin Jobes		

Other Activities / Comments:

WORK ACTIVITIES

- AMEC's staff arrived on site at 7:10 am and performed the daily site inspection prior to starting work activity.
- AMEC representative traveled to Hicks Industries to obtain a fine aggregate sample for QA testing.
- Arrived at 7:00 am and found stockpile and obtained sample – left for site job site.
- Also on 3/28/13 an additional (7) cylinders were molded along side of Tierra for comparison testing. Both samples transported to AMEC-Tampa for testing.

Point "S26"

- Start drilling @ 7:37 am
- Finished drilling @ 10:14 am
- **(Final Depth of Point S26 = 240 feet below grade COMPLETED).**
- Truck # 95 arrived @ 11:20 am
- Start grout @ 11:25 am; Line pressure: 400 psi; Slump = 4"
- Finished grout @ 12:05 pm; returned 0.8 cu.yd.
- **(Total grout quantity for Point S26 = 4.2 cu.yd. COMPLETED).**

Point "S25"

- New starter installed
- Started drilling S25 @ 12:55 pm
- Finished drilling @ 3:00 pm
- **(Final Depth of Point S25 = 240 feet below grade COMPLETED).**

Point "S16"

- Continued drilling S16 @ 8:04 @ 140 feet below grade
- Encountered very hard material @ 155 feet
- Tried to advance for almost 1 hour with duplex and no progress
- Will use 4" roller bit
- Started pushing 4" casing @ 1:15 pm
- Finished drilling @ 2:37 pm
- Will grout on 4/1/13
- **(Final Depth of Point S16 = 231 feet below grade COMPLETED).**



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Date:	4/01/2013	Page:	
Project No:	13354.8	Client:	HDR Engineering, Inc.
Location:	Hillsborough County Southeast Landfill		
AMEC Staff:	Mark Chomtid, P.E.; Ricardo Kiriakidis, P.E.; Kevin Jobes		
Inspector	Mark Chomtid, P.E.; Kevin Jobes		
Reviewed by	Carl Christmann, P.E.		

Contractor Earth Tech, Inc.

Contractor Supvr

Hours Worked:

Onsite 7:10am – 6:00 pm

Lunch

Day: ☒ Monday ☐ Tuesday ☐ Wednesday ☐ Thursday

☐ Friday ☐ Saturday ☐ Sunday

Weather: Wind Dir Wind Speed

☐ Cloudy ☐ Sunny ☒ Overcast ☐ Rainy ☐ Stormy

Work Performed:

S15 – Drill (completed) S15 – Grout (incompleted)

S16 – Grout (completed) S22 – Drill (incomplete)

S23 – Drill (completed) S23 – Grout (completed)

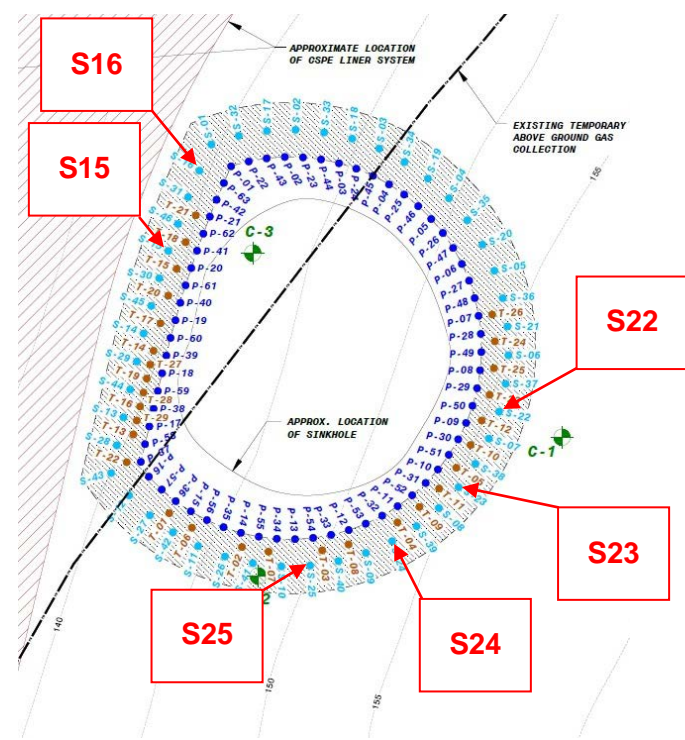
S24 – Drill (completed) S24 – Grout (completed)

S25 – Grout (completed)

Total Grout Order = 25 cu.yd.; Return = 2.5 cu.yd.

Qty	Equipment Onsite	Qty	Equipment Onsite
2	SM-20 Drill Rigs	2	Schwing Pumps
1	Skid Steer	2	Frack Tanks
1	Small Excavator	2	Water Tanks
1	Forklift		
	Other: RAM, arc welder, lights, water pumps		
	Farm Tractors -	Implement:	
		Implement	

WORK AREA





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DAILY FIELD REPORT

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Date:	4/01/2013	Page:	
Project No:	13354.8	Client:	HDR Engineering, Inc.
Location:	Hillsborough County Southeast Landfill		
AMEC Staff:	Mark Chomtid, P.E.; Ricardo Kiriakidis, P.E.; Kevin Jobes		

Other Activities / Comments:

WORK ACTIVITIES

- AMEC's staff arrived on site at 7:10 am and performed the daily site inspection prior to starting work activity.

Point "S16"

- Started advancing 4" casing (Previously with 5" casing) @ 7:25 am
- Finished drilling @ 8:28 am
- **(Final Depth of Point S16 = 231 feet below grade COMPLETED).**
- Continued truck # 96 @ 8:29 am
- Line pressure: 360 psi; Slump = 4.25"
- Finished grout @ 9:25 am; returned 1.3 cu.yd.
- **(Total grout quantity for Point S16 = 4.0 cu.yd. COMPLETED).**

Point "S15"

- Started drilling S15 @ 10:27 am
- Loss of Circulation @ 20 to 25 feet
- 1 hour of drilling and no advancement @ 165 feet with duplex
- Started duplex @ 2:26 pm
- Finished drilling @ 3:20 pm
- Will remove inner rod prior to grouting
- **(Final Depth of Point S15 = 230 feet below grade COMPLETED).**
- Truck # 99 arrived @ 4:15 pm
- Start grout @ 4:40 pm
- Line pressure: 320 psi; Slump = 3"
- Finished grout @ 5:00 pm
- **(Total grout quantity for Point S15 = 5.0 cu.yd. INCOMPLETE).**

Point "S25"

- Truck # 96 arrived @ 7:30 am
- Start grout @ 7:35 am
- Line pressure: 300 psi; Slump = 4.25"
- Finished grout @ 8:22 am
- Sent remainder of truck # 96 to point S16
- **(Total grout quantity for Point S25 = 4.7 cu.yd. COMPLETED).**

Point "S24"

- Started drilling @ 8:49 am
- Finished drilling @ 11:18 am
- **(Final Depth of Point S24 = 247 feet below grade COMPLETED).**
- Truck # 97 arrived @ 12:02 pm
- Start grout @ 12:10 pm
- Line pressure: 300 psi; Slump = 4.5"
- Finished grout @ 12:56 pm; returned 0.5 cu.yd.
- **(Total grout quantity for Point S24 = 4.5 cu.yd. COMPLETED).**



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DAILY FIELD REPORT

Route To:	Carl Christmann, P.E.	Copy To:	Richard Siemering, P.E.
Date:	4/01/2013	Page:	
Project No:	13354.8	Client:	HDR Engineering, Inc.
Location:	Hillsborough County Southeast Landfill		
AMEC Staff:	Mark Chomtid, P.E.; Ricardo Kiriakidis, P.E.; Kevin Jobes		

Point "S23"

- Started drilling @ 1:05 pm
- Finished drilling @ 2:50 pm
- **(Final Depth of Point S23 = 248 feet below grade COMPLETED).**
- Delay: waited for truck from 2:50 pm to 3:27 pm
- Truck # 98 arrived @ 3:27 pm
- Start grout @ 3:32 pm
- Line pressure: 400 psi; Slump = 3"
- Finished grout @ 4:15 pm; returned 0.7 cu.yd.
- **(Total grout quantity for Point S23 = 4.3 cu.yd. COMPLETED).**

Point "S22"

- New starter installed
- Started drilling @ 4:39 pm
- Stopped drilling @ 5:30 pm
- **(Depth of Point S22 = 120 feet below grade INCOMPLETE).**



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DAILY FIELD REPORT

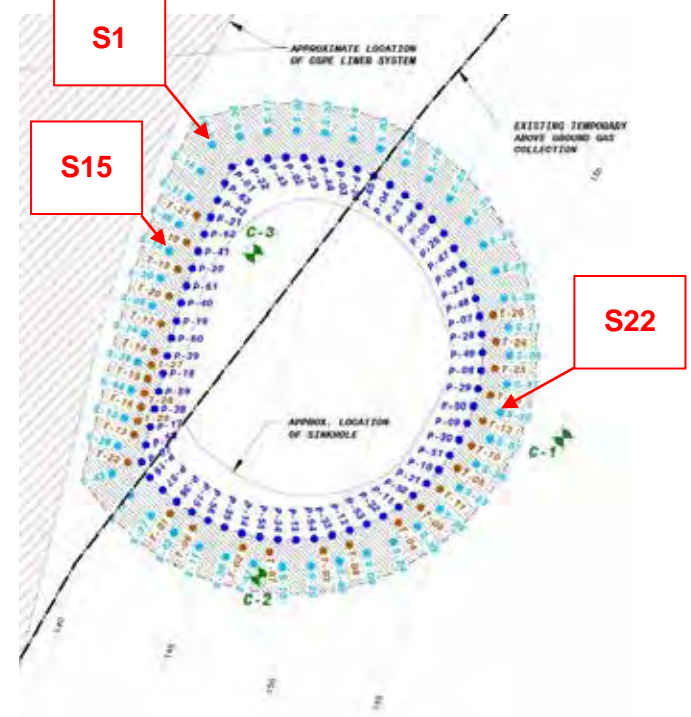
Route To:	Carl Christmann, P.E.	Copy To:	Richard Siemerling, P.E.
Date:	4/02/2013	Page:	
Project No:	13354.8	Client:	HDR Engineering, Inc.
Location:	Hillsborough County Southeast Landfill		
AMEC Staff:	Mark Chomtid, P.E.; Ricardo Kiriakidis, P.E.; Kevin Jobes		
Inspector	Mark Chomtid, P.E.; Kevin Jobes		
Reviewed by	Carl Christmann, P.E.		

Contractor	Earth Tech, Inc.
Contractor Supvr	

Day:	<input type="checkbox"/> Monday	<input checked="" type="checkbox"/> Tuesday	<input type="checkbox"/> Wednesday	<input type="checkbox"/> Thursday
	<input type="checkbox"/> Friday	<input type="checkbox"/> Saturday	<input type="checkbox"/> Sunday	
Weather:	Wind Dir		Wind Speed	
	<input type="checkbox"/> Cloudy	<input checked="" type="checkbox"/> Sunny	<input type="checkbox"/> Overcast	<input type="checkbox"/> Rainy <input type="checkbox"/> Stormy

Hours Worked:	
Onsite	7:10 am – 4:55 pm
Lunch	

Work Performed:	Qty	Equipment Onsite	Qty	Equipment Onsite
S1– Drill (incomplete)	2	SM-20 Drill Rigs	2	Schwing Pumps
S15 – Grout (completed)	1	Skid Steer	2	Frack Tanks
S22 – Drill (completed)	1	Small Excavator	2	Water Tanks
	1	Forklift		
		Other: RAM, arc welder, lights, water pumps		
Total Grout Order = 20 cu.yd.; Return = 11.6 cu.yd.				
WORK AREA 		Farm Tractors -	Implement:	
			Implement	





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DAILY FIELD REPORT

Route To:	Carl Christmann, P.E.	Copy To:	Richard Siemering, P.E.
Date:	4/02/2013	Page:	
Project No:	13354.8	Client:	HDR Engineering, Inc.
Location:	Hillsborough County Southeast Landfill		
AMEC Staff:	Mark Chomtid, P.E.; Ricardo Kiriakidis, P.E.; Kevin Jobes		

Other Activities / Comments:

WORK ACTIVITIES

- AMEC's staff arrived on site at 7:10 am and performed the daily site inspection prior to starting work activity.
- Truck # 100 was sent back due to mechanical problems. Grout discharged from truck. Crews assisted in roadway cleanup for CR39 & CR672.
- Delayed work from 8:15 am to 10:40 am.

Point "S22"

- Resumed drilling @ 10:45 am
- Finished drilling @ 10:55 am
- **(Final Depth of Point S22 = 240 feet below grade COMPLETED).**
- Delay from 10:55 am to 1:00 pm waiting for truck.
- Truck # 101 arrived @ 12:55 pm
- Start grout @ 2:15 pm (pumped S15 first)
- Line pressure: 300 psi; Slump = 4.5"
- Finished grout @ 2:55 pm; returned 1.6 cu.yd.
- **(Total grout quantity for Point S22 = 5.2 cu.yd. COMPLETED).**

Point "S15"

- Truck # 101 arrived @ 12:55 pm
- Start grout @ 1:25 pm
- Line pressure: 300 psi; Slump = 4.5"
- Finished grout @ 2:10 pm; sent remainder of truck # 101 to point S22
- **(Total grout quantity for Point S15 = 3.2 cu.yd. COMPLETED).**

Point "S1"

- Started drilling @ 3:15 pm
- Stopped drilling @ 4:13 pm
- Will resume 4/3/13
- **(Depth of Point S1 = 80 feet below grade INCOMPLETE).**



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DAILY FIELD REPORT

Route To:	Carl Christmann, P.E.	Copy To:	Richard Siemerling, P.E.
Date:	4/04/2013	Page:	
Project No:	13354.8	Client:	HDR Engineering, Inc.
Location:	Hillsborough County Southeast Landfill		
AMEC Staff:	Mark Chomtid, P.E.; Ricardo Kiriakidis, P.E.; Kevin Jobes		
Inspector	Mark Chomtid, P.E.; Kevin Jobes		
Reviewed by	Carl Christmann, P.E.		

Contractor Earth Tech, Inc.

Contractor Supvr

Hours Worked:

Onsite 7:10 am – 1:00 pm

Lunch

Day: ☐ Monday ☐ Tuesday ☐ Wednesday ☒ Thursday

☐ Friday ☐ Saturday ☐ Sunday

Weather: Wind Dir Wind Speed

☒ Cloudy ☐ Sunny ☒ Overcast ☒ Rainy ☒ Stormy

Work Performed:

S2 – Grout (completed)

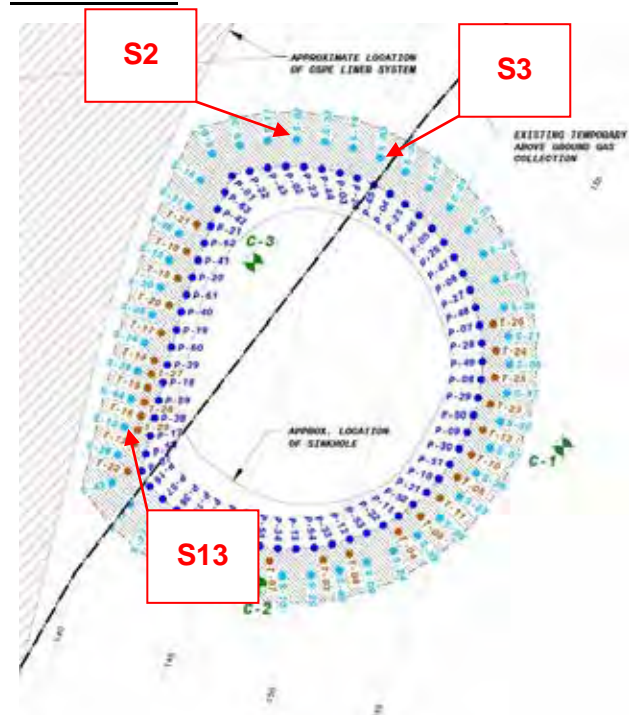
S3– Drill (incomplete)

S13 – Drill (completed) S13 – Grout (incomplete)

Qty	Equipment Onsite	Qty	Equipment Onsite
2	SM-20 Drill Rigs	2	Schwing Pumps
1	Skid Steer	2	Frack Tanks
1	Small Excavator	2	Water Tanks
1	Forklift		
Other: RAM, arc welder, lights, water pumps			
Farm Tractors -		Implement:	
		Implement	

Total Grout Order = 15 cu.yd.; Return = 5 cu.yd.

WORK AREA





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DAILY FIELD REPORT

Route To:	Carl Christmann, P.E.	Copy To:	Richard Siemering, P.E.
Date:	4/04/2013	Page:	
Project No:	13354.8	Client:	HDR Engineering, Inc.
Location:	Hillsborough County Southeast Landfill		
AMEC Staff:	Mark Chomtid, P.E.; Ricardo Kiriakidis, P.E.; Kevin Jobes		

Other Activities / Comments:

WORK ACTIVITIES

- AMEC's staff arrived on site at 7:10 am and performed the daily site inspection prior to starting work activity.
- Truck # 107 was sent back due to weather **(5 cu.yd.)**

Point "S13"

- Resumed drilling @ 7:47 am
- Finished drilling @ 10:15 am
- **(Final Depth of Point S13 = 235 feet below grade COMPLETED).**
- Continued truck # 106 @ 10:50 am
- Line pressure: 500 psi; Slump = 4"
- Finished truck # 106 @ 11:10 am
- Delay – waited for next truck ,but during this time bad weather moved in
- Heavy rain, winds, and lightning stikes
- Barnes called off remaing work due to weather & site conditions @ 12:40 pm
- **(Total grout quantity for Point S13 = 5.8 cu.yd. INCOMPLETE).**

Point "S2"

- Truck # 106 arrived @ 9:44 am
- Start grout @ 9:50 am
- Line pressure:360 psi; Slump = 4"
- Finished grout @ 10:30 am
- Remainder of truck # 106 was sent to point S2
- **(Total grout quantity for Point S2 = 4.2 cu.yd. COMPLETED).**

Point "S3"

- Started mobilizing the drill rig
- Did not begin drilling due to weather worsening
- **(Depth of Point S3 = 0 feet below grade INCOMPLETE).**



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DAILY FIELD REPORT

Route To:	Carl Christmann, P.E.	Copy To:	Richard Siemerling, P.E.
Date:	4/05/2013	Page:	
Project No:	13354.8	Client:	HDR Engineering, Inc.
Location:	Hillsborough County Southeast Landfill		
AMEC Staff:	Mark Chomtid, P.E.; Ricardo Kiriakidis, P.E.; Kevin Jobes		
Inspector	Mark Chomtid, P.E.; Kevin Jobes		
Reviewed by	Carl Christmann, P.E.		

Contractor Earth Tech, Inc.

Contractor Supvr

Hours Worked:

Onsite 7:10 am – 1:30 pm

Lunch

Day: ☐ Monday ☐ Tuesday ☐ Wednesday ☐ Thursday

☒ Friday ☐ Saturday ☐ Sunday

Weather: Wind Dir Wind Speed

☒ Cloudy ☐ Sunny ☒ Overcast ☒ Rainy ☒ Stormy

Work Performed:

S13 – Drill (completed)

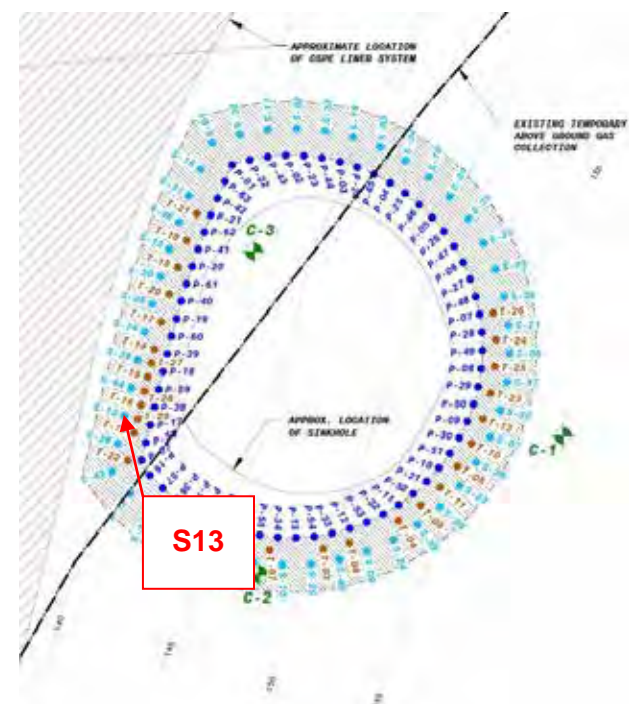
S13 – Grout (completed)

Qty	Equipment Onsite	Qty	Equipment Onsite
2	SM-20 Drill Rigs	2	Schwing Pumps
1	Skid Steer	2	Frack Tanks
1	Small Excavator	2	Water Tanks
1	Forklift		

Other: RAM, arc welder, lights, water pumps

Total Grout Order = 12 cu.yd.; Return = 0 cu.yd.

WORK AREA



Farm Tractors -

Implement:

Implement



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DAILY FIELD REPORT

Route To:	Carl Christmann, P.E.	Copy To:	Richard Siemering, P.E.
Date:	4/05/2013	Page:	
Project No:	13354.8	Client:	HDR Engineering, Inc.
Location:	Hillsborough County Southeast Landfill		
AMEC Staff:	Mark Chomtid, P.E.; Ricardo Kiriakidis, P.E.; Kevin Jobes		

Other Activities / Comments:

WORK ACTIVITIES

- AMEC's staff arrived on site at 7:10 am and performed the daily site inspection prior to starting work activity.
- Upon arrival burm had been breached due to excessive run-off from rainfall on 4/4/13 and 4/5/13.
- Workers repairing breach and cleaning up the displaced soil.

Point "S13"

- Casing stuck
- Removed 10 foot section to 220 feet below grade
- Attached hydraulic ram @ 7:50 am to free up casing
- Casing free @ 8:15 am
- Truck # 108 arrived @ 9:34 am
- Line pressure: 300 psi; Slump = 5"
- Finished truck # 108 @ 10:35 am
- Delay – waited for next truck to arrive
- Truck # 109 arrived @ 11:30 am
- Finished grout and truck # 109 @ 12:30 pm
- **(Total grout quantity for Point S13 = 17.8 cu.yd. COMPLETED).**



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DAILY FIELD REPORT

Route To:	Carl Christmann, P.E.	Copy To:	Richard Siemerling, P.E.
Date:	4/08/2013	Page:	
Project No:	13354.8	Client:	HDR Engineering, Inc.
Location:	Hillsborough County Southeast Landfill		
AMEC Staff:	Mark Chomtid, P.E.; Ricardo Kiriakidis, P.E.; Kevin Jobes		
Inspector	Mark Chomtid, P.E.; Kevin Jobes		
Reviewed by	Carl Christmann, P.E.		

Contractor Earth Tech, Inc.

Contractor Supvr

Hours Worked:

Onsite 7:10 am – 7:00 pm

Lunch

Day: ☒ Monday ☐ Tuesday ☐ Wednesday ☐ Thursday

☐ Friday ☐ Saturday ☐ Sunday

Weather: Wind Dir Wind Speed

☐ Cloudy ☒ Sunny ☐ Overcast ☐ Rainy ☐ Stormy

Work Performed:

S3 – Drill (completed) S3 – Grout (completed)

S14 – Drill (completed) S14 – Grout (completed)

S28 – Drill (completed) S28 – Grout (incomplete)

Qty	Equipment Onsite	Qty	Equipment Onsite
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2	SM-20 Drill Rigs	2	Schwing Pumps
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1	Skid Steer	2	Frack Tanks
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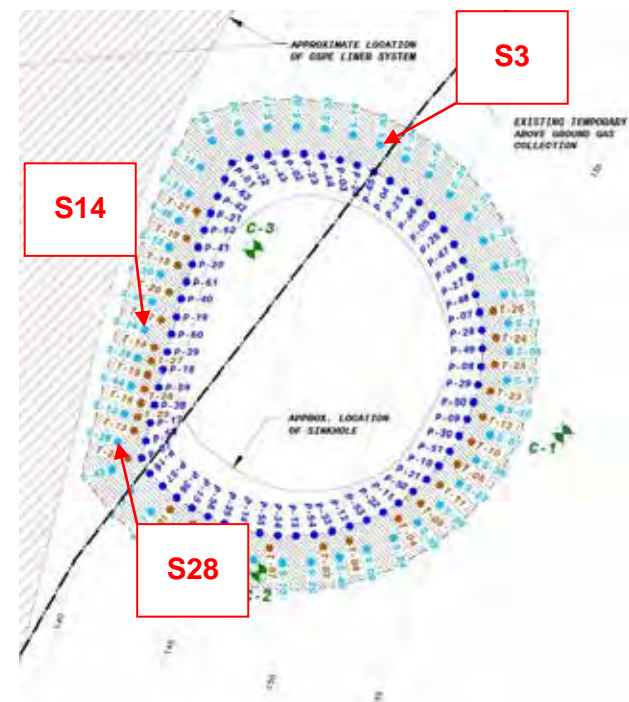
1	Small Excavator	2	Water Tanks
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1	Forklift		
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Other: RAM, arc welder, lights, water pumps

Total Grout Order = 20 cu.yd.; Return = 3.9 cu.yd.

WORK AREA



Farm Tractors -

Implement:

Implement



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DAILY FIELD REPORT

Route To:	Carl Christmann, P.E.	Copy To:	Richard Siemering, P.E.
Date:	4/08/2013	Page:	
Project No:	13354.8	Client:	HDR Engineering, Inc.
Location:	Hillsborough County Southeast Landfill		
AMEC Staff:	Mark Chomtid, P.E.; Ricardo Kiriakidis, P.E.; Kevin Jobes		

Other Activities / Comments:

WORK ACTIVITIES

- AMEC's staff arrived on site at 7:10 am and performed the daily site inspection prior to starting work activity.

Point "S14"

- Started drilling @ 8:10 am
- Finished drilling @ 11:00 am – Additional 10 feet of casing added
- (Final Depth of Point S14 = 235 feet below grade COMPLETED).**
- Truck # 110 arrived @ 11:46 am
- Line pressure: 250 psi; Slump = 4.5"
- Finished grout @ 12:58 pm; returned 3.9 cu.yd.
- 20 feet removed due to tight casing
- (4.0 cu.yd. comp / 2.1 cu.yd. trash)
- (Total grout quantity for Point S14 = 6.1 cu.yd. COMPLETED).**

Point "S28"

- Same starter as S14; some wear but OK
- Started drilling @ 1:03 pm
- Drilling delayed @ 4:00 pm; No teeth on starter
- Removed and replaced starter & casing
- All out @ 4:38 pm; starter worn smooth
- Replaced starter @ 4:45 pm
- Resumed drilling @ 210 feet
- Finished drilling @ 5:40 pm
- (Final Depth of Point S28 = 240 feet below grade COMPLETED).**
- Continued truck # 111 @ 5:50 pm
- Line pressure: 320 psi; Slump = 3"
- Finished truck @ 6:20 pm @ 200 feet below grade
- (Total grout quantity for Point S28 = 4.5 cu.yd. INCOMPLETE).**

Point "S3"

- Started drilling @ 8:03 am using 5" casing
- Could not penetrate any further than 165 feet; will have to duplex
- Started duplex @ 11:08 am
- Can't continue; could not penetrate (1 hour drilling) Bit appears to have worn out
- Pulled out inner rod and casing – both bits are worn out; changed bit and advanced only outer casing
- @ 1:50 pm back to 200 feet; will continue drilling
- Finished drilling @ 3:40 pm
- (Final Depth of Point S3 = 225 feet below grade COMPLETED).**
- Truck # 111 arrived @ 4:31 pm
- Line pressure: 320 psi; Slump = 4.5"
- Start grout @ 4:33 pm
- Sections removed due to tight casing; after 100 feet of casing, had to be filled several times
- Finished grout @ 5:25 pm
- (Total grout quantity for Point S3 = 5.5 cu.yd. COMPLETED).**



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DAILY FIELD REPORT

Route To:	Carl Christmann, P.E.	Copy To:	Richard Siemering, P.E.
Date:	4/09/2013	Page:	
Project No:	13354.8	Client:	HDR Engineering, Inc.
Location:	Hillsborough County Southeast Landfill		
AMEC Staff:	Mark Chomtid, P.E.; Ricardo Kiriakidis, P.E.; Kevin Jobes		
Inspector	Mark Chomtid, P.E.; Kevin Jobes		
Reviewed by	Carl Christmann, P.E.		

Contractor Earth Tech, Inc.

Contractor Supvr

Hours Worked:

Onsite 7:05 am – 5:30 pm

Lunch

Day: ☐ Monday ☒ Tuesday ☐ Wednesday ☐ Thursday

☐ Friday ☐ Saturday ☐ Sunday

Weather: Wind Dir Wind Speed

☐ Cloudy ☒ Sunny ☐ Overcast ☐ Rainy ☐ Stormy

Work Performed:

S17– Drill (incomplete)

S27 – Drill (incomplete)

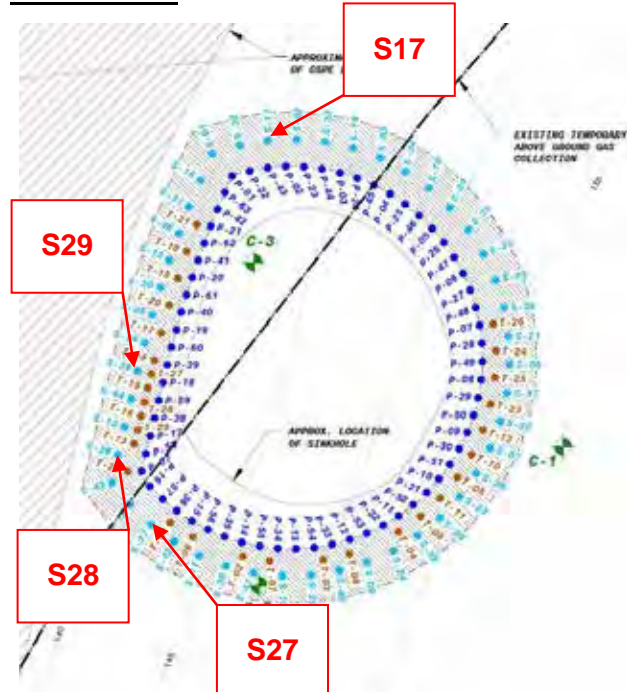
S28 – Grout (completed)

S29 – Drill (completed) S29 – Grout (completed)

Qty	Equipment Onsite	Qty	Equipment Onsite
2	SM-20 Drill Rigs	2	Schwing Pumps
1	Skid Steer	2	Frack Tanks
1	Small Excavator	2	Water Tanks
1	Forklift		
Other: RAM, arc welder, lights, water pumps			
Farm Tractors -		Implement:	
		Implement	

Total Grout Order = 27 cu.yd.; Return = 5.2 cu.yd.

WORK AREA





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DAILY FIELD REPORT

Route To:	Carl Christmann, P.E.	Copy To:	Richard Siemering, P.E.
Date:	4/09/2013	Page:	
Project No:	13354.8	Client:	HDR Engineering, Inc.
Location:	Hillsborough County Southeast Landfill		
AMEC Staff:	Mark Chomtid, P.E.; Ricardo Kiriakidis, P.E.; Kevin Jobes		

Other Activities / Comments:

WORK ACTIVITIES

- AMEC's staff arrived on site at 7:05 am and performed the daily site inspection prior to starting work activity.

Point "S17"

- Installed new roller bit
- Started drilling @ 8:00 am
- Stopped drilling @ 9:52 am – Due to oil build up in the rig
- Resumed drilling @ 10:19 am
- Casing plugged & got stuck @ 12:15 pm – 200 feet; need hydraulic ram
- Started extracting @ 1:30 pm
- Casing broke @ 2:00 pm
- Removed 30 feet and left the rest in the ground
- (Depth of Point S17 = INCOMPLETE - WILL BE REDRILLED).**

Point "S27"

- Started drilling @ 2:53 pm
- Stopped drilling @ 5:15 pm due to end of work day
- (Depth of Point S27 = 180 feet below grade INCOMPLETE).**

Point "S28"

- Resumed grouting @ 200 feet below grade
- Truck # 1123 arrived @ 7:25 am
- Line pressure: 320 psi; Slump = 3.5"
- Start grout @ 7:35 am
- Finished grout @ 8:15 am; returned 0.7 cu.yd.
- (Total grout quantity for Point S28 = 6.3 cu.yd. COMPLETED).**

Point "S29"

- Started drilling @ 8:43 am
- Finished drilling @ 11:50 am
- (Final Depth of Point S29 = 235 feet below grade COMPLETED).**
- Truck # 113 arrived @ 12:07 pm
- Start grout @ 12:20 pm
- Line pressure: 360 psi
- Finished truck @ 12:40 pm
- Truck # 114 arrived @ 1:43 pm
- Start grout @ 1:50 pm
- Finished grout @ 2:35 pm; returned 4.5 cu.yd.
- (Total grout quantity for Point S29 = 15.5 cu.yd. COMPLETED).**



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DAILY FIELD REPORT

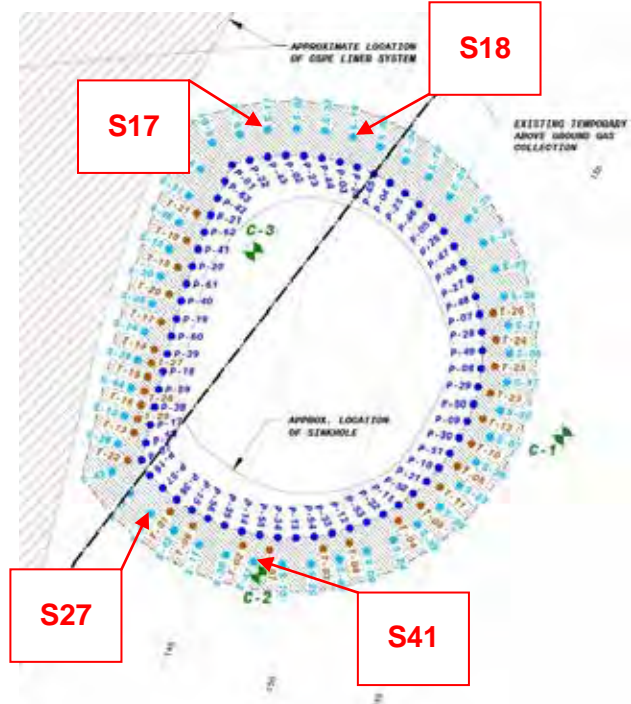
Route To:	Carl Christmann, P.E.	Copy To:	Richard Siemering, P.E.
Date:	4/10/2013	Page:	
Project No:	13354.8	Client:	HDR Engineering, Inc.
Location:	Hillsborough County Southeast Landfill		
AMEC Staff:	Mark Chomtid, P.E.; Ricardo Kiriakidis, P.E.; Kevin Jobes		
Inspector	Mark Chomtid, P.E.; Kevin Jobes		
Reviewed by	Carl Christmann, P.E.		

Contractor	Earth Tech, Inc.
Contractor Supvr	

Hours Worked:	Day: <input type="checkbox"/> Monday <input type="checkbox"/> Tuesday <input checked="" type="checkbox"/> Wednesday <input type="checkbox"/> Thursday
Onsite	<input type="checkbox"/> Friday <input type="checkbox"/> Saturday <input type="checkbox"/> Sunday
Lunch	Weather: Wind Dir Wind Speed
	<input type="checkbox"/> Cloudy <input checked="" type="checkbox"/> Sunny <input type="checkbox"/> Overcast <input type="checkbox"/> Rainy <input type="checkbox"/> Stormy

Hours Worked:	7:10 am – 5:30 pm
Onsite	
Lunch	

Work Performed:	Qty	Equipment Onsite	Qty	Equipment Onsite
S17– Drill (completed) S17 – Grout (completed);	2	SM-20 Drill Rigs	2	Schwing Pumps
S18 – Drill (incomplete)	1	Skid Steer	2	Frack Tanks
S27 – Drill (completed) S27 – Grout (completed)	1	Small Excavator	2	Water Tanks
S41 – Drill (completed) S41 – Grout (incomplete)	1	Forklift		
		Other: RAM, arc welder, lights, water pumps		
Total Grout Order = 37 cu.yd.; Return = 1 cu.yd.				
<u>WORK AREA</u> 		Farm Tractors -	Implement:	
			Implement	





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DAILY FIELD REPORT

Route To:	Carl Christmann, P.E.	Copy To:	Richard Siemering, P.E.
Date:	4/10/2013	Page:	
Project No:	13354.8	Client:	HDR Engineering, Inc.
Location:	Hillsborough County Southeast Landfill		
AMEC Staff:	Mark Chomtid, P.E.; Ricardo Kiriakidis, P.E.; Kevin Jobes		

Other Activities / Comments:

WORK ACTIVITIES

- AMEC's staff arrived on site at 7:10 am and performed the daily site inspection prior to starting work activity.

Point "S17"

- Moved 18 inches North of original point
- Started drilling @ 7:39 am
- @ 100 feet driller decided to duplex @ 9:10 am
- Finished drilling @ 11:10 am
- (Final Depth of Point S17 = 240 feet below grade COMPLETED).
- Truck # 116 arrived @ 12:30 pm
- Start grout @ 12:40 pm
- Line pressure: 200 psi; Slump = 4.75"
- Finished grout @ 1:15 pm
- Remainder of grout was sent to point S41
- (Total grout quantity for Point S17 = 4.7 cu.yd. COMPLETED).

Point "S18"

- Started drilling @ 1:52 pm
- Started duplex @ 3:17 pm @ 100 feet below grade
- Stopped drilling @ 4:00 pm due to end of work day. Driller had to leave site.
- (Depth of Point S18 = 140 feet below grade INCOMPLETE).

Point "S27"

- Resumed drilling @ 7:27 am
- Finished drilling @ 8:35 am
- (Final Depth of Point S27 = 245 feet below grade COMPLETED).
- Truck # 115 arrived @ 8:23 am
- Start grout @ 8:36 am
- Line pressure: 360 psi; Slump = 4"
- Finished grout @ 9:23 am; returned 1 cu.yd.
- (Total grout quantity for Point S27 = 6 cu.yd. COMPLETED).

Point "S41"

- Started drilling @ 10:04 am
- Refueled drill rig from 12:56 pm to 1:18 pm; Finished drilling @ 1:33 pm
- (Final Depth of Point S41 = 246 feet below grade COMPLETED).
- Continued truck # 116 @ 12:53 pm; Line pressure: 280 psi; Slump = 4.75"
- Finished truck # 116 @ 1:54 pm
- Truck # 117 arrived 3:00 pm ; Line pressure:350 psi; Slump = 3.5"
- Finished truck # 117 @ 3:40 pm
- Truck # 118 arrived @ 4:45 pm; Line pressure:300 psi; Slump = 3.5"
- Finished truck # 118 @ 5:20 pm
- (Total grout quantity for Point S41 = 25.3 cu.yd. INCOMPLETE).



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DAILY FIELD REPORT

Route To:	Carl Christmann, P.E.	Copy To:	Richard Siemerling, P.E.
Date:	4/03/2013	Page:	
Project No:	13354.8	Client:	HDR Engineering, Inc.
Location:	Hillsborough County Southeast Landfill		
AMEC Staff:	Mark Chomtid, P.E.; Ricardo Kiriakidis, P.E.; Kevin Jobes		
Inspector	Mark Chomtid, P.E.; Kevin Jobes		
Reviewed by	Carl Christmann, P.E.		

Contractor Earth Tech, Inc.

Contractor Supvr

Hours Worked:

Onsite 7:10 am – 7:25 pm

Lunch

Day: ☐ Monday ☐ Tuesday ☒ Wednesday ☐ Thursday

☐ Friday ☐ Saturday ☐ Sunday

Weather: Wind Dir Wind Speed

☒ Cloudy ☒ Sunny ☐ Overcast ☐ Rainy ☐ Stormy

Work Performed:

S1– Drill (completed) S1 – Grout (completed)

S2 – Drill (completed)

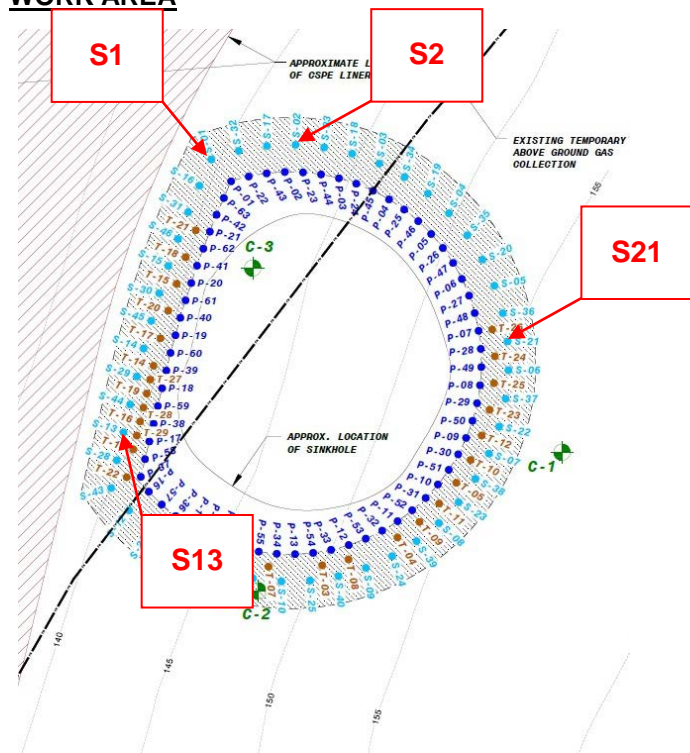
S13 – Drill (incomplete)

S21 – Drill (complete) S21 – Grout (completed)

Qty	Equipment Onsite	Qty	Equipment Onsite
2	SM-20 Drill Rigs	2	Schwing Pumps
1	Skid Steer	2	Frack Tanks
1	Small Excavator	2	Water Tanks
1	Forklift		
Other: RAM, arc welder, lights, water pumps			
Farm Tractors -		Implement:	
		Implement	

Total Grout Order = 20 cu.yd.; Return = 2.5 cu.yd.

WORK AREA





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DAILY FIELD REPORT

Route To:	Carl Christmann, P.E.	Copy To:	Richard Siemerling, P.E.
Date:	4/03/2013	Page:	
Project No:	13354.8	Client:	HDR Engineering, Inc.
Location:	Hillsborough County Southeast Landfill		
AMEC Staff:	Mark Chomtid, P.E.; Ricardo Kiriakidis, P.E.; Kevin Jobes		

Other Activities / Comments:

WORK ACTIVITIES

- AMEC's staff arrived on site at 7:10 am and performed the daily site inspection prior to starting work activity.

Point "S21"

- New starter installed; Using 5" casing for first time on the Eastern side
- Started drilling @ 7:29 am; Finished drilling @ 10:58 am; Possibly plugged – Deemed OK
- (Final Depth of Point S21 = 231 feet below grade COMPLETED).**
- Truck # 102 arrived @ 10:40 am
- Start grout @ 11:11 am; Line pressure: 500 psi; Slump = 4"
- Casing became plugged @ 11:35 am @ 180 feet – Working to remove obstruction
- Stopped grout with truck # 102 **(2.8 cu.yd.)** Sent remainder of truck # 102 to point S1
- Reinstalling casing clear obstruction (core and approx 6 feet sand in last set)
- Reinstalled casing @ 1:10 pm; Finished @ 2:40 pm
- Resumed grouting with remainder of truck # 103
- Finished truck # 103 @ 4:00 pm
- Truck # 104 arrived @ 3:58 pm; Start truck # 104 @ 4:00 pm; Line pressure: 250 psi; Slump = 3.5"
- Finished truck # 104 @ 4:35 pm
- @ 120 feet below grade – removed casing 120 to 110 feet due to tight casing/stuck
- Removed 100 feet of remaining casing due to becoming too tight and getting stuck
- Finished grout @ 4:55 pm;
- Truck # 105 arrived @ 5:36 pm and was used to fill cavity from casing removal **(1 cu.yd.)**
- (Total grout quantity for Point S21 = 11.2 cu.yd. COMPLETED).**

Point "S13"

- Started drilling @ 5:31 pm; New starter installed
- Stopped drilling @ 7:07 pm; Will resume 4/4/13
- (Depth of Point S13 = 130 feet below grade INCOMPLETE).**

Point "S1"

- Continued drilling @ 8:04 am from 80 feet below grade
- Finished drilling @ 10:52 am
- (Final Depth of Point S1 = 230 feet below grade COMPLETED).**
- Continued truck # 102 @ 12:50 pm
- Line pressure: 400 psi; Slump = 4"
- Finished truck # 102 @ 1:22 pm; Truck # 103 arrived @ 1:30 pm
- Start grout @ 1:40 pm; Finished grout @ 2:10 pm
- After removing the casing; there was no grout to surface
- Pumped additional grout to fill the hole with truck # 105. Finished @ 5:05 PM
- (Total grout quantity for Point S1 = 6.3 cu.yd. COMPLETED).**

Point "S2"

- Started drilling @ 3:23 pm
- Finished drilling @ 7:20 pm
- (Final Depth of Point S2 = 230 feet below grade COMPLETED).**




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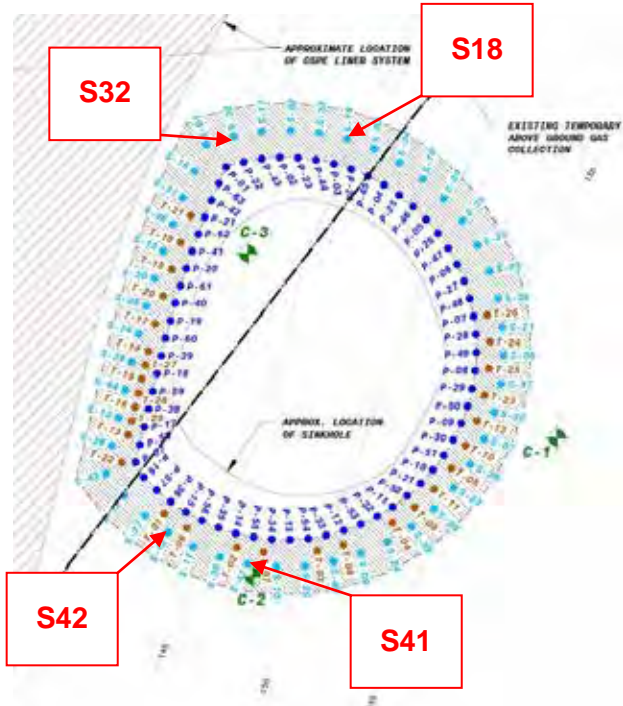
DAILY FIELD REPORT

Route To:	Carl Christmann, P.E.	Copy To:	Richard Siemering, P.E.
Date:	4/11/2013	Page:	
Project No:	13354.8	Client:	HDR Engineering, Inc.
Location:	Hillsborough County Southeast Landfill		
AMEC Staff:	Mark Chomtid, P.E.; Ricardo Kiriakidis, P.E.; Kevin Jobes		
Inspector	Mark Chomtid, P.E.; Kevin Jobes		
Reviewed by	Carl Christmann, P.E.		

Contractor	Earth Tech, Inc.
Contractor Supvr	

Hours Worked:	Day: <input type="checkbox"/> Monday <input type="checkbox"/> Tuesday <input type="checkbox"/> Wednesday <input checked="" type="checkbox"/> Thursday
Onsite	7:15 am – 6:30 pm <input type="checkbox"/> Friday <input type="checkbox"/> Saturday <input type="checkbox"/> Sunday
Lunch	Weather: Wind Dir Wind Speed
	<input type="checkbox"/> Cloudy <input checked="" type="checkbox"/> Sunny <input type="checkbox"/> Overcast <input type="checkbox"/> Rainy <input type="checkbox"/> Stormy

Work Performed:	Qty	Equipment Onsite	Qty	Equipment Onsite
S18– Drill (completed) S18 – Grout (completed)	2	SM-20 Drill Rigs	2	Schwing Pumps
S32 – Drill (completed)	1	Skid Steer	2	Frack Tanks
S41 – Grout (completed)	1	Small Excavator	2	Water Tanks
S42 – Drill (completed) S42 – Grout (incomplete)	1	Forklift		
		Other: RAM, arc welder, lights, water pumps		
Total Grout Order = 50 cu.yd.; Return = 2.2 cu.yd.				
<u>WORK AREA</u> 		Farm Tractors -	Implement:	
			Implement	





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DAILY FIELD REPORT

Route To:	Carl Christmann, P.E.	Copy To:	Richard Siemering, P.E.
Date:	4/11/2013	Page:	
Project No:	13354.8	Client:	HDR Engineering, Inc.
Location:	Hillsborough County Southeast Landfill		
AMEC Staff:	Mark Chomtid, P.E.; Ricardo Kiriakidis, P.E.; Kevin Jobes		

Other Activities / Comments:

WORK ACTIVITIES

- AMEC's staff arrived on site at 7:15 am and performed the daily site inspection prior to starting work activity.

Point "S41"

- Continued grout @ 185 feet
- Truck # 119 arrived @ 7:36 am
- Start grout @ 7:50 am
- Line pressure: 360 psi; Slump = 4.25"
- Finished truck #119 @ 8:25 am
- Truck # 120 arrived @ 9:14 am
- Start grout @ 9:16 am
- Line pressure: 300 psi; Slump = 5"
- Finished truck #120 @ 9:44 am
- Truck # 121 arrived @ 10:42 am
- Start grout @ 10:45 am
- Line pressure: 340 psi; Slump = 4.5"
- Finished grout @ 11:20 am
- Remainder of grout was sent to point S18
- (Total grout quantity for Point S41 = 48.8 cu.yd. COMPLETED).

Point "S42"

- New starter installed
- Started drilling @ 12:05 pm
- Finished drilling @ 3:20 pm
- (Final Depth of Point S42 = 246 feet below grade COMPLETED).
- Truck # 122 arrived @ 3:45 pm
- Start grout @ 3:49 pm
- Line pressure: 300 psi; Slump = 5"
- Finished truck #122 @ 4:24 pm
- Truck # 123 arrived @ 4:18 pm
- Start grout @ 4:25 pm
- Line pressure: 280 psi; Slump = 5"
- Finished truck # 123 @ 4:45 pm
- (Total grout quantity for Point S42 = 20 cu.yd. INCOMPLETE).

Point "S18"

- Resumed drilling from 140 feet @ 7:45 am
- Finished drilling @ 9:43 am
- (Final Depth of Point S18 = 230 feet below grade COMPLETED).
- Continued truck # 11 @ 11:25 am
- Line pressure: 280 psi; Slump = 4.5"
- Finished grout @ 12:13 pm; returned 2.2 cu.yd.
- (Total grout quantity for Point S18 = 4.3 cu.yd. COMPLETED).



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DAILY FIELD REPORT

Route To:	Carl Christmann, P.E.	Copy To:	Richard Siemering, P.E.
Date:	4/11/2013	Page:	
Project No:	13354.8	Client:	HDR Engineering, Inc.
Location:	Hillsborough County Southeast Landfill		
AMEC Staff:	Mark Chomtid, P.E.; Ricardo Kiriakidis, P.E.; Kevin Jobes		

Point "S32"

- New starter installed
- Started drilling @ 1:26 pm
- Drilled to 140 feet and will continue with duplex
- Start duplex @ 3:39 pm
- Finished drilling @ 5:04 pm
- *(Final Depth of Point S32 = 230 feet below grade COMPLETED).*



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DAILY FIELD REPORT

Route To:	Carl Christmann, P.E.	Copy To:	Richard Siemerling, P.E.
Date:	4/12/2013	Page:	
Project No:	13354.8	Client:	HDR Engineering, Inc.
Location:	Hillsborough County Southeast Landfill		
AMEC Staff:	Mark Chomtid, P.E.; Ricardo Kiriakidis, P.E.; Kevin Jobes		
Inspector	Mark Chomtid, P.E.; Kevin Jobes		
Reviewed by	Carl Christmann, P.E.		

Contractor Earth Tech, Inc.

Contractor Supvr

Hours Worked:

Onsite 7:10 am – 6:30 pm

Lunch

Day: ☐ Monday ☐ Tuesday ☐ Wednesday ☐ Thursday

☒ Friday ☐ Saturday ☐ Sunday

Weather: Wind Dir Wind Speed

☐ Cloudy ☒ Sunny ☐ Overcast ☐ Rainy ☐ Stormy

Work Performed:

S32 – Grout (completed)

S33 – Drill (completed) S33 – Grout (completed)

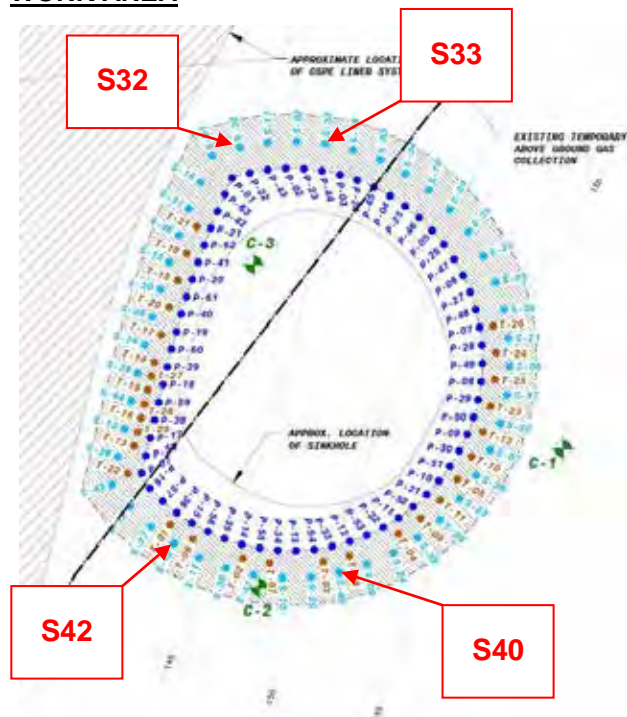
S40 – Drill (completed) S40 – Grout (incomplete)

S42 – Grout (completed)

Qty	Equipment Onsite	Qty	Equipment Onsite
2	SM-20 Drill Rigs	2	Schwing Pumps
1	Skid Steer	2	Frack Tanks
1	Small Excavator	2	Water Tanks
1	Forklift		
Other: RAM, arc welder, lights, water pumps			
Farm Tractors -		Implement:	
		Implement	

Total Grout Order = 30 cu.yd.; Return = 0 cu.yd.

WORK AREA





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DAILY FIELD REPORT

Route To:	Carl Christmann, P.E.	Copy To:	Richard Siemerling, P.E.
Date:	4/12/2013	Page:	
Project No:	13354.8	Client:	HDR Engineering, Inc.
Location:	Hillsborough County Southeast Landfill		
AMEC Staff:	Mark Chomtid, P.E.; Ricardo Kiriakidis, P.E.; Kevin Jobes		

Other Activities / Comments:

WORK ACTIVITIES

- AMEC's staff arrived on site at 7:10 am and performed the daily site inspection prior to starting work activity.

Point "S32"

- Truck # 124 arrived @ 7:20 am
- Start grout @ 7:40 am
- Line pressure: 380 psi; Slump = 4.75"
- Finished grout @ 8:20 am
- (Total grout quantity for Point S32 = 5.2 cu.yd. COMPLETED).

Point "S33"

- New starter installed
- Started drilling @ 9:01 am
- From 11:16 am to 11:54 am no penetration – will duplex
- Started duplex @ 12:31 pm @ 165 feet below grade
- Finished drilling @ 2:00 pm
- Casing stuck; started to extract inner rod @ 2:30 pm
- Finished extracting inner rod @ 3:20 pm
- (Final Depth of Point S33 = 230 feet below grade COMPLETED).
- Truck # 126 arrived @ 4:30 pm
- Start grout @ 4:40 pm
- Line pressure: 240 psi; Slump = 4.75"
- Tight casing from 215 to 185 feet below grade
- Pump broke down – delay – switched pumps
- Finished grout @ 5:55 pm
- 3 casings lost
- (Total grout quantity for Point S33 = 4 cu.yd. COMPLETED).

Point "S42"

- Point was left @ 190 feet
- Casing is now stuck & crew working to free up casing
- Truck # 124 arrived @ 7:30 am and will be used for S32
- @ 8:45 am removed 30 feet of casing to release high water pressure; casing also obstructed
- @ 8:55 am removed casing to clear blockage
- @ 9:40 am replaced casing – starter clogged
- Continued truck # 124 @ 10:00 am
- Line pressure: 300 psi; Slump = 4.75"
- Finished grout @ 10:38 am; starter worn – teeth missing
- (Total grout quantity for Point S42 = 24.8 cu.yd. COMPLETED).



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DAILY FIELD REPORT

Route To:	Carl Christmann, P.E.	Copy To:	Richard Siemering, P.E.
Date:	4/12/2013	Page:	
Project No:	13354.8	Client:	HDR Engineering, Inc.
Location:	Hillsborough County Southeast Landfill		
AMEC Staff:	Mark Chomtid, P.E.; Ricardo Kiriakidis, P.E.; Kevin Jobes		

Point "S40"

- New starter installed
- Started drilling @ 11:17 am
- Finished drilling @ 2:11 pm
- **(Final Depth of Point S40 = 245 feet below grade COMPLETED).**
- Truck # 125 arrived @ 2:50 pm
- Start grout @ 2:55 pm
- Line pressure: 300 psi; Slump = 4.5"
- Finished truck # 125 @ 3:35 pm
- Continued truck # 126 @ 5:58 pm
- Line pressure: 340 psi; Slump = 4.75"
- Finished grout @ 6:15 pm
- To continue 4/15/13
- **(Total grout quantity for Point S40 = 16 cu.yd. INCOMPLETE).**



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DAILY FIELD REPORT

Route To:	Carl Christmann, P.E.	Copy To:	Richard Siemering, P.E.
Date:	4/15/2013	Page:	
Project No:	13354.8	Client:	HDR Engineering, Inc.
Location:	Hillsborough County Southeast Landfill		
AMEC Staff:	Mark Chomtid, P.E.; Ricardo Kiriakidis, P.E.; Kevin Jobes		
Inspector	Mark Chomtid, P.E.; Kevin Jobes		
Reviewed by	Carl Christmann, P.E.		

Contractor Earth Tech, Inc.

Contractor Supvr

Hours Worked:

Onsite 7:10 am – 6:00 pm

Lunch

Day: ☒ Monday ☐ Tuesday ☐ Wednesday ☐ Thursday

☐ Friday ☐ Saturday ☐ Sunday

Weather: Wind Dir Wind Speed

☐ Cloudy ☒ Sunny ☐ Overcast ☐ Rainy ☐ Stormy

Work Performed:

S30 – Drill (incomplete)

S31 – Drill (completed) S31 – Grout (completed)

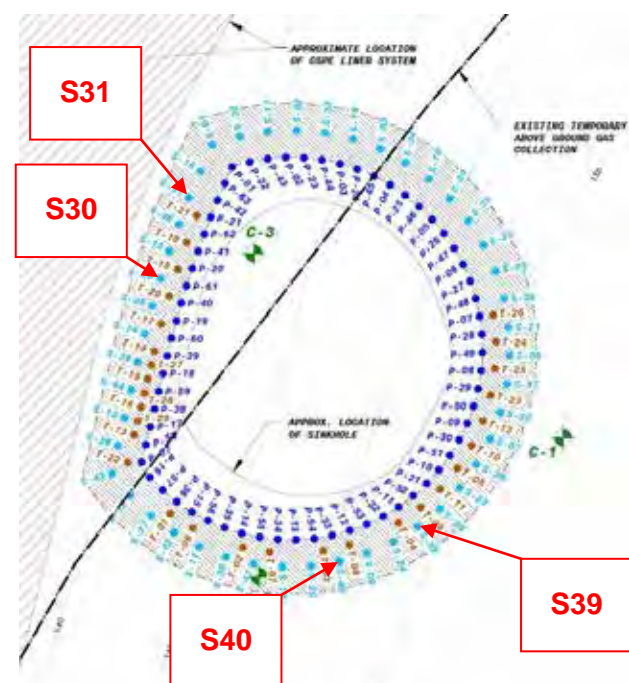
S39 – Drill (completed) S39 – Grout (incomplete)

S40 – Drill (completed) S40 – Grout (incomplete)

Qty	Equipment Onsite	Qty	Equipment Onsite
2	SM-20 Drill Rigs	2	Schwing Pumps
1	Skid Steer	2	Frack Tanks
1	Small Excavator	2	Water Tanks
1	Forklift		
Other: RAM, arc welder, lights, water pumps			
Farm Tractors -		Implement:	
		Implement	

Total Grout Order = 60 cu.yd.; Return = 0 cu.yd.

WORK AREA





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DAILY FIELD REPORT

Route To:	Carl Christmann, P.E.	Copy To:	Richard Siemering, P.E.
Date:	4/15/2013	Page:	
Project No:	13354.8	Client:	HDR Engineering, Inc.
Location:	Hillsborough County Southeast Landfill		
AMEC Staff:	Mark Chomtid, P.E.; Ricardo Kiriakidis, P.E.; Kevin Jobes		

Other Activities / Comments:

WORK ACTIVITIES

- AMEC's staff arrived on site at 7:10 am and performed the daily site inspection prior to starting work activity.

Point "S40"

- Resumed grout; added 2 sections back on that were removed on 4/12/13
- Truck # 127 arrived @ 7:50 am
- Start grout @ 7:52 am
- Line pressure: 340 psi; Slump = 4.75"
- Finished truck # 127 @ 8:25 am
- Truck # 128 arrived @ 9:15 am
- Start grout @ 9:19 am
- Line pressure: 300 psi; Slump = 5"
- Finished grout @ 9:40 am
- Flushed and locked off @ 175 feet
- (Total grout quantity for Point S40 = 36 cu.yd. INCOMPLETE).**

Point "S39"

- New starter installed
- Started drilling @ 10:10 am; Finished drilling @ 1:37 pm
- (Final Depth of Point S39 = 248 feet below grade COMPLETED).**
- Continued truck # 129 @ 2:22 pm
- Line pressure: 400 psi; Slump = 4.5"
- Finished truck # 129 @ 2:42 pm **(2.5 cu.yd.)**
- Truck # 130 arrived @ 2:54 pm
- Start grout @ 2:55 pm
- Line pressure: 320 psi; Slump = 4.5"
- Finished truck # 130 @ 3:25 pm **(10 cu.yd.)**
- Truck # 131 arrived @ 4:34 pm
- Start grout @ 4:39 pm
- Line pressure: 340 psi; Slump = 4"
- Finished truck # 131 @ 5:05 pm **(10 cu.yd.)**
- Truck # 132 arrived @ 5:23 pm
- Start grout @ 5:26 pm
- Line pressure: 340 psi; Slump = 5"
- Finished truck # 132 @ 5:45 pm **(10 cu.yd.)**
- (Total grout quantity for Point S39 = 32.5 cu.yd. INCOMPLETE).**

Point "S31"

- New starter installed
- Started drilling @ 7:50 am
- Could not advance more than 30 to 40 feet – Duplex head installed
- Started duplex @ 9:04 am
- Observed soft drilling from 195 to 225 feet
- Finished drilling @ 12:02 pm
- (Final Depth of Point S31 = 230 feet below grade COMPLETED).**



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DAILY FIELD REPORT

Route To:	Carl Christmann, P.E.	Copy To:	Richard Siemering, P.E.
Date:	4/15/2013	Page:	
Project No:	13354.8	Client:	HDR Engineering, Inc.
Location:	Hillsborough County Southeast Landfill		
AMEC Staff:	Mark Chomtid, P.E.; Ricardo Kiriakidis, P.E.; Kevin Jobes		

Point "S31"Cont'd

- Started to remove the inner rod
- Truck # 129 arrived @ 1:35 pm
- Start grout @ 1:38 pm
- Line pressure: 300 psi; Slump = 4.5"
- Finished grout @ 2:15 pm
- Sent remainder of truck # 129 to point S 39
- **(Total grout quantity for Point S31 = 7.5 cu.yd. COMPLETED).**

Point "S30"

- Started drilling @ 3:08 pm
- Stopped drilling @ 5:30 pm due to end of work day
- **(Depth of Point S30 = 165 feet below grade INCOMPLETE).**



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DAILY FIELD REPORT

Route To:	Carl Christmann, P.E.	Copy To:	Richard Siemering, P.E.
Date:	4/16/2013	Page:	
Project No:	13354.8	Client:	HDR Engineering, Inc.
Location:	Hillsborough County Southeast Landfill		
AMEC Staff:	Mark Chomtid, P.E.; Ricardo Kiriakidis, P.E.; Kevin Jobes		
Inspector	Mark Chomtid, P.E.; Kevin Jobes		
Reviewed by	Carl Christmann, P.E.		

Contractor Earth Tech, Inc.

Contractor Supvr

Hours Worked:

Onsite 7:10 am 5:30 pm

Lunch

Day: ☐ Monday ☒ Tuesday ☐ Wednesday ☐ Thursday

☐ Friday ☐ Saturday ☐ Sunday

Weather: Wind Dir Wind Speed

☐ Cloudy ☒ Sunny ☐ Overcast ☐ Rainy ☐ Stormy

Work Performed:

S30 – Drill (completed) S30 – Grout (completed);

S38– Drill (incomplete)

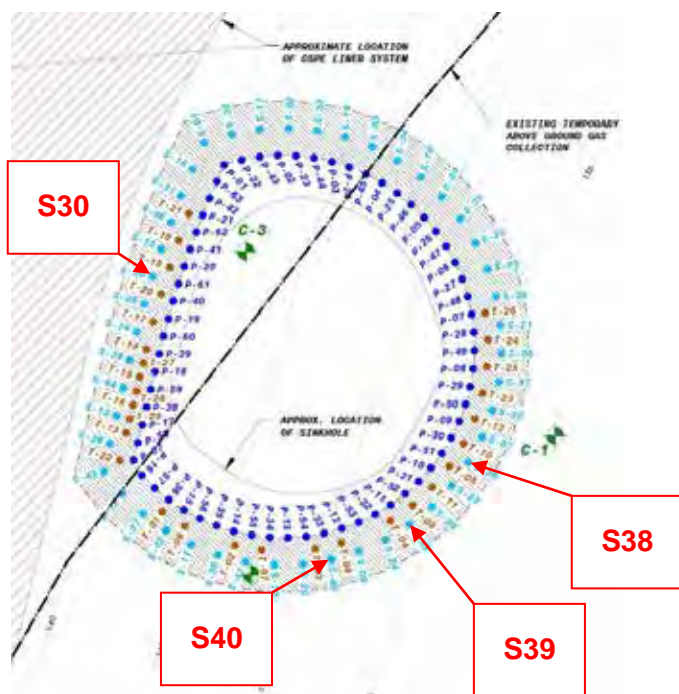
S39 – Grout (completed)

S40 – Grout (completed)

Qty	Equipment Onsite	Qty	Equipment Onsite
2	SM-20 Drill Rigs	2	Schwing Pumps
1	Skid Steer	2	Frack Tanks
1	Small Excavator	2	Water Tanks
1	Forklift		
Other: RAM, arc welder, lights, water pumps			
	Farm Tractors -	Implement:	
		Implement	

Total Grout Order = 40 cu.yd.; Return = 0 cu.yd.

WORK AREA





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DAILY FIELD REPORT

Route To:	Carl Christmann, P.E.	Copy To:	Richard Siemering, P.E.
Date:	4/16/2013	Page:	
Project No:	13354.8	Client:	HDR Engineering, Inc.
Location:	Hillsborough County Southeast Landfill		
AMEC Staff:	Mark Chomtid, P.E.; Ricardo Kiriakidis, P.E.; Kevin Jobes		

Other Activities / Comments:

WORK ACTIVITIES

- AMEC's staff arrived on site at 7:10 am and performed the daily site inspection prior to starting work activity.
- Downtime due to rig being fixed
- Progress meeting from 9:00 am to 10:00 am

Point "S39"

- Resumed grout; Truck # 133 arrived @ 7:41 am
- Start grout @ 7:45 am; Line pressure: 400 psi; Slump = 3"
- Finished truck # 133 @ 8:13 am
- Truck # 134 arrived @ 9:05 am
- Start grout @ 9:08 am; Line pressure: 340 psi; Slump = 4.75"
- Finished grout @ 9:57 am; Remainder of truck # 134 sent to point S40
- **(Total grout quantity for Point S39 = 51.8 cu.yd. COMPLETED).**

Point "S40"

- Resumed grout; Continued truck # 134 @ 10:14 am
- Line pressure: 410 psi; Slump = 4.75"
- Finished truck # 134 @ 10:20 am
- Truck # 135 arrived @ 11:13 am
- Start grout @ 11:17 am; Line pressure: 300 psi; Slump = 3"
- Finished truck # 135 @ 11:45 am
- Truck # 136 arrived @ 12:30 pm
- Start grout @ 12:35 pm; Line pressure: 360 psi; Slump = 4"
- Finished grout @ 1:55 pm; Remainder of truck # 136 sent to point S30
- **(Total grout quantity for Point S40 = 50.7 cu.yd. COMPLETED).**

Point "S30"

- Continued drilling @ 9:05 am (introduced inner rod)
- Could not advance between 9:20 am and 10:00 am. Will have to extract casing & inner rod to change bit
- Replaced bit & reinserted casing & rod @ 12:50 pm
- Observed very hard drilling from 228 to 230 feet
- Finished drilling @ 1:50 pm
- **(Final Depth of Point S30 = 230 feet below grade COMPLETED).**
- Continued truck # 136 @ 3:10 pm; Line pressure: 300 psi; Slump = 4"
- Finished grout and truck # 136 @ 3:55 pm
- **(Total grout quantity for Point S30 = 6 cu.yd. COMPLETED).**

Point "S38"

- Switched back to 4" casing
- Drilling not started due to casing pins not welded – this is new casing delivered to job site on 4/16/13 @ 3:40 pm
- **(Depth of Point S38 = 0 feet below grade INCOMPLETE).**



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DAILY FIELD REPORT

Route To:	Carl Christmann, P.E.	Copy To:	Richard Siemering, P.E.
Date:	4/17/2013	Page:	
Project No:	13354.8	Client:	HDR Engineering, Inc.
Location:	Hillsborough County Southeast Landfill		
AMEC Staff:	Mark Chomtid, P.E.; Ricardo Kiriakidis, P.E.; Kevin Jobes		
Inspector	Mark Chomtid, P.E.; Kevin Jobes		
Reviewed by	Carl Christmann, P.E.		

Contractor Earth Tech, Inc.

Contractor Supvr

Hours Worked:

Onsite 7:10 am 6:00 pm

Lunch

Day: ☐ Monday ☐ Tuesday ☒ Wednesday ☐ Thursday

☐ Friday ☐ Saturday ☐ Sunday

Weather: Wind Dir Wind Speed

☐ Cloudy ☒ Sunny ☐ Overcast ☐ Rainy ☐ Stormy

Work Performed:

S19 – Drill (incomplete)

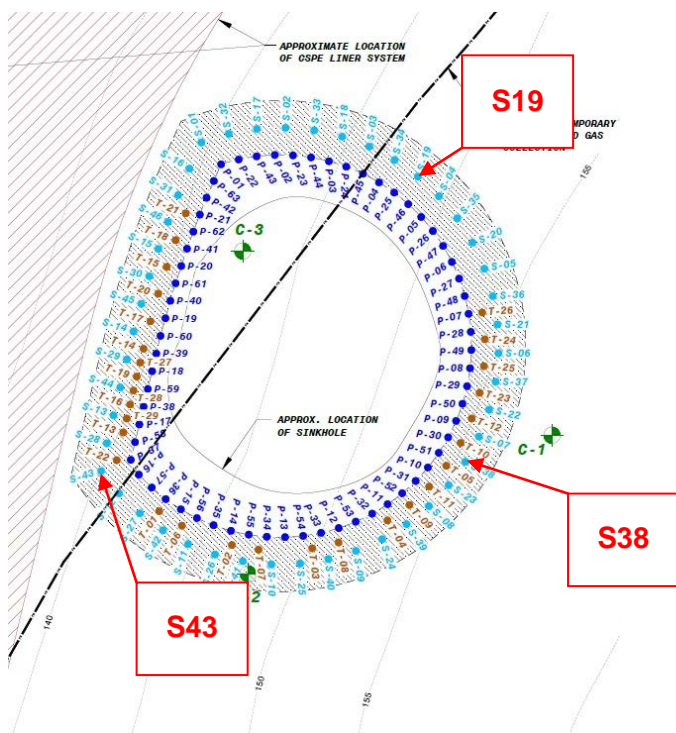
S38– Drill (complete); S38 – Grout (completed)

S43 – Drill (incomplete)

Qty	Equipment Onsite	Qty	Equipment Onsite
2	SM-20 Drill Rigs	2	Schwing Pumps
1	Skid Steer	2	Frack Tanks
1	Small Excavator	2	Water Tanks
1	Forklift		
Other: RAM, arc welder, lights, water pumps			
Farm Tractors -		Implement:	
		Implement	

Total Grout Order = 20 cu.yd.; Return = 1.5 cu.yd.

WORK AREA





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DAILY FIELD REPORT

Route To:	Carl Christmann, P.E.	Copy To:	Richard Siemering, P.E.
Date:	4/17/2013	Page:	
Project No:	13354.8	Client:	HDR Engineering, Inc.
Location:	Hillsborough County Southeast Landfill		
AMEC Staff:	Mark Chomtid, P.E.; Ricardo Kiriakidis, P.E.; Kevin Jobes		

Other Activities / Comments:

WORK ACTIVITIES

- AMEC's staff arrived on site at 7:10 am and performed the daily site inspection prior to starting work activity.

Point "S38"

- Started drilling @ 7:49 am
- Starter plugged @ 8:07 am; removed blockage
- Resumed drilling @ 8:38 am
- Finished drilling @ 10:55 am
- **(Final Depth of Point S38 = 240 feet below grade COMPLETED).**
- Truck # 137 arrived @ 11:34 am
- Line pressure: 440 psi; Slump = 3.5"
- Finished truck # 137 @ 12:15 pm
- Truck # 138 arrived @ 1:20 pm
- Start grout @ 1:25 pm
- Line pressure: 320 psi; Slump = 4"
- Finished grout @ 2:09 pm; returned 1.5 cu.yd.
- Starter was worn but OK
- **(Total grout quantity for Point S38 = 18.5 cu.yd. COMPLETED).**

Point "S19"

- Same starter as S38
- Started drilling @ 2:30 pm
- Finished drilling for the day @ 5:46 pm
- **(Depth of Point S19 = 220 feet below grade INCOMPLETE).**

Point "S43"

- Started drilling @ 7:57 am
- @ 25 feet below grade the driller (Chris) stated they were at the edge of something hard which is deflecting the pipe, so we will move over less than 6"
- Started drilling again @ 8:20 am
- @ 175 feet below grade: had to advance the inner rod @ 1:20 pm
- Almost 1 hour and no penetration; will have to change bits
- Inner rod OK: will remove casing
- @ 4:10 pm casing out; no teeth ; change casing bit and re-advanced casing & rod
- Driller believes that casing bit teeth were hitting the inner rod roller bit
- @ 5:07 pm drilling continued
- Finished drilling for the day @ 5:45 pm
- Will continue 4/18/13
- **(Depth of Point S43 = 230 feet below grade INCOMPLETE).**



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DAILY FIELD REPORT

Route To:	Carl Christmann, P.E.	Copy To:	Richard Siemering, P.E.
Date:	4/18/2013	Page:	
Project No:	13354.8	Client:	HDR Engineering, Inc.
Location:	Hillsborough County Southeast Landfill		
AMEC Staff:	Mark Chomtid, P.E.; Ricardo Kiriakidis, P.E.; Kevin Jobes		
Inspector	Mark Chomtid, P.E.; Kevin Jobes		
Reviewed by	Carl Christmann, P.E.		

Contractor Earth Tech, Inc.

Contractor Supvr

Hours Worked:

Onsite 7:10 am 5:50 pm

Lunch

Day: ☐ Monday ☐ Tuesday ☐ Wednesday ☒ Thursday

☐ Friday ☐ Saturday ☐ Sunday

Weather: Wind Dir Wind Speed

☐ Cloudy ☒ Sunny ☐ Overcast ☐ Rainy ☐ Stormy

Work Performed:

S19 – Drill (completed) S19 – Grout (completed)

S20 – Drill (completed) S20 – Grout (completed)

S34 – Drill (incomplete)

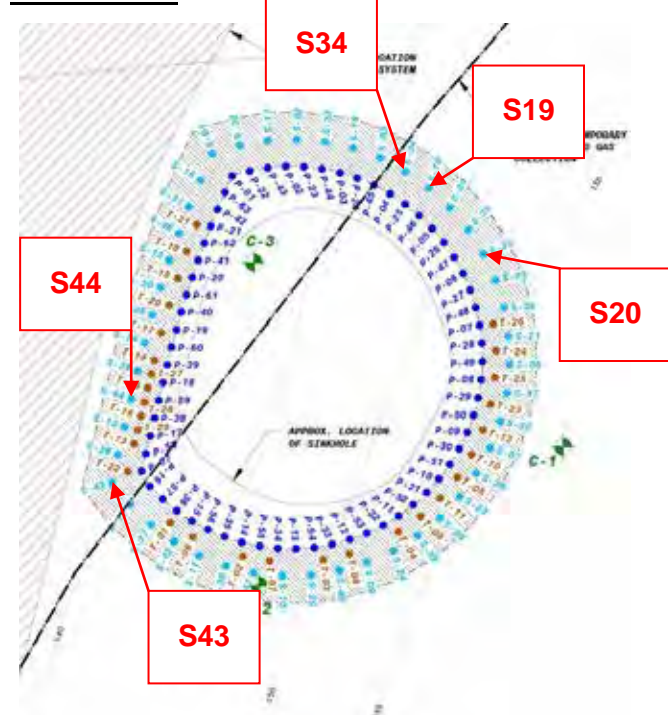
S43– Drill (completed) S43 – Grout (completed)

S44 – Drill (incomplete)

Total Grout Order = 20 cu.yd.; Return = 0 cu.yd.

Qty	Equipment Onsite	Qty	Equipment Onsite
2	SM-20 Drill Rigs	2	Schwing Pumps
1	Skid Steer	2	Frack Tanks
1	Small Excavator	2	Water Tanks
1	Forklift		
	Other: RAM, arc welder, lights, water pumps		
	Farm Tractors -	Implement:	
		Implement	

WORK AREA





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DAILY FIELD REPORT

Route To:	Carl Christmann, P.E.	Copy To:	Richard Siemering, P.E.
Date:	4/18/2013	Page:	
Project No:	13354.8	Client:	HDR Engineering, Inc.
Location:	Hillsborough County Southeast Landfill		
AMEC Staff:	Mark Chomtid, P.E.; Ricardo Kiriakidis, P.E.; Kevin Jobes		

Other Activities / Comments:

WORK ACTIVITIES

- AMEC's staff arrived on site at 7:10 am and performed the daily site inspection prior to starting work activity.

Point "S19"

- Resumed drilling @ 7:30 am
- Finished drilling @ 8:07 am
- (Final Depth of Point S19 = 229 feet below grade COMPLETED).
- Truck # 139 arrived @ 7:56 am
- Start grout @ 8:20 am
- Line pressure: 360 psi; Slump = 3.5"
- Finished grout @ 9:05 am
- Sent remainder of truck # 139 to point S43
- (Total grout quantity for Point S19 = 3.6 cu.yd. COMPLETED).

Point "S20"

- New starter installed
- Started drilling @ 9:35 am
- Drilling stopped @ 12:28 pm due to no movement in over 20 min
- Removed casing to check starter @ 12:56 pm – All teeth were intact
- Reinstall casing @ 12:59 pm to drill depth
- Resumed drilling @ 1:26 pm
- Finished drilling @ 2:06 pm
- (Final Depth of Point S20 = 231 feet below grade COMPLETED).
- Continued truck # 140 @ 3:30 pm
- Line pressure: 300 psi; Slump = 3"
- Finished truck # 140 @ 3:40 pm;
- (Total grout quantity for Point S20 = 2.5 cu.yd. COMPLETED).

Point "S34"

- New starter installed
- Started drilling @ 4:30 pm
- Finished drilling for the day @ 5:15 pm
- Will continue 4/19/13
- (Depth of Point S34 = 110 feet below grade INCOMPLETE).



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DAILY FIELD REPORT

Route To:	Carl Christmann, P.E.	Copy To:	Richard Siemering, P.E.
Date:	4/18/2013	Page:	
Project No:	13354.8	Client:	HDR Engineering, Inc.
Location:	Hillsborough County Southeast Landfill		
AMEC Staff:	Mark Chomtid, P.E.; Ricardo Kiriakidis, P.E.; Kevin Jobes		

Point "S43"

- Continued drilling @ 7:13 am
- Finished drilling @ 7:33 am
- Could not stop @ 245 feet below grade because duplex can only go in 10 foot intervals
- Started to remove inner rod @ 7:33 am; finished removing inner rod @ 8:45 am
- (Final Depth of Point S43 = 250 feet below grade COMPLETED).**
- Continued truck # 139 @ 9:13 am
- Line pressure: 320 psi; Slump = 3.5"
- Finished truck # 139 @ 9:55 am; Pump broke down; brought in new pump – also not working; brought another pump
- Grouting resumed with truck # 140 @ 2:45 pm; Line pressure: 360 psi; Slump = 3"
- Finished grout @ 3:26 pm
- Remainder of truck # 140 sent to point S20
- (Total grout quantity for Point S43 = 13.9 cu.yd. COMPLETED).**

Point "S44"

- Started drilling @ 3:48 pm
- Finished drilling for the day @ 5:07 pm
- Will continue 4/19/13
- (Depth of Point S44 = 100 feet below grade INCOMPLETE).**



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DAILY FIELD REPORT

Route To:	Carl Christmann, P.E.	Copy To:	Richard Siemerling, P.E.
Date:	4/19/2013	Page:	
Project No:	13354.8	Client:	HDR Engineering, Inc.
Location:	Hillsborough County Southeast Landfill		
AMEC Staff:	Mark Chomtid, P.E.; Ricardo Kiriakidis, P.E.; Kevin Jobes		
Inspector	Mark Chomtid, P.E.; Kevin Jobes		
Reviewed by	Carl Christmann, P.E.		

Contractor Earth Tech, Inc.

Contractor Supvr

Hours Worked:

Onsite 7:30 am 5:50 pm

Lunch

Day: ☐ Monday ☐ Tuesday ☐ Wednesday ☐ Thursday

☒ Friday ☐ Saturday ☐ Sunday

Weather: Wind Dir Wind Speed

☒ Cloudy ☒ Sunny ☒ Overcast ☒ Rainy ☐ Stormy

Work Performed:

S34 – Drill (completed) S34 – Grout (completed)

S36 – Drill (completed) S36 – Grout (completed)

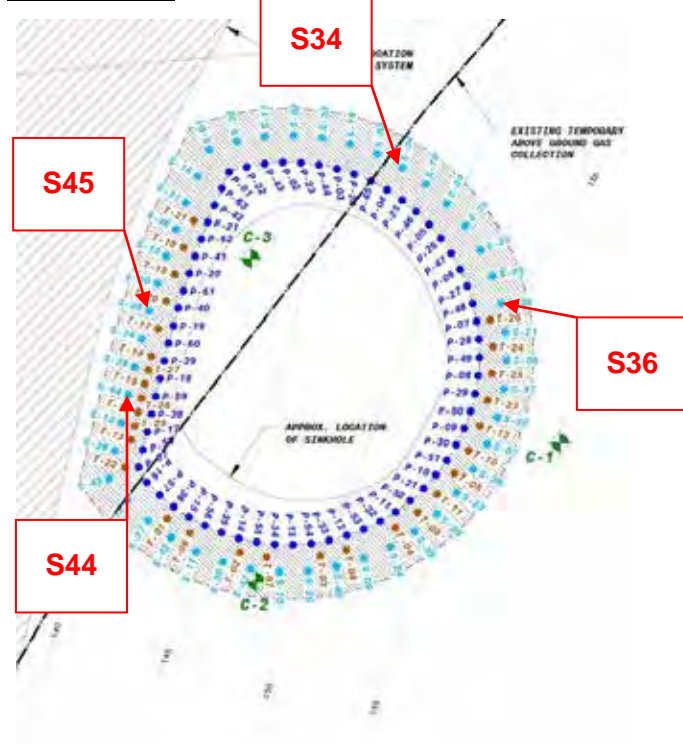
S44 – Drill (completed) S44 – Grout (completed)

S45 – Drill (incomplete)

Qty	Equipment Onsite	Qty	Equipment Onsite
2	SM-20 Drill Rigs	2	Schwing Pumps
1	Skid Steer	2	Frack Tanks
1	Small Excavator	2	Water Tanks
1	Forklift		
Other: RAM, arc welder, lights, water pumps			
Farm Tractors -		Implement:	
		Implement	

Total Grout Order = 25 cu.yd.; Return = 0 cu.yd.

WORK AREA





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DAILY FIELD REPORT

Route To:	Carl Christmann, P.E.	Copy To:	Richard Siemering, P.E.
Date:	4/19/2013	Page:	
Project No:	13354.8	Client:	HDR Engineering, Inc.
Location:	Hillsborough County Southeast Landfill		
AMEC Staff:	Mark Chomtid, P.E.; Ricardo Kiriakidis, P.E.; Kevin Jobes		

Other Activities / Comments:

WORK ACTIVITIES

- AMEC's staff arrived on site at 7:30 am and performed the daily site inspection prior to starting work activity.

Point "S34"

- Resumed drilling @ 7:46 am
- Finished drilling @ 9:47 am
- (Final Depth of Point S34 = 228 feet below grade COMPLETED).
- Truck # 141 arrived @ 10:05 am
- Start grout @ 10:10 am
- Line pressure: 300 psi; Slump = 4.5"
- Casing blockage @ 10:15 am
- Worked to remove obstruction
- Resumed grouting @ 11:08 am
- Finished grout @ 11:50 am
- Sent remainder of truck # 141 to point S44
- (Total grout quantity for Point S34 = 3 cu.yd. COMPLETED).

Point "S36"

- Started drilling @ 12:50 pm
- Drilling stopped @ 12:59 pm unable to get through debris @ approximately 17 to 20 linear feet
- Brought casing back up – removed debris
- Resumed drilling @ 1:07 pm
- Finished drilling @ 3:31 pm
- (Final Depth of Point S36 = 231 feet below grade COMPLETED).
- Continued truck # 142 @ 3:33 pm
- Line pressure: 300 psi; Slump = 4.5"
- Finished truck # 142 @ 3:45 pm
- Truck # 143 arrived @ 4:13 pm
- Start grout @ 4:15 pm
- Line pressure: 360 psi; Slump = 3"
- Finished grout and truck # 143 @ 4:45 pm
- (Total grout quantity for Point S36 = 7.1 cu.yd. COMPLETED).

Point "S44"

- Continued drilling from 100 feet below grade @ 8:10 am with duplex
- Finished drilling @ 10:35 am
- (Final Depth of Point S44 = 250 feet below grade COMPLETED).
- Continued truck # 141 @ 11:40 am
- Line pressure: 350 psi; Slump = 4.5"
- Finished truck # 141 @ 12:03 pm
- Truck # 142 arrived @ 1:16 pm
- Start grout @ 1:20 pm; Line pressure: 360 psi; Slump = 3"
- Finished grout @ 2:35 pm
- Remainder of truck # 142 sent to point S36
- (Total grout quantity for Point S44 = 14.9 cu.yd. COMPLETED).



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DAILY FIELD REPORT

Route To:	Carl Christmann, P.E.	Copy To:	Richard Siemering, P.E.
Date:	4/19/2013	Page:	
Project No:	13354.8	Client:	HDR Engineering, Inc.
Location:	Hillsborough County Southeast Landfill		
AMEC Staff:	Mark Chomtid, P.E.; Ricardo Kiriakidis, P.E.; Kevin Jobes		

Point "S45"

- Started drilling @ 2:45 pm
- Finished drilling for the day @ 3:25 pm
- Will continue 4/22/13
- **(Depth of Point S45 = 80 feet below grade INCOMPLETE).**



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DAILY FIELD REPORT

Route To:	Carl Christmann, P.E.	Copy To:	Richard Siemering, P.E.
Date:	4/22/2013	Page:	
Project No:	13354.8	Client:	HDR Engineering, Inc.
Location:	Hillsborough County Southeast Landfill		
AMEC Staff:	Mark Chomtid, P.E.; Ricardo Kiriakidis, P.E.; Kevin Jobes		
Inspector	Mark Chomtid, P.E.; Kevin Jobes		
Reviewed by	Carl Christmann, P.E.		

Contractor Earth Tech, Inc.

Contractor Supvr

Hours Worked:

Onsite 7:00 am 6:30 pm

Lunch

Day: ☒ Monday ☐ Tuesday ☐ Wednesday ☐ Thursday

☐ Friday ☐ Saturday ☐ Sunday

Weather: Wind Dir Wind Speed

☐ Cloudy ☒ Sunny ☒ Overcast ☐ Rainy ☐ Stormy

Work Performed:

S35 – Drill (completed) S35 – Grout (completed)

S37 – Drill (completed) S37 – Grout (incomplete)

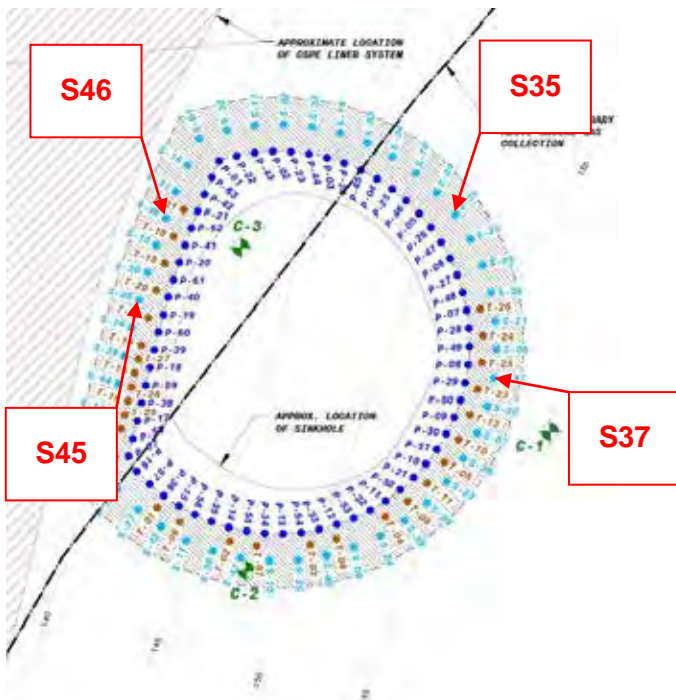
S45 – Drill (completed) S45 – Grout (completed)

S46 – Drill (completed) S46 – Grout (completed)

Qty	Equipment Onsite	Qty	Equipment Onsite
2	SM-20 Drill Rigs	2	Schwing Pumps
1	Skid Steer	2	Frack Tanks
1	Small Excavator	2	Water Tanks
1	Forklift		
Other: RAM, arc welder, lights, water pumps			
Farm Tractors -		Implement:	
		Implement	

Total Grout Order = 20 cu.yd.; Return = 0.9 cu.yd.

WORK AREA





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DAILY FIELD REPORT

Route To:	Carl Christmann, P.E.	Copy To:	Richard Siemering, P.E.
Date:	4/22/2013	Page:	
Project No:	13354.8	Client:	HDR Engineering, Inc.
Location:	Hillsborough County Southeast Landfill		
AMEC Staff:	Mark Chomtid, P.E.; Ricardo Kiriakidis, P.E.; Kevin Jobes		

Other Activities / Comments:

WORK ACTIVITIES

- AMEC's staff arrived onsite at 7:30 am and performed the daily site inspection prior to starting work activities.

Point "S45"

- Started advancing the inner rod @ 7:45 am
- Continued drilling @ 8:06 am
- Finished drilling @ 10:22 am
- (Final Depth of Point S45 = 242 feet below grade COMPLETED).
- Truck # 144 arrived @ 11:24 am
- Start grout @ 11:30 am
- Line pressure: 200 psi; Slump = 5"
- Finished grout @ 12:15 pm
- Sent remainder of truck # 144 to point S35
- (Total grout quantity for Point S45 = 5.3 cu.yd. COMPLETED).

Point "S46"

- Started drilling @ 12:36 pm
- Started duplex after 40 feet @ 1:15 pm
- Finished drilling @ 3:48 pm
- Started to remove inner rod @ 4:41 pm
- Advanced an extra section @ 4:47 pm
- (Final Depth of Point S46 = 250 feet below grade COMPLETED).
- Truck # 145 arrived @ 4:45 pm
- Start grout @ 4:50 pm
- Line pressure: 300 psi; Slump = 5"
- Finished grout @ 5:31 pm
- Sent remainder of truck # 145 to point S37
- (Total grout quantity for Point S46 = 4.7 cu.yd. COMPLETED).

Point "S35"

- Started drilling with 7 toothed bit @ 7:40 am
- Changed to a 4 toothed bit to drill in trash area
- Pulled up a metal piece stuck with bit. Took a picture
- Changed bit back to 7 toothed bit to drill
- @ 11:54 am extracted all rods from 200 ft back up to examine drilling bit
- Very hard rock (chert) stuck inside bit
- 4 teeth missing carbide cutting piece; replaced with a bit having 5 out of 7 teeth with carbide
- Resumed drilling @ 1:35 pm
- Finished drilling @ 2:18 pm
- (Final Depth of Point S35 = 230 feet below grade COMPLETED).
- Continued truck # 144 @ 2:25 pm
- Line pressure: 300 psi; Slump = 5"
- Finished point and truck # 144 @ 2:46 pm
- (Total grout quantity for Point S35 = 3.8 cu.yd. COMPLETED).



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DAILY FIELD REPORT

Route To:	Carl Christmann, P.E.	Copy To:	Richard Siemering, P.E.
Date:	4/22/2013	Page:	
Project No:	13354.8	Client:	HDR Engineering, Inc.
Location:	Hillsborough County Southeast Landfill		
AMEC Staff:	Mark Chomtid, P.E.; Ricardo Kiriakidis, P.E.; Kevin Jobes		

Point "S37"

- Started drilling @ 3:28 pm
- Finished drilling @ 5:50 pm
- *(Final Depth of Point S37 = 230 feet below grade COMPLETED).*
- Continued truck # 145 @ 5:55 pm
- Line pressure: 300 psi; Slump = 5"
- Finished truck # 145 @ 6:08 pm
- *(Total grout quantity for Point S37 = 5.3 cu.yd. INCOMPLETE).*



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DAILY FIELD REPORT

Route To:	Carl Christmann, P.E.	Copy To:	Richard Siemerling, P.E.
Date:	4/23/2013	Page:	
Project No:	13354.8	Client:	HDR Engineering, Inc.
Location:	Hillsborough County Southeast Landfill		
AMEC Staff:	Mark Chomtid, P.E.; Ricardo Kiriakidis, P.E.; Kevin Jobes		
Inspector	Mark Chomtid, P.E.; Kevin Jobes		
Reviewed by	Carl Christmann, P.E.		

Contractor Earth Tech, Inc.

Contractor Supvr

Hours Worked:

Onsite 7:00 am 6:30 pm

Lunch

Day: ☐ Monday ☒ Tuesday ☐ Wednesday ☐ Thursday

☐ Friday ☐ Saturday ☐ Sunday

Weather: Wind Dir Wind Speed

☐ Cloudy ☒ Sunny ☐ Overcast ☐ Rainy ☐ Stormy

Work Performed:

S37 – Grout (completed)

T11 – Drill (incomplete)

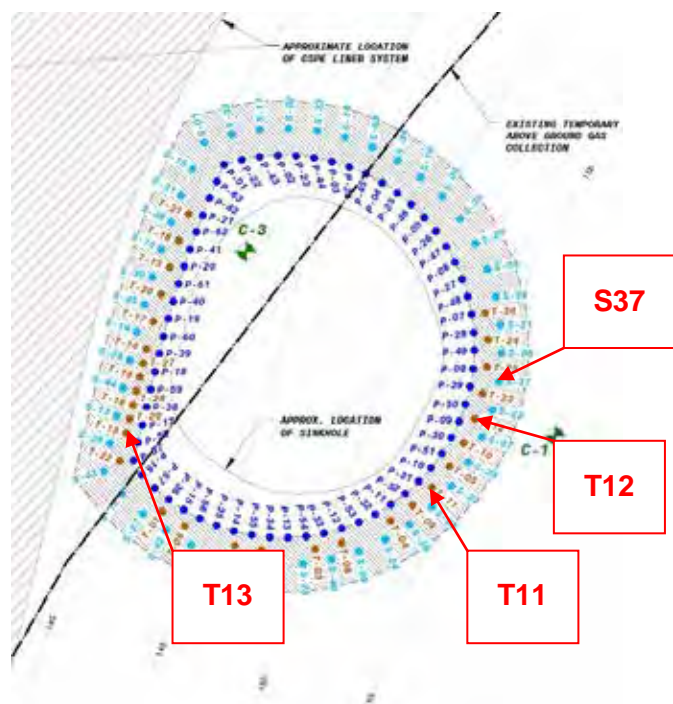
T12 – Drill (completed) T12 – Grout (completed)

T13 – Drill (completed) T13 – Grout (incomplete)

Qty	Equipment Onsite	Qty	Equipment Onsite
2	SM-20 Drill Rigs	2	Schwing Pumps
1	Skid Steer	2	Frack Tanks
1	Small Excavator	2	Water Tanks
1	Forklift		
Other: RAM, arc welder, lights, water pumps			
Farm Tractors -		Implement:	
		Implement	

Total Grout Order = 20 cu.yd.; Return = 3.5 cu.yd.

WORK AREA





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DAILY FIELD REPORT

Route To:	Carl Christmann, P.E.	Copy To:	Richard Siemerling, P.E.
Date:	4/23/2013	Page:	
Project No:	13354.8	Client:	HDR Engineering, Inc.
Location:	Hillsborough County Southeast Landfill		
AMEC Staff:	Mark Chomtid, P.E.; Ricardo Kiriakidis, P.E.; Kevin Jobes		

Other Activities / Comments:

WORK ACTIVITIES

- AMEC's staff arrived onsite at 7:30 am and performed the daily site inspection prior to starting work activities.
- After grouting S37 there were not anymore points to drill or grout. Waited for surveyors to lay out tertiary points
- Attended progress meeting from 9:00 am to 10:30 am

Point "S37"

- Truck # 146 arrived @ 7:19 am
- Start grout @ 7:30 am
- Line pressure: 240 psi; Slump = 5"
- Finished grout @ 8:18 am; returned 3.5 cu.yd.
- **(Total grout quantity for Point S37 = 11.8 cu.yd. COMPLETED).**

Point "T12"

- Started drilling @ 12:48 pm
- Finished drilling @ 4:31 pm
- Started to remove inner rod @ 4:41 pm
- **(Final Depth of Point T12 = 250 feet below grade COMPLETED).**
- Truck # 147 arrived @ 4:06 pm
- Start grout @ 4:48 pm
- Line pressure: 400 psi; Slump = 3.5"
- Finished grout @ 5:40 pm
- Sent remainder of truck # 147 to point T13
- **(Total grout quantity for Point T12 = 5.1 cu.yd. COMPLETED).**

Point "T13"

- Started drilling @ 1:09 pm
- Started to duplex after 90 feet
- Finished drilling @ 4:44 pm
- Started to remove inner rod @ 4:44 pm
- Finished removing inner rod @ 5:25 pm
- Because 240 feet was a bit soft we advanced 5 feet to 245 feet
- Finished drilling @ 5:35 pm
- **(Final Depth of Point T13 = 245 feet below grade COMPLETED).**
- Continued truck # 147 @ 5:50 pm
- Tight casing between 240 and 235 feet; and 210 and 205 feet below grade
- Line pressure: 360 psi; Slump = 3.5"
- Finished truck # 147 @ 6:06 pm
- **(Total grout quantity for Point T13 = 4.9 cu.yd. INCOMPLETE).**

Point "T11"

- Set up point
- Rig checked for plumb
- Resume drill on 4/24/13
- **(Depth of Point T11= 0 feet below grade INCOMPLETE).**



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DAILY FIELD REPORT

Route To:	Carl Christmann, P.E.	Copy To:	Richard Siemering, P.E.
Date:	4/24/2013	Page:	
Project No:	13354.8	Client:	HDR Engineering, Inc.
Location:	Hillsborough County Southeast Landfill		
AMEC Staff:	Mark Chomtid, P.E.; Ricardo Kiriakidis, P.E.; Kevin Jobes		
Inspector	Mark Chomtid, P.E.; Kevin Jobes		
Reviewed by	Carl Christmann, P.E.		

Contractor Earth Tech, Inc.

Contractor Supvr

Hours Worked:

Onsite 7:10 am 6:00 pm

Lunch

Day: ☐ Monday ☐ Tuesday ☒ Wednesday ☐ Thursday

☐ Friday ☐ Saturday ☐ Sunday

Weather: Wind Dir Wind Speed

☐ Cloudy ☒ Sunny ☐ Overcast ☐ Rainy ☐ Stormy

Work Performed:

T9 – Drill (completed);

T10 – Drill (completed) T10 – Grout (completed)

T11 – Drill (completed) T11 – Grout (completed)

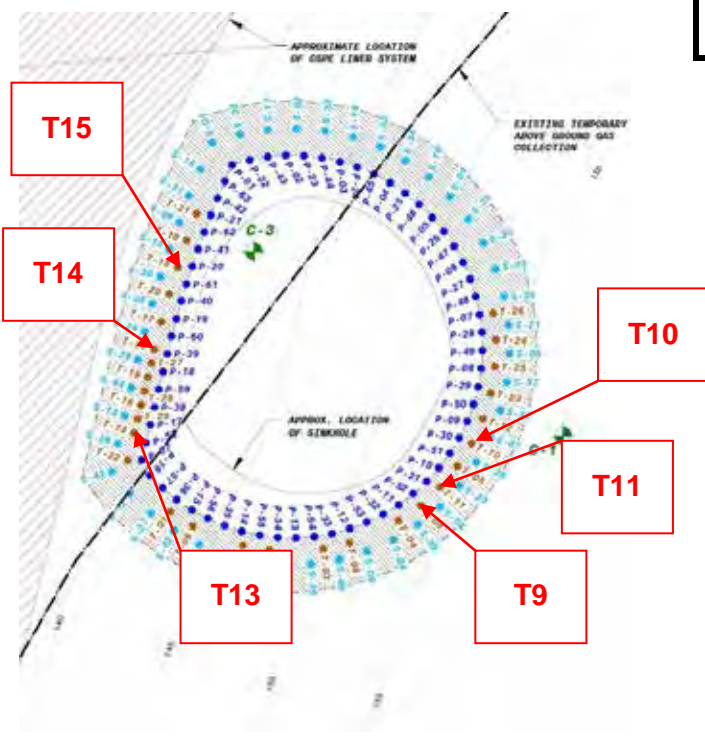
T13 – Grout (completed) T14 – Drill (completed)

T14 – Grout (completed) T15 – Drill (incomplete)

Total Grout Order = 20 cu.yd.; Return = 0 cu.yd.

Qty	Equipment Onsite	Qty	Equipment Onsite
2	SM-20 Drill Rigs	2	Schwing Pumps
1	Skid Steer	2	Frack Tanks
1	Small Excavator	2	Water Tanks
1	Forklift		
	Other: RAM, arc welder, lights, water pumps		
	Farm Tractors -	Implement:	
		Implement	

WORK AREA





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DAILY FIELD REPORT

Route To:	Carl Christmann, P.E.	Copy To:	Richard Siemerling, P.E.
Date:	4/24/2013	Page:	
Project No:	13354.8	Client:	HDR Engineering, Inc.
Location:	Hillsborough County Southeast Landfill		
AMEC Staff:	Mark Chomtid, P.E.; Ricardo Kiriakidis, P.E.; Kevin Jobes		

Other Activities / Comments:

WORK ACTIVITIES

- AMEC's staff arrived onsite at 7:10 am and performed the daily site inspection prior to starting work activities.

Point "T13"

- Truck # 148 arrived @ 8:04 am
- Start grout @ 8:09 am; Line pressure: 360 psi; Slump = 4.5"
- Finished grout @ 8:44 am
- Remainder of truck # 148 sent to point T11
- (Total grout quantity for Point T13 = 4.8 cu.yd. COMPLETED).

Point "T14"

- Started drilling @ 9:09 am
- Started duplex @ 10:19 am
- Finished drilling @ 2:20 pm
- (Final Depth of Point T14 = 240 feet below grade COMPLETED).
- Continued truck # 149 @ 2:55 pm; Line pressure: 300 psi; Slump = 4"
- Tight casing from 210 to 175 feet; able to pump but did not reach pressure; however, it appears that we are on clayey material so it is unlikely that it would have taken
- Finished grout @ 3:35 pm
- (Total grout quantity for Point T14 = 4.9 cu.yd. COMPLETED).

Point "T15"

- Started drilling 4:41 pm
- Stopped drilling @ 5:31 pm
- (Depth of Point T15 = 90 feet below grade INCOMPLETE).

Point "T11"

- Rig Maintenance; New starter installed
- Started drilling @ 8:10 am; Finished drilling @ 10:23 am
- (Final Depth of Point T11 = 240 feet below grade COMPLETED).
- Continued truck # 148 @ 10:30 am; Line pressure: 200 psi; Slump = 4.5"
- Finished grout @ 11:10 am
- (Total grout quantity for Point T11 = 5.2 cu.yd. COMPLETED).

Point "T10"

- Started drilling @ 11:25 am; Finished drilling @ 1:41 pm
- (Final Depth of Point T10 = 245 feet below grade COMPLETED).
- Truck # 149 arrived @ 2:00 pm; Line pressure: 360 psi; Slump = 4"
- Finished grout @ 2:47 pm; Remainder of truck # 149 sent to point T14
- (Total grout quantity for Point T10 = 5.1 cu.yd. COMPLETED).

Point "T9"

- New starter installed
- Started drilling @ 2:58 pm
- Finished drilling @ 5:27 pm
- (Final Depth of Point T9 = 245 feet below grade COMPLETED).



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DAILY FIELD REPORT

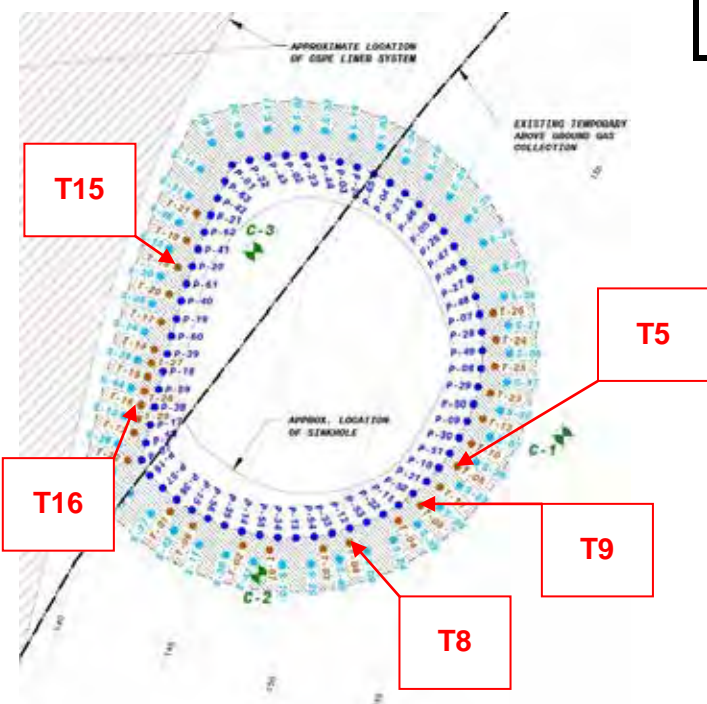
Route To:	Carl Christmann, P.E.	Copy To:	Richard Siemering, P.E.
Date:	4/25/2013	Page:	
Project No:	13354.8	Client:	HDR Engineering, Inc.
Location:	Hillsborough County Southeast Landfill		
AMEC Staff:	Mark Chomtid, P.E.; Ricardo Kiriakidis, P.E.; Kevin Jobes		
Inspector	Mark Chomtid, P.E.; Kevin Jobes		
Reviewed by	Carl Christmann, P.E.		

Contractor	Earth Tech, Inc.
Contractor Supvr	

Hours Worked:	Day: <input type="checkbox"/> Monday <input type="checkbox"/> Tuesday <input type="checkbox"/> Wednesday <input checked="" type="checkbox"/> Thursday
Onsite	7:10 am 4:30 pm
Lunch	<input type="checkbox"/> Friday <input type="checkbox"/> Saturday <input type="checkbox"/> Sunday
	Weather: Wind Dir Wind Speed
	<input type="checkbox"/> Cloudy <input checked="" type="checkbox"/> Sunny <input type="checkbox"/> Overcast <input type="checkbox"/> Rainy <input type="checkbox"/> Stormy

Work Performed:	Qty	Equipment Onsite	Qty	Equipment Onsite
T5 – Drill (completed) T5 – Grout (completed)	2	SM-20 Drill Rigs	2	Schwing Pumps
T8 – Drill (completed) T8 – Grout (completed)	1	Skid Steer	2	Frack Tanks
T9 – Drill (completed)	1	Small Excavator	2	Water Tanks
T15 – Grout (completed) T15 – Drill (completed)	1	Forklift		
T16 – Drill (incomplete)		Other: RAM, arc welder, lights, water pumps		
Total Grout Order = 30 cu.yd.; Return = 10.5 cu.yd.				

WORK AREA



Implement:

Implement



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DAILY FIELD REPORT

Route To:	Carl Christmann, P.E.	Copy To:	Richard Siemering, P.E.
Date:	4/25/2013	Page:	
Project No:	13354.8	Client:	HDR Engineering, Inc.
Location:	Hillsborough County Southeast Landfill		
AMEC Staff:	Mark Chomtid, P.E.; Ricardo Kiriakidis, P.E.; Kevin Jobes		

Other Activities / Comments:

WORK ACTIVITIES

- AMEC's staff arrived onsite at 7:10 am and performed the daily site inspection prior to starting work activities.

Point "T9"

- Truck # 150 arrived @ 7:30 am
- Start grout @ 7:36 am; Line pressure: 360 psi; Slump = 3.5"
- Finished grout @ 8:40 am; returned 5.7 cu.yd.
- (Total grout quantity for Point T9 = 4.3 cu.yd. COMPLETED).**

Point "T5"

- New starter installed
- Started drilling @ 9:08 am
- Finished drilling @ 11:00 am
- (Final Depth of Point T5 = 240 feet below grade COMPLETED).**
- Truck # 151 arrived @ 12:00 pm
- Start grout @ 12:05 pm Line pressure: 220 psi; Slump = 4.5"
- Finished grout @ 12:45 pm
- Remainder of truck sent to point T15
- (Total grout quantity for Point T5 = 5 cu.yd. COMPLETED).**

Point "T8"

- New starter installed
- Started drilling @ 1:00 pm
- Finished drilling @ 2:45 pm
- (Final Depth of Point T8 = 240 feet below grade COMPLETED).**
- Truck # 152 arrived @ 3:18 pm
- Start grout @ 3:24 pm Line pressure: 300 psi; Slump = 5"
- Finished grout @ 4:05 pm; returned 4.8 cu.yd.
- (Total grout quantity for Point T8 = 5.2 cu.yd. COMPLETED).**

Point "T15"

- Resumed drilling from 90 feet below grade
- Started drilling @ 7:50 am; found hard material and will duplex
- Finished drilling @ 11:20 am
- (Final Depth of Point T15 = 232 feet below grade COMPLETED).**
- Continued truck # 151 @ 12:55 pm; Line pressure: 300 psi; Slump = 5"
- Became plugged; insterted inner rod @ 1:10 pm; Resumed grouting @ 2:08 pm
- Finished grout @ 2:44 pm
- 5 cu.yd were pumped, however 1.1 cu.yd were lost due to plugged pipe.
- (Total grout quantity for Point T15 = 3.9 cu.yd. COMPLETED).**

Point "T16"

- Started drilling @ 3:08 pm
- Stopped drilling @ 4:01 pm due to end of work day
- (Final Depth of Point T16 = 60 feet below grade INCOMPLETE).**



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DAILY FIELD REPORT

Route To:	Carl Christmann, P.E.	Copy To:	Richard Siemering, P.E.
Date:	4/26/2013	Page:	
Project No:	13354.8	Client:	HDR Engineering, Inc.
Location:	Hillsborough County Southeast Landfill		
AMEC Staff:	Mark Chomtid, P.E.; Ricardo Kiriakidis, P.E.; Kevin Jobes		
Inspector	Mark Chomtid, P.E.; Kevin Jobes		
Reviewed by	Carl Christmann, P.E.		

Contractor Earth Tech, Inc.

Contractor Supvr

Hours Worked:

Onsite 7:10 am 4:00 pm

Lunch

Day: ☐ Monday ☐ Tuesday ☐ Wednesday ☐ Thursday

☒ Friday ☐ Saturday ☐ Sunday

Weather: Wind Dir Wind Speed

☐ Cloudy ☒ Sunny ☐ Overcast ☐ Rainy ☐ Stormy

Work Performed:

T4 – Drill (completed) T4 – Grout (completed)

T16 – Drill (completed) T16 – Grout (completed)

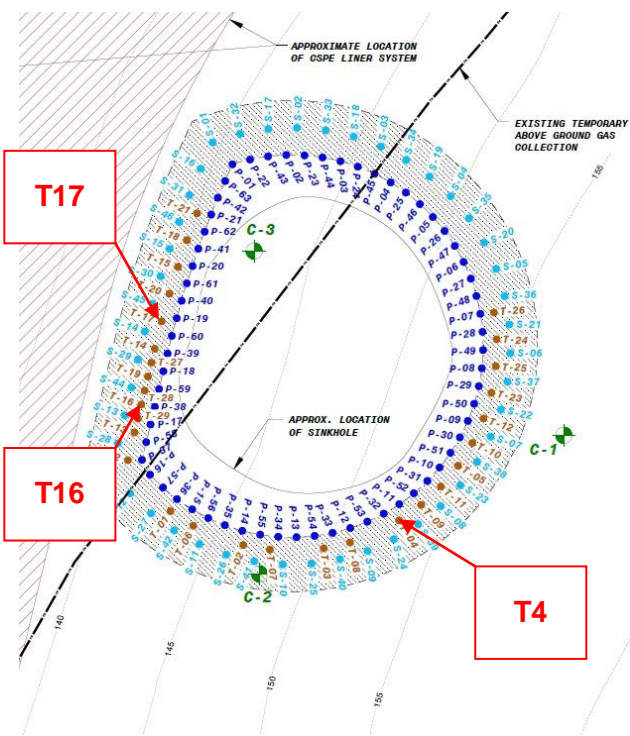
T17 – Drill (incompleted)

Qty	Equipment Onsite	Qty	Equipment Onsite
2	SM-20 Drill Rigs	2	Schwing Pumps
1	Skid Steer	2	Frack Tanks
1	Small Excavator	2	Water Tanks
1	Forklift		

Other: RAM, arc welder, lights, water pumps

Total Grout Order = 20 cu.yd.; Return = 0 cu.yd.

WORK AREA



Farm Tractors -

Implement:

Implement



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DAILY FIELD REPORT

Route To:	Carl Christmann, P.E.	Copy To:	Richard Siemerling, P.E.
Date:	4/26/2013	Page:	
Project No:	13354.8	Client:	HDR Engineering, Inc.
Location:	Hillsborough County Southeast Landfill		
AMEC Staff:	Mark Chomtid, P.E.; Ricardo Kiriakidis, P.E.; Kevin Jobes		

Other Activities / Comments:

WORK ACTIVITIES

- AMEC's staff arrived onsite at 7:10 am and performed the daily site inspection prior to starting work activities.

Point "T16"

- Continued drilling from 60 feet below grade
- Start drilling @ 7:20 am
- Started duplex @ 8:16 am from 90 feet below grade
- Reached 230 feet and started to remove inner rod
- Finished drilling @ 11:15 am
- **(Final Depth of Point T16 = 235 feet below grade COMPLETED).**
- Truck # 153 arrived @ 10:07 am
- Start grout @ 11:16 am Line pressure: 300 psi; Slump = 4.5"
- Finished truck @ 11:50 am
- Truck # 154 arrived @ 12:48 pm
- Start grout @ 1:05 pm; Line pressure: 300 psi; Slump = 5"
- Finished grout @ 1:35 pm
- Remainder of truck # 154 sent to point T4
- **(Total grout quantity for Point T16 = 12.8 cu.yd. COMPLETED).**

Point "T17"

- Started drilling @ 2:50 pm
- Stopped drilling @ 3:24 pm due to end of day
- **(Depth of Point T17 = 70 feet below grade INCOMPLETE).**

Point "T4"

- Started drilling @ 7:15 am
- Finished drilling @ 9:05 am
- Estimated depth was 245 feet below grade , but soft drilling was observed at this depth
- Advised the driller to take it to 250 feet and found medium to soft conditions
- **(Final Depth of Point T4 = 250 feet below grade COMPLETED).**
- Truck # 153 arrived @ 10:07 am
- Start grout @ 10:10 am
- High pressure @ 18 strokes; casing plugged; start removal of casing @ 10:15 am
- Casing cleaned @ 11:15 am
- Truck # 154 arrived @ 12:48 pm
- Start grout @ 12:55 pm
- Hole plugged a second time
- Diverted truck to T16
- Casing removal started @ 1:05 pm to check for obstructions – starter obstructed. All casing out @ 1:40 pm
- Replaced casing @ 1:43 pm
- Continued truck # 154 @ 2:20 pm
- Line pressure: 300 psi; Slump = 5"
- Finished grout @ 3:10 pm
- **(Total grout quantity for Point T4 = 7.2 cu.yd. COMPLETED).**



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DAILY FIELD REPORT

Route To:	Carl Christmann, P.E.	Copy To:	Richard Siemering, P.E.
Date:	4/29/2013	Page:	
Project No:	13354.8	Client:	HDR Engineering, Inc.
Location:	Hillsborough County Southeast Landfill		
AMEC Staff:	Mark Chomtid, P.E.; Ricardo Kiriakidis, P.E.; Kevin Jobes		
Inspector	Mark Chomtid, P.E.; Kevin Jobes		
Reviewed by	Carl Christmann, P.E.		

Contractor Earth Tech, Inc.

Contractor Supvr

Hours Worked:

Onsite 7:10 am 7:10 pm

Lunch

Day: ☒ Monday ☐ Tuesday ☐ Wednesday ☐ Thursday

☐ Friday ☐ Saturday ☐ Sunday

Weather: Wind Dir Wind Speed

☐ Cloudy ☒ Sunny ☒ Overcast ☐ Rainy ☐ Stormy

Work Performed:

T1 – Drill (incomplete);

T3 – Drill (completed) T3 – Grout (completed)

T7 – Drill (completed) T7 – Grout (completed)

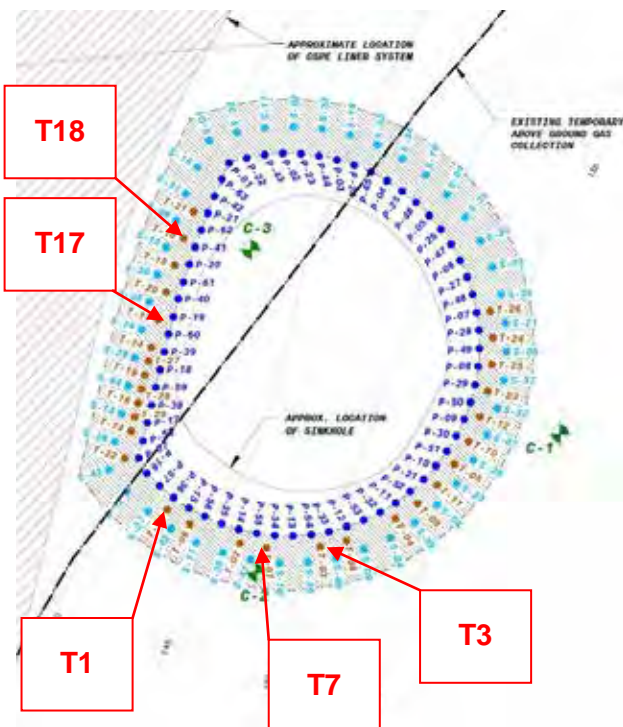
T17 – Drill (completed) T17 – Grout (completed)

T18 – Drill (completed) T18 – Grout (completed)

Total Grout Order = 20 cu.yd.; Return = 0 cu.yd.

Qty	Equipment Onsite	Qty	Equipment Onsite
2	SM-20 Drill Rigs	2	Schwing Pumps
1	Skid Steer	2	Frack Tanks
1	Small Excavator	2	Water Tanks
1	Forklift		
	Other: RAM, arc welder, lights, water pumps		
	Farm Tractors -	Implement:	
		Implement	

WORK AREA





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DAILY FIELD REPORT

Route To:	Carl Christmann, P.E.	Copy To:	Richard Siemerling, P.E.
Date:	4/29/2013	Page:	
Project No:	13354.8	Client:	HDR Engineering, Inc.
Location:	Hillsborough County Southeast Landfill		
AMEC Staff:	Mark Chomtid, P.E.; Ricardo Kiriakidis, P.E.; Kevin Jobes		

Other Activities / Comments:

WORK ACTIVITIES

- AMEC's staff arrived onsite at 7:10 am and performed the daily site inspection prior to starting work activities.

Point "T3"

- Start drilling @ 7:30 am
- Finished drilling @ 10:47 am
- *(Final Depth of Point T3 = 240 feet below grade COMPLETED).*
- Truck # 155 arrived @ 10:10 am
- Start grout @ 10:53 am; Line pressure: 480 psi; Slump = 3.5"
- Finished grout @ 12:15 pm
- Remainder of truck # 155 sent to point T17
- *(Total grout quantity for Point T3 = 4.5 cu.yd. COMPLETED).*

Point "T7"

- New starter installed
- Start drilling @ 1:00 pm
- Casing became obstructed @ 2:51 pm @ 240 feet +/- ; working to remove obstruction
- Obstruction removed @ 3:30 pm; Reinstalled casing that was removed
- Finished drilling @ 3:45 pm
- *(Final Depth of Point T7 = 240 feet below grade COMPLETED).*
- Truck # 156 arrived @ 4:02 pm
- Start grout @ 4:07 pm; Line pressure: 200 psi; Slump = 4.5"
- Finished grout @ 5:00 pm
- Remainder of truck # 155 sent to point T18
- *(Total grout quantity for Point T7 = 14.4 cu.yd. COMPLETED).*

Point "T1"

- Started drilling @ 5:55 pm
- Finished drilling for the day @ 7:05 pm
- *(Depth of Point T1 = 210 feet below grade INCOMPLETE).*

Point "T17"

- Continued drilling from 70 feet below grade
- Start drilling @ 7:31 am
- Started duplex @ 10:38 am @ 170 feet
- Finished drilling @ 11:18 am
- *(Final Depth of Point T17 = 230 feet below grade COMPLETED).*
- Continued truck # 155 @ 12:30 pm
- Line pressure: 430 psi; Slump = 3.5"
- Finished grout @ 1:05 pm
- *(Total grout quantity for Point T17 = 5.5 cu.yd. COMPLETED).*



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DAILY FIELD REPORT

Route To:	Carl Christmann, P.E.	Copy To:	Richard Siemering, P.E.
Date:	4/29/2013	Page:	
Project No:	13354.8	Client:	HDR Engineering, Inc.
Location:	Hillsborough County Southeast Landfill		
AMEC Staff:	Mark Chomtid, P.E.; Ricardo Kiriakidis, P.E.; Kevin Jobes		

Point "T18"

- Installed new bit
- Start drilling @ 1:41 pm
- Started duplex @ 3:42 pm @ 120 feet
- Finished drilling @ 5:15 pm
- **(Final Depth of Point T18 = 230 feet below grade COMPLETED).**
- Continued truck # 156 @ 6:01 pm
- Line pressure: 220 psi; Slump = 4.5"
- Finished grout @ 6:45 pm
- **(Total grout quantity for Point T18 = 5.6 cu.yd. COMPLETED).**



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DAILY FIELD REPORT

Route To:	Carl Christmann, P.E.	Copy To:	Richard Siemering, P.E.
Date:	4/30/2013	Page:	
Project No:	13354.8	Client:	HDR Engineering, Inc.
Location:	Hillsborough County Southeast Landfill		
AMEC Staff:	Mark Chomtid, P.E.; Ricardo Kiriakidis, P.E.; Kevin Jobes		
Inspector	Mark Chomtid, P.E.; Kevin Jobes		
Reviewed by	Carl Christmann, P.E.		

Contractor Earth Tech, Inc.

Contractor Supvr

Hours Worked:

Onsite 7:00 am 6:00 pm

Lunch

Day: ☐ Monday ☒ Tuesday ☐ Wednesday ☐ Thursday

☐ Friday ☐ Saturday ☐ Sunday

Weather: Wind Dir Wind Speed

☐ Cloudy ☐ Sunny ☒ Overcast ☐ Rainy ☐ Stormy

Work Performed:

T1 – Drill (completed) T1 – Grout (completed)

T2 – Drill (completed) T2 – Grout (completed)

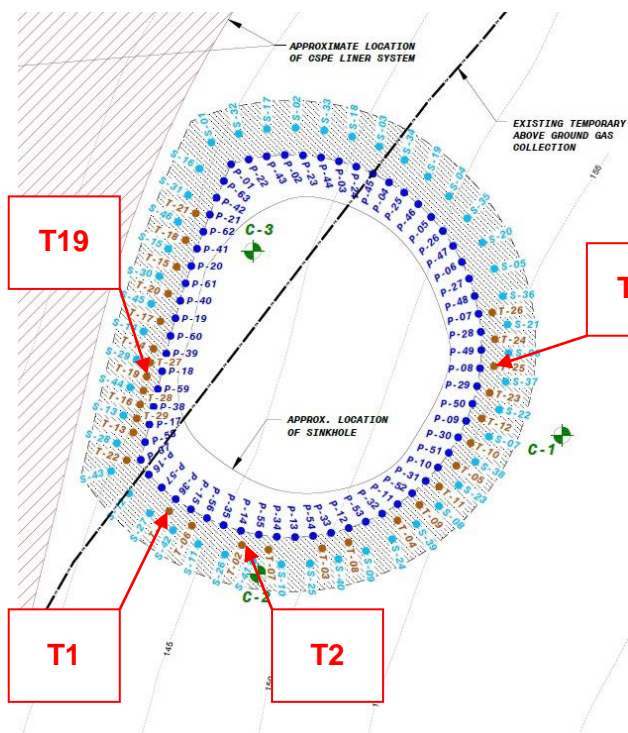
T19 – Drill (completed) T19 – Grout (completed)

T25 – Drill (incompleted)

Qty	Equipment Onsite	Qty	Equipment Onsite
2	SM-20 Drill Rigs	2	Schwing Pumps
1	Skid Steer	2	Frack Tanks
1	Small Excavator	2	Water Tanks
1	Forklift		
Other: RAM, arc welder, lights, water pumps			
Farm Tractors -		Implement:	
		Implement	

Total Grout Order = 40 cu.yd.; Return = 9.6 cu.yd.

WORK AREA





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DAILY FIELD REPORT

Route To:	Carl Christmann, P.E.	Copy To:	Richard Siemering, P.E.
Date:	4/30/2013	Page:	
Project No:	13354.8	Client:	HDR Engineering, Inc.
Location:	Hillsborough County Southeast Landfill		
AMEC Staff:	Mark Chomtid, P.E.; Ricardo Kiriakidis, P.E.; Kevin Jobes		

Other Activities / Comments:

WORK ACTIVITIES

- AMEC's staff arrived onsite at 7:00 am and performed the daily site inspection prior to starting work activities.

Point "T1"

- Resume drilling from 210 feet below grade
- Start drilling @ 7:15 am
- Finished drilling @ 7:50 am
- **(Final Depth of Point T1 = 240 feet below grade COMPLETED).**
- Truck # 157 arrived @ 8:30 am
- Start grout @ 8:56 am; Line pressure: 360 psi; Slump = 4"
- Finished grout @ 9:45 am; returned 4.6 cu.yd
- **(Total grout quantity for Point T1 = 5.4 cu.yd. COMPLETED).**

Point "T2"

- New starter installed
- Start drilling @ 10:12 am
- Finished drilling @ 12:00 pm
- **(Final Depth of Point T2 = 240 feet below grade COMPLETED).**
- Delay – waiting for truck to return
- Truck # 159 arrived @ 2:40 pm
- Start grout @ 2:45 pm; Line pressure: 180 psi; Slump = 5"
- Finished grout @ 3:25 pm
- Remainder of truck # 155 sent to point T19
- **(Total grout quantity for Point T2 = 7.2 cu.yd. COMPLETED).**

Point "T25"

- New starter installed; worked on swivel @ 4:15 pm
- Started drilling @ 5:42 pm
- Finished drilling for the day @ 6:00 pm
- **(Depth of Point T25 = 15 feet below grade INCOMPLETE).**



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DAILY FIELD REPORT

Route To:	Carl Christmann, P.E.	Copy To:	Richard Siemering, P.E.
Date:	4/30/2013	Page:	
Project No:	13354.8	Client:	HDR Engineering, Inc.
Location:	Hillsborough County Southeast Landfill		
AMEC Staff:	Mark Chomtid, P.E.; Ricardo Kiriakidis, P.E.; Kevin Jobes		

Point "T19"

- Start drilling @ 7:35 am
- Started duplex @ 9:15 am @ 120 feet
- Finished drilling @ 10:51 am
- **(Final Depth of Point T19 = 240 feet below grade COMPLETED).**
- Truck # 158 arrived @ 12:05 pm
- Start grout @ 12:15 pm; Line pressure: 200 psi; Slump = 4.5"
- Finished truck # 158 @ 1:35 pm
- Continued truck # 159 @ 3:35 pm, Line pressure: 200 psi; Slump = 5"
- Finished grout @ 3:50 pm
- Truck # 160 arrived @ 5:50 pm,
- Start grout @ 5:52 pm; , Line pressure: 200 psi; Slump = 5"
- Finished grout @ 6:18 pm
- **(Total grout quantity for Point T19 = 17.8 cu.yd. COMPLETED).**



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DAILY FIELD REPORT

Route To:	Carl Christmann, P.E.	Copy To:	Richard Siemering, P.E.
Date:	5/01/2013	Page:	
Project No:	13354.8	Client:	HDR Engineering, Inc.
Location:	Hillsborough County Southeast Landfill		
AMEC Staff:	Mark Chomtid, P.E.; Ricardo Kiriakidis, P.E.; Kevin Jobes		
Inspector	Mark Chomtid, P.E.; Kevin Jobes		
Reviewed by	Carl Christmann, P.E.		

