



PRELIMINARY RESULTS

CJES State AB #1 SWD Facility Assessment Report Hobbs, Lea County, New Mexico

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1.0 INTRODUCTION

This assessment report has been prepared by EnTech Consulting Corporation (EnTech) to document delineation of potential affected soil at the C&J Energy Services (CJES) State AB SWD #1 salt water disposal (SWD) facility (hereinafter referred to as the “Site”), located approximately 6 miles west of Hobbs, Lea County, New Mexico (**Figure 1**). The CJES Site is located in Section 3, Township 19S, Range 37E. The actual location of the release is 660 from the north line of the Section and 1980-feet from the east line of the Section at latitude 32.6947220 and longitude -103.2402780.

The Site consists of a disposal well, a fresh water well, and a storage yard, equipped with numerous tanks and truck unloading area. On September 22, 2017, an offload valve attached to a hose was left partially open during a night offload. The hose was stored vertically so that the release was not seen until it filled the hose and spilled. The fluids were discovered the next morning on September 23, 2017, when the valve was properly closed. The released fluids were immediately removed, through the use of a vacuum truck, from the yard. The release area was scraped, with the effected soil stockpiled at the Site (hereinafter referred to as “1RP-4836 Release”). The Site reportedly experienced thunderstorms on the 23rd-25th of September 2017. The storm water outfall for the Site is located on the east side of the facility, adjacent to the northeast exterior corner of the bermed tank battery system. The heavy rains produced storm water which migrated off the facility pad via the storm water outfall. The spill area and the area outside of storm water outfall were treated as an area of concern for the purpose of this assessment (**Figure 2**).

On October 31, 2017, representatives of New Mexico CJES and EnTech met with the New Mexico Oil Conservation Division (NMOCD) and State Lands (NMSL). Based on these discussions, additional areas of concern were identified for delineation of possible impacts from breaks in the southern earthen berm that surrounds the Site (hereinafter referred to as the “1RP-3961 Release”). Fluids from the 1RP-3961 Release which resulted from a lightning strike and subsequent fire, were originally contained within the lined secondary containment area around the tanks. A break in the tank battery secondary containment was created after released fluids were removed and disposed of to allow removal of the damaged tanks. Breaks in the outer facility earthen berm were also created to remove accumulated runoff from heavy precipitation to provide access and a stable surface during removal of the damaged tanks. A stockpile along the southern property boundary (southwest corner), containing stained soils related to a 2016 tank fire, was also identified as an area of concern during this meeting. Finally, the liner in the tank battery area was noted as an area of concern due to potential impacts to the integrity of the liner from fires and subsequent repairs.

In New Mexico, the NMOCD oversees and regulates oil, gas and geothermal activities, including enforcement and compliance with environmental regulations. Guidance for cleanup of crude oil releases is provided in the NMOCD Guidelines for Remediation of Leaks, Spills and Releases (August 13, 1993) document. Primary contaminants, or chemicals of concern (COCs), associated with releases from this facility, and requested in the directive attached to the NMOCD Release Notification and Corrective Action (dated October 4, 2017) include benzene, toluene, ethylbenzene, and total xylenes (BTEX), total petroleum hydrocarbons (TPH), and chlorides. Guidelines for these COCs in soil were evaluated based on a Site ranking system established during a previous tank closure at the Site, which is documented in the report dated October 7, 2015. The ranking system estimates the likelihood of exposures to the COCs and is based on the following three (3) parameters to protect groundwater and surface water resources:

- Depth to groundwater (Site ranking score = 20);
- Wellhead protection area (Site ranking score = 0); and,
- Distance to surface water body (Site ranking score = 0).

2.0 NMOCD SITE RANKING

Based on the proximity of the Site to water wells, surface water bodies, and depth to groundwater, an NMOCD ranking score of 20 points was established in October 2015, with the soil remediation goals defined in the table below:

Parameter	Total Ranking Site Score		
	19 or greater	10-19	0-9
Benzene	10 ppm	10 ppm	10 ppm
BTEX	50 ppm	50 ppm	50 ppm
TPH (C6-C36)	100 ppm	1000 ppm	5000 ppm

Per the NMOCD Pit Rule (NMAC 19.15.17), closure criteria for chloride affected soils has been established as follows:

Closure Criteria for Soils			
Depth to Groundwater with less than 10,000 mg/L TDS	Constituent	Method	Limit
<50-feet	Chloride	EPA 300.0	600 mg/Kg

*numerical limit or background concentration, whichever is greater

Based on typical NMOCD remediation standards, the analytical goals for confirmation samples collected from the affected area at the Site are: TPH target concentration of 100 mg/Kg, benzene target concentration of 10 mg/Kg, total BTEX target concentration of 50 mg/Kg, and chloride target concentration of 600 mg/Kg. It should be noted that the target concentration for TPH, as outlined in the NMOCD guidance, is the TPH contaminant

concentration above background levels (i.e., background concentration plus 100 mg/Kg). Additionally, per NMOCD guidance, a field soil vapor headspace measurement of 100 ppm may be substituted for a laboratory analysis of the benzene and BTEX concentration limits.

The scope of this assessment report is to document the environmental sample collection objectives and the technical site investigation strategies that were utilized during the characterization of impacts associated with the release of oil and gas fluids at the Site and subsequent remediation.

3.0 CHRONOLOGY

- 09/22/2017 Offload valve attached to hose was left partially open and Site impacted.
- 10/31/2017 Representatives of CJES and EnTech met with the NMOCD and New Mexico State Lands (NMSL) to review concerns identified in the submitted Assessment Work Plan. Additional areas of investigation were identified.
- 12/8/2017 An Assessment Work Plan was re-submitted to NMOCD incorporating additional areas to be investigated that were discussed in the meeting of 10/31/2017.
- 12/19/2017 A visual inspection of the liner within the containment berm of the tank battery system was conducted. The liner was inspected at six (6) separate locations. Two (2) soil samples were collected from a depth of 3- to 6-inches into the surface of the berm, in an area lacking high density polyethylene (HDPE) geomembrane/liner. Soil samples were submitted for laboratory analysis.
- 12/21/2017 NMOCD approved the Assessment Work Plan (dated 12/8/2017), with the condition that one (1) additional soil boring be added in the 1RP-4836 release area.
- 02/05/2018 Ten (10) background samples (BG-1 through BG-10) were collected from the north and south side of the entrance road to the Site, in areas suspected of being free of anthropogenic interference. Four (4) soil borings (B-1 through B-4) were installed to a depth of 20-feet below ground surface (bgs). Soil samples collected from background locations and soil borings submitted for laboratory analysis.
- 02/07/2018 Twenty-four (24) soil borings, using a tractor-mounted Geoprobe, were installed in and around the Site, to a maximum depth of 30-inches bgs or refusal, whichever occurred first. Soil samples from cardinal direction locations (CD-1, C-2, and CD-3), delineation locations (D-1 through D-16), and backup delineation locations (BUC-1 through BUC-5), collected and submitted for laboratory analysis.

02/08/2018 Six (6) stockpile soil samples (SP-1(A) through SP-2(C)) collected. Twenty-three (23) soil borings, using a tractor-mounted Geoprobe, were installed around the Site, to a maximum depth of 30-inches bgs or refusal, whichever occurred first. Soil samples from cardinal direction locations (CD-4 through CD-7), delineation locations (D-17 through D-21), and backup delineation locations (BUC-6 through BUC-19), collected and submitted for laboratory analysis.

4.0 SCOPE OF WORK

During the assessment process, EnTech personnel completed the following: 1. Installed four (4) soil borings to a depth of 20-feet bgs to collect samples at 5-, 10, and 20-feet bgs; 2. Collected ten (10) background soil samples at a depth of 3-inches to 6-inches bgs using a hand trowel; 3. Collected soil samples from two (2) locations in an earthen berm surrounding the on-Site tank battery system; 4. Collected soil samples from seven (7) cardinal points in and around the impacted area to a maximum depth of 30-inches bgs using a tractor-mounted Geoprobe; 5. Collected soil samples from twenty-one (21) locations in and around the impacted area to a maximum depth of 30-inches bgs using a tractor mounted Geoprobe; 6. Collected soil samples from nineteen (19) locations in and around the impacted area to a maximum depth of 32-inches bgs using a tractor-mounted Geoprobe; 7. Inspected the geomembrane liner located on the interior of the bermed tank battery at six (6) different locations; and, 8. Collected six (6) discreet soil samples from two (2) separate stockpiles.

Due to the number of areas sampled at the Site and concerns related to each area, each task outlined in the scope of work is addressed separately below.

4.1 Soil Boring Installation

Four (4) soil borings (B-1 through B-4), were installed at the Site on February 5, 2018, using an air rotary, truck-mounted drilling rig, operated by Straub Corporation of Stanton, Texas. All drilling rig and sampling equipment was decontaminated prior to the start of field activities. Soil samples were examined in the field immediately following retrieval of the cuttings. The soil cuttings were logged by geologist from EnTech and described according to the Unified Soil Classification System criteria. All four (4) soil borings were installed to a depth of 20-feet bgs. Soil samples from cuttings were collected from each soil boring at a depth of 5-, 10-, and 20-feet bgs. Once collected, each soil sample was split into two and one-half the sample placed in a half-gallon sealable polyethylene bag and allowed to equilibrate for approximately 15-minutes, prior to conducting field screening with an Organic Vapor Meter (OVM), calibrated with 100-ppm isobutylene. The second half of the sample was transferred to clean, laboratory supplied glass containers, labeled, and place in a cooler on ice, for transport to the analytical laboratory.

Soil boring B-1 was installed on the interior of the Site, immediately north of the northeast corner of the bermed tank battery. Soil boring B-1 was installed in the former flow path of the 1RP-4836 Release in an attempt to determine the vertical extent of potential impact from the release.

Soil boring B-2 was installed on the exterior perimeter of the Site, immediately east of the northeast corner of the bermed tank battery to evaluate the run-off from the storm water outfall. Soil boring B-3 was installed on the southern exterior perimeter of the Site, immediately south of the southeastern corner of the bermed tank battery. Soil boring B-4 was also installed on the southern exterior perimeter, immediately south of the southwestern corner of the bermed tank battery. Soil borings B-3, and B-4 were installed to address NMOCD concerns related to comments made during the site inspection with NMOCD and NMSL on October 31, 2017. Specifically, the soil borings were installed to address potential impact from the 1RP-3961 release, in areas of possible pooling that may have resulted from the cuts in the facility perimeter.

A total of twelve (12) soil samples were collected from the four (4) soil borings. All twelve (12) soil samples were screened for BTEX using an OVM. Soil screening was completed by placing a soil sample aliquot in zip-lock bags, allowing the sample to equilibrate for 15-minutes, and then collecting a headspace reading using the OVM. OVM readings of the soil samples collected from the borings ranged from 1.9 parts per million vapor (ppmv) to 13.0 ppmv. Readings below 100 ppmv were used to determine if they were below cleanup levels for BTEX.

All soil samples were analyzed by the laboratory for TPH by EPA Method 8015 extended range (GRO+DRO+MRO; C6 thru C36), and for chloride by EPA Method 300.0.

Groundwater was not encountered in any of the soil borings. After advancing each soil boring to total depth (20-feet bgs), and collecting soil samples, the soil borings were plugged with bentonite and hydrated using fresh water.

Detailed drillers logs and geologic logs for each soil boring are included in **Appendix A**.

4.2 Background Soil Samples

Ten (10) locations [BG-1 to BG-10], were selected for collection of background soil samples. All background samples were collected from areas suspected of being representative of native conditions, without industrial or commercial activity. The background samples were all collected from the north and south side of the facility access road on the western exterior of the Site. Three (3) samples were collected on the north side of the access road and seven (7) samples were collected on the south side of the road. All background samples were collected on February 5, 2015, using a hand trowel. All background samples were collected from a depth of 3- to 6-inches bgs. The background samples were field screened by the same method described from the soil

samples collected from the soil borings, with an OVM. OVM readings of the background samples ranged from 2.2 ppmv to 9.1 ppmv.

4.3 Berm Soil Samples

Two (2) locations were selected for sampling on December 19, 2017. The two (2) soil samples were collected from a depth of 3- to 6-inches into the surface of the berm, in an area lacking geomembrane liner. The liner had been removed to facilitate removal of damaged equipment from the 1RP-3961 Release.

4.4 Cardinal Confirmation Soil Samples

Seventeen (17) soil samples were collected from seven (7) locations [CD-1 to CD-7], from areas in and around the impacted area, to confirm the lateral delineation of the 1RP-4836 Release and the 1RP-3961 Release. The soil samples were collected from various depths using a tractor-mounted Geoprobe, between February 7, 2018 and February 8, 2018. Typically, samples were collected from 6-inches bgs, from the top of a dense limestone layer (hereinafter referred to as "hard pan"), and immediately under the hard pan if possible. One (1) of the locations (CD-1) had no recovery at 6-inches bgs. Four (4) of the locations had probe refusal at the hard pan, resulting in no collection of a sample. The cardinal samples were all collected as discrete samples and field screened with an OVM by the same method described for the soil samples collected from the soil borings. OVM readings of the cardinal samples ranged from 0.1 ppmv to 5.6 ppmv.

4.5 Delineation Soil Samples

Forty-nine (49) soil samples were collected from twenty-one (21) locations [D-1 to D-21], in and around the impacted area to establish delineation of the 1RP-4836 Release and the 1RP-3961 Release. The soil samples were collected from various depth using a tractor-mounted Geoprobe, between February 7, 2018 and February 8, 2018. Typically, samples were collected from 6-inches bgs, from the top of the hard pan, and immediately under the hard pan if possible. Thirteen (13) of the locations had probe refusal at or immediately below the hard pan, resulting in no collection of a sample. The delineation samples were all collected as discrete samples and field screened with an OVM by the same method described for the soil samples collected from the soil borings. OVM readings of the cardinal samples ranged from non-detectable (0 ppmv) to 16 ppmv.

4.6 Backup Delineation Soil Samples

Thirty-seven (37) soil samples were collected from nineteen (19) locations [BUC-1 to BUC-19], in areas beyond the delineation soil sample locations mentioned previously and held under a separate chain-of-custody in the event that laboratory analysis of further delineation sampling was required. Typically, samples were collected from 6-inches bgs, from the top of the hard pan, and immediately under the hard pan if possible, utilizing a tractor-mounted Geoprobe. The soil samples were collected between February 7, 2018 and February 8, 2018. Fifteen (15) of the locations had probe refusal at or immediately below the hard pan, resulting in no collection of a sample. The delineation samples were

all collected as discrete samples and field screened with an OVM by the same method described for the soil samples collected from the soil borings. OVM readings of the cardinal samples ranged from 0.2 ppmv to 10 ppmv.

4.7 Liner Inspection

A visual inspection of the liner within the containment berm of the tank battery system was conducted on December 19, 2017. The liner was inspected at six (6) separate locations. A hand trowel was utilized to scrape the pea gravel overlying the liner, so that a visual inspection could be conducted. Four (4) of the liner inspection points occurred on the north, west and south sides of the former tanks that were removed as a result of the fires (1RP-3961 Release). Two (2) additional inspection points were made to the north and east of the existing tanks in the battery. The liner appeared to be in good condition and did not appear to require repair in the six (6) locations examined. Photographic documentation of the liner is included in **Appendix B**

4.8 Stockpile Samples

Six (6) discrete soil samples were collected from two (2) stockpiles located at the Site. One (1) stockpile exists on the southwest corner of the Site and occurred as a result of the 1PR-3961 Release [SP-1(A) to SP-1(C)]. This stockpile consists of approximately 28 cubic yards of material that was scraped from the pad. A second stockpile exists on the northeast corner of the bermed battery area, in close proximity to the primary storm water outfall [SP-2(A) to SP-2(C)]. The material in this stockpile consists of approximately 20 cubic yards and was originally scraped from the pad as a result of the 1PR-4836 Release. Three (3) grab samples were collected from each stockpile: two (2) samples were collected within the stockpile and one (1) sample was collected from the base of the stockpiled material. All samples were collected utilizing a hand trowel. The stockpile samples were field screened with an OVM by the same method described for the soil samples collected from the soil borings. OVM readings of the stockpile samples ranged from non-detectable (0 ppmv) to 0.6 ppmv. All stockpile samples were analyzed for BTEX by EPA Method 8260, TPH by EPA Method 8015 extended range (GRO+DRO+MRO: C6-C35), and for chloride by EPA Method 300.0 for waste characterization.

5.0 GEOLOGY

(from Geologic Atlas of Texas, Bureau of Economic Geology, Hobbs Sheet, 1976; Nicholson et al, Geology and Groundwater Conditions in Southern Lea County, New Mexico, State Bureau of Mines and Mineral Sources, 1961)

The regional geology for the Site, as described in the Geologic Atlas of Texas, is made up of sediments of the Ogallala Formation. It is described as fluviatile sand, silt, clay, and gravel capped by caliche. The sand is fine-medium grained quartz, silty in-part and calcareous. Clay balls are common, and the formation is clayey in the upper part. It is indistinctly bedded to massive, cross-bedded, unconsolidated to weakly cohesive and consists of various shades of gray and red. Silt and clay with caliche nodules are present

which is reddish brown, dusky red, and pink in color. Some beds of well-consolidated, silica-cemented conglomeratic sandstone, 1- to 3-feet in thickness occur with the Ogallala. Maximum thickness up to 100 feet.

The Site is located on the southern boundary of a region referred to as the “High Plains” and described in detail in *Groundwater Conditions in Southern Lea County, New Mexico* (1961). The High Plains surface is uniformly flat and slopes about 17 feet per mile between 15 degrees and 20 degrees south of east. The oldest sediments that can be seen at the surface are Triassic in age. Triassic sediments of the area consist chiefly of a sequence of red beds of the Dockum group, which are separated from sediments of the Permian or Triassic age by an erosional unconformity. The uppermost formation of the Dockum group is the Chinle, which ranges in thickness from zero to 1,270-feet. It is thickest in the eastern part of the area and entirely absent in the western part, where it has been removed by post-Mesozoic erosion. The Chinle is dominantly red and green claystone but also contains minor fine-grained sandstone and siltstone. Sediments of Jurassic age have not been found in southern Lea County. Cretaceous sediments have been identified in a quarry located southeast of the Site (east of Eunice, New Mexico), but for the most part have been almost entirely removed in Lea County, by erosion. Tertiary sediments are represented in this area by the Ogallala formation, of Pliocene age. The Ogallala underlies the High Plains and is composed of a heterogeneous complex of terrestrial sediments, which mantles an irregular erosion surface cut into Triassic rocks. The Ogallala on the High Plains is capped by a layer of dense caliche, which ranges in thickness from a few feet to as much as 60-feet. At the surface, the caliche is well indurated and is almost completely calcium carbonate. Sediments of Quaternary age are present in southern Lea County and cover the Ogallala. These Quaternary sediments form alluvial deposits, probably of both Pleistocene and Recent age, and dune sands of Recent age. The dune sands mantle the older alluvium and the Ogallala formation over most of the area.

Only sediments of Tertiary and Quaternary age yield potable water.

It should be noted that a thick outcrop of caliche is evident on the east and west sides of the Site and that field geology noted a structural “high” defined by probe refusal, underlying the facility.

6.0 LABORATORY ANALYSIS

Due to the number of areas identified for assessment (i.e., berm, soil borings, etc.), laboratory analysis for each assessment area is described individually below. A summary of the analytical results and the OVM readings are presented in **Table 1**. Laboratory supplied analytical reports are in **Appendix C** on the enclosed CD only.

6.1 Soil Boring Samples

Three (3) soil samples were collected from each soil boring at a depth of 5-, 10-, and 20-foot bgs. Laboratory analyses of the soil samples indicated TPH concentrations ranging from 4.83 mg/Kg to 429.1 mg/Kg. Only three (3) of the twelve (12) collected samples indicated TPH (C6-C35) concentrations above 100 mg/Kg: soil boring B-2@5' (342.5 mg/Kg); soil boring B-3@5' (152.6 mg/Kg); and, soil boring B-4@5' (429.1 mg/Kg).

Laboratory analysis for chlorides from these same samples indicated chloride concentrations ranging from 103 mg/Kg to 1,350 mg/Kg. Chloride concentrations exceeding the target cleanup level of 600 mg/Kg were analyzed in: soil boring B-2@10' (956 mg/Kg); soil boring B-2@20' (1,130 mg/Kg); soil boring B-4@5' (1,350 mg/Kg); soil boring B-4@10' (662 mg/Kg); and, soil boring B-4@20' (811 mg/Kg).

6.2 Background Soil Samples

Eleven (11) locations [BG-1 to BG-10, and DUP-1], considered being representative of native conditions without industrial or commercial activity, were selected for collection of background soil samples. Laboratory analyses of the background samples indicated TPH (C6-C35) concentrations ranging from 7.09 mg/Kg to 41.27 mg/Kg and chloride concentrations ranging from nondetectable to 30.8 mg/Kg.

Results from these eleven (11) background samples, along with soil samples collected from CD-5, CD-6, and CD-7, were utilized to calculate the upper tolerance level (UTL) concentration for TPH (C6-C35) and chlorides.

Laboratory analysis of the background soil samples collected on February 5, 2018 (BG-1 through BG-10), and cardinal samples considered representative of background conditions, indicated a 95% UTL of 51.90 mg/Kg, resulting in a target cleanup level of 151.9 mg/Kg. The UTL calculations for TPH are presented in **Appendix D**.

6.3 Berm Soil Samples

Two (2) soil samples were collected from a depth of 3- to 6-inches into the surface of the berm. Laboratory analyses of the berm soil samples indicated nondetectable total BTEX, TPH (C6-C35) concentrations ranging from 12.99 mg/Kg to 166.2 mg/Kg, and chloride concentrations ranging from 2,980 mg/Kg to 4,720 mg/Kg.

6.4 Cardinal Confirmation Soil Samples

Seven (7) cardinal locations [CD-1 to CD-7], representing four (4) compass points around the impacted area were sampled. Seventeen (17) soil samples were collected from the seven (7) locations, with sixteen (16) soil samples analyzed. Laboratory analyses of the soil samples indicated TPH (C6-C35) concentrations ranging from 3.92 mg/Kg to 144.4 mg/Kg and chloride concentrations ranging from 25.7 mg/Kg to 2,760 mg/Kg. None of the analyzed samples indicated TPH (C6-C35) concentrations in excess of the target cleanup levels for TPH (C6-C35) incorporating the UTL (151.90 mg/Kg). Chloride concentrations exceeding the target concentration of 600 mg/Kg were analyzed in soil

samples collected from CD-1@18" (2,760 mg/Kg); and, CD-2@6" (1,360 mg/Kg), CD-2@12" (1,100 mg/Kg), and CD-2@30" (1,180 mg/Kg).

6.5 Delineation Soil Samples

Forty-nine (49) soil samples were collected from twenty-one (21) locations [D-1 to D-21], in and around the impacted area to establish delineation of the 1RP-4836 Release and the 1RP-3961 Release. Laboratory analyses of the delineation soil samples indicated TPH (C6-C35) concentrations ranging from nondetectable to 467 mg/Kg. TPH (C6-C35) concentrations in excess of the target cleanup levels for TPH (C6-C35) incorporating the UTL (151.90 mg/Kg) were analyzed in soil samples collected from: D-4@6" (185.3 mg/Kg); D-5@12" (467 mg/Kg); D-7@6" (167.8 mg/Kg); D-17@16" (197.7) mg/Kg; and, D-19@6" (383.9 mg/Kg).

Laboratory analysis of these same samples for chlorides indicated concentrations ranging from 66.9 mg/Kg to 5,120 mg/Kg. Chloride concentrations exceeding the target cleanup level of 600 mg/Kg, were analyzed in sample locations D-1, D-2, D-3, D-4, D-5, D-6, D-7, D-8, D-13, D-14, D-15, D-16, and D-18.

6.6 Backup Delineation Soil Samples

Nineteen (19) sample locations [BUC-1 to BUC-19], in areas beyond the delineation soil sample locations mentioned previously, were held under a separate chain-of-custody in the event that further laboratory analysis of delineation sample locations was required. Additional laboratory analyses were performed on a total of twenty (20) of forty-five (45) soil samples collected from twelve (12) of the nineteen (19) sample locations.

Laboratory analyses of the backup delineation soils samples indicated TPH (C6-C35) concentrations 24.16 mg/Kg to 136.7 mg/Kg. All analyzed TPH (C6-C35) concentrations in the backup delineation soil samples were below the target cleanup levels for TPH (C6-C35) incorporating the UTL (151.90 mg/Kg). Laboratory analysis for chlorides in the backup delineation soils samples indicated concentrations ranging from 18.5 mg/Kg to 1,650 mg/Kg. Chloride concentrations exceeding the target cleanup level of 600 mg/Kg were analyzed in soil samples collected from: BUC-1@8" (1,530 mg/Kg); BUC-15@24" (658 mg/Kg); and, BUC-15@30" (1,650 mg/Kg).

6.7 Stockpile Samples

Six (6) discrete soil samples were collected from two (2) stockpiles located at the Site. One (1) stockpile consisting of approximately 28 cubic yards, exists on the southwest corner of the Site and occurred as a result of the 1PR-3961 Release [SP-1(A) to SP-1(C)]. A second stockpile exists on the northeast corner of the bermed battery area, in close proximity to the primary storm water outfall [SP-2(A) to SP-2(C)]. The material in the second stockpile consists of approximately 20 cubic yards and was originally scraped from the pad as a result of the 1PR-4836 Release.

Laboratory analyses was performed on the stockpiles for waste characterization and indicated benzene concentrations ranging from nondetectable to 0.00074 mg/Kg, total BTEX concentrations ranging from nondetectable to 0.00074 mg/Kg, TPH (C6-C35) concentrations ranging from 3.00 mg/Kg to 705 mg/Kg, and chloride concentrations ranging from 6.7 mg/Kg to 21,100 mg/Kg.

7.0 SIGNIFANCE OF DATA

The approach to establish a path forward to address the exceedances detected in soil samples collected at the Site included: a statistical evaluation of the data; followed by identification of areas associated with data points that require additional evaluation; and, selection of a remedial approach to address affected areas within the operating facility boundaries and surrounding State lands, beyond the fenced perimeter.

7.1 Chloride Analytical Method

Analysis for Chloride was completed using EPA Method 300.0 - Determination of Inorganic Anions by Ion Chromatography (**Appendix E**). The extraction method used for a solid material requires (the addition of a reagent water equal to 10 times the weight of the dry solid sample (normally 5-10 grams). This slurry is mixed for 10 minutes using a magnetic stirring device and resulting slurry filtered using a 0.45 μ membrane type filter before analysis of the sample occurs. This process removes all chloride ions from the soil sample.

The on-site situation is very different from the extraction process identified above as contact with storm water and affected soil is very limited. The amount of soil surface area exposed to the stormwater is minimal and no mixing takes place. Subsequently the concentration of chloride ion, although soluble in water will be significant less than the samples analyzed in the laboratory. Therefore the statistical analysis/evaluation and the remedial options presented below have been developed to address the more realistic chloride ion concentrations that can be expected to migrate from the chloride affected soil at the site via stormwater runoff or stormwater infiltration into the subsurface.

7.2 Statistical Evaluation

An accepted statistical method for determining a background value from a set of data is the 95% upper tolerance limit (UTL). The UTL represents a statistical value whereby 95% of the sampled population will fall below the value with 95% confidence. Usually, the UTL will tend to be higher than the highest value in the background data set that was used to calculate the UTL. A total of seventeen (17) soil samples, considered to be representative of background conditions, were utilized to calculate the UTL (i.e., upper tolerance limit of background conditions). Any single data point from the site that is above the background UTL indicates an exceedance or affected soil. Per NMOCD guidance, for TPH, the affected soil is background plus 100 mg/Kg. This equates to a total of 151.90 mg/Kg, utilizing the calculated UTL of 51.90 mg/Kg. **Table 1** identifies TPH concentrations above the 151.90 mg/Kg in red bold text in the TPH (C6-C35) column. A similar approach was

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applied to Chloride concentrations in soil for this Site. A UTL of 277.50 mg/Kg was calculated and added to the regulatory limit of 600 mg/kg for a value of 877.50 mg/Kg as the level of which to evaluate Chloride affected soils. It is requested that an approach, similar to determining acceptable concentrations of TPH, be authorized by the NMOCD for Chlorides in soil. The UTL calculations for Chlorides are presented in **Appendix F**. **Figure 3** *TPH Affected Area Map above NMOCD Limits (100 mg/Kg)* display TPH affected area without UTL Concentrations and **Figure 4** *Chloride Affected Area Map above NMOCD Limit (600 mg/Kg)* display chloride affected areas without UTL Concentrations. Figures 3 and Figure 4 highlight the affected areas based on a TPH limit of 100 mg/kg and a Chloride limit of 600 mg/Kg. **Figure 5** *TPH Affected Area Map above NMOCD limit using UTL (151.9 mg/Kg)* and **Figure 6** *Chloride Affected Area Map above NMOCD Limit using UTL (877.5 mg/Kg)*, highlight the affected areas based on a UTL TPH limit of 151.9 mg/kg and a UTL Chloride limit of 877.5 mg/Kg.

7.3 Areas Requiring Additional Investigation

Evaluation of the analytical results of soil samples collected from the four (4) deeper soil borings (B-1 through B-4), demonstrates that the vertical delineation is complete for TPH [C6-C35]. For Chlorides, elevated concentrations were analyzed at 10-feet bgs at boring location B-2 and increased slightly at 20-feet bgs. Elevated concentrations of Chlorides were also analyzed in soil samples collected from B-4 at 5-feet bgs, and decreased in the soil samples collected from 10-feet bgs and 20-feet bgs. Although not indicative of surface migration due to the number of samples collected in the area that are below NMOCD limits, vertical delineation is not considered complete.

Two (2) sample locations (CD-1 and CD-2), where samples were collected from areas representative of a cardinal direction, indicated elevated Chloride concentrations. CD-1 was collected south of the loading and unloading pad and CD-2 was collected outside of the bermed facility area to the northeast. It is recommended that two (2) additional cardinal samples be collected further to the north of CD-1 and CD-2 outside of the facility perimeter berm area. The CD-7 sample will serve as a cardinal direction sample to the west.

All other areas are considered delineated for both TPH and Chlorides.

7.4 Areas Requiring Excavation and Treatment.

On-Site facility areas are considered the area bound by the perimeter berm and fence. Off-Site areas are considered those areas beyond the facility perimeter berm and fence.

Off-Site TPH exceedance were noted in the long chain hydrocarbon range (TPH [C22-C35]) at 5-feet bgs in soil boring locations B2, B3 and B4. Only two (2) other locations, D17 and D19, indicated TPH exceedances above 151.90 mg/Kg (UTL). These areas are identified in **Figure 5** *TPH Affected Area Map above NMOCD limit using UTL (151.9 mg/Kg)*. Although not indicative of surface migration due to the number of samples

collected in the area that are below NMOCD limits, current plans call for treatment of these areas with hydrocarbon degrading bacterial and nutrient solution, to decrease the TPH concentrations. Four (4) treatments will be applied over a 1-year period.

Laboratory analysis of soil samples collected from off-Site sample locations indicated Chloride exceedances in soil boring B-4 at 5-feet bgs and BUC-15 at 30-inches bgs, south of the facility. Based on the number of samples collected surrounding these two (2) locations, soil boring B-4 and BUC-15 are not an area representative of a release from the facility.

On the east side of the facility, near the storm water outfall, there are several Chloride exceedances. This area is shown on **Figure 6 Chloride Affected Area Map above NMOCD Limit using UTL (877.5 mg/Kg)**. This affected area will be excavated to a depth of 9 inches and the soil replaced with gypsum and caliche to form a treatment zone for storm water running off the facility. Stormwater leaving the treatment zone should be tested to evaluate the effectiveness of the proposed treatment method.

The area by CD-2 and BUC-1 have higher Chloride concentrations but are not associated with the release from the two incidents at this facility.

On-Site TPH and Chlorides exceedances are also shown on **Figure 5** and **Figure 6** respectively. They are primarily related to the 1RP-4836 release. Current plans call for the area outlined in red to be excavated to a depth of 1-foot bgs to remove the majority of the affected soil. The excavated area will be backfilled with 3 to 6-inches of gypsum followed by 6 to 9 inches of caliche. The backfilled area will be compacted and graded to meet current surface conditions. The compacted caliche at the surface will allow storm water to run off and limit infiltration down into the subsurface as well as limiting the soil surface area exposed to stormwater runoff. The gypsum functions to decrease the effect of Chloride affected soil by changing the sodium absorption ratio (SAR). The stormwater runoff should be tested to evaluate the concentration of chloride ion in stormwater and then develop treatment options. Although Chloride affected soils are present below the 1-foot bgs depth scheduled for excavation, a more comprehensive investigation will be completed to identify additional areas requiring remediation when the facility is closed.

7.5 Disposition of Stockpiles

The analytical data for the stockpile samples was used to prepare profiles and attain approval for final disposal at the Sundance Facility in Eunice NM (**Appendix G**). A total of 48 cubic yards of affected soil were transported from the Site for disposal.

8.0 CONCLUSIONS AND RECOMMENDATION

Based on the investigation completed at this Site, the data collected and presented in this report, EnTech presents the following conclusion and recommendations;

1. A visual inspection of the liner within the containment berm of the tank battery system at six (6) separate locations shows the liner to be in good condition and did not require repairs. Other areas of the liner over the berm that were damaged are scheduled to be repaired in April 2018.
2. The two (2) samples from the berm reported chloride and TPH concentrations above NMOCD limits. These exposed affected berm soils will be covered with HDPE liner as part of the repairs to the secondary containment system for the tanks and exposure to stormwater will cease. The soils associated with the berms will be addressed when the facility is closed.
3. Evaluation of the analytical results of soil samples collected indicated the main areas investigated are considered delineated for both TPH and Chlorides with minor exceptions for the cardinal direction to the north.
4. The use of the UTL for both TPH and Chlorides provides a very conservative value for identifying the affected soils. For TPH the majority of the hydrocarbons detected are in the TPH MRO C22- C36 range with very few detections in the TPH GRO C-6 to C-10 range, along with low OVM reading less than 35 ppmv, indicate more stable hydrocarbon and less volatile hydrocarbon which generally present less health and migration risk.
5. For Chlorides, the laboratory extraction method is not representative of the site condition where stormwater contract is limited to exposure to compacted caliche and therefore a limited potential to remove chloride ions from the surface or subsurface soil.
6. Laboratory analysis of soil samples collected from off-Site sample locations south of the facility indicated Chloride exceedances in soil boring B-4 at 5-feet bgs and BUC-15 at 30-inches bgs, south of the facility. Based on the number of samples collected surrounding these two (2) locations, soil boring B-4 and BUC-15 are not an area representative of a release from the facility. Although the perimeter berms had been breached during the time of the inspection with NMOCD and NMSL, it has been ascertained the breaches were made to allow stormwater that had pooled in this area to drain to allow access for removal of the burned tanks and replacement with new tanks.
7. Off-Site TPH exceedance at 5-feet bgs was analyzed in soil samples collected from soil boring locations B2, B3 and B4. Soil sample locations D17 and D19 will be treated with hydrocarbon degrading bacterial and nutrient solution, to decrease the TPH concentrations.
8. On Site TPH affected soil will be excavated as part of the removal of chlorides affected oil when the facility is closed
9. The chlorides affected onsite and offsite areas identified for remediation in **Section 7.4** (both on-site and off-site) once implemented, will result in the removal of the majority of the remaining exposed impacted soil from the 1RP-483 Release. Restoration activities will result in treatment zones for precipitation that may seep into the compacted caliche surface or run-off the compacted caliche. Any

precipitation will contact gypsum and have its SAR changed to decrease the effects of chlorides to the surrounding soil.

Figures



Legend:

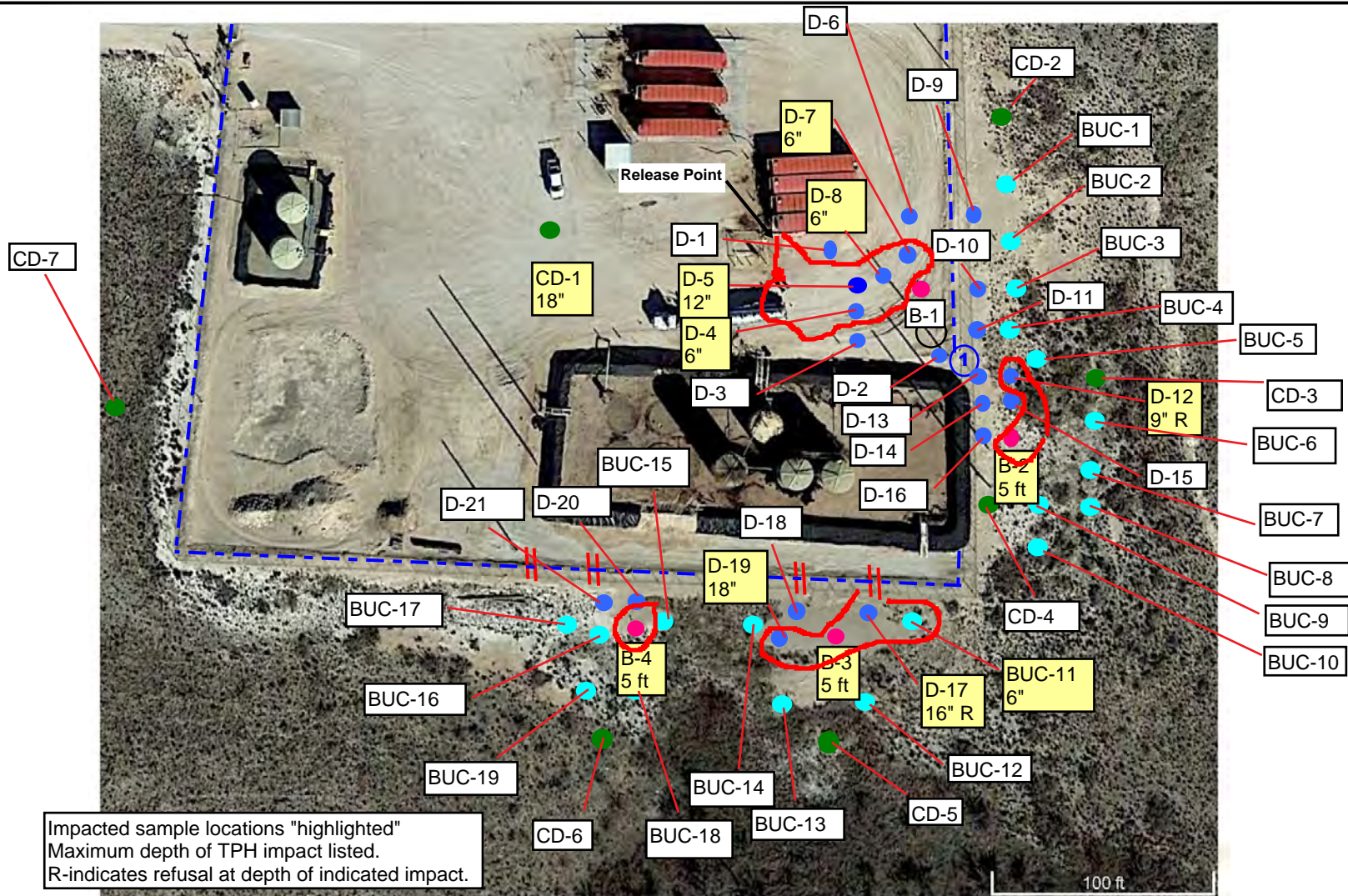
- - - - - -Spill Flow Path
- -Spill - Pooled Area
- - - - - -Earthen Berm
- || -Break in Earthen Berm
- ① -Storm Water Outfall

0 100
Feet



Figure 2
Site Layout
CJES -State AB SWD #1
Hobbs, New Mexico

Job No.: CJES15051 | DATE: 11/17



Legend:

- -Earthen Berm
- - TPH Exceedance
- || -Break in Earthen Berm
- Sample locations exceeding TPH concentration of 100 mg/kg
- 1 -Storm Water Outfall
- Scraped Soil Stockpile (from Spill) and Soil Grab Sample Location
- -Soil Sample Locations for Delineation
- -Soil Sample Locations - Cardinal Directions
- -Backup Soil Sample Locations
- -Deep Boring to 20 Feet Below Ground Surface - Probable Pooling Location

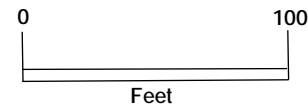
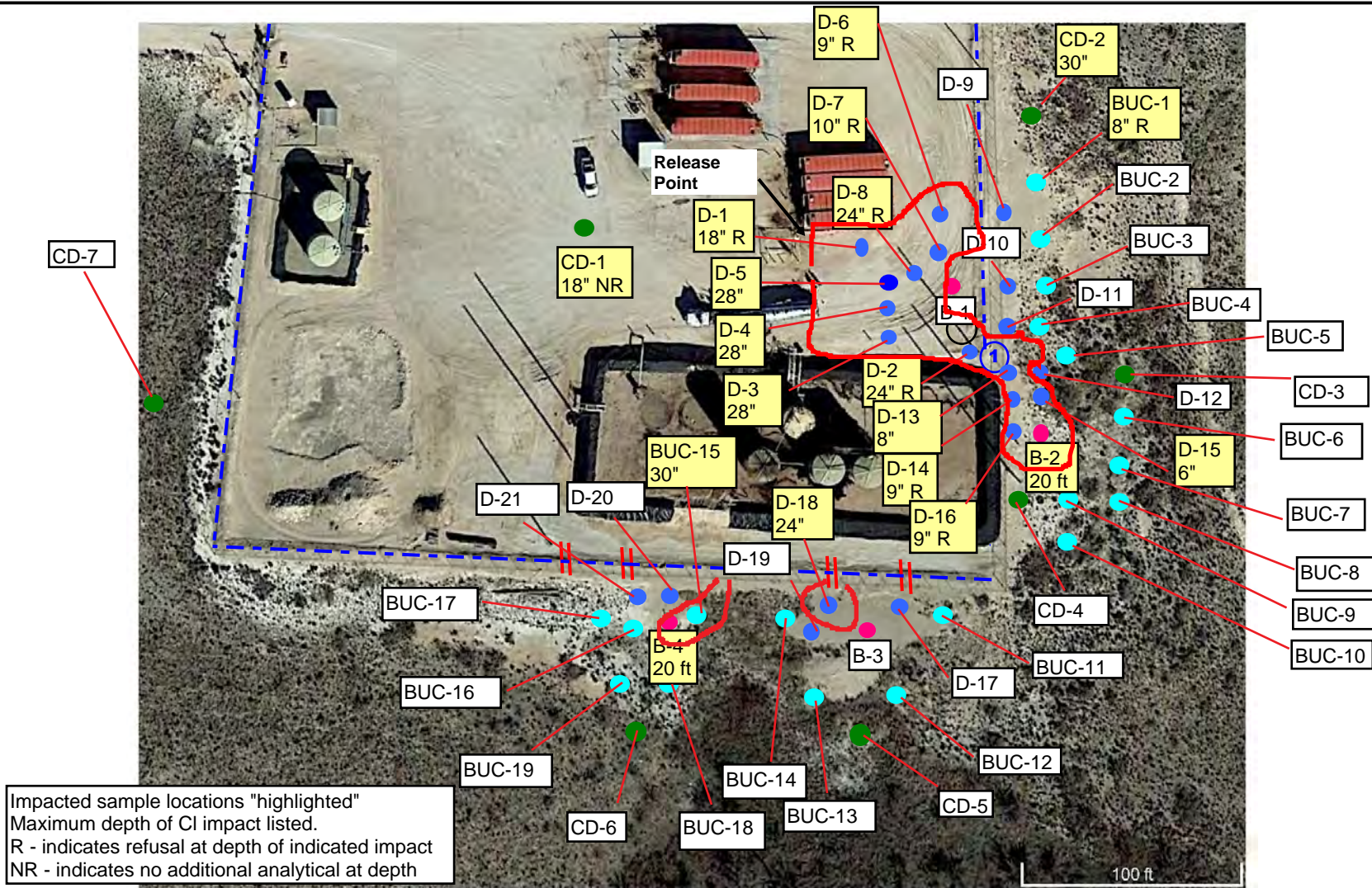


Figure 3
TPH Affected Area Map above
NMOCD Limit (100 mg/kg)
CJES -State AB SWD #1
Hobbs, New Mexico

Job No.: CJES18002 | DATE: 4/16/18



Legend:

- -Earthen Berm
- -Chloride Exceedence
- || -Break in Earthen Berm
- Sample Location Exceeding NMOCD Limit of 600 mg/kg
- 1 -Storm Water Outfall
- Scraped Soil Stockpile (from Spill) and Soil Grab Sample Location
- -Soil Sample Locations for Delineation
- -Soil Sample Locations - Cardinal Directions
- -Backup Soil Sample Locations
- -Deep Boring to 20 Feet Below Ground Surface - Probable Pooling Location

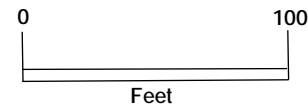
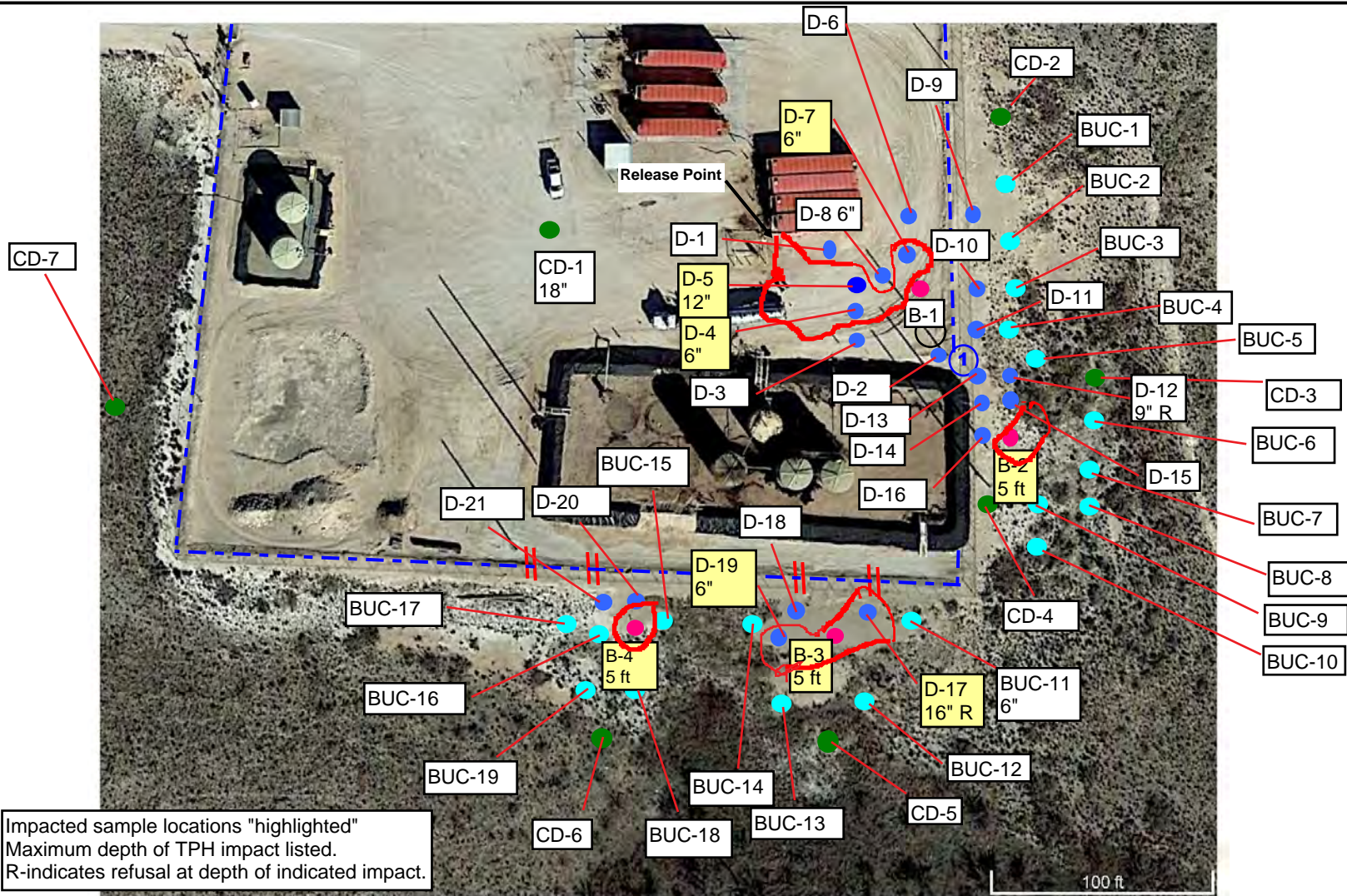


Figure 4
Chloride Affected Area Map
Above NMOCD Limit (600 mg/kg)
CJES -State AB SWD #1
Hobbs, New Mexico

Job No.: CJES18002 | DATE: 4/16/18



Legend:

- -Earthen Berm
- -TPH Exceedance
- || -Break in Earthen Berm
- Sample locations above TPH concentration of 151.9 mg/kg
- 1 -Storm Water Outfall
- Scraped Soil Stockpile (from Spill) and Soil Grab Sample Location
- -Soil Sample Locations for Delineation
- -Soil Sample Locations - Cardinal Directions
- -Backup Soil Sample Locations
- -Deep Boring to 20 Feet Below Ground Surface - Probable Pooling Location

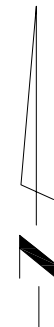
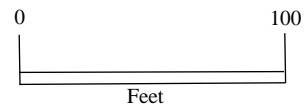
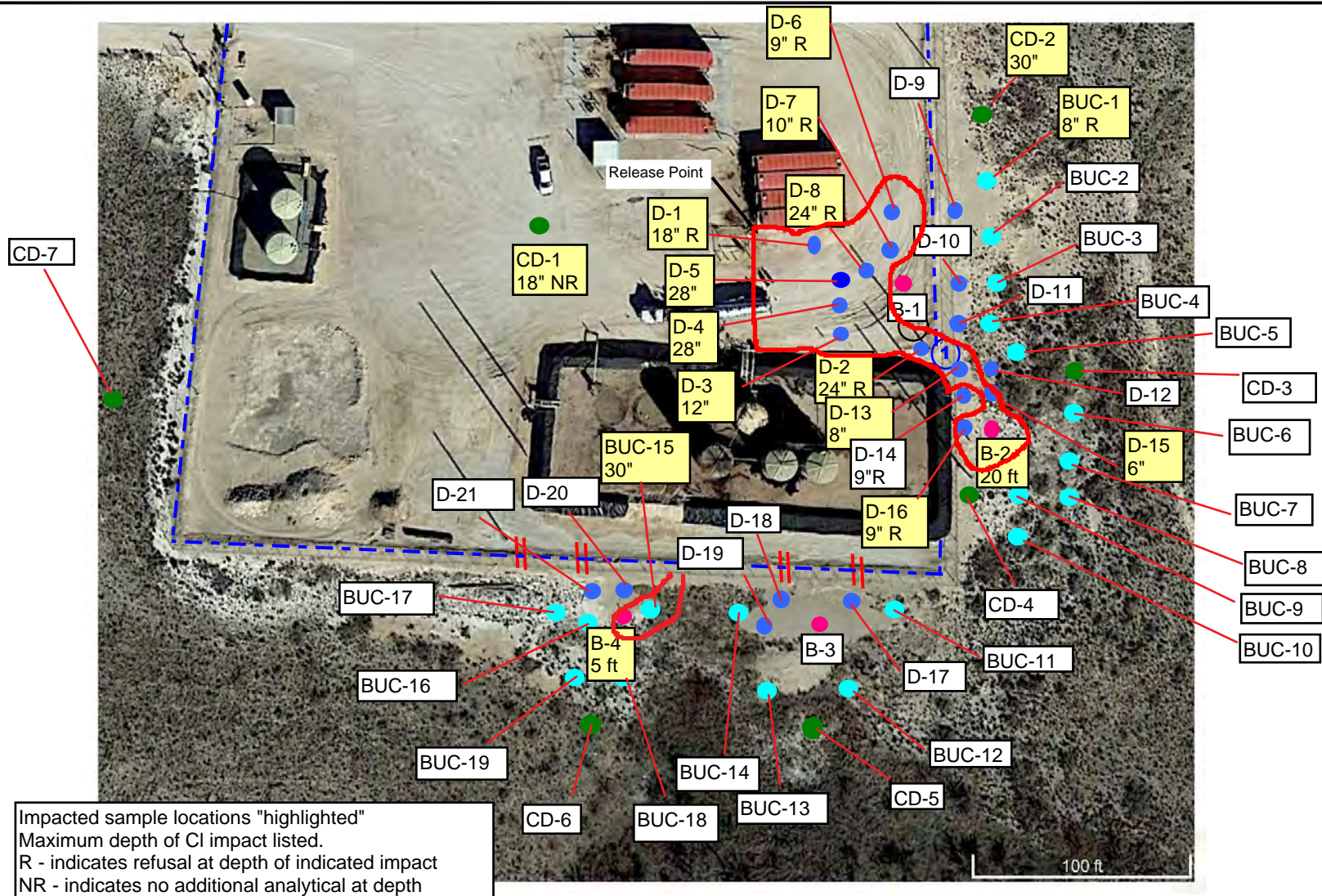


Figure 5
TPH Affected Area Map above NMOC limit using UTL (151.9 mg/kg)
CJES -State AB SWD #1
Hobbs, New Mexico

Job No.: CJES18002 | DATE: 4/16/18



Legend:

- -Earthen Berm
- -Chloride Exceedance
- || -Break in Earthen Berm
- Sample locations exceeding Chloride concentration of 877.5 mg/kg
- 1 -Storm Water Outfall
- Scraped Soil Stockpile (from Spill) and Soil Grab Sample Location
- -Soil Sample Locations for Delineation
- -Soil Sample Locations - Cardinal Directions
- -Backup Soil Sample Locations
- -Deep Boring to 20 Feet Below Ground Surface - Probable Pooling Location



Figure 6
Chloride Affected Area Map above
NMOCD limit using UTL (877.5mg/kg)
CJES -State AB SWD #1
Hobbs, New Mexico

Job No.: CJES18002 | DATE: 4/16/18

Table

Table 1 : Summary of Sample Analytical Results

Sample Location ID	Laboratory ID	Date	Time	Depth Collected (inches bgs)	PID (ppmv)	Chlorides (mg/Kg)	Benzene (ug/Kg)	Toluene (ug/Kg)	Ethylbenzene (ug/Kg)	Xylene (ug/Kg)	TPH [GRO: C6-C10] (mg/Kg)	TPH [DRO:C10-C22] (mg/Kg)	TPH [MRO: C22-C36] (mg/Kg)	TPH [C6-C35] (mg/Kg)	Utilized in UCL/UTL Calculations
	NMOC Standard limits				100.00	600.00	10 mg/Kg							100.00	
	Calc UCL - Chloride					58.22									
	Calc UTL - Chloride					277.50									
	Calc UCL - TPH													27.24	
	Calc UTL - TPH													51.90	
	Regulator Limit - Chloride (using UTL)*					877.50									
	Regulator Limit - TPH (using UTL)													151.90	
BG-1	TD16243-13	2/5/2018	725	2"-3"	5.4	11.3	NA	NA	NA	NA	<2.6	5.07	31.8	36.87	x
BG-2	TD16243-14	2/5/2018	728	2"-3"	7.3	24.8	NA	NA	NA	NA	<2.5	<2.5	18.7	18.7	x
BG-3	TD16243-15	2/5/2018	731	2"-3"	2.5	10.8	NA	NA	NA	NA	<3.7	5.17	24.7	29.87	x
BG-4	TD16243-16	2/5/2018	735	2"-3"	3.1	8.3	NA	NA	NA	NA	<3.2	5.06	26.6	31.66	x
BG-5	TD16243-17	2/5/2018	739	2"-3"	7.1	10.5	NA	NA	NA	NA	<2.6	3.08	20.9	23.98	x
BG-6	TD16243-18	2/5/2018	743	2"-3"	9.1	14	NA	NA	NA	NA	<2.5	3.35	30.8	34.15	x
BG-7	TD16243-19	2/5/2018	805	2"-3"	2.2	6.4	NA	NA	NA	NA	<2.5	5.07	36.2	41.27	x
BG-8	TD16243-20	2/5/2018	809	2"-3"	4.8	6.4	NA	NA	NA	NA	<2.5	3.99	26.9	30.89	x
BG-9	TD16243-21	2/5/2018	813	2"-3"	6.0	<5.1	NA	NA	NA	NA	<2.6	<2.6	7.09	7.09	x
BG-10	TD16243-22	2/5/2018	817	2"-3"	5.3	5.7	NA	NA	NA	NA	<2.7	3.32	17.2	20.52	x
DUP-1 (BG-1)	TD16243-23	2/5/2018	725	2"-3"	5.4	30.8	NA	NA	NA	NA	<2.5	<2.5	17.1	17.1	x
B-1@5	TD16243-1	2/5/2018	1124	5-feet	4.0	382	NA	NA	NA	NA	<2.7	<2.7	10.3	10.3	
B-1@10	TD16243-2	2/5/2018	1126	10-feet	4.9	318	NA	NA	NA	NA	<2.5	<2.7	4.91	4.91	
B-1@20	TD16243-3	2/5/2018	1215	20-feet	4.7	171	NA	NA	NA	NA	<2.9	<2.7	4.83	4.83	
B-2@5	TD16243-4	2/5/2018	1205	5-feet	7.9	308	NA	NA	NA	NA	<2.7	47.5	295	342.5	
B-2@10	TD16243-5	2/5/2018	1210	10-feet	8.2	956	NA	NA	NA	NA	<2.7	<5.4	16.6	16.6	
B-2@20	TD16243-6	2/5/2018	1215	20-feet	11.2	1130	NA	NA	NA	NA	<2.7	3.26	12.8	16.1	
B-3@5	TD16243-7	2/5/2018	1242	5-feet	4.3	359	NA	NA	NA	NA	<2.8	21.6	131	152.6	
B-3@10	TD16243-8	2/5/2018	1244	10-feet	13.0	110	NA	NA	NA	NA	<2.8	2.77	10.6	13.37	
B-3@20	TD16243-9	2/5/2018	1250	20-feet	4.6	103	NA	NA	NA	NA	<2.6	<2.6	9.71	9.71	
B-4@5	TD16243-10	2/5/2018	1324	5-feet	1.9	1350	NA	NA	NA	NA	<2.8	64.1	365	429.1	
B-4@10	TD16243-11	2/5/2018	1325	10-feet	10.4	662	NA	NA	NA	NA	<3.1	4.55	23	27.55	
B-4@20	TD16243-12	2/5/2018	1331	20-feet	3.5	811	NA	NA	NA	NA	<5.8	3.01	13.8	16.81	
Liner Loc 1		12/19/2017					No Sample Collected - Visual Inspection of Liner Only								
Liner Loc 2		12/19/2017					No Sample Collected - Visual Inspection of Liner Only								
Liner Loc 3		12/19/2017					No Sample Collected - Visual Inspection of Liner Only								
Liner Loc 4		12/19/2017					No Sample Collected - Visual Inspection of Liner Only								
Liner Loc 5		12/19/2017					No Sample Collected - Visual Inspection of Liner Only								
Liner Loc 6		12/19/2017					No Sample Collected - Visual Inspection of Liner Only								
Berm-1	TD14096-1	12/19/2017	1715	NA	NA	4720	<0.011	<0.036	<0.0089	<0.0065	12.8	84.8	68.6	166.2	
Berm-2	TD14096-2	12/19/2017	1720	NA	NA	2980	<0.013	<0.040	<0.0098	<0.0071	<6.4	5.78	7.21	12.99	
CD-1@6		2/7/2018	1030				No recovery								
CD-1@18	TD16439-38	2/7/2018	1030	18	1.9	2760	NA	NA	NA	NA	<5.3	28.4	116	144.4	
CD-1@30	TD16439-39R	2/7/2018	1030	30	4.3	NA	NA	NA	NA	NA	<5.2	17.1	45.8	62.9	
DUP-2 (CD-1@18)	TD16439-45	2/7/2018	1030	18	1.9	963	NA	NA	NA	NA	<5.3	25.3	93.7	119	
CD-2@6	TD16439-40	2/7/2018	1440	6	1.9	1360	NA	NA	NA	NA	<5.6	4.12	11.7	15.82	
CD-2@12	TD16439-41	2/7/2018	1440	12	3.7	1100	NA	NA	NA	NA	<5.6	3.53	8.22	11.75	
CD-2@30	TD16439-42B	2/7/2018	1440	30	2.8	1180	NA	NA	NA	NA	NA	NA	NA	NA	
CD-3@4	TD16439-43	2/7/2018	1710	4	3.7	129	NA	NA	NA	NA	<5.6	3.74	9.07	12.81	
CD-3@7	TD16439-44	2/7/2018	1710	7	1.2	110	NA	NA	NA	NA	<5.7	4.51	6.76	11.27	
CD-3@7							refusal								
CD-4@6	TD16466-1	2/8/2018	935	6	0.3	78.6	NA	NA	NA	NA	5.75	2.82	6.69	15.26	
CD-4@18	TD16466-2	2/8/2018	935	18	0.7	84.8	NA	NA	NA	NA	6.6	3.39	6.42	16.41	
CD-4@30	NRA	2/8/2018	935			0.8									
CD-5@6	TD16466-4	2/8/2018	1035	6	0.3	191	NA	NA	NA	NA	7.2	4.41	25.1	36.71	x
CD-5@16	TD16466-5	2/8/2018	1035	16	0.1	44.2	NA	NA	NA	NA	6.69	<2.9	4.08	10.77	x
CD-5@28	NRA	2/8/2018	1035	28	0.1	NA	NA	NA	NA	NA	NA	NA	NA	NA	
CD-6@6	TD16466-7	2/8/2018	1347	6	4.1	25.7	NA	NA	NA	NA	5.64	<2.7	3.36	9	x
CD-6@8	TD16466-8	2/8/2018	1347	8	5.6	80.8	NA	NA	NA	NA	<7.0	3.92	<3.1	3.92	x
CD-6@8							refusal								
CD-7@6	TD16466-9	2/8/2018	1358	6	2.8	38.9	NA	NA	NA	NA	<5.9	4.19	4.85	9.04	x
CD-7@8	TD16466-10	2/8/2018	1358	8	3.7	210	NA	NA	NA	NA	<5.6	7.04	8.36	15.4	x
CD-7@8							refusal								
D-1@6	TD16439-1	2/7/2018	1055	6	5.9	5120	NA	NA	NA	NA	<6.2	15.8	54.9	70.7	
D-1@18	TD16439-2	2/7/2018	1055	18	16	4410	NA	NA	NA	NA	<5.9	5.18	10.5	15.68	
D-1@28							refusal								
D-2@6	TD16439-3	2/7/2018	1117	6	4.6	1360	NA	NA	NA	NA	<5.7	4.85	16.9	21.75	
D-2@24	TD16439-4	2/7/2018	1117	24	8.9	1510	NA	NA	NA	NA	<6.5	<2.9	<2.9	<6.5	
D-2@28							refusal								
D-3@6	TD16439-5	2/7/2018	1146	6	5.8	979	NA	NA	NA	NA	<5.6	13.6	66.8	80.4	
D-3@12	TD16439-6	2/7/2018	1146	12	6.3	1090	NA	NA	NA	NA	<5.9	6.64	32.8	39.44	
D-3@28	TD16439-7B	2/7/2018	1146	28	6.3	749	NA	NA	NA	NA	NA	NA	NA	NA	
D-4@6	TD16439-8	2/7/2018	1205	6	6.8	2870	NA	NA	NA	NA	<5.5	35.3	150	185.3	
D-4@12	TD16439-9	2/7/2018	1205	12	4.1	1700	NA	NA	NA	NA	<5.9	16.2	60	76.2	
D-4@28	TD16439-10B	2/7/2018	1205	28	3.8	3590	NA	NA	NA	NA	NA	NA	NA	NA	
DUP-3 (D-4@12)	TD16439-46	2/7/2018	1205	12	4.1	1290	NA	NA	NA	NA	<5.7	19.4	69.1	88.5	
D-5@6	TD16439-11	2/7/2018	1217	6	2.2	1920	NA	NA	NA	NA	<5.3	20.7	66.1	86.8	
D-5@12	TD16439-12	2/7/2018	1217	12	4.3	2220	NA	NA	NA	NA	<5.6	148	319	467	
D-5@28	TD16439-13B	2/7/2018	1217	28	5	1670	NA	NA	NA	NA	<5.2	22.7	42	64.7	
D-6@6	TD16439-14	2/7/2018	1230	6	3.8	2460	NA	NA	NA	NA	<5.6	14.3	54.1	68.4	
D-6@9	TD16439-15	2/7/2018	1230	9	3.5	1920	NA	NA	NA	NA	<5.3	8.07	20.3	28.37	
D-6@10							refusal								
D-7@6	TD16439-16	2/7/2018	1253	6	3	2120	NA	NA	NA	NA	<5.3	47.8	120	167.8	
D-7@10	TD16439-17	2/7/2018	1253	10	3.1	2920	NA	NA	NA	NA	<5.3	13.4	37.6	51	
D-7@10							refusal								
D-8@6	TD16439-18	2/7/2018	1306	6	1.8	2410	NA	NA	NA	NA	<5.5	25.1	85.7	110.8	
D-8@12	TD16439-19	2/7/2018	1306	12	1.2	2060	NA	NA	NA	NA	<5.8	11.6	55.7	67.3	
D-8@24	TD-16439-20B	2/7/2018	1306	24	1.4	1860	NA	NA	NA	NA	NA	NA	NA	NA	

Table 1 : Summary of Sample Analytical Results

Sample Location ID	Laboratory ID	Date	Time	Depth Collected (inches bgs)	PID (ppmv)	Chlorides (mg/Kg)	Benzene (ug/Kg)	Toluene (ug/Kg)	Ethylbenzene (ug/Kg)	Xylene (ug/Kg)	TPH [GRO: C6-C10] (mg/Kg)	TPH [DRO: C10-C22] (mg/Kg)	TPH [MRO: C22-C36] (mg/Kg)	TPH [C6-C35] (mg/Kg)	Utilized in UCL/UTL Calculations
DUP-4 (D-8@6)	TD16439-47	2/7/2018	1306	6	1.8	2700	NA	NA	NA	NA	<5.5	20.5	75.9	96.4	
D-9@6	TD16439-21	2/7/2018	1508	6	0.3	142	NA	NA	NA	NA	<5.4	3.86	J	13.7	17.56
D-9@10	TD16439-22	2/7/2018	1508	10	0.5	242	NA	NA	NA	NA	<5.5	3.5	J	7.74	11.24
D-9@10									refusal						
D-10@6	TD16439-23	2/7/2018	1532	6	0.4	204	NA	NA	NA	NA	<5.7	2.79	J	4.1	6.89
D-10@9	TD16439-24	2/7/2018	1532	9	0.5	492	NA	NA	NA	NA	<5.4	6.65		35.7	42.35
D-10@9									refusal						
D-11@6	TD16439-25	2/7/2018	1600	6	0.4	94.3	NA	NA	NA	NA	<5.8	3.94	J	7.07	11.01
D-11@9	TD16439-26	2/7/2018	1600	9	0.8	95.2	NA	NA	NA	NA	8.89	5.84		17.2	23.04
D-11@9									refusal						
D-12@6	TD16439-27	2/7/2018	1624	6	0.5	72.9	NA	NA	NA	NA	<5.2	4.79	J	13.9	18.69
D-12@9	TD16439-28	2/7/2018	1624	9	1	71.9	NA	NA	NA	NA	<5.2	13.5		108	121.5
D-12@9									refusal						
D-13@6	TD16439-29	2/7/2018	1630	6	0.8	1170	NA	NA	NA	NA	<5.6	3.75	J	9.01	12.76
D-13@8	TD16439-30	2/7/2018	1630	8	0.5	1090	NA	NA	NA	NA	<5.6	4.44	J	14.4	18.84
D-13@20	TD16439-31B	2/7/2018	1630		1.6	185	NA	NA	NA	NA	NA	NA		NA	NA
D-14@6	TD16439-32	2/7/2018	1443	6	0.6	428	NA	NA	NA	NA	<5.7	4.95	J	12.8	17.75
D-14@9	TD16439-33	2/7/2018	1443	9	1	753	NA	NA	NA	NA	<5.2	4.59	J	16.1	20.69
D-14@9									refusal						
D-15@6	TD16439-34	2/7/2018	1452	6	0.8	1990	NA	NA	NA	NA	<5.8	3.86	J	10.9	14.76
D-15@20	TD16439-35	2/7/2018	1452	20	1.4	359	NA	NA	NA	NA	<6.2	3.21	J	<2.8	3.21
D-15@20									refusal						
D-16@6	TD16439-36	2/7/2018	1702	6	0.9	1900	NA	NA	NA	NA	<5.6	4.37	J	12.6	16.97
D-16@9	TD16439-37	2/7/2018	1702	9	5.2	1790	NA	NA	NA	NA	<5.5	3.5	J	4.24	7.74
D-16@9									refusal						
D-17@6	TD16466-11	2/8/2018	1016	6	0	355	NA	NA	NA	NA	<6.8	5.63	J	14.7	20.33
D-17@16	TD16466-12	2/8/2018	1016	16	0.1	260	NA	NA	NA	NA	<6.4	43.7		154	197.7
D-17@16									refusal						
D-18@6	TD16466-13	2/8/2018	1100	6	0	600	NA	NA	NA	NA	<6.6	8.87		26.5	35.37
D-18@24	TD16466-14	2/8/2018	1100	24	0.2	838	NA	NA	NA	NA	<6.1	12.8		33.8	46.6
D-18@28	TD16466-15R	2/8/2018	1100	28	0.1	197	NA	NA	NA	NA	NA	NA		NA	NA
DUP-9 (D-18@6)	TD16466-23	2/8/2018	1100	6	0	692	NA	NA	NA	NA	<5.6	6.59		20.7	27.29
D-19@6	TD16466-16	2/8/2018	1111	6	0	222	NA	NA	NA	NA	<5.7	83.9		300	383.9
D-19@18	TD16466-17	2/8/2018	1111	18	0.1	308	NA	NA	NA	NA	<4.9	26.6		107	133.6
D-19@30	TD16466-18A	2/8/2018	1111	30	0.1	NA	NA	NA	NA	NA	<5.6	12.4		39.8	52.2
D-20@6	TD16466-19	2/8/2018	1253	6	1.2	80.2	NA	NA	NA	NA	<6.2	3.7	J	3.8	7.5
D-20@13	TD16466-20	2/8/2018	1253	13	1.3	158	NA	NA	NA	NA	<6.8	7.3		16.9	24.2
D-20@13									refusal						
D-21@6	TD16466-21	2/8/2018	1302	6	2.5	66.9	NA	NA	NA	NA	<6.9	6.51		14.7	21.21
D-21@13	TD16466-22	2/8/2018	1302	13	1.2	85.2	NA	NA	NA	NA	<7.3	5.57	J	11	16.57
D-21@13									refusal						
DUP-10 (D-21@6)	TD16466-24	2/8/2018	1302	6	2.5	<5.6	NA	NA	NA	NA	<6.1	12.6		48.1	60.7
SP-1 [A]	TD16465-1	2/8/2018	750	3	0.6	6.7	0.42 "J"	1.0 "J"	<0.58	<1.2	<5.7	<2.7		3.00	3.00
SP-1 [B]	TD16465-2	2/8/2018	753	3	0.3	1030	0.74	2.1 "J"	0.77 "J"	1.5 "J"	12.70	81.20		196.00	289.90
SP-1 [C]	TD16465-3	2/8/2018	757	3	0.5	558	0.51 "J"	0.86 "J"	<0.63	<1.3	<5.4	19.60		187.00	206.60
SP-2 [A]	TD16465-4	2/8/2018	809	3	0	16500	0.42 "J"	1.1 "J"	<0.62	<1.2	6.40	3.44	J	5.75	15.59
SP-2 [B]	TD16465-5	2/8/2018	813	3	0.2	21100	0.53	1.1 "J"	<0.60	<1.2	<5.1	14.10		35.00	49.10
SP-2 [C]	TD16465-6	2/8/2018	821	3	0	15700	<0.35	<0.46	<0.58	<1.2	<5.3	236.00		469.00	705.00
DUP-5 (SP-1 [A])	TD16465-7	2/8/2018	750	3	0.6	6.5	<0.34	4.3 "J"	<0.57	1.2 "J"	5.85	2.74	J	4.81	13.40
BUC-1@6	NA	2/8/2018	1500	5	3.2										
BUC-1@8	TD16424-2A	2/8/2018	1500	8	1.1	1530	NA	NA	NA	NA	NA	NA		NA	NA
BUC-1@9									refusal						
BUC-2@6	NRA	2/8/2018	1520	6	1.9										
BUC-2@12	NRA	2/8/2018	1520	12	0.4										
BUC-2@12									refusal						
BUC-3@6	NRA	2/8/2018	1545	6	1.8										
BUC-3@10	NRA	2/8/2018	1545	10	5.4										
BUC-3@10									refusal						
BUC-4@6	NRA	2/8/2018	1608	6	4.3										
BUC-4@9	NRA	2/8/2018	1608	9	1.9										
BUC-4@9									refusal						
BUC-5@6	TD16424-9R	2/8/2018	1615	6	3.7	18.5	NA	NA	NA	NA	10.5	9.31		42.1	61.91
BUC-5@12	TD16424-10R	2/8/2018	1615	12	2.1	20.1	NA	NA	NA	NA	<5.9	7.56		16.6	24.16
BUC-5@12									refusal						
BUC-6@6	NRA	2/8/2018	855	6	0.6										
BUC-6@8	TD16489-2R	2/8/2018	855	8	1.7	186	NA	NA	NA	NA	NA	NA		NA	NA
BUC-6@8									refusal						
BUC-7@6	NRA	2/8/2018	903	6	1.3										
BUC-7@10	TD16489-4R	2/8/2018	903	10	1.3	62.6	NA	NA	NA	NA	NA	NA		NA	NA
BUC-7@10									refusal						
BUC-8@6	NRA	2/8/2018	913	6	1.1										
BUC-8@8	TD16489-6R	2/8/2018	913	8	1.3	68.1	NA	NA	NA	NA	NA	NA		NA	NA
BUC-8@8									refusal						
BUC-9@6	TD16489-7R	2/8/2018	923	6	1.2	43.6	NA	NA	NA	NA	NA	NA		NA	NA
BUC-9@12	TD16489-8R	2/8/2018	923	12	1.5	29.3	NA	NA	NA	NA	NA	NA		NA	NA
BUC-9@12									refusal						
BUC-10@6	NRA	2/8/2018	946	6	1.5										
BUC-10@16	NRA	2/8/2018	946	16	0.4										
BUC-10@24	NRA	2/8/2018	946	24	0.7										
DUP-6 (BUC-10@24)	NRA	2/8/2018	946	24	0.7										
BUC-11@6	TD16489-12A	2/8/2018	1006	6	0.2	358	NA	NA	NA	NA	<5.7	26.7		110	136.7
BUC-11@13	TD16489-13A	2/8/2018	1006	13	0.5	441	NA	NA	NA	NA	<5.4	7.44		19.1	26.54
BUC-11@13									refusal						
DUP-7 (BUC-11@13)	TD16489-34R	2/8/2018	1006	13	0.5	500	NA	NA	NA	NA	NA	NA		NA	NA
BUC-12@6	TD16489-14A	2/8/2018	1025	6	0.2	43.3	NA	NA	NA	NA	<6.2	15.4		49.5	64.9
BUC-12@18	TD16489-15A	2/8/2018	1025	18	0.3	28.6	NA	NA	NA	NA	<5.6	14.9		67.6	82.5

Table 1 : Summary of Sample Analytical Results

Sample Location ID	Laboratory ID	Date	Time	Depth Collected (inches bgs)	PID (ppmv)	Chlorides (mg/Kg)	Benzene (ug/Kg)	Toluene (ug/Kg)	Ethylbenzene (ug/Kg)	Xylene (ug/Kg)	TPH [GRO: C6-C10] (mg/Kg)	TPH [DRO:C10-C22] (mg/Kg)	TPH [MRO: C22-C36] (mg/Kg)	TPH [C6-C35] (mg/Kg)	Utilized in UCL/UTL Calculations
BUC-12@18															
BUC-13@6	NRA	2/8/2018	1050	6	0.2										
BUC-13@20	NRA	2/8/2018	1050	20	0.2										
BUC-13@30	NRA	2/8/2018	1050	30	0.3										
BUC-14@6	NRA	2/8/2018	1125	6	0.4										
BUC-14@24	NRA	2/8/2018	1125	24	0.2										
BUC-14@32	NRA	2/8/2018	1125	32	0.3										
BUC-15@6	TD16489-22R	2/8/2018	1245	6	3.8	47.9	NA	NA	NA	NA	NA	NA	NA	NA	NA
BUC-15@24	TD16489-23R	2/8/2018	1245	24	2.4	658	NA	NA	NA	NA	NA	NA	NA	NA	NA
BUC-15@30	TD16489-24R	2/8/2018	1245	30	2.6	1650	NA	NA	NA	NA	NA	NA	NA	NA	NA
BUC-16@6	NRA	2/8/2018	1313	6	4.6										
BUC-16@9	TD16489-26R	2/8/2018	1313	9	4.6	317	NA	NA	NA	NA	NA	NA	NA	NA	NA
BUC-16@9															
BUC-17@6	NRA	2/8/2018	1320	6	3.2										
BUC-17@8	NRA	2/8/2018	1320	8	3.3										
BUC-17@8															
BUC-18@6	NRA	2/8/2018	1329	6	3										
BUC-18@9	TD16489-30R	2/8/2018	1329	9	4.8	22.6	NA	NA	NA	NA	NA	NA	NA	NA	NA
BUC-18@9															
DUP-8 (BUC-18@9)	TD16489-35R	2/8/2018	1329	9	4.8	37.0	NA	NA	NA	NA	NA	NA	NA	NA	NA
BUC-19@6	Hold	2/8/2018	1336	6	5.7										
BUC-19@8	TD16489-32R	2/8/2018	1336	8	3.9	40.5	NA	NA	NA	NA	NA	NA	NA	NA	NA
BUC-19@8															

Bolded results indicate an exceedance over established concentrations (UTL + OCD Site Ranking). Excludes SP and Berm Data

Bolded results indicate an exceedance over established concentrations (OCD Site Ranking). Excludes SP and Berm Data

*Establishing UTL + OCD Site Ranking for chlorides will require discussions with NMOCD for concurrence.

NRA = Not required for analysis as area delineated by other sample locations

NA = Not analyzed

UCL = Upper Confidence Level/Limit

UTL = Upper Tolerance Level/Limit

Appendix C: Laboratory Analytical Reports (enclosed CD only)

Following Reports are enclosed:

TD16243

TD16424

TD16439

TD16465

TD16466

TD16489

The results set forth herein are provided by SGS North America Inc.

e-Hardcopy 2.0
Automated Report

Technical Report for

EnTech Consulting Corporation

CJES State AB SWD #1/LEA Co,N Mex

SGS Job Number: TD16243

Sampling Date: 02/05/18


Report to:

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Total number of pages in report: 106



Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable.


Richard Rodriguez
Laboratory Director

Client Service contact: Sylvia Garza 713-271-4700

Certifications: TX (T104704220-18-28) AR (14-016-0) AZ (AZ0769) FL (E87628)
KS (E-10366) LA (85695/04004) NJ (TX010) OK (2017-002) VA (8999)

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Test results relate only to samples analyzed.

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Sample Summary

EnTech Consulting Corporation

Job No: TD16243

CJES State AB SWD #1/LEA Co,N Mex

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
TD16243-1	02/05/18	11:24	02/07/18	SO	Soil	B1@5' (SOIL BORING)
TD16243-2	02/05/18	11:26	02/07/18	SO	Soil	B1@10' (SOIL BORING)
TD16243-3	02/05/18	11:29	02/07/18	SO	Soil	B1@20' (SOIL BORING)
TD16243-4	02/05/18	12:05	02/07/18	SO	Soil	B2@5' (SOIL BORING)
TD16243-5	02/05/18	12:10	02/07/18	SO	Soil	B2@10' (SOIL BORING)
TD16243-6	02/05/18	12:15	02/07/18	SO	Soil	B2@20' (SOIL BORING)
TD16243-7	02/05/18	12:42	02/07/18	SO	Soil	B3@5' (SOIL BORING)
TD16243-8	02/05/18	12:44	02/07/18	SO	Soil	B3@10' (SOIL BORING)
TD16243-9	02/05/18	12:50	02/07/18	SO	Soil	B3@20' (SOIL BORING)
TD16243-10	02/05/18	13:24	02/07/18	SO	Soil	B4@5' (SOIL BORING)
TD16243-11	02/05/18	13:25	02/07/18	SO	Soil	B4@10' (SOIL BORING)
TD16243-12	02/05/18	13:31	02/07/18	SO	Soil	B4@20' (SOIL BORING)
TD16243-13	02/05/18	07:25	02/07/18	SO	Soil	BG-1 (BACKGROUND)

Soil samples reported on a dry weight basis unless otherwise indicated on result page.



Sample Summary
(continued)

EnTech Consulting Corporation

Job No: TD16243

CJES State AB SWD #1/LEA Co,N Mex

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
TD16243-14	02/05/18	07:28	02/07/18	SO	Soil	BG-2 (BACKGROUND)
TD16243-15	02/05/18	07:31	02/07/18	SO	Soil	BG-3 (BACKGROUND)
TD16243-16	02/05/18	07:35	02/07/18	SO	Soil	BG-4 (BACKGROUND)
TD16243-17	02/05/18	07:39	02/07/18	SO	Soil	BG-5 (BACKGROUND)
TD16243-18	02/05/18	07:43	02/07/18	SO	Soil	BG-6 (BACKGROUND)
TD16243-19	02/05/18	08:05	02/07/18	SO	Soil	BG-7 (BACKGROUND)
TD16243-20	02/05/18	08:09	02/07/18	SO	Soil	BG-8 (BACKGROUND)
TD16243-21	02/05/18	08:13	02/07/18	SO	Soil	BG-9 (BACKGROUND)
TD16243-22	02/05/18	08:17	02/07/18	SO	Soil	BG-10 (BACKGROUND)
TD16243-23	02/05/18	00:00	02/07/18	SO	Soil	DUP-01

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

Summary of Hits

Job Number: TD16243
 Account: EnTech Consulting Corporation
 Project: CJES State AB SWD #1/LEA Co,N Mex
 Collected: 02/05/18

Lab Sample ID	Client Sample ID	Result/ Analyte	RL	MDL	Units	Method
TD16243-1	B1@5' (SOIL BORING)					
TPH (> C22-C36) ^a		10.3	5.3	2.7	mg/kg	SW846 8015C
Chloride		382	11		mg/kg	EPA 300.0
TD16243-2	B1@10' (SOIL BORING)					
TPH (> C22-C36) ^a		4.91 J	5.3	2.7	mg/kg	SW846 8015C
Chloride		318	26		mg/kg	EPA 300.0
TD16243-3	B1@20' (SOIL BORING)					
TPH (> C22-C36) ^a		4.83 J	5.3	2.7	mg/kg	SW846 8015C
Chloride		171	27		mg/kg	EPA 300.0
TD16243-4	B2@5' (SOIL BORING)					
TPH (C10-C22) ^a		47.5	26	13	mg/kg	SW846 8015C
TPH (> C22-C36) ^a		295	26	13	mg/kg	SW846 8015C
Chloride		308	26		mg/kg	EPA 300.0
TD16243-5	B2@10' (SOIL BORING)					
TPH (> C22-C36) ^b		16.6	5.4	2.7	mg/kg	SW846 8015C
Chloride		956	54		mg/kg	EPA 300.0
TD16243-6	B2@20' (SOIL BORING)					
TPH (C10-C22) ^a		3.26 J	5.2	2.6	mg/kg	SW846 8015C
TPH (> C22-C36) ^a		12.8	5.2	2.6	mg/kg	SW846 8015C
Chloride		1130	52		mg/kg	EPA 300.0
TD16243-7	B3@5' (SOIL BORING)					
TPH (C10-C22) ^a		21.6 J	22	11	mg/kg	SW846 8015C
TPH (> C22-C36) ^a		131	22	11	mg/kg	SW846 8015C
Chloride		359	26		mg/kg	EPA 300.0
TD16243-8	B3@10' (SOIL BORING)					
TPH (C10-C22) ^a		2.77 J	5.3	2.7	mg/kg	SW846 8015C
TPH (> C22-C36) ^a		10.6	5.3	2.7	mg/kg	SW846 8015C
Chloride		110	5.2		mg/kg	EPA 300.0

Summary of Hits

Job Number: TD16243
Account: EnTech Consulting Corporation
Project: CJES State AB SWD #1/LEA Co,N Mex
Collected: 02/05/18

Lab Sample ID	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
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TD16243-9 B3@20' (SOIL BORING)

TPH (> C22-C36) ^a	9.71	5.2	2.6	mg/kg	SW846 8015C
Chloride	103	5.1		mg/kg	EPA 300.0

TD16243-10 B4@5' (SOIL BORING)

TPH (C10-C22) ^a	64.1	27	14	mg/kg	SW846 8015C
TPH (> C22-C36) ^a	365	27	14	mg/kg	SW846 8015C
Chloride	1350	54		mg/kg	EPA 300.0

TD16243-11 B4@10' (SOIL BORING)

TPH (C10-C22) ^a	4.55 J	5.6	2.8	mg/kg	SW846 8015C
TPH (> C22-C36) ^a	23.0	5.6	2.8	mg/kg	SW846 8015C
Chloride	662	56		mg/kg	EPA 300.0

TD16243-12 B4@20' (SOIL BORING)

TPH (C10-C22) ^a	3.01 J	5.4	2.7	mg/kg	SW846 8015C
TPH (> C22-C36) ^a	13.8	5.4	2.7	mg/kg	SW846 8015C
Chloride	811	54		mg/kg	EPA 300.0

TD16243-13 BG-1 (BACKGROUND)

TPH (C10-C22) ^a	5.07	5.0	2.5	mg/kg	SW846 8015C
TPH (> C22-C36) ^a	31.8	5.0	2.5	mg/kg	SW846 8015C
Chloride	11.3	5.0		mg/kg	EPA 300.0

TD16243-14 BG-2 (BACKGROUND)

TPH (> C22-C36) ^a	18.7	5.1	2.5	mg/kg	SW846 8015C
Chloride	24.8	5.1		mg/kg	EPA 300.0

TD16243-15 BG-3 (BACKGROUND)

TPH (C10-C22) ^a	5.17 J	6.3	3.1	mg/kg	SW846 8015C
TPH (> C22-C36) ^a	24.7	6.3	3.1	mg/kg	SW846 8015C
Chloride	10.8	6.3		mg/kg	EPA 300.0

TD16243-16 BG-4 (BACKGROUND)

TPH (C10-C22) ^a	5.06 J	5.7	2.8	mg/kg	SW846 8015C
TPH (> C22-C36) ^a	26.6	5.7	2.8	mg/kg	SW846 8015C
Chloride	8.3	5.7		mg/kg	EPA 300.0

Summary of Hits

Job Number: TD16243
 Account: EnTech Consulting Corporation
 Project: CJES State AB SWD #1/LEA Co,N Mex
 Collected: 02/05/18

Lab Sample ID	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
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TD16243-17 BG-5 (BACKGROUND)

TPH (C10-C22) ^a	3.08 J	5.0	2.5	mg/kg	SW846 8015C
TPH (> C22-C36) ^a	20.9	5.0	2.5	mg/kg	SW846 8015C
Chloride	10.5	5.1		mg/kg	EPA 300.0

TD16243-18 BG-6 (BACKGROUND)

TPH (C10-C22) ^a	3.35 J	5.0	2.5	mg/kg	SW846 8015C
TPH (> C22-C36) ^a	30.8	5.0	2.5	mg/kg	SW846 8015C
Chloride	14.0	5.1		mg/kg	EPA 300.0

TD16243-19 BG-7 (BACKGROUND)

TPH (C10-C22) ^a	5.07	5.0	2.5	mg/kg	SW846 8015C
TPH (> C22-C36) ^a	36.2	5.0	2.5	mg/kg	SW846 8015C
Chloride	6.4	5.0		mg/kg	EPA 300.0

TD16243-20 BG-8 (BACKGROUND)

TPH (C10-C22) ^a	3.99 J	5.0	2.5	mg/kg	SW846 8015C
TPH (> C22-C36) ^a	26.9	5.0	2.5	mg/kg	SW846 8015C
Chloride	6.4	5.1		mg/kg	EPA 300.0

TD16243-21 BG-9 (BACKGROUND)

TPH (> C22-C36) ^a	7.09	5.1	2.6	mg/kg	SW846 8015C
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TD16243-22 BG-10 (BACKGROUND)

TPH (C10-C22) ^a	3.32 J	5.2	2.6	mg/kg	SW846 8015C
TPH (> C22-C36) ^a	17.2	5.2	2.6	mg/kg	SW846 8015C
Chloride	5.7	5.2		mg/kg	EPA 300.0

TD16243-23 DUP-01

TPH (> C22-C36) ^a	17.1	5.1	2.5	mg/kg	SW846 8015C
Chloride	30.8	5.0		mg/kg	EPA 300.0

(a) Analysis performed at SGS Orlando, FL.

