2015 SITE ASSESSMENT REPORT
JAQUEZ COM. C#1 AND E#1
SAN JUAN COUNTY, NEW MEXICO

FINAL

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TABLE OF CONTENTS

TABLES

FIGURES

TABLE OF CONTENTS

APPENDICES

1.0 INTRODUCTION

This Site Assessment Report (Report)has been prepared by MWH Americas, Inc. (MWH) on behalf of El Paso CGP Company, LLC (EPCGP) for submittal to the New Mexico Oil Conservation Division (NMOCD) to document soil and groundwater sampling activities performed in 2015 at the Jaquez Com C#1 and E#1 Site in New Mexico (Site). The soil sampling activities were completed along the perimeter and west of an area excavated in 2010 and 2011 to confirm the petroleum impacts in soil did not extend beyond the excavation limits. Three new monitoring wells were also installed in the previous excavation area to assess locations in the excavation where previously collected soil and water samples exhibited concentrations that did not meet applicable closure criteria. Additional soil sampling was completed within the excavation area to better define the lateral extent of soil not meeting applicable closure criteria. Gauging and sampling of four monitoring wells was completed in August and November 2015.

An overview of the release history at the Site, including previously completed assessment and remedial activities is presented in a Remedial Action Summary Report dated October 13, 2014 (Summary Report). Soil and groundwater data provided in this Report is to supplement data contained in the 2014 Summary Report.

2.0 2015 SOIL AND GROUNDWATER SAMPLING ACTIVITIES

This section summarizes the soil boring, soil sampling, monitoring well installation, and groundwater sampling activities performed at the Site in 2015. A work plan summarizing the proposed locations and rationale of the 2015 sampling locations was submitted via electronic mail (e-mail) to the NMOCD on May 18, 2015. The NMOCD approved the proposed locations in an e-mail dated June 5, 2015. For reference, a copy of the proposed work and the June 5, 2015 approval NMOCD approval are included as Attachment A.

2.1 SOIL BORING AND SAMPLING ACTIVITIES

Prior to completing the soil sampling activities, MWH retained the services of Souder Miller and Associates (SMA) to flag the proposed soil boring and monitoring well locations, and mark out the lateral extent of the 2010-2011 soil excavation, as depicted in the October 13, 2014 Remedial Action Summary Report. SMA completed these activities and a topographic survey of the Site on September 1, 2015. The soil boring and monitoring well installation activities were completed by National EWP, Inc. (National). Prior to initiating the sampling activities, National completed a utility locate notification with New Mexico One Call, Inc. to mark the locations of member utilities in and near the work area. National also retained the services of High Mesa Consulting Group to identify and mark non-member or private utilities in the work area, which was completed on September 4, 2015. Permit SJ-4165 for the proposed soil borings and monitoring wells was issued by the New Mexico Office of the State Engineer on August 12, 2015.

From September 9 to 18, 2015, sixty soil borings were advanced to depths between 10 and 30 feet below ground surface (bgs) on site, using a track-mounted direct-push drilling rig. Soil samples were collected for description, field screening, and retention for potential off-site laboratory analysis. The following deviations from the approved Work Plan were made:

- The soil boring logs at the monitoring well locations were designated with the prefix “MW,” rather than “M.”

- Proposed soil boring and monitoring well “M-7” was renumber as “MW-12”, because it was determined that a monitoring well with designation “M-7” had previously been installed at the Site.

- At the request of the property owner, a duplicate soil boring identified as MW-8A was advanced within a few feet of soil boring MW-8 to obtain additional soil samples at this location.

- Soil boring SB-32R was advanced adjacent to soil boring SB-32 in order to evaluate soil conditions below the termination depth of the 2010-2011 excavation, as identified from confirmation soil samples collected from the floor of the excavation immediately east of this location. No soil samples were collected from soil boring SB-32R.

- In order to better delineate field-apparent soil impacts, five additional soils borings, designated SB-73 through SB-77, were completed within the footprint of the 2010-2011 soil excavation to the north and northeast of MW-8 and MW-12.

- Gaps in the "SB" and "MW" sequence represent ten proposed soil borings (SB-13, SB 17, SB-18, SB-28, SB-29, SB-33, SB-40, SB-62, SB-63, and SB-66) and two of the proposed monitoring well locations (MW-10 and MW-11) which were not completed. Soil borings SB-17, SB-18, SB-40, SB-62, SB-63 and SB-66, and MW-10 and MW-11, were not advanced due to constraints prohibiting rig access or proximity to identified subsurface utilities. Soil borings SB-13, SB-28, SB-29 and SB-33 were not completed, based on the lack of hydrocarbon impacts noted in samples obtained from soil borings completed between these locations and the 2010-2011 excavation area.

  The locations of soil borings SB-14, SB-19, SB-21, SB-23, SB-26, SB-27, SB-30, SB-31, SB-32, SB-39, SB-41, SB-42, SB-44, SB-46, SB-51, SB-58, SB-59, SB-60, SB-64, SB-67, SB-69, SB-70 and SB-71, were adjusted from the original staked locations by up to 10 feet to avoid subsurface utilities or to accommodate access of the rig. The completed locations were staked upon completion and their locations surveyed by SMA on September 22, 2015.

The locations of pertinent site features, soil borings, and monitoring wells as completed are depicted in Figure 1.

With the exception of the first 5 feet bgs at each soil boring location, soil sampling activities were completed to depth using 2-inch diameter Macro-core® samplers, each 5 feet in length, and equipped with disposable liners. To clear the borehole for shallow unmarked utilities or other obstructions, each soil boring was first manually hand-augured to a depth of 5 feet bgs. The soil cores obtained from each soil boring were examined, and field screened using a properly calibrated photoionization detector (PID).

Recovered soil samples were examined for visual and olfactory indications of petroleum impact and general moisture content, measured to determine percent recovery, described according to general Unified Soil Classification System (USCS) methods, and field screened with a PID. Field screening was completed by opening the retrieved direct-push liner following its retrieval and recording PID readings at 1-foot intervals from the freshly-exposed soil core surface or sample as it was "notched" with a clean trowel. Beginning on September 10, 2015, soil sample cores were also photographed, and headspace screening was completed in addition to screening notches in the cored soil. Headspace analysis was accomplished by placing a portion of the retrieved sample in a zip lock bag, sealing it, and letting it stabilize for at least 10 minutes before screening the bag headspace with a PID. The PID was equipped with a 10.6 electronvolt (eV) lamp and calibrated daily. The lithological logging, field observations, field-screening measurements, and headspace measurements are documented on soil boring logs, included as Appendix B. A photographic log of the recovered soil boring cores and general site conditions is included as Appendix C.

Based on field-screening results, a portion of the sample interval above the field-apparent water table that exhibited the highest PID reading was retained from each boring for submittal for laboratory analysis. The soil cores were handled by field staff wearing Nitrile gloves. Gloves were changed between sampling intervals. The retained soil samples were placed in laboratory-provided containers, sealed, labeled, and placed in a cooler on ice. Prior to capping, the jar threads were wiped to remove excess soil. The soil sample containers retained for laboratory analysis were labeled with the Site name, date, sample designation, sample depth, project name, collector's name, time of collection, and parameters to be analyzed. The retained soil samples were handled according to chain-of-custody (COC) procedures and shipped on ice in insulated coolers to TestAmerica Laboratories, Inc. (TestAmerica) in Pensacola, Florida via overnight commercial courier.

The soil samples were submitted for analysis of gasoline range organics (GRO) and diesel range organics (DRO) by USEPA SW-846 Method 8015B; benzene, toluene, ethylbenzene, and total xylenes (BTEX) by USEPA SW-846 Method 8021; and chloride by EPA Method 300. A summary of the soil samples retained from each soil boring, including field screening and headspace readings, is presented as Table 1. Soil samples not selected for laboratory analysis were disposed with the drill cuttings.

During a portion of the soil boring and sampling activities conducted by MWH on September 11, and from September 14 to 18, 2015, EnviroTech, Inc. (EnviroTech) of Farmington, New Mexico, was on site on behalf of the property owner, to observe field activities and collect split soil samples from a portion of the soil borings completed. It is EPCGP's understanding EnviroTech intended to analyze some or all of the split soil samples they retained. As of the completion of this Report, neither MWH nor EPCGP have been provided a copy of laboratory results or other information collected by EnviroTech.

Upon completion of each soil boring, the boring was sealed with bentonite granules, and the location re-marked with a flag to allow for SMA to verify its location and survey-in the ground surface elevation.

2.2 MONITORING WELL INSTALLATION ACTIVITIES

On September 10 and 11, 2015, three groundwater monitoring wells (MW-8, MW-9, and MW-12) were installed and completed in the previous excavation area to obtain groundwater samples at previously reported locations where groundwater samples collected from the floor of the 2010 / 2011 soil excavation contained dissolved hydrocarbon concentrations exceeding applicable New Mexico Water Quality Control Commission (NMWQCC) water quality standards for groundwater containing 10,000 milligrams per liter (mg/L) or less of total dissolved solids (Standard). As indicated above, proposed monitoring wells MW-10 and MW-11 were not installed due to constraints of site access. Monitoring wells MW-8 and MW-12 were installed south of the Citizens Ditch and MW-9 was installed north of the Citizens Ditch.

National over-drilled soil borings MW-8, MW-9 and MW-12 to complete each monitoring well. Due to its proximity to soil boring MW-8, soil boring MW-8A was also over-drilled to accommodate installation of well MW-8. Prior to advancing augers, the location of each monitoring well was

cleared for potential subsurface utilities or other obstacles to a depth of 5-feet bgs, using a post-hole digger and hand-augers. Following utility clearance, the boreholes were advanced to depth with hollow-stem augers equipped with polyethylene knock-out plugs. No soil sampling or logging was completed during advancement of the augers. Once the augers were advanced to the targeted depth, the knock-out plug was dislodged and a monitoring well was constructed. The total depths of the new monitoring wells were approximately 18 feet bgs at MW-8 and MW-12, and 29 feet at MW-9.

Monitoring wells were constructed of 2-inch-diameter, Schedule 40 polyvinyl chloride (PVC), with 15 foot-long 0.010-inch slot, continuous, factory-slotted PVC screen. Each well was constructed for the screened interval to intersect the water table. A minimum 1-foot seal of bentonite chips was placed above the sandpack and hydrated, and the remaining annular space was filled with bentonite grout to within 6-inches of the ground surface. The surface completion of each of the monitoring wells utilized a bolted, traffic rated steel well-box cover, a compression well cap, and a concrete surface completion sloped away from the well vault to shed precipitation. The monitoring well construction diagrams are provided in Appendix D, and the locations of the monitoring wells are depicted in Figure 1. Ground surface and well casing elevations and the locations of marked utilities were surveyed on September 22, 2015 by SMA, and are presented along with the soil borings in a site drawing included as Appendix E.

Following monitoring well installation, each well was developed using a swabbing method followed by pumping water from the well using a submersible pump or bailer. The extent of monitoring well development was determined in the field using indicators of improved water clarity and removed water volume. Following completion of the well development, HydraSleeves™ were installed in each monitoring well to facilitate groundwater sampling during a subsequent site visit.

MWH also completed a visual survey for previously-installed monitoring and remediation wells, with pre-existing monitoring well M-6 the only well located. Well M-6 (subsequently identified as MW-6) was opened, inspected, and found to be partially filled with fine roots. The roots were dislodged and removed with a weighted disposable bailer to accommodate installation of a HydraSleeve™ sampling device for future groundwater sampling.

2.3 GROUNDWATER SAMPLING ACTIVITIES

Groundwater samples were collected on September 19, 2015 and November 20, 2015 from the four monitoring wells at the Site (MW-6, MW-8, MW-9, and MW-12). Prior to groundwater sample collection, the water level in each well was measured using an electronic oil-water interface probe. Groundwater samples were collected using a previously installed HydraSleeve™, a single-use, disposable, no-purge passive groundwater sampling device. Each HydraSleeve™ was set approximately 5 to 8 feet below the top of the water column in the monitoring well using a suspension tether and stainless steel weights to collect a sample from the screened interval. On September 19, 2015, due to the insufficient size of the previously deployed HydraSleeves™, the monitoring wells had to be purged of three well volumes and sampled using disposable polyethylene bailers to obtain the necessary sample volume. Large- sized HydraSleeves™ were used to sample the wells during the November 20, 2015 sampling event, and provided the

required sample volume. The larger sized HydraSleeve™ will be utilized for all future sample events.

Recovered groundwater was carefully poured into laboratory-supplied sample containers, packed on ice in an insulated cooler, and shipped under standard chain-of-custody protocol to TestAmerica. The samples were analyzed for BTEX using EPA Method 8021, GRO, DRO, and MRO using EPA Method 8015, and chlorides using Standard Method 4500. One laboratory-provided trip blank, which accompanied the sample containers from the laboratory, was also submitted for laboratory analyses for BTEX constituents using EPA Method 8021. Field parameters dissolved oxygen, temperature, conductivity, pH, and oxidation-reduction potential (ORP) were also measured in the monitoring wells following sample collection using an YSI multi-parameter meter.

Water remaining in the HydraSleeve™ was combined in a waste container with other investigation derived water for subsequent disposal off site. Following collection of each groundwater sample, new HydraSleeves™ were deployed in the monitoring wells to facilitate groundwater sampling during a subsequent sampling event.

2.4 GENERAL PROTOCOLS

This section presents a discussion of documentation procedures, location identification, sampling methods, and other procedures performed as part of the field work.

2.4.1 Documentation Procedures

The field environmental scientist/geologist maintained a field logbook including the following information:

- Date
- Name and location of the work activities
- Weather conditions
- Personnel and visitors on site
- Field screening results (separate sheets)
- Sample locations and methods (including sampling equipment), time of sample collection, and sample depths (separate sheets)
- Samples submitted to the laboratory for analyses (separate sheets)
- Schematic drawings of sample locations (separate sheets)
- Relevant observations as the field work progresses
- Problems and corrective actions

2.4.2 Sample Labeling, Handling, and Shipping

A sample label was placed on each sample container submitted for analysis and included the project name and location, sample designation (including depth interval, when appropriate), date and time of collection, preservative (when applicable), sampler's initials, and required analyses. Soil and groundwater sample containers were placed in clean protective foam or bubble pack sleeves.

A COC form was completed and accompanied each sample cooler. The COC form included project identification, project location, sample designation, analysis type, and shipping account information. The COC form was completed in duplicate. Sampling personnel inventoried the sample bottles from the Site prior to shipment to verify that all samples listed on the COC form were present. All laboratory samples were shipped in coolers containing bagged ice. Each cooler contained a sealed temperature blank and coolers containing groundwater samples intended for BTEX analyses also contained a Trip Blank sample. The originals of the COC forms were sealed in a waterproof plastic bag and placed inside the shipping cooler prior to sealing of the cooler. The cooler was taped shut and custody seals were placed across the cooler lid.

All samples were transported by field personnel and via a commercial carrier (e.g., FedEx Priority Service). Upon receipt, the laboratory recorded the temperature of the blank on the COC form.

2.4.3 Equipment Decontamination

Prior to collecting any sample and between sampling locations, small sampling tools (e.g., hand-auger, trowels, YSI multi-parameter meter, and oil-water level probe) were decontaminated using a non-phosphate detergent (e.g., Alconox®) and distilled water wash followed by a distilled water rinse. Down-hole drilling equipment was decontaminated between locations using a high-pressure, hot water wash.

2.4.4 Investigation-Derived Waste

Investigation-derived wastes consisting of drill-cuttings and excess soil samples were containerized in labeled drums, and transported off site for landfarming at the Envirotech Land Farm. A copy of the drum disposal documentation is included as Appendix F. Decontamination, development, and purge water was containerized in a poly tank and removed from the site for treatment at Basin Disposal.

2.4.5 Field Equipment Calibration Procedures

Field personnel used a PID equipped with a 10.6 eV lamp for soil sample screening of organic vapors. The PID was calibrated daily using an isobutylene standard prior to use according to the manufacturer's procedures. Calibration information was recorded on the daily field notes.

3.0 2015 SOIL AND GROUNDWATER RESULTS

This section summarizes the results of soil sampling, and groundwater monitoring and sampling results performed at the Site by MWH in 2015.

3.1 SOIL ANALYTICAL RESULTS

A summary of the soil analytical results is presented in Table 2. The laboratory analytical reports for the soil samples are included in Appendix F. The soil sample results were compared with Table I in Attachment A to the New Mexico Oil Conservation Commission Order Number R-13506-D, dated June 6, 2013 (2013 Pit Rule). The applicable criteria for the Site are 10 milligram per kilogram (mg/kg), 50 mg/kg, and 100 mg/kg for benzene, total BTEX, and TPH (GRO + DRO + MRO), respectively.

A total of 59 soil samples were collected as part of the September 2015 assessment activities. Fifty samples were collected around and within the perimeter of the 2010-2011 excavation area or to the west of the excavation area towards existing buildings. Nine soil samples were collected inside the perimeter of the excavated area. Of the 50 soil samples collected outside the excavation perimeter, 49 of the samples contained concentrations of benzene, total BTEX, and TPH concentrations either below the applicable 2013 Pit Rule site closure criteria, or below laboratory reporting limits. The soil sample from soil boring SB-54 (5-6.5 feet bgs), located along the southeast excavation perimeter, contained a reported total TPH concentration of 109 mg/kg, which exceeds the 2013 Pit Rule site closure criteria of 100 mg/kg.

Nine soil samples were collected from borings advanced within the footprint of the 2010-2011 excavation area. Soil samples from borings SB-72, SB-74, MW8/MW-8A, and MW-12, located in the southern portion of the excavation area, and the soil sample collected from soil boring MW-9 in the northern portion of the excavation area contained concentrations of total BTEX and/or total TPH exceeding the applicable 2013 Pit Rule site closure criteria.

The criteria for total BTEX (50 mg/kg) was exceeded in SB-74 at 4-6 feet bgs (61.9 mg/kg) and MW-8A at 7-8 feet bgs (84.6 mg/kg). The criteria for total TPH (100 mg/kg) was exceeded in SB-72 at 6-7 feet bgs (155 mg/kg), SB-74 at 4-6 feet bgs (2,247 mg/kg), MW-8 at 7-8 feet bgs (1,126 mg/kg), MW-8A at 7-8 feet bgs (1,913 mg/kg), MW-12 at 5.5-7.5 feet bgs (189 mg/kg), MW-9 at 16-17.5 feet bgs (1,387 mg/kg).

Figure 2 depicts locations of the soil samples where analytical results exceeded applicable 2013 Pit Rule criteria. As depicted on Figure 2, locations of soil samples exceeding applicable 2013 Pit Rule criteria in the southern portion of the 2010-2011 excavation area, with the exception of the sample collected from SB-54, are generally well delineated by other soil samples collected during the 2015 assessment activities, and post-excavation soil samples collected in 2010 and 2011.

3.2 GROUNDWATER GAUGING DATA

Table 3 summarizes monitoring well gauging data collected from the four existing site monitoring wells, MW-6, MW-8, MW-9 and MW-12, on September 19, 2015 and November 20, 2015. Light non-aqueous phase liquid was not detected in the four monitoring wells during either gauging event. On September 12, 2015, MWH completed a visual inspection for monitoring wells M-1, M-2, M-5 and M-7, located outside of the footprint of the 2010-2011 soil excavation. The four wells could not be located, and are assumed to have been destroyed. The monitoring and remediation wells which previously existed inside of the excavation footprint were removed as part of the 2010-2011 soil excavation activities.

Groundwater elevation contours based on the measured water levels in September and November 2015 are depicted in Figures 4 and 5, respectively. Based on the groundwater gauging data, apparent groundwater flow at the Site during both gauging events is toward the southwest. The calculated hydraulic gradient between monitoring wells MW-9 and MW-6 was approximately 0.015 foot/foot for the September 19, 2015 sampling event, and approximately 0.013 foot/foot for the November 20, 2015 event.

Based on static groundwater measurements collected from monitoring wells MW-8, MW-9, and MW-12, soil samples collected from these locations were below the measured water table in these wells.

3.3 GROUNDWATER ANALYTICAL RESULTS

Groundwater samples were collected from the four site monitoring wells (MW-6, MW-8, MW-9, and MW-12) on September 19, 2015 and on November 20, 2015 and analyzed for BTEX, GRO, DRO, MRO, and chloride. A summary of the groundwater analytical results is presented in Table 4. The laboratory analytical reports for the groundwater samples are included in Appendix G. The groundwater sample results were compared against the NMWQCC Standards. The applicable NMWQCC standards for the Site are 10 micrograms per liter (µg/L), 750 µg/L, 750 µg/L, 620 µg/L, and 250 mg/L for benzene, toluene, ethylbenzene, total xylenes, and chloride, respectively.

For the September 19, 2015 sampling event, the groundwater sample collected from monitoring well MW-8 contained a benzene concentration of 18 micrograms per liter (µg/L), exceeding the applicable NMWQCC Standard of 10 µg/L. The concentration of benzene in the remaining monitoring wells was either below reporting limits (BRLs) or below the NMWQCC Standard for benzene. The concentration of toluene, ethylbenzene, and xylenes in the four monitoring wells was also BRL or below the applicable NMWQCC Standard. The concentrations of chloride in the four monitoring wells were below the applicable NMWQCC Standard. Detectable concentrations of GRO were reported for the samples collected from MW-8, MW-9, and MW-12, and detectable concentrations of DRO were reported for MW-6; however, a NMWQCC Standard has not been established for these analytes. A NMWQCC Standard for TPH also has not been established.

For the November 20, 2015 sampling event, the concentrations of each of the individual BTEX components and Total BTEX in the four monitoring wells were BRL or below the applicable NMWQCC Standard. The concentrations of chloride in the four monitoring wells were below the

applicable NMWQCC Standard. Detectable concentrations of GRO were reported in the samples collected from MW-8, MW-9 and MW-12; however, a NMWQCC Standard has not been established. Detectable concentrations of DRO were reported in the samples collected from MW-6, MW-8 and MW-9; however, a NMWQCC Standard has not been established. An NMWQCC Standard for TPH also has not been established.

Figure 3 depicts the location of the groundwater sample where the analytical result for benzene exceeded the applicable NMWQCC Standard. Location MW-8, the only location where a NMWQCC groundwater standard was exceeded, also had a soil sample with Total BTEX, and TPH results exceeding the applicable 2013 Pit Rule criteria. Groundwater samples collected from monitoring wells MW-9 and MW-12, which were also installed in areas where sample results exceeded the applicable 2013 Pit Rule criteria, did not have a NMWQCC groundwater standard exceedance.

4.0 SUMMARY

A soil and groundwater assessment of the Site was conducted in 2015 to further evaluate conditions since completion of a large soil excavation in 2010 and 2011. Soil sampling activities included the advancement of 60 soil borings, and submittal of 59 soil samples for laboratory analysis. Only one soil sample collected from outside the excavation footprint (SB-54, collected at a depth of 5 to 6.5 feet bgs) exceeded the applicable 2013 Pit Rule site closure criteria. Five soil samples collected within the excavation footprint exceeded applicable 2013 Pit Rule site closure criteria. With the exception of the SB-54 sample, the locations of soil samples exceeding applicable Pit Rule site closure criteria in the southern portion of the excavation area are generally well delineated by samples collected during the 2015 assessment activities, and post-excavation soil samples collected in 2010 and 2011.

Monitoring wells MW-9 and MW-12 were completed within the footprint of the 2010-2011 soil excavation, at locations where groundwater samples collected from the floor of the excavation in 2011 exceeded an applicable NMWQCC Standard. Monitoring well MW-8 was completed at the location of former monitoring well M-4, where a groundwater exceedance had been reported in 2010. Two additional wells planned for installation along the northern edge of the Site could not be completed due to the proximity of pipelines and fencing. One existing monitoring well, MW-6, was also sampled as part of this investigation.

The four monitoring wells were gauged and sampled in September and November 2015. Measureable LNAPL was not encountered in the monitoring wells. The groundwater sample collected from MW-8, installed adjacent to former monitoring well M-4, contained a reported concentration (18 µg/L benzene), exceeding the NMWQCC standard (10 µg/L). The remaining results from the September 2015 groundwater sampling event did not exceed applicable NMWQCC standards. NMWQCC standards were not exceeded in any of the groundwater samples collected in November 2015.

TABLES

TABLE 1

SUMMARY OF SOIL SAMPLE FIELD SCREENING– SEPTEMBER 2015
JAQUEZ E#1 AND C#1

Boring ID	Date	Sample Depth	PID (Screen)	PID (Headspace)	Odor?	Split Sample with Envirotech?	Soil Boring Total Depth	Core photographed?	Notes
MW(M)-8	9/10/2015	7-8	218.4	N/A	Yes	No	15	No	
MW(M)-9	9/11/2015	16-17.5	446-26.9	430.2-32.7	Yes	Yes	30	Yes	
MW-12 (7)	9/11/2015	5.5-7.5	119.5-1105	119.5-1165	Yes	Yes	20	Yes	
MW-8R	9/10/2015	7-8	390.6	N/A	Yes	No	20	Yes	Advanced as replicate of M-8, at the request of the property owner.
SB-14	9/17/2015	12-13	0.0	10.5	No	No	20	Yes	
SB-15	9/17/2015	10.5-12.5	0.0-0.0	2.7-1.4	No	No	20	Yes	
SB-16	9/18/2015	5.9-6.8	0.0	3.9	No	No	15	Yes	
SB-19	9/14/2015	12-13	0.0	0.8	No	No	20	Yes	
SB-20	9/18/2015	5-7	0.0-0.0	2.2-1.2	No	Yes	15	Yes	
SB-21	9/17/2015	6.7-7.7	0.0	1.9	No	No	20	Yes	
SB-22	9/17/2015	10-11	0.0	4.0	No	No	20	Yes	
SB-23	9/17/2015	4-5	0.0	8.8	No	No	15	Yes	
SB-24	9/17/2015	3-4	0.0	11.6	No	No	15	Yes	
SB-25	9/17/2015	5-6	0.0	7.2	No	No	20	Yes	
SB-26	9/17/2015	5-6	0.0	3.6	No	No	20	Yes	
SB-27	9/14/2015	6-7	0.0	5.2	No	No	12	Yes	
SB-30	9/16/2015	5-6	0.0	3.5	No	No	20	Yes	
SB-31	9/16/2015	5-6	0.0	8.2	No	No	20	Yes	
SB-32	9/13/2015	3-4	0.0	5.3	No	No	10	Yes	
SB-32R	9/15/2015	NS	NS	NS	No	No	20	Yes	Advanced to assess conditions adjacent to SB-32 at depths of 10-20 feet bgs.
SB-34	9/18/2015	5-6.5	0.0-0.0	1.1-1.2	No	No	20	Yes	
SB-35	9/16/2015	6-7	0.0	4.4	No	No	20	Yes	
SB-36	9/16/2015	5-6	0.0	2.5	No	Yes	20	Yes	
SB-37	9/15/2015	5-7	0.0-0.0	2.0-2.2	No	Yes	20	yes	
SB-38	9/13/2015	6-7.5	0.7-0.5	10.1-7.7	No	No	15	Yes	
SB-39	9/18/2015	6.5-8.5	0.0-0.0	3.6-3.8	No	Yes	20	Yes	
SB-41	9/15/2015	5-7	0.1-0.1	0.6-2.5	No	Yes	20	yes	
SB-42	9/13/2015	6.8-7.8	0.5-0.2	8.0-11.2	No	No	15	Yes	
SB-43	9/15/2015	10-11	0.0	1.0	No	No	20	Yes	
SB-44	9/15/2015	5-6	0.0	4.7	No	No	15	Yes	
SB-45	9/15/2015	5-6	0.0	4.2	No	Yes	15	yes	
SB-46	9/14/2015	5-6.5	0.0-0.0	1.0-1.2	No	No	15	Yes	
SB-47	9/15/2015	5-6.5	0.0-0.0	0.6-1.0	No	No	15	Yes	
SB-48	9/15/2015	5-6	0.0	0.9	No	No	15	Yes	

TABLE 1

SUMMARY OF SOIL SAMPLE FIELD SCREENING– SEPTEMBER 2015
JAQUEZ E#1 AND C#1

Boring ID	Date	Sample Depth	PID (Screen)	PID (Headspace)	Odor?	Split Sample with Envirotech?	Soil Boring Total Depth	Core photographed?	Notes
SB-49	9/12/2015	3-4	0.0	10.9	No	No	10	Yes	
SB-50	9/12/2015	4-5	0.0	7.0	No	No	10	Yes	
SB-51	9/13/2015	5-6	0.0	3.8	No	No	11	Yes	
SB-52	9/9/2015	5-6	13.7	N/A	No	No	20	No	
SB-53	9/9/2015	5-6	0.0	N/A	No	No	16	No	
SB-54	9/9/2015	5-6.5	0.3	N/A	No	No	12	No	
SB-55	9/9/2015	5-7	0.0	N/A	No	No	15	No	
SB-56	9/12/2015	3-4.5	0.0-0.0	28.4-0.7	No	No	10	Yes	
SB-57	9/12/2015	5-6	0.0	1.5	No	No	11	Yes	
SB-58	9/12/2015	3-4	0.0	1.2	No	No	10	Yes	
SB-59	9/12/2015	4-5	0.0	1.0	No	No	10	Yes	
SB-60	9/12/2015	4-5	0.0	1.1	No	No	10	Yes	
SB-61	9/12/2015	6-7	0.0	1.8	No	No	12	Yes	
SB-64	9/11/2015	10-12	0.1-0.1	0.5-1.7	No	Yes	22	Yes	
SB-65	9/14/2015	15-16	0.1	6.8	No	No	21	Yes	
SB-67	9/14/2015	15-16	0.0	16.4	No	No	21	Yes	
SB-68	9/14/2015	15-16	0.0	6.8	No	No	21	Yes	
SB-69	9/13/2015	10.6-11.6	0.0	6.3	No	No	20	Yes	
SB-70	9/13/2015	11-12	0.0-0.0	3.3-6.3	No	No	17	Yes	
SB-71	9/13/2015	11-12	0.0	10.2	No	No	17	Yes	
SB-72	9/12/2015	6-7	1587.6	1525	Yes	No	12	Yes	
SB-73	9/16/2015	6.7-7.7	0.1-0.2	2.8-37.5	Yes	No	20	Yes	Added to assess conditions north of SB-72 and M-8.
SB-74	9/16/2015	4-6	760.7-165.3	1222-1181.6	Yes	Yes	20	Yes	Added to assess conditions northeast of M-8.
SB-75	9/16/2015	5-7	2.1-0.0	4.2-3.5	No	Yes	15	Yes	Added to assess conditions east of M-8 and M-12 (formerly M-7).
SB-76	9/18/2015	3-5	0.3-0.1	9.5-8.6	No	Yes	15	Yes	Added to assess conditions north of SB-74.
SB-77	9/18/2015	3-4	0.0	2.8	No	Yes	15	Yes	Added to assess conditions northeast of SB-74.

Notes:

All depths in feet below ground surface (bgs).
Field Screening and Headspace Readings in parts per million vapor.
M-10 and M-11 skipped as the locations were too close to the fenceline and pipeline to safely complete.
SB-62 and SB-63 skipped as the locations are along the steep side of the irrigation dirt berm, and rig access.
SB-66 skipped due to its proximity to an existing pipeline.
SB-18, SB-17, and SB-40 skipped as the locations are in conflict with surface structures or obstructions, preventing their completion.
SB-13, SB-28, SB-29, and SB-33 skipped at the request of the client.

TABLE 2

SUMMARY OF SOIL ANALYTICAL RESULTS – SEPTEMBER 2015
JAQUEZ E#1 AND C#1

	Depth (feet bgs)	Date (dd-mmm-yy)	Analytical Parameter									
			Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Total Xylenes (mg/kg)	Total BTEX (mg/kg)	TPH-GRO (C6-C10) (mg/kg)	TPH (C10-C28) (mg/kg)	TPH (C28-C35) (mg/kg)	Total TPH (mg/kg)	Chloride (mg/kg)
NMOCD Standard			10	NE	NE	NE	50	NE	NE	NE	100	600
SB-13	Soil boring not completed based on adjacent soil boring observations											
SB-14 (12-13')	12	17-Sep-15	BRL	BRL	BRL	BRL	0.0	BRL	BRL	BRL	0.0	BRL
SB-15 (10.5-12.5')	10.5	17-Sep-15	BRL	BRL	BRL	BRL	0.0	BRL	BRL	BRL	0.0	BRL
SB-16 (5.8-6.8')	5.8	18-Sep-15	BRL	BRL	BRL	BRL	0.0	BRL	BRL	BRL	0.0	BRL
SB-17	Soil boring not completed due to lack of access (building/debris)											
SB-18	Soil boring not completed due to lack of access (building/debris)											
SB-19 (12-13')	12	14-Sep-15	BRL	BRL	BRL	BRL	0.0	BRL	BRL	BRL	0.0	BRL
SB-20 (5-7')	5	18-Sep-15	BRL	BRL	BRL	BRL	0.0	BRL	BRL	BRL	0.0	BRL
SB-21 (6.7-7.7')	6.7	17-Sep-15	BRL	BRL	BRL	BRL	0.0	BRL	BRL	BRL	0.0	BRL
SB-22 (10-11')	10	17-Sep-15	BRL	BRL	BRL	BRL	0.0	BRL	BRL	BRL	0.0	BRL
SB-23 (4-5')	4	17-Sep-15	BRL	BRL	BRL	BRL	0.0	BRL	BRL	BRL	0.0	BRL
SB-24 (3-4')	3	17-Sep-15	BRL	BRL	BRL	BRL	0.0	BRL	BRL	BRL	0.0	BRL
SB-25 (5-6')	5	17-Sep-15	BRL	BRL	BRL	BRL	0.0	BRL	BRL	BRL	0.0	BRL
SB-26 (5-6')	5	17-Sep-15	BRL	BRL	BRL	BRL	0.0	BRL	BRL	BRL	0.0	BRL
SB-27 (6-7')	6	14-Sep-15	BRL	BRL	BRL	BRL	0.0	BRL	BRL	BRL	0.0	BRL
SB-28	Soil boring not completed based on adjacent soil boring observations											
SB-29	Soil boring not completed based on adjacent soil boring observations											
SB-30 (5-6')	5	16-Sep-15	BRL	BRL	BRL	BRL	0.0	BRL	BRL	BRL	0.0	BRL
SB-31 (5-6')	5	16-Sep-15	BRL	BRL	BRL	BRL	0.0	BRL	BRL	BRL	0.0	BRL
SB-32 (3-4')	3	13-Sep-15	BRL	BRL	BRL	BRL	0.0	BRL	BRL	BRL	0.0	BRL
SB-33	Soil boring not completed based on adjacent soil boring observations											
SB-34 (5-6.5')	5	18-Sep-15	BRL	BRL	BRL	BRL	0.0	BRL	BRL	BRL	0.0	BRL
SB-35 (6-7')	6	16-Sep-15	BRL	BRL	BRL	BRL	0.0	BRL	BRL	BRL	0.0	BRL
SB-36 (5-6')	5	16-Sep-15	BRL	BRL	BRL	BRL	0.0	BRL	BRL	BRL	0.0	BRL
SB-37 (5-7')	5	15-Jun-15	BRL	BRL	BRL	BRL	0.0	BRL	BRL	BRL	0.0	BRL
SB-38 (6.5-7.5')	6.5	13-Sep-15	BRL	BRL	BRL	BRL	0.0	BRL	BRL	BRL	0.0	BRL
SB-39 (6.5-8.5')	6.5	18-Sep-15	BRL	BRL	BRL	BRL	0.0	BRL	BRL	BRL	0.0	BRL
SB-40	Soil boring not completed based on lack of access (building/debris)											
SB-41 (5-7')	5	15-Sep-15	BRL	BRL	BRL	BRL	0.0	BRL	BRL	BRL	0.0	BRL
SB-42 (6.8-7.8')	6.8	13-Sep-15	BRL	BRL	BRL	BRL	0.0	BRL	BRL	BRL	0.0	BRL
SB-43 (10-11')	10	15-Sep-15	BRL	BRL	BRL	BRL	0.0	BRL	BRL	BRL	0.0	BRL
SB-44 (5-6')	5	15-Sep-15	BRL	BRL	BRL	BRL	0.0	BRL	BRL	BRL	0.0	BRL
SB-45 (5-6')	5	15-Sep-15	BRL	BRL	BRL	BRL	0.0	BRL	BRL	BRL	0.0	BRL
SB-46 (5-6.5')	5	14-Sep-15	BRL	BRL	BRL	BRL	0.0	BRL	BRL	BRL	0.0	BRL
SB-47 (5-6')	5	15-Sep-15	BRL	BRL	BRL	BRL	0.0	BRL	BRL	BRL	0.0	BRL
SB-48 (5-6')	5	15-Sep-15	BRL	BRL	BRL	BRL	0.0	BRL	BRL	BRL	0.0	BRL
SB-49 (3-4')	3	12-Sep-15	BRL	BRL	BRL	BRL	0.0	BRL	BRL	BRL	0.0	BRL
SB-50 (4-5')	4	12-Sep-15	BRL	BRL	BRL	BRL	0.0	BRL	BRL	BRL	0.0	BRL
SB-51 (5-6')	5	13-Sep-15	BRL	BRL	BRL	BRL	0.0	BRL	BRL	BRL	0.0	BRL
SB-52 (5-6")	5	09-Sep-15	BRL	BRL	BRL	BRL	0.0	1.3 [1,2]	24.0	BRL	25.3	BRL
SB-53 (5-6')	5	09-Sep-15	BRL	BRL	BRL	BRL	0.0	BRL	BRL	BRL	0.0	BRL
SB-54 (5-6.5')	5	09-Sep-15	BRL	BRL	0.0034	0.0140	0.0174	41.0	68.0	BRL	**109**	BRL
SB-55 (5-7')	5	09-Sep-15	BRL	BRL	BRL	BRL	0.0	BRL	BRL	BRL	0.0	BRL
SB-56 (2.5-4.5')	2.5	12-Sep-15	BRL	BRL	BRL	0.0063	0.0063	0.67	35	17	52.67	BRL
SB-57 (5-6')	5	12-Sep-15	BRL	BRL	BRL	BRL	0.0	BRL	BRL	BRL	0.0	BRL
SB-58 (3-4')	3	12-Sep-15	BRL	BRL	BRL	BRL	0.0	BRL	BRL	BRL	0.0	BRL
SB-59 (4-5')	4	12-Sep-15	BRL	BRL	BRL	BRL	0.0	BRL	BRL	BRL	0.0	BRL
SB-60 (4-5')	4	12-Sep-15	BRL	BRL	BRL	BRL	0.0	BRL	BRL	BRL	0.0	BRL

TABLE 2

SUMMARY OF SOIL ANALYTICAL RESULTS – SEPTEMBER 2015
JAQUEZ E#1 AND C#1

	Depth (feet bgs)	Date (dd-mmm-yy)	Analytical Parameter									
			Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Total Xylenes (mg/kg)	Total BTEX (mg/kg)	TPH-GRO (C6-C10) (mg/kg)	TPH (C10-C28) (mg/kg)	TPH (C28-C35) (mg/kg)	Total TPH (mg/kg)	Chloride (mg/kg)
NMOCD Standard			10	NE	NE	NE	50	NE	NE	NE	100	600
SB-61 (6-7')	6	12-Sep-15	BRL	BRL	BRL	BRL	0.0	BRL	BRL	BRL	0.0	BRL
SB-62	Soil boring not completed based on poor direct push rig access to location											
SB-63	Soil boring not completed based on poor direct push rig access to location											
SB-64 (10-12')	10	11-Sep-15	BRL	BRL	BRL	BRL	0.0	BRL	BRL	BRL	0.0	BRL
SB-65 (15-16')	15	14-Sep-15	BRL	BRL	BRL	BRL	0.0	BRL	BRL	BRL	0.0	32
SB-66	Soil boring not completed due to close proximity with an existing pipeline											
SB-67 (15-16')	15	14-Sep-15	BRL	BRL	BRL	BRL	0.0	BRL	BRL	BRL	0.0	46
SB-68 (15-16')	15	14-Sep-15	BRL	BRL	BRL	BRL	0.0	BRL	BRL	BRL	0.0	BRL
SB-69 (10.6-11.6')	10.6	13-Sep-15	BRL	BRL	BRL	BRL	0.0	BRL	BRL	BRL	0.0	BRL
SB-70 (11-12')	11	13-Sep-15	BRL	BRL	BRL	BRL	0.0	BRL	BRL	BRL	0.0	BRL
SB-71 (11-12)	11	13-Sep-15	BRL	BRL	BRL	BRL	0.0	BRL	BRL	BRL	0.0	BRL
SB-72 (6-7')	6	12-Sep-15	0.3	0.27	0.4	2.2	3.22	140	15	BRL	**155**	BRL
SB-73 (6.7-7.7')	6.7	16-Sep-15	BRL	BRL	BRL	BRL	0.0	0.26	13	BRL	13.26	BRL
SB-74 (4-6')	4	16-Sep-15	6.7	6.8	8.4	40	**61.9**	1,900	330	17	**2,247**	41
SB-75 (5-7')	5	16-Sep-15	BRL	BRL	BRL	BRL	0.0	BRL	BRL	BRL	0.0	BRL
SB-76 (3-5')	3	18-Sep-15	BRL	BRL	BRL	BRL	0.0	BRL	BRL	BRL	0.0	BRL
SB-77 (3-4')	3	18-Sep-15	BRL	BRL	BRL	BRL	0.0	BRL	BRL	BRL	0.0	BRL
MW-8 (7-8')	7	10-Sep-15	3.8	3.5	3.6	16	26.9	1,100	26	BRL	**1,126**	BRL
MW-8(A) (7-8')	7	10-Sep-15	4.6	7.0	12	61	**84.6**	1,800	100	13	**1,913**	BRL
MW-9 (16-17.5')	16	11-Sep-15	1.5	3.0	5.8	24	34.3	960	370	57	**1,387**	BRL
M-10	Soil boring not completed due to close proximity with an existing pipeline and fence line											
M-11	Soil boring not completed due to close proximity with an existing pipeline and fence line											
MW-12 (5.5-7.5')	5.5	11-Sep-15	0.3	0.50	0.7	3.7	5.22	170	19	BRL	**189**	BRL

Notes:

bgs	Below ground surface.
mg/kg	Milligram(s) per kilogram.
mg/L	Milligram(s) per liter.
NE	New Mexico Oil Conservation Division (NMOCD) Standard Not Established.
BRL	Analyte not detected above the reporting limit.
BTEX	Benzene, toluene, ethylbenzene, xylenes.
TPH	Total petroleum hydrocarbons.
GRO	Gasoline range organics.
Total BTEX	Sum of the detectable concentrations of individual BTEX constituents.
Total TPH	Sum of the detectable concentrations of TPH-GRO and individual TPH constituents.
NMOCD Standard	New Mexico Oil Conservation Division closure criteria for pits ≤50 feet below bottom of pit to groundwater less than 10,000 mg/L. Results bolded and highlighted yellow exceed their respective NMOCD Standards.
1	Flag "F1" matrix spike (MS) and/or matrix spike delivery (MSD) recovery is outside acceptance limits.
2	Flag "F2" MS/MSD relative percent difference (RPD) exceeds control limits.

TABLE 3

JAQUEZ E#1 AND C#1
GROUNDWATER GAUGING DATA SUMMARY - SEPTEMBER AND NOVEMBER 2015
JAQUEZ SITE

Well ID	Date	Top of Casing Elevation (feet)	Depth to Water (feet)	Depth to LNAPL (feet)	LNAPL Thickness feet)	Groundwater Elevation (feet)
MW-6	09/19/15	5593.34	9.47	ND	ND	5583.87
MW-6	11/20/15	5593.34	9.72	ND	ND	5583.62
MW-8	09/19/15	5588.70	3.09	ND	ND	5585.61
MW-8	11/20/15	5588.70	3.64	ND	ND	5585.06
MW-9	09/19/15	5600.97	13.36	ND	ND	5587.61
MW-9	11/20/15	5600.97	14.20	ND	ND	5586.77
MW-12	09/19/15	5588.78	3.31	ND	ND	5585.47
MW-12	11/20/15	5588.78	3.84	ND	ND	5584.94

Notes:

ND = Light nonaqueous phase liquid (LNAPL) not detected.

TABLE 4

SUMMARY OF GROUNDWATER ANALYTICAL RESULTS – SEPTEMBER AND NOVEMBER 2015
JAQUEZ E#1 AND C#1

Location	Date (dd/mm/yy)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	GRO (C6-C10) (µg/L)	DRO (C10-C28) (µg/L)	Oil Range Organics (C28-C35) (µg/L)	Total TPH (µg/L)	Chloride (mg/L)
NMWQCC Standards:		10	750	750	620	NE	NE	NE	NE	250
MW-6	09/19/15	BRL	BRL	BRL	BRL	BRL	170	BRL	170	5.5
MW-6	11/20/15	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	3.2
MW-8	09/19/15	**18**	BRL	13	110	1500	BRL	BRL	1500	9.2
MW-8	11/20/15	7.6	BRL	3.1	BRL	260	140	BRL	400	8.2
MW-9	09/19/15	2.4	BRL	6.7	20	240	BRL	BRL	240	29
MW-9	11/20/15	BRL	BRL	2.0	BRL	140	350 H	BRL H	490	33
MW-12	09/19/15	5.6	BRL	6.0	60	1300	BRL	BRL	1300	6.0
MW-12	11/20/15	5.3	BRL	BRL	BRL	370	BRL	BRL	370	3.9

Notes:

Results bolded and highlighted yellow exceed their respective New Mexico Water Quality Control Commission (NMWQCC) standards.
Total TPH = Sum of detectable concentrations of gasoline range organics (GRO), diesel range organics (DRO), and Oil Range Organics.
BRL = Analyte was not detected above the reporting limit.
NE = NMWQCC Standard not established.
µg/L = Micrograms per liter.
mg/L = Milligrams per liter.
"H" = Sample analyzed twice with the surrogate recovery failing the initial run, and the sample analyzed beyond the hold time during the second run. The highest of the two results reported.

FIGURES

D:\GIS\JAQUEZ\JAQUEZ SOIL RESULTS BASE.mxd

LEGEND:

2015 LOCATIONS AND SURVEYED FEATURES

- Monitoring Well
- Proposed Monitoring Well (Not Completed)
- Soil Boring
- Soil Boring Location (Not Completed)
- Approximate Ground Surface Contour
- Fence
- Overhead Electric Line
- Pipeline

FORMER SITE FEATURES

- Abandoned Monitoring Well or Abandoned Recovery Well
- Former Pipeline
- Former Excavation Area (02/28/2011)

NOTES:

Features shown based on survey conducted by Souder Miller and Associates (SMA) in October 2015.

Former site features are approximate

N

SCALE IN FEET

0 40 80

REVISION	DATE	DESIGN BY	DRAWN BY	REVIEWED BY
A	1/12/2016	CCL	CCL	CO

TITLE:

SEPTEMBER 2015 SAMPLING LOCATIONS

PROJECT:

SAN JUAN RIVER BASIN
JAQUEZ E#1 & C#1
SAN JUAN COUNTY, NEW MEXICO

MWH

Figure No.: 1

D:\GIS\JAQUEZ\JAQUEZ SOIL RESULTS 2015r2.mxd

JAQUEZ-111(17)-021011 (Soil)		
Date Sampled: February 10, 2011		
Analyte	*Result*	*NMOCD Std.*
Total BTEX (mg/kg)	62.22	50
Total TPH (mg/kg)	3,476	100

JAQUEZ-113(12)-021011 (Soil)		
Date Sampled: February 10, 2011		
Analyte	*Result*	*NMOCD Std.*
Total TPH (mg/kg)	471.9	100

JAQUEZ-66(9)-010511 (Soil)		
Date Sampled: January 5, 2011		
Analyte	*Result*	*NMOCD Std.*
Total BTEX (mg/kg)	57.4	50
Total TPH (mg/kg)	924	100

MW-9 (16-17.5')(Soil)		
Date Sampled: September 11, 2015		
Analyte	*Result*	*NMOCD Std.*
Total TPH (mg/kg)	1,387	100

SB-74 (4-6') (Soil)		
Date Sampled: September 16, 2015		
Analyte	*Result*	*NMOCD Std.*
Total BTEX (mg/kg)	61.9	50
Total TPH (mg/kg)	2,247	100

MW-8 (7-8')(Soil)		
Date Sampled: September 10, 2015		
Analyte	*Result*	*NMOCD Std.*
Total TPH (mg/kg)	1,126.0	100

MW-8A (7-8')(Soil)		
Date Sampled: September 10, 2015		
Analyte	*Result*	*NMOCD Std.*
Total BTEX (mg/kg)	84.6	50
Total TPH (mg/kg)	1,913	100

SB-72 (6-7') (Soil)		
Date Sampled: September 12, 2015		
Analyte	*Result*	*NMOCD Std.*
Total TPH (mg/kg)	155	100

JAQUEZ-143(7)-021611 (Soil)		
Date Sampled: February 16, 2011		
Analyte	*Result*	*NMOCD Std.*
Total TPH (mg/kg)	911	100

SB-54 (5-6.5') (Soil)		
Date Sampled: September 9, 2015		
Analyte	*Result*	*NMOCD Std.*
Total TPH (mg/kg)	109	100

MW-12 (5.5-7.5')(Soil)		
Date Sampled: September 11, 2015		
Analyte	*Result*	*NMOCD Std.*
Total TPH (mg/kg)	189	100

12" CMP

Concrete Pads

Former Gas Well Pit Area

Former AMOCO Production Lines

Foot Bridge

Limits of 2010-2011 Excavation

Limits of Previous Excavation

AERIAL IMAGE FROM GOOGLE EARTH, DATED 3/15/2015

LEGEND:

2010-11 POST-EXCAVATION SAMPLE LOCATIONS

- Borehole Soil Sample (Hand Auger)
- Sidewall Sample Later Overexcavated
- Floor or Sidewall Sample

2015 LOCATIONS AND SURVEYED FEATURES

- Monitoring Well
- Soil Boring
- Fence
- Overhead Electric Line
- Pipeline

FORMER SITE FEATURES

- Former Pipeline
- Former Excavation Area (02/28/2011)

NOTES:

Features shown based on survey conducted by Souder Miller and Associates (SMA) in October 2015.

Former site features are approximate

N

SCALE IN FEET

0 40 80

REVISION	DATE	DESIGN BY	DRAWN BY	REVIEWED BY
A	1/12/2016	CCL	CCL	CO

TITLE:

COMPOSITE 2010-2011 POST EXCAVATION AND 2015 SOIL SAMPLE LOCATIONS EXCEEDING NMOCD CRITERIA

PROJECT:

SAN JUAN RIVER BASIN
JAQUEZ E#1 & C#1
SAN JUAN COUNTY, NEW MEXICO

MWH

Figure No.: 2

D:\GIS\JAQUEZ\JAQUEZ SOIL RESULTS COMBINED.mxd

JAQUEZ-GW1-NORTH-121710 (Groundwater)		
Date Sampled: December 17, 2010		
Analyte	*Result*	*NMWQCC Std.*
Benzene (ug/l)	32.4	10

MW-8 (Groundwater)		
Date Sampled: September 19, 2015		
Analyte	*Result*	*NMWQCC Std.*
Benzene (ug/l)	18	10

JAQUEZ-133(GW)-021611 (Groundwater)		
Date Sampled: February 16, 2011		
Analyte	*Result*	*NMWQCC Std.*
Benzene (ug/l)	301	10
Total Xylenes (ug/l)	1,560	620

MW-9
MW-8
MW-12
MW-6
Former Gas Well Pit Area
Concrete Pads
12" CMP
Former AMOCO Production Lines
Foot Bridge
Limits of 2010-2011 Excavation
Limits of Previous Excavation

AERIAL IMAGE FROM GOOGLE EARTH, DATED 3/15/2015

LEGEND:

2010-11 POST-EXCAVATION SAMPLE LOCATIONS

- Groundwater Sample

2015 LOCATIONS AND SURVEYED FEATURES

- Monitoring Well
- Fence
- Overhead Electric Line
- Pipeline

FORMER SITE FEATURES

- Former Pipeline
- Former Excavation Area (02/28/2011)

NOTES:

Features shown based on survey conducted by Souder Miller and Associates (SMA) in October 2015.

Former site features are approximate

N

SCALE IN FEET

0 40 80

REVISION	DATE	DESIGN BY	DRAWN BY	REVIEWED BY
A	1/12/2016	CCL	CCL	CO

TITLE:

COMPOSITE 2010-2011 POST-EXCAVATION AND 2015 GROUNDWATER SAMPLE LOCATIONS EXCEEDING NMWQCC STANDARDS

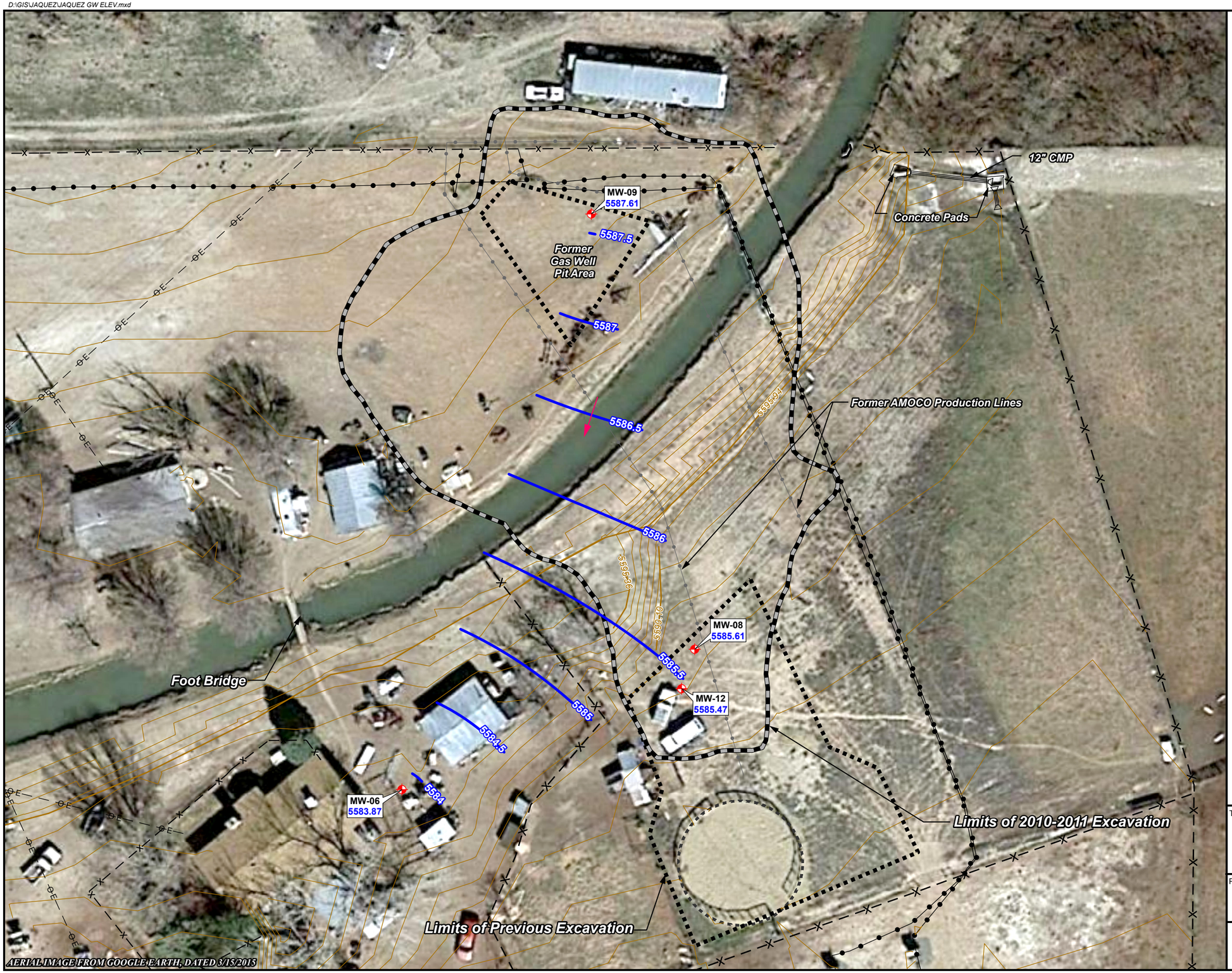
PROJECT:

SAN JUAN RIVER BASIN
JAQUEZ E#1 & C#1
SAN JUAN COUNTY, NEW MEXICO

MWH

Figure No.: 3

D:\GIS\JAQUEZ\JAQUEZ GW ELEV.mxd



LEGEND:

2015 LOCATIONS AND SURVEYED FEATURES

- MW-09 5587.61 — Monitoring Well and Groundwater Elevation
- Approximate Ground Surface Contour
- Fence
- Overhead Electric Line
- Pipeline
- Former Pipeline
- Former Excavation Area (02/28/2011)

NOTES:

Features shown based on survey conducted by Souder Miller and Associates (SMA) in October 2015.

Former site features are approximate

- 5318.24 — GROUNDWATER ELEVATION FEET ABOVE MEAN SEA LEVEL
- 5317 — WATER LEVEL ELEVATION CONTOUR (FEET ABOVE MEAN SEA LEVEL, 0.5 FOOT CONTOUR INTERVAL)
- DIRECTION OF GROUNDWATER FLOW

N

SCALE IN FEET

0 40 80

REVISION	DATE	DESIGN BY	DRAWN BY	REVIEWED BY
A	1/7/2016	CCL	CCL	CO

TITLE:

GROUNDWATER ELEVATION CONTOUR MAP
SEPTEMBER 19, 2015

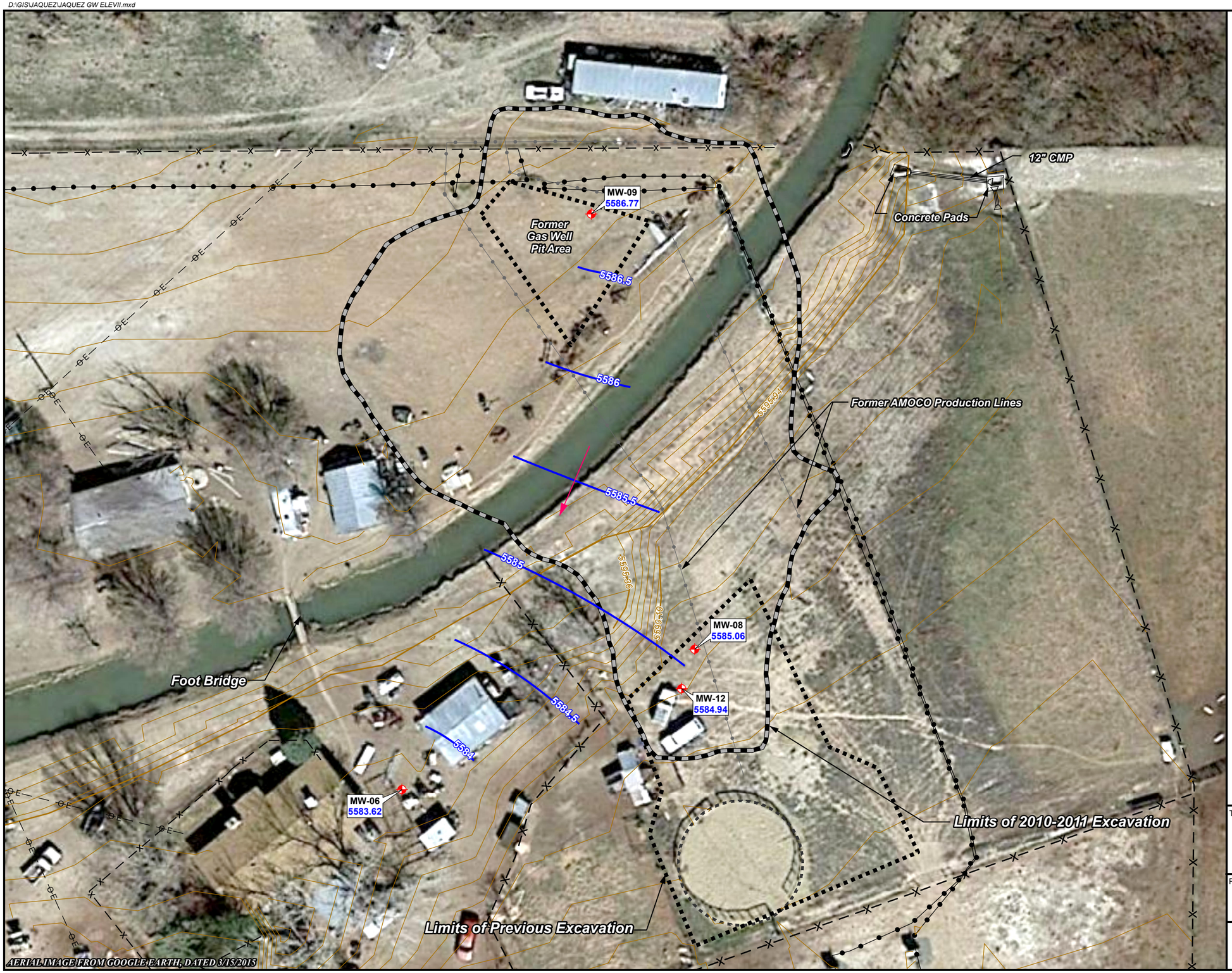
PROJECT:

SAN JUAN RIVER BASIN
JAQUEZ E#1 & C#1
SAN JUAN COUNTY, NEW MEXICO

MWH

Figure No.: 4

D:\GIS\JAQUEZ\JAQUEZ GW ELEVII.mxd



LEGEND:

2015 LOCATIONS AND SURVEYED FEATURES

- MW-09 5587.61 — Monitoring Well and Groundwater Elevation
- Approximate Ground Surface Contour
- Fence
- Overhead Electric Line
- Pipeline
- Former Pipeline
- Former Excavation Area (02/28/2011)

NOTES:

Features shown based on survey conducted by Souder Miller and Associates (SMA) in October 2015.

Former site features are approximate

- 5318.24 — GROUNDWATER ELEVATION. FEET ABOVE MEAN SEA LEVEL
- 5317 — WATER LEVEL ELEVATION CONTOUR (FEET ABOVE MEAN SEA LEVEL, 0.5 FOOT CONTOUR INTERVAL)
- DIRECTION OF GROUNDWATER FLOW

N

SCALE IN FEET

0 40 80

REVISION	DATE	DESIGN BY	DRAWN BY	REVIEWED BY
A	1/27/2016	CCL	CCL	CO

TITLE:

GROUNDWATER ELEVATION CONTOUR MAP
NOVEMBER 20, 2015

PROJECT:

SAN JUAN RIVER BASIN
JAQUEZ E#1 & C#1
SAN JUAN COUNTY, NEW MEXICO

MWH

Figure No.: 5

APPENDIX A

Jaquez Work Plan and NMOCD Approval

Stephen Varsa

Subject: FW: Jaquez Site #3R-194 - Proposed Work Borings and Wells

From: VonGonten, Glenn, EMNRD [mailto:Glenn.VonGonten@state.nm.us]
Sent: Friday, June 05, 2015 10:45 AM
To: Wiley, Joe
Cc: Griswold, Jim, EMNRD; Smith, Cory, EMNRD; Powell, Brandon, EMNRD
Subject: RE: Jaquez Site #3R-194 - Proposed Work Borings and Wells

Joe,

As per our discussion of June 5, 2015, OCD approves Kinder Morgan's proposed workplan for the Jacques' sites. This approval by OCD does not relieve Kinder Morgan of responsibility should future information indicate a threat to ground water, surface water, human health, or the environment. Furthermore, it does not relieve Kinder Morgan of responsibility for compliance with any federal, state, or local laws and/or regulations. Please let OCD know when you are about to mobilize so that OCD has an opportunity to witness the investigation.

Please give me a call if you have any other issues.

Glenn von Gonten
Senior Hydrologist
Environmental Bureau
Oil Conservation Division
Energy, Minerals and Natural Resources Department
1220 South St. Francis Drive
Santa Fe, New Mexico 87505
505-476-3488
Fax-476-3462
glenn.vongonten@state.nm.us
http://www.emnrd.state.nm.us/ocd/

From: Wiley, Joe
Sent: Monday, May 18, 2015 2:40 PM
To: Glenn.VonGonten@state.nm.us
Cc: Stephen Varsa (Steve.Varsa@mwhglobal.com)
Subject: FW: Jaquez Site #3R-194 - Proposed Work Borings and Wells

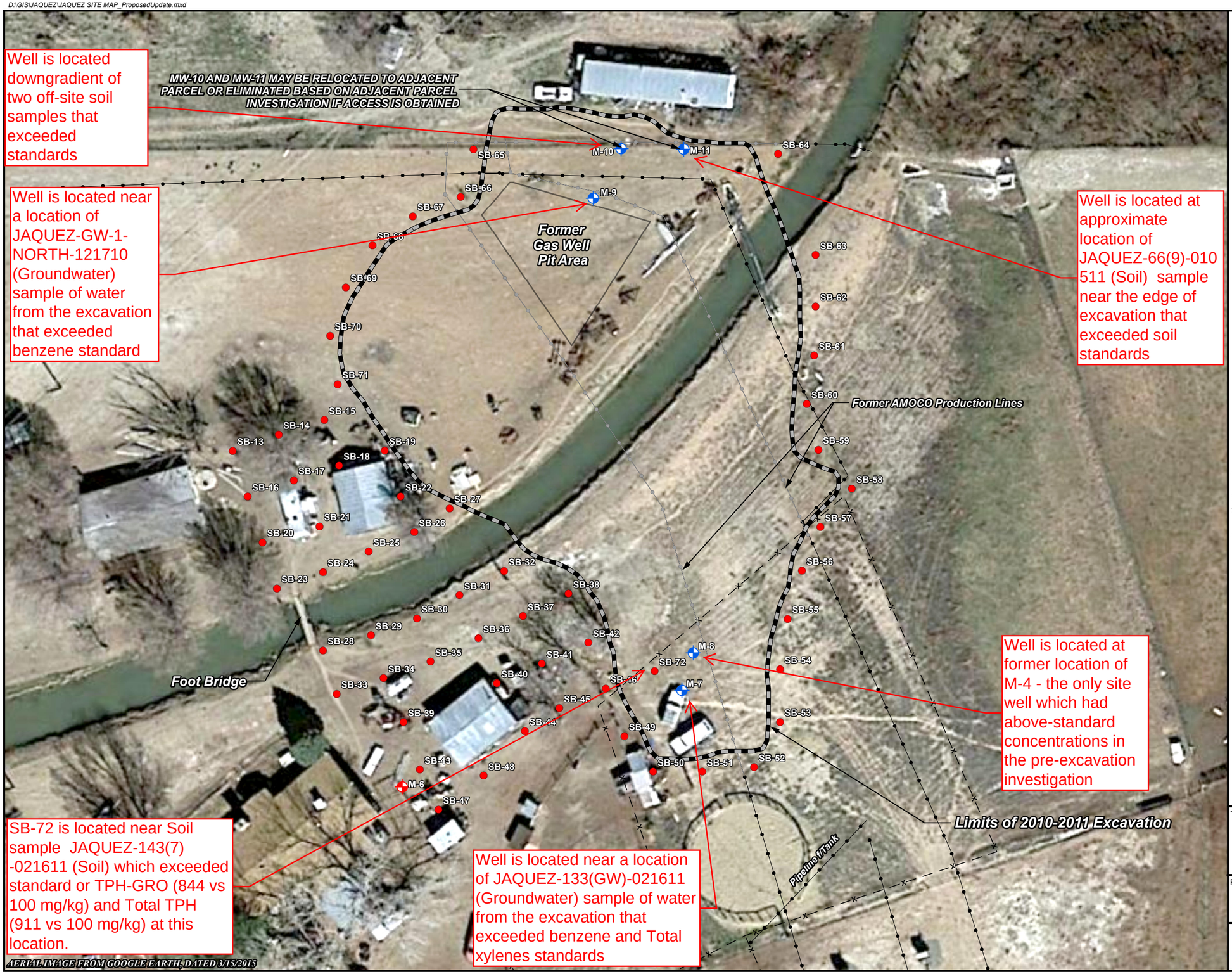
Hello Glenn,
I would appreciate some feedback on the proposed monitoring well locations for the Jaquez site follow-up work. Three site maps are included in the attached PDF document. The first map (labeled Figure1) shows our proposed monitoring well locations and soil boring locations. The monitoring wells and one soil boring location inside the boundary of the excavated area are located in areas where exceedances of standards were reported for samples collected during the 2011 soil excavation. Additional borings around the excavation perimeter and on the west side of the excavation will be conducted at the request of Mr. Jaquez. The second map (labeled Figure 3) shows the locations of all samples collected at the time of the excavation. The third map (labeled Figure 4) shows the locations where exceedances occurred and the reported concentrations.

It should be noted that EPCGP has made contact with the McCarty family, owners of the property directly north of the Jaquez property, and they appear to be receptive to a plan to remove the trailer house and allow us to excavate remaining impacted soil on their property. If that excavation occurs, the two monitoring wells shown along the northern fence line at the Jaquez property will potentially be relocated onto the McCarty property.

I would like to know if the distribution of the proposed monitoring wells is satisfactory, or if the NMOCD would prefer to see additional monitoring wells in the excavation area. We hope to begin field work on the site in the next month, and your feedback on this issue would be greatly appreciated. Thanks,

Joseph (Joe) Wiley, P.G.
Project Manager - Pipeline Remediation
Kinder Morgan, Inc.
1001 Louisiana Street, Room 956I
Houston, TX 77002
Phone: 713-420-3475
Fax 713-445-8244
Cell Phone: 832-279-1610
Joe_wiley@kindermorgan.com

D:\GIS\JAQUEZ\JAQUEZ SITE MAP_ProposedUpdate.mxd



LEGEND:

- Monitoring Well
- Proposed Monitoring Well
- Proposed Soil Boring
- Fence
- Former Pit
- Pipeline
- Former Pipeline
- Excavation Area (02/28/2011)

NOTES:

Figure shows site features prior to 2010-2011 excavation.

Features shown based on field data and should be considered approximate.

Soil borings to a minimum depth of 5' below apparent water level or maximum depth of 30 feet. Based on past excavation work, boring depths estimated 13-24 feet across site.

Locations are approximate and will be adjusted based on site features including utilities and structures. Borings may be added or eliminated based on results from prior borings.

N

SCALE IN FEET

0 40 80

REVISION	DATE	DESIGN BY	DRAWN BY	REVIEWED BY
A	4/29/2015	CCL	CCL	MA

TITLE:

JAQUEZ PROPOSED MONITORING WELLS AND SOIL BORINGS

PROJECT: ***SAN JUAN RIVER BASIN MONITORING AND REMEDIATION SAN JUAN COUNTY, NEW MEXICO***

MWH

Figure No.: 1

L:\San Juan River Basin\SJRB GENERAL\GIS-NEW_MXDs\JAQUEZ\JAQUEZ_2010-2011 Excv_Areas.mxd

JAQUEZ BH-5
JAQUEZ BH-6
JAQUEZ BH-1
JAQUEZ BH-4
JAQUEZ-67(9)-010511
JAQUEZ BH-3
JAQUEZ-124(9)-021311
JAQUEZ-113(12)-021011
JAQUEZ BH-2
JAQUEZ-111(17)-021011
JAQUEZ-41(13)-122810
JAQUEZ-66(9)-010511
JAQUEZ-GW1-NORTH-121710
JAQUEZ-8(9)-121510
JAQUEZ-55(9)-010411
JAQUEZ-1(14)-121510
JAQUEZ-12(14)-121610
Limits of Previous Excavation
JAQUEZ-19(15)-122110
JAQUEZ-40(7)-010311
JAQUEZ-16(14)-121710
JAQUEZ-39(14)-122810
JAQUEZ-40(14)-122810
JAQUEZ-17(14)-121910
JAQUEZ-279(7)-022811
JAQUEZ-35(14.75)-122710
JAQUEZ-38(18)-122810
JAQUEZ-280(16)-022811
JAQUEZ-49(10)-010411
JAQUEZ-18(14)-122010
JAQUEZ-36(15)-122710
JAQUEZ-249(15)-022411
JAQUEZ-42(10)-010311
JAQUEZ-37(14)-122810
JAQUEZ-254(GW)-022511
JAQUEZ-22(15)-122110
JAQUEZ-248(8)-022411
JAQUEZ-32(11)-122210
JAQUEZ-24(15)-122110
JAQUEZ-232(19)-022311
JAQUEZ-25(20)-122110
JAQUEZ-23(15)-122110
JAQUEZ-247(6)-022411
JAQUEZ-226(13)-022311
JAQUEZ-31(9)-122210
JAQUEZ-33(14)-122210
JAQUEZ-213(20.5)-022211
JAQUEZ-265(12.5)-022511
JAQUEZ-115(4)-021111
JAQUEZ-114(9)-021111
JAQUEZ-264(22)-022511
JAQUEZ-219(17)-022211
JAQUEZ-199(25)-022111
JAQUEZ-132(6)-021411
JAQUEZ-220(10)-022211
JAQUEZ-179(10)-021811
JAQUEZ-148(12)-021711
JAQUEZ-138(6)-021611
JAQUEZ-143(7)-021611
JAQUEZ-169(6.5)-021811
JAQUEZ-178(5.5)-021811
JAQUEZ-157(7)-021811
JAQUEZ-133(GW)-021611
JAQUEZ-174(5)-021811
Limits of 2010-2011 Excavation
Limits of Previous Excavation
AERIAL IMAGE FROM GOOGLE EARTH, DATED 11/17/2013

LEGEND:

EXCAVATION AREA AND SAMPLE LOCS

- Borehole Soil Sample
- Sidewall Sample Later Overexcavated
- Floor or Sidewall Soil Sample
- Groundwater Sample
- Excavation Area (02/28/2011)

PREVIOUS SITE FEATURES

- Abandoned Monitoring Well
- Monitoring Well
- Fence
- Former Citizen's Ditch
- Former Pit
- Pipeline

NOTE:

Features shown based on field data and should be considered approximate

N

SCALE IN FEET

0 40 80

REVISION	DATE	DESIGN BY	DRAWN BY	REVIEWED BY
A	10/8/2014	CCL	CCL	MA

TITLE:

2010-2011 EXCAVATION AREA AND SAMPLE LOCATIONS

PROJECT: *SAN JUAN RIVER BASIN MONITORING AND REMEDIATION SAN JUAN COUNTY, NEW MEXICO*

MWH

Figure No.: 3

L:\San Juan River Basin\SJRB GENERAL\GIS-NEW_MXDs\JAQUEZ\JAQUEZ_Confirmation_Exceeds.mxd

JAQUEZ-111(17)-02011 (Soil)		
Analyte	*Result*	*NMOCD Std.*
Total BTEX (µg/kg)	62,220.0	50,000
TPH-GRO (C6-C10)(mg/kg)	1,230.0	100
TPH (C10-C28)(mg/kg)	1,740.0	100
TPH (>C28-C40)(mg/kg)	506.0	100
Total TPH (mg/kg)	3,476.0	100

JAQUEZ-GW1-NORTH-121710 (Groundwater)		
Analyte	*Result*	*NMWQCC Std.*
Benzene (µg/l)	32.4	10

JAQUEZ-113(12)-02011 (Soil)		
Analyte	*Result*	*NMOCD Std.*
TPH (C10-C28) (mg/kg)	253.0	100
Total TPH (mg/kg)	471.9	100

JAQUEZ-66(9)-010511 (Soil)		
Analyte	*Result*	*NMOCD Std.*
Total BTEX µg/kg	57,400.0	50,000
TPH-GRO (C6-C10)(mg/kg)	600.0	100
TPH (C10-C28)(mg/kg)	286.0	100
Total TPH (mg/kg)	924.0	100

Limits of Previous Excavation

JAQUEZ-143(7)-021611 (Soil)		
Analyte	*Result*	*NMOCD Std.*
TPH-GRO (C6-C10) (mg/kg)	844.0	100
Total TPH (mg/kg)	911	100

JAQUEZ-133(GW)-021611 (Groundwater)		
Analyte	*Result*	*NMOCD Std.*
Benzene (µg/l)	301.0	10
Total Xylenes	1,560	620

Limits of Previous Excavation

Limits of 2010-2011 Excavation

AERIAL IMAGE FROM GOOGLE EARTH, DATED 11/17/2013

LEGEND:

EXCAVATION AREA AND SAMPLE LOCS

- Borehole Soil Sample
- Sidewall Sample Later Overexcavated
- Floor or Sidewall Soil Sample
- Groundwater Sample
- Excavation Area (02/28/2011)

PREVIOUS SITE FEATURES

- Abandoned Monitoring Well
- Monitoring Well
- Fence
- Former Citizen's Ditch
- Former Pit
- Pipeline

NOTE:

Features shown based on field data and should be considered approximate

N

SCALE IN FEET

0 40 80

REVISION	DATE	DESIGN BY	DRAWN BY	REVIEWED BY
A	10/8/2014	CCL	CCL	MA

TITLE:

CONFIRMATION SAMPLES EXCEEDING NMOCD/NMWQCC STANDARDS

PROJECT: SAN JUAN RIVER BASIN MONITORING AND REMEDIATION SAN JUAN COUNTY, NEW MEXICO

MWH

Figure No.: 4

APPENDIX B

Soil Boring Logs

MWH

Drilling Log

Soil Boring **MW-8**

Project *Jaquez E#1 & C#1* Owner *El Paso CGP Company, LLC*

Location *San Juan River Basin, New Mexico* Project Number *10507777*

Surface Elev. *NA* North *NA* East *NA*

Top of Casing *NA* Water Level Initial ▽ *NA* Static ▼ *NA*

Hole Depth *15.0ft* Screen: Diameter *NA* Length *NA* Type/Size *NA*

Hole Diameter *3" (0-5)' & 2" (5-15)'* Casing: Diameter *NA* Length *NA* Type *NA*

Drill Co. *National EWP* Drilling Method *Direct Push (Geoprobe)* Sand Pack *NA*

Driller *Rodrigo Cano* Driller Reg. # *WD 1210* Log By *Brad Barton*

Start Date *9/9/2015* Completion Date *9/9/2015* Checked By *S. Varsa*

COMMENTS
Soil boring completed using hand auger from 0 to 5 feet and dual tube from 5 to 15 feet.

Bentonite Grout | Bentonite Granules | Grout | Portland Cement | Sand Pack | Sand Pack

Depth (ft)	PID (ppm)	% Recovery	Headspace Screening	Sample ID	Blow Count Recovery	Graphic Log	USCS	Description (Color, Moisture, Texture, Structure, Odor) Geologic Descriptions are Based on the USCS.
								Grass/weeds w/ dirt
0								0 - 5' bgs Hand augered
	0.0		-					(0 - 8) Silty SAND: brown, 4/3 10YR dry to moist, fine to med sand, low plasticity, minor gravels to trace, loose, no HC odor
	0.0		-					
2	0.0		-					
	0.0		-					⇩increasing moisture to moist
4	0.0		-				SM	
	0.0	100%	-					
	0.0		-					
6	13.7		-					⇩color changes to very dk gray 3/1 2.5Y, slight HC odor, minor black HC staining
	218.4		-	MW-8 (7-8)' 930				⇩water @ about 8'
8	NR		NR					(8 - 10) No Recovery
	NR		NR					
10		60%						
	0.2		-					(10 - 12.5) - Poorly Graded SAND: very dk gray 3/1 2.5Y, very slight HC odor, saturated as above, loose, fine sand, no cementation
	0.2		-				SP	
12	0.2		-					
								(12.5 - 15) No Recovery
	NR		NR					
14	NR		NR					
		50%						
16								TD = 15' bgs
18								

Drilling Log JAQUEZ LOGS EL PASO - COPY.GPJ MWH IA.GDT 1/15/16

Drilling Log

MWH

Soil Boring **MW-8(A)**

Project *Jaquez E#1 & C#1* Owner *El Paso CGP Company, LLC*

Location *San Juan River Basin, New Mexico* Project Number *10507777*

Surface Elev. *NA* North *NA* East *NA*

Top of Casing *NA* Water Level Initial ▽ *NA* Static ▼ *NA*

Hole Depth *20.0ft* Screen: Diameter *NA* Length *NA* Type/Size *NA*

Hole Diameter *3" (0-5)' & 2" (5-20)'* Casing: Diameter *NA* Length *NA* Type *NA*

Drill Co. *National EWP* Drilling Method *Direct Push (Geoprobe)* Sand Pack *NA*

Driller *Rodrigo Cano* Driller Reg. # *WD 1210* Log By *Brad Barton*

Start Date *9/10/2015* Completion Date *9/10/2015* Checked By *S. Varsa*

COMMENTS
Soil boring completed using hand auger from 0 to 5 feet and dual tube from 5 to 20 feet.

■ Bentonite Grout ▩ Bentonite Granules ▭ Grout ▨ Portland Cement ⋰ Sand Pack ⋰ Sand Pack

Depth (ft)	PID (ppm)	% Recovery	Headspace Screening	Sample ID	Blow Count Recovery	Graphic Log	USCS	Description (Color, Moisture, Texture, Structure, Odor) Geologic Descriptions are Based on the USCS.
								Grass/weeds w/ dirt
0	0.0		-					(0 - 6.5) Silty Sand: lt brown, 5/3 10YR, loose, minor gravels, fine and med sand, dry to moist, no HC odor
	0.0		-					
2	0.1		-					
	0.1		-				SM	
4	0.1	100%	-					
	8.9		-					⇩6/4 2.5Y light yellowish brown
6	18.0		-					
	390.6		-	MW-8(A) (7-8)' 1310			SC	(6 - 8.0) Clayey SAND: 3/1 2.5Y very dk gray, mod HC odor, soft to loose, very moist, fine sand
8								▼water @ 8' bgs
	13.8		-				SP	(8 - 8.4) Poorly Graded SAND: wet, saturated, minor clay, fine sand, loose, slight to med HC odor, dk gray 3/1 2.5 Y
	NR	68%	NR					(10 - 13.8) No Recovery
10	2.0		-					(10 - 12.5) Poorly Graded SAND: dk gray to very dk gray, loose, wet, saturated, fine sand, slight HC odor to no HC odor
	0.8		-				SP	
12	0.4		-					⇩6/4 2.5Y light yellowish brown color change
	NR		NR					(12.5 - 15) No Recovery
14	NR	50%	NR					
	0.2		-				SP	(15 - 16) Poorly Graded SAND: wet, no HC odor, 6/4 2.5 Y light yellowish brown sand, fine sand, no cementation
16	0.2		-				SC	(16 - 17.0) Clayey SAND: wet, no HC odor, soft to loose, med plasticity, fine to very fine sand, 6/3 2.5Y light yellowish brown
	0.2		-				CH	(17.0 - 17.9) FAT CLAY w/ fine sand: soft, 6/3 2.5Y light yellowishbrown, high plasticity, wet, no HC odor
18	NR		NR					No Recovery
	NR	58%	NR					
20								
22								TD = 20.0' bgs

Drilling Log JAQUEZ LOGS EL PASO - COPY.GPJ MWH IA.GDT 1/15/16

MWH

Drilling Log

Soil Boring **MW-9**

Project *Jaquez E#1 & C#1* Owner *El Paso CGP Company, LLC*

Location *San Juan River Basin, New Mexico* Project Number *10507777*

Surface Elev. *NA* North *NA* East *NA*

Top of Casing *NA* Water Level Initial ▽ *NA* Static ▼ *NA*

Hole Depth *20.0ft* Screen: Diameter *NA* Length *NA* Type/Size *NA*

Hole Diameter *3" (0-5)' & 2" (5-20)'* Casing: Diameter *NA* Length *NA* Type *NA*

Drill Co. *National EWP* Drilling Method *Direct Push (Geoprobe)* Sand Pack *NA*

Driller *Rodrigo Cano* Driller Reg. # *WD 1210* Log By *Brad Barton*

Start Date *9/11/2015* Completion Date *9/11/2015* Checked By *S. Varsa*

COMMENTS
Soil boring completed using hand auger from 0 to 5 feet and dual tube from 5 to 30 feet.

■ Bentonite Grout ▩ Bentonite Granules ▭ Grout ▨ Portland Cement ⁘ Sand Pack ⁘ Sand Pack

Depth (ft)	PID (ppm)	% Recovery	Headspace Screening	Sample ID	Blow Count Recovery	Graphic Log	USCS	Description (Color, Moisture, Texture, Structure, Odor) Geologic Descriptions are Based on the USCS.
								Dirt, old lay down area wood piles
0	0.0		0.2					0 - 5' hand augered
	0.1		0.8					(0 - 4) Clayey Silt w/ gravels: minor gravels up to 1", shale broken up to gravels, trace cobbles, 6/4 2.5Y light yellowish brown, dry, loose fine grained, no HC odor
2	0.1		0.5				ML	⇩color grades to 5Y pale olive
	0.1		0.9					⇩very slight moist
4								Refusal @ 4' bgs w/ Hand auger
	0.1	100%	2.3					(4-8.3)⇩ Clayey SAND: 5/3 5Y olive, slight moist, loose, no cementation, fine sand, low plasticity, no HC odor
	0.0		5.0					
6	0.1		4.2				SC	
	0.0		4.7					⇩color change to 3/2 5Y dk olive gray
8	0.1		2.5					(8.3-10) No Recovery
	NR	66%	NR					
10	0.0		2.0					(10-12.5) FAT CLAY w/ Fine Sand: med to fine sand, very moist, soft, minor coarse sand, no HC odor, brown 7.5 YR, high plasticity
	0.0		1.8				CH	
12	0.0		1.2					(12.5-15) No Recovery
	NR		NR					
14	NR	50%	NR					
	0.0		1.4					FAT CLAY w/ Sand Lenses: 3/1 2.5Y dk gray, very moist, no HC odor to mod HC odor, sand lenses are black HC stained from (16-17.5), soft, high plasticity
16	446.0		430.2	MW-9 (16-17.5)' 1420			CH	
	26.9		32.7					
18							SP	▼ water @ 18' bgs (18-18.3) Poorly Graded Sands: loose, fine sand, wet saturated, no cementation, light grayish brown 6/2 2.5Y
	8.9		4.0					(18.3-20) No Recovery
	NR	66%	NR					
20								*Continued Next Page*

Drilling Log

MWH

Soil Boring **MW-9**

Project *Jaquez E#1 & C#1* Owner *El Paso CGP Company, LLC*

Location *San Juan River Basin, New Mexico* Project Number *10507777*

Depth (ft)	PID (ppm)	% Recovery	Headspace Screening	Sample ID	Blow Count Recovery	Graphic Log	USCS	Description (Color, Moisture, Texture, Structure, Odor) Geologic Descriptions are Based on the USCS.
								Continued
20	0.1		1.0				SP	(20-21.0) Poorly Graded SANDS: brown, loose, wet, no cementation fine sand, no HC odor
	0.1						CH	FAT CLAY: 5/4 light olive brown, med stiff to stiff, moist, no HC odor, high plasticity
22	NR		NR					(21.8-25) No Recovery
	NR		NR					
24	NR	36%	NR					
	0.0		0.4					(25-30) FAT CLAY: saturated wet to moist @ 29-30', high plasticity, soft to stiff @29-30', no HC odor, 5/3 olive brown, high dry strength, high toughness
26	0.0		0.5					
	0.1		0.5				CH	
28	0.1		0.7					possibly slough in PVC liner for 25-30'
	0.1	100%	0.9					
30								
32								TD = 30' bgs
34								
36								
38								
40								
42								
44								
46								

MWH

Drilling Log

Soil Boring **MW-12**

Project *Jaquez E#1 & C#1* Owner *El Paso CGP Company, LLC*

Location *San Juan River Basin, New Mexico* Project Number *10507777*

Surface Elev. *NA* North *NA* East *NA*

Top of Casing *NA* Water Level Initial ▽ *NA* Static ▼ *NA*

Hole Depth *20.0ft* Screen: Diameter *NA* Length *NA* Type/Size *NA*

Hole Diameter *3" (0-5)' & 2" (5-20)'* Casing: Diameter *NA* Length *NA* Type *NA*

Drill Co. *National EWP* Drilling Method *Direct Push (Geoprobe)* Sand Pack *NA*

Driller *Rodrigo Cano* Driller Reg. # *WD 1210* Log By *Brad Barton*

Start Date *9/11/2015* Completion Date *9/11/2015* Checked By *S. Varsa*

COMMENTS
Soil boring completed using hand auger from 0 to 5 feet and dual tube from 5 to 20 feet.

■ Bentonite Grout ▨ Bentonite Granules ▤ Grout ▨ Portland Cement ▨ Sand Pack ▨ Sand Pack

Depth (ft)	PID (ppm)	% Recovery	Headspace Screening	Sample ID	Blow Count Recovery	Graphic Log	USCS	Description (Color, Moisture, Texture, Structure, Odor) Geologic Descriptions are Based on the USCS.
								Grass/weeds w/ dirt
0	0.0		0.4					0 - 5' Hand augered
	0.0		0.8					(0-5.5) Silty SAND: 6/4 2.5Y ligh yellowish brown, dry, loose, fine sand, trace gravels, no HC odor
2	0.0		1.0				SM	
	0.0		1.0					⇩minor clay content in matrix, color changes to dk grayish brown 4/2 2.5Y slightly moist to moist, minor organics material in matrix
4	0.1	100%	6.8					
	119.5		183.1	MW-12 (5.5-7.5)' 1045				⇩HC stained @ 5.5' bgs, very dk gray 3/1 2.5Y, mod HC odor
6	9.0		52.3				SP	(5.5-8.2) Poorly Graded SAND: loose, moist, fine sand, minor clay content in matrix, no cementation, mod HC odor, minor HC staining
	1105		1165					⇩water @ 7.5' bgs
8	60.4		11.5					(8.2-10) No Recovery
	NR	64%	NR					
10	3.4		4.3				SP	(10-11.3) Poorly Graded SAND: very dk gray 3/1 2.5Y to black, HC stained, wet, saturated, loose
	0.6		1.6					(11.3-15) No Recovery
12	NR		NR					
	NR		NR					
14	NR	26%	NR					
	NR		NR					(15-20) No Recovery driller reports flowing sands 15-20'
16	NR		NR					
	NR		NR					
18	NR		NR					
	NR	0%	NR					
20								TD = 20.0' bgs
22								

Drilling Log JAQUEZ LOGS EL PASO - COPY.GPJ MWH IA.GDT 1/15/16

MWH

Drilling Log

Soil Boring **SB-14**

Project *Jaquez E#1 & C#1* Owner *El Paso CGP Company, LLC*

Location *San Juan River Basin, New Mexico* Project Number *10507777*

Surface Elev. *NA* North *NA* East *NA*

Top of Casing *NA* Water Level Initial ▽ *NA* Static ▼ *NA*

Hole Depth *20.0ft* Screen: Diameter *NA* Length *NA* Type/Size *NA*

Hole Diameter *3" (0-5)' & 2" (5-20)'* Casing: Diameter *NA* Length *NA* Type *NA*

Drill Co. *National EWP* Drilling Method *Direct Push (Geoprobe)* Sand Pack *NA*

Driller *Rodrigo Cano* Driller Reg. # *WD 1210* Log By *Brad Barton*

Start Date *9/17/2015* Completion Date *9/17/2015* Checked By *S. Varsa*

COMMENTS
Soil boring completed using hand auger from 0 to 5 feet and dual tube from 5 to 20 feet.

Bentonite Grout | Bentonite Granules | Grout | Portland Cement | Sand Pack | Sand Pack

Depth (ft)	PID (ppm)	% Recovery	Headspace Screening	Sample ID	Blow Count Recovery	Graphic Log	USCS	Description (Color, Moisture, Texture, Structure, Odor) Geologic Descriptions are Based on the USCS.
								Dirt, weeds debris in area
0	0.0		2.5					0 - 5' Hand augered
	0.0		3.5					(0 - 6.9) Silty SAND: lt olive brown 5/4 2.5Y, dry, loose, fine sand, no HC odor
2	0.0		3.3					
	0.0		3.5				SM	
4	0.0	100%	2.3					⇩slight moist
	0.0		2.5					
6	0.0		9.9					
	NR		NR					(6.9 - 10) No Recovery
8	NR		NR					
	NR	38%	NR					
10	0.0		4.3				SM	(10 - 11) Silty SAND: (cont'd) moist, as above
	0.0		8.2					(11 - 13) Clayey SAND: moist to very moist, high plasticity, fine sand
12	0.0		10.5				SC	
	0.0		8.9	SB-14 (12-13)' 0955			CH	⇩water @ about 13' bgs (13 - 13.8) FAT CLAY w/ Poorly Graded SAND lenses: olive brown, wet, saturated, high plasticity, no HC odor
14	NR	76%	NR					(13.8 - 15) No Recovery
	0.0		11.2					(15 - 18) FAT CLAY w/ Poorly Graded SAND lenses: as above, (cont'd)
16	0.0		9.0				CH	
	0.0		6.5					
18	NR		NR					(18 - 20) No Recovery
	NR	60%	NR					
20								
								TD = 20' bgs
22								

Drilling Log JAQUEZ LOGS EL PASO - COPY.GPJ MWH IA.GDT 1/15/16

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Drilling Log

Soil Boring **SB-15**

Project *Jaquez E#1 & C#1* Owner *El Paso CGP Company, LLC*

Location *San Juan River Basin, New Mexico* Project Number *10507777*

Surface Elev. *NA* North *NA* East *NA*

Top of Casing *NA* Water Level Initial ▽ *NA* Static ▼ *NA*

Hole Depth *20.0ft* Screen: Diameter *NA* Length *NA* Type/Size *NA*

Hole Diameter *3" (0-5)' & 2" (5-20)'* Casing: Diameter *NA* Length *NA* Type *NA*

Drill Co. *National EWP* Drilling Method *Direct Push (Geoprobe)* Sand Pack *NA*

Driller *Rodrigo Cano* Driller Reg. # *WD 1210* Log By *Brad Barton*

Start Date *9/17/2015* Completion Date *9/17/2015* Checked By *S. Varsa*

COMMENTS
Soil boring completed using hand auger from 0 to 5 feet and dual tube from 5 to 20 feet.

■ Bentonite Grout ▨ Bentonite Granules ▭ Grout ▨ Portland Cement ▨ Sand Pack ▨ Sand Pack

Depth (ft)	PID (ppm)	% Recovery	Headspace Screening	Sample ID	Blow Count Recovery	Graphic Log	USCS	Description (Color, Moisture, Texture, Structure, Odor) Geologic Descriptions are Based on the USCS.
								Dirt, debris in area
0								0 - 5' Hand Augered
	0.0		2.6					(0 - 8) Silty SAND: lt olive brown 5/4 2.5Y, dry, loose, fine sand, minor organics rootlets/roots 0-5', no HC odor
	0.0		3.5					
2	0.0		3.1					
	0.0		2.3					
4	0.0	100%	1.2				SM	⇩slight moist
	0.0		2.9					
6	0.0		3.7					
	0.3		2.5					
8	NR		NR					(8 - 10) No Recovery
	NR	60%	NR					
10	0.0		1.8					(10 - 12) Silty SAND: (cont'd) as above, moist, no HC odor
	0.0		2.7	SB-15 (10.5-12.5)' 0905 MS/MSD collected QA/QC			SM	
12	0.0		1.4				SC	(12 - 13) Clayey SAND: lt olive brown5/4 2.5Y, moist to wet, high plasticity clay, soft to loose, fine sand, no HC odor
	NR		NR					▼water @ 12.5' bgs
14	NR	60%	NR					(13 - 15) No Recovery
	0.0		1.4					(15 - 18.4) Clayey SAND: (cont'd) as above, wet
16	0.0		3.1				SC	
	0.0		3.2					
18	0.0		3.0					(18.4 - 20) No Recovery
	NR	68%	NR					
20								
								TD = 20' bgs
22								

Drilling Log JAQUEZ LOGS EL PASO - COPY.GPJ MWH IA.GDT 1/15/16

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Drilling Log

Soil Boring **SB-16**

Project *Jaquez E#1 & C#1* Owner *El Paso CGP Company, LLC*

Location *San Juan River Basin, New Mexico* Project Number *10507777*

Surface Elev. *NA* North *NA* East *NA*

Top of Casing *NA* Water Level Initial ▽ *NA* Static ▼ *NA*

Hole Depth *15.0ft* Screen: Diameter *NA* Length *NA* Type/Size *NA*

Hole Diameter *3" (0-5)' & 2" (5-15)'* Casing: Diameter *NA* Length *NA* Type *NA*

Drill Co. *National EWP* Drilling Method *Direct Push (Geoprobe)* Sand Pack *NA*

Driller *Rodrigo Cano* Driller Reg. # *WD 1210* Log By *Brad Barton*

Start Date *9/18/2015* Completion Date *9/18/2015* Checked By *S. Varsa*

COMMENTS
Soil boring completed using hand auger from 0 to 5 feet and dual tube from 5 to 15 feet.

■ Bentonite Grout ▩ Bentonite Granules ▤ Grout ▨ Portland Cement ⋰ Sand Pack ⋰ Sand Pack

Depth (ft)	PID (ppm)	% Recovery	Headspace Screening	Sample ID	Blow Count Recovery	Graphic Log	USCS	Description (Color, Moisture, Texture, Structure, Odor) Geologic Descriptions are Based on the USCS.
								Dirt, w/ minor weeds
0	0.0		1.2					(0 - 4) Silty SAND: lt olive brown 5/4 2.5Y, dry to slight moist, fine sand, no cementation, no HC odor
	0.0		3.3					
2	0.0		4.1				SM	
	0.0		3.3					
4	0.0	100%	2.7					(4 - 6.8) Clayey SAND: lt olive brown 5/4 2.5Y, slight moist, low to med plasticity, fine to med sand, loose, no HC odor
	0.0		3.6				SC	
6	0.0		3.9	SB-16 (5.8-6.8)' 1050				
	NR		NR					(6.8 - 10) No Recovery
8	NR		NR					⇩color graded to dk gray 4/1 2.5Y, very moist ▼water @ 7' bgs
	NR	36%	NR					
10	0.0		2.3				SC	(12 - 13) Clayey SAND: olive 5/4 5Y, as above, med sand, wet, saturated, high plasticity, clay, loose to soft, no HC odor
	0.0		3.2					
12	0.0		4.2				CH	(12 - 12.9) FAT CLAY: olive 5/4 5Y, high plasticity, soft, saturated, no HC odor
	NR		NR					(12.9 - 15) No Recovery
14	NR	58%	NR					
16								TD = 15'bgs
18								

Drilling Log JAQUEZ LOGS EL PASO - COPY.GPJ MWH IA.GDT 1/15/16

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Drilling Log

Soil Boring **SB-19**

Project *Jaquez E#1 & C#1* Owner *El Paso CGP Company, LLC*

Location *San Juan River Basin, New Mexico* Project Number *10507777*

Surface Elev. *NA* North *NA* East *NA*

Top of Casing *NA* Water Level Initial ▽ *NA* Static ▼ *NA*

Hole Depth *20.0ft* Screen: Diameter *NA* Length *NA* Type/Size *NA*

Hole Diameter *3" (0-5)' & 2" (5-20)'* Casing: Diameter *NA* Length *NA* Type *NA*

Drill Co. *National EWP* Drilling Method *Direct Push (Geoprobe)* Sand Pack *NA*

Driller *Rodrigo Cano* Driller Reg. # *WD 1210* Log By *Brad Barton*

Start Date *9/14/2015* Completion Date *9/14/2015* Checked By *S. Varsa*

COMMENTS
Soil boring completed using hand auger from 0 to 5 feet and dual tube from 5 to 20 feet.

Bentonite Grout | Bentonite Granules | Grout | Portland Cement | Sand Pack | Sand Pack

Depth (ft)	PID (ppm)	% Recovery	Headspace Screening	Sample ID	Blow Count Recovery	Graphic Log	USCS	Description (Color, Moisture, Texture, Structure, Odor) Geologic Descriptions are Based on the USCS.
								Dirt next to debris pile
0	0.0		3.3					0 - 5' bgs Hand augered
	0.0		3.8					(0 - 8.5) Silty SAND: olive brown 4/2 2.5Y, loose, fine sand, dry to slight moist, no HC odor
2	0.0		2.3					
	0.0		3.7					
4	0.0	100%	4.0				SM	
	0.0		0.9					⇩slight moist
6	0.0		0.8					
	0.0		0.1					
8	0.0		0.4					
	NR	70%	NR					(8.5 - 10) No Recovery
10	0.0		0.7					(10 - 14) Poorly Graded SAND: olive brown, 4/2 2.5Y, loose, med sand, minor fine sand, moist to wet, no HC odor, no cementation,
	0.0		0.6					
12	0.0		0.8	SB-19 (12-13)' 1420			SP	⇩water @ 13' bgs
	0.0		0.8					⇩saturated, wet
14	NR	80%	NR					(14 - 15) No Recovery
	0.0		0.8					(15 - 17) Poorly Graded SAND: (cont'd) as before
16	0.0		0.7				SP	
	0.0		0.4					(17 - 18.6) FAT CLAY; lt olive brown 4/3 2.5Y, soft to med stiff, very moist, high dry strength, high plasticity
18	0.0		0.4				CH	
	NR	72%	NR					(18.6 - 20) No Recovery
20								
								TD = 20' bgs
22								

Drilling Log

MWH

Soil Boring **SB-20**

Project *Jaquez E#1 & C#1* Owner *El Paso CGP Company, LLC*

Location *San Juan River Basin, New Mexico* Project Number *10507777*

Surface Elev. *NA* North *NA* East *NA*

Top of Casing *NA* Water Level Initial ▽ *NA* Static ▼ *NA*

Hole Depth *15.0ft* Screen: Diameter *NA* Length *NA* Type/Size *NA*

Hole Diameter *3" (0-5)' & 2" (5-15)'* Casing: Diameter *NA* Length *NA* Type *NA*

Drill Co. *National EWP* Drilling Method *Direct Push (Geoprobe)* Sand Pack *NA*

Driller *Rodrigo Cano* Driller Reg. # *WD 1210* Log By *Brad Barton*

Start Date *9/18/2015* Completion Date *9/18/2015* Checked By *S. Varsa*

COMMENTS
Soil boring completed using hand auger from 0 to 5 feet and dual tube from 5 to 15 feet.

Bentonite Grout | Bentonite Granules | Grout | Portland Cement | Sand Pack | Sand Pack

Depth (ft)	PID (ppm)	% Recovery	Headspace Screening	Sample ID	Blow Count Recovery	Graphic Log	USCS	Description (Color, Moisture, Texture, Structure, Odor) Geologic Descriptions are Based on the USCS.
								Dirt , w/ weeds by opening of trailer
0	0.0		1.8					0 - 5' bgs Hand Augered
	0.0		0.9				SM	(0 - 2) Silty SAND: lt olive brown, dry, fine sand, loose, trace organics - rootlets, no HC odor
2	0.0		1.2					(2 - 7.8) Clayey SAND: lt olive brown, low to med plasticity, fine to med sand, slight moist, no HC odor
	0.0		0.8					
4	0.0		0.9					
	0.0	100%		SB-20			SC	
	0.0		2.2	(5-7)' 1000				
6	0.0		1.2					▼water @ 7' bgs ⇩saturated, wet
	0.0		1.7					
8								⇩color grades to dk gray 4/1 2.5Y
	NR		NR					(7.8 - 10) No Recovery
	NR		NR					
10		56%						
	0.0		1.3				SC	(10 - 12) Clayey SAND: dk gray 4/1 2.5Y, loose to soft, med sand, wet, med to high plasticity, no HC odor
	0.0		1.8					
12	0.0		1.3				CH	(12 - 13) FAT CLAY: olive 5/4 5Y, saturated, soft, high plasticity, no HC odor
	NR		NR					(13 - 15) No Recovery
14	NR		NR					
		60%						
16								TD = 15' bgs
18								

Drilling Log

MWH

Soil Boring **SB-21**

Project *Jaquez E#1 & C#1* Owner *El Paso CGP Company, LLC*

Location *San Juan River Basin, New Mexico* Project Number *10507777*

Surface Elev. *NA* North *NA* East *NA*

Top of Casing *NA* Water Level Initial ▽ *NA* Static ▼ *NA*

Hole Depth *20.0ft* Screen: Diameter *NA* Length *NA* Type/Size *NA*

Hole Diameter *3" (0-5)' & 2" (5-20)'* Casing: Diameter *NA* Length *NA* Type *NA*

Drill Co. *National EWP* Drilling Method *Direct Push (Geoprobe)* Sand Pack *NA*

Driller *Rodrigo Cano* Driller Reg. # *WD 1210* Log By *Brad Barton*

Start Date *9/17/2015* Completion Date *9/17/2015* Checked By *S. Varsa*

COMMENTS
Soil boring completed using hand auger from 0 to 5 feet and dual tube from 5 to 20 feet.