Contractor Earth Tech, Inc.

Contractor Supvr

Hours Worked:

Onsite 7:10 am 4:30 pm

Lunch

Day: ☐ Monday ☐ Tuesday ☒ Wednesday ☐ Thursday

☐ Friday ☐ Saturday ☐ Sunday

Weather: Wind Dir Wind Speed

☒ Cloudy ☐ Sunny ☒ Overcast ☒ Rainy ☐ Stormy

Work Performed:

T21 – Drill (completed) T21 – Grout (completed)

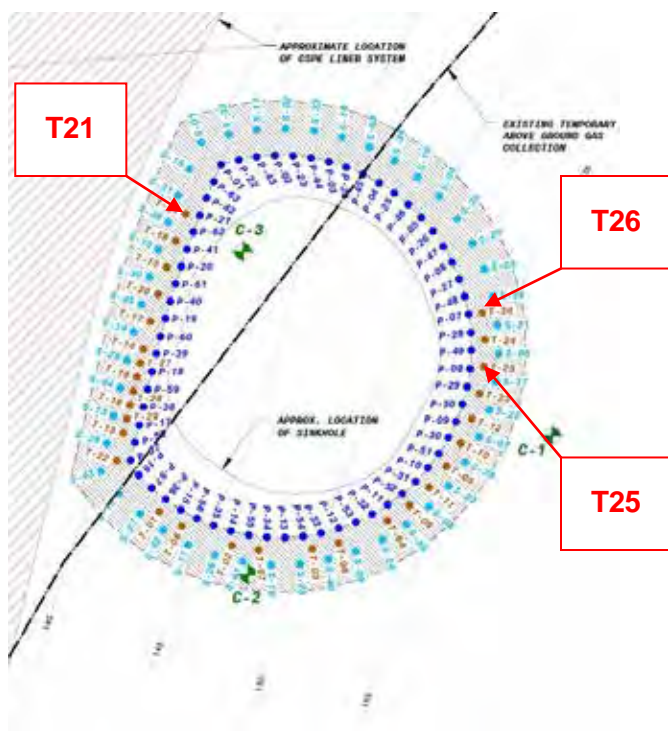
T25 – Drill (completed) T25 – Grout (completed)

T26 – Drill (completed) T26 – Grout (completed)

Qty	Equipment Onsite	Qty	Equipment Onsite
2	SM-20 Drill Rigs	2	Schwing Pumps
1	Skid Steer	2	Frack Tanks
1	Small Excavator	2	Water Tanks
1	Forklift		
Other: RAM, arc welder, lights, water pumps			
Farm Tractors -		Implement:	
		Implement	

Total Grout Order = 40 cu.yd.; Return = 9.6 cu.yd.

WORK AREA





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DAILY FIELD REPORT

Route To:	Carl Christmann, P.E.	Copy To:	Richard Siemering, P.E.
Date:	5/01/2013	Page:	
Project No:	13354.8	Client:	HDR Engineering, Inc.
Location:	Hillsborough County Southeast Landfill		
AMEC Staff:	Mark Chomtid, P.E.; Ricardo Kiriakidis, P.E.; Kevin Jobes		

Other Activities / Comments:

WORK ACTIVITIES

- AMEC's staff arrived onsite at 7:10 am and performed the daily site inspection prior to starting work activities.

Point "T25"

- Start drilling @ 7:49 am
- Object stuck in inside casing @ 105 feet below grade; dropped weight to clear object
- Finished drilling @ 10:34 am
- (Final Depth of Point T25 = 240 feet below grade COMPLETED).
- Truck # 161 arrived @ 10:50 am
- Start grout @ 11:10 am; Line pressure: 340 psi; Slump = 3"
- Finished grout @ 12:00 pm
- Remainder of truck # 161 sent to T21
- (Total grout quantity for Point T25 = 7.8 cu.yd. COMPLETED).

Point "T26"

- Start drilling @ 12:30 pm
- Object stuck in inside casing @ 100 feet below grade; dropped weight to clear object
- Resumed drilling @ 1:30 pm
- Finished drilling @ 3:04 pm
- (Final Depth of Point T26= 240 feet below grade COMPLETED).
- Delay – waiting for truck to return
- Continued truck # 162 @ 3:05 pm
- Line pressure: 200 psi; Slump = 4.5"
- Finished grout @ 4:00 pm; returned 3 cu.yd.
- (Total grout quantity for Point T26 = 4.6 cu.yd. COMPLETED).

Point "T21"

- Start drilling @ 7:34 am
- Started duplex @ 9:57 am @ 165 feet
- Finished drilling @ 11:03 am
- (Final Depth of Point T21 = 230 feet below grade COMPLETED).
- Continued truck # 161 @ 12:07 pm
- Line pressure: 280 psi; Slump = 3"
- Finished truck # 161 @ 12:44 pm
- Truck # 162 arrived @ 12:40 pm
- Start grout @ 12:45 pm
- Remainder of truck @ 162 sent to point T26
- (Total grout quantity for Point T21 = 4.6 cu.yd. COMPLETED).



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DAILY FIELD REPORT

Route To:	Carl Christmann, P.E.	Copy To:	Richard Siemering, P.E.
Date:	5/02/2013	Page:	
Project No:	13354.8	Client:	HDR Engineering, Inc.
Location:	Hillsborough County Southeast Landfill		
AMEC Staff:	Mark Chomtid, P.E.; Ricardo Kiriakidis, P.E.; Kevin Jobes		
Inspector	Mark Chomtid, P.E.; Kevin Jobes		
Reviewed by	Carl Christmann, P.E.		

Contractor Earth Tech, Inc.

Contractor Supvr

Hours Worked:

Onsite 7:10 am 3:30 pm

Lunch

Day: ☐ Monday ☐ Tuesday ☐ Wednesday ☒ Thursday

☐ Friday ☐ Saturday ☐ Sunday

Weather: Wind Dir Wind Speed

☒ Cloudy ☐ Sunny ☒ Overcast ☒ Rainy ☐ Stormy

Work Performed:

T20 – Drill (incomplete);

T22 – Drill (completed) T22 – Grout (completed)

T23 – Drill (completed) T23 – Grout (completed)

T24 – Drill (completed) T24 – Grout (completed)

Qty	Equipment Onsite	Qty	Equipment Onsite
-----	------------------	-----	------------------

2	SM-20 Drill Rigs	2	Schwing Pumps
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1	Skid Steer	2	Frack Tanks
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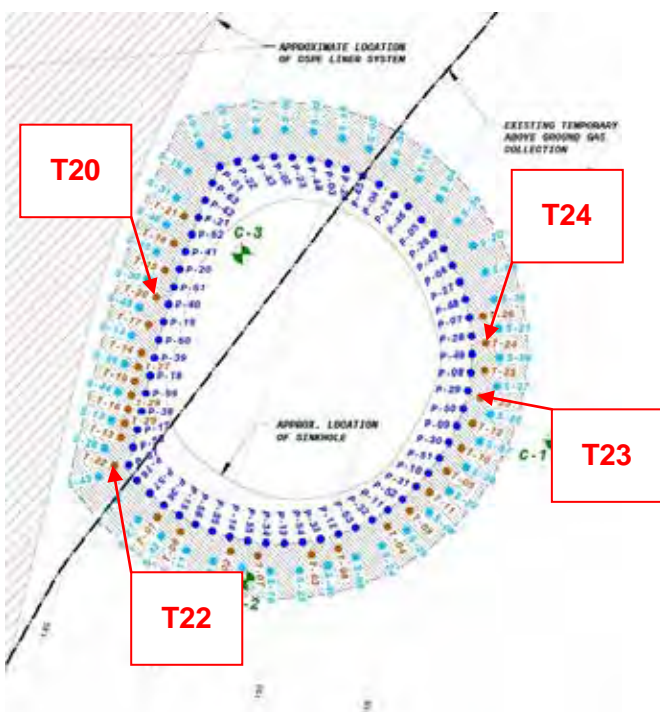
1	Small Excavator	2	Water Tanks
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1	Forklift		
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Other: RAM, arc welder, lights, water pumps

Total Grout Order = 20 cu.yd.; Return = 3.8 cu.yd.

WORK AREA



Farm Tractors -

Implement:

Implement



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DAILY FIELD REPORT

Route To:	Carl Christmann, P.E.	Copy To:	Richard Siemering, P.E.
Date:	5/02/2013	Page:	
Project No:	13354.8	Client:	HDR Engineering, Inc.
Location:	Hillsborough County Southeast Landfill		
AMEC Staff:	Mark Chomtid, P.E.; Ricardo Kiriakidis, P.E.; Kevin Jobes		

Other Activities / Comments:

WORK ACTIVITIES

- AMEC's staff arrived onsite at 7:10 am and performed the daily site inspection prior to starting work activities.

Point "T24"

- New starter installed
- Start drilling @ 7:40 am
- Obstruction in casing @ 60 feet below grade
- Resumed drilling @ 8:23 am; swivel came off @ hose connection; drilling paused
- Resumed Drilling @ 8:38 am
- Finished drilling @ 10:25 am
- (Final Depth of Point T24 = 240 feet below grade COMPLETED).
- Truck # 163 arrived @ 10:14 am
- Start grout @ 10:34 am; Line pressure: 240 psi; Slump = 4.5"
- Finished grout @ 11:15 am
- Remainder of truck # 163 sent to T22
- (Total grout quantity for Point T24 = 6 cu.yd. COMPLETED).

Point "T23"

- Start drilling @ 11:37 am;
- Finished drilling @ 1:06 pm
- (Final Depth of Point T23 = 240 feet below grade COMPLETED).
- Truck # 164 arrived @ 1:36 pm
- Start grout @ 2:10 pm; Line pressure: 220 psi; Slump = 4"
- Finished grout @ 4:55 pm; returned 3.8 cu.yd.
- (Total grout quantity for Point T23 = 6.2 cu.yd. COMPLETED).

Point "T22"

- Start drilling @ 7:46 am With 5" casing
- Observed very firm zone after 170 feet below grade
- Finished drilling @ 12:05 pm
- (Final Depth of Point T22 = 240 feet below grade COMPLETED).
- Continued truck # 163 @ 12:14 pm
- Line pressure: 260 psi; Slump = 4"
- Finished truck # 163 @ 12:55 pm
- (Total grout quantity for Point T22 = 4 cu.yd. COMPLETED).

Point "T20"

- New starter installed
- Start drilling @ 1:44 pm;
- Stopped drilling @ 2:45 pm
- Driller did not want to leave pipe in ground overnight
- (Depth of Point T20 = 100 feet below grade INCOMPLETE).



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DAILY FIELD REPORT

Route To:	Carl Christmann, P.E.	Copy To:	Richard Siemering, P.E.
Date:	5/03/2013	Page:	
Project No:	13354.8	Client:	HDR Engineering, Inc.
Location:	Hillsborough County Southeast Landfill		
AMEC Staff:	Mark Chomtid, P.E.; Ricardo Kiriakidis, P.E.; Kevin Jobes		
Inspector	Mark Chomtid, P.E.; Kevin Jobes		
Reviewed by	Carl Christmann, P.E.		

Contractor Earth Tech, Inc.

Contractor Supvr

Hours Worked:

Onsite 7:10 am 2:30 pm

Lunch

Day: ☐ Monday ☐ Tuesday ☐ Wednesday ☐ Thursday

☒ Friday ☐ Saturday ☐ Sunday

Weather: Wind Dir Wind Speed

☒ Cloudy ☐ Sunny ☒ Overcast ☒ Rainy ☐ Stormy

Work Performed:

T6 – Drill (completed) T6 – Grout (completed)

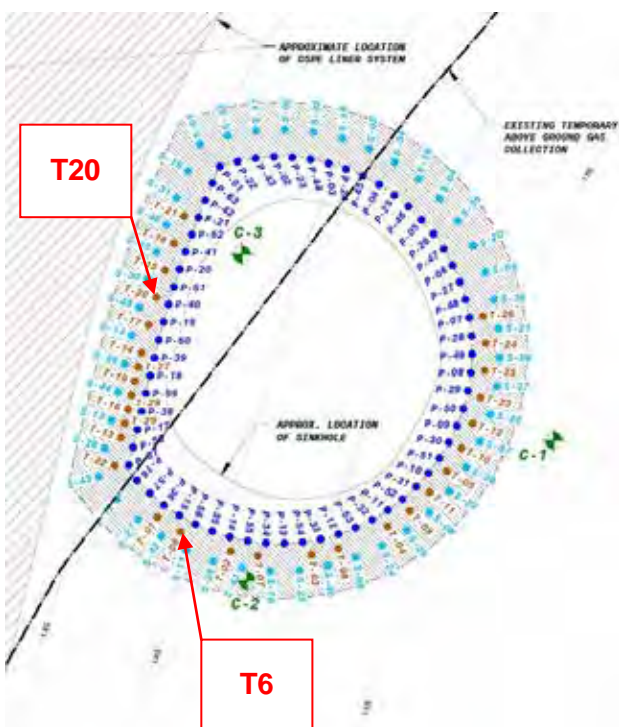
T20 – Drill (completed) T20 – Grout (completed)

Qty	Equipment Onsite	Qty	Equipment Onsite
2	SM-20 Drill Rigs	2	Schwing Pumps
1	Skid Steer	2	Frack Tanks
1	Small Excavator	2	Water Tanks
1	Forklift		

Other: RAM, arc welder, lights, water pumps

Total Grout Order = 20 cu.yd.; Return = 9 cu.yd.

WORK AREA



Farm Tractors -

Implement:

Implement



2000 E Edgewood Dr, Ste. 215
Lakeland FL 33803
863-667-2345
www.amec.com

DAILY FIELD REPORT

Route To:	Carl Christmann, P.E.	Copy To:	Richard Siemering, P.E.
Date:	5/03/2013	Page:	
Project No:	13354.8	Client:	HDR Engineering, Inc.
Location:	Hillsborough County Southeast Landfill		
AMEC Staff:	Mark Chomtid, P.E.; Ricardo Kiriakidis, P.E.; Kevin Jobes		

Other Activities / Comments:

WORK ACTIVITIES

- AMEC's staff arrived onsite at 7:10 am and performed the daily site inspection prior to starting work activities.
- After T20 & T6 complete: paperwork & planning until 2:30 pm

Point "T20"

- Started advancing inner rod @ 7:20 am
- Start duplex @ 8:00 am from 100 feet
- Finished drilling @ 9:52 am
- Finished removing the inner rod @ 10:15 am
- **(Final Depth of Point T20 = 230 feet below grade COMPLETED).**
- Truck # 165 arrived @ 10:30 am
- Start grout @ 10:36 am; Line pressure: 280 psi; Slump = 4"
- Finished grout @ 11:20 am
- Remainder of truck # 165 sent to T6
- **(Total grout quantity for Point T20 = 7.1 cu.yd. COMPLETED).**

Point "T6"

- New starter installed
- Start drilling @ 7:44 am;
- Finished drilling @ 10:35 am
- **(Final Depth of Point T6 = 240 feet below grade COMPLETED).**
- Continued truck # 165 @ 11:25 am
- Line pressure: 300 psi; Slump = 4"
- Finished truck # 165 @ 11:35 pm
- Truck # 166 arrived @ 12:00 pm
- Start grout @ 12:05 pm
- Finished grout @ 12:17 pm; returned 9 cu.yd.
- **(Total grout quantity for Point T6 = 3.9 cu.yd. COMPLETED).**



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DAILY FIELD REPORT

Route To:	Carl Christmann, P.E.	Copy To:	Richard Siemerling, P.E.
Date:	5/06/2013	Page:	
Project No:	13354.8	Client:	HDR Engineering, Inc.
Location:	Hillsborough County Southeast Landfill		
AMEC Staff:	Mark Chomtid, P.E.; Ricardo Kiriakidis, P.E.; Kevin Jobes		
Inspector	Mark Chomtid, P.E.; Kevin Jobes		
Reviewed by	Carl Christmann, P.E.		

Contractor Earth Tech, Inc.

Contractor Supvr

Hours Worked:

Onsite 7:10 am 5:30 pm

Lunch

Day: ☒ Monday ☐ Tuesday ☐ Wednesday ☐ Thursday

☐ Friday ☐ Saturday ☐ Sunday

Weather: Wind Dir Wind Speed

☐ Cloudy ☐ Sunny ☐ Overcast ☐ Rainy ☐ Stormy

Work Performed:

T27 – Drill (completed)

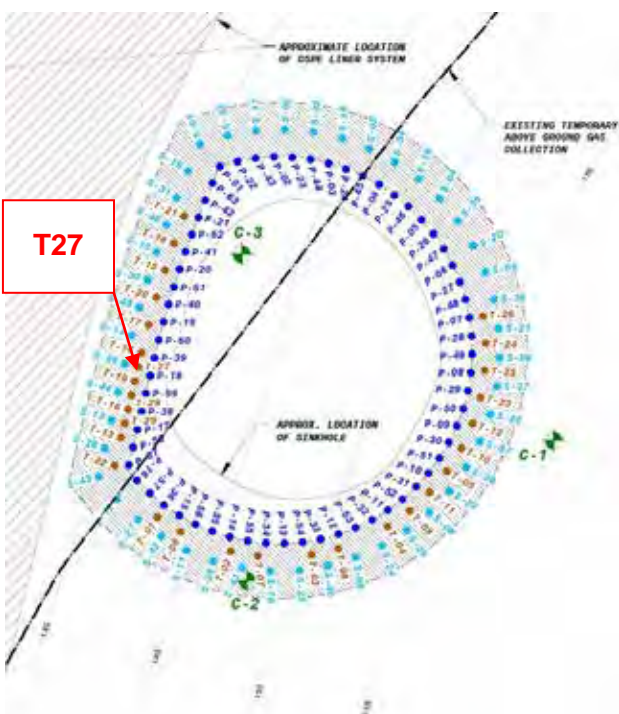
T27 – Grout (incomplete)

Qty	Equipment Onsite	Qty	Equipment Onsite
2	SM-20 Drill Rigs	2	Schwing Pumps
1	Skid Steer	2	Frack Tanks
1	Small Excavator	2	Water Tanks
1	Forklift		

Other: RAM, arc welder, lights, water pumps

Total Grout Order = 10 cu.yd.; Return = 0 cu.yd.

WORK AREA



Farm Tractors -

Implement:

Implement



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DAILY FIELD REPORT

Route To:	Carl Christmann, P.E.	Copy To:	Richard Siemering, P.E.
Date:	5/06/2013	Page:	
Project No:	13354.8	Client:	HDR Engineering, Inc.
Location:	Hillsborough County Southeast Landfill		
AMEC Staff:	Mark Chomtid, P.E.; Ricardo Kiriakidis, P.E.; Kevin Jobes		

Other Activities / Comments:

WORK ACTIVITIES

- AMEC's staff arrived onsite at 7:10 am and performed the daily site inspection prior to starting work activities.
- Downtime from 7:10 am to 10:19 am waiting for surveyors

Point "T27"

- Start drilling @ 10:19 am
- @ 2:17 am could not advance past 200 feet
- Will have to duplex
- Start duplex @ 2:50 pm
- Finished drilling @ 3:35 pm
- Will remove inner rod
- **(Final Depth of Point T27 = 240 feet below grade COMPLETED).**
- Truck # 167 arrived @ 1:32 pm
- Start grout @ 4:16 pm; Line pressure: 280 psi
- Finished grout @ 5:15 pm
- **(Total grout quantity for Point T27 = 10 cu.yd. INCOMPLETE).**



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DAILY FIELD REPORT

Route To:	Carl Christmann, P.E.	Copy To:	Richard Siemerling, P.E.
Date:	5/07/2013	Page:	
Project No:	13354.8	Client:	HDR Engineering, Inc.
Location:	Hillsborough County Southeast Landfill		
AMEC Staff:	Mark Chomtid, P.E.; Ricardo Kiriakidis, P.E.; Kevin Jobes		
Inspector	Mark Chomtid, P.E.; Kevin Jobes		
Reviewed by	Carl Christmann, P.E.		

Contractor Earth Tech, Inc.

Contractor Supvr

Hours Worked:

Onsite 7:10 am 5:00 pm

Lunch

Day: ☐ Monday ☒ Tuesday ☐ Wednesday ☐ Thursday

☐ Friday ☐ Saturday ☐ Sunday

Weather: Wind Dir Wind Speed

☐ Cloudy ☒ Sunny ☐ Overcast ☐ Rainy ☐ Stormy

Work Performed:

T27 – Grout (completed)

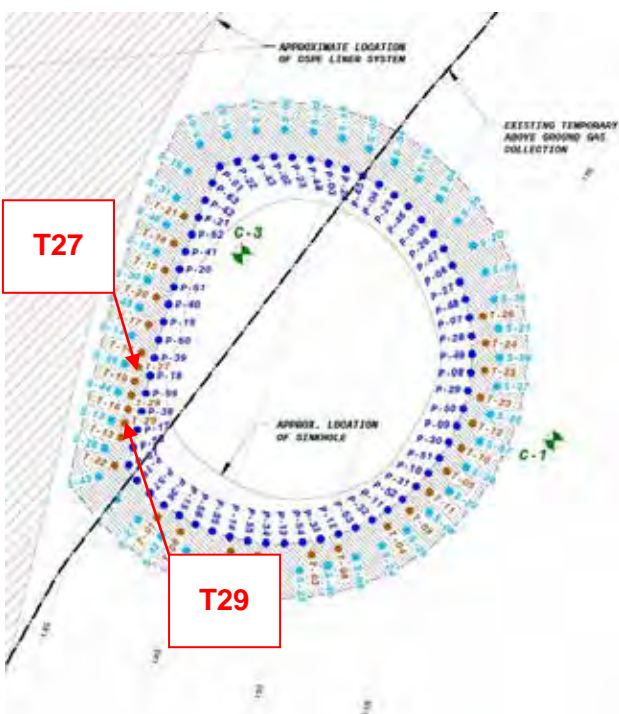
T29 – Drill (completed) T29 – Grout (completed)

Qty	Equipment Onsite	Qty	Equipment Onsite
2	SM-20 Drill Rigs	2	Schwing Pumps
1	Skid Steer	2	Frack Tanks
1	Small Excavator	2	Water Tanks
1	Forklift		

Other: RAM, arc welder, lights, water pumps

Total Grout Order = 40 cu.yd.; Return = 8 cu.yd.

WORK AREA



Farm Tractors -

Implement:

Implement



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DAILY FIELD REPORT

Route To:	Carl Christmann, P.E.	Copy To:	Richard Siemering, P.E.
Date:	5/07/2013	Page:	
Project No:	13354.8	Client:	HDR Engineering, Inc.
Location:	Hillsborough County Southeast Landfill		
AMEC Staff:	Mark Chomtid, P.E.; Ricardo Kiriakidis, P.E.; Kevin Jobes		

Other Activities / Comments:

WORK ACTIVITIES

- AMEC's staff arrived onsite at 7:10 am and performed the daily site inspection prior to starting work activities.
- Met with contractor

Point "T27"

- Truck # 168 arrived @ 7:35 am
- Start grout @ 7:45 am
- Line pressure: 160 psi; Slump = 5"
- Finished truck @ 8:10 am
- So far 20 cu.yd. @ 150 feet
- Waited for the next truck
- Truck # 169 arrived @ 9:05 am
- Start grout @ 9:13 am
- Line pressure: 360 psi; Slump = 3"
- Finished grout @ 9:50 am; returned 5.7 cu.yd
- **(Total grout quantity for Point T27 = 24.3 cu.yd. COMPLETED).**

Point "T29"

- Start drilling @ 10:15 am
- @ 10:45 am stopped to install inner rod
- Resumed drilling @ 11:02 am
- Finished drilling @ 1:22 pm
- Removed inner rod
- **(Final Depth of Point T29 = 240 feet below grade COMPLETED).**
- Truck # 170 arrived @ 2:16 pm
- Start grout @ 2:22 pm
- Line pressure: 200 psi; Slump = 5"
- Finished truck # 170 @ 3:05 pm
- Truck # 171 arrived @ 4:40 pm
- Start grout 4:50 pm
- Finished grout @ 5:20 pm; returned 2.3 cu.yd
- **(Total grout quantity for Point T29 = 7.7 cu.yd. COMPLETED).**



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DAILY FIELD REPORT

Route To:	Carl Christmann, P.E.	Copy To:	Richard Siemering, P.E.
Date:	5/08/2013	Page:	
Project No:	13354.8	Client:	HDR Engineering, Inc.
Location:	Hillsborough County Southeast Landfill		
AMEC Staff:	Mark Chomtid, P.E.; Ricardo Kiriakidis, P.E.; Kevin Jobes		
Inspector	Mark Chomtid, P.E.; Kevin Jobes		
Reviewed by	Carl Christmann, P.E.		

Contractor Earth Tech, Inc.

Contractor Supvr

Hours Worked:

Onsite 7:10 am 3:10 pm

Lunch

Day: ☐ Monday ☐ Tuesday ☒ Wednesday ☐ Thursday

☐ Friday ☐ Saturday ☐ Sunday

Weather: Wind Dir Wind Speed

☐ Cloudy ☒ Sunny ☐ Overcast ☐ Rainy ☐ Stormy

Work Performed:

T28 – Drill (completed)

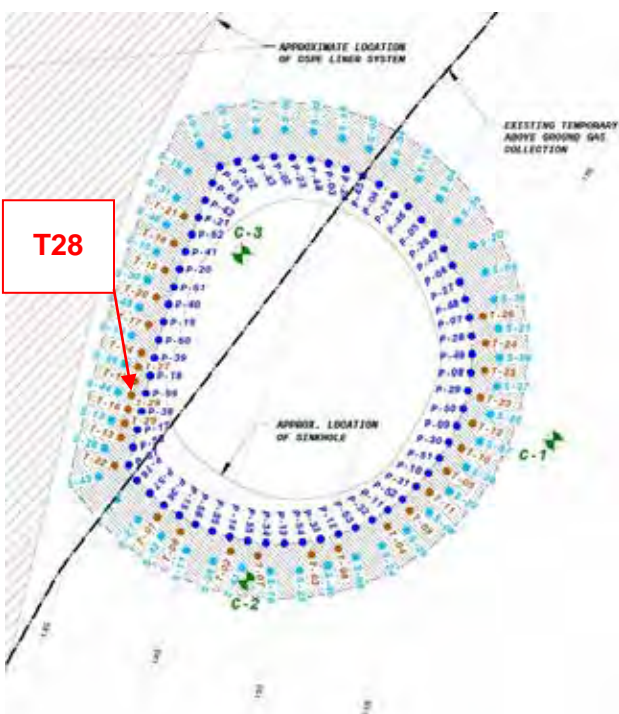
T28 – Grout (completed)

Qty	Equipment Onsite	Qty	Equipment Onsite
2	SM-20 Drill Rigs	2	Schwing Pumps
1	Skid Steer	2	Frack Tanks
1	Small Excavator	2	Water Tanks
1	Forklift		

Other: RAM, arc welder, lights, water pumps

Total Grout Order = 10 cu.yd.; Return = 3.4 cu.yd.

WORK AREA



Farm Tractors - Implement:
Implement



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DAILY FIELD REPORT

Route To:	Carl Christmann, P.E.	Copy To:	Richard Siemering, P.E.
Date:	5/08/2013	Page:	
Project No:	13354.8	Client:	HDR Engineering, Inc.
Location:	Hillsborough County Southeast Landfill		
AMEC Staff:	Mark Chomtid, P.E.; Ricardo Kiriakidis, P.E.; Kevin Jobes		

Other Activities / Comments:

WORK ACTIVITIES

- AMEC's staff arrived onsite at 7:10 am and performed the daily site inspection prior to starting work activities.
- Corresponded with Mark Chomtid, P.E.(AMEC) & Joe O'Neil (Civil Design/HDR) about grout take of last point. Also spoke with John Barnes (EarthTech) & informed him that no additional points were needed.

Point "T28"

- Start drilling @ 7:35 am
- @ 7:48 am stopped to install inner rod @ 40 feet – encountering some hard material
- Resumed drilling @ 8:25 am – something very hard @ 40 feet: over 10 minutes of drilling with inner rods @ 8:51 am still unable to go through obstruction
- Abandon point location – move T28 approximately 1 foot to the North towards T27 – OK by Ricardo K.
- Resume / reinstall casing @ 9:08
- From 9:20 am to 9:25 am: drilling was very hard from 37 to 40 feet; installed new clay bit
- Was able to break through
- @ 11:35 am winch cable not working – crew working to repair
- Resumed drilling @ 11:55 am
- Finished drilling @ 12:56 pm
- **(Final Depth of Point T28 = 240 feet below grade COMPLETED).**
- Truck # 172 arrived @ 12:54 pm
- Start grout @ 1:40 pm
- Line pressure: 240 psi; Slump = 4.5"
- Finished grout @ 2:20 pm; returned 3.4 cu.yd
- **(Total grout quantity for Point T28 = 6.6 cu.yd. COMPLETED).**

APPENDIX C

Drilling Logs



4919 West Laurel Street
Tampa, Florida 33607
Phone: (813) 289-0750
Fax: (813)289-5474

COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: C1
Elev: 155.66 ft

Date Drilled: Started on 2/11/2013; Finished on 2-12-2013
Date Grouted: 2/12/2013
Inspector: RK

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
0-5'	8:10 AM	*	50-80	150	Started 3:45 PM, 4" casing, Plumb, SD
5-10		*	50-80	120	continuous and steady drilling, SD, (driller going up and down when resistance)
10-15		*	50-80	130	SD
15-20		10s	50-80	120	SD
20-25		15s	50-80	120	SD
25-30		15s	50-80	135	SD
30-35		slow	50-80	130	hitting something hard, possibly debris
35-40		obs.	50-80	120-180	debris, HD
40-45		2.5m	50-80	120-140	debris, HD
45-50		2.5m	50-80	120	debris, HD, last 2' SD
50-55		22s	50-80	115	very SD
55-60		20s	50-80	115	very SD,
60-65		57s	50-80	120	SD
65-70		30s	50-80	120	SD
70-75		25s	50-80	120	SD
75-80		25s	50-80	120	SD
80-85		50s	50-80	135	HD, LSC
85-90		1.5m	50-80	135-170	HD, LSC
90-95		1.25m	50-80	115	medium dense
95-100		2.25m	50-80	120-180	medium drilling, TC near the end, Stopped drilling, will resume next day
100-105	7:20 AM	50s	50-80	130	2-12-2013, resumed drilling at 7:20 AM, slight LSC
105-110		42s	50-80	130	slight LSC
110-115		40s	50-80	130	slight LSC
115-120		50s	50-80	130	slight LSC

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.

COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: C1
Elev: 155.66 ft

Date Drilled: 2/11/2013
Date Grouted: 2/11/2013
Inspector: R.K

[illegible]

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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Tampa, Florida 33607
Phone: (813) 289-0750
Fax: (813)289-5474

COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: C2
Elev: 151.49 ft

Date Drilled: 2/11/2013
Date Grouted: 2/11/2013
Inspector: RK

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
0-5'	8:10 AM		50-80	100-150	SD
5-10			50-80	100-150	SD
10-15			50-80	100-150	SD
15-20			50-80	100-150	SD
20-25			50-80	100-150	SD
25-30			50-80	100-150	SD
30-35			50-80	100-150	SD
35-40			50-80	100-150	SD
40-45			50-80	100-150	SD
45-50			50-80	100-150	SD
50-55			50-80	100-150	SD
55-60			50-80	100-150	SD
60-65			50-80	100-150	SD
65-70			50-80	100-150	SD
70-75			50-80	100-150	SD
75-80			50-80	100-150	SD
80-85			50-80	100-200	HD,C
85-90			50-80	100-200	HD,C
90-95			50-80	100-200	HD,C
95-100			50-80	100-200	HD,C
100-105			50-80	150-200	Very HD,C
105-110			50-80	150-200	Very HD,C
110-115			80	150-200	Very HD,C
115-120			80	150-200	Very HD,C

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



4919 West Laurel Street
Tampa, Florida 33607
Phone: (813) 289-0750
Fax: (813)289-5474

COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: C2
Elev: 151.49 ft

Date Drilled: 2/11/2013
Date Grouted: 2/11/2013
Inspector: R.K

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
120-125			80	150-200	Very HD,C
125-130			80	150-200	Very HD,C
130-135			50-80	100-180	HD, C
135-140			50-80	100-180	HD, C
140-145			50-80	100-180	HD, C
145-150			50-80	100-180	HD, C
150-155			50-80	100-180	HD, C
155-160			50-80	100-180	HD, C
160-165			50-80	100-180	HD, C
165-170			50-80	100-180	HD, C
170-175			50-80	100-180	HD, C
175-180			50-80	100-180	HD, C
180-185			50-80	100-150	SD
185-190			50-80	100-150	SD
190-195			50-80	100-150	SD
195-200			50-80	100-150	SD
200-205			50-80	100-150	SD
205-210			50-80	100-150	SD
210-215			50-80	100-150	SD
215-220			50-80	100-150	SD
220-225			50-80	100-150	medium hard
225-230			50-80	100-150	medium hard
230-235			50-80	100-150	medium hard
235-240			50-80	100-150	medium hard

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.

COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: C2
Elev: 151.49 ft

Date Drilled: 2/11/2013
Date Grouted: 2/11/2013
Inspector: R.K

[illegible]

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



4919 West Laurel Street
Tampa, Florida 33607
Phone: (813) 289-0750
Fax: (813)289-5474

COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: C3
Elev: 147.87 ft

Date Drilled: Started on 2/12/2013; 5" casing
Date Grouted: 2/13/2013
Inspector: RK

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
0-5'	10:00 AM	1 min	50	100	Started 10:00 AM, 5" casing, Plum, SD
5-10		1 min	50	100	
10-15		50 sec	50	100-200	
15-20		55 sec	50-75	100-150	
20-25		25 sec	50	150-200	
25-30		45 sec	50	100	SD
30-35		45 sec	50	100-150	
35-40		2 min	50-70	100-110	LSC
40-45		1 min	50-70	100-105	LSC
45-50		15 min	50-60	100-110	LSC
50-55		2 min	50-60	160	LSC
55-60		2 min	50	180-200	TC (rotation stopped at ~57-60)
60-65		43 sec	55-60	170	
65-70		30 sec	50-60	100-120	
70-75		30 sec	50	110-120	
75-80		1 min	50	170-200	
80-85		2 min	50	110-140	
85-90		2 min	50-70	100-120	
90-95		1 min	50-60	110-120	
95-100		4 min	50	170	
100-105	7:20 AM	1 min	50-60	160	LSC
105-110		1 min	50-60	160	LSC
110-115		2 min	50-60	140-160	LSC
115-120		4 min	50-70	140-180	LSC

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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Phone: (813) 289-0750
Fax: (813)289-5474

COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: C3
Elev 147.87 ft

Date Drilled: 2/12/2013
Date Grouted: 2/12/2013
Inspector: R.K

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
120-125		2m	50	140	no compression
125-130		2m	50	160-180	some LSC
130-135		4m	50-70	160-240	some LSC
135-140		5m	50-70	140-220	some LSC
140-145		4m	50-100	160-220	some LSC
145-150		4m	50-60	180-240	some LSC
150-155		1m	50	200	some LSC
155-160		6m	50	140-200	some LSC
160-165		1m	50	160-220	some LSC
165-170		45m	50-90	160-240	some LSC, possibly limestone
170-175		10m	50-100	200-240	high LSC
175-180		40m	50-100	200-240	high LSC
180-185		2m	50	160-220	SD, CR
185-190		22m	50-70	180-240	high LSC
190-195		1m	50	220	SD, CR
195-200		4m	50-60	200-240	LSC
200-205		2m	50	200-240	SD, CR
205-210		3m	50	200-240	SD, CR
210-215		4m	50	200-240	SD, CR
215-220		2m	50	200-240	SD, CR
220-225		7m	50	200-280	SD, CR
225-230		2m	50	180	SD, CR
230-235		3m	50	200-220	stopped due to hydraulic leak at 12:40 PM, restart at 1:00 PM, stopped again due to clogged pipe at 3:40 PM will extract casing.

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.

COMPACTION GROUT REPORT

Project:	SE County Landfill
Project #:	13354x8
Pin #:	C3
Elev:	147.87 ft

Date Drilled: Started 2/12/2013 cont on 2/13/13
Date Grouted: 2/14/2013
Inspector: RK

[illegible]

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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Tampa, Florida 33607
Phone: (813) 289-0750
Fax: (813)289-5474

COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: C3
Elev: 147.87 ft

Date Drilled: 2/14/13 re-drill to 80' and re-grout
Date Grouted: 2/14/2013
Inspector: RK

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
0-5	12:30 PM		50	180-200	Resumed drilling at 12:30 pm
5-10			50	180-200	SD
10-15			50	180-200	SD
15-20			50	180-200	SD
20-25			50	180-200	SD
25-30			50	180-200	SD
30-35			50	180-200	SD
35-40			50	180-200	SD
40-45			50	180-200	SD
45-50			50	180-200	SD
50-55			50	180-200	SD
55-60			50	180-200	SD
60-65			50	180-200	SD
65-70			50	180-200	SD
70-75			50	180-200	SD
75-80		1:30 PM	50	180-200	Hit old grout. Drilling stopped. TERMINATED AT 80 FT at 1:30 PM

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



4919 West Laurel Street
Tampa, Florida 33607
Phone: (813) 289-0750
Fax: (813)289-5474

COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: P1
Elev: 146.9

Date Drilled: 2/22/2013
Date Grouted: ABANDONED
Inspector: RK

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
0-5'	12:35 PM	13s	50	100-150	SD
5-10	-	15s	50-80	100-150	SD
10-15	12:52 PM	15s	50-80	100-150	SD
15-20	-	15s	50-80	100-150	SD
20-25	12:56 PM	20s	50	100-150	SD
25-30	-	3m	50-80	150-190	LSC, MD to HD
30-35	1:03 PM	1m 30s	50-80	120-180	LSC, MD to HD
35-40	-	1m 30s	50-800	120-180	LSC, debris
40-45	1:11 PM	25s	50-80	100-150	SD
45-50	-	40s	50-80	100-150	SD
50-55	1:16 PM	1m 8s	50-80	100-150	SD
55-60	-	3m	50-80	120-180	SD-MD
60-65	1:22 PM	20s	50-80	100-150	SD
65-70	-	50s	50-80	100-180	SD
70-75	1:27 PM	50s	50-80	150-180	LSC
75-80	-	1m 10s	50-80	150-180	LSC
80-85	1:33 PM	2m30s	50-80	150-180	LSC
85-90	-	40s	50-80	100-150	LSC
90-95	1:40 PM	1m 30s	50-80	100-180	limestone and sand layers, LSC
95-100	-	2m 10s	50-80	150-180	LSC
100-105	1:47 PM	30s	50-80	100-150	LSC
105-110	-	1m	50-80	100-150	LSC
110-115	1:54 PM	1m 20s	50-80	100-150	LSC
115-120	-	3m 15s	50-80	100-150	LSC, HD to MD

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: P1
Elev: 146.9

Date Drilled: 2/22/2013
Date Grouted: ABANDONED
Inspector: RK

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
120-125	2:03 PM	2m	50-70	100-150	LSC, very HD to SD to HD
125-130		1m 48s	50-70	100-150	LSC, very HD to SD to HD
130-135	2:11 PM	1m 30s	50-70	100-150	LSC, HD
135-140		1m 46s	50-70	100-150	LSC, HD
140-145	2:23 PM	2m 30s	50-70	100-150	LSC, HD, HH
145-150		10s	50-70	100-150	LSC, MD to SD
150-155	2:33 PM	2m	50-70	100-150	LSC, very HD to MD
155-160		2m	50-70	100-150	MD to HD
160-165	2:41 PM	3m	50-80	150-180	MD to SD, LSC, C
165-170		5m	50-80	150-180	VHD, MD, HD
170-175	2:53 PM	2m 30s	50-70	180-200	HD, LSC, C
175-180	-	4m 20s	50-70	180-200	HD, LSC, C
180-185	3:04 PM	2m	50-70	100-150	HD, LSC, C
185-190	-	5m	50-70	100-150	HD, LSC, C
190-195	3:16 PM	5m	50-70	100-150	HD, LSC, C
195-200		8m	50-70	100-150	LOC, SD to very HD, LSC, C
200-205	3:52 PM	14m	50-70	100-150	LSC, very HD, C
205-210		3m	50-70	100-150	LSC, HD to MD, regained circulation
210-215	4:14 PM	3m	50-70	200+	LSC, HD, HH
215-220		1m	50-70	180-200	HD, LSC, C
220-225	4:22 PM	8m	50-70	100-150	LSC, LIMESTONE. EOB 225'

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: P2
Elev: 146.75

Date Drilled: 3/6/2013 - 3/7/2013
Date Grouted: ABANDONED
Inspector: KJ, MC

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
0-5'	4:00 PM		50-70	120-140	SD
5-10		4:01 PM	50-70	120-140	SD
10-15	4:33 PM	4:36 PM	50-70	120-140	SD
15-20	4:36 PM	4:43 PM	50-70	120-140	SD
20-25	4:47 PM	4:51 PM	50-70	120-140	MD
25-30	4:51 PM	4:55 PM	50-70	120-140	MD
30-35	4:58 PM	5:00 PM	50-70	140-160	MD, LSC
35-40	5:00 PM	5:01 PM	50-70	120-140	SD
40-45	8:05 AM		50-70	100-140	SD, USC
45-50		8:06 AM	50-70	100-140	USC, MD
50-55	8:08 AM		50-70	100-140	SD
55-60		8:09 AM	50-70	100-140	SD
60-65	8:20 AM		50-70	100-140	SD
65-70		8:21 AM	50-70	100-140	SD
70-75	8:25 AM	8:26 AM	50-70	100-160	USC, MD
75-80	8:26 AM	8:27 AM	50-70	100-160	USD, MD
80-85	8:31 AM	9:09 AM	50-70	100-160	USC, MD, HD
85-90	9:09 AM	9:11 AM	50-80	100-160	USC, MD, HD
90-95	9:15 AM	9:19 AM	50-80	100-180	USC, HD
95-100	9:19 AM	9:23 AM	50-80	100-180	USC, HD
100-105	9:28 AM	9:30 AM	50-80	100-160	USC, MD, HD
105-110	9:30 AM	9:33 AM	50-80	100-180	USC, HD
110-115	9:50 AM	9:54 AM	50-80	100-180	USC, MD, HD
115-120	9:54 AM	9:56 AM	50-70	100-180	USC, MD, HD

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling; LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: P2
Elev: 146.75

Date Drilled: 3/7/2013
Date Grouted: ABANDONED
Inspector: MC

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
120-125	10:01 AM	10:03 AM	50-90	140-200	USC, HD
125-130	10:03 AM	10:04 AM	50-70	100-160	USC, MD, HD
130-135	10:09 AM	10:11 AM	50-80	100-160	USC, MD
135-140	10:11 AM	10:17 AM	50-80	100-220	USC, HD
140-145	10:22 AM	10:27 AM	50-80	100-180	USC, HD
145-150	10:27 AM	10:28 AM	50-70	100-160	USC, MD
150-155	10:33 AM	10:34 AM	50-70	100-160	USC, SD, MD
155-160	10:34 AM	10:35 AM	50-70	100-160	USC, SD, MD
160-165	10:41 AM	10:43 AM	50-80	100-160	USC, SD
165-170	10:43 AM	10:46 AM	50-80	100-200	USC, MD, HD
170-175	10:50 AM	10:52 AM	50-80	100-180	USC, MD, HD
175-180	10:52 AM	10:55 AM	50-80	100-200	USC, HD
180-185	11:00 AM	11:02 AM	50-80	100-180	USC, MD
185-190	11:02 AM	11:05 AM	50-90	100-200	USC, HD
190-195	11:09 AM	11:11 AM	50-90	100-200	USC, HD, MD
195-200	11:11 AM	11:12 AM	50-80	100-180	USC, SD, MD
200-205	11:15 AM	11:17 AM	50-70	100-220	HH, MD
205-210	11:17 AM	11:18 AM	50-70	100-180	MD, SD
210-215	11:23 AM		50-70	100-160	SD, MD
215-220		11:24 AM	50-70	100-160	SD, MD
220-225	11:28 AM	11:30 AM	50-90	100-220	HD, MD
225-230	11:30 AM	11:32 AM	50-90	100-220	HD, MD Terminated at 230'

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: P3
Elev: 148.00

Date Drilled: 3/7/2013
Date Grouted: 3/8/2013
Inspector: MC

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
0-5'	1:50 PM		50	100-120	SD
5-10		1:51 PM	50	100-120	SD
10-15	1:53 PM		50	100-140	USC, SD
15-20		1:54 PM	50	100-140	USC, SD
20-25	1:57 PM	2:00 PM	50-70	100-180	USC, SD, HD
25-30	2:00 PM	2:05 PM	50-70	140-180	USC, MD, HD
30-35	2:06 PM	2:08 PM	50-70	140-180	USC, MD
35-40	2:08 PM	2:12 PM	50-80	140-180	USC, HD
40-45	2:13 PM	2:15 PM	50-80	140-180	USC, MD, HD
45-50	2:19 PM	2:20 PM	50-80	140-160	USC, SD, MD
50-55	2:21 PM	2:22 PM	50-70	100-140	SD
55-60	2:22 PM	2:23 PM	50-70	100-140	SD
60-65	2:26 PM	2:27 PM	50-70	100-160	USC, SD, MD
65-70	2:27 PM	2:28 PM	50-70	100-140	USC, SD
70-75	2:29 PM	2:30 PM	50-70	100-140	SD
75-80	2:30 PM	2:31 PM	50-80	100-180	USC, MD
80-85	2:34 PM	2:36 PM	50-80	140-200	USC, HD
85-90	2:36 PM	2:37 PM	50-70	140-180	USC, SD, MD
90-95	2:38 PM	2:39 PM	50-70	100-180	USC, SD, MD
95-100	2:39 PM	2:43 PM	50-70	100-180	USC, HD
100-105	3:08 PM	3:09 PM	50-80	140-200	USC, HD, MD
105-110	3:09 PM	3:10 PM	50-80	140-200	USC, MD, HD
110-115	3:14 PM	3:16 PM	50-80	140-200	USC, MD, HD
115-120	3:16 PM	3:18 PM	50-80	140-200	USC, HD

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: P3
Elev: 148.00

Date Drilled: 3/7/2013
Date Grouted: 3/8/2013
Inspector: MC

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
120-125	3:30 PM	3:33 PM	50-80	140-200	USC, MD, HD
125-130	3:33 PM	3:35 PM	50-70	140-180	USC, MD
130-135	3:40 PM	3:41 PM	50-80	140-180	USC, MD
135-140	3:41 PM	3:45 PM	50-80	140-200	USC, HD
140-145	3:48 PM	3:55 PM	50-80	140-200	USC, HD
145-150	3:55 PM	3:57 PM	50-80	140-200	USC, MD
150-155	4:01 PM	4:02 PM	50-80	140-200	USC, MD
155-160	4:02 PM	4:04 PM	50-80	140-200	USC, MD, HD
160-165	4:18 PM	4:21 PM	50-80	140-220	USC, HD
165-170	4:21 PM	4:22 PM	50-80	140-200	USC, MD
170-175	4:26 PM	4:28 PM	50-80	140-200	USC, HD
175-180	4:28 PM	4:31 PM	50-80	140-200	USC, HD
180-185	4:38 PM	4:39 PM	50-80	140-200	USC, MD
185-190	4:39 PM	4:41 PM	50-80	140-220	USC, HD
190-195	4:45 PM	4:48 PM	50-80	140-220	USC, HD
195-200	4:48 PM	4:54 PM	50-80	140-200	USC, HD
200-205	4:57 PM	4:58 PM	50-80	140-200	SD, MD
205-210	4:58 PM	4:59 PM	50-80	140-180	SD, MD
210-215	5:03 PM	5:05 PM	50-80	140-200	USC, HH, MD, HD
215-220	5:05 PM	5:06 PM	50-80	140-180	SD, MD
220-225	5:09 PM	5:11 PM	50-80	140-200	HH, MD
225-230	5:11 PM	5:13 PM	50-80	140-220	USC, HH, MD, HD Terminated at 230'

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: P4
Elev: 149.00

Date Drilled: 3/8/2013 & 3/11/2013
Date Grouted: 3/12/2013
Inspector: RK

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
0-5'	11:30 AM		50	100-120	SD
5-10		11:37 AM	50	100-120	SD
10-15	11:40 AM		50	100-120	SD
15-20		11:41 AM	50	100-120	SD
20-25	11:46 AM	11:45 AM	50	100-120	SD
25-30	11:45 AM	11:47 AM	50-60	100-120	USC, SD
30-35	11:56 AM	12:00 PM	50-60	100-120	USC, MD
35-40	12:00 PM	12:03 PM	50-60	100-120	USC, MD
40-45	12:09 PM	12:10 PM	50-60	100-120	USC, HD
45-50	12:10 PM	12:21 PM	50-70	100-120	USC, MD, SD, lose of circulation
50-55	12:37 PM		50-70	100-120	USC, MD, add bentonite
55-60		12:30 PM	50-70	100-120	USC, SD
60-65	12:42 PM		50-70	100-120	USC, SD
65-70		12:43 PM	50-70	100-120	USC, SD
70-75	12:47 PM		50-70	100-120	USC, SD
75-80		12:48 PM	50-70	100-120	USC, SD, MD
80-85	12:53 PM	12:55 PM	50-60	100-120	USC, MD
85-90	12:55 PM	12:56 PM	50-60	100-120	USC, MD, SD
90-95	12:58 PM	12:59 PM	50-60	100-120	USC, SD
95-100	12:59 PM	1:00 PM	50-60	100-120	USC, SD
100-105	1:36 PM	1:37 PM	50-70	100-120	USC, MD
105-110	1:37 PM	1:38 PM	50-70	100-120	USC, MD
110-115	1:41 PM	1:43 PM	50-70	100-120	USC, MD
115-120	1:43 PM	1:45 PM	50-80	100-120	USC, HH, MD

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: P4
Elev: 149.00

Date Drilled: 3/8/2013 & 3/11/2013
Date Grouted: 3/12/2013
Inspector: RK

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
120-125	1:47 PM	1:49 PM	50-70	100-180	USC, MD, HD
125-130	11:49 AM	1:50 PM	50-100	120-240	USC, MD, HD
130-135	1:51 PM	1:52 PM	50-80	120-220	USC, MD, HD
135-140	1:52 PM	1:54 PM	50-80	120-200	USC, HD
140-145	2:05 PM	2:09 PM	50-80	120-200	USC, HD
145-150	3:53 PM	2:55 PM	50-80	120-200	USC, HD
150-155	2:57 PM	3:00 PM	50-80	120-200	USC, HD
155-160	3:00 PM	3:01 PM	50-80	120-200	USC, HD
160-165	3:03 PM	3:14 PM	50-80	120-200	USC, HD
165-170	3:14 PM	3:23 PM	50-100	120-240	USC, HD, HH
170-175	3:24 PM	3:27 PM	50-100	120-240	USC, HD,HH
175-180	3:47 PM	3:43 PM	50-100	120-240	USC, HD, HH
180-185	3:45 PM	3:47 PM	50-100	120-240	USC, HD, HH
185-190	3:47 PM		50-100	120-240	USC, HD, HH end of drilling 3/8/2013
190-195	8:45 AM	8:48 AM	50-100	120-240	USC, HD
195-200	8:48 AM	8:51 AM	50-100	120-240	USC hard with interbedded softer zones
200-205	8:55 AM	8:56 AM	50-100	120-240	SD, CR, LOC
205-210	8:56 AM	8:57 AM	50-100	120-240	SD
210-215	9:01 AM	9:02 AM	50-100	120-240	SD, HH
215-220	9:02 AM	9:03 AM	50-100	120-240	SD, HH
220-225	9:06 AM	9:08 AM	50-100	180-250	USC, SD, MD
225-230	9:08 AM	9:10 AM	50-100	180-280	USC, SD, MD - soft to medium, pipe trying to back
230-235	9:13 AM	9:15 AM	50-100	120-240	USC, MD
235-240	9:15 AM	9:16 AM	50-100	120-240	USC, MD-pipe getting lock - end of drill 237'

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: P5
Elev: 150.58

Date Drilled: 2/27/2013
Date Grouted: 2/11/2013
Inspector: KJ

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
0-5'	8:00 AM	30s	50-70	110-120	SD
5-10	-	30s	50-70	110-120	SD
10-15	-	30s	50-70	110-120	SD
15-20	-	30s	50-70	110-120	SD
20-25	-	30s	50-70	110-120	SD
25-30	-	49s	50-70	120-140	MD
30-35	-	30s	50-70	120-140	SD
35-40	8:21 AM	8:28 AM	50-70	120-140	debris, BSC
40-45	8:30 AM	8:31 AM	50-70	140-200	MD
45-50	8:31 AM	8:41 AM	50-70	160-220	HD
50-55	8:43 AM	8:44 AM	50-70	120-140	MD
55-60	8:44 AM	8:45 AM	50-70	120-140	MD
60-65	8:46 AM	8:47 AM	50-70	120-140	MD-HD, C
65-70	8:47 AM	8:48 AM	50-70	120-140	MD
70-75	8:50 AM	8:51 AM	50-70	110-120	SD-MD
75-80	8:51 AM	8:52 AM	50-70	120-140	MD
80-85	8:54 AM	8:56 AM	50-70	140-180	HD, C
85-90	8:56 AM	8:58 AM	50-70	140-180	MD-HD
90-95	9:01 AM	9:05 AM	50-70	140-180	MD-HD
95-100	9:05 AM	9:12 AM	50-70	140-180	HD-MD
100-105	9:14 AM	9:17 AM	50-70	140-180	MD
105-110	9:17 AM	9:19 AM	50-70	120-140	MD-HD
110-115	9:21 AM	9:24 AM	50-70	120-140	MD-HD
115-120	9:24 AM	9:32 AM	50-70	120-160	MD-HD, C

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: P5
Elev: 150.58

Date Drilled: 2/27/2013
Date Grouted: 2/11/2013
Inspector: KJ

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
120-125	9:34 AM	9:40 AM	50-70	140-160	MD-HD
125-130	9:40 AM	10:12 AM	50-70	140-160	plugged (see daily), BSC
130-135	10:15 AM	10:17 AM	50-70	160-200	HD, LSC, C
135-140	10:17 AM	10:19 AM	50-70	160-200	HD, LSC, C
140-145	10:21 AM	10:23 AM	50-70	140-160	HD, LSC, C
145-150	10:23 AM	10:26 AM	50-70	140-160	HD, LSC, C
150-155	10:28 AM	10:32 AM	50-70	160-200	HD, LSC, C
155-160	10:32 AM	10:35 AM	50-70	140-160	HD, LSC, C
160-165	10:37 AM	10:41 AM	50-70	160-180	HD, LSC, C
165-170	10:41 AM	10:45 AM	50-70	160-180	rig stopped, see daily
170-175	1:54 PM	2:01 PM	50-70	180-220	HD, C
175-180	2:01 PM	2:23 PM	60-80	180-220	HD, LSC, C
180-185	2:26 PM	2:32 PM	60-80	180-220	HD, LSC, C
185-190	2:32 PM	2:40 PM	60-80	180-220	HD, LSC, C
190-195	2:42 PM	3:02 PM	60-80	180-220	HD, USC, LSC, C
195-200	3:02 PM	3:05 PM	60-80	180-220	HD, USC, LSC, C
200-205	3:06 PM	3:07 PM	50-70	120-140	MD-SD
205-210	3:07 PM	3:08 PM	50-70	120-140	MD-SD
210-215	-	30s	50-70	110-120	SD
215-220	3:11 PM	3:12 PM	60-80	120-140	MD
220-225	3:15 PM	3:18 PM	60-80	140-160	HD, C
225-230	3:18 PM	3:21 PM	60-80	160-180	HD-MD
230-235	3:23 PM	3:30 PM	60-80	180-220	HD, C
235-240	3:30 PM	3:32 PM	60-80	180-220	HD, C

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



4919 West Laurel Street
Tampa, Florida 33607
Phone: (813) 289-0750
Fax: (813)289-5474

COMPACTION GROUT REPORT

Project: SE County Landfill Date Drilled: 2/27/2013
Project #: 13354x8 Date Grouted: 2/28/2013
Pin #: P6 Inspector: KJ
Elev: 151.33

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
0-5'	-	30s	50-70	110-120	Start 4:15 PM
5-10	-	30s	50-70	110-120	SD
10-15	-	30s	50-70	110-120	SD
15-20	-	30s	50-70	110-120	SD
20-25	-	30s	50-70	110-120	SD
25-30	-	30s	50-70	110-120	SD
30-35	4:24 PM	4:27 PM	50-70	120-140	MD
35-40	4:27 PM	4:29 PM	50-70	120-140	MD
40-45	4:50 PM	4:52 PM	50-70	140-160	MD
45-50	4:52 PM	4:54 PM	50-70	140-160	MD
50-55	4:56 PM	4:57 PM	50-70	120-140	MD-SD
55-60	4:57 PM	4:58 PM	50-70	120-140	MD-SD
60-65	4:59 PM	5:00 PM	50-70	120-140	MD
65-70	-	45s	50-70	120-140	MD-SD
70-75	5:02 PM	-	50-70	120-140	SD
75-80	-	5:03 PM	50-70	120-140	MD
80-85	5:05 PM	5:07 PM	50-70	120-140	MD
85-90	5:07 PM	5:08 PM	50-70	140-160	MD-HD, C
90-95	5:09 PM	5:12 PM	50-70	140-160	MD-HD, C
95-100	5:12 PM	5:14 PM	50-70	140-160	MD-HD
100-105	5:15 PM	5:19 PM	50-70	160-180	HD
105-110	5:19 PM	5:20 PM	50-70	160-180	HD
110-115	5:21 PM	5:22 PM	50-70	140-160	MD-HD
115-120	5:22 PM	5:25 PM	50-70	140-160	MD-HD

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: P6
Elev: 151.33

Date Drilled: 2/27/2013
Date Grouted: 2/28/2013
Inspector: KJ

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
120-125	7:36 AM	7:37 AM	50-70	110-120	MD
125-130	7:37 AM	7:39 AM	50-70	110-120	MD
130-135	7:44 AM	7:46 AM	50-70	120-140	MD-HD, C
135-140	7:46 AM	7:48 AM	50-70	120-140	MD
140-145	7:50 AM	7:53 AM	50-70	120-140	MD
145-150	7:53 AM	7:56 AM	50-70	120-140	MD
150-155	7:58 AM	8:00 AM	50-70	120-140	MD-HD, C
155-160	8:00 AM	8:02 AM	50-70	110-120	MD-HD, C
160-165	8:03 AM	8:05 AM	50-70	120-140	MD-HD, C
165-170	8:05 AM	8:08 AM	50-70	120-140	MD-HD, C
170-175	8:10 AM	8:13 AM	50-70	120-140	MD-HD
175-180	8:13 AM	8:16 AM	50-70	120-140	MD-HD
180-185	8:18 AM	-	50-70	110-120	SD
185-190	-	8:19 AM	50-70	110-120	SD
190-195	8:20 AM	-	50-70	110-120	SD
195-200	-	8:21 AM	50-70	110-120	SD
200-205	8:22 AM	8:22 AM	50-70	110-120	SD
205-210	8:22 AM	8:23 AM	50-70	110-120	SD
210-215	8:25 AM	8:25 AM	50-70	110-120	SD
215-220	8:25 AM	8:28 AM	50-70	140-160	MD-HD, LSC, C
220-225	8:31 AM	8:33 AM	50-70	160-180	HD, LSC, C
225-230	8:33 AM	8:36 AM	50-70	160-180	HD, C
230-235	8:38 AM	8:39 AM	50-70	160-180	MD-HD
235-240	8:39 AM	8:40 AM	50-70	160-180	MD-HD

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: P7
Elev 151.58

Date Drilled: 2/28/2013
Date Grouted: 2/28/2013
Inspector: KJ

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
0-5'	-	30s	50-70	110-120	SD Start 1410
5-10	-	30s	50-70	110-120	SD
10-15	-	30s	50-70	110-120	SD
15-20	-	30s	50-70	110-120	SD
20-25	-	30s	50-70	110-120	SD
25-30	-	30s	50-70	110-120	SD
30-35	-	30s	50-70	110-120	SD
35-40	-	40s	50-70	110-120	SD
40-45	-	30s	50-70	110-120	SD
45-50	-	30s	50-70	110-120	SD
50-55	-	30s	50-70	110-120	SD
55-60	-	30s	50-70	110-120	SD
60-65	-	45s	50-70	120-140	MD
65-70	-	30s	50-70	110-120	SD
70-75	-	30s	50-70	110-120	SD
75-80	-	30s	50-70	110-120	SD
80-85	-	30s	50-70	110-120	SD
85-90	2:39 PM	2:41 PM	50-70	120-140	MD, C
90-95	2:42 PM	2:43 PM	50-70	120-140	MD
95-100	2:43 PM	2:45 PM	50-70	120-140	MD
100-105	2:46 PM	2:47 PM	50-70	120-140	MD, LSC
105-110	2:47 PM	2:48 PM	50-70	120-140	MD
110-115	2:51 PM	2:52 PM	50-70	120-140	MD
115-120	2:52 PM	2:55 PM	50-70	120-140	MD

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: P7
Elev: 151.58

Date Drilled: 2/28/2013
Date Grouted: 2/28/2013
Inspector: KJ

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
120-125	2:57 PM	2:58 PM	50-70	120-140	MD
125-130	2:58 PM	3:00 PM	50-70	140-160	MD
130-135	3:02 PM	3:04 PM	50-70	160-180	HD, LSC, C
135-140	3:04 PM	3:06 PM	50-70	160-180	HD
140-145	3:08 PM	3:10 PM	50-70	140-160	MD-HD
145-150	3:10 PM	3:13 PM	50-70	160-180	HD
150-155	3:15 PM	3:16 PM	50-70	140-160	MD
155-160	3:16 PM	3:18 PM	50-70	160-180	HD, LSC, C
160-165	3:26 PM	3:27 PM	50-70	120-160	MD-SD
165-170	3:27 PM	3:28 PM	50-70	120-140	SD-MD, C
170-175	3:29 PM	3:30 PM	50-70	120-140	MD-SD, C
175-180	3:30 PM	3:31 PM	50-70	120-140	MD-SD, C
180-185	3:33 PM	-	50-70	110-120	SD
185-190	-	3:34 PM	50-70	110-120	SD
190-195	3:35 PM	-	50-70	110-120	SD
195-200	-	3:36 PM	50-70	110-120	SD
200-205	3:37 PM	-	50-70	120-140	SD
205-210	-	3:38 PM	50-70	120-140	SD
210-215	3:39 PM	-	50-70	140-160	MD
215-220	-	3:41 PM	50-70	140-160	MD, C
220-225	3:42 PM	3:43 PM	50-70	120-140	MD-SD
225-230	3:43 PM	3:44 PM	50-70	160-180	MD-FD, C
230-235	3:45 PM	3:46 PM	50-70	160-180	MD-HD, C

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: P8
Elev: 150.58

Date Drilled: 2/26/2013
Date Grouted: 2/26/2013
Inspector: KJ

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
0-5'	11:14 AM	45s	50-70	100-120	SOB @ 11:14AM
5-10		45s	50-70	100-120	Slow progress. Heavy rains.
10-15	11:17 AM	45s	50-70	100-120	Using pipe wrenches to break casings
15-20		45s	50-70	100-120	SD
20-25	11:20 AM	45s	50-70	100-120	SD
25-30		45s	50-70	100-120	SD
30-35	11:23 AM	45s	50-70	100-120	SD
35-40		45s	50-70	100-120	SD
40-45	11:27 AM	45s	50-70	100-120	SD
45-50		2m	50-70	120-140	MD
50-55	11:31 AM	45s	50-70	120-140	SD
55-60		1m	50-70	120-140	MD
60-65	11:35 AM	50s	50-70	120-140	SD
65-70		45s	50-70	120-140	SD
70-75	11:38 AM	40s	50-70	120-140	SD
75-80		45s	50-70	120-140	SD
80-85	11:41 AM	40s	50-70	110-120	SD
85-90		45s	50-70	110-120	SD
90-95	11:44 AM	45s	50-70	110-120	SD
95-100		45s	50-70	110-120	SD
100-105	11:47 AM	55s	50-70	120-140	MD
105-110		55s	50-70	120-140	MD
110-115	11:53 AM	2m	60-80	140-160	MD, HD
115-120		2m	60-80	140-160	MD, HD

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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: P8
Elev: 150.58

Date Drilled: 2/26/2013
Date Grouted: 2/26/2013
Inspector: KJ

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
120-125	11:57 AM	2m	60-80	140-160	MD
125-130		2m	60-80	140-160	MD
130-135	12:03 PM	2m	60-80	140-160	MD
135-140		2m	60-80	140-160	MD
140-145	12:09 PM	1m	60-80	140-160	MD
145-150		2m	60-80	140-160	MD
150-155	12:15 PM	2m	60-80	140-160	MD
155-160		1m	60-80	140-160	MD
160-165	12:21 PM	2m	60-80	140-160	MD
165-170		1m	60-80	140-160	MD
170-175	12:24 PM	45s	50-70	110-120	SD
175-180		45s	50-70	110-120	SD
180-185	12:27 PM	45s	50-70	110-120	SD
185-190		45s	50-70	110-120	SD
190-195	12:30 PM	30s	50-70	110-120	SD
195-200		30s	50-70	110-120	SD
200-205	12:33 PM	30s	50-70	110-120	SD
205-210		30s	50-70	110-120	SD
210-215	12:36 PM	2m	60-80	140-160	MD, HD
215-220		2m	60-80	140-160	MD, HD
220-225	12:39 PM	2m	60-80	140-160	MD, HD
225-230		2m	60-80	140-160	MD, HD
230-235	12:02 PM	2m	60-80	140-160	MD, HD
235-240		2m	60-80	140-160	MD, HD

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: P9
Elev: 152.8 ft

Date Drilled: 2/18/2013 to 2/19/2013
Date Grouted: 2/19/2013
Inspector: RK

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
0-5	12:41 PM		50-80	100-120	New bit, checked for plumbness
5-10		12:42 PM	50-80	100-120	
10-15	12:46 PM		50-80	100-120	
15-20		12:47 PM	50-80	100-120	
20-25	12:48 PM		50-80	100-120	
25-30		12:49 PM	50-80	100-120	
30-35	12:50 PM		50-80	100-120	Problem with water pressure
35-40		12:53 PM	50-80	100-120	
40-45	12:55 PM		50-80	100-120	Standby
45-50	1:43 PM		50-80	100-120	
50-55	1:44 PM		50-80	100-120	
55-60		1:47 PM	50-80	100-120	
60-65	1:49 PM		50-80	100-120	
65-70		1:49 PM	50-80	100-120	
70-75	1:51 PM		50-80	100-120	
75-80		1:52 PM	50-80	100-120	
80-85	1:54 PM		50-80	100-120	LSC
85-90		1:58 PM	50-80	100-120	
90-95	1:59 PM		50-80	100-120	
95-100		2:05 PM	50-80	100-120	LSC
100-105	2:07 PM	2:17 PM	50-80	100-120	Stopped, water pressure
105-110	2:57 PM		50-80	100-120	
110-115		2:59 PM	50-80	100-120	
115-120			50-80	100-120	

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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: P9
Elev: 152.8 ft

Date Drilled: 2/18/2013 to 2/19/13
Date Grouted: 2/19/2013
Inspector: RK

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
120-125		3:13 PM	50-80	100-120	
125-130	3:13 PM		50-80	100-120	
130-135		3:32 PM	50-80	100-120	
135-140	3:34 PM		50-80	100-120	No water pressure.
140-145		3:42 PM	50-80	100-120	No water pressure.
145-150	3:45 PM		50-80	100-120	No water pressure.
150-155		3:45 PM	50-80	100-120	No water pressure.
155-160	3:57 PM		50-80	100-120	No water pressure.
160-165		4:00 PM	50-80	100-120	No water pressure.
165-170	4:04 PM		50-80	100-120	No water pressure.
170-175		4:40 PM	50-80	100-120	No water pressure.
175-180	4:43 PM		50-80	100-120	No water pressure.
180-185		4:50 PM	50-80	100-120	No water pressure.
185-190	4:53 PM		50-80	100-120	No water pressure.
190-195		5:05 PM	50-80	100-120	No water pressure.
195-200	5:07 PM		50-80	100-120	No water pressure.
200-205		5:11 PM	50-80	100-120	No water pressure.
205-210	5:14 PM		50-80	100-120	No water pressure.
210-215		5:25 PM	50-80	100-120	No water pressure.
215-220	5:27 PM	7:50 AM	50-80	100-120	End of day. Resumed 2/19/13
220-225	7:51 AM		50-81	100-121	Resumed drilling 2/19/2013, no water pressure
225-230		7:53 AM	50-82	100-122	No water pressure.
230-235	7:56 AM		50-83	100-123	No water pressure.
235-240		8:02 AM	50-80	100-120	No water pressure.

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.

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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: P9
Elev: 152.8 ft

Date Drilled: _____
Date Grouted: 2/19/2013
Inspector: RK

[illegible]

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill Date Drilled: 2/20/2013
Project #: 13354x8 Date Grouted: 2/20/2013
Pin #: P10 Inspector: MC
Elev: 152.83 ft

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
0-5	10:02 AM				Checked for plumbness
5-10		10:03 AM	50	100	
10-15	10:05 AM		70	90	
15-20		10:06 AM	70	90	
20-25	10:08 AM		70	90	
25-30		10:09 AM	70	90	
30-35	10:10 AM	10:11 AM	70	100	loss of circulation
35-40	10:11 AM	10:13 AM	70	100	
40-45	10:15 AM	10:16 AM	60-90	100-180	LSC, HH, medium dense
45-50	10:16 AM	10:19 AM	60-70	160-200	LSD
50-55	10:22 AM		60-70	160-200	LSC, SD
55-60		10:23 AM	60	120-140	LSC, SD
60-65	10:25 AM	10:25 AM	60	140-180	LSC, SD
65-70	10:26 AM	10:27 AM	60	140-180	LSC, SD
70-75	10:29 AM		60	140-180	LSC, SD
75-80		10:30 AM	60	140-180	LSC, SD
80-85	10:32 AM	10:33 AM	60	140-180	LSC, HH, medium dense
85-90	10:33 AM	10:35 AM	60	140-180	LSC, HH
90-95	10:37 AM	10:39 AM	50-60	140-200	LSC, HH, MD
95-100	10:39 AM	10:48 AM	50-70	140-200	HH, SC, HD
100-105	10:45 AM	10:48 AM	50-60	120-140	HH, SC, MD
105-110	10:48 AM	10:51 AM	50-60	120-200	LSC
110-115	10:53 AM	10:57 AM	60-90	120-180	LSC, HH, MD
115-120	10:57 AM	11:00 AM	50-70	120	LSC, HD

*** Note:** The terms listed above are defined as follows: SD = Soft drilling; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill Date Drilled: 2/20/2013
Project #: 13354x8 Date Grouted: 2/20/2013
Pin #: P10 Inspector: MC
Elev: 152.83 ft

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
120-125	11:02 AM	11:04 AM	50-70	120-200	LSC, HH, medium dense to HD
125-130	11:04 AM	11:08 AM	50-70	120-180	LSC, HH, medium dense to HD
130-135	11:10 AM	11:11 AM	50-70	120-160	LSC, HH, SD
135-140	11:11 AM	11:13 AM	50-100	120-160	LSC, HH, medium dense
140-145	11:15 AM	11:18 AM	50-70	110-240	LSC, HH, medium dense
145-150	11:18 AM	11:21 AM	50-70	120-140	LSC, HH, medium dense
150-155	11:24 AM	11:26 AM	50-70	120-180	LSC, HH, medium dense
155-160	11:26 AM	11:27 AM	50	120	LSC, HH, SD
160-165	11:29 AM				
165-170		11:29 AM	50	120	LSC, very SD
170-175	11:32 AM		60	140-160	LSC, very SD
175-180		11:33 AM			LSC, very SD to medium dense
180-185	11:35 AM				
185-190		11:35 AM	50-60	120-160	LSC, very SD
190-195	11:37 AM		50	120-180	LSC, very SD
195-200		11:38 AM	50	140	LSC, very SD
200-205	11:40 AM	11:41 AM	50-70	120-180	LSC, very SD to medium dense
205-210	11:41 AM	11:43 AM	50-70	160-200	LSC, very SD to medium dense
210-215	11:45 AM	11:48 AM	50-70	180-220	LSC, HH, Medium dense to HD
215-220	11:48 AM	11:51 AM	50-70	160-220	LSC, medium dense TO HD
220-225	11:53 AM				LSC
225-230		11:54 AM	50-70	120-160	LSC
230-235	11:57 AM	10:45 AM	50	160-200	LSC
235-240	10:45 AM	12:00 PM	50	160-220	LSC

*** Note:** The terms listed above are defined as follows: SD = Soft drilling; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.

4919 West Laurel Street
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Phone: (813) 289-0750
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COMPACTION GROUT REPORT

Project:	SE County Landfill
Project #:	13354x8
Pin #:	P10
Elev	152.83 ft

Date Drilled: 2/20/2013
Date Grouted: 2/20/2013
Inspector: MC

[illegible]

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: P11
Elev: 152.79

Date Drilled: 2/21/2013
Date Grouted: 2/21/2013
Inspector: KJ

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
0-5	8:00 AM	30s	50	100	SD
5-10	-	30s	50	100	SD
10-15	8:03 AM	30s	50-60	100	SD
15-20	-	30s	50-60	100	SD
20-25	-	30s	50-60	100-110	SD
25-30	-	30s	50-60	100-110	SD
30-35	-	30s	50-60	100-110	SD
35-40	-	45s	50-60	100-110	debris encountered
40-45	-	40s	50-60	100-110	debris encountered
45-50	-	2m	50-60	100-120	debris encountered
50-55	-	1m20s	50-60	120-140	debris encountered
55-60	-	45s	50-60	100-120	
60-65	-	45s	55-60	140-200	MD
65-70	-	30s	50-60	100-110	SD
70-75	-	20s	50-60	120-140	SD
75-80	-	20s	50-60	120-140	SD
80-85	-	1m20s	70-100	120-140	limestone, LSC, MD
85-90	-	1m40s	70-100	120-140	limestone, LSC, MD
90-95	-	2m5s	60-80	110-140	LSC, MD
95-100	-	2m10s	60-80	120-140	LSC, MD
100-105	-	2m30s	50-70	120-160	LSC, MD
105-110	-	2m20s	50-70	110-120	LSC, MD
110-115	8:43 AM	8:46	50-60	110-120	possible debris, MD
115-120	8:46 AM	8:48	50-70	120-140	possible debris, MD

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: P11
Elev: 152.79

Date Drilled: 2/21/2013
Date Grouted: 2/21/2013
Inspector: KJ

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
120-125	8:49 AM	8:51 AM	50-70	110-140	MD, BSC
125-130	8:51 AM	8:55 AM	50-60	120-180	debris, SD-MD, LSC
130-135	8:57 AM	8:58 AM	50-70	120-160	debris, SD-MD, LSC
135-140	8:58 AM	8:59 AM	50-70	120-160	debris, SD-MD, LSC
140-145	9:01 AM	9:04 AM	50-70	140-200	debris, MD, LSC
145-150	9:04 AM	9:07 AM	50-70	140-160	debris, MD, LSC
150-155	9:09 AM	9:10 AM	50-70	100-120	debris, MD, LSC
155-160	-	38s	50-70	100-110	SD
160-165	-	25s	50-60	100-110	SD
165-170	-	30s	50-60	100-110	SD
170-175	-	20s	50-60	100-110	SD
175-180	-	20s	50-60	100-110	SD
180-185	-	20s	50-60	100-110	SD
185-190	-	20s	50-60	100-110	SD
190-195	-	20s	50-60	120-140	SD
195-200	-	30s	50-60	140-160	SD
200-205	-	20s	50-70	120-140	SD
205-210	-	30s	50-70	140-160	SD
210-215	-	1m10s	50-70	110-120	MD
215-220	9:25 AM	9:28 AM	50-70	140-180	MD to HD
220-225	9:30 AM	9:32 AM	50-70	140-180	TC, LSC
225-230	9:32 AM	9:34 AM	50-70	140-200	MD to HD
230-235	9:36 AM	9:38 AM	50-70	140-200	MD
235-240	-	30s	50-70	140-160	SD

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.

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COMPACTION GROUT REPORT

Project: SE County Landfill
 Project #: 13354x8
 Pin #: P11
 Elev: 152.79

Date Drilled: 2/21/2013
Date Grouted: 2/21/2013
Inspector: KJ

[illegible]

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: P12
Elev: 152.32

Date Drilled: 2/21/2013
Date Grouted: 2/22/2013
Inspector: KJ

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
0-5	-	30s	50-70	100-110	plumb, start at 14:27
5-10	-	30s	50-70	100-110	SD
10-15	-	30s	50-70	100-110	SD
15-20	-	30s	50-60	100	SD
20-25	-	30s	50-60	100-110	SD
25-30	-	30s	50-60	100-110	SD
30-35	-	30s	50-60	100-110	SD
35-40	-	30s	50-70	100-110	SD
40-45	-	30s	50-70	100-110	SD
45-50	-	1m20s	50-70	100-110	MD
50-55	-	30s	50-70	100-110	SD
55-60	-	30s	50-70	100-110	SD
60-65	-	30s	50-70	100-110	SD
65-70	-	30s	50-70	100-110	SD
70-75	-	30s	50-70	110-120	SD
75-80	-	30s	50-70	110-120	SD
80-85	2:49 PM	2:51 PM	50-70	120-140	limestone, MD
85-90	2:51 PM	2:52 PM	50-70	110-120	limestone, MD, C
90-95	2:54 PM	2:55 PM	50-70	160-200	MD, BSC
95-100	2:55 PM	2:57 PM	50-70	160-200	MD, BSC
100-105	2:59 PM	3:02 PM	50-70	160-180	MD
105-110	3:02 PM	3:03 PM	50-70	140-160	MD
110-115	3:05 PM	3:07 PM	60-80	120-140	MD
115-120	3:07 PM	3:10 PM	50-70	120-140	MD, firm thin layer

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: P12
Elev: 152.32

Date Drilled: 2/21/2013
Date Grouted: 2/22/2013
Inspector: KJ

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
120-125	3:12 PM	3:14 PM	50-70	120-140	C
125-130	3:14 PM	3:22 PM	60-100	120-140	C, LSC HD
130-135	3:25 PM	3:27 PM	50-70	110-140	MD
135-140	3:27 PM	3:28 PM	50-70	110-140	MD
140-145	3:30 PM	3:33 PM	50-70	140-180	MD to HD
145-150	3:33 PM	3:36 PM	50-70	120-160	MD to HD
150-155	3:38 PM	3:39 PM	50-70	120-160	MD
155-160	-	30s	50-70	110-120	SD
160-165	-	30s	50-70	110-120	SD
165-170	-	30s	50-70	110-120	SD
170-175	-	30s	50-70	110-120	SD
175-180	-	2m30s	50-80	140-180	MD to HD, C
180-185	-	45s	50-70	110-140	MD
185-190	-	30s	50-70	110-120	SD
190-195	-	30s	50-70	110-120	SD
195-200	-	45s	50-70	140-180	MD
200-205	-	45s	50-70	140-180	MD to HD
205-210	-	45s	50-70	140-180	MD, USC
210-215	3:57 PM	4:00 PM	50-70	160-200	MD TO HD
215-220	-	55s	50-70	160-180	MD
220-225	4:02 PM	4:10 PM	50-80	160-180	C, LSC
225-230	4:10 PM	4:11 PM	50-80	180-200+	MD to HD
230-235	4:13 PM	4:18 PM	50-60	200-220+	HD, USC
235-240	4:18 PM	4:26 PM	50-60	200	HD

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: P13
Elev: 151.85

Date Drilled: 2/22/2013
Date Grouted: 2/22/2013
Inspector: KJ

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
0-5'	12:55 PM	30s	50-70	100-110	SD
5-10	-	30s	50-70	100-110	SD
10-15	-	30s	50-70	100-110	SD
15-20	-	30s	50-70	100-110	SD
20-25	-	30s	50-70	110-120	SD
25-30	-	30s	50-70	110-120	SD
30-35	-	30s	50-7050-70	120-140	SD
35-40	-	30s	50-70	120-140	SD
40-45	-	30s	50-70	120-140	SD
45-50	1:07 PM	1:12 PM	50-70	140-180	MD, LSC
50-55	-	30s	50-70	110-120	SD
55-60	-	30s	50-70	110-120	SD
60-65	-	30s	50-70	120-140	SD
65-70	-	30s	50-70	110-120	SD
70-75	-	30s	50-70	120-140	SD
75-80	-	30s	50-70	120-140	SD
80-85	1:20 PM	1:21 PM	60-80	140-160	MD, LSC
85-90	1:21 PM	1:23 PM	60-80	140-180	MD to HD, C
90-95	1:24 PM	1:26 PM	60-80	140-180	MD to HD, LSC, C
95-100	-	45s	60-80	140-180	MD
100-105	1:29 PM	1:34 PM	50-70	120-140	MD to HD
105-110	1:34 PM	1:35 PM	50-80	110-120	SD to MD
110-115	1:37 PM	1:39 PM	50-80	110-120	MD
115-120	1:39 PM	1:44 PM	60-80	140-180	MD to HD

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: P13
Elev: 151.85

Date Drilled: 2/22/2013
Date Grouted: 2/22/2013
Inspector: KJ

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
120-125	1:45 PM	1:46 PM	50-70	120-140	SD to MD
125-130	1:46 PM	1:50 PM	50-70	120-140	MD
130-135	1:51 PM	1:52 PM	50-70	120-140	MD, C
135-140	1:52 PM	1:54 PM	50-70	120-140	MD
140-145	1:55 PM	1:57 PM	60-80	160-180	MD
145-150	1:57 PM	2:00 PM	60-80	180-200	MD
150-155	-	30s	50-70	110-120	SD
155-160	-	30s	50-70	110-120	SD
160-165	-	30s	50-70	110-120	SD
165-170	-	30s	50-70	110-120	SD
170-175	-	30s	50-70	140-160	SD
175-180	-	30s	50-70	140-160	SD
180-185	2:06 PM	2:08 PM	50-70	140-160	MD
185-190	2:08 PM	2:10 PM	50-70	140-160	MD to SD
190-195	-	30s	50-70	120-140	SD
195-200	-	30s	50-70	120-140	SD
200-205	2:13 PM	2:16 PM	50-70	120-140	MD to HD, LSC, C
205-210	-	30s	50-70	120-140	SD
210-215	2:18 PM	2:20 PM	50-70	200-250	MD to HD, LSC, C
215-220	2:20 PM	2:21 PM	50-70	210-240	MD to HD, USC
220-225	2:23 PM	2:24 PM	50-70	200-220	MD to HD
225-230	2:24 PM	2:28 PM	50-70	220-250	MD to HD, LSC, C
230-235	2:29 PM	2:31 PM	50-70	200-220	MD to HD
235-240	2:31 PM	2:32 PM	50-70	200-220	MD to HD

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: P14
Elev: 150.97 ft

Date Drilled: 2/18/2013
Date Grouted: 2/18/2013
Inspector: RK

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
0-5	8:21 AM				Checked for plumbness
5-10		8:26 AM	50	180-200	SD
10-15	8:27 AM		50	180-200	SD
15-20		8:28 AM	50	180-200	SD
20-25	8:29 AM		50	180-200	SD
25-30		8:30 AM	50	180-200	SD
30-35	8:32 AM		50	180-200	SD
35-40		8:33 AM	50	180-200	SD
40-45	8:34 AM		50	180-200	SD
45-50		8:35 AM	50	180-200	SD
50-55	8:36 AM		50	180-200	SD
55-60		8:37 AM	50	180-200	SD
60-65	8:38 AM		50	180-200	SD
65-70		8:39 AM	50	180-200	SD
70-75	8:40 AM		50	180-200	SD
75-80		8:41 AM	50	180-200	
80-85	8:42 AM		50	180-200	C for 1'
85-90		8:44 AM	50	180-200	
90-95	8:46 AM		50	180-200	
95-100		8:49 AM	50	180-200	slight C
100-105	8:50 AM		50	180-200	
105-110		8:54 AM	50	180-200	
110-115	8:55 AM		50	180-200	LSC
115-120		9:03 AM	50	180-200	full compression of spring, small C, HH

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: P14
Elev 150.97 ft

Date Drilled: 2/18/2013
Date Grouted: 2/18/2013
Inspector: RK

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
120-125	9:04 AM		50-80	180-200	
125-130		9:07 AM	50-80	180-200	
130-135	9:08 AM		50-80	180-200	C, HH
135-140		9:11 AM	50-80	180-200	
140-145	9:13 AM		50-80	180-200	HH
145-150		9:18 AM	50-80	180-200	
150-155	9:19 AM		50-80	180-200	
155-160		9:21 AM	50-80	180-200	
160-165	9:22 AM		50-80	180-200	
165-170		9:23 AM	50-80	180-200	
170-175	9:23 AM		50-80	180-200	
175-180		9:26 AM	50-80	180-200	
180-185	9:26 AM		50-80	180-200	
185-190		9:27 AM	50-80	180-200	
190-195	9:28 AM		50-80	180-200	
195-200		9:29 AM	50-80	180-200	
200-205	9:31 AM		50-80	180-200	
205-210		9:34 AM	50-80	180-200	driller noted a very soft zone
210-215	9:36 AM		50-80	220	started getting harder, then soft zone
215-220		9:37 AM	50-80	220	hit hard zone in last foot
220-225	9:38 AM		50-80	220-280	loss of circulation, C, full LSC
225-230		10:42 AM	50-81	220-280	water pressure back after 3', soft zone at bottom
230-235	10:43 AM	10:45 AM	50-82	250	chattering
235-240	10:45 AM	10:46 AM	50-83	200	very soft

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.

COMPACTION GROUT REPORT

Project:	SE County Landfill
Project #:	13354x8
Pin #:	P14
Elev:	150.97 ft

Date Drilled: 2/18/2013
Date Grouted: 2/18/2013
Inspector: RK

[illegible]

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: P15
Elev: 150

Date Drilled: 2/22/13 & 2/25/13
Date Grouted: 2/25/2013
Inspector: KJ

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
0-5'	4:36 PM	30s	50-70	100-110	SD
5-10	-	30s	50-70	100-110	SD
10-15	-	30s	50-70	110-120	SD
15-20	-	30s	50-70	110-120	SD
20-25	-	30s	50-70	110-120	SD
25-30	-	30s	50-70	110-120	SD
30-35	-	30s	50-70	110-120	SD
35-40	-	30s	50-70	110-120	SD
40-45	-	30s	50-70	110-120	SD
45-50	-	50s	50-70	120-140	SD
50-55	-	30s	50-70	120-140	SD
55-60	-	50s	50-70	120-140	SD
60-65	-	30s	50-70	110-120	SD
65-70	-	30s	50-70	110-120	SD
70-75	-	30s	50-70	110-120	SD
75-80	-	30s	50-70	110-120	SD
80-85	-	1m30s	50-70	120-140	MD, debris
85-90	-	45s	50-70	110-120	SD
90-95	5:02 PM	5:05 PM	50-70	120-140	MD
95-100	-	5:07 PM	50-70	110-120	SD
100-105	7:51 AM	7:53 AM	50-70	100-120	MD
105-110	7:53 AM	7:55 AM	50-70	100-120	MD
110-115	7:57 AM	7:59 AM	50-70	110-120	MD
115-120	7:59 AM	8:01 AM	50-70	110-120	MD

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: P15
Elev: 150

Date Drilled: 2/22/13 & 2/25/13
Date Grouted: 2/25/2013
Inspector: KJ

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
120-125	8:02 AM	8:04 AM	50-70	110-120	MD, C, debris
125-130	8:04 AM	8:06 AM	50-70	110-120	MD
130-135	8:08 AM	8:09 AM	50-70	120-140	MD, C
135-140	8:09 AM	8:10 AM	50-70	120-140	MD
140-145	8:12 AM	8:14 AM	50-70	110-120	MD
145-150	8:14 AM	8:18 AM	50-70	120-140	MD
150-155	8:20 AM	8:22 AM	50-70	120-140	MD, C
155-160	8:22 AM	8:23 AM	50-70	110-140	MD
160-165	-	30s	50-70	110-120	SD
165-170	8:25 AM	8:26 AM	50-70	110-120	MD-SD
170-175	-	30s	50-70	100-110	SD
175-180	-	30s	50-70	100-110	SD
180-185	-	30s	50-70	100-110	SD
185-190	-	30s	50-70	100-110	SD
190-195	8:32 AM	8:34 AM	50-70	140-180	MD
195-200	8:34 AM	8:35 AM	50-70	140-180	MD, C, USC
200-205	8:36 AM	8:37 AM	50-70	140-180	MD
205-210	-	30s	50-70	140-180	MD to SD
210-215	8:39 AM	8:41 AM	50-70	120-140	MD, LSC
215-220	8:41 AM	8:49 AM	60-80	140-180	MD to HD, C
220-225	8:51 AM	8:53 AM	60-80	140-180	MD, C
225-230	8:53 AM	8:54 AM	50-70	120-140	MD to SD
230-235	8:56 AM	8:57 AM	50-70	110-120	SD
235-240	8:57 AM	9:01 AM	60-80	120-140	MD, PC

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling; LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



4919 West Laurel Street
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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: P16
Elev: 148.93

Date Drilled: 2/25/2013
Date Grouted: 2/25/2013
Inspector: KJ

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
0-5'	12:21 PM	40s	50-70	100-110	SD
5-10	-	30s	50-70	100-110	SD
10-15	-	40s	50-70	110-120	SD
15-20	-	40s	50-70	110-120	SD
20-25	-	30s	50-70	110-120	SD
25-30	-	30s	50-70	110-120	SD
30-35	-	30s	50-70	110-120	SD
35-40	-	30s	50-70	110-120	SD
40-45	12:30 PM	12:32 PM	50-80	120-140	HD, LSC DEBRIS, TC
45-50	-	40s	50-70	120-140	SD
50-55	-	30s	50-70	110-120	SD
55-60	-	45s	50-70	120-140	SD to MD
60-65	-	30s	50-70	110-120	SD
65-70	-	30s	50-70	110-120	SD
70-75	-	30s	50-70	120-140	SD
75-80	12:39 PM	12:40 PM	50-70	120-140	MD, LSC
80-85	12:42 PM	12:43 PM	50-70	120-140	MD, C
85-90	12:43 PM	12:44 PM	60-80	120-140	MD, C
90-95	12:46 PM	12:48 PM	60-80	120-140	MD, LSC
95-100	12:48 PM	12:50 PM	60-80	120-140	MD, C
100-105	12:54 PM	12:56 PM	60-80	140-180	HD, LSC
105-110	12:56 PM	12:59 PM	60-80	120-140	MD to HD
110-115	1:01 PM	1:02 PM	60-80	140-180	MD to HD
115-120	1:02 PM	1:06 PM	50-70	120-140	MD to HD, C

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: P16
Elev: 148.93

Date Drilled: 2/25/2013
Date Grouted: 2/25/2013
Inspector: KJ

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
120-125	1:08 PM	1:12 PM	60-80	140-180	HD, C
125-130	1:12 PM	1:13 PM	60-80	140-180	HD, C
130-135	1:15 PM	1:16 PM	50-70	120-140	MD, C
135-140	1:16 PM	1:18 PM	50-70	120-140	MD to HD, C
140-145	1:21 PM	1:23 PM	60-80	120-140	HD, LSC
145-150	1:23 PM	1:27 PM	60-80	140-180	HD, C
150-155	1:29 PM	1:31 PM	50-70	120-140	HD, C
155-160	1:31 PM	1:32 PM	50-70	120-140	MD to HD, C
160-165	1:34 PM	1:35 PM	50-70	120-140	MD to HD, C
165-170	1:35 PM	1:38 PM	60-80	140-160	MD to SD to HD, C, LSC
170-175	-	30s	50-70	120-140	SD
175-180	-	30s	50-70	120-140	SD
180-185	-	30s	50-70	110-120	SD
185-190	-	30s	50-70	110-120	SD
190-195	-	30s	50-70	110-120	SD
195-200	-	35s	50-70	110-120	SD
200-205	-	30s	50-70	110-120	SD
205-210	-	30s	50-70	110-120	SD
210-215	-	30s	50-70	120-140	SD to MD
215-220	-	30s	50-70	120-140	SD to MD
220-225	-	30s	50-70	140-160	MD
225-230	-	45s	50-70	160-200	MD
230-235	1:52 PM	1:53 PM	60-80	160-200	MD
235-240	1:53 PM	1:54 PM	60-80	160-200	MD, PC

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: P17
Elev: 148.58

Date Drilled: 2/25/2013-2/26/2013
Date Grouted: 2/26/2013
Inspector: KJ

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
0-5'	-	40s	50-70	110-120	SD
5-10	-	40s	50-70	110-120	SD
10-15	-	30s	50-70	110-120	SD
15-20	-	30s	50-70	110-120	SD
20-25	-	30s	50-70	110-120	SD
25-30	-	30s	50-70	110-120	SD
30-35	-	30s	50-70	110-120	SD
35-40	-	30s	50-70	110-120	SD
40-45	-	45s	50-70	120-140	MD, debris, grout
45-50	-	30s	50-70	110-120	SD
50-55	-	30s	50-70	110-120	SD
55-60	-	50s	50-70	120-140	MD, C, debris
60-65	-	30s	50-70	110-120	SD
65-70	-	30s	50-70	110-120	SD
70-75	-	30s	50-70	110-120	SD
75-80	4:35 PM	4:36 PM	50-70	120-140	MD to SD
80-85	4:38 PM	4:39 PM	50-70	120-140	MD
85-90	4:39 PM	4:40 PM	50-70	120-140	MD
90-95	4:41 PM	4:42 PM	50-70	120-140	MD
95-100	4:42 PM	4:45 PM	50-70	120-140	MD
100-105	4:47 PM	4:48 PM	60-80	120-140	MD to HD, LSC
105-110	4:48 PM	4:49 PM	60-80	140-160	MD to HD
110-115	4:51 PM	4:52 PM	50-70	140-160	HD, LSC
115-120	4:52 PM	4:54 PM	60-80	140-160	HD, C

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: P17
Elev: 148.58

Date Drilled: 2/25/2013-2/26/2013
Date Grouted: 2/26/2013
Inspector: KJ

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
120-125	4:55 PM	4:58 PM	50-70	120-140	HD, LSC, C
125-130	4:58 PM	4:59 PM	50-70	140-160	HD, LSC, C
130-135	5:00 PM	5:01 PM	50-70	140-160	MD to HD, LSC
135-140	5:01 PM	5:03 PM	50-70	140-160	MD to HD
140-145	5:04 PM	5:06 PM	60-80	140-160	MD to HD
145-150	5:06 PM	5:08 PM	60-80	140-160	MD to HD
150-155	7:51 AM	7:52 AM	50-70	120-140	MD, C
155-160	7:52 AM	7:54 AM	50-70	120-140	MD, C
160-165	7:56 AM	7:57 AM	50-70	110-120	SD
165-170	7:57 AM	7:59 AM	50-70	120-140	SD to MD to HD, C
170-175	-	30s	50-70	110-120	SD
175-180	-	30s	50-70	110-120	SD
180-185	-	30s	50-70	110-120	SD
185-190	-	30s	50-70	120-140	SD
190-195	8:04 AM	8:05 AM	50-70	120-140	MD, LSC, C
195-200	8:05 AM	8:07 AM	50-70	120-140	MD, LSC, C
200-205	8:09 AM	8:10 AM	50-70	120-140	MD, LSC
205-210	8:10 AM	8:12 AM	50-70	140-160	MD, LSC
210-215	-	30s	50-70	110-120	SD
215-220	8:14 AM	8:18 AM	50-70	120-140	MD, C, LSC
220-225	8:20 AM	8:21 AM	50-70	140-180	HD, C
225-230	8:21 AM	8:22 AM	50-70	140-180	HD

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: P18
Elev: 148.06

Date Drilled: 2/26/2013, 2/27/2013
Date Grouted: 3/1/2013
Inspector: RK

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
0-5'	2:40 PM	20s	50-80	100-150	Check Plumb
5-10	-	20s	50-80	100-150	SD, CR
10-15	2:42 PM	1m	50-80	100-150	SD, CR
15-20	-	1m	50-80	100-150	SD, CR
20-25	2:48 PM	30s	50-80	100-180	SD
25-30	-	1.5m	80-100	150-220	SD-MD
30-35	2:52 PM	1m	50-80	110-150	MD
35-40	-	2.5m	50-80	110-150	MD
40-45	2:57 PM	3m	50-80	110-150	SD, LSC
45-50	3:25 PM	1m	50-80	110-150	MD-SD, LSC
50-55	3:27 PM	30s	50-80	110-150	MD-SD
55-60	-	30s	50-80	110-150	MD-SD
60-65	3:29 PM	30s	50-80	110-150	SD
65-70	-	30s	50-80	100-150	SD
70-75	3:32 PM	35s	50-80	110-150	SD, LSC
75-80	-	1.5m	50-80	110-150	SD, LSC
80-85	3:35 PM	3m	50-100	150-200	SD, C, LSC
85-90	-	40s	50-80	120-180	SD, LSC, C
90-95	3:41 PM	3m	50-80	110-150	SD, LSC, C
95-100	-	3m	50-80	110-150	SD, LSC
100-105	3:49 PM	5m	50-80	110-150	SD, LSC
105-110	-	6m	50-80	110-150	SD, LSC
110-115	4:02 PM	11m	50-80	110-150	SD, LSC, LOC
115-120	-	20m	50-80	110-150	HD-SD, HH, TC

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling; LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: P18
Elev: 148.06

Date Drilled: 2/26/2013, 2/27/2013
Date Grouted: 3/1/2013
Inspector: RK

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
120-125	8:55 AM	3m	50-80	120-180	0-115 drilled with 5" pipe, clean water, LSC
125-130	-	2m	50-80	120-180	LSC, C, cream water
130-135	9:05 AM	1m	50-80	120-180	LSC, C, cream water
135-140	-	5m	50-80	120-180	LSC, white water
140-145	9:14 AM	10m	50-80	120-180	LSC, white water, debris
145-150	-	1m	50-80	120-180	LSC, water clearing
150-155	9:29 AM	30s	50-80	120-180	SD, CR, cream water
155-160	-	2m	50-80	120-180	LSC, cream water, SD, LOC
160-165	9:36 AM	30s	50-80	100-150	WR, cream water
165-170	-	1.5m	50-80	100-150	SD, CR for 3', MD, C, LSC
170-175	9:42 AM	30s	50-80	100-150	SD, CR, cream water
175-180	-	1m	50-80	100-150	LSC 1'-SD
180-185	9:47 AM	25s	50-80	100-150	SD, CR, cream water
185-190	-	25s	50-80	100-150	SD, CR, cream water
190-195	10:01 AM	40s	50-80	100-150	SD, CR, cream water
195-200	-	40s	50-80	100-150	SD, CR, cream water
200-205	10:06 AM	50s	50-80	10-150	SD, CR, cream water
205-210	-	2m	50-80	100-150	LSC, C for 3' to SD
210-215	10:13 AM	1m	50-80	100-150	SD, CR for 3', LSC
215-220	-	20s	50-80	100-150	SD, CR
220-225	10:18 AM	1m	50-80	180-200	LSC
225-230	-	9m	50-80	180-200	LSC, C

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: P19
Elev: 147.50

Date Drilled: 3/1/2013
Date Grouted: 3/1/2013
Inspector: MC

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
0-5'	10:01 AM		50	100	SD
5-10		10:02 AM	50	100	SD
10-15	10:06 AM		50	120	SD, TSC
15-20		10:07 AM	50	140	SD, TSC
20-25	10:10 AM		50	120	SD
25-30		10:08 AM	50	120	SD
30-35	10:13 AM		50	120	SD
35-40		10:14 AM	50	120-200	SD, TSC
40-45	10:16 AM	10:19 AM	50-100	100-160	SD, TSC
45-50	10:19 AM	10:20 AM	50-70	160-180	SD, TSC
50-55	10:21 AM	10:22 AM	50-60	120-140	SD, TSC
55-60	10:22 AM	10:23 AM	50-60	120-140	SD, TSC
60-65	10:25 AM	10:26 AM	50-60	120	SD, TSC
65-70	10:26 AM	10:27 AM	50-70	120	SD, TSC
70-75	10:28 AM	10:30 AM	50-70	120-180	SD, TSC
75-80	10:30 AM	10:32 AM	50-70	120-180	SD, TSC
80-85	10:33 AM	10:36 AM	50-70	120-200	SD, TSC
85-90	10:36 AM	10:39 AM	50-70	120-180	SD, TSC
90-95	10:40 AM	10:41 AM	50-60	120	SD, TSC
95-100	10:41 AM	10:44 AM	50-60	120-180	SD, TSC
100-105	10:46 AM	10:47 AM	50-70	120-160	SD, TSC
105-110	10:47 AM	10:50 AM	50-70	120-160	SD, TSC
110-115	10:53 AM	10:56 AM	50-80	120-160	SD, TSC
115-120	10:56 AM	11:20 AM	50-100	120-140	MD, TSC

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: P19
Elev: 147.50

Date Drilled: 3/1/2013
Date Grouted: 3/1/2013
Inspector: MC

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
120-125	11:22 AM	11:27 AM	70-100	120-180	TSC, HD, HH
125-130	11:27 AM	11:29 AM	50-80	140-180	TSC, HD
130-135	11:31 AM	11:33 AM	50-70	160-220	TSC, HD
135-140	11:33 AM	11:35 AM	50-70	120-160	SD, TSC
140-145	11:36 AM	11:37 AM	50-80	120-160	SD, TSC
145-150	11:37 AM	11:41 AM	50-80	120-160	SD, TSC
150-155	11:43 AM	11:44 AM	50-80	180-220	SD, TSC
155-160	11:44 AM	11:48 AM	50-70	160-180	SD, TSC
160-165	11:49 AM	11:50 AM	50-70	120-140	SD, TSC
165-170	11:50 AM	12:38 PM	50-70	120-200	TSC, HD, HH, DUPLEX
170-175	12:41 PM	12:45 PM	50-80	160-220	TSC, HD, DUPLEX
175-180	12:45 PM	12:48 PM	50-80	160-200	TSC, HD, DUPLEX
180-185	12:51 PM	12:53 PM	50-100	140-220	TSC, HH DCD
185-190	12:53 PM	12:55 PM	50-80	140-180	TSC, DCD
190-195	12:58 PM	12:59 PM	50-80	140-200	TSC, DCD
195-200	12:59 PM	1:00 PM	50-80	140-180	TSC, DCD
200-205	1:03 PM	1:04 PM	50-70	160-180	TSC, DCD
205-210	1:04 PM	1:05 PM	50-70	160-180	TSC, DCD
210-215	1:09 PM	1:10 PM	50-70	160-200	TSC, DCD
215-220	1:10 PM	1:11 PM	50-70	160-220	TSC, DCD
220-225	1:15 PM	1:16 PM	50-80	180-220	TSC, DCD
225-230	1:16 PM	1:18 PM	50-80	160-220	TSC, DCD

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: P20
Elev: 145.00

Date Drilled: 3/4/2013 - 3/6/2013
Date Grouted: 3/6/2013
Inspector: MC

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
0-5'	11:40 AM	11:40 AM	50	120	SD, USC
5-10	11:41 AM	11:43 AM	50	120	SD, USC
10-15	11:45 AM		50-60	110-140	SD, USC
15-20		11:46 AM	50-60	100-140	SD, USC
20-25	11:48 AM		50-60	100-120	SD
25-30		11:49 AM	50-60	100-120	SD
30-35	11:50 AM	11:52 AM	50-60	100-160	SD, USC
35-40	11:52 AM	11:53 AM	50-60	100-160	SD, USC
40-45	11:57 AM	12:09 PM	50-70	100-120	SD, USC
45-50	12:09 PM	12:10 PM	50-70	100-120	SD, USC
50-55	12:12 PM		50-70	100-120	SD
55-60		12:13 PM	50-70	100-120	SD
60-65	12:16 PM	12:18 PM	50-60	120-240	USC, HD
65-70	12:18 PM	12:19 PM	50-60	100-140	SD, USC
70-75	12:20 PM	12:21 PM	50-60	100-140	SD, USC
75-80	12:21 PM	12:22 PM	50-70	100-180	USC, MD, HD
80-85	12:23 PM	12:25 PM	50-60	100-160	USC, MD
85-90	2:36 PM	2:37 PM	50-70	100-120	USC, SD, MD
90-95	2:38 PM	2:39 PM	50-80	100-160	USC, MD
95-100	2:39 PM	2:43 PM	50-80	100-160	USC, HD
100-105	3:08 PM	3:09 PM	50-80	100-160	SD, USC
105-110	3:09 PM	3:10 PM	50-80	100-160	SD, USC
110-115	3:14 PM	3:16 PM	50-70	100-160	USC, HD
115-120	3:16 PM	3:18 PM	50-80	100-200	USC, HD

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



4919 West Laurel Street
Tampa, Florida 33607
Phone: (813) 289-0750
Fax: (813)289-5474

COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: P20
Elev: 145.00

Date Drilled: 3/4/2013 - 3/6/2013
Date Grouted: 3/6/2013
Inspector: MC

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
120-125	11:58 AM	12:02 PM	50-90	100-200	USC, HD, HH
125-130	12:02 PM	12:04 PM	50-90	100-200	USC, HD, HH
130-135	12:07 PM	12:10 PM	50-90	160-220	USC, HD, HH
135-140	12:10 PM	12:15 PM	50-90	160-220	USC, HD, HH
140-145	12:27 PM	12:35 PM	50-90	160-220	USC, HD
145-150	12:35 PM	12:38 PM	50-70	100-160	USC, MD
150-155	12:39 PM	12:42 PM	50-90	100-200	USC, HD, HH
155-160	12:42 PM	12:45 PM	50-90	100-200	USC, HD
160-165	12:55 PM	12:56 PM	50-70	100-160	USC, SD, MD
165-170	12:56 PM	12:58 PM	50-70	100-200	USC, MD, HD, HH
170-175	1:02 PM	1:05 PM	50-80	100-200	USC, MD, HD, HH
175-180	1:05 PM	1:09 PM	50-80	100-220	USC, HD
180-185	1:52 PM	1:55 PM	50-100	11-220	USC, HD, HH
185-190	1:55 PM	1:58 PM	50-80	100-180	USC, MD
190-195	2:01 PM	2:02 PM	50-80	100-180	USC, MD
195-200	2:02 PM	2:03 PM	50-80	100-180	USC, MD
200-205	2:07 PM	2:09 PM	50-80	100-200	USC, MD, HD
205-210	2:09 PM	2:10 PM	50-70	100-160	MD
210-215	2:14 PM	2:16 PM	50-70	100-180	MD
215-220	2:16 PM	2:17 PM	50-70	100-180	MD
220-225	2:21 PM	2:22 PM	50-70	100-180	MD
225-230	2:22 PM	2:24 PM	50-70	100-180	MD Terminated at 230'

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: P21
Elev: 146.52

Date Drilled: 2/18, 2/19/2013
Date Grouted: 2/22/2013
Inspector: RK

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
0-5	5:15 PM		50-80	100-120	Checked for plumbness
5-10		5:16 AM	50-80	100-120	
10-15	5:18 AM		50-80	100-120	
15-20		5:19 AM	50-80	100-120	
20-25	5:21 AM		50-80	100-120	
25-30		5:22 AM	50-80	100-120	
30-35	5:24 AM		50-80	100-120	
35-40		5:25 AM	50-80	100-120	
40-45	5:26 AM		50-80	100-120	
45-50		5:27 AM	50-80	100-120	
50-55	5:28 AM		50-80	100-120	
55-60		5:29 AM	50-80	100-120	
60-65	5:30 AM		50-80	100-120	
65-70		5:31 AM	50-80	100-120	
70-75	5:32 AM		50-80	100-120	
75-80		5:34 AM	50-80	100-120	slight C, HH, End of day.
80-85	7:48 AM		50-80	100-120	Resumed 2/19/13. Lot of chatter.
85-90		7:50 AM	50-80	100-120	
90-95	7:58 AM		50-80	150-200	lot of C
95-100		8:12 AM	50-80	150-200	lot of C
100-105	8:13 AM		50-80	150-200	
105-110		8:18 AM	50-80	100-150	slight C
110-115	8:23 AM		50-80	100-150	HH
115-120		8:48 AM	50-80	100-150	

*** Note:** The terms listed above are defined as follows: SD = Soft drilling; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.

COMPACTION GROUT REPORT

Project:	SE County Landfill
Project #:	13354x8
Pin #:	P21
Elev:	146.52

Date Drilled: 2/18, 2/19/2013
Date Grouted: 2/22/2013
Inspector: RK

[illegible]

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: P22
Elev: 145.82

Date Drilled: 3/19/2013
Date Grouted: 3/22/2013
Inspector: RK

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
0-5'	8:41AM	20s	50-80	100-120	
5-10		20s	50-80	100-120	
10-15	8:43AM	2m	50-80	100-120	LSC - odor
15-20		10m	50-80	100-120	LSC - odor
20-25	8:57AM	5m	50-80	100-120	LSC - odor
25-30		3m	50-80	100-120	LSC - odor
30-35	9:06AM	7m	50-80	100-200	LSC
35-40		7m	50-80	100-200	LSC
40-45	9:24AM	1m	50-80	100 -120	LSC
45-50		1.25m	50-80	100-120	LSC
50-55	9:28AM	1m	50-80	100-200	LSC
55-60		40s	50-80	100-200	LSC
60-65	9:33AM	40s	50-80	100-120	CR,LSC SD/MD
65-70		30s	50-80	100-120	CR, LSC SD/MD
70-75	9:36AM	30s	50-80	100-120	CR,LSC SD/MD
75-80		45s	50-80	100-120	CR,LSC SD/MD
80-85	9:40AM	1.5m	50-80	100-120	LSC MD/HD
85-90		2.5m	50-80	100-120	LSC MD/HD
90-95	9:47AM	1m	50-80	100-120	MD/HD
95-100		1m	50-80	100-120	MD/HD
100-105	9:54AM	2m	50-80	100-120	LSC MD/HD
105-110		3m	50-80	100-120	LSC MD/HD
110-115	10:01AM	2m	50-80	100-120	LSC MD/HD
115-120		10m	50-80	100-120	LSC

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: P22
Elev: 145.82

Date Drilled: 3/19/2013
Date Grouted: 3/22/2013
Inspector: RK

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
120-125	10:10AM	2.5m	50-80	100-120	LSC MD/HD
125-130		3m	50-80	100-120	MD/HD
130-135	10:39AM	2m	50-80	100-150	LSC MD/HD
135-140		8m	50-80	100-150	LSC HD
140-145	10:52AM	4m	50-80	100-150	LSC HD
145-150		4m	50-80	100-150	LSC HD
150-155	11:01AM	2m	50-80	100-150	LSC,C MD/HD
155-160		2m	50-80	100-150	LSC MD/HD
160-165	11:09AM	1m	50-80	100-150	LSC MD/HD
165-170		6m	50-80	100-150	LSC,C
170-175	11:18AM	1.5m	50-80	100-150	CR, LSC
175-180		2.5m	50-80	100-150	SD, LSC,C
180-185	11:25AM	3m	50-80	120-200	LSC,C
185-190		5m	50-80	120-200	LSC,C HD
190-195	11:35AM	3m	50-80	120-200	LSC, C
195-200		2m	50-80	120-200	CR, LSC
200-205	11:44Am	3m	50-80	120-200	LSR,C HD
205-210		2m	50-80	120-200	SD/MD, LSC
210-215	11:52AM	1.5m	50-80	120-200	CR,HH LSC MD
215-220		1m	50-80	120-200	CR, HH MD
220-225	11:58AM	3m	50-80	120-200	CR, LSC
225-230		50s	50-80	120-200	LSC,C
230-235	12:07PM	20s	50-80	120-200	CR
235-240		1m	50-80	120-200	CR, LSC

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.

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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: P22
Elev: 145.82

Date Drilled: 3/19/2013
Date Grouted: 3/22/2013
Inspector: RK

[illegible]

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: P23
Elev: 146.75

Date Drilled: 3/21/2013
Date Grouted: 3/21/2013
Inspector: KJ

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
0-5'	10:25 AM		50-70	110-120	SD
5-10		10:26 AM	50-70	110-120	SD
10-15	10:28 AM	10:34 AM	50-70	120-140	SD
15-20	10:34 AM	10:38 AM	50-70	120-140	remove pipe; replace head
20-25	10:45 AM		50-70	120-140	delay - new bit
25-30		11:20 AM	50-70	120-140	weld head
30-35	11:21 AM		50-70	120-140	MD
35-40		11:32 AM	50-70	120-140	MD
40-45	11:33 AM	11:35 AM	50-70	120-140	SD
45-50	11:35 AM	11:37 AM	50-70	120-140	SD
50-55	12:00 AM	11:40 AM	50-70	120-140	MD
55-60	11:40 AM	11:42 AM	50-70	120-140	MD
60-65	11:43 AM		50-70	100-110	SD
65-70		11:44 AM	50-70	100-110	SD
70-75	11:45 AM	11:47 AM	50-70	110-120	MD
75-80	11:47 AM	11:51 AM	50-70	110-120	MD,HD,C
80-85	11:52 AM	11:54 AM	50-70	100-120	MD,C
85-90	11:54 AM	11:56 AM	50-70	100-120	MD,C
90-95	11:57 AM	12:02 PM	50-70	100-120	MD,HD
95-100	12:02 PM	12:22 PM	50-70	100-120	MD,HD, some delay
100-105	12:23 PM	12:27 PM	50-70	100-120	MD
105-110	12:27 PM	12:32 PM	50-70	100-120	MD
110-115	12:33 PM	12:37 PM	50-70	110-120	MD,HD,C
115-120	12:37 PM	12:40 PM	50-70	110-120	MD

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: P23
Elev: 146.75

Date Drilled: 3/21/2013
Date Grouted: 3/21/2013
Inspector: KJ

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
120-125	12:41 PM	12:44 PM	50-70	100-110	MD,HD,C
125-130	12:44 PM	12:48 PM	50-70	100-110	MD,HD,C
130-135	12:49 PM	12:57 PM	50-70	100-120	MD,HD
135-140	12:57 PM	1:11 PM	50-70	100-120	MD,HD
140-145	1:12 PM	1:17 PM	50-70	100-120	HD,MD,C
145-150	1:17 PM	1:20 PM	50-70	100-120	HD,MD
150-155	1:21 PM	1:23 PM	50-70	100-120	MD
155-160	1:23 PM	1:26 PM	50-70	100-120	MD
160-165	1:27 PM	1:30 PM	50-70	100-120	MD,HD
165-170	1:30 PM	1:42 PM	50-70	100-120	MD
170-175	1:43 PM	1:47 PM	50-70	110-130	MD
175-180	1:47 PM	1:52 PM	50-70	110-130	HD,MD,C
180-185	1:53 PM	2:00 PM	50-70	110-130	MD
185-190	2:00 PM	2:08 PM	50-70	110-130	MD
190-195	2:09 PM	2:13 PM	50-70	110-130	HD,C
195-200	2:13 PM	2:15 PM	50-70	110-120	HD,MD
200-205	2:16 PM	2:19 PM	50-70	110-120	MD,HD
205-210	2:19 PM	2:22 PM	50-70	110-120	MD,HD
210-215	2:23 PM	2:25 PM	50-70	110-120	MD
215-220	2:25 PM	2:28 PM	50-70	110-120	MD
220-225	2:28 PM	2:30 PM	50-70	110-120	MD
225-230	2:30 PM	2:33 PM	50-70	110-120	MD
					EOB at 2:35 PM at 230 feet

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: P24
Elev: 147.82

Date Drilled: 3/22/2013
Date Grouted: 3/22/2013
Inspector: RK

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
0-5'	8:26 AM		50-80	100-120	checked for plum, redrilled with four inch bit
5-10		8:28 AM	50-80	100-120	LSC
10-15	8:28 AM		50-80	100-120	LSC
15-20		8:31 AM	50-80	100-120	LSC
20-25	8:33 AM		50-80	100-120	LSC
25-30		8:40 AM	50-80	100-120	LSC, C
30-35	8:42 AM		50-80	100-120	LSC, C
35-40		8:52 AM	50-80	100-120	LSC, C
40-45	8:54 AM		50-80	100-120	SD
45-50		8:56 AM	50-80	100-120	SD
50-55	8:58 AM		50-80	100-120	SD
55-60		9:00 AM	50-80	100-120	SD
60-65	9:02 AM		50-80	100-120	SD
65-70		9:03 AM	50-80	100-120	SD
70-75	9:04 AM		50-80	100-120	SD
75-80		9:08 AM	50-80	100-120	HD, MD, LSC, C
80-85	12:00 AM		50-80	100-120	HD, MD, LSC, C
85-90		9:14 AM	50-80	100-120	HD, MD, LSC, C
90-95	9:15 AM		50-80	100-120	HD, MD, LSC
95-100		9:22 AM	50-80	100-120	HD, MD, LSC
100-105	9:23 AM		50-80	100-120	HD
105-110		9:38 AM	50-80	100-120	HD
110-115	9:40 AM		50-80	100-120	HD, LSC, C
115-120		9:46 AM	50-80	100-120	MD, LSC

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: P24
Elev: 147.82

Date Drilled: 3/22/2013
Date Grouted: 3/22/2013
Inspector: RK

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
120-125	9:46 AM		50-80	100-120	HD, MD, LSC, C
125-130		9:53 AM	50-80	100-120	HD, MD, LSC, C
130-135	9:55 AM		50-80	100-120	HD, LSC
135-140		10:13 AM	50-80	100-120	HD, LSC
140-145	10:15 AM		50-80	100-120	HD, LSC
145-150		10:22 AM	50-80	100-120	HD, MD, LSC, C
150-155	10:23 AM		50-80	100-120	HD, LSC
155-160		10:29 AM	50-80	100-120	HD, MD, LSC, C
160-165	10:31 AM		50-80	100-120	HD, LSC, C
165-170		10:42 AM	50-80	100-120	MD, HD, LSC, C
170-175	10:43 AM		50-80	100-120	MD, HD, LSC, C
175-180		10:55 AM	50-80	100-120	MD, SD, LSC
180-185	12:00 AM		50-80	100-120	HD, LSC, HH, C
185-190		11:12 AM	50-80	100-120	LSC, C, HD
190-195	11:13 AM		50-80	100-120	LSC, C, HD
195-200		11:35 AM	50-80	100-120	LSC, SD
200-205	11:37 AM		50-80	100-120	LSC, C, SD
205-210		11:41 AM	50-80	100-120	LSC, SD
210-215	11:51 AM		50-80	100-120	MD, SD, LSC
215-220		11:56 AM	50-80	100-120	MD, SD, LSC, HH, HD
220-225	11:56 AM		50-80	100-120	MD, LSC, HD, LSC, C
225-230		12:03 PM	50-80	100-120	HD
230-235	12:04 PM	12:08 PM	50-80	100-120	LSC, C, HD

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: P25
Elev: 149.07

Date Drilled: 3/15/2015
Date Grouted: 3/18/2013
Inspector: KJ

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
0-5'	11:18 AM		50-70	110-120	Rig checked For plumb
5-10		11:19 AM	50-70	110-120	SD
10-15	11:23 AM	11:24 AM	50-70	110-120	SD
15-20	11:24 AM	11:26 AM	50-70	120-140	SD, MD
20-25	11:27 AM	11:28 AM	50-70	120-140	SD
25-30	11:28 AM	11:30 AM	50-70	120-140	SD
30-35	11:31 AM	11:32 AM	50-70	120-140	SD
35-40	11:32 AM	11:33 AM	50-70	120-140	SD
40-45	11:34 AM	11:35 AM	50-70	120-140	SD
45-50	11:35 AM	11:39 AM	50-70	140-180	MD
50-55	11:40 AM	11:42 AM	50-70	140-160	SD
55-60	11:42 AM	11:43 AM	50-70	140-160	SD
60-65	11:44 AM	11:45 AM	50-70	120-140	SD
65-70	11:45 AM	11:46 AM	50-70	120-140	SD
70-75	11:47 AM	11:48 AM	50-70	120-140	SD
75-80	11:48 AM	11:49 AM	50-70	120-140	SD
80-85	11:50 AM	11:52 AM	50-70	140-160	SD/MD, C
85-90	11:52 AM	11:53 AM	50-70	140-160	SD
90-95	11:54 AM	11:56 AM	50-70	140-160	MD/SD
95-100	11:56 AM	11:59 AM	50-70	160-180	MD
100-105	12:00 PM	12:02 PM	50-70	140-160	SD
105-110	12:02 PM	12:03 PM	50-70	140-160	SD
110-115	12:04 PM	12:06 PM	50-70	140-160	SD
115-120	12:08 PM	12:09 PM	50-70	140-160	SD

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: P25
Elev: 149.07

Date Drilled: 3/15/2015
Date Grouted: 3/18/2013
Inspector: KJ

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
120-125	12:11 PM	12:12 PM	50-70	120-140	SD
125-130	12:12 PM	12:14 PM	50-70	120-140	SD
130-135	12:15 PM	12:16 PM	50-70	120-140	SD
135-140	12:16 PM	12:18 PM	50-70	140-160	MD/SD
140-145	12:19 PM	12:21 PM	50-70	140-160	MD/SD
145-150	12:21 PM	12:23 PM	50-70	140-160	MD/SD
150-155	12:24 PM	12:26 PM	50-70	140-160	MD/SD
155-160	12:26 PM	12:28 PM	50-70	140-160	MD, C
160-165	1:03 PM	1:05 PM	50-70	160-180	Delay, waiting on water, medium C
165-170	1:05 PM	1:19 PM	50-70	160-180	HD, C/bottom
170-175	1:20 PM	1:25 PM	50-70	160-180	HD, C/bottom
175-180	1:25 PM	1:33 PM	50-70	160-180	HD, C/bottom
180-185	1:34 PM	1:40 PM	50-70	160-180	HD,MD
185-190	1:40 PM	1:56 PM	65-85	160-180	HD
190-195	1:57 PM	2:02 PM	65-85	160-180	HD
195-200	2:02 PM	2:27 PM	65-85	180-220	HD,MD,HD,C
200-205	8:21 AM	8:22 AM	50-70	160-200	HD,C
205-210	8:22 AM	8:23 AM	50-70	140-160	MD/HD
210-215	8:24 AM	8:27 AM	50-70	160-180	MD/HD
215-220	8:27 AM	8:32 AM	50-70	160-180	MD/HD
220-225	8:33 AM	8:36 AM	50-70	160-180	HD
225-230	8:36 AM	8:39 AM	50-70	160-180	HD
230-235	8:40 AM	8:42 AM	50-70	160-180	HD
235-240	8:42 AM	8:46 AM	50-70	160-180	HD (EOB 3/18)

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



4919 West Laurel Street
Tampa, Florida 33607
Phone: (813) 289-0750
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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: P26
Elev: 150.5

Date Drilled: 3/4/2013
Date Grouted: 3/5/2013
Inspector: KJ

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
0-5'	-	30 sec	50-70	110-120	start of business 2:10 PM
5-10		30 sec	50-70	110-120	SD
10-15	-	30 sec	50-70	110-120	SD
15-20	-	30 sec	50-70	110-120	SD
20-25	-	30 sec	50-70	110-120	SD
25-30	-	30 sec	50-70	110-120	SD
30-35	2:21 PM	2:22 PM	50-70	120-140	MD
35-40	2:22 PM	2:25 PM	50-70	120-140	MD,C debris
40-45	2:26 PM	2:27 PM	50-70	120-140	MD
45-50	2:28 PM	2:31 PM	50-70	120-140	MD
50-55	2:32 PM	2:33 PM	50-70	120-140	MD
55-60	2:33 PM	2:34 PM	50-70	120-140	MD/SD,C
60-65	2:36 PM	-	50-70	120-140	MD/SD,C
65-70	-	2:37 PM	50-70	120-140	SD
70-75	2:38 PM	-	50-70	120-140	SD
75-80	-	2:39 PM	50-70	120-140	SD/MD
80-85	2:40 PM	2:43 PM	50-70	140-160	MD
85-90	2:43 PM	2:46 PM	50-70	140-160	MD
90-95	2:47 PM	2:49 PM	50-70	160-180	MD
95-100	2:49 PM	2:53 PM	50-70	140-160	MD
100-105	2:54 PM	2:55 PM	50-70	160-180	MD/HD
105-110	2:55 PM	2:58 PM	50-70	160-180	HD
110-115	3:00 PM	3:02 PM	50-70	160-180	HD/MD
115-120	3:02 PM	3:05 PM	50-70	160-180	HD

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: P26 (continued)
Elev: 150.5

Date Drilled: 3/4/2013
Date Grouted: 3/5/2013
Inspector: KJ

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
120-125	3:07 PM	3:08 PM	50-70	140-160	MD
125-130	3:08 PM	3:11 PM	50-70	180-220	HD,C
130-135	3:12 PM	3:14 PM	50-70	160-180	MD/HD,C
135-140	3:14 PM	3:17 PM	50-70	160-180	HD,C
140-145	3:18 PM	3:20 PM	50-70	180-220	HD,C
145-150	3:20 PM	3:23 PM	50-70	180-220	HD,C
150-155	3:23 PM	3:26 PM	50-70	180-220	HD,C
155-160	3:26 PM	3:28 PM	50-70	180-220	HD/MD,C
160-165	3:30 PM	3:31 PM	50-70	180-220	HD/MD,C
165-170	3:31 PM	3:34 PM	50-70	180-220	HD,C
170-175	3:36 PM	3:40 PM	50-70	180-220	HD,C
175-180	3:40 PM	3:45 PM	50-70	180-220	HD
180-185	3:47 PM	3:50 PM	50-70	18--220	HD
185-190	3:50 PM	3:57 PM	50-70	180-220	HD,C
190-195	4:00 PM	-	50-70	160-180	MD/SD
195-200	-	4:01 PM	50-70	160-180	MD/SD
200-205	4:02 PM	4:03 PM	50-70	140-160	MD
205-210	4:03 PM	4:04 PM	50-70	140-160	SD/MD
210-215	4:05 PM	4:07 PM	50-70	160-180	MD/HD
215-220	4:07 PM	4:09 PM	50-70	160-180	MD/SD
220-225	4:10 PM	4:12 PM	50-70	140-160	MD
225-230	4:12 PM	4:15 PM	50-70	140-160	MD
230-235	4:15 PM	4:18 PM	50-70	140-160	MD/HD
					end of boring 4:20 PM

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: P27
Elev: 151.50

Date Drilled: 3/4/2013
Date Grouted: 3/4/2013
Inspector: KJ

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
0-5'	-	30 sec	50-70	110-120	start of business 9:58 AM
5-10	-	30 sec	50-70	110-120	SD
10-15	-	30 sec	50-70	110-120	SD
15-20	-	30 sec	50-70	110-120	SD
20-25	-	30 sec	50-70	110-120	SD
25-30	-	30 sec	50-70	110-120	SD
30-35	-	30 sec	50-70	110-120	Sd
35-40	-	30 sec	50-70	110-120	MD-debris
40-45	10:11 AM	10:12 AM	50-70	120-140	MD-debris
45-50	10:12 AM	10:14 AM	50-70	120-140	MD
50-55	10:15 AM	-	50-70	110-120	SD
55-60	-	10:16 AM	50-70	110-120	SD
60-65	10:18 AM	-	50-70	110-120	SD
65-70	-	10:19 AM	50-70	110-120	SD
70-75	10:21 AM	-	50-70	120-140	SD
75-80	-	10:22 AM	50-70	120-140	SD
80-85	10:24 AM	10:25 AM	50-70	120-140	SD
85-90	10:25 AM	10:26 AM	50-70	120-140	MD,C
90-95	10:27 AM	10:28 AM	50-70	120-140	MD,C
95-100	10:28 AM	10:29 AM	50-70	120-140	MD,C
100-105	10:32 AM	10:34 AM	50-70	110-120	MD
105-110	10:34 AM	10:36 AM	50-70	110-120	MD
110-115	10:37 AM	10:39 AM	50-70	120-140	MD
115-120	10:39 AM	10:42 AM	50-70	120-140	MD

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: P27
Elev: 151.50

Date Drilled: 3/4/2013
Date Grouted: 3/4/2013
Inspector: KJ

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
120-125	10:44 AM	10:46 AM	50-70	120-140	MD,C
125-130	10:46 AM	10:48 AM	50-70	120-140	MD
130-135	10:50 AM	10:52 AM	50-70	140-160	MD/HD,C
135-140	10:52 AM	10:54 AM	50-70	140-160	MD/HD,C
140-145	10:55 AM	10:57 AM	50-70	140-160	MD
145-150	10:57AM	11:00 AM	50-70	160-180	MD/HD,C
150-155	11:01 AM	11:03 AM	50-70	140-160	MD
155-160	11:03 AM	11:05 AM	50-70	140-160	MD/SD
160-165	11:06 AM	11:07 AM	50-70	140-160	MD
165-170	11:07 AM	11:09 AM	50-70	140-160	MD/SD,C
170-175	11:10 AM	11:11 AM	50-70	140-160	MD
175-180	11:11 AM	11:15 AM	50-70	140-160	MD/HD,C
180-185	11:16 AM	-	50-70	120-140	SD
185-190	-	11:17 AM	50-70	120-140	SD
190-195	11:18 AM	-	50-70	120-140	SD
195-200	-	11:19 AM	50-70	120-140	SD
200-205	11:20 AM	-	50-70	120-140	SD
205-210	-	11:21 AM	50-70	120-140	SD
210-215	11:23 AM	11:25 AM	50-70	160-180	MD/HD
215-220	11:25 AM	11:28 AM	50-70	180-200	MD/HD
220-225	11:28 AM	11:31 AM	50-70	180-200	HD,C
225-230	11:32 AM	11:34 AM	50-70	180-200	HD,C
230-235	11:34 AM	11:37 AM	50-70	180-200	HD,C
					end of boring 11:37 AM

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: P28
Elev: 152.26

Date Drilled: 3/4/2013
Date Grouted: 3/4/2013
Inspector: KJ

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
0-5'	7:51 AM	30 sec	50-70	110-120	start of business 7:51 AM
5-10	-	30 sec	50-70	110-120	SD
10-15	-	30 sec	50-70	110-120	SD
15-20	-	30 sec	50-70	110-120	SD
20-25	-	30 sec	50-70	110-120	SD
25-30	-	30 sec	50-70	110-120	SD
30-35	-	45 sec	50-70	120-140	MD/debris
35-40	-	45 sec	50-70	120-140	MD/debris
40-45	-	30 sec	50-70	120-140	SD
45-50	-	30 sec	50-70	120-140	SD
50-55	-	30 sec	50-70	120-140	SD
55-60	-	30 sec	50-70	120-140	SD
60-65	-	45 sec	50-70	120-140	SD
65-70	-	45 sec	50-70	120-140	SD
70-75	-	30 sec	50-70	110-120	SD
75-80	-	30 sec	50-70	110-120	Sd
80-85	8:19 AM	-	50-70	120-140	SD/MD,C
85-90	-	8:20 AM	50-70	120-140	SD/MD,C
90-95	8:22 AM	8:23 AM	50-70	110-120	MD,C
95-100	8:23 AM	8:24 AM	50-70	110-120	MD
100-105	8:26 AM	8:28 AM	50-70	110-120	MD
105-110	8:28 AM	8:32 AM	50-70	110-120	MD
110-115	8:35 AM	8:36 AM	50-70	110-120	SD/MD
115-120	8:36 AM	8:41 AM	50-70	110-120	MD/HD

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: P28 (continued)
Elev: 152.26

Date Drilled: 3/4/2013
Date Grouted: 3/4/2013
Inspector: KJ

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
120-125	8:44 AM	8:45 AM	50-70	120-140	MD
125-130	8:45 AM	8:47 AM	50-70	120-140	MD
130-135	8:49 AM	8:51 AM	50-70	120-140	MD
135-140	8:51 AM	8:52 AM	50-70	120-140	MD
140-145	8:55 AM	8:57 AM	50-70	120-140	MD
145-150	8:57 AM	9:05 AM	50-70	120-140	MD/HD,C
150-155	9:06 AM	9:07 AM	50-70	120-140	MD/HD,C
155-160	9:08 AM	9:09 AM	50-70	120-140	MD/SD
160-165	9:10 AM	9:11 AM	50-70	120-140	MD
165-170	9:11 AM	9:13 AM	50-70	120-140	MD
170-175	9:14 AM	-	50-70	110-120	SD
175-180	-	9:15 AM	50-70	110-120	SD
180-185	9:16 AM	9:17 AM	50-70	120-140	MD
185-190	9:17 AM	9:18 AM	50-70	120-140	MD/SD
190-195	9:19 AM	-	50-70	120-140	SD
195-200	-	9:20 AM	50-70	120-140	SD
200-205	9:21 AM	9:22 AM	50-70	120-140	MD/SD
205-210	9:22 AM	9:23 AM	50-70	140-160	MD/SD
210-215	9:24 AM	9:27 AM	50-70	140-160	HD, C
215-220	9:27 AM	9:29 AM	50-70	140-160	HD/MD
220-225	9:30 AM	-	50-70	120-140	SD
225-230	-	9:31 AM	50-70	120-140	SD
230-235	9:32 AM	9:34 AM	50-70	140-180	HD/C
235-240	9:34 AM	9:36 AM	50-70	140-180	MD/HD (End of boring 9:40 AM)

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: P29
Elev: 152.67

Date Drilled: 3/1/2013
Date Grouted: 3/1/2013
Inspector: KJ

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
0-5'	-	30s	50-70	110-120	Start of boring 2:19 PM
5-10	-	30s	50-70	110-120	SD
10-15	-	30s	50-70	110-120	SD
15-20	-	30s	50-70	110-120	SD
20-25	-	30s	50-70	110-120	SD
25-30	-	45s	50-70	110-120	SD
30-35	2:28 PM	2:30 PM	50-70	120-140	MD/debris
35-40	2:30 PM	2:32 PM	50-70	120-140	MD/debris
40-45	2:32 PM	2:33 PM	50-70	120-140	MD
45-50	2:33 PM	2:36 PM	50-70	120-140	MD/SD
50-55	2:37 PM	2:38 PM	50-70	120-140	MD
55-60	2:38 PM	2:39 PM	50-70	120-140	MD/SD
60-65	2:40 PM	-	50-70	120-140	SD
65-70	-	2:41 PM	50-70	120-140	SD
70-75	2:42 PM	-	50-70	120-140	SD
75-80	-	2:43 PM	50-70	120-140	SD
80-85	2:44 PM	2:45 PM	50-70	120-140	MD
85-90	2:45 PM	2:47 PM	50-70	120-140	MD
90-95	2:48 PM	2:49 PM	50-70	120-140	MD
95-100	2:49 PM	2:50 PM	50-70	120-140	MD
100-105	2:51 PM	2:54 PM	50-70	140-160	MD
105-110	2:54 PM	2:56 PM	50-70	140-160	MD
110-115	2:57 PM	2:59 PM	50-70	140-160	MD
115-120	2:59 PM	3:02 PM	50-70	140-160	MD

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: P29 (continued)
Elev: 152.67

Date Drilled: 3/1/2013
Date Grouted: 3/1/2013
Inspector: KJ

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
120-125	3:04 PM	3:06 PM	50-70	120-140	MD
125-130	3:06 PM	3:08 PM	50-70	120-140	MD
130-135	3:09 PM	3:11 PM	50-70	140-160	MD,C
135-140	3:11 PM	3:12 PM	50-70	140-160	MD
140-145	3:13 PM	3:14 PM	50-70	140-160	MD
145-150	3:14 PM	3:16 PM	50-70	140-160	MD
150-155	3:17 PM	-	50-70	120-140	SD
155-160	-	3:18 PM	50-70	120-140	SD
160-165	3:19 PM	-	50-70	120-140	SD
165-170	-	3:20 PM	50-70	120-140	SD
170-175	3:22 PM	-	50-70	120-140	SD
175-180	-	3:23 PM	50-70	120-140	SD
180-185	3:24 PM	3:24 PM	50-70	120-140	SD
185-190	3:24PM	3:26 PM	50-70	140-160	MD
190-195	3:27 PM	-	50-70	120-140	SD
195-200	-	3:28	50-70	120-140	SD
200-205	3:30 PM	3:31 PM	50-70	140-160	MD
205-210	3:31 PM	3:31 PM	50-70	120-140	SD
210-215	3:32 PM	3:34 PM	50-70	140-160	MD
215-220	3:34 PM	3:34 PM	50-70	120-140	MD/SD
220-225	3:36 PM	3:37 PM	50-70	120-140	SD
225-230	3:37 PM	3:40 PM	50-70	140-160	SD
230-235	3:41 PM	3:43 PM	50-70	160-180	MD,C
235-240	3:43 PM	3:44 PM	50-70	180-200	HD

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.

COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: P29 (continued)
Elev: 152.67

Date Drilled: 3/1/2013

Date Grouted: 3/1/2013

Inspector: KJ

[illegible]

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: P30
Elev: 152.78

Date Drilled: 3/1/2013
Date Grouted: 3/1/2013
Inspector: KJ

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
0-5'	12:10	30s	50-70	110-120	
5-10	-	30s	50-70	110-120	SD
10-15	-	30s	50-70	110-120	SD
15-20	-	30s	50-70	110-120	SD
20-25	12:12PM	-	50-70	110-120	SD
25-30	-	12:13PM	50-70	110-120	SD
30-35	12:15PM	-	50-70	110-120	SD
35-40	-	12:17PM	50-70	110-120	SD
40-45	12:19PM	12:22PM	50-70	140-160	MD
45-50	12:22PM	12:25PM	50-70	140-160	MD
50-55	12:27PM	12:27PM	50-70	140-160	MD
55-60	12:28PM	12:30PM	50-70	140-160	MD
60-65	12:31PM	12:32PM	50-70	120-140	MD
65-70	12:32PM	12:33PM	50-70	120-140	MD/SD
70-75	12:34PM	30 sec	50-70	110-120	SD
75-80	-	12:35PM	50-70	110-120	SD
80-85	12:36PM	12:38PM	50-70	120-140	MD
85-90	12:38PM	12:41PM	50-70	120-140	MD
90-95	12:43PM	12:44PM	50-70	140-160	MD,C
95-100	12:44PM	12:45PM	50-70	120-140	MD
100-105	12:46PM	12:50PM	50-70	120-140	MD
105-110	12:50PM	12:52PM	50-70	120-140	MD
110-115	12:53PM	12:55PM	50-70	120-140	MD
115-120	12:55PM	12:58PM	50-70	120-140	MD/SD

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: P30
Elev: 152.78

Date Drilled: 3/1/2013
Date Grouted: 3/1/2013
Inspector: KJ

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
120-125	1:00PM	1:02PM	50-70	120-140	MD
125-130	1:02Pm	1:04PM	50-70	120-140	MD/SD
130-135	1:06PM	1:07PM	50-70	120-140	MD
135-140	1:07PM	1:09PM	50-70	120-140	MD,C
140-145	1:10PM	1:11PM	50-70	120-140	MD
145-150	1:11PM	1:12PM	50-70	110-120	MD/SD
150-155	1:13PM	-	50-70	110-120	SD
155-160	-	1:14PM	50-70	110-120	SD
160-165	1:16PM	-	50-70	110-120	SD
165-170	-	1:17PM	50-70	110-120	SD
170-175	1:18PM	1:19PM	50-70	110-120	SD
175-180	1:19PM	1:20PM	50-70	120-140	MD
180-185	1:21PM	1:22PM	50-70	110-120	SD
185-190	1:22PM	1:23PM	50-70	120-140	MD
190-195	1:24PM	1:25PM	50-70	110-120	SD
195-200	1:25PM	1:27PM	50-70	140-160	SD/MD
200-205	1:28PM	1:29PM	50-70	120-140	SD
205-210	1:29PM	1:30PM	50-70	160-180	MD, C
210-215	1:32PM	1:33PM	50-70	120-140	SD/MD
215-220	1:33PM	1:35PM	50-70	160-180	MD
220-225	1:36PM	1:37PM	50-70	120-160	MD
225-230	1:38PM	1:39PM	50-70	120-140	SD
230-235	1:40PM	1:41PM	50-70	160-180	SD/MD
235-240	1:41PM	1:42PM	50-70	180-200	MD,C

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.

4919 West Laurel Street
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Phone: (813) 289-0750
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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: P30
Elev: 152.78

Date Drilled: 3/1/2013
Date Grouted: 3/1/2013
Inspector: KJ

[illegible]

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: P31
Elev: 152.54

Date Drilled: 3/1/2013
Date Grouted: 3/1/2013
Inspector: KJ

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
0-5'	-	30s	50-70	110-120	Start at 7:51AM
5-10	-	30s	50-70	110-120	SD
10-15	-	30s	50-70	110-120	SD
15-20	-	30s	50-70	110-120	SD
20-25	8:02AM	8:03AM	50-70	120-140	MD
25-30	8:03AM	8:04AM	50-70	110-120	SD/MD
30-35	8:06AM	8:07AM	50-70	110-120	SD
35-40	8:07AM	8:11AM	50-70	120-140	MD debris
40-45	8:14AM	8:16AM	50-70	120-140	MD
45-50	8:16Am	8:22AM	50-70	120-140	MD debris
50-55	-	30s	50-70	110-120	SD
55-60	-	30s	50-70	120-140	SD
60-65	-	30s	50-70	120-140	SD
65-70	-	45s	50-70	120-140	SD/MD
70-75	-	30s	50-70	110-120	SD
75-80	-	45s	50-70	110-120	SD/MD
80-85	-	30s	50-70	110-120	SD
85-90	8:35AM	8:37AM	50-70	120-140	MD,C
90-95	-	30s	50-70	120-140	SD
95-100	8:39AM	8:41AM	50-70	120-140	MD
100-105	8:42AM	8:44AM	50-70	140-160	MD
105-110	8:44AM	8:46AM	50-70	140-160	MD
110-115	8:48AM	8:50AM	50-70	120-140	MD
115-120	8:50AM	8:54AM	50-70	140-160	MD/HD

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: P31
Elev: 152.54

Date Drilled: 3/1/2013
Date Grouted: 3/1/2013
Inspector: KJ

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
120-125	8:56AM	8:58AM	50-70	120-140	MD
125-130	8:58AM	9:01AM	50-70	120-140	MD
130-135	9:02AM	9:03AM	50-70	120-140	MD
135-140	9:03AM	9:05AM	50-70	120-140	MD
140-145	9:06AM	9:07AM	50-70	120-140	MD
145-150	9:07AM	9:10AM	50-70	160-180	MD/HD
150-155	9:12AM	9:13AM	50-70	160-180	MD/HD,C
155-160	-	30s	50-70	120-140	SD
160-165	-	30s	50-70	110-120	SD
165-170	-	30s	50-70	110-120	SD
170-175	9:18AM	-	50-70	110-120	SD
175-180	-	9:19AM	50-70	110-120	SD
180-185	9:22AM	-	50-70	120-140	SD
185-190	-	9:23AM	50-70	120-140	SD
190-195	9:25AM	9:26AM	50-70	120-140	SD
195-200	9:26AM	9:28AM	50-70	120-140	SD/MD
200-205	9:28AM	-	50-70	120-140	SD
205-210	-	9:29AM	50-70	120-140	SD
210-215	9:31AM	9:33AM	50-70	140-180	MD
215-220	9:33AM	9:36AM	50-70	140-180	MD/HD,C
220-225	9:39AM	9:40AM	50-70	140-180	MD
225-230	9:40AM	9:42AM	50-70	140-180	MD, C
230-235	9:44AM	9:45AM	50-70	140-180	MD
235-242	9:45AM	9:47AM	50-70	140-180	HD,C, terminated at 242 feet

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: P32
Elev: 152.28

Date Drilled: 3/5/2013
Date Grouted: 3/5/2013
Inspector: KJ

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
0-5'	7:27 AM	30 sec	50-70	110-120	start of boring 7:27 AM
5-10	-	30 sec	50-70	110-120	SD
10-15	-	30 sec	50-70	110-120	SD
15-20	-	30 sec	50-70	110-120	SD
20-25	-	30 sec	50-70	110-120	SD
25-30	-	30 sec	50-70	110-120	SD
30-35	-	30 sec	50-70	110-120	SD
35-40	-	30 sec	50-70	110-120	MD
40-45	7:43 AM	7:45 AM	50-70	120-140	MD
45-50	7:45 AM	7:48 AM	50-70	120-140	MD/HD
50-55	7:50 AM	-	50-70	120-140	SD
55-60	-	7:52 AM	50-70	120-140	SD
60-65	7:54 AM	-	50-70	110-120	SD
65-70	-	7:55 AM	50-70	110-120	SD
70-75	7:56 AM	-	50-70	110-130	SD
75-80	-	7:57 AM	50-70	110-130	SD
80-85	7:59 AM	8:01 AM	50-70	120-140	MD
85-90	8:01 AM	8:02 AM	50-70	140-160	MD/HD, C
90-95	8:03 AM	8:04 AM	50-70	140-160	MD
95-100	8:04 AM	8:06 AM	50-70	140-160	MD/HD, C
100-105	8:07 AM	8:09 AM	50-70	140-160	MD
105-110	8:09 AM	8:11 AM	50-70	140-160	MD
110-115	8:12 AM	8:14 AM	50-70	140-160	MD
115-120	8:14 AM	8:17 AM	50-70	140-160	MD

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: P32
Elev: 152.28

Date Drilled: 3/5/2013
Date Grouted: 3/5/2013
Inspector: KJ

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
120-125	8:20 AM	8:21 AM	50-70	120-140	MD
125-130	8:21 AM	8:24 AM	50-70	120-140	MD
130-135	8:25 AM	8:27 AM	50-70	120-140	MD
135-140	8:27 AM	8:29 AM	50-70	120-140	MD
140-145	8:31 AM	8:32 AM	50-70	140-160	MD
145-150	8:32 AM	8:34 AM	50-70	140-160	MD
150-155	8:36 AM	8:37 AM	50-70	140-160	MD,C
155-160	8:37 AM	8:38 AM	50-70	120-140	MD/SD,C
160-165	8:39 AM	-	50-70	120-140	SD
165-170	-	8:40 AM	50-70	120-140	SD
170-175	8:42 AM	-	50-70	120-140	SD
175-180	-	8:43 AM	50-70	120-140	SD
180-185	8:45 AM	-	50-70	120-140	SD
185-190	-	8:46 AM	50-70	120-140	SD
190-195	8:48 AM	-	50-70	120-140	SD
195-200	-	8:49 AM	50-70	120-140	SD
200-205	8:51 AM	8:52 AM	50-70	160-180	MD
205-210	8:52 AM	8:53 AM	50-70	160-180	MD/SD,C
210-215	8:54 AM	-	50-70	140-160	SD/MD
215-220	-	8:55 AM	50-70	140-160	SD/MD
220-225	8:57 AM	-	50-70	140-160	SD
225-230	-	8:58 AM	50-70	140-160	SD
230-235	8:59 AM	-	50-70	160-180	MD
					end of boring 9:06 AM

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: P33
Elev: 152.11

Date Drilled: 3/5/2013
Date Grouted: 3/6/2013
Inspector: KJ

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
0-5'	-	30 sec	50-70	110-120	Start of Boring 2:43 PM (Rig checked for plumb)
5-10	-	30 sec	50-70	110-120	SD
10-15	2:46 PM	-	50-70	110-120	SD/MD
15-20	-	2:47 PM	50-70	110-120	SD/MD
20-25	2:48 PM	-	50-70	120-140	SD/MD
25-30	-	2:49 PM	50-70	120-140	SD/MD
30-35	2:50 PM	2:51 PM	50-70	120-140	MD
35-40	2:51 PM	2:52 PM	50-70	120-140	MD
40-45	2:53 PM	2:55 PM	50-70	140-160	MD
45-50	2:55 PM	2:58 PM	50-70	140-160	MD, LSC, C
50-55	3:00 PM	3:01 PM	50-70	120-140	MD/SD
55-60	3:01 PM	3:02 PM	50-70	120-140	MD/SD
60-65	3:03 PM	3:04 PM	50-70	120-140	SD
65-70	3:04 PM	3:05 PM	50-70	120-140	SD
70-75	3:06 PM	3:07 PM	50-70	120-140	SD
75-80	3:07 PM	3:08 PM	50-70	120-140	SD
80-85	3:09 PM	3:10 PM	50-70	140-160	MD, C
85-90	3:10 PM	3:11 PM	50-70	140-160	MD,C
90-95	3:12 PM	3:13 PM	50-70	140-160	MD/SD
95-100	3:13 PM	3:16 PM	50-70	160-180	MD
100-105	3:18 PM	3:20 PM	50-70	140-160	MD
105-110	3:20 PM	3:24 PM	50-70	140-160	MD
110-115	3:26 PM	3:29 PM	50-70	120-140	MD
115-120	3:29 PM	3:34 PM	50-70	120-140	MD

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: P33
Elev: 152.11

Date Drilled: 3/5/2013
Date Grouted: 3/6/2013
Inspector: KJ

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
120-125	3:35 PM	3:38 PM	50-70	140-160	MD, C
125-130	3:38 PM	3:40 PM	50-70	140-160	MD, C
130-135	3:41 PM	3:44 PM	50-70	140-160	MD
135-140	3:44 PM	3:48 PM	50-70	140-160	MD
140-145	3:50 PM	3:53 PM	50-70	160-180	MD
145-150	3:53 PM	3:56 PM	50-70	160-180	MD
150-155	3:57 PM	3:58 PM	50-70	160-180	MD/SD
155-160	3:58 PM	3:59 PM	50-70	160-180	MD/SD
160-165	4:01 PM	-	50-70	140-160	SD
165-170	-	4:02 PM	50-70	140-160	SD
170-175	4:03 PM	-	50-70	140-160	SD
175-180	-	4:04 PM	50-70	140-160	SD
180-185	4:05 PM	-	50-70	140-160	SD
185-190	-	4:06 PM	50-70	140-160	SD
190-195	4:08 PM	-	50-70	140-160	SD
195-200	-	4:10 PM	50-70	140-160	SD
200-205	4:11 PM	4:13 PM	50-70	160-180	MD,C
205-210	4:13 PM	4:14 PM	50-70	160-1801	MD/HD
210-215	4:16 PM	4:17 PM	50-70	140-160	MD
215-220	4:17 PM	4:19 PM	50-70	160-180	MD/HD
220-225	4:20 PM	4:22 PM	50-70	140-160	MD,C
225-230	4:22 PM	4:33 PM	50-70	180-220	MD/HD, C
230-235	4:34 PM	4:36 PM	50-70	180-220	HD
235-240	4:36 PM	4:38 PM	50-70	160-180	MD (EOB at 4:40 PM)

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: P34
Elev: 151.24

Date Drilled: 3/5/2013
Date Grouted: 3/6/2013
Inspector: KJ

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
0-5'	-	30s	50-70	110-120	start at 12:10PM/ Rig checked for plumb
5-10	-	30s	50-70	110-120	SD
10-15	-	30s	50-70	110-120	SD
15-20	-	30s	50-70	110-120	SD
20-25	-	30s	50-70	110-120	SD
25-30	-	30s	50-70	110-120	SD
30-35	-	30s	50-70	120-140	SD
35-40	-	50s	50-70	120-140	SD/MD
40-45	-	30s	50-70	120-140	SD
45-50	-	30s	50-70	120-140	SD/MD
50-55	-	30s	50-70	120-140	SD/MD
55-60	-	30s	50-70	120-140	SD/MD
60-65	12:36 PM	12:37 PM	50-70	120-140	MD
65-70	12:37 PM	12:38 PM	50-70	140-160	MD
70-75	12:39 PM	12:40 PM	50-70	160-180	MD, C
75-80	12:40 PM	12:42 PM	50-70	160-180	MD, C
80-85	12:43 PM	12:44 PM	50-70	160-180	MD
85-90	12:44 PM	12:48 PM	50-70	160-180	MD
90-95	12:50 PM	12:53 PM	50-70	160-180	MD
95-100	12:53 PM	12:56 PM	50-70	160-180	MD
100-105	12:57 PM	1:00 PM	50-70	160-180	MD/HD
105-110	1:00 PM	1:05 PM	50-70	180-220	HD
110-115	1:06 PM	1:07 PM	50-70	180-220	MD
115-120	1:07 PM	1:10 PM	50-70	180-220	MD/HD

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: P34
Elev: 151.24

Date Drilled: 3/5/2013
Date Grouted: 3/6/2013
Inspector: KJ

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
120-125	1:18 PM	1:20 PM	50-70	140-160	MD, C
125-130	1:20 PM	1:21 PM	50-70	140-160	MD,C
130-135	1:23 PM	1:26 PM	50-70	160-180	MD
135-140	1:26 PM	1:29 PM	50-70	160-180	MD/HD
140-145	1:30 PM	1:31 PM	50-70	140-160	MD/HD
145-150	1:31 PM	1:32 PM	50-70	140-160	MD/HD
150-155	1:33 PM	1:36 PM	50-70	140-160	MD/HD
155-160	1:36 PM	1:38 PM	50-70	160-180	MD/HD
160-165	1:40 PM	1:41 PM	50-70	140-160	SD
165-170	1:41 PM	1:43 PM	50-70	160-180	SD
170-175	1:44 PM	1:45 PM	50-70	140-160	SD
175-180	1:45 PM	1:47 PM	50-70	150-180	SD
180-185	1:48 PM	1:49 PM	50-70	160-180	SD
185-190	1:50 PM	1:51 PM	50-70	160-180	MD
190-195	1:52 AM	-	50-70	160-180	MD
195-200	-	1:54 PM	50-70	160-180	MD
200-205	1:54 PM	-	50-70	160-180	MD
205-210	-	1:56 PM	50-70	160-180	MD
210-215	1:56 PM	-	50-70	160-180	MD
215-220	-	1:58 PM	50-70	160-180	MD
220-225	2:00 PM	2:04 PM	50-70	180-220	MD/HD, C
225-230	2:04 PM	2:08 PM	50-70	180-220	HD, C
230-235	2:09 PM	2:11 PM	50-70	180-220	HD,C
235-240	2:12 PM	2:15 PM	50-70	180-220	HD, C (EOB 2:15 PM, depth 240)

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill

Date Drilled: 3/7/2013

Project #: 13354x8

Date Grouted: 3/7/2013

Pin #: P35

Inspector: RK

Elev: 150.57

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
0-5'	8:03 AM		50-80	100-120	SD
5-10		8:04 AM	50-80	100-120	SD
10-15	8:07 AM		50-80	100-120	SD
15-20		8:08 AM	50-80	100-120	SD
20-25	8:11 AM		50-80	100-120	SD
25-30		8:12 AM	50-80	100-120	SD
30-35	8:13 AM		50-80	100-120	SD
35-40		8:14 AM	50-80	100-120	SD
40-45	8:17 AM		50-80	100-120	SD
45-50	8:17 AM	8:22 AM	50-80	100-120	MD, HH
50-55	8:23 AM		50-80	100-120	SD
55-60		8:24 AM	50-80	100-120	SD
60-65	8:27 AM		50-80	100-120	SD
65-70		8:28 AM	50-80	100-120	SD
70-75	8:30 AM		50-80	100-120	SD
75-80		8:31 AM	50-80	100-120	SD
80-85	8:33 AM		50-80	100-120	SD
85-90	8:33 AM	8:36 AM	50-80	100-160	SD, HH, C, LSC
90-95	8:37 AM	8:38 AM	50-80	100-160	SD, C, LSC
95-100	8:38 AM	8:40 AM	50-80	100-160	SD, LSC
100-105	8:46 AM	8:48 AM	50-80	100-120	SD
105-110	8:48 AM	8:51 AM	50-80	100-120	SD, LSC
110-115	8:54 AM	8:56 AM	50-80	100-120	SD, LSC
115-120	8:56 AM	9:01 AM	50-80	100-120	LSC, HH, HD

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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Tampa, Florida 33607
Phone: (813) 289-0750
Fax: (813)289-5474

COMPACTION GROUT REPORT

Project: SE County Landfill Date Drilled: 3/7/2013
Project #: 13354x8 Date Grouted: 3/7/2013
Pin #: P35 Inspector: RK
Elev: 150.57

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
120-125	9:04 AM	9:05 AM	50-80	100-120	SD, HH
125-130	9:05 AM	9:07 AM	50-80	100-120	SD, HH, C, LSC
130-135	9:09 AM	9:10 AM	50-80	100-120	SD
135-140	9:10 AM	9:13 AM	50-80	100-150	SD, LSC, C
140-145	9:15 AM	9:17 AM	50-80	100-150	SD, HH, LSC
145-150	9:17 AM	9:21 AM	50-80	100-150	SD, LSC
150-155	9:33 AM	9:35 AM	50-80	100-150	SD, HH, C, LSC
155-160	9:35 AM	9:36 AM	50-80	100-150	SD, HH, C, LSC
160-165	9:36 AM		50	120-180	SD
165-170		9:37 AM	50	120-180	SD
170-175	9:39 AM		50	120-180	SD
175-180		9:40 AM	50	120-180	SD
180-185	9:42 AM		50	150-200	SD
185-190		9:43 AM	50	150-200	SD
190-195	9:44 AM		50	150-180	SD
195-200		9:45 AM	50	150-180	SD
200-205	9:47 AM		50	150-200	SD
205-210		9:48 AM	50	150-200	SD
210-215	9:52 AM		50	150-200	SD
215-220		9:53 AM	50-80	150-200	SD, LSC
220-225	9:56 AM		50	150-200	SD
225-230		9:57 AM	50-80	150-200	LSC, SD
230-235	10:00 AM	10:02 AM	50-80	150-200	LSC, MD, HD terminated at 235'

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



4919 West Laurel Street
Tampa, Florida 33607
Phone: (813) 289-0750
Fax: (813)289-5474

COMPACTION GROUT REPORT

Project: SE County Landfill

Date Drilled: 3/8/2013

Project #: 13354x8

Date Grouted: _____

Pin #: P36

Inspector: RK

Elev: 149.32

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
0-5'	8:13 AM		50-80	100-120	SD
5-10		8:13 AM	50-80	100-120	SD
10-15	8:15 AM		50-80	100-120	SD
15-20		8:16 AM	50-80	100-120	SD
20-25	8:18 AM		50-80	100-120	SD
25-30		8:20 AM	50-80	100-120	SD
30-35	8:22 AM		50-80	100-120	SD
35-40		8:23 AM	50-80	100-120	SD
40-45	8:25 AM		50-80	100-120	SD
45-50		8:26 AM	50-80	100-120	SD
50-55	8:28 AM		50-80	100-120	SD
55-60		8:29 AM	50-80	100-120	SD
60-65	8:31 AM		50-80	100-120	SD
65-70		8:31 AM	50-80	100-120	SD
70-75	8:33 AM		50-80	100-120	SD
75-80		8:34 AM	50-80	100-120	LSC, C, MD
80-85	8:36 AM		50-80	100-120	LSC, C, MD
85-90		8:38 AM	50-80	100-120	LSC, C, MD
90-95	8:40 AM		50-80	100-120	LSC, C, MD, HD
95-100		8:46 AM	50-80	100-120	LSC, HD
100-105	8:48 AM		50-80	100-120	LSC, MD, HD
105-110		8:53 AM	50-80	100-120	LSC, HD, MD
110-115	8:55 AM		50-80	100-120	LSC to LSC, MD to HD
115-120		9:00 AM	50-80	100-120	LSC, C near bottom, HD

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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Project: SE County Landfill Date Drilled: 3/8/2013
Project #: 13354x8 Date Grouted: _____
Pin #: P36 Inspector: RK
Elev: 149.32

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
120-125	9:02 AM		50-80	100-120	LSC
125-130		9:05 AM	50-80	100-120	LSC for 2' → SD
130-135	9:07 AM		50-80	100-120	C, LSC
135-140		9:11 AM	50-80	100-120	LSC
140-145	9:13 AM		50-80	100-120	LSC, C
145-150		9:17 AM	50-80	100-120	C, LSC
150-155	9:19 AM		50-80	100-120	C, LSC
155-160		9:22 AM	50-80	100-120	C, HH, LSC
160-165	9:24 AM		50-80	100-120	SD, 1' → HD (C, LSC) → HD
165-170		9:26 AM	50-80	100-120	C, LSC → SD at bottom
170-175	9:28 AM		50-80	100-120	SD
175-180		9:28 AM	50-80	100-120	SD
180-185	9:30 AM		50-80	100-120	SD
185-190		9:31 AM	50-80	100-120	SD 4' → 1' MD (LSC)
190-195	9:33 AM		50-80	100-120	SD
195-200		9:34 AM	50-80	100-120	SD, 2' → HD 1' → SD 2'
200-205	9:36 AM		50-80	100-120	LSC
205-210		9:39 AM	50-80	100-120	SD
210-215	9:41 AM		50-80	100-120	SD 3' → LSC, C
215-220		9:49 AM	50-80	100-120	LSC, C 1' → SD 4'
220-225	9:51 AM		50-80	100-120	LSC 2' → SD
225-230		9:55 AM	50-80	100-120	SD
230-235	9:57 AM		50-80	100-120	SD 4' → LSC 1'
235-240		10:05 AM	50-80	100-120	LSC, C → HD end of drilling

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: P37
Elev: 149.00

Date Drilled: 3/7/2013
Date Grouted: 3/7/2013
Inspector: RK

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
0-5'	10:26 AM		50-80	100-120	SD
5-10		10:27 AM	50-80	100-120	SD
10-15	10:29 AM		50-80	100-120	SD
15-20		10:30 AM	50-80	100-120	SD
20-25	10:31 AM		50-80	100-120	SD
25-30		10:32 AM	50-80	100-120	SD
30-35	10:34 AM		50-80	100-120	SD
35-40		10:35 AM	50-80	100-120	SD
40-45	10:36 AM		50-80	100-120	SD
45-50		10:36 AM	50-80	100-120	SD
50-55	10:39 AM		50-80	100-120	SD
55-60		10:40 AM	50-80	100-120	SD
60-65	10:41 AM		50-80	100-120	SD
65-70		10:41 AM	50-80	100-120	SD
70-75	10:44 AM	10:45 AM	50-80	100-150	SD, LSC
75-80	10:45 AM	10:46 AM	50-80	100-150	SD, LSC, C
80-85	10:48 AM	10:49 AM	50-80	100-150	SD, C, LSC
85-90	10:49 AM	10:51 AM	50-80	100-150	SD, LSC
90-95	10:53 AM	10:54 AM	50-80	100-150	SD, C, LSC
95-100	10:54 AM	10:58 AM	50-80	100-180	SD, LSC
100-105	11:01 AM	11:02 AM	50-80	100-120	SD, LSC
105-110	11:02 AM	11:05 AM	50-80	100-120	SD, LSC, C
110-115	11:08 AM	11:10 AM	50-80	100-150	SD, LSC, HH, C
115-120	11:10 AM	11:16 AM	50-80	100-120	SD, LSC, HD

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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Pin #: P37
Elev: 149.00

Date Drilled: 3/7/2013
Date Grouted: 3/7/2013
Inspector: RK

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
120-125	11:16 AM	11:18 AM	50-90	140-200	SD, LSC
125-130	11:18 AM	11:20 AM	50-70	100-160	SD, LSC, C
130-135	11:21 AM	11:22 AM	50-80	100-160	SD, LSC
135-140	11:22 AM	11:25 AM	50-80	100-220	SD, LSC
140-145	11:28 AM	11:30 AM	50-80	100-180	SD, LSC
145-150	11:30 AM	11:33 AM	50-70	100-160	SD, LSC, C
150-155	11:36 AM	11:36 AM	50-70	100-160	SD
155-160	11:36 AM	11:38 AM	50-70	100-160	LSC, HD
160-165	11:40 AM	11:40 AM	50-80	100-160	SD
165-170	11:40 AM	11:43 AM	50-80	100-200	SD, HD, LSC
170-175	11:45 AM	11:46 AM	50-80	100-180	LSC, MD
175-180	11:46 AM	11:47 AM	50-80	100-200	SD
180-185	11:50 AM		50-80	100-180	SD
185-190		11:50 AM	50-90	100-200	SD
190-195	11:52 AM	11:52 AM	50-90	100-200	SD
195-200	11:52 AM	11:54 AM	50-80	100-180	LSC, HD
200-205	12:19 PM		50-70	100-220	SD
205-210		12:20 PM	50-70	100-180	SD
210-215	12:21 PM		50-70	100-160	SD
215-220		12:21 PM	50-70	100-160	SD
220-225	12:24 PM		50-90	100-220	SD
225-230		12:25 PM	50-90	100-220	MD
230-235	12:28 PM	12:30 PM	50-90	100-220	MD
235-240	12:30 PM	12:31 PM	50-90	100-220	terminated at 237'

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill

Date Drilled: 3/13/2013

Project #: 13354x8

Date Grouted: 3/14/2013

Pin #: P38

Inspector: RK

Elev: 148.14

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
0-5'	10:15 AM	20 sec	50-80	100-120	SD
5-10		20 sec	50-80	100-120	SD
10-15	10:17 AM	20 sec	50-80	100-120	SD
15-20		25 sec	50-80	100-120	SD
20-25	10:26 AM	30 sec	50-80	100-120	SD
25-30		30 sec	50-80	100-120	SD
30-35	10:29 AM	35 sec	50-80	100-120	SD
35-40		42 sec	50-80	100-120	SD
40-45	10:33 AM		50-80	100-120	SD
45-50		10:36 AM	50-80	100-120	SD
50-55	10:37 AM		50-80	100-120	SD
55-60		10:39 AM	50-80	100-120	SD
60-65	10:41 AM		50-80	100-120	SD
65-70		10:42 AM	50-80	120-150	SD
70-75	10:44 AM		50-80	120-150	SD
75-80		10:46 AM	50-80	120-180	MD, LSC
80-85	10:48 AM		50-80	120-180	MD, HD, LSC
85-90		10:52 AM	50-80	120-180	MD, HD, LSC
90-95	10:54 AM		50-80	120-180	HD, LSC
95-100		10:57 AM	50-80	120-180	MD, HD, LSC
100-105	11:03 AM		50-80	120-180	HD, LSC
105-110		11:12 AM	50-80	120-180	MD, HD, LSC
110-115	11:14 AM		50-80	120-180	HD, LSC
115-120		11:20 AM	50-80	120-180	HD, LSC

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: P38
Elev: 148.14

Date Drilled: 3/13/2013
Date Grouted: 3/14/2013
Inspector: RK

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
120-125	12:16 PM		50-80	120-180	HD, LSC
125-130		12:21 PM	50-80	120-200	HD, LSC
130-135	12:24 PM		50-80	120-200	HD, LSC
135-140		12:30 PM	50-80	120-200	HD, LSC
140-145	12:34 PM	12:41 PM	50-80	120-200	HD, LSC
145-150		40s	50-80	120-200	HD, LSC, SD
150-155	12:46 PM	40s	50-80	120-200	SD, MD, CR
155-160		45s	50-80	120-200	MD, LSC
160-165	12:53 PM	40s	50-80	100-180	MD, SD, CR
165-170		15s	50-80	100-180	SD, CR
170-175	12:56 PM	20s	50-80	100-180	SD, CR
175-180		20s	50-80	100-180	SD, CR
180-185	1:03 PM	60s	50-80	100-180	MD, CR, LSC
185-190		25s	50-80	100-180	SD, CR
190-195	1:08 PM	20s	50-80	100-180	SD, CR
195-200		20s	50-80	100-180	SD, CR
200-205	1:12 PM	15s	50-80	100-180	SD, CR
205-210		1:14 PM	50-80	100-180	SD, MD, LSC, HD, LSC, SD
210-215	1:19 PM	28s	50-80	100-180	SD, MD, CR
215-220		1:21 PM	50-80	120-200	MD, SD, LSC, CR
220-225	1:24 PM	30s	50-80	120-200	LSC, LSC, CR, MD, SD
225-230		1:32 PM	50-80	120-200	LSC, C, HD, TERMINATED

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: P39
Elev: 147.67

Date Drilled: 3/18/2013
Date Grouted: 3/21/2013
Inspector: RK

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
0-5'	2:23 PM	20s	50-80	120-180	SD
5-10		20s	50-80	120-180	SD
10-15	2:26 PM	20s	50-80	120-180	SD
15-20		20s	50-80	120-180	SD
20-25	2:28 PM	20s	50-80	120-180	SD
25-30		20s	50-80	120-180	SD
30-35	2:31 PM	30s	50-80	120-180	SD
35-40		1.5m	50-80	120-180	LSC, MD
40-45	2:37 PM	1m	50-80	120-180	LSC, MD/HD
45-50		3m	50-80	120-180	LSC, MD/HD
50-55	2:41 PM	20s	50-80	120-180	LSC, SD/MD
55-60		45s	50-80	120-180	LSC, MD
60-65	2:45 PM	35s	50-80	120-180	LSC, MD
65-70		1.25s	50-80	120-180	LSC, MD/HD
70-75	2:49 PM	25s	50-80	120-180	LSC, HD
75-80		1.5m	50-80	120-180	LSC, HD
80-85	2:54 PM	2m	50-80	120-180	LSC, HD
85-90		5m	50-80	120-180	LSC, HD
90-95	3:40 PM	10m/1.5m	50-80	120-180	LSC-10 min with no advancement, will start duplex
95-100		2m	50-80	120-180	LSC,C MD/HD
100-105	3:47 PM	1.5m	50-80	120-180	LSC MD/HD
105-110		1.5m	50-80	120-180	LSC MD/HD
110-115	3:55 PM	1.5m	50-80	120-180	LSC
115-120		3m	50-80	120-180	LSC, C

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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Project: SE County Landfill
Project #: 13354x8
Pin #: P39
Elev: 147.67

Date Drilled: 3/18/2013
Date Grouted: 3/21/2013
Inspector: RK

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
120-125	4:12 PM	45s	50-80	120-180	LSC MD/HD
125-130		1.5m	50-80	120-180	LSC, C MD/HD
130-135	4:20 PM	45s	50-80	120-180	CR for 3', LSC for 2' SD/MD
135-140		4m	50-80	120-180	CR to LRC, MD
140-145	4:28 PM	7.1m	50-80	120-180	LSC MD/HD
145-150		2m	50-80	120-180	LSC MD/HD
150-155	4:40 PM	1m	50-80	120-180	LSC MD/SD
155-160		40s	50-80	120-200	LSC MD/SD
160-165	4:46 PM	35s	50-80	120-200	CR, SD
165-170		40s	50-80	120-200	CR, SD
170-175	4:50 PM	30s	50-80	120-200	CR, SD
175-180		40s	50-80	120-200	CR, SD
180-185	4:59 PM	35s	50-80	120-200	CR, SD
185-190		35s	50-80	120-200	CR, SD
190-195	5:03 PM	35s	50-80	120-200	CR, SD
195-200		1m	50-80	120-200	CR, SD
200-205	5:08 PM	38s	50-80	120-200	CR, SD
205-210		1m	50-80	120-200	CR, SD
210-215	5:13 PM	40s	50-80	120-200	CR, SD
215-220		25s	50-80	120-200	CR, SD
220-225	4:17 PM	1.75m	50-80	120-200	CR, SD
225-230		9m	50-80	120-200	LSC,C

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: P40
Elev: 147.32

Date Drilled: 3/12/2013 & 3/13/2013
Date Grouted: 3/15/2013
Inspector: KJ

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
0-5'	12:57 PM	15s	50-80	100-120	Started drilling
5-10		20s	50-80	100-120	SD
10-15	1:08 PM	30s	50-80	100-120	SD
15-20		35s	50-80	100-120	SD
20-25	1:12 PM	32s	50-80	100-120	SD
25-30		34s	50-80	100-120	SD
30-35	1:15 PM	1.25m	50-80	100-120	MD, LOC
35-40		1.5m	50-80	100-120	MD
40-45	1:20 PM	6.5m	50-80	100-150	LSC, C, HH (regained H2O) strong odor
45-50		2.5m	50-80	100-150	LSC
50-55	1:31 PM	42s	50-80	110-120	SD
55-60		55s	50-80	100-120	SD
60-65	1:35 PM	47s	50-80	100-120	SD
65-70		1.11m	50-80	100-120	SD / strong odor
70-75	1:40 PM	40s	50-80	100-120	SD / strong odor
75-80		1m	50-80	100-120	SD to MD / strong odor
80-85	1:47 PM	1.5m	50-80	100-120	C, LSC, HH / strong odor
85-90		1m	50-80	100-120	LSC, HH
90-95	1:53 PM	1.5m	50-80	100-120	LSC, HH / smell
95-100		1m	50-80	100-120	LSC, HH / smell
100-105	1:58 AM	2.5m	50-80	100-120	LSC, HH
105-110		1.8m	50-80	100-120	LSC, HH
110-115	2:11 PM	48s	50-80	100-120	LSC, HD
115-120		17m	50-80	100-120	LSC, C, HH, HD

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: P40
Elev: 147.32

Date Drilled: 3/12/2013 & 3/13/2013
Date Grouted: 3/15/2013
Inspector: RK

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
120-125	2:46 PM	1.75m	50-80	100-150	LSC, HD
125-130		2.5m	50-80	150-180	LSC, C, HH
130-135	2:54 PM	1.2m	50-80	150-200	LSC, C, HD
135-140		2m	50-80	150-200	LSC, C, HD
140-145	3:00 PM	3m	50-80	150-200	LSC, HH, HD
145-150		2.5m	50-80	150-200	LSC, HH, HD
150-155	3:09 PM	1.5m	50-80	150-200	C, MD
155-160		5m	50-80	150-200	LSC, C, MD to HD
160-165	3:17 PM	3.25m	50-80	150-200	LSC, C, MD to HD
165-170		2.6m	50-80	150-200	LSC, C, MD to HD
170-175	3:29 PM	1.8m	50-80	150-200	LSC, MD to HD
175-180		4m	50-80	150-200	LSC, MD to HD
180-185	3:56 PM	3m	50-80	150-200	LSC, HD
185-190		4m	50-80	12S0-150	2' soft, LSC, HH, very hard to MD
190-195	4:06 PM	20s	50-80	100-150	SD
195-200		30s	50-80	100-150	SD, MD
200-205	4:09 AM	20s	50-80	100-150	SD, MD
205-210		5.5m	50-80	150-180	HD, LSC, C, SD
210-215	4:17 PM	8m	50-80	150-180	C, LSC, HH (soft at bottom)
215-220		20m/30s	50-80	150-180	C, LSC, HH (will duplex next morning)
220-225	8:30 AM	40s	50-80	180-250	Very high torque (pipe tight) - Cont. 3/13/2013

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



4919 West Laurel Street
Tampa, Florida 33607
Phone: (813) 289-0750
Fax: (813)289-5474

COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: P41
Elev: 146.45

Date Drilled: 3/15/2013 and 03/18/13
Date Grouted: 3/21/2013
Inspector: RK

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
0-5'	2:58 PM	15s	50-80	100-120	CR, SD
5-10		15s	50-80	100-120	CR, SD
10-15	3:04 PM	15s	50-80	100-120	CR, SD
15-20		15s	50-80	100-120	CR, SD
20-25	3:07 PM	20s	50-80	100-120	CR, SD
25-30		20s	50-80	100-120	CR, SD
30-35	3:13 PM	20s	50-80	100-120	CR, SD
35-40		1m	50-80	120-240	CR for 3'-LSC for 2' MD
40-45	3:20 PM	4m	50-80	120-240	LSC to CR, MD
45-50		4m	50-80	120-240	CR to LSC
50-55	3:33 PM	20m	50-80	100-120	CR, SD
55-60		1m	50-80	120-240	CR, SD for 4' - LSC 1'
60-65	3:37 PM	2m	50-80	120-240	LSC, MD to HD
65-70		2m	50-80	120-150	CR to LSC, MD
70-75	3:45 PM	1m	50-80	100-150	LSC to CR, MD
75-80		2m	50-80	120-150	LSC to CR, MD
80-85	7:49 AM	50s	50-80	120-150	LSC to MD
85-90		1.1m	50-80	120-150	LSC, MD to HD
90-95	7:53 AM	50s	50-80	120-150	LSC, MD to HD
95-100		3m	50-80	120-150	LSC, MD to HD
100-105	8:11 AM	1m	50-80	120-150	LSC, MD to HD
105-110		1.5m	50-80	120-150	LSC, MD to HD
110-115	8:15 AM	1.25m	50-80	120-150	LSC, MD to HD
115-120	9:14 AM	1m	50-80	120-150	LSC

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: P41
Elev: 146.45

Date Drilled: 3/15/2013 & 03/18/13
Date Grouted: 3/21/2013
Inspector: KJ

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
120-125	9:19 AM	35s	50-80	120-150	LSC
125-130		2m	50-80	120-150	LSC, CR, MD, HD to soft
130-135	9:26 AM	2m	50-80	120-150	LSC MD to HD
135-140		6m	50-80	120-150	LSC MD to HD
140-145	9:38 AM	3m	50-80	120-150	LSC-C, MD, HD
145-150		3m	50-80	120-150	LSC, C, MD to HD
150-155	9:47 AM	1.25m	50-80	120-150	LSC, C, MD to HD
155-160		3m	50-80	120-150	LSC, C, MD to HD
160-165	9:55 AM	3m	50-80	120-150	LSC, MD to HD
165-170		5.75m	50-80	120-150	CR for 2' LSC, C
170-175	10:07 AM	2m	50-80	120-150	LSC for 3', SD
175-180		4m	50-80	120-150	LSC, C, HD
180-185	10:17 AM	1.4m	50-80	120-150	LSC for 2' CR 3'
185-190		3.5m	50-80	120-150	LSC for 4.5' SD
190-195	10:26 AM	20s	50-80	120-200	CR, SD
195-200		30s	50-80	120-200	CR, SD, HH
200-205	10:30 AM	40s	50-80	120-200	CR, HH, SD
205-210		10s	50-80	120-200	CR, SD
210-215	10:35 AM	30s	50-80	120-200	CR, SD
215-220		30 sec	50-80	120-200	CR, SD
220-225	10:39 AM	1m	50-80	180-240	CR to LSC, SD to MD
225-230		2.5m	50-80	180-240	CR to LSC, SD to MD, end of boring 230'

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill

Date Drilled: 3/11/2013

Project #: 13354x8

Date Grouted: 3/12/2013

Pin #: P42

Inspector: RK

Elev: 146.21

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
0-5'	10:04 AM		50-80	100-120	SD
5-10		11:05 AM	50-80	100-120	SD
10-15	11:07 AM		50-80	100-120	SD
15-20		11:07 AM	50-80	100-120	SD
20-25	11:09 AM		50-80	100-120	SD
25-30		11:10 AM	50-80	100-180	SD
30-35	11:12 AM		50-80	100-180	LSC
35-40		11:17 AM	50-80	100-180	LSC
40-45	11:19 AM		50-80	100-180	LSC
45-50		11:19 AM	50-80	100-180	LSC
50-55	11:21 AM		50-80	100-180	LSC
55-60		11:23 AM	50-80	100-180	LSC
60-65	11:25 AM		50-80	100-180	LSC
65-70		11:25 AM	50-80	100-180	LSC
70-75	11:27 AM		50-80	100-180	chassing bit
75-80		11:30 AM	50-80	100-180	LSC
80-85	11:32 AM		50-80	100-180	LSC, CL
85-90		11:34 AM	50-80	100-180	LSC
90-95	11:36 AM		50-80	100-180	LSC
95-100		11:40 AM	50-80	100-180	LSC, HH
100-105	11:42 AM		50-80	100-180	LSC, HH
105-110		11:45 AM	50-80	100-180	LSC, HH
110-115	11:47 AM		50-80	100-180	LSC, HH
115-120		11:52 AM	50-80	100-180	LSC, HH

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: P42
Elev: 146.21

Date Drilled: 3/11/2013
Date Grouted: 3/12/2013
Inspector: RK

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
120-125	11:55 AM		50-80	120-180	LSC, HH
125-130		12:00 PM	50-80	120-180	LSC, HH →soft last 2'
130-135	12:02 PM		50-80	120-180	C, LSC
135-140		12:08 PM	50-80	120-180	LSC, HD very hard 1'→hard, HH-C bottom 1'
140-145	12:10 PM		50-80	120-180	LSC
145-150		12:16 PM	50-80	120-180	LSC, HH
150-155	12:18 PM		50-80	120-180	C, LSC, HD very hard at bottom
155-160		1:13 PM	50-80	120-180	C, LSC, HD very hard (10mins 2'), HH
160-165	1:15 PM		50-80	120-180	start duplex LSC, C for 1'→medium MD
165-170		1:22 PM	50-80	120-180	MD
170-175	1:24 PM		50-80	120-180	LSC, MD, SD, MD, HD, MD, SD
175-180		1:32 PM	50-80	120-180	LSC, C HD, SD, HD, MD
180-185	1:34 PM		50-80	120-180	LSC, C
185-190		1:41 PM	50-80	120-180	LSC, C, Grout, HD to MD, SD last 2'
190-195	1:43 PM		50-80	120-180	SD 1' →MD, LSC
195-200		1:50 PM	50-80	120-180	LSC, LOC, TC
200-205	1:52 PM		50-80	120-180	LSC, C, MD, SD
205-210		1:56 PM	50-80	120-180	LSC, MD, SD
210-215	1:58 PM		50-80	120-200	SD 1' →MD, LSC
215-220		2:23 PM	50-80	120-200	SD, LSC, MD
220-225	2:25 PM		50-80	120-200	SD, MD, LSC
225-230		2:30 PM	50-80	120-200	MD, LSC, HH, SD lower 2'
230-235	2:32 PM		50-80	120-200	MED, SD, MD
235-240		2:35 PM	50-80	120-200	MD, HD, LSC, HH end of drill at 2:35pm

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: P43
Elev: 141.8

Date Drilled: 3/25/2013
Date Grouted: 3/25/2013
Inspector: RK

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
0-5'	8:49 AM		50-80	100-120	SD
5-10		8:50 AM	50-80	100-120	MD
10-15	8:58 AM		50-80	100-120	MD
15-20		9:06 AM	50-80	100-120	HD, C, LSC, strong odor
20-25	9:07 AM		50-80	100-120	HD, C, LSC, strong odor
25-30		9:21 AM	50-80	100-120	HD, LSC
30-35	9:23 AM		50-80	100-120	HD, LSC
35-40		9:30 AM	50-80	100-120	HD, LSC
40-45	9:32 AM		50-80	100-120	SD
45-50		9:33 AM	50-80	100-120	SD
50-55	9:34 AM		50-80	100-120	SD/MD
55-60		9:36 AM	50-80	100-120	MD, LSC
60-65	9:38 AM		50-80	100-120	MD, LSC
65-70		9:40 AM	50-80	100-120	SD, MD, ground bubbling near hole
70-75	9:41 AM		50-80	100-120	SD, MD, C, LSC
75-80		9:46 AM	50-80	100-120	MD, HD, C, LSC
80-85	9:47 AM		50-80	100-120	MD, HD, C, LSC
85-90		9:52 AM	50-80	100-120	MD, HD, C, LSC
90-95	9:54 AM		50-80	100-120	MD, HD, C, LSC
95-100		10:00 AM	50-80	100-120	MD, HD, C, LSC
100-105	10:02 AM		50-80	100-120	MD, HD, C, LSC
105-110		10:07 AM	50-80	100-120	MD, HD, C, LSC
110-115	10:14 AM		50-80	100-120	HD, C, LSC
115-120		10:21 AM	50-80	100-120	HD, C, LSC

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: P43
Elev: 141.8

Date Drilled: 3/25/2013
Date Grouted: 3/25/2013
Inspector: RK

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start				
120-125	10:23 AM		50-80	100-120	MD, SD, C
125-130		10:27 AM	50-80	100-120	MD, HD, C, LSC
130-135	10:29 AM		50-80	100-120	HD, C, LSC
135-140		10:47 AM	50-80	100-120	HD, C, LSC
140-145	10:48 AM		50-80	100-120	HD, C, LSC
145-150		10:52 AM	50-80	100-120	HD, C, LSC
150-155	10:53 AM		50-80	100-120	HD, C, LSC
155-160		11:01 AM	50-80	100-120	HD, C, LSC
160-165	11:02 AM		50-80	100-120	HD, C, LSC
165-170		11:12 AM	50-80	100-120	MD, HD, C, LSD
170-175	11:14 AM		50-80	100-120	MD, HD, C, LSD
175-180		11:25 AM	50-80	120-180	MD, HD, C, LSC
180-185	11:27 AM		50-80	100-150	HD,C,LSC
185-190		11:37 AM	50-80	100-150	HD,C,LSC
190-195	11:39 AM		50-80	100-150	HD,C,LSC
195-200		11:55 AM	50-80	100-150	HD,C,LSC
200-205	11:58 AM		50-80	150-180	SD, C, LSC
205-210		12:01 PM	50-80	100-150	LSC, C, SD, LSC, C
210-215	12:04 PM		50-80	100-150	SD
215-220		12:08 PM	50-80	100-150	SD, MD, HH
220-225	12:09 PM		50-80	100-150	SD, MD
225-230		12:13 PM	50-80	100-150	SD, LSC, C
230-235	12:14 PM	12:16 PM	50-80	100-150	MD, HD
235-240					EOB 233' 12.17 PM

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: P44
Elev: 147.23

Date Drilled: 3/25/2013 & 3/26/2013
Date Grouted: 3/26/2013
Inspector: RK

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
0-5'	4:20 PM		50-80	100-120	SD
5-10		4:21 PM	50-80	100-120	SD
10-15	4:23 PM		50-80	100-120	SD
15-20		4:28 PM	50-80	100-120	SD, LSC, strong odor
20-25	4:31 PM		50-80	100-120	SD, LSC
25-30		4:45 PM	50-80	100-120	SD, LSC
30-35	4:46 PM		50-80	100-120	SD, LSC
35-40		4:56 AM	50-80	100-120	SD, LSC
40-45	7:28 AM		50-80	100-180	MD
45-50		7:30 AM	50-80	100-180	MD
50-55	7:36 AM		50-80	100-150	MD
55-60		7:39 AM	50-80	100-150	HD, MD, LSC, C
60-65	7:42 AM		50-80	100-150	HD, MD, LSC, C
65-70		7:43 AM	50-80	100-150	HD, MD, LSC, C
70-75	7:45 AM		50-80	100-150	HD, MD, LSC, C
75-80		7:48 AM	50-80	100-150	HD, MD, LSC, C
80-85	7:50 AM		50-80	100-150	HD, MD, LSC, C
85-90		7:56 AM	50-80	100-150	HD, MD, LSC, C
90-95	7:58 AM		50-80	100-150	HD, MD, LSC, C
95-100		8:04 AM	50-80	100-150	HD, MD, LSC, C
100-105	8:05 AM		50-80	100-150	HD, MD, LSC
105-110		8:12 AM	50-80	100-150	HD, MD, LSC
110-115	8:13 AM		50-80	100-150	HD, MD, LSC, C
115-120		8:20 AM	50-80	100-150	HD, MD, LSC, C

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: P44
Elev: 147.23

Date Drilled: 3/25/2013 & 3/26/2013
Date Grouted: 3/26/2013
Inspector: RK

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
120-125	8:22 AM		50-80	100-150	HD, MD, LSC, C
125-130		8:26 AM	50-80	100-150	HD, MD, LSC
130-135	8:27 AM		50-80	100-150	HD, MD, LSC, HH
135-140		8:47 AM	50-80	100-150	HD, MD, LSC, HH
140-145	8:48 AM		50-80	100-120	HD, MD, LSC, C
145-150		8:54 AM	50-80	100-120	HD, MD, LSC, C
150-155	8:55 AM		50-80	100-120	HD, MD, LSC
155-160		9:01 AM	50-80	100-120	HD, MD, LSC, C
160-165	9:11 AM		50-80	100-150	HD, MD, LSC, C
165-170		9:19 AM	50-80	100-150	HD, MD, LSC, C
170-175	9:30 AM		50-80	100-150	HD, MD, LSC
175-180		9:38 AM	50-80	100-150	HD, MD, LSC, C
180-185	12:00 AM		50-80	100-150	HD, MD, LSC, C
185-190		12:00 AM	50-80	100-150	HD, MD, LSC, C
190-195	9:51 AM		50-80	100-150	HD, MD, LSC, C
195-200		10:00 AM	50-80	100-150	HD, MD, LSC, C
200-205	10:02 AM		50-80	100-150	HD, MD, LSC, C
205-210		10:08 AM	50-80	100-150	HD, MD, LSC, C
210-215	10:09 AM	15s	50-80	100-150	SD
215-220		10:13 AM	50-80	100-150	LSC, MD, SD, HD, LSC
220-225	10:15 AM		50-80	100-150	LSC, HD
225-230		10:21 AM	50-80	100-150	LSC, C, HD,

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill

Date Drilled: 3/27/2013

Project #: 13354x8

Date Grouted: 3/28/2103

Pin #: P45

Inspector: KJ

Elev: 145.85

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
0-5'	1:35 PM		50-70	100-110	SD
5-10		1:36 PM	50-70	100-110	SD
10-15	1:37 PM	1:38 PM	50-70	110-120	MD, SD
15-20	1:38 PM	1:40 PM	50-70	110-120	MD
20-25	1:41 PM	1:46 PM	50-70	120-140	MD
25-30	1:46 PM	1:51 PM	50-70	120-140	MD
30-35	1:52 PM	1:56 PM	50-70	120-140	MD
35-40	1:56 PM	2:02 PM	50-70	120-140	MD
40-45	2:03 PM	2:05 PM	50-70	110-120	SD
45-50	2:05 PM	2:07 PM	50-70	110-120	SD
50-55	12:00 AM	12:00 AM	50-70	110-120	SD
55-60	12:00 AM	12:00 AM	50-70	110-120	SD
60-65	12:00 AM		50-70	100-110	SD
65-70		2:13 PM	50-70	100-110	SD
70-75	2:14 PM		50-70	100-110	SD
75-80		2:15 PM	50-70	100-110	SD
80-85	2:16 PM	2:19 PM	50-70	120-140	MD
85-90	2:19 PM	2:21 PM	50-70	120-140	MD
90-95	2:22 PM	2:25 PM	50-70	120-140	MD
95-100	2:25 PM	2:30 PM	50-70	120-140	MD
100-105	2:31 PM	2:34 PM	50-70	120-140	MD
105-110	2:34 PM	2:38 PM	50-70	120-140	MD
110-115	2:39 PM	2:43 PM	50-70	120-140	MD, SD
115-120	2:43 PM	2:46 PM	50-70	120-140	MD, SD

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



4919 West Laurel Street
Tampa, Florida 33607
Phone: (813) 289-0750
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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: P45
Elev: 145.85

Date Drilled: 3/27/2013
Date Grouted: 3/28/2013
Inspector: KJ

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
120-125	2:47 PM	2:49 PM	50-70	120-140	MD, TSC, BSC
125-130	2:49 PM	2:51 PM	50-70	120-140	MD, TSC, BSC
130-135	2:52 PM	2:57 PM	50-70	120-140	MD, HD
135-140	2:57 PM	3:04 PM	50-70	120-140	MD, HD
140-145	3:05 PM	3:07 PM	50-70	120-140	MD, HD
145-150	3:07 PM	3:10 PM	50-70	120-140	MD
150-155	3:11 PM	3:14 PM	50-70	120-140	MD
155-160	3:14 PM	3:18 PM	50-70	120-140	MD
160-165	3:19 PM	3:24 PM	50-70	140-160	MD
165-170	3:24 PM	3:28 PM	50-70	140-160	MD
170-175	3:29 PM	3:37 PM	50-70	140-160	MD, HD, C
175-180	3:37 PM	12:00 AM	50-70	140-160	MD, HD, C
180-185	3:45 PM	12:00 AM	50-70	140-160	MD, HD, C
185-190	3:52 PM	12:00 AM	50-70	140-160	MD, HD, C
190-195	4:03 PM	4:33 PM	50-70	140-160	HD, ran out of fuel
195-200	5:00 PM / 9:12 AM	5:33 PM / 9:18 AM	50-70	140-160	HD, C, work stopped, r/r
200-205	10:58 AM	11:01 AM	50-70	120-140	MD, C
205-210	11:01 AM	11:02 AM	50-70	120-140	MD, casing plugged
210-215	11:03 AM	11:08 AM	50-70	120-140	MD, HD
215-220	11:08 AM	11:13 AM	50-70	120-140	MD, HD
220-225	11:14 AM	11:21 AM	50-70	140-160	MD, HD
225-230	11:21 AM	11:27 AM	50-70	140-160	MD, HD, Terminated at 230 feet

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: P46
Elev: 149.74

Date Drilled: 3/6/2013
Date Grouted: 3/6/2013
Inspector: TN

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
0-5'	11:43 AM	11:44 AM	50	80	SD
5-10	11:44 AM	11:45 AM	50	80	SD
10-15	11:47 AM		50-60	120	SD, USC
15-20		11:48 AM	50-60	120	SD
20-25	11:50 AM		60	130	SD, USC
25-30		11:51 AM	60	130	SD
30-35	11:54 AM		60-70	180	MD, USC
35-40		11:56 AM	60-70	180	MD, HH
40-45	11:59 AM		60-80	180-200	MD, USC
45-50		12:03 PM	60-80	180-200	MD, loss of circulation
50-55	12:05 PM		50-60	180-200	MD, USC
55-60		12:07 PM	50-60	180-200	MD
60-65	12:09 PM		50-60	150-160	SD, USC
65-70		12:11 PM	50-60	150-160	SD
70-75	12:13 PM		50-60	120-150	SD, USC
75-80		12:15 PM	50-60	120-150	SD
80-85	12:17 PM		50-70	120-160	SD, USC
85-90		12:22 PM	50-70	120-160	MD, C
90-95	12:24 PM	12:26 PM	50-70	120-160	MD, USC
95-100	12:26 PM	12:30 PM	50-70	120-170	HD
100-105	12:32 PM	12:35 PM	50-70	120-160	MD, USC
105-110	12:35 PM	12:38 PM	50-70	120-160	MD, USC
110-115	12:40 PM	12:43 PM	50-70	120-150	MD, USC
115-120	12:43 PM	12:48 PM	50-70	120-150	MD, USC

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: P46
Elev: 149.74

Date Drilled: 3/6/2013
Date Grouted: 3/6/2013
Inspector: TN

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
120-125	12:50 PM	12:52 PM	50-70	110-140	MD, USC
125-130	12:52 PM	12:55 PM	50-70	110-140	MD, USC, C
130-135	12:57 PM	1:00 PM	50-80	110-140	MD, USC, C
135-140	1:00 PM	1:05 PM	50-80	120-140	MD, USC, C
140-145	1:08 PM	1:13 PM	50-60	120-140	MD, USC, C
145-150	1:17 PM	1:25 PM	50-60	120-140	MD, USC, C
150-155	1:27 PM	1:30 PM	50-80	120-180	MD, USC, C
155-160	1:30 PM	1:34 PM	50-70	120-160	MD, USC, C
160-165	1:36 PM	1:41 PM	60-130	120-150	MD, USC, C
165-170	1:41 PM	1:45 PM	50-60	150-170	MD, USC, C
170-175	1:47 PM	1:52 PM	50-60	120-140	MD, USC, C
175-180	1:52 PM	1:58 PM	50-60	120-140	MD, USC, C
180-185	2:00 PM	2:05 PM	50-70	120-160	MD, USC, C
185-190	2:05 PM	2:11 PM	50-100	120-180	MD, USC, C
190-195	2:13 PM	2:15 PM	50-80	120-180	MD, USC, C
195-200	2:15 PM	2:17 PM	50-80	120-160	MD, USC
200-205	2:19 PM	2:20 PM	50-60	160-180	MD, USC, C
205-210	2:20 PM	2:21 PM	50-60	160-190	MD, USC
210-215	2:23 PM	2:25 PM	50-60	150-170	MD, USC
215-220	2:25 PM	2:27 PM	50-60	150-170	MD, USC
220-225	2:29 PM	2:33 PM	50-60	150-220	HD, USC
225-230	2:33 PM	2:36 PM	50-60	180-240	HD, USC
230-235	2:38 PM	2:42 PM	50-60	180-220	HD, USC terminated at 235'

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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Phone: (813) 289-0750
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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: P47
Elev: 150.59

Date Drilled: 3/15/2013
Date Grouted: 3/15/2013
Inspector: KJ

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
0-5'	8:13 AM		50-70	100-120	SOB @ 812
5-10		8:15 AM	50-70	100-120	SD
10-15	8:20 AM		50-70	100-120	SD
15-20		8:21 AM	50-70	100-120	SD
20-25	8:22 AM		50-70	100-120	SD
25-30		8:25 AM	50-70	140-160	MD, C
30-35	8:26 AM	8:28 AM	50-70	140-160	MD
35-40	8:28 AM	8:36 AM	50-70	140-160	MD, HD, LSC
40-45	8:37 AM	8:43 AM	50-70	160-180	MD, HD, LSC
45-50	8:43 AM	8:51 AM	50-70	160-180	HD, MD
50-55	8:52 AM	8:53 AM	50-70	140-160	MD
55-60	8:53 AM	8:54 AM	50-70	140-160	MD
60-65	8:55 AM	8:56 AM	50-70	120-140	SD
65-70	8:56 AM	8:57 AM	50-70	120-140	SD
70-75	8:58 AM	8:59 AM	50-70	120-140	SD
75-80	8:59 AM	9:01 AM	50-70	120-140	SD
80-85	9:02 AM	9:03 AM	50-70	120-140	SD
85-90	9:03 AM	9:04 AM	50-70	120-140	SD
90-95	9:05 AM	9:07 AM	50-70	120-140	SD, MD
95-100	9:07 AM	9:10 AM	50-70	120-140	MD
100-105	9:11 AM	9:12 AM	50-70	120-140	MD, SD
105-110	9:12 AM	9:14 AM	50-70	120-140	MD, SD
110-115	9:16 AM	9:18 AM	50-70	120-140	SD, MD
115-120	9:18 AM	9:24 AM	50-70	140-160	MD, HD

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: P47
Elev: 150.59

Date Drilled: 3/15/2013
Date Grouted: 3/15/2013
Inspector: KJ

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
120-125	9:27 AM	9:29 AM	50-70	140-160	MD
125-130	9:29 AM	9:32 AM	50-70	140-160	MD, HD
130-135	9:33 AM	9:35 AM	50-70	140-160	MD
135-140	9:35 AM	9:38 AM	50-70	160-180	HD, LSC
140-145	9:39 AM	9:42 AM	50-70	160-180	MD, HD, LSC
145-150	9:42 AM	9:47 AM	50-70	160-180	MD, HD, LSC
150-155	9:53 AM	9:55 AM	50-70	160-180	MD, C, small delay w/water pump
155-160	9:55 AM	9:57 AM	50-70	160-180	MD, HD, LSC
160-165	9:58 AM	9:59 AM	50-70	140-160	MD, SD
165-170	9:59 AM	10:04 AM	50-70	160-180	MD, HD, C, LSC
170-175	10:05 AM	10:09 AM	50-70	140-160	HD, C, LSC
175-180	10:09 AM	10:14 AM	50-70	140-160	HD, C, LSC
180-185	10:15 AM	10:16 AM	50-70	120-140	SD
185-190	10:16 AM	10:17 AM	50-70	120-140	SD
190-195	10:18 AM	10:19 AM	50-70	120-140	SD
195-200	10:19 AM	10:20 AM	50-70	120-140	SD
200-205	10:21 AM	10:22 AM	50-70	120-140	SD
205-210	10:22 AM	10:23 AM	50-70	120-140	MD, SD
210-215	10:24 AM	10:26 AM	50-70	120-140	SD
215-220	10:26 AM	10:30 AM	50-70	180-220	HD, C, LSC
220-225	10:31 AM	10:33 AM	50-70	180-220	HD, C, LSC
225-230	10:33 AM	10:35 AM	50-70	160-180	MD, HD
230-235	10:36 AM	10:39 AM	50-70	160-180	MD, HD
235-240	10:39 AM	10:42 AM	50-70	160-180	MD, HD

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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Tampa, Florida 33607
Phone: (813) 289-0750
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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: P48
Elev: 151.5

Date Drilled: 3/14/2013
Date Grouted: 3/14/2013
Inspector: KJ

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
0-5'	12:00 PM		50-70	110-120	SOB 11:52 AM new starter, rig checked for plumb
5-10		12:02 PM	50-70	110-120	SD
10-15	12:04 PM		50-70	110-120	SD
15-20		12:06 PM	50-70	110-120	SD
20-25	12:07 PM		50-70	110-120	SD
25-30		12:09 PM	50-70	110-120	SD
30-35	12:10 PM	12:11 PM	50-70	110-120	SD
35-40	12:11 PM	12:14 PM	50-70	140-160	MD
40-45	12:15 PM	12:17 PM	50-70	140-160	MD
45-50	12:17 PM	12:19 PM	50-70	140-160	MD
50-55	12:20 PM	12:21 PM	50-70	120-140	SD
55-60	12:21 PM	12:22 PM	50-70	120-140	SD
60-65	12:29 PM	12:31 PM	50-70	120-140	MD
65-70	12:31 PM	12:34 PM	50-70	120-140	MD/SD
70-75	12:35 PM	12:36 PM	50-70	120-140	SD
75-80	1:36 AM	12:37 PM	50-70	120-140	SD
80-85	12:38 PM	12:40 PM	50-70	120-140	SD
85-90	12:40 PM	12:42 PM	50-70	140-160	MD, C
90-95	12:43 PM	12:45 PM	50-70	160-180	MD,C
95-100	12:45 PM	12:48 PM	50-70	160-180	HD, C
100-105	12:49 PM	12:52 PM	50-70	160-180	HD, C
105-110	12:52 PM	12:54 PM	50-70	160-180	HD
110-115	12:55 PM	12:56 PM	50-70	160-180	HD
115-120	12:56 PM	1:00 PM	50-70	160-180	HD,C

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: P48
Elev: 151.5

Date Drilled: 3/14/2013
Date Grouted: 3/14/2013
Inspector: KJ

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
120-125	1:01 PM	1:02 PM	50-70	140-160	MD,C
125-130	1:02 PM	1:05 PM	50-70	140-160	MD
130-135	1:06 PM	1:08 PM	50-70	140-160	MD
135-140	1:08 PM	1:11 PM	50-70	140-160	MD
140-145	1:12 PM	1:14 PM	50-70	140-160	MD
145-150	1:14 PM	1:16 PM	50-70	140-160	MD
150-155	1:17 PM	1:19 PM	50-70	140-160	MD
155-160	1:19 PM	1:21 PM	50-70	140-160	MD
160-165	1:22 PM	1:23 PM	50-70	140-160	MD
165-170	1:23 PM	1:25 PM	50-70	140-160	MD
170-175	1:26 PM	1:29 PM	50-70	160-180	MD, HD
175-180	1:29 PM	1:32 PM	50-70	160-180	MD, HD
180-185	1:33 PM	1:34 PM	50-70	120-140	MD, SD
185-190	1:34 PM	1:35 PM	50-70	120-140	SD
190-195	1:36 PM	1:37 PM	50-70	120-140	SD
195-200	1:37 PM	1:38 PM	50-70	120-140	SD
200-205	1:39 PM		50-70	120-140	SD
205-210		1:41 PM	50-70	120-140	SD
210-215	1:42 PM	1:43 PM	50-70	120-140	SD
215-220	1:43 PM	1:44 PM	50-70	120-140	SD
220-225	1:45 PM	1:48 PM	50-70	120-140	SD
225-230	1:48 PM	1:52 PM	50-70	140-160	MD
230-235	1:53 PM	1:56 PM	50-70	140-160	MD, HD

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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Phone: (813) 289-0750
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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: P49
Elev: 152.34

Date Drilled: 3/13/2013
Date Grouted: 3/14/2013
Inspector: KJ

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
0-5'	1:23 PM	-	50-70	110-120	rig plumb
5-10	-	1:24 PM	50-70	110-120	SD
10-15	1:25 PM	-	50-70	110-120	SD
15-20	-	1:26 PM	50-70	110-120	SD
20-25	1:27 PM	1:28 PM	50-70	120-140	SD, MD
25-30	1:28 PM	1:29 PM	50-70	120-140	MD
30-35	1:30 PM	1:31 PM	50-70	120-140	MD
35-40	1:31 PM	1:33 PM	50-70	120-140	MD, SD
40-45	1:34 PM	1:35 PM	50-70	120-140	SD
45-50	1:35 PM	1:36 PM	50-70	120-140	SD
50-55	1:37 PM	1:38 PM	50-70	120-140	MD, SD
55-60	1:38 PM	1:40 PM	50-70	120-140	MD, SD
60-65	1:41 PM	1:42 PM	50-70	120-140	MD, SD
65-70	1:42 PM	1:43 PM	50-70	140-160	MD
70-75	1:44 PM	1:45 PM	50-70	120-140	MD
75-80	1:45 PM	1:47 PM	50-70	120-140	MD
80-85	1:48 PM	1:49 PM	50-70	120-140	MD
85-90	1:49 PM	1:52 PM	50-70	140-160	MD
90-95	1:53 PM	1:55 PM	50-70	140-160	MD
95-100	1:55 PM	1:57 PM	50-70	140-160	MD
100-105	1:58 PM	2:00 PM	50-70	140-160	MD
105-110	2:00 PM	2:05 PM	50-70	160-180	MD, HD
110-115	2:06 PM	2:08 PM	50-70	140-160	MD
115-120	2:08 PM	2:11 PM	50-70	160-180	MD, HD

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: P49
Elev: 152.34

Date Drilled: 3/13/2013
Date Grouted: 3/14/2013
Inspector: KJ

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
120-125	2:12 PM	2:14 PM	50-70	120-140	MD
125-130	2:14 PM	2:17 PM	50-70	120-140	MD
130-135	2:18 PM	2:20 PM	50-70	120-140	MD, C
135-140	2:20 PM	2:24 PM	50-70	120-140	MD, C
140-145	2:25 PM	2:28 PM	50-70	140-160	MD
145-150	2:28 PM	2:32 PM	50-70	140-160	MD, HD
150-155	2:33 PM	2:35 PM	50-70	120-140	MD, SD
155-160	2:35 PM	2:37 PM	50-70	120-140	MD, SD
160-165	2:38 PM	2:40 PM	50-70	120-140	SD
165-170	2:40 PM	2:42 PM	50-70	120-140	SD
170-175	2:44 PM	2:46 PM	50-70	120-140	SD
175-180	2:46 PM	2:47 PM	50-70	120-140	SD
180-185	2:50 PM	2:52 PM	50-70	120-140	SD
185-190	2:52 PM	2:54 PM	50-70	120-140	SD
190-195	2:59 PM	3:00 PM	50-70	120-140	SD
195-200	3:00 PM	3:02 PM	50-70	120-140	SD
200-205	3:03 PM	3:05 PM	50-70	120-140	SD
205-210	3:05 PM	3:07 PM	50-70	120-140	SD
210-215	3:08 PM	3:09 PM	50-70	120-140	SD, MD
215-220	3:09 PM	3:13 PM	50-70	120-140	MD
220-225	3:14 PM	3:17 PM	50-70	140-160	MD, HD
225-230	3:17 PM	3:21 PM	50-70	120-140	MD, HD, Terminated at 225 feet

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: P50
Elev: 152.62

Date Drilled: 3/13/2013
Date Grouted: 3/13/2013
Inspector: KJ

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
0-5'	3:56 PM	-	50-70	110-120	rig plumbed, SOB@1555
5-10	-	3:58 PM	50-70	110-120	SD
10-15	3:59 PM	-	50-70	110-120	SD
15-20	-	4:02 PM	50-70	110-120	SD
20-25	4:03 PM	4:04 PM	50-70	120-140	SD, MD
25-30	4:04 PM	4:05 PM	50-70	120-140	SD, MD
30-35	4:06 PM	4:07 PM	50-70	120-140	MD
35-40	4:07 PM	4:09 PM	50-70	120-140	MD
40-45	4:10 PM	4:13 PM	50-70	140-160	MD, HD
45-50	4:13 PM	4:17 PM	50-70	140-160	MD, HD
50-55	4:18 PM	4:20 PM	50-70	140-160	MD
55-60	4:20 PM	4:21 PM	50-70	140-160	MD
60-65	4:22 PM	-	50-70	140-160	MD, SD
65-70	-	4:23 PM	50-70	140-160	MD, SD
70-75	4:24 PM	4:25 PM	50-70	140-160	MD, SD
75-80	4:25 PM	4:26 PM	50-70	140-160	MD, SD
80-85	4:27 PM	4:28 PM	50-70	140-160	MD
85-90	4:28 PM	4:31 PM	50-70	180-220	MD, HD, C
90-95	4:32 PM	4:34 PM	50-70	160-180	MD, HD
95-100	4:34 PM	4:36 PM	50-70	160-180	MD, HD
100-105	4:37 PM	4:39 PM	50-70	160-180	MD, HD
105-110	4:39 PM	4:41 PM	50-70	160-180	MD, HD
110-115	4:40 PM	4:43 PM	50-70	180-220	HD, C, TSC, BSC
115-120	4:43 PM	4:49 PM	50-70	180-220	HD, C, TSC, BSC

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



4919 West Laurel Street
Tampa, Florida 33607
Phone: (813) 289-0750
Fax: (813)289-5474

COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: P50
Elev: 152.62

Date Drilled: 3/13/2013
Date Grouted: 3/13/2013
Inspector: KJ

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
120-125	4:50 PM	4:52 PM	50-70	180-220	HD
125-130	4:52 PM	4:55 PM	50-70	180-220	HD
130-135	4:56 PM	4:58 PM	50-70	180-220	HD
135-140	4:58 PM	5:01 PM	50-70	180-220	HD
140-145	5:02 PM	5:03 PM	50-70	180-200	HD
145-150	5:03 PM	5:05 PM	50-70	180-200	MD, HD
150-155	5:06 PM	5:07 PM	50-70	120-140	SD
155-160	5:07 PM	5:08 PM	50-70	120-140	SD
160-165	5:09 PM	5:10 PM	50-70	120-140	SD
165-170	5:10 PM	5:11 PM	50-70	120-140	SD
170-175	5:12 PM	5:13 PM	50-70	120-140	SD
175-180	5:13 PM	5:14 PM	50-70	120-140	SD
180-185	5:15 PM		50-70	120-140	SD
185-190		5:16 PM	50-70	120-140	SD
190-195	5:17 PM		50-70	120-140	SD
195-200		5:18 PM	50-70	120-140	SD
200-205	5:19 PM	5:20 PM	50-70	120-140	SD
205-210	5:20 PM	5:22 PM	50-70	120-140	SD, MD
210-215	5:23 PM	5:24 PM	50-70	160-180	SD, MD
215-220	5:24 PM	5:26 PM	50-70	180-220	MD, HD, C, BSC
220-225	5:27 PM	5:28 PM	50-70	160-180	MD, HD, C, BSC
225-230	5:28 PM	5:29 PM	50-70	160-180	MD, HD, C, BSC
230-235	5:30 PM	5:32 PM	50-70	160-180	MD, HD, C, BSC
235-240	5:32 PM	5:35 PM	50-70	160-180	MD, HD, C, BSC

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: P51
Elev: 152.73

Date Drilled: 3/13/2013
Date Grouted: 3/13/2013
Inspector: KJ

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
0-5'	8:12 AM		50-70	110-120	Rig checked for plumb
5-10		8:13 AM	50-70	110-120	SD
10-15	8:14 AM		50-70	110-120	SD
15-20		8:15 AM	50-70	110-120	SD
20-25	8:17 AM	8:18 AM	50-70	120-140	MD, debris
25-30	8:18 AM	8:20 AM	50-70	120-140	MD, debris
30-35	8:21 AM	8:22 AM	50-70	140-160	MD
35-40	8:22 AM	8:24 AM	50-70	140-160	MD, HD
40-45	8:25 AM	8:28 AM	50-70	140-160	MD, HD, debris
45-50	8:28 AM	8:35 AM	60-80	140-160	HD, debris
50-55	8:36 AM	8:37 AM	50-70	140-160	MD
55-60	8:37 AM	8:39 AM	50-70	140-160	MD
60-65	8:40 AM	8:41 AM	50-70	140-160	MD, SD
65-70	8:41 AM	8:42 AM	50-70	120-140	SD
70-75	8:43 AM	8:44 AM	50-70	120-140	SD
75-80	8:44 AM	8:46 AM	50-70	120-140	SD
80-85	8:47 AM	8:49 AM	50-70	140-160	MD, HD
85-90	8:49 AM	8:52 AM	50-70	140-160	MD, HD
90-95	8:53 AM	8:55 AM	50-70	140-160	MD, HD
95-100	8:55 AM	8:59 AM	60-80	160-180	HD
100-105	9:00 AM	9:03 AM	50-70	140-160	HD
105-110	9:03 AM	9:06 AM	50-70	140-160	HD
110-115	9:07 AM	9:10 AM	50-70	160-180	HD
115-120	9:10 AM	9:15 AM	50-70	160-180	HD

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: P51
Elev: 152.73

Date Drilled: 3/13/2013
Date Grouted: 3/13/2013
Inspector: KJ

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
120-125	9:16 AM	9:19 AM	50-70	140-160	HD, C, LSC
125-130	9:19 AM	9:23 AM	50-70	140-160	HD, C, LSC
130-135	9:24 AM	9:25 AM	50-70	120-140	MD
135-140	9:25 AM	9:28 AM	50-70	140-160	HD, MD
140-145	9:29 AM	9:31 AM	50-70	140-160	HD
145-150	9:31 AM	9:34 AM	50-70	140-160	HD
150-155	9:35 AM	9:36 AM	50-70	120-140	SD
155-160	9:36 AM	9:38 AM	50-70	120-140	SD
160-165	9:39 AM	30 sec	50-70	120-140	SD
165-170		9:40 AM	50-70	120-140	SD
170-175	9:41 AM	30 sec	50-70	120-140	SD
175-180		9:42 AM	50-70	120-140	SD
180-185	9:43 AM	30 sec	50-70	120-140	SD
185-190		9:44 AM	50-70	120-140	SD
190-195	9:45 AM	30 sec	50-70	120-140	SD
195-200		9:47 AM	50-70	120-140	SD
200-205	9:48 AM	30 sec	50-70	120-140	SD
205-210		9:49 AM	50-70	120-140	SD
210-215	9:50 AM	9:51 AM	50-70	120-140	SD
215-220	9:51 AM	9:52 AM	50-70	140-160	SD, C
220-225	9:53 AM	9:54 AM	50-70	120-140	SD
225-230	9:54 AM	9:57 AM	50-70	160-180	MD, C, LSC
230-235	9:58 AM	10:00 AM	50-70	140-160	MD
235-240	10:00 AM	10:02 AM	50-70	140-160	MD

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.

COMPACTION GROUT REPORT

Project:	SE County Landfill
Project #:	13354x8
Pin #:	P51
Elev:	152.73

Date Drilled: 3/13/2013
Date Grouted: 3/13/2013
Inspector: KJ

[illegible]

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill

Date Drilled: 3/12/2013 & 3/13/2013

Project #: 13354x8

Date Grouted: _____

Pin #: P52

Inspector: KJ

Elev: 152.62

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
0-5'	3:56 PM	-	50-80	110-120	SD
5-10	-	3:57 PM	50-80	110-120	SD
10-15	3:58 PM	-	50-80	110-120	SD
15-20	-	4:01 PM	50-80	110-120	SD
20-25	4:02 PM	-	50-80	110-120	SD
25-30	-	4:04 PM	50-80	110-120	SD
30-35	4:05 PM	-	50-80	140-160	MD, grout
35-40	-	4:09 PM	50-80	140-160	MD, grout
40-45	4:10 PM	-	50-80	140-160	MD, HD
45-50	-	4:17 PM	50-80	140-160	MD, HD
50-55	4:18 PM	-	50-80	140-160	MD, SD
55-60	-	4:21 PM	50-80	140-160	MD, SD
60-65	4:22 PM	-	50-80	140-160	MD, SD
65-70	-	4:23 PM	50-80	140-160	MD, SD
70-75	4:24 PM	-	50-80	140-160	MD
75-80	-	4:25 PM	50-80	160-180	MD, HD, C, LSC
80-85	4:26 PM	-	50-80	160-180	MD, HD, C, LSC
85-90	-	4:31 PM	50-80	160-180	MD, HD, C, LSC
90-95	4:32 PM	-	50-80	160-180	MD, HD, C, LSC
95-100	-	4:37 PM	50-80	160-180	MD, HD, C, LSC
100-105	4:28 PM	-	50-80	160-180	MD, HD, C, LSC
105-110	-	4:44 PM	50-80	160-180	MD, HD, C, LSC
110-115	4:45 PM	-	50-80	160-180	MD, HD, C, LSC
115-120	-	4:50 PM	50-80	160-180	MD, HD, C, LSC

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: P52
Elev: 152.62

Date Drilled: 3/12/2013 & 3/13/2013
Date Grouted: _____
Inspector: KJ

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
120-125	4:51 PM	-	50-80	180-200	MD, HD
125-130	-	4:58 PM	50-80	180-200	MD, HD
130-135	4:59 PM	-	50-80	180-200	MD, HD
135-140	-	5:01 PM	50-80	180-200	MD, HD
140-145	5:02 PM	-	50-80	180-200	MD, HD
145-150	-	5:07 PM	50-80	180-200	MD, HD
150-155	5:08 PM	-	50-80	140-160	MD, SD
155-160	-	5:11 PM	50-80	140-160	MD
160-165	5:12 PM	-	50-80	140-160	SD, MD
165-170	-	5:15 PM	50-80	140-160	MD
170-175	5:16 PM	-	50-80	140-160	SD
175-180	-	5:17 PM	50-80	140-160	MD, SD
180-185	5:18 PM	-	50-80	140-160	MD, SD
185-190	-	5:19 PM	50-80	140-160	MD, SD
190-195	5:20 PM	-	50-80	140-160	MD, SD
195-200	-	5:23 PM	50-80	140-160	MD, SD
200-205	5:24 PM	-	50-80	180-220	MD, HD
205-210	-	5:28 PM	50-80	180-2220	MD, HD
210-215	5:29 PM	-	50-80	180-220	MD, HD
215-220	-	5:32 PM	50-80	180-220	MD, HD
220-225	5:33 PM	-	50-80	180-220	MD, HD
225-230	-	5:37 PM	50-80	180-220	MD, HD
230-235	5:37 PM	-	50-80	180-220	MD, HD
235-240	-	5:40 PM	50-80	180-220	MD, HD, terminated

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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Phone: (813) 289-0750
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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: P53
Elev: 152.48

Date Drilled: 3/12/2013
Date Grouted: 3/12/2013
Inspector: KJ

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
0-5'	9:59 AM	-	50-80	100-120	SD
5-10	-	10:00 AM	50-80	100-120	SD
10-15	10:01 AM	-	50-80	100-120	SD
15-20	-	10:02 AM	50-80	100-120	SD
20-25	10:03 AM	-	50-80	100-120	SD
25-30	-	10:08 AM	50-80	100-120	SD
30-35	10:09 AM	-	50-80	100-120	SD
35-40	-	10:12 AM	50-80	100-120	MD, SD
40-45	10:13 AM	-	50-80	100-120	MD, SD
45-50	-	10:19 AM	50-80	100-120	MD, SD
50-55	10:20 AM	-	50-80	120-140	MD
55-60	-	10:23 AM	50-80	120-140	MD
60-65	10:24 AM	-	50-80	120-140	MD
65-70	-	10:26 AM	50-80	120-140	MD
70-75	10:27 AM	-	50-80	120-140	MD
75-80	-	10:30 AM	50-80	120-140	MD
80-85	10:31 AM	-	50-80	120-140	MD
85-90	-	10:35 AM	50-80	120-140	MD
90-95	10:36 AM	-	50-80	120-140	MD
95-100	-	10:43 AM	50-80	120-140	MD
100-105	10:44 AM	-	50-80	120-140	MD
105-110	-	10:49 AM	50-80	120-140	MD
110-115	10:50 AM	-	50-80	120-140	MD
115-120	-	10:58 AM	50-80	120-140	MD

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: P53
Elev: 152.48

Date Drilled: 3/12/2013
Date Grouted: 3/12/2013
Inspector: KJ

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
120-125	10:58 AM	-	50-80	140-160	MD
125-130	-	11:04 AM	50-80	140-160	MD
130-135	11:05 AM	-	50-80	140-160	MD
135-140	-	11:06 AM	50-80	140-160	MD
140-145	11:07 AM	-	50-80	140-160	MD
145-150	-	11:10 AM	50-80	140-160	MD
150-155	11:11 AM	-	50-80	120-140	SD
155-160	-	11:16 AM	50-80	120-140	SD
160-165	11:17 AM	-	50-80	120-140	SD
165-170	-	11:19 AM	50-80	120-140	SD
170-175	11:20 AM	-	50-80	120-140	SD
175-180	-	11:23 AM	50-80	120-140	SD
180-185	11:24 AM	-	50-80	120-140	SD
185-190	-	11:26 AM	50-80	120-140	SD
190-195	11:27 AM	-	50-80	120-140	SD
195-200	-	11:30 AM	50-80	120-140	SD
200-205	11:31 AM	-	50-80	160-180	MD, FD
205-210	-	11:33 AM	50-80	160-180	MD, FD
210-215	11:34 AM	-	50-80	160-180	MD, FD
215-220	-	11:37 AM	50-80	160-180	MD, FD
220-225	11:38 AM	-	50-80	160-180	MD, FD
225-230	-	11:40 AM	50-80	160-180	MD, FD
230-235	11:41 AM	-	50-80	160-180	MD, FD
235-240	-	11:46 AM	50-80	160-180	MD, FD, terminated

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: P54
Elev: _____

Date Drilled: 3/11&3/12/13
Date Grouted: 3/12/2013
Inspector: KJ

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
0-5'	4:29 PM	-	50-80	120-140	rig checked for plumb, SOB@1622
5-10	-	4:30 PM	50-80	120-140	SD
10-15	4:32 PM	-	50-80	120-140	SD
15-20	-	4:33 PM	50-80	120-140	SD
20-25	4:34 PM	4:35 PM	50-80	110-120	SD
25-30	4:35 PM	4:36 PM	50-80	100-120	SD
30-35	4:37 PM	4:38 PM	50-80	120-140	MD
35-40	4:38 PM	4:39 PM	50-80	120-140	MD
40-45	4:40 PM	4:42 PM	50-80	120-140	MD
45-50	4:42 PM	4:45 PM	50-80	120-140	MD
50-55	4:46 PM	4:48 PM	50-80	120-140	MD
55-60	4:48 PM	4:49 PM	50-80	120-140	MD, SD
60-65	4:50 PM	-	50-80	120-140	SD
65-70	-	4:51 PM	50-80	120-140	SD
70-75	4:52 PM	4:53 PM	50-80	120-140	SD
75-80	4:53 PM	4:54 PM	50-80	120-140	MD
80-85	4:55 PM	4:57 PM	50-80	120-140	MD, C
85-90	4:57 PM	5:00 PM	50-80	140-160	MD, C
90-95	5:01 PM	5:03 PM	50-80	140-160	HD, MD
95-100	5:03 PM	5:06 PM	50-80	140-160	HD, MD
100-105	5:08 PM	5:11 PM	50-80	140-160	HD, MD
105-110	5:11 PM	5:14 PM	50-80	140-160	END OF DAY
110-115	7:40 AM	-	50-80	140-160	MD
115-120	-	7:46 AM	50-80	140-160	MD

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: P54
Elev: _____

Date Drilled: 3/11&3/12/13
Date Grouted: 3/12/2013
Inspector: KJ

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
120-125	7:48 AM	-	50-80	140-160	MD
125-130	-	7:52 AM	50-80	140-160	MD
130-135	7:54 AM	-	50-80	140-160	MD
135-140	-	7:58 AM	50-80	140-160	MD, C
140-145	7:59 AM	-	50-80	120-140	MD
145-150	-	8:05 AM	50-80	120-140	MD
150-155	8:06 AM	-	50-80	120-140	SD
155-160	-	8:07 AM	50-80	120-140	SD
160-165	8:08 AM	-	50-80	120-140	SD
165-170	-	8:11 AM	50-80	120-140	SD
170-175	8:12 AM	-	50-80	120-140	SD
175-180	-	8:14 AM	50-80	120-140	SD
180-185	8:15 AM	-	50-80	120-140	SD
185-190	-	8:17 AM	50-80	120-140	SD
190-195	8:18 AM	-	50-80	140-160	MD, HD
195-200	-	8:21 AM	50-80	140-160	MD, HD
200-205	8:22 AM	-	50-80	140-160	MD, HD
205-210	-	8:24 AM	50-80	140-160	MD, HD
210-215	8:25 AM	-	50-80	160-180	HD
215-220	-	8:29 AM	50-80	160-180	HD
220-225	8:50 AM	-	50-80	180-220	HD
225-230	-	8:57 AM	50-80	180-220	HD
230-235	8:58 AM	-	50-80	180-220	HD
235-240	-	9:05 AM	50-80	180-220	HD, TERMINATED

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: P55
Elev: 151.17

Date Drilled: 3/11/2013
Date Grouted: 3/11/2013
Inspector: RK

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
0-5'	11:25 AM		50-70	110-120	Start of business at 11:25 AM
5-10		11:26 AM	50-70	110-120	SD
10-15	11:27 AM		50-70	110-120	SD
15-20		11:29 AM	50-70	110-120	SD
20-25	11:30 AM		50-70	110-120	SD
25-30		11:32 AM	50-70	110-120	SD
30-35	11:33 AM	11:35 AM	50-70	120-140	MD
35-40	11:35 AM	11:36 AM	50-70	120-140	MD
40-45	11:37 AM	11:39 AM	50-70	120-140	MD, C
45-50	11:39 AM	11:41 AM	50-70	120-140	MD, C
50-55	11:43 AM		50-70	110-140	SD
55-60		11:44 AM	50-70	110-140	SD
60-65	11:46 AM		50-70	110-140	SD
65-70		11:47 AM	50-70	110-140	SD
70-75	11:48 AM	11:49 AM	50-70	120-140	MD
75-80	11:49 AM	11:50 AM	50-70	120-140	MD
80-85	11:51 AM	11:53 AM	50-70	120-140	MD
85-90	11:53 AM	11:55 AM	50-70	120-140	MD
90-95	11:56 AM	11:58 AM	50-70	140-160	MD, C
95-100	11:58 AM	12:00 PM	50-70	140-160	MD, C
100-105	12:01 PM	12:03 PM	50-70	140-160	MD
105-110	12:03 PM	5:05 PM	50-70	140-160	MD
110-115	12:06 PM	12:08 PM	50-70	140-160	MD, LSC
115-120	12:08 PM	12:11 PM	50-70	140-160	MD, LSC

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



4919 West Laurel Street
Tampa, Florida 33607
Phone: (813) 289-0750
Fax: (813)289-5474

COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: P55
Elev: 146.21

Date Drilled: 3/11/2013
Date Grouted: 3/11/2013
Inspector: RK

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
120-125	12:13 PM	1:58 AM	60-80	180-220	HD
125-130	12:15 PM	12:19 PM	60-80	180-220	HD
130-135	12:20 PM	12:22 PM	50-70	180-220	HD, LCS, C
135-140	12:22 PM	12:24 PM	50-70	160-180	MD, HD
140-145	12:25 PM	12:26 PM	50-70	140-160	MD, HD
145-150	12:26 PM	12:29 PM	50-70	160-180	MD, HD
150-155	12:30 PM	12:34 PM	50-70	120-140	MD, SD
155-160	12:31 PM	12:32 PM	50-70	140-160	MD, HD, C
160-165	12:33 PM		50-70	120-140	MD, SD
165-170		12:34 PM	50-70	120-140	MD, SD
170-175	12:35 PM	12:34 PM	50-70	120-140	SD
175-180	12:34 PM	12:36 PM	50-70	140-160	MD
180-185	12:37 PM	12:38 PM	50-70	140-160	MD
185-190	12:38 PM	12:39 PM	50-70	140-160	MD, SD
190-195	12:40 PM		50-70	120-140	SD
195-200		12:41 PM	50-70	120-140	SD
200-205	12:43 PM	12:44 PM	50-70	140-160	MD, HD
205-210	12:44 PM	12:46 PM	50-70	140-160	MD, SD
210-215	12:47 PM	12:49 PM	50-70	160-180	MD
215-220	12:49 PM	12:52 PM	50-70	160-180	MD, C
220-225	12:53 PM	12:55 PM	50-70	160-180	MD, C
225-230	12:55 PM	12:58 PM	50-70	160-180	MD, C
230-235	12:58 PM	1:00 PM	50-70	140-160	MD, C
235-240	1:00 PM	1:03 PM	50-70	140-160	MD, C-some, end of boring at 1:05 PM

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: P56
Elev: 150.03

Date Drilled: 3/18/2013
Date Grouted: 3/18/2013
Inspector: KJ

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
0-5'	9:14 AM	-	50-70	110-120	SD (rig checked for plumb)
5-10	-	9:15 AM	50-70	110-120	SD
10-15	9:16 AM	9:17 AM	50-70	110-120	SD
15-20	9:17 AM	9:18 AM	50-70	110-120	SD
20-25	9:19 AM	9:20 AM	50-70	110-120	SD
25-30	9:20 AM	9:21 AM	50-70	110-120	SD
30-35	9:22 AM	9:23 AM	50-70	110-120	SD
35-40	9:23 AM	9:24 AM	50-70	110-120	SD
40-45	9:25 AM	9:27 AM	50-70	120-140	MD
45-50	9:27 AM	9:29 AM	50-70	120-140	MD
50-55	9:30 AM	-	50-70	120-140	SD
55-60	-	9:31 AM	50-70	120-140	SD
60-65	9:32 AM	9:33 AM	50-70	120-140	SD
65-70	9:33 AM	9:34 AM	50-70	120-140	SD
70-75	9:35 AM	9:36 AM	50-70	120-140	SD
75-80	9:36 AM	9:37 AM	50-70	120-140	SD
80-85	9:38 AM	9:39 AM	50-70	120-140	SD
85-90	9:39 AM	9:40 AM	50-70	120-140	MD
90-95	9:41 AM	9:43 AM	50-70	120-160	MD
95-100	9:43 AM	9:46 AM	50-70	120-160	MD
100-105	9:47 AM	9:48 AM	50-70	120-160	MD
105-110	9:48 AM	9:50 AM	50-70	120-160	MD
110-115	9:51 AM	9:54 AM	50-70	100-180	MD
115-120	9:54 AM	9:56 AM	50-70	100-180	MD

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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Phone: (813) 289-0750
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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: P56
Elev: 150.04

Date Drilled: 3/18/2013
Date Grouted: 3/18/2013
Inspector: KJ

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
120-125	9:57 AM	10:00 AM	60-80	160-180	HD,MD,C
125-130	10:00 AM	10:01 AM	50-70	140-160	MD
130-135	10:02 AM	10:04 AM	50-70	140-160	MD,C
135-140	10:04 AM	10:06 AM	50-70	140-160	MD,C
140-145	10:07 AM	10:09 AM	50-70	140-160	MD,C
145-150	10:09 AM	10:11 AM	50-70	140-160	HD,C
150-155	10:12 AM	10:13 AM	50-70	120-140	MD
155-160	10:13 AM	10:14 AM	50-70	120-140	MD
160-165	10:15 AM	-	50-70	110-120	SD
165-170	-	10:16 AM	50-70	110-120	SD
170-175	10:17 AM	-	50-70	110-120	SD
175-180	-	10:18 AM	50-70	110-120	SD
180-185	10:19 AM	-	50-70	110-120	SD
185-190	-	10:20 AM	50-70	110-120	SD
190-195	10:21 AM	-	50-70	120-140	SD
195-200	-	10:22 AM	50-70	120-140	SD
200-205	10:23 AM	-	50-70	120-140	SD
205-210	-	10:24 AM	50-70	120-140	SD
210-215	10:25 AM	10:27 AM	50-70	120-140	MD,SD
215-220	10:27 AM	10:30 AM	50-70	140-160	MD,SD,C
220-225	10:31 AM	10:33 AM	50-70	140-160	MD
225-230	10:33 AM	10:35 AM	50-70	140-160	MD
230-235	10:35 AM	10:37 AM	50-70	140-160	MD
235-240	10:37 AM	10:39 AM	50-70	140-160	MD

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: P57
Elev. 149.07

Date Drilled: 3/19/2013
Date Grouted: 3/19/2013
Inspector: KJ

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
0-5'	10:29 AM	-	50-70	100-110	Start of business 10:29 AM
5-10	-	10:30 AM	50-70	100-110	SD
10-15	10:31 AM	-	50-70	100-110	SD
15-20	-	10:32 AM	50-70	100-110	SD
20-25	10:33 AM	-	50-70	100-110	SD
25-30	-	10:34 AM	50-70	100-110	SD
30-35	10:35 AM	10:36 AM	50-70	100-110	SD
35-40	10:36 AM	10:37 AM	50-70	100-110	SD
40-45	10:38 AM	10:39 AM	50-70	100-110	SD
45-50	10:39 AM	10:40 AM	50-70	100-110	SD
50-55	10:41 AM	10:42 AM	50-70	110-120	SD
55-60	10:42 AM	10:43 AM	50-70	110-120	SD
60-65	10:44 AM	10:45 AM	50-70	110-120	SD
65-70	10:46 AM	10:47 AM	50-70	120-140	MD, C
70-75	10:48 AM	10:49 AM	50-70	120-140	MD
75-80	10:49 AM	10:50 AM	50-70	120-140	MD
80-85	10:51 AM	10:52 AM	50-70	120-140	MD
85-90	10:52 AM	10:53 AM	50-70	120-140	MD
90-95	10:54 AM	10:56 AM	50-70	140-160	MD
95-100	10:56 AM	10:57 AM	50-70	140-160	MD
100-105	10:58 AM	11:00 AM	50-70	140-160	MD
105-110	11:01 AM	11:02 AM	50-70	140-160	MD
110-115	11:03 AM	11:05 AM	50-70	140-160	MD
115-120	11:05 AM	11:07 AM	50-70	140-160	MD

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: P57
Elev: 149.07

Date Drilled: 3/19/2013
Date Grouted: 3/19/2013
Inspector: KJ

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
120-125	11:08 AM	11:10 AM	50-70	140-160	MD
125-130	11:10 AM	11:12 AM	50-70	140-160	MD
130-135	11:13 AM	11:15 AM	50-70	140-160	MD, C
135-140	11:15 AM	11:17 AM	50-70	140-160	MD, C
140-145	11:18 AM	11:20 AM	50-70	140-160	MD, C
145-150	11:20 AM	11:22 AM	50-70	140-160	MD,C
150-155	11:23 AM	11:24 AM	50-70	140-160	MD
155-160	11:24 AM	11:26 AM	50-70	140-160	MD
160-165	11:27 AM	11:28 AM	50-70	160-180	MD,C
165-170	11:28 AM	11:30 AM	50-70	160-180	MD,C
170-175	11:31 AM	-	50-70	140-160	SD
175-180	-	11:32 AM	50-70	140-160	SD
180-185	11:33 AM	-	50-70	140-160	SD
185-190	-	11:34 AM	50-70	140-160	SD
190-195	11:35 AM	11:38 AM	50-70	180-200	MD
195-200	11:38 AM	11:40 AM	50-70	180-200	MD
200-205	11:41 AM	11:42 AM	50-70	160-180	MD
205-210	11:44 AM	11:46 AM	50-70	160-180	MD,HD
210-215	11:47 AM	11:48 AM	50-70	160-180	MD/HD
215-220	11:48 AM	11:49 AM	50-70	160-180	MD/HD
220-225	11:50 AM	11:52 AM	50-70	160-180	MD/HD
225-230	11:52 AM	11:54 AM	50-70	140-160	MD/SD
230-235	11:55 AM	11:57 AM	50-70	140-160	MD/SD
235-240	11:59 AM				End of business 11:59 AM

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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Phone: (813) 289-0750
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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: P58
Elev: 148.22

Date Drilled: 3/19/2013
Date Grouted: 3/19/2013
Inspector: KJ

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
0-5'	8:21 AM	-	50-70	110-120	SOB 0820
5-10	-	8:22 AM	50-70	110-120	SD
10-15	8:23 AM	8:24 AM	50-70	110-120	SD
15-20	8:24 AM	8:25 AM	50-70	110-120	SD
20-25	8:26 AM	8:27 AM	50-70	100-140	SD
25-30	8:27 AM	8:28 AM	50-70	100-140	SD
30-35	8:29 AM	8:30 AM	50-70	100-140	SD
35-40	8:30 AM	8:31 AM	50-70	100-140	SD
40-45	8:32 AM	8:33 AM	50-70	100-110	SD
45-50	8:33 AM	8:34 AM	50-70	100-110	SD
50-55	8:35 AM	8:36 AM	50-70	100-110	SD
55-60	8:36 AM	8:37 AM	50-70	100-110	SD
60-65	8:38 AM	8:39 AM	50-70	100-110	SD
65-70	8:39 AM	8:40 AM	50-70	100-110	SD
70-75	8:41 AM	8:42 AM	50-70	100-110	SD
75-80	8:42 AM	8:44 AM	50-70	110-120	MD/SD
80-85	8:45 AM	8:47 AM	50-70	120-140	MD
85-90	8:47 AM	8:49 AM	50-70	120-140	MD
90-95	8:50 AM	8:53 AM	50-70	120-140	MD
95-100	8:53 AM	9:02 AM	50-70	140-160	HD
100-105	9:03 AM	9:04 AM	50-70	140-160	MD
105-110	9:04 AM	9:07 AM	50-70	140-160	HD
110-115	9:08 AM	9:11 AM	50-70	140-160	HD
115-120	9:11 AM	9:16 AM	50-70	140-160	HD

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: P58
Elev: 148.22

Date Drilled: 3/19/2013
Date Grouted: 3/19/2013
Inspector: KJ

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
120-125	9:17 AM	9:18 AM	50-70	140-160	MD
125-130	9:18 AM	9:21 AM	50-70	140-160	MD
130-135	9:22 AM	9:23 AM	50-70	140-160	MD
135-140	9:23 AM	9:26 AM	50-70	140-160	MD
140-145	9:27 AM	9:29 AM	50-70	140-160	MD
145-150	9:29 AM	9:32 AM	50-70	140-160	MD
150-155	9:33 AM	9:35 AM	50-70	140-160	MD
155-160	9:35 AM	9:37 AM	50-70	140-160	MD
160-165	9:38 AM	9:39 AM	50-70	140-160	MD
165-170	9:39 AM	9:42 AM	50-70	160-180	HD, C
170-175	9:43 AM	9:44 AM	50-70	140-160	MD,SD
175-180	9:44 AM	9:45 AM	50-70	140-160	MD/SD
180-185	9:46 AM	9:46 AM	50-70	120-140	SD
185-190	9:46 AM	9:47 AM	50-70	120-140	SD
190-195	9:48 AM	-	50-70	120-140	SD
195-200	-	9:49 AM	50-70	120-140	SD
200-205	9:50 AM	9:51 AM	50-70	140-160	MD/SD
205-210	9:51 AM	9:53 AM	50-70	140-160	MD,C
210-215	9:54 AM	9:56 AM	50-70	140-160	MD/SD
215-220	9:56 AM	9:58 AM	50-70	140-160	MD
220-225	9:59 AM	10:00 AM	50-70	140-160	MD/SD
225-230	10:01 AM	10:03 AM	50-70	140-160	MD
230-235	10:03 AM	10:05 AM	50-70	140-160	MD
235-240	10:06 AM		50-70		

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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Phone: (813) 289-0750
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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: P59
Elev: 147.87

Date Drilled: 3/25/2013
Date Grouted: 3/25/2013
Inspector: KJ

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
0-5'	10:56 AM		50-70	100-110	rig checked for plumb
5-10		10:57 AM	50-70	100-110	SD
10-15	10:58 AM		50-70	100-110	SD
15-20		10:59 AM	50-70	100-110	SD
20-25	11:01 AM		50-70	100-110	SD
25-30		11:02 AM	50-70	100-110	SD
30-35	11:03 AM		50-70	110-120	SD
35-40		11:04 AM	50-70	110-120	SD
40-45	11:05 AM	11:07 AM	50-70	120-140	MD
45-50	11:07 AM	11:10 AM	50-70	120-140	MS
50-55	11:11 AM	11:12 AM	50-70	120-140	MD, SD
55-60	11:13 AM	11:14 AM	50-70	120-140	MD, SD
60-65	11:15 AM		50-70	110-120	SD
65-70		11:16 AM	50-70	110-120	SD
70-75	11:17 AM	11:18 AM	50-70	110-120	SD, MD
75-80	11:18 AM	11:20 AM	50-70	120-140	MD, C
80-85	11:21 AM	11:23 AM	50-70	120-140	MD, C
85-90	11:23 AM	11:24 AM	50-70	120-140	MD, C
90-95	11:25 AM	11:27 AM	50-70	120-140	MD
95-100	11:27 AM	11:30 AM	50-70	120-140	MD
100-105	11:32 AM	11:34 AM	50-70	120-140	MD
105-110	11:34 AM	11:37 AM	50-70	120-140	MD
110-115	11:38 AM	11:41 AM	50-70	120-150	MD
115-120	11:41 AM	11:45 AM	50-70	120-150	MD

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: P59
Elev: 147.87

Date Drilled: 3/25/2013
Date Grouted: 3/25/2013
Inspector: KJ

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
120-125	11:47 AM	11:50 AM	50-70	120-140	MD, C
125-130	11:50 AM	11:53 AM	50-70	120-140	MD, C
130-135	11:54 AM	11:57 AM	50-70	120-140	MD, C, BSC
135-140	11:57 AM	12:00 PM	50-70	120-140	MD, C, BSC
140-145	12:01 PM	12:03 PM	50-70	140-160	MD
145-150	12:03 PM	12:05 PM	50-70	140-160	MD
150-155	12:06 PM	12:08 PM	50-70	140-160	MD
155-160	12:08 PM	12:10 PM	50-70	140-160	MD
160-165	12:11 PM	12:13 PM	50-70	120-140	MD
165-170	12:13 PM	12:15 PM	50-70	120-140	MD
170-175	12:16 PM	12:17 PM	50-70	120-140	MD
175-180	12:17 PM	12:19 PM	50-70	120-140	MD
180-185	12:20 PM		50-70	120-140	MD, SD
185-190		12:21 PM	50-70	120-140	SD
190-195	12:22 PM	12:23 PM	50-70	120-140	SD
195-200	12:23 PM	12:25 PM	50-70	140-160	MD, SD
200-205	12:26 PM	12:28 PM	50-70	140-160	MD, BSC
205-210	12:28 PM	12:31 PM	50-70	140-160	MD, BSC
210-215	12:32 PM	12:34 PM	50-70	140-180	MD, BSC
215-220	12:34 PM	12:36 PM	50-70	140-180	MD, BSC
220-225	12:37 PM	12:40 PM	50-70	140-160	MD, C
225-230	12:46 PM	12:42 PM	50-70	140-160	MD, C
					EOB @ 12.45

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: P60
Elev: 147.47

Date Drilled: 3/25/2013
Date Grouted: 3/26/2013
Inspector: KJ

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
0-5'	2:30 PM		50-70	110-120	SD
5-10		2:32 PM	50-70	110-120	SD
10-15	2:33 PM		50-70	110-120	SD
15-20		2:35 PM	50-70	110-120	SD
20-25	2:36 PM		50-70	110-120	SD
25-30		2:37 PM	50-70	110-120	SD
30-35	2:38 PM		50-70	110-120	SD
35-40		2:40 PM	50-70	110-120	SD
40-45	2:42 PM	2:44 PM	50-70	110-120	SD
45-50	2:44 PM	2:45 PM	50-70	110-120	SD
50-55	2:47 PM	2:48 PM	50-70	110-120	SD
55-60	2:48 PM	2:50 PM	50-70	120-140	MD, SD
60-65	2:52 PM		50-70	120-140	SD
65-70		2:54 PM	50-70	120-140	SD
70-75	2:55 PM		50-70	120-140	SD
75-80		2:56 PM	50-70	120-140	SD
80-85	2:57 PM	2:58 PM	50-70	120-140	SD, MD
85-90	2:58 PM	2:59 PM	50-70	120-140	SD, MD
90-95	3:01 PM	3:02 PM	50-70	140-160	MD
95-100	3:02 PM	3:06 PM	50-70	140-160	MD
100-105	3:07 PM	3:09 PM	50-70	140-160	MD
105-110	3:09 PM	3:13 PM	50-70	140-160	MD
110-115	3:14 PM	3:19 PM	50-70	140-160	MD
115-120	3:19 PM	3:23 PM	50-70	140-160	MD

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



4919 West Laurel Street
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Phone: (813) 289-0750
Fax: (813)289-5474

COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: P60
Elev: 147.47

Date Drilled: 3/25/2013
Date Grouted: 3/26/2013
Inspector: KJ

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
120-125	3:25 PM	3:27 PM	50-70	140-160	MD, HD, C, BSC
125-130	3:27 PM	3:29 PM	50-70	140-160	MD, HD, C, BSC
130-135	3:30 PM	3:33 PM	50-70	140-160	MD, HD, C, BSC
135-140	3:33 PM	3:36 PM	50-70	140-160	MD, HD, C, BSC
140-145	3:37 PM	3:39 PM	50-70	140-160	MD, HD, C, BSC
145-150	3:39 PM	3:41 PM	50-70	140-160	MD, HD, C, BSC
150-155	3:42 PM	3:45 PM	50-70	140-160	MD, HD, C, BSC
155-160	3:45 PM	3:47 PM	50-70	140-160	MD, HD, C, BSC
160-165	3:48 PM	3:50 PM	50-70	140-160	MD, HD, C, BSC
165-170	3:50 PM	3:54 PM	50-70	140-160	MD, HD, C, BSC
170-175	3:55 PM	3:58 PM	50-70	160-180	MD, HD, C, BSC
175-180	3:58 PM	4:02 PM	50-70	160-180	MD, HD, C, BSC
180-185	4:03 PM	4:06 PM	50-70	160-180	HD,C,BSC
185-190	4:06 PM	4:11 PM	50-70	160-180	HD,C,BSC
190-195	4:12 PM	4:13 PM	50-70	140-160	SD, MD
195-200	4:13 PM	4:14 PM	50-70	140-160	SD, MD
200-205	4:15 PM	4:16 PM	50-70	140-160	SD
205-210	4:16 PM	4:19 PM	50-70	160-180	SD, MD, C
210-215	4:20 PM	4:22 PM	50-70	140-160	MD
215-220	4:22 PM	4:25 PM	50-70	160-180	MD, HD
220-225	4:26 PM	4:28 PM	50-70	160-180	HD,C,BSC
225-230	4:28 PM	4:32 PM	50-70	160-180	HD, MD
230-235					EOB @ 16.35

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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Phone: (813) 289-0750
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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: P61
Elev: 147

Date Drilled: 3/28/2013
Date Grouted: 3/28/2013
Inspector: RK

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
0-5'	7:48 AM		50-80	100-120	SD
5-10		7:50 AM	50-80	100-120	SD
10-15	7:56 AM		50-80	100-120	SD
15-20		7:58 AM	50-80	100-120	SD
20-25	8:00 AM		50-80	100-120	SD
25-30		8:02 AM	50-80	100-120	SD
30-35	8:03 AM		50-80	100-120	SD, MD
35-40		8:07 AM	50-80	100-120	LSC, MD, HD
40-45	8:11 / 9:02 / 9:27 AM		50-80	150-220	LSC, NO ADVANCE, LSC, MD, LSC
45-50		9:29 AM	50-80	150-220	LSC
50-55	9:34 AM		50-80	120-180	LSC, MD, HD
55-60		9:36 AM	50-80	120-180	LSC, MD, HD, SD
60-65	9:40 AM		50-80	120-180	CR, SD
65-70		12:00 AM	50-80	120-180	CR, SD
70-75	9:46 AM		50-80	120-150	CR, SD
75-80		9:50 AM	50-80	120-150	CR, SD
80-85	9:55 AM		50-80	120-150	CR, LSC, SD, MD
85-90		9:58 AM	50-80	120-150	LSC, MD, HD, SD
90-95	10:02 AM		50-80	120-150	LSC, MD, HD
95-100		10:07 AM	50-80	120-150	LSC, MD, HD
100-105	10:11 AM		50-80	120-150	LSC, MD, HD
105-110		10:16 AM	50-80	120-150	LSC, MD, HD
110-115	10:20 AM		50-80	120-150	LSC, MD, HD
115-120		10:25 AM	50-80	120-150	LSC, MD, HD, C

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: P61
Elev: 147

Date Drilled: 3/28/2013
Date Grouted: 3/28/2013
Inspector: RK

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
120-125	10:31 AM		50-80	120-150	LSC, MD, HD
125-130		10:37 AM	50-80	120-150	LSC, MD, HD
130-135	10:41 AM		50-80	120-150	LSC, MD, HD
135-140		10:49 AM	50-80	120-150	LSC, MD, HD
140-145	10:52 AM		50-80	120-150	LSC, MD, HD
145-150		10:59 AM	50-80	120-150	LSC, MD, HD
150-155	11:12 AM		50-80	120-150	LSC, MD
155-160		11:17 AM	50-80	120-150	LSC, MD, HD
160-165	11:19 AM		50-80	120-150	CR, LSC
165-170		11:24 AM	50-80	120-150	LSC, CR, LSC, C
170-175	11:26 AM		50-80	120-150	LSC, HD
175-180		11:31 AM	50-80	120-150	LSC, HD, SD
180-185	11:37 AM		50-80	120-150	LSC, CR, SD, MD
185-190		11:42 AM	50-80	120-150	LSC, MD
190-195	11:45 AM		50-80	120-150	LSC, CR, MD, SD
195-200		11:47 AM	50-80	120-150	LSC, CR, MD, SD
200-205	11:50 AM		50-80	120-150	LSC, CR, SD
205-210		11:51 AM	50-80	120-150	LSC, CR, SD, MD
210-215	11:57 AM		50-80	120-150	LSC, CR, HH, SD
215-220		11:58 AM	50-80	120-150	LSC, CR, SD
220-225	12:02 PM		50-80	120-150	LSC, CR, SD
225-230		12:04 PM	50-80	120-150	CR, SD
230-235	12:07 PM		50-80	120-150	CR, SD
235-240		12:09 PM	50-80	120-150	CR, SD

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.

COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: P61
Elev: 147

Date Drilled: 3/28/2013
Date Grouted: 3/28/2013
Inspector: RK

[illegible]

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling; LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: P62
Elev: 146.21

Date Drilled: 3/27/2013
Date Grouted: 3/27/2013
Inspector: RK

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
0-5'	11:06 AM		50-80	100-120	SD
5-10		11:07 AM	50-80	100-120	SD
10-15	11:10 AM		50-80	100-120	SD
15-20		11:12 AM	50-80	100-120	SD
20-25	11:14 AM		50-80	100-120	SD
25-30		11:16 AM	50-80	100-120	SD
30-35	11:18 AM		50-80	100-120	LSC, MD, HD
35-40		11:24 AM	50-80	100-120	LSC, HH, MD, HD, LOC
40-45	11:27 AM		50-80	100-120	LSC TO CR, MD
45-50		11:29 AM	50-80	100-120	LSC TO CR, MD
50-55	11:31 AM		50-80	100-120	LSC TO CR, MD
55-60		11:33 AM	50-80	100-120	LSC TO CR, MD
60-65	11:36 AM		50-80	100-120	LSC TO CR, MD
65-70		11:38 AM	50-80	100-120	LSC TO CR, MD
70-75	12:00 AM		50-80	100-120	LSC TO LSC, HH, MD, HD
75-80		11:44 AM	50-80	100-120	LSC, HH, MD, HD
80-85	11:48 AM		50-60	100-120	LSC, MD, HD
85-90		11:53 AM	50-60	100-120	LSC, HH, C, HD, MD
90-95	11:56 AM		50-80	100-120	LSC TO LSC, HH, MD, HD
95-100		12:00 AM	50-80	100-120	CR TO LSC, SD, MD
100-105	12:02 PM		50-80	100-120	LSC, HH, HD, MD
105-110		12:07 PM	50-80	100-120	LSC, MD, HD
110-115	12:04 PM	12:13 PM	50-80	100-120	LSC, HH, MD, HD, SD zones
115-120	12:57 PM	1:00 PM	50-80	100-120	LSC, HH, HD, will duplex

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: P62
Elev: 146.21

Date Drilled: 3/27/2013
Date Grouted: 3/27/2013
Inspector: RK

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
120-125	1:04 PM		50-80	100-180	LSC TO CR, SD, MD
125-130		1:07 PM	50-80	100-180	LSC TO CR, SD, MD
130-135	1:11 PM		50-80	100-180	LSC TO LSC, MD, HD
135-140		1:20 PM	50-80	100-180	LSC TO LSC, MD, HD
140-145	1:24 PM		50-80	100-120	LSC, HH, MD, HD
145-150		1:30 PM	50-80	100-120	LSC, MD
150-155	1:33 PM		50-80	100-180	LSC, MD
155-160		1:38 PM	50-80	100-180	LSC, MD
160-165	1:42 PM		50-80	100-180	CR 3', LSC 2', SD
165-170		1:48 PM	50-80	100-180	LSC, LSO TO CR, HD 1', SD 2', MD 2'
170-175	1:53 PM		50-80	100-180	LSC, MD
175-180		2:01 AM	50-80	100-180	LSC, MD, HD
180-185	2:03 PM	50s	50-80	150-220	LSC, SD with occasional MD zones
185-190		2:08 PM	50-80	150-220	LSC TO CR, SD with occasional HD zones
190-195	2:13 PM		50-80	100-180	LSC TO CR, LSC 2'
195-200		2:17 PM	50-80	100-180	SD 2', LSC 1', SD 2'
200-205	2:20 PM	30s	50-80	150-180	CR, SD with MD zones
205-210		2:23 PM	50-80	150-180	LSC 1', SD
210-215	2:27 PM	30s	50-80	180-220	CR, SD
215-220		30s	50-80	100-180	CR, SD
220-225	2:32 PM	30s	50-80	150-200	CR, SD
225-230		2:35 PM	50-80	150-200	SD 3', HD 2'
230-235					EOB 231' @ 2.36 pm

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: P63
Elev: 140.6

Date Drilled: 3/26/2013
Date Grouted: 3/27/2013
Inspector: RK

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
0-5'	2:38 PM		50-80	100-120	SD
5-10		2:41 PM	50-80	100-120	SD
10-15	2:44 PM		50-80	100-120	SD
15-20		2:48 PM	50-80	100-120	SD
20-25	2:49 PM		50-80	100-120	SD, C
25-30		2:59 PM	50-80	100-120	SD, LSC, ODOR
30-35	3:14 PM		50-80	100-120	MD, SD, LSC
35-40		3:15 PM	50-80	100-120	MD, SD, LSC
40-45	3:17 PM		50-80	100-120	SD, CR
45-50		3:19 PM	50-80	100-120	CR, LSC, MD, SD, HD
50-55	3:22 PM		50-80	100-120	LSC, MD, SD
55-60		3:24 PM	50-80	100-120	LSC, MD
60-65	3:25 PM		50-80	100-120	LSC, CR, MD, SD
65-70		3:27 PM	50-80	100-120	CR, SD
70-75	3:28 PM		50-80	100-120	CR, LSC, SD, MD, SD
75-80		3:34 PM	50-80	100-120	MD, HD, LSC, C
80-85	3:36 PM		50-80	100-120	HD, MD, LSC, C
85-90		3:38 PM	50-80	100-120	HD, MD, LSC, C
90-95	3:40 PM		50-80	100-120	LSC, C, HD
95-100		3:46 PM	50-80	100-120	LSC, C, HD
100-105	3:47 PM		50-80	100-120	LSC, HD
105-110		3:54 PM	50-80	100-120	LSC, HD
110-115	3:56 PM		50-80	100-120	LSC, C, HD
115-120		4:03 PM	50-80	100-120	LSC, C, HD

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: P63
Elev: 140.6

Date Drilled: 3/26/2013
Date Grouted: 3/27/2013
Inspector: RK

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
120-125	4:04 PM		50-80	100-120	LSC, C, HD
125-130		4:08 PM	50-80	100-120	LSC, C, HD
130-135	4:10 PM		50-80	100-120	LSC, C, MD, HD
135-140		4:23 PM	50-80	100-120	LSC, C, HD
140-145	4:35 PM		50-80	100-120	LSC, C, MD, HD
145-150		4:41 PM	50-80	100-120	LSC, C, MD, HD
150-155	4:43 PM		50-80	100-120	LSC, C, MD
155-160		4:46 PM	50-80	100-120	LSC, C, MD
160-165	4:49 PM		50-80	100-120	LSC, C, HD
165-170		4:58 PM	50-80	100-120	LSC, C, HD
170-175	4:59 PM		50-80	100-120	LSC, C, MD
175-180		5:06 PM	50-80	100-120	LSC, C, HD
180-185	5:08 PM		50-80	100-120	LSC, C, HD
185-190		5:17 PM	50-80	100-120	LSC, C, HD
190-195	5:18 PM		50-80	100-120	LSC, C, MD, HD
195-200		5:30 PM	50-80	100-120	LSC, C, HD, LOC@200'
200-205	5:31 PM		50-80	100-120	CR, LSC, MD, SD
205-210		5:35 PM	50-80	100-120	LSC, CR, MD, SD, LSC, C
210-215	5:36 PM		50-80	100-120	CR, MD, SD
215-220		5:45 PM	50-80	150-240	CR, LSC, C, MD, SD, LSC, C
220-225	5:48 PM		50-80	150-240	CR, LSC, MD
225-230		5:50 PM	50-80	150-240	LSC, MD

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: S1
Elev: 145.46

Date Drilled: 4/2/2013, 4/3/2013
Date Grouted: 4/3/2013
Inspector: RK

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
0-5'	3:15 PM		50-80	100-150	SD
5-10		3:18 AM	50-80	100-150	SD
10-15	3:19 AM		50-80	100-150	SD
15-20		3:24 AM	50-80	100-150	SD
20-25	3:25 AM		50-80	100-150	SD, MD, LSC
25-30		3:32 AM	50-80	100-150	SD, MD, LSC
30-35	3:34 AM		50-80	100-150	SD, MD, LSC
35-40		3:36 AM	50-80	100-150	SD, MD, LSC
40-45	3:38 AM		50-80	100-150	SD, MD, LSC
45-50		3:40 AM	50-80	100-150	SD, MD, LSC
50-55	3:44 AM		50-80	100-150	SD, MD, LSC
55-60		3:46 AM	50-80	100-150	SD, MD, LSC
60-65	3:48 AM		50-80	100-150	SD, MD, LSC
65-70		3:50 AM	50-80	100-150	SD, MD, LSC
70-75	4:01 AM		50-80	100-150	SD, MD, LSC, C
75-80		4:06 PM	50-80	100-150	SD, MD, LSC, C, End of drill on 4/2/2013
80-85	8:04 AM		50-80	100-150	SD, MD, LSC, C, HD, Begin drill on 4/3/13
85-90		8:13 AM	50-80	100-150	SD, MD, LSC, C, HD
90-95	8:16 AM		50-80	100-150	C, MD, LSC
95-100		8:22 AM	50-80	100-150	HD, LSC
100-105	8:23 AM		50-80	100-150	HD, MD, LSC
105-110		8:34 AM	50-80	100-150	HD, LSC
110-115	8:35 AM		50-80	100-150	HD, LSC
115-120		8:44 AM	50-80	100-150	HD, LSC

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: S1
Elev: 145.46

Date Drilled: 4/2/2013, 4/3/2013
Date Grouted: 4/3/2013
Inspector: RK

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
120-125	8:45 AM		50-80	100-150	LSC, C, MD, HD
125-130		8:53 AM	50-80	100-150	LSC, C, MD, HD
130-135	8:54 AM		50-80	100-150	LSC, HD
135-140		9:21 AM	50-80	100-150	LSC, HD
140-145	9:22 AM		50-80	100-150	LSC, C, MD, HD
145-150		9:28 AM	50-80	100-150	LSC, C, MD, HD
150-155	9:29 AM		50-80	100-150	LSC, C, MD, HD
155-160		9:36 AM	50-80	100-150	LSC, C, MD, HD
160-165	9:37 AM		50-80	100-150	LSC, C, MD, HD
165-170		9:47 AM	50-80	100-150	LSC, SD, MD, HD
170-175	9:48 AM		50-80	100-150	LSC, C, MD, SD
175-180		10:01 AM	50-80	100-150	LSC, C, MD, HD
180-185	10:05 AM		50-80	100-150	LSC, C, MD, HD
185-190		10:18 AM	50-80	100-150	LSC, C, MD, HD
190-195	10:19 AM		50-80	100-150	LSC, C, MD, HD
195-200		10:27 AM	50-80	100-150	LSC, C, MD, HD
200-205	10:28 AM		50-80	100-150	LSC, C, MD, HD
205-210		10:35 AM	50-80	100-150	LSC, C, MD, HD, SD
210-215	10:36 AM		50-80	100-150	SD, MD
215-220		10:40 AM	50-80	100-150	SD, MD
220-225	10:42 AM		50-80	100-150	LSC, C, MD, HD
225-230		10:52 AM	50-80	100-150	LSC, C, MD, HD, SD, End of boring at 230 feet

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



4919 West Laurel Street
Tampa, Florida 33607
Phone: (813) 289-0750
Fax: (813)289-5474

COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: S2
Elev: 146.21

Date Drilled: 4/3/2013
Date Grouted: 4/5/2013
Inspector: RK

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
0-5'	3:23 PM		50-80	100-120	SD
5-10		3:25 PM	50-80	100-120	SD
10-15	3:26 PM		50-80	100-150	LSC, C, MD
15-20		3:32 PM	50-80	100-150	LSC, C, MD
20-25	3:33 PM		50-80	100-150	LSC, HD
25-30		4:00 PM	50-80	100-150	LSC, HD
30-35	4:01 PM		50-80	100-150	LSC, C, MD
35-40		4:06 PM	50-80	100-150	LSC, SD, MD
40-45	4:10 PM		50-80	100-150	SD
45-50		4:14 PM	50-80	100-150	SD
50-55	4:15 PM		50-80	100-150	MD
55-60		4:18 AM	50-80	100-150	MD
60-65	4:19 AM		50-80	100-150	SD, MD
65-70		4:22 PM	50-80	100-150	SD, MD
70-75	4:23 PM		50-80	100-150	LSC, C, MD, HD
75-80		4:30 PM	50-80	100-150	LSC, C, MD, HD
80-85	4:31 PM		50-80	100-150	LSC, C, MD, HD
85-90		4:35 PM	50-80	100-150	LSC, C, MD, HD
90-95	4:36 PM		50-80	100-150	LSC, C, MD, HD
95-100		4:42 PM	50-80	100-150	LSC, C, MD, HD
100-105	4:43 PM		50-80	100-150	LSC, C, MD, HD
105-110		4:51 PM	50-80	100-150	LSC, C, MD, HD
110-115	4:52 PM		50-80	100-150	LSC, C, MD, HD
115-120		4:56 PM	50-80	100-150	LSC, C, MD, HD

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: S2
Elev: 146.21

Date Drilled: 4/3/2013
Date Grouted: 4/5/2013
Inspector: RK

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
120-125	5:15 PM		50-80	100-150	LSC, C, MD, HD
125-130		5:20 PM	50-80	100-150	LSC, C, MD, HD
130-135	5:40 PM		50-80	100-150	LSC, MD, HD
135-140		5:55 PM	50-80	100-150	LSC, MD, HD
140-145	5:56 PM		50-80	100-150	LSC, C, HD
145-150		6:03 PM	50-80	100-150	LSC, C, HD
150-155	6:04 PM		50-80	100-150	LSC, C, HD
155-160		6:09 PM	50-80	100-150	LSC, C, HD
160-165	6:10 PM		50-80	100-150	LSC, C, HD
165-170		6:21 PM	50-80	100-150	LSC, C, HD
170-175	6:22 PM		50-80	100-150	LSC, C, HD, SD zones
175-180		6:31 PM	50-80	100-150	LSC, C, HD, SD zones
180-185	6:32 PM		50-80	100-150	LSC, C, HD
185-190		6:43 AM	50-80	100-150	LSC, C, HD
190-195	6:44 AM		50-80	100-150	LSC, C, HD
195-200		6:57 AM	50-80	100-150	LSC, C, 4 feet HD, 1 foot SD
200-205	6:58 AM		50-80	100-150	SD
205-210		6:59 PM	50-80	100-150	SD
210-215	7:00 PM		50-80	100-150	SD
215-220		7:08 PM	50-80	100-150	LSC, C, MD, HD
220-225	7:09 PM		50-80	100-150	LSC, C, HD
225-230		7:20 PM	50-80	100-150	LSC, C, HD, End of boring at 230 feet

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: S3
Elev: 146.00

Date Drilled: 4/8/2013
Date Grouted: 4/8/2013
Inspector: RK

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
0-5'	8:03 AM		50-80	100-120	SD
5-10		8:04 AM	50-80	100-120	SD
10-15	8:13 AM		50-80	100-120	SD
15-20		8:14 AM	50-80	100-120	SD
20-25	8:16 AM		50-80	100-120	SD, MD
25-30		8:18 AM	50-80	100-120	SD, MD
30-35	8:20 AM		50-80	100-120	MD, LSC
35-40		8:23 AM	50-80	100-120	MD, LSC
40-45	8:24 AM		50-80	100-120	MD, LSC
45-50		8:28 AM	50-80	100-120	MD, LSC
50-55	8:29 AM		50-80	100-120	MD, HD, LSC
55-60		8:32 AM	50-80	100-120	MD, HD, LSC
60-65	8:33 AM		50-80	100-120	MD, HD, LSC
65-70		8:36 AM	50-80	100-120	MD, HD, LSC
70-75	8:37 AM		50-80	100-150	MD, HD, LSC
75-80		8:42 AM	50-80	100-150	MD, HD, LSC
80-85	8:43 AM		50-80	100-150	MD, HD, LSC
85-90		8:47 AM	50-80	100-150	MD, HD, LSC
90-95	8:49 AM		50-80	100-120	MD, HD, LSC
95-100		8:53 AM	50-80	100-120	MD, HD, LSC
100-105	8:55 AM		50-80	100-120	MD, HD, LSC
105-110		8:58 AM	50-80	100-120	MD, HD, LSC
110-115	9:00 AM		50-80	100-120	MD, HD, LSC
115-120		9:07 AM	50-80	100-120	MD, HD, LSC

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: S3
Elev: 146

Date Drilled: 4/8/2013
Date Grouted: 4/8/2013
Inspector: RK

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
120-125	9:09 AM		50-80	100-120	MD, HD, LSC
125-130		9:13 AM	50-80	100-120	MD, HD, LSC
130-135	9:15 AM		50-80	100-150	HD, LSC
135-140		9:25 AM	50-80	100-150	HD, LSC
140-145	9:26 AM		50-80	100-150	HD, LSC
145-150		9:33 AM	50-80	100-150	HD, LSC, HH, C
150-155	9:34 AM		50-80	120-180	HD, LSC, HH, C
155-160		10:00 AM	50-80	120-180	HD, LSC, HH, C
160-165	10:02 AM		50-80	100-120	SD, MD, LSC, CR, Drill did not advance past 165 feet, started duplex at 10:08 AM
165-170	11:08 AM	11:18 AM	50-80	120-180	MD, HD, LSC, Drilled w/ duplex for 1 hr, bits wore out, replaced bits and used outer casing only
170-175	11:21 AM		50-80	120-150	MD, HD, LSC, C
175-180		11:30 AM	50-80	120-150	MD, HD, LSC, C
180-185	11:33 AM		50-80	120-150	MD, HD, LSC, C
185-190		11:41 AM	50-80	120-150	MD, HD, LSC, C, SD
190-195	11:44 AM		50-80	120-150	MD, HD, LSC, C
195-200		11:53 AM	50-80	120-200	MD, HD, LSC, C, SD, Replaced bit
200-205	3:04 PM		50-80	120-180	HD, LSC
205-210		3:09 PM	50-80	120-180	MD, HD
210-215	3:10 PM		50-80	150-200	MD, HD, LSC, C, HH, TC
215-220		3:18 PM	50-80	150-200	MD, HD, LSC, C, HH, TC
220-225	3:19 PM	3:40 PM	50-80	180-220	HD, LSC, C, HH, TC, Terminated at 225 feet

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: S4
Elev: 150.12

Date Drilled: 3/27/2013
Date Grouted: 3/27/2013
Inspector: KJ

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
0-5'	8:56 AM		50-70	100-110	SD
5-10		8:58 AM	50-70	100-110	SD
10-15	8:59 AM		50-70	100-110	SD
15-20		9:01 AM	50-70	100-110	SD
20-25	9:02 AM		50-70	100-110	SD
25-30		9:04 AM	50-70	100-110	SD
30-35	9:05 AM		50-70	100-110	SD
35-40		9:07 AM	50-70	100-110	SD
40-45	9:08 AM		50-70	110-120	SD
45-50		9:10 AM	50-70	110-120	SD
50-55	9:11 AM		50-70	110-120	SD
55-60		9:13 AM	50-70	110-120	SD
60-65	9:14 AM	9:15 AM	50-70	110-120	SD
65-70	9:15 AM	9:17 AM	50-70	120-140	SD, MD
70-75	9:18 AM		50-70	120-140	SD, MD
75-80		9:20 AM	50-70	120-140	SD, MD
80-85	9:21 AM	9:23 AM	50-70	120-140	MD
85-90	9:23 AM	9:25 AM	50-70	120-140	MD
90-95	9:26 AM	9:29 AM	50-70	120-140	MD, BSC
95-100	9:29 AM	9:32 AM	50-70	120-140	MD, BSC
100-105	9:33 AM	9:37 AM	50-70	120-140	MD, BSC
105-110	9:37 AM	9:40 AM	50-70	120-140	MD, BSC
110-115	9:41 AM	9:45 AM	50-70	140-160	MD, HD
115-120	9:45 AM	9:49 AM	50-70	140-160	MD, HD

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: S4
Elev: 150.12

Date Drilled: 3/27/2013
Date Grouted: 3/27/2013
Inspector: KJ

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
120-125	9:50 AM	9:54 AM	50-70	140-160	MD
125-130	9:54 AM	9:59 AM	50-70	140-160	MD
130-135	10:00 AM	10:07 AM	50-70	140-160	MD
135-140	10:07 AM	10:11 AM	50-70	140-160	MD
140-145	10:12 AM	10:16 AM	50-70	140-160	MD, HD, C
145-150	10:16 AM	10:21 AM	50-70	140-160	MD, HD, C
150-155	10:22 AM	10:28 AM	50-70	140-160	MD, HD, C
155-160	10:25 AM	10:34 AM	50-70	140-160	MD, HD, C
160-165	10:36 AM	10:40 AM	50-70	140-160	MD, HD, C
165-170	10:40 AM	10:48 AM	50-70	140-160	MD, HD, C
170-175	10:49 AM	10:54 AM	50-70	140-160	MD, HD, C
175-180	10:54 AM	10:58 AM	50-70	140-160	MD, HD, C
180-185	11:14 AM	11:20 AM	50-70	140-160	MD, HD, C
185-190	11:20 AM	11:32 AM	50-70	140-160	MD, HD, C
190-195	11:33 AM	11:35 AM	50-70	120-140	MD, SD
195-200	11:35 AM	11:37 AM	50-70	120-140	MD, SD
200-205	11:38 AM	11:39 AM	50-70	120-140	MD, SD
205-210	11:39 AM	11:41 AM	50-70	120-140	MD, SD
210-215	11:42 AM	11:46 AM	50-70	140-160	MD HD
215-220	11:46 AM	11:52 AM	50-70	140-160	MD, SD
220-225	11:53 AM	11:56 AM	50-70	160-180	MD
225-230	11:56 AM	12:05 PM	50-70	160-180	MD
					EOB @ 12:05 PM

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill

Date Drilled: 3/26/2013

Project #: 13354x8

Date Grouted: 3/27/2013

Pin #: S5

Inspector: KJ

Elev: 151.91

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
0-5'	2:01 PM	2:04 PM	50-70	120-140	MD
5-10	2:04 PM	2:09 PM	50-70	120-140	MD
10-15	2:10 PM	2:14 PM	50-70	120-140	MD
15-20	2:14 PM	2:20 PM	50-70	120-140	MD
20-25	2:22 PM	2:23 PM	50-70	120-140	MD, SD
25-30	2:23 PM	2:25 PM	50-70	120-140	MD, SD
30-35	2:26 PM	2:27 PM	50-70	120-140	MD, SD
35-40	2:27 PM	2:29 PM	50-70	120-140	MD, SD
40-45	2:30 PM	2:31 PM	50-70	120-140	MD, SD
45-50	2:31 PM	2:32 PM	50-70	120-140	MD, SD
50-55	2:33 PM	2:34 PM	50-70	120-140	MD, SD
55-60	2:34 PM	2:36 PM	50-70	120-140	MD, SD
60-65	2:37 PM	2:39 PM	50-70	120-140	MD
65-70	2:39 PM	2:41 PM	50-70	120-140	MD
70-75	2:42 PM	2:43 PM	50-70	110-120	SD, MD
75-80	2:43 PM	2:44 PM	50-70	110-120	SD, MD
80-85	2:45 PM	2:47 PM	50-70	120-140	MD
85-90	2:47 PM	2:49 PM	50-70	120-140	MD
90-95	2:50 PM	2:54 PM	50-70	120-140	MD
95-100	2:54 PM	2:58 PM	50-70	120-140	MD
100-105	2:59 PM	3:02 PM	50-70	140-160	MD
105-110	3:02 PM	3:05 PM	50-70	140-160	MD
110-115	3:06 PM	3:10 PM	50-70	140-160	MD, HD
115-120	3:10 PM	3:16 PM	50-70	140-160	MD, HD

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: S5
Elev: 151.91

Date Drilled: 3/26/2013
Date Grouted: 3/27/2013
Inspector: KJ

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
120-125	3:17 PM	3:19 PM	50-70	140-160	MD, BSC
125-130	3:19 PM	3:22 PM	50-70	140-160	MD, BSC
130-135	3:23 PM	3:27 PM	50-70	140-160	MD, BSC
135-140	3:27 PM	3:30 PM	50-70	140-160	MD, BSC
140-145	3:31 PM	3:36 PM	50-70	140-160	MD, BSC
145-150	3:36 PM	3:42 PM	50-70	140-160	MD, BSC
150-155	3:43 PM	3:47 PM	50-70	140-160	MD, BSC
155-160	3:47 PM	3:51 PM	50-70	140-160	MD, BSC
160-165	3:52 PM	3:55 PM	50-70	140-160	MD, BSC
165-170	3:55 PM	4:00 PM	50-70	140-160	MD, BSC
170-175	4:01 PM	4:06 PM	50-70	140-160	MD, BSC
175-180	4:06 PM	4:11 PM	50-70	140-160	MD, BSC
180-185	4:12 PM	16:15	50-70	140-160	MD, BSC
185-190	4:15 PM	4:21 PM	50-70	140-160	MD, BSC
190-195	4:22 PM		50-70	120-140	SD
195-200		4:23 PM	50-70	120-140	SD
200-205	4:24 PM	4:26 PM	50-70	120-140	MD
205-210	4:26 PM	4:29 PM	50-70	120-140	MD
210-215	4:30 PM	4:32 PM	50-70	140-160	MD
215-220	4:32 PM	4:35 PM	50-70	140-160	MD
220-225	4:35 PM	4:37 PM	50-70	140-160	MD
225-230	4:37 PM	4:39 PM	50-70	140-160	MD
230-235	4:39 PM	4:42 PM	50-70	140-160	MD, EOB @ 16:45

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: S6
Elev: 152.85

Date Drilled: 3/26/2013
Date Grouted: 3/26/2013
Inspector: KJ

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
0-5'	9:05 AM		50-70	100-110	SD, MD
5-10		9:07 AM	50-70	100-110	SD, MD
10-15	9:08 AM		50-70	100-110	SD, MD
15-20		9:09 AM	50-70	100-110	SD, MD
20-25	9:10 AM		50-70	100-110	SD
25-30		9:11 AM	50-70	100-110	SD
30-35	9:12 AM		50-70	100-110	SD
35-40		9:13 AM	50-70	100-110	SD
40-45	9:14 AM	9:15 AM	50-70	100-110	SD
45-50	9:15 AM	9:17 AM	50-70	120-150	MD, HD, LSC, C
50-55	9:18 AM		50-70	110-120	SD
55-60		9:19 AM	50-70	110-120	SD
60-65	9:20 AM		50-70	110-120	SD
65-70		9:21 AM	50-70	110-120	SD
70-75	9:22 AM		50-70	120-140	SD, MD
75-80		9:24 AM	50-70	120-140	SD, MD
80-85	9:25 AM		50-70	120-140	SD, MD
85-90		9:27 AM	50-70	120-140	SD, MD
90-95	9:28 AM	9:32 AM	50-70	140-160	MD
95-100	9:32 AM	9:35 AM	50-70	140-160	MD
100-105	9:36 AM	9:40 AM	50-70	140-160	MD
105-110	9:40 AM	9:43 AM	50-70	140-160	MD
110-115	9:45 AM	9:50 AM	50-70	140-160	MD
115-120	9:50 AM	9:54 AM	50-70	140-160	MD, HD

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: S6
Elev: 152.85

Date Drilled: 3/26/2013
Date Grouted: 3/26/2013
Inspector: KJ

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
120-125	9:56 AM	10:01 AM	50-70	160-180	MD, HD, C, TSC, BSC
125-130	10:01 AM	10:06 AM	50-70	160-180	MD, HD, C, TSC, BSC
130-135	10:08 AM	10:12 AM	50-70	140-160	MD, C
135-140	10:12 AM	10:16 AM	50-70	140-160	MD, C
140-145	10:17 AM	10:21 AM	50-70	140-160	MD, C
145-150	10:21 AM	10:25 AM	50-70	140-160	MD, C
150-155	10:26 AM	10:31 AM	50-70	140-160	MD, FD
155-160	10:32 AM	10:35 AM	50-70	140-160	MD
160-165	10:36 AM	10:38 AM	50-70	120-140	MD
165-170	10:38 AM	10:39 AM	50-70	120-140	MD, SD
170-175	10:40 AM	10:41 AM	50-70	120-140	MD
175-180	10:41 AM	10:44 AM	50-70	160-180	MD, HD, SD
180-185	10:45 AM		50-70	120-140	SD
185-190		10:46 AM	50-70	120-140	SD
190-195	10:47 AM		50-70	120-140	SD
195-200		10:48 AM	50-70	120-140	SD
200-205	10:49 AM		50-70	120-140	SD
205-210		10:50 AM	50-70	120-140	SD
210-215	10:51 AM	10:53 AM	50-70	120-140	SD, MD
215-220	10:53 AM	10:56 AM	50-70	140-160	MD
220-225	10:57 AM	10:59 AM	50-70	140-160	MD, SD, C
225-230	10:59 AM	11:02 AM	50-70	140-160	MD, SD, C
230-235	11:03 AM	11:06 AM	50-70	160-180	MD
235-240	11:06 AM		50-70	160-180	Terminated at 240 feet

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



4919 West Laurel Street
Tampa, Florida 33607
Phone: (813) 289-0750
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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: S7
Elev: 153.18

Date Drilled: 3/25/2013
Date Grouted: 3/25/2013
Inspector: KB

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
0-5'	7:46 AM		50-70	100-110	rig check for plumb, SD
5-10		7:47 AM	50-70	100-110	SD
10-15	7:48 AM		50-70	100-110	SD
15-20		7:49 AM	50-70	100-110	SD
20-25	7:50 AM		50-70	100-110	SD
25-30		7:51 AM	50-70	100-110	SD
30-35	7:52 AM		50-70	100-110	SD
35-40		7:54 AM	50-70	100-110	SD
40-45	7:55 AM		50-70	100-110	SD
45-50		7:56 AM	50-70	100-110	SD
50-55	7:57 AM		50-70	100-110	SD
55-60		7:59 AM	50-70	100-110	SD
60-65	8:01 AM		50-70	100-110	SD
65-70		8:02 AM	50-70	100-110	SD
70-75	8:04 AM		50-70	100-110	SD
75-80		8:05 AM	50-70	100-110	SD
80-85	8:06 AM	8:07 AM	50-70	120-140	SD, MD
85-90	8:07 AM	8:09 AM	50-70	120-140	MD, C
90-95	8:11 AM	8:13 AM	50-70	120-140	MD
95-100	8:13 AM	8:15 AM	50-70	120-140	MD
100-105	8:16 AM	8:19 AM	50-70	120-140	MD
105-110	8:19 AM	8:21 AM	50-70	120-140	MD
110-115	8:22 AM	8:24 AM	50-70	120-140	MD,C
115-120	8:24 AM	8:27 AM	50-70	120-140	MD

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: S7
Elev: 153.18

Date Drilled: 3/25/2013
Date Grouted: 3/25/2013
Inspector: KB

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
120-125	8:29 AM	8:31 AM	50-70	120-140	MD
125-130	8:31 AM	8:33 AM	50-70	120-140	MD
130-135	8:34 AM	8:36 AM	50-70	120-140	MD
135-140	8:36 AM	8:38 AM	50-70	120-140	MD,C
140-145	8:39 AM	8:41 AM	50-70	120-140	MD
145-150	8:41 AM	8:44 AM	50-70	120-140	MD
150-155	8:45 AM	8:46 AM	50-70	110-120	MD, SD
155-160	8:46 AM	8:47 AM	50-70	110-120	MD, SD
160-165	8:48 AM	8:49 AM	50-70	110-120	MD, SD
165-170	8:49 AM	8:51 AM	50-70	120-140	MD, C
170-175	8:52 AM		50-70	110-120	SD
175-180		8:53 AM	50-70	110-120	SD
180-185	8:54 AM		50-70	110-120	SD
185-190		8:55 AM	50-70	110-120	SD
190-195	8:56 AM		50-70	110-120	SD
195-200		8:57 AM	50-70	110-120	SD
200-205	8:58 AM		50-70	110-120	SD
205-210		8:59 AM	50-70	110-120	SD
210-215	9:00 AM	9:01 AM	50-70	120-140	SD, MD
215-220	9:01 AM	9:02 AM	50-70	120-140	SD, MD
220-225	9:03 AM	9:05 AM	60-80	160-180	MD, HD, MD, BSC
225-230	9:05 AM	9:07 AM	50-70	140-160	MD, SD
230-235	9:08 AM	9:09 AM	50-70	120-140	SD
235-240	9:09 AM	9:11 AM	50-70	140-160	MD, SD

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.

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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: S7
Elev: 153.18

Date Drilled: 3/25/2013
Date Grouted: 3/25/2013
Inspector: KJ

[illegible]

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling; LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: S8
Elev: 153.07

Date Drilled: 3/22/2013
Date Grouted: 3/22/2013
Inspector: KJ

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
0-5'	12:31 PM	-	50-70	100-110	Original boring broke off - re-drill approximately 1-1.5' S/ of original - SD
5-10	-	12:33 PM	50-70	100-110	SD
10-15	12:34 PM	-	50-70	100-110	SD
15-20	-	12:35 PM	50-70	100-110	SD
20-25	12:36 PM	-	50-70	100-110	SD
25-30	-	12:38 PM	50-70	100-110	SD
30-35	12:39 PM	-	50-70	100-110	SD
35-40	-	12:40 PM	50-70	100-110	SD
40-45	12:41 PM	-	50-70	100-110	SD
45-50	-	12:43 PM	50-70	100-110	SD
50-55	12:44 PM	-	50-70	100-110	SD
55-60	-	12:45 PM	50-70	100-110	SD
60-65	12:46 PM	-	50-70	100-110	SD
65-70	-	12:48 PM	50-70	100-110	SD
70-75	12:49 PM	-	50-70	110-120	SD
75-80	-	12:50 PM	50-70	110-120	SD, MD
80-85	12:51 PM	12:53 PM	50-70	120-140	MD
85-90	12:53 PM	12:55 PM	50-70	120-140	MD, HD, TSC, BSC
90-95	12:56 PM	12:58 PM	50-70	120-140	MD
95-100	12:58 PM	1:00 PM	50-70	120-140	MD
100-105	1:01 PM	1:04 PM	50-70	120-140	MD, HD
105-110	1:04 PM	1:07 PM	50-70	120-140	MD, HD
110-115	1:08 PM	1:11 PM	50-70	120-140	MD, HD
115-120	1:11 PM	1:16 PM	50-70	120-140	MD, HD

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: S8
Elev: 153.07

Date Drilled: 3/22/2013
Date Grouted: 3/22/2013
Inspector: KJ

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
120-125	1:17 PM	1:20 PM	50-70	140-160	MD, HD
125-130	1:20 PM	1:23 PM	50-70	140-160	MD, HD
130-135	1:24 PM	1:26 PM	50-70	120-140	MD
135-140	1:27 PM	1:29 PM	50-70	120-140	MD
140-145	1:30 PM	1:33 PM	50-70	140-160	MD, HD, BSC
145-150	1:33 PM	1:37 PM	50-70	140-160	MD, HD, BSC
150-155	1:38 PM	1:40 PM	50-70	140-160	MD
155-160	1:40 PM	1:43 PM	50-70	160-180	MD, HD, C
160-165	1:44 PM	1:47 PM	50-70	160-180	MD, HD, C
165-170	1:47 PM	1:51 PM	50-70	160-180	MD, HD, C
170-175	1:52 PM	1:53 PM	50-70	140-160	MD, HD, C
175-180	1:53 PM	1:56 PM	50-70	120-140	SD
180-185	1:57 PM		50-70	120-140	SD
185-190		1:58 PM	50-70	120-140	SD
190-195	1:55 PM	2:01 PM	50-70	120-140	SD
195-200	2:01 PM	2:02 PM	50-70	120-140	SD
200-205	2:03 PM		50-70	120-140	SD
205-210		2:04 PM	50-70	120-140	SD
210-215	2:05 PM	2:07 PM	50-70	120-140	SD
215-220	2:07 PM	2:09 PM	50-70	120-140	SD
220-225	2:10 PM		50-70	120-140	SD
225-230		2:13 PM	50-70	120-140	SD
230-235	2:19 PM	2:20 PM	50-70	120-140	SD
235-240	2:21 PM	2:22 PM	50-70	120-140	SD

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.

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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: S8
Elev: 153.07

Date Drilled: 3/22/2013
Date Grouted: 3/22/2013
Inspector: KJ

[illegible]

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: S9
Elev: 152.67

Date Drilled: 3/21/2013
Date Grouted: 3/22/2013
Inspector: TN

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
0-5'	3:22 PM		50-100	100-200	Start of boring @ 3:22 PM
5-10		3:24 PM	50-100	100-200	SD
10-15	3:25 PM		50-70	100-120	SD
15-20		3:26 PM	50-70	100-120	SD
20-25	3:27 PM		50-70	100-120	SD
25-30		3:28 PM	50-70	100-120	SD
30-35	3:30 PM		50-70	100-120	SD
35-40		3:31 PM	50-70	100-120	SD
40-45	3:32 PM		50-70	100-120	SD
45-50		3:34 PM	50-70	100-120	SD
50-55	3:35 PM		50-70	110-130	SD
55-60		3:36 PM	50-70	110-130	SD
60-65	3:37 PM		50-70	110-130	SD
65-70		3:38 PM	50-70	110-130	SD
70-75	3:39 PM		50-70	120-150	MD
75-80		3:41 PM	50-70	120-150	MD
80-85	3:42 PM		50-70	125-150-200	MD,C
85-90		3:44 PM	50-70	125-150-200	MD
90-95	3:45 PM	3:46 PM	50-70	110-130	SD
95-100	3:46 PM	3:48 PM	50-70	110-150	SD,C
100-105	3:50 PM		50-70	100-150	SD
105-110		3:53 PM	50-70	100-150	SD
110-115	3:55 PM	3:56 PM	50-70	10130	SD
115-120	3:56 PM	3:58 PM	50-70	110-150	SD,C

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: S9
Elev: 152.67

Date Drilled: 3/21/2013
Date Grouted: 3/22/2013
Inspector: TN

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
120-125	4:00 PM	4:02 PM	50-70	120-180	MD, C
125-130	4:02 PM	4:03 PM	50-70	110-150	SD, C
130-135	4:05 PM		50-70	110-150	SD, C
135-140		4:07 PM	50-70	110-150	SD, C
140-145	4:08 PM		50-70	100-130	SD, C
145-150		4:12 PM	50-70	100-130	SD, C
150-155	4:14 PM		50-70	110-200	SD, C
155-160		4:16 PM	50-70	110-200	SD, C
160-165	4:17 PM		50-70	110-150	SD
165-170		4:19 PM	50-70	110-150	SD
170-175	4:21 PM		50-70	110-150	SD
175-180		4:22 PM	50-70	110-150	SD, C
180-185	4:23 PM		50-70	120-160	SD
185-190		4:24 PM	50-70	120-160	SD
190-195	4:25 PM		50-70	120-180	SD
195-200		4:26 PM	50-70	120-180	SD
200-205	4:27 PM		50-70	150-250	MD, HD
205-210		4:29 PM	50-70	150-200	MD, HD
210-215	4:30 PM		50-70	150-250	MD, HD
215-220		4:32 PM	50-70	150-250	MD, HD
220-225	4:33 PM	4:36 PM	50-70	150-280	MD, HD, C, paused 10 min.
225-230	4:46 PM	4:49 PM	50-70	150-280	MD, HD, C
230-235	4:51 PM	4:55 PM	50-70	200-280	HD
235-240	4:55 PM	5:00 PM	50-70	200-280	HD tape measured 245' 2"

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.

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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: S9
Elev: 152.67

Date Drilled: 3/21/2013
Date Grouted: 3/22/2013
Inspector: TN

[illegible]

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: S10
Elev. 151.6

Date Drilled: 3/20/2013
Date Grouted: 3/20/2013
Inspector: KJ

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
0-5'	12:10PM	12:11PM	50-70	100-110	SD
5-10	12:11PM	12:12PM	50-70	100-110	SD
10-15	12:13PM	-	50-70	100-110	SD
15-20	-	12:14PM	50-70	100-110	SD
20-25	12:15PM	-	50-70	100-110	SD
25-30	-	12:16PM	50-70	100-110	SD
30-35	12:17PM	-	50-70	110-120	SD
35-40	-	12:18PM	50-70	110-120	SD
40-45	12:19PM	-	50-70	110-120	SD
45-50	-	12:20PM	50-70	110-120	SD
50-55	12:21PM	-	50-70	110-120	SD
55-60	-	12:22PM	50-70	110-120	SD
60-65	12:23PM	-	50-70	120-140	SD
65-70	-	12:24PM	50-70	120-140	SD
70-75	12:25PM	12:26PM	50-70	120-140	SD
75-80	12:26PM	12:27PM	50-70	120-140	MD
80-85	12:28PM	12:29PM	50-70	140-160	MD,C
85-90	12:29PM	12:30PM	50-70	140-160	MD,C
90-95	12:31PM	12:32PM	50-70	140-160	MD
95-100	12:32PM	12:34PM	50-70	160-180	MD
100-105	12:35PM	12:37PM	50-70	160-180	HD/MD
105-110	12:37PM	12:38PM	50-70	160-180	MD
110-115	12:39PM	12:41PM	50-70	160-180	HD/MD
115-120	12:41PM	12:43PM	50-70	160-180	HD

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: S10
Elev: 151.6

Date Drilled: 3/20/2013
Date Grouted: 3/20/2013
Inspector: KJ

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
120-125	12:44PM	12:45PM	50-70	120-140	HD/MD
125-130	12:46PM	12:47PM	50-70	120-140	HD/MD,C
130-135	12:48PM	12:49PM	50-70	120-140	HD/MD
135-140	12:49PM	12:50PM	50-70	120-140	HD/MD
140-145	12:51PM	12:52PM	50-70	120-140	HD/MD/C
145-150	12:52PM	12:55PM	50-70	120-140	HD,C
150-155	12:56PM	12:57PM	50-70	120-140	HD/MD,C
155-160	12:57PM	12:59PM	50-70	120-140	HD/MD,C
160-165	1:00PM	1:02PM	50-70	120-140	HD/MD,C
165-170	1:02PM	1:04PM	50-70	120-150	HD/MD,C
170-175	1:06PM	1:06PM	50-70	120-140	MD/SD
175-180	1:06PM	1:08PM	50-70	120-140	HD/MD, C
180-185	1:09PM	1:09PM	50-70	120-140	SD,CR
185-190	1:09PM	1:10PM	50-70	120-140	MD/SD, CR
190-195	1:11PM	1:11PM	50-70	120-140	SD,CR
195-200	1:11PM	1:11PM	50-70	120-140	SD,CR
200-205	1:12PM	1:12PM	50-70	120-140	SD/MD,C
205-210	1:12PM	1:15PM	50-70	120-140	HD/SD,C,SC
210-215	1:17PM	1:18PM	50-70	120-140	SD
215-220	1:18PM	1:20PM	50-70	120-140	MD
220-225	1:21PM	1:23PM	50-70	140-160	MD/HD
225-230	1:23PM	1:25PM	50-70	140-160	HD/MD
230-235	1:26PM	1:28PM	50-70	140-1601	MD/HD
235-240	1:28PM	1:30PM	50-70		EOB 1:30PM

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: S11
Elev: 150.27

Date Drilled: 3/20/2013
Date Grouted: 3/20/2013
Inspector: KJ

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
0-5'	10:14AM	-	50-70	100-110	SD
5-10	-	10:15AM	50-70	100-110	SD
10-15	10:16AM	10:17AM	50-70	120-140	MD
15-20	10:17AM	10:18AM	50-70	120-140	MD
20-25	10:10AM	10:20AM	50-70	110-120	SD
25-30	10:20AM	10:21AM	50-70	110-120	SD
30-35	10:22AM	10:23AM	50-70	110-120	SD
35-40	10:23AM	10:24AM	50-70	110-120	SD
40-45	10:25AM	-	50-70	110-120	SD
45-50	-	10:26AM	50-70	110-120	SD
50-55	10:27AM	-	50-70	110-120	SD
55-60	-	10:28AM	50-70	110-120	SD
60-65	10:29AM	10:30AM	50-70	110-120	SD
65-70	10:30AM	10:31AM	50-70	110-120	SD
70-75	10:32AM	-	50-70	110-120	SD
75-80	-	10:33AM	50-70	110-120	SD
80-85	10:34AM	10:36AM	50-70	120-140	MD
85-90	10:36AM	10:38AM	50-70	120-140	MD
90-95	10:39AM	10:41AM	50-70	120-140	MD
95-100	10:41AM	10:43AM	50-70	120-140	MD
100-105	10:44AM	10:46AM	50-70	120-140	MD
105-110	10:46AM	10:49AM	50-70	120-140	MD, C
110-115	10:50AM	10:52AM	50-70	120-140	MD
115-120	10:52AM	10:56AM	50-70	120-140	MD

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



4919 West Laurel Street
Tampa, Florida 33607
Phone: (813) 289-0750
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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: S11
Elev: 150.27

Date Drilled: 3/20/2013
Date Grouted: 3/20/2013
Inspector: KJ

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
120-125	10:57AM	10:58AM	50-70	140-160	MD, C
125-130	10:58AM	11:00AM	50-70	140-160	MD,C
130-135	11:01AM	11:02AM	50-70	120-140	MD
135-140	11:02AM	11:04Am	50-70	120-140	MD
140-145	11:05AM	11:08AM	50-70	120-140	MD
145-150	11:08AM	11:10AM	50-70	120-140	MD
150-155	11:13AM	11:14AM	50-70	120-140	MD
155-160	11:14AM	11:16AM	50-70	120-140	MD
160-165	11:17AM	11:19AM	50-70	120-140	MD, HD, C
165-170	11:19AM	11:21Am	50-70	120-140	MD, HD, C
170-175	11:21AM	11:23AM	50-70	140-160	MD/HD, C
175-180	11:23AM	11:24AM	50-70	140-160	MD/SD
180-185	11:25AM	-	50-70	120-140	SD
185-190	-	11:26AM	50-70	120-140	SD
190-195	11:27AM	11:30AM	50-70	160-180	MD/HD, C
195-200	11:30AM	11:31AM	50-70	160-180	MD/HD/C
200-205	11:32AM	-	50-70	140-160	SD
205-210	-	11:33AM	50-70	140-160	MD
210-215	11:34AM	11:35AM	50-70	140-160	SD
215-220	11:35AM	11:36AM	50-70	140-160	MD/SD
220-225	11:37AM	11:38AM	50-70	140-160	MD
225-230	11:38AM	11:39AM	50-70	140-160	MD
230-235	11:40AM	11:42AM	50-70	140-160	MD
235-240	11:42AM	11:44AM	50-70	140-160	EOB 11:44 AM

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: S12
Elev: 148.51

Date Drilled: 3/28/2013
Date Grouted: 3/28/2013
Inspector: KJ

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
0-5'	1:02 PM		50-70	110-120	Start of business at 1:02 PM
5-10		1:04 PM	50-70	110-120	SD
10-15	1:05 PM		50-70	110-120	SD
15-20		1:07 PM	50-70	110-120	SD
20-25	1:09 PM	1:12 PM	50-70	120-140	MD
25-30	1:12 PM	1:19 PM	50-70	120-140	MD
30-35	1:20 PM	1:25 PM	50-70	120-140	MD
35-40	1:25 PM	1:30 PM	50-70	120-140	MD
40-45	1:31 PM		50-70	110-120	SD
45-50		1:32 PM	50-70	110-120	SD
50-55	1:33 PM	1:34 PM	50-70	120-140	MD
55-60	1:34 PM	1:35 PM	50-70	120-140	MD, C
60-65	1:36 PM	1:37 PM	50-70	120-140	SD
65-70	1:38 PM	1:39 PM	50-70	120-140	SD
70-75	1:40 PM	1:42 PM	50-70	120-140	MD
75-80	1:42 PM	1:44 PM	50-70	120-140	MD
80-85	1:45 PM	1:48 PM	50-70	120-140	MD, HD
85-90	1:48 PM	1:55 PM	50-70	140-160	MD, HD
90-95	1:56 PM	2:06 PM	50-70	140-160	HD
95-100	2:06 PM	2:16 PM	50-70	160-180	HD
100-105	2:18 PM	2:24 PM	50-70	160-180	HD
105-110	2:24 PM	2:28 PM	50-70	160-180	HD
110-115	2:29 PM	2:34 PM	50-70	160-180	HD
115-120	2:34 PM	2:44 PM	50-70	160-180	HD

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: S12
Elev: 148.51

Date Drilled: 3/28/2013
Date Grouted: 3/28/2013
Inspector: KJ

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
120-125	2:45 PM	2:50 PM	50-70	140-160	MD
125-130	2:50 PM	2:57 PM	50-70	140-160	MD
130-135	2:58 PM	3:02 PM	50-70	140-160	MD
135-140	3:02 PM	3:06 PM	50-70	140-160	MD
140-145	3:07 PM	3:11 PM	50-70	140-160	MD
145-150	3:11 PM	3:16 PM	50-70	140-160	MD
150-155	3:17 PM	3:22 PM	50-70	140-160	MD
155-160	3:22 PM	3:27 PM	50-70	140-160	MD
160-165	3:28 PM	3:31 PM	50-70	140-160	MD, C
165-170	3:31 PM	3:35 PM	50-70	140-160	MD, C
170-175	3:36 PM	3:39 PM	50-70	140-160	MD
175-180	3:39 PM	3:41 PM	50-70	140-160	MD
180-185	3:42 PM		50-70	120-140	SD
185-190		3:44 PM	50-70	120-140	SD
190-195	3:45 PM	3:47 PM	50-70	120-140	MD, C
195-200	3:47 PM	3:52 PM	50-70	120-140	MD, C
200-205	3:53 PM	3:55 PM	50-70	120-140	MD, C
205-210	3:55 PM	3:57 PM	50-70	120-140	MD, C
210-215	3:57 PM	4:00 PM	50-70	140-160	MD, C
215-220	4:00 PM	4:03 PM	50-70	140-160	MD, C
220-225	4:04 PM	4:07 PM	50-70	140-160	MD
225-230	4:07 PM	4:11 PM	50-70	140-160	MD
230-235	4:12 PM	4:15 PM	50-70	140-160	MD
235-240	4:15 PM	4:19 PM	50-70	140-160	MD

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: S13
Elev: 147.72

Date Drilled: 4/3/2013, 4/4/2013
Date Grouted: 4/5/2013
Inspector: KJ

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
0-5'	5:31 PM		50-70	100-110	SD
5-10		5:32 PM	50-70	100-110	SD
10-15	5:33 PM		50-70	100-110	SD
15-20		5:35 PM	50-70	100-110	SD
20-25	5:36 PM		50-80	110-120	SD
25-30		5:38 PM	50-80	110-120	SD
30-35	5:39 PM	5:41 PM	50-80	120-140	SD
35-40	5:41 PM	5:46 PM	50-80	120-140	SD, MD
40-45	5:48 PM	5:50 PM	50-80	120-140	MD
45-50	5:50 PM	5:54 PM	50-80	120-140	MD
50-55	5:55 PM	5:58 PM	50-70	120-140	MD
55-60	5:58 PM	6:00 PM	50-70	120-140	MD
60-65	6:01 PM		50-70	120-140	SD, MD
65-70		6:05 PM	50-70	120-140	SD, MD
70-75	6:06 PM	6:09 PM	50-70	140-160	MD
75-80	6:09 PM	6:12 PM	50-70	140-160	MD
80-85	6:13 PM	6:15 PM	50-70	140-160	MD, HD, C, LSC
85-90	6:15 PM	6:18 PM	50-70	140-160	MD, HD, C, LSC
90-95	6:19 PM	6:23 PM	50-80	140-160	MD, HD, C, LSC
95-100	6:23 PM	6:27 PM	50-80	140-160	MD, HD, C, LSC
100-105	6:30 PM	6:36 PM	50-80	140-160	MD, LSC
105-110	6:36 PM	6:45 PM	50-80	140-160	MD, LSC
110-115	6:46 PM	6:49 PM	50-70	140-160	MD, LSC
115-120	6:49 PM	6:52 PM	50-70	140-160	MD, LSC

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: S13
Elev: 147.72

Date Drilled: 4/3/2013, 4/4/2013
Date Grouted: 4/5/2013
Inspector: KJ

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
120-125	6:54 PM	6:58 PM	50-70	140-160	MD, HD, C
125-130	6:58 AM	7:02 PM	50-70	140-160	MD, HD, end of drill on 4/3/2013
130-135	7:47 AM		50-70	180-200	MD, C, beginning of drill on 4/4/2013
135-140		7:54 AM	50-70	180-200	MD, C
140-145	7:57 AM			200-250	MD, C
145-150		8:03 AM	50-70	200-250	MD, C
150-155	8:04 AM		50-70	180-250	MD, C
155-160		8:13 AM	50-70	180-250	MD, C
160-165	8:14 AM		50-70	180-250	MD, C
165-170		8:25 AM	50-70	180-250	MD, C
170-175	8:29 AM		50-70	180-250	MD, C
175-180		8:35 AM	50-70	180-250	MD, C
180-185	8:36 AM		50-70	180-250	MD, C
185-190		8:41 AM	50-70	180-250	MD, C
190-195	8:42 AM		50-70	180-250	MD, C
195-200		8:47 AM	50-70	180-250	MD, C
200-205	8:48 AM		50-70	180-250	MD, C
205-210		9:18 AM	50-70	180-250	MD, C
210-215	9:18 AM		50-70	180-250	MD, C
215-220		9:53 AM	50-70	180-250	MD, C
220-225	9:54 AM		50-70	180-250	MD, C
225-230		10:03 AM	50-70	180-250	MD, C
230-235	10:04 AM	10:15 AM	50-70	180-250	MD, C, Terminated at 235 feet

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: S14
Elev: 147.05

Date Drilled: 4/8/2013
Date Grouted: 4/8/2013
Inspector: KJ

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
0-5'	8:10 AM		50-70	100-110	SD
5-10		8:11 AM	50-70	100-110	SD
10-15	8:11 AM		50-70	100-110	SD
15-20		8:12 AM	50-70	100-110	SD
20-25	8:14 AM	8:16 AM	50-80	100-110	SD
25-30	8:16 AM	8:18 AM	50-80	110-120	SD, MD
30-35	8:19 AM	8:22 AM	50-70	110-120	SD, MD
35-40	8:22 AM	8:25 AM	50-70	110-120	SD, MD
40-45	8:26 AM	8:28 AM	50-70	110-120	SD
45-50	8:28 AM	8:30 AM	50-70	110-120	SD
50-55	8:31 AM	8:33 AM	50-70	110-120	SD, MD
55-60	8:33 AM	8:35 AM	50-70	110-120	SD, MD
60-65	8:36 AM	8:37 AM	50-70	110-120	SD
65-70	8:37 AM	8:39 AM	50-70	110-120	SD
70-75	8:40 AM	8:42 AM	50-70	110-120	SD
75-80	8:42 AM	8:45 AM	50-70	120-140	SD
80-85	8:46 AM	8:49 AM	50-70	120-140	SD
85-90	8:49 AM	8:52 AM	50-70	120-140	SD
90-95	8:52 AM	8:56 AM	50-70	120-140	SD, MD
95-100	8:56 AM	8:58 AM	50-70	120-140	SD, MD
100-105	8:59 AM	9:02 AM	50-70	120-140	MD
105-110	9:02 AM	9:06 AM	50-70	120-140	MD
110-115	9:07 AM	9:10 AM	50-80	120-140	MD
115-120	9:10 AM	9:16 AM	50-80	120-140	MD, C

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: S14
Elev: 147.05

Date Drilled: 4/8/2013
Date Grouted: 4/8/2013
Inspector: KJ

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
120-125	9:18 AM	9:21 AM	50-70	120-140	MD
125-130	9:21 AM	9:25 AM	50-70	120-140	MD
130-135	9:26 AM	9:31 AM	50-70	140-160	MD
135-140	9:31 AM	9:36 AM	50-70	140-160	MD
140-145	9:37 AM	9:42 AM	50-70	140-160	MD
145-150	9:42 AM	9:51 AM	50-70	140-160	MD
150-155	9:52 AM	9:55 AM	50-70	140-160	MD
155-160	9:55 AM	9:59 AM	50-70	140-160	MD
160-165	10:01 AM	10:03 AM	50-70	160-180	MD, HD, C
165-170	10:03 AM	10:07 AM	50-70	160-180	MD, SD, C
170-175	10:08 AM	10:13 AM	50-70	180-200	MD
175-180	10:13 AM	10:19 AM	50-70	180-200	MD
180-185	10:20 AM	10:24 AM	50-70	160-180	MD
185-190	10:24 AM	10:30 AM	50-70	160-180	MD
190-195	10:31 AM	10:33 AM	50-70	160-180	MD, SD
195-200	10:33 AM	10:35 AM	50-70	160-180	MD, SD
200-205	10:36 AM	10:39 AM	50-70	160-180	MD, LSC
205-210	10:39 AM	10:43 AM	50-70	160-180	MD, LSC
210-215	10:44 AM	10:46 AM	50-70	240-280	MD, SD
215-220	10:46 AM	10:49 AM	50-70	240-280	MD, SD
220-225	10:50 AM	10:53 AM	50-70	200-280	MD, SD
225-230	10:53 AM		50-70	200-280	MD, SD
230-235		10:54 AM	50-70	200-280	SD
235-240	10:55 AM	10:58 AM	50-70	200-280	MD, Terminated at 240 feet

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling; LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: S15
Elev: 146.06

Date Drilled: 4/1/2013
Date Grouted: 4/1/2013
Inspector: RK

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
0-5'	10:27 AM		50-80	100-120	rig checked for plumb.
5-10		10:28 AM	50-80	100-120	SD
10-15	10:30 AM		50-80	100-120	SD
15-20		10:32 AM	50-80	100-120	SD
20-25	10:33 AM		50-80	100-120	SD, LOC
25-30		12:00 AM	50-80	150-200	SD, TC
30-35	10:39 AM		50-80	100-120	MD
35-40		10:42 AM	50-80	100-120	MD
40-45	10:43 AM		50-80	100-120	MD
45-50		10:44 AM	50-80	100-120	MD
50-55	10:46 AM		50-80	100-120	MD, HD, LSC
55-60		10:48 AM	50-80	100-120	MD, HD, LSC
60-65	10:49 AM		50-80	100-120	MD, HD, LSC
65-70		10:52 AM	50-80	100-120	MD, HD, LSC
70-75	10:53 AM		50-80	100-120	MD, HD, LSC
75-80		10:55 AM	50-80	100-120	MD, HD, LSC
80-85	11:21 AM		50-80	100-120	MD, HD, LSC
85-90		11:26 AM	50-80	100-120	LSC, HH, HD, CIRC
90-95	11:27 AM		50-80	100-120	LSC, HD, HH
95-100		11:32 AM	50-80	100-120	LSC, HD, MD, HH
100-105	11:34 AM		50-80	100-120	LSC, HD, MD, HH
105-110		11:38 AM	50-80	100-120	LSC, HD, HH
110-115	11:40 AM		50-80	100-120	LSC, HD, HH
115-120		11:45 AM	50-80	100-120	LSC, HD, HH

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: S15
Elev: 146.06

Date Drilled: 4/1/2013
Date Grouted: 4/1/2013
Inspector: RK

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
120-125	11:49 AM		50-80	100-120	LSC, HH, HD
125-130		11:54 AM	50-80	100-120	LSC, HH, C, HD
130-135	11:57 AM		50-80	100-120	LSC, HH, C, HD
135-140		12:12 PM	50-80	100-120	LSC, HH, C, HD
140-145	12:14 PM		50-80	100-120	LSC, HD
145-150		12:20 PM	50-80	100-120	LSC, HD
150-155	12:32 PM		50-80	100-120	LSC, HD
155-160		12:43 PM	50-80	100-120	LSC, HD
160-165	12:45 PM	1:50 PM	50-80	100-120	LSC, C, HH, MD
165-170	2:26 PM	2:28 PM	50-80	100-150	NO ADVANCE. WILL DUPLEX
170-175	2:32 PM		50-80	100-150	LSC, HD
175-180		2:38 PM	50-80	100-150	LSC, HD
180-185	2:42 PM		50-80	100-150	LSC, C, MD
185-190		2:49 PM	50-80	100-150	LSC, C, MD
190-195	2:52 PM		50-80	100-150	LSC, C, MD
195-200		2:58 PM	50-80	100-150	LSC, C, SD, LSC
200-205	3:01 PM		50-80	100-150	LSC, SD
205-210		3:08 PM	50-80	100-150	LSC, SD
210-215	3:11 PM		50-80	150-180	CR, SD
215-220		3:13 PM	50-80	150-180	CR, SD
220-225	3:18 PM		50-80	150-180	HH, CR, SD
225-230		3:20 PM	50-80	150-180	LSC, MD, HD, EOB at 3:20pm

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: S16
Elev: 145.05

Date Drilled: 3/28/2013 & 3/29/2013
Date Grouted: 4/1/2013
Inspector: RK

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
0-5'	4:28 PM		50-80	100-120	Installed a new bit, leveled pipe, started at 4:27 pm. LSC, SD, MD
5-10		4:29 PM	50-80	100-120	LSC, SD, MD
10-15	4:31 PM		50-80	100-120	LSC, MD, SD
15-20		4:33 PM	50-80	100-120	LSC, MD, SD
20-25	4:35 PM		50-80	100-120	LSC, MD, SD
25-30		4:44 PM	50-80	100-120	LSC 4', LSC 1', HD, BSC, debris
30-35	4:45 PM		50-80	100-120	LSC
35-40		4:48 PM	50-80	100-120	LSC, MD, HD
40-45	4:52 PM		50-80	100-120	LSC, MD, HD
45-50		4:55 PM	50-80	100-120	LSC, MD, HD
50-55	4:55 PM		50-80	100-120	LSC, MD, HD
55-60		4:58 PM	50-80	100-120	LSC, MD, HD
60-65	4:59 PM		50-80	100-120	LSC, MD, HD
65-70		5:01 PM	50-80	100-120	LSC, MD, HD
70-75	5:03 PM		50-80	100-120	LSC, MD, HD
75-80		5:05 PM	50-80	100-120	LSC, MD, HD
80-85	5:06 PM		50-80	100-120	LSC, MD, HD
85-90		5:10 PM	50-80	100-120	LSC, MD, HD
90-95	5:12 PM		50-80	100-120	LSC, MD, HD
95-100		5:15 PM	50-80	100-120	LSC, MD, HD
100-105	5:17 PM		50-80	100-120	LSC, MD, HD
105-110		5:22 PM	50-80	100-120	LSC, MD, HD
110-115	5:24 PM		50-80	100-120	LSC TO LSC, C, HD
115-120		5:29 PM	50-80	100-120	LSC TO LSC, C, HD

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



4919 West Laurel Street
Tampa, Florida 33607
Phone: (813) 289-0750
Fax: (813)289-5474

COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: S16
Elev: 145.05

Date Drilled: 3/28/2013 & 3/29/2013
Date Grouted: 4/1/2013
Inspector: RK

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
120-125	5:35 PM		50-80	100-120	LSC, HH, MD, HD
125-130		5:39 PM	50-80	100-120	LSC TO LSC, HH, C MD, HD
130-135	5:42 PM		50-80	100-120	LSC, C, HD
135-140		6:30 PM	50-80	100-120	LSC, HH, HD
140-145	8:04 AM		50-80	150-200	LSC, HD
145-150		8:20 AM	50-80	150-200	LSC, HD, BSC
150-155	9:50 AM	10:00 AM	50-80	150-200	Stopped until 9.50, had to switch to low gear
155-160	9:50 PM	10:00 PM	50-80	150-200	HD
160-165	10:04 AM	10:23 AM	50-80	150-200	HD
165-170	1:44 PM	1:50 PM	50-80	150-200 / 100-150	Very hard, cannot continue- using 4" w/roller C, debris coming in the water
170-175	1:51 PM		50-80	100-150	LSC, C, HD
175-180		1:59 PM	50-80	100-150	LSC TO LSC, C, HD
180-185	2:00 PM		50-80	100-150	LSC, C, HD
185-190		2:13 PM	50-80	100-150	LSC, C, HD
190-195	2:14 PM		50-80	100-150	LSC, C, HD
195-200		2:18 PM	50-80	100-150	LSC, C, HD
200-205	2:20 PM		50-80	100-150	LSC, C
205-210		2:25 PM	50-80	100-150	LSC TO CR 4', LSC, C
210-215	2:26 PM		50-80	100-150	CR TO LSC, SD
215-220		2:29 PM	50-80	100-150	LSC, HH, SD, LSC, MD
220-225	2:30 PM		50-80	100-180	LSC, C, MD, HD
225-230		2:37 PM	50-80	100-180	LSC, C, HD
230-235					End of boring at 231'

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: S17
Elev: 145.43

Date Drilled: 4/9/2013
Date Grouted: 4/10/2013
Inspector: RK

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
0-5'	8:00 AM		50-80	100-120	SD
5-10		8:02 AM	50-80	100-120	SD
10-15	8:04 AM		50-80	100-120	MD, HD, debris, LSC
15-20		8:14 AM	50-80	100-120	MD, HD, debris, LSC
20-25	8:15 AM		50-80	100-120	MD, HD, debris, LSC
25-30		8:30 AM	50-80	100-120	MD, HD, debris, LSC
30-35	8:35 AM		50-80	100-120	MD, SD, LSC
35-40		8:39 AM	50-80	100-120	MD, SD, LSC
40-45	8:40 AM		50-80	100-120	MD, SD, LSC
45-50		8:43 AM	50-80	100-120	MD, SD, LSC
50-55	8:44 AM		50-80	100-120	MD, LSC
55-60		8:50 AM	50-80	100-120	MD, LSC
60-65	8:51 AM		50-80	100-120	MD, LSC
65-70		8:54 AM	50-80	100-120	MD, LSC
70-75	8:58 AM		50-80	100-120	MD, HD, LSC, C
75-80		9:04 AM	50-80	100-120	MD, HD, LSC, C
80-85	9:05 AM		50-80	100-120	MD, HD, LSC
85-90		9:12 AM	50-80	100-120	MD, HD, LSC
90-95	9:13 AM		50-80	100-120	MD, HD, LSC, C
95-100		9:23 AM	50-80	100-120	MD, HD, LSC, C
100-105	9:24 AM		50-80	100-120	MD, HD, LSC, C
105-110		9:34 AM	50-80	100-120	MD, HD, LSC, C
110-115	9:35 AM		50-80	100-120	MD, HD, LSC, C
115-120		9:44 AM	50-80	100-120	MD, HD, LSC, C

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: S17
Elev: 145.43

Date Drilled: 4/9/2013
Date Grouted: 4/10/2013
Inspector: RK

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
120-125	9:45 AM		50-80	100-120	MD, HD, LSC, C
125-130		9:52 AM	50-80	100-120	MD, HD, LSC, C, SD
130-135	10:19 AM		50-80	100-120	HD, LSC
135-140		10:43 AM	50-80	100-120	HD, LSC
140-145	10:44 AM		50-80	100-120	MD, HD, LSC, C
145-150		10:48 AM	50-80	100-120	MD, HD, LSC, C
150-155	10:49 AM		50-80	100-120	MD, HD, LSC, C
155-160		10:57 AM	50-80	100-120	MD, HD, LSC, C
160-165	10:58 AM		50-80	100-120	MD, HD, LSC, C
165-170		11:16 AM	50-80	100-120	MD, HD, LSC, C, SD
170-175	11:35 AM		50-80	100-120	MD, HD, LSC, C
175-180		11:40 AM	50-80	100-120	MD, HD, LSC, C
180-185	11:41 AM		50-80	100-120	MD, HD, LSC, C
185-190		11:52 AM	50-80	100-120	MD, HD, LSC, C
190-195	11:53 AM		50-80	100-120	MD, HD, LSC, C
195-200		12:13 PM	50-80	100-120	MD, HD, LSC, C, SD
200-205	12:14 PM	2:00 PM	50-80	100-120	Casing stuck and plugged at 12:15, started ram at 1:30, casing broke at 2:00, able to remove 30 feet, remaining casing was left in the ground - will re-drill

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: S17 (Re-drill)
Elev: 141.5

Date Drilled: 4/9/2013 & 4/10/2013
Date Grouted: 4/10/2013
Inspector: RK

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
0-5'	7:39 AM		50-80	100-120	SD
5-10		7:40 AM	50-80	100-120	SD
10-15	7:43 AM		50-80	100-120	SD
15-20		7:46 AM	50-80	100-120	SD
20-25	7:49 AM		50-80	100-120	MD, LSC
25-30		7:58 AM	50-80	100-120	MD, LSC
30-35	8:22 AM		50-80	100-120	MD, LSC
35-40		8:24 AM	50-80	100-120	MD, LSC
40-45	8:27 AM		50-80	100-150	SD, CR
45-50		8:28 AM	50-80	100-150	SD, CR
50-55	8:30 AM		50-80	100-150	SD, CR
55-60		8:31 AM	50-80	100-150	SD, CR
60-65	8:32 AM		50-80	100-150	SD, MD, CR, LSC
65-70		8:34 AM	50-80	100-150	SD, MD, CR, LSC
70-75	8:35 AM		50-80	100-150	SD, MD, CR, LSC, C
75-80		8:37 AM	50-80	100-150	SD, MD, CR, LSC, C
80-85	8:39 AM		50-80	100-120	MD, SD, LSC
85-90		8:42 AM	50-80	100-120	MD, SD, LSC
90-95	8:43 AM		50-80	100-120	MD, SD, LSC
95-100		8:49 AM	50-80	100-120	MD, SD, LSC
100-105	9:10 AM		50-80	100-150	MD, SD, LSC
105-110		9:15 AM	50-80	100-150	MD, SD, LSC
110-115	9:18 AM		50-80	100-150	MD, SD, LSC
115-120		9:22 AM	50-80	100-150	MD, SD, LSC

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: S17 (Re-drill)
Elev: 141.5

Date Drilled: 4/9/2013 & 4/10/2013
Date Grouted: 4/10/2013
Inspector: RK

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
120-125	9:26 AM		50-80	100-150	MD, LSC
125-130		9:30 AM	50-80	100-150	MD, LSC
130-135	9:34 AM		50-80	100-150	MD, HD, LSC
135-140		9:42 AM	50-80	100-150	MD, HD, LSC
140-145	9:46 AM		50-80	100-150	MD
145-150		9:50 AM	50-80	100-150	MD
150-155	9:53 AM		50-80	100-150	MD, HD, LSC
155-160		9:58 AM	50-80	100-150	MD, HD, LSC
160-165	10:01 AM		50-80	100-150	MD, HD, LSC
165-170		10:08 AM	50-80	100-150	MD, HD, LSC
170-175	10:11 AM		50-80	100-150	MD, HD, LSC
175-180		10:15 AM	50-80	100-150	MD, HD, LSC
180-185	10:18 AM		50-80	100-150	MD, HD, LSC
185-190		10:25 AM	50-80	100-150	MD, HD, LSC
190-195	10:27 AM		50-80	100-150	HD, LSC
195-200		10:39 AM	50-80	100-150	HD, LSC
200-205	10:41 AM		50-80	100-150	SD, MD
205-210		10:46 AM	50-80	100-150	MD, SD, LSC, CR
210-215	10:50 AM		50-80	100-150	MD, SD, LSC
215-220		10:55 AM	50-80	100-150	MD, SD, LSC
220-225	10:57 AM		50-80	100-150	MD, SD, LSC
225-230		11:03 AM	50-80	100-150	MD, LSC
230-235	11:04 AM		50-80	100-150	MD, LSC
235-240			50-80	100-150	MD, LSC

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: S18
Elev: 146.86

Date Drilled: 4/10/2013 & 4/11/2013
Date Grouted: 4/11/2013
Inspector: RK

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
0-5'	1:52 PM		50-80	100-120	SD
5-10		1:53 PM	50-80	100-120	SD
10-15	1:54 PM		50-80	100-120	SD
15-20		1:55 PM	50-80	100-120	SD
20-25	1:56 PM		50-80	100-120	MD, HD, LSC, HH
25-30		2:03 PM	50-80	100-120	MD, HD, LSC, HH
30-35	2:05 PM		50-80	100-120	MD, HD, LSC
35-40		2:16 PM	50-80	100-120	MD, HD, LSC
40-45	2:22 PM		50-80	100-120	MD, LSC
45-50		2:24 PM	50-80	100-120	MD, LSC
50-55	2:26 PM		50-80	100-150	MD, LSC
55-60		2:28 PM	50-80	150-200	MD, TC
60-65	2:29 PM		50-80	100-120	MD, LSC
65-70		2:31 PM	50-80	100-120	MD, LSC
70-75	2:32 PM		50-80	120-150	MD, LSC
75-80		2:34 PM	50-80	120-150	MD, HD, LSC
80-85	2:35 PM		50-80	120-150	MD, HD, LSC
85-90		2:29 PM	50-80	120-150	MD, HD, LSC
90-95	2:40 PM		50-80	120-150	MD, HD, LSC
95-100		2:47 PM	50-80	120-150	MD, HD, LSC
100-105	3:17 PM		50-80	120-150	DUPLEX, MD, HD
105-110		3:21 PM	50-80	120-150	DUPLEX, MD, HD
110-115	3:35 PM		50-80	120-150	MD, HD, LSC
115-120		3:40 PM	50-80	120-150	MD, HD, LSC

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: S18
Elev: 146.86

Date Drilled: 4/10/2013 & 4/11/2013
Date Grouted: 4/11/2013
Inspector: RK

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
120-125	3:46 PM		50-80	120-150	MD, HD, LSC
125-130		3:50 PM	50-80	120-150	MD, HD, LSC
130-135	3:52 PM		50-80	120-150	MD, HD, LSC
135-140		4:00 PM	50-80	120-150	MD, HD, LSC
140-145	7:45 AM		50-80	120-150	MD, HD, LSC - 4/11/2013
145-150		7:52 AM	50-80	120-150	MD, HD, LSC
150-155	7:56 AM		50-80	120-150	MD, LSC
155-160		8:02 AM	50-80	120-150	MD, LSC
160-165	8:06 AM		50-80	120-150	MD, HD, LSC
165-170		8:15 AM	50-80	120-150	MD, HD, LSC
170-175	8:19 AM		50-80	120-150	MD, HD, LSC
175-180		8:27 AM	50-80	120-150	MD, HD, LSC
180-185	8:31 AM		50-80	120-180	MD, LSC
185-190		8:44 AM	50-80	120-180	MD, LSC
190-195	8:46 AM		50-80	120-180	MD, LSC
195-200		8:58 AM	50-80	120-180	MD, LSC
200-205	9:00 AM		50-80	150-200	MD, SD, CR, TC
205-210		9:05 AM	50-80	150-200	MD, SD, CR, TC
210-215	9:08 AM		50-80	120-220	MD, SD, CR, TC
215-220		9:33 AM	50-80	120-220	MD, SD, CR, TC, hard at the bottom
220-225	9:35 AM		50-80	150-200	MD, LSC, TC
225-230		9:43 AM	50-80	150-200	MD, LSC, TC

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: S19
Elev: 149.52

Date Drilled: 4/17/2013, 4/18/2013
Date Grouted: 4/18/2013
Inspector: KJ

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
0-5'	2:30 PM		50-70	100-110	SD
5-10		2:31 PM	50-70	100-110	SD
10-15	2:32 PM		50-70	100-110	SD
15-20		2:33 PM	50-70	100-110	SD
20-25	2:34 PM		50-70	100-110	MD
25-30		2:38 PM	50-70	110-120	MD
30-35	2:40 PM		50-70	110-120	SD, MD
35-40		2:43 PM	50-70	110-120	SD, MD
40-45	2:44 PM		50-70	110-120	SD
45-50		2:46 PM	50-70	110-120	SD
50-55	2:47 PM		50-70	110-120	SD
55-60		2:48 PM	50-70	110-120	SD
60-65	2:49 PM		50-70	110-120	SD
65-70		2:50 PM	50-70	110-120	SD
70-75	2:52 PM		50-70	110-120	SD
75-80		2:55 PM	50-70	120-140	SD, MD, C
80-85	2:57 PM	3:01 PM	50-70	120-140	SD, MD, C
85-90	3:01 PM	3:06 PM	50-70	120-140	SD, MD, C
90-95	3:07 PM	3:09 PM	50-70	120-140	MD, C
95-100	3:09 PM	3:15 PM	50-70	120-140	MD, C
100-105	3:15 PM	3:19 PM	50-70	120-140	MD, C
105-110	3:19 PM	3:24 PM	50-70	120-140	MD, C
110-115	3:24 PM	3:28 PM	50-70	120-140	MD, C
115-120	3:28 PM	3:33 PM	50-70	120-140	MD, C

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: S19
Elev: 149.52

Date Drilled: 4/17/2013, 4/18/2013
Date Grouted: 4/18/2013
Inspector: KJ

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
120-125	3:34 AM	3:37 PM	50-80	100-150	MD
125-130	3:37 PM	3:39 PM	50-80	100-150	MD
130-135	3:41 PM	3:46 PM	50-80	100-150	MD
135-140	3:46 PM	3:51 PM	50-80	100-150	MD
140-145	3:52 PM	3:54 PM	50-80	100-150	MD
145-150	3:54 PM	3:59 PM	50-80	100-150	MD
150-155	4:01 PM	4:06 PM	50-80	100-150	MD
155-160	4:06 PM	4:09 PM	50-80	100-150	MD
160-165	4:10 PM	4:15 PM	50-80	120-180	MD, C
165-170	4:15 PM	4:20 PM	50-80	120-180	MD
170-175	4:21 PM	4:25 PM	50-80	120-180	MD, C
175-180	4:25 PM	4:32 PM	50-80	120-180	MD, C
180-185	4:33 PM	4:40 PM	50-80	150-200	MD
185-190	4:40 PM	4:56 PM	50-80	150-200	MD
190-195	4:57 PM	5:06 PM	50-80	150-180	MD, C
195-200	5:06 PM	5:14 PM	50-80	150-180	MD, C
200-205	5:15 PM	5:17 PM	50-80	150-200	MD, SD
205-210	5:17 PM	5:26 PM	50-80	150-200	MD, SD
210-215	5:27 PM	5:32 PM	50-80	150-200	MD
215-220	5:32 PM	5:46 PM	50-80	150-200	MD, end of drilling for 4/17/2013
215-220	7:30 AM	7:40 AM	50-80	150-200	MD, beginning of drilling for 4/18/2013
220-225	7:41 AM	7:48 AM	50-80	150-200	MD
225-230	7:48 AM	8:05 AM	50-80	150-200	MD
					End of boring at 8:07 AM

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: S20
Elev: 151.49

Date Drilled: 4/18/2013
Date Grouted: 4/18/2013
Inspector: KJ

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
0-5'	9:35 AM		50-70	100-110	SD
5-10		9:37 PM	50-70	100-110	SD
10-15	9:37 PM		50-70	100-110	SD
15-20		9:40 PM	50-70	100-110	SD
20-25	9:41 PM		50-70	100-110	SD
25-30		9:42 PM	50-70	100-110	SD
30-35	9:43 PM		50-70	100-110	SD
35-40		9:45 PM	50-70	100-110	SD
40-45	9:46 PM		50-70	100-110	SD
45-50		9:48 PM	50-70	100-110	SD
50-55	9:50 PM		50-70	100-110	SD
55-60		9:52 PM	50-70	100-110	SD
60-65	9:54 PM		50-70	100-110	SD
65-70		9:56 PM	50-70	100-110	SD
70-75	9:58 PM		50-70	100-110	SD
75-80		10:00 PM	50-70	100-110	SD
80-85	10:02 PM		50-70	100-110	SD
85-90		10:04 PM	50-70	100-110	SD
90-95	10:06 PM	10:09 PM	50-70	100-110	SD
95-100	10:09 PM	10:15 PM	50-70	120-140	SD, MD
100-105	10:17 PM	10:21 PM	50-70	120-140	MD
105-110	10:21 PM	10:24 PM	50-70	120-140	MD
110-115	10:25 PM	10:31 PM	50-70	120-140	MD
115-120	10:31 PM	10:37 PM	50-70	120-140	MD

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



4919 West Laurel Street
Tampa, Florida 33607
Phone: (813) 289-0750
Fax: (813)289-5474

COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: S20
Elev: 151.49

Date Drilled: 4/18/2013
Date Grouted: 4/18/2013
Inspector: KJ

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
120-125	10:50 PM	10:53 PM	50-70	120-140	MD, SD
125-130	10:53 PM	10:57 PM	50-70	120-140	MD
130-135	10:58 PM	11:01 PM	50-70	120-140	MD, SD
135-140	11:01 PM	11:06 PM	50-70	120-140	MD
140-145	11:08 PM	11:13 PM	50-70	120-140	MD, C
145-150	11:13 PM	11:17 PM	50-70	120-140	MD, C
150-155	11:19 PM	11:21 PM	50-70	120-140	MD, SD, C
155-160	11:21 PM	11:27 PM	50-70	120-140	MD, C, BS
160-165	11:28 PM	11:32 PM	50-70	120-140	MD, SD
165-170	11:32 PM	11:38 PM	50-70	120-140	MD, SD
170-175	11:40 PM	11:44 PM	50-70	140-160	MD, SD
175-180	11:44 PM	11:51 PM	50-70	140-160	MD, SD
180-185	11:52 PM	11:59 PM	50-70	140-160	MD
185-190	11:59 PM	1:44 PM	50-70	140-160	MD, stopped & remove casing, reinstall casing
190-195	1:45 PM	1:47 PM	50-70	140-160	MD, C, RC, BS
195-200	1:47 PM	1:51 PM	50-70	140-160	MD, C, RC, BS
200-205	1:52 PM	1:54 PM	50-70	120-140	SD
205-210	1:54 PM	1:56 PM	50-70	120-140	SD
210-215	1:57 PM	1:59 PM	50-70	120-140	SD
215-220	1:59 PM	2:00 PM	50-70	120-140	SD
220-225	2:01 PM		50-70	120-140	SD
225-230		2:04 PM	50-70	120-140	MD, SD
					End of Boring at 2:06 PM at 231 feet

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: S21
Elev: 152.6

Date Drilled: 4/3/2013
Date Grouted: 4/3/2013
Inspector: KJ

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
0-5'	7:29 AM		50-70	110-120	MD, debris
5-10		7:30 AM	50-70	110-120	MD, debris
10-15	7:33 AM	7:35 AM	50-80	120-140	MD, debris
15-20	7:35 AM	7:39 AM	50-80	120-140	MD, debris
20-25	7:41 AM	7:42 AM	50-80	110-120	MD, SD
25-30	7:42 AM	7:45 AM	50-80	110-120	MD, SD
30-35	7:46 AM		50-80	110-120	SD
35-40		7:48 AM	50-80	110-120	SD
40-45	7:49 AM	7:52 AM	50-80	120-140	MD
45-50	7:52 AM	7:57 AM	50-80	120-140	MD
50-55	7:58 AM		50-80	110-120	SD
55-60		8:00 AM	50-80	110-120	SD
60-65	8:01 AM		50-80	110-120	SD
65-70		8:02 AM	50-80	110-120	SD
70-75	8:03 AM		50-80	110-120	SD
75-80		8:05 AM	50-80	110-120	SD
80-85	8:06 AM	8:08 AM	50-80	140-180	MD
85-90	8:08 AM	8:10 AM	50-80	140-180	MD
90-95	8:11 AM	8:12 AM	50-80	140-180	MD
95-100	8:12 AM	8:14 AM	50-80	140-180	MD
100-105	8:15 AM	8:19 AM	50-80	180-250	MD
105-110	8:19 AM	8:25 AM	50-80	180-250	MD
110-115	8:26 AM	8:30 AM	50-80	180-250	MD
115-120	8:30 AM	8:37 AM	50-80	180-250	MD

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: S21
Elev: 152.6

Date Drilled: 4/3/2013
Date Grouted: 4/3/2013
Inspector: KJ

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
120-125	8:39 AM	8:42 AM	50-80	180-250	MD, HD, C
125-130	8:42 AM	8:48 AM	50-80	180-250	MD, HD, C
130-135	8:49 AM	8:53 AM	50-80	190-250	MD, HD, C
135-140	8:53 AM	8:58 AM	50-80	190-250	MD, HD, C
140-145	9:00 AM	9:08 AM	50-80	200-260	MD, HD
145-150	9:08 AM	9:13 AM	50-80	200-260	MD, HD
150-155	9:14 AM	9:18 AM	50-80	200-260	MD, HD, C
155-160	9:18 AM	9:24 AM	50-80	200-260	MD, HD, C
160-165	9:26 AM	9:30 AM	50-80	200-280	MD
165-170	9:30 AM	9:34 AM	50-80	200-280	MD, SD
170-175	9:36 AM	9:40 AM	50-80	190-260	MD, C
175-180	9:40 AM	9:46 AM	50-80	190-260	MD, HD, C
180-185	9:47 AM	9:50 AM	50-80	190-260	MD
185-190	9:50 AM	9:51 AM	50-80	160-200	MD, SD
190-195	9:52 AM	9:53 AM	50-80	160-200	SD
195-200	9:53 AM	9:54 AM	50-80	160-200	SD
200-205	9:55 AM	10:00 AM	50-80	190-260	MD, HD
205-210	10:00 AM	10:09 AM	50-80	190-260	MD, HD
210-215	10:11 AM	10:20 AM	50-80	200-300	MD
215-220	10:20 AM	10:29 AM	50-80	200-300	MD
220-225	10:31 AM	10:41 AM	50-80	200-300	MD, HD
225-230	10:41 AM	10:53 AM	50-80	200-300	MD, HD, end of boring at 230 feet at 10:58 AM

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: S22
Elev: 153.09

Date Drilled: 04/01/13 & 04/02/13
Date Grouted: 4/2/2013
Inspector: KJ

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
0-5'	4:41 PM	4:43 PM	50-80	120-140	Rig checked for plumb; SOB @ 16.39 HR, HD
5-10	4:43 PM	4:48 PM	50-80	120-140	HD, debris
10-15	4:49 PM	4:51 PM	50-80	120-140	HD, debris
15-20	4:51 PM	4:52 PM	50-80	110-120	SD
20-25	4:53 PM	4:54 PM	50-70	110-120	SD
25-30	4:54 PM	4:55 PM	50-70	110-120	SD
30-35	4:56 PM		50-70	110-120	SD
35-40		4:57 PM	50-70	110-120	SD
40-45	4:58 PM		50-70	110-120	SD
45-50		4:59 PM	50-70	110-120	SD
50-55	5:01 PM		50-70	110-120	SD
55-60		5:02 PM	50-70	110-120	SD
60-65	5:04 PM		50-70	120-140	MD, SD
65-70		5:06 PM	50-70	110-120	SD
70-75	5:07 PM		50-70	110-120	SD
75-80		5:08 PM	50-70	110-120	SD
80-85	5:09 PM	5:11 PM	50-70	120-130	SD, MD
85-90	5:11 PM	5:12 PM	50-70	120-140	MD, SD, C
90-95	5:13 PM	5:15 PM	50-70	120-140	MD, SD, C
95-100	5:15 PM	5:17 PM	50-70	120-140	MD
100-105	5:18 PM	5:19 PM	50-70	120-140	MD
105-110	5:19 PM	5:22 PM	50-70	120-140	MD
110-115	5:23 PM	5:25 PM	50-70	120-140	MD
115-120	5:25 PM	5:30 PM	50-70	120-140	MD

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: S22
Elev 153.09

Date Drilled: 04/01/13 & 04/02/13
Date Grouted: 4/2/2013
Inspector: RK & KJ

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
120-125	7:25 AM		50-80	100-120	C, LSC, MD, HD
125-130		7:35 AM	50-80	100-120	C, LSC, MD, HD
130-135	7:39 AM		50-80	100-120	C, LSC
135-140		7:43 AM	50-80	100-120	C, LSC
140-145	7:45 AM		50-80	100-150	LSC TO LSC, /W OCCASIONAL SD ZONES
145-150		7:48 AM	50-80	100-150	LSC, HD
150-155	7:50 AM		50-80	100-150	LSC, C, MD
155-160		7:51 AM	50-80	100-150	C, MD 4', LSC LAST 1'
160-165	7:53 AM		50-80	100-150	C, MD, LSC
165-170		7:55 AM	50-80	100-150	C, MD, LSC
170-175	7:57 AM		50-80	100-150	SD
175-180		7:59 AM	50-80	100-150	SD
180-185	8:00 AM		50-80	100-150	SD
185-190		8:03 AM	50-80	100-150	SD 2', MD 1', SD 2'
190-195	8:05 AM		50-80	100-150	SD
195-200		8:05 AM	50-80	100-150	SD
200-205	8:07 AM		50-80	100-180	LSC, MD, HD
205-210		8:09 AM	50-80	100-180	LSC, MD, HD
210-215	8:10 AM		50-80	140-160	LSC, MD, HD, C
215-220		8:14 AM	50-80	140-160	LSC, MD, HD, C
220-225	10:45 AM	10:48 AM	50-80	140-180	MD, HD
225-230	10:48 AM	10:51 AM	50-80	140-180	MD, HD
230-235	10:52 AM	10:53 AM	50-80	140-180	MD, SD
235-240	10:53 AM	10:55 AM	50-80	140-180	MD, HD EOB @ 10.56

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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Phone: (813) 289-0750
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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: S23
Elev: 153.05

Date Drilled: 4/1/2013
Date Grouted: 4/1/2013
Inspector: KJ

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
0-5'	1:08 PM		50-70	110-120	rig checked for plumb.
5-10		1:10 PM	50-70	110-120	SD
10-15	1:11 PM		50-70	110-120	SD
15-20		1:12 PM	50-70	110-120	SD
20-25	1:13 PM		50-70	110-120	SD
25-30		1:14 PM	50-70	110-120	SD
30-35	1:19 PM		50-70	110-120	SD
35-40		1:21 PM	50-70	110-120	SD, MD
40-45	1:22 PM		50-70	110-120	SD
45-50		1:23 PM	50-70	110-120	SD
50-55	1:24 PM		50-70	110-120	SD
55-60		1:26 PM	50-70	110-120	SD
60-65	1:26 PM		50-70	110-120	SD
65-70		1:28 PM	50-70	110-120	SD
70-75	1:30 PM		50-70	110-120	SD
75-80		1:32 PM	50-70	110-120	SD
80-85	1:34 PM	1:37 PM	50-70	120-140	SD, MD
85-90	1:37 PM	1:40 PM	50-70	120-140	MD
90-95	1:40 PM	1:42 PM	50-70	120-140	MD
95-100	1:42 PM	1:44 PM	50-70	120-140	MD
100-105	1:45 PM	1:47 PM	50-70	120-140	MD
105-110	1:47 PM	1:49 PM	50-70	120-140	MD
110-115	1:50 PM	1:52 PM	50-70	140-160	MD, C
115-120	1:52 PM	1:55 PM	50-70	140-160	MD, C

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: S23
Elev: 153.05

Date Drilled: 4/1/2013
Date Grouted: 4/1/2013
Inspector: KJ

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
120-125	1:56 PM	1:58 PM	50-70	120-140	MD, HD, C, TSC, BSC
125-130	1:58 PM	2:00 PM	50-70	120-140	MD, C, TSC, BSC
130-135	2:01 PM	2:02 PM	50-70	120-140	MD, C, TSC, BSC
135-140	2:03 PM	2:04 PM	50-70	120-140	MD, C, TSC, BSC
140-145	2:05 PM	2:08 PM	50-70	140-160	MD, C, TSC, BSC
145-150	2:08 PM	2:10 PM	50-70	140-160	MD, C, TSC, BSC
150-155	2:11 PM	2:13 PM	50-70	140-160	MD, C, TSC, BSC
155-160	2:13 PM	2:15 PM	50-70	140-160	MD, C, TSC, BSC
160-165	2:16 PM	2:18 PM	50-70	140-160	MD
165-170	2:18 PM	2:20 PM	50-70	140-160	MD, SD
170-175	2:21 PM		50-70	120-140	MD, SD
175-180		2:22 PM	50-70	120-140	SD
180-185	2:23 PM		50-70	120-140	SD
185-190		2:24 PM	50-70	120-140	SD
190-195	2:25 PM		50-70	120-140	SD
195-200		2:26 PM	50-70	120-140	SD
200-205	2:27 PM		50-70	120-140	SD
205-210		2:28 PM	50-70	120-140	SD
210-215	12:00 AM	2:31 PM	50-70	120-140	SD, MD
215-220	2:31 PM	2:33 PM	50-70	120-140	MD, SD, C
220-225	2:34 PM	2:37 PM	50-70	120-140	MD, C
225-230	2:37 PM	2:39 PM	50-70	120-140	MD, C
230-235	2:40 PM		50-70	120-140	MD, SD
235-240		2:41 PM	50-70	120-140	SD, MD

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.

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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: S23
Elev: 153.05

Date Drilled: 4/1/2013
Date Grouted: 4/1/2013
Inspector: KJ

[illegible]

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: S24
Elev: 152.78

Date Drilled: 4/1/2013
Date Grouted: 4/1/2013
Inspector: KJ

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
0-5'	8:50 AM		50-70	100-110	rig checked for plumb.
5-10		8:52 AM	50-70	100-110	SD
10-15	8:53 AM		50-70	100-110	SD
15-20		8:56 AM	50-70	110-120	SD, MD
20-25	8:57 AM	8:59 AM	50-70	120-140	MD
25-30	8:59 AM	9:02 AM	50-70	120-140	MD
30-35	9:03 AM	9:05 AM	50-70	120-140	MD
35-40	12:00 AM	9:08 AM	50-70	120-140	MD
40-45	12:00 AM		50-70	110-120	SD
45-50		9:11 AM	50-70	110-120	SD
50-55	9:12 AM	9:13 AM	50-70	110-120	SD
55-60	9:13 AM	9:14 AM	50-70	110-120	SD
60-65	9:15 AM		50-70	110-120	SD
65-70		9:17 AM	50-70	110-120	SD
70-75	9:18 AM	9:19 AM	50-70	110-120	SD
75-80	9:19 AM	9:21 AM	50-70	120-140	SD, MD
80-85	9:22 AM	9:24 AM	50-70	120-140	MD
85-90	9:24 AM	9:27 AM	50-70	120-140	MD
90-95	9:32 AM	9:35 AM	50-70	120-140	MD
95-100	9:35 AM	9:38 AM	50-70	120-140	MD
100-105	9:39 AM	9:43 AM	50-70	120-140	MD
105-110	9:43 AM	9:47 AM	50-70	120-140	MD
110-115	9:48 AM	9:51 AM	50-70	120-140	MD
115-120	9:51 AM	9:54 AM	50-70	120-140	MD

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: S24
Elev: 152.78

Date Drilled: 4/1/2013
Date Grouted: 4/1/2013
Inspector: KJ

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
120-125	9:55 AM	9:59 AM	50-70	120-140	MD
125-130	9:59 AM	10:04 AM	50-70	120-140	MD
130-135	10:05 AM	10:08 AM	50-70	140-160	MD, TSC, BSC
135-140	10:08 AM	10:12 AM	50-70	140-160	MD, TSC, BSC
140-145	10:13 AM	10:16 AM	50-70	140-160	MD, TSC, BSC
145-150	10:16 AM	10:19 AM	50-70	140-160	MD, TSC, BSC
150-155	10:20 AM	10:23 AM	50-70	140-160	MD, C, TSC, BSC
155-160	10:23 AM	10:27 AM	50-70	140-160	MD, C, TSC, BSC
160-165	10:28 AM	10:31 AM	50-70	140-160	MD, C, TSC, BSC
165-170	10:31 AM	10:35 AM	50-70	140-160	MD, C, TSC, BSC
170-175	10:36 AM	10:40 AM	50-70	140-160	MD, C, TSC, BSC
175-180	10:40 AM	10:44 AM	50-70	140-160	MD, C, TSC, BSC
180-185	10:45 AM	10:46 AM	50-70	140-160	MD
185-190	10:46 AM	10:47 AM	50-70	120-140	SD
190-195	10:48 AM	10:49 AM	50-70	120-140	SD
195-200	10:49 AM	10:52 AM	50-70	120-140	SD, MD
200-205	10:53 AM	10:54 AM	50-70	120-140	SD, MD
205-210	10:54 AM	10:55 AM	50-70	120-140	SD, MD
210-215	10:56 AM		50-70	120-140	SD
215-220		10:57 AM	50-70	120-140	SD
220-225	10:58 AM	11:00 AM	50-70	120-140	SD, MD
225-230	11:00 AM	11:04 AM	50-70	120-140	MD
230-235	11:05 AM	11:07 AM	50-70	120-140	MD, SD
235-240	11:07 AM	11:11 AM	50-70	140-160	MD

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.

4919 West Laurel Street
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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: S24
Elev: 152.78

Date Drilled: 4/1/2013
Date Grouted: 4/1/2013
Inspector: KJ

[illegible]

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: S25
Elev: 151.96

Date Drilled: 3/29/2013
Date Grouted: 4/1/2013
Inspector: KJ

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
0-5'	12:59 PM		50-70	100-110	SD
5-10		1:01 PM	50-70	100-110	SD
10-15	1:02 PM		50-70	100-110	SD
15-20		1:03 PM	50-70	100-110	SD
20-25	1:04 PM		50-70	100-110	SD
25-30		1:05 PM	50-70	100-110	SD
30-35	1:06 PM		50-70	100-110	SD
35-40		1:07 PM	50-70	100-110	SD
40-45	1:08 PM		50-70	100-110	SD
45-50		1:10 PM	50-70	100-110	SD
50-55	1:11 PM		50-70	100-110	SD
55-60		1:13 PM	50-70	100-110	SD
60-65	1:14 PM		50-70	100-110	SD
65-70		1:15 PM	50-70	100-110	SD
70-75	1:16 PM	1:17 PM	50-70	100-110	SD
75-80	1:17 PM	1:20 PM	50-70	120-140	MD, C
80-85	1:21 PM	1:23 PM	50-70	120-140	MD, C
85-90	1:23 PM	1:25 PM	50-70	120-140	MD, C
90-95	1:26 PM	1:28 PM	50-70	120-140	MD, C, BSC
95-100	1:28 PM	1:31 PM	50-70	120-140	MD, C, BSC
100-105	1:32 PM	1:34 PM	50-70	120-140	MD, C
105-110	1:34 PM	1:40 PM	50-70	120-140	MD, C, BSC
110-115	1:41 PM	1:44 PM	50-70	120-140	MD
115-120	1:44 PM	1:47 PM	50-70	120-140	MD

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: S25
Elev: 151.96

Date Drilled: 3/29/2013
Date Grouted: 4/1/2013
Inspector: KJ

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
120-125	1:49 PM	1:53 PM	50-70	140-160	MD, HD, C, BSC
125-130	1:53 PM	1:56 PM	50-70	140-160	MD, HD
130-135	1:57 PM	1:59 PM	50-70	140-160	MD
135-140	1:59 PM	2:02 PM	50-70	140-160	MD
140-145	2:03 PM	2:08 PM	50-70	140-160	MD, HD, BSC
145-150	2:08 PM	2:13 PM	50-70	140-160	MD, HD, BSC
150-155	2:14 PM	2:16 PM	50-70	120-140	MD, C
155-160	2:16 PM	2:19 PM	50-70	120-140	MD, C
160-165	2:20 PM	2:21 PM	50-70	140-160	MD, SC, C
165-170	2:21 PM	2:22 PM	50-70	140-160	SD, MD, C
170-175	2:23 PM	2:26 PM	50-70	140-160	MD
175-180	2:26 PM	2:30 PM	50-70	140-160	MD, HD, C, BSC
180-185	2:31 PM		50-70	120-140	SD
185-190		2:32 PM	50-70	120-140	SD
190-195	2:33 PM		50-70	120-140	SD
195-200		2:34 PM	50-70	120-140	SD
200-205	2:35 PM	2:37 PM	50-80	120-140	SD
205-210	2:37 PM	2:43 PM	50-80	140-180	MD, SD, C
210-215	2:44 PM	2:46 PM	50-70	140-160	MD, HD, C, BSC
215-220	2:46 PM	2:49 PM	50-70	140-160	MD, HD, SD, C, BSC
220-225	2:50 PM	2:52 PM	50-70	140-170	SD, MD, BSC
225-230	2:52 PM	2:54 PM	50-70	140-170	MD, HD, SD, BSC
230-235	2:55 PM	2:57 PM	50-70	140-170	MD
235-240	2:57 PM	3:00 PM	50-70	140-170	MD

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: S26
Elev: 150.62

Date Drilled: 3/29/2013
Date Grouted: 3/29/2013
Inspector: RK & KJ

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
0-5'	7:37 AM		50-80	100-120	LSC, SD, MD
5-10		7:40 AM	50-80	100-120	LSC, SD, MD
10-15	7:43 AM		50-80	100-120	LSC, SD, MD
15-20		7:46 AM	50-80	100-120	LSC, C, MD
20-25	7:48 AM		50-80	100-120	SD
25-30		7:48 AM	50-80	100-120	SD
30-35	7:51 AM		50-80	100-120	CR TO LSC, SD
35-40		7:52 AM	50-80	100-120	CR TO LSC, SD
40-45	7:54 AM		50-80	100-120	LSC, SD
45-50		7:55 AM	50-80	100-120	LSC, SD
50-55	7:56 AM		50-70	100-110	SD
55-60		7:58 AM	50-70	100-110	SD
60-65	7:59 AM	8:01 AM	50-80	100-110	SD
65-70	8:01 AM	8:02 AM	50-80	100-110	SD
70-75	8:03 AM	8:04 AM	50-80	100-110	SD, LSC
75-80	8:04 AM	8:05 AM	50-80	120-140	MD
80-85	8:06 AM	8:07 AM	50-80	120-140	MD
85-90	8:07 AM	8:09 AM	50-80	120-140	MD, LSC
90-95	8:10 AM	8:12 AM	50-70	120-140	MD
95-100	8:12 AM	8:18 AM	50-70	120-140	MD
100-105	8:19 AM	8:24 AM	50-70	120-140	MD
105-110	8:24 AM	8:29 AM	50-70	120-140	MD
110-115	8:30 AM	8:37 AM	50-70	120-140	MD, HD
115-120	8:37 AM	8:44 AM	50-70	120-140	MD, HD

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: S26
Elev: 150.62

Date Drilled: 3/29/2013
Date Grouted: 3/29/2013
Inspector: RK & KJ

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
120-125	8:46 AM	8:49 AM	50-70	120-140	MD
125-130	8:49 AM	9:00 AM	50-70	120-140	MD
130-135	9:01 AM	9:07 AM	50-70	120-140	MD
135-140	9:07 AM	9:14 AM	50-70	120-140	MD
140-145	9:16 AM	9:20 AM	50-70	120-140	MD
145-150	9:20 AM	9:30 AM	50-70	120-140	MD
150-155	9:31 AM	9:32 AM	50-70	120-140	MD
155-160	9:32 AM	9:35 AM	50-70	120-140	MD
160-165	9:36 AM	9:37 AM	50-70	120-140	MD, SD
165-170	9:37 AM	9:39 AM	50-70	120-140	MD, SD
170-175	9:40 AM		50-70	110-120	SD
175-180		9:41 AM	50-70	110-120	SD
180-185	9:42 AM		50-70	110-120	SD
185-190		9:43 AM	50-70	110-120	SD
190-195	9:44 AM	9:45 AM	50-70	110-120	SD
195-200	9:45 AM	9:52 AM	50-70	120-140	MD, BSC
200-205	9:53 AM	9:55 AM	50-70	120-140	MD, BSC
205-210	9:55 AM	9:57 AM	50-70	120-140	MD, BSC
210-215	9:58 AM	10:00 AM	50-70	120-140	MD, BSC
215-220	10:00 AM	10:02 AM	50-70	120-140	MD, BSC
220-225	10:03 AM	10:03 AM	50-70	120-140	SD, MD, C, BSCSD
225-230	10:03 AM	10:06 AM	50-70	120-140	MD, C, BSCSD
230-235	10:07 AM	10:09 AM	50-70	140-160	MD, C, BSCSD
235-240	10:09 AM	10:11 AM	50-70	140-160	MD, EOB 10.14

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: S27
Elev: 148.98

Date Drilled: 4/9/2013 & 4/10/2013
Date Grouted: 4/10/2013
Inspector: RK

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
0-5'	2:53 PM		50-60	100-110	SD
5-10		2:56 PM	50-60	100-110	SD
10-15	2:58 PM		50-60	100-110	SD
15-20		3:00 PM	50-60	100-110	SD
20-25	3:02 PM		50-80	100-110	MD, HD
25-30		3:12 PM	50-80	100-110	MD, HD
30-35	3:14 PM		50-80	100-120	MD, HD, LSC
35-40		3:18 PM	50-80	100-120	MD, HD, LSC
40-45	3:20 PM		50-80	100-120	MD, SD
45-50		3:21 PM	50-80	100-120	MD, SD
50-55	3:23 PM		50-80	100-120	MD, SD
55-60		3:24 PM	50-80	100-120	MD, SD
60-65	3:26 PM		50-80	100-120	MD, SD
65-70		3:27 PM	50-80	100-120	MD, SD
70-75	3:30 PM		50-80	100-120	MD, SD, CR
75-80		3:30 PM	50-80	100-120	MD, SD, CR
80-85	3:34 PM		50-80	100-150	MD, SD, CR with osculation at harder zones
85-90		3:37 PM	50-80	100-150	MD, HD, LSC - with soft zones
90-95	3:39 PM		50-80	120-180	MD, HD, LSC - with soft zones
95-100		3:46 PM	50-80	120-180	MD, HD, LSC - with soft zones
100-105	3:57 PM		50-80	120-150	MD, HD, LSC - with soft zones
105-110		4:10 PM	50-80	120-150	MD, HD, LSC - with soft zones
110-115	4:12 PM		50-80	120-150	MD, HD, LSC - with soft zones
115-120		4:18 PM	50-80	120-150	MD, HD, LSC - with soft zones

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: S27
Elev: 148.98

Date Drilled: 4/6/2013 & 4/10/2013
Date Grouted: 4/10/2013
Inspector: RK

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
120-125	2:21 PM		50-80	120-150	MD, HD, LSC with soft zones, C
125-130		2:24 PM	50-80	120-150	MD, HD, LSC with soft zones, C
130-135	2:27 PM		50-80	120-150	MD, HD, LSC, C
135-140		2:34 PM	50-80	120-150	MD, HD, LSC, C
140-145	2:37 PM		50-80	120-150	MD, HD, LSC
145-150		2:50 PM	50-80	120-150	MD, HD, LSC
150-155	2:52 PM		50-80	120-180	MD, LCS, CR
155-160		2:56 PM	50-80	120-180	MD, LCS, CR
160-165	2:59 PM		50-80	120-180	MD, HD, LSC, HH
165-170		5:05 PM	50-80	120-180	MD, SD, LSC,CR
170-175	5:05 PM		50-80	120-180	MD, LSC,CR with soft zones
175-180		5:15 PM	50-80	120-180	MD, LSC,CR with soft zones
180-185	7:27 AM		50-80	120-150	SD, CR
185-190		7:29 AM	50-80	120-150	SD, CR
190-195	7:31 AM		50-80	120-150	SD, CR
195-200		7:33 AM	50-80	120-150	SD, CR
200-205	7:35 AM		50-80	150-200	MD, SD, LSC, C, CR
205-210		7:39 AM	50-80	150-200	MD, SD, LSC, C, CR
210-215	7:43 AM		50-80	150-220	MD, LSC
215-220		7:49 AM	50-80	150-220	MD, LSC
220-225	7:52 AM		50-80	150-220	MD, HD, LSC
225-230		8:00 AM	50-80	150-220	MD, HD, LSC
230-235	8:02 AM		50-80	150-280	MD, HD, LSC
235-240		8:08 AM	50-80	150-280	MD, HD, LSC

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.

COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: S27
Elev: 148.98

Date Drilled: 4/6/2013 & 4/10/2013
Date Grouted: 4/10/2013
Inspector: RK

[illegible]

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: S28
Elev: 147.63

Date Drilled: 4/8/2013
Date Grouted: 4/9/2013
Inspector: KJ

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
0-5'	1:03 PM		50-70	100-110	SD
5-10		1:05 PM	50-70	100-110	SD
10-15	1:07 PM		50-70	100-110	SD
15-20		1:10 PM	50-70	100-110	SD
20-25	1:11 PM	1:13 PM	50-80	100-110	SD
25-30	1:13 PM	1:15 PM	50-80	100-110	SD
30-35	1:16 PM	1:18 PM	50-70	100-110	SD
35-40	1:18 PM	1:20 PM	50-70	100-110	SD
40-45	1:21 PM	1:22 PM	50-70	110-120	SD, MD
45-50	1:22 PM	1:24 PM	50-70	110-120	SD, MD
50-55	1:25 PM	1:27 PM	50-70	110-120	SD, MD
55-60	1:27 PM	1:29 PM	50-70	110-120	SD, MD
60-65	1:30 PM	1:34 PM	50-70	120-140	MD
65-70	1:34 PM	1:37 PM	50-70	120-140	MD
70-75	1:38 PM	1:40 PM	50-70	120-140	MD
75-80	1:40 PM	1:44 PM	50-70	120-140	MD
80-85	1:45 PM	1:48 PM	50-70	120-140	MD
85-90	1:48 PM	1:52 PM	50-70	120-140	MD
90-95	1:53 PM	1:56 PM	50-70	120-140	MD
95-100	1:56 PM	1:59 PM	50-70	120-140	MD
100-105	2:00 PM	2:05 PM	50-70	120-140	MD
105-110	2:05 PM	2:09 PM	50-70	120-140	MD
110-115	2:10 PM	2:14 PM	50-80	140-160	MD, HD C, LSC
115-120	2:14 PM	2:19 PM	50-80	140-160	MD, HD C, LSC

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: S28
Elev: 147.63

Date Drilled: 4/8/2013
Date Grouted: 4/9/2013
Inspector: KJ

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
120-125	2:20 PM	2:22 PM	50-70	140-160	MD, C, LSC
125-130	2:22 PM	2:25 PM	50-70	140-160	MD, C, LSC
130-135	2:26 PM	2:29 PM	50-70	140-160	MD, HH
135-140	2:29 PM	2:34 PM	50-70	140-160	MD, HH
140-145	2:35 PM	2:40 PM	50-70	140-160	MD, HD
145-150	2:40 PM	2:48 PM	50-70	140-160	MD, HD
150-155	2:49 PM	2:52 PM	50-70	140-160	MD, HD
155-160	2:52 PM	2:57 PM	50-70	140-160	MD, HD
160-165	2:58 PM	3:03 PM	50-70	160-180	MD, HD
165-170	3:03 PM	3:09 PM	50-70	160-180	MD, HD
170-175	3:10 PM	3:16 PM	50-70	200-250	MD, HD, C, LSC
175-180	3:16 PM	3:25 PM	50-70	200-250	MD, HD, C, LSC
180-185	3:26 PM	3:31 PM	50-70	200-250	MD, HD, C, LSC
185-190	3:31 PM	3:37 PM	50-70	200-250	MD, HD, C, LSC
190-195	3:38 PM	3:40 PM	50-70	200-250	MD, HD, C, LSC
195-200	3:40 PM	3:43 PM	50-70	200-250	MD, HD, C, LSC
200-205	3:44 PM	3:49 PM	50-70	200-250	HD, C, LSC
205-210	3:49 PM	4:00 PM	50-70	200-250	HD, C, LSC, replace starter
210-215	5:20 PM	5:23 PM	50-70	200-240	MD, SD, LSC
215-220	5:23 PM	5:28 PM	50-70	200-240	MD, LSC
220-225	5:29 PM	5:32 PM	50-70	200-240	MD
225-230	5:32 PM	5:35 PM	50-70	200-240	MD
230-235	5:36 PM	5:37 PM	50-70	200-240	MD, SD
235-240	5:37 PM	5:40 PM	50-70	200-240	MD, terminated at 240 feet

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling; LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: S29
Elev: 147.25

Date Drilled: 4/9/2013
Date Grouted: 4/9/2013
Inspector: TN

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torgue Pressure (right gauge)	Comments/Drilling
	Start	Finish			
0-5'	8:43 AM		60	100	SD to MD
5-10		8:45 AM	60	100	SD to MD
10-15	8:47 AM		60	100	SD to MD
15-20		8:50 AM	60	100	SD to MD
20-25	8:52 AM		60	100	SD to MD
25-30		8:55 AM	60	100	SD to MD
30-35	8:57 AM		60	100	SD to MD
35-40		9:01 AM	60	100	SD to MD
40-45	9:03 AM		60	100	SD to MD
45-50		9:05 AM	60	100	SD to MD
50-55	9:11 AM		50-60	100-110	SD to MD
55-60		9:13 AM	50-60	100-110	SD to MD
60-65	9:15 AM		50-60	100-110	SD to MD
65-70		9:17 AM	50-60	100-110	SD to MD
70-75	9:19 AM		50-60	100-110	SD to MD
75-80		9:21 AM	50-60	100-110	SD to MD
80-85	9:23 AM		50-70	100-120	SD to MD
85-90		9:27 AM	50-70	100-120	SD to MD
90-95	9:29 AM		50-70	100-150	SD to MD
95-100		9:34 AM	50-70	100-150	MD
100-105	9:36 AM		50-70	110-160	MD
105-110		9:43 AM	50-70	110-160	MD
110-115	9:45 AM		50-70	120-170	MD
115-120		9:51 AM	50-70	120-170	C, HD

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: S29
Elev: 147.25

Date Drilled: 4/9/2013
Date Grouted: 4/9/2013
Inspector: TN

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
120-125	9:52 AM		50-70	120-170	HD
125-130		9:55 AM	50-70	120-170	HD
130-135	9:57 AM		50-70	120-170	HD
135-140		10:03 AM	50-70	120-170	HD
140-145	10:13 AM		50-70	120-170	HD
145-150		10:21 AM	50-70	120-170	HD
150-155	10:23 AM		50-70	120-170	HD
155-160		10:29 AM	50-70	120-170	HD
160-165	10:31 AM		50-70	130-190	Loss of Circulation
165-170		10:37 AM	50-70	130-190	HD
170-175	10:39 AM		50-70	130-200	HD
175-180		10:47 AM	50-70	130-200	HD
180-185	10:49 AM		50-70	120-200	HD
185-190		10:56 AM	50-70	120-200	HD
190-195	10:58 AM		50-70	120-230	HD
195-200		11:02 AM	50-70	120-230	HD
200-205	11:03 AM		50-70	110-200	HD
205-210		11:08 AM	50-70	110-200	HD
210-215	11:10 AM		50-70	110-250	HD
215-220		11:14 AM	50-70	110-250	HD
220-225	11:16 AM		50-70	110-250	HD
225-230		11:22 AM	50-70	110-250	HD
230-235	11:24 AM	11:31 AM	50-70	110-250	Terminated at 235 feet

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



4919 West Laurel Street
Tampa, Florida 33607
Phone: (813) 289-0750
Fax: (813)289-5474

COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: S30
Elev: 146.16

Date Drilled: 4/15/2013, 4/16/2013
Date Grouted: 4/16/2013
Inspector: RK

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
0-5'	3:08 PM		50-80	100-120	SD
5-10		3:11 PM	50-80	100-120	SD
10-15	3:13 PM		50-80	100-120	SD, LSC
15-20		3:15 PM	50-80	100-120	SD, LSC
20-25	3:18 PM		50-80	100-120	SD, MD, LSC
25-30		3:21 PM	50-80	100-120	SD, MD, LSC
30-35	3:24 PM		50-80	100-120	MD, LSC
35-40		3:26 PM	50-80	100-120	MD, LSC
40-45	3:27 PM		50-80	100-150	MD, LSC
45-50		3:32 PM	50-80	100-150	MD, LSC
50-55	3:33 AM		50-80	100-150	MD, LSC
55-60		3:37 AM	50-80	100-150	MD, LSC
60-65	3:39 PM		50-80	100-150	MD, LSC
65-70		3:44 PM	50-80	100-150	MD, LSC
70-75	3:46 PM		50-80	100-150	MD, LSC
75-80		3:51 PM	50-80	100-150	MD, LSC
80-85	4:02 PM		50-80	100-150	MD, HD LSC
85-90		4:09 PM	50-80	100-150	MD, HD LSC
90-95	4:12 PM		50-80	100-150	MD, HD LSC
95-100		4:18 PM	50-80	100-150	MD, HD LSC
100-105	4:21 PM		50-80	100-150	MD, HD LSC
105-110		4:28 PM	50-80	100-150	MD, HD LSC
110-115	4:31 PM		50-80	100-150	MD, HD LSC
115-120		4:38 PM	50-80	100-150	MD, HD LSC

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: S30
Elev: 146.16

Date Drilled: 4/15/2013, 4/16/2013
Date Grouted: 4/16/2013
Inspector: RK

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
120-125	4:40 PM		50-80	100-150	MD, HD, LSC
125-130		4:46 PM	50-80	100-150	MD, HD, LSC, C
130-135	4:42 PM		50-80	120-150	MD, HD, LSC, C
135-140		4:56 PM	50-80	120-150	MD, HD, LSC, C
140-145	4:57 PM		50-80	120-150	MD, HD, LSC
145-150		5:05 PM	50-80	120-150	MD, HD, LSC
150-155	5:06 PM		50-80	120-150	MD, HD, LSC
155-160		5:14 PM	50-80	120-150	MD, HD, LSC
160-165	5:15 PM	5:33 PM	50-80	120-160	HD, LSC, C, end of drill on 4/15/2013
165-170	9:05 AM	9:35 AM	50-80	150-200	HD, LSC, C, beginning of drill on 4/16/2013
170-175	9:40 AM	12:50 PM	50-80	150-180	HD, LSC, 10:00 AM changed bit
175-180		1:00 PM	50-80	150-180	HD
180-185	1:03 PM		50-80	150-180	HD, SD
185-190		1:12 PM	50-80	150-180	HD, SD
190-195	1:16 PM		50-80	150-180	MD, SD, LSC, CR, C
195-200		1:25 PM	50-80	150-180	MD, SD, LSC, CR, C
200-205	1:28 PM		50-80	150-180	SD, HD
205-210		1:34 PM	50-80	150-180	SD, CR
210-215	1:38 PM		50-80	150-180	SD, CR
215-220		1:39 PM	50-80	150-180	SD, CR
220-225	1:43 PM		50-80	120-180	SD, CR, HD
225-230		1:50 PM	50-80	120-180	SD, HD, Terminated at 230 feet

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: S31
Elev: 145.66

Date Drilled: 4/15/2013
Date Grouted: 4/15/2013
Inspector: RK

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
0-5'	7:50 AM		50-80	100-120	SD
5-10		7:51 AM	50-80	100-120	SD
10-15	7:55 AM		50-80	100-120	SD, MD
15-20		7:57 AM	50-80	100-150	SD, MD
20-25	8:00 AM		50-80	100-150	LSC, HH, HD debris
25-30		8:13 AM	50-80	100-150	LSC, HH, HD debris
30-35	8:04 AM		50-80	100-150	LSC, HH, HD, duplex
35-40		9:10 AM	50-80	100-150	LSC, HH, HD, duplex
40-45	9:15 AM		50-80	100-150	SD, MD, LSC
45-50		9:16 AM	50-80	100-150	SD, MD, LSC
50-55	9:20 AM		50-80	100-150	MD, LSC
55-60		9:23 AM	50-80	100-150	MD, LSC
60-65	9:27 AM		50-80	100-150	MD, LSC
65-70		9:28 AM	50-80	100-150	MD, LSC
70-75	9:32 AM		50-80	100-150	MD, LSC
75-80		9:34 AM	50-80	100-150	MD, LSC
80-85	9:37 AM		50-80	100-150	MD, LSC
85-90		9:41 AM	50-80	100-150	MD, LSC
90-95	9:49 AM		50-80	100-150	MD, HD, LSC
95-100		9:54 AM	50-80	100-150	MD, HD, LSC
100-105	9:58 AM		50-80	100-150	MD, HD, LSC
105-110		10:01 AM	50-80	100-150	MD, HD, LSC
110-115	10:04 AM		50-80	100-150	MD, HD, LSC
115-120		10:10 AM	50-80	100-150	MD, HD, LSC

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: S31
Elev: 145.66

Date Drilled: 4/15/2013
Date Grouted: 4/15/2013
Inspector: RK

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
120-125	10:32 AM		50-80	100-150	MD, HD, LSC
125-130		10:38 AM	50-80	100-150	MD, HD, LSC
130-135	10:41 AM		50-80	100-150	MD, HD, LSC
135-140		10:49 AM	50-80	100-150	MD, HD, LSC
140-145	10:54 AM		50-80	100-150	MD, HD, LSC
145-150		10:59 AM	50-80	100-150	MD, HD, LSC
150-155	11:02 AM		50-80	100-150	MD, HD, LSC
155-160		11:07 AM	50-80	100-150	MD, HD, LSC
160-165	11:10 AM		50-80	100-150	MD, HD, LSC
165-170		11:19 AM	50-80	100-150	MD, HD, LSC
170-175	11:22 AM		50-80	100-150	MD, HD, LSC
175-180		11:30 AM	50-80	100-150	MD, HD, LSC
180-185	11:33 AM		50-80	120-150	MD, HD, LSC, C
185-190		11:41 AM	50-80	120-150	MD, HD, LSC, C
190-195	11:44 AM		50-80	120-150	MD, HD, LSC, C
195-200		11:48 AM	50-80	120-150	MD, HD, LSC, C, soft at the bottom
200-205	11:51 AM		50-80	120-150	SD, CR
205-210		11:51 AM	50-80	120-150	SD, CR
210-215	11:55 AM		50-80	120-180	SD, CR
215-220		11:55 AM	50-80	120-180	SD, CR, slight resistance at bottom
220-225	11:59 AM		50-80	150-200	SD, MD, HD, CR, LSC, HH
225-230		12:02 PM	50-80	150-200	MD, HD, LSC

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: S32
Elev: 145.89

Date Drilled: 4/11/2013
Date Grouted: 4/12/2013
Inspector: RK

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
0-5'	1:26 PM		50-80	100-120	SD
5-10		1:27 PM	50-80	100-120	SD
10-15	1:31 PM		50-80	100-120	SD
15-20		1:33 PM	50-80	100-120	SD
20-25	1:35 PM		50-80	100-120	SD, MD, LSC
25-30		1:41 PM	50-80	100-120	SD, MD, LSC
30-35	1:44 PM		50-80	100-120	MD, LSC
35-40		1:48 PM	50-80	100-120	MD, LSC
40-45	1:51 PM		50-80	100-120	MD, LSC
45-50		1:54 PM	50-80	100-120	MD, LSC
50-55	1:57 PM		50-80	100-120	MD, SD, LSC
55-60		2:00 PM	50-80	100-120	MD, SD, LSC
60-65	2:02 PM		50-80	100-120	SD, MD, CR
65-70		2:04 PM	50-80	100-120	SD, MD, CR
70-75	2:08 PM		50-80	100-120	MD, LSC
75-80		2:13 PM	50-80	100-120	MD, LSC
80-85	2:17 PM		50-80	100-120	MD, HD, LSC
85-90		2:22 PM	50-80	100-120	MD, HD, LSC
90-95	2:24 PM		50-80	100-120	MD, HD, LSC
95-100		2:29 PM	50-80	100-120	MD, HD, LSC
100-105	2:31 PM		50-80	100-120	MD, HD, LSC
105-110		2:35 PM	50-80	100-120	MD, HD, LSC
110-115	2:37 PM		50-80	100-120	MD, HD, LSC
115-120		2:45 PM	50-80	100-120	MD, HD, LSC

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling; LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: S32
Elev: 145.89

Date Drilled: 4/11/2013
Date Grouted: 4/12/2013
Inspector: RK

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
120-125	2:47 PM		50-80	100-120	MD, HD, LSC
125-130		2:52 PM	50-80	100-120	MD, HD, LSC, C
130-135	2:54 PM		50-80	100-120	MD, HD, LSC, HH
135-140		3:02 PM	50-80	100-120	MD, HD, LSC, HH, C
140-145	3:39 PM		50-80	100-150	MD, HD, LSC, duplex
145-150		3:44 PM	50-80	100-150	MD, HD, LSC, duplex
150-155	3:47 PM		50-80	100-150	MD, HD, LSC
155-160		3:51 PM	50-80	100-150	MD, HD, LSC
160-165	3:54 PM		50-80	120-150	MD, HD, LSC
165-170		4:02 PM	50-80	120-150	MD, HD, LSC
170-175	4:04 PM		50-80	120-150	MD, HD, LSC
175-180		4:11 PM	50-80	120-150	MD, HD, LSC
180-185	4:15 PM		50-80	120-150	MD, HD, LSC
185-190		4:23 PM	50-80	120-150	MD, HD, LSC
190-195	4:26 PM		50-80	120-150	MD, HD, LSC
195-200		4:39 PM	50-80	120-150	MD, HD, LSC, soft at bottom
200-205	4:43 PM		50-80	120-150	MD, LSC
205-210		4:47 PM	50-80	120-150	MD, LSC
210-215	4:51 PM		50-80	120-150	MD, SD, CR→LSC, C
215-220		4:56 PM	50-80	120-150	SD, CR→LSC bottom
220-225	5:00 PM		50-80	120-150	MD, SD, LSC
225-230		5:04 PM	50-80	120-150	MD, LSC, end of drill

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: S33
Elev: 146.20

Date Drilled: 4/12/2013
Date Grouted: 4/12/2013
Inspector: RK

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
0-5'	9:01 AM		50-80	100-120	loose
5-10		9:07 AM	50-80	100-120	loose, LSC in lower 2'
10-15	9:08 AM		50-80	100-120	MD, HD, LSC debris
15-20		9:16 AM	50-80	100-120	MD, HD, LSC debris
20-25	9:17 AM		50-80	100-120	MD, LSC
25-30		9:22 AM	50-80	100-120	MD, LSC
30-35	9:23 AM		50-80	100-120	MD, loose, LSC
35-40		9:26 AM	50-80	100-120	MD, loose, LSC
40-45	9:27 AM		50-80	100-120	MD, LSC
45-50		9:30 AM	50-80	100-120	MD, LSC
50-55	9:32 AM		50-80	100-120	MD, loose, LSC
55-60		9:34 AM	50-80	100-120	MD, loose, LSC
60-65	9:34 AM		50-80	100-120	MD, LSC
65-70		9:38 AM	50-80	100-120	MD, LSC
70-75	9:39 AM		50-80	100-120	MD, loose, LSC
75-80		9:42 AM	50-80	100-120	MD, loose, LSC
80-85	9:43 AM		50-80	100-120	MD, LSC
85-90		9:47 AM	50-80	100-120	MD, LSC
90-95	9:48 AM		50-80	100-120	MD, HD, LSC
95-100		9:55 AM	50-80	100-120	MD, HD, LSC
100-105	9:56 AM		50-80	100-120	MD, HD, LSC
105-110		10:03 AM	50-80	100-120	MD, HD, LSC
110-115	10:04 AM		50-80	100-120	MD, HD, LSC
115-120		10:13 AM	50-80	100-120	MD, HD, LSC

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: S33
Elev: 146.20

Date Drilled: 4/12/2013
Date Grouted: 4/12/2013
Inspector: RK

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
120-125	10:15 AM		50-80	120-150	MD, HD, LSC, C
125-130		10:21 AM	50-80	120-150	MD, HD, LSC, C
130-135	10:23 AM		50-80	120-150	MD, HD, LSC, C
135-140		10:34 AM	50-80	120-150	MD, HD, LSC, C
140-145	10:35 AM		50-80	120-180	MD, HD, LSC
145-150		10:46 AM	50-80	120-180	MD, HD, LSC
150-155	10:48 AM		50-80	120-180	MD, HD, LSC, HH
155-160		11:15 AM	50-80	120-180	MD, HD, LSC very hard last 2', C
160-165	11:16 AM		50-80	120-150	MD, HD, LSC
165-170		12:31 PM	50-80	120-150	Duplex, LSC, HD
170-175	12:34 PM		50-80	120-180	HD, LSC, C
175-180		12:40 PM	50-80	120-180	HD, LSC, C with in bedded soft zones
180-185	12:42 PM		50-80	120-180	HD, MD, LSC, C
185-190		12:52 PM	50-80	120-180	HD, MD, LSC, C
190-195	12:54 PM		50-80	120-180	MD, HD, LSC
195-200		1:05 PM	50-80	120-180	MD, HD, LSC
200-205	1:03 PM		50-80	120-180	MD, SD, LSC, CR
205-210		1:12 PM	50-80	120-180	MD, SD, LSC, CR
210-215	1:16 PM		50-80	120-180	MD, SD, LSC, CR
215-220		1:20 PM	50-80	120-180	MD, SD, LSC, CR
220-225	1:24 PM		50-80	120-180	SD to MD
225-230		2:00 PM	50-80	120-180	MD

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: S34
Elev: 148.82

Date Drilled: 4/18/2013, 4/19/2013
Date Grouted: 4/19/2013
Inspector: KJ

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
0-5'	4:30 PM		50-70	100-110	SD
5-10		4:32 PM	50-70	100-110	SD
10-15	4:33 PM		50-70	100-110	SD
15-20		4:34 PM	50-70	100-110	SD
20-25	4:36 PM		50-70	100-110	SD
25-30		4:37 PM	50-70	100-110	SD
30-35	4:37 PM		50-70	100-110	MD
35-40		4:40 PM	50-70	100-110	MD
40-45	4:41 PM		50-70	100-110	SD
45-50		4:42 PM	50-70	100-110	SD
50-55	4:43 PM		50-70	100-110	SD
55-60		4:44 PM	50-70	100-110	SD
60-65	4:45 PM		50-70	100-110	SD
65-70		4:46 PM	50-70	100-110	SD
70-75	4:47 PM	4:49 PM	50-70	120-140	MD
75-80	4:49 PM	4:51 PM	50-70	120-140	MD
80-85	4:52 PM	4:54 PM	50-70	120-140	MD
85-90	4:54 PM	4:56 PM	50-70	120-140	MD
90-95	4:57 PM	5:02 PM	50-70	120-140	MD
95-100	5:02 PM	5:05 PM	50-70	120-140	MD
100-105	5:06 PM	5:08 PM	50-70	120-140	MD
105-110	5:08 PM	5:10 PM	50-70	120-140	MD, End of drill on 4/18/2013
110-115	7:46 AM	7:49 AM	50-70	120-140	MD, Beginning of drill on 4/19/2013
115-120	7:49 AM	7:53 AM	50-70	120-140	MD

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: S34
Elev: 148.82

Date Drilled: 4/18/2013, 4/19/2013
Date Grouted: 4/19/2013
Inspector: KJ

Casing Depth(Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
120-125	7:54 AM		50-70	120-140	SD
125-130		7:56 AM	50-70	120-140	SD
130-135	7:58 AM	8:08 AM	50-70	120-160	MD, LSC
135-140	8:08 AM	8:20 AM	50-70	120-160	MD, LSC
140-145	8:21 AM	8:23 AM	50-70	140-160	MD, LSC
145-150	8:23 AM	8:27 AM	50-70	140-160	MD, LSC
150-155	8:28 AM	8:33 AM	50-70	140-160	MD, LSC, C
155-160	8:33 AM	8:36 AM	50-70	140-160	MD, LSC, C
160-165	8:37 AM	8:44 AM	50-70	140-160	MD, LSC, C
165-170	8:44 AM	8:47 AM	50-70	140-160	MD, LSC, C
170-175	8:48 AM	8:53 AM	50-70	140-160	MD, LSC, C
175-180	8:53 AM	9:02 AM	50-70	140-160	MD, LSC, C
180-185	9:03 AM	9:08 AM	50-70	140-160	MD, LSC, C
185-190	9:08 AM	9:12 AM	50-70	140-160	MD, SD, LSC
190-195	9:13 AM	9:19 AM	50-70	140-160	MD, LSC, CR
195-200	9:19 AM	9:24 AM	50-70	140-160	MD, LSC, CR
200-205	9:25 AM	9:27 AM	50-70	140-160	MD, SD, LSC, CR
205-210	9:27 AM	9:31 AM	50-70	140-160	MD, LSC, CR
210-215	9:32 AM	9:35 AM	50-70	140-160	MD, SD, LSC, CR
215-220	9:35 AM	9:39 AM	50-70	140-160	MD, C
220-225	9:40 AM	9:42 AM	50-70	140-160	MD
225-230	9:42 AM	9:45 AM	50-70	140-160	MD, Terminated at 228 feet

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



4919 West Laurel Street
Tampa, Florida 33607
Phone: (813) 289-0750
Fax: (813)289-5474

COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: S35
Elev: 150.93

Date Drilled: 4/22/2013
Date Grouted: 4/22/2013
Inspector: TN

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
0-5'	7:40 AM		50-60	100	7 tooth bit
5-10		7:45 AM	50-60	100	
10-15	7:55 AM	8:05 AM	50-60	100	Switch to 4 tooth bi
15-20			50-60	100	Loss of circulation
20-25	8:07 AM		50-60	100-110	SD, Switch back to 7 tooth bit
25-30		8:09 AM	50-60	100-110	SD
30-35	8:11 AM		50-60	100-110	SD
35-40		8:13 AM	50-60	100-110	SD
40-45	8:15 AM		50-60	100-120	SD
45-50		8:17 AM	50-60	100-120	SD
50-55	8:18 AM		50-60	100-120	SD
55-60		8:19 AM	50-60	100-120	SD
60-65	8:20 AM		50-70	100-140	SD
65-70		8:22 AM	50-70	100-140	SD
70-75	8:24 AM		50-70	100-140	MD
75-80		8:28 AM	50-70	100-140	MD
80-85	8:30 AM		50-70	100-140	MD
85-90		8:36 AM	50-70	100-140	MD
90-95	8:38 AM		50-70	100-140	MD, LSC
95-100		8:46 AM	50-70	100-140	MD, LSC
100-105	8:56 AM		50-70	100-140	MD, LSC
105-110		9:05 AM	50-70	100-140	MD, LSC
110-115	9:07 AM		50-70	100-140	MD, HD, LSC
115-120		9:16 AM	50-70	100-140	C

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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Phone: (813) 289-0750
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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: S35
Elev: 150.93

Date Drilled: 4/22/2013
Date Grouted: 4/22/2013
Inspector: TN

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
120-125	9:17 AM		50-70	100-140	MD, LSC
125-130		9:24 AM	50-70	100-140	MD, LSC, C
130-135	9:25 AM		50-70	100-140	HD, LSC
135-140		9:41 AM	50-70	100-140	HD, LSC, C
140-145	9:43 AM		50-70	100-140	HD, LSC
145-150		9:56 AM	50-70	100-140	HD, LSC, C
150-155	9:58 AM		50-70	100-140	HD, MD, LSC
155-160		10:06 AM	50-70	100-140	HD, MD, LSC
160-165	10:08 AM		50-70	100-140	HD, MD, LSC, C
165-170		10:22 AM	50-70	100-140	HD, LSC, C
170-175	10:28 AM		50-70	100-150	MD, LSC
175-180		10:48 AM	50-70	100-150	HD, LSC, C
180-185	10:50 AM		50-70	100-200	HD, LSC, C
185-190		11:06 AM	50-70	100-200	HD, LSC, C
190-195	11:07 AM		50-70	100-180	HD, LSC, C
195-200		11:54 AM	50-70	100-180	HD, LSC, C
200-205	1:35 PM		50-70	120-180	HD, LSC, C, Replaced drill bit
205-210		1:50 PM	50-70	120-180	HD, LSC, C
210-215	1:52 PM		50-70	120-180	HD, LSC, C
215-220		2:02 PM	50-70	120-180	HD, LSC, C
220-225	2:04 PM		50-70	120-180	HD, LSC, C
225-230		2:18 PM	50-70	120-180	HD, LSC, C, Terminated at 230 feet

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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Phone: (813) 289-0750
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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: S36
Elev: 152.14

Date Drilled: 4/19/2013
Date Grouted: 4/19/2013
Inspector: KJ

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
0-5'	12:40 PM		50-70	100-110	SD
5-10		12:41 PM	50-70	100-110	SD
10-15	12:42 PM		50-70	100-110	SD
15-20	12:49 PM	1:06 PM	50-70	100-110	SD, starter plugged, had to remove debris
20-25	1:07 PM		50-70	100-110	SD
25-30		1:11 PM	50-70	100-110	SD
30-35	1:12 PM	1:14 PM	50-70	120-140	SD, MD
35-40	1:14 PM	1:16 PM	50-70	120-140	SD, MD
40-45	1:17 PM		50-70	110-120	SD, MD
45-50		1:19 PM	50-70	110-120	SD, MD
50-55	1:20 PM		50-70	110-120	SD
55-60		1:22 PM	50-70	110-120	SD
60-65	1:23 PM		50-70	110-120	SD
65-70		1:24 PM	50-70	110-120	SD
70-75	1:25 PM		50-70	110-120	SD
75-80		1:27 PM	50-70	110-120	SD
80-85	1:28 PM		50-70	110-120	SD
85-90		1:30 PM	50-70	110-120	SD
90-95	1:31 PM	1:34 PM	50-70	120-140	SD, MD
95-100	1:34 PM	1:39 PM	50-70	120-140	MD, LSC
100-105	1:40 PM	1:44 PM	50-70	120-140	MD, LSC
105-110	1:44 PM	1:47 PM	50-70	120-140	MD, LSC
110-115	1:48 PM	1:53 PM	50-70	120-140	MD, LSC
115-120	1:53 PM	1:57 PM	50-70	120-140	MD, LSC

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: S36
Elev: 152.14

Date Drilled: 4/19/2013
Date Grouted: 4/19/2013
Inspector: KJ

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
120-125	1:58 PM	2:02 PM	50-70	120-140	MD, C
125-130	2:02 PM	2:05 PM	50-70	120-140	MD, C
130-135	2:06 PM	2:09 PM	50-70	120-140	MD, C, LSC
135-140	2:09 PM	2:13 PM	50-70	120-140	MD, C, LSC
140-145	2:18 PM	2:24 PM	50-70	120-140	MD, C, LSC
145-150	2:24 PM	2:31 PM	50-70	120-140	MD, C, LSC
150-155	2:33 PM	2:37 PM	50-70	120-140	MD, C, LSC
155-160	2:37 PM	2:40 PM	50-70	120-140	MD, C, LSC
160-165	2:41 PM	2:44 PM	50-70	120-140	MD, C, LSC
165-170	2:44 PM	2:51 PM	50-70	120-140	MD, C, LSC
170-175	2:52 PM	3:03 PM	50-70	120-140	MD, C, LSC
175-180	3:03 PM	3:06 PM	50-70	120-140	MD, C, LSC
180-185	3:07 PM	3:09 PM	50-70	120-140	MD, C, LSC
185-190	3:09 PM	3:14 PM	50-70	120-140	MD, C, LSC
190-195	3:15 PM		50-70	110-140	SD
195-200		3:16 PM	50-70	110-140	SD
200-205	3:17 PM	3:19 PM	50-70	120-140	SD
205-210	3:19 PM	3:21 PM	50-70	120-160	SD, MD, CR
210-215	3:22 PM		50-70	110-140	SD
215-220		3:23 PM	50-70	110-140	SD, MD
220-225	3:24 PM	3:26 PM	50-70	120-160	SD, MD
225-230	3:26 PM	3:30 PM	50-70	140-200	SD, MD, terminated at 231 feet

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling; LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: S37
Elev: 152.88

Date Drilled: 4/22/2013
Date Grouted: 4/23/2013
Inspector: TN

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
0-5'	3:28 PM		50-60	100-110	SD
5-10		3:31 PM	50-60	100-110	SD
10-15	3:31 PM		50-60	100-110	SD
15-20		3:35 PM	50-60	100-110	SD, loss of circulation
20-25	3:37 PM		50-60	100-110	SD
25-30		3:40 PM	50-60	100-110	SD
30-35	3:41 PM		50-60	100-120	SD
35-40		3:43 PM	50-60	100-120	SD
40-45	3:44 PM		50-60	100-140	SD, MD
45-50		3:49 PM	50-60	100-140	SD, MD
50-55	3:51 PM		50-60	100-120	SD
55-60		3:53 PM	50-60	100-120	SD
60-65	3:54 PM		50-60	100-120	SD
65-70		3:55 PM	50-60	100-120	SD
70-75	3:56 PM		50-60	100-120	SD
75-80		3:58 PM	50-60	100-120	SD
80-85	3:59 PM		50-70	100-140	SD, MD, C
85-90		4:04 PM	50-70	100-140	SD, MD, C
90-95	4:18 PM		50-70	100-140	SD, MD
95-100		4:24 PM	50-70	100-140	SD, MD
100-105	4:26 PM		50-70	100-140	MD
105-110		4:34 PM	50-70	100-140	MD
110-115	4:36 PM		50-70	100-140	MD
115-120		4:48 PM	50-70	100-140	HD, C

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: S37
Elev: 152.88

Date Drilled: 4/22/2013
Date Grouted: 4/23/2013
Inspector: TN

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
120-125	4:49 PM		50-70	100-140	MD, LSC
125-130		4:56 PM	50-70	100-140	MD, LSC
130-135	4:57 PM		50-70	100-140	MD, HD, LSC
135-140		5:08 PM	50-70	100-140	MD, HD, LSC
140-145	5:10 PM		50-70	100-150	HD, LSC
145-150		5:24 PM	50-70	100-150	HD, LSC, C
150-155	5:26 PM		50-70	100-150	MD, HD, LSC, C
155-160		5:33 PM	50-70	100-150	MD, HD, LSC, C
160-165	5:34 PM		50-70	100-150	SD
165-170		5:36 PM	50-70	100-150	SD
170-175	5:37 PM		50-70	100-150	SD
175-180		5:38 PM	50-70	100-150	SD
180-185	5:39 PM		50-70	100-150	SD
185-190		5:40 PM	50-70	100-150	SD
190-195	5:41 PM		50-70	100-180	SD
195-200		5:42 PM	50-70	100-180	SD
200-205	5:44 PM		50-70	100-180	SD
205-210		5:47 PM	50-70	100-180	SD, LSC, C
210-215	5:49 PM		50-70	100-180	SD
215-220		5:52 PM	50-70	100-180	SD, LSC, C
220-225	5:53 PM		50-70	120-200	SD, MD, C
225-230		5:58 PM	50-70	120-200	SD, MD, C, terminated at 230 feet

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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Phone: (813) 289-0750
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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: S38
Elev: 153.27

Date Drilled: 4/17/2013
Date Grouted: 4/17/2013
Inspector: KJ

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
0-5'	7:57 AM		50-70	100-110	SD
5-10		8:01 PM	50-70	100-110	MD, SD
10-15	8:02 PM		50-70	100-110	SD
15-20		8:03 PM	50-70	100-110	SD, casing plugged with debris
20-25	8:04 PM		50-70	100-110	SD, casing plugged with debris
25-30		8:05 PM	50-70	100-110	SD, casing plugged with debris
30-35	8:38 PM		50-70	110-120	SD
35-40		8:40 PM	50-70	110-120	SD
40-45	8:41 PM		50-70	110-120	SD
45-50		8:43 PM	50-70	120-140	SD, MD
50-55	8:44 PM		50-70	120-140	SD, MD
55-60		8:47 PM	50-70	120-140	SD, MD
60-65	8:48 PM		50-70	120-140	SD, MD
65-70		8:51 PM	50-70	120-140	SD, MD
70-75	8:52 PM		50-70	120-140	SD, MD
75-80		8:54 PM	50-70	120-140	SD, MD
80-85	8:55 PM	8:58 PM	50-70	120-140	MD
85-90	8:58 PM	9:00 PM	50-70	120-140	MD
90-95	9:02 PM	9:06 PM	50-70	120-140	MD
95-100	9:06 PM	9:14 PM	50-70	140-160	MD
100-105	9:16 PM	9:24 PM	50-70	140-160	MD
105-110	9:24 PM	9:31 PM	50-70	140-160	MD
110-115	9:43 PM	9:47 PM	50-70	140-160	MD
115-120	9:47 PM	9:52 AM	50-70	140-160	MD

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: S38
Elev: 153.27

Date Drilled: 4/17/2013
Date Grouted: 4/17/2013
Inspector: KJ

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
120-125	9:53 PM	9:55 PM	50-70	120-140	MD
125-130	9:55 PM	9:57 PM	50-70	120-140	MD, C
130-135	9:59 PM	10:01 PM	50-70	120-140	MD
135-140	10:01 PM	10:04 PM	50-70	120-140	MD
140-145	10:05 PM	10:08 PM	50-70	120-140	MD, C
145-150	10:08 PM	10:14 PM	50-70	140-160	MD, C
150-155	10:16 PM	10:20 PM	50-70	140-160	MD, C, LSC
155-160	10:20 PM	10:24 PM	50-70	140-160	MD, C, LSC
160-165	10:26 PM	10:27 PM	50-70	140-160	MD
165-170	10:28 PM	10:29 PM	50-70	140-160	MD, SD
170-175	10:30 PM		50-70	140-160	SD
175-180		10:37 PM	50-70	140-160	SD, MD
180-185	10:33 PM		50-70	140-160	SD
185-190		10:34 PM	50-70	140-160	SD
190-195	10:35 PM		50-70	140-160	SD
195-200		10:36 PM	50-70	140-160	SD
200-205	10:37 PM		50-70	140-160	SD, MD
205-210		10:39 PM	50-70	140-160	SD, MD
210-215	10:41 PM		50-70	140-160	SD, MD
215-220		10:44 PM	50-70	140-160	SD, MD
220-225	10:46 PM		50-70	140-160	SD, MD
225-230		10:48 PM	50-70	140-160	SD, MD
230-235	10:50 PM		50-70	140-160	SD, MD
235-240		10:52 AM	50-70	140-160	SD, MD, Terminated at 240 feet at 10:55 AM

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling; LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: S39
Elev: 153.03

Date Drilled: 4/15/2013
Date Grouted: 4/16/2013
Inspector: RK

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
0-5'	10:31 AM		50-70	100-110	SD
5-10		10:14 AM	50-70	100-110	SD
10-15	10:15 AM		50-70	100-110	SD
15-20		10:17 AM	50-70	100-110	SD
20-25	10:18 AM	10:19 AM	50-70	100-110	SD
25-30	10:19 AM	10:21 AM	50-70	100-110	SD, MD debris
30-35	10:22 AM	10:24 AM	50-70	100-110	SD, MD debris
35-40	10:24 AM	10:26 AM	50-70	100-110	SD, MD debris
40-45	10:27 AM	10:34 AM	50-70	120-140	MD
45-50	10:34 AM	10:38 AM	50-70	120-140	MD
50-55	10:39 AM	10:41 AM	50-70	110-120	SD
55-60	10:41 AM	10:43 AM	50-70	110-120	SD, MD
60-65	10:44 AM	10:46 AM	50-70	110-120	SD
65-70	10:46 AM	10:48 AM	50-70	110-120	SD, MD
70-75	10:49 AM	10:50 AM	50-70	120-140	MD
75-80	10:50 AM	10:52 AM	50-70	120-140	MD
80-85	10:54 AM	10:57 AM	50-70	140-160	MD
85-90	10:57 AM	11:02 AM	50-70	140-160	MD
90-95	11:03 AM	11:06 AM	50-70	140-180	MD
95-100	11:06 AM	11:13 AM	50-70	140-180	HD
100-105	11:14 AM	11:19 AM	50-70	160-200	HD, HH
105-110	11:19 AM	11:24 AM	50-70	160-200	HD, HH
110-115	11:24 AM	11:30 AM	50-70	140-180	MD
115-120	11:30 AM	11:37 AM	50-70	140-180	MD

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: S39
Elev: 153.03

Date Drilled: 4/15/2013
Date Grouted: 4/16/2013
Inspector: RK

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
120-125	11:39 AM	11:44 AM	50-70	140-180	MD
125-130	11:44 AM	11:50 AM	50-70	140-180	MD
130-135	11:50 AM	11:56 AM	50-70	140-180	SD, MD
135-140	11:56 AM	12:02 PM	50-70	140-180	SD, MD
140-145	12:03 PM	12:10 PM	50-70	160-200	MD, HD
145-150	12:10 PM	12:19 PM	50-70	160-200	MD, HD
150-155	12:21 PM	12:24 PM	50-70	160-200	MD
155-160	12:24 PM	12:29 PM	50-70	160-200	MD
160-165	12:30 PM	12:33 PM	50-70	160-200	MD
165-170	12:33 PM	12:39 PM	50-70	160-200	SD, MD
170-175	12:40 PM	12:46 PM	50-70	160-200	MD, HD, C
175-180	12:46 PM	12:48 PM	50-70	140-180	MD, SD
180-185	12:49 PM		50-70	120-140	SD
185-190		12:50 PM	50-70	120-140	SD
190-195	12:52 PM	12:53 PM	50-70	120-140	SD
195-200	12:53 PM	12:55 PM	50-70	180-280	SD, MD
200-205	12:56 PM	12:59 PM	50-70	180-280	MD, SD
205-210	12:59 PM	1:02 AM	50-70	180-280	MD, SD
210-215	1:03 AM	1:05 AM	50-70	140-280	MD, SD
215-220	1:05 AM	1:07 AM	50-70	140-280	MD, SD, MD
220-225	1:08 AM	1:09 AM	50-70	140-280	MD, SD, MD
225-230	1:09 AM	1:11 AM	50-70	140-280	MD, SD, MD
230-235	1:12 AM	1:15 AM	50-70	140-280	MD, SD, MD
235-240	1:15 AM	1:20 PM	50-70	140-280	MD, SD, MD, Rotation stop

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.