(b) Re-extract results reported because they were significantly higher than original results. Sample re-extracted beyond hold-time. Analysis performed at SGS Orlando, FL.



Houston, TX

Section 3



Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	B1@5' (SOIL BORING)	Date Sampled:	02/05/18
Lab Sample ID:	TD16243-1	Date Received:	02/07/18
Matrix:	SO - Soil	Percent Solids:	93.5
Method:	SW846 8015C		
Project:	CJES State AB SWD #1/LEA Co,N Mex		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	CD149150.D	1	02/16/18 19:33	AFL	n/a	n/a	F:GCD6225
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.19 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	5.5	2.7	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
460-00-4	4-Bromofluorobenzene	83%		56-149%		
98-08-8	aaa-Trifluorotoluene	73%		66-132%		

(a) Analysis performed at SGS Orlando, FL.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	B1@5' (SOIL BORING)	Date Sampled:	02/05/18
Lab Sample ID:	TD16243-1	Date Received:	02/07/18
Matrix:	SO - Soil	Percent Solids:	93.5
Method:	SW846 8015C SW846 3546		
Project:	CJES State AB SWD #1/LEA Co,N Mex		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	WW14791.D	1	02/15/18 18:43	AFL	02/15/18 08:30	F:OP68788	F:GWW596
Run #2							

Run #	Initial Weight	Final Volume
Run #1	20.1 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C22)	ND	5.3	2.7	mg/kg	
	TPH (> C22-C36)	10.3	5.3	2.7	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	100%		56-122%

(a) Analysis performed at SGS Orlando, FL.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	B1@5' (SOIL BORING)	Date Sampled:	02/05/18
Lab Sample ID:	TD16243-1	Date Received:	02/07/18
Matrix:	SO - Soil	Percent Solids:	93.5
Project:	CJES State AB SWD #1/LEA Co,N Mex		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	382	11	mg/kg	2	02/08/18 19:48	SM	EPA 300.0
Solids, Percent	93.5		%	1	02/10/18	TH	SM 2540 G

RL = Reporting Limit

Report of Analysis

Client Sample ID:	B1@10' (SOIL BORING)	Date Sampled:	02/05/18
Lab Sample ID:	TD16243-2	Date Received:	02/07/18
Matrix:	SO - Soil	Percent Solids:	94.1
Method:	SW846 8015C		
Project:	CJES State AB SWD #1/LEA Co,N Mex		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	CD149154.D	1	02/16/18 21:20	AFL	n/a	n/a	F:GCD6225
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.66 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	5.0	2.5	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
460-00-4	4-Bromofluorobenzene	80%		56-149%		
98-08-8	aaa-Trifluorotoluene	72%		66-132%		

(a) Analysis performed at SGS Orlando, FL.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	B1@10' (SOIL BORING)	Date Sampled:	02/05/18
Lab Sample ID:	TD16243-2	Date Received:	02/07/18
Matrix:	SO - Soil	Percent Solids:	94.1
Method:	SW846 8015C SW846 3546		
Project:	CJES State AB SWD #1/LEA Co,N Mex		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	WW14792.D	1	02/15/18 19:12	AFL	02/15/18 08:30	F:OP68788	F:GWW596
Run #2							

Run #	Initial Weight	Final Volume
Run #1	20.0 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C22)	ND	5.3	2.7	mg/kg	
	TPH (> C22-C36)	4.91	5.3	2.7	mg/kg	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	85%		56-122%

(a) Analysis performed at SGS Orlando, FL.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	B1@10' (SOIL BORING)	Date Sampled:	02/05/18
Lab Sample ID:	TD16243-2	Date Received:	02/07/18
Matrix:	SO - Soil	Percent Solids:	94.1
Project:	CJES State AB SWD #1/LEA Co,N Mex		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	318	26	mg/kg	5	02/08/18 21:07	SM	EPA 300.0
Solids, Percent	94.1		%	1	02/10/18	TH	SM 2540 G

RL = Reporting Limit

Report of Analysis

Client Sample ID:	B1@20' (SOIL BORING)	Date Sampled:	02/05/18
Lab Sample ID:	TD16243-3	Date Received:	02/07/18
Matrix:	SO - Soil	Percent Solids:	92.3
Method:	SW846 8015C		
Project:	CJES State AB SWD #1/LEA Co,N Mex		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	CD149155.D	1	02/16/18 21:47	AFL	n/a	n/a	F:GCD6225
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.05 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	5.8	2.9	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
460-00-4	4-Bromofluorobenzene	80%		56-149%		
98-08-8	aaa-Trifluorotoluene	73%		66-132%		

(a) Analysis performed at SGS Orlando, FL.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	B1@20' (SOIL BORING)	Date Sampled:	02/05/18
Lab Sample ID:	TD16243-3	Date Received:	02/07/18
Matrix:	SO - Soil	Percent Solids:	92.3
Method:	SW846 8015C SW846 3546		
Project:	CJES State AB SWD #1/LEA Co,N Mex		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	WW14793.D	1	02/15/18 19:41	AFL	02/15/18 08:30	F:OP68788	F:GWW596
Run #2							

Run #	Initial Weight	Final Volume
Run #1	20.4 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C22)	ND	5.3	2.7	mg/kg	
	TPH (> C22-C36)	4.83	5.3	2.7	mg/kg	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	92%		56-122%

(a) Analysis performed at SGS Orlando, FL.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	B1@20' (SOIL BORING)	Date Sampled:	02/05/18
Lab Sample ID:	TD16243-3	Date Received:	02/07/18
Matrix:	SO - Soil	Percent Solids:	92.3
Project:	CJES State AB SWD #1/LEA Co,N Mex		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	171	27	mg/kg	5	02/08/18 21:23	SM	EPA 300.0
Solids, Percent	92.3		%	1	02/10/18	TH	SM 2540 G

RL = Reporting Limit

Report of Analysis

Client Sample ID:	B2@5' (SOIL BORING)	Date Sampled:	02/05/18
Lab Sample ID:	TD16243-4	Date Received:	02/07/18
Matrix:	SO - Soil	Percent Solids:	93.9
Method:	SW846 8015C		
Project:	CJES State AB SWD #1/LEA Co,N Mex		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	CD149156.D	1	02/16/18 22:13	AFL	n/a	n/a	F:GCD6225
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.31 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	5.3	2.7	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
460-00-4	4-Bromofluorobenzene	81%		56-149%		
98-08-8	aaa-Trifluorotoluene	72%		66-132%		

(a) Analysis performed at SGS Orlando, FL.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	B2@5' (SOIL BORING)	Date Sampled:	02/05/18
Lab Sample ID:	TD16243-4	Date Received:	02/07/18
Matrix:	SO - Soil	Percent Solids:	93.9
Method:	SW846 8015C SW846 3546		
Project:	CJES State AB SWD #1/LEA Co,N Mex		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	WW14794.D	5	02/15/18 20:10	AFL	02/15/18 08:30	F:OP68788	F:GWW596
Run #2							

Run #	Initial Weight	Final Volume
Run #1	20.2 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C22)	47.5	26	13	mg/kg	
	TPH (> C22-C36)	295	26	13	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
84-15-1	o-Terphenyl	96%		56-122%		

(a) Analysis performed at SGS Orlando, FL.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	B2@5' (SOIL BORING)	Date Sampled:	02/05/18
Lab Sample ID:	TD16243-4	Date Received:	02/07/18
Matrix:	SO - Soil	Percent Solids:	93.9
Project:	CJES State AB SWD #1/LEA Co,N Mex		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	308	26	mg/kg	5	02/08/18 21:39	SM	EPA 300.0
Solids, Percent	93.9		%	1	02/10/18	TH	SM 2540 G

RL = Reporting Limit

Report of Analysis

Client Sample ID:	B2@10' (SOIL BORING)	Date Sampled:	02/05/18
Lab Sample ID:	TD16243-5	Date Received:	02/07/18
Matrix:	SO - Soil	Percent Solids:	92.4
Method:	SW846 8015C		
Project:	CJES State AB SWD #1/LEA Co,N Mex		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	CD149157.D	1	02/16/18 22:40	AFL	n/a	n/a	F:GCD6225
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.35 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	5.5	2.7	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
460-00-4	4-Bromofluorobenzene	81%		56-149%		
98-08-8	aaa-Trifluorotoluene	73%		66-132%		

(a) Analysis performed at SGS Orlando, FL.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	B2@10' (SOIL BORING)	Date Sampled:	02/05/18
Lab Sample ID:	TD16243-5	Date Received:	02/07/18
Matrix:	SO - Soil	Percent Solids:	92.4
Method:	SW846 8015C SW846 3546		
Project:	CJES State AB SWD #1/LEA Co,N Mex		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	WW14868.D	1	02/22/18 21:32	AFL	02/22/18 09:15	F:OP68867	F:GWW600
Run #2 ^b	WW14802.D	1	02/19/18 20:35	AFL	02/19/18 08:09	F:OP68811	F:GWW597

	Initial Weight	Final Volume
Run #1	20.1 g	1.0 ml
Run #2	20.4 g	1.0 ml

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C22)	ND	5.4	2.7	mg/kg	
	TPH (> C22-C36)	16.6	5.4	2.7	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	91%	46%	56-122%

(a) Re-extract results reported because they were significantly higher than original results. Sample re-extracted beyond hold-time. Analysis performed at SGS Orlando, FL.

(b) Confirmation run. Analysis performed at SGS Orlando, FL.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	B2@10' (SOIL BORING)	Date Sampled:	02/05/18
Lab Sample ID:	TD16243-5	Date Received:	02/07/18
Matrix:	SO - Soil	Percent Solids:	92.4
Project:	CJES State AB SWD #1/LEA Co,N Mex		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	956	54	mg/kg	10	02/08/18 21:55	SM	EPA 300.0
Solids, Percent	92.4		%	1	02/10/18	TH	SM 2540 G

RL = Reporting Limit

Report of Analysis

Client Sample ID:	B2@20' (SOIL BORING)	Date Sampled:	02/05/18
Lab Sample ID:	TD16243-6	Date Received:	02/07/18
Matrix:	SO - Soil	Percent Solids:	94.4
Method:	SW846 8015C		
Project:	CJES State AB SWD #1/LEA Co,N Mex		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	CD149158.D	1	02/16/18 23:07	AFL	n/a	n/a	F:GCD6225
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.13 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	5.5	2.7	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
460-00-4	4-Bromofluorobenzene	80%		56-149%		
98-08-8	aaa-Trifluorotoluene	72%		66-132%		

(a) Analysis performed at SGS Orlando, FL.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	B2@20' (SOIL BORING)	Date Sampled:	02/05/18
Lab Sample ID:	TD16243-6	Date Received:	02/07/18
Matrix:	SO - Soil	Percent Solids:	94.4
Method:	SW846 8015C SW846 3546		
Project:	CJES State AB SWD #1/LEA Co,N Mex		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	WW14803.D	1	02/19/18 21:03	AFL	02/19/18 08:09	F:OP68811	F:GWW597
Run #2							

Run #	Initial Weight	Final Volume
Run #1	20.2 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C22)	3.26	5.2	2.6	mg/kg	J
	TPH (> C22-C36)	12.8	5.2	2.6	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	65%		56-122%

(a) Analysis performed at SGS Orlando, FL.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	B2@20' (SOIL BORING)	Date Sampled:	02/05/18
Lab Sample ID:	TD16243-6	Date Received:	02/07/18
Matrix:	SO - Soil	Percent Solids:	94.4
Project:	CJES State AB SWD #1/LEA Co,N Mex		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	1130	52	mg/kg	10	02/08/18 22:11	SM	EPA 300.0
Solids, Percent	94.4		%	1	02/10/18	TH	SM 2540 G

RL = Reporting Limit

Report of Analysis

Client Sample ID:	B3@5' (SOIL BORING)	Date Sampled:	02/05/18
Lab Sample ID:	TD16243-7	Date Received:	02/07/18
Matrix:	SO - Soil	Percent Solids:	92.9
Method:	SW846 8015C		
Project:	CJES State AB SWD #1/LEA Co,N Mex		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	CD149159.D	1	02/16/18 23:34	AFL	n/a	n/a	F:GCD6225
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.18 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	5.6	2.8	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
460-00-4	4-Bromofluorobenzene	82%		56-149%		
98-08-8	aaa-Trifluorotoluene	73%		66-132%		

(a) Analysis performed at SGS Orlando, FL.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	B3@5' (SOIL BORING)	Date Sampled:	02/05/18
Lab Sample ID:	TD16243-7	Date Received:	02/07/18
Matrix:	SO - Soil	Percent Solids:	92.9
Method:	SW846 8015C SW846 3546		
Project:	CJES State AB SWD #1/LEA Co,N Mex		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	WW14830.D	4	02/20/18 10:07	AFL	02/19/18 08:09	F:OP68811	F:GWW597
Run #2							

Run #	Initial Weight	Final Volume
Run #1	20.0 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C22)	21.6	22	11	mg/kg	J
	TPH (> C22-C36)	131	22	11	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	73%		56-122%

(a) Analysis performed at SGS Orlando, FL.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	B3@5' (SOIL BORING)	Date Sampled:	02/05/18
Lab Sample ID:	TD16243-7	Date Received:	02/07/18
Matrix:	SO - Soil	Percent Solids:	92.9
Project:	CJES State AB SWD #1/LEA Co,N Mex		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	359	26	mg/kg	5	02/08/18 22:27	SM	EPA 300.0
Solids, Percent	92.9		%	1	02/10/18	TH	SM 2540 G

RL = Reporting Limit

Report of Analysis

Client Sample ID:	B3@10' (SOIL BORING)	Date Sampled:	02/05/18
Lab Sample ID:	TD16243-8	Date Received:	02/07/18
Matrix:	SO - Soil	Percent Solids:	93.7
Method:	SW846 8015C		
Project:	CJES State AB SWD #1/LEA Co,N Mex		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	CD149160.D	1	02/17/18 00:01	AFL	n/a	n/a	F:GCD6226
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.12 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	5.5	2.8	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
460-00-4	4-Bromofluorobenzene	82%		56-149%		
98-08-8	aaa-Trifluorotoluene	74%		66-132%		

(a) Analysis performed at SGS Orlando, FL.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	B3@10' (SOIL BORING)	Date Sampled:	02/05/18
Lab Sample ID:	TD16243-8	Date Received:	02/07/18
Matrix:	SO - Soil	Percent Solids:	93.7
Method:	SW846 8015C SW846 3546		
Project:	CJES State AB SWD #1/LEA Co,N Mex		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	WW14831.D	1	02/20/18 10:36	AFL	02/19/18 08:09	F:OP68811	F:GWW597
Run #2							

Run #	Initial Weight	Final Volume
Run #1	20.1 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C22)	2.77	5.3	2.7	mg/kg	J
	TPH (> C22-C36)	10.6	5.3	2.7	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	66%		56-122%

(a) Analysis performed at SGS Orlando, FL.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	B3@10' (SOIL BORING)	Date Sampled:	02/05/18
Lab Sample ID:	TD16243-8	Date Received:	02/07/18
Matrix:	SO - Soil	Percent Solids:	93.7
Project:	CJES State AB SWD #1/LEA Co,N Mex		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	110	5.2	mg/kg	1	02/08/18 22:43	SM	EPA 300.0
Solids, Percent	93.7		%	1	02/10/18	TH	SM 2540 G

RL = Reporting Limit

Report of Analysis

Client Sample ID:	B3@20' (SOIL BORING)	Date Sampled:	02/05/18
Lab Sample ID:	TD16243-9	Date Received:	02/07/18
Matrix:	SO - Soil	Percent Solids:	95.9
Method:	SW846 8015C		
Project:	CJES State AB SWD #1/LEA Co,N Mex		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	CD149161.D	1	02/17/18 00:27	AFL	n/a	n/a	F:GCD6226
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.14 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	5.3	2.6	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
460-00-4	4-Bromofluorobenzene	81%		56-149%		
98-08-8	aaa-Trifluorotoluene	73%		66-132%		

(a) Analysis performed at SGS Orlando, FL.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	B3@20' (SOIL BORING)	Date Sampled:	02/05/18
Lab Sample ID:	TD16243-9	Date Received:	02/07/18
Matrix:	SO - Soil	Percent Solids:	95.9
Method:	SW846 8015C SW846 3546		
Project:	CJES State AB SWD #1/LEA Co,N Mex		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	WW14810.D	1	02/20/18 00:25	AFL	02/19/18 08:09	F:OP68811	F:GWW597
Run #2							

Run #	Initial Weight	Final Volume
Run #1	20.2 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C22)	ND	5.2	2.6	mg/kg	
	TPH (> C22-C36)	9.71	5.2	2.6	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	81%		56-122%

(a) Analysis performed at SGS Orlando, FL.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	B3@20' (SOIL BORING)	Date Sampled:	02/05/18
Lab Sample ID:	TD16243-9	Date Received:	02/07/18
Matrix:	SO - Soil	Percent Solids:	95.9
Project:	CJES State AB SWD #1/LEA Co,N Mex		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	103	5.1	mg/kg	1	02/08/18 22:59	SM	EPA 300.0
Solids, Percent	95.9		%	1	02/10/18	TH	SM 2540 G

RL = Reporting Limit

Report of Analysis

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Client Sample ID:	B4@5' (SOIL BORING)	Date Sampled:	02/05/18
Lab Sample ID:	TD16243-10	Date Received:	02/07/18
Matrix:	SO - Soil	Percent Solids:	91.9
Method:	SW846 8015C		
Project:	CJES State AB SWD #1/LEA Co,N Mex		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	CD149162.D	1	02/17/18 00:54	AFL	n/a	n/a	F:GCD6226
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.19 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	5.7	2.8	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
460-00-4	4-Bromofluorobenzene	81%		56-149%		
98-08-8	aaa-Trifluorotoluene	72%		66-132%		

(a) Analysis performed at SGS Orlando, FL.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	B4@5' (SOIL BORING)	
Lab Sample ID:	TD16243-10	Date Sampled: 02/05/18
Matrix:	SO - Soil	Date Received: 02/07/18
Method:	SW846 8015C SW846 3546	Percent Solids: 91.9
Project:	CJES State AB SWD #1/LEA Co,N Mex	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	WW14832.D	5	02/20/18 11:05	AFL	02/19/18 08:09	F:OP68811	F:GWW597
Run #2							

Run #	Initial Weight	Final Volume
Run #1	20.0 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C22)	64.1	27	14	mg/kg	
	TPH (> C22-C36)	365	27	14	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	78%		56-122%

(a) Analysis performed at SGS Orlando, FL.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	B4@5' (SOIL BORING)	Date Sampled:	02/05/18
Lab Sample ID:	TD16243-10	Date Received:	02/07/18
Matrix:	SO - Soil	Percent Solids:	91.9
Project:	CJES State AB SWD #1/LEA Co,N Mex		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	1350	54	mg/kg	10	02/08/18 23:14	SM	EPA 300.0
Solids, Percent	91.9		%	1	02/10/18	TH	SM 2540 G

RL = Reporting Limit

Report of Analysis

Client Sample ID:	B4@10' (SOIL BORING)	Date Sampled:	02/05/18
Lab Sample ID:	TD16243-11	Date Received:	02/07/18
Matrix:	SO - Soil	Percent Solids:	89.2
Method:	SW846 8015C		
Project:	CJES State AB SWD #1/LEA Co,N Mex		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	CD149166.D	1	02/17/18 02:41	AFL	n/a	n/a	F:GCD6226
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.06 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	6.1	3.1	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
460-00-4	4-Bromofluorobenzene	80%		56-149%		
98-08-8	aaa-Trifluorotoluene	73%		66-132%		

(a) Analysis performed at SGS Orlando, FL.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	B4@10' (SOIL BORING)	Date Sampled:	02/05/18
Lab Sample ID:	TD16243-11	Date Received:	02/07/18
Matrix:	SO - Soil	Percent Solids:	89.2
Method:	SW846 8015C SW846 3546		
Project:	CJES State AB SWD #1/LEA Co,N Mex		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	WW14833.D	1	02/20/18 11:34	AFL	02/19/18 08:09	F:OP68811	F:GWW597
Run #2							

Run #	Initial Weight	Final Volume
Run #1	20.1 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C22)	4.55	5.6	2.8	mg/kg	J
	TPH (> C22-C36)	23.0	5.6	2.8	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	76%		56-122%

(a) Analysis performed at SGS Orlando, FL.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	B4@10' (SOIL BORING)	Date Sampled:	02/05/18
Lab Sample ID:	TD16243-11	Date Received:	02/07/18
Matrix:	SO - Soil	Percent Solids:	89.2
Project:	CJES State AB SWD #1/LEA Co,N Mex		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	662	56	mg/kg	10	02/09/18 00:33	SM	EPA 300.0
Solids, Percent	89.2		%	1	02/10/18	TH	SM 2540 G

RL = Reporting Limit

Report of Analysis

Client Sample ID:	B4@20' (SOIL BORING)	Date Sampled:	02/05/18
Lab Sample ID:	TD16243-12	Date Received:	02/07/18
Matrix:	SO - Soil	Percent Solids:	92.1
Method:	SW846 8015C		
Project:	CJES State AB SWD #1/LEA Co,N Mex		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	CD149167.D	1	02/17/18 03:08	AFL	n/a	n/a	F:GCD6226
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.05 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	5.8	2.9	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
460-00-4	4-Bromofluorobenzene	79%		56-149%		
98-08-8	aaa-Trifluorotoluene	72%		66-132%		

(a) Analysis performed at SGS Orlando, FL.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	B4@20' (SOIL BORING)	Date Sampled:	02/05/18
Lab Sample ID:	TD16243-12	Date Received:	02/07/18
Matrix:	SO - Soil	Percent Solids:	92.1
Method:	SW846 8015C SW846 3546		
Project:	CJES State AB SWD #1/LEA Co,N Mex		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	WW14813.D	1	02/20/18 01:52	AFL	02/19/18 08:09	F:OP68811	F:GWW597
Run #2							

Run #	Initial Weight	Final Volume
Run #1	20.1 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C22)	3.01	5.4	2.7	mg/kg	J
	TPH (> C22-C36)	13.8	5.4	2.7	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	74%		56-122%

(a) Analysis performed at SGS Orlando, FL.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	B4@20' (SOIL BORING)	Date Sampled:	02/05/18
Lab Sample ID:	TD16243-12	Date Received:	02/07/18
Matrix:	SO - Soil	Percent Solids:	92.1
Project:	CJES State AB SWD #1/LEA Co,N Mex		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	811	54	mg/kg	10	02/09/18 01:21	SM	EPA 300.0
Solids, Percent	92.1		%	1	02/10/18	TH	SM 2540 G

RL = Reporting Limit

Report of Analysis

Client Sample ID:	BG-1 (BACKGROUND)	Date Sampled:	02/05/18
Lab Sample ID:	TD16243-13	Date Received:	02/07/18
Matrix:	SO - Soil	Percent Solids:	97.7
Method:	SW846 8015C		
Project:	CJES State AB SWD #1/LEA Co,N Mex		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	CD149168.D	1	02/17/18 03:34	AFL	n/a	n/a	F:GCD6226
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.09 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	5.1	2.6	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	79%		56-149%
98-08-8	aaa-Trifluorotoluene	71%		66-132%

(a) Analysis performed at SGS Orlando, FL.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	BG-1 (BACKGROUND)	
Lab Sample ID:	TD16243-13	Date Sampled: 02/05/18
Matrix:	SO - Soil	Date Received: 02/07/18
Method:	SW846 8015C SW846 3546	Percent Solids: 97.7
Project:	CJES State AB SWD #1/LEA Co,N Mex	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	WW14814.D	1	02/20/18 02:21	AFL	02/19/18 08:09	F:OP68811	F:GWW597
Run #2							

Run #	Initial Weight	Final Volume
Run #1	20.4 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C22)	5.07	5.0	2.5	mg/kg	
	TPH (> C22-C36)	31.8	5.0	2.5	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	65%		56-122%

(a) Analysis performed at SGS Orlando, FL.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	BG-1 (BACKGROUND)	Date Sampled:	02/05/18
Lab Sample ID:	TD16243-13	Date Received:	02/07/18
Matrix:	SO - Soil	Percent Solids:	97.7
Project:	CJES State AB SWD #1/LEA Co,N Mex		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	11.3	5.0	mg/kg	1	02/09/18 01:37	SM	EPA 300.0
Solids, Percent	97.7		%	1	02/10/18	TH	SM 2540 G

RL = Reporting Limit

Report of Analysis

Client Sample ID:	BG-2 (BACKGROUND)	Date Sampled:	02/05/18
Lab Sample ID:	TD16243-14	Date Received:	02/07/18
Matrix:	SO - Soil	Percent Solids:	97.8
Method:	SW846 8015C		
Project:	CJES State AB SWD #1/LEA Co,N Mex		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	CD149169.D	1	02/17/18 04:01	AFL	n/a	n/a	F:GCD6226
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.27 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	5.0	2.5	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	83%		56-149%
98-08-8	aaa-Trifluorotoluene	74%		66-132%

(a) Analysis performed at SGS Orlando, FL.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	BG-2 (BACKGROUND)	Date Sampled:	02/05/18
Lab Sample ID:	TD16243-14	Date Received:	02/07/18
Matrix:	SO - Soil	Percent Solids:	97.8
Method:	SW846 8015C SW846 3546		
Project:	CJES State AB SWD #1/LEA Co,N Mex		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	WW14815.D	1	02/20/18 02:50	AFL	02/19/18 08:09	F:OP68811	F:GWW597
Run #2							

Run #	Initial Weight	Final Volume
Run #1	20.2 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C22)	ND	5.1	2.5	mg/kg	
	TPH (> C22-C36)	18.7	5.1	2.5	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	64%		56-122%

(a) Analysis performed at SGS Orlando, FL.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	BG-2 (BACKGROUND)	Date Sampled:	02/05/18
Lab Sample ID:	TD16243-14	Date Received:	02/07/18
Matrix:	SO - Soil	Percent Solids:	97.8
Project:	CJES State AB SWD #1/LEA Co,N Mex		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	24.8	5.1	mg/kg	1	02/09/18 01:53	SM	EPA 300.0
Solids, Percent	97.8		%	1	02/10/18	TH	SM 2540 G

RL = Reporting Limit

Report of Analysis

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Client Sample ID:	BG-3 (BACKGROUND)	Date Sampled:	02/05/18
Lab Sample ID:	TD16243-15	Date Received:	02/07/18
Matrix:	SO - Soil	Percent Solids:	78.8
Method:	SW846 8015C		
Project:	CJES State AB SWD #1/LEA Co,N Mex		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	CD149170.D	1	02/17/18 04:27	AFL	n/a	n/a	F:GCD6226
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.28 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	7.4	3.7	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
460-00-4	4-Bromofluorobenzene	80%		56-149%		
98-08-8	aaa-Trifluorotoluene	73%		66-132%		

(a) Analysis performed at SGS Orlando, FL.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	BG-3 (BACKGROUND)	
Lab Sample ID:	TD16243-15	Date Sampled: 02/05/18
Matrix:	SO - Soil	Date Received: 02/07/18
Method:	SW846 8015C SW846 3546	Percent Solids: 78.8
Project:	CJES State AB SWD #1/LEA Co,N Mex	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	WW14816.D	1	02/20/18 03:19	AFL	02/19/18 08:09	F:OP68811	F:GWW597
Run #2							

Run #	Initial Weight	Final Volume
Run #1	20.2 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C22)	5.17	6.3	3.1	mg/kg	J
	TPH (> C22-C36)	24.7	6.3	3.1	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
84-15-1	o-Terphenyl	61%		56-122%		

(a) Analysis performed at SGS Orlando, FL.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	BG-3 (BACKGROUND)	Date Sampled:	02/05/18
Lab Sample ID:	TD16243-15	Date Received:	02/07/18
Matrix:	SO - Soil	Percent Solids:	78.8
Project:	CJES State AB SWD #1/LEA Co,N Mex		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	10.8	6.3	mg/kg	1	02/09/18 02:09	SM	EPA 300.0
Solids, Percent	78.8		%	1	02/10/18	TH	SM 2540 G

RL = Reporting Limit

Report of Analysis

Client Sample ID:	BG-4 (BACKGROUND)	
Lab Sample ID:	TD16243-16	Date Sampled: 02/05/18
Matrix:	SO - Soil	Date Received: 02/07/18
Method:	SW846 8015C	Percent Solids: 86.7
Project:	CJES State AB SWD #1/LEA Co,N Mex	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	CD149171.D	1	02/17/18 04:54	AFL	n/a	n/a	F:GCD6226
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.03 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	6.5	3.2	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
460-00-4	4-Bromofluorobenzene	82%		56-149%		
98-08-8	aaa-Trifluorotoluene	74%		66-132%		

(a) Analysis performed at SGS Orlando, FL.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	BG-4 (BACKGROUND)	Date Sampled:	02/05/18
Lab Sample ID:	TD16243-16	Date Received:	02/07/18
Matrix:	SO - Soil	Percent Solids:	86.7
Method:	SW846 8015C SW846 3546		
Project:	CJES State AB SWD #1/LEA Co,N Mex		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	WW14817.D	1	02/20/18 03:47	AFL	02/19/18 08:09	F:OP68811	F:GWW597
Run #2							

Run #	Initial Weight	Final Volume
Run #1	20.3 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C22)	5.06	5.7	2.8	mg/kg	J
	TPH (> C22-C36)	26.6	5.7	2.8	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	64%		56-122%

(a) Analysis performed at SGS Orlando, FL.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	BG-4 (BACKGROUND)	Date Sampled:	02/05/18
Lab Sample ID:	TD16243-16	Date Received:	02/07/18
Matrix:	SO - Soil	Percent Solids:	86.7
Project:	CJES State AB SWD #1/LEA Co,N Mex		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	8.3	5.7	mg/kg	1	02/09/18 02:25	SM	EPA 300.0
Solids, Percent	86.7		%	1	02/10/18	TH	SM 2540 G

RL = Reporting Limit

Report of Analysis

Client Sample ID:	BG-5 (BACKGROUND)	Date Sampled:	02/05/18
Lab Sample ID:	TD16243-17	Date Received:	02/07/18
Matrix:	SO - Soil	Percent Solids:	97.6
Method:	SW846 8015C		
Project:	CJES State AB SWD #1/LEA Co,N Mex		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	CD149172.D	1	02/17/18 05:21	AFL	n/a	n/a	F:GCD6226
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.07 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	5.2	2.6	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
460-00-4	4-Bromofluorobenzene	80%		56-149%		
98-08-8	aaa-Trifluorotoluene	72%		66-132%		

(a) Analysis performed at SGS Orlando, FL.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	BG-5 (BACKGROUND)	Date Sampled:	02/05/18
Lab Sample ID:	TD16243-17	Date Received:	02/07/18
Matrix:	SO - Soil	Percent Solids:	97.6
Method:	SW846 8015C SW846 3546		
Project:	CJES State AB SWD #1/LEA Co,N Mex		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	WW14818.D	1	02/20/18 04:16	AFL	02/19/18 08:09	F:OP68811	F:GWW597
Run #2							

Run #	Initial Weight	Final Volume
Run #1	20.3 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C22)	3.08	5.0	2.5	mg/kg	J
	TPH (> C22-C36)	20.9	5.0	2.5	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	67%		56-122%

(a) Analysis performed at SGS Orlando, FL.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	BG-5 (BACKGROUND)	Date Sampled:	02/05/18
Lab Sample ID:	TD16243-17	Date Received:	02/07/18
Matrix:	SO - Soil	Percent Solids:	97.6
Project:	CJES State AB SWD #1/LEA Co,N Mex		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	10.5	5.1	mg/kg	1	02/09/18 03:12	SM	EPA 300.0
Solids, Percent	97.6		%	1	02/10/18	TH	SM 2540 G

RL = Reporting Limit

Report of Analysis

Client Sample ID:	BG-6 (BACKGROUND)	Date Sampled:	02/05/18
Lab Sample ID:	TD16243-18	Date Received:	02/07/18
Matrix:	SO - Soil	Percent Solids:	97.5
Method:	SW846 8015C		
Project:	CJES State AB SWD #1/LEA Co,N Mex		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	CD149176.D	1	02/17/18 07:08	AFL	n/a	n/a	F:GCD6226
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.18 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	5.1	2.5	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
460-00-4	4-Bromofluorobenzene	87%		56-149%		
98-08-8	aaa-Trifluorotoluene	73%		66-132%		

(a) Analysis performed at SGS Orlando, FL.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	BG-6 (BACKGROUND)	Date Sampled:	02/05/18
Lab Sample ID:	TD16243-18	Date Received:	02/07/18
Matrix:	SO - Soil	Percent Solids:	97.5
Method:	SW846 8015C SW846 3546		
Project:	CJES State AB SWD #1/LEA Co,N Mex		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	WW14822.D	1	02/20/18 06:12	AFL	02/19/18 08:09	F:OP68811	F:GWW597
Run #2							

Run #	Initial Weight	Final Volume
Run #1	20.4 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C22)	3.35	5.0	2.5	mg/kg	J
	TPH (> C22-C36)	30.8	5.0	2.5	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	72%		56-122%

(a) Analysis performed at SGS Orlando, FL.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	BG-6 (BACKGROUND)	Date Sampled:	02/05/18
Lab Sample ID:	TD16243-18	Date Received:	02/07/18
Matrix:	SO - Soil	Percent Solids:	97.5
Project:	CJES State AB SWD #1/LEA Co,N Mex		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	14.0	5.1	mg/kg	1	02/09/18 03:28	SM	EPA 300.0
Solids, Percent	97.5		%	1	02/10/18	TH	SM 2540 G

RL = Reporting Limit

Report of Analysis

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Client Sample ID:	BG-7 (BACKGROUND)	Date Sampled:	02/05/18
Lab Sample ID:	TD16243-19	Date Received:	02/07/18
Matrix:	SO - Soil	Percent Solids:	98.5
Method:	SW846 8015C		
Project:	CJES State AB SWD #1/LEA Co,N Mex		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	CD149177.D	1	02/17/18 07:34	AFL	n/a	n/a	F:GCD6226
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.20 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	5.0	2.5	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
460-00-4	4-Bromofluorobenzene	80%		56-149%		
98-08-8	aaa-Trifluorotoluene	74%		66-132%		

(a) Analysis performed at SGS Orlando, FL.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	BG-7 (BACKGROUND)	Date Sampled:	02/05/18
Lab Sample ID:	TD16243-19	Date Received:	02/07/18
Matrix:	SO - Soil	Percent Solids:	98.5
Method:	SW846 8015C SW846 3546		
Project:	CJES State AB SWD #1/LEA Co,N Mex		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	WW14834.D	1	02/20/18 12:03	AFL	02/19/18 08:09	F:OP68811	F:GWW597
Run #2							

Run #	Initial Weight	Final Volume
Run #1	20.5 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C22)	5.07	5.0	2.5	mg/kg	
	TPH (> C22-C36)	36.2	5.0	2.5	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	65%		56-122%

(a) Analysis performed at SGS Orlando, FL.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	BG-7 (BACKGROUND)	Date Sampled:	02/05/18
Lab Sample ID:	TD16243-19	Date Received:	02/07/18
Matrix:	SO - Soil	Percent Solids:	98.5
Project:	CJES State AB SWD #1/LEA Co,N Mex		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	6.4	5.0	mg/kg	1	02/09/18 03:44	SM	EPA 300.0
Solids, Percent	98.5		%	1	02/10/18	TH	SM 2540 G

RL = Reporting Limit

Report of Analysis

Client Sample ID:	BG-8 (BACKGROUND)	
Lab Sample ID:	TD16243-20	Date Sampled: 02/05/18
Matrix:	SO - Soil	Date Received: 02/07/18
Method:	SW846 8015C	Percent Solids: 97.6
Project:	CJES State AB SWD #1/LEA Co,N Mex	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	CD149178.D	1	02/17/18 08:01	AFL	n/a	n/a	F:GCD6226
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.22 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	5.0	2.5	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
460-00-4	4-Bromofluorobenzene	76%		56-149%		
98-08-8	aaa-Trifluorotoluene	71%		66-132%		

(a) Analysis performed at SGS Orlando, FL.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	BG-8 (BACKGROUND)	Date Sampled:	02/05/18
Lab Sample ID:	TD16243-20	Date Received:	02/07/18
Matrix:	SO - Soil	Percent Solids:	97.6
Method:	SW846 8015C SW846 3546		
Project:	CJES State AB SWD #1/LEA Co,N Mex		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	WW14835.D	1	02/20/18 12:32	AFL	02/19/18 08:09	F:OP68811	F:GWW597
Run #2							

Run #	Initial Weight	Final Volume
Run #1	20.5 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C22)	3.99	5.0	2.5	mg/kg	J
	TPH (> C22-C36)	26.9	5.0	2.5	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
84-15-1	o-Terphenyl	66%		56-122%		

(a) Analysis performed at SGS Orlando, FL.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	BG-8 (BACKGROUND)	Date Sampled:	02/05/18
Lab Sample ID:	TD16243-20	Date Received:	02/07/18
Matrix:	SO - Soil	Percent Solids:	97.6
Project:	CJES State AB SWD #1/LEA Co,N Mex		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	6.4	5.1	mg/kg	1	02/09/18 04:00	SM	EPA 300.0
Solids, Percent	97.6		%	1	02/10/18	TH	SM 2540 G

RL = Reporting Limit

Report of Analysis

Client Sample ID:	BG-9 (BACKGROUND)	Date Sampled:	02/05/18
Lab Sample ID:	TD16243-21	Date Received:	02/07/18
Matrix:	SO - Soil	Percent Solids:	97.6
Method:	SW846 8015C		
Project:	CJES State AB SWD #1/LEA Co,N Mex		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	CD149179.D	1	02/17/18 08:28	AFL	n/a	n/a	F:GCD6226
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.00 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	5.2	2.6	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
460-00-4	4-Bromofluorobenzene	81%		56-149%		
98-08-8	aaa-Trifluorotoluene	73%		66-132%		

(a) Analysis performed at SGS Orlando, FL.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	BG-9 (BACKGROUND)	
Lab Sample ID:	TD16243-21	Date Sampled: 02/05/18
Matrix:	SO - Soil	Date Received: 02/07/18
Method:	SW846 8015C SW846 3546	Percent Solids: 97.6
Project:	CJES State AB SWD #1/LEA Co,N Mex	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	WW14825.D	1	02/20/18 07:38	AFL	02/19/18 08:09	F:OP68811	F:GWW597
Run #2							

Run #	Initial Weight	Final Volume
Run #1	20.0 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C22)	ND	5.1	2.6	mg/kg	
	TPH (> C22-C36)	7.09	5.1	2.6	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	75%		56-122%

(a) Analysis performed at SGS Orlando, FL.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	BG-9 (BACKGROUND)	Date Sampled:	02/05/18
Lab Sample ID:	TD16243-21	Date Received:	02/07/18
Matrix:	SO - Soil	Percent Solids:	97.6
Project:	CJES State AB SWD #1/LEA Co,N Mex		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	< 5.1	5.1	mg/kg	1	02/09/18 04:48	SM	EPA 300.0
Solids, Percent	97.6		%	1	02/10/18	TH	SM 2540 G

RL = Reporting Limit

Report of Analysis

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Client Sample ID:	BG-10 (BACKGROUND)	
Lab Sample ID:	TD16243-22	Date Sampled: 02/05/18
Matrix:	SO - Soil	Date Received: 02/07/18
Method:	SW846 8015C	Percent Solids: 95.4
Project:	CJES State AB SWD #1/LEA Co,N Mex	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	CD149180.D	1	02/17/18 08:54	AFL	n/a	n/a	F:GCD6226
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.13 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	5.3	2.7	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	82%		56-149%
98-08-8	aaa-Trifluorotoluene	73%		66-132%

(a) Analysis performed at SGS Orlando, FL.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	BG-10 (BACKGROUND)	
Lab Sample ID:	TD16243-22	Date Sampled: 02/05/18
Matrix:	SO - Soil	Date Received: 02/07/18
Method:	SW846 8015C SW846 3546	Percent Solids: 95.4
Project:	CJES State AB SWD #1/LEA Co,N Mex	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	WW14836.D	1	02/20/18 13:00	AFL	02/19/18 08:09	F:OP68811	F:GWW597
Run #2							

Run #	Initial Weight	Final Volume
Run #1	20.1 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C22)	3.32	5.2	2.6	mg/kg	J
	TPH (> C22-C36)	17.2	5.2	2.6	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	75%		56-122%

(a) Analysis performed at SGS Orlando, FL.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	BG-10 (BACKGROUND)	Date Sampled:	02/05/18
Lab Sample ID:	TD16243-22	Date Received:	02/07/18
Matrix:	SO - Soil	Percent Solids:	95.4
Project:	CJES State AB SWD #1/LEA Co,N Mex		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	5.7	5.2	mg/kg	1	02/09/18 05:36	SM	EPA 300.0
Solids, Percent	95.4		%	1	02/10/18	TH	SM 2540 G

RL = Reporting Limit

Report of Analysis

Client Sample ID:	DUP-01	Date Sampled:	02/05/18
Lab Sample ID:	TD16243-23	Date Received:	02/07/18
Matrix:	SO - Soil	Percent Solids:	98.0
Method:	SW846 8015C		
Project:	CJES State AB SWD #1/LEA Co,N Mex		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	CD149181.D	1	02/17/18 09:21	AFL	n/a	n/a	F:GCD6226
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.14 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	5.1	2.5	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	80%		56-149%
98-08-8	aaa-Trifluorotoluene	73%		66-132%

(a) Analysis performed at SGS Orlando, FL.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	DUP-01	
Lab Sample ID:	TD16243-23	Date Sampled: 02/05/18
Matrix:	SO - Soil	Date Received: 02/07/18
Method:	SW846 8015C SW846 3546	Percent Solids: 98.0
Project:	CJES State AB SWD #1/LEA Co,N Mex	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	WW14842.D	1	02/21/18 15:29	AFL	02/19/18 08:09	F:OP68811	F:GWW598
Run #2							

Run #	Initial Weight	Final Volume
Run #1	20.2 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C22)	ND	5.1	2.5	mg/kg	
	TPH (> C22-C36)	17.1	5.1	2.5	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	56%		56-122%

(a) Analysis performed at SGS Orlando, FL.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	DUP-01	Date Sampled:	02/05/18
Lab Sample ID:	TD16243-23	Date Received:	02/07/18
Matrix:	SO - Soil	Percent Solids:	98.0
Project:	CJES State AB SWD #1/LEA Co,N Mex		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	30.8	5.0	mg/kg	1	02/09/18 06:23	SM	EPA 300.0
Solids, Percent	98		%	1	02/10/18	TH	SM 2540 G

RL = Reporting Limit

Misc. Forms**Custody Documents and Other Forms**

Includes the following where applicable:

- Chain of Custody

10165 Harwin Dr, Ste 150 Houston, TX 77036
TEL: 713-271-4700 FAX: 713-271-4770
www.accutest.com

<div style="display: flex; justify-content: space-between;"> <div> <p>ACCUTEST</p> <p>10165 Harwin Dr, Ste 150 Houston, TX 77036</p> <p>TEL 713-271-4700 FAX 713-271-4770</p> <p>www.accutest.com</p> </div> <div> <p>FED-EX Tracking #</p> <p>SGS Accutest Quote #</p> </div> <div> <p>Bottle Order Control #</p> <p>SGS Accutest Job #</p> </div> </div>			
<p>Client / Reporting Information</p> <p>Company Name: EnTech Consulting Corp</p> <p>Street Address: 21 Waterway Ave, Suite 300</p> <p>City: State: Zip: 77380</p> <p>Project Contact: E-mail: Pete.Schwartz@entechservice.com</p> <p>Phone #: 210-326-7831 Fax #: 210-326-7831</p> <p>Sampler(s) Name(s): Pete Schwartz Phone #: 210-326-7831</p>		<p>Project Information</p> <p>Project Name: CJES STATE AB SODW</p> <p>Street: LEA CO, N Hwy State: </p> <p>Billing Information (If different from Report to):</p> <p>Company Name: ENTECH</p> <p>Street Address: 21 Waterway Ave, #300</p> <p>City: The Woodlands TX State: Zip: </p> <p>Attention: </p>	
<p>Field ID / Point of Collection</p> <p>1 B105' (soil boring)</p> <p>2 B100'</p> <p>3 B1020'</p> <p>4 B205'</p> <p>5 B200'</p> <p>6 B2020'</p> <p>7 B305'</p> <p>8 B300'</p> <p>9 B3020'</p> <p>10 B405'</p> <p>11 B400'</p> <p>12 B4020' (soil boring)</p>		<p>Collection</p> <p>Date: Time: Sampled By: Matrix: # of bottles:</p> <p>2/5/18 1124 PJS S 1</p> <p>1126</p> <p>1129</p> <p>1205</p> <p>1210</p> <p>1215</p> <p>1242</p> <p>1244</p> <p>1250</p> <p>1324</p> <p>1325</p> <p>2/5/18 1331 PJS S 1</p>	
<p>SGS Accutest Sample #</p> <p>Field ID / Point of Collection</p>		<p>Number of preserved Bottles</p> <p>HCl NaOH Zn/NOH HNO3 H2SO4 HClO4 DI Water MCH TSP NaHSO4 ENCORE OTHER</p>	
<p>Turnaround Time (Business days)</p> <p><input checked="" type="checkbox"/> Standard</p> <p><input type="checkbox"/> 5 Day RUSH</p> <p><input type="checkbox"/> 4 Day RUSH</p> <p><input type="checkbox"/> 3 Day RUSH</p> <p><input type="checkbox"/> 2 Day RUSH</p> <p><input type="checkbox"/> 1 Day EMERGENCY</p> <p>Emergency & Rush T/A data available via Lablink</p>		<p>Data Deliverable Information</p> <p>Approved By (SGS Accutest PM): / Date:</p> <p><input type="checkbox"/> Commercial "A" (Level 1)</p> <p><input checked="" type="checkbox"/> Commercial "B" (Level 2)</p> <p><input type="checkbox"/> FULT1 (Level 3+4)</p> <p><input type="checkbox"/> REDT1 (Level 3+4)</p> <p><input type="checkbox"/> Commercial "C"</p> <p><input type="checkbox"/> TRRP</p> <p><input type="checkbox"/> EDD Format</p> <p><input type="checkbox"/> Other</p> <p>Commercial "A" = Results Only</p> <p>Commercial "B" = Results + QC Summary</p> <p>T2 Commercial "C" = Results + QC & Surrogate Summary</p>	
<p>Requisitioned by Sampler:</p> <p>1 [Signature] Date Time: 2/5/18 1430</p> <p>Requisitioned by Sampler:</p> <p>3 [Signature] Date Time: 2/6/18 1600</p> <p>Requisitioned by:</p> <p>5 Date Time:</p>		<p>Comments / Special Instructions</p> <p>T2 Method 8015 Exl</p> <p>Chloride Method 300.2</p> <p>Grav/Dry Wt (6-Exl)</p> <p>Matrix Codes</p> <p>DW - Drinking Water</p> <p>GW - Ground Water</p> <p>WW - Water</p> <p>SW - Surface Water</p> <p>SO - Soil</p> <p>SL - Sludge</p> <p>SED - Sediment</p> <p>OI - Oil</p> <p>LIQ - Other Liquid</p> <p>AIR - Air</p> <p>SOL - Other Solid</p> <p>WP - Wipe</p> <p>FB - Field Blank</p>	
<p>Sample Custody must be documented below each time samples change possession, including courier delivery.</p> <p>Form: SM021-0</p>		<p>Requisitioned by:</p> <p>2 [Signature] Date Time: 2/5/18 1430</p> <p>Requisitioned by:</p> <p>4 [Signature] Date Time: 2/5/18 1900</p> <p>Requisitioned by:</p> <p>6 [Signature] Date Time: 2/6/18 1015</p>	

TD16243: Chain of Custody

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ACCUTEST

CHAIN OF CUSTODY

PAGE 2 OF 2

10165 Harwin Dr, Ste 150 Houston, TX 77036
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FED-EX Tracking #		Bottle Order Control #	
SGS Accutest Quote #		SGS Accutest Job #	
Requested Analyses		Matrix Codes	
<div>Chloride Method 300.2 TPH Method 8015 EXT CRO + DRO + H2O (CRO)</div>		<div>DW - Drinking Water GW - Ground Water WW - Water SW - Surface Water SO - Soil SL - Sludge SED - Sediment OI - Oil LIQ - Other Liquid AIR - Air SOL - Other Solid WP - Wipe FB - Field Blank</div>	
<div>Turnaround Time (Business days)</div> <div><input checked="" type="checkbox"/> Standard <input type="checkbox"/> 5 Day RUSH <input type="checkbox"/> 4 Day RUSH <input type="checkbox"/> 3 Day RUSH <input type="checkbox"/> 2 Day RUSH <input type="checkbox"/> 1 Day EMERGENCY</div> <div>Emergency & Rush T/A data available VIA Lablink</div>			
<div>Comments / Special Instructions</div>			

Client / Reporting Information		Project Information	
Company Name EnTech Consulting Corp		Project Name QES STATE AB SUD #1	
Street Address 21 Waterway Ave, Suite 300		Street Lee Co., NM	
City The Woodlands TX		City The Woodlands TX	
State TX		State TX	
Zip 77380		Zip 77380	
Project Contact Pete Schwarm		Billing Information (If different from Report to) EnTech Service Corp	
E-mail pete.schwarm@entechservice.com		Company Name EnTech Service Corp	
Phone # 281-322-7831		Street Address 21 Waterway Ave, # 300	
Fax #		City The Woodlands TX	
Sampler(s) Name(s) Pete Schwarm		Attention Citrao Patel	
Phone #		City The Woodlands TX	
Project Manager Citrao Patel		Attention Citrao Patel	
Field ID / Point of Collection		Collection	
Date		Time	
Sampled By		Matrix	
# of bottles		# of bottles	
HCl		NaOH	
ZnAcOH		HNO3	
H2SO4		H2O2	
NONE		NONE	
DI Water		MECH	
TSP		ENCORE	
OTHER		OTHER	
1 BG-1 (background)		2/5/18 725	
2 BG-2		728	
3 BG-3		731	
4 BG-4		735	
5 BG-5		739	
6 BG-6		743	
7 BG-7		805	
8 BG-8		809	
9 BG-9		813	
10 BG-10 (background)		2/5/18 812	
11 DUP-01		2/5/18 812	
Turnaround Time (Business days)		Data Deliverable Information	
<input checked="" type="checkbox"/> Standard <input type="checkbox"/> 5 Day RUSH <input type="checkbox"/> 4 Day RUSH <input type="checkbox"/> 3 Day RUSH <input type="checkbox"/> 2 Day RUSH <input type="checkbox"/> 1 Day EMERGENCY		<input type="checkbox"/> Commercial "A" (Level 1) <input checked="" type="checkbox"/> Commercial "B" (Level 2) <input type="checkbox"/> FULL1 (Level 3+4) <input type="checkbox"/> REDT1 (Level 3+4) <input type="checkbox"/> Commercial "C"	
Approved By (SGS Accutest PM): / Date:		<input type="checkbox"/> TRRP <input type="checkbox"/> EDD Format <input type="checkbox"/> Other	
Form: SM021-0		Commercial "A" = Results Only Commercial "B" = Results + QC Summary T2 Commercial "C" = Results + QC & Surrogate Summary	
Sample Custody must be documented below each time samples change possession, including courier delivery.			
Relinquished By Sampler: 1 Jason Fishbein		Received By: 1 Citrao Patel	
Date Time: 2/5/18 14:30		Date Time: 2/5/18 14:30	
Relinquished By Sampler: 3 Jason Fishbein		Received By: 3 FedEx	
Date Time: 2/4/18 11:00		Date Time: 2/4/18 11:00	
Relinquished By: 5		Received By: 5	
Date Time: 2/4/18 11:00		Date Time: 2/4/18 11:00	
Custody Seal #		Intact <input type="checkbox"/> Intact <input type="checkbox"/> Not intact	
Preserved where applicable		On Ice <input type="checkbox"/> On Ice <input type="checkbox"/> Cooler Temp.	

TD16243: Chain of Custody

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ACCU-TEST

COOLER TEMP FORM

TC# TD16243

Delivered by (circle one): ☒ FedEx/UPS ☐ ALGC Driver Client

Date:

2/18

Client:

ENTERED

Cooler Number:

1

Thermometer ID:

JMS

CF, °C

0

Corrected Temp, °C

3.6

SAMPLES CONTAINED IN COOLER

ORIGIN ID: SGRA (830) 816-5434
ANDREW SILVAS
BOENBENT & ASSOCIATES
113 FALLS COURT, SUITE # 200
BOERNE, TX 78008
UNITED STATES US

SHIP DATE: 24 MAY 17
ACTIVITY: 155
CNO: 0243598/06 FEB 16

BILL SENDER

TO SAMPLE MANAGEMENT

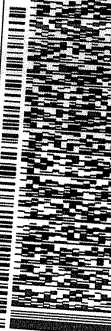
SGS ACCUTEST

10165 HARWIN DRIVE
SUITE 150

HOUSTON TX 77036

(713) 271-4700

REF: WATER KITS / 50096

FedEx
Express

FedEx

TRK#

0221

7314 4441 8192

WED - 07 FEB 10:30A

PRIORITY OVERNIGHT

AB SGRA

77036

TX-US

IAH



#5020880 02/06 553J1/128D/PC48

CUSTODY SEAL CUSTODY SEAL

INITIALS: JF

pH Lot# 10D4561

ACCU-TEST LABORATORIES
CUSTODY SEAL
CUSTODY SEAL
DATE / TIME SEALED: 2/6/18 14:20

Form: SW027-06 Rev 10/24/2015

TD16243: Chain of Custody

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SGS Sample Receipt Summary

Page 1 of 2

Job Number: TD16243 **Client:** ENTECH **Project:** CJES STATE AB SWD #1
Date / Time Received: _____ **Delivery Method:** _____ **Airbill #'s:** _____
No. Coolers: 1 **Therm ID:** IR9; **Temp Adjustment Factor:** 0;
Cooler Temps (Initial/Adjusted): #1: (3.6/3.6);

Cooler Security		<u>Y or N</u>		<u>Y or N</u>	
1. Custody Seals Present:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	3. COC Present:	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. Custody Seals Intact:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	4. Smpl Dates/Time OK	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Cooler Temperature		<u>Y or N</u>			
1. Temp criteria achieved:	<input checked="" type="checkbox"/>	<input type="checkbox"/>			
2. Cooler temp verification:	_____				
3. Cooler media:	Ice (Bag)				
Quality Control Preservation	<u>Y or N</u>		<u>N/A</u>	<u>WTB</u>	<u>STB</u>
1. Trip Blank present / cooler:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Trip Blank listed on COC:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>		
3. Samples preserved properly:	<input checked="" type="checkbox"/>	<input type="checkbox"/>			
4. VOCs headspace free:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>		

Sample Integrity - Documentation		<u>Y or N</u>	
1. Sample labels present on bottles:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
2. Container labeling complete:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
3. Sample container label / COC agree:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Sample Integrity - Condition		<u>Y or N</u>	
1. Sample recvd within HT:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
2. All containers accounted for:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
3. Condition of sample:	Intact		
Sample Integrity - Instructions		<u>Y or N</u>	<u>N/A</u>
1. Analysis requested is clear:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
2. Bottles received for unspecified tests	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
3. Sufficient volume recvd for analysis:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
4. Compositing instructions clear:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
5. Filtering instructions clear:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Comments

TD16243: Chain of Custody
Page 4 of 5

Sample Receipt Log

Page 2 of 2

Job #: TD16243

Date / Time Received: 2/7/2018 10:15:00 AM

Initials: BG

Client: ENTECH

Cooler #	Sample ID:	Vol	Bot #	Location	Pres	pH	Therm ID	Initial Temp	Therm CF	Corrected Temp
1	TD16243-1	4oz	1	2-98	N/P	Note #2 - Preservative check not applicable.	IR9	3.6	0	3.6
1	TD16243-2	4oz	1	2-98	N/P	Note #2 - Preservative check not applicable.	IR9	3.6	0	3.6
1	TD16243-3	4oz	1	2-98	N/P	Note #2 - Preservative check not applicable.	IR9	3.6	0	3.6
1	TD16243-4	4oz	1	2-98	N/P	Note #2 - Preservative check not applicable.	IR9	3.6	0	3.6
1	TD16243-5	4oz	1	2-98	N/P	Note #2 - Preservative check not applicable.	IR9	3.6	0	3.6
1	TD16243-6	4oz	1	2-98	N/P	Note #2 - Preservative check not applicable.	IR9	3.6	0	3.6
1	TD16243-7	4oz	1	2-98	N/P	Note #2 - Preservative check not applicable.	IR9	3.6	0	3.6
1	TD16243-8	4oz	1	2-98	N/P	Note #2 - Preservative check not applicable.	IR9	3.6	0	3.6
1	TD16243-9	4oz	1	2-98	N/P	Note #2 - Preservative check not applicable.	IR9	3.6	0	3.6
1	TD16243-10	4oz	1	2-98	N/P	Note #2 - Preservative check not applicable.	IR9	3.6	0	3.6
1	TD16243-11	4oz	1	2-98	N/P	Note #2 - Preservative check not applicable.	IR9	3.6	0	3.6
1	TD16243-12	4oz	1	2-98	N/P	Note #2 - Preservative check not applicable.	IR9	3.6	0	3.6
1	TD16243-13	4oz	1	2-98	N/P	Note #2 - Preservative check not applicable.	IR9	3.6	0	3.6
1	TD16243-14	4oz	1	2-98	N/P	Note #2 - Preservative check not applicable.	IR9	3.6	0	3.6
1	TD16243-15	4oz	1	2-98	N/P	Note #2 - Preservative check not applicable.	IR9	3.6	0	3.6
1	TD16243-16	4oz	1	2-98	N/P	Note #2 - Preservative check not applicable.	IR9	3.6	0	3.6
1	TD16243-17	4oz	1	2-98	N/P	Note #2 - Preservative check not applicable.	IR9	3.6	0	3.6
1	TD16243-18	4oz	1	2-98	N/P	Note #2 - Preservative check not applicable.	IR9	3.6	0	3.6
1	TD16243-19	4oz	1	2-98	N/P	Note #2 - Preservative check not applicable.	IR9	3.6	0	3.6
1	TD16243-20	4oz	1	2-98	N/P	Note #2 - Preservative check not applicable.	IR9	3.6	0	3.6
1	TD16243-21	4oz	1	2-98	N/P	Note #2 - Preservative check not applicable.	IR9	3.6	0	3.6
1	TD16243-22	4oz	1	2-98	N/P	Note #2 - Preservative check not applicable.	IR9	3.6	0	3.6
1	TD16243-23	4oz	1	2-98	N/P	Note #2 - Preservative check not applicable.	IR9	3.6	0	3.6

TD16243: Chain of Custody

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General Chemistry

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QC Data Summaries

Includes the following where applicable:

- **Method Blank and Blank Spike Summaries**
- **Duplicate Summaries**
- **Matrix Spike Summaries**

METHOD BLANK AND SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: TD16243
Account: ENTECTXW - EnTech Consulting Corporation
Project: CJES State AB SWD #1/LEA Co,N Mex

Analyte	Batch ID	RL	MB Result	Units	Spike Amount	BSP Result	BSP %Recov	QC Limits
Chloride	GP46176/GN87677	5.0	0.0	mg/kg	100	95.9	95.9	90-110%
Chloride	GP46177/GN87677	5.0	0.0	mg/kg	100	96.5	96.5	90-110%
Chloride	GP46178/GN87677	5.0	0.0	mg/kg	100	97.7	97.7	90-110%

Associated Samples:

Batch GP46176: TD16243-1, TD16243-2, TD16243-3, TD16243-4, TD16243-5, TD16243-6, TD16243-7, TD16243-8, TD16243-9, TD16243-10

Batch GP46177: TD16243-11, TD16243-12, TD16243-13, TD16243-14, TD16243-15, TD16243-16, TD16243-17, TD16243-18, TD16243-19, TD16243-20

Batch GP46178: TD16243-21, TD16243-22, TD16243-23

(*) Outside of QC limits

DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: TD16243
Account: ENTECTXW - EnTech Consulting Corporation
Project: CJES State AB SWD #1/LEA Co,N Mex

Analyte	Batch ID	QC Sample	Units	Original Result	DUP Result	RPD	QC Limits
Chloride	GP46176/GN87677	TD16243-1	mg/kg	382	374	2.1	0-20%
Chloride	GP46177/GN87677	TD16243-11	mg/kg	662	660	0.3	0-20%
Chloride	GP46178/GN87677	TD16243-21	mg/kg	4.4	4.7	6.6	0-20%
Solids, Percent	GN87713	TD16243-1	%	93.5	93.5	0.0	0-5%
Solids, Percent	GN87714	TD16243-10	%	91.9	91.9	0.0	0-5%

Associated Samples:

Batch GN87713: TD16243-1, TD16243-2, TD16243-3, TD16243-4, TD16243-5, TD16243-6, TD16243-7, TD16243-8, TD16243-9
Batch GN87714: TD16243-10, TD16243-11, TD16243-12, TD16243-13, TD16243-14, TD16243-15, TD16243-16, TD16243-17, TD16243-18, TD16243-19, TD16243-20, TD16243-21, TD16243-22, TD16243-23
Batch GP46176: TD16243-1, TD16243-2, TD16243-3, TD16243-4, TD16243-5, TD16243-6, TD16243-7, TD16243-8, TD16243-9, TD16243-10
Batch GP46177: TD16243-11, TD16243-12, TD16243-13, TD16243-14, TD16243-15, TD16243-16, TD16243-17, TD16243-18, TD16243-19, TD16243-20
Batch GP46178: TD16243-21, TD16243-22, TD16243-23
(*) Outside of QC limits

MATRIX SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: TD16243
Account: ENTECTXW - EnTech Consulting Corporation
Project: CJES State AB SWD #1/LEA Co,N Mex

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MS Result	%Rec	QC Limits
Chloride	GP46176/GN87677	TD16243-1	mg/kg	382	104	713	316.9N(a)	80-120%
Chloride	GP46177/GN87677	TD16243-11	mg/kg	662	111	829	150.8(b)	80-120%
Chloride	GP46178/GN87677	TD16243-21	mg/kg	4.4	101	99.7	94.7	80-120%

Associated Samples:

Batch GP46176: TD16243-1, TD16243-2, TD16243-3, TD16243-4, TD16243-5, TD16243-6, TD16243-7, TD16243-8, TD16243-9, TD16243-10

Batch GP46177: TD16243-11, TD16243-12, TD16243-13, TD16243-14, TD16243-15, TD16243-16, TD16243-17, TD16243-18, TD16243-19, TD16243-20

Batch GP46178: TD16243-21, TD16243-22, TD16243-23

(*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits

(a) Outside control limits due to matrix interference and/or sample nonhomogeneity.

(b) Spike amount low relative to the sample amount. Refer to lab control or spike blank for recovery information.

Misc. Forms**Custody Documents and Other Forms**

(SGS Orlando, FL)

Includes the following where applicable:

- Chain of Custody

				10165 Harwin Drive, Houston, TX 77036 TEL: 713-271-4700 FAX: 713-271-4770				FED-EX Tracking # _____ SGS Quote # _____		Bottle Order Control # _____ TD16243							
Client / Reporting Information				Project Information				Requested Analysis (see TEST CODE sheet)						Matrix Codes			
Company Name: SGS North America Inc.				Project Name: CJES State AB SWD #1/LEA Co,N Mex										DW - Drinking Water GW - Ground Water WW - Water SW - Surface Water SO - Soil SL- Sludge SED-Sediment OI - Oil LIQ - Other Liquid AIR - Air SOL - Other Solid WP - Wipe FB-Field Blank EB-Equipment Blank RB-Rinse Blank TB-Trip Blank			
Street Address 10165 Harwin Drive				Street		Billing Information (if different from Report to)											
City Houston TX 77036		State		City		Company Name											
Project Contact E-mail Trameshia.Brown@sgs.com		Project #		Street Address													
Phone # 713-271-4700		Fax #		Client Purchase Order #		City State Zip											
Sampler(s) Name(s)				Phone		Project Manager		Attention:									
SGS Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Collection		Sampled by	Matrix	# of bottles	Number of preserved Bottles						LAB USE ONLY			
			Date	Time				NYSP	MECH	HNCO3	H2SO4	NH4E	D1 Washer		MEOH	ENCORE	
1	B1@5' (SOIL BORING)		2/5/18	11:24:00 AM		SO	2				X	X	X				
2	B1@10' (SOIL BORING)		2/5/18	11:26:00 AM		SO	2				X	X	X				
3	B1@20' (SOIL BORING)		2/5/18	11:29:00 AM		SO	2				X	X	X				
4	B2@5' (SOIL BORING)		2/5/18	12:05:00 PM		SO	2				X	X	X				
5	B2@10' (SOIL BORING)		2/5/18	12:10:00 PM		SO	2				X	X	X				
6	B2@20' (SOIL BORING)		2/5/18	12:15:00 PM		SO	2				X	X	X				
7	B3@5' (SOIL BORING)		2/5/18	12:42:00 PM		SO	2				X	X	X				
8	B3@10' (SOIL BORING)		2/5/18	12:44:00 PM		SO	2				X	X	X				
9	B3@20' (SOIL BORING)		2/5/18	12:50:00 PM		SO	2				X	X	X				
10	B4@5' (SOIL BORING)		2/5/18	1:24:00 PM		SO	2				X	X	X				
11	B4@10' (SOIL BORING)		2/5/18	1:25:00 PM		SO	2				X	X	X				
12	B4@20' (SOIL BORING)		2/5/18	1:31:00 PM		SO	2				X	X	X				
Turnaround Time (Business days)				Data Deliverable Information								Comments / Special Instructions					
<input type="checkbox"/> Std. 10 Business Days <input type="checkbox"/> 5 Day RUSH <input type="checkbox"/> 3 Day EMERGENCY <input type="checkbox"/> 2 Day EMERGENCY <input type="checkbox"/> 1 Day EMERGENCY <input checked="" type="checkbox"/> other Due 2/14/2018				Approved By (SGS PM) : Date:				<input type="checkbox"/> Commercial "A" (Level 1) <input type="checkbox"/> Commercial "B" (Level 2) <input type="checkbox"/> FULL T1 (Level 3 & 4) <input type="checkbox"/> NJ Reduced <input type="checkbox"/> Commercial "C" <input checked="" type="checkbox"/> NYASP Category A <input type="checkbox"/> NYASP Category B <input type="checkbox"/> State Forms <input type="checkbox"/> EDD Format <input checked="" type="checkbox"/> Other COMMB				Sub out the 4oz and vial and keep the 2oz here for CHL. FL					
Emergency & Rush T/A data available VIA Lablink				Commercial "A" = Results Only Commercial "B" = Results + QC Summary NJ Reduced = Results + QC Summary + Partial Raw data				Sample Custody must be documented below each time samples change possession, including courier delivery.									
Relinquished by Sampler: [Signature]				Received By: [Signature]				Relinquished By: [Signature]				Date Time: 02/08/18					
Relinquished by Sampler:				Received By:				Relinquished By:				Date Time:					
Relinquished by:				Received By:				Custody Seal #				<input type="checkbox"/> Intact <input type="checkbox"/> Not Intact Preserved where applicable <input type="checkbox"/> On Ice <input type="checkbox"/> Cooler Temp. 4.0					

TD16243: Chain of Custody

Page 1 of 3

SGS Orlando, FL



CHAIN OF CUSTODY

Page 2 of 2

10165 Harwin Drive, Houston, TX 77036
TEL: 713-271-4700 FAX: 713-271-4770

FED-EX Tracking #		Bottle Order Control #	
SGS Quote #		SGS Job # TD16243	
Client / Client / Reporting Information		Project Information	
Company Name: SGS North America Inc.		Project Name: CJES State AB SWD #1/LEA Co,N Max	
Street Address 10165 Harwin Drive		Street	
City State Zip Houston TX 77036		Billing Information (if different from Report to) Company Name	
Project Contact E-mail Trameshia.Brown@sgs.com		Project #	
Phone # 713-271-4700		Client Purchase Order #	
Fax #		City State Zip	
Sampler(s) Name(s)		Project Manager	
Phone		Attention:	
Matrix Codes		Requested Analysis (see TEST CODE sheet)	
DW - Drinking Water GW - Ground Water WW - Water SW - Surface Water SO - Soil SL - Sludge SED - Sediment OI - Oil LIQ - Other Liquid AIR - Air SOL - Other Solid WP - Wipe FB - Field Blank EB - Equipment Blank RB - Rinse Blank TB - Trip Blank		B80150RCORO1.V8015GRO	
LAB USE ONLY			
Turnaround Time (Business days)		Data Deliverable Information	
Approved By (SGS PM) / Date: <input type="checkbox"/> Std. 10 Business Days <input type="checkbox"/> 5 Day RUSH <input type="checkbox"/> 3 Day EMERGENCY <input type="checkbox"/> 2 Day EMERGENCY <input type="checkbox"/> 1 Day EMERGENCY <input checked="" type="checkbox"/> other <u>Due 2/14/2018</u> <u>TS</u> Emergency & Rush TIA data available VIA Lablink		<input type="checkbox"/> Commercial "A" (Level 1) <input type="checkbox"/> Commercial "B" (Level 2) <input type="checkbox"/> FULLT1 (Level 3+4) <input type="checkbox"/> NJ Reduced <input type="checkbox"/> Commercial "C" <input type="checkbox"/> NYASP Category A <input type="checkbox"/> NYASP Category B <input type="checkbox"/> State Forms <input type="checkbox"/> EDD Format <input checked="" type="checkbox"/> Other <u>COMMB</u> Commercial "A" = Results Only Commercial "B" = Results + QC Summary NJ Reduced = Results + QC Summary + Partial Raw data Sub out the 4oz and vial and keep the 2oz here for CHL. <u>FL</u>	
Relinquished by: <u>[Signature]</u> Date Time: <u>2/13/18 16:00</u>		Relinquished By: <u>2</u> Date Time: <u>02/03/18</u>	
Relinquished by: <u>3</u> Date Time: <u></u>		Relinquished By: <u>4</u> Date Time: <u></u>	
Relinquished by: <u>5</u> Date Time: <u></u>		Custody Seal # <input type="checkbox"/> Intact <input type="checkbox"/> Not Intact Preserved where applicable <input type="checkbox"/> On Ice <input type="checkbox"/> Cooler Temp. <input type="checkbox"/>	

TD16243: Chain of Custody

Page 2 of 3



SGS Sample Receipt Summary

Job Number: TD16243

Client: ALGC

Project: CJES STATE AB SWD

Date / Time Received: 2/8/2018 9:30:00 AM

Delivery Method: FED EX

Airbill #s: 1001891751060003281100731444464765

Therm ID: IR 1;

Therm CF: 0.4;

of Coolers: 1

Cooler Temps (Raw Measured) °C: Cooler 1: (3.6);

Cooler Temps (Corrected) °C: Cooler 1: (4.0);

Cooler Information

Y or N

1. Custody Seals Present ☒ ☐
2. Custody Seals Intact ☒ ☐
3. Temp criteria achieved ☒ ☐
4. Cooler temp verification IR Gun
5. Cooler media Ice (Bag)

Trip Blank Information

Y or N N/A

1. Trip Blank present / cooler ☐ ☐ ☒
 2. Trip Blank listed on COC ☐ ☐ ☒
- W or S N/A
3. Type Of TB Received ☐ ☐ ☒

Sample Information

Y or N N/A

1. Sample labels present on bottles ☒ ☐
2. Samples preserved properly ☒ ☐
3. Sufficient volume/containers recvd for analysis: ☒ ☐
4. Condition of sample Intact
5. Sample recvd within HT ☒ ☐
6. Dates/Times/IDs on COC match Sample Label ☒ ☐
7. VOCs have headspace ☐ ☐ ☒
8. Bottles received for unspecified tests ☐ ☒ ☐
9. Compositing instructions clear ☐ ☐ ☒
10. Voa Soil Kits/Jars received past 48hrs? ☐ ☐ ☒
11. % Solids Jar received? ☒ ☐ ☐
12. Residual Chlorine Present? ☐ ☐ ☒

Misc. Information

Number of Encores: 25-Gram _____ 5-Gram _____

Number of 5035 Field Kits: 23

Number of Lab Filtered Metals: _____

Test Strip Lot #s: pH 0-3 230315

pH 10-12 219813A

Other: (Specify) _____

Residual Chlorine Test Strip Lot #: _____

Comments

SM001
Rev. Date 05/24/17

Technician: SHAYLAP

Date: 2/8/2018 9:30:00 AM

Reviewer: P.H

Date: 2/8/2018

TD16243: Chain of Custody

Page 3 of 3



GC Volatiles**QC Data Summaries**

(SGS Orlando, FL)

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Job Number: TD16243
Account: ALGC SGS Houston, TX
Project: ENTECTXW: CJES State AB SWD #1/LEA Co,N Mex

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GCD6225-MB	CD149132.D	1	02/16/18	JG	n/a	n/a	GCD6225

The QC reported here applies to the following samples: Method: SW846 8015C

TD16243-1, TD16243-2, TD16243-3, TD16243-4, TD16243-5, TD16243-6, TD16243-7

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	5.0	2.5	mg/kg	

CAS No.	Surrogate Recoveries	Limits
460-00-4	4-Bromofluorobenzene	84% 56-149%
98-08-8	aaa-Trifluorotoluene	72% 66-132%

Method Blank Summary

Job Number: TD16243
Account: ALGC SGS Houston, TX
Project: ENTECTXW: CJES State AB SWD #1/LEA Co,N Mex

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GCD6226-MB	CD149165.D	1	02/17/18	JG	n/a	n/a	GCD6226

The QC reported here applies to the following samples: Method: SW846 8015C

TD16243-8, TD16243-9, TD16243-10, TD16243-11, TD16243-12, TD16243-13, TD16243-14, TD16243-15, TD16243-16, TD16243-17, TD16243-18, TD16243-19, TD16243-20, TD16243-21, TD16243-22, TD16243-23

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	5.0	2.5	mg/kg	

CAS No.	Surrogate Recoveries	Limits
460-00-4	4-Bromofluorobenzene	78% 56-149%
98-08-8	aaa-Trifluorotoluene	70% 66-132%

7.1.2
7

Blank Spike Summary

Job Number: TD16243
Account: ALGC SGS Houston, TX
Project: ENTECTXW: CJES State AB SWD #1/LEA Co,N Mex

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GCD6225-BS	CD149131.D	1	02/16/18	JG	n/a	n/a	GCD6225

The QC reported here applies to the following samples: Method: SW846 8015C

TD16243-1, TD16243-2, TD16243-3, TD16243-4, TD16243-5, TD16243-6, TD16243-7

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	Limits
	TPH-GRO (C6-C10)	20	22.6	113	74-128

CAS No.	Surrogate Recoveries	BSP	Limits
460-00-4	4-Bromofluorobenzene	94%	56-149%
98-08-8	aaa-Trifluorotoluene	99%	66-132%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: TD16243
Account: ALGC SGS Houston, TX
Project: ENTECTXW: CJES State AB SWD #1/LEA Co,N Mex

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GCD6226-BS	CD149164.D	1	02/17/18	JG	n/a	n/a	GCD6226

The QC reported here applies to the following samples: Method: SW846 8015C

TD16243-8, TD16243-9, TD16243-10, TD16243-11, TD16243-12, TD16243-13, TD16243-14, TD16243-15, TD16243-16, TD16243-17, TD16243-18, TD16243-19, TD16243-20, TD16243-21, TD16243-22, TD16243-23

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	Limits
	TPH-GRO (C6-C10)	20	19.8	99	74-128

CAS No.	Surrogate Recoveries	BSP	Limits
460-00-4	4-Bromofluorobenzene	90%	56-149%
98-08-8	aaa-Trifluorotoluene	92%	66-132%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: TD16243
Account: ALGC SGS Houston, TX
Project: ENTECTXW: CJES State AB SWD #1/LEA Co,N Mex

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA51677-1MS	CD149134.D	1	02/16/18	JG	n/a	n/a	GCD6225
FA51677-1MSD	CD149135.D	1	02/16/18	JG	n/a	n/a	GCD6225
FA51677-1	CD149133.D	1	02/16/18	JG	n/a	n/a	GCD6225

The QC reported here applies to the following samples: Method: SW846 8015C

TD16243-1, TD16243-2, TD16243-3, TD16243-4, TD16243-5, TD16243-6, TD16243-7

CAS No.	Compound	FA51677-1 mg/kg	Spike mg/kg	MS mg/kg	MS %	Spike mg/kg	MSD mg/kg	MSD %	RPD	Limits Rec/RPD
	TPH-GRO (C6-C10)	67.5	51.1	99.2	62*	51.1	110	83	10	74-128/17

CAS No.	Surrogate Recoveries	MS	MSD	FA51677-1	Limits
460-00-4	4-Bromofluorobenzene	131%	137%	141%	56-149%
98-08-8	aaa-Trifluorotoluene	116%	120%	106%	66-132%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: TD16243
Account: ALGC SGS Houston, TX
Project: ENTECTXW: CJES State AB SWD #1/LEA Co,N Mex

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
TD16243-23MS	CD149182.D	1	02/17/18	JG	n/a	n/a	GCD6226
TD16243-23MSD	CD149183.D	1	02/17/18	JG	n/a	n/a	GCD6226
TD16243-23	CD149181.D	1	02/17/18	JG	n/a	n/a	GCD6226

The QC reported here applies to the following samples: Method: SW846 8015C

TD16243-8, TD16243-9, TD16243-10, TD16243-11, TD16243-12, TD16243-13, TD16243-14, TD16243-15, TD16243-16, TD16243-17, TD16243-18, TD16243-19, TD16243-20, TD16243-21, TD16243-22, TD16243-23

CAS No.	Compound	TD16243-23 Spike mg/kg	Q	Spike mg/kg	MS mg/kg	MS %	Spike mg/kg	MSD mg/kg	MSD %	RPD	Limits Rec/RPD
	TPH-GRO (C6-C10)	ND		20.3	18.8	93	20.3	18.9	93	1	74-128/17

CAS No.	Surrogate Recoveries	MS	MSD	TD16243-23	Limits
460-00-4	4-Bromofluorobenzene	91%	88%	80%	56-149%
98-08-8	aaa-Trifluorotoluene	89%	89%	73%	66-132%

* = Outside of Control Limits.

GC/LC Semi-volatiles**QC Data Summaries**

(SGS Orlando, FL)

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Job Number: TD16243
Account: ALGC SGS Houston, TX
Project: ENTECTXW: CJES State AB SWD #1/LEA Co,N Mex

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP68788-MB	WW14790.D	1	02/15/18	SJL	02/15/18	OP68788	GWW596

The QC reported here applies to the following samples: Method: SW846 8015C

TD16243-1, TD16243-2, TD16243-3, TD16243-4

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C22)	ND	5.0	2.5	mg/kg	
	TPH (> C22-C36)	ND	5.0	2.5	mg/kg	

CAS No.	Surrogate Recoveries	Limits
84-15-1	o-Terphenyl	82% 56-122%

8.1.1
8

Method Blank Summary

Job Number: TD16243
Account: ALGC SGS Houston, TX
Project: ENTECTXW: CJES State AB SWD #1/LEA Co,N Mex

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP68811-MB	WW14801.D	1	02/19/18	SJL	02/19/18	OP68811	GWW597

The QC reported here applies to the following samples: Method: SW846 8015C

TD16243-6, TD16243-7, TD16243-8, TD16243-9, TD16243-10, TD16243-11, TD16243-12, TD16243-13, TD16243-14, TD16243-15, TD16243-16, TD16243-17, TD16243-18, TD16243-19, TD16243-20, TD16243-21, TD16243-22, TD16243-23

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C22)	ND	5.0	2.5	mg/kg	
	TPH (> C22-C36)	ND	5.0	2.5	mg/kg	

CAS No.	Surrogate Recoveries	Limits
84-15-1	o-Terphenyl	75% 56-122%

8.1.2
8

Method Blank Summary

Job Number: TD16243
Account: ALGC SGS Houston, TX
Project: ENTECTXW: CJES State AB SWD #1/LEA Co,N Mex

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP68867-MB	WW14867.D	1	02/22/18	SJL	02/22/18	OP68867	GWW600

The QC reported here applies to the following samples: Method: SW846 8015C

TD16243-5

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C22)	ND	5.0	2.5	mg/kg	
	TPH (> C22-C36)	ND	5.0	2.5	mg/kg	

CAS No.	Surrogate Recoveries	Limits
84-15-1	o-Terphenyl	88% 56-122%

8.1.3
8

Blank Spike Summary

Job Number: TD16243
Account: ALGC SGS Houston, TX
Project: ENTECTXW: CJES State AB SWD #1/LEA Co,N Mex

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP68788-BS ^a	WW14789.D	1	02/15/18	SJL	02/15/18	OP68788	GWW596

The QC reported here applies to the following samples: Method: SW846 8015C

TD16243-1, TD16243-2, TD16243-3, TD16243-4

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	Limits
	TPH (C10-C22)	50	41.3	83	65-116
	TPH (> C22-C36)	50	49.8	100	51-148

CAS No.	Surrogate Recoveries	BSP	Limits
84-15-1	o-Terphenyl	98%	56-122%

(a) Insufficient sample for MS/MSD.

* = Outside of Control Limits.

Blank Spike Summary

Job Number: TD16243
Account: ALGC SGS Houston, TX
Project: ENTECTXW: CJES State AB SWD #1/LEA Co,N Mex

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP68811-BS	WW14800.D	1	02/19/18	SJL	02/19/18	OP68811	GWW597

The QC reported here applies to the following samples: Method: SW846 8015C

TD16243-6, TD16243-7, TD16243-8, TD16243-9, TD16243-10, TD16243-11, TD16243-12, TD16243-13, TD16243-14, TD16243-15, TD16243-16, TD16243-17, TD16243-18, TD16243-19, TD16243-20, TD16243-21, TD16243-22, TD16243-23

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	Limits
	TPH (C10-C22)	50	39.1	78	65-116
	TPH (> C22-C36)	50	49.6	99	51-148

CAS No.	Surrogate Recoveries	BSP	Limits
84-15-1	o-Terphenyl	80%	56-122%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: TD16243
Account: ALGC SGS Houston, TX
Project: ENTECTXW: CJES State AB SWD #1/LEA Co,N Mex

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP68867-BS	WW14866.D	1	02/22/18	SJL	02/22/18	OP68867	GWW600

The QC reported here applies to the following samples: Method: SW846 8015C

TD16243-5

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	Limits
	TPH (C10-C22)	50	42.7	85	65-116
	TPH (> C22-C36)	50	52.5	105	51-148

CAS No.	Surrogate Recoveries	BSP	Limits
84-15-1	o-Terphenyl	100%	56-122%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: TD16243
Account: ALGC SGS Houston, TX
Project: ENTECTXW: CJES State AB SWD #1/LEA Co,N Mex

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP68811-MS	WW14806.D	1	02/19/18	SJL	02/19/18	OP68811	GWW597
OP68811-MSD	WW14807.D	1	02/19/18	SJL	02/19/18	OP68811	GWW597
TD16243-8	WW14831.D	1	02/20/18	SJL	02/19/18	OP68811	GWW597

The QC reported here applies to the following samples: Method: SW846 8015C

TD16243-6, TD16243-7, TD16243-8, TD16243-9, TD16243-10, TD16243-11, TD16243-12, TD16243-13, TD16243-14, TD16243-15, TD16243-16, TD16243-17, TD16243-18, TD16243-19, TD16243-20, TD16243-21, TD16243-22, TD16243-23

CAS No.	Compound	TD16243-8 mg/kg	Spike Q	mg/kg	MS mg/kg	MS %	Spike mg/kg	MSD mg/kg	MSD %	RPD	Limits Rec/RPD
	TPH (C10-C22)	2.77	J	52.3	39.6	70	53.4	38.9	68	2	65-116/28
	TPH (> C22-C36)	10.6		52.3	55.3	85	53.4	55.7	85	1	51-148/28

CAS No.	Surrogate Recoveries	MS	MSD	TD16243-8	Limits
84-15-1	o-Terphenyl	71%	71%	66%	56-122%

* = Outside of Control Limits.

The results set forth herein are provided by SGS North America Inc.

e-Hardcopy 2.0
Automated Report

Technical Report for

EnTech Consulting Corporation

CJES State AB SWD #1/LEA Co,N Mex

SGS Job Number: TD16424

Sampling Date: 02/07/18


Report to:

EnTech Consulting Corporation
21 Waterway Ave, Suite 300
The Woodlands, TX 77380
chan.patel@entechservice.com; pete.schram@entechservice.com
ATTN: Chan Patel

Total number of pages in report: 36



Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable.


Richard Rodriguez
Laboratory Director

Client Service contact: Sylvia Garza 713-271-4700

Certifications: TX (T104704220-18-28) AR (14-016-0) AZ (AZ0769) FL (E87628)
KS (E-10366) LA (85695/04004) NJ (TX010) OK (2017-002) VA (8999)

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Test results relate only to samples analyzed.

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Sample Summary

EnTech Consulting Corporation**Job No: TD16424****CJES State AB SWD #1/LEA Co,N Mex**

Sample Number	Collected		Received	Matrix		Client Sample ID
	Date	Time By		Code	Type	
TD16424-1	02/07/18	15:00	02/09/18	SO	Soil	BUC-1@6
TD16424-2	02/07/18	15:20	02/09/18	SO	Soil	BUC-1@8
TD16424-2A	02/07/18	15:20	02/09/18	SO	Soil	BUC-1@8
TD16424-3	02/07/18	15:20	02/09/18	SO	Soil	BUC-2@6
TD16424-4	02/07/18	15:20	02/09/18	SO	Soil	BUC-2@12
TD16424-5	02/07/18	15:45	02/09/18	SO	Soil	BUC-3@6
TD16424-6	02/07/18	15:45	02/09/18	SO	Soil	BUC-3@10
TD16424-7	02/07/18	10:08	02/09/18	SO	Soil	BUC-4@6
TD16424-8	02/07/18	16:08	02/09/18	SO	Soil	BUC-4@9
TD16424-9	02/07/18	16:15	02/09/18	SO	Soil	BUC-5@6
TD16424-9A	02/07/18	16:15	02/09/18	SO	Soil	BUC-5@6
TD16424-9R	02/07/18	16:15	02/09/18	SO	Soil	BUC-5@6
TD16424-10	02/07/18	16:15	02/09/18	SO	Soil	BUC-5@12

Soil samples reported on a dry weight basis unless otherwise indicated on result page.



Sample Summary
(continued)

EnTech Consulting Corporation

Job No: TD16424

CJES State AB SWD #1/LEA Co,N Mex

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
TD16424-10A	02/07/18	16:15	02/09/18	SO	Soil	BUC-5@12
TD16424-10R	02/07/18	16:15	02/09/18	SO	Soil	BUC-5@12

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

Summary of Hits

Page 1 of 1

Job Number: TD16424
Account: EnTech Consulting Corporation
Project: CJES State AB SWD #1/LEA Co,N Mex
Collected: 02/07/18

Lab Sample ID Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
TD16424-2A	BUC-1@8					
Chloride		1530	51		mg/kg	EPA 300.0
TD16424-9A	BUC-5@6					
Chloride		18.5	5.4		mg/kg	EPA 300.0
TD16424-9R	BUC-5@6					
TPH-GRO (C6-C10) ^a		10.5	5.9	5.8	mg/kg	SW846 8015C
TPH (C10-C22) ^a		9.31	5.4	2.7	mg/kg	SW846 8015C
TPH (> C22-C36) ^a		42.1	5.4	2.7	mg/kg	SW846 8015C
TD16424-10A	BUC-5@12					
Chloride		20.1	5.4		mg/kg	EPA 300.0
TD16424-10R	BUC-5@12					
TPH (C10-C22) ^a		7.56	5.4	2.7	mg/kg	SW846 8015C
TPH (> C22-C36) ^a		16.6	5.4	2.7	mg/kg	SW846 8015C

(a) Analysis performed at SGS Scott, LA.