Bentonite Grout | Bentonite Granules | Grout | Portland Cement | Sand Pack | Sand Pack

Depth (ft)	PID (ppm)	% Recovery	Headspace Screening	Sample ID	Blow Count Recovery	Graphic Log	USCS	Description (Color, Moisture, Texture, Structure, Odor) Geologic Descriptions are Based on the USCS.
								Dirt
0	0.0		3.2					0 - 5' bgs Hand Augered
	0.0		5.6					(0 - 7.7) Silty SAND: lt olive brown, dry, fine sand, loose, no cementation, no HC odor
2	0.0		3.9					
	0.0		6.2					
4	0.0	100%	6.0				SM	⇩slight moist
	0.0		3.9					
6	0.0		3.3	SB-21 (6.7-7.7)' 1410				⇩very moist
	0.0		1.9					
8	NR		NR					▼water @ 8-10' bgs (7.7 - 10) No Recovery
	NR	54%	NR					
10	0.0		6.9					(10 - 12.5) Clayey SAND: lt olive brown, wet, saturated, soft to loose, fine sand, high plasticity, no HC odor
	0.0		5.0				SP	
12	0.0		5.0				CH	(12.5 - 12.8) FAT CLAY: olive, soft to med stiff, saturated, high plasticity, no HC odor
	NR		NR					(12.8 - 15) No Recovery
14	NR	56%	NR					
	0.0		3.9					FAT CLAY w/ Poorly Graded SAND lenses: olive brown, saturated, wet, loose sand, soft clay, high plasticity, med sand, no HC odor
16	0.0		4.9				CH	
	0.0		2.5					
18	NR		NR					(17.9 - 20) No Recovery
	NR	58%	NR					
20								
								TD = 20' bgs
22								

MWH

Drilling Log

Soil Boring **SB-22**

Project *Jaquez E#1 & C#1* Owner *El Paso CGP Company, LLC*

Location *San Juan River Basin, New Mexico* Project Number *10507777*

Surface Elev. *NA* North *NA* East *NA*

Top of Casing *NA* Water Level Initial ▽ *NA* Static ▼ *NA*

Hole Depth *20.0ft* Screen: Diameter *NA* Length *NA* Type/Size *NA*

Hole Diameter *3" (0-5)' & 2" (5-20)'* Casing: Diameter *NA* Length *NA* Type *NA*

Drill Co. *National EWP* Drilling Method *Direct Push (Geoprobe)* Sand Pack *NA*

Driller *Rodrigo Cano* Driller Reg. # *WD 1210* Log By *Brad Barton*

Start Date *9/17/2015* Completion Date *9/17/2015* Checked By *S. Varsa*

COMMENTS
Soil boring completed using hand auger from 0 to 5 feet and dual tube from 5 to 20 feet.

Bentonite Grout | Bentonite Granules | Grout | Portland Cement | Sand Pack | Sand Pack

Depth (ft)	PID (ppm)	% Recovery	Headspace Screening	Sample ID	Blow Count Recovery	Graphic Log	USCS	Description (Color, Moisture, Texture, Structure, Odor) Geologic Descriptions are Based on the USCS.
								Dirt, next to debris pile 0 - 5' bgs Hand Augered
0	0.0		0.8					(0 - 7) Silty SAND: dry, lt olive brown, loose, no cementation, fine to med sand, no HC odor
	0.0		4.0					
2	0.0		6.3					
	0.0		6.7				SM	
4	0.0	100%	6.1					⇩slight moist
	0.0		2.1					
6	0.0		5.6					
	NR		NR					(7 - 10) No Recovery
8	NR		NR					
	NR	40%	NR	SB-22 (10-11)' 1310				
10	0.0		4.0				SP	(10 - 12.5) Poorly Graded SAND: very moist to wet, lt olive brown 5/4 2.5Y, loose, no cementation, no HC odor
	0.0		6.3					▼water @ 11' bgs
12	0.0		4.3					⇩ wet
	NR		NR					(12.5 - 15) No Recovery
14	NR	50%	NR					
	0.0		3.4					(15 - 17) Poorly Graded SAND: (cont'd), as above, wet
16	0.0		2.5				SP	
	0.0		5.4				CH	(17 - 17.5) FAT CLAY: olive, soft, saturated, high plasticity, no HC odor
18	NR		NR					(17.5 - 20) No Recovery
	NR	50%	NR					
20								
								TD = 20' bgs
22								

Drilling Log

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Soil Boring **SB-23**

Project *Jaquez E#1 & C#1* Owner *El Paso CGP Company, LLC*

Location *San Juan River Basin, New Mexico* Project Number *10507777*

Surface Elev. *NA* North *NA* East *NA*

Top of Casing *NA* Water Level Initial ▽ *NA* Static ▼ *NA*

Hole Depth *15.0ft* Screen: Diameter *NA* Length *NA* Type/Size *NA*

Hole Diameter *3" (0-5)' & 2" (5-15)'* Casing: Diameter *NA* Length *NA* Type *NA*

Drill Co. *National EWP* Drilling Method *Direct Push (Geoprobe)* Sand Pack *NA*

Driller *Rodrigo Cano* Driller Reg. # *WD 1210* Log By *Brad Barton*

Start Date *9/17/2015* Completion Date *9/17/2015* Checked By *S. Varsa*

COMMENTS
Soil boring completed using hand auger from 0 to 5 feet and dual tube from 5 to 15 feet.

Bentonite Grout | Bentonite Granules | Grout | Portland Cement | Sand Pack | Sand Pack

Depth (ft)	PID (ppm)	% Recovery	Headspace Screening	Sample ID	Blow Count Recovery	Graphic Log	USCS	Description (Color, Moisture, Texture, Structure, Odor) Geologic Descriptions are Based on the USCS.
								Dirt near canal
0								0 - 5' bgs Hand augered
	0.0		3.6					(0 - 3) Silty SAND: lt olive brown 5/4 2.5Y, dry, loose, fine sand, no HC odor
	0.0		8.7				SM	
2	0.0		12.8					
	0.0		9.3					(3 - 7.2) Clayey SAND: lt olive brown, moist, med plasticity, fine to med sand, loose, no HC odor
4	0.0		8.8	SB-23 (4-5)' 1530				
	0.0	100%					SC	▼water @ 5' bgs ⇩wet, saturated
	0.0		5.9					
6	0.0		5.8					
	0.0		5.5					(7.2 - 10) No Recovery
8	NR		NR					
	NR	44%	NR					
10	0.0		6.2					(10 - 13) FAT CLAY w/ minor fine and med sand: olive, soft, saturated, wet, high plasticity, no HC odor
	0.0		6.4				CH	
12	0.0		5.7					
	NR		NR					(13 - 15) No Recovery
14	NR		NR					
		60%						
16								TD = 15' bgs
18								

MWH

Drilling Log

Soil Boring **SB-24**

Project *Jaquez E#1 & C#1* Owner *El Paso CGP Company, LLC*

Location *San Juan River Basin, New Mexico* Project Number *10507777*

Surface Elev. *NA* North *NA* East *NA*

Top of Casing *NA* Water Level Initial ▽ *NA* Static ▼ *NA*

Hole Depth *15.0ft* Screen: Diameter *NA* Length *NA* Type/Size *NA*

Hole Diameter *3" (0-5)' & 2" (5-15)'* Casing: Diameter *NA* Length *NA* Type *NA*

Drill Co. *National EWP* Drilling Method *Direct Push (Geoprobe)* Sand Pack *NA*

Driller *Rodrigo Cano* Driller Reg. # *WD 1210* Log By *Brad Barton*

Start Date *9/17/2015* Completion Date *9/17/2015* Checked By *S. Varsa*

COMMENTS
Soil boring completed using hand auger from 0 to 5 feet and dual tube from 5 to 15 feet.

Bentonite Grout | Bentonite Granules | Grout | Portland Cement | Sand Pack | Sand Pack

Depth (ft)	PID (ppm)	% Recovery	Headspace Screening	Sample ID	Blow Count Recovery	Graphic Log	USCS	Description (Color, Moisture, Texture, Structure, Odor) Geologic Descriptions are Based on the USCS.
								Dirt near canal
0								0 - 5' bgs Hand Augered
	0.0		3.4				SM	(0 - 2) Silty SAND: lt olive brown 5/4 2.5Y, fine sand, loose, no cementation, no HC odor, minor organics rootlets
2	0.0		5.5					
	0.0		8.8					(2 - 7) Clayey SAND: olive brown, very moist to wet, fine to med sand, med plasticity, no HC odor, minor organics, tootlets
	0.0		11.6	SB-24 (3-4)' 1445				
4	0.0	100%	8.5				SC	▼water @ 4' bgs ⇩wet, saturated
6	0.0		2.6					
	0.0		3.5					
	NR		NR					(7 - 10) No Recovery
8	NR		NR					
	NR	40%	NR					
10	0.0		3.9				CH	(10 - 12.2) FAT CLAY w/ Poorly Graded SAND lenses: olive, saturated, wet, med sand lense, high plasticity, soft, no HC odor
	0.0		4.4					
12	0.0		7.7					(12.2 - 15) No Recovery
	NR		NR					
14	NR	44%	NR					
16								TD = 15' bgs
18								

Drilling Log JAQUEZ LOGS EL PASO - COPY.GPJ MWH IA.GDT 1/15/16

Drilling Log

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Soil Boring **SB-25**

Project *Jaquez E#1 & C#1* Owner *El Paso CGP Company, LLC*

Location *San Juan River Basin, New Mexico* Project Number *10507777*

Surface Elev. *NA* North *NA* East *NA*

Top of Casing *NA* Water Level Initial ▽ *NA* Static ▼ *NA*

Hole Depth *20.0ft* Screen: Diameter *NA* Length *NA* Type/Size *NA*

Hole Diameter *3" (0-5)' & 2" (5-20)'* Casing: Diameter *NA* Length *NA* Type *NA*

Drill Co. *National EWP* Drilling Method *Direct Push (Geoprobe)* Sand Pack *NA*

Driller *Rodrigo Cano* Driller Reg. # *WD 1210* Log By *Brad Barton*

Start Date *9/17/2015* Completion Date *9/17/2015* Checked By *S. Varsa*

COMMENTS
Soil boring completed using hand auger from 0 to 5 feet and dual tube from 5 to 20 feet.

Bentonite Grout | Bentonite Granules | Grout | Portland Cement | Sand Pack | Sand Pack

Depth (ft)	PID (ppm)	% Recovery	Headspace Screening	Sample ID	Blow Count Recovery	Graphic Log	USCS	Description (Color, Moisture, Texture, Structure, Odor) Geologic Descriptions are Based on the USCS.
								Dirt near canal
0	0.0		3.8					0 - 5' bgs Hand augered
	0.0		5.1					(0 - 6) Silty SAND: lt olive brown, loose, dry, fine sand, no cementation, no HC odor
2	0.0		6.6					
	0.0		4.8				SM	
4	0.0		5.2					⇩iron mottling, minor organics, moist
	0.0	100%	7.2	SB-25 (5-6)' 1130				
6	0.0		6.4					▼water @ 6' bgs
	0.0		5.1				SP	(6 - 7.3) Poorly Graded SAND: wet, saturated, loose, med sand, no cementation, no HC odor
8	NR		NR					(6 - 10) No Recovery
	NR	46%	NR					
10	0.0		2.9					(10 - 12.9) Poorly Graded SAND: (cont'd) as above
	0.0		4.6				SP	
12	0.0		3.2					
	NR		NR					(12.9 - 15) No Recovery
14	NR	58%	NR					
	0.0		4.0				SP	(15 - 16) Poorly Graded SAND: cont'd as above
16	0.0		4.9				CH	FAT CLAY: olive, saturated, soft, high plasticity, no HC odor
	0.0		3.7				SP	(17 - 1706) Poorly Graded SAND: as above
18	NR		NR					
	NR	52%	NR					
20								
22								TD = 20' bgs

MWH

Drilling Log

Soil Boring **SB-26**

Project *Jaquez E#1 & C#1* Owner *El Paso CGP Company, LLC*

Location *San Juan River Basin, New Mexico* Project Number *10507777*

Surface Elev. *NA* North *NA* East *NA*

Top of Casing *NA* Water Level Initial ▽ *NA* Static ▼ *NA*

Hole Depth *20.0ft* Screen: Diameter *NA* Length *NA* Type/Size *NA*

Hole Diameter *3" (0-5)' & 2" (5-20)'* Casing: Diameter *NA* Length *NA* Type *NA*

Drill Co. *National EWP* Drilling Method *Direct Push (Geoprobe)* Sand Pack *NA*

Driller *Rodrigo Cano* Driller Reg. # *WD 1210* Log By *Brad Barton*

Start Date *9/17/2015* Completion Date *9/17/2015* Checked By *S. Varsa*

COMMENTS
Soil boring completed using hand auger from 0 to 5 feet and dual tube from 5 to 20 feet.

Bentonite Grout | Bentonite Granules | Grout | Portland Cement | Sand Pack | Sand Pack

Depth (ft)	PID (ppm)	% Recovery	Headspace Screening	Sample ID	Blow Count Recovery	Graphic Log	USCS	Description (Color, Moisture, Texture, Structure, Odor) Geologic Descriptions are Based on the USCS.
								Dirt near canal
0	0.0		1.9					0 - 5' bgs Hand Augered
	0.0		2.8					(0 - 5) Silty SAND: lt olive brown 5/4 2.5Y, dry, loose, fine sand, no HC odor
2	0.0		3.1				SM	
	0.0		2.5					
4	0.0	100%	1.4					
	0.0		3.6	SB-26 (5-6)' 1045				(5 - 7) Clayey SAND: lt olive brown, very moist to wet, saturated
6	0.0		4.1				SC	▼ water @ 6' bgs
	NR		NR					(7 - 10) No Recovery
8	NR		NR					
	NR	40%	NR					
10	0.0		3.2					(10 - 13) Poorly Graded SAND: med sand, loose, wet, minor clay content, no HC odor
	0.0		4.1				SP	
12	0.0		4.8					
	0.0		4.0				CH	(13 - 13.3): FAT CLAY w/ minor fine sand: olive brown, soft to med stiff, high plasticity, no HC odor
14	NR	66%	NR					(13.3 - 15) No Recovery
	0.0		3.5					(15 - 18) FAT CLAY w/ minor Poorly Graded SAND lenses: olive, saturated, soft, high plasticity, med sand, loose, no HC odor
16	0.0		4.9				CH	
	0.0		4.2					
18	NR		NR					(18 - 20) No Recovery
	NR	60%	NR					
20								TD = 20' bgs
22								

MWH

Drilling Log

Soil Boring **SB-27**

Project *Jaquez E#1 & C#1* Owner *El Paso CGP Company, LLC*

Location *San Juan River Basin, New Mexico* Project Number *10507777*

Surface Elev. *NA* North *NA* East *NA*

Top of Casing *NA* Water Level Initial ▽ *NA* Static ▼ *NA*

Hole Depth *12.0ft* Screen: Diameter *NA* Length *NA* Type/Size *NA*

Hole Diameter *3" (0-5)' & 2" (5-12)'* Casing: Diameter *NA* Length *NA* Type *NA*

Drill Co. *National EWP* Drilling Method *Direct Push (Geoprobe)* Sand Pack *NA*

Driller *Rodrigo Cano* Driller Reg. # *WD 1210* Log By *Brad Barton*

Start Date *9/14/2015* Completion Date *9/14/2015* Checked By *S. Varsa*

COMMENTS
Soil boring completed using hand auger from 0 to 5 feet and dual tube from 5 to 12 feet.

■ Bentonite Grout ▩ Bentonite Granules ▤ Grout ▨ Portland Cement ⋰ Sand Pack ⋰ Sand Pack

Depth (ft)	PID (ppm)	% Recovery	Headspace Screening	Sample ID	Blow Count Recovery	Graphic Log	USCS	Description (Color, Moisture, Texture, Structure, Odor) Geologic Descriptions are Based on the USCS.
								Dirt - bermed area near canal
0								0 - 5' Hand Augered
	0.0		0.2					(0 - 3) Silty SAND: lt yellowish brown 6/4 10YR, loose, very fine sand, dry, no HC odor
	0.0		4.5				SM	
2	0.0		2.0					
	0.0		1.5					(3 - 5) Clayey SAND: lt olive brown 5/4 2.5Y, slight moist, fine sand, low to med plasticity, no HC odor
4	0.0		0.9				SC	
		100%						
	0.0		0.8					(5 - 8) Clayey SAND: (cont'd) as before, very moist to wet
6	0.0		5.2	SB-27 (6-7)' 1520			SC	▼Water @ 7' bgs
	0.0		0.7					
8	NR		NR					(8 - 10) No Recovery
	NR	60%	NR					
10	0.0		0.6				SP	(10 - 11) Poorly Graded SAND: lt olive brown, loose, wet, no cementation, med sand, no HC odor
	0.0		0.6				CH	(11 - 11.5) FAT CLAY: lt olive brown, soft to med stiff, moist, high plasticity, high dry dtrength, no HC odor
12	NR	75%	NR					(11.5 12) No Recovery
14								

Drilling Log

MWH

Soil Boring **SB-30**

Project *Jaquez E#1 & C#1* Owner *El Paso CGP Company, LLC*

Location *San Juan River Basin, New Mexico* Project Number *10507777*

Surface Elev. *NA* North *NA* East *NA*

Top of Casing *NA* Water Level Initial ▽ *NA* Static ▼ *NA*

Hole Depth *20.0ft* Screen: Diameter *NA* Length *NA* Type/Size *NA*

Hole Diameter *3" (0-5)' & 2" (5-20)'* Casing: Diameter *NA* Length *NA* Type *NA*

Drill Co. *National EWP* Drilling Method *Direct Push (Geoprobe)* Sand Pack *NA*

Driller *Rodrigo Cano* Driller Reg. # *WD 1210* Log By *Brad Barton*

Start Date *9/16/2015* Completion Date *9/16/2015* Checked By *S. Varsa*

COMMENTS
Soil boring completed using hand auger from 0 to 5 feet and dual tube from 5 to 20 feet.

Bentonite Grout | Bentonite Granules | Grout | Portland Cement | Sand Pack | Sand Pack

Depth (ft)	PID (ppm)	% Recovery	Headspace Screening	Sample ID	Blow Count Recovery	Graphic Log	USCS	Description (Color, Moisture, Texture, Structure, Odor) Geologic Descriptions are Based on the USCS.
								Dirt, weeds
0	0.0	100%	2.0	SB-30 (5-6)' 1535				0 - 5' Hand augered
	0.0		2.1					(0 - 7) Silty SAND: lt olive brown 5/3 2.5Y, dry, loose, fine sand, no HC odor
2	0.0		4.8					
	0.0		5.1				SM	
4	0.0		4.6					⇩slight moist
	0.0		3.5					
6	0.0		2.8					▼water @ 6' bgs ⇩very saturated
	NR		NR					(7 - 10) No Recovery
8	NR		NR					
	NR	40%	NR					
10	0.0		4.0				SC	(10 - 11) Clayey SAND: lt olive brown, high plasticity, fine sand, loose, wet, no HC odor
	0.0		4.4				CH	(11 - 11.8) FAT CLAY w/ fine sand: high plasticity, soft to med stiff
12	NR		NR					(11.8 - 15) No Recovery
	NR		NR					
14	NR	36%	NR					
	0.0		5.9				CH	FAT CLAY: olive, med stiff to stiff, high plasticity, moist, high dry strength, no HC odor
16	0.0		4.0				SP	(16 - 17.6) Poorly Graded SAND: minor clay content, lt olive brown, loose, med sand, no HC odor
	0.0		4.6					
18	NR		NR					(17.6 - 20) No Recovery
	NR	52%	NR					
20								
								TD = 20' bgs
22								

MWH

Drilling Log

Soil Boring **SB-31**

Project *Jaquez E#1 & C#1* Owner *El Paso CGP Company, LLC*

Location *San Juan River Basin, New Mexico* Project Number *10507777*

Surface Elev. *NA* North *NA* East *NA*

Top of Casing *NA* Water Level Initial ▽ *NA* Static ▼ *NA*

Hole Depth *20.0ft* Screen: Diameter *NA* Length *NA* Type/Size *NA*

Hole Diameter *3" (0-5)' & 2" (5-20)'* Casing: Diameter *NA* Length *NA* Type *NA*

Drill Co. *National EWP* Drilling Method *Direct Push (Geoprobe)* Sand Pack *NA*

Driller *Rodrigo Cano* Driller Reg. # *WD 1210* Log By *Brad Barton*

Start Date *9/16/2015* Completion Date *9/16/2015* Checked By *S. Varsa*

COMMENTS
Soil boring completed using hand auger from 0 to 5 feet and dual tube from 5 to 20 feet.

■ Bentonite Grout ▩ Bentonite Granules ▤ Grout ▨ Portland Cement ⋰ Sand Pack ⋰ Sand Pack

Depth (ft)	PID (ppm)	% Recovery	Headspace Screening	Sample ID	Blow Count Recovery	Graphic Log	USCS	Description (Color, Moisture, Texture, Structure, Odor) Geologic Descriptions are Based on the USCS.
								Dirt, weeds
0								0 - 5' hand Augered
	0.0		2.2					(0 - 4) Silty SAND: lt olive brown, dry, loose, fine sand, wood debris @ 1' bgs, no HC odor
	0.0		2.9					
2	0.0		5.2				SM	
	0.0		7.7					
4	0.0		5.2				CH	(4 - 5) FAT CLAY: olive, slight moist, med stiff to stiff, high plasticity, high dry strength, no HC odor
	0.0	100%	8.2	SB-31 (5-6)' 1615			SC	(5 - 7.2) Clayey SAND: lt olive brown, high plasticity, loose to soft, very moist to wet, no HC odor, fine sand ▼water @ 6' bgs ⇩wet, saturated
6	0.0		2.3					
	0.0		4.5					(7.2 - 10) No Recovery
8	NR		NR					
	NR	44%	NR					
10	0.0		5.8				CH	(10 - 12) FAT CLAY w/ minor fine sand: olive to lt olive brown, soft to med stiff, moist to very moist, high plasticity, no HC odor
	0.0		6.2					
12	NR		NR					(12 - 15) No Recovery
	NR		NR					
14	NR	40%	NR					
	0.0		4.9				CH	(15 - 16) FAT CLAY: (cont'd) as above, olive, med soft
16	0.0		5.1				SP	(16 - 18) Poorly Graded SAND: lt olive brown, wet, staurated, loose, med sand, no HC odor
	0.0		5.6					
18	NR		NR					(18 - 20) No Recovery
	NR	60%	NR					
20								
								TD = 20' bgs
22								

MWH

Drilling Log

Soil Boring **SB-32**

Project *Jaquez E#1 & C#1* Owner *El Paso CGP Company, LLC*

Location *San Juan River Basin, New Mexico* Project Number *10507777*

Surface Elev. *NA* North *NA* East *NA*

Top of Casing *NA* Water Level Initial ▽ *NA* Static ▼ *NA*

Hole Depth *10.0ft* Screen: Diameter *NA* Length *NA* Type/Size *NA*

Hole Diameter *3" (0-5)' & 2" (5-10)'* Casing: Diameter *NA* Length *NA* Type *NA*

Drill Co. *National EWP* Drilling Method *Direct Push (Geoprobe)* Sand Pack *NA*

Driller *Rodrigo Cano* Driller Reg. # *WD 1210* Log By *Brad Barton*

Start Date *9/13/2015* Completion Date *9/13/2015* Checked By *S. Varsa*

COMMENTS
Soil boring completed using hand auger from 0 to 5 feet and dual tube from 5 to 10 feet.

Bentonite Grout | Bentonite Granules | Grout | Portland Cement | Sand Pack | Sand Pack

Depth (ft)	PID (ppm)	% Recovery	Headspace Screening	Sample ID	Blow Count Recovery	Graphic Log	USCS	Description (Color, Moisture, Texture, Structure, Odor) Geologic Descriptions are Based on the USCS.
								Dirt, Bermed area right next to cone
0								0 - 5' hand augered - Hit refusal 3 time
	0.0		1.7					(0 - 6.6) Silty SAND w/ minor clay: @ 2.5' bgs, olive brown 4/3 2.5Y, dry to moist, med sand, loose, trace cobbles, minor gravels
	0.0		1.6					
2	0.0		2.9					⇩slight moist to moist, trace cobbles ⇩Cobbles @ 2.5' bgs
	0.0		5.3	SB-32 (3-4)' 1225			SM	
4	0.0		3.1					▼water @ 4' bgs ⇩saturated, wet
		100%						
	0.2		2.3					⇩less cobbles, saturated, wet, no HC odor, as above without cobbles
6	0.2		2.9					
								(6.6 - 10) No Recovery
	NR		NR					
8	NR		NR					
	NR		NR					
10		32%						
12								TD = 10' bgs

Drilling Log JAQUEZ LOGS EL PASO - COPY.GPJ MWH IA.GDT 1/15/16

Drilling Log

MWH

Soil Boring **SB-32(R)**

Project *Jaquez E#1 & C#1* Owner *El Paso CGP Company, LLC*

Location *San Juan River Basin, New Mexico* Project Number *10507777*

Surface Elev. *NA* North *NA* East *NA*

Top of Casing *NA* Water Level Initial ▽ *NA* Static ▼ *NA*

Hole Depth *20.0ft* Screen: Diameter *NA* Length *NA* Type/Size *NA*

Hole Diameter *3" (0-5)' & 2" (5-20)'* Casing: Diameter *NA* Length *NA* Type *NA*

Drill Co. *National EWP* Drilling Method *Direct Push (Geoprobe)* Sand Pack *NA*

Driller *Rodrigo Cano* Driller Reg. # *WD 1210* Log By *Brad Barton*

Start Date *9/15/2015* Completion Date *9/15/2015* Checked By *S. Varsa*

COMMENTS
Soil boring completed using hand auger from 0 to 5 feet and dual tube from 5 to 20 feet. Continued from SB-32

Bentonite Grout | Bentonite Granules | Grout | Portland Cement | Sand Pack | Sand Pack

Depth (ft)	PID (ppm)	% Recovery	Headspace Screening	Blow Count Recovery	Graphic Log	USCS	Description (Color, Moisture, Texture, Structure, Odor) Geologic Descriptions are Based on the USCS.
							Dirt, bermed area near canal
0	NA		NA				0 - 5' bgs Hand augered
	NA		NA				(0 - 10) no samples (10-20' sampled)
2	NA		NA				
	NA		NA				
4	NA		NA				▼ water @ 4' bgs
	NA	100%	NA				
	NA		NA				
6	NA		NA				
	NA		NA				
8	NA		NA				(sent to lab)
	NA		NA				▼ no samples below 10' bgs
10	NA	100%	NA			SP	(10 - 10.5) Poorly Graded SANDS: lt olive brown, 5/4 2.5Y, wet, saturated, loose, no HC odor, med sand
	0.0		1.3			CH	(10.5 - 13) - FAT CALY: lt olive brown 5/3 2.5Y, soft to med stiff, very moist, high plasticity, high dry strength, no HC odor
12	0.0		1.1				
	0.0		2.5				
	NR		NR				(13 - 15) No Recovery
14	NR	60%	NR				
	0.0		1.9			CH	(15 - 15.5) FAT CLAY: (cont'd) as above
16	0.0		1.2			SC	(15.5 - 17) Clayey SAND: loose, lt olive brown 5/4 2.5Y, med plasticity, very moist to wet, fine sand, no HC odor
	0.0		0.5			SP	(17 - 17.8) Poorly Graded SAND: med sand, loose, wet, lt olive brown, no cementation, no HC odor
18	NR		NR				(17.8 - 20) No Recovery
	NR	56%	NR				
20							TD = 20.0' bgs
22							

Drilling Log JAQUEZ LOGS EL PASO - COPY.GPJ MWH IA.GDT 1/15/16

Drilling Log

MWH

Soil Boring **SB-34**

Project *Jaquez E#1 & C#1* Owner *El Paso CGP Company, LLC*

Location *San Juan River Basin, New Mexico* Project Number *10507777*

Surface Elev. *NA* North *NA* East *NA*

Top of Casing *NA* Water Level Initial ▽ *NA* Static ▼ *NA*

Hole Depth *20.0ft* Screen: Diameter *NA* Length *NA* Type/Size *NA*

Hole Diameter *3" (0-5)' & 2" (5-20)'* Casing: Diameter *NA* Length *NA* Type *NA*

Drill Co. *National EWP* Drilling Method *Direct Push (Geoprobe)* Sand Pack *NA*

Driller *Rodrigo Cano* Driller Reg. # *WD 1210* Log By *Brad Barton*

Start Date *9/18/2015* Completion Date *9/18/2015* Checked By *S. Varsa*

COMMENTS
Soil boring completed using hand auger from 0 to 5 feet and dual tube from 5 to 20 feet.

Bentonite Grout | Bentonite Granules | Grout | Portland Cement | Sand Pack | Sand Pack

Depth (ft)	PID (ppm)	% Recovery	Headspace Screening	Sample ID	Blow Count Recovery	Graphic Log	USCS	Description (Color, Moisture, Texture, Structure, Odor) Geologic Descriptions are Based on the USCS.
								Weeds & Dirt
0	0.0		6.1					(0 - 5) Silty SAND: lt olive brown, dry to slight moist, loose, fine sand to med sand, no cementation, no HC odor
	0.0		4.9					
2	0.0		2.2				SM	
	0.0		3.6					
4	0.0	100%	3.8					⇩slight moist
	0.0		1.1	SB-34 (5-6.5)' 1150 MS/MSD collected QA/QC				(5 - 7) Poorly Graded SAND: lt olive brown 5/4 2.5Y, moist to wet, med sand, minor clay content, no cementation, no HC odor
6	0.0		1.2				SP	▼water @ 6.5' bgs
	NR		NR					⇩wet
8	NR		NR					(7 - 10) No Recovery
	NR	40%	NR					
10	0.0		4.6				SC	(10 - 12) Clayey SAND: lt olive brown 5/4 2.5Y, wet, saturated, high plasticity, loose to soft, no HC odor
	0.0		5.2					
12	0.0		4.0				CH	(12 - 14) FAT CLAY: olive, soft to med stiff, saturated, high plasticity, no HC odor
	0.0		3.1					
14	NR	80%	NR					(14 - 15) No Recovery
	0.0		2.7					(15 - 18.5) Clayey SAND: lt olive brown, wet, med sand, med to high plasticity, no HC odor
16	0.0		3.5				SC	
	0.0		2.7					
18	0.0		3.8					(18.5 - 20) No Recovery
	NR	70%	NR					
20								
22								TD = 20' bgs

MWH

Drilling Log

Soil Boring **SB-35**

Project *Jaquez E#1 & C#1* Owner *El Paso CGP Company, LLC*

Location *San Juan River Basin, New Mexico* Project Number *10507777*

Surface Elev. *NA* North *NA* East *NA*

Top of Casing *NA* Water Level Initial ▽ *NA* Static ▼ *NA*

Hole Depth *20.0ft* Screen: Diameter *NA* Length *NA* Type/Size *NA*

Hole Diameter *3" (0-5)' & 2" (5-20)'* Casing: Diameter *NA* Length *NA* Type *NA*

Drill Co. *National EWP* Drilling Method *Direct Push (Geoprobe)* Sand Pack *NA*

Driller *Rodrigo Cano* Driller Reg. # *WD 1210* Log By *Brad Barton*

Start Date *9/16/2015* Completion Date *9/16/2015* Checked By *S. Varsa*

COMMENTS
Soil boring completed using hand auger from 0 to 5 feet and dual tube from 5 to 20 feet.

Bentonite Grout | Bentonite Granules | Grout | Portland Cement | Sand Pack | Sand Pack

Depth (ft)	PID (ppm)	% Recovery	Headspace Screening	Sample ID	Blow Count Recovery	Graphic Log	USCS	Description (Color, Moisture, Texture, Structure, Odor) Geologic Descriptions are Based on the USCS.
								Dirt, weeds
0	0.0		4.0					0 - 5' bgs Hand Auger
	0.0		2.5					(0 - 7.6) Silty SAND: dry, loose, fine sand, lt olive brown 5/4 2.5Y, no HC odor
2	0.0		3.2					
	0.0		3.0				SM	
4	0.0	100%	2.7					⇩slight moist
	0.0		2.8					
6	0.0		4.4	SB-35 (6-7)' 1500				▼water @ 7' bgs ⇩wet, saturated
	0.0		3.8					
8	NR		NR					(7.6 - 10) No Recovery
	NR	52%	NR					
10	0.0		3.8				SM	(10 - 10.5) Silty SAND: (cont'd), wet
	0.0		3.7				CH	FAT CLAY w/ med fine sand: lt olive brown 5/4 2.5Y, soft, moist to very moist, high plasticity
12	NR		NR					(12 - 15) No Recovery
	NR		NR					
14	NR	40%	NR					
	0.0		6.4				CH	(15 - 15.5) FAT CLAY: 4/3 5Y olive, soft to med stiff, very moist, high plasticity, high dry strength, no HC odor
16	0.0		3.5				SC	(15.5 - 17) Clayey SAND: lt olive brown 5/4 2.5Y, wet, loose, fine sand, high plasticity, no HC odor
	NR		NR					(17 - 20) No Recovery
18	NR		NR					
	NR	40%	NR					
20								
								TD = 20' bgs
22								

Drilling Log

MWH

Soil Boring **SB-36**

Project *Jaquez E#1 & C#1* Owner *El Paso CGP Company, LLC*

Location *San Juan River Basin, New Mexico* Project Number *10507777*

Surface Elev. *NA* North *NA* East *NA*

Top of Casing *NA* Water Level Initial ▽ *NA* Static ▼ *NA*

Hole Depth *20.0ft* Screen: Diameter *NA* Length *NA* Type/Size *NA*

Hole Diameter *3" (0-5)' & 2" (5-20)'* Casing: Diameter *NA* Length *NA* Type *NA*

Drill Co. *National EWP* Drilling Method *Direct Push (Geoprobe)* Sand Pack *NA*

Driller *Rodrigo Cano* Driller Reg. # *WD 1210* Log By *Brad Barton*

Start Date *9/16/2015* Completion Date *9/16/2015* Checked By *S. Varsa*

COMMENTS
Soil boring completed using hand auger from 0 to 5 feet and dual tube from 5 to 20 feet.

Bentonite Grout | Bentonite Granules | Grout | Portland Cement | Sand Pack | Sand Pack

Depth (ft)	PID (ppm)	% Recovery	Headspace Screening	Sample ID	Blow Count Recovery	Graphic Log	USCS	Description (Color, Moisture, Texture, Structure, Odor) Geologic Descriptions are Based on the USCS.
								Dirt, weeds, bermed area close to canel
0	0.0		2.9					(0 - 6) Silty SAND: lt olive brown 5/4 2.5Y, loose, fine sand, dry to slight moist, no cementation, no HC odor
	0.0		1.8					
2	0.0		3.1					
	0.0		4.5				SM	
4	0.0	100%	5.5					
	0.0		2.5					
6								▼ water @ 6' bgs
	0.0		3.1	SB-36 (5-6)' 1410			SC	(6 - 7.4) Clayey SAND: lt olive brown, soft, fine sand, wet, saturated, med to high plasticity, no HC odor
	0.0		3.5					(7.4 - 10) No Recovery
8	NR		NR					
	NR	48%	NR					
10	0.0		1.7				CH	(10 - 12.2) FAT CLAY: lt olive brown 5/4 2.5Y, soft to med stiff, high plasticity, minor fine sand, moist to very moist, no HC odor
	0.0		4.1					
12	0.0		3.8					(12.2 - 15) No Recovery
	NR		NR					
14	NR	44%	NR					
	0.0		4.2					(15 - 17.5) Clayey SAND: lt olive brown 5/4 2.5Y, wet, saturated, loose, high plasticity, fine to med sand, no HC odor
16	0.0		5.7				SC	
	0.0		2.8					(17.5 - 20) No Recovery
18	NR		NR					
	NR	50%	NR					
20								TD = 20' bgs
22								

MWH

Drilling Log

Soil Boring **SB-37**

Project *Jaquez E#1 & C#1* Owner *El Paso CGP Company, LLC*

Location *San Juan River Basin, New Mexico* Project Number *10507777*

Surface Elev. *NA* North *NA* East *NA*

Top of Casing *NA* Water Level Initial ▽ *NA* Static ▼ *NA*

Hole Depth *20.0ft* Screen: Diameter *NA* Length *NA* Type/Size *NA*

Hole Diameter *3" (0-5)' & 2" (5-20)'* Casing: Diameter *NA* Length *NA* Type *NA*

Drill Co. *National EWP* Drilling Method *Direct Push (Geoprobe)* Sand Pack *NA*

Driller *Rodrigo Cano* Driller Reg. # *WD 1210* Log By *Brad Barton*

Start Date *9/15/2015* Completion Date *9/15/2015* Checked By *S. Varsa*

COMMENTS
Soil boring completed using hand auger from 0 to 5 feet and dual tube from 5 to 20 feet.

■ Bentonite Grout ▩ Bentonite Granules ▭ Grout ▨ Portland Cement ⋰ Sand Pack ⋰ Sand Pack

Depth (ft)	PID (ppm)	% Recovery	Headspace Screening	Sample ID	Blow Count Recovery	Graphic Log	USCS	Description (Color, Moisture, Texture, Structure, Odor) Geologic Descriptions are Based on the USCS.
								Dirt bermed area near canal & fencline
0	0.0		0.5					(0 - 5) Silty SAND: lt olive brown 5/4 2.5Y, dry, loose, fine sand, no HC odor
	0.0		0.9					
2	0.0		0.5				SM	
	0.0		0.7					
4	0.0	100%	0.4					
	0.0		2.0	SB-37 (5-7)' 1025				Poorly Graded SAND: very moist, lt olive brown 5/4 2.5Y, fine sand, minor med sand, loose, no HC odor
6	0.0		2.2				SP	
	0.0		2.3					▼water @ 7' bgs ⇩wet, saturated
8	0.0		2.4					(8.2 - 10) No Recovery
	NR	64%	NR					
10	0.0		2.5					(10 - 13) Clayey SAND: high plasticity, wet, lt olive brown, fine to very fine sand, loose, no HC odor
	0.0		2.2				SC	
12	0.1		2.0					
	NR		NR					(13 - 15) No Recovery
14	NR	60%	NR					
	0.1		1.0					(15-17.2) Poorly Graded SAND: wet, loose, lt olive brown, fine sand w/ minor med sand, no HC odor
16	0.1		0.9				SP	
	0.1		0.8					
18	NR		NR					(17.2-20) No Recovery
	NR	44%	NR					
20								
								TD = 20' bgs
22								

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Drilling Log

Soil Boring **SB-38**

Project *Jaquez E#1 & C#1* Owner *El Paso CGP Company, LLC*

Location *San Juan River Basin, New Mexico* Project Number *10507777*

Surface Elev. *NA* North *NA* East *NA*

Top of Casing *NA* Water Level Initial ▽ *NA* Static ▼ *NA*

Hole Depth *15.0ft* Screen: Diameter *NA* Length *NA* Type/Size *NA*

Hole Diameter *3" (0-5)' & 2" (5-15)'* Casing: Diameter *NA* Length *NA* Type *NA*

Drill Co. *National EWP* Drilling Method *Direct Push (Geoprobe)* Sand Pack *NA*

Driller *Rodrigo Cano* Driller Reg. # *WD 1210* Log By *Brad Barton*

Start Date *9/13/2015* Completion Date *9/13/2015* Checked By *S. Varsa*

COMMENTS
Soil boring completed using hand auger from 0 to 5 feet and dual tube from 5 to 15 feet.

Bentonite Grout | Bentonite Granules | Grout | Portland Cement | Sand Pack | Sand Pack

Depth (ft)	PID (ppm)	% Recovery	Headspace Screening	Sample ID	Blow Count Recovery	Graphic Log	USCS	Description (Color, Moisture, Texture, Structure, Odor) Geologic Descriptions are Based on the USCS.
								Dirt, bermed area near canal
0								0 - 5' hand augered
	0.0		8.5					(0 - 7.5) Silty SAND: lt yellowish brown 6/4 10YR dry, loose, fine sand, no cementation, no HC odor
	0.0		5.0					
2	0.0		5.7					
	0.0		4.8				SM	
4	0.0	100%	5.2					⇩slight moist
	0.5		5.8					
6	0.7		10.1					⇩very moist, minor gravels 5-10% about 1/4"
	0.5		7.7	SB-38 (6.5-7.5)' 1120				▼water @ 7.5' bgs
8	NR		NR					(7.8 - 10) No Recovery
	NR	50%	NR					
10	0.3		3.8				SM	(10 - 11.8) Silty SAND: (cont'd) saturated, wet, no HC odor
	0.4		2.5					
12	NR		NR					(11.8 - 15) No Recovery
	NR		NR					
14	NR	36%	NR					
16								TD = 15' bgs
18								

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Drilling Log

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Soil Boring **SB-39**

Project *Jaquez E#1 & C#1* Owner *El Paso CGP Company, LLC*

Location *San Juan River Basin, New Mexico* Project Number *10507777*

Surface Elev. *NA* North *NA* East *NA*

Top of Casing *NA* Water Level Initial ▽ *NA* Static ▼ *NA*

Hole Depth *20.0ft* Screen: Diameter *NA* Length *NA* Type/Size *NA*

Hole Diameter *3" (0-5)' & 2" (5-20)'* Casing: Diameter *NA* Length *NA* Type *NA*

Drill Co. *National EWP* Drilling Method *Direct Push (Geoprobe)* Sand Pack *NA*

Driller *Rodrigo Cano* Driller Reg. # *WD 1210* Log By *Brad Barton*

Start Date *9/18/2015* Completion Date *9/18/2015* Checked By *S. Varsa*

COMMENTS
Soil boring completed using hand auger from 0 to 5 feet and dual tube from 5 to 20 feet.

Bentonite Grout | Bentonite Granules | Grout | Portland Cement | Sand Pack | Sand Pack

Depth (ft)	PID (ppm)	% Recovery	Headspace Screening	Sample ID	Blow Count Recovery	Graphic Log	USCS	Description (Color, Moisture, Texture, Structure, Odor) Geologic Descriptions are Based on the USCS.
								Dirt, weeds
0	0.0		4.1					0 - 5' hand Augered
	0.0		3.2					(0 - 8.7) Silty SAND: lt olive brown 5/4 2.5Y, dry, loose, fine to med sand, loose, no HC odor
2	0.0		4.9					
	0.0		2.8					
4	0.0	100%	2.7				SM	⇩slight moist
	0.0		2.8					
6	0.0		3.6					
	0.0		2.0	SB-39 (6.5-8.5)' 1315				
8	0.0		3.8					▼water @ 8.5' bgs
	NR	74%	NR					(8.7 - 10) No Recovery
10	0.0		2.8				SC	(10 - 11) Clayey SAND: lt olive brown 5/4 2.5Y, wet, med plasticity, med sand, no HC odor
	0.0		4.6				CH	(11 - 12) FAT CLAY: olive, soft to med stiff, saturated, high plasticity, no HC odor
12	0.0		4.3				SP	(12 - 12.5) Poorly Graded SAND: med sand, lt olive brown, loose, wet, no HC odor
	NR		NR					(12.5 - 15) No Recovery
14	NR	50%	NR					
	0.0		4.6					(15 - 18) Poorly Graded SAND: lt olive brown 5/4 2.5Y, med sand, minor clay, content, loose, wet, no HC odor
16	0.0		2.1				SP	
	0.0		3.7					
18	NR		NR					(18 - 20) No Recovery
	NR	60%	NR					
20								
22								TD = 20' bgs

Drilling Log

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Soil Boring **SB-41**

Project *Jaquez E#1 & C#1* Owner *El Paso CGP Company, LLC*

Location *San Juan River Basin, New Mexico* Project Number *10507777*

Surface Elev. *NA* North *NA* East *NA*

Top of Casing *NA* Water Level Initial ▽ *NA* Static ▼ *NA*

Hole Depth *12.0ft* Screen: Diameter *NA* Length *NA* Type/Size *NA*

Hole Diameter *3" (0-5)' & 2" (5-20)'* Casing: Diameter *NA* Length *NA* Type *NA*

Drill Co. *National EWP* Drilling Method *Direct Push (Geoprobe)* Sand Pack *NA*

Driller *Rodrigo Cano* Driller Reg. # *WD 1210* Log By *Brad Barton*

Start Date *9/15/2015* Completion Date *9/15/2015* Checked By *S. Varsa*

COMMENTS
Soil boring completed using hand auger from 0 to 5 feet and dual tube from 5 to 20 feet.

Bentonite Grout | Bentonite Granules | Grout | Portland Cement | Sand Pack | Sand Pack

Depth (ft)	PID (ppm)	% Recovery	Headspace Screening	Sample ID	Blow Count Recovery	Graphic Log	USCS	Description (Color, Moisture, Texture, Structure, Odor) Geologic Descriptions are Based on the USCS.
								Dirt
0	0.0		0.4					(0 - 5) Silty SAND: lt olive brown 5/4 2.5Y, dry to slight moist, fine to very fine sand, loose, no HC odor
	0.0		0.6					
2	0.0		0.6				SM	
	0.0		0.9					
4	0.0	100%	0.8					
	0.1		0.6	SB-41 (5-7)' 1110				(5 - 8.2) Poorly Graded SAND: moist to wet, loose, fine sand, lt olive brown, no cementation, no HC odor
6	0.1		2.5				SP	
	0.1		1.5					▼water @ 7' bgs ⇩wet, saturated
8	0.1							(8.2 - 10) No Recovery
	NR	64%	NR					
10	0.1		2.3					(10 - 12.7) Clayey SAND: med plasticity, wet, fine sand, lt olive brown, no cementation, no HC odor
	0.1		2.5				SC	
12	0.1		0.8					
	NR		NR					(13 - 15) No Recovery
14	NR	54%	NR					
	0.0		1.7					(15 - 18.0) Clayey SAND: (cont'd) as above
16	0.0		0.8				SC	
	0.0		2.4					
18	0.0		2.2				SP	(18 - 18.5) Poorly Graded SAND: lt olive brown 5/4 2.5Y, loose, med sand, wet, no cementation, no HC odor
	NR	70%	NR					(18.5 - 20) No Recovery
20								
22								TD = 20' bgs

Drilling Log

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Soil Boring **SB-42**

Project *Jaquez E#1 & C#1* Owner *El Paso CGP Company, LLC*

Location *San Juan River Basin, New Mexico* Project Number *10507777*

Surface Elev. *NA* North *NA* East *NA*

Top of Casing *NA* Water Level Initial ▽ *NA* Static ▼ *NA*

Hole Depth *15.0ft* Screen: Diameter *NA* Length *NA* Type/Size *NA*

Hole Diameter *3" (0-5)' & 2" (5-15)'* Casing: Diameter *NA* Length *NA* Type *NA*

Drill Co. *National EWP* Drilling Method *Direct Push (Geoprobe)* Sand Pack *NA*

Driller *Rodrigo Cano* Driller Reg. # *WD 1210* Log By *Brad Barton*

Start Date *9/13/2015* Completion Date *9/13/2015* Checked By *S. Varsa*

COMMENTS
Soil boring completed using hand auger from 0 to 5 feet and dual tube from 5 to 15 feet.

Bentonite Grout | Bentonite Granules | Grout | Portland Cement | Sand Pack | Sand Pack

Depth (ft)	PID (ppm)	% Recovery	Headspace Screening	Sample ID	Blow Count Recovery	Graphic Log	USCS	Description (Color, Moisture, Texture, Structure, Odor) Geologic Descriptions are Based on the USCS.
								Dirt (on bermed area near canal
0								0 - 5' hand augered
	0.0		6.0					(0 - 7.8) Silty SAND: lt yellowish brown 6/4 10YR, dry, loose, fine sand, no cementation, no HC odor
	0.0		41					
2	0.0		4.6					
	0.0		4.1					
4	0.0	100%	6.2				SM	⇩slight moist
	0.4		9.7					
6	0.5		8.0					⇩very moist
	0.2		11.2	SB-42 (6.8-7.8)' 1035				▼water @ 8' bgs
8	NR		NR					(7.8 - 10) No Recovery
	NR	56%	NR					
10	0.1		3.2				SM	(10 - 12.2) Silty SAND: as before increasing sand content, wet, saturated, no HC odor
	0.1		6.9					
12	0.1		8.8					(12.2 - 15) No Recovery
	NR		NR					
14	NR	44%	NR					
16								TD = 15.0' bgs
18								

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Drilling Log

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Soil Boring **SB-43**

Project *Jaquez E#1 & C#1* Owner *El Paso CGP Company, LLC*

Location *San Juan River Basin, New Mexico* Project Number *10507777*

Surface Elev. *NA* North *NA* East *NA*

Top of Casing *NA* Water Level Initial ▽ *NA* Static ▼ *NA*

Hole Depth *15.0ft* Screen: Diameter *NA* Length *NA* Type/Size *NA*

Hole Diameter *3" (0-5)' & 2" (5-15)'* Casing: Diameter *NA* Length *NA* Type *NA*

Drill Co. *National EWP* Drilling Method *Direct Push (Geoprobe)* Sand Pack *NA*

Driller *Rodrigo Cano* Driller Reg. # *WD 1210* Log By *Brad Barton*

Start Date *9/15/2015* Completion Date *9/15/2015* Checked By *S. Varsa*

COMMENTS
Soil boring completed using hand auger from 0 to 5 feet and dual tube from 5 to 20 feet.

Bentonite Grout | Bentonite Granules | Grout | Portland Cement | Sand Pack | Sand Pack

Depth (ft)	PID (ppm)	% Recovery	Headspace Screening	Sample ID	Blow Count Recovery	Graphic Log	USCS	Description (Color, Moisture, Texture, Structure, Odor) Geologic Descriptions are Based on the USCS.
								Dirt next to debris
0	0.0		0.9					0 - 5' Hand Augered
	0.0		0.4					(0 - 5) Silty SAND: olive brown, dry to slight moist, fine sand, loose, minor organics - rootlets 0-2' bgs, no HC odor
2	0.0		0.4				SM	
	0.0		0.4					
4	0.0	100%	0.4	SB-43 (10-11)' 1650				
	0.0		0.8					(5 - 8.6) Clayey SAND: moist, lt olive brown, 5/4 2.5Y, fine sand, low to med plasticity, loose, no HC odor
6	0.0		0.7				SC	
	0.0		0.5					
8	0.0		0.6					(8.6 - 10) No Recovery
	NR	72%	NR					
10	0.0		1.0					(10 - 11.9) Clayey SAND: (cont'd) as above, moist to wet
	0.0		0.9				SC	▼water @ 11' bgs ⇩wet, saturated, high plasticity clay
12	NR		NR					(11.9 - 15) No Recovery
	NR		NR					
14	NR	38%	NR					
	0.0		0.1				SP	(15 - 16.4) Poorly Graded sand w/ minor clay: lt olive brown, staurated, wet, loose, med sand, med plasticity, no HC odor
16	0.0		0.8					(16.4 - 20) No Recovery
	NR		NR					
18	NR		NR					
	NR	28%	NR					
20								
								TD = 20' bgs
22								

Drilling Log

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Soil Boring **SB-44**

Project *Jaquez E#1 & C#1* Owner *El Paso CGP Company, LLC*

Location *San Juan River Basin, New Mexico* Project Number *10507777*

Surface Elev. *NA* North *NA* East *NA*

Top of Casing *NA* Water Level Initial ▽ *NA* Static ▼ *NA*

Hole Depth *15.0ft* Screen: Diameter *NA* Length *NA* Type/Size *NA*

Hole Diameter *3" (0-5)' & 2" (5-15)'* Casing: Diameter *NA* Length *NA* Type *NA*

Drill Co. *National EWP* Drilling Method *Direct Push (Geoprobe)* Sand Pack *NA*

Driller *Rodrigo Cano* Driller Reg. # *WD 1210* Log By *Brad Barton*

Start Date *9/15/2015* Completion Date *9/15/2015* Checked By *S. Varsa*

COMMENTS
Soil boring completed using hand auger from 0 to 5 feet and dual tube from 5 to 15 feet.

■ Bentonite Grout ▩ Bentonite Granules ▤ Grout ▨ Portland Cement ⋰ Sand Pack ⋰ Sand Pack

Depth (ft)	PID (ppm)	% Recovery	Headspace Screening	Sample ID	Blow Count Recovery	Graphic Log	USCS	Description (Color, Moisture, Texture, Structure, Odor) Geologic Descriptions are Based on the USCS.
								Dirt
0								0 - 5' hand augered
	0.0		2.6					(0 - 5) Silty SAND: lt olive brown, 5/4 2.5Y, dry to slight moist, loose, fine sand, no HC odor
	0.0		3.0					
2	0.0		3.3				SM	
	0.0		3.1					
4	0.0		4.2					
	0.0	100%	4.7	SB-44 (5-6)' 1345			SC	(5 - 6.5) Clayey SAND: lt olive brown, moist to wet, high plasticity
6								▼ water @ 6' bgs
	0.0		2.6					⇩ wet, saturated
	NR		NR					(6.5 - 10) No Recovery
8	NR		NR					
	NR		NR					
10		30%					CH	(10 - 10.5) FAT CLAY: olive 4/3 5Y, very moist to wet, soft, high plasticity, no HC odor
	0.0		0.6					
	0.0		0.7				SP	(10.5 - 12.2) Poorly Graded SAND: lt olive brown 5/4 2.5Y, loose, wet, med sand, no HC odor
12	0.0		0.5					(12.2 - 15) No Recovery
	NR		NR					
14	NR	44%	NR					
16								TD = 15.0' bgs
18								

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Drilling Log

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Soil Boring **SB-45**

Project *Jaquez E#1 & C#1* Owner *El Paso CGP Company, LLC*

Location *San Juan River Basin, New Mexico* Project Number *10507777*

Surface Elev. *NA* North *NA* East *NA*

Top of Casing *NA* Water Level Initial ▽ *NA* Static ▼ *NA*

Hole Depth *15.0ft* Screen: Diameter *NA* Length *NA* Type/Size *NA*

Hole Diameter *3" (0-5)' & 2" (5-15)'* Casing: Diameter *NA* Length *NA* Type *NA*

Drill Co. *National EWP* Drilling Method *Direct Push (Geoprobe)* Sand Pack *NA*

Driller *Rodrigo Cano* Driller Reg. # *WD 1210* Log By *Brad Barton*

Start Date *9/15/2015* Completion Date *9/15/2015* Checked By *S. Varsa*

COMMENTS
Soil boring completed using hand auger from 0 to 5 feet and dual tube from 5 to 15 feet.

Bentonite Grout | Bentonite Granules | Grout | Portland Cement | Sand Pack | Sand Pack

Depth (ft)	PID (ppm)	% Recovery	Headspace Screening	Sample ID	Blow Count Recovery	Graphic Log	USCS	Description (Color, Moisture, Texture, Structure, Odor) Geologic Descriptions are Based on the USCS.
								Grass/Weeds near fenceline
0	0.0		2.2				ML	(0 - 1) Clayey Silt: loose, dk olive brown 3/3 2.5Y, organics - rootlets, no HC odor
	0.0		3.5					(1 - 5) Clayey SAND: med plasticity, organics - rootlets, olive brown 4/3 2.5Y, slight moist, fine sand, loose, no HC odor
2	0.0		3.2				SC	
	0.0		4.5					
4	0.0	100%	1.9					
	0.0		4.2	SB-45 (5-6)' 1210			CH	(5 - 6) FAT CLAY: 4/2 2.5Y dk grayish brown, med stiff to stiff, high plasticity, moist
6								▼ water @ 6' bgs
	0.0		4.0				SP	(6 - 6.9) Poorly Graded SAND: loose, wet, saturated, med sand, lt olive brown, no cementation, no HC odor
	NR		NR					6.9 - 10) No Recovery
8	NR		NR					
	NR		NR					
10		38%					SP	(10 - 10.5) Poorly Graded SAND: (cont'd) as above, wet
	0.0		1.7					(10.5 - 12.6) Clayey SAND: lt olive brown, soft to med stiff, moist to very moist, high plasticity, no HC odor
12	0.0		3.5				SC	
	0.0		5.2					(12.2 - 15) No Recovery
14	NR		NR					
	NR	52%	NR					
16								TD = 15.0' bgs
18								

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Drilling Log

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Soil Boring **SB-46**

Project *Jaquez E#1 & C#1* Owner *El Paso CGP Company, LLC*

Location *San Juan River Basin, New Mexico* Project Number *10507777*

Surface Elev. *NA* North *NA* East *NA*

Top of Casing *NA* Water Level Initial ▽ *NA* Static ▼ *NA*

Hole Depth *15.0ft* Screen: Diameter *NA* Length *NA* Type/Size *NA*

Hole Diameter *3" (0-5)' & 2" (5-15)'* Casing: Diameter *NA* Length *NA* Type *NA*

Drill Co. *National EWP* Drilling Method *Direct Push (Geoprobe)* Sand Pack *NA*

Driller *Rodrigo Cano* Driller Reg. # *WD 1210* Log By *Brad Barton*

Start Date *9/14/2015* Completion Date *9/14/2015* Checked By *S. Varsa*

COMMENTS
Soil boring completed using hand auger from 0 to 5 feet and dual tube from 5 to 15 feet.

Bentonite Grout | Bentonite Granules | Grout | Portland Cement | Sand Pack | Sand Pack

Depth (ft)	PID (ppm)	% Recovery	Headspace Screening	Sample ID	Blow Count Recovery	Graphic Log	USCS	Description (Color, Moisture, Texture, Structure, Odor) Geologic Descriptions are Based on the USCS.
								Dirt weeds
0								0 - 5' Hand auger
	0.0		2.9					(0 - 3) Clayey Silt w/ minor fine sand: lt olive brown, 5/4 2.5Y, dry, low plasticity, no HC odor, loose
	0.0		1.1				ML	
2	0.0		0.6					
	0.0		0.6					Silty SAND: dry to slight moist, lt olive brown 5/4 2.5Y, fine sand, loose, no HC odor, no cementation
4	0.0		0.6				SM	
	0.0	100%	0.6	SB-46				
	0.0		1.0	(5-6.5)'				(5 - 7.8) Poorly Graded SAND: fine sand, loose, lt olive brown 5/4 2.5Y no cementation, very moist to moist, no HC odor
6	0.0		1.2	1610 MS/MSD collected			SP	▼water @ 6.5' bgs
	0.0		0.5	QA/QC				⇩wet, saturated
8	NR		NR					(7.8 - 10) No Recovery
	NR	56%	NR					
10	0.0		0.5					(10 - 13.3) Clayey SAND: lt olive brown 5/3 2.5Y, saturated, loose, fine sand, no HC odor, low plasticity
	0.0		0.3				SC	
12	0.0		0.6					
							CH	(13 - 13.3) FAT CLAY: lt olive brown 5/3 2.5Y, very moist, soft, high plasticity, no HC odor
	0.0		0.8					
14	NR	66%	NR					(13.3 - 15) No Recovery
16								TD = 15.0' bgs
18								

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Drilling Log

Soil Boring **SB-47**

Project *Jaquez E#1 & C#1* Owner *El Paso CGP Company, LLC*

Location *San Juan River Basin, New Mexico* Project Number *10507777*

Surface Elev. *NA* North *NA* East *NA*

Top of Casing *NA* Water Level Initial ▽ *NA* Static ▼ *NA*

Hole Depth *15.0ft* Screen: Diameter *NA* Length *NA* Type/Size *NA*

Hole Diameter *3" (0-5)' & 2" (5-15)'* Casing: Diameter *NA* Length *NA* Type *NA*

Drill Co. *National EWP* Drilling Method *Direct Push (Geoprobe)* Sand Pack *NA*

Driller *Rodrigo Cano* Driller Reg. # *WD 1210* Log By *Brad Barton*

Start Date *9/15/2015* Completion Date *9/15/2015* Checked By *S. Varsa*

COMMENTS
Soil boring completed using hand auger from 0 to 5 feet and dual tube from 5 to 15 feet.

Bentonite Grout | Bentonite Granules | Grout | Portland Cement | Sand Pack | Sand Pack

Depth (ft)	PID (ppm)	% Recovery	Headspace Screening	Sample ID	Blow Count Recovery	Graphic Log	USCS	Description (Color, Moisture, Texture, Structure, Odor) Geologic Descriptions are Based on the USCS.
								Dirt w/ weeds in area
0								0 - 5' hand augered
	0.0		1.4					Silty SAND: fine to med sand, olive brown 5/4 2.5Y, dry to slight moist, minor organics - rootlets, no HC odor
	0.0		1.1					
2	0.0		0.7				SM	⇩slight moist, increasing sand content
	0.0		0.6					
4	0.0		1.2					
	0.0	100%	0.6	SB-47 (5-6.5)' 1600				(5 - 7.2) Clayey SAND: lt olive brown 5/4 2.5Y, moist to wet, high plasticity, fine to med sand
6	0.0		1.0				SC	▼water @ 6.5' bgs
	0.0		0.6					(7.2 - 10) No Recovery
8	NR		NR					
	NR	44%	NR					
10	0.0		0.4				SC	(10 - 11) Clayey SAND: (cont'd)
	0.0		0.3				CH	(11 - 12.5) Poorly Graded SAND: lt olive brown, wet, saturated, loose, med sand, minor clay content, no cementation, no HC odor
12	0.0		0.8					(12.5 - 15) No Recovery
	NR		NR					
14	NR	50%	NR					
16								TD = 15' bgs
18								

Drilling Log JAQUEZ LOGS EL PASO - COPY.GPJ MWH IA.GDT 1/15/16

MWH

Drilling Log

Soil Boring **SB-48**

Project *Jaquez E#1 & C#1* Owner *El Paso CGP Company, LLC*

Location *San Juan River Basin, New Mexico* Project Number *10507777*

Surface Elev. *NA* North *NA* East *NA*

Top of Casing *NA* Water Level Initial ▽ *NA* Static ▼ *NA*

Hole Depth *15.0ft* Screen: Diameter *NA* Length *NA* Type/Size *NA*

Hole Diameter *3" (0-5)' & 2" (5-15)'* Casing: Diameter *NA* Length *NA* Type *NA*

Drill Co. *National EWP* Drilling Method *Direct Push (Geoprobe)* Sand Pack *NA*

Driller *Rodrigo Cano* Driller Reg. # *WD 1210* Log By *Brad Barton*

Start Date *9/15/2015* Completion Date *9/15/2015* Checked By *S. Varsa*

COMMENTS
Soil boring completed using hand auger from 0 to 5 feet and dual tube from 5 to 15 feet.

Bentonite Grout | Bentonite Granules | Grout | Portland Cement | Sand Pack | Sand Pack

Depth (ft)	PID (ppm)	% Recovery	Headspace Screening	Sample ID	Blow Count Recovery	Graphic Log	USCS	Description (Color, Moisture, Texture, Structure, Odor) Geologic Descriptions are Based on the USCS.
								Dirt, weeds
0								0 - 5' Hand Augered
	0.0		1.1					(0 - 5) Silty SAND: lt olive brown, 5/4 2.5Y, dry to slight moist, fine sand, no cementation, trace organics, no HC odor
	0.0		1.9					
2	0.0		0.5				SM	
	0.0		0.4					
4	0.0		0.3					
	0.0	100%	0.9	SB-48 (5-6)' 1445				(5 - 7.2) Clayey SAND: lt olive brown to olive, moist to wet, fine sand, high plasticity, no HC odor
6	0.0		1.1				SC	▼ water @ 6' bgs
	0.0		1.2					(7.2 - 10) No Recovery
8	NR		NR					
	NR	44%	NR					
10	0.0		1.1				CH	(10 - 12) FAT CLAY w/ med sand: 4/4 5Y olive w/ gray mottling, soft, very moist, high plasticity, minor sand lenses
	0.0		1.1					
12	0.0		0.9				SP	(12 - 12.8) Poorly Graded SAND: olive brown, med sand, trace coarse sand, loose, wet, saturated, no HC odor
	NR		NR					(12.2 - 15) No Recovery
14	NR	56%	NR					
16								TD = 15.0' bgs
18								

MWH

Drilling Log

Soil Boring **SB-49**

Project *Jaquez E#1 & C#1* Owner *El Paso CGP Company, LLC*

Location *San Juan River Basin, New Mexico* Project Number *10507777*

Surface Elev. *NA* North *NA* East *NA*

Top of Casing *NA* Water Level Initial ▽ *NA* Static ▼ *NA*

Hole Depth *10.0ft* Screen: Diameter *NA* Length *NA* Type/Size *NA*

Hole Diameter *3" (0-5)' & 2" (5-10)'* Casing: Diameter *NA* Length *NA* Type *NA*

Drill Co. *National EWP* Drilling Method *Direct Push (Geoprobe)* Sand Pack *NA*

Driller *Rodrigo Cano* Driller Reg. # *WD 1210* Log By *Brad Barton*

Start Date *9/12/2015* Completion Date *9/12/2015* Checked By *S. Varsa*

COMMENTS
Soil boring completed using hand auger from 0 to 5 feet and dual tube from 5 to 10 feet.

Bentonite Grout | Bentonite Granules | Grout | Portland Cement | Sand Pack | Sand Pack

Depth (ft)	PID (ppm)	% Recovery	Headspace Screening	Sample ID	Blow Count Recovery	Graphic Log	USCS	Description (Color, Moisture, Texture, Structure, Odor) Geologic Descriptions are Based on the USCS.
								Old washed out area, dirt/gravels in area
0								0 - 5' Hand Augered
	0.0		1.7				SM	(0 - 2) Silty SAND: fine to med sand, loose, dry to slight moist, brown 5/3 10YR, no HC odor
	0.0		2.8					
2	0.0		9.7					(4 - 7) Clayey SAND: fine to med sand, moist to wet, loose, low plasticity, no HC odor, olive brown 4/3 2.5Y
	0.0		10.9	SB-49 (3-4)' 1525			SC	
4	0.0		5.1					▼ water @ 4' bgs
		100%						
	0.7		4.2					(5 - 8) Poorly Graded SAND: lt olive brown 5/4 2.5Y, wet, saturated, loose, no HC odor, no cementation, med sand w/ minor fine sand
6	0.1		4.0				SP	
	0.1		4.2					
8	NR		NR					(8 - 10) No Recovery
	NR		NR					
		60%						
10								TD = 10' bgs
12								

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Drilling Log

MWH

Soil Boring **SB-50**

Project *Jaquez E#1 & C#1* Owner *El Paso CGP Company, LLC*

Location *San Juan River Basin, New Mexico* Project Number *10507777*

Surface Elev. *NA* North *NA* East *NA*

Top of Casing *NA* Water Level Initial ▽ *NA* Static ▼ *NA*

Hole Depth *10.0ft* Screen: Diameter *NA* Length *NA* Type/Size *NA*

Hole Diameter *3" (0-5)' & 2" (5-10)'* Casing: Diameter *NA* Length *NA* Type *NA*

Drill Co. *National EWP* Drilling Method *Direct Push (Geoprobe)* Sand Pack *NA*

Driller *Rodrigo Cano* Driller Reg. # *WD 1210* Log By *Brad Barton*

Start Date *9/12/2015* Completion Date *9/12/2015* Checked By *S. Varsa*

COMMENTS
Soil boring completed using hand auger from 0 to 5 feet and dual tube from 5 to 10 feet.

Bentonite Grout | Bentonite Granules | Grout | Portland Cement | Sand Pack | Sand Pack

Depth (ft)	PID (ppm)	% Recovery	Headspace Screening	Sample ID	Blow Count Recovery	Graphic Log	USCS	Description (Color, Moisture, Texture, Structure, Odor) Geologic Descriptions are Based on the USCS.
								Gravels/dirt
0								0 - 5' hand augered Post hole
	0.0		2.5					(0 - 5) Silty SANDS: minor clay content, dry to moist, loose, dk yellowish brown 4/6 10YR, med sand fo fine sand, no HC odor
	0.0		2.6					
2	0.0		6.0				SM	
	0.0		5.0					⇩cobbles in hole, tough hand augering
4	0.0	100%	7.0	SB-50 (4-5)' 1625				▼water @ 5' bgs
	0.7		2.8					(5 - 8.4) Clayey SAND: loose, lt olive brown, wet, saturated, fine to med sand, low plasticity, no HC odor
6	0.4		2.5				SP	
	0.2		5.8					
8	0.2		2.0					(8.4 - 10) No Recovery
	NR	68%	NR					
10								
12								TD = 10' bgs

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Drilling Log

MWH

Soil Boring **SB-51**

Project *Jaquez E#1 & C#1* Owner *El Paso CGP Company, LLC*

Location *San Juan River Basin, New Mexico* Project Number *10507777*

Surface Elev. *NA* North *NA* East *NA*

Top of Casing *NA* Water Level Initial ▽ *NA* Static ▼ *NA*

Hole Depth *11.0ft* Screen: Diameter *NA* Length *NA* Type/Size *NA*

Hole Diameter *3" (0-5)' & 2" (5-11)'* Casing: Diameter *NA* Length *NA* Type *NA*

Drill Co. *National EWP* Drilling Method *Direct Push (Geoprobe)* Sand Pack *NA*

Driller *Rodrigo Cano* Driller Reg. # *WD 1210* Log By *Brad Barton*

Start Date *9/13/2015* Completion Date *9/13/2015* Checked By *S. Varsa*

COMMENTS
Soil boring completed using hand auger from 0 to 5 feet and dual tube from 5 to 11 feet.

Bentonite Grout | Bentonite Granules | Grout | Portland Cement | Sand Pack | Sand Pack

Depth (ft)	PID (ppm)	% Recovery	Headspace Screening	Sample ID	Blow Count Recovery	Graphic Log	USCS	Description (Color, Moisture, Texture, Structure, Odor) Geologic Descriptions are Based on the USCS.
								Washed out area - dirt
0								0 - 5' Hand augered
	0.0		2.2				ML	(0 - 2) Clayey Silt: lt brown 5/4 7.5YR, loose, low plasticty, minor gravels, no HC odor, dry
	0.0		1.5					
2								(2 - 7) Clayey SAND: fine sand, lt olive brown 5/4 2.5 Y, slight moist to moist, loose, med plasticity, no HC odor, minor cobbles
	0.0		2.3					
	0.0		3.0					
4								
	0.0	100%	1.8				SC	
	0.1		3.8	SB-51 (5-6)' 950				
6								▼water @ 6' bgs ⇩color changes black 2.5/1 5Y w/ dk gray
	0.0		4.4					no HC odor
	0.0		3.1				SP	(7 - 8.3) Poorly Graded SAND: black w/ dk gray as above, loose, wet, saturated, fine sand, no HC odor
8								
	0.0		3.3					(8.3 - 10) No Recovery
	NR	66%	NR					
10							SP	Poorly Graded SAND as above
	0.0		2.8					(10.4 - 11) No Recovery
	NR	40%	NR					
12								
								TD = 11.0' bgs
14								

MWH

Drilling Log

Soil Boring **SB-52**

Project *Jaquez E#1 & C#1* Owner *El Paso CGP Company, LLC*

Location *San Juan River Basin, New Mexico* Project Number *10507777*

Surface Elev. *NA* North *NA* East *NA*

Top of Casing *NA* Water Level Initial ▽ *NA* Static ▼ *NA*

Hole Depth *20.0ft* Screen: Diameter *NA* Length *NA* Type/Size *NA*

Hole Diameter *3" (0-5)' & 2" (5-20)'* Casing: Diameter *NA* Length *NA* Type *NA*

Drill Co. *National EWP* Drilling Method *Direct Push (Geoprobe)* Sand Pack *NA*

Driller *Rodrigo Cano* Driller Reg. # *WD 1210* Log By *Brad Barton*

Start Date *9/9/2015* Completion Date *9/9/2015* Checked By *S. Varsa*

COMMENTS
Soil boring completed using hand auger from 0 to 5 feet and dual tube from 5 to 20 feet.

■ Bentonite Grout ▨ Bentonite Granules ▭ Grout ▨ Portland Cement ▨ Sand Pack ▨ Sand Pack

Depth (ft)	PID (ppm)	% Recovery	Headspace Screening	Sample ID	Blow Count Recovery	Graphic Log	USCS	Description (Color, Moisture, Texture, Structure, Odor) Geologic Descriptions are Based on the USCS.
								Grass weeds, w/ dirt
0	0.0		-				ML	0 - 5' bgs Hand augered (0 - 1) Clayey Silt: lt brown 5/3 10YR, dry, minor gravels, loose, low plasticty, no HC odor
	0.0		-					
2	0.0		-				CL	(1 - 3.0) Clay w/ silt: brown 4/3 10YR, slight moist, med stiff, no plasticity, no HC odor
	0.0		-					(3 - 6) Clayey SAND: dk greyish brown, 4/2 2.5Y, moist, trace cobbles up to 2", loose, low plasticity, no HC odor
4	0.0	100%	-				SC	
	13.7		-	SB-52 (5-6)' 1355				⇩minor HC odor ▼wet @ 6' bgs
6	4.2		-				SP	(6 - 8.2) Poorly Graded SAND: wet, saturated fine sand, loose, no cementation, very minor HC odor, very dk grey 3/1 2.5Y
	1.9		-					
8	NR		NR					(8.2 - 10) - No Recovery
	NR	64%	NR					
10	0.0		-					(10 - 13.8) Poorly Graded SAND: saturated as above
	0.0		-				SP	
12	0.0		-					
	0.0		-					
14	NR	76%	NR					(13.8 - 15) No Recovery
	0.0		-				SP	(15 - 16) Poorly Graded SAND: (cont'd)
16	NR		NR					(16 - 20) No Recovery
	NR		NR					
18	NR		NR					
	NR	20%	NR					
20								TD = 20.0' bgs
22								

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MWH

Drilling Log

Soil Boring **SB-53**

Project *Jaquez E#1 & C#1* Owner *El Paso CGP Company, LLC*

Location *San Juan River Basin, New Mexico* Project Number *10507777*

Surface Elev. *NA* North *NA* East *NA*

Top of Casing *NA* Water Level Initial ▽ *NA* Static ▼ *NA*

Hole Depth *16.0ft* Screen: Diameter *NA* Length *NA* Type/Size *NA*

Hole Diameter *3" (0-5)' & 2" (5-16)'* Casing: Diameter *NA* Length *NA* Type *NA*

Drill Co. *National EWP* Drilling Method *Direct Push (Geoprobe)* Sand Pack *NA*

Driller *Rodrigo Cano* Driller Reg. # *WD 1210* Log By *Brad Barton*

Start Date *9/9/2015* Completion Date *9/9/2015* Checked By *S. Varsa*

COMMENTS
Soil boring completed using hand auger from 0 to 5 feet and dual tube from 5 to 16 feet.

Bentonite Grout | Bentonite Granules | Grout | Portland Cement | Sand Pack | Sand Pack

Depth (ft)	PID (ppm)	% Recovery	Headspace Screening	Sample ID	Blow Count Recovery	Graphic Log	USCS	Description (Color, Moisture, Texture, Structure, Odor) Geologic Descriptions are Based on the USCS.
								Grass w/ weeds, & dirt
0	0.0		-				ML	0 - 5' bgs Hand augered Clayey Silt (0 - 1) - brown 5/3 10YR, loose, dry, minor cobbles/gravels, low plasticity
	0.0		-					(1 - 4.5) FAT CLAY: brown 4/3 10YR, slight moist to moist, stiff to med stiff, high plasticity, no dilatancy, high toughness, high dry strength, no HC odor
2	0.0		-				CH	
	0.0		-					
4	0.0	100%	-					
	0.0		-	SB-53 (5-6)' 1505			SC	(4.5 - 6) Clayey SAND: 4/3 olive brown, 2.5YR, moist, fine sand, med plasticity, soft, no HC odor ▼ Water @ 6' bgs
6	0.0		-					(6 - 8) Poorly Gradded SAND: olive brown, loose, wet, saturated, no HC odor, fine sand, no cementation
	0.0		-				SP	
8	NR		NR					(8 - 10) - No Recovery
	NR	60%	NR					
10	0.0		-					(10 - 13) Poorly Graded SAND: (cont'd) Very dk grey, 3/1 2.5Y, loose, (cont'd)
	0.0		-				SP	
12	0.0		-					
	NR		NR					(13 - 15) No Recovery
14	NR	60%	NR					
	NR	0%	NR					(15 - 16) No Recovery
16								
18								TD = 16.0' bgs

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Drilling Log

MWH

Soil Boring **SB-54**

Page: 1 of 1

Project *Jaquez E#1 & C#1* Owner *El Paso CGP Company, LLC*

Location *San Juan River Basin, New Mexico* Project Number *10507777*

Surface Elev. *NA* North *NA* East *NA*

Top of Casing *NA* Water Level Initial ▽ *NA* Static ▼ *NA*

Hole Depth *12.0ft* Screen: Diameter *NA* Length *NA* Type/Size *NA*

Hole Diameter *3" (0-5)' & 2" (5-12)'* Casing: Diameter *NA* Length *NA* Type *NA*

Drill Co. *National EWP* Drilling Method *Direct Push (Geoprobe)* Sand Pack *NA*

Driller *Rodrigo Cano* Driller Reg. # *WD 1210* Log By *Brad Barton*

Start Date *9/9/2015* Completion Date *9/9/2015* Checked By *S. Varsa*

COMMENTS
Soil boring completed using hand auger from 0 to 5 feet and dual tube from 5 to 12 feet.

■ Bentonite Grout ▩ Bentonite Granules ▭ Grout ▨ Portland Cement ⋰ Sand Pack ⋰ Sand Pack

Depth (ft)	PID (ppm)	% Recovery	Headspace Screening	Sample ID	Blow Count Recovery	Graphic Log	USCS	Description (Color, Moisture, Texture, Structure, Odor) Geologic Descriptions are Based on the USCS.
0	0.0		-				ML	(0 - 1) Clayey Silt: lt brown 5/3 10YR, loose, dry, minor gravels
	0.0		-					(1 - 2) LEAN CLAY w/ silt: brown 4/3 10YR, slight moist, med plasticity, med stiff, no HC odor
2	0.0		-				CL CH	(2 - 4) FAT CLAY: dk brown, 3/3 10YR, high plasticity, moist, minor organics (wood debris) black in matrix, med stiff to stiff, no HC odor
	0.0		-					
4	0.0		-					(4 - 7.5) Clayey Sand; dk greyish brown, 4/2 2.5Y, moist, fine sand loose to soft, low to med plasticity, no HC odor
	0.0	100%	-	SB-54				▼ Water @ 6.5' bgs
	0.3		-	(5-6.5)'			SC	
6	0.0		-	1535				
	0.0		-					
8	NR		NR					(7.5 - 10) - No Recovery
	NR	50%	NR					
10	0.0		-				SC	(10 - 11.2) Clayey SAND: (cont'd) dk greyish brown
	NR		NR					(11.2 - 12) No Recovery
12		60%						
14								TD = 12.0' bgs

MWH

Drilling Log

Soil Boring **SB-55**

Project *Jaquez E#1 & C#1* Owner *El Paso CGP Company, LLC*

Location *San Juan River Basin, New Mexico* Project Number *10507777*

Surface Elev. *NA* North *NA* East *NA*

Top of Casing *NA* Water Level Initial ▽ *NA* Static ▼ *NA*

Hole Depth *15.0ft* Screen: Diameter *NA* Length *NA* Type/Size *NA*

Hole Diameter *3" (0-5)' & 2" (5-15)'* Casing: Diameter *NA* Length *NA* Type *NA*

Drill Co. *National EWP* Drilling Method *Direct Push (Geoprobe)* Sand Pack *NA*

Driller *Rodrigo Cano* Driller Reg. # *WD 1210* Log By *Brad Barton*

Start Date *9/9/2015* Completion Date *9/9/2015* Checked By *S. Varsa*

COMMENTS
Soil boring completed using hand auger from 0 to 5 feet and dual tube from 5 to 15 feet.

■ Bentonite Grout ▨ Bentonite Granules ▤ Grout ▨ Portland Cement ▨ Sand Pack ▨ Sand Pack

Depth (ft)	PID (ppm)	% Recovery	Headspace Screening	Sample ID	Blow Count Recovery	Graphic Log	USCS	Description (Color, Moisture, Texture, Structure, Odor) Geologic Descriptions are Based on the USCS.
								Grass weeds, w/ dirt
0								0 - 5' bgs hand augered
	0.0		-				ML	(0 - 2) Clayey Silt: lt brown, dry, minor gravels, loose, low plasticty, no HC odor
	0.0		-					
2	0.0		-					(2 - 5) LEAN Clay w/ sand: fine to med sand, brown 4/3 10YR, slight moist, med plasticity, no HC odor
	0.0		-				CL	
4	0.0		-					
	0.0	100%	-					
	0.0		-	SB-55			SC	(5 - 6) Clayey SAND: loose to soft, fine sand, med to high plasticity, no HC odor
6	0.0		-	(5-7)' 1620			CH	(6 - 7) FAT CLAY: loose, soft, high plasticity, brown, moist, no dilatancy, no HC odor, ▼ Wet at 7' bgs
	0.0		-				SC	(7 - 7.2) - Clayey SAND: brown to light grey, low to med plasticity, wet, no HC odor, fine sand, saturated
8								(7.2 - 10) No Recovery
	NR		NR					
	NR		NR					
10		44%					SP	(10 - 10.7) Poorly Graded SAND: lt gray, loose, med sand, wet, no cementation, no HC odor
	0.0		-					(10.7 - 15) No Recovery
	NR		NR					
12	NR		NR					
	NR		NR					
14	NR		NR					
		14%						
16								TD = 15' bgs
18								

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Drilling Log

MWH

Soil Boring **SB-56**

Project *Jaquez E#1 & C#1* Owner *El Paso CGP Company, LLC*

Location *San Juan River Basin, New Mexico* Project Number *10507777*

Surface Elev. *NA* North *NA* East *NA*

Top of Casing *NA* Water Level Initial ▽ *NA* Static ▼ *NA*

Hole Depth *10.0ft* Screen: Diameter *NA* Length *NA* Type/Size *NA*

Hole Diameter *3" (0-5)' & 2" (5-10)'* Casing: Diameter *NA* Length *NA* Type *NA*

Drill Co. *National EWP* Drilling Method *Direct Push (Geoprobe)* Sand Pack *NA*

Driller *Rodrigo Cano* Driller Reg. # *WD 1210* Log By *Brad Barton*

Start Date *9/12/2015* Completion Date *9/12/2015* Checked By *S. Varsa*

COMMENTS
Soil boring completed using hand auger from 0 to 5 feet and dual tube from 5 to 10 feet.

Bentonite Grout | Bentonite Granules | Grout | Portland Cement | Sand Pack | Sand Pack

Depth (ft)	PID (ppm)	% Recovery	Headspace Screening	Sample ID	Blow Count Recovery	Graphic Log	USCS	Description (Color, Moisture, Texture, Structure, Odor) Geologic Descriptions are Based on the USCS.
								Grass/weeds w/ dirt
0	0.0		3.5				ML	(0 - 1) Clayey Silt: brown brown 5/4 7.5YR, dry, loose, minor gravels, low plasticity, no HC odor
	0.0		3.4				SC	(1 - 2) Clayey sand: lt olive brown 5/4 2.5Y, slight moist, fine sand, minor iron mottling, no HC odor
2	0.0		28.4				CH	FAT CLAY w/ fine sand: lt olive brown, 5/4 2.5Y, high plasticity, med stiff, moist, iron mottling, no HC odor
	0.0		5.5	SB-56 (2.5-4.5)' 1330				
4	0.0		0.7					▼ water @ 4.5' bgs
	0.0	100%	1.4				SP	(4.5 - 5.5) Poorly Graded SAND: wet staurated, loose, fine sand, minor med sand, no HC odor, ne cementation
6	NR		NR				CH	FAT CLAY: lt olive brown 5/4 2.5Y, soft, moist, high plasticity, no HC odor
	NR		NR					(6 - 10) No Recovery
8	NR		NR					
	NR	20%	NR					
10								
12								TD = 10' bgs

Drilling Log

MWH

Soil Boring **SB-57**

Project *Jaquez E#1 & C#1* Owner *El Paso CGP Company, LLC*

Location *San Juan River Basin, New Mexico* Project Number *10507777*

Surface Elev. *NA* North *NA* East *NA*

Top of Casing *NA* Water Level Initial ▽ *NA* Static ▼ *NA*

Hole Depth *12.0ft* Screen: Diameter *NA* Length *NA* Type/Size *NA*

Hole Diameter *3" (0-5)' & 2" (5-12)'* Casing: Diameter *NA* Length *NA* Type *NA*

Drill Co. *National EWP* Drilling Method *Direct Push (Geoprobe)* Sand Pack *NA*

Driller *Rodrigo Cano* Driller Reg. # *WD 1210* Log By *Brad Barton*

Start Date *9/12/2015* Completion Date *9/12/2015* Checked By *S. Varsa*

COMMENTS
Soil boring completed using hand auger from 0 to 5 feet and dual tube from 5 to 11 feet.

Bentonite Grout | Bentonite Granules | Grout | Portland Cement | Sand Pack | Sand Pack

Depth (ft)	PID (ppm)	% Recovery	Headspace Screening	Sample ID	Blow Count Recovery	Graphic Log	USCS	Description (Color, Moisture, Texture, Structure, Odor) Geologic Descriptions are Based on the USCS.
								Grass/weeds w/ dirt
0								0 - 5' Hand Augered
	0.0		0.5				ML	(0 - 2) Clayey Silt: brown 5/4 7.5YR, dry, loose, fine grained, low plasticity, minor gravels, no HC odor
	0.0		0.7					
2	0.0		0.6				SC	(2 - 4) Clayey SAND: lt olive brown 5/4 2.5YR, slight moist, loose, fine sand, med plasticity, no HC odor, minor iron mottling in matrix
	0.0		1.5					
4	0.0		0.8				CH	(4 - 6) FAT CLAY w/ fine sand: lt olive brown 5/4 2.5Y, fine sand, high plasticity, no HC odor, moist
	0.0	100%	1.5	SB-57 (5-6)' 1300				▼water @ 6' bgs
6	0.0		1.5				SP	(6 - 6.5) Poorly Graded SAND: olive 5/2 5Y, saturated, loose, fine sand minor med sand
							SC	(6.5 - 7.2) Clayey SAND: very moist, lt olive brown 5/4 2.5Y, high plasticity, fine sand, soft to loose, no HC odor
	0.0		0.8					(7.2 - 10) No Recovery
8	NR		NR					
	NR	44%	NR					
10	0.0		0.9				CH	(10 - 10.6) FAT CLAY: lt olive brown 5/4 2.5Y, moist, high plasticity, soft to med stiff, no HC odor
	NR	60%	NR					(10.6 - 11) No Recovery
12								TD = 11' bgs
14								

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Drilling Log

MWH

Soil Boring **SB-58**

Project *Jaquez E#1 & C#1* Owner *El Paso CGP Company, LLC*

Location *San Juan River Basin, New Mexico* Project Number *10507777*

Surface Elev. *NA* North *NA* East *NA*

Top of Casing *NA* Water Level Initial ▽ *NA* Static ▼ *NA*

Hole Depth *10.0ft* Screen: Diameter *NA* Length *NA* Type/Size *NA*

Hole Diameter *3" (0-5)' & 2" (5-10)'* Casing: Diameter *NA* Length *NA* Type *NA*

Drill Co. *National EWP* Drilling Method *Direct Push (Geoprobe)* Sand Pack *NA*

Driller *Rodrigo Cano* Driller Reg. # *WD 1210* Log By *Brad Barton*

Start Date *9/12/2015* Completion Date *9/12/2015* Checked By *S. Varsa*

COMMENTS
Soil boring completed using hand auger from 0 to 5 feet and dual tube from 5 to 10 feet.

Bentonite Grout | Bentonite Granules | Grout | Portland Cement | Sand Pack | Sand Pack

Depth (ft)	PID (ppm)	% Recovery	Headspace Screening	Sample ID	Blow Count Recovery	Graphic Log	USCS	Description (Color, Moisture, Texture, Structure, Odor) Geologic Descriptions are Based on the USCS.
								Grass/weeds & dirt
0								0 - 5' Hand Augered
	0.0		0.7				ML	(0 - 1) Clayey Silt: 6/3 7.5YR lt brown, dry, loose, fine grained, low plasticity, no HC odor
	0.0		0.6					(1 - 4) Clayey SAND: lt olive brown 5/4 2.5YR, slight moist to moist, fine sand, med to high plasticity, no HC odor
2	0.0		0.4				SC	
	0.0		1.2	SB-58 (3-4)' 1115				
4	0.0		2.0					(4 - 6) Poorly Graded SAND: 4/3 5Y olive, loose, wet, saturated, fine sand, trace med sand, no HC odor
	0.0	100%	0.3				SP	⇩ 5/4 2.5Y lt olive brown, wet saturated
6	NR		NR					(6 - 10) No Recovery
	NR		NR					
8	NR		NR					
	NR		NR					
10		20%						
12								TD = 10' bgs

Drilling Log JAQUEZ LOGS EL PASO - COPY.GPJ MWH IA.GDT 1/15/16

Drilling Log

MWH

Soil Boring **SB-59**

Project *Jaquez E#1 & C#1* Owner *El Paso CGP Company, LLC*

Location *San Juan River Basin, New Mexico* Project Number *10507777*

Surface Elev. *NA* North *NA* East *NA*

Top of Casing *NA* Water Level Initial ▽ *NA* Static ▼ *NA*

Hole Depth *10.0ft* Screen: Diameter *NA* Length *NA* Type/Size *NA*

Hole Diameter *3" (0-5)' & 2" (5-10)'* Casing: Diameter *NA* Length *NA* Type *NA*

Drill Co. *National EWP* Drilling Method *Direct Push (Geoprobe)* Sand Pack *NA*

Driller *Rodrigo Cano* Driller Reg. # *WD 1210* Log By *Brad Barton*

Start Date *9/12/2015* Completion Date *9/12/2015* Checked By *S. Varsa*

COMMENTS
Soil boring completed using hand auger from 0 to 5 feet and dual tube from 5 to 10 feet.

Bentonite Grout | Bentonite Granules | Grout | Portland Cement | Sand Pack | Sand Pack

Depth (ft)	PID (ppm)	% Recovery	Headspace Screening	Sample ID	Blow Count Recovery	Graphic Log	USCS	Description (Color, Moisture, Texture, Structure, Odor) Geologic Descriptions are Based on the USCS.
								Grass/weeds w/ dirt
0								0 - 5' hand augered
	0.0		0.3				ML	(0 - 1) Clayey Silt: brown 5/4 7.5YR, dry, loose, fine gravel, low plasticity, no HC odor
	0.0		0.6					(1 - 5) Clayey SAND: lt olive brown 5/4 2.5YR, loose, slight moist to moist, soft to loose, med to high plasticity, no HC odor, fine sand
2	0.0		0.9					
	0.0		0.5				SC	
4								⇩very moist
	0.0	100%	1.0	SB-59 (4-5)' 1040				▼water @ 5' bgs
	0.0		0.4				SP	(5 - 6.3) Poorly Graded SAND: lt olive brown, 5/4 2.5Y, loose, minor clay in matrix, wet, saturated, fine sand, no cementation, no HC odor
6	0.0		0.6					(6.3 - 10) No Recovery
	NR		NR					
8	NR		NR					
	NR	26%	NR					
10								
12								TD = 10' bgs

Drilling Log JAQUEZ LOGS EL PASO - COPY.GPJ MWH IA.GDT 1/15/16

Drilling Log

MWH

Soil Boring **SB-60**

Project *Jaquez E#1 & C#1* Owner *El Paso CGP Company, LLC*

Location *San Juan River Basin, New Mexico* Project Number *10507777*

Surface Elev. *NA* North *NA* East *NA*

Top of Casing *NA* Water Level Initial ▽ *NA* Static ▼ *NA*

Hole Depth *10.0ft* Screen: Diameter *NA* Length *NA* Type/Size *NA*

Hole Diameter *3" (0-5)' & 2" (5-10)'* Casing: Diameter *NA* Length *NA* Type *NA*

Drill Co. *National EWP* Drilling Method *Direct Push (Geoprobe)* Sand Pack *NA*

Driller *Rodrigo Cano* Driller Reg. # *WD 1210* Log By *Brad Barton*

Start Date *9/12/2015* Completion Date *9/12/2015* Checked By *S. Varsa*

COMMENTS
Soil boring completed using hand auger from 0 to 5 feet and dual tube from 5 to 10 feet.

Bentonite Grout | Bentonite Granules | Grout | Portland Cement | Sand Pack | Sand Pack

Depth (ft)	PID (ppm)	% Recovery	Headspace Screening	Sample ID	Blow Count Recovery	Graphic Log	USCS	Description (Color, Moisture, Texture, Structure, Odor) Geologic Descriptions are Based on the USCS.
								Grass/weeds w/ dirt
0								0 - 5' hand augered
	0.0		0.1					(0 - 3) Clayey Silt: brown 5/4 7.5YR, loose, dry, low plasticty, no HC odor
	0.0		0.8				ML	
2	0.0		0.6					⇩slight moist, color grades to light olive 5/4 2.5Y
	0.0		0.7				CH	(3 - 4) FAT CLAY w/ fine sand: lt olive gray 5/4 2.5Y, moist, soft to med stiff, high plastisity, high dry strength, no HC odor.
4	0.0	100%	1.1	SB-60 (4-5)' 1010			SC	(4 - 5) Clayey SAND: lt olive brown 5/4 2.5Y, loose, very moist, fine sand, med plasticity
								▼water @ 5' bgs
	0.0		0.3				SP	(5 - 6.5) Poorly Graded SAND: trace to minor clay, saturated, wet, loose, fine sand, lt olive brown, 5/4 2.5Y, no cementation, no HC odor
6	0.0		0.3				CH	FAT CLAY: lt olive brown, 5/4 2.5Y, soft to med stiff, high plasticity, moist, no HC odor
	0.0		0.3					(7.3 - 10) No Recovery
8	NR		NR					
	NR	46%	NR					
10								
12								TD = 10' bgs

Drilling Log JAQUEZ LOGS EL PASO - COPY.GPJ MWH IA.GDT 1/15/16

MWH

Drilling Log

Soil Boring **SB-61**

Project *Jaquez E#1 & C#1* Owner *El Paso CGP Company, LLC*

Location *San Juan River Basin, New Mexico* Project Number *10507777*

Surface Elev. *NA* North *NA* East *NA*

Top of Casing *NA* Water Level Initial ▽ *NA* Static ▼ *NA*

Hole Depth *12.0ft* Screen: Diameter *NA* Length *NA* Type/Size *NA*

Hole Diameter *3" (0-5)' & 2" (5-12)'* Casing: Diameter *NA* Length *NA* Type *NA*

Drill Co. *National EWP* Drilling Method *Direct Push (Geoprobe)* Sand Pack *NA*

Driller *Rodrigo Cano* Driller Reg. # *WD 1210* Log By *Brad Barton*

Start Date *9/12/2015* Completion Date *9/12/2015* Checked By *S. Varsa*

COMMENTS
Soil boring completed using hand auger from 0 to 5 feet and dual tube from 5 to 12 feet.

Bentonite Grout | Bentonite Granules | Grout | Portland Cement | Sand Pack | Sand Pack

Depth (ft)	PID (ppm)	% Recovery	Headspace Screening	Sample ID	Blow Count Recovery	Graphic Log	USCS	Description (Color, Moisture, Texture, Structure, Odor) Geologic Descriptions are Based on the USCS.
								Grass weeds, w/ dirt
0								Hand auger to 5' bgs
	0.0		0.2					(0 - 4) Clayey Silt: brown 5/4 7.5YR, loose, dry, low plasticty
	0.0		0.6					
2							ML	
	0.0		1.4					⇩color grades to light brown 5/4 2.5Y, slight moist
	0.0		1.2					
4								
	0.0		1.5					(4 - 7) FAT CLAY w/ fine sand: light olive brown 5/4 2.5Y, moist, soft to med stiff, high plasticity, high dry strength, no HC odor
		100%						
	0.0		1.5				CH	
6				SB-61				
	0.0		1.8	(6-7)' 930				⇩more fine sand increasing in matrix ▼water @ 7' bgs
	NR		NR					(7 - 10) No Recovery
8								
	NR		NR					
	NR		NR					
10		40%						
	0.0		1.3				SC	(10 - 11) Clayey Sand: dk grayish brown 4/2 2.5Y, wet, loose to soft, med plasticity, saturated, no HC odor, fine sand
							CH	(11 - 11.5) FAT CLAY: lt olive brown (5/4 2.5Y), high plasticity, moist, med stiff to stiff, no HC odor
	0.0		0.9					
12		75%						(11.5 - 12) No Recovery
	NR		NR					
14								TD = 12' bgs

MWH

Drilling Log

Soil Boring **SB-64**

Project *Jaquez E#1 & C#1* Owner *El Paso CGP Company, LLC*

Location *San Juan River Basin, New Mexico* Project Number *10507777*

Surface Elev. *NA* North *NA* East *NA*

Top of Casing *NA* Water Level Initial ▽ *NA* Static ▼ *NA*

Hole Depth *22.0ft* Screen: Diameter *NA* Length *NA* Type/Size *NA*

Hole Diameter *3" (0-5)' & 2" (5-22)'* Casing: Diameter *NA* Length *NA* Type *NA*

Drill Co. *National EWP* Drilling Method *Direct Push (Geoprobe)* Sand Pack *NA*

Driller *Rodrigo Cano* Driller Reg. # *WD 1210* Log By *Brad Barton*

Start Date *9/11/2015* Completion Date *9/11/2015* Checked By *S. Varsa*

COMMENTS
Soil boring completed using hand auger from 0 to 5 feet and dual tube from 5 to 22 feet.

Bentonite Grout | Bentonite Granules | Grout | Portland Cement | Sand Pack | Sand Pack

Depth (ft)	PID (ppm)	% Recovery	Headspace Screening	Sample ID	Blow Count Recovery	Graphic Log	USCS	Description (Color, Moisture, Texture, Structure, Odor) Geologic Descriptions are Based on the USCS.
								dirt w/ grass/weeds
0	0.0		0.8					0 - 5' hand augered
	0.3		0.3					(0-4) Clayey Silt: light brown, loose, dry, minor gravels, low plasticity, no HC odor
	0.1		0.4				ML	
	0.1		1.4					
	0.1	100%	1.3					(4-8) Silty SAND: minor clay, 5/6 2.5Y light olive brown, slight moist, loose, fine sand, low to med plasticity, no HC odor
5	0.7		1.1					
	0.3		1.1				SM	
	0.2		1.0					
	0.2		1.5				SC	(8-8.8) Clayey SAND: soft fine sand, med plasticity, moist, no HC odor, dk gray 4/1 10YR
	NR	76%	NR					(8.8-14) No Recovery
10	0.1		0.5	SB-64 (10-12)' 1610			SC	Clayey SAND: (cont'd), very moist
	0.1		1.7					▼ water @12' bgs
	0.0		1.6				SP	Poorly Graded SAND: loose, wet, light grayish brown 6/2 10YR, no cementation, no HC odor
	NR		NR					(12.6-15) No Recovery
	NR	52%	NR					
15	0.2							(15-18.4) Poorly Graded SAND: (cont'd) saturated, no HC odor, light grayish brown 6/2 10YR
	0.1		1.0				SP	
	0.1		0.8					
	0.2		0.9					(18-20) No Recovery
	NR	68%	NR					
20	0.0		0.7				SP	(20-21) Poorly Graded SAND: saturated, wet, (cont'd)
	0.1	100%	0.6				CH	(21-22) FAT CLAY: dkgrayish brown 4/2 10YR, high plasticity, soft to med stiff, wet to moist, no HC odor
								TD = 22' bgs
25								

MWH

Drilling Log

Soil Boring **SB-65**

Project *Jaquez E#1 & C#1* Owner *El Paso CGP Company, LLC*

Location *San Juan River Basin, New Mexico* Project Number *10507777*

Surface Elev. *NA* North *NA* East *NA*

Top of Casing *NA* Water Level Initial ▽ *NA* Static ▼ *NA*

Hole Depth *21.0ft* Screen: Diameter *NA* Length *NA* Type/Size *NA*

Hole Diameter *3" (0-5)' & 2" (5-21)'* Casing: Diameter *NA* Length *NA* Type *NA*

Drill Co. *National EWP* Drilling Method *Direct Push (Geoprobe)* Sand Pack *NA*

Driller *Rodrigo Cano* Driller Reg. # *WD 1210* Log By *Brad Barton*

Start Date *9/14/2015* Completion Date *9/14/2015* Checked By *S. Varsa*

COMMENTS
Soil boring completed using hand auger from 0 to 5 feet and dual tube from 5 to 21 feet.

Bentonite Grout | Bentonite Granules | Grout | Portland Cement | Sand Pack | Sand Pack

Depth (ft)	PID (ppm)	% Recovery	Headspace Screening	Sample ID	Blow Count Recovery	Graphic Log	USCS	Description (Color, Moisture, Texture, Structure, Odor) Geologic Descriptions are Based on the USCS.
								Dirt, near fence line
0	0.1		0.1				SM	0 - 5' Hand Augered - many tries - attempts in 1' area
	0.0		0.1					(0 - 2) Silty SAND: lt olive brown 5/4 2.5Y, dry, loose, fine sand, minor gravels, no cementation, no HC odor
2	0.0		0.1					(2 - 7) Clayey SAND: 4/3 2.5Y olive brown, slight moist, fine sand, low to med plasticity, no HC odor, minor cobbles @ 2.5' bgs
	0.0		0.1					
4	0.0	100%	0.1				SC	
	0.1		0.1					⇩interbedded SAND lenses, fine sand, minor iron oxidation in mottles
6	0.1		0.1					
	NR		NR					(7 - 10) No Recovery
8	NR		NR					
	NR	40%	NR					
10	0.1		4.6				SC	(10 - 11) Clayey SAND: (cont'd) as before
	0.1		4.2				CH	(11 - 11.6) FAT CLAY: lt olive brown 5/4 2.5Y
12	NR		NR					(11.6 - 15) No Recovery
	NR		NR					
14	NR	32%	NR					
	0.1		6.8	SB-65 (15-16)' 1025			CH	(15 - 16) FAT CLAY: as above Water @16' bgs
16	0.1		5.7				SC	(16 - 17.2) Clayey SAND w/ sand lenses: Water in sand lenses, saturated, poorly graded sand lenses, fine sand, med plasticity, wet, no HC odor, lt olive brown 5/4 2.5Y
	0.1		5.4					
18	NR		NR					(17.2 - 20) No Recovery
	NR	44%	NR					
20	0.0	100%	2.2				SC	Clayey SAND: fine sand, saturated, soft to loose, no HC odor
22								TD = 21' bgs
24								

MWH

Drilling Log

Soil Boring **SB-67**

Project *Jaquez E#1 & C#1* Owner *El Paso CGP Company, LLC*

Location *San Juan River Basin, New Mexico* Project Number *10507777*

Surface Elev. *NA* North *NA* East *NA*

Top of Casing *NA* Water Level Initial ▽ *NA* Static ▼ *NA*

Hole Depth *21.0ft* Screen: Diameter *NA* Length *NA* Type/Size *NA*

Hole Diameter *3" (0-5)' & 2" (5-21)'* Casing: Diameter *NA* Length *NA* Type *NA*

Drill Co. *National EWP* Drilling Method *Direct Push (Geoprobe)* Sand Pack *NA*

Driller *Rodrigo Cano* Driller Reg. # *WD 1210* Log By *Brad Barton*

Start Date *9/14/2015* Completion Date *9/14/2015* Checked By *S. Varsa*

COMMENTS
Soil boring completed using hand auger from 0 to 5 feet and dual tube from 5 to 21 feet.