4919 West Laurel Street
Tampa, Florida 33607
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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: S39
Elev: 153.03

Date Drilled: 4/15/2013
Date Grouted: 4/16/2013
Inspector: RK

[illegible]

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: S40
Elev: 152.41

Date Drilled: 4/12/2013
Date Grouted: 4/16/2013
Inspector: RK

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
0-5'	11:17 AM		50-70	100-110	SD
5-10		11:19 AM	50-70	100-110	SD
10-15	11:20 AM		50-70	100-110	SD
15-20		11:22 AM	50-70	100-110	SD
20-25	11:23 AM		50-80	110-120	SD, MD
25-30		11:25 AM	50-80	110-120	MD, SD debris
30-35	11:26 AM		50-70	100-110	SD
35-40		11:28 AM	50-70	100-110	SD
40-45	11:29 AM	11:30 AM	50-70	100-110	SD
45-50	11:30 AM	11:33 AM	50-70	100-110	SD, MD
50-55	11:34 AM	11:36 AM	50-80	110-120	SD
55-60	11:36 AM	11:37 AM	50-80	110-120	SD
60-65	11:38 AM		50-70	100-110	SD
65-70		11:40 AM	50-70	100-110	SD
70-75	11:41 AM		50-70	100-110	SD
75-80		11:44 AM	50-70	100-110	SD, MD
80-85	11:45 AM	11:46 AM	50-70	100-110	SD, MD
85-90	11:46 AM	11:48 AM	50-70	100-110	SD, MD
90-95	11:49 AM	11:25 AM	50-80	120-140	MD
95-100	11:52 AM	11:57 AM	50-80	120-140	MD
100-105	11:58 AM	12:02 PM	50-80	120-140	MD
105-110	12:02 PM	12:10 PM	50-80	120-140	MD
110-115	12:15 PM	12:22 PM	50-80	120-140	MD
115-120	12:22 PM	12:35 PM	50-80	120-140	MD

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: S40
Elev: 152.41

Date Drilled: 4/12/2013
Date Grouted: 4/16/2013
Inspector: RK

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
120-125	12:36 PM	12:39 PM	50-70	120-160	MD
125-130	12:39 PM	12:43 PM	50-70	120-160	MD
130-135	12:44 PM	12:46 PM	50-70	120-160	MD
135-140	12:46 PM	12:50 PM	50-70	120-160	MD
140-145	12:51 PM	1:01 PM	50-70	120-160	MD
145-150	1:01 PM	1:11 PM	50-70	120-160	MD
150-155	1:12 PM	1:14 PM	50-80	120-140	MD
155-160	1:14 PM	1:17 PM	50-80	120-140	MD to SD, C
160-165	1:18 PM	1:20 PM	50-80	120-140	MD to SD, C
165-170	1:20 PM	1:22 PM	50-80	120-140	MD to SD, C
170-175	1:23 PM	1:25 PM	50-80	140-160	MD to SD, C
175-180	1:25 PM	1:28 PM	50-80	140-160	SD to MD to SD, C
180-185	1:29 PM		50-80	120-140	SD
185-190		1:31 PM	50-80	120-140	SD
190-195	1:32 PM	1:33 PM	50-80	120-140	SD
195-200	1:33 PM	1:35 PM	50-80	180-220	MD, SD rotate stop
200-205	1:36 PM	1:37 PM	50-80	180-220	MD, SD rotate stop
205-210	1:37 PM	1:40 PM	50-80	180-220	MD, HD
210-215	1:41 PM	1:44 PM	50-80	180-220	MD to HD to MD to SD
215-220	1:44 PM	1:47 PM	50-80	180-220	MD to SD to MD
220-225	1:48 PM	1:52 PM	50-70	180-220	MD, SD, C
225-230	1:52 PM	1:55 PM	50-70	180-220	MD to MD to SD
230-235	1:56 PM	1:59 PM	50-70	180-220	MD
235-240	13:59	2:03 PM	50-70	180-220	MD

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.

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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: S40
Elev: 152.41

Date Drilled: 4/12/2013
Date Grouted: 4/16/2013
Inspector: RK

[illegible]

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: S41
Elev: 151.00

Date Drilled: 4/10/2013
Date Grouted: 4/11/2013
Inspector: RK

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
0-5'	10:04 AM		50-60	100-110	SD, HD
5-10		10:10 AM	50-60	100-110	SD, HD
10-15	10:10 AM		50-60	100-120	SD
15-20		10:12 AM	50-60	100-120	SD
20-25	10:14 AM		50-60	100-120	SD (LOC)
25-30		10:16 AM	50-60	100-120	SD
30-35	10:18 AM		50-60	100-120	SD
35-40		10:21 AM	50-60	100-120	SD
40-45	10:23 AM		50-70	100-130	SD, MD
45-50		10:27 AM	50-70	100-130	SD, MD
50-55	10:28 AM		50-70	100-140	SD
55-60		10:30 AM	50-70	100-140	SD
60-65	10:32 AM		50-70	100-140	SD
65-70		10:34 AM	50-70	100-140	SD
70-75	10:36 AM		50-70	100-140	SD
75-80		10:38 AM	50-70	100-140	Clayey soil pushed water up thru casing when unthread. Circulation never returned.
80-85	10:40 AM		50-70	100-140	
85-90		10:44 AM	50-70	100-140	MD
90-95	10:46 AM		50-70	100-160	MD, HD, LSC
95-100		10:53 AM	50-70	100-160	MD, HD, LSC
100-105	10:55 AM		50-70	100-150	MD, HD, LSC
105-110		11:03 AM	50-70	100-150	MD, HD, LSC
110-115	11:16 AM		50-70	100-150	MD, HD, LSC
115-120		11:24 AM	50-70	100-150	MD, HD, LSC

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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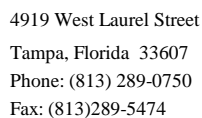
COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: S41
Elev: 151.00

Date Drilled: 4/10/2013
Date Grouted: 4/11/2013
Inspector: RK

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
120-125	11:26 AM		50-70	100-160	HD, C, LSC
125-130		11:34 AM	50-70	100-160	MD, HD, LSC
130-135	11:36 AM		50-70	100-160	MD, HD, LSC
135-140		11:12 AM	50-70	100-160	MD, HD, LSC
140-145	11:44 AM		50-70	100-170	MD, HD, LSC
145-150		11:56 AM	50-70	100-170	MD, HD, LSC
150-155	11:58 AM		50-70	100-160	SD, MD
155-160		12:03 PM	50-70	100-160	SD, MD
160-165	12:05 PM		50-70	100-160	SD, MD
165-170		12:09 PM	50-70	100-160	SD, MD
170-175	12:11 PM		50-70	100-160	SD, MD
175-180		12:15 PM	50-70	100-160	SD, MD
180-185	12:17 PM		50-70	100-160	SD
185-190		12:19 PM	50-70	100-160	SD
190-195	12:20 PM		50-70	100-160	SD
195-200		12:23 PM	50-70	100-160	SD
200-205	12:24 PM		50-70	110-170	MD, C, LSC
205-210		12:29 PM	50-70	110-170	MD, C, LSC
210-215	12:30 PM		50-70	110-170	SD, MD
215-220		12:34 PM	50-70	110-170	SD, MD
220-225	12:36 PM		50-70	120-180	MD, C, LSC
225-230		12:42 PM	50-70	120-180	MD, C, LSC
230-235	12:44 PM		50-70	120-180	MD, HD, LSC
235-240		12:56 PM	50-70	120-180	MD, HD, LSC (pause to refuel rig)

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



Project: SE County Landfill
Project #: 13354x8
Pin #: S41
Elev: 151.00

Date Drilled: 4/10/2013
Date Grouted: 4/11/2013
Inspector: RK

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: S42
Elev: 149.51

Date Drilled: 4/11/2013
Date Grouted: 4/12/2013
Inspector: RK

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
0-5'	12:05 PM		50-70	100-110	SD
5-10		12:07 PM	50-70	100-110	SD
10-15	12:08 PM	12:12 PM	50-70	110-120	SD, MD (debris)
15-20	12:12 PM	12:16 PM	50-70	110-120	SD, MD (debris)
20-25	12:19 PM	12:23 PM	50-70	120-140	MD (debris)
25-30	12:23 PM	12:27 PM	50-70	120-140	MD (debris)
30-35	12:28 PM	12:31 PM	50-80	110-120	MD
35-40	12:31 PM	12:35 PM	50-80	110-120	MD
40-45	12:36 PM	12:37 PM	50-80	110-120	SD
45-50	12:37 PM	12:38 PM	50-80	110-120	SD
50-55	12:39 PM	12:40 PM	50-80	110-120	SD
55-60	12:40 PM	12:42 PM	50-80	120-140	MD
60-65	12:43 PM	12:44 PM	50-80	120-140	MD, SD
65-70	12:44 PM	12:45 PM	50-80	120-140	MD, SD
70-75	12:46 PM	12:47 PM	50-80	120-140	SD
75-80	12:47 PM	12:48 PM	50-80	120-140	SD
80-85	12:49 PM	12:52 PM	50-80	140-160	MD
85-90	12:53 PM	12:57 PM	50-80	140-160	MD
90-95	12:58 PM	1:04 PM	50-80	140-160	MD
95-100	1:04 PM	1:09 PM	50-80	140-160	MD
100-105	1:10 PM	1:15 PM	50-80	140-160	MD
105-110	1:15 PM	1:22 PM	50-80	140-160	MD
110-115	1:23 PM	1:26 PM	50-70	120-140	MD
115-120	1:26 PM	1:34 PM	50-70	120-140	MD

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: S42
Elev: 149.51

Date Drilled: 4/11/2013
Date Grouted: 4/12/2013
Inspector: RK

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
120-125	1:35 PM	1:37 PM	50-70	120-140	SD, MD
125-130	1:37 PM	1:40 PM	50-70	120-140	SD, MD
130-135	1:41 PM	1:44 PM	50-70	120-140	MD
135-140	1:44 PM	1:49 PM	50-70	120-140	MD
140-145	1:50 PM	1:55 PM	50-80	120-140	MD, C
145-150	1:55 PM	2:05 PM	50-80	120-140	MD, C
150-155	2:06 PM	2:09 PM	50-80	140-160	MD, C
155-160	2:09 PM	2:12 PM	50-80	140-160	MD, C
160-165	2:13 PM	2:16 PM	50-80	140-160	MD, C
165-170	2:16 PM	2:21 PM	50-80	140-160	MD, SD, C
170-175	2:22 PM	2:27 PM	50-80	120-140	MD, C
175-180	2:27 PM	2:34 PM	50-80	120-140	MD, C
180-185	2:35 PM	2:37 PM	50-80	120-140	MD
185-190	2:37 PM	2:40 PM	50-80	120-140	MD, SD, C
190-195	2:41 PM	2:47 PM	50-80	140-160	MD, C
195-200	2:47 PM	2:50 PM	50-80	140-160	MD, SD, MD, C
200-205	2:51 PM	2:54 PM	50-80	160-180	MD, HD, C
205-210	2:54 PM	2:56 PM	50-80	160-180	MD, C
210-215	2:57 PM		50-70	160-180	SD, MD
215-220		2:58 PM	50-70	160-180	SD, MD
220-225	2:59 PM	3:03 PM	50-70	180-220	MD, HD, HH
225-230	3:03 PM	3:07 PM	50-70	180-220	MD, HD, HH
230-235	3:08 PM	3:09 PM	50-70	180-220	SD, MD
235-240	3:09 PM	3:13 PM	50-70	180-220	MD, SD

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.

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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: S42
Elev: 149.51

Date Drilled: 4/11/2013
Date Grouted: 4/13/2013
Inspector: RK

[illegible]

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: S43
Elev: 147.46

Date Drilled: 4/17/2013, 4/18/2013
Date Grouted: 4/18/2013
Inspector: RK

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
0-5'	8:20 AM		50-80	100-120	SD
5-10		8:22 AM	50-80	100-120	SD
10-15	8:22 AM		50-80	100-120	SD
15-20		8:29 AM	50-80	100-120	SD for 4 feet, HD for 1 foot
20-25	8:29 AM		50-80	100-120	MD, SD, CR to LSC
25-30		8:33 AM	50-80	100-120	MD, SD, CR to LSC
30-35	8:38 AM		50-80	100-120	MD, LSC
35-40		8:44 AM	50-80	100-120	MD, LSC
40-45	8:46 AM		50-80	100-120	MD, LSC
45-50		8:49 AM	50-80	100-120	MD, LSC
50-55	8:51 AM		50-80	100-120	MD, LSC, CR
55-60		8:54 AM	50-80	100-120	MD, LSC
60-65	8:56 AM		50-80	100-120	MD, LSC
65-70		8:59 AM	50-80	100-120	MD, LSC
70-75	9:01 AM		50-80	100-120	MD, LSC
75-80		9:10 AM	50-80	100-120	MD, LSC
80-85	9:11 AM		50-80	100-120	MD, LSC
85-90		9:21 AM	50-80	100-120	MD, LSC
90-95	9:23 AM		50-80	100-120	MD, LSC
95-100		9:40 AM	50-80	100-120	MD, LSC
100-105	9:42 AM		50-80	100-120	MD, LSC
105-110		9:57 AM	50-80	100-120	MD, LSC
110-115	9:59 AM		50-80	100-120	MD, LSC
115-120		10:20 AM	50-80	100-120	MD, LSC

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: S43
Elev: 147.46

Date Drilled: 4/17/2013, 4/18/2013
Date Grouted: 4/18/2013
Inspector: RK

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
120-125	11:25 AM		50-80	120-180	MD, LSC
125-130		11:31 AM	50-80	120-180	MD, LSC
130-135	11:35 AM		50-80	150-200	MD, LSC
135-140		11:45 AM	50-80	150-200	MD, LSC
140-145	11:48 AM		50-80	120-180	MD, LSC
145-150		12:06 PM	50-80	120-180	MD, LSC
150-155	12:09 PM	12:21 PM	50-80	120-180	MD, LSC
155-160	12:21 PM	12:22 PM	50-80	120-180	SD, CR
160-165	12:23 PM		50-80	120-180	MD, LSC
165-170		12:37 PM	50-80	120-180	MD, LSC
170-175	12:40 PM	1:00 AM	50-80	150-200	MD, LSC, Took break
175-180	1:20 PM	1:45 PM	50-80	150-200	MD, LSC, Change drill bit
175-180	4:10 PM	5:00 PM	50-80	120-180	MD, LSC
180-185	5:07 PM		50-80	120-180	MD, LSC, Occasional soft zones
185-190		5:20 PM	50-80	120-180	MD, LSC, C
190-195	5:23 PM		50-80	120-180	MD, LSC, C
195-200		5:26 PM	50-80	120-180	MD, SD
200-205	5:28 PM		50-80	120-180	MD, SD
205-210		5:30 PM	50-80	120-180	MD, SD
210-215	5:33 PM		50-80	120-180	MD, SD
215-220		5:36 PM	50-80	120-180	MD, SD
220-225	5:38 PM		50-80	120-180	MD, SD
225-230		5:42 PM	50-80	120-180	MD, LSC, End of drilling on 4/17/2013
230-235	7:15 AM		50-80	120-180	MD, LSC, Beginning of drilling on 4/18/2013

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.

COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: S43
Elev: 147.46

Date Drilled: 4/17/2013, 4/18/2013
Date Grouted: 4/18/2013
Inspector: RK

[illegible]

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



4919 West Laurel Street
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Phone: (813) 289-0750
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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: S44
Elev: 147.22

Date Drilled: 4/18/2013, 4/19/2013
Date Grouted: 4/19/2013
Inspector: RK

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
0-5'	3:48 PM		50-80	100-120	SD
5-10		3:50 PM	50-80	100-120	SD
10-15	3:53 PM		50-80	100-120	SD
15-20		3:55 PM	50-80	100-120	SD
20-25	3:58 PM		50-80	100-120	MD, LSC
25-30		4:01 PM	50-80	100-120	MD, LSC
30-35	4:02 PM		50-80	100-120	MD, HD, LSC
35-40		4:10 PM	50-80	100-120	MD, HD, LSC
40-45	4:44 PM		50-80	100-120	SD, CR
45-50		4:46 PM	50-80	100-120	SD, MD, CR, LSC
50-55	4:47 PM		50-80	120-150	SD, MD, LSC
55-60		4:49 PM	50-80	120-150	MD, SD, LSC
60-65	4:51 PM		50-80	100-120	MD, SD, LSC, CR
65-70		4:52 PM	50-80	100-120	MD, SD, LSC, CR
70-75	4:53 PM		50-80	100-120	MD, SD, LSC, CR
75-80		4:50 PM	50-80	100-120	MD, SD, LSC, CR
80-85	4:56 PM		50-80	100-120	MD, LSC
85-90		5:01 PM	50-80	100-120	MD, LSC
90-95	5:02 PM		50-80	100-120	MD, LSC
95-100		5:07 PM	50-80	100-120	MD, LSC, End of drill on 4/18/2013
100-105	8:10 AM		50-80	100-150	MD, HD, LSC, Beginning of drill on 4/19/2013
105-110		8:18 AM	50-80	100-150	MD, HD, LSC
110-115	8:22 AM		50-80	100-150	MD, HD, LSC, C
115-120		8:27 AM	50-80	100-150	MD, HD, LSC, C

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: S44
Elev: 147.22

Date Drilled: 4/18/2013, 4/19/2013
Date Grouted: 4/19/2013
Inspector: RK

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
120-125	8:59 AM		50-80	100-150	MD, SD, LSC, CR
125-130		9:04 AM	50-80	100-150	MD, SD, LSC, CR
130-135	9:07 AM		50-80	100-150	MD, SD, LSC
135-140		9:15 AM	50-80	100-150	MD, SD, LSC
140-145	9:20 AM		50-80	100-150	MD, SD, LSC, CR
145-150		9:27 AM	50-80	100-150	MD, SD, LSC, CR
150-155	9:30 AM		50-80	100-150	MD, SD, LSC, CR
155-160		9:34 AM	50-80	100-150	MD, HD, LSC
160-165	9:37 AM		50-80	100-150	MD, HD, LSC
165-170		9:44 AM	50-80	100-150	MD, HD, LSC
170-175	9:47 AM		50-80	120-180	MD, LSC, HH
175-180		9:53 AM	50-80	120-180	MD, LSC, HH
180-185	9:56 AM		50-80	120-180	MD, LSC, HH
185-190		10:00 AM	50-80	120-180	MD, LSC, HH
190-195	10:02 AM		50-80	120-180	MD, SD, LSC
195-200		10:05 AM	50-80	120-180	MD, LSC
200-205	10:08 AM		50-80	120-180	SD, CR
205-210		10:10 AM	50-80	120-180	MD, SD
210-215	10:13 AM		50-80	120-180	MD, SD
215-220		10:15 AM	50-80	120-180	SD, CR
220-225	10:18 AM		50-80	120-180	SD, CR
225-230		10:20 AM	50-80	120-180	SD, MD
230-235	10:23 AM		50-80	120-180	SD, CR
235-240		10:25 AM	50-80	120-180	SD, CR

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling; LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.

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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: S44
Elev: 147.22

Date Drilled: 4/18/2013, 4/19/2013
Date Grouted: 4/19/2013
Inspector: RK

[illegible]

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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Phone: (813) 289-0750
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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: S45
Elev: 146.00

Date Drilled: 4/19/2013, 4/22/2013
Date Grouted: 4/22/2013
Inspector: RK

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
0-5'	2:45 PM		50-80	100-120	SD
5-10		2:47 PM	50-80	100-120	SD
10-15	2:49 PM		50-80	100-120	SD
15-20		2:51 PM	50-80	100-120	SD
20-25	2:52 PM		50-80	100-120	MD, SD
25-30		2:54 PM	50-80	100-120	MD, SD
30-35	2:55 PM		50-80	100-120	MD, SD
35-40		2:58 PM	50-80	100-120	MD, SD
40-45	3:02 PM		50-80	100-120	MD, LSC
45-50		3:11 PM	50-80	100-120	MD, LSC
50-55	3:12 PM		50-80	100-200	MD, LSC, TC
55-60		3:15 PM	50-80	100-200	MD, LSC, TC
60-65	3:16 PM		50-80	100-120	MD, LSC
65-70		3:18 PM	50-80	100-120	MD, LSC
70-75	3:19 PM		50-80	100-120	MD, HD, LSC
75-80		3:25 AM	50-80	100-120	MD, HD, LSC, End of drill on 4/19/2013
80-85	8:06 AM		50-80	120-150	MD, HD, LSC, Beginning of drill on 4/22/2013
85-90		8:11 AM	50-80	120-150	MD, SD, LSC, CR, HD
90-95	8:15 AM		50-80	120-150	MD, HD, LSC
95-100		8:20 AM	50-80	120-150	MD, HD, LSC
100-105	8:24 AM		50-80	120-150	MD, LSC
105-110		8:28 AM	50-80	120-150	MD, LSC
110-115	8:31 AM		50-80	120-150	MD, LSC
115-120		8:39 AM	50-80	120-150	MD, LSC, HD

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: S45
Elev: 146.00

Date Drilled: 4/19/2013, 4/22/2013
Date Grouted: 4/22/2013
Inspector: RK

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
120-125	8:41 AM		50-80	120-150	MD, HD, LSC
125-130		8:46 AM	50-80	120-150	SD, CR
130-135	8:51 AM		50-80	120-150	MD, HD, LSC
135-140		8:59 AM	50-80	120-150	MD, HD, LSC
140-145	9:02 AM		50-80	120-150	MD, HD, LSC
145-150		9:11 AM	50-80	120-150	MD, HD, LSC
150-155	9:14 AM		50-80	120-150	MD, SD, LSC, CR, Loss of circulation
155-160		9:19 AM	50-80	120-150	MD, SD, LSC, CR, Loss of circulation
160-165	9:22 AM		50-80	120-150	MD, LSC
165-170		9:30 AM	50-80	120-150	MD, LSC
170-175	9:33 AM		50-80	120-150	MD, LSC, HH
175-180		9:38 AM	50-80	120-150	MD, LSC, HH, SD
180-185	9:41 AM		50-80	120-150	MD, HD, LSC, C
185-190		9:48 AM	50-80	120-150	MD, SD
190-195	9:52 AM		50-80	120-150	MD, SD, CR
195-200		9:55 AM	50-80	120-150	MD, SD, CR
200-205	9:58 AM		50-80	120-180	SD, CR
205-210		10:00 AM	50-80	120-180	SD, MD
210-215	10:03 AM		50-80	120-180	MD, HD, LSC, SD
215-220		10:06 AM	50-80	120-180	SD, MD, HD
220-225	10:10 AM		50-80	120-180	MD, SD
225-230		10:12 AM	50-80	120-180	SD, CR
230-235	10:16 AM		50-80	150-200	MD, LSC
235-242		10:22 AM	50-80	150-200	MD, HD, LSC, Terminated at 242 feet

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling; LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: S46
Elev: 145.62

Date Drilled: 4/22/2013
Date Grouted: 4/22/2013
Inspector: RK

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
0-5'	12:36 PM		50-80	100-120	SD
5-10		12:38 PM	50-80	100-120	SD
10-15	12:38 PM		50-80	100-120	SD
15-20		12:40 PM	50-80	100-120	SD
20-25	12:42 PM		50-80	100-120	MD, LSC
25-30		12:48 PM	50-80	100-120	MD, LSC
30-35	12:57 PM		50-80	100-120	MD, HD, LSC
35-40		1:01 PM	50-80	100-120	MD, HD, LSC
40-45	1:15 PM		50-80	100-120	MD, LSC
45-50		1:17 PM	50-80	100-120	MD, LSC
50-55	1:20 PM		50-80	120-150	MD, LSC
55-60		1:24 PM	50-80	120-150	MD, LSC
60-65	1:28 PM		50-80	100-120	MD, SD, LSC, CR
65-70		1:30 PM	50-80	100-120	MD, SD, LSC, CR
70-75	1:34 PM		50-80	100-120	MD, HD, LSC
75-80		1:39 PM	50-80	100-120	MD, HD, LSC
80-85	1:42 PM		50-80	100-120	MD, HD, LSC
85-90		1:47 PM	50-80	100-120	MD, HD, LSC
90-95	1:49 PM		50-80	100-120	MD, LSC
95-100		1:52 PM	50-80	100-120	MD, LSC
100-105	1:54 PM		50-80	100-120	MD, LSC
105-110		1:59 PM	50-80	100-120	MD, LSC
110-115	2:03 PM		50-80	100-120	MD, HD, LSC
115-120		2:08 PM	50-80	100-120	MD, HD, LSC

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: S46
Elev: 145.62

Date Drilled: 4/22/2013
Date Grouted: 4/22/2013
Inspector: RK

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
120-125	2:13 PM		50-80	100-150	MD, LSC
125-130		2:15 PM	50-80	100-150	MD, LSC
130-135	2:18 PM		50-80	100-150	HD, MD, LSC
135-140		2:26 PM	50-80	100-150	HD, MD, LSC
140-145	2:29 PM		50-80	100-150	HD, MD, LSC
145-150		2:34 PM	50-80	100-150	HD, MD, LSC
150-155	2:37 PM		50-80	100-150	HD, MD, LSC
155-160		2:42 PM	50-80	100-150	HD, MD, LSC
160-165	2:46 PM		50-80	100-150	HD, MD, LSC, C
165-170		2:53 PM	50-80	100-150	HD, MD, LSC, C
170-175	2:55 PM		50-80	100-150	HD, MD, LSC, C
175-180		3:00 PM	50-80	100-150	HD, MD, LSC, C
180-185	3:03 PM		50-80	100-150	MD, SD
185-190		3:10 PM	50-80	100-150	MD, LSC
190-195	3:13 PM		50-80	120-180	HD, MD, LSC, C
195-200		3:22 PM	50-80	120-180	HD, MD, LSC, C
200-205	3:27 PM		50-80	120-180	HD, MD, LSC
205-210		3:30 PM	50-80	120-180	HD, MD, LSC, SD
210-215	3:33 PM		50-80	150-200	SD, CR, TC
215-220		3:34 PM	50-80	150-200	SD, CR, TC
220-225	3:37 PM		50-80	150-200	MD, SD, LSC, CR, HH
225-230		3:40 PM	50-80	150-200	MD, SD, LSC, CR, HH, HD
230-235	3:43 PM		50-80	150-200	MD, LSC
235-240		3:48 PM	50-80	150-200	MD, LSC, SD

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.

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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: S46
Elev: 145.62

Date Drilled: 4/22/2013
Date Grouted: 4/22/2013
Inspector: RK

[illegible]

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: T1
Elev: 149.06

Date Drilled: 4/29/2013
Date Grouted: 4/30/2013
Inspector: KJ

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
0-5'	5:55 PM		50-70	100-110	SD
5-10		5:56 PM	50-70	100-110	SD
10-15	5:57 PM		50-70	100-110	SD
15-20		5:58 PM	50-70	100-110	SD
20-25	5:59 PM		50-70	100-110	SD
25-30		6:00 PM	50-70	100-110	SD
30-35	6:01 PM		50-70	100-110	SD
35-40		6:02 PM	50-70	100-110	SD
40-45	6:03 PM		50-70	110-120	SD
45-50		6:04 PM	50-70	110-120	SD
50-55	6:05 PM		50-70	110-120	SD
55-60		6:06 PM	50-70	110-120	SD
60-65	6:07 PM		50-70	110-120	SD, MD
65-70		6:09 PM	50-70	110-120	SD, MD
70-75	6:10 PM		50-70	110-120	SD, MD, BSC
75-80		6:13PM	50-70	110-120	SD, MD, BSC
80-85	6:13 PM		50-70	120-140	MD
85-90		6:15 PM	50-70	120-140	MD
90-95	6:16 PM	6:18 PM	50-70	120-140	MD, BSC
95-100	6:18 PM	6:20 PM	50-70	120-140	MD, BSC
100-105	6:21 PM	6:23 PM	50-70	140-160	MD, BSC
105-110	6:23 PM	6:26 PM	50-70	140-160	MD, BSC
110-115	6:27 PM	6:29 PM	50-70	140-160	MD
115-120	6:29 PM	6:30 PM	50-70	140-160	MD

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: T1
Elev: 149.06

Date Drilled: 4/29/2013
Date Grouted: 4/30/2013
Inspector: KJ

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
120-125	6:31 PM	6:33 PM	50-70	140-160	MD, C
125-130	6:33 PM	6:34 PM	50-70	140-160	MD, C
130-135	6:35 PM	6:37 PM	50-70	140-160	MD, C
135-140	6:37 PM	6:39 PM	50-70	140-160	MD, C
140-145	6:40 PM	6:42 PM	50-70	140-160	MD, BSC
145-150	6:42 PM	6:46 PM	50-70	140-160	MD, SD, BSC
150-155	6:47 PM		50-70	120-140	SD
155-160		6:48 PM	50-70	120-140	SD
160-165	6:49 PM		50-70	120-140	SD, MD
165-170		6:51 PM	50-70	120-140	SD, MD
170-175	6:52 PM		50-70	120-140	MD, SD, BSC
175-180		6:54 PM	50-70	120-140	MD, SD, BSC
180-185	6:55 PM		50-70	120-140	MD, SD, BSC
185-190		6:56 PM	50-70	120-140	MD, SD, BSC
190-195	6:57 PM		50-70	120-140	SD
195-200		6:58 PM	50-70	120-140	SD
200-205	6:59 PM		50-70	120-140	MD
205-210		7:05 PM	50-70	120-140	MD
210-215	7:15 PM		50-70	140-160	MD
215-220		7:24 PM	50-70	140-160	MD
220-225	7:30 PM		50-70	140-160	MD
225-230		7:39 PM	50-70	140-160	MD
230-235	7:40 PM		50-70	140-160	MD
235-240		7:49 PM	50-70	140-160	MD

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: T2
Elev: 150.76

Date Drilled: 4/30/2013
Date Grouted: 4/30/2013
Inspector: KJ

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
0-5'	10:12 AM		50-70	100-110	SD
5-10		10:14 AM	50-70	100-110	SD
10-15	10:14 AM		50-70	100-110	SD
15-20		10:15 AM	50-70	100-110	SD
20-25	10:16 AM		50-70	100-110	SD
25-30		10:17 AM	50-70	100-110	SD
30-35	10:18 AM		50-70	100-110	SD
35-40		10:19 AM	50-70	100-110	SD
40-45	10:20 AM		50-70	110-120	SD, MD, HH
45-50		10:22 AM	50-70	110-120	SD, MD, HH
50-55	10:23 AM		50-70	120-140	MD, SD, HH
55-60		10:25 AM	50-70	120-140	MD, SD, HH
60-65	10:26 AM		50-70	120-140	SD, HH
65-70		10:27 AM	50-70	120-140	SD, HH
70-75	10:28 AM		50-70	120-140	SD, MD, HH
75-80		10:30 AM	50-70	120-140	SD, MD, HH
80-85	10:31 AM	10:33 AM	50-70	120-140	MD, C
85-90	10:33 AM	10:36 AM	50-70	120-140	MD, C
90-95	10:37 AM	10:39 AM	50-70	120-140	MD, HH
95-100	10:39 AM	10:41 AM	50-70	120-140	MD, HH
100-105	10:42 AM	10:43 AM	50-70	120-140	MD, C
105-110	10:43 AM	10:45 AM	50-70	120-140	MD, C
110-115	10:46 AM	10:48 AM	50-70	120-140	MD, SD, MD
115-120	10:48 AM	10:51 AM	50-70	120-140	MD, SD

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: T2
Elev: 150.76

Date Drilled: 4/30/2013
Date Grouted: 4/30/2013
Inspector: KJ

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
120-125	10:52 AM	10:59 AM	50-70	140-180	MD, HD, C
125-130	10:59 AM	11:03 AM	50-70	140-180	MD, C
130-135	11:04 AM	11:06 AM	50-70	140-180	MD, C
135-140	11:06 AM	11:08 AM	50-70	140-180	MD, C
140-145	11:09 AM	11:12 AM	50-70	160-180	MD, C
145-150	11:12 AM	11:14 AM	50-70	160-180	MD, C
150-155	11:15 AM	11:17 AM	50-70	160-180	MD, C
155-160	11:17 AM	11:20 AM	50-70	160-180	MD, C
160-165	11:21 AM	11:23 AM	50-70	160-180	MD
165-170	11:23 AM	11:25 AM	50-70	160-180	SD
170-175	11:26 AM		50-70	120-140	SD
175-180		11:27 AM	50-70	120-140	SD
180-185	11:28 AM		50-70	120-140	SD
185-190		11:29 AM	50-70	120-140	SD
190-195	11:30 AM		50-70	140-160	MD, SD, C
195-200		11:33 AM	50-70	140-160	MD, SD, C
200-205	11:34 AM	11:37 AM	50-70	140-160	MD
205-210	11:37 AM	11:40 AM	50-70	140-160	MD
210-215	11:41 AM	11:44 AM	50-70	140-160	MD, HD, C
215-220	11:44 AM	11:49 AM	50-70	140-160	MD, HD, C
220-225	11:50 AM	11:52 AM	50-70	140-160	MD, SD, MD, C
225-230	11:52 AM	11:54 AM	50-70	140-160	MD, SD, MD, C
230-235	11:55 AM	11:57 AM	50-70	140-160	MD
235-240	11:57 AM	11:59 AM	50-70	140-160	MD

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



4919 West Laurel Street
Tampa, Florida 33607
Phone: (813) 289-0750
Fax: (813)289-5474

COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: T3
Elev: 152.00

Date Drilled: 4/29/2013
Date Grouted: 4/29/2013
Inspector: KJ

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
0-5'	7:30 AM		50-70	100-110	SD
5-10		7:31 AM	50-70	100-110	SD
10-15	7:32 AM		50-70	100-110	SD
15-20		7:33 AM	50-70	100-110	SD
20-25	7:34 AM		50-70	100-110	SD
25-30		7:36 AM	50-70	100-110	SD
30-35	7:37 AM		50-70	100-110	SD
35-40		7:38 AM	50-70	100-110	SD
40-45	7:40 AM	7:43 AM	50-70	110-140	SD, MD
45-50	7:43 AM	7:47 AM	50-70	110-140	SD, MD
50-55	7:48 AM		50-70	110-140	SD, MD
55-60		7:51 AM	50-70	110-140	SD, MD
60-65	7:52 AM	7:54 AM	50-70	120-140	SD, MD
65-70	7:54 AM	7:56 AM	50-70	120-140	SD, MD
70-75	7:57 AM	8:00 AM	50-70	120-140	MD
75-80	8:00 AM	8:03 AM	50-70	120-140	MD
80-85	8:04 AM	8:07 AM	50-70	120-140	MD
85-90	8:07 AM	8:12 AM	50-70	120-140	MD
90-95	8:13 AM	8:15 AM	50-70	120-140	MD
95-100	8:15 AM	8:19 AM	50-70	120-140	MD
100-105	8:48 AM	8:52 AM	50-70	120-140	MD
105-110	8:52 AM	8:56 AM	50-70	120-140	MD
110-115	8:57 AM	9:02 AM	50-70	120-140	MD
115-120	9:02 AM	9:05 AM	50-70	120-140	MD

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: T3
Elev: 152.00

Date Drilled: 4/29/2013
Date Grouted: 4/29/2013
Inspector: KJ

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
120-125	9:06 AM	9:17 AM	50-70	140-180	MD, LSC, C
125-130	9:17 AM	9:29 AM	50-70	140-180	MD, LSC, C
130-135	9:31 AM	9:33 AM	50-70	140-180	MD, LSC, C
135-140	9:33 AM	9:39 AM	50-70	140-180	MD, LSC, C
140-145	9:41 AM	9:47 AM	50-70	140-180	MD, LSC, C
145-150	9:47 AM	9:51 AM	50-70	140-180	MD, LSC, C
150-155	9:52 AM	9:54 AM	50-70	140-180	MD, LSC, C
155-160	9:54 AM	9:58 AM	50-70	140-180	MD, LSC, C
160-165	9:59 AM	10:01 AM	50-70	140-180	MD, SD
165-170	10:01 AM	10:04 AM	50-70	140-180	MD, SD
170-175	10:05 AM		50-70	120-160	MD, SD
175-180		10:06 AM	50-70	120-160	MD, SD
180-185	10:07 AM		50-70	120-160	SD
185-190		10:09 AM	50-70	120-160	SD
190-195	10:10 AM		50-70	120-160	SD
195-200		10:11 AM	50-70	120-160	SD
200-205	10:12 AM	10:14 AM	50-70	120-140	SD, MD
205-210	10:14 AM	10:16 AM	50-70	120-140	SD, MD
210-215	10:17 AM	10:19 AM	50-70	120-140	SD, MD, C
215-220	10:19 AM	10:22 AM	50-70	120-140	SD, MD, C
220-225	10:23 AM	10:25 AM	50-70	120-140	MD
225-230	10:25 AM	10:29 AM	50-70	120-140	MD
230-235	10:31 AM	10:39 AM	50-70	140-180	MD
235-240	10:39 AM	10:45 AM	50-70	140-180	MD, Terminated at 240 feet at 10:47 AM

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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Phone: (813) 289-0750
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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: T4
Elev: 152.60

Date Drilled: 4/26/2013
Date Grouted: 4/26/2013
Inspector: KJ

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
0-5'	7:19 AM		50-70	100-110	SD
5-10		7:20 AM	50-70	100-110	SD
10-15	7:21 AM		50-70	100-110	SD
15-20		7:23 AM	50-70	100-110	SD
20-25	7:30 AM		50-70	100-110	SD
25-30		7:32 AM	50-70	100-110	SD
30-35	7:33 AM		50-70	100-110	SD
35-40		7:35 AM	50-70	100-110	SD
40-45	7:36 AM		50-70	100-110	SD, MD
45-50		7:38 AM	50-70	100-110	SD, MD
50-55	7:39 AM		50-70	100-110	SD
55-60		7:41 AM	50-70	100-110	SD
60-65	7:42 AM		50-70	110-120	SD
65-70		7:43 AM	50-70	110-120	SD
70-75	7:45 AM		50-70	110-120	SD
75-80		7:47 AM	50-70	110-120	SD
80-85	7:49 AM		50-70	110-120	SD
85-90		7:51 AM	50-70	110-120	SD, MD
90-95	7:53 AM	7:57 AM	50-70	120-140	MD
95-100	7:54 AM	8:02 AM	50-70	120-140	MD
100-105	8:03 AM	8:07 AM	50-70	120-140	MD
105-110	8:07 AM	8:10 AM	50-70	120-140	MD
110-115	8:11 AM	8:12 AM	50-70	120-140	MD
115-120	8:12 AM	8:15 AM	50-70	120-140	MD

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: T4
Elev: 152.6

Date Drilled: 4/26/2013
Date Grouted: 4/26/2013
Inspector: KJ

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
120-125	8:16 AM	8:19 AM	50-70	120-140	MD
125-130	8:19 AM	8:21 AM	50-70	120-140	SD
130-135	8:22 AM	8:24 AM	50-70	120-140	MD, SD
135-140	8:24 AM	8:25 AM	50-70	120-140	MD, SD
140-145	8:26 AM	8:27 AM	50-70	120-140	MD, SD
145-150	8:27 AM	8:29 AM	50-70	120-140	MD, SD, C
150-155	8:30 AM		50-70	110-160	MD, SD, C
155-160		8:31 AM	50-70	110-160	MD, SD, C
160-165	8:32 AM		50-70	110-120	SD
165-170		8:33 AM	50-70	110-120	SD
170-175	8:34 AM		50-70	110-120	SD
175-180		8:35 AM	50-70	110-120	SD
180-185	8:36 AM		50-70	120-140	SD, MD
185-190		8:38 AM	50-70	120-140	SD, MD
190-195	8:39 AM		50-70	120-140	SD, MD
195-200		8:41 AM	50-70	120-140	SD, MD
200-205	8:42 AM	8:43 AM	50-70	110-120	SD
205-210	8:43 AM	8:45 AM	50-70	120-140	SD, MD
210-215	8:46 AM	8:47 AM	50-70	140-160	SD, MD, LSC, C
215-220	8:47 AM	8:50 AM	50-70	140-160	MD
220-225	8:51 AM		50-70	120-140	SD
225-230		8:52 AM	50-70	120-140	SD
230-235	8:53 AM	8:54 AM	50-70	120-140	SD
235-240	8:54 AM	8:58 AM	50-70	140-160	SD, MD, C

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.

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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: T4
Elev: 152.6

Date Drilled: 4/26/2013
Date Grouted: 4/26/2013
Inspector: KJ

[illegible]

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: T5
Elev: 152.85

Date Drilled: 4/25/2013
Date Grouted: 4/25/2013
Inspector: KJ

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
0-5'	9:08 AM		50-70	100-110	SD
5-10		9:09 AM	50-70	100-110	SD
10-15	9:10 AM		50-70	100-110	SD
15-20		9:12 AM	50-70	100-110	SD
20-25	9:13 AM		50-70	100-110	SD
25-30		9:15 AM	50-70	100-110	SD
30-35	9:16 AM	9:18 AM	50-70	100-110	SD, MD
35-40	9:18 AM	9:21 AM	50-70	100-110	SD, MD, debris
40-45	9:22 AM	9:27 AM	50-70	120-140	MD, debris
45-50	9:27 AM	9:32 AM	50-70	120-140	MD, debris
50-55	9:35 AM	9:37 AM	50-70	120-140	SD, MD
55-60	9:37 AM	9:38 AM	50-70	120-140	SD, MD
60-65	9:39 AM		50-70	120-140	SD
65-70		9:40 AM	50-70	120-140	SD
70-75	9:41 AM		50-70	110-120	SD
75-80		9:43 AM	50-70	110-120	SD
80-85	9:44 AM	9:46 AM	50-70	110-120	SD
85-90	9:46 AM	9:48 AM	50-70	120-140	SD, MD, C
90-95	9:49 AM	9:52 AM	50-70	120-140	MD
95-100	9:52 AM	9:54 AM	50-70	120-140	MD
100-105	9:55 AM	9:58 AM	50-70	120-140	MD
105-110	9:58 AM	10:02 AM	50-70	120-140	MD
110-115	10:03 AM	10:06 AM	50-70	120-140	MD
115-120	10:06 AM	10:08 AM	50-70	120-140	MD

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: T5
Elev: 152.85

Date Drilled: 4/25/2013
Date Grouted: 4/25/2013
Inspector: KJ

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
120-125	10:10 AM	10:12 AM	50-70	120-140	MD, SD
125-130	10:12 AM	10:13 AM	50-70	120-140	MD, SD
130-135	10:14 AM	10:16 AM	50-70	120-140	MD, SD
135-140	10:16 AM	10:18 AM	50-70	120-140	MD, SD
140-145	10:19 AM	10:21 AM	50-70	120-140	MD, SD
145-150	10:21 AM	10:23 AM	50-70	120-140	MD, SD
150-155	10:25 AM		50-70	120-140	MD, SD
155-160		10:28 AM	50-70	120-140	MD, SD
160-165	10:29 AM	10:30 AM	50-70	120-140	MD, SD, C
165-170	10:30 AM	10:31 AM	50-70	120-140	MD, SD, C
170-175	10:32 AM		50-70	120-140	MD, SD, C
175-180		10:34 AM	50-70	120-140	MD, SD, C
180-185	10:35 AM		50-70	120-140	MD, SD, C
185-190		10:37 AM	50-70	120-140	MD, SD, C
190-195	10:38 AM		50-70	120-140	SD
195-200		10:39 AM	50-70	120-140	SD
200-205	10:40 AM	10:41 AM	50-70	120-140	SD
205-210	10:41 AM	10:42 AM	50-70	120-140	MD, SD, C
210-215	10:43 AM	10:45 AM	50-70	140-160	MD, C
215-220	10:45 AM	10:47 AM	50-70	120-140	MD, SD, C
220-225	10:49 AM	10:51 AM	50-70	140-160	MD, C
225-230	10:51 AM	10:53 AM	50-70	140-160	MD, C
230-235	10:55 AM	10:57 AM	50-70	140-160	MD, C
235-240	10:57 AM	10:59 AM	50-70	140-160	MD, C, Terminated at 240 feet

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: T6
Elev: 149.7

Date Drilled: 5/3/2013
Date Grouted: 5/3/2013
Inspector: KJ

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
0-5'	7:44 AM		50-70	100-110	SD
5-10		7:45 AM	50-70	100-110	SD
10-15	7:46 AM		50-70	100-110	SD
15-20		7:47 AM	50-70	100-110	SD
20-25	7:49 AM		50-70	100-110	SD, MD
25-30		7:52 AM	50-70	100-110	SD, MD
30-35	7:53 AM		50-70	100-110	SD
35-40		7:55 AM	50-70	100-110	SD
40-45	7:56 AM		50-70	100-110	SD
45-50		7:57 AM	50-70	100-110	SD
50-55	7:58 AM		50-70	100-110	SD
55-60		8:00 AM	50-70	100-110	SD
60-65	8:02 AM		50-70	100-110	SD
65-70		8:04 AM	50-70	100-110	SD
70-75	8:05 AM	8:08 AM	50-70	120-160	MD
75-80	8:08 AM	8:12 AM	50-70	120-160	MD, C
80-85	8:13 AM	8:17 AM	50-70	120-160	MD, HH
85-90	8:17 AM	8:20 AM	50-70	120-160	MD, SD, HH
90-95	8:27 AM	8:29 AM	50-70	120-140	MD
95-100	8:29 AM	8:36 AM	50-70	120-140	MD
100-105	8:37 AM	8:40 AM	50-70	120-140	MD
105-110	8:40 AM	8:43 AM	50-70	120-140	MD
110-115	8:44 AM	8:50 AM	50-70	140-160	MD
115-120	8:50 AM	8:54 AM	50-70	140-160	MD, C

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: T6
Elev: 149.7

Date Drilled: 5/3/2013
Date Grouted: 5/3/2013
Inspector: KJ

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
120-125	8:55 AM	8:59 AM	50-70	140-180	MD
125-130	8:59 AM	9:04 AM	50-70	140-180	MD
130-135	9:05 AM	9:09 AM	50-70	160-200	MD, LSC
135-140	9:09 AM	9:15 AM	50-70	160-200	MS, LSC
140-145	9:16 AM	9:21 AM	50-70	160-200	MD, LSC
145-150	9:21 AM	9:27 AM	50-70	160-200	MD, LSC
150-155	9:28 AM	9:33 AM	50-70	160-200	MD
155-160	9:33 AM	9:35 AM	50-70	160-200	MD
160-165	9:36 AM	9:40 AM	50-70	160-200	MD
165-170	9:40 AM	9:44 AM	50-70	160-200	MD
170-175	9:44 AM		50-70	140-160	SD
175-180		9:45 AM	50-70	140-160	SD
180-185	9:46 AM		50-70	120-160	SD, MD
185-190		9:48 AM	50-70	120-160	SD, MD
190-195	9:49 AM		50-70	120-160	MD, SD, C
195-200		9:51 AM	50-70	120-160	MD, SD, C
200-205	9:52 AM		50-70	120-160	MD, SD
205-210		9:56 AM	50-70	120-160	MD, SD
210-215	9:57 AM	10:03 AM	50-70	140-200	MD, HD, LSC, C
215-220	10:03 AM	10:10 AM	50-70	140-200	MD, HD, LSC, C
220-225	10:17 AM	10:20 AM	50-70	140-180	MD, LSC, C
225-230	10:20 AM	10:23 AM	50-70	140-180	MD, LSC, C
230-235	10:24 AM	10:29 AM	50-70	140-180	MD, SD, C
235-240	10:29 AM	10:35 AM	50-70	140-180	MD, SD Terminated at 240'

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling; LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: T7
Elev: 151.13

Date Drilled: 4/29/2013
Date Grouted: 4/29/2013
Inspector: KJ

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
0-5'	1:00 PM		50-70	100-110	SD
5-10		1:02 PM	50-70	100-110	SD
10-15	1:03 PM		50-70	100-110	SD
15-20		1:04 PM	50-70	100-110	SD
20-25	1:06 PM		50-70	100-110	SD
25-30		1:08 PM	50-70	100-110	SD
30-35	1:09 PM		50-70	100-110	SD
35-40		1:10 PM	50-70	100-110	SD
40-45	1:12 PM		50-70	100-110	SD
45-50		1:14 PM	50-70	100-110	SD
50-55	1:16 PM		50-70	100-110	SD
55-60		1:18 PM	50-70	100-110	SD
60-65	1:19 PM		50-70	100-110	SD
65-70		1:20 PM	50-70	100-110	SD
70-75	1:21 PM		50-70	100-110	SD
75-80		1:23 PM	50-70	100-110	SD
80-85	1:24 PM	1:22 PM	50-70	120-140	SD, MD
85-90	1:26 PM	1:28 PM	50-70	120-140	SD, MD
90-95	1:29 PM	1:32 PM	50-70	120-140	MD
95-100	1:32 PM	1:35 PM	50-70	120-140	MD
100-105	1:37 PM	1:39 PM	50-70	140-180	MD
105-110	1:39 PM	1:41 PM	50-70	140-180	MD
110-115	1:42 PM	1:44 PM	50-70	140-180	MD
115-120	1:44 PM	1:46 PM	50-70	140-180	MD

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



4919 West Laurel Street
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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: T7
Elev: 151.13

Date Drilled: 4/29/2013
Date Grouted: 4/29/2013
Inspector: KJ

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
120-125	1:47 PM	1:49 PM	50-70	140-180	MD
125-130	1:49 PM	1:51 PM	50-70	140-180	MD
130-135	1:52 PM	1:54 PM	50-70	140-180	MD
135-140	1:54 PM	1:56 PM	50-70	140-180	MD
140-145	1:57 PM	2:02 PM	50-70	140-180	MD
145-150	2:02 PM	2:06 PM	50-70	140-180	MD
150-155	2:07 PM	2:09 PM	50-70	140-180	MD, HD, C
155-160	2:09 PM	2:12 PM	50-70	140-180	MD, HD, C
160-165	2:13 PM	2:15 PM	50-70	180-200	MD, HD, C
165-170	2:15 PM	2:17 PM	50-70	180-200	MD, HD, C
170-175	2:18 PM	2:19 PM	50-70	180-200	MD, HD
175-180	2:19 PM	2:22 PM	50-70	180-200	MD, SD
180-185	2:23 PM	2:25 PM	50-70	140-180	MD, C
185-190	2:25 PM	2:27 PM	50-70	140-180	MD, C
190-195	2:28 PM	2:30 PM	50-70	140-180	MD, C
195-200	2:31 PM	2:33 PM	50-70	140-180	MD, C
200-205	2:34 PM	2:36 PM	50-70	140-180	MD, C
205-210	2:38 PM	2:41 PM	50-70	140-180	MD, C
210-215	2:42 PM	2:43 PM	50-70	140-160	MD
215-220	2:43 PM	2:44 PM	50-70	140-160	MD
220-225	2:45 PM	2:47 PM	50-70	140-160	MD
225-230	2:47 PM	2:49 PM	50-70	140-160	MD
230-235	2:50 AM	3:35 PM	50-70	140-160	MD, Plugged at 2:51 PM, finished at 3:35 PM
235-240	3:35 PM	3:45 PM	50-70	140-160	MD, Terminated at 240 feet at 3:45 PM

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: T8
Elev: 152.30

Date Drilled: 4/25/2013
Date Grouted: 4/25/2013
Inspector: KJ

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
0-5'	1:00 PM		50-70	100-110	SD
5-10		1:01 PM	50-70	100-110	SD
10-15	1:02 PM		50-70	100-110	SD
15-20		1:03 PM	50-70	100-110	SD
20-25	1:04 PM		50-70	100-110	SD
25-30		1:06 PM	50-70	100-110	SD
30-35	1:07 PM		50-70	100-110	SD
35-40		1:09 PM	50-70	100-110	SD, MD
40-45	1:10 PM		50-70	110-120	SD, MD
45-50		1:13 PM	50-70	110-120	SD, MD
50-55	1:14 PM		50-70	120-140	SD, MD
55-60		1:16 PM	50-70	120-140	SD, MD
60-65	1:17 PM		50-70	120-140	SD, MD
65-70		1:18 PM	50-70	120-140	SD, MD
70-75	1:19 PM		50-70	120-140	SD, MD
75-80		1:20 PM	50-70	120-140	SD, MD
80-85	1:21 PM	1:24 PM	50-70	120-140	MD
85-90	1:24 PM	1:26 PM	50-70	120-140	MD
90-95	1:28 PM	1:31 PM	50-70	120-140	MD
95-100	1:30 PM	1:37 PM	50-70	120-140	MD
100-105	1:38 PM		50-70	120-140	MD, SD
105-110		1:41 PM	50-70	120-140	MD, SD
110-115	1:42 PM	1:44 PM	50-70	120-140	MD
115-120	1:44 PM	1:48 PM	50-70	120-140	MD

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: T8
Elev: 152.3

Date Drilled: 4/25/2013
Date Grouted: 4/25/2013
Inspector: KJ

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
120-125	1:48 PM	1:50 PM	50-70	120-140	MD
125-130	1:50 PM	1:52 PM	50-70	120-140	MD
130-135	1:53 PM	1:56 PM	50-70	120-140	MD
135-140	1:56 PM	1:59 PM	50-70	120-140	MD
140-145	2:00 PM	2:03 PM	50-70	120-140	MD
145-150	2:03 PM	2:08 PM	50-70	120-140	MD, C, LSC
150-155	2:09 PM	2:11 PM	50-70	140-160	MD, C, LSC
155-160	2:11 PM	2:13 PM	50-70	140-160	MD, C, LSC
160-165	2:14 PM		50-70	140-160	MD, C, LSC
165-170		2:17 PM	50-70	140-160	MD, C, LSC
170-175	2:18 PM		50-70	120-160	MD, SD, C
175-180		2:19 PM	50-70	120-160	MD, SD, C
180-185	2:20 PM		50-70	120-140	SD
185-190		2:22 PM	50-70	120-140	SD
190-195	2:23 PM	2:25 PM	50-70	120-140	SD
195-200	2:25 PM	2:27 PM	50-70	140-180	MD, SD
200-205	2:28 PM	2:29 PM	50-70	120-140	SD
205-210	2:29 PM	2:31 PM	50-70	120-180	SD, MD, C
210-215	2:32 PM		50-70	120-160	SD, MD
215-220		2:33 PM	50-70	120-160	SD, MD
220-225	2:34 PM		50-70	120-160	SD, MD
225-230		2:38 PM	50-70	120-160	SD, MD
230-235	2:39 PM	2:41 PM	50-70	120-160	MD
235-240	2:41 PM	2:44 PM	50-70	120-160	MD, Terminated at 240 feet

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling; LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: T9
Elev: 152.70

Date Drilled: 4/24/2013
Date Grouted: 4/25/2013
Inspector: KJ

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
0-5'	2:58 PM		50-70	100-110	SD
5-10		3:00 PM	50-70	100-110	SD
10-15	3:01 PM		50-70	100-110	SD
15-20		3:02 PM	50-70	100-110	SD
20-25	3:03 PM		50-70	100-110	SD
25-30		3:04 PM	50-70	100-110	SD
30-35	3:05 PM	3:08 PM	50-70	100-110	MD
35-40	3:08 PM	3:12 PM	50-70	100-110	MD
40-45	3:13 PM	3:19 PM	50-70	120-140	MD
45-50	3:19 PM	3:25 PM	50-70	120-140	MD
50-55	3:26 PM		50-70	120-140	SD, MD
55-60		3:28 PM	50-70	120-140	SD, MD
60-65	3:29 PM		50-70	120-140	SD
65-70		3:31 PM	50-70	120-140	SD
70-75	3:32 PM		50-70	120-140	SD
75-80		3:33 PM	50-70	120-140	SD
80-85	3:34 PM	3:35 PM	50-70	120-140	SD, ,MD
85-90	3:35 PM	3:37 PM	50-70	120-140	SD, ,MD
90-95	3:38 PM	3:40 PM	50-70	120-140	MD
95-100	3:40 PM	3:44 PM	50-70	120-140	MD
100-105	3:46 PM	3:48 PM	50-70	120-140	MD
105-110	3:48 PM	3:50 PM	50-70	120-140	MD
110-115	3:51 PM	3:58 PM	50-70	120-140	MD
115-120	3:58 PM	4:01 PM	50-70	120-140	MD

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: T9
Elev: 152.7

Date Drilled: 4/24/2013
Date Grouted: 4/25/2013
Inspector: KJ

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
120-125	4:02 PM	4:04 PM	50-70	140-160	MD
125-130	4:04 PM	4:08 PM	50-70	140-160	MD
130-135	4:09 PM	4:11 PM	50-70	140-160	MD
135-140	4:11 PM	4:16 PM	50-70	140-160	MD
140-145	4:17 PM	4:24 PM	50-70	140-160	MD
145-150	4:24 PM	4:28 PM	50-70	140-160	MD
150-155	4:29 PM	4:34 PM	50-70	140-160	MD, HH
155-160	4:34 PM	4:37 PM	50-70	140-160	MD, HH
160-165	4:38 PM	4:42 PM	50-70	140-160	MD
165-170	4:42 PM	4:45 PM	50-70	140-160	MD
170-175	4:46 PM	4:48 PM	50-70	140-160	MD
175-180	4:48 PM	4:50 PM	50-70	140-160	MD, SD
180-185	4:51 PM		50-70	120-160	SD
185-190		4:53 PM	50-70	120-160	SD
190-195	4:54 PM		50-70	140-160	MD, SD
195-200		4:58 PM	50-70	140-160	MD, SD
200-205	4:59 PM		50-70	140-160	MD, SD
205-210		5:02 PM	50-70	140-160	MD, SD
210-215	5:03 PM	5:05 PM	50-70	160-180	MD, HH, LSC, C
215-220	5:05 PM	5:09 PM	50-70	160-180	MD, HH, LSC, C
220-225	5:10 PM	5:12 PM	50-70	160-180	MD
225-230	5:12 PM	5:15 PM	50-70	160-180	MD
230-235	5:16 PM	5:17 PM	50-70	120-140	MD, SD
235-240	5:17 PM	5:21 PM	50-70	140-160	MD

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.

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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: T9
Elev: 152.7

Date Drilled: 4/24/2013
Date Grouted: 4/25/2013
Inspector: KJ

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* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: T10
Elev: 152.80

Date Drilled: 4/24/2013
Date Grouted: 4/24/2013
Inspector: KJ

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
0-5'	11:25 AM		50-70	100-110	SD
5-10		11:26 AM	50-70	100-110	SD
10-15	11:27 AM		50-70	100-110	SD
15-20		11:28 AM	50-70	100-110	SD
20-25	11:29 AM		50-70	100-110	SD
25-30		11:30 AM	50-70	100-110	SD
30-35	11:31 AM	11:33 AM	50-70	120-140	MD
35-40	11:33 AM	11:39 AM	50-70	120-140	MD
40-45	11:41 AM	11:43 AM	50-70	120-140	MD
45-50	11:43 AM	11:48 AM	50-70	120-140	MD
50-55	11:49 AM		50-70	120-140	MD, SD
55-60		11:51 AM	50-70	120-140	MD, SD
60-65	11:52 AM		50-70	120-140	MD, SD
65-70		11:53 AM	50-70	120-140	MD, SD
70-75	11:54 AM		50-70	120-140	SD
75-80		11:56 AM	50-70	120-140	SD
80-85	11:57 AM	11:59 AM	50-70	120-140	MD
85-90	11:59 AM	12:01 PM	50-70	120-140	MD
90-95	12:02 PM	12:04 PM	50-70	120-140	MD
95-100	12:04 PM	12:09 PM	50-70	120-140	MD
100-105	12:10 PM	12:12 PM	50-70	140-160	MD
105-110	12:12 PM	12:15 PM	50-70	140-160	MD
110-115	12:16 PM	12:22 PM	50-70	140-160	MD
115-120	12:22 PM	12:27 PM	50-70	140-160	MD

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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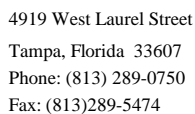
COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: T10
Elev: 152.8

Date Drilled: 4/24/2013
Date Grouted: 4/24/2013
Inspector: KJ

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
120-125	12:28 PM	12:31 PM	50-70	160-180	MD
125-130	12:31 PM	12:33 PM	50-70	160-180	MD
130-135	12:34 PM	12:36 PM	50-70	140-160	MD
135-140	12:36 PM	12:41 PM	50-70	140-160	MD
140-145	12:42 PM	12:44 PM	50-70	140-160	MD
145-150	12:44 PM	12:49 PM	50-70	140-160	MD
150-155	12:51 PM	12:52 PM	50-70	120-140	MD
155-160	12:52 PM	12:54 PM	50-70	120-140	MD
160-165	12:55 PM	12:57 PM	50-70	120-140	MD, SD
165-170	12:57 PM	12:58 PM	50-70	120-140	MD, SD
170-175	1:00 AM		50-70	120-140	SD
175-180		1:01 AM	50-70	120-140	SD
180-185	1:02 AM		50-70	120-140	SD
185-190		1:04 AM	50-70	120-140	SD
190-195	1:05 AM		50-70	120-140	SD
195-200		1:06 AM	50-70	120-140	SD
200-205	1:07 AM	1:09 AM	50-70	120-140	MD
205-210	1:09 AM	1:11 AM	50-70	120-140	MD
210-215	1:12 AM	1:14 AM	50-70	120-140	MD
215-220	1:14 AM	1:17 AM	50-70	120-140	MD
220-225	1:18 AM	1:21 AM	50-70	120-140	MD, SD
225-230	1:21 AM	1:24 AM	50-70	140-160	MD
230-235	1:27 AM	1:31 AM	50-70	140-160	MD
235-240	1:31 AM	1:35 PM	50-70	140-160	MD

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



Project: <u>SE County Landfill</u>	Date Drilled: <u>4/24/2013</u>
Project #: <u>13354x8</u>	Date Grouted: <u>4/24/2013</u>
Pin #: <u>T10</u>	Inspector: <u>KJ</u>
Elev: <u>152.8</u>	

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T:\13354 HDR\13354.8 SCLF Sinkhole Remed Assist TO 11\Drilling\Reviewed\T10-Drilling SE Landfill 4-24-2013 T10.xls



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: T11
Elev: 152.70

Date Drilled: 4/24/2013
Date Grouted: 4/24/2013
Inspector: KJ

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
0-5'	8:21 AM		50-70	100-110	SD
5-10		8:22 AM	50-70	100-110	SD
10-15	8:23 AM		50-70	100-110	SD
15-20		8:24 AM	50-70	100-110	SD
20-25	8:25 AM		50-70	100-110	SD
25-30		8:27 AM	50-70	100-110	SD
30-35	8:28 AM	8:31 AM	50-70	100-110	SD
35-40	8:31 AM	8:35 AM	50-70	120-140	SD, MD
40-45	8:42 AM	8:48 AM	50-70	120-140	MD
45-50	8:48 AM	8:52 AM	50-70	120-140	MD
50-55	8:54 AM	8:56 AM	50-70	120-140	SD
55-60	8:56 AM	8:58 AM	50-70	120-140	SD
60-65	9:00 AM		50-70	120-140	SD
65-70		9:02 AM	50-70	120-140	SD
70-75	9:03 AM		50-70	110-120	SD
75-80		9:04 AM	50-70	110-120	SD
80-85	9:05 AM	9:07 AM	50-70	120-140	SD
85-90	9:07 AM	9:10 AM	50-70	120-140	SD, MD
90-95	9:12 AM	9:14 AM	50-70	120-140	MD
95-100	9:14 AM	9:16 AM	50-70	120-140	MD
100-105	9:17 AM	9:19 AM	50-70	120-140	MD
105-110	9:19 AM	9:20 AM	50-70	120-140	MD
110-115	9:21 AM	9:24 AM	50-70	140-160	MD
115-120	9:24 AM	9:20 AM	50-70	140-160	MD, C

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: T11
Elev: 152.7

Date Drilled: 4/24/2013
Date Grouted: 4/24/2013
Inspector: KJ

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
120-125	9:23 AM	9:25 AM	50-70	120-140	MD
125-130	9:25 AM	9:31 AM	50-70	120-140	MD
130-135	9:33 AM	9:37 AM	50-70	140-160	MD
135-140	9:37 AM	9:40 AM	50-70	140-160	MD
140-145	9:41 AM	9:45 AM	50-70	140-160	MD
145-150	9:45 AM	9:48 AM	50-70	140-160	MD
150-155	9:50 AM	9:52 AM	50-70	120-160	MD, SD
155-160	9:52 AM	9:54 AM	50-70	120-160	MD, SD
160-165	9:55 AM	9:57 AM	50-70	140-160	MD, SD, CR, LSC
165-170	9:57 AM	9:58 AM	50-70	140-160	MD, SD, CR, LSC
170-175	9:59 AM	10:00 AM	50-70	140-160	MD, SD
175-180	10:00 AM	10:02 AM	50-70	140-160	MD, SD, C
180-185	10:03 AM		50-70	140-160	SD
185-190		10:05 AM	50-70	140-160	SD
190-195	10:06 AM		50-70	120-140	SD
195-200		10:08 AM	50-70	120-140	SD
200-205	10:09 AM		50-70	120-140	MD, SD, C
205-210		10:11 AM	50-70	120-140	MD, SD, C
210-215	10:12 AM		50-70	120-140	MD, SD
215-220		10:14 AM	50-70	140-160	MD
220-225	10:15 AM		50-70	140-160	MD, SD
225-230		10:17 AM	50-70	120-160	MD, SD
230-235	10:19 AM		50-70	120-160	MD, SD
235-240		10:22 AM	50-70	120-160	SD, Terminated at 240 feet

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling; LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: T12
Elev: 153.00

Date Drilled: 4/23/2013
Date Grouted: 4/23/2013
Inspector: KJ

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
0-5'	12:48 PM		50-70	100-110	SD
5-10		12:49 PM	50-70	100-110	SD
10-15	12:50 PM		50-70	100-110	SD
15-20		12:51 PM	50-70	100-110	SD
20-25	12:52 PM		50-70	100-110	SD
25-30		12:54 PM	50-70	100-110	SD
30-35	12:55 PM		50-70	100-110	SD
35-40		12:56 PM	50-70	100-110	SD
40-45	12:57 PM		50-70	110-120	SD, MD
45-50		1:16 PM	50-70	110-120	SD, MD
50-55	1:17 PM	1:19 PM	50-70	120-140	MD
55-60	1:19 PM	1:22 PM	50-70	120-140	MD
60-65	1:23 PM		50-70	110-120	SD
65-70		1:25 PM	50-70	110-120	SD
70-75	1:26 PM	1:28 PM	50-70	120-140	MD
75-80	1:28 PM	1:33 PM	50-70	120-140	MD
80-85	1:34 PM	1:36 PM	50-70	120-140	MD
85-90	1:36 PM	1:40 PM	50-70	120-140	MD, SD
90-95	1:41 PM	1:47 PM	50-70	120-140	MD
95-100	1:47 PM	1:51 PM	50-70	120-140	MD
100-105	1:52 PM	1:58 PM	50-70	120-140	MD
105-110	1:58 PM	2:02 PM	50-70	120-140	MD
110-115	2:03 PM	2:10 PM	50-70	120-140	MD
115-120	2:10 PM	2:17 PM	50-70	120-140	MD

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



4919 West Laurel Street
Tampa, Florida 33607
Phone: (813) 289-0750
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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: T12
Elev: 153.00

Date Drilled: 4/23/2013
Date Grouted: 4/23/2013
Inspector: KJ

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
120-125	2:18 PM	2:22 PM	50-70	120-140	MD
125-130	2:22 PM	2:29 PM	50-70	120-140	MD
130-135	2:30 PM	2:32 PM	50-70	140-160	MD, SD
135-140	2:32 PM	2:35 PM	50-70	140-160	MD, SD
140-145	2:36 PM	2:37 PM	50-70	140-160	MD, SD
145-150	2:37 PM	2:50 PM	50-70	140-160	MD, SD
150-155	2:51 PM	2:52 PM	50-70	120-160	MD, SD
155-160	2:52 PM	2:56 PM	50-70	140-160	MD, SD, CR, LSC
160-165	2:57 PM	2:59 PM	50-70	120-140	SD
165-170	2:59 PM	3:01 PM	50-70	120-140	SD
170-175	3:02 PM	3:04 PM	50-70	120-140	SD
175-180	3:04 PM	3:05 PM	50-70	140-160	MD, SD
180-185	3:07 PM	3:08 PM	50-70	120-140	SD
185-190	3:08 PM	3:11 PM	50-70	120-140	SD
190-195	3:12 PM		50-70	120-140	SD
195-200		3:15 PM	50-70	120-140	SD
200-205	3:15 PM	3:20 PM	50-70	120-140	SD
205-210	3:20 PM	3:35 PM	50-70	140-180	MD
210-215	3:35 PM	3:56 PM	50-70	140-180	MD
215-220	3:56 PM	3:59 PM	50-70	140-180	MD
220-225	4:01 PM	4:03 PM	50-70	140-180	MD, SD, C
225-230	4:03 PM	4:05 PM	50-70	140-180	MD, SD, C
230-235	4:06 PM	4:08 PM	50-70	160-200	MD, SD, C
235-240	4:08 PM	4:10 PM	50-70	160-200	MD, SD, C

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling; LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.

4919 West Laurel Street
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COMPACTION GROUT REPORT

Project:	SE County Landfill
Project #:	13354x8
Pin #:	T12
Elev:	153.00

Date Drilled: 4/23/2013
Date Grouted: 4/23/2013
Inspector: KJ

[illegible]

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: T13
Elev: 147.95

Date Drilled: 4/23/2013
Date Grouted: 4/24/2013
Inspector: RK

Casing Dept (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
0-5'	1:09 PM		50-80	100-120	SD
5-10		1:10 PM	50-80	100-120	SD
10-15	1:10 PM		50-80	100-120	SD
15-20		1:12 PM	50-80	100-120	SD
20-25	1:15 PM		50-80	100-120	SD, MD, LSC
25-30		1:17 PM	50-80	100-120	SD, MD, LSC
30-35	1:18 PM		50-80	100-120	SD, MD, LSC
35-40		1:20 PM	50-80	100-120	SD, MD, LSC
40-45	1:21 PM		50-80	100-150	SD, MD, LSC
45-50		1:23 PM	50-80	100-150	SD, MD, LSC
50-55	1:27 PM		50-80	120-180	SD, CR
55-60		1:31 PM	50-80	120-180	SD, CR
60-65	1:33 PM		50-80	120-180	MD, LSC
65-70		1:36 PM	50-80	120-180	MD, LSC
70-75	1:37 PM		50-80	120-180	MD, LSC, HH
75-80		1:42 PM	50-80	120-180	MD, LSC, HH
80-85	1:43 PM		50-80	120-180	MD, LSC, SD
85-90		1:48 PM	50-80	120-180	MD, LSC, SD
90-95	1:49 PM	2:34 PM	50-80	150-180	MD, HD, LSC
95-100		2:36 PM	50-80	150-180	MD, HD, LSC
100-105	2:39 PM		50-80	150-180	MD, HD, LSC, HH
105-110		2:43 PM	50-80	150-180	MD, HD, LSC, HH
110-115	2:46 PM		50-80	150-180	MD, HD, LSC, HH, C
115-120		2:52 PM	50-80	150-180	MD, HD, LSC, HH, C

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling; LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: T13
Elev: 147.95

Date Drilled: 4/23/2013
Date Grouted: 4/24/2013
Inspector: RK

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
120-125	2:55 PM		50-80	150-180	MD, HD, LSC, SD
125-130		3:00 PM	50-80	150-180	MD, HD, LSC, SD
130-135	3:04 PM		50-80	150-200	MD, HD, LSC, HH
135-140		3:11 PM	50-80	150-200	MD, HD, LSC, HH
140-145	3:16 PM		50-80	150-200	MD, HD, LSC, HH
145-150		3:25 PM	50-80	150-200	MD, HD, LSC, HH
150-155	3:28 PM		50-80	150-200	MD, LSC, HH
155-160		3:32 PM	50-80	150-200	MD, LSC, HH
160-165	3:51 PM		50-80	150-200	MD, LSC, HD
165-170		3:56 PM	50-80	150-200	MD, LSC, HD, HH
170-175	4:00 PM		50-80	150-200	MD, HD, LSC, HH
175-180		4:05 PM	50-80	150-200	MD, HD, LSC, HH
180-185	4:08 PM		50-80	150-200	MD, SD
185-190		4:09 PM	50-80	150-200	SD
190-195	4:12 PM		50-80	150-200	MD, SD
195-200		4:14 PM	50-80	150-200	SD, TC
200-205	4:18 PM		50-80	150-200	MD, SD, TC
205-210		4:24 PM	50-80	150-200	MD, HD, LSC, C, TC
210-215	4:27 PM		50-80	150-200	MD, SD, LSC, CR, C, TC
215-220		4:31 PM	50-80	150-200	SD, CR
220-225	4:34 PM		50-80	150-200	MD, SD, LSC, CR, HH
225-230		4:36 PM	50-80	150-200	SD, CR, HH
230-235	4:41 PM		50-80	150-200	MD, LSC
235-240		4:44 PM	50-80	150-200	MD, LSC

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.

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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: T13
Elev: 147.95

Date Drilled: 4/23/2013
Date Grouted: 4/24/2013
Inspector: RK

[illegible]

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: T14
Elev: 147.15

Date Drilled: 4/24/2013
Date Grouted: 4/29/2013
Inspector: RK

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
0-5	9:09 AM		50-80	100-120	SD
5-10		9:10 AM	50-80	100-120	SD
10-15	9:10 AM		50-80	100-120	SD
15-20		9:11 AM	50-80	100-120	SD
20-25	9:14 AM		50-80	100-120	SD
25-30		9:15 AM	50-80	100-120	SD
30-35	9:17 AM		50-80	100-120	MD, LSC
35-40		9:19 AM	50-80	100-120	MD, LSC
40-45	9:21 AM		50-80	100-120	MD, LSC
45-50		9:26 AM	50-80	100-120	MD, LSC
50-55	9:28 AM		50-80	100-150	SD, MD, LSC, CR
55-60		9:29 AM	50-80	100-150	SD, MD, LSC, CR
60-65	9:30 AM		50-80	100-150	SD, MD, LSC
65-70		9:32 AM	50-80	100-150	SD, MD, LSC
70-75	9:33 AM		50-80	150-180	SD, MD, LSC
75-80		9:37 AM	50-80	150-180	SD, MD, LSC
80-85	9:38 AM		50-80	150-180	HD, MD, LSC, C
85-90		9:44 AM	50-80	150-180	HD, MD, LSC, C
90-95	10:19 AM		50-80	120-150	MD, HD, LSC
95-100		10:25 AM	50-80	120-150	MD, HD, LSC
100-105	10:28 AM		50-80	120-150	MD, HD, LSC
105-110		10:32 AM	50-80	120-150	MD, HD, LSC
110-115	10:36 AM		50-80	120-150	HD, LSC
115-120		10:49 AM	50-80	120-150	HD, LSC

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: T14
Elev: 147.15

Date Drilled: 4/24/2013
Date Grouted: 4/29/2013
Inspector: RK

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
120-125	10:53 AM		50-80	120-180	HD, LSC, HH
125-130		11:02 AM	50-80	120-180	MD, HD, LSC, HH
130-135	11:05 AM		50-80	150-180	MD, HD, LSC
135-140		11:11 AM	50-80	150-180	MD, HD, LSC
140-145	11:15 AM		50-80	150-180	MD, HD, LSC
145-150		11:23 AM	50-80	150-180	MD, HD, LSC
150-155	11:26 AM		50-80	150-180	MD, HD, LSC
155-160		11:33 AM	50-80	150-180	MD, HD, LSC
160-165	11:36 AM		50-80	150-180	HD, LSC, HH
165-170		11:55 AM	50-80	150-180	HD, LSC, HH
170-175	12:20 PM		50-80	150-180	HD, LSC
175-180		12:45 PM	50-80	150-180	HD, LSC
180-185	12:48 PM		50-80	150-180	HD, LSC
185-190		12:54 PM	50-80	150-180	MD, LSC, CR
190-195	12:57 PM		50-80	150-180	MD, LSC, CR
195-200		1:01 PM	50-80	150-200	SD, LSC, CR
200-205	1:04 PM		50-80	150-200	MD, SD, HD, LSC
205-210		1:10 PM	50-80	150-200	MD, SD, LSC
210-215	1:13 PM		50-80	150-180	MD, SD, LSC
215-220		1:18 PM	50-80	150-180	HD, LSC, C, SD
220-225	1:21 PM		50-80	150-180	MD, LSC, C
225-230		1:25 PM	50-80	150-180	MD, LSC, C, TC
230-235	2:15 PM		50-80	180-220	MD, TC
235-240		2:20 PM	50-80	180-220	MD, TC

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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Tampa, Florida 33607
Phone: (813) 289-0750
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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: T15
Elev: 146.12

Date Drilled: 4/24/2013, 4/25/2013
Date Grouted: 4/25/2013
Inspector: RK

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
0-5'	4:41 PM		50-80	100-120	SD
5-10		4:43 PM	50-80	100-120	SD
10-15	4:43 PM		50-80	100-120	SD
15-20		4:44 PM	50-80	100-120	SD
20-25	4:47 PM		50-80	100-120	SD
25-30		4:48 PM	50-80	100-120	SD
30-35	4:50 PM		50-80	100-120	MD, LSC
35-40		4:54 PM	50-80	100-120	MD, LSC
40-45	4:56 PM		50-80	100-120	MD, LSC
45-50		4:58 PM	50-80	100-120	MD, LSC
50-55	5:00 PM		50-80	120-150	MD, LSC
55-60		5:03 PM	50-80	150-180	MD, SD
60-65	5:04 PM		50-80	120-150	MD, SD, LSC, CR
65-70		5:06 PM	50-80	120-150	MD, SD, LSC, CR
70-75	5:08 PM		50-80	120-150	MD, LSC
75-80		5:11 PM	50-80	120-150	MD, LSC
80-85	5:25 PM		50-80	120-150	MD, LSC, C
85-90		5:31 AM	50-80	120-150	MD, LSC, C, End of drill on 4/24/2013
90-95	7:50 AM		50-80	120-150	MD, HD, LSC, Beginning of drill on 4/25/2013
95-100		7:58 AM	50-80	120-150	MD, HD, LSC
100-105	8:00 AM		50-80	120-150	MD, HD, LSC
105-110		8:05 AM	50-80	120-150	MD, HD, LSC
110-115	8:08 AM		50-80	120-150	HD, LSC
115-120		8:23 AM	50-80	120-150	HD, LSC

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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Tampa, Florida 33607
Phone: (813) 289-0750
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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: T15
Elev: 146.12

Date Drilled: 4/24/2013, 4/25/2013
Date Grouted: 4/25/2013
Inspector: RK

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
120-125	8:24 AM		50-80	120-150	HD, LSC
125-130		8:35 AM	50-80	150-200	SD, CR, MD, LSC
130-135	8:37 AM		50-80	120-150	MD, SD, LSC, CR
135-140		8:47 AM	50-80	120-150	MD, HD, LSC
140-145	8:48 AM		50-80	120-150	MD, HD, LSC
145-150		8:58 AM	50-80	120-150	MD, HD, LSC, SD
150-155	9:00 AM		50-80	120-150	MD, HD, LSC
155-160		9:21 AM	50-80	120-150	MD, HD, LSC
160-165	9:23 AM		50-80	120-150	MD, HD, LSC
165-170		9:39 AM	50-80	120-150	MD, HD, LSC, C, SD
170-175	9:40 AM		50-80	120-150	MD, C, LSC
175-180		10:12 AM	50-80	120-150	HD, C, LSC, SD
180-185	10:14 AM		50-80	120-180	SD, CR
185-190		10:45 AM	50-80	120-180	HD, LSC
190-195	10:48 AM		50-80	120-180	HD, LSC, C
195-200		10:58 AM	50-80	120-180	MD, LSC, C
200-205	11:00 AM		50-80	120-180	MD, SD, LSC, C
205-210		11:02 AM	50-80	120-180	SD, CR
210-215	11:04 AM		50-80	120-180	MD, SD, CR
215-220		11:06 AM	50-80	120-180	SD, CR
220-225	11:07 AM		50-80	120-180	MD, SD, LSC, CR
225-230		11:11 AM	50-80	120-180	MD, SD, LSC, CR
230-232	11:13 AM	11:18 AM	50-80	120-180	MD, LSC, Terminated at 232 feet

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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Phone: (813) 289-0750
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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: T16
Elev: 147.70

Date Drilled: 4/25/2013, 4/26/2013
Date Grouted: 4/26/2013
Inspector: RK

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
0-5'	3:08 PM		50-80	100-120	SD
5-10		3:11 PM	50-80	100-120	SD
10-15	3:11 PM		50-80	100-120	SD
15-20		3:13 PM	50-80	100-120	SD
20-25	3:36 PM		50-80	100-120	SD
25-30		3:39 PM	50-80	100-120	SD
30-35	3:41 PM		50-80	100-120	SD, MD
35-40		3:45 PM	50-80	100-120	SD, MD
40-45	3:48 PM		50-80	100-120	MD, LSC
45-50		3:55 PM	50-80	100-120	MD, LSC
50-55	3:58 AM		50-80	100-120	MD, LSC
55-60		4:01 AM	50-80	100-120	MD, HD, LSC, End of drill on 4/25/2013
60-65	7:20 AM		50-80	100-120	MD, LSC, Beginning of drill on 4/26/2013
65-70		7:26 AM	50-80	100-120	MD, LSC
70-75	7:40 AM		50-80	100-120	MD, LSC
75-80		7:46 AM	50-80	100-120	MD, LSC
80-85	7:48 AM		50-80	120-150	MD, LSC
85-90		7:52 AM	50-80	120-150	MD, LSC
90-95	8:16 AM		50-80	120-180	MD, LSC
95-100		8:21 AM	50-80	120-180	MD, LSC
100-105	8:25 AM		50-80	120-180	MD, LSC
105-110		8:30 AM	50-80	120-180	MD, LSC
110-115	8:32 AM		50-80	120-180	MD, HD LSC, C
115-120		8:42 AM	50-80	120-180	MD, LSC

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: T16
Elev: 147.7

Date Drilled: 4/25/2013, 4/26/2013
Date Grouted: 4/26/2013
Inspector: RK

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
120-125	8:45 AM		50-80	120-180	MD, HD, LSC, C
125-130		8:51 AM	50-80	120-180	MD, HD, LSC, C
130-135	8:54 AM		50-80	120-180	MD, HD, LSC
135-140		9:02 AM	50-80	120-180	MD, HD, LSC
140-145	9:04 AM		50-80	120-180	MD, HD, LSC
145-150		9:15 AM	50-80	120-180	MD, HD, LSC
150-155	9:18 AM		50-80	120-150	MD, LSC
155-160		9:20 AM	50-80	120-150	MD, LSC
160-165	9:24 AM		50-80	120-180	MD, SD, LSC, CR, HH
165-170		9:28 AM	50-80	120-180	MD, SD, LSC, CR
170-175	9:31 AM		50-80	120-180	MD, HD, LSC, C, HH
175-180		9:36 AM	50-80	120-180	MD, HD, LSC, C, HH
180-185	9:39 AM		50-80	150-180	MD, SD, LSC, CR
185-190		9:42 AM	50-80	150-180	MD, SD, LSC, CR
190-195	9:45 AM		50-80	150-180	MD, SD
195-200		9:47 AM	50-80	150-180	MD, SD
200-205	9:50 AM		50-80	150-200	MD, SD
205-210		9:52 AM	50-80	150-200	MD, SD
210-215	9:55 AM		50-80	150-200	MD, SD
215-220		9:57 AM	50-80	150-200	MD, SD
220-225	10:01 AM		50-80	150-200	MD, SD, LSC, CR
225-230		10:05 AM	50-80	150-200	MD, SD, LSC, CR
230-235	11:10 AM	11:15 AM	50-80	150-200	MD, HD, LSC

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling; LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



4919 West Laurel Street
Tampa, Florida 33607
Phone: (813) 289-0750
Fax: (813)289-5474

COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: T17
Elev: 146.85

Date Drilled: 4/26/2013 & 4/29/2013
Date Grouted: 4/29/2013
Inspector: RK

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
0-5'	2:50 PM		50-80	100-120	SD
5-10		2:50 PM	50-80	100-120	SD
10-15	2:50 PM		50-80	100-120	SD, MD, LSC
15-20		2:53 PM	50-80	100-120	SD, MD, LSC
20-25	2:55 PM		50-80	100-120	SD, MD, LSC
25-30		2:57 PM	50-80	100-120	SD, MD, LSC
30-35	2:59 PM		50-80	100-120	SD, MD, LSC
35-40		3:01 PM	50-80	100-120	SD, MD, LSC
40-45	3:04 PM		50-80	100-120	HD, MD, LSC
45-50		3:13 PM	50-80	100-120	SD, HD, MD, LSC
50-55	3:14 PM		50-80	100-120	SD, CR
55-60		3:19 PM	50-80	100-120	SD, CR, HD
60-65	3:22 AM		50-80	100-120	MD, LSC
65-70		3:24 PM	50-80	100-120	MD, LSC, End of drill on 4/26/2013
70-75	7:31 AM		50-80	100-150	MD, LSC, Beginning of drill on 4/29/2013
75-80		7:35 AM	50-80	100-150	MD, LSC
80-85	7:36 AM		50-80	120-150	MD, LSC, HD, C
85-90		7:45 AM	50-80	120-150	MD, LSC, HD, C, SD
90-95	7:47 AM		50-80	120-150	HD, LSC
95-100		8:21 AM	50-80	120-150	HD, LSC
100-105	8:22 AM		50-80	120-150	HD, LSC, MD
105-110		8:27 AM	50-80	120-150	HD, LSC, MD
110-115	8:28 AM		50-80	120-150	HD, LSC, HH
115-120		8:40 AM	50-80	120-150	HD, LSC, HH

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: T17
Elev: 146.85

Date Drilled: 4/26/2013 & 4/29/2013
Date Grouted: 4/29/2013
Inspector: RK

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
120-125	8:41 AM		50-80	120-150	HD, LSC, HH
125-130		9:03 AM	50-80	120-150	HD, LSC, HH
130-135	9:04 AM		50-80	120-150	MD, HD, LSC, HH
135-140		9:11 AM	50-80	120-150	MD, HD, LSC, HH
140-145	9:12 AM		50-80	120-150	MD, LSC
145-150		9:18 AM	50-80	120-150	MD, LSC
150-155	9:19 AM		50-80	120-200	MD, LSC, SD
155-160		9:26 AM	50-80	120-200	MD, LSC, SD, C
160-165	9:28 AM		50-80	120-200	MD, SD LSC, CR, C
165-170		10:02 AM	50-80	120-200	HD LSC, C
170-175	10:38 AM		50-80	150-180	MD, HD, LSC
175-180		10:41 AM	50-80	150-180	MD, HD, LSC
180-185	10:45 AM		50-80	150-180	MD, SD, LSC
185-190		10:49 AM	50-80	120-200	MD, SD, LSC
190-195	10:53 AM		50-80	150-200	SD, CR
195-200		10:55 AM	50-80	150-200	SD, CR
200-205	10:58 AM		50-80	150-200	SD, CR
205-210		10:59 AM	50-80	150-200	SD, CR, MD
210-215	11:03 AM		50-80	150-200	SD, MD
215-220		10:07 AM	50-80	150-200	SD, HD
220-225	11:10 AM		50-80	150-180	MD, HD, LSC, SD
225-230		11:18 AM	50-80	150-200	SD, CR, MD, HD, Terminated at 230 feet

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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Phone: (813) 289-0750
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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: T18
Elev: 146.00

Date Drilled: 4/29/2013
Date Grouted: 4/29/2013
Inspector: RK

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
0-5'	1:41 PM		50-80	100-120	SD
5-10		1:43 PM	50-80	100-120	SD
10-15	1:43 PM		50-80	100-120	SD
15-20		1:45 PM	50-80	100-120	SD
20-25	1:47 PM		50-80	100-120	SD
25-30		1:48 PM	50-80	100-120	SD
30-35	1:49 PM		50-80	100-120	MD, LSC
35-40		1:56 PM	50-80	100-120	MD, LSC
40-45	1:57 PM		50-80	100-120	MD, SD, LSC
45-50		2:00 PM	50-80	100-120	MD, SD, LSC
50-55	2:02 PM		50-80	100-120	MD, SD, LSC, CR
55-60		2:05 PM	50-80	100-120	MD, SD, LSC, CR
60-65	2:06 PM		50-80	100-120	MD, SD, LSC
65-70		2:08 PM	50-80	100-120	MD, SD, LSC
70-75	2:09 PM		50-80	100-150	MD, LSC
75-80		2:14 PM	50-80	100-150	MD, LSC
80-85	2:15 PM		50-80	100-150	MD, HD, LSC, C
85-90		2:23 PM	50-80	100-150	MD, HD, LSC, C
90-95	2:24 PM		50-80	100-150	MD, HD, LSC, C
95-100		2:33 PM	50-80	100-150	MD, HD, LSC, C
100-105	2:35 PM		50-80	100-150	MD, HD, LSC, C
105-110		2:41 PM	50-80	100-150	MD, HD, LSC, C
110-115	2:42 PM		50-80	100-150	MD, HD, LSC, C
115-120		2:57 PM	50-80	100-150	MD, HD, LSC, C

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: T18
Elev: 146.00

Date Drilled: 4/29/2013
Date Grouted: 4/29/2013
Inspector: RK

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
120-125	3:42 PM		50-80	120-150	MD, HD, LSC
125-130		3:47 PM	50-80	120-150	MD, HD, LSC
130-135	3:48 PM		50-80	120-180	MD, HD, LSC
135-140		3:58 PM	50-80	120-180	MD, HD, LSC
140-145	4:02 PM		50-80	120-180	MD, HD, LSC
145-150		4:08 PM	50-80	120-180	MD, HD, LSC
150-155	4:10 PM		50-80	120-180	MD, HD, LSC
155-160		4:17 PM	50-80	120-180	MD, HD, LSC
160-165	4:19 PM		50-80	120-180	MD, LSC
165-170		4:29 PM	50-80	120-180	MD, SD, LSC, CR
170-175	4:32 PM		50-80	120-180	MD, HD, LSC, C
175-180		4:41 PM	50-80	120-180	MD, HD, LSC, C
180-185	4:43 PM		50-80	120-180	MD, LSC, C
185-190		4:51 PM	50-80	120-180	MD, SD
190-195	4:54 PM		50-80	120-180	MD, SD
195-200		4:59 PM	50-80	120-180	MD, SD
200-205	5:03 PM		50-80	120-180	MD, SD
205-210		5:04 PM	50-80	120-180	MD, LSC, HH
210-215	5:07 PM		50-80	120-180	SD, CR, HH
215-220		5:08 PM	50-80	120-180	SD, CR, HH
220-225	5:13 PM		50-80	120-180	CR, SD
225-230		5:15 PM	50-80	120-180	MD, HD, Terminated at 230 feet

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling; LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: T19
Elev: 147.50

Date Drilled: 4/30/2013
Date Grouted: 4/30/2013
Inspector: MC

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
0-5'	7:35 AM	7:37 AM	50-70	100-140	SD
5-10	7:37 AM	7:38 AM	50-70	100-140	SD
10-15	7:38 AM	7:39 AM	50-70	100-140	SD
15-20	7:39 AM	7:40 AM	50-70	100-140	SD
20-25	7:40 AM	7:42 AM	50-70	100-140	SD
25-30	7:42 AM	7:45 AM	50-70	100-140	SD
30-35	7:48 AM	7:50 AM	50-70	100-140	SD
35-40	7:50 AM	7:52 AM	50-70	100-140	SD, TSC
40-45	7:55 AM	7:57 AM	50-70	100-140	SD, TSC
45-50	7:57 AM	7:59 AM	50-70	100-140	SD, TSC
50-55	8:01 AM	8:02 AM	50-70	100-140	SD, TSC
55-60	8:02 AM	8:04 AM	50-70	100-140	SD, TSC
60-65	8:05 AM	8:06 AM	50-70	100-140	SD, TSC
65-70	8:06 AM	8:07 AM	50-70	100-140	SD, TSC
70-75	8:09 AM	8:10 AM	50-70	100-140	SD, TSC
75-80	8:10 AM	8:12 AM	50-70	100-140	SD, TSC
80-85	8:14 AM	8:15 AM	50-70	100-140	SD, TSC
85-90	8:15 AM	8:17 AM	50-70	100-140	SD, TSC
90-95	8:20 AM	8:23 AM	50-70	100-140	SD, TSC
95-100	8:23 AM	8:26 AM	50-70	100-140	SD, TSC
100-105	8:28 AM	8:30 AM	50-70	100-140	SD, TSC
105-110	8:30 AM	8:33 AM	50-70	100-140	SD, TSC
110-115	8:35 AM	8:37 AM	50-70	100-140	SD, TSC
115-120	8:37 AM	8:39 AM	50-70	100-140	HD, TSC

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: T19
Elev: 147.50

Date Drilled: 4/30/2013
Date Grouted: 4/30/2013
Inspector: MC

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
120-125	9:15 AM		50-70	140-160	START INNER ROD, TSC, HD
125-130		9:18 AM	50-70	140-160	START INNER ROD, TSC, HD
130-135	9:20 AM		50-70	140-160	MD, HD
135-140		9:30 AM	50-70	140-160	MD, HD
140-145	9:32 AM		50-70	140-160	MD, HD, BSC
145-150		9:42 AM	50-70	120-160	MD, HD, BSC
150-155	9:45 AM		50-70	120-160	MD, HD, BSC
155-160		9:49 AM	50-70	120-160	MD, HD, BSC
160-165	9:53 AM		50-70	120-160	MD, HD, BSC
165-170		10:00 AM	50-70	120-160	MD, HD, BSC
170-175	10:03 AM		50-70	120-160	MD, HD, BSC
175-180		10:08 AM	50-70	120-160	MD, HD, BSC
180-185	10:11 AM		50-70	120-160	SD
185-190		10:12 AM	50-70	120-160	SD
190-195	10:17 AM		50-70	120-160	SD, MD, TSC
195-200		10:19 AM	50-70	120-160	SD, MD, TSC
200-205	10:22 AM	10:29 AM	50-70	120-160	MD, HD, TSC
205-210	10:29 AM	10:31 AM	50-70	120-160	MD, TSC
210-215	10:35 AM		50-70	120-160	MD, TSC
215-220		10:40 AM	50-70	120-160	MD, TSC
220-225	10:43 AM		50-70	120-160	SD, MD
225-230		10:45 AM	50-70	120-160	SD, MD
230-235	10:49 AM		50-70	120-160	SD, MD
235-240		10:51 AM	50-70	120-160	SD, MD

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: T20
Elev: 146.46

Date Drilled: 5/2/2013 & 5/3/2013
Date Grouted: 5/3/2013
Inspector: RK

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
0-5'	1:44 PM		50-80	100-120	SD
5-10		1:46 PM	50-80	100-120	SD
10-15	1:46 PM		50-80	100-120	SD
15-20		1:48 AM	50-80	100-120	SD
20-25	1:51 AM		50-80	100-120	SD
25-30		1:52 PM	50-80	100-120	SD
30-35	1:54 PM		50-80	100-120	SD, CR
35-40		1:58 PM	50-80	100-120	MD, LSC
40-45	2:00 PM		50-80	100-120	MD, LSC
45-50		2:06 AM	50-80	100-120	MD, LSC
50-55	2:07 AM		50-80	100-120	MD, LSC
55-60		2:11 PM	50-80	100-120	MD, SD, LSC, CR
60-65	2:13 PM		50-80	100-150	MD, LSC
65-70		2:17 PM	50-80	100-150	MD, LSC
70-75	2:19 PM		50-80	100-150	MD, LSC, HH
75-80		2:26 PM	50-80	100-150	MD, LSC
80-85	2:27 PM		50-80	100-150	MD, SD
85-90		2:32 PM	50-80	100-150	MD, LSC
90-95	2:34 PM		50-80	100-150	MD, LSC
95-100		2:45 PM	50-80	100-150	MD, LSC, HD - (stopped for the day)
100-105	8:00 AM		50-80	120-150	MD, HD, LSC
105-110		8:04 AM	50-80	120-150	MD, HD, LSC
110-115	8:08 AM		50-80	120-150	MD, HD, LSC
115-120		8:11 AM	50-80	120-150	MD, HD, LSC

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: T20
Elev: 146.46

Date Drilled: 5/2/2013 & 5/3/2013
Date Grouted: 5/3/2013
Inspector: RK

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
120-125	8:15 AM		50-80	120-150	MD, HD, LSC
125-130		8:21 AM	50-80	120-150	MD, HD, LSC
130-135	8:24 AM		50-80	120-150	MD, HD, LSC
135-140		8:32 AM	50-80	120-150	MD, HD, LSC
140-145	8:35 AM		50-80	120-150	MD, HD, SD, LSC
145-150		8:43 AM	50-80	120-150	MD, HD, SD, LSC
150-155	8:46 AM		50-80	120-180	MD, HD, LSC
155-160		8:52 AM	50-80	120-180	MD, HD, LSC, C
160-165	8:59 AM		50-80	120-180	MD, LSC, CR
165-170		9:07 AM	50-80	120-180	HD, LSC, C
170-175	9:10 AM		50-80	120-180	MD, HD, LSC
175-180		9:19 AM	50-80	120-180	MD, HD, LSC, SD
180-185	9:22 AM		50-80	120-180	MD, HD, LSC
185-190		9:29 AM	50-80	120-180	MD, HD, LSC, SD
190-195	9:32 AM		50-80	120-180	MD, LSC, SD
195-200		9:36 AM	50-80	120-180	SD, CR
200-205	9:39 AM		50-80	120-180	SD, CR
205-210		9:40 AM	50-80	120-180	SD, CR
210-215	9:43 AM		50-80	120-180	SD, CR
215-220		9:44 AM	50-80	120-180	SD, CR, MD
220-225	9:47 AM		50-80	120-180	SD, CR
225-230		9:52 AM	50-80	120-180	MD, HD, LSC Terminated at 230'

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: T21
Elev: 145.7

Date Drilled: 5/1/2013
Date Grouted: 5/1/2013
Inspector: RK

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
0-5'	7:34 AM		50-80	100-120	SD
5-10		7:36 AM	50-80	100-120	SD
10-15	7:36 AM		50-80	100-120	SD
15-20		7:38 AM	50-80	100-120	SD
20-25	7:40 AM		50-80	100-120	SD, MD
25-30		7:43 AM	50-80	100-120	SD, MD
30-35	7:45 AM		50-80	100-120	MD, SD, LSC
35-40		7:47 AM	50-80	100-120	MD, SD, LSC
40-45	7:48 AM		50-80	100-120	MD, LSC
45-50		7:51 AM	50-80	100-120	MD, LSC
50-55	7:52 AM		50-80	100-120	MD, LSC
55-60		7:55 AM	50-80	100-120	MD, LSC
60-65	7:56 AM		50-80	100-120	MD, LSC
65-70		8:00 AM	50-80	100-120	MD, LSC
70-75	8:02 AM		50-80	100-120	SD
75-80		8:03 AM	50-80	100-120	SD
80-85	8:05 AM		50-80	100-120	MD, LSC
85-90		8:09 AM	50-80	100-120	MD, LSC
90-95	8:10 AM		50-80	100-150	MD, LSC
95-100		8:15 AM	50-80	100-150	MD, LSC
100-105	8:16 AM		50-80	100-150	MD, HD, LSC
105-110		8:22 AM	50-80	100-150	MD, HD, LSC
110-115	8:23 AM		50-80	100-150	MD, HD, LSC
115-120		8:29 AM	50-80	100-150	MD, HD, LSC

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: T21
Elev: 145.7

Date Drilled: 5/1/2013
Date Grouted: 5/1/2013
Inspector: RK

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
120-125	8:31 AM		50-80	100-150	MD, HD, LSC
125-130		8:38 AM	50-80	100-150	MD, HD, LSC
130-135	8:39 AM		50-80	100-180	SD, MD, HD, HH
135-140		8:43 AM	50-80	100-180	SD, MD, HD
140-145	8:45 AM		50-80	100-180	MD, HD, LSC
145-150		8:55 AM	50-80	100-180	MD, HD, LSC
150-155	8:56 AM		50-80	100-180	MD, HD, LSC, HH
155-160		9:03 AM	50-80	100-180	MD, HD, LSC, C, HH
160-165	9:12 AM	9:25 AM	50-80	100-180	MD, HD, LSC, HH
165-170	9:57 AM	10:01 AM	50-80	100-180	HD, LSC, C, HH
170-175	10:04 AM		50-80	150-200	HD, LSC, HH
175-180		10:11 AM	50-80	150-200	HD, LSC, HH
180-185	10:16 AM		50-80	150-200	HD, LSC, HH
185-190		10:25 AM	50-80	150-200	HD, LSC, HH
190-195	10:28 AM		50-80	150-200	HD, LSC, HH
195-200		10:38 AM	50-80	150-200	HD, LSC, HH
200-205	10:40 AM		50-80	150-200	HD, SD
205-210		10:49 AM	50-80	150-200	HD, SD
210-215	10:52 AM		50-80	150-200	SD, CR, HH
215-220		10:54 AM	50-80	150-200	SD, MD, CR, HH
220-225	10:57 AM		50-80	150-200	MD, LSC, CR
225-230		11:03 AM	50-80	150-200	MD, LSC, CR Terminated at 230'

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



4919 West Laurel Street
Tampa, Florida 33607
Phone: (813) 289-0750
Fax: (813)289-5474

COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: T22
Elev: 147.65

Date Drilled: 5/2/2013
Date Grouted: 5/2/2013
Inspector: RK

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
0-5'	7:46 AM		50-80	100-150	SD
5-10		7:47 AM	50-80	100-150	SD
10-15	7:47 AM		50-80	120-180	MD, LSC
15-20		7:49 AM	50-80	120-180	MD, LSC
20-25	7:52 AM		50-80	120-180	MD, SD, CR
25-30		7:54 AM	50-80	120-180	MD, SD, CR
30-35	7:55 AM		50-80	100-120	SD, CR
35-40		7:57 AM	50-80	100-120	SD, CR
40-45	7:59 AM		50-80	100-120	SD, CR
45-50		8:00 AM	50-80	100-120	SD, CR
50-55	8:01 AM		50-80	100-120	SD, CR
55-60		8:02 AM	50-80	100-120	SD, CR
60-65	8:03 AM		50-80	100-120	SD, CR
65-70		8:04 AM	50-80	100-120	SD, CR
70-75	8:05 AM		50-80	100-150	SD, MD
75-80		8:08 AM	50-80	100-150	MD, SD, LSC
80-85	8:09 AM		50-80	100-120	MD, LSC, C
85-90		8:13 AM	50-80	100-120	MD, LSC, C
90-95	8:15 AM		50-80	100-120	MD, LSC, HH
95-100		8:19 AM	50-80	100-120	MD, LSC, HH
100-105	8:20 AM		50-80	100-150	MD, LSC, HH
105-110		8:26 AM	50-80	100-150	MD, HD, LSC, HH
110-115	8:27 AM		50-80	100-150	MD, HD, LSC, HH
115-120		8:32 AM	50-80	100-150	MD, HD, LSC, HH

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: T22
Elev: 147.65

Date Drilled: 5/2/2013
Date Grouted: 5/2/2013
Inspector: RK

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
120-125	8:35 AM		50-80	100-150	MD, HD, LSC
125-130		8:43 AM	50-80	100-150	MD, HD, LSC
130-135	8:44 AM		50-80	100-150	MD, HD, LSC
135-140		8:51 AM	50-80	100-150	MD, HD, LSC
140-145	8:53 AM		50-80	100-150	MD, LSC
145-150		9:00 AM	50-80	100-150	MD, SD, LSC
150-155	9:01 AM		50-80	100-150	MD, SD
155-160		9:06 AM	50-80	100-150	MD, SD
160-165	9:09 AM		50-80	120-180	MD, SD, LSC, CR
165-170		9:33 AM	50-80	120-180	MD, HD, LSC, C
170-175	9:34 AM		50-80	120-180	MD, HD, HH
175-180		10:30 AM	50-80	120-180	HD, HH
180-185	10:41 AM		50-80	150-200	SD, CR, TC, HH
185-190		10:43 AM	50-80	150-200	SD, CR, TC, HH
190-195	10:45 AM		50-80	150-180	SD, MD, CR, LSC, HH
195-200		10:49 AM	50-80	150-180	SD, MD, CR, LSC, HH
200-205	10:51 AM		50-80	150-200	HD, SD, HD
205-210		11:40 AM	50-80	150-200	HD, LSC, HH
210-215	11:42 AM		50-80	150-200	MD, HD, LSC, HH
215-220		11:43 AM	50-80	150-200	MD, HD, LSC, HH
220-225	11:49 AM		50-80	150-200	MD, HD, SD, HH
225-230		11:55 AM	50-80	150-200	MD, HD, SD, HH
230-235	11:57 AM		50-80	150-200	MD, HD, SD
235-240		12:05 PM	50-80	150-200	MD, HD, SD Terminated at 240'

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling; LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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Phone: (813) 289-0750
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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: T23
Elev: 152.6

Date Drilled: 5/2/2013
Date Grouted: 5/2/2013
Inspector: KJ

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
0-5'	11:37 AM		50-70	100-110	SD
5-10		11:38 AM	50-70	100-110	SD
10-15	11:38 AM		50-70	100-110	SD
15-20		11:39 AM	50-70	100-110	SD
20-25	11:40 AM		50-70	100-110	SD
25-30		11:42 AM	50-70	100-110	SD
30-35	11:43 AM		50-70	120-140	MD
35-40		11:49 AM	50-70	120-140	MD
40-45	11:50 AM	11:55 AM	50-70	140-180	MD
45-50	11:55 AM	12:05 PM	50-70	140-180	MD
50-55	12:06 PM	12:08 PM	50-70	120-140	SD
55-60	12:08 PM	12:09 PM	50-70	120-140	SD
60-65	12:10 PM		50-70	120-140	SD
65-70		12:11 PM	50-70	120-140	SD
70-75	12:12 PM	12:13 PM	50-70	120-160	SD, MD, HH
75-80	12:13 PM	12:15 PM	50-70	120-160	SD, MD, HH
80-85	12:16 PM	12:18 PM	50-70	120-160	MD, HH
85-90	12:16 PM	12:21 PM	50-70	120-160	MD, HH
90-95	12:22 PM	12:26 PM	50-70	120-160	MD, C
95-100	12:26 PM	12:30 PM	50-70	120-160	MD, C
100-105	12:31 PM	12:36 PM	50-70	140-180	MD, HD
105-110	12:36 PM	12:45 PM	50-70	140-180	MD, HD
110-115	12:46 PM	12:52 PM	50-70	140-200	MD, LSC, C
115-120	12:52 PM	12:59 PM	50-70	140-200	MD, LSC, C

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: T23
Elev: 152.6

Date Drilled: 5/2/2013
Date Grouted: 5/2/2013
Inspector: KJ

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
120-125	1:01 PM	1:06 PM	50-70	120-140	MD, HD
125-130	1:06 PM	1:10 PM	50-70	120-140	MD, HD
130-135	1:11 PM		50-70	140-180	MD, HD
135-140		1:20 PM	50-70	140-180	MD, HD
140-145	1:21 PM		50-70	160-200	MD, HD, LSC, C
145-150		1:31 PM	50-70	160-200	MD, HD, LSC, C
150-155	1:32 PM		50-70	140-160	SD
155-160		1:35 PM	50-70	140-160	SD
160-165	1:36 PM		50-70	120-140	SD
165-170		1:37 PM	50-70	120-140	SD
170-175	1:38 PM		50-70	120-140	SD
175-180		1:39 PM	50-70	120-140	SD
180-185	1:40 PM		50-70	120-140	SD, MD
185-190		1:44 PM	50-70	120-140	SD, MD
190-195	1:45 PM		50-70	120-140	SD
195-200		1:46 PM	50-70	120-140	SD
200-205	1:47 PM		50-70	160-180	MD, LSC, C
205-210		1:53 PM	50-70	160-180	MD, LSC, C
210-215	1:54 PM		50-70	160-180	MD, LSC, C
215-220		1:56 AM	50-70	160-180	SD, LSC, C
220-225	1:56 PM		50-70	120-160	MD, SD, LSC
225-230		2:00 PM	50-70	120-160	MD, LSC, C
230-235	2:01 PM	2:02 PM	50-70	140-200	MD, SD, LSC
235-240	2:02 PM	2:06 PM	50-70	140-200	MD, SD, C Terminated at 240'

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: T24
Elev: 152.2

Date Drilled: 5/2/2013
Date Grouted: 5/2/2013
Inspector: KJ

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
0-5'	7:40 AM		50-70	100-110	SD
5-10		7:41 AM	50-70	100-110	SD
10-15	7:41 AM		50-70	100-110	SD
15-20		7:43 AM	50-70	100-110	SD
20-25	7:44 AM		50-70	120-140	SD, MD
25-30		7:48 AM	50-70	120-140	SD, MD
30-35	7:49 AM	7:54 AM	50-70	120-140	MD, HH
35-40	7:54 AM	8:02 AM	50-70	120-140	MD, HH
40-45	8:03 AM		50-70	110-120	SD
45-50		8:05 AM	50-70	110-120	SD
50-55	8:06 AM		50-70	110-120	SD
55-60		8:08 AM	50-70	110-120	SD
60-65	8:38 AM		50-70	110-120	SD, MD
65-70		8:40 AM	50-70	110-120	SD, MD
70-75	8:41 AM		50-70	110-120	SD
75-80		8:42 AM	50-70	110-120	SD
80-85	8:43 AM		50-70	120-140	SD, MD, LSC, HH
85-90		8:46 AM	50-70	120-140	SD, MD, LSC, HH
90-95	8:47 AM	8:51 AM	50-70	120-140	MD, LSC
95-100	8:51 AM	8:56 AM	50-70	120-140	MD, LSC
100-105	8:57 AM	8:59 AM	50-70	120-140	MD, LSC
105-110	8:59 AM	9:03 AM	50-70	120-140	MD, LSC
110-115	9:03 AM	9:07 AM	50-70	120-140	MD
115-120	9:07 AM	9:15 AM	50-70	140-180	MD, HD, LSC, C

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: T24
Elev: 152.2

Date Drilled: 5/2/2013
Date Grouted: 5/2/2013
Inspector: KJ

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
120-125	9:16 AM	9:19 AM	50-70	140-180	MD, LSC
125-130	9:19 AM	9:23 AM	50-70	140-180	MD, LSC
130-135	9:24 AM	9:29 AM	50-70	140-180	MD, LSC
135-140	9:29 AM	9:32 AM	50-70	140-180	MD, LSC
140-145	9:33 AM	9:39 AM	50-70	140-180	MD, LSC
145-150	9:39 AM	9:43 AM	50-70	140-180	MD, LSC
150-155	9:44 AM		50-70	140-160	MD
155-160		9:48 AM	50-70	140-160	MD
160-165	9:49 AM	9:50 AM	50-70	140-180	MD, LSC
165-170	9:50 AM	9:53 AM	50-70	140-180	MD, LSC
170-175	9:54 AM		50-70	140-160	MD, SD
175-180		9:56 AM	50-70	140-160	MD, SD
180-185	9:57 AM		50-70	120-160	SD
185-190		9:58 AM	50-70	120-160	SD
190-195	9:59 AM		50-70	120-160	SD
195-200		10:00 AM	50-70	120-160	SD
200-205	10:01 AM	10:04 AM	50-70	120-140	SD
205-210	10:04 AM	10:05 AM	50-70	140-200	MD, HD, SD, C
210-215	10:06 AM	10:09 AM	50-70	140-180	MD, SD, LSC
215-220	10:09 AM	10:13 AM	50-70	140-180	MD, SD, LSC, C
220-225	10:14 AM	10:16 AM	50-70	140-160	MD
225-230	10:16 AM	10:18 AM	50-70	140-160	MD
230-235	10:19 AM	10:23 AM	50-70	160-210	MD, HD, SD, C
235-240	10:23 AM	12:25 PM	50-70	160-210	MD, HD, SD Terminated at 240'

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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Phone: (813) 289-0750
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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: T25
Elev: 152.43

Date Drilled: 4/30/2013 & 5/1/2013
Date Grouted: 5/1/2013
Inspector: KJ, TN

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
0-5'	7:42 AM	30s	50-70	100-110	SD
5-10		7:45 AM	50-70	100-110	SD
10-15	7:46 AM	30s	50-60	100-110	SD
15-20	7:49 AM	7:50 AM	50-60	100-110	SD
20-25	7:51 AM	30s	50-60	100-110	SD
25-30		5:52 AM	50-60	100-110	SD
30-35	7:54 AM	7:55 AM	50-60	100-110	SD
35-40	7:55 AM	8:16 AM	50-60	100-110	HD
40-45	8:20 AM	8:29 AM	50-70	100-120	HD, MD
45-50	8:29 AM	8:32 AM	50-70	100-120	MD, SD
50-55	8:33 AM	30s	50-70	100-120	SD
55-60		8:35 AM	50-70	100-120	SD
60-65	8:36 AM	30s	50-70	100-120	SD
65-70		8:37 AM	50-70	100-120	SD
70-75	8:39 AM	30s	50-70	100-120	SD
75-80		8:41 AM	50-70	100-120	SD
80-85	8:42 AM	8:45 AM	50-70	100-120	SD, MD
85-90	8:45 AM	8:47 AM	50-70	100-120	SD, MD, C
90-95	8:48 AM	30s	50-70	100-120	MD, LSC, C
95-100		8:56 AM	50-70	100-120	MD, LSC
100-105	8:57 AM	9:04 AM	50-80	100-130	MD, LSC, C
105-110	9:17 AM	9:20 AM	50-70	100-130	MD
110-115	9:21 AM	30s	50-70	100-140	MD
115-120		9:26 AM	50-70	100-140	MD, C

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: T25
Elev: 152.43

Date Drilled: 4/30/2013 & 5/1/2013
Date Grouted: 5/1/2013
Inspector: KJ, TN

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
120-125	9:27 AM		50-70	100-140	SD
125-130		9:31 AM	50-70	100-140	SD
130-135	9:32 AM		50-70	100-140	SD, MD
135-140		9:39 AM	50-70	100-140	SD, MD
140-145	9:40 AM		50-70	100-140	MD, LSC
145-150		9:50 AM	50-70	100-140	MD, LSC
150-155	9:51 AM		50-70	100-140	SD
155-160		9:54 AM	50-70	100-140	SD
160-165	9:55 AM		50-70	100-140	SD
165-170		9:59 AM	50-70	100-140	SD, C
170-175	10:00 AM		50-70	100-140	SD
175-180		10:01 AM	50-70	100-140	SD
180-185	10:02 AM		50-70	100-140	SD
185-190		10:04 AM	50-70	100-140	SD
190-195	10:05 AM		50-70	100-140	SD
195-200		10:06 AM	50-70	100-140	SD
200-205	10:08 AM		50-70	100-160	SD, MD, C
205-210		10:13 AM	50-70	100-160	SD, MD, C
210-215	10:14 AM		50-70	120-200	SD, MD, C
215-220		10:20 AM	50-70	120-200	MD, C
220-225	10:21 AM		50-70	120-200	MD, C
225-230		10:26 AM	50-70	120-200	MD, C, LSC
230-235	10:27 AM		50-70	120-220	MD, C, LSC
235-240		10:34 AM	50-70	120-220	MD, C, LSC Terminated at 240'

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling; LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: T26
Elev: 151.6

Date Drilled: 5/1/2013
Date Grouted: 5/1/2013
Inspector: TN

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
0-5'	12:30 PM	12:35 PM	50-60	100-120	MD
5-10	12:35 PM	12:38 PM	50-60	100-120	SD
10-15	12:41 PM	30s	50-60	100-120	SD
15-20		12:42 PM	50-60	100-120	SD
20-25	12:43 PM	30s	50-60	100-140	SD
25-30		12:45 PM	50-60	100-140	SD
30-35	12:46 PM	30s	50-60	100-140	SD
35-40		12:48 PM	50-60	100-140	SD
40-45	12:49 PM	30s	50-60	100-140	SD
45-50		12:50 PM	50-60	100-140	SD
50-55	12:52 PM	30s	50-60	100-140	SD
55-60		12:53 PM	50-60	100-140	SD
60-65	12:54 PM	30s	50-70	100-140	SD
65-70		12:55 PM	50-70	100-140	SD
70-75	12:56 PM	30s	50-70	100-140	SD
75-80		12:57 PM	50-70	100-140	SD
80-85	12:58 PM	12:59 PM	50-70	100-140	SD
85-90	12:59 PM	1:02 AM	50-70	100-140	MD, SD, C, LSC
90-95	1:03 PM		50-70	120-160	SD, MD, LSC
95-100		1:09 PM	50-70	120-160	SD, MD, C, LSC
100-105	1:30 AM		50-70	120-160	SD, MD
105-110		1:36 PM	50-70	120-160	SD, MD
110-115	1:37 PM		50-70	120-160	SD, MD
115-120		1:49 PM	50-70	120-160	SD, MD

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: T26
Elev: 151.6

Date Drilled: 5/1/2013
Date Grouted: 5/1/2013
Inspector: TN

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
120-125	1:45 PM		50-70	120-160	SD, MD, LSC
125-130		1:49 PM	50-70	120-160	SD, LSC
130-135	1:50 PM		50-70	120-160	MD, LSC
135-140		1:58 PM	50-70	120-160	MD, LSC
140-145	2:00 PM		50-80	120-160	MD, LSC
145-150		2:06 PM	50-80	120-160	MD, LSC
150-155	2:08 PM		50-80	120-160	MD, LSC
155-160		2:16 PM	50-80	120-160	MD, LSC
160-165	2:18 PM		50-80	120-160	MD, LSC
165-170		2:26 PM	50-80	120-160	MD, LSC, C
170-175	2:27 PM		50-80	120-160	MD, SD
175-180		2:35 PM	50-80	120-160	MD, SD
180-185	2:36 PM		50-80	120-160	MD, SD, LSC
185-190		2:40 PM	50-80	120-160	MD, HD, LSC, C
190-195	2:42 PM		50-80	120-160	SD
195-200		2:43 PM	50-80	120-160	MD, SD
200-205	2:44 PM		50-80	120-160	MD, SD, LSC, CR, C
205-210		2:50 PM	50-80	120-160	MD, SD, LSC, CR, C
210-215	2:52 PM		50-80	120-160	SD, CR
215-220		2:53 PM	50-80	120-160	SD, CR
220-225	2:55 PM		50-80	120-160	SD, CR
225-230		2:56 PM	50-80	120-160	SD, MD
230-235	2:59 PM		50-80	120-160	MD, LSC
235-240		3:04 PM	50-80	120-160	MD, LSC Terminated at 240'

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling; LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



4919 West Laurel Street
Tampa, Florida 33607
Phone: (813) 289-0750
Fax: (813)289-5474

COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: T27
Elev: 147.14

Date Drilled: 5/6/2013
Date Grouted: 5/6/2013
Inspector: RK

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
0-5'	10:19 AM		50-80	100-120	SD
5-10		10:20 AM	50-80	100-120	SD
10-15	10:20 AM		50-80	100-120	SD
15-20		10:21 AM	50-80	100-120	SD
20-25	10:23 AM		50-80	100-180	MD, LSC, TC
25-30		10:26 AM	50-80	100-180	MD, LSC, TC
30-35	10:34 AM		50-80	100-150	MD, SD, LSC, CR
35-40		10:38 AM	50-80	100-150	MD, SD, LSC, CR
40-45	10:39 AM		50-80	100-150	SD, CR
45-50		10:42 AM	50-80	100-150	SD, CR
50-55	10:45 AM		50-80	100-150	SD, MD, CR, LSC
55-60		10:48 AM	50-80	100-150	SD, MD, CR, LSC
60-65	10:49 AM		50-80	100-150	SD, CR
65-70		10:52 AM	50-80	100-150	MD, LSC, SD
70-75	10:53 AM		50-80	100-150	MD, HD, LSC
75-80		10:57 AM	50-80	100-150	MD, HD, LSC
80-85	10:59 AM		50-80	100-150	MD, HD, LSC
85-90		11:02 AM	50-80	100-150	MD, HD, LSC
90-95	11:11 AM		50-80	100-150	MD, HD, LSC
95-100		11:18 AM	50-80	100-150	MD, HD, LSC
100-105	11:19 AM		50-80	100-150	MD, HD, LSC
105-110		11:32 AM	50-80	100-150	MD, HD, LSC, C
110-115	11:33 AM		50-80	100-150	MD, HD, LSC
115-120		11:40 AM	50-80	100-150	MD, HD, LSC

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: T27
Elev: 147.14

Date Drilled: 5/6/2013
Date Grouted: 5/6/2013
Inspector: RK

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
120-125	11:41 AM		50-80	100-150	MD, HD, LSC
125-130		11:47 AM	50-80	100-150	MD, HD, LSC
130-135	11:48 AM		50-80	100-150	MD, HD, LSC
135-140		11:59 AM	50-80	100-150	MD, HD, LSC
140-145	12:00 PM		50-80	100-150	MD, HD, LSC
145-150		12:09 PM	50-80	100-150	MD, HD, LSC
150-155	12:11 PM		50-80	100-150	MD, LSC
155-160		12:15 PM	50-80	100-150	MD, LSC
160-165	12:16 PM		50-80	100-150	MD, LSC
165-170		12:21 PM	50-80	100-150	MD, LSC
170-175	12:23 PM		50-80	100-150	MD, LSC
175-180		12:44 PM	50-80	100-150	HD, LSC
180-185	12:46 PM		50-80	120-200	MD, HD, SD
185-190		12:58 PM	50-80	120-200	HD, SD
190-195	12:59 PM		50-80	120-200	MD, SD, MD
195-200		1:04 PM	50-80	120-200	HD, MD
200-205	1:05 PM		50-80	120-200	MD, SD, LSC, CR
205-210		1:11 PM	50-80	120-200	SD, CR
210-215	1:12 PM		50-80	120-200	SD, MD
215-220		1:16 PM	50-80	120-200	SD, MD
220-225	1:17 PM	2:17 PM	50-80	120-200	SD, HD
225-230	2:50 PM	3:20 PM	50-80	150-200	HD
230-235	3:23 PM		50-80	150-180	HD, SD
235-240		3:35 PM	50-80	150-180	HD, SD, Terminated at 240 feet

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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Tampa, Florida 33607
Phone: (813) 289-0750
Fax: (813)289-5474

COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: T-28
Elev: 147.5

Date Drilled: 5/8/2013
Date Grouted: 5/8/2013
Inspector: KJ

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
0-5'	7:35 AM		50-70	100-110	SD
5-10		7:36 AM	50-70	100-110	SD
10-15	7:36 AM		50-70	100-110	SD
15-20		7:39 AM	50-70	100-110	SD, some debris
20-25	7:41 AM		50-70	100-110	SD
25-30		7:43 AM	50-70	100-110	SD
30-35	7:44 AM		50-70	100-110	SD
35-40	7:46 AM / 8:25 AM	8:50 AM /9:18 AM- 9:25 AM	50-70	140-180	SD, HD, debris
40-45	9:27 AM		50-70	120-160	MD
45-50		9:33 AM	50-70	120-160	MD
50-55	9:36 AM		50-70	120-140	MD
55-60		9:39 AM	50-70	120-140	MD
60-65	9:41 AM		50-70	120-140	MD, SD
65-70		9:42 AM	50-70	120-140	MD, SD
70-75	9:45 AM		50-70	120-160	MD, BSC
75-80		9:51 AM	50-70	120-160	MD, BSC
80-85	9:54 AM		50-70	120-160	MD
85-90		9:58 AM	50-70	120-160	MD
90-95	10:01 AM		50-70	120-150	MD
95-100		10:06 AM	50-70	120-150	MD
100-105	10:09 AM		50-70	120-160	MD. SD
105-110		10:14 AM	50-70	120-160	MD, SD
110-115	10:17 AM	10:21 AM	50-70	120-140	MD
115-120	10:21 AM	10:24 AM	50-70	140-180	MD, HD, C

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: T-28
Elev: 147.5

Date Drilled: 5/8/2013
Date Grouted: 5/8/2013
Inspector: KJ

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
120-125	10:27 AM		50-70	120-160	MD, C
125-130		10:34 AM	50-70	120-160	MD, BSC
130-135	10:44 AM		50-70	120-160	MD, BSC, HH
135-140		10:50 AM	50-70	120-160	MD, BSC, HH
140-145	10:57 AM		50-70	120-160	MD
145-150		11:05 AM	50-70	120-160	MD
150-155	11:09 AM		50-70	120-160	MD, SD
155-160		11:13 AM	50-70	120-160	MD, SD
160-165	11:18 AM		50-70	120-200	MD, SD
165-170		11:21 AM	50-70	120-200	MD, SD
170-175	11:25 AM		50-70	140-180	MD, SD
175-180		11:30 AM	50-70	140-180	MD, SD
180-185	11:55 AM		50-70	140-180	MD, SD, rig problem
185-190		11:58 AM	50-70	140-180	ME, SD, BSC
190-195	12:03 PM		50-70	120-160	MD, SD
195-200		12:05 PM	50-70	120-160	MD, SD
200-205	12:20 PM		50-70	140-200	MD, HD, BSC, C
205-210		12:31 PM	50-70	10-200	MD, HD, BSC, C
210-215	12:34 PM		50-70	160-210	MD, HD, BSC, C
215-220		12:40 PM	50-70	160-210	MD, HD, BSC, C
220-225	12:43 PM		50-70	160-210	MD, HD, BSC, C
225-230		12:48 PM	50-70	160-210	MD, HD, BSC, C
230-235	12:51 PM		50-70	140-180	MD, BSC
235-240		12:56 PM	50-70	140-180	MD, BSC

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: T29
Elev: 147.7

Date Drilled: 5/7/2013
Date Grouted: 5/7/2013
Inspector: KJ

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
0-5'	10:15 AM		50-70	100-110	SD
5-10		10:18 AM	50-70	100-110	SD
10-15	10:18 AM		50-70	100-110	SD, MD
15-20		10:20 AM	50-70	100-110	SD, MD
20-25	10:22 AM		50-70	100-110	SD
25-30		10:24 AM	50-70	100-110	SD
30-35	10:26 AM		50-70	120-160	MD
35-40		10:28 AM	50-70	120-160	MD
40-45	10:30 AM		50-70	110-120	SD
45-50		10:32 AM	50-70	110-120	SD
50-55	10:33 AM		50-70	110-120	SD
55-60		10:35 AM	50-70	110-120	SD
60-65	10:36 AM		50-70	110-120	SD
65-70		10:38 AM	50-70	110-120	SD, MD
70-75	10:40 AM		50-70	120-140	SD
75-80		10:43 AM	50-70	120-140	SD, MD, LSC
80-85	11:02 AM		50-70	110-140	SD
85-90		11:07 AM	50-70	110-140	SD
90-95	11:09 AM		50-70	110-140	MD, SD
95-100		11:14 AM	50-70	110-140	MD, SD
100-105	11:17 AM		50-70	110-140	MD
105-110		11:24 AM	50-70	110-140	MD, LSC
110-115	11:26 AM		50-70	120-140	MD, LSC
115-120		11:31 AM	50-70	120-140	MD, LSC

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling, LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.