Houston, TX

Section 3



Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	BUC-1@8	Date Sampled:	02/07/18
Lab Sample ID:	TD16424-2A	Date Received:	02/09/18
Matrix:	SO - Soil	Percent Solids:	96.7
Project:	CJES State AB SWD #1/LEA Co,N Mex		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	1530	51	mg/kg	10	03/03/18 15:29	LR	EPA 300.0
Solids, Percent	96.7		%	1	02/28/18	PA	SM 2540 G

RL = Reporting Limit

Report of Analysis

Client Sample ID:	BUC-5@6	Date Sampled:	02/07/18
Lab Sample ID:	TD16424-9A	Date Received:	02/09/18
Matrix:	SO - Soil	Percent Solids:	91.7
Project:	CJES State AB SWD #1/LEA Co,N Mex		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	18.5	5.4	mg/kg	1	03/06/18 15:59	LR	EPA 300.0

RL = Reporting Limit

Report of Analysis

Client Sample ID:	BUC-5@6	Date Sampled:	02/07/18
Lab Sample ID:	TD16424-9R	Date Received:	02/09/18
Matrix:	SO - Soil	Percent Solids:	91.7
Method:	SW846 8015C		
Project:	CJES State AB SWD #1/LEA Co,N Mex		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	LA286700.D	1	02/21/18 06:13	ALA	n/a	n/a	L:GLA1697
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.00 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	10.5	5.9	5.8	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	97%		63-139%
540-36-3	1,4-Difluorobenzene	95%		52-140%

(a) Analysis performed at SGS Scott, LA.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	BUC-5@6	Date Sampled:	02/07/18
Lab Sample ID:	TD16424-9R	Date Received:	02/09/18
Matrix:	SO - Soil	Percent Solids:	91.7
Method:	SW846 8015C SW846 3546		
Project:	CJES State AB SWD #1/LEA Co,N Mex		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	S0005079.D	1	02/22/18 17:45	ALA	02/21/18 12:00	L:OP10558	L:GLG620
Run #2							

Run #	Initial Weight	Final Volume
Run #1	20.2 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C22)	9.31	5.4	2.7	mg/kg	
	TPH (> C22-C36)	42.1	5.4	2.7	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	87%		31-130%

(a) Analysis performed at SGS Scott, LA.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	BUC-5@12	Date Sampled:	02/07/18
Lab Sample ID:	TD16424-10A	Date Received:	02/09/18
Matrix:	SO - Soil	Percent Solids:	91.3
Project:	CJES State AB SWD #1/LEA Co,N Mex		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	20.1	5.4	mg/kg	1	03/03/18 15:45	LR	EPA 300.0

RL = Reporting Limit

Report of Analysis

Client Sample ID:	BUC-5@12	Date Sampled:	02/07/18
Lab Sample ID:	TD16424-10R	Date Received:	02/09/18
Matrix:	SO - Soil	Percent Solids:	91.3
Method:	SW846 8015C		
Project:	CJES State AB SWD #1/LEA Co,N Mex		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	LA286702.D	1	02/21/18 06:36	ALA	n/a	n/a	L:GLA1697
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.00 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	6.0	5.9	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
460-00-4	4-Bromofluorobenzene	96%		63-139%		
540-36-3	1,4-Difluorobenzene	94%		52-140%		

(a) Analysis performed at SGS Scott, LA.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	BUC-5@12	
Lab Sample ID:	TD16424-10R	Date Sampled: 02/07/18
Matrix:	SO - Soil	Date Received: 02/09/18
Method:	SW846 8015C SW846 3546	Percent Solids: 91.3
Project:	CJES State AB SWD #1/LEA Co,N Mex	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	S0005080.D	1	02/22/18 18:06	ALA	02/21/18 12:00	L:OP10558	L:GLG620
Run #2							

Run #	Initial Weight	Final Volume
Run #1	20.1 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C22)	7.56	5.4	2.7	mg/kg	
	TPH (> C22-C36)	16.6	5.4	2.7	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	82%		31-130%

(a) Analysis performed at SGS Scott, LA.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Misc. Forms**Custody Documents and Other Forms**

Includes the following where applicable:

- Chain of Custody



ACCUTEST

CHAIN OF CUSTODY

10165 Harwin Dr, Ste 150 Houston, TX 77036
TEL: 713-271-4700 FAX: 713-271-4770
www.accutest.com

Client / Reporting Information		Project Information																	
Company Name Tech Consulting Corp	Project Name CES STATE AB SUD #1	Street LEACONIM	Billing Information (If different from Report to) Company Name ENTER																
Address Waterway Ave, Suite 300	City TX	State TX	Street Address 21 WATERWAY STE 300																
City Woodlands TX	Zip 77380	City TX	State TX																
Phone # 210 326-7321	Fax # 210 326-7321	Project # ENTER	Attention: CHAM PATEL																
Project Contact PETE SCHRAM	E-mail pschram@techconsulting.com	Client Purchase Order #	Number of preserved Bottles																
Sampler(s) Name(s) PETE SCHRAM	Phone # 210 326-7321	Project Manager CHAM PATEL	Collection																
Field ID / Point of Collection	Date	Time	Sampled By	Matrix	# of bottles	NO3	NO2	ZANON	HNO3	H2SO4	NO3	NO2	DI Water	MEH	TSP	MPHSD	ENDURE	OTHER	
1 BUC-1EL	2/1/13	1530	PUS	S	1														
2 BUC-1EL		1530																	
3 BUC-2EL		1530																	
4 BUC-2EL		1645																	
5 BUC-3EL		1545																	
6 BUC-3EL		1605																	
7 BUC-4EL		1605																	
8 BUC-4EL		1615																	
9 BUC-5EL	2/7/13	1615	PUS	S	1														
10 BUC-5EL																			
Turnaround Time (Business days)		Approved By (SGS Accutest PM): / Date:		Data Deliverable Information															
<input checked="" type="checkbox"/> Standard <input type="checkbox"/> 5 Day RUSH <input type="checkbox"/> 4 Day RUSH <input type="checkbox"/> 3 Day RUSH <input type="checkbox"/> 2 Day RUSH <input type="checkbox"/> 1 Day EMERGENCY				<input type="checkbox"/> Commercial "A" (Level 1) <input checked="" type="checkbox"/> Commercial "B" (Level 2) <input type="checkbox"/> FULT1 (Level 3+4) <input type="checkbox"/> REDT1 (Level 3+4) <input type="checkbox"/> Commercial "C"		<input type="checkbox"/> TRRP <input type="checkbox"/> EDD Format <input type="checkbox"/> Other													
Emergency & Rush T/A data available via Lablink				Form: SM021-0															
Relinquished by Sampler: 1 Pete Schram		Date Time: 2/1/13 17:30		Received By: 3 FELIX		Date Time: 2/1/13 17:30		Relinquished By: 2 COS		Date Time: 2/1/13 8:00		Received By: 4 FELIX		Date Time: 2/1/13 13:00		Received By: 4 FELIX		Date Time: 2/1/13 13:00	
Sampled By: 1 FELIX		Date Time: 2/1/13 16:00		Received By: 3 FELIX		Date Time: 2/1/13 16:00		Relinquished By: 2 COS		Date Time: 2/1/13 8:00		Received By: 4 FELIX		Date Time: 2/1/13 13:00		Received By: 4 FELIX		Date Time: 2/1/13 13:00	
Custody Seal #		Intact		Not Intact		Preserved where applicable		On Ice		Cooler Temp									

TD16424: Chain of Custody

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ACCUTEST

CHAIN OF CUSTODY

10165 Harwin Dr, Ste 150 Houston, TX 77036
TEL: 713-271-4700 FAX: 713-271-4770
www.accutest.com

Client / Reporting Information		Project Information		Billing Information (if different from Report to)	
Company Name Tech Consulting Corp	Project Name CJES STATE AB SOD #1	Company Name ENTECH			
Street Address Waterway Ave, Suite 300	Street LEA CO NM	Street Address 21 WATERWAY STE 300			
City Waterway Ave, Suite 300	City LEA CO NM	City THE WOODLANDS TX			
State TX	State NM	State TX			
Zip 77380	Zip 87001	Zip 77380			
Project Contact PETE SCHRAM	Project # 210-326-7331	Client Purchase Order # ENTECH SERVICE, INC			
Phone # 210-326-7331	E-mail pschram@entechservice.com	Attention CHAD PATEL			
Fax #	Project Manager CHAD PATEL	Number of preserved bottles			
	Phone # 210-326-7331	HCl			
Sampler(s) Name(s) PETE SCHRAM 210-326-7331	Collection	NaNOH			
		ZnAcOH			
		HNO3			
		H2SO4			
		HNO2			
		DI Water			
		MEOH			
		NaOH			
		NaNO3			
		OTHER			
Field ID / Point of Collection	Date	Time	Sampled By	Matrix	# of bottles
1 BUC-1e6	2/11/13	1500	POS	S	1
2 BUC-1e8		1500			
3 BUC-2e6		1520			
4 BUC-2e12		1520			
5 BUC-3e6		1545			
6 BUC-3e10		1545			
7 BUC-4e6		1608			
8 BUC-4e9		1608			
9 BUC-5e6	2/11/13	1615	POS	S	1
10 BUC-5e12					
Data Deliverable Information					
<input type="checkbox"/> Commercial "A" (Level 1) <input type="checkbox"/> TRRP					
<input checked="" type="checkbox"/> Commercial "B" (Level 2) <input type="checkbox"/> EDD Format					
<input type="checkbox"/> FULLT1 (Level 3+4) <input type="checkbox"/> Other					
<input type="checkbox"/> REDT1 (Level 3+4)					
<input type="checkbox"/> Commercial "C"					
Commercial "A" = Results Only					
Commercial "B" = Results + QC Summary					
T2 Commercial "C" = Results + QC & Surrogate Summary					
Form: SM021-0					
Sample Custody must be documented below each time samples change possession, including courier delivery.					
Relinquished By: 1	Date Time: 2/11/13 17:30	Relinquished By: 2	Date Time: 2/11/13 17:30	Relinquished By: 3	Date Time: 2/11/13 17:30
Received By: 1	Date Time: 2/11/13 17:30	Received By: 2	Date Time: 2/11/13 17:30	Received By: 3	Date Time: 2/11/13 17:30
Relinquished By: 1	Date Time: 2/11/13 17:30	Relinquished By: 2	Date Time: 2/11/13 17:30	Relinquished By: 3	Date Time: 2/11/13 17:30
Received By: 1	Date Time: 2/11/13 17:30	Received By: 2	Date Time: 2/11/13 17:30	Received By: 3	Date Time: 2/11/13 17:30
Relinquished By: 1	Date Time: 2/11/13 17:30	Relinquished By: 2	Date Time: 2/11/13 17:30	Relinquished By: 3	Date Time: 2/11/13 17:30
Received By: 1	Date Time: 2/11/13 17:30	Received By: 2	Date Time: 2/11/13 17:30	Received By: 3	Date Time: 2/11/13 17:30

TD16424: Chain of Custody

Page 2 of 4





ACCOUNT

COOLER TEMP FORM

TC#

TD16424

Client

ALGC Driver

Delivered by (circle one):

FedEx/UPS

2/9/18

Date:

Client:

Cooler Number:

CF, °C

Corrected Temp, °C

Thermometer ID:

SAMPLES CONTAINED IN COOLER

SHIP DATE: 05 JAN 18
ACTUATOR: 255 GUB HAN
CNO: 0243260 CREFE2916

BILL SENDER

(432) 234-3079

ORIGIN ID: SGRA
ORIGIN FIRM
SGS-ACCOUNTS
3800 S. COUNTRY ROAD
MIDLAND, TX 79706
UNITED STATES US

TO
SAMPLE MANAGEMENT
SGS ACCUTEST
10165 HARWIN DRIVE
SUITE 150
HOUSTON TX 77036

REF: (713) 271-4700

FedEx

Express



FRI - 09 FEB 10:30A
PRIORITY OVERNIGHT

FedEx

TRK# 7314 4445 7877

0221

AB SGRA

77036

IAH

TX-US



Customer

DATE

2/2

SIGNATURE

SGS

10:30

7877

02.09

Fntan

3/1/8

PH LOT# 10D4561

Form: SW027-06 Rev 10/24/2016

TD16424: Chain of Custody

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ACCUTEST

COOLER TEMP FORM

TC#

TD16424

Client

ALGC Driver

FedEx/UPS

Delivered by (circle one):

Date:

Client:

Cooler Number:

Thermometer ID:

CF, °C

Corrected Temp, °C

SAMPLES CONTAINED IN COOLER

SHIP DATE: 05 JAN 18
ACTUAL DATE: 05 JAN 18
CART: 0643390-CAFE2816

BILL SENDER

(432) 234-3079

ORIGIN: ID:SGRA
JACKSON, MS
SGS-ACCUTEST
3600 S. COUNTRY ROAD
MIDLAND, TX 79706
UNITED STATES US

TO: SAMPLE MANAGEMENT
SGS ACCUTEST
10165 HARWIN DRIVE
SUITE 150
HOUSTON TX 77036

(713) 271-4700

REF:

DEPT:

FedEx
EXPRESS

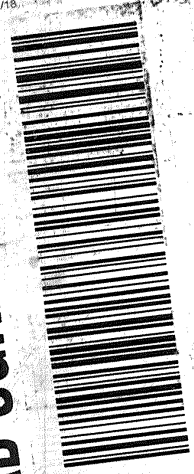


FRI - 09 FEB 11
PRIORITY OVERNIGHT

FedEx
TRK# 7314 4445 7888
0221

AB SGRA

77036
IAH
TX-US



45305030 02/09 56211/232/DCAS

Form: SW02706 Rev 10/24/2006

PH LOT# 10D4561

Enter

091010



General Chemistry

5

QC Data Summaries

Includes the following where applicable:

- **Method Blank and Blank Spike Summaries**
- **Duplicate Summaries**
- **Matrix Spike Summaries**

METHOD BLANK AND SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: TD16424
Account: ENTECTXW - EnTech Consulting Corporation
Project: CJES State AB SWD #1/LEA Co,N Mex

Analyte	Batch ID	RL	MB Result	Units	Spike Amount	BSP Result	BSP %Recov	QC Limits
Bromide	GP46558/GN88230	5.0	0.0	mg/kg	100	96.5	96.5	90-110%
Chloride	GP46536/GN88202	5.0	0.0	mg/kg	100	94.6	94.6	90-110%
Chloride	GP46558/GN88230	5.0	0.0	mg/kg	100	94.2	94.2	90-110%
Fluoride	GP46558/GN88230	5.0	0.0	mg/kg	100	101	101.0	90-110%
Nitrogen, Nitrate	GP46558/GN88230	5.0	0.0	mg/kg	100	92.4	92.4	90-110%
Nitrogen, Nitrite	GP46558/GN88230	5.0	0.0	mg/kg	100	99.6	99.6	90-110%
Sulfate	GP46558/GN88230	5.0	0.0	mg/kg	100	103	103.0	90-110%

Associated Samples:

Batch GP46536: TD16424-2A, TD16424-10A

Batch GP46558: TD16424-9A

(*) Outside of QC limits

DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: TD16424
Account: ENTECTXW - EnTech Consulting Corporation
Project: CJES State AB SWD #1/LEA Co,N Mex

Analyte	Batch ID	QC Sample	Units	Original Result	DUP Result	RPD	QC Limits
Chloride	GP46536/GN88202	TD16424-10A	mg/kg	20.1	20.6	2.5	0-20%
Chloride	GP46558/GN88230	TD16424-9A	mg/kg	18.5	17.6	5.0	0-20%
Solids, Percent	GN87931	TD16995-1	%	61.5	61.6	0.2	0-5%
Solids, Percent	GN88106	TD17272-1	%	79.6	79.3	0.4	0-5%

Associated Samples:

Batch GN87931: TD16424-9R, TD16424-10R

Batch GN88106: TD16424-2A

Batch GP46536: TD16424-2A, TD16424-10A

Batch GP46558: TD16424-9A

(*) Outside of QC limits

5.2

5

MATRIX SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: TD16424
Account: ENTECTXW - EnTech Consulting Corporation
Project: CJES State AB SWD #1/LEA Co,N Mex

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MS Result	%Rec	QC Limits
Chloride	GP46536/GN88202	TD16424-10A	mg/kg	20.1	108	122	94.0	80-120%
Chloride	GP46558/GN88230	TD16424-9A	mg/kg	18.5	109	113	86.8	80-120%

Associated Samples:

Batch GP46536: TD16424-2A, TD16424-10A

Batch GP46558: TD16424-9A

(*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits

Misc. Forms

Custody Documents and Other Forms

(SGS Scott, LA)

Includes the following where applicable:

- Chain of Custody



CHAIN OF CUSTODY

Page 1 of 2

10165 Harwin Drive, Houston, TX 77036
TEL: 713-271-4700 FAX: 713-271-4770
www.sgs.com

FED-EX Tracking #	Bottle Order Control #
SGS Quote #	SGS Job # TD16424

Client / Reporting Information		Project Information		Requested Analysis (see TEST CODE sheet)												Matrix Codes	
Company Name: SGS North America Inc.		Project Name: CJES State AB SWD #1/LEA Co,N Mex														<div>DW - Drinking Water GW - Ground Water WW - Water SW - Surface Water SO - Soil SL - Sludge SED - Sediment OI - Oil LIQ - Other Liquid AIR - Air SOL - Other Solid WP - Wipe FB - Field Blank ED - Equipment Blank RB - Rinse Blank TB - Trip Blank</div>	
Street Address 10165 Harwin Drive		Street															
City State Zip Houston TX 77036		City State															
Project Contact Trumeshia.Brown@sgs.com		Project #															
Phone # 713-271-4700		Client Purchase Order #															
Sampler(s) Name(s)		Project Manager															
Attention:																	
Collection																	
Date Time																	
Sampled by																	
Matrix																	
# of bottles																	
HCl																	
NaOH																	
HNO3																	
H2SO4																	
H2O2																	
DI Water																	
MEOH																	
ENCODE																	
HOLD																	
LAB USE ONLY																	
Turnaround Time (Business days)		Data Deliverable Information												Comments / Special Instructions			
<input type="checkbox"/> Std. 10 Business Days <input type="checkbox"/> 5 Day RUSH <input type="checkbox"/> 3 Day EMERGENCY <input type="checkbox"/> 2 Day EMERGENCY <input type="checkbox"/> 1 Day EMERGENCY <input checked="" type="checkbox"/> other Due 2/18/2018 Emergency & Rush T/A data available VIA Lablink		Approved By (SGS PM): / Date:		<input type="checkbox"/> Commercial "A" (Level 1) <input type="checkbox"/> Commercial "B" (Level 2) <input type="checkbox"/> FULLT1 (Level 3+4) <input type="checkbox"/> NJ Reduced <input type="checkbox"/> Commercial "C" <input type="checkbox"/> NYASP Category A <input type="checkbox"/> NYASP Category B <input type="checkbox"/> State Forms <input type="checkbox"/> EDD Format <input checked="" type="checkbox"/> Other COMMB Commercial "A" = Results Only Commercial "B" = Results + QC Summary NJ Reduced = Results + QC Summary + Partial Raw data								Split off into an 2oz LA 7B3(RMM4)					
Sample Custody must be documented below each time samples change possession, including courier delivery.																	
Relinquished by Sampler: 1 S. Fang		Date Tm 2-18-18		Received By: 1 JG		Date Time: 2-18-18		Relinquished By: 2 JG		Date Time: 2-18-18		Received By: 2 JG					
Relinquished by Sampler: 3 JG		Date Time: 2-18-18		Received By: 3 JG		Date Time: 2-18-18		Relinquished By: 4 JG		Date Time: 2-18-18		Received By: 4 JG					
Relinquished by: 5 JG		Date Time: 2-18-18		Received By: 5 JG		Date Time: 2-18-18		Custody Seal: 25106		<input checked="" type="checkbox"/> Intact <input type="checkbox"/> Not Intact		Preserved where applicable PB					
										On Ice 2-18-18		Cooler Temp. 4C					

TD16424: Chain of Custody

Page 1 of 3

SGS Scott, LA



SGS Sample Receipt Summary

Job Number: TD16424

Client: SGS NORTH AMERICA

Project: CJES STATE AB SWD#1/LEA

Date / Time Received: 2/13/2018 8:15:00 AM

Delivery Method: Accutest Courier

Airbill #'s: _____

Cooler Temps (Initial/Adjusted): #1: (2/2); #2: (1.8/1.8);

Cooler Security

	<u>Y</u>	<u>or</u>	<u>N</u>		<u>Y</u>	<u>or</u>	<u>N</u>
1. Custody Seals Present:	<input checked="" type="checkbox"/>		<input type="checkbox"/>	3. COC Present:	<input checked="" type="checkbox"/>		<input type="checkbox"/>
2. Custody Seals Intact:	<input checked="" type="checkbox"/>		<input type="checkbox"/>	4. Smpl Dates/Time OK	<input checked="" type="checkbox"/>		<input type="checkbox"/>

Cooler Temperature

	<u>Y</u>	<u>or</u>	<u>N</u>
1. Temp criteria achieved:	<input checked="" type="checkbox"/>		<input type="checkbox"/>
2. Thermometer ID:	<u>DV441;</u>		
3. Cooler media:	<u>Ice (direct contact)</u>		
4. No. Coolers:	<u>2</u>		

Quality Control Preservation

	<u>Y</u>	<u>or</u>	<u>N</u>	<u>N/A</u>
1. Trip Blank present / cooler:	<input type="checkbox"/>		<input type="checkbox"/>	<input checked="" type="checkbox"/>
2. Trip Blank listed on COC:	<input type="checkbox"/>		<input type="checkbox"/>	<input checked="" type="checkbox"/>
3. Samples preserved properly:	<input checked="" type="checkbox"/>		<input type="checkbox"/>	
4. VOCs headspace free:	<input type="checkbox"/>		<input type="checkbox"/>	<input checked="" type="checkbox"/>

Comments

Sample Integrity - Documentation

	<u>Y</u>	<u>or</u>	<u>N</u>
1. Sample labels present on bottles:	<input checked="" type="checkbox"/>		<input type="checkbox"/>
2. Container labeling complete:	<input checked="" type="checkbox"/>		<input type="checkbox"/>
3. Sample container label / COC agree:	<input checked="" type="checkbox"/>		<input type="checkbox"/>

Sample Integrity - Condition

	<u>Y</u>	<u>or</u>	<u>N</u>
1. Sample recvd within HT:	<input checked="" type="checkbox"/>		<input type="checkbox"/>
2. All containers accounted for:	<input checked="" type="checkbox"/>		<input type="checkbox"/>
3. Condition of sample:	<u>Intact</u>		

Sample Integrity - Instructions

	<u>Y</u>	<u>or</u>	<u>N</u>	<u>N/A</u>
1. Analysis requested is clear:	<input checked="" type="checkbox"/>		<input type="checkbox"/>	
2. Bottles received for unspecified tests	<input type="checkbox"/>		<input checked="" type="checkbox"/>	
3. Sufficient volume recvd for analysis:	<input checked="" type="checkbox"/>		<input type="checkbox"/>	
4. Compositing instructions clear:	<input type="checkbox"/>		<input type="checkbox"/>	<input checked="" type="checkbox"/>
5. Filtering instructions clear:	<input type="checkbox"/>		<input type="checkbox"/>	<input checked="" type="checkbox"/>

TD16424: Chain of Custody

Page 2 of 3

Job Change Order: TD16424

Requested Date:	2/20/2018	Received Date:	2/9/2018
Account Name:	EnTech Consulting Corporation	Due Date:	2/26/2018
Project Description:	CJES State AB SWD #1/LEA Co,N Mex	Deliverable:	COMMB
CSR:	SylviaG	TAT (Days):	6

=====
Sample #: TD16424-9R, 10R Change: Login V8015GRO, B8015DROORO1
Dept:
TAT: 6
=====

Above Changes Per: Client Date/Time: 2/20/2018 2:37:45 PM

To Client: This Change Order is confirmation of the revisions, previously discussed with the Client Service Representative.

Page 1 of 1

GC Volatiles**QC Data Summaries**

(SGS Scott, LA)

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Job Number: TD16424
Account: ALGC SGS Houston, TX
Project: ENTECTXW: CJES State AB SWD #1/LEA Co,N Mex

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GLA1697-MB1	LA286698.D	1	02/21/18	SV	n/a	n/a	GLA1697

The QC reported here applies to the following samples: Method: SW846 8015C

TD16424-9R, TD16424-10R

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	5.0	4.9	mg/kg	

CAS No.	Surrogate Recoveries	Limits
460-00-4	4-Bromofluorobenzene	109% 63-139%
540-36-3	1,4-Difluorobenzene	101% 52-140%

Blank Spike/Blank Spike Duplicate Summary

Job Number: TD16424
Account: ALGC SGS Houston, TX
Project: ENTECTXW: CJES State AB SWD #1/LEA Co,N Mex

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GLA1697-BS1	LA286694.D	1	02/21/18	SV	n/a	n/a	GLA1697
GLA1697-BSD1	LA286696.D	1	02/21/18	SV	n/a	n/a	GLA1697

The QC reported here applies to the following samples: Method: SW846 8015C

TD16424-9R, TD16424-10R

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	BSD mg/kg	BSD %	RPD	Limits Rec/RPD
	TPH-GRO (C6-C10)	50	48.6	97	48.5	97	0	79-121/6

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
460-00-4	4-Bromofluorobenzene	109%	107%	63-139%
540-36-3	1,4-Difluorobenzene	110%	109%	52-140%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: TD16424
Account: ALGC SGS Houston, TX
Project: ENTECTXW: CJES State AB SWD #1/LEA Co,N Mex

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
LA41435-1AMS	LA286728.D	1	02/21/18	SV	n/a	n/a	GLA1697
LA41435-1AMSD	LA286730.D	1	02/21/18	SV	n/a	n/a	GLA1697
LA41435-1A	LA286716.D	1	02/21/18	SV	n/a	n/a	GLA1697

The QC reported here applies to the following samples: Method: SW846 8015C

TD16424-9R, TD16424-10R

CAS No.	Compound	LA41435-1A Spike mg/kg	Q	MS mg/kg	MS %	Spike mg/kg	MSD mg/kg	MSD %	RPD	Limits Rec/RPD
	TPH-GRO (C6-C10)	1690	982	3090	143*	982	3360	170*	8*	79-121/6

CAS No.	Surrogate Recoveries	MS	MSD	LA41435-1A Limits
460-00-4	4-Bromofluorobenzene	114%	132%	122% 63-139%
540-36-3	1,4-Difluorobenzene	104%	103%	101% 52-140%

* = Outside of Control Limits.

GC/LC Semi-volatiles**QC Data Summaries**

(SGS Scott, LA)

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Job Number: TD16424
Account: ALGC SGS Houston, TX
Project: ENTECTXW: CJES State AB SWD #1/LEA Co,N Mex

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP10558-MB	S0005074.D	1	02/22/18	JT	02/21/18	OP10558	GLG620

The QC reported here applies to the following samples: Method: SW846 8015C

TD16424-9R, TD16424-10R

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C22)	2.83	5.0	2.5	mg/kg	J
	TPH (> C22-C36)	ND	5.0	2.5	mg/kg	

CAS No.	Surrogate Recoveries	Limits
84-15-1	o-Terphenyl	82% 31-130%

8.1.1
8

Blank Spike/Blank Spike Duplicate Summary

Job Number: TD16424
Account: ALGC SGS Houston, TX
Project: ENTECTXW: CJES State AB SWD #1/LEA Co,N Mex

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP10558-BS1	S0005075.D	1	02/22/18	JT	02/21/18	OP10558	GLG620
OP10558-BSD1	S0005076.D	1	02/22/18	JT	02/21/18	OP10558	GLG620

The QC reported here applies to the following samples: Method: SW846 8015C

TD16424-9R, TD16424-10R

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	BSD mg/kg	BSD %	RPD	Limits Rec/RPD
	TPH (C10-C22)	120	75.4	63	122	102	47*	57-119/30

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
84-15-1	o-Terphenyl	51%	80%	31-130%

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: TD16424
Account: ALGC SGS Houston, TX
Project: ENTECTXW: CJES State AB SWD #1/LEA Co,N Mex

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP10558-BS2	S0005077.D	1	02/22/18	JT	02/21/18	OP10558	GLG620
OP10558-BSD2	S0005078.D	1	02/22/18	JT	02/21/18	OP10558	GLG620

The QC reported here applies to the following samples: Method: SW846 8015C

TD16424-9R, TD16424-10R

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	BSD mg/kg	BSD %	RPD	Limits Rec/RPD
	TPH (> C22-C36)	150	120	80	121	81	1	55-117/25

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
84-15-1	o-Terphenyl	77%	81%	31-130%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: TD16424
Account: ALGC SGS Houston, TX
Project: ENTECTXW: CJES State AB SWD #1/LEA Co,N Mex

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP10558-MS1	S0005092.D	1	02/22/18	JT	02/21/18	OP10558	GLG620
OP10558-MSD1	S0005093.D	1	02/22/18	JT	02/21/18	OP10558	GLG620
TD16424-9R	S0005079.D	1	02/22/18	JT	02/21/18	OP10558	GLG620

The QC reported here applies to the following samples: Method: SW846 8015C

TD16424-9R, TD16424-10R

CAS No.	Compound	TD16424-9R Spike mg/kg	Q	MS mg/kg	MS %	Spike mg/kg	MSD mg/kg	MSD %	RPD	Limits Rec/RPD
	TPH (C10-C22)	9.31	129	131	94	130	142	102	8	57-119/30

CAS No.	Surrogate Recoveries	MS	MSD	TD16424-9R Limits
84-15-1	o-Terphenyl	83%	82%	87% 31-130%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: TD16424
Account: ALGC SGS Houston, TX
Project: ENTECTXW: CJES State AB SWD #1/LEA Co,N Mex

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP10558-MS2	S0005094.D	1	02/22/18	JT	02/21/18	OP10558	GLG620
OP10558-MSD2	S0005095.D	1	02/22/18	JT	02/21/18	OP10558	GLG620
TD16424-9R	S0005079.D	1	02/22/18	JT	02/21/18	OP10558	GLG620

The QC reported here applies to the following samples: Method: SW846 8015C

TD16424-9R, TD16424-10R

CAS No.	Compound	TD16424-9R Spike mg/kg	Q	MS mg/kg	MS %	Spike mg/kg	MSD mg/kg	MSD %	RPD	Limits Rec/RPD
	TPH (> C22-C36)	42.1	164	153	68	163	162	74	6	55-117/25

CAS No.	Surrogate Recoveries	MS	MSD	TD16424-9R Limits
84-15-1	o-Terphenyl	81%	79%	87% 31-130%

* = Outside of Control Limits.

The results set forth herein are provided by SGS North America Inc.

e-Hardcopy 2.0
Automated Report

Technical Report for

EnTech Consulting Corporation

CJES State AB SWD #1/LEA Co,N Mex

SGS Job Number: TD16439

Sampling Date: 02/07/18


Report to:

EnTech Consulting Corporation
21 Waterway Ave, Suite 300
The Woodlands, TX 77380
chan.patel@entechservice.com; pete.schram@entechservice.com
ATTN: Chan Patel

Total number of pages in report: 220



Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable.


Richard Rodriguez
Laboratory Director

Client Service contact: Sylvia Garza 713-271-4700

Certifications: TX (T104704220-18-28) AR (14-016-0) AZ (AZ0769) FL (E87628)
KS (E-10366) LA (85695/04004) NJ (TX010) OK (2017-002) VA (8999)

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Test results relate only to samples analyzed.

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Sample Summary

EnTech Consulting Corporation**Job No: TD16439****CJES State AB SWD #1/LEA Co,N Mex**

Sample Number	Collected		Received	Matrix		Client Sample ID
	Date	Time By		Code	Type	
TD16439-1	02/07/18	10:55	02/09/18	SO	Soil	D-1 @ 6"
TD16439-1A	02/07/18	10:55	02/09/18	SO	Soil	D-1 @ 6"
TD16439-2	02/07/18	10:55	02/09/18	SO	Soil	D-1 @ 18"
TD16439-2A	02/07/18	10:55	02/09/18	SO	Soil	D-1 @ 18"
TD16439-3	02/07/18	11:17	02/09/18	SO	Soil	D2 @ 6"
TD16439-3A	02/07/18	11:17	02/09/18	SO	Soil	D2 @ 6"
TD16439-4	02/07/18	11:17	02/09/18	SO	Soil	D2 @ 24
TD16439-4A	02/07/18	11:17	02/09/18	SO	Soil	D2 @ 24
TD16439-5	02/07/18	11:40	02/09/18	SO	Soil	D3 @ 6
TD16439-5A	02/07/18	11:40	02/09/18	SO	Soil	D3 @ 6
TD16439-6	02/07/18	11:40	02/09/18	SO	Soil	D3 @ 12
TD16439-6A	02/07/18	11:40	02/09/18	SO	Soil	D3 @ 12
TD16439-7	02/07/18	11:40	02/09/18	SO	Soil	D3 @ 28

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

Sample Summary
(continued)

EnTech Consulting Corporation

Job No: TD16439

CJES State AB SWD #1/LEA Co,N Mex

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
TD16439-7A	02/07/18	11:40	02/09/18	SO	Soil	D3 @ 28
TD16439-7B	02/07/18	11:40	02/09/18	SO	Soil	D3 @ 28
TD16439-8	02/07/18	12:05	02/09/18	SO	Soil	D4 @ 6
TD16439-8A	02/07/18	12:05	02/09/18	SO	Soil	D4 @ 6
TD16439-9	02/07/18	12:05	02/09/18	SO	Soil	D4 @ 12
TD16439-9A	02/07/18	12:05	02/09/18	SO	Soil	D4 @ 12
TD16439-10	02/07/18	12:05	02/09/18	SO	Soil	D4 @ 28
TD16439-10A	02/07/18	12:05	02/09/18	SO	Soil	D4 @ 28
TD16439-10B	02/07/18	12:05	02/09/18	SO	Soil	D4 @ 28
TD16439-11	02/07/18	12:17	02/09/18	SO	Soil	D5 @ 6
TD16439-11A	02/07/18	12:17	02/09/18	SO	Soil	D5 @ 6
TD16439-12	02/07/18	12:17	02/09/18	SO	Soil	D5 @ 12
TD16439-12A	02/07/18	12:17	02/09/18	SO	Soil	D5 @ 12

Soil samples reported on a dry weight basis unless otherwise indicated on result page.



Sample Summary

(continued)

EnTech Consulting Corporation

Job No: TD16439

CJES State AB SWD #1/LEA Co,N Mex

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
TD16439-13	02/07/18	12:17	02/09/18	SO	Soil	D5 @ 28
TD16439-13B	02/07/18	12:17	02/09/18	SO	Soil	D5 @ 28
TD16439-13R	02/07/18	12:17	02/09/18	SO	Soil	D5 @ 28
TD16439-14	02/07/18	12:30	02/09/18	SO	Soil	D6 @ 6
TD16439-14A	02/07/18	12:30	02/09/18	SO	Soil	D6 @ 6
TD16439-15	02/07/18	12:30	02/09/18	SO	Soil	D6 @ 9
TD16439-15A	02/07/18	12:30	02/09/18	SO	Soil	D6 @ 9
TD16439-16	02/07/18	12:53	02/09/18	SO	Soil	D7 @ 6
TD16439-16A	02/07/18	12:53	02/09/18	SO	Soil	D7 @ 6
TD16439-17	02/07/18	12:53	02/09/18	SO	Soil	D7 @ 10
TD16439-17A	02/07/18	12:53	02/09/18	SO	Soil	D7 @ 10
TD16439-18	02/07/18	13:06	02/09/18	SO	Soil	D8 @ 6
TD16439-18A	02/07/18	13:06	02/09/18	SO	Soil	D8 @ 6

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

Sample Summary
(continued)

EnTech Consulting Corporation

Job No: TD16439

CJES State AB SWD #1/LEA Co,N Mex

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
TD16439-19	02/07/18	13:06	02/09/18	SO	Soil	D8 @ 12
TD16439-19A	02/07/18	13:06	02/09/18	SO	Soil	D8 @ 12
TD16439-20	02/07/18	13:06	02/09/18	SO	Soil	D8 @ 24
TD16439-20A	02/07/18	13:06	02/09/18	SO	Soil	D8 @ 24
TD16439-20B	02/07/18	13:06	02/09/18	SO	Soil	D8 @ 24
TD16439-21	02/07/18	15:08	02/09/18	SO	Soil	D9 @ 6
TD16439-21A	02/07/18	15:08	02/09/18	SO	Soil	D9 @ 6
TD16439-22	02/07/18	15:08	02/09/18	SO	Soil	D9 @ 10
TD16439-22A	02/07/18	15:08	02/09/18	SO	Soil	D9 @ 10
TD16439-23	02/07/18	15:32	02/09/18	SO	Soil	D10 @ 6
TD16439-23A	02/07/18	15:32	02/09/18	SO	Soil	D10 @ 6
TD16439-24	02/07/18	15:32	02/09/18	SO	Soil	D10 @ 9
TD16439-24A	02/07/18	15:32	02/09/18	SO	Soil	D10 @ 9

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

Sample Summary

(continued)

EnTech Consulting Corporation

Job No: TD16439

CJES State AB SWD #1/LEA Co,N Mex

Sample Number	Collected Date	Time By	Received	Matrix Code Type	Client Sample ID
TD16439-25	02/07/18	16:00	02/09/18	SO Soil	D11 @ 6
TD16439-25A	02/07/18	16:00	02/09/18	SO Soil	D11 @ 6
TD16439-26	02/07/18	16:00	02/09/18	SO Soil	D11 @ 9
TD16439-26A	02/07/18	16:00	02/09/18	SO Soil	D11 @ 9
TD16439-27	02/07/18	16:24	02/09/18	SO Soil	D12 @ 6
TD16439-27A	02/07/18	16:24	02/09/18	SO Soil	D12 @ 6
TD16439-28	02/07/18	16:24	02/09/18	SO Soil	D12 @ 9
TD16439-28A	02/07/18	16:24	02/09/18	SO Soil	D12 @ 9
TD16439-29	02/07/18	16:30	02/09/18	SO Soil	D13 @ 6
TD16439-29A	02/07/18	16:30	02/09/18	SO Soil	D13 @ 6
TD16439-30	02/07/18	16:30	02/09/18	SO Soil	D13 @ 8
TD16439-30A	02/07/18	16:30	02/09/18	SO Soil	D13 @ 8
TD16439-31	02/07/18	16:30	02/09/18	SO Soil	D13 @ 20

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

Sample Summary

(continued)

EnTech Consulting Corporation

Job No: TD16439

CJES State AB SWD #1/LEA Co,N Mex

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
TD16439-31A	02/07/18	16:30	02/09/18	SO	Soil	D13 @ 20
TD16439-31B	02/07/18	16:30	02/09/18	SO	Soil	D13 @ 20
TD16439-32	02/07/18	14:43	02/09/18	SO	Soil	D14 @ 6
TD16439-32A	02/07/18	14:43	02/09/18	SO	Soil	D14 @ 6
TD16439-33	02/07/18	14:43	02/09/18	SO	Soil	D14 @ 9
TD16439-33A	02/07/18	14:43	02/09/18	SO	Soil	D14 @ 9
TD16439-34	02/07/18	14:52	02/09/18	SO	Soil	D15 @ 6
TD16439-34A	02/07/18	14:52	02/09/18	SO	Soil	D15 @ 6
TD16439-35	02/07/18	14:52	02/09/18	SO	Soil	D15 @ 20
TD16439-35A	02/07/18	14:52	02/09/18	SO	Soil	D15 @ 20
TD16439-36	02/07/18	17:02	02/09/18	SO	Soil	D16 @ 6
TD16439-36A	02/07/18	17:02	02/09/18	SO	Soil	D16 @ 6
TD16439-37	02/07/18	17:02	02/09/18	SO	Soil	D16 @ 9

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

Sample Summary

(continued)

EnTech Consulting Corporation

Job No: TD16439

CJES State AB SWD #1/LEA Co,N Mex

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
TD16439-37A	02/07/18	17:02	02/09/18	SO	Soil	D16 @ 9
TD16439-38	02/07/18	10:30	02/09/18	SO	Soil	CD-1 @ 18
TD16439-38A	02/07/18	10:30	02/09/18	SO	Soil	CD-1 @ 18
TD16439-39	02/07/18	10:30	02/09/18	SO	Soil	CD-1 @ 30
TD16439-39R	02/07/18	10:30	02/09/18	SO	Soil	CD-1 @ 30
TD16439-40	02/07/18	14:40	02/09/18	SO	Soil	CD-2 @ 6
TD16439-40A	02/07/18	14:40	02/09/18	SO	Soil	CD-2 @ 6
TD16439-41	02/07/18	14:40	02/09/18	SO	Soil	CD-2 @ 12
TD16439-41A	02/07/18	14:40	02/09/18	SO	Soil	CD-2 @ 12
TD16439-42	02/07/18	14:40	02/09/18	SO	Soil	CD-2 @ 30
TD16439-42A	02/07/18	14:40	02/09/18	SO	Soil	CD-2 @ 30
TD16439-42B	02/07/18	14:40	02/09/18	SO	Soil	CD-2 @ 30
TD16439-43	02/07/18	17:10	02/09/18	SO	Soil	CD-3 @ 4

Soil samples reported on a dry weight basis unless otherwise indicated on result page.



Sample Summary
(continued)

EnTech Consulting Corporation

Job No: TD16439

CJES State AB SWD #1/LEA Co,N Mex

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
TD16439-43A	02/07/18	17:10	02/09/18	SO	Soil	CD-3 @ 4
TD16439-44	02/07/18	17:10	02/09/18	SO	Soil	CD-3 @ 7
TD16439-44A	02/07/18	17:10	02/09/18	SO	Soil	CD-3 @ 7
TD16439-45	02/07/18	00:00	02/09/18	SO	Soil	DUP-2
TD16439-45A	02/07/18	00:00	02/09/18	SO	Soil	DUP-2
TD16439-46	02/07/18	00:00	02/09/18	SO	Soil	DUP-3
TD16439-46A	02/07/18	00:00	02/09/18	SO	Soil	DUP-3
TD16439-47	02/07/18	00:00	02/09/18	SO	Soil	DUP-4
TD16439-47A	02/07/18	00:00	02/09/18	SO	Soil	DUP-4

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

Summary of Hits

Job Number: TD16439
Account: EnTech Consulting Corporation
Project: CJES State AB SWD #1/LEA Co,N Mex
Collected: 02/07/18

Lab Sample ID	Client Sample ID	Result/ Analyte	RL	MDL	Units	Method
TD16439-1	D-1 @ 6"					
Chloride		5120	570		mg/kg	EPA 300.0
TD16439-1A	D-1 @ 6"					
TPH (C10-C22) ^a		15.8	5.6	2.8	mg/kg	SW846 8015C
TPH (> C22-C36) ^a		54.9	5.6	2.8	mg/kg	SW846 8015C
TD16439-2	D-1 @ 18"					
Chloride		4410	270		mg/kg	EPA 300.0
TD16439-2A	D-1 @ 18"					
TPH (C10-C22) ^a		5.18 J	5.5	2.7	mg/kg	SW846 8015C
TPH (> C22-C36) ^a		10.5	5.5	2.7	mg/kg	SW846 8015C
TD16439-3	D2 @ 6"					
Chloride		1360	54		mg/kg	EPA 300.0
TD16439-3A	D2 @ 6"					
TPH (C10-C22) ^a		4.85 J	5.4	2.7	mg/kg	SW846 8015C
TPH (> C22-C36) ^a		16.9	5.4	2.7	mg/kg	SW846 8015C
TD16439-4	D2 @ 24					
Chloride		1510	57		mg/kg	EPA 300.0
TD16439-4A	D2 @ 24					
No hits reported in this sample.						
TD16439-5	D3 @ 6					
Chloride		979	53		mg/kg	EPA 300.0
TD16439-5A	D3 @ 6					
TPH (C10-C22) ^a		13.6	5.3	2.6	mg/kg	SW846 8015C
TPH (> C22-C36) ^a		66.8	5.3	2.6	mg/kg	SW846 8015C

Summary of Hits

Job Number: TD16439
Account: EnTech Consulting Corporation
Project: CJES State AB SWD #1/LEA Co,N Mex
Collected: 02/07/18

Lab Sample ID Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
TD16439-6	D3 @ 12					
Chloride		1090	54		mg/kg	EPA 300.0
TD16439-6A	D3 @ 12					
TPH (C10-C22) ^a		6.64	5.4	2.7	mg/kg	SW846 8015C
TPH (> C22-C36) ^a		32.8	5.4	2.7	mg/kg	SW846 8015C
TD16439-7B	D3 @ 28					
Chloride		749	27		mg/kg	EPA 300.0
TD16439-8	D4 @ 6					
Chloride		2870	110		mg/kg	EPA 300.0
TD16439-8A	D4 @ 6					
TPH (C10-C22) ^a		35.3	5.2	2.6	mg/kg	SW846 8015C
TPH (> C22-C36) ^a		150	5.2	2.6	mg/kg	SW846 8015C
TD16439-9	D4 @ 12					
Chloride		1700	55		mg/kg	EPA 300.0
TD16439-9A	D4 @ 12					
TPH (C10-C22) ^a		16.2	5.5	2.7	mg/kg	SW846 8015C
TPH (> C22-C36) ^a		60.0	5.5	2.7	mg/kg	SW846 8015C
TD16439-10B	D4 @ 28					
Chloride		3590	260		mg/kg	EPA 300.0
TD16439-11	D5 @ 6					
Chloride		1920	100		mg/kg	EPA 300.0
TD16439-11A	D5 @ 6					
TPH (C10-C22) ^a		20.7	5.2	2.6	mg/kg	SW846 8015C
TPH (> C22-C36) ^a		66.1	5.2	2.6	mg/kg	SW846 8015C

Summary of Hits

Job Number: TD16439
 Account: EnTech Consulting Corporation
 Project: CJES State AB SWD #1/LEA Co,N Mex
 Collected: 02/07/18

Lab Sample ID	Client Sample ID	Result/ Analyte	RL	MDL	Units	Method
TD16439-12	D5 @ 12					
Chloride		2220	110		mg/kg	EPA 300.0
TD16439-12A	D5 @ 12					
TPH (C10-C22) ^a		148	5.3	2.6	mg/kg	SW846 8015C
TPH (> C22-C36) ^a		319	5.3	2.6	mg/kg	SW846 8015C
TD16439-13B	D5 @ 28					
Chloride		1670	51		mg/kg	EPA 300.0
TD16439-13R	D5 @ 28					
TPH (C10-C22) ^a		22.7	5.2	2.6	mg/kg	SW846 8015C
TPH (> C22-C36) ^a		42.0	5.2	2.6	mg/kg	SW846 8015C
TD16439-14	D6 @ 6					
Chloride		2460	100		mg/kg	EPA 300.0
TD16439-14A	D6 @ 6					
TPH (C10-C22) ^a		14.3	5.3	2.7	mg/kg	SW846 8015C
TPH (> C22-C36) ^a		54.1	5.3	2.7	mg/kg	SW846 8015C
TD16439-15	D6 @ 9					
Chloride		1920	100		mg/kg	EPA 300.0
TD16439-15A	D6 @ 9					
TPH (C10-C22) ^a		8.07	5.2	2.6	mg/kg	SW846 8015C
TPH (> C22-C36) ^a		20.3	5.2	2.6	mg/kg	SW846 8015C
TD16439-16	D7 @ 6					
Chloride		2120	100		mg/kg	EPA 300.0
TD16439-16A	D7 @ 6					
TPH (C10-C22) ^a		47.8	5.1	2.6	mg/kg	SW846 8015C
TPH (> C22-C36) ^a		120	5.1	2.6	mg/kg	SW846 8015C

Summary of Hits

Job Number: TD16439
 Account: EnTech Consulting Corporation
 Project: CJES State AB SWD #1/LEA Co,N Mex
 Collected: 02/07/18

Lab Sample ID	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
TD16439-17	D7 @ 10					
Chloride		2920	100		mg/kg	EPA 300.0
TD16439-17A	D7 @ 10					
TPH (C10-C22) ^a		13.4	5.1	2.6	mg/kg	SW846 8015C
TPH (> C22-C36) ^a		37.6	5.1	2.6	mg/kg	SW846 8015C
TD16439-18	D8 @ 6					
Chloride		2410	100		mg/kg	EPA 300.0
TD16439-18A	D8 @ 6					
TPH (C10-C22) ^a		25.1	5.2	2.6	mg/kg	SW846 8015C
TPH (> C22-C36) ^a		85.7	5.2	2.6	mg/kg	SW846 8015C
TD16439-19	D8 @ 12					
Chloride		2060	110		mg/kg	EPA 300.0
TD16439-19A	D8 @ 12					
TPH (C10-C22) ^a		11.6	5.4	2.7	mg/kg	SW846 8015C
TPH (> C22-C36) ^a		55.7	5.4	2.7	mg/kg	SW846 8015C
TD16439-20B	D8 @ 24					
Chloride		1860	54		mg/kg	EPA 300.0
TD16439-21	D9 @ 6					
Chloride		142	11		mg/kg	EPA 300.0
TD16439-21A	D9 @ 6					
TPH (C10-C22) ^a		3.86 J	5.2	2.6	mg/kg	SW846 8015C
TPH (> C22-C36) ^a		13.7	5.2	2.6	mg/kg	SW846 8015C
TD16439-22	D9 @ 10					
Chloride		242	27		mg/kg	EPA 300.0

Summary of Hits

Job Number: TD16439
 Account: EnTech Consulting Corporation
 Project: CJES State AB SWD #1/LEA Co,N Mex
 Collected: 02/07/18

Lab Sample ID	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
TD16439-22A	D9 @ 10					
TPH (C10-C22) ^a		3.50 J	5.3	2.7	mg/kg	SW846 8015C
TPH (> C22-C36) ^a		7.74	5.3	2.7	mg/kg	SW846 8015C
TD16439-23	D10 @ 6					
Chloride		204	26		mg/kg	EPA 300.0
TD16439-23A	D10 @ 6					
TPH (C10-C22) ^a		2.79 J	5.3	2.6	mg/kg	SW846 8015C
TPH (> C22-C36) ^a		4.10 J	5.3	2.6	mg/kg	SW846 8015C
TD16439-24	D10 @ 9					
Chloride		492	26		mg/kg	EPA 300.0
TD16439-24A	D10 @ 9					
TPH (C10-C22) ^a		6.65	5.3	2.6	mg/kg	SW846 8015C
TPH (> C22-C36) ^a		35.7	5.3	2.6	mg/kg	SW846 8015C
TD16439-25	D11 @ 6					
Chloride		94.3	5.5		mg/kg	EPA 300.0
TD16439-25A	D11 @ 6					
TPH (C10-C22) ^a		3.94 J	5.5	2.8	mg/kg	SW846 8015C
TPH (> C22-C36) ^a		7.07	5.5	2.8	mg/kg	SW846 8015C
TD16439-26	D11 @ 9					
Chloride		95.2	5.0		mg/kg	EPA 300.0
TD16439-26A	D11 @ 9					
TPH-GRO (C6-C10) ^a		8.89	5.1	5.0	mg/kg	SW846 8015C
TPH (C10-C22) ^a		5.84	5.1	2.5	mg/kg	SW846 8015C
TPH (> C22-C36) ^a		17.2	5.1	2.5	mg/kg	SW846 8015C
TD16439-27	D12 @ 6					
Chloride		72.9	5.2		mg/kg	EPA 300.0

Summary of Hits

Job Number: TD16439
 Account: EnTech Consulting Corporation
 Project: CJES State AB SWD #1/LEA Co,N Mex
 Collected: 02/07/18

Lab Sample ID	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
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TD16439-27A D12 @ 6

TPH (C10-C22) ^a	4.79 J	5.2	2.6	mg/kg	SW846 8015C
TPH (> C22-C36) ^a	13.9	5.2	2.6	mg/kg	SW846 8015C

TD16439-28 D12 @ 9

Chloride	71.9	5.1		mg/kg	EPA 300.0
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TD16439-28A D12 @ 9

TPH (C10-C22) ^a	13.5	5.0	2.5	mg/kg	SW846 8015C
TPH (> C22-C36) ^a	108	5.0	2.5	mg/kg	SW846 8015C

TD16439-29 D13 @ 6

Chloride	1170	51		mg/kg	EPA 300.0
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TD16439-29A D13 @ 6

TPH (C10-C22) ^a	3.75 J	5.2	2.6	mg/kg	SW846 8015C
TPH (> C22-C36) ^a	9.01	5.2	2.6	mg/kg	SW846 8015C

TD16439-30 D13 @ 8

Chloride	1090	53		mg/kg	EPA 300.0
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TD16439-30A D13 @ 8

TPH (C10-C22) ^a	4.44 J	5.3	2.7	mg/kg	SW846 8015C
TPH (> C22-C36) ^a	14.4	5.3	2.7	mg/kg	SW846 8015C

TD16439-31B D13 @ 20

Chloride	185	5.6		mg/kg	EPA 300.0
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TD16439-32 D14 @ 6

Chloride	428	26		mg/kg	EPA 300.0
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TD16439-32A D14 @ 6

TPH (C10-C22) ^a	4.95 J	5.3	2.7	mg/kg	SW846 8015C
TPH (> C22-C36) ^a	12.8	5.3	2.7	mg/kg	SW846 8015C

Summary of Hits

Job Number: TD16439
Account: EnTech Consulting Corporation
Project: CJES State AB SWD #1/LEA Co,N Mex
Collected: 02/07/18

Lab Sample ID	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
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TD16439-33 D14 @ 9

Chloride	753	51			mg/kg	EPA 300.0
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TD16439-33A D14 @ 9

TPH (C10-C22) ^a	4.59 J	5.2	2.6		mg/kg	SW846 8015C
TPH (> C22-C36) ^a	16.1	5.2	2.6		mg/kg	SW846 8015C

TD16439-34 D15 @ 6

Chloride	1990	110			mg/kg	EPA 300.0
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TD16439-34A D15 @ 6

TPH (C10-C22) ^a	3.86 J	5.4	2.7		mg/kg	SW846 8015C
TPH (> C22-C36) ^a	10.9	5.4	2.7		mg/kg	SW846 8015C

TD16439-35 D15 @ 20

Chloride	359	27			mg/kg	EPA 300.0
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TD16439-35A D15 @ 20

TPH (C10-C22) ^a	3.21 J	5.6	2.8		mg/kg	SW846 8015C
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TD16439-36 D16 @ 6

Chloride	1900	110			mg/kg	EPA 300.0
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TD16439-36A D16 @ 6

TPH (C10-C22) ^a	4.37 J	5.3	2.6		mg/kg	SW846 8015C
TPH (> C22-C36) ^a	12.6	5.3	2.6		mg/kg	SW846 8015C

TD16439-37 D16 @ 9

Chloride	1790	100			mg/kg	EPA 300.0
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TD16439-37A D16 @ 9

TPH (C10-C22) ^a	3.50 J	5.3	2.7		mg/kg	SW846 8015C
TPH (> C22-C36) ^a	4.24 J	5.3	2.7		mg/kg	SW846 8015C

Summary of Hits

Job Number: TD16439
Account: EnTech Consulting Corporation
Project: CJES State AB SWD #1/LEA Co,N Mex
Collected: 02/07/18

Lab Sample ID Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
TD16439-38	CD-1 @ 18					
Chloride		2760	100		mg/kg	EPA 300.0
TD16439-38A	CD-1 @ 18					
TPH (C10-C22) ^a		28.4	5.2	2.6	mg/kg	SW846 8015C
TPH (> C22-C36) ^a		116	5.2	2.6	mg/kg	SW846 8015C
TD16439-39R	CD-1 @ 30					
TPH (C10-C22) ^a		17.1	5.1	2.6	mg/kg	SW846 8015C
TPH (> C22-C36) ^a		45.8	5.1	2.6	mg/kg	SW846 8015C
TD16439-40	CD-2 @ 6					
Chloride		1360	54		mg/kg	EPA 300.0
TD16439-40A	CD-2 @ 6					
TPH (C10-C22) ^a		4.12 J	5.4	2.7	mg/kg	SW846 8015C
TPH (> C22-C36) ^a		11.7	5.4	2.7	mg/kg	SW846 8015C
TD16439-41	CD-2 @ 12					
Chloride		1100	52		mg/kg	EPA 300.0
TD16439-41A	CD-2 @ 12					
TPH (C10-C22) ^a		3.53 J	5.3	2.6	mg/kg	SW846 8015C
TPH (> C22-C36) ^a		8.22	5.3	2.6	mg/kg	SW846 8015C
TD16439-42B	CD-2 @ 30					
Chloride		1180	54		mg/kg	EPA 300.0
TD16439-43	CD-3 @ 4					
Chloride		129	5.3		mg/kg	EPA 300.0
TD16439-43A	CD-3 @ 4					
TPH (C10-C22) ^a		3.74 J	5.3	2.7	mg/kg	SW846 8015C
TPH (> C22-C36) ^a		9.07	5.3	2.7	mg/kg	SW846 8015C

Summary of Hits

Job Number: TD16439
Account: EnTech Consulting Corporation
Project: CJES State AB SWD #1/LEA Co,N Mex
Collected: 02/07/18

Lab Sample ID Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
TD16439-44	CD-3 @ 7					
Chloride		110	5.2		mg/kg	EPA 300.0
TD16439-44A	CD-3 @ 7					
TPH (C10-C22) ^a		4.51 J	5.3	2.7	mg/kg	SW846 8015C
TPH (> C22-C36) ^a		6.76	5.3	2.7	mg/kg	SW846 8015C
TD16439-45	DUP-2					
Chloride		963	51		mg/kg	EPA 300.0
TD16439-45A	DUP-2					
TPH (C10-C22) ^a		25.3	5.2	2.6	mg/kg	SW846 8015C
TPH (> C22-C36) ^a		93.7	5.2	2.6	mg/kg	SW846 8015C
TD16439-46	DUP-3					
Chloride		1290	53		mg/kg	EPA 300.0
TD16439-46A	DUP-3					
TPH (C10-C22) ^a		19.4	5.3	2.6	mg/kg	SW846 8015C
TPH (> C22-C36) ^a		69.1	5.3	2.6	mg/kg	SW846 8015C
TD16439-47	DUP-4					
Chloride		2700	110		mg/kg	EPA 300.0
TD16439-47A	DUP-4					
TPH (C10-C22) ^a		20.5	5.3	2.6	mg/kg	SW846 8015C
TPH (> C22-C36) ^a		75.9	5.3	2.6	mg/kg	SW846 8015C

(a) Analysis performed at SGS Scott, LA.



Houston, TX

Section 3



Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	D-1 @ 6"	Date Sampled:	02/07/18
Lab Sample ID:	TD16439-1	Date Received:	02/09/18
Matrix:	SO - Soil	Percent Solids:	88.0
Project:	CJES State AB SWD #1/LEA Co,N Mex		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	5120	570	mg/kg	100	02/15/18 11:47	SM	EPA 300.0
Solids, Percent	88		%	1	02/10/18	TH	SM 2540 G

RL = Reporting Limit

Report of Analysis

Client Sample ID:	D-1 @ 6"	Date Sampled:	02/07/18
Lab Sample ID:	TD16439-1A	Date Received:	02/09/18
Matrix:	SO - Soil	Percent Solids:	88.0
Method:	SW846 8015C		
Project:	CJES State AB SWD #1/LEA Co,N Mex		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	LA286048.D	1	02/12/18 16:25	ALA	n/a	n/a	L:GLA1685
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.10 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	6.3	6.2	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	92%		63-139%
540-36-3	1,4-Difluorobenzene	94%		52-140%

(a) Analysis performed at SGS Scott, LA.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	D-1 @ 6"	Date Sampled:	02/07/18
Lab Sample ID:	TD16439-1A	Date Received:	02/09/18
Matrix:	SO - Soil	Percent Solids:	88.0
Method:	SW846 8015C SW846 3546		
Project:	CJES State AB SWD #1/LEA Co,N Mex		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	S0004756.D	1	02/13/18 16:05	ALA	02/13/18 07:10	L:OP10476	L:GLG613
Run #2							

Run #	Initial Weight	Final Volume
Run #1	20.3 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C22)	15.8	5.6	2.8	mg/kg	
	TPH (> C22-C36)	54.9	5.6	2.8	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
84-15-1	o-Terphenyl	76%		31-130%		

(a) Analysis performed at SGS Scott, LA.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	D-1 @ 18"	Date Sampled:	02/07/18
Lab Sample ID:	TD16439-2	Date Received:	02/09/18
Matrix:	SO - Soil	Percent Solids:	90.9
Project:	CJES State AB SWD #1/LEA Co,N Mex		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	4410	270	mg/kg	50	02/15/18 12:34	SM	EPA 300.0
Solids, Percent	90.9		%	1	02/10/18	TH	SM 2540 G

RL = Reporting Limit

Report of Analysis

Client Sample ID:	D-1 @ 18"	Date Sampled:	02/07/18
Lab Sample ID:	TD16439-2A	Date Received:	02/09/18
Matrix:	SO - Soil	Percent Solids:	90.9
Method:	SW846 8015C		
Project:	CJES State AB SWD #1/LEA Co,N Mex		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	LA286058.D	1	02/12/18 18:16	ALA	n/a	n/a	L:GLA1685
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.00 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	6.0	5.9	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
460-00-4	4-Bromofluorobenzene	94%		63-139%		
540-36-3	1,4-Difluorobenzene	93%		52-140%		

(a) Analysis performed at SGS Scott, LA.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	D-1 @ 18"	Date Sampled:	02/07/18
Lab Sample ID:	TD16439-2A	Date Received:	02/09/18
Matrix:	SO - Soil	Percent Solids:	90.9
Method:	SW846 8015C SW846 3546		
Project:	CJES State AB SWD #1/LEA Co,N Mex		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	S0004757.D	1	02/13/18 16:27	ALA	02/13/18 07:10	L:OP10476	L:GLG613
Run #2							

Run #	Initial Weight	Final Volume
Run #1	20.1 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C22)	5.18	5.5	2.7	mg/kg	J
	TPH (> C22-C36)	10.5	5.5	2.7	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	62%		31-130%

(a) Analysis performed at SGS Scott, LA.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	D2 @ 6"	Date Sampled:	02/07/18
Lab Sample ID:	TD16439-3	Date Received:	02/09/18
Matrix:	SO - Soil	Percent Solids:	91.8
Project:	CJES State AB SWD #1/LEA Co,N Mex		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	1360	54	mg/kg	10	02/15/18 13:22	SM	EPA 300.0
Solids, Percent	91.8		%	1	02/10/18	TH	SM 2540 G

RL = Reporting Limit

Report of Analysis

Client Sample ID:	D2 @ 6"	Date Sampled:	02/07/18
Lab Sample ID:	TD16439-3A	Date Received:	02/09/18
Matrix:	SO - Soil	Percent Solids:	91.8
Method:	SW846 8015C		
Project:	CJES State AB SWD #1/LEA Co,N Mex		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	LA286184.D	1	02/13/18 17:50	ALA	n/a	n/a	L:GLA1687
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.10 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	5.8	5.7	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
460-00-4	4-Bromofluorobenzene	96%		63-139%		
540-36-3	1,4-Difluorobenzene	96%		52-140%		

(a) Analysis performed at SGS Scott, LA.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	D2 @ 6"	
Lab Sample ID:	TD16439-3A	Date Sampled: 02/07/18
Matrix:	SO - Soil	Date Received: 02/09/18
Method:	SW846 8015C SW846 3546	Percent Solids: 91.8
Project:	CJES State AB SWD #1/LEA Co,N Mex	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	S0004758.D	1	02/13/18 16:50	ALA	02/13/18 07:10	L:OP10476	L:GLG613
Run #2							

Run #	Initial Weight	Final Volume
Run #1	20.0 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C22)	4.85	5.4	2.7	mg/kg	J
	TPH (> C22-C36)	16.9	5.4	2.7	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	59%		31-130%

(a) Analysis performed at SGS Scott, LA.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	D2 @ 24	Date Sampled:	02/07/18
Lab Sample ID:	TD16439-4	Date Received:	02/09/18
Matrix:	SO - Soil	Percent Solids:	85.5
Project:	CJES State AB SWD #1/LEA Co,N Mex		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	1510	57	mg/kg	10	02/15/18 13:38	SM	EPA 300.0
Solids, Percent	85.5		%	1	02/10/18	TH	SM 2540 G

RL = Reporting Limit

Report of Analysis

Client Sample ID:	D2 @ 24	Date Sampled:	02/07/18
Lab Sample ID:	TD16439-4A	Date Received:	02/09/18
Matrix:	SO - Soil	Percent Solids:	85.5
Method:	SW846 8015C		
Project:	CJES State AB SWD #1/LEA Co,N Mex		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	LA286062.D	1	02/12/18 19:01	ALA	n/a	n/a	L:GLA1685
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.10 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	6.6	6.5	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	93%		63-139%
540-36-3	1,4-Difluorobenzene	93%		52-140%

(a) Analysis performed at SGS Scott, LA.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	D2 @ 24	
Lab Sample ID:	TD16439-4A	Date Sampled: 02/07/18
Matrix:	SO - Soil	Date Received: 02/09/18
Method:	SW846 8015C SW846 3546	Percent Solids: 85.5
Project:	CJES State AB SWD #1/LEA Co,N Mex	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	S0004762.D	1	02/13/18 18:12	ALA	02/13/18 07:10	L:OP10476	L:GLG613
Run #2							

Run #	Initial Weight	Final Volume
Run #1	20.3 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C22)	ND	5.8	2.9	mg/kg	
	TPH (> C22-C36)	ND	5.8	2.9	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	50%		31-130%

(a) Analysis performed at SGS Scott, LA.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	D3 @ 6	Date Sampled:	02/07/18
Lab Sample ID:	TD16439-5	Date Received:	02/09/18
Matrix:	SO - Soil	Percent Solids:	93.9
Project:	CJES State AB SWD #1/LEA Co,N Mex		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	979	53	mg/kg	10	02/15/18 13:54	SM	EPA 300.0
Solids, Percent	93.9		%	1	02/10/18	TH	SM 2540 G

RL = Reporting Limit

Report of Analysis

Client Sample ID:	D3 @ 6	Date Sampled:	02/07/18
Lab Sample ID:	TD16439-5A	Date Received:	02/09/18
Matrix:	SO - Soil	Percent Solids:	93.9
Method:	SW846 8015C		
Project:	CJES State AB SWD #1/LEA Co,N Mex		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	LA286064.D	1	02/12/18 19:23	ALA	n/a	n/a	L:GLA1685
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.00 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	5.6	5.6	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
460-00-4	4-Bromofluorobenzene	92%		63-139%		
540-36-3	1,4-Difluorobenzene	92%		52-140%		

(a) Analysis performed at SGS Scott, LA.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	D3 @ 6	
Lab Sample ID:	TD16439-5A	Date Sampled: 02/07/18
Matrix:	SO - Soil	Date Received: 02/09/18
Method:	SW846 8015C SW846 3546	Percent Solids: 93.9
Project:	CJES State AB SWD #1/LEA Co,N Mex	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	S0004763.D	1	02/13/18 18:32	ALA	02/13/18 07:10	L:OP10476	L:GLG613
Run #2							

Run #	Initial Weight	Final Volume
Run #1	20.1 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C22)	13.6	5.3	2.6	mg/kg	
	TPH (> C22-C36)	66.8	5.3	2.6	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	39%		31-130%

(a) Analysis performed at SGS Scott, LA.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	D3 @ 12	Date Sampled:	02/07/18
Lab Sample ID:	TD16439-6	Date Received:	02/09/18
Matrix:	SO - Soil	Percent Solids:	90.2
Project:	CJES State AB SWD #1/LEA Co,N Mex		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	1090	54	mg/kg	10	02/15/18 14:10	SM	EPA 300.0
Solids, Percent	90.2		%	1	02/10/18	TH	SM 2540 G

RL = Reporting Limit

Report of Analysis

Client Sample ID:	D3 @ 12	Date Sampled:	02/07/18
Lab Sample ID:	TD16439-6A	Date Received:	02/09/18
Matrix:	SO - Soil	Percent Solids:	90.2
Method:	SW846 8015C		
Project:	CJES State AB SWD #1/LEA Co,N Mex		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	LA286066.D	1	02/12/18 19:45	ALA	n/a	n/a	L:GLA1685
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.10 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	6.0	5.9	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
460-00-4	4-Bromofluorobenzene	91%		63-139%		
540-36-3	1,4-Difluorobenzene	91%		52-140%		

(a) Analysis performed at SGS Scott, LA.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	D3 @ 12	
Lab Sample ID:	TD16439-6A	Date Sampled: 02/07/18
Matrix:	SO - Soil	Date Received: 02/09/18
Method:	SW846 8015C SW846 3546	Percent Solids: 90.2
Project:	CJES State AB SWD #1/LEA Co,N Mex	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	S0004764.D	1	02/13/18 18:53	ALA	02/13/18 07:10	L:OP10476	L:GLG613
Run #2							

Run #	Initial Weight	Final Volume
Run #1	20.4 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C22)	6.64	5.4	2.7	mg/kg	
	TPH (> C22-C36)	32.8	5.4	2.7	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	58%		31-130%

(a) Analysis performed at SGS Scott, LA.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	D3 @ 28	Date Sampled:	02/07/18
Lab Sample ID:	TD16439-7B	Date Received:	02/09/18
Matrix:	SO - Soil	Percent Solids:	93.0
Project:	CJES State AB SWD #1/LEA Co,N Mex		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	749	27	mg/kg	5	03/03/18 17:05	LR	EPA 300.0
Solids, Percent	93		%	1	03/01/18	PA	SM 2540 G

RL = Reporting Limit

Report of Analysis

Client Sample ID:	D4 @ 6	Date Sampled:	02/07/18
Lab Sample ID:	TD16439-8	Date Received:	02/09/18
Matrix:	SO - Soil	Percent Solids:	94.1
Project:	CJES State AB SWD #1/LEA Co,N Mex		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	2870	110	mg/kg	20	02/15/18 14:26	SM	EPA 300.0
Solids, Percent	94.1		%	1	02/10/18	TH	SM 2540 G

RL = Reporting Limit

Report of Analysis

Page 1 of 1

Client Sample ID:	D4 @ 6	Date Sampled:	02/07/18
Lab Sample ID:	TD16439-8A	Date Received:	02/09/18
Matrix:	SO - Soil	Percent Solids:	94.1
Method:	SW846 8015C		
Project:	CJES State AB SWD #1/LEA Co,N Mex		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	LA286070.D	1	02/12/18 20:29	ALA	n/a	n/a	L:GLA1685
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.00 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	5.6	5.5	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	91%		63-139%
540-36-3	1,4-Difluorobenzene	92%		52-140%

(a) Analysis performed at SGS Scott, LA.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	D4 @ 6	Date Sampled:	02/07/18
Lab Sample ID:	TD16439-8A	Date Received:	02/09/18
Matrix:	SO - Soil	Percent Solids:	94.1
Method:	SW846 8015C SW846 3546		
Project:	CJES State AB SWD #1/LEA Co,N Mex		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	S0004765.D	1	02/13/18 19:13	ALA	02/13/18 07:10	L:OP10476	L:GLG613
Run #2							

Run #	Initial Weight	Final Volume
Run #1	20.5 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C22)	35.3	5.2	2.6	mg/kg	
	TPH (> C22-C36)	150	5.2	2.6	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	63%		31-130%

(a) Analysis performed at SGS Scott, LA.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	D4 @ 12	Date Sampled:	02/07/18
Lab Sample ID:	TD16439-9	Date Received:	02/09/18
Matrix:	SO - Soil	Percent Solids:	91.0
Project:	CJES State AB SWD #1/LEA Co,N Mex		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	1700	55	mg/kg	10	02/15/18 14:42	SM	EPA 300.0
Solids, Percent	91		%	1	02/10/18	TH	SM 2540 G

RL = Reporting Limit

Report of Analysis

Client Sample ID:	D4 @ 12	
Lab Sample ID:	TD16439-9A	Date Sampled: 02/07/18
Matrix:	SO - Soil	Date Received: 02/09/18
Method:	SW846 8015C	Percent Solids: 91.0
Project:	CJES State AB SWD #1/LEA Co,N Mex	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	LA286072.D	1	02/12/18 20:51	ALA	n/a	n/a	L:GLA1685
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.00 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	6.0	5.9	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
460-00-4	4-Bromofluorobenzene	90%		63-139%		
540-36-3	1,4-Difluorobenzene	90%		52-140%		

(a) Analysis performed at SGS Scott, LA.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	D4 @ 12	
Lab Sample ID:	TD16439-9A	Date Sampled: 02/07/18
Matrix:	SO - Soil	Date Received: 02/09/18
Method:	SW846 8015C SW846 3546	Percent Solids: 91.0
Project:	CJES State AB SWD #1/LEA Co,N Mex	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	S0004766.D	1	02/13/18 19:34	ALA	02/13/18 07:10	L:OP10476	L:GLG613
Run #2							

Run #	Initial Weight	Final Volume
Run #1	20.1 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C22)	16.2	5.5	2.7	mg/kg	
	TPH (> C22-C36)	60.0	5.5	2.7	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	65%		31-130%

(a) Analysis performed at SGS Scott, LA.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	D4 @ 28	Date Sampled:	02/07/18
Lab Sample ID:	TD16439-10B	Date Received:	02/09/18
Matrix:	SO - Soil	Percent Solids:	95.1
Project:	CJES State AB SWD #1/LEA Co,N Mex		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	3590	260	mg/kg	50	03/03/18 17:20	LR	EPA 300.0
Solids, Percent	95.1		%	1	03/01/18	PA	SM 2540 G

RL = Reporting Limit

Report of Analysis

Client Sample ID:	D5 @ 6	Date Sampled:	02/07/18
Lab Sample ID:	TD16439-11	Date Received:	02/09/18
Matrix:	SO - Soil	Percent Solids:	96.6
Project:	CJES State AB SWD #1/LEA Co,N Mex		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	1920	100	mg/kg	20	02/15/18 14:58	SM	EPA 300.0
Solids, Percent	96.6		%	1	02/10/18	TH	SM 2540 G

RL = Reporting Limit

Report of Analysis

Client Sample ID:	D5 @ 6	
Lab Sample ID:	TD16439-11A	Date Sampled: 02/07/18
Matrix:	SO - Soil	Date Received: 02/09/18
Method:	SW846 8015C	Percent Solids: 96.6
Project:	CJES State AB SWD #1/LEA Co,N Mex	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	LA286080.D	1	02/12/18 22:19	ALA	n/a	n/a	L:GLA1685
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.00 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	5.4	5.3	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	90%		63-139%
540-36-3	1,4-Difluorobenzene	90%		52-140%

(a) Analysis performed at SGS Scott, LA.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	D5 @ 6	
Lab Sample ID:	TD16439-11A	Date Sampled: 02/07/18
Matrix:	SO - Soil	Date Received: 02/09/18
Method:	SW846 8015C SW846 3546	Percent Solids: 96.6
Project:	CJES State AB SWD #1/LEA Co,N Mex	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	S0004767.D	1	02/13/18 19:54	ALA	02/13/18 07:10	L:OP10476	L:GLG613
Run #2							

Run #	Initial Weight	Final Volume
Run #1	20.0 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C22)	20.7	5.2	2.6	mg/kg	
	TPH (> C22-C36)	66.1	5.2	2.6	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	67%		31-130%

(a) Analysis performed at SGS Scott, LA.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	D5 @ 12	Date Sampled:	02/07/18
Lab Sample ID:	TD16439-12	Date Received:	02/09/18
Matrix:	SO - Soil	Percent Solids:	93.7
Project:	CJES State AB SWD #1/LEA Co,N Mex		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	2220	110	mg/kg	20	02/15/18 15:14	SM	EPA 300.0
Solids, Percent	93.7		%	1	02/10/18	TH	SM 2540 G

RL = Reporting Limit

Report of Analysis

Client Sample ID:	D5 @ 12	Date Sampled:	02/07/18
Lab Sample ID:	TD16439-12A	Date Received:	02/09/18
Matrix:	SO - Soil	Percent Solids:	93.7
Method:	SW846 8015C		
Project:	CJES State AB SWD #1/LEA Co,N Mex		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	LA286082.D	1	02/12/18 22:41	ALA	n/a	n/a	L:GLA1685
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.00 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	5.7	5.6	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
460-00-4	4-Bromofluorobenzene	91%		63-139%		
540-36-3	1,4-Difluorobenzene	91%		52-140%		

(a) Analysis performed at SGS Scott, LA.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	D5 @ 12	Date Sampled:	02/07/18
Lab Sample ID:	TD16439-12A	Date Received:	02/09/18
Matrix:	SO - Soil	Percent Solids:	93.7
Method:	SW846 8015C SW846 3546		
Project:	CJES State AB SWD #1/LEA Co,N Mex		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	S0004768.D	1	02/13/18 20:15	ALA	02/13/18 07:10	L:OP10476	L:GLG613
Run #2							

Run #	Initial Weight	Final Volume
Run #1	20.3 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C22)	148	5.3	2.6	mg/kg	
	TPH (> C22-C36)	319	5.3	2.6	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	73%		31-130%

(a) Analysis performed at SGS Scott, LA.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	D5 @ 28	Date Sampled:	02/07/18
Lab Sample ID:	TD16439-13B	Date Received:	02/09/18
Matrix:	SO - Soil	Percent Solids:	96.3
Project:	CJES State AB SWD #1/LEA Co,N Mex		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	1670	51	mg/kg	10	03/03/18 17:36	LR	EPA 300.0
Solids, Percent	96.3		%	1	03/01/18	PA	SM 2540 G

RL = Reporting Limit

Report of Analysis

Client Sample ID:	D5 @ 28	
Lab Sample ID:	TD16439-13R	Date Sampled: 02/07/18
Matrix:	SO - Soil	Date Received: 02/09/18
Method:	SW846 8015C	Percent Solids: 97.0
Project:	CJES State AB SWD #1/LEA Co,N Mex	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	LA286704.D	1	02/21/18 06:58	ALA	n/a	n/a	L:GLA1697
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.00 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	5.3	5.2	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	101%		63-139%
540-36-3	1,4-Difluorobenzene	95%		52-140%

(a) Analysis performed at SGS Scott, LA.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	D5 @ 28	
Lab Sample ID:	TD16439-13R	Date Sampled: 02/07/18
Matrix:	SO - Soil	Date Received: 02/09/18
Method:	SW846 8015C SW846 3546	Percent Solids: 97.0
Project:	CJES State AB SWD #1/LEA Co,N Mex	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	S0005081.D	1	02/22/18 18:27	ALA	02/21/18 12:00	L:OP10558	L:GLG620
Run #2							

Run #	Initial Weight	Final Volume
Run #1	20.0 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C22)	22.7	5.2	2.6	mg/kg	
	TPH (> C22-C36)	42.0	5.2	2.6	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	89%		31-130%

(a) Analysis performed at SGS Scott, LA.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	D6 @ 6	Date Sampled:	02/07/18
Lab Sample ID:	TD16439-14	Date Received:	02/09/18
Matrix:	SO - Soil	Percent Solids:	93.9
Project:	CJES State AB SWD #1/LEA Co,N Mex		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	2460	100	mg/kg	20	02/16/18 01:02	SM	EPA 300.0
Solids, Percent	93.9		%	1	02/10/18	TH	SM 2540 G

RL = Reporting Limit

Report of Analysis

Client Sample ID:	D6 @ 6	Date Sampled:	02/07/18
Lab Sample ID:	TD16439-14A	Date Received:	02/09/18
Matrix:	SO - Soil	Percent Solids:	93.9
Method:	SW846 8015C		
Project:	CJES State AB SWD #1/LEA Co,N Mex		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	LA286086.D	1	02/12/18 23:24	ALA	n/a	n/a	L:GLA1685
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.00 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	5.6	5.6	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
460-00-4	4-Bromofluorobenzene	91%		63-139%		
540-36-3	1,4-Difluorobenzene	91%		52-140%		

(a) Analysis performed at SGS Scott, LA.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	D6 @ 6	
Lab Sample ID:	TD16439-14A	Date Sampled: 02/07/18
Matrix:	SO - Soil	Date Received: 02/09/18
Method:	SW846 8015C SW846 3546	Percent Solids: 93.9
Project:	CJES State AB SWD #1/LEA Co,N Mex	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	S0004769.D	1	02/13/18 20:36	ALA	02/13/18 07:10	L:OP10476	L:GLG613
Run #2							

Run #	Initial Weight	Final Volume
Run #1	20.0 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C22)	14.3	5.3	2.7	mg/kg	
	TPH (> C22-C36)	54.1	5.3	2.7	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	66%		31-130%

(a) Analysis performed at SGS Scott, LA.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	D6 @ 9	Date Sampled:	02/07/18
Lab Sample ID:	TD16439-15	Date Received:	02/09/18
Matrix:	SO - Soil	Percent Solids:	96.8
Project:	CJES State AB SWD #1/LEA Co,N Mex		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	1920	100	mg/kg	20	02/16/18 02:21	SM	EPA 300.0
Solids, Percent	96.8		%	1	02/10/18	TH	SM 2540 G

RL = Reporting Limit

Report of Analysis

Client Sample ID:	D6 @ 9	
Lab Sample ID:	TD16439-15A	Date Sampled: 02/07/18
Matrix:	SO - Soil	Date Received: 02/09/18
Method:	SW846 8015C	Percent Solids: 96.8
Project:	CJES State AB SWD #1/LEA Co,N Mex	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	LA286088.D	1	02/12/18 23:46	ALA	n/a	n/a	L:GLA1685
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.00 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	5.3	5.3	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
460-00-4	4-Bromofluorobenzene	90%		63-139%		
540-36-3	1,4-Difluorobenzene	91%		52-140%		

(a) Analysis performed at SGS Scott, LA.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	D6 @ 9	
Lab Sample ID:	TD16439-15A	Date Sampled: 02/07/18
Matrix:	SO - Soil	Date Received: 02/09/18
Method:	SW846 8015C SW846 3546	Percent Solids: 96.8
Project:	CJES State AB SWD #1/LEA Co,N Mex	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	S0004873.D	1	02/15/18 11:13	ALA	02/14/18 08:00	L:OP10485	L:GLG615
Run #2							

Run #	Initial Weight	Final Volume
Run #1	20.0 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C22)	8.07	5.2	2.6	mg/kg	
	TPH (> C22-C36)	20.3	5.2	2.6	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	78%		31-130%

(a) Analysis performed at SGS Scott, LA.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	D7 @ 6	Date Sampled:	02/07/18
Lab Sample ID:	TD16439-16	Date Received:	02/09/18
Matrix:	SO - Soil	Percent Solids:	95.5
Project:	CJES State AB SWD #1/LEA Co,N Mex		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	2120	100	mg/kg	20	02/16/18 02:37	SM	EPA 300.0
Solids, Percent	95.5		%	1	02/10/18	TH	SM 2540 G

RL = Reporting Limit

Report of Analysis

Client Sample ID:	D7 @ 6	Date Sampled:	02/07/18
Lab Sample ID:	TD16439-16A	Date Received:	02/09/18
Matrix:	SO - Soil	Percent Solids:	95.5
Method:	SW846 8015C		
Project:	CJES State AB SWD #1/LEA Co,N Mex		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	LA286090.D	1	02/13/18 00:08	ALA	n/a	n/a	L:GLA1685
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.10 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	5.4	5.3	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	90%		63-139%
540-36-3	1,4-Difluorobenzene	91%		52-140%

(a) Analysis performed at SGS Scott, LA.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	D7 @ 6	
Lab Sample ID:	TD16439-16A	Date Sampled: 02/07/18
Matrix:	SO - Soil	Date Received: 02/09/18
Method:	SW846 8015C SW846 3546	Percent Solids: 95.5
Project:	CJES State AB SWD #1/LEA Co,N Mex	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	S0004771.D	1	02/13/18 21:17	ALA	02/13/18 07:10	L:OP10476	L:GLG613
Run #2							

Run #	Initial Weight	Final Volume
Run #1	20.4 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C22)	47.8	5.1	2.6	mg/kg	
	TPH (> C22-C36)	120	5.1	2.6	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	63%		31-130%

(a) Analysis performed at SGS Scott, LA.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	D7 @ 10	Date Sampled:	02/07/18
Lab Sample ID:	TD16439-17	Date Received:	02/09/18
Matrix:	SO - Soil	Percent Solids:	95.4
Project:	CJES State AB SWD #1/LEA Co,N Mex		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	2920	100	mg/kg	20	02/16/18 02:53	SM	EPA 300.0
Solids, Percent	95.4		%	1	02/10/18	TH	SM 2540 G

RL = Reporting Limit

Report of Analysis

Page 1 of 1

Client Sample ID:	D7 @ 10	
Lab Sample ID:	TD16439-17A	Date Sampled: 02/07/18
Matrix:	SO - Soil	Date Received: 02/09/18
Method:	SW846 8015C	Percent Solids: 95.4
Project:	CJES State AB SWD #1/LEA Co,N Mex	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	LA286092.D	1	02/13/18 00:30	ALA	n/a	n/a	L:GLA1685
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.10 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	5.4	5.3	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
460-00-4	4-Bromofluorobenzene	90%		63-139%		
540-36-3	1,4-Difluorobenzene	90%		52-140%		

(a) Analysis performed at SGS Scott, LA.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	D7 @ 10	
Lab Sample ID:	TD16439-17A	Date Sampled: 02/07/18
Matrix:	SO - Soil	Date Received: 02/09/18
Method:	SW846 8015C SW846 3546	Percent Solids: 95.4
Project:	CJES State AB SWD #1/LEA Co,N Mex	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	S0004780.D	1	02/14/18 00:23	ALA	02/13/18 07:10	L:OP10476	L:GLG613
Run #2							

Run #	Initial Weight	Final Volume
Run #1	20.4 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C22)	13.4	5.1	2.6	mg/kg	
	TPH (> C22-C36)	37.6	5.1	2.6	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	53%		31-130%

(a) Analysis performed at SGS Scott, LA.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	D8 @ 6	Date Sampled:	02/07/18
Lab Sample ID:	TD16439-18	Date Received:	02/09/18
Matrix:	SO - Soil	Percent Solids:	94.1
Project:	CJES State AB SWD #1/LEA Co,N Mex		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	2410	100	mg/kg	20	02/16/18 03:09	SM	EPA 300.0
Solids, Percent	94.1		%	1	02/10/18	TH	SM 2540 G

RL = Reporting Limit



Report of Analysis

Client Sample ID:	D8 @ 6	Date Sampled:	02/07/18
Lab Sample ID:	TD16439-18A	Date Received:	02/09/18
Matrix:	SO - Soil	Percent Solids:	94.1
Method:	SW846 8015C		
Project:	CJES State AB SWD #1/LEA Co,N Mex		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	LA286098.D	1	02/13/18 01:36	ALA	n/a	n/a	L:GLA1685
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.00 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	5.6	5.5	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
460-00-4	4-Bromofluorobenzene	90%		63-139%		
540-36-3	1,4-Difluorobenzene	90%		52-140%		

(a) Analysis performed at SGS Scott, LA.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	D8 @ 6	
Lab Sample ID:	TD16439-18A	Date Sampled: 02/07/18
Matrix:	SO - Soil	Date Received: 02/09/18
Method:	SW846 8015C SW846 3546	Percent Solids: 94.1
Project:	CJES State AB SWD #1/LEA Co,N Mex	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	S0004781.D	1	02/14/18 00:44	ALA	02/13/18 07:10	L:OP10476	L:GLG613
Run #2							

Run #	Initial Weight	Final Volume
Run #1	20.3 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C22)	25.1	5.2	2.6	mg/kg	
	TPH (> C22-C36)	85.7	5.2	2.6	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	66%		31-130%