Bentonite Grout | Bentonite Granules | Grout | Portland Cement | Sand Pack | Sand Pack

Depth (ft)	PID (ppm)	% Recovery	Headspace Screening	Sample ID	Blow Count Recovery	Graphic Log	USCS	Description (Color, Moisture, Texture, Structure, Odor) Geologic Descriptions are Based on the USCS.
								Dirt minor weeds
0								0 - 5' hand augered
	0.0		4.7				SM	(0 - 2) Silty SAND: lt yellowish brown, dry, loose, fine sand, minor gravel, no HC odor
	0.0		6.8					
2	0.0		7.3					(2 - 7.5) Clayey SAND: fine sand, loose, slight moist, olive brown 4/3 2.5Y, low to med plasticity, no HC odor
	0.0		5.5					⇩minor cobbles
4	0.0	100%	4.7				SC	
	0.0		6.7					
6	0.0		5.1					
	0.0		5.3					
8	NR		NR					(7.5 - 10) No Recovery
	NR	50%	NR					
10	0.0		10.1				SC	(10 - 12) Clayey SAND: lt olive brown, 4/3 2.5Y, moist
	0.0		15.1					
12	0.0		12.0				CH	(12 - 12.3) FAT CLAY: olive brown/olive 4/3 5Y, soft, moist to very moist, high plasticity, minor fine sand, no HC odor
	NR		NR					(12.3 - 15) No Recovery
14	NR	46%	NR	SB-67 (15-16)' 1150				
	0.0		16.4				CH	(15 - 16) FAT CLAY: (cont'd) as above, very moist, no HC odor
16	0.0		3.1					▼water @ 16' bgs
	0.0		2.1				SC	(16 - 17.1) Clayey SAND w/ sand lenses: lt olive brown 4/3 2.5Y, wet, saturated, water standing in sand lenses, med plasticity, fine sand, no HC odor
18	NR		NR					(17.1 - 20) No Recovery
	NR	42%	NR					
20	0.0	80%	-				SC	Clayey SAND: (cont'd) as above
								(20.8 - 21) No Recovery
22								
								TD = 21' bgs
24								

MWH

Drilling Log

Soil Boring **SB-68**

Project *Jaquez E#1 & C#1* Owner *El Paso CGP Company, LLC*

Location *San Juan River Basin, New Mexico* Project Number *10507777*

Surface Elev. *NA* North *NA* East *NA*

Top of Casing *NA* Water Level Initial ▽ *NA* Static ▼ *NA*

Hole Depth *21.0ft* Screen: Diameter *NA* Length *NA* Type/Size *NA*

Hole Diameter *3" (0-5)' & 2" (5-21)'* Casing: Diameter *NA* Length *NA* Type *NA*

Drill Co. *National EWP* Drilling Method *Direct Push (Geoprobe)* Sand Pack *NA*

Driller *Rodrigo Cano* Driller Reg. # *WD 1210* Log By *Brad Barton*

Start Date *9/14/2015* Completion Date *9/14/2015* Checked By *S. Varsa*

COMMENTS
Soil boring completed using hand auger from 0 to 5 feet and dual tube from 5 to 21 feet.

Bentonite Grout | Bentonite Granules | Grout | Portland Cement | Sand Pack | Sand Pack

Depth (ft)	PID (ppm)	% Recovery	Headspace Screening	Sample ID	Blow Count Recovery	Graphic Log	USCS	Description (Color, Moisture, Texture, Structure, Odor) Geologic Descriptions are Based on the USCS.
								Dirt
0	0.0		1.1				SM	0 - 5' Hand Augered (1 - 2) Silty SAND: dry, lt yellowish brown 6/4 10YR, loose, fine sand, minor gravels, no HC odor
	0.0		1.2					
2	0.0		3.2				SC	(2 - 5) Clayey SAND: olive brown 2/3 2.5Y, dry to slight moist, fine sand, med plasticity, no HC odor
	0.0		4.3					
4	0.0	100%	3.1					
	0.0		2.2				SM	(5 - 7.4) Silty SAND: fine to med sand, loose, minor clay content, olive brown 4/2 2.5Y, no HC odor
6	0.0		2.4					
	0.0		4.9					(8.4 - 10) No Recovery
8	NR		NR					
	NR	48%	NR					
10	0.0		4.9				SC	(10 - 13) Clayey SAND: olive brown, moist, low plasticity, fine sand, no HC odor
	0.0		6.6					
12	0.0		6.6					
	NR		NR					(13 - 15) No Recovery
14	NR	60%	NR	SB-68 (15-16)' 1330				
	0.0		6.8				SC	Clayey SAND: (cont'd) as above ▼ water @ 16' bgs
16	0.0		5.1				SP	(16 - 18.5) Poorly Graded SAND: med sand, loose, saturated, wet, no cementation, olive brown 4/3 2.5Y, no HC odor
	0.0		5.1					
18	0.0		2.8					(18.5 - 20) No Recovery
	NR	70%	NR					
20	0.0		2.7				SP	(20 - 20.7) Poorly Graded SAND: (cont'd) as above
	NR	70%	NR					(20.7 - 21) No Recovery
22								
								TD = 21' bgs
24								

Drilling Log

MWH

Soil Boring **SB-69**

Project *Jaquez E#1 & C#1* Owner *El Paso CGP Company, LLC*

Location *San Juan River Basin, New Mexico* Project Number *10507777*

Surface Elev. *NA* North *NA* East *NA*

Top of Casing *NA* Water Level Initial ▽ *NA* Static ▼ *NA*

Hole Depth *20.0ft* Screen: Diameter *NA* Length *NA* Type/Size *NA*

Hole Diameter *3" (0-5)' & 2" (5-20)'* Casing: Diameter *NA* Length *NA* Type *NA*

Drill Co. *National EWP* Drilling Method *Direct Push (Geoprobe)* Sand Pack *NA*

Driller *Rodrigo Cano* Driller Reg. # *WD 1210* Log By *Brad Barton*

Start Date *9/13/2015* Completion Date *9/13/2015* Checked By *S. Varsa*

COMMENTS
Soil boring completed using hand auger from 0 to 5 feet and dual tube from 5 to 20 feet.

Bentonite Grout | Bentonite Granules | Grout | Portland Cement | Sand Pack | Sand Pack

Depth (ft)	PID (ppm)	% Recovery	Headspace Screening	Sample ID	Blow Count Recovery	Graphic Log	USCS	Description (Color, Moisture, Texture, Structure, Odor) Geologic Descriptions are Based on the USCS.
								Dirt w/ minor weeds
0	0.0		4.8				ML	0 - 5' Hand augered (0 - 1) Clayey Silt: lt yellowish brown 6/4 10YR, dry, loose, fine grained, minor gravels, no HC odor
	0.0		3.4					
2	0.0		4.5				SM	(1 - 4) Silty SAND: yellowish brown 5/4 10YR, dry to slight moist, trace clay content, trace cobbles @ 2.5' bgs, fine sand, loose, no HC odor minor cobbles 2.5' bgs
	0.0		2.9					
4	0.0	100%	2.9					(4 - 7) Clayey SAND: loose, fine sand, lt olive brown, 5/3 2.5Y, slight moist to moist, med plasticity, no HC odor
	0.3		3.6				SC	
6	0.0		5.4					
	NR		NR					(7 - 10) No Recovery
8	NR		NR					
	NR	40%	NR	SB-69 (10.6-11.6)' 1535				
10	0.0		3.3				SP	(10 - 11.6) Poorly Graded SAND: lt olive brown, 5/3 2.5Y, loose, fine sand minor clay content, moist, no HC odor
	0.0		6.3					⇩very moist
12	NR		NR					(11.6 - 15) No Recovery ▼water @ 12' bgs from rods pulling out of ground
	NR		NR					
14	NR	32%	NR					
	NR		NR					
16	NR		NR					(15 - 20) No Recovery except slough 0.7' of slough
	NR		NR					
18	NR		NR					
	NR	0%	NR					
20								TD = 20' bgs
22								

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MWH

Drilling Log

Soil Boring **SB-70**

Project *Jaquez E#1 & C#1* Owner *El Paso CGP Company, LLC*

Location *San Juan River Basin, New Mexico* Project Number *10507777*

Surface Elev. *NA* North *NA* East *NA*

Top of Casing *NA* Water Level Initial ▽ *NA* Static ▼ *NA*

Hole Depth *17.0ft* Screen: Diameter *NA* Length *NA* Type/Size *NA*

Hole Diameter *3" (0-5)' & 2" (5-17)'* Casing: Diameter *NA* Length *NA* Type *NA*

Drill Co. *National EWP* Drilling Method *Direct Push (Geoprobe)* Sand Pack *NA*

Driller *Rodrigo Cano* Driller Reg. # *WD 1210* Log By *Brad Barton*

Start Date *9/13/2015* Completion Date *9/13/2015* Checked By *S. Varsa*

COMMENTS
Soil boring completed using hand auger from 0 to 5 feet and dual tube from 5 to 17 feet.

Bentonite Grout | Bentonite Granules | Grout | Portland Cement | Sand Pack | Sand Pack

Depth (ft)	PID (ppm)	% Recovery	Headspace Screening	Sample ID	Blow Count Recovery	Graphic Log	USCS	Description (Color, Moisture, Texture, Structure, Odor) Geologic Descriptions are Based on the USCS.
								Dirt minor weeds
0								0 - 5' Hand augered
	0.0		2.2				ML	(0 - 2) Clayey Silt: lt yellowish brown 6/4 10YR, dry, fine grained, loose, minor gravels, no HC odor
	0.0		3.5					
2	0.0		3.0				SM	(2 - 4) Silty SAND: yellowish brown 5/4 10YR, dry to slight moist, trace clay content in matrix, fine sand, loose, trace cobbles @ 2.5' bgs, no HC odor
	0.0		3.9					
4	0.0		4.0				SC	(4 - 5) Clayey SAND: loose fine sand, slight moist, lt olive brown 5/3 2.5Y, low to med plasticity, no HC odor
	0.0	100%	3.6				SP	(5 - 8.3) Poorly Graded SAND: minor gravels up to 1/4", slight moist, loose, med sand, no cementation, no HC odor
6	0.0		2.4					
	0.0		2.7					
8	0.0		0.7					(8.3 - 10) No Recovery
	NR	66%	NR					
10	0.0		6.2	SB-70 (11-12)' 1440			SP	(10 - 13.2) Poorly Graded SAND: minor silt/clay, loose, moist to wet @ 12' bgs, fine sand, no cementation, no HC odor
	0.0		6.3					▼ water @ 12' bgs
12	0.0		4.5					
	0.0		2.7					(13.2 - 15) No Recovery
14	NR	64%	NR					
	0.9		3.8				SP	Poorly Graded SAND: as above, saturated
16	0.1		6.2				CH	FAT CLAY: moist, soft to med stiff, high plasticity, no HC odor, lt olive brown
	NR	80%	NR					(16.6 - 17) No Recovery
18								
								TD = 17' bgs
20								

MWH

Drilling Log

Soil Boring **SB-71**

Project *Jaquez E#1 & C#1* Owner *El Paso CGP Company, LLC*

Location *San Juan River Basin, New Mexico* Project Number *10507777*

Surface Elev. *NA* North *NA* East *NA*

Top of Casing *NA* Water Level Initial ▽ *NA* Static ▼ *NA*

Hole Depth *17.0ft* Screen: Diameter *NA* Length *NA* Type/Size *NA*

Hole Diameter *3" (0-5)' & 2" (5-17)'* Casing: Diameter *NA* Length *NA* Type *NA*

Drill Co. *National EWP* Drilling Method *Direct Push (Geoprobe)* Sand Pack *NA*

Driller *Rodrigo Cano* Driller Reg. # *WD 1210* Log By *Brad Barton*

Start Date *9/13/2015* Completion Date *9/13/2015* Checked By *S. Varsa*

COMMENTS
Soil boring completed using hand auger from 0 to 5 feet and dual tube from 5 to 17 feet.

Bentonite Grout | Bentonite Granules | Grout | Portland Cement | Sand Pack | Sand Pack

Depth (ft)	PID (ppm)	% Recovery	Headspace Screening	Sample ID	Blow Count Recovery	Graphic Log	USCS	Description (Color, Moisture, Texture, Structure, Odor) Geologic Descriptions are Based on the USCS.
								Dirt w/ minor weeds
0	0.0	100%	41				SM	(0 - 5) Silty SAND: lt olive brown 5/4 2.5Y, loose, dry to slight moist, fine sand, no cementation, no HC odor
	0.0		3.8					
2	0.0		3.4					⇩minor cobbles
	0.0		3.4					
4	0.0		4.0					
	0.0		5.6				SP	(5 - 8.5) Poorly Graded SAND: lt olive brown 5/4 2.5Y, loose, moist, fine sand, no cementation, no HC odor
6	0.0		5.3					
	0.0		4.8					
8	0.0		6.0					
	NR	70%	NR					(8.5 - 10) No Recovery
10	0.0		6.7	SB-71 (11-12)' 1615			SP	(10 - 14) Poorly Graded SAND: cont'd, minor gravels, no HC odor, very moist to wet
	0.0		10.2					▼water @ 12' bgs
12	0.0		5.3					⇩saturated, wet
	0.0		5.6					
14	NR	80%	NR					(14 - 15) No Recovery
	0.0		5.4				SP	(15 - 16) Poorly Graded SAND: cont'd, saturated, no HC odor
16	0.0		4.0				CH	(16 - 16.4) FAT CLAY: lt olive brown 5/4 2.5Y, moist, soft to med stiff, high dry strength, high plasticity
	NR	70%	NR					(16.4 - 17) No Recovery
18								
								TD = 17.0' bgs
20								

Drilling Log JAQUEZ LOGS EL PASO - COPY.GPJ MWH IA.GDT 1/15/16

MWH

Drilling Log

Soil Boring **SB-72**

Project *Jaquez E#1 & C#1* Owner *El Paso CGP Company, LLC*

Location *San Juan River Basin, New Mexico* Project Number *10507777*

Surface Elev. *NA* North *NA* East *NA*

Top of Casing *NA* Water Level Initial ▽ *NA* Static ▼ *NA*

Hole Depth *12.0ft* Screen: Diameter *NA* Length *NA* Type/Size *NA*

Hole Diameter *3" (0-5)' & 2" (5-12)'* Casing: Diameter *NA* Length *NA* Type *NA*

Drill Co. *National EWP* Drilling Method *Direct Push (Geoprobe)* Sand Pack *NA*

Driller *Rodrigo Cano* Driller Reg. # *WD 1210* Log By *Brad Barton*

Start Date *9/12/2015* Completion Date *9/12/2015* Checked By *S. Varsa*

COMMENTS
Soil boring completed using hand auger from 0 to 5 feet and dual tube from 5 to 12 feet.

Bentonite Grout | Bentonite Granules | Grout | Portland Cement | Sand Pack | Sand Pack

Depth (ft)	PID (ppm)	% Recovery	Headspace Screening	Sample ID	Blow Count Recovery	Graphic Log	USCS	Description (Color, Moisture, Texture, Structure, Odor) Geologic Descriptions are Based on the USCS.
								Grass weeds, w/ dirt
0								0 - 5' Hand Augered
	0.0		0.5				ML	(0 - 1) Clayey Silt: brown 4/3 10YR, loose, dry, low plasticty, no HC odor
	0.0		3.5					(1 - 6) Silty SAND: fine to med sand, minor coarse sand, trace gravels, loose, slight moist to moist, brown 4/3 10YR, no HC odor
2	0.0		3.8					
	0.0		7.5				SM	
4	0.0		6.7					
		100%						
	2.7		3.6					
6	1587.6		1525.0	SB-72 (6-7)' 1440				(6 - 8.5) Clayey SAND: HC stain, 3/1 2.5Y black to very dk gray, mod HC odor, soft to loose, very moist, fine sand ▼ water @ 7' bgs
	31.8		23.7				SC	
8	12.7		4.2					(8.5 - 10) No Recovery
	NR		NR					
10		70%						
	0.4		3.8				SP	(10 - 11.5) Poorly Graded SAND: very dk gray to black, loose, fine to minor med sand, slight to no HC odor, wet, saturated
	0.4		5.2					(11.5 - 12) No Recovery
12	NR	75%	NR					
14								TD = 12' bgs

Drilling Log JAQUEZ LOGS EL PASO - COPY.GPJ MWH IA.GDT 1/15/16

MWH

Drilling Log

Soil Boring **SB-73**

Project *Jaquez E#1 & C#1* Owner *El Paso CGP Company, LLC*

Location *San Juan River Basin, New Mexico* Project Number *10507777*

Surface Elev. *NA* North *NA* East *NA*

Top of Casing *NA* Water Level Initial ▽ *NA* Static ▼ *NA*

Hole Depth *20.0ft* Screen: Diameter *NA* Length *NA* Type/Size *NA*

Hole Diameter *3" (0-5)' & 2" (5-20)'* Casing: Diameter *NA* Length *NA* Type *NA*

Drill Co. *National EWP* Drilling Method *Direct Push (Geoprobe)* Sand Pack *NA*

Driller *Rodrigo Cano* Driller Reg. # *WD 1210* Log By *Brad Barton*

Start Date *9/16/2015* Completion Date *9/16/2015* Checked By *S. Varsa*

COMMENTS
Soil boring completed using hand auger from 0 to 5 feet and dual tube from 5 to 20 feet.

■ Bentonite Grout ▩ Bentonite Granules ▤ Grout ▨ Portland Cement ⋰ Sand Pack ⋰ Sand Pack

Depth (ft)	PID (ppm)	% Recovery	Headspace Screening	Sample ID	Blow Count Recovery	Graphic Log	USCS	Description (Color, Moisture, Texture, Structure, Odor) Geologic Descriptions are Based on the USCS.
								Dirt w/ weeds
0	0.0		0.6					0 - 5' Hand augered, Hand auger 2 holes
	0.0		1.1				SM	(0 - 3) Silty SAND: lt olive brown 5/4 2.5Y, dry (Hand augered 2 holes before reaching 5' bgs) to moist, fine sand, loose, trace cobbles @ 2.5' bgs,
2	0.0		0.4					⇩slight moist to moist
	0.0		1.0				CH	(3 - 3.5) FAT CLAY: 3/1 10YR, very dk gray, no HC odor, stiff, discoloration like HC staining but no odor, moist
4	0.0	100%	1.0				SM	3.5 - 7) Silty SAND: fine to med sand, minor coarse sand w/ gravels, very moist to wet, lt olive brown
	0.1		1.1					
6	0.1		2.8	SB-73 (6.7-7.7)' 1050				▼water @ 8' bgs
	0.2		37.5				SC	(7 - 7.7) Clayey SAND: very dk gray 3/1 10YR, w/ gray area, soft to loose, very moist to wet, high plasticity, fine to med sand, very slight HC odor, HC stained present
8	NR		NR					(7.7 - 10) No Recovery
	NR	54%	NR					
10	0.1		1.2					(10 - 13) Poorly Graded SAND: med sand, black 2.5/1 25Y, wet, loose, no HC odor, no cementation, staining present
	0.1		1.3				SP	
12	0.1		1.0					⇩color changes to lt olive brown, wet, no HC odor, no staining
	NR		NR					(13 - 20) No Recovery
14	NR	60%	NR					
	NR		NR					
16	NR		NR					
	NR		NR					(15 - 20) possible flowing sands, only water in PVC liner, no soils 15-20'
18	NR		NR					
	NR	0%	NR					
20								
								TD = 20' bgs
22								

MWH

Drilling Log

Soil Boring **SB-74**

Project *Jaquez E#1 & C#1* Owner *El Paso CGP Company, LLC*

Location *San Juan River Basin, New Mexico* Project Number *10507777*

Surface Elev. *NA* North *NA* East *NA*

Top of Casing *NA* Water Level Initial ▽ *NA* Static ▼ *NA*

Hole Depth *20.0ft* Screen: Diameter *NA* Length *NA* Type/Size *NA*

Hole Diameter *3" (0-5)' & 2" (5-20)'* Casing: Diameter *NA* Length *NA* Type *NA*

Drill Co. *National EWP* Drilling Method *Direct Push (Geoprobe)* Sand Pack *NA*

Driller *Rodrigo Cano* Driller Reg. # *WD 1210* Log By *Brad Barton*

Start Date *9/16/2015* Completion Date *9/16/2015* Checked By *S. Varsa*

COMMENTS
Soil boring completed using hand auger from 0 to 5 feet and dual tube from 5 to 20 feet.

Bentonite Grout | Bentonite Granules | Grout | Portland Cement | Sand Pack | Sand Pack

Depth (ft)	PID (ppm)	% Recovery	Headspace Screening	Sample ID	Blow Count Recovery	Graphic Log	USCS	Description (Color, Moisture, Texture, Structure, Odor) Geologic Descriptions are Based on the USCS.
								Dirt minor weeds
0	0.0		2.9					0 - 5' bgs Hand Augered
	0.0		5.7				SM	(0 - 2) Silty SAND: lt olive brown 5/4 2.5Y, dry, loose, fine sand, no cementation, no HC odor
2	0.8		18.5					
	0.9		28.2				CH	(2 - 4) FAT CLAY: dk gray 4/1 5Y, minor HC staining, slight HC odor, slight moist, high plasticity, soft to med stiff
4	760.7	100%	1222	SB-74 (4-6)' 1145				
	165.3		1181.6				SC	(4 - 6) Clayey SAND: dk gray 4/1 5Y, loose, med plasticity, strong HC odor, minor HC staining, moist, fine sand
6	22.7		485.2				SP	▼water @ 6' bgs (6 - 6.5) Poorly Graded SAND: very dk gray to black, mod HC odor, saturated, wet, loose, med sand
							CH	(6.5 - 7) FAT CLAY: lt olive brown 5/4 2.5Y, moist, soft to med stiff, high plasticity, very slight HC odor
	4.7		75.1				SC	
8	3.1		35.2					(7 - 8.9) Clayey SAND: dk gray 3/1 5Y, wet, loose to stiff, high plasticity, fine sand, very slight HC odor
	NR	78%	NR					(8.9 - 10) No Recovery
10	3.9		25.7				SP	(10 - 11) Poorly Graded SAND: dk gray to black, loose, med sand, loose, wet, very slight HC odor
	NR		NR					(11 - 15) No Recovery
12	NR		NR					
	NR		NR					
14	NR	20%	NR					
	0.0		10.4				SP	(15 - 16) Poorly Graded SAND: brown 4/3 10YR, loose, med sand, wet
16	0.0		9.9					(16 - 19) FAT CLAY w/ fine sand: vrown 4/3 10YR, soft, fine sand, wet, high plasticity, no HC odor
	0.0		10.3				CH	
18	0.0		4.9					
	NR	80%	NR					(19 - 20) No Recovery
20								
22								TD = 20' bgs

Drilling Log JAQUEZ LOGS EL PASO - COPY.GPJ MWH IA.GDT 1/15/16

MWH

Drilling Log

Soil Boring **SB-75**

Project *Jaquez E#1 & C#1* Owner *El Paso CGP Company, LLC*

Location *San Juan River Basin, New Mexico* Project Number *10507777*

Surface Elev. *NA* North *NA* East *NA*

Top of Casing *NA* Water Level Initial ▽ *NA* Static ▼ *NA*

Hole Depth *15.0ft* Screen: Diameter *NA* Length *NA* Type/Size *NA*

Hole Diameter *3" (0-5)' & 2" (5-15)'* Casing: Diameter *NA* Length *NA* Type *NA*

Drill Co. *National EWP* Drilling Method *Direct Push (Geoprobe)* Sand Pack *NA*

Driller *Rodrigo Cano* Driller Reg. # *WD 1210* Log By *Brad Barton*

Start Date *9/16/2015* Completion Date *9/16/2015* Checked By *S. Varsa*

COMMENTS
Soil boring completed using hand auger from 0 to 5 feet and dual tube from 5 to 15 feet.

■ Bentonite Grout ▩ Bentonite Granules ▤ Grout ▨ Portland Cement ⋰ Sand Pack ⋰ Sand Pack

Depth (ft)	PID (ppm)	% Recovery	Headspace Screening	Sample ID	Blow Count Recovery	Graphic Log	USCS	Description (Color, Moisture, Texture, Structure, Odor) Geologic Descriptions are Based on the USCS.
								Dirt, weeds
0								0 - 5' Hand augered
	0.0		6.3				SC	(0 - 2) Clayey SAND: lt olive brown 5/4 2.5Y, dry to slight moist, fine to med sand, loose, low plasticity, no HC odor
	0.0		2.5					
2	0.0		11.3				SM	(2 - 5) Silty SAND: med to fine sand, minor coarse sand, trace gravels, lt olive brown 5/4 2.5Y, loose, moist to very moist, no HC odor,
	0.0		4.5					
4	0.0	100%	4.2					very moist @ 4'
	2.1		3.5	SB-75 (5-7)' 1320			SC	(5 - 7.7) Clayey SAND: olive brown to dk gray 4/1 2.5Y, moist to wet, med to high plasticity, soft to loose, fine sand, no HC odor
6	0.0		4.2					▼water @ about 7' bgs⇩saturated, wet
	0.0		7.7					
8	NR		NR					(7.7 - 10) No Recovery
	NR	54%	NR					
10	0.0		4.5				SC	Clayey SAND: dk gray to black, wet to saturated, fine sand, no HC odor, high to med plasticity
	0.0		2.5					
12	0.0		5.6					⇩olive brown 4/4 2.5Y, color change
	NR		NR					(12.6 - 15) No Recovery
14	NR	52%	NR					
16								TD = 15' bgs
18								

MWH

Drilling Log

Soil Boring **SB-76**

Project *Jaquez E#1 & C#1* Owner *El Paso CGP Company, LLC*

Location *San Juan River Basin, New Mexico* Project Number *10507777*

Surface Elev. *NA* North *NA* East *NA*

Top of Casing *NA* Water Level Initial ▽ *NA* Static ▼ *NA*

Hole Depth *15.0ft* Screen: Diameter *NA* Length *NA* Type/Size *NA*

Hole Diameter *3" (0-5)' & 2" (5-15)'* Casing: Diameter *NA* Length *NA* Type *NA*

Drill Co. *National EWP* Drilling Method *Direct Push (Geoprobe)* Sand Pack *NA*

Driller *Rodrigo Cano* Driller Reg. # *WD 1210* Log By *Brad Barton*

Start Date *9/18/2015* Completion Date *9/18/2015* Checked By *S. Varsa*

COMMENTS
Soil boring completed using hand auger from 0 to 5 feet and dual tube from 5 to 15 feet.

Bentonite Grout | Bentonite Granules | Grout | Portland Cement | Sand Pack | Sand Pack

Depth (ft)	PID (ppm)	% Recovery	Headspace Screening	Sample ID	Blow Count Recovery	Graphic Log	USCS	Description (Color, Moisture, Texture, Structure, Odor) Geologic Descriptions are Based on the USCS.
								Dirt, Weeds
0								0 - 5' Hand Augered
	0.0		3.5					(0 - 3) Silty SAND: lt olive brown 5/4 2.5Y, dry to moist, fine to med sand, loose, no HC odor
	0.0		6.1				SM	
2	0.1		4.5					
	0.3		9.5				CH	(3 - 4) FAT CLAY: 3/1 10YR, very dk gray, no HC odor,organic wood debris, high plasticity, moist
4	0.1		8.6	SB-76 (3-5)' 1405			SM	(4 - 5) Silty SAND: (FIII) loose, very moist, fine to med sand, minor coarse sand
		100%						▼water @ 5' bgs
	NR		NR					(5 - 10) No Recovery
6	NR		NR					
	NR		NR					
8	NR		NR					
	NR		NR					
10		0%						
	0.0		1.0				SC	(10 - 11) dk gray 3/1 10YR Clayey SAND: wet, loose, med plasticity, fine to med sand, no HC odor
	0.0		0.5					⇩color grades to lt olive brown 5/4 2.5Y
12	0.0		0.8					(12 - 15) No Recovery
	NR		NR					
14	NR		NR					
		50%						
16								TD = 15' bgs
18								

Drilling Log

MWH

Soil Boring **SB-77**

Project *Jaquez E#1 & C#1* Owner *El Paso CGP Company, LLC*

Location *San Juan River Basin, New Mexico* Project Number *10507777*

Surface Elev. *NA* North *NA* East *NA*

Top of Casing *NA* Water Level Initial ▽ *NA* Static ▼ *NA*

Hole Depth *15.0ft* Screen: Diameter *NA* Length *NA* Type/Size *NA*

Hole Diameter *3" (0-5)' & 2" (5-15)'* Casing: Diameter *NA* Length *NA* Type *NA*

Drill Co. *National EWP* Drilling Method *Direct Push (Geoprobe)* Sand Pack *NA*

Driller *Rodrigo Cano* Driller Reg. # *WD 1210* Log By *Brad Barton*

Start Date *9/18/2015* Completion Date *9/18/2015* Checked By *S. Varsa*

COMMENTS
Soil boring completed using hand auger from 0 to 5 feet and dual tube from 5 to 15 feet.

Bentonite Grout | Bentonite Granules | Grout | Portland Cement | Sand Pack | Sand Pack

Depth (ft)	PID (ppm)	% Recovery	Headspace Screening	Sample ID	Blow Count Recovery	Graphic Log	USCS	Description (Color, Moisture, Texture, Structure, Odor) Geologic Descriptions are Based on the USCS.
								Dirt, w/ minor weeds
0								0 - 5' bgs Hand Augered
	0.0		4.6				ML	(0 - 1) Clayey Silt: lt yellowish brown 6/4 10YR, dry, minor gravels, loose, no HC odor
	0.0		1.7					(1 - 5.5) Silty SAND: lt olive brown 5/4 2.5Y, dry to moist, minor coars sand, angular, loose, no cementation, no HC odor
2	0.0		4.3					
	0.0		2.8	SB-77 (3-4)' 1530			SM	
4								▼ water @ 4' bgs
	0.0	100%	1.0					⇩ wet, saturated
	0.1		1.8				SC	(5.5 - 5.7) Clayey SAND: olive 4/4 5Y, wet, minor organics, no HC odor, med to low plasticity, fine sand
6	NR		NR					(5.7 - 10) No Recovery
	NR		NR					
8	NR		NR					
	NR	14%	NR					
10							SP	(10 - 10.5) Poorly Graded SAND: wet, med sand, loose, no cementation, no HC odor, lt olive brown
	0.0		1.3					(10.5 - 13) FAT CLAY w/ minor fine sand: high plasticity, @ 11' bgs, color change to brown 4/3 10YR, soft, saturated, no HC odor
	0.1		0.6				CH	
12	0.0		1.1					
	NR		NR					(13 - 15) No Recovery
14	NR	60%	NR					
16								TD = 15' bgs
18								

APPENDIX C

September 2015 Site Assessment

Photographic Log

MWH

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Photographic Log

Client:	**El Paso CGP Company, LLC**	**Project:**	**10507777.0501**
Site Name:	**Jaquez E#1 & C#1**	**Site Location:**	**Blanco, NM**

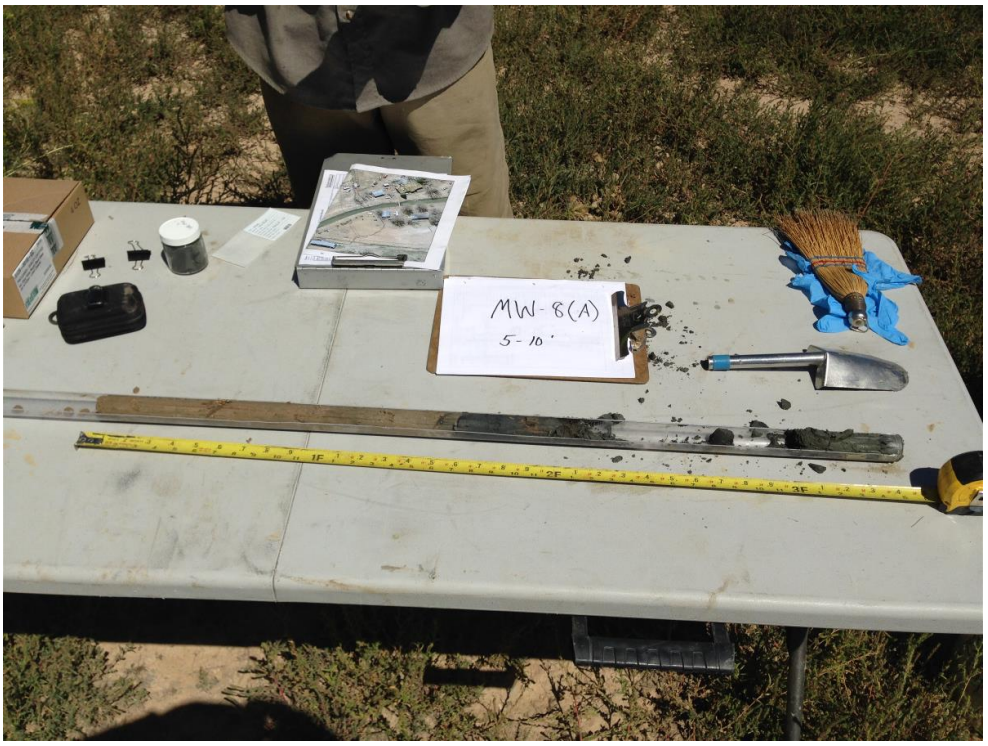
Photograph ID: 1

Photo Location:
Jaquez E#1 & C#1

Direction:
N/A

Survey Date:
9/10/2015

Comments:
MW-8(A) 5-10' (top to the left)



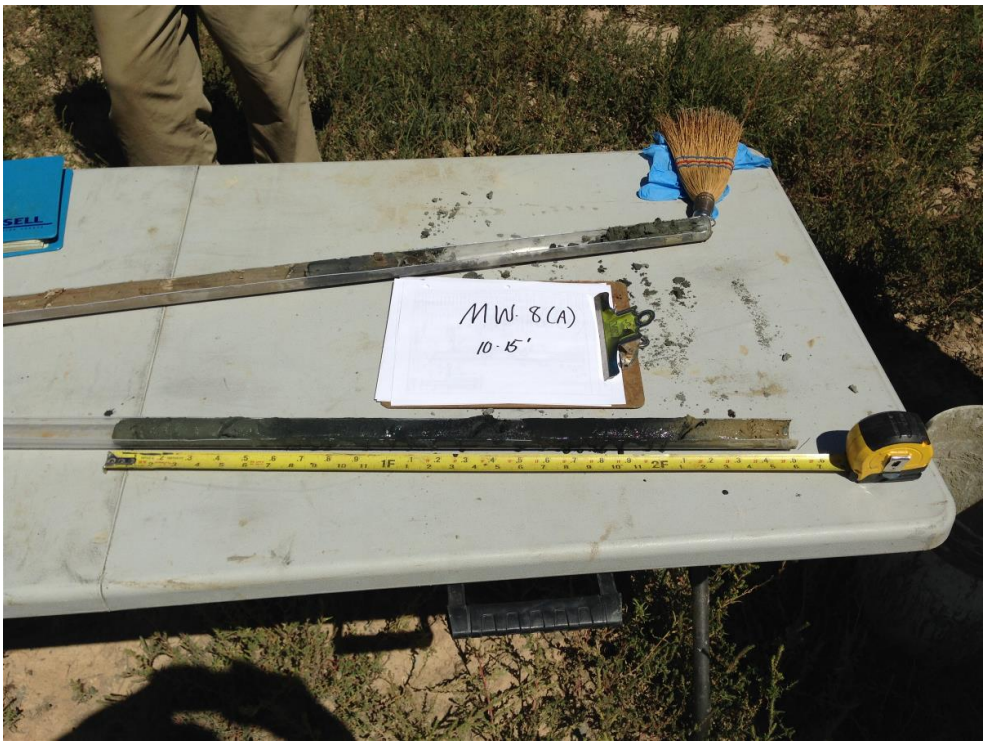
Photograph ID: 2

Photo Location:
Jaquez E#1 & C#1

Direction:
N/A

Survey Date:
9/10/2015

Comments:
MW-8(A) 10-15'



Client:	**El Paso CGP Company, LLC**	**Project:**	**10507777.0501**
Site Name:	**Jaquez E#1 & C#1**	**Site Location:**	**Blanco, NM**

Photograph ID: 3 **Photo Location:** Jaquez E#1 & C#1 **Direction:** N/A **Survey Date:** 9/10/2015 **Comments:** MW-8(A) 15-20'	
Photograph ID: 4 **Photo Location:** Jaquez E#1 & C#1 **Direction:** N/A **Survey Date:** 9/11/2015 **Comments:** MW-12 0-5' (increasing depth right to left, at one-foot intervals)	

Client:	**El Paso CGP Company, LLC**	**Project:**	**10507777.0501**
Site Name:	**Jaquez E#1 & C#1**	**Site Location:**	**Blanco, NM**

Photograph ID: 5 **Photo Location:** Jaquez E#1 & C#1 **Direction:** N/A **Survey Date:** 9/11/2015 **Comments:** MW-12 5-10'	
Photograph ID: 6 **Photo Location:** Jaquez E#1 & C#1 **Direction:** N/A **Survey Date:** 9/11/2015 **Comments:** MW-12 10-15'	

Client:	**El Paso CGP Company, LLC**	**Project:**	**10507777.0501**
Site Name:	**Jaquez E#1 & C#1**	**Site Location:**	**Blanco, NM**

Photograph ID: 7

Photo Location:
Jaquez E#1 & C#1

Direction:
N/A

Survey Date:
9/11/2015

Comments:
MW-9 0-5'

Photograph ID: 8

Photo Location:
Jaquez E#1 & C#1

Direction:
N/A

Survey Date:
9/11/2015

Comments:
MW-9 5-10'

Client:	**El Paso CGP Company, LLC**	**Project:**	**10507777.0501**
Site Name:	**Jaquez E#1 & C#1**	**Site Location:**	**Blanco, NM**

Photograph ID: 9 **Photo Location:** Jaquez E#1 & C#1 **Direction:** N/A **Survey Date:** 9/11/2015 **Comments:** MW-9 10-15'	
Photograph ID: 10 **Photo Location:** Jaquez E#1 & C#1 **Direction:** N/A **Survey Date:** 9/11/2015 **Comments:** MW-9 15-20'	

Client:	**El Paso CGP Company, LLC**	**Project:**	**10507777.0501**
Site Name:	**Jaquez E#1 & C#1**	**Site Location:**	**Blanco, NM**

Photograph ID: 11 **Photo Location:** Jaquez E#1 & C#1 **Direction:** N/A **Survey Date:** 9/11/2015 **Comments:** MW-9 20-25'	
Photograph ID: 12 **Photo Location:** Jaquez E#1 & C#1 **Direction:** N/A **Survey Date:** 9/11/2015 **Comments:** MW-9 25-30'	

Client:	**El Paso CGP Company, LLC**	**Project:**	**10507777.0501**
Site Name:	**Jaquez E#1 & C#1**	**Site Location:**	**Blanco, NM**

Photograph ID: 13 **Photo Location:** Jaquez E#1 & C#1 **Direction:** N/A **Survey Date:** 9/11/2015 **Comments:** SB-64 5-10'	
Photograph ID: 14 **Photo Location:** Jaquez E#1 & C#1 **Direction:** N/A **Survey Date:** 9/11/2015 **Comments:** SB-64 10-15'	

Client:	**El Paso CGP Company, LLC**	**Project:**	**10507777.0501**
Site Name:	**Jaquez E#1 & C#1**	**Site Location:**	**Blanco, NM**

Photograph ID: 15 **Photo Location:** Jaquez E#1 & C#1 **Direction:** N/A **Survey Date:** 9/11/2015 **Comments:** SB-64 15-20'	
Photograph ID: 16 **Photo Location:** Jaquez E#1 & C#1 **Direction:** N/A **Survey Date:** 9/11/2015 **Comments:** SB-64 20-22'	

Client:	**El Paso CGP Company, LLC**	**Project:**	**10507777.0501**
Site Name:	**Jaquez E#1 & C#1**	**Site Location:**	**Blanco, NM**

Photograph ID: 17 **Photo Location:** Jaquez E#1 & C#1 **Direction:** N/A **Survey Date:** 9/12/2015 **Comments:** SB-61 0-5'	
Photograph ID: 18 **Photo Location:** Jaquez E#1 & C#1 **Direction:** N/A **Survey Date:** 9/12/2015 **Comments:** SB-61 5-10'	

Client:	**El Paso CGP Company, LLC**	**Project:**	**10507777.0501**
Site Name:	**Jaquez E#1 & C#1**	**Site Location:**	**Blanco, NM**

Photograph ID: 19

Photo Location:
Jaquez E#1 & C#1

Direction:
N/A

Survey Date:
9/12/2015

Comments:
SB-61 5-10'

Photograph ID: 20

Photo Location:
Jaquez E#1 & C#1

Direction:
N/A

Survey Date:
9/12/2015

Comments:
SB-61 10-12'

Client:	**El Paso CGP Company, LLC**	**Project:**	**10507777.0501**
Site Name:	**Jaquez E#1 & C#1**	**Site Location:**	**Blanco, NM**

Photograph ID: 21

Photo Location:
Jaquez E#1 & C#1

Direction:
N/A

Survey Date:
9/12/2015

Comments:
SB-60 0-5'

Photograph ID: 22

Photo Location:
Jaquez E#1 & C#1

Direction:
N/A

Survey Date:
9/12/2015

Comments:
SB-60 5-10'

Client:	**El Paso CGP Company, LLC**	**Project:**	**10507777.0501**
Site Name:	**Jaquez E#1 & C#1**	**Site Location:**	**Blanco, NM**

Photograph ID: 23

Photo Location:
Jaquez E#1 & C#1

Direction:
N/A

Survey Date:
9/12/2015

Comments:
SB-59 0-5'

Photograph ID: 24

Photo Location:
Jaquez E#1 & C#1

Direction:
N/A

Survey Date:
9/12/2015

Comments:
SB-59 5-10'

Client:	**El Paso CGP Company, LLC**	**Project:**	**10507777.0501**
Site Name:	**Jaquez E#1 & C#1**	**Site Location:**	**Blanco, NM**

Photograph ID: 25 **Photo Location:** Jaquez E#1 & C#1 **Direction:** N/A **Survey Date:** 9/12/2015 **Comments:** SB-58 0-5'	
Photograph ID: 26 **Photo Location:** Jaquez E#1 & C#1 **Direction:** N/A **Survey Date:** 9/12/2015 **Comments:** SB-58 5-10'	

Client:	**El Paso CGP Company, LLC**	**Project:**	**10507777.0501**
Site Name:	**Jaquez E#1 & C#1**	**Site Location:**	**Blanco, NM**

Photograph ID: 27

Photo Location:
Jaquez E#1 & C#1

Direction:
N/A

Survey Date:
9/12/2015

Comments:
SB-57 0-5'

Photograph ID: 28

Photo Location:
Jaquez E#1 & C#1

Direction:
N/A

Survey Date:
9/12/2015

Comments:
SB-57 5-10'

Client:	**El Paso CGP Company, LLC**	**Project:**	**10507777.0501**
Site Name:	**Jaquez E#1 & C#1**	**Site Location:**	**Blanco, NM**

Photograph ID: 29

Photo Location:
Jaquez E#1 & C#1

Direction:
N/A

Survey Date:
9/12/2015

Comments:
SB-57 10-11'

Photograph ID: 30

Photo Location:
Jaquez E#1 & C#1

Direction:
N/A

Survey Date:
9/12/2015

Comments:
SB-56 0-5'

Client:	**El Paso CGP Company, LLC**	**Project:**	**10507777.0501**
Site Name:	**Jaquez E#1 & C#1**	**Site Location:**	**Blanco, NM**

Photograph ID: 31

Photo Location:
Jaquez E#1 & C#1

Direction:
N/A

Survey Date:
9/12/2015

Comments:
SB-56 5-10'

Photograph ID: 32

Photo Location:
Jaquez E#1 & C#1

Direction:
N/A

Survey Date:
9/12/2015

Comments:
SB-72 0-5'

Client:	**El Paso CGP Company, LLC**	**Project:**	**10507777.0501**
Site Name:	**Jaquez E#1 & C#1**	**Site Location:**	**Blanco, NM**

Photograph ID: 33

Photo Location:
Jaquez E#1 & C#1

Direction:
N/A

Survey Date:
9/12/2015

Comments:
SB-72 5-10'

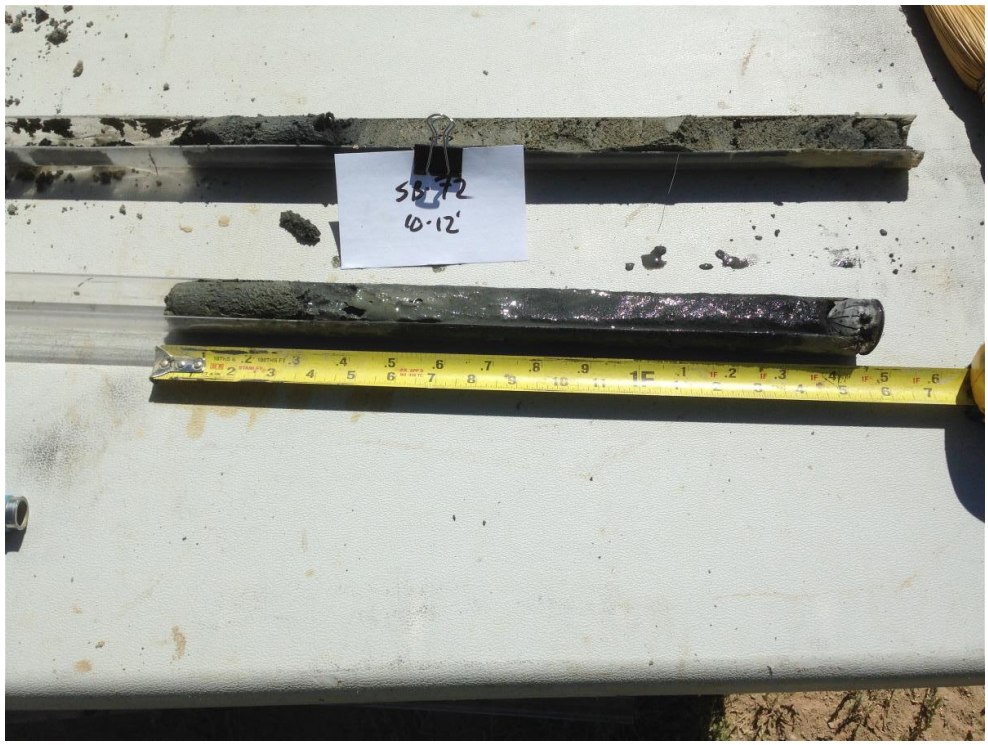
Photograph ID: 34

Photo Location:
Jaquez E#1 & C#1

Direction:
N/A

Survey Date:
9/12/2015

Comments:
SB-72 10-12'



Client:	**El Paso CGP Company, LLC**	**Project:**	**10507777.0501**
Site Name:	**Jaquez E#1 & C#1**	**Site Location:**	**Blanco, NM**

Photograph ID: 35

Photo Location:
Jaquez E#1 & C#1

Direction:
N/A

Survey Date:
9/12/2015

Comments:
SB-49 0-5'

Photograph ID: 36

Photo Location:
Jaquez E#1 & C#1

Direction:
N/A

Survey Date:
9/12/2015

Comments:
SB-49 5-10'

Client:	**El Paso CGP Company, LLC**	**Project:**	**10507777.0501**
Site Name:	**Jaquez E#1 & C#1**	**Site Location:**	**Blanco, NM**

Photograph ID: 37 **Photo Location:** Jaquez E#1 & C#1 **Direction:** N/A **Survey Date:** 9/12/2015 **Comments:** SB-50 0-5' (cobbles present)	
Photograph ID: 38 **Photo Location:** Jaquez E#1 & C#1 **Direction:** N/A **Survey Date:** 9/12/2015 **Comments:** SB-50 0-5'	

Client:	**El Paso CGP Company, LLC**	**Project:**	**10507777.0501**
Site Name:	**Jaquez E#1 & C#1**	**Site Location:**	**Blanco, NM**

Photograph ID: 39

Photo Location:
Jaquez E#1 & C#1

Direction:
N/A

Survey Date:
9/12/2015

Comments:
SB-50 5-10'

Photograph ID: 40

Photo Location:
Jaquez E#1 & C#1

Direction:
N/A

Survey Date:
9/13/2015

Comments:
SB-51 0-5'

Client:	**El Paso CGP Company, LLC**	**Project:**	**10507777.0501**
Site Name:	**Jaquez E#1 & C#1**	**Site Location:**	**Blanco, NM**

Photograph ID: 41

Photo Location:
Jaquez E#1 & C#1

Direction:
N/A

Survey Date:
9/13/2015

Comments:
SB-51 5-10'

Photograph ID: 42

Photo Location:
Jaquez E#1 & C#1

Direction:
N/A

Survey Date:
9/13/2015

Comments:
SB-51 10-11'

Client:	El Paso CGP Company, LLC	Project:	10507777.0501
Site Name:	Jaquez E#1 & C#1	Site Location:	Blanco, NM

Photograph ID: 43

Photo Location:
Jaquez E#1 & C#1

Direction:
N/A

Survey Date:
9/13/2015

Comments:
SB-42 0-5'

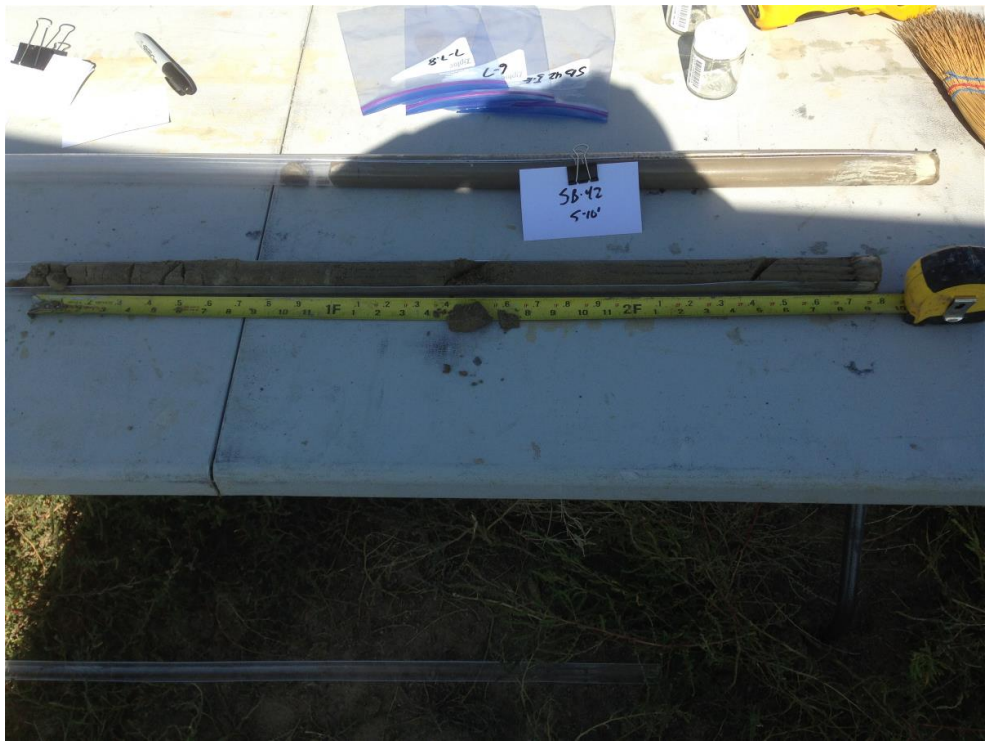
Photograph ID: 44

Photo Location:
Jaquez E#1 & C#1

Direction:
N/A

Survey Date:
9/13/2015

Comments:
SB-42 5-10'



Client:	El Paso CGP Company, LLC	Project:	10507777.0501
Site Name:	Jaquez E#1 & C#1	Site Location:	Blanco, NM

Photograph ID: 45

Photo Location:
Jaquez E#1 & C#1

Direction:
N/A

Survey Date:
9/13/2015

Comments:
SB-42 10-15'

Photograph ID: 46

Photo Location:
Jaquez E#1 & C#1

Direction:
N/A

Survey Date:
9/13/2015

Comments:
SB-38 0-5'

Client:	El Paso CGP Company, LLC	Project:	10507777.0501
Site Name:	Jaquez E#1 & C#1	Site Location:	Blanco, NM

Photograph ID: 47 **Photo Location:** Jaquez E#1 & C#1 **Direction:** N/A **Survey Date:** 9/13/2015 **Comments:** SB-38 5-10'	
Photograph ID: 48 **Photo Location:** Jaquez E#1 & C#1 **Direction:** N/A **Survey Date:** 9/13/2015 **Comments:** SB-38 10-15'	

Client:	El Paso CGP Company, LLC	Project:	10507777.0501
Site Name:	Jaquez E#1 & C#1	Site Location:	Blanco, NM

Photograph ID: 49

Photo Location:
Jaquez E#1 & C#1

Direction:
N/A

Survey Date:
9/13/2015

Comments:
SB-32 0-5'

Photograph ID: 50

Photo Location:
Jaquez E#1 & C#1

Direction:
N/A

Survey Date:
9/13/2015

Comments:
SB-32 5-10'

Client:	**El Paso CGP Company, LLC**	**Project:**	**10507777.0501**
Site Name:	**Jaquez E#1 & C#1**	**Site Location:**	**Blanco, NM**

Photograph ID: 51

Photo Location:
Jaquez E#1 & C#1

Direction:
N/A

Survey Date:
9/13/2015

Comments:
SB-70 0-5'

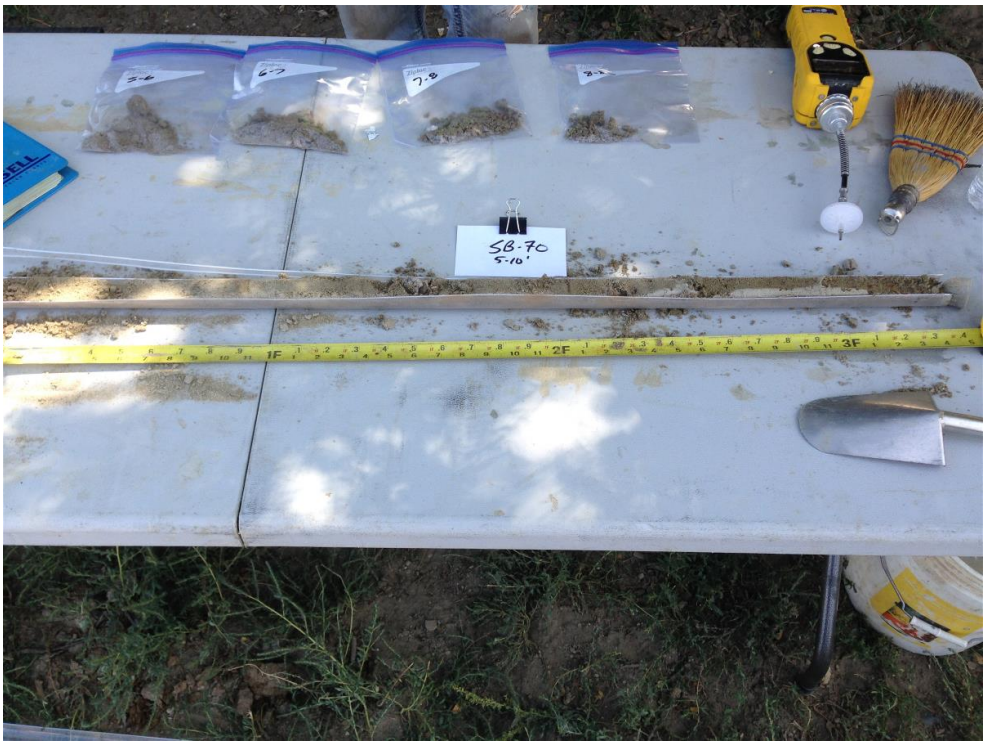
Photograph ID: 52

Photo Location:
Jaquez E#1 & C#1

Direction:
N/A

Survey Date:
9/13/2015

Comments:
SB-70 5-10'



Client:	**El Paso CGP Company, LLC**	**Project:**	**10507777.0501**
Site Name:	**Jaquez E#1 & C#1**	**Site Location:**	**Blanco, NM**

Photograph ID: 53

Photo Location:
Jaquez E#1 & C#1

Direction:
N/A

Survey Date:
9/13/2015

Comments:
SB-70 10-15'

Photograph ID: 54

Photo Location:
Jaquez E#1 & C#1

Direction:
N/A

Survey Date:
9/13/2015

Comments:
SB-70 15-17'

Client:	**El Paso CGP Company, LLC**	**Project:**	**10507777.0501**
Site Name:	**Jaquez E#1 & C#1**	**Site Location:**	**Blanco, NM**

Photograph ID: 55

Photo Location:
Jaquez E#1 & C#1

Direction:
N/A

Survey Date:
9/13/2015

Comments:
SB-69 0-5'

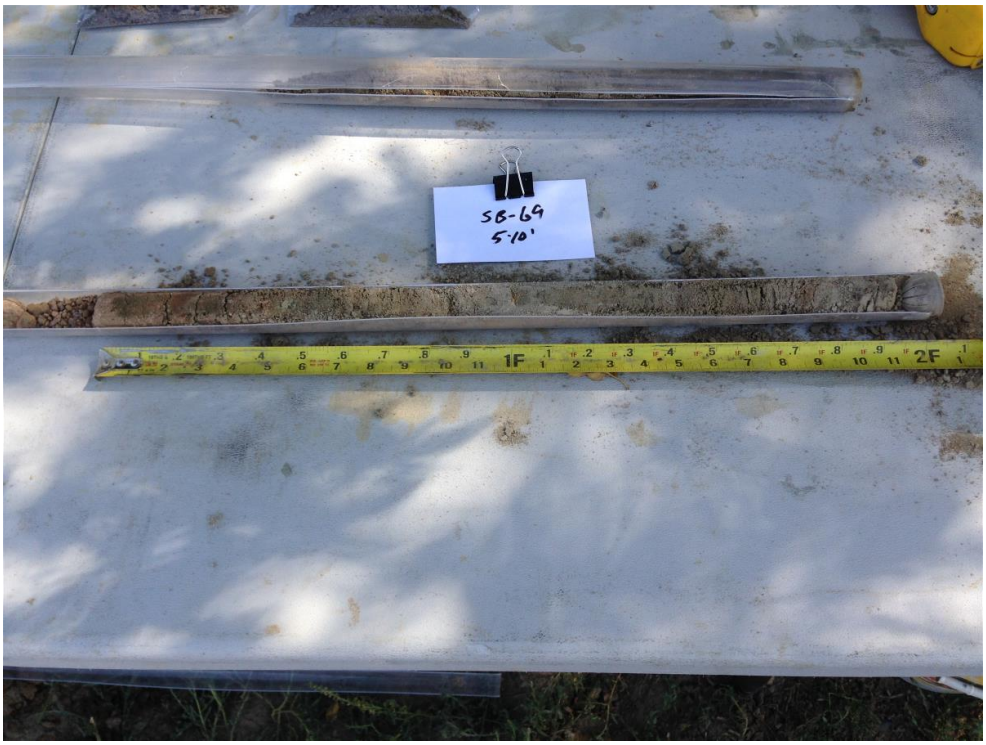
Photograph ID: 56

Photo Location:
Jaquez E#1 & C#1

Direction:
N/A

Survey Date:
9/13/2015

Comments:
SB-69 5-10'



Client:	**El Paso CGP Company, LLC**	**Project:**	**10507777.0501**
Site Name:	**Jaquez E#1 & C#1**	**Site Location:**	**Blanco, NM**

Photograph ID: 57

Photo Location:
Jaquez E#1 & C#1

Direction:
N/A

Survey Date:
9/13/2015

Comments:
SB-69 10-15'

Photograph ID: 58

Photo Location:
Jaquez E#1 & C#1

Direction:
N/A

Survey Date:
9/13/2015

Comments:
SB-69 15-20'

Client:	**El Paso CGP Company, LLC**	**Project:**	**10507777.0501**
Site Name:	**Jaquez E#1 & C#1**	**Site Location:**	**Blanco, NM**

Photograph ID: 59

Photo Location:
Jaquez E#1 & C#1

Direction:
N/A

Survey Date:
9/13/2015

Comments:
SB-71 0-5'

Photograph ID: 60

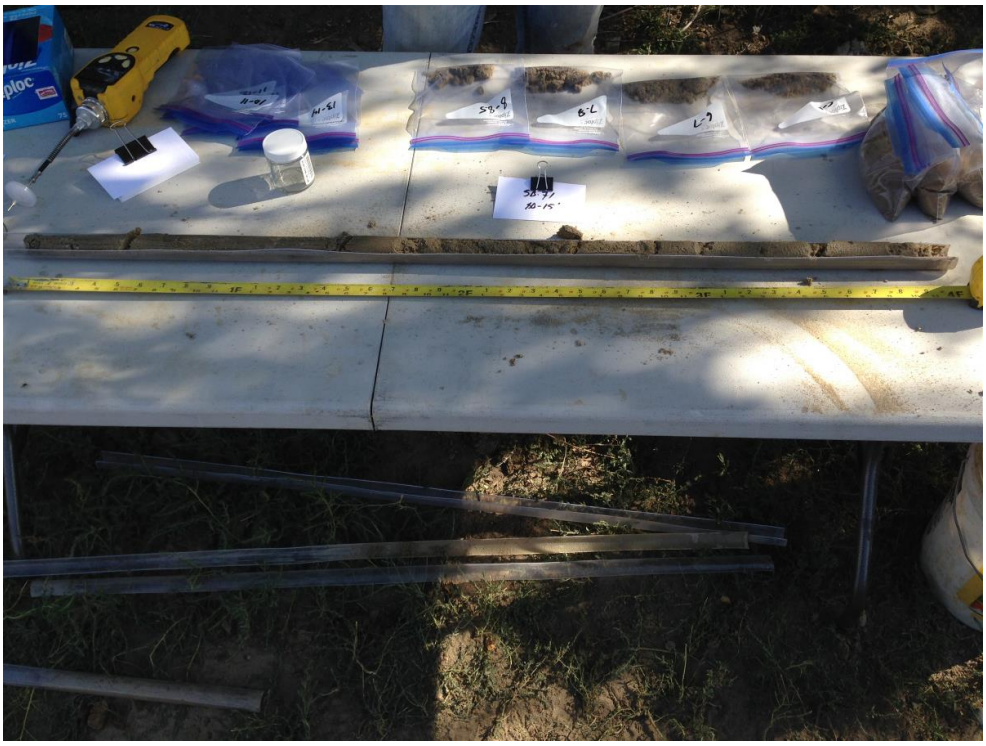
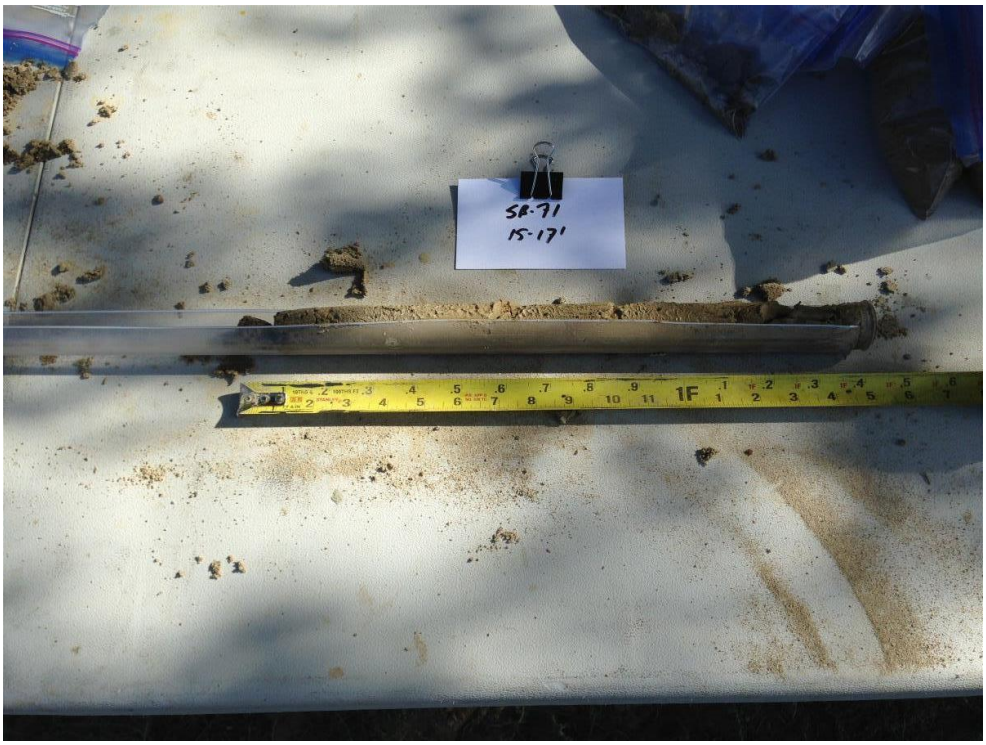
Photo Location:
Jaquez E#1 & C#1

Direction:
N/A

Survey Date:
9/13/2015

Comments:
SB-71 5-10'

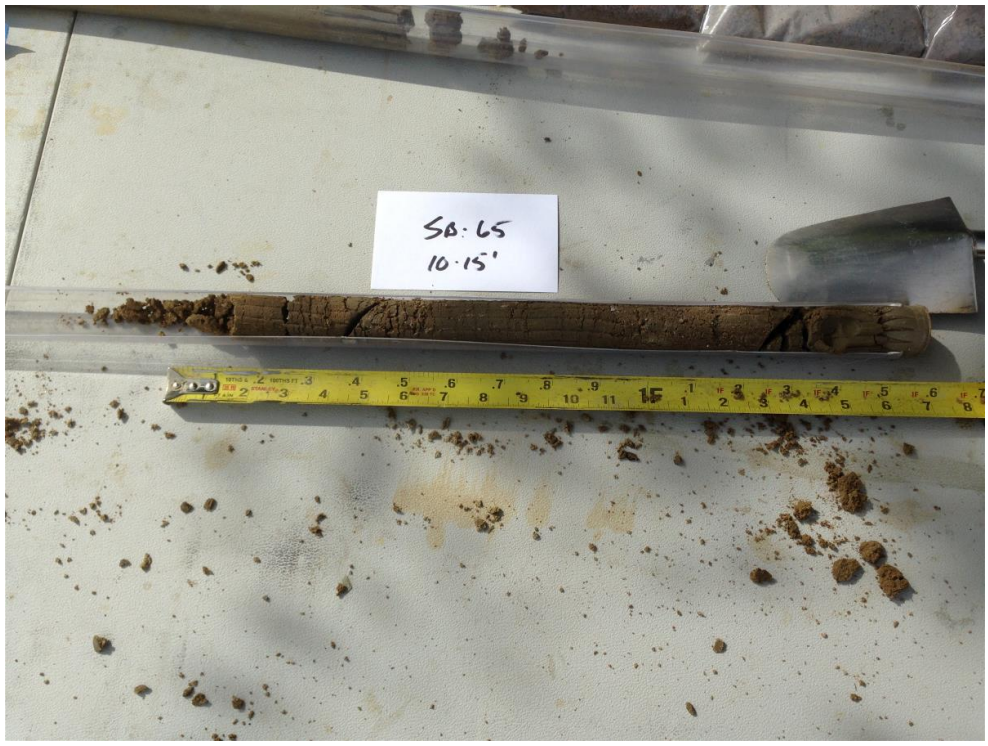
Client:	**El Paso CGP Company, LLC**	**Project:**	**10507777.0501**
Site Name:	**Jaquez E#1 & C#1**	**Site Location:**	**Blanco, NM**

Photograph ID: 61 **Photo Location:** Jaquez E#1 & C#1 **Direction:** N/A **Survey Date:** 9/13/2015 **Comments:** SM-71 10-15'	
Photograph ID: 62 **Photo Location:** Jaquez E#1 & C#1 **Direction:** N/A **Survey Date:** 9/13/2015 **Comments:** SB-71 15-17'	

Client:	**El Paso CGP Company, LLC**	**Project:**	**10507777.0501**
Site Name:	**Jaquez E#1 & C#1**	**Site Location:**	**Blanco, NM**

Photograph ID: 63 **Photo Location:** Jaquez E#1 & C#1 **Direction:** N/A **Survey Date:** 9/14/2015 **Comments:** SB-65 0-5'	
Photograph ID: 64 **Photo Location:** Jaquez E#1 & C#1 **Direction:** N/A **Survey Date:** 9/14/2015 **Comments:** SB-65 5-10'	

Client:	El Paso CGP Company, LLC	Project:	10507777.0501
Site Name:	Jaquez E#1 & C#1	Site Location:	Blanco, NM

Photograph ID: 65 **Photo Location:** Jaquez E#1 & C#1 **Direction:** N/A **Survey Date:** 9/14/2015 **Comments:** SB-65 10-15'	
Photograph ID: 66 **Photo Location:** Jaquez E#1 & C#1 **Direction:** N/A **Survey Date:** 9/14/2015 **Comments:** SB-65 15-20'	

Client:	**El Paso CGP Company, LLC**	**Project:**	**10507777.0501**
Site Name:	**Jaquez E#1 & C#1**	**Site Location:**	**Blanco, NM**

Photograph ID: 67

Photo Location:
Jaquez E#1 & C#1

Direction:
N/A

Survey Date:
9/14/2015

Comments:
SB-65 20-21'

Photograph ID: 68

Photo Location:
Jaquez E#1 & C#1

Direction:
N/A

Survey Date:
9/14/2015

Comments:
Soil Sampling Set-up with Tent

Client:	**El Paso CGP Company, LLC**	**Project:**	**10507777.0501**
Site Name:	**Jaquez E#1 & C#1**	**Site Location:**	**Blanco, NM**

Photograph ID: 69

Photo Location:
Jaquez E#1 & C#1

Direction:
N/A

Survey Date:
9/14/2015

Comments:
National's Geoprobe 7730 Rig

Photograph ID: 70

Photo Location:
Jaquez E#1 & C#1

Direction:
N/A

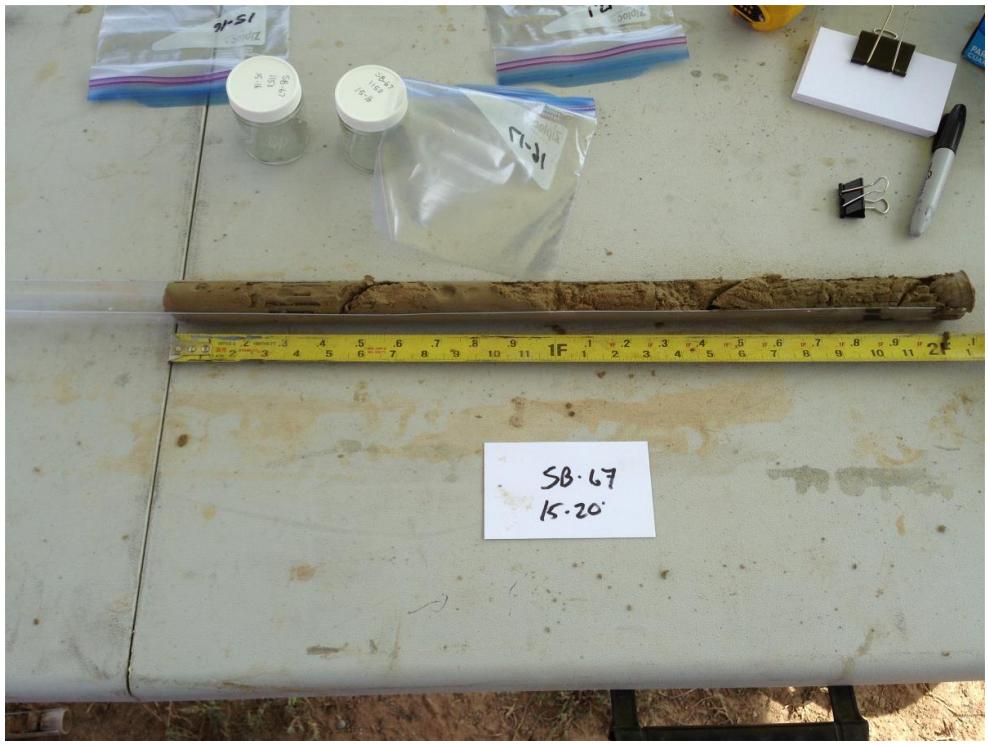
Survey Date:
9/14/2015

Comments:
SB-67 0-5'

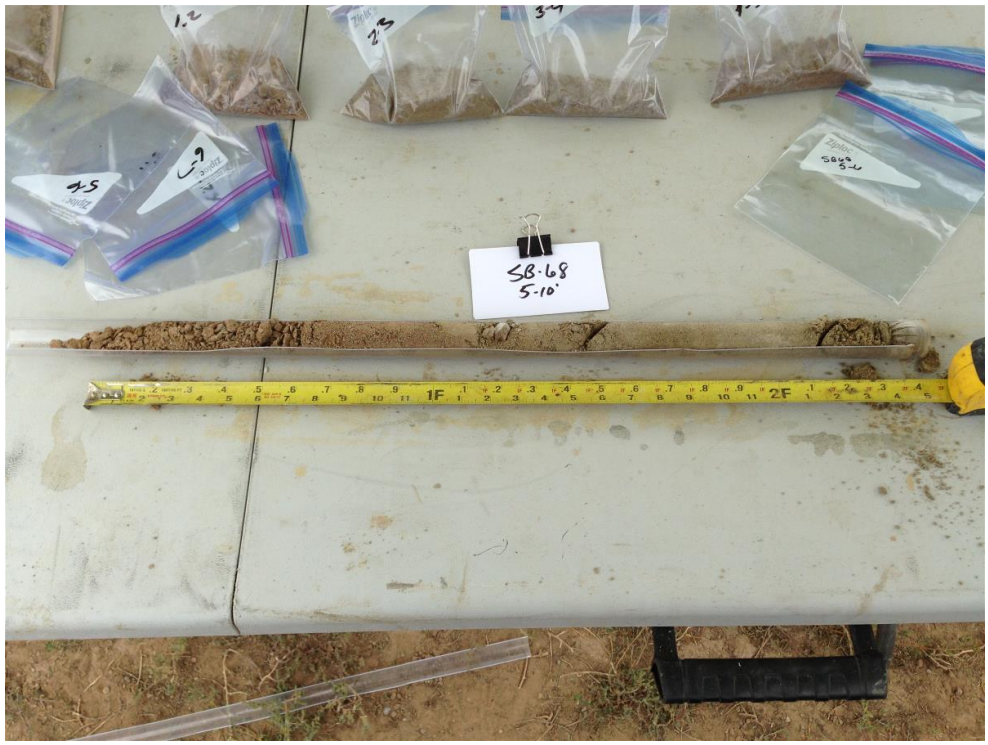
Client:	El Paso CGP Company, LLC	Project:	10507777.0501
Site Name:	Jaquez E#1 & C#1	Site Location:	Blanco, NM

Photograph ID: 71 **Photo Location:** Jaquez E#1 & C#1 **Direction:** N/A **Survey Date:** 9/14/2015 **Comments:** SB-67 5-10'	
Photograph ID: 72 **Photo Location:** Jaquez E#1 & C#1 **Direction:** N/A **Survey Date:** 9/14/2015 **Comments:** SB-67 10-15'	

Client:	**El Paso CGP Company, LLC**	**Project:**	**10507777.0501**
Site Name:	**Jaquez E#1 & C#1**	**Site Location:**	**Blanco, NM**

Photograph ID: 73 **Photo Location:** Jaquez E#1 & C#1 **Direction:** N/A **Survey Date:** 9/14/2015 **Comments:** SB-67 15-20'	
Photograph ID: 74 **Photo Location:** Jaquez E#1 & C#1 **Direction:** N/A **Survey Date:** 9/14/2015 **Comments:** SB-67 20-21'	

Client:	El Paso CGP Company, LLC	Project:	10507777.0501
Site Name:	Jaquez E#1 & C#1	Site Location:	Blanco, NM

Photograph ID: 75 **Photo Location:** Jaquez E#1 & C#1 **Direction:** N/A **Survey Date:** 9/14/2015 **Comments:** SB-68 0-5'	
Photograph ID: 76 **Photo Location:** Jaquez E#1 & C#1 **Direction:** N/A **Survey Date:** 9/14/2015 **Comments:** SB-68 5-10'	

Client:	**El Paso CGP Company, LLC**	**Project:**	**10507777.0501**
Site Name:	**Jaquez E#1 & C#1**	**Site Location:**	**Blanco, NM**

Photograph ID: 77 **Photo Location:** Jaquez E#1 & C#1 **Direction:** N/A **Survey Date:** 9/14/2015 **Comments:** SB-68 10-15'	
Photograph ID: 78 **Photo Location:** Jaquez E#1 & C#1 **Direction:** N/A **Survey Date:** 9/14/2015 **Comments:** SB-68 15-20'	

Client:	**El Paso CGP Company, LLC**	**Project:**	**10507777.0501**
Site Name:	**Jaquez E#1 & C#1**	**Site Location:**	**Blanco, NM**

Photograph ID: 79

Photo Location:
Jaquez E#1 & C#1

Direction:
N/A

Survey Date:
9/14/2015

Comments:
SB-68 20-21'

Photograph ID: 80

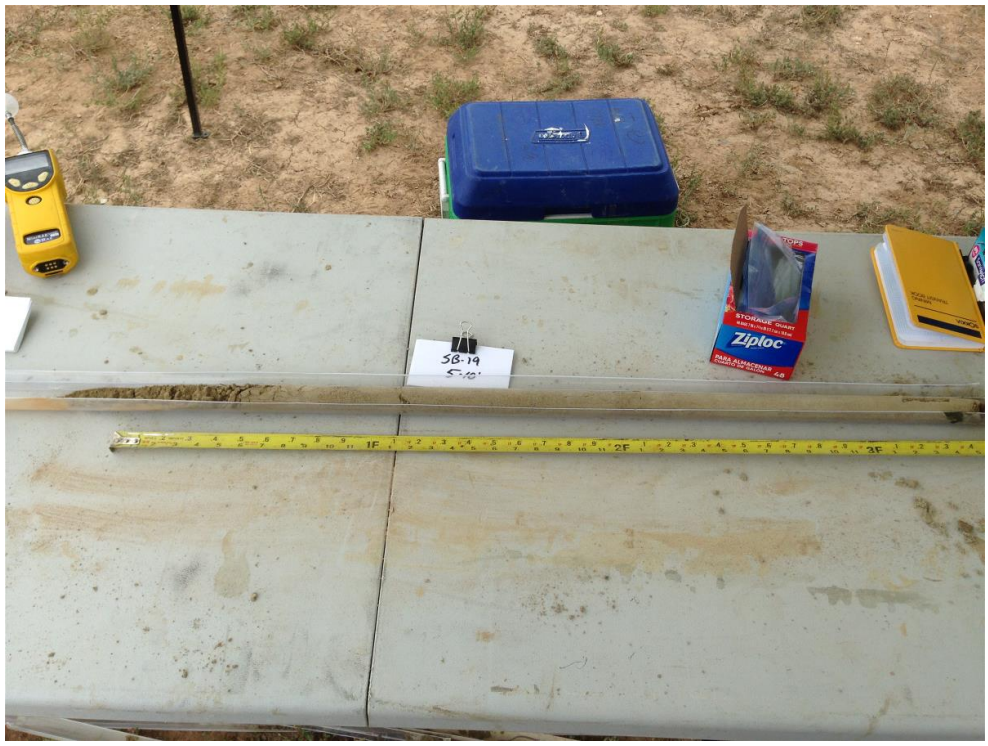
Photo Location:
Jaquez E#1 & C#1

Direction:
N/A

Survey Date:
9/14/2015

Comments:
SB-19 0-5'

Client:	**El Paso CGP Company, LLC**	**Project:**	**10507777.0501**
Site Name:	**Jaquez E#1 & C#1**	**Site Location:**	**Blanco, NM**

Photograph ID: 81 **Photo Location:** Jaquez E#1 & C#1 **Direction:** N/A **Survey Date:** 9/14/2015 **Comments:** SB-19 5-10'	
Photograph ID: 82 **Photo Location:** Jaquez E#1 & C#1 **Direction:** N/A **Survey Date:** 9/14/2015 **Comments:** SB-19 10-15'	

Client:	El Paso CGP Company, LLC	Project:	10507777.0501
Site Name:	Jaquez E#1 & C#1	Site Location:	Blanco, NM

Photograph ID: 83

Photo Location:
Jaquez E#1 & C#1

Direction:
N/A

Survey Date:
9/14/2015

Comments:
SB-19 15-20'

Photograph ID: 84

Photo Location:
Jaquez E#1 & C#1

Direction:
N/A

Survey Date:
9/14/2015

Comments:
SB-27 0-5'

Client:	El Paso CGP Company, LLC	Project:	10507777.0501
Site Name:	Jaquez E#1 & C#1	Site Location:	Blanco, NM

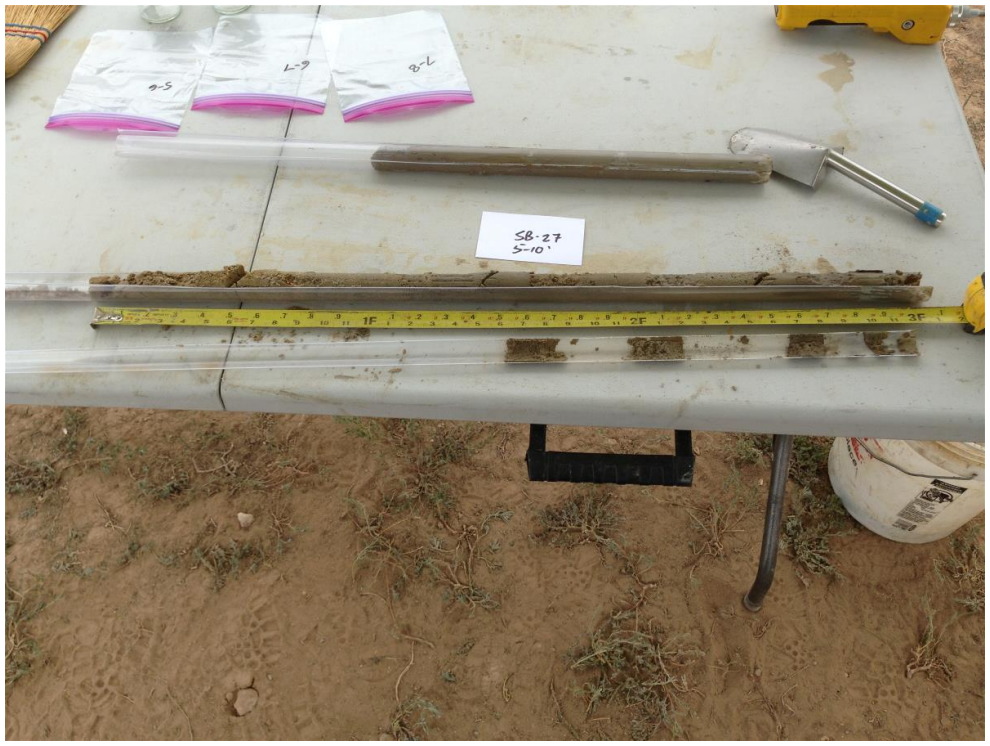
Photograph ID: 85

Photo Location:
Jaquez E#1 & C#1

Direction:
N/A

Survey Date:
9/14/2015

Comments:
SB-27 5-10'



Photograph ID: 86

Photo Location:
Jaquez E#1 & C#1

Direction:
N/A

Survey Date:
9/14/2015

Comments:
SB-27 10-12'

Client:	**El Paso CGP Company, LLC**	**Project:**	**10507777.0501**
Site Name:	**Jaquez E#1 & C#1**	**Site Location:**	**Blanco, NM**

Photograph ID: 87

Photo Location:
Jaquez E#1 & C#1

Direction:
N/A

Survey Date:
9/14/2015

Comments:
SB-46 0-5'

Photograph ID: 88

Photo Location:
Jaquez E#1 & C#1

Direction:
N/A

Survey Date:
9/14/2015

Comments:
SB-46 5-10'

Client:	**El Paso CGP Company, LLC**	**Project:**	**10507777.0501**
Site Name:	**Jaquez E#1 & C#1**	**Site Location:**	**Blanco, NM**

Photograph ID: 89

Photo Location:
Jaquez E#1 & C#1

Direction:
N/A

Survey Date:
9/14/2015

Comments:
SB-46 5-10'

Photograph ID: 90

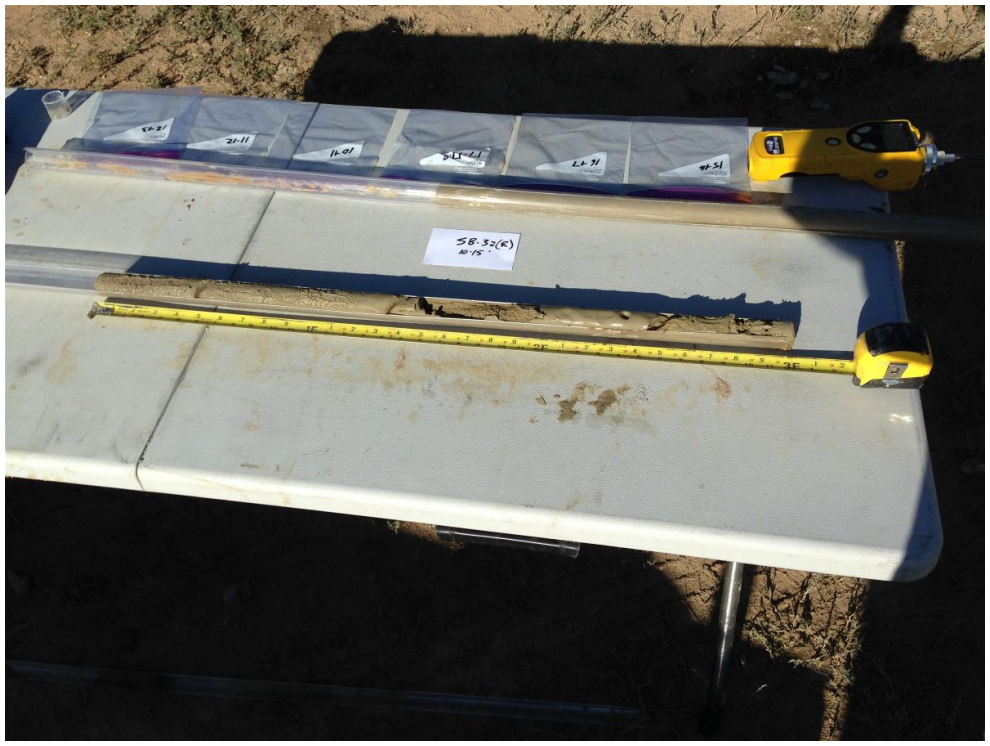
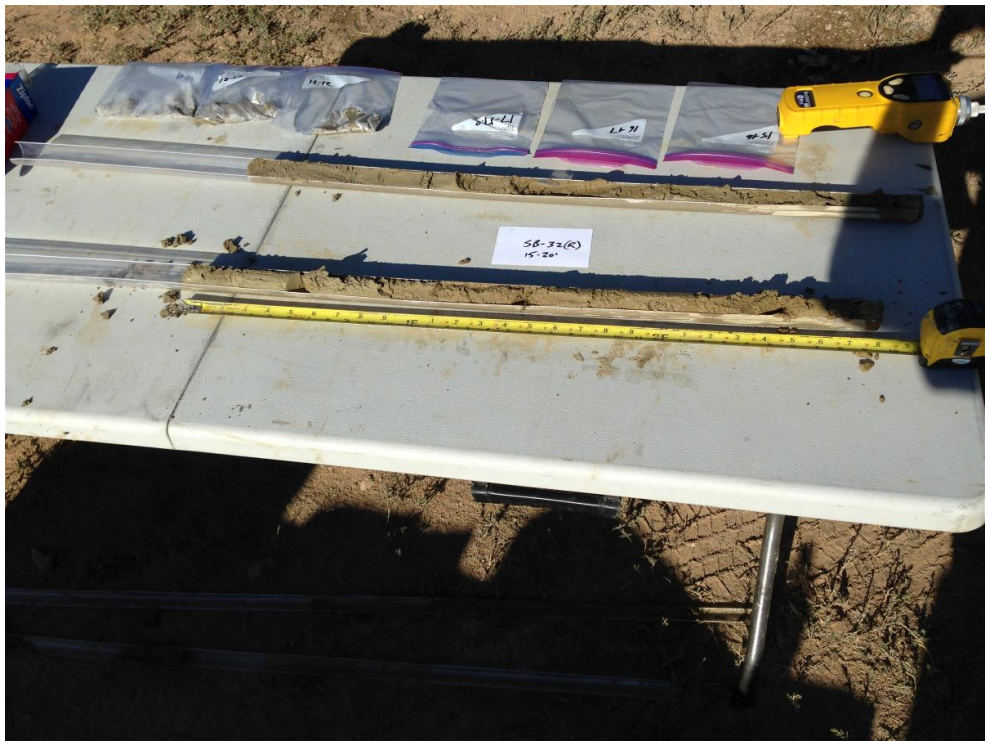
Photo Location:
Jaquez E#1 & C#1

Direction:
N/A

Survey Date:
9/14/2015

Comments:
SB-46 10-15'

Client:	El Paso CGP Company, LLC	Project:	10507777.0501
Site Name:	Jaquez E#1 & C#1	Site Location:	Blanco, NM

Photograph ID: 91 **Photo Location:** Jaquez E#1 & C#1 **Direction:** N/A **Survey Date:** 9/15/2015 **Comments:** SB-32 (R) 10-15'	
Photograph ID: 92 **Photo Location:** Jaquez E#1 & C#1 **Direction:** N/A **Survey Date:** 9/15/2015 **Comments:** SB-32 (R) 15-20'	

Client:	**El Paso CGP Company, LLC**	**Project:**	**10507777.0501**
Site Name:	**Jaquez E#1 & C#1**	**Site Location:**	**Blanco, NM**

Photograph ID: 93

Photo Location:
Jaquez E#1 & C#1

Direction:
N/A

Survey Date:
9/15/2015

Comments:
SB-37 0-5'

Photograph ID: 94

Photo Location:
Jaquez E#1 & C#1

Direction:
N/A

Survey Date:
9/15/2015

Comments:
SB-37 5-10'

Client:	El Paso CGP Company, LLC	Project:	10507777.0501
Site Name:	Jaquez E#1 & C#1	Site Location:	Blanco, NM

Photograph ID: 95

Photo Location:
Jaquez E#1 & C#1

Direction:
N/A

Survey Date:
9/15/2015

Comments:
SB-37 10-15'

Photograph ID: 96

Photo Location:
Jaquez E#1 & C#1

Direction:
N/A

Survey Date:
9/15/2015

Comments:
SB-37 15-20'

Client:	**El Paso CGP Company, LLC**	**Project:**	**10507777.0501**
Site Name:	**Jaquez E#1 & C#1**	**Site Location:**	**Blanco, NM**

Photograph ID: 97

Photo Location:
Jaquez E#1 & C#1

Direction:
N/A

Survey Date:
9/15/2015

Comments:
SB-41 0-5'

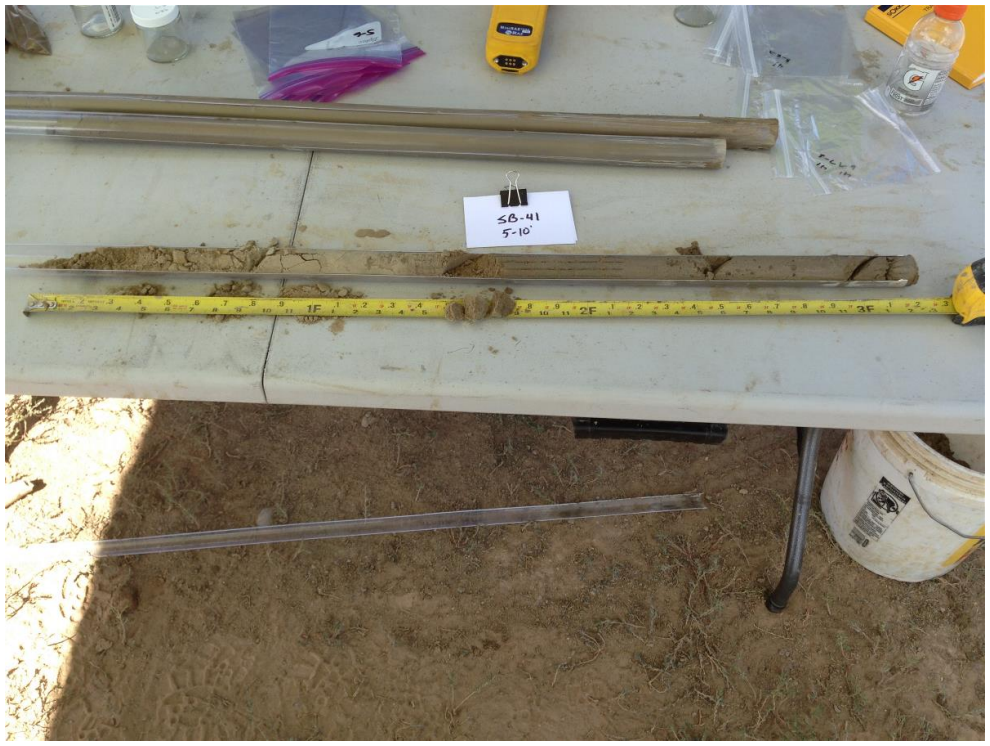
Photograph ID: 98

Photo Location:
Jaquez E#1 & C#1

Direction:
N/A

Survey Date:
9/15/2015

Comments:
SB-41 5-10'



Client:	El Paso CGP Company, LLC	Project:	10507777.0501
Site Name:	Jaquez E#1 & C#1	Site Location:	Blanco, NM

Photograph ID: 99 **Photo Location:** Jaquez E#1 & C#1 **Direction:** N/A **Survey Date:** 9/15/2015 **Comments:** SB-41 10-15'	
Photograph ID: 100 **Photo Location:** Jaquez E#1 & C#1 **Direction:** N/A **Survey Date:** 9/15/2015 **Comments:** SB-37 15-20'	

Client:	**El Paso CGP Company, LLC**	**Project:**	**10507777.0501**
Site Name:	**Jaquez E#1 & C#1**	**Site Location:**	**Blanco, NM**

Photograph ID: 101

Photo Location:
Jaquez E#1 & C#1

Direction:
N/A

Survey Date:
9/15/2015

Comments:
SB-45 0-5'

Photograph ID: 102

Photo Location:
Jaquez E#1 & C#1

Direction:
N/A

Survey Date:
9/15/2015

Comments:
SB-45 5-10'

Client:	**El Paso CGP Company, LLC**	**Project:**	**10507777.0501**
Site Name:	**Jaquez E#1 & C#1**	**Site Location:**	**Blanco, NM**

Photograph ID: 103

Photo Location:
Jaquez E#1 & C#1

Direction:
N/A

Survey Date:
9/15/2015

Comments:
SB-45 10-15'

Photograph ID: 104

Photo Location:
Jaquez E#1 & C#1

Direction:
N/A

Survey Date:
9/15/2015

Comments:
SB-44 0-5'

Client:	**El Paso CGP Company, LLC**	**Project:**	**10507777.0501**
Site Name:	**Jaquez E#1 & C#1**	**Site Location:**	**Blanco, NM**

Photograph ID: 105 **Photo Location:** Jaquez E#1 & C#1 **Direction:** N/A **Survey Date:** 9/15/2015 **Comments:** SB-44 5-10'	
Photograph ID: 106 **Photo Location:** Jaquez E#1 & C#1 **Direction:** N/A **Survey Date:** 9/15/2015 **Comments:** SB-44 10-15'	

Client:	**El Paso CGP Company, LLC**	**Project:**	**10507777.0501**
Site Name:	**Jaquez E#1 & C#1**	**Site Location:**	**Blanco, NM**

Photograph ID: 107 **Photo Location:** Jaquez E#1 & C#1 **Direction:** N/A **Survey Date:** 9/15/2015 **Comments:** SB-48 0-5'	
Photograph ID: 108 **Photo Location:** Jaquez E#1 & C#1 **Direction:** N/A **Survey Date:** 9/15/2015 **Comments:** SB-48 5-10'	

Client:	**El Paso CGP Company, LLC**	**Project:**	**10507777.0501**
Site Name:	**Jaquez E#1 & C#1**	**Site Location:**	**Blanco, NM**

Photograph ID: 109

Photo Location:
Jaquez E#1 & C#1

Direction:
N/A

Survey Date:
9/15/2015

Comments:
SB-48 10-15'

Photograph ID: 110

Photo Location:
Jaquez E#1 & C#1

Direction:
N/A

Survey Date:
9/15/2015

Comments:
SB-47 0-5'

Client:	**El Paso CGP Company, LLC**	**Project:**	**10507777.0501**
Site Name:	**Jaquez E#1 & C#1**	**Site Location:**	**Blanco, NM**

Photograph ID: 111

Photo Location:
Jaquez E#1 & C#1

Direction:
N/A

Survey Date:
9/15/2015

Comments:
SB-47 5-10'

Photograph ID: 112

Photo Location:
Jaquez E#1 & C#1

Direction:
N/A

Survey Date:
9/15/2015

Comments:
SB-47 10-15'

Client:	**El Paso CGP Company, LLC**	**Project:**	**10507777.0501**
Site Name:	**Jaquez E#1 & C#1**	**Site Location:**	**Blanco, NM**

Photograph ID: 113

Photo Location:
Jaquez E#1 & C#1

Direction:
N/A

Survey Date:
9/15/2015

Comments:
SB-43 0-5'

Photograph ID: 114

Photo Location:
Jaquez E#1 & C#1

Direction:
N/A

Survey Date:
9/15/2015

Comments:
SB-43 5-10'

Client:	**El Paso CGP Company, LLC**	**Project:**	**10507777.0501**
Site Name:	**Jaquez E#1 & C#1**	**Site Location:**	**Blanco, NM**

Photograph ID: 115

Photo Location:
Jaquez E#1 & C#1

Direction:
N/A

Survey Date:
9/15/2015

Comments:
SB-43 15-20'

Photograph ID: 116

Photo Location:
Jaquez E#1 & C#1

Direction:
N/A

Survey Date:
9/16/2015

Comments:
SB-73 0-5'

Client:	El Paso CGP Company, LLC	Project:	10507777.0501
Site Name:	Jaquez E#1 & C#1	Site Location:	Blanco, NM

Photograph ID: 117

Photo Location:
Jaquez E#1 & C#1

Direction:
N/A

Survey Date:
9/16/2015

Comments:
SB-73 5-10'

Photograph ID: 118

Photo Location:
Jaquez E#1 & C#1

Direction:
N/A

Survey Date:
9/16/2015

Comments:
SB-73 10-15'

Client:	El Paso CGP Company, LLC	Project:	10507777.0501
Site Name:	Jaquez E#1 & C#1	Site Location:	Blanco, NM

Photograph ID: 119 **Photo Location:** Jaquez E#1 & C#1 **Direction:** N/A **Survey Date:** 9/16/2015 **Comments:** SB-74 0-5'	
Photograph ID: 120 **Photo Location:** Jaquez E#1 & C#1 **Direction:** N/A **Survey Date:** 9/16/2015 **Comments:** SB-74 5-10'	

Client:	**El Paso CGP Company, LLC**	**Project:**	**10507777.0501**
Site Name:	**Jaquez E#1 & C#1**	**Site Location:**	**Blanco, NM**

Photograph ID: 121

Photo Location:
Jaquez E#1 & C#1

Direction:
N/A

Survey Date:
9/16/2015

Comments:
SB-74 10-15'

Photograph ID: 122

Photo Location:
Jaquez E#1 & C#1

Direction:
N/A

Survey Date:
9/16/2015

Comments:
SB-74 15-20'

Client:	**El Paso CGP Company, LLC**	**Project:**	**10507777.0501**
Site Name:	**Jaquez E#1 & C#1**	**Site Location:**	**Blanco, NM**

Photograph ID: 123

Photo Location:
Jaquez E#1 & C#1

Direction:
N/A

Survey Date:
9/16/2015

Comments:
SB-75 0-5'

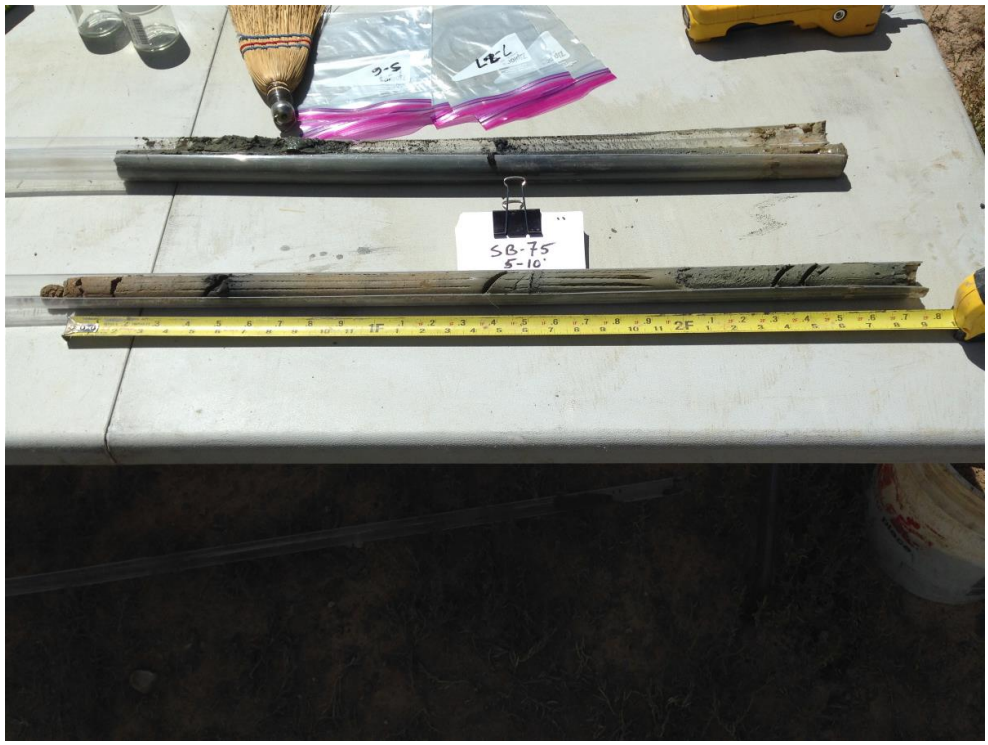
Photograph ID: 124

Photo Location:
Jaquez E#1 & C#1

Direction:
N/A

Survey Date:
9/16/2015

Comments:
SB-75 5-10'



Client:	**El Paso CGP Company, LLC**	**Project:**	**10507777.0501**
Site Name:	**Jaquez E#1 & C#1**	**Site Location:**	**Blanco, NM**

Photograph ID: 125

Photo Location:
Jaquez E#1 & C#1

Direction:
N/A

Survey Date:
9/16/2015

Comments:
SB-75 10-15'

Photograph ID: 126

Photo Location:
Jaquez E#1 & C#1

Direction:
N/A

Survey Date:
9/16/2015

Comments:
SB-36 0-5'

Client:	El Paso CGP Company, LLC	Project:	10507777.0501
Site Name:	Jaquez E#1 & C#1	Site Location:	Blanco, NM

Photograph ID: 127

Photo Location:
Jaquez E#1 & C#1

Direction:
N/A

Survey Date:
9/16/2015

Comments:
SB-36 5-10'

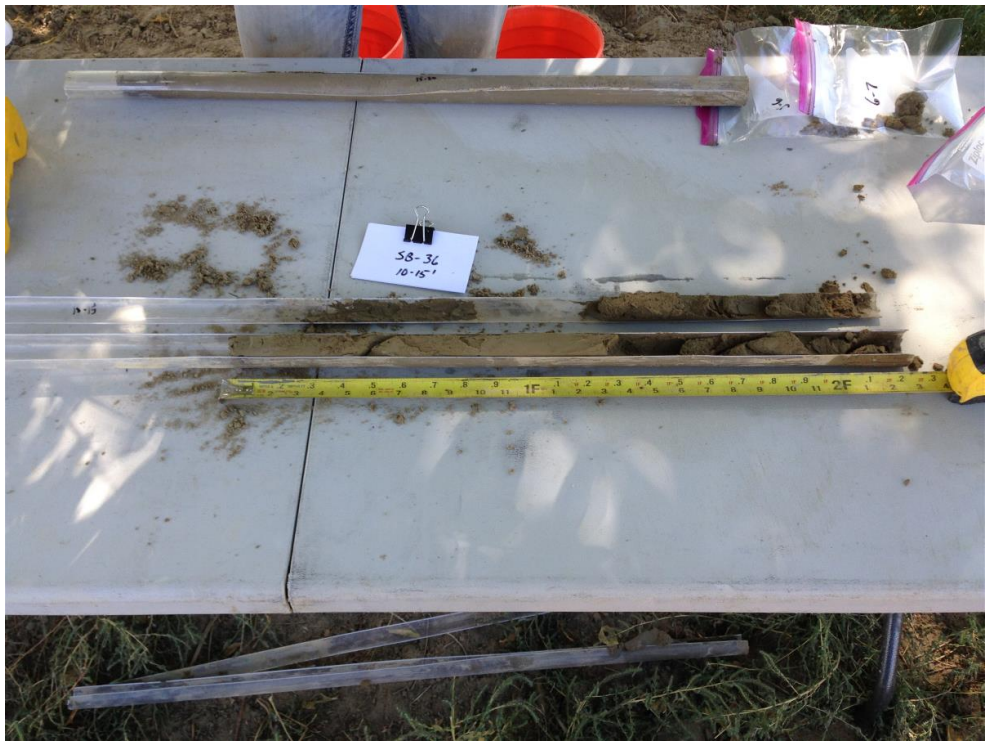
Photograph ID: 128

Photo Location:
Jaquez E#1 & C#1

Direction:
N/A

Survey Date:
9/16/2015

Comments:
SB-36 10-15'