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COMPACTION GROUT REPORT

Project: SE County Landfill
Project #: 13354x8
Pin #: T29
Elev: 147.7

Date Drilled: 5/7/2013
Date Grouted: 5/7/2013
Inspector: KJ

Casing Depth (Feet)	Drilling Time		Down Pressure (left gauge)	Torque Pressure (right gauge)	Comments/Drilling
	Start	Finish			
120-125	11:33 AM		50-70	120-140	MD
125-130		11:38 AM	50-70	120-140	MD, SD
130-135	11:47 AM		50-70	120-140	MD
135-140		11:56 AM	50-70	120-140	MD, LSC
140-145	11:58 AM		50-70	120-160	MD, LSC
145-150		12:07 PM	50-70	120-160	MD, LSC
150-155	12:10 PM		50-70	120-140	MD, LSC, HH
155-160		12:14 PM	50-70	120-140	MD, LSC, HH
160-165	12:17 PM		50-70	120-160	MD, HD, LSC
165-170		12:25 PM	50-70	120-160	MD, HD, LSC
170-175	12:29 PM		50-70	140-160	MD, HD, LSC
175-180		12:37 PM	50-70	140-160	MD, HD, LSC
180-185	12:40 PM		50-70	120-140	MD, SD
185-190		12:42 PM	50-70	120-140	SD
190-195	12:45 PM		50-70	120-140	MD, SD
195-200		12:47 PM	50-70	120-140	SD
200-205	12:50 PM		50-70	140-160	MD, LSC
205-210		1:01 PM	50-70	140-160	MD, LSC
210-215	1:04 PM		50-70	120-140	SD
215-220		1:07 PM	50-70	120-140	SD
220-225	1:09 PM		50-70	140-160	MD, LSC
225-230		1:14 PM	50-70	140-160	MD, LSC
230-235	1:17 PM		50-70	140-160	MD, LSC
235-240		1:21 PM	50-70	140-160	MD, LSC, Terminated at 240 feet

* **Note:** The terms listed above are defined as follows: SD = Soft drilling; MD = Medium dense; HD = Hard drilling; LSC = Lower spring compression; USC = Upper spring compression; TC = Tight casing or difficulty to rotate or high torque; C = Chatter; HH = High water pressure; CR = no drilling resistance or chasing drill rod.

APPENDIX D

Grout Logs



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

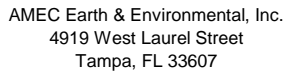
COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill
Project #: 13354x8
Location: SE Landfill
Inspector: KJ
Contractor: Earthtech

Pin #: C1
Date Drilled: 2/12/2013
Date Grouted: 2/12/2013
Total Depth: 170 ft
Total Grout: Pipe plugged - will re-drilled to 140 ft

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
2/12/2013	2	170	10	450						casing could not be pushed back to 180 because pipe was getting stuck, so grouted from 170, Original line pressure ~200 psi
		165	13	400						
		160	16	400						
		155	17	450						
		150	19	500						
		145	19	450						
		140	20	500 +						
		135	20	500 +						
		130	21	500 +						
		125	21	500 +						
		120	22	500 +						
		115	22	500 +						
		110	23	500 +						
		105	23	500 +						
		100	24	500 +						
		95	24	500 +						
		90	25	500 +						
		85	26	500 +						
		80	27	500 +						
		75	27	500 +						rig tried to lift from the ground

* **Note:** The terms listed above are defined as follows: HP = High Pressure, **TC** = Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



Project Name: SE COUNTY Landfill
Project #: 13354x8
Location: SE Landfill
Inspector: RK
Contractor: Earthtech

Pin #:_ C1

Date Drilled: _ 2/11/2013

Date Grouted: _ 2/11/2013

Total Depth: _ 300 ft

Total Grout: _ 3.8 cy

[illegible]

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC** = Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: _ SE COUNTY Landfill

Project #: _____ 13354x8

Location: _____ SE Landfill

Inspector: _____ RK

Contractor: _____ Earthtech

Pin #: _ C1

Date Drilled: _ 2/12/2013

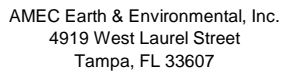
Date Grouted: _ 2/13/2013

Total Depth: _ 140 ft

Total Grout: _ 5 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
2/13/2013	3	140	15	400 +	X					SOT#3 (9:00 AM) - Line Pressure 300 psi
		135	17	400 +	X					
		130	19	400 +	X					
		125	20	400 +	X					
		120	22	400 +	X					
		115	22	400 +	X					
		110	23	400 +	X					
		105	24	400 +	X					
		100	26	400 +	X					
		95	27	400 +	X					
		90	29	400 +	X					
		85	30	400 +	X					
		80	63	380 +	X					soft at drilling log
		75	63	400 +	X					
		70	85	390						
		65	100	390						
		60	118	390						
		55	122	390						
		50	124	350						
		45	126	350						rig tried to lift from the ground

* Note: The terms listed above are defined as follows: HP = High Pressure, TC= Tight casing (Torque > 240), GH = Ground Heave, GTS = Grout to Surface, BP = Back Pressure



Project Name: _ SE COUNTY Landfill

Location: _____ SE Landfill

Contractor: Earthtech

Date Drilled: ____ 2/12/2013

Date Grouted: _ 2/13/2013

Total Depth: 140 ft

Total Grout: 5 cy

*** Note: The terms listed above are defined as follows: HP = High Pressure, TC= Tight casing (Torque > 240), GH = Ground Heave, GTS = Grout to Surface, BP = Back Pressure**



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: _ SE COUNTY Landfill

Project #: _____ 13354x8

Location: _____

Inspector: _____ RK

Contractor: _____ Earthtech

Pin #: _ C2

Date Drilled: _ 2/11/2013

Date Grouted: _ 2/11/2013

Total Depth: _ 300 ft

Total Grout: _ 3.8 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
2/11/2013	1	300		300						SOT#1 (1:10 PM) - Line pressure ~150 psi
		290		350	X					
		280		350	X					
		270		350	X					
		260		350	X					
		250		350	X					
		240		350	X					
		230		350	X					
		220		350	X					
		215		330						
		210		350	X					
		205		330	X					
		200		380	X					
		195		350	X					
		190		400	X					
		185		380	X					
		180		380	X					
		175		380	X					
		170		380	X					
		160		400	X					

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill

Project #: 13354x8

Location: SE Landfill

Inspector: RK

Contractor: Earthtech

Pin #: C2

Date Drilled: 2/11/2013

Date Grouted: 2/11/2013

Total Depth: 300 ft

Total Grout: 3.8 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
2/11/2013	1	150		370	X					
		140		400	X					
		130	81	380	X					
		120	83	350	X					
		110	85	380	X					
		100	87	380	X					
		90	90	380	X					
		80	92	390	X					
		70	95	350	X					
		60	97	375	X					
		50	99	365	X					
		40	101	380	X					
		30	103	400	X					
		20	108	410	X					
		10	112	350	X					
		0					X			Boring Terminated, at 2:15 PM - 3.8 cy used

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill

Project #: 13354x8

Location: SE Landfill

Inspector: KJ

Contractor: Earthtech

Pin #: C3

Date Drilled: 2/12/2013 and 2/13/2013

Date Grouted: 2/13/2013 & 2/14/2013

Total Depth: 255

Total Grout: Total of 18.3 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
2/13/2013	4	255	131	200						SOT #4 (11:47 AM) - TC
		250	147	200						EOT #4 (12:00 PM) - TC
	5	245	14	>200						SOT #5 (4:00 PM) - TC
		240	20	200						TC
		235	22	200						TC
		230	50	200						TC
		225	58	200						TC
		220	95	200						TC
		215	101	215						TC
		210	146	200						TC
		205	158	225						TC
		200	169	225						TC
		195	184	225						TC
		190	198	225						TC
		185	218	225						TC
		180	236	225						TC
		175	259	225						TC
		170	282	200						TC
		165	290	200						TC
		160	297	250+						TC

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill

Project #: 13354x8

Location: SE Landfill

Inspector: KJ

Contractor: Earthtech

Pin #: C3

Date Drilled: 2/13/2013

Date Grouted: 2/13/2013 & 2/14/2013

Total Depth: 255

Total Grout: Total of 18.3 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
2/13/2013	5	155	300	250+						TC
		150	300	200						TC
		145	301	200						TC
		140	301	200						Target Depth - Pump and pull (4:58 PM)
		135	302	200						
		130	303	200						
		125	304	200						
		120	307	200						
		115	308	200						
		110	309	200						
		105	309	200						
		100	310	200						
		95	311	200						
		90	312	200						
		85	312	200						
		80	313	200			X			
		75	313	200						
		70	314	200						
		65	314	200						
		60	315	200						

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC** = Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill **Pin #:** C3
Project #: 13354x8 **Date Drilled:** 2/13/2013
Location: SE Landfill **Date Grouted:** 2/13/2013 & 2/14/2013
Inspector: KJ **Total Depth:** 80 ft
Contractor: Earthtech **Total Grout:** Total of 18.3 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
2/13/2013	5	55	315	200						
		50	316	200						
		45	316	200						
		40	317	200						EOT#5 (3:15 PM)
2/14/2013	6	80	34	250						HDR, AMEC and ET decided to regrout the upper portion of C3, - Hit old grout at 80 ft - SOT #6 (1:40 PM)
		75	36	300						
		70	39	350						
		65	41	350						
		60	45	350						
		55	48	340						
		50	51	325						
		45	53	350						
		40	55	350						
		35	71	350						
		30	87	350						
		25	89	350						
		20	91	350						
		15	94	350						
		10	95	300						
		5	99	200			X			
		0	100	150			X			completed point used additional 3.3 cy for a total of 18.3 cy

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill

Project #: 13354x8

Location: SE Landfill

Inspector: KJ

Contractor: Earthtech

Pin #: P1

Date Drilled: 2/22/2013

Date Grouted: 2/25/2013 & 2/26/2013

Total Depth: 230

Total Grout: Abandoned

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
2/25/2013	21	230	--	--	X					TC lifted without pumping
		225	--	--	X					TC lifted without pumping
		220	46	300	X					SOT#21 at 9:00 AM - Line pressure 300 psi
		215	--	300	X					pipe getting stuck in ground - moved to another point will continue on 2/26
2/26/2013	24	210	36	350	X					re-drilled to 210, encountered grout, SOT#24, line pressure 300 psi
		205	56	350	X					TC
		200	57	>600	X					TC
		195	58	>600	X					TC
		190	64	>600	X					TC
		185	66	>600	X					TC, pipe stuck, unable to extract - hole abandoned (casing filled and left in place)
		180								1.9 cy used
		175								
		170								
		165								
		160								
		155								
		150								
		145								
		140								
		135								

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill
Project #: 13354x8
Location: SE Landfill
Inspector: KJ
Contractor: Earthtech

Pin #: P2
Date Drilled: 3/6/2013 & 3/7/2013
Date Grouted: 3/8/2013
Total Depth: 230
Total Grout: 1.9 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
3/8/2013	50	230	260-295	500						Cont. Truck#50 from 260 strokes at 9:59 AM - Line pressure 360 psi
		225	298	500						TC - pump and pull
		220	305	500						TC - pump and pull
		215	301	500						TC - pump and pull
		210	303	500						TC - pump and pull
		205	315	500						TC - pump and pull EOT#50 at 10:08 AM
3/8/2013	51	200	4	500						SOT#51 at 10:20 AM - Line pressure 380 psi - TC - pump and pull
		195	8	500						TC - pump and pull
		190	10	450						TC - pump and pull
		185	12	450						TC - pump and pull
		180	13	450						TC - pump and pull
		175	14	450						TC - pump and pull
		170	15	500						TC - pump and pull
		165	16	500						TC - pump and pull
		160								TC, pipe stuck, unable to extract using ramp - pipe sheared - hole abandoned (casing filled and left in place)
		155								
		150								
		145								
		140								
		135								

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC** = Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill
Project #: 13354x8
Location: SE Landfill
Inspector: MC
Contractor: Earthtech

Pin #: P3
Date Drilled: 3/7/2013
Date Grouted: 3/8/2013
Total Depth: 230
Total Grout: 8.6 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
3/8/2013	50	230	49	580	X					SOT#50 at 8:35 AM - line pressure = 360 PSI
		225	53	580	X					TC - pump and pull
		220	58	600	X					
		215	63	600	X					
		210	105	500						TC - pump and pull
		205	119	500						TC - pump and pull
3/8/2013	51	200	149	450						TC - pump and pull
		195	192	450						TC - pump and pull
		190	200	600						
		185	203	600						TC - pump and pull
		180	204	600						TC - pump and pull
		175	205	600						TC - pump and pull
		170	207	600						
		165	208	600						
		160	209	600						TC - pump and pull
		155	211	600						TC - pump and pull
		150	214	600						
		145	216	600						
		140	218	600						
		135	219	600						

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill

Project #: 13354x8

Location: SE Landfill

Inspector: MC

Contractor: Earthtech

Pin #: P3

Date Drilled: 3/7/2013

Date Grouted: 3/8/2013

Total Depth: 230

Total Grout: 8.6 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
		130	220	600	X					TC - pump and pull
		125	220	600	X					TC - pump and pull
		120-110	224	450						Pump & Pull Zone
		110-100	227	450						
		100-90	231	400						
		90-80	234	400						
		80-70	240	400						
		70-60	243	400						
		60-50	246	400						
		50-40	250	400						
		40-30	253	400						
		30-20	256	400						
		20-10	259	400						
		10-0'	260	400						Point Completed at 9:30 AM with 8.6 cy

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill

Project #: 13354x8

Location: SE Landfill

Inspector: RK

Contractor: Earthtech

Pin #: P4

Date Drilled: 3/11/2013

Date Grouted: 3/12/2013

Total Depth: 240

Total Grout: 7.1 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
3/12/2013	53	240	159-202	620	X					Cont. Truck#53 from 159 strokes at 9:53 AM - Line pressure 400 psi
		235	204	620						
		230	209	500	X					TC - pump and pull
		225	210	450						
		220	214	620	X					TC - pump and pull
		215	220	550						
		210	249	500						TC - pump and pull
		205	277	550						TC - pump and pull
		200	295	650	X					TC - pump and pull
		195	302	650	X					
		190	304	650						
		185	308	650						
		180	309	650						
		175	311	700						
		170	313	680						
		165	315	650						
		160	317	650						
		155	319	600						
		150	321	650						
		145	324	650						

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill

Project #: 13354x8

Location: SE Landfill

Inspector: RK

Contractor: Earthtech

Pin #: P4

Date Drilled: 3/11/2013

Date Grouted: 3/12/2013

Total Depth: 240

Total Grout: 7.1 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
3/11/2013	53	140	324							Start of Pump and pull Zone
	53/54	135	324							EOT#53 at 10:30 AM - SOT#54 at 12:15 PM - Line pressure 400 psi
	54	130-120	23							
	54	120-110	27							
	54	110-100	31							
	54	100-90	37							
	54	90-80	43							
	54	80-70	48							
	54	70-60	51							
	54	60-50	55							
	54	50-40	58							
	54	40-30	61							
	54	30-20	64							
	54	20-10	67							
	54	10-0'	70				X			Point Completed at 12:40 PM with 7.1 cy

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill

Project #: 13354x8

Location: SE Landfill

Inspector: KJ

Contractor: Earthtech

Pin #: P5

Date Drilled: 2/27/2013

Date Grouted: 2/28/2013

Total Depth: 240

Total Grout: 3.2 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
2/28/2013	32	240	136	>650	X					Cont. Truck#32 from 111 strokes at 2:00 PM - Line pressure 325 psi
		235	138	>650	X					
		230	140	>700	X					
		225	142	>700	X					
		220	144	>700	X					
		215	146	>700	X					
		210	148	>700	X					
		205	150	>700	X					
		200	152	>700	X					
		195	154	>700	X					
		190	156	>700	X					
		185	158	>700	X					
		180	159	>750	X					
		175	160	>750	X					
		170	161	>800	X					
		165	163	>800	X					
		160	164	>750	X					
		155	165	>750	X					
		150	166	>750	X					
		145	167	>750	X					

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill

Project #: 13354x8

Location: SE Landfill

Inspector: KJ

Contractor: Earthtech

Pin #: P5

Date Drilled: 2/27/2013

Date Grouted: 2/28/2013

Total Depth: 240

Total Grout: 3.2 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
2/28/2013	32	140	168	>750	X					Pump & Pull Zone
		135	169	>750	X					
		130	170	800	X					
		125	83	800	X					
		120	172	800	X					
		115	88	800	X					
		110	174	800	X					
		105	95	800	X					
		100-90	176	800	X					
		90-80	179	750	X					
		80-70	182	650	X					
		70-60	185	600	X					
		60-50	189	600	X					
		50-40	192	600	X					
		40-30	196	450						
		30-20	199	450						
		20-10	204	450						
		10-0'	207	450			X			Point Completed at 1:55 PM with 3.2 cy

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill

Project #: 13354x8

Location: SE Landfill

Inspector: KJ

Contractor: Earthtech

Pin #: P7

Date Drilled: 2/28/2013

Date Grouted: 2/28/2013

Total Depth: 240

Total Grout: 8.3 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
2/28/2013	34	240	29	500	X					SOT#34 at 4:55 AM - Line pressure 300 psi
		235	36	500	X					
		230	43	550	X					
		225	49	550	X					
		220	54	550	X					
		215	83	550	X					
		210	112	550	X					
		205	126	550	X					
		200	139	>500	X					
		195	142	>500	X					
		190	145	>550	X					
		185	156	>550	X					
		180	167	550	X					
		175	177	550	X					
		170	187	525	X					
		165	190	525	X					
		160	193	600	X					
		155	195	600	X					
		150	197	>700	X					
		145	198	>700	X					

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill

Project #: 13354x8

Location: SE Landfill

Inspector: KJ

Contractor: Earthtech

Pin #: P7

Date Drilled: 2/28/2013

Date Grouted: 2/28/2013

Total Depth: 240

Total Grout: 8.3 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
2/28/2013	34	140-130	199	>700	X					Pump & Pull Zone
		130-120	203	>700	X					
		120-110	206	700	X					
		110-100	208	700	X					
		100-90	211	700	X					
		90-80	214	700	X					
		80-70	218	600	X					
		70-60	222	600	X					
		60-50	228	400						
		50-40	233	400						
		40-30	238	400						
		30-20	242	400						
		20-10	245	400						
		10-0'	250	400			X			Point Completed at 6:06 PM with 8.3 cy

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill

Project #: 13354x8

Location: SE Landfill

Inspector: KJ

Contractor: Earthtech

Pin #: P6

Date Drilled: 2/27/2013 & 2/28/2013

Date Grouted: 2/28/2013

Total Depth: 240

Total Grout: 3.7 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
2/28/2013	32	240	31	600	X					SOT#32 at 11:40 AM - Line pressure 300 psi
		235	33	600	X					
		230	35	650	X					
		225	38	650	X					
		220	40	700	X					
		215	43	700	X					
		210	45	700	X					
		205	48	700	X					
		200	50	650	X					
		195	53	650	X					
		190	55	650	X					
		185	58	650	X					
		180	60	650	X					
		175	63	650	X					
		170	65	650	X					
		165	67	650	X					
		160	68	>700	X					
		155	70	>700	X					
		150	71	>700	X					
		145	73	>700	X					

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill

Project #: 13354x8

Location: SE Landfill

Inspector: KJ

Contractor: Earthtech

Pin #: P6

Date Drilled: 2/27/2013 & 2/28/2013

Date Grouted: 2/28/2013

Total Depth: 240

Total Grout: 3.7 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
2/28/2013	32	140	74	>700	X					Pump & Pull Zone
		135	75	>700	X					
		130	76	800	X					
		125	77	800	X					
		120-110	78	800	X					
		110-100	81	800	X					
		100-90	84	800	X					
		90-80	86	800	X					
		80-70	89	800	X					
		70-60	92	750	X					
		60-50	95	650	X					
		50-40	99	600	X					
		40-30	102	600	X					
		30-20	105	600	X					
		20-10	108	450						
		10-0'	111	450			X			Point Completed at 12:55 PM with 3.7 cy

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill

Project #: 13354x8

Location: SE Landfill

Inspector: KJ

Contractor: Earthtech

Pin #: P8

Date Drilled: 2/26/2013

Date Grouted: 2/26/2013

Total Depth: 240

Total Grout: 4.0 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
2/26/2013	25	240	24	600	X					SOT#25 at 3:20 PM - Line pressure 300 psi
		235	29	600	X					
		230	34	>650	X					
		225	36	>650	X					
		220	38	>800	X					
		215	40	>800	X					issues with pipe alignment, corrected immediately
		210	42	>700	X					issues with pipe alignment, corrected immediately
		205	44	>700	X					issues with pipe alignment, corrected immediately
		200	46	>700	X					issues with pipe alignment, corrected immediately
		195	48	>700	X					issues with pipe alignment, corrected immediately
		190	50	>700	X					issues with pipe alignment, corrected immediately
		185	52	>700	X					issues with pipe alignment, corrected immediately
		180	54	>700	X					issues with pipe alignment, corrected immediately
		175	57	>700	X					issues with pipe alignment, corrected immediately
		170	59	>700	X					issues with pipe alignment, corrected immediately
		165	62	>700	X					issues with pipe alignment, corrected immediately
		160	65	>600	X					issues with pipe alignment, corrected immediately
		155	68	>600	X					issues with pipe alignment, corrected immediately
		150	70	>700	X					issues with pipe alignment, corrected immediately
		145	72	>700	X					issues with pipe alignment, corrected immediately

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill

Project #: 13354x8

Location: SE Landfill

Inspector: KJ

Contractor: Earthtech

Pin #: P8

Date Drilled: 2/26/2013

Date Grouted: 2/26/2013

Total Depth: 240

Total Grout: 4.0 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
2/26/2013	25	140-130	73	800	X					Pump & Pull Zone
		130-120	77	800	X					
		110-100	81	600	X					issues with pipe alignment, corrected immediately
		100-90	83	600	X					issues with pipe alignment, corrected immediately
		90-80	85	600	X					issues with pipe alignment, corrected immediately
		80-70	88	600	X					issues with pipe alignment, corrected immediately
		70-60	91	600	X					issues with pipe alignment, corrected immediately
		60-50	95	600	X					issues with pipe alignment, corrected immediately
		50-40	98	600	X					issues with pipe alignment, corrected immediately
		40-30	102	600	X					issues with pipe alignment, corrected immediately
		30-20	106	400						issues with pipe alignment, corrected immediately
		20-10	109	400						issues with pipe alignment, corrected immediately
		10-0'	114	400			X			Point Completed at 5:20 PM with 4.0 cy

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: _ SE COUNTY Landfill

Project #: _____ **13354x8**

Location: _____ SE Landfill

Inspector: _____ **KJ**

Contractor: _____ Earthtech

Pin #: _ **P9**

Date Drilled: _____ 2/18/2013 and 2/19/2013

Date Grouted: _____ 2/19/2013

Total Depth: _____ 240

Total Grout: _____ 2.5 cy - Pipe Plugged

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
2/19/2013	8	240	36	700						SOT #8 - at 10:51 AM - Line pressure 425 psi
		235	43	690						
		230	44	>800	X					
		225	46	>800	X					High Pressure, possibly plugged
		220	47	>800	X					Back Stroke
		215	48	>800	X					
		210	49	>800	X					Back Stroke
		205	50	>800	X					
		200	51	>800	X					Back Stroke
		195	52	>800	X					
		190	53	>800	X					Back Stroke
		185	54	>800	X					
		180	55	>800	X					Back Stroke
		175	56	>800	X					
		170	57	>800	X					Back Stroke
		165	58	>800	X					
		160	59	>800	X					Back Stroke
		155	60	>800						
		150	61	>800						Back Stroke
		145	62	>800						

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: _ SE COUNTY Landfill

Pin #: _ P9

Project #: _ 13354x8

Date Drilled: _ 2/18/2013 and 2/19/2013

Location: _ SE Landfill

Date Grouted: _ 2/19/2013

Inspector: _ KJ

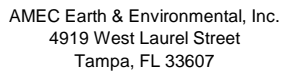
Total Depth: _ 240

Contractor: _ Earthtech

Total Grout: _ 2.5 cy - Pipe Plugged

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
2/19/2013	8	140	63	>800						Back Stroke
		135	63	>400						Start of Pump & Pull Zone - Pressure not reseding
		130	64	>400						
		125	64	>400						
		120	65	>400						
		115	65	>400						
		110	66	>400						
		105	66	>400						
		100	67	>400						
		95	67	>400						
		90	68	>400						
		85	68	>400						
		80	69	>400						
		75	69	>400						
		70	70	>400						
		65	70	>400						
		60	71	>400						
		55	71	>400						
		50	72	>400						
		45	72	>400						

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



Project Name: _ SE COUNTY Landfill

Location: _____ SE Landfill

Contractor: Earthtech

Date Drilled: 2/18/2013 and 2/19/2013

Date Grouted: _ 2/19/2013

Total Depth: 240

Total Grout: 2.5 cy - Pipe Plugged

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill

Pin #: P9

Project #: 13354x8

Date Drilled: 2/18/2013 and 2/19/2013

Location: SE Landfill

Date Grouted: 2/19/2013

Inspector: KJ

Total Depth: 240

Contractor: Earthtech

Total Grout: 13.5 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
2/19/2013	10	225	33	500	X					Pushed casing back to 225 ft - SOT#10 at 4:00 PM Line pressure 300 psi
		220	36	500	X					
		215	140	620	X					
		210	141	>800	X					
		205	142	>800	X					
	11	200	150 / 55	600	X					EOT#10 at 4:35 PM - SOT #11 at 5:30 PM - Line Plugged, fixed immediately - Line pressure 400
		195	61	600	X					
		190	64	600	X					
		185	66	600	X					
		180	69	600	X					
		175	72	600	X					
		170	74	600	X					
		165	77	600	X					
		160	80	600	X					
		155	84	600	X					
		150	130	600	X					
		145	138	600	X					
		140	140	600	X					Pump & Pull Zone
		135	144	600	X					
		130	145	600	X					

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC** = Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: _ SE COUNTY Landfill

Pin #: _ P9

Project #: _ 13354x8

Date Drilled: _ 2/18/2013 and 2/19/2013

Location: _ SE Landfill

Date Grouted: _ 2/19/2013

Inspector: _ KJ

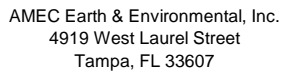
Total Depth: _ 240

Contractor: _ Earthtech

Total Grout: _ 13.5 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
2/19/2013	11	125	146	600	X					
		120	147	600	X					
		115	148	500						
		110	149	500						
		105	150	500						
		100	152	500						
		95	153	500						
		90	155	500						
		85	156	500						
		80	158	500						
		75	160	500						
		70	163	500						
		65	164	500						
		60	166	500						
		55	168	500						
		50	169	500						
		45	172	500						
		40	173	500						
		35	174	500						
		30	175	500						

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



Project Name: _ SE COUNTY Landfill	Pin #: _ P9
Project #: _____ 13354x8	Date Drilled: __ 2/18/2013 and 2/19/2013
Location: __ SE Landfill	Date Grouted: _ 2/19/2013
Inspector: __ KJ	Total Depth: __ 240
Contractor: __ Earthtech	Total Grout: __ 13.5 cy

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: _ SE COUNTY Landfill

Project #: _____ 13354x8

Location: _____ SE Landfill

Inspector: _____ KJ

Contractor: _____ Earthtech

Pin #: _ P10

Date Drilled: _____ 2/20/2013

Date Grouted: _____ 2/20/2013

Total Depth: _____ 265

Total Grout: _____ 16.5 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
2/20/2013	13	265	49	600	X					SOT#13 at 4:00 PM Line pressure 400 psi
		260	55	600	X					
		255	59	600	X					
		250	65	600	X					
		245	69	600	X					
		240	75	600	X					
		235	80	600	X					
		230	92	600	X					
		225	117	550	X				X	TC - hard to rotate pipe
		220	200	600	X					
		215	229	600	X				X	TC - hard to rotate pipe
		210	251	600	X					
		205	300	600	X					EOT#13 at 2:55PM
	14	200	30	600	X					SOT#14 at 3:35 - 22 - 23 strokes to fill pipe - Line pressure 400 psi
		195	35	600	X					
		190	37	600	X					
		185	44	600	X			X		
		180	49	600	X					
		175	53	600	X					line flushed to clean pipe, no plug found - 20 strokes to fill pipe
		170	84	600	X					

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill

Project #: 13354x8

Location: SE Landfill

Inspector: KJ

Contractor: Earthtech

Pin #: P10

Date Drilled: 2/20/2013

Date Grouted: 2/20/2013

Total Depth: 265

Total Grout: 16.5 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
2/19/2013	14	165	101	600	X			X		
		160	104	600	X					
		155	108	600						
		150	113	600						
		145	129	600						Start of Pump & Pull Zone - no compaction required
		140	131	400						
		135	133	400						
		130	135	400						
		125	138	400						
		120	139	400						
		115	140	400						
		110	141	400						
		105	142	400						
		100	143	400						
		95	145	400						
		90	147	400						
		85	148	400						
		80	150	400						
		75	153	400						
		70	155	400						

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
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Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill **Pin #:** P10
Project #: 13354x8 **Date Drilled:** 2/20/2013
Location: SE Landfill **Date Grouted:** 2/20/2013
Inspector: KJ **Total Depth:** 265
Contractor: Earthtech **Total Grout:** 16.5 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
2/19/2013	14	65	157	400						
		60	159	400						
		55	161	400						
		50	163	400						
		45	165	400						
		40	167	400						
		35	169	400						
		30	171	400						
		25	173	400						
		20	177	400						
		15	185	400						
		10	194	400						
		5	196	400						
		0					X			used 10 cy + 6.5 cy. Finished point at 6:30 PM - Due to low take within soft zone, secondary points are recommended
										no plugs found in casing after extraction

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: _ SE COUNTY Landfill

Project #: _____ 13354x8

Location: _____ SE Landfill

Inspector: _____ KJ

Contractor: _____ Earthtech

Pin #: _ P11

Date Drilled: _____ 2/21/2013

Date Grouted: _____ 2/21/2013

Total Depth: _____ 251

Total Grout: _____ 13.2 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
2/21/2013	15	251	50	>500	X					SOT#15 at 2:39 PM Line pressure 300 psi
		245	58	600	X					
		240	69	>600	X					
		235	73	>600	X					
		230	77	>600	X					
		225	82	600	X					
		220	86	600	X					
		215	91	600	X					
		210	96	600	X					
		205	99	600	X					
		200	102	600	X					
		195	107	600	X					
		190	111	550	X					
		185	118	550	X					
		180	125	500	X					
		175	135	500	X					
		170	144	500	X					soft
		165	159	500	X					soft
		160	190	>500	X					soft
		155	209	>500	X					soft

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill

Project #: 13354x8

Location: SE Landfill

Inspector: KJ

Contractor: Earthtech

Pin #: P11

Date Drilled: 2/21/2013

Date Grouted: 2/21/2013

Total Depth: 251

Total Grout: 13.2 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
2/21/2013	15	150	299	400	X					soft
	15/16	145	329 / 43	>400	X					EOT#15 at 12:02 PM / SOT#16 at 1:15 PM - Line pressure 150 psi
		140	47	>500	X					
		130-120	50	350	X					Start of Pump & Pull Zone
		120-110	52	400	X					
		110-100	54	>500	X					
		100-90	56	>600	X					
		90-80	59	>600	X					
		80-70	64	>600	X					
		70-60	71	>600	X					
		60-50	76	>600	X					
		50-40	78	>600	X					
		40-30	84	>600	X					
		30-20	88	600	X					
		20-10	93	600	X					
		10-0'	93	600	X		X			Point Completed at 2:05 PM with 13.2 cy

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: _ SE COUNTY Landfill

Project #: _____ 13354x8

Location: _____ SE Landfill

Inspector: _____ KJ

Contractor: _____ Earthtech

Pin #: _ P12

Date Drilled: _____ 2/21/2013

Date Grouted: _____ 2/22/2013

Total Depth: _____ 241

Total Grout: _____ 4.6 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
2/22/2013	19	241	60	>600	X					Cont. T#19 from 43 strokes at 10:59 AM Line pressure 300 psi
		235	67	>600	X					
		230	77	>600	X					
		225	82	>600	X					
		220	86	>600	X					
		215	88	>600	X					
		210	90	>600	X					
		205	92	>600	X					
		200	94	>600	X					
		195	97	>600	X					
		190	100	>600	X					
		185	104	>600	X					
		180	107	>600	X					
		175	110	>600	X					
		170	112	>600	X					
		165	120	>600	X					
		160	128	>600	X					
		155	131	580	X					
		150	134	400	X					
		145	136	400	X					

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill

Project #: 13354x8

Location: SE Landfill

Inspector: KJ

Contractor: Earthtech

Pin #: P12

Date Drilled: 2/21/2013

Date Grouted: 2/22/2013

Total Depth: 241

Total Grout: 4.6 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
2/22/2013	19	140-130	138	450	X					Start of Pump & Pull Zone
		130-120	142	480	X					
		120-110	145	500	X					
		110-100	148	>600	X					
		100-90	151	>600	X					
		90-80	153	>600	X					
		80-70	157	>500	X					
		70-60	161	>500	X					
		60-50	165	>400						
		50-40	168	>400						
		40-30	172	>400						
		30-20	176	>350						
		20-10	179	>350						
		10-0'	181	>350			X			Point Completed at 12:08 PM AM with 4.6 cy

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill

Project #: 13354x8

Location: SE Landfill

Inspector: KJ

Contractor: Earthtech

Pin #: P13

Date Drilled: 2/21/2013

Date Grouted: 2/21/2013

Total Depth: 240

Total Grout: 4.5 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
2/21/2013	20	240	30	>650	X					SOT#20 at 2:39 PM Line pressure 350 psi
		235	35	>650	X					
		230	38	>650	X					
		225	41	>650	X					
		220	44	>650	X					
		215	47	>650	X					
		210	51	>650	X					
		205	55	>650	X					
		200	57	>650	X					
		195	59	>650	X					
		190	61	>650	X					
		185	63	>650	X					
		180	65	>650	X					
		175	67	>650	X					
		170	69	>600	X					
		165	72	>600	X					
		160	75	>600	X					
		155	78	>600	X					
		150	81	>600	X					
		145	84	>600	X					

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill

Project #: 13354x8

Location: SE Landfill

Inspector: KJ

Contractor: Earthtech

Pin #: P13

Date Drilled: 2/21/2013

Date Grouted: 2/21/2013

Total Depth: 240

Total Grout: 4.5 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
2/19/2013	20	140-130	88	550	X					Start of Pump & Pull Zone
		130-120	91	>500	X					
		120-110	94	600	X					
		110-100	97	600	X					
		100-90	100	600	X					
		90-80	104	600	X					
		80-70	108	600	X					
		70-60	112	600	X					
		60-50	115	600	X					
		50-40	118	600	X					
		40-30	122	500						
		30-20	126	400						
		20-10	131	450						
		10-0'	137	450			X			Point Completed at 3:35 PM with 4.5 cy

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: _ SE COUNTY Landfill

Project #: _____ 13354x8

Location: _____ SE Landfill

Inspector: _____ KJ

Contractor: _____ Earthtech

Pin #: _ P14

Date Drilled: _____ 2/18/2013

Date Grouted: _____ 2/18/2013

Total Depth: _____ 280

Total Grout: _____ 4.1 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
2/18/2013	7	280	24	420						SOT #7 - (11:20 AM) - ine pressure 400 psi - TC
		275	38	450						TC
		270	41	470						TC
		265	45	480						TC
		260	47	480						TC
		255	49	470						TC
		250	52	480						TC
		245	54	480						TC
		240	56	475						TC
		235	58	480						TC
		230	61	450						TC
		225	63	480						TC
		220	65	480						TC
		215	67	480						TC
		210	69	470						TC
		205	70	480						TC
		200	71	470						TC
		195	73	480						TC
		190	75	470						TC
		185	77	480						TC

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: _ SE COUNTY Landfill

Pin #: _ P14

Project #: _ 13354x8

Date Drilled: _ 2/18/2013

Location: _ SE Landfill

Date Grouted: _ 2/18/2013

Inspector: _ KJ

Total Depth: _ 280

Contractor: _ Earthtech

Total Grout: _ 4.1 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
2/18/2013	7	180	79	470						TC
		175	81	480						TC
		170	83	480						TC
		165	85	460						TC
		160	87	480						TC
		155	89	480						TC
		150	91	460						TC
		145	95	480						TC
		140	97	480						Start of Pump & Pull Zone
		135	99	480						
		130	101	460						
		125	102	450						
		120	103	450						
		115	104	420						
		110	105	400						
		105	106	400						
		100	107	400						
		95	108	400						
		90	109	400						
		85	110	400						

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: _ SE COUNTY Landfill

Pin #: _ P14

Project #: _ 13354x8

Date Drilled: _ 2/18/2013

Location: _ SE Landfill

Date Grouted: _ 2/18/2013

Inspector: _ KJ

Total Depth: _ 280

Contractor: _ Earthtech

Total Grout: _ 4.1 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
2/18/2013	7	80	112	400						
		75	113	400						
		70	114	400						
		65	114	400						
		60	115	420						
		55	115	400						
		50	116	400						
		45	116	400						
		40	117	420						
		35	117	400						
		30	118	400						
		25	118	400						
		20	119	420						
		15	120	420						
		10	121	420						
		5	123	400			X			
		0	123	200			X			completed point used 4.1 cy

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: _ SE COUNTY Landfill

Project #: _____ **13354x8**

Location: _____ SE Landfill

Inspector: _____ **KJ**

Contractor: _____ Earthtech

Pin #: _ **P15**

Date Drilled: _____ **2/22/2013 & 2/25/2013**

Date Grouted: _____ **2/25/2013**

Total Depth: _____ **240**

Total Grout: _____ **4.0 cy**

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
2/25/2013	21	240	64	550	X					Cont. Truck#21 from 46 strokes at 9:52 AM Line pressure 300 psi
		235	88	>550	X					
		230	94	>600	X					
		225	97	>600	X					
		220	100	>600	X					
		215	103	>600	X					
		210	105	>600	X					
		205	107	>600	X					
		200	108	>600	X					
		195	109	>600	X					
		190	110	>600	X					
		185	112	>600	X					
		180	113	>600	X					
		175	116	>600	X					
		170	118	>600	X					
		165	121	>600	X					
		160	123	>600	X					
		155	124	>600	X					
		150	125	>650	X					
		145	126	>650	X					

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill

Project #: 13354x8

Location: SE Landfill

Inspector: KJ

Contractor: Earthtech

Pin #: P15

Date Drilled: 2/22/2013 & 2/25/2013

Date Grouted: 2/25/2013

Total Depth: 240

Total Grout: 4.0 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
2/25/2013	21	140-130	127	>650	X					Pump & Pull Zone
		130-120	129	600	X					
		120-110	133	600	X					
		110-100	137	>600	X					issues with pipe alignment, corrected immediately
		100-90	138	500	X					issues with pipe alignment, corrected immediately
		90-80	140	500	X					issues with pipe alignment, corrected immediately
		80-70	143	>550	X					issues with pipe alignment, corrected immediately
		70-60	146	>550	X					issues with pipe alignment, corrected immediately
		60-50	149	>550						issues with pipe alignment, corrected immediately
		50-40	152	>550						
		40-30	155	>550						
		30-20	159	400						
		20-10	162	400						
		10-0'	166	400			X			Point Completed at 10:30 AM with 4.0 cy

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill

Project #: 13354x8

Location: SE Landfill

Inspector: KJ

Contractor: Earthtech

Pin #: P16

Date Drilled: 2/25/2013

Date Grouted: 2/25/2013

Total Depth: 241

Total Grout: 3.1 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
2/25/2013	22	241	33	600	X					SOT#22 at 2:02 PM - Line pressure 300 psi
		235	36	600	X					
		230	39	>600	X					
		225	41	>600	X					
		220	43	>600	X					
		215	45	>600	X					
		210	47	>600	X					
		205	49	>600	X					
		200	50	>600	X					
		195	52	>600	X					
		190	54	>600	X					
		185	56	>600	X					
		180	57	>600	X					
		175	59	>600	X					
		170	60	>600	X					
		165	62	>600	X					
		160	63	>600	X					
		155	64	>600	X					
		150	65	>600	X					
		145	66	>600	X					

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill

Project #: 13354x8

Location: SE Landfill

Inspector: KJ

Contractor: Earthtech

Pin #: P16

Date Drilled: 2/25/2013

Date Grouted: 2/25/2013

Total Depth: 241

Total Grout: 3.1 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
2/25/2013	22	140-130	67	600	X					Pump & Pull Zone
		130-120	69	>600	X					
		120-110	71	>600	X					issues with pipe alignment, corrected immediately
		110-100	73	>600	X					issues with pipe alignment, corrected immediately
		100-90	75	>600	X					issues with pipe alignment, corrected immediately
		90-80	77	>600	X					issues with pipe alignment, corrected immediately
		80-70	79	>600	X					issues with pipe alignment, corrected immediately
		70-60	81	>600	X					issues with pipe alignment, corrected immediately
		60-50	83	>600	X					issues with pipe alignment, corrected immediately
		50-40	85	>600	X					issues with pipe alignment, corrected immediately
		40-30	87	>600	X					
		30-20	89	>600	X					
		20-10	91	>600	X					
		10-0'	93	300			X			Point Completed at 3:32 PM with 3.1 cy

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill

Project #: 13354x8

Location: SE Landfill

Inspector: KJ

Contractor: Earthtech

Pin #: P17

Date Drilled: 2/25/2013 & 2/26/13

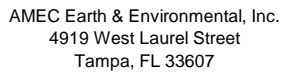
Date Grouted: 2/26/2013

Total Depth: 230

Total Grout: 3.8 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
2/26/2013	23	230	42	>600	X					SOT#23 at 8:37 AM - Line pressure 300 psi
		225	43	>600	X					
		220	44	>600	X					
		215	48	>600	X					
		210	52	>600	X					
		205	54	>600	X					
		200	56	>600	X					
		195	58	>600	X					
		190	60	>600	X					
		185	62	>600	X					
		180	63	>650	X					
		175	65	>650	X					
		170	66	>650	X					
		165	68	>650	X					
		160	70	>650	X					
		155	72	>650	X					
		150	73	>650	X					
		145	74	>650	X					
		140	75	>650	X					
		135	76	>650	X					

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



Project Name: _ SE COUNTY Landfill

Location: _____ SE Landfill

Contractor: Earthtech

Date Drilled: 2/25/2013 & 2/26/13

Date Grouted: 2/26/2013

Total Depth: 230

Total Grout: 3.8 cy

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill
Project #: 13354x8
Location: SE Landfill
Inspector: KJ
Contractor: Earthtech

Pin #: P18
Date Drilled: 2/26/2013 & 2/27/2013
Date Grouted: 2/27/2013 & 2/28/2013 & 3/1/2013
Total Depth: 230
Total Grout: 79.8 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
2/27/2013	26	230	58	500						SOT#26 at 11:45 AM - Line pressure 500 psi
		225	106	650						TC - pump and pull to prevent getting stuck
	26 / 27	220	150 / 84	650 / 650						EOT#26 at 12:00 PM / SOT#27 at 1:10 PM - Line pressure 500 psi
		215	300	600						TC - pump and pull EOT#27 at 1:37 PM
	28	210	53	550						SOT#28 at 2:20 PM - Line pressure 500 psi
2/27/2013 2/28/2013	28 / 29 / 30	205	300/330/75	550 / 500 / 620						EOT#28 at 3:06 PM / SOT#29 at 4:45 PM - Line pressure 500 psi / EOT#29 at 5:15 PM / SOT#30 at 8:35 AM - Line pressure 500 psi /
		200	77	750	X					TC - pump and pull
		195	300	620						TC - pump and pull EOT#30 at 9:10 AM
	31 / 32 / 33	190	300 / from 207 to 300 / 83	600 / 500 / 500						SOT#31 at 10:06 AM - Line pressure 550 psi - EOT#31 at 10:40 PM / Cont T#32 from 207 strokes - Line pressure 400 psi - EOT#32 at 2:20 PM / SOT#33 at 3:10 PM - Line pressure 400 psi
		185	173	500						TC - pump and pull
		180	198	500						TC - pump and pull
	33 / 34	175	300 / from 260 to 300	500						Cont Truck #34 at 6:06 PM from 260 strokes - Line pressure 400 psi - EOT #34 at 6:15 PM - TC - pump and pull
3/1/2013	35	170	34	600	X					SOT#35 at 8:35 AM - Line pressure 400 psi
		165	45	600	X					
		160	227	600	X					
		155	231	600	X					
		150	233	600	X					

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill

Project #: 13354x8

Location: SE Landfill

Inspector: KJ

Contractor: Earthtech

Pin #: P18

Date Drilled: 2/26/2013 & 2/27/2013

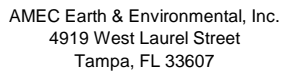
Date Grouted: 2/27/2013 & 2/28/2013 & 3/1/2013

Total Depth: 230

Total Grout: 79.8 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
3/1/2013	35	145	236	600	X					
		140	239	620	X					
		135	241	620	X					Pump & Pull Zone
		130	243	600	X					
		125	246	600	X					
		120	248	600	X					
		115	249	700	X					
		110	251	500	X					
		105	254	600	X					
		100	256	550	X					
		95	259	600	X					
		90	260	450						
		85	261	600	X					
		80	263	600	X					
		75	265	450						
		70	267	400						
		65	269	400						
		60	271	400						
		55	275	400						
		50	279	400						

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



Project Name: _ SE COUNTY Landfill

Location: _____ SE Landfill

Contractor: Earthtech

Date Drilled: 2/26/2013 & 2/27/2013

Date Grouted: 2/27/2013 & 2/28/2013 & 3/1/2013

Total Depth: 230

Total Grout: 79.8 cy

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill
Project #: 13354x8
Location: SE Landfill
Inspector: KJ
Contractor: Earthtech

Pin #: P19
Date Drilled: 3/1/2013
Date Grouted: 3/1/2013 & 03/04/2013 & 03/05/2013
Total Depth: 230
Total Grout: 49 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
3/1/2013	37	230	123	500						SOT#37 at 3:11 PM - Line pressure 350 psi / TC - pump and pull
		225	246	500						TC - pump and pull
	37 / 38	220	311 / from 201 to 262	600	X					EOT#37 at 3:40 PM / SOT#38 at 6:30PM - Line pressure 300 psi / TC - pump and pull
3/4/2013	38 / 39	215	300 / 34	500 /					X	EOT#38 at 7:10 PM / SOT#39 at 8:38 AM - Line pressure 400 psi / TC - pump and pull
		210	39	500					X	TC - pump and pull
		205	166	500					X	TC - pump and pull
	39 / 40 / 41	200	310 / 315 / from 235 to 303	450						EOT#39 at 9:02 AM / SOT#40 at 2:10 PM - Line pressure 400 psi - EOT#40 at 1:34 PM / Cont T#41 from 235 strokes at 2:10 PM - Line pressure 400 psi - EOT #41 at 2:45 PM
	42	195	60	500						SOT#42 at 3:25 PM - Line pressure 350 psi / TC - pump and pull
		190	65	600	X					
		185	67	600	X					
		180	69	600	X					
		175	139	500	X				X	
		170	200	500					X	TC - pump and pull
		165	283	500					X	TC - pump and pull
3/4/2013 / 3/5/2013	42 / 43	160	310 / 32	600	X					EOT#42 at 3:50 PM / SOT#43 - Line pressure 400 psi
		155	36	600	X				X	TC
		150	39	500					X	TC - pump and pull
		145	41	500						TC - pump and pull

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill

Project #: 13354x8

Location: SE Landfill

Inspector: KJ

Contractor: Earthtech

Pin #: P19

Date Drilled: 3/1/2013

Date Grouted: 3/1/2013 & 03/04/2013 & 03/05/2013

Total Depth: 230

Total Grout: 49 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
3/5/2013	43	140	43	600	X					
		135	47	600	X					
		130	50	500						Start of Pump & Pull Zone
		125	52	500						
		120	53	500						
		115	55	500						
		110	57	500						
		105	58	500						
		100	59	550						
		95	61	550						
		90	63	450						
		85	65	450						
		80	68	450						
		75	70	450						
		70	72	400						
		65	74	400						
		60	77	400						
		55	79	400						
		50	82	400						
		45	85	400						

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill

Project #: 13354x8

Location: SE Landfill

Inspector: KJ

Contractor: Earthtech

Pin #: P20

Date Drilled: 3/4/2013 & 3/5/2013

Date Grouted: 3/5/2013 & 3/6/2013

Total Depth: 230

Total Grout: 26.3 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
3/5/2013	44	230	65	500						SOT#44 at 4:20 PM - Line pressure 400 psi / TC - pump and pull
		225	142	500						TC - pump and pull
		220	157	500						TC - pump and pull
		215	248	450						TC - pump and pull
3/5/2013 / 3/6/2013	44 / 45	210	310 / 285	450/600						TC - pump and pull / EOT#44 at 4:40 PM / Cont T#45 from 267 strokes - Line pressure 400 psi / TC - pump and pull
		205	300	600						TC - pump and pull EOT#45 at 11:15 PM
	46	200	181	450						SOT#46 at 11:36 PM - Line pressure 400 psi / TC - pump and pull
		195	300	450						TC - pump and pull / EOT#46 at 11:15 PM
	47	190	56	400						SOT#47 at 1:55 PM - Line pressure 400 psi / TC - pump and pull
		185	61	400						TC - pump and pull
		180	71	>600	X			X		TC - pump and pull
		175	73	>600	X			X		TC - pump and pull
		170	75	600	X			X		TC - pump and pull
		165	80	600	X			X		TC - pump and pull
		160	85	600	X					TC - pump and pull
		155	99	600	X					TC - pump and pull
		150	103	650	X					TC - pump and pull
		145	105	650	X					TC - pump and pull
		140	107	600	X					Start of Pump & Pull Zone
		135	109	600	X					

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill

Pin #: P20

Project #: 13354x8

Date Drilled: 3/4/2013 & 3/5/2013

Location: SE Landfill

Date Grouted: 3/5/2013 & 3/6/2013

Inspector: KJ

Total Depth: 230

Contractor: Earthtech

Total Grout: 26.3 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
3/6/2013	47	130	111	600	X					
		125	113	600	X					
		120-110	115	400						
		110-100	119	500						
		100-90	123	500						
		90-80	127	500						
		80-70	131	500						
		70-60	135	500						
		60-50	139	500						
		50-40	143	400						
		40-30	147	400						
		30-20	151	400						
		20-10	155	400						
		10-0'	159	400			X			Point Completed at 2:37 PM with 26.3 cy

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill
Project #: 13354x8
Location: SE Landfill
Inspector: RK
Contractor: Earthtech

Pin #: P21
Date Drilled: 2/21/2013
Date Grouted: 2/21/2013
Total Depth: 230
Total Grout: 21.4 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
2/21/2013	17	230	48	500	X					SOT#17 at 4:15 PM Line pressure 300 psi
		225	147	450						TC - pump and pull
2/21/2013 / 2/22/2013	17/18	220	317 / 43	350/550						EOT#17at 4:45 PM / SOT#18 at 9:00 AM - Line pressure 350 psi - TC
		215	240	350						TC- pump and pull
		210	290	350						TC- pump and pull
		205	291	350						TC- pump and pull
		200	292	480						TC- pump and pull
		195	293	480						TC- pump and pull
		190	294	550	X					
		185	295	550	X					
		180	296	600	X					
		175	297	620	X					TC
		170	298	550	X					
		165	301	550	X					
		160	304	500	X					
		155	306	580	X					
		150	309	580	X					
		145	310	580	X					
		140	312	400	X					Start of Pump & Pull Zone
		135	313	400	X					

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill

Project #: 13354x8

Location: SE Landfill

Inspector: RK

Contractor: Earthtech

Pin #: P21

Date Drilled: 2/21/2013

Date Grouted: 2/21/2013

Total Depth: 230

Total Grout: 21.4 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
2/22/2013	18	130	315	450	X					
		125	317	480	X					
		120-110	317	550	X					
		110-100	321	550	X					EOT#18at 10:25 AM
	19	100-90	5	200						SOT#19 at 10:45 AM - Line pressure 200 psi
		90-80	12	200						
		80-70	16	200						
		70-60	20	200						
		60-50	25	200						
		50-40	28	200						
		40-30	32	210						
		30-20	37	300						
		20-10	40	300						
		10-0'	43	300			X			Point Completed at 11:15 AM with 21.4 cy

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill

Project #: 13354x8

Location: SE Landfill

Inspector: RK

Contractor: Earthtech

Pin #: P22

Date Drilled: 3/19/2013

Date Grouted: 3/19/2013 & 3/21/2013

Total Depth: 250

Total Grout: 6 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
3/19/2013	71	250	55	550						Start # 71 line pressure 300 PSI
		245	56	550	X					TC - pump and pull
		240	58	550						TC - pump and pull
		235	60	580						TC - pump and pull
		230	64	550	X					TC - pump and pull
		225	85	580	X					TC - pump and pull
		220	89	580	X					TC - pump and pull - Pipe stuck in ground
										Used ram to extract casing
										Redrilled, encountered hard grout at 200.
3/21/2013	75	200	43	550	X					SOT#75 at 8:32 AM - Line pressure 250 psi
	75	195	45	550	X					
	75	190	46	600	X					
	75	185	49	600	X					
	75	180	51	500	X					
	75	175	53	500	X					
	75	170	56	550	X					
	75	165	58	550	X					
	75	160	59	700	X					
	75	155	60	700	X					

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill

Project #: 13354x8

Location: SE Landfill

Inspector: RK

Contractor: Earthtech

Pin #: P22

Date Drilled: 3/19/2013

Date Grouted: 3/19/2013 & 3/21/2013

Total Depth: 250

Total Grout: 6 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
3/21/2013	77	150	61	700	X					
	77	145	62	700	X					
	77	140-130	63	500	X					Start of Pump & Pull Zone
	77	130-120	65	600	X					
	77	120-110	67	650	X					
	77	110-100	69	650	X					
	77	100-90	71	650	X					
	77	90-80	73	650	X					
	77	80-70	75	650	X					Tight Casing
	77	70-60	77	650	X					
	77	60-50	79	650	X					
	77	50-40	81	400	X					
	77	40-30	83	400	X					
	77	30-20	85	400	X					
	77	20-10	87	400	X					
	77	10-0'	90	400	X		X			Point Completed at 9:10 AM PM with 6 cy

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill

Project #: 13354x8

Location: SE Landfill

Inspector: KJ

Contractor: Earthtech

Pin #: P23

Date Drilled: 3/21/2013

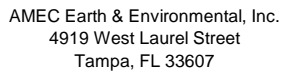
Date Grouted: 3/21/2013

Total Depth: 230

Total Grout: 3.4 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
3/21/2013	78	230	72	550	X					Cont. Truck#78 from 41 strokes at 3:55 PM - Line pressure 300 psi
	78	225	74	550	X					
	78	220	76	600	X					
	78	215	77	600	X					
	78	210	78	600	X					
	78	205	80	600	X					TC
	78	200	81	550	X					TC
	78	195	85	550	X					
	78	190	88	550	X					
	78	185	91	550	X					
	78	180	94	550	X					
	78	175	97	550	X					
	78	170	100	600	X					
	78	165	103	600	X					
	78	160	105	600	X					
	78	155	108	600	X					
	78	150	110	600	X					
	78	145	112	600	X					
	78	140-130	115	600	X					Start of Pump & Pull Zone
	78	130-120	117	600	X					

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **SL** = Structure Lift (less than 1/8 of an inch), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure, **PL** = Pipe Lift, **SD** = Structural Damage (Damage as a result of structural lift greater than 1/8 of an inch).



Project Name: _SE COUNTY Landfill	Pin #: _P23
Project #: _____13354x8	Date Drilled: __3/21/2013
Location: __SE Landfill	Date Grouted: __3/21/2013
Inspector: __KJ	Total Depth: __230
Contractor: __Earthtech	Total Grout: __3.4 cy

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **SL** = Structure Lift (less than 1/8 of an inch), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure, **PL** = Pipe Lift, **SD** = Structural Damage (Damage as a result of structural lift greater than 1/8 of an inch).



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill

Project #: 13354x8

Location: SE Landfill

Inspector: RK

Contractor: Earthtech

Pin #: P24

Date Drilled: 3/22/2013

Date Grouted: 3/22/2013

Total Depth: 235

Total Grout: 4.6 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
3/22/2013	80	235	0-37	550	X					SOT#80 at 1:20 PM - Line pressure 300 psi
	80	230	39	700	X					
	80	225								TC - pump and pull
	80	220	41	700	X					
	80	215	43	700	X					
	80	210	44	700	X					
	80	205	46	700	X					
	80	200	49	700	X					
	80	195	52	700	X					
	80	190	53	650	X					
	80	185	55	750	X					
	80	180	56	750	X					
	80	175	57	750	X					
	80	170	58	750	X					
	80	165	60	750	X					
	80	160	61	750	X					
	80	155	62	750	X					
	80	150	65	600	X					
	80	145	69	600	X					
	80	140	72	600	X					Start of Pump & Pull Zone

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill

Project #: 13354x8

Location: SE Landfill

Inspector: RK

Contractor: Earthtech

Pin #: P24

Date Drilled: 3/22/2013

Date Grouted: 3/22/2013

Total Depth: 235

Total Grout: 4.6 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
3/22/2013	80	135	74	620	X					
	80	130-120	77	500						
	80	120-110	91	550						
	80	110-100	96	700						
	80	100-90	89	500						
	80	90-80	93	500						
	80	80-70	97	420						
	80	70-60	100	420						
	80	60-50	104	450						
	80	50-40	108	330						
	80	40-30	119	350						casing empty - filled with additional strokes
	80	30-20	123	330						
	80	20-10	130	350						
	80	10-0'	133	350			X			Point Completed at 1:55 PM with 4.6 cy

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill

Pin #: P25

Project #: 13354x8

Date Drilled: 3/15/2013 & 3/18/13

Location: SE Landfill

Date Grouted: 3/18/2013

Inspector: KJ

Total Depth: 237

Contractor: Earthtech

Total Grout: 5.0 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
3/18/2013	69	140	216	700	X					
		135	220	700	X					
		130	223	700	X					
		125	225	700	X					
		120	228	700	X					
		115	230	700	X					
		110	232	700	X					
		105	235	700	X					
		100-90	237	700	X					Start of Pump & Pull Zone
		90-80	244	650	X					
		80-70	253	600	X					
		70-60	261	450	X					
		60-50	269	450	X					
		50-40	276	450	X					
		40-30	283	450	X					
		30-20	290	450	X					
		20-10	297	450	X					
		10-0'	302	450	X		X			Point Completed at 3:30 PM with 5 cy

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: _ SE COUNTY Landfill

Project #: _____ 13354x8

Location: _____ SE Landfill

Inspector: _____ KJ

Contractor: _____ Earthtech

Pin #: _ P26

Date Drilled: _____ 3/4/2013

Date Grouted: _____ 3/5/2013

Total Depth: _____ 235

Total Grout: _____ 3.3 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
3/5/2013	43	235	242	600	X					Cont T#43 from 202 strokes at 10:50 AM - Line pressure 400 psi
		230	248	600	X					
		225	254	600	X					
		220	257	600	X					
		215	259	600	X					
		210	262	600	X					
		205	265	600	X					
		200	269	600	X					
		195	272	600	X					
		190	274	600	X					
		185	275	600	X					
		180	277	600	X					
		175	278	600	X					
		170	280	600	X					
		165	281	600	X					
		160	283	600	X					
		155	284	600	X					
		150	286	600	X					
		145	287	600	X					
		140	288	600	X					

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill

Project #: 13354x8

Location: SE Landfill

Inspector: KJ

Contractor: Earthtech

Pin #: P26

Date Drilled: 3/4/2013

Date Grouted: 3/5/2013

Total Depth: 235

Total Grout: 3.3 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
3/5/2013	43	135	289	600	X					
		130	290	600	X					
		125	292	600	X					Pump & Pull Zone
		120	293	600	X					
		115-105	294	600	X					
		105-95	296	600	X					
		95-85	298	600	X					
		85-75	300	600	X					
		75-65	302	600	X					
		65-55	304	600	X					
		55-45	306	600	X					
		45-35	308	600	X					
		35-25	310	600	X					
		25-15	312	600	X					
		15-5	314	600	X					
		0					X			Point Completed at 11:44 AM with 3.3 cy

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill

Project #: 13354x8

Location: SE Landfill

Inspector: KJ

Contractor: Earthtech

Pin #: P27

Date Drilled: 3/4/2013

Date Grouted: 3/4/2013

Total Depth: 235

Total Grout: 5.0 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
3/4/2013	41	235	33	600	X					SOT#41 at 11:46 AM - Line pressure 350 psi
		230	37	600	X					
		225	40	650	X					
		220	43	650	X					
		215	46	625	X					
		210	49	625	X					
		205	52	600	X					
		200	56	600	X					
		195	59	>600	X					
		190	68	>600	X					
		185	76	600	X					
		180	81	600	X					
		175	85	650	X					
		170	88	650	X					
		165	91	700	X					
		160	93	700	X					
		155	95	>700	X					
		150	98	>700	X					
		145-135	100	>700	X					
		135-125	103	>700	X					Start of Pump & Pull Zone

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **SL** = Structure Lift (less than 1/8 of an inch), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure, **PL** = Pipe Lift, **SD** = Structural Damage (Damage as a result of structural lift greater than 1/8 of an inch).



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill

Project #: 13354x8

Location: SE Landfill

Inspector: KJ

Contractor: Earthtech

Pin #: P27

Date Drilled: 3/4/2013

Date Grouted: 3/4/2013

Total Depth: 235

Total Grout: 5.0 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
3/4/2013	41	125-115	105	>750	X					
		115-105	108	650	X					
		105-95	113	700	X					
		95-85	118	600	X					
		85-75	121	600	X					
		75-65	125	550	X					
		65-55	129	550	X					
		55-45	133	450						
		45-35	137	400						
		35-25	141	400						
		25-15	145	400						
		15-5	148	400						
		0	151	400			X			Point Completed at 12:50 PM with 5.0 cy

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **SL** = Structure Lift (less than 1/8 of an inch), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure, **PL** = Pipe Lift, **SD** = Structural Damage (Damage as a result of structural lift greater than 1/8 of an inch).



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill

Project #: 13354x8

Location: SE Landfill

Inspector: KJ

Contractor: Earthtech

Pin #: P28

Date Drilled: 3/4/2013

Date Grouted: 3/4/2013

Total Depth: 240

Total Grout: 2.8 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
3/4/2013	41	240	163	700	X					Cont T#41 from 151 strokes at 12:55 PM - Line pressure 350 psi
		235	165	700	X					
		230	166	800	X					
		225	167	800	X					
		220	168	>800	X					
		215	169	>800	X					
		210	170	>850	X					
		205	171	>850	X					
		200	172	>850	X					grout in casing
		195	173	>850	X					
		190	173	>850	X					
		185	174	>850	X					
		180	174	>850	X					
		175	175	>850	X					grout in casing
		170	176	>850	X					
		165	177	>850	X					
		160	178	>850	X					
		155	179	>850	X					
		150	180	>850	X					
		145	184	>850	X					

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **SL** = Structure Lift (less than 1/8 of an inch), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure, **PL** = Pipe Lift, **SD** = Structural Damage (Damage as a result of structural lift greater than 1/8 of an inch).



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill

Project #: 13354x8

Location: SE Landfill

Inspector: KJ

Contractor: Earthtech

Pin #: P28

Date Drilled: 3/4/2013

Date Grouted: 3/4/2013

Total Depth: 240

Total Grout: 2.8 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
3/4/2013	41	140-130	182	>850	X					Start of Pump & Pull Zone
		130-120	184	>850	X					
		120-110	186	>850	X					
		110-100	188	>850	X					
		100-90	192	>400						
		90-80	197	>400						
		80-70	203	400						
		70-60	209	400						
		60-50	213	400						
		50-40	218	400						
		40-30	223	400						
		30-20	227	400						
		20-10	231	400						
		10-0'	235	400			X			Point Completed at 1:56 PM with 2.8 cy

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **SL** = Structure Lift (less than 1/8 of an inch), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure, **PL** = Pipe Lift, **SD** = Structural Damage (Damage as a result of structural lift greater than 1/8 of an inch).



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill

Project #: 13354x8

Location: SE Landfill

Inspector: KJ

Contractor: Earthtech

Pin #: P29

Date Drilled: 3/1/2013

Date Grouted: 3/1/2013

Total Depth: 250

Total Grout: 3.5 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
3/1/2013	38	250	27	700	X					SOT#38 at 4:25 PM - Line pressure 400 psi
		245	30	700	X					
		240	33	650	X					
		235	35	650	X					
		230	36	700	X					
		225	38	700	X					
		220	40	700	X					
		215	42	700	X					
		210	43	700	X					
		205	45	700	X					
		200	46	750	X					
		195	48	750	X					
		190	49	700	X					
		185	51	700	X					
		180	52	700	X					
		175	54	700	X					
		170	55	700	X					
		165	57	700	X					
		160	59	650	X					
		155	61	650	X					

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill

Project #: 13354x8

Location: SE Landfill

Inspector: KJ

Contractor: Earthtech

Pin #: P29

Date Drilled: 3/1/2013

Date Grouted: 3/1/2013

Total Depth: 250

Total Grout: 3.5 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
3/1/2013	38	150	63	700	X					
		145	64	700	X					
		140-130	66	>650	X					Start of Pump & Pull Zone
		130-120	69	>650	X					
		120-110	72	>650	X					
		110-100	75	>650	X					
		100-90	78	>650	X					
		90-80	81	>650	X					
		80-70	84	>650	X					
		70-60	87	>600	X					
		60-50	90	>600	X					
		50-40	93	600	X					
		40-30	96	600	X					
		30-20	99	600	X					
		20-10	102	600	X					
		10-0'	105	600	X		X			Point Completed at 5:20 PM with 3.5 cy

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill

Project #: 13354x8

Location: SE Landfill

Inspector: KJ

Contractor: Earthtech

Pin #: P30

Date Drilled: 3/1/2013

Date Grouted: 3/1/2013

Total Depth: 250

Total Grout: 3.2 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
3/1/2013	38	250	127	>700	X					Cont T#38 from 105 strokes at 5:35 PM - Line pressure 400 psi
		245	130	>700	X					
		240	132	700	X					
		235	134	700	X					
		230	135	700	X					
		225	137	700	X					
		220	138	700	X					
		215	140	700	X					
		210	141	>700	X					
		205	143	>700	X					
		200	144	>700	X					
		195	146	>700	X					
		190	147	>700	X					
		185	149	>700	X					
		180	150	>700	X					
		175	152	>700	X					
		170	153	>700	X					
		165	155	>700	X					
		160	156	700	X					
		155	158	700	X					

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill

Project #: 13354x8

Location: SE Landfill

Inspector: KJ

Contractor: Earthtech

Pin #: P30

Date Drilled: 3/1/2013

Date Grouted: 3/1/2013

Total Depth: 250

Total Grout: 3.2 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
3/1/2013	38	150	159	>700	X					
		145	160	>700	X					
		140-130	162	700	X					Start of Pump & Pull Zone
		130-120	165	700	X					
		120-110	168	>650	X					
		110-100	171	>650	X					
		100-90	174	>650	X					
		90-80	177	>650	X					
		80-70	180	700	X					
		70-60	183	650	X					
		60-50	186	650	X					
		50-40	189	650	X					
		40-30	192	650	X					
		30-20	99	650	X					
		20-10	102	650	X					
		10-0'	105	650	X		X			Point Completed at 6:38 PM with 3.2 cy

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill

Project #: 13354x8

Location: SE Landfill

Inspector: KJ

Contractor: Earthtech

Pin #: P31

Date Drilled: 3/1/2013

Date Grouted: 3/1/2013

Total Depth: 242

Total Grout: 7.3

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
3/1/2013	35	242	36	550	X					SOT#35 at 10:20 AM - Line pressure 300 psi
		235	41	550	X					
		230	46	550	X					
		225	77	550	X					
		220	107	650	X					
		215	110	650	X					
		210	113	650	X					
		205	117	650	X					
		200	120	>600	X					
		195	124	>600	X					
		190	127	600	X					
		185	131	600	X					
		180	134	600	X					
		175	138	600	X					
		170	141	650	X					
		165	145	650	X					
		160	148	600	X					
		155	152	600	X					
		150	155	600	X					
		145	157	600	X					

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill

Project #: 13354x8

Location: SE Landfill

Inspector: KJ

Contractor: Earthtech

Pin #: P31

Date Drilled: 3/1/2013

Date Grouted: 3/1/2013

Total Depth: 242

Total Grout: 7.3

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
3/1/2013	35	140-130	159	600	X					Start of Pump & Pull Zone
		130-120	165	600	X					
		120-110	169	650	X					
		110-100	173	640	X					
		100-90	177	700	X					
		90-80	180	700	X					
		80-70	183	600	X					
		70-60	188	550	X					
		60-50	194	600	X					
		50-40	199	550	X					
		40-30	203	550	X					
		30-20	208	550	X					
		20-10	215	500	X					
		10-0'	218		X		X			Point Completed at 11:45 AM with 7.3 cy

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill

Project #: 13354x8

Location: SE Landfill

Inspector: KJ

Contractor: Earthtech

Pin #: P32

Date Drilled: 3/5/2013

Date Grouted: 3/5/2013

Total Depth: 242

Total Grout: 3.2 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
3/5/2013	43	242	133	800	X					Cont T#43 from 105 strokes at 9:15 AM - Line pressure 500 psi
		235	135	800	X					
		230	137	800	X					
		225	139	800	X					
		220	140	800	X					
		215	142	800	X					
		210	144	800	X					
		205	146	800	X					
		200	148	800	X					
		195	150	800	X					
		190	152	750	X					
		185	155	750	X					
		180	157	800	X					
		175	159	800	X					
		170	161	750	X					
		165	163	750	X					
		160	165	750	X					
		155	167	750	X					
		150	169	750	X					
		145	171	750	X					

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill

Project #: 13354x8

Location: SE Landfill

Inspector: KJ

Contractor: Earthtech

Pin #: P32

Date Drilled: 3/5/2013

Date Grouted: 3/5/2013

Total Depth: 242

Total Grout: 3.2 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
3/5/2013	43	140-130	172	800	X					Start of Pump & Pull Zone
		130-120	174	800	X					
		120-110	176	750	X					
		110-100	179	750	X					
		100-90	182	800	X					
		90-80	184	800	X					
		80-70	186	750	X					
		70-60	189	600						
		60-50	191	550						
		50-40	193	550						
		40-30	195	500						
		30-20	197	550						
		20-10	200	550						
		10-0'	202	500			X			Point Completed at 10:14 AM with 3.2 cy

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill
Project #: 13354x8
Location: SE Landfill
Inspector: RK
Contractor: Earthtech

Pin #: P36
Date Drilled: 3/8/2013
Date Grouted: 3/8/2013 & 3/11/2013
Total Depth: 240
Total Grout: 5.3 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
3/8/2013	51	240	14-23	600						Cont. Truck#51 from 14 strokes at 10:45 AM - Loine pressure 380 psi
		235	35	600	X			X		
		230	200	600	X			X		Back pressure not releasing - it is likely a plugged casing - inner rod and pvc pipe used to clear obstruction
3/11/13	52	225	215	600	X					Cont. Truck#52 from 150 strokes at 3:05 PM - Line pressure 380 psi
		220	231	600	X					
		215	237	600	X					
		210	242	625	X					
		205	245	625	X					
		200	248	625	X					
		195	250	625	X					
		190	253	625	X					
		185	255	625	X					
		180	260	625	X					
		175	263	625	X					
		170	266	625	X					
		165	269	625	X					
		160	274	600	X					
		155	276	600	X					
		150	279	625	X					
		145	280	625	X					

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill

Project #: 13354x8

Location: SE Landfill

Inspector: RK

Contractor: Earthtech

Pin #: P36

Date Drilled: 3/8/2013

Date Grouted: 3/8/2013 & 3/11/2013

Total Depth: 240

Total Grout: 5.3 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
		140	282	800	X					
		135	283	600	X					
		130-120	284	600	X					Start of Pump & Pull Zone
		120-110	286	600	X					
		110-100	288	600	X					
		100-90	290	600	X					
		90-80	292	600	X					
		80-70	294	600	X					
		70-60	296	600	X					
		60-50	298	600	X					
		50-40	300	600	X					
		40-30	302	600	X					
		30-20	304	600	X					
		20-10	306	600	X					
		10-0'	308	600	X		X			Point Completed at 4:00 PM with 5.3 cy

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill

Project #: 13354x8

Location: SE Landfill

Inspector: KJ

Contractor: Earthtech

Pin #: P33

Date Drilled: 3/5/2013

Date Grouted: 3/6/2013

Total Depth: 240

Total Grout: 5.4 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
3/6/2013	45	240	32	600	X					SOT#45 at 8:06 AM - Line pressure 450 psi
		235	41	600	X					
		230	49	700	X					
		225	52	700	X					
		220	54	700	X					
		215	56	700	X					
		210	99	650	X					pipe originally plugged at 170 ft, casing removed 40 ft, cleaned with small rod and re-installed casing / Line pressure 350 psi
		205	102	650	X					
		200	104	700	X					
		195	107	700	X					
		190	109	700	X					
		185	112	700	X					
		180	114	650	X					
		175	116	650	X					
		170	118	700	X					
		165	121	700	X					
		160	124	625	X					
		155	127	625	X					
		150	129	650	X					
		145	131	650	X					

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill

Project #: 13354x8

Location: SE Landfill

Inspector: KJ

Contractor: Earthtech

Pin #: P33

Date Drilled: 3/5/2013

Date Grouted: 3/6/2013

Total Depth: 240

Total Grout: 5.4 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
3/6/2013	45	140-130	132	600	X					Start of Pump & Pull Zone
		130-120	134	600	X					
		120-110	136	650	X					
		110-100	138	600	X					
		100-90	140	650	X					
		90-80	142	650	X					
		80-70	145	600	X					
		70-60	147	600	X					
		60-50	150	550	X					
		50-40	152	600	X					
		40-30	154	600	X					
		30-20	157	550	X					
		20-10	160	600	X					
		10-0'	162				X			Point Completed at 10:06 AM with 5.4 cy

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill

Project #: 13354x8

Location: SE Landfill

Inspector: KJ

Contractor: Earthtech

Pin #: P34

Date Drilled: 3/5/2013

Date Grouted: 3/6/2013

Total Depth: 240

Total Grout: 3.5 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
3/6/2013	45	240	183	900	X					Cont T#45 from 162 strokes at 10:22 AM - Line pressure 450 psi
		235	187	900	X					Line pressure 700
		230	191	900	X					
		225	194	>650	X					Line pressure 450 psi after flushing line
		220	197	>650	X					
		215	200	650	X					
		210	202	650	X					
		205	205	650	X					
		200	207	675	X					
		195	210	675	X					
		190	212	700	X					
		185	214	700	X					
		180	216	700	X					
		175	218	700	X					
		170	219	700	X					
		165	221	700	X					
		160	222	700	X					
		155	224	700	X					
		150	225	700	X					
		145	227	700	X					

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill

Project #: 13354x8

Location: SE Landfill

Inspector: KJ

Contractor: Earthtech

Pin #: P34

Date Drilled: 3/5/2013

Date Grouted: 3/6/2013

Total Depth: 240

Total Grout: 3.5 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
3/6/2013	45	140-130	228	700	X					Start of Pump & Pull Zone
		130-120	231	700	X					
		120-110	234	800	X					
		110-100	237	650	X					
		100-90	240	650	X					
		90-80	243	650	X					
		80-70	246	650	X					
		70-60	249	650	X					
		60-50	252	650	X					
		50-40	255	650	X					
		40-30	258	650	X					
		30-20	261	650	X					
		20-10	264	650	X					
		10-0'	267	650			X			Point Completed at 11:14 AM with 3.5 cy

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: _ SE COUNTY Landfill

Project #: _____ 13354x8

Location: _____ SE Landfill

Inspector: _____ TN

Contractor: _____ Earthtech

Pin #: _ P37

Date Drilled: _____ 3/7/2013

Date Grouted: _____ 3/7/2013

Total Depth: _____ 237

Total Grout: _____ 13 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
3/7/2013	48	237	36	600	X					SOT#48 at 12:52 PM - Line pressure 380 psi
		235	39	600	X					
		230	42	600	X					
		225	44	650	X					
		220	47	620	X					
		215	49	600	X					
		210	52	650	X					
		205	56	600	X					
		200	61	620	X					
		195	65	600	X					
		190	214	580	X					
		185	219	580	X					
		180	285	600	X					
	48	175	300	600	X					EOT#48 at 1:30 PM
	49	170	34	600	X					SOT#49 at 2:36 PM - Line pressure 350 psi
		165	40	580	X					
		160	42	600	X					
		155	45	650	X					
		150	47	700	X					
		145	49	700	X					

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill

Project #: 13354x8

Location: SE Landfill

Inspector: TN

Contractor: Earthtech

Pin #: P37

Date Drilled: 3/7/2013

Date Grouted: 3/7/2013

Total Depth: 237

Total Grout: 13 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
3/7/2013	49	140	51	700	X					
		135	52	650	X					
		130-120	55	650	X					Start of Pump & Pull Zone
		120-110	57	500	X					
		110-100	60	500	X					
		100-90	63	500	X					
		90-80	66	500	X					
		80-70	69	500						
		70-60	72	500						
		60-50	75	500						
		50-40	78	500						
		40-30	81	500						
		30-20	84	500						
		20-10	87	500						
		10-0'	90	500			X			Point Completed at 3:13 PM with 13 cy

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: _ SE COUNTY Landfill

Project #: _____ 13354x8

Location: _____ SE Landfill

Inspector: _____ TN

Contractor: _____ Earthtech

Pin #: _ P35

Date Drilled: _____ 3/7/2013

Date Grouted: _____ 3/7/2013

Total Depth: _____ 235

Total Grout: _____ 5.4 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
3/7/2013	49	235	120	620	X					Cont T#49 from 90 strokes at 3:30 PM - Line pressure 360 psi
		230	126	610	X					
		225	129	610	X					
		220	135	610	X					
		215	139	600	X					
		210	146	610	X					
		205	149	600	X					
		200	152	600	X					
		195	156	610	X					
		190	159	610	X					
		185	162	610	X					
		180	167	610	X					
		175	171	610	X					
		170	177	600	X					
		165	182	600	X					
		160	186	600	X					
		155	193	600	X					
		150	196	750	X					
		145	197	700	X					
		140	198	700	X					

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill

Project #: 13354x8

Location: SE Landfill

Inspector: TN

Contractor: Earthtech

Pin #: P35

Date Drilled: 3/7/2013

Date Grouted: 3/7/2013

Total Depth: 235

Total Grout: 5.4 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
3/7/2013	49	135	200	700	X					
		130-120	203	750	X					Start of Pump & Pull Zone
		120-110	205	700	X					
		110-100	208	630	X					
		100-90	211	600	X					
		90-80	214	630	X					
		80-70	218	600	X					
		70-60	222	550	X					
		60-50	226	500	X					
		50-40	230	500	X					
		40-30	234	500	X					
		30-20	238	500	X					
		20-10	242	500	X					
		10-0'	250	500			X			Point Completed at 4:32 PM with 5.4 cy

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill

Project #: 13354x8

Location: SE Landfill

Inspector: RK

Contractor: Earthtech

Pin #: P38

Date Drilled: 3/13/2013

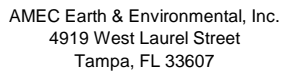
Date Grouted: 3/13/2013

Total Depth: 230

Total Grout: 33.1cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
3/13/2013	57	230	105	610						SOT#57 at 3:00 PM - Line pressure 440 psi
		225	105	610						TC - pump and pull
		220	135	580						TC - pump and pull
		215	240	590						TC - pump and pull
		210	316	650	X					TC - pump and pull EOT#57 at 3:38 PM
	58	205	140	500						SOT#58 at 3:48 PM - Line pressure 400 PSI
		200	169	500						TC - pump and pull
		195	192	500						TC - pump and pull
		190	250	500						TC - pump and pull
		185	311	500						EOT#58 at 5:15 PM
	59	180	154-218	620	X					Cont. Truck#59 from 154 strokes at 9:50 AM - Line pressure 380 psi
		175	247	590	X					
		170	269	590	X					
		165	306	620	X					EOT#59 at 10:10 AM
	60	160	60	600						SOT#60 at 11:13 AM - Line pressure 500 psi - TC - pump and pull
		155	75	580						TC - pump and pull
		150	127	580						TC - pump and pull
		145	172	580						TC - pump and pull
		140	176	750	X					
		135	183	760	X					

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



Project Name: _ SE COUNTY Landfill

Location: _____ SE Landfill

Contractor: ___ Earthtech

Date Drilled: ____ 3/13/2013

Date Grouted: 3/13/2013

Total Depth: _____ 230

Total Grout: ____ 33.1cy

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill

Project #: 13354x8

Location: SE Landfill

Inspector: TN

Contractor: Earthtech

Pin #: P39

Date Drilled: 3/21/2013

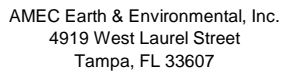
Date Grouted: 3/21/2013

Total Depth: 230

Total Grout: 25.5 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
3/21/2013	75	230	90-200	550						Cont. Truck#75 from 90 strokes at 9:20 AM - Line pressure 350 psi
		225	260	550						TC - pump and pull
		220	321	600	X					
		215	322	600						EOT# 75 at 9:35 AM
	76	210	161	400						SOT# 76 at 11:00 AM - Line pressure 300 PSI - TC - pump and pull
		205	333	400						EOT# 76 at 11:16 AM
	77	200	254	520						Cont.T # 77 from 89 strokes - Line pressure 400 psi - TC - pump and pull
		195	254	520						TC - pump and pull
		190	256	520						TC - pump and pull
		185	259	400						5 strokes to fill pipe after extraction of casing
		180	260	400						TC - pump and pull
		175	262	400						3 additional strokes to fill pipe
		170	269	400						TC - pump and pull
		165	275	400						TC - pump and pull
		160	280	500						TC - pump and pull
		155	305	500						TC - pump and pull
		150	309	600						TC - pump and pull
		145	310	600						TC - pump and pull
		140	311	500						Start of Pump & Pull Zone
		135	312	500						

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



Project Name: _ SE COUNTY Landfill

Location: _____ SE Landfill

Contractor: Earthtech

Date Drilled: 3/21/2013

Date Grouted: 3/21/2013

Total Depth: 230

Total Grout: 25.5 cy

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill
Project #: 13354x8
Location: SE Landfill
Inspector: RK
Contractor: Earthtech

Pin #: P40
Date Drilled: 3/12/2013
Date Grouted: 3/14/2013 & 3/15/2013
Total Depth: 230
Total Grout: 47.7 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
3/14/2013	60	230	300							Cont. T# 60 from 247 line pressure 450
	61	230	100	600						EOT#60 at 12:45 PM - SOT#61 at 1:15 PM - Line pressure 500
	61	225	130	600						TC - pump and pull
	61	220	137	600						TC - pump and pull
	61	215	148	600						TC - pump and pull
	61	210	185	580						TC - pump and pull
	61	205	293	590						TC - pump and pull
3/14/2013 3/15/2013	61/64	200	312 / 34	590 / 550						EOT # 61 at 1:52 PM - SOT# 64 on 3/15/2013 at 7:50 AM - Line pressure 480 psi
		195	72	680	X					TC - pump and pull
		190	120	600						TC - pump and pull
	64/65	185	306 / 250							EOT# 64 at 8:18 AM - SOT# 65 at 9:52 AM - Line Pressure 450 psi
	65/66	180	303 / 41	600						EOT#65 at 10:20 AM - SOT#66 at 11:30 AM - Line Pressure 460 psi
		175	47	610						TC - pump and pull
		170	52	630						TC - pump and pull
		165	109	600						TC - pump and pull
		160	312	600						End # 66 Start # 67
		155	105	605						TC - pump and pull
		150	113	750	X					TC - pump and pull
		145	117	750	X					TC - pump and pull
		140	119	750	X					TC - pump and pull

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill

Project #: 13354x8

Location: SE Landfill

Inspector: RK

Contractor: Earthtech

Pin #: P40

Date Drilled: 3/12/2013

Date Grouted: 3/14/2013 & 3/15/2013

Total Depth: 230

Total Grout: 47.7 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
3/15/2013	67	135	121	700						
	67	130-120	125	620						Start of Pump & Pull Zone
	67	120-110	129	680						
	67	110-100	133	680						
	67	100-90	137	680						
	67	90-80	141	600						
	67	80-70	145	500						
	67	70-60	149	500						
	67	60-50	153	500						
	67	50-40	158	500						
	67	40-30	162	500						
	67	30-20	166	500						
	67	20-10	171	580						
	67	10-0'	178	500			X			Point Completed at 2:00 PM with 47.7 cy

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill

Pin #: P41

Project #: 13354x8

Date Drilled: 3/15/2013 & 3/18/2013

Location: SE Landfill

Date Grouted: 3/18/2013 & 3/20/2013 & 3/21/2013

Inspector: RK&TN

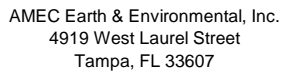
Total Depth: 230

Contractor: Earthtech

Total Grout: 32.9 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
3/18/2013	68	230	87	620	X					Cont. T# 68 from 17 strokes at 11:45 AM - Line pressure 440 psi
		225	94	630	X					TC - pump and pull
		220	94		X					TC - pull, no pumping
		215	125	620	X					TC - pump and pull
		210	142	580	X					TC - pump and pull
		205	145	580	X					TC - pump and pull
3/18/2013 - 3/20/2013	68 / 72	200	311 / 100	450						EOT# 68 at 12:18 PM - SOT# 72 at 8:31 AM - Line pressure 350 psi - TC - pump and pull
	72 / 73	195	303 / 62	400						EOT# 72 at 9:02 PM - SOT# 73 at 11:30 AM - Line pressure 350 psi
		190	117	430						TC - pump and pull
		185	175	420						TC - pump and pull
		180	204	410						
		175	305	400						EOT# 73 at 11:59 AM
3/21/2013	77	170	39	400						SOT# 77 at 12:06 PM - Line pressure 300 psi
		165	40	400						TC - pump and pull
		160	41	600	X					TC - pump and pull
		155	42	600	X					
		150	43	550	X					
		145	46	550	X					
		140	48	520	X					Start of Pump & Pull Zone
		135	50	500	X					

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC** = Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



Project Name: _ SE COUNTY Landfill

Location: _____ SE Landfill

Contractor: Earthtech

Date Drilled: 3/15/2013 & 3/18/2013

Date Grouted: 3/18/2013 & 3/20/2013 & 3/21/2013

Total Depth: 230

Total Grout: 32.9 cy

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill

Project #: 13354x8

Location: SE Landfill

Inspector: KJ

Contractor: Earthtech

Pin #: P42

Date Drilled: 3/11/2013

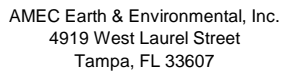
Date Grouted: 3/12/2013

Total Depth: 240

Total Grout: 5.3 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
3/12/2013	53	240	36-44	625	X					SOT#53 at 8:45 AM - Line pressure 380 psi
		235	48	625	X					TC
		230	50	625	X					
		225	53	625	X					TC
		220	57	625	X					
		215	61	625	X					
		210	66	625	X					TC
		205	90	625	X					
		200	91	625	X					TC
		195	92	625	X					TC
		190	93	625						TC - Pump and pull
		185	94	625						TC - Pump and pull
		180-170	100	625						Start of Pump & Pull Zone
		170-160	105	625						
		160-150	106	625						
		150-140	109	625						
		140-130	112	625						
		130-120	115	625						
		120-110	118	625						
		110-100	121	625						

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



Project Name: _ SE COUNTY Landfill

Location: _____ SE Landfill

Contractor: Earthtech

Date Drilled: 3/11/2013

Date Grouted: 3/12/2013

Total Depth: _____ 240

Total Grout: 5.3 cy

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



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COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill

Project #: 13354x8

Location: SE Landfill

Inspector: RK

Contractor: Earthtech

Pin #: P43

Date Drilled: 3/25/2013

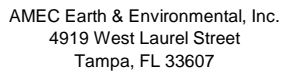
Date Grouted: 3/25/2013

Total Depth: 233

Total Grout: 3.9 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
3/25/2013	84	233	30	780	X					SOT# 86 at 3:02 PM - Line pressure 360 psi
		230								TC, pull no pump - Section of pipe without grout, filled pipe to top.
		225								
		220	32	750	X					TC - pump and pull
		215	34	750	X					
		210	36	680	X					
		205	38	680	X					
		200	39	700	X					
		195	40	700	X					
		190	41	690	X					
		185	43	730	X					
		180	45	720	X					
		175	46	700	X					
		170	47	750	X					
		165	48	750	X					
		160	49	720	X					
		155	51	750	X					
		150	52	700	X					
		145	54	720	X					
		140-130	57	720	X					Start of Pump & Pull Zone

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



Project Name: _SE COUNTY Landfill	Pin #: _P43
Project #: _____13354x8	Date Drilled: __3/25/2013
Location: __SE Landfill	Date Grouted: __3/25/2013
Inspector: __RK	Total Depth: __233
Contractor: __Earthtech	Total Grout: __3.9 cy

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



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COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill

Project #: 13354x8

Location: SE Landfill

Inspector: RK

Contractor: Earthtech

Pin #: P44

Date Drilled: 3/25/2013

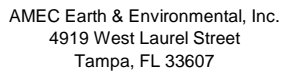
Date Grouted: 3/26/2013

Total Depth: 232

Total Grout: 4 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
3/26/2013	87	232	0-35	750	X					SOT# 87 at 12:59 PM - Line pressure 500 psi
		230	35	750	X					
		225	37	750	X					
		220	39	750	X					
		215	41	750	X					
		210	43	750	X					
		205	44	750	X					
		200	46	750	X					
		195	48	750	X					
		190	52	750	X					
		185	55	750	X					
		180	57	750	X					
		175	59	750	X					
		170	61	750	X					
		165	64	750	X					
		160	67	750	X					
		155	69	750	X					
		150	72	750	X					
		145	75	750	X					
		140-130	78	680	X					Start of Pump & Pull Zone

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



Project Name: _SE COUNTY Landfill	Pin #: _P44
Project #: _____13354x8	Date Drilled: ___3/25/2013_____
Location: ___SE Landfill_____	Date Grouted: ___3/26/2013_____
Inspector: ___RK_____	Total Depth: ___232_____
Contractor: ___Earthtech_____	Total Grout: ___4 cy_____

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



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COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill

Project #: 13354x8

Location: SE Landfill

Inspector: KJ

Contractor: Earthtech

Pin #: P45

Date Drilled: 3/27/2013

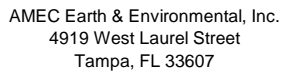
Date Grouted: 3/28/2013

Total Depth: 230

Total Grout: 4.2 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
3/28/2013	91	230	0-25	700	X					SOT# 91 at 10:03 AM - Line pressure 500 psi
		225	32	700	X					
		220	37	700	X					
		215	44	700	X					
		210	56	700	X					
		205	59	700	X					
		200	62	700	X					
		195	64	700	X					
		190	66	700	X					
		185	67	700	X					
		180	70	700	X					
		175	73	700	X					
		170	75	700	X					
		165	77	700	X					
		160	78	700	X					
		155	80	700	X					
		150	82	700	X					
		145	84	700	X					
		140-130	86	700	X					Start of Pump & Pull Zone
		130-120	89	700	X					

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



Project Name: _ SE COUNTY Landfill

Location: _____ SE Landfill

Contractor: Earthtech

Date Drilled: 3/27/2013

Date Grouted: 3/28/2013

Total Depth: _____ 230

Total Grout: 4.2 cy

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



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Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill

Project #: 13354x8

Location: SE Landfill

Inspector: TN

Contractor: Earthtech

Pin #: P46

Date Drilled: 3/6/2013

Date Grouted: 3/6/2013

Total Depth: 235

Total Grout: 4.8 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
3/6/2013	47	235	179	700	X					Cont T#47 from 159 strokes at 2:55 PM - Line pressure 400 psi
		230	180	700	X					
		225	182	700	X					
		220	184	>800	X					
		215	190	>800	X					
		210	232	500	X					pipe originally plugged at 190 ft, casing cleaned and re-installed casing to 210 ft / Line pressure 300 psi
		205	239	500	X					
		200	241	500	X					
		195	243	550	X					
		190	246	550	X					
		185	249	550	X					
		180	253	550	X					
		175	256	550	X					
		170	259	550	X					
		165	262	550	X					
		160	265	550	X					
		155	267	550	X					
		150	269	550	X					
		145	271	550	X					
		140	273	550	X					

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill

Project #: 13354x8

Location: SE Landfill

Inspector: TN

Contractor: Earthtech

Pin #: P46

Date Drilled: 3/6/2013

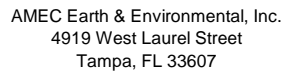
Date Grouted: 3/6/2013

Total Depth: 235

Total Grout: 4.8 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
3/6/2013	47	135	274	600	X					
		130	275	600	X					
		125	276	650	X					
		120	277	650	X					Start of Pump & Pull Zone
		115	278	600	X					
		110	279	600	X					
		105	280	650	X					
		100	281	650	X					
		95	282	650	X					
		90	283	650	X					
		85	284	600	X					
		80	285	600	X					
		75	286	600	X					
		70	287	600						
		65	288	500						
		60	289	500						
		55	290	500						
		50	291	500						
		45	292	500						
		40	295	500						

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



Project Name: _ SE COUNTY Landfill	Pin #: _ P46
Project #: _ 13354x8	Date Drilled: _ 3/6/2013
Location: _ SE Landfill	Date Grouted: _ 3/6/2013
Inspector: _ KJ	Total Depth: _ 235
Contractor: _ Earthtech	Total Grout: _ 4.8 cy

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill

Project #: 13354x8

Location: SE Landfill

Inspector: KJ

Contractor: Earthtech

Pin #: P47

Date Drilled: 3/15/2013

Date Grouted: 3/15/2013

Total Depth: 237

Total Grout: 4 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
3/15/2013	67	235	178-212	600	X					Cont. T# 67 from 178 strokes at 2:40 PM - Line pressure 300 psi
		230	216	600	X					
		225	221	550	X					
		220	223	550	X					
		215	227	550	X					
		210	230	550	X					
		205	233	550	X					
		200	236	550	X					
		195	238	550	X					
		190	241	550	X					
		185	243	550	X					
		180	245	550	X					
		175	247	550	X					
		170	249	550	X					
		165	251	550	X					
		160	253	550	X					
		155	255	600	X					
		150	256	600	X					
		145	258	600	X					Start of Pump & Pull Zone
		140	259	600	X					

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill

Pin #: P47

Project #: 13354x8

Date Drilled: 3/15/2013

Location: SE Landfill

Date Grouted: 3/15/2013

Inspector: KJ

Total Depth: 237

Contractor: Earthtech

Total Grout: 4 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
3/15/2013	63	135	260	700	X					
		130	262	700	X					
		125	263	700	X					
		120	264	700	X					
		115	265	800	X					
		110	267	800	X					
		105	268	700	X					
		100	270	700	X					
		90-80	271	600	X					
		80-70	274	600	X					
		70-60	279	600	X					
		60-50	282	600	X					
		50-40	286	600	X					
		40-30	290	600	X					
		30-20	294	600	X					
		20-10	298	600	X					
		10-0'	302	600	X		X			Point Completed at 2:00 PM with 4 cy

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
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COMPACTION GROUT REPORT

Project Name: _ SE COUNTY Landfill

Project #: _____ **13354x8**

Location: _____ SE Landfill

Inspector: _____ **KJ**

Contractor: _____ Earthtech

Pin #: _ **P48**

Date Drilled: _____ **3/14/2013**

Date Grouted: _____ **3/14/2013**

Total Depth: _____ **235**

Total Grout: _____ **15 cy**

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
3/14/2013	62	235	44	750	X					SOT# 62 at 2:59 PM - Line pressure 500 psi
		230	54	750	X					
		225	112	750	X					
		220	179	700	X					
		215	240	700	X					
	62/63	210	300 / 56	700	X					EOT# 62 at 3:35 PM - SOT# 63 at 4:35 PM - Line pressure 500 PSI
		205	60	700	X					
		200	63	700	X					
		195	68	700	X					
		190	72	700	X					
		185	76	700	X					
		180	83	700	X					
		175	86	700	X					
		170	91	700	X					
		165	95	700	X					
		160	98	700	X					
		155	100	700	X					
		150	102	800	X			X		
		145	103	800	X			X		
		140	105	800	X					

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill

Project #: 13354x8

Location: SE Landfill

Inspector: KJ

Contractor: Earthtech

Pin #: P48

Date Drilled: 3/14/2013

Date Grouted: 3/14/2013

Total Depth: 235

Total Grout: 15 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
3/14/2013	63	135	106	800	X					Start of Pump & Pull Zone
		130	108	800	X					
		125	110	800	X					
		120-110	111	700	X					
		110-100	114	700	X					
		100-90	117	700	X					
		90-80	120	600	X					
		80-70	124	600	X					
		70-60	126	600	X					
		60-50	130	600	X					
		50-40	135	600	X					
		40-30	139	600	X					
		30-20	143	600	X					
		20-10	146	600	X					
		10-0'	150	600	X		X			Point Completed at 5:20 PM with 15 cy

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



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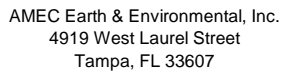
COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill
Project #: 13354x8
Location: SE Landfill
Inspector: KJ
Contractor: Earthtech

Pin #: P49
Date Drilled: 3/13/2013
Date Grouted: 3/14/2013
Total Depth: 233
Total Grout: 5 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
3/14/2013	59/63	230	454-198	500	X					SOT#59 at 9:05 AM - Line pressure 300 psi - used 154 strokes used in plugged casing (not counted) - Used inner rod to clear blockage at 10:55 AM Cont. T#63 from 150 strokes at 5:28 AM - Line pressure 280 psi
		225	205	500	X					
		220	217	550	X					
		215	222	550	X					
		210	231	550	X					
		205	236	550	X					
		200	241	550	X					
		195	255	550	X					
		190	250	550	X					
		185	255	550	X					
		180	259	550	X					
		175	263	550	X					
		170	267	550	X					
		165	269	550	X					
		160	274	600	X					
		155	277	600	X					
		150	280	500	X					
		145	281	450	X					
		140-130	282	450	X					Start of Pump & Pull Zone
		130-120	283	450	X					

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC** = Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



Project Name: _ SE COUNTY Landfill

Location: _____ SE Landfill

Contractor: Earthtech

Date Drilled: 3/13/2013

Date Grouted: 3/14/2013

Total Depth: _____ 233

Total Grout: 5 cy

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill

Project #: 13354x8

Location: SE Landfill

Inspector: KJ

Contractor: Earthtech

Pin #: P50

Date Drilled: 3/13/2013

Date Grouted: 3/14/2013

Total Depth: 240

Total Grout: 5.1 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
3/14/2013	59	240	59	625	X					SOT#59 at 7:55 AM - Line pressure 350 psi
		235	65	625	X					
		230	69	700	X					
		225	73	700	X					
		220	76	700	X					
		215	79	700	X					
		210	82	700	X					
		205	85	700	X					
		200	88	700	X					
		195	90	700	X					
		190	93	700	X					
		185	96	700	X					
		180	99	700	X					
		175	102	700	X					
		170	105	700	X					
		165	108	700	X					
		160	112	600	X					
		155	117	600	X					
		150	121	600	X					
		145	123	600	X					

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill

Project #: 13354x8

Location: SE Landfill

Inspector: KJ

Contractor: Earthtech

Pin #: P50

Date Drilled: 3/13/2013

Date Grouted: 3/14/2013

Total Depth: 240

Total Grout: 5.1 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
3/14/2013	59	140-130	126	600	X					Start of Pump & Pull Zone
		130-120	129	600	X					
		120-110	131	550	X					
		110-100	134	550	X					
		100-90	136	550	X					
		90-80	138	550	X					
		80-70	140	550	X					
		70-60	142	550	X					
		60-50	144	550						
		50-40	146	550						
		40-30	148	550						
		30-20	150	550						
		20-10	152	550						
		10-0'	154	550			X			Point Completed at 8:52 AM with 5.1 cy

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill

Project #: 13354x8

Location: SE Landfill

Inspector: KJ

Contractor: Earthtech

Pin #: P51

Date Drilled: 3/13/2013

Date Grouted: 3/13/2013

Total Depth: 250

Total Grout: 5.8 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
3/13/2013	56	250	61	600	X					SOT#56 at 10:05 AM - Line pressure 350 psi
		245	67	600	X					
		240	74	600	X					
		235	80	600	X					
		230	83	600	X					
		225	86	600	X					
		220	92	600	X					
		215	96	600	X					
		210	100	600	X					
		205	103	600	X					
		200	106	600	X					
		195	109	600	X					
		190	112	600	X					
		185	115	600	X					
		180	120	600	X					
		175	124	600	X					
		170	128	600	X					
		165	135	600	X					
		160	138	600	X					
		155	142	600	X					

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill

Project #: 13354x8

Location: SE Landfill

Inspector: KJ

Contractor: Earthtech

Pin #: P51

Date Drilled: 3/13/2013

Date Grouted: 3/13/2013

Total Depth: 250

Total Grout: 5.8 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
3/11/2013	56	150	146	550	X					
		145	147	550	X					
		140-130	148	500	X					Start of Pump & Pull Zone
		130-120	150	500	X					
		120-110	152	500	X					
		110-100	154	500	X			X		
		100-90	156	500	X			X		
		90-80	158	500	X			X		
		80-70	160	500						
		70-60	162	500						
		60-50	164	500						
		50-40	166	500						
		40-30	168	500						
		30-20	170	500						
		20-10	172	500						
		10-0'	174	500			X			Point Completed at 11:45 AM with 5.8 cy

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill

Project #: 13354x8

Location: SE Landfill

Inspector: KJ

Contractor: Earthtech

Pin #: P52

Date Drilled: 3/13/2013

Date Grouted: 3/13/2013

Total Depth: 240

Total Grout: 4.2 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
3/13/2013	56	240	211	600	X					Cont. Truck#56 from 174 strokes at 12:05 PM - Line pressure 350 psi
		235	215	600	X					
		230	218	600	X					
		225	221	600	X					
		220	224	600	X					
		215	227	600	X					
		210	230	600	X					
		205	233	600	X					
		200	235	600	X					
		195	237	600	X					
		190	240	600	X					
		185	243	600	X					
		180	245	600	X					
		175	247	600	X					
		170	250	600	X					
		165	253	600	X					
		160	255	600	X					
		155	257	600	X					
		150	261	600	X					
		145	262	600	X					

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill

Project #: 13354x8

Location: SE Landfill

Inspector: KJ

Contractor: Earthtech

Pin #: P52

Date Drilled: 3/13/2013

Date Grouted: 3/13/2013

Total Depth: 240

Total Grout: 4.2 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
3/13/2013	56	140-130	264	500	X					Start of Pump & Pull Zone
		130-120	267	550	X					
		120-110	270	500	X					
		110-100	273	500	X					
		100-90	276	500	X					
		90-80	279	500	X					
		80-70	282	500	X					
		70-60	285	500	X					
		60-50	288	500						
		50-40	291	500						
		40-30	294	500						
		30-20	297	500						
		20-10	300	500						
		10-0'	303	500			X			EOT#56 - Point Completed at 12:55 PM with 4.2 cy

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill

Project #: 13354x8

Location: SE Landfill

Inspector: KJ

Contractor: Earthtech

Pin #: P53

Date Drilled: 3/12/2013

Date Grouted: 3/12/2013

Total Depth: 240

Total Grout: 5.4 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
3/12/2013	54	240	73-119	625	X					Cont. Truck#54 from 73 strokes at 12:46 PM - Line pressure 400 psi
		235	128	625	X					
		230	135	625	X					
		225	140	625	X					
		220	143	625	X					
		215	147	625	X					
		210	151	625	X					
		205	155	625	X					
		200	158	625	X					
		195	162	625	X					
		190	165	625	X					
		185	169	625	X					
		180	172	625	X					
		175	175	625	X					
		170	178	625	X					
		165	182	625	X					
		160	185	625	X					
		155	189	625	X					
		150	194	625	X					
		145	196	625	X					

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill

Project #: 13354x8

Location: SE Landfill

Inspector: KJ

Contractor: Earthtech

Pin #: P53

Date Drilled: 3/12/2013

Date Grouted: 3/12/2013

Total Depth: 240

Total Grout: 5.4 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
3/12/2013	54	140-130	197	600	X					Start of Pump & pull Zone
		130-120	200	600	X					
		120-110	203	550	X					
		110-100	206	400	X					
		100-90	209	400	X					
		90-80	211	400	X					
		80-70	214	550	X					
		70-60	216	500	X					
		60-50	219	550	X					
		50-40	222	600	X					
		40-30	225	600	X					
		30-20	228	600	X					
		20-10	231	600	X					
		10-0'	234	600	X		X			Point Completed at 2:49 PM with 5.4 cy

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill

Project #: 13354x8

Location: SE Landfill

Inspector: KJ

Contractor: Earthtech

Pin #: P54

Date Drilled: 3/11/2013 & 3/12/2013

Date Grouted: 3/12/2013

Total Depth: 240

Total Grout: 5.7 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
3/12/2013	54	240	234-258	650	X					Cont. Truck#54 from 234 strokes at 1:45 PM - Line pressure 450 psi
		235	263	650	X					
		230	270	650	X					
		225	273	650	X					
		220	277	650	X					
		215	280	650	X					
		210	284	650	X					
		205	286	650	X					
		200	290	650	X					
		195	293	650	X					
		190	296	650	X					
		185	298	650	X					
3/12/13	54/55	180	300 / 22	650	X					EOT#54 at 2:35 PM - SOT#55 at 2:49 PM - Line pressure 450 psi
		175	24	700	X					
		170	27	700	X					
		165	30	700	X					
		160	32	700	X					
		155	35	700	X					
		150	38	700	X					
		145	41	700	X					

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill

Project #: 13354x8

Location: SE Landfill

Inspector: KJ

Contractor: Earthtech

Pin #: P54

Date Drilled: 3/11/2013 & 3/12/2013

Date Grouted: 3/12/2013

Total Depth: 240

Total Grout: 5.7 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
3/12/2013	55	140-130	44	700	X					Start of Pump & Pull Zone
		130-120	49	700	X					
		120-110	54	700	X					
		110-100	58	700	X					
		100-90	61	700	X					
		90-80	65	600	X					
		80-70	70	600	X					
		70-60	75	600	X					
		60-50	81	550	X					
		50-40	87	600	X					
		40-30	92	500	X					
		30-20	97	500	X					
		20-10	102	500	X					
		10-0'	105	500	X		X			Point Completed at 3:35 PM with 5.7 cy

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill

Project #: 13354x8

Location: SE Landfill

Inspector: KJ

Contractor: Earthtech

Pin #: P55

Date Drilled: 3/11/2013

Date Grouted: 3/11/2013

Total Depth: 240

Total Grout: 5.4 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
3/11/2013	52	240	45	500	X					SOT # 52 at 1:52 PM - Line pressure = 300 PSI
		235	52	500	X					
		230	58	500	X					
		225	65	500	X					
		220	70	550	X					
		215	75	550	X					
		210	79	575	X					
		205	83	575	X					
		200	86	600	X					
		195	89	600	X					
		190	92	600	X					
		185	96	600	X					
		180	99	600	X					
		175	103	600	X					
		170	106	600	X					
		165	110	600	X					
		160	114	575	X					
		155	118	575	X					
		150	122	575	X					
		145	123	575	X					

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill

Project #: 13354x8

Location: SE Landfill

Inspector: KJ

Contractor: Earthtech

Pin #: P55

Date Drilled: 3/11/2013

Date Grouted: 3/11/2013

Total Depth: 240

Total Grout: 5.4 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
3/11/2013	52	140-130	125	500	X					Start of Pump & Pull Zone
		130-120	128	400	X					
		120-110	131	550	X					
		110-100	134	600	X					
		100-90	137	600	X					
		90-80	140	600	X					
		80-70	143	450	X					
		70-60	146	450	X					
		60-50	149	450	X					
		50-40	152	450	X					
		40-30	155	500	X					
		30-20	158	500	X					
		20-10	161	500	X					
		10-0'	165	500	X		X			Point Completed at 2:49 PM with 5.4 cy

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill

Project #: 13354x8

Location: SE Landfill

Inspector: KJ

Contractor: Earthtech

Pin #: P56

Date Drilled: 3/18/2013

Date Grouted: 3/18/2013

Total Depth: 240

Total Grout: 5.0 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
3/18/2013	68 / 69	240	17 / 41	600	X					SOT# 68 at 11:25 PM - Line pressure 360 PSI - after 17 strokes casing was plugged - moved truck to different point - cleared obstruction at 1:00 PM - SOT# 69 at 1:42 PM - Line pressure 360 PSI
		235	44	600	X					
		230	47	600	X					
		225	53	600	X					
		220	57	600	X					
		215	61	600	X					
		210	65	600	X					
		205	69	600	X					
		200	71	600	X					
		195	74	600	X					
		190	77	600	X					
		185	81	600	X					
		180	85	600	X					
		175	88	600	X					
		170	91	600	X					
		165	95	600	X					
		160	100	600	X					
		155	105	600	X					
		150	109	600	X					
		145	111	600	X					

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill

Project #: 13354x8

Location: SE Landfill

Inspector: KJ

Contractor: Earthtech

Pin #: P56

Date Drilled: 3/18/2013

Date Grouted: 3/18/2013

Total Depth: 240

Total Grout: 5.0 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
3/18/2013	69	140-130	112	600	X					Start of Pump & Pull Zone
		130-120	115	600	X					
		120-110	117	600	X					
		110-100	120	650	X					
		100-90	123	600	X					
		90-80	126	600	X					
		80-70	129	600	X					
		70-60	131	600	X					
		60-50	133	600	X					
		50-40	136	600	X					
		40-30	139	600	X					
		30-20	142	600	X					
		20-10	146	600	X					
		10-0'	150	600	X		X			Point Completed at 2:26 PM with 5 cy

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill

Project #: 13354x8

Location: SE Landfill

Inspector: KJ

Contractor: Earthtech

Pin #: P57

Date Drilled: 3/19/2013

Date Grouted: 3/19/2013

Total Depth: 236

Total Grout: 6.0 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
3/19/2013	70	240	38	600	X					Start # 70 at 12:40 pm line pressure 360 PSI
		235	40	600	X					
		230	43	600	X					
		225	47	600	X					
		220	50	600	X					
		215	55	600	X					
		210	60	600	X					
		205	65	600	X					
		200	70	600	X					
		195	76	600	X					
		190	83	600	X					
		185	87	600	X					
		180	94	600	X					
		175	116	600	X					
		170	133	600	X					
		165	136	600	X					
		160	138	625	X					
		155	140	625	X					
		150	141	650	X					
		145	143	650	X					

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill

Project #: 13354x8

Location: SE Landfill

Inspector: KJ

Contractor: Earthtech

Pin #: P57

Date Drilled: 3/19/2013

Date Grouted: 3/19/2013

Total Depth: 236

Total Grout: 6.0 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
3/19/2013	70	140-130	144	650	X					Start of Pump & Pull Zone
		130-120	147	600	X					
		120-110	150	600	X					
		110-100	153	600	X					
		100-90	156	550	X					
		90-80	158	550	X					
		80-70	161	500	X					
		70-60	164	500	X					
		60-50	167	500	X					
		50-40	170	400	X					
		40-30	173	400	X					
		30-20	176	400	X					
		20-10	178	400	X					
		10-0'	180	400	X		X			Point Completed at 1:35 PM with 6 cy

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill

Project #: 13354x8

Location: SE Landfill

Inspector: KJ

Contractor: Earthtech

Pin #: P58

Date Drilled: 3/19/2013

Date Grouted: 3/19/2013

Total Depth: 235

Total Grout: 4.0 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
3/19/2013	70	240	217	575	X					Cont.T# 70 from 180 strokes at 1:48 PM - Lline pressure 300 PSI
		235	222	575	X					
		230	227	525	X					
		225	230	525	X					
		220	233	500	X					
		215	237	500	X					
		210	240	500	X					
		205	243	500	X					
		200	246	500	X					
		195	248	500	X					
		190	251	500	X					
		185	253	500	X					
		180	255	500	X					
		175	257	500	X					
		170	260	500	X					
		165	263	500	X					
		160	265	700	X					
		155	266	700	X					
		150	268	700	X					
		145	270	700	X					

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill

Project #: 13354x8

Location: SE Landfill

Inspector: KJ

Contractor: Earthtech

Pin #: P58

Date Drilled: 3/19/2013

Date Grouted: 3/19/2013

Total Depth: 235

Total Grout: 4.0 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
3/19/2013	69	140	271	700	X					Start of Pump & Pull Zone
		135	272	700	X					
		130-120	274	700	X					
		120-110	277	700	X					
		110-100	280	700	X					
		100-90	282	700	X					
		90-80	284	700	X					
		80-70	286	700	X					
		70-60	288	700	X					
		60-50	290	700	X					
		50-40	292	600	X					
		40-30	294	600	X					
		30-20	296	600	X					
		20-10	298	600	X					
		10-0'	300	400	X		X			Point Completed at 2:30 PM with 4 cy

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill

Project #: 13354x8

Location: SE Landfill

Inspector: KJ

Contractor: Earthtech

Pin #: P59

Date Drilled: 3/25/2013

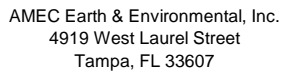
Date Grouted: 3/25/2013

Total Depth: 231

Total Grout: 4.7 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
3/25/2013	83	230	0-35	550	X					SOT# 83 at 1:05 PM - Line pressure 340 psi
		225	38	600	X					
		220	41	500	X					
		215	44	600	X					
		210	47	600	X					
		205	50	600	X					
		200	53	580	X					
		195	56	580	X					
		190	59	600	X					
		185	62	600	X					
		180	65	600	X					
		175	69	600	X					
		170	72	600	X					
		165	75	60	X					
		160	79	480	X					
		155	81	480	X					
		150	84	650	X					
		145	86	650	X					
		140	88	700	X					
		135	89	700	X					

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



Project Name: _ SE COUNTY Landfill

Location: _____ SE Landfill

Contractor: Earthtech

Date Drilled: 3/25/2013

Date Grouted: 3/25/2013

Total Depth: 231

Total Grout: 4.7 cy

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill

Project #: 13354x8

Location: SE Landfill

Inspector: KJ

Contractor: Earthtech

Pin #: P60

Date Drilled: 3/25/2013

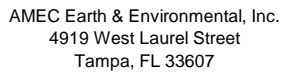
Date Grouted: 3/26/2013

Total Depth: 230

Total Grout: 4 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
3/26/2013	85	230	36	600	X					SOT# 85 at 7:47 AM - Line pressure 390 psi
		225	39	600	X					
		220	42	600	X					
		215	44	600	X					
		210	46	600	X					
		205	48	600	X					
		200	50	600	X					
		195	52	600	X					
		190	54	600	X					
		185	55	600	X					
		180	57	600	X					
		175	59	600	X					
		170	61	600	X					
		165	62	600	X					
		160	64	600	X					
		155	65	600	X					
		150	67	600	X					
		145	69	650	X					
		140	71	650	X					
		135	72	650	X					Start of Pump & Pull Zone

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



Project Name: _ SE COUNTY Landfill

Location: _____ SE Landfill

Contractor: Earthtech

Date Drilled: 3/25/2013

Date Grouted: 3/26/2013

Total Depth: 230

Total Grout: 4 cy

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill

Project #: 13354x8

Location: SE Landfill

Inspector: KJ

Contractor: Earthtech

Pin #: P61

Date Drilled: 3/28/2013

Date Grouted: 3/28/2013

Total Depth: 260

Total Grout: 20.3 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
3/28/2013	92/93	260	150 / 101	480						SOT#92 at 1:35 PM - Line pressure 365 psi SOT#93 at 3:20 PM - Line pressure 365 psi
		255	110	480						TC - pump and pull
		250	123	600	X					
		245	181	500						TC - pump and pull
		240	200	500						TC - pump and pull
		235	221	450						TC - pump and pull
		230	233	500						TC - pump and pull
		225	262	500						TC - pump and pull
		220	268	500						TC - pump and pull
		215	292	500						TC - pump and pull
		210	301	500						TC - pump and pull
		205	310							EOT#93 at 3:55 PM
		200	--							TC - pull no pump
		195	--							TC - pull no pump
	94	190	213	550						Cont. Truck#94 from 154 strokes at 6:15 PM - Line pressure 420 psi
		185	229	550						TC - pump and pull
		180	234	500						TC - pump and pull
		175	269	650	X					TC - pump and pull
		170	271	600						
		165	273	500						TC - pump and pull

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill

Project #: 13354x8

Location: SE Landfill

Inspector: KJ

Contractor: Earthtech

Pin #: P61

Date Drilled: 3/28/2013

Date Grouted: 3/28/2013

Total Depth: 260

Total Grout: 20.3 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
3/28/2013	94	160	275	500						TC - pump and pull
		155	279	550						TC - pump and pull
		150	293	600						TC - pump and pull
		145	299	600						TC - pump and pull
		140-130	303	650	X					Start of Pump & Pull Zone
		130-120	305	500						
		120-110	307	500						
		110-100	309	600						
		100-90	311	480						
		90-80	313	480						
		80-70	315	480						
		70-60	317	480						
		60-50	318	480						
		50-40	321	480						
		40-30	323	480						
		30-20	325	480						
		20-10	327	480						
		10-0'	329	480			X			Point Completed at 6:50 PM with 20.3 cy

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



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4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill

Project #: 13354x8

Location: SE Landfill

Inspector: RK

Contractor: Earthtech

Pin #: P62

Date Drilled: 3/27/2013

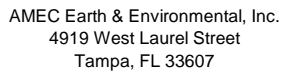
Date Grouted: 3/27/2013

Total Depth: 231

Total Grout: 6.3 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
3/27/2013	90	231	0-66	520	X					SOT#90 at 4:10 PM - Line pressure 300 PSI
		225	72	530	X					
		220	75	600	X					
		215	79	500	X					
		210	83	550	X					
		205	99	520	X					
		200	123	480	X					TC - pump and pull
		195	126	--						TC - Pull, no pummp
		190	128	680	X					
		185		--						TC - Pull, no pummp
		180	130	600	X					
		175		--						TC - Pull, no pummp
		170	133	600	X					
		165	136	600	X					
		160	138	600	X					
		155	140	600	X					
		150	142	650	X					
		145	144	650	X					
		140-130	146	550						Start of Pump & Pull Zone
		130-120	148	500						