(a) Analysis performed at SGS Scott, LA.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	D8 @ 12	Date Sampled:	02/07/18
Lab Sample ID:	TD16439-19	Date Received:	02/09/18
Matrix:	SO - Soil	Percent Solids:	92.1
Project:	CJES State AB SWD #1/LEA Co,N Mex		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	2060	110	mg/kg	20	02/16/18 03:25	SM	EPA 300.0
Solids, Percent	92.1		%	1	02/10/18	TH	SM 2540 G

RL = Reporting Limit

Report of Analysis

Client Sample ID:	D8 @ 12	Date Sampled:	02/07/18
Lab Sample ID:	TD16439-19A	Date Received:	02/09/18
Matrix:	SO - Soil	Percent Solids:	92.1
Method:	SW846 8015C		
Project:	CJES State AB SWD #1/LEA Co,N Mex		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	LA286100.D	1	02/13/18 01:58	ALA	n/a	n/a	L:GLA1685
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.00 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	5.9	5.8	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
460-00-4	4-Bromofluorobenzene	89%		63-139%		
540-36-3	1,4-Difluorobenzene	91%		52-140%		

(a) Analysis performed at SGS Scott, LA.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	D8 @ 12	
Lab Sample ID:	TD16439-19A	Date Sampled: 02/07/18
Matrix:	SO - Soil	Date Received: 02/09/18
Method:	SW846 8015C SW846 3546	Percent Solids: 92.1
Project:	CJES State AB SWD #1/LEA Co,N Mex	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	S0004782.D	1	02/14/18 01:04	ALA	02/13/18 07:10	L:OP10476	L:GLG613
Run #2							

Run #	Initial Weight	Final Volume
Run #1	20.0 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C22)	11.6	5.4	2.7	mg/kg	
	TPH (> C22-C36)	55.7	5.4	2.7	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	54%		31-130%

(a) Analysis performed at SGS Scott, LA.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	D8 @ 24	Date Sampled:	02/07/18
Lab Sample ID:	TD16439-20B	Date Received:	02/09/18
Matrix:	SO - Soil	Percent Solids:	92.9
Project:	CJES State AB SWD #1/LEA Co,N Mex		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	1860	54	mg/kg	10	03/03/18 17:52	LR	EPA 300.0
Solids, Percent	92.9		%	1	03/01/18	PA	SM 2540 G

RL = Reporting Limit

Report of Analysis

Client Sample ID:	D9 @ 6	Date Sampled:	02/07/18
Lab Sample ID:	TD16439-21	Date Received:	02/09/18
Matrix:	SO - Soil	Percent Solids:	94.1
Project:	CJES State AB SWD #1/LEA Co,N Mex		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	142	11	mg/kg	2	02/16/18 03:41	SM	EPA 300.0
Solids, Percent	94.1		%	1	02/10/18	TH	SM 2540 G

RL = Reporting Limit

Report of Analysis

Client Sample ID:	D9 @ 6	Date Sampled:	02/07/18
Lab Sample ID:	TD16439-21A	Date Received:	02/09/18
Matrix:	SO - Soil	Percent Solids:	94.1
Method:	SW846 8015C		
Project:	CJES State AB SWD #1/LEA Co,N Mex		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	LA286112.D	1	02/13/18 04:09	ALA	n/a	n/a	L:GLA1686
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.10 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	5.5	5.4	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
460-00-4	4-Bromofluorobenzene	90%		63-139%		
540-36-3	1,4-Difluorobenzene	90%		52-140%		

(a) Analysis performed at SGS Scott, LA.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	D9 @ 6	
Lab Sample ID:	TD16439-21A	Date Sampled: 02/07/18
Matrix:	SO - Soil	Date Received: 02/09/18
Method:	SW846 8015C SW846 3546	Percent Solids: 94.1
Project:	CJES State AB SWD #1/LEA Co,N Mex	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	S0004783.D	1	02/14/18 01:25	ALA	02/13/18 07:10	L:OP10476	L:GLG613
Run #2							

Run #	Initial Weight	Final Volume
Run #1	20.3 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C22)	3.86	5.2	2.6	mg/kg	J
	TPH (> C22-C36)	13.7	5.2	2.6	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	63%		31-130%

(a) Analysis performed at SGS Scott, LA.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	D9 @ 10	Date Sampled:	02/07/18
Lab Sample ID:	TD16439-22	Date Received:	02/09/18
Matrix:	SO - Soil	Percent Solids:	93.0
Project:	CJES State AB SWD #1/LEA Co,N Mex		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	242	27	mg/kg	5	02/16/18 03:57	SM	EPA 300.0
Solids, Percent	93		%	1	02/10/18	TH	SM 2540 G

RL = Reporting Limit

Report of Analysis

Client Sample ID:	D9 @ 10	Date Sampled:	02/07/18
Lab Sample ID:	TD16439-22A	Date Received:	02/09/18
Matrix:	SO - Soil	Percent Solids:	93.0
Method:	SW846 8015C		
Project:	CJES State AB SWD #1/LEA Co,N Mex		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	LA286114.D	1	02/13/18 04:31	ALA	n/a	n/a	L:GLA1686
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.20 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	5.5	5.5	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
460-00-4	4-Bromofluorobenzene	97%		63-139%		
540-36-3	1,4-Difluorobenzene	91%		52-140%		

(a) Analysis performed at SGS Scott, LA.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	D9 @ 10	
Lab Sample ID:	TD16439-22A	Date Sampled: 02/07/18
Matrix:	SO - Soil	Date Received: 02/09/18
Method:	SW846 8015C SW846 3546	Percent Solids: 93.0
Project:	CJES State AB SWD #1/LEA Co,N Mex	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	S0004784.D	1	02/14/18 01:46	ALA	02/13/18 07:10	L:OP10476	L:GLG613
Run #2							

Run #	Initial Weight	Final Volume
Run #1	20.2 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C22)	3.50	5.3	2.7	mg/kg	J
	TPH (> C22-C36)	7.74	5.3	2.7	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	59%		31-130%

(a) Analysis performed at SGS Scott, LA.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	D10 @ 6	Date Sampled:	02/07/18
Lab Sample ID:	TD16439-23	Date Received:	02/09/18
Matrix:	SO - Soil	Percent Solids:	93.1
Project:	CJES State AB SWD #1/LEA Co,N Mex		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	204	26	mg/kg	5	02/16/18 04:13	SM	EPA 300.0
Solids, Percent	93.1		%	1	02/10/18	TH	SM 2540 G

RL = Reporting Limit

Report of Analysis

Client Sample ID:	D10 @ 6	Date Sampled:	02/07/18
Lab Sample ID:	TD16439-23A	Date Received:	02/09/18
Matrix:	SO - Soil	Percent Solids:	93.1
Method:	SW846 8015C		
Project:	CJES State AB SWD #1/LEA Co,N Mex		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	LA286116.D	1	02/13/18 04:53	ALA	n/a	n/a	L:GLA1686
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.00 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	5.7	5.7	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	96%		63-139%
540-36-3	1,4-Difluorobenzene	92%		52-140%

(a) Analysis performed at SGS Scott, LA.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	D10 @ 6	
Lab Sample ID:	TD16439-23A	Date Sampled: 02/07/18
Matrix:	SO - Soil	Date Received: 02/09/18
Method:	SW846 8015C SW846 3546	Percent Solids: 93.1
Project:	CJES State AB SWD #1/LEA Co,N Mex	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	S0004790.D	1	02/14/18 03:50	ALA	02/13/18 07:10	L:OP10477	L:GLG613
Run #2							

Run #	Initial Weight	Final Volume
Run #1	20.3 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C22)	2.79	5.3	2.6	mg/kg	J
	TPH (> C22-C36)	4.10	5.3	2.6	mg/kg	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	49%		31-130%

(a) Analysis performed at SGS Scott, LA.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	D10 @ 9	Date Sampled:	02/07/18
Lab Sample ID:	TD16439-24	Date Received:	02/09/18
Matrix:	SO - Soil	Percent Solids:	95.2
Project:	CJES State AB SWD #1/LEA Co,N Mex		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	492	26	mg/kg	5	02/16/18 04:29	SM	EPA 300.0
Solids, Percent	95.2		%	1	02/13/18	TH	SM 2540 G

RL = Reporting Limit

Report of Analysis

Client Sample ID:	D10 @ 9	Date Sampled:	02/07/18
Lab Sample ID:	TD16439-24A	Date Received:	02/09/18
Matrix:	SO - Soil	Percent Solids:	95.2
Method:	SW846 8015C		
Project:	CJES State AB SWD #1/LEA Co,N Mex		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	LA286118.D	1	02/13/18 05:15	ALA	n/a	n/a	L:GLA1686
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.00 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	5.5	5.4	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
460-00-4	4-Bromofluorobenzene	95%		63-139%		
540-36-3	1,4-Difluorobenzene	92%		52-140%		

(a) Analysis performed at SGS Scott, LA.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	D10 @ 9	
Lab Sample ID:	TD16439-24A	Date Sampled: 02/07/18
Matrix:	SO - Soil	Date Received: 02/09/18
Method:	SW846 8015C SW846 3546	Percent Solids: 95.2
Project:	CJES State AB SWD #1/LEA Co,N Mex	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	S0004874.D	1	02/15/18 11:36	ALA	02/14/18 08:00	L:OP10485	L:GLG615
Run #2							

Run #	Initial Weight	Final Volume
Run #1	20.0 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C22)	6.65	5.3	2.6	mg/kg	
	TPH (> C22-C36)	35.7	5.3	2.6	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	69%		31-130%

(a) Analysis performed at SGS Scott, LA.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	D11 @ 6	Date Sampled:	02/07/18
Lab Sample ID:	TD16439-25	Date Received:	02/09/18
Matrix:	SO - Soil	Percent Solids:	90.4
Project:	CJES State AB SWD #1/LEA Co,N Mex		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	94.3	5.5	mg/kg	1	02/15/18 16:33	SM	EPA 300.0
Solids, Percent	90.4		%	1	02/13/18	TH	SM 2540 G

RL = Reporting Limit

Report of Analysis

Client Sample ID:	D11 @ 6	Date Sampled:	02/07/18
Lab Sample ID:	TD16439-25A	Date Received:	02/09/18
Matrix:	SO - Soil	Percent Solids:	90.4
Method:	SW846 8015C		
Project:	CJES State AB SWD #1/LEA Co,N Mex		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	LA286120.D	1	02/13/18 05:37	ALA	n/a	n/a	L:GLA1686
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.20 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	5.8	5.8	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
460-00-4	4-Bromofluorobenzene	94%		63-139%		
540-36-3	1,4-Difluorobenzene	91%		52-140%		

(a) Analysis performed at SGS Scott, LA.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	D11 @ 6	Date Sampled:	02/07/18
Lab Sample ID:	TD16439-25A	Date Received:	02/09/18
Matrix:	SO - Soil	Percent Solids:	90.4
Method:	SW846 8015C SW846 3546		
Project:	CJES State AB SWD #1/LEA Co,N Mex		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	S0004792.D	1	02/14/18 04:31	ALA	02/13/18 07:10	L:OP10477	L:GLG613
Run #2							

Run #	Initial Weight	Final Volume
Run #1	20.0 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C22)	3.94	5.5	2.8	mg/kg	J
	TPH (> C22-C36)	7.07	5.5	2.8	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	75%		31-130%

(a) Analysis performed at SGS Scott, LA.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	D11 @ 9	Date Sampled:	02/07/18
Lab Sample ID:	TD16439-26	Date Received:	02/09/18
Matrix:	SO - Soil	Percent Solids:	98.3
Project:	CJES State AB SWD #1/LEA Co,N Mex		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	95.2	5.0	mg/kg	1	02/15/18 16:49	SM	EPA 300.0
Solids, Percent	98.3		%	1	02/10/18	TH	SM 2540 G

RL = Reporting Limit

Report of Analysis

Client Sample ID:	D11 @ 9	Date Sampled:	02/07/18
Lab Sample ID:	TD16439-26A	Date Received:	02/09/18
Matrix:	SO - Soil	Percent Solids:	98.3
Method:	SW846 8015C		
Project:	CJES State AB SWD #1/LEA Co,N Mex		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	LA286122.D	1	02/13/18 05:58	ALA	n/a	n/a	L:GLA1686
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.10 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	8.89	5.1	5.0	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
460-00-4	4-Bromofluorobenzene	89%		63-139%		
540-36-3	1,4-Difluorobenzene	91%		52-140%		

(a) Analysis performed at SGS Scott, LA.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	D11 @ 9	
Lab Sample ID:	TD16439-26A	Date Sampled: 02/07/18
Matrix:	SO - Soil	Date Received: 02/09/18
Method:	SW846 8015C SW846 3546	Percent Solids: 98.3
Project:	CJES State AB SWD #1/LEA Co,N Mex	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	S0004818.D	1	02/14/18 13:30	ALA	02/13/18 07:10	L:OP10477	L:GLG613
Run #2							

Run #	Initial Weight	Final Volume
Run #1	20.1 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C22)	5.84	5.1	2.5	mg/kg	
	TPH (> C22-C36)	17.2	5.1	2.5	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	60%		31-130%

(a) Analysis performed at SGS Scott, LA.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	D12 @ 6	Date Sampled:	02/07/18
Lab Sample ID:	TD16439-27	Date Received:	02/09/18
Matrix:	SO - Soil	Percent Solids:	95.4
Project:	CJES State AB SWD #1/LEA Co,N Mex		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	72.9	5.2	mg/kg	1	02/15/18 17:05	SM	EPA 300.0
Solids, Percent	95.4		%	1	02/10/18	TH	SM 2540 G

RL = Reporting Limit

Report of Analysis

Client Sample ID:	D12 @ 6	Date Sampled:	02/07/18
Lab Sample ID:	TD16439-27A	Date Received:	02/09/18
Matrix:	SO - Soil	Percent Solids:	95.4
Method:	SW846 8015C		
Project:	CJES State AB SWD #1/LEA Co,N Mex		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	LA286128.D	1	02/13/18 07:04	ALA	n/a	n/a	L:GLA1686
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.20 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	5.3	5.2	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
460-00-4	4-Bromofluorobenzene	99%		63-139%		
540-36-3	1,4-Difluorobenzene	91%		52-140%		

(a) Analysis performed at SGS Scott, LA.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	D12 @ 6	
Lab Sample ID:	TD16439-27A	Date Sampled: 02/07/18
Matrix:	SO - Soil	Date Received: 02/09/18
Method:	SW846 8015C SW846 3546	Percent Solids: 95.4
Project:	CJES State AB SWD #1/LEA Co,N Mex	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	S0004794.D	1	02/14/18 05:13	ALA	02/13/18 07:10	L:OP10477	L:GLG613
Run #2							

Run #	Initial Weight	Final Volume
Run #1	20.3 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C22)	4.79	5.2	2.6	mg/kg	J
	TPH (> C22-C36)	13.9	5.2	2.6	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	45%		31-130%

(a) Analysis performed at SGS Scott, LA.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	D12 @ 9	Date Sampled:	02/07/18
Lab Sample ID:	TD16439-28	Date Received:	02/09/18
Matrix:	SO - Soil	Percent Solids:	96.7
Project:	CJES State AB SWD #1/LEA Co,N Mex		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	71.9	5.1	mg/kg	1	02/15/18 17:53	SM	EPA 300.0
Solids, Percent	96.7		%	1	02/10/18	TH	SM 2540 G

RL = Reporting Limit

Report of Analysis

Client Sample ID:	D12 @ 9	Date Sampled:	02/07/18
Lab Sample ID:	TD16439-28A	Date Received:	02/09/18
Matrix:	SO - Soil	Percent Solids:	96.7
Method:	SW846 8015C		
Project:	CJES State AB SWD #1/LEA Co,N Mex		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	LA286130.D	1	02/13/18 07:26	ALA	n/a	n/a	L:GLA1686
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.10 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	5.2	5.2	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
460-00-4	4-Bromofluorobenzene	96%		63-139%		
540-36-3	1,4-Difluorobenzene	95%		52-140%		

(a) Analysis performed at SGS Scott, LA.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	D12 @ 9	Date Sampled:	02/07/18
Lab Sample ID:	TD16439-28A	Date Received:	02/09/18
Matrix:	SO - Soil	Percent Solids:	96.7
Method:	SW846 8015C SW846 3546		
Project:	CJES State AB SWD #1/LEA Co,N Mex		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	S0004795.D	1	02/14/18 05:34	ALA	02/13/18 07:10	L:OP10477	L:GLG613
Run #2							

Run #	Initial Weight	Final Volume
Run #1	20.5 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C22)	13.5	5.0	2.5	mg/kg	
	TPH (> C22-C36)	108	5.0	2.5	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	61%		31-130%

(a) Analysis performed at SGS Scott, LA.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	D13 @ 6	Date Sampled:	02/07/18
Lab Sample ID:	TD16439-29	Date Received:	02/09/18
Matrix:	SO - Soil	Percent Solids:	93.9
Project:	CJES State AB SWD #1/LEA Co,N Mex		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	1170	51	mg/kg	10	02/15/18 18:09	SM	EPA 300.0
Solids, Percent	93.9		%	1	02/10/18	TH	SM 2540 G

RL = Reporting Limit

Report of Analysis

Page 1 of 1

Client Sample ID:	D13 @ 6	Date Sampled:	02/07/18
Lab Sample ID:	TD16439-29A	Date Received:	02/09/18
Matrix:	SO - Soil	Percent Solids:	93.9
Method:	SW846 8015C		
Project:	CJES State AB SWD #1/LEA Co,N Mex		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	LA286132.D	1	02/13/18 07:48	ALA	n/a	n/a	L:GLA1686
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.00 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	5.6	5.6	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
460-00-4	4-Bromofluorobenzene	91%		63-139%		
540-36-3	1,4-Difluorobenzene	90%		52-140%		

(a) Analysis performed at SGS Scott, LA.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	D13 @ 6	
Lab Sample ID:	TD16439-29A	Date Sampled: 02/07/18
Matrix:	SO - Soil	Date Received: 02/09/18
Method:	SW846 8015C SW846 3546	Percent Solids: 93.9
Project:	CJES State AB SWD #1/LEA Co,N Mex	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	S0004796.D	1	02/14/18 05:55	ALA	02/13/18 07:10	L:OP10477	L:GLG613
Run #2							

Run #	Initial Weight	Final Volume
Run #1	20.5 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C22)	3.75	5.2	2.6	mg/kg	J
	TPH (> C22-C36)	9.01	5.2	2.6	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	77%		31-130%

(a) Analysis performed at SGS Scott, LA.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	D13 @ 8	Date Sampled:	02/07/18
Lab Sample ID:	TD16439-30	Date Received:	02/09/18
Matrix:	SO - Soil	Percent Solids:	93.5
Project:	CJES State AB SWD #1/LEA Co,N Mex		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	1090	53	mg/kg	10	02/15/18 18:25	SM	EPA 300.0
Solids, Percent	93.5		%	1	02/10/18	TH	SM 2540 G

RL = Reporting Limit

Report of Analysis

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Client Sample ID:	D13 @ 8	
Lab Sample ID:	TD16439-30A	Date Sampled: 02/07/18
Matrix:	SO - Soil	Date Received: 02/09/18
Method:	SW846 8015C	Percent Solids: 93.5
Project:	CJES State AB SWD #1/LEA Co,N Mex	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	LA286134.D	1	02/13/18 08:10	ALA	n/a	n/a	L:GLA1686
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.00 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	5.7	5.6	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
460-00-4	4-Bromofluorobenzene	91%		63-139%		
540-36-3	1,4-Difluorobenzene	90%		52-140%		

(a) Analysis performed at SGS Scott, LA.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	D13 @ 8	
Lab Sample ID:	TD16439-30A	Date Sampled: 02/07/18
Matrix:	SO - Soil	Date Received: 02/09/18
Method:	SW846 8015C SW846 3546	Percent Solids: 93.5
Project:	CJES State AB SWD #1/LEA Co,N Mex	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	S0004797.D	1	02/14/18 06:15	ALA	02/13/18 07:10	L:OP10477	L:GLG613
Run #2							

Run #	Initial Weight	Final Volume
Run #1	20.0 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C22)	4.44	5.3	2.7	mg/kg	J
	TPH (> C22-C36)	14.4	5.3	2.7	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	70%		31-130%

(a) Analysis performed at SGS Scott, LA.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	D13 @ 20	Date Sampled:	02/07/18
Lab Sample ID:	TD16439-31B	Date Received:	02/09/18
Matrix:	SO - Soil	Percent Solids:	88.2
Project:	CJES State AB SWD #1/LEA Co,N Mex		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	185	5.6	mg/kg	1	03/03/18 18:08	LR	EPA 300.0
Solids, Percent	88.2		%	1	03/01/18	PA	SM 2540 G

RL = Reporting Limit

Report of Analysis

Client Sample ID:	D14 @ 6	Date Sampled:	02/07/18
Lab Sample ID:	TD16439-32	Date Received:	02/09/18
Matrix:	SO - Soil	Percent Solids:	93.0
Project:	CJES State AB SWD #1/LEA Co,N Mex		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	428	26	mg/kg	5	02/15/18 18:40	SM	EPA 300.0
Solids, Percent	93		%	1	02/10/18	TH	SM 2540 G

RL = Reporting Limit

Report of Analysis

Client Sample ID:	D14 @ 6	Date Sampled:	02/07/18
Lab Sample ID:	TD16439-32A	Date Received:	02/09/18
Matrix:	SO - Soil	Percent Solids:	93.0
Method:	SW846 8015C		
Project:	CJES State AB SWD #1/LEA Co,N Mex		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	LA286138.D	1	02/13/18 08:53	ALA	n/a	n/a	L:GLA1686
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.00 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	5.8	5.7	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
460-00-4	4-Bromofluorobenzene	90%		63-139%		
540-36-3	1,4-Difluorobenzene	90%		52-140%		

(a) Analysis performed at SGS Scott, LA.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	D14 @ 6	
Lab Sample ID:	TD16439-32A	Date Sampled: 02/07/18
Matrix:	SO - Soil	Date Received: 02/09/18
Method:	SW846 8015C SW846 3546	Percent Solids: 93.0
Project:	CJES State AB SWD #1/LEA Co,N Mex	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	S0004801.D	1	02/14/18 07:39	ALA	02/13/18 07:10	L:OP10477	L:GLG613
Run #2							

Run #	Initial Weight	Final Volume
Run #1	20.1 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C22)	4.95	5.3	2.7	mg/kg	J
	TPH (> C22-C36)	12.8	5.3	2.7	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	62%		31-130%

(a) Analysis performed at SGS Scott, LA.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	D14 @ 9	Date Sampled:	02/07/18
Lab Sample ID:	TD16439-33	Date Received:	02/09/18
Matrix:	SO - Soil	Percent Solids:	96.9
Project:	CJES State AB SWD #1/LEA Co,N Mex		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	753	51	mg/kg	10	02/15/18 18:56	SM	EPA 300.0
Solids, Percent	96.9		%	1	02/10/18	TH	SM 2540 G

RL = Reporting Limit

Report of Analysis

Client Sample ID:	D14 @ 9	Date Sampled:	02/07/18
Lab Sample ID:	TD16439-33A	Date Received:	02/09/18
Matrix:	SO - Soil	Percent Solids:	96.9
Method:	SW846 8015C		
Project:	CJES State AB SWD #1/LEA Co,N Mex		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	LA286140.D	1	02/13/18 09:15	ALA	n/a	n/a	L:GLA1686
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.00 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	5.3	5.2	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
460-00-4	4-Bromofluorobenzene	90%		63-139%		
540-36-3	1,4-Difluorobenzene	91%		52-140%		

(a) Analysis performed at SGS Scott, LA.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	D14 @ 9	
Lab Sample ID:	TD16439-33A	Date Sampled: 02/07/18
Matrix:	SO - Soil	Date Received: 02/09/18
Method:	SW846 8015C SW846 3546	Percent Solids: 96.9
Project:	CJES State AB SWD #1/LEA Co,N Mex	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	S0004802.D	1	02/14/18 07:59	ALA	02/13/18 07:10	L:OP10477	L:GLG613
Run #2							

Run #	Initial Weight	Final Volume
Run #1	20.0 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C22)	4.59	5.2	2.6	mg/kg	J
	TPH (> C22-C36)	16.1	5.2	2.6	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	84%		31-130%

(a) Analysis performed at SGS Scott, LA.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	D15 @ 6	Date Sampled:	02/07/18
Lab Sample ID:	TD16439-34	Date Received:	02/09/18
Matrix:	SO - Soil	Percent Solids:	91.8
Project:	CJES State AB SWD #1/LEA Co,N Mex		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	1990	110	mg/kg	20	02/15/18 19:44	SM	EPA 300.0
Solids, Percent	91.8		%	1	02/10/18	TH	SM 2540 G

RL = Reporting Limit

Report of Analysis

Client Sample ID:	D15 @ 6	Date Sampled:	02/07/18
Lab Sample ID:	TD16439-34A	Date Received:	02/09/18
Matrix:	SO - Soil	Percent Solids:	91.8
Method:	SW846 8015C		
Project:	CJES State AB SWD #1/LEA Co,N Mex		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	LA286142.D	1	02/13/18 09:37	ALA	n/a	n/a	L:GLA1686
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.00 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	5.9	5.8	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
460-00-4	4-Bromofluorobenzene	91%		63-139%		
540-36-3	1,4-Difluorobenzene	90%		52-140%		

(a) Analysis performed at SGS Scott, LA.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	D15 @ 6	
Lab Sample ID:	TD16439-34A	Date Sampled: 02/07/18
Matrix:	SO - Soil	Date Received: 02/09/18
Method:	SW846 8015C SW846 3546	Percent Solids: 91.8
Project:	CJES State AB SWD #1/LEA Co,N Mex	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	S0004803.D	1	02/14/18 08:20	ALA	02/13/18 07:10	L:OP10477	L:GLG613
Run #2							

Run #	Initial Weight	Final Volume
Run #1	20.1 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C22)	3.86	5.4	2.7	mg/kg	J
	TPH (> C22-C36)	10.9	5.4	2.7	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	66%		31-130%

(a) Analysis performed at SGS Scott, LA.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	D15 @ 20	Date Sampled:	02/07/18
Lab Sample ID:	TD16439-35	Date Received:	02/09/18
Matrix:	SO - Soil	Percent Solids:	88.8
Project:	CJES State AB SWD #1/LEA Co,N Mex		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	359	27	mg/kg	5	02/15/18 19:59	SM	EPA 300.0
Solids, Percent	88.8		%	1	02/10/18	TH	SM 2540 G

RL = Reporting Limit

Report of Analysis

Client Sample ID:	D15 @ 20	Date Sampled:	02/07/18
Lab Sample ID:	TD16439-35A	Date Received:	02/09/18
Matrix:	SO - Soil	Percent Solids:	88.8
Method:	SW846 8015C		
Project:	CJES State AB SWD #1/LEA Co,N Mex		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	LA286148.D	1	02/13/18 11:03	ALA	n/a	n/a	L:GLA1686
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.00 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	6.3	6.2	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
460-00-4	4-Bromofluorobenzene	92%		63-139%		
540-36-3	1,4-Difluorobenzene	92%		52-140%		

(a) Analysis performed at SGS Scott, LA.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	D15 @ 20	
Lab Sample ID:	TD16439-35A	Date Sampled: 02/07/18
Matrix:	SO - Soil	Date Received: 02/09/18
Method:	SW846 8015C SW846 3546	Percent Solids: 88.8
Project:	CJES State AB SWD #1/LEA Co,N Mex	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	S0004804.D	1	02/14/18 08:40	ALA	02/13/18 07:10	L:OP10477	L:GLG613
Run #2							

Run #	Initial Weight	Final Volume
Run #1	20.0 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C22)	3.21	5.6	2.8	mg/kg	J
	TPH (> C22-C36)	ND	5.6	2.8	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	71%		31-130%

(a) Analysis performed at SGS Scott, LA.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	D16 @ 6	Date Sampled:	02/07/18
Lab Sample ID:	TD16439-36	Date Received:	02/09/18
Matrix:	SO - Soil	Percent Solids:	94.0
Project:	CJES State AB SWD #1/LEA Co,N Mex		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	1900	110	mg/kg	20	02/15/18 20:47	SM	EPA 300.0
Solids, Percent	94		%	1	02/10/18	TH	SM 2540 G

RL = Reporting Limit

Report of Analysis

Client Sample ID:	D16 @ 6	Date Sampled:	02/07/18
Lab Sample ID:	TD16439-36A	Date Received:	02/09/18
Matrix:	SO - Soil	Percent Solids:	94.0
Method:	SW846 8015C		
Project:	CJES State AB SWD #1/LEA Co,N Mex		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	LA286150.D	1	02/13/18 11:25	ALA	n/a	n/a	L:GLA1686
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.00 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	5.6	5.6	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
460-00-4	4-Bromofluorobenzene	96%		63-139%		
540-36-3	1,4-Difluorobenzene	94%		52-140%		

(a) Analysis performed at SGS Scott, LA.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	D16 @ 6	
Lab Sample ID:	TD16439-36A	Date Sampled: 02/07/18
Matrix:	SO - Soil	Date Received: 02/09/18
Method:	SW846 8015C SW846 3546	Percent Solids: 94.0
Project:	CJES State AB SWD #1/LEA Co,N Mex	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	S0004805.D	1	02/14/18 09:01	ALA	02/13/18 07:10	L:OP10477	L:GLG613
Run #2							

Run #	Initial Weight	Final Volume
Run #1	20.1 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C22)	4.37	5.3	2.6	mg/kg	J
	TPH (> C22-C36)	12.6	5.3	2.6	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	73%		31-130%

(a) Analysis performed at SGS Scott, LA.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	D16 @ 9	Date Sampled:	02/07/18
Lab Sample ID:	TD16439-37	Date Received:	02/09/18
Matrix:	SO - Soil	Percent Solids:	93.2
Project:	CJES State AB SWD #1/LEA Co,N Mex		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	1790	100	mg/kg	20	02/15/18 21:03	SM	EPA 300.0
Solids, Percent	93.2		%	1	02/10/18	TH	SM 2540 G

RL = Reporting Limit

Report of Analysis

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Client Sample ID:	D16 @ 9	Date Sampled:	02/07/18
Lab Sample ID:	TD16439-37A	Date Received:	02/09/18
Matrix:	SO - Soil	Percent Solids:	93.2
Method:	SW846 8015C		
Project:	CJES State AB SWD #1/LEA Co,N Mex		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	LA286152.D	1	02/13/18 11:48	ALA	n/a	n/a	L:GLA1686
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.10 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	5.6	5.5	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
460-00-4	4-Bromofluorobenzene	95%		63-139%		
540-36-3	1,4-Difluorobenzene	94%		52-140%		

(a) Analysis performed at SGS Scott, LA.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	D16 @ 9	
Lab Sample ID:	TD16439-37A	Date Sampled: 02/07/18
Matrix:	SO - Soil	Date Received: 02/09/18
Method:	SW846 8015C SW846 3546	Percent Solids: 93.2
Project:	CJES State AB SWD #1/LEA Co,N Mex	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	S0004806.D	1	02/14/18 09:22	ALA	02/13/18 07:10	L:OP10477	L:GLG613
Run #2							

Run #	Initial Weight	Final Volume
Run #1	20.1 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C22)	3.50	5.3	2.7	mg/kg	J
	TPH (> C22-C36)	4.24	5.3	2.7	mg/kg	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	76%		31-130%

(a) Analysis performed at SGS Scott, LA.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CD-1 @ 18	Date Sampled:	02/07/18
Lab Sample ID:	TD16439-38	Date Received:	02/09/18
Matrix:	SO - Soil	Percent Solids:	95.9
Project:	CJES State AB SWD #1/LEA Co,N Mex		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	2760	100	mg/kg	20	02/15/18 21:19	SM	EPA 300.0
Solids, Percent	95.9		%	1	02/10/18	TH	SM 2540 G

RL = Reporting Limit

Report of Analysis

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Client Sample ID:	CD-1 @ 18	Date Sampled:	02/07/18
Lab Sample ID:	TD16439-38A	Date Received:	02/09/18
Matrix:	SO - Soil	Percent Solids:	95.9
Method:	SW846 8015C		
Project:	CJES State AB SWD #1/LEA Co,N Mex		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	LA286154.D	1	02/13/18 12:10	ALA	n/a	n/a	L:GLA1686
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.10 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	5.3	5.3	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
460-00-4	4-Bromofluorobenzene	95%		63-139%		
540-36-3	1,4-Difluorobenzene	95%		52-140%		

(a) Analysis performed at SGS Scott, LA.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CD-1 @ 18	Date Sampled:	02/07/18
Lab Sample ID:	TD16439-38A	Date Received:	02/09/18
Matrix:	SO - Soil	Percent Solids:	95.9
Method:	SW846 8015C SW846 3546		
Project:	CJES State AB SWD #1/LEA Co,N Mex		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	S0004807.D	1	02/14/18 09:43	ALA	02/13/18 07:10	L:OP10477	L:GLG613
Run #2							

Run #	Initial Weight	Final Volume
Run #1	20.1 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C22)	28.4	5.2	2.6	mg/kg	
	TPH (> C22-C36)	116	5.2	2.6	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	75%		31-130%

(a) Analysis performed at SGS Scott, LA.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

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Client Sample ID:	CD-1 @ 30	Date Sampled:	02/07/18
Lab Sample ID:	TD16439-39R	Date Received:	02/09/18
Matrix:	SO - Soil	Percent Solids:	96.7
Method:	SW846 8015C		
Project:	CJES State AB SWD #1/LEA Co,N Mex		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	LA286706.D	1	02/21/18 07:21	ALA	n/a	n/a	L:GLA1697
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.10 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	5.2	5.2	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
460-00-4	4-Bromofluorobenzene	100%		63-139%		
540-36-3	1,4-Difluorobenzene	95%		52-140%		

(a) Analysis performed at SGS Scott, LA.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CD-1 @ 30	
Lab Sample ID:	TD16439-39R	Date Sampled: 02/07/18
Matrix:	SO - Soil	Date Received: 02/09/18
Method:	SW846 8015C SW846 3546	Percent Solids: 96.7
Project:	CJES State AB SWD #1/LEA Co,N Mex	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	S0005082.D	1	02/22/18 18:49	ALA	02/21/18 12:00	L:OP10558	L:GLG620
Run #2							

Run #	Initial Weight	Final Volume
Run #1	20.1 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C22)	17.1	5.1	2.6	mg/kg	
	TPH (> C22-C36)	45.8	5.1	2.6	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	85%		31-130%

(a) Analysis performed at SGS Scott, LA.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CD-2 @ 6	Date Sampled:	02/07/18
Lab Sample ID:	TD16439-40	Date Received:	02/09/18
Matrix:	SO - Soil	Percent Solids:	92.3
Project:	CJES State AB SWD #1/LEA Co,N Mex		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	1360	54	mg/kg	10	02/15/18 22:07	SM	EPA 300.0
Solids, Percent	92.3		%	1	02/13/18	TH	SM 2540 G

RL = Reporting Limit

Report of Analysis

Page 1 of 1

Client Sample ID:	CD-2 @ 6	Date Sampled:	02/07/18
Lab Sample ID:	TD16439-40A	Date Received:	02/09/18
Matrix:	SO - Soil	Percent Solids:	92.3
Method:	SW846 8015C		
Project:	CJES State AB SWD #1/LEA Co,N Mex		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	LA286158.D	1	02/13/18 12:56	ALA	n/a	n/a	L:GLA1686
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.10 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	5.7	5.6	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	94%		63-139%
540-36-3	1,4-Difluorobenzene	93%		52-140%

(a) Analysis performed at SGS Scott, LA.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CD-2 @ 6	Date Sampled:	02/07/18
Lab Sample ID:	TD16439-40A	Date Received:	02/09/18
Matrix:	SO - Soil	Percent Solids:	92.3
Method:	SW846 8015C SW846 3546		
Project:	CJES State AB SWD #1/LEA Co,N Mex		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	S0004808.D	1	02/14/18 10:03	ALA	02/13/18 07:10	L:OP10477	L:GLG613
Run #2							

Run #	Initial Weight	Final Volume
Run #1	20.1 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C22)	4.12	5.4	2.7	mg/kg	J
	TPH (> C22-C36)	11.7	5.4	2.7	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	69%		31-130%

(a) Analysis performed at SGS Scott, LA.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CD-2 @ 12	Date Sampled:	02/07/18
Lab Sample ID:	TD16439-41	Date Received:	02/09/18
Matrix:	SO - Soil	Percent Solids:	94.0
Project:	CJES State AB SWD #1/LEA Co,N Mex		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	1100	52	mg/kg	10	02/15/18 22:54	SM	EPA 300.0
Solids, Percent	94		%	1	02/10/18	TH	SM 2540 G

RL = Reporting Limit

Report of Analysis

Client Sample ID:	CD-2 @ 12	Date Sampled:	02/07/18
Lab Sample ID:	TD16439-41A	Date Received:	02/09/18
Matrix:	SO - Soil	Percent Solids:	94.0
Method:	SW846 8015C		
Project:	CJES State AB SWD #1/LEA Co,N Mex		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	LA286186.D	1	02/13/18 18:12	ALA	n/a	n/a	L:GLA1687
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.00 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	5.6	5.6	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
460-00-4	4-Bromofluorobenzene	96%		63-139%		
540-36-3	1,4-Difluorobenzene	96%		52-140%		

(a) Analysis performed at SGS Scott, LA.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CD-2 @ 12	Date Sampled:	02/07/18
Lab Sample ID:	TD16439-41A	Date Received:	02/09/18
Matrix:	SO - Soil	Percent Solids:	94.0
Method:	SW846 8015C SW846 3546		
Project:	CJES State AB SWD #1/LEA Co,N Mex		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	S0004809.D	1	02/14/18 10:24	ALA	02/13/18 07:10	L:OP10477	L:GLG613
Run #2							

Run #	Initial Weight	Final Volume
Run #1	20.1 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C22)	3.53	5.3	2.6	mg/kg	J
	TPH (> C22-C36)	8.22	5.3	2.6	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	61%		31-130%

(a) Analysis performed at SGS Scott, LA.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CD-2 @ 30	Date Sampled:	02/07/18
Lab Sample ID:	TD16439-42B	Date Received:	02/09/18
Matrix:	SO - Soil	Percent Solids:	92.3
Project:	CJES State AB SWD #1/LEA Co,N Mex		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	1180	54	mg/kg	10	03/03/18 18:40	LR	EPA 300.0
Solids, Percent	92.3		%	1	03/01/18	PA	SM 2540 G

RL = Reporting Limit

Report of Analysis

Client Sample ID:	CD-3 @ 4	Date Sampled:	02/07/18
Lab Sample ID:	TD16439-43	Date Received:	02/09/18
Matrix:	SO - Soil	Percent Solids:	93.8
Project:	CJES State AB SWD #1/LEA Co,N Mex		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	129	5.3	mg/kg	1	02/15/18 23:10	SM	EPA 300.0
Solids, Percent	93.8		%	1	02/10/18	TH	SM 2540 G

RL = Reporting Limit

Report of Analysis

Client Sample ID:	CD-3 @ 4	
Lab Sample ID:	TD16439-43A	Date Sampled: 02/07/18
Matrix:	SO - Soil	Date Received: 02/09/18
Method:	SW846 8015C	Percent Solids: 93.8
Project:	CJES State AB SWD #1/LEA Co,N Mex	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	LA286194.D	1	02/13/18 19:43	ALA	n/a	n/a	L:GLA1687
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.00 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	5.7	5.6	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	95%		63-139%
540-36-3	1,4-Difluorobenzene	94%		52-140%

(a) Analysis performed at SGS Scott, LA.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CD-3 @ 4	Date Sampled:	02/07/18
Lab Sample ID:	TD16439-43A	Date Received:	02/09/18
Matrix:	SO - Soil	Percent Solids:	93.8
Method:	SW846 8015C SW846 3546		
Project:	CJES State AB SWD #1/LEA Co,N Mex		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	S0004810.D	1	02/14/18 10:45	ALA	02/13/18 07:10	L:OP10477	L:GLG613
Run #2							

Run #	Initial Weight	Final Volume
Run #1	20.0 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C22)	3.74	5.3	2.7	mg/kg	J
	TPH (> C22-C36)	9.07	5.3	2.7	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	73%		31-130%

(a) Analysis performed at SGS Scott, LA.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CD-3 @ 7	Date Sampled:	02/07/18
Lab Sample ID:	TD16439-44	Date Received:	02/09/18
Matrix:	SO - Soil	Percent Solids:	93.0
Project:	CJES State AB SWD #1/LEA Co,N Mex		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	110	5.2	mg/kg	1	02/15/18 23:26	SM	EPA 300.0
Solids, Percent	93		%	1	02/10/18	TH	SM 2540 G

RL = Reporting Limit

Report of Analysis

Client Sample ID:	CD-3 @ 7	Date Sampled:	02/07/18
Lab Sample ID:	TD16439-44A	Date Received:	02/09/18
Matrix:	SO - Soil	Percent Solids:	93.0
Method:	SW846 8015C		
Project:	CJES State AB SWD #1/LEA Co,N Mex		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	LA286196.D	1	02/13/18 20:06	ALA	n/a	n/a	L:GLA1687
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.00 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	5.8	5.7	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
460-00-4	4-Bromofluorobenzene	97%		63-139%		
540-36-3	1,4-Difluorobenzene	96%		52-140%		

(a) Analysis performed at SGS Scott, LA.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CD-3 @ 7	Date Sampled:	02/07/18
Lab Sample ID:	TD16439-44A	Date Received:	02/09/18
Matrix:	SO - Soil	Percent Solids:	93.0
Method:	SW846 8015C SW846 3546		
Project:	CJES State AB SWD #1/LEA Co,N Mex		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	S0004814.D	1	02/14/18 12:07	ALA	02/13/18 07:10	L:OP10477	L:GLG613
Run #2							

Run #	Initial Weight	Final Volume
Run #1	20.1 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C22)	4.51	5.3	2.7	mg/kg	J
	TPH (> C22-C36)	6.76	5.3	2.7	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	77%		31-130%

(a) Analysis performed at SGS Scott, LA.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	DUP-2	Date Sampled:	02/07/18
Lab Sample ID:	TD16439-45	Date Received:	02/09/18
Matrix:	SO - Soil	Percent Solids:	96.1
Project:	CJES State AB SWD #1/LEA Co,N Mex		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	963	51	mg/kg	10	02/15/18 23:42	SM	EPA 300.0
Solids, Percent	96.1		%	1	02/10/18	TH	SM 2540 G

RL = Reporting Limit

Report of Analysis

Client Sample ID:	DUP-2	Date Sampled:	02/07/18
Lab Sample ID:	TD16439-45A	Date Received:	02/09/18
Matrix:	SO - Soil	Percent Solids:	96.1
Method:	SW846 8015C		
Project:	CJES State AB SWD #1/LEA Co,N Mex		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	LA286198.D	1	02/13/18 20:28	ALA	n/a	n/a	L:GLA1687
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.00 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	5.4	5.3	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
460-00-4	4-Bromofluorobenzene	96%		63-139%		
540-36-3	1,4-Difluorobenzene	96%		52-140%		

(a) Analysis performed at SGS Scott, LA.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	DUP-2						
Lab Sample ID:	TD16439-45A					Date Sampled:	02/07/18
Matrix:	SO - Soil					Date Received:	02/09/18
Method:	SW846 8015C SW846 3546					Percent Solids:	96.1
Project:	CJES State AB SWD #1/LEA Co,N Mex						

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	S0004815.D	1	02/14/18 12:28	ALA	02/13/18 07:10	L:OP10477	L:GLG613
Run #2							

Run #	Initial Weight	Final Volume
Run #1	20.1 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C22)	25.3	5.2	2.6	mg/kg	
	TPH (> C22-C36)	93.7	5.2	2.6	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	81%		31-130%

(a) Analysis performed at SGS Scott, LA.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	DUP-3	Date Sampled:	02/07/18
Lab Sample ID:	TD16439-46	Date Received:	02/09/18
Matrix:	SO - Soil	Percent Solids:	92.8
Project:	CJES State AB SWD #1/LEA Co,N Mex		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	1290	53	mg/kg	10	02/15/18 23:58	SM	EPA 300.0
Solids, Percent	92.8		%	1	02/10/18	TH	SM 2540 G

RL = Reporting Limit

Report of Analysis

Client Sample ID:	DUP-3	Date Sampled:	02/07/18
Lab Sample ID:	TD16439-46A	Date Received:	02/09/18
Matrix:	SO - Soil	Percent Solids:	92.8
Method:	SW846 8015C		
Project:	CJES State AB SWD #1/LEA Co,N Mex		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	LA286200.D	1	02/13/18 20:51	ALA	n/a	n/a	L:GLA1687
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.00 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	5.8	5.7	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	97%		63-139%
540-36-3	1,4-Difluorobenzene	97%		52-140%

(a) Analysis performed at SGS Scott, LA.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	DUP-3	
Lab Sample ID:	TD16439-46A	Date Sampled: 02/07/18
Matrix:	SO - Soil	Date Received: 02/09/18
Method:	SW846 8015C SW846 3546	Percent Solids: 92.8
Project:	CJES State AB SWD #1/LEA Co,N Mex	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	S0004831.D	1	02/14/18 18:18	ALA	02/14/18 08:00	L:OP10484	L:GLG614
Run #2							

Run #	Initial Weight	Final Volume
Run #1	20.5 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C22)	19.4	5.3	2.6	mg/kg	
	TPH (> C22-C36)	69.1	5.3	2.6	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	66%		31-130%

(a) Analysis performed at SGS Scott, LA.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	DUP-4	Date Sampled:	02/07/18
Lab Sample ID:	TD16439-47	Date Received:	02/09/18
Matrix:	SO - Soil	Percent Solids:	93.1
Project:	CJES State AB SWD #1/LEA Co,N Mex		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	2700	110	mg/kg	20	02/16/18 00:14	SM	EPA 300.0
Solids, Percent	93.1		%	1	02/10/18	TH	SM 2540 G

RL = Reporting Limit

Report of Analysis

Page 1 of 1

Client Sample ID:	DUP-4	Date Sampled:	02/07/18
Lab Sample ID:	TD16439-47A	Date Received:	02/09/18
Matrix:	SO - Soil	Percent Solids:	93.1
Method:	SW846 8015C		
Project:	CJES State AB SWD #1/LEA Co,N Mex		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	LA286202.D	1	02/13/18 21:14	ALA	n/a	n/a	L:GLA1687
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.20 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	5.5	5.5	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
460-00-4	4-Bromofluorobenzene	97%		63-139%		
540-36-3	1,4-Difluorobenzene	97%		52-140%		

(a) Analysis performed at SGS Scott, LA.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	DUP-4	
Lab Sample ID:	TD16439-47A	Date Sampled: 02/07/18
Matrix:	SO - Soil	Date Received: 02/09/18
Method:	SW846 8015C SW846 3546	Percent Solids: 93.1
Project:	CJES State AB SWD #1/LEA Co,N Mex	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	S0004832.D	1	02/14/18 18:39	ALA	02/14/18 08:00	L:OP10484	L:GLG614
Run #2							

Run #	Initial Weight	Final Volume
Run #1	20.3 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C22)	20.5	5.3	2.6	mg/kg	
	TPH (> C22-C36)	75.9	5.3	2.6	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	67%		31-130%

(a) Analysis performed at SGS Scott, LA.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Misc. Forms**Custody Documents and Other Forms**

Includes the following where applicable:

- Chain of Custody

10165 Harwin Dr, Ste 150 Houston, TX 77036
TEL: 713-271-4700 FAX: 713-271-4770
www.accutest.com

Client / Reporting Information		Project Information		Requested Analyses		Matrix Codes	
Company Name EnTech Consulting Corp Street Address 21 Waterway Ave, Suite 300 City State Zip The Woodlands TX 77380 Project Contact E-mail PETE SCHRAM pete.schram@entechservices.com Phone # Fax # 281 326-7531 Sampler(s) Name(s) Phone # PETE SCHRAM		Project Name: CJES STATE AB 200 #1 Street LEA CO., NM City State The Woodlands TX Project # 21 Waterway Ave Suite 300 Client Purchase Order # 21000000000000000000 Project Manager CHAS PATEL Attention: CHAS PATEL		Billing Information (If different from Report to) Company Name EnTech Street Address 21 Waterway Ave Suite 300 City State Zip The Woodlands TX Number of preserved Bottles Collection		Matrix Codes DW - Drinking Water GW - Ground Water WW - Water SW - Surface Water SO - Soil SL - Sludge SED - Sediment CI - Oil LO - Other Liquid AIR - Air SOL - Other Solid WP - Wipe FB - Field Blank	
SGS Accutest Sample # Field ID / Point of Collection		Date Time Sampled By Matrix # of bottles HCl NH ₄ ZN ₄ _{OH} HNO ₃ H ₂ O ₂ NONE DI Water MECH TSP NH ₄ NO ₃ ENCORE OTHER		Requested Analyses Matrix Codes		Matrix Codes	
1 D-1 @ 6" 2/7/13 1055 PJS 5 1 2 D-1 @ 12" 1055 PJS 5 1 3 D-1 @ 24" 1117 PJS 5 1 4 D-3 @ 6" 1117 PJS 5 1 5 D-3 @ 12" 1140 PJS 5 1 6 D-3 @ 20" 1140 PJS 5 1 7 D-4 @ 6" 1205 PJS 5 1 8 D-4 @ 12" 1205 PJS 5 1 9 D-5 @ 6" 1217 PJS 5 1 10 D-5 @ 12" 1217 PJS 5 1		Data Deliverable Information Commercial "A" (Level 1) Commercial "B" (Level 2) FULT1 (Level 3+4) REDT1 (Level 3+4) Commercial "C" TRRP EDD Format Other		Comments / Special Instructions 2-5-18 800 2-5-18 800 2-5-18 800 2-5-18 800		Matrix Codes	
Turnaround Time (Business days) Standard 5 Day RUSH 4 Day RUSH 3 Day RUSH 2 Day RUSH 1 Day EMERGENCY Emergency & Rush TIA data available VIA Lablink		Approved By (SGS Accutest PM): / Date: _____ _____ _____ _____ _____ _____		Form: SM021-0 Sample Custody must be documented below each time samples change possession, including courier delivery.		Matrix Codes	
Relinquished by Sampler: Date Time Relinquished by Sampler: Date Time Relinquished by: Date Time		Received By: Date Time Received By: Date Time Received By: Date Time		Relinquished by: Date Time Relinquished by: Date Time Relinquished by: Date Time		Date Time Date Time Date Time Date Time	
1 2/7/13 1730 3 2/7/13 15:00 5		1 2/7/13 1730 3 2/7/13 15:00 5		2 2/7/13 1730 4 2/7/13 15:00 6		2 2/7/13 1730 4 2/7/13 15:00 6	
Preserved where applicable On Ice Cooler Temp.		Preserved where applicable On Ice Cooler Temp.		Preserved where applicable On Ice Cooler Temp.		Preserved where applicable On Ice Cooler Temp.	

TD16439: Chain of Custody

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CHAIN OF CUSTODY

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FED-EX Tracking #	Bottle Order Control #
SGS Accutest Quote #	SGS Accutest Job #

TD16439

Requested Analyses	Matrix Codes
DW - Drinking Water GW - Ground Water WW - Wastewater SW - Surface Water SO - Soil SL - Sludge SED - Sediment OI - Oil LIQ - Other Liquid AIR - Air SOL - Other Solid WP - Wipe FB - Field Blank	

CL Method 300.0
TRD EOT EXL (10/20/2012)
HOLD FOR ANALYSIS

Field ID / Point of Collection	Date	Time	Sampled By	Matrix	# of bottles	HCl	NO ₃	Zn/NO ₃	PHOS	RESOX	DI Water	MEOH	TSP	NH ₄ NO ₃	ENDURE	OTHER	LAB USE ONLY
17 D5 @ 25	2/7/15	1217	PVS	S	1												
18 D6 @ 6		1230															
19 D6 @ 9		1230															
16 D7 @ 6		1253															
17 D7 @ 10		1253															
18 D8 @ 6		1300															
19 D8 @ 12		1300															
20 D8 @ 24		1300															
21 D9 @ 6		1508															
22 D9 @ 10		1508															
23 D10 @ 6		1532															
24 D10 @ 9	2/7/15	1532	PVS	S	1												

Turnaround Time (Business days)

Standard
5 Day RUSH
4 Day RUSH
3 Day RUSH
2 Day RUSH
1 Day EMERGENCY

Approved By (SGS Accutest PM) / Date:

Data Deliverable Information

Commercial "A" (Level 1)
Commercial "B" (Level 2)
FULT1 (Level 3+4)
REDT1 (Level 3+4)
Commercial "C"

TRRP
EDD Format
Other

Comments / Special Instructions

Form: SM021-0

Commercial "A" = Results Only
Commercial "B" = Results + QC Summary
T2 Commercial "C" = Results + QC & Surrogate Summary

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by Sampler	Date Time	Received By	Date Time	Relinquished by	Date Time	Received By	Date Time
1. [Signature]	2/7/15 1730	1. [Signature]	2/7/15 1730	2. [Signature]	2/7/15 1730	2. [Signature]	2/7/15 1730
3. [Signature]	2/15/15	3. [Signature]	2/15/15	4. [Signature]	2/15/15	4. [Signature]	2/15/15
5. [Signature]		5. [Signature]					

Custody Seal #

Intact
Not Intact

Preserved where applicable

On Ice
Cooler Temp.

TD16439: Chain of Custody

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CHAIN OF CUSTODY

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10165 Harwin Dr, Ste 150 Houston, TX 77036
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FED-EX Tracking #		Botle Order Control #	
SGS Accutest Quote #		SGS Accutest Job #	
TD16439			
Client / Reporting Information		Project Information	
Company Name En Tech Consulting Corp		Project Name WES STATE AIR SUD #1	
Street Address 21 Waterway Ave, Suite 300		Street LEA CO. NM	
City The Woodlands TX		State TX	
Zip 77380		Billing Information (if different from Report to)	
Project Contact Pete Schramm		Company Name ENTRECH	
E-mail p.schramm@enttech.com		Street Address 21 Waterway Ave #300	
Phone # 281-326-1831		City The Woodlands TX	
Fax #		State TX	
Sample ID(s) Name(s) Pete Schramm		Zip 77380	
Phone #		Attention CARR PATEL	
SGS Account #		Collection	
Field ID / Point of Collection		Date	
2-5 D1E6		2/7/18	
26 D1E6		1600	
27 D1E6		1600	
28 D1E6		1624	
29 D1E6		1624	
30 D1E6		1630	
31 D1E6		1630	
32 D1E6		1630	
33 D1E6		1443	
34 D1E6		1443	
35 D1E6		1452	
36 D1E6		1452	
Turnaround Time (Business days)		Date	
Standard		2/7/18	
5 Day RUSH		1702	
4 Day RUSH		PJS	
3 Day RUSH		S	
2 Day RUSH		I	
1 Day EMERGENCY			
Emergency & Rush T/A data available VIA Lablink			
Approved By (SGS Accutest PM): / Date:		Data Deliverable Information	
		Commercial "A" (Level 1)	
		Commercial "B" (Level 2)	
		FULY1 (Level 3+4)	
		REDT1 (Level 3+4)	
		Commercial "C"	
		Commercial "A" = Results Only	
		Commercial "B" = Results + QC Summary	
		T2 Commercial "C" = Results + QC & Surrogate Summary	
Relinquished By Sampler:		Sample Custody must be documented below each time samples change possession, including courier delivery.	
1. [Signature]		Received By: 1. [Signature]	
Date Time: 2/6/18 1730		Date Time: 2/6/18 1730	
Relinquished By Sampler:		Received By: 2. [Signature]	
3. [Signature]		Date Time: 2/6/18 800	
Date Time: 2/6/18 1600		Relinquished By: 3. [Signature]	
Relinquished By:		Date Time: 2/6/18 0414	
5		Custody Seal #	
		Intact	
		Not intact	
		Preserved where applicable	
		On Ice	
		Cooler Temp.	

TD16439: Chain of Custody

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FED-EX Tracking #		Bottle Order Control #	
SGS Accutest Quote #		SGS Accutest Job #	

TD16439

Client / Reporting Information		Project Information	
Company Name EnTech Consulting Corp Street Address 21 Waterway Ave, Suite 300 City The Woodlands TX State TX Zip 77380 Project Contact E-mail: Pate Shannon pat@schreinerlab.com Phone # (214) 326-7331 Fax # Sampler(s) Name(s) Pate Shannon (214) 326-7331 Phone # Project Manager Cuan Patel Attention: Cuan Patel		Project Name CIES STATE AB WOOD-1 Street LEA CO. NM City State Zip Billing Information (if different from Report to) Company Name ENTERED Street Address 21 Waterway Ave #300 City The Woodlands TX State TX Zip Client Purchase Order # Collection	

Requested Analyses		Matrix Codes
DW - Drinking Water GW - Ground Water WW - Water SW - Surface Water SO - Soil SL - Sludge SED - Sediment LIQ - Other Liquid AIR - Air SOL - Other Solid WP - Wipe FB - Field Blank		

SGS Accutest Sample #	Field ID / Point of Collection	Date	Time	Sampled By	Matrix	# of bottles	NOI	MECH	DI Water	MECH	TPP	EMERGE	OTHER	LAB USE ONLY
37	DIC-9	2/7/15	1702	PS	S	1								2
38	CD-1 & 2		1030											2
39	CD-1 & 3		1030											2
40	CD-2 & 4		1440											2
41	CD-2 & 12		1440											2
42	CD-2 & 30		1440											2
43	CD-3 & 4		1710											2
44	CD-3 & 7		1710											2
45	DUP-2													2
46	DUP-3													1
47	DUP-4	2/7/15		PS	S	1								1
48														2

Turnaround Time (Business days)

Approved By (SGS Accutest PM): / Date:

Emergency & Rush T/A data available VIA Lablink

Form: SM021-0

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by: Sample 1	Date/Time: 2/7/15 1730	Received By: 1	Date/Time: 2/7/15 1732	Relinquished by: Sample 2	Date/Time: 2/7/15 1732	Received By: 2	Date/Time: 2/7/15 1732
Relinquished by: Sample 3	Date/Time: 2/7/15 16:00	Received By: 3	Date/Time: 2/7/15 1732	Relinquished by: Sample 4	Date/Time: 2/7/15 1732	Received By: 4	Date/Time: 2/7/15 1732
Relinquished by: Sample 5	Date/Time:	Received By: 5	Date/Time:	Relinquished by: Sample 6	Date/Time:	Received By: 6	Date/Time:

Custody Seal #

Intact ☐ Not intact ☐

Preserved where applicable ☐

On Ice ☐ Cooler Temp. ☐

TD16439: Chain of Custody

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Client / Reporting Information Company Name: SGS North America Inc. Street Address: 10165 Harwin Drive City: Houston State: TX Zip: 77036 Project Contact: syvlla.garza@sgs.com E-mail: Phone #: 713-271-4700 Fax #: Sampler(s) Name(s):		Project Information Project Name: CJES State AB SWD #1/LEA Co,N Mex Street: Billing Information (if different from Report to): Company Name: Project #: Street Address: City: State: Zip: Attention:		FED-EX Tracking # SGS Quote #		Bottle Order Control # SGS Job #		TD16439	
				Requested Analysis (see TEST CODE sheet) <div style="font-size: 2em; transform: rotate(-15deg); position: absolute; top: 10px; right: 10px;"> Return Samples of marked red per SAG (CCL) </div>				Matrix Codes DW - Drinking Water GW - Ground Water WW - Water SW - Surface Water SO - Soil SL - Sludge SED - Sediment OL - Oil LIQ - Other Liquid AIR - Air SOL - Other Solid WIP - Wipe FB - Field Blank EB - Equipment Blank RB - Rinse Blank TB - Trip Blank	
Field ID / Point of Collection MEQNDI Val #		Collection Date Time Sampled Matrix # of bottles		Number of preserved Bottles HCl NaOH HNO3 H2SO4 NONE DI Water MEQNDI ENCODE		BBD50R00R01		LAB USE ONLY	
Turnaround Time (Business days)		Approved By (SGS PM) / Date:		Data Deliverable Information <input type="checkbox"/> Std. 10 Business Days <input type="checkbox"/> 5 Day RUSH <input type="checkbox"/> 3 Day EMERGENCY <input type="checkbox"/> 2 Day EMERGENCY <input type="checkbox"/> 1 Day EMERGENCY <input checked="" type="checkbox"/> other Due 2/16/2018 Emergency & Rush T/A data available via Lablink		<input type="checkbox"/> Commercial "A" (Level 1) <input type="checkbox"/> Commercial "B" (Level 2) <input type="checkbox"/> FULLT1 (Level 3+4) <input type="checkbox"/> NJ Reduced <input type="checkbox"/> Commercial "C" Commercial "A" = Results Only Commercial "B" = Results + QC Summary NJ Reduced = Results + QC Summary + Partial Raw data		Comments / Special Instructions <div style="font-size: 2em; transform: rotate(-15deg); position: absolute; top: 10px; right: 10px;"> R4X 6(714) </div>	
Relinquished by Sampler: S. Garza Date Time: 2-11-18		Received By: SGS Date Time: 2/11/18 1000		Relinquished By: SGS Date Time: 2/11/18		Received By: SGS Date Time: 2/11/18		Relinquished By: SGS Date Time: 2/11/18	
Relinquished by: SGS Date Time:		Received By: SGS Date Time:		Relinquished By: SGS Date Time:		Received By: SGS Date Time:		Relinquished By: SGS Date Time:	
Relinquished by: SGS Date Time:		Received By: SGS Date Time:		Relinquished By: SGS Date Time:		Received By: SGS Date Time:		Relinquished By: SGS Date Time:	
Relinquished by: SGS Date Time:		Received By: SGS Date Time:		Relinquished By: SGS Date Time:		Received By: SGS Date Time:		Relinquished By: SGS Date Time:	
Relinquished by: SGS Date Time:		Received By: SGS Date Time:		Relinquished By: SGS Date Time:		Received By: SGS Date Time:		Relinquished By: SGS Date Time:	
Relinquished by: SGS Date Time:		Received By: SGS Date Time:		Relinquished By: SGS Date Time:		Received By: SGS Date Time:		Relinquished By: SGS Date Time:	
Relinquished by: SGS Date Time:		Received By: SGS Date Time:		Relinquished By: SGS Date Time:		Received By: SGS Date Time:		Relinquished By: SGS Date Time:	
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TD16439: Chain of Custody

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[illegible]

TD16439: Chain of Custody

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CHAIN OF CUSTODY

Page 3 of 4

10165 Harwin Drive, Houston, TX 77036
TEL: 713-271-4700 FAX: 713-271-4770

FED-EX Tracking #

Bottle Order Control #

SGS Quote #

SGS Job #

TD16439

Client / Reporting Information				Project Information				Requested Analysis (see TEST CODE sheet)												Matrix Codes	
Company Name: SGS North America Inc.				Project Name: CJES State AB SWD #1/LEA Co,N Mex																DW - Drinking Water GW - Ground Water WW - Water SW - Surface Water SO - Soil SL - Sludge SED-Sediment OI - Oil LIQ - Other Liquid AIR - Air SOL - Other Solid WP - Wipe FB-Field Blank EB-Equipment Blank RB- Rinse Blank TB-Trip Blank	
Street Address: 10165 Harwin Drive				Street:																	
City: Houston State: TX Zip: 77036				City: State:																	
Project Contact: sylvia.garza@sgs.com				Project #:																	
Phone #: 713-271-4700				Client Purchase Order #:																	
Sampler(s) Name(s):				Project Manager:																	
Field ID / Point of Collection				MEOHDI Vial #																	
Date				Time																	
Sampled by				Matrix																	
# of bottles				Number of preserved bottles																	
PCD				HACH																	
PNO3				PNO2																	
PNO4				PNO5																	
PNO6				PNO7																	
PNO8				PNO9																	
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TD16439: Chain of Custody

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Frye, Ralph (Scott)

From: Garza, Sylvia (Houston)
Sent: Monday, February 12, 2018 12:37 PM
To: Larriviere, Christina (Scott); Frye, Ralph (Scott)
Cc: Estrada, Ruben (Houston); Shkurti, Edmond (Houston); Mulepati, Sandip (Houston)
Subject: TD16439-24, 25, 40 volume?

Importance: High

Hello,

My folks did not subsample a 2oz for TD16439-24, 25, and 40.

Can you send a 2oz our way PLEASE.

We need to run CHL and %SOL here.

Thank you,

Sylvia A. Garza
Environment, Health and Safety
Project Manager, Houston

SGS North America Inc. -Houston
10165 Harwin Dr, Suite 150
Houston, Texas 77036

Phone: +1 713 271 4700 ext 4123
Mobile: +1 281 202 5373
Fax: +1 713 271 4770
Email: Sylvia.Garza@sgs.com

SGS ACCUTEST IS PART OF SGS, THE WORLD'S LEADING INSPECTION,
VERIFICATION, TESTING AND CERTIFICATION COMPANY.



TD16439: Chain of Custody
Page 9 of 17



ACCUTEST

COOLER TEMP FORM

TO# SGD16436

Delivered by (circle one):

FedEx/UPS

ALGC Driver

Date:

Client

Client:

2-12-16

Cooler Number:

SGS

Thermometer ID:

TD4

CF, °C

0.0

Corrected Temp, °C

3.6

SAMPLES CONTAINED IN COOLER

LA41200 (1) 1250UP

LA41208 (09/11) (1) 1250UP

LA41239 (1) 1500UP

LA41224 (21) 1324UP

(1) 1254UP

LA41214-2 400UP

LA41216 (2) 400UP

LA41238 (2) 1250UP

LA41204 (1) 1324UP

(1) 1254UP

LA41223 (1) 1324UP

(1) 1254UP

LA41231 (1) 1250UP

20071117 842UP

LA41207 (1) 1250UP

SGS

Customer

DATE

2-12-16

SIGNATURE

[Signature]

PH LOT# 10D4561

Form: SW027-06 Rev 10/24/2016

TD16439: Chain of Custody

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SGS

SGS Sample Receipt Summary

Page 1 of 7

Job Number: TD16439 Client: ENTECH Project: SJES STATE AB SWD #1
 Date / Time Received: Delivery Method: Airbill #'s: 731444457888,731444457888
 No. Coolers: 3 Therm ID: IR9; Temp Adjustment Factor: 0;
 Cooler Temps (Initial/Adjusted): #1: (3.6/3.6); #2: (1.4/1.4); 3.6

Cooler Security Y or N Y or N
 1. Custody Seals Present: ☒ ☐ 3. COC Present: ☒ ☐
 2. Custody Seals Intact: ☒ ☐ 4. Smpl Dates/Time OK: ☒ ☐

Cooler Temperature Y or N
 1. Temp criteria achieved: ☒ ☐
 2. Cooler temp verification:
 3. Cooler media: Ice (Bag)

Quality Control Preservation Y or N N/A WTB STB
 1. Trip Blank present / cooler: ☐ ☐ ☒ ☐ ☐
 2. Trip Blank listed on COC: ☐ ☐ ☒
 3. Samples preserved properly: ☒ ☐
 4. VOCs headspace free: ☐ ☐ ☒

Sample Integrity - Documentation Y or N
 1. Sample labels present on bottles: ☐ ☒
 2. Container labeling complete: ☒ ☐
 3. Sample container label / COC agree: ☐ ☒

Sample Integrity - Condition Y or N
 1. Sample recvd within HT: ☒ ☐
 2. All containers accounted for: ☒ ☐
 3. Condition of sample: Intact

Sample Integrity - Instructions Y or N N/A
 1. Analysis requested is clear: ☒ ☐
 2. Bottles received for unspecified tests: ☐ ☒
 3. Sufficient volume recvd for analysis: ☒ ☐
 4. Compositing instructions clear: ☐ ☐ ☒
 5. Filtering instructions clear: ☐ ☐ ☒

Comments Received a jar with lid written "CD 1 @ 1.5" 2/7/18 @ 10:30 and chain list "CD 1 @ 18" lab indentified by collection date and time.
 Received a jar with lid written "CD 1 @ 2.5" 2/7/18 @ 10:30 and chain list "CD 1 @ 30" lab indentified by collection date and time.
 Received sample 24,25, and 40 back on 2/12/18 @2250

TD16439: Chain of Custody

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Problem Resolution

Page 2 of 7

Job Number: TD16439

CSR: _____

Response Date: _____

Response:

4.1

4

TD16439: Chain of Custody
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Sample Receipt Log

Page 3 of 7

Job #: TD16439

Date / Time Received: 2/9/2018 9:45:00 AM 9:45:00

Initials: BG

Client: ENTECH

Cooler #	Sample ID:	Vol	Bot #	Location	Pres	pH	Therm ID	Initial Temp	Therm CF	Corrected Temp
1	TD16439-1	4oz	1	SUB	N/P	Note #2 - Preservative check not applicable.	IR9	3.6	0	3.6
1	TD16439-1	2oz	2	2-104	N/P	Note #2 - Preservative check not applicable.	IR9	3.6	0	3.6
1	TD16439-2	4oz	1	SUB	N/P	Note #2 - Preservative check not applicable.	IR9	3.6	0	3.6
1	TD16439-2	2oz	2	2-104	N/P	Note #2 - Preservative check not applicable.	IR9	3.6	0	3.6
1	TD16439-3	4oz	1	SUB	N/P	Note #2 - Preservative check not applicable.	IR9	3.6	0	3.6
1	TD16439-3	2oz	2	2-104	N/P	Note #2 - Preservative check not applicable.	IR9	3.6	0	3.6
1	TD16439-4	4oz	1	SUB	N/P	Note #2 - Preservative check not applicable.	IR9	3.6	0	3.6
1	TD16439-4	2oz	2	2-104	N/P	Note #2 - Preservative check not applicable.	IR9	3.6	0	3.6
1	TD16439-5	4oz	1	SUB	N/P	Note #2 - Preservative check not applicable.	IR9	3.6	0	3.6
1	TD16439-5	2oz	2	2-104	N/P	Note #2 - Preservative check not applicable.	IR9	3.6	0	3.6
1	TD16439-6	4oz	1	SUB	N/P	Note #2 - Preservative check not applicable.	IR9	3.6	0	3.6
1	TD16439-6	2oz	2	2-104	N/P	Note #2 - Preservative check not applicable.	IR9	3.6	0	3.6
1	TD16439-7	4oz	1	SUB	N/P	Note #2 - Preservative check not applicable.	IR9	3.6	0	3.6
1	TD16439-7	2oz	2	2-104	N/P	Note #2 - Preservative check not applicable.	IR9	3.6	0	3.6
1	TD16439-8	4oz	1	SUB	N/P	Note #2 - Preservative check not applicable.	IR9	3.6	0	3.6
1	TD16439-8	2oz	2	2-104	N/P	Note #2 - Preservative check not applicable.	IR9	3.6	0	3.6
1	TD16439-9	4oz	1	SUB	N/P	Note #2 - Preservative check not applicable.	IR9	3.6	0	3.6
1	TD16439-9	2oz	2	2-104	N/P	Note #2 - Preservative check not applicable.	IR9	3.6	0	3.6
1	TD16439-10	4oz	1	SUB	N/P	Note #2 - Preservative check not applicable.	IR9	3.6	0	3.6
1	TD16439-10	2oz	2	2-104	N/P	Note #2 - Preservative check not applicable.	IR9	3.6	0	3.6
1	TD16439-11	4oz	1	SUB	N/P	Note #2 - Preservative check not applicable.	IR9	3.6	0	3.6
1	TD16439-11	2oz	2	2-104	N/P	Note #2 - Preservative check not applicable.	IR9	3.6	0	3.6
1	TD16439-12	4oz	1	SUB	N/P	Note #2 - Preservative check not applicable.	IR9	3.6	0	3.6

TD16439: Chain of Custody

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Sample Receipt Log

Page 4 of 7

Job #: TD16439

Date / Time Received: 2/9/2018 9:45:00 AM 9:45:00

Initials: BG

Client: ENTECH

Cooler #	Sample ID:	Vol	Bot #	Location	Pres	pH	Therm ID	Initial Temp	Therm CF	Corrected Temp
1	TD16439-12	2oz	2	2-104	N/P	Note #2 - Preservative check not applicable.	IR9	3.6	0	3.6
1	TD16439-13	4oz	1	SUB	N/P	Note #2 - Preservative check not applicable.	IR9	3.6	0	3.6
1	TD16439-13	2oz	2	2-104	N/P	Note #2 - Preservative check not applicable.	IR9	3.6	0	3.6
1	TD16439-14	4oz	1	SUB	N/P	Note #2 - Preservative check not applicable.	IR9	3.6	0	3.6
1	TD16439-14	2oz	2	2-104	N/P	Note #2 - Preservative check not applicable.	IR9	3.6	0	3.6
1	TD16439-15	4oz	1	SUB	N/P	Note #2 - Preservative check not applicable.	IR9	3.6	0	3.6
1	TD16439-15	2oz	2	2-104	N/P	Note #2 - Preservative check not applicable.	IR9	3.6	0	3.6
1	TD16439-16	4oz	1	SUB	N/P	Note #2 - Preservative check not applicable.	IR9	3.6	0	3.6
1	TD16439-16	2oz	2	2-104	N/P	Note #2 - Preservative check not applicable.	IR9	3.6	0	3.6
1	TD16439-17	4oz	1	SUB	N/P	Note #2 - Preservative check not applicable.	IR9	3.6	0	3.6
1	TD16439-17	2oz	2	2-104	N/P	Note #2 - Preservative check not applicable.	IR9	3.6	0	3.6
1	TD16439-18	4oz	1	SUB	N/P	Note #2 - Preservative check not applicable.	IR9	3.6	0	3.6
1	TD16439-18	2oz	2	2-104	N/P	Note #2 - Preservative check not applicable.	IR9	3.6	0	3.6
1	TD16439-19	4oz	1	SUB	N/P	Note #2 - Preservative check not applicable.	IR9	3.6	0	3.6
1	TD16439-19	2oz	2	2-104	N/P	Note #2 - Preservative check not applicable.	IR9	3.6	0	3.6
1	TD16439-20	4oz	1	SUB	N/P	Note #2 - Preservative check not applicable.	IR9	3.6	0	3.6
1	TD16439-20	2oz	2	2-104	N/P	Note #2 - Preservative check not applicable.	IR9	3.6	0	3.6
1	TD16439-21	4oz	1	SUB	N/P	Note #2 - Preservative check not applicable.	IR9	3.6	0	3.6
1	TD16439-21	2oz	2	2-104	N/P	Note #2 - Preservative check not applicable.	IR9	3.6	0	3.6
1	TD16439-22	4oz	1	SUB	N/P	Note #2 - Preservative check not applicable.	IR9	3.6	0	3.6
1	TD16439-22	2oz	2	2-104	N/P	Note #2 - Preservative check not applicable.	IR9	3.6	0	3.6
1	TD16439-23	4oz	1	SUB	N/P	Note #2 - Preservative check not applicable.	IR9	3.6	0	3.6
1	TD16439-23	2oz	2	2-104	N/P	Note #2 - Preservative check not applicable.	IR9	3.6	0	3.6

TD16439: Chain of Custody

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Sample Receipt Log

Page 5 of 7

Job #: TD16439

Date / Time Received: 2/9/2018 9:45:00 AM 9:45:00

Initials: BG

Client: ENTECH

Cooler #	Sample ID:	Vol	Bot #	Location	Pres	pH	Therm ID	Initial Temp	Therm CF	Corrected Temp
1	TD16439-24	4oz	1	SUB	N/P	Note #2 - Preservative check not applicable.	IR9	3.6	0	3.6
1	TD16439-24	2oz	2	2-104	N/P	Note #2 - Preservative check not applicable.	IR9	3.6	0	3.6
2	TD16439-25	4oz	1	SUB	N/P	Note #2 - Preservative check not applicable.	IR9	1.4	0	1.4
2	TD16439-25	2oz	2	2-104	N/P	Note #2 - Preservative check not applicable.	IR9	1.4	0	1.4
2	TD16439-26	4oz	1	SUB	N/P	Note #2 - Preservative check not applicable.	IR9	1.4	0	1.4
2	TD16439-26	2oz	2	2-104	N/P	Note #2 - Preservative check not applicable.	IR9	1.4	0	1.4
2	TD16439-27	4oz	1	SUB	N/P	Note #2 - Preservative check not applicable.	IR9	1.4	0	1.4
2	TD16439-27	2oz	2	2-104	N/P	Note #2 - Preservative check not applicable.	IR9	1.4	0	1.4
2	TD16439-28	4oz	1	SUB	N/P	Note #2 - Preservative check not applicable.	IR9	1.4	0	1.4
2	TD16439-28	2oz	2	2-104	N/P	Note #2 - Preservative check not applicable.	IR9	1.4	0	1.4
2	TD16439-29	4oz	1	SUB	N/P	Note #2 - Preservative check not applicable.	IR9	1.4	0	1.4
2	TD16439-29	2oz	2	2-104	N/P	Note #2 - Preservative check not applicable.	IR9	1.4	0	1.4
2	TD16439-30	4oz	1	SUB	N/P	Note #2 - Preservative check not applicable.	IR9	1.4	0	1.4
2	TD16439-30	2oz	2	2-104	N/P	Note #2 - Preservative check not applicable.	IR9	1.4	0	1.4
2	TD16439-31	4oz	1	SUB	N/P	Note #2 - Preservative check not applicable.	IR9	1.4	0	1.4
2	TD16439-31	2oz	2	2-104	N/P	Note #2 - Preservative check not applicable.	IR9	1.4	0	1.4
2	TD16439-32	4oz	1	SUB	N/P	Note #2 - Preservative check not applicable.	IR9	1.4	0	1.4
2	TD16439-32	2oz	2	2-104	N/P	Note #2 - Preservative check not applicable.	IR9	1.4	0	1.4
2	TD16439-33	4oz	1	SUB	N/P	Note #2 - Preservative check not applicable.	IR9	1.4	0	1.4
2	TD16439-33	2oz	2	2-104	N/P	Note #2 - Preservative check not applicable.	IR9	1.4	0	1.4
2	TD16439-34	4oz	1	SUB	N/P	Note #2 - Preservative check not applicable.	IR9	1.4	0	1.4
2	TD16439-34	2oz	2	2-104	N/P	Note #2 - Preservative check not applicable.	IR9	1.4	0	1.4
2	TD16439-35	4oz	1	SUB	N/P	Note #2 - Preservative check not applicable.	IR9	1.4	0	1.4

TD16439: Chain of Custody

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Sample Receipt Log

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Job #: TD16439

Date / Time Received: 2/9/2018 9:45:00 AM 9:45:00

Initials: BG

Client: ENTECH

Cooler #	Sample ID:	Vol	Bot #	Location	Pres	pH	Therm ID	Initial Temp	Therm CF	Corrected Temp
2	TD16439-35	2oz	2	2-104	N/P	Note #2 - Preservative check not applicable.	IR9	1.4	0	1.4
2	TD16439-36	4oz	1	SUB	N/P	Note #2 - Preservative check not applicable.	IR9	1.4	0	1.4
2	TD16439-36	2oz	2	2-104	N/P	Note #2 - Preservative check not applicable.	IR9	1.4	0	1.4
2	TD16439-37	4oz	1	SUB	N/P	Note #2 - Preservative check not applicable.	IR9	1.4	0	1.4
2	TD16439-37	2oz	2	2-104	N/P	Note #2 - Preservative check not applicable.	IR9	1.4	0	1.4
2	TD16439-38	4oz	1	SUB	N/P	Note #2 - Preservative check not applicable.	IR9	1.4	0	1.4
2	TD16439-38	2oz	2	2-104	N/P	Note #2 - Preservative check not applicable.	IR9	1.4	0	1.4
2	TD16439-39	4oz	1	SUB	N/P	Note #2 - Preservative check not applicable.	IR9	1.4	0	1.4
2	TD16439-39	2oz	2	2-104	N/P	Note #2 - Preservative check not applicable.	IR9	1.4	0	1.4
2	TD16439-40	4oz	1	SUB	N/P	Note #2 - Preservative check not applicable.	IR9	1.4	0	1.4
2	TD16439-40	2oz	2	2-104	N/P	Note #2 - Preservative check not applicable.	IR9	1.4	0	1.4
2	TD16439-41	4oz	1	SUB	N/P	Note #2 - Preservative check not applicable.	IR9	1.4	0	1.4
2	TD16439-41	2oz	2	2-104	N/P	Note #2 - Preservative check not applicable.	IR9	1.4	0	1.4
2	TD16439-42	4oz	1	SUB	N/P	Note #2 - Preservative check not applicable.	IR9	1.4	0	1.4
2	TD16439-42	2oz	2	2-104	N/P	Note #2 - Preservative check not applicable.	IR9	1.4	0	1.4
2	TD16439-43	4oz	1	SUB	N/P	Note #2 - Preservative check not applicable.	IR9	1.4	0	1.4
2	TD16439-43	2oz	2	2-104	N/P	Note #2 - Preservative check not applicable.	IR9	1.4	0	1.4
2	TD16439-44	4oz	1	SUB	N/P	Note #2 - Preservative check not applicable.	IR9	1.4	0	1.4
2	TD16439-44	2oz	2	2-104	N/P	Note #2 - Preservative check not applicable.	IR9	1.4	0	1.4
2	TD16439-45	4oz	1	SUB	N/P	Note #2 - Preservative check not applicable.	IR9	1.4	0	1.4
2	TD16439-45	2oz	2	2-104	N/P	Note #2 - Preservative check not applicable.	IR9	1.4	0	1.4
1	TD16439-46	4oz	1	SUB	N/P	Note #2 - Preservative check not applicable.	IR9	3.6	0	3.6
1	TD16439-46	2oz	2	2-104	N/P	Note #2 - Preservative check not applicable.	IR9	3.6	0	3.6

TD16439: Chain of Custody

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Sample Receipt Log

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Job #: TD16439

Date / Time Received: 2/9/2018 9:45:00 AM 9:45:00

Initials: BG

Client: ENTECH

Cooler #	Sample ID:	Vol	Bot #	Location	Pres	pH	Therm ID	Initial Temp	Therm CF	Corrected Temp
1	TD16439-47	4oz	1	SUB	N/P	Note #2 - Preservative check not applicable.	IR9	3.6	0	3.6
1	TD16439-47	2oz	2	2-104	N/P	Note #2 - Preservative check not applicable.	IR9	3.6	0	3.6

4.1
4

TD16439: Chain of Custody

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General Chemistry

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QC Data Summaries

Includes the following where applicable:

- **Method Blank and Blank Spike Summaries**
- **Duplicate Summaries**
- **Matrix Spike Summaries**

METHOD BLANK AND SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: TD16439
Account: ENTECTXW - EnTech Consulting Corporation
Project: CJES State AB SWD #1/LEA Co,N Mex

Analyte	Batch ID	RL	MB Result	Units	Spike Amount	BSP Result	BSP %Recov	QC Limits
Chloride	GP46278/GN87828	5.0	0.0	mg/kg	100	94.3	94.3	90-110%
Chloride	GP46283/GN87828	5.0	0.0	mg/kg	100	94.5	94.5	90-110%
Chloride	GP46284/GN87828	5.0	0.0	mg/kg	100	103	103.0	90-110%
Chloride	GP46285/GN87828	5.0	0.0	mg/kg	100	96.7	96.7	90-110%
Chloride	GP46536/GN88202	5.0	0.0	mg/kg	100	94.6	94.6	90-110%

Associated Samples:

Batch GP46278: TD16439-1, TD16439-2, TD16439-3, TD16439-4, TD16439-5, TD16439-6, TD16439-8, TD16439-9, TD16439-11, TD16439-12

Batch GP46283: TD16439-25, TD16439-26, TD16439-27, TD16439-28, TD16439-29, TD16439-30, TD16439-32, TD16439-33, TD16439-34, TD16439-35

Batch GP46284: TD16439-36, TD16439-37, TD16439-38, TD16439-40, TD16439-41, TD16439-43, TD16439-44, TD16439-45, TD16439-46, TD16439-47

Batch GP46285: TD16439-14, TD16439-15, TD16439-16, TD16439-17, TD16439-18, TD16439-19, TD16439-21, TD16439-22, TD16439-23, TD16439-24

Batch GP46536: TD16439-7B, TD16439-10B, TD16439-13B, TD16439-20B, TD16439-31B, TD16439-42B

(*) Outside of QC limits

DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: TD16439
Account: ENTECTXW - EnTech Consulting Corporation
Project: CJES State AB SWD #1/LEA Co,N Mex

Analyte	Batch ID	QC Sample	Units	Original Result	DUP Result	RPD	QC Limits
Chloride	GP46278/GN87828	TD16439-1	mg/kg	5120	5070	1.0	0-20%
Chloride	GP46283/GN87828	TD16439-27	mg/kg	72.9	69.3	5.1	0-20%
Chloride	GP46284/GN87828	TD16439-38	mg/kg	2760	2790	1.1	0-20%
Chloride	GP46285/GN87828	TD16439-14	mg/kg	2460	2650	7.4	0-20%
Chloride	GP46536/GN88202	TD16424-10A	mg/kg	20.1	20.6	2.5	0-20%
Solids, Percent	GN87711	TD16244-1	%	91.1	91	0.1	0-5%
Solids, Percent	GN87712	TD16442-1	%	85.6	85.6	0.0	0-5%
Solids, Percent	GN87713	TD16243-1	%	93.5	93.5	0.0	0-5%
Solids, Percent	GN87774	TD16272-1	%	90.2	90.6	0.4	0-5%
Solids, Percent	GN87931	TD16995-1	%	61.5	61.6	0.2	0-5%
Solids, Percent	GN88127	TD17298-1	%	79.8	79.4	0.5	0-5%

Associated Samples:

Batch GN87711: TD16439-1, TD16439-2, TD16439-3, TD16439-4, TD16439-5, TD16439-6, TD16439-8
Batch GN87712: TD16439-9, TD16439-11, TD16439-12, TD16439-14, TD16439-15, TD16439-16, TD16439-17, TD16439-18, TD16439-19, TD16439-21, TD16439-22, TD16439-23, TD16439-26, TD16439-27, TD16439-28, TD16439-29, TD16439-30, TD16439-32, TD16439-33
Batch GN87713: TD16439-34, TD16439-35, TD16439-36, TD16439-37, TD16439-38, TD16439-41, TD16439-43, TD16439-44, TD16439-45, TD16439-46, TD16439-47
Batch GN87774: TD16439-24, TD16439-25, TD16439-40
Batch GN87931: TD16439-13R, TD16439-39R
Batch GN88127: TD16439-7B, TD16439-10B, TD16439-13B, TD16439-20B, TD16439-31B, TD16439-42B
Batch GP46278: TD16439-1, TD16439-2, TD16439-3, TD16439-4, TD16439-5, TD16439-6, TD16439-8, TD16439-9, TD16439-11, TD16439-12
Batch GP46283: TD16439-25, TD16439-26, TD16439-27, TD16439-28, TD16439-29, TD16439-30, TD16439-32, TD16439-33, TD16439-34, TD16439-35
Batch GP46284: TD16439-36, TD16439-37, TD16439-38, TD16439-40, TD16439-41, TD16439-43, TD16439-44, TD16439-45, TD16439-46, TD16439-47
Batch GP46285: TD16439-14, TD16439-15, TD16439-16, TD16439-17, TD16439-18, TD16439-19, TD16439-21, TD16439-22, TD16439-23, TD16439-24
Batch GP46536: TD16439-7B, TD16439-10B, TD16439-13B, TD16439-20B, TD16439-31B, TD16439-42B
(*) Outside of QC limits

MATRIX SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: TD16439
Account: ENTECTXW - EnTech Consulting Corporation
Project: CJES State AB SWD #1/LEA Co,N Mex

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MS Result	%Rec	QC Limits
Chloride	GP46278/GN87828	TD16439-1	mg/kg	5120	113	6240	993.5(a)	80-120%
Chloride	GP46283/GN87828	TD16439-27	mg/kg	72.9	105	175	97.4	80-120%
Chloride	GP46284/GN87828	TD16439-38	mg/kg	2760	102	2600	-156.2(a)	80-120%
Chloride	GP46285/GN87828	TD16439-14	mg/kg	2460	105	2680	210.3(a)	80-120%
Chloride	GP46536/GN88202	TD16424-10A	mg/kg	20.1	108	122	94.0	80-120%

Associated Samples:

Batch GP46278: TD16439-1, TD16439-2, TD16439-3, TD16439-4, TD16439-5, TD16439-6, TD16439-8, TD16439-9, TD16439-11, TD16439-12

Batch GP46283: TD16439-25, TD16439-26, TD16439-27, TD16439-28, TD16439-29, TD16439-30, TD16439-32, TD16439-33, TD16439-34, TD16439-35

Batch GP46284: TD16439-36, TD16439-37, TD16439-38, TD16439-40, TD16439-41, TD16439-43, TD16439-44, TD16439-45, TD16439-46, TD16439-47

Batch GP46285: TD16439-14, TD16439-15, TD16439-16, TD16439-17, TD16439-18, TD16439-19, TD16439-21, TD16439-22, TD16439-23, TD16439-24

Batch GP46536: TD16439-7B, TD16439-10B, TD16439-13B, TD16439-20B, TD16439-31B, TD16439-42B

(*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits

(a) Spike amount low relative to the sample amount. Refer to lab control or spike blank for recovery information.