Client:	**El Paso CGP Company, LLC**	**Project:**	**10507777.0501**
Site Name:	**Jaquez E#1 & C#1**	**Site Location:**	**Blanco, NM**

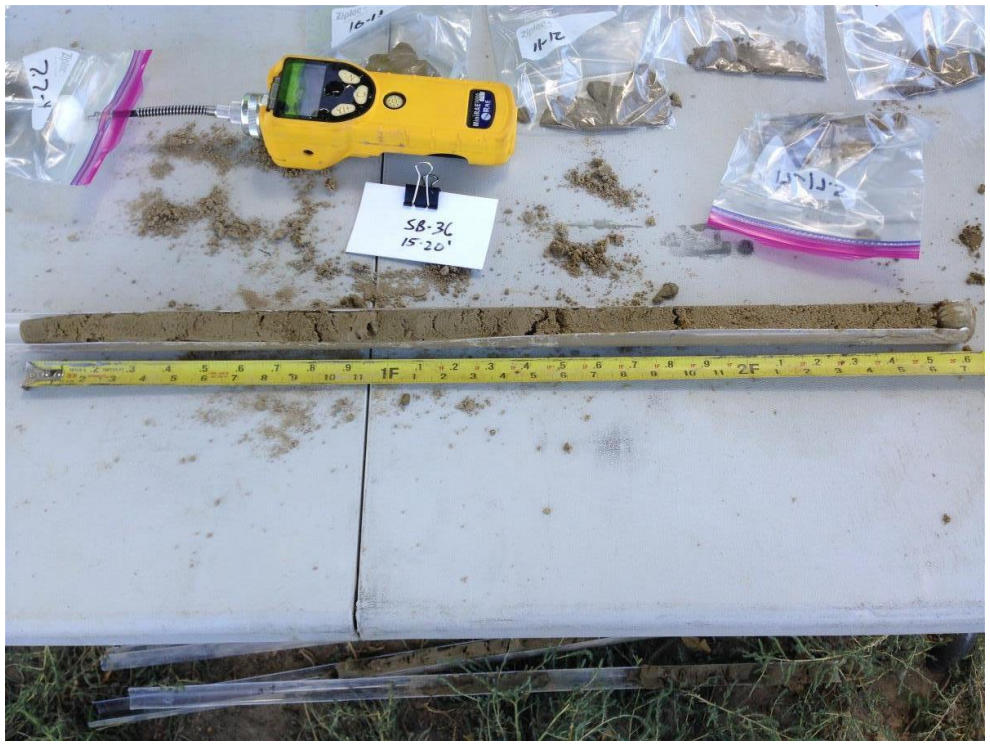
Photograph ID: 129

Photo Location:
Jaquez E#1 & C#1

Direction:
N/A

Survey Date:
9/16/2015

Comments:
SB-36 15-20'



Photograph ID: 130

Photo Location:
Jaquez E#1 & C#1

Direction:
N/A

Survey Date:
9/16/2015

Comments:
SB-35 0-5'

Client:	El Paso CGP Company, LLC	Project:	10507777.0501
Site Name:	Jaquez E#1 & C#1	Site Location:	Blanco, NM

Photograph ID: 131

Photo Location:
Jaquez E#1 & C#1

Direction:
N/A

Survey Date:
9/16/2015

Comments:
SB-35 5-10'

Photograph ID: 132

Photo Location:
Jaquez E#1 & C#1

Direction:
N/A

Survey Date:
9/16/2015

Comments:
SB-35 10-15'

Client:	**El Paso CGP Company, LLC**	**Project:**	**10507777.0501**
Site Name:	**Jaquez E#1 & C#1**	**Site Location:**	**Blanco, NM**

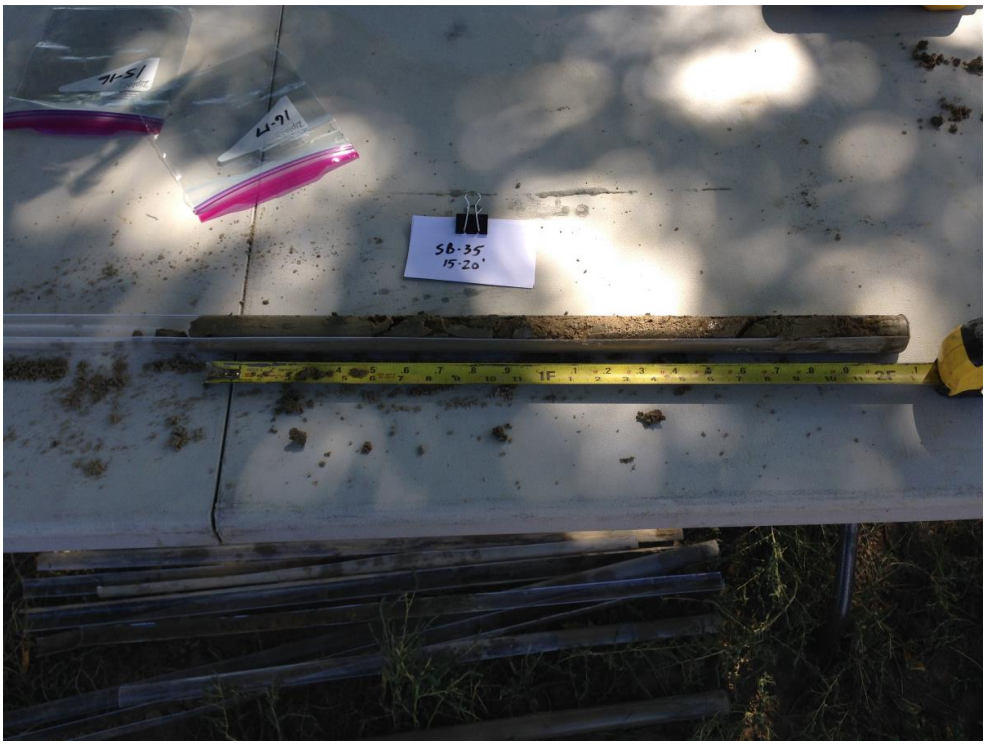
Photograph ID: 133

Photo Location:
Jaquez E#1 & C#1

Direction:
N/A

Survey Date:
9/16/2015

Comments:
SB-35 15-20'



Photograph ID: 134

Photo Location:
Jaquez E#1 & C#1

Direction:
N/A

Survey Date:
9/16/2015

Comments:
SB-30 0-5'

Client:	**El Paso CGP Company, LLC**	**Project:**	**10507777.0501**
Site Name:	**Jaquez E#1 & C#1**	**Site Location:**	**Blanco, NM**

Photograph ID: 135

Photo Location:
Jaquez E#1 & C#1

Direction:
N/A

Survey Date:
9/16/2015

Comments:
SB-30 5-10'

Photograph ID: 136

Photo Location:
Jaquez E#1 & C#1

Direction:
N/A

Survey Date:
9/16/2015

Comments:
SB-30 10-15'

Client:	**El Paso CGP Company, LLC**	**Project:**	**10507777.0501**
Site Name:	**Jaquez E#1 & C#1**	**Site Location:**	**Blanco, NM**

Photograph ID: 137

Photo Location:
Jaquez E#1 & C#1

Direction:
N/A

Survey Date:
9/16/2015

Comments:
SB-30 15-20'

Photograph ID: 138

Photo Location:
Jaquez E#1 & C#1

Direction:
N/A

Survey Date:
9/16/2015

Comments:
SB-31 0-5'

Client:	**El Paso CGP Company, LLC**	**Project:**	**10507777.0501**
Site Name:	**Jaquez E#1 & C#1**	**Site Location:**	**Blanco, NM**

Photograph ID: 139 **Photo Location:** Jaquez E#1 & C#1 **Direction:** N/A **Survey Date:** 9/16/2015 **Comments:** SB-31 5-10'	
Photograph ID: 140 **Photo Location:** Jaquez E#1 & C#1 **Direction:** N/A **Survey Date:** 9/16/2015 **Comments:** SB-31 10-15'	

Client:	**El Paso CGP Company, LLC**	**Project:**	**10507777.0501**
Site Name:	**Jaquez E#1 & C#1**	**Site Location:**	**Blanco, NM**

Photograph ID: 141

Photo Location:
Jaquez E#1 & C#1

Direction:
N/A

Survey Date:
9/16/2015

Comments:
SB-31 15-20'

Photograph ID: 142

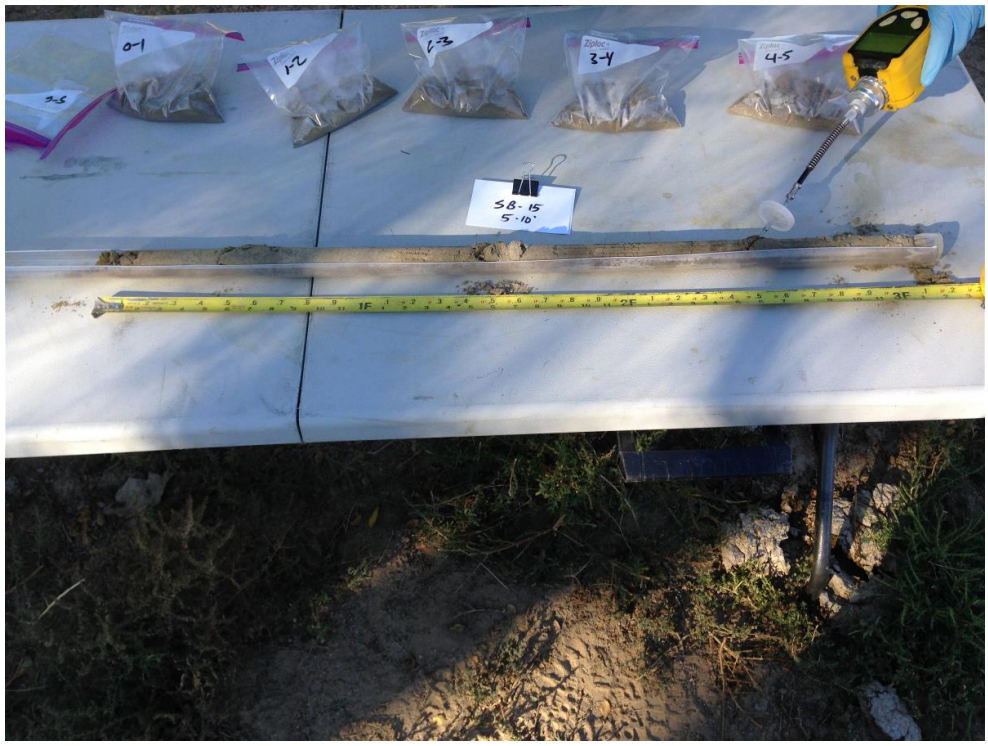
Photo Location:
Jaquez E#1 & C#1

Direction:
N/A

Survey Date:
9/17/2015

Comments:
SB-15 0-5'

Client:	**El Paso CGP Company, LLC**	**Project:**	**10507777.0501**
Site Name:	**Jaquez E#1 & C#1**	**Site Location:**	**Blanco, NM**

Photograph ID: 143 **Photo Location:** Jaquez E#1 & C#1 **Direction:** N/A **Survey Date:** 9/17/2015 **Comments:** SB-15 5-10'	
Photograph ID: 144 **Photo Location:** Jaquez E#1 & C#1 **Direction:** N/A **Survey Date:** 9/17/2015 **Comments:** SB-15 10-15'	

Client:	**El Paso CGP Company, LLC**	**Project:**	**10507777.0501**
Site Name:	**Jaquez E#1 & C#1**	**Site Location:**	**Blanco, NM**

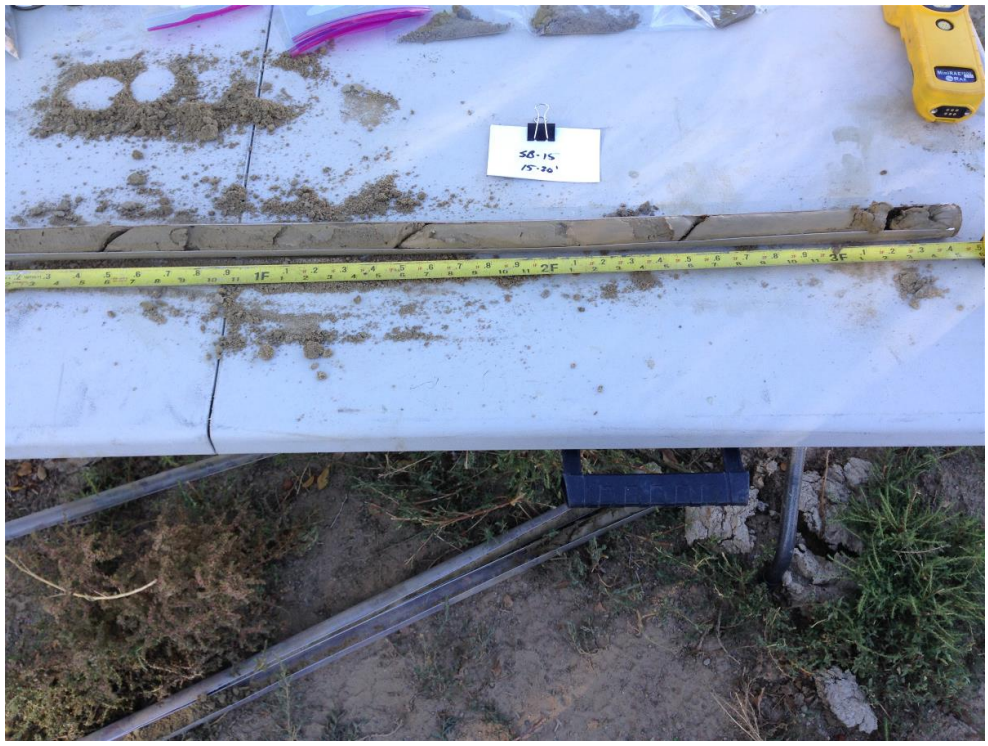
Photograph ID: 145

Photo Location:
Jaquez E#1 & C#1

Direction:
N/A

Survey Date:
9/17/2015

Comments:
SB-15 15-20'



Photograph ID: 146

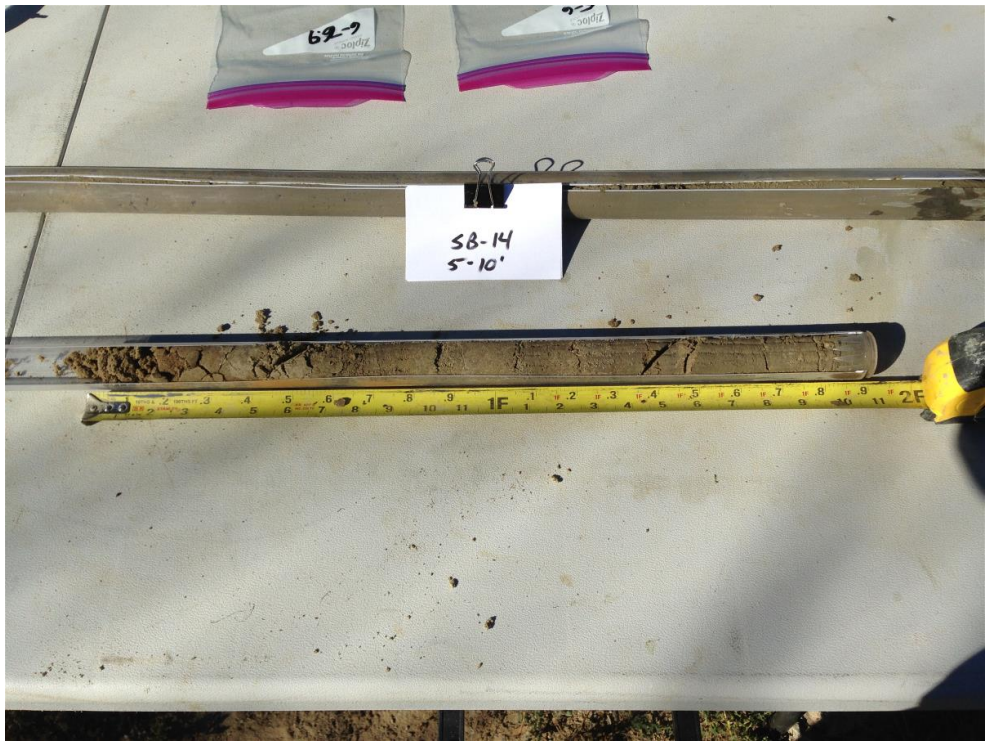
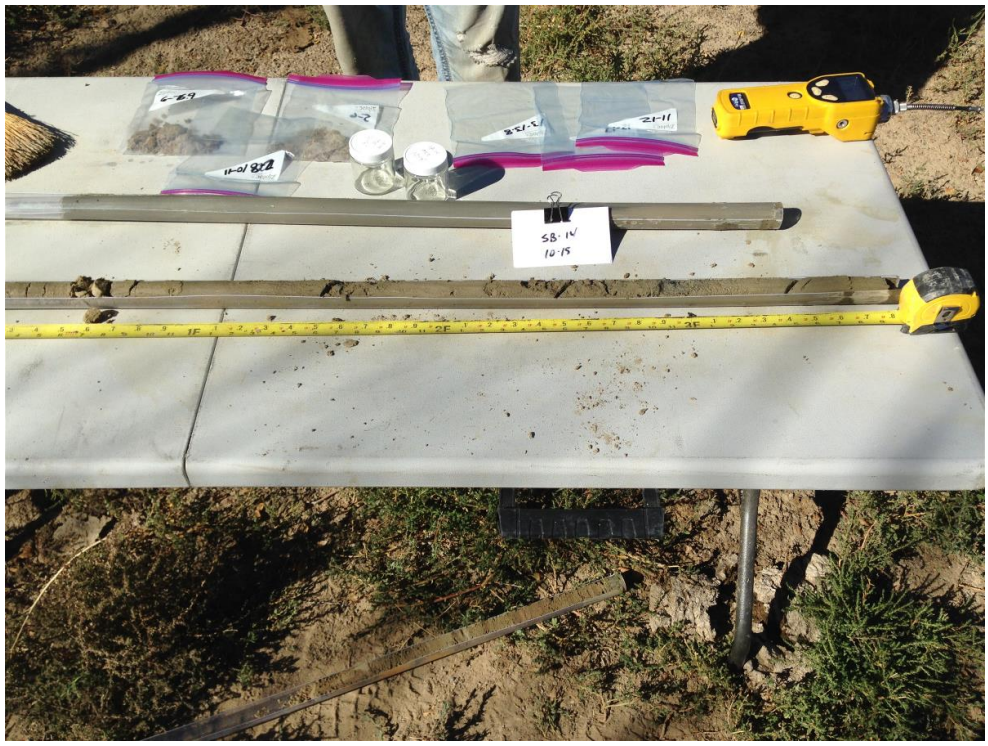
Photo Location:
Jaquez E#1 & C#1

Direction:
N/A

Survey Date:
9/17/2015

Comments:
SB-14 0-5'

Client:	**El Paso CGP Company, LLC**	**Project:**	**10507777.0501**
Site Name:	**Jaquez E#1 & C#1**	**Site Location:**	**Blanco, NM**

Photograph ID: 147 **Photo Location:** Jaquez E#1 & C#1 **Direction:** N/A **Survey Date:** 9/17/2015 **Comments:** SB-14 5-10'	
Photograph ID: 148 **Photo Location:** Jaquez E#1 & C#1 **Direction:** N/A **Survey Date:** 9/17/2015 **Comments:** SB-14 10-15'	

Client:	**El Paso CGP Company, LLC**	**Project:**	**10507777.0501**
Site Name:	**Jaquez E#1 & C#1**	**Site Location:**	**Blanco, NM**

Photograph ID: 149

Photo Location:
Jaquez E#1 & C#1

Direction:
N/A

Survey Date:
9/17/2015

Comments:
SB-14 15-20'

Photograph ID: 150

Photo Location:
Jaquez E#1 & C#1

Direction:
N/A

Survey Date:
9/17/2015

Comments:
SB-26 0-5'

Client:	**El Paso CGP Company, LLC**	**Project:**	**10507777.0501**
Site Name:	**Jaquez E#1 & C#1**	**Site Location:**	**Blanco, NM**

Photograph ID: 151

Photo Location:
Jaquez E#1 & C#1

Direction:
N/A

Survey Date:
9/17/2015

Comments:
SB-26 5-10'

Photograph ID: 152

Photo Location:
Jaquez E#1 & C#1

Direction:
N/A

Survey Date:
9/17/2015

Comments:
SB-26 10-15'

Client:	**El Paso CGP Company, LLC**	**Project:**	**10507777.0501**
Site Name:	**Jaquez E#1 & C#1**	**Site Location:**	**Blanco, NM**

Photograph ID: 153

Photo Location:
Jaquez E#1 & C#1

Direction:
N/A

Survey Date:
9/17/2015

Comments:
SB-26 15-20'

Photograph ID: 154

Photo Location:
Jaquez E#1 & C#1

Direction:
N/A

Survey Date:
9/17/2015

Comments:
SB-25 0-5'

Client:	El Paso CGP Company, LLC	Project:	10507777.0501
Site Name:	Jaquez E#1 & C#1	Site Location:	Blanco, NM

Photograph ID: 155

Photo Location:
Jaquez E#1 & C#1

Direction:
N/A

Survey Date:
9/17/2015

Comments:
SB-25 5-10'

Photograph ID: 156

Photo Location:
Jaquez E#1 & C#1

Direction:
N/A

Survey Date:
9/17/2015

Comments:
SB-25 10-15'

Client:	**El Paso CGP Company, LLC**	**Project:**	**10507777.0501**
Site Name:	**Jaquez E#1 & C#1**	**Site Location:**	**Blanco, NM**

Photograph ID: 157

Photo Location:
Jaquez E#1 & C#1

Direction:
N/A

Survey Date:
9/17/2015

Comments:
SB-25 15-20'

Photograph ID: 158

Photo Location:
Jaquez E#1 & C#1

Direction:
N/A

Survey Date:
9/17/2015

Comments:
SB-22 0-5'

Client:	**El Paso CGP Company, LLC**	**Project:**	**10507777.0501**
Site Name:	**Jaquez E#1 & C#1**	**Site Location:**	**Blanco, NM**

Photograph ID: 159 **Photo Location:** Jaquez E#1 & C#1 **Direction:** N/A **Survey Date:** 9/17/2015 **Comments:** SB-22 5-10'	
Photograph ID: 160 **Photo Location:** Jaquez E#1 & C#1 **Direction:** N/A **Survey Date:** 9/17/2015 **Comments:** SB-22 10-15'	

Client:	**El Paso CGP Company, LLC**	**Project:**	**10507777.0501**
Site Name:	**Jaquez E#1 & C#1**	**Site Location:**	**Blanco, NM**

Photograph ID: 161

Photo Location:
Jaquez E#1 & C#1

Direction:
N/A

Survey Date:
9/17/2015

Comments:
SB-22 15-20'

Photograph ID: 162

Photo Location:
Jaquez E#1 & C#1

Direction:
N/A

Survey Date:
9/17/2015

Comments:
SB-21 0-5'

Client:	El Paso CGP Company, LLC	Project:	10507777.0501
Site Name:	Jaquez E#1 & C#1	Site Location:	Blanco, NM

Photograph ID: 163

Photo Location:
Jaquez E#1 & C#1

Direction:
N/A

Survey Date:
9/17/2015

Comments:
SB-21 5-10'

Photograph ID: 164

Photo Location:
Jaquez E#1 & C#1

Direction:
N/A

Survey Date:
9/17/2015

Comments:
SB-21 10-15'

Client:	**El Paso CGP Company, LLC**	**Project:**	**10507777.0501**
Site Name:	**Jaquez E#1 & C#1**	**Site Location:**	**Blanco, NM**

Photograph ID: 165

Photo Location:
Jaquez E#1 & C#1

Direction:
N/A

Survey Date:
9/17/2015

Comments:
SB-21 15-20'

Photograph ID: 166

Photo Location:
Jaquez E#1 & C#1

Direction:
N/A

Survey Date:
9/17/2015

Comments:
SB-24 0-5'

Client:	**El Paso CGP Company, LLC**	**Project:**	**10507777.0501**
Site Name:	**Jaquez E#1 & C#1**	**Site Location:**	**Blanco, NM**

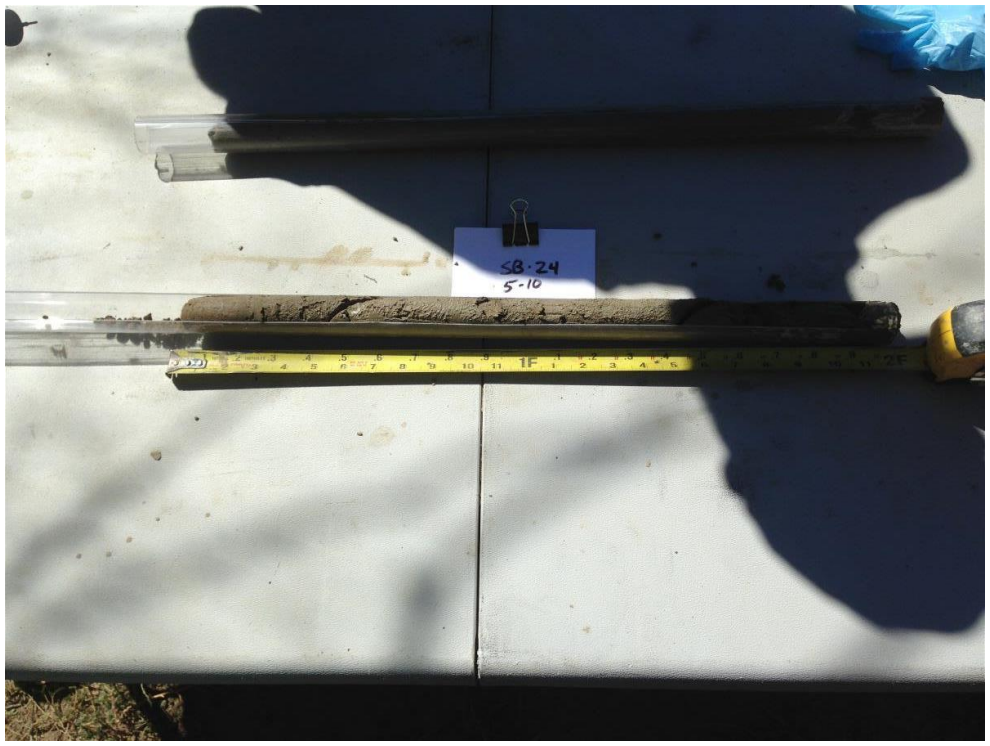
Photograph ID: 167

Photo Location:
Jaquez E#1 & C#1

Direction:
N/A

Survey Date:
9/17/2015

Comments:
SB-24 5-10'



Photograph ID: 168

Photo Location:
Jaquez E#1 & C#1

Direction:
N/A

Survey Date:
9/17/2015

Comments:
SB-24 10-15'

Client:	**El Paso CGP Company, LLC**	**Project:**	**10507777.0501**
Site Name:	**Jaquez E#1 & C#1**	**Site Location:**	**Blanco, NM**

Photograph ID: 169

Photo Location:
Jaquez E#1 & C#1

Direction:
N/A

Survey Date:
9/17/2015

Comments:
SB-23 0-5'

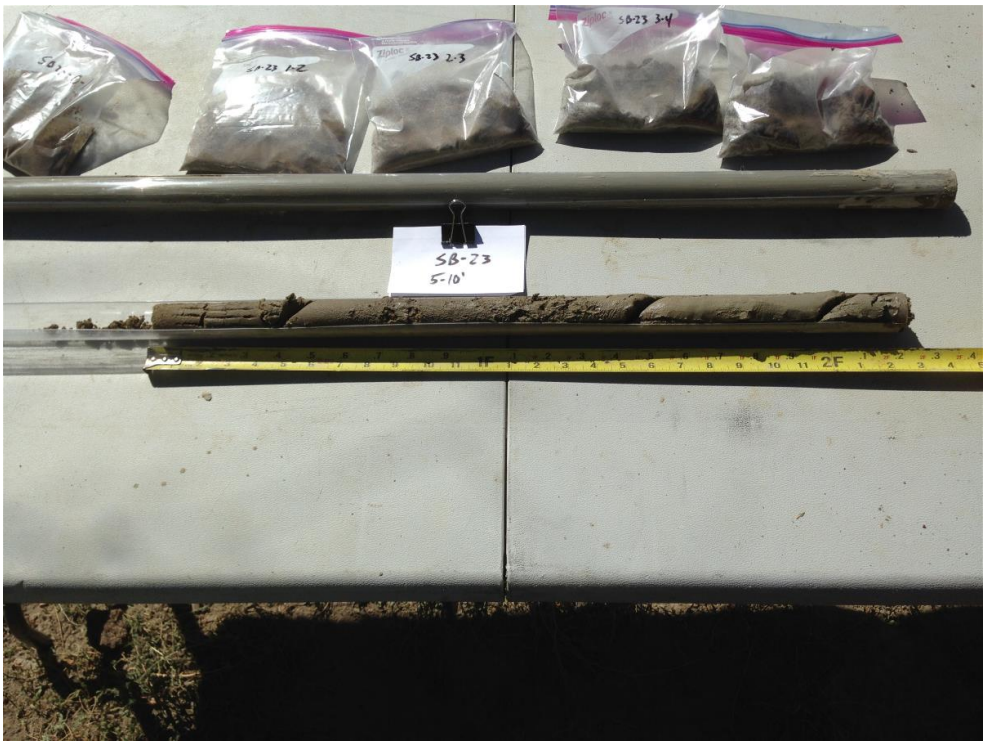
Photograph ID: 170

Photo Location:
Jaquez E#1 & C#1

Direction:
N/A

Survey Date:
9/17/2015

Comments:
SB-23 5-10'



Client:	**El Paso CGP Company, LLC**	**Project:**	**10507777.0501**
Site Name:	**Jaquez E#1 & C#1**	**Site Location:**	**Blanco, NM**

Photograph ID: 171

Photo Location:
Jaquez E#1 & C#1

Direction:
N/A

Survey Date:
9/17/2015

Comments:
SB-23 10-15'

Photograph ID: 172

Photo Location:
Jaquez E#1 & C#1

Direction:
View to the North

Survey Date:
9/17/2015

Comments:
Site conditions - Southern Area (South of canal)

Client:	**El Paso CGP Company, LLC**	**Project:**	**10507777.0501**
Site Name:	**Jaquez E#1 & C#1**	**Site Location:**	**Blanco, NM**

Photograph ID: 173

Photo Location:
Jaquez E#1 & C#1

Direction:
View to the West

Survey Date:
9/17/2015

Comments:
Site conditions - Southern Area (South of canal)

Photograph ID: 174

Photo Location:
Jaquez E#1 & C#1

Direction:
View to the South

Survey Date:
9/17/2015

Comments:
Gate Entry - Southern Area (South of Canal)

Client:	El Paso CGP Company, LLC	Project:	10507777.0501
Site Name:	Jaquez E#1 & C#1	Site Location:	Blanco, NM

Photograph ID: 175

Photo Location:
Jaquez E#1 & C#1

Direction:
View to the West

Survey Date:
9/17/2015

Comments:
Site conditions - Southern Area (South of canal)

Photograph ID: 176

Photo Location:
Jaquez E#1 & C#1

Direction:
View to the East

Survey Date:
9/17/2015

Comments:
Site conditions - Southern Area (South of canal)

Client:	El Paso CGP Company, LLC	Project:	10507777.0501
Site Name:	Jaquez E#1 & C#1	Site Location:	Blanco, NM

Photograph ID: 177

Photo Location:
Jaquez E#1 & C#1

Direction:
View to the Northeast

Survey Date:
9/17/2015

Comments:
View of MW-8

Photograph ID: 178

Photo Location:
Jaquez E#1 & C#1

Direction:
View to the South

Survey Date:
9/17/2015

Comments:
View of washed out area, Western Edge of previous Over-Excavation (South of Canal)

Client:	**El Paso CGP Company, LLC**	**Project:**	**10507777.0501**
Site Name:	**Jaquez E#1 & C#1**	**Site Location:**	**Blanco, NM**

Photograph ID: 179

Photo Location:
Jaquez E#1 & C#1

Direction:
N/A

Survey Date:
9/17/2015

Comments:
Existing possible Septic Tank in washed out area, Western Edge of previous Over-Excavation (South of Canal)

Photograph ID: 180

Photo Location:
Jaquez E#1 & C#1

Direction:
View to the South

Survey Date:
9/17/2015

Comments:
Southern Area, Western Edge of previous Over-Excavation

Client:	**El Paso CGP Company, LLC**	**Project:**	**10507777.0501**
Site Name:	**Jaquez E#1 & C#1**	**Site Location:**	**Blanco, NM**

Photograph ID: 181

Photo Location:
Jaquez E#1 & C#1

Direction:
View to the West

Survey Date:
9/17/2015

Comments:
Southern Area along canal berm, Western Edge of previous Over-Excavation

Photograph ID: 182

Photo Location:
Jaquez E#1 & C#1

Direction:
View to the East

Survey Date:
9/17/2015

Comments:
Southern Area along canal berm, Western Edge of previous Over-Excavation

Client:	**El Paso CGP Company, LLC**	**Project:**	**10507777.0501**
Site Name:	**Jaquez E#1 & C#1**	**Site Location:**	**Blanco, NM**

Photograph ID: 183

Photo Location:
Jaquez E#1 & C#1

Direction:
View to the Northeast

Survey Date:
9/17/2015

Comments:
View along canal berm from Southern Area near Western Edge of previous Over-Excavation

Photograph ID: 184

Photo Location:
Jaquez E#1 & C#1

Direction:
View to the Northwest

Survey Date:
9/17/2015

Comments:
View along canal berm from Southern Area, Western Edge of previous Over-Excavation

Client:	**El Paso CGP Company, LLC**	**Project:**	**10507777.0501**
Site Name:	**Jaquez E#1 & C#1**	**Site Location:**	**Blanco, NM**

Photograph ID: 185

Photo Location:
Jaquez E#1 & C#1

Direction:
View to the North

Survey Date:
9/17/2015

Comments:
View of Northern area from just south of canal near Western Edge of previous Over-Excavation

Photograph ID: 186

Photo Location:
Jaquez E#1 & C#1

Direction:
View to the East

Survey Date:
9/17/2015

Comments:
View along canal berm from the Southern Area, Eastern Edge of previous Over-Excavation

Client:	**El Paso CGP Company, LLC**	**Project:**	**10507777.0501**
Site Name:	**Jaquez E#1 & C#1**	**Site Location:**	**Blanco, NM**

Photograph ID: 187

Photo Location:
Jaquez E#1 & C#1

Direction:
View to the North

Survey Date:
9/17/2015

Comments:
View of Northern Area from the Southern Area, Eastern Edge of the previous Over-Excavation

Photograph ID: 188

Photo Location:
Jaquez E#1 & C#1

Direction:
View to the Southwest

Survey Date:
9/17/2015

Comments:
View of Southern Area from the Eastern Edge of the previous Over-Excavation (top of canal berm)

Client:	El Paso CGP Company, LLC	Project:	10507777.0501
Site Name:	Jaquez E#1 & C#1	Site Location:	Blanco, NM

Photograph ID: 189

Photo Location:
Jaquez E#1 & C#1

Direction:
View to the Northwest

Survey Date:
9/17/2015

Comments:
View of the Pipeline crossing the canal near the Eastern Edge of the previous Over-Excavation

Photograph ID: 190

Photo Location:
Jaquez E#1 & C#1

Direction:
View to the North

Survey Date:
9/17/2015

Comments:
Area of soil borings (SB-40,41)

Client:	El Paso CGP Company, LLC	Project:	10507777.0501
Site Name:	Jaquez E#1 & C#1	Site Location:	Blanco, NM

Photograph ID: 191

Photo Location:
Jaquez E#1 & C#1

Direction:
View to the North

Survey Date:
9/17/2015

Comments:
Area near MW-6 and SB-43

Photograph ID: 192

Photo Location:
Jaquez E#1 & C#1

Direction:
View to the East

Survey Date:
9/17/2015

Comments:
Area near SB-48

Client:	El Paso CGP Company, LLC	Project:	10507777.0501
Site Name:	Jaquez E#1 & C#1	Site Location:	Blanco, NM

Photograph ID: 193

Photo Location:
Jaquez E#1 & C#1

Direction:
View to the East

Survey Date:
9/17/2015

Comments:
Area of soil borings (SB-29,34)

Photograph ID: 194

Photo Location:
Jaquez E#1 & C#1

Direction:
View to the North

Survey Date:
9/17/2015

Comments:
Walkway across canal

Client:	**El Paso CGP Company, LLC**	**Project:**	**10507777.0501**
Site Name:	**Jaquez E#1 & C#1**	**Site Location:**	**Blanco, NM**

Photograph ID: 195

Photo Location:
Jaquez E#1 & C#1

Direction:
View to the East

Survey Date:
9/17/2015

Comments:
Area of soil borings (SB-24,25) North of canal

Photograph ID: 196

Photo Location:
Jaquez E#1 & C#1

Direction:
View to the North

Survey Date:
9/17/2015

Comments:
Area of soil boring (SB-20) North of canal

Client:	**El Paso CGP Company, LLC**	**Project:**	**10507777.0501**
Site Name:	**Jaquez E#1 & C#1**	**Site Location:**	**Blanco, NM**

Photograph ID: 197

Photo Location:
Jaquez E#1 & C#1

Direction:
View to the North

Survey Date:
9/17/2015

Comments:
Area of soil boring (SB-21)
North of canal

Photograph ID: 198

Photo Location:
Jaquez E#1 & C#1

Direction:
View to the North

Survey Date:
9/17/2015

Comments:
Area of soil boring (SB-22)
North of canal

Client:	El Paso CGP Company, LLC	Project:	10507777.0501
Site Name:	Jaquez E#1 & C#1	Site Location:	Blanco, NM

Photograph ID: 199

Photo Location:
Jaquez E#1 & C#1

Direction:
View to the West

Survey Date:
9/17/2015

Comments:
Area of soil borings (SB-15,19) North of canal

Photograph ID: 200

Photo Location:
Jaquez E#1 & C#1

Direction:
N/A

Survey Date:
9/17/2015

Comments:
Area near proposed SB-18, possible sewage pit, North of canal

Client:	**El Paso CGP Company, LLC**	**Project:**	**10507777.0501**
Site Name:	**Jaquez E#1 & C#1**	**Site Location:**	**Blanco, NM**

Photograph ID: 201

Photo Location:
Jaquez E#1 & C#1

Direction:
View to the Northeast

Survey Date:
9/17/2015

Comments:
Area of soil borings (SB-67,68,69,70) North of canal, Eastern Edge of previous Over-Excavation

Photograph ID: 202

Photo Location:
Jaquez E#1 & C#1

Direction:
View to the East

Survey Date:
9/17/2015

Comments:
Area of soil boring (SB-65) North of canal, Northern Edge of previous Over-Excavation

Client:	**El Paso CGP Company, LLC**	**Project:**	**10507777.0501**
Site Name:	**Jaquez E#1 & C#1**	**Site Location:**	**Blanco, NM**

Photograph ID: 203

Photo Location:
Jaquez E#1 & C#1

Direction:
View to the Northwest

Survey Date:
9/17/2015

Comments:
Area near SB-65, looking down Fence line Northern Edge of property line (Jaquez)

Photograph ID: 204

Photo Location:
Jaquez E#1 & C#1

Direction:
View to the East

Survey Date:
9/17/2015

Comments:
View along canal from near the bridge

Client:	**El Paso CGP Company, LLC**	**Project:**	**10507777.0501**
Site Name:	**Jaquez E#1 & C#1**	**Site Location:**	**Blanco, NM**

Photograph ID: 205

Photo Location:
Jaquez E#1 & C#1

Direction:
View to the Southwest

Survey Date:
9/17/2015

Comments:
View of the bridge crossing on Jaquez property

Photograph ID: 206

Photo Location:
Jaquez E#1 & C#1

Direction:
View to the South

Survey Date:
9/17/2015

Comments:
View from bridge of Jaquez Ranch (houses)

Client:	**El Paso CGP Company, LLC**	**Project:**	**10507777.0501**
Site Name:	**Jaquez E#1 & C#1**	**Site Location:**	**Blanco, NM**

Photograph ID: 207

Photo Location:
Jaquez E#1 & C#1

Direction:
View to the Northeast

Survey Date:
9/17/2015

Comments:
View of staging area for soil drums near the access gate for the Jaquez Ranch

Photograph ID: 208

Photo Location:
Jaquez E#1 & C#1

Direction:
View to the West

Survey Date:
9/17/2015

Comments:
View of the Jaquez Ranch from the access gate

Client:	**El Paso CGP Company, LLC**	**Project:**	**10507777.0501**
Site Name:	**Jaquez E#1 & C#1**	**Site Location:**	**Blanco, NM**

Photograph ID: 209

Photo Location:
Jaquez E#1 & C#1

Direction:
View to the North

Survey Date:
9/17/2015

Comments:
View of the access gate to the Jaquez Ranch

Photograph ID: 210

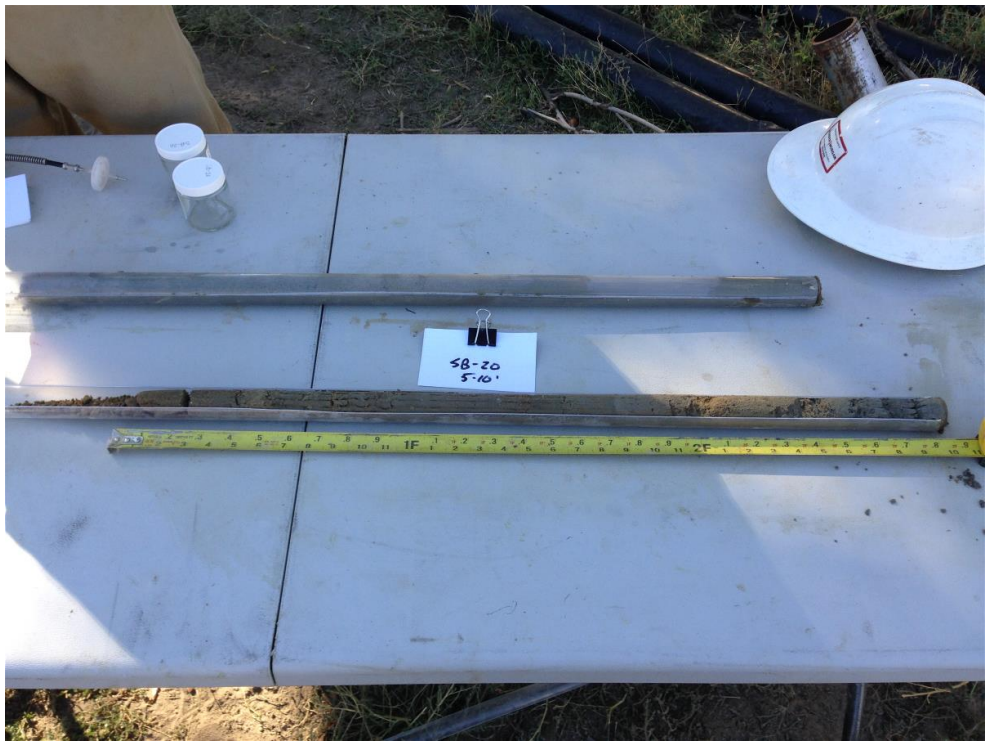
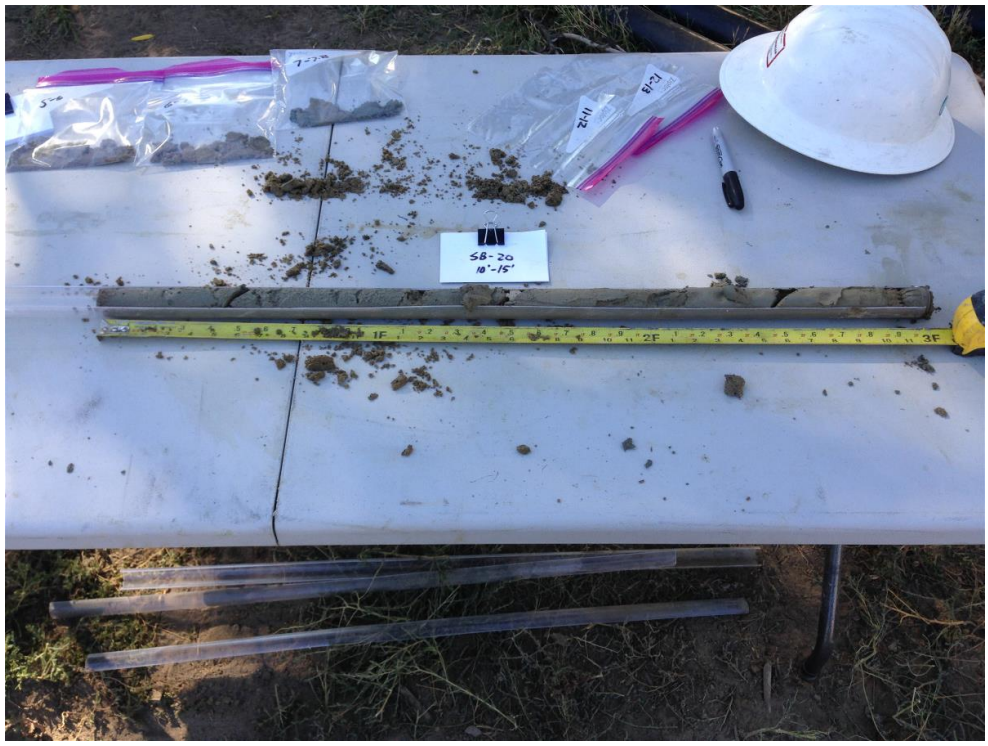
Photo Location:
Jaquez E#1 & C#1

Direction:
N/A

Survey Date:
9/18/2015

Comments:
SB-20 0-5'

Client:	**El Paso CGP Company, LLC**	**Project:**	**10507777.0501**
Site Name:	**Jaquez E#1 & C#1**	**Site Location:**	**Blanco, NM**

Photograph ID: 211 **Photo Location:** Jaquez E#1 & C#1 **Direction:** N/A **Survey Date:** 9/18/2015 **Comments:** SB-20 5-10'	
Photograph ID: 212 **Photo Location:** Jaquez E#1 & C#1 **Direction:** N/A **Survey Date:** 9/18/2015 **Comments:** SB-20 10'-15'	

Client:	**El Paso CGP Company, LLC**	**Project:**	**10507777.0501**
Site Name:	**Jaquez E#1 & C#1**	**Site Location:**	**Blanco, NM**

Photograph ID: 213

Photo Location:
Jaquez E#1 & C#1

Direction:
N/A

Survey Date:
9/18/2015

Comments:
SB-16 0-5'

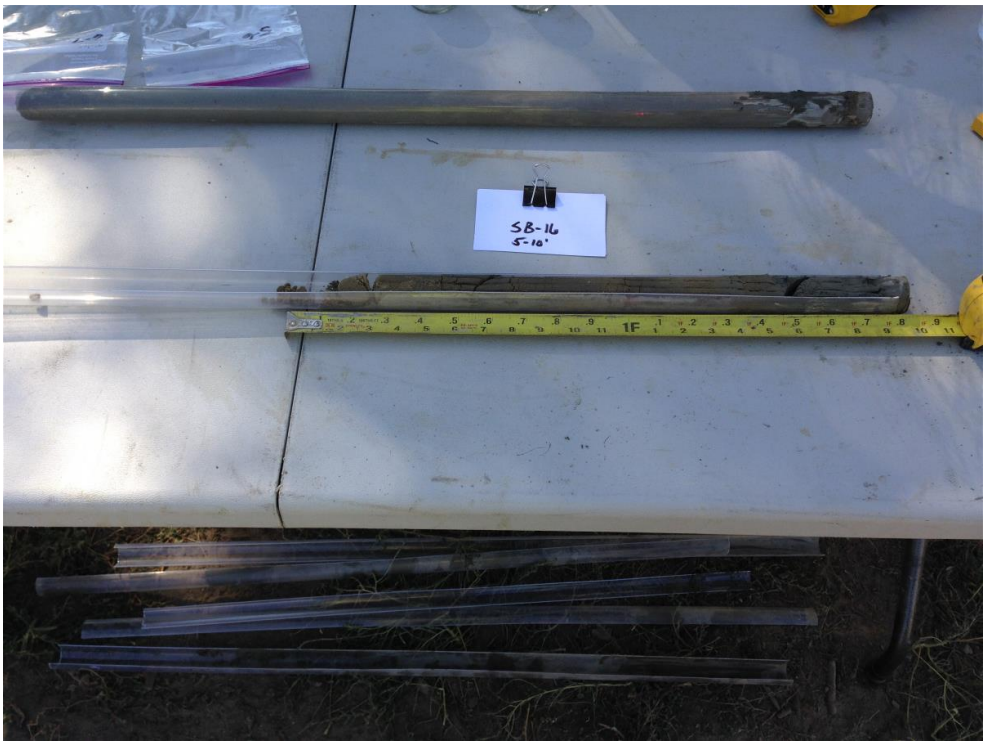
Photograph ID: 214

Photo Location:
Jaquez E#1 & C#1

Direction:
N/A

Survey Date:
9/18/2015

Comments:
SB-16 5-10'



Client:	**El Paso CGP Company, LLC**	**Project:**	**10507777.0501**
Site Name:	**Jaquez E#1 & C#1**	**Site Location:**	**Blanco, NM**

Photograph ID: 215

Photo Location:
Jaquez E#1 & C#1

Direction:
N/A

Survey Date:
9/18/2015

Comments:
SB-16 10-15'

Photograph ID: 216

Photo Location:
Jaquez E#1 & C#1

Direction:
N/A

Survey Date:
9/18/2015

Comments:
SB-34 0-5'

Client:	**El Paso CGP Company, LLC**	**Project:**	**10507777.0501**
Site Name:	**Jaquez E#1 & C#1**	**Site Location:**	**Blanco, NM**

Photograph ID: 217

Photo Location:
Jaquez E#1 & C#1

Direction:
N/A

Survey Date:
9/18/2015

Comments:
SB-34 5-10'

Photograph ID: 218

Photo Location:
Jaquez E#1 & C#1

Direction:
N/A

Survey Date:
9/18/2015

Comments:
SB-34 10-15'

Client:	**El Paso CGP Company, LLC**	**Project:**	**10507777.0501**
Site Name:	**Jaquez E#1 & C#1**	**Site Location:**	**Blanco, NM**

Photograph ID: 219

Photo Location:
Jaquez E#1 & C#1

Direction:
N/A

Survey Date:
9/18/2015

Comments:
SB-34 15-20'

Photograph ID: 220

Photo Location:
Jaquez E#1 & C#1

Direction:
N/A

Survey Date:
9/18/2015

Comments:
SB-39 0-5'

Client:	**El Paso CGP Company, LLC**	**Project:**	**10507777.0501**
Site Name:	**Jaquez E#1 & C#1**	**Site Location:**	**Blanco, NM**

Photograph ID: 221

Photo Location:
Jaquez E#1 & C#1

Direction:
N/A

Survey Date:
9/18/2015

Comments:
SB-39 5-10'

Photograph ID: 222

Photo Location:
Jaquez E#1 & C#1

Direction:
N/A

Survey Date:
9/18/2015

Comments:
SB-39 10-15'

Client:	El Paso CGP Company, LLC	Project:	10507777.0501
Site Name:	Jaquez E#1 & C#1	Site Location:	Blanco, NM

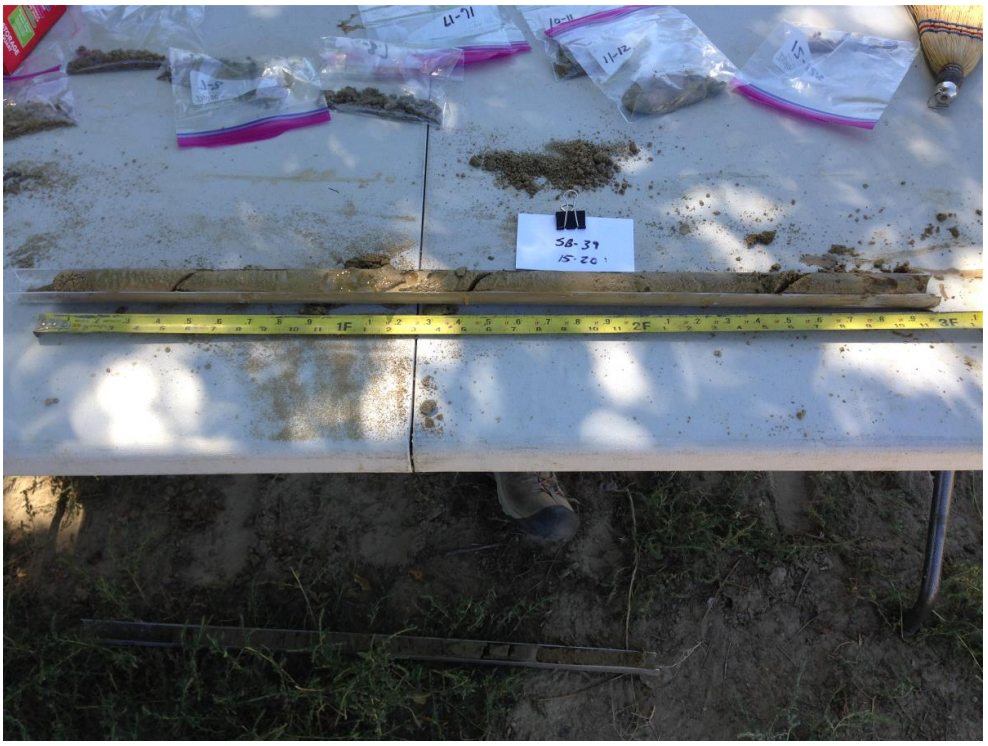
Photograph ID: 223

Photo Location:
Jaquez E#1 & C#1

Direction:
N/A

Survey Date:
9/18/2015

Comments:
SB-39 15-20'



Photograph ID: 224

Photo Location:
Jaquez E#1 & C#1

Direction:
N/A

Survey Date:
9/18/2015

Comments:
SB-76 0-5'

Client:	**El Paso CGP Company, LLC**	**Project:**	**10507777.0501**
Site Name:	**Jaquez E#1 & C#1**	**Site Location:**	**Blanco, NM**

Photograph ID: 225

Photo Location:
Jaquez E#1 & C#1

Direction:
N/A

Survey Date:
9/18/2015

Comments:
SB-76 10-15'

Photograph ID: 226

Photo Location:
Jaquez E#1 & C#1

Direction:
N/A

Survey Date:
9/18/2015

Comments:
SB-77 0-5'

Client:	**El Paso CGP Company, LLC**	**Project:**	**10507777.0501**
Site Name:	**Jaquez E#1 & C#1**	**Site Location:**	**Blanco, NM**

Photograph ID: 227

Photo Location:
Jaquez E#1 & C#1

Direction:
N/A

Survey Date:
9/18/2015

Comments:
SB-77 5-10'

Photograph ID: 228

Photo Location:
Jaquez E#1 & C#1

Direction:
N/A

Survey Date:
9/18/2015

Comments:
SB-77 10-15'

Client:	**El Paso CGP Company, LLC**	**Project:**	**10507777.0501**
Site Name:	**Jaquez E#1 & C#1**	**Site Location:**	**Blanco, NM**

Photograph ID: 229 **Photo Location:** Jaquez E#1 & C#1 **Direction:** N/A **Survey Date:** 9/19/2015 **Comments:** MW-9	
Photograph ID: 230 **Photo Location:** Jaquez E#1 & C#1 **Direction:** N/A **Survey Date:** 9/19/2015 **Comments:** MW-8	

Client:	**El Paso CGP Company, LLC**	**Project:**	**10507777.0501**
Site Name:	**Jaquez E#1 & C#1**	**Site Location:**	**Blanco, NM**

Photograph ID: 231

Photo Location:
Jaquez E#1 & C#1

Direction:
N/A

Survey Date:
9/19/2015

Comments:
MW-12

Photograph ID: 232

Photo Location:
Jaquez E#1 & C#1

Direction:
N/A

Survey Date:
9/19/2015

Comments:
MW-6

Client:	El Paso CGP Company, LLC	Project:	10507777.0501
Site Name:	Jaquez E#1 & C#1	Site Location:	Blanco, NM

Photograph ID: 233 **Photo Location:** Jaquez E#1 & C#1 **Direction:** N/A **Survey Date:** 9/19/2015 **Comments:** View of SB-58 locations flagged (Red Flag - proposed location, White Flag - final location of SB-58 due to proximity to pipeline)	
Photograph ID: 234 **Photo Location:** Jaquez E#1 & C#1 **Direction:** N/A **Survey Date:** 9/19/2015 **Comments:** View of SB-59 locations flagged (Red Flag - proposed location, White Flag - final location of SB-58 due to proximity to pipeline)	

APPENDIX D

Monitoring Well Contruction Diagrams

Facility/Project Name: JAQUEZ

Well Number: MW8

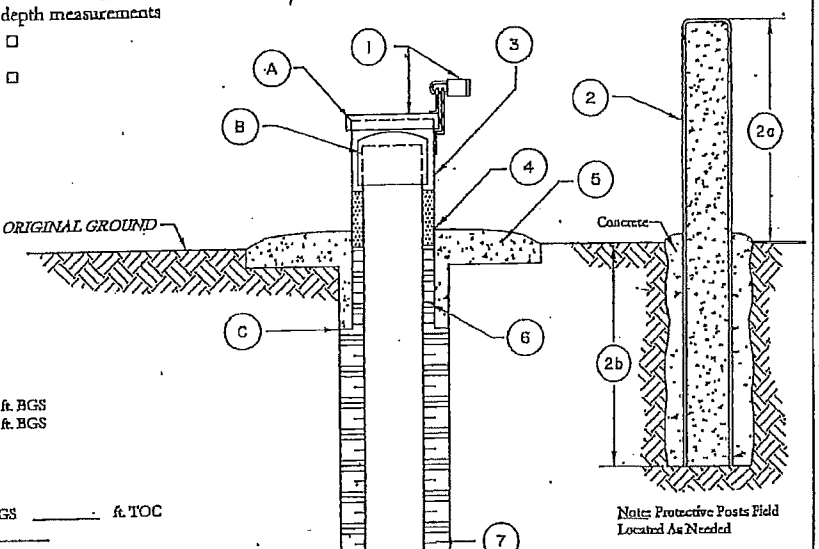
Date Well Installed: From 9/11/15 To 9/13/15

Well Installed By (Person's Name & Firm) MATT CAIN
LOUIS ALDAZ, DWAYNE DOWNING

Type of Protective Cover:
Above-Ground ☐
Flush-To-Ground ☒

NOTE: Use Ground Surface (BGS or AGS) for all depth measurements

(A) - Protective casing N/A ft. BGS ☐ or AGS ☐
(B) - Well casing, top ~0.49 ft. BGS ☒ or AGS ☐
(C) - Surface seal, bottom ~0.69 ft. BGS
(D) - Bentonite seal, top 1 ft. BGS
(E) - Primary filter, top 2 ft. BGS
(F) - Screen joint, top 3 ft. BGS
(G) - Screen joint, bottom 18 ft. BGS
(H) - End cap bottom 18.51 ft. BGS
(I) - Filter pack, bottom 20 ft. BGS
(J) - Borehole, bottom 20 ft. BGS
(K) - Borehole, diameter 8.25 in. to ____ ft. BGS
in. to ____ ft. BGS
(L) - O.D. well casing 2.375 in.
(M) - I.D. well casing 2 in.
(N) - ~~24~~ 23 hr. water level after completion 3.50 ft. BGS ____ ft. TOC



Notes Protective Posts Field Located As Needed

(1) - Cap and ~~Sealed~~ LOCKABLE Yes ☒ No ☐
(2) - Protective posts? Yes ☐ No ☒ No. of Posts ____
a. Height AGS: Feet: ____ b. Depth BGS: Feet: ____
(3) - Protective casing:
a. Inside diameter: Inches: N/A b. Depth: Feet: ____
(4) - Drainage port (s)? Yes ☐ No ☒
(5) - Surface seal material a. Cap: ____ b. Annular space seal: CONCRETE
(6) - Material between well casing and protective casing: N/A
(7) - Annular space seal: Mix: HYDRATED HOLE PLUG
- How installed: Tremie ☐ Tremie pumped ☐ Gravity ☒
(8) - Centralizers: No ☒ Yes ☐ Depths (BGS) ____
(9) - Bentonite seal:
a. Bentonite granules ☐ or b. Bentonite pellets 1/4in. ☐ 3/8in. ☒ 1/2in. ☒
c. ____ ☐ other
(10) - Filter pack material: Manufacturer, product name, & mesh size
a. 10/20 SILICA SAND
b. Volume added ____ ft.^3 11 Bags/Size 50 pd
(11) - Well casing: Flush threaded PVC schedule 40 ☒
Flush threaded PVC schedule 80 ☐
Other ☐
(12) - Screen material: PVC
a. Screen type: ____
Factory cut ☒ Continuous slot ☐ Other ☐ ____
b. Manufacturer: ____
c. Slot size: 0.010 10' SECTION BOTTOM
d. Slotted length: 15' 5' SECTION ABOVE
(13) - Backfill material (below filter pack): None ☐
10/20 SAND AND CAVE Other ☐
(14) - USCS classification of soil near screen None ☐
GP ☐ GM ☐ GC ☐ GW ☐ SW ☐ SP ☐
SM ☐ SC ☒ ML ☐ MH ☐ CL ☒ CH ☐ Bedrock ☐
(15) - Sieve analysis attached? Yes ☐ No ☒
(16) - Drilling method used: Rotary ☐ Hollow Stem Auger ☒ Other ☐ ____
(17) - Drilling fluid used: Water ☒ Air ☐ Drilling Mud ☐ None ☐ 13.3 GALLONS
(18) - Drilling additives used? Yes ☐ No ☒
Describe: ____

REV. No.	REVISIONS	REV. DATE	DESIGN BY	DRAWN BY	REVIEWED AND SIGNED BY

MW-8

MWH

PROJECT No. D1701G13M08
AutoCAD FILE: TYPICAL-WELL-NOSES
SCALE: Not To Scale
FIGURE No.

WELL CONSTRUCTION FORM

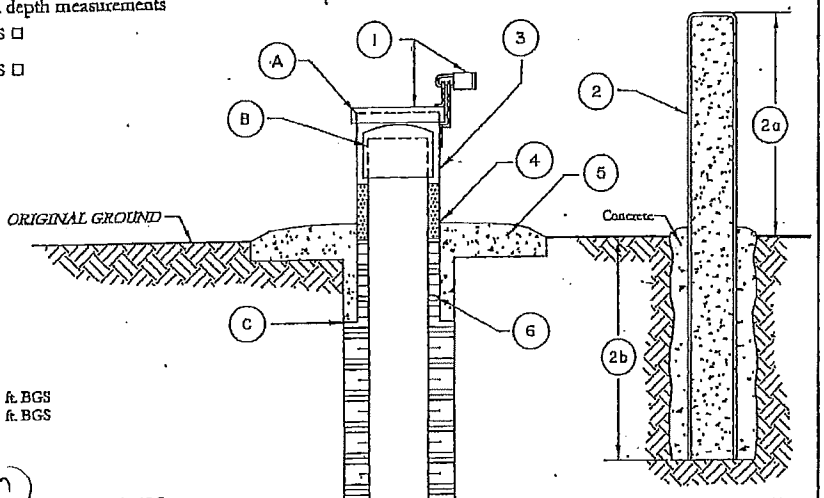
Facility/Project Name: JAQUEZ
Well Number: MW-9

Date Well Installed: From 9/12/15 To 9/12/15
Well Installed By (Person's Name & Firm) MATT CAIN
LOUIS ALDAZ, DWAYNE DOWNING

Type of Protective Cover:
Above-Gound ☐
Flush-To-Ground ☒

NOTE: Use Ground Surface (BGS or AGS) for all depth measurements

(A) - Protective casing N/A ft. BGS ☐ or AGS ☐
(B) - Well casing, top ~0.37 ft. BGS ☒ or AGS ☐
(C) - Surface seal, bottom 0.6 ft. BGS
(D) - Bentonite seal, top 2 ft. BGS
(E) - Primary filter, top 10.5 ft. BGS
(F) - Screen joint, top 13 ft. BGS
(G) - Screen joint, bottom 25 ft. BGS
(H) - End cap bottom 26.51 ft. BGS
(I) - Filter pack, bottom 30 ft. BGS
(J) - Borehole, bottom 30 ft. BGS
(K) - Borehole, diameter 8.25 in. to _____ ft. BGS
in. to _____ ft. BGS
(L) - O.D. well casing 2.375 in.
(M) - I.D. well casing 2 in.
(N) - 24 hr. water level after completion 13.65 ft BGS _____ ft. TOC



Note: Protective Posts Field Located As Needed

(1) - Cap and Lock? Yes ☒ No ☐
(2) - Protective posts? Yes ☐ No ☐ No. of Posts NA
a. Height AGS: Feet: _____ b. Depth BGS: Feet: _____
(3) - Protective casing:
a. Inside diameter: Inches: N/A b. Depth: Feet: _____
(4) - Drainage port (s)? Yes ☐ No ☒
(5) - Surface seal material a. Cap: _____ b. Annular space seal: CONCRETE
(6) - Material between well casing and protective casing: N/A
(7) - Annular space seal: Mix: HYDRATED HOLE PLUG - 4 BAGS
- How installed: Tremie ☐ Tremie pumped ☐ Gravity ☒
(8) - Centralizers: No ☒ Yes ☐ Depths (BGS) _____
(9) - Bentonite seal:
a. Bentonite granules ☐ or b. Bentonite pellets 1/4in. ☐ 3/8in. ☒ 1/2in. ☒
c. _____ ☐ other
(10) - Filter pack material: Manufacturer, product name, & mesh size
a. 10/20 SILICA SAND
b. Volume added _____ ft/3 14 Bags/Size 50 pd
(11) - Well casing: Flush threaded PVC schedule 40 ☒
Flush threaded PVC schedule 80 ☐
_____ Other ☐
(12) - Screen material: PVC
a. Screen type: Factory cut ☒ Continuous slot ☐ Other ☐ _____
b. Manufacturer: _____
c. Slot size: 0.010
d. Slotted length: 15'
10' SECTION BOTTOM
5' SECTION ABOVE
(13) - Backfill material (below filter pack): None ☐
10/20 SAND AND CAVE Other ☐
(14) - USCS classification of soil near screen None ☐
GP ☐ GM ☐ GC ☐ GW ☐ SW ☐ SP ☐
SM ☐ SC ☒ ML ☐ MH ☐ CL ☒ CH ☐ Bedrock ☐
(15) - Sieve analysis attached? Yes ☐ No ☒
(16) - Drilling method used: Rotary ☐ Hollow Stem Auger ☒ Other ☐ _____
(17) - Drilling fluid used: Water ☒ Air ☐ Drilling Mud ☐ None ☐ 20 GALLONS
(18) - Drilling additives used? Yes ☐ No ☒
Describe: _____

REV. No.	REVISIONS	REV. DATE	DESIGN BY	DRAWN BY	REVIEWED AND SIGNED BY

MW-9

MWH

PROJECT No: 1027016.13408
AutoCAD FILE: TYPICAL-WELL-MOSES
SCALE: Not To Scale
FIGURE No:

WELL CONSTRUCTION FORM

Facility/Project Name: JARVEZ
Well Number: MW12

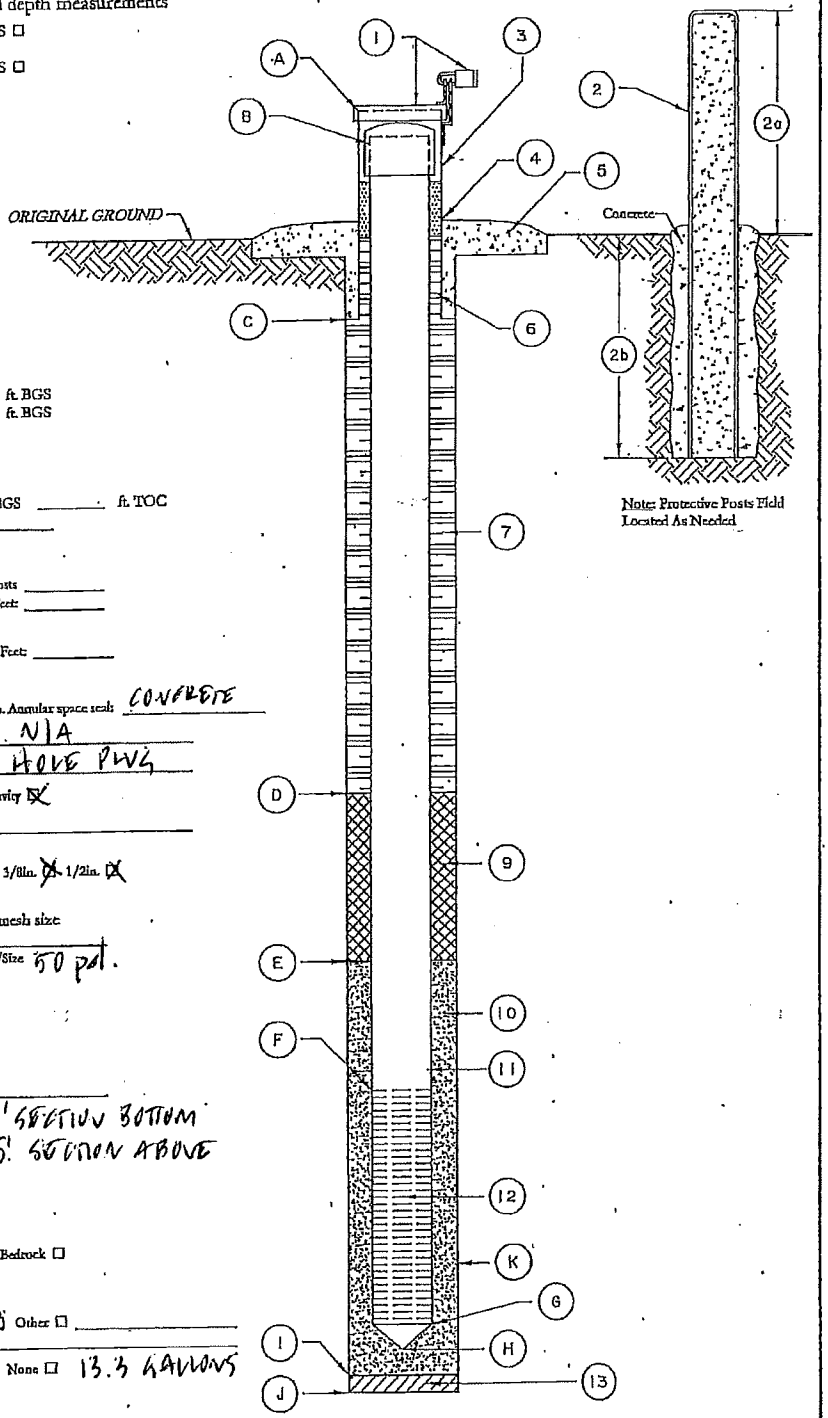
Date Well Installed: From 9/11/15 To 9/12/15
Well Installed By (Person's Name & Firm) MATT CAIN
LOUIS ALDAZ, DWAYNE DOWNING

Type of Protective Cover:
Above-Ground ☐
Flush-To-Ground ☒

NOTE: Use Ground Surface (BGS or AGS) for all depth measurements

(A) - Protective casing N/A ft. BGS ☐ or AGS ☐
(B) - Well casing, top ~0.34 ft. BGS ☒ or AGS ☐
(C) - Surface seal, bottom 0.91 ft. BGS
(D) - Bentonite seal, top 1 ft. BGS
(E) - Primary filter, top 2 ft. BGS
(F) - Screen joint, top 3 ft. BGS
(G) - Screen joint, bottom 15 ft. BGS
(H) - End cap bottom 18.51 ft. BGS
(I) - Filter pack, bottom 20 ft. BGS
(J) - Borehole, bottom 20 ft. BGS
(K) - Borehole, diameter 8.25 in. to ____ ft. BGS
in. to ____ ft. BGS
(L) - O.D. well casing 2.375 in.
(M) - I.D. well casing 2 in.
(N) 22 24 hr. water level after completion 3.23 ft. BGS ____ ft. TOC

(1) - Cap and ~~Lock~~ LIFTIE Yes ☒ No ☐
(2) - Protective posts? Yes ☐ No ☒ No. of Posts ____
a. Height AGS: Feet: N/A b. Depth BGS: Feet: ____
(3) - Protective casing:
a. Inside diameter: Inches: N/A b. Depth: Feet: ____
(4) - Drainage port (s)? Yes ☐ No ☒
(5) - Surface seal material a. Cap: ____ b. Annular space seal: CONCRETE
(6) - Material between well casing and protective casing: N/A
(7) - Annular space seal: Mix HYDRATED HOLE PLUG
- How installed: Tremie ☐ Tremie pumped ☐ Gravity ☒
(8) - Centralizers: No ☒ Yes ☐ Depths (BGS) ____
(9) - Bentonite seal:
a. Bentonite granules ☐ or b. Bentonite pellets 1/4in ☒ 3/8in. ☒ 1/2in. ☒
c. ____ ☐ other
(10) - Filter pack material: Manufacturer, product name, & mesh size:
a. 10/20 SILICA SAND
b. Volume added ____ ft^3 11 Bags/Size 50 pd.
(11) - Well casing: Flush threaded PVC schedule 40 ☒
Flush threaded PVC schedule 80 ☐
____ Other ☐
(12) - Screen material: PVC
a. Screen type: ____
b. Factory cut ☒ Continuous slot ☐ Other ☐ ____
b. Manufacturer ____
c. Slot size: 0.010
d. Slotted length: 15' 10' SECTION BOTTOM 5' SECTION ABOVE
(13) - Backfill material (below filter pack): None ☐
10/20 SAND AND CAVE Other ☐
(14) - USCS classification of soil near screen: None ☐
GP ☐ GM ☐ GC ☐ GW ☐ SW ☐ SP ☐
SM ☐ SC ☒ ML ☐ MH ☐ CL ☒ CH ☐ Bedrock ☐
(15) - Sieve analysis attached? Yes ☐ No ☒
(16) - Drilling method used: Rotary ☐ Hollow Stem Auger ☒ Other ☐ ____
(17) - Drilling fluid used: Water ☒ Air ☐ Drilling Mud ☐ None ☐ 13.3 GALLONS
(18) - Drilling additives used? Yes ☐ No ☒
Describe: ____



Note: Protective Posts Field Located As Needed

REV. No.	REVISIONS	REV. DATE	DESIGN BY	DRAWN BY	REVIEWED AND SIGNED BY

MW12

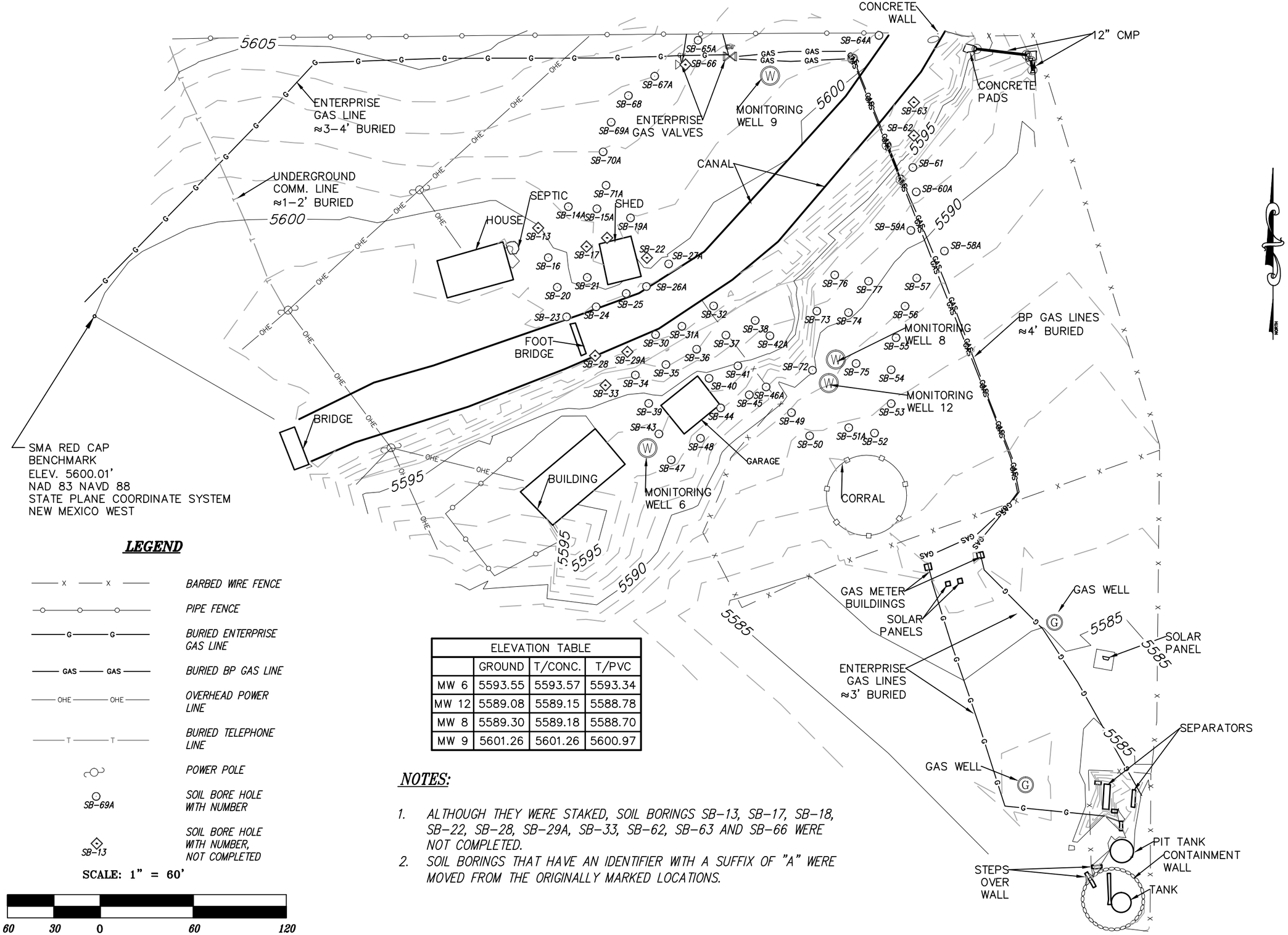
MWH

PROJECT No: 107010.13008
ArcCAD FILE: TYPICAL-WELL-MOSES
SCALE: Not To Scale
FIGURE No:

WELL CONSTRUCTION FORM

APPENDIX E

Survey Map of Jaquez Site



LEGEND

- BARBED WIRE FENCE
- PIPE FENCE
- BURIED ENTERPRISE GAS LINE
- BURIED BP GAS LINE
- OVERHEAD POWER LINE
- BURIED TELEPHONE LINE
- POWER POLE
- SB-69A — SOIL BORE HOLE WITH NUMBER
- SB-13 — SOIL BORE HOLE WITH NUMBER, NOT COMPLETED

SCALE: 1" = 60'

60 30 0 60 120

ELEVATION TABLE			
	GROUND	T/CONC.	T/PVC
MW 6	5593.55	5593.57	5593.34
MW 12	5589.08	5589.15	5588.78
MW 8	5589.30	5589.18	5588.70
MW 9	5601.26	5601.26	5600.97

NOTES:

1. *ALTHOUGH THEY WERE STAKED, SOIL BORINGS SB–13, SB–17, SB–18, SB–22, SB–28, SB–29A, SB–33, SB–62, SB–63 AND SB–66 WERE NOT COMPLETED.*
2. *SOIL BORINGS THAT HAVE AN IDENTIFIER WITH A SUFFIX OF "A" WERE MOVED FROM THE ORIGINALLY MARKED LOCATIONS.*

TOPOGRAPHIC MAP
JAQUEZ WELL SITE
SAN JUAN COUNTY, NEW MEXICO

BLOOMFIELD, NEW MEXICO

MWH

SOUDER, MILLER & ASSOCIATES
401 West Broadway Avenue
Farmington, NM 87401-5907
Phone (505) 325-7535 Toll-Free (800) 519-0098 Fax (505) 326-0045
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Cortez, CO - Grand Junction, CO - Moab, UT - Salina, UT

SMA Engineering Environmental Surveying

Designed	Drawn	Checked
GR	KA	KS

THIS DRAWING IS INCOMPLETE AND NOT TO BE USED FOR CONSTRUCTION UNLESS IT IS STAMPED, SIGNED AND DATED

Date: OCT. 22, 2015

Scale: Horiz: 1" = 60'
Vert: N/A

Project No: 2123923

Sheet: 1 OF 1

X:\2-MWH Monitoring Wells 2015(2123923)\DWG\JACQUEZ SITE PLAT.dwg , GAR, 10/30/2015 2:02 PM

APPENDIX F

Drum Disposal Documentation

envirotech

Bill of Lading

MANIFEST # 53084
GENERATOR El Paso CGP
POINT OF ORIGIN Jaquez
TRANSPORTER Stevens oil Field
DATE 9-21-15 JOB # 14073-0009

PHONE: (505) 632-0615 • 5796 U.S. HIGHWAY 64 • FARMINGTON, NEW MEXICO 87401

LOAD NO.	COMPLETE DESCRIPTION OF SHIPMENT					TRANSPORTING COMPANY			
	DESTINATION	MATERIAL	GRID	YDS	BBLS	TKT#	TRK#	TIME	DRIVER SIGNATURE
1	LF II	Cont Soil	N-4	—	10	—	26	1046	[signature]
					10				

RESULTS			LANDFARM EMPLOYEE	NOTES
4278	CHLORIDE TEST	1	Gary Robinson	1E
	PAINT FILTER TEST	1	Certification of above receival & placement	

By signing as the driver/transporter, I certify the material hauled from the above location has not been added to or tampered with. I certify the material is from the above mentioned Generator/Point of Origin and that no additional material has been added or mixed into the load.

Generator Onsite Contact _____ Phone _____

Signatures required prior to distribution of the legal document. DISTRIBUTION: **White** - Company Records, **Yellow** - Billing, **Pink** - Customer, **Goldenrod** - LF Copy

envirotech

BOL# 53084

CHLORIDE TESTING / PAINT FILTER TESTING

DATE 9-21-15 TIME 1040

CUSTOMER El Paso CGP

SITE Jaquez

DRIVER [signature]

SAMPLE (Soil) Straight — With Dirt ____

CHLORIDE TEST 278 mg/Kg

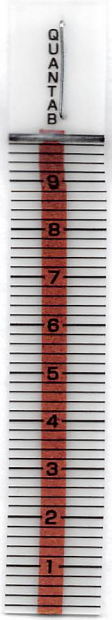
ACCEPTED YES — NO ____

PAINT FILTER TEST Time started 1040 Time completed 1055

PASS YES — NO ____

SAMPLER/ANALYST Gary Robinson

Attach test strip here



5796 US Hwy 64, Farmington, NM 87401 | Ph (505) 632-0615 Fr (800) 362-1879 Fx (505) 632-1865 | info@envirotech-inc.com envirotech-inc.com

APPENDIX G

Soil Analytical Reports

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

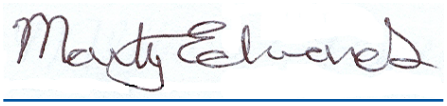
ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Pensacola
3355 McLemore Drive
Pensacola, FL 32514
Tel: (850)474-1001

TestAmerica Job ID: 400-110906-1
Client Project/Site: Jaquez
Revision: 3

For:
MWH Americas Inc
11153 Aurora Avenue
Des Moines, Iowa 50322-7904

Attn: Steve Varsa



Authorized for release by:
1/25/2016 4:34:39 PM

Marty Edwards, Manager of Project Management
(850)474-1001
marty.edwards@testamericainc.com

Table of Contents

Definitions/Glossary

Client: MWH Americas Inc
Project/Site: Jaquez

TestAmerica Job ID: 400-110906-1

Qualifiers

GC VOA

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery is outside acceptance limits.
F2	MS/MSD RPD exceeds control limits
E	Result exceeded calibration range.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Job ID: 400-110906-1

Laboratory: TestAmerica Pensacola

Narrative

Job Narrative
400-110906-1

Comments
No additional comments.

Receipt
The samples were received on 9/12/2015 9:07 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 1.1º C.

Receipt Exceptions
Per client, MW-8 should not have been listed on COC, and sample containers were not received for MW-8.

HPLC/IC
Method 300.0: The method blank for preparation batch 400-275556 and analytical batch 400-275665 contained Chloride above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC VOA
Method 8021B: The matrix spike duplicate (MSD) recovery for preparation batch 400-275764 and analytical batch 400-275765 was outside control limits due to matrix interference.

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) precision for preparation batch 400-275764 and analytical batch 400-275765 was outside control limits due to matrix interference.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC Semi VOA
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Organic Prep
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Revised Report
Rev(1): The deliverable was revised to report to the RL only.
Rev(2): The report was revised to correct the following sample ID: MW-8 (7-8') (400-110906-4).
Rev(3): The report was revised to change the analyte descriptions for the 8015 DRO/ORO analysis.

Detection Summary

Client: MWH Americas Inc
Project/Site: Jaquez

TestAmerica Job ID: 400-110906-1

Client Sample ID: SB-55 (5-7') — Lab Sample ID: 400-110906-1

No Detections.

Client Sample ID: SB-52 (5-6') — Lab Sample ID: 400-110906-2

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Gasoline Range Organics (GRO) C6--C10	1.3	F2 F1	0.11		mg/Kg	1	☼	8015B	Total/NA
Diesel Range Organics [C10-C28]	24		11		mg/Kg	1	☼	8015B	Total/NA

Client Sample ID: SB-53 (5-6') — Lab Sample ID: 400-110906-3

No Detections.

Client Sample ID: MW-8 (7-8') — Lab Sample ID: 400-110906-4

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Gasoline Range Organics (GRO) C6--C10	1100		25		mg/Kg	250	☼	8015B	Total/NA
Benzene	3.8		0.25		mg/Kg	250	☼	8021B	Total/NA
Ethylbenzene	3.6		0.25		mg/Kg	250	☼	8021B	Total/NA
Toluene	3.5		1.3		mg/Kg	250	☼	8021B	Total/NA
Xylenes, Total	16		1.3		mg/Kg	250	☼	8021B	Total/NA
Diesel Range Organics [C10-C28]	26		12		mg/Kg	1	☼	8015B	Total/NA

Client Sample ID: SB-54 (5-6.5') — Lab Sample ID: 400-110906-5

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Gasoline Range Organics (GRO) C6--C10	41		5.2		mg/Kg	50	☼	8015B	Total/NA
Ethylbenzene	0.0034		0.0013		mg/Kg	1	☼	8021B	Total/NA
Xylenes, Total	0.014		0.0063		mg/Kg	1	☼	8021B	Total/NA
Diesel Range Organics [C10-C28]	68		12		mg/Kg	1	☼	8015B	Total/NA

Client Sample ID: MW-8(A) (7-8') — Lab Sample ID: 400-110906-6

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Gasoline Range Organics (GRO) C6--C10	1800		50		mg/Kg	500	☼	8015B	Total/NA
Benzene	4.6		0.50		mg/Kg	500	☼	8021B	Total/NA
Ethylbenzene	12		0.50		mg/Kg	500	☼	8021B	Total/NA
Toluene	7.0		2.5		mg/Kg	500	☼	8021B	Total/NA
Xylenes, Total	61		2.5		mg/Kg	500	☼	8021B	Total/NA
Diesel Range Organics [C10-C28]	100		11		mg/Kg	1	☼	8015B	Total/NA
Oil Range Organics (C28-C35)	13		11		mg/Kg	1	☼	8015B	Total/NA

This Detection Summary does not include radiochemical test results.

Sample Summary

Client: MWH Americas Inc
Project/Site: Jaquez

TestAmerica Job ID: 400-110906-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-110906-1	SB-55 (5-7')	Solid	09/09/15 16:20	09/12/15 09:07
400-110906-2	SB-52 (5-6')	Solid	09/09/15 13:55	09/12/15 09:07
400-110906-3	SB-53 (5-6')	Solid	09/09/15 15:05	09/12/15 09:07
400-110906-4	MW-8 (7-8')	Solid	09/10/15 09:30	09/12/15 09:07
400-110906-5	SB-54 (5-6.5')	Solid	09/09/15 15:35	09/12/15 09:07
400-110906-6	MW-8(A) (7-8')	Solid	09/10/15 13:10	09/12/15 09:07

Client Sample Results

Client: MWH Americas Inc
Project/Site: Jaquez

TestAmerica Job ID: 400-110906-1

Client Sample ID: SB-55 (5-7')

Date Collected: 09/09/15 16:20
Date Received: 09/12/15 09:07

Lab Sample ID: 400-110906-1

Matrix: Solid
Percent Solids: 81.8

Method: 8015B - GRO by 8015B

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) C6--C10	<0.11		0.11		mg/Kg	☼	09/18/15 10:00	09/19/15 03:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (fid)	*97*		*65 - 125*	*09/18/15 10:00*	*09/19/15 03:11*	*1*

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0011		0.0011		mg/Kg	☼	09/16/15 10:00	09/16/15 16:38	1
Ethylbenzene	<0.0011		0.0011		mg/Kg	☼	09/16/15 10:00	09/16/15 16:38	1
Toluene	<0.0054		0.0054		mg/Kg	☼	09/16/15 10:00	09/16/15 16:38	1
Xylenes, Total	<0.0054		0.0054		mg/Kg	☼	09/16/15 10:00	09/16/15 16:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (pid)	*94*		*40 - 150*	*09/16/15 10:00*	*09/16/15 16:38*	*1*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	<12		12		mg/Kg	☼	09/15/15 08:54	09/16/15 13:49	1
Oil Range Organics (C28-C35)	<12		12		mg/Kg	☼	09/15/15 08:54	09/16/15 13:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*68*		*27 - 151*	*09/15/15 08:54*	*09/16/15 13:49*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<24		24		mg/Kg	☼		09/23/15 08:02	1

Client Sample ID: SB-52 (5-6')

Date Collected: 09/09/15 13:55
Date Received: 09/12/15 09:07

Lab Sample ID: 400-110906-2

Matrix: Solid
Percent Solids: 87.0

Method: 8015B - GRO by 8015B

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) C6--C10	1.3	F2 F1	0.11		mg/Kg	☼	09/23/15 10:00	09/23/15 13:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (fid)	*95*		*65 - 125*	*09/23/15 10:00*	*09/23/15 13:46*	*1*

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0011		0.0011		mg/Kg	☼	09/23/15 10:00	09/23/15 13:46	1
Ethylbenzene	<0.0011		0.0011		mg/Kg	☼	09/23/15 10:00	09/23/15 13:46	1
Toluene	<0.0056		0.0056		mg/Kg	☼	09/23/15 10:00	09/23/15 13:46	1
Xylenes, Total	<0.0056		0.0056		mg/Kg	☼	09/23/15 10:00	09/23/15 13:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (pid)	*95*		*40 - 150*	*09/23/15 10:00*	*09/23/15 13:46*	*1*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	24		11		mg/Kg	☼	09/15/15 08:54	09/16/15 13:59	1
Oil Range Organics (C28-C35)	<11		11		mg/Kg	☼	09/15/15 08:54	09/16/15 13:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*73*		*27 - 151*	*09/15/15 08:54*	*09/16/15 13:59*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<22		22		mg/Kg	☼		09/23/15 09:10	1

Client: MWH Americas Inc
Project/Site: Jaquez

TestAmerica Job ID: 400-110906-1

Client Sample ID: SB-53 (5-6')
Date Collected: 09/09/15 15:05
Date Received: 09/12/15 09:07

Lab Sample ID: 400-110906-3
Matrix: Solid
Percent Solids: 84.7

Method: 8015B - GRO by 8015B

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) C6--C10	<0.10		0.10		mg/Kg	☼	09/18/15 10:00	09/19/15 03:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (fid)	*98*		*65 - 125*	*09/18/15 10:00*	*09/19/15 03:45*	*1*

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0011		0.0011		mg/Kg	☼	09/16/15 10:00	09/16/15 17:13	1
Ethylbenzene	<0.0011		0.0011		mg/Kg	☼	09/16/15 10:00	09/16/15 17:13	1
Toluene	<0.0053		0.0053		mg/Kg	☼	09/16/15 10:00	09/16/15 17:13	1
Xylenes, Total	<0.0053		0.0053		mg/Kg	☼	09/16/15 10:00	09/16/15 17:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (pid)	*95*		*40 - 150*	*09/16/15 10:00*	*09/16/15 17:13*	*1*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	<12		12		mg/Kg	☼	09/15/15 08:54	09/16/15 14:09	1
Oil Range Organics (C28-C35)	<12		12		mg/Kg	☼	09/15/15 08:54	09/16/15 14:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*75*		*27 - 151*	*09/15/15 08:54*	*09/16/15 14:09*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<23		23		mg/Kg	☼		09/23/15 09:33	1

Client Sample ID: MW-8 (7-8')

Date Collected: 09/10/15 09:30
Date Received: 09/12/15 09:07

Lab Sample ID: 400-110906-4

Matrix: Solid
Percent Solids: 83.9

Method: 8015B - GRO by 8015B

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) C6--C10	1100		25		mg/Kg	☼	09/18/15 15:00	09/21/15 15:09	250

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (fid)	*80*		*65 - 125*	*09/18/15 15:00*	*09/21/15 15:09*	*250*

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	3.8		0.25		mg/Kg	☼	09/18/15 15:00	09/21/15 15:09	250
Ethylbenzene	3.6		0.25		mg/Kg	☼	09/18/15 15:00	09/21/15 15:09	250
Toluene	3.5		1.3		mg/Kg	☼	09/18/15 15:00	09/21/15 15:09	250
Xylenes, Total	16		1.3		mg/Kg	☼	09/18/15 15:00	09/21/15 15:09	250

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (pid)	*99*		*40 - 150*	*09/18/15 15:00*	*09/21/15 15:09*	*250*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	26		12		mg/Kg	☼	09/15/15 08:54	09/16/15 14:30	1
Oil Range Organics (C28-C35)	<12		12		mg/Kg	☼	09/15/15 08:54	09/16/15 14:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*75*		*27 - 151*	*09/15/15 08:54*	*09/16/15 14:30*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<24		24		mg/Kg	☼		09/23/15 10:41	1

Client Sample ID: SB-54 (5-6.5')

Date Collected: 09/09/15 15:35
Date Received: 09/12/15 09:07

Lab Sample ID: 400-110906-5

Matrix: Solid
Percent Solids: 86.1

Method: 8015B - GRO by 8015B

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) C6--C10	**41**		5.2		mg/Kg	☼	09/18/15 15:00	09/18/15 21:45	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (fid)	*99*		*65 - 125*	*09/18/15 15:00*	*09/18/15 21:45*	*50*

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0013		0.0013		mg/Kg	☼	09/23/15 10:00	09/23/15 14:48	1
Ethylbenzene	**0.0034**		0.0013		mg/Kg	☼	09/23/15 10:00	09/23/15 14:48	1
Toluene	<0.0063		0.0063		mg/Kg	☼	09/23/15 10:00	09/23/15 14:48	1
Xylenes, Total	**0.014**		0.0063		mg/Kg	☼	09/23/15 10:00	09/23/15 14:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (pid)	*91*		*40 - 150*	*09/23/15 10:00*	*09/23/15 14:48*	*1*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	**68**		12		mg/Kg	☼	09/15/15 08:54	09/16/15 14:40	1
Oil Range Organics (C28-C35)	<12		12		mg/Kg	☼	09/15/15 08:54	09/16/15 14:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*61*		*27 - 151*	*09/15/15 08:54*	*09/16/15 14:40*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<24		24		mg/Kg	☼		09/23/15 11:04	1

Client Sample ID: MW-8(A) (7-8')

Date Collected: 09/10/15 13:10
Date Received: 09/12/15 09:07

Lab Sample ID: 400-110906-6

Matrix: Solid
Percent Solids: 84.8

Method: 8015B - GRO by 8015B

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) C6--C10	1800		50		mg/Kg	☼	09/18/15 15:00	09/21/15 14:41	500

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (fid)	*82*		*65 - 125*	*09/18/15 15:00*	*09/21/15 14:41*	*500*

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	4.6		0.50		mg/Kg	☼	09/18/15 15:00	09/21/15 14:41	500
Ethylbenzene	12		0.50		mg/Kg	☼	09/18/15 15:00	09/21/15 14:41	500
Toluene	7.0		2.5		mg/Kg	☼	09/18/15 15:00	09/21/15 14:41	500
Xylenes, Total	61		2.5		mg/Kg	☼	09/18/15 15:00	09/21/15 14:41	500

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (pid)	*101*		*40 - 150*	*09/18/15 15:00*	*09/21/15 14:41*	*500*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	100		11		mg/Kg	☼	09/15/15 08:54	09/16/15 14:50	1
Oil Range Organics (C28-C35)	13		11		mg/Kg	☼	09/15/15 08:54	09/16/15 14:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*68*		*27 - 151*	*09/15/15 08:54*	*09/16/15 14:50*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<23		23		mg/Kg	☼		09/23/15 11:27	1

GC VOA

Analysis Batch: 274676

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-110856-E-1-D MS	Matrix Spike	Total/NA	Solid	8021B	274697
400-110856-E-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	274697
400-110906-1	SB-55 (5-7')	Total/NA	Solid	8021B	274697
400-110906-3	SB-53 (5-6')	Total/NA	Solid	8021B	274697
LCS 400-274697/2-A	Lab Control Sample	Total/NA	Solid	8021B	274697
MB 400-274697/1-A	Method Blank	Total/NA	Solid	8021B	274697

Prep Batch: 274697

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-110856-E-1-D MS	Matrix Spike	Total/NA	Solid	5035	
400-110856-E-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	
400-110906-1	SB-55 (5-7')	Total/NA	Solid	5035	
400-110906-3	SB-53 (5-6')	Total/NA	Solid	5035	
LCS 400-274697/2-A	Lab Control Sample	Total/NA	Solid	5035	
MB 400-274697/1-A	Method Blank	Total/NA	Solid	5035	

Prep Batch: 275112

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-110906-1	SB-55 (5-7')	Total/NA	Solid	5035	
400-110906-3	SB-53 (5-6')	Total/NA	Solid	5035	
400-110975-B-20-G MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	
400-110975-B-20-I MS	Matrix Spike	Total/NA	Solid	5035	
LCS 400-275112/2-A	Lab Control Sample	Total/NA	Solid	5035	
MB 400-275112/1-A	Method Blank	Total/NA	Solid	5035	

Analysis Batch: 275116

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-110906-1	SB-55 (5-7')	Total/NA	Solid	8015B	275112
400-110906-3	SB-53 (5-6')	Total/NA	Solid	8015B	275112
400-110975-B-20-G MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B	275112
400-110975-B-20-I MS	Matrix Spike	Total/NA	Solid	8015B	275112
LCS 400-275112/2-A	Lab Control Sample	Total/NA	Solid	8015B	275112
MB 400-275112/1-A	Method Blank	Total/NA	Solid	8015B	275112

Prep Batch: 275117

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-110906-4	MW-8 (7-8')	Total/NA	Solid	5035	
400-110906-5	SB-54 (5-6.5')	Total/NA	Solid	5035	
400-110906-6	MW-8(A) (7-8')	Total/NA	Solid	5035	
400-110906-6 MS	MW-8(A) (7-8')	Total/NA	Solid	5035	
400-110906-6 MS	MW-8(A) (7-8')	Total/NA	Solid	5035	
400-110906-6 MSD	MW-8(A) (7-8')	Total/NA	Solid	5035	
400-110906-6 MSD	MW-8(A) (7-8')	Total/NA	Solid	5035	
LCS 400-275117/2-A	Lab Control Sample	Total/NA	Solid	5035	
LCS 400-275117/3-A	Lab Control Sample	Total/NA	Solid	5035	
MB 400-275117/1-A	Method Blank	Total/NA	Solid	5035	

Analysis Batch: 275679

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-110906-2	SB-52 (5-6')	Total/NA	Solid	8021B	275764
400-110906-2 MS	SB-52 (5-6')	Total/NA	Solid	8021B	275764

GC VOA (Continued)

Analysis Batch: 275679 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-110906-2 MSD	SB-52 (5-6')	Total/NA	Solid	8021B	275764
400-110906-5	SB-54 (5-6.5')	Total/NA	Solid	8021B	275764
LCS 400-275764/2-A	Lab Control Sample	Total/NA	Solid	8021B	275764
MB 400-275764/1-A	Method Blank	Total/NA	Solid	8021B	275764

Prep Batch: 275764

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-110906-2	SB-52 (5-6')	Total/NA	Solid	5035	
400-110906-2 MS	SB-52 (5-6')	Total/NA	Solid	5035	
400-110906-2 MS	SB-52 (5-6')	Total/NA	Solid	5035	
400-110906-2 MSD	SB-52 (5-6')	Total/NA	Solid	5035	
400-110906-2 MSD	SB-52 (5-6')	Total/NA	Solid	5035	
400-110906-5	SB-54 (5-6.5')	Total/NA	Solid	5035	
LCS 400-275764/2-A	Lab Control Sample	Total/NA	Solid	5035	
LCS 400-275764/3-A	Lab Control Sample	Total/NA	Solid	5035	
MB 400-275764/1-A	Method Blank	Total/NA	Solid	5035	

Analysis Batch: 275765

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-110906-2	SB-52 (5-6')	Total/NA	Solid	8015B	275764
400-110906-2 MS	SB-52 (5-6')	Total/NA	Solid	8015B	275764
400-110906-2 MSD	SB-52 (5-6')	Total/NA	Solid	8015B	275764
LCS 400-275764/3-A	Lab Control Sample	Total/NA	Solid	8015B	275764
MB 400-275764/1-A	Method Blank	Total/NA	Solid	8015B	275764

Analysis Batch: 275909

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-110906-4	MW-8 (7-8')	Total/NA	Solid	8021B	275117
400-110906-6	MW-8(A) (7-8')	Total/NA	Solid	8021B	275117
400-110906-6 MS	MW-8(A) (7-8')	Total/NA	Solid	8021B	275117
400-110906-6 MSD	MW-8(A) (7-8')	Total/NA	Solid	8021B	275117
LCS 400-275117/2-A	Lab Control Sample	Total/NA	Solid	8021B	275117
MB 400-275117/1-A	Method Blank	Total/NA	Solid	8021B	275117

Analysis Batch: 275911

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-110906-4	MW-8 (7-8')	Total/NA	Solid	8015B	275117
400-110906-5	SB-54 (5-6.5')	Total/NA	Solid	8015B	275117
400-110906-6	MW-8(A) (7-8')	Total/NA	Solid	8015B	275117
LCS 400-275117/3-A	Lab Control Sample	Total/NA	Solid	8015B	275117
MB 400-275117/1-A	Method Blank	Total/NA	Solid	8015B	275117

Analysis Batch: 275912

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-110906-6 MS	MW-8(A) (7-8')	Total/NA	Solid	8015B	275117
400-110906-6 MSD	MW-8(A) (7-8')	Total/NA	Solid	8015B	275117
LCS 400-275117/3-A	Lab Control Sample	Total/NA	Solid	8015B	275117
MB 400-275117/1-A	Method Blank	Total/NA	Solid	8015B	275117

QC Association Summary

Client: MWH Americas Inc
Project/Site: Jaquez

TestAmerica Job ID: 400-110906-1

GC Semi VOA

Prep Batch: 274413

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-110906-1	SB-55 (5-7')	Total/NA	Solid	3546	
400-110906-2	SB-52 (5-6')	Total/NA	Solid	3546	
400-110906-3	SB-53 (5-6')	Total/NA	Solid	3546	
400-110906-4	MW-8 (7-8')	Total/NA	Solid	3546	
400-110906-5	SB-54 (5-6.5')	Total/NA	Solid	3546	
400-110906-6	MW-8(A) (7-8')	Total/NA	Solid	3546	
LCS 400-274413/16-A	Lab Control Sample	Total/NA	Solid	3546	
MB 400-274413/17-A	Method Blank	Total/NA	Solid	3546	