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



Project Name: _ SE COUNTY Landfill

Location: _____ SE Landfill

Contractor: Earthtech

Date Drilled: 3/27/2013

Date Grouted: 3/27/2013

Total Depth: 231

Total Grout: 6.3 cy

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



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COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill

Project #: 13354x8

Location: SE Landfill

Inspector: RK

Contractor: Earthtech

Pin #: P63

Date Drilled: 3/26/2013

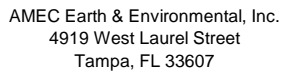
Date Grouted: 3/27/2013

Total Depth: 232

Total Grout: 3.4 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
3/27/2013	88	232	144	600	X					Cont. Truck# 88 from 117 strokes at 8:40 AM - Line pressure 380 psi
		225	149	680	X					
		220	151	680	X					
		215	153	680	X					
		210	155	680	X					
		205	157	700	X					
		200	159	680	X					
		195	161	680	X					
		190	163	680	X					
		185	165	680	X					
		180	167	680	X					
		175	168	680	X					
		170	170	680	X					
		165	171	680	X					
		160	173	680	X					
		155	175	680	X					
		150	176	650	X					
		145	178	680	X					
		140-130	180	400						Start of Pump & Pull Zone
		130-120	186	680						

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



Project Name: _SE COUNTY Landfill	Pin #: _P63
Project #: _____13354x8	Date Drilled: __3/26/2013
Location: __SE Landfill	Date Grouted: __3/27/2013
Inspector: __RK	Total Depth: __232
Contractor: __Earthtech	Total Grout: __3.4 cy

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
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COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill

Project #: 13354x8

Location: Lithia

Inspector: RK

Contractor: Earthtech

Pin #: S1

Date Drilled: 4/2/2013, 4/3/2013

Date Grouted: 4/3/2013

Total Depth: 230

Total Grout: 6.3 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
4/3/2013	102	230	108							Cont. Truck #102 at 12:50 PM from 84 Strokes - Line Pressure 400 psi
		230	109	650	X					
		225	111	700	X					
		220	114	650	X					
		215	115	700	X					
		210	116	780	X					
		205	117	780	X					TC
		200	119	650	X					TC
		195	120	630	X					TC
		190	122	620	X					
		185	125	620	X					
		180	127	600	X					
		175	130	630	X					TC
		170	132	630	X					
		165	134	630	X					
		160	136	650	X					
		155	138	650	X					
		150	140	700	X					
		145	142	610	X					
		140-130	147	650	X					Start of Pump & Pull Zone

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill

Project #: 13354x8

Location: Lithia

Inspector: RK

Contractor: Earthtech

Pin #: S1

Date Drilled: 4/2/2013, 4/3/2013

Date Grouted: 4/3/2013

Total Depth: 230

Total Grout: 6.3 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
4/3/2013	102	130-120	151	600	X					EOT #102 at 1:22 PM
	103	120-110	13							SOT # 103 at 1:40 PM - Line pressure 400 psi
		110-100	17							
		100-90	20							
		90-80	23							
		80-70	26							
		70-60	29							
		60-50	31							
		50-40	34							
		40-30	37							
		30-20	40							
		20-10	43							
	103	10-0'	77							Used a total of 4.8 cy at 2:10 pm
4/3/2013	105	0	45				X			additional 1.5 cy (from Truck#105) used to fill settlement after casing extraction at 4:15 PM
										Point Completed at 5:05 PM with 6.3 cy

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: _ SE COUNTY Landfill

Project #: _____ 13354x8

Location: ___ Li SE Landfill

Inspector: ___ RK

Contractor: ___ Earthtech

Pin #: _ S-2

Date Drilled: ___ 4/3/2013

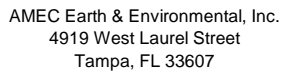
Date Grouted: ___ 4/4/2013

Total Depth: ___ 230

Total Grout: ___ 4.2 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
4/4/2013	106	230	34	360						SOT#106 at 9:50 AM - Line pressure 360 psi
		230	40	650	X					
		225	45	650	X					
		220	48	650	X					
		215	50	650	X					
		210	52	680	X					
		205	54	680	X					
		200	56	680	X					
		195	58	680	X					
		190	60	680	X					
		185	63	650	X					
		180	65	680	X					
		175	67	650	X					
		170	69	700	X					
		165	70	700	X					
		160	71	700	X					
		155	72	700	X					
		150	74	650	X					
		145	76	700	X					
		140-130	79	650	X					

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



Project Name: _ SE COUNTY Landfill

Location: _____ SE Landfill

Contractor: Earthtech

Date Drilled: ____ 4/3/2013

Date Grouted: 4/4/2013

Total Depth: 230

Total Grout: 4.2 cy

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill

Project #: 13354x8

Location: Lithia

Inspector: RK

Contractor: Earthtech

Pin #: S-3

Date Drilled: 4/8/2013

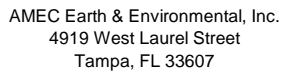
Date Grouted: 4/8/2013

Total Depth: 225

Total Grout: 5.5 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
4/8/2013	111	225	43							SOT#111 at 4:31 PM - Line pressure 320 PSI
		225	55	550	X					TC - pump and pull
		220	57	500						TC - pump and pull
		215	60	600	X					
		210	61	400						TC - pull no pump
		205	61	400						TC - pump and pull
		200	62	350						TC - pump and pull
		195	62	350						
		190	66	650	X					2 Strokes to Fill Pipe
		185	67	650	X					
		180	67	--						TC - pump and pull
		175	67	--						TC - pump and pull
		170	73	550	X					
		165	74	580	X					
		160	76	550	X					
		155	77	580	X					
		150	82	580	X					
		145	84	580	X					
		140-130	87	620						Start of Pump & Pull Zone
		130-120	90	400						

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



Project Name: _ SE COUNTY Landfill

Project #: _____ 13354x8

Location: _____ Lithia

Inspector: _____ RK

Contractor: ___ Earthtech

Pin #:_ S-3

Date Drilled: 4/8/2013

Date Grouted: 4/8/2013

Total Depth: _____ 225

Total Grout: 5.5 cy

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill

Project #: 13354x8

Location: SE Landfill

Inspector: KJ

Contractor: Earthtech

Pin #: S4

Date Drilled: 3/27/2013

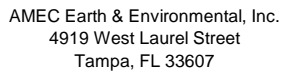
Date Grouted: 3/27/2013

Total Depth: 231

Total Grout: 3.5 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
3/27/2013	89	230	0-31	600	X					SOT#89 at 12:10 PM - Line pressure 380 psi
		225	33	650	X					
		220	35	650	X					
		215	37	650	X					
		210	40	625	X					
		205	43	625	X					
		200	45	600	X					
		195	47	600	X					
		190	48	680	X					
		185	50	600	X					
		180	52	600	X					
		175	53	600	X					
		170	--	--						TC - pull no pump
		165	--	--						TC - pull no pump
		160	55	700	X					TC
		155	57	700	X					TC
		150	59	325	X					
		145	60	325	X					
		140-130	62	350	X					Start of Pump & Pull Zone
		130-120	65	350	X					

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



Project Name: _ SE COUNTY Landfill

Location: _____ SE Landfill

Contractor: Earthtech

Date Drilled: 3/27/2013

Date Grouted: 3/27/2013

Total Depth: _____ 231

Total Grout: 3.5 cy

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill

Project #: 13354x8

Location: SE Landfill

Inspector: KJ

Contractor: Earthtech

Pin #: S5

Date Drilled: 3/26/2013

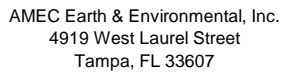
Date Grouted: 3/27/2013

Total Depth: 233

Total Grout: 3.9 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
3/27/2013	88	230	38	600	X					SOT# 88 at 7:40 AM - Line pressure 375 psi
	88	225	41	600	X					
	88	220	44	600	X					
	88	215	46	600	X					
	88	210	49	600	X					
	88	205	51	600	X					
	88	200	54	600	X					
	88	195	57	600	X					
	88	190	60	600	X					
	88	185	63	600	X					
	88	180	66	650	X					
	88	175	69	650	X					
	88	170	71	650	X					
	88	165	72	650	X					
	88	160	73	650	X					TC
	88	155	75	650	X					TC
	88	150	76	650	X					
	88	145	78	650	X					
	88	140-130	79	700	X					Start of Pump & Pull Zone
	88	130-120	82	650	X					

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



Project Name: _ SE COUNTY Landfill

Location: _____ SE Landfill

Contractor: Earthtech

Date Drilled: 3/26/2013

Date Grouted: 3/27/2013

Total Depth: 233

Total Grout: 3.9 cy

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill

Project #: 13354x8

Location: SE Landfill

Inspector: KJ

Contractor: Earthtech

Pin #: S6

Date Drilled: 3/26/2013

Date Grouted: 3/26/2013

Total Depth: 240

Total Grout: 5 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
3/26/2013	86	240	38	600	X					SOT# 86 at 11:26 AM - Lline pressure 360 psi
		235	43	600	X					
		230	48	600	X					
		225	52	600	X					
		220	56	600	X					
		215	60	600	X					
		210	65	600	X					
		205	72	600	X					
		200	81	600	X					
		195	86	600	X					
		190	93	600	X					
		185	97	600	X					
		180	103	600	X					
		175	108	600	X					
		170	111	500	X					
		165	115	500	X					
		160	118	700	X					
		155	121	700	X					
		150	124	650	X					
		145	125	650	X					

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill

Project #: 13354x8

Location: SE Landfill

Inspector: KJ

Contractor: Earthtech

Pin #: S6

Date Drilled: 3/26/2013

Date Grouted: 3/26/2013

Total Depth: 240

Total Grout: 5 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
3/26/2013	86	140-130	126	600	X					Start of Pump & Pull Zone
		130-120	128	600	X					
		120-110	130	500	X					
		110-100	132	500	X					
		100-90	134	500	X					
		90-80	136	500	X					
		80-70	138	500	X					
		70-60	140	500	X					
		60-50	142	500	X					
		50-40	144	500	X					
		40-30	146	500	X					
		30-20	148	500	X					
		20-10	150	500	X					
		10-0'	152	500	X		X			Point Completed at 12:02 PM with 5.0 cy

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill

Project #: 13354x8

Location: SE Landfill

Inspector: KJ

Contractor: Earthtech

Pin #: S7

Date Drilled: 3/25/2013

Date Grouted: 3/25/2013

Total Depth: 248

Total Grout: 5 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
3/25/2013	82	250	0-36	600	X					SOT# 82 at 9:56 AM - Line pressure 375 psi
		245	39	600	X					
		240	42	625	X					
		235	46	625	X					
		230	51	625	X					
		225	55	625	X					
		220	59	650	X					
		215	62	650	X					
		210	65	650	X					
		205	68	650	X					
		200	72	650	X					
		195	75	650	X					
		190	78	650	X					
		185	82	650	X					
		180	85	650	X					
		175	88	650	X					
		170	92	650	X					
		165	100	650	X					
		160	101	625	X					
		155	103	625	X					

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill

Project #: 13354x8

Location: SE Landfill

Inspector: KJ

Contractor: Earthtech

Pin #: S7

Date Drilled: 3/25/2013

Date Grouted: 3/25/2013

Total Depth: 248

Total Grout: 5 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
3/25/2013	82	150-140	105	600	X					Start of Pump & Pull Zone
		140-130	109	600	X					
		130-120	113	600	X					
		120-110	117	600	X					
		110-100	121	600	X					
		100-90	124	600	X					
		90-80	127	600	X					
		80-70	1630	600	X					
		70-60	133	600	X					
		60-50	136	600	X					
		50-40	139	600	X					
		40-30	142	600	X					
		30-20	145	500	X					
		20-10	148	400	X					
		10-0'	151	400	X		X			Point Completed at 10:40 AM with 5.0 cy

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill

Project #: 13354x8

Location: SE Landfill

Inspector: KJ

Contractor: Earthtech

Pin #: S8

Date Drilled: 3/22/2013

Date Grouted: 3/22/2013

Total Depth: 245

Total Grout: 5 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
3/22/2013	81	250	0-35	650	X					SOT# 81 at 3:30 PM - Line pressure 420 psi
	81	245	38	650	X					
	81	240	42	700	X					
	81	235	46	700	X					
	81	230	49	700	X					
	81	225	52	700	X					
	81	220	56	700	X					
	81	215	59	700	X					
	81	210	62	700	X					
	81	205	65	700	X					
	81	200	68	700	X					
	81	195	71	700	X					
	81	190	74	700	X					
	81	185	77	700	X					
	81	180	82	650	X					
	81	175	85	650	X					
	81	170	89	700	X					
	81	165	91	700	X					
	81	160	94	700	X					
	81	155	96	700	X					

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill

Project #: 13354x8

Location: SE Landfill

Inspector: KJ

Contractor: Earthtech

Pin #: S8

Date Drilled: 3/22/2013

Date Grouted: 3/22/2013

Total Depth: 245

Total Grout: 5 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
3/22/2013	81	150	98	750	X					Start of Pump & Pull Zone
		145	99	800	X					
		140-130	101	800	X					
		130-120	104	800	X					
		120-110	106	800	X					
		110-100	109	800	X					
		100-90	112	800	X					
		90-80	116	800	X					
		80-70	122	800	X					
		70-60	1287	600	X					
		60-50	133	600	X					
		50-40	137	600	X					
		40-30	141	600	X					
		30-20	145	600	X					
		20-10	148	600	X					
		10-0'	150	600	X		X			Point Completed at 4:18 PM with 5.0 cy

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill

Project #: 13354x8

Location: SE Landfill

Inspector: KJ

Contractor: Earthtech

Pin #: S9

Date Drilled: 3/21/2013

Date Grouted: 3/22/2013

Total Depth: 242

Total Grout: 4 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
3/22/2013	79	240	0-26	600	X					SOT# 79 at 8:15 AM -Line pressure 500 psi
		235	30	600	X					
		230	35	800	X					
		225	37	800	X					
		220	40	800	X					
		215	43	800	X					
		210	45	800	X					
		205	47	800	X					
		200	50	800	X					
		195	53	800	X					
		190	56	800	X					
		185	59	800	X					
		180	61	800	X					
		175	64	800	X					
		170	68	800	X					
		165	70	800	X					
		160	74	800	X					
		155	76	800	X					
		150	78	800	X					
		145	80	800	X					

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill

Project #: 13354x8

Location: SE Landfill

Inspector: KJ

Contractor: Earthtech

Pin #: S9

Date Drilled: 3/21/2013

Date Grouted: 3/22/2013

Total Depth: 242

Total Grout: 4 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
3/22/2013	79	140-130	81	750	X					Start of Pump & Pull Zone
		130-120	84	800	X					
		120-110	87	800	X					
		110-100	90	800	X					
		100-90	93	800	X					
		90-80	96	800	X					
		80-70	100	700	X					
		70-60	103	800	X					
		60-50	106	700	X					TC
		50-40	109	700	X					
		40-30	112	700	X					
		30-20	115	700	X					
		20-10	118	700	X					
		10-0'	121	700	X		X			Point Completed at 8:55 AM with 4.0 cy

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill

Project #: 13354x8

Location: SE Landfill

Inspector: KJ

Contractor: Earthtech

Pin #: S10

Date Drilled: 3/20/2013

Date Grouted: 3/20/2013

Total Depth: 241

Total Grout: 4.3 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
3/20/2013	74	240	44	550	X					SOT# 74 at 2:01 PM - Line pressure 360 psi
		235	47	550	X					
		230	50	600	X					
		225	53	600	X					
		220	57	600	X					
		215	62	600	X					
		210	65	600	X					
		205	69	600	X					
		200	72	600	X					
		195	74	600	X					
		190	77	600	X					
		185	83	600	X					
		180	87	600	X					
		175	90	600	X					
		170	94	600	X					
		165	96	600	X					
		160	99	600	X					
		155	10	600	X					
		150	102	800	X					
		145	103	800	X					

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill

Project #: 13354x8

Location: SE Landfill

Inspector: KJ

Contractor: Earthtech

Pin #: S10

Date Drilled: 3/20/2013

Date Grouted: 3/20/2013

Total Depth: 241

Total Grout: 4.3 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
3/20/2013	74	140-130	104	450	X					Start of Pump & Pull Zone
		130-120	106	550	X					
		120-110	108	600	X					
		110-100	110	600	X					
		100-90	112	600	X					
		90-80	114	400	X					
		80-70	116	400	X					
		70-60	118	400	X					
		60-50	120	400	X					
		50-40	122	400	X					
		40-30	124	400	X					
		30-20	126	400	X					
		20-10	128	400	X					
		10-0'	130	400	X		X			Point Completed at 2:45 PM with 4.3 cy

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill

Project #: 13354x8

Location: SE Landfill

Inspector: KJ

Contractor: Earthtech

Pin #: S11

Date Drilled: 3/20/2013

Date Grouted: 3/20/2013

Total Depth: 240

Total Grout: 4.7 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
3/20/2013	74	240	157	700	X					Cont Truck# 74 from 130 strokes at 2:55 PM - Line pressure 340 psi
		235	160	700	X					
		230	163	600	X					
		225	166	600	X					
		220	170	600	X					
		215	173	600	X					
		210	176	600	X					
		205	180	600	X					
		200	183	600	X					
		195	186	600	X					
		190	189	600	X					
		185	194	600	X					
		180	197	600	X					
		175	200	600	X					
		170	201	600	X					
		165	206	600	X					
		160	210	600	X					
		155	212	600	X					
		150	213	800	X					
		145	215	800	X					

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill

Project #: 13354x8

Location: SE Landfill

Inspector: KJ

Contractor: Earthtech

Pin #: S11

Date Drilled: 3/20/2013

Date Grouted: 3/20/2013

Total Depth: 240

Total Grout: 4.7 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
3/20/2013	70	140-130	217	600	X					Start of Pump & Pull Zone
		130-120	330	800	X					
		120-110	223	700	X					
		110-100	226	700	X					
		100-90	229	700	X					
		90-80	233	650	X					
		80-70	237	600	X					
		70-60	242	600	X					
		60-50	247	600	X					
		50-40	252	500	X					
		40-30	257	460	X					
		30-20	262	460	X					
		20-10	267	460	X					
		10-0'	272	400	X		X			Point Completed at 3:40 PM with 4.7 cy

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill

Project #: 13354x8

Location: SE Landfill

Inspector: KJ

Contractor: Earthtech

Pin #: S12

Date Drilled: 3/28/2013

Date Grouted: 3/28/2013

Total Depth: 240

Total Grout: 4.7 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
3/28/2013	94	240	32	625	X					SOT# 94 at 5:28 PM - Line pressure 380 psi
		235	35	625	X					
		230	38	625	X					
		225	40	625	X					
		220	43	600	X					
		215	62	600	X					
		210	85	600	X					
		205	90	600	X					
		200	95	600	X					
		195	100	600	X					
		190	104	580	X					
		185	108	580	X					
		180	111	600	X					
		175	113	600	X					
		170	116	650	X					
		165	118	650	X					
		160	121	650	X					
		155	123	650	X					
		150	126	700	X					
		145	127	700	X					

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill

Project #: 13354x8

Location: SE Landfill

Inspector: KJ

Contractor: Earthtech

Pin #: S12

Date Drilled: 3/28/2013

Date Grouted: 3/28/2013

Total Depth: 240

Total Grout: 4.7 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
3/28/2013	94	140-130	128	600	X					Start of Pump & Pull Zone
		130-120	130	600	X					
		120-110	132	600	X					
		110-100	134	600	X					
		100-90	136	600	X					
		90-80	138	600	X					
		80-70	140	600	X					
		70-60	142	600	X					
		60-50	144	600	X					
		50-40	146	600	X					
		40-30	148	600	X					
		30-20	150	600	X					
		20-10	152	600	X					
		10-0'	154	600	X		X			Point Completed at 6:10 PM with 4.7 cy

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill

Project #: 13354x8

Location: Lithia

Inspector: KJ

Contractor: Earthtech

Pin #: S-13

Date Drilled: 4/4/2013-4/5/2013

Date Grouted: 4/4/2013-4/5/2013

Total Depth: 240

Total Grout: 17.8 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
4/4/2013	106	240	127-216	700	X					Cont. Truck#106 from 127 strokes at 10:50 AM - Line pressure 500 psi
		235	216	--	X					TC - pump and pull
		230	--	--						TC - pump and pull
		225	--	--						TC - pump and pull
		220	260	--						TC - pump and pull
		215	300	--						EOT#106 at 11:10 AM - Stop work - Bad weather
4/5/2013	108	210	60	350						Casing Stuck - Remove & reinstall casing - SOT#108 at 9:34 AM - Line pressure 300 psi
		205	60	350						TC - pump and pull
	108/109	200	150/ 76	350/500	X					EOT #108 at 10: 35 AM SOT#109 at 11:30 AM - Line pressure 300
		195	76	500	X					
		190	87	600	X					
		185	87	600	X					
		180	91	650	X					
		175	91	650	X					
		170	95	650	X					
		165	95	650	X					
		160	100	600	X					
		155	100	600	X					
		150	104	600	X					
		145	104	600	X					

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill

Project #: 13354x8

Location: Lithia

Inspector: KJ

Contractor: Earthtech

Pin #: S-13

Date Drilled: 4/4/2013-4/5/2013

Date Grouted: 4/4/2013-4/5/2013

Total Depth: 240

Total Grout: 17.8 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
3/11/2013	109	140	108	600	X					Start of Pump & Pull Zone
		135	108	600	X					
		130	113	600	X					
		120-110	117	600	X					
		110-100	121	600	X					
		100-90	125	600	X					
		90-80	129	650	X					
		80-70	135	400						additional strokes to fill casing
		70-60	141	400						additional strokes to fill casing
		60-50	161	400						additional strokes to fill casing
		50-40	176	350						additional strokes to fill casing
		40-30	193	350						additional strokes to fill casing
		30-20	200							
		20-10	207							
		10-0'	210				X			Point Completed at 12:30 PM with 17.8 cy

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill

Project #: 13354x8

Location: Lithia

Inspector: KJ

Contractor: Earthtech

Pin #: S-14

Date Drilled: 4/8/2013

Date Grouted: 4/8/2013

Total Depth: 235

Total Grout: 6.1 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
4/8/2013	110	240	57	500	X					SOT#110 at 11:50 AM - Line pressure 250 psi
		235	57	500	X					
		230	767	500	X					
		225	67	500	X					
		220	76	500	X					
		215	76	500	X					
		210	84	500	X					
		205	84	500	X					
		200	92	500	X					
		195	92	500	X					
		190	100	500	X					
		185	100	500	X					
		180	TC	--						TC – pull no pump
		175	TC	--						TC – pull no pump
		170	108	550	X					
		165	108	550	X					
		160	114	550	X					
		155	114	550	X					
		150	120	600	X					
		145	120	600	X					

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill

Project #: 13354x8

Location: Lithia

Inspector: KJ

Contractor: Earthtech

Pin #: S-14

Date Drilled: 4/8/2013

Date Grouted: 4/8/2013

Total Depth: 235

Total Grout: 6.1 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
4/8/2013	110	140	0		TC					TC – pull no pump
		135	0		TC					TC – pull no pump
		130-120	125	600	X					Start of Pump & Pull Zone
		120-110	130	650	X					
		110-100	134	700	X					
		100-90	139	650	X					
		90-80	143	650	X					
		80-70	148	600	X					
		70-60	153	600	X					
		60-50	158	600	X					
		50-40	163	600	X					
		40-30	168	600	X					
		30-20	173	600	X					
		20-10	178	600	X					
		10-0'	183	600	X		X			Point Completed at 12:58 PM with 6.1 cy

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill

Project #: 13354x8

Location: SE Landfill

Inspector: RK

Contractor: Earthtech

Pin #: S15

Date Drilled: 4/1/2013

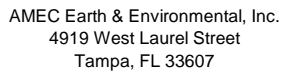
Date Grouted: 4/1/2013 & 4/2/2013

Total Depth: 230

Total Grout: 8.2 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
4/1/2013 &	99	230	53	540	X					SOT # 99 at 4:40 PM - Line pressure 320 psi
		225	67	540	X					
		220	69	540	X					
		215	72	550	X					
		210	76	500	X					TC - pump and pull
		205	--	--						TC - pull no pump
		200	135	450						TC - pump and pull
		195	155	450						TC - pump and pull
		190	156	430						TC - pump and pull
		185	157	450						TC - pump and pull - EOT# 99 at 5:00 PM
4/2/2013	101	180	22	560	X					SOT# 101 at 1:25 PM - Line pressure 300 psi
		175	--	--	--					TC - pull no pump
		170	34	500	X					
		165	36	500						TC - pull no pump
		160	38	500	X					
		155	--	--	--					TC - pull no pump
		150	39	500	X					TC
		145	42	500	X					TC
		140-130	44	500	X					Start of Pump & Pull Zone
		130-120	46	550	X					

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC** = Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



Project Name: _SE COUNTY Landfill	Pin #: _S15
Project #: _____ 13354x8	Date Drilled: ____ 4/1/2013
Location: ____ SE Landfill	Date Grouted: ____ 4/1/2013 & 4/2/2013
Inspector: ____ RK	Total Depth: ____ 230
Contractor: ____ Earthtech	Total Grout: ____ 8.2 cy

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill

Project #: 13354x8

Location: SE Landfill

Inspector: RK

Contractor: Earthtech

Pin #: S16

Date Drilled: 3/29/2013

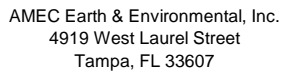
Date Grouted: 4/1/2013

Total Depth: 231

Total Grout: 4 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
4/1/2013	86	231	140-177	600	X					Cont. Truck# 86 from 140 strokes at 8:29 AM - Line pressure 360 psi
		225	180	600	X					
		220	183	600	X					
		215	185	600	X					
		210	187	650	X					
		205	190	650	X					
		200	192	630	X					
		195	193	650	X					
		190	196	650	X					
		185	198	600	X					
		180	201	600	X					
		175	203	600	X					
		170	205	600	X					
		165	207	600	X					
		160	209	600	X					
		155	212	600	X					
		150	214	600	X					
		145	217	600	X					
		140-130	221	600	X					Start of Pump & Pull Zone
		130-120	224	600	X					

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



Project Name: _ SE COUNTY Landfill

Location: _____ SE Landfill

Contractor: Earthtech

Date Drilled: ____ 3/29/2013

Date Grouted: 4/1/2013

Total Depth: 231

Total Grout: 4 cy

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill

Project #: 13354x8

Location: Lithia

Inspector: RK

Contractor: Earthtech

Pin #: S17

Date Drilled: 4/10/2013

Date Grouted: 4/10/2013

Total Depth: 240

Total Grout: 4.7 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
4/10/2013	116	240	40							SOT #116 at 12:40 PM - Line pressure 200 psi
		240	45	500	X					
		235	48	500	X					
		230	52	500	X					
		225	54	500	X					TC
		220	55	300						TC - pump and pull
		215	55	300						TC - pull no pump
		210	56							TC - pump and pull
		205	56							TC - pull no pump
		200	56							TC - pull no pump
		195	56							TC - pull no pump
		190	58	450	X					
		185	60	500	X					
		180	61	350						TC - pump and pull
		175	64	500	X					
		170	66	500	X					
		165	67	500	X					
		160	69	500	X					
		155	71	550	X					
		150	73	300						TC - pump and pull

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill

Pin #: S17

Project #: 13354x8

Date Drilled: 4/10/2013

Location: Lithia

Date Grouted: 4/10/2013

Inspector: RK

Total Depth: 240

Contractor: Earthtech

Total Grout: 4.7 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
4/10/2013	116	145	75	500	X					
		140-130	79	500						Start of Pump & Pull Zone
		130-120	82	400						
		120-110	85	400						
		110-100	88	400						
		100-90	92	400						
		90-80	96	350						
		80-70	100	300						
		70-60	104	300						
		60-50	108	300						
		50-40	112	300						
		40-30	118	300						
		30-20	123	300						
		20-10	129	320						
		10-0'	130	350						
		0	141				X			Additional strokes after all Casing Extracted
										Point Completed at 1:15pm with 4.7 cy

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill

Project #: 13354x8

Location: Lithia

Inspector: RK

Contractor: Earthtech

Pin #: S18

Date Drilled: 4/10/2013 - 4/11/2013

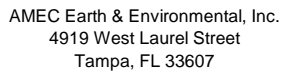
Date Grouted: 4/11/2013

Total Depth: 230

Total Grout: 4.3 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
4/11/2013	121	230	145	500						Cont. Truck #121 from 105 Strokes at 11:25 AM - Line Pressure 280 PSI
		225	155	550						
		220	--							TC - Pull no Pump
		215	--	--						TC - Pull no Pump
		210	--	--						TC - Pull no Pump
		205	--	--						TC - Pull no Pump
		200	161	650	X					
		195	--	--						TC - Pull no Pump
		190	--	--						TC - Pull no Pump
		185	--	--						TC - Pull no Pump
		180	166	650	X					
		175	--	--						TC - Pull no Pump
		170	169	600	X					
		165	--	--						TC - Pull no Pump
		160	171	620	X					
		155	--	--						TC - Pull no Pump, Torque > 240
		150	174	630	X					
		145	177	680	X					
		140-130	181	620	X					Start of Pump & Pull Zone
		130-120	184	400						

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



Project Name: _ SE COUNTY Landfill

Location: _____ Lithia

Contractor: Earthtech

Date Drilled: 4/10/2013 - 4/11/2013

Date Grouted: 4/11/2013

Total Depth: 230

Total Grout: 4.3 cy

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill

Project #: 13354x8

Location: Lithia

Inspector: KJ

Contractor: Earthtech

Pin #: S19

Date Drilled: 4/17/2013, 4/18/2013

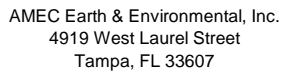
Date Grouted: 4/18/2013

Total Depth: 229

Total Grout: 3.6 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
4/18/2013	139	229	32	650	X					SOT#139 at 8:20 am - Line pressure 360 psi
	139	225	34	650	X					
	139	220	36	650	X					
	139	215	38	650	X					
	139	210	40	650	X					
	139	205	42	650	X					
	139	200	44	560	X					
	139	195	46	560	X					
	139	190	49	600	X					
	139	185	50	600	X					
	139	180	53	600	X					
	139	175	55	600	X					
	139	170	56	600	X					
	139	165	57	600	X					
	139	160	58	600	X					
	139	155	61	600	X					
	139	150	65	560	X					
	139	145	66	560	X					
	139	140-130	68	550	X					Start of Pump & Pull Zone
	139	130-120	71	450	X					

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



Project Name: _ SE COUNTY Landfill

Location: _____ Lithia

Contractor: Earthtech

Date Drilled: 4/17/2013, 4/18/2013

Date Grouted: 4/18/2013

Total Depth: _____ 229

Total Grout: 3.6 cy

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill

Project #: 13354x8

Location: Lithia

Inspector: KJ

Contractor: Earthtech

Pin #: S20

Date Drilled: 4/18/2013

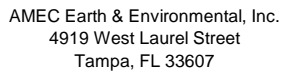
Date Grouted: 4/18/2013

Total Depth: 231

Total Grout: 2.5 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
4/18/2013	140	231	275	550	X					Cont. Truck #140 from 249 strokes at 3:30 PM - Line pressure 300 psi
		225	278	550	X					
		220	281	550	X					
		215	283	550	X					
		210	285	600	X					TC
		205	287	600	X					TC
		200	289	600	X					TC
		195	292	600	X					TC
		190	294	600	X					
		185	296	600	X					
		180	299	600	X					
		175	300	600	X					
		170	301	600	X					
		165	302	600	X					
		160	--	--						TC - Pull no pump
		155	--	--						TC - Pull no pump
		150	304	700	X					
		145	305	700	X					
		140-130	306	700	X					Start of Pump & Pull Zone
		130-120	308	700	X					

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



Project Name: _ SE COUNTY Landfill

Location: _____ Lithia

Contractor: Earthtech

Date Drilled: 4/18/2013

Date Grouted: 4/18/2013

Total Depth: _____ 231

Total Grout: 2.5 cy

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill

Project #: 13354x8

Location: SE Landfill

Inspector: KJ

Contractor: Earthtech

Pin #: S21

Date Drilled: 4/3/2013

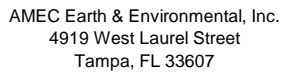
Date Grouted: 4/3/2013

Total Depth: 231

Total Grout: 11.2 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
4/3/2013	102	230	54	650	X					SOT# 102 at 11:11 AM - Line pressure 500 psi
	102	225	63	700	X					
	102	220	73	700	X					
	102	215	75	700	X					
	102	210	77	700	X					
	102	205	78	700	X					
	102	200	79	700	X					
	102	195	80	700	X					casing plugged - sent truck 102 to different point - clear obstruction and re-installed casing to 190 feet - SOT#103
	102 / 103	190	85 / 150	700	X					at 3:45 PM - Line pressure 500 psi (17 strokes lost) - EOT#103 at 4:00 PM
	104	185	82	800	X					SOT#104 at 4:00 PM - Line pressure 250 psi
		180	135	800	X					TC - pump and pull
		175	140	900	X					
		170	145	900	X					
		165	150	700	X					
		160	152	700	X					
		155	155	700	X					
		150	158	700	X					
		145	160	700	X					
		140-130	161	700	X					Start of Pump & Pull Zone
		130-120	167	700	X					

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



Project Name: _SE COUNTY Landfill	Pin #: _S21
Project #: _____ 13354x8	Date Drilled: ____ 4/3/2013
Location: ____ SE Landfill	Date Grouted: ____ 4/3/2013
Inspector: ____ KJ	Total Depth: ____ 231
Contractor: ____ Earthtech	Total Grout: ____ 11.2 cy

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill

Project #: 13354x8

Location: SE Landfill

Inspector: KJ

Contractor: Earthtech

Pin #: S22

Date Drilled: 4/1/2013

Date Grouted: 4/2/2013

Total Depth: 240

Total Grout: 5.2 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
4/2/2013	101	240	97-140	600	X					Cont Truck# 101 from 97 strokes at 2:15 PM - Line pressure 300
		235	143	600	X					
		230	146	625	X					
		225	149	625	X					
		220	151	625	X					
		215	153	625	X					
		210	156	625	X					
		205	159	625	X					
		200	162	625	X					
		195	165	625	X					
		190	168	625	X					
		185	172	625	X					
		180	177	600	X					
		175	182	600	X					
		170	186	600	X					
		165	190	600	X					
		160	195	600	X					
		155	167	600	X					
		150	199	800	X					
		145	200	800	X					

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill

Project #: 13354x8

Location: SE Landfill

Inspector: KJ

Contractor: Earthtech

Pin #: S22

Date Drilled: 4/1/2013

Date Grouted: 4/2/2013

Total Depth: 240

Total Grout: 5.2 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
4/2/2013	101	140-130	202	800	X					Start of Pump & Pull Zone
		130-120	205	700	X					
		120-110	208	700	X					
		110-100	212	700	X					
		100-90	216	700	X					
		90-80	220	700	X					
		80-70	224	700	X					
		70-60	228	700	X					
		60-50	232	700	X					
		50-40	236	700	X					
		40-30	240	700	X					
		30-20	244	700	X					
		20-10	248	700	X					
		10-0'	252	700	X		X			Point Completed at 2:55 PM with 5.2 cy

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill

Project #: 13354x8

Location: SE Landfill

Inspector: KJ

Contractor: Earthtech

Pin #: S23

Date Drilled: 4/1/2013

Date Grouted: 4/1/2013

Total Depth: 248

Total Grout: 4.3 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
4/1/2013	98	250	0-27	600	X					SOT# 98 at 3:32 PM - Line pressure 400 psi
		245	33	600	X					
		240	40	600	X					
		235	43	600	X					
		230	45	600	X					
		225	47	600	X					
		220	49	700	X					
		215	52	700	X					
		210	55	700	X					
		205	57	700	X					
		200	59	650	X					
		195	61	650	X					
		190	64	650	X					
		185	67	650	X					
		180	70	650	X					
		175	73	650	X					
		170	75	650	X					
		165	78	650	X					
		160	81	650	X					
		155	84	650	X					

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill

Project #: 13354x8

Location: SE Landfill

Inspector: KJ

Contractor: Earthtech

Pin #: S23

Date Drilled: 4/1/2013

Date Grouted: 4/1/2013

Total Depth: 248

Total Grout: 4.3 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
4/1/2013	98	150	87	700	X					
		145	88	700	X					
		140-130	90	600	X					Start of Pump & Pull Zone
		130-120	93	700	X					
		120-110	96	700	X					
		110-100	99	700	X					
		100-90	102	600	X					
		90-80	105	600	X					
		80-70	108	600	X					
		70-60	111	600	X					
		60-50	114	600	X					
		50-40	117	600	X					
		40-30	120	600	X					
		30-20	123	600	X					
		20-10	126	600	X					
		10-0'	130	600	X		X			Point Completed at 4:15 PM with 4.3 cy

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill

Project #: 13354x8

Location: SE Landfill

Inspector: KJ

Contractor: Earthtech

Pin #: S24

Date Drilled: 4/1/2013

Date Grouted: 4/1/2013

Total Depth: 247

Total Grout: 4.5 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
4/1/2013	97	250	0-25	525	X					SOT# 97 at 12:10 PM - Line pressure 300 psi
	97	245	28	525	X					
	97	240	32	600	X					
	97	235	35	600	X					
	97	230	39	600	X					
	97	225	42	600	X					
	97	220	46	600	X					
	97	215	50	600	X					
	97	210	54	600	X					
	97	205	57	600	X					
	97	200	60	600	X					
	97	195	63	600	X					
	97	190	67	600	X					
	97	185	70	600	X					
	97	180	74	600	X					
	97	175	77	600	X					
	97	170	80	650	X					
	97	165	83	650	X					
	97	160	86	700	X					
	97	155	88	700	X					

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill

Project #: 13354x8

Location: SE Landfill

Inspector: KJ

Contractor: Earthtech

Pin #: S24

Date Drilled: 4/1/2013

Date Grouted: 4/1/2013

Total Depth: 247

Total Grout: 4.5 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
4/1/2013	97	150	90	600	X					Start of Pump & Pull Zone
		145	92	600	X					
		140-130	93	700	X					
		130-120	96	700	X					
		120-110	99	700	X					
		110-100	102	700	X					
		100-90	105	700	X					
		90-80	108	700	X					
		80-70	111	700	X					
		70-60	114	700	X					
		60-50	117	700	X					
		50-40	120	700	X					
		40-30	123	700	X					
		30-20	126	700	X					
		20-10	129	700	X					
		10-0'	135	700	X		X			Point Completed at 12:56 PM with 4.5 cy

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill

Project #: 13354x8

Location: SE Landfill

Inspector: RK

Contractor: Earthtech

Pin #: S25

Date Drilled: 3/29/2013

Date Grouted: 4/1/2013

Total Depth: 242

Total Grout: 4.7 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
4/1/2013	96	240	0-44	525	X					Start # 96 at 7:35 AM - Line pressure 300 psi
		235	49	525	X					
		230	54	600	X					
		225	57	600	X					
		220	60	600	X					
		215	64	600	X					
		210	67	600	X					
		205	71	600	X					
		200	75	600	X					
		195	77	600	X					
		190	81	600	X					
		185	85	600	X					
		180	88	600	X					
		175	91	600	X					
		170	94	600	X					
		165	96	600	X					
		160	99	650	X					
		155	101	650	X					
		150	104	700	X					Start of Pump & Pull Zone
		145	105	700	X					

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill

Project #: 13354x8

Location: SE Landfill

Inspector: RK

Contractor: Earthtech

Pin #: S25

Date Drilled: 3/29/2013

Date Grouted: 4/1/2013

Total Depth: 242

Total Grout: 4.7 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
4/1/2013	96	140-130	107	700	X					
		130-120	110	700	X					
		120-110	112	600	X					
		110-100	114	650	X					
		100-90	117	700	X					
		90-80	119	500	X					
		80-70	122	500	X					
		70-60	125	500	X					
		60-50	128	500	X					
		50-40	130	500	X					
		40-30	133	500	X					
		30-20	136	500	X					
		20-10	138	500	X					
		10-0'	140	500	X		X			Point Completed at 8:22 AM with 4.7 cy

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill

Project #: 13354x8

Location: SE Landfill

Inspector: KJ

Contractor: Earthtech

Pin #: S26

Date Drilled: 3/29/2013

Date Grouted: 3/29/2013

Total Depth: 240

Total Grout: 4.2 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
3/29/2013	95	240	0-34	650	X					SOT# 95 at 11:25 PM - Line pressure 400 psi
		235	36	650	X					
		230	39	650	X					
		225	44	650	X					
		220	47	625	X					
		215	50	625	X					
		210	52	625	X					
		205	54	625	X					
		200	57	625	X					
		195	59	625	X					
		190	62	625	X					
		185	65	625	X					
		180	68	600	X					
		175	74	600	X					
		170	74	600	X					
		165	75	600	X					
		160	80	600	X					
		155	82	600	X					
		150	84	700	X					
		145	86	700	X					

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill

Project #: 13354x8

Location: SE Landfill

Inspector: KJ

Contractor: Earthtech

Pin #: S26

Date Drilled: 3/29/2013

Date Grouted: 3/29/2013

Total Depth: 240

Total Grout: 4.2 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
3/29/2013	95	140-130	87	650	X					Start of Pump & Pull Zone
		130-120	91	650	X					
		120-110	94	700	X					
		110-100	97	600	X					
		100-90	100	600	X					
		90-80	103	600	X					
		80-70	106	600	X					
		70-60	109	600	X					
		60-50	112	600	X					
		50-40	115	600	X					
		40-30	118	600	X					
		30-20	121	600	X					
		20-10	124	600	X					
		10-0'	127	600	X		X			Point Completed at 12:05 PM with 4.2 cy

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill

Project #: 13354x8

Location: Lithia

Inspector: TN

Contractor: Earthtech

Pin #: S27

Date Drilled: 4/9/2013 - 4/10/2013

Date Grouted: 4/10/2013

Total Depth: 245

Total Grout: 6.0 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
4/10/2013	115	245-240	36	380						SOT #115 at 8:36 AM - Line Pressure 360 PSI, TC
		240-235	42	400						TC
		230	46	400						TC
		225	--	--						TC - Pull no Pump,
		220	--	--						TC - Pull no Pump,
		215	49	400						TC
		210	52	500						TC
		205	58	560	X					
		200	58	560	X					
		195	72	400						TC
		190	72	400						TC
		185	84	400						TC
		180	84	420						TC
		175	88	460						TC
		170	90	--						TC - Pump and pull
		165	96	600	X					
		160	96	600	X					
		155	101	650	X					
		150	101	650	X					
		150-140	105	650	X					Start of Pump & Pull Zone

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill

Pin #: S27

Project #: 13354x8

Date Drilled: 4/9/2013 - 4/10/2013

Location: Lithia

Date Grouted: 4/10/2013

Inspector: TN

Total Depth: 245

Contractor: Earthtech

Total Grout: 6.0 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
4/10/2013	115	140-130	111	600	X					
		130-120	116	600	X					
		120-110	122	600	X					
		110-100	127	650	X					
		100-90	132	550	X					
		90-80	137	580	X					
		80-70	142	450						
		70-6-	147	400						
		60-50	154	400						
		50-40	161	400						
		40-30	168	430						
		30-20	175	420						
		20-10	180	400						
		10-0'	181	400			X			Point Completed at 9:23 AM with 6.0 cy

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill

Project #: 13354x8

Location: Lithia

Inspector: KJ/TN

Contractor: Earthtech

Pin #: S28

Date Drilled: 4/8/2013

Date Grouted: 4/8/2013, 4/9/2013

Total Depth: 240

Total Grout: 10.8 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
4/8/2013	111	240	165-227	520	X					Cont. Truck#111 from 165 strokes at 5:50 PM - Line pressure 320 psi
		235	227	520	X					
		230	233	650	X					TC
		225	233	650	X					
		220	251	550	X					TC
		215	251	550	X					TC
		210	300/	450/TC						EOT#111 at 6:20
		205	300	450/TC						
4/9/2013	112	200	76	400						SOT#112 at 7:35 AM - Line Pressure 320 psi
		195	76	400						TC - pump and pull
		190	82	550	X					
		185	82	550						
		180	87	550	X					
		175	87	550						
		170	95	700	X					
		165	95	550	X					
		160	101	550	X					
		155	101	550	X					
		150	104	700	X					
		145	104	450						TC - pump and pull

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill

Project #: 13354x8

Location: Lithia

Inspector: KJ/TN

Contractor: Earthtech

Pin #: S28

Date Drilled: 4/8/2013

Date Grouted: 4/8/2013, 4/9/2013

Total Depth: 240

Total Grout: 10.8 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
4/9/2013	112	140-130	107	500						Start of Pump & Pull Zone
		130-120	112	450						
		120-110	116	450						
		110-100	120	500						
		100-90	125	500						
		90-80	129	550						
		80-70	135	400						
		70-60	140	400						
		60-50	145	350						
		50-40	152	300						
		40-30	160	350						
		30-20	169	350						
		20-10	179	350						
		10-0'	189	350			X			Point Completed at 8:15 AM with 10.8 cy

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill

Project #: 13354x8

Location: Lithia

Inspector: TN

Contractor: Earthtech

Pin #: S29

Date Drilled: 4/9/2013

Date Grouted: 4/9/2013

Total Depth: 235

Total Grout: 15.5

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
4/9/2013	113	235	82	520						SOT#113 at 12:20 PM - Line Pressure 360 psi
		230	82	520	X					TC - pump and pull
		225	88	500						TC - pump and pull
		220	88	500						TC - pump and pull
		215	--	--						TC - pull no pump
		210	--	--						TC - pull no pump
		205	136	550						TC - pump and pull
		200	136	550						TC - pump and pull
		195	319	450						EOT#113 at 12:40 PM
	114	190	83	400						SOT#114 at 1:50 PM - Line pressure 360 psi
		185	--	--						TC - pull no pump
		180	--	--						TC - pull no pump
		175	--	--						TC - pull no pump
		170	--	--						TC - pull no pump
		165	87	520	X					
		160	--	--						TC - pull no pump
		155	90	600	X					
		150	90	600						
		145	94	650	X					
		140	97	550	X					

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill

Project #: 13354x8

Location: Lithia

Inspector: TN

Contractor: Earthtech

Pin #: S29

Date Drilled: 4/9/2013

Date Grouted: 4/9/2013

Total Depth: 235

Total Grout: 15.5

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
4/9/2013	114	135	99	600	X					
		130	100	500						
		130-120	104	600	X					Start of Pump & Pull Zone
		120-110	108	700	X					
		110-100	114	550	X					
		100-90	118	520	X					
		90-80	122	600	X					
		80-70	126	400						
		70-60	131	350						
		60-50	138	350						
		50-40	144	350						
		40-30	151	360						
		30-20	157	380						
		20-10	164	380						
		10-0'	166	380			X			Point Complete at 2:35 PM with 15.5 cy

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill

Project #: 13354x8

Location: Lithia

Inspector: RK

Contractor: Earthtech

Pin #: S30

Date Drilled: 4/15/2013, 4/16/2013

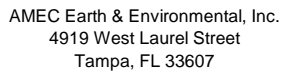
Date Grouted: 4/16/2013

Total Depth: 230

Total Grout: 6.0 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
4/16/2013	136	230	162	300						Cont. Truck #136 at 3:10pm from 120 Strokes - Line Pressue 300 PSI
		230	192	520	X					
		225	198	520	X					
		220	200	510	X					
		215	202	510	X					
		210	206	480						
		203	206							TC
		200	206							TC
		195	206							TC
		190	210	520	X					
		185	212	520	X					
		180	215	550	X					
		175	216	650	X					TC
		170	217	650	X					
		165	218	550	X					
		160	220	500	X					
		155	223	500	X					
		150	225	520	X					
		145	228	550	X					
		140-130	233	420						Start of Pump and Pull Zone

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



Project Name: _SE COUNTY Landfill	Pin #: _S30
Project #: _____ 13354x8	Date Drilled: ___4/15/2013, 4/16/2013
Location: ___Lithia	Date Grouted: ___4/16/2013
Inspector: ___RK	Total Depth: ___230
Contractor: ___Earthtech	Total Grout: ___6.0 cy

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill

Project #: 13354x8

Location: Lithia

Inspector: RK

Contractor: Earthtech

Pin #: S31

Date Drilled: 4/15/2013

Date Grouted: 4/15/2013

Total Depth: 230

Total Grout: 7.5 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
4/15/2013	129	230	46	550		X				SOT #129 at 1:38 PM - Line Pressure 300 PSI
		225	48	600		X				
		220	52	580		X				
		215	54	600		X				
		210	80	400						TC - Pipe Full
		205	130	400						TC - Pipe Full
		200	150	510		X				
		195	155	550		X				
		190	160	550		X				
		185	164	520		X				
		180	166	550		X				
		175	169	620		X				
		170	170	620		X				
		165	171	620		X				
		160	174	600		X				
		155	176	530		X				
		150	178	600		X				
		145	180	600		X				
		140-130	183	500		X				Start of Pump & Pull Zone
		130-120	187	480						

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill
Project #: 13354x8
Location: Lithia
Inspector: RK
Contractor: Earthtech

Pin #: S31
Date Drilled: 4/15/2013
Date Grouted: 4/15/2013
Total Depth: 230
Total Grout: 7.5 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
4/15/2013	129	120-110	190	490						
	129	110-100	193	450						
	129	100-90	197	450						
	129	90-80	200	450						
	129	80-70	203	400						
	129	70-60	206	400						
	129	60-50	210	400						
	129	50-40	214	400						
	129	40-30	218	400						
	129	30-20	221	400						
	129	20-10	223	400						
	129	10-0'	226	350			X			Point Completed at 2:15 PM with 7.5 cy

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill

Project #: 13354x8

Location: Lithia

Inspector: RK

Contractor: Earthtech

Pin #: S32

Date Drilled: 4/11/2013

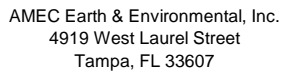
Date Grouted: 4/12/2013

Total Depth: 230

Total Grout: 5.2 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
4/12/2013	124	230	48	600	X					SOT #124 at 7:40 AM - Line Pressure 380 PSI
		225	50	600	X					
		220	55	600	X					
		215	58	600	X					
		210	--	--						TC - Pull no Pump
		205	--	--						TC - Pull no Pump
		200	--	--						TC - Pull no Pump
		195	--	--						TC - Pull no Pump
		190	63	700	X					
		185	--	--						TC - Pull no Pump
		180	67	630	X					
		175	70	620	X					
		170	72	680	X					
		165	73	700	X					
		160	75	700	X					
		155	76	650	X					
		150	79	580	X					
		145	81	650	X					
		140-130	85	700						Start of Pump and Pull Zone
		130-120	89	600						

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



Project Name: _ SE COUNTY Landfill

Project #: _____ 13354x8

Location: _____ Lithia

Inspector: _____RK

Contractor: ___ Earthtech

Pin #:_ S32

Date Drilled: ____ 4/11/2013

Date Grouted: 4/12/2013

Total Depth: _____ 230

Total Grout: 5.2 cy

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
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COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill

Project #: 13354x8

Location: Lithia

Inspector: RK

Contractor: Earthtech

Pin #: S33

Date Drilled: 4/12/2013

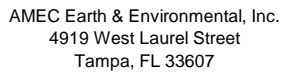
Date Grouted: 4/12/2013

Total Depth: 230

Total Grout: 4.0 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
4/12/2013	126	230	21	--						SOT #126 at 4:40 PM - Line Pressure 240 PSI, TC - Pull no Pump
		225	--	--						TC - Pull no Pump
		220	35	--						TC - Pull no Pump - grout pump from open pipe to fill casing
		215	--	--						TC - Pull no Pump
		210	--	--						TC - Pull no Pump
		205	--	--						TC - Pull no Pump
		200	43	--						TC - Pull no Pump - grout pump from open pipe to fill casing
		195	--	--						TC - Pull no Pump
		190	--	--						TC - Pull no Pump
		185	--	--						TC - Pull no Pump
		180	48	450	X					
		175	50	500	X					
		170	52	600	X					
		165	54	700	X					
		160	56	550	X					
		155	58	550	X					
		150	59	580	X					
		145	60	580	X					
		140-130	62	600	X					Start of Pump & Pull Zone
		130-120	67	500	X					

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC** = Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



Project Name: _ SE COUNTY Landfill

Location: _____ Lithia

Contractor: Earthtech

Date Drilled: 4/12/2013

Date Grouted: 4/12/2013

Total Depth: 230

Total Grout: 4.0 cy

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



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COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill

Project #: 13354x8

Location: Lithia

Inspector: KJ

Contractor: Earthtech

Pin #: S34

Date Drilled: 4/18/13, 4/19/2013

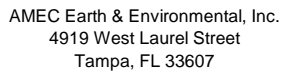
Date Grouted: 4/19/2013

Total Depth: 228

Total Grout: 3.0 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
4/19/2013	141	228	37	600	X					SOT #141 at 10:10 am - Line pressure 300 psi
	141	225	39	600	X					
	141	220	41	600	X					
	141	215	42	600	X					
	141	210	44	600	X					
	141	205	45	600	X					
	141	200	--	--						TC – pull no pump
	141	195	--	--						TC – pull no pump
	141	190	49	600	X					
	141	185	51	600	X					
	141	180	53	700	X					
	141	175		700	X					
	141	170	--	--						TC – pull no pump
	141	165	--	--						TC – pull no pump
	141	160	55	700	X					
	141	155		700	X					
	141	150	60	600	X					
	141	145	61	600	X					
	141	140-130	62	600	X					Start of Pump and Pull Zone
	141	130-120	65	600	X					

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



Project Name: _SE COUNTY Landfill	Pin #: _S34
Project #: _____ 13354x8	Date Drilled: ____4/18/13, 4/19/2013
Location: ____Lithia	Date Grouted: ____4/19/2013
Inspector: ____KJ	Total Depth: ____228
Contractor: ____Earthtech	Total Grout: ____3.0 cy

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



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COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill

Project #: 13354x8

Location: Lithia

Inspector: TN

Contractor: Earthtech

Pin #: S35

Date Drilled: 4/22/2013

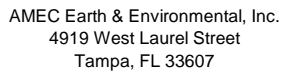
Date Grouted: 4/22/2013

Total Depth: 230

Total Grout: 3.8 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
4/22/2013	144	230	182	600	X					Cont. Truck#144 from 159 at 2:25 PM - Line pressure: 300 psi
		225	185	600	X					
		220	185	600	X					
		215	189	600	X					
		210	189	600	X					
		205	192	600	X					
		200	194	600	X					
		195	198	600	X					
		190	200	600	X					
		185	204	600	X					
		180	206	600	X					
		175	208	600	X					
		170	210	600	X					
		165	213	600	X					
		160	215	600	X					
		155	217	600	X					
		150	219	600	X					
		145	222	600	X					
		140	224	600	X					Start of Pump and Pull Zone
		140-130	227	600	X					

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



Project Name: _ SE COUNTY Landfill

Location: _____ Lithia

Contractor: Earthtech

Date Drilled: 4/22/2013

Date Grouted: 4/22/2013

Total Depth: 230

Total Grout: 3.8 cy

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



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COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill

Project #: 13354x8

Location: Lithia

Inspector: KJ

Contractor: Earthtech

Pin #: S36

Date Drilled: 4/19/2013

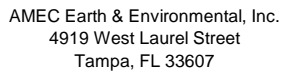
Date Grouted: 4/19/2013

Total Depth: 231

Total Grout: 7.1 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
4/19/2013	141	231	277	550	X					Cont. Truck#142 from 238 strokes at 2:33 PM Line pressure: 300 psi
		225	280	550	X					
		220	284	550	X					
		215	290	550	X					
		210	295	550	X					
		205	300	550	X					EOT #142 at 3:45 PM
		200	Flush	--						
		195	Flush	--						
4/19/2013	143	190	76	580	X					SOT#143 at 4:15 PM - Line pressure 360 psi
		185	79	580	X					
		180	81	600	X					
		175	84	600	X					
		170	86	600	X					
		165	88	600	X					
		160	91	700	X					
		155	93	700	X					
		150	95	700	X					
		145	97	700	X					
		140-130	98	700	X					Start of Pump and Pull Zone
		130-120	102	700	X					

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



Project Name: _ SE COUNTY Landfill

Location: _____ Lithia

Contractor: Earthtech

Date Drilled: ____ 4/19/2013

Date Grouted: 4/19/2013

Total Depth: 231

Total Grout: 7.1 cy

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



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COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill

Project #: 13354x8

Location: Lithia

Inspector: RK

Contractor: Earthtech

Pin #: S37

Date Drilled: 4/22/2013

Date Grouted: 4/22/2013, 4/23/2013

Total Depth: 230

Total Grout: 11.8 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
4/22/2013	145	230	171							Cont. Truck#145 from 141 strokes at 5:55 PM - Line pressure: 300 psi
		230	300	450	X					EOT #145 at 6:08 pm
4/23/2013	146	230	47	450	X					SOT#146 at 7:30 am - Line pressure 240 psi
		225	57	450	X					
		220	70	500	X					
		215	76	500	X					
		210	82	500	X					
		205	87	500	X					
		200	92	500	X					
		195	97	500	X					
		190	102	500	X					
		185	107	500	X					
		180	112	500	X					
		175	117	500	X					
		170	122	500	X					
		165	126	500	X					
		160	131	550	X					
		155	134	550	X					
		150	137	650	X					
		145	139	650	X					

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
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COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill

Pin #: S37

Project #: 13354x8

Date Drilled: 4/22/2013

Location: Lithia

Date Grouted: 4/22/2013, 4/23/2013

Inspector: RK

Total Depth: 230

Contractor: Earthtech

Total Grout: 11.8 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
4/23/2013	146	140-130	141	600	X					Start of Pump & Pull Zone
		130-120	144	600	X					
		120-110	148	600	X					
		110-100	151	600	X					
		100-90	156	600	X					
		90-80	161	500	X					
		80-70	165	500	X					
		70-60	169	500	X					
		60-50	173	500	X					
		50-40	177	500	X					
		40-30	181	500	X					
		30-20	185	500	X					
		20-10	189	500	X					
		~10-0	195	500	X		X			Point Completed at 8:18 AM with 11.8 cy

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
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COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill

Project #: 13354x8

Location: Lithia

Inspector: KJ

Contractor: Earthtech

Pin #: S38

Date Drilled: 4/17/2013

Date Grouted: 4/17/2013

Total Depth: 240

Total Grout: 18.5 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
4/16/2013	137	240	31	650	X					SOT#137 at 11:42 am - Line pressure 440 psi
		235	36	650	X					
		230	42	700	X					
		225	45	700	X					
		220	48	700	X					
		215	52	700	X					
		210	59	650	X					
		205	62	650	X					
		200	65	650	X					
		195	68	650	X					
		190	75	650	X					
		185	80	650	X					
		180	86	650	X					
		175	190	650	X					
4/16/2013	137 / 138	170	304 / 174	700	X					EOT#137 at 12:15 PM - SOT#138 at 1:25 PM - Line pressure 320 psi
		165	179	700	X					
		160	181	700	X					TC
		155	184	700	X					TC
		150	187	650	X					
		145	189	650	X					

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
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COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill

Pin #: S38

Project #: 13354x8

Date Drilled: 4/17/2013

Location: Lithia

Date Grouted: 4/17/2013

Inspector: KJ

Total Depth: 240

Contractor: Earthtech

Total Grout: 18.5 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
4/16/2013	138	140-130	190	800	X					Start of Pump & Pull Zone
		130-120	194	700	X					
		120-110	196	800	X					
		110-100	200	600	X					
		100-90	204	600	X					
		90-80	209	600	X					
		80-70	215	600	X					
		70-60	221	600	X					
		60-50	229	600	X					
		50-40	235	500						
		40-30	240	400						
		30-20	245	400						
		20-10	250	400						
		10-0'	255	400			X			Point Completed at 2:09 PM with 18.5 cy

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
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COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill

Project #: 13354x8

Location: Lithia

Inspector: KJ

Contractor: Earthtech

Pin #: S39

Date Drilled: 4/15/2013

Date Grouted: 4/15/2013 - 4/16/2013

Total Depth: 248

Total Grout: 51.8 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
4/15/2013	129	248	276	450						Cont. Truck #129 from 226 Strokes at 2:22 PM - Line Pressure 400 PSI
		245	300	450						TC - Pump and pull
		240	--	--						TC - Pull no Pump, Flush
	129	235	--	--						TC - Pull no Pump, Flush, EOT #129 at 2:42 PM
4/15/2013	130	230	128	400						SOT #130 at 2:55 PM - Line Pressure 320 psi - TC - Pump and pull
		225	185	400						TC - Pump and pull
		220	243	400						TC - Pump and pull
		215	300	400						EOT #130 at 3:25 PM - TC - Pump and pull
4/15/2013	131	210	138	400						SOT #131 at 4:39 PM - Line Pressure 340 psi - TC - Pump and pull
		205	189	400						TC - Pump and pull
		200	240	400						TC - Pump and pull
		195	303	400						EOT #131 at 5:05 PM - TC - Pump and pull
4/15/2013	132	190	226	400						SOT #132 - Line Pressure 340 PSI - TC - Pump and pull
		185	303	400						EOT #132 at 5:45 PM - TC - Pump and pull
4/16/2013	133	180	186	400						SOT #133 at 7:45 AM - Line Pressure 400 PSI - TC - Pump and pull
		175	303	400						EOT #133 at 8:13 AM - TC - Pump and pull
4/16/2013	134	170	221	400						SOT #134 at 9:08 AM - Line Pressure 340 PSI - TC - Pump and pull
		165	225	400						TC - Pump and pull
		160	228	600	X					
		155	231	600	X					

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



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COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill

Project #: 13354x8

Location: Lithia

Inspector: KJ

Contractor: Earthtech

Pin #: S39

Date Drilled: 4/15/2013

Date Grouted: 4/15/2013 - 4/16/2013

Total Depth: 248

Total Grout: 51.8 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
3/11/2013	134	150-140	--	--						TC - Pull no pump
		140-130	233	600	X					Start of Pump & Pull Zone,
		130-120	237	600	X					
		120-110	241	500						
		110-100	244	400						
		100-90	247	400						
		90-80	250	400						
		80-70	253	400						
		70-60	257	400						
		60-50	261	400						
		50-40	264	400						
		40-30	267	400						
		30-20	271	400						
		20-10	275	400						
		10-0'	279	400			X			Point Completed at 9:57 AM with 51.8 cy

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



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COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill
Project #: 13354x8
Location: Lithia
Inspector: KJ
Contractor: Earthtech

Pin #: S40
Date Drilled: 4/12/2013
Date Grouted: 4/12/2013, 4/15/2013, 4/16/2013
Total Depth: 245
Total Grout: 50.7 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
4/12/2013	125	245	58	500	X					SOT#125 at 2:55 PM - Line Pressue 300 psi - TC
		240	62	530	X					
		235	69	530	X					
		230	77	500	X					
		225	126	500	X					
		220	175	400						TC - pump and pull
		215	234	400						TC - pump and pull
		210	293	400						TC - pump and pull
		205	296	400						TC - pump and pull
	125/126	200	300/ 263	400						EOT #125 at 3:35 PM - Cont. Truck #126 from 120 Strokes at 5:58 PM - Line Pressure 340 psi - TC - pump and pull
		195	281	400						TC - pump and pull
4/12/2013 - 4/15/2013	126/127	190	300/ 258	400						EOT #126, TC - Removed 2 sections - added two sections back - SOT#127 at 7:52 AM - Line pressure 340 psi - TC - Pump and pull
		185	308	400						EOT #127 at 8:25 AM - TC - pump and pull
4/15/2013	128	180	250	400						SOT #128 at 9:19 AM - Line Pressure 300 psi, TC
		175	302	400						EOT #128 at 9:40 AM - TC - pump and pull
4/16/2013	134/135	170	300/ 226	400/500						Cont. Truck #134 from 279 Strokes at 10:14 AM Line Pressure 410 psi - EOT #134 at 10:20 AM - SOT #135 at 11:17 AM - Line Pressure 410 psi,
		165	300	500						EOT #135 at 11:45 AM, TC - pump and pull
	136	160	66	500						SOT #136 at 12:35 PM - Line Pressure 360 psi - TC - pump and pull
		155	68	500						TC - pump and pull
		150	70	550						TC - pump and pull

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave,
GTS = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
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COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill

Project #: 13354x8

Location: Lithia

Inspector: KJ

Contractor: Earthtech

Pin #: S40

Date Drilled: 4/12/2013

Date Grouted: 4/12/2013, 4/15/2013, 4/16/2013

Total Depth: 245

Total Grout: 50.7 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
4/16/2013	136	145	74	550						TC - pump and pull
	136	140-130	--	--						TC - Pull no Pump
	136	130-120	77	600	X					Start of Pump & Pull Zone
	136	120-110	81	400						
	136	110-100	86	400						
	136	100-90	90	600	X					
	136	90-80	94	600						
	136	80-70	97	600	X					
	136	70-60	100	600						
	136	60-50	103	600						
	136	50-40	106	600						
	136	40-30	109	600						
	136	30-20	112	600						
	136	20-10	116	600						
	136	10-0'	120	600			X			Point Completed at 1:55 PM with 50.7 cy

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



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Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill

Project #: 13354x8

Location: Lithia

Inspector: TN, KJ

Contractor: Earthtech

Pin #: S41

Date Drilled: 4/10/2013

Date Grouted: 4/10/2013 - 4/11/2013

Total Depth: 246

Total Grout: 48.8 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
4/10/2013	116	246	184							Cont. Truck #116 from 141 strokes at 1:31 PM - Line Pressure 280 PSI
		240	216	480	X					
		235	305	500	X					
		230	305	500	X					EOT #116 at 1:54 PM
	117	225	200	400						SOT #117 at 3:00 PM - Line Pressure 350 PSI, TC - pump and pull
		220	305	450						EOT #117 at 3:40 PM - TC - pump and pull
	118	215	131	450						SOT #118 at 4:45 PM - Line Pressure 300 PSI, TC - pump and pull
		210	135	350						TC - pump and pull
		205	148	420						TC - pump and pull
		200	203	420						TC - pump and pull
		195	224	450						TC - pump and pull
		190	230	450						TC - pump and pull
4/10/2013 - 4/11/2013	118/119	185	302/ 308	400						EOT #118 at 5:20 PM - SOT #119 at 7:50 AM - Line Pressure 360 psi - TC - pump and pull
		180	308	420						TC - pump and pull
		175	308	420						EOT #119 at 8:25 AM - TC - pump and pull
4/11/2013	120	170	272	400						SOT #120 at 9:16 AM- Line Pressure 300 psi - TC - pump and pull
		165	272	400						TC - pump and pull
	120/121	160	300/ 44	420						EOT #120 at 9:44 AM, SOT #121 at 10:45 AM - Line Pressure 340 psi - TC - pump and pull
		155	44	420						TC - pump and pull
		150	49	600	X					TC

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill

Project #: 13354x8

Location: Lithia

Inspector: TN, KJ

Contractor: Earthtech

Pin #: S41

Date Drilled: 4/10/2013

Date Grouted: 4/10/2013 - 4/11/2013

Total Depth: 246

Total Grout: 48.8 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
3/11/2013	121	145	49	600	X					
		140-130	54	600	X					Start of Pump & Pull Zone
		130-120	59	600	X					
		120-110	63	600	X					
		110-100	67	600	X					
		100-90	70	600	X					
		90-80	73	600	X					
		80-70	76	500	X					
		70-60	80	500	X					
		60-50	88	400						
		50-40	92	400						
		40-30	95	400						
		30-20	98	400						
		20-10	104	400						
		10-0'	105	400			X			Point Completed at 11:20 AM with 48.8 cy

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill

Project #: 13354x8

Location: Lithia

Inspector: KJ

Contractor: Earthtech

Pin #: S42

Date Drilled: 4/11/2013

Date Grouted: 4/11/2013 - 4/12/2013

Total Depth: 246

Total Grout: 24.8 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
4/11/2013	122	246	55	500	X					SOT #122 at 3:45 PM - Line Pressure 300 psi
		245	65	500	X					TC
		240	74	400						TC - pump and pull
		235	78	400						TC - pump and pull
		230	81	500	X					TC
		225	88	500	X					TC
		220	95	400						TC - pump and pull
		215	200	400						TC - pump and pull
		210	304	400						TC - pump and pull
		205	--	--						EOT # 122 at 4:25 PM - TC - pull no pump / Flush
4/11/2013	123	200	111	380						SOT # 123, Line Pressure 280 PSI - TC - pump and pull
		195	207	380						TC - pump and pull
		190	255	--						TC - pump and pull
		185	302	--						EOT # 123 at 4:45 PM
4/12/2013	124	180	241	600	X					Cont. Truck#124 from 156 Strokes at 10:00 AM - Line Pressure 340 psi
		175	242	600	X					TC
		170	244	650	X					TC
		165	246	650	X					TC
		160	247	600	X					TC
		155	249	600	X					TC

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill

Project #: 13354x8

Location: Lithia

Inspector: KJ

Contractor: Earthtech

Pin #: S42

Date Drilled: 4/11/2013

Date Grouted: 4/11/2013 - 4/12/2013

Total Depth: 246

Total Grout: 24.8 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
4/12/2013	124	150	251	700	X					
		145	254	700	X					
		140-130	255	700	X					Start of Pump & Pull Zone
		130-120	258	--						
		120-110	261	--						
		110-100	264	--						
		100-90	267	--						
		90-80	270	--						
		80-70	273	--						
		70-60	276	--						
		60-50	279	--						
		50-40	282	--						
		40-30	285	--						
		30-20	290	--						
		20-10	295	--						
		10-0'	300	--			X			Point Completed at 10:38 AM with 24.8 cy

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill

Project #: 13354x8

Location: Lithia

Inspector: RK

Contractor: Earthtech

Pin #: S43

Date Drilled: 4/17/13, 4/18/2013

Date Grouted: 4/18/2013

Total Depth: 250

Total Grout: 14.0 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
4/18/2013	139	250	157							Cont. Truck #139 from 107 strokes at 9:13 am - Line Pressure: 320 psi
		250	170	600	X					
		245	178	500						
		240	178	500						TC - pump and pull
		235	178	500						TC - pump and pull
		230	186	580	X					
		225	192	570	X					
		220	208	480						TC - pump and pull
		215	235	510						TC - pump and pull
		210	258	450						TC - pump and pull
		205	302	550	X					EOT #139 at 9:55 am
	140	200	60	500						SOT #140 at 2:45 pm - Line pressure: 360 psi - TC - pump and pull
		195	138	480						TC - pump and pull
		190	140	580	X					
		185	144	580	X					
		180	146	560	X					
		175	149	600	X					
		170	151	600	X					
		165	153	600	X					Start of Pump & Pull Zone
		160	154	600	X					

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill

Pin #: S43

Project #: 13354x8

Date Drilled: 4/17/13, 4/18/2013

Location: Lithia

Date Grouted: 4/18/2013

Inspector: RK

Total Depth: 250

Contractor: Earthtech

Total Grout: 14.0 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
	140	155	155	600	X					
	140	150	158	600	X					
	140	145	160	600	X					
	140	140-130	163	640	X					
	140	130-120	166	400						
	140	120-110	169	400						
	140	110-100	173	400						
	140	100-90	176	360						
	140	90-80	179	360						
	140	80-70	183	360						
	140	70-60	186	360						
	140	60-50	199	350						
	140	50-40	203	350						
	140	40-30	213	350						
	140	30-20	216	350						
	140	20-10	220							
	140	Oct-00	249				X			Point Completed at 3:26 PM with 14.0 cy

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill

Project #: 13354x8

Location: Lithia

Inspector: RK

Contractor: Earthtech

Pin #: S44

Date Drilled: 4/18/2013, 4/19/2013

Date Grouted: 4/19/2013

Total Depth: 250

Total Grout: 14.9 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
4/19/2013	141	250	153							Cont. Truck#141 from 90 strokes at 11:40 AM - Line pressure: 350 psi
	141/142	250	300 / 50	407 / 350						EOT #141 at 12:03 PM
		245	-	-						SOT #142 at 1:20 pm, Line pressure: 200 psi, TC - pump and pull
		240	-	-						TC - pull no pump
		235	-	-						TC - pull no pump
		230	61	420	X					
		225	75	410	X					
		220	78	400	X					
		215	83	450	X					
		210	87	450	X					
		205	92	430	X					
		200	96	430	X					
		195	101	430	X					
		190	107	430	X					
		185	112	450	X					
		180	116	450	X					
		175	119	420	X					
		170	121	480	X					
		165	126	430	X					
		160	130	450	X					

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill

Pin #: S44

Project #: 13354x8

Date Drilled: 4/18/2013, 4/19/2013

Location: Lithia

Date Grouted: 4/19/2013

Inspector: RK

Total Depth: 250

Contractor: Earthtech

Total Grout: 14.9 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
	142	155	135	450	X					
	142	150	139	550	X					
	142	145	141	500	X					
	142	140-130	145	580	X					Start of Pump & Pull Zone
	142	130-120	148	450	X					
	142	120-110	151	400	X					
	142	110-100	154	420	X					
	142	100-90	157	450	X					
	142	90-80	160	400	X					
	142	80-70	164	400	X					
	142	70-60	168	350						
	142	60-50	171	300						
	142	50-40	174	320						
	142	40-30	177	300						
	142	30-20	180	300						
	142	20-10	183	300						
	142	~10-0	186	300		X				Point Completed at 4:40 PM with 14.9 cy

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill

Pin #: S45

Project #: 13354x8

Date Drilled: 4/19/2013, 4/22/2013

Location: Lithia

Date Grouted: 4/22/2013

Inspector: RK

Total Depth: 242

Contractor: Earthtech

Total Grout: 5.3 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
4/22/2013	144	242	40							SOT. #144 at 11:30 am, Line pressure: 200 psi
		242	55	400	X					
		235	62	400	X					
		230	66	500	X					
		225	70	500	X					
		220	74	550	X					
		215	77	550	X					
		210	80	550	X					
		205	85	500	X					
		200	89	500	X					
		195	94	520	X					
		190	95	450	X					TC
		185	96	500	X					TC
		180	-	-						TC – pull no pump
		175	-	-						TC – pull no pump
		170	100	550	X					
		165	-	-						TC – pull no pump
		160	103	500	X					
		155	106	520	X					
		150	108	500	X					

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill

Pin #: S45

Project #: 13354x8

Date Drilled: 4/19/2013, 4/22/2013

Location: Lithia

Date Grouted: 4/22/2013

Inspector: RK

Total Depth: 242

Contractor: Earthtech

Total Grout: 5.3 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
4/22/2013	144	145	111	540	X					
		140-130	114	500	X					Start of Pump & Pull Zone
		130-120	118	450	X					
		120-110	121	500	X					
		110-100	124	450	X					
		100-90	127	500	X					
		90-80	130	550	X					
		80-70	133	450	X					
		70-60	136	450	X					
		60-50	139	450	X					
		50-40	142	420	X					
		40-30	145	420	X					
		30-20	149	400	X					
		20-10	153	420	X					
		~10-0	159	250			X			Point Completed at 12:15 pm with 5.3 cu

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill

Project #: 13354x8

Location: Lithia

Inspector: RK

Contractor: Earthtech

Pin #: S46

Date Drilled: 4/22/2013

Date Grouted: 4/22/2013

Total Depth: 250

Total Grout: 4.7 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
4/22/2013	145	250	36							SOT. #145 at 4:50 pm, Line pressure: 300 psi
	145	250	43	550	X					
	145	245	46	550	X					
	145	240	49	600	X					
	145	235	--	--						TC - pull no pump
	145	230	52	400						TC - pump and pull
	145	225	54	400						TC - pump and pull
	145	220	58	550	X					
	145	215	62	500	X					
	145	210	65	400						TC - pump and pull
	145	205	68	450						TC - pump and pull
	145	200	70	650	X					
	145	195	73	580	X					
	145	190	75	600	X					TC
	145	185	--	--						TC - pull no pump
	145	180	77	650	X					TC - pump and pull
	145	175	--	--						TC - pull no pump
	145	170	79	600	X					
	145	165	82	550	X					
	145	160	84	580	X					

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill

Pin #: S46

Project #: 13354x8

Date Drilled: 4/22/2013

Location: Lithia

Date Grouted: 4/22/2013

Inspector: RK

Total Depth: 250

Contractor: Earthtech

Total Grout: 4.7 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
4/22/2013	144	155	84	-						TC – pull no pump
		150	86	550	X					
		145	89	550	X					
		140-130	92	550	X					Start of Pump & Pull Zone
		130-120	96	550	X					
		120-110	100	500	X					
		110-100	104	500	X					
		100-90	108	480						
		90-80	112	500	X					
		80-70	116	550	X					
		70-60	120	550	X					
		60-50	124	450						
		50-40	128	450						
		40-30	133	450						
		30-20	137	400						
		20-10	139	400						
		~10-0	141	300			X			Point Completed at 5:31 PM with 4.7 cy

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: _ SE COUNTY Landfill

Project #: _____ 13354x8

Location: _____ SE Landfill

Inspector: _____ KJ

Contractor: _____ Earthtech

Pin #: _ T1

Date Drilled: _ 4/29/2013

Date Grouted: _ 4/30/2013

Total Depth: _ 240 ft

Total Grout: _ 5.4 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
4/30/2013	157	240	42	600	X					SOT157 at 8:56 AM - Line pressure 360 psi
		235	46	600	X					
		230	49	600	X					
		225	52	600	X					
		220	55	600	X					
		215	59	600	X					
		210	62	600	X					
		205	65	600	X					
		200	68	600	X					
		195	71	600	X					
		190	74	600	X					
		185	78	600	X					
		180	81	600	X					
		175	85	600	X					
		170	88	600	X					
		165	93	600	X					
		160	98	600	X					
		155	101	600	X					
		150	104	650	X					
		145	106	650	X					

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill

Project #: 13354x8

Location: SE Landfill

Inspector: KJ

Contractor: Earthtech

Pin #: T1

Date Drilled: 4/29/2013

Date Grouted: 4/30/2013

Total Depth: 240 ft

Total Grout: 5.4 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
4/30/2013	157	140-130	108	650	X					Start of Pump and pull Zone
		130-120	112	600	X					
		120-110	116	600	X					
		110-100	120	600	X					
		100-90	124	600	X					
		90-80	128	600	X					
		80-70	132	600	X					
		70-60	136	600	X					
		60-50	140	600	X					
		50-40	144	600	X					
		40-30	148	600	X					
		30-20	152	600	X					
		20-10	156	600	X					
		10-0	160	600	X		X			Point Completed at 9:45 AM with 5.4 cy

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill

Project #: 13354x8

Location: SE Landfill

Inspector: KJ

Contractor: Earthtech

Pin #: T2

Date Drilled: 4/30/2013

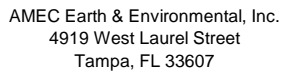
Date Grouted: 4/30/2013

Total Depth: 240 ft

Total Grout: 7.2 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
4/30/2013	159	240	80	400	X					SOT#159 at 2:45 PM - Line pressure 180 psi
		235	88	400	X					
		230	96	400	X					
		225	100	400	X					
		220	104	400	X					
		215	108	400	X					
		210	111	400	X					
		205	117	400	X					
		200	123	400	X					
		195	127	400	X					
		190	131	400	X					
		185	141	400	X					
		180	151	400	X					
		175	156	400	X					
		170	161	400	X					
		165	165	400	X					
		160	169	400	X					
		155	172	400	X					
		150	175	400	X					
		145	177	400	X					
		140-130	178	400	X					Start of Pump and Pull Zone
		130-120	181	400	X					

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



Project Name: _ SE COUNTY Landfill

Location: _____ SE Landfill

Contractor: Earthtech

Date Drilled: 4/30/2013

Date Grouted: 4/30/2013

Total Depth: 240 ft

Total Grout: 7.2 cy

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill

Project #: 13354x8

Location: Lithia

Inspector: KJ

Contractor: Earthtech

Pin #: T3

Date Drilled: 4/29/2013

Date Grouted: 4/29/2013

Total Depth: 240

Total Grout: 4.5 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
4/29/2013	155	240	37	700	X					SOT #155 at 10:53 am, Line pressure: 480 psi
		235	37	700	X					
		230	44	700	X					
		225	44	700	X					
		220	50	700	X					
		215	50	700	X					
		210	57	700	X					
		205	57	700	X					
		200	62	700	X					
		195	62	700	X					
		190	68	780	X					
		185	68	780	X					
		180	74	780	X					
		175	74	780	X					
		170	80	780	X					
		165	80	780	X					
		160	86	780	X					
		155	86	780	X					
		150	92	780	X					
		145	92	780	X					

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill

Project #: 13354x8

Location: Lithia

Inspector: KJ

Contractor: Earthtech

Pin #: T3

Date Drilled: 4/29/2013

Date Grouted: 4/29/2013

Total Depth: 240

Total Grout: 4.5 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
4/29/2013	155	140-130	95	680	X					Start of Pump & Pull Zone
		130-120	98	650	X					
		120-110	102	800	X					
		110-100	106	800	X					
		100-90	109	800	X					
		90-80	112	800	X					
		80-70	115	800	X					
		70-60	118	800	X					
		60-50	121	800	X					
		50-40	124	800	X					
		40-30	127	800	X					
		30-20	130	800	X					
		20-10	133	800	X					
		~10-0	136	800	X		X			Point Completed at 12:15 PM with 4.5 cy

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill

Project #: 13354x8

Location: Lithia

Inspector: KJ

Contractor: Earthtech

Pin #: T4

Date Drilled: 4/26/2013

Date Grouted: 4/26/2013

Total Depth: 250

Total Grout: 7.2 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
4/26/2013	154	250	157	520	X					Cont. Truck#154 from 83 strokes at 12:20 PM - Line pressure: 300 psi
		245	157	520	X					
		240	170	600	X					
		235	170	600	X					
		230	177	600	X					
		225	177	600	X					
		220	184	600	X					
		215	184	600	X					
		210	191	600	X					
		205	191	600	X					
		200	199	600	X					
		195	199	600	X					
		190	205	600	X					
		185	205	600	X					
		180	214	600	X					
		175	214	600	X					
		170	221	600	X					
		165	221	600	X					
		160	228	600	X					
		155	228	600	X					

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill

Project #: 13354x8

Location: Lithia

Inspector: KJ

Contractor: Earthtech

Pin #: T4

Date Drilled: 4/26/2013

Date Grouted: 4/26/2013

Total Depth: 250

Total Grout: 7.2 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
4/26/2013	154	150	232	600	X					
		145	232	600	X					
		140-130	238	600	X					Start of Pump & Pull Zone
		130-120	241	600	X					
		120-110	244	600	X					
		110-100	248	600	X					
		100-90	252	600	X					
		90-80	258	600	X					
		80-70	263	600	X					
		70-60	268	600	X					
		60-50	273	600	X					
		50-40	278	600	X					
		40-30	283	600	X					
		30-20	288	600	X					
		20-10	294	600	X					
		~10-0	300	600	X		X			Point Completed at 3:10 PM with 7.2 cy

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill

Project #: 13354x8

Location: Lithia

Inspector: KJ

Contractor: Earthtech

Pin #: T5

Date Drilled: 4/25/2013

Date Grouted: 4/25/2013

Total Depth: 240

Total Grout: 5.0 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
4/25/2013	151	240	49	520	X					SOT #151 at 12:05 PM - Line pressure 220 psi
		235	49	520	X					
		230	58	560	X					
		225	58	560	X					
		220	65	600	X					
		215	65	600	X					
		210	72	600	X					
		205	72	600	X					
		200	78	600	X					
		195	78	600	X					
		190	85	600	X					
		185	85	600	X					
		180	92	600	X					
		175	92	600	X					
		170	101	560	X					
		165	101	560	X					
		160	106	600	X					
		155	106	600	X					
		150	112	600	X					
		145	112	600	X					

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC** = Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill

Pin #: T5

Project #: 13354x8

Date Drilled: 4/25/2013

Location: Lithia

Date Grouted: 4/25/2013

Inspector: KJ

Total Depth: 240

Contractor: Earthtech

Total Grout: 5.0 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
4/25/2013	151	140-130	115	600	X					Start of Pump & Pull Zone
		130-120	118	800	X					
		120-110	121	600	X					
		110-100	124	600	X					
		100-90	127							
		90-80	130							
		80-70	133							
		70-60	136							
		60-50	139							
		50-40	142							
		40-30	145							
		30-20	148							
		20-10	151							
		~10-0	154				X			Point Completed at 12:45 PM with 5.0 cy

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: _ SE COUNTY Landfill

Project #: _____ 13354x8

Location: _____ SE Landfill

Inspector: _____ KJ

Contractor: _____ Earthtech

Pin #: _ T-6

Date Drilled: _ 5/3/2013

Date Grouted: _ 5/3/2013

Total Depth: _ 240 ft

Total Grout: _ 3.9 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
5/3/2013	165	240	265	600	X					Cont T#145 from 225 strokes at 11:25
		235	268	600	X					Line Pressure = 300 PSI
		230	271	600	X					
		225	275	600	X					
		220	278	600	X					
		215	281	600	X					
		210	283	600	X					
		205	287	600	X					
		200	290	600	X					
		195	293	600	X					
		190	295	600	X					
		185	299	600	X					
		180	302	600	X					
		175	305	600	X					
		170	307	600	X					
		165	309	600	X					
		160	311	600	X					
		155	313	600	X					
		150	315	600	X					
		145	316	600	X					

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill

Project #: 13354x8

Location: SE Landfill

Inspector: KJ

Contractor: Earthtech

Pin #: T-6

Date Drilled: 5/3/2013

Date Grouted: 5/3/2013

Total Depth: 240 ft

Total Grout: 3.9 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
5/3/2013	165	140-130	318	600	X					Start of Pump and Pull Zone
		130-120	321	600	X					
		120-110	326	600	X					
		110-100	330	600	X					EOT#165 at 11:45 PM
		100-90	3	600	X					SOT#166 at 12:05 PM
		90-80	6	600	X					
		80-70	9	600	X					
		70-60	12	600	X					
		60-50	15	600	X					
		50-40	18	600	X					
		40-30	21	600	X					
		30-20	24	600	X					
		20-10	27	600	X					
		10-0	30	600	X		X			Point Completed t 12:20 PM with 3.9 cy

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill

Project #: 13354x8

Location: Lithia

Inspector: KJ

Contractor: Earthtech

Pin #: T7

Date Drilled: 4/29/2013

Date Grouted: 4/29/2013

Total Depth: 240

Total Grout: 4.4 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
4/29/2013	156	240	39	500	X					SOT#156 at 4:07 pm, Line pressure: 200 psi
	156	235	39	500	X					
	156	230	47	600	X					
	156	225	47	600	X					
	156	220	53	600	X					
	156	215	53	600	X					
	156	210	61	600	X					
	156	205	61	600	X					
	156	200	66	550	X					
	156	195	66	550	X					
	156	190	72	600	X					
	156	185	72	600	X					
	156	180	77	600	X					
	156	175	77	600	X					
	156	170	83	600	X					
	156	165	83	600	X					
	156	160	87	700	X					
	156	155	87	700	X					
	156	150	90	700	X					TC
	156	145	90	700	X					TC

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill

Pin #: T7

Project #: 13354x8

Date Drilled: 4/29/2013

Location: Lithia

Date Grouted: 4/29/2013

Inspector: KJ

Total Depth: 240

Contractor: Earthtech

Total Grout: 4.4 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
4/29/2013	155	140-130	93	500	X					Start of Pump & Pull Zone
		130-120	96	500	X					
		120-110	99	500	X					
		110-100	102	500	X					
		100-90	105	500	X					
		90-80	108	500	X					
		80-70	111	500	X					
		70-60	114	500	X					
		60-50	117	500	X					
		50-40	120	500	X					
		40-30	123	500	X					
		30-20	126	500	X					
		20-10	129	500	X					
		~10-0	132	500	X		X			Point Completed at 5:00 PM with 4.4 cy

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill

Project #: 13354x8

Location: Lithia

Inspector: KJ

Contractor: Earthtech

Pin #: T8

Date Drilled: 4/25/2013

Date Grouted: 4/25/2013

Total Depth: 240

Total Grout: 5.2 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
4/25/2013	152	240	43	520	X					SOT #152 at 3:24 PM - Line pressure 300 psi
		235	43	520	X					
		230	55	500	X					
		225	55	500	X					
		220	61	520	X					
		215	61	520	X					
		210	68	520	X					
		205	68	520	X					
		200	77	550	X					
		195	77	550	X					
		190	85	600	X					
		185	85	600	X					
		180	91	600	X					
		175	91	600	X					
		170	100	600	X					
		165	100	600	X					
		160	67	550	X					
		155	67	550	X					
		150	112	700	X					
		145	112	700	X					

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill

Pin #: T8

Project #: 13354x8

Date Drilled: 4/25/2013

Location: Lithia

Date Grouted: 4/25/2013

Inspector: KJ

Total Depth: 240

Contractor: Earthtech

Total Grout: 5.2 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
4/25/2013	152	140-130	116	600	X					Start of Pump & Pull Zone
		130-120	119	600	X					
		120-110	123	600	X					
		110-100	126	600	X					
		100-90	130	600	X					
		90-80	133	600	X					
		80-70	136	600	X					
		70-60	139	600	X					
		60-50	142	600	X					
		50-40	145	600	X					
		40-30	148	600	X					
		30-20	151	600	X					
		20-10	154	600	X					
		~10-0	157	600	X		X			Point Completed at 4:05 PM with 5.2 cy

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill

Project #: 13354x8

Location: Lithia

Inspector: KJ

Contractor: Earthtech

Pin #: T9

Date Drilled: 4/24/2013

Date Grouted: 4/25/2013

Total Depth: 250

Total Grout: 4.3 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
4/25/2013	150	250	29	700	X					Cont. Truck #150 from 143 strokes at 7:36 am - Line pressure: 200 psi
		245	29	700	X					
		240	35	800	X					
		235	35	800	X					
		230	40	700	X					
		225	40	700	X					
		220	46	700	X					
		215	46	700	X					
		210	52	700	X					
		205	52	700	X					
		200	61	600	X					
		195	61	600	X					
		190	66	600	X					
		185	66	600	X					
		180	73	600	X					
		175	73	600	X					
		170	78	600	X					
		165	78	600	X					
		160	83	650	X					
		155	83	650	X					

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill

Pin #: T9

Project #: 13354x8

Date Drilled: 4/24/2013

Location: Lithia

Date Grouted: 4/25/2013

Inspector: KJ

Total Depth: 250

Contractor: Earthtech

Total Grout: 4.3 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
4/25/2013	150	150	86	800	X					
		145	86	800	X					
		140-130	89	700	X					Start of Pump & Pull Zone
		130-120	92	700	X					
		120-110	96	700	X					
		110-100	99	600	X					
		100-90	102	500	X					
		90-80	105	500	X					
		80-70	108	500	X					
		70-60	111	500	X					
		60-50	114	500	X					
		50-40	117	500	X					
		40-30	120	500	X					
		30-20	123	500	X					
		20-10	126	500	X					
		~10-0	129	500	X		X			Point Completed at 8:40 AM PM with 4.3 cy

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill

Project #: 13354x8

Location: Lithia

Inspector: KJ

Contractor: Earthtech

Pin #: T10

Date Drilled: 4/24/2013

Date Grouted: 4/24/2013

Total Depth: 245

Total Grout: 5.1 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
4/24/2013	149	245	41	600	X					SOT#149 at 2:05 pm - Line pressure 360 psi
		240	48	600	X					
		235	48	600	X					
		230	55	600	X					
		225	55	600	X					
		220	63	600	X					
		215	63	600	X					
		210	70	600	X					
		205	70	600	X					
		200	78	600	X					
		195	78	600	X					
		190	90	600	X					
		185	90	600	X					
		180	103	600	X					
		175	103	600	X					
		170	110	600	X					
		165	110	600	X					
		160	115	600	X					
		155	115	600	X					
		150	119	700	X					

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill

Project #: 13354x8

Location: Lithia

Inspector: KJ

Contractor: Earthtech

Pin #: T10

Date Drilled: 4/24/2013

Date Grouted: 4/24/2013

Total Depth: 245

Total Grout: 5.1 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
4/24/2013	149	145	119	700	X					
		140-130	122	600	X					Start of Pump & Pull Zone
		130-120	125	600	X					
		120-110	127	600	X					
		110-100	130	600	X					
		100-90	133	600	X					
		90-80	135	600	X					
		80-70	138	600	X					
		70-60	141	500	X					
		60-50	143	500	X					
		50-40	146	500	X					
		40-30	148	500	X					
		30-20	151	500	X					
		20-10	154	500	X					
		~10-0	156	500	X		X			Point Completed at 2:47 PM with 5.1 cy

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill

Project #: 13354x8

Location: Lithia

Inspector: KJ

Contractor: Earthtech

Pin #: T11

Date Drilled: 4/24/2013

Date Grouted: 4/24/2013

Total Depth: 240

Total Grout: 5.2 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
4/24/2013	148	240	187	400	X					Cont. #148 at 10:30 am from 143 strokes, Line pressure: 200 psi
	148	235	187	400	X					
	148	230	195	600	X					
	148	225	195	600	X					
	148	220	203	600	X					
	148	215	203	600	X					
	148	210	209	600	X					
	148	205	209	600	X					
	148	200	216	600	X					
	148	195	216	600	X					
	148	190	224	600	X					
	148	185	224	600	X					
	148	180	231	600	X					
	148	175	231	600	X					
	148	170	237	600	X					
	148	165	237	600	X					
	148	160	243	600	X					
	148	155	243	600	X					
	148	150	249	600	X					
	148	145	249	600	X					

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill

Project #: 13354x8

Location: Lithia

Inspector: KJ

Contractor: Earthtech

Pin #: T11

Date Drilled: 4/24/2013

Date Grouted: 4/24/2013

Total Depth: 240

Total Grout: 5.2 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
	149	140-130	253	650	X					Start of Pump & Pull Zone
	149	130-120	258	650	X					
	149	120-110	261	600	X					
	149	110-100	264	600	X					
	149	100-90	267	600	X					
	149	90-80	270	600	X					
	149	80-70	273	600	X					
	149	70-60	276	600	X					
	149	60-50	279	600	X					
	149	50-40	282	600	X					
	149	40-30	285	600	X					
	149	30-20	290	600	X					
	149	20-10	295	600	X					
	149	~10-0	300	600	X		X			Point Completed at 11:10 AM with 5.2 cy

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill

Project #: 13354x8

Location: Lithia

Inspector: KJ

Contractor: Earthtech

Pin #: T12

Date Drilled: 4/23/2013

Date Grouted: 4/23/2013

Total Depth: 245

Total Grout: 5.1 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
4/23/2013	147	245	36	600	X					SOT#147 at 4:48 PM - Line pressure 400 psi
		240	41	650	X					
		235	41	650	X					
		230	48	650	X					
		225	48	650	X					
		220	56	650	X					
		215	56	650	X					
		210	64	650	X					
		205	64	650	X					
		200	72	650	X					
		195	72	650	X					
		190	78	700	X					
		185	78	700	X					
		180	88	600	X					
		175	88	600	X					
		170	97	600	X					
		165	97	600	X					
		160	104	600	X					
		155	104	600	X					
		150	108	700	X					

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill

Project #: 13354x8

Location: Lithia

Inspector: KJ

Contractor: Earthtech

Pin #: T12

Date Drilled: 4/23/2013

Date Grouted: 4/23/2013

Total Depth: 245

Total Grout: 5.1 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
4/23/2013	147	145	111	700	X					
		140-130	115	700	X					Start of Pump & Pull Zone
		130-120	118	700	X					
		120-110	121	700	X					
		110-100	124	650	X					
		100-90	129	700	X					
		90-80	132	700	X					
		80-70	135	700	X					
		70-60	138	600	X					
		60-50	141	500	X					
		50-40	144	500	X					
		40-30	147	500	X					
		30-20	150	500	X					
		20-10	150	500	X					
		~10-0	153	500	X		X			Point Completed at 5:40 PM with 5.1 cy

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill

Project #: 13354x8

Location: Lithia

Inspector: RK

Contractor: Earthtech

Pin #: T13

Date Drilled: 4/23/2013

Date Grouted: 4/23/2013, 4/24/2013

Total Depth: 245

Total Grout: 9.7 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
4/23/2013	147	245	199	650	X					Cont. #147 from 153 strokes at 5:50 PM - Line pressure: 360 psi
		240	-	-	X					TC - pull no pump
		235	-	-	X					TC - pull no pump
		230	202	500	X					
		225	-	-	X					TC - pull no pump
		220	206	600	X					
		215	210	600	X					
		210	-	-	X					TC - pull no pump
		205	-	-	X					TC - pull no pump
		200	285	580	X					
		195	300	580	X					EOT. #147 at 6:00 PM
4/24/2013	148	190	41	520	X					SOT. #148 at 8:09 AM - Line pressure: 260 psi
		185	59	500	X					
		180	61	500	X					
		175	63	580	X					TC
		170	65	500	X					
		165	68	580	X					TC
		160	70	550	X					
		155	71	570	X					TC
		150	74	500	X					

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill

Project #: 13354x8

Location: Lithia

Inspector: RK

Contractor: Earthtech

Pin #: T13

Date Drilled: 4/23/2013

Date Grouted: 4/23/2013, 4/24/2013

Total Depth: 245

Total Grout: 9.7 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
4/24/2013	147	145	77	500	X					
		140-130	80	500	X					Start of Pump & Pull Zone
		130-120	84	500	X					
		120-110	88	550	X					
		110-100	92	580	X					
		100-90	96	580	X					
		90-80	100	580	X					
		80-70	104	550	X					
		70-60	112	400						
		60-50	118	380						
		50-40	125	380						
		40-30	131	350						
		30-20	137	380						
		20-10	140	300						
		~10-0	143	280			X			Point Completed at 8:44 AM with 9.7 cy

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill

Project #: 13354x8

Location: Lithia

Inspector: RK

Contractor: Earthtech

Pin #: T14

Date Drilled: 4/24/2013

Date Grouted: 4/24/2013

Total Depth: 240

Total Grout: 4.9 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
4/24/2013	149	240	196							Cont. #149 at 2:50 pm from 156 strokes, Line pressure: 300 psi
		240	208	520	X					
		235	216	520	X					
		230	218	550	X					
		225	221	550	X					
		220	223	620	X					
		215	-	-						TC - pull no pump
		210	232	480						TC - pump and pull
		205	244	480						TC - pump and pull
		200	250	550	X					
		195	-	-						TC - pull no pump
		190	254	450						TC - pump and pull
		185	-	-						TC - pull no pump
		180	260	450						TC - pump and pull
		175	-	-						TC - pull no pump
		170	270	500	X					
		165	272	510	X					
		160	274	550	X					
		155	276	560	X					
		150	278	550	X					

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill

Project #: 13354x8

Location: Lithia

Inspector: RK

Contractor: Earthtech

Pin #: T14

Date Drilled: 4/24/2013

Date Grouted: 4/24/2013

Total Depth: 240

Total Grout: 4.9 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
4/24/2013	149	145	282	520	X					
		140-130	284	400						Start of Pump & Pull Zone
		130-120	286	380						
		120-110	288	350						
		110-100	290	350						
		100-90	292	350						
		90-80	294	350						
		80-70	296	350						
		70-60	298	350						
		60-50	300	350						
		50-40	302	350						
		40-30	304	350						
		30-20	306	350						
		20-10	308	350						
		~10-0	310	300			X			Point Completed at 3:35 PM with 4.9 cy

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill
Project #: 13354x8
Location: Lithia
Inspector: RK
Contractor: Earthtech

Pin #: T15
Date Drilled: 4/24/2013, 4/25/2013
Date Grouted: 4/25/2013
Total Depth: 232
Total Grout: 3.9 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
4/25/2013	151	232	189							Cont. #151 at 12:55 pm from 154 strokes, Line pressure: 300 psi
		232	190	600	X					
		225	191	600	X					
		220	193	650	X					
		215	194	650	X					
		210	195	680	X					
		205	196	680	X					"Plugged" at 1:10 pm. Used inner rod to clear.
		230	236	500	X					Plugged grout not counted. Cont.Truck#151 from 196 strokes at 2:08 pm - Line pressure: 320 psi - TC
		225	246	500	X					TC
		220	248	550	X					
		215	251	550	X					
		210	253	550	X					
		205	255	550	X					
		200	258	400						TC
		195	261	400						TC
		190	263	560	X					
		185	266	560	X					
		180	268	600	X					
		175	270	600	X					
		170	271	650	X					

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill
Project #: 13354x8
Location: Lithia
Inspector: RK
Contractor: Earthtech

Pin #: T15
Date Drilled: 4/24/2013, 4/25/2013
Date Grouted: 4/25/2013
Total Depth: 232
Total Grout: 3.9 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
	151	165	273	700	X					TC
	151	160	274	600	X					
	151	155	276	620	X					
	151	150	278	540	X					
	151	145	280	580	X					
	151	140-130	283	580	X					Start of Pump & Pull Zone
	151	130-120	285	450						
	151	120-110	287	400						
	151	110-100	289	400						
	151	100-90	291	400						
	151	90-80	293	400						
	151	80-70	295	400						
	151	70-60	297	380						
	151	60-50	299	350						
	151	50-40	301	350						
	151	40-30	303	340						
	151	30-20	305	340						
	151	20-10	307	320						
	151	~10-0	309	320						Point Completed at 2:44 PM with 3.9 cy - 1.1 cy lost in plugged casing

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC** = Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill

Project #: 13354x8

Location: Lithia

Inspector: RK

Contractor: Earthtech

Pin #: T16

Date Drilled: 4/25/2013, 4/26/2013

Date Grouted: 4/26/2013

Total Depth: 235

Total Grout: 12.8 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
4/26/2013	153	235	43							SOT #153 at 11:15 AM - Line pressure: 300 psi
		235	61	550	X					
		230	68	550	X					
		225	72	550	X					
		220	75	450						TC - pump and pull
		215	77	450						TC - pump and pull
		210	88	520	X					
		205	95	550	X					
		200	100	520	X					
		195	106	520	X					
		190	116	520	X					
		185	124	520	X					
		180	128	520	X					
		175	131	550	X					
		170	167	580	X					
		165	300	500	X					EOT #153 at 11:50 AM
	154	160	25	550	X					SOT #154 at 1:05 PM - Line pressure 300 psi
		155	31	580	X					
		150	-	-						TC - pull no pump
		145	-	-						TC - pull no pump

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill

Pin #: T16

Project #: 13354x8

Date Drilled: 4/25/2013, 4/26/2013

Location: Lithia

Date Grouted: 4/26/2013

Inspector: RK

Total Depth: 235

Contractor: Earthtech

Total Grout: 12.8 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
4/26/2013	154	140-130	35	580	X					Start of Pump & Pull Zone
		130-120	40	580	X					
		120-110	43	520	X					
		110-100	47	520	X					
		100-90	48	300						
		90-80	51	420						
		80-70	54	400						
		70-60	59	350						
		60-50	63	320						
		50-40	67	320						
		40-30	71	320						
		30-20	75	320						
		20-10	79	320						
		~10-0	83	320			X			Point Completed at 1:35 PM with 12.8 cy

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill

Project #: 13354x8

Location: Lithia

Inspector: RK

Contractor: Earthtech

Pin #: T17

Date Drilled: 4/26/2013, 4/29/2013

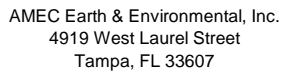
Date Grouted: 4/29/2013

Total Depth: 230

Total Grout: 5.5 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
4/29/2013	155	230	175							Cont. Truck#155 from 136 strokes at 12:30 PM - Line pressure: 430 psi
		230	180	680	X					
		225	185	680	X					
		220	186	600						TC - pump and pull
		215	187	600						TC - pump and pull
		210	192	650	X					
		205	198	650	X					
		200	202	680	X					
		195	210	650	X					
		190	213	650	X					
		185	216	650	X					
		180	218	700	X					
		175	220	700	X					
		170	224	700	X					
		165	227	650	X					
		160	229	650	X					
		155	232	650	X					
		150	234	650	X					
		145	237	650	X					
		140-130	241	650	X					Start of Pump & pull Zone

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



Project Name: _ SE COUNTY Landfill

Location: _____ Lithia

Contractor: Earthtech

Date Drilled: 4/26/2013, 4/29/2013

Date Grouted: 4/29/2013

Total Depth: 230

Total Grout: 5.5 cy

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill

Project #: 13354x8

Location: Lithia

Inspector: RK

Contractor: Earthtech

Pin #: T18

Date Drilled: 4/29/2013

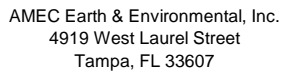
Date Grouted: 4/29/2013

Total Depth: 230

Total Grout: 5.6 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
4/29/2013	156	230	169							Cont. #156 at 6:01 pm from 132 strokes, Line pressure: 220 psi
		230	186	450	X					
		225	196	450	X					
		220	199	450						TC - pump and pull
		215	201	450						TC - pump and pull
		210	203	450	X					
		205	206	450	X					
		200	208	450	X					
		195	210	450	X					
		190	212	500	X					
		185	214	500	X					
		180	216	550	X					
		175	219	500	X					
		170	222	650	X					
		165	-	-						TC - pull no pump
		160	223	600	X					TC
		155	225	700	X					TC
		150	227	500	X					
		145	230	550	X					
		140-130	233	580	X					Start of Pump & pull Zone

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



Project Name: _ SE COUNTY Landfill

Location: _____ Lithia

Contractor: Earthtech

Date Drilled: 4/29/2013

Date Grouted: 4/29/2013

Total Depth: 230

Total Grout: 5.6 cy

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill
Project #: 13354x8
Location: SE Landfill
Inspector: Mark C.
Contractor: Earthtech

Pin #: T-19
Date Drilled: 4/30/2013
Date Grouted: 4/30/2013
Total Depth: 240 ft
Total Grout: 17.8 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
4/30/2013	158	240	120	380					X	SOT#158 at 12:15 PM - Line pressure 200 psi
		235	176	380					X	Tight Casing
		230	185	390					X	Tight Casing
		225	201	390					X	Tight Casing
		220	230	400						
		215	253	390					X	Tight Casing
		210	270	380					X	Tight Casing
		205	295	390					X	Tight Casing
	158/159	200	310/275	390					X	Tight Casing - EOT#158 at 1:35 PM - Cont T#159 from 217 strokes at 3:35 PM - Line pressure 200 psi
		195	280	390					X	Tight Casing
		190	282	390					X	Tight Casing, Lift 10' of pipe
		185	282	390					X	Tight Casing
		180	288	390					X	Tight Casing, Lift 10' of pipe
		175	288	390					X	Tight Casing
		170	293	390					X	Tight Casing, Lift 10' of pipe
		165	300	390					X	Tight Casing - EOT#159 at 3:35 PM
	160	160	69	380					X	SOT#160 at 5:52 PM - Line pressure = 200 PSI
		155	92	380					X	Tight Casing
		150	95	420						
		145	98	440						

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC** = Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill

Pin #: T-19

Project #: 13354x8

Date Drilled: 4/30/2013

Location: SE Landfill

Date Grouted: 4/30/2013

Inspector: Mark C.

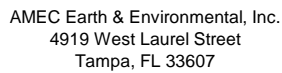
Total Depth: 240 ft

Contractor: Earthtech

Total Grout: 17.8 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
4/30/2013	160	140	100							Start of Pump and pull Zone
		135	102							
		130	103							
		125	105							
		120	106							
		115	107							
		110	108							
		105	109							
		100	111							
		95	112							
		90	114							
		85	115							
		80	117							
		75	118							
		70	120							
		65	121							
		60	123							
		55	124							
		50	126							
		45	127							

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



Project Name: SE COUNTY Landfill	Pin #: T-19
Project #: 13354x8	Date Drilled: 4/30/2013
Location: SE Landfill	Date Grouted: 4/30/2013
Inspector: Mark C.	Total Depth: 240 ft
Contractor: Earthtech	Total Grout: 17.8 cy

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: _ SE COUNTY Landfill

Project #: _____ 13354x8

Location: _____ SE Landfill

Inspector: _____ RK

Contractor: _____ Earthtech

Pin #: _ T-20

Date Drilled: _ 5/3/2013

Date Grouted: _ 5/3/2013

Total Depth: _ 230 ft

Total Grout: _ 7.1 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
5/3/2013	165	230	40							SOT #165 at 10:36 am Line pressure = 280 PSI
		230	56	500	X					
		225	63	500	X					
		220	67	500	X					
		215	70	500	X					
		210	120	500	X					
		205	145	500	X					
		200	149	500	X					
		195	152	500	X					
		190	156	500	X					
		185	159	500	X					
		180	162	500	X					
		175	164	500	X					
		170	167	500	X					
		165	169	500	X					
		160	172	550	X					
		155	175	550	X					
		150	177	500	X					
		145	180	550	X					
		140-130	184	500	X					Start of Pump & pull Zone

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill

Project #: 13354x8

Location: SE Landfill

Inspector: RK

Contractor: Earthtech

Pin #: T-20

Date Drilled: 5/3/2013

Date Grouted: 5/3/2013

Total Depth: 230 ft

Total Grout: 7.1 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
1/0/1900	0	130-120	188	550	X					
		120-110	191	400						
		110-100	195	500	X					
		100-90	199	450						
		90-80	203	500	X					
		80-70	207	450						
		70-60	211	360						
		60-50	215	400						
		50-40	219	400						
		40-30	223	380						
		30-20	227	380						
		20-10	231	350						
		10-0	235	300			X			Point completed at 11:20 pm with 7.1 cy

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: _ SE COUNTY Landfill

Project #: _____ 13354x8

Location: _____ SE Landfill

Inspector: _____ RK

Contractor: _____ Earthtech

Pin #: _ T-21

Date Drilled: _ 5/1/2013

Date Grouted: _ 5/1/2013

Total Depth: _ 230 ft

Total Grout: _ 4.6 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
5/1/2013	161	230	288							Cont T#161 at 12:07 PM from 257 strokes - Line pressure = 280 PSI
		230	295	550	X					
		225	300	550	X					
		220	300	--						Tight Casing - no pump
		215	300	--						Tight Casing - no pump
		210	300	--						Tight Casing - no pump
		205	300	--						Tight Casing - no pump
		200	300	--						Tight Casing - no pump
		195	303	400						Tight Casing, Pump and pull
		190	306	560	X					
		185	309	580	X					
		180	310	580	X					
		175	312	600	X					Tight Casing
		170	315	550	X					
		165	317	480	X					
		160	319	560	X					
		155	322	500	X					
		150	324	500	X					
		145	326	500	X					
		140-130	330	500	X					EOT#161 at 12:44 pm - Start of Pump and pull Zone

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill

Project #: 13354x8

Location: SE Landfill

Inspector: RK

Contractor: Earthtech

Pin #: T-21

Date Drilled: 5/1/2013

Date Grouted: 5/1/2013

Total Depth: 230 ft

Total Grout: 4.6 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
5/1/2013	162	130-120	5							SOT#162 at 12:45 PM - line pressure 300psi -
		120-110	9	300						
		110-100	14	300						
		100-90	20	280						
		90-80	24	280						
		80-70	35	280						
		70-60	43	280						
		60-50	48	280						
		50-40	53	280						
		40-30	58	280						
		30-20	63	280						
		20-10	68	280						
		10-0	73	280			X			Finished at 1:10 pm
										Total = 4.6 CY

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill

Project #: 13354x8

Location: SE Landfill

Inspector: RK

Contractor: Earthtech

Pin #: T-22

Date Drilled: 5/2/2013

Date Grouted: 5/2/2013

Total Depth: 240 ft

Total Grout: 4 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
5/2/2013	163	240	216							Cont T#163 from 180 strokes at 12:14 pm - Line Pressure = 260 PSI
		240	223	480	X					
		235	228	480	X					
		230	230	500	X					
		225	233	500	X					
		220	235	600	X					
		215	238	650	X					
		210	240	550	X					
		205	243	500	X					
		200	246	550	X					
		195	249	480	X					
		190	253	500	X					
		185	255	500	X					
		180	258	500	X					
		175	261	500	X					
		170	264	550	X					
		165	267	500	X					
		160	269	580	X					
		155	272	580	X					
		150	274	600	X					

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill

Project #: 13354x8

Location: SE Landfill

Inspector: RK

Contractor: Earthtech

Pin #: T-22

Date Drilled: 5/2/2013

Date Grouted: 5/2/2013

Total Depth: 240 ft

Total Grout: 4 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
5/2/2013	163	145	277	600	X					
		140-130	279	500	X					Start of Pump & Pull Zone
		130-120	281	500	X					
		120-110	283	480	X					
		110-100	285	500	X					
		100-90	287	500	X					
		90-80	289	480	X					
		80-70	291	350						
		70-60	293	350						
		60-50	295	350						
		50-40	297	300						
		40-30	299	350						
		30-20	301	280						
		20-10	303	300						
		10-0	305	300			X			Point completed at 12:55 pm with 4.0 cy

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: _ SE COUNTY Landfill

Project #: _____ 13354x8

Location: _____ SE Landfill

Inspector: _____ KJ

Contractor: _____ Earthtech

Pin #: _ T-23

Date Drilled: _ 5/2/2013

Date Grouted: _ 5/2/2013

Total Depth: _ 240 ft

Total Grout: _ 6.2 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
5/2/2013	164	240	44	450	X					SOT#164 at 2:10 PM - Line Pressure = 220 PSI
		235	52	450	X					
		230	60	450	X					
		225	65	450	X					
		220	69	500	X					
		215	74	500	X					
		210	79	550	X					
		205	84	550	X					
		200	88	550	X					
		195	93	550	X					
		190	97	550	X					
		185	102	550	X					
		180	106	550	X					
		175	111	550	X					
		170	115	550	X					
		165	120	550	X					
		160	124	550	X					
		155	128	550	X					
		150	131	550	X					
		145	133	550	X					

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill
Project #: 13354x8
Location: SE Landfill
Inspector: KJ
Contractor: Earthtech

Pin #: T-23
Date Drilled: 5/2/2013
Date Grouted: 5/2/2013
Total Depth: 240 ft
Total Grout: 6.2 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
5/2/2013	164	140-130	135	550	X					Start of Pump and pull Zone
		130-120	139	550	X					
		120-110	143	500	X					
		110-100	147	500	X					
		100-90	151	500	X					
		90-80	155	500	X					
		80-70	159	500	X					
		70-60	163	500	X					
		60-50	167	500	X					
		50-40	171	500	X					
		40-30	175	500	X					
		30-20	179	500	X					
		20-10	183	500	X					
		10-0	187	500	X		X			Point Complete at 4:45 PM with 6.2 cy

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: _ SE COUNTY Landfill

Project #: _____ 13354x8

Location: _____ SE Landfill

Inspector: _____ KJ

Contractor: _____ Earthtech

Pin #: _ T-24

Date Drilled: _ 5/2/2013

Date Grouted: _ 5/2/2013

Total Depth: _ 240 ft

Total Grout: _ 6 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
5/2/2013	163	240	59	450	X					SOT#163 at 10:34 AM - Line pressure 240 psi
		235	67	450	X					
		230	74	450	X					
		225	79	450	X					
		220	83	500	X					
		215	87	500	X					
		210	90	500	X					
		205	95	500	X					
		200	99	550	X					
		195	103	550	X					
		190	107	550	X					
		185	112	550	X					
		180	116	600	X					
		175	119	600	X					
		170	122	550	X					
		165	125	550	X					
		160	127	600	X					
		155	129	600	X					
		150	131	600	X					
		145	132	600	X					

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill

Project #: 13354x8

Location: SE Landfill

Inspector: KJ

Contractor: Earthtech

Pin #: T-24

Date Drilled: 5/2/2013

Date Grouted: 5/2/2013

Total Depth: 240 ft

Total Grout: 6 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
5/2/2013	163	140-130	134	600	X					Start of Pump and pull Zone
		130-120	137	600	X					
		120-110	140	600	X					
		110-100	144	600	X					
		100-90	148	600	X					
		90-80	152	600	X					
		80-70	155	600	X					
		70-60	158	600	X					
		60-50	161	600	X					
		50-40	164	600	X					
		40-30	167	600	X					
		30-20	171	600	X					
		20-10	175	600	X					
		10-0	180	600	X		X			Point Complete at 11:15 AM with 6.0 cy

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill
Project #: 13354x8
Location: SE Landfill
Inspector: TN
Contractor: Earthtech

Pin #: T-25
Date Drilled: 4/30/2013 and 5/1/2013
Date Grouted: 5/1/2013
Total Depth: 240 ft
Total Grout: 7.8 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
5/1/2013	161	240	41	540	X					SOT#161 at 11:10 AM - Line pressure 340 psi
		235	45	540	X					
		230	49	550	X					
		225	52	600	X					
		220	55	550	X					
		215	59	540	X					
		210	63	540	X					
		205	67	540	X					
		200	70	540	X					
		195	76	540	X					
		190	82	540	X					
		185	104	540	X					
		180	178	540	X					
		175	180	540	X					
		170	188	540	X					
		165	199	540	X					
		160	203	540	X					
		155	207	540	X					
		150	210	600	X					
		145	214	600	X					

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill

Pin #: T-25

Project #: 13354x8

Date Drilled: 4/30/2013 and 5/1/2013

Location: SE Landfill

Date Grouted: 5/1/2013

Inspector: TN

Total Depth: 240 ft

Contractor: Earthtech

Total Grout: 7.8 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
5/1/2013	161	140-130	218	600	X					Start of Pump and Pull Zone
		130-120	221	550	X					
		120-110	224	600	X					
		110-100	227	600	X					
		100-90	230	550	X					
		90-80	233	550	X					
		80-70	236	500						
		70-60	239	450						
		60-50	242	400						
		50-40	245	450						
		40-30	248	450						
		30-20	251	420						
		20-10	254	400						
		10-0	257	400			X			Completed 12:00 pm with 7.8 cy

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: _ SE COUNTY Landfill

Project #: _____ 13354x8

Location: _____ SE Landfill

Inspector: _____ RK

Contractor: _____ Earthtech

Pin #: _ T-26

Date Drilled: _ 5/1/2013

Date Grouted: _ 5/1/2013

Total Depth: _ 240 ft

Total Grout: _ 4.6 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
5/1/2013	162	240	105		X					Cont T#162 from 73 strokes at 3:05 PM - Line pressure 200 psi
		235	107	500	X					
		230	100	500	X					
		225	113	500	X					
		220	120	500	X					
		215	128	450	X					
		210	131	450	X					
		205	134	500	X					
		200	138	450	X					
		195	141	500	X					
		190	144	450	X					
		185	147	550	X					
		180	150	550	X					
		175	152	600	X					
		170	155	600	X					
		165	157	600	X					
		160	159	650	X					
		155	161	600	X					
		150	163	600	X					
		145	165	650	X					

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill

Project #: 13354x8

Location: SE Landfill

Inspector: RK

Contractor: Earthtech

Pin #: T-26

Date Drilled: 5/1/2013

Date Grouted: 5/1/2013

Total Depth: 240 ft

Total Grout: 4.6 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
5/1/2013	162	140-130	168	600	X					Start of Pump and pull
		130-120	171		X					
		120-110	174							
		110-100	177							
		100-90	180							
		90-80	183							
		80-70	186							
		70-60	189							
		60-50	192							
		50-40	195							
		40-30	198							
		30-20	201							
		20-10	204							
		10-0	210				X			Finished at 4:00 pm with 4.6 cy

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: _ SE COUNTY Landfill

Project #: _____ 13354x8

Location: _____ SE Landfill

Inspector: _____ RK

Contractor: _____ Earthtech

Pin #: _ T-27

Date Drilled: _ 5/6/2013

Date Grouted: _ 5/6/2013

Total Depth: _ 240 ft

Total Grout: _ 24.3 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
5/6/2013	167	240	40							SOT#167 at 4:16 PM - Line Pressure 280 psi
		240	183	460						Tight Casing, Pump and Pull
		235	193	460						Tight Casing, Pump and Pull
		230	200	510	X					
		225	205	510	X					
		220	227	520	X					
		215	246	500	X					
		210	249	550	X					
		205	252	550	X					
		200	263	500	X					
		195	278	480						Tight Casing, Pump and Pull
		190	290	50	X					
		185	301	600	X					
		180	302	510	X					
		175	304	600	X					
		170	308	650	X					
		165	312	500	X					EOT# 167 at 5:15 PM
5/7/2013	168	160	107	300						SOT#168 at 7:45 AM - Line Pressure 160 psi - Tight Casing
		155	302	300						EOT#168 at 8:10 AM, Tight Casing
	169	150	43	600	X					SOT#169 at 9:15 AM - Line pressure 360 psi

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill

Project #: 13354x8

Location: SE Landfill

Inspector: KJ

Contractor: Earthtech

Pin #: T-27

Date Drilled: 5/6/2013

Date Grouted: 5/6/2013

Total Depth: 240 ft

Total Grout: 24.3 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
5/7/2013	169	145	45	650	X					
		140-130	46	500						Tight Casing
		130-120	50	600	X					Start of Pump and pull Zone
		120-110	54	600	X					
		110-100	61	600	X					
		100-90	67	600	X					
		90-80	72	600	X					
		80-70	77	600	X					
		70-60	83	400						
		60-50	88	400						
		50-40	96	400						
		40-30	105	400						
		30-20	110	400						
		20-10	123	400						
		10-0	129	400			X			Point Completed at 9:50 AM with 24.3 cy

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: _ SE COUNTY Landfill

Project #: _____ 13354x8

Location: _____ SE Landfill

Inspector: _____ KJ

Contractor: _____ Earthtech

Pin #: _ T-28

Date Drilled: _ 5/8/2013

Date Grouted: _ 5/8/2013

Total Depth: _ 240 ft

Total Grout: _ 6.6 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
5/8/2013	172	240	48	600	X					SOT#172 at 1:40 pm - Line pressure 240 psi
		235	53	600	X					
		230	57	550	X					
		225	60	550	X					
		220	63	550	X					
		215	71	550	X					
		210	78	550	X					
		205	82	550	X					
		200	86	550	X					
		195	90	550	X					
		190	94	450	X					
		185	100	450	X					
		180	105	500	X					
		175	109	500	X					
		170	112	450	X					
		165	116	450	X					
		160	120	500	X					
		155	124	500	X					
		150	127	500	X					
		145	130	500	X					

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC** = Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill

Project #: 13354x8

Location: SE Landfill

Inspector: KJ

Contractor: Earthtech

Pin #: T-28

Date Drilled: 5/8/2013

Date Grouted: 5/8/2013

Total Depth: 240 ft

Total Grout: 6.6 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
5/8/2013	172	140-130	132	450	X					Start of Pump and pull Zone
		130-120	137	450	X					
		120-110	142	600	X					
		110-100	147	600	X					
		100-90	152	600	X					
		90-80	157	600	X					
		80-70	162	600	X					
		70-60	167	600	X					
		60-50	172	600	X					
		50-40	177	600	X					
		40-30	182	600	X					
		30-20	187	600	X					
		20-10	192	600	X					
		10-0	197	600	X		X			Point Completed at 2:20 PM with 6.6 cy

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: _ SE COUNTY Landfill

Project #: _____ 13354x8

Location: _____ SE Landfill

Inspector: _____ KJ

Contractor: _____ Earthtech

Pin #: _ T-29

Date Drilled: _ 5/7/2013

Date Grouted: _ 5/7/2013

Total Depth: _ 240 ft

Total Grout: _ 17.7 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
5/7/2013	170	240	82	400	X					SOT#170 at 2:22 pm - Line Pressure 200 psi - Tight Casing
		235	87	400	X					
		230	96	400	X					Tight Casing, Pump and Pull
		225	104	400	X					Tight Casing, Pump and Pull
		220	113	400	X					Tight Casing, Hard to pull
		215	119	400	X					
		210	125	400	X					Tight Casing
		205	137	400	X					Tight Casing
		200	148	400	X					
		195	169	400	X					
		190	197	400	X					Tight Casing
		185	199	400	X					Tight Casing
		180	203	400	X					Tight Casing
		175	273	400	X					Tight Casing
5/7/2013	170/171	170	304/27	340/380	X					EOT#170 at 3:05 PM - SOT#171 at 4:50 PM
		165	90	380	X					
		160	155	400	X					
		155	157	400	X					
		150	160	400	X					
		145	163	400	X					

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure



AMEC Earth & Environmental, Inc.
4919 West Laurel Street
Tampa, FL 33607

COMPACTION GROUT REPORT

Project Name: SE COUNTY Landfill

Project #: 13354x8

Location: SE Landfill

Inspector: KJ

Contractor: Earthtech

Pin #: T-29

Date Drilled: 5/7/2013

Date Grouted: 5/7/2013

Total Depth: 240 ft

Total Grout: 17.7 cy

Date	Truck #	Depth (ft)	Strokes	Max Pressure (psi)	HP	GH	GTS	BP	PL	Comments
5/7/2013	171	140-130	166	400	X					Start of Pump and pull Zone
		130-120	171	400	X					
		120-110	176	500	X					
		110-100	181	580	X					
		100-90	186	580	X					
		90-80	191	580	X					
		80-70	196	580	X					
		70-60	201	580	X					
		60-50	206	580	X					
		50-40	211	580	X					
		40-30	216	580	X					
		30-20	221	580	X					
		20-10	226	580	X					
		10-0	231	580	X		X			Point completed at 5:20 PM with 17.7 cy

* **Note:** The terms listed above are defined as follows: **HP** = High Pressure, **TC**= Tight casing (Torque > 240), **GH** = Ground Heave, **GTS** = Grout to Surface, **BP** = Back Pressure

APPENDIX E

Grout Compressive Strength Test Report

T I E R R A

7351 Temple Terrace Highway • Tampa, Florida 33637
Phone: (813) 989-1354 • Fax: (813) 989-1355

GROUT COMPRESSION TEST REPORT

CLIENT: Mr. John Barnes
Earth Tech, LLC
2620 Hunt Road
Land O' Lakes, FL 34638

DATE: 3/18/2013
JOB NO: 6111-13-009

PROJECT: SE County Landfill Stage 4 Sinkhole Remediation
Hillsborough County, FL

SAMPLE NO: 001

FIELD INFORMATION		FIELD TEST DATA		
DATE SAMPLED: 2/18/2013	BY: N. SUAREZ	TEMPERATURE: AIR (°F): 62		
CONCRETE SUPPLIER: EARTH TECH	PLANT:	0 GALLONS WATER ADDED TO	10	CY
TRUCK NO: 218	TICKET NO: 179407	ADD'L WATER AUTH. BY:		
TIME MIXED: 2:00 PM	TIME SAMPLED: 3:15 PM	MEASURED	SPECIFIED	ASTM METHOD
DESIGN MIX NO: 324-4	SIZE OF LOAD (CY): 10	SLUMP (IN.): 4	3 - 5	C-143
DESIGN COMP. STR. AT 28 DAYS (PSI): 1500		AIR CONTENT (%): NA		C-231
DATE REC'D N LAB: 2/19/2013		W/C RATIO: NA		
LOCATION OF POUR:		TEMP CONCRETE (°F): 65		C-1064
PIN #14				
		FIELD REMARKS		

LABORATORY TEST DATA								
CYL NO.	DATE OF TEST	AGE (DAYS)	LOAD (lbs)	DIAMETER (in.)	AREA (sq. in.)	COMPRESSIVE STRENGTH (psi)	TESTED BY	FRACTURE TYPE
A	2/21/13	3	2,820	3.00	7.07	400	CM	2
B	2/21/13	3	2,680	3.00	7.07	380	CM	2
C	2/25/13	7	3,280	3.00	7.07	460	CM	5
D	2/25/13	7	3,390	3.00	7.07	480	CM	6
E	3/18/13	28	6,330	3.00	7.07	900	LH	5
F	3/18/13	28	6,080	3.00	7.07	860	LH	3
G	4/15/13	56	7,990	3.00	7.07	1130	LH	5

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T I E R R A I N C.