Misc. Forms

Custody Documents and Other Forms

(SGS Scott, LA)

Includes the following where applicable:

- Chain of Custody



CHAIN OF CUSTODY

Page 1 of 4

Client / Reporting Information		Project Information		Requested Analysis (see TEST CODE sheet)												Matrix Codes	
Company Name: SGS North America In.		Project Name: CJES State AB SWD #1/LEA Co.N Mex		<div>BM15DPOCK01_V00150RO</div>												<div>DW - Drinking Water GW - Ground Water WW - Water SW - Surface Water SO - Soil SL - Sludge SED-Sediment OI - Oil LIQ - Other Liquid AIR - Air SOL - Other Solid WP - Wipe FB-Field Blank EB-Equipment Blank RB- Rinse Blank TB-Trip Blank</div>	
Street Address: 10165 Harwin Drive		Street:															
City State Zip: Houston TX 77036		City State:															
Project Contact E-mail: sylvia.garza@sgs.com		Project #															
Phone #: 713-271-4700		Fax #															
Sampler(s) Name(s)		Project Manager		Attention:													
SGS Sample #	Field ID / Point of Collection	MEOHDI Vial #	Collection	Date	Time	Sampled by	Matrix	# of bottles	HQ	NACH	HMO3	HSCA	NONE	DI Water	MEOH	ENCORE	
1A	D-1 @ 6"			2/7/18	10:55:00 AM	SO	1						X				X
2A	D-1 @ 18"			2/7/18	10:55:00 AM	SO	1						X				X
3A	D2 @ 6"			2/7/18	11:17:00 AM	SO	1						X				X
4A	D2 @ 24			2/7/18	11:17:00 AM	SO	1						X				X
5A	D3 @ 6			2/7/18	11:40:00 AM	SO	1						X				X
6A	D3 @ 12			2/7/18	11:40:00 AM	SO	1						X				X
8A	D4 @ 6			2/7/18	12:05:00 PM	SO	1						X				X
9A	D4 @ 12			2/7/18	12:05:00 PM	SO	1						X				X
11A	D5 @ 6			2/7/18	12:17:00 PM	SO	1						X				X
12A	D5 @ 12			2/7/18	12:17:00 PM	SO	1						X				X
14A	D6 @ 6			2/7/18	12:30:00 PM	SO	1						X				X
15A	D6 @ 9			2/7/18	12:30:00 PM	SO	1						X				X
Turnaround Time (Business days)		Approved By (SGS PM): / Date:		Data Deliverable Information												Comments / Special Instructions	
<input type="checkbox"/> Std. 10 Business Days <input type="checkbox"/> 5 Day RUSH <input type="checkbox"/> 3 Day EMERGENCY <input type="checkbox"/> 2 Day EMERGENCY <input type="checkbox"/> 1 Day EMERGENCY <input checked="" type="checkbox"/> other <u>Due 2/16/2018</u> Emergency & Rush T/A date available VIA Lablink		Approved By (SGS PM): / Date:		<input type="checkbox"/> Commercial "A" (Level 1) <input type="checkbox"/> Commercial "B" (Level 2) <input type="checkbox"/> FULLT1 (Level 3+4) <input type="checkbox"/> NJ Reduced <input type="checkbox"/> Commercial "C" Commercial "A" = Results Only Commercial "B" = Results + QC Summary NJ Reduced = Results + QC Summary + Partial Raw data												LA	
Sample Custody must be documented below each time samples change possession, including courier delivery.																	
Relinquished by Sampler:		Date Tin		Received By:		Relinquished By:		Date Time:		Received By:							
1				1		2				2							
Relinquished by Sampler:		Date Time:		Received By:		Relinquished By:		Date Time:		Received By:							
3				3		4				4							
Relinquished by:		Date Time:		Received By:		Custody Seal #		Intact		Preserved where applicable		On Ice		Cooler Temp.			
5				5				<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>			

TD16439: Chain of Custody

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SGS Scott, LA





CHAIN OF CUSTODY

Page 2 of 4

Client / Client / Reporting Information		Project Information		Requested Analysis (see TEST CODE sheet)												Matrix Codes					
Company Name: SGS North America Inc.		Project Name: CJES State AB SWD #1/LEA Co.N Mex																			
Street Address: 10165 Harwin Drive		Street: 10165 Harwin Drive																			
City State Zip: Houston TX 77036		City State Zip: Houston TX 77036																			
Project Contact: sylvia.garza@sgs.com		Project #:																			
Phone #: 713-271-4700		Fax #:																			
Sampler(s) Name(s):		Project Manager:																			
MEOHDI Vial #		Date		Time		Sampled by		Matrix		# of bottles		Number of preserved bottles									
Field ID / Point of Collection		Date		Time		Sampled by		Matrix		# of bottles		Number of preserved bottles									
16A D7 @ 6		2/7/18		12:53:00 PM		SO		1		1		1		X							
17A D7 @ 10		2/7/18		12:53:00 PM		SO		1		1		1		X							
18A D8 @ 6		2/7/18		1:00:00 PM		SO		1		1		1		X							
19A D8 @ 12		2/7/18		1:06:00 PM		SO		1		1		1		X							
21A D9 @ 6		2/7/18		3:08:00 PM		SO		1		1		1		X							
22A D9 @ 10		2/7/18		3:08:00 PM		SO		1		1		1		X							
23A D10 @ 6		2/7/18		3:32:00 PM		SO		1		1		1		X							
24A D10 @ 9		2/7/18		3:32:00 PM		SO		1		1		1		X							
25A D11 @ 6		2/7/18		4:00:00 PM		SO		1		1		1		X							
26A D11 @ 9		2/7/18		4:00:00 PM		SO		1		1		1		X							
27A D12 @ 6		2/7/18		4:24:00 PM		SO		1		1		1		X							
28A D12 @ 9		2/7/18		4:24:00 PM		SO		1		1		1		X							
Turnaround Time (Business days)		Data Deliverable Information		Comments / Special Instructions																	
Approved By (SGS PM): / Date:		Commercial "A" (Level 1)		Commercial "B" (Level 2)		FULLT1 (Level 3+4)		NJ Reduced		Commercial "C"		NYASP Category A		NYASP Category B		State Forms		EDD Format		Other COMMB	
Std. 10 Business Days		Commercial "A" = Results Only		Commercial "B" = Results + QC Summary		NJ Reduced = Results + QC Summary + Partial Raw data															
5 Day RUSH																					
3 Day EMERGENCY																					
2 Day EMERGENCY																					
1 Day EMERGENCY																					
other Due 2/16/2018																					
Emergency & Rush T/A data available VIA Lablink																					
Relinquished by Sampler:		Date Tin		Received By:		Relinquished By:		Date Time:		Received By:		Date Time:		Received By:		Date Time:		Received By:		Date Time:	
1				1		2				2				2				2			
Relinquished by Sampler:		Date Time:		Received By:		Relinquished By:		Date Time:		Received By:		Date Time:		Received By:		Date Time:		Received By:		Date Time:	
3				3		4				4				4				4			
Relinquished by:		Date Time:		Received By:		Custody Seal #		Intact		Preserved where applicable		On Ice		Cooler Temp.							
5				5																	

TD16439: Chain of Custody

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CHAIN OF CUSTODY

Page 3 of 4

Client / Reporting Information		Project Information		Requested Analysis (see TEST CODE sheet)												Matrix Codes	
Company Name: SGS North America Inc.		Project Name: CJES State AB SWD #1/LEA Co.N Mex		<div>BM15DPOCK01_V00150RO</div>												<div>DW - Drinking Water GW - Ground Water WW - Water SW - Surface Water SO - Soil SL - Sludge SED-Sediment OI - Oil LIQ - Other Liquid AIR - Air SOL - Other Solid WP - Wipe FB-Field Blank EB-Equipment Blank RB- Rinse Blank TB-Trip Blank</div>	
Street Address: 10165 Harwin Drive		Street:															
City: Houston State: TX Zip: 77036		Billing Information (if different from Report to) Company Name:															
Project Contact: sylvia.garza@sgs.com E-mail:		Project #:															
Phone #: 713-271-4700		Fax #:															
Sampler(s) Name(s):		Project Manager:		City:		State:		Zip:		Attention:							
SGS Sample #	Field ID / Point of Collection	MEOHDI Vial #	Collection Date Time	Sampled by	Matrix	# of bottles	HC	NACH	HMO3	HSCA	NONE	DI Water	MEOH	ENCODE	LAB USE ONLY		
29A	D13 @ 6		2/7/18 4:30:00 PM	SO	1						X				X		
30A	D13 @ 8		2/7/18 4:30:00 PM	SO	1						X				X		
32A	D14 @ 6		2/7/18 2:43:00 PM	SO	1						X				X		
33A	D14 @ 9		2/7/18 2:43:00 PM	SO	1						X				X		
34A	D15 @ 6		2/7/18 2:52:00 PM	SO	1						X				X		
35A	D15 @ 20		2/7/18 2:52:00 PM	SO	1						X				X		
36A	D16 @ 6		2/7/18 5:02:00 PM	SO	1						X				X		
37A	D16 @ 9		2/7/18 5:02:00 PM	SO	1						X				X		
38A	CD-1 @ 18		2/7/18 10:30:00 AM	SO	1						X				X		
40A	CD-2 @ 6		2/7/18 2:40:00 PM	SO	1						X				X		
41A	CD-2 @ 12		2/7/18 2:40:00 PM	SO	1						X				X		
43A	CD-3 @ 4		2/7/18 5:10:00 PM	SO	1						X				X		
Turnaround Time (Business days)		Approved By (SGS PM): / Date:		Data Deliverable Information												Comments / Special Instructions	
<input type="checkbox"/> Std. 10 Business Days <input type="checkbox"/> 5 Day RUSH <input type="checkbox"/> 3 Day EMERGENCY <input type="checkbox"/> 2 Day EMERGENCY <input type="checkbox"/> 1 Day EMERGENCY <input checked="" type="checkbox"/> other <u>Due 2/16/2018</u> Emergency & Rush T/A date available VIA Lablink		_____		<input type="checkbox"/> Commercial "A" (Level 1) <input type="checkbox"/> Commercial "B" (Level 2) <input type="checkbox"/> FULLT1 (Level 3+4) <input type="checkbox"/> NJ Reduced <input type="checkbox"/> Commercial "C" <input type="checkbox"/> NYASP Category A <input type="checkbox"/> NYASP Category B <input type="checkbox"/> State Forms <input type="checkbox"/> EDD Format <input checked="" type="checkbox"/> Other COMMB Commercial "A" = Results Only Commercial "B" = Results + QC Summary NJ Reduced = Results + QC Summary + Partial Raw data												LA	
Sample Custody must be documented below each time samples change possession, including courier delivery.																	
Relinquished by Sampler:		Date Tin		Received By:		Date Time:		Relinquished By:		Date Time:		Received By:					
1				1				2				2					
Relinquished by Sampler:		Date Time:		Received By:		Date Time:		Relinquished By:		Date Time:		Received By:					
3				3				4				4					
Relinquished by:		Date Time:		Received By:		Date Time:		Custody Seal #		<input type="checkbox"/> Intact <input type="checkbox"/> Not intact		Preserved where applicable <input type="checkbox"/>		On Ice <input type="checkbox"/> Cooler Temp. <input type="checkbox"/>			
5				5													

TD16439: Chain of Custody

Page 3 of 10





CHAIN OF CUSTODY

Page 4 of 4

Client / Reporting Information		Project Information		Requested Analysis (see TEST CODE sheet)												Matrix Codes			
Company Name: SGS North America Inc.		Project Name: CJES State AB SWD #1/LEA Co.N Mex		<div>BM15DPOCK01_V00150RO</div>												<div>DW - Drinking Water GW - Ground Water WW - Water SW - Surface Water SO - Soil SL - Sludge SED-Sediment OI - Oil LIQ - Other Liquid AIR - Air SOL - Other Solid WP - Wipe FB-Field Blank EB-Equipment Blank RB- Rinse Blank TB-Trip Blank</div>			
Street Address: 10165 Harwin Drive		Street:																	
City State Zip: Houston TX 77036		City State:																	
Project Contact: sylvia.garza@sgs.com		Project #:																	
Phone #: 713-271-4700		Fax #:																	
Sampler(s) Name(s):		Project Manager:		Attention:		City State Zip:													
SGS Sample #	Field ID / Point of Collection	MEOHDI Vial #	Collection	Date	Time	Sampled by	Matrix	# of bottles	HQ	NACH	HNO3	H2SO4	NONE	DI Water	MEOH	ENCODE	LAB USE ONLY		
44A	CD-3 @ 7			2/7/18	5:10:00 PM	SO		1					X				X		
45A	DUP-2			2/7/18	12:00:00 AM	SO		1					X				X		
46A	DUP-3			2/7/18	12:00:00 AM	SO		1					X				X		
47A	DUP-4			2/7/18	12:00:00 AM	SO		1					X				X		
Turnaround Time (Business days)		Approved By (SGS PM): / Date:		Data Deliverable Information												Comments / Special Instructions			
<input type="checkbox"/> Std. 10 Business Days <input type="checkbox"/> 5 Day RUSH <input type="checkbox"/> 3 Day EMERGENCY <input type="checkbox"/> 2 Day EMERGENCY <input type="checkbox"/> 1 Day EMERGENCY <input checked="" type="checkbox"/> other <u>Due 2/16/2018</u> <small>Emergency & Rush T/A date available VIA Lablink</small>		<input type="checkbox"/> Commercial "A" (Level 1) <input type="checkbox"/> Commercial "B" (Level 2) <input type="checkbox"/> FULLT1 (Level 3+4) <input type="checkbox"/> NJ Reduced <input type="checkbox"/> Commercial "C" <small>Commercial "A" = Results Only Commercial "B" = Results + QC Summary NJ Reduced = Results + QC Summary + Partial Raw data</small>		<input type="checkbox"/> NYASP Category A <input type="checkbox"/> NYASP Category B <input type="checkbox"/> State Forms <input type="checkbox"/> EDD Format <input checked="" type="checkbox"/> Other COMMB												LA			
Sample Custody must be documented below each time samples change possession, including courier delivery.																			
Relinquished by Sampler:		Date Tin		Received By:		Relinquished By:		Date Time:		Received By:		Relinquished By:		Date Time:		Received By:			
1				1		2				2		3				4			
Relinquished by Sampler:		Date Time:		Received By:		Relinquished By:		Date Time:		Received By:		Relinquished by:		Date Time:		Received By:			
3				3		4				4		5				5			
Relinquished by:		Date Time:		Received By:		Custody Seal #		<input type="checkbox"/> Intact <input type="checkbox"/> Not intact		Preserved where applicable		<input type="checkbox"/> On Ice		<input type="checkbox"/> Cooler Temp.					
5				5															

TD16439: Chain of Custody

Page 4 of 10



SGS Sample Receipt Summary

Job Number: TD16439

Client: SGS NORTH AMERICA

Project: CJES STATE AB SWD

Date / Time Received: 2/11/2018 10:00:00 AM

Delivery Method: Accutest Courier

Airbill #'s:

Cooler Temps (Initial/Adjusted): #1: (2.2/2.2):

Cooler Security

	Y	or	N		Y	or	N
1. Custody Seals Present:	<input checked="" type="checkbox"/>		<input type="checkbox"/>	3. COC Present:	<input checked="" type="checkbox"/>		<input type="checkbox"/>
2. Custody Seals Intact:	<input checked="" type="checkbox"/>		<input type="checkbox"/>	4. Smpl Dates/Time OK	<input checked="" type="checkbox"/>		<input type="checkbox"/>

Cooler Temperature

	Y	or	N
1. Temp criteria achieved:	<input checked="" type="checkbox"/>		<input type="checkbox"/>
2. Thermometer ID:	DV439;		
3. Cooler media:	Ice (direct contact)		
4. No. Coolers:	1		

Quality Control Preservation

	Y	or	N	N/A
1. Trip Blank present / cooler:	<input type="checkbox"/>		<input type="checkbox"/>	<input checked="" type="checkbox"/>
2. Trip Blank listed on COC:	<input type="checkbox"/>		<input type="checkbox"/>	<input checked="" type="checkbox"/>
3. Samples preserved properly:	<input checked="" type="checkbox"/>		<input type="checkbox"/>	
4. VOCs headspace free:	<input type="checkbox"/>		<input type="checkbox"/>	<input checked="" type="checkbox"/>

Comments

Sample Integrity - Documentation

	Y	or	N
1. Sample labels present on bottles:	<input checked="" type="checkbox"/>		<input type="checkbox"/>
2. Container labeling complete:	<input checked="" type="checkbox"/>		<input type="checkbox"/>
3. Sample container label / COC agree:	<input checked="" type="checkbox"/>		<input type="checkbox"/>

Sample Integrity - Condition

	Y	or	N
1. Sample recvd within HT:	<input checked="" type="checkbox"/>		<input type="checkbox"/>
2. All containers accounted for:	<input checked="" type="checkbox"/>		<input type="checkbox"/>
3. Condition of sample:	Intact		

Sample Integrity - Instructions

	Y	or	N	N/A
1. Analysis requested is clear:	<input checked="" type="checkbox"/>		<input type="checkbox"/>	
2. Bottles received for unspecified tests	<input type="checkbox"/>		<input checked="" type="checkbox"/>	
3. Sufficient volume recvd for analysis:	<input checked="" type="checkbox"/>		<input type="checkbox"/>	
4. Compositing instructions clear:	<input type="checkbox"/>		<input type="checkbox"/>	<input checked="" type="checkbox"/>
5. Filtering instructions clear:	<input type="checkbox"/>		<input type="checkbox"/>	<input checked="" type="checkbox"/>

TD16439: Chain of Custody

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CHAIN OF CUSTODY

Page 1 of 4

10165 Harwin Drive, Houston, TX 77036
TEL: 713-271-4700 FAX: 713-271-4770

FED-EX Tracking #		Bottle Order Control #																																					
SGS Quote #		SGS Job #																																					
		TD16439																																					
Client / Reporting Information										Project Information										Requested Analysis (see TEST CODE sheet)										Matrix Codes									
Company Name: SGS North America Inc.										Project Name: CJES State AB SWD #1/LEA Co,N Mex.																													
Street Address: 10165 Harwin Drive										Street: City: State: Zip:										Billing Information (if different from Report to) Company Name:																			
City: Houston TX 77036										City: State: Zip:										Project #										Street Address:									
Project Contact: sylvia.garza@sgs.com										Project #										Client Purchase Order #										City: State: Zip:									
Phone #: 713-271-4700										Fax #										Client Purchase Order #										City: State: Zip:									
Sample(s) Name(s):										Project Manager:										Attention:																			
Field ID / Point of Collection										MECH/CI Val#										Collection										Number of preserved Bottles									
										Date:										Time:										Sampled by:									
										Matrix:										# of bottles:										H2O									
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TD16439: Chain of Custody

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10165 Harwin Drive, Houston, TX 77036
TEL: 713-271-4700 FAX: 713-271-4770

FED-EX Tracking #		Bottle Order Control #	
SOS Quote #		SOS Job #	
		TD16439	
Requested Analysis (see TEST CODE sheet)			Matrix Codes
B&B (H&O) (1)			DW - Drinking Water
			GW - Ground Water
			WW - Water
			SW - Surface Water
			SO - Soil
			SL - Sludge
			SED - Sediment
			OL - Oil
			LQ - Other Liquid
			A/R - Air
		SOL - Other Solid	
		WP - Wipe	
		FB - Field Blank	
		EB - Equipment Blank	
		TB - Trip Blank	
			LAB USE ONLY
X			/
X			/
X			/
X			/
X			/
X			/
X			/
X			/
X			/
X			/
Comments / Special Instructions			
Category A		LA	
Category B			
ns			
at			
MMMB			
Original Raw data			
ion, including courier delivery.			
Copy 2/11 0000		Received By: <i>[Signature]</i>	
Date Time:		Received By: 4	
Preserved where Applicable		On Ice	
Cooling Temp.		Cooling Temp.	

6.1 6

TD16439: Chain of Custody

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CHAIN OF CUSTODY

Page 4 of 4

10165 Harwin Drive, Houston, TX 77036
TEL: 713-271-4700 FAX: 713-271-4770

FED-EX Tracking #		Bottle Order Control #														
SGS Quote #		SGS Job # TD16439														
Client / Reporting Information		Project Information														
Company Name: SGS North America Inc.		Project Name: CIES State AB SWD #1/LEA Co,N Mex														
Street Address: 10165 Harwin Drive		Street: _____														
City: Houston State: TX Zip: 77036		Billing Information (if different from Report to)														
Project Contact: sylvia.garza@sgs.com		Company Name: _____														
Phone #: 713-271-4700		Street Address: _____														
Fax #: _____		City: _____ State: _____ Zip: _____														
Sample(s) Name(s): _____		Project Manager: _____ Attention: _____														
Collection		Number of preserved Bottles														
SGS Sample #	Field ID / Point of Collection	MECH/DI Val #	Date	Time	Sampled by	Matrix	# of bottles	H2O	NaOH	PHOS	HCN	NO3	NO2	DI Water	MECH	ENCORE
37A	D16 @ 9		2/7/18	5:02:00 PM	SO	1								X		X
38A	CD-1 @ 18		2/7/18	10:30:00 AM	SO	1								X		X
39A	CD-1 @ 30		2/7/18	10:30:00 AM	SO	1								X		X
40A	CD-2 @ 6		2/7/18	2:40:00 PM	SO	1								X		X
41A	CD-2 @ 12		2/7/18	2:40:00 PM	SO	1								X		X
42A	CD-2 @ 30		2/7/18	2:40:00 PM	SO	1								X		X
43A	CD-3 @ 4		2/7/18	5:10:00 PM	SO	1								X		X
44A	CD-3 @ 7		2/7/18	5:10:00 PM	SO	1								X		X
45A	DUP-2		2/7/18	12:00:00 AM	SO	1								X		X
46A	DUP-3		2/7/18	12:00:00 AM	SO	1								X		X
47A	DUP-4		2/7/18	12:00:00 AM	SO	1								X		X
Turnaround Time (Business days)		Date Deliverable Information		Comments / Special Instructions												
<input type="checkbox"/> Std. 10 Business Days <input type="checkbox"/> 5 Day RUSH <input type="checkbox"/> 3 Day EMERGENCY <input type="checkbox"/> 2 Day EMERGENCY <input type="checkbox"/> 1 Day EMERGENCY <input checked="" type="checkbox"/> other Due 2/16/2018 Emergency & Rush T/A data available via Lablink		Approved By (SGS PM) / Date: _____ _____		LA												
<input type="checkbox"/> Commercial "A" (Level 1) <input type="checkbox"/> Commercial "B" (Level 2) <input type="checkbox"/> FULLY (Level 3+4) <input type="checkbox"/> NJ Reduced <input type="checkbox"/> Commercial "C"		<input type="checkbox"/> NYASP Category A <input type="checkbox"/> NYASP Category E <input type="checkbox"/> State Forms <input type="checkbox"/> EDD Format <input checked="" type="checkbox"/> Other COMMB														
Commercial "A" = Results Only Commercial "B" = Results + QC Summary NJ Reduced = Results + QC Summary + Partial Raw data																
Sample Custody must be documented below each time samples change possession, including courier delivery.																
Relinquished by Sampler: S. Jones	Date Tx: 2-15-18	Received By: 365	Relinquished By: 365	Date Time: 2/15/18	Received By: 2/15/18											
Relinquished by Sampler: 2/15/18	Date Time: 2/15/18	Received By: 2/15/18	Relinquished By: 2/15/18	Date Time: 2/15/18	Received By: 2/15/18											
Relinquished by: 2/15/18	Date Time: 2/15/18	Received By: 2/15/18	Relinquished By: 2/15/18	Date Time: 2/15/18	Received By: 2/15/18											
Relinquished by: 2/15/18	Date Time: 2/15/18	Received By: 2/15/18	Relinquished By: 2/15/18	Date Time: 2/15/18	Received By: 2/15/18											
Relinquished by: 2/15/18	Date Time: 2/15/18	Received By: 2/15/18	Relinquished By: 2/15/18	Date Time: 2/15/18	Received By: 2/15/18											

TD16439: Chain of Custody

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TD16439

Job Change Order: TD16439

Requested Date:	2/20/2018	Received Date:	2/9/2018
Account Name:	EnTech Consulting Corporation	Due Date:	2/26/2018
Project Description:	CJES State AB SWD #1/LEA Co,N Mex	Deliverable:	COMMB
CSR:	SylviaG	TAT (Days):	6

=====
Sample #: TD16439-13R, 39R Change: Login V8015GRO, B8015DROORO1
Dept: Login V8015GRO, B8015DROORO1

TAT: 6

Above Changes Per: Client Date/Time: 2/20/2018 2:37:07 PM

To Client: This Change Order is confirmation of the revisions, previously discussed with the Client Service Representative.

Page 1 of 1

GC Volatiles**QC Data Summaries**

(SGS Scott, LA)

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Job Number: TD16439
Account: ALGC SGS Houston, TX
Project: ENTECTXW: CJES State AB SWD #1/LEA Co,N Mex

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GLA1685-MB2	LA286044.D	1	02/12/18	MB	n/a	n/a	GLA1685

The QC reported here applies to the following samples: Method: SW846 8015C

TD16439-1A, TD16439-2A, TD16439-4A, TD16439-5A, TD16439-6A, TD16439-8A, TD16439-9A, TD16439-11A, TD16439-12A, TD16439-14A, TD16439-15A, TD16439-16A, TD16439-17A, TD16439-18A, TD16439-19A

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	2.55	5.0	4.9	mg/kg	J

CAS No.	Surrogate Recoveries	Limits
460-00-4	4-Bromofluorobenzene	94% 63-139%
540-36-3	1,4-Difluorobenzene	93% 52-140%

Method Blank Summary

Job Number: TD16439
Account: ALGC SGS Houston, TX
Project: ENTECTXW: CJES State AB SWD #1/LEA Co,N Mex

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GLA1686-MB2	LA286110.D	1	02/13/18	MB	n/a	n/a	GLA1686

The QC reported here applies to the following samples: Method: SW846 8015C

TD16439-21A, TD16439-22A, TD16439-23A, TD16439-24A, TD16439-25A, TD16439-26A, TD16439-27A, TD16439-28A, TD16439-29A, TD16439-30A, TD16439-32A, TD16439-33A, TD16439-34A, TD16439-35A, TD16439-36A, TD16439-37A, TD16439-38A, TD16439-40A

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	5.0	4.9	mg/kg	

CAS No.	Surrogate Recoveries	Limits
460-00-4	4-Bromofluorobenzene	98% 63-139%
540-36-3	1,4-Difluorobenzene	94% 52-140%

Method Blank Summary

Job Number: TD16439
Account: ALGC SGS Houston, TX
Project: ENTECTXW: CJES State AB SWD #1/LEA Co,N Mex

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GLA1687-MB2	LA286180.D	1	02/13/18	MB	n/a	n/a	GLA1687

The QC reported here applies to the following samples: Method: SW846 8015C

TD16439-3A, TD16439-41A, TD16439-43A, TD16439-44A, TD16439-45A, TD16439-46A, TD16439-47A

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	5.0	4.9	mg/kg	

CAS No.	Surrogate Recoveries	Limits
460-00-4	4-Bromofluorobenzene	100% 63-139%
540-36-3	1,4-Difluorobenzene	96% 52-140%

Method Blank Summary

Job Number: TD16439
Account: ALGC SGS Houston, TX
Project: ENTECTXW: CJES State AB SWD #1/LEA Co,N Mex

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GLA1697-MB1	LA286698.D	1	02/21/18	SV	n/a	n/a	GLA1697

The QC reported here applies to the following samples: Method: SW846 8015C

TD16439-13R, TD16439-39R

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	5.0	4.9	mg/kg	

CAS No.	Surrogate Recoveries	Limits
460-00-4	4-Bromofluorobenzene	109% 63-139%
540-36-3	1,4-Difluorobenzene	101% 52-140%

7.1.4
7

Blank Spike/Blank Spike Duplicate Summary

Job Number: TD16439
Account: ALGC SGS Houston, TX
Project: ENTECTXW: CJES State AB SWD #1/LEA Co,N Mex

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GLA1685-BS2	LA286040.D	1	02/12/18	MB	n/a	n/a	GLA1685
GLA1685-BSD2	LA286042.D	1	02/12/18	MB	n/a	n/a	GLA1685

The QC reported here applies to the following samples: Method: SW846 8015C

TD16439-1A, TD16439-2A, TD16439-4A, TD16439-5A, TD16439-6A, TD16439-8A, TD16439-9A, TD16439-11A, TD16439-12A, TD16439-14A, TD16439-15A, TD16439-16A, TD16439-17A, TD16439-18A, TD16439-19A

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	BSD mg/kg	BSD %	RPD	Limits Rec/RPD
	TPH-GRO (C6-C10)	50	50.4	101	50.9	102	1	79-121/6

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
460-00-4	4-Bromofluorobenzene	100%	101%	63-139%
540-36-3	1,4-Difluorobenzene	102%	102%	52-140%

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: TD16439
Account: ALGC SGS Houston, TX
Project: ENTECTXW: CJES State AB SWD #1/LEA Co,N Mex

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GLA1686-BS2	LA286106.D	1	02/13/18	MB	n/a	n/a	GLA1686
GLA1686-BSD2	LA286108.D	1	02/13/18	MB	n/a	n/a	GLA1686

The QC reported here applies to the following samples: Method: SW846 8015C

TD16439-21A, TD16439-22A, TD16439-23A, TD16439-24A, TD16439-25A, TD16439-26A, TD16439-27A, TD16439-28A, TD16439-29A, TD16439-30A, TD16439-32A, TD16439-33A, TD16439-34A, TD16439-35A, TD16439-36A, TD16439-37A, TD16439-38A, TD16439-40A

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	BSD mg/kg	BSD %	RPD	Limits Rec/RPD
	TPH-GRO (C6-C10)	50	47.7	95	46.7	93	2	79-121/6

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
460-00-4	4-Bromofluorobenzene	96%	97%	63-139%
540-36-3	1,4-Difluorobenzene	98%	98%	52-140%

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: TD16439
Account: ALGC SGS Houston, TX
Project: ENTECTXW: CJES State AB SWD #1/LEA Co,N Mex

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GLA1687-BS2	LA286176.D	1	02/13/18	MB	n/a	n/a	GLA1687
GLA1687-BSD2	LA286178.D	1	02/13/18	MB	n/a	n/a	GLA1687

The QC reported here applies to the following samples: Method: SW846 8015C

TD16439-3A, TD16439-41A, TD16439-43A, TD16439-44A, TD16439-45A, TD16439-46A, TD16439-47A

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	BSD mg/kg	BSD %	RPD	Limits Rec/RPD
	TPH-GRO (C6-C10)	50	47.3	95	49.7	99	5	79-121/6

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
460-00-4	4-Bromofluorobenzene	101%	102%	63-139%
540-36-3	1,4-Difluorobenzene	102%	104%	52-140%

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: TD16439
Account: ALGC SGS Houston, TX
Project: ENTECTXW: CJES State AB SWD #1/LEA Co,N Mex

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GLA1697-BS1	LA286694.D	1	02/21/18	SV	n/a	n/a	GLA1697
GLA1697-BSD1	LA286696.D	1	02/21/18	SV	n/a	n/a	GLA1697

The QC reported here applies to the following samples: Method: SW846 8015C

TD16439-13R, TD16439-39R

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	BSD mg/kg	BSD %	RPD	Limits Rec/RPD
	TPH-GRO (C6-C10)	50	48.6	97	48.5	97	0	79-121/6

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
460-00-4	4-Bromofluorobenzene	109%	107%	63-139%
540-36-3	1,4-Difluorobenzene	110%	109%	52-140%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: TD16439
Account: ALGC SGS Houston, TX
Project: ENTECTXW: CJES State AB SWD #1/LEA Co,N Mex

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
TD16439-1AMS	LA286050.D	1	02/12/18	MB	n/a	n/a	GLA1685
TD16439-1AMSD	LA286052.D	1	02/12/18	MB	n/a	n/a	GLA1685
TD16439-1A	LA286048.D	1	02/12/18	MB	n/a	n/a	GLA1685

The QC reported here applies to the following samples: Method: SW846 8015C

TD16439-1A, TD16439-2A, TD16439-4A, TD16439-5A, TD16439-6A, TD16439-8A, TD16439-9A, TD16439-11A, TD16439-12A, TD16439-14A, TD16439-15A, TD16439-16A, TD16439-17A, TD16439-18A, TD16439-19A

CAS No.	Compound	TD16439-1A Spike mg/kg	Q	MS mg/kg	MS %	Spike mg/kg	MSD mg/kg	MSD %	RPD	Limits Rec/RPD
	TPH-GRO (C6-C10)	ND		250	216	86	250	229	92	6 79-121/6

CAS No.	Surrogate Recoveries	MS	MSD	TD16439-1A Limits
460-00-4	4-Bromofluorobenzene	102%	101%	92% 63-139%
540-36-3	1,4-Difluorobenzene	102%	100%	94% 52-140%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: TD16439
Account: ALGC SGS Houston, TX
Project: ENTECTXW: CJES State AB SWD #1/LEA Co,N Mex

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
TD16439-37AMS	LA286160.D	1	02/13/18	MB	n/a	n/a	GLA1686
TD16439-37AMSD	LA286162.D	1	02/13/18	MB	n/a	n/a	GLA1686
TD16439-37A	LA286152.D	1	02/13/18	MB	n/a	n/a	GLA1686

The QC reported here applies to the following samples: Method: SW846 8015C

TD16439-21A, TD16439-22A, TD16439-23A, TD16439-24A, TD16439-25A, TD16439-26A, TD16439-27A, TD16439-28A, TD16439-29A, TD16439-30A, TD16439-32A, TD16439-33A, TD16439-34A, TD16439-35A, TD16439-36A, TD16439-37A, TD16439-38A, TD16439-40A

CAS No.	Compound	TD16439-37A mg/kg	Q	Spike mg/kg	MS mg/kg	MS %	Spike mg/kg	MSD mg/kg	MSD %	RPD	Limits Rec/RPD
	TPH-GRO (C6-C10)	ND		112	107	95	112	105	93	2	79-121/6

CAS No.	Surrogate Recoveries	MS	MSD	TD16439-37A	Limits
460-00-4	4-Bromofluorobenzene	99%	100%	95%	63-139%
540-36-3	1,4-Difluorobenzene	102%	104%	94%	52-140%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: TD16439
Account: ALGC SGS Houston, TX
Project: ENTECTXW: CJES State AB SWD #1/LEA Co,N Mex

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
TD16439-47AMS	LA286206.D	1	02/13/18	MB	n/a	n/a	GLA1687
TD16439-47AMSD	LA286208.D	1	02/13/18	MB	n/a	n/a	GLA1687
TD16439-47A	LA286202.D	1	02/13/18	MB	n/a	n/a	GLA1687

The QC reported here applies to the following samples: Method: SW846 8015C

TD16439-3A, TD16439-41A, TD16439-43A, TD16439-44A, TD16439-45A, TD16439-46A, TD16439-47A

CAS No.	Compound	TD16439-47A mg/kg	Q	Spike mg/kg	MS mg/kg	MS %	Spike mg/kg	MSD mg/kg	MSD %	RPD	Limits Rec/RPD
	TPH-GRO (C6-C10)	ND		221	190	86	221	192	87	1	79-121/6

CAS No.	Surrogate Recoveries	MS	MSD	TD16439-47A Limits
460-00-4	4-Bromofluorobenzene	104%	103%	97% 63-139%
540-36-3	1,4-Difluorobenzene	106%	105%	97% 52-140%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: TD16439
Account: ALGC SGS Houston, TX
Project: ENTECTXW: CJES State AB SWD #1/LEA Co,N Mex

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
LA41435-1AMS	LA286728.D	1	02/21/18	SV	n/a	n/a	GLA1697
LA41435-1AMSD	LA286730.D	1	02/21/18	SV	n/a	n/a	GLA1697
LA41435-1A	LA286716.D	1	02/21/18	SV	n/a	n/a	GLA1697

The QC reported here applies to the following samples: Method: SW846 8015C

TD16439-13R, TD16439-39R

CAS No.	Compound	LA41435-1A Spike mg/kg	Q	MS mg/kg	MS %	Spike mg/kg	MSD mg/kg	MSD %	RPD	Limits Rec/RPD
	TPH-GRO (C6-C10)	1690	982	3090	143*	982	3360	170*	8*	79-121/6

CAS No.	Surrogate Recoveries	MS	MSD	LA41435-1A Limits
460-00-4	4-Bromofluorobenzene	114%	132%	122% 63-139%
540-36-3	1,4-Difluorobenzene	104%	103%	101% 52-140%

* = Outside of Control Limits.

GC/LC Semi-volatiles**QC Data Summaries**

(SGS Scott, LA)

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Job Number: TD16439
Account: ALGC SGS Houston, TX
Project: ENTECTXW: CJES State AB SWD #1/LEA Co,N Mex

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP10476-MB	S0004749.D	1	02/13/18	JT	02/13/18	OP10476	GLG613

The QC reported here applies to the following samples: Method: SW846 8015C

TD16439-1A, TD16439-2A, TD16439-3A, TD16439-4A, TD16439-5A, TD16439-6A, TD16439-8A, TD16439-9A, TD16439-11A, TD16439-12A, TD16439-14A, TD16439-16A, TD16439-17A, TD16439-18A, TD16439-19A, TD16439-21A, TD16439-22A

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C22)	2.51	5.0	2.5	mg/kg	J
	TPH (> C22-C36)	ND	5.0	2.5	mg/kg	

CAS No.	Surrogate Recoveries	Limits
84-15-1	o-Terphenyl	74% 31-130%

8.1.1
8

Method Blank Summary

Job Number: TD16439
Account: ALGC SGS Houston, TX
Project: ENTECTXW: CJES State AB SWD #1/LEA Co,N Mex

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP10477-MB	S0004775.D	1	02/13/18	JT	02/13/18	OP10477	GLG613

The QC reported here applies to the following samples: Method: SW846 8015C

TD16439-23A, TD16439-25A, TD16439-26A, TD16439-27A, TD16439-28A, TD16439-29A, TD16439-30A, TD16439-32A, TD16439-33A, TD16439-34A, TD16439-35A, TD16439-36A, TD16439-37A, TD16439-38A, TD16439-40A, TD16439-41A, TD16439-43A, TD16439-44A, TD16439-45A

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C22)	2.58	5.0	2.5	mg/kg	J
	TPH (> C22-C36)	ND	5.0	2.5	mg/kg	

CAS No.	Surrogate Recoveries	Limits
84-15-1	o-Terphenyl	76% 31-130%

8.1.2
8

Method Blank Summary

Job Number: TD16439
Account: ALGC SGS Houston, TX
Project: ENTECTXW: CJES State AB SWD #1/LEA Co,N Mex

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP10484-MB	S0004826.D	1	02/14/18	JT	02/14/18	OP10484	GLG614

The QC reported here applies to the following samples: Method: SW846 8015C

TD16439-46A, TD16439-47A

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C22)	2.59	5.0	2.5	mg/kg	J
	TPH (> C22-C36)	ND	5.0	2.5	mg/kg	

CAS No.	Surrogate Recoveries	Limits
84-15-1	o-Terphenyl	76% 31-130%

Method Blank Summary

Job Number: TD16439
Account: ALGC SGS Houston, TX
Project: ENTECTXW: CJES State AB SWD #1/LEA Co,N Mex

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP10485-MB	S0004868.D	1	02/15/18	JT	02/14/18	OP10485	GLG615

The QC reported here applies to the following samples: Method: SW846 8015C

TD16439-15A, TD16439-24A

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C22)	2.57	5.0	2.5	mg/kg	J
	TPH (> C22-C36)	ND	5.0	2.5	mg/kg	

CAS No.	Surrogate Recoveries	Limits
84-15-1	o-Terphenyl	76% 31-130%

8.1.4
8

Method Blank Summary

Job Number: TD16439
Account: ALGC SGS Houston, TX
Project: ENTECTXW: CJES State AB SWD #1/LEA Co,N Mex

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP10558-MB	S0005074.D	1	02/22/18	JT	02/21/18	OP10558	GLG620

The QC reported here applies to the following samples: Method: SW846 8015C

TD16439-13R, TD16439-39R

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C22)	2.83	5.0	2.5	mg/kg	J
	TPH (> C22-C36)	ND	5.0	2.5	mg/kg	

CAS No.	Surrogate Recoveries	Limits
84-15-1	o-Terphenyl	82% 31-130%

8.1.5
8

Blank Spike/Blank Spike Duplicate Summary

Job Number: TD16439
Account: ALGC SGS Houston, TX
Project: ENTECTXW: CJES State AB SWD #1/LEA Co,N Mex

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP10476-BS1	S0004750.D	1	02/13/18	JT	02/13/18	OP10476	GLG613
OP10476-BSD1	S0004751.D	1	02/13/18	JT	02/13/18	OP10476	GLG613

The QC reported here applies to the following samples: Method: SW846 8015C

TD16439-1A, TD16439-2A, TD16439-3A, TD16439-4A, TD16439-5A, TD16439-6A, TD16439-8A, TD16439-9A, TD16439-11A, TD16439-12A, TD16439-14A, TD16439-16A, TD16439-17A, TD16439-18A, TD16439-19A, TD16439-21A, TD16439-22A

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	BSD mg/kg	BSD %	RPD	Limits Rec/RPD
	TPH (C10-C22)	120	103	86	105	88	2	57-119/30

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
84-15-1	o-Terphenyl	68%	66%	31-130%

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: TD16439
Account: ALGC SGS Houston, TX
Project: ENTECTXW: CJES State AB SWD #1/LEA Co,N Mex

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP10476-BS2	S0004752.D	1	02/13/18	JT	02/13/18	OP10476	GLG613
OP10476-BSD2	S0004753.D	1	02/13/18	JT	02/13/18	OP10476	GLG613

The QC reported here applies to the following samples: Method: SW846 8015C

TD16439-1A, TD16439-2A, TD16439-3A, TD16439-4A, TD16439-5A, TD16439-6A, TD16439-8A, TD16439-9A, TD16439-11A, TD16439-12A, TD16439-14A, TD16439-16A, TD16439-17A, TD16439-18A, TD16439-19A, TD16439-21A, TD16439-22A

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	BSD mg/kg	BSD %	RPD	Limits Rec/RPD
	TPH (> C22-C36)	150	120	80	125	83	4	55-117/25

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
84-15-1	o-Terphenyl	74%	73%	31-130%

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: TD16439
Account: ALGC SGS Houston, TX
Project: ENTECTXW: CJES State AB SWD #1/LEA Co,N Mex

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP10477-BS1	S0004776.D	1	02/13/18	JT	02/13/18	OP10477	GLG613
OP10477-BSD1	S0004777.D	1	02/13/18	JT	02/13/18	OP10477	GLG613

The QC reported here applies to the following samples: Method: SW846 8015C

TD16439-23A, TD16439-25A, TD16439-26A, TD16439-27A, TD16439-28A, TD16439-29A, TD16439-30A, TD16439-32A, TD16439-33A, TD16439-34A, TD16439-35A, TD16439-36A, TD16439-37A, TD16439-38A, TD16439-40A, TD16439-41A, TD16439-43A, TD16439-44A, TD16439-45A

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	BSD mg/kg	BSD %	RPD	Limits Rec/RPD
	TPH (C10-C22)	120	117	98	110	92	6	57-119/30

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
84-15-1	o-Terphenyl	77%	73%	31-130%

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: TD16439
Account: ALGC SGS Houston, TX
Project: ENTECTXW: CJES State AB SWD #1/LEA Co,N Mex

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP10477-BS2	S0004778.D	1	02/13/18	JT	02/13/18	OP10477	GLG613
OP10477-BSD2	S0004779.D	1	02/14/18	JT	02/13/18	OP10477	GLG613

The QC reported here applies to the following samples: Method: SW846 8015C

TD16439-23A, TD16439-25A, TD16439-26A, TD16439-27A, TD16439-28A, TD16439-29A, TD16439-30A, TD16439-32A, TD16439-33A, TD16439-34A, TD16439-35A, TD16439-36A, TD16439-37A, TD16439-38A, TD16439-40A, TD16439-41A, TD16439-43A, TD16439-44A, TD16439-45A

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	BSD mg/kg	BSD %	RPD	Limits Rec/RPD
	TPH (> C22-C36)	150	122	81	135	90	10	55-117/25

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
84-15-1	o-Terphenyl	74%	76%	31-130%

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: TD16439
Account: ALGC SGS Houston, TX
Project: ENTECTXW: CJES State AB SWD #1/LEA Co,N Mex

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP10484-BS1	S0004827.D	1	02/14/18	JT	02/14/18	OP10484	GLG614
OP10484-BSD	S0004828.D	1	02/14/18	JT	02/14/18	OP10484	GLG614

The QC reported here applies to the following samples: Method: SW846 8015C

TD16439-46A, TD16439-47A

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	BSD mg/kg	BSD %	RPD	Limits Rec/RPD
	TPH (C10-C22)	120	111	93	118	98	6	57-119/30

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
84-15-1	o-Terphenyl	75%	77%	31-130%

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: TD16439
Account: ALGC SGS Houston, TX
Project: ENTECTXW: CJES State AB SWD #1/LEA Co,N Mex

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP10484-BS2	S0004829.D	1	02/14/18	JT	02/14/18	OP10484	GLG614
OP10484-BSD2	S0004830.D	1	02/14/18	JT	02/14/18	OP10484	GLG614

The QC reported here applies to the following samples: Method: SW846 8015C

TD16439-46A, TD16439-47A

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	BSD mg/kg	BSD %	RPD	Limits Rec/RPD
	TPH (> C22-C36)	150	131	87	130	87	1	55-117/25

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
84-15-1	o-Terphenyl	76%	72%	31-130%

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: TD16439
Account: ALGC SGS Houston, TX
Project: ENTECTXW: CJES State AB SWD #1/LEA Co,N Mex

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP10485-BS1	S0004869.D	1	02/15/18	JT	02/14/18	OP10485	GLG615
OP10485-BSD1	S0004870.D	1	02/15/18	JT	02/14/18	OP10485	GLG615

The QC reported here applies to the following samples: Method: SW846 8015C

TD16439-15A, TD16439-24A

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	BSD mg/kg	BSD %	RPD	Limits Rec/RPD
	TPH (C10-C22)	120	112	93	110	92	2	57-119/30

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
84-15-1	o-Terphenyl	76%	71%	31-130%

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: TD16439
Account: ALGC SGS Houston, TX
Project: ENTECTXW: CJES State AB SWD #1/LEA Co,N Mex

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP10485-BS2	S0004871.D	1	02/15/18	JT	02/14/18	OP10485	GLG615
OP10485-BSD2	S0004872.D	1	02/15/18	JT	02/14/18	OP10485	GLG615

The QC reported here applies to the following samples: Method: SW846 8015C

TD16439-15A, TD16439-24A

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	BSD mg/kg	BSD %	RPD	Limits Rec/RPD
	TPH (> C22-C36)	150	109	73	118	79	8	55-117/25

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
84-15-1	o-Terphenyl	68%	73%	31-130%

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: TD16439
Account: ALGC SGS Houston, TX
Project: ENTECTXW: CJES State AB SWD #1/LEA Co,N Mex

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP10558-BS1	S0005075.D	1	02/22/18	JT	02/21/18	OP10558	GLG620
OP10558-BSD1	S0005076.D	1	02/22/18	JT	02/21/18	OP10558	GLG620

The QC reported here applies to the following samples: Method: SW846 8015C

TD16439-13R, TD16439-39R

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	BSD mg/kg	BSD %	RPD	Limits Rec/RPD
	TPH (C10-C22)	120	75.4	63	122	102	47*	57-119/30

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
84-15-1	o-Terphenyl	51%	80%	31-130%

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: TD16439
Account: ALGC SGS Houston, TX
Project: ENTECTXW: CJES State AB SWD #1/LEA Co,N Mex

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP10558-BS2	S0005077.D	1	02/22/18	JT	02/21/18	OP10558	GLG620
OP10558-BSD2	S0005078.D	1	02/22/18	JT	02/21/18	OP10558	GLG620

The QC reported here applies to the following samples: Method: SW846 8015C

TD16439-13R, TD16439-39R

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	BSD mg/kg	BSD %	RPD	Limits Rec/RPD
	TPH (> C22-C36)	150	120	80	121	81	1	55-117/25

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
84-15-1	o-Terphenyl	77%	81%	31-130%

* = Outside of Control Limits.

Matrix Spike Summary

Job Number: TD16439
Account: ALGC SGS Houston, TX
Project: ENTECTXW: CJES State AB SWD #1/LEA Co,N Mex

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP10477-MS1	S0004788.D	1	02/14/18	JT	02/13/18	OP10477	GLG613
TD16439-23A	S0004790.D	1	02/14/18	JT	02/13/18	OP10477	GLG613

The QC reported here applies to the following samples: Method: SW846 8015C

TD16439-23A, TD16439-25A, TD16439-26A, TD16439-27A, TD16439-28A, TD16439-29A, TD16439-30A, TD16439-32A, TD16439-33A, TD16439-34A, TD16439-35A, TD16439-36A, TD16439-37A, TD16439-38A, TD16439-40A, TD16439-41A, TD16439-43A, TD16439-44A, TD16439-45A

CAS No.	Compound	TD16439-23ASpike mg/kg	Q	MS mg/kg	MS mg/kg	%	Limits
	TPH (C10-C22)	2.79	J	127	96.2	74	57-119

CAS No.	Surrogate Recoveries	MS	TD16439-23ALimits
84-15-1	o-Terphenyl	67%	49% 31-130%

* = Outside of Control Limits.

Matrix Spike Summary

Job Number: TD16439
Account: ALGC SGS Houston, TX
Project: ENTECTXW: CJES State AB SWD #1/LEA Co,N Mex

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP10477-MS2	S0004789.D	1	02/14/18	JT	02/13/18	OP10477	GLG613
TD16439-23A	S0004790.D	1	02/14/18	JT	02/13/18	OP10477	GLG613

The QC reported here applies to the following samples: Method: SW846 8015C

TD16439-23A, TD16439-25A, TD16439-26A, TD16439-27A, TD16439-28A, TD16439-29A, TD16439-30A, TD16439-32A, TD16439-33A, TD16439-34A, TD16439-35A, TD16439-36A, TD16439-37A, TD16439-38A, TD16439-40A, TD16439-41A, TD16439-43A, TD16439-44A, TD16439-45A

CAS No.	Compound	TD16439-23ASpike mg/kg	Q	MS mg/kg	MS mg/kg	%	Limits
	TPH (> C22-C36)	4.10	J	160	110	66	55-117

CAS No.	Surrogate Recoveries	MS	TD16439-23ALimits
84-15-1	o-Terphenyl	58%	49% 31-130%

* = Outside of Control Limits.

Matrix Spike Summary

Job Number: TD16439
Account: ALGC SGS Houston, TX
Project: ENTECTXW: CJES State AB SWD #1/LEA Co,N Mex

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP10484-MS1	S0004839.D	1	02/14/18	JT	02/14/18	OP10484	GLG614
TD16439-46A	S0004831.D	1	02/14/18	JT	02/14/18	OP10484	GLG614

The QC reported here applies to the following samples: Method: SW846 8015C

TD16439-46A, TD16439-47A

CAS No.	Compound	TD16439-46A mg/kg	Spike Q	MS mg/kg	MS %	Limits
	TPH (C10-C22)	19.4	129	127	84	57-119

CAS No.	Surrogate Recoveries	MS	TD16439-46A	Limits
84-15-1	o-Terphenyl	76%	66%	31-130%

* = Outside of Control Limits.

Matrix Spike Summary

Job Number: TD16439
Account: ALGC SGS Houston, TX
Project: ENTECTXW: CJES State AB SWD #1/LEA Co,N Mex

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP10484-MS2	S0004840.D	1	02/14/18	JT	02/14/18	OP10484	GLG614
TD16439-46A	S0004831.D	1	02/14/18	JT	02/14/18	OP10484	GLG614

The QC reported here applies to the following samples: Method: SW846 8015C

TD16439-46A, TD16439-47A

CAS No.	Compound	TD16439-46A mg/kg	Spike Q	MS mg/kg	MS %	Limits
	TPH (> C22-C36)	69.1	162	144	46*	55-117

CAS No.	Surrogate Recoveries	MS	TD16439-46A	Limits
84-15-1	o-Terphenyl	64%	66%	31-130%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: TD16439
Account: ALGC SGS Houston, TX
Project: ENTECTXW: CJES State AB SWD #1/LEA Co,N Mex

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP10558-MS1	S0005092.D	1	02/22/18	JT	02/21/18	OP10558	GLG620
OP10558-MSD1	S0005093.D	1	02/22/18	JT	02/21/18	OP10558	GLG620
TD16424-9R	S0005079.D	1	02/22/18	JT	02/21/18	OP10558	GLG620

The QC reported here applies to the following samples: Method: SW846 8015C

TD16439-13R, TD16439-39R

CAS No.	Compound	TD16424-9R Spike mg/kg	Q	MS mg/kg	MS %	Spike mg/kg	MSD mg/kg	MSD %	RPD	Limits Rec/RPD
	TPH (C10-C22)	9.31	129	131	94	130	142	102	8	57-119/30

CAS No.	Surrogate Recoveries	MS	MSD	TD16424-9R Limits
84-15-1	o-Terphenyl	83%	82%	87% 31-130%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: TD16439
Account: ALGC SGS Houston, TX
Project: ENTECTXW: CJES State AB SWD #1/LEA Co,N Mex

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP10558-MS2	S0005094.D	1	02/22/18	JT	02/21/18	OP10558	GLG620
OP10558-MSD2	S0005095.D	1	02/22/18	JT	02/21/18	OP10558	GLG620
TD16424-9R	S0005079.D	1	02/22/18	JT	02/21/18	OP10558	GLG620

The QC reported here applies to the following samples: Method: SW846 8015C

TD16439-13R, TD16439-39R

CAS No.	Compound	TD16424-9R Spike mg/kg	Q	MS mg/kg	MS %	Spike mg/kg	MSD mg/kg	MSD %	RPD	Limits Rec/RPD
	TPH (> C22-C36)	42.1	164	153	68	163	162	74	6	55-117/25

CAS No.	Surrogate Recoveries	MS	MSD	TD16424-9R Limits
84-15-1	o-Terphenyl	81%	79%	87% 31-130%

* = Outside of Control Limits.

The results set forth herein are provided by SGS North America Inc.

e-Hardcopy 2.0
Automated Report

Technical Report for

EnTech Consulting Corporation

CJES State AB SWD #1/LEA Co,N Mex

SGS Job Number: TD16465

Sampling Date: 02/08/18

Report to:

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Total number of pages in report: 60



Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable.


Richard Rodriguez
Laboratory Director

Client Service contact: Sylvia Garza 713-271-4700

Certifications: TX (T104704220-18-28) AR (14-016-0) AZ (AZ0769) FL (E87628)
KS (E-10366) LA (85695/04004) NJ (TX010) OK (2017-002) VA (8999)

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Test results relate only to samples analyzed.

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Sample Summary

EnTech Consulting Corporation

Job No: TD16465

CJES State AB SWD #1/LEA Co,N Mex

Sample Number	Collected		Received	Matrix		Client Sample ID
	Date	Time By		Code	Type	
TD16465-1	02/08/18	07:50	02/10/18	SO	Soil	SP-1(A)
TD16465-2	02/08/18	07:53	02/10/18	SO	Soil	SP-1(B)
TD16465-3	02/08/18	07:57	02/10/18	SO	Soil	SP-1(C)
TD16465-4	02/08/18	08:09	02/10/18	SO	Soil	SP-2(A)
TD16465-5	02/08/18	08:13	02/10/18	SO	Soil	SP-2(B)
TD16465-6	02/08/18	08:21	02/10/18	SO	Soil	SP-2(C)
TD16465-7	02/08/18	00:00	02/10/18	SO	Soil	DUP-5

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

Summary of Hits

Job Number: TD16465
 Account: EnTech Consulting Corporation
 Project: CJES State AB SWD #1/LEA Co,N Mex
 Collected: 02/08/18

Lab Sample ID	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
TD16465-1	SP-1(A)					
Benzene ^a		0.42 J	0.50	0.35	ug/kg	SW846 8260B
Toluene ^a		1.0 J	5.0	0.46	ug/kg	SW846 8260B
TPH (> C22-C36) ^a		3.00 J	5.4	2.7	mg/kg	SW846 8015C
Chloride		6.7	5.3		mg/kg	EPA 300.0
TD16465-2	SP-1(B)					
Benzene ^b		0.74	0.53	0.37	ug/kg	SW846 8260B
Toluene ^b		2.1 J	5.3	0.49	ug/kg	SW846 8260B
Ethylbenzene ^b		0.77 J	1.1	0.62	ug/kg	SW846 8260B
Xylene (total) ^b		1.5 J	2.1	1.2	ug/kg	SW846 8260B
TPH-GRO (C6-C10) ^a		12.7	6.0	6.0	mg/kg	SW846 8015C
TPH (C10-C22) ^a		81.2	5.3	2.6	mg/kg	SW846 8015C
TPH (> C22-C36) ^a		196	5.3	2.6	mg/kg	SW846 8015C
Chloride		1030	53		mg/kg	EPA 300.0
TD16465-3	SP-1(C)					
Benzene ^a		0.51 J	0.54	0.38	ug/kg	SW846 8260B
Toluene ^a		0.86 J	5.4	0.50	ug/kg	SW846 8260B
TPH (C10-C22) ^a		19.6	5.4	2.7	mg/kg	SW846 8015C
TPH (> C22-C36) ^a		187	5.4	2.7	mg/kg	SW846 8015C
Chloride		558	11		mg/kg	EPA 300.0
TD16465-4	SP-2(A)					
Benzene ^a		0.42 J	0.53	0.37	ug/kg	SW846 8260B
Toluene ^a		1.1 J	5.3	0.50	ug/kg	SW846 8260B
TPH-GRO (C6-C10) ^a		6.40	5.7	5.6	mg/kg	SW846 8015C
TPH (C10-C22) ^a		3.44 J	5.5	2.8	mg/kg	SW846 8015C
TPH (> C22-C36) ^a		5.75	5.5	2.8	mg/kg	SW846 8015C
Chloride		16500	550		mg/kg	EPA 300.0
TD16465-5	SP-2(B)					
Benzene ^a		0.53	0.51	0.36	ug/kg	SW846 8260B
Toluene ^a		1.1 J	5.1	0.48	ug/kg	SW846 8260B
TPH (C10-C22) ^a		14.1	5.4	2.7	mg/kg	SW846 8015C
TPH (> C22-C36) ^a		35.0	5.4	2.7	mg/kg	SW846 8015C
Chloride		21100	540		mg/kg	EPA 300.0

Summary of Hits

Job Number: TD16465
Account: EnTech Consulting Corporation
Project: CJES State AB SWD #1/LEA Co,N Mex
Collected: 02/08/18

Lab Sample ID	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
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TD16465-6 SP-2(C)

TPH (C10-C22) ^a	236	5.3	2.7	mg/kg	SW846 8015C
TPH (> C22-C36) ^a	469	5.3	2.7	mg/kg	SW846 8015C
Chloride	15700	530		mg/kg	EPA 300.0

TD16465-7 DUP-5

Toluene ^a	4.3 J	4.9	0.46	ug/kg	SW846 8260B
Xylene (total) ^a	1.2 J	2.0	1.1	ug/kg	SW846 8260B
TPH-GRO (C6-C10) ^a	5.85	5.8	5.7	mg/kg	SW846 8015C
TPH (C10-C22) ^a	2.74 J	5.1	2.5	mg/kg	SW846 8015C
TPH (> C22-C36) ^a	4.81 J	5.1	2.5	mg/kg	SW846 8015C
Chloride	6.5	5.2		mg/kg	EPA 300.0

(a) Analysis performed at SGS Scott, LA.

(b) Internal standards are not within control limits due to matrix interference. Confirmed by reanalysis.

Analysis performed at SGS Scott, LA.



Houston, TX

Section 3



Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	SP-1(A)	Date Sampled:	02/08/18
Lab Sample ID:	TD16465-1	Date Received:	02/10/18
Matrix:	SO - Soil	Percent Solids:	92.8
Method:	SW846 8260B SW846 5035		
Project:	CJES State AB SWD #1/LEA Co,N Mex		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	2H0044109.D	1	02/17/18 02:57	ALA	02/10/18 17:00	n/a	L:V2H1528
Run #2							

Run #	Initial Weight
Run #1	5.4 g
Run #2	

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	0.42	0.50	0.35	ug/kg	J
108-88-3	Toluene	1.0	5.0	0.46	ug/kg	J
100-41-4	Ethylbenzene	ND	1.0	0.58	ug/kg	
1330-20-7	Xylene (total)	ND	2.0	1.2	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	105%		59-143%
2037-26-5	Toluene-D8	102%		52-159%
460-00-4	4-Bromofluorobenzene	102%		38-183%

(a) Analysis performed at SGS Scott, LA.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SP-1(A)						
Lab Sample ID:	TD16465-1					Date Sampled:	02/08/18
Matrix:	SO - Soil					Date Received:	02/10/18
Method:	SW846 8015C SW846 5035					Percent Solids:	92.8
Project:	CJES State AB SWD #1/LEA Co,N Mex						

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	LC036413.D	1	02/14/18 13:27	ALA	02/10/18 17:00	n/a	L:GLC1644
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.00 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	5.8	5.7	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	95%		63-139%
540-36-3	1,4-Difluorobenzene	89%		52-140%

(a) Analysis performed at SGS Scott, LA.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SP-1(A)	Date Sampled:	02/08/18
Lab Sample ID:	TD16465-1	Date Received:	02/10/18
Matrix:	SO - Soil	Percent Solids:	92.8
Method:	SW846 8015C SW846 3546		
Project:	CJES State AB SWD #1/LEA Co,N Mex		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	S0004833.D	1	02/14/18 19:00	ALA	02/14/18 08:00	L:OP10484	L:GLG614
Run #2							

Run #	Initial Weight	Final Volume
Run #1	20.1 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C22)	ND	5.4	2.7	mg/kg	
	TPH (> C22-C36)	3.00	5.4	2.7	mg/kg	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	61%		31-130%

(a) Analysis performed at SGS Scott, LA.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SP-1(A)	Date Sampled:	02/08/18
Lab Sample ID:	TD16465-1	Date Received:	02/10/18
Matrix:	SO - Soil	Percent Solids:	92.8
Project:	CJES State AB SWD #1/LEA Co,N Mex		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	6.7	5.3	mg/kg	1	02/20/18 10:11	LR	EPA 300.0
Solids, Percent	92.8		%	1	02/12/18	TH	SM 2540 G

RL = Reporting Limit

Report of Analysis

Client Sample ID:	SP-1(B)	Date Sampled:	02/08/18
Lab Sample ID:	TD16465-2	Date Received:	02/10/18
Matrix:	SO - Soil	Percent Solids:	94.5
Method:	SW846 8260B SW846 5035		
Project:	CJES State AB SWD #1/LEA Co,N Mex		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	1H0044183.D	1	02/19/18 05:24	ALA	02/10/18 17:00	n/a	L:V1H1532
Run #2							

Run #	Initial Weight
Run #1	5.0 g
Run #2	

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	0.74	0.53	0.37	ug/kg	
108-88-3	Toluene	2.1	5.3	0.49	ug/kg	J
100-41-4	Ethylbenzene	0.77	1.1	0.62	ug/kg	J
1330-20-7	Xylene (total)	1.5	2.1	1.2	ug/kg	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	103%		59-143%
2037-26-5	Toluene-D8	97%		52-159%
460-00-4	4-Bromofluorobenzene	91%		38-183%

(a) Internal standards are not within control limits due to matrix interference. Confirmed by reanalysis.
Analysis performed at SGS Scott, LA.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SP-1(B)	
Lab Sample ID:	TD16465-2	Date Sampled: 02/08/18
Matrix:	SO - Soil	Date Received: 02/10/18
Method:	SW846 8015C SW846 5035	Percent Solids: 94.5
Project:	CJES State AB SWD #1/LEA Co,N Mex	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	LC036414.D	1	02/14/18 13:58	ALA	02/10/18 17:00	n/a	L:GLC1644
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	4.60 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	12.7	6.0	6.0	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	90%		63-139%
540-36-3	1,4-Difluorobenzene	87%		52-140%

(a) Analysis performed at SGS Scott, LA.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SP-1(B)	Date Sampled:	02/08/18
Lab Sample ID:	TD16465-2	Date Received:	02/10/18
Matrix:	SO - Soil	Percent Solids:	94.5
Method:	SW846 8015C SW846 3546		
Project:	CJES State AB SWD #1/LEA Co,N Mex		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	S0004857.D	1	02/15/18 03:29	ALA	02/14/18 08:00	L:OP10484	L:GLG614
Run #2							

Run #	Initial Weight	Final Volume
Run #1	20.0 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C22)	81.2	5.3	2.6	mg/kg	
	TPH (> C22-C36)	196	5.3	2.6	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	73%		31-130%

(a) Analysis performed at SGS Scott, LA.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SP-1(B)	Date Sampled:	02/08/18
Lab Sample ID:	TD16465-2	Date Received:	02/10/18
Matrix:	SO - Soil	Percent Solids:	94.5
Project:	CJES State AB SWD #1/LEA Co,N Mex		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	1030	53	mg/kg	10	02/20/18 10:59	LR	EPA 300.0
Solids, Percent	94.5		%	1	02/12/18	TH	SM 2540 G

RL = Reporting Limit

Report of Analysis

Client Sample ID:	SP-1(C)	Date Sampled:	02/08/18
Lab Sample ID:	TD16465-3	Date Received:	02/10/18
Matrix:	SO - Soil	Percent Solids:	92.3
Method:	SW846 8260B SW846 5035		
Project:	CJES State AB SWD #1/LEA Co,N Mex		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	2H0044111.D	1	02/17/18 03:45	ALA	02/10/18 17:00	n/a	L:V2H1528
Run #2							

Run #	Initial Weight
Run #1	5.0 g
Run #2	

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	0.51	0.54	0.38	ug/kg	J
108-88-3	Toluene	0.86	5.4	0.50	ug/kg	J
100-41-4	Ethylbenzene	ND	1.1	0.63	ug/kg	
1330-20-7	Xylene (total)	ND	2.2	1.3	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	99%		59-143%
2037-26-5	Toluene-D8	100%		52-159%
460-00-4	4-Bromofluorobenzene	94%		38-183%

(a) Analysis performed at SGS Scott, LA.

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SP-1(C)	
Lab Sample ID:	TD16465-3	Date Sampled: 02/08/18
Matrix:	SO - Soil	Date Received: 02/10/18
Method:	SW846 8015C SW846 5035	Percent Solids: 92.3
Project:	CJES State AB SWD #1/LEA Co,N Mex	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	LC036415.D	1	02/14/18 14:29	ALA	02/10/18 17:00	n/a	L:GLC1644
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.40 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	5.4	5.4	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	96%		63-139%
540-36-3	1,4-Difluorobenzene	90%		52-140%

(a) Analysis performed at SGS Scott, LA.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SP-1(C)	Date Sampled:	02/08/18
Lab Sample ID:	TD16465-3	Date Received:	02/10/18
Matrix:	SO - Soil	Percent Solids:	92.3
Method:	SW846 8015C SW846 3546		
Project:	CJES State AB SWD #1/LEA Co,N Mex		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	S0004858.D	1	02/15/18 03:51	ALA	02/14/18 08:00	L:OP10484	L:GLG614
Run #2							

Run #	Initial Weight	Final Volume
Run #1	20.1 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C22)	19.6	5.4	2.7	mg/kg	
	TPH (> C22-C36)	187	5.4	2.7	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
84-15-1	o-Terphenyl	60%		31-130%		

(a) Analysis performed at SGS Scott, LA.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SP-1(C)	Date Sampled:	02/08/18
Lab Sample ID:	TD16465-3	Date Received:	02/10/18
Matrix:	SO - Soil	Percent Solids:	92.3
Project:	CJES State AB SWD #1/LEA Co,N Mex		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	558	11	mg/kg	2	02/20/18 11:15	LR	EPA 300.0
Solids, Percent	92.3		%	1	02/12/18	TH	SM 2540 G

RL = Reporting Limit

Report of Analysis

Client Sample ID:	SP-2(A)	Date Sampled:	02/08/18
Lab Sample ID:	TD16465-4	Date Received:	02/10/18
Matrix:	SO - Soil	Percent Solids:	90.4
Method:	SW846 8260B SW846 5035		
Project:	CJES State AB SWD #1/LEA Co,N Mex		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	2H0044112.D	1	02/17/18 04:09	ALA	02/10/18 17:00	n/a	L:V2H1528
Run #2							

Run #	Initial Weight
Run #1	5.2 g
Run #2	

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	0.42	0.53	0.37	ug/kg	J
108-88-3	Toluene	1.1	5.3	0.50	ug/kg	J
100-41-4	Ethylbenzene	ND	1.1	0.62	ug/kg	
1330-20-7	Xylene (total)	ND	2.1	1.2	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	107%		59-143%
2037-26-5	Toluene-D8	102%		52-159%
460-00-4	4-Bromofluorobenzene	96%		38-183%

(a) Analysis performed at SGS Scott, LA.

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SP-2(A)	
Lab Sample ID:	TD16465-4	Date Sampled: 02/08/18
Matrix:	SO - Soil	Date Received: 02/10/18
Method:	SW846 8015C SW846 5035	Percent Solids: 90.4
Project:	CJES State AB SWD #1/LEA Co,N Mex	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	LC036416.D	1	02/14/18 15:00	ALA	02/10/18 17:00	n/a	L:GLC1644
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.40 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	6.40	5.7	5.6	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	93%		63-139%
540-36-3	1,4-Difluorobenzene	87%		52-140%

(a) Analysis performed at SGS Scott, LA.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SP-2(A)	Date Sampled:	02/08/18
Lab Sample ID:	TD16465-4	Date Received:	02/10/18
Matrix:	SO - Soil	Percent Solids:	90.4
Method:	SW846 8015C SW846 3546		
Project:	CJES State AB SWD #1/LEA Co,N Mex		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	S0004834.D	1	02/14/18 19:20	ALA	02/14/18 08:00	L:OP10484	L:GLG614
Run #2							

Run #	Initial Weight	Final Volume
Run #1	20.0 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C22)	3.44	5.5	2.8	mg/kg	J
	TPH (> C22-C36)	5.75	5.5	2.8	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	68%		31-130%

(a) Analysis performed at SGS Scott, LA.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SP-2(A)	Date Sampled:	02/08/18
Lab Sample ID:	TD16465-4	Date Received:	02/10/18
Matrix:	SO - Soil	Percent Solids:	90.4
Project:	CJES State AB SWD #1/LEA Co,N Mex		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	16500	550	mg/kg	100	02/20/18 11:31	LR	EPA 300.0
Solids, Percent	90.4		%	1	02/12/18	TH	SM 2540 G

RL = Reporting Limit

Report of Analysis

Client Sample ID:	SP-2(B)	Date Sampled:	02/08/18
Lab Sample ID:	TD16465-5	Date Received:	02/10/18
Matrix:	SO - Soil	Percent Solids:	91.9
Method:	SW846 8260B SW846 5035		
Project:	CJES State AB SWD #1/LEA Co,N Mex		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	2H0044113.D	1	02/17/18 04:33	ALA	02/10/18 17:00	n/a	L:V2H1528
Run #2							

Run #	Initial Weight
Run #1	5.3 g
Run #2	

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	0.53	0.51	0.36	ug/kg	
108-88-3	Toluene	1.1	5.1	0.48	ug/kg	J
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/kg	
1330-20-7	Xylene (total)	ND	2.1	1.2	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	102%		59-143%
2037-26-5	Toluene-D8	100%		52-159%
460-00-4	4-Bromofluorobenzene	96%		38-183%

(a) Analysis performed at SGS Scott, LA.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SP-2(B)		
Lab Sample ID:	TD16465-5	Date Sampled:	02/08/18
Matrix:	SO - Soil	Date Received:	02/10/18
Method:	SW846 8015C SW846 5035	Percent Solids:	91.9
Project:	CJES State AB SWD #1/LEA Co,N Mex		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	LC036417.D	1	02/14/18 15:30	ALA	02/10/18 17:00	n/a	L:GLC1644
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.80 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	5.1	5.1	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	90%		63-139%
540-36-3	1,4-Difluorobenzene	86%		52-140%

(a) Analysis performed at SGS Scott, LA.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SP-2(B)	
Lab Sample ID:	TD16465-5	Date Sampled: 02/08/18
Matrix:	SO - Soil	Date Received: 02/10/18
Method:	SW846 8015C SW846 3546	Percent Solids: 91.9
Project:	CJES State AB SWD #1/LEA Co,N Mex	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	S0004835.D	1	02/14/18 19:41	ALA	02/14/18 08:00	L:OP10484	L:GLG614
Run #2							

Run #	Initial Weight	Final Volume
Run #1	20.1 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C22)	14.1	5.4	2.7	mg/kg	
	TPH (> C22-C36)	35.0	5.4	2.7	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	65%		31-130%

(a) Analysis performed at SGS Scott, LA.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SP-2(B)	Date Sampled:	02/08/18
Lab Sample ID:	TD16465-5	Date Received:	02/10/18
Matrix:	SO - Soil	Percent Solids:	91.9
Project:	CJES State AB SWD #1/LEA Co,N Mex		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	21100	540	mg/kg	100	02/20/18 11:47	LR	EPA 300.0
Solids, Percent	91.9		%	1	02/12/18	TH	SM 2540 G

RL = Reporting Limit

Report of Analysis

Client Sample ID:	SP-2(C)	Date Sampled:	02/08/18
Lab Sample ID:	TD16465-6	Date Received:	02/10/18
Matrix:	SO - Soil	Percent Solids:	93.4
Method:	SW846 8260B SW846 5035		
Project:	CJES State AB SWD #1/LEA Co,N Mex		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	1H0044184.D	1	02/19/18 05:48	ALA	02/10/18 17:00	n/a	L:V1H1532
Run #2							

Run #	Initial Weight
Run #1	5.4 g
Run #2	

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	0.50	0.35	ug/kg	
108-88-3	Toluene	ND	5.0	0.46	ug/kg	
100-41-4	Ethylbenzene	ND	0.99	0.58	ug/kg	
1330-20-7	Xylene (total)	ND	2.0	1.2	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	133%		59-143%
2037-26-5	Toluene-D8	102%		52-159%
460-00-4	4-Bromofluorobenzene	107%		38-183%

(a) Internal standards are not within control limits due to matrix interference. Confirmed by reanalysis.
Analysis performed at SGS Scott, LA.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SP-2(C)						
Lab Sample ID:	TD16465-6					Date Sampled:	02/08/18
Matrix:	SO - Soil					Date Received:	02/10/18
Method:	SW846 8015C SW846 5035					Percent Solids:	93.4
Project:	CJES State AB SWD #1/LEA Co,N Mex						

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	LC036418.D	1	02/14/18 16:01	ALA	02/10/18 17:00	n/a	L:GLC1644
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.30 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	5.4	5.3	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	94%		63-139%
540-36-3	1,4-Difluorobenzene	87%		52-140%

(a) Analysis performed at SGS Scott, LA.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SP-2(C)	
Lab Sample ID:	TD16465-6	Date Sampled: 02/08/18
Matrix:	SO - Soil	Date Received: 02/10/18
Method:	SW846 8015C SW846 3546	Percent Solids: 93.4
Project:	CJES State AB SWD #1/LEA Co,N Mex	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	S0004841.D	1	02/14/18 21:47	ALA	02/14/18 08:00	L:OP10484	L:GLG614
Run #2							

Run #	Initial Weight	Final Volume
Run #1	20.2 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C22)	236	5.3	2.7	mg/kg	
	TPH (> C22-C36)	469	5.3	2.7	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	81%		31-130%

(a) Analysis performed at SGS Scott, LA.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SP-2(C)	Date Sampled:	02/08/18
Lab Sample ID:	TD16465-6	Date Received:	02/10/18
Matrix:	SO - Soil	Percent Solids:	93.4
Project:	CJES State AB SWD #1/LEA Co,N Mex		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	15700	530	mg/kg	100	02/20/18 12:03	LR	EPA 300.0
Solids, Percent	93.4		%	1	02/12/18	TH	SM 2540 G

RL = Reporting Limit

Report of Analysis

Client Sample ID:	DUP-5	Date Sampled:	02/08/18
Lab Sample ID:	TD16465-7	Date Received:	02/10/18
Matrix:	SO - Soil	Percent Solids:	96.4
Method:	SW846 8260B SW846 5035		
Project:	CJES State AB SWD #1/LEA Co,N Mex		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	2H0044115.D	1	02/17/18 05:21	ALA	02/10/18 17:00	n/a	L:V2H1528
Run #2							

Run #	Initial Weight
Run #1	5.3 g
Run #2	

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	0.49	0.34	ug/kg	
108-88-3	Toluene	4.3	4.9	0.46	ug/kg	J
100-41-4	Ethylbenzene	ND	0.98	0.57	ug/kg	
1330-20-7	Xylene (total)	1.2	2.0	1.1	ug/kg	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	99%		59-143%
2037-26-5	Toluene-D8	100%		52-159%
460-00-4	4-Bromofluorobenzene	102%		38-183%

(a) Analysis performed at SGS Scott, LA.

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	DUP-5	
Lab Sample ID:	TD16465-7	Date Sampled: 02/08/18
Matrix:	SO - Soil	Date Received: 02/10/18
Method:	SW846 8015C SW846 5035	Percent Solids: 96.4
Project:	CJES State AB SWD #1/LEA Co,N Mex	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	LC036421.D	1	02/14/18 17:32	ALA	02/10/18 17:00	n/a	L:GLC1644
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	4.60 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	5.85	5.8	5.7	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
460-00-4	4-Bromofluorobenzene	98%		63-139%		
540-36-3	1,4-Difluorobenzene	89%		52-140%		

(a) Analysis performed at SGS Scott, LA.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	DUP-5	Date Sampled:	02/08/18
Lab Sample ID:	TD16465-7	Date Received:	02/10/18
Matrix:	SO - Soil	Percent Solids:	96.4
Method:	SW846 8015C SW846 3546		
Project:	CJES State AB SWD #1/LEA Co,N Mex		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	S0004842.D	1	02/14/18 22:10	ALA	02/14/18 08:00	L:OP10484	L:GLG614
Run #2							

Run #	Initial Weight	Final Volume
Run #1	20.5 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C22)	2.74	5.1	2.5	mg/kg	J
	TPH (> C22-C36)	4.81	5.1	2.5	mg/kg	J
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
84-15-1	o-Terphenyl	65%		31-130%		

(a) Analysis performed at SGS Scott, LA.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

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Report of Analysis

Client Sample ID:	DUP-5	Date Sampled:	02/08/18
Lab Sample ID:	TD16465-7	Date Received:	02/10/18
Matrix:	SO - Soil	Percent Solids:	96.4
Project:	CJES State AB SWD #1/LEA Co,N Mex		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	6.5	5.2	mg/kg	1	02/20/18 12:50	LR	EPA 300.0
Solids, Percent	96.4		%	1	02/12/18	TH	SM 2540 G

RL = Reporting Limit

Misc. Forms**Custody Documents and Other Forms**

Includes the following where applicable:

- Chain of Custody

10165 Harwin Dr, Ste 150 Houston, TX 77036
TEL: 713-271-4700 FAX: 713-271-4770
www.accutest.com

<div style="display: flex; justify-content: space-between;"> <div> <h1 style="margin:0;">ACCUTEST</h1> <p>10165 Harwin Dr, Ste 150 Houston, TX 77036 TEL 713-271-4700 FAX: 713-271-4770 www.acctest.com</p> </div> <div> <p>FED-EX Tracking #</p> <p>SGS Accutest Job #</p> </div> <div> <p>Bottle Order Control #</p> <p>SGS Accutest Job #</p> </div> </div>																																																																																																																																																																																																																														
<div style="display: flex; justify-content: space-between;"> <div style="width: 30%;"> <p>Client / Reporting Information</p> <p>Company Name: ENTER Construction Corp</p> <p>Street Address: 21 WATERWAY AVE #300</p> <p>City: The Woodlands TX</p> <p>Project Contact: JOE SCHRAM E-mail: joe.schram@enterconstruction.com</p> <p>Phone #: 281-326-7431 Fax #: </p> <p>Sampler(s) Name(s): JOE SCHRAM</p> <p>SGS Account Sample #</p> </div> <div style="width: 30%;"> <p>Project Information</p> <p>Project Name: CJES STATE AB ROAD #1</p> <p>Street: LEX CO, HM</p> <p>City: State: </p> <p>Billing Information (if different from Report to)</p> <p>Company Name: ENTER Construction Corp</p> <p>Street Address: 21 WATERWAY AVE #300</p> <p>City: The Woodlands TX State: Zip: </p> <p>Client Purchase Order #</p> <p>Project Manager: CAROL PATE</p> <p>Attention: CAROL PATE</p> </div> <div style="width: 35%;"> <p>Requested Analyses</p> <p>Matrix Codes</p> <p>DW - Drinking Water GW - Ground Water WW - Water SW - Surface Water SO - Soil SL - Sludge SED - Sediment OI - Oil LIQ - Other Liquid AIR - Air SOL - Other Solid WP - Wipe FB-Field Blank</p> </div> </div>																																																																																																																																																																																																																														
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<p>Form: SM021-0</p> <p>Sample Custody must be documented below each time samples change possession, including courier delivery.</p> <table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th>Relinquished by Sampler:</th> <th>Date Time:</th> <th>Received By:</th> <th>Date Time:</th> <th>Relinquished By:</th> <th>Date Time:</th> <th>Received By:</th> <th>Date Time:</th> </tr> </thead> <tbody> <tr> <td>1 [Signature]</td> <td>2/18/18 12:00</td> <td>1 Jason Fish</td> <td>2/18/18 12:00</td> <td>2 Jason Fish</td> <td>2/18/18 14:00</td> <td>2 [Signature]</td> <td></td> </tr> <tr> <td>3 [Signature]</td> <td>2-18-18 1:00</td> <td>3 [Signature]</td> <td>2-18-18 1:00</td> <td>4 [Signature]</td> <td></td> <td></td> <td></td> </tr> <tr> <td>5 [Signature]</td> <td></td> <td>5 [Signature]</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>		Relinquished by Sampler:	Date Time:	Received By:	Date Time:	Relinquished By:	Date Time:	Received By:	Date Time:	1 [Signature]	2/18/18 12:00	1 Jason Fish	2/18/18 12:00	2 Jason Fish	2/18/18 14:00	2 [Signature]		3 [Signature]	2-18-18 1:00	3 [Signature]	2-18-18 1:00	4 [Signature]				5 [Signature]		5 [Signature]																																																																																																																																																																																																		
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<p>Custody Seal # <input type="checkbox"/> Intact <input type="checkbox"/> Not intact</p> <p>Preserved where applicable <input type="checkbox"/></p> <p>On Ice <input type="checkbox"/> Cooler Temp: <input type="checkbox"/></p>																																																																																																																																																																																																																														

TD16465: Chain of Custody

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AccuTest

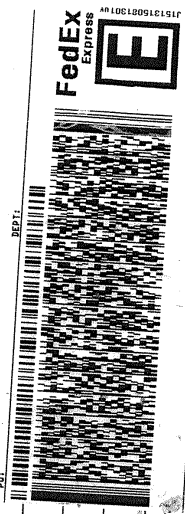
COOLER TEMP FORM

TCH TD16465

Delivered by (circle one): FedEx/UPS ALGC Driver Client
Date: 2-10-10
Client: Exach
Cooler Number: 1
Thermometer ID: 225 CF, °C Corrected Temp, °C 2.0

ORIGIN: ID-68RA (432) 234-3079
JASON FISHER
SGS-ACCUTEST
3600 S. COUNTRY ROAD
MIDLAND, TX 79706
UNITED STATES US
SHIP DATE: 05/JAN/10
ACTIVITY: 55
CNO: 0243396-CRTE016
BILL SENDER

TO: **SAMPLE MANAGEMENT**
SGS ACCUTEST
10165 HARWIN DRIVE
SUITE 150
HOUSTON TX 77036
REF: (719) 271-4700



TRK **FedEx**
SATURDAY 12
PRIORITY OVERNIGHT

77036
TX-US IAH



PH Lot# 10D4561

Form: SW027-06 Rev 10/24/2006

SGS Sample Receipt Summary

Job Number: TD16465 **Client:** ENTECH **Project:** CJES STATE AB
Date / Time Received: _____ **Delivery Method:** _____ **Airbill #'s:** _____
No. Coolers: 1 **Therm ID:** IR-5; **Temp Adjustment Factor:** 0;
Cooler Temps (Initial/Adjusted): #1: (2/2);

Cooler Security	Y or N
1. Custody Seals Present:	<input checked="" type="checkbox"/> <input type="checkbox"/>
2. Custody Seals Intact:	<input checked="" type="checkbox"/> <input type="checkbox"/>
3. COC Present:	<input checked="" type="checkbox"/> <input type="checkbox"/>
4. Smpl Dates/Time OK	<input checked="" type="checkbox"/> <input type="checkbox"/>

Cooler Temperature **Y or N**
 1. Temp criteria achieved: ☒ ☐
 2. Cooler temp verification: _____
 3. Cooler media: Ice (Bag)

Quality Control Preservation	Y	or	N	N/A	WTB	STB
1. Trip Blank present / cooler:	<input type="checkbox"/>		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Trip Blank listed on COC:	<input type="checkbox"/>		<input type="checkbox"/>	<input checked="" type="checkbox"/>		
3. Samples preserved properly:	<input checked="" type="checkbox"/>		<input type="checkbox"/>			
4. VOCs headspace free:	<input type="checkbox"/>		<input type="checkbox"/>	<input checked="" type="checkbox"/>		

Sample Integrity - Documentation **Y or N**
 1. Sample labels present on bottles: ☒ ☐
 2. Container labeling complete: ☒ ☐
 3. Sample container label / COC agree: ☒ ☐

Sample Integrity - Condition **Y or N**
 1. Sample recvd within HT: ☒ ☐
 2. All containers accounted for: ☒ ☐
 3. Condition of sample: Intact

Sample Integrity - Instructions	Y	or	N	N/A
1. Analysis requested is clear:	<input checked="" type="checkbox"/>		<input type="checkbox"/>	
2. Bottles received for unspecified tests	<input type="checkbox"/>		<input checked="" type="checkbox"/>	
3. Sufficient volume recvd for analysis:	<input checked="" type="checkbox"/>		<input type="checkbox"/>	
4. Compositing instructions clear:	<input type="checkbox"/>		<input type="checkbox"/>	<input checked="" type="checkbox"/>
5. Filtering instructions clear:	<input type="checkbox"/>		<input type="checkbox"/>	<input checked="" type="checkbox"/>

Comments Subsampled into 1-2oz container for wet chem for all samples.