Analysis Batch: 274656

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-110906-1	SB-55 (5-7')	Total/NA	Solid	8015B	274413
400-110906-2	SB-52 (5-6')	Total/NA	Solid	8015B	274413
400-110906-3	SB-53 (5-6')	Total/NA	Solid	8015B	274413
400-110906-4	MW-8 (7-8')	Total/NA	Solid	8015B	274413
400-110906-5	SB-54 (5-6.5')	Total/NA	Solid	8015B	274413
400-110906-6	MW-8(A) (7-8')	Total/NA	Solid	8015B	274413
LCS 400-274413/16-A	Lab Control Sample	Total/NA	Solid	8015B	274413
MB 400-274413/17-A	Method Blank	Total/NA	Solid	8015B	274413

HPLC/IC

Leach Batch: 275556

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-110906-1	SB-55 (5-7')	Soluble	Solid	DI Leach	
400-110906-1 MS	SB-55 (5-7')	Soluble	Solid	DI Leach	
400-110906-1 MSD	SB-55 (5-7')	Soluble	Solid	DI Leach	
400-110906-2	SB-52 (5-6')	Soluble	Solid	DI Leach	
400-110906-3	SB-53 (5-6')	Soluble	Solid	DI Leach	
400-110906-4	MW-8 (7-8')	Soluble	Solid	DI Leach	
400-110906-5	SB-54 (5-6.5')	Soluble	Solid	DI Leach	
400-110906-6	MW-8(A) (7-8')	Soluble	Solid	DI Leach	
LCS 400-275556/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 400-275556/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
MB 400-275556/1-A	Method Blank	Soluble	Solid	DI Leach	

Analysis Batch: 275665

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-110906-1	SB-55 (5-7')	Soluble	Solid	300.0	275556
400-110906-1 MS	SB-55 (5-7')	Soluble	Solid	300.0	275556
400-110906-1 MSD	SB-55 (5-7')	Soluble	Solid	300.0	275556
400-110906-2	SB-52 (5-6')	Soluble	Solid	300.0	275556
400-110906-3	SB-53 (5-6')	Soluble	Solid	300.0	275556
400-110906-4	MW-8 (7-8')	Soluble	Solid	300.0	275556
400-110906-5	SB-54 (5-6.5')	Soluble	Solid	300.0	275556
400-110906-6	MW-8(A) (7-8')	Soluble	Solid	300.0	275556
LCS 400-275556/2-A	Lab Control Sample	Soluble	Solid	300.0	275556
LCSD 400-275556/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	275556
MB 400-275556/1-A	Method Blank	Soluble	Solid	300.0	275556

QC Association Summary

Client: MWH Americas Inc
Project/Site: Jaquez

TestAmerica Job ID: 400-110906-1

General Chemistry

Analysis Batch: 274560

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-110901-A-2 DU	Duplicate	Total/NA	Solid	Moisture	
400-110906-1	SB-55 (5-7')	Total/NA	Solid	Moisture	
400-110906-2	SB-52 (5-6')	Total/NA	Solid	Moisture	
400-110906-3	SB-53 (5-6')	Total/NA	Solid	Moisture	
400-110906-4	MW-8 (7-8')	Total/NA	Solid	Moisture	
400-110906-5	SB-54 (5-6.5')	Total/NA	Solid	Moisture	
400-110906-6	MW-8(A) (7-8')	Total/NA	Solid	Moisture	

Method: 8015B - GRO by 8015B

Lab Sample ID: MB 400-275112/1-A
Matrix: Solid
Analysis Batch: 275116

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 275112

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) C6--C10	<0.10		0.10		mg/Kg		09/18/15 10:00	09/18/15 11:27	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (fid)	*98*		*65 - 125*	*09/18/15 10:00*	*09/18/15 11:27*	*1*

Lab Sample ID: LCS 400-275112/2-A
Matrix: Solid
Analysis Batch: 275116

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 275112

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO) C6--C10			1.00	1.11		mg/Kg		111	62 - 141		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
a,a,a-Trifluorotoluene (fid)	*102*		*65 - 125*

Lab Sample ID: 400-110975-B-20-G MSD
Matrix: Solid
Analysis Batch: 275116

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 275112

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO) C6--C10	<0.094		0.942	1.14		mg/Kg	☼	121	10 - 150	4	32

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
a,a,a-Trifluorotoluene (fid)	*100*		*65 - 125*

Lab Sample ID: 400-110975-B-20-I MS
Matrix: Solid
Analysis Batch: 275116

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 275112

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO) C6--C10	<0.094		0.965	1.09		mg/Kg	☼	113	10 - 150		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
a,a,a-Trifluorotoluene (fid)	*98*		*65 - 125*

Lab Sample ID: MB 400-275117/1-A
Matrix: Solid
Analysis Batch: 275911

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 275117

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) C6--C10	<5.0		5.0		mg/Kg		09/18/15 15:00	09/18/15 20:21	50
Gasoline Range Organics (GRO) C6--C10	<5.0		5.0		mg/Kg		09/18/15 15:00	09/18/15 20:21	50

Method: 8015B - GRO by 8015B (Continued)

Lab Sample ID: MB 400-275117/1-A
Matrix: Solid
Analysis Batch: 275911

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 275117

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid)	105		65 - 125	09/18/15 15:00	09/18/15 20:21	50
a,a,a-Trifluorotoluene (fid)	105		65 - 125	09/18/15 15:00	09/18/15 20:21	50

Lab Sample ID: LCS 400-275117/3-A
Matrix: Solid
Analysis Batch: 275911

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 275117

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO) C6--C10	50.0	67.7		mg/Kg		135	62 - 141
Gasoline Range Organics (GRO) C6--C10	50.0	67.7		mg/Kg		135	62 - 141

Surrogate	LCS %Recovery	LCS Qualifier	Limits
a,a,a-Trifluorotoluene (fid)	101		65 - 125
a,a,a-Trifluorotoluene (fid)	101		65 - 125

Lab Sample ID: 400-110906-6 MS
Matrix: Solid
Analysis Batch: 275912

Client Sample ID: MW-8(A) (7-8')
Prep Type: Total/NA
Prep Batch: 275117

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO) C6--C10	1800		496	2490	E	mg/Kg	☼	132	10 - 150

Surrogate	MS %Recovery	MS Qualifier	Limits
a,a,a-Trifluorotoluene (fid)	78		65 - 125

Lab Sample ID: 400-110906-6 MSD
Matrix: Solid
Analysis Batch: 275912

Client Sample ID: MW-8(A) (7-8')
Prep Type: Total/NA
Prep Batch: 275117

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO) C6--C10	1800		496	2520	E	mg/Kg	☼	138	10 - 150	1	32

Surrogate	MSD %Recovery	MSD Qualifier	Limits
a,a,a-Trifluorotoluene (fid)	79		65 - 125

Lab Sample ID: MB 400-275764/1-A
Matrix: Solid
Analysis Batch: 275765

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 275764

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) C6--C10	<0.10		0.10		mg/Kg		09/23/15 10:00	09/23/15 11:53	1

Method: 8015B - GRO by 8015B (Continued)

Lab Sample ID: MB 400-275764/1-A
Matrix: Solid
Analysis Batch: 275765

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 275764

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid)	102		65 - 125	09/23/15 10:00	09/23/15 11:53	1

Lab Sample ID: LCS 400-275764/3-A
Matrix: Solid
Analysis Batch: 275765

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 275764

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO) C6--C10	1.00	1.04		mg/Kg		104	62 - 141

Surrogate	LCS %Recovery	LCS Qualifier	Limits
a,a,a-Trifluorotoluene (fid)	100		65 - 125

Lab Sample ID: 400-110906-2 MS
Matrix: Solid
Analysis Batch: 275765

Client Sample ID: SB-52 (5-6')
Prep Type: Total/NA
Prep Batch: 275764

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO) C6--C10	1.3	F2 F1	1.10	2.47		mg/Kg	☼	107	10 - 150

Surrogate	MS %Recovery	MS Qualifier	Limits
a,a,a-Trifluorotoluene (fid)	90		65 - 125

Lab Sample ID: 400-110906-2 MSD
Matrix: Solid
Analysis Batch: 275765

Client Sample ID: SB-52 (5-6')
Prep Type: Total/NA
Prep Batch: 275764

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO) C6--C10	1.3	F2 F1	1.11	5.43	F1 F2	mg/Kg	☼	374	10 - 150	75	32

Surrogate	MSD %Recovery	MSD Qualifier	Limits
a,a,a-Trifluorotoluene (fid)	92		65 - 125

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 400-274697/1-A
Matrix: Solid
Analysis Batch: 274676

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 274697

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0010		0.0010	mg/Kg		09/16/15 10:00	09/16/15 12:36	1
Ethylbenzene	<0.0010		0.0010	mg/Kg		09/16/15 10:00	09/16/15 12:36	1
Toluene	<0.0050		0.0050	mg/Kg		09/16/15 10:00	09/16/15 12:36	1
Xylenes, Total	<0.0050		0.0050	mg/Kg		09/16/15 10:00	09/16/15 12:36	1

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: MB 400-274697/1-A
Matrix: Solid
Analysis Batch: 274676

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 274697

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (pid)	95		40 - 150	09/16/15 10:00	09/16/15 12:36	1

Lab Sample ID: LCS 400-274697/2-A
Matrix: Solid
Analysis Batch: 274676

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 274697

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.0500	0.0493		mg/Kg		99	74 - 127
Ethylbenzene	0.0500	0.0486		mg/Kg		97	79 - 131
Toluene	0.0500	0.0485		mg/Kg		97	76 - 127
Xylenes, Total	0.150	0.144		mg/Kg		96	80 - 129

Surrogate	LCS %Recovery	LCS Qualifier	Limits
a,a,a-Trifluorotoluene (pid)	99		40 - 150

Lab Sample ID: 400-110856-E-1-D MS
Matrix: Solid
Analysis Batch: 274676

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 274697

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	<0.0011		0.0540	0.0507		mg/Kg	☼	94	10 - 150
Ethylbenzene	<0.0011		0.0540	0.0489		mg/Kg	☼	91	10 - 150
Toluene	<0.0055		0.0540	0.0492		mg/Kg	☼	91	10 - 150
Xylenes, Total	<0.0055		0.162	0.145		mg/Kg	☼	90	50 - 150

Surrogate	MS %Recovery	MS Qualifier	Limits
a,a,a-Trifluorotoluene (pid)	95		40 - 150

Lab Sample ID: 400-110856-E-1-E MSD
Matrix: Solid
Analysis Batch: 274676

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 274697

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	<0.0011		0.0552	0.0571		mg/Kg	☼	104	10 - 150	12	34
Ethylbenzene	<0.0011		0.0552	0.0508		mg/Kg	☼	92	10 - 150	4	66
Toluene	<0.0055		0.0552	0.0508		mg/Kg	☼	92	10 - 150	3	44
Xylenes, Total	<0.0055		0.165	0.153		mg/Kg	☼	93	50 - 150	5	46

Surrogate	MSD %Recovery	MSD Qualifier	Limits
a,a,a-Trifluorotoluene (pid)	96		40 - 150

Lab Sample ID: MB 400-275117/1-A
Matrix: Solid
Analysis Batch: 275909

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 275117

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.050		0.050	mg/Kg		09/18/15 15:00	09/18/15 20:21	50

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: MB 400-275117/1-A
Matrix: Solid
Analysis Batch: 275909

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 275117

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	<0.050		0.050		mg/Kg		09/18/15 15:00	09/18/15 20:21	50
Toluene	<0.25		0.25		mg/Kg		09/18/15 15:00	09/18/15 20:21	50
Xylenes, Total	<0.25		0.25		mg/Kg		09/18/15 15:00	09/18/15 20:21	50

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (pid)	*99*		*40 - 150*	*09/18/15 15:00*	*09/18/15 20:21*	*50*

Lab Sample ID: LCS 400-275117/2-A
Matrix: Solid
Analysis Batch: 275909

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 275117

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			2.50	2.57		mg/Kg		103	74 - 127		
Ethylbenzene			2.50	2.53		mg/Kg		101	79 - 131		
Toluene			2.50	2.57		mg/Kg		103	76 - 127		
Xylenes, Total			7.50	7.60		mg/Kg		101	80 - 129		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
a,a,a-Trifluorotoluene (pid)	*97*		*40 - 150*

Lab Sample ID: 400-110906-6 MS
Matrix: Solid
Analysis Batch: 275909

Client Sample ID: MW-8(A) (7-8')
Prep Type: Total/NA
Prep Batch: 275117

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene	4.6		24.8	27.8		mg/Kg	☼	93	10 - 150		
Ethylbenzene	12		24.8	39.4		mg/Kg	☼	111	10 - 150		
Toluene	7.0		24.8	30.0		mg/Kg	☼	93	10 - 150		
Xylenes, Total	61		74.4	132		mg/Kg	☼	96	50 - 150		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
a,a,a-Trifluorotoluene (pid)	*84*		*40 - 150*

Lab Sample ID: 400-110906-6 MSD
Matrix: Solid
Analysis Batch: 275909

Client Sample ID: MW-8(A) (7-8')
Prep Type: Total/NA
Prep Batch: 275117

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	4.6		24.8	27.8		mg/Kg	☼	94	10 - 150	0	34
Ethylbenzene	12		24.8	39.4		mg/Kg	☼	111	10 - 150	0	66
Toluene	7.0		24.8	29.9		mg/Kg	☼	92	10 - 150	0	44
Xylenes, Total	61		74.4	133		mg/Kg	☼	97	50 - 150	0	46

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
a,a,a-Trifluorotoluene (pid)	*84*		*40 - 150*

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: MB 400-275764/1-A
Matrix: Solid
Analysis Batch: 275679

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 275764

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0010		0.0010		mg/Kg		09/23/15 10:00	09/23/15 11:53	1
Ethylbenzene	<0.0010		0.0010		mg/Kg		09/23/15 10:00	09/23/15 11:53	1
Toluene	<0.0050		0.0050		mg/Kg		09/23/15 10:00	09/23/15 11:53	1
Xylenes, Total	<0.0050		0.0050		mg/Kg		09/23/15 10:00	09/23/15 11:53	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (pid)	*99*		*40 - 150*	*09/23/15 10:00*	*09/23/15 11:53*	*1*

Lab Sample ID: LCS 400-275764/2-A
Matrix: Solid
Analysis Batch: 275679

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 275764

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			0.0500	0.0453		mg/Kg		91	74 - 127		
Ethylbenzene			0.0500	0.0452		mg/Kg		90	79 - 131		
Toluene			0.0500	0.0453		mg/Kg		91	76 - 127		
Xylenes, Total			0.150	0.134		mg/Kg		90	80 - 129		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
a,a,a-Trifluorotoluene (pid)	*98*		*40 - 150*

Lab Sample ID: 400-110906-2 MS
Matrix: Solid
Analysis Batch: 275679

Client Sample ID: SB-52 (5-6')
Prep Type: Total/NA
Prep Batch: 275764

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene	<0.0011		0.0547	0.0511		mg/Kg	☼	93	10 - 150		
Ethylbenzene	<0.0011		0.0547	0.0504		mg/Kg	☼	90	10 - 150		
Toluene	<0.0056		0.0547	0.0523		mg/Kg	☼	93	10 - 150		
Xylenes, Total	<0.0056		0.164	0.169		mg/Kg	☼	101	50 - 150		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
a,a,a-Trifluorotoluene (pid)	*94*		*40 - 150*

Lab Sample ID: 400-110906-2 MSD
Matrix: Solid
Analysis Batch: 275679

Client Sample ID: SB-52 (5-6')
Prep Type: Total/NA
Prep Batch: 275764

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	<0.0011		0.0559	0.0506		mg/Kg	☼	91	10 - 150	1	34
Ethylbenzene	<0.0011		0.0559	0.0519		mg/Kg	☼	91	10 - 150	3	66
Toluene	<0.0056		0.0559	0.0527		mg/Kg	☼	91	10 - 150	1	44
Xylenes, Total	<0.0056		0.168	0.166		mg/Kg	☼	97	50 - 150	2	46

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
a,a,a-Trifluorotoluene (pid)	*94*		*40 - 150*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 400-274413/17-A
Matrix: Solid
Analysis Batch: 274656

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 274413

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	<10		10		mg/Kg		09/15/15 08:54	09/16/15 12:37	1
Oil Range Organics (C28-C35)	<10		10		mg/Kg		09/15/15 08:54	09/16/15 12:37	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*78*		*27 - 151*	*09/15/15 08:54*	*09/16/15 12:37*	*1*

Lab Sample ID: LCS 400-274413/16-A
Matrix: Solid
Analysis Batch: 274656

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 274413

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Diesel Range Organics [C10-C28]			335	276		mg/Kg		83	63 - 153		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
o-Terphenyl	*78*		*27 - 151*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 400-275556/1-A
Matrix: Solid
Analysis Batch: 275665

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<20		20		mg/Kg			09/23/15 06:53	1

Lab Sample ID: LCS 400-275556/2-A
Matrix: Solid
Analysis Batch: 275665

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride			100	90.1		mg/Kg		90	80 - 120		

Lab Sample ID: LCSD 400-275556/3-A
Matrix: Solid
Analysis Batch: 275665

Client Sample ID: Lab Control Sample Dup
Prep Type: Soluble

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride			100	90.4		mg/Kg		90	80 - 120	0	15

Lab Sample ID: 400-110906-1 MS
Matrix: Solid
Analysis Batch: 275665

Client Sample ID: SB-55 (5-7')
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride	<24		121	112		mg/Kg	☼	88	80 - 120		

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 400-110906-1 MSD
Matrix: Solid
Analysis Batch: 275665

Client Sample ID: SB-55 (5-7')
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	<24		118	111		mg/Kg	☼	89	80 - 120	1	15

Lab Chronicle

Client: MWH Americas Inc
Project/Site: Jaquez

TestAmerica Job ID: 400-110906-1

Client Sample ID: SB-55 (5-7')
Date Collected: 09/09/15 16:20
Date Received: 09/12/15 09:07

Lab Sample ID: 400-110906-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			274560	09/15/15 17:01	LEC	TAL PEN
	Instrument ID: NOEQUIP									

Client Sample ID: SB-55 (5-7')
Date Collected: 09/09/15 16:20
Date Received: 09/12/15 09:07

Lab Sample ID: 400-110906-1
Matrix: Solid
Percent Solids: 81.8

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.43 g	5.0 g	275112	09/18/15 10:00	GRK	TAL PEN
Total/NA	Analysis	8015B		1	5.43 g	5.0 g	275116	09/19/15 03:11	GRK	TAL PEN
	Instrument ID: CH_JOAN									
Total/NA	Prep	5035			5.70 g	5.0 g	274697	09/16/15 10:00	GRK	TAL PEN
Total/NA	Analysis	8021B		1	5.70 g	5.0 g	274676	09/16/15 16:38	GRK	TAL PEN
	Instrument ID: CH_JOAN									
Total/NA	Prep	3546			15.19 g	2.0 mL	274413	09/15/15 08:54	RDT	TAL PEN
Total/NA	Analysis	8015B		1	15.19 g	2.0 mL	274656	09/16/15 13:49	C1M	TAL PEN
	Instrument ID: Eva									
Soluble	Leach	DI Leach			2.59 g	50 mL	275556	09/22/15 17:44	TAJ	TAL PEN
Soluble	Analysis	300.0		1	1 mL		275665	09/23/15 08:02	TAJ	TAL PEN
	Instrument ID: IC2									

Client Sample ID: SB-52 (5-6')
Date Collected: 09/09/15 13:55
Date Received: 09/12/15 09:07

Lab Sample ID: 400-110906-2
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			274560	09/15/15 17:01	LEC	TAL PEN
	Instrument ID: NOEQUIP									

Client Sample ID: SB-52 (5-6')
Date Collected: 09/09/15 13:55
Date Received: 09/12/15 09:07

Lab Sample ID: 400-110906-2
Matrix: Solid
Percent Solids: 87.0

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.13 g	5.0 g	275764	09/23/15 10:00	GRK	TAL PEN
Total/NA	Analysis	8015B		1	5.13 g	5.0 g	275765	09/23/15 13:46	GRK	TAL PEN
	Instrument ID: CH_RITA									
Total/NA	Prep	5035			5.13 g	5.0 g	275764	09/23/15 10:00	GRK	TAL PEN
Total/NA	Analysis	8021B		1	5.13 g	5.0 g	275679	09/23/15 13:46	GRK	TAL PEN
	Instrument ID: CH_RITA									
Total/NA	Prep	3546			15.29 g	2.0 mL	274413	09/15/15 08:54	RDT	TAL PEN
Total/NA	Analysis	8015B		1	15.29 g	2.0 mL	274656	09/16/15 13:59	C1M	TAL PEN
	Instrument ID: Eva									

Client Sample ID: SB-52 (5-6')

Lab Sample ID: 400-110906-2
Date Collected: 09/09/15 13:55
Matrix: Solid
Date Received: 09/12/15 09:07
Percent Solids: 87.0

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			2.56 g	50 mL	275556	09/22/15 17:44	TAJ	TAL PEN
Soluble	Analysis	300.0		1	1 mL		275665	09/23/15 09:10	TAJ	TAL PEN
	Instrument ID: IC2									

Client Sample ID: SB-53 (5-6')

Lab Sample ID: 400-110906-3
Date Collected: 09/09/15 15:05
Matrix: Solid
Date Received: 09/12/15 09:07

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			274560	09/15/15 17:01	LEC	TAL PEN
	Instrument ID: NOEQUIP									

Client Sample ID: SB-53 (5-6')

Lab Sample ID: 400-110906-3
Date Collected: 09/09/15 15:05
Matrix: Solid
Date Received: 09/12/15 09:07
Percent Solids: 84.7

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.63 g	5.0 g	275112	09/18/15 10:00	GRK	TAL PEN
Total/NA	Analysis	8015B		1	5.63 g	5.0 g	275116	09/19/15 03:45	GRK	TAL PEN
	Instrument ID: CH_JOAN									
Total/NA	Prep	5035			5.62 g	5.0 g	274697	09/16/15 10:00	GRK	TAL PEN
Total/NA	Analysis	8021B		1	5.62 g	5.0 g	274676	09/16/15 17:13	GRK	TAL PEN
	Instrument ID: CH_JOAN									
Total/NA	Prep	3546			15.05 g	2.0 mL	274413	09/15/15 08:54	RDT	TAL PEN
Total/NA	Analysis	8015B		1	15.05 g	2.0 mL	274656	09/16/15 14:09	C1M	TAL PEN
	Instrument ID: Eva									
Soluble	Leach	DI Leach			2.52 g	50 mL	275556	09/22/15 17:44	TAJ	TAL PEN
Soluble	Analysis	300.0		1	1 mL		275665	09/23/15 09:33	TAJ	TAL PEN
	Instrument ID: IC2									

Client Sample ID: MW-8 (7-8')

Lab Sample ID: 400-110906-4
Date Collected: 09/10/15 09:30
Matrix: Solid
Date Received: 09/12/15 09:07

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			274560	09/15/15 17:01	LEC	TAL PEN
	Instrument ID: NOEQUIP									

Lab Chronicle

Client: MWH Americas Inc
Project/Site: Jaquez

TestAmerica Job ID: 400-110906-1

Client Sample ID: MW-8 (7-8')

Lab Sample ID: 400-110906-4
Date Collected: 09/10/15 09:30
Matrix: Solid
Date Received: 09/12/15 09:07
Percent Solids: 83.9

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.87 g	5.0 g	275117	09/18/15 15:00	GRK	TAL PEN
Total/NA	Analysis	8015B		250	5.87 g	5.0 g	275911	09/21/15 15:09	GRK	TAL PEN
	Instrument ID: CH_RITA									
Total/NA	Prep	5035			5.87 g	5.0 g	275117	09/18/15 15:00	GRK	TAL PEN
Total/NA	Analysis	8021B		250	5.87 g	5.0 g	275909	09/21/15 15:09	GRK	TAL PEN
	Instrument ID: CH_RITA									
Total/NA	Prep	3546			15.11 g	2.0 mL	274413	09/15/15 08:54	RDT	TAL PEN
Total/NA	Analysis	8015B		1	15.11 g	2.0 mL	274656	09/16/15 14:30	C1M	TAL PEN
	Instrument ID: Eva									
Soluble	Leach	DI Leach			2.52 g	50 mL	275556	09/22/15 17:44	TAJ	TAL PEN
Soluble	Analysis	300.0		1	1 mL		275665	09/23/15 10:41	TAJ	TAL PEN
	Instrument ID: IC2									

Client Sample ID: SB-54 (5-6.5')

Lab Sample ID: 400-110906-5
Date Collected: 09/09/15 15:35
Matrix: Solid
Date Received: 09/12/15 09:07

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			274560	09/15/15 17:01	LEC	TAL PEN
	Instrument ID: NOEQUIP									

Client Sample ID: SB-54 (5-6.5')

Lab Sample ID: 400-110906-5
Date Collected: 09/09/15 15:35
Matrix: Solid
Date Received: 09/12/15 09:07
Percent Solids: 86.1

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.62 g	5.0 g	275117	09/18/15 15:00	GRK	TAL PEN
Total/NA	Analysis	8015B		50	5.62 g	5.0 g	275911	09/18/15 21:45	GRK	TAL PEN
	Instrument ID: CH_RITA									
Total/NA	Prep	5035			4.62 g	5.0 g	275764	09/23/15 10:00	GRK	TAL PEN
Total/NA	Analysis	8021B		1	4.62 g	5.0 g	275679	09/23/15 14:48	GRK	TAL PEN
	Instrument ID: CH_RITA									
Total/NA	Prep	3546			15.10 g	2.0 mL	274413	09/15/15 08:54	RDT	TAL PEN
Total/NA	Analysis	8015B		1	15.10 g	2.0 mL	274656	09/16/15 14:40	C1M	TAL PEN
	Instrument ID: Eva									
Soluble	Leach	DI Leach			2.45 g	50 mL	275556	09/22/15 17:44	TAJ	TAL PEN
Soluble	Analysis	300.0		1	1 mL		275665	09/23/15 11:04	TAJ	TAL PEN
	Instrument ID: IC2									

Lab Chronicle

Client: MWH Americas Inc
Project/Site: Jaquez

TestAmerica Job ID: 400-110906-1

Client Sample ID: MW-8(A) (7-8')

Date Collected: 09/10/15 13:10
Date Received: 09/12/15 09:07

Lab Sample ID: 400-110906-6

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			274560	09/15/15 17:01	LEC	TAL PEN
	Instrument ID: NOEQUIP									

Client Sample ID: MW-8(A) (7-8')

Date Collected: 09/10/15 13:10
Date Received: 09/12/15 09:07

Lab Sample ID: 400-110906-6

Matrix: Solid
Percent Solids: 84.8

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.94 g	5.0 g	275117	09/18/15 15:00	GRK	TAL PEN
Total/NA	Analysis	8015B		500	5.94 g	5.0 g	275911	09/21/15 14:41	GRK	TAL PEN
	Instrument ID: CH_RITA									
Total/NA	Prep	5035			5.94 g	5.0 g	275117	09/18/15 15:00	GRK	TAL PEN
Total/NA	Analysis	8021B		500	5.94 g	5.0 g	275909	09/21/15 14:41	GRK	TAL PEN
	Instrument ID: CH_RITA									
Total/NA	Prep	3546			15.45 g	2.0 mL	274413	09/15/15 08:54	RDT	TAL PEN
Total/NA	Analysis	8015B		1	15.45 g	2.0 mL	274656	09/16/15 14:50	C1M	TAL PEN
	Instrument ID: Eva									
Soluble	Leach	DI Leach			2.60 g	50 mL	275556	09/22/15 17:44	TAJ	TAL PEN
Soluble	Analysis	300.0		1	1 mL		275665	09/23/15 11:27	TAJ	TAL PEN
	Instrument ID: IC2									

Laboratory References:

TAL PEN = TestAmerica Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

Certification Summary

Client: MWH Americas Inc
Project/Site: Jaquez

TestAmerica Job ID: 400-110906-1

Laboratory: TestAmerica Pensacola

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Alabama	State Program	4	40150	01-31-16
Arizona	State Program	9	AZ0710	01-11-17
Arkansas DEQ	State Program	6	88-0689	09-01-16
Florida	NELAP	4	E81010	06-30-16
Georgia	State Program	4	N/A	06-30-16
Illinois	NELAP	5	200041	10-09-16
Iowa	State Program	7	367	07-31-16
Kansas	NELAP	7	E-10253	01-31-16 *
Kentucky (UST)	State Program	4	53	06-30-16
Kentucky (WW)	State Program	4	98030	12-31-16
Louisiana	NELAP	6	30976	06-30-16
Maryland	State Program	3	233	09-30-16
Massachusetts	State Program	1	M-FL094	06-30-16
Michigan	State Program	5	9912	06-30-16
New Jersey	NELAP	2	FL006	06-30-16
North Carolina (WW/SW)	State Program	4	314	12-31-15 *
Oklahoma	State Program	6	9810	08-31-16
Pennsylvania	NELAP	3	68-00467	01-31-16
Rhode Island	State Program	1	LAO00307	12-30-16
South Carolina	State Program	4	96026	06-30-16
Tennessee	State Program	4	TN02907	06-30-16
Texas	NELAP	6	T104704286-15-9	09-30-16
USDA	Federal		P330-13-00193	07-01-16
Virginia	NELAP	3	460166	06-14-16
West Virginia DEP	State Program	3	136	06-30-16

* Certification renewal pending - certification considered valid.

Method Summary

Client: MWH Americas Inc
Project/Site: Jaquez

TestAmerica Job ID: 400-110906-1

Method	Method Description	Protocol	Laboratory
8015B	GRO by 8015B	SW846	TAL PEN
8021B	Volatile Organic Compounds (GC)	SW846	TAL PEN
8015B	Diesel Range Organics (DRO) (GC)	SW846	TAL PEN
300.0	Anions, Ion Chromatography	MCAWW	TAL PEN
Moisture	Percent Moisture	EPA	TAL PEN

Protocol References:

EPA = US Environmental Protection Agency

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL PEN = TestAmerica Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

TestAmerica Pensacola
3355 McLemore Drive
Pensacola, FL 32514
Phone (850) 474-1001 Fax (850) 478-2671

Chain of Custody Record

Client Information	Sampler: Chris Lee / Brad Barton	Lab PM: Edwards, Marty P	Carrier Tracking No(s):
Client Contact: Christopher Lee	Phone:	E-Mail: marty.edwards@testamericainc.com	
Company: MWH Americas Inc		Analysis Requested	
Address: 1560 Broadway Suite 1800	Due Date Requested: HOLD		
City: Denver	TAT Requested (days): STANDARD		
State, Zip: CO, 80202	PO #: Purchase Order Requested		
Phone: 303-291-2239(Tel)	WO#: ARFF PRG- MWH-08-18-15-CWO-61		
Email: christopher.c.lee@mwhglobal.com / STEVE.VARGA@MWHGLOBAL.COM	Project #: 40005479		
Project Name: Jaquez	SSOW#:		
Site:			

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	8015B_DRO, 9056_ORGFM_28D	8021B - 8021 ETEX/ 8015 GRO
SB-55(5-7')	9/9/15	1620	G	S	1	1
SB-52(5-6')	9/9/15	1355	G	S	1	1
SB-53(5-6')	9/9/15	1505	G	S	1	1
MW-8(7-8')	9/10/15	930	G	S	1	1
SB-54(5-6.5')	9/9/15	1535	G	S	1	1
~~MW-8~~ SV 9/14/15	~~9/10/15~~	~~930~~	~~G~~	~~S~~	1	1 SV 9/14/15
MW-8(A) (7-8') SV 9/14/15	9/10/15	1310	G	S	1	1

400-170906 COC

Possible Hazard Identification
[X] Non-Hazard [ ] Flammable [ ] Skin Irritant [ ] Poison B [ ] Unknown [ ] Radiological

Sample Disposal (A fee may be assessed if samples are retai
[ ] Return To Client [X] Disposal By Lab [ ] Arc

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:
Relinquished by:	Date/Time:	Company	Received by:
			Date/Time:

Login Sample Receipt Checklist

Client: MWH Americas Inc

Job Number: 400-110906-1

Login Number: 110906
List Number: 1
Creator: Crawford, Lauren E

List Source: TestAmerica Pensacola

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	1.1°C IR-5
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	False	Refer to Job Narrative for details.
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

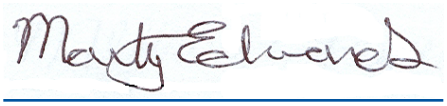
ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Pensacola
3355 McLemore Drive
Pensacola, FL 32514
Tel: (850)474-1001

TestAmerica Job ID: 400-110979-1
Client Project/Site: Jaquez
Revision: 1

For:
MWH Americas Inc
11153 Aurora Avenue
Des Moines, Iowa 50322-7904

Attn: Steve Varsa



Authorized for release by:
1/25/2016 4:45:03 PM

Marty Edwards, Manager of Project Management
(850)474-1001
marty.edwards@testamericainc.com

Table of Contents

Client: MWH Americas Inc
Project/Site: Jaquez

TestAmerica Job ID: 400-110979-1

Qualifiers

GC Semi VOA

Qualifier	Qualifier Description
F2	MS/MSD RPD exceeds control limits

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Job ID: 400-110979-1

Laboratory: TestAmerica Pensacola

Narrative

Job Narrative
400-110979-1

Comments
No additional comments.

Receipt
The samples were received on 9/15/2015 9:31 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.6º C.

Revised Report
The report was revised to change the analyte descriptions for the 8015 DRO/ORO analysis.

HPLC/IC
Method 300.0: The method blank for preparation batch 400-275900 and analytical batch 400-275998 contained Chloride above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC VOA
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

GC Semi VOA
Method 8015B: The matrix spike / matrix spike duplicate (MS/MSD) precision for preparation batch 400-274599 and analytical batch 400-274849 was outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory control sample duplicate (LCS/LCSD) precision was within acceptance limits.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Organic Prep
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Detection Summary

Client: MWH Americas Inc
Project/Site: Jaquez

TestAmerica Job ID: 400-110979-1

Client Sample ID: MW-9 16-17.5 — Lab Sample ID: 400-110979-1

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Gasoline Range Organics (GRO) C6--C10	960		24		mg/Kg	250	☼	8015B	Total/NA
Benzene	1.5		0.24		mg/Kg	250	☼	8021B	Total/NA
Ethylbenzene	5.8		0.24		mg/Kg	250	☼	8021B	Total/NA
Toluene	3.0		1.2		mg/Kg	250	☼	8021B	Total/NA
Xylenes, Total	24		1.2		mg/Kg	250	☼	8021B	Total/NA
Diesel Range Organics [C10-C28]	370		13		mg/Kg	1	☼	8015B	Total/NA
Oil Range Organics (C28-C35)	57		13		mg/Kg	1	☼	8015B	Total/NA

Client Sample ID: MW-12 5.5-7.5 — Lab Sample ID: 400-110979-2

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Gasoline Range Organics (GRO) C6--C10	170		4.0		mg/Kg	50	☼	8015B	Total/NA
Benzene	0.33		0.040		mg/Kg	50	☼	8021B	Total/NA
Ethylbenzene	0.69		0.040		mg/Kg	50	☼	8021B	Total/NA
Toluene	0.50		0.20		mg/Kg	50	☼	8021B	Total/NA
Xylenes, Total	3.7		0.20		mg/Kg	50	☼	8021B	Total/NA
Diesel Range Organics [C10-C28]	19		12		mg/Kg	1	☼	8015B	Total/NA

Client Sample ID: SB-64 10-12 — Lab Sample ID: 400-110979-3

No Detections.

Client Sample ID: SB-61 6-7 — Lab Sample ID: 400-110979-4

No Detections.

Client Sample ID: SB-60 4-5 — Lab Sample ID: 400-110979-5

No Detections.

Client Sample ID: SB-59 4-5 — Lab Sample ID: 400-110979-6

No Detections.

Client Sample ID: SB-58 3-4 — Lab Sample ID: 400-110979-7

No Detections.

Client Sample ID: SB-57 5-6 — Lab Sample ID: 400-110979-8

No Detections.

Client Sample ID: SB-56 2.5-4.5 — Lab Sample ID: 400-110979-9

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Gasoline Range Organics (GRO) C6--C10	0.67		0.12		mg/Kg	1	☼	8015B	Total/NA
Xylenes, Total	0.0063		0.0061		mg/Kg	1	☼	8021B	Total/NA
Diesel Range Organics [C10-C28]	35		14		mg/Kg	1	☼	8015B	Total/NA
Oil Range Organics (C28-C35)	17		14		mg/Kg	1	☼	8015B	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: MWH Americas Inc
Project/Site: Jaquez

TestAmerica Job ID: 400-110979-1

Client Sample ID: SB-72 6-7 — Lab Sample ID: 400-110979-10

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Gasoline Range Organics (GRO) C6--C10	140		5.4		mg/Kg	50	☼	8015B	Total/NA
Benzene	0.32		0.054		mg/Kg	50	☼	8021B	Total/NA
Ethylbenzene	0.43		0.054		mg/Kg	50	☼	8021B	Total/NA
Toluene	0.27		0.27		mg/Kg	50	☼	8021B	Total/NA
Xylenes, Total	2.2		0.27		mg/Kg	50	☼	8021B	Total/NA
Diesel Range Organics [C10-C28]	15		13		mg/Kg	1	☼	8015B	Total/NA

Client Sample ID: SB-49 3-4 — Lab Sample ID: 400-110979-11

No Detections.

Client Sample ID: SB-50 4-5 — Lab Sample ID: 400-110979-12

No Detections.

Client Sample ID: SB-51 5-6 — Lab Sample ID: 400-110979-13

No Detections.

Client Sample ID: SB-42 6.8-7.8 — Lab Sample ID: 400-110979-14

No Detections.

Client Sample ID: SB-38 6.5-7.5 — Lab Sample ID: 400-110979-15

No Detections.

Client Sample ID: SB-32 3-4 — Lab Sample ID: 400-110979-16

No Detections.

Client Sample ID: SB-70 11-12 — Lab Sample ID: 400-110979-17

No Detections.

Client Sample ID: SB-69 10.6-11.6 — Lab Sample ID: 400-110979-18

No Detections.

Client Sample ID: SB-71 11-12 — Lab Sample ID: 400-110979-19

No Detections.

This Detection Summary does not include radiochemical test results.

Sample Summary

Client: MWH Americas Inc
Project/Site: Jaquez

TestAmerica Job ID: 400-110979-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-110979-1	MW-9 16-17.5	Solid	09/11/15 14:20	09/15/15 09:31
400-110979-2	MW-12 5.5-7.5	Solid	09/11/15 10:45	09/15/15 09:31
400-110979-3	SB-64 10-12	Solid	09/11/15 16:10	09/15/15 09:31
400-110979-4	SB-61 6-7	Solid	09/12/15 09:30	09/15/15 09:31
400-110979-5	SB-60 4-5	Solid	09/12/15 10:10	09/15/15 09:31
400-110979-6	SB-59 4-5	Solid	09/12/15 10:40	09/15/15 09:31
400-110979-7	SB-58 3-4	Solid	09/12/15 11:15	09/15/15 09:31
400-110979-8	SB-57 5-6	Solid	09/12/15 13:00	09/15/15 09:31
400-110979-9	SB-56 2.5-4.5	Solid	09/12/15 13:30	09/15/15 09:31
400-110979-10	SB-72 6-7	Solid	09/12/15 14:40	09/15/15 09:31
400-110979-11	SB-49 3-4	Solid	09/12/15 15:25	09/15/15 09:31
400-110979-12	SB-50 4-5	Solid	09/12/15 16:25	09/15/15 09:31
400-110979-13	SB-51 5-6	Solid	09/13/15 09:50	09/15/15 09:31
400-110979-14	SB-42 6.8-7.8	Solid	09/13/15 10:35	09/15/15 09:31
400-110979-15	SB-38 6.5-7.5	Solid	09/13/15 11:20	09/15/15 09:31
400-110979-16	SB-32 3-4	Solid	09/13/15 12:25	09/15/15 09:31
400-110979-17	SB-70 11-12	Solid	09/13/15 14:40	09/15/15 09:31
400-110979-18	SB-69 10.6-11.6	Solid	09/13/15 15:35	09/15/15 09:31
400-110979-19	SB-71 11-12	Solid	09/13/15 16:15	09/15/15 09:31

Client Sample Results

Client: MWH Americas Inc
Project/Site: Jaquez

TestAmerica Job ID: 400-110979-1

Client Sample ID: MW-9 16-17.5

Date Collected: 09/11/15 14:20
Date Received: 09/15/15 09:31

Lab Sample ID: 400-110979-1

Matrix: Solid
Percent Solids: 76.8

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) C6--C10	960		24		mg/Kg	☼	09/21/15 11:00	09/22/15 12:54	250

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (fid)	*81*		*65 - 125*	*09/21/15 11:00*	*09/22/15 12:54*	*250*

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	1.5		0.24		mg/Kg	☼	09/21/15 11:00	09/22/15 12:54	250
Ethylbenzene	5.8		0.24		mg/Kg	☼	09/21/15 11:00	09/22/15 12:54	250
Toluene	3.0		1.2		mg/Kg	☼	09/21/15 11:00	09/22/15 12:54	250
Xylenes, Total	24		1.2		mg/Kg	☼	09/21/15 11:00	09/22/15 12:54	250

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (pid)	*105*		*40 - 150*	*09/21/15 11:00*	*09/22/15 12:54*	*250*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	370		13		mg/Kg	☼	09/16/15 07:29	09/17/15 21:03	1
Oil Range Organics (C28-C35)	57		13		mg/Kg	☼	09/16/15 07:29	09/17/15 21:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*87*		*27 - 151*	*09/16/15 07:29*	*09/17/15 21:03*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<25		25		mg/Kg	☼		09/24/15 19:43	1

Client Sample ID: MW-12 5.5-7.5

Date Collected: 09/11/15 10:45
Date Received: 09/15/15 09:31

Lab Sample ID: 400-110979-2

Matrix: Solid
Percent Solids: 84.4

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) C6--C10	170		4.0		mg/Kg	☼	09/21/15 11:00	09/22/15 13:21	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (fid)	*80*		*65 - 125*	*09/21/15 11:00*	*09/22/15 13:21*	*50*

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.33		0.040		mg/Kg	☼	09/21/15 11:00	09/22/15 13:21	50
Ethylbenzene	0.69		0.040		mg/Kg	☼	09/21/15 11:00	09/22/15 13:21	50
Toluene	0.50		0.20		mg/Kg	☼	09/21/15 11:00	09/22/15 13:21	50
Xylenes, Total	3.7		0.20		mg/Kg	☼	09/21/15 11:00	09/22/15 13:21	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (pid)	*100*		*40 - 150*	*09/21/15 11:00*	*09/22/15 13:21*	*50*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	19		12		mg/Kg	☼	09/16/15 07:29	09/17/15 21:27	1
Oil Range Organics (C28-C35)	<12		12		mg/Kg	☼	09/16/15 07:29	09/17/15 21:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*94*		*27 - 151*	*09/16/15 07:29*	*09/17/15 21:27*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<24		24		mg/Kg	☼		09/24/15 20:06	1

Client: MWH Americas Inc
Project/Site: Jaquez

TestAmerica Job ID: 400-110979-1

Client Sample ID: SB-64 10-12
Date Collected: 09/11/15 16:10
Date Received: 09/15/15 09:31

Lab Sample ID: 400-110979-3
Matrix: Solid
Percent Solids: 73.5

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) C6--C10	<0.13		0.13		mg/Kg	☼	09/23/15 10:00	09/23/15 15:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (fid)	*100*		*65 - 125*	*09/23/15 10:00*	*09/23/15 15:58*	*1*

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0013		0.0013		mg/Kg	☼	09/23/15 10:00	09/23/15 15:58	1
Ethylbenzene	<0.0013		0.0013		mg/Kg	☼	09/23/15 10:00	09/23/15 15:58	1
Toluene	<0.0063		0.0063		mg/Kg	☼	09/23/15 10:00	09/23/15 15:58	1
Xylenes, Total	<0.0063		0.0063		mg/Kg	☼	09/23/15 10:00	09/23/15 15:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (pid)	*92*		*40 - 150*	*09/23/15 10:00*	*09/23/15 15:58*	*1*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	<14		14		mg/Kg	☼	09/16/15 07:29	09/17/15 21:52	1
Oil Range Organics (C28-C35)	<14		14		mg/Kg	☼	09/16/15 07:29	09/17/15 21:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*97*		*27 - 151*	*09/16/15 07:29*	*09/17/15 21:52*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<27		27		mg/Kg	☼		09/24/15 20:29	1

Client: MWH Americas Inc
Project/Site: Jaquez

TestAmerica Job ID: 400-110979-1

Client Sample ID: SB-61 6-7
Date Collected: 09/12/15 09:30
Date Received: 09/15/15 09:31

Lab Sample ID: 400-110979-4
Matrix: Solid
Percent Solids: 79.2

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) C6--C10	<0.13		0.13		mg/Kg	☼	09/23/15 10:00	09/23/15 16:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (fid)	*100*		*65 - 125*	*09/23/15 10:00*	*09/23/15 16:32*	*1*

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0013		0.0013		mg/Kg	☼	09/23/15 10:00	09/23/15 16:32	1
Ethylbenzene	<0.0013		0.0013		mg/Kg	☼	09/23/15 10:00	09/23/15 16:32	1
Toluene	<0.0067		0.0067		mg/Kg	☼	09/23/15 10:00	09/23/15 16:32	1
Xylenes, Total	<0.0067		0.0067		mg/Kg	☼	09/23/15 10:00	09/23/15 16:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (pid)	*98*		*40 - 150*	*09/23/15 10:00*	*09/23/15 16:32*	*1*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	<12		12		mg/Kg	☼	09/16/15 07:29	09/17/15 22:17	1
Oil Range Organics (C28-C35)	<12		12		mg/Kg	☼	09/16/15 07:29	09/17/15 22:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*98*		*27 - 151*	*09/16/15 07:29*	*09/17/15 22:17*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<26		26		mg/Kg	☼		09/24/15 20:52	1

Client Sample ID: SB-60 4-5

Date Collected: 09/12/15 10:10
Date Received: 09/15/15 09:31

Lab Sample ID: 400-110979-5

Matrix: Solid
Percent Solids: 85.9

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) C6--C10	<0.12		0.12		mg/Kg	☼	09/23/15 10:00	09/23/15 17:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (fid)	*100*		*65 - 125*	*09/23/15 10:00*	*09/23/15 17:07*	*1*

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0012		0.0012		mg/Kg	☼	09/23/15 10:00	09/23/15 17:07	1
Ethylbenzene	<0.0012		0.0012		mg/Kg	☼	09/23/15 10:00	09/23/15 17:07	1
Toluene	<0.0058		0.0058		mg/Kg	☼	09/23/15 10:00	09/23/15 17:07	1
Xylenes, Total	<0.0058		0.0058		mg/Kg	☼	09/23/15 10:00	09/23/15 17:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (pid)	*97*		*40 - 150*	*09/23/15 10:00*	*09/23/15 17:07*	*1*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	<11		11		mg/Kg	☼	09/16/15 07:29	09/17/15 22:41	1
Oil Range Organics (C28-C35)	<11		11		mg/Kg	☼	09/16/15 07:29	09/17/15 22:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*87*		*27 - 151*	*09/16/15 07:29*	*09/17/15 22:41*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<23		23		mg/Kg	☼		09/24/15 21:14	1

Client Sample ID: SB-59 4-5

Date Collected: 09/12/15 10:40
Date Received: 09/15/15 09:31

Lab Sample ID: 400-110979-6

Matrix: Solid
Percent Solids: 90.3

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) C6--C10	<0.10		0.10		mg/Kg	☼	09/23/15 10:00	09/23/15 17:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (fid)	*99*		*65 - 125*	*09/23/15 10:00*	*09/23/15 17:42*	*1*

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0010		0.0010		mg/Kg	☼	09/23/15 10:00	09/23/15 17:42	1
Ethylbenzene	<0.0010		0.0010		mg/Kg	☼	09/23/15 10:00	09/23/15 17:42	1
Toluene	<0.0051		0.0051		mg/Kg	☼	09/23/15 10:00	09/23/15 17:42	1
Xylenes, Total	<0.0051		0.0051		mg/Kg	☼	09/23/15 10:00	09/23/15 17:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (pid)	*96*		*40 - 150*	*09/23/15 10:00*	*09/23/15 17:42*	*1*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	<11		11		mg/Kg	☼	09/16/15 07:29	09/17/15 23:06	1
Oil Range Organics (C28-C35)	<11		11		mg/Kg	☼	09/16/15 07:29	09/17/15 23:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*91*		*27 - 151*	*09/16/15 07:29*	*09/17/15 23:06*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<23		23		mg/Kg	☼		09/24/15 21:37	1

Client: MWH Americas Inc
Project/Site: Jaquez

TestAmerica Job ID: 400-110979-1

Client Sample ID: SB-58 3-4
Date Collected: 09/12/15 11:15
Date Received: 09/15/15 09:31

Lab Sample ID: 400-110979-7
Matrix: Solid
Percent Solids: 80.1

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) C6--C10	<0.13		0.13		mg/Kg	☼	09/23/15 10:00	09/23/15 18:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (fid)	*100*		*65 - 125*	*09/23/15 10:00*	*09/23/15 18:16*	*1*

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0013		0.0013		mg/Kg	☼	09/23/15 10:00	09/23/15 18:16	1
Ethylbenzene	<0.0013		0.0013		mg/Kg	☼	09/23/15 10:00	09/23/15 18:16	1
Toluene	<0.0065		0.0065		mg/Kg	☼	09/23/15 10:00	09/23/15 18:16	1
Xylenes, Total	<0.0065		0.0065		mg/Kg	☼	09/23/15 10:00	09/23/15 18:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (pid)	*94*		*40 - 150*	*09/23/15 10:00*	*09/23/15 18:16*	*1*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	<12		12		mg/Kg	☼	09/16/15 07:29	09/17/15 23:30	1
Oil Range Organics (C28-C35)	<12		12		mg/Kg	☼	09/16/15 07:29	09/17/15 23:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*89*		*27 - 151*	*09/16/15 07:29*	*09/17/15 23:30*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<26		26		mg/Kg	☼		09/24/15 22:00	1

Client: MWH Americas Inc
Project/Site: Jaquez

TestAmerica Job ID: 400-110979-1

Client Sample ID: SB-57 5-6

Date Collected: 09/12/15 13:00
Date Received: 09/15/15 09:31

Lab Sample ID: 400-110979-8

Matrix: Solid
Percent Solids: 83.3

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) C6--C10	<0.11		0.11		mg/Kg	☼	09/23/15 10:00	09/23/15 18:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (fid)	*101*		*65 - 125*	*09/23/15 10:00*	*09/23/15 18:51*	*1*

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0011		0.0011		mg/Kg	☼	09/23/15 10:00	09/23/15 18:51	1
Ethylbenzene	<0.0011		0.0011		mg/Kg	☼	09/23/15 10:00	09/23/15 18:51	1
Toluene	<0.0055		0.0055		mg/Kg	☼	09/23/15 10:00	09/23/15 18:51	1
Xylenes, Total	<0.0055		0.0055		mg/Kg	☼	09/23/15 10:00	09/23/15 18:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (pid)	*97*		*40 - 150*	*09/23/15 10:00*	*09/23/15 18:51*	*1*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	<12		12		mg/Kg	☼	09/16/15 07:29	09/17/15 23:55	1
Oil Range Organics (C28-C35)	<12		12		mg/Kg	☼	09/16/15 07:29	09/17/15 23:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*93*		*27 - 151*	*09/16/15 07:29*	*09/17/15 23:55*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<24		24		mg/Kg	☼		09/24/15 23:08	1

Client: MWH Americas Inc
Project/Site: Jaquez

TestAmerica Job ID: 400-110979-1

Client Sample ID: SB-56 2.5-4.5
Date Collected: 09/12/15 13:30
Date Received: 09/15/15 09:31

Lab Sample ID: 400-110979-9
Matrix: Solid
Percent Solids: 69.3

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) C6--C10	0.67		0.12		mg/Kg	☼	09/23/15 10:00	09/23/15 21:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (fid)	*98*		*65 - 125*	*09/23/15 10:00*	*09/23/15 21:10*	*1*

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0012		0.0012		mg/Kg	☼	09/23/15 10:00	09/23/15 21:10	1
Ethylbenzene	<0.0012		0.0012		mg/Kg	☼	09/23/15 10:00	09/23/15 21:10	1
Toluene	<0.0061		0.0061		mg/Kg	☼	09/23/15 10:00	09/23/15 21:10	1
Xylenes, Total	0.0063		0.0061		mg/Kg	☼	09/23/15 10:00	09/23/15 21:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (pid)	*93*		*40 - 150*	*09/23/15 10:00*	*09/23/15 21:10*	*1*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	35		14		mg/Kg	☼	09/16/15 07:29	09/18/15 00:19	1
Oil Range Organics (C28-C35)	17		14		mg/Kg	☼	09/16/15 07:29	09/18/15 00:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*87*		*27 - 151*	*09/16/15 07:29*	*09/18/15 00:19*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<29		29		mg/Kg	☼		09/24/15 23:31	1

Client: MWH Americas Inc
Project/Site: Jaquez

TestAmerica Job ID: 400-110979-1

Client Sample ID: SB-72 6-7

Date Collected: 09/12/15 14:40
Date Received: 09/15/15 09:31

Lab Sample ID: 400-110979-10

Matrix: Solid
Percent Solids: 76.3

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) C6--C10	140		5.4		mg/Kg	☼	09/21/15 11:00	09/21/15 23:11	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (fid)	*85*		*65 - 125*	*09/21/15 11:00*	*09/21/15 23:11*	*50*

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.32		0.054		mg/Kg	☼	09/21/15 11:00	09/21/15 23:11	50
Ethylbenzene	0.43		0.054		mg/Kg	☼	09/21/15 11:00	09/21/15 23:11	50
Toluene	0.27		0.27		mg/Kg	☼	09/21/15 11:00	09/21/15 23:11	50
Xylenes, Total	2.2		0.27		mg/Kg	☼	09/21/15 11:00	09/21/15 23:11	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (pid)	*101*		*40 - 150*	*09/21/15 11:00*	*09/21/15 23:11*	*50*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	15		13		mg/Kg	☼	09/16/15 07:29	09/18/15 00:44	1
Oil Range Organics (C28-C35)	<13		13		mg/Kg	☼	09/16/15 07:29	09/18/15 00:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*85*		*27 - 151*	*09/16/15 07:29*	*09/18/15 00:44*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<26		26		mg/Kg	☼		09/24/15 23:54	1

Client: MWH Americas Inc
Project/Site: Jaquez

TestAmerica Job ID: 400-110979-1

Client Sample ID: SB-49 3-4
Date Collected: 09/12/15 15:25
Date Received: 09/15/15 09:31

Lab Sample ID: 400-110979-11
Matrix: Solid
Percent Solids: 85.2

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) C6--C10	<0.11		0.11		mg/Kg	☼	09/23/15 10:00	09/23/15 21:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (fid)	*100*		*65 - 125*	*09/23/15 10:00*	*09/23/15 21:45*	*1*

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0011		0.0011		mg/Kg	☼	09/23/15 10:00	09/23/15 21:45	1
Ethylbenzene	<0.0011		0.0011		mg/Kg	☼	09/23/15 10:00	09/23/15 21:45	1
Toluene	<0.0056		0.0056		mg/Kg	☼	09/23/15 10:00	09/23/15 21:45	1
Xylenes, Total	<0.0056		0.0056		mg/Kg	☼	09/23/15 10:00	09/23/15 21:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (pid)	*94*		*40 - 150*	*09/23/15 10:00*	*09/23/15 21:45*	*1*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	<12		12		mg/Kg	☼	09/16/15 07:29	09/18/15 01:33	1
Oil Range Organics (C28-C35)	<12		12		mg/Kg	☼	09/16/15 07:29	09/18/15 01:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*79*		*27 - 151*	*09/16/15 07:29*	*09/18/15 01:33*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<23		23		mg/Kg	☼		09/25/15 00:17	1

Client: MWH Americas Inc
Project/Site: Jaquez

TestAmerica Job ID: 400-110979-1

Client Sample ID: SB-50 4-5
Date Collected: 09/12/15 16:25
Date Received: 09/15/15 09:31

Lab Sample ID: 400-110979-12
Matrix: Solid
Percent Solids: 75.9

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) C6--C10	<0.12		0.12		mg/Kg	☼	09/23/15 10:00	09/23/15 22:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (fid)	*99*		*65 - 125*	*09/23/15 10:00*	*09/23/15 22:19*	*1*

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0012		0.0012		mg/Kg	☼	09/23/15 10:00	09/23/15 22:19	1
Ethylbenzene	<0.0012		0.0012		mg/Kg	☼	09/23/15 10:00	09/23/15 22:19	1
Toluene	<0.0062		0.0062		mg/Kg	☼	09/23/15 10:00	09/23/15 22:19	1
Xylenes, Total	<0.0062		0.0062		mg/Kg	☼	09/23/15 10:00	09/23/15 22:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (pid)	*95*		*40 - 150*	*09/23/15 10:00*	*09/23/15 22:19*	*1*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	<13		13		mg/Kg	☼	09/16/15 07:29	09/18/15 01:57	1
Oil Range Organics (C28-C35)	<13		13		mg/Kg	☼	09/16/15 07:29	09/18/15 01:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*78*		*27 - 151*	*09/16/15 07:29*	*09/18/15 01:57*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<27		27		mg/Kg	☼		09/25/15 00:40	1

Client: MWH Americas Inc
Project/Site: Jaquez

TestAmerica Job ID: 400-110979-1

Client Sample ID: SB-51 5-6
Date Collected: 09/13/15 09:50
Date Received: 09/15/15 09:31

Lab Sample ID: 400-110979-13
Matrix: Solid
Percent Solids: 77.6

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) C6--C10	<0.12		0.12		mg/Kg	☼	09/23/15 10:00	09/23/15 22:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (fid)	*100*		*65 - 125*	*09/23/15 10:00*	*09/23/15 22:54*	*1*

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0012		0.0012		mg/Kg	☼	09/23/15 10:00	09/23/15 22:54	1
Ethylbenzene	<0.0012		0.0012		mg/Kg	☼	09/23/15 10:00	09/23/15 22:54	1
Toluene	<0.0059		0.0059		mg/Kg	☼	09/23/15 10:00	09/23/15 22:54	1
Xylenes, Total	<0.0059		0.0059		mg/Kg	☼	09/23/15 10:00	09/23/15 22:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (pid)	*91*		*40 - 150*	*09/23/15 10:00*	*09/23/15 22:54*	*1*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	<13	F2	13		mg/Kg	☼	09/16/15 07:29	09/18/15 02:22	1
Oil Range Organics (C28-C35)	<13		13		mg/Kg	☼	09/16/15 07:29	09/18/15 02:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*95*		*27 - 151*	*09/16/15 07:29*	*09/18/15 02:22*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<25		25		mg/Kg	☼		09/25/15 01:03	1

Client: MWH Americas Inc
Project/Site: Jaquez

TestAmerica Job ID: 400-110979-1

Client Sample ID: SB-42 6.8-7.8
Date Collected: 09/13/15 10:35
Date Received: 09/15/15 09:31

Lab Sample ID: 400-110979-14
Matrix: Solid
Percent Solids: 90.7

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) C6--C10	<0.11		0.11		mg/Kg	☼	09/23/15 10:00	09/24/15 03:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (fid)	*99*		*65 - 125*	*09/23/15 10:00*	*09/24/15 03:30*	*1*

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0011		0.0011		mg/Kg	☼	09/23/15 10:00	09/24/15 03:30	1
Ethylbenzene	<0.0011		0.0011		mg/Kg	☼	09/23/15 10:00	09/24/15 03:30	1
Toluene	<0.0054		0.0054		mg/Kg	☼	09/23/15 10:00	09/24/15 03:30	1
Xylenes, Total	<0.0054		0.0054		mg/Kg	☼	09/23/15 10:00	09/24/15 03:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (pid)	*96*		*40 - 150*	*09/23/15 10:00*	*09/24/15 03:30*	*1*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	<11		11		mg/Kg	☼	09/16/15 07:29	09/18/15 03:35	1
Oil Range Organics (C28-C35)	<11		11		mg/Kg	☼	09/16/15 07:29	09/18/15 03:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*69*		*27 - 151*	*09/16/15 07:29*	*09/18/15 03:35*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<22		22		mg/Kg	☼		09/25/15 02:11	1

Client: MWH Americas Inc
Project/Site: Jaquez

TestAmerica Job ID: 400-110979-1

Client Sample ID: SB-38 6.5-7.5
Date Collected: 09/13/15 11:20
Date Received: 09/15/15 09:31

Lab Sample ID: 400-110979-15
Matrix: Solid
Percent Solids: 89.5

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) C6--C10	<0.11		0.11		mg/Kg	☼	09/23/15 10:00	09/24/15 04:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (fid)	*99*		*65 - 125*	*09/23/15 10:00*	*09/24/15 04:05*	*1*

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0011		0.0011		mg/Kg	☼	09/23/15 10:00	09/24/15 04:05	1
Ethylbenzene	<0.0011		0.0011		mg/Kg	☼	09/23/15 10:00	09/24/15 04:05	1
Toluene	<0.0053		0.0053		mg/Kg	☼	09/23/15 10:00	09/24/15 04:05	1
Xylenes, Total	<0.0053		0.0053		mg/Kg	☼	09/23/15 10:00	09/24/15 04:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (pid)	*94*		*40 - 150*	*09/23/15 10:00*	*09/24/15 04:05*	*1*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	<11		11		mg/Kg	☼	09/16/15 07:29	09/18/15 03:59	1
Oil Range Organics (C28-C35)	<11		11		mg/Kg	☼	09/16/15 07:29	09/18/15 03:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*100*		*27 - 151*	*09/16/15 07:29*	*09/18/15 03:59*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<22		22		mg/Kg	☼		09/25/15 02:34	1

Client: MWH Americas Inc
Project/Site: Jaquez

TestAmerica Job ID: 400-110979-1

Client Sample ID: SB-32 3-4
Date Collected: 09/13/15 12:25
Date Received: 09/15/15 09:31

Lab Sample ID: 400-110979-16
Matrix: Solid
Percent Solids: 85.0

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) C6--C10	<0.12		0.12		mg/Kg	☼	09/23/15 10:00	09/24/15 04:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (fid)	*100*		*65 - 125*	*09/23/15 10:00*	*09/24/15 04:40*	*1*

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0012		0.0012		mg/Kg	☼	09/23/15 10:00	09/24/15 04:40	1
Ethylbenzene	<0.0012		0.0012		mg/Kg	☼	09/23/15 10:00	09/24/15 04:40	1
Toluene	<0.0059		0.0059		mg/Kg	☼	09/23/15 10:00	09/24/15 04:40	1
Xylenes, Total	<0.0059		0.0059		mg/Kg	☼	09/23/15 10:00	09/24/15 04:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (pid)	*97*		*40 - 150*	*09/23/15 10:00*	*09/24/15 04:40*	*1*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	<12		12		mg/Kg	☼	09/16/15 07:29	09/18/15 04:23	1
Oil Range Organics (C28-C35)	<12		12		mg/Kg	☼	09/16/15 07:29	09/18/15 04:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*82*		*27 - 151*	*09/16/15 07:29*	*09/18/15 04:23*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<24		24		mg/Kg	☼		09/25/15 03:42	1

Client: MWH Americas Inc
Project/Site: Jaquez

TestAmerica Job ID: 400-110979-1

Client Sample ID: SB-70 11-12
Date Collected: 09/13/15 14:40
Date Received: 09/15/15 09:31

Lab Sample ID: 400-110979-17
Matrix: Solid
Percent Solids: 90.6

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) C6--C10	<0.12		0.12		mg/Kg	☼	09/23/15 10:00	09/24/15 05:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (fid)	*100*		*65 - 125*	*09/23/15 10:00*	*09/24/15 05:14*	*1*

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0012		0.0012		mg/Kg	☼	09/23/15 10:00	09/24/15 05:14	1
Ethylbenzene	<0.0012		0.0012		mg/Kg	☼	09/23/15 10:00	09/24/15 05:14	1
Toluene	<0.0058		0.0058		mg/Kg	☼	09/23/15 10:00	09/24/15 05:14	1
Xylenes, Total	<0.0058		0.0058		mg/Kg	☼	09/23/15 10:00	09/24/15 05:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (pid)	*90*		*40 - 150*	*09/23/15 10:00*	*09/24/15 05:14*	*1*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	<11		11		mg/Kg	☼	09/16/15 07:29	09/18/15 04:48	1
Oil Range Organics (C28-C35)	<11		11		mg/Kg	☼	09/16/15 07:29	09/18/15 04:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*89*		*27 - 151*	*09/16/15 07:29*	*09/18/15 04:48*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<22		22		mg/Kg	☼		09/25/15 04:05	1

Client: MWH Americas Inc
Project/Site: Jaquez

TestAmerica Job ID: 400-110979-1

Client Sample ID: SB-69 10.6-11.6
Date Collected: 09/13/15 15:35
Date Received: 09/15/15 09:31

Lab Sample ID: 400-110979-18
Matrix: Solid
Percent Solids: 88.4

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) C6--C10	<0.11		0.11		mg/Kg	☼	09/23/15 10:00	09/24/15 05:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (fid)	*100*		*65 - 125*	*09/23/15 10:00*	*09/24/15 05:49*	*1*

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0011		0.0011		mg/Kg	☼	09/23/15 10:00	09/24/15 05:49	1
Ethylbenzene	<0.0011		0.0011		mg/Kg	☼	09/23/15 10:00	09/24/15 05:49	1
Toluene	<0.0053		0.0053		mg/Kg	☼	09/23/15 10:00	09/24/15 05:49	1
Xylenes, Total	<0.0053		0.0053		mg/Kg	☼	09/23/15 10:00	09/24/15 05:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (pid)	*94*		*40 - 150*	*09/23/15 10:00*	*09/24/15 05:49*	*1*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	<11		11		mg/Kg	☼	09/16/15 07:29	09/18/15 05:12	1
Oil Range Organics (C28-C35)	<11		11		mg/Kg	☼	09/16/15 07:29	09/18/15 05:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*83*		*27 - 151*	*09/16/15 07:29*	*09/18/15 05:12*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<22		22		mg/Kg	☼		09/25/15 04:28	1

Client: MWH Americas Inc
Project/Site: Jaquez

TestAmerica Job ID: 400-110979-1

Client Sample ID: SB-71 11-12
Date Collected: 09/13/15 16:15
Date Received: 09/15/15 09:31

Lab Sample ID: 400-110979-19
Matrix: Solid
Percent Solids: 82.4

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) C6--C10	<0.11		0.11		mg/Kg	☼	09/23/15 10:00	09/24/15 06:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (fid)	*99*		*65 - 125*	*09/23/15 10:00*	*09/24/15 06:23*	*1*

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0011		0.0011		mg/Kg	☼	09/23/15 10:00	09/24/15 06:23	1
Ethylbenzene	<0.0011		0.0011		mg/Kg	☼	09/23/15 10:00	09/24/15 06:23	1
Toluene	<0.0057		0.0057		mg/Kg	☼	09/23/15 10:00	09/24/15 06:23	1
Xylenes, Total	<0.0057		0.0057		mg/Kg	☼	09/23/15 10:00	09/24/15 06:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (pid)	*96*		*40 - 150*	*09/23/15 10:00*	*09/24/15 06:23*	*1*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	<12		12		mg/Kg	☼	09/16/15 07:29	09/18/15 06:00	1
Oil Range Organics (C28-C35)	<12		12		mg/Kg	☼	09/16/15 07:29	09/18/15 06:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*77*		*27 - 151*	*09/16/15 07:29*	*09/18/15 06:00*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<24		24		mg/Kg	☼		09/25/15 04:51	1

GC VOA

Prep Batch: 275117

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-110906-A-6-C MS	Matrix Spike	Total/NA	Solid	5035	
400-110906-A-6-D MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	
400-110979-1	MW-9 16-17.5	Total/NA	Solid	5035	
400-110979-2	MW-12 5.5-7.5	Total/NA	Solid	5035	
400-110979-10	SB-72 6-7	Total/NA	Solid	5035	
LCS 400-275117/2-A	Lab Control Sample	Total/NA	Solid	5035	
LCS 400-275117/3-A	Lab Control Sample	Total/NA	Solid	5035	
MB 400-275117/1-A	Method Blank	Total/NA	Solid	5035	

Analysis Batch: 275677

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-110979-3	SB-64 10-12	Total/NA	Solid	8021B	275696
400-110979-4	SB-61 6-7	Total/NA	Solid	8021B	275696
400-110979-5	SB-60 4-5	Total/NA	Solid	8021B	275696
400-110979-6	SB-59 4-5	Total/NA	Solid	8021B	275696
400-110979-7	SB-58 3-4	Total/NA	Solid	8021B	275696
400-110979-8	SB-57 5-6	Total/NA	Solid	8021B	275696
400-110979-9	SB-56 2.5-4.5	Total/NA	Solid	8021B	275696
400-110979-11	SB-49 3-4	Total/NA	Solid	8021B	275696
400-110979-12	SB-50 4-5	Total/NA	Solid	8021B	275696
400-110979-13	SB-51 5-6	Total/NA	Solid	8021B	275696
400-110979-13 MS	SB-51 5-6 MS	Total/NA	Solid	8021B	275696
400-110979-13 MSD	SB-51 5-6 MSD	Total/NA	Solid	8021B	275696
400-110979-14	SB-42 6.8-7.8	Total/NA	Solid	8021B	275696
400-110979-15	SB-38 6.5-7.5	Total/NA	Solid	8021B	275696
400-110979-16	SB-32 3-4	Total/NA	Solid	8021B	275696
400-110979-17	SB-70 11-12	Total/NA	Solid	8021B	275696
400-110979-18	SB-69 10.6-11.6	Total/NA	Solid	8021B	275696
400-110979-19	SB-71 11-12	Total/NA	Solid	8021B	275696
LCS 400-275696/3-A	Lab Control Sample	Total/NA	Solid	8021B	275696
MB 400-275696/1-A	Method Blank	Total/NA	Solid	8021B	275696

Prep Batch: 275696

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-110979-3	SB-64 10-12	Total/NA	Solid	5035	
400-110979-4	SB-61 6-7	Total/NA	Solid	5035	
400-110979-5	SB-60 4-5	Total/NA	Solid	5035	
400-110979-6	SB-59 4-5	Total/NA	Solid	5035	
400-110979-7	SB-58 3-4	Total/NA	Solid	5035	
400-110979-8	SB-57 5-6	Total/NA	Solid	5035	
400-110979-9	SB-56 2.5-4.5	Total/NA	Solid	5035	
400-110979-11	SB-49 3-4	Total/NA	Solid	5035	
400-110979-12	SB-50 4-5	Total/NA	Solid	5035	
400-110979-13	SB-51 5-6	Total/NA	Solid	5035	
400-110979-13 MS	SB-51 5-6 MS	Total/NA	Solid	5035	
400-110979-13 MS	SB-51 5-6 MS	Total/NA	Solid	5035	
400-110979-13 MSD	SB-51 5-6 MSD	Total/NA	Solid	5035	
400-110979-13 MSD	SB-51 5-6 MSD	Total/NA	Solid	5035	
400-110979-14	SB-42 6.8-7.8	Total/NA	Solid	5035	
400-110979-15	SB-38 6.5-7.5	Total/NA	Solid	5035	
400-110979-16	SB-32 3-4	Total/NA	Solid	5035	

GC VOA (Continued)

Prep Batch: 275696 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-110979-17	SB-70 11-12	Total/NA	Solid	5035	
400-110979-18	SB-69 10.6-11.6	Total/NA	Solid	5035	
400-110979-19	SB-71 11-12	Total/NA	Solid	5035	
LCS 400-275696/2-A	Lab Control Sample	Total/NA	Solid	5035	
LCS 400-275696/3-A	Lab Control Sample	Total/NA	Solid	5035	
MB 400-275696/1-A	Method Blank	Total/NA	Solid	5035	

Analysis Batch: 275760

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-110979-3	SB-64 10-12	Total/NA	Solid	8015B	275696
400-110979-4	SB-61 6-7	Total/NA	Solid	8015B	275696
400-110979-5	SB-60 4-5	Total/NA	Solid	8015B	275696
400-110979-6	SB-59 4-5	Total/NA	Solid	8015B	275696
400-110979-7	SB-58 3-4	Total/NA	Solid	8015B	275696
400-110979-8	SB-57 5-6	Total/NA	Solid	8015B	275696
400-110979-9	SB-56 2.5-4.5	Total/NA	Solid	8015B	275696
400-110979-11	SB-49 3-4	Total/NA	Solid	8015B	275696
400-110979-12	SB-50 4-5	Total/NA	Solid	8015B	275696
400-110979-13	SB-51 5-6	Total/NA	Solid	8015B	275696
400-110979-13 MS	SB-51 5-6 MS	Total/NA	Solid	8015B	275696
400-110979-13 MSD	SB-51 5-6 MSD	Total/NA	Solid	8015B	275696
400-110979-14	SB-42 6.8-7.8	Total/NA	Solid	8015B	275696
400-110979-15	SB-38 6.5-7.5	Total/NA	Solid	8015B	275696
400-110979-16	SB-32 3-4	Total/NA	Solid	8015B	275696
400-110979-17	SB-70 11-12	Total/NA	Solid	8015B	275696
400-110979-18	SB-69 10.6-11.6	Total/NA	Solid	8015B	275696
400-110979-19	SB-71 11-12	Total/NA	Solid	8015B	275696
LCS 400-275696/2-A	Lab Control Sample	Total/NA	Solid	8015B	275696
MB 400-275696/1-A	Method Blank	Total/NA	Solid	8015B	275696

Analysis Batch: 275909

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-110906-A-6-C MS	Matrix Spike	Total/NA	Solid	8021B	275117
400-110906-A-6-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	275117
400-110979-1	MW-9 16-17.5	Total/NA	Solid	8021B	275117
400-110979-2	MW-12 5.5-7.5	Total/NA	Solid	8021B	275117
400-110979-10	SB-72 6-7	Total/NA	Solid	8021B	275117
LCS 400-275117/2-A	Lab Control Sample	Total/NA	Solid	8021B	275117
MB 400-275117/1-A	Method Blank	Total/NA	Solid	8021B	275117

Analysis Batch: 275912

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-110979-1	MW-9 16-17.5	Total/NA	Solid	8015B	275117
400-110979-2	MW-12 5.5-7.5	Total/NA	Solid	8015B	275117
400-110979-10	SB-72 6-7	Total/NA	Solid	8015B	275117
LCS 400-275117/3-A	Lab Control Sample	Total/NA	Solid	8015B	275117
MB 400-275117/1-A	Method Blank	Total/NA	Solid	8015B	275117

GC Semi VOA

Prep Batch: 274599

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-110979-1	MW-9 16-17.5	Total/NA	Solid	3546	
400-110979-2	MW-12 5.5-7.5	Total/NA	Solid	3546	
400-110979-3	SB-64 10-12	Total/NA	Solid	3546	
400-110979-4	SB-61 6-7	Total/NA	Solid	3546	
400-110979-5	SB-60 4-5	Total/NA	Solid	3546	
400-110979-6	SB-59 4-5	Total/NA	Solid	3546	
400-110979-7	SB-58 3-4	Total/NA	Solid	3546	
400-110979-8	SB-57 5-6	Total/NA	Solid	3546	
400-110979-9	SB-56 2.5-4.5	Total/NA	Solid	3546	
400-110979-10	SB-72 6-7	Total/NA	Solid	3546	
400-110979-11	SB-49 3-4	Total/NA	Solid	3546	
400-110979-12	SB-50 4-5	Total/NA	Solid	3546	
400-110979-13	SB-51 5-6	Total/NA	Solid	3546	
400-110979-13 MS	SB-51 5-6 MS	Total/NA	Solid	3546	
400-110979-13 MSD	SB-51 5-6 MSD	Total/NA	Solid	3546	
400-110979-14	SB-42 6.8-7.8	Total/NA	Solid	3546	
400-110979-15	SB-38 6.5-7.5	Total/NA	Solid	3546	
400-110979-16	SB-32 3-4	Total/NA	Solid	3546	
400-110979-17	SB-70 11-12	Total/NA	Solid	3546	
400-110979-18	SB-69 10.6-11.6	Total/NA	Solid	3546	
400-110979-19	SB-71 11-12	Total/NA	Solid	3546	
LCS 400-274599/22-A	Lab Control Sample	Total/NA	Solid	3546	
MB 400-274599/23-A	Method Blank	Total/NA	Solid	3546	

Analysis Batch: 274848

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-110979-1	MW-9 16-17.5	Total/NA	Solid	8015B	274599
400-110979-2	MW-12 5.5-7.5	Total/NA	Solid	8015B	274599
400-110979-3	SB-64 10-12	Total/NA	Solid	8015B	274599
400-110979-4	SB-61 6-7	Total/NA	Solid	8015B	274599
400-110979-5	SB-60 4-5	Total/NA	Solid	8015B	274599
400-110979-6	SB-59 4-5	Total/NA	Solid	8015B	274599
400-110979-7	SB-58 3-4	Total/NA	Solid	8015B	274599
400-110979-8	SB-57 5-6	Total/NA	Solid	8015B	274599
400-110979-9	SB-56 2.5-4.5	Total/NA	Solid	8015B	274599
400-110979-10	SB-72 6-7	Total/NA	Solid	8015B	274599
LCS 400-274599/22-A	Lab Control Sample	Total/NA	Solid	8015B	274599
MB 400-274599/23-A	Method Blank	Total/NA	Solid	8015B	274599

Analysis Batch: 274849

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-110979-11	SB-49 3-4	Total/NA	Solid	8015B	274599
400-110979-12	SB-50 4-5	Total/NA	Solid	8015B	274599
400-110979-13	SB-51 5-6	Total/NA	Solid	8015B	274599
400-110979-13 MS	SB-51 5-6 MS	Total/NA	Solid	8015B	274599
400-110979-13 MSD	SB-51 5-6 MSD	Total/NA	Solid	8015B	274599
400-110979-14	SB-42 6.8-7.8	Total/NA	Solid	8015B	274599
400-110979-15	SB-38 6.5-7.5	Total/NA	Solid	8015B	274599
400-110979-16	SB-32 3-4	Total/NA	Solid	8015B	274599
400-110979-17	SB-70 11-12	Total/NA	Solid	8015B	274599
400-110979-18	SB-69 10.6-11.6	Total/NA	Solid	8015B	274599

GC Semi VOA (Continued)

Analysis Batch: 274849 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-110979-19	SB-71 11-12	Total/NA	Solid	8015B	274599

HPLC/IC

Leach Batch: 275900

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-110979-1	MW-9 16-17.5	Soluble	Solid	DI Leach	
400-110979-2	MW-12 5.5-7.5	Soluble	Solid	DI Leach	
400-110979-3	SB-64 10-12	Soluble	Solid	DI Leach	
400-110979-4	SB-61 6-7	Soluble	Solid	DI Leach	
400-110979-5	SB-60 4-5	Soluble	Solid	DI Leach	
400-110979-6	SB-59 4-5	Soluble	Solid	DI Leach	
400-110979-7	SB-58 3-4	Soluble	Solid	DI Leach	
400-110979-8	SB-57 5-6	Soluble	Solid	DI Leach	
400-110979-9	SB-56 2.5-4.5	Soluble	Solid	DI Leach	
400-110979-10	SB-72 6-7	Soluble	Solid	DI Leach	
400-110979-11	SB-49 3-4	Soluble	Solid	DI Leach	
400-110979-12	SB-50 4-5	Soluble	Solid	DI Leach	
400-110979-13	SB-51 5-6	Soluble	Solid	DI Leach	
400-110979-13 MS	SB-51 5-6 MS	Soluble	Solid	DI Leach	
400-110979-13 MSD	SB-51 5-6 MSD	Soluble	Solid	DI Leach	
400-110979-14	SB-42 6.8-7.8	Soluble	Solid	DI Leach	
400-110979-15	SB-38 6.5-7.5	Soluble	Solid	DI Leach	
400-110979-16	SB-32 3-4	Soluble	Solid	DI Leach	
400-110979-17	SB-70 11-12	Soluble	Solid	DI Leach	
400-110979-18	SB-69 10.6-11.6	Soluble	Solid	DI Leach	
400-110979-19	SB-71 11-12	Soluble	Solid	DI Leach	
LCS 400-275900/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 400-275900/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
MB 400-275900/1-A	Method Blank	Soluble	Solid	DI Leach	

Analysis Batch: 275998

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-110979-1	MW-9 16-17.5	Soluble	Solid	300.0	275900
400-110979-2	MW-12 5.5-7.5	Soluble	Solid	300.0	275900
400-110979-3	SB-64 10-12	Soluble	Solid	300.0	275900
400-110979-4	SB-61 6-7	Soluble	Solid	300.0	275900
400-110979-5	SB-60 4-5	Soluble	Solid	300.0	275900
400-110979-6	SB-59 4-5	Soluble	Solid	300.0	275900
400-110979-7	SB-58 3-4	Soluble	Solid	300.0	275900
400-110979-8	SB-57 5-6	Soluble	Solid	300.0	275900
400-110979-9	SB-56 2.5-4.5	Soluble	Solid	300.0	275900
400-110979-10	SB-72 6-7	Soluble	Solid	300.0	275900
400-110979-11	SB-49 3-4	Soluble	Solid	300.0	275900
400-110979-12	SB-50 4-5	Soluble	Solid	300.0	275900
400-110979-13	SB-51 5-6	Soluble	Solid	300.0	275900
400-110979-13 MS	SB-51 5-6 MS	Soluble	Solid	300.0	275900
400-110979-13 MSD	SB-51 5-6 MSD	Soluble	Solid	300.0	275900
400-110979-14	SB-42 6.8-7.8	Soluble	Solid	300.0	275900
400-110979-15	SB-38 6.5-7.5	Soluble	Solid	300.0	275900

HPLC/IC (Continued)

Analysis Batch: 275998 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-110979-16	SB-32 3-4	Soluble	Solid	300.0	275900
400-110979-17	SB-70 11-12	Soluble	Solid	300.0	275900
400-110979-18	SB-69 10.6-11.6	Soluble	Solid	300.0	275900
400-110979-19	SB-71 11-12	Soluble	Solid	300.0	275900
LCS 400-275900/2-A	Lab Control Sample	Soluble	Solid	300.0	275900
LCSD 400-275900/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	275900
MB 400-275900/1-A	Method Blank	Soluble	Solid	300.0	275900

General Chemistry

Analysis Batch: 274744

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-110979-1	MW-9 16-17.5	Total/NA	Solid	Moisture	
400-110979-2	MW-12 5.5-7.5	Total/NA	Solid	Moisture	
400-110979-3	SB-64 10-12	Total/NA	Solid	Moisture	
400-110979-4	SB-61 6-7	Total/NA	Solid	Moisture	
400-110979-5	SB-60 4-5	Total/NA	Solid	Moisture	
400-110979-6	SB-59 4-5	Total/NA	Solid	Moisture	
400-110979-7	SB-58 3-4	Total/NA	Solid	Moisture	
400-110979-8	SB-57 5-6	Total/NA	Solid	Moisture	
400-110979-9	SB-56 2.5-4.5	Total/NA	Solid	Moisture	
400-110979-10	SB-72 6-7	Total/NA	Solid	Moisture	
400-110979-11	SB-49 3-4	Total/NA	Solid	Moisture	
400-110979-12	SB-50 4-5	Total/NA	Solid	Moisture	
400-110979-12 DU	SB-50 4-5	Total/NA	Solid	Moisture	
400-110979-13	SB-51 5-6	Total/NA	Solid	Moisture	
400-110979-13 MS	SB-51 5-6 MS	Total/NA	Solid	Moisture	
400-110979-13 MSD	SB-51 5-6 MSD	Total/NA	Solid	Moisture	
400-110979-14	SB-42 6.8-7.8	Total/NA	Solid	Moisture	
400-110979-15	SB-38 6.5-7.5	Total/NA	Solid	Moisture	
400-110979-16	SB-32 3-4	Total/NA	Solid	Moisture	
400-110979-17	SB-70 11-12	Total/NA	Solid	Moisture	
400-110979-18	SB-69 10.6-11.6	Total/NA	Solid	Moisture	
400-110979-19	SB-71 11-12	Total/NA	Solid	Moisture	

Method: 8015B - Gasoline Range Organics - (GC)

Lab Sample ID: MB 400-275117/1-A
Matrix: Solid
Analysis Batch: 275912

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 275117

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) C6--C10	<5.0		5.0		mg/Kg		09/18/15 15:00	09/18/15 20:21	50

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (fid)	*105*		*65 - 125*	*09/18/15 15:00*	*09/18/15 20:21*	*50*

Lab Sample ID: LCS 400-275117/3-A
Matrix: Solid
Analysis Batch: 275912

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 275117

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO) C6--C10			50.0	67.7		mg/Kg		135	62 - 141		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
a,a,a-Trifluorotoluene (fid)	*101*		*65 - 125*

Lab Sample ID: MB 400-275696/1-A
Matrix: Solid
Analysis Batch: 275760

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 275696

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) C6--C10	<0.10		0.10		mg/Kg		09/23/15 10:00	09/23/15 13:18	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (fid)	*100*		*65 - 125*	*09/23/15 10:00*	*09/23/15 13:18*	*1*

Lab Sample ID: LCS 400-275696/2-A
Matrix: Solid
Analysis Batch: 275760

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 275696

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO) C6--C10			1.00	1.09		mg/Kg		109	62 - 141		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
a,a,a-Trifluorotoluene (fid)	*105*		*65 - 125*

Lab Sample ID: 400-110979-13 MS
Matrix: Solid
Analysis Batch: 275760

Client Sample ID: SB-51 5-6 MS
Prep Type: Total/NA
Prep Batch: 275696

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO) C6--C10	<0.12		1.23	1.27		mg/Kg	☼	103	10 - 150		

Method: 8015B - Gasoline Range Organics - (GC) (Continued)

Lab Sample ID: 400-110979-13 MS
Matrix: Solid
Analysis Batch: 275760

Client Sample ID: SB-51 5-6 MS
Prep Type: Total/NA
Prep Batch: 275696

Surrogate	MS %Recovery	MS Qualifier	Limits
a,a,a-Trifluorotoluene (fid)	*103*		*65 - 125*

Lab Sample ID: 400-110979-13 MSD
Matrix: Solid
Analysis Batch: 275760

Client Sample ID: SB-51 5-6 MSD
Prep Type: Total/NA
Prep Batch: 275696

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO) C6--C10	<0.12		1.25	1.31		mg/Kg	☼	105	10 - 150	4	32

Surrogate	MSD %Recovery	MSD Qualifier	Limits
a,a,a-Trifluorotoluene (fid)	*104*		*65 - 125*

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 400-275117/1-A
Matrix: Solid
Analysis Batch: 275909

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 275117

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.050		0.050		mg/Kg		09/18/15 15:00	09/18/15 20:21	50
Ethylbenzene	<0.050		0.050		mg/Kg		09/18/15 15:00	09/18/15 20:21	50
Toluene	<0.25		0.25		mg/Kg		09/18/15 15:00	09/18/15 20:21	50
Xylenes, Total	<0.25		0.25		mg/Kg		09/18/15 15:00	09/18/15 20:21	50

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (pid)	*99*		*40 - 150*	*09/18/15 15:00*	*09/18/15 20:21*	*50*

Lab Sample ID: LCS 400-275117/2-A
Matrix: Solid
Analysis Batch: 275909

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 275117

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			2.50	2.57		mg/Kg		103	74 - 127		
Ethylbenzene			2.50	2.53		mg/Kg		101	79 - 131		
Toluene			2.50	2.57		mg/Kg		103	76 - 127		
Xylenes, Total			7.50	7.60		mg/Kg		101	80 - 129		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
a,a,a-Trifluorotoluene (pid)	*97*		*40 - 150*

Lab Sample ID: 400-110906-A-6-C MS
Matrix: Solid
Analysis Batch: 275909

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 275117

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene	4.6		24.8	27.8		mg/Kg	☼	93	10 - 150		

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: 400-110906-A-6-C MS
Matrix: Solid
Analysis Batch: 275909

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 275117

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Ethylbenzene	12		24.8	39.4		mg/Kg	☼	111	10 - 150
Toluene	7.0		24.8	30.0		mg/Kg	☼	93	10 - 150
Xylenes, Total	61		74.4	132		mg/Kg	☼	96	50 - 150

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
a,a,a-Trifluorotoluene (pid)	*84*		*40 - 150*

Lab Sample ID: 400-110906-A-6-D MSD
Matrix: Solid
Analysis Batch: 275909

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 275117

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	4.6		24.8	27.8		mg/Kg	☼	94	10 - 150	0	34
Ethylbenzene	12		24.8	39.4		mg/Kg	☼	111	10 - 150	0	66
Toluene	7.0		24.8	29.9		mg/Kg	☼	92	10 - 150	0	44
Xylenes, Total	61		74.4	133		mg/Kg	☼	97	50 - 150	0	46

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
a,a,a-Trifluorotoluene (pid)	*84*		*40 - 150*

Lab Sample ID: MB 400-275696/1-A
Matrix: Solid
Analysis Batch: 275677

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 275696

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0010		0.0010		mg/Kg		09/23/15 10:00	09/23/15 13:18	1
Ethylbenzene	<0.0010		0.0010		mg/Kg		09/23/15 10:00	09/23/15 13:18	1
Toluene	<0.0050		0.0050		mg/Kg		09/23/15 10:00	09/23/15 13:18	1
Xylenes, Total	<0.0050		0.0050		mg/Kg		09/23/15 10:00	09/23/15 13:18	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (pid)	*95*		*40 - 150*	*09/23/15 10:00*	*09/23/15 13:18*	*1*

Lab Sample ID: LCS 400-275696/3-A
Matrix: Solid
Analysis Batch: 275677

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 275696

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene			0.0500	0.0471		mg/Kg		94	74 - 127
Ethylbenzene			0.0500	0.0490		mg/Kg		98	79 - 131
Toluene			0.0500	0.0490		mg/Kg		98	76 - 127
Xylenes, Total			0.150	0.146		mg/Kg		98	80 - 129

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
a,a,a-Trifluorotoluene (pid)	*98*		*40 - 150*

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: 400-110979-13 MS
Matrix: Solid
Analysis Batch: 275677

Client Sample ID: SB-51 5-6 MS
Prep Type: Total/NA
Prep Batch: 275696

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	<0.0012		0.0631	0.0592		mg/Kg	☼	94	10 - 150
Ethylbenzene	<0.0012		0.0631	0.0587		mg/Kg	☼	93	10 - 150
Toluene	<0.0059		0.0631	0.0566		mg/Kg	☼	90	10 - 150
Xylenes, Total	<0.0059		0.189	0.175		mg/Kg	☼	92	50 - 150

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
a,a,a-Trifluorotoluene (pid)	*94*		*40 - 150*

Lab Sample ID: 400-110979-13 MSD
Matrix: Solid
Analysis Batch: 275677

Client Sample ID: SB-51 5-6 MSD
Prep Type: Total/NA
Prep Batch: 275696

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	<0.0012		0.0628	0.0535		mg/Kg	☼	85	10 - 150	10	34
Ethylbenzene	<0.0012		0.0628	0.0459		mg/Kg	☼	73	10 - 150	24	66
Toluene	<0.0059		0.0628	0.0508		mg/Kg	☼	81	10 - 150	11	44
Xylenes, Total	<0.0059		0.188	0.137		mg/Kg	☼	73	50 - 150	24	46

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
a,a,a-Trifluorotoluene (pid)	*95*		*40 - 150*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 400-274599/23-A
Matrix: Solid
Analysis Batch: 274848

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 274599

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	<10		10		mg/Kg		09/16/15 07:29	09/17/15 19:48	1
Oil Range Organics (C28-C35)	<10		10		mg/Kg		09/16/15 07:29	09/17/15 19:48	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*81*		*27 - 151*	*09/16/15 07:29*	*09/17/15 19:48*	*1*

Lab Sample ID: LCS 400-274599/22-A
Matrix: Solid
Analysis Batch: 274848

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 274599

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Diesel Range Organics [C10-C28]			337	247		mg/Kg		73	63 - 153

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
o-Terphenyl	*68*		*27 - 151*

Method: 8015B - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: 400-110979-13 MS
Matrix: Solid
Analysis Batch: 274849

Client Sample ID: SB-51 5-6 MS
Prep Type: Total/NA
Prep Batch: 274599

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Diesel Range Organics [C10-C28]	<13	F2	436	361	F2	mg/Kg	☼	83	62 - 204

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
o-Terphenyl	*83*		*27 - 151*

Lab Sample ID: 400-110979-13 MSD
Matrix: Solid
Analysis Batch: 274849

Client Sample ID: SB-51 5-6 MSD
Prep Type: Total/NA
Prep Batch: 274599

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Diesel Range Organics [C10-C28]	<13	F2	418	261	F2	mg/Kg	☼	62	62 - 204	32	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
o-Terphenyl	*61*		*27 - 151*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 400-275900/1-A
Matrix: Solid
Analysis Batch: 275998

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<20		20		mg/Kg			09/24/15 18:35	1

Lab Sample ID: LCS 400-275900/2-A
Matrix: Solid
Analysis Batch: 275998

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride			100	90.1		mg/Kg		90	80 - 120

Lab Sample ID: LCSD 400-275900/3-A
Matrix: Solid
Analysis Batch: 275998

Client Sample ID: Lab Control Sample Dup
Prep Type: Soluble

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride			100	90.1		mg/Kg		90	80 - 120	0	15

Lab Sample ID: 400-110979-13 MS
Matrix: Solid
Analysis Batch: 275998

Client Sample ID: SB-51 5-6 MS
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	<25		125	124		mg/Kg	☼	90	80 - 120

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 400-110979-13 MSD
Matrix: Solid
Analysis Batch: 275998

Client Sample ID: SB-51 5-6 MSD
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	<25		131	131		mg/Kg	☼	91	80 - 120	6	15

Lab Chronicle

Client: MWH Americas Inc
Project/Site: Jaquez

TestAmerica Job ID: 400-110979-1

Client Sample ID: MW-9 16-17.5
Date Collected: 09/11/15 14:20
Date Received: 09/15/15 09:31

Lab Sample ID: 400-110979-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			274744	09/16/15 16:28	LEC	TAL PEN
	Instrument ID: NOEQUIP									

Client Sample ID: MW-9 16-17.5
Date Collected: 09/11/15 14:20
Date Received: 09/15/15 09:31

Lab Sample ID: 400-110979-1
Matrix: Solid
Percent Solids: 76.8

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			6.71 g	5.0 g	275117	09/21/15 11:00	GRK	TAL PEN
Total/NA	Analysis	8015B		250	6.71 g	5.0 g	275912	09/22/15 12:54	GRK	TAL PEN
	Instrument ID: CH_RITA									
Total/NA	Prep	5035			6.71 g	5.0 g	275117	09/21/15 11:00	GRK	TAL PEN
Total/NA	Analysis	8021B		250	6.71 g	5.0 g	275909	09/22/15 12:54	GRK	TAL PEN
	Instrument ID: CH_RITA									
Total/NA	Prep	3546			14.72 g	2.0 mL	274599	09/16/15 07:29	RDT	TAL PEN
Total/NA	Analysis	8015B		1	14.72 g	2.0 mL	274848	09/17/15 21:03	C1M	TAL PEN
	Instrument ID: FLASH									
Soluble	Leach	DI Leach			2.60 g	50 mL	275900	09/24/15 15:16	TAJ	TAL PEN
Soluble	Analysis	300.0		1	1 mL		275998	09/24/15 19:43	TAJ	TAL PEN
	Instrument ID: IC2									

Client Sample ID: MW-12 5.5-7.5
Date Collected: 09/11/15 10:45
Date Received: 09/15/15 09:31

Lab Sample ID: 400-110979-2
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			274744	09/16/15 16:28	LEC	TAL PEN
	Instrument ID: NOEQUIP									

Client Sample ID: MW-12 5.5-7.5
Date Collected: 09/11/15 10:45
Date Received: 09/15/15 09:31

Lab Sample ID: 400-110979-2
Matrix: Solid
Percent Solids: 84.4

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			7.42 g	5.0 g	275117	09/21/15 11:00	GRK	TAL PEN
Total/NA	Analysis	8015B		50	7.42 g	5.0 g	275912	09/22/15 13:21	GRK	TAL PEN
	Instrument ID: CH_RITA									
Total/NA	Prep	5035			7.42 g	5.0 g	275117	09/21/15 11:00	GRK	TAL PEN
Total/NA	Analysis	8021B		50	7.42 g	5.0 g	275909	09/22/15 13:21	GRK	TAL PEN
	Instrument ID: CH_RITA									
Total/NA	Prep	3546			14.95 g	2.0 mL	274599	09/16/15 07:29	RDT	TAL PEN
Total/NA	Analysis	8015B		1	14.95 g	2.0 mL	274848	09/17/15 21:27	C1M	TAL PEN
	Instrument ID: FLASH									

Lab Chronicle

Client: MWH Americas Inc
Project/Site: Jaquez

TestAmerica Job ID: 400-110979-1

Client Sample ID: MW-12 5.5-7.5

Lab Sample ID: 400-110979-2
Date Collected: 09/11/15 10:45
Matrix: Solid
Date Received: 09/15/15 09:31
Percent Solids: 84.4

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			2.52 g	50 mL	275900	09/24/15 15:16	TAJ	TAL PEN
Soluble	Analysis	300.0		1	1 mL		275998	09/24/15 20:06	TAJ	TAL PEN
	Instrument ID: IC2									

Client Sample ID: SB-64 10-12

Lab Sample ID: 400-110979-3
Date Collected: 09/11/15 16:10
Matrix: Solid
Date Received: 09/15/15 09:31

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			274744	09/16/15 16:28	LEC	TAL PEN
	Instrument ID: NOEQUIP									

Client Sample ID: SB-64 10-12

Lab Sample ID: 400-110979-3
Date Collected: 09/11/15 16:10
Matrix: Solid
Date Received: 09/15/15 09:31
Percent Solids: 73.5

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.43 g	5.0 g	275696	09/23/15 10:00	GRK	TAL PEN
Total/NA	Analysis	8015B		1	5.43 g	5.0 g	275760	09/23/15 15:58	GRK	TAL PEN
	Instrument ID: CH_JOAN									
Total/NA	Prep	5035			5.43 g	5.0 g	275696	09/23/15 10:00	GRK	TAL PEN
Total/NA	Analysis	8021B		1	5.43 g	5.0 g	275677	09/23/15 15:58	GRK	TAL PEN
	Instrument ID: CH_JOAN									
Total/NA	Prep	3546			14.74 g	2.0 mL	274599	09/16/15 07:29	RDT	TAL PEN
Total/NA	Analysis	8015B		1	14.74 g	2.0 mL	274848	09/17/15 21:52	C1M	TAL PEN
	Instrument ID: FLASH									
Soluble	Leach	DI Leach			2.51 g	50 mL	275900	09/24/15 15:16	TAJ	TAL PEN
Soluble	Analysis	300.0		1	1 mL		275998	09/24/15 20:29	TAJ	TAL PEN
	Instrument ID: IC2									

Client Sample ID: SB-61 6-7

Lab Sample ID: 400-110979-4
Date Collected: 09/12/15 09:30
Matrix: Solid
Date Received: 09/15/15 09:31

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			274744	09/16/15 16:28	LEC	TAL PEN
	Instrument ID: NOEQUIP									

Lab Chronicle

Client: MWH Americas Inc
Project/Site: Jaquez

TestAmerica Job ID: 400-110979-1

Client Sample ID: SB-61 6-7

Lab Sample ID: 400-110979-4

Date Collected: 09/12/15 09:30
Matrix: Solid
Date Received: 09/15/15 09:31
Percent Solids: 79.2

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.71 g	5.0 g	275696	09/23/15 10:00	GRK	TAL PEN
Total/NA	Analysis	8015B		1	4.71 g	5.0 g	275760	09/23/15 16:32	GRK	TAL PEN
	Instrument ID: CH_JOAN									
Total/NA	Prep	5035			4.71 g	5.0 g	275696	09/23/15 10:00	GRK	TAL PEN
Total/NA	Analysis	8021B		1	4.71 g	5.0 g	275677	09/23/15 16:32	GRK	TAL PEN
	Instrument ID: CH_JOAN									
Total/NA	Prep	3546			15.41 g	2.0 mL	274599	09/16/15 07:29	RDT	TAL PEN
Total/NA	Analysis	8015B		1	15.41 g	2.0 mL	274848	09/17/15 22:17	C1M	TAL PEN
	Instrument ID: FLASH									
Soluble	Leach	DI Leach			2.44 g	50 mL	275900	09/24/15 15:16	TAJ	TAL PEN
Soluble	Analysis	300.0		1	1 mL		275998	09/24/15 20:52	TAJ	TAL PEN
	Instrument ID: IC2									

Client Sample ID: SB-60 4-5

Lab Sample ID: 400-110979-5

Date Collected: 09/12/15 10:10
Matrix: Solid
Date Received: 09/15/15 09:31

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			274744	09/16/15 16:28	LEC	TAL PEN
	Instrument ID: NOEQUIP									

Client Sample ID: SB-60 4-5

Lab Sample ID: 400-110979-5

Date Collected: 09/12/15 10:10
Matrix: Solid
Date Received: 09/15/15 09:31
Percent Solids: 85.9

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5.0 g	275696	09/23/15 10:00	GRK	TAL PEN
Total/NA	Analysis	8015B		1	5.01 g	5.0 g	275760	09/23/15 17:07	GRK	TAL PEN
	Instrument ID: CH_JOAN									
Total/NA	Prep	5035			5.01 g	5.0 g	275696	09/23/15 10:00	GRK	TAL PEN
Total/NA	Analysis	8021B		1	5.01 g	5.0 g	275677	09/23/15 17:07	GRK	TAL PEN
	Instrument ID: CH_JOAN									
Total/NA	Prep	3546			15.48 g	2.0 mL	274599	09/16/15 07:29	RDT	TAL PEN
Total/NA	Analysis	8015B		1	15.48 g	2.0 mL	274848	09/17/15 22:41	C1M	TAL PEN
	Instrument ID: FLASH									
Soluble	Leach	DI Leach			2.49 g	50 mL	275900	09/24/15 15:16	TAJ	TAL PEN
Soluble	Analysis	300.0		1	1 mL		275998	09/24/15 21:14	TAJ	TAL PEN
	Instrument ID: IC2									

Lab Chronicle

Client: MWH Americas Inc
Project/Site: Jaquez

TestAmerica Job ID: 400-110979-1

Client Sample ID: SB-59 4-5
Date Collected: 09/12/15 10:40
Date Received: 09/15/15 09:31

Lab Sample ID: 400-110979-6
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			274744	09/16/15 16:28	LEC	TAL PEN
	Instrument ID: NOEQUIP									

Client Sample ID: SB-59 4-5
Date Collected: 09/12/15 10:40
Date Received: 09/15/15 09:31

Lab Sample ID: 400-110979-6
Matrix: Solid
Percent Solids: 90.3

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.38 g	5.0 g	275696	09/23/15 10:00	GRK	TAL PEN
Total/NA	Analysis	8015B		1	5.38 g	5.0 g	275760	09/23/15 17:42	GRK	TAL PEN
	Instrument ID: CH_JOAN									
Total/NA	Prep	5035			5.38 g	5.0 g	275696	09/23/15 10:00	GRK	TAL PEN
Total/NA	Analysis	8021B		1	5.38 g	5.0 g	275677	09/23/15 17:42	GRK	TAL PEN
	Instrument ID: CH_JOAN									
Total/NA	Prep	3546			15.02 g	2.0 mL	274599	09/16/15 07:29	RDT	TAL PEN
Total/NA	Analysis	8015B		1	15.02 g	2.0 mL	274848	09/17/15 23:06	C1M	TAL PEN
	Instrument ID: FLASH									
Soluble	Leach	DI Leach			2.45 g	50 mL	275900	09/24/15 15:16	TAJ	TAL PEN
Soluble	Analysis	300.0		1	1 mL		275998	09/24/15 21:37	TAJ	TAL PEN
	Instrument ID: IC2									