TIERRA

7351 Temple Terrace Highway • Tampa, Florida 33637
Phone: (813) 989-1354 • Fax: (813) 989-1355

GROUT COMPRESSION TEST REPORT

CLIENT: Mr. John Barnes
Earth Tech, LLC
2620 Hunt Road
Land O' Lakes, FL 34638

DATE: 4/16/2013
JOB NO: 6111-13-009

PROJECT: SE County Landfill Stage 4 Sinkhole Remediation
Hillsborough County, FL

SAMPLE NO: 002

FIELD INFORMATION		FIELD TEST DATA		
DATE SAMPLED: 2/19/2013	BY: E. TIRADO	TEMPERATURE: AIR (°F): 74		
CONCRETE SUPPLIER: EARTH TECH	PLANT:	0 GALLONS WATER ADDED TO	10	CY
TRUCK NO: 216	TICKET NO: 179430	ADD'L WATER AUTH. BY:		
TIME MIXED: 9:55 AM	TIME SAMPLED: 11:00 AM	MEASURED	SPECIFIED	ASTM METHOD
DESIGN MIX NO: 324-4	SIZE OF LOAD (CY): 10	SLUMP (IN.) 4.25	3 - 5	C-143
DESIGN COMP. STR. AT 28 DAYS (PSI): 1500		AIR CONTENT (%) NA		C-231
DATE REC'D N LAB: 2/20/2013		W/C RATIO: NA		
LOCATION OF POUR:		TEMP CONCRETE (°F): 72		C-1064
PIN #9				
		FIELD REMARKS		

LABORATORY TEST DATA								
CYL. NO.	DATE OF TEST	AGE (DAYS)	LOAD (lbs)	DIAMETER (in.)	AREA (sq. in.)	COMPRESSIVE STRENGTH (psi)	TESTED BY	FRACTURE TYPE
A	2/22/13	3	2,730	3.00	7.07	390	CM	5
B	2/22/13	3	2,790	3.00	7.07	390	CM	2
C	2/26/13	7	3,890	3.00	7.07	550	LH	3
D	2/26/13	7	3,980	3.01	7.12	560	LH	3
E	3/19/13	28	6,580	3.00	7.07	930	LH	3
F	3/19/13	28	6,630	3.00	7.07	940	LH	3
G	4/16/13	56	8,920	3	7.07	1280	LH	6

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GROUT COMPRESSION TEST REPORT

CLIENT: Mr. John Barnes
Earth Tech, LLC
2620 Hunt Road
Land O' Lakes, FL 34638

DATE: 3/20/2013
JOB NO: 6111-13-009

PROJECT: SE County Landfill Stage 4 Sinkhole Remediation
Hillsborough County, FL

SAMPLE NO: 003

FIELD INFORMATION		FIELD TEST DATA		
DATE SAMPLED: 2/20/2013	BY: E. TIRADO	TEMPERATURE: AIR (°F): 78		
CONCRETE SUPPLIER: EARTH TECH	PLANT: 1	0 GALLONS WATER ADDED TO	10	CY
TRUCK NO: 218	TICKET NO: 179511-20	ADD'L WATER AUTH. BY:		
TIME MIXED: 2:50 PM	TIME SAMPLED: 3:40 PM	MEASURED	SPECIFIED	ASTM METHOD
DESIGN MIX NO: 324-4	SIZE OF LOAD (CY): 10	SLUMP (IN.): 3.5	3 - 5	C-143
DESIGN COMP. STR. AT 28 DAYS (PSI): 1500		AIR CONTENT (%): NA		C-231
DATE REC'D N 21-Feb 2/20/2013		W/C RATIO: NA		
LOCATION OF POUR:		TEMP CONCRETE (°F): 85		C-1064
PIN #10				
		FIELD REMARKS		

LABORATORY TEST DATA								
CYL NO.	DATE OF TEST	AGE (DAYS)	LOAD (lbs)	DIAMETER (in.)	AREA (sq. in.)	COMPRESSIVE STRENGTH (psi)	TESTED BY	FRACTURE TYPE
A	2/23/13	3	4,280	3.00	7.07	610	CM	6
B	2/23/13	3	4,010	3.00	7.07	570	CM	6
C	2/27/13	7	4,530	3.00	7.07	640	LH	6
D	2/27/13	7	4,270	3.01	7.12	600	LH	6
E	3/20/13	28	6,880	3.00	7.07	970	LH	3
F	3/20/13	28	8,130	3.00	7.07	1150	LH	3
G	4/17/13	56	9,550	3.00	7.07	1350	LH	5

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REMARKS: Hold specimen to be tested at 56 days of age

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GROUT COMPRESSION TEST REPORT

CLIENT: Mr. John Barnes
Earth Tech, LLC
2620 Hunt Road
Land O' Lakes, FL 34638

DATE: 3/21/2013
JOB NO: 6111-13-009

PROJECT: SE County Landfill Stage 4 Sinkhole Remediation
Hillsborough County, FL

SAMPLE NO: 004

FIELD INFORMATION		FIELD TEST DATA		
DATE SAMPLED: 2/21/2013	BY: E. TIRADO	TEMPERATURE: AIR (°F): 82		
CONCRETE SUPPLIER: EARTH TECH	PLANT: 1	0 GALLONS WATER ADDED TO	10	CY
TRUCK NO: 218	TICKET NO: 179528	ADD'L WATER AUTH. BY:		
TIME MIXED: 12:36 PM	TIME SAMPLED: 1:19 PM	MEASURED	SPECIFIED	ASTM METHOD
DESIGN MIX NO: 324-4	SIZE OF LOAD (CY): 10	SLUMP (IN.) 4.25	3 - 5	C-143
DESIGN COMP. STR. AT 28 DAYS (PSI): 1500		AIR CONTENT (%) NA		C-231
DATE REC'D N 21-Feb	2/22/2013	W/C RATIO: NA		
LOCATION OF POUR:		TEMP CONCRETE (°F): 85		C-1064
PIN #11				
		FIELD REMARKS		

LABORATORY TEST DATA								
CYL NO.	DATE OF TEST	AGE (DAYS)	LOAD (lbs)	DIAMETER (in.)	AREA (sq. in.)	COMPRESSIVE STRENGTH (psi)	TESTED BY	FRACTURE TYPE
A	2/24/13	3	3,660	3.00	7.07	520	CM	3
B	2/24/13	3	3,960	3.02	7.16	550	CM	3
C	2/28/13	7	4,130	3.01	7.12	580	LH	3
D	2/28/13	7	4,310	3.01	7.12	610	LH	3
E	3/21/13	28	6,970	3.00	7.07	990	LH	5
F	3/21/13	28	7,050	3.00	7.07	1000	LH	3
G	4/18/13	56	10,010	3	7.07	1420	LH	5

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GROUT COMPRESSION TEST REPORT

CLIENT: Mr. John Barnes
Earth Tech, LLC
2620 Hunt Road
Land O' Lakes, FL 34638

DATE: 4/19/2013
JOB NO: 6111-13-009

PROJECT: SE County Landfill Stage 4 Sinkhole Remediation
Hillsborough County, FL

SAMPLE NO: 005

FIELD INFORMATION		FIELD TEST DATA		
DATE SAMPLED: 2/22/2013	BY: E. TIRADO	TEMPERATURE: AIR (°F): 70		
CONCRETE SUPPLIER: EARTH TECH	PLANT: 1	0 GALLONS WATER ADDED TO	10	CY
TRUCK NO: 218	TICKET NO: 179548	ADD'L WATER AUTH. BY:		
TIME MIXED: 7:35 AM	TIME SAMPLED: 9:12 AM	MEASURED	SPECIFIED	ASTM METHOD
DESIGN MIX NO: 324-4	SIZE OF LOAD (CY): 10	SLUMP (IN.) 4	3 - 5	C-143
DESIGN COMP. STR. AT 28 DAYS (PSI): 1500		AIR CONTENT (%) NA		C-231
DATE REC'D N 21-Feb 2/22/2013		W/C RATIO: NA		
LOCATION OF POUR:		TEMP CONCRETE (°F): 78		C-1064
PIN #21				
		FIELD REMARKS		

LABORATORY TEST DATA								
CYL NO.	DATE OF TEST	AGE (DAYS)	LOAD (lbs)	DIAMETER (in.)	AREA (sq. in.)	COMPRESSIVE STRENGTH (psi)	TESTED BY	FRACTURE TYPE
A	2/25/13	3	3,640	3.01	7.12	510	LH	3
B	2/25/13	3	3,480	3.01	7.12	490	LH	3
C	3/1/13	7	4,110	3.00	7.07	580	LH	3
D	3/1/13	7	4,830	3.01	7.12	540	LH	3
E	3/22/13	28	5,990	3.00	7.07	850	LH	5
F	3/22/13	28	6,420	3.00	7.07	910	LH	2
G	4/19/13	56	7,990	3	7.07	1130	LH	

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GROUT COMPRESSION TEST REPORT

CLIENT: Mr. John Barnes
Earth Tech, LLC
2620 Hunt Road
Land O' Lakes, FL 34638

DATE: 4/19/2013
JOB NO: 6111-13-009

PROJECT: SE County Landfill Stage 4 Sinkhole Remediation
Hillsborough County, FL

SAMPLE NO: 006

FIELD INFORMATION		FIELD TEST DATA		
DATE SAMPLED: 2/22/2013	BY: E. TIRADO	TEMPERATURE: AIR (°F): 87		
CONCRETE SUPPLIER: EARTH TECH	PLANT: 1	5 GALLONS WATER ADDED TO	10	CY
TRUCK NO: 218	TICKET NO: 179548	ADD'L WATER AUTH. BY:		
TIME MIXED: 11:35 AM	TIME SAMPLED: 2:32 PM	MEASURED	SPECIFIED	ASTM METHOD
DESIGN MIX NO: 324-4	SIZE OF LOAD (CY): 10	SLUMP (IN.) 4.5	3 - 5	C-143
DESIGN COMP. STR. AT 28 DAYS (PSI): 1500		AIR CONTENT (%) NA		C-231
DATE REC'D N 21-Feb 2/22/2013		W/C RATIO: NA		
LOCATION OF POUR:		TEMP CONCRETE (°F): 88		C-1064
PIN #13				
		FIELD REMARKS		

LABORATORY TEST DATA								
CYL NO.	DATE OF TEST	AGE (DAYS)	LOAD (lbs)	DIAMETER (in.)	AREA (sq. in.)	COMPRESSIVE STRENGTH (psi)	TESTED BY	FRACTURE TYPE
A	2/25/13	3	3,240	3.00	7.07	460	LH	3
B	2/25/13	3	3,300	3.02	7.12	460	LH	3
C	3/1/13	7	3,490	3.00	7.07	490	LH	3
D	3/1/13	7	3,600	3.01	7.12	510	LH	3
E	3/22/13	28	6,000	3.00	7.07	850	LH	5
F	3/22/13	28	5,960	3.00	7.07	840	LH	6
G	4/19/13	56	8,500	3	7.07	1200	LH	5

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GROUT COMPRESSION TEST REPORT

CLIENT: Mr. John Barnes
Earth Tech, LLC
2620 Hunt Road
Land O' Lakes, FL 34638

DATE: 3/25/2013
JOB NO: 6111-13-009

PROJECT: SE County Landfill Stage 4 Sinkhole Remediation
Hillsborough County, FL

SAMPLE NO: 007

FIELD INFORMATION		FIELD TEST DATA		
DATE SAMPLED: 1/2/1900	BY: E. TIRADO	TEMPERATURE: AIR (°F): 86		
CONCRETE SUPPLIER: EARTH TECH	PLANT: 1	0 GALLONS WATER ADDED TO	10	CY
TRUCK NO: 216	TICKET NO: 179564	ADD'L WATER AUTH. BY:		
TIME MIXED:	TIME SAMPLED: 1:57 PM	MEASURED	SPECIFIED	ASTM METHOD
DESIGN MIX NO: 324-4	SIZE OF LOAD (CY): 10	SLUMP (IN.) 3.25	3 - 5	C-143
DESIGN COMP. STR. AT 28 DAYS (PSI): 1500		AIR CONTENT (%) NA		C-231
DATE REC'D N 21-Feb	2/26/2013	W/C RATIO: NA		
LOCATION OF POUR:		TEMP CONCRETE (°F): 94		C-1064
PIN #16				
		FIELD REMARKS		

LABORATORY TEST DATA								
CYL NO.	DATE OF TEST	AGE (DAYS)	LOAD (lbs)	DIAMETER (in.)	AREA (sq. in.)	COMPRESSIVE STRENGTH (psi)	TESTED BY	FRACTURE TYPE
A	2/28/13	3	990	3.00	7.07	140	LH	3
B	2/28/13	3	1,010	3.01	7.12	140	LH	4
C	3/4/13	7	1,600	3.01	7.12	220	LH	3
D	3/4/13	7	1,580	3.01	7.12	220	LH	3
E	3/25/13	28	4,530	3.00	7.07	640	LH	2
F	3/25/13	28	4,530	3.00	7.07	640	LH	3
G	4/22/13	56						

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GROUT COMPRESSION TEST REPORT

CLIENT: Mr. John Barnes
Earth Tech, LLC
2620 Hunt Road
Land O' Lakes, FL 34638

DATE: 4/23/2013
JOB NO: 6111-13-009

PROJECT: SE County Landfill Stage 4 Sinkhole Remediation
Hillsborough County, FL

SAMPLE NO: 008

FIELD INFORMATION		FIELD TEST DATA		
DATE SAMPLED: 2/26/2013	BY: E. TIRADO	TEMPERATURE: AIR (°F): 75		
CONCRETE SUPPLIER: EARTH TECH	PLANT: 1	0 GALLONS WATER ADDED TO	10	CY
TRUCK NO: 618	TICKET NO: 179587	ADD'L WATER AUTH. BY:		
TIME MIXED: 7:50 AM	TIME SAMPLED: 8:27 AM	MEASURED	SPECIFIED	ASTM METHOD
DESIGN MIX NO: 324-4	SIZE OF LOAD (CY): 6	SLUMP (IN.) 3.25	3 - 5	C-143
DESIGN COMP. STR. AT 28 DAYS (PSI): 1500		AIR CONTENT (%) NA		C-231
DATE REC'D N 21-Feb 2/27/2013		W/C RATIO: NA		
LOCATION OF POUR:		TEMP CONCRETE (°F): 84		C-1064
PIN #17				
		FIELD REMARKS		

LABORATORY TEST DATA								
CYL NO.	DATE OF TEST	AGE (DAYS)	LOAD (lbs)	DIAMETER (in.)	AREA (sq. in.)	COMPRESSIVE STRENGTH (psi)	TESTED BY	FRACTURE TYPE
A	3/1/13	3	2,310	3.00	7.07	330	LH	3
B	3/1/13	3	2,310	3.01	7.12	330	LH	3
C	3/5/13	7	3,710	3.00	7.07	520	LH	4
D	3/5/13	7	3,320	3.00	7.07	470	LH	3
E	3/26/13	28	6,180	3.00	7.07	870	LH	2
F	3/26/13	28	5,660	3.00	7.07	800	LH	5
G	4/23/13	56	8,120	3	7.07	1150	LH	3

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GROUT COMPRESSION TEST REPORT

CLIENT: Mr. John Barnes
Earth Tech, LLC
2620 Hunt Road
Land O' Lakes, FL 34638

DATE: 3/27/2013
JOB NO: 6111-13-009

PROJECT: SE County Landfill Stage 4 Sinkhole Remediation
Hillsborough County, FL

SAMPLE NO: 009

FIELD INFORMATION		FIELD TEST DATA		
DATE SAMPLED: 2/27/2013	BY: E. TIRADO	TEMPERATURE: AIR (°F): 74		
CONCRETE SUPPLIER: EARTH TECH	PLANT: 1	0 GALLONS WATER ADDED TO	10	CY
TRUCK NO: 218	TICKET NO: 179613	ADD'L WATER AUTH. BY:		
TIME MIXED: 12:25 PM	TIME SAMPLED: 1:11 PM	MEASURED	SPECIFIED	ASTM METHOD
DESIGN MIX NO: 324-4	SIZE OF LOAD (CY): 10	SLUMP (IN.) 3.75	3 - 5	C-143
DESIGN COMP. STR. AT 28 DAYS (PSI): 1500		AIR CONTENT (%) NA		C-231
DATE REC'D N 21-Feb	2/28/2013	W/C RATIO: NA		
LOCATION OF POUR:		TEMP CONCRETE (°F): 82		C-1064
PIN #18				
		FIELD REMARKS		

LABORATORY TEST DATA								
CYL NO.	DATE OF TEST	AGE (DAYS)	LOAD (lbs)	DIAMETER (in.)	AREA (sq. in.)	COMPRESSIVE STRENGTH (psi)	TESTED BY	FRACTURE TYPE
A	3/4/13	5	3,780	3.00	7.07	530	LH	3
B	3/4/13	5	3,550	3.00	7.07	500	LH	3
C	3/6/13	7	4,410	3.00	7.07	620	LH	3
D	3/6/13	7	4,310	3.00	7.07	610	LH	3
E	3/27/13	28	9,090	3.00	7.07	1300	LH	5
F	3/27/13	28	8,200	3.00	7.07	1160	LH	5
G	4/24/13	56						

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GROUT COMPRESSION TEST REPORT

CLIENT: Mr. John Barnes
Earth Tech, LLC
2620 Hunt Road
Land O' Lakes, FL 34638

DATE: 3/27/2013
JOB NO: 6111-13-009

PROJECT: SE County Landfill Stage 4 Sinkhole Remediation
Hillsborough County, FL

SAMPLE NO: 010

FIELD INFORMATION		FIELD TEST DATA		
DATE SAMPLED: 2/27/2013	BY: E. TIRADO	TEMPERATURE: AIR (°F): 76		
CONCRETE SUPPLIER: EARTH TECH	PLANT: 1	0 GALLONS WATER ADDED TO	10	CY
TRUCK NO: 218	TICKET NO: 179613	ADD'L WATER AUTH. BY:		
TIME MIXED: 3:45 PM	TIME SAMPLED: 4:40 PM	MEASURED	SPECIFIED	ASTM METHOD
DESIGN MIX NO: 324-4	SIZE OF LOAD (CY): 10	SLUMP (IN.) 5.25	3 - 5	C-143
DESIGN COMP. STR. AT 28 DAYS (PSI): 1500		AIR CONTENT (%) NA		C-231
DATE REC'D N 21-Feb	2/28/2013	W/C RATIO: NA		
LOCATION OF POUR:		TEMP CONCRETE (°F): 83		C-1064
PIN #18				
		FIELD REMARKS		

LABORATORY TEST DATA								
CYL NO.	DATE OF TEST	AGE (DAYS)	LOAD (lbs)	DIAMETER (in.)	AREA (sq. in.)	COMPRESSIVE STRENGTH (psi)	TESTED BY	FRACTURE TYPE
A	3/4/13	5	3,080	3.00	7.07	440	LH	3
B	3/4/13	5	2,510	3.00	7.07	360	LH	3
C	3/6/13	7	3,580	3.00	7.07	510	LH	3
D	3/6/13	7	3,610	3.00	7.07	510	LH	3
E	3/27/13	28	5,820	3.00	7.07	820	LH	5
F	3/27/13	28	6,040	3.00	7.07	850	LH	5
G	4/24/13	56						

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Respectfully Submitted

TIERRA INC.

TIERRA

7351 Temple Terrace Highway • Tampa, Florida 33637
Phone: (813) 989-1354 • Fax: (813) 989-1355

GROUT COMPRESSION TEST REPORT

CLIENT: Mr. John Barnes
Earth Tech, LLC
2620 Hunt Road
Land O' Lakes, FL 34638

DATE: 4/25/2013
JOB NO: 6111-13-009

PROJECT: SE County Landfill Stage 4 Sinkhole Remediation
Hillsborough County, FL

SAMPLE NO: 011

FIELD INFORMATION		FIELD TEST DATA		
DATE SAMPLED: 2/28/2013	BY: E. TIRADO	TEMPERATURE: AIR (°F): 74		
CONCRETE SUPPLIER: EARTH TECH	PLANT: 1	0 GALLONS WATER ADDED TO	10	CY
TRUCK NO: 216	TICKET NO: 179837	ADD'L WATER AUTH. BY:		
TIME MIXED: 10:45 AM	TIME SAMPLED: 11:32 AM	MEASURED	SPECIFIED	ASTM METHOD
DESIGN MIX NO: 324-4	SIZE OF LOAD (CY): 10	SLUMP (IN.) 4	3 - 5	C-143
DESIGN COMP. STR. AT 28 DAYS (PSI): 1500		AIR CONTENT (%) NA		C-231
DATE REC'D N 21-Feb 3/1/2013		W/C RATIO: NA		
LOCATION OF POUR:		TEMP CONCRETE (°F): 78		C-1064
PIN #6				
		FIELD REMARKS		

LABORATORY TEST DATA								
CYL NO.	DATE OF TEST	AGE (DAYS)	LOAD (lbs)	DIAMETER (in.)	AREA (sq. in.)	COMPRESSIVE STRENGTH (psi)	TESTED BY	FRACTURE TYPE
A	3/4/13	4	3,540	3.01	7.12	500	LH	3
B	3/4/13	4	3,430	3.01	7.12	480	LH	3
C	3/7/13	7	3,830	3.01	7.12	540	LH	3
D	3/7/13	7	3,900	3.01	7.12	550	LH	3
E	3/28/13	28	7,440	3.00	7.07	1050	LH	3
F	3/28/13	28	7,420	3.00	7.07	1050	LH	5
G	4/25/13	56	10,580	3.00	7.07	1500	LH	3

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GROUT COMPRESSION TEST REPORT

CLIENT: Mr. John Barnes
Earth Tech, LLC
2620 Hunt Road
Land O' Lakes, FL 34638

DATE: 4/26/2013
JOB NO: 6111-13-009

PROJECT: SE County Landfill Stage 4 Sinkhole Remediation
Hillsborough County, FL

SAMPLE NO: 012

FIELD INFORMATION		FIELD TEST DATA		
DATE SAMPLED: 3/1/2013	BY: E. TIRADO	TEMPERATURE: AIR (°F): 57		
CONCRETE SUPPLIER: EARTH TECH	PLANT: 1	0 GALLONS WATER ADDED TO	10	CY
TRUCK NO: 218	TICKET NO: 179657	ADD'L WATER AUTH. BY:		
TIME MIXED: 9:24 AM	TIME SAMPLED: 10:18 AM	MEASURED	SPECIFIED	ASTM METHOD
DESIGN MIX NO: 324-4	SIZE OF LOAD (CY): 10	SLUMP (IN.): 5.75	3 - 5	C-143
DESIGN COMP. STR. AT 28 DAYS (PSI): 1500		AIR CONTENT (%): NA		C-231
DATE REC'D N 21-Feb 3/5/2013		W/C RATIO: NA		
LOCATION OF POUR:		TEMP CONCRETE (°F): 71		C-1084
PIN #31				
		FIELD REMARKS		

LABORATORY TEST DATA								
CYL NO.	DATE OF TEST	AGE (DAYS)	LOAD (lbs)	DIAMETER (in.)	AREA (sq. in.)	COMPRESSIVE STRENGTH (psi)	TESTED BY	FRACTURE TYPE
A	3/5/13	4	2,460	3.00	7.07	350	LH	3
B	3/5/13	4	2,110	3.00	7.07	300	LH	3
C	3/8/13	7	2,720	3.00	7.07	380	LH	3
D	3/8/13	7	2,670	3.00	7.07	380	LH	3
E	3/29/13	28	6,470	3.00	7.07	920	LH	5
F	3/29/13	28	6,510	3.00	7.07	920	LH	3
G	4/26/13	56	9,860	3.00	7.07	1390	LH	5

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GROUT COMPRESSION TEST REPORT

CLIENT: Mr. John Barnes
Earth Tech, LLC
2620 Hunt Road
Land O' Lakes, FL 34638

DATE: 4/1/2013
JOB NO: 6111-13-009

PROJECT: SE County Landfill Stage 4 Sinkhole Remediation
Hillsborough County, FL

SAMPLE NO: 013

FIELD INFORMATION			FIELD TEST DATA		
DATE SAMPLED: 3/4/2013	BY: E. TIRADO	TEMPERATURE: AIR (°F): 54			
CONCRETE SUPPLIER: EARTH TECH	PLANT: 1	0 GALLONS WATER ADDED TO	10	CY	
TRUCK NO: 218	TICKET NO: 179673	ADD'L WATER AUTH. BY:			
TIME MIXED: 9:24 AM	TIME SAMPLED: 10:09 AM	MEASURED	SPECIFIED	ASTM METHOD	
DESIGN MIX NO: 324-4	SIZE OF LOAD (CY): 10	SLUMP (IN.) 3.75	3 - 5	C-143	
DESIGN COMP. STR. AT 28 DAYS (PSI): 1500		AIR CONTENT (%) NA		C-231	
DATE REC'D N 21-Feb	3/5/2013	W/C RATIO: NA			
LOCATION OF POUR:		TEMP CONCRETE (°F): 68		C-1064	
PIN #19					
		FIELD REMARKS			

LABORATORY TEST DATA								
CYL NO.	DATE OF TEST	AGE (DAYS)	LOAD (lbs)	DIAMETER (in.)	AREA (sq. in.)	COMPRESSIVE STRENGTH (psi)	TESTED BY	FRACTURE TYPE
A	3/7/13	3	2,800	3.00	7.07	400	LH	3
B	3/7/13	3	2,770	3.00	7.07	390	LH	3
C	3/11/13	7	3,850	3.00	7.07	540	LH	3
D	3/11/13	7	3,870	3.00	7.07	550	LH	3
E	4/1/13	28	8,520	3.00	7.07	1210	LH	5
F	4/1/13	28	8,610	3.00	7.07	1220	LH	3
G	4/29/13	56	10,460	3.00	7.07	1480	LH	3

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GROUT COMPRESSION TEST REPORT

CLIENT: Mr. John Barnes
Earth Tech, LLC
2620 Hunt Road
Land O' Lakes, FL 34638

DATE: 4/30/2013
JOB NO: 6111-13-009

PROJECT: SE County Landfill Stage 4 Sinkhole Remediation
Hillsborough County, FL

SAMPLE NO: 014

FIELD INFORMATION			FIELD TEST DATA		
DATE SAMPLED:	3/5/2013	BY: E. TIRADO	TEMPERATURE: AIR (°F):	55	
CONCRETE SUPPLIER: EARTH TECH	PLANT:	1	0 GALLONS WATER ADDED TO	10	CY
TRUCK NO: 218	TICKET NO: 179694	ADD'L WATER AUTH. BY:			
TIME MIXED: 7:29 AM	TIME SAMPLED: 8:43 AM	MEASURED		SPECIFIED	ASTM METHOD
DESIGN MIX NO: 324-4	SIZE OF LOAD (CY): 10	SLUMP (IN.)	4.5	3 - 5	C-143
DESIGN COMP. STR. AT 28 DAYS (PSI): 1500		AIR CONTENT (%)	NA		C-231
DATE REC'D N 21-Feb	3/6/2013	W/C RATIO:	NA		
LOCATION OF POUR:		TEMP CONCRETE (°F):	71		C-1064
PIN #19					
			FIELD REMARKS		

LABORATORY TEST DATA								
CYL NO.	DATE OF TEST	AGE (DAYS)	LOAD (lbs)	DIAMETER (in.)	AREA (sq. in.)	COMPRESSIVE STRENGTH (psi)	TESTED BY	FRACTURE TYPE
A	3/8/13	3	2,840	3.01	7.12	400	LH	3
B	3/8/13	3	2,820	3.01	7.12	400	LH	3
C	3/12/13	7	3,680	3.00	7.07	520	LH	3
D	3/12/13	7	3,510	3.00	7.07	500	LH	3
E	4/2/13	28	7,640	3.00	7.07	1080	LH	5
F	4/2/13	28	7,810	3.00	7.07	1100	LH	5
G	4/30/13	56	11,880	3	7.07	1680	LH	

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GROUT COMPRESSION TEST REPORT

CLIENT: Mr. John Barnes
Earth Tech, LLC
2620 Hunt Road
Land O' Lakes, FL 34638

DATE: 5/1/2013
JOB NO: 6111-13-009

PROJECT: SE County Landfill Stage 4 Sinkhole Remediation
Hillsborough County, FL

SAMPLE NO: 015

FIELD INFORMATION		FIELD TEST DATA	
DATE SAMPLED: 3/6/2013	BY: E. TIRADO	TEMPERATURE: AIR (°F): 50	
CONCRETE SUPPLIER: EARTH TECH	PLANT: 1	10 GALLONS WATER ADDED TO	8 CY
TRUCK NO: 218	TICKET NO: 179914	ADD'L WATER AUTH. BY: AMEC	
TIME MIXED: 7:23 AM	TIME SAMPLED:	MEASURED	SPECIFIED ASTM METHOD
DESIGN MIX NO: 324-4	SIZE OF LOAD (CY): 10	SLUMP (IN.) 5	3 - 5 C-143
DESIGN COMP. STR. AT 28 DAYS (PSI): 1500		AIR CONTENT (%) NA	C-231
DATE REC'D N 21-Feb 3/7/2013		W/C RATIO: NA	
LOCATION OF POUR:		TEMP CONCRETE (°F): 74	C-1064
PIN #33			
		FIELD REMARKS	

LABORATORY TEST DATA								
CYL NO.	DATE OF TEST	AGE (DAYS)	LOAD (lbs)	DIAMETER (in.)	AREA (sq. in.)	COMPRESSIVE STRENGTH (psi)	TESTED BY	FRACTURE TYPE
A	3/11/13	5	2,650	3.00	7.07	370	LH	3
B	3/11/13	5	2,810	3.00	7.07	400	LH	3
C	3/13/13	7	3,210	3.00	7.07	450	LH	3
D	3/13/13	7	3,050	3.00	7.07	430	LH	3
E	4/3/13	28	6,320	3.00	7.07	890	LH	2
F	4/3/13	28	5,830	3.00	7.07	820	LH	2
G	5/1/13	56	9,060	3	7.07	1280	LH	3

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GROUT COMPRESSION TEST REPORT

CLIENT: Mr. John Barnes
Earth Tech, LLC
2620 Hunt Road
Land O' Lakes, FL 34638

DATE: 4/4/2013
JOB NO: 6111-13-009

PROJECT: SE County Landfill Stage 4 Sinkhole Remediation
Hillsborough County, FL

SAMPLE NO: 016

FIELD INFORMATION		FIELD TEST DATA		
DATE SAMPLED: 3/7/2013	BY: E. TIRADO	TEMPERATURE: AIR (°F): 63		
CONCRETE SUPPLIER: EARTH TECH	PLANT: 1	0 GALLONS WATER ADDED TO	10	CY
TRUCK NO: 216	TICKET NO:	ADD'L WATER AUTH. BY:		
TIME MIXED:	TIME SAMPLED: 11:02 AM	MEASURED	SPECIFIED	ASTM METHOD
DESIGN MIX NO: 324-4	SIZE OF LOAD (CY): 10	SLUMP (IN.): 4	3 - 5	C-143
DESIGN COMP. STR. AT 28 DAYS (PSI): 1500		AIR CONTENT (%): NA		C-231
DATE REC'D N 21-Feb	3/8/2013	W/C RATIO: NA		
LOCATION OF POUR:		TEMP CONCRETE (°F): 73		C-1064
PIN #37				
		FIELD REMARKS		

LABORATORY TEST DATA								
CYL NO.	DATE OF TEST	AGE (DAYS)	LOAD (lbs)	DIAMETER (in.)	AREA (sq. in.)	COMPRESSIVE STRENGTH (psi)	TESTED BY	FRACTURE TYPE
A	3/11/13	4	2,590	3.00	7.07	370	LH	6
B	3/11/13	4	2,580	3.00	7.07	360	LH	6
C	3/14/13	7	2,750	3.00	7.07	390	LH	3
D	3/14/13	7	2,850	3.00	7.07	400	LH	3
E	4/4/13	28	5,650	3.00	7.07	800	LH	5
F	4/4/13	28	5,580	3.00	7.07	790	LH	3
G	5/2/13	56						

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GROUT COMPRESSION TEST REPORT

CLIENT: Mr. John Barnes
Earth Tech, LLC
2620 Hunt Road
Land O' Lakes, FL 34638

DATE: 5/3/2013
JOB NO: 6111-13-009

PROJECT: SE County Landfill Stage 4 Sinkhole Remediation
Hillsborough County, FL

SAMPLE NO: 017

FIELD INFORMATION		FIELD TEST DATA		
DATE SAMPLED: 3/8/2013	BY: E. TIRADO	TEMPERATURE: AIR (°F): 54		
CONCRETE SUPPLIER: EARTH TECH	PLANT: 1	0 GALLONS WATER ADDED TO	10	CY
TRUCK NO: 216	TICKET NO:	ADD'L WATER AUTH. BY:		
TIME MIXED: 7:30 AM	TIME SAMPLED: 8:19 AM	MEASURED	SPECIFIED	ASTM METHOD
DESIGN MIX NO: 324-4	SIZE OF LOAD (CY): 10	SLUMP (IN.) 5.25	3 - 5	C-143
DESIGN COMP. STR. AT 28 DAYS (PSI): 1500		AIR CONTENT (%) NA		C-231
DATE REC'D N 21-Feb 3/11/2013		W/C RATIO: NA		
LOCATION OF POUR:		TEMP CONCRETE (°F): 63		C-1064
PIN #3				
		FIELD REMARKS		

LABORATORY TEST DATA								
CYL NO.	DATE OF TEST	AGE (DAYS)	LOAD (lbs)	DIAMETER (in.)	AREA (sq. in.)	COMPRESSIVE STRENGTH (psi)	TESTED BY	FRACTURE TYPE
A	3/12/13	4	3,370	3.00	7.07	480	LH	5
B	3/12/13	4	3,290	3.00	7.07	470	LH	5
C	3/15/13	7	4,020	3.00	7.07	570	LH	3
D	3/15/13	7	3,880	3.00	7.07	550	LH	3
E	4/5/13	28	6,860	3.00	7.07	970	LH	3
F	4/5/13	28	6,920	3.00	7.07	980	LH	3
G	5/3/13	56	10,610	3.00	7.07	1500	LH	3

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GROUT COMPRESSION TEST REPORT

CLIENT: Mr. John Barnes
Earth Tech, LLC
2620 Hunt Road
Land O' Lakes, FL 34638

DATE: 5/6/2013
JOB NO: 6111-13-009

PROJECT: SE County Landfill Stage 4 Sinkhole Remediation
Hillsborough County, FL

SAMPLE NO: 018

FIELD INFORMATION		FIELD TEST DATA		
DATE SAMPLED: 3/11/2013	BY: E. TIRADO	TEMPERATURE: AIR (°F): 79		
CONCRETE SUPPLIER: EARTH TECH	PLANT: 1	0 GALLONS WATER ADDED TO	10	CY
TRUCK NO: 218	TICKET NO: 179768	ADD'L WATER AUTH. BY:		
TIME MIXED: 1:06 PM	TIME SAMPLED: 1:53 PM	MEASURED	SPECIFIED	ASTM METHOD
DESIGN MIX NO: 324-4	SIZE OF LOAD (CY): 10	SLUMP (IN.) 5	3 - 5	C-143
DESIGN COMP. STR. AT 28 DAYS (PSI): 1500		AIR CONTENT (%) NA		C-231
DATE REC'D N 21-Feb 3/12/2013		W/C RATIO: NA		
LOCATION OF POUR:		TEMP CONCRETE (°F): 77		C-1064
PIN #55				
		FIELD REMARKS		

LABORATORY TEST DATA								
CYL NO.	DATE OF TEST	AGE (DAYS)	LOAD (lbs)	DIAMETER (in.)	AREA (sq. in.)	COMPRESSIVE STRENGTH (psi)	TESTED BY	FRACTURE TYPE
A	3/14/13	3	2,180	3.00	7.07	310	LH	4
B	3/14/13	3	2,180	3.00	7.07	310	LH	3
C	3/18/13	7	3,110	3.00	7.07	440	LH	3
D	3/18/13	7	3,170	3.00	7.07	450	LH	3
E	4/8/13	28	6,260	3.00	7.07	890	LH	5
F	4/8/13	28	6,310	3.00	7.07	890	LH	3
G	5/6/13	56	9,990	3.00	7.07	1410	LH	3

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GROUT COMPRESSION TEST REPORT

CLIENT: Mr. John Barnes
Earth Tech, LLC
2620 Hunt Road
Land O' Lakes, FL 34638

DATE: 4/9/2013
JOB NO: 6111-13-009

PROJECT: SE County Landfill Stage 4 Sinkhole Remediation
Hillsborough County, FL

SAMPLE NO: 019

FIELD INFORMATION				FIELD TEST DATA			
DATE SAMPLED:	3/12/2013	BY:	E. TIRADO	TEMPERATURE: AIR (°F) :	66		
CONCRETE SUPPLIER:	EARTH TECH	PLANT:	1	0	GALLONS WATER ADDED TO	10	CY
TRUCK NO:	218	TICKET NO:	179790	ADD'L WATER AUTH. BY:			
TIME MIXED:	11:20 AM	TIME SAMPLED:	12:12 PM	MEASURED		SPECIFIED	ASTM METHOD
DESIGN MIX NO:	324-4	SIZE OF LOAD (CY):	10	SLUMP (IN.)	4.5	3 - 5	C-143
DESIGN COMP. STR. AT 28 DAYS (PSI):			1500	AIR CONTENT (%)	NA		C-231
DATE REC'D N 21-Feb		3/13/2013		W/C RATIO:	NA		
LOCATION OF POUR:				TEMP CONCRETE (°F):	77		C-1064
PIN #4							
				FIELD REMARKS			

LABORATORY TEST DATA								
CYL NO.	DATE OF TEST	AGE (DAYS)	LOAD (lbs)	DIAMETER (in.)	AREA (sq. in.)	COMPRESSIVE STRENGTH (psi)	TESTED BY	FRACTURE TYPE
A	3/15/13	3	2,060	3.00	7.07	290	LH	5
B	3/15/13	3	2,210	3.00	7.07	310	LH	3
C	3/19/13	7	3,050	3.00	7.07	430	LH	3
D	3/19/13	7	2,900	3.00	7.07	410	LH	5
E	4/9/13	28	7,040	3.00	7.07	1000	LH	3
F	4/9/13	28	7,130	3.00	7.07	1010	LH	3
G	5/7/13	56	10,510	3.00	7.07	1490	LH	3

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GROUT COMPRESSION TEST REPORT

CLIENT: Mr. John Barnes
Earth Tech, LLC
2620 Hunt Road
Land O' Lakes, FL 34638

DATE: 5/8/2013
JOB NO: 6111-13-009

PROJECT: SE County Landfill Stage 4 Sinkhole Remediation
Hillsborough County, FL

SAMPLE NO: 020

FIELD INFORMATION		FIELD TEST DATA		
DATE SAMPLED: 3/13/2013	BY: E. TIRADO	TEMPERATURE: AIR (°F): 65		
CONCRETE SUPPLIER: EARTH TECH	PLANT: 1	0 GALLONS WATER ADDED TO	10	CY
TRUCK NO: 218	TICKET NO:	ADD'L WATER AUTH. BY:		
TIME MIXED: 10:00 AM	TIME SAMPLED: 10:48 AM	MEASURED	SPECIFIED	ASTM METHOD
DESIGN MIX NO: 324-4	SIZE OF LOAD (CY): 10	SLUMP (IN.) 4.75	3 - 5	C-143
DESIGN COMP. STR. AT 28 DAYS (PSI): 1500		AIR CONTENT (%) NA		C-231
DATE REC'D N 21-Feb 3/14/2013		W/C RATIO: NA		
LOCATION OF POUR:		TEMP CONCRETE (°F): 71		C-1064
PIN #51				
		FIELD REMARKS		

LABORATORY TEST DATA								
CYL NO.	DATE OF TEST	AGE (DAYS)	LOAD (lbs)	DIAMETER (in.)	AREA (sq. in.)	COMPRESSIVE STRENGTH (psi)	TESTED BY	FRACTURE TYPE
A	3/17/13	4	2,050	3.00	7.07	290	LH	3
B	3/17/13	4	2,020	3.00	7.07	290	LH	3
C	3/20/13	7	2,160	3.00	7.07	310	LH	2
D	3/20/13	7	2,230	3.00	7.07	320	LH	5
E	4/10/13	28	4,670	3.00	7.07	660	LH	3
F	4/10/13	28	4,590	3.00	7.07	650	LH	3
G	5/8/13	56	6,890	3.00	7.07	970	LH	3

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GROUT COMPRESSION TEST REPORT

CLIENT: Mr. John Barnes
Earth Tech, LLC
2620 Hunt Road
Land O' Lakes, FL 34638

DATE: 5/9/2013
JOB NO: 6111-13-009

PROJECT: SE County Landfill Stage 4 Sinkhole Remediation
Hillsborough County, FL

SAMPLE NO: 021

FIELD INFORMATION		FIELD TEST DATA	
DATE SAMPLED: 3/14/2013	BY: E. TIRADO	TEMPERATURE: AIR (°F): 57	
CONCRETE SUPPLIER: EARTH TECH	PLANT: 1	0 GALLONS WATER ADDED TO	10 CY
TRUCK NO: 216	TICKET NO: 179837	ADD'L WATER AUTH. BY:	
TIME MIXED:	TIME SAMPLED: 11:19 AM	MEASURED	SPECIFIED ASTM METHOD
DESIGN MIX NO: 324-4	SIZE OF LOAD (CY): 10	SLUMP (IN.) 4.25	3 - 5 C-143
DESIGN COMP. STR. AT 28 DAYS (PSI): 1500		AIR CONTENT (%) NA	C-231
DATE REC'D N 21-Feb	3/15/2013	W/C RATIO: NA	
LOCATION OF POUR:		TEMP CONCRETE (°F): 69	C-1064
PIN #38			
		FIELD REMARKS	

LABORATORY TEST DATA								
CYL NO.	DATE OF TEST	AGE (DAYS)	LOAD (lbs)	DIAMETER (in.)	AREA (sq. in.)	COMPRESSIVE STRENGTH (psi)	TESTED BY	FRACTURE TYPE
A	3/18/13	4	3,290	3.00	7.07	470	LH	2
B	3/18/13	4	3,240	3.00	7.07	460	LH	2
C	3/21/13	7	4,060	3.00	7.07	570	LH	3
D	3/21/13	7	4,130	3.00	7.07	580	LH	3
E	4/11/13	28	7,620	3.00	7.07	1080	LH	5
F	4/11/13	28	7,790	3.00	7.07	1100	LH	3
G	5/9/13	56	9,090	3.00	7.07	1290	LH	3

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Respectfully Submitted

TIERRA INC.

TIERRA

7351 Temple Terrace Highway • Tampa, Florida 33637
Phone: (813) 989-1354 • Fax: (813) 989-1355

GROUT COMPRESSION TEST REPORT

CLIENT: Mr. John Barnes
Earth Tech, LLC
2620 Hunt Road
Land O' Lakes, FL 34638

DATE: 5/10/2013
JOB NO: 6111-13-009

PROJECT: SE County Landfill Stage 4 Sinkhole Remediation
Hillsborough County, FL

SAMPLE NO: 022

FIELD INFORMATION		FIELD TEST DATA		
DATE SAMPLED: 3/15/2013	BY: E. TIRADO	TEMPERATURE: AIR (°F): 55		
CONCRETE SUPPLIER: EARTH TECH	PLANT: 1	0 GALLONS WATER ADDED TO	10	CY
TRUCK NO: 218	TICKET NO:	ADD'L WATER AUTH. BY:		
TIME MIXED: 8:50 AM	TIME SAMPLED: 10:00 AM	MEASURED	SPECIFIED	ASTM METHOD
DESIGN MIX NO: 324-4	SIZE OF LOAD (CY): 10	SLUMP (IN.) 5	3 - 5	C-143
DESIGN COMP. STR. AT 28 DAYS (PSI): 1500		AIR CONTENT (%) NA		C-231
DATE REC'D N 21-Feb 3/18/2013		W/C RATIO: NA		
LOCATION OF POUR:		TEMP CONCRETE (°F): 68		C-1064
PIN #40				
		FIELD REMARKS		

LABORATORY TEST DATA								
CYL NO.	DATE OF TEST	AGE (DAYS)	LOAD (lbs)	DIAMETER (in.)	AREA (sq. in.)	COMPRESSIVE STRENGTH (psi)	TESTED BY	FRACTURE TYPE
A	3/18/13	3	3,160	3.00	7.07	450	LH	5
B	3/18/13	3	2,950	3.00	7.07	420	LH	3
C	3/22/13	7	3,620	3.00	7.07	510	LH	5
D	3/22/13	7	3,440	3.00	7.07	490	LH	2
E	4/12/13	28	7,430	3.00	7.07	1050	LH	3
F	4/12/13	28	7,550	3.00	7.07	1070	LH	3
G	5/10/13	56	10,310	3.00	7.07	1460	LH	3

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GROUT COMPRESSION TEST REPORT

CLIENT: Mr. John Barnes
Earth Tech, LLC
2620 Hunt Road
Land O' Lakes, FL 34638

DATE: 5/13/2013
JOB NO: 6111-13-009

PROJECT: SE County Landfill Stage 4 Sinkhole Remediation
Hillsborough County, FL

SAMPLE NO: 023

FIELD INFORMATION		FIELD TEST DATA		
DATE SAMPLED: 3/18/2013	BY: E. TIRADO	TEMPERATURE: AIR (°F): 78		
CONCRETE SUPPLIER: EARTH TECH	PLANT: 1	0 GALLONS WATER ADDED TO	10	CY
TRUCK NO: 216	TICKET NO: 179889	ADD'L WATER AUTH. BY:		
TIME MIXED: 12:55 PM	TIME SAMPLED: 1:43 PM	MEASURED	SPECIFIED	ASTM METHOD
DESIGN MIX NO: 324-4	SIZE OF LOAD (CY): 10	SLUMP (IN.) 4.5	3 - 5	C-143
DESIGN COMP. STR. AT 28 DAYS (PSI): 1500		AIR CONTENT (%) NA		C-231
DATE REC'D N 21-Feb	3/19/2013	W/C RATIO: NA		
LOCATION OF POUR:		TEMP CONCRETE (°F): 78		C-1064
PIN #56				
		FIELD REMARKS		

LABORATORY TEST DATA								
CYL NO.	DATE OF TEST	AGE (DAYS)	LOAD (lbs)	DIAMETER (in.)	AREA (sq. in.)	COMPRESSIVE STRENGTH (psi)	TESTED BY	FRACTURE TYPE
A	3/21/13	3	2,330	3.00	7.07	330	LH	3
B	3/21/13	3	2,570	3.00	7.07	360	LH	5
C	3/25/13	7	3,450	3.00	7.07	490	LH	3
D	3/25/13	7	3,530	3.00	7.07	500	LH	6
E	4/15/13	28	6,350	3.00	7.07	900	LH	3
F	4/15/13	28	6,410	3.00	7.07	910	LH	3
G	5/13/13	56	9,480	3.00	7.07	1340	LH	3

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GROUT COMPRESSION TEST REPORT

CLIENT: Mr. John Barnes
Earth Tech, LLC
2620 Hunt Road
Land O' Lakes, FL 34638

DATE: 5/14/2013
JOB NO: 6111-13-009

PROJECT: SE County Landfill Stage 4 Sinkhole Remediation
Hillsborough County, FL

SAMPLE NO: 024

FIELD INFORMATION		FIELD TEST DATA		
DATE SAMPLED: 3/19/2013	BY: E. TIRADO	TEMPERATURE: AIR (°F): 80		
CONCRETE SUPPLIER: EARTH TECH	PLANT: 1	0 GALLONS WATER ADDED TO	10	CY
TRUCK NO: 218	TICKET NO:	ADD'L WATER AUTH. BY:		
TIME MIXED:	TIME SAMPLED: 12:36 PM	MEASURED	SPECIFIED	ASTM METHOD
DESIGN MIX NO: 324-4	SIZE OF LOAD (CY): 10	SLUMP (IN.): 3.5	3 - 5	C-143
DESIGN COMP. STR. AT 28 DAYS (PSI): 1500		AIR CONTENT (%): NA		C-231
DATE REC'D N 21-Feb 3/20/2013		W/C RATIO: NA		
LOCATION OF POUR:		TEMP CONCRETE (°F): 81		C-1064
PIN #57				
		FIELD REMARKS		

LABORATORY TEST DATA								
CYL NO.	DATE OF TEST	AGE (DAYS)	LOAD (lbs)	DIAMETER (in.)	AREA (sq. in.)	COMPRESSIVE STRENGTH (psi)	TESTED BY	FRACTURE TYPE
A	3/22/13	3	2,370	3.00	7.07	340	LH	3
B	3/22/13	3	2,490	3.00	7.07	350	LH	2
C	3/26/13	7	3,480	3.00	7.07	490	LH	2
D	3/26/13	7	3,500	3.00	7.07	500	LH	2
E	4/16/13	28	6,800	3.00	7.07	960	LH	2
F	4/16/13	28	6,910	3.00	7.07	980	LH	3
G	5/14/13	56	9,680	3.00	7.07	1370	LH	3

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GROUT COMPRESSION TEST REPORT

CLIENT: Mr. John Barnes
Earth Tech, LLC
2620 Hunt Road
Land O' Lakes, FL 34638

DATE: 5/15/2013
JOB NO: 6111-13-009

PROJECT: SE County Landfill Stage 4 Sinkhole Remediation
Hillsborough County, FL

SAMPLE NO: 025

FIELD INFORMATION		FIELD TEST DATA		
DATE SAMPLED: 3/20/2013	BY: E. TIRADO	TEMPERATURE: AIR (°F): 72		
CONCRETE SUPPLIER: EARTH TECH	PLANT: 1	0 GALLONS WATER ADDED TO	10	CY
TRUCK NO: 218	TICKET NO: 179924	ADD'L WATER AUTH. BY:		
TIME MIXED: 7:44 AM	TIME SAMPLED: 8:36 AM	MEASURED	SPECIFIED	ASTM METHOD
DESIGN MIX NO: 324-4	SIZE OF LOAD (CY): 10	SLUMP (IN.) 3.5	3 - 5	C-143
DESIGN COMP. STR. AT 28 DAYS (PSI): 1500		AIR CONTENT (%) NA		C-231
DATE REC'D N 21-Feb	3/21/2013	W/C RATIO: NA		
LOCATION OF POUR:		TEMP CONCRETE (°F): 77		C-1064
PIN #41				
		FIELD REMARKS		

LABORATORY TEST DATA								
CYL NO.	DATE OF TEST	AGE (DAYS)	LOAD (lbs)	DIAMETER (in.)	AREA (sq. in.)	COMPRESSIVE STRENGTH (psi)	TESTED BY	FRACTURE TYPE
A	3/25/13	5	2,900	3.00	7.07	410	LH	2
B	3/25/13	5	2,970	3.00	7.07	420	LH	5
C	3/27/13	7	3,440	3.00	7.07	490	LH	5
D	3/27/13	7	3,360	3.00	7.07	480	LH	5
E	4/17/13	28	6,640	3.00	7.07	940	LH	5
F	4/17/13	28	6,780	3.00	7.07	960	LH	3
G	5/15/13	56	9,800	3.00	7.07	1390	LH	5

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GROUT COMPRESSION TEST REPORT

CLIENT: Mr. John Barnes
Earth Tech, LLC
2620 Hunt Road
Land O' Lakes, FL 34638

DATE: 4/18/2013
JOB NO: 6111-13-009

PROJECT: SE County Landfill Stage 4 Sinkhole Remediation
Hillsborough County, FL

SAMPLE NO: 026

FIELD INFORMATION		FIELD TEST DATA		
DATE SAMPLED: 3/21/2013	BY: E. TIRADO	TEMPERATURE: AIR (°F): 63		
CONCRETE SUPPLIER: EARTH TECH	PLANT: 1	0 GALLONS WATER ADDED TO	10	CY
TRUCK NO: 218	TICKET NO:	ADD'L WATER AUTH. BY:		
TIME MIXED: 10:10 AM	TIME SAMPLED: 10:54 AM	MEASURED	SPECIFIED	ASTM METHOD
DESIGN MIX NO: 324-4	SIZE OF LOAD (CY): 10	SLUMP (IN.): 5	3 - 5	C-143
DESIGN COMP. STR. AT 28 DAYS (PSI): 1500		AIR CONTENT (%): NA		C-231
DATE REC'D N 21-Feb	3/22/2013	W/C RATIO: NA		
LOCATION OF POUR:		TEMP CONCRETE (°F): 76		C-1064
PIN #39				
		FIELD REMARKS		

LABORATORY TEST DATA								
CYL NO.	DATE OF TEST	AGE (DAYS)	LOAD (lbs)	DIAMETER (in.)	AREA (sq. in.)	COMPRESSIVE STRENGTH (psi)	TESTED BY	FRACTURE TYPE
A	3/25/13	4	2,660	3.01	7.12	370	CM	6
B	3/25/13	4	2,790	3.01	7.12	390	CM	5
C	3/28/13	7	3,330	3.00	7.07	470	LH	3
D	3/28/13	7	3,450	3.00	7.07	490	LH	5
E	4/18/13	28	7,200	3.00	7.07	1020	LH	5
F	4/18/13	28	7,280	3.00	7.07	1030	LH	3
G	5/16/13	56						

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GROUT COMPRESSION TEST REPORT

CLIENT: Mr. John Barnes
Earth Tech, LLC
2620 Hunt Road
Land O' Lakes, FL 34638

DATE: 4/19/2013
JOB NO: 6111-13-009

PROJECT: SE County Landfill Stage 4 Sinkhole Remediation
Hillsborough County, FL

SAMPLE NO: 027

FIELD INFORMATION		FIELD TEST DATA		
DATE SAMPLED: 3/22/2013	BY: E. TIRADO	TEMPERATURE: AIR (°F): 58		
CONCRETE SUPPLIER: EARTH TECH	PLANT: 1	0 GALLONS WATER ADDED TO	10	CY
TRUCK NO: 216	TICKET NO: 179969	ADD'L WATER AUTH. BY:		
TIME MIXED: 7:15 AM	TIME SAMPLED: 8:12 AM	MEASURED	SPECIFIED	ASTM METHOD
DESIGN MIX NO: 324-4	SIZE OF LOAD (CY): 10	SLUMP (IN.) 3.75	3 - 5	C-143
DESIGN COMP. STR. AT 28 DAYS (PSI): 1500		AIR CONTENT (%) NA		C-231
DATE REC'D N 21-Feb	3/23/2013	W/C RATIO: NA		
LOCATION OF POUR:		TEMP CONCRETE (°F): 70		C-1064
S-9				
		FIELD REMARKS		

LABORATORY TEST DATA								
CYL NO.	DATE OF TEST	AGE (DAYS)	LOAD (lbs)	DIAMETER (in.)	AREA (sq. in.)	COMPRESSIVE STRENGTH (psi)	TESTED BY	FRACTURE TYPE
A	3/26/13	4	3,390	3.00	7.07	480	LH	5
B	3/26/13	4	3,000	3.00	7.07	420	LH	5
C	3/29/13	7	3,980	3.00	7.07	560	LH	3
D	3/29/13	7	4,010	3.00	7.07	570	LH	5
E	4/19/13	28	7,230	3.00	7.07	1020	LH	3
F	4/19/13	28	7,310	3.00	7.07	1030	LH	2
G	5/17/13	56						

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GROUT COMPRESSION TEST REPORT

CLIENT: Mr. John Barnes
Earth Tech, LLC
2620 Hunt Road
Land O' Lakes, FL 34638

DATE: 4/1/2013
JOB NO: 6111-13-009

PROJECT: SE County Landfill Stage 4 Sinkhole Remediation
Hillsborough County, FL

SAMPLE NO: 028

FIELD INFORMATION		FIELD TEST DATA		
DATE SAMPLED: 3/25/2013	BY: E. TIRADO	TEMPERATURE: AIR (°F): 63		
CONCRETE SUPPLIER: EARTH TECH	PLANT: 1	0 GALLONS WATER ADDED TO	5	CY
TRUCK NO: 218	TICKET NO:	ADD'L WATER AUTH. BY:		
TIME MIXED: 8:55 AM	TIME SAMPLED: 9:54 AM	MEASURED	SPECIFIED	ASTM METHOD
DESIGN MIX NO: 324-4	SIZE OF LOAD (CY): 5	SLUMP (IN.) 4.75	3 - 5	C-143
DESIGN COMP. STR. AT 28 DAYS (PSI): 1500		AIR CONTENT (%) NA		C-231
DATE REC'D N 21-Feb 3/26/2013		W/C RATIO: NA		
LOCATION OF POUR:		TEMP CONCRETE (°F): 78		C-1064
PIN: S-7				
		FIELD REMARKS		

LABORATORY TEST DATA								
CYL NO.	DATE OF TEST	AGE (DAYS)	LOAD (lbs)	DIAMETER (in.)	AREA (sq. in.)	COMPRESSIVE STRENGTH (psi)	TESTED BY	FRACTURE TYPE
A	3/28/13	3	2,420	3.00	7.07	340	LH	2
B	3/28/13	3	2,380	3.00	7.07	340	LH	3
C	4/1/13	7	3,380	3.00	7.07	480	LH	3
D	4/1/13	7	3,330	3.00	7.07	470	LH	5
E	4/22/13	28	7,260	3.00	7.07	1030	LH	6
F	4/22/13	28	7,310	3.00	7.07	1030	LH	3
G	HOLD	H						

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GROUT COMPRESSION TEST REPORT

CLIENT: Mr. John Barnes
Earth Tech, LLC
2620 Hunt Road
Land O' Lakes, FL 34638

DATE: 4/23/2013
JOB NO: 6111-13-009

PROJECT: SE County Landfill Stage 4 Sinkhole Remediation
Hillsborough County, FL

SAMPLE NO: 029

FIELD INFORMATION		FIELD TEST DATA		
DATE SAMPLED: 3/26/2013	BY: E. TIRADO	TEMPERATURE: AIR (°F): 57		
CONCRETE SUPPLIER: EARTH TECH	PLANT: 1	0 GALLONS WATER ADDED TO	3	CY
TRUCK NO: 218	TICKET NO: 180013	ADD'L WATER AUTH. BY:		
TIME MIXED: 10:20 AM	TIME SAMPLED: 11:42 AM	MEASURED	SPECIFIED	ASTM METHOD
DESIGN MIX NO: 324-4	SIZE OF LOAD (CY): 3	SLUMP (IN.) 5	3 - 5	C-143
DESIGN COMP. STR. AT 28 DAYS (PSI): 1500		AIR CONTENT (%) NA		C-231
DATE REC'D N 21-Feb	3/27/2013	W/C RATIO: NA		
LOCATION OF POUR:		TEMP CONCRETE (°F): 71		C-1064
PIN: S-6				
		FIELD REMARKS		

LABORATORY TEST DATA								
CYL NO.	DATE OF TEST	AGE (DAYS)	LOAD (lbs)	DIAMETER (in.)	AREA (sq. in.)	COMPRESSIVE STRENGTH (psi)	TESTED BY	FRACTURE TYPE
A	3/29/13	3	2,210	3.00	7.07	310	LH	2
B	3/29/13	3	2,300	3.00	7.07	330	LH	2
C	4/2/13	7	2,620	3.00	7.07	370	LH	3
D	4/2/13	7	2,690	3.00	7.07	380	LH	3
E	4/23/13	28	5,210	3.00	7.07	740	LH	3
F	4/23/13	28	5,330	3.00	7.07	750	LH	3
G	HOLD	H						

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GROUT COMPRESSION TEST REPORT

CLIENT: Mr. John Barnes
Earth Tech, LLC
2620 Hunt Road
Land O' Lakes, FL 34638

DATE: 4/24/2013
JOB NO: 6111-13-009

PROJECT: SE County Landfill Stage 4 Sinkhole Remediation
Hillsborough County, FL

SAMPLE NO: 030

FIELD INFORMATION		FIELD TEST DATA		
DATE SAMPLED: 3/27/2013	BY: E. TIRADO	TEMPERATURE: AIR (°F): 41		
CONCRETE SUPPLIER: EARTH TECH	PLANT: 1	0 GALLONS WATER ADDED TO	10	CY
TRUCK NO: 218	TICKET NO: 180036	ADD'L WATER AUTH. BY:		
TIME MIXED: 6:43 AM	TIME SAMPLED: 7:39 AM	MEASURED	SPECIFIED	ASTM METHOD
DESIGN MIX NO: 324-4	SIZE OF LOAD (CY): 10	SLUMP (IN.): 5	3 - 5	C-143
DESIGN COMP. STR. AT 28 DAYS (PSI): 1500		AIR CONTENT (%): NA		C-231
DATE REC'D N 21-Feb	3/28/2013	W/C RATIO: NA		
LOCATION OF POUR:		TEMP CONCRETE (°F): 66		C-1064
PIN: S-5				
		FIELD REMARKS		

LABORATORY TEST DATA								
CYL NO.	DATE OF TEST	AGE (DAYS)	LOAD (lbs)	DIAMETER (in.)	AREA (sq. in.)	COMPRESSIVE STRENGTH (psi)	TESTED BY	FRACTURE TYPE
A	3/30/13	3	2,250	3.00	7.07	320	LH	5
B	3/30/13	3	2,310	3.00	7.07	330	LH	5
C	4/3/13	7	2,840	3.00	7.07	400	LH	5
D	4/3/13	7	2,910	3.00	7.07	410	LH	5
E	4/24/13	28	6,340	3.00	7.07	900	LH	3
F	4/24/13	28	6,480	3.00	7.07	920	LH	5
G	HOLD	H						

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GROUT COMPRESSION TEST REPORT

CLIENT: Mr. John Barnes
Earth Tech, LLC
2620 Hunt Road
Land O' Lakes, FL 34638

DATE: 4/25/2013
JOB NO: 6111-13-009

PROJECT: SE County Landfill Stage 4 Sinkhole Remediation
Hillsborough County, FL

SAMPLE NO: 031

FIELD INFORMATION		FIELD TEST DATA		
DATE SAMPLED: 3/28/2013	BY: E. TIRADO	TEMPERATURE: AIR (°F): 60		
CONCRETE SUPPLIER: EARTH TECH	PLANT: 1	0 GALLONS WATER ADDED TO	5	CY
TRUCK NO: 216	TICKET NO: 180066	ADD'L WATER AUTH. BY:		
TIME MIXED: 9:15 AM	TIME SAMPLED: 10:49 AM	MEASURED	SPECIFIED	ASTM METHOD
DESIGN MIX NO: 324-4	SIZE OF LOAD (CY): 5	SLUMP (IN.) 3.5	3 - 5	C-143
DESIGN COMP. STR. AT 28 DAYS (PSI): 1500		AIR CONTENT (%) NA		C-231
DATE REC'D N 21-Feb 3/29/2013		W/C RATIO: NA		
LOCATION OF POUR:		TEMP CONCRETE (°F): 73		C-1064
PIN: P-45				
		FIELD REMARKS		

LABORATORY TEST DATA								
CYL NO.	DATE OF TEST	AGE (DAYS)	LOAD (lbs)	DIAMETER (in.)	AREA (sq. in.)	COMPRESSIVE STRENGTH (psi)	TESTED BY	FRACTURE TYPE
A	3/31/13	3	2,430	3.00	7.07	340	LH	5
B	3/31/13	3	2,320	3.00	7.07	330	LH	3
C	4/4/13	7	3,230	3.00	7.07	460	LH	3
D	4/4/13	7	3,190	3.00	7.07	450	LH	2
E	4/25/13	28	7,070	3.00	7.07	1000	LH	2
F	4/25/13	28	7,180	3.00	7.07	1020	LH	3
G	5/23/13	56						

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GROUT COMPRESSION TEST REPORT

CLIENT: Mr. John Barnes
Earth Tech, LLC
2620 Hunt Road
Land O' Lakes, FL 34638

DATE: 4/26/2013
JOB NO: 6111-13-009

PROJECT: SE County Landfill Stage 4 Sinkhole Remediation
Hillsborough County, FL

SAMPLE NO: 032

FIELD INFORMATION		FIELD TEST DATA		
DATE SAMPLED: 3/29/2013	BY: E. TIRADO	TEMPERATURE: AIR (°F): 70		
CONCRETE SUPPLIER: EARTH TECH	PLANT:	0 GALLONS WATER ADDED TO	5	CY
TRUCK NO: 216	TICKET NO:	ADD'L WATER AUTH. BY:		
TIME MIXED: 10:30 AM	TIME SAMPLED: 11:25 AM	MEASURED	SPECIFIED	ASTM METHOD
DESIGN MIX NO: 324-4	SIZE OF LOAD (CY): 5	SLUMP (IN.) 4	3 - 5	C-143
DESIGN COMP. STR. AT 28 DAYS (PSI): 1500		AIR CONTENT (%) NA		C-231
DATE REC'D N 21-Feb	4/1/2013	W/C RATIO: NA		
LOCATION OF POUR:		TEMP CONCRETE (°F): 72		C-1064
PIN: S-26				
		FIELD REMARKS		

LABORATORY TEST DATA								
CYL NO.	DATE OF TEST	AGE (DAYS)	LOAD (lbs)	DIAMETER (in.)	AREA (sq. in.)	COMPRESSIVE STRENGTH (psi)	TESTED BY	FRACTURE TYPE
A	4/2/13	3	2,770	3.01	7.12	390	LH	3
B	4/2/13	3	3,180	3.00	7.07	450	LH	5
C	4/5/13	7	3,780	3.00	7.07	530	LH	3
D	4/5/13	7	3,840	3.00	7.07	540	LH	5
E	4/26/13	28	6,870	3.00	7.07	970	LH	3
F	4/26/13	28	6,690	3.00	7.07	950	LH	5
G	HOLD	H						

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Respectfully Submitted

TIERRA INC.

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7351 Temple Terrace Highway • Tampa, Florida 33637
Phone: (813) 989-1354 • Fax: (813) 989-1355

GROUT COMPRESSION TEST REPORT

CLIENT: Mr. John Barnes
Earth Tech, LLC
2620 Hunt Road
Land O' Lakes, FL 34638

DATE: 4/29/2013
JOB NO: 6111-13-009

PROJECT: SE County Landfill Stage 4 Sinkhole Remediation
Hillsborough County, FL

SAMPLE NO: 033

FIELD INFORMATION		FIELD TEST DATA		
DATE SAMPLED: 4/1/2013	BY: E. TIRADO	TEMPERATURE: AIR (°F): 78		
CONCRETE SUPPLIER: EARTH TECH	PLANT:	0 GALLONS WATER ADDED TO	5	CY
TRUCK NO: 216	TICKET NO: 180091	ADD'L WATER AUTH. BY:		
TIME MIXED: 11:10 AM	TIME SAMPLED: 12:06 PM	MEASURED	SPECIFIED	ASTM METHOD
DESIGN MIX NO: 324-4	SIZE OF LOAD (CY): 5	SLUMP (IN.) 4.5	3 - 5	C-143
DESIGN COMP. STR. AT 28 DAYS (PSI): 1500		AIR CONTENT (%) NA		C-231
DATE REC'D N 21-Feb 4/3/2013		W/C RATIO: NA		
LOCATION OF POUR:		TEMP CONCRETE (°F): 80		C-1064
PIN: S-24				
		FIELD REMARKS		

LABORATORY TEST DATA								
CYL NO.	DATE OF TEST	AGE (DAYS)	LOAD (lbs)	DIAMETER (in.)	AREA (sq. in.)	COMPRESSIVE STRENGTH (psi)	TESTED BY	FRACTURE TYPE
A	4/4/13	3	2,360	3.00	7.07	330	LH	3
B	4/4/13	3	2,280	3.00	7.07	320	LH	2
C	4/8/13	7	3,150	3.00	7.07	450	LH	3
D	4/8/13	7	3,090	3.00	7.07	440	LH	5
E	4/29/13	28	5,760	3.00	7.07	810	LH	3
F	4/29/13	28	5,980	3.00	7.07	850	LH	3
G	HOLD	H						

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GROUT COMPRESSION TEST REPORT

CLIENT: Mr. John Barnes
Earth Tech, LLC
2620 Hunt Road
Land O' Lakes, FL 34638

DATE: 4/30/2013
JOB NO: 6111-13-009

PROJECT: SE County Landfill Stage 4 Sinkhole Remediation
Hillsborough County, FL

SAMPLE NO: 034

FIELD INFORMATION		FIELD TEST DATA		
DATE SAMPLED: 4/2/2013	BY: E. TIRADO	TEMPERATURE: AIR (°F): 82		
CONCRETE SUPPLIER: EARTH TECH	PLANT:	0 GALLONS WATER ADDED TO	10	CY
TRUCK NO: 216	TICKET NO: 180106	ADD'L WATER AUTH. BY:		
TIME MIXED: 12:10 PM	TIME SAMPLED: 1:13 PM	MEASURED	SPECIFIED	ASTM METHOD
DESIGN MIX NO: 324-4	SIZE OF LOAD (CY): 10	SLUMP (IN.) 4.5	3 - 5	C-143
DESIGN COMP. STR. AT 28 DAYS (PSI): 1500		AIR CONTENT (%) NA		C-231
DATE REC'D N 21-Feb 4/3/2013		W/C RATIO: NA		
LOCATION OF POUR:		TEMP CONCRETE (°F): 87		C-1064
PIN: S-15				
		FIELD REMARKS		

LABORATORY TEST DATA								
CYL NO.	DATE OF TEST	AGE (DAYS)	LOAD (lbs)	DIAMETER (in.)	AREA (sq. in.)	COMPRESSIVE STRENGTH (psi)	TESTED BY	FRACTURE TYPE
A	4/5/13	3	2,340	3.00	7.07	330	LH	3
B	4/5/13	3	2,420	3.00	7.07	340	LH	5
C	4/9/13	7	2,870	3.00	7.07	410	LH	3
D	4/9/13	7	2,910	3.00	7.07	410	LH	3
E	4/30/13	28	6,690	3.00	7.07	950	LH	
F	4/30/13	28	6,750	3.00	7.07	950	LH	
G	HOLD	H						

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GROUT COMPRESSION TEST REPORT

CLIENT: Mr. John Barnes
Earth Tech, LLC
2620 Hunt Road
Land O' Lakes, FL 34638

DATE: 5/1/2013
JOB NO: 6111-13-009

PROJECT: SE County Landfill Stage 4 Sinkhole Remediation
Hillsborough County, FL

SAMPLE NO: 035

FIELD INFORMATION		FIELD TEST DATA		
DATE SAMPLED: 4/3/2013	BY: E. TIRADO	TEMPERATURE: AIR (°F): 84		
CONCRETE SUPPLIER: EARTH TECH	PLANT:	0 GALLONS WATER ADDED TO	5	CY
TRUCK NO: 218	TICKET NO: 180142	ADD'L WATER AUTH. BY:		
TIME MIXED: 10:00 AM	TIME SAMPLED: 11:30 AM	MEASURED	SPECIFIED	ASTM METHOD
DESIGN MIX NO: 324-4	SIZE OF LOAD (CY): 5	SLUMP (IN.) 4	3 - 5	C-143
DESIGN COMP. STR. AT 28 DAYS (PSI): 1500		AIR CONTENT (%) NA		C-231
DATE REC'D N 21-Feb 4/4/2013		W/C RATIO: NA		
LOCATION OF POUR:		TEMP CONCRETE (°F): 88		C-1064
PIN: S-21				
		FIELD REMARKS		

LABORATORY TEST DATA								
CYL NO.	DATE OF TEST	AGE (DAYS)	LOAD (lbs)	DIAMETER (in.)	AREA (sq. in.)	COMPRESSIVE STRENGTH (psi)	TESTED BY	FRACTURE TYPE
A	4/8/13	5	2,550	3.00	7.07	360	LH	5
B	4/8/13	5	2,530	3.00	7.07	360	LH	3
C	4/10/13	7	2,810	3.00	7.07	400	LH	3
D	4/10/13	7	2,780	3.00	7.07	390	LH	3
E	5/1/13	28	7,260	3.00	7.07	1030	LH	3
F	5/1/13	28	7,340	3.00	7.07	1040	LH	2
G	5/29/13	56						

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GROUT COMPRESSION TEST REPORT

CLIENT: Mr. John Barnes
Earth Tech, LLC
2620 Hunt Road
Land O' Lakes, FL 34638

DATE: 5/2/2013
JOB NO: 6111-13-009

PROJECT: SE County Landfill Stage 4 Sinkhole Remediation
Hillsborough County, FL

SAMPLE NO: 036

FIELD INFORMATION		FIELD TEST DATA		
DATE SAMPLED: 4/4/2013	BY: E. TIRADO	TEMPERATURE: AIR (°F): 74		
CONCRETE SUPPLIER: EARTH TECH	PLANT:	0 GALLONS WATER ADDED TO	10	CY
TRUCK NO: 218	TICKET NO: 180170	ADD'L WATER AUTH. BY:		
TIME MIXED: 8:59 AM	TIME SAMPLED: 10:00 AM	MEASURED	SPECIFIED	ASTM METHOD
DESIGN MIX NO: 324-4	SIZE OF LOAD (CY): 10	SLUMP (IN.): 4	3 - 5	C-143
DESIGN COMP. STR. AT 28 DAYS (PSI): 1500		AIR CONTENT (%): NA		C-231
DATE REC'D N 21-Feb 4/5/2013		W/C RATIO: NA		
LOCATION OF POUR:		TEMP CONCRETE (°F): 80		C-1064
PIN: S-2				
		FIELD REMARKS		

LABORATORY TEST DATA								
CYL NO.	DATE OF TEST	AGE (DAYS)	LOAD (lbs)	DIAMETER (in.)	AREA (sq. in.)	COMPRESSIVE STRENGTH (psi)	TESTED BY	FRACTURE TYPE
A	4/8/13	4	4,090	3.00	7.07	580	LH	5
B	4/8/13	4	4,000	3.00	7.07	570	LH	5
C	4/11/13	7	5,350	3.00	7.07	760	LH	3
D	4/11/13	7	5,440	3.00	7.07	770	LH	3
E	5/2/13	28	10,160	3.00	7.07	1440	LH	3
F	5/2/13	28	9,830	3.00	7.07	1390	LH	3
G	5/30/13	56						

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GROUT COMPRESSION TEST REPORT

CLIENT: Mr. John Barnes
Earth Tech, LLC
2620 Hunt Road
Land O' Lakes, FL 34638

DATE: 5/3/2013
JOB NO: 6111-13-009

PROJECT: SE County Landfill Stage 4 Sinkhole Remediation
Hillsborough County, FL

SAMPLE NO: 037

FIELD INFORMATION		FIELD TEST DATA		
DATE SAMPLED: 4/5/2013	BY:	TEMPERATURE: AIR (°F): 76		
CONCRETE SUPPLIER: EARTH TECH	PLANT:	0 GALLONS WATER ADDED TO	10	CY
TRUCK NO: 218	TICKET NO: 180193	ADD'L WATER AUTH. BY:		
TIME MIXED: 8:50 AM	TIME SAMPLED: 9:39 AM	MEASURED	SPECIFIED	ASTM METHOD
DESIGN MIX NO: 324-4	SIZE OF LOAD (CY): 5	SLUMP (IN.) 5	3 - 5	C-143
DESIGN COMP. STR. AT 28 DAYS (PSI): 1500		AIR CONTENT (%) NA		C-231
DATE REC'D N 21-Feb	4/9/2013	W/C RATIO: NA		
LOCATION OF POUR:		TEMP CONCRETE (°F): 81		C-1064
PIN: S-13				
		FIELD REMARKS		

LABORATORY TEST DATA								
CYL. NO.	DATE OF TEST	AGE (DAYS)	LOAD (lbs)	DIAMETER (in.)	AREA (sq. in.)	COMPRESSIVE STRENGTH (psi)	TESTED BY	FRACTURE TYPE
A	4/9/13	4	3,830	3.01	7.12	540	LH	6
B	4/9/13	4	3,330	3.01	7.12	470	LH	5
C	4/12/13	7	4,100	3.00	7.07	580	LH	3
D	4/12/13	7	4,180	3.00	7.07	590	LH	3
E	5/3/13	28	9,190	3.00	7.07	1300	LH	3
F	5/3/13	28	9,410	3.00	7.07	1330	LH	3
G	5/31/13	56						

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GROUT COMPRESSION TEST REPORT

CLIENT: Mr. John Barnes
Earth Tech, LLC
2620 Hunt Road
Land O' Lakes, FL 34638

DATE: 5/6/2013
JOB NO: 6111-13-009

PROJECT: SE County Landfill Stage 4 Sinkhole Remediation
Hillsborough County, FL

SAMPLE NO: 038

FIELD INFORMATION		FIELD TEST DATA		
DATE SAMPLED: 4/8/2013	BY:	TEMPERATURE: AIR (°F): 82		
CONCRETE SUPPLIER: EARTH TECH	PLANT:	0 GALLONS WATER ADDED TO	10	CY
TRUCK NO: 218	TICKET NO: 180206	ADD'L WATER AUTH. BY:		
TIME MIXED: 11:00 AM	TIME SAMPLED: 11:55 AM	MEASURED	SPECIFIED	ASTM METHOD
DESIGN MIX NO: 324-4	SIZE OF LOAD (CY): 10	SLUMP (IN.) 4.5	3 - 5	C-143
DESIGN COMP. STR. AT 28 DAYS (PSI): 1500		AIR CONTENT (%) NA		C-231
DATE REC'D N 21-Feb	4/10/2013	W/C RATIO: NA		
LOCATION OF POUR:		TEMP CONCRETE (°F): 86		C-1064
PIN: S-14 & S-3				
		FIELD REMARKS		

LABORATORY TEST DATA								
CYL NO.	DATE OF TEST	AGE (DAYS)	LOAD (lbs)	DIAMETER (in.)	AREA (sq. in.)	COMPRESSIVE STRENGTH (psi)	TESTED BY	FRACTURE TYPE
A	4/11/13	3	2,260	3.00	7.07	320	LH	3
B	4/11/13	3	2,080	3.00	7.07	290	LH	3
C	4/15/13	9	3,430	3.00	7.07	490	LH	5
D	4/15/13	9	3,290	3.00	7.07	470	LH	3
E	5/6/13	28	6,740	3.00	7.07	950	LH	3
F	5/6/13	28	6,580	3.00	7.07	930	LH	3
G	6/3/13	56						

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GROUT COMPRESSION TEST REPORT

CLIENT: Mr. John Barnes
Earth Tech, LLC
2620 Hunt Road
Land O' Lakes, FL 34638

DATE: 4/16/2013
JOB NO: 6111-13-009

PROJECT: SE County Landfill Stage 4 Sinkhole Remediation
Hillsborough County, FL

SAMPLE NO: 039

FIELD INFORMATION		FIELD TEST DATA		
DATE SAMPLED: 4/9/2013	BY:	TEMPERATURE: AIR (°F): 73		
CONCRETE SUPPLIER: EARTH TECH	PLANT:	0 GALLONS WATER ADDED TO	7	CY
TRUCK NO: 218	TICKET NO: 180233	ADD'L WATER AUTH. BY:		
TIME MIXED: 6:45 AM	TIME SAMPLED: 7:40 AM	MEASURED	SPECIFIED	ASTM METHOD
DESIGN MIX NO: 324-4	SIZE OF LOAD (CY): 7	SLUMP (IN.) 3.5	3 - 5	C-143
DESIGN COMP. STR. AT 28 DAYS (PSI): 1500		AIR CONTENT (%) NA		C-231
DATE REC'D N 21-Feb	4/10/2013	W/C RATIO: NA		
LOCATION OF POUR:		TEMP CONCRETE (°F): 79		C-1064
PIN: S-28				
		FIELD REMARKS		

LABORATORY TEST DATA								
CYL NO.	DATE OF TEST	AGE (DAYS)	LOAD (lbs)	DIAMETER (in.)	AREA (sq. in.)	COMPRESSIVE STRENGTH (psi)	TESTED BY	FRACTURE TYPE
A	4/12/13	3	2,630	3.00	7.07	370	LH	5
B	4/12/13	3	2,520	3.00	7.07	360	LH	3
C	4/16/13	7	3,080	3.00	7.07	440	LH	2
D	4/16/13	7	2,970	3.00	7.07	420	LH	3
E	5/7/13	28	7,240	3.00	7.07	1020	LH	3
F	5/7/13	28	7,100	3.00	7.07	1000	LH	3
G	6/4/13	56						

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GROUT COMPRESSION TEST REPORT

CLIENT: Mr. John Barnes
Earth Tech, LLC
2620 Hunt Road
Land O' Lakes, FL 34638

DATE: 5/8/2013
JOB NO: 6111-13-009

PROJECT: SE County Landfill Stage 4 Sinkhole Remediation
Hillsborough County, FL

SAMPLE NO: 040

FIELD INFORMATION		FIELD TEST DATA		
DATE SAMPLED: 4/9/2013	BY:	TEMPERATURE: AIR (°F): 73		
CONCRETE SUPPLIER: EARTH TECH	PLANT:	0 GALLONS WATER ADDED TO	7	CY
TRUCK NO: 218	TICKET NO: 180233	ADD'L WATER AUTH. BY:		
TIME MIXED: 6:45 AM	TIME SAMPLED: 7:40 AM	MEASURED	SPECIFIED	ASTM METHOD
DESIGN MIX NO: 324-4	SIZE OF LOAD (CY): 7	SLUMP (IN.) 3.5	3 - 5	C-143
DESIGN COMP. STR. AT 28 DAYS (PSI): 1500		AIR CONTENT (%) NA		C-231
DATE REC'D N 21-Feb	4/10/2013	W/C RATIO: NA		
LOCATION OF POUR:		TEMP CONCRETE (°F): 79		C-1064
PIN: S-28				
		FIELD REMARKS		

LABORATORY TEST DATA								
CYL. NO.	DATE OF TEST	AGE (DAYS)	LOAD (lbs)	DIAMETER (in.)	AREA (sq. in.)	COMPRESSIVE STRENGTH (psi)	TESTED BY	FRACTURE TYPE
A	4/15/13	5	3,100	3.00	7.07	440	LH	5
B	4/15/13	5	2,970	3.00	7.07	420	LH	3
C	4/17/13	7	3,910	3.00	7.07	550	LH	3
D	4/17/13	7	3,840	3.00	7.07	540	LH	5
E	5/8/13	28	7,950	3.00	7.07	1120	LH	3
F	5/8/13	28	7,890	3.00	7.07	1120	LH	3
G	6/5/13	56						

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GROUT COMPRESSION TEST REPORT

CLIENT: Mr. John Barnes
Earth Tech, LLC
2620 Hunt Road
Land O' Lakes, FL 34638

DATE: 5/9/2013
JOB NO: 6111-13-009

PROJECT: SE County Landfill Stage 4 Sinkhole Remediation
Hillsborough County, FL

SAMPLE NO: 041

FIELD INFORMATION		FIELD TEST DATA		
DATE SAMPLED: 4/11/2013	BY: R.K.	TEMPERATURE: AIR (°F): 79		
CONCRETE SUPPLIER: EARTH TECH	PLANT: HICKS	GALLONS WATER ADDED TO CY		
TRUCK NO: 216	TICKET NO: 180284	ADD'L WATER AUTH. BY:		
TIME MIXED: 6:50 AM	TIME SAMPLED: 8:00 AM	MEASURED	SPECIFIED	ASTM METHOD
DESIGN MIX NO: 324-4	SIZE OF LOAD (CY):	SLUMP (IN.) 4.25	3 - 5	C-143
DESIGN COMP. STR. AT 28 DAYS (PSI): 1500		AIR CONTENT (%) NA		C-231
DATE REC'D N 21-Feb	4/12/2013	W/C RATIO: NA		
LOCATION OF POUR:		TEMP CONCRETE (°F): 86		C-1064
PIN: S-17				
		FIELD REMARKS		

LABORATORY TEST DATA								
CYL NO.	DATE OF TEST	AGE (DAYS)	LOAD (lbs)	DIAMETER (in.)	AREA (sq. in.)	COMPRESSIVE STRENGTH (psi)	TESTED BY	FRACTURE TYPE
A	4/15/13	4	2,600	3.00	7.07	370	LH	3
B	4/15/13	4	2,720	3.00	7.07	380	LH	5
C	4/18/13	7	3,390	3.00	7.07	480	LH	2
D	4/18/13	7	3,510	3.00	7.07	500	LH	3
E	5/9/13	28	6,690	3.00	7.07	950	LH	3
F	5/9/13	28	6,720	3.00	7.07	950	LH	3
G	6/6/13	56						

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GROUT COMPRESSION TEST REPORT

CLIENT: Mr. John Barnes
Earth Tech, LLC
2620 Hunt Road
Land O' Lakes, FL 34638

DATE: 5/10/2013
JOB NO: 6111-13-009

PROJECT: SE County Landfill Stage 4 Sinkhole Remediation
Hillsborough County, FL

SAMPLE NO: 042

FIELD INFORMATION		FIELD TEST DATA		
DATE SAMPLED: 4/12/2013	BY: R.K.	TEMPERATURE: AIR (°F): 80		
CONCRETE SUPPLIER: EARTH TECH	PLANT: HICKS	GALLONS WATER ADDED TO CY		
TRUCK NO: 218	TICKET NO: 180309	ADD'L WATER AUTH. BY:		
TIME MIXED: 6:38 AM	TIME SAMPLED: 8:00 AM	MEASURED	SPECIFIED	ASTM METHOD
DESIGN MIX NO: 624 - 4	SIZE OF LOAD (CY): 10	SLUMP (IN.) 4.75	3 - 5	C-143
DESIGN COMP. STR. AT 28 DAYS (PSI): 1500		AIR CONTENT (%) NA		C-231
DATE REC'D N 21-Feb	4/15/2013	W/C RATIO: NA		
LOCATION OF POUR:		TEMP CONCRETE (°F): 84		C-1064
PIN: S-32				
		FIELD REMARKS		

LABORATORY TEST DATA								
CYL NO.	DATE OF TEST	AGE (DAYS)	LOAD (lbs)	DIAMETER (in.)	AREA (sq. in.)	COMPRESSIVE STRENGTH (psi)	TESTED BY	FRACTURE TYPE
A	4/16/13	4	4,380	3.00	7.07	620	LH	3
B	4/16/13	4	4,240	3.00	7.07	600	LH	5
C	4/19/13	7	5,430	3.00	7.07	770	LH	2
D	4/19/13	7	5,590	3.00	7.07	790	LH	3
E	5/10/13	28	9,310	3.00	7.07	1320	LH	3
F	5/10/13	28	9,470	3.00	7.07	1340	LH	3
G	6/7/13	56						

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Earth Tech, LLC
2620 Hunt Road
Land O' Lakes, FL 34638

DATE: 5/13/2013
JOB NO: 6111-13-009

PROJECT: SE County Landfill Stage 4 Sinkhole Remediation
Hillsborough County, FL

SAMPLE NO: 043

FIELD INFORMATION		FIELD TEST DATA		
DATE SAMPLED: 4/15/2013	BY: R.K.	TEMPERATURE: AIR (°F): 76		
CONCRETE SUPPLIER: EARTH TECH	PLANT: HICKS	GALLONS WATER ADDED TO CY		
TRUCK NO: 216	TICKET NO: 180326	ADD'L WATER AUTH. BY:		
TIME MIXED: 6:55 AM	TIME SAMPLED: 8:05 AM	MEASURED	SPECIFIED	ASTM METHOD
DESIGN MIX NO: 324 - 4	SIZE OF LOAD (CY): 10	SLUMP (IN.) 4.5	3 - 5	C-143
DESIGN COMP. STR. AT 28 DAYS (PSI): 1500		AIR CONTENT (%) NA		C-231
DATE REC'D N 21-Feb	4/16/2013	W/C RATIO: NA		
LOCATION OF POUR:		TEMP CONCRETE (°F): 79		C-1064
PIN: S-32				
		FIELD REMARKS		

LABORATORY TEST DATA								
CYL NO.	DATE OF TEST	AGE (DAYS)	LOAD (lbs)	DIAMETER (in.)	AREA (sq. in.)	COMPRESSIVE STRENGTH (psi)	TESTED BY	FRACTURE TYPE
A	4/18/13	3	2,460	3.00	7.07	350	LH	3
B	4/18/13	3	2,490	3.00	7.07	350	LH	2
C	4/22/13	7	3,630	3.00	7.07	510	LH	3
D	4/22/13	7	3,490	3.00	7.07	490	LH	3
E	5/13/13	28	6,470	3.00	7.07	920	LH	3
F	5/13/13	28	6,470	3.00	7.07	920	LH	2
G	6/10/13	56						

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Respectfully Submitted

TIERRA INC.

TIERRA

7351 Temple Terrace Highway • Tampa, Florida 33637
Phone: (813) 989-1354 • Fax: (813) 989-1355

GROUT COMPRESSION TEST REPORT

CLIENT: Mr. John Barnes
Earth Tech, LLC
2620 Hunt Road
Land O' Lakes, FL 34638

DATE: 5/13/2013
JOB NO: 6111-13-009

PROJECT: SE County Landfill Stage 4 Sinkhole Remediation
Hillsborough County, FL

SAMPLE NO: 044

FIELD INFORMATION		FIELD TEST DATA		
DATE SAMPLED: 4/15/2013	BY: R.K.	TEMPERATURE: AIR (°F): 86		
CONCRETE SUPPLIER: EARTH TECH	PLANT: HICKS	GALLONS WATER ADDED TO CY		
TRUCK NO: 218	TICKET NO: 180309	ADD'L WATER AUTH. BY:		
TIME MIXED: 4:40 PM	TIME SAMPLED: 5:40 PM	MEASURED	SPECIFIED	ASTM METHOD
DESIGN MIX NO: 624 - 4	SIZE OF LOAD (CY): 10	SLUMP (IN.): 5	3 - 5	C-143
DESIGN COMP. STR. AT 28 DAYS (PSI): 1500		AIR CONTENT (%): NA		C-231
DATE REC'D N 21-Feb 4/16/2013		W/C RATIO: NA		
LOCATION OF POUR:		TEMP CONCRETE (°F): 90		C-1064
PIN: S-39				
		FIELD REMARKS		

LABORATORY TEST DATA								
CYL NO.	DATE OF TEST	AGE (DAYS)	LOAD (lbs)	DIAMETER (in.)	AREA (sq. in.)	COMPRESSIVE STRENGTH (psi)	TESTED BY	FRACTURE TYPE
A	4/18/13	3	2,490	3.00	7.07	350	LH	3
B	4/18/13	3	2,570	3.00	7.07	360	LH	3
C	4/22/13	7	3,440	3.00	7.07	490	LH	5
D	4/22/13	7	3,530	3.00	7.07	500	LH	3
E	5/13/13	28	7,010	3.00	7.07	990	LH	3
F	5/13/13	28	7,310	3.00	7.07	1030	LH	2
G	6/10/13	56						

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GROUT COMPRESSION TEST REPORT

CLIENT: Mr. John Barnes
Earth Tech, LLC
2620 Hunt Road
Land O' Lakes, FL 34638

DATE: 5/14/2013
JOB NO: 6111-13-009

PROJECT: SE County Landfill Stage 4 Sinkhole Remediation
Hillsborough County, FL

SAMPLE NO: 045

FIELD INFORMATION		FIELD TEST DATA		
DATE SAMPLED: 4/16/2013	BY: R.K.	TEMPERATURE: AIR (°F): 77		
CONCRETE SUPPLIER: EARTH TECH	PLANT: HICKS	GALLONS WATER ADDED TO CY		
TRUCK NO: 216	TICKET NO: 180355	ADD'L WATER AUTH. BY:		
TIME MIXED: 7:10 AM	TIME SAMPLED: 8:00 AM	MEASURED	SPECIFIED	ASTM METHOD
DESIGN MIX NO: 324 - 4	SIZE OF LOAD (CY): 10	SLUMP (IN.): 3	3 - 5	C-143
DESIGN COMP. STR. AT 28 DAYS (PSI): 1500		AIR CONTENT (%): NA		C-231
DATE REC'D N 21-Feb	4/17/2013	W/C RATIO: NA		
LOCATION OF POUR:		TEMP CONCRETE (°F): 84		C-1064
PIN: S-39				
		FIELD REMARKS		

LABORATORY TEST DATA								
CYL NO.	DATE OF TEST	AGE (DAYS)	LOAD (lbs)	DIAMETER (in.)	AREA (sq. in.)	COMPRESSIVE STRENGTH (psi)	TESTED BY	FRACTURE TYPE
A	4/19/13	3	2,690	3.00	7.07	380	LH	3
B	4/19/13	3	2,780	3.00	7.07	390	LH	3
C	4/23/13	7	3,890	3.00	7.07	550	LH	3
D	4/23/13	7	3,980	3.00	7.07	560	LH	3
E	5/14/13	28	7,270	3.00	7.07	1030	LH	2
F	5/14/13	28	7,410	3.00	7.07	1050	LH	3
G	6/11/13	56						

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GROUT COMPRESSION TEST REPORT

CLIENT: Mr. John Barnes
Earth Tech, LLC
2620 Hunt Road
Land O' Lakes, FL 34638

DATE: 5/15/2013
JOB NO: 6111-13-009

PROJECT: SE County Landfill Stage 4 Sinkhole Remediation
Hillsborough County, FL

SAMPLE NO: 046

FIELD INFORMATION			FIELD TEST DATA			
DATE SAMPLED:	4/17/2013	BY:	R.K.	TEMPERATURE: AIR (°F) :	84	
CONCRETE SUPPLIER:	EARTH TECH	PLANT:	HICKS	GALLONS WATER ADDED TO		CY
TRUCK NO:	216	TICKET NO:	180368	ADD'L WATER AUTH. BY:		
TIME MIXED:	10:55 AM	TIME SAMPLED:	11:50 AM	MEASURED		SPECIFIED ASTM METHOD
DESIGN MIX NO:	324-4	SIZE OF LOAD (CY):	10	SLUMP (IN.)	3.5	3 - 5 C-143
DESIGN COMP. STR. AT 28 DAYS (PSI):			1500	AIR CONTENT (%)	NA	C-231
DATE REC'D N 21-Feb		4/18/2013		W/C RATIO:	NA	
LOCATION OF POUR:			TEMP CONCRETE (°F):		88	C-1064
PIN: S-38						
			FIELD REMARKS			

LABORATORY TEST DATA								
CYL NO.	DATE OF TEST	AGE (DAYS)	LOAD (lbs)	DIAMETER (in.)	AREA (sq. in.)	COMPRESSIVE STRENGTH (psi)	TESTED BY	FRACTURE TYPE
A	4/20/13	3	2,650	3.04	7.26	370	RA	3
B	4/20/13	3	2,460	3.04	7.26	340	RA	3
C	4/24/13	7	3,570	3.00	7.07	500	LH	6
D	4/24/13	7	3,690	3.00	7.07	520	LH	3
E	5/15/13	28	6,970	3.00	7.07	990	LH	3
F	5/15/13	28	7,110	3.00	7.07	1010	LH	3
G	6/12/13	56						

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GROUT COMPRESSION TEST REPORT

CLIENT: Mr. John Barnes
Earth Tech, LLC
2620 Hunt Road
Land O' Lakes, FL 34638

DATE: 4/25/2013
JOB NO: 6111-13-009

PROJECT: SE County Landfill Stage 4 Sinkhole Remediation
Hillsborough County, FL

SAMPLE NO: 047

FIELD INFORMATION		FIELD TEST DATA		
DATE SAMPLED: 4/18/2013	BY: R.K.	TEMPERATURE: AIR (°F): 80		
CONCRETE SUPPLIER: EARTH TECH	PLANT: HICKS	GALLONS WATER ADDED TO CY		
TRUCK NO: 216	TICKET NO: 180376	ADD'L WATER AUTH. BY:		
TIME MIXED: 7:30 AM	TIME SAMPLED: 8:30 AM	MEASURED	SPECIFIED	ASTM METHOD
DESIGN MIX NO: 324-4	SIZE OF LOAD (CY): 10	SLUMP (IN.) 3.5	3 - 5	C-143
DESIGN COMP. STR. AT 28 DAYS (PSI): 1500		AIR CONTENT (%) NA		C-231
DATE REC'D N 21-Feb	4/22/2013	W/C RATIO: NA		
LOCATION OF POUR:		TEMP CONCRETE (°F): 84		C-1064
PIN: S-19				
		FIELD REMARKS		

LABORATORY TEST DATA								
CYL NO.	DATE OF TEST	AGE (DAYS)	LOAD (lbs)	DIAMETER (in.)	AREA (sq. in.)	COMPRESSIVE STRENGTH (psi)	TESTED BY	FRACTURE TYPE
A	4/22/13	4	3,020	3.04	7.26	420	RA	3
B	4/22/13	4	2,980	3.04	7.26	410	RA	3
C	4/25/13	7	3,420	3.00	7.07	480	LH	3
D	4/25/13	7	3,590	3.00	7.07	510	LH	2
E	5/16/13	28						
F	5/16/13	28						
G	HOLD	H						

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GROUT COMPRESSION TEST REPORT

CLIENT: Mr. John Barnes
Earth Tech, LLC
2620 Hunt Road
Land O' Lakes, FL 34638

DATE: 4/26/2013
JOB NO: 6111-13-009

PROJECT: SE County Landfill Stage 4 Sinkhole Remediation
Hillsborough County, FL

SAMPLE NO: 048

FIELD INFORMATION		FIELD TEST DATA		
DATE SAMPLED: 4/19/2013	BY: R.K.	TEMPERATURE: AIR (°F): 80		
CONCRETE SUPPLIER: EARTH TECH	PLANT: HICKS	GALLONS WATER ADDED TO CY		
TRUCK NO: 216	TICKET NO: 180404	ADD'L WATER AUTH. BY:		
TIME MIXED: 8:15 AM	TIME SAMPLED: 10:20 AM	MEASURED	SPECIFIED	ASTM METHOD
DESIGN MIX NO: 324-4	SIZE OF LOAD (CY):	SLUMP (IN.) 4.5	3 - 5	C-143
DESIGN COMP. STR. AT 28 DAYS (PSI): 1500		AIR CONTENT (%) NA		C-231
DATE REC'D N LAB: 4/22/2013		W/C RATIO: NA		
LOCATION OF POUR:		TEMP CONCRETE (°F): 84		C-1064
PIN: S-34				
		FIELD REMARKS		

LABORATORY TEST DATA								
CYL NO.	DATE OF TEST	AGE (DAYS)	LOAD (lbs)	DIAMETER (in.)	AREA (sq. in.)	COMPRESSIVE STRENGTH (psi)	TESTED BY	FRACTURE TYPE
A	4/23/13	4	2,810	3.00	7.07	400	LH	3
B	4/23/13	4	2,760	3.00	7.07	390	LH	3
C	4/26/13	7	3,320	3.00	7.07	470	LH	3
D	4/26/13	7	3,250	3.00	7.07	460	LH	3
E	5/17/13	28						
F	5/17/13	28						
G	HOLD	H						

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GROUT COMPRESSION TEST REPORT

CLIENT: Mr. John Barnes
Earth Tech, LLC
2620 Hunt Road
Land O' Lakes, FL 34638

DATE: 4/29/2013
JOB NO: 6111-13-009

PROJECT: SE County Landfill Stage 4 Sinkhole Remediation
Hillsborough County, FL

SAMPLE NO: 049

FIELD INFORMATION		FIELD TEST DATA		
DATE SAMPLED: 4/22/2013	BY: R.K.	TEMPERATURE: AIR (°F): 79		
CONCRETE SUPPLIER: EARTH TECH	PLANT: HICKS	GALLONS WATER ADDED TO CY		
TRUCK NO: 218	TICKET NO: 180421	ADD'L WATER AUTH. BY:		
TIME MIXED: 10:46 AM	TIME SAMPLED: 11:39 AM	MEASURED	SPECIFIED	ASTM METHOD
DESIGN MIX NO: 324-4	SIZE OF LOAD (CY): 10	SLUMP (IN.) 5	3 - 5	C-143
DESIGN COMP. STR. AT 28 DAYS (PSI): 1500		AIR CONTENT (%) NA		C-231
DATE REC'D N LAB: 4/23/2013		W/C RATIO: NA		
LOCATION OF POUR:		TEMP CONCRETE (°F): 82		C-1064
PIN: S-45				
		FIELD REMARKS		

LABORATORY TEST DATA								
CYL NO.	DATE OF TEST	AGE (DAYS)	LOAD (lbs)	DIAMETER (in.)	AREA (sq. in.)	COMPRESSIVE STRENGTH (psi)	TESTED BY	FRACTURE TYPE
A	4/25/13	3	2,120	3.00	7.07	300	LH	3
B	4/25/13	3	2,180	3.00	7.07	310	LH	3
C	4/29/13	7	3,330	3.00	7.07	470	LH	3
D	4/29/13	7	3,480	3.00	7.07	490	LH	2
E	5/20/13	28						
F	5/20/13	28						
G	HOLD	H						

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GROUT COMPRESSION TEST REPORT

CLIENT: Mr. John Barnes
Earth Tech, LLC
2620 Hunt Road
Land O' Lakes, FL 34638

DATE: 4/30/2013
JOB NO: 6111-13-009

PROJECT: SE County Landfill Stage 4 Sinkhole Remediation
Hillsborough County, FL

SAMPLE NO: 050

FIELD INFORMATION		FIELD TEST DATA		
DATE SAMPLED: 4/22/2013	BY: R.K.	TEMPERATURE: AIR (°F): 77		
CONCRETE SUPPLIER: EARTH TECH	PLANT: HICKS	GALLONS WATER ADDED TO CY		
TRUCK NO: 218	TICKET NO: 180435	ADD'L WATER AUTH. BY:		
TIME MIXED: 6:44 AM	TIME SAMPLED: 7:35 AM	MEASURED	SPECIFIED	ASTM METHOD
DESIGN MIX NO: 324-4	SIZE OF LOAD (CY): 10	SLUMP (IN.) 5	3 - 5	C-143
DESIGN COMP. STR. AT 28 DAYS (PSI): 1500		AIR CONTENT (%) NA		C-231
DATE REC'D N LAB: 4/25/2013		W/C RATIO: NA		
LOCATION OF POUR:		TEMP CONCRETE (°F): 81		C-1064
PIN: S-37				
		FIELD REMARKS		

LABORATORY TEST DATA								
CYL NO.	DATE OF TEST	AGE (DAYS)	LOAD (lbs)	DIAMETER (in.)	AREA (sq. in.)	COMPRESSIVE STRENGTH (psi)	TESTED BY	FRACTURE TYPE
A	4/26/13	3	2,230	3.00	7.07	320	LH	2
B	4/26/13	3	2,300	3.00	7.07	330	LH	3
C	4/30/13	7	3,590	3.00	7.07	510	LH	3
D	4/30/13	7	3,460	3.00	7.07	490	LH	3
E	5/21/13	28						
F	5/21/13	28						
G	HOLD	H						

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GROUT COMPRESSION TEST REPORT

CLIENT: Mr. John Barnes
Earth Tech, LLC
2620 Hunt Road
Land O' Lakes, FL 34638

DATE: 5/1/2013
JOB NO: 6111-13-009

PROJECT: SE County Landfill Stage 4 Sinkhole Remediation
Hillsborough County, FL

SAMPLE NO: 051

FIELD INFORMATION		FIELD TEST DATA		
DATE SAMPLED: 4/24/2013	BY: R.K.	TEMPERATURE: AIR (°F): 78		
CONCRETE SUPPLIER: EARTH TECH	PLANT: HICKS	GALLONS WATER ADDED TO CY		
TRUCK NO: 218	TICKET NO: 180463	ADD'L WATER AUTH. BY:		
TIME MIXED: 7:25 AM	TIME SAMPLED: 8:16 AM	MEASURED	SPECIFIED	ASTM METHOD
DESIGN MIX NO: 324-4	SIZE OF LOAD (CY): 10	SLUMP (IN.) 4.5	3 - 5	C-143
DESIGN COMP. STR. AT 28 DAYS (PSI): 1500		AIR CONTENT (%) NA		C-231
DATE REC'D N LAB: 4/25/2013		W/C RATIO: NA		
LOCATION OF POUR:		TEMP CONCRETE (°F): 80		C-1064
PIN: T-13				
		FIELD REMARKS		

LABORATORY TEST DATA								
CYL. NO.	DATE OF TEST	AGE (DAYS)	LOAD (lbs)	DIAMETER (in.)	AREA (sq. in.)	COMPRESSIVE STRENGTH (psi)	TESTED BY	FRACTURE TYPE
A	4/29/13	3	3,090	3.00	7.07	440	LH	2
B	4/29/13	3	3,010	3.00	7.07	430	LH	3
C	5/1/13	7	3,440	3.00	7.07	490	LH	3
D	5/1/13	7	3,490	3.00	7.07	490	LH	2
E	5/22/13	28						
F	5/22/13	28						
G	HOLD	H						

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GROUT COMPRESSION TEST REPORT

CLIENT: Mr. John Barnes
Earth Tech, LLC
2620 Hunt Road
Land O' Lakes, FL 34638

DATE: 5/2/2013
JOB NO: 6111-13-009

PROJECT: SE County Landfill Stage 4 Sinkhole Remediation
Hillsborough County, FL

SAMPLE NO: 052

FIELD INFORMATION		FIELD TEST DATA		
DATE SAMPLED: 4/25/2013	BY: R.K.	TEMPERATURE: AIR (°F): 77		
CONCRETE SUPPLIER: EARTH TECH	PLANT: HICKS	GALLONS WATER ADDED TO CY		
TRUCK NO: 218	TICKET NO: 108453	ADD'L WATER AUTH. BY:		
TIME MIXED: 6:50 AM	TIME SAMPLED: 7:40 AM	MEASURED	SPECIFIED	ASTM METHOD
DESIGN MIX NO: 324-4	SIZE OF LOAD (CY): 10	SLUMP (IN.) 3.5	3 - 5	C-143
DESIGN COMP. STR. AT 28 DAYS (PSI): 1500		AIR CONTENT (%) NA		C-231
DATE REC'D N LAB: 4/29/2013		W/C RATIO: NA		
LOCATION OF POUR:		TEMP CONCRETE (°F): 80		C-1064
PIN: T-9				
		FIELD REMARKS		

LABORATORY TEST DATA								
CYL NO.	DATE OF TEST	AGE (DAYS)	LOAD (lbs)	DIAMETER (in.)	AREA (sq. in.)	COMPRESSIVE STRENGTH (psi)	TESTED BY	FRACTURE TYPE
A	4/29/13	4	3,730	3.00	7.07	530	LH	3
B	4/29/13	4	3,680	3.00	7.07	520	LH	3
C	5/2/13	7	4,340	3.00	7.07	610	LH	3
D	5/2/13	7	4,420	3.00	7.07	630	LH	3
E	5/23/13	28						
F	5/23/13	28						
G	HOLD	H						

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GROUT COMPRESSION TEST REPORT

CLIENT: Mr. John Barnes
Earth Tech, LLC
2620 Hunt Road
Land O' Lakes, FL 34638

DATE: 5/3/2013
JOB NO: 6111-13-009

PROJECT: SE County Landfill Stage 4 Sinkhole Remediation
Hillsborough County, FL

SAMPLE NO: 053

FIELD INFORMATION		FIELD TEST DATA		
DATE SAMPLED: 4/28/2013	BY: R.K.	TEMPERATURE: AIR (°F): 81		
CONCRETE SUPPLIER: EARTH TECH	PLANT: HICKS	GALLONS WATER ADDED TO CY		
TRUCK NO: 216	TICKET NO: 180505	ADD'L WATER AUTH. BY:		
TIME MIXED: 9:20 AM	TIME SAMPLED: 10:20 AM	MEASURED	SPECIFIED	ASTM METHOD
DESIGN MIX NO: 324-4	SIZE OF LOAD (CY): 10	SLUMP (IN.) 4.5	3 - 5	C-143
DESIGN COMP. STR. AT 28 DAYS (PSI): 1500		AIR CONTENT (%) NA		C-231
DATE REC'D N LAB: 4/29/2013		W/C RATIO: NA		
LOCATION OF POUR:		TEMP CONCRETE (°F): 85		C-1064
PIN: T-4				
		FIELD REMARKS		

LABORATORY TEST DATA								
CYL NO.	DATE OF TEST	AGE (DAYS)	LOAD (lbs)	DIAMETER (in.)	AREA (sq. in.)	COMPRESSIVE STRENGTH (psi)	TESTED BY	FRACTURE TYPE
A	4/30/13	4	3,270	3.00	7.07	460	LH	3
B	4/30/13	4	3,340	3.00	7.07	470	LH	3
C	5/3/13	7	4,100	3.00	7.07	580	LH	3
D	5/3/13	7	3,890	3.00	7.07	550	LH	2
E	5/24/13	28						
F	5/24/13	28						
G	HOLD	H						

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GROUT COMPRESSION TEST REPORT

CLIENT: Mr. John Barnes
Earth Tech, LLC
2620 Hunt Road
Land O' Lakes, FL 34638

DATE: 5/2/2013
JOB NO: 6111-13-009

PROJECT: SE County Landfill Stage 4 Sinkhole Remediation
Hillsborough County, FL

SAMPLE NO: 054

FIELD INFORMATION		FIELD TEST DATA		
DATE SAMPLED: 4/29/2013	BY: R.K.	TEMPERATURE: AIR (°F): 84		
CONCRETE SUPPLIER: EARTH TECH	PLANT: HICKS	GALLONS WATER ADDED TO CY		
TRUCK NO: 216	TICKET NO: 180515	ADD'L WATER AUTH. BY:		
TIME MIXED: 9:25 AM	TIME SAMPLED: 11:00 AM	MEASURED	SPECIFIED	ASTM METHOD
DESIGN MIX NO: 324-4	SIZE OF LOAD (CY): 10	SLUMP (IN.) 3.5	3 - 5	C-143
DESIGN COMP. STR. AT 28 DAYS (PSI): 1500		AIR CONTENT (%) NA		C-231
DATE REC'D N LAB: 5/1/2013		W/C RATIO: NA		
LOCATION OF POUR:		TEMP CONCRETE (°F): 86		C-1064
PIN: T-3				
		FIELD REMARKS		

LABORATORY TEST DATA								
CYL NO.	DATE OF TEST	AGE (DAYS)	LOAD (lbs)	DIAMETER (in.)	AREA (sq. in.)	COMPRESSIVE STRENGTH (psi)	TESTED BY	FRACTURE TYPE
A	5/2/13	3	2,780	3.00	7.07	390	LH	3
B	5/2/13	3	2,690	3.00	7.07	380	LH	3
C	5/6/13	7						
D	5/6/13	7						
E	5/27/13	28						
F	5/27/13	28						
G	HOLD	H						

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Respectfully Submitted

TIERRA INC.

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7351 Temple Terrace Highway • Tampa, Florida 33637
Phone: (813) 989-1354 • Fax: (813) 989-1355

GROUT COMPRESSION TEST REPORT

CLIENT: Mr. John Barnes
Earth Tech, LLC
2620 Hunt Road
Land O' Lakes, FL 34638

DATE: 5/7/2013
JOB NO: 6111-13-009

PROJECT: SE County Landfill Stage 4 Sinkhole Remediation
Hillsborough County, FL

SAMPLE NO: 055

FIELD INFORMATION		FIELD TEST DATA		
DATE SAMPLED: 4/30/2013	BY: R.K.	TEMPERATURE: AIR (°F): 77		
CONCRETE SUPPLIER: EARTH TECH	PLANT: HICKS	GALLONS WATER ADDED TO CY		
TRUCK NO: 218	TICKET NO: 180532	ADD'L WATER AUTH. BY:		
TIME MIXED: 8:00 AM	TIME SAMPLED: 8:45 AM	MEASURED	SPECIFIED	ASTM METHOD
DESIGN MIX NO: 324-4	SIZE OF LOAD (CY): 10	SLUMP (IN.): 4	3 - 5	C-143
DESIGN COMP. STR. AT 28 DAYS (PSI): 1500		AIR CONTENT (%): NA		C-231
DATE REC'D N LAB: 5/2/2013		W/C RATIO: NA		
LOCATION OF POUR:		TEMP CONCRETE (° F): 83		C-1064
PIN: T-1				
		FIELD REMARKS		

LABORATORY TEST DATA								
CYL NO.	DATE OF TEST	AGE (DAYS)	LOAD (lbs)	DIAMETER (in.)	AREA (sq. in.)	COMPRESSIVE STRENGTH (psi)	TESTED BY	FRACTURE TYPE
A	5/3/13	3	2,760	3.00	7.07	390	LH	3
B	5/3/13	3	2,840	3.00	7.07	400	LH	3
C	5/7/13	7	3,880	3.00	7.07	550	LH	3
D	5/7/13	7	3,940	3.00	7.07	560	LH	3
E	5/28/13	28						
F	5/28/13	28						
G	HOLD	H						

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GROUT COMPRESSION TEST REPORT

CLIENT: Mr. John Barnes
Earth Tech, LLC
2620 Hunt Road
Land O' Lakes, FL 34638

DATE: 5/8/2013
JOB NO: 6111-13-009

PROJECT: SE County Landfill Stage 4 Sinkhole Remediation
Hillsborough County, FL

SAMPLE NO: 056

FIELD INFORMATION		FIELD TEST DATA		
DATE SAMPLED: 5/1/2013	BY: R.K.	TEMPERATURE: AIR (°F): 82		
CONCRETE SUPPLIER: EARTH TECH	PLANT: HICKS	GALLONS WATER ADDED TO CY		
TRUCK NO: 216	TICKET NO: 180547	ADD'L WATER AUTH. BY:		
TIME MIXED: 10:15 AM	TIME SAMPLED: 11:05 AM	MEASURED	SPECIFIED	ASTM METHOD
DESIGN MIX NO: 324-4	SIZE OF LOAD (CY): 10	SLUMP (IN.) 3	3 - 5	C-143
DESIGN COMP. STR. AT 28 DAYS (PSI): 1500		AIR CONTENT (%) NA		C-231
DATE REC'D N LAB: 5/2/2013		W/C RATIO: NA		
LOCATION OF POUR:		TEMP CONCRETE (°F): 86		C-1064
PIN: T-25				
		FIELD REMARKS		

LABORATORY TEST DATA								
CYL NO.	DATE OF TEST	AGE (DAYS)	LOAD (lbs)	DIAMETER (in.)	AREA (sq. in.)	COMPRESSIVE STRENGTH (psi)	TESTED BY	FRACTURE TYPE
A	5/4/13	3	1,980	3.00	7.07	280	LH	3
B	5/4/13	3	2,190	3.00	7.07	310	LH	3
C	5/8/13	7	3,330	3.00	7.07	470	LH	3
D	5/8/13	7	3,420	3.00	7.07	480	LH	3
E	5/29/13	28						
F	5/29/13	28						
G	HOLD	H						

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GROUT COMPRESSION TEST REPORT

CLIENT: Mr. John Barnes
Earth Tech, LLC
2620 Hunt Road
Land O' Lakes, FL 34638

DATE: 5/9/2013
JOB NO: 6111-13-009

PROJECT: SE County Landfill Stage 4 Sinkhole Remediation
Hillsborough County, FL

SAMPLE NO: 057

FIELD INFORMATION		FIELD TEST DATA		
DATE SAMPLED: 5/2/2013	BY: R.K.	TEMPERATURE: AIR (°F): 77		
CONCRETE SUPPLIER: EARTH TECH	PLANT: HICKS	GALLONS WATER ADDED TO CY		
TRUCK NO: 216	TICKET NO: 180560	ADD'L WATER AUTH. BY:		
TIME MIXED: 9:30 AM	TIME SAMPLED: 10:37 AM	MEASURED	SPECIFIED	ASTM METHOD
DESIGN MIX NO: 324-4	SIZE OF LOAD (CY): 10	SLUMP (IN.) 4.5	3 - 5	C-143
DESIGN COMP. STR. AT 28 DAYS (PSI): 1500		AIR CONTENT (%) NA		C-231
DATE REC'D N LAB: 5/3/2013		W/C RATIO: NA		
LOCATION OF POUR:		TEMP CONCRETE (°F): 82		C-1064
PIN: T-24				
		FIELD REMARKS		

LABORATORY TEST DATA								
CYL. NO.	DATE OF TEST	AGE (DAYS)	LOAD (lbs)	DIAMETER (in.)	AREA (sq. in.)	COMPRESSIVE STRENGTH (psi)	TESTED BY	FRACTURE TYPE
A	5/6/13	4	3,230	3.00	7.07	460	LH	3
B	5/6/13	4	3,420	3.00	7.07	480	LH	3
C	5/9/13	7	4,040	3.00	7.07	570	LH	3
D	5/9/13	7	4,100	3.00	7.07	580	LH	3
E	5/30/13	28						
F	5/30/13	28						
G	HOLD	H						

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GROUT COMPRESSION TEST REPORT

CLIENT: Mr. John Barnes
Earth Tech, LLC
2620 Hunt Road
Land O' Lakes, FL 34638

DATE: 5/10/2013
JOB NO: 6111-13-009

PROJECT: SE County Landfill Stage 4 Sinkhole Remediation
Hillsborough County, FL

SAMPLE NO: 058

FIELD INFORMATION		FIELD TEST DATA		
DATE SAMPLED: 5/3/2013	BY: R.K.	TEMPERATURE: AIR (°F): 83		
CONCRETE SUPPLIER: EARTH TECH	PLANT: HICKS	GALLONS WATER ADDED TO CY		
TRUCK NO: 216	TICKET NO: 180583	ADD'L WATER AUTH. BY:		
TIME MIXED: 11:15 AM	TIME SAMPLED: 12:00 PM	MEASURED	SPECIFIED	ASTM METHOD
DESIGN MIX NO: 324-4	SIZE OF LOAD (CY): 10	SLUMP (IN.) 4	3 - 5	C-143
DESIGN COMP. STR. AT 28 DAYS (PSI): 1500		AIR CONTENT (%) NA		C-231
DATE REC'D N LAB: 5/4/2013		W/C RATIO: NA		
LOCATION OF POUR:		TEMP CONCRETE (°F): 85		C-1064
PIN: T-20				
		FIELD REMARKS		

LABORATORY TEST DATA								
CYL. NO.	DATE OF TEST	AGE (DAYS)	LOAD (lbs)	DIAMETER (in.)	AREA (sq. in.)	COMPRESSIVE STRENGTH (psi)	TESTED BY	FRACTURE TYPE
A	5/7/13	4	3,450	3.00	7.07	490	LH	3
B	5/7/13	4	3,620	3.00	7.07	510	LH	3
C	5/10/13	7	4,170	3.00	7.07	590	LH	3
D	5/10/13	7	4,000	3.00	7.07	570	LH	3
E	5/31/13	28						
F	5/31/13	28						
G	HOLD	H						

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GROUT COMPRESSION TEST REPORT

CLIENT: Mr. John Barnes
Earth Tech, LLC
2620 Hunt Road
Land O' Lakes, FL 34638

DATE: 5/9/2013
JOB NO: 6111-13-009

PROJECT: SE County Landfill Stage 4 Sinkhole Remediation
Hillsborough County, FL

SAMPLE NO: 059

FIELD INFORMATION		FIELD TEST DATA		
DATE SAMPLED: 5/6/2013	BY: R.K.	TEMPERATURE: AIR (°F): 84		
CONCRETE SUPPLIER: EARTH TECH	PLANT: HICKS	GALLONS WATER ADDED TO CY		
TRUCK NO: 218	TICKET NO: 180598	ADD'L WATER AUTH. BY:		
TIME MIXED: 12:58 PM	TIME SAMPLED: 4:10 PM	MEASURED	SPECIFIED	ASTM METHOD
DESIGN MIX NO: 624-4	SIZE OF LOAD (CY): 10	SLUMP (IN.) 4	3 - 5	C-143
DESIGN COMP. STR. AT 28 DAYS (PSI): 1500		AIR CONTENT (%) NA		C-231
DATE REC'D N LAB: 5/7/2013		W/C RATIO: NA		
LOCATION OF POUR:		TEMP CONCRETE (°F): 87		C-1064
PIN: T-27				
		FIELD REMARKS		

LABORATORY TEST DATA								
CYL NO.	DATE OF TEST	AGE (DAYS)	LOAD (lbs)	DIAMETER (in.)	AREA (sq. in.)	COMPRESSIVE STRENGTH (psi)	TESTED BY	FRACTURE TYPE
A	5/9/13	3	2,010	3.00	7.07	280	LH	3
B	5/9/13	3	2,100	3.00	7.07	300	LH	3
C	5/13/13	7						
D	5/13/13	7						
E	6/3/13	28						
F	6/3/13	28						
G	HOLD	H						

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GROUT COMPRESSION TEST REPORT

CLIENT: Mr. John Barnes
Earth Tech, LLC
2620 Hunt Road
Land O' Lakes, FL 34638

DATE: 5/14/2013
JOB NO: 6111-13-009

PROJECT: SE County Landfill Stage 4 Sinkhole Remediation
Hillsborough County, FL

SAMPLE NO: 060

FIELD INFORMATION		FIELD TEST DATA		
DATE SAMPLED: 5/7/2013	BY: R.K.	TEMPERATURE: AIR (°F): 82		
CONCRETE SUPPLIER: EARTH TECH	PLANT: HICKS	GALLONS WATER ADDED TO CY		
TRUCK NO: 218	TICKET NO: 180617	ADD'L WATER AUTH. BY:		
TIME MIXED: 7:00 AM	TIME SAMPLED: 7:50 AM	MEASURED	SPECIFIED	ASTM METHOD
DESIGN MIX NO: 324-4	SIZE OF LOAD (CY): 10	SLUMP (IN.) 5	3 - 5	C-143
DESIGN COMP. STR. AT 28 DAYS (PSI): 1500		AIR CONTENT (%) NA		C-231
DATE REC'D N LAB: 5/8/2013		W/C RATIO: NA		
LOCATION OF POUR:		TEMP CONCRETE (°F): 86		C-1064
PIN: T-27				
		FIELD REMARKS		

LABORATORY TEST DATA								
CYL NO.	DATE OF TEST	AGE (DAYS)	LOAD (lbs)	DIAMETER (in.)	AREA (sq. in.)	COMPRESSIVE STRENGTH (psi)	TESTED BY	FRACTURE TYPE
A	5/10/13	3	2,320	3.00	7.07	330	LH	3
B	5/10/13	3	2,180	3.00	7.07	310	LH	3
C	5/14/13	7	3,280	3.00	7.07	460	LH	5
D	5/14/13	7	3,410	3.00	7.07	480	LH	2
E	6/4/13	28						
F	6/4/13	28						
G	HOLD	H						

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GROUT COMPRESSION TEST REPORT

CLIENT: Mr. John Barnes
Earth Tech, LLC
2620 Hunt Road
Land O' Lakes, FL 34638

DATE: 5/15/2013
JOB NO: 6111-13-009

PROJECT: SE County Landfill Stage 4 Sinkhole Remediation
Hillsborough County, FL

SAMPLE NO: 061

FIELD INFORMATION		FIELD TEST DATA		
DATE SAMPLED: 5/8/2013	BY: R.K.	TEMPERATURE: AIR (°F): 83		
CONCRETE SUPPLIER: EARTH TECH	PLANT: HICKS	GALLONS WATER ADDED TO CY		
TRUCK NO: 218	TICKET NO: 180642	ADD'L WATER AUTH. BY:		
TIME MIXED: 12:20 PM	TIME SAMPLED: 1:40 PM	MEASURED	SPECIFIED	ASTM METHOD
DESIGN MIX NO: 324-4	SIZE OF LOAD (CY): 10	SLUMP (IN.) 4.5	3 - 5	C-143
DESIGN COMP. STR. AT 28 DAYS (PSI): 1500		AIR CONTENT (%) NA		C-231
DATE REC'D N LAB: 5/9/2013		W/C RATIO: NA		
LOCATION OF POUR:		TEMP CONCRETE (°F): 86		C-1064
PIN: T-28				
		FIELD REMARKS		

LABORATORY TEST DATA								
CYL. NO.	DATE OF TEST	AGE (DAYS)	LOAD (lbs)	DIAMETER (in.)	AREA (sq. in.)	COMPRESSIVE STRENGTH (psi)	TESTED BY	FRACTURE TYPE
A	5/10/13	2	1,660	3.00	7.07	230	LH	3
B	5/10/13	2	1,780	3.00	7.07	250	LH	3
C	5/15/13	7	2,620	3.00	7.07	370	LH	3
D	5/15/13	7	2,810	3.00	7.07	400	LH	3
E	6/5/13	28						
F	6/5/13	28						
G	HOLD	H						

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Daily Grout Slump Reports

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**CLIENT: Mr. John Barnes
Earth Tech, LLC
2620 Hunt Road
Land O' Lakes, Florida 34638**

DATE: 2/18/13
PROJECT NO: 6111-13-009

**PROJECT NAME: SE County Landfill Stage 4 Sinkhole Remediation
Hillsborough County, FL**

REPORT OF DAILY CONCRETE MONITORING

CONCRETE SUPPLIER:	Hicks	MIX DESIGN NO:	324-4
PLACEMENT LOCATION:	Compaction Grout Points		

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CLIENT: Mr. John Barnes
Earth Tech, LLC
2620 Hunt Road
Land O' Lakes, Florida 34638

DATE: 2/19/13
PROJECT NO: 6111-13-009

**PROJECT NAME: SE County Landfill Stage 4 Sinkhole Remediation
Hillsborough County, FL**

REPORT OF DAILY CONCRETE MONITORING

CONCRETE SUPPLIER: Hicks MIX DESIGN NO: 324-4
 PLACEMENT LOCATION: Compaction Grout Points - Pin #9

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**CLIENT: Mr. John Barnes
Earth Tech, LLC
2620 Hunt Road
Land O' Lakes, Florida 34638**

DATE: 3/7/13
PROJECT NO: 6111-13-009

**PROJECT NAME: SE County Landfill Stage 4 Sinkhole Remediation
Hillsborough County, FL**

REPORT OF DAILY CONCRETE MONITORING

CONCRETE SUPPLIER: Earth Tech MIX DESIGN NO: 324-4
 PLACEMENT LOCATION: Compaction Grout Points

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CLIENT: Mr. John Barnes
Earth Tech, LLC
2620 Hunt Road
Land O' Lakes, Florida 34638

DATE: 3/11/13
PROJECT NO: 6111-13-009

**PROJECT NAME: SE County Landfill Stage 4 Sinkhole Remediation
Hillsborough County, FL**

REPORT OF DAILY CONCRETE MONITORING

CONCRETE SUPPLIER: Earth Tech MIX DESIGN NO: 324-4
 PLACEMENT LOCATION: Compaction Grout Points

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CLIENT: Mr. John Barnes
Earth Tech, LLC
2620 Hunt Road
Land O' Lakes, Florida 34638

DATE: 3/13/13
PROJECT NO: 6111-13-009

**PROJECT NAME: SE County Landfill Stage 4 Sinkhole Remediation
Hillsborough County, FL**

REPORT OF DAILY CONCRETE MONITORING

CONCRETE SUPPLIER: Earth Tech MIX DESIGN NO: 324-4
 PLACEMENT LOCATION: Compaction Grout Points

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CLIENT: Mr. John Barnes
Earth Tech, LLC
2620 Hunt Road
Land O' Lakes, Florida 34638

DATE: 3/21/13
PROJECT NO: 6111-13-009

**PROJECT NAME: SE County Landfill Stage 4 Sinkhole Remediation
Hillsborough County, FL**

REPORT OF DAILY CONCRETE MONITORING

CONCRETE SUPPLIER: Earth Tech MIX DESIGN NO: 324-4
 PLACEMENT LOCATION: Compaction Grout Points

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**CLIENT: Mr. John Barnes
Earth Tech, LLC
2620 Hunt Road
Land O' Lakes, Florida 34638**

DATE: 4/5/13
PROJECT NO: 6111-13-009

**PROJECT NAME: SE County Landfill Stage 4 Sinkhole Remediation
Hillsborough County, FL**

REPORT OF DAILY CONCRETE MONITORING

CONCRETE SUPPLIER: Earth Tech MIX DESIGN NO: 324-4
 PLACEMENT LOCATION: Compaction Grout Points

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CLIENT: Mr. John Barnes
Earth Tech, LLC
2620 Hunt Road
Land O' Lakes, Florida 34638

DATE: 4/8/13
PROJECT NO: 6111-13-009

**PROJECT NAME: SE County Landfill Stage 4 Sinkhole Remediation
Hillsborough County, FL**

REPORT OF DAILY CONCRETE MONITORING

CONCRETE SUPPLIER: Earth Tech MIX DESIGN NO: 324-4
 PLACEMENT LOCATION: Compaction Grout Points

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CLIENT: Mr. John Barnes
Earth Tech, LLC
2620 Hunt Road
Land O' Lakes, Florida 34638

DATE: 4/23/13
PROJECT NO: 6111-13-009

**PROJECT NAME: SE County Landfill Stage 4 Sinkhole Remediation
Hillsborough County, FL**

REPORT OF DAILY CONCRETE MONITORING

CONCRETE SUPPLIER: Earth Tech MIX DESIGN NO: 324-4
 PLACEMENT LOCATION: Compaction Grout Points

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**CLIENT: Mr. John Barnes
Earth Tech, LLC
2620 Hunt Road
Land O' Lakes, Florida 34638**

DATE: 4/24/13
PROJECT NO: 6111-13-009

**PROJECT NAME: SE County Landfill Stage 4 Sinkhole Remediation
Hillsborough County, FL**

REPORT OF DAILY CONCRETE MONITORING

CONCRETE SUPPLIER:	Earth Tech	MIX DESIGN NO:	324-4
PLACEMENT LOCATION:	Compaction Grout Points		

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CLIENT: Mr. John Barnes
Earth Tech, LLC
2620 Hunt Road
Land O' Lakes, Florida 34638

DATE: 5/6/13
PROJECT NO: 6111-13-009

**PROJECT NAME: SE County Landfill Stage 4 Sinkhole Remediation
Hillsborough County, FL**

REPORT OF DAILY CONCRETE MONITORING

CONCRETE SUPPLIER: Earth Tech MIX DESIGN NO: 324-4
 PLACEMENT LOCATION: Compaction Grout Points

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Phone: (813) 989-1354
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CLIENT: Mr. John Barnes
Earth Tech, LLC
2620 Hunt Road
Land O' Lakes, Florida 34638

DATE: 5/8/13
PROJECT NO: 6111-13-009

**PROJECT NAME: SE County Landfill Stage 4 Sinkhole Remediation
Hillsborough County, FL**

REPORT OF DAILY CONCRETE MONITORING

CONCRETE SUPPLIER: Earth Tech MIX DESIGN NO: 324-4
 PLACEMENT LOCATION: Compaction Grout Points

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