TD16465: Chain of Custody
Page 3 of 3

General Chemistry

5

QC Data Summaries

Includes the following where applicable:

- **Method Blank and Blank Spike Summaries**
- **Duplicate Summaries**
- **Matrix Spike Summaries**

METHOD BLANK AND SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: TD16465
Account: ENTECTXW - EnTech Consulting Corporation
Project: CJES State AB SWD #1/LEA Co,N Mex

Analyte	Batch ID	RL	MB Result	Units	Spike Amount	BSP Result	BSP %Recov	QC Limits
Chloride	GP46351/GN87921	5.0	0.0	mg/kg	100	95.7	95.7	90-110%

Associated Samples:

Batch GP46351: TD16465-1, TD16465-2, TD16465-3, TD16465-4, TD16465-5, TD16465-6, TD16465-7

(*) Outside of QC limits

5.1

5

DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: TD16465
Account: ENTECTXW - EnTech Consulting Corporation
Project: CJES State AB SWD #1/LEA Co,N Mex

Analyte	Batch ID	QC Sample	Units	Original Result	DUP Result	RPD	QC Limits
Chloride	GP46351/GN87921	TD16465-1	mg/kg	6.7	11.9	55.9(a)	0-20%
Solids, Percent	GN87743	TD16465-1	%	92.8	92.7	0.1	0-5%

Associated Samples:

Batch GN87743: TD16465-1, TD16465-2, TD16465-3, TD16465-4, TD16465-5, TD16465-6, TD16465-7

Batch GP46351: TD16465-1, TD16465-2, TD16465-3, TD16465-4, TD16465-5, TD16465-6, TD16465-7

(*) Outside of QC limits

(a) RPD acceptable due to low duplicate and sample concentrations.

MATRIX SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: TD16465
Account: ENTECTXW - EnTech Consulting Corporation
Project: CJES State AB SWD #1/LEA Co,N Mex

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MS Result	%Rec	QC Limits
Chloride	GP46351/GN87921	TD16465-1	mg/kg	6.7	107	106	92.7	80-120%

Associated Samples:

Batch GP46351: TD16465-1, TD16465-2, TD16465-3, TD16465-4, TD16465-5, TD16465-6, TD16465-7

(*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits

Misc. Forms**Custody Documents and Other Forms**

(SGS Scott, LA)

Includes the following where applicable:

- Chain of Custody



CHAIN OF CUSTODY

Page 1 of 2

10165 Harwin Drive, Houston, TX, 77036
TEL: 713-271-4700 FAX: 713-271-4770
www.sgs.com

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bottles	HC	INCH	INCH3	INCH4	INCH5	INCH6	INCH7	INCH8	INCH9	INCH10	INCH11	INCH12	INCH13	INCH14	INCH15	INCH16	INCH17	INCH18	INCH19	INCH20	INCH21	INCH22	INCH23	INCH24	INCH25	INCH26	INCH27	INCH28	INCH29	INCH30	INCH31	INCH32	INCH33	INCH34	INCH35	INCH36	INCH37	INCH38	INCH39	INCH40	INCH41	INCH42	INCH43	INCH44	INCH45	INCH46	INCH47	INCH48	INCH49	INCH50	INCH51	INCH52	INCH53	INCH54	INCH55	INCH56	INCH57	INCH58	INCH59	INCH60	INCH61	INCH62	INCH63	INCH64	INCH65	INCH66	INCH67	INCH68	INCH69	INCH70	INCH71	INCH72	INCH73	INCH74	INCH75	INCH76	INCH77	INCH78	INCH79	INCH80	INCH81	INCH82	INCH83	INCH84	INCH85	INCH86	INCH87	INCH88	INCH89	INCH90	INCH91	INCH92	INCH93	INCH94	INCH95	INCH96	INCH97	INCH98	INCH99	INCH100	INCH101	INCH102	INCH103	INCH104	INCH105	INCH106	INCH107	INCH108	INCH109	INCH110	INCH111	INCH112	INCH113	INCH114	INCH115	INCH116	INCH117	INCH118	INCH119	INCH120	INCH121	INCH122	INCH123	INCH124	INCH125	INCH126	INCH127	INCH128	INCH129	INCH130	INCH131	INCH132	INCH133	INCH134	INCH135	INCH136	INCH137	INCH138	INCH139	INCH140	INCH141	INCH142	INCH143	INCH144	INCH145	INCH146	INCH147	INCH148	INCH149	INCH150	INCH151	INCH152	INCH153	INCH154	INCH155	INCH156	INCH157	INCH158	INCH159	INCH160	INCH161	INCH162	INCH163	INCH164	INCH165	INCH166	INCH167	INCH168	INCH169	INCH170	INCH171	INCH172	INCH173	INCH174	INCH175	INCH176	INCH177	INCH178	INCH179	INCH180	INCH181	INCH182	INCH183	INCH184	INCH185	INCH186	INCH187	INCH188	INCH189	INCH190	INCH191	INCH192	INCH193	INCH194	INCH195	INCH196	INCH197	INCH198	INCH199	INCH200	INCH201	INCH202	INCH203	INCH204	INCH205	INCH206	INCH207	INCH208	INCH209	INCH210	INCH211	INCH212	INCH213	INCH214	INCH215	INCH216	INCH217	INCH218	INCH219	INCH220	INCH221	INCH222	INCH223	INCH224	INCH225	INCH226	INCH227	INCH228	INCH229	INCH230	INCH231	INCH232	INCH233	INCH234	INCH235	INCH236	INCH237	INCH238	INCH239	INCH240	INCH241	INCH242	INCH243	INCH244	INCH245	INCH246	INCH247	INCH248	INCH249	INCH250	INCH251	INCH252	INCH253	INCH254	INCH255	INCH256	INCH257	INCH258	INCH259	INCH260	INCH261	INCH262	INCH263	INCH264	INCH265	INCH266	INCH267	INCH268	INCH269	INCH270	INCH271	INCH272	INCH273	INCH274	INCH275	INCH276	INCH277	INCH278	INCH279	INCH280	INCH281	INCH282	INCH283	INCH284	INCH285	INCH286	INCH287	INCH288	INCH289	INCH290	INCH291	INCH292	INCH293	INCH294	INCH295	INCH296	INCH297	INCH298	INCH299	INCH300	INCH301	INCH302	INCH303	INCH304	INCH305	INCH306	INCH307	INCH308	INCH309	INCH310	INCH311	INCH312	INCH313	INCH314	INCH315	INCH316	INCH317	INCH318	INCH319	INCH320	INCH321	INCH322	INCH323	INCH324	INCH325	INCH326	INCH327	INCH328	INCH329	INCH330	INCH331	INCH332	INCH333	INCH334	INCH335	INCH336	INCH337	INCH338	INCH339	INCH340	INCH341	INCH342	INCH343	INCH344	INCH345	INCH346	INCH347	INCH348	INCH349	INCH350	INCH351	INCH352	INCH353	INCH354	INCH355	INCH356	INCH357	INCH358	INCH359	INCH360	INCH361	INCH362	INCH363	INCH364	INCH365	INCH366	INCH367	INCH368	INCH369	INCH370	INCH371	INCH372	INCH373	INCH374	INCH375	INCH376	INCH377	INCH378	INCH379	INCH380	INCH381	INCH382	INCH383	INCH384	INCH385	INCH386	INCH387	INCH388	INCH389	INCH390	INCH391	INCH392	INCH393	INCH394	INCH395	INCH396	INCH397	INCH398	INCH399	INCH400	INCH401	INCH402	INCH403	INCH404	INCH405	INCH406	INCH407	INCH408	INCH409	INCH410	INCH411	INCH412	INCH413	INCH414	INCH415	INCH416	INCH417	INCH418	INCH419	INCH420	INCH421	INCH422	INCH423	INCH424	INCH425	INCH426	INCH427	INCH428	INCH429	INCH430	INCH431	INCH432	INCH433	INCH434	INCH435	INCH436	INCH437	INCH438	INCH439	INCH440	INCH441	INCH442	INCH443	INCH444	INCH445	INCH446	INCH447	INCH448	INCH449	INCH450	INCH451	INCH452	INCH453	INCH454	INCH455	INCH456	INCH457	INCH458	INCH459	INCH460	INCH461	INCH462	INCH463	INCH464	INCH465	INCH466	INCH467	INCH468	INCH469	INCH470	INCH471	INCH472	INCH473	INCH474	INCH475	INCH476	INCH477	INCH478	INCH479	INCH480	INCH481	INCH482	INCH483	INCH484	INCH485	INCH486	INCH487	INCH488	INCH489	INCH490	INCH491	INCH492	INCH493	INCH494	INCH495	INCH496	INCH497	INCH498	INCH499	INCH500	INCH501	INCH502	INCH503	INCH504	INCH505	INCH506	INCH507	INCH508	INCH509	INCH510	INCH511	INCH512	INCH513	INCH514	INCH515	INCH516	INCH517	INCH518	INCH519	INCH520	INCH521	INCH522	INCH523	INCH524	INCH525	INCH526	INCH527	INCH528	INCH529	INCH530	INCH531	INCH532	INCH533	INCH534	INCH535	INCH536	INCH537	INCH538	INCH539	INCH540	INCH541	INCH542	INCH543	INCH544	INCH545	INCH546	INCH547	INCH548	INCH549	INCH550	INCH551	INCH552	INCH553	INCH554	INCH555	INCH556	INCH557	INCH558	INCH559	INCH560	INCH561	INCH562	INCH563	INCH564	INCH565	INCH566	INCH567	INCH568	INCH569	INCH570	INCH571	INCH572	INCH573	INCH574	INCH575	INCH576	INCH577	INCH578	INCH579	INCH580	INCH581	INCH582	INCH583	INCH584	INCH585	INCH586	INCH587	INCH588	INCH589	INCH590	INCH591	INCH592	INCH593	INCH594	INCH595	INCH596	INCH597	INCH598	INCH599	INCH600	INCH601	INCH602	INCH603	INCH604	INCH605	INCH606	INCH607	INCH608	INCH609	INCH610	INCH611	INCH612	INCH613	INCH614	INCH615	INCH616	INCH617	INCH618	INCH619	INCH620	INCH621	INCH622	INCH623	INCH624	INCH625	INCH626	INCH627	INCH628	INCH629	INCH630	INCH631	INCH632	INCH633	INCH634	INCH635	INCH636	INCH637	INCH638	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SGS Sample Receipt Summary

Job Number: TD16465

Client: SGS NORTH AMERICA

Project: CJES STATE AB SWD#1/LEA

Date / Time Received: 2/13/2018 8:15:00 AM

Delivery Method: Accutest Courier

Airbill #'s:

Cooler Temps (Initial/Adjusted): #1: (2/2):

Cooler Security

	Y	or	N		Y	or	N
1. Custody Seals Present:	<input checked="" type="checkbox"/>		<input type="checkbox"/>	3. COC Present:	<input checked="" type="checkbox"/>		<input type="checkbox"/>
2. Custody Seals Intact:	<input checked="" type="checkbox"/>		<input type="checkbox"/>	4. Smpl Dates/Time OK	<input checked="" type="checkbox"/>		<input type="checkbox"/>

Cooler Temperature

	Y	or	N
1. Temp criteria achieved:	<input checked="" type="checkbox"/>		<input type="checkbox"/>
2. Thermometer ID:	DV441;		
3. Cooler media:	Ice (direct contact)		
4. No. Coolers:	1		

Quality Control Preservation

	Y	or	N	N/A
1. Trip Blank present / cooler:	<input type="checkbox"/>		<input type="checkbox"/>	<input checked="" type="checkbox"/>
2. Trip Blank listed on COC:	<input type="checkbox"/>		<input type="checkbox"/>	<input checked="" type="checkbox"/>
3. Samples preserved properly:	<input checked="" type="checkbox"/>		<input type="checkbox"/>	
4. VOCs headspace free:	<input type="checkbox"/>		<input type="checkbox"/>	<input checked="" type="checkbox"/>

Comments

Sample Integrity - Documentation

	Y	or	N
1. Sample labels present on bottles:	<input checked="" type="checkbox"/>		<input type="checkbox"/>
2. Container labeling complete:	<input checked="" type="checkbox"/>		<input type="checkbox"/>
3. Sample container label / COC agree:	<input checked="" type="checkbox"/>		<input type="checkbox"/>

Sample Integrity - Condition

	Y	or	N
1. Sample recvd within HT:	<input checked="" type="checkbox"/>		<input type="checkbox"/>
2. All containers accounted for:	<input checked="" type="checkbox"/>		<input type="checkbox"/>
3. Condition of sample:	Intact		

Sample Integrity - Instructions

	Y	or	N	N/A
1. Analysis requested is clear:	<input checked="" type="checkbox"/>		<input type="checkbox"/>	
2. Bottles received for unspecified tests	<input type="checkbox"/>		<input checked="" type="checkbox"/>	
3. Sufficient volume recvd for analysis:	<input checked="" type="checkbox"/>		<input type="checkbox"/>	
4. Compositing instructions clear:	<input type="checkbox"/>		<input type="checkbox"/>	<input checked="" type="checkbox"/>
5. Filtering instructions clear:	<input type="checkbox"/>		<input type="checkbox"/>	<input checked="" type="checkbox"/>

TD16465: Chain of Custody

Page 2 of 2

MS Volatiles**QC Data Summaries**

(SGS Scott, LA)

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Page 1 of 1

Job Number: TD16465

Account: ALGC SGS Houston, TX

Project: ENTECTXW: CJES State AB SWD #1/LEA Co,N Mex

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V2H1528-MB1	2H0044101.D	1	02/17/18	NN	n/a	n/a	V2H1528

The QC reported here applies to the following samples:

Method: SW846 8260B

TD16465-1, TD16465-3, TD16465-4, TD16465-5, TD16465-7

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	0.50	0.35	ug/kg	
100-41-4	Ethylbenzene	ND	1.0	0.58	ug/kg	
108-88-3	Toluene	ND	5.0	0.47	ug/kg	
1330-20-7	Xylene (total)	ND	2.0	1.2	ug/kg	

CAS No.	Surrogate Recoveries	Limits
17060-07-0	1,2-Dichloroethane-D4	103% 59-143%
2037-26-5	Toluene-D8	102% 52-159%
460-00-4	4-Bromofluorobenzene	105% 38-183%

Method Blank Summary

Job Number: TD16465
Account: ALGC SGS Houston, TX
Project: ENTECTXW: CJES State AB SWD #1/LEA Co,N Mex

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V1H1532-MB1	1H0044168.D	1	02/18/18	PJ	n/a	n/a	V1H1532

The QC reported here applies to the following samples: Method: SW846 8260B

TD16465-2, TD16465-6

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	0.50	0.35	ug/kg	
100-41-4	Ethylbenzene	ND	1.0	0.58	ug/kg	
108-88-3	Toluene	ND	5.0	0.47	ug/kg	
1330-20-7	Xylene (total)	ND	2.0	1.2	ug/kg	

CAS No.	Surrogate Recoveries	Limits
17060-07-0	1,2-Dichloroethane-D4	99% 59-143%
2037-26-5	Toluene-D8	103% 52-159%
460-00-4	4-Bromofluorobenzene	103% 38-183%

Blank Spike/Blank Spike Duplicate Summary

Job Number: TD16465
Account: ALGC SGS Houston, TX
Project: ENTECTXW: CJES State AB SWD #1/LEA Co,N Mex

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V2H1528-BS1	2H0044097.D	1	02/16/18	NN	n/a	n/a	V2H1528
V2H1528-BSD1	2H0044099.D	1	02/17/18	NN	n/a	n/a	V2H1528

The QC reported here applies to the following samples: Method: SW846 8260B

TD16465-1, TD16465-3, TD16465-4, TD16465-5, TD16465-7

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	BSD ug/kg	BSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	20	19.1	96	18.7	94	2	67-135/30
100-41-4	Ethylbenzene	20	18.3	92	18.8	94	3	69-136/30
108-88-3	Toluene	20	17.9	90	18.0	90	1	71-135/30
1330-20-7	Xylene (total)	60	57.0	95	57.2	95	0	69-138/30

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
17060-07-0	1,2-Dichloroethane-D4	96%	99%	59-143%
2037-26-5	Toluene-D8	99%	100%	52-159%
460-00-4	4-Bromofluorobenzene	104%	104%	38-183%

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: TD16465
Account: ALGC SGS Houston, TX
Project: ENTECTXW: CJES State AB SWD #1/LEA Co,N Mex

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V1H1532-BS1	1H0044165.D	1	02/18/18	PJ	n/a	n/a	V1H1532
V1H1532-BSD1	1H0044166.D	1	02/18/18	PJ	n/a	n/a	V1H1532

The QC reported here applies to the following samples: Method: SW846 8260B

TD16465-2, TD16465-6

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	BSD ug/kg	BSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	20	17.0	85	17.7	89	4	67-135/30
100-41-4	Ethylbenzene	20	17.7	89	17.5	88	1	69-136/30
108-88-3	Toluene	20	17.2	86	17.4	87	1	71-135/30
1330-20-7	Xylene (total)	60	54.0	90	54.9	92	2	69-138/30

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
17060-07-0	1,2-Dichloroethane-D4	96%	98%	59-143%
2037-26-5	Toluene-D8	99%	99%	52-159%
460-00-4	4-Bromofluorobenzene	106%	101%	38-183%

* = Outside of Control Limits.

GC Volatiles**QC Data Summaries**

(SGS Scott, LA)

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Job Number: TD16465
Account: ALGC SGS Houston, TX
Project: ENTECTXW: CJES State AB SWD #1/LEA Co,N Mex

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GLC1644-MB2	LC036412.D	1	02/14/18	MB	n/a	n/a	GLC1644

The QC reported here applies to the following samples: Method: SW846 8015C

TD16465-1, TD16465-2, TD16465-3, TD16465-4, TD16465-5, TD16465-6, TD16465-7

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	5.0	4.9	mg/kg	

CAS No.	Surrogate Recoveries	Limits
460-00-4	4-Bromofluorobenzene	95% 63-139%
540-36-3	1,4-Difluorobenzene	87% 52-140%

8.1.1
8

Blank Spike/Blank Spike Duplicate Summary

Job Number: TD16465
Account: ALGC SGS Houston, TX
Project: ENTECTXW: CJES State AB SWD #1/LEA Co,N Mex

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GLC1644-BS2	LC036410.D	1	02/14/18	MB	n/a	n/a	GLC1644
GLC1644-BSD2	LC036411.D	1	02/14/18	MB	n/a	n/a	GLC1644

The QC reported here applies to the following samples: Method: SW846 8015C

TD16465-1, TD16465-2, TD16465-3, TD16465-4, TD16465-5, TD16465-6, TD16465-7

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	BSD mg/kg	BSD %	RPD	Limits Rec/RPD
	TPH-GRO (C6-C10)	50	47.0	94	46.4	93	1	79-121/6

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
460-00-4	4-Bromofluorobenzene	96%	95%	63-139%
540-36-3	1,4-Difluorobenzene	92%	91%	52-140%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: TD16465
Account: ALGC SGS Houston, TX
Project: ENTECTXW: CJES State AB SWD #1/LEA Co,N Mex

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
TD16465-7MS	LC036437.D	1	02/15/18	MB	n/a	n/a	GLC1644
TD16465-7MSD	LC036438.D	1	02/15/18	MB	n/a	n/a	GLC1644
TD16465-7	LC036421.D	1	02/14/18	MB	n/a	n/a	GLC1644

The QC reported here applies to the following samples: Method: SW846 8015C

TD16465-1, TD16465-2, TD16465-3, TD16465-4, TD16465-5, TD16465-6, TD16465-7

CAS No.	Compound	TD16465-7 mg/kg	Spike Q	MS mg/kg	MS %	Spike mg/kg	MSD mg/kg	MSD %	RPD	Limits Rec/RPD
	TPH-GRO (C6-C10)	5.85	233	202	84	233	199	83	1	79-121/6

CAS No.	Surrogate Recoveries	MS	MSD	TD16465-7	Limits
460-00-4	4-Bromofluorobenzene	98%	97%	98%	63-139%
540-36-3	1,4-Difluorobenzene	94%	93%	89%	52-140%

* = Outside of Control Limits.

GC/LC Semi-volatiles**QC Data Summaries**

(SGS Scott, LA)

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Job Number: TD16465
Account: ALGC SGS Houston, TX
Project: ENTECTXW: CJES State AB SWD #1/LEA Co,N Mex

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP10484-MB	S0004826.D	1	02/14/18	JT	02/14/18	OP10484	GLG614

The QC reported here applies to the following samples: Method: SW846 8015C

TD16465-1, TD16465-2, TD16465-3, TD16465-4, TD16465-5, TD16465-6, TD16465-7

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C22)	2.59	5.0	2.5	mg/kg	J
	TPH (> C22-C36)	ND	5.0	2.5	mg/kg	

CAS No.	Surrogate Recoveries	Limits
84-15-1	o-Terphenyl	76% 31-130%

Blank Spike/Blank Spike Duplicate Summary

Page 1 of 1

Job Number: TD16465

Account: ALGC SGS Houston, TX

Project: ENTECTXW: CJES State AB SWD #1/LEA Co,N Mex

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP10484-BS1	S0004827.D	1	02/14/18	JT	02/14/18	OP10484	GLG614
OP10484-BSD	S0004828.D	1	02/14/18	JT	02/14/18	OP10484	GLG614

The QC reported here applies to the following samples:

Method: SW846 8015C

TD16465-1, TD16465-2, TD16465-3, TD16465-4, TD16465-5, TD16465-6, TD16465-7

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	BSD mg/kg	BSD %	RPD	Limits Rec/RPD
	TPH (C10-C22)	120	111	93	118	98	6	57-119/30

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
84-15-1	o-Terphenyl	75%	77%	31-130%

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Page 1 of 1

Job Number: TD16465

Account: ALGC SGS Houston, TX

Project: ENTECTXW: CJES State AB SWD #1/LEA Co,N Mex

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP10484-BS2	S0004829.D	1	02/14/18	JT	02/14/18	OP10484	GLG614
OP10484-BSD2	S0004830.D	1	02/14/18	JT	02/14/18	OP10484	GLG614

The QC reported here applies to the following samples:

Method: SW846 8015C

TD16465-1, TD16465-2, TD16465-3, TD16465-4, TD16465-5, TD16465-6, TD16465-7

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	BSD mg/kg	BSD %	RPD	Limits Rec/RPD
	TPH (> C22-C36)	150	131	87	130	87	1	55-117/25

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
84-15-1	o-Terphenyl	76%	72%	31-130%

* = Outside of Control Limits.

Matrix Spike Summary

Job Number: TD16465
Account: ALGC SGS Houston, TX
Project: ENTECTXW: CJES State AB SWD #1/LEA Co,N Mex

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP10484-MS1	S0004839.D	1	02/14/18	JT	02/14/18	OP10484	GLG614
TD16439-46A	S0004831.D	1	02/14/18	JT	02/14/18	OP10484	GLG614

The QC reported here applies to the following samples: Method: SW846 8015C

TD16465-1, TD16465-2, TD16465-3, TD16465-4, TD16465-5, TD16465-6, TD16465-7

CAS No.	Compound	TD16439-46Spike mg/kg	Q	MS mg/kg	MS %	Limits
	TPH (C10-C22)	19.4	129	127	84	57-119

CAS No.	Surrogate Recoveries	MS	TD16439-46ALimits
84-15-1	o-Terphenyl	76%	66% 31-130%

* = Outside of Control Limits.

Matrix Spike Summary

Job Number: TD16465
Account: ALGC SGS Houston, TX
Project: ENTECTXW: CJES State AB SWD #1/LEA Co,N Mex

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP10484-MS2	S0004840.D	1	02/14/18	JT	02/14/18	OP10484	GLG614
TD16439-46A	S0004831.D	1	02/14/18	JT	02/14/18	OP10484	GLG614

The QC reported here applies to the following samples: Method: SW846 8015C

TD16465-1, TD16465-2, TD16465-3, TD16465-4, TD16465-5, TD16465-6, TD16465-7

CAS No.	Compound	TD16439-46Spike mg/kg	Q	MS mg/kg	MS %	Limits
	TPH (> C22-C36)	69.1	162	144	46*	55-117

CAS No.	Surrogate Recoveries	MS	TD16439-46ALimits
84-15-1	o-Terphenyl	64%	66% 31-130%

* = Outside of Control Limits.

The results set forth herein are provided by SGS North America Inc.

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Automated Report

Technical Report for

EnTech Consulting Corporation

CJES State AB SWD #1/LEA Co,N Mex

SGS Job Number: TD16466

Sampling Date: 02/08/18


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Total number of pages in report: 107



Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable.


Richard Rodriguez
Laboratory Director

Client Service contact: Sylvia Garza 713-271-4700

Certifications: TX (T104704220-18-28) AR (14-016-0) AZ (AZ0769) FL (E87628)
KS (E-10366) LA (85695/04004) NJ (TX010) OK (2017-002) VA (8999)

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Test results relate only to samples analyzed.

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Sample Summary

EnTech Consulting Corporation**Job No: TD16466****CJES State AB SWD #1/LEA Co,N Mex**

Sample Number	Collected			Received	Matrix		Client Sample ID
	Date	Time	By		Code	Type	
TD16466-1	02/08/18	09:35	PS	02/10/18	SO	Soil	CD-4@6
TD16466-2	02/08/18	09:35	PS	02/10/18	SO	Soil	CD-4@18
TD16466-3	02/08/18	09:35	PS	02/10/18	SO	Soil	CD-4@30
TD16466-4	02/08/18	10:35	PS	02/10/18	SO	Soil	CD-5@6
TD16466-5	02/08/18	10:35	PS	02/10/18	SO	Soil	CD-5@16
TD16466-6	02/08/18	10:35	PS	02/10/18	SO	Soil	CD-5@28
TD16466-7	02/08/18	13:47	PS	02/10/18	SO	Soil	CD-6@6
TD16466-8	02/08/18	13:47	PS	02/10/18	SO	Soil	CD-6@8
TD16466-9	02/08/18	13:58	PS	02/10/18	SO	Soil	CD-7@6
TD16466-10	02/08/18	13:58	PS	02/10/18	SO	Soil	CD-7@8
TD16466-11	02/08/18	10:16	PS	02/10/18	SO	Soil	D-17@6
TD16466-12	02/08/18	10:16	PS	02/10/18	SO	Soil	D-17@16
TD16466-13	02/08/18	11:00	PS	02/10/18	SO	Soil	D-18@6

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

Sample Summary

(continued)

EnTech Consulting Corporation

Job No: TD16466

CJES State AB SWD #1/LEA Co,N Mex

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
TD16466-14	02/08/18	11:00 PS	02/10/18	SO	Soil	D-18@24
TD16466-15	02/08/18	11:00 PS	02/10/18	SO	Soil	D-18@28
TD16466-15R	02/08/18	11:00 PS	02/10/18	SO	Soil	D-18@28
TD16466-16	02/08/18	11:11 PS	02/10/18	SO	Soil	D-19@6
TD16466-17	02/08/18	11:11 PS	02/10/18	SO	Soil	D-19@18
TD16466-18	02/08/18	11:11 PS	02/10/18	SO	Soil	D-19@30
TD16466-18A	02/08/18	11:11 PS	02/10/18	SO	Soil	D-19@30
TD16466-19	02/08/18	12:53 PS	02/10/18	SO	Soil	D-20@6
TD16466-20	02/08/18	12:53 PS	02/10/18	SO	Soil	D-20@13
TD16466-21	02/08/18	13:02 PS	02/10/18	SO	Soil	D-21@6
TD16466-22	02/08/18	13:02 PS	02/10/18	SO	Soil	D-21@13
TD16466-23	02/08/18	00:00 PS	02/10/18	SO	Soil	DUP-9
TD16466-24	02/08/18	00:00 PS	02/10/18	SO	Soil	DUP-10

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

Summary of Hits

Job Number: TD16466
Account: EnTech Consulting Corporation
Project: CJES State AB SWD #1/LEA Co,N Mex
Collected: 02/08/18

Lab Sample ID	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
TD16466-1	CD-4@6					
TPH-GRO (C6-C10) ^a		5.75	5.7	5.6	mg/kg	SW846 8015C
TPH (C10-C22) ^a		2.82 J	5.2	2.6	mg/kg	SW846 8015C
TPH (> C22-C36) ^a		6.69	5.2	2.6	mg/kg	SW846 8015C
Chloride		78.6	5.3		mg/kg	EPA 300.0
TD16466-2	CD-4@18					
TPH-GRO (C6-C10) ^a		6.60	6.1	6.0	mg/kg	SW846 8015C
TPH (C10-C22) ^a		3.39 J	5.5	2.7	mg/kg	SW846 8015C
TPH (> C22-C36) ^a		6.42	5.5	2.7	mg/kg	SW846 8015C
Chloride		84.8	5.6		mg/kg	EPA 300.0
TD16466-4	CD-5@6					
TPH-GRO (C6-C10) ^a		7.20	6.5	6.4	mg/kg	SW846 8015C
TPH (C10-C22) ^a		4.41 J	5.5	2.8	mg/kg	SW846 8015C
TPH (> C22-C36) ^a		25.1	5.5	2.8	mg/kg	SW846 8015C
Chloride		191	11		mg/kg	EPA 300.0
TD16466-5	CD-5@16					
TPH-GRO (C6-C10) ^a		6.69	6.5	6.4	mg/kg	SW846 8015C
TPH (> C22-C36) ^a		4.08 J	5.8	2.9	mg/kg	SW846 8015C
Chloride		44.2	5.9		mg/kg	EPA 300.0
TD16466-7	CD-6@6					
TPH-GRO (C6-C10) ^a		5.64	5.6	5.5	mg/kg	SW846 8015C
TPH (> C22-C36) ^a		3.36 J	5.4	2.7	mg/kg	SW846 8015C
Chloride		25.7	5.4		mg/kg	EPA 300.0
TD16466-8	CD-6@8					
TPH (C10-C22) ^a		3.92 J	6.1	3.1	mg/kg	SW846 8015C
Chloride		80.8	6.3		mg/kg	EPA 300.0
TD16466-9	CD-7@6					
TPH (C10-C22) ^a		4.19 J	5.2	2.6	mg/kg	SW846 8015C
TPH (> C22-C36) ^a		4.85 J	5.2	2.6	mg/kg	SW846 8015C
Chloride		38.9	5.2		mg/kg	EPA 300.0

Summary of Hits

Job Number: TD16466
 Account: EnTech Consulting Corporation
 Project: CJES State AB SWD #1/LEA Co,N Mex
 Collected: 02/08/18

Lab Sample ID	Client Sample ID	Result/ Analyte	RL	MDL	Units	Method
TD16466-10	CD-7@8					
		TPH (C10-C22) ^a	7.04	5.2	2.6	mg/kg SW846 8015C
		TPH (> C22-C36) ^a	8.36	5.2	2.6	mg/kg SW846 8015C
		Chloride	210	10		mg/kg EPA 300.0
TD16466-11	D-17@6					
		TPH (C10-C22) ^a	5.63 J	5.9	3.0	mg/kg SW846 8015C
		TPH (> C22-C36) ^a	14.7	5.9	3.0	mg/kg SW846 8015C
		Chloride	355	30		mg/kg EPA 300.0
TD16466-12	D-17@16					
		TPH (C10-C22) ^a	43.7	5.4	2.7	mg/kg SW846 8015C
		TPH (> C22-C36) ^a	154	5.4	2.7	mg/kg SW846 8015C
		Chloride	260	27		mg/kg EPA 300.0
TD16466-13	D-18@6					
		TPH (C10-C22) ^a	8.87	5.5	2.7	mg/kg SW846 8015C
		TPH (> C22-C36) ^a	26.5	5.5	2.7	mg/kg SW846 8015C
		Chloride	600	55		mg/kg EPA 300.0
TD16466-14	D-18@24					
		TPH (C10-C22) ^a	12.8	5.7	2.8	mg/kg SW846 8015C
		TPH (> C22-C36) ^a	33.8	5.7	2.8	mg/kg SW846 8015C
		Chloride	838	57		mg/kg EPA 300.0
TD16466-15R	D-18@28					
		Chloride	197	6.2		mg/kg EPA 300.0
TD16466-16	D-19@6					
		TPH (C10-C22) ^a	83.9	5.5	2.8	mg/kg SW846 8015C
		TPH (> C22-C36) ^a	300	5.5	2.8	mg/kg SW846 8015C
		Chloride	222	11		mg/kg EPA 300.0
TD16466-17	D-19@18					
		TPH (C10-C22) ^a	26.6	5.1	2.6	mg/kg SW846 8015C
		TPH (> C22-C36) ^a	107	5.1	2.6	mg/kg SW846 8015C
		Chloride	308	26		mg/kg EPA 300.0

Summary of Hits

Job Number: TD16466
 Account: EnTech Consulting Corporation
 Project: CJES State AB SWD #1/LEA Co,N Mex
 Collected: 02/08/18

Lab Sample ID	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
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TD16466-18A D-19@30

TPH (C10-C22) ^a	12.4	5.1	2.5	mg/kg	SW846 8015C
TPH (> C22-C36) ^a	39.8	5.1	2.5	mg/kg	SW846 8015C

TD16466-19 D-20@6

TPH (C10-C22) ^a	3.70 J	5.5	2.8	mg/kg	SW846 8015C
TPH (> C22-C36) ^a	3.80 J	5.5	2.8	mg/kg	SW846 8015C
Chloride	80.2	5.6		mg/kg	EPA 300.0

TD16466-20 D-20@13

TPH (C10-C22) ^a	7.30	6.0	3.0	mg/kg	SW846 8015C
TPH (> C22-C36) ^a	16.9	6.0	3.0	mg/kg	SW846 8015C
Chloride	158	6.0		mg/kg	EPA 300.0

TD16466-21 D-21@6

TPH (C10-C22) ^a	6.51	6.0	3.0	mg/kg	SW846 8015C
TPH (> C22-C36) ^a	14.7	6.0	3.0	mg/kg	SW846 8015C
Chloride	66.9	6.0		mg/kg	EPA 300.0

TD16466-22 D-21@13

TPH (C10-C22) ^a	5.57 J	6.1	3.0	mg/kg	SW846 8015C
TPH (> C22-C36) ^a	11.0	6.1	3.0	mg/kg	SW846 8015C
Chloride	85.2	6.1		mg/kg	EPA 300.0

TD16466-23 DUP-9

TPH (C10-C22) ^a	6.59	5.4	2.7	mg/kg	SW846 8015C
TPH (> C22-C36) ^a	20.7	5.4	2.7	mg/kg	SW846 8015C
Chloride	692	54		mg/kg	EPA 300.0

TD16466-24 DUP-10

TPH (C10-C22) ^a	12.6	5.6	2.8	mg/kg	SW846 8015C
TPH (> C22-C36) ^a	48.1	5.6	2.8	mg/kg	SW846 8015C

(a) Analysis performed at SGS Scott, LA.



Houston, TX

Section 3



Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	CD-4@6	Date Sampled:	02/08/18
Lab Sample ID:	TD16466-1	Date Received:	02/10/18
Matrix:	SO - Soil	Percent Solids:	93.6
Method:	SW846 8015C SW846 5035		
Project:	CJES State AB SWD #1/LEA Co,N Mex		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	LC036422.D	1	02/14/18 18:03	ALA	02/10/18 17:00	n/a	L:GLC1644
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.00 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	5.75	5.7	5.6	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	93%		63-139%
540-36-3	1,4-Difluorobenzene	87%		52-140%

(a) Analysis performed at SGS Scott, LA.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CD-4@6	
Lab Sample ID:	TD16466-1	Date Sampled: 02/08/18
Matrix:	SO - Soil	Date Received: 02/10/18
Method:	SW846 8015C SW846 3546	Percent Solids: 93.6
Project:	CJES State AB SWD #1/LEA Co,N Mex	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	S0004843.D	1	02/14/18 22:32	ALA	02/14/18 08:00	L:OP10484	L:GLG614
Run #2							

Run #	Initial Weight	Final Volume
Run #1	20.4 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C22)	2.82	5.2	2.6	mg/kg	J
	TPH (> C22-C36)	6.69	5.2	2.6	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	58%		31-130%

(a) Analysis performed at SGS Scott, LA.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CD-4@6	Date Sampled:	02/08/18
Lab Sample ID:	TD16466-1	Date Received:	02/10/18
Matrix:	SO - Soil	Percent Solids:	93.6
Project:	CJES State AB SWD #1/LEA Co,N Mex		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	78.6	5.3	mg/kg	1	02/20/18 13:06	LR	EPA 300.0
Solids, Percent	93.6		%	1	02/12/18	TH	SM 2540 G

RL = Reporting Limit

Report of Analysis

Client Sample ID:	CD-4@18	Date Sampled:	02/08/18
Lab Sample ID:	TD16466-2	Date Received:	02/10/18
Matrix:	SO - Soil	Percent Solids:	89.2
Method:	SW846 8015C SW846 5035		
Project:	CJES State AB SWD #1/LEA Co,N Mex		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	LC036423.D	1	02/14/18 18:34	ALA	02/10/18 17:00	n/a	L:GLC1644
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.10 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	6.60	6.1	6.0	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
460-00-4	4-Bromofluorobenzene	96%		63-139%		
540-36-3	1,4-Difluorobenzene	89%		52-140%		

(a) Analysis performed at SGS Scott, LA.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CD-4@18	
Lab Sample ID:	TD16466-2	Date Sampled: 02/08/18
Matrix:	SO - Soil	Date Received: 02/10/18
Method:	SW846 8015C SW846 3546	Percent Solids: 89.2
Project:	CJES State AB SWD #1/LEA Co,N Mex	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	S0004844.D	1	02/14/18 22:54	ALA	02/14/18 08:00	L:OP10484	L:GLG614
Run #2							

Run #	Initial Weight	Final Volume
Run #1	20.4 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C22)	3.39	5.5	2.7	mg/kg	J
	TPH (> C22-C36)	6.42	5.5	2.7	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	70%		31-130%

(a) Analysis performed at SGS Scott, LA.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CD-4@18	Date Sampled:	02/08/18
Lab Sample ID:	TD16466-2	Date Received:	02/10/18
Matrix:	SO - Soil	Percent Solids:	89.2
Project:	CJES State AB SWD #1/LEA Co,N Mex		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	84.8	5.6	mg/kg	1	02/20/18 13:22	LR	EPA 300.0
Solids, Percent	89.2		%	1	02/12/18	TH	SM 2540 G

RL = Reporting Limit

Report of Analysis

Client Sample ID:	CD-5@6	
Lab Sample ID:	TD16466-4	Date Sampled: 02/08/18
Matrix:	SO - Soil	Date Received: 02/10/18
Method:	SW846 8015C SW846 5035	Percent Solids: 88.9
Project:	CJES State AB SWD #1/LEA Co,N Mex	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	LC036425.D	1	02/14/18 19:36	ALA	02/10/18 17:00	n/a	L:GLC1644
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	4.80 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	7.20	6.5	6.4	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	94%		63-139%
540-36-3	1,4-Difluorobenzene	89%		52-140%

(a) Analysis performed at SGS Scott, LA.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CD-5@6	
Lab Sample ID:	TD16466-4	Date Sampled: 02/08/18
Matrix:	SO - Soil	Date Received: 02/10/18
Method:	SW846 8015C SW846 3546	Percent Solids: 88.9
Project:	CJES State AB SWD #1/LEA Co,N Mex	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	S0004845.D	1	02/14/18 23:17	ALA	02/14/18 08:00	L:OP10484	L:GLG614
Run #2							

Run #	Initial Weight	Final Volume
Run #1	20.4 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C22)	4.41	5.5	2.8	mg/kg	J
	TPH (> C22-C36)	25.1	5.5	2.8	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	50%		31-130%

(a) Analysis performed at SGS Scott, LA.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CD-5@6	Date Sampled:	02/08/18
Lab Sample ID:	TD16466-4	Date Received:	02/10/18
Matrix:	SO - Soil	Percent Solids:	88.9
Project:	CJES State AB SWD #1/LEA Co,N Mex		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	191	11	mg/kg	2	02/20/18 14:26	LR	EPA 300.0
Solids, Percent	88.9		%	1	02/12/18	TH	SM 2540 G

RL = Reporting Limit

Report of Analysis

Client Sample ID:	CD-5@16	Date Sampled:	02/08/18
Lab Sample ID:	TD16466-5	Date Received:	02/10/18
Matrix:	SO - Soil	Percent Solids:	84.7
Method:	SW846 8015C SW846 5035		
Project:	CJES State AB SWD #1/LEA Co,N Mex		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	LC036426.D	1	02/14/18 20:07	ALA	02/10/18 17:00	n/a	L:GLC1644
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.30 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	6.69	6.5	6.4	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	92%		63-139%
540-36-3	1,4-Difluorobenzene	87%		52-140%

(a) Analysis performed at SGS Scott, LA.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CD-5@16	Date Sampled:	02/08/18
Lab Sample ID:	TD16466-5	Date Received:	02/10/18
Matrix:	SO - Soil	Percent Solids:	84.7
Method:	SW846 8015C SW846 3546		
Project:	CJES State AB SWD #1/LEA Co,N Mex		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	S0004846.D	1	02/14/18 23:37	ALA	02/14/18 08:00	L:OP10484	L:GLG614
Run #2							

Run #	Initial Weight	Final Volume
Run #1	20.3 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C22)	ND	5.8	2.9	mg/kg	
	TPH (> C22-C36)	4.08	5.8	2.9	mg/kg	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	58%		31-130%

(a) Analysis performed at SGS Scott, LA.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CD-5@16	Date Sampled:	02/08/18
Lab Sample ID:	TD16466-5	Date Received:	02/10/18
Matrix:	SO - Soil	Percent Solids:	84.7
Project:	CJES State AB SWD #1/LEA Co,N Mex		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	44.2	5.9	mg/kg	1	02/20/18 13:38	LR	EPA 300.0
Solids, Percent	84.7		%	1	02/12/18	TH	SM 2540 G

RL = Reporting Limit

Report of Analysis

Client Sample ID:	CD-6@6	Date Sampled:	02/08/18
Lab Sample ID:	TD16466-7	Date Received:	02/10/18
Matrix:	SO - Soil	Percent Solids:	91.7
Method:	SW846 8015C SW846 5035		
Project:	CJES State AB SWD #1/LEA Co,N Mex		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	LC036428.D	1	02/14/18 21:08	ALA	02/10/18 17:00	n/a	L:GLC1644
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.30 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	5.64	5.6	5.5	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	95%		63-139%
540-36-3	1,4-Difluorobenzene	89%		52-140%

(a) Analysis performed at SGS Scott, LA.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CD-6@6	Date Sampled:	02/08/18
Lab Sample ID:	TD16466-7	Date Received:	02/10/18
Matrix:	SO - Soil	Percent Solids:	91.7
Method:	SW846 8015C SW846 3546		
Project:	CJES State AB SWD #1/LEA Co,N Mex		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	S0004847.D	1	02/14/18 23:58	ALA	02/14/18 08:00	L:OP10484	L:GLG614
Run #2							

Run #	Initial Weight	Final Volume
Run #1	20.2 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C22)	ND	5.4	2.7	mg/kg	
	TPH (> C22-C36)	3.36	5.4	2.7	mg/kg	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	33%		31-130%

(a) Analysis performed at SGS Scott, LA.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CD-6@6	Date Sampled:	02/08/18
Lab Sample ID:	TD16466-7	Date Received:	02/10/18
Matrix:	SO - Soil	Percent Solids:	91.7
Project:	CJES State AB SWD #1/LEA Co,N Mex		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	25.7	5.4	mg/kg	1	02/20/18 15:14	LR	EPA 300.0
Solids, Percent	91.7		%	1	02/12/18	TH	SM 2540 G

RL = Reporting Limit

Report of Analysis

Client Sample ID:	CD-6@8	Date Sampled:	02/08/18
Lab Sample ID:	TD16466-8	Date Received:	02/10/18
Matrix:	SO - Soil	Percent Solids:	79.5
Method:	SW846 8015C SW846 5035		
Project:	CJES State AB SWD #1/LEA Co,N Mex		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	LC036431.D	1	02/14/18 22:40	ALA	02/10/18 17:00	n/a	L:GLC1644
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.40 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	7.1	7.0	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
460-00-4	4-Bromofluorobenzene	103%		63-139%		
540-36-3	1,4-Difluorobenzene	93%		52-140%		

(a) Analysis performed at SGS Scott, LA.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CD-6@8	
Lab Sample ID:	TD16466-8	Date Sampled: 02/08/18
Matrix:	SO - Soil	Date Received: 02/10/18
Method:	SW846 8015C SW846 3546	Percent Solids: 79.5
Project:	CJES State AB SWD #1/LEA Co,N Mex	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	S0004848.D	1	02/15/18 00:18	ALA	02/14/18 08:00	L:OP10484	L:GLG614
Run #2							

Run #	Initial Weight	Final Volume
Run #1	20.5 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C22)	3.92	6.1	3.1	mg/kg	J
	TPH (> C22-C36)	ND	6.1	3.1	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	83%		31-130%

(a) Analysis performed at SGS Scott, LA.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CD-6@8	Date Sampled:	02/08/18
Lab Sample ID:	TD16466-8	Date Received:	02/10/18
Matrix:	SO - Soil	Percent Solids:	79.5
Project:	CJES State AB SWD #1/LEA Co,N Mex		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	80.8	6.3	mg/kg	1	02/20/18 16:01	LR	EPA 300.0
Solids, Percent	79.5		%	1	02/12/18	TH	SM 2540 G

RL = Reporting Limit

Report of Analysis

Client Sample ID:	CD-7@6	Date Sampled:	02/08/18
Lab Sample ID:	TD16466-9	Date Received:	02/10/18
Matrix:	SO - Soil	Percent Solids:	95.1
Method:	SW846 8015C SW846 5035		
Project:	CJES State AB SWD #1/LEA Co,N Mex		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	LC036432.D	1	02/14/18 23:11	ALA	02/10/18 17:00	n/a	L:GLC1644
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	4.60 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	6.0	5.9	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
460-00-4	4-Bromofluorobenzene	97%		63-139%		
540-36-3	1,4-Difluorobenzene	90%		52-140%		

(a) Analysis performed at SGS Scott, LA.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CD-7@6	Date Sampled:	02/08/18
Lab Sample ID:	TD16466-9	Date Received:	02/10/18
Matrix:	SO - Soil	Percent Solids:	95.1
Method:	SW846 8015C SW846 3546		
Project:	CJES State AB SWD #1/LEA Co,N Mex		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	S0004852.D	1	02/15/18 01:41	ALA	02/14/18 08:00	L:OP10484	L:GLG614
Run #2							

Run #	Initial Weight	Final Volume
Run #1	20.1 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C22)	4.19	5.2	2.6	mg/kg	J
	TPH (> C22-C36)	4.85	5.2	2.6	mg/kg	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	83%		31-130%

(a) Analysis performed at SGS Scott, LA.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CD-7@6	Date Sampled:	02/08/18
Lab Sample ID:	TD16466-9	Date Received:	02/10/18
Matrix:	SO - Soil	Percent Solids:	95.1
Project:	CJES State AB SWD #1/LEA Co,N Mex		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	38.9	5.2	mg/kg	1	02/20/18 16:17	LR	EPA 300.0
Solids, Percent	95.1		%	1	02/12/18	TH	SM 2540 G

RL = Reporting Limit

Report of Analysis

Client Sample ID:	CD-7@8	
Lab Sample ID:	TD16466-10	Date Sampled: 02/08/18
Matrix:	SO - Soil	Date Received: 02/10/18
Method:	SW846 8015C SW846 5035	Percent Solids: 95.4
Project:	CJES State AB SWD #1/LEA Co,N Mex	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	LC036433.D	1	02/14/18 23:42	ALA	02/10/18 17:00	n/a	L:GLC1644
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	4.80 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	5.7	5.6	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	94%		63-139%
540-36-3	1,4-Difluorobenzene	90%		52-140%

(a) Analysis performed at SGS Scott, LA.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CD-7@8	
Lab Sample ID:	TD16466-10	Date Sampled: 02/08/18
Matrix:	SO - Soil	Date Received: 02/10/18
Method:	SW846 8015C SW846 3546	Percent Solids: 95.4
Project:	CJES State AB SWD #1/LEA Co,N Mex	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	S0004853.D	1	02/15/18 02:02	ALA	02/14/18 08:00	L:OP10484	L:GLG614
Run #2							

Run #	Initial Weight	Final Volume
Run #1	20.3 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C22)	7.04	5.2	2.6	mg/kg	
	TPH (> C22-C36)	8.36	5.2	2.6	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	73%		31-130%

(a) Analysis performed at SGS Scott, LA.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CD-7@8	Date Sampled:	02/08/18
Lab Sample ID:	TD16466-10	Date Received:	02/10/18
Matrix:	SO - Soil	Percent Solids:	95.4
Project:	CJES State AB SWD #1/LEA Co,N Mex		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	210	10	mg/kg	2	02/20/18 16:33	LR	EPA 300.0
Solids, Percent	95.4		%	1	02/12/18	TH	SM 2540 G

RL = Reporting Limit

Report of Analysis

Client Sample ID:	D-17@6	
Lab Sample ID:	TD16466-11	Date Sampled: 02/08/18
Matrix:	SO - Soil	Date Received: 02/10/18
Method:	SW846 8015C SW846 5035	Percent Solids: 84.3
Project:	CJES State AB SWD #1/LEA Co,N Mex	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	LC036434.D	1	02/15/18 00:13	ALA	02/10/18 17:00	n/a	L:GLC1644
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.00 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	6.9	6.8	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	94%		63-139%
540-36-3	1,4-Difluorobenzene	88%		52-140%

(a) Analysis performed at SGS Scott, LA.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	D-17@6	
Lab Sample ID:	TD16466-11	Date Sampled: 02/08/18
Matrix:	SO - Soil	Date Received: 02/10/18
Method:	SW846 8015C SW846 3546	Percent Solids: 84.3
Project:	CJES State AB SWD #1/LEA Co,N Mex	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	S0004854.D	1	02/15/18 02:23	ALA	02/14/18 08:00	L:OP10484	L:GLG614
Run #2							

Run #	Initial Weight	Final Volume
Run #1	20.1 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C22)	5.63	5.9	3.0	mg/kg	J
	TPH (> C22-C36)	14.7	5.9	3.0	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	86%		31-130%

(a) Analysis performed at SGS Scott, LA.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	D-17@6	Date Sampled:	02/08/18
Lab Sample ID:	TD16466-11	Date Received:	02/10/18
Matrix:	SO - Soil	Percent Solids:	84.3
Project:	CJES State AB SWD #1/LEA Co,N Mex		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	355	30	mg/kg	5	02/20/18 16:49	LR	EPA 300.0
Solids, Percent	84.3		%	1	02/12/18	TH	SM 2540 G

RL = Reporting Limit

Report of Analysis

Client Sample ID:	D-17@16	
Lab Sample ID:	TD16466-12	Date Sampled: 02/08/18
Matrix:	SO - Soil	Date Received: 02/10/18
Method:	SW846 8015C SW846 5035	Percent Solids: 92.1
Project:	CJES State AB SWD #1/LEA Co,N Mex	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	LC036435.D	1	02/15/18 00:44	ALA	02/10/18 17:00	n/a	L:GLC1644
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	4.50 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	6.5	6.4	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	99%		63-139%
540-36-3	1,4-Difluorobenzene	93%		52-140%

(a) Analysis performed at SGS Scott, LA.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	D-17@16	
Lab Sample ID:	TD16466-12	Date Sampled: 02/08/18
Matrix:	SO - Soil	Date Received: 02/10/18
Method:	SW846 8015C SW846 3546	Percent Solids: 92.1
Project:	CJES State AB SWD #1/LEA Co,N Mex	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	S0004855.D	1	02/15/18 02:45	ALA	02/14/18 08:00	L:OP10484	L:GLG614
Run #2							

Run #	Initial Weight	Final Volume
Run #1	20.0 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C22)	43.7	5.4	2.7	mg/kg	
	TPH (> C22-C36)	154	5.4	2.7	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	79%		31-130%

(a) Analysis performed at SGS Scott, LA.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	D-17@16	Date Sampled:	02/08/18
Lab Sample ID:	TD16466-12	Date Received:	02/10/18
Matrix:	SO - Soil	Percent Solids:	92.1
Project:	CJES State AB SWD #1/LEA Co,N Mex		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	260	27	mg/kg	5	02/20/18 17:05	LR	EPA 300.0
Solids, Percent	92.1		%	1	02/12/18	TH	SM 2540 G

RL = Reporting Limit

Report of Analysis

Client Sample ID:	D-18@6	
Lab Sample ID:	TD16466-13	Date Sampled: 02/08/18
Matrix:	SO - Soil	Date Received: 02/10/18
Method:	SW846 8015C SW846 5035	Percent Solids: 90.5
Project:	CJES State AB SWD #1/LEA Co,N Mex	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	LC036436.D	1	02/15/18 01:15	ALA	02/10/18 17:00	n/a	L:GLC1644
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	4.50 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	6.7	6.6	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
460-00-4	4-Bromofluorobenzene	97%		63-139%		
540-36-3	1,4-Difluorobenzene	91%		52-140%		

(a) Analysis performed at SGS Scott, LA.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	D-18@6	
Lab Sample ID:	TD16466-13	Date Sampled: 02/08/18
Matrix:	SO - Soil	Date Received: 02/10/18
Method:	SW846 8015C SW846 3546	Percent Solids: 90.5
Project:	CJES State AB SWD #1/LEA Co,N Mex	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	S0004856.D	1	02/15/18 03:07	ALA	02/14/18 08:00	L:OP10484	L:GLG614
Run #2							

Run #	Initial Weight	Final Volume
Run #1	20.1 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C22)	8.87	5.5	2.7	mg/kg	
	TPH (> C22-C36)	26.5	5.5	2.7	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	81%		31-130%

(a) Analysis performed at SGS Scott, LA.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	D-18@6	Date Sampled:	02/08/18
Lab Sample ID:	TD16466-13	Date Received:	02/10/18
Matrix:	SO - Soil	Percent Solids:	90.5
Project:	CJES State AB SWD #1/LEA Co,N Mex		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	600	55	mg/kg	10	02/20/18 17:21	LR	EPA 300.0
Solids, Percent	90.5		%	1	02/12/18	TH	SM 2540 G

RL = Reporting Limit

Report of Analysis

Client Sample ID:	D-18@24	
Lab Sample ID:	TD16466-14	Date Sampled: 02/08/18
Matrix:	SO - Soil	Date Received: 02/10/18
Method:	SW846 8015C SW846 5035	Percent Solids: 87.5
Project:	CJES State AB SWD #1/LEA Co,N Mex	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	LA286312.D	1	02/14/18 23:11	ALA	02/10/18 17:00	n/a	L:GLA1690
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.20 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	6.2	6.1	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	97%		63-139%
540-36-3	1,4-Difluorobenzene	95%		52-140%

(a) Analysis performed at SGS Scott, LA.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	D-18@24	
Lab Sample ID:	TD16466-14	Date Sampled: 02/08/18
Matrix:	SO - Soil	Date Received: 02/10/18
Method:	SW846 8015C SW846 3546	Percent Solids: 87.5
Project:	CJES State AB SWD #1/LEA Co,N Mex	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	S0004875.D	1	02/15/18 11:56	ALA	02/14/18 08:00	L:OP10485	L:GLG615
Run #2							

Run #	Initial Weight	Final Volume
Run #1	20.1 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C22)	12.8	5.7	2.8	mg/kg	
	TPH (> C22-C36)	33.8	5.7	2.8	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	78%		31-130%

(a) Analysis performed at SGS Scott, LA.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	D-18@24	Date Sampled:	02/08/18
Lab Sample ID:	TD16466-14	Date Received:	02/10/18
Matrix:	SO - Soil	Percent Solids:	87.5
Project:	CJES State AB SWD #1/LEA Co,N Mex		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	838	57	mg/kg	10	02/20/18 17:37	LR	EPA 300.0
Solids, Percent	87.5		%	1	02/12/18	TH	SM 2540 G

RL = Reporting Limit

Report of Analysis

Client Sample ID:	D-18@28	Date Sampled:	02/08/18
Lab Sample ID:	TD16466-15R	Date Received:	02/10/18
Matrix:	SO - Soil	Percent Solids:	80.3
Project:	CJES State AB SWD #1/LEA Co,N Mex		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	197	6.2	mg/kg	1	03/03/18 18:56	LR	EPA 300.0
Solids, Percent	80.3		%	1	02/28/18	PA	SM 2540 G

RL = Reporting Limit

Report of Analysis

Client Sample ID:	D-19@6	Date Sampled:	02/08/18
Lab Sample ID:	TD16466-16	Date Received:	02/10/18
Matrix:	SO - Soil	Percent Solids:	89.3
Method:	SW846 8015C SW846 5035		
Project:	CJES State AB SWD #1/LEA Co,N Mex		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	LA286316.D	1	02/14/18 23:57	ALA	02/10/18 17:00	n/a	L:GLA1690
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.40 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	5.8	5.7	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	98%		63-139%
540-36-3	1,4-Difluorobenzene	97%		52-140%

(a) Analysis performed at SGS Scott, LA.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	D-19@6						
Lab Sample ID:	TD16466-16					Date Sampled:	02/08/18
Matrix:	SO - Soil					Date Received:	02/10/18
Method:	SW846 8015C SW846 3546					Percent Solids:	89.3
Project:	CJES State AB SWD #1/LEA Co,N Mex						

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	S0004876.D	1	02/15/18 12:17	ALA	02/14/18 08:00	L:OP10485	L:GLG615
Run #2							

	Initial Weight	Final Volume
Run #1	20.2 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C22)	83.9	5.5	2.8	mg/kg	
	TPH (> C22-C36)	300	5.5	2.8	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	90%		31-130%

(a) Analysis performed at SGS Scott, LA.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	D-19@6	Date Sampled:	02/08/18
Lab Sample ID:	TD16466-16	Date Received:	02/10/18
Matrix:	SO - Soil	Percent Solids:	89.3
Project:	CJES State AB SWD #1/LEA Co,N Mex		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	222	11	mg/kg	2	02/20/18 19:12	LR	EPA 300.0
Solids, Percent	89.3		%	1	02/12/18	TH	SM 2540 G

RL = Reporting Limit

Report of Analysis

Client Sample ID:	D-19@18	
Lab Sample ID:	TD16466-17	Date Sampled: 02/08/18
Matrix:	SO - Soil	Date Received: 02/10/18
Method:	SW846 8015C SW846 5035	Percent Solids: 95.1
Project:	CJES State AB SWD #1/LEA Co,N Mex	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	LA286318.D	1	02/15/18 00:19	ALA	02/10/18 17:00	n/a	L:GLA1690
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.60 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	5.0	4.9	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
460-00-4	4-Bromofluorobenzene	98%		63-139%		
540-36-3	1,4-Difluorobenzene	97%		52-140%		

(a) Analysis performed at SGS Scott, LA.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	D-19@18	
Lab Sample ID:	TD16466-17	Date Sampled: 02/08/18
Matrix:	SO - Soil	Date Received: 02/10/18
Method:	SW846 8015C SW846 3546	Percent Solids: 95.1
Project:	CJES State AB SWD #1/LEA Co,N Mex	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	S0004877.D	1	02/15/18 12:37	ALA	02/14/18 08:00	L:OP10485	L:GLG615
Run #2							

Run #	Initial Weight	Final Volume
Run #1	20.5 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C22)	26.6	5.1	2.6	mg/kg	
	TPH (> C22-C36)	107	5.1	2.6	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	74%		31-130%

(a) Analysis performed at SGS Scott, LA.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	D-19@18	Date Sampled:	02/08/18
Lab Sample ID:	TD16466-17	Date Received:	02/10/18
Matrix:	SO - Soil	Percent Solids:	95.1
Project:	CJES State AB SWD #1/LEA Co,N Mex		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	308	26	mg/kg	5	02/20/18 17:52	LR	EPA 300.0
Solids, Percent	95.1		%	1	02/12/18	TH	SM 2540 G

RL = Reporting Limit

Report of Analysis

Client Sample ID:	D-19@30	Date Sampled:	02/08/18
Lab Sample ID:	TD16466-18A	Date Received:	02/10/18
Matrix:	SO - Soil	Percent Solids:	96.5
Method:	SW846 8015C		
Project:	CJES State AB SWD #1/LEA Co,N Mex		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	LC036628.D	1	02/22/18 12:16	ALA	n/a	n/a	L:GLC1651
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	4.70 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	5.7	5.6	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	98%		63-139%
540-36-3	1,4-Difluorobenzene	87%		52-140%

(a) Analysis performed at SGS Scott, LA.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	D-19@30	
Lab Sample ID:	TD16466-18A	Date Sampled: 02/08/18
Matrix:	SO - Soil	Date Received: 02/10/18
Method:	SW846 8015C SW846 3546	Percent Solids: 96.5
Project:	CJES State AB SWD #1/LEA Co,N Mex	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	S0005083.D	1	02/22/18 19:11	ALA	02/22/18 08:00	L:OP10567	L:GLG620
Run #2							

Run #	Initial Weight	Final Volume
Run #1	20.4 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C22)	12.4	5.1	2.5	mg/kg	
	TPH (> C22-C36)	39.8	5.1	2.5	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	88%		31-130%

(a) Analysis performed at SGS Scott, LA.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	D-20@6	
Lab Sample ID:	TD16466-19	Date Sampled: 02/08/18
Matrix:	SO - Soil	Date Received: 02/10/18
Method:	SW846 8015C SW846 5035	Percent Solids: 88.5
Project:	CJES State AB SWD #1/LEA Co,N Mex	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	LA286322.D	1	02/15/18 01:05	ALA	02/10/18 17:00	n/a	L:GLA1690
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.00 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	6.3	6.2	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	97%		63-139%
540-36-3	1,4-Difluorobenzene	95%		52-140%

(a) Analysis performed at SGS Scott, LA.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	D-20@6	
Lab Sample ID:	TD16466-19	Date Sampled: 02/08/18
Matrix:	SO - Soil	Date Received: 02/10/18
Method:	SW846 8015C SW846 3546	Percent Solids: 88.5
Project:	CJES State AB SWD #1/LEA Co,N Mex	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	S0004881.D	1	02/15/18 14:00	ALA	02/14/18 08:00	L:OP10485	L:GLG615
Run #2							

Run #	Initial Weight	Final Volume
Run #1	20.4 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C22)	3.70	5.5	2.8	mg/kg	J
	TPH (> C22-C36)	3.80	5.5	2.8	mg/kg	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	71%		31-130%

(a) Analysis performed at SGS Scott, LA.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	D-20@6	Date Sampled:	02/08/18
Lab Sample ID:	TD16466-19	Date Received:	02/10/18
Matrix:	SO - Soil	Percent Solids:	88.5
Project:	CJES State AB SWD #1/LEA Co,N Mex		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	80.2	5.6	mg/kg	1	02/20/18 20:00	LR	EPA 300.0
Solids, Percent	88.5		%	1	02/12/18	TH	SM 2540 G

RL = Reporting Limit

Report of Analysis

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3.18

3

Client Sample ID:	D-20@13	
Lab Sample ID:	TD16466-20	Date Sampled: 02/08/18
Matrix:	SO - Soil	Date Received: 02/10/18
Method:	SW846 8015C SW846 5035	Percent Solids: 83.0
Project:	CJES State AB SWD #1/LEA Co,N Mex	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	LA286328.D	1	02/15/18 02:13	ALA	02/10/18 17:00	n/a	L:GLA1690
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.10 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	6.9	6.8	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	97%		63-139%
540-36-3	1,4-Difluorobenzene	96%		52-140%

(a) Analysis performed at SGS Scott, LA.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	D-20@13	
Lab Sample ID:	TD16466-20	Date Sampled: 02/08/18
Matrix:	SO - Soil	Date Received: 02/10/18
Method:	SW846 8015C SW846 3546	Percent Solids: 83.0
Project:	CJES State AB SWD #1/LEA Co,N Mex	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	S0004882.D	1	02/15/18 14:21	ALA	02/14/18 08:00	L:OP10485	L:GLG615
Run #2							

Run #	Initial Weight	Final Volume
Run #1	20.0 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C22)	7.30	6.0	3.0	mg/kg	
	TPH (> C22-C36)	16.9	6.0	3.0	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	78%		31-130%

(a) Analysis performed at SGS Scott, LA.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	D-20@13	Date Sampled:	02/08/18
Lab Sample ID:	TD16466-20	Date Received:	02/10/18
Matrix:	SO - Soil	Percent Solids:	83.0
Project:	CJES State AB SWD #1/LEA Co,N Mex		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	158	6.0	mg/kg	1	02/20/18 20:16	LR	EPA 300.0
Solids, Percent	83		%	1	02/12/18	TH	SM 2540 G

RL = Reporting Limit

Report of Analysis

Client Sample ID:	D-21@6	
Lab Sample ID:	TD16466-21	Date Sampled: 02/08/18
Matrix:	SO - Soil	Date Received: 02/10/18
Method:	SW846 8015C SW846 5035	Percent Solids: 83.1
Project:	CJES State AB SWD #1/LEA Co,N Mex	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	LA286330.D	1	02/15/18 02:36	ALA	02/10/18 17:00	n/a	L:GLA1690
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.00 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	7.0	6.9	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
460-00-4	4-Bromofluorobenzene	97%		63-139%		
540-36-3	1,4-Difluorobenzene	96%		52-140%		

(a) Analysis performed at SGS Scott, LA.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	D-21@6	
Lab Sample ID:	TD16466-21	Date Sampled: 02/08/18
Matrix:	SO - Soil	Date Received: 02/10/18
Method:	SW846 8015C SW846 3546	Percent Solids: 83.1
Project:	CJES State AB SWD #1/LEA Co,N Mex	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	S0004883.D	1	02/15/18 14:42	ALA	02/14/18 08:00	L:OP10485	L:GLG615
Run #2							

Run #	Initial Weight	Final Volume
Run #1	20.1 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C22)	6.51	6.0	3.0	mg/kg	
	TPH (> C22-C36)	14.7	6.0	3.0	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	69%		31-130%

(a) Analysis performed at SGS Scott, LA.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	D-21@6	Date Sampled:	02/08/18
Lab Sample ID:	TD16466-21	Date Received:	02/10/18
Matrix:	SO - Soil	Percent Solids:	83.1
Project:	CJES State AB SWD #1/LEA Co,N Mex		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	66.9	6.0	mg/kg	1	02/20/18 20:32	LR	EPA 300.0
Solids, Percent	83.1		%	1	02/12/18	TH	SM 2540 G

RL = Reporting Limit

Report of Analysis

Client Sample ID:	D-21@13	
Lab Sample ID:	TD16466-22	Date Sampled: 02/08/18
Matrix:	SO - Soil	Date Received: 02/10/18
Method:	SW846 8015C SW846 5035	Percent Solids: 81.4
Project:	CJES State AB SWD #1/LEA Co,N Mex	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	LA286332.D	1	02/15/18 02:59	ALA	02/10/18 17:00	n/a	L:GLA1690
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	4.90 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	7.4	7.3	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	97%		63-139%
540-36-3	1,4-Difluorobenzene	96%		52-140%

(a) Analysis performed at SGS Scott, LA.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	D-21@13	Date Sampled:	02/08/18
Lab Sample ID:	TD16466-22	Date Received:	02/10/18
Matrix:	SO - Soil	Percent Solids:	81.4
Method:	SW846 8015C SW846 3546		
Project:	CJES State AB SWD #1/LEA Co,N Mex		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	S0004884.D	1	02/15/18 15:03	ALA	02/14/18 08:00	L:OP10485	L:GLG615
Run #2							

Run #	Initial Weight	Final Volume
Run #1	20.2 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C22)	5.57	6.1	3.0	mg/kg	J
	TPH (> C22-C36)	11.0	6.1	3.0	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	78%		31-130%

(a) Analysis performed at SGS Scott, LA.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	D-21@13	Date Sampled:	02/08/18
Lab Sample ID:	TD16466-22	Date Received:	02/10/18
Matrix:	SO - Soil	Percent Solids:	81.4
Project:	CJES State AB SWD #1/LEA Co,N Mex		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	85.2	6.1	mg/kg	1	02/20/18 20:48	LR	EPA 300.0
Solids, Percent	81.4		%	1	02/12/18	TH	SM 2540 G

RL = Reporting Limit

Report of Analysis

Client Sample ID:	DUP-9	
Lab Sample ID:	TD16466-23	Date Sampled: 02/08/18
Matrix:	SO - Soil	Date Received: 02/10/18
Method:	SW846 8015C SW846 5035	Percent Solids: 92.5
Project:	CJES State AB SWD #1/LEA Co,N Mex	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	LA286334.D	1	02/15/18 03:22	ALA	02/10/18 17:00	n/a	L:GLA1690
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.10 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	5.7	5.6	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	97%		63-139%
540-36-3	1,4-Difluorobenzene	96%		52-140%

(a) Analysis performed at SGS Scott, LA.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	DUP-9						
Lab Sample ID:	TD16466-23					Date Sampled:	02/08/18
Matrix:	SO - Soil					Date Received:	02/10/18
Method:	SW846 8015C SW846 3546					Percent Solids:	92.5
Project:	CJES State AB SWD #1/LEA Co,N Mex						

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	S0004885.D	1	02/15/18 15:23	ALA	02/14/18 08:00	L:OP10485	L:GLG615
Run #2							

	Initial Weight	Final Volume
Run #1	20.1 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C22)	6.59	5.4	2.7	mg/kg	
	TPH (> C22-C36)	20.7	5.4	2.7	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	73%		31-130%

(a) Analysis performed at SGS Scott, LA.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	DUP-9	Date Sampled:	02/08/18
Lab Sample ID:	TD16466-23	Date Received:	02/10/18
Matrix:	SO - Soil	Percent Solids:	92.5
Project:	CJES State AB SWD #1/LEA Co,N Mex		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	692	54	mg/kg	10	02/20/18 21:03	LR	EPA 300.0
Solids, Percent	92.5		%	1	02/12/18	TH	SM 2540 G

RL = Reporting Limit

Report of Analysis

Client Sample ID:	DUP-10	Date Sampled:	02/08/18
Lab Sample ID:	TD16466-24	Date Received:	02/10/18
Matrix:	SO - Soil	Percent Solids:	89.0
Method:	SW846 8015C SW846 5035		
Project:	CJES State AB SWD #1/LEA Co,N Mex		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	LA286336.D	1	02/15/18 03:44	ALA	02/10/18 17:00	n/a	L:GLA1690
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.00 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	6.2	6.1	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	97%		63-139%
540-36-3	1,4-Difluorobenzene	96%		52-140%

(a) Analysis performed at SGS Scott, LA.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

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Client Sample ID:	DUP-10	
Lab Sample ID:	TD16466-24	Date Sampled: 02/08/18
Matrix:	SO - Soil	Date Received: 02/10/18
Method:	SW846 8015C SW846 3546	Percent Solids: 89.0
Project:	CJES State AB SWD #1/LEA Co,N Mex	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	S0004886.D	1	02/15/18 15:44	ALA	02/14/18 08:00	L:OP10485	L:GLG615
Run #2							

Run #	Initial Weight	Final Volume
Run #1	20.1 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C22)	12.6	5.6	2.8	mg/kg	
	TPH (> C22-C36)	48.1	5.6	2.8	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	84%		31-130%

(a) Analysis performed at SGS Scott, LA.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	DUP-10	Date Sampled:	02/08/18
Lab Sample ID:	TD16466-24	Date Received:	02/10/18
Matrix:	SO - Soil	Percent Solids:	89.0
Project:	CJES State AB SWD #1/LEA Co,N Mex		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	< 5.6	5.6	mg/kg	1	02/20/18 21:19	LR	EPA 300.0
Solids, Percent	89		%	1	02/12/18	TH	SM 2540 G

RL = Reporting Limit

Misc. Forms**Custody Documents and Other Forms**

Includes the following where applicable:

- Chain of Custody



ACCUTEST

CHAIN OF CUSTODY

PAGE 1 OF 2

10165 Harwin Dr, Ste 150 Houston, TX 77036
TEL: 713-271-4700 FAX: 713-271-4770
www.accutest.com

FED-EX Tracking #	Bottle Order Control #
SGS Accutest Quote #	SGS Accutest Job # TD16466
Requested Analyses	
Matrix Codes	
DW - Drinking Water GW - Ground Water WW - Water SW - Surface Water SO - Soil SL - Sludge SED - Sediment OI - Oil LIQ - Other Liquid AIR - Air SOL - Other Solid WP - Wipe FB - Field Blank	
LAB USE ONLY	

Handwritten notes:
C1 Method 300.0
TIA 8015 Ext (Geo/Proc/Method)
Hand For Analysis

Client / Reporting Information		Project Information	
Company Name ENTECH CONSULTING CORP		Project Name CJES STATE AB SEED #1	
Street Address 21 Waterway Ave #300		Street Lea Co. TX	
City The Woodlands TX		City Lea Co. TX	
Project Contact PETE SCHRAM		Project #	
E-mail pete.schram@entechservice.com		Billing Information (if different from Report to)	
Phone # 210-326-7831		Company Name ENTECH CONSULTING	
Fax #		Street Address 21 Waterway Ave #300	
Sampler(s) Name(s) PETE SCHRAM		Client Purchase Order #	
Phone # 210-326-7831		City The Woodlands TX	
Project Manager CHAS PATEL		Attention CHAS PATEL	
Field ID / Point of Collection		Collection	
Date		Time	
Sampled By		Matrix	
# of bottles		# of	
HCl		NAGH	
ZINC		HNO3	
H2SO4		NONE	
DI Water		MECH	
TSP		NANOS	
ENGINE		OTHER	
Number of preserved Bottles			
1		1	
2		1	
3		1	
4		1	
5		1	
6		1	
7		1	
8		1	
9		1	
10		1	
11		1	
12		1	
Turnaround Time (Business days)			
Standard		Approved By (SGS Accutest PM): / Date:	
5 Day RUSH			
4 Day RUSH			
3 Day RUSH			
2 Day RUSH			
1 Day EMERGENCY			
Emergency & Rush T/A data available VIA Lablink			
Data Deliverable Information		Comments / Special Instructions	
Commercial "A" (Level 1)			
Commercial "B" (Level 2)			
FULT1 (Level 3+4)			
REDT1 (Level 3+4)			
Commercial "C"			
Commercial "A" = Results Only			
Commercial "B" = Results + QC Summary			
Commercial "C" = Results + QC & Surrogate Summary			
Form: SM021-0			
Sample Custody must be documented below each time samples change possession, including courier delivery.			
Relinquished By: 1 JASON FISH	Date Time: 2/19/18 12:00	Received By: 1 JASON FISH	Date Time: 2/19/18 12:00
Relinquished By: 2 JASON FISH	Date Time: 2/19/18 12:00	Received By: 2 JASON FISH	Date Time: 2/19/18 12:00
Relinquished By: 3 JASON FISH	Date Time: 2/19/18 12:00	Received By: 3 JASON FISH	Date Time: 2/19/18 12:00
Relinquished By: 4 JASON FISH	Date Time: 2/19/18 12:00	Received By: 4 JASON FISH	Date Time: 2/19/18 12:00
Relinquished By: 5 JASON FISH	Date Time: 2/19/18 12:00	Received By: 5 JASON FISH	Date Time: 2/19/18 12:00
Custody Seal #		Preserved where applicable	
Intact		On Ice	
Not intact		Cooler Temp.	

TD16466: Chain of Custody

Page 1 of 4



10165 Harwin Dr, Ste 150 Houston, TX 77036
TEL: 713-271-4700 FAX: 713-271-4770
www.accutest.com

Client / Reporting Information		Project Information		Requested Analyses		Matrix Codes	
Company Name ENTECH CONSULTING		Project Name CJED STATE AB SCD #1		Hold For Analysis STPH 8015 EXT (600/200/100) <1- Method 300.0		<div>DW - Drinking Water GW - Ground Water WW - Water SW - Surface Water SO - Soil SL - Sludge SED - Sediment OI - Oil LIQ - Other Liquid AIR - Air SOL - Other Solid WP - Wipe FB - Field Blank</div>	
Street Address 21 WATERWAY AVE #300		Street LEA CO, NMEX					
City THE WOODLANDS TX		City THE WOODLANDS TX					
Project Contact PETE SCHRAM		Project #					
E-mail pete.schram@entechservice.com		Billing Information (if different from Report to)					
Phone # 210-326-7931		Fax #		Street Address 21 WATERWAY AVE #300		City THE WOODLANDS TX	
Sampler(s) Name(s) PETE SCHRAM 210526 7831		Client Purchase Order #		Attention: CHAS PATEL			
Phone # 210526 7831		Project Manager CHAS PATEL					
Field ID / Point of Collection		Collection		Number of preserved bottles		LAB USE ONLY	
		Date	Time	Sampled By	Matrix	# of bottles	
13 D-18C6		2/8/18	1100	POS	S	1	
14 D-18C24			1100				
15 D-18C28			1100				
16 D-19C6			1111				
17 D-19C18			1111				
18 D-19C30			1111				
19 D-20C6			1253				
20 D-26C13			1253				
21 D-21C6			1302				
22 D-21C13			1302				
23 DUP-9							
24 DUP-10		2/8/18		POS	S	1	
Turnaround Time (Business days)		Data Deliverable Information		Comments / Special Instructions			
<input checked="" type="checkbox"/> Standard		Approved By (SGS Accutest PM): / Date:		<input type="checkbox"/> Commercial "A" (Level 1)		<input type="checkbox"/> TRRP	
<input type="checkbox"/> 5 Day RUSH				<input checked="" type="checkbox"/> Commercial "B" (Level 2)		<input type="checkbox"/> EDD Format	
<input type="checkbox"/> 4 Day RUSH				<input type="checkbox"/> FULT1 (Level 3+4)		<input type="checkbox"/> Other	
<input type="checkbox"/> 3 Day RUSH				<input type="checkbox"/> REDT1 (Level 3+4)			
<input type="checkbox"/> 2 Day RUSH				<input type="checkbox"/> Commercial "C"			
<input type="checkbox"/> 1 Day EMERGENCY							
Emergency & Rush T/A data available VIA Lablink		Form: SM021-0		Commercial "A" = Results Only			
				Commercial "B" = Results + QC Summary			
				Commercial "C" = Results + QC & Surrogate Summary			
Relinquished By Sampler:		Date Time:		Relinquished By:		Date Time:	
3/4/18 12:00		2/4/18 12:00		2/4/18 12:00		2/4/18 14:00	
Relinquished By Sampler:		Date Time:		Relinquished By:		Date Time:	
3/4/18 12:00		2/4/18 12:00		2/4/18 12:00		2/4/18 14:00	
Relinquished By:		Date Time:		Relinquished By:		Date Time:	
5/4/18 12:00		2/4/18 12:00		2/4/18 12:00		2/4/18 14:00	
Custody Seal #		Intact		Preserved where applicable		On Ice	
		Not intact				Cooler Temp	

TD16466: Chain of Custody

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SGS
ACCUTEST

COOLER TEMP FORM

TC# TD16466

Delivered by (circle one): FedEx/UPS ALGC Driver Client

Date: 2-10-18

Client: Exxon

Cooler Number: 1

Thermometer ID: 25 CF, °C 0 Corrected Temp, °C 2.0

SAMPLES CONTY

ORIGIN ID: SGR4 (432) 234-3079
JASON FISHER
3600 S. COUNTRY ROAD
MIDLAND, TX 79706
UNITED STATES US

SHIP DATE: 05/AN/18
ACT146T: 25.0 LB HAN
CNO: 0243986/CRFE2916
BILL SENDER

TO
SAMPLE MANAGEMENT
SGS ACCUTEST
10165 HARWIN DRIVE
SUITE 150
HOUSTON TX 77036
REF: 7143 271-4700



PH LOT# 10D4561

Form: SW027-06 Rev 10/24/2016

SGS Sample Receipt Summary

Job Number: TD16466

Client: ENTECH

Project: CJES STATE AB

Date / Time Received:

Delivery Method:

Airbill #'s:

No. Coolers: 1

Therm ID: IR-5;

Temp Adjustment Factor: 0;

Cooler Temps (Initial/Adjusted): #1: (2/2);

Cooler Security

Y or N

1. Custody Seals Present:

☒ ☐

3. COC Present:

☒ ☐

2. Custody Seals Intact:

☒ ☐

4. Smpl Dates/Time OK

☒ ☐

Cooler Temperature

Y or N

1. Temp criteria achieved:

☒ ☐

2. Cooler temp verification:

3. Cooler media:

Ice (Bag)

Quality Control Preservation

Y or N

N/A

WTB STB

1. Trip Blank present / cooler:

☐ ☐

☒

☐

☐

2. Trip Blank listed on COC:

☐ ☐

☒

3. Samples preserved properly:

☒ ☐

4. VOCs headspace free:

☐ ☐

☒

Sample Integrity - Documentation

Y or N

1. Sample labels present on bottles:

☒ ☐

2. Container labeling complete:

☒ ☐

3. Sample container label / COC agree:

☒ ☐

Sample Integrity - Condition

Y or N

1. Sample recvd within HT:

☒ ☐

2. All containers accounted for:

☒ ☐

3. Condition of sample:

Intact

Sample Integrity - Instructions

Y or N N/A

1. Analysis requested is clear:

☒ ☐

2. Bottles received for unspecified tests

☐ ☒

3. Sufficient volume recvd for analysis:

☒ ☐

4. Compositing instructions clear:

☐ ☐

☒

5. Filtering instructions clear:

☐ ☐

☒

Comments Subsampled into 1-2oz container for all samples to run wet chem analysis.

TD16466: Chain of Custody

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General Chemistry

5

QC Data Summaries

Includes the following where applicable:

- **Method Blank and Blank Spike Summaries**
- **Duplicate Summaries**
- **Matrix Spike Summaries**

METHOD BLANK AND SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: TD16466
Account: ENTECTXW - EnTech Consulting Corporation
Project: CJES State AB SWD #1/LEA Co,N Mex

Analyte	Batch ID	RL	MB Result	Units	Spike Amount	BSP Result	BSP %Recov	QC Limits
Chloride	GP46351/GN87921	5.0	0.0	mg/kg	100	95.7	95.7	90-110%
Chloride	GP46357/GN87921	5.0	0.0	mg/kg	100	94.4	94.4	90-110%
Chloride	GP46358/GN87921	5.0	0.0	mg/kg	100	95.1	95.1	90-110%
Chloride	GP46536/GN88202	5.0	0.0	mg/kg	100	94.6	94.6	90-110%

Associated Samples:

Batch GP46351: TD16466-1, TD16466-2, TD16466-5

Batch GP46357: TD16466-4, TD16466-7, TD16466-8, TD16466-9, TD16466-10, TD16466-11, TD16466-12, TD16466-13, TD16466-14, TD16466-17

Batch GP46358: TD16466-16, TD16466-19, TD16466-20, TD16466-21, TD16466-22, TD16466-23, TD16466-24

Batch GP46536: TD16466-15R

(*) Outside of QC limits

DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: TD16466
Account: ENTECTXW - EnTech Consulting Corporation
Project: CJES State AB SWD #1/LEA Co,N Mex

Analyte	Batch ID	QC Sample	Units	Original Result	DUP Result	RPD	QC Limits
Chloride	GP46351/GN87921	TD16465-1	mg/kg	6.7	11.9	55.9(a)	0-20%
Chloride	GP46357/GN87921	TD16466-4	mg/kg	191	183	4.3	0-20%
Chloride	GP46358/GN87921	TD16466-16	mg/kg	222	224	0.9	0-20%
Chloride	GP46536/GN88202	TD16424-10A	mg/kg	20.1	20.6	2.5	0-20%
Solids, Percent	GN87743	TD16465-1	%	92.8	92.7	0.1	0-5%
Solids, Percent	GN87749	TD16461-2	%	83.7	83.6	0.1	0-5%
Solids, Percent	GN87959	TD17042-1	%	69	69.5	0.7	0-5%
Solids, Percent	GN88105	TD17204-2	%	82.1	82.1	0.0	0-5%

Associated Samples:

Batch GN87743: TD16466-1, TD16466-2, TD16466-4, TD16466-5, TD16466-7, TD16466-8, TD16466-9, TD16466-10, TD16466-11, TD16466-12, TD16466-13, TD16466-14, TD16466-16
Batch GN87749: TD16466-17, TD16466-19, TD16466-20, TD16466-21, TD16466-22, TD16466-23, TD16466-24
Batch GN87959: TD16466-18A
Batch GN88105: TD16466-15R
Batch GP46351: TD16466-1, TD16466-2, TD16466-5
Batch GP46357: TD16466-4, TD16466-7, TD16466-8, TD16466-9, TD16466-10, TD16466-11, TD16466-12, TD16466-13, TD16466-14, TD16466-17
Batch GP46358: TD16466-16, TD16466-19, TD16466-20, TD16466-21, TD16466-22, TD16466-23, TD16466-24
Batch GP46536: TD16466-15R
(*) Outside of QC limits
(a) RPD acceptable due to low duplicate and sample concentrations.