Client Sample ID: SB-58 3-4
Date Collected: 09/12/15 11:15
Date Received: 09/15/15 09:31

Lab Sample ID: 400-110979-7
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			274744	09/16/15 16:28	LEC	TAL PEN
	Instrument ID: NOEQUIP									

Client Sample ID: SB-58 3-4
Date Collected: 09/12/15 11:15
Date Received: 09/15/15 09:31

Lab Sample ID: 400-110979-7
Matrix: Solid
Percent Solids: 80.1

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.83 g	5.0 g	275696	09/23/15 10:00	GRK	TAL PEN
Total/NA	Analysis	8015B		1	4.83 g	5.0 g	275760	09/23/15 18:16	GRK	TAL PEN
	Instrument ID: CH_JOAN									
Total/NA	Prep	5035			4.83 g	5.0 g	275696	09/23/15 10:00	GRK	TAL PEN
Total/NA	Analysis	8021B		1	4.83 g	5.0 g	275677	09/23/15 18:16	GRK	TAL PEN
	Instrument ID: CH_JOAN									
Total/NA	Prep	3546			15.24 g	2.0 mL	274599	09/16/15 07:29	RDT	TAL PEN
Total/NA	Analysis	8015B		1	15.24 g	2.0 mL	274848	09/17/15 23:30	C1M	TAL PEN
	Instrument ID: FLASH									
Soluble	Leach	DI Leach			2.42 g	50 mL	275900	09/24/15 15:16	TAJ	TAL PEN

Client Sample ID: SB-58 3-4
Date Collected: 09/12/15 11:15
Date Received: 09/15/15 09:31

Lab Sample ID: 400-110979-7
Matrix: Solid
Percent Solids: 80.1

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Analysis	300.0		1	1 mL		275998	09/24/15 22:00	TAJ	TAL PEN
	Instrument ID: IC2									

Client Sample ID: SB-57 5-6
Date Collected: 09/12/15 13:00
Date Received: 09/15/15 09:31

Lab Sample ID: 400-110979-8
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			274744	09/16/15 16:28	LEC	TAL PEN
	Instrument ID: NOEQUIP									

Client Sample ID: SB-57 5-6
Date Collected: 09/12/15 13:00
Date Received: 09/15/15 09:31

Lab Sample ID: 400-110979-8
Matrix: Solid
Percent Solids: 83.3

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.43 g	5.0 g	275696	09/23/15 10:00	GRK	TAL PEN
Total/NA	Analysis	8015B		1	5.43 g	5.0 g	275760	09/23/15 18:51	GRK	TAL PEN
	Instrument ID: CH_JOAN									
Total/NA	Prep	5035			5.43 g	5.0 g	275696	09/23/15 10:00	GRK	TAL PEN
Total/NA	Analysis	8021B		1	5.43 g	5.0 g	275677	09/23/15 18:51	GRK	TAL PEN
	Instrument ID: CH_JOAN									
Total/NA	Prep	3546			15.11 g	2.0 mL	274599	09/16/15 07:29	RDT	TAL PEN
Total/NA	Analysis	8015B		1	15.11 g	2.0 mL	274848	09/17/15 23:55	C1M	TAL PEN
	Instrument ID: FLASH									
Soluble	Leach	DI Leach			2.46 g	50 mL	275900	09/24/15 15:16	TAJ	TAL PEN
Soluble	Analysis	300.0		1	1 mL		275998	09/24/15 23:08	TAJ	TAL PEN
	Instrument ID: IC2									

Client Sample ID: SB-56 2.5-4.5
Date Collected: 09/12/15 13:30
Date Received: 09/15/15 09:31

Lab Sample ID: 400-110979-9
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			274744	09/16/15 16:28	LEC	TAL PEN
	Instrument ID: NOEQUIP									

Client Sample ID: SB-56 2.5-4.5
Date Collected: 09/12/15 13:30
Date Received: 09/15/15 09:31

Lab Sample ID: 400-110979-9
Matrix: Solid
Percent Solids: 69.3

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.89 g	5.0 g	275696	09/23/15 10:00	GRK	TAL PEN

Client Sample ID: SB-56 2.5-4.5

Lab Sample ID: 400-110979-9
Date Collected: 09/12/15 13:30
Matrix: Solid
Date Received: 09/15/15 09:31
Percent Solids: 69.3

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015B		1	5.89 g	5.0 g	275760	09/23/15 21:10	GRK	TAL PEN
	Instrument ID: CH_JOAN									
Total/NA	Prep	5035			5.89 g	5.0 g	275696	09/23/15 10:00	GRK	TAL PEN
Total/NA	Analysis	8021B		1	5.89 g	5.0 g	275677	09/23/15 21:10	GRK	TAL PEN
	Instrument ID: CH_JOAN									
Total/NA	Prep	3546			15.02 g	2.0 mL	274599	09/16/15 07:29	RDT	TAL PEN
Total/NA	Analysis	8015B		1	15.02 g	2.0 mL	274848	09/18/15 00:19	C1M	TAL PEN
	Instrument ID: FLASH									
Soluble	Leach	DI Leach			2.53 g	50 mL	275900	09/24/15 15:16	TAJ	TAL PEN
Soluble	Analysis	300.0		1	1 mL		275998	09/24/15 23:31	TAJ	TAL PEN
	Instrument ID: IC2									

Client Sample ID: SB-72 6-7

Lab Sample ID: 400-110979-10
Date Collected: 09/12/15 14:40
Matrix: Solid
Date Received: 09/15/15 09:31

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			274744	09/16/15 16:28	LEC	TAL PEN
	Instrument ID: NOEQUIP									

Client Sample ID: SB-72 6-7

Lab Sample ID: 400-110979-10
Date Collected: 09/12/15 14:40
Matrix: Solid
Date Received: 09/15/15 09:31
Percent Solids: 76.3

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			6.06 g	5.0 g	275117	09/21/15 11:00	GRK	TAL PEN
Total/NA	Analysis	8015B		50	6.06 g	5.0 g	275912	09/21/15 23:11	GRK	TAL PEN
	Instrument ID: CH_RITA									
Total/NA	Prep	5035			6.06 g	5.0 g	275117	09/21/15 11:00	GRK	TAL PEN
Total/NA	Analysis	8021B		50	6.06 g	5.0 g	275909	09/21/15 23:11	GRK	TAL PEN
	Instrument ID: CH_RITA									
Total/NA	Prep	3546			15.37 g	2.0 mL	274599	09/16/15 07:29	RDT	TAL PEN
Total/NA	Analysis	8015B		1	15.37 g	2.0 mL	274848	09/18/15 00:44	C1M	TAL PEN
	Instrument ID: FLASH									
Soluble	Leach	DI Leach			2.52 g	50 mL	275900	09/24/15 15:16	TAJ	TAL PEN
Soluble	Analysis	300.0		1	1 mL		275998	09/24/15 23:54	TAJ	TAL PEN
	Instrument ID: IC2									

Client Sample ID: SB-49 3-4

Lab Sample ID: 400-110979-11
Date Collected: 09/12/15 15:25
Matrix: Solid
Date Received: 09/15/15 09:31

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			274744	09/16/15 16:28	LEC	TAL PEN

Client Sample ID: SB-49 3-4

Lab Sample ID: 400-110979-11

Date Collected: 09/12/15 15:25

Matrix: Solid

Date Received: 09/15/15 09:31

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			274744	09/16/15 16:28	LEC	TAL PEN
	Instrument ID: NOEQUIP									

Client Sample ID: SB-49 3-4

Lab Sample ID: 400-110979-11

Date Collected: 09/12/15 15:25

Matrix: Solid

Date Received: 09/15/15 09:31

Percent Solids: 85.2

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.27 g	5.0 g	275696	09/23/15 10:00	GRK	TAL PEN
Total/NA	Analysis	8015B		1	5.27 g	5.0 g	275760	09/23/15 21:45	GRK	TAL PEN
	Instrument ID: CH_JOAN									
Total/NA	Prep	5035			5.27 g	5.0 g	275696	09/23/15 10:00	GRK	TAL PEN
Total/NA	Analysis	8021B		1	5.27 g	5.0 g	275677	09/23/15 21:45	GRK	TAL PEN
	Instrument ID: CH_JOAN									
Total/NA	Prep	3546			14.84 g	2.0 mL	274599	09/16/15 07:29	RDT	TAL PEN
Total/NA	Analysis	8015B		1	14.84 g	2.0 mL	274849	09/18/15 01:33	C1M	TAL PEN
	Instrument ID: FLASH									
Soluble	Leach	DI Leach			2.52 g	50 mL	275900	09/24/15 15:16	TAJ	TAL PEN
Soluble	Analysis	300.0		1	1 mL		275998	09/25/15 00:17	TAJ	TAL PEN
	Instrument ID: IC2									

Client Sample ID: SB-50 4-5

Lab Sample ID: 400-110979-12

Date Collected: 09/12/15 16:25

Matrix: Solid

Date Received: 09/15/15 09:31

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			274744	09/16/15 16:28	LEC	TAL PEN
	Instrument ID: NOEQUIP									

Client Sample ID: SB-50 4-5

Lab Sample ID: 400-110979-12

Date Collected: 09/12/15 16:25

Matrix: Solid

Date Received: 09/15/15 09:31

Percent Solids: 75.9

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.33 g	5.0 g	275696	09/23/15 10:00	GRK	TAL PEN
Total/NA	Analysis	8015B		1	5.33 g	5.0 g	275760	09/23/15 22:19	GRK	TAL PEN
	Instrument ID: CH_JOAN									
Total/NA	Prep	5035			5.33 g	5.0 g	275696	09/23/15 10:00	GRK	TAL PEN
Total/NA	Analysis	8021B		1	5.33 g	5.0 g	275677	09/23/15 22:19	GRK	TAL PEN
	Instrument ID: CH_JOAN									
Total/NA	Prep	3546			15.35 g	2.0 mL	274599	09/16/15 07:29	RDT	TAL PEN
Total/NA	Analysis	8015B		1	15.35 g	2.0 mL	274849	09/18/15 01:57	C1M	TAL PEN
	Instrument ID: FLASH									
Soluble	Leach	DI Leach			2.48 g	50 mL	275900	09/24/15 15:16	TAJ	TAL PEN

Client Sample ID: SB-50 4-5
Date Collected: 09/12/15 16:25
Date Received: 09/15/15 09:31

Lab Sample ID: 400-110979-12
Matrix: Solid
Percent Solids: 75.9

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Analysis	300.0		1	1 mL		275998	09/25/15 00:40	TAJ	TAL PEN
	Instrument ID: IC2									

Client Sample ID: SB-51 5-6
Date Collected: 09/13/15 09:50
Date Received: 09/15/15 09:31

Lab Sample ID: 400-110979-13
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			274744	09/16/15 16:28	LEC	TAL PEN
	Instrument ID: NOEQUIP									

Client Sample ID: SB-51 5-6
Date Collected: 09/13/15 09:50
Date Received: 09/15/15 09:31

Lab Sample ID: 400-110979-13
Matrix: Solid
Percent Solids: 77.6

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.49 g	5.0 g	275696	09/23/15 10:00	GRK	TAL PEN
Total/NA	Analysis	8015B		1	5.49 g	5.0 g	275760	09/23/15 22:54	GRK	TAL PEN
	Instrument ID: CH_JOAN									
Total/NA	Prep	5035			5.49 g	5.0 g	275696	09/23/15 10:00	GRK	TAL PEN
Total/NA	Analysis	8021B		1	5.49 g	5.0 g	275677	09/23/15 22:54	GRK	TAL PEN
	Instrument ID: CH_JOAN									
Total/NA	Prep	3546			15.30 g	2.0 mL	274599	09/16/15 07:29	RDT	TAL PEN
Total/NA	Analysis	8015B		1	15.30 g	2.0 mL	274849	09/18/15 02:22	C1M	TAL PEN
	Instrument ID: FLASH									
Soluble	Leach	DI Leach			2.58 g	50 mL	275900	09/24/15 15:16	TAJ	TAL PEN
Soluble	Analysis	300.0		1	1 mL		275998	09/25/15 01:03	TAJ	TAL PEN
	Instrument ID: IC2									

Client Sample ID: SB-42 6.8-7.8
Date Collected: 09/13/15 10:35
Date Received: 09/15/15 09:31

Lab Sample ID: 400-110979-14
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			274744	09/16/15 16:28	LEC	TAL PEN
	Instrument ID: NOEQUIP									

Client Sample ID: SB-42 6.8-7.8
Date Collected: 09/13/15 10:35
Date Received: 09/15/15 09:31

Lab Sample ID: 400-110979-14
Matrix: Solid
Percent Solids: 90.7

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.14 g	5.0 g	275696	09/23/15 10:00	GRK	TAL PEN

Client Sample ID: SB-42 6.8-7.8

Lab Sample ID: 400-110979-14

Date Collected: 09/13/15 10:35
Matrix: Solid
Date Received: 09/15/15 09:31
Percent Solids: 90.7

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015B		1	5.14 g	5.0 g	275760	09/24/15 03:30	GRK	TAL PEN
	Instrument ID: CH_JOAN									
Total/NA	Prep	5035			5.14 g	5.0 g	275696	09/23/15 10:00	GRK	TAL PEN
Total/NA	Analysis	8021B		1	5.14 g	5.0 g	275677	09/24/15 03:30	GRK	TAL PEN
	Instrument ID: CH_JOAN									
Total/NA	Prep	3546			15.10 g	2.0 mL	274599	09/16/15 07:29	RDT	TAL PEN
Total/NA	Analysis	8015B		1	15.10 g	2.0 mL	274849	09/18/15 03:35	C1M	TAL PEN
	Instrument ID: FLASH									
Soluble	Leach	DI Leach			2.47 g	50 mL	275900	09/24/15 15:16	TAJ	TAL PEN
Soluble	Analysis	300.0		1	1 mL		275998	09/25/15 02:11	TAJ	TAL PEN
	Instrument ID: IC2									

Client Sample ID: SB-38 6.5-7.5

Lab Sample ID: 400-110979-15

Date Collected: 09/13/15 11:20
Matrix: Solid
Date Received: 09/15/15 09:31

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			274744	09/16/15 16:28	LEC	TAL PEN
	Instrument ID: NOEQUIP									

Client Sample ID: SB-38 6.5-7.5

Lab Sample ID: 400-110979-15

Date Collected: 09/13/15 11:20
Matrix: Solid
Date Received: 09/15/15 09:31
Percent Solids: 89.5

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.29 g	5.0 g	275696	09/23/15 10:00	GRK	TAL PEN
Total/NA	Analysis	8015B		1	5.29 g	5.0 g	275760	09/24/15 04:05	GRK	TAL PEN
	Instrument ID: CH_JOAN									
Total/NA	Prep	5035			5.29 g	5.0 g	275696	09/23/15 10:00	GRK	TAL PEN
Total/NA	Analysis	8021B		1	5.29 g	5.0 g	275677	09/24/15 04:05	GRK	TAL PEN
	Instrument ID: CH_JOAN									
Total/NA	Prep	3546			15.41 g	2.0 mL	274599	09/16/15 07:29	RDT	TAL PEN
Total/NA	Analysis	8015B		1	15.41 g	2.0 mL	274849	09/18/15 03:59	C1M	TAL PEN
	Instrument ID: FLASH									
Soluble	Leach	DI Leach			2.50 g	50 mL	275900	09/24/15 15:16	TAJ	TAL PEN
Soluble	Analysis	300.0		1	1 mL		275998	09/25/15 02:34	TAJ	TAL PEN
	Instrument ID: IC2									

Client Sample ID: SB-32 3-4

Lab Sample ID: 400-110979-16

Date Collected: 09/13/15 12:25
Matrix: Solid
Date Received: 09/15/15 09:31

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			274744	09/16/15 16:28	LEC	TAL PEN

Client Sample ID: SB-32 3-4
Date Collected: 09/13/15 12:25
Date Received: 09/15/15 09:31

Lab Sample ID: 400-110979-16
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			274744	09/16/15 16:28	LEC	TAL PEN
	Instrument ID: NOEQUIP									

Client Sample ID: SB-32 3-4
Date Collected: 09/13/15 12:25
Date Received: 09/15/15 09:31

Lab Sample ID: 400-110979-16
Matrix: Solid
Percent Solids: 85.0

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5.0 g	275696	09/23/15 10:00	GRK	TAL PEN
Total/NA	Analysis	8015B		1	5.01 g	5.0 g	275760	09/24/15 04:40	GRK	TAL PEN
	Instrument ID: CH_JOAN									
Total/NA	Prep	5035			5.01 g	5.0 g	275696	09/23/15 10:00	GRK	TAL PEN
Total/NA	Analysis	8021B		1	5.01 g	5.0 g	275677	09/24/15 04:40	GRK	TAL PEN
	Instrument ID: CH_JOAN									
Total/NA	Prep	3546			15.09 g	2.0 mL	274599	09/16/15 07:29	RDT	TAL PEN
Total/NA	Analysis	8015B		1	15.09 g	2.0 mL	274849	09/18/15 04:23	C1M	TAL PEN
	Instrument ID: FLASH									
Soluble	Leach	DI Leach			2.42 g	50 mL	275900	09/24/15 15:16	TAJ	TAL PEN
Soluble	Analysis	300.0		1	1 mL		275998	09/25/15 03:42	TAJ	TAL PEN
	Instrument ID: IC2									

Client Sample ID: SB-70 11-12
Date Collected: 09/13/15 14:40
Date Received: 09/15/15 09:31

Lab Sample ID: 400-110979-17
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			274744	09/16/15 16:28	LEC	TAL PEN
	Instrument ID: NOEQUIP									

Client Sample ID: SB-70 11-12
Date Collected: 09/13/15 14:40
Date Received: 09/15/15 09:31

Lab Sample ID: 400-110979-17
Matrix: Solid
Percent Solids: 90.6

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.80 g	5.0 g	275696	09/23/15 10:00	GRK	TAL PEN
Total/NA	Analysis	8015B		1	4.80 g	5.0 g	275760	09/24/15 05:14	GRK	TAL PEN
	Instrument ID: CH_JOAN									
Total/NA	Prep	5035			4.80 g	5.0 g	275696	09/23/15 10:00	GRK	TAL PEN
Total/NA	Analysis	8021B		1	4.80 g	5.0 g	275677	09/24/15 05:14	GRK	TAL PEN
	Instrument ID: CH_JOAN									
Total/NA	Prep	3546			15.23 g	2.0 mL	274599	09/16/15 07:29	RDT	TAL PEN
Total/NA	Analysis	8015B		1	15.23 g	2.0 mL	274849	09/18/15 04:48	C1M	TAL PEN
	Instrument ID: FLASH									
Soluble	Leach	DI Leach			2.48 g	50 mL	275900	09/24/15 15:16	TAJ	TAL PEN

Client Sample ID: SB-70 11-12
Date Collected: 09/13/15 14:40
Date Received: 09/15/15 09:31

Lab Sample ID: 400-110979-17
Matrix: Solid
Percent Solids: 90.6

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Analysis	300.0		1	1 mL		275998	09/25/15 04:05	TAJ	TAL PEN
	Instrument ID: IC2									

Client Sample ID: SB-69 10.6-11.6
Date Collected: 09/13/15 15:35
Date Received: 09/15/15 09:31

Lab Sample ID: 400-110979-18
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			274744	09/16/15 16:28	LEC	TAL PEN
	Instrument ID: NOEQUIP									

Client Sample ID: SB-69 10.6-11.6
Date Collected: 09/13/15 15:35
Date Received: 09/15/15 09:31

Lab Sample ID: 400-110979-18
Matrix: Solid
Percent Solids: 88.4

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.37 g	5.0 g	275696	09/23/15 10:00	GRK	TAL PEN
Total/NA	Analysis	8015B		1	5.37 g	5.0 g	275760	09/24/15 05:49	GRK	TAL PEN
	Instrument ID: CH_JOAN									
Total/NA	Prep	5035			5.37 g	5.0 g	275696	09/23/15 10:00	GRK	TAL PEN
Total/NA	Analysis	8021B		1	5.37 g	5.0 g	275677	09/24/15 05:49	GRK	TAL PEN
	Instrument ID: CH_JOAN									
Total/NA	Prep	3546			15.33 g	2.0 mL	274599	09/16/15 07:29	RDT	TAL PEN
Total/NA	Analysis	8015B		1	15.33 g	2.0 mL	274849	09/18/15 05:12	C1M	TAL PEN
	Instrument ID: FLASH									
Soluble	Leach	DI Leach			2.59 g	50 mL	275900	09/24/15 15:16	TAJ	TAL PEN
Soluble	Analysis	300.0		1	1 mL		275998	09/25/15 04:28	TAJ	TAL PEN
	Instrument ID: IC2									

Client Sample ID: SB-71 11-12
Date Collected: 09/13/15 16:15
Date Received: 09/15/15 09:31

Lab Sample ID: 400-110979-19
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			274744	09/16/15 16:28	LEC	TAL PEN
	Instrument ID: NOEQUIP									

Client Sample ID: SB-71 11-12
Date Collected: 09/13/15 16:15
Date Received: 09/15/15 09:31

Lab Sample ID: 400-110979-19
Matrix: Solid
Percent Solids: 82.4

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.33 g	5.0 g	275696	09/23/15 10:00	GRK	TAL PEN

Lab Chronicle

Client: MWH Americas Inc
Project/Site: Jaquez

TestAmerica Job ID: 400-110979-1

Client Sample ID: SB-71 11-12

Date Collected: 09/13/15 16:15
Date Received: 09/15/15 09:31

Lab Sample ID: 400-110979-19

Matrix: Solid
Percent Solids: 82.4

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015B		1	5.33 g	5.0 g	275760	09/24/15 06:23	GRK	TAL PEN
	Instrument ID: CH_JOAN									
Total/NA	Prep	5035			5.33 g	5.0 g	275696	09/23/15 10:00	GRK	TAL PEN
Total/NA	Analysis	8021B		1	5.33 g	5.0 g	275677	09/24/15 06:23	GRK	TAL PEN
	Instrument ID: CH_JOAN									
Total/NA	Prep	3546			15.03 g	2.0 mL	274599	09/16/15 07:29	RDT	TAL PEN
Total/NA	Analysis	8015B		1	15.03 g	2.0 mL	274849	09/18/15 06:00	C1M	TAL PEN
	Instrument ID: FLASH									
Soluble	Leach	DI Leach			2.56 g	50 mL	275900	09/24/15 15:16	TAJ	TAL PEN
Soluble	Analysis	300.0		1	1 mL		275998	09/25/15 04:51	TAJ	TAL PEN
	Instrument ID: IC2									

Laboratory References:

TAL PEN = TestAmerica Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

Certification Summary

Client: MWH Americas Inc
Project/Site: Jaquez

TestAmerica Job ID: 400-110979-1

Laboratory: TestAmerica Pensacola

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Alabama	State Program	4	40150	01-31-16
Arizona	State Program	9	AZ0710	01-11-17
Arkansas DEQ	State Program	6	88-0689	09-01-16
Florida	NELAP	4	E81010	06-30-16
Georgia	State Program	4	N/A	06-30-16
Illinois	NELAP	5	200041	10-09-16
Iowa	State Program	7	367	07-31-16
Kansas	NELAP	7	E-10253	01-31-16 *
Kentucky (UST)	State Program	4	53	06-30-16
Kentucky (WW)	State Program	4	98030	12-31-16
Louisiana	NELAP	6	30976	06-30-16
Maryland	State Program	3	233	09-30-16
Massachusetts	State Program	1	M-FL094	06-30-16
Michigan	State Program	5	9912	06-30-16
New Jersey	NELAP	2	FL006	06-30-16
North Carolina (WW/SW)	State Program	4	314	12-31-15 *
Oklahoma	State Program	6	9810	08-31-16
Pennsylvania	NELAP	3	68-00467	01-31-16
Rhode Island	State Program	1	LAO00307	12-30-16
South Carolina	State Program	4	96026	06-30-16
Tennessee	State Program	4	TN02907	06-30-16
Texas	NELAP	6	T104704286-15-9	09-30-16
USDA	Federal		P330-13-00193	07-01-16
Virginia	NELAP	3	460166	06-14-16
West Virginia DEP	State Program	3	136	06-30-16

* Certification renewal pending - certification considered valid.

Method Summary

Client: MWH Americas Inc
Project/Site: Jaquez

TestAmerica Job ID: 400-110979-1

Method	Method Description	Protocol	Laboratory
8015B	Gasoline Range Organics - (GC)	SW846	TAL PEN
8021B	Volatile Organic Compounds (GC)	SW846	TAL PEN
8015B	Diesel Range Organics (DRO) (GC)	SW846	TAL PEN
300.0	Anions, Ion Chromatography	MCAWW	TAL PEN
Moisture	Percent Moisture	EPA	TAL PEN

Protocol References:

EPA = US Environmental Protection Agency

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL PEN = TestAmerica Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

TestAmerica Pensacola
3355 McLemore Drive
Pensacola, FL 32514
Phone (850) 474-1001 Fax (850) 478-2671

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: Brad Barton, Christopher Lee	Lab PM: Edwards, Marty P	Carrier Tracking No(s):	COC No: 400-47764-22401.2
Client Contact: Christopher Lee	Phone: 303 291-2242	E-Mail: marty.edwards@testamericainc.com		Page: Page 2 of 6 1 of 2
Company: MWH Americas Inc				Job #: 10507777
Address: 1560 Broadway Suite 1800	Due Date Requested:			
City: Denver	TAT Requested (days): STANDARD			
State, Zip: CO, 80202				
Phone: 303-291-2239(Tel)	PO #: Purchase Order Requested			
Email: christopher.c.lee@mwhglobal.com	WO #: ~~402~~ ERG-MWH-08-18-15-CLSO-01			
Project Name: Jaquez	Project #: 40005479			
Site: JAQUEZ	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL; B - NaOH; C - Zn Acetate; D - Nitric Acid; E - NaHSO4; F - MeOH; G - Amchlor; H - Ascorbic Acid; I - Ice; J - DI Water; K - EDTA; L - EDA; M - Hexane; N - None; O - AsNaO2; P - Na2O4S; Q - Na2SO3; R - Na2S2SO3; S - H2SO4; T - TSP Dodecahydrate; U - Acetone; V - MCAA; W - ph 4-5; Z - other (specify); Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	8015B_DRO, 9056_ORGFM_28D	8021B - 8021 BTEX 8015 GRO	Special Instructions/Note:
MW-9 16-17.5	9/11/15	1420	G	S	X	X	
MW-17 5.5-7.5	9/11/15	1045	G	S	X	X	
SB-64 10-12	9/11/15	1610	G	S	X	X	
SB-61 6-7	9/12/15	0930	G	S	X	X	
SB-60 4-5	9/12/15	1010	G	S	X	X	
SB-59 4-5	9/12/15	1040	G	S	X	X	
SB-58 3-4	9/12/15	1115	G	S	X	X	
SB-57 5-6	9/12/15	1300	G	S	X	X	
SB-56 2.5-4.5	9/12/15	1330	G	S	X	X	
SB-72 6-7	9/12/15	1440	G	S	X	X	
SB-49 3-4	9/12/15	1525	G	S	X	X	

Possible Hazard Identification: [X] Non-Hazard; [ ] Flammable; [ ] Skin Irritant; [ ] Poison B; [ ] Unknown; [ ] Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month): [ ] Return To Client; [X] Disposal By Lab; [ ] Archive For ____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:		Method of Shipment:	
Relinquished by:	Date/Time: 9/14/15 9:15	Company	Received by:	Date/Time: 9/15/15 0931	Company TA
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: [ ] Yes [ ] No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks:

TestAmerica Pensacola
3355 McLemore Drive
Pensacola, FL 32514
Phone (850) 474-1001 Fax (850) 478-2671

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: Brad Barton/Christopher Lee	Lab PM: Edwards, Marty P	Carrier Tracking No(s):	COC No: 400-47764-22401.3
Client Contact: Christopher Lee	Phone: 303 291-2242	E-Mail: marty.edwards@testamericainc.com		Page: ~~Page 3 of 6~~ 2 of 2
Company: MWH Americas Inc		**Analysis Requested**		Job #: 10507771
Address: 1560 Broadway Suite 1800	Due Date Requested:			Preservation Codes: A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2SO3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - ph 4-5, Z - other (specify)
City: Denver	TAT Requested (days): STANDARD			
State, Zip: CO, 80202	PO #: Purchase Order Requested			
Phone: 303-291-2239(Tel)	WO #: ~~ARF~~ ERG-MWH-08-18-15-CW0-01			Other:
Email: christopher.c.lee@mwhglobal.com	Project #: 40005479			
Project Name: Jaquez	SSOW#:			
Site: JAQUEZ				

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (Water, Solid, Oil, Tissue, Air)	8015B_DRO_8068_OR3FM_28D	8021B - 8021 BTEX/ 8015 GRO	Special Instructions/Note:
SB-50 4-5	9/12/15	1625	G	S	X	X	
SB-51 5-6	9/13/15	950	G	S	X	X	
SB-51 5-6 (MS/MSD)	9/13/15	950	G	S	X	X	
SB-42 6.8-7.8	9/13/15	1035	G	S	X	X	
SB-39 6.5-7.5	9/13/15	1120	G	S	X	X	
SB-32 3-4	9/13/15	1225	G	S	X	X	
SB-70 11-12	9/13/15	1440	G	S	X	X	
SB-69 10.6-11.6	9/13/15	1535	G	S	X	X	
SB-71 11-12	9/13/15	1615	G	S	X	X	

400-110979 COC

Possible Hazard Identification: ☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month): ☐ Return To Client ☒ Disposal By Lab ☐ Archive For ____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:		Method of Shipment:		
Relinquished by:	Date/Time: 9/14/15 9:15	Company	Received by:	Date/Time: 9/15/15 0931	Company TA	
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company	
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company	

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks: 2.6°C IR-6

Login Sample Receipt Checklist

Client: MWH Americas Inc

Job Number: 400-110979-1

Login Number: 110979
List Number: 1
Creator: Benforado, Jessica L

List Source: TestAmerica Pensacola

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	2.6°C IR-6
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

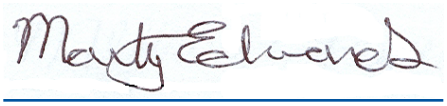
ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Pensacola
3355 McLemore Drive
Pensacola, FL 32514
Tel: (850)474-1001

TestAmerica Job ID: 400-111047-1
Client Project/Site: Jaquez
Revision: 1

For:
MWH Americas Inc
11153 Aurora Avenue
Des Moines, Iowa 50322-7904

Attn: Steve Varsa



Authorized for release by:
1/25/2016 4:46:51 PM

Marty Edwards, Manager of Project Management
(850)474-1001
marty.edwards@testamericainc.com

Table of Contents

Definitions/Glossary

Client: MWH Americas Inc
Project/Site: Jaquez

TestAmerica Job ID: 400-111047-1

Qualifiers

GC VOA

Qualifier	Qualifier Description
F2	MS/MSD RPD exceeds control limits

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Case Narrative

Client: MWH Americas Inc
Project/Site: Jaquez

TestAmerica Job ID: 400-111047-1

Job ID: 400-111047-1

Laboratory: TestAmerica Pensacola

Narrative

Job Narrative
400-111047-1

Comments
No additional comments.

Receipt
The samples were received on 9/16/2015 9:26 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 0.0º C.

Revised Report
The report was revised to change the analyte descriptions for the 8015 DRO/ORO analysis.

HPLC/IC
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

GC VOA
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

GC Semi VOA
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Organic Prep
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Detection Summary

Client: MWH Americas Inc
Project/Site: Jaquez

TestAmerica Job ID: 400-111047-1

Client Sample ID: SB-65 (15-16) — Lab Sample ID: 400-111047-1

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Chloride	32		28		mg/Kg	1	☼	300.0	Soluble

Client Sample ID: SB-67 (15-16) — Lab Sample ID: 400-111047-2

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Chloride	46		23		mg/Kg	1	☼	300.0	Soluble

Client Sample ID: SB-68 (15-16) — Lab Sample ID: 400-111047-3

No Detections.

Client Sample ID: SB-19 (12-13) — Lab Sample ID: 400-111047-4

No Detections.

Client Sample ID: SB-27 (6-7) — Lab Sample ID: 400-111047-5

No Detections.

Client Sample ID: SB-46 (5-6.5) — Lab Sample ID: 400-111047-6

No Detections.

This Detection Summary does not include radiochemical test results.

Sample Summary

Client: MWH Americas Inc
Project/Site: Jaquez

TestAmerica Job ID: 400-111047-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-111047-1	SB-65 (15-16)	Solid	09/14/15 10:25	09/16/15 09:26
400-111047-2	SB-67 (15-16)	Solid	09/14/15 11:50	09/16/15 09:26
400-111047-3	SB-68 (15-16)	Solid	09/14/15 13:30	09/16/15 09:26
400-111047-4	SB-19 (12-13)	Solid	09/14/15 14:20	09/16/15 09:26
400-111047-5	SB-27 (6-7)	Solid	09/14/15 15:20	09/16/15 09:26
400-111047-6	SB-46 (5-6.5)	Solid	09/14/15 16:10	09/16/15 09:26

Client: MWH Americas Inc
Project/Site: Jaquez

TestAmerica Job ID: 400-111047-1

Client Sample ID: SB-65 (15-16)
Date Collected: 09/14/15 10:25
Date Received: 09/16/15 09:26

Lab Sample ID: 400-111047-1
Matrix: Solid
Percent Solids: 71.7

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) C6--C10	<0.12		0.12		mg/Kg	☼	09/23/15 11:00	09/24/15 09:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (fid)	*99*		*65 - 125*	*09/23/15 11:00*	*09/24/15 09:50*	*1*

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0012		0.0012		mg/Kg	☼	09/23/15 11:00	09/24/15 09:50	1
Ethylbenzene	<0.0012		0.0012		mg/Kg	☼	09/23/15 11:00	09/24/15 09:50	1
Toluene	<0.0062		0.0062		mg/Kg	☼	09/23/15 11:00	09/24/15 09:50	1
Xylenes, Total	<0.0062		0.0062		mg/Kg	☼	09/23/15 11:00	09/24/15 09:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (pid)	*94*		*40 - 150*	*09/23/15 11:00*	*09/24/15 09:50*	*1*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	<14		14		mg/Kg	☼	09/17/15 08:03	09/18/15 11:36	1
Oil Range Organics (C28-C35)	<14		14		mg/Kg	☼	09/17/15 08:03	09/18/15 11:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*75*		*27 - 151*	*09/17/15 08:03*	*09/18/15 11:36*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**32**		28		mg/Kg	☼		09/26/15 01:21	1

Client Sample ID: SB-67 (15-16)

Date Collected: 09/14/15 11:50
Date Received: 09/16/15 09:26

Lab Sample ID: 400-111047-2

Matrix: Solid
Percent Solids: 82.1

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) C6--C10	<0.11		0.11		mg/Kg	☼	09/23/15 11:00	09/24/15 10:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (fid)	*98*		*65 - 125*	*09/23/15 11:00*	*09/24/15 10:25*	*1*

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0011		0.0011		mg/Kg	☼	09/23/15 11:00	09/24/15 10:25	1
Ethylbenzene	<0.0011		0.0011		mg/Kg	☼	09/23/15 11:00	09/24/15 10:25	1
Toluene	<0.0055		0.0055		mg/Kg	☼	09/23/15 11:00	09/24/15 10:25	1
Xylenes, Total	<0.0055		0.0055		mg/Kg	☼	09/23/15 11:00	09/24/15 10:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (pid)	*94*		*40 - 150*	*09/23/15 11:00*	*09/24/15 10:25*	*1*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	<12		12		mg/Kg	☼	09/17/15 08:03	09/18/15 11:46	1
Oil Range Organics (C28-C35)	<12		12		mg/Kg	☼	09/17/15 08:03	09/18/15 11:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*79*		*27 - 151*	*09/17/15 08:03*	*09/18/15 11:46*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**46**		23		mg/Kg	☼		09/26/15 01:44	1

Client: MWH Americas Inc
Project/Site: Jaquez

TestAmerica Job ID: 400-111047-1

Client Sample ID: SB-68 (15-16)
Date Collected: 09/14/15 13:30
Date Received: 09/16/15 09:26

Lab Sample ID: 400-111047-3
Matrix: Solid
Percent Solids: 75.2

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) C6--C10	<0.13		0.13		mg/Kg	☼	09/23/15 11:00	09/24/15 10:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (fid)	*99*		*65 - 125*	*09/23/15 11:00*	*09/24/15 10:59*	*1*

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0013		0.0013		mg/Kg	☼	09/23/15 11:00	09/24/15 10:59	1
Ethylbenzene	<0.0013		0.0013		mg/Kg	☼	09/23/15 11:00	09/24/15 10:59	1
Toluene	<0.0065		0.0065		mg/Kg	☼	09/23/15 11:00	09/24/15 10:59	1
Xylenes, Total	<0.0065		0.0065		mg/Kg	☼	09/23/15 11:00	09/24/15 10:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (pid)	*94*		*40 - 150*	*09/23/15 11:00*	*09/24/15 10:59*	*1*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	<14		14		mg/Kg	☼	09/17/15 08:03	09/18/15 11:56	1
Oil Range Organics (C28-C35)	<14		14		mg/Kg	☼	09/17/15 08:03	09/18/15 11:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*82*		*27 - 151*	*09/17/15 08:03*	*09/18/15 11:56*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<25		25		mg/Kg	☼		09/26/15 02:06	1

Client Sample ID: SB-19 (12-13)

Date Collected: 09/14/15 14:20
Date Received: 09/16/15 09:26

Lab Sample ID: 400-111047-4

Matrix: Solid
Percent Solids: 91.9

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) C6--C10	<0.11		0.11		mg/Kg	☼	09/23/15 11:00	09/24/15 11:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (fid)	*98*		*65 - 125*	*09/23/15 11:00*	*09/24/15 11:34*	*1*

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0011		0.0011		mg/Kg	☼	09/23/15 11:00	09/24/15 11:34	1
Ethylbenzene	<0.0011		0.0011		mg/Kg	☼	09/23/15 11:00	09/24/15 11:34	1
Toluene	<0.0053		0.0053		mg/Kg	☼	09/23/15 11:00	09/24/15 11:34	1
Xylenes, Total	<0.0053		0.0053		mg/Kg	☼	09/23/15 11:00	09/24/15 11:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (pid)	*95*		*40 - 150*	*09/23/15 11:00*	*09/24/15 11:34*	*1*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	<11		11		mg/Kg	☼	09/17/15 08:03	09/18/15 12:06	1
Oil Range Organics (C28-C35)	<11		11		mg/Kg	☼	09/17/15 08:03	09/18/15 12:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*72*		*27 - 151*	*09/17/15 08:03*	*09/18/15 12:06*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<22		22		mg/Kg	☼		09/26/15 02:29	1

Client Sample ID: SB-27 (6-7)

Date Collected: 09/14/15 15:20
Date Received: 09/16/15 09:26

Lab Sample ID: 400-111047-5

Matrix: Solid
Percent Solids: 87.0

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) C6--C10	<0.10		0.10		mg/Kg	☼	09/23/15 11:00	09/24/15 12:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (fid)	*98*		*65 - 125*	*09/23/15 11:00*	*09/24/15 12:08*	*1*

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0010		0.0010		mg/Kg	☼	09/23/15 11:00	09/24/15 12:08	1
Ethylbenzene	<0.0010		0.0010		mg/Kg	☼	09/23/15 11:00	09/24/15 12:08	1
Toluene	<0.0051		0.0051		mg/Kg	☼	09/23/15 11:00	09/24/15 12:08	1
Xylenes, Total	<0.0051		0.0051		mg/Kg	☼	09/23/15 11:00	09/24/15 12:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (pid)	*92*		*40 - 150*	*09/23/15 11:00*	*09/24/15 12:08*	*1*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	<12		12		mg/Kg	☼	09/17/15 08:03	09/18/15 12:17	1
Oil Range Organics (C28-C35)	<12		12		mg/Kg	☼	09/17/15 08:03	09/18/15 12:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*70*		*27 - 151*	*09/17/15 08:03*	*09/18/15 12:17*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<24		24		mg/Kg	☼		09/26/15 02:52	1

Client Sample ID: SB-46 (5-6.5)

Date Collected: 09/14/15 16:10
Date Received: 09/16/15 09:26

Lab Sample ID: 400-111047-6

Matrix: Solid
Percent Solids: 88.5

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) C6--C10	<0.11		0.11		mg/Kg	☼	09/23/15 11:00	09/24/15 12:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (fid)	*97*		*65 - 125*	*09/23/15 11:00*	*09/24/15 12:43*	*1*

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0011		0.0011		mg/Kg	☼	09/23/15 11:00	09/24/15 12:43	1
Ethylbenzene	<0.0011		0.0011		mg/Kg	☼	09/23/15 11:00	09/24/15 12:43	1
Toluene	<0.0054		0.0054		mg/Kg	☼	09/23/15 11:00	09/24/15 12:43	1
Xylenes, Total	<0.0054	F2	0.0054		mg/Kg	☼	09/23/15 11:00	09/24/15 12:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (pid)	*95*		*40 - 150*	*09/23/15 11:00*	*09/24/15 12:43*	*1*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	<11		11		mg/Kg	☼	09/17/15 08:03	09/18/15 12:27	1
Oil Range Organics (C28-C35)	<11		11		mg/Kg	☼	09/17/15 08:03	09/18/15 12:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*75*		*27 - 151*	*09/17/15 08:03*	*09/18/15 12:27*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<22		22		mg/Kg	☼		09/26/15 03:15	1

GC VOA

Prep Batch: 275754

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-111047-1	SB-65 (15-16)	Total/NA	Solid	5035	
400-111047-2	SB-67 (15-16)	Total/NA	Solid	5035	
400-111047-3	SB-68 (15-16)	Total/NA	Solid	5035	
400-111047-4	SB-19 (12-13)	Total/NA	Solid	5035	
400-111047-5	SB-27 (6-7)	Total/NA	Solid	5035	
400-111047-6	SB-46 (5-6.5)	Total/NA	Solid	5035	
400-111047-6MS	SB-46 (5-6.5)	Total/NA	Solid	5035	
400-111047-6MS	SB-46 (5-6.5)	Total/NA	Solid	5035	
400-111047-6MSD	SB-46 (5-6.5)	Total/NA	Solid	5035	
400-111047-6MSD	SB-46 (5-6.5)	Total/NA	Solid	5035	
LCS 400-275754/2-A	Lab Control Sample	Total/NA	Solid	5035	
LCS 400-275754/3-A	Lab Control Sample	Total/NA	Solid	5035	
MB 400-275754/1-A	Method Blank	Total/NA	Solid	5035	

Analysis Batch: 275761

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-111047-1	SB-65 (15-16)	Total/NA	Solid	8015B	275754
400-111047-2	SB-67 (15-16)	Total/NA	Solid	8015B	275754
400-111047-3	SB-68 (15-16)	Total/NA	Solid	8015B	275754
400-111047-4	SB-19 (12-13)	Total/NA	Solid	8015B	275754
400-111047-5	SB-27 (6-7)	Total/NA	Solid	8015B	275754
400-111047-6	SB-46 (5-6.5)	Total/NA	Solid	8015B	275754
400-111047-6MS	SB-46 (5-6.5)	Total/NA	Solid	8015B	275754
400-111047-6MSD	SB-46 (5-6.5)	Total/NA	Solid	8015B	275754
LCS 400-275754/3-A	Lab Control Sample	Total/NA	Solid	8015B	275754
MB 400-275754/1-A	Method Blank	Total/NA	Solid	8015B	275754

Analysis Batch: 275762

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-111047-1	SB-65 (15-16)	Total/NA	Solid	8021B	275754
400-111047-2	SB-67 (15-16)	Total/NA	Solid	8021B	275754
400-111047-3	SB-68 (15-16)	Total/NA	Solid	8021B	275754
400-111047-4	SB-19 (12-13)	Total/NA	Solid	8021B	275754
400-111047-5	SB-27 (6-7)	Total/NA	Solid	8021B	275754
400-111047-6	SB-46 (5-6.5)	Total/NA	Solid	8021B	275754
400-111047-6MS	SB-46 (5-6.5)	Total/NA	Solid	8021B	275754
400-111047-6MSD	SB-46 (5-6.5)	Total/NA	Solid	8021B	275754
LCS 400-275754/2-A	Lab Control Sample	Total/NA	Solid	8021B	275754
MB 400-275754/1-A	Method Blank	Total/NA	Solid	8021B	275754

GC Semi VOA

Prep Batch: 274812

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-111047-1	SB-65 (15-16)	Total/NA	Solid	3546	
400-111047-2	SB-67 (15-16)	Total/NA	Solid	3546	
400-111047-3	SB-68 (15-16)	Total/NA	Solid	3546	
400-111047-4	SB-19 (12-13)	Total/NA	Solid	3546	
400-111047-5	SB-27 (6-7)	Total/NA	Solid	3546	
400-111047-6	SB-46 (5-6.5)	Total/NA	Solid	3546	

GC Semi VOA (Continued)

Prep Batch: 274812 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-111047-6MS	SB-46 (5-6.5)	Total/NA	Solid	3546	
400-111047-6MSD	SB-46 (5-6.5)	Total/NA	Solid	3546	
LCS 400-274812/17-A	Lab Control Sample	Total/NA	Solid	3546	
MB 400-274812/18-A	Method Blank	Total/NA	Solid	3546	

Analysis Batch: 275005

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-111047-1	SB-65 (15-16)	Total/NA	Solid	8015B	274812
400-111047-2	SB-67 (15-16)	Total/NA	Solid	8015B	274812
400-111047-3	SB-68 (15-16)	Total/NA	Solid	8015B	274812
400-111047-4	SB-19 (12-13)	Total/NA	Solid	8015B	274812
400-111047-5	SB-27 (6-7)	Total/NA	Solid	8015B	274812
400-111047-6	SB-46 (5-6.5)	Total/NA	Solid	8015B	274812
400-111047-6MS	SB-46 (5-6.5)	Total/NA	Solid	8015B	274812
400-111047-6MSD	SB-46 (5-6.5)	Total/NA	Solid	8015B	274812
LCS 400-274812/17-A	Lab Control Sample	Total/NA	Solid	8015B	274812
MB 400-274812/18-A	Method Blank	Total/NA	Solid	8015B	274812

HPLC/IC

Leach Batch: 275920

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-111047-1	SB-65 (15-16)	Soluble	Solid	DI Leach	
400-111047-2	SB-67 (15-16)	Soluble	Solid	DI Leach	
400-111047-3	SB-68 (15-16)	Soluble	Solid	DI Leach	
400-111047-4	SB-19 (12-13)	Soluble	Solid	DI Leach	
400-111047-5	SB-27 (6-7)	Soluble	Solid	DI Leach	
400-111047-6	SB-46 (5-6.5)	Soluble	Solid	DI Leach	
400-111047-6MS	SB-46 (5-6.5)	Soluble	Solid	DI Leach	
400-111047-6MSD	SB-46 (5-6.5)	Soluble	Solid	DI Leach	
LCS 400-275920/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 400-275920/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
MB 400-275920/1-A	Method Blank	Soluble	Solid	DI Leach	

Analysis Batch: 276147

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-111047-1	SB-65 (15-16)	Soluble	Solid	300.0	275920
400-111047-2	SB-67 (15-16)	Soluble	Solid	300.0	275920
400-111047-3	SB-68 (15-16)	Soluble	Solid	300.0	275920
400-111047-4	SB-19 (12-13)	Soluble	Solid	300.0	275920
400-111047-5	SB-27 (6-7)	Soluble	Solid	300.0	275920
400-111047-6	SB-46 (5-6.5)	Soluble	Solid	300.0	275920
400-111047-6MS	SB-46 (5-6.5)	Soluble	Solid	300.0	275920
400-111047-6MSD	SB-46 (5-6.5)	Soluble	Solid	300.0	275920
LCS 400-275920/2-A	Lab Control Sample	Soluble	Solid	300.0	275920
LCSD 400-275920/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	275920
MB 400-275920/1-A	Method Blank	Soluble	Solid	300.0	275920

QC Association Summary

Client: MWH Americas Inc
Project/Site: Jaquez

TestAmerica Job ID: 400-111047-1

General Chemistry

Analysis Batch: 275137

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-111047-1	SB-65 (15-16)	Total/NA	Solid	Moisture	
400-111047-2	SB-67 (15-16)	Total/NA	Solid	Moisture	
400-111047-3	SB-68 (15-16)	Total/NA	Solid	Moisture	
400-111047-4	SB-19 (12-13)	Total/NA	Solid	Moisture	
400-111047-5	SB-27 (6-7)	Total/NA	Solid	Moisture	
400-111047-6	SB-46 (5-6.5)	Total/NA	Solid	Moisture	
400-111047-6MS	SB-46 (5-6.5)	Total/NA	Solid	Moisture	
400-111047-6MSD	SB-46 (5-6.5)	Total/NA	Solid	Moisture	
400-111100-A-1 DU	Duplicate	Total/NA	Solid	Moisture	

Method: 8015B - Gasoline Range Organics - (GC)

Lab Sample ID: MB 400-275754/1-A
Matrix: Solid
Analysis Batch: 275761

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 275754

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) C6--C10	<0.10		0.10		mg/Kg		09/23/15 11:00	09/24/15 08:06	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (fid)	*100*		*65 - 125*	*09/23/15 11:00*	*09/24/15 08:06*	*1*

Lab Sample ID: LCS 400-275754/3-A
Matrix: Solid
Analysis Batch: 275761

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 275754

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO) C6--C10			1.00	1.07		mg/Kg		107	62 - 141		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
a,a,a-Trifluorotoluene (fid)	*102*		*65 - 125*

Lab Sample ID: 400-111047-6MS
Matrix: Solid
Analysis Batch: 275761

Client Sample ID: SB-46 (5-6.5)
Prep Type: Total/NA
Prep Batch: 275754

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO) C6--C10	<0.11		1.07	1.12		mg/Kg	☼	104	10 - 150		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
a,a,a-Trifluorotoluene (fid)	*102*		*65 - 125*

Lab Sample ID: 400-111047-6MSD
Matrix: Solid
Analysis Batch: 275761

Client Sample ID: SB-46 (5-6.5)
Prep Type: Total/NA
Prep Batch: 275754

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO) C6--C10	<0.11		1.08	1.10		mg/Kg	☼	101	10 - 150	2	32

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
a,a,a-Trifluorotoluene (fid)	*103*		*65 - 125*

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 400-275754/1-A
Matrix: Solid
Analysis Batch: 275762

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 275754

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0010		0.0010		mg/Kg		09/23/15 11:00	09/24/15 08:06	1
Ethylbenzene	<0.0010		0.0010		mg/Kg		09/23/15 11:00	09/24/15 08:06	1

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: MB 400-275754/1-A
Matrix: Solid
Analysis Batch: 275762

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 275754

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Toluene	<0.0050		0.0050		mg/Kg		09/23/15 11:00	09/24/15 08:06	1
Xylenes, Total	<0.0050		0.0050		mg/Kg		09/23/15 11:00	09/24/15 08:06	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (pid)	*92*		*40 - 150*	*09/23/15 11:00*	*09/24/15 08:06*	*1*

Lab Sample ID: LCS 400-275754/2-A
Matrix: Solid
Analysis Batch: 275762

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 275754

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			0.0500	0.0498		mg/Kg		100	74 - 127		
Ethylbenzene			0.0500	0.0480		mg/Kg		96	79 - 131		
Toluene			0.0500	0.0466		mg/Kg		93	76 - 127		
Xylenes, Total			0.150	0.142		mg/Kg		95	80 - 129		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
a,a,a-Trifluorotoluene (pid)	*96*		*40 - 150*

Lab Sample ID: 400-111047-6MS
Matrix: Solid
Analysis Batch: 275762

Client Sample ID: SB-46 (5-6.5)
Prep Type: Total/NA
Prep Batch: 275754

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene	<0.0011		0.0544	0.0470		mg/Kg	☼	86	10 - 150		
Ethylbenzene	<0.0011		0.0544	0.0483		mg/Kg	☼	89	10 - 150		
Toluene	<0.0054		0.0544	0.0475		mg/Kg	☼	87	10 - 150		
Xylenes, Total	<0.0054	F2	0.163	0.142		mg/Kg	☼	87	50 - 150		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
a,a,a-Trifluorotoluene (pid)	*95*		*40 - 150*

Lab Sample ID: 400-111047-6MSD
Matrix: Solid
Analysis Batch: 275762

Client Sample ID: SB-46 (5-6.5)
Prep Type: Total/NA
Prep Batch: 275754

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	<0.0011		0.0538	0.0399		mg/Kg	☼	74	10 - 150	16	34
Ethylbenzene	<0.0011		0.0538	0.0300		mg/Kg	☼	56	10 - 150	47	66
Toluene	<0.0054		0.0538	0.0362		mg/Kg	☼	67	10 - 150	27	44
Xylenes, Total	<0.0054	F2	0.161	0.0881	F2	mg/Kg	☼	55	50 - 150	47	46

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
a,a,a-Trifluorotoluene (pid)	*97*		*40 - 150*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 400-274812/18-A
Matrix: Solid
Analysis Batch: 275005

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 274812

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	<9.9		9.9		mg/Kg		09/17/15 08:03	09/18/15 11:05	1
Oil Range Organics (C28-C35)	<9.9		9.9		mg/Kg		09/17/15 08:03	09/18/15 11:05	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*84*		*27 - 151*	*09/17/15 08:03*	*09/18/15 11:05*	*1*

Lab Sample ID: LCS 400-274812/17-A
Matrix: Solid
Analysis Batch: 275005

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 274812

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Diesel Range Organics [C10-C28]			330	321		mg/Kg		97	63 - 153		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
o-Terphenyl	*100*		*27 - 151*

Lab Sample ID: 400-111047-6MS
Matrix: Solid
Analysis Batch: 275005

Client Sample ID: SB-46 (5-6.5)
Prep Type: Total/NA
Prep Batch: 274812

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Diesel Range Organics [C10-C28]	<11		379	343		mg/Kg	☼	91	62 - 204		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
o-Terphenyl	*86*		*27 - 151*

Lab Sample ID: 400-111047-6MSD
Matrix: Solid
Analysis Batch: 275005

Client Sample ID: SB-46 (5-6.5)
Prep Type: Total/NA
Prep Batch: 274812

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Diesel Range Organics [C10-C28]	<11		385	380		mg/Kg	☼	99	62 - 204	10	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
o-Terphenyl	*99*		*27 - 151*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 400-275920/1-A
Matrix: Solid
Analysis Batch: 276147

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.0		5.0		mg/Kg			09/26/15 00:12	1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 400-275920/2-A
Matrix: Solid
Analysis Batch: 276147

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride			25.0	22.7		mg/Kg		91	80 - 120		

Lab Sample ID: LCSD 400-275920/3-A
Matrix: Solid
Analysis Batch: 276147

Client Sample ID: Lab Control Sample Dup
Prep Type: Soluble

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride			25.0	22.6		mg/Kg		91	80 - 120	0	15

Lab Sample ID: 400-111047-6MS
Matrix: Solid
Analysis Batch: 276147

Client Sample ID: SB-46 (5-6.5)
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride	<22		114	110		mg/Kg	☼	93	80 - 120		

Lab Sample ID: 400-111047-6MSD
Matrix: Solid
Analysis Batch: 276147

Client Sample ID: SB-46 (5-6.5)
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	<22		110	96.3		mg/Kg	☼	84	80 - 120	13	15

Lab Chronicle

Client: MWH Americas Inc
Project/Site: Jaquez

TestAmerica Job ID: 400-111047-1

Client Sample ID: SB-65 (15-16)
Date Collected: 09/14/15 10:25
Date Received: 09/16/15 09:26

Lab Sample ID: 400-111047-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			275137	09/19/15 08:59	JLB	TAL PEN
	Instrument ID: NOEQUIP									

Client Sample ID: SB-65 (15-16)
Date Collected: 09/14/15 10:25
Date Received: 09/16/15 09:26

Lab Sample ID: 400-111047-1
Matrix: Solid
Percent Solids: 71.7

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.61 g	5.0 g	275754	09/23/15 11:00	GRK	TAL PEN
Total/NA	Analysis	8015B		1	5.61 g	5.0 g	275761	09/24/15 09:50	GRK	TAL PEN
	Instrument ID: CH_JOAN									
Total/NA	Prep	5035			5.61 g	5.0 g	275754	09/23/15 11:00	GRK	TAL PEN
Total/NA	Analysis	8021B		1	5.61 g	5.0 g	275762	09/24/15 09:50	GRK	TAL PEN
	Instrument ID: CH_JOAN									
Total/NA	Prep	3546			15.38 g	2.0 mL	274812	09/17/15 08:03	RDT	TAL PEN
Total/NA	Analysis	8015B		1	15.38 g	2.0 mL	275005	09/18/15 11:36	C1M	TAL PEN
	Instrument ID: Eva									
Soluble	Leach	DI Leach			2.48 g	50 mL	275920	09/24/15 16:48	TAJ	TAL PEN
Soluble	Analysis	300.0		1	1 mL		276147	09/26/15 01:21	TAJ	TAL PEN
	Instrument ID: IC2									

Client Sample ID: SB-67 (15-16)
Date Collected: 09/14/15 11:50
Date Received: 09/16/15 09:26

Lab Sample ID: 400-111047-2
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			275137	09/19/15 08:59	JLB	TAL PEN
	Instrument ID: NOEQUIP									

Client Sample ID: SB-67 (15-16)
Date Collected: 09/14/15 11:50
Date Received: 09/16/15 09:26

Lab Sample ID: 400-111047-2
Matrix: Solid
Percent Solids: 82.1

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.52 g	5.0 g	275754	09/23/15 11:00	GRK	TAL PEN
Total/NA	Analysis	8015B		1	5.52 g	5.0 g	275761	09/24/15 10:25	GRK	TAL PEN
	Instrument ID: CH_JOAN									
Total/NA	Prep	5035			5.52 g	5.0 g	275754	09/23/15 11:00	GRK	TAL PEN
Total/NA	Analysis	8021B		1	5.52 g	5.0 g	275762	09/24/15 10:25	GRK	TAL PEN
	Instrument ID: CH_JOAN									
Total/NA	Prep	3546			14.91 g	2.0 mL	274812	09/17/15 08:03	RDT	TAL PEN
Total/NA	Analysis	8015B		1	14.91 g	2.0 mL	275005	09/18/15 11:46	C1M	TAL PEN
	Instrument ID: Eva									

Lab Chronicle

Client: MWH Americas Inc
Project/Site: Jaquez

TestAmerica Job ID: 400-111047-1

Client Sample ID: SB-67 (15-16)

Lab Sample ID: 400-111047-2
Date Collected: 09/14/15 11:50
Matrix: Solid
Date Received: 09/16/15 09:26
Percent Solids: 82.1

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			2.65 g	50 mL	275920	09/24/15 16:48	TAJ	TAL PEN
Soluble	Analysis	300.0		1	1 mL		276147	09/26/15 01:44	TAJ	TAL PEN
	Instrument ID: IC2									

Client Sample ID: SB-68 (15-16)

Lab Sample ID: 400-111047-3
Date Collected: 09/14/15 13:30
Matrix: Solid
Date Received: 09/16/15 09:26

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			275137	09/19/15 08:59	JLB	TAL PEN
	Instrument ID: NOEQUIP									

Client Sample ID: SB-68 (15-16)

Lab Sample ID: 400-111047-3
Date Collected: 09/14/15 13:30
Matrix: Solid
Date Received: 09/16/15 09:26
Percent Solids: 75.2

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.10 g	5.0 g	275754	09/23/15 11:00	GRK	TAL PEN
Total/NA	Analysis	8015B		1	5.10 g	5.0 g	275761	09/24/15 10:59	GRK	TAL PEN
	Instrument ID: CH_JOAN									
Total/NA	Prep	5035			5.10 g	5.0 g	275754	09/23/15 11:00	GRK	TAL PEN
Total/NA	Analysis	8021B		1	5.10 g	5.0 g	275762	09/24/15 10:59	GRK	TAL PEN
	Instrument ID: CH_JOAN									
Total/NA	Prep	3546			14.69 g	2.0 mL	274812	09/17/15 08:03	RDT	TAL PEN
Total/NA	Analysis	8015B		1	14.69 g	2.0 mL	275005	09/18/15 11:56	C1M	TAL PEN
	Instrument ID: Eva									
Soluble	Leach	DI Leach			2.61 g	50 mL	275920	09/24/15 16:48	TAJ	TAL PEN
Soluble	Analysis	300.0		1	1 mL		276147	09/26/15 02:06	TAJ	TAL PEN
	Instrument ID: IC2									

Client Sample ID: SB-19 (12-13)

Lab Sample ID: 400-111047-4
Date Collected: 09/14/15 14:20
Matrix: Solid
Date Received: 09/16/15 09:26

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			275137	09/19/15 08:59	JLB	TAL PEN
	Instrument ID: NOEQUIP									

Lab Chronicle

Client: MWH Americas Inc
Project/Site: Jaquez

TestAmerica Job ID: 400-111047-1

Client Sample ID: SB-19 (12-13)

Lab Sample ID: 400-111047-4

Date Collected: 09/14/15 14:20
Matrix: Solid
Date Received: 09/16/15 09:26
Percent Solids: 91.9

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.10 g	5.0 g	275754	09/23/15 11:00	GRK	TAL PEN
Total/NA	Analysis	8015B		1	5.10 g	5.0 g	275761	09/24/15 11:34	GRK	TAL PEN
	Instrument ID: CH_JOAN									
Total/NA	Prep	5035			5.10 g	5.0 g	275754	09/23/15 11:00	GRK	TAL PEN
Total/NA	Analysis	8021B		1	5.10 g	5.0 g	275762	09/24/15 11:34	GRK	TAL PEN
	Instrument ID: CH_JOAN									
Total/NA	Prep	3546			14.97 g	2.0 mL	274812	09/17/15 08:03	RDT	TAL PEN
Total/NA	Analysis	8015B		1	14.97 g	2.0 mL	275005	09/18/15 12:06	C1M	TAL PEN
	Instrument ID: Eva									
Soluble	Leach	DI Leach			2.49 g	50 mL	275920	09/24/15 16:48	TAJ	TAL PEN
Soluble	Analysis	300.0		1	1 mL		276147	09/26/15 02:29	TAJ	TAL PEN
	Instrument ID: IC2									

Client Sample ID: SB-27 (6-7)

Lab Sample ID: 400-111047-5

Date Collected: 09/14/15 15:20
Matrix: Solid
Date Received: 09/16/15 09:26

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			275137	09/19/15 08:59	JLB	TAL PEN
	Instrument ID: NOEQUIP									

Client Sample ID: SB-27 (6-7)

Lab Sample ID: 400-111047-5

Date Collected: 09/14/15 15:20
Matrix: Solid
Date Received: 09/16/15 09:26
Percent Solids: 87.0

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.59 g	5.0 g	275754	09/23/15 11:00	GRK	TAL PEN
Total/NA	Analysis	8015B		1	5.59 g	5.0 g	275761	09/24/15 12:08	GRK	TAL PEN
	Instrument ID: CH_JOAN									
Total/NA	Prep	5035			5.59 g	5.0 g	275754	09/23/15 11:00	GRK	TAL PEN
Total/NA	Analysis	8021B		1	5.59 g	5.0 g	275762	09/24/15 12:08	GRK	TAL PEN
	Instrument ID: CH_JOAN									
Total/NA	Prep	3546			14.81 g	2.0 mL	274812	09/17/15 08:03	RDT	TAL PEN
Total/NA	Analysis	8015B		1	14.81 g	2.0 mL	275005	09/18/15 12:17	C1M	TAL PEN
	Instrument ID: Eva									
Soluble	Leach	DI Leach			2.44 g	50 mL	275920	09/24/15 16:48	TAJ	TAL PEN
Soluble	Analysis	300.0		1	1 mL		276147	09/26/15 02:52	TAJ	TAL PEN
	Instrument ID: IC2									

Lab Chronicle

Client: MWH Americas Inc
Project/Site: Jaquez

TestAmerica Job ID: 400-111047-1

Client Sample ID: SB-46 (5-6.5)

Date Collected: 09/14/15 16:10
Date Received: 09/16/15 09:26

Lab Sample ID: 400-111047-6

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			275137	09/19/15 08:59	JLB	TAL PEN
	Instrument ID: NOEQUIP									

Client Sample ID: SB-46 (5-6.5)

Date Collected: 09/14/15 16:10
Date Received: 09/16/15 09:26

Lab Sample ID: 400-111047-6

Matrix: Solid
Percent Solids: 88.5

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.23 g	5.0 g	275754	09/23/15 11:00	GRK	TAL PEN
Total/NA	Analysis	8015B		1	5.23 g	5.0 g	275761	09/24/15 12:43	GRK	TAL PEN
	Instrument ID: CH_JOAN									
Total/NA	Prep	5035			5.23 g	5.0 g	275754	09/23/15 11:00	GRK	TAL PEN
Total/NA	Analysis	8021B		1	5.23 g	5.0 g	275762	09/24/15 12:43	GRK	TAL PEN
	Instrument ID: CH_JOAN									
Total/NA	Prep	3546			15.35 g	2.0 mL	274812	09/17/15 08:03	RDT	TAL PEN
Total/NA	Analysis	8015B		1	15.35 g	2.0 mL	275005	09/18/15 12:27	C1M	TAL PEN
	Instrument ID: Eva									
Soluble	Leach	DI Leach			2.54 g	50 mL	275920	09/24/15 16:48	TAJ	TAL PEN
Soluble	Analysis	300.0		1	1 mL		276147	09/26/15 03:15	TAJ	TAL PEN
	Instrument ID: IC2									

Laboratory References:

TAL PEN = TestAmerica Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

Certification Summary

Client: MWH Americas Inc
Project/Site: Jaquez

TestAmerica Job ID: 400-111047-1

Laboratory: TestAmerica Pensacola

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Alabama	State Program	4	40150	01-31-16
Arizona	State Program	9	AZ0710	01-11-17
Arkansas DEQ	State Program	6	88-0689	09-01-16
Florida	NELAP	4	E81010	06-30-16
Georgia	State Program	4	N/A	06-30-16
Illinois	NELAP	5	200041	10-09-16
Iowa	State Program	7	367	07-31-16
Kansas	NELAP	7	E-10253	01-31-16 *
Kentucky (UST)	State Program	4	53	06-30-16
Kentucky (WW)	State Program	4	98030	12-31-16
Louisiana	NELAP	6	30976	06-30-16
Maryland	State Program	3	233	09-30-16
Massachusetts	State Program	1	M-FL094	06-30-16
Michigan	State Program	5	9912	06-30-16
New Jersey	NELAP	2	FL006	06-30-16
North Carolina (WW/SW)	State Program	4	314	12-31-15 *
Oklahoma	State Program	6	9810	08-31-16
Pennsylvania	NELAP	3	68-00467	01-31-16
Rhode Island	State Program	1	LAO00307	12-30-16
South Carolina	State Program	4	96026	06-30-16
Tennessee	State Program	4	TN02907	06-30-16
Texas	NELAP	6	T104704286-15-9	09-30-16
USDA	Federal		P330-13-00193	07-01-16
Virginia	NELAP	3	460166	06-14-16
West Virginia DEP	State Program	3	136	06-30-16

* Certification renewal pending - certification considered valid.

Method Summary

Client: MWH Americas Inc
Project/Site: Jaquez

TestAmerica Job ID: 400-111047-1

Method	Method Description	Protocol	Laboratory
8015B	Gasoline Range Organics - (GC)	SW846	TAL PEN
8021B	Volatile Organic Compounds (GC)	SW846	TAL PEN
8015B	Diesel Range Organics (DRO) (GC)	SW846	TAL PEN
300.0	Anions, Ion Chromatography	MCAWW	TAL PEN
Moisture	Percent Moisture	EPA	TAL PEN

Protocol References:

EPA = US Environmental Protection Agency

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL PEN = TestAmerica Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

TestAmerica Pensacola
3355 McLemore Drive
Pensacola, FL 32514
Phone (850) 474-1001 Fax (850) 478-2671

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: Chris Lee, Brad Barton	Lab PM: Edwards, Marty P	Carrier Tracking No(s):	COC No: 400-47764-22401.4
Client Contact: Christopher Lee	Phone: 303 291-2242	E-Mail: marty.edwards@testamericainc.com		Page: Page 1 of 1
Company: MWH Americas Inc		Analysis Requested		Job #: 10907777.XXXX
Address: 1560 Broadway Suite 1800	Due Date Requested:			Preservation Codes:
City: Denver	TAT Requested (days): STANDARD			A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2SO3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - ph 4-5, Z - other (specify)
State, Zip: CO, 80202	PO #: Purchase Order Requested			
Phone: 303-291-2239(Tel)	~~WO #~~ ARFR ERG-MWH-08-18-15-CWO-01			
Email: christopher.c.lee@mwhglobal.com	Project #: 40005479			Other:
Project Name: Jaquez	SSOW#:			
Site: JAQUEZ				

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	8015B_DRO, 9056_ORGFM_28D	8021B - 8021 BTEX/ 8015 GRO	Total Number of containers	Special Instructions/Note:
SB-65(15-16)	9/14/15	1025	G	S	N	N	1	1	
SB-67(15-16)	9/14/15	1150	G	S	N	N	1	1	
SB-68(15-16)	9/14/15	1330	G	S	N	N	1	1	
SB-19(12-13)	9/14/15	1420	G	S	N	N	1	1	
SB-27(6-7)	9/14/15	1520	G	S	N	N	1	1	
SB-46(5-6.5)	9/14/15	1610	G	S	N	N	1	1	
SB-46(5-6.5)(MS/MSD)	9/14/15	1610	G	S	N	Y	1	1	

400-111047 COC

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
		9/15/15 1115			9/16/15 0926	
	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: △ Yes △ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks: 0.0°C IR6

Login Sample Receipt Checklist

Client: MWH Americas Inc

Job Number: 400-111047-1

Login Number: 111047
List Number: 1
Creator: Crawford, Lauren E

List Source: TestAmerica Pensacola

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	0.0°C IR-6
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

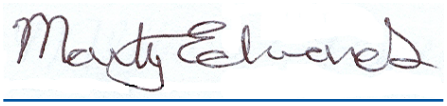
ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Pensacola
3355 McLemore Drive
Pensacola, FL 32514
Tel: (850)474-1001

TestAmerica Job ID: 400-111122-1
Client Project/Site: Jaquez
Revision: 1

For:
MWH Americas Inc
11153 Aurora Avenue
Des Moines, Iowa 50322-7904

Attn: Steve Varsa



Authorized for release by:
1/25/2016 4:48:32 PM

Marty Edwards, Manager of Project Management
(850)474-1001
marty.edwards@testamericainc.com

Table of Contents

Definitions/Glossary

Client: MWH Americas Inc
Project/Site: Jaquez

TestAmerica Job ID: 400-111122-1

Qualifiers

GC VOA

Qualifier	Qualifier Description
F2	MS/MSD RPD exceeds control limits

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Case Narrative

Client: MWH Americas Inc
Project/Site: Jaquez

TestAmerica Job ID: 400-111122-1

Job ID: 400-111122-1

Laboratory: TestAmerica Pensacola

Narrative

Job Narrative
400-111122-1

Comments
No additional comments.

Receipt
The samples were received on 9/17/2015 8:56 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 0.0º C.

Revised Report
The report was revised to change the analyte descriptions for the 8015 DRO/ORO analysis.

HPLC/IC
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

GC VOA
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

GC Semi VOA
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Organic Prep
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Detection Summary

Client: MWH Americas Inc
Project/Site: Jaquez

TestAmerica Job ID: 400-111122-1

Client Sample ID: SB-37 (5-7') — Lab Sample ID: 400-111122-1

No Detections.

Client Sample ID: SB-41 (5-7') — Lab Sample ID: 400-111122-2

No Detections.

Client Sample ID: SB-45 (5-6') — Lab Sample ID: 400-111122-3

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Chloride	28		26		mg/Kg	1	☼	300.0	Soluble

Client Sample ID: SB-44 (5-6') — Lab Sample ID: 400-111122-4

No Detections.

Client Sample ID: SB-48 (5-6') — Lab Sample ID: 400-111122-5

No Detections.

Client Sample ID: SB-47 (5-6') — Lab Sample ID: 400-111122-6

No Detections.

Client Sample ID: SB-43 (10-11') — Lab Sample ID: 400-111122-7

No Detections.

This Detection Summary does not include radiochemical test results.

Sample Summary

Client: MWH Americas Inc
Project/Site: Jaquez

TestAmerica Job ID: 400-111122-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-111122-1	SB-37 (5-7')	Solid	09/15/15 10:25	09/17/15 08:56
400-111122-2	SB-41 (5-7')	Solid	09/15/15 11:10	09/17/15 08:56
400-111122-3	SB-45 (5-6')	Solid	09/15/15 12:10	09/17/15 08:56
400-111122-4	SB-44 (5-6')	Solid	09/15/15 13:45	09/17/15 08:56
400-111122-5	SB-48 (5-6')	Solid	09/15/15 14:45	09/17/15 08:56
400-111122-6	SB-47 (5-6')	Solid	09/15/15 16:00	09/17/15 08:56
400-111122-7	SB-43 (10-11')	Solid	09/15/15 16:50	09/17/15 08:56

Client: MWH Americas Inc
Project/Site: Jaquez

TestAmerica Job ID: 400-111122-1

Client Sample ID: SB-37 (5-7')
Date Collected: 09/15/15 10:25
Date Received: 09/17/15 08:56

Lab Sample ID: 400-111122-1
Matrix: Solid
Percent Solids: 87.8

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) C6--C10	<0.097		0.097		mg/Kg	☼	09/24/15 10:30	09/24/15 17:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (fid)	*97*		*65 - 125*	*09/24/15 10:30*	*09/24/15 17:20*	*1*

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00097		0.00097		mg/Kg	☼	09/24/15 10:30	09/24/15 17:20	1
Ethylbenzene	<0.00097		0.00097		mg/Kg	☼	09/24/15 10:30	09/24/15 17:20	1
Toluene	<0.0048		0.0048		mg/Kg	☼	09/24/15 10:30	09/24/15 17:20	1
Xylenes, Total	<0.0048		0.0048		mg/Kg	☼	09/24/15 10:30	09/24/15 17:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (pid)	*90*		*40 - 150*	*09/24/15 10:30*	*09/24/15 17:20*	*1*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	<11		11		mg/Kg	☼	09/18/15 08:34	09/21/15 20:25	1
Oil Range Organics (C28-C35)	<11		11		mg/Kg	☼	09/18/15 08:34	09/21/15 20:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*90*		*27 - 151*	*09/18/15 08:34*	*09/21/15 20:25*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<22		22		mg/Kg	☼		09/26/15 05:09	1

Client: MWH Americas Inc
Project/Site: Jaquez

TestAmerica Job ID: 400-111122-1

Client Sample ID: SB-41 (5-7')
Date Collected: 09/15/15 11:10
Date Received: 09/17/15 08:56

Lab Sample ID: 400-111122-2
Matrix: Solid
Percent Solids: 93.6

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) C6--C10	<0.11		0.11		mg/Kg	☼	09/24/15 10:30	09/24/15 17:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (fid)	*99*		*65 - 125*	*09/24/15 10:30*	*09/24/15 17:54*	*1*

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0011		0.0011		mg/Kg	☼	09/24/15 10:30	09/24/15 17:54	1
Ethylbenzene	<0.0011		0.0011		mg/Kg	☼	09/24/15 10:30	09/24/15 17:54	1
Toluene	<0.0053		0.0053		mg/Kg	☼	09/24/15 10:30	09/24/15 17:54	1
Xylenes, Total	<0.0053		0.0053		mg/Kg	☼	09/24/15 10:30	09/24/15 17:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (pid)	*92*		*40 - 150*	*09/24/15 10:30*	*09/24/15 17:54*	*1*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	<11		11		mg/Kg	☼	09/18/15 08:34	09/21/15 20:54	1
Oil Range Organics (C28-C35)	<11		11		mg/Kg	☼	09/18/15 08:34	09/21/15 20:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*84*		*27 - 151*	*09/18/15 08:34*	*09/21/15 20:54*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<21		21		mg/Kg	☼		09/26/15 05:32	1

Client: MWH Americas Inc
Project/Site: Jaquez

TestAmerica Job ID: 400-111122-1

Client Sample ID: SB-45 (5-6')
Date Collected: 09/15/15 12:10
Date Received: 09/17/15 08:56

Lab Sample ID: 400-111122-3
Matrix: Solid
Percent Solids: 70.7

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) C6--C10	<0.13		0.13		mg/Kg	☼	09/24/15 10:30	09/24/15 18:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (fid)	*99*		*65 - 125*	*09/24/15 10:30*	*09/24/15 18:29*	*1*

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0013		0.0013		mg/Kg	☼	09/24/15 10:30	09/24/15 18:29	1
Ethylbenzene	<0.0013		0.0013		mg/Kg	☼	09/24/15 10:30	09/24/15 18:29	1
Toluene	<0.0066		0.0066		mg/Kg	☼	09/24/15 10:30	09/24/15 18:29	1
Xylenes, Total	<0.0066		0.0066		mg/Kg	☼	09/24/15 10:30	09/24/15 18:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (pid)	*92*		*40 - 150*	*09/24/15 10:30*	*09/24/15 18:29*	*1*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	<14		14		mg/Kg	☼	09/18/15 08:34	09/21/15 21:04	1
Oil Range Organics (C28-C35)	<14		14		mg/Kg	☼	09/18/15 08:34	09/21/15 21:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*100*		*27 - 151*	*09/18/15 08:34*	*09/21/15 21:04*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**28**		26		mg/Kg	☼		09/26/15 05:54	1

Client: MWH Americas Inc
Project/Site: Jaquez

TestAmerica Job ID: 400-111122-1

Client Sample ID: SB-44 (5-6')
Date Collected: 09/15/15 13:45
Date Received: 09/17/15 08:56

Lab Sample ID: 400-111122-4
Matrix: Solid
Percent Solids: 94.3

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) C6--C10	<0.098		0.098		mg/Kg	☼	09/24/15 10:30	09/24/15 19:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (fid)	*99*		*65 - 125*	*09/24/15 10:30*	*09/24/15 19:04*	*1*

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00098		0.00098		mg/Kg	☼	09/24/15 10:30	09/24/15 19:04	1
Ethylbenzene	<0.00098		0.00098		mg/Kg	☼	09/24/15 10:30	09/24/15 19:04	1
Toluene	<0.0049		0.0049		mg/Kg	☼	09/24/15 10:30	09/24/15 19:04	1
Xylenes, Total	<0.0049		0.0049		mg/Kg	☼	09/24/15 10:30	09/24/15 19:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (pid)	*96*		*40 - 150*	*09/24/15 10:30*	*09/24/15 19:04*	*1*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	<11		11		mg/Kg	☼	09/18/15 08:34	09/21/15 21:13	1
Oil Range Organics (C28-C35)	<11		11		mg/Kg	☼	09/18/15 08:34	09/21/15 21:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*106*		*27 - 151*	*09/18/15 08:34*	*09/21/15 21:13*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<21		21		mg/Kg	☼		09/26/15 06:17	1

Client: MWH Americas Inc
Project/Site: Jaquez

TestAmerica Job ID: 400-111122-1

Client Sample ID: SB-48 (5-6')

Date Collected: 09/15/15 14:45
Date Received: 09/17/15 08:56

Lab Sample ID: 400-111122-5

Matrix: Solid
Percent Solids: 88.7

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) C6--C10	<0.12		0.12		mg/Kg	☼	09/24/15 10:30	09/24/15 21:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (fid)	*99*		*65 - 125*	*09/24/15 10:30*	*09/24/15 21:22*	*1*

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0012		0.0012		mg/Kg	☼	09/24/15 10:30	09/24/15 21:22	1
Ethylbenzene	<0.0012		0.0012		mg/Kg	☼	09/24/15 10:30	09/24/15 21:22	1
Toluene	<0.0062		0.0062		mg/Kg	☼	09/24/15 10:30	09/24/15 21:22	1
Xylenes, Total	<0.0062		0.0062		mg/Kg	☼	09/24/15 10:30	09/24/15 21:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (pid)	*87*		*40 - 150*	*09/24/15 10:30*	*09/24/15 21:22*	*1*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	<11		11		mg/Kg	☼	09/18/15 08:34	09/21/15 21:23	1
Oil Range Organics (C28-C35)	<11		11		mg/Kg	☼	09/18/15 08:34	09/21/15 21:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*90*		*27 - 151*	*09/18/15 08:34*	*09/21/15 21:23*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<22		22		mg/Kg	☼		09/26/15 06:40	1

Client: MWH Americas Inc
Project/Site: Jaquez

TestAmerica Job ID: 400-111122-1

Client Sample ID: SB-47 (5-6')
Date Collected: 09/15/15 16:00
Date Received: 09/17/15 08:56

Lab Sample ID: 400-111122-6
Matrix: Solid
Percent Solids: 92.9

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) C6--C10	<0.12		0.12		mg/Kg	☼	09/24/15 10:30	09/24/15 21:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (fid)	*99*		*65 - 125*	*09/24/15 10:30*	*09/24/15 21:57*	*1*

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0012		0.0012		mg/Kg	☼	09/24/15 10:30	09/24/15 21:57	1
Ethylbenzene	<0.0012		0.0012		mg/Kg	☼	09/24/15 10:30	09/24/15 21:57	1
Toluene	<0.0059		0.0059		mg/Kg	☼	09/24/15 10:30	09/24/15 21:57	1
Xylenes, Total	<0.0059		0.0059		mg/Kg	☼	09/24/15 10:30	09/24/15 21:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (pid)	*96*		*40 - 150*	*09/24/15 10:30*	*09/24/15 21:57*	*1*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	<11		11		mg/Kg	☼	09/18/15 08:34	09/21/15 21:33	1
Oil Range Organics (C28-C35)	<11		11		mg/Kg	☼	09/18/15 08:34	09/21/15 21:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*102*		*27 - 151*	*09/18/15 08:34*	*09/21/15 21:33*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<22		22		mg/Kg	☼		09/26/15 07:03	1

Client: MWH Americas Inc
Project/Site: Jaquez

TestAmerica Job ID: 400-111122-1

Client Sample ID: SB-43 (10-11')
Date Collected: 09/15/15 16:50
Date Received: 09/17/15 08:56

Lab Sample ID: 400-111122-7
Matrix: Solid
Percent Solids: 89.7

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) C6--C10	<0.11		0.11		mg/Kg	☼	09/24/15 10:30	09/24/15 22:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (fid)	*99*		*65 - 125*	*09/24/15 10:30*	*09/24/15 22:32*	*1*

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0011		0.0011		mg/Kg	☼	09/24/15 10:30	09/24/15 22:32	1
Ethylbenzene	<0.0011		0.0011		mg/Kg	☼	09/24/15 10:30	09/24/15 22:32	1
Toluene	<0.0053		0.0053		mg/Kg	☼	09/24/15 10:30	09/24/15 22:32	1
Xylenes, Total	<0.0053		0.0053		mg/Kg	☼	09/24/15 10:30	09/24/15 22:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (pid)	*96*		*40 - 150*	*09/24/15 10:30*	*09/24/15 22:32*	*1*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	<11		11		mg/Kg	☼	09/18/15 08:34	09/21/15 21:42	1
Oil Range Organics (C28-C35)	<11		11		mg/Kg	☼	09/18/15 08:34	09/21/15 21:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*100*		*27 - 151*	*09/18/15 08:34*	*09/21/15 21:42*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<23		23		mg/Kg	☼		09/26/15 07:26	1

GC VOA

Prep Batch: 275754

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-111047-A-6-E MS	Matrix Spike	Total/NA	Solid	5035	
400-111047-A-6-F MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	
400-111047-A-6-G MS	Matrix Spike	Total/NA	Solid	5035	
400-111047-A-6-H MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	
400-111122-1	SB-37 (5-7')	Total/NA	Solid	5035	
400-111122-2	SB-41 (5-7')	Total/NA	Solid	5035	
400-111122-3	SB-45 (5-6')	Total/NA	Solid	5035	
400-111122-4	SB-44 (5-6')	Total/NA	Solid	5035	
400-111122-5	SB-48 (5-6')	Total/NA	Solid	5035	
400-111122-6	SB-47 (5-6')	Total/NA	Solid	5035	
400-111122-7	SB-43 (10-11')	Total/NA	Solid	5035	
LCS 400-275754/2-A	Lab Control Sample	Total/NA	Solid	5035	
LCS 400-275754/3-A	Lab Control Sample	Total/NA	Solid	5035	
MB 400-275754/1-A	Method Blank	Total/NA	Solid	5035	

Analysis Batch: 275761

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-111047-A-6-G MS	Matrix Spike	Total/NA	Solid	8015B	275754
400-111047-A-6-H MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B	275754
400-111122-1	SB-37 (5-7')	Total/NA	Solid	8015B	275754
400-111122-2	SB-41 (5-7')	Total/NA	Solid	8015B	275754
400-111122-3	SB-45 (5-6')	Total/NA	Solid	8015B	275754
400-111122-4	SB-44 (5-6')	Total/NA	Solid	8015B	275754
400-111122-5	SB-48 (5-6')	Total/NA	Solid	8015B	275754
400-111122-6	SB-47 (5-6')	Total/NA	Solid	8015B	275754
400-111122-7	SB-43 (10-11')	Total/NA	Solid	8015B	275754
LCS 400-275754/3-A	Lab Control Sample	Total/NA	Solid	8015B	275754
MB 400-275754/1-A	Method Blank	Total/NA	Solid	8015B	275754

Analysis Batch: 275762

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-111047-A-6-E MS	Matrix Spike	Total/NA	Solid	8021B	275754
400-111047-A-6-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	275754
400-111122-1	SB-37 (5-7')	Total/NA	Solid	8021B	275754
400-111122-2	SB-41 (5-7')	Total/NA	Solid	8021B	275754
400-111122-3	SB-45 (5-6')	Total/NA	Solid	8021B	275754
400-111122-4	SB-44 (5-6')	Total/NA	Solid	8021B	275754
400-111122-5	SB-48 (5-6')	Total/NA	Solid	8021B	275754
400-111122-6	SB-47 (5-6')	Total/NA	Solid	8021B	275754
400-111122-7	SB-43 (10-11')	Total/NA	Solid	8021B	275754
LCS 400-275754/2-A	Lab Control Sample	Total/NA	Solid	8021B	275754
MB 400-275754/1-A	Method Blank	Total/NA	Solid	8021B	275754

GC Semi VOA

Prep Batch: 275021

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-111122-1	SB-37 (5-7')	Total/NA	Solid	3546	
400-111122-1 MS	SB-37 (5-7')	Total/NA	Solid	3546	
400-111122-1 MSD	SB-37 (5-7')	Total/NA	Solid	3546	

GC Semi VOA (Continued)

Prep Batch: 275021 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-111122-2	SB-41 (5-7')	Total/NA	Solid	3546	
400-111122-3	SB-45 (5-6')	Total/NA	Solid	3546	
400-111122-4	SB-44 (5-6')	Total/NA	Solid	3546	
400-111122-5	SB-48 (5-6')	Total/NA	Solid	3546	
400-111122-6	SB-47 (5-6')	Total/NA	Solid	3546	
400-111122-7	SB-43 (10-11')	Total/NA	Solid	3546	
LCS 400-275021/19-A	Lab Control Sample	Total/NA	Solid	3546	
MB 400-275021/20-A	Method Blank	Total/NA	Solid	3546	

Analysis Batch: 275461

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-111122-1	SB-37 (5-7')	Total/NA	Solid	8015B	275021
400-111122-1 MS	SB-37 (5-7')	Total/NA	Solid	8015B	275021
400-111122-1 MSD	SB-37 (5-7')	Total/NA	Solid	8015B	275021
400-111122-2	SB-41 (5-7')	Total/NA	Solid	8015B	275021
400-111122-3	SB-45 (5-6')	Total/NA	Solid	8015B	275021
400-111122-4	SB-44 (5-6')	Total/NA	Solid	8015B	275021
400-111122-5	SB-48 (5-6')	Total/NA	Solid	8015B	275021
400-111122-6	SB-47 (5-6')	Total/NA	Solid	8015B	275021
400-111122-7	SB-43 (10-11')	Total/NA	Solid	8015B	275021
LCS 400-275021/19-A	Lab Control Sample	Total/NA	Solid	8015B	275021
MB 400-275021/20-A	Method Blank	Total/NA	Solid	8015B	275021

HPLC/IC

Leach Batch: 275920

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-111122-1	SB-37 (5-7')	Soluble	Solid	DI Leach	
400-111122-2	SB-41 (5-7')	Soluble	Solid	DI Leach	
400-111122-3	SB-45 (5-6')	Soluble	Solid	DI Leach	
400-111122-4	SB-44 (5-6')	Soluble	Solid	DI Leach	
400-111122-5	SB-48 (5-6')	Soluble	Solid	DI Leach	
400-111122-6	SB-47 (5-6')	Soluble	Solid	DI Leach	
400-111122-7	SB-43 (10-11')	Soluble	Solid	DI Leach	
LCS 400-275920/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 400-275920/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
MB 400-275920/1-A	Method Blank	Soluble	Solid	DI Leach	

Analysis Batch: 276147

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-111122-1	SB-37 (5-7')	Soluble	Solid	300.0	275920
400-111122-2	SB-41 (5-7')	Soluble	Solid	300.0	275920
400-111122-3	SB-45 (5-6')	Soluble	Solid	300.0	275920
400-111122-4	SB-44 (5-6')	Soluble	Solid	300.0	275920
400-111122-5	SB-48 (5-6')	Soluble	Solid	300.0	275920
400-111122-6	SB-47 (5-6')	Soluble	Solid	300.0	275920
400-111122-7	SB-43 (10-11')	Soluble	Solid	300.0	275920
LCS 400-275920/2-A	Lab Control Sample	Soluble	Solid	300.0	275920
LCSD 400-275920/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	275920
MB 400-275920/1-A	Method Blank	Soluble	Solid	300.0	275920

QC Association Summary

Client: MWH Americas Inc
Project/Site: Jaquez

TestAmerica Job ID: 400-111122-1

General Chemistry

Analysis Batch: 275354

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-111110-A-16 DU	Duplicate	Total/NA	Solid	Moisture	
400-111122-1	SB-37 (5-7')	Total/NA	Solid	Moisture	
400-111122-2	SB-41 (5-7')	Total/NA	Solid	Moisture	
400-111122-3	SB-45 (5-6')	Total/NA	Solid	Moisture	
400-111122-4	SB-44 (5-6')	Total/NA	Solid	Moisture	
400-111122-5	SB-48 (5-6')	Total/NA	Solid	Moisture	
400-111122-6	SB-47 (5-6')	Total/NA	Solid	Moisture	
400-111122-7	SB-43 (10-11')	Total/NA	Solid	Moisture	
400-111201-A-1 MS	Matrix Spike	Total/NA	Solid	Moisture	
400-111201-A-1 MSD	Matrix Spike Duplicate	Total/NA	Solid	Moisture	

Method: 8015B - Gasoline Range Organics - (GC)

Lab Sample ID: MB 400-275754/1-A
Matrix: Solid
Analysis Batch: 275761

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 275754

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) C6--C10	<0.10		0.10		mg/Kg		09/23/15 11:00	09/24/15 08:06	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (fid)	*100*		*65 - 125*	*09/23/15 11:00*	*09/24/15 08:06*	*1*

Lab Sample ID: LCS 400-275754/3-A
Matrix: Solid
Analysis Batch: 275761

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 275754

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO) C6--C10			1.00	1.07		mg/Kg		107	62 - 141		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
a,a,a-Trifluorotoluene (fid)	*102*		*65 - 125*

Lab Sample ID: 400-111047-A-6-G MS
Matrix: Solid
Analysis Batch: 275761

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 275754

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO) C6--C10	<0.11		1.07	1.12		mg/Kg	☼	104	10 - 150		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
a,a,a-Trifluorotoluene (fid)	*102*		*65 - 125*

Lab Sample ID: 400-111047-A-6-H MSD
Matrix: Solid
Analysis Batch: 275761

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 275754

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO) C6--C10	<0.11		1.08	1.10		mg/Kg	☼	101	10 - 150	2	32

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
a,a,a-Trifluorotoluene (fid)	*103*		*65 - 125*

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 400-275754/1-A
Matrix: Solid
Analysis Batch: 275762

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 275754

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0010		0.0010		mg/Kg		09/23/15 11:00	09/24/15 08:06	1
Ethylbenzene	<0.0010		0.0010		mg/Kg		09/23/15 11:00	09/24/15 08:06	1

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: MB 400-275754/1-A
Matrix: Solid
Analysis Batch: 275762

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 275754

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Toluene	<0.0050		0.0050		mg/Kg		09/23/15 11:00	09/24/15 08:06	1
Xylenes, Total	<0.0050		0.0050		mg/Kg		09/23/15 11:00	09/24/15 08:06	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (pid)	*92*		*40 - 150*	*09/23/15 11:00*	*09/24/15 08:06*	*1*

Lab Sample ID: LCS 400-275754/2-A
Matrix: Solid
Analysis Batch: 275762

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 275754

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			0.0500	0.0498		mg/Kg		100	74 - 127		
Ethylbenzene			0.0500	0.0480		mg/Kg		96	79 - 131		
Toluene			0.0500	0.0466		mg/Kg		93	76 - 127		
Xylenes, Total			0.150	0.142		mg/Kg		95	80 - 129		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
a,a,a-Trifluorotoluene (pid)	*96*		*40 - 150*

Lab Sample ID: 400-111047-A-6-E MS
Matrix: Solid
Analysis Batch: 275762

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 275754

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene	<0.0011		0.0544	0.0470		mg/Kg	☼	86	10 - 150		
Ethylbenzene	<0.0011		0.0544	0.0483		mg/Kg	☼	89	10 - 150		
Toluene	<0.0054		0.0544	0.0475		mg/Kg	☼	87	10 - 150		
Xylenes, Total	<0.0054	F2	0.163	0.142		mg/Kg	☼	87	50 - 150		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
a,a,a-Trifluorotoluene (pid)	*95*		*40 - 150*

Lab Sample ID: 400-111047-A-6-F MSD
Matrix: Solid
Analysis Batch: 275762

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 275754

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	<0.0011		0.0538	0.0399		mg/Kg	☼	74	10 - 150	16	34
Ethylbenzene	<0.0011		0.0538	0.0300		mg/Kg	☼	56	10 - 150	47	66
Toluene	<0.0054		0.0538	0.0362		mg/Kg	☼	67	10 - 150	27	44
Xylenes, Total	<0.0054	F2	0.161	0.0881	F2	mg/Kg	☼	55	50 - 150	47	46

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
a,a,a-Trifluorotoluene (pid)	*97*		*40 - 150*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 400-275021/20-A
Matrix: Solid
Analysis Batch: 275461

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 275021

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	<10		10		mg/Kg		09/18/15 08:34	09/22/15 11:13	1
Oil Range Organics (C28-C35)	<10		10		mg/Kg		09/18/15 08:34	09/22/15 11:13	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*108*		*27 - 151*	*09/18/15 08:34*	*09/22/15 11:13*	*1*

Lab Sample ID: LCS 400-275021/19-A
Matrix: Solid
Analysis Batch: 275461

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 275021

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Diesel Range Organics [C10-C28]			340	307		mg/Kg		90	63 - 153		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
o-Terphenyl	*31*		*27 - 151*

Lab Sample ID: 400-111122-1 MS
Matrix: Solid
Analysis Batch: 275461

Client Sample ID: SB-37 (5-7')
Prep Type: Total/NA
Prep Batch: 275021

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Diesel Range Organics [C10-C28]	<11		389	319		mg/Kg	☼	82	62 - 204		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
o-Terphenyl	*116*		*27 - 151*

Lab Sample ID: 400-111122-1 MSD
Matrix: Solid
Analysis Batch: 275461

Client Sample ID: SB-37 (5-7')
Prep Type: Total/NA
Prep Batch: 275021

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Diesel Range Organics [C10-C28]	<11		388	320		mg/Kg	☼	82	62 - 204	0	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
o-Terphenyl	*116*		*27 - 151*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 400-275920/1-A
Matrix: Solid
Analysis Batch: 276147

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.0		5.0		mg/Kg			09/26/15 00:12	1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 400-275920/2-A
Matrix: Solid
Analysis Batch: 276147

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride			25.0	22.7		mg/Kg		91	80 - 120		

Lab Sample ID: LCSD 400-275920/3-A
Matrix: Solid
Analysis Batch: 276147

Client Sample ID: Lab Control Sample Dup
Prep Type: Soluble

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride			25.0	22.6		mg/Kg		91	80 - 120	0	15

Lab Chronicle

Client: MWH Americas Inc
Project/Site: Jaquez

TestAmerica Job ID: 400-111122-1

Client Sample ID: SB-37 (5-7')
Date Collected: 09/15/15 10:25
Date Received: 09/17/15 08:56

Lab Sample ID: 400-111122-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			275354	09/21/15 15:20	LEC	TAL PEN
	Instrument ID: NOEQUIP									

Client Sample ID: SB-37 (5-7')
Date Collected: 09/15/15 10:25
Date Received: 09/17/15 08:56

Lab Sample ID: 400-111122-1
Matrix: Solid
Percent Solids: 87.8

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.90 g	5.0 g	275754	09/24/15 10:30	GRK	TAL PEN
Total/NA	Analysis	8015B		1	5.90 g	5.0 g	275761	09/24/15 17:20	GRK	TAL PEN
	Instrument ID: CH_JOAN									
Total/NA	Prep	5035			5.90 g	5.0 g	275754	09/24/15 10:30	GRK	TAL PEN
Total/NA	Analysis	8021B		1	5.90 g	5.0 g	275762	09/24/15 17:20	GRK	TAL PEN
	Instrument ID: CH_JOAN									
Total/NA	Prep	3546			15.19 g	2.0 mL	275021	09/18/15 08:34	RDT	TAL PEN
Total/NA	Analysis	8015B		1	15.19 g	2.0 mL	275461	09/21/15 20:25	C1M	TAL PEN
	Instrument ID: WALLE									
Soluble	Leach	DI Leach			2.63 g	50 mL	275920	09/24/15 16:48	TAJ	TAL PEN
Soluble	Analysis	300.0		1	1 mL		276147	09/26/15 05:09	TAJ	TAL PEN
	Instrument ID: IC2									

Client Sample ID: SB-41 (5-7')
Date Collected: 09/15/15 11:10
Date Received: 09/17/15 08:56

Lab Sample ID: 400-111122-2
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			275354	09/21/15 15:20	LEC	TAL PEN
	Instrument ID: NOEQUIP									

Client Sample ID: SB-41 (5-7')
Date Collected: 09/15/15 11:10
Date Received: 09/17/15 08:56

Lab Sample ID: 400-111122-2
Matrix: Solid
Percent Solids: 93.6

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.05 g	5.0 g	275754	09/24/15 10:30	GRK	TAL PEN
Total/NA	Analysis	8015B		1	5.05 g	5.0 g	275761	09/24/15 17:54	GRK	TAL PEN
	Instrument ID: CH_JOAN									
Total/NA	Prep	5035			5.05 g	5.0 g	275754	09/24/15 10:30	GRK	TAL PEN
Total/NA	Analysis	8021B		1	5.05 g	5.0 g	275762	09/24/15 17:54	GRK	TAL PEN
	Instrument ID: CH_JOAN									
Total/NA	Prep	3546			14.88 g	2.0 mL	275021	09/18/15 08:34	RDT	TAL PEN
Total/NA	Analysis	8015B		1	14.88 g	2.0 mL	275461	09/21/15 20:54	C1M	TAL PEN
	Instrument ID: WALLE									

Lab Chronicle

Client: MWH Americas Inc
Project/Site: Jaquez

TestAmerica Job ID: 400-111122-1

Client Sample ID: SB-41 (5-7')

Lab Sample ID: 400-111122-2
Date Collected: 09/15/15 11:10
Matrix: Solid
Date Received: 09/17/15 08:56
Percent Solids: 93.6

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			2.57 g	50 mL	275920	09/24/15 16:48	TAJ	TAL PEN
Soluble	Analysis	300.0		1	1 mL		276147	09/26/15 05:32	TAJ	TAL PEN
	Instrument ID: IC2									

Client Sample ID: SB-45 (5-6')

Lab Sample ID: 400-111122-3
Date Collected: 09/15/15 12:10
Matrix: Solid
Date Received: 09/17/15 08:56

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			275354	09/21/15 15:20	LEC	TAL PEN
	Instrument ID: NOEQUIP									

Client Sample ID: SB-45 (5-6')

Lab Sample ID: 400-111122-3
Date Collected: 09/15/15 12:10
Matrix: Solid
Date Received: 09/17/15 08:56
Percent Solids: 70.7

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.34 g	5.0 g	275754	09/24/15 10:30	GRK	TAL PEN
Total/NA	Analysis	8015B		1	5.34 g	5.0 g	275761	09/24/15 18:29	GRK	TAL PEN
	Instrument ID: CH_JOAN									
Total/NA	Prep	5035			5.34 g	5.0 g	275754	09/24/15 10:30	GRK	TAL PEN
Total/NA	Analysis	8021B		1	5.34 g	5.0 g	275762	09/24/15 18:29	GRK	TAL PEN
	Instrument ID: CH_JOAN									
Total/NA	Prep	3546			15.38 g	2.0 mL	275021	09/18/15 08:34	RDT	TAL PEN
Total/NA	Analysis	8015B		1	15.38 g	2.0 mL	275461	09/21/15 21:04	C1M	TAL PEN
	Instrument ID: WALLE									
Soluble	Leach	DI Leach			2.68 g	50 mL	275920	09/24/15 16:48	TAJ	TAL PEN
Soluble	Analysis	300.0		1	1 mL		276147	09/26/15 05:54	TAJ	TAL PEN
	Instrument ID: IC2									

Client Sample ID: SB-44 (5-6')

Lab Sample ID: 400-111122-4
Date Collected: 09/15/15 13:45
Matrix: Solid
Date Received: 09/17/15 08:56

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			275354	09/21/15 15:20	LEC	TAL PEN
	Instrument ID: NOEQUIP									

Lab Chronicle

Client: MWH Americas Inc
Project/Site: Jaquez

TestAmerica Job ID: 400-111122-1

Client Sample ID: SB-44 (5-6')

Lab Sample ID: 400-111122-4
Date Collected: 09/15/15 13:45
Matrix: Solid
Date Received: 09/17/15 08:56
Percent Solids: 94.3

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.40 g	5.0 g	275754	09/24/15 10:30	GRK	TAL PEN
Total/NA	Analysis	8015B		1	5.40 g	5.0 g	275761	09/24/15 19:04	GRK	TAL PEN
	Instrument ID: CH_JOAN									
Total/NA	Prep	5035			5.40 g	5.0 g	275754	09/24/15 10:30	GRK	TAL PEN
Total/NA	Analysis	8021B		1	5.40 g	5.0 g	275762	09/24/15 19:04	GRK	TAL PEN
	Instrument ID: CH_JOAN									
Total/NA	Prep	3546			14.63 g	2.0 mL	275021	09/18/15 08:34	RDT	TAL PEN
Total/NA	Analysis	8015B		1	14.63 g	2.0 mL	275461	09/21/15 21:13	C1M	TAL PEN
	Instrument ID: WALLE									
Soluble	Leach	DI Leach			2.49 g	50 mL	275920	09/24/15 16:48	TAJ	TAL PEN
Soluble	Analysis	300.0		1	1 mL		276147	09/26/15 06:17	TAJ	TAL PEN
	Instrument ID: IC2									

Client Sample ID: SB-48 (5-6')

Lab Sample ID: 400-111122-5
Date Collected: 09/15/15 14:45
Matrix: Solid
Date Received: 09/17/15 08:56

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			275354	09/21/15 15:20	LEC	TAL PEN
	Instrument ID: NOEQUIP									

Client Sample ID: SB-48 (5-6')

Lab Sample ID: 400-111122-5
Date Collected: 09/15/15 14:45
Matrix: Solid
Date Received: 09/17/15 08:56
Percent Solids: 88.7

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.51 g	5.0 g	275754	09/24/15 10:30	GRK	TAL PEN
Total/NA	Analysis	8015B		1	4.51 g	5.0 g	275761	09/24/15 21:22	GRK	TAL PEN
	Instrument ID: CH_JOAN									
Total/NA	Prep	5035			4.51 g	5.0 g	275754	09/24/15 10:30	GRK	TAL PEN
Total/NA	Analysis	8021B		1	4.51 g	5.0 g	275762	09/24/15 21:22	GRK	TAL PEN
	Instrument ID: CH_JOAN									
Total/NA	Prep	3546			14.75 g	2.0 mL	275021	09/18/15 08:34	RDT	TAL PEN
Total/NA	Analysis	8015B		1	14.75 g	2.0 mL	275461	09/21/15 21:23	C1M	TAL PEN
	Instrument ID: WALLE									
Soluble	Leach	DI Leach			2.53 g	50 mL	275920	09/24/15 16:48	TAJ	TAL PEN
Soluble	Analysis	300.0		1	1 mL		276147	09/26/15 06:40	TAJ	TAL PEN
	Instrument ID: IC2									

Lab Chronicle

Client: MWH Americas Inc
Project/Site: Jaquez

TestAmerica Job ID: 400-111122-1

Client Sample ID: SB-47 (5-6')

Lab Sample ID: 400-111122-6

Date Collected: 09/15/15 16:00
Matrix: Solid
Date Received: 09/17/15 08:56

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			275354	09/21/15 15:20	LEC	TAL PEN
	Instrument ID: NOEQUIP									

Client Sample ID: SB-47 (5-6')

Lab Sample ID: 400-111122-6

Date Collected: 09/15/15 16:00
Matrix: Solid
Date Received: 09/17/15 08:56
Percent Solids: 92.9

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.58 g	5.0 g	275754	09/24/15 10:30	GRK	TAL PEN
Total/NA	Analysis	8015B		1	4.58 g	5.0 g	275761	09/24/15 21:57	GRK	TAL PEN
	Instrument ID: CH_JOAN									
Total/NA	Prep	5035			4.58 g	5.0 g	275754	09/24/15 10:30	GRK	TAL PEN
Total/NA	Analysis	8021B		1	4.58 g	5.0 g	275762	09/24/15 21:57	GRK	TAL PEN
	Instrument ID: CH_JOAN									
Total/NA	Prep	3546			14.73 g	2.0 mL	275021	09/18/15 08:34	RDT	TAL PEN
Total/NA	Analysis	8015B		1	14.73 g	2.0 mL	275461	09/21/15 21:33	C1M	TAL PEN
	Instrument ID: WALLE									
Soluble	Leach	DI Leach			2.43 g	50 mL	275920	09/24/15 16:48	TAJ	TAL PEN
Soluble	Analysis	300.0		1	1 mL		276147	09/26/15 07:03	TAJ	TAL PEN
	Instrument ID: IC2									

Client Sample ID: SB-43 (10-11')

Lab Sample ID: 400-111122-7

Date Collected: 09/15/15 16:50
Matrix: Solid
Date Received: 09/17/15 08:56

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			275354	09/21/15 15:20	LEC	TAL PEN
	Instrument ID: NOEQUIP									

Client Sample ID: SB-43 (10-11')

Lab Sample ID: 400-111122-7

Date Collected: 09/15/15 16:50
Matrix: Solid
Date Received: 09/17/15 08:56
Percent Solids: 89.7

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.26 g	5.0 g	275754	09/24/15 10:30	GRK	TAL PEN
Total/NA	Analysis	8015B		1	5.26 g	5.0 g	275761	09/24/15 22:32	GRK	TAL PEN
	Instrument ID: CH_JOAN									
Total/NA	Prep	5035			5.26 g	5.0 g	275754	09/24/15 10:30	GRK	TAL PEN
Total/NA	Analysis	8021B		1	5.26 g	5.0 g	275762	09/24/15 22:32	GRK	TAL PEN
	Instrument ID: CH_JOAN									
Total/NA	Prep	3546			14.93 g	2.0 mL	275021	09/18/15 08:34	RDT	TAL PEN
Total/NA	Analysis	8015B		1	14.93 g	2.0 mL	275461	09/21/15 21:42	C1M	TAL PEN
	Instrument ID: WALLE									
Soluble	Leach	DI Leach			2.45 g	50 mL	275920	09/24/15 16:48	TAJ	TAL PEN

Lab Chronicle

Client: MWH Americas Inc
Project/Site: Jaquez

TestAmerica Job ID: 400-111122-1

Client Sample ID: SB-43 (10-11')
Date Collected: 09/15/15 16:50
Date Received: 09/17/15 08:56

Lab Sample ID: 400-111122-7
Matrix: Solid
Percent Solids: 89.7

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Analysis	300.0		1	1 mL		276147	09/26/15 07:26	TAJ	TAL PEN
	Instrument ID: IC2									

Laboratory References:

TAL PEN = TestAmerica Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

Certification Summary

Client: MWH Americas Inc
Project/Site: Jaquez

TestAmerica Job ID: 400-111122-1

Laboratory: TestAmerica Pensacola

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Alabama	State Program	4	40150	01-31-16
Arizona	State Program	9	AZ0710	01-11-17
Arkansas DEQ	State Program	6	88-0689	09-01-16
Florida	NELAP	4	E81010	06-30-16
Georgia	State Program	4	N/A	06-30-16
Illinois	NELAP	5	200041	10-09-16
Iowa	State Program	7	367	07-31-16
Kansas	NELAP	7	E-10253	01-31-16 *
Kentucky (UST)	State Program	4	53	06-30-16
Kentucky (WW)	State Program	4	98030	12-31-16
Louisiana	NELAP	6	30976	06-30-16
Maryland	State Program	3	233	09-30-16
Massachusetts	State Program	1	M-FL094	06-30-16
Michigan	State Program	5	9912	06-30-16
New Jersey	NELAP	2	FL006	06-30-16
North Carolina (WW/SW)	State Program	4	314	12-31-15 *
Oklahoma	State Program	6	9810	08-31-16
Pennsylvania	NELAP	3	68-00467	01-31-16
Rhode Island	State Program	1	LAO00307	12-30-16
South Carolina	State Program	4	96026	06-30-16
Tennessee	State Program	4	TN02907	06-30-16
Texas	NELAP	6	T104704286-15-9	09-30-16
USDA	Federal		P330-13-00193	07-01-16
Virginia	NELAP	3	460166	06-14-16
West Virginia DEP	State Program	3	136	06-30-16

* Certification renewal pending - certification considered valid.

Method Summary

Client: MWH Americas Inc
Project/Site: Jaquez

TestAmerica Job ID: 400-111122-1

Method	Method Description	Protocol	Laboratory
8015B	Gasoline Range Organics - (GC)	SW846	TAL PEN
8021B	Volatile Organic Compounds (GC)	SW846	TAL PEN
8015B	Diesel Range Organics (DRO) (GC)	SW846	TAL PEN
300.0	Anions, Ion Chromatography	MCAWW	TAL PEN
Moisture	Percent Moisture	EPA	TAL PEN

Protocol References:

EPA = US Environmental Protection Agency

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL PEN = TestAmerica Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

TestAmerica Pensacola
3355 McLemore Drive
Pensacola, FL 32514
Phone (850) 474-1001 Fax (850) 478-2671

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: Chris Lee, Brad Barton	Lab PM: Edwards, Marty P	Carrier Tracking No(s):	COC No: 400-47764-22401.5
Client Contact: Christopher Lee	Phone: 303 291-2242	E-Mail: marty.edwards@testamericainc.com		Page: Page 5 of 6
Company: MWH Americas Inc		Analysis Requested		Job #:
Address: 1560 Broadway Suite 1800	Due Date Requested:			Preservation Codes:
City: Denver	TAT Requested (days): STANDARD			A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2SO3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - ph 4-5, Z - other (specify)
State, Zip: CO, 80202	PO #: Purchase Order Requested			
Phone: 303-291-2239(Tel)	~~WO#:~~ N/A			
Email: christopher.c.lee@mwhglobal.com	ERG-MWH-06-18-15-CWO-01			
Project Name: Jaquez	Project #: 40005479			Other:
Site: JAQUEZ	SSOW#:			

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	8015B_DRO, 9056_ORGFM_28D	8021B - 8021 BTEX/ 8015 GRO	Special Instructions/Note:
SB-37(5-7')	9/15/15	1025	G	S	NW	1 1	
SB-41(5-7)	9/15/15	1110	G	S	NW	1 1	
SB-45(5-6')	9/15/15	1210	G	S	NW	1 1	
SB-44(5-6')	9/15/15	1345	G	S	NW	1 1	
SB-48(5-6')	9/15/15	1445	G	S	NW	1 1	
SB-47(5-6')	9/15/15	1600	G	S	NW	1 1	
SB-43(10-11')	9/15/15	1650	G	S	NW	1 1	

400-111122 COC

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify) Per Arf

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:		
Relinquished by: Chris Lee	Date/Time: 9/16/15 730	Company: MWH	Received by:	Date/Time: 9/17/15 0856	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks: 0.0°C IR2

Page 28 of 29

1/25/2016

Login Sample Receipt Checklist

Client: MWH Americas Inc

Job Number: 400-111122-1

Login Number: 111122
List Number: 1
Creator: Crawford, Lauren E

List Source: TestAmerica Pensacola

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	0.0°C IR-2
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

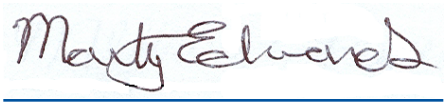
ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Pensacola
3355 McLemore Drive
Pensacola, FL 32514
Tel: (850)474-1001

TestAmerica Job ID: 400-111192-1
Client Project/Site: Jaquez
Revision: 1

For:
MWH Americas Inc
11153 Aurora Avenue
Des Moines, Iowa 50322-7904

Attn: Steve Varsa



Authorized for release by:
1/25/2016 4:50:05 PM

Marty Edwards, Manager of Project Management
(850)474-1001
marty.edwards@testamericainc.com

Table of Contents

Client: MWH Americas Inc
Project/Site: Jaquez

TestAmerica Job ID: 400-111192-1

Qualifiers

GC VOA

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery is outside acceptance limits.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Job ID: 400-111192-1

Laboratory: TestAmerica Pensacola

Narrative

Job Narrative
400-111192-1

Comments
No additional comments.

Receipt
The samples were received on 9/18/2015 9:13 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 0.5º C.

Revised Report
The report was revised to change the analyte descriptions for the 8015 DRO/ORO analysis.

HPLC/IC
Method 300.0: The method blank for preparation batch 400-275920 and analytical batch 400-276147 contained Chloride above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC VOA
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

GC Semi VOA
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Organic Prep
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

VOA Prep
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Lab Admin
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Detection Summary

Client: MWH Americas Inc
Project/Site: Jaquez

TestAmerica Job ID: 400-111192-1

Client Sample ID: SB-73 (6.7-7.7') — Lab Sample ID: 400-111192-1

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Gasoline Range Organics (GRO) C6--C10	0.26		0.12		mg/Kg	1	☼	8015B	Total/NA
Diesel Range Organics [C10-C28]	13		12		mg/Kg	1	☼	8015B	Total/NA

Client Sample ID: SB-74 (4-6') — Lab Sample ID: 400-111192-2

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Gasoline Range Organics (GRO) C6--C10	1900		57		mg/Kg	500	☼	8015B	Total/NA
Benzene	6.7		0.57		mg/Kg	500	☼	8021B	Total/NA
Ethylbenzene	8.4		0.57		mg/Kg	500	☼	8021B	Total/NA
Toluene	6.8		2.9		mg/Kg	500	☼	8021B	Total/NA
Xylenes, Total	40		2.9		mg/Kg	500	☼	8021B	Total/NA
Diesel Range Organics [C10-C28]	330		13		mg/Kg	1	☼	8015B	Total/NA
Oil Range Organics (C28-C35)	17		13		mg/Kg	1	☼	8015B	Total/NA
Chloride	41		24		mg/Kg	1	☼	300.0	Soluble

Client Sample ID: SB-75 (5-7') — Lab Sample ID: 400-111192-3

No Detections.

Client Sample ID: SB-36 (5-6') — Lab Sample ID: 400-111192-4

No Detections.

Client Sample ID: SB-35 (6-7') — Lab Sample ID: 400-111192-5

No Detections.

Client Sample ID: SB-30 (5-6') — Lab Sample ID: 400-111192-6

No Detections.

Client Sample ID: SB-31 (5-6') — Lab Sample ID: 400-111192-7

No Detections.

This Detection Summary does not include radiochemical test results.

Sample Summary

Client: MWH Americas Inc
Project/Site: Jaquez

TestAmerica Job ID: 400-111192-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-111192-1	SB-73 (6.7-7.7')	Solid	09/16/15 10:50	09/18/15 09:13
400-111192-2	SB-74 (4-6')	Solid	09/16/15 11:45	09/18/15 09:13
400-111192-3	SB-75 (5-7')	Solid	09/16/15 13:20	09/18/15 09:13
400-111192-4	SB-36 (5-6')	Solid	09/16/15 14:10	09/18/15 09:13
400-111192-5	SB-35 (6-7')	Solid	09/16/15 15:00	09/18/15 09:13
400-111192-6	SB-30 (5-6')	Solid	09/16/15 15:35	09/18/15 09:13
400-111192-7	SB-31 (5-6')	Solid	09/16/15 16:15	09/18/15 09:13

Client: MWH Americas Inc
Project/Site: Jaquez

TestAmerica Job ID: 400-111192-1

Client Sample ID: SB-73 (6.7-7.7')
Date Collected: 09/16/15 10:50
Date Received: 09/18/15 09:13

Lab Sample ID: 400-111192-1
Matrix: Solid
Percent Solids: 80.2

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) C6--C10	0.26		0.12		mg/Kg	☼	09/29/15 15:00	09/30/15 16:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (fid)	*91*		*65 - 125*	*09/29/15 15:00*	*09/30/15 16:56*	*1*

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0012		0.0012		mg/Kg	☼	09/29/15 15:00	09/30/15 16:56	1
Ethylbenzene	<0.0012		0.0012		mg/Kg	☼	09/29/15 15:00	09/30/15 16:56	1
Toluene	<0.0062		0.0062		mg/Kg	☼	09/29/15 15:00	09/30/15 16:56	1
Xylenes, Total	<0.0062		0.0062		mg/Kg	☼	09/29/15 15:00	09/30/15 16:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (pid)	*93*		*40 - 150*	*09/29/15 15:00*	*09/30/15 16:56*	*1*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	13		12		mg/Kg	☼	09/21/15 09:42	09/22/15 23:18	1
Oil Range Organics (C28-C35)	<12		12		mg/Kg	☼	09/21/15 09:42	09/22/15 23:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*94*		*27 - 151*	*09/21/15 09:42*	*09/22/15 23:18*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<25		25		mg/Kg	☼		09/26/15 07:48	1

Client: MWH Americas Inc
Project/Site: Jaquez

TestAmerica Job ID: 400-111192-1

Client Sample ID: SB-74 (4-6')

Date Collected: 09/16/15 11:45
Date Received: 09/18/15 09:13

Lab Sample ID: 400-111192-2

Matrix: Solid
Percent Solids: 78.0

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) C6--C10	1900		57		mg/Kg	☼	09/29/15 15:00	09/30/15 15:22	500

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (fid)	*89*		*65 - 125*	*09/29/15 15:00*	*09/30/15 15:22*	*500*

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	6.7		0.57		mg/Kg	☼	09/29/15 15:00	09/30/15 15:22	500
Ethylbenzene	8.4		0.57		mg/Kg	☼	09/29/15 15:00	09/30/15 15:22	500
Toluene	6.8		2.9		mg/Kg	☼	09/29/15 15:00	09/30/15 15:22	500
Xylenes, Total	40		2.9		mg/Kg	☼	09/29/15 15:00	09/30/15 15:22	500

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (pid)	*105*		*40 - 150*	*09/29/15 15:00*	*09/30/15 15:22*	*500*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	330		13		mg/Kg	☼	09/21/15 09:42	09/22/15 23:27	1
Oil Range Organics (C28-C35)	17		13		mg/Kg	☼	09/21/15 09:42	09/22/15 23:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*97*		*27 - 151*	*09/21/15 09:42*	*09/22/15 23:27*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	41		24		mg/Kg	☼		09/26/15 08:57	1

Client: MWH Americas Inc
Project/Site: Jaquez

TestAmerica Job ID: 400-111192-1

Client Sample ID: SB-75 (5-7')
Date Collected: 09/16/15 13:20
Date Received: 09/18/15 09:13

Lab Sample ID: 400-111192-3
Matrix: Solid
Percent Solids: 75.6

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) C6--C10	<0.13		0.13		mg/Kg	☼	09/29/15 15:00	09/30/15 16:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (fid)	*90*		*65 - 125*	*09/29/15 15:00*	*09/30/15 16:21*	*1*

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0013		0.0013		mg/Kg	☼	09/29/15 15:00	09/30/15 16:21	1
Ethylbenzene	<0.0013		0.0013		mg/Kg	☼	09/29/15 15:00	09/30/15 16:21	1
Toluene	<0.0066		0.0066		mg/Kg	☼	09/29/15 15:00	09/30/15 16:21	1
Xylenes, Total	<0.0066		0.0066		mg/Kg	☼	09/29/15 15:00	09/30/15 16:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (pid)	*90*		*40 - 150*	*09/29/15 15:00*	*09/30/15 16:21*	*1*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	<13		13		mg/Kg	☼	09/21/15 09:42	09/22/15 23:46	1
Oil Range Organics (C28-C35)	<13		13		mg/Kg	☼	09/21/15 09:42	09/22/15 23:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*91*		*27 - 151*	*09/21/15 09:42*	*09/22/15 23:46*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<27		27		mg/Kg	☼		09/26/15 09:20	1

Client: MWH Americas Inc
Project/Site: Jaquez

TestAmerica Job ID: 400-111192-1

Client Sample ID: SB-36 (5-6')

Date Collected: 09/16/15 14:10
Date Received: 09/18/15 09:13

Lab Sample ID: 400-111192-4

Matrix: Solid
Percent Solids: 91.3

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) C6--C10	<0.10		0.10		mg/Kg	☼	09/29/15 15:00	09/30/15 13:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (fid)	*92*		*65 - 125*	*09/29/15 15:00*	*09/30/15 13:57*	*1*

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0010		0.0010		mg/Kg	☼	09/29/15 15:00	09/30/15 13:57	1
Ethylbenzene	<0.0010		0.0010		mg/Kg	☼	09/29/15 15:00	09/30/15 13:57	1
Toluene	<0.0051		0.0051		mg/Kg	☼	09/29/15 15:00	09/30/15 13:57	1
Xylenes, Total	<0.0051		0.0051		mg/Kg	☼	09/29/15 15:00	09/30/15 13:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (pid)	*90*		*40 - 150*	*09/29/15 15:00*	*09/30/15 13:57*	*1*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	<11		11		mg/Kg	☼	09/21/15 09:42	09/22/15 23:56	1
Oil Range Organics (C28-C35)	<11		11		mg/Kg	☼	09/21/15 09:42	09/22/15 23:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*100*		*27 - 151*	*09/21/15 09:42*	*09/22/15 23:56*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<22		22		mg/Kg	☼		09/26/15 09:42	1

Client: MWH Americas Inc
Project/Site: Jaquez

TestAmerica Job ID: 400-111192-1

Client Sample ID: SB-35 (6-7')
Date Collected: 09/16/15 15:00
Date Received: 09/18/15 09:13

Lab Sample ID: 400-111192-5
Matrix: Solid
Percent Solids: 88.4

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) C6--C10	<0.11		0.11		mg/Kg	☼	09/29/15 15:00	09/30/15 14:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (fid)	*92*		*65 - 125*	*09/29/15 15:00*	*09/30/15 14:31*	*1*

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0011		0.0011		mg/Kg	☼	09/29/15 15:00	09/30/15 14:31	1
Ethylbenzene	<0.0011		0.0011		mg/Kg	☼	09/29/15 15:00	09/30/15 14:31	1
Toluene	<0.0054		0.0054		mg/Kg	☼	09/29/15 15:00	09/30/15 14:31	1
Xylenes, Total	<0.0054		0.0054		mg/Kg	☼	09/29/15 15:00	09/30/15 14:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (pid)	*87*		*40 - 150*	*09/29/15 15:00*	*09/30/15 14:31*	*1*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	<11		11		mg/Kg	☼	09/21/15 09:42	09/23/15 00:05	1
Oil Range Organics (C28-C35)	<11		11		mg/Kg	☼	09/21/15 09:42	09/23/15 00:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*97*		*27 - 151*	*09/21/15 09:42*	*09/23/15 00:05*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<24		24		mg/Kg	☼		09/26/15 10:05	1

Client: MWH Americas Inc
Project/Site: Jaquez

TestAmerica Job ID: 400-111192-1

Client Sample ID: SB-30 (5-6')

Date Collected: 09/16/15 15:35
Date Received: 09/18/15 09:13

Lab Sample ID: 400-111192-6

Matrix: Solid
Percent Solids: 91.6

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) C6--C10	<0.10		0.10		mg/Kg	☼	09/29/15 15:00	09/30/15 12:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (fid)	*92*		*65 - 125*	*09/29/15 15:00*	*09/30/15 12:47*	*1*

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0010		0.0010		mg/Kg	☼	09/29/15 15:00	09/30/15 12:47	1
Ethylbenzene	<0.0010		0.0010		mg/Kg	☼	09/29/15 15:00	09/30/15 12:47	1
Toluene	<0.0052		0.0052		mg/Kg	☼	09/29/15 15:00	09/30/15 12:47	1
Xylenes, Total	<0.0052		0.0052		mg/Kg	☼	09/29/15 15:00	09/30/15 12:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (pid)	*86*		*40 - 150*	*09/29/15 15:00*	*09/30/15 12:47*	*1*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	<11		11		mg/Kg	☼	09/21/15 09:42	09/23/15 00:15	1
Oil Range Organics (C28-C35)	<11		11		mg/Kg	☼	09/21/15 09:42	09/23/15 00:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*105*		*27 - 151*	*09/21/15 09:42*	*09/23/15 00:15*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<22		22		mg/Kg	☼		09/26/15 10:28	1

Client Sample ID: SB-31 (5-6')

Date Collected: 09/16/15 16:15
Date Received: 09/18/15 09:13

Lab Sample ID: 400-111192-7

Matrix: Solid
Percent Solids: 89.5

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) C6--C10	<0.11		0.11		mg/Kg	☼	09/29/15 15:00	09/30/15 13:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (fid)	*92*		*65 - 125*	*09/29/15 15:00*	*09/30/15 13:22*	*1*

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0011		0.0011		mg/Kg	☼	09/29/15 15:00	09/30/15 13:22	1
Ethylbenzene	<0.0011		0.0011		mg/Kg	☼	09/29/15 15:00	09/30/15 13:22	1
Toluene	<0.0056		0.0056		mg/Kg	☼	09/29/15 15:00	09/30/15 13:22	1
Xylenes, Total	<0.0056		0.0056		mg/Kg	☼	09/29/15 15:00	09/30/15 13:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (pid)	*90*		*40 - 150*	*09/29/15 15:00*	*09/30/15 13:22*	*1*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	<11		11		mg/Kg	☼	09/21/15 09:42	09/23/15 00:24	1
Oil Range Organics (C28-C35)	<11		11		mg/Kg	☼	09/21/15 09:42	09/23/15 00:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*102*		*27 - 151*	*09/21/15 09:42*	*09/23/15 00:24*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<23		23		mg/Kg	☼		09/26/15 10:51	1

GC VOA

Prep Batch: 276678

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-111192-2	SB-74 (4-6')	Total/NA	Solid	5035	
400-111192-2 MS	SB-74 (4-6')	Total/NA	Solid	5035	
400-111192-2 MSD	SB-74 (4-6')	Total/NA	Solid	5035	
LCS 400-276678/2-A	Lab Control Sample	Total/NA	Solid	5035	
LCS 400-276678/3-A	Lab Control Sample	Total/NA	Solid	5035	
MB 400-276678/1-A	Method Blank	Total/NA	Solid	5035	

Prep Batch: 276679

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-111192-1	SB-73 (6.7-7.7')	Total/NA	Solid	5035	
400-111192-3	SB-75 (5-7')	Total/NA	Solid	5035	
400-111192-4	SB-36 (5-6')	Total/NA	Solid	5035	
400-111192-5	SB-35 (6-7')	Total/NA	Solid	5035	
400-111192-6	SB-30 (5-6')	Total/NA	Solid	5035	
400-111192-7	SB-31 (5-6')	Total/NA	Solid	5035	
400-111274-A-3-G MS	Matrix Spike	Total/NA	Solid	5035	
400-111274-A-3-H MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	
400-111274-A-3-I MS	Matrix Spike	Total/NA	Solid	5035	
400-111274-A-3-J MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	
LCS 400-276679/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCS 400-276679/2-A	Lab Control Sample	Total/NA	Solid	5035	
MB 400-276679/3-A	Method Blank	Total/NA	Solid	5035	

Analysis Batch: 276687

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-111192-2	SB-74 (4-6')	Total/NA	Solid	8021B	276678
400-111192-2 MS	SB-74 (4-6')	Total/NA	Solid	8021B	276678
400-111192-2 MSD	SB-74 (4-6')	Total/NA	Solid	8021B	276678
LCS 400-276678/2-A	Lab Control Sample	Total/NA	Solid	8021B	276678
MB 400-276678/1-A	Method Blank	Total/NA	Solid	8021B	276678

Analysis Batch: 276688

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-111192-2	SB-74 (4-6')	Total/NA	Solid	8015B	276678
LCS 400-276678/3-A	Lab Control Sample	Total/NA	Solid	8015B	276678
MB 400-276678/1-A	Method Blank	Total/NA	Solid	8015B	276678

Analysis Batch: 276694

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-111192-1	SB-73 (6.7-7.7')	Total/NA	Solid	8021B	276679
400-111192-3	SB-75 (5-7')	Total/NA	Solid	8021B	276679
400-111192-4	SB-36 (5-6')	Total/NA	Solid	8021B	276679
400-111192-5	SB-35 (6-7')	Total/NA	Solid	8021B	276679
400-111192-6	SB-30 (5-6')	Total/NA	Solid	8021B	276679
400-111192-7	SB-31 (5-6')	Total/NA	Solid	8021B	276679
400-111274-A-3-G MS	Matrix Spike	Total/NA	Solid	8021B	276679
400-111274-A-3-H MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	276679
LCS 400-276679/1-A	Lab Control Sample	Total/NA	Solid	8021B	276679
MB 400-276679/3-A	Method Blank	Total/NA	Solid	8021B	276679

GC VOA (Continued)

Analysis Batch: 276695

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-111192-1	SB-73 (6.7-7.7')	Total/NA	Solid	8015B	276679
400-111192-3	SB-75 (5-7')	Total/NA	Solid	8015B	276679
400-111192-4	SB-36 (5-6')	Total/NA	Solid	8015B	276679
400-111192-5	SB-35 (6-7')	Total/NA	Solid	8015B	276679
400-111192-6	SB-30 (5-6')	Total/NA	Solid	8015B	276679
400-111192-7	SB-31 (5-6')	Total/NA	Solid	8015B	276679
400-111274-A-3-I MS	Matrix Spike	Total/NA	Solid	8015B	276679
400-111274-A-3-J MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B	276679
LCS 400-276679/2-A	Lab Control Sample	Total/NA	Solid	8015B	276679
MB 400-276679/3-A	Method Blank	Total/NA	Solid	8015B	276679

GC Semi VOA

Prep Batch: 275253

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-111192-1	SB-73 (6.7-7.7')	Total/NA	Solid	3546	
400-111192-2	SB-74 (4-6')	Total/NA	Solid	3546	
400-111192-3	SB-75 (5-7')	Total/NA	Solid	3546	
400-111192-4	SB-36 (5-6')	Total/NA	Solid	3546	
400-111192-5	SB-35 (6-7')	Total/NA	Solid	3546	
400-111192-6	SB-30 (5-6')	Total/NA	Solid	3546	
400-111192-7	SB-31 (5-6')	Total/NA	Solid	3546	
400-111201-A-1-B MS	Matrix Spike	Total/NA	Solid	3546	
400-111201-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	3546	
LCS 400-275253/18-A	Lab Control Sample	Total/NA	Solid	3546	
MB 400-275253/19-A	Method Blank	Total/NA	Solid	3546	

Analysis Batch: 275541

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-111192-1	SB-73 (6.7-7.7')	Total/NA	Solid	8015B	275253
400-111192-2	SB-74 (4-6')	Total/NA	Solid	8015B	275253
400-111192-3	SB-75 (5-7')	Total/NA	Solid	8015B	275253
400-111192-4	SB-36 (5-6')	Total/NA	Solid	8015B	275253
400-111192-5	SB-35 (6-7')	Total/NA	Solid	8015B	275253
400-111192-6	SB-30 (5-6')	Total/NA	Solid	8015B	275253
400-111192-7	SB-31 (5-6')	Total/NA	Solid	8015B	275253
400-111201-A-1-B MS	Matrix Spike	Total/NA	Solid	8015B	275253
400-111201-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B	275253
LCS 400-275253/18-A	Lab Control Sample	Total/NA	Solid	8015B	275253
MB 400-275253/19-A	Method Blank	Total/NA	Solid	8015B	275253

HPLC/IC

Leach Batch: 275920

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-111047-A-6-J MS	Matrix Spike	Soluble	Solid	DI Leach	
400-111047-A-6-K MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	
400-111192-1	SB-73 (6.7-7.7')	Soluble	Solid	DI Leach	
400-111192-2	SB-74 (4-6')	Soluble	Solid	DI Leach	
400-111192-3	SB-75 (5-7')	Soluble	Solid	DI Leach	

HPLC/IC (Continued)

Leach Batch: 275920 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-111192-4	SB-36 (5-6')	Soluble	Solid	DI Leach	
400-111192-5	SB-35 (6-7')	Soluble	Solid	DI Leach	
400-111192-6	SB-30 (5-6')	Soluble	Solid	DI Leach	
400-111192-7	SB-31 (5-6')	Soluble	Solid	DI Leach	
LCS 400-275920/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 400-275920/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
MB 400-275920/1-A	Method Blank	Soluble	Solid	DI Leach	

Analysis Batch: 276147

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-111047-A-6-J MS	Matrix Spike	Soluble	Solid	300.0	275920
400-111047-A-6-K MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	275920
400-111192-1	SB-73 (6.7-7.7')	Soluble	Solid	300.0	275920
400-111192-2	SB-74 (4-6')	Soluble	Solid	300.0	275920
400-111192-3	SB-75 (5-7')	Soluble	Solid	300.0	275920
400-111192-4	SB-36 (5-6')	Soluble	Solid	300.0	275920
400-111192-5	SB-35 (6-7')	Soluble	Solid	300.0	275920
400-111192-6	SB-30 (5-6')	Soluble	Solid	300.0	275920
400-111192-7	SB-31 (5-6')	Soluble	Solid	300.0	275920
LCS 400-275920/2-A	Lab Control Sample	Soluble	Solid	300.0	275920
LCSD 400-275920/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	275920
MB 400-275920/1-A	Method Blank	Soluble	Solid	300.0	275920

General Chemistry

Analysis Batch: 275354

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-111192-1	SB-73 (6.7-7.7')	Total/NA	Solid	Moisture	
400-111192-1 DU	SB-73 (6.7-7.7')	Total/NA	Solid	Moisture	
400-111192-2	SB-74 (4-6')	Total/NA	Solid	Moisture	
400-111192-3	SB-75 (5-7')	Total/NA	Solid	Moisture	
400-111192-4	SB-36 (5-6')	Total/NA	Solid	Moisture	
400-111192-5	SB-35 (6-7')	Total/NA	Solid	Moisture	
400-111192-6	SB-30 (5-6')	Total/NA	Solid	Moisture	
400-111192-7	SB-31 (5-6')	Total/NA	Solid	Moisture	
400-111201-A-1 MS	Matrix Spike	Total/NA	Solid	Moisture	
400-111201-A-1 MSD	Matrix Spike Duplicate	Total/NA	Solid	Moisture	

Method: 8015B - Gasoline Range Organics - (GC)

Lab Sample ID: MB 400-276678/1-A
Matrix: Solid
Analysis Batch: 276688

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 276678

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) C6--C10	<0.10		0.10		mg/Kg		09/29/15 15:00	09/29/15 21:41	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (fid)	*105*		*65 - 125*	*09/29/15 15:00*	*09/29/15 21:41*	*1*

Lab Sample ID: LCS 400-276678/3-A
Matrix: Solid
Analysis Batch: 276688

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 276678

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO) C6--C10			50.0	60.8		mg/Kg		122	62 - 141		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
a,a,a-Trifluorotoluene (fid)	*104*		*65 - 125*

Lab Sample ID: MB 400-276679/3-A
Matrix: Solid
Analysis Batch: 276695

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 276679

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) C6--C10	<0.10		0.10		mg/Kg		09/29/15 15:00	09/29/15 21:13	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (fid)	*95*		*65 - 125*	*09/29/15 15:00*	*09/29/15 21:13*	*1*

Lab Sample ID: LCS 400-276679/2-A
Matrix: Solid
Analysis Batch: 276695

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 276679

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO) C6--C10			1.00	0.983		mg/Kg		98	62 - 141		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
a,a,a-Trifluorotoluene (fid)	*99*		*65 - 125*

Lab Sample ID: 400-111274-A-3-I MS
Matrix: Solid
Analysis Batch: 276695

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 276679

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO) C6--C10	<0.11		1.10	0.912		mg/Kg	☼	83	10 - 150		

Method: 8015B - Gasoline Range Organics - (GC) (Continued)

Lab Sample ID: 400-111274-A-3-I MS
Matrix: Solid
Analysis Batch: 276695

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 276679

Surrogate	MS %Recovery	MS Qualifier	Limits
a,a,a-Trifluorotoluene (fid)	*98*		*65 - 125*

Lab Sample ID: 400-111274-A-3-J MSD
Matrix: Solid
Analysis Batch: 276695

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 276679

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO) C6--C10	<0.11		1.10	0.870		mg/Kg	☼	79	10 - 150	5	32

Surrogate	MSD %Recovery	MSD Qualifier	Limits
a,a,a-Trifluorotoluene (fid)	*97*		*65 - 125*

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 400-276678/1-A
Matrix: Solid
Analysis Batch: 276687

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 276678

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0010		0.0010		mg/Kg		09/29/15 15:00	09/29/15 21:41	1
Ethylbenzene	<0.0010		0.0010		mg/Kg		09/29/15 15:00	09/29/15 21:41	1
Toluene	<0.0050		0.0050		mg/Kg		09/29/15 15:00	09/29/15 21:41	1
Xylenes, Total	<0.0050		0.0050		mg/Kg		09/29/15 15:00	09/29/15 21:41	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (pid)	*101*		*40 - 150*	*09/29/15 15:00*	*09/29/15 21:41*	*1*

Lab Sample ID: LCS 400-276678/2-A
Matrix: Solid
Analysis Batch: 276687

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 276678

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	2.50	2.20		mg/Kg		88	74 - 127
Ethylbenzene	2.50	2.13		mg/Kg		85	79 - 131
Toluene	2.50	2.17		mg/Kg		87	76 - 127
Xylenes, Total	7.50	6.41		mg/Kg		86	80 - 129

Surrogate	LCS %Recovery	LCS Qualifier	Limits
a,a,a-Trifluorotoluene (pid)	*100*		*40 - 150*

Lab Sample ID: 400-111192-2 MS
Matrix: Solid
Analysis Batch: 276687

Client Sample ID: SB-74 (4-6')
Prep Type: Total/NA
Prep Batch: 276678

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	6.7		28.7	37.5		mg/Kg	☼	107	10 - 150

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: 400-111192-2 MS
Matrix: Solid
Analysis Batch: 276687

Client Sample ID: SB-74 (4-6')
Prep Type: Total/NA
Prep Batch: 276678

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Ethylbenzene	8.4		28.7	43.5		mg/Kg	☼	122	10 - 150
Toluene	6.8		28.7	37.8		mg/Kg	☼	108	10 - 150
Xylenes, Total	40		86.0	131		mg/Kg	☼	106	50 - 150

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
a,a,a-Trifluorotoluene (pid)	*89*		*40 - 150*

Lab Sample ID: 400-111192-2 MSD
Matrix: Solid
Analysis Batch: 276687

Client Sample ID: SB-74 (4-6')
Prep Type: Total/NA
Prep Batch: 276678

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	6.7		28.7	37.9		mg/Kg	☼	109	10 - 150	1	34
Ethylbenzene	8.4		28.7	43.8		mg/Kg	☼	124	10 - 150	1	66
Toluene	6.8		28.7	38.3		mg/Kg	☼	110	10 - 150	1	44
Xylenes, Total	40		86.0	133		mg/Kg	☼	107	50 - 150	1	46

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
a,a,a-Trifluorotoluene (pid)	*88*		*40 - 150*

Lab Sample ID: MB 400-276679/3-A
Matrix: Solid
Analysis Batch: 276694

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 276679

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0010		0.0010		mg/Kg		09/29/15 15:00	09/29/15 21:13	1
Ethylbenzene	<0.0010		0.0010		mg/Kg		09/29/15 15:00	09/29/15 21:13	1
Toluene	<0.0050		0.0050		mg/Kg		09/29/15 15:00	09/29/15 21:13	1
Xylenes, Total	<0.0050		0.0050		mg/Kg		09/29/15 15:00	09/29/15 21:13	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (pid)	*92*		*40 - 150*	*09/29/15 15:00*	*09/29/15 21:13*	*1*

Lab Sample ID: LCS 400-276679/1-A
Matrix: Solid
Analysis Batch: 276694

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 276679

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene			0.0500	0.0427		mg/Kg		85	74 - 127
Ethylbenzene			0.0500	0.0449		mg/Kg		90	79 - 131
Toluene			0.0500	0.0446		mg/Kg		89	76 - 127
Xylenes, Total			0.150	0.135		mg/Kg		90	80 - 129

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
a,a,a-Trifluorotoluene (pid)	*95*		*40 - 150*

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: 400-111274-A-3-G MS
Matrix: Solid
Analysis Batch: 276694

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 276679

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	<0.0011		0.0550	0.0411		mg/Kg	☼	75	10 - 150
Ethylbenzene	<0.0011		0.0550	0.0254		mg/Kg	☼	46	10 - 150
Toluene	<0.0055		0.0550	0.0309		mg/Kg	☼	56	10 - 150
Xylenes, Total	<0.0055	F1	0.165	0.0737	F1	mg/Kg	☼	45	50 - 150

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
a,a,a-Trifluorotoluene (pid)	*89*		*40 - 150*

Lab Sample ID: 400-111274-A-3-H MSD
Matrix: Solid
Analysis Batch: 276694

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 276679

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	<0.0011		0.0550	0.0431		mg/Kg	☼	78	10 - 150	5	34
Ethylbenzene	<0.0011		0.0550	0.0406		mg/Kg	☼	74	10 - 150	46	66
Toluene	<0.0055		0.0550	0.0419		mg/Kg	☼	76	10 - 150	30	44
Xylenes, Total	<0.0055	F1	0.165	0.114		mg/Kg	☼	69	50 - 150	43	46

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
a,a,a-Trifluorotoluene (pid)	*91*		*40 - 150*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 400-275253/19-A
Matrix: Solid
Analysis Batch: 275541

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 275253

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	<10		10	mg/Kg		09/21/15 09:42	09/22/15 22:59	1
Oil Range Organics (C28-C35)	<10		10	mg/Kg		09/21/15 09:42	09/22/15 22:59	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*112*		*27 - 151*	*09/21/15 09:42*	*09/22/15 22:59*	*1*

Lab Sample ID: LCS 400-275253/18-A
Matrix: Solid
Analysis Batch: 275541

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 275253

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Diesel Range Organics [C10-C28]	333	315		mg/Kg		95	63 - 153

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
o-Terphenyl	*139*		*27 - 151*

Method: 8015B - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: 400-111201-A-1-B MS
Matrix: Solid
Analysis Batch: 275541

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 275253

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Diesel Range Organics [C10-C28]	<10		356	324		mg/Kg	☼	91	62 - 204

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
o-Terphenyl	*125*		*27 - 151*

Lab Sample ID: 400-111201-A-1-C MSD
Matrix: Solid
Analysis Batch: 275541

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 275253

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Diesel Range Organics [C10-C28]	<10		352	314		mg/Kg	☼	89	62 - 204	3	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
o-Terphenyl	*133*		*27 - 151*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 400-275920/1-A
Matrix: Solid
Analysis Batch: 276147

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.0		5.0	mg/Kg			09/26/15 00:12	1

Lab Sample ID: LCS 400-275920/2-A
Matrix: Solid
Analysis Batch: 276147

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	25.0	22.7		mg/Kg		91	80 - 120

Lab Sample ID: LCSD 400-275920/3-A
Matrix: Solid
Analysis Batch: 276147

Client Sample ID: Lab Control Sample Dup
Prep Type: Soluble

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	25.0	22.6		mg/Kg		91	80 - 120	0	15

Lab Sample ID: 400-111047-A-6-J MS
Matrix: Solid
Analysis Batch: 276147

Client Sample ID: Matrix Spike
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	<22		114	110		mg/Kg	☼	93	80 - 120

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 400-111047-A-6-K MSD
Matrix: Solid
Analysis Batch: 276147

Client Sample ID: Matrix Spike Duplicate
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	<22		110	96.3		mg/Kg	☼	84	80 - 120	13	15

Lab Chronicle

Client: MWH Americas Inc
Project/Site: Jaquez

TestAmerica Job ID: 400-111192-1

Client Sample ID: SB-73 (6.7-7.7')
Date Collected: 09/16/15 10:50
Date Received: 09/18/15 09:13

Lab Sample ID: 400-111192-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			275354	09/21/15 15:20	LEC	TAL PEN
	Instrument ID: NOEQUIP									

Client Sample ID: SB-73 (6.7-7.7')
Date Collected: 09/16/15 10:50
Date Received: 09/18/15 09:13

Lab Sample ID: 400-111192-1
Matrix: Solid
Percent Solids: 80.2

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.04 g	5.0 g	276679	09/29/15 15:00	GRK	TAL PEN
Total/NA	Analysis	8015B		1	5.04 g	5.0 g	276695	09/30/15 16:56	GRK	TAL PEN
	Instrument ID: CH_JOAN									
Total/NA	Prep	5035			5.04 g	5.0 g	276679	09/29/15 15:00	GRK	TAL PEN
Total/NA	Analysis	8021B		1	5.04 g	5.0 g	276694	09/30/15 16:56	GRK	TAL PEN
	Instrument ID: CH_JOAN									
Total/NA	Prep	3546			15.11 g	2.0 mL	275253	09/21/15 09:42	RDT	TAL PEN
Total/NA	Analysis	8015B		1	15.11 g	2.0 mL	275541	09/22/15 23:18	RM	TAL PEN
	Instrument ID: WALLE									
Soluble	Leach	DI Leach			2.51 g	50 mL	275920	09/24/15 16:48	TAJ	TAL PEN
Soluble	Analysis	300.0		1	1 mL		276147	09/26/15 07:48	TAJ	TAL PEN
	Instrument ID: IC2									

Client Sample ID: SB-74 (4-6')
Date Collected: 09/16/15 11:45
Date Received: 09/18/15 09:13

Lab Sample ID: 400-111192-2
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			275354	09/21/15 15:20	LEC	TAL PEN
	Instrument ID: NOEQUIP									

Client Sample ID: SB-74 (4-6')
Date Collected: 09/16/15 11:45
Date Received: 09/18/15 09:13

Lab Sample ID: 400-111192-2
Matrix: Solid
Percent Solids: 78.0

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.59 g	5.0 g	276678	09/29/15 15:00	GRK	TAL PEN
Total/NA	Analysis	8015B		500	5.59 g	5.0 g	276688	09/30/15 15:22	GRK	TAL PEN
	Instrument ID: CH_RITA									
Total/NA	Prep	5035			5.59 g	5.0 g	276678	09/29/15 15:00	GRK	TAL PEN
Total/NA	Analysis	8021B		500	5.59 g	5.0 g	276687	09/30/15 15:22	GRK	TAL PEN
	Instrument ID: CH_RITA									
Total/NA	Prep	3546			15.04 g	2.0 mL	275253	09/21/15 09:42	RDT	TAL PEN
Total/NA	Analysis	8015B		1	15.04 g	2.0 mL	275541	09/22/15 23:27	RM	TAL PEN
	Instrument ID: WALLE									

Lab Chronicle

Client: MWH Americas Inc
Project/Site: Jaquez

TestAmerica Job ID: 400-111192-1

Client Sample ID: SB-74 (4-6')

Lab Sample ID: 400-111192-2
Date Collected: 09/16/15 11:45
Matrix: Solid
Date Received: 09/18/15 09:13
Percent Solids: 78.0

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			2.62 g	50 mL	275920	09/24/15 16:48	TAJ	TAL PEN
Soluble	Analysis	300.0		1	1 mL		276147	09/26/15 08:57	TAJ	TAL PEN
	Instrument ID: IC2									

Client Sample ID: SB-75 (5-7')

Lab Sample ID: 400-111192-3
Date Collected: 09/16/15 13:20
Matrix: Solid
Date Received: 09/18/15 09:13

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			275354	09/21/15 15:20	LEC	TAL PEN
	Instrument ID: NOEQUIP									

Client Sample ID: SB-75 (5-7')

Lab Sample ID: 400-111192-3
Date Collected: 09/16/15 13:20
Matrix: Solid
Date Received: 09/18/15 09:13
Percent Solids: 75.6

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.00 g	5.0 g	276679	09/29/15 15:00	GRK	TAL PEN
Total/NA	Analysis	8015B		1	5.00 g	5.0 g	276695	09/30/15 16:21	GRK	TAL PEN
	Instrument ID: CH_JOAN									
Total/NA	Prep	5035			5.00 g	5.0 g	276679	09/29/15 15:00	GRK	TAL PEN
Total/NA	Analysis	8021B		1	5.00 g	5.0 g	276694	09/30/15 16:21	GRK	TAL PEN
	Instrument ID: CH_JOAN									
Total/NA	Prep	3546			15.25 g	2.0 mL	275253	09/21/15 09:42	RDT	TAL PEN
Total/NA	Analysis	8015B		1	15.25 g	2.0 mL	275541	09/22/15 23:46	RM	TAL PEN
	Instrument ID: WALLE									
Soluble	Leach	DI Leach			2.46 g	50 mL	275920	09/24/15 16:48	TAJ	TAL PEN
Soluble	Analysis	300.0		1	1 mL		276147	09/26/15 09:20	TAJ	TAL PEN
	Instrument ID: IC2									

Client Sample ID: SB-36 (5-6')

Lab Sample ID: 400-111192-4
Date Collected: 09/16/15 14:10
Matrix: Solid
Date Received: 09/18/15 09:13

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			275354	09/21/15 15:20	LEC	TAL PEN
	Instrument ID: NOEQUIP									

Lab Chronicle

Client: MWH Americas Inc
Project/Site: Jaquez

TestAmerica Job ID: 400-111192-1

Client Sample ID: SB-36 (5-6')

Lab Sample ID: 400-111192-4

Date Collected: 09/16/15 14:10
Matrix: Solid
Date Received: 09/18/15 09:13
Percent Solids: 91.3

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.36 g	5.0 g	276679	09/29/15 15:00	GRK	TAL PEN
Total/NA	Analysis	8015B		1	5.36 g	5.0 g	276695	09/30/15 13:57	GRK	TAL PEN
	Instrument ID: CH_JOAN									
Total/NA	Prep	5035			5.36 g	5.0 g	276679	09/29/15 15:00	GRK	TAL PEN
Total/NA	Analysis	8021B		1	5.36 g	5.0 g	276694	09/30/15 13:57	GRK	TAL PEN
	Instrument ID: CH_JOAN									
Total/NA	Prep	3546			15.21 g	2.0 mL	275253	09/21/15 09:42	RDT	TAL PEN
Total/NA	Analysis	8015B		1	15.21 g	2.0 mL	275541	09/22/15 23:56	RM	TAL PEN
	Instrument ID: WALLE									
Soluble	Leach	DI Leach			2.48 g	50 mL	275920	09/24/15 16:48	TAJ	TAL PEN
Soluble	Analysis	300.0		1	1 mL		276147	09/26/15 09:42	TAJ	TAL PEN
	Instrument ID: IC2									

Client Sample ID: SB-35 (6-7')

Lab Sample ID: 400-111192-5

Date Collected: 09/16/15 15:00
Matrix: Solid
Date Received: 09/18/15 09:13

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			275354	09/21/15 15:20	LEC	TAL PEN
	Instrument ID: NOEQUIP									

Client Sample ID: SB-35 (6-7')

Lab Sample ID: 400-111192-5

Date Collected: 09/16/15 15:00
Matrix: Solid
Date Received: 09/18/15 09:13
Percent Solids: 88.4

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.21 g	5.0 g	276679	09/29/15 15:00	GRK	TAL PEN
Total/NA	Analysis	8015B		1	5.21 g	5.0 g	276695	09/30/15 14:31	GRK	TAL PEN
	Instrument ID: CH_JOAN									
Total/NA	Prep	5035			5.21 g	5.0 g	276679	09/29/15 15:00	GRK	TAL PEN
Total/NA	Analysis	8021B		1	5.21 g	5.0 g	276694	09/30/15 14:31	GRK	TAL PEN
	Instrument ID: CH_JOAN									
Total/NA	Prep	3546			15.00 g	2.0 mL	275253	09/21/15 09:42	RDT	TAL PEN
Total/NA	Analysis	8015B		1	15.00 g	2.0 mL	275541	09/23/15 00:05	RM	TAL PEN
	Instrument ID: WALLE									
Soluble	Leach	DI Leach			2.40 g	50 mL	275920	09/24/15 16:48	TAJ	TAL PEN
Soluble	Analysis	300.0		1	1 mL		276147	09/26/15 10:05	TAJ	TAL PEN
	Instrument ID: IC2									

Lab Chronicle

Client: MWH Americas Inc
Project/Site: Jaquez

TestAmerica Job ID: 400-111192-1

Client Sample ID: SB-30 (5-6')
Date Collected: 09/16/15 15:35
Date Received: 09/18/15 09:13

Lab Sample ID: 400-111192-6
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			275354	09/21/15 15:20	LEC	TAL PEN
	Instrument ID: NOEQUIP									

Client Sample ID: SB-30 (5-6')
Date Collected: 09/16/15 15:35
Date Received: 09/18/15 09:13

Lab Sample ID: 400-111192-6
Matrix: Solid
Percent Solids: 91.6

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.27 g	5.0 g	276679	09/29/15 15:00	GRK	TAL PEN
Total/NA	Analysis	8015B		1	5.27 g	5.0 g	276695	09/30/15 12:47	GRK	TAL PEN
	Instrument ID: CH_JOAN									
Total/NA	Prep	5035			5.27 g	5.0 g	276679	09/29/15 15:00	GRK	TAL PEN
Total/NA	Analysis	8021B		1	5.27 g	5.0 g	276694	09/30/15 12:47	GRK	TAL PEN
	Instrument ID: CH_JOAN									
Total/NA	Prep	3546			15.06 g	2.0 mL	275253	09/21/15 09:42	RDT	TAL PEN
Total/NA	Analysis	8015B		1	15.06 g	2.0 mL	275541	09/23/15 00:15	RM	TAL PEN
	Instrument ID: WALLE									
Soluble	Leach	DI Leach			2.47 g	50 mL	275920	09/24/15 17:28	TAJ	TAL PEN
Soluble	Analysis	300.0		1	1 mL		276147	09/26/15 10:28	TAJ	TAL PEN
	Instrument ID: IC2									

Client Sample ID: SB-31 (5-6')
Date Collected: 09/16/15 16:15
Date Received: 09/18/15 09:13

Lab Sample ID: 400-111192-7
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			275354	09/21/15 15:20	LEC	TAL PEN
	Instrument ID: NOEQUIP									

Client Sample ID: SB-31 (5-6')
Date Collected: 09/16/15 16:15
Date Received: 09/18/15 09:13

Lab Sample ID: 400-111192-7
Matrix: Solid
Percent Solids: 89.5

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5.0 g	276679	09/29/15 15:00	GRK	TAL PEN
Total/NA	Analysis	8015B		1	5.03 g	5.0 g	276695	09/30/15 13:22	GRK	TAL PEN
	Instrument ID: CH_JOAN									
Total/NA	Prep	5035			5.03 g	5.0 g	276679	09/29/15 15:00	GRK	TAL PEN
Total/NA	Analysis	8021B		1	5.03 g	5.0 g	276694	09/30/15 13:22	GRK	TAL PEN
	Instrument ID: CH_JOAN									
Total/NA	Prep	3546			15.14 g	2.0 mL	275253	09/21/15 09:42	RDT	TAL PEN
Total/NA	Analysis	8015B		1	15.14 g	2.0 mL	275541	09/23/15 00:24	RM	TAL PEN
	Instrument ID: WALLE									
Soluble	Leach	DI Leach			2.45 g	50 mL	275920	09/24/15 16:48	TAJ	TAL PEN

Lab Chronicle

Client: MWH Americas Inc
Project/Site: Jaquez

TestAmerica Job ID: 400-111192-1

Client Sample ID: SB-31 (5-6')
Date Collected: 09/16/15 16:15
Date Received: 09/18/15 09:13

Lab Sample ID: 400-111192-7
Matrix: Solid
Percent Solids: 89.5

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Analysis	300.0		1	1 mL		276147	09/26/15 10:51	TAJ	TAL PEN
	Instrument ID: IC2									

Laboratory References:

TAL PEN = TestAmerica Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

Certification Summary

Client: MWH Americas Inc
Project/Site: Jaquez

TestAmerica Job ID: 400-111192-1

Laboratory: TestAmerica Pensacola

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Alabama	State Program	4	40150	01-31-16
Arizona	State Program	9	AZ0710	01-11-17
Arkansas DEQ	State Program	6	88-0689	09-01-16
Florida	NELAP	4	E81010	06-30-16
Georgia	State Program	4	N/A	06-30-16
Illinois	NELAP	5	200041	10-09-16
Iowa	State Program	7	367	07-31-16
Kansas	NELAP	7	E-10253	01-31-16 *
Kentucky (UST)	State Program	4	53	06-30-16
Kentucky (WW)	State Program	4	98030	12-31-16
Louisiana	NELAP	6	30976	06-30-16
Maryland	State Program	3	233	09-30-16
Massachusetts	State Program	1	M-FL094	06-30-16
Michigan	State Program	5	9912	06-30-16
New Jersey	NELAP	2	FL006	06-30-16
North Carolina (WW/SW)	State Program	4	314	12-31-15 *
Oklahoma	State Program	6	9810	08-31-16
Pennsylvania	NELAP	3	68-00467	01-31-16
Rhode Island	State Program	1	LAO00307	12-30-16
South Carolina	State Program	4	96026	06-30-16
Tennessee	State Program	4	TN02907	06-30-16
Texas	NELAP	6	T104704286-15-9	09-30-16
USDA	Federal		P330-13-00193	07-01-16
Virginia	NELAP	3	460166	06-14-16
West Virginia DEP	State Program	3	136	06-30-16

* Certification renewal pending - certification considered valid.

Method Summary

Client: MWH Americas Inc
Project/Site: Jaquez

TestAmerica Job ID: 400-111192-1

Method	Method Description	Protocol	Laboratory
8015B	Gasoline Range Organics - (GC)	SW846	TAL PEN
8021B	Volatile Organic Compounds (GC)	SW846	TAL PEN
8015B	Diesel Range Organics (DRO) (GC)	SW846	TAL PEN
300.0	Anions, Ion Chromatography	MCAWW	TAL PEN
Moisture	Percent Moisture	EPA	TAL PEN

Protocol References:

EPA = US Environmental Protection Agency

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL PEN = TestAmerica Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

TestAmerica Pensacola
3355 McLemore Drive
Pensacola, FL 32514
Phone (850) 474-1001 Fax (850) 478-2671

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: Chris Lee, Brad Barton	Lab PM: Edwards, Marty P	Carrier Tracking No(s):	COC No: 400-47764-22401.6
Client Contact: Christopher Lee	Phone: 303 291-2242	E-Mail: marty.edwards@testamericainc.com		Page: Page 6 of 6
Company: MWH Americas Inc				Job #:
Address: 1560 Broadway Suite 1800	Due Date Requested:	Analysis Requested		
City: Denver	TAT Requested (days): STANDARD			
State, Zip: CO, 80202	PO #: Purchase Order Requested			
Phone: 303-291-2239(Tel)	~~WO #:~~ ~~ARF #~~ ERG-MWH-08-18-15-CWO-01			
Email: christopher.c.lee@mwhglobal.com	Project #: 40005479			
Project Name: Jaquez	SSOW#:			
Site: JAQUEZ				

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2SO3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - ph 4-5, Z - other (specify)
Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	8015B_DRO, 9056_ORGFM_28D	8021B - 8021 BTEX/ 8015 GRO	400-111192 COC	Perform MS/MSD (Yes or No)	Total Number of containers	Special Instructions/Note:
				Preservation Code:	N	N	N		N		
SB-73(6.7-7.7')	9/16/15	1050	G	S	N	1	1			2	
SB-74(4-6')	9/16/15	1145	G	S	N	1	1			2	
SB-75(5-7')	9/16/15	1320	G	S	N	1	1			2	
SB-36(5-6')	9/16/15	1410	G	S	N	1	1			2	
SB-35(6-7')	9/16/15	1500	G	S	N	1	1			2	
SB-30(5-6')	9/16/15	1535	G	S	N	1	1			2	
SB-31(5-6')	9/16/15	1615	G	S	N	1	1			2	

Possible Hazard Identification
[X] Non-Hazard [ ] Flammable [ ] Skin Irritant [ ] Poison B [ ] Unknown [ ] Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
[ ] Return To Client [X] Disposal By Lab [ ] Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Chris Lee	9/17/15 700	MWH	Colin Whitmire	9-18-15 09:13	TA
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: [X] Yes [ ] No
Custody Seal No.: 525134
Cooler Temperature(s) °C and Other Remarks: 0.5°C IR-5

Login Sample Receipt Checklist

Client: MWH Americas Inc

Job Number: 400-111192-1

Login Number: 111192
List Number: 1
Creator: Crawford, Lauren E

List Source: TestAmerica Pensacola

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	0.5°C IR-5
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

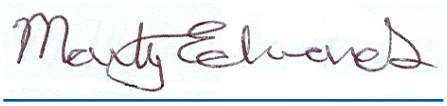
ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Pensacola
3355 McLemore Drive
Pensacola, FL 32514
Tel: (850)474-1001

TestAmerica Job ID: 400-111201-1
Client Project/Site: Jaquez
Revision: 1

For:
MWH Americas Inc
11153 Aurora Avenue
Des Moines, Iowa 50322-7904

Attn: Steve Varsa



Authorized for release by:
1/25/2016 4:51:44 PM

Marty Edwards, Manager of Project Management
(850)474-1001
marty.edwards@testamericainc.com

Table of Contents

Client: MWH Americas Inc
Project/Site: Jaquez

TestAmerica Job ID: 400-111201-1

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Case Narrative

Client: MWH Americas Inc
Project/Site: Jaquez

TestAmerica Job ID: 400-111201-1

Job ID: 400-111201-1

Laboratory: TestAmerica Pensacola

Narrative

Job Narrative
400-111201-1

Comments
No additional comments.

Receipt
The samples were received on 9/19/2015 9:06 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 0.4° C.

Revised
The report was revised to change the analyte descriptions for the 8015 DRO/ORO analysis.

HPLC/IC
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

GC VOA
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

GC Semi VOA
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Organic Prep
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

VOA Prep
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Lab Admin
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Detection Summary

Client: MWH Americas Inc
Project/Site: Jaquez

TestAmerica Job ID: 400-111201-1

Client Sample ID: SB-15 10.5-12.5' **Lab Sample ID: 400-111201-1**

No Detections.

Client Sample ID: SB-14 12-13' **Lab Sample ID: 400-111201-2**

No Detections.

Client Sample ID: SB-26 5-6' **Lab Sample ID: 400-111201-3**

No Detections.

Client Sample ID: SB-25 5-6' **Lab Sample ID: 400-111201-4**

No Detections.

Client Sample ID: SB-22 10-11' **Lab Sample ID: 400-111201-5**

No Detections.

Client Sample ID: SB-21 6.7-7.7' **Lab Sample ID: 400-111201-6**

No Detections.

Client Sample ID: SB-24 3-4' **Lab Sample ID: 400-111201-7**

No Detections.

Client Sample ID: SB-23 4-5' **Lab Sample ID: 400-111201-8**

No Detections.

This Detection Summary does not include radiochemical test results.

Sample Summary

Client: MWH Americas Inc
Project/Site: Jaquez

TestAmerica Job ID: 400-111201-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-111201-1	SB-15 10.5-12.5'	Solid	09/17/15 09:05	09/19/15 09:06
400-111201-2	SB-14 12-13'	Solid	09/17/15 09:55	09/19/15 09:06
400-111201-3	SB-26 5-6'	Solid	09/17/15 10:45	09/19/15 09:06
400-111201-4	SB-25 5-6'	Solid	09/17/15 11:30	09/19/15 09:06
400-111201-5	SB-22 10-11'	Solid	09/17/15 13:10	09/19/15 09:06
400-111201-6	SB-21 6.7-7.7'	Solid	09/17/15 14:10	09/19/15 09:06
400-111201-7	SB-24 3-4'	Solid	09/17/15 14:45	09/19/15 09:06
400-111201-8	SB-23 4-5'	Solid	09/17/15 15:30	09/19/15 09:06

Client: MWH Americas Inc
Project/Site: Jaquez

TestAmerica Job ID: 400-111201-1

Client Sample ID: SB-15 10.5-12.5'
Date Collected: 09/17/15 09:05
Date Received: 09/19/15 09:06

Lab Sample ID: 400-111201-1
Matrix: Solid
Percent Solids: 94.0

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) C6--C10	<0.10		0.10		mg/Kg	☼	09/29/15 15:00	09/29/15 18:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (fid)	*93*		*65 - 125*	*09/29/15 15:00*	*09/29/15 18:54*	*1*

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0010		0.0010		mg/Kg	☼	09/29/15 15:00	09/29/15 18:54	1
Ethylbenzene	<0.0010		0.0010		mg/Kg	☼	09/29/15 15:00	09/29/15 18:54	1
Toluene	<0.0052		0.0052		mg/Kg	☼	09/29/15 15:00	09/29/15 18:54	1
Xylenes, Total	<0.0052		0.0052		mg/Kg	☼	09/29/15 15:00	09/29/15 18:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (pid)	*84*		*40 - 150*	*09/29/15 15:00*	*09/29/15 18:54*	*1*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	<10		10		mg/Kg	☼	09/21/15 09:42	09/23/15 00:34	1
Oil Range Organics (C28-C35)	<10		10		mg/Kg	☼	09/21/15 09:42	09/23/15 00:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*87*		*27 - 151*	*09/21/15 09:42*	*09/23/15 00:34*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<21		21		mg/Kg	☼		10/01/15 01:29	1

Client: MWH Americas Inc
Project/Site: Jaquez

TestAmerica Job ID: 400-111201-1

Client Sample ID: SB-14 12-13'
Date Collected: 09/17/15 09:55
Date Received: 09/19/15 09:06

Lab Sample ID: 400-111201-2
Matrix: Solid
Percent Solids: 85.0

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) C6--C10	<0.11		0.11		mg/Kg	☼	09/29/15 15:00	09/29/15 19:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (fid)	*95*		*65 - 125*	*09/29/15 15:00*	*09/29/15 19:29*	*1*

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0011		0.0011		mg/Kg	☼	09/29/15 15:00	09/29/15 19:29	1
Ethylbenzene	<0.0011		0.0011		mg/Kg	☼	09/29/15 15:00	09/29/15 19:29	1
Toluene	<0.0057		0.0057		mg/Kg	☼	09/29/15 15:00	09/29/15 19:29	1
Xylenes, Total	<0.0057		0.0057		mg/Kg	☼	09/29/15 15:00	09/29/15 19:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (pid)	*85*		*40 - 150*	*09/29/15 15:00*	*09/29/15 19:29*	*1*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	<11		11		mg/Kg	☼	09/21/15 09:42	09/23/15 01:02	1
Oil Range Organics (C28-C35)	<11		11		mg/Kg	☼	09/21/15 09:42	09/23/15 01:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*95*		*27 - 151*	*09/21/15 09:42*	*09/23/15 01:02*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<24		24		mg/Kg	☼		10/01/15 02:37	1

Client: MWH Americas Inc
Project/Site: Jaquez

TestAmerica Job ID: 400-111201-1

Client Sample ID: SB-26 5-6'
Date Collected: 09/17/15 10:45
Date Received: 09/19/15 09:06

Lab Sample ID: 400-111201-3
Matrix: Solid
Percent Solids: 84.1

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) C6--C10	<0.12		0.12		mg/Kg	☼	09/29/15 15:00	09/30/15 00:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (fid)	*95*		*65 - 125*	*09/29/15 15:00*	*09/30/15 00:06*	*1*

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0012		0.0012		mg/Kg	☼	09/29/15 15:00	09/30/15 00:06	1
Ethylbenzene	<0.0012		0.0012		mg/Kg	☼	09/29/15 15:00	09/30/15 00:06	1
Toluene	<0.0058		0.0058		mg/Kg	☼	09/29/15 15:00	09/30/15 00:06	1
Xylenes, Total	<0.0058		0.0058		mg/Kg	☼	09/29/15 15:00	09/30/15 00:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (pid)	*83*		*40 - 150*	*09/29/15 15:00*	*09/30/15 00:06*	*1*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	<12		12		mg/Kg	☼	09/21/15 09:42	09/23/15 01:11	1
Oil Range Organics (C28-C35)	<12		12		mg/Kg	☼	09/21/15 09:42	09/23/15 01:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*98*		*27 - 151*	*09/21/15 09:42*	*09/23/15 01:11*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<24		24		mg/Kg	☼		10/01/15 03:00	1

Client: MWH Americas Inc
Project/Site: Jaquez

TestAmerica Job ID: 400-111201-1

Client Sample ID: SB-25 5-6'
Date Collected: 09/17/15 11:30
Date Received: 09/19/15 09:06

Lab Sample ID: 400-111201-4
Matrix: Solid
Percent Solids: 90.4

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) C6--C10	<0.11		0.11		mg/Kg	☼	09/29/15 15:00	09/30/15 00:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (fid)	*94*		*65 - 125*	*09/29/15 15:00*	*09/30/15 00:41*	*1*

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0011		0.0011		mg/Kg	☼	09/29/15 15:00	09/30/15 00:41	1
Ethylbenzene	<0.0011		0.0011		mg/Kg	☼	09/29/15 15:00	09/30/15 00:41	1
Toluene	<0.0054		0.0054		mg/Kg	☼	09/29/15 15:00	09/30/15 00:41	1
Xylenes, Total	<0.0054		0.0054		mg/Kg	☼	09/29/15 15:00	09/30/15 00:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (pid)	*84*		*40 - 150*	*09/29/15 15:00*	*09/30/15 00:41*	*1*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	<11		11		mg/Kg	☼	09/21/15 09:42	09/23/15 13:34	1
Oil Range Organics (C28-C35)	<11		11		mg/Kg	☼	09/21/15 09:42	09/23/15 13:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*102*		*27 - 151*	*09/21/15 09:42*	*09/23/15 13:34*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<22		22		mg/Kg	☼		10/01/15 03:23	1

Client Sample ID: SB-22 10-11'

Date Collected: 09/17/15 13:10
Date Received: 09/19/15 09:06

Lab Sample ID: 400-111201-5

Matrix: Solid
Percent Solids: 87.2

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) C6--C10	<0.11		0.11		mg/Kg	☼	09/29/15 15:00	09/30/15 01:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (fid)	*94*		*65 - 125*	*09/29/15 15:00*	*09/30/15 01:15*	*1*

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0011		0.0011		mg/Kg	☼	09/29/15 15:00	09/30/15 01:15	1
Ethylbenzene	<0.0011		0.0011		mg/Kg	☼	09/29/15 15:00	09/30/15 01:15	1
Toluene	<0.0057		0.0057		mg/Kg	☼	09/29/15 15:00	09/30/15 01:15	1
Xylenes, Total	<0.0057		0.0057		mg/Kg	☼	09/29/15 15:00	09/30/15 01:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (pid)	*89*		*40 - 150*	*09/29/15 15:00*	*09/30/15 01:15*	*1*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	<11		11		mg/Kg	☼	09/21/15 09:42	09/23/15 13:44	1
Oil Range Organics (C28-C35)	<11		11		mg/Kg	☼	09/21/15 09:42	09/23/15 13:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*102*		*27 - 151*	*09/21/15 09:42*	*09/23/15 13:44*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<23		23		mg/Kg	☼		10/01/15 04:31	1

Client: MWH Americas Inc
Project/Site: Jaquez

TestAmerica Job ID: 400-111201-1

Client Sample ID: SB-21 6.7-7.7'
Date Collected: 09/17/15 14:10
Date Received: 09/19/15 09:06

Lab Sample ID: 400-111201-6
Matrix: Solid
Percent Solids: 90.2

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) C6--C10	<0.11		0.11		mg/Kg	☼	09/29/15 15:00	09/30/15 01:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (fid)	*93*		*65 - 125*	*09/29/15 15:00*	*09/30/15 01:50*	*1*

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0011		0.0011		mg/Kg	☼	09/29/15 15:00	09/30/15 01:50	1
Ethylbenzene	<0.0011		0.0011		mg/Kg	☼	09/29/15 15:00	09/30/15 01:50	1
Toluene	<0.0054		0.0054		mg/Kg	☼	09/29/15 15:00	09/30/15 01:50	1
Xylenes, Total	<0.0054		0.0054		mg/Kg	☼	09/29/15 15:00	09/30/15 01:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (pid)	*86*		*40 - 150*	*09/29/15 15:00*	*09/30/15 01:50*	*1*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	<11		11		mg/Kg	☼	09/21/15 09:42	09/23/15 13:53	1
Oil Range Organics (C28-C35)	<11		11		mg/Kg	☼	09/21/15 09:42	09/23/15 13:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*101*		*27 - 151*	*09/21/15 09:42*	*09/23/15 13:53*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<22		22		mg/Kg	☼		10/01/15 04:54	1

Client: MWH Americas Inc
Project/Site: Jaquez

TestAmerica Job ID: 400-111201-1

Client Sample ID: SB-24 3-4'
Date Collected: 09/17/15 14:45
Date Received: 09/19/15 09:06

Lab Sample ID: 400-111201-7
Matrix: Solid
Percent Solids: 75.1

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) C6--C10	<0.13		0.13		mg/Kg	☼	09/29/15 15:00	09/30/15 04:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (fid)	*93*		*65 - 125*	*09/29/15 15:00*	*09/30/15 04:09*	*1*

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0013		0.0013		mg/Kg	☼	09/29/15 15:00	09/30/15 04:09	1
Ethylbenzene	<0.0013		0.0013		mg/Kg	☼	09/29/15 15:00	09/30/15 04:09	1
Toluene	<0.0065		0.0065		mg/Kg	☼	09/29/15 15:00	09/30/15 04:09	1
Xylenes, Total	<0.0065		0.0065		mg/Kg	☼	09/29/15 15:00	09/30/15 04:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (pid)	*86*		*40 - 150*	*09/29/15 15:00*	*09/30/15 04:09*	*1*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	<13		13		mg/Kg	☼	09/21/15 09:42	09/23/15 14:03	1
Oil Range Organics (C28-C35)	<13		13		mg/Kg	☼	09/21/15 09:42	09/23/15 14:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*108*		*27 - 151*	*09/21/15 09:42*	*09/23/15 14:03*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<26		26		mg/Kg	☼		10/01/15 05:17	1

Client: MWH Americas Inc
Project/Site: Jaquez

TestAmerica Job ID: 400-111201-1

Client Sample ID: SB-23 4-5'
Date Collected: 09/17/15 15:30
Date Received: 09/19/15 09:06

Lab Sample ID: 400-111201-8
Matrix: Solid
Percent Solids: 87.9

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) C6--C10	<0.11		0.11		mg/Kg	☼	09/29/15 15:00	09/30/15 04:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (fid)	*93*		*65 - 125*	*09/29/15 15:00*	*09/30/15 04:43*	*1*

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0011		0.0011		mg/Kg	☼	09/29/15 15:00	09/30/15 04:43	1
Ethylbenzene	<0.0011		0.0011		mg/Kg	☼	09/29/15 15:00	09/30/15 04:43	1
Toluene	<0.0056		0.0056		mg/Kg	☼	09/29/15 15:00	09/30/15 04:43	1
Xylenes, Total	<0.0056		0.0056		mg/Kg	☼	09/29/15 15:00	09/30/15 04:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (pid)	*87*		*40 - 150*	*09/29/15 15:00*	*09/30/15 04:43*	*1*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	<11		11		mg/Kg	☼	09/21/15 09:42	09/23/15 14:13	1
Oil Range Organics (C28-C35)	<11		11		mg/Kg	☼	09/21/15 09:42	09/23/15 14:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*96*		*27 - 151*	*09/21/15 09:42*	*09/23/15 14:13*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<22		22		mg/Kg	☼		10/01/15 05:40	1

GC VOA

Prep Batch: 276679

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-111201-1	SB-15 10.5-12.5'	Total/NA	Solid	5035	
400-111201-1 MS	SB-15 10.5-12.5' MS	Total/NA	Solid	5035	
400-111201-1 MS	SB-15 10.5-12.5' MS	Total/NA	Solid	5035	
400-111201-1 MSD	SB-15 10.5-12.5' MSD	Total/NA	Solid	5035	
400-111201-1 MSD	SB-15 10.5-12.5' MSD	Total/NA	Solid	5035	
400-111201-2	SB-14 12-13'	Total/NA	Solid	5035	
400-111201-3	SB-26 5-6'	Total/NA	Solid	5035	
400-111201-4	SB-25 5-6'	Total/NA	Solid	5035	
400-111201-5	SB-22 10-11'	Total/NA	Solid	5035	
400-111201-6	SB-21 6.7-7.7'	Total/NA	Solid	5035	
400-111201-7	SB-24 3-4'	Total/NA	Solid	5035	
400-111201-8	SB-23 4-5'	Total/NA	Solid	5035	
LCS 400-276679/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCS 400-276679/2-A	Lab Control Sample	Total/NA	Solid	5035	
MB 400-276679/3-A	Method Blank	Total/NA	Solid	5035	

Analysis Batch: 276694

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-111201-1	SB-15 10.5-12.5'	Total/NA	Solid	8021B	276679
400-111201-1 MS	SB-15 10.5-12.5' MS	Total/NA	Solid	8021B	276679
400-111201-1 MSD	SB-15 10.5-12.5' MSD	Total/NA	Solid	8021B	276679
400-111201-2	SB-14 12-13'	Total/NA	Solid	8021B	276679
400-111201-3	SB-26 5-6'	Total/NA	Solid	8021B	276679
400-111201-4	SB-25 5-6'	Total/NA	Solid	8021B	276679
400-111201-5	SB-22 10-11'	Total/NA	Solid	8021B	276679
400-111201-6	SB-21 6.7-7.7'	Total/NA	Solid	8021B	276679
400-111201-7	SB-24 3-4'	Total/NA	Solid	8021B	276679
400-111201-8	SB-23 4-5'	Total/NA	Solid	8021B	276679
LCS 400-276679/1-A	Lab Control Sample	Total/NA	Solid	8021B	276679
MB 400-276679/3-A	Method Blank	Total/NA	Solid	8021B	276679

Analysis Batch: 276695

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-111201-1	SB-15 10.5-12.5'	Total/NA	Solid	8015B	276679
400-111201-1 MS	SB-15 10.5-12.5' MS	Total/NA	Solid	8015B	276679
400-111201-1 MSD	SB-15 10.5-12.5' MSD	Total/NA	Solid	8015B	276679
400-111201-2	SB-14 12-13'	Total/NA	Solid	8015B	276679
400-111201-3	SB-26 5-6'	Total/NA	Solid	8015B	276679
400-111201-4	SB-25 5-6'	Total/NA	Solid	8015B	276679
400-111201-5	SB-22 10-11'	Total/NA	Solid	8015B	276679
400-111201-6	SB-21 6.7-7.7'	Total/NA	Solid	8015B	276679
400-111201-7	SB-24 3-4'	Total/NA	Solid	8015B	276679
400-111201-8	SB-23 4-5'	Total/NA	Solid	8015B	276679
LCS 400-276679/2-A	Lab Control Sample	Total/NA	Solid	8015B	276679
MB 400-276679/3-A	Method Blank	Total/NA	Solid	8015B	276679

GC Semi VOA

Prep Batch: 275253

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-111201-1	SB-15 10.5-12.5'	Total/NA	Solid	3546	
400-111201-1 MS	SB-15 10.5-12.5' MS	Total/NA	Solid	3546	
400-111201-1 MSD	SB-15 10.5-12.5' MSD	Total/NA	Solid	3546	
400-111201-2	SB-14 12-13'	Total/NA	Solid	3546	
400-111201-3	SB-26 5-6'	Total/NA	Solid	3546	
400-111201-4	SB-25 5-6'	Total/NA	Solid	3546	
400-111201-5	SB-22 10-11'	Total/NA	Solid	3546	
400-111201-6	SB-21 6.7-7.7'	Total/NA	Solid	3546	
400-111201-7	SB-24 3-4'	Total/NA	Solid	3546	
400-111201-8	SB-23 4-5'	Total/NA	Solid	3546	
LCS 400-275253/18-A	Lab Control Sample	Total/NA	Solid	3546	
MB 400-275253/19-A	Method Blank	Total/NA	Solid	3546	

Analysis Batch: 275541

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-111201-1	SB-15 10.5-12.5'	Total/NA	Solid	8015B	275253
400-111201-1 MS	SB-15 10.5-12.5' MS	Total/NA	Solid	8015B	275253
400-111201-1 MSD	SB-15 10.5-12.5' MSD	Total/NA	Solid	8015B	275253
400-111201-2	SB-14 12-13'	Total/NA	Solid	8015B	275253
400-111201-3	SB-26 5-6'	Total/NA	Solid	8015B	275253
LCS 400-275253/18-A	Lab Control Sample	Total/NA	Solid	8015B	275253
MB 400-275253/19-A	Method Blank	Total/NA	Solid	8015B	275253

Analysis Batch: 275680

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-111201-4	SB-25 5-6'	Total/NA	Solid	8015B	275253
400-111201-5	SB-22 10-11'	Total/NA	Solid	8015B	275253
400-111201-6	SB-21 6.7-7.7'	Total/NA	Solid	8015B	275253
400-111201-7	SB-24 3-4'	Total/NA	Solid	8015B	275253
400-111201-8	SB-23 4-5'	Total/NA	Solid	8015B	275253

HPLC/IC

Leach Batch: 276630

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-111201-1	SB-15 10.5-12.5'	Soluble	Solid	DI Leach	
400-111201-1 MS	SB-15 10.5-12.5' MS	Soluble	Solid	DI Leach	
400-111201-1 MSD	SB-15 10.5-12.5' MSD	Soluble	Solid	DI Leach	
400-111201-2	SB-14 12-13'	Soluble	Solid	DI Leach	
400-111201-3	SB-26 5-6'	Soluble	Solid	DI Leach	
400-111201-4	SB-25 5-6'	Soluble	Solid	DI Leach	
400-111201-5	SB-22 10-11'	Soluble	Solid	DI Leach	
400-111201-6	SB-21 6.7-7.7'	Soluble	Solid	DI Leach	
400-111201-7	SB-24 3-4'	Soluble	Solid	DI Leach	
400-111201-8	SB-23 4-5'	Soluble	Solid	DI Leach	
LCS 400-276630/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 400-276630/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
MB 400-276630/1-A	Method Blank	Soluble	Solid	DI Leach	

HPLC/IC (Continued)

Analysis Batch: 276874

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-111201-1	SB-15 10.5-12.5'	Soluble	Solid	300.0	276630
400-111201-1 MS	SB-15 10.5-12.5' MS	Soluble	Solid	300.0	276630
400-111201-1 MSD	SB-15 10.5-12.5' MSD	Soluble	Solid	300.0	276630
400-111201-2	SB-14 12-13'	Soluble	Solid	300.0	276630
400-111201-3	SB-26 5-6'	Soluble	Solid	300.0	276630
400-111201-4	SB-25 5-6'	Soluble	Solid	300.0	276630
400-111201-5	SB-22 10-11'	Soluble	Solid	300.0	276630
400-111201-6	SB-21 6.7-7.7'	Soluble	Solid	300.0	276630
400-111201-7	SB-24 3-4'	Soluble	Solid	300.0	276630
400-111201-8	SB-23 4-5'	Soluble	Solid	300.0	276630
LCS 400-276630/2-A	Lab Control Sample	Soluble	Solid	300.0	276630
LCSD 400-276630/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	276630
MB 400-276630/1-A	Method Blank	Soluble	Solid	300.0	276630

General Chemistry

Analysis Batch: 275354

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-111201-1	SB-15 10.5-12.5'	Total/NA	Solid	Moisture	
400-111201-1 MS	SB-15 10.5-12.5' MS	Total/NA	Solid	Moisture	
400-111201-1 MSD	SB-15 10.5-12.5' MSD	Total/NA	Solid	Moisture	
400-111201-2	SB-14 12-13'	Total/NA	Solid	Moisture	
400-111201-3	SB-26 5-6'	Total/NA	Solid	Moisture	
400-111201-4	SB-25 5-6'	Total/NA	Solid	Moisture	
400-111201-5	SB-22 10-11'	Total/NA	Solid	Moisture	
400-111201-5 DU	SB-22 10-11'	Total/NA	Solid	Moisture	
400-111201-6	SB-21 6.7-7.7'	Total/NA	Solid	Moisture	
400-111201-7	SB-24 3-4'	Total/NA	Solid	Moisture	
400-111201-8	SB-23 4-5'	Total/NA	Solid	Moisture	

Method: 8015B - Gasoline Range Organics - (GC)

Lab Sample ID: MB 400-276679/3-A
Matrix: Solid
Analysis Batch: 276695

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 276679

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) C6--C10	<0.10		0.10		mg/Kg		09/29/15 15:00	09/29/15 21:13	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (fid)	*95*		*65 - 125*	*09/29/15 15:00*	*09/29/15 21:13*	*1*

Lab Sample ID: LCS 400-276679/2-A
Matrix: Solid
Analysis Batch: 276695

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 276679

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO) C6--C10			1.00	0.983		mg/Kg		98	62 - 141		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
a,a,a-Trifluorotoluene (fid)	*99*		*65 - 125*

Lab Sample ID: 400-111201-1 MS
Matrix: Solid
Analysis Batch: 276695

Client Sample ID: SB-15 10.5-12.5' MS
Prep Type: Total/NA
Prep Batch: 276679

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO) C6--C10	<0.10		1.03	1.10		mg/Kg	☼	106	10 - 150		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
a,a,a-Trifluorotoluene (fid)	*97*		*65 - 125*

Lab Sample ID: 400-111201-1 MSD
Matrix: Solid
Analysis Batch: 276695

Client Sample ID: SB-15 10.5-12.5' MSD
Prep Type: Total/NA
Prep Batch: 276679

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO) C6--C10	<0.10		1.03	1.05		mg/Kg	☼	101	10 - 150	5	32

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
a,a,a-Trifluorotoluene (fid)	*97*		*65 - 125*

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 400-276679/3-A
Matrix: Solid
Analysis Batch: 276694

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 276679

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0010		0.0010		mg/Kg		09/29/15 15:00	09/29/15 21:13	1
Ethylbenzene	<0.0010		0.0010		mg/Kg		09/29/15 15:00	09/29/15 21:13	1

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: MB 400-276679/3-A
Matrix: Solid
Analysis Batch: 276694

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 276679

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Toluene	<0.0050		0.0050		mg/Kg		09/29/15 15:00	09/29/15 21:13	1
Xylenes, Total	<0.0050		0.0050		mg/Kg		09/29/15 15:00	09/29/15 21:13	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (pid)	*92*		*40 - 150*	*09/29/15 15:00*	*09/29/15 21:13*	*1*

Lab Sample ID: LCS 400-276679/1-A
Matrix: Solid
Analysis Batch: 276694

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 276679

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			0.0500	0.0427		mg/Kg		85	74 - 127		
Ethylbenzene			0.0500	0.0449		mg/Kg		90	79 - 131		
Toluene			0.0500	0.0446		mg/Kg		89	76 - 127		
Xylenes, Total			0.150	0.135		mg/Kg		90	80 - 129		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
a,a,a-Trifluorotoluene (pid)	*95*		*40 - 150*

Lab Sample ID: 400-111201-1 MS
Matrix: Solid
Analysis Batch: 276694

Client Sample ID: SB-15 10.5-12.5' MS
Prep Type: Total/NA
Prep Batch: 276679

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene	<0.0010		0.0517	0.0514		mg/Kg	☼	99	10 - 150		
Ethylbenzene	<0.0010		0.0517	0.0517		mg/Kg	☼	100	10 - 150		
Toluene	<0.0052		0.0517	0.0518		mg/Kg	☼	100	10 - 150		
Xylenes, Total	<0.0052		0.155	0.155		mg/Kg	☼	100	50 - 150		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
a,a,a-Trifluorotoluene (pid)	*92*		*40 - 150*

Lab Sample ID: 400-111201-1 MSD
Matrix: Solid
Analysis Batch: 276694

Client Sample ID: SB-15 10.5-12.5' MSD
Prep Type: Total/NA
Prep Batch: 276679

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	<0.0010		0.0517	0.0479		mg/Kg	☼	93	10 - 150	7	34
Ethylbenzene	<0.0010		0.0517	0.0475		mg/Kg	☼	92	10 - 150	9	66
Toluene	<0.0052		0.0517	0.0482		mg/Kg	☼	93	10 - 150	7	44
Xylenes, Total	<0.0052		0.155	0.142		mg/Kg	☼	92	50 - 150	9	46

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
a,a,a-Trifluorotoluene (pid)	*92*		*40 - 150*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 400-275253/19-A
Matrix: Solid
Analysis Batch: 275541

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 275253

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	<10		10		mg/Kg		09/21/15 09:42	09/22/15 22:59	1
Oil Range Organics (C28-C35)	<10		10		mg/Kg		09/21/15 09:42	09/22/15 22:59	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*112*		*27 - 151*	*09/21/15 09:42*	*09/22/15 22:59*	*1*

Lab Sample ID: LCS 400-275253/18-A
Matrix: Solid
Analysis Batch: 275541

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 275253

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Diesel Range Organics [C10-C28]			333	315		mg/Kg		95	63 - 153		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
o-Terphenyl	*139*		*27 - 151*

Lab Sample ID: 400-111201-1 MS
Matrix: Solid
Analysis Batch: 275541

Client Sample ID: SB-15 10.5-12.5' MS
Prep Type: Total/NA
Prep Batch: 275253

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Diesel Range Organics [C10-C28]	<10		356	324		mg/Kg	☼	91	62 - 204		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
o-Terphenyl	*125*		*27 - 151*

Lab Sample ID: 400-111201-1 MSD
Matrix: Solid
Analysis Batch: 275541

Client Sample ID: SB-15 10.5-12.5' MSD
Prep Type: Total/NA
Prep Batch: 275253

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Diesel Range Organics [C10-C28]	<10		352	314		mg/Kg	☼	89	62 - 204	3	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
o-Terphenyl	*133*		*27 - 151*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 400-276630/1-A
Matrix: Solid
Analysis Batch: 276874

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<20		20		mg/Kg			10/01/15 00:20	1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 400-276630/2-A
Matrix: Solid
Analysis Batch: 276874

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride			100	98.6		mg/Kg		99	80 - 120		

Lab Sample ID: LCSD 400-276630/3-A
Matrix: Solid
Analysis Batch: 276874

Client Sample ID: Lab Control Sample Dup
Prep Type: Soluble

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride			100	99.1		mg/Kg		99	80 - 120	0	15

Lab Sample ID: 400-111201-1 MS
Matrix: Solid
Analysis Batch: 276874

Client Sample ID: SB-15 10.5-12.5' MS
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride	<21		108	120		mg/Kg	☼	95	80 - 120		

Lab Sample ID: 400-111201-1 MSD
Matrix: Solid
Analysis Batch: 276874

Client Sample ID: SB-15 10.5-12.5' MSD
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	<21		107	122		mg/Kg	☼	97	80 - 120	2	15

Lab Chronicle

Client: MWH Americas Inc
Project/Site: Jaquez

TestAmerica Job ID: 400-111201-1

Client Sample ID: SB-15 10.5-12.5'
Date Collected: 09/17/15 09:05
Date Received: 09/19/15 09:06

Lab Sample ID: 400-111201-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			275354	09/21/15 15:20	LEC	TAL PEN
	Instrument ID: NOEQUIP									

Client Sample ID: SB-15 10.5-12.5'
Date Collected: 09/17/15 09:05
Date Received: 09/19/15 09:06

Lab Sample ID: 400-111201-1
Matrix: Solid
Percent Solids: 94.0

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.14 g	5.0 g	276679	09/29/15 15:00	GRK	TAL PEN
Total/NA	Analysis	8015B		1	5.14 g	5.0 g	276695	09/29/15 18:54	GRK	TAL PEN
	Instrument ID: CH_JOAN									
Total/NA	Prep	5035			5.14 g	5.0 g	276679	09/29/15 15:00	GRK	TAL PEN
Total/NA	Analysis	8021B		1	5.14 g	5.0 g	276694	09/29/15 18:54	GRK	TAL PEN
	Instrument ID: CH_JOAN									
Total/NA	Prep	3546			15.49 g	2.0 mL	275253	09/21/15 09:42	RDT	TAL PEN
Total/NA	Analysis	8015B		1	15.49 g	2.0 mL	275541	09/23/15 00:34	RM	TAL PEN
	Instrument ID: WALLE									
Soluble	Leach	DI Leach			2.50 g	50 mL	276630	09/30/15 09:37	TAJ	TAL PEN
Soluble	Analysis	300.0		1	1 mL		276874	10/01/15 01:29	TAJ	TAL PEN
	Instrument ID: IC2									

Client Sample ID: SB-14 12-13'
Date Collected: 09/17/15 09:55
Date Received: 09/19/15 09:06

Lab Sample ID: 400-111201-2
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			275354	09/21/15 15:20	LEC	TAL PEN
	Instrument ID: NOEQUIP									

Client Sample ID: SB-14 12-13'
Date Collected: 09/17/15 09:55
Date Received: 09/19/15 09:06

Lab Sample ID: 400-111201-2
Matrix: Solid
Percent Solids: 85.0

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.17 g	5.0 g	276679	09/29/15 15:00	GRK	TAL PEN
Total/NA	Analysis	8015B		1	5.17 g	5.0 g	276695	09/29/15 19:29	GRK	TAL PEN
	Instrument ID: CH_JOAN									
Total/NA	Prep	5035			5.17 g	5.0 g	276679	09/29/15 15:00	GRK	TAL PEN
Total/NA	Analysis	8021B		1	5.17 g	5.0 g	276694	09/29/15 19:29	GRK	TAL PEN
	Instrument ID: CH_JOAN									
Total/NA	Prep	3546			15.45 g	2.0 mL	275253	09/21/15 09:42	RDT	TAL PEN
Total/NA	Analysis	8015B		1	15.45 g	2.0 mL	275541	09/23/15 01:02	RM	TAL PEN
	Instrument ID: WALLE									

Lab Chronicle

Client: MWH Americas Inc
Project/Site: Jaquez

TestAmerica Job ID: 400-111201-1

Client Sample ID: SB-14 12-13'

Lab Sample ID: 400-111201-2
Date Collected: 09/17/15 09:55
Matrix: Solid
Date Received: 09/19/15 09:06
Percent Solids: 85.0

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			2.49 g	50 mL	276630	09/30/15 09:37	TAJ	TAL PEN
Soluble	Analysis	300.0		1	1 mL		276874	10/01/15 02:37	TAJ	TAL PEN
	Instrument ID: IC2									

Client Sample ID: SB-26 5-6'

Lab Sample ID: 400-111201-3
Date Collected: 09/17/15 10:45
Matrix: Solid
Date Received: 09/19/15 09:06

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			275354	09/21/15 15:20	LEC	TAL PEN
	Instrument ID: NOEQUIP									

Client Sample ID: SB-26 5-6'

Lab Sample ID: 400-111201-3
Date Collected: 09/17/15 10:45
Matrix: Solid
Date Received: 09/19/15 09:06
Percent Solids: 84.1

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.09 g	5.0 g	276679	09/29/15 15:00	GRK	TAL PEN
Total/NA	Analysis	8015B		1	5.09 g	5.0 g	276695	09/30/15 00:06	GRK	TAL PEN
	Instrument ID: CH_JOAN									
Total/NA	Prep	5035			5.09 g	5.0 g	276679	09/29/15 15:00	GRK	TAL PEN
Total/NA	Analysis	8021B		1	5.09 g	5.0 g	276694	09/30/15 00:06	GRK	TAL PEN
	Instrument ID: CH_JOAN									
Total/NA	Prep	3546			15.00 g	2.0 mL	275253	09/21/15 09:42	RDT	TAL PEN
Total/NA	Analysis	8015B		1	15.00 g	2.0 mL	275541	09/23/15 01:11	RM	TAL PEN
	Instrument ID: WALLE									
Soluble	Leach	DI Leach			2.48 g	50 mL	276630	09/30/15 09:37	TAJ	TAL PEN
Soluble	Analysis	300.0		1	1 mL		276874	10/01/15 03:00	TAJ	TAL PEN
	Instrument ID: IC2									

Client Sample ID: SB-25 5-6'

Lab Sample ID: 400-111201-4
Date Collected: 09/17/15 11:30
Matrix: Solid
Date Received: 09/19/15 09:06

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			275354	09/21/15 15:20	LEC	TAL PEN
	Instrument ID: NOEQUIP									

Lab Chronicle

Client: MWH Americas Inc
Project/Site: Jaquez

TestAmerica Job ID: 400-111201-1

Client Sample ID: SB-25 5-6'

Lab Sample ID: 400-111201-4
Date Collected: 09/17/15 11:30
Matrix: Solid
Date Received: 09/19/15 09:06
Percent Solids: 90.4

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.12 g	5.0 g	276679	09/29/15 15:00	GRK	TAL PEN
Total/NA	Analysis	8015B		1	5.12 g	5.0 g	276695	09/30/15 00:41	GRK	TAL PEN
	Instrument ID: CH_JOAN									
Total/NA	Prep	5035			5.12 g	5.0 g	276679	09/29/15 15:00	GRK	TAL PEN
Total/NA	Analysis	8021B		1	5.12 g	5.0 g	276694	09/30/15 00:41	GRK	TAL PEN
	Instrument ID: CH_JOAN									
Total/NA	Prep	3546			15.08 g	2.0 mL	275253	09/21/15 09:42	RDT	TAL PEN
Total/NA	Analysis	8015B		1	15.08 g	2.0 mL	275680	09/23/15 13:34	C1M	TAL PEN
	Instrument ID: WALLE									
Soluble	Leach	DI Leach			2.52 g	50 mL	276630	09/30/15 09:37	TAJ	TAL PEN
Soluble	Analysis	300.0		1	1 mL		276874	10/01/15 03:23	TAJ	TAL PEN
	Instrument ID: IC2									

Client Sample ID: SB-22 10-11'

Lab Sample ID: 400-111201-5
Date Collected: 09/17/15 13:10
Matrix: Solid
Date Received: 09/19/15 09:06

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			275354	09/21/15 15:20	LEC	TAL PEN
	Instrument ID: NOEQUIP									

Client Sample ID: SB-22 10-11'

Lab Sample ID: 400-111201-5
Date Collected: 09/17/15 13:10
Matrix: Solid
Date Received: 09/19/15 09:06
Percent Solids: 87.2

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.07 g	5.0 g	276679	09/29/15 15:00	GRK	TAL PEN
Total/NA	Analysis	8015B		1	5.07 g	5.0 g	276695	09/30/15 01:15	GRK	TAL PEN
	Instrument ID: CH_JOAN									
Total/NA	Prep	5035			5.07 g	5.0 g	276679	09/29/15 15:00	GRK	TAL PEN
Total/NA	Analysis	8021B		1	5.07 g	5.0 g	276694	09/30/15 01:15	GRK	TAL PEN
	Instrument ID: CH_JOAN									
Total/NA	Prep	3546			15.11 g	2.0 mL	275253	09/21/15 09:42	RDT	TAL PEN
Total/NA	Analysis	8015B		1	15.11 g	2.0 mL	275680	09/23/15 13:44	C1M	TAL PEN
	Instrument ID: WALLE									
Soluble	Leach	DI Leach			2.44 g	50 mL	276630	09/30/15 09:37	TAJ	TAL PEN
Soluble	Analysis	300.0		1	1 mL		276874	10/01/15 04:31	TAJ	TAL PEN
	Instrument ID: IC2									

Lab Chronicle

Client: MWH Americas Inc
Project/Site: Jaquez

TestAmerica Job ID: 400-111201-1

Client Sample ID: SB-21 6.7-7.7'
Date Collected: 09/17/15 14:10
Date Received: 09/19/15 09:06

Lab Sample ID: 400-111201-6
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			275354	09/21/15 15:20	LEC	TAL PEN
	Instrument ID: NOEQUIP									

Client Sample ID: SB-21 6.7-7.7'
Date Collected: 09/17/15 14:10
Date Received: 09/19/15 09:06

Lab Sample ID: 400-111201-6
Matrix: Solid
Percent Solids: 90.2

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.16 g	5.0 g	276679	09/29/15 15:00	GRK	TAL PEN
Total/NA	Analysis	8015B		1	5.16 g	5.0 g	276695	09/30/15 01:50	GRK	TAL PEN
	Instrument ID: CH_JOAN									
Total/NA	Prep	5035			5.16 g	5.0 g	276679	09/29/15 15:00	GRK	TAL PEN
Total/NA	Analysis	8021B		1	5.16 g	5.0 g	276694	09/30/15 01:50	GRK	TAL PEN
	Instrument ID: CH_JOAN									
Total/NA	Prep	3546			15.20 g	2.0 mL	275253	09/21/15 09:42	RDT	TAL PEN
Total/NA	Analysis	8015B		1	15.20 g	2.0 mL	275680	09/23/15 13:53	C1M	TAL PEN
	Instrument ID: WALLE									
Soluble	Leach	DI Leach			2.48 g	50 mL	276630	09/30/15 09:37	TAJ	TAL PEN
Soluble	Analysis	300.0		1	1 mL		276874	10/01/15 04:54	TAJ	TAL PEN
	Instrument ID: IC2									

Client Sample ID: SB-24 3-4'
Date Collected: 09/17/15 14:45
Date Received: 09/19/15 09:06

Lab Sample ID: 400-111201-7
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			275354	09/21/15 15:20	LEC	TAL PEN
	Instrument ID: NOEQUIP									

Client Sample ID: SB-24 3-4'
Date Collected: 09/17/15 14:45
Date Received: 09/19/15 09:06

Lab Sample ID: 400-111201-7
Matrix: Solid
Percent Solids: 75.1

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.10 g	5.0 g	276679	09/29/15 15:00	GRK	TAL PEN
Total/NA	Analysis	8015B		1	5.10 g	5.0 g	276695	09/30/15 04:09	GRK	TAL PEN
	Instrument ID: CH_JOAN									
Total/NA	Prep	5035			5.10 g	5.0 g	276679	09/29/15 15:00	GRK	TAL PEN
Total/NA	Analysis	8021B		1	5.10 g	5.0 g	276694	09/30/15 04:09	GRK	TAL PEN
	Instrument ID: CH_JOAN									
Total/NA	Prep	3546			15.20 g	2.0 mL	275253	09/21/15 09:42	RDT	TAL PEN
Total/NA	Analysis	8015B		1	15.20 g	2.0 mL	275680	09/23/15 14:03	C1M	TAL PEN
	Instrument ID: WALLE									
Soluble	Leach	DI Leach			2.60 g	50 mL	276630	09/30/15 09:37	TAJ	TAL PEN

Lab Chronicle

Client: MWH Americas Inc
Project/Site: Jaquez

TestAmerica Job ID: 400-111201-1

Client Sample ID: SB-24 3-4'

Lab Sample ID: 400-111201-7
Date Collected: 09/17/15 14:45
Matrix: Solid
Date Received: 09/19/15 09:06
Percent Solids: 75.1

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Analysis	300.0		1	1 mL		276874	10/01/15 05:17	TAJ	TAL PEN
	Instrument ID: IC2									

Client Sample ID: SB-23 4-5'

Lab Sample ID: 400-111201-8
Date Collected: 09/17/15 15:30
Matrix: Solid
Date Received: 09/19/15 09:06

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			275354	09/21/15 15:20	LEC	TAL PEN
	Instrument ID: NOEQUIP									

Client Sample ID: SB-23 4-5'

Lab Sample ID: 400-111201-8
Date Collected: 09/17/15 15:30
Matrix: Solid
Date Received: 09/19/15 09:06
Percent Solids: 87.9

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.08 g	5.0 g	276679	09/29/15 15:00	GRK	TAL PEN
Total/NA	Analysis	8015B		1	5.08 g	5.0 g	276695	09/30/15 04:43	GRK	TAL PEN
	Instrument ID: CH_JOAN									
Total/NA	Prep	5035			5.08 g	5.0 g	276679	09/29/15 15:00	GRK	TAL PEN
Total/NA	Analysis	8021B		1	5.08 g	5.0 g	276694	09/30/15 04:43	GRK	TAL PEN
	Instrument ID: CH_JOAN									
Total/NA	Prep	3546			15.27 g	2.0 mL	275253	09/21/15 09:42	RDT	TAL PEN
Total/NA	Analysis	8015B		1	15.27 g	2.0 mL	275680	09/23/15 14:13	C1M	TAL PEN
	Instrument ID: WALLE									
Soluble	Leach	DI Leach			2.53 g	50 mL	276630	09/30/15 09:37	TAJ	TAL PEN
Soluble	Analysis	300.0		1	1 mL		276874	10/01/15 05:40	TAJ	TAL PEN
	Instrument ID: IC2									

Laboratory References:

TAL PEN = TestAmerica Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

Certification Summary

Client: MWH Americas Inc
Project/Site: Jaquez

TestAmerica Job ID: 400-111201-1

Laboratory: TestAmerica Pensacola

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Alabama	State Program	4	40150	01-31-16
Arizona	State Program	9	AZ0710	01-11-17
Arkansas DEQ	State Program	6	88-0689	09-01-16
Florida	NELAP	4	E81010	06-30-16
Georgia	State Program	4	N/A	06-30-16
Illinois	NELAP	5	200041	10-09-16
Iowa	State Program	7	367	07-31-16
Kansas	NELAP	7	E-10253	01-31-16 *
Kentucky (UST)	State Program	4	53	06-30-16
Kentucky (WW)	State Program	4	98030	12-31-16
Louisiana	NELAP	6	30976	06-30-16
Maryland	State Program	3	233	09-30-16
Massachusetts	State Program	1	M-FL094	06-30-16
Michigan	State Program	5	9912	06-30-16
New Jersey	NELAP	2	FL006	06-30-16
North Carolina (WW/SW)	State Program	4	314	12-31-15 *
Oklahoma	State Program	6	9810	08-31-16
Pennsylvania	NELAP	3	68-00467	01-31-16
Rhode Island	State Program	1	LAO00307	12-30-16
South Carolina	State Program	4	96026	06-30-16
Tennessee	State Program	4	TN02907	06-30-16
Texas	NELAP	6	T104704286-15-9	09-30-16
USDA	Federal		P330-13-00193	07-01-16
Virginia	NELAP	3	460166	06-14-16
West Virginia DEP	State Program	3	136	06-30-16

* Certification renewal pending - certification considered valid.