MATRIX SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: TD16466
Account: ENTECTXW - EnTech Consulting Corporation
Project: CJES State AB SWD #1/LEA Co,N Mex

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MS Result	%Rec	QC Limits
Chloride	GP46351/GN87921	TD16465-1	mg/kg	6.7	107	106	92.7	80-120%
Chloride	GP46357/GN87921	TD16466-4	mg/kg	191	112	379	168.1N	80-120%
Chloride	GP46358/GN87921	TD16466-16	mg/kg	222	111	422	179.7N	80-120%
Chloride	GP46536/GN88202	TD16424-10A	mg/kg	20.1	108	122	94.0	80-120%

Associated Samples:

Batch GP46351: TD16466-1, TD16466-2, TD16466-5

Batch GP46357: TD16466-4, TD16466-7, TD16466-8, TD16466-9, TD16466-10, TD16466-11, TD16466-12, TD16466-13, TD16466-14, TD16466-17

Batch GP46358: TD16466-16, TD16466-19, TD16466-20, TD16466-21, TD16466-22, TD16466-23, TD16466-24

Batch GP46536: TD16466-15R

(*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits

Misc. Forms

Custody Documents and Other Forms

(SGS Scott, LA)

Includes the following where applicable:

- Chain of Custody



10165 Harwin Drive, Houston, TX 77036
TEL: 713-271-4700 FAX: 713-271-4770

		10165 Harwin Drive, Houston, TX 77036 TEL: 713-271-4700 FAX: 713-271-4770		FED-EX Tracking # _____ Bottle Order Control # _____	Bottle Order Control # _____ TD16466						
Client / Reporting Information		Project Information		Requested Analysis (see TEST CODE sheet)				Matrix Codes			
Company Name: SGS North America In.		Project Name: CJES State AB SWD #1/LEA Co,N Mex		B801BDR00R01_V0015GRO				<div style="font-size: x-small;"> DW - Drinking Water GW - Ground Water WW - Water SW - Surface Water SO - Soil SL - Sludge SED-Sediment OI - Oil LIQ - Other Liquid AIR - Air SOL - Other Solid WP - Wipe PB-Field Blank ES-Equipment Blank RS - Rinse Blank TS-Trip Blank </div>			
Street Address 10165 Harwin Drive		Street 									
City State Zip Houston TX 77036		City State Company Name 									
Project Contact E-mail Trameshia.Brown@sgs.com		Project # Street Address 									
Phone # Fax # 713-271-4700		Client Purchase Order # City State Zip 									
Sampler(s) Name(s) PS		Phone Project Manager Attention: 									
				Number of preserved Bottles							
SGS Sample #	Field ID / Point of Collection	MEOH/DI Val #	Date	Time	Sampled by	Matrix	# of bottles	HCl NO3 NH3 H2CO4 NONE DI Water MEOH ENCORE	Hold	LAB USE ONLY	
1	CD-4@6		2/8/18	9:35:00 AM	PS	SO	1		X		
2	CD-4@18		2/8/18	9:35:00 AM	PS	SO	1		X		
3	CD-4@30		2/8/18	9:35:00 AM	PS	SO	1		X		
4	CD-5@6		2/8/18	10:35:00 AM	PS	SO	1		X		
5	CD-5@16		2/8/18	10:35:00 AM	PS	SO	1		X		
6	CD-5@28		2/8/18	10:35:00 AM	PS	SO	1		X		
7	CD-6@6		2/8/18	1:47:00 PM	PS	SO	1		X		
8	CD-6@8		2/8/18	1:47:00 PM	PS	SO	1		X		
9	CD-7@6		2/8/18	1:58:00 PM	PS	SO	1		X		
10	CD-7@8		2/8/18	1:58:00 PM	PS	SO	1		X		
11	D-17@6		2/8/18	10:16:00 AM	PS	SO	1		X		
12	D-17@16		2/8/18	10:16:00 AM	PS	SO	1		X		
Turnaround Time (Business days)		Data Deliverable Information				Comments / Special Instructions					
<div style="font-size: x-small;"> <input type="checkbox"/> Std. 10 Business Days <input type="checkbox"/> 5 Day RUSH <input type="checkbox"/> 3 Day EMERGENCY <input type="checkbox"/> 2 Day EMERGENCY <input type="checkbox"/> 1 Day EMERGENCY <input checked="" type="checkbox"/> other Due 2/19/2018 </div>		Approved By (SGS PM): / Date: _____ <div style="font-size: 2em; opacity: 0.5; transform: rotate(-15deg); display: inline-block;">RUSH</div>		<div style="font-size: x-small;"> <input type="checkbox"/> Commercial "A" (Level 1) <input type="checkbox"/> Commercial "B" (Level 2) <input type="checkbox"/> FULLT1 (Level 3+4) <input type="checkbox"/> NJ Reduced <input type="checkbox"/> Commercial "C" </div>		<div style="font-size: x-small;"> <input type="checkbox"/> NYASP Category A <input type="checkbox"/> NYASP Category B <input type="checkbox"/> State Forms <input type="checkbox"/> EDD Format <input checked="" type="checkbox"/> Other COMMB </div>		<div style="font-size: 1.5em; font-weight: bold; transform: rotate(-10deg); display: inline-block;"> Noted VS(RRM80) 704(8X1) </div>			
										<div style="font-size: x-small;"> Commercial "A" = Results Only Commercial "B" = Results + QC Summary NJ Reduced = Results + QC Summary + Partial Raw data </div>	
Sample Custody must be documented below each time samples change possession, including courier delivery.											
Relinquished by Sampler: S. Ponce		Date Tir: 2-12-18		Received By: SGS		Relinquished By: SGS		Date Time: _____		Received By: D. Hall	
Relinquished by Sampler: D. Hall		Date Time: 2/12/18		Received By: Walter Ponce		Relinquished By: Walter Newman		Date Time: _____		Received By: _____	
Relinquished by: _____		Date Time: _____		Received By: _____		Custody Seal # 2310C		<input type="checkbox"/> Blank <input type="checkbox"/> Not intact		Preserved where applicable On Ice Cooler Temp. 20.1.5 duc	

TD16466: Chain of Custody

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SGS Scott, LA



CHAIN OF CUSTODY

Page 2 of 2

10165 Harwin Drive, Houston, TX 77036
TEL: 713-271-4700 FAX: 713-271-4770

FED-EX Tracking #		Bottle Order Control #	
SGS Quote #		SGS Job # TD16466	
Client / Client / Reporting Information		Project Information	
Company Name: SGS North America Inc.		Project Name: CJES State AB SWB #1/LEA Co,N Mex	
Street Address: 10165 Harwin Drive		Street:	
City: Houston State: TX Zip: 77036		City: State: Company Name:	
Project Contact: Trameshia.Brown@sgs.com		Project #: Street Address:	
Phone #: 713-271-4700		Client Purchase Order #: City: State: Zip:	
Sample(s) Name(s): PS		Project Manager: Attention:	
SGS Sample #		Field ID / Point of Collection	
MEOH/DI Vial #		Collection	
Date		Time	
Sampled by		Matrix	
# of bottles		Number of preserved bottles	
HCl		NaOH	
HNO3		H2O2	
H2SO4		HNO3	
H2O2		H2O2	
DI Water		DI Water	
MEOH		MEOH	
ENCORE		ENCORE	
Hold		Hold	
Matrix Codes		Matrix Codes	
DW - Drinking Water		DW - Drinking Water	
GW - Ground Water		GW - Ground Water	
WW - Water		WW - Water	
SW - Surface Water		SW - Surface Water	
SO - Soil		SO - Soil	
SL - Sludge		SL - Sludge	
SED - Sediment		SED - Sediment	
OI - Oil		OI - Oil	
LIQ - Other Liquid		LIQ - Other Liquid	
AIR - Air		AIR - Air	
SOL - Other Solid		SOL - Other Solid	
WP - Waste		WP - Waste	
FB - Field Blank		FB - Field Blank	
EB - Equipment Blank		EB - Equipment Blank	
RB - Rinse Blank		RB - Rinse Blank	
TB - Trip Blank		TB - Trip Blank	
LAB USE ONLY		LAB USE ONLY	
Turnaround Time (Business days)		Data Deliverable Information	
Comments / Special Instructions		Comments / Special Instructions	
Approved By (SGS PM): / Date:		Approved By (SGS PM): / Date:	
Commercial "A" (Level 1)		Commercial "A" (Level 1)	
Commercial "B" (Level 2)		Commercial "B" (Level 2)	
FULLT1 (Level 3+4)		FULLT1 (Level 3+4)	
NJ Reduced		NJ Reduced	
Commercial "C"		Commercial "C"	
NYASP Category A		NYASP Category A	
NYASP Category B		NYASP Category B	
State Forms		State Forms	
EDD Format		EDD Format	
Other COMMB		Other COMMB	
Commercial "A" = Results Only		Commercial "A" = Results Only	
Commercial "B" = Results + QC Summary		Commercial "B" = Results + QC Summary	
NJ Reduced = Results + QC Summary + Partial Raw data		NJ Reduced = Results + QC Summary + Partial Raw data	
Emergency & Rush TIA data available VIA Lablink		Emergency & Rush TIA data available VIA Lablink	
Relinquished By: S. Brown		Relinquished By: S. Brown	
Date Time: 2-12-18		Date Time: 2-12-18	
Received By: 565		Received By: 565	
Date Time: 2-13-18		Date Time: 2-13-18	
Relinquished By: 3		Relinquished By: 3	
Date Time: 2-13-18		Date Time: 2-13-18	
Received By: 460		Received By: 460	
Date Time: 2-13-18		Date Time: 2-13-18	
Relinquished By: 5		Relinquished By: 5	
Date Time: 2-13-18		Date Time: 2-13-18	
Received By: 5		Received By: 5	
Date Time: 2-13-18		Date Time: 2-13-18	
Custody Seal # CS/PL		Custody Seal # CS/PL	
Intact		Intact	
Not Intact		Not Intact	
Preserved where applicable		Preserved where applicable	
On Ice		On Ice	
Cooler Temp. 2.0, 1.8, 1.4		Cooler Temp. 2.0, 1.8, 1.4	

TD16466: Chain of Custody

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SGS Sample Receipt Summary

Job Number: TD16466

Client: SGS NORTH AMERICA

Project: CJES STATE AB SWD#1/LEA

Date / Time Received: 2/13/2018 8:15:00 AM

Delivery Method: Accutest Courier

Airbill #'s: _____

Cooler Temps (Initial/Adjusted): #1: (2/2); #2: (1.8/1.8);

Cooler Security

	<u>Y</u>	<u>or</u>	<u>N</u>		<u>Y</u>	<u>or</u>	<u>N</u>
1. Custody Seals Present:	<input checked="" type="checkbox"/>		<input type="checkbox"/>	3. COC Present:	<input checked="" type="checkbox"/>		<input type="checkbox"/>
2. Custody Seals Intact:	<input checked="" type="checkbox"/>		<input type="checkbox"/>	4. Smpl Dates/Time OK	<input checked="" type="checkbox"/>		<input type="checkbox"/>

Cooler Temperature

	<u>Y</u>	<u>or</u>	<u>N</u>
1. Temp criteria achieved:	<input checked="" type="checkbox"/>		<input type="checkbox"/>
2. Thermometer ID:	<u>DV441;</u>		
3. Cooler media:	<u>Ice (direct contact)</u>		
4. No. Coolers:	<u>2</u>		

Quality Control Preservation

	<u>Y</u>	<u>or</u>	<u>N</u>	<u>N/A</u>
1. Trip Blank present / cooler:	<input type="checkbox"/>		<input type="checkbox"/>	<input checked="" type="checkbox"/>
2. Trip Blank listed on COC:	<input type="checkbox"/>		<input type="checkbox"/>	<input checked="" type="checkbox"/>
3. Samples preserved properly:	<input checked="" type="checkbox"/>		<input type="checkbox"/>	
4. VOCs headspace free:	<input type="checkbox"/>		<input type="checkbox"/>	<input checked="" type="checkbox"/>

Comments

Sample Integrity - Documentation

	<u>Y</u>	<u>or</u>	<u>N</u>
1. Sample labels present on bottles:	<input checked="" type="checkbox"/>		<input type="checkbox"/>
2. Container labeling complete:	<input checked="" type="checkbox"/>		<input type="checkbox"/>
3. Sample container label / COC agree:	<input checked="" type="checkbox"/>		<input type="checkbox"/>

Sample Integrity - Condition

	<u>Y</u>	<u>or</u>	<u>N</u>
1. Sample recvd within HT:	<input checked="" type="checkbox"/>		<input type="checkbox"/>
2. All containers accounted for:	<input checked="" type="checkbox"/>		<input type="checkbox"/>
3. Condition of sample:	<u>Intact</u>		

Sample Integrity - Instructions

	<u>Y</u>	<u>or</u>	<u>N</u>	<u>N/A</u>
1. Analysis requested is clear:	<input checked="" type="checkbox"/>		<input type="checkbox"/>	
2. Bottles received for unspecified tests	<input type="checkbox"/>		<input checked="" type="checkbox"/>	
3. Sufficient volume recvd for analysis:	<input checked="" type="checkbox"/>		<input type="checkbox"/>	
4. Compositing instructions clear:	<input type="checkbox"/>		<input type="checkbox"/>	<input checked="" type="checkbox"/>
5. Filtering instructions clear:	<input type="checkbox"/>		<input type="checkbox"/>	<input checked="" type="checkbox"/>

TD16466: Chain of Custody

Page 3 of 4

Job Change Order: TD16466

Requested Date:	2/21/2018	Received Date:	2/10/2018
Account Name:	EnTech Consulting Corporation	Due Date:	2/20/2018
Project Description:	CJES State AB SWD #1/LEA Co,N Mex	Deliverable:	COMMB
CSR:	SylviaG	TAT (Days):	7

=====

Sample #:	TD16466-18A	Change:
Dept:	Login V8015GRO, B8015DROORO1	
TAT:	7	
D-19@30		

=====

TD16466: Chain of Custody
Page 4 of 4

Above Changes Per: Client Date/Time: 2/21/2018 4:40:50 PM

To Client: This Change Order is confirmation of the revisions, previously discussed with the Client Service Representative.

GC Volatiles**QC Data Summaries**

(SGS Scott, LA)

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Job Number: TD16466
Account: ALGC SGS Houston, TX
Project: ENTECTXW: CJES State AB SWD #1/LEA Co,N Mex

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GLC1644-MB2	LC036412.D	1	02/14/18	MB	n/a	n/a	GLC1644

The QC reported here applies to the following samples: Method: SW846 8015C

TD16466-1, TD16466-2, TD16466-4, TD16466-5, TD16466-7, TD16466-8, TD16466-9, TD16466-10, TD16466-11, TD16466-12, TD16466-13

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	5.0	4.9	mg/kg	

CAS No.	Surrogate Recoveries	Limits
460-00-4	4-Bromofluorobenzene	95% 63-139%
540-36-3	1,4-Difluorobenzene	87% 52-140%

Method Blank Summary

Job Number: TD16466
Account: ALGC SGS Houston, TX
Project: ENTECTXW: CJES State AB SWD #1/LEA Co,N Mex

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GLA1690-MB2	LA286310.D	1	02/14/18	MB	n/a	n/a	GLA1690

The QC reported here applies to the following samples: Method: SW846 8015C

TD16466-14, TD16466-16, TD16466-17, TD16466-19, TD16466-20, TD16466-21, TD16466-22, TD16466-23, TD16466-24

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	5.0	4.9	mg/kg	

CAS No.	Surrogate Recoveries	Limits
460-00-4	4-Bromofluorobenzene	99% 63-139%
540-36-3	1,4-Difluorobenzene	97% 52-140%

7.1.2
7

Method Blank Summary

Job Number: TD16466
Account: ALGC SGS Houston, TX
Project: ENTECTXW: CJES State AB SWD #1/LEA Co,N Mex

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GLC1651-MB1	LC036627.D	1	02/22/18	SV	n/a	n/a	GLC1651

The QC reported here applies to the following samples: Method: SW846 8015C

TD16466-18A

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	5.0	4.9	mg/kg	

CAS No.	Surrogate Recoveries	Limits
460-00-4	4-Bromofluorobenzene	105% 63-139%
540-36-3	1,4-Difluorobenzene	92% 52-140%

7.1.3
7

Blank Spike/Blank Spike Duplicate Summary

Page 1 of 1

Job Number: TD16466

Account: ALGC SGS Houston, TX

Project: ENTECTXW: CJES State AB SWD #1/LEA Co,N Mex

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GLC1644-BS2	LC036410.D	1	02/14/18	MB	n/a	n/a	GLC1644
GLC1644-BSD2	LC036411.D	1	02/14/18	MB	n/a	n/a	GLC1644

The QC reported here applies to the following samples:

Method: SW846 8015C

TD16466-1, TD16466-2, TD16466-4, TD16466-5, TD16466-7, TD16466-8, TD16466-9, TD16466-10, TD16466-11, TD16466-12, TD16466-13

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	BSD mg/kg	BSD %	RPD	Limits Rec/RPD
	TPH-GRO (C6-C10)	50	47.0	94	46.4	93	1	79-121/6

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
460-00-4	4-Bromofluorobenzene	96%	95%	63-139%
540-36-3	1,4-Difluorobenzene	92%	91%	52-140%

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: TD16466
Account: ALGC SGS Houston, TX
Project: ENTECTXW: CJES State AB SWD #1/LEA Co,N Mex

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GLA1690-BS2	LA286306.D	1	02/14/18	MB	n/a	n/a	GLA1690
GLA1690-BSD2	LA286308.D	1	02/14/18	MB	n/a	n/a	GLA1690

The QC reported here applies to the following samples: Method: SW846 8015C

TD16466-14, TD16466-16, TD16466-17, TD16466-19, TD16466-20, TD16466-21, TD16466-22, TD16466-23, TD16466-24

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	BSD mg/kg	BSD %	RPD	Limits Rec/RPD
	TPH-GRO (C6-C10)	50	48.4	97	46.3	93	4	79-121/6

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
460-00-4	4-Bromofluorobenzene	101%	102%	63-139%
540-36-3	1,4-Difluorobenzene	101%	104%	52-140%

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: TD16466
Account: ALGC SGS Houston, TX
Project: ENTECTXW: CJES State AB SWD #1/LEA Co,N Mex

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GLC1651-BS1	LC036625.D	1	02/22/18	SV	n/a	n/a	GLC1651
GLC1651-BSD1	LC036626.D	1	02/22/18	SV	n/a	n/a	GLC1651

The QC reported here applies to the following samples: Method: SW846 8015C

TD16466-18A

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	BSD mg/kg	BSD %	RPD	Limits Rec/RPD
	TPH-GRO (C6-C10)	50	47.3	95	46.5	93	2	79-121/6

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
460-00-4	4-Bromofluorobenzene	98%	101%	63-139%
540-36-3	1,4-Difluorobenzene	96%	97%	52-140%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: TD16466
Account: ALGC SGS Houston, TX
Project: ENTECTXW: CJES State AB SWD #1/LEA Co,N Mex

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
TD16465-7MS	LC036437.D	1	02/15/18	MB	n/a	n/a	GLC1644
TD16465-7MSD	LC036438.D	1	02/15/18	MB	n/a	n/a	GLC1644
TD16465-7	LC036421.D	1	02/14/18	MB	n/a	n/a	GLC1644

The QC reported here applies to the following samples: Method: SW846 8015C

TD16466-1, TD16466-2, TD16466-4, TD16466-5, TD16466-7, TD16466-8, TD16466-9, TD16466-10, TD16466-11, TD16466-12, TD16466-13

CAS No.	Compound	TD16465-7 mg/kg	Spike Q	MS mg/kg	MS %	Spike mg/kg	MSD mg/kg	MSD %	RPD	Limits Rec/RPD
	TPH-GRO (C6-C10)	5.85	233	202	84	233	199	83	1	79-121/6

CAS No.	Surrogate Recoveries	MS	MSD	TD16465-7	Limits
460-00-4	4-Bromofluorobenzene	98%	97%	98%	63-139%
540-36-3	1,4-Difluorobenzene	94%	93%	89%	52-140%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: TD16466
Account: ALGC SGS Houston, TX
Project: ENTECTXW: CJES State AB SWD #1/LEA Co,N Mex

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
TD16466-24MS	LA286340.D	1	02/15/18	MB	n/a	n/a	GLA1690
TD16466-24MSD	LA286342.D	1	02/15/18	MB	n/a	n/a	GLA1690
TD16466-24	LA286336.D	1	02/15/18	MB	n/a	n/a	GLA1690

The QC reported here applies to the following samples: Method: SW846 8015C

TD16466-14, TD16466-16, TD16466-17, TD16466-19, TD16466-20, TD16466-21, TD16466-22, TD16466-23, TD16466-24

CAS No.	Compound	TD16466-24 Spike mg/kg	Q	Spike mg/kg	MS mg/kg	MS %	Spike mg/kg	MSD mg/kg	MSD %	RPD	Limits Rec/RPD
	TPH-GRO (C6-C10)	ND		249	224	90	249	219	88	2	79-121/6

CAS No.	Surrogate Recoveries	MS	MSD	TD16466-24	Limits
460-00-4	4-Bromofluorobenzene	104%	103%	97%	63-139%
540-36-3	1,4-Difluorobenzene	107%	106%	96%	52-140%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: TD16466
Account: ALGC SGS Houston, TX
Project: ENTECTXW: CJES State AB SWD #1/LEA Co,N Mex

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
TD16466-18AMS	LC036630.D	1	02/22/18	SV	n/a	n/a	GLC1651
TD16466-18AMSD	LC036631.D	1	02/22/18	SV	n/a	n/a	GLC1651
TD16466-18A	LC036628.D	1	02/22/18	SV	n/a	n/a	GLC1651

The QC reported here applies to the following samples: Method: SW846 8015C

TD16466-18A

CAS No.	Compound	TD16466-18A mg/kg	Spike Q mg/kg	MS mg/kg	MS %	Spike mg/kg	MSD mg/kg	MSD %	RPD	Limits Rec/RPD
	TPH-GRO (C6-C10)	ND	228	205	90	228	200	88	2	79-121/6

CAS No.	Surrogate Recoveries	MS	MSD	TD16466-18A	Limits
460-00-4	4-Bromofluorobenzene	104%	99%	98%	63-139%
540-36-3	1,4-Difluorobenzene	96%	95%	87%	52-140%

* = Outside of Control Limits.

GC/LC Semi-volatiles**QC Data Summaries**

(SGS Scott, LA)

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Job Number: TD16466
Account: ALGC SGS Houston, TX
Project: ENTECTXW: CJES State AB SWD #1/LEA Co,N Mex

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP10484-MB	S0004826.D	1	02/14/18	JT	02/14/18	OP10484	GLG614

The QC reported here applies to the following samples: Method: SW846 8015C

TD16466-1, TD16466-2, TD16466-4, TD16466-5, TD16466-7, TD16466-8, TD16466-9, TD16466-10, TD16466-11, TD16466-12, TD16466-13

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C22)	2.59	5.0	2.5	mg/kg	J
	TPH (> C22-C36)	ND	5.0	2.5	mg/kg	

CAS No.	Surrogate Recoveries	Limits
84-15-1	o-Terphenyl	76% 31-130%

8.1.1
8

Method Blank Summary

Job Number: TD16466
Account: ALGC SGS Houston, TX
Project: ENTECTXW: CJES State AB SWD #1/LEA Co,N Mex

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP10485-MB	S0004868.D	1	02/15/18	JT	02/14/18	OP10485	GLG615

The QC reported here applies to the following samples: Method: SW846 8015C

TD16466-14, TD16466-16, TD16466-17, TD16466-19, TD16466-20, TD16466-21, TD16466-22, TD16466-23, TD16466-24

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C22)	2.57	5.0	2.5	mg/kg	J
	TPH (> C22-C36)	ND	5.0	2.5	mg/kg	

CAS No.	Surrogate Recoveries	Limits
84-15-1	o-Terphenyl	76% 31-130%

8.1.2
8

Method Blank Summary

Job Number: TD16466
Account: ALGC SGS Houston, TX
Project: ENTECTXW: CJES State AB SWD #1/LEA Co,N Mex

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP10567-MB	S0005087.D	1	02/22/18	JT	02/22/18	OP10567	GLG620

The QC reported here applies to the following samples: Method: SW846 8015C

TD16466-18A

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C22)	2.82	5.0	2.5	mg/kg	J
	TPH (> C22-C36)	ND	5.0	2.5	mg/kg	

CAS No.	Surrogate Recoveries	Limits
84-15-1	o-Terphenyl	80% 31-130%

8.1.3
8

Blank Spike/Blank Spike Duplicate Summary

Job Number: TD16466
Account: ALGC SGS Houston, TX
Project: ENTECTXW: CJES State AB SWD #1/LEA Co,N Mex

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP10484-BS1	S0004827.D	1	02/14/18	JT	02/14/18	OP10484	GLG614
OP10484-BSD	S0004828.D	1	02/14/18	JT	02/14/18	OP10484	GLG614

The QC reported here applies to the following samples: Method: SW846 8015C

TD16466-1, TD16466-2, TD16466-4, TD16466-5, TD16466-7, TD16466-8, TD16466-9, TD16466-10, TD16466-11, TD16466-12, TD16466-13

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	BSD mg/kg	BSD %	RPD	Limits Rec/RPD
	TPH (C10-C22)	120	111	93	118	98	6	57-119/30

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
84-15-1	o-Terphenyl	75%	77%	31-130%

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: TD16466
Account: ALGC SGS Houston, TX
Project: ENTECTXW: CJES State AB SWD #1/LEA Co,N Mex

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP10484-BS2	S0004829.D	1	02/14/18	JT	02/14/18	OP10484	GLG614
OP10484-BSD2	S0004830.D	1	02/14/18	JT	02/14/18	OP10484	GLG614

The QC reported here applies to the following samples: Method: SW846 8015C

TD16466-1, TD16466-2, TD16466-4, TD16466-5, TD16466-7, TD16466-8, TD16466-9, TD16466-10, TD16466-11, TD16466-12, TD16466-13

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	BSD mg/kg	BSD %	RPD	Limits Rec/RPD
	TPH (> C22-C36)	150	131	87	130	87	1	55-117/25

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
84-15-1	o-Terphenyl	76%	72%	31-130%

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: TD16466
Account: ALGC SGS Houston, TX
Project: ENTECTXW: CJES State AB SWD #1/LEA Co,N Mex

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP10485-BS1	S0004869.D	1	02/15/18	JT	02/14/18	OP10485	GLG615
OP10485-BSD1	S0004870.D	1	02/15/18	JT	02/14/18	OP10485	GLG615

The QC reported here applies to the following samples: Method: SW846 8015C

TD16466-14, TD16466-16, TD16466-17, TD16466-19, TD16466-20, TD16466-21, TD16466-22, TD16466-23, TD16466-24

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	BSD mg/kg	BSD %	RPD	Limits Rec/RPD
	TPH (C10-C22)	120	112	93	110	92	2	57-119/30

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
84-15-1	o-Terphenyl	76%	71%	31-130%

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Page 1 of 1

Job Number: TD16466

Account: ALGC SGS Houston, TX

Project: ENTECTXW: CJES State AB SWD #1/LEA Co,N Mex

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP10485-BS2	S0004871.D	1	02/15/18	JT	02/14/18	OP10485	GLG615
OP10485-BSD2	S0004872.D	1	02/15/18	JT	02/14/18	OP10485	GLG615

The QC reported here applies to the following samples:

Method: SW846 8015C

TD16466-14, TD16466-16, TD16466-17, TD16466-19, TD16466-20, TD16466-21, TD16466-22, TD16466-23, TD16466-24

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	BSD mg/kg	BSD %	RPD	Limits Rec/RPD
	TPH (> C22-C36)	150	109	73	118	79	8	55-117/25

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
84-15-1	o-Terphenyl	68%	73%	31-130%

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: TD16466
Account: ALGC SGS Houston, TX
Project: ENTECTXW: CJES State AB SWD #1/LEA Co,N Mex

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP10567-BS1	S0005088.D	1	02/22/18	JT	02/22/18	OP10567	GLG620
OP10567-BSD1	S0005089.D	1	02/22/18	JT	02/22/18	OP10567	GLG620

The QC reported here applies to the following samples: Method: SW846 8015C

TD16466-18A

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	BSD mg/kg	BSD %	RPD	Limits Rec/RPD
	TPH (C10-C22)	120	127	106	127	106	0	57-119/30

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
84-15-1	o-Terphenyl	88%	89%	31-130%

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: TD16466
Account: ALGC SGS Houston, TX
Project: ENTECTXW: CJES State AB SWD #1/LEA Co,N Mex

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP10567-BS2	S0005090.D	1	02/22/18	JT	02/22/18	OP10567	GLG620
OP10567-BSD2	S0005091.D	1	02/22/18	JT	02/22/18	OP10567	GLG620

The QC reported here applies to the following samples: Method: SW846 8015C

TD16466-18A

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	BSD mg/kg	BSD %	RPD	Limits Rec/RPD
	TPH (> C22-C36)	150	121	81	125	83	3	55-117/25

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
84-15-1	o-Terphenyl	76%	82%	31-130%

* = Outside of Control Limits.

Matrix Spike Summary

Job Number: TD16466
Account: ALGC SGS Houston, TX
Project: ENTECTXW: CJES State AB SWD #1/LEA Co,N Mex

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP10484-MS1	S0004839.D	1	02/14/18	JT	02/14/18	OP10484	GLG614
TD16439-46A	S0004831.D	1	02/14/18	JT	02/14/18	OP10484	GLG614

The QC reported here applies to the following samples: Method: SW846 8015C

TD16466-1, TD16466-2, TD16466-4, TD16466-5, TD16466-7, TD16466-8, TD16466-9, TD16466-10, TD16466-11, TD16466-12, TD16466-13

CAS No.	Compound	TD16439-46Spike mg/kg	Q	MS mg/kg	MS %	Limits
	TPH (C10-C22)	19.4	129	127	84	57-119

CAS No.	Surrogate Recoveries	MS	TD16439-46ALimits
84-15-1	o-Terphenyl	76%	66% 31-130%

* = Outside of Control Limits.

Matrix Spike Summary

Job Number: TD16466
Account: ALGC SGS Houston, TX
Project: ENTECTXW: CJES State AB SWD #1/LEA Co,N Mex

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP10484-MS2	S0004840.D	1	02/14/18	JT	02/14/18	OP10484	GLG614
TD16439-46A	S0004831.D	1	02/14/18	JT	02/14/18	OP10484	GLG614

The QC reported here applies to the following samples: Method: SW846 8015C

TD16466-1, TD16466-2, TD16466-4, TD16466-5, TD16466-7, TD16466-8, TD16466-9, TD16466-10, TD16466-11, TD16466-12, TD16466-13

CAS No.	Compound	TD16439-46Spike mg/kg	Q	MS mg/kg	MS %	Limits
	TPH (> C22-C36)	69.1	162	144	46*	55-117

CAS No.	Surrogate Recoveries	MS	TD16439-46ALimits
84-15-1	o-Terphenyl	64%	66% 31-130%

* = Outside of Control Limits.

The results set forth herein are provided by SGS North America Inc.

e-Hardcopy 2.0
Automated Report

Technical Report for

EnTech Consulting Corporation

CJES State AB SWD #1/LEA Co,N Mex

SGS Job Number: TD16489

Sampling Date: 02/08/18


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Total number of pages in report: 64



Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable.


Richard Rodriguez
Laboratory Director

Client Service contact: Sylvia Garza 713-271-4700

Certifications: TX (T104704220-18-28) AR (14-016-0) AZ (AZ0769) FL (E87628)
KS (E-10366) LA (85695/04004) NJ (TX010) OK (2017-002) VA (8999)

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Test results relate only to samples analyzed.

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Sample Summary

EnTech Consulting Corporation**Job No: TD16489****CJES State AB SWD #1/LEA Co,N Mex**

Sample Number	Collected			Received	Matrix		Client Sample ID
	Date	Time	By		Code	Type	
TD16489-1	02/08/18	08:55		02/10/18	SO	Soil	BUC-6@6
TD16489-2	02/08/18	08:55		02/10/18	SO	Soil	BUC-6@8
TD16489-2R	02/08/18	08:55		02/10/18	SO	Soil	BUC-6@8
TD16489-3	02/08/18	09:03		02/10/18	SO	Soil	BUC-7@6
TD16489-4	02/08/18	09:03		02/10/18	SO	Soil	BUC-7@10
TD16489-4R	02/08/18	09:03		02/10/18	SO	Soil	BUC-7@10
TD16489-5	02/08/18	09:13		02/10/18	SO	Soil	BUC-8@6
TD16489-6	02/08/18	09:13		02/10/18	SO	Soil	BUC-8@8
TD16489-6R	02/08/18	09:13		02/10/18	SO	Soil	BUC-8@8
TD16489-7	02/08/18	09:23		02/10/18	SO	Soil	BUC-9@6
TD16489-7R	02/08/18	09:23		02/10/18	SO	Soil	BUC-9@6
TD16489-8	02/08/18	09:23		02/10/18	SO	Soil	BUC-9@12
TD16489-8R	02/08/18	09:23		02/10/18	SO	Soil	BUC-9@12

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

Sample Summary

(continued)

EnTech Consulting Corporation

Job No: TD16489

CJES State AB SWD #1/LEA Co,N Mex

Sample Number	Collected Date	Time By	Received	Matrix Code Type	Client Sample ID
TD16489-9	02/08/18	09:46	02/10/18	SO Soil	BUC-10@6
TD16489-10	02/08/18	09:46	02/10/18	SO Soil	BUC-10@16
TD16489-11	02/08/18	09:46	02/10/18	SO Soil	BUC-10@24
TD16489-12	02/08/18	10:06	02/10/18	SO Soil	BUC-11@6
TD16489-12A	02/08/18	10:06	02/10/18	SO Soil	BUC-11@6
TD16489-12R	02/08/18	10:06	02/10/18	SO Soil	BUC-11@6
TD16489-13	02/08/18	10:06	02/10/18	SO Soil	BUC-11@13
TD16489-13A	02/08/18	10:06	02/10/18	SO Soil	BUC-11@13
TD16489-13R	02/08/18	10:06	02/10/18	SO Soil	BUC-11@13
TD16489-14	02/08/18	10:25	02/10/18	SO Soil	BUC-12@6
TD16489-14A	02/08/18	10:25	02/10/18	SO Soil	BUC-12@6
TD16489-14R	02/08/18	10:25	02/10/18	SO Soil	BUC-12@6
TD16489-15	02/08/18	10:25	02/10/18	SO Soil	BUC-12@18

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

Sample Summary

(continued)

EnTech Consulting Corporation

Job No: TD16489

CJES State AB SWD #1/LEA Co,N Mex

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
TD16489-15A	02/08/18	10:25	02/10/18	SO	Soil	BUC-12@18
TD16489-15R	02/08/18	10:25	02/10/18	SO	Soil	BUC-12@18
TD16489-16	02/08/18	10:50	02/10/18	SO	Soil	BUC-13@6
TD16489-17	02/08/18	10:50	02/10/18	SO	Soil	BUC-13@20
TD16489-18	02/08/18	10:50	02/10/18	SO	Soil	BUC-13@30
TD16489-19	02/08/18	11:25	02/10/18	SO	Soil	BUC-14@6
TD16489-20	02/08/18	11:25	02/10/18	SO	Soil	BUC-14@24
TD16489-21	02/08/18	11:25	02/10/18	SO	Soil	BUC-14@32
TD16489-22	02/08/18	12:45	02/10/18	SO	Soil	BUC-15@6
TD16489-22R	02/08/18	12:45	02/10/18	SO	Soil	BUC-15@6
TD16489-23	02/08/18	12:45	02/10/18	SO	Soil	BUC-15@24
TD16489-23R	02/08/18	12:45	02/10/18	SO	Soil	BUC-15@24
TD16489-24	02/08/18	12:45	02/10/18	SO	Soil	BUC-15@30

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

Sample Summary

(continued)

EnTech Consulting Corporation

Job No: TD16489

CJES State AB SWD #1/LEA Co,N Mex

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
TD16489-24R	02/08/18	12:45	02/10/18	SO	Soil	BUC-15@30
TD16489-25	02/08/18	13:13	02/10/18	SO	Soil	BUC-16@6
TD16489-26	02/08/18	13:13	02/10/18	SO	Soil	BUC-16@9
TD16489-26R	02/08/18	13:13	02/10/18	SO	Soil	BUC-16@9
TD16489-27	02/08/18	13:20	02/10/18	SO	Soil	BUC-17@6
TD16489-28	02/08/18	13:20	02/10/18	SO	Soil	BUC-17@8
TD16489-29	02/08/18	13:29	02/10/18	SO	Soil	BUC-18@6
TD16489-30	02/08/18	13:29	02/10/18	SO	Soil	BUC-18@9
TD16489-30R	02/08/18	13:29	02/10/18	SO	Soil	BUC-18@9
TD16489-31	02/08/18	13:36	02/10/18	SO	Soil	BUC-19@6
TD16489-32	02/08/18	13:36	02/10/18	SO	Soil	BUC-19@8
TD16489-32R	02/08/18	13:36	02/10/18	SO	Soil	BUC-19@8
TD16489-33	02/08/18	00:00	02/10/18	SO	Soil	DUP-6

Soil samples reported on a dry weight basis unless otherwise indicated on result page.



Sample Summary
(continued)

EnTech Consulting Corporation

Job No: TD16489

CJES State AB SWD #1/LEA Co,N Mex

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
TD16489-34	02/08/18	00:00	02/10/18	SO	Soil	DUP-7
TD16489-34R	02/08/18	00:00	02/10/18	SO	Soil	DUP-7
TD16489-35	02/08/18	00:00	02/10/18	SO	Soil	DUP-8
TD16489-35R	02/08/18	00:00	02/10/18	SO	Soil	DUP-8

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

Summary of Hits

Page 1 of 3

Job Number: TD16489
Account: EnTech Consulting Corporation
Project: CJES State AB SWD #1/LEA Co,N Mex
Collected: 02/08/18

Lab Sample ID Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
TD16489-2R	BUC-6@8					
Chloride		186	5.3		mg/kg	EPA 300.0
TD16489-4R	BUC-7@10					
Chloride		62.6	5.6		mg/kg	EPA 300.0
TD16489-6R	BUC-8@8					
Chloride		68.1	6.0		mg/kg	EPA 300.0
TD16489-7R	BUC-9@6					
Chloride		43.6	5.1		mg/kg	EPA 300.0
TD16489-8R	BUC-9@12					
Chloride		29.3	5.4		mg/kg	EPA 300.0
TD16489-12A	BUC-11@6					
TPH (C10-C22) ^a		26.7	5.4	2.7	mg/kg	SW846 8015C
TPH (> C22-C36) ^a		110	5.4	2.7	mg/kg	SW846 8015C
TD16489-12R	BUC-11@6					
Chloride		358	27		mg/kg	EPA 300.0
TD16489-13A	BUC-11@13					
TPH (C10-C22) ^a		7.44	5.2	2.6	mg/kg	SW846 8015C
TPH (> C22-C36) ^a		19.1	5.2	2.6	mg/kg	SW846 8015C
TD16489-13R	BUC-11@13					
Chloride		441	26		mg/kg	EPA 300.0
TD16489-14A	BUC-12@6					
TPH (C10-C22) ^a		15.4	5.6	2.8	mg/kg	SW846 8015C
TPH (> C22-C36) ^a		49.5	5.6	2.8	mg/kg	SW846 8015C

Summary of Hits

Job Number: TD16489
Account: EnTech Consulting Corporation
Project: CJES State AB SWD #1/LEA Co,N Mex
Collected: 02/08/18

Lab Sample ID Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
TD16489-14R	BUC-12@6					
Chloride		43.3	5.7		mg/kg	EPA 300.0
TD16489-15A	BUC-12@18					
TPH (C10-C22) ^a		14.9	5.3	2.6	mg/kg	SW846 8015C
TPH (> C22-C36) ^a		67.6	5.3	2.6	mg/kg	SW846 8015C
TD16489-15R	BUC-12@18					
Chloride		28.6	5.4		mg/kg	EPA 300.0
TD16489-22R	BUC-15@6					
Chloride		47.9	5.2		mg/kg	EPA 300.0
TD16489-23R	BUC-15@24					
Chloride		658	27		mg/kg	EPA 300.0
TD16489-24R	BUC-15@30					
Chloride		1650	54		mg/kg	EPA 300.0
TD16489-26R	BUC-16@9					
Chloride		317	10		mg/kg	EPA 300.0
TD16489-30R	BUC-18@9					
Chloride		22.6	6.0		mg/kg	EPA 300.0
TD16489-32R	BUC-19@8					
Chloride		40.5	5.2		mg/kg	EPA 300.0
TD16489-34R	DUP-7					
Chloride		500	26		mg/kg	EPA 300.0
TD16489-35R	DUP-8					
Chloride		37.0	6.4		mg/kg	EPA 300.0

Summary of Hits

Job Number: TD16489
Account: EnTech Consulting Corporation
Project: CJES State AB SWD #1/LEA Co,N Mex
Collected: 02/08/18

Lab Sample ID	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
Analyte						

(a) Analysis performed at SGS Scott, LA.



Houston, TX

Section 3



Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	BUC-6@8	Date Sampled:	02/08/18
Lab Sample ID:	TD16489-2R	Date Received:	02/10/18
Matrix:	SO - Soil	Percent Solids:	93.6
Project:	CJES State AB SWD #1/LEA Co,N Mex		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	186	5.3	mg/kg	1	03/05/18 11:40	LR	EPA 300.0
Solids, Percent	93.6		%	1	03/01/18	PA	SM 2540 G

RL = Reporting Limit

Report of Analysis

Client Sample ID:	BUC-7@10	Date Sampled:	02/08/18
Lab Sample ID:	TD16489-4R	Date Received:	02/10/18
Matrix:	SO - Soil	Percent Solids:	89.3
Project:	CJES State AB SWD #1/LEA Co,N Mex		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	62.6	5.6	mg/kg	1	03/05/18 11:55	LR	EPA 300.0
Solids, Percent	89.3		%	1	03/01/18	PA	SM 2540 G

RL = Reporting Limit

Report of Analysis

Client Sample ID:	BUC-8@8	Date Sampled:	02/08/18
Lab Sample ID:	TD16489-6R	Date Received:	02/10/18
Matrix:	SO - Soil	Percent Solids:	83.0
Project:	CJES State AB SWD #1/LEA Co,N Mex		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	68.1	6.0	mg/kg	1	03/05/18 12:43	LR	EPA 300.0
Solids, Percent	83		%	1	02/28/18	PA	SM 2540 G

RL = Reporting Limit

Report of Analysis

Client Sample ID:	BUC-9@6	Date Sampled:	02/08/18
Lab Sample ID:	TD16489-7R	Date Received:	02/10/18
Matrix:	SO - Soil	Percent Solids:	96.3
Project:	CJES State AB SWD #1/LEA Co,N Mex		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	43.6	5.1	mg/kg	1	03/05/18 12:59	LR	EPA 300.0
Solids, Percent	96.3		%	1	02/28/18	PA	SM 2540 G

RL = Reporting Limit

Report of Analysis

Client Sample ID:	BUC-9@12	Date Sampled:	02/08/18
Lab Sample ID:	TD16489-8R	Date Received:	02/10/18
Matrix:	SO - Soil	Percent Solids:	91.4
Project:	CJES State AB SWD #1/LEA Co,N Mex		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	29.3	5.4	mg/kg	1	03/05/18 13:15	LR	EPA 300.0
Solids, Percent	91.4		%	1	03/01/18	PA	SM 2540 G

RL = Reporting Limit

Report of Analysis

Client Sample ID:	BUC-11@6	Date Sampled:	02/08/18
Lab Sample ID:	TD16489-12A	Date Received:	02/10/18
Matrix:	SO - Soil	Percent Solids:	92.8
Method:	SW846 8015C		
Project:	CJES State AB SWD #1/LEA Co,N Mex		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	LA286827.D	1	02/22/18 12:36	ALA	n/a	n/a	L:GLA1699
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.00 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	5.8	5.7	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	95%		63-139%
540-36-3	1,4-Difluorobenzene	91%		52-140%

(a) Analysis performed at SGS Scott, LA.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	BUC-11@6	Date Sampled:	02/08/18
Lab Sample ID:	TD16489-12A	Date Received:	02/10/18
Matrix:	SO - Soil	Percent Solids:	92.8
Method:	SW846 8015C SW846 3546		
Project:	CJES State AB SWD #1/LEA Co,N Mex		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	S0005096.D	1	02/22/18 23:45	ALA	02/22/18 08:00	L:OP10567	L:GLG620
Run #2							

Run #	Initial Weight	Final Volume
Run #1	20.1 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C22)	26.7	5.4	2.7	mg/kg	
	TPH (> C22-C36)	110	5.4	2.7	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	86%		31-130%

(a) Analysis performed at SGS Scott, LA.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	BUC-11@6	Date Sampled:	02/08/18
Lab Sample ID:	TD16489-12R	Date Received:	02/10/18
Matrix:	SO - Soil	Percent Solids:	92.8
Project:	CJES State AB SWD #1/LEA Co,N Mex		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	358	27	mg/kg	5	03/05/18 13:30	LR	EPA 300.0

RL = Reporting Limit

Report of Analysis

Client Sample ID:	BUC-11@13	Date Sampled:	02/08/18
Lab Sample ID:	TD16489-13A	Date Received:	02/10/18
Matrix:	SO - Soil	Percent Solids:	94.6
Method:	SW846 8015C		
Project:	CJES State AB SWD #1/LEA Co,N Mex		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	LA286829.D	1	02/22/18 12:58	ALA	n/a	n/a	L:GLA1699
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.10 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	5.5	5.4	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	93%		63-139%
540-36-3	1,4-Difluorobenzene	90%		52-140%

(a) Analysis performed at SGS Scott, LA.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	BUC-11@13	Date Sampled:	02/08/18
Lab Sample ID:	TD16489-13A	Date Received:	02/10/18
Matrix:	SO - Soil	Percent Solids:	94.6
Method:	SW846 8015C SW846 3546		
Project:	CJES State AB SWD #1/LEA Co,N Mex		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	S0005100.D	1	02/23/18 01:15	ALA	02/22/18 08:00	L:OP10567	L:GLG620
Run #2							

Run #	Initial Weight	Final Volume
Run #1	20.2 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C22)	7.44	5.2	2.6	mg/kg	
	TPH (> C22-C36)	19.1	5.2	2.6	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	91%		31-130%

(a) Analysis performed at SGS Scott, LA.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	BUC-11@13	Date Sampled:	02/08/18
Lab Sample ID:	TD16489-13R	Date Received:	02/10/18
Matrix:	SO - Soil	Percent Solids:	94.6
Project:	CJES State AB SWD #1/LEA Co,N Mex		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	441	26	mg/kg	5	03/05/18 16:29	LR	EPA 300.0

RL = Reporting Limit

Report of Analysis

Page 1 of 1

Client Sample ID:	BUC-12@6	Date Sampled:	02/08/18
Lab Sample ID:	TD16489-14A	Date Received:	02/10/18
Matrix:	SO - Soil	Percent Solids:	87.4
Method:	SW846 8015C		
Project:	CJES State AB SWD #1/LEA Co,N Mex		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	LA286831.D	1	02/22/18 13:20	ALA	n/a	n/a	L:GLA1699
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.10 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	6.3	6.2	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
460-00-4	4-Bromofluorobenzene	95%		63-139%		
540-36-3	1,4-Difluorobenzene	91%		52-140%		

(a) Analysis performed at SGS Scott, LA.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	BUC-12@6	Date Sampled:	02/08/18
Lab Sample ID:	TD16489-14A	Date Received:	02/10/18
Matrix:	SO - Soil	Percent Solids:	87.4
Method:	SW846 8015C SW846 3546		
Project:	CJES State AB SWD #1/LEA Co,N Mex		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	S0005101.D	1	02/23/18 01:37	ALA	02/22/18 08:00	L:OP10567	L:GLG620
Run #2							

Run #	Initial Weight	Final Volume
Run #1	20.3 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C22)	15.4	5.6	2.8	mg/kg	
	TPH (> C22-C36)	49.5	5.6	2.8	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	87%		31-130%

(a) Analysis performed at SGS Scott, LA.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	BUC-12@6	Date Sampled:	02/08/18
Lab Sample ID:	TD16489-14R	Date Received:	02/10/18
Matrix:	SO - Soil	Percent Solids:	87.4
Project:	CJES State AB SWD #1/LEA Co,N Mex		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	43.3	5.7	mg/kg	1	03/05/18 16:45	LR	EPA 300.0

RL = Reporting Limit

Report of Analysis

Client Sample ID:	BUC-12@18	Date Sampled:	02/08/18
Lab Sample ID:	TD16489-15A	Date Received:	02/10/18
Matrix:	SO - Soil	Percent Solids:	92.8
Method:	SW846 8015C		
Project:	CJES State AB SWD #1/LEA Co,N Mex		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	LA286833.D	1	02/22/18 13:42	ALA	n/a	n/a	L:GLA1699
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.10 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	5.7	5.6	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	94%		63-139%
540-36-3	1,4-Difluorobenzene	90%		52-140%

(a) Analysis performed at SGS Scott, LA.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	BUC-12@18	Date Sampled:	02/08/18
Lab Sample ID:	TD16489-15A	Date Received:	02/10/18
Matrix:	SO - Soil	Percent Solids:	92.8
Method:	SW846 8015C SW846 3546		
Project:	CJES State AB SWD #1/LEA Co,N Mex		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	S0005102.D	1	02/23/18 01:58	ALA	02/22/18 08:00	L:OP10567	L:GLG620
Run #2							

Run #	Initial Weight	Final Volume
Run #1	20.4 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C22)	14.9	5.3	2.6	mg/kg	
	TPH (> C22-C36)	67.6	5.3	2.6	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	77%		31-130%

(a) Analysis performed at SGS Scott, LA.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	BUC-12@18	Date Sampled:	02/08/18
Lab Sample ID:	TD16489-15R	Date Received:	02/10/18
Matrix:	SO - Soil	Percent Solids:	92.8
Project:	CJES State AB SWD #1/LEA Co,N Mex		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	28.6	5.4	mg/kg	1	03/05/18 17:01	LR	EPA 300.0

RL = Reporting Limit

Report of Analysis

Client Sample ID:	BUC-15@6	Date Sampled:	02/08/18
Lab Sample ID:	TD16489-22R	Date Received:	02/10/18
Matrix:	SO - Soil	Percent Solids:	96.1
Project:	CJES State AB SWD #1/LEA Co,N Mex		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	47.9	5.2	mg/kg	1	03/05/18 17:17	LR	EPA 300.0
Solids, Percent	96.1		%	1	03/01/18	PA	SM 2540 G

RL = Reporting Limit

Report of Analysis

Client Sample ID:	BUC-15@24	Date Sampled:	02/08/18
Lab Sample ID:	TD16489-23R	Date Received:	02/10/18
Matrix:	SO - Soil	Percent Solids:	90.3
Project:	CJES State AB SWD #1/LEA Co,N Mex		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	658	27	mg/kg	5	03/06/18 02:50	LR	EPA 300.0
Solids, Percent	90.3		%	1	03/01/18	PA	SM 2540 G

RL = Reporting Limit

Report of Analysis

Client Sample ID:	BUC-15@30	Date Sampled:	02/08/18
Lab Sample ID:	TD16489-24R	Date Received:	02/10/18
Matrix:	SO - Soil	Percent Solids:	92.2
Project:	CJES State AB SWD #1/LEA Co,N Mex		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	1650	54	mg/kg	10	03/06/18 03:06	LR	EPA 300.0
Solids, Percent	92.2		%	1	03/01/18	PA	SM 2540 G

RL = Reporting Limit

Report of Analysis

Client Sample ID:	BUC-16@9	Date Sampled:	02/08/18
Lab Sample ID:	TD16489-26R	Date Received:	02/10/18
Matrix:	SO - Soil	Percent Solids:	93.4
Project:	CJES State AB SWD #1/LEA Co,N Mex		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	317	10	mg/kg	2	03/06/18 03:22	LR	EPA 300.0
Solids, Percent	93.4		%	1	03/01/18	PA	SM 2540 G

RL = Reporting Limit

Report of Analysis

Client Sample ID:	BUC-18@9	Date Sampled:	02/08/18
Lab Sample ID:	TD16489-30R	Date Received:	02/10/18
Matrix:	SO - Soil	Percent Solids:	82.4
Project:	CJES State AB SWD #1/LEA Co,N Mex		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	22.6	6.0	mg/kg	1	03/06/18 03:38	LR	EPA 300.0
Solids, Percent	82.4		%	1	03/01/18	PA	SM 2540 G

RL = Reporting Limit

Report of Analysis

Client Sample ID:	BUC-19@8	Date Sampled:	02/08/18
Lab Sample ID:	TD16489-32R	Date Received:	02/10/18
Matrix:	SO - Soil	Percent Solids:	95.8
Project:	CJES State AB SWD #1/LEA Co,N Mex		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	40.5	5.2	mg/kg	1	03/06/18 03:54	LR	EPA 300.0
Solids, Percent	95.8		%	1	03/01/18	PA	SM 2540 G

RL = Reporting Limit

Report of Analysis

Client Sample ID:	DUP-7	Date Sampled:	02/08/18
Lab Sample ID:	TD16489-34R	Date Received:	02/10/18
Matrix:	SO - Soil	Percent Solids:	94.2
Project:	CJES State AB SWD #1/LEA Co,N Mex		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	500	26	mg/kg	5	03/06/18 04:09	LR	EPA 300.0
Solids, Percent	94.2		%	1	03/01/18	PA	SM 2540 G

RL = Reporting Limit

Report of Analysis

Client Sample ID:	DUP-8	Date Sampled:	02/08/18
Lab Sample ID:	TD16489-35R	Date Received:	02/10/18
Matrix:	SO - Soil	Percent Solids:	77.5
Project:	CJES State AB SWD #1/LEA Co,N Mex		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	37.0	6.4	mg/kg	1	03/06/18 04:25	LR	EPA 300.0
Solids, Percent	77.5		%	1	03/01/18	PA	SM 2540 G

RL = Reporting Limit

Misc. Forms**Custody Documents and Other Forms**

Includes the following where applicable:

- Chain of Custody



ACCUTEST

CHAIN OF CUSTODY

PAGE 1 OF 3

10165 Harwin Dr, Ste 150 Houston, TX 77036
TEL: 713-271-4700 FAX: 713-271-4770
www.accutest.com

FED-EX Tracking #		Bottle Order Control #	
SGS Accutest Quote #		SGS Accutest Job #	
Client / Reporting Information		Project Information	
Company Name ENTECH CONSULTING		Project Name CJES STATE AB SUD #1	
Street Address 21 WATERWAY AVE #300		City LEN CO., NM	
City The Woodlands TX		State	
Project Contact PETE SCHRAM		Project #	
E-mail pete.schram@entechservice.com		Company Name ENTECH CONSULTING	
Phone # 210-326-7831		Street Address 21 WATERWAY AVE #300	
Fax #		City The Woodlands TX	
Client Purchase Order #		State	
Project Manager CHAS PATEL		Zip	
Attention: CHAS PATEL		Number of preserved Bottles	
Collection		Matrix	
Field ID / Point of Collection		Date	
Time		Sampled By	
Matrix		# of bottles	
AC		AsH	
Zn		NaOH	
Pb		HNO3	
Cu		H2SO4	
Ni		HCl	
Mn		EDTA	
Fe		TSP	
Cd		HACH	
Co		ENCODE	
Cr		OTHER	
SGS Accutest Sample #		LAB USE ONLY	
Turnaround Time (Business days)		Data Deliverable Information	
Standard		Commercial "A" (Level 1)	
5 Day RUSH		Commercial "B" (Level 2)	
4 Day RUSH		FUL T1 (Level 3+4)	
3 Day RUSH		RED T1 (Level 3+4)	
2 Day RUSH		Commercial "C"	
1 Day EMERGENCY		Commercial "A" = Results Only	
Emergency & Rush T/A data available VIA Lablink		Commercial "B" = Results + QC Summary	
Form: SM021-0		Commercial "C" = Results + QC & Surrogate Summary	
Relinquished by Sampler		Date Time	
Received By		Date Time	
Relinquished by Sampler		Date Time	
Received By		Date Time	
Relinquished by		Date Time	
Received By		Date Time	
Custody Seal #		Intact	
Not intact		Preserved where applicable	
On Ice		Cooling Temp.	

TD16489: Chain of Custody

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CHAIN OF CUSTODY

PAGE 2 OF 3

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FED-EX Tracking #		Bottle Order Control #	
SGS Accutest Quote #		SGS Accutest Job #	
TD16789		TD16789	
Client / Reporting Information		Project Information	
Company Name ENTECH CONSULTING CORP		Project Name:	
Street Address 21 WATERWAY AVE #300		Street	
City THE WOODLANDS TX		City	
State TX		State	
Zip 77380		Zip	
Project Contact PETE SCHRAM		Project #	
E-mail pete.schram@entechservice.com		Company Name ENTECH CONSULTING CORP	
Phone # 210-326-7831		Street Address 21 WATERWAY AVE #300	
Fax #		City THE WOODLANDS TX	
Sampler(s) Name(s) PETE SCHRAM		Client Purchase Order #	
Phone # 210-326-7831		Attention: CHAD PATEL	
Project Manager CHAD PATEL		Collection	
Field ID / Point of Collection		Date	
13 BUC-11 E 13		2/8/08	
14 BUC-12 E 6		1025	
15 BUC-12 E 18		1025	
16 BUC-13 E 6		1050	
17 BUC-13 E 20		1050	
18 BUC-13 E 30		1050	
19 BUC-14 E 6		1125	
20 BUC-14 E 24		1125	
21 BUC-14 E 32		1125	
22 BUC-15 E 6		1245	
23 BUC-15 E 24		1245	
24 BUC-15 E 30		2/8/08	
Turnaround Time (Business days)		Data Deliverable Information	
<input checked="" type="checkbox"/> Standard		<input type="checkbox"/> Commercial "A" (Level 1)	
<input type="checkbox"/> 5 Day RUSH		<input checked="" type="checkbox"/> Commercial "B" (Level 2)	
<input type="checkbox"/> 4 Day RUSH		<input type="checkbox"/> FULT1 (Level 3+4)	
<input type="checkbox"/> 3 Day RUSH		<input type="checkbox"/> REDT1 (Level 3+4)	
<input type="checkbox"/> 2 Day RUSH		<input type="checkbox"/> Commercial "C"	
<input type="checkbox"/> 1 Day EMERGENCY		Comments / Special Instructions	
Emergency & Rush T/A data available VIA Lablink			
Approved By (SGS Accutest PM): / Date:		Form: SM021-0	
		Commercial "A" = Results Only	
		Commercial "B" = Results + QC Summary	
		Commercial "C" = Results + QC & Surrogate Summary	
Sample Custody must be documented below each time samples change possession, including courier delivery.			
Relinquished By: 1 [Signature]		Received By: 2 [Signature]	
Date Time: 2/19/08 12:00		Date Time: 2/19/08 12:00	
Relinquished By: 3 [Signature]		Received By: 4 [Signature]	
Date Time: 2/19/08 10:05		Date Time: 2/19/08 14:00	
Relinquished By: 5 [Signature]		Received By: 6 [Signature]	
Date Time: 2/19/08 10:05		Date Time: 2/19/08 14:00	
Custody Seal #		Preserved where applicable	
<input type="checkbox"/> Intact		<input type="checkbox"/> On Ice	
<input type="checkbox"/> Not intact		<input type="checkbox"/> Cooler Temp.	

TD16489: Chain of Custody

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[illegible]

TD16489: Chain of Custody

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ACCUTEST

COOLER TEMP FORM

TC# TD16489

Delivered by (circle one): FedEx/UPS

ALGC Driver

Client

Date:

2-10-13

Client:

Eatech

Cooler Number:

1

Thermometer ID:

285

CF, °C

Corrected Temp, °C 1.6

SAMPLES CONTAINED IN COOLER

UNISH, FISHER
JASON P. FISHER
3650 S. COUNTRY ROAD
MIDLAND, TX 79706
UNITED STATES US
BILL SENDER

TO **SAMPLE MANAGEMENT**
SGS ACCUTEST
10165 HARWIN DRIVE
SUITE 150
HOUSTON TX 77036

REF: 7319 271-4700

DEPT: 281

FedEx

EXPRESS

FedEx

TRK# 7314 4445 7903

SATURDAY 12:00P
PRIORITY OVERNIGHT

X0 SGRA

7703G

TX-US IAT



81

PH LOT# 10D4561

Form: SW027-06 Rev 10/24/2016



SGS Sample Receipt Summary

Page 1 of 5

Job Number: TD16489 **Client:** ENTECH **Project:** CJES STATE AB
Date / Time Received: _____ **Delivery Method:** _____ **Airbill #'s:** 731444457903
No. Coolers: 2 **Therm ID:** IR-5; **Temp Adjustment Factor:** 0;
Cooler Temps (Initial/Adjusted): #1: (1.6/1.6);

Cooler Security		<u>Y or N</u>		<u>Y or N</u>	
1. Custody Seals Present:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	3. COC Present:	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. Custody Seals Intact:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	4. Smpl Dates/Time OK	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Cooler Temperature		<u>Y or N</u>			
1. Temp criteria achieved:	<input checked="" type="checkbox"/>	<input type="checkbox"/>			
2. Cooler temp verification:	_____				
3. Cooler media:	Ice (Bag)				
Quality Control Preservation	<u>Y or N</u>		<u>N/A</u>	<u>WTB</u>	<u>STB</u>
1. Trip Blank present / cooler:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Trip Blank listed on COC:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>		
3. Samples preserved properly:	<input checked="" type="checkbox"/>	<input type="checkbox"/>			
4. VOCs headspace free:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>		

Sample Integrity - Documentation	<u>Y or N</u>		
1. Sample labels present on bottles:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
2. Container labeling complete:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
3. Sample container label / COC agree:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Sample Integrity - Condition	<u>Y or N</u>		
1. Sample recvd within HT:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
2. All containers accounted for:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
3. Condition of sample:	Intact		
Sample Integrity - Instructions	<u>Y or N</u>	<u>N/A</u>	
1. Analysis requested is clear:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
2. Bottles received for unspecified tests	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
3. Sufficient volume recvd for analysis:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
4. Compositing instructions clear:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
5. Filtering instructions clear:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Comments

TD16489: Chain of Custody
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4.1

Sample Receipt Log

Page 2 of 5

Job #: TD16489

Date / Time Received: 2/10/2018 10:05:00 AM

Initials: ec

Client: ENTECH

Cooler #	Sample ID:	Vol	Bot #	Location	Pres	pH	Therm ID	Initial Temp	Therm CF	Corrected Temp
1	TD16489-1	4oz	1	SUB	N/P	Note #2 - Preservative check not applicable.	IR-5	1.6	0	1.6
1	TD16489-1	2oz	2	2-107	N/P	Note #2 - Preservative check not applicable.	IR-5	1.6	0	1.6
1	TD16489-2	4oz	1	SUB	N/P	Note #2 - Preservative check not applicable.	IR-5	1.6	0	1.6
1	TD16489-2	2oz	2	2-107	N/P	Note #2 - Preservative check not applicable.	IR-5	1.6	0	1.6
1	TD16489-3	4oz	1	SUB	N/P	Note #2 - Preservative check not applicable.	IR-5	1.6	0	1.6
1	TD16489-3	2oz	2	2-107	N/P	Note #2 - Preservative check not applicable.	IR-5	1.6	0	1.6
1	TD16489-4	4oz	1	SUB	N/P	Note #2 - Preservative check not applicable.	IR-5	1.6	0	1.6
1	TD16489-4	2oz	2	2-107	N/P	Note #2 - Preservative check not applicable.	IR-5	1.6	0	1.6
1	TD16489-5	4oz	1	SUB	N/P	Note #2 - Preservative check not applicable.	IR-5	1.6	0	1.6
1	TD16489-5	2oz	2	2-107	N/P	Note #2 - Preservative check not applicable.	IR-5	1.6	0	1.6
1	TD16489-6	4oz	1	SUB	N/P	Note #2 - Preservative check not applicable.	IR-5	1.6	0	1.6
1	TD16489-6	2oz	2	2-107	N/P	Note #2 - Preservative check not applicable.	IR-5	1.6	0	1.6
1	TD16489-7	4oz	1	SUB	N/P	Note #2 - Preservative check not applicable.	IR-5	1.6	0	1.6
1	TD16489-7	2oz	2	2-107	N/P	Note #2 - Preservative check not applicable.	IR-5	1.6	0	1.6
1	TD16489-8	4oz	1	SUB	N/P	Note #2 - Preservative check not applicable.	IR-5	1.6	0	1.6
1	TD16489-8	2oz	2	2-107	N/P	Note #2 - Preservative check not applicable.	IR-5	1.6	0	1.6
1	TD16489-9	4oz	1	SUB	N/P	Note #2 - Preservative check not applicable.	IR-5	1.6	0	1.6
1	TD16489-9	2oz	2	2-107	N/P	Note #2 - Preservative check not applicable.	IR-5	1.6	0	1.6
1	TD16489-10	4oz	1	SUB	N/P	Note #2 - Preservative check not applicable.	IR-5	1.6	0	1.6
1	TD16489-10	2oz	2	2-107	N/P	Note #2 - Preservative check not applicable.	IR-5	1.6	0	1.6
1	TD16489-11	4oz	1	SUB	N/P	Note #2 - Preservative check not applicable.	IR-5	1.6	0	1.6
1	TD16489-11	2oz	2	2-107	N/P	Note #2 - Preservative check not applicable.	IR-5	1.6	0	1.6
1	TD16489-12	4oz	1	SUB	N/P	Note #2 - Preservative check not applicable.	IR-5	1.6	0	1.6

TD16489: Chain of Custody

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Sample Receipt Log

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Job #: TD16489

Date / Time Received: 2/10/2018 10:05:00 AM

Initials: ec

Client: ENTECH

Cooler #	Sample ID:	Vol	Bot #	Location	Pres	pH	Therm ID	Initial Temp	Therm CF	Corrected Temp
1	TD16489-12	2oz	2	2-107	N/P	Note #2 - Preservative check not applicable.	IR-5	1.6	0	1.6
1	TD16489-13	4oz	1	SUB	N/P	Note #2 - Preservative check not applicable.	IR-5	1.6	0	1.6
1	TD16489-13	2oz	2	2-107	N/P	Note #2 - Preservative check not applicable.	IR-5	1.6	0	1.6
1	TD16489-14	4oz	1	SUB	N/P	Note #2 - Preservative check not applicable.	IR-5	1.6	0	1.6
1	TD16489-14	2oz	2	2-107	N/P	Note #2 - Preservative check not applicable.	IR-5	1.6	0	1.6
1	TD16489-15	4oz	1	SUB	N/P	Note #2 - Preservative check not applicable.	IR-5	1.6	0	1.6
1	TD16489-15	2oz	2	2-107	N/P	Note #2 - Preservative check not applicable.	IR-5	1.6	0	1.6
1	TD16489-16	4oz	1	SUB	N/P	Note #2 - Preservative check not applicable.	IR-5	1.6	0	1.6
1	TD16489-16	2oz	2	2-107	N/P	Note #2 - Preservative check not applicable.	IR-5	1.6	0	1.6
1	TD16489-17	4oz	1	SUB	N/P	Note #2 - Preservative check not applicable.	IR-5	1.6	0	1.6
1	TD16489-17	2oz	2	2-107	N/P	Note #2 - Preservative check not applicable.	IR-5	1.6	0	1.6
1	TD16489-18	4oz	1	SUB	N/P	Note #2 - Preservative check not applicable.	IR-5	1.6	0	1.6
1	TD16489-18	2oz	2	2-107	N/P	Note #2 - Preservative check not applicable.	IR-5	1.6	0	1.6
1	TD16489-19	4oz	1	SUB	N/P	Note #2 - Preservative check not applicable.	IR-5	1.6	0	1.6
1	TD16489-19	2oz	2	2-107	N/P	Note #2 - Preservative check not applicable.	IR-5	1.6	0	1.6
1	TD16489-20	4oz	1	SUB	N/P	Note #2 - Preservative check not applicable.	IR-5	1.6	0	1.6
1	TD16489-20	2oz	2	2-107	N/P	Note #2 - Preservative check not applicable.	IR-5	1.6	0	1.6
1	TD16489-21	4oz	1	SUB	N/P	Note #2 - Preservative check not applicable.	IR-5	1.6	0	1.6
1	TD16489-21	2oz	2	2-107	N/P	Note #2 - Preservative check not applicable.	IR-5	1.6	0	1.6
1	TD16489-22	4oz	1	SUB	N/P	Note #2 - Preservative check not applicable.	IR-5	1.6	0	1.6
1	TD16489-22	2oz	2	2-107	N/P	Note #2 - Preservative check not applicable.	IR-5	1.6	0	1.6
1	TD16489-23	4oz	1	SUB	N/P	Note #2 - Preservative check not applicable.	IR-5	1.6	0	1.6
1	TD16489-23	2oz	2	2-107	N/P	Note #2 - Preservative check not applicable.	IR-5	1.6	0	1.6

TD16489: Chain of Custody

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Sample Receipt Log

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Job #: TD16489

Date / Time Received: 2/10/2018 10:05:00 AM

Initials: ec

Client: ENTECH

Cooler #	Sample ID:	Vol	Bot #	Location	Pres	pH	Therm ID	Initial Temp	Therm CF	Corrected Temp
1	TD16489-24	4oz	1	SUB	N/P	Note #2 - Preservative check not applicable.	IR-5	1.6	0	1.6
1	TD16489-24	2oz	2	2-107	N/P	Note #2 - Preservative check not applicable.	IR-5	1.6	0	1.6
1	TD16489-25	4oz	1	SUB	N/P	Note #2 - Preservative check not applicable.	IR-5	1.6	0	1.6
1	TD16489-25	2oz	2	2-107	N/P	Note #2 - Preservative check not applicable.	IR-5	1.6	0	1.6
1	TD16489-26	4oz	1	SUB	N/P	Note #2 - Preservative check not applicable.	IR-5	1.6	0	1.6
1	TD16489-26	2oz	2	2-107	N/P	Note #2 - Preservative check not applicable.	IR-5	1.6	0	1.6
1	TD16489-27	4oz	1	SUB	N/P	Note #2 - Preservative check not applicable.	IR-5	1.6	0	1.6
1	TD16489-27	2oz	2	2-107	N/P	Note #2 - Preservative check not applicable.	IR-5	1.6	0	1.6
1	TD16489-28	4oz	1	SUB	N/P	Note #2 - Preservative check not applicable.	IR-5	1.6	0	1.6
1	TD16489-28	2oz	2	2-107	N/P	Note #2 - Preservative check not applicable.	IR-5	1.6	0	1.6
1	TD16489-29	4oz	1	SUB	N/P	Note #2 - Preservative check not applicable.	IR-5	1.6	0	1.6
1	TD16489-29	2oz	2	2-107	N/P	Note #2 - Preservative check not applicable.	IR-5	1.6	0	1.6
1	TD16489-30	4oz	1	SUB	N/P	Note #2 - Preservative check not applicable.	IR-5	1.6	0	1.6
1	TD16489-30	2oz	2	2-107	N/P	Note #2 - Preservative check not applicable.	IR-5	1.6	0	1.6
1	TD16489-31	4oz	1	SUB	N/P	Note #2 - Preservative check not applicable.	IR-5	1.6	0	1.6
1	TD16489-31	2oz	2	2-107	N/P	Note #2 - Preservative check not applicable.	IR-5	1.6	0	1.6
1	TD16489-32	4oz	1	SUB	N/P	Note #2 - Preservative check not applicable.	IR-5	1.6	0	1.6
1	TD16489-32	2oz	2	2-107	N/P	Note #2 - Preservative check not applicable.	IR-5	1.6	0	1.6
1	TD16489-33	4oz	1	SUB	N/P	Note #2 - Preservative check not applicable.	IR-5	1.6	0	1.6
1	TD16489-33	2oz	2	2-107	N/P	Note #2 - Preservative check not applicable.	IR-5	1.6	0	1.6
1	TD16489-34	4oz	1	SUB	N/P	Note #2 - Preservative check not applicable.	IR-5	1.6	0	1.6
1	TD16489-34	2oz	2	2-107	N/P	Note #2 - Preservative check not applicable.	IR-5	1.6	0	1.6
1	TD16489-35	4oz	1	SUB	N/P	Note #2 - Preservative check not applicable.	IR-5	1.6	0	1.6

TD16489: Chain of Custody

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Sample Receipt Log

Page 5 of 5

Job #: TD16489

Date / Time Received: 2/10/2018 10:05:00 AM

Initials: ec

Client: ENTECH

Cooler #	Sample ID:	Vol	Bot #	Location	Pres	pH	Therm ID	Initial Temp	Therm CF	Corrected Temp
1	TD16489-35	2oz	2	2-107	N/P	Note #2 - Preservative check not applicable.	IR-5	1.6	0	1.6

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TD16489: Chain of Custody

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General Chemistry

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QC Data Summaries

Includes the following where applicable:

- **Method Blank and Blank Spike Summaries**
- **Duplicate Summaries**
- **Matrix Spike Summaries**

METHOD BLANK AND SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: TD16489
Account: ENTECTXW - EnTech Consulting Corporation
Project: CJES State AB SWD #1/LEA Co,N Mex

Analyte	Batch ID	RL	MB Result	Units	Spike Amount	BSP Result	BSP %Recov	QC Limits
Bromide	GP46546/GN88207	5.0	0.0	mg/kg	100	99.2	99.2	90-110%
Bromide	GP46554/GN88207	5.0	0.0	mg/kg	100	91.8	91.8	90-110%
Chloride	GP46546/GN88207	5.0	0.0	mg/kg	100	90.5	90.5	90-110%
Chloride	GP46554/GN88207	5.0	0.0	mg/kg	100	93.5	93.5	90-110%
Fluoride	GP46546/GN88207	5.0	0.0	mg/kg	100	94.8	94.8	90-110%
Fluoride	GP46554/GN88207	5.0	0.0	mg/kg	100	103	103.0	90-110%
Nitrogen, Nitrate	GP46546/GN88207	5.0	0.0	mg/kg	100	97.9	97.9	90-110%
Nitrogen, Nitrate	GP46554/GN88207	5.0	0.0	mg/kg	100	90.9	90.9	90-110%
Nitrogen, Nitrite	GP46546/GN88207	5.0	0.0	mg/kg	100	98.3	98.3	90-110%
Nitrogen, Nitrite	GP46554/GN88207	5.0	0.0	mg/kg	100	99.1	99.1	90-110%
Sulfate	GP46546/GN88207	5.0	0.0	mg/kg	100	96.1	96.1	90-110%
Sulfate	GP46554/GN88207	5.0	0.0	mg/kg	100	96.6	96.6	90-110%

Associated Samples:

Batch GP46546: TD16489-2R, TD16489-4R, TD16489-6R, TD16489-7R, TD16489-8R, TD16489-12R, TD16489-13R, TD16489-14R, TD16489-15R, TD16489-22R

Batch GP46554: TD16489-23R, TD16489-24R, TD16489-26R, TD16489-30R, TD16489-32R, TD16489-34R, TD16489-35R

(*) Outside of QC limits

DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: TD16489
Account: ENTECTXW - EnTech Consulting Corporation
Project: CJES State AB SWD #1/LEA Co,N Mex

Analyte	Batch ID	QC Sample	Units	Original Result	DUP Result	RPD	QC Limits
Chloride	GP46546/GN88207	TD16489-4R	mg/kg	62.6	62.0	1.0	0-20%
Chloride	GP46554/GN88207	TD17223-1	mg/kg	70.2	68.4	2.6	0-20%
Solids, Percent	GN87959	TD17042-1	%	69	69.5	0.7	0-5%
Solids, Percent	GN88105	TD17204-2	%	82.1	82.1	0.0	0-5%
Solids, Percent	GN88127	TD17298-1	%	79.8	79.4	0.5	0-5%

Associated Samples:

Batch GN87959: TD16489-12A, TD16489-13A, TD16489-14A, TD16489-15A

Batch GN88105: TD16489-6R, TD16489-7R

Batch GN88127: TD16489-2R, TD16489-4R, TD16489-8R, TD16489-22R, TD16489-23R, TD16489-24R, TD16489-26R, TD16489-30R, TD16489-32R, TD16489-34R, TD16489-35R

Batch GP46546: TD16489-2R, TD16489-4R, TD16489-6R, TD16489-7R, TD16489-8R, TD16489-12R, TD16489-13R, TD16489-14R, TD16489-15R, TD16489-22R

Batch GP46554: TD16489-23R, TD16489-24R, TD16489-26R, TD16489-30R, TD16489-32R, TD16489-34R, TD16489-35R

(*) Outside of QC limits

MATRIX SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: TD16489
Account: ENTECTXW - EnTech Consulting Corporation
Project: CJES State AB SWD #1/LEA Co,N Mex

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MS Result	%Rec	QC Limits
Chloride	GP46546/GN88207	TD16489-4R	mg/kg	62.6	112	163	90.0	80-120%
Chloride	GP46554/GN88207	TD17223-1	mg/kg	70.2	124	211	113.8	80-120%

Associated Samples:

Batch GP46546: TD16489-2R, TD16489-4R, TD16489-6R, TD16489-7R, TD16489-8R, TD16489-12R, TD16489-13R, TD16489-14R, TD16489-15R, TD16489-22R

Batch GP46554: TD16489-23R, TD16489-24R, TD16489-26R, TD16489-30R, TD16489-32R, TD16489-34R, TD16489-35R

(*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits

Misc. Forms

Custody Documents and Other Forms

(SGS Scott, LA)

Includes the following where applicable:

- Chain of Custody



CHAIN OF CUSTODY

Page 1 of 3

10165 Harwin Drive, Houston, TX 77036
TEL: 713-271-4700 FAX: 713-271-4770

FED-EX Tracking #		Bottle Order Control #	
SGS Quote #		SGS Job # TD16489	
Client / Reporting Information		Project Information	
Company Name: SGS North America Inc.		Project Name: CJES State AB SWD #1/LEA Co,N Mex	
Street Address: 10165 Harwin Drive		Street:	
City: Houston State: TX Zip: 77036		Billing Information (if different from Report to)	
Project Contact: Tremeshia Brown@sgs.com		Company Name:	
Phone #: 713-271-4700		Project #:	
Fax #:		Street Address:	
Client Purchase Order #:		City: State: Zip:	
Project Manager:		Attestation:	
Sampler(s) Name(s):		Collection	
MEOH/DI Vial #		Date Time	
Field ID / Point of Collection		Sampled by	
SGS Sample #		Matrix	
1 BUC-6@6		SO	
2 BUC-6@8		SO	
3 BUC-7@6		SO	
4 BUC-7@10		SO	
5 BUC-8@6		SO	
6 BUC-8@8		SO	
7 BUC-9@6		SO	
8 BUC-9@12		SO	
9 BUC-10@6		SO	
10 BUC-10@16		SO	
11 BUC-10@24		SO	
12 BUC-11@6		SO	
Turnaround Time (Business days)		Data Deliverable Information	
Approved By (SGS PM): / Date:		Comments / Special Instructions	
<input type="checkbox"/> Std. 10 Business Days <input type="checkbox"/> 5 Day RUSH <input type="checkbox"/> 3 Day EMERGENCY <input type="checkbox"/> 2 Day EMERGENCY <input type="checkbox"/> 1 Day EMERGENCY <input checked="" type="checkbox"/> other Due 2/19/2018		Please split off an 2oz for CHL to keep here and send the 4oz to LA.	
Emergency & Rush T/A data available VIA Lablink		705(RX14)	
Relinquished by: S. Brown		Received By: SPS	
Date Time: 2-13-18		Date Time: 2-13-18	
Relinquished by: S. Brown		Received By: M. Nunez	
Date Time: 2-13-18		Date Time: 2-13-18	
Relinquished by:		Received By:	
Date Time:		Date Time:	
Custody Seal #		Preserved where applicable	
CO/OC		On Ice	
<input checked="" type="checkbox"/> Intact		Cooler Temp: 20.18 20.44	
<input type="checkbox"/> Not intact			

TD16489: Chain of Custody

Page 1 of 5

SGS Scott, LA





CHAIN OF CUSTODY

Page 2 of 3

10165 Harwin Drive, Houston, TX 77036
TEL: 713-271-4700 FAX: 713-271-4770

FED-EX Tracking #		Batch Order Control #															
SGS Quote #		SGS Job # TD16489															
Client / Client / Reporting Information		Project Information															
Company Name: SGS North America Inc.		Project Name: CJS State AB SWD #1/LEA Co.N Mex															
Street Address: 10165 Harwin Drive		Street:															
City: Houston State: TX Zip: 77036		City: State: Company Name:															
Project Contact: Trameshia Brown@sgs.com		Project #:															
Phone #: 713-271-4700		Street Address:															
Fax #:		Client Purchase Order #:															
Sampler(s) Name(s):		City: State: Zip:															
Phone:		Attention:															
Collection		Number of preserved Bottles															
SGS Sample #	Field ID / Point of Collection	MEOH/DI Val #	Date	Time	Sampled by	Matrix	# of bottles	HC	NaOH	HNO3	H2SO4	NONE	DI Water	MEOH	ENCORE	HOLD	LAB USE ONLY
13	BUC-11@13		2/8/18	10:06:00 AM		SO	1					X				X	
14	BUC-12@6		2/8/18	10:25:00 AM		SO	1					X				X	
15	BUC-12@18		2/8/18	10:25:00 AM		SO	1					X				X	
16	BUC-13@6		2/8/18	10:50:00 AM		SO	1					X				X	
17	BUC-13@20		2/8/18	10:50:00 AM		SO	1					X				X	
18	BUC-13@30		2/8/18	10:50:00 AM		SO	1					X				X	
19	BUC-14@6		2/8/18	11:25:00 AM		SO	1					X				X	
20	BUC-14@24		2/8/18	11:25:00 AM		SO	1					X				X	
21	BUC-14@32		2/8/18	11:25:00 AM		SO	1					X				X	
22	BUC-15@6		2/8/18	12:45:00 PM		SO	1					X				X	
23	BUC-15@24		2/8/18	12:45:00 PM		SO	1					X				X	
24	BUC-15@30		2/8/18	12:45:00 PM		SO	1					X				X	
Turnaround Time (Business days)		Approved By (SGS PM): / Date:		Data Deliverable Information		Comments / Special Instructions											
<input type="checkbox"/> Std. 10 Business Days <input type="checkbox"/> 5 Day RUSH <input type="checkbox"/> 3 Day EMERGENCY <input type="checkbox"/> 2 Day EMERGENCY <input type="checkbox"/> 1 Day EMERGENCY <input checked="" type="checkbox"/> other Due 2/19/2018 Emergency & Rush T/A data available VIA Lablink		<input type="checkbox"/> Commercial "A" (Level 1) <input type="checkbox"/> Commercial "B" (Level 2) <input type="checkbox"/> FULLT1 (Level 3+4) <input type="checkbox"/> NU Reduced <input type="checkbox"/> Commercial "C" Commercial "A" = Results Only Commercial "B" = Results + QC Summary NU Reduced = Results + QC Summary + Partial Raw data		<input type="checkbox"/> NYASP Category A <input type="checkbox"/> NYASP Category B <input type="checkbox"/> State Forms <input type="checkbox"/> EDO Format <input checked="" type="checkbox"/> Other COMMB		Please split off an 2oz for CHL to keep here and send the 4oz to LA.											
Sample Custody must be documented below each time samples change possession, including courier delivery.																	
Relinquished by Sampler:	Date/Time:	Received By:	Date/Time:	Relinquished By:	Date/Time:	Received By:	Date/Time:										
1	2-12-18	1	2-13-18	2	2-13-18	3	2-13-18										
3	2-13-18	3	2-13-18	4	2-13-18	4	2-13-18										
5	2-13-18	5	2-13-18	Custody Seal #	Intact	Preserved where applicable	On Ice										

TD16489: Chain of Custody

Page 2 of 5



10165 Harwin Drive, Houston, TX 77036
TEL: 713-271-4700 FAX: 713-271-4770

SGS			10165 Harwin Drive, Houston, TX, 77036 TEL 713-271-4700 FAX: 713-271-4770			FED-EX Tracking #	Battle Order Control #																
						SGS Quote #	SGS Job # TD16489																
Client / Reporting Information				Project Information				Requested Analysis (see TEST CODE sheet)												Matrix Codes			
Company Name: SGS North America Inc.				Project Name: CJES State AB SWD #1/LEA Co,N Mex																OW - Drinking Water GW - Ground Water WW - Water SW - Surface Water SO - Soil SL - Sludge SED-Sediment OI - Oil LIQ - Other Liquid AIR - Air SOL - Other Solid WP - Waste FB-Field Blank EB-Equipment Blank RS-Rinse Blank TB-Trip Blank			
Street Address: 10165 Harwin Drive				Street:																			
City State Zip: Houston TX 77036				Billing Information (if different from Report to)																			
Project Contact E-mail: Trameshia.Brown@sgs.com				Project #																			
Phone # 713-271-4700				Fax# Client Purchase Order #																			
Sampler(s) Name(s)				Project Manager				Attention:															
SGS Sample #	Field ID / Point of Collection	MEOHDI Val #	Date	Time	Sampled by	Matrix	# of bottles	NHCl	NHNO3	HgSO4	HgSO4	NONE	PV Value	MEOHA	BRONOL	HOLD	LAB USE ONLY						
25	BUC-16@6		2/8/18	1:13:00 PM		SO	1					x				X							
26	BUC-16@9		2/8/18	1:13:00 PM		SO	1					x				X							
27	BUC-17@6		2/8/18	1:20:00 PM		SO	1					x				X							
28	BUC-17@8		2/8/18	1:20:00 PM		SO	1					x				X							
29	BUC-18@6		2/8/18	1:29:00 PM		SO	1					x				X							
30	BUC-18@9		2/8/18	1:29:00 PM		SO	1					x				X							
31	BUC-19@6		2/8/18	1:36:00 PM		SO	1					x				X							
32	BUC-19@8		2/8/18	1:36:00 PM		SO	1					x				X							
33	DUP-6		2/8/18	12:00:00 AM		SO	1					x				X							
34	DUP-7		2/8/18	12:00:00 AM		SO	1					x				X							
35	DUP-8		2/8/18	12:00:00 AM		SO	1					x				X							
Turnaround Time (Business days)								Data Deliverable Information								Comments / Special Instructions							
<input type="checkbox"/> Std. 10 Business Days <input type="checkbox"/> 5 Day RUSH <input type="checkbox"/> 3 Day EMERGENCY <input type="checkbox"/> 2 Day EMERGENCY <input type="checkbox"/> 1 Day EMERGENCY <input checked="" type="checkbox"/> other Due 2/19/2018 Emergency & Rush T/A date available VIA Lablink				Approved By (SGS PM) : / Date:				<input type="checkbox"/> Commercial "A" (Level 1) <input type="checkbox"/> Commercial "B" (Level 2) <input type="checkbox"/> FULLT1 (Level 3+4) <input type="checkbox"/> NJ Reduced <input type="checkbox"/> Commercial "C" Commercial "A" = Results Only Commercial "B" = Results + QC Summary NJ Reduced = Results + QC Summary + Partial Raw data								Please split off an 2oz for CHL to keep here and send the 4oz to LA. <input type="checkbox"/> NYASP Category A <input type="checkbox"/> NYASP Category B <input type="checkbox"/> State Forms <input type="checkbox"/> EDD Format <input checked="" type="checkbox"/> Other COMMB							
Sample Custody must be documented below each time samples change possession, including courier delivery.																							
Relinquished by Sampler: [Signature]				Date Tr: 2-13-18				Received By: [Signature] 365				Date Time: 2				Received By: [Signature]							
Relinquished by: [Signature]				Date Time: 2:30P				Received By: [Signature] 2-13-18				Date Time: 4				Received By: [Signature]							
Relinquished by:				Date Time:				Custody Seal # CS/CL				<input checked="" type="checkbox"/> Intact <input type="checkbox"/> Not intact				Preserved where applicable							
												On Ice				Cooler Temp. 2.0 / 1.8 clv							

TD16489: Chain of Custody

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SGS Sample Receipt Summary

Job Number: TD16489

Client: SGS NORTH AMERICA

Project: CJES STATE AB SWD#1/LEA

Date / Time Received: 2/13/2018 8:15:00 AM

Delivery Method: Accutest Courier

Airbill #'s: _____

Cooler Temps (Initial/Adjusted): #1: (2/2); #2: (1.8/1.8);

Cooler Security

	<u>Y</u>	<u>or</u>	<u>N</u>		<u>Y</u>	<u>or</u>	<u>N</u>
1. Custody Seals Present:	<input checked="" type="checkbox"/>		<input type="checkbox"/>	3. COC Present:	<input checked="" type="checkbox"/>		<input type="checkbox"/>
2. Custody Seals Intact:	<input checked="" type="checkbox"/>		<input type="checkbox"/>	4. Smpl Dates/Time OK	<input checked="" type="checkbox"/>		<input type="checkbox"/>

Cooler Temperature

	<u>Y</u>	<u>or</u>	<u>N</u>
1. Temp criteria achieved:	<input checked="" type="checkbox"/>		<input type="checkbox"/>
2. Thermometer ID:	<u>DV441;</u>		
3. Cooler media:	<u>Ice (direct contact)</u>		
4. No. Coolers:	<u>2</u>		

Quality Control Preservation

	<u>Y</u>	<u>or</u>	<u>N</u>	<u>N/A</u>
1. Trip Blank present / cooler:	<input type="checkbox"/>		<input type="checkbox"/>	<input checked="" type="checkbox"/>
2. Trip Blank listed on COC:	<input type="checkbox"/>		<input type="checkbox"/>	<input checked="" type="checkbox"/>
3. Samples preserved properly:	<input checked="" type="checkbox"/>		<input type="checkbox"/>	
4. VOCs headspace free:	<input type="checkbox"/>		<input type="checkbox"/>	<input checked="" type="checkbox"/>

Comments

Sample Integrity - Documentation

	<u>Y</u>	<u>or</u>	<u>N</u>
1. Sample labels present on bottles:	<input checked="" type="checkbox"/>		<input type="checkbox"/>
2. Container labeling complete:	<input checked="" type="checkbox"/>		<input type="checkbox"/>
3. Sample container label / COC agree:	<input checked="" type="checkbox"/>		<input type="checkbox"/>

Sample Integrity - Condition

	<u>Y</u>	<u>or</u>	<u>N</u>
1. Sample recvd within HT:	<input checked="" type="checkbox"/>		<input type="checkbox"/>
2. All containers accounted for:	<input checked="" type="checkbox"/>		<input type="checkbox"/>
3. Condition of sample:	<u>Intact</u>		

Sample Integrity - Instructions

	<u>Y</u>	<u>or</u>	<u>N</u>	<u>N/A</u>
1. Analysis requested is clear:	<input checked="" type="checkbox"/>		<input type="checkbox"/>	
2. Bottles received for unspecified tests	<input type="checkbox"/>		<input checked="" type="checkbox"/>	
3. Sufficient volume recvd for analysis:	<input checked="" type="checkbox"/>		<input type="checkbox"/>	
4. Compositing instructions clear:	<input type="checkbox"/>		<input type="checkbox"/>	<input checked="" type="checkbox"/>
5. Filtering instructions clear:	<input type="checkbox"/>		<input type="checkbox"/>	<input checked="" type="checkbox"/>

TD16489: Chain of Custody

Page 4 of 5

Job Change Order: TD16489

Requested Date:	2/21/2018	Received Date:	2/10/2018
Account Name:	EnTech Consulting Corporation	Due Date:	2/22/2018
Project Description:	CJES State AB SWD #1/LEA Co,N Mex	Deliverable:	COMMB
CSR:	SylviaG	TAT (Days):	7

Sample #: TD16489-12A, 13A, 14A , 15A Change:
Login V8015GRO, B8015DROORO1

Dept:

TAT: 7

Above Changes Per: Client

Date/Time: 2/21/2018 4:41:23 PM

To Client: This Change Order is confirmation of the revisions, previously discussed with the Client Service Representative.

Page 1 of 1

GC Volatiles**QC Data Summaries**

(SGS Scott, LA)

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Job Number: TD16489
Account: ALGC SGS Houston, TX
Project: ENTECTXW: CJES State AB SWD #1/LEA Co,N Mex

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GLA1699-MB1	LA286825.D	1	02/22/18	SV	n/a	n/a	GLA1699

The QC reported here applies to the following samples: Method: SW846 8015C

TD16489-12A, TD16489-13A, TD16489-14A, TD16489-15A

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	5.0	4.9	mg/kg	

CAS No.	Surrogate Recoveries	Limits
460-00-4	4-Bromofluorobenzene	103% 63-139%
540-36-3	1,4-Difluorobenzene	95% 52-140%

Blank Spike/Blank Spike Duplicate Summary

Job Number: TD16489
Account: ALGC SGS Houston, TX
Project: ENTECTXW: CJES State AB SWD #1/LEA Co,N Mex

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GLA1699-BS1	LA286821.D	1	02/22/18	SV	n/a	n/a	GLA1699
GLA1699-BSD1	LA286823.D	1	02/22/18	SV	n/a	n/a	GLA1699

The QC reported here applies to the following samples: Method: SW846 8015C

TD16489-12A, TD16489-13A, TD16489-14A, TD16489-15A

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	BSD mg/kg	BSD %	RPD	Limits Rec/RPD
	TPH-GRO (C6-C10)	50	49.0	98	46.8	94	5	79-121/6

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
460-00-4	4-Bromofluorobenzene	102%	103%	63-139%
540-36-3	1,4-Difluorobenzene	104%	104%	52-140%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: TD16489
Account: ALGC SGS Houston, TX
Project: ENTECTXW: CJES State AB SWD #1/LEA Co,N Mex

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
TD16489-15AMS	LA286835.D	1	02/22/18	SV	n/a	n/a	GLA1699
TD16489-15AMSD	LA286837.D	1	02/22/18	SV	n/a	n/a	GLA1699
TD16489-15A	LA286833.D	1	02/22/18	SV	n/a	n/a	GLA1699

The QC reported here applies to the following samples: Method: SW846 8015C

TD16489-12A, TD16489-13A, TD16489-14A, TD16489-15A

CAS No.	Compound	TD16489-15A mg/kg	Spike Q	MS mg/kg	MS %	Spike mg/kg	MSD mg/kg	MSD %	RPD	Limits Rec/RPD
	TPH-GRO (C6-C10)	ND	113	106	93	113	104	92	2	79-121/6

CAS No.	Surrogate Recoveries	MS	MSD	TD16489-15A	Limits
460-00-4	4-Bromofluorobenzene	99%	97%	94%	63-139%
540-36-3	1,4-Difluorobenzene	103%	101%	90%	52-140%

* = Outside of Control Limits.

GC/LC Semi-volatiles**QC Data Summaries**

(SGS Scott, LA)

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Job Number: TD16489
Account: ALGC SGS Houston, TX
Project: ENTECTXW: CJES State AB SWD #1/LEA Co,N Mex

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP10567-MB	S0005087.D	1	02/22/18	JT	02/22/18	OP10567	GLG620

The QC reported here applies to the following samples: Method: SW846 8015C

TD16489-12A, TD16489-13A, TD16489-14A, TD16489-15A

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C22)	2.82	5.0	2.5	mg/kg	J
	TPH (> C22-C36)	ND	5.0	2.5	mg/kg	

CAS No.	Surrogate Recoveries	Limits
84-15-1	o-Terphenyl	80% 31-130%

8.1.1
8

Blank Spike/Blank Spike Duplicate Summary

Job Number: TD16489
Account: ALGC SGS Houston, TX
Project: ENTECTXW: CJES State AB SWD #1/LEA Co,N Mex

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP10567-BS1	S0005088.D	1	02/22/18	JT	02/22/18	OP10567	GLG620
OP10567-BSD1	S0005089.D	1	02/22/18	JT	02/22/18	OP10567	GLG620

The QC reported here applies to the following samples: Method: SW846 8015C

TD16489-12A, TD16489-13A, TD16489-14A, TD16489-15A

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	BSD mg/kg	BSD %	RPD	Limits Rec/RPD
	TPH (C10-C22)	120	127	106	127	106	0	57-119/30

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
84-15-1	o-Terphenyl	88%	89%	31-130%

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: TD16489
Account: ALGC SGS Houston, TX
Project: ENTECTXW: CJES State AB SWD #1/LEA Co,N Mex

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP10567-BS2	S0005090.D	1	02/22/18	JT	02/22/18	OP10567	GLG620
OP10567-BSD2	S0005091.D	1	02/22/18	JT	02/22/18	OP10567	GLG620

The QC reported here applies to the following samples: Method: SW846 8015C

TD16489-12A, TD16489-13A, TD16489-14A, TD16489-15A

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	BSD mg/kg	BSD %	RPD	Limits Rec/RPD
	TPH (> C22-C36)	150	121	81	125	83	3	55-117/25

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
84-15-1	o-Terphenyl	76%	82%	31-130%

* = Outside of Control Limits.

Appendix A: Drilling and Geological Logs

Project: CJES State AB #1 SWD

Location: Lea County, NM

Station ID: B-1

Date Drilled: 2/5/18

Geologist: P. Schram

Drilling Company: -

Drilling Method: -

Boring/Well Diameter: 2"

Boring/Well Total Depth: 20'

Screen Length: NA



DEPTH (feet bgs)	PID (ppm)	GRAPHIC LOG	LITHOLOGIC DESCRIPTION/COMMENTS
0.0			
1.0			Sandstone, unconsolidated, fine grained, tan to buff, consolidated in part, caliche nodules present, dry, no odor.
2.0			
3.0			Sandstone, unconsolidated, fine grained, red to reddish brown color, consolidated in part, limestone, dry, no odor.
4.0	4.0		
5.0			
6.0			Sandstone, unconsolidated, fined grained, red to reddish brown color, sucrosic, consolidated in part dry, no odor.
7.0			
8.0	4.9		
9.0			
10.0			
11.0			Sandstone, unconsolidated, fine grained, red to reddish brown, consolidated in part, caliche nodules evident, dry, no odor.
12.0			
13.0			
14.0			
15.0	4.7		
16.0			
17.0			
18.0			
19.0			
20.0			
21.0			
22.0			
23.0			
24.0			
25.0			

Project: CJES State AB #1 SWD

Location: Lea County, NM

Station ID: B-2

Date Drilled: 2/5/18

Geologist: P. Schram

Drilling Company: -

Drilling Method: -

Boring/Well Diameter: 2"

Boring/Well Total Depth: 20'

Screen Length: NA



DEPTH (feet bgs)	PID (ppm)	GRAPHIC LOG	LITHOLOGIC DESCRIPTION/COMMENTS
0.0			Clayey sandstone, unconsolidated, fine grained, tan to brown, consolidated in part, caliche nodules present, dry, no odor.
1.0			
2.0			Sandstone, unconsolidated, fine grained, tan to reddish brown, consolidated in part, limestone, off-white to tan, microcrystalline, dry, no odor.
3.0	7.9		
4.0			
5.0			
6.0			Sandstone, unconsolidated, fine grained, tan to brown, consolidated in part, limestone evident, dry, no odor.
7.0			
8.0	8.2		
9.0			
10.0			
11.0			Sandstone, tan to buff, unconsolidated, fine grained, consolidated in part, dry, no odor.
12.0			
13.0			
14.0			
15.0	11.2		
16.0			
17.0			
18.0			
19.0			
20.0			
21.0			
22.0			
23.0			
24.0			
25.0			

Project: CJES State AB #1 SWD

Location: Lea County, NM

Station ID: B-3

Date Drilled: 2/5/18

Geologist: P. Schram

Drilling Company: -

Drilling Method: -

Boring/Well Diameter: 2"

Boring/Well Total Depth: 20'

Screen Length: NA



DEPTH (feet bgs)	PID (ppm)	GRAPHIC LOG	LITHOLOGIC DESCRIPTION/COMMENTS
0.0			Clayey sandstone, unconsolidated, fine grained, tan to buff, consolidated in part, caliche evident, dry, no odor.
1.0			
2.0			
3.0	4.3		Sandstone, unconsolidated, tan to buff color, fine grained, consolidated in part, limestone, off-white to tan, microcrystalline, dry, no odor.
4.0			
5.0			
6.0	13.0		Sandstone, unconsolidated, fine grained, tan to reddish brown, sucrosic, consolidated in part, dry, no odor.
7.0			
8.0			
9.0			
10.0			
11.0			Sandstone, unconsolidated, tan to buff color, fine grained, consolidated in part, caliche nodules evident, dry, no odor.
12.0			
13.0			
14.0			
15.0	4.6		
16.0			
17.0			
18.0			
19.0			
20.0			
21.0			
22.0			
23.0			
24.0			
25.0			

Project: CJES State AB #1 SWD

Location: Lea County, NM

Station ID: B-4

Date Drilled: 2/5/18

Geologist: P. Schram

Drilling Company: -

Drilling Method: -

Boring/Well Diameter: 2"

Boring/Well Total Depth: 20'

Screen Length: NA



DEPTH (feet bgs)	PID (ppm)	GRAPHIC LOG	LITHOLOGIC DESCRIPTION/COMMENTS
0.0			Clayey sandstone, unconsolidated, fine grained, tan to buff, consolidated in part, caliche evident, dry, no odor.
1.0			
2.0			
3.0	1.9		Sandstone, unconsolidated, fine grained, tan to buff color, consolidated in part, dry, no odor.
4.0			
5.0			
6.0	10.4		Sandstone, unconsolidated, fine grained, tan to reddish brown in color, sucrosic, consolidated in part, dry, no odor.
7.0			
8.0			
9.0			
10.0			
11.0			Sandstone, unconsolidated, tan to buff color, fine grained, consolidated in part, limestone evident, conchoidal fracture, abundant calcite, dry, no odor.
12.0			
13.0			
14.0			
15.0	3.5		
16.0			
17.0			
18.0			
19.0			
20.0			
21.0			
22.0			
23.0			
24.0			
25.0			



WELL RECORD & LOG

OFFICE OF THE STATE ENGINEER

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1. GENERAL AND WELL LOCATION	OSE POD NUMBER (WELL NUMBER) STATE AB SWD #1 SB-1			OSE FILE NUMBER(S)				
	WELL OWNER NAME(S) C&J ENERGY SERVICES			PHONE (OPTIONAL)				
	WELL OWNER MAILING ADDRESS 5208 N LOVINGTON HWY			CITY HOBBS	STATE NM	ZIP 88240-9111		
	WELL LOCATION (FROM GPS)	DEGREES LATITUDE 32	MINUTES 41	SECONDS 40.7832	N	* ACCURACY REQUIRED: ONE TENTH OF A SECOND * DATUM REQUIRED: WGS 84		
DESCRIPTION RELATING WELL LOCATION TO STREET ADDRESS AND COMMON LANDMARKS - PLSS (SECTION, TOWNSHIP, RANGE) WHERE AVAILABLE APPROXIMATELY 1.9 MILES WEST OF THE HOBBS AIRPORT IN HOBBS, NEW MEXICO								
2. DRILLING & CASING INFORMATION	LICENSE NUMBER WD1711		NAME OF LICENSED DRILLER EDWARD BRYAN		NAME OF WELL DRILLING COMPANY STRAUB CORPORATION			
	DRILLING STARTED 2-5-18	DRILLING ENDED 2-5-18	DEPTH OF COMPLETED WELL (FT) 20'	BORE HOLE DEPTH (FT) 20'	DEPTH WATER FIRST ENCOUNTERED (FT) N/A			
	COMPLETED WELL IS: <input type="radio"/> ARTESIAN <input checked="" type="radio"/> DRY HOLE <input type="radio"/> SHALLOW (UNCONFINED)				STATIC WATER LEVEL IN COMPLETED WELL (FT) N/A			
	DRILLING FLUID: <input checked="" type="radio"/> AIR <input type="radio"/> MUD ADDITIVES - SPECIFY:							
	DRILLING METHOD: <input checked="" type="radio"/> ROTARY <input type="radio"/> HAMMER <input type="radio"/> CABLE TOOL <input type="radio"/> OTHER - SPECIFY:							
	DEPTH (feet bgl) FROM TO		BORE HOLE DIAM (inches)	CASING MATERIAL AND/OR GRADE (include each casing string, and note sections of screen)	CASING CONNECTION TYPE	CASING INSIDE DIAM. (inches)	CASING WALL THICKNESS (inches)	SLOT SIZE (inches)
	0 20'		6"	N/A	N/A	N/A	N/A	N/A
3. ANNULAR MATERIAL	DEPTH (feet bgl) FROM TO		BORE HOLE DIAM. (inches)	LIST ANNULAR SEAL MATERIAL AND GRAVEL PACK SIZE-RANGE BY INTERVAL	AMOUNT (cubic feet)	METHOD OF PLACEMENT		
	0 2'		6"	1 CEMENT		TOPLOAD		
	2 20'		6"	5 BAGS OF 3/8 HOLEPLUG		TOPLOAD		

FOR OSE INTERNAL USE

WR-20 WELL RECORD & LOG (Version 06/08/2012)


FILE NUMBER

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LOCATION

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	DEPTH (feet bgl)		THICKNESS (feet)	COLOR AND TYPE OF MATERIAL ENCOUNTERED - INCLUDE WATER-BEARING CAVITIES OR FRACTURE ZONES (attach supplemental sheets to fully describe all units)	WATER BEARING? (YES / NO)	ESTIMATED YIELD FOR WATER- BEARING ZONES (gpm)
	FROM	TO				
4. HYDROGEOLOGIC LOG OF WELL	0	6'	6'	TAN FINE SAND CALICHE - SANDSTONE	<input type="radio"/> Y <input checked="" type="radio"/> N	N/A
	6'	8'	2'	TAN FINE SAND - SANDSTONE	<input type="radio"/> Y <input checked="" type="radio"/> N	N/A
	8'	10'	2'	TAN VERY FINE SAND - SOFT SANDSTONE	<input type="radio"/> Y <input checked="" type="radio"/> N	N/A
	10'	11'	1'	TAN VERY FINE SAND - CEMENT SANDSTONE	<input type="radio"/> Y <input checked="" type="radio"/> N	N/A
	11'	17'	6'	TAN VERY FINE SAND	<input type="radio"/> Y <input checked="" type="radio"/> N	N/A
	17'	20'	3'	TAN FINE SAND - CEMENT SANDSTONE	<input type="radio"/> Y <input checked="" type="radio"/> N	N/A
	TD	20'			<input type="radio"/> Y <input checked="" type="radio"/> N	
					<input type="radio"/> Y <input checked="" type="radio"/> N	
					<input type="radio"/> Y <input checked="" type="radio"/> N	
					<input type="radio"/> Y <input checked="" type="radio"/> N	
					<input type="radio"/> Y <input checked="" type="radio"/> N	
					<input type="radio"/> Y <input checked="" type="radio"/> N	
					<input type="radio"/> Y <input checked="" type="radio"/> N	
					<input type="radio"/> Y <input checked="" type="radio"/> N	
					<input type="radio"/> Y <input checked="" type="radio"/> N	
					<input type="radio"/> Y <input checked="" type="radio"/> N	
					<input type="radio"/> Y <input checked="" type="radio"/> N	
					<input type="radio"/> Y <input checked="" type="radio"/> N	
					<input type="radio"/> Y <input checked="" type="radio"/> N	
	METHOD USED TO ESTIMATE YIELD OF WATER-BEARING STRATA: <input type="radio"/> PUMP					TOTAL ESTIMATED
<input type="radio"/> AIR LIFT <input type="radio"/> BAILER <input type="radio"/> OTHER - SPECIFY:					WELL YIELD (gpm):	
5. TEST; RIG SUPERVISION	WELL TEST	TEST RESULTS - ATTACH A COPY OF DATA COLLECTED DURING WELL TESTING, INCLUDING DISCHARGE METHOD, START TIME, END TIME, AND A TABLE SHOWING DISCHARGE AND DRAWDOWN OVER THE TESTING PERIOD.				
	MISCELLANEOUS INFORMATION:					
	SOIL BORING ONLY - SOIL BORING WAS PLUGGED AND ABANDONED UPON COMPLETION OF SAMPLING. LEA COUNTY, NM					
PRINT NAME(S) OF DRILL RIG SUPERVISOR(S) THAT PROVIDED ONSITE SUPERVISION OF WELL CONSTRUCTION OTHER THAN LICENSEE:						
6. SIGNATURE	THE UNDERSIGNED HEREBY CERTIFIES THAT, TO THE BEST OF HIS OR HER KNOWLEDGE AND BELIEF, THE FOREGOING IS A TRUE AND CORRECT RECORD OF THE ABOVE DESCRIBED HOLE AND THAT HE OR SHE WILL FILE THIS WELL RECORD WITH THE STATE ENGINEER AND THE PERMIT HOLDER WITHIN 20 DAYS AFTER COMPLETION OF WELL DRILLING:					
	 <u>Edward Bryan</u> SIGNATURE OF DRILLER / PRINT SIGNEE NAME					<u>3-7-18</u> DATE

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WR-20 WELL RECORD & LOG (Version 06/08/2012)

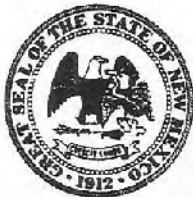
FILE NUMBER

POD NUMBER

TRN NUMBER

LOCATION

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WELL RECORD & LOG

OFFICE OF THE STATE ENGINEER

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1. GENERAL AND WELL LOCATION	OSE POD NUMBER (WELL NUMBER) STATE AB SWD #1 SB-2				OSE FILE NUMBER(S)			
	WELL OWNER NAME(S) C&J ENERGY SERVICES				PHONE (OPTIONAL)			
	WELL OWNER MAILING ADDRESS 5208 N LOVINGTON HWY				CITY HOBBS		STATE NM	ZIP 88240-9111
	WELL LOCATION (FROM GPS)	DEGREES LATITUDE 32	MINUTES 41	SECONDS 128 N	* ACCURACY REQUIRED: ONE TENTH OF A SECOND			
		LONGITUDE 103	14	28.8204 W	* DATUM REQUIRED: WGS 84			
DESCRIPTION RELATING WELL LOCATION TO STREET ADDRESS AND COMMON LANDMARKS - PLSS (SECTION, TOWNSHIP, RANGE) WHERE AVAILABLE APPROXIMATELY 1.9 MILES WEST OF THE HOBBS AIRPORT IN HOBBS, NEWMEXICO								
2. DRILLING & CASING INFORMATION	LICENSE NUMBER WD1711		NAME OF LICENSED DRILLER EDWARD BRYAN			NAME OF WELL DRILLING COMPANY STRAUB CORPORATION		
	DRILLING STARTED 2-5-18		DRILLING ENDED 2-5-18		DEPTH OF COMPLETED WELL (FT) 20'	BORE HOLE DEPTH (FT) 20'	DEPTH WATER FIRST ENCOUNTERED (FT) N/A	
	COMPLETED WELL IS: <input type="radio"/> ARTESIAN <input checked="" type="radio"/> DRY HOLE <input type="radio"/> SHALLOW (UNCONFINED)						STATIC WATER LEVEL IN COMPLETED WELL (FT) N/A	
	DRILLING FLUID: <input checked="" type="radio"/> AIR <input type="radio"/> MUD ADDITIVES - SPECIFY:							
	DRILLING METHOD: <input checked="" type="radio"/> ROTARY <input type="radio"/> HAMMER <input type="radio"/> CABLE TOOL <input type="radio"/> OTHER - SPECIFY:							
	DEPTH (feet bgl) FROM TO		BORE HOLE DIAM (inches)	CASING MATERIAL AND/OR GRADE (include each casing string, and note sections of screen)	CASING CONNECTION TYPE	CASING INSIDE DIAM. (inches)	CASING WALL THICKNESS (inches)	SLOT SIZE (inches)
	0 20'		6"	N/A	N/A	N/A	N/A	N/A
3. ANNULAR MATERIAL	DEPTH (feet bgl) FROM TO		BORE HOLE DIAM. (inches)	LIST ANNULAR SEAL MATERIAL AND GRAVEL PACK SIZE-RANGE BY INTERVAL	AMOUNT (cubic feet)	METHOD OF PLACEMENT		
	0 2'		6"	1 CEMENT		TOPLOAD		
	2 20'		6"	5 BAGS OF 3/8 HOLEPLUG		TOPLOAD		

FOR OSE INTERNAL USE

WR-20 WELL RECORD & LOG (Version 06/08/2012)

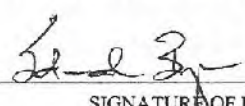
FILE NUMBER

POD NUMBER

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LOCATION

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	DEPTH (feet bgl)		THICKNESS (feet)	COLOR AND TYPE OF MATERIAL ENCOUNTERED - INCLUDE WATER-BEARING CAVITIES OR FRACTURE ZONES (attach supplemental sheets to fully describe all units)	WATER BEARING? (YES / NO)	ESTIMATED YIELD FOR WATER- BEARING ZONES (gpm)	
	FROM	TO					
4. HYDROGEOLOGIC LOG OF WELL	0	2'	2	TAN BROWN CLAY FINE SAND - CALICHE - SANDSTONE	<input type="radio"/> Y <input checked="" type="radio"/> N	N/A	
	2'	5'	3'	TAN FINE SAND - CEMENT- SANDSTONE	<input type="radio"/> Y <input checked="" type="radio"/> N	N/A	
	5'	8'	3'	TAN FINE SAND - SANDSTONE	<input type="radio"/> Y <input checked="" type="radio"/> N	N/A	
	8'	11'	3'	TAN VERY FINE SAND	<input type="radio"/> Y <input checked="" type="radio"/> N	N/A	
	11'	20'	9'	TAN VERY FINE SAND - CEMENT SANDSTONE	<input type="radio"/> Y <input checked="" type="radio"/> N	N/A	
	TD'	20'			<input type="radio"/> Y <input type="radio"/> N		
					<input type="radio"/> Y <input checked="" type="radio"/> N		
					<input type="radio"/> Y <input type="radio"/> N		
					<input type="radio"/> Y <input type="radio"/> N		
					<input type="radio"/> Y <input type="radio"/> N		
					<input type="radio"/> Y <input type="radio"/> N		
					<input type="radio"/> Y <input type="radio"/> N		
					<input type="radio"/> Y <input type="radio"/> N		
					<input type="radio"/> Y <input type="radio"/> N		
					<input type="radio"/> Y <input type="radio"/> N		
					<input type="radio"/> Y <input type="radio"/> N		
					<input type="radio"/> Y <input type="radio"/> N		
					<input type="radio"/> Y <input type="radio"/> N		
	METHOD USED TO ESTIMATE YIELD OF WATER-BEARING STRATA: <input type="radio"/> PUMP					TOTAL ESTIMATED WELL YIELD (gpm):	
	<input type="radio"/> AIR LIFT <input type="radio"/> BAILER <input type="radio"/> OTHER - SPECIFY:						
5. TEST; RIG SUPERVISION	WELL TEST	TEST RESULTS - ATTACH A COPY OF DATA COLLECTED DURING WELL TESTING, INCLUDING DISCHARGE METHOD, START TIME, END TIME, AND A TABLE SHOWING DISCHARGE AND DRAWDOWN OVER THE TESTING PERIOD.					
	MISCELLANEOUS INFORMATION:						
	SOIL BORING ONLY - SOIL BORING WAS PLUGGED AND ABANDONED UPON COMPLETION OF SAMPLING. LEA COUNTY, NM						
PRINT NAME(S) OF DRILL RIG SUPERVISOR(S) THAT PROVIDED ONSITE SUPERVISION OF WELL CONSTRUCTION OTHER THAN LICENSEE:							
6. SIGNATURE	THE UNDERSIGNED HEREBY CERTIFIES THAT, TO THE BEST OF HIS OR HER KNOWLEDGE AND BELIEF, THE FOREGOING IS A TRUE AND CORRECT RECORD OF THE ABOVE DESCRIBED HOLE AND THAT HE OR SHE WILL FILE THIS WELL RECORD WITH THE STATE ENGINEER AND THE PERMIT HOLDER WITHIN 20 DAYS AFTER COMPLETION OF WELL DRILLING:						
	 Edward Bryaw					3-7-18	
SIGNATURE OF DRILLER / PRINT SIGNEE NAME					DATE		

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WELL RECORD & LOG

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1. GENERAL AND WELL LOCATION	OSE POD NUMBER (WELL NUMBER) STATE AB SWD #1 SB-3				OSE FILE NUMBER(S)				
	WELL OWNER NAME(S) C&J ENERGY SERVICES				PHONE (OPTIONAL)				
	WELL OWNER MAILING ADDRESS 5208 N LOVINGTON HWY				CITY HOBBS		STATE NM	ZIP 88240-9111	
	WELL LOCATION (FROM GPS)	DEGREES LATITUDE 32		MINUTES 41	SECONDS 1604	N	* ACCURACY REQUIRED: ONE TENTH OF A SECOND		
		LONGITUDE 103		14	29.93286	W	* DATUM REQUIRED: WGS 84		
DESCRIPTION RELATING WELL LOCATION TO STREET ADDRESS AND COMMON LANDMARKS - PLSS (SECTION, TOWNSHIP, RANGE) WHERE AVAILABLE APPROXIMATELY 1.9 MILES WEST OF THE HOBBS AIRPORT IN HOBBS, NEWMEXICO									
2. DRILLING & CASING INFORMATION	LICENSE NUMBER WD1711		NAME OF LICENSED DRILLER EDWARD BRYAN			NAME OF WELL DRILLING COMPANY STRAUB CORPORATION			
	DRILLING STARTED 2-5-18		DRILLING ENDED 2-5-18		DEPTH OF COMPLETED WELL (FT) 20'	BORE HOLE DEPTH (FT) 20'	DEPTH WATER FIRST ENCOUNTERED (FT) N/A		
	COMPLETED WELL IS: <input type="radio"/> ARTESIAN <input checked="" type="radio"/> DRY HOLE <input type="radio"/> SHALLOW (UNCONFINED)						STATIC WATER LEVEL IN COMPLETED WELL (FT) N/A		
	DRILLING FLUID: <input checked="" type="radio"/> AIR <input type="radio"/> MUD ADDITIVES - SPECIFY:								
	DRILLING METHOD: <input checked="" type="radio"/> ROTARY <input type="radio"/> HAMMER <input type="radio"/> CABLE TOOL <input type="radio"/> OTHER - SPECIFY:								
	DEPTH (feet bgl) FROM TO		BORE HOLE DIAM. (inches)	CASING MATERIAL AND/OR GRADE (include each casing string, and note sections of screen)	CASING CONNECTION TYPE	CASING INSIDE DIAM. (inches)	CASING WALL THICKNESS (inches)	SLOT SIZE (inches)	
	0 20'		6"	N/A	N/A	N/A	N/A	N/A	
3. ANNULAR MATERIAL	DEPTH (feet bgl) FROM TO		BORE HOLE DIAM. (inches)	LIST ANNULAR SEAL MATERIAL AND GRAVEL PACK SIZE-RANGE BY INTERVAL	AMOUNT (cubic feet)	METHOD OF PLACEMENT			
	0 2'		6"	1 CEMENT		TOPLOAD			
	2 20'		6"	5 BAGS OF 3/8 HOLEPLUG		TOPLOAD			

FOR OSE INTERNAL USE

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FILE NUMBER	POD NUMBER	TRN NUMBER
LOCATION	PAGE 1 OF 2	

	DEPTH (feet bgl)		THICKNESS (feet)	COLOR AND TYPE OF MATERIAL ENCOUNTERED - INCLUDE WATER-BEARING CAVITIES OR FRACTURE ZONES (attach supplemental sheets to fully describe all units)	WATER BEARING? (YES / NO)	ESTIMATED YIELD FOR WATER- BEARING ZONES (gpm)
	FROM	TO				
4. HYDROGEOLOGIC LOG OF WELL	0	2'	2	TAN FINE SAND - SANDSTONE - BROWN CLAY	<input checked="" type="radio"/> Y <input checked="" type="radio"/> N	N/A
	2'	8'	6'	TAN FINE SAND - CEMENT- SANDSTONE	<input checked="" type="radio"/> Y <input checked="" type="radio"/> N	N/A
	8'	11'	3'	TAN VERY FINE SAND	<input checked="" type="radio"/> Y <input checked="" type="radio"/> N	N/A
	11'	14'	3'	TAN FINE SAND - CEMENT SANDSTONE	<input checked="" type="radio"/> Y <input checked="" type="radio"/> N	N/A
	14'	19'	9'	TAN FINE SAND - SILICEOUS SANDSTONE	<input checked="" type="radio"/> Y <input checked="" type="radio"/> N	N/A
	19'	20'	1'	TAN FINE SAND - SANDSTONE	<input checked="" type="radio"/> Y <input checked="" type="radio"/> N	N/A
	TD	20'			<input checked="" type="radio"/> Y <input checked="" type="radio"/> N	
					<input checked="" type="radio"/> Y <input checked="" type="radio"/> N	
					<input checked="" type="radio"/> Y <input checked="" type="radio"/> N	
					<input checked="" type="radio"/> Y <input checked="" type="radio"/> N	
					<input checked="" type="radio"/> Y <input checked="" type="radio"/> N	
					<input checked="" type="radio"/> Y <input checked="" type="radio"/> N	
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					<input checked="" type="radio"/> Y <input checked="" type="radio"/> N	
					<input checked="" type="radio"/> Y <input checked="" type="radio"/> N	
					<input checked="" type="radio"/> Y <input checked="" type="radio"/> N	
					<input checked="" type="radio"/> Y <input checked="" type="radio"/> N	
	METHOD USED TO ESTIMATE YIELD OF WATER-BEARING STRATA: <input checked="" type="radio"/> PUMP <input type="radio"/> AIR LIFT <input type="radio"/> BAILER <input type="radio"/> OTHER - SPECIFY:					TOTAL ESTIMATED WELL YIELD (gpm):
5. TEST; RIG SUPERVISION	WELL TEST	TEST RESULTS - ATTACH A COPY OF DATA COLLECTED DURING WELL TESTING, INCLUDING DISCHARGE METHOD, START TIME, END TIME, AND A TABLE SHOWING DISCHARGE AND DRAWDOWN OVER THE TESTING PERIOD.				
	MISCELLANEOUS INFORMATION: SOIL BORING ONLY - SOIL BORING WAS PLUGGED AND ABANDONED UPON COMPLETION OF SAMPLING. LEA COUNTY, NM					
	PRINT NAME(S) OF DRILL RIG SUPERVISOR(S) THAT PROVIDED ONSITE SUPERVISION OF WELL CONSTRUCTION OTHER THAN LICENSEE:					
6. SIGNATURE	<p>THE UNDERSIGNED HEREBY CERTIFIES THAT, TO THE BEST OF HIS OR HER KNOWLEDGE AND BELIEF, THE FOREGOING IS A TRUE AND CORRECT RECORD OF THE ABOVE DESCRIBED HOLE AND THAT HE OR SHE WILL FILE THIS WELL RECORD WITH THE STATE ENGINEER AND THE PERMIT HOLDER WITHIN 20 DAYS AFTER COMPLETION OF WELL DRILLING:</p> <div style="display: flex; justify-content: space-between; align-items: flex-end; margin-top: 20px;"> <div style="text-align: center;"> SIGNATURE OF DRILLER / PRINT SIGNEE NAME </div> <div style="text-align: center;"> 3-7-18 DATE </div> </div>					

FOR OSE INTERNAL USE

WR-20 WELL RECORD & LOG (Version 06/08/2012)

FILE NUMBER

POD NUMBER

TRN NUMBER

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WELL RECORD & LOG

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1. GENERAL AND WELL LOCATION	OSE POD NUMBER (WELL NUMBER) STATE AB SWD #1 SB-4				OSE FILE NUMBER(S)			
	WELL OWNER NAME(S) C&J ENERGY SERVICES				PHONE (OPTIONAL)			
	WELL OWNER MAILING ADDRESS 5208 N LOVINGTON HWY				CITY HOBBS		STATE NM	ZIP 88240-9111
	WELL LOCATION (FROM GPS)	DEGREES LATITUDE 32	MINUTES 41	SECONDS 41.6004 N	* ACCURACY REQUIRED: ONE TENTH OF A SECOND			
		LONGITUDE 103	14	28.3668 W	* DATUM REQUIRED: WGS 84			
DESCRIPTION RELATING WELL LOCATION TO STREET ADDRESS AND COMMON LANDMARKS - PLSS (SECTION, TOWNSHIP, RANGE) WHERE AVAILABLE APPROXIMATELY 1.9 MILES WEST OF THE HOBBS AIRPORT IN HOBBS, NEWMEXICO								
2. DRILLING & CASING INFORMATION	LICENSE NUMBER WD1711		NAME OF LICENSED DRILLER EDWARD BRYAN			NAME OF WELL DRILLING COMPANY STRAUB CORPORATION		
	DRILLING STARTED 2-5-18		DRILLING ENDED 2-5-18		DEPTH OF COMPLETED WELL (FT) 20'	BORE HOLE DEPTH (FT) 20'	DEPTH WATER FIRST ENCOUNTERED (FT) N/A	
	COMPLETED WELL IS: <input type="radio"/> ARTESIAN <input checked="" type="radio"/> DRY HOLE <input type="radio"/> SHALLOW (UNCONFINED)						STATIC WATER LEVEL IN COMPLETED WELL (FT) N/A	
	DRILLING FLUID: <input checked="" type="radio"/> AIR <input type="radio"/> MUD ADDITIVES - SPECIFY:							
	DRILLING METHOD: <input checked="" type="radio"/> ROTARY <input type="radio"/> HAMMER <input type="radio"/> CABLE TOOL <input type="radio"/> OTHER - SPECIFY:							
	DEPTH (feet bgl)		BORE HOLE DIAM (inches)	CASING MATERIAL AND/OR GRADE (include each casing string, and note sections of screen)	CASING CONNECTION TYPE	CASING INSIDE DIAM. (inches)	CASING WALL THICKNESS (inches)	SLOT SIZE (inches)
	FROM	TO						
	0	20'	6"	N/A	N/A	N/A	N/A	N/A
3. ANNULAR MATERIAL	DEPTH (feet bgl)		BORE HOLE DIAM. (inches)	LIST ANNULAR SEAL MATERIAL AND GRAVEL PACK SIZE-RANGE BY INTERVAL	AMOUNT (cubic feet)	METHOD OF PLACEMENT		
	FROM	TO						
	0	2'	6"	1 CEMENT		TOPLOAD		
	2	20'	6"	5 BAGS OF 3/8 HOLEPLUG		TOPLOAD		

FOR OSE INTERNAL USE

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FILE NUMBER	POD NUMBER	TRN NUMBER
LOCATION		PAGE 1 OF 2

	DEPTH (feet bgl)		THICKNESS (feet)	COLOR AND TYPE OF MATERIAL ENCOUNTERED - INCLUDE WATER-BEARING CAVITIES OR FRACTURE ZONES (attach supplemental sheets to fully describe all units)	WATER BEARING? (YES / NO)	ESTIMATED YIELD FOR WATER- BEARING ZONES (gpm)
	FROM	TO				
4. HYDROGEOLOGIC LOG OF WELL	0	2'	2	TAN FINE SAND - CALICHE- SANDSTONE	<input type="radio"/> Y <input checked="" type="radio"/> N	N/A
	2'	7'	7'	TAN FINE SAND - CEMENT SANDSTONE	<input type="radio"/> Y <input checked="" type="radio"/> N	N/A
	7'	11'	4'	TAN VERY FINE SAND -SOFT SANDSTONE	<input type="radio"/> Y <input checked="" type="radio"/> N	N/A
	11'	15'	4'	TAN VERY FINE SAND	<input type="radio"/> Y <input checked="" type="radio"/> N	N/A
	15'	18'	3'	TAN VERY FINE SAND - CEMENT SANDSTONE	<input type="radio"/> Y <input checked="" type="radio"/> N	N/A
	18'	20'	2'	TAN VERY FINE SAND - WEATHERED LIMESTONE	<input type="radio"/> Y <input checked="" type="radio"/> N	N/A
	TD	20'			<input type="radio"/> Y <input type="radio"/> N	
					<input type="radio"/> Y <input type="radio"/> N	
					<input type="radio"/> Y <input type="radio"/> N	
					<input type="radio"/> Y <input type="radio"/> N	
					<input type="radio"/> Y <input type="radio"/> N	
					<input type="radio"/> Y <input type="radio"/> N	
					<input type="radio"/> Y <input type="radio"/> N	
					<input type="radio"/> Y <input type="radio"/> N	
					<input type="radio"/> Y <input type="radio"/> N	
					<input type="radio"/> Y <input type="radio"/> N	
					<input type="radio"/> Y <input type="radio"/> N	
					<input type="radio"/> Y <input type="radio"/> N	
					<input type="radio"/> Y <input type="radio"/> N	
	METHOD USED TO ESTIMATE YIELD OF WATER-BEARING STRATA: <input type="radio"/> PUMP					TOTAL ESTIMATED
<input type="radio"/> AIR LIFT <input type="radio"/> BAILER <input type="radio"/> OTHER - SPECIFY:					WELL YIELD (gpm):	
5. TEST, RIG SUPERVISION	WELL TEST TEST RESULTS - ATTACH A COPY OF DATA COLLECTED DURING WELL TESTING, INCLUDING DISCHARGE METHOD, START TIME, END TIME, AND A TABLE SHOWING DISCHARGE AND DRAWDOWN OVER THE TESTING PERIOD.					
	MISCELLANEOUS INFORMATION: SOIL BORING ONLY - SOIL BORING WAS PLUGGED AND ABANDONED UPON COMPLETION OF SAMPLING. LEA COUNTY, NM					
	PRINT NAME(S) OF DRILL RIG SUPERVISOR(S) THAT PROVIDED ONSITE SUPERVISION OF WELL CONSTRUCTION OTHER THAN LICENSEE:					
6. SIGNATURE	<p>THE UNDERSIGNED HEREBY CERTIFIES THAT, TO THE BEST OF HIS OR HER KNOWLEDGE AND BELIEF, THE FOREGOING IS A TRUE AND CORRECT RECORD OF THE ABOVE DESCRIBED HOLE AND THAT HE OR SHE WILL FILE THIS WELL RECORD WITH THE STATE ENGINEER AND THE PERMIT HOLDER WITHIN 20 DAYS AFTER COMPLETION OF WELL DRILLING:</p> <div style="display: flex; justify-content: space-between; align-items: flex-end; margin-top: 20px;"> <div style="text-align: center;"> SIGNATURE OF DRILLER / PRINT SIGNEE NAME </div> <div style="text-align: center;"> DATE </div> </div>					

FOR OSF INTERNAL USE

WR-20 WELL RECORD & LOG (Version 06/08/2012)

FILE NUMBER

POD NUMBER

TRN NUMBER

LOCATION

PAGE 2 OF 2

Appendix B: Photographic documentation of the liner



Photographic Description of Liner -1



Photographic Description of Liner -2



Photographic Description of Liner -3



Photographic Description of Liner -4



Photographic Description of Liner -5



Photographic Description of Liner -6

Appendix C: Laboratory Analytical Reports

(enclosed CD only)

Following Reports are enclosed:

TD16243

TD16424

TD16439

TD16465

TD16466

TD16489

Appendix D: UTL calculations for TPH

	A	B	C	D	E	F	G	H	I	J	K	L
1	UCL Statistics for Uncensored Full Data Sets											
2												
3	User Selected Options											
4	Date/Time of Computation			3/8/2018 2:46:36 PM								
5	From File			WorkSheet.xls								
6	Full Precision			OFF								
7	Confidence Coefficient			95%								
8	Number of Bootstrap Operations			2000								
9												
10												
11	TPH (C6-C35)											
12												
13	General Statistics											
14	Total Number of Observations				17		Number of Distinct Observations				17	
15							Number of Missing Observations				0	
16	Minimum				3.92		Mean				22.17	
17	Maximum				41.27		Median				20.52	
18	SD				11.96		Std. Error of Mean				2.9	
19	Coefficient of Variation				0.539		Skewness				0.0362	
20												
21	Normal GOF Test											
22	Shapiro Wilk Test Statistic				0.939		Shapiro Wilk GOF Test					
23	5% Shapiro Wilk Critical Value				0.892		Data appear Normal at 5% Significance Level					
24	Lilliefors Test Statistic				0.152		Lilliefors GOF Test					
25	5% Lilliefors Critical Value				0.215		Data appear Normal at 5% Significance Level					
26	Data appear Normal at 5% Significance Level											
27												
28	Assuming Normal Distribution											
29	95% Normal UCL					95% UCLs (Adjusted for Skewness)						
30	95% Student's-t UCL				27.24		95% Adjusted-CLT UCL (Chen-1995)				26.97	
31							95% Modified-t UCL (Johnson-1978)				27.24	
32												
33	Gamma GOF Test											
34	A-D Test Statistic				0.447		Anderson-Darling Gamma GOF Test					
35	5% A-D Critical Value				0.746		Detected data appear Gamma Distributed at 5% Significance Level					
36	K-S Test Statistic				0.177		Kolmogrov-Smirnoff Gamma GOF Test					
37	5% K-S Critical Value				0.211		Detected data appear Gamma Distributed at 5% Significance Level					
38	Detected data appear Gamma Distributed at 5% Significance Level											
39												
40	Gamma Statistics											
41	k hat (MLE)				2.866		k star (bias corrected MLE)				2.4	
42	Theta hat (MLE)				7.736		Theta star (bias corrected MLE)				9.24	
43	nu hat (MLE)				97.45		nu star (bias corrected)				81.59	
44	MLE Mean (bias corrected)				22.17		MLE Sd (bias corrected)				14.31	
45							Approximate Chi Square Value (0.05)				61.77	
46	Adjusted Level of Significance				0.0346		Adjusted Chi Square Value				59.97	
47												
48	Assuming Gamma Distribution											
49	95% Approximate Gamma UCL (use when n>=50))				29.29		95% Adjusted Gamma UCL (use when n<50)				30.17	
50												
51	Lognormal GOF Test											
52	Shapiro Wilk Test Statistic				0.914		Shapiro Wilk Lognormal GOF Test					

	A	B	C	D	E	F	G	H	I	J	K	L	
53	5% Shapiro Wilk Critical Value					0.892	Data appear Lognormal at 5% Significance Level						
54	Lilliefors Test Statistic					0.171	Lilliefors Lognormal GOF Test						
55	5% Lilliefors Critical Value					0.215	Data appear Lognormal at 5% Significance Level						
56	Data appear Lognormal at 5% Significance Level												
57													
58	Lognormal Statistics												
59	Minimum of Logged Data					1.366	Mean of logged Data					2.914	
60	Maximum of Logged Data					3.72	SD of logged Data					0.685	
61													
62	Assuming Lognormal Distribution												
63	95% H-UCL					34.23	90% Chebyshev (MVUE) UCL					35.04	
64	95% Chebyshev (MVUE) UCL					40.52	97.5% Chebyshev (MVUE) UCL					48.13	
65	99% Chebyshev (MVUE) UCL					63.07							
66													
67	Nonparametric Distribution Free UCL Statistics												
68	Data appear to follow a Discernible Distribution at 5% Significance Level												
69													
70	Nonparametric Distribution Free UCLs												
71	95% CLT UCL					26.94	95% Jackknife UCL					27.24	
72	95% Standard Bootstrap UCL					26.8	95% Bootstrap-t UCL					27.08	
73	95% Hall's Bootstrap UCL					26.79	95% Percentile Bootstrap UCL					26.7	
74	95% BCA Bootstrap UCL					27.04							
75	90% Chebyshev(Mean, Sd) UCL					30.87	95% Chebyshev(Mean, Sd) UCL					34.81	
76	97.5% Chebyshev(Mean, Sd) UCL					40.28	99% Chebyshev(Mean, Sd) UCL					51.02	
77													
78	Suggested UCL to Use												
79	95% Student's-t UCL					27.24							
80													
81	Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.												
82	These recommendations are based upon the results of the simulation studies summarized in Singh, Singh, and Iaci (2002)												
83	and Singh and Singh (2003). However, simulations results will not cover all Real World data sets.												
84	For additional insight the user may want to consult a statistician.												
85													

	A	B	C	D	E	F	G	H	I	J	K	L
1				Background Statistics for Uncensored Full Data Sets								
2	User Selected Options											
3	Date/Time of Computation			3/8/2018 2:46:10 PM								
4	From File			WorkSheet.xls								
5	Full Precision			OFF								
6	Confidence Coefficient			95%								
7	Coverage			95%								
8	New or Future K Observations			1								
9	Number of Bootstrap Operations			2000								
10												
11	TPH (C6-C35)											
12												
13	General Statistics											
14	Total Number of Observations				17		Number of Distinct Observations				17	
15	Minimum				3.92		First Quartile				10.77	
16	Second Largest				36.87		Median				20.52	
17	Maximum				41.27		Third Quartile				31.66	
18	Mean				22.17		SD				11.96	
19	Coefficient of Variation				0.539		Skewness				0.0362	
20	Mean of logged Data				2.914		SD of logged Data				0.685	
21												
22	Critical Values for Background Threshold Values (BTVs)											
23	Tolerance Factor K (For UTL)				2.486		d2max (for USL)				2.475	
24												
25	Normal GOF Test											
26	Shapiro Wilk Test Statistic				0.939		Shapiro Wilk GOF Test					
27	5% Shapiro Wilk Critical Value				0.892		Data appear Normal at 5% Significance Level					
28	Lilliefors Test Statistic				0.152		Lilliefors GOF Test					
29	5% Lilliefors Critical Value				0.215		Data appear Normal at 5% Significance Level					
30	Data appear Normal at 5% Significance Level											
31												
32	Background Statistics Assuming Normal Distribution											
33	95% UTL with		95% Coverage		51.9		90% Percentile (z)				37.49	
34			95% UPL (t)		43.65		95% Percentile (z)				41.84	
35			95% USL		51.76		99% Percentile (z)				49.99	
36												
37	Gamma GOF Test											
38	A-D Test Statistic				0.447		Anderson-Darling Gamma GOF Test					
39	5% A-D Critical Value				0.746		Detected data appear Gamma Distributed at 5% Significance Level					
40	K-S Test Statistic				0.177		Kolmogrov-Smirnoff Gamma GOF Test					
41	5% K-S Critical Value				0.211		Detected data appear Gamma Distributed at 5% Significance Level					
42	Detected data appear Gamma Distributed at 5% Significance Level											
43												
44	Gamma Statistics											
45	k hat (MLE)				2.866		k star (bias corrected MLE)				2.4	
46	Theta hat (MLE)				7.736		Theta star (bias corrected MLE)				9.24	
47	nu hat (MLE)				97.45		nu star (bias corrected)				81.59	
48	MLE Mean (bias corrected)				22.17		MLE Sd (bias corrected)				14.31	
49												
50	Background Statistics Assuming Gamma Distribution											
51	95% Wilson Hilferty (WH) Approx. Gamma UPL				51.78		90% Percentile				41.34	
52	95% Hawkins Wixley (HW) Approx. Gamma UPL				53.78		95% Percentile				49.71	

	A	B	C	D	E	F	G	H	I	J	K	L
53	95% WH Approx. Gamma UTL with				95% Coverage	69.93	99% Percentile					68.06
54	95% HW Approx. Gamma UTL with				95% Coverage	74.87						
55					95% WH USL	69.61	95% HW USL					74.48
56												
57	Lognormal GOF Test											
58	Shapiro Wilk Test Statistic					0.914	Shapiro Wilk Lognormal GOF Test					
59	5% Shapiro Wilk Critical Value					0.892	Data appear Lognormal at 5% Significance Level					
60	Lilliefors Test Statistic					0.171	Lilliefors Lognormal GOF Test					
61	5% Lilliefors Critical Value					0.215	Data appear Lognormal at 5% Significance Level					
62	Data appear Lognormal at 5% Significance Level											
63												
64	Background Statistics assuming Lognormal Distribution											
65	95% UTL with			95% Coverage	101.3	90% Percentile (z)					44.38	
66				95% UPL (t)	63.16	95% Percentile (z)					56.92	
67				95% USL	100.5	99% Percentile (z)					90.81	
68												
85												

Appendix E: EPA Method 300

METHOD 300.0

DETERMINATION OF INORGANIC ANIONS BY ION CHROMATOGRAPHY

John D. Pfaff
Inorganic Chemistry Branch
Chemistry Research Division

Revision 2.1
August 1993

ENVIRONMENTAL MONITORING SYSTEMS LABORATORY
OFFICE OF RESEARCH AND DEVELOPMENT
U.S. ENVIRONMENTAL PROTECTION AGENCY
CINCINNATI, OHIO 45268

METHOD 300.0

DETERMINATION OF INORGANIC ANIONS BY ION CHROMATOGRAPHY

1.0 SCOPE AND APPLICATION

- 1.1 This method covers the determination of the following inorganic anions:

PART A.

Bromide	Nitrite
Chloride	Ortho-Phosphate-P
Fluoride	Sulfate
Nitrate	

PART B.

Bromate	Chlorite
Chlorate	

- 1.2 The matrices applicable to each method are shown below:

1.2.1 Drinking water, surface water, mixed domestic and industrial wastewaters, groundwater, reagent waters, solids (after extraction 11.7), leachates (when no acetic acid is used).

1.2.2 Drinking water and reagent waters

- 1.3 The single laboratory Method Detection Limit (MDL defined in Section 3.2) for the above analytes is listed in Tables 1A and 1B. The MDL for a specific matrix may differ from those listed, depending upon the nature of the sample.
- 1.4 Method A is recommended for drinking and wastewaters. The multilaboratory ranges tested for each anion are as follows:

<u>Analyte</u>	<u>mg/L</u>
Bromide	0.63 - 21.0
Chloride	0.78 - 26.0
Fluoride	0.26 - 8.49
Nitrate-N	0.42 - 14.0
Nitrite-N	0.36 - 12.0
Ortho-Phosphate-P	0.69 - 23.1
Sulfate	2.85 - 95.0

- 1.5 This method is recommended for use only by or under the supervision of analysts experienced in the use of ion chromatography and in the interpretation of the resulting ion chromatograms.

- 1.6 When this method is used to analyze unfamiliar samples for any of the above anions, anion identification should be supported by the use of a fortified sample matrix covering the anions of interest. The fortification procedure is described in Section 11.6.
- 1.7 Users of the method data should state the data-quality objectives prior to analysis. Users of the method must demonstrate the ability to generate acceptable results with this method, using the procedures described in Section 9.0.

2.0 **SUMMARY OF METHOD**

- 2.1 A small volume of sample, typically 2-3 mL, is introduced into an ion chromatograph. The anions of interest are separated and measured, using a system comprised of a guard column, analytical column, suppressor device, and conductivity detector.
- 2.2 The main differences between Parts A and B are the separator columns and guard columns. Sections 6.0 and 7.0 will elicit the differences.
- 2.3 An extraction procedure must be performed to use this method for solids (See Section 11.7).
- 2.4 Limited performance-based method modifications may be acceptable provided they are fully documented and meet or exceed requirements expressed in Section 9.0, Quality Control.

3.0 **DEFINITIONS**

- 3.1 **Calibration Blank (CB)** -- A volume of reagent water fortified with the same matrix as the calibration standards, but without the analytes, internal standards, or surrogate analytes.
- 3.2 **Calibration Standard (CAL)** -- A solution prepared from the primary dilution standard solution or stock standard solutions and the internal standards and surrogate analytes. The CAL solutions are used to calibrate the instrument response with respect to analyte concentration.
- 3.3 **Field Duplicates (FD)** -- Two separate samples collected at the same time and placed under identical circumstances and treated exactly the same throughout field and laboratory procedures. Analyses of field duplicates indicate the precision associated with sample collection, preservation and storage, as well as with laboratory procedures.
- 3.4 **Instrument Performance Check Solution (IPC)** -- A solution of one or more method analytes, surrogates, internal standards, or other test substances used to evaluate the performance of the instrument system with respect to a defined set of criteria.

- 3.5 **Laboratory Fortified Blank (LFB)** -- An aliquot of reagent water or other blank matrices to which known quantities of the method analytes are added in the laboratory. The LFB is analyzed exactly like a sample, and its purpose is to determine whether the methodology is in control, and whether the laboratory is capable of making accurate and precise measurements.
- 3.6 **Laboratory Fortified Sample Matrix (LFM)** -- An aliquot of an environmental sample to which known quantities of the method analytes are added in the laboratory. The LFM is analyzed exactly like a sample, and its purpose is to determine whether the sample matrix contributes bias to the analytical results. The background concentrations of the analytes in the sample matrix must be determined in a separate aliquot and the measured values in the LFM corrected for background concentrations.
- 3.7 **Laboratory Reagent Blank (LRB)** -- An aliquot of reagent water or other blank matrices that are treated exactly as a sample including exposure to all glassware, equipment, solvents, reagents, internal standards, and surrogates that are used with other samples. The LRB is used to determine if method analytes or other interferences are present in the laboratory environment, the reagents, or the apparatus.
- 3.8 **Linear Calibration Range (LCR)** -- The concentration range over which the instrument response is linear.
- 3.9 **Material Safety Data Sheet (MSDS)** -- Written information provided by vendors concerning a chemical's toxicity, health hazards, physical properties, fire, and reactivity data including storage, spill, and handling precautions.
- 3.10 **Method Detection Limit (MDL)** -- The minimum concentration of an analyte that can be identified, measured and reported with 99% confidence that the analyte concentration is greater than zero.
- 3.11 **Performance Evaluation Sample (PE)** -- A solution of method analytes distributed by the Quality Assurance Research Division (QARD), Environmental Monitoring Systems Laboratory (EMSL-Cincinnati), U. S. Environmental Protection Agency, Cincinnati, Ohio, to multiple laboratories for analysis. A volume of the solution is added to a known volume of reagent water and analyzed with procedures used for samples. Results of analyses are used by QARD to determine statistically the accuracy and precision that can be expected when a method is performed by a competent analyst. Analyte true values are unknown to the analyst.
- 3.12 **Quality Control Sample (QCS)** -- A solution of method analytes of known concentrations that is used to fortify an aliquot of LRB or sample matrix. The QCS is obtained from a source external to the laboratory and different from the source of calibration standards. It is used to check laboratory performance with externally prepared test materials.

- 3.13 **Stock Standard Solution (SSS)** -- A concentrated solution containing one or more method analytes prepared in the laboratory using assayed reference materials or purchased from a reputable commercial source.

4.0 INTERFERENCES

- 4.1 Interferences can be caused by substances with retention times that are similar to and overlap those of the anion of interest. Large amounts of an anion can interfere with the peak resolution of an adjacent anion. Sample dilution and/or fortification can be used to solve most interference problems associated with retention times.
- 4.2 The water dip or negative peak that elutes near, and can interfere with, the fluoride peak can usually be eliminated by the addition of the equivalent of 1 mL of concentrated eluent (7.3 100X) to 100 mL of each standard and sample.
- 4.3 Method interferences may be caused by contaminants in the reagent water, reagents, glassware, and other sample processing apparatus that lead to discrete artifacts or elevated baseline in ion chromatograms.
- 4.4 Samples that contain particles larger than 0.45 microns and reagent solutions that contain particles larger than 0.20 microns require filtration to prevent damage to instrument columns and flow systems.
- 4.5 Any anion that is not retained by the column or only slightly retained will elute in the area of fluoride and interfere. Known coelution is caused by carbonate and other small organic anions. At concentrations of fluoride above 1.5 mg/L, this interference may not be significant, however, it is the responsibility of the user to generate precision and accuracy information in each sample matrix.
- 4.6 The acetate anion elutes early during the chromatographic run. The retention times of the anions also seem to differ when large amounts of acetate are present. Therefore, this method is not recommended for leachates of solid samples when acetic acid is used for pH adjustment.
- 4.7 The quantitation of unretained peaks should be avoided, such as low molecular weight organic acids (formate, acetate, propionate etc.) which are conductive and coelute with or near fluoride and would bias the fluoride quantitation in some drinking and most waste waters.
- 4.8 Any residual chlorine dioxide present in the sample will result in the formation of additional chlorite prior to analysis. If any concentration of chlorine dioxide is suspected in the sample purge the sample with an inert gas (argon or nitrogen) for about five minutes or until no chlorine dioxide remains.

5.0 SAFETY

- 5.1 The toxicity or carcinogenicity of each reagent used in this method have not been fully established. Each chemical should be regarded as a potential health hazard and exposure should be as low as reasonably achievable. Cautions are included for known extremely hazardous materials or procedures.
- 5.2 Each laboratory is responsible for maintaining a current awareness file of OSHA regulations regarding the safe handling of the chemicals specified in this method. A reference file of Material Safety Data Sheets (MSDS) should be made available to all personnel involved in the chemical analysis. The preparation of a formal safety plan is also advisable.
- 5.3 The following chemicals have the potential to be highly toxic or hazardous, consult MSDS.
 - 5.3.1 Sulfuric acid (Section 7.4)

6.0 EQUIPMENT AND SUPPLIES

- 6.1 Balance -- Analytical, capable of accurately weighing to the nearest 0.0001 g.
- 6.2 Ion chromatograph -- Analytical system complete with ion chromatograph and all required accessories including syringes, analytical columns, compressed gasses and detectors.
 - 6.2.1 Anion guard column: A protector of the separator column. If omitted from the system the retention times will be shorter. Usually packed with a substrate the same as that in the separator column.
 - 6.2.2 Anion separator column: This column produces the separation shown in Figures 1 and 2.
 - 6.2.2.1 Anion analytical column (Method A): The separation shown in Figure 1 was generated using a Dionex AS4A column (P/N 37041). An optional column may be used if comparable resolution of peaks is obtained, and the requirements of Section 9.2 can be met.
 - 6.2.2.2 Anion analytical column (Method B): The separation shown in Figure 2 was generated using a Dionex AS9 column (P/N 42025). An optional column may be used if comparable resolution of peaks is obtained and the requirements of Section 9.2 can be met.
 - 6.2.3 Anion suppressor device: The data presented in this method were generated using a Dionex anion micro membrane suppressor (P/N 37106).
 - 6.2.4 Detector -- Conductivity cell: Approximately 1.25 μ L internal volume, (Dionex, or equivalent) capable of providing data as required in Section 9.2.

- 6.3 The Dionex AI-450 Data Chromatography Software was used to generate all the data in the attached tables. Systems using a stripchart recorder and integrator or other computer based data system may achieve approximately the same MDL's but the user should demonstrate this by the procedure outlined in Section 9.2.

7.0 REAGENTS AND STANDARDS

- 7.1 Sample bottles: Glass or polyethylene of sufficient volume to allow replicate analyses of anions of interest.
- 7.2 Reagent water: Distilled or deionized water, free of the anions of interest. Water should contain particles no larger than 0.20 microns.
- 7.3 Eluent solution (Method A and Method B): Sodium bicarbonate (CASRN 144-55-8) 1.7 mM, sodium carbonate (CASRN 497-19-8) 1.8 mM. Dissolve 0.2856 g sodium bicarbonate (NaHCO_3) and 0.3816 g of sodium carbonate (Na_2CO_3) in reagent water (Section 7.2) and dilute to 2 L.
- 7.4 Regeneration solution (micro membrane suppressor): Sulfuric acid (CASRN-7664-93-9) 0.025N. Dilute 2.8 mL conc. sulfuric acid (H_2SO_4) to 4 L with reagent water.
- 7.5 Stock standard solutions, 1000 mg/L (1 mg/mL): Stock standard solutions may be purchased as certified solutions or prepared from ACS reagent grade materials (dried at 105°C for 30 minutes) as listed below.
- 7.5.1 Bromide (Br^-) 1000 mg/L: Dissolve 1.2876 g sodium bromide (NaBr , CASRN 7647-15-6) in reagent water and dilute to 1 L.
- 7.5.2 Bromate (BrO_3^-) 1000 mg/L: Dissolve 1.1798g of sodium bromate (NaBrO_3 , CASRN 7789-38-0) in reagent water and dilute to 1 L.
- 7.5.3 Chlorate (ClO_3^-) 1000 mg/L: Dissolve 1.2753g of sodium chlorate (NaClO_3 , CASRN 7775-09-9) in reagent water and dilute to 1 L.
- 7.5.4 Chloride (Cl^-) 1000 mg/L: Dissolve 1.6485 g sodium chloride (NaCl , CASRN 7647-14-5) in reagent water and dilute to 1 L.
- 7.5.5 Chlorite (ClO_2^-) 1000 mg/L: Dissolve 1.3410g of sodium chlorite (NaClO_2 , CASRN 7758-19-2) in reagent water and dilute to 1 L.
- 7.5.6 Fluoride (F^-) 1000 mg/L: Dissolve 2.2100g sodium fluoride (NaF , CASRN 7681-49-4) in reagent water and dilute to 1 L.
- 7.5.7 Nitrate (NO_3^- -N) 1000 mg/L: Dissolve 6.0679 g sodium nitrate (NaN_3 , CASRN 7631-99-4) in reagent water and dilute to 1 L.
- 7.5.8 Nitrite (NO_2^- -N) 1000 mg/L: Dissolve 4.9257 g sodium nitrite (NaN_2 , CASRN 7632-00-0) in reagent water and dilute to 1 L.

7.5.9 Phosphate ($\text{PO}_4^{3-}\text{-P}$) 1000 mg/L: Dissolve 4.3937 g potassium phosphate (KH_2PO_4 , CASRN 7778-77-0) in reagent water and dilute to 1 L.

7.5.10 Sulfate (SO_4^{2-}) 1000 mg/L: Dissolve 1.8141 g potassium sulfate (K_2SO_4 , CASRN 7778-80-5) in reagent water and dilute to 1 L.

Note: Stability of standards: Stock standards (7.5) are stable for at least one month when stored at 4°C. Except for the chlorite standard which is only stable for two weeks. Dilute working standards should be prepared weekly, except those that contain nitrite and phosphate should be prepared fresh daily.

7.6 Ethylenediamine preservation solution: Dilute 10 mL of ethylenediamine (99%) (CASRN 107-15-3) to 200 mL with reagent water. Use 1 mL of this dilution to each 1 L of sample taken.

8.0 SAMPLE COLLECTION, PRESERVATION AND STORAGE

8.1 Samples should be collected in plastic or glass bottles. All bottles must be thoroughly cleaned and rinsed with reagent water. Volume collected should be sufficient to insure a representative sample, allow for replicate analysis, if required, and minimize waste disposal.

8.2 Sample preservation and holding times for the anions that can be determined by this method are as follows:

<u>Analyte</u>	<u>Preservation</u>	<u>Holding Time</u>
Bromate	None required	28 days
Bromide	None required	28 days
Chlorate	None required	28 days
Chloride	None required	28 days
Chlorite	Cool to 4°C	immediately
Fluoride	None required	28 days
Nitrate-N	Cool to 4°C	48 hours
Combined (Nitrate/Nitrite)	conc. H_2SO_4 to a pH <2	28 days
Nitrite-N	Cool to 4°C	48 hours
0-Phosphate-P	Cool to 4°C	48 hours
Sulfate	Cool to 4°C	28 days

Note: If the determined value for the combined nitrate/nitrite exceeds 0.5 mg/L as N, a resample must be analyzed for the individual concentrations of nitrate and nitrite.

8.3 The method of preservation and the holding time for samples analyzed by this method are determined by the anions of interest. In a given sample, the anion that requires the most preservation treatment and the shortest holding time will determine the preservation treatment. It is recommended that all samples

be cooled to 4°C and held for no longer than 28 days for Method A and analyzed immediately in Method B.

Note: If the sample cannot be analyzed for chlorite within ≤ 10 minutes, the sample may be preserved by adding 1 mL of the ethylenediamine (EDA) preservation solution (Section 7.6) to 1 L of sample. This will preserve the concentration of the chlorite for up to 14 days. This addition of EDA has no effect on bromate or chlorate, so they can also be determined in a sample preserved with EDA. Residual chlorine dioxide should be removed from the sample (per Section 4.8) prior to the addition of EDA.

9.0 QUALITY CONTROL

9.1 Each laboratory using this method is required to operate a formal quality control (QC) program. The minimum requirements of this program consist of an initial demonstration of laboratory capability, and the periodic analysis of laboratory reagent blanks, fortified blanks and other laboratory solutions as a continuing check on performance. The laboratory is required to maintain performance records that define the quality of the data that are generated.

9.2 INITIAL DEMONSTRATION OF PERFORMANCE

9.2.1 The initial demonstration of performance is used to characterize instrument performance (determination of LCRs and analysis of QCS) and laboratory performance (determination of MDLs) prior to performing analyses by this method.

9.2.2 Linear Calibration Range (LCR) -- The LCR must be determined initially and verified every six months or whenever a significant change in instrument response is observed or expected. The initial demonstration of linearity must use sufficient standards to insure that the resulting curve is linear. The verification of linearity must use a minimum of a blank and three standards. If any verification data exceeds the initial values by $\pm 10\%$, linearity must be reestablished. If any portion of the range is shown to be nonlinear, sufficient standards must be used to clearly define the nonlinear portion.

9.2.3 Quality Control Sample (QCS) -- When beginning the use of this method, on a quarterly basis or as required to meet data-quality needs, verify the calibration standards and acceptable instrument performance with the preparation and analyses of a QCS. If the determined concentrations are not within $\pm 10\%$ of the stated values, performance of the determinative step of the method is unacceptable. The source of the problem must be identified and corrected before either proceeding with the initial determination of MDLs or continuing with on-going analyses.

9.2.4 Method Detection Limit (MDL) -- MDLs must be established for all analytes, using reagent water (blank) fortified at a concentration of two

to three times the estimated instrument detection limit.⁽⁶⁾ To determine MDL values, take seven replicate aliquots of the fortified reagent water and process through the entire analytical method. Perform all calculations defined in the method and report the concentration values in the appropriate units. Calculate the MDL as follows:

$$\text{MDL} = (t) \times (S)$$

where, t = Student's t value for a 99% confidence level and a standard deviation estimate with $n-1$ degrees of freedom [$t= 3.14$ for seven replicates]

S = standard deviation of the replicate analyses

MDLs should be determined every six months, when a new operator begins work or whenever there is a significant change in the background or instrument response.

9.3 ASSESSING LABORATORY PERFORMANCE

- 9.3.1 Laboratory Reagent Blank (LRB) -- The laboratory must analyze at least one LRB with each batch of samples. Data produced are used to assess contamination from the laboratory environment. Values that exceed the MDL indicate laboratory or reagent contamination should be suspected and corrective actions must be taken before continuing the analysis.
- 9.3.2 Laboratory Fortified Blank (LFB) -- The laboratory must analyze at least one LFB with each batch of samples. Calculate accuracy as percent recovery (Section 9.4.2). If the recovery of any analyte falls outside the required control limits of 90-110%, that analyte is judged out of control, and the source of the problem should be identified and resolved before continuing analyses.
- 9.3.3 The laboratory must use LFB analyses data to assess laboratory performance against the required control limits of 90-110%. When sufficient internal performance data become available (usually a minimum of 20-30 analyses), optional control limits can be developed from the percent mean recovery (\bar{x}) and the standard deviation (S) of the mean recovery. These data can be used to establish the upper and lower control limits as follows:

$$\begin{aligned}\text{UPPER CONTROL LIMIT} &= \bar{x} + 3S \\ \text{LOWER CONTROL LIMIT} &= \bar{x} - 3S\end{aligned}$$

The optional control limits must be equal to or better than the required control limits of 90-110%. After each five to 10 new recovery measurements, new control limits can be calculated using only the most recent 20-30 data points. Also, the standard deviation (S) data should

be used to establish an on-going precision statement for the level of concentrations included in the LFB. These data must be kept on file and be available for review.

- 9.3.4 Instrument Performance Check Solution (IPC) -- For all determinations the laboratory must analyze the IPC (a mid-range check standard) and a calibration blank immediately following daily calibration, after every tenth sample (or more frequently, if required) and at the end of the sample run. Analysis of the IPC solution and calibration blank immediately following calibration must verify that the instrument is within $\pm 10\%$ of calibration. Subsequent analyses of the IPC solution must verify the calibration is still within $\pm 10\%$. If the calibration cannot be verified within the specified limits, reanalyze the IPC solution. If the second analysis of the IPC solution confirms calibration to be outside the limits, sample analysis must be discontinued, the cause determined and/or in the case of drift, the instrument recalibrated. All samples following the last acceptable IPC solution must be reanalyzed. The analysis data of the calibration blank and IPC solution must be kept on file with the sample analyses data.

9.4 ASSESSING ANALYTE RECOVERY AND DATA QUALITY

- 9.4.1 Laboratory Fortified Sample Matrix (LFM) -- The laboratory must add a known amount of analyte to a minimum of 10% of the routine samples. In each case the LFM aliquot must be a duplicate of the aliquot used for sample analysis. The analyte concentration must be high enough to be detected above the original sample and should not be less than four times the MDL. The added analyte concentration should be the same as that used in the laboratory fortified blank.

9.4.1.1 If the concentration of fortification is less than 25% of the background concentration of the matrix the matrix recovery should not be calculated.

- 9.4.2 Calculate the percent recovery for each analyte, corrected for concentrations measured in the unfortified sample, and compare these values to the designated LFM recovery range 90-110%. Percent recovery may be calculated using the following equation:

$$R = \frac{C_s - C}{s} \times 100$$

where,

R = percent recovery
C_s = fortified sample concentration
C = sample background concentration
s = concentration equivalent of analyte added to sample

- 9.4.3 Until sufficient data becomes available (usually a minimum of 20-30 analysis), assess laboratory performance against recovery limits for Method A of 80-120% and 75-125% for Method B. When sufficient internal performance data becomes available develop control limits from percent mean recovery and the standard deviation of the mean recovery.
- 9.4.4 If the recovery of any analyte falls outside the designated LFM recovery range and the laboratory performance for that analyte is shown to be in control (Section 9.3), the recovery problem encountered with the LFM is judged to be either matrix or solution related, not system related.
- 9.4.5 Where reference materials are available, they should be analyzed to provide additional performance data. The analysis of reference samples is a valuable tool for demonstrating the ability to perform the method acceptably.
- 9.4.6 In recognition of the rapid advances occurring in chromatography, the analyst is permitted certain options, such as the use of different columns and/or eluents, to improve the separations or lower the cost of measurements. Each time such modifications to the method are made, the analyst is required to repeat the procedure in Section 9.2.
- 9.4.7 It is recommended that the laboratory adopt additional quality assurance practices for use with this method. The specific practices that are most productive depend upon the needs of the laboratory and the nature of the samples. Field duplicates may be analyzed to monitor the precision of the sampling technique. When doubt exists over the identification of a peak in the chromatogram, confirmatory techniques such as sample dilution and fortification, must be used. Whenever possible, the laboratory should perform analysis of quality control check samples and participate in relevant performance evaluation sample studies.
- 9.4.8 At least quarterly, replicates of LFBs should be analyzed to determine the precision of the laboratory measurements. Add these results to the on-going control charts to document data quality.
- 9.4.9 When using Part B, the analyst should be aware of the purity of the reagents used to prepare standards. Allowances must be made when the solid materials are less than 99% pure.

10.0 CALIBRATION AND STANDARDIZATION

- 10.1 Establish ion chromatographic operating parameters equivalent to those indicated in Tables 1A or 1B.
- 10.2 For each analyte of interest, prepare calibration standards at a minimum of three concentration levels and a blank by adding accurately measured volumes of one or more stock standards (Section 7.5) to a volumetric flask and diluting

to volume with reagent water. If a sample analyte concentration exceeds the calibration range the sample may be diluted to fall within the range. If this is not possible then three new calibration concentrations must be chosen, two of which must bracket the concentration of the sample analyte of interest. Each attenuation range of the instrument used to analyze a sample must be calibrated individually.

- 10.3 Using injections of 0.1-1.0 mL (determined by injection loop volume) of each calibration standard, tabulate peak height or area responses against the concentration. The results are used to prepare a calibration curve for each analyte. During this procedure, retention times must be recorded.
- 10.4 The calibration curve must be verified on each working day, or whenever the anion eluent is changed, and after every 20 samples. If the response or retention time for any analyte varies from the expected values by more than $\pm 10\%$, the test must be repeated, using fresh calibration standards. If the results are still more than $\pm 10\%$, a new calibration curve must be prepared for that analyte.
- 10.5 Nonlinear response can result when the separator column capacity is exceeded (overloading). The response of the detector to the sample when diluted 1:1, and when not diluted, should be compared. If the calculated responses are the same, samples of this total anionic concentration need not be diluted.

11.0 PROCEDURE

- 11.1 Tables 1A and 1B summarize the recommended operating conditions for the ion chromatograph. Included in these tables are estimated retention times that can be achieved by this method. Other columns, chromatographic conditions, or detectors may be used if the requirements of Section 9.2 are met.
- 11.2 Check system calibration daily and, if required, recalibrate as described in Section 10.0.
- 11.3 Load and inject a fixed amount of well mixed sample. Flush injection loop thoroughly, using each new sample. Use the same size loop for standards and samples. Record the resulting peak size in area or peak height units. An automated constant volume injection system may also be used.
- 11.4 The width of the retention time window used to make identifications should be based upon measurements of actual retention time variations of standards over the course of a day. Three times the standard deviation of a retention time can be used to calculate a suggested window size for each analyte. However, the experience of the analyst should weigh heavily in the interpretation of chromatograms.
- 11.5 If the response for the peak exceeds the working range of the system, dilute the sample with an appropriate amount of reagent water and reanalyze.

- 11.6 If the resulting chromatogram fails to produce adequate resolution, or if identification of specific anions is questionable, fortify the sample with an appropriate amount of standard and reanalyze.

Note: Retention time is inversely proportional to concentration. Nitrate and sulfate exhibit the greatest amount of change, although all anions are affected to some degree. In some cases this peak migration may produce poor resolution or identification.

- 11.7 The following extraction should be used for solid materials. Add an amount of reagent water equal to 10 times the weight of dry solid material taken as a sample. This slurry is mixed for 10 minutes using a magnetic stirring device. Filter the resulting slurry before injecting using a 0.45 μ membrane type filter. This can be the type that attaches directly to the end of the syringe. Care should be taken to show that good recovery and identification of peaks is obtained with the user's matrix through the use of fortified samples.
- 11.8 It has been reported that lower detection limits for bromate ($\approx 7 \mu\text{g/L}$) can be obtained using a borate based eluent⁽⁷⁾. The use of this eluent or other eluents that improve method performance may be considered as a minor modification of the method and as such still are acceptable.
- 11.9 Should more complete resolution be needed between peaks the eluent (7.3) can be diluted. This will spread out the run but will also cause the later eluting anions to be retained longer. The analyst must determine to what extent the eluent is diluted. This dilution should not be considered a deviation from the method.

12.0 DATA ANALYSIS AND CALCULATIONS

- 12.1 Prepare a calibration curve for each analyte by plotting instrument response against standard concentration. Compute sample concentration by comparing sample response with the standard curve. Multiply answer by appropriate dilution factor.
- 12.2 Report only those values that fall between the lowest and the highest calibration standards. Samples exceeding the highest standard should be diluted and reanalyzed.
- 12.3 Report results in mg/L.
- 12.4 Report NO_2^- as N
 NO_3^- as N
 HPO_4 as P

13.0 METHODS PERFORMANCE

- 13.1 Tables 1A and 2A give the single laboratory (EMSL-Cincinnati) MDL for each anion included in the method under the conditions listed.

- 13.2 Tables 2A and 2B give the single laboratory (EMSL-Cincinnati) standard deviation for each anion included in the method in a variety of waters for the listed conditions.
- 13.3 Multiple laboratory accuracy and bias data (S_i) and estimated single operator values (S_o) for reagent, drinking and waste water using Method A are given for each anion in Tables 3 through 9. Data from 19 laboratories were used for this data.
- 13.4 Some of the bias statements, for example chloride and sulfate, may be misleading due to spiking small increments of the anion into large naturally occurring concentrations of the same anion.

14.0 POLLUTION PREVENTION

- 14.1 Pollution prevention encompasses any technique that reduces or eliminates the quantity or toxicity of waste at the point of generation. Numerous opportunities for pollution prevention exist in laboratory operation. The EPA has established a preferred hierarchy of environmental management techniques that places pollution prevention as the management option of first choice. Whenever feasible, laboratory personnel should use pollution prevention techniques to address their waste generation. When wastes cannot be feasibly reduced at the source, the Agency recommends recycling as the next best option.
- 14.2 Quantity of the chemicals purchased should be based on expected usage during its shelf life and disposal cost of unused material. Actual reagent preparation volumes should reflect anticipated usage and reagent stability.
- 14.3 For information about pollution prevention that may be applicable to laboratories and research institutions, consult "Less is Better: Laboratory Chemical Management for Waste Reduction," available from the American Chemical Society's Department of Government Regulations and Science Policy, 1155 16th Street N.W., Washington, D.C. 20036, (202) 872-4477.

15.0 WASTE MANAGEMENT

- 15.1 The Environmental Protection Agency requires that laboratory waste management practices be conducted consistent with all applicable rules and regulations. Excess reagents, samples and method process wastes should be characterized and disposed of in an acceptable manner. The Agency urges laboratories to protect the air, water, and land by minimizing and controlling all releases from hoods and bench operations, complying with the letter and spirit of any waste discharge permit and regulations, and by complying with all solid and hazardous waste regulations, particularly the hazardous waste identification rules and land disposal restrictions. For further information on waste management consult the "Waste Management Manual for Laboratory Personnel", available from the American Chemical Society at the address listed in Section 14.3.

16.0 REFERENCES

1. "Determination of Inorganic Disinfection By-Products by Ion Chromatography", J. Pfaff, C. Brockhoff. J. Am. Water Works Assoc., Vol 82, No. 4, pg 192.
2. Standard Methods for the Examination of Water and Wastewater, Method 4110B, "Anions by Ion Chromatography", 18th Edition of Standard Methods (1992).
3. Dionex, System 4000 Operation and Maintenance Manual, Dionex Corp., Sunnyvale, California 94086, 1988.
4. Method Detection Limit (MDL) as described in "Trace Analyses for Wastewater", J. Glaser, D. Foerst, G. McKee, S. Quave, W. Budde, Environmental Science and Technology, Vol. 15, Number 12, page 1426, December, 1981.
5. American Society for Testing and Materials. Test Method for Anions in Water by Chemically-Suppressed Ion Chromatography D4327-91. Annual Book of Standards, Vol 11.01 (1993).
6. Code of Federal Regulations 40, Ch. 1, Pt. 136, Appendix B.
7. Hautman, D.P. & Bolyard, M. Analysis of Oxyhalide Disinfection By-products and other Anions of Interest in Drinking Water by Ion Chromatography. Jour. of Chromatog., 602, (1992), 65-74.

17.0 TABLES, DIAGRAMS, FLOWCHARTS AND VALIDATION DATA**TABLE 1A. CHROMATOGRAPHIC CONDITIONS AND DETECTION LIMITS
IN REAGENT WATER (PART A)**

Analyte	Peak #*	Retention Time (min)	MDL (mg/L)
Fluoride	1	1.2	0.01
Chloride	2	1.7	0.02
Nitrite-N	3	2.0	0.004
Bromide	4	2.9	0.01
Nitrate-N	5	3.2	0.002
o-Phosphate-P	6	5.4	0.003
Sulfate	7	6.9	0.02

Standard Conditions:

Columns: as specified in Section 6.2.2.1

Detector: as specified in Section 6.2.4

Eluent: as specified in Section 7.3

Pump Rate: 2.0 mL/min.

Sample Loop: 50 µL

MDL calculated from data system using a y-axis selection of 1000 ns and with a stripchart recorder with an attenuator setting of 1 uMHO full scale.

*See Figure 1

**TABLE 1B. CHROMATOGRAPHIC CONDITIONS AND DETECTION LIMITS
IN REAGENT WATER (PART B)**

Analyte	Peak #*	Retention Time (min)	MDL (mg/L)
Chlorite	1	2.8	0.01
Bromate	2	3.2	0.02
Chlorate	4	7.1	0.003

Standard Conditions:

Column: as specified in Section 6.2.2.2

Detector: as specified in Section 6.2.4

Eluent: as specified in Section 7.3

Pump Rate: 1.0 mL/min.

Sample Loop: 50 µL

Attenuation - 1

y-axis - 500 ns

*See Figure 2

**TABLE 2A. SINGLE-OPERATOR ACCURACY AND BIAS OF STANDARD ANIONS
(METHOD A)**

Analyte	Sample Type	Known Conc. (mg/L)	Number of Replicates	Mean Recovery %	Standard Deviation (mg/L)
Bromide	RW	5.0	7	99	0.08
	DW	5.0	7	105	0.10
	SW	5.0	7	95	0.13
	WW	5.0	7	105	0.34
	GW	5.0	7	92	0.34
	SD	2.0	7	82	0.06
Chloride	RW	20.0	7	96	0.35
	DW	20.0	7	108	1.19
	SW	10.0	7	86	0.33
	WW	20.0	7	101	5.2
	GW	20.0	7	114	1.3
	SD	20.0	7	90	0.32
Fluoride	RW	2.0	7	91	0.05
	DW	1.0	7	92	0.06
	SW	1.0	7	73	0.05
	WW	1.0	7	87	0.07
	GW	0.4	7	95	0.07
	SD	5.0	7	101	0.35
Nitrate-N	RW	10.0	7	103	0.21
	DW	10.0	7	104	0.27
	SW	10.0	7	93	0.17
	WW	10.0	7	101	0.82
	GW	10.0	7	97	0.47
	SD	10.0	7	82	0.28
Nitrite	RW	10.0	7	97	0.14
	DW	10.0	7	121	0.25
	SW	5.0	7	92	0.14
	WW	5.0	7	91	0.50
	GW	10.0	7	96	0.35
	SD	2.0	7	98	0.08
o-Phosphate-P	RW	10.0	7	99	0.17
	DW	10.0	7	99	0.26
	SW	10.0	7	98	0.22
	WW	10.0	7	106	0.85
	GW	10.0	7	95	0.33
Sulfate	RW	20.0	7	99	0.40
	DW	50.0	7	105	3.35
	SW	40.0	7	95	1.7
	WW	40.0	7	102	6.4
	GW	40.0	7	112	3.2

**TABLE 2B. SINGLE-OPERATOR ACCURACY AND BIAS OF BY-PRODUCT
(PART B)**

Analyte	Sample Type	Spike (mg/L)	Number of Replicates	Mean Recovery %	Standard Deviation (mg/L)
Bromide	RW	5.0	7	103	0.07
		1.0	7	98	0.04
		0.1	7	155	0.005
		0.05	7	122	0.01
	DW	5.0	7	95	0.04
		1.0	7	85	0.02
		0.1	7	98	0.005
		0.05	7	98	0.005
Chlorate	RW	5.0	7	101	0.06
		1.0	7	97	0.01
		0.1	7	100	0.01
		0.05	7	119	0.05
	DW	5.0	7	101	0.04
		1.0	7	115	0.01
		0.1	7	121	0.005
		0.05	7	110	0.01
Chlorite	RW	5.0	7	100	0.04
		1.0	7	98	0.01
		0.1	7	86	0.01
		0.05	7	94	0.01
	DW	5.0	7	96	0.03
		1.0	7	100	0.02
		0.1	7	76	0.00
		0.05	7	96	0.01

RW = Reagent Water
DW = Drinking Water

TABLE 3. MULTIPLE LABORATORY (n=19) DETERMINATION OF BIAS FOR FLUORIDE

Water	Amount Added mg/L	Amount Found mg/L	S_i	S_o	Bias %
Reagent	0.26	0.25	0.08	0.11	-3.8
	0.34	0.29	0.11		-14.7
	2.12	2.12	0.07	0.12	0.0
	2.55	2.48	0.14		-2.7
	6.79	6.76	0.20	0.19	-0.4
	8.49	8.46	0.30		-0.4
Drinking	0.26	0.24	0.08	0.05	-7.7
	0.34	0.34	0.11		0.0
	2.12	2.09	0.18	0.06	-1.4
	2.55	2.55	0.16		0.0
	6.79	6.84	0.54	0.25	+0.7
	8.49	8.37	0.75		-1.4
Waste	0.26	0.25	0.15	0.06	-3.8
	0.34	0.32	0.08		-5.9
	2.12	2.13	0.22	0.15	+0.5
	2.55	2.48	0.16		-2.7
	6.79	6.65	0.41	0.20	-2.1
	8.49	8.27	0.36		-2.6

TABLE 4. MULTIPLE LABORATORY (n=19) DETERMINATION OF BIAS FOR CHLORIDE

Water	Amount Added mg/L	Amount Found mg/L	S_i	S_o	Bias %
Reagent	0.78	0.79	0.17	0.29	+1.3
	1.04	1.12	0.46		+7.7
	6.50	6.31	0.27	0.14	-2.9
	7.80	7.76	0.39		-0.5
	20.8	20.7	0.54	0.62	-0.5
	26.0	25.9	0.58		-0.4
Drinking	0.78	0.54	0.35	0.20	-30.8
	1.04	0.51	0.38		-51.0
	6.50	5.24	1.35	1.48	-19.4
	7.80	6.02	1.90		-22.8
	20.8	20.0	2.26	1.14	-3.8
	26.0	24.0	2.65		-7.7
Waste	0.78	0.43	0.32	0.39	-44.9
	1.04	0.65	0.48		-37.5
	6.50	4.59	1.82	0.83	-29.4
	7.80	5.45	2.02		-30.1
	20.8	18.3	2.41	1.57	-11.8
	26.0	23.0	2.50		-11.5

**TABLE 5. MULTIPLE LABORATORY (n=19) DETERMINATION OF BIAS FOR
NITRITE-NITROGEN**

Water	Amount Added mg/L	Amount Found mg/L	S_i	S_o	Bias %
Reagent	0.36	0.37	0.04	0.04	+2.8
	0.48	0.48	0.06		0.0
	3.00	3.18	0.12	0.06	+6.0
	3.60	3.83	0.12		+6.4
	9.60	9.84	0.36	0.26	+2.5
	12.0	12.1	0.27		+0.6
Drinking	0.36	0.30	0.13	0.03	-16.7
	0.48	0.40	0.14		-16.7
	3.00	3.02	0.23	0.12	+0.7
	3.60	3.62	0.22		+0.6
	9.60	9.59	0.44	0.28	-0.1
	12.0	11.6	0.59		-3.1
Waste	0.36	0.34	0.06	0.04	-5.6
	0.48	0.46	0.07		-4.2
	3.00	3.18	0.13	0.10	+6.0
	3.60	3.76	0.18		+4.4
	9.60	9.74	0.49	0.26	+1.5
	12.0	12.0	0.56		+0.3

TABLE 6. MULTIPLE LABORATORY (n=19) DETERMINATION OF BIAS FOR BROMIDE

Water	Amount Added mg/L	Amount Found mg/L	S_i	S_o	Bias %
Reagent	0.63	0.69	0.11	0.05	+9.5
	0.84	0.85	0.12		+1.2
	5.24	5.21	0.22	0.21	-0.6
	6.29	6.17	0.35		-1.9
	16.8	17.1	0.70	0.36	+1.6
	21.0	21.3	0.93		+1.5
Drinking	0.63	0.63	0.13	0.04	0.0
	0.84	0.81	0.13		-3.6
	5.24	5.11	0.23	0.13	-2.5
	6.29	6.18	0.30		-1.7
	16.8	17.0	0.55	0.57	+0.9
	21.0	20.9	0.65		-0.4
Waste	0.63	0.63	0.15	0.09	0.0
	0.84	0.85	0.15		+1.2
	5.24	5.23	0.36	0.11	-0.2
	6.29	6.27	0.46		-0.3
	16.8	16.6	0.69	0.43	-1.0
	21.0	21.1	0.63		+0.3

**TABLE 7. MULTIPLE LABORATORY (n=19) DETERMINATION OF BIAS FOR
NITRATE-NITROGEN**

Water	Amount Added mg/L	Amount Found mg/L	S_i	S_o	Bias %
Reagent	0.42	0.42	0.04	0.02	0.0
	0.56	0.56	0.06		0.0
	3.51	3.34	0.15	0.08	-4.8
	4.21	4.05	0.28		-3.8
	11.2	11.1	0.47	0.34	-1.1
	14.0	14.4	0.61		+2.6
Drinking	0.42	0.46	0.08	0.03	+9.5
	0.56	0.58	0.09		+3.6
	3.51	3.45	0.27	0.10	-1.7
	4.21	4.21	0.38		0.0
	11.2	11.5	0.50	0.48	+2.3
	14.0	14.2	0.70		+1.6
Waste	0.42	0.36	0.07	0.06	-14.6
	0.56	0.40	0.16		-28.6
	3.51	3.19	0.31	0.07	-9.1
	4.21	3.84	0.28		-8.8
	11.2	10.9	0.35	0.51	-3.0
	14.0	14.1	0.74		+0.4

**TABLE 8. MULTIPLE LABORATORY (n=19) DETERMINATION OF BIAS FOR
ORTHO-PHOSPHATE**

Water	Amount Added mg/L	Amount Found mg/L	S_i	S_o	Bias %