Method Summary

Client: MWH Americas Inc
Project/Site: Jaquez

TestAmerica Job ID: 400-111201-1

Method	Method Description	Protocol	Laboratory
8015B	Gasoline Range Organics - (GC)	SW846	TAL PEN
8021B	Volatile Organic Compounds (GC)	SW846	TAL PEN
8015B	Diesel Range Organics (DRO) (GC)	SW846	TAL PEN
300.0	Anions, Ion Chromatography	MCAWW	TAL PEN
Moisture	Percent Moisture	EPA	TAL PEN

Protocol References:

EPA = US Environmental Protection Agency

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL PEN = TestAmerica Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

SERIAL NUMBER: 77916

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

TestAmerica Pensacola
3355 McLemore Drive
Pensacola, FL 32514
Phone: 850-474-1001
Fax: 850-478-2671
Website: www.testamericainc.com

QUOTE NO.:
BOTTLE ORDER NO.:
ORDER - LOG-IN NO.: C

CLIENT: MWH
ADDRESS: 1560 BROADWAY Suite 2900 Denver CO 80202
PAGE: 1 OF: 1

PROJECT NAME: JAQUEZ
PROJECT NO.: 1057777
CLIENT PROJECT MANAGER: STEVE VARSA
PROJECT LOC. (STATE): NEW MEXICO

SAMPLED BY: ChrisLee, Brad Barton
~~CONTRACT / P.O. NO.~~ ARF#: ERG-MWH-08-1815-CWO-01
CLIENT PHONE: 303 291 2242
CLIENT E-MAIL OR FAX: christopher.c.lee@mwhglobal

TAT REQUESTED: RUSH NEEDS LAB PREAPPROVAL ☐ NORMAL ☒ 10 BUSINESS DAYS
☐ 1 DAY ☐ 2 DAYS ☐ 3 DAYS ☐ 5 DAYS ☐ 20 DAYS (Package) ☐ OTHER:

SAMPLE DISPOSAL: ☐ RETURN TO CLIENT ☒ DISPOSAL BY LAB
☐ SEE CONTRACT ☐ OTHER:

REQUESTED ANALYSIS: 8015B-DRO, 9056 ORGFM_28D; 8021B-8021 BTEX / 8015 GRO

POSSIBLE HAZARD IDENTIFICATION
☒ NON-HAZARD
△ FLAMMABLE
△ RADIOACTIVE
△ POISON B
△ UNKNOWN
△ OTHER:

400-111201 COC

NO. OF COOLERS PER SHIPMENT: 1

LAB USE ONLY - SAMPLE NUMBER

SAMPLE DATE	SAMPLE TIME	SAMPLE IDENTIFICATION	PRESERVATIVE: No Preservative	HCL - Hydrochloric Acid	HNO3 - Nitric Acid	H2SO4 - Sulfuric Acid or H3PO4	NAOH - Sodium Hydroxide	CH3OH - Methanol	NAHSO4 - Sodium Bisulfate	NA2S2O3 - Sodium Thiosulfate	Other:	MATRIX: Drinking Water	Aqueous GW, SW, WW	Solid, Semisolid, Sediment	Air	NonAqueous (Oil, Solvent, etc.)	NUMBER OF CONTAINERS SUBMITTED		SPECIAL INSTRUCTIONS/ CONDITIONS OF RECEIPT
9/17/15	905	SB-15 10.5-12.5'	X											X			1	1	
9/17/15	905	SB-15 (MS/MSD) 10.5-12.5'	X											X			1	1	
9/17/15	955	SB-14 12-13'	X											X			1	1	
9/17/15	1045	SB-26 5-6'	X											X			1	1	
9/17/15	1130	SB-25 5-6'	X											X			1	1	
9/17/15	1310	SB-22 10-11'	X											X			1	1	
9/17/15	1410	SB-21 6.7-7.7'	X											X			1	1	
9/17/15	1445	SB-24 3-4'	X											X			1	1	
9/17/15	1530	SB-23 4-5'	X											X			1	1	

RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME
EMPTY CONTAINERS						ChrisLee	9/18/15	700
RECEIVED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME
EMPTY CONTAINERS								

LABORATORY USE ONLY

RECEIVED FOR LABORATORY BY:	DATE	TIME	CUSTODY INTACT?	CUSTODY SEAL NO.	REMARKS:
	9/19/15	0906	△ YES △ NO		0.4°C IR-5

TAL-8251 (1207)

Login Sample Receipt Checklist

Client: MWH Americas Inc

Job Number: 400-111201-1

Login Number: 111201
List Number: 1
Creator: Benforado, Jessica L

List Source: TestAmerica Pensacola

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	0.4°C IR-5
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

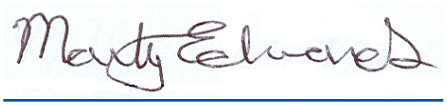
ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Pensacola
3355 McLemore Drive
Pensacola, FL 32514
Tel: (850)474-1001

TestAmerica Job ID: 400-111274-1
Client Project/Site: Jaquez
Revision: 1

For:
MWH Americas Inc
11153 Aurora Avenue
Des Moines, Iowa 50322-7904

Attn: Steve Varsa



Authorized for release by:
1/25/2016 4:53:38 PM

Marty Edwards, Manager of Project Management
(850)474-1001
marty.edwards@testamericainc.com

Table of Contents

Definitions/Glossary

Client: MWH Americas Inc
Project/Site: Jaquez

TestAmerica Job ID: 400-111274-1

Qualifiers

GC VOA

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery is outside acceptance limits.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Case Narrative

Client: MWH Americas Inc
Project/Site: Jaquez

TestAmerica Job ID: 400-111274-1

Job ID: 400-111274-1

Laboratory: TestAmerica Pensacola

Narrative

Job Narrative
400-111274-1

Comments
No additional comments.

Receipt
The samples were received on 9/22/2015 9:58 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.2º C.

Revised Report
The report was revised to change the analyte descriptions for the 8015 DRO/ORO analysis.

HPLC/IC
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

GC VOA
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

GC Semi VOA
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Organic Prep
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

VOA Prep
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Lab Admin
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Detection Summary

Client: MWH Americas Inc
Project/Site: Jaquez

TestAmerica Job ID: 400-111274-1

Client Sample ID: SB-20 5-7' — Lab Sample ID: 400-111274-1

No Detections.

Client Sample ID: SB-16 5.8-6.8' — Lab Sample ID: 400-111274-2

No Detections.

Client Sample ID: SB-34 5-6.5' — Lab Sample ID: 400-111274-3

No Detections.

Client Sample ID: SB-39 6.5-8.5' — Lab Sample ID: 400-111274-4

No Detections.

Client Sample ID: SB-76 3-5' — Lab Sample ID: 400-111274-5

No Detections.

Client Sample ID: SB-77 3-4' — Lab Sample ID: 400-111274-6

No Detections.

This Detection Summary does not include radiochemical test results.

Sample Summary

Client: MWH Americas Inc
Project/Site: Jaquez

TestAmerica Job ID: 400-111274-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-111274-1	SB-20 5-7'	Solid	09/18/15 10:00	09/22/15 09:58
400-111274-2	SB-16 5.8-6.8'	Solid	09/18/15 10:50	09/22/15 09:58
400-111274-3	SB-34 5-6.5'	Solid	09/18/15 11:50	09/22/15 09:58
400-111274-4	SB-39 6.5-8.5'	Solid	09/18/15 13:15	09/22/15 09:58
400-111274-5	SB-76 3-5'	Solid	09/18/15 14:05	09/22/15 09:58
400-111274-6	SB-77 3-4'	Solid	09/18/15 15:30	09/22/15 09:58

Client Sample Results

Client: MWH Americas Inc
Project/Site: Jaquez

TestAmerica Job ID: 400-111274-1

Client Sample ID: SB-20 5-7'
Date Collected: 09/18/15 10:00
Date Received: 09/22/15 09:58

Lab Sample ID: 400-111274-1
Matrix: Solid
Percent Solids: 86.9

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) C6--C10	<0.11		0.11		mg/Kg	☼	09/29/15 15:00	09/30/15 05:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (fid)	*94*		*65 - 125*	*09/29/15 15:00*	*09/30/15 05:18*	*1*

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0011		0.0011		mg/Kg	☼	09/29/15 15:00	09/30/15 05:18	1
Ethylbenzene	<0.0011		0.0011		mg/Kg	☼	09/29/15 15:00	09/30/15 05:18	1
Toluene	<0.0056		0.0056		mg/Kg	☼	09/29/15 15:00	09/30/15 05:18	1
Xylenes, Total	<0.0056		0.0056		mg/Kg	☼	09/29/15 15:00	09/30/15 05:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (pid)	*91*		*40 - 150*	*09/29/15 15:00*	*09/30/15 05:18*	*1*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	<12		12		mg/Kg	☼	09/24/15 13:46	09/25/15 16:16	1
Oil Range Organics (C28-C35)	<12		12		mg/Kg	☼	09/24/15 13:46	09/25/15 16:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*88*		*27 - 151*	*09/24/15 13:46*	*09/25/15 16:16*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<24		24		mg/Kg	☼		10/01/15 06:02	1

Client: MWH Americas Inc
Project/Site: Jaquez

TestAmerica Job ID: 400-111274-1

Client Sample ID: SB-16 5.8-6.8'
Date Collected: 09/18/15 10:50
Date Received: 09/22/15 09:58

Lab Sample ID: 400-111274-2
Matrix: Solid
Percent Solids: 86.1

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) C6--C10	<0.11		0.11		mg/Kg	☼	09/29/15 15:00	09/30/15 05:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (fid)	*94*		*65 - 125*	*09/29/15 15:00*	*09/30/15 05:52*	*1*

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0011		0.0011		mg/Kg	☼	09/29/15 15:00	09/30/15 05:52	1
Ethylbenzene	<0.0011		0.0011		mg/Kg	☼	09/29/15 15:00	09/30/15 05:52	1
Toluene	<0.0056		0.0056		mg/Kg	☼	09/29/15 15:00	09/30/15 05:52	1
Xylenes, Total	<0.0056		0.0056		mg/Kg	☼	09/29/15 15:00	09/30/15 05:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (pid)	*91*		*40 - 150*	*09/29/15 15:00*	*09/30/15 05:52*	*1*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	<11		11		mg/Kg	☼	09/24/15 13:46	09/25/15 16:26	1
Oil Range Organics (C28-C35)	<11		11		mg/Kg	☼	09/24/15 13:46	09/25/15 16:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*81*		*27 - 151*	*09/24/15 13:46*	*09/25/15 16:26*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<24		24		mg/Kg	☼		10/01/15 06:25	1

Client Sample Results

Client: MWH Americas Inc
Project/Site: Jaquez

TestAmerica Job ID: 400-111274-1

Client Sample ID: SB-34 5-6.5'

Date Collected: 09/18/15 11:50
Date Received: 09/22/15 09:58

Lab Sample ID: 400-111274-3

Matrix: Solid
Percent Solids: 88.3

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) C6--C10	<0.11		0.11		mg/Kg	☼	09/29/15 15:00	09/30/15 06:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (fid)	*94*		*65 - 125*	*09/29/15 15:00*	*09/30/15 06:27*	*1*

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0011		0.0011		mg/Kg	☼	09/29/15 15:00	09/30/15 06:27	1
Ethylbenzene	<0.0011		0.0011		mg/Kg	☼	09/29/15 15:00	09/30/15 06:27	1
Toluene	<0.0055		0.0055		mg/Kg	☼	09/29/15 15:00	09/30/15 06:27	1
Xylenes, Total	<0.0055	F1	0.0055		mg/Kg	☼	09/29/15 15:00	09/30/15 06:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (pid)	*89*		*40 - 150*	*09/29/15 15:00*	*09/30/15 06:27*	*1*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	<11		11		mg/Kg	☼	09/24/15 13:46	09/25/15 16:36	1
Oil Range Organics (C28-C35)	<11		11		mg/Kg	☼	09/24/15 13:46	09/25/15 16:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*77*		*27 - 151*	*09/24/15 13:46*	*09/25/15 16:36*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<23		23		mg/Kg	☼		10/01/15 19:44	1

Client: MWH Americas Inc
Project/Site: Jaquez

TestAmerica Job ID: 400-111274-1

Client Sample ID: SB-39 6.5-8.5'
Date Collected: 09/18/15 13:15
Date Received: 09/22/15 09:58

Lab Sample ID: 400-111274-4
Matrix: Solid
Percent Solids: 89.0

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) C6--C10	<0.11		0.11		mg/Kg	☼	09/29/15 15:00	09/30/15 07:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (fid)	*94*		*65 - 125*	*09/29/15 15:00*	*09/30/15 07:02*	*1*

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0011		0.0011		mg/Kg	☼	09/29/15 15:00	09/30/15 07:02	1
Ethylbenzene	<0.0011		0.0011		mg/Kg	☼	09/29/15 15:00	09/30/15 07:02	1
Toluene	<0.0055		0.0055		mg/Kg	☼	09/29/15 15:00	09/30/15 07:02	1
Xylenes, Total	<0.0055		0.0055		mg/Kg	☼	09/29/15 15:00	09/30/15 07:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (pid)	*87*		*40 - 150*	*09/29/15 15:00*	*09/30/15 07:02*	*1*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	<11		11		mg/Kg	☼	09/24/15 13:46	09/25/15 17:15	1
Oil Range Organics (C28-C35)	<11		11		mg/Kg	☼	09/24/15 13:46	09/25/15 17:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*84*		*27 - 151*	*09/24/15 13:46*	*09/25/15 17:15*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<23		23		mg/Kg	☼		10/01/15 07:56	1

Client: MWH Americas Inc
Project/Site: Jaquez

TestAmerica Job ID: 400-111274-1

Client Sample ID: SB-76 3-5'
Date Collected: 09/18/15 14:05
Date Received: 09/22/15 09:58

Lab Sample ID: 400-111274-5
Matrix: Solid
Percent Solids: 81.7

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) C6--C10	<0.12		0.12		mg/Kg	☼	09/29/15 15:00	09/30/15 07:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (fid)	*93*		*65 - 125*	*09/29/15 15:00*	*09/30/15 07:36*	*1*

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0012		0.0012		mg/Kg	☼	09/29/15 15:00	09/30/15 07:36	1
Ethylbenzene	<0.0012		0.0012		mg/Kg	☼	09/29/15 15:00	09/30/15 07:36	1
Toluene	<0.0060		0.0060		mg/Kg	☼	09/29/15 15:00	09/30/15 07:36	1
Xylenes, Total	<0.0060		0.0060		mg/Kg	☼	09/29/15 15:00	09/30/15 07:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (pid)	*87*		*40 - 150*	*09/29/15 15:00*	*09/30/15 07:36*	*1*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	<12		12		mg/Kg	☼	09/24/15 13:46	09/25/15 17:25	1
Oil Range Organics (C28-C35)	<12		12		mg/Kg	☼	09/24/15 13:46	09/25/15 17:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*88*		*27 - 151*	*09/24/15 13:46*	*09/25/15 17:25*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<24		24		mg/Kg	☼		10/01/15 09:05	1

Client: MWH Americas Inc
Project/Site: Jaquez

TestAmerica Job ID: 400-111274-1

Client Sample ID: SB-77 3-4'
Date Collected: 09/18/15 15:30
Date Received: 09/22/15 09:58

Lab Sample ID: 400-111274-6
Matrix: Solid
Percent Solids: 89.8

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) C6--C10	<0.11		0.11		mg/Kg	☼	09/29/15 15:00	09/30/15 08:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (fid)	*94*		*65 - 125*	*09/29/15 15:00*	*09/30/15 08:11*	*1*

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0011		0.0011		mg/Kg	☼	09/29/15 15:00	09/30/15 08:11	1
Ethylbenzene	<0.0011		0.0011		mg/Kg	☼	09/29/15 15:00	09/30/15 08:11	1
Toluene	<0.0055		0.0055		mg/Kg	☼	09/29/15 15:00	09/30/15 08:11	1
Xylenes, Total	<0.0055		0.0055		mg/Kg	☼	09/29/15 15:00	09/30/15 08:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (pid)	*88*		*40 - 150*	*09/29/15 15:00*	*09/30/15 08:11*	*1*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	<11		11		mg/Kg	☼	09/24/15 13:46	09/25/15 17:35	1
Oil Range Organics (C28-C35)	<11		11		mg/Kg	☼	09/24/15 13:46	09/25/15 17:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*73*		*27 - 151*	*09/24/15 13:46*	*09/25/15 17:35*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<22		22		mg/Kg	☼		10/01/15 09:28	1

GC VOA

Prep Batch: 276679

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-111274-1	SB-20 5-7'	Total/NA	Solid	5035	
400-111274-2	SB-16 5.8-6.8'	Total/NA	Solid	5035	
400-111274-3	SB-34 5-6.5'	Total/NA	Solid	5035	
400-111274-3 MS	SB-34 5-6.5'	Total/NA	Solid	5035	
400-111274-3 MS	SB-34 5-6.5'	Total/NA	Solid	5035	
400-111274-3 MSD	SB-34 5-6.5'	Total/NA	Solid	5035	
400-111274-3 MSD	SB-34 5-6.5'	Total/NA	Solid	5035	
400-111274-4	SB-39 6.5-8.5'	Total/NA	Solid	5035	
400-111274-5	SB-76 3-5'	Total/NA	Solid	5035	
400-111274-6	SB-77 3-4'	Total/NA	Solid	5035	
LCS 400-276679/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCS 400-276679/2-A	Lab Control Sample	Total/NA	Solid	5035	
MB 400-276679/3-A	Method Blank	Total/NA	Solid	5035	

Analysis Batch: 276694

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-111274-1	SB-20 5-7'	Total/NA	Solid	8021B	276679
400-111274-2	SB-16 5.8-6.8'	Total/NA	Solid	8021B	276679
400-111274-3	SB-34 5-6.5'	Total/NA	Solid	8021B	276679
400-111274-3 MS	SB-34 5-6.5'	Total/NA	Solid	8021B	276679
400-111274-3 MSD	SB-34 5-6.5'	Total/NA	Solid	8021B	276679
400-111274-4	SB-39 6.5-8.5'	Total/NA	Solid	8021B	276679
400-111274-5	SB-76 3-5'	Total/NA	Solid	8021B	276679
400-111274-6	SB-77 3-4'	Total/NA	Solid	8021B	276679
LCS 400-276679/1-A	Lab Control Sample	Total/NA	Solid	8021B	276679
MB 400-276679/3-A	Method Blank	Total/NA	Solid	8021B	276679

Analysis Batch: 276695

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-111274-1	SB-20 5-7'	Total/NA	Solid	8015B	276679
400-111274-2	SB-16 5.8-6.8'	Total/NA	Solid	8015B	276679
400-111274-3	SB-34 5-6.5'	Total/NA	Solid	8015B	276679
400-111274-3 MS	SB-34 5-6.5'	Total/NA	Solid	8015B	276679
400-111274-3 MSD	SB-34 5-6.5'	Total/NA	Solid	8015B	276679
400-111274-4	SB-39 6.5-8.5'	Total/NA	Solid	8015B	276679
400-111274-5	SB-76 3-5'	Total/NA	Solid	8015B	276679
400-111274-6	SB-77 3-4'	Total/NA	Solid	8015B	276679
LCS 400-276679/2-A	Lab Control Sample	Total/NA	Solid	8015B	276679
MB 400-276679/3-A	Method Blank	Total/NA	Solid	8015B	276679

GC Semi VOA

Prep Batch: 275870

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-111274-1	SB-20 5-7'	Total/NA	Solid	3546	
400-111274-2	SB-16 5.8-6.8'	Total/NA	Solid	3546	
400-111274-3	SB-34 5-6.5'	Total/NA	Solid	3546	
400-111274-3 MS	SB-34 5-6.5'	Total/NA	Solid	3546	
400-111274-3 MSD	SB-34 5-6.5'	Total/NA	Solid	3546	
400-111274-4	SB-39 6.5-8.5'	Total/NA	Solid	3546	

GC Semi VOA (Continued)

Prep Batch: 275870 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-111274-5	SB-76 3-5'	Total/NA	Solid	3546	
400-111274-6	SB-77 3-4'	Total/NA	Solid	3546	
LCS 400-275870/2-A	Lab Control Sample	Total/NA	Solid	3546	
MB 400-275870/1-A	Method Blank	Total/NA	Solid	3546	

Analysis Batch: 276016

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-111274-1	SB-20 5-7'	Total/NA	Solid	8015B	275870
400-111274-2	SB-16 5.8-6.8'	Total/NA	Solid	8015B	275870
400-111274-3	SB-34 5-6.5'	Total/NA	Solid	8015B	275870
400-111274-3 MS	SB-34 5-6.5'	Total/NA	Solid	8015B	275870
400-111274-3 MSD	SB-34 5-6.5'	Total/NA	Solid	8015B	275870
400-111274-4	SB-39 6.5-8.5'	Total/NA	Solid	8015B	275870
400-111274-5	SB-76 3-5'	Total/NA	Solid	8015B	275870
400-111274-6	SB-77 3-4'	Total/NA	Solid	8015B	275870
LCS 400-275870/2-A	Lab Control Sample	Total/NA	Solid	8015B	275870
MB 400-275870/1-A	Method Blank	Total/NA	Solid	8015B	275870

HPLC/IC

Leach Batch: 276630

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-111274-1	SB-20 5-7'	Soluble	Solid	DI Leach	
400-111274-2	SB-16 5.8-6.8'	Soluble	Solid	DI Leach	
400-111274-3	SB-34 5-6.5'	Soluble	Solid	DI Leach	
400-111274-3 MS	SB-34 5-6.5'	Soluble	Solid	DI Leach	
400-111274-3 MSD	SB-34 5-6.5'	Soluble	Solid	DI Leach	
400-111274-4	SB-39 6.5-8.5'	Soluble	Solid	DI Leach	
400-111274-5	SB-76 3-5'	Soluble	Solid	DI Leach	
400-111274-6	SB-77 3-4'	Soluble	Solid	DI Leach	
LCS 400-276630/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 400-276630/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
MB 400-276630/1-A	Method Blank	Soluble	Solid	DI Leach	

Analysis Batch: 276874

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-111274-1	SB-20 5-7'	Soluble	Solid	300.0	276630
400-111274-2	SB-16 5.8-6.8'	Soluble	Solid	300.0	276630
400-111274-3	SB-34 5-6.5'	Soluble	Solid	300.0	276630
400-111274-3 MS	SB-34 5-6.5'	Soluble	Solid	300.0	276630
400-111274-3 MSD	SB-34 5-6.5'	Soluble	Solid	300.0	276630
400-111274-4	SB-39 6.5-8.5'	Soluble	Solid	300.0	276630
400-111274-5	SB-76 3-5'	Soluble	Solid	300.0	276630
400-111274-6	SB-77 3-4'	Soluble	Solid	300.0	276630
LCS 400-276630/2-A	Lab Control Sample	Soluble	Solid	300.0	276630
LCSD 400-276630/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	276630
MB 400-276630/1-A	Method Blank	Soluble	Solid	300.0	276630

QC Association Summary

Client: MWH Americas Inc
Project/Site: Jaquez

TestAmerica Job ID: 400-111274-1

General Chemistry

Analysis Batch: 275558

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-111209-A-35 DU	Duplicate	Total/NA	Solid	Moisture	
400-111274-1	SB-20 5-7'	Total/NA	Solid	Moisture	
400-111274-2	SB-16 5.8-6.8'	Total/NA	Solid	Moisture	
400-111274-3	SB-34 5-6.5'	Total/NA	Solid	Moisture	
400-111274-3 MS	SB-34 5-6.5'	Total/NA	Solid	Moisture	
400-111274-3 MSD	SB-34 5-6.5'	Total/NA	Solid	Moisture	
400-111274-4	SB-39 6.5-8.5'	Total/NA	Solid	Moisture	
400-111274-5	SB-76 3-5'	Total/NA	Solid	Moisture	
400-111274-6	SB-77 3-4'	Total/NA	Solid	Moisture	

Method: 8015B - Gasoline Range Organics - (GC)

Lab Sample ID: MB 400-276679/3-A
Matrix: Solid
Analysis Batch: 276695

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 276679

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) C6--C10	<0.10		0.10		mg/Kg		09/29/15 15:00	09/29/15 21:13	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (fid)	*95*		*65 - 125*	*09/29/15 15:00*	*09/29/15 21:13*	*1*

Lab Sample ID: LCS 400-276679/2-A
Matrix: Solid
Analysis Batch: 276695

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 276679

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO) C6--C10			1.00	0.983		mg/Kg		98	62 - 141		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
a,a,a-Trifluorotoluene (fid)	*99*		*65 - 125*

Lab Sample ID: 400-111274-3 MS
Matrix: Solid
Analysis Batch: 276695

Client Sample ID: SB-34 5-6.5'
Prep Type: Total/NA
Prep Batch: 276679

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO) C6--C10	<0.11		1.10	0.912		mg/Kg	☼	83	10 - 150		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
a,a,a-Trifluorotoluene (fid)	*98*		*65 - 125*

Lab Sample ID: 400-111274-3 MSD
Matrix: Solid
Analysis Batch: 276695

Client Sample ID: SB-34 5-6.5'
Prep Type: Total/NA
Prep Batch: 276679

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO) C6--C10	<0.11		1.10	0.870		mg/Kg	☼	79	10 - 150	5	32

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
a,a,a-Trifluorotoluene (fid)	*97*		*65 - 125*

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 400-276679/3-A
Matrix: Solid
Analysis Batch: 276694

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 276679

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0010		0.0010		mg/Kg		09/29/15 15:00	09/29/15 21:13	1
Ethylbenzene	<0.0010		0.0010		mg/Kg		09/29/15 15:00	09/29/15 21:13	1

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: MB 400-276679/3-A
Matrix: Solid
Analysis Batch: 276694

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 276679

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Toluene	<0.0050		0.0050		mg/Kg		09/29/15 15:00	09/29/15 21:13	1
Xylenes, Total	<0.0050		0.0050		mg/Kg		09/29/15 15:00	09/29/15 21:13	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (pid)	*92*		*40 - 150*	*09/29/15 15:00*	*09/29/15 21:13*	*1*

Lab Sample ID: LCS 400-276679/1-A
Matrix: Solid
Analysis Batch: 276694

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 276679

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			0.0500	0.0427		mg/Kg		85	74 - 127		
Ethylbenzene			0.0500	0.0449		mg/Kg		90	79 - 131		
Toluene			0.0500	0.0446		mg/Kg		89	76 - 127		
Xylenes, Total			0.150	0.135		mg/Kg		90	80 - 129		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
a,a,a-Trifluorotoluene (pid)	*95*		*40 - 150*

Lab Sample ID: 400-111274-3 MS
Matrix: Solid
Analysis Batch: 276694

Client Sample ID: SB-34 5-6.5'
Prep Type: Total/NA
Prep Batch: 276679

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene	<0.0011		0.0550	0.0411		mg/Kg	☼	75	10 - 150		
Ethylbenzene	<0.0011		0.0550	0.0254		mg/Kg	☼	46	10 - 150		
Toluene	<0.0055		0.0550	0.0309		mg/Kg	☼	56	10 - 150		
Xylenes, Total	<0.0055	F1	0.165	0.0737	F1	mg/Kg	☼	45	50 - 150		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
a,a,a-Trifluorotoluene (pid)	*89*		*40 - 150*

Lab Sample ID: 400-111274-3 MSD
Matrix: Solid
Analysis Batch: 276694

Client Sample ID: SB-34 5-6.5'
Prep Type: Total/NA
Prep Batch: 276679

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	<0.0011		0.0550	0.0431		mg/Kg	☼	78	10 - 150	5	34
Ethylbenzene	<0.0011		0.0550	0.0406		mg/Kg	☼	74	10 - 150	46	66
Toluene	<0.0055		0.0550	0.0419		mg/Kg	☼	76	10 - 150	30	44
Xylenes, Total	<0.0055	F1	0.165	0.114		mg/Kg	☼	69	50 - 150	43	46

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
a,a,a-Trifluorotoluene (pid)	*91*		*40 - 150*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 400-275870/1-A
Matrix: Solid
Analysis Batch: 276016

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 275870

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	<10		10		mg/Kg		09/24/15 13:46	09/25/15 15:56	1
Oil Range Organics (C28-C35)	<10		10		mg/Kg		09/24/15 13:46	09/25/15 15:56	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*89*		*27 - 151*	*09/24/15 13:46*	*09/25/15 15:56*	*1*

Lab Sample ID: LCS 400-275870/2-A
Matrix: Solid
Analysis Batch: 276016

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 275870

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Diesel Range Organics [C10-C28]			335	264		mg/Kg		79	63 - 153		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
o-Terphenyl	*87*		*27 - 151*

Lab Sample ID: 400-111274-3 MS
Matrix: Solid
Analysis Batch: 276016

Client Sample ID: SB-34 5-6.5'
Prep Type: Total/NA
Prep Batch: 275870

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Diesel Range Organics [C10-C28]	<11		376	300		mg/Kg	☼	80	62 - 204		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
o-Terphenyl	*103*		*27 - 151*

Lab Sample ID: 400-111274-3 MSD
Matrix: Solid
Analysis Batch: 276016

Client Sample ID: SB-34 5-6.5'
Prep Type: Total/NA
Prep Batch: 275870

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Diesel Range Organics [C10-C28]	<11		375	242		mg/Kg	☼	65	62 - 204	22	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
o-Terphenyl	*77*		*27 - 151*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 400-276630/1-A
Matrix: Solid
Analysis Batch: 276874

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<20		20		mg/Kg			10/01/15 00:20	1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 400-276630/2-A
Matrix: Solid
Analysis Batch: 276874

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride			100	98.6		mg/Kg		99	80 - 120		

Lab Sample ID: LCSD 400-276630/3-A
Matrix: Solid
Analysis Batch: 276874

Client Sample ID: Lab Control Sample Dup
Prep Type: Soluble

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride			100	99.1		mg/Kg		99	80 - 120	0	15

Lab Sample ID: 400-111274-3 MS
Matrix: Solid
Analysis Batch: 276874

Client Sample ID: SB-34 5-6.5'
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride	<23		112	111		mg/Kg	☼	96	80 - 120		

Lab Sample ID: 400-111274-3 MSD
Matrix: Solid
Analysis Batch: 276874

Client Sample ID: SB-34 5-6.5'
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	<23		113	114		mg/Kg	☼	98	80 - 120	2	15

Lab Chronicle

Client: MWH Americas Inc
Project/Site: Jaquez

TestAmerica Job ID: 400-111274-1

Client Sample ID: SB-20 5-7'
Date Collected: 09/18/15 10:00
Date Received: 09/22/15 09:58

Lab Sample ID: 400-111274-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			275558	09/22/15 17:47	LEC	TAL PEN
	Instrument ID: NOEQUIP									

Client Sample ID: SB-20 5-7'
Date Collected: 09/18/15 10:00
Date Received: 09/22/15 09:58

Lab Sample ID: 400-111274-1
Matrix: Solid
Percent Solids: 86.9

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.10 g	5.0 g	276679	09/29/15 15:00	GRK	TAL PEN
Total/NA	Analysis	8015B		1	5.10 g	5.0 g	276695	09/30/15 05:18	GRK	TAL PEN
	Instrument ID: CH_JOAN									
Total/NA	Prep	5035			5.10 g	5.0 g	276679	09/29/15 15:00	GRK	TAL PEN
Total/NA	Analysis	8021B		1	5.10 g	5.0 g	276694	09/30/15 05:18	GRK	TAL PEN
	Instrument ID: CH_JOAN									
Total/NA	Prep	3546			14.85 g	2.0 mL	275870	09/24/15 13:46	VC1	TAL PEN
Total/NA	Analysis	8015B		1	14.85 g	2.0 mL	276016	09/25/15 16:16	RM	TAL PEN
	Instrument ID: WALLE									
Soluble	Leach	DI Leach			2.43 g	50 mL	276630	09/30/15 09:37	TAJ	TAL PEN
Soluble	Analysis	300.0		1	1 mL		276874	10/01/15 06:02	TAJ	TAL PEN
	Instrument ID: IC2									

Client Sample ID: SB-16 5.8-6.8'
Date Collected: 09/18/15 10:50
Date Received: 09/22/15 09:58

Lab Sample ID: 400-111274-2
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			275558	09/22/15 17:47	LEC	TAL PEN
	Instrument ID: NOEQUIP									

Client Sample ID: SB-16 5.8-6.8'
Date Collected: 09/18/15 10:50
Date Received: 09/22/15 09:58

Lab Sample ID: 400-111274-2
Matrix: Solid
Percent Solids: 86.1

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.15 g	5.0 g	276679	09/29/15 15:00	GRK	TAL PEN
Total/NA	Analysis	8015B		1	5.15 g	5.0 g	276695	09/30/15 05:52	GRK	TAL PEN
	Instrument ID: CH_JOAN									
Total/NA	Prep	5035			5.15 g	5.0 g	276679	09/29/15 15:00	GRK	TAL PEN
Total/NA	Analysis	8021B		1	5.15 g	5.0 g	276694	09/30/15 05:52	GRK	TAL PEN
	Instrument ID: CH_JOAN									
Total/NA	Prep	3546			15.22 g	2.0 mL	275870	09/24/15 13:46	VC1	TAL PEN
Total/NA	Analysis	8015B		1	15.22 g	2.0 mL	276016	09/25/15 16:26	RM	TAL PEN
	Instrument ID: WALLE									

Lab Chronicle

Client: MWH Americas Inc
Project/Site: Jaquez

TestAmerica Job ID: 400-111274-1

Client Sample ID: SB-16 5.8-6.8'

Lab Sample ID: 400-111274-2
Date Collected: 09/18/15 10:50
Matrix: Solid
Date Received: 09/22/15 09:58
Percent Solids: 86.1

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			2.45 g	50 mL	276630	09/30/15 09:37	TAJ	TAL PEN
Soluble	Analysis	300.0		1	1 mL		276874	10/01/15 06:25	TAJ	TAL PEN
	Instrument ID: IC2									

Client Sample ID: SB-34 5-6.5'

Lab Sample ID: 400-111274-3
Date Collected: 09/18/15 11:50
Matrix: Solid
Date Received: 09/22/15 09:58

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			275558	09/22/15 17:47	LEC	TAL PEN
	Instrument ID: NOEQUIP									

Client Sample ID: SB-34 5-6.5'

Lab Sample ID: 400-111274-3
Date Collected: 09/18/15 11:50
Matrix: Solid
Date Received: 09/22/15 09:58
Percent Solids: 88.3

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.15 g	5.0 g	276679	09/29/15 15:00	GRK	TAL PEN
Total/NA	Analysis	8015B		1	5.15 g	5.0 g	276695	09/30/15 06:27	GRK	TAL PEN
	Instrument ID: CH_JOAN									
Total/NA	Prep	5035			5.15 g	5.0 g	276679	09/29/15 15:00	GRK	TAL PEN
Total/NA	Analysis	8021B		1	5.15 g	5.0 g	276694	09/30/15 06:27	GRK	TAL PEN
	Instrument ID: CH_JOAN									
Total/NA	Prep	3546			15.15 g	2.0 mL	275870	09/24/15 13:46	VC1	TAL PEN
Total/NA	Analysis	8015B		1	15.15 g	2.0 mL	276016	09/25/15 16:36	RM	TAL PEN
	Instrument ID: WALLE									
Soluble	Leach	DI Leach			2.50 g	50 mL	276630	09/30/15 09:37	TAJ	TAL PEN
Soluble	Analysis	300.0		1	1 mL		276874	10/01/15 19:44	TAJ	TAL PEN
	Instrument ID: IC2									

Client Sample ID: SB-39 6.5-8.5'

Lab Sample ID: 400-111274-4
Date Collected: 09/18/15 13:15
Matrix: Solid
Date Received: 09/22/15 09:58

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			275558	09/22/15 17:47	LEC	TAL PEN
	Instrument ID: NOEQUIP									

Lab Chronicle

Client: MWH Americas Inc
Project/Site: Jaquez

TestAmerica Job ID: 400-111274-1

Client Sample ID: SB-39 6.5-8.5'

Lab Sample ID: 400-111274-4
Date Collected: 09/18/15 13:15
Matrix: Solid
Date Received: 09/22/15 09:58
Percent Solids: 89.0

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.13 g	5.0 g	276679	09/29/15 15:00	GRK	TAL PEN
Total/NA	Analysis	8015B		1	5.13 g	5.0 g	276695	09/30/15 07:02	GRK	TAL PEN
	Instrument ID: CH_JOAN									
Total/NA	Prep	5035			5.13 g	5.0 g	276679	09/29/15 15:00	GRK	TAL PEN
Total/NA	Analysis	8021B		1	5.13 g	5.0 g	276694	09/30/15 07:02	GRK	TAL PEN
	Instrument ID: CH_JOAN									
Total/NA	Prep	3546			15.41 g	2.0 mL	275870	09/24/15 13:46	VC1	TAL PEN
Total/NA	Analysis	8015B		1	15.41 g	2.0 mL	276016	09/25/15 17:15	RM	TAL PEN
	Instrument ID: WALLE									
Soluble	Leach	DI Leach			2.44 g	50 mL	276630	09/30/15 09:37	TAJ	TAL PEN
Soluble	Analysis	300.0		1	1 mL		276874	10/01/15 07:56	TAJ	TAL PEN
	Instrument ID: IC2									

Client Sample ID: SB-76 3-5'

Lab Sample ID: 400-111274-5
Date Collected: 09/18/15 14:05
Matrix: Solid
Date Received: 09/22/15 09:58

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			275558	09/22/15 17:47	LEC	TAL PEN
	Instrument ID: NOEQUIP									

Client Sample ID: SB-76 3-5'

Lab Sample ID: 400-111274-5
Date Collected: 09/18/15 14:05
Matrix: Solid
Date Received: 09/22/15 09:58
Percent Solids: 81.7

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.10 g	5.0 g	276679	09/29/15 15:00	GRK	TAL PEN
Total/NA	Analysis	8015B		1	5.10 g	5.0 g	276695	09/30/15 07:36	GRK	TAL PEN
	Instrument ID: CH_JOAN									
Total/NA	Prep	5035			5.10 g	5.0 g	276679	09/29/15 15:00	GRK	TAL PEN
Total/NA	Analysis	8021B		1	5.10 g	5.0 g	276694	09/30/15 07:36	GRK	TAL PEN
	Instrument ID: CH_JOAN									
Total/NA	Prep	3546			15.18 g	2.0 mL	275870	09/24/15 13:46	VC1	TAL PEN
Total/NA	Analysis	8015B		1	15.18 g	2.0 mL	276016	09/25/15 17:25	RM	TAL PEN
	Instrument ID: WALLE									
Soluble	Leach	DI Leach			2.51 g	50 mL	276630	09/30/15 09:37	TAJ	TAL PEN
Soluble	Analysis	300.0		1	1 mL		276874	10/01/15 09:05	TAJ	TAL PEN
	Instrument ID: IC2									

Lab Chronicle

Client: MWH Americas Inc
Project/Site: Jaquez

TestAmerica Job ID: 400-111274-1

Client Sample ID: SB-77 3-4'

Lab Sample ID: 400-111274-6

Date Collected: 09/18/15 15:30

Matrix: Solid

Date Received: 09/22/15 09:58

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			275558	09/22/15 17:47	LEC	TAL PEN
	Instrument ID: NOEQUIP									

Client Sample ID: SB-77 3-4'

Lab Sample ID: 400-111274-6

Date Collected: 09/18/15 15:30

Matrix: Solid

Date Received: 09/22/15 09:58

Percent Solids: 89.8

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.09 g	5.0 g	276679	09/29/15 15:00	GRK	TAL PEN
Total/NA	Analysis	8015B		1	5.09 g	5.0 g	276695	09/30/15 08:11	GRK	TAL PEN
	Instrument ID: CH_JOAN									
Total/NA	Prep	5035			5.09 g	5.0 g	276679	09/29/15 15:00	GRK	TAL PEN
Total/NA	Analysis	8021B		1	5.09 g	5.0 g	276694	09/30/15 08:11	GRK	TAL PEN
	Instrument ID: CH_JOAN									
Total/NA	Prep	3546			14.77 g	2.0 mL	275870	09/24/15 13:46	VC1	TAL PEN
Total/NA	Analysis	8015B		1	14.77 g	2.0 mL	276016	09/25/15 17:35	RM	TAL PEN
	Instrument ID: WALLE									
Soluble	Leach	DI Leach			2.48 g	50 mL	276630	09/30/15 09:37	TAJ	TAL PEN
Soluble	Analysis	300.0		1	1 mL		276874	10/01/15 09:28	TAJ	TAL PEN
	Instrument ID: IC2									

Laboratory References:

TAL PEN = TestAmerica Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

Certification Summary

Client: MWH Americas Inc
Project/Site: Jaquez

TestAmerica Job ID: 400-111274-1

Laboratory: TestAmerica Pensacola

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Alabama	State Program	4	40150	01-31-16
Arizona	State Program	9	AZ0710	01-11-17
Arkansas DEQ	State Program	6	88-0689	09-01-16
Florida	NELAP	4	E81010	06-30-16
Georgia	State Program	4	N/A	06-30-16
Illinois	NELAP	5	200041	10-09-16
Iowa	State Program	7	367	07-31-16
Kansas	NELAP	7	E-10253	01-31-16 *
Kentucky (UST)	State Program	4	53	06-30-16
Kentucky (WW)	State Program	4	98030	12-31-16
Louisiana	NELAP	6	30976	06-30-16
Maryland	State Program	3	233	09-30-16
Massachusetts	State Program	1	M-FL094	06-30-16
Michigan	State Program	5	9912	06-30-16
New Jersey	NELAP	2	FL006	06-30-16
North Carolina (WW/SW)	State Program	4	314	12-31-15 *
Oklahoma	State Program	6	9810	08-31-16
Pennsylvania	NELAP	3	68-00467	01-31-16
Rhode Island	State Program	1	LAO00307	12-30-16
South Carolina	State Program	4	96026	06-30-16
Tennessee	State Program	4	TN02907	06-30-16
Texas	NELAP	6	T104704286-15-9	09-30-16
USDA	Federal		P330-13-00193	07-01-16
Virginia	NELAP	3	460166	06-14-16
West Virginia DEP	State Program	3	136	06-30-16

* Certification renewal pending - certification considered valid.

Method Summary

Client: MWH Americas Inc
Project/Site: Jaquez

TestAmerica Job ID: 400-111274-1

Method	Method Description	Protocol	Laboratory
8015B	Gasoline Range Organics - (GC)	SW846	TAL PEN
8021B	Volatile Organic Compounds (GC)	SW846	TAL PEN
8015B	Diesel Range Organics (DRO) (GC)	SW846	TAL PEN
300.0	Anions, Ion Chromatography	MCAWW	TAL PEN
Moisture	Percent Moisture	EPA	TAL PEN

Protocol References:

EPA = US Environmental Protection Agency

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL PEN = TestAmerica Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

400-111274

SERIAL NUMBER: 77917

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

TestAmerica Pensacola
3355 McLemore Drive
Pensacola, FL 32514
Phone: 850-474-1001
Fax: 850-478-2671
Website: www.testamericainc.com

QUOTE NO.

BOTTLE ORDER NO.

ORDER - LOG-IN NO.: C

CLIENT: MWH

ADDRESS: 1560 Broadway Suite 2900 Denver CO 80202

PAGE: 1 OF: 1

PROJECT NAME: JAQUEZ

PROJECT NO.: 105777

CLIENT PROJECT MANAGER: STEVE VARSA

PROJECT LOC. (STATE)

SAMPLED BY: Chris Lee, Brad Barton

CONTRACT / P.O. NO. ~~AFF#~~: ERG-MWH-08-18-15-CWO-01

CLIENT PHONE: 303 291-2242

CLIENT E-MAIL OR FAX: Christopher.c.lee@mwhglobal

TAT REQUESTED: RUSH NEEDS LAB PREAPPROVAL ☐ NORMAL ☒ 10 BUSINESS DAYS
☐ 1 DAY ☐ 2 DAYS ☐ 3 DAYS ☐ 5 DAYS ☐ 20 DAYS (Package) ☐ OTHER:

SAMPLE DISPOSAL: ☐ RETURN TO CLIENT ☒ DISPOSAL BY LAB
☐ SEE CONTRACT ☐ OTHER:

REQUESTED ANALYSIS

8015B_DRO, 9056 ORGIFM_28D
8021B-8021 BTEX /8015 GRO

400-111274 COC

POSSIBLE HAZARD IDENTIFICATION
△ NON-HAZARD
△ FLAMMABLE
△ RADIOACTIVE
△ POISON B
△ UNKNOWN
△ OTHER:

NO. OF COOLERS PER SHIPMENT:

SAMPLE DATE	SAMPLE TIME	SAMPLE IDENTIFICATION	PRESERVATIVE: No Preservative	HCL - Hydrochloric Acid	HNO3 - Nitric Acid	H2SO4 - Sulfuric Acid or H3PO4	NAOH - Sodium Hydroxide	CH3OH - Methanol	NAHSO4 - Sodium Bisulfate	NA2S2O3 - Sodium Thiosulfate	Other:	MATRIX: Drinking Water	Aqueous GW, SW, WW	Solid, Semisolid, Sediment	Air	NonAqueous (Oil, Solvent, etc.)	NUMBER OF CONTAINERS SUBMITTED		SPECIAL INSTRUCTIONS/ CONDITIONS OF RECEIPT
9/18/15	1000	SB-20 5-7'	X														1	1	
9/18/15	1050	SB-16 5.8-6.8'	X														1	1	
9/18/15	1150	SB-34 5-6.5'	X														1	1	
9/18/15	1150	SB-34 5-6.5' (MS/MSD)	X														1	1	
9/18/15	1315	SB-39 6.5-8.5'	X														1	1	
9/18/15	1405	SB-76 3-5'	X														1	1	
9/18/15	1530	SB-77 3-4'	X														1	1	

LAB USE ONLY - SAMPLE NUMBER

RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME
EMPTY CONTAINERS						Chris Lee	9/21/15	1035
RECEIVED BY: (SIGNATURE)	**DATE**	**TIME**	**RECEIVED BY: (SIGNATURE)**	**DATE**	**TIME**	**RECEIVED BY: (SIGNATURE)**	**DATE**	**TIME**
EMPTY CONTAINERS								

LABORATORY USE ONLY

RECEIVED FOR LABORATORY BY:	DATE	TIME	CUSTODY INTACT? △ YES △ NO	CUSTODY SEAL NO.	REMARKS:
	9215	958			3.2°C IR-6

TAL-8251 (1207)

1/25/2016

Login Sample Receipt Checklist

Client: MWH Americas Inc

Job Number: 400-111274-1

Login Number: 111274
List Number: 1
Creator: Crawford, Lauren E

List Source: TestAmerica Pensacola

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	3.2°C IR-6
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

APPENDIX H

Groundwater Analytical Reports

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Pensacola
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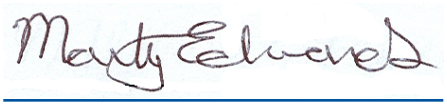
Pensacola, FL 32514
Tel: (850)474-1001

TestAmerica Job ID: 400-111300-1
Client Project/Site: Jaquez
Revision: 1

For:
MWH Americas Inc
11153 Aurora Avenue
Des Moines, Iowa 50322-7904

Attn: Steve Varsa



Authorized for release by:
1/25/2016 4:56:30 PM

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Table of Contents

Definitions/Glossary

Client: MWH Americas Inc
Project/Site: Jaquez

TestAmerica Job ID: 400-111300-1

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Case Narrative

Client: MWH Americas Inc
Project/Site: Jaquez

TestAmerica Job ID: 400-111300-1

Job ID: 400-111300-1

Laboratory: TestAmerica Pensacola

Narrative

Job Narrative
400-111300-1

Comments
No additional comments.

Receipt
The samples were received on 9/22/2015 9:58 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.0º C.

Revised Report
The report was revised to change the analyte descriptions for the 8015 GRO analysis.

GC VOA
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

GC Semi VOA
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

General Chemistry
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Organic Prep
Method 3520C: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with analytical batch 400-275721.

Method 3520C: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with analytical batch 400-275755.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

VOA Prep
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Detection Summary

Client: MWH Americas Inc
Project/Site: Jaquez

TestAmerica Job ID: 400-111300-1

Client Sample ID: MW-6 — Lab Sample ID: 400-111300-1

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Diesel Range Organics [C10-C28]	170		130		ug/L	1		8015B	Total/NA
Chloride	5.5		2.0		mg/L	1		SM 4500 Cl- E	Total/NA

Client Sample ID: MW-8 — Lab Sample ID: 400-111300-2

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Gasoline Range Organics (GRO) C6--C10	1500		100		ug/L	1		8015B	Total/NA
Benzene	18		1.0		ug/L	1		8021B	Total/NA
Ethylbenzene	13		1.0		ug/L	1		8021B	Total/NA
Xylenes, Total	110		5.0		ug/L	1		8021B	Total/NA
Chloride	9.2		2.0		mg/L	1		SM 4500 Cl- E	Total/NA

Client Sample ID: MW-9 — Lab Sample ID: 400-111300-3

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Gasoline Range Organics (GRO) C6--C10	240		100		ug/L	1		8015B	Total/NA
Benzene	2.4		1.0		ug/L	1		8021B	Total/NA
Ethylbenzene	6.7		1.0		ug/L	1		8021B	Total/NA
Xylenes, Total	20		5.0		ug/L	1		8021B	Total/NA
Chloride	29		2.0		mg/L	1		SM 4500 Cl- E	Total/NA

Client Sample ID: MW-12 — Lab Sample ID: 400-111300-4

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Gasoline Range Organics (GRO) C6--C10	1300		100		ug/L	1		8015B	Total/NA
Benzene	5.6		1.0		ug/L	1		8021B	Total/NA
Ethylbenzene	6.0		1.0		ug/L	1		8021B	Total/NA
Xylenes, Total	60		5.0		ug/L	1		8021B	Total/NA
Chloride	6.0		2.0		mg/L	1		SM 4500 Cl- E	Total/NA

Client Sample ID: TRIP BLANK — Lab Sample ID: 400-111300-5

No Detections.

This Detection Summary does not include radiochemical test results.

Sample Summary

Client: MWH Americas Inc
Project/Site: Jaquez

TestAmerica Job ID: 400-111300-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-111300-1	MW-6	Water	09/19/15 11:00	09/22/15 09:58
400-111300-2	MW-8	Water	09/19/15 10:00	09/22/15 09:58
400-111300-3	MW-9	Water	09/19/15 09:10	09/22/15 09:58
400-111300-4	MW-12	Water	09/19/15 10:30	09/22/15 09:58
400-111300-5	TRIP BLANK	Water	09/19/15 08:30	09/22/15 09:58

Client: MWH Americas Inc
Project/Site: Jaquez

TestAmerica Job ID: 400-111300-1

Client Sample ID: MW-6

Date Collected: 09/19/15 11:00
Date Received: 09/22/15 09:58

Lab Sample ID: 400-111300-1

Matrix: Water

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) C6--C10	<100		100		ug/L			09/30/15 20:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (fid)	*104*		*78 - 119*		*09/30/15 20:54*	*1*

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<1.0		1.0		ug/L			09/30/15 20:54	1
Ethylbenzene	<1.0		1.0		ug/L			09/30/15 20:54	1
Toluene	<5.0		5.0		ug/L			09/30/15 20:54	1
Xylenes, Total	<5.0		5.0		ug/L			09/30/15 20:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (pid)	*101*		*78 - 124*		*09/30/15 20:54*	*1*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	**170**		130		ug/L		09/23/15 17:23	09/25/15 01:45	1
Oil Range Organics (C28-C35)	<130		130		ug/L		09/23/15 17:23	09/25/15 01:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*103*		*49 - 134*	*09/23/15 17:23*	*09/25/15 01:45*	*1*

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**5.5**		2.0		mg/L			10/01/15 12:15	1

Client: MWH Americas Inc
Project/Site: Jaquez

TestAmerica Job ID: 400-111300-1

Client Sample ID: MW-8

Date Collected: 09/19/15 10:00
Date Received: 09/22/15 09:58

Lab Sample ID: 400-111300-2

Matrix: Water

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) C6--C10	**1500**		100		ug/L			09/30/15 23:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (fid)	*102*		*78 - 119*		*09/30/15 23:11*	*1*

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**18**		1.0		ug/L			09/30/15 23:11	1
Ethylbenzene	**13**		1.0		ug/L			09/30/15 23:11	1
Toluene	<5.0		5.0		ug/L			09/30/15 23:11	1
Xylenes, Total	**110**		5.0		ug/L			09/30/15 23:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (pid)	*93*		*78 - 124*		*09/30/15 23:11*	*1*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	<130		130		ug/L		09/23/15 17:23	09/25/15 01:55	1
Oil Range Organics (C28-C35)	<130		130		ug/L		09/23/15 17:23	09/25/15 01:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*109*		*49 - 134*	*09/23/15 17:23*	*09/25/15 01:55*	*1*

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**9.2**		2.0		mg/L			10/01/15 12:15	1

Client: MWH Americas Inc
Project/Site: Jaquez

TestAmerica Job ID: 400-111300-1

Client Sample ID: MW-9

Date Collected: 09/19/15 09:10
Date Received: 09/22/15 09:58

Lab Sample ID: 400-111300-3

Matrix: Water

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) C6--C10	240		100		ug/L			09/30/15 23:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (fid)	*106*		*78 - 119*		*09/30/15 23:39*	*1*

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	2.4		1.0		ug/L			09/30/15 23:39	1
Ethylbenzene	6.7		1.0		ug/L			09/30/15 23:39	1
Toluene	<5.0		5.0		ug/L			09/30/15 23:39	1
Xylenes, Total	20		5.0		ug/L			09/30/15 23:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (pid)	*98*		*78 - 124*		*09/30/15 23:39*	*1*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	<130		130		ug/L		09/23/15 17:23	09/25/15 02:05	1
Oil Range Organics (C28-C35)	<130		130		ug/L		09/23/15 17:23	09/25/15 02:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*102*		*49 - 134*	*09/23/15 17:23*	*09/25/15 02:05*	*1*

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	29		2.0		mg/L			10/01/15 12:15	1

Client: MWH Americas Inc
Project/Site: Jaquez

TestAmerica Job ID: 400-111300-1

Client Sample ID: MW-12

Date Collected: 09/19/15 10:30
Date Received: 09/22/15 09:58

Lab Sample ID: 400-111300-4

Matrix: Water

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) C6--C10	1300		100		ug/L			10/01/15 00:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (fid)	*103*		*78 - 119*		*10/01/15 00:06*	*1*

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	5.6		1.0		ug/L			10/01/15 00:06	1
Ethylbenzene	6.0		1.0		ug/L			10/01/15 00:06	1
Toluene	<5.0		5.0		ug/L			10/01/15 00:06	1
Xylenes, Total	60		5.0		ug/L			10/01/15 00:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (pid)	*93*		*78 - 124*		*10/01/15 00:06*	*1*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	<130		130		ug/L		09/23/15 17:23	09/25/15 02:15	1
Oil Range Organics (C28-C35)	<130		130		ug/L		09/23/15 17:23	09/25/15 02:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*93*		*49 - 134*	*09/23/15 17:23*	*09/25/15 02:15*	*1*

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	6.0		2.0		mg/L			10/01/15 12:15	1

Client: MWH Americas Inc
Project/Site: Jaquez

TestAmerica Job ID: 400-111300-1

Client Sample ID: TRIP BLANK
Date Collected: 09/19/15 08:30
Date Received: 09/22/15 09:58

Lab Sample ID: 400-111300-5
Matrix: Water

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<1.0		1.0		ug/L			10/01/15 01:55	1
Ethylbenzene	<1.0		1.0		ug/L			10/01/15 01:55	1
Toluene	<5.0		5.0		ug/L			10/01/15 01:55	1
Xylenes, Total	<5.0		5.0		ug/L			10/01/15 01:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (pid)	*99*		*78 - 124*		*10/01/15 01:55*	*1*

GC VOA

Analysis Batch: 276870

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-111300-1	MW-6	Total/NA	Water	8021B	
400-111300-1 MS	MW-6	Total/NA	Water	8021B	
400-111300-1 MSD	MW-6	Total/NA	Water	8021B	
400-111300-2	MW-8	Total/NA	Water	8021B	
400-111300-3	MW-9	Total/NA	Water	8021B	
400-111300-4	MW-12	Total/NA	Water	8021B	
400-111300-5	TRIP BLANK	Total/NA	Water	8021B	
LCS 400-276870/1001	Lab Control Sample	Total/NA	Water	8021B	
MB 400-276870/3	Method Blank	Total/NA	Water	8021B	

Analysis Batch: 276871

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-111300-1	MW-6	Total/NA	Water	8015B	
400-111300-1 MS	MW-6	Total/NA	Water	8015B	
400-111300-1 MSD	MW-6	Total/NA	Water	8015B	
400-111300-2	MW-8	Total/NA	Water	8015B	
400-111300-3	MW-9	Total/NA	Water	8015B	
400-111300-4	MW-12	Total/NA	Water	8015B	
LCS 400-276871/1002	Lab Control Sample	Total/NA	Water	8015B	
MB 400-276871/3	Method Blank	Total/NA	Water	8015B	

GC Semi VOA

Prep Batch: 275755

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-111300-1	MW-6	Total/NA	Water	3520C	
400-111300-2	MW-8	Total/NA	Water	3520C	
400-111300-3	MW-9	Total/NA	Water	3520C	
400-111300-4	MW-12	Total/NA	Water	3520C	
LCS 400-275755/2-A	Lab Control Sample	Total/NA	Water	3520C	
LCSD 400-275755/3-A	Lab Control Sample Dup	Total/NA	Water	3520C	
MB 400-275755/1-A	Method Blank	Total/NA	Water	3520C	

Analysis Batch: 275930

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-111300-1	MW-6	Total/NA	Water	8015B	275755
400-111300-2	MW-8	Total/NA	Water	8015B	275755
400-111300-3	MW-9	Total/NA	Water	8015B	275755
400-111300-4	MW-12	Total/NA	Water	8015B	275755
LCS 400-275755/2-A	Lab Control Sample	Total/NA	Water	8015B	275755
LCSD 400-275755/3-A	Lab Control Sample Dup	Total/NA	Water	8015B	275755
MB 400-275755/1-A	Method Blank	Total/NA	Water	8015B	275755

General Chemistry

Analysis Batch: 276964

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-111300-1	MW-6	Total/NA	Water	SM 4500 Cl- E	
400-111300-2	MW-8	Total/NA	Water	SM 4500 Cl- E	
400-111300-3	MW-9	Total/NA	Water	SM 4500 Cl- E	

General Chemistry (Continued)

Analysis Batch: 276964 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-111300-4	MW-12	Total/NA	Water	SM 4500 Cl- E	
400-111454-F-1 MS	Matrix Spike	Total/NA	Water	SM 4500 Cl- E	
400-111454-F-1 MSD	Matrix Spike Duplicate	Total/NA	Water	SM 4500 Cl- E	
LCS 400-276964/7	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	
MB 400-276964/6	Method Blank	Total/NA	Water	SM 4500 Cl- E	
MRL 400-276964/3	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	

Method: 8015B - Gasoline Range Organics - (GC)

Lab Sample ID: MB 400-276871/3
Matrix: Water
Analysis Batch: 276871

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) C6--C10	<100		100		ug/L			09/30/15 20:27	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (fid)	*103*		*78 - 119*		*09/30/15 20:27*	*1*

Lab Sample ID: LCS 400-276871/1002
Matrix: Water
Analysis Batch: 276871

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO) C6--C10			1000	997		ug/L		100	85 - 115		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
a,a,a-Trifluorotoluene (fid)	*104*		*78 - 119*

Lab Sample ID: 400-111300-1 MS
Matrix: Water
Analysis Batch: 276871

Client Sample ID: MW-6
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO) C6--C10	<100		1000	1130		ug/L		113	35 - 150		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
a,a,a-Trifluorotoluene (fid)	*107*		*78 - 119*

Lab Sample ID: 400-111300-1 MSD
Matrix: Water
Analysis Batch: 276871

Client Sample ID: MW-6
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO) C6--C10	<100		1000	1110		ug/L		111	35 - 150	2	15

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
a,a,a-Trifluorotoluene (fid)	*106*		*78 - 119*

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 400-276870/3
Matrix: Water
Analysis Batch: 276870

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<1.0		1.0		ug/L			09/30/15 20:27	1
Ethylbenzene	<1.0		1.0		ug/L			09/30/15 20:27	1

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: MB 400-276870/3
Matrix: Water
Analysis Batch: 276870

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Toluene	<5.0		5.0		ug/L			09/30/15 20:27	1
Xylenes, Total	<5.0		5.0		ug/L			09/30/15 20:27	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (pid)	*100*		*78 - 124*		*09/30/15 20:27*	*1*

Lab Sample ID: LCS 400-276870/1001
Matrix: Water
Analysis Batch: 276870

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			50.0	46.3		ug/L		93	85 - 115		
Ethylbenzene			50.0	45.9		ug/L		92	85 - 115		
Toluene			50.0	46.2		ug/L		92	85 - 115		
Xylenes, Total			150	138		ug/L		92	85 - 115		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
a,a,a-Trifluorotoluene (pid)	*100*		*78 - 124*

Lab Sample ID: 400-111300-1 MS
Matrix: Water
Analysis Batch: 276870

Client Sample ID: MW-6
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene	<1.0		50.0	54.0		ug/L		108	44 - 150		
Ethylbenzene	<1.0		50.0	54.1		ug/L		108	70 - 142		
Toluene	<5.0		50.0	54.3		ug/L		109	69 - 136		
Xylenes, Total	<5.0		150	163		ug/L		108	68 - 142		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
a,a,a-Trifluorotoluene (pid)	*100*		*78 - 124*

Lab Sample ID: 400-111300-1 MSD
Matrix: Water
Analysis Batch: 276870

Client Sample ID: MW-6
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	<1.0		50.0	56.6		ug/L		113	44 - 150	5	16
Ethylbenzene	<1.0		50.0	56.8		ug/L		114	70 - 142	5	16
Toluene	<5.0		50.0	56.8		ug/L		114	69 - 136	4	16
Xylenes, Total	<5.0		150	171		ug/L		114	68 - 142	5	15

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
a,a,a-Trifluorotoluene (pid)	*104*		*78 - 124*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 400-275755/1-A
Matrix: Water
Analysis Batch: 275930

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 275755

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	<130		130		ug/L		09/23/15 17:23	09/24/15 22:33	1
Oil Range Organics (C28-C35)	<130		130		ug/L		09/23/15 17:23	09/24/15 22:33	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*106*		*49 - 134*	*09/23/15 17:23*	*09/24/15 22:33*	*1*

Lab Sample ID: LCS 400-275755/2-A
Matrix: Water
Analysis Batch: 275930

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 275755

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Diesel Range Organics [C10-C28]			8030	6830		ug/L		85	63 - 138		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
o-Terphenyl	*113*		*49 - 134*

Lab Sample ID: LCSD 400-275755/3-A
Matrix: Water
Analysis Batch: 275930

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 275755

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Diesel Range Organics [C10-C28]			8030	7900		ug/L		98	63 - 138	15	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
o-Terphenyl	*125*		*49 - 134*

Method: SM 4500 Cl- E - Chloride, Total

Lab Sample ID: MB 400-276964/6
Matrix: Water
Analysis Batch: 276964

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<2.0		2.0		mg/L			10/01/15 11:58	1

Lab Sample ID: LCS 400-276964/7
Matrix: Water
Analysis Batch: 276964

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride			30.0	32.4		mg/L		108	90 - 110		

Method: SM 4500 Cl- E - Chloride, Total (Continued)

Lab Sample ID: MRL 400-276964/3
Matrix: Water
Analysis Batch: 276964

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride			2.00	<2.0		mg/L		96	50 - 150		

Lab Sample ID: 400-111454-F-1 MS
Matrix: Water
Analysis Batch: 276964

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride	22		10.0	31.4		mg/L		90	73 - 120		

Lab Sample ID: 400-111454-F-1 MSD
Matrix: Water
Analysis Batch: 276964

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	22		10.0	31.4		mg/L		90	73 - 120	0	8

Lab Chronicle

Client: MWH Americas Inc
Project/Site: Jaquez

TestAmerica Job ID: 400-111300-1

Client Sample ID: MW-6

Date Collected: 09/19/15 11:00
Date Received: 09/22/15 09:58

Lab Sample ID: 400-111300-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015B		1	5 mL	5 mL	276871	09/30/15 20:54	GRK	TAL PEN
	Instrument ID: CH_RITA									
Total/NA	Analysis	8021B		1	5 mL	5 mL	276870	09/30/15 20:54	GRK	TAL PEN
	Instrument ID: CH_RITA									
Total/NA	Prep	3520C			250 mL	1 mL	275755	09/23/15 17:23	KH1	TAL PEN
Total/NA	Analysis	8015B		1	250 mL	1 mL	275930	09/25/15 01:45	C1M	TAL PEN
	Instrument ID: WALLE									
Total/NA	Analysis	SM 4500 Cl- E		1	10 mL	10 mL	276964	10/01/15 12:15	NAB	TAL PEN
	Instrument ID: KONELAB-M									

Client Sample ID: MW-8

Date Collected: 09/19/15 10:00
Date Received: 09/22/15 09:58

Lab Sample ID: 400-111300-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015B		1	5 mL	5 mL	276871	09/30/15 23:11	GRK	TAL PEN
	Instrument ID: CH_RITA									
Total/NA	Analysis	8021B		1	5 mL	5 mL	276870	09/30/15 23:11	GRK	TAL PEN
	Instrument ID: CH_RITA									
Total/NA	Prep	3520C			250 mL	1 mL	275755	09/23/15 17:23	KH1	TAL PEN
Total/NA	Analysis	8015B		1	250 mL	1 mL	275930	09/25/15 01:55	C1M	TAL PEN
	Instrument ID: WALLE									
Total/NA	Analysis	SM 4500 Cl- E		1	10 mL	10 mL	276964	10/01/15 12:15	NAB	TAL PEN
	Instrument ID: KONELAB-M									

Client Sample ID: MW-9

Date Collected: 09/19/15 09:10
Date Received: 09/22/15 09:58

Lab Sample ID: 400-111300-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015B		1	5 mL	5 mL	276871	09/30/15 23:39	GRK	TAL PEN
	Instrument ID: CH_RITA									
Total/NA	Analysis	8021B		1	5 mL	5 mL	276870	09/30/15 23:39	GRK	TAL PEN
	Instrument ID: CH_RITA									
Total/NA	Prep	3520C			250 mL	1 mL	275755	09/23/15 17:23	KH1	TAL PEN
Total/NA	Analysis	8015B		1	250 mL	1 mL	275930	09/25/15 02:05	C1M	TAL PEN
	Instrument ID: WALLE									
Total/NA	Analysis	SM 4500 Cl- E		1	10 mL	10 mL	276964	10/01/15 12:15	NAB	TAL PEN
	Instrument ID: KONELAB-M									

Lab Chronicle

Client: MWH Americas Inc
Project/Site: Jaquez

TestAmerica Job ID: 400-111300-1

Client Sample ID: MW-12

Lab Sample ID: 400-111300-4

Date Collected: 09/19/15 10:30

Matrix: Water

Date Received: 09/22/15 09:58

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015B		1	5 mL	5 mL	276871	10/01/15 00:06	GRK	TAL PEN
	Instrument ID: CH_RITA									
Total/NA	Analysis	8021B		1	5 mL	5 mL	276870	10/01/15 00:06	GRK	TAL PEN
	Instrument ID: CH_RITA									
Total/NA	Prep	3520C			250 mL	1 mL	275755	09/23/15 17:23	KH1	TAL PEN
Total/NA	Analysis	8015B		1	250 mL	1 mL	275930	09/25/15 02:15	C1M	TAL PEN
	Instrument ID: WALLE									
Total/NA	Analysis	SM 4500 Cl- E		1	10 mL	10 mL	276964	10/01/15 12:15	NAB	TAL PEN
	Instrument ID: KONELAB-M									

Client Sample ID: TRIP BLANK

Lab Sample ID: 400-111300-5

Date Collected: 09/19/15 08:30

Matrix: Water

Date Received: 09/22/15 09:58

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	5 mL	5 mL	276870	10/01/15 01:55	GRK	TAL PEN
	Instrument ID: CH_RITA									

Laboratory References:

TAL PEN = TestAmerica Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

Certification Summary

Client: MWH Americas Inc
Project/Site: Jaquez

TestAmerica Job ID: 400-111300-1

Laboratory: TestAmerica Pensacola

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Alabama	State Program	4	40150	01-31-16
Arizona	State Program	9	AZ0710	01-11-17
Arkansas DEQ	State Program	6	88-0689	09-01-16
Florida	NELAP	4	E81010	06-30-16
Georgia	State Program	4	N/A	06-30-16
Illinois	NELAP	5	200041	10-09-16
Iowa	State Program	7	367	07-31-16
Kansas	NELAP	7	E-10253	01-31-16 *
Kentucky (UST)	State Program	4	53	06-30-16
Kentucky (WW)	State Program	4	98030	12-31-16
Louisiana	NELAP	6	30976	06-30-16
Maryland	State Program	3	233	09-30-16
Massachusetts	State Program	1	M-FL094	06-30-16
Michigan	State Program	5	9912	06-30-16
New Jersey	NELAP	2	FL006	06-30-16
North Carolina (WW/SW)	State Program	4	314	12-31-15 *
Oklahoma	State Program	6	9810	08-31-16
Pennsylvania	NELAP	3	68-00467	01-31-16
Rhode Island	State Program	1	LAO00307	12-30-16
South Carolina	State Program	4	96026	06-30-16
Tennessee	State Program	4	TN02907	06-30-16
Texas	NELAP	6	T104704286-15-9	09-30-16
USDA	Federal		P330-13-00193	07-01-16
Virginia	NELAP	3	460166	06-14-16
West Virginia DEP	State Program	3	136	06-30-16

* Certification renewal pending - certification considered valid.

Method Summary

Client: MWH Americas Inc
Project/Site: Jaquez

TestAmerica Job ID: 400-111300-1

Method	Method Description	Protocol	Laboratory
8015B	Gasoline Range Organics - (GC)	SW846	TAL PEN
8021B	Volatile Organic Compounds (GC)	SW846	TAL PEN
8015B	Diesel Range Organics (DRO) (GC)	SW846	TAL PEN
SM 4500 Cl- E	Chloride, Total	SM	TAL PEN

Protocol References:

SM = "Standard Methods For The Examination Of Water And Wastewater",

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL PEN = TestAmerica Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

TestAmerica Pensacola
3355 McLemore Drive
Pensacola, FL 32514
Phone (850) 474-1001 Fax (850) 478-2671

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: Chris Lee, Brad Barton	Lab PM: Edwards, Marty P	Carrier Tracking No(s):	COC No: 400-48641-22613.1
Client Contact: Steve Varsa	Phone: 303 291-2242	E-Mail: marty.edwards@testamericainc.com		Page: Page 1 of 1
Company: MWH Americas Inc		Analysis Requested		Job #:
Address: 11153 Aurora Avenue	Due Date Requested:			Preservation Codes:
City: Des Moines	TAT Requested (days): STANDARD			A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2SO3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - ph 4-5, Z - other (specify)
State, Zip: IA, 50322-7904	PO #: Purchase Order Requested			
Phone: 303-291-2239(Tel)	WO #: ERG-MWH-08-18-15-CWO-01			
Email: steve.varsa@us.mwhglobal.com	Project #: 40005479			Other:
Project Name: Farmington New Mexico - GW	SSOW#:			
Site: JAQUEZ				

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	SM4500_Cl_E - Chloride	8015B_DRO - (MOD) DRO C10-C28/ ORO C28-C35	8015B_GRO - Local Method	8021B - BTEX 8021	Total Number of containers	Special Instructions/Note:
			Preservation Code:			X	X	X	X		
MW-6	9/19/15	1100	G	W		1	2	2	2		
MW-8	9/19/15	1000	G	W		1	2	2	2		
MW-9	9/19/15	910	G	W		1	2	2	2		
MW-12	9/19/15	1030	G	W		1	2	2	2		
TRIP	9/19/15	830	G	W							

100-111300 COC

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Chris Lee	9/21/15 1035	MWH		9/22/15 958	
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks: 3.0°C IR-6

Login Sample Receipt Checklist

Client: MWH Americas Inc

Job Number: 400-111300-1

Login Number: 111300
List Number: 1
Creator: Crawford, Lauren E

List Source: TestAmerica Pensacola

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	3.0°C IR-6
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

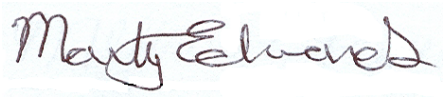
ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Pensacola
3355 McLemore Drive
Pensacola, FL 32514
Tel: (850)474-1001

TestAmerica Job ID: 400-114297-1
Client Project/Site: Jaquez
Revision: 1

For:
MWH Americas Inc
1560 Broadway
Suite 1800
Denver, Colorado 80202

Attn: Ms. Sarah Gardner



Authorized for release by:
1/25/2016 5:09:18 PM

Marty Edwards, Manager of Project Management
(850)474-1001
marty.edwards@testamericainc.com

Table of Contents

Client: MWH Americas Inc
Project/Site: Jaquez

TestAmerica Job ID: 400-114297-1

Qualifiers

GC Semi VOA

Qualifier	Qualifier Description
X	Surrogate is outside control limits
H	Sample was prepped or analyzed beyond the specified holding time

General Chemistry

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery is outside acceptance limits.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Case Narrative

Client: MWH Americas Inc
Project/Site: Jaquez

TestAmerica Job ID: 400-114297-1

Job ID: 400-114297-1

Laboratory: TestAmerica Pensacola

Narrative

Job Narrative
400-114297-1

Comments
No additional comments.

Receipt
The samples were received on 11/24/2015 8:47 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 5 coolers at receipt time were 0.4º C, 0.8º C, 0.9º C, 0.9º C and 1.1º C.

Revised Report
The report was revised to change the analyte descriptions for the 8015 GRO analysis.

GC VOA
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

GC Semi VOA
Method 8015B: The following sample was re-prepared outside of preparation holding time due to surrogate failure: MW-9 (400-114297-3).

Method 8015B: Surrogate recovery for the following sample was outside control limits: (LCSD 400-286464/3-A). Recovery of the spiked analyte was within control limits for accuracy and precision. Therefore, the data was qualified and reported.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

General Chemistry
Method SM 4500 Cl- E: The matrix spike (MS) recoveries for analytical batch 400-286015 were outside control limits. Non-homogeneity is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Organic Prep
Method 3520C: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with DRO. analytical batch 400-284879.

Method 3520C: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with DRO. analytical batch 400-286464.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Detection Summary

Client: MWH Americas Inc
Project/Site: Jaquez

TestAmerica Job ID: 400-114297-1

Client Sample ID: MW-6 — Lab Sample ID: 400-114297-1

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Chloride	3.2		2.0		mg/L	1		SM 4500 Cl- E	Total/NA

Client Sample ID: MW-8 — Lab Sample ID: 400-114297-2

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Gasoline Range Organics (GRO) -C6-C10	260		100		ug/L	1		8015B	Total/NA
Ethylbenzene	3.1		1.0		ug/L	1		8021B	Total/NA
Benzene	7.6		1.0		ug/L	1		8021B	Total/NA
Diesel Range Organics [C10-C28]	140		130		ug/L	1		8015B	Total/NA
Chloride	8.2		2.0		mg/L	1		SM 4500 Cl- E	Total/NA

Client Sample ID: MW-9 — Lab Sample ID: 400-114297-3

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Gasoline Range Organics (GRO) -C6-C10	140		100		ug/L	1		8015B	Total/NA
Ethylbenzene	2.0		1.0		ug/L	1		8021B	Total/NA
Diesel Range Organics [C10-C28]	140		130		ug/L	1		8015B	Total/NA
Diesel Range Organics [C10-C28]	350	H	130		ug/L	1		8015B	Total/NA
Chloride	33		2.0		mg/L	1		SM 4500 Cl- E	Total/NA

Client Sample ID: MW-12 — Lab Sample ID: 400-114297-4

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Gasoline Range Organics (GRO) -C6-C10	370		100		ug/L	1		8015B	Total/NA
Benzene	5.3		1.0		ug/L	1		8021B	Total/NA
Chloride	3.9		2.0		mg/L	1		SM 4500 Cl- E	Total/NA

Client Sample ID: TRIP BLANK — Lab Sample ID: 400-114297-5

No Detections.

This Detection Summary does not include radiochemical test results.

Sample Summary

Client: MWH Americas Inc
Project/Site: Jaquez

TestAmerica Job ID: 400-114297-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-114297-1	MW-6	Water	11/20/15 10:30	11/24/15 08:47
400-114297-2	MW-8	Water	11/20/15 10:00	11/24/15 08:47
400-114297-3	MW-9	Water	11/20/15 09:20	11/24/15 08:47
400-114297-4	MW-12	Water	11/20/15 09:55	11/24/15 08:47
400-114297-5	TRIP BLANK	Water	11/20/15 09:15	11/24/15 08:47

Client: MWH Americas Inc
Project/Site: Jaquez

TestAmerica Job ID: 400-114297-1

Client Sample ID: MW-6

Date Collected: 11/20/15 10:30
Date Received: 11/24/15 08:47

Lab Sample ID: 400-114297-1

Matrix: Water

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	<100		100		ug/L			12/01/15 23:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*92*		*50 - 150*		*12/01/15 23:19*	*1*

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	<1.0		1.0		ug/L			12/01/15 23:19	1
Toluene	<1.0		1.0		ug/L			12/01/15 23:19	1
Xylenes, Total	<3.0		3.0		ug/L			12/01/15 23:19	1
Benzene	<1.0		1.0		ug/L			12/01/15 23:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*88*		*50 - 150*		*12/01/15 23:19*	*1*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	<130		130		ug/L		11/25/15 11:30	11/27/15 18:36	1
Oil Range Organics (C28-C35)	<130		130		ug/L		11/25/15 11:30	11/27/15 18:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*82*		*49 - 134*	*11/25/15 11:30*	*11/27/15 18:36*	*1*

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**3.2**		2.0		mg/L			12/04/15 11:54	1

Client: MWH Americas Inc
Project/Site: Jaquez

TestAmerica Job ID: 400-114297-1

Client Sample ID: MW-8

Date Collected: 11/20/15 10:00
Date Received: 11/24/15 08:47

Lab Sample ID: 400-114297-2

Matrix: Water

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	**260**		100		ug/L			12/02/15 00:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*90*		*50 - 150*		*12/02/15 00:47*	*1*

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	**3.1**		1.0		ug/L			12/02/15 00:47	1
Toluene	<1.0		1.0		ug/L			12/02/15 00:47	1
Xylenes, Total	<3.0		3.0		ug/L			12/02/15 00:47	1
Benzene	**7.6**		1.0		ug/L			12/02/15 00:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*84*		*50 - 150*		*12/02/15 00:47*	*1*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	**140**		130		ug/L		11/25/15 11:30	11/27/15 18:46	1
Oil Range Organics (C28-C35)	<130		130		ug/L		11/25/15 11:30	11/27/15 18:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*85*		*49 - 134*	*11/25/15 11:30*	*11/27/15 18:46*	*1*

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**8.2**		2.0		mg/L			12/05/15 09:27	1

Client Sample ID: MW-9

Date Collected: 11/20/15 09:20
Date Received: 11/24/15 08:47

Lab Sample ID: 400-114297-3

Matrix: Water

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	**140**		100		ug/L			12/02/15 01:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*93*		*50 - 150*		*12/02/15 01:16*	*1*

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	**2.0**		1.0		ug/L			12/02/15 01:16	1
Toluene	<1.0		1.0		ug/L			12/02/15 01:16	1
Xylenes, Total	<3.0		3.0		ug/L			12/02/15 01:16	1
Benzene	<1.0		1.0		ug/L			12/02/15 01:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*87*		*50 - 150*		*12/02/15 01:16*	*1*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	**140**		130		ug/L		11/25/15 11:30	11/27/15 19:06	1
Diesel Range Organics [C10-C28]	**350**	**H**	130		ug/L		12/09/15 09:58	12/09/15 23:04	1
Oil Range Organics (C28-C35)	<130		130		ug/L		11/25/15 11:30	11/27/15 19:06	1
Oil Range Organics (C28-C35)	<130	H	130		ug/L		12/09/15 09:58	12/09/15 23:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*46*	*X*	*49 - 134*	*11/25/15 11:30*	*11/27/15 19:06*	*1*
o-Terphenyl	*83*		*49 - 134*	*12/09/15 09:58*	*12/09/15 23:04*	*1*

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**33**		2.0		mg/L			12/05/15 09:27	1

Client: MWH Americas Inc
Project/Site: Jaquez

TestAmerica Job ID: 400-114297-1

Client Sample ID: MW-12
Date Collected: 11/20/15 09:55
Date Received: 11/24/15 08:47

Lab Sample ID: 400-114297-4
Matrix: Water

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	**370**		100		ug/L			12/02/15 01:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*91*		*50 - 150*		*12/02/15 01:46*	*1*

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	<1.0		1.0		ug/L			12/02/15 01:46	1
Toluene	<1.0		1.0		ug/L			12/02/15 01:46	1
Xylenes, Total	<3.0		3.0		ug/L			12/02/15 01:46	1
Benzene	**5.3**		1.0		ug/L			12/02/15 01:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*85*		*50 - 150*		*12/02/15 01:46*	*1*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	<130		130		ug/L		11/25/15 11:30	11/27/15 19:16	1
Oil Range Organics (C28-C35)	<130		130		ug/L		11/25/15 11:30	11/27/15 19:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*74*		*49 - 134*	*11/25/15 11:30*	*11/27/15 19:16*	*1*

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**3.9**		2.0		mg/L			12/05/15 09:27	1

Client: MWH Americas Inc
Project/Site: Jaquez

TestAmerica Job ID: 400-114297-1

Client Sample ID: TRIP BLANK
Date Collected: 11/20/15 09:15
Date Received: 11/24/15 08:47

Lab Sample ID: 400-114297-5
Matrix: Water

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	<1.0		1.0		ug/L			12/01/15 22:50	1
Toluene	<1.0		1.0		ug/L			12/01/15 22:50	1
Xylenes, Total	<3.0		3.0		ug/L			12/01/15 22:50	1
Benzene	<1.0		1.0		ug/L			12/01/15 22:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*90*		*50 - 150*		*12/01/15 22:50*	*1*

QC Association Summary

Client: MWH Americas Inc
Project/Site: Jaquez

TestAmerica Job ID: 400-114297-1

GC VOA

Analysis Batch: 303018

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-114297-1	MW-6	Total/NA	Water	8015B	
400-114297-2	MW-8	Total/NA	Water	8015B	
400-114297-3	MW-9	Total/NA	Water	8015B	
400-114297-4	MW-12	Total/NA	Water	8015B	
LCS 490-303018/74	Lab Control Sample	Total/NA	Water	8015B	
LCSD 490-303018/75	Lab Control Sample Dup	Total/NA	Water	8015B	
MB 490-303018/77	Method Blank	Total/NA	Water	8015B	

Analysis Batch: 303019

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-114297-1	MW-6	Total/NA	Water	8021B	
400-114297-1 MS	MW-6	Total/NA	Water	8021B	
400-114297-1 MSD	MW-6	Total/NA	Water	8021B	
400-114297-2	MW-8	Total/NA	Water	8021B	
400-114297-3	MW-9	Total/NA	Water	8021B	
400-114297-4	MW-12	Total/NA	Water	8021B	
400-114297-5	TRIP BLANK	Total/NA	Water	8021B	
LCS 490-303019/71	Lab Control Sample	Total/NA	Water	8021B	
LCSD 490-303019/72	Lab Control Sample Dup	Total/NA	Water	8021B	
MB 490-303019/77	Method Blank	Total/NA	Water	8021B	
MB 490-303019/93	Method Blank	Total/NA	Water	8021B	

GC Semi VOA

Prep Batch: 284879

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-114297-1	MW-6	Total/NA	Water	3520C	
400-114297-2	MW-8	Total/NA	Water	3520C	
400-114297-3	MW-9	Total/NA	Water	3520C	
400-114297-4	MW-12	Total/NA	Water	3520C	
LCS 400-284879/2-A	Lab Control Sample	Total/NA	Water	3520C	
LCSD 400-284879/3-A	Lab Control Sample Dup	Total/NA	Water	3520C	
MB 400-284879/1-A	Method Blank	Total/NA	Water	3520C	

Analysis Batch: 285147

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-114297-1	MW-6	Total/NA	Water	8015B	284879
400-114297-2	MW-8	Total/NA	Water	8015B	284879
400-114297-3	MW-9	Total/NA	Water	8015B	284879
400-114297-4	MW-12	Total/NA	Water	8015B	284879
LCS 400-284879/2-A	Lab Control Sample	Total/NA	Water	8015B	284879
LCSD 400-284879/3-A	Lab Control Sample Dup	Total/NA	Water	8015B	284879
MB 400-284879/1-A	Method Blank	Total/NA	Water	8015B	284879

Prep Batch: 286464

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-114297-3	MW-9	Total/NA	Water	3520C	
LCS 400-286464/2-A	Lab Control Sample	Total/NA	Water	3520C	
LCSD 400-286464/3-A	Lab Control Sample Dup	Total/NA	Water	3520C	
MB 400-286464/1-A	Method Blank	Total/NA	Water	3520C	

GC Semi VOA (Continued)

Analysis Batch: 286602

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-114297-3	MW-9	Total/NA	Water	8015B	286464

Analysis Batch: 286667

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 400-286464/2-A	Lab Control Sample	Total/NA	Water	8015B	286464
LCSD 400-286464/3-A	Lab Control Sample Dup	Total/NA	Water	8015B	286464
MB 400-286464/1-A	Method Blank	Total/NA	Water	8015B	286464

General Chemistry

Analysis Batch: 286015

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-114201-A-22 MS	Matrix Spike	Total/NA	Water	SM 4500 Cl- E	
400-114201-A-22 MSD	Matrix Spike Duplicate	Total/NA	Water	SM 4500 Cl- E	
400-114201-A-28 DU	Duplicate	Total/NA	Water	SM 4500 Cl- E	
400-114297-1	MW-6	Total/NA	Water	SM 4500 Cl- E	
LCS 400-286015/7	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	
MB 400-286015/6	Method Blank	Total/NA	Water	SM 4500 Cl- E	

Analysis Batch: 286093

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-114297-2	MW-8	Total/NA	Water	SM 4500 Cl- E	
400-114297-3	MW-9	Total/NA	Water	SM 4500 Cl- E	
400-114297-4	MW-12	Total/NA	Water	SM 4500 Cl- E	
400-114585-D-6 MS	Matrix Spike	Total/NA	Water	SM 4500 Cl- E	
400-114585-D-6 MSD	Matrix Spike Duplicate	Total/NA	Water	SM 4500 Cl- E	
LCS 400-286093/7	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	
MB 400-286093/6	Method Blank	Total/NA	Water	SM 4500 Cl- E	

Method: 8015B - Gasoline Range Organics - (GC)

Lab Sample ID: MB 490-303018/77
Matrix: Water
Analysis Batch: 303018

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	<100		100		ug/L			12/01/15 21:51	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*93*		*50 - 150*		*12/01/15 21:51*	*1*

Lab Sample ID: LCS 490-303018/74
Matrix: Water
Analysis Batch: 303018

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO) -C6-C10			1000	1160		ug/L		116	66 - 140		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
a,a,a-Trifluorotoluene	*110*		*50 - 150*

Lab Sample ID: LCSD 490-303018/75
Matrix: Water
Analysis Batch: 303018

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO) -C6-C10			1000	1110		ug/L		111	66 - 140	5	42

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
a,a,a-Trifluorotoluene	*108*		*50 - 150*

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 490-303019/77
Matrix: Water
Analysis Batch: 303019

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	<1.0		1.0		ug/L			12/01/15 21:51	1
Toluene	<1.0		1.0		ug/L			12/01/15 21:51	1
Xylenes, Total	<3.0		3.0		ug/L			12/01/15 21:51	1
Benzene	<1.0		1.0		ug/L			12/01/15 21:51	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*88*		*50 - 150*		*12/01/15 21:51*	*1*

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: MB 490-303019/93
Matrix: Water
Analysis Batch: 303019

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	<1.0		1.0		ug/L			12/02/15 05:40	1
Toluene	<1.0		1.0		ug/L			12/02/15 05:40	1
Xylenes, Total	<3.0		3.0		ug/L			12/02/15 05:40	1
Benzene	<1.0		1.0		ug/L			12/02/15 05:40	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*86*		*50 - 150*		*12/02/15 05:40*	*1*

Lab Sample ID: LCS 490-303019/71
Matrix: Water
Analysis Batch: 303019

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Ethylbenzene			100	105		ug/L		105	70 - 130		
Toluene			100	103		ug/L		103	66 - 127		
Xylenes, Total			200	210		ug/L		105	69 - 123		
Benzene			100	99.6		ug/L		100	69 - 129		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
a,a,a-Trifluorotoluene	*92*		*50 - 150*

Lab Sample ID: LCSD 490-303019/72
Matrix: Water
Analysis Batch: 303019

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Ethylbenzene			100	103		ug/L		103	70 - 130	2	35
Toluene			100	102		ug/L		102	66 - 127	1	34
Xylenes, Total			200	207		ug/L		104	69 - 123	1	37
Benzene			100	98.2		ug/L		98	69 - 129	1	33

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
a,a,a-Trifluorotoluene	*84*		*50 - 150*

Lab Sample ID: 400-114297-1 MS
Matrix: Water
Analysis Batch: 303019

Client Sample ID: MW-6
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Ethylbenzene	<1.0		50.0	51.2		ug/L		102	30 - 170		
Toluene	<1.0		50.0	50.3		ug/L		101	30 - 167		
Xylenes, Total	<3.0		100	102		ug/L		102	28 - 164		
Benzene	<1.0		50.0	48.3		ug/L		97	29 - 176		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
a,a,a-Trifluorotoluene	*87*		*50 - 150*

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: 400-114297-1 MSD
Matrix: Water
Analysis Batch: 303019

Client Sample ID: MW-6
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Ethylbenzene	<1.0		50.0	53.9		ug/L		108	30 - 170	5	35
Toluene	<1.0		50.0	52.9		ug/L		106	30 - 167	5	34
Xylenes, Total	<3.0		100	108		ug/L		108	28 - 164	5	37
Benzene	<1.0		50.0	50.9		ug/L		102	29 - 176	5	33

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
a,a,a-Trifluorotoluene	*85*		*50 - 150*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 400-284879/1-A
Matrix: Water
Analysis Batch: 285147

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 284879

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	<130		130		ug/L		11/25/15 07:21	11/27/15 17:14	1
Oil Range Organics (C28-C35)	<130		130		ug/L		11/25/15 07:21	11/27/15 17:14	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*96*		*49 - 134*	*11/25/15 07:21*	*11/27/15 17:14*	*1*

Lab Sample ID: LCS 400-284879/2-A
Matrix: Water
Analysis Batch: 285147

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 284879

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Diesel Range Organics [C10-C28]			20300	18700		ug/L		92	63 - 138		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
o-Terphenyl	*109*		*49 - 134*

Lab Sample ID: LCSD 400-284879/3-A
Matrix: Water
Analysis Batch: 285147

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 284879

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Diesel Range Organics [C10-C28]			20300	19500		ug/L		96	63 - 138	4	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
o-Terphenyl	*114*		*49 - 134*

Method: 8015B - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: MB 400-286464/1-A
Matrix: Water
Analysis Batch: 286667

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 286464

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	<130		130		ug/L		12/09/15 08:35	12/10/15 15:43	1
Oil Range Organics (C28-C35)	<130		130		ug/L		12/09/15 08:35	12/10/15 15:43	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*110*		*49 - 134*	*12/09/15 08:35*	*12/10/15 15:43*	*1*

Lab Sample ID: LCS 400-286464/2-A
Matrix: Water
Analysis Batch: 286667

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 286464

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Diesel Range Organics [C10-C28]			20300	22100		ug/L		109	63 - 138		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
o-Terphenyl	*118*		*49 - 134*

Lab Sample ID: LCSD 400-286464/3-A
Matrix: Water
Analysis Batch: 286667

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 286464

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Diesel Range Organics [C10-C28]			20300	23800		ug/L		117	63 - 138	7	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
o-Terphenyl	*144*	*X*	*49 - 134*

Method: SM 4500 Cl- E - Chloride, Total

Lab Sample ID: MB 400-286015/6
Matrix: Water
Analysis Batch: 286015

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<2.0		2.0		mg/L			12/04/15 11:47	1

Lab Sample ID: LCS 400-286015/7
Matrix: Water
Analysis Batch: 286015

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride			30.0	31.5		mg/L		105	90 - 110		

Method: SM 4500 Cl- E - Chloride, Total (Continued)

Lab Sample ID: 400-114201-A-22 MS
Matrix: Water
Analysis Batch: 286015

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	11000	F1	10000	11200	F1	mg/L		2	73 - 120

Lab Sample ID: 400-114201-A-22 MSD
Matrix: Water
Analysis Batch: 286015

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	11000	F1	10000	11400	F1	mg/L		4	73 - 120	2	8

Lab Sample ID: 400-114201-A-28 DU
Matrix: Water
Analysis Batch: 286015

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Chloride	23000		23000		mg/L		0.7	8

Lab Sample ID: MB 400-286093/6
Matrix: Water
Analysis Batch: 286093

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<2.0		2.0	mg/L			12/05/15 09:25	1

Lab Sample ID: LCS 400-286093/7
Matrix: Water
Analysis Batch: 286093

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	30.0	30.7		mg/L		102	90 - 110

Lab Sample ID: 400-114585-D-6 MS
Matrix: Water
Analysis Batch: 286093

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	<2.0		10.0	9.71		mg/L		97	73 - 120

Lab Sample ID: 400-114585-D-6 MSD
Matrix: Water
Analysis Batch: 286093

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	<2.0		10.0	9.57		mg/L		96	73 - 120	1	8

Lab Chronicle

Client: MWH Americas Inc
Project/Site: Jaquez

TestAmerica Job ID: 400-114297-1

Client Sample ID: MW-6

Date Collected: 11/20/15 10:30
Date Received: 11/24/15 08:47

Lab Sample ID: 400-114297-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015B		1	5 mL	5 mL	303018	12/01/15 23:19	GWM	TAL NSH
	Instrument ID: HP52									
Total/NA	Analysis	8021B		1	5 mL	5 mL	303019	12/01/15 23:19	GWM	TAL NSH
	Instrument ID: HP52									
Total/NA	Prep	3520C			250 mL	1 mL	284879	11/25/15 11:30	KH1	TAL PEN
Total/NA	Analysis	8015B		1	250 mL	1 mL	285147	11/27/15 18:36	C1M	TAL PEN
	Instrument ID: WALLE									
Total/NA	Analysis	SM 4500 Cl- E		1	10 mL	10 mL	286015	12/04/15 11:54	LSS	TAL PEN
	Instrument ID: KONELAB									

Client Sample ID: MW-8

Date Collected: 11/20/15 10:00
Date Received: 11/24/15 08:47

Lab Sample ID: 400-114297-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015B		1	5 mL	5 mL	303018	12/02/15 00:47	GWM	TAL NSH
	Instrument ID: HP52									
Total/NA	Analysis	8021B		1	5 mL	5 mL	303019	12/02/15 00:47	GWM	TAL NSH
	Instrument ID: HP52									
Total/NA	Prep	3520C			250 mL	1 mL	284879	11/25/15 11:30	KH1	TAL PEN
Total/NA	Analysis	8015B		1	250 mL	1 mL	285147	11/27/15 18:46	C1M	TAL PEN
	Instrument ID: WALLE									
Total/NA	Analysis	SM 4500 Cl- E		1	10 mL	10 mL	286093	12/05/15 09:27	LSS	TAL PEN
	Instrument ID: KONELAB									

Client Sample ID: MW-9

Date Collected: 11/20/15 09:20
Date Received: 11/24/15 08:47

Lab Sample ID: 400-114297-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015B		1	5 mL	5 mL	303018	12/02/15 01:16	GWM	TAL NSH
	Instrument ID: HP52									
Total/NA	Analysis	8021B		1	5 mL	5 mL	303019	12/02/15 01:16	GWM	TAL NSH
	Instrument ID: HP52									
Total/NA	Prep	3520C			250 mL	1 mL	284879	11/25/15 11:30	KH1	TAL PEN
Total/NA	Analysis	8015B		1	250 mL	1 mL	285147	11/27/15 19:06	C1M	TAL PEN
	Instrument ID: WALLE									
Total/NA	Prep	3520C			250 mL	1 mL	286464	12/09/15 09:58	KH1	TAL PEN
Total/NA	Analysis	8015B		1	250 mL	1 mL	286602	12/09/15 23:04	C1M	TAL PEN
	Instrument ID: WALLE									
Total/NA	Analysis	SM 4500 Cl- E		1	10 mL	10 mL	286093	12/05/15 09:27	LSS	TAL PEN
	Instrument ID: KONELAB									

Lab Chronicle

Client: MWH Americas Inc
Project/Site: Jaquez

TestAmerica Job ID: 400-114297-1

Client Sample ID: MW-12

Date Collected: 11/20/15 09:55
Date Received: 11/24/15 08:47

Lab Sample ID: 400-114297-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015B		1	5 mL	5 mL	303018	12/02/15 01:46	GWM	TAL NSH
	Instrument ID: HP52									
Total/NA	Analysis	8021B		1	5 mL	5 mL	303019	12/02/15 01:46	GWM	TAL NSH
	Instrument ID: HP52									
Total/NA	Prep	3520C			250 mL	1 mL	284879	11/25/15 11:30	KH1	TAL PEN
Total/NA	Analysis	8015B		1	250 mL	1 mL	285147	11/27/15 19:16	C1M	TAL PEN
	Instrument ID: WALLE									
Total/NA	Analysis	SM 4500 Cl- E		1	10 mL	10 mL	286093	12/05/15 09:27	LSS	TAL PEN
	Instrument ID: KONELAB									

Client Sample ID: TRIP BLANK

Date Collected: 11/20/15 09:15
Date Received: 11/24/15 08:47

Lab Sample ID: 400-114297-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	5 mL	5 mL	303019	12/01/15 22:50	GWM	TAL NSH
	Instrument ID: HP52									

Laboratory References:

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177
TAL PEN = TestAmerica Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

Certification Summary

Client: MWH Americas Inc
Project/Site: Jaquez

TestAmerica Job ID: 400-114297-1

Laboratory: TestAmerica Pensacola

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Alabama	State Program	4	40150	01-31-16
Arizona	State Program	9	AZ0710	01-11-17
Arkansas DEQ	State Program	6	88-0689	09-01-16
Florida	NELAP	4	E81010	06-30-16
Georgia	State Program	4	N/A	06-30-16
Illinois	NELAP	5	200041	10-09-16
Iowa	State Program	7	367	07-31-16
Kansas	NELAP	7	E-10253	01-31-16 *
Kentucky (UST)	State Program	4	53	06-30-16
Kentucky (WW)	State Program	4	98030	12-31-16
Louisiana	NELAP	6	30976	06-30-16
Maryland	State Program	3	233	09-30-16
Massachusetts	State Program	1	M-FL094	06-30-16
Michigan	State Program	5	9912	06-30-16
New Jersey	NELAP	2	FL006	06-30-16
North Carolina (WW/SW)	State Program	4	314	12-31-15 *
Oklahoma	State Program	6	9810	08-31-16
Pennsylvania	NELAP	3	68-00467	01-31-16
Rhode Island	State Program	1	LAO00307	12-30-16
South Carolina	State Program	4	96026	06-30-16
Tennessee	State Program	4	TN02907	06-30-16
Texas	NELAP	6	T104704286-15-9	09-30-16
USDA	Federal		P330-13-00193	07-01-16
Virginia	NELAP	3	460166	06-14-16
West Virginia DEP	State Program	3	136	06-30-16

Laboratory: TestAmerica Nashville

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
A2LA	A2LA		NA: NELAP & A2LA	12-31-15
A2LA	ISO/IEC 17025		0453.07	02-29-16
Alaska (UST)	State Program	10	UST-087	07-24-16
Arizona	State Program	9	AZ0473	05-05-16
Arkansas DEQ	State Program	6	88-0737	04-25-16
California	State Program	9	2938	10-31-16
Connecticut	State Program	1	PH-0220	12-31-17
Florida	NELAP	4	E87358	06-30-16
Georgia	State Program	4	N/A	06-30-16
Illinois	NELAP	5	200010	12-09-16
Iowa	State Program	7	131	04-01-16
Kansas	NELAP	7	E-10229	01-31-16 *
Kentucky (UST)	State Program	4	19	06-30-16
Kentucky (WW)	State Program	4	90038	12-31-16
Louisiana	NELAP	6	30613	06-30-16
Maine	State Program	1	TN00032	11-03-17
Maryland	State Program	3	316	03-31-16
Massachusetts	State Program	1	M-TN032	06-30-16
Minnesota	NELAP	5	047-999-345	12-31-16
Mississippi	State Program	4	N/A	06-30-16

* Certification renewal pending - certification considered valid.

Certification Summary

Client: MWH Americas Inc
Project/Site: Jaquez

TestAmerica Job ID: 400-114297-1

Laboratory: TestAmerica Nashville (Continued)

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Montana (UST)	State Program	8	NA	02-24-20
Nevada	State Program	9	TN00032	07-31-16
New Hampshire	NELAP	1	2963	10-09-16
New Jersey	NELAP	2	TN965	06-30-16
New York	NELAP	2	11342	03-31-16
North Carolina (WW/SW)	State Program	4	387	12-31-16
North Dakota	State Program	8	R-146	06-30-16
Ohio VAP	State Program	5	CL0033	07-10-17
Oklahoma	State Program	6	9412	08-31-16
Oregon	NELAP	10	TN200001	04-27-16
Pennsylvania	NELAP	3	68-00585	06-30-16
Rhode Island	State Program	1	LAO00268	12-30-15 *
South Carolina	State Program	4	84009 (001)	02-28-16
South Carolina (Do Not Use - DW)	State Program	4	84009 (002)	12-16-17
Tennessee	State Program	4	2008	02-23-17
Texas	NELAP	6	T104704077	08-31-16
USDA	Federal		S-48469	10-30-16
Utah	NELAP	8	TN00032	07-31-16
Virginia	NELAP	3	460152	06-14-16
Washington	State Program	10	C789	07-19-16
West Virginia DEP	State Program	3	219	02-28-16
Wisconsin	State Program	5	998020430	08-31-16
Wyoming (UST)	A2LA	8	453.07	02-29-16

* Certification renewal pending - certification considered valid.

Method Summary

Client: MWH Americas Inc
Project/Site: Jaquez

TestAmerica Job ID: 400-114297-1

Method	Method Description	Protocol	Laboratory
8015B	Gasoline Range Organics - (GC)	SW846	TAL NSH
8021B	Volatile Organic Compounds (GC)	SW846	TAL NSH
8015B	Diesel Range Organics (DRO) (GC)	SW846	TAL PEN
SM 4500 Cl- E	Chloride, Total	SM	TAL PEN

Protocol References:

SM = "Standard Methods For The Examination Of Water And Wastewater",

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

TAL PEN = TestAmerica Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

TestAmerica Pensacola
3355 McLemore Drive
Pensacola, FL 32514
Phone (850) 474-1001 Fax (850) 478-2671

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: Chris Lee / Sarah Gardner	Lab PM: Edwards, Marty P	Carrier Tracking No(s):	COC No: 400-50167-23002.1
Client Contact: Ms. Sarah Gardner	Phone: 303 291 2239	E-Mail: marty.edwards@testamericainc.com		Page: Page 1 of 1
Company: MWH Americas Inc				Job #:
Address: 1560 Broadway Suite 1800	Due Date Requested:			
City: Denver	TAT Requested (days): Standard			
State, Zip: CO, 80202				
Phone: 303-291-2239(Tel)	PO #: Purchase Order Requested			
Email: sarah.gardner@mwhglobal.com	WO #:			
Project Name: Jaquez	Project #: 40005479			
Site: Jaquez	SSOW#:			

Analysis Requested

400-114297 COC

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2SO3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - ph 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	SM4500_Cl_E - Chloride	8015B_DRO - (MOD) DRO C10-C28/ ORO C28-C35	8015B_GRO - Local Method	8021B - BTEX 8021	Total Number of containers	Special Instructions/Note:
CYCLE MACHINE			G	Water			X	X	X			SG
MW-6	11/20/15	1030	G	W	N	N	1	2	2	2	7	
MW-8	11/20/15	1000	G	W	N	N	1	2	2	2	7	
MW-9	11/20/15	920	G	W	N	N	1	2	2	2	7	
MW-12	11/20/15	955	G	W	N	N	1	2	2	2	7	
TRIP BLANK	11/20/15	915	G	W						2	2	

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Sarah Gardner	11/23/2015 800	MWH			
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks: Rec 1.1/0.9/0.8/0.4/0.4 11/24/15 0847

Page 24 of 26

1/25/2016

Login Sample Receipt Checklist

Client: MWH Americas Inc

Job Number: 400-114297-1

Login Number: 114297
List Number: 1
Creator: Menoher, Rachel C

List Source: TestAmerica Pensacola

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	1.1/0.9/0.8/0.4/0.9°C IR 6
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: MWH Americas Inc

Job Number: 400-114297-1

Login Number: 114297
List Number: 2
Creator: Ford, Easton

List Source: TestAmerica Nashville
List Creation: 11/25/15 04:51 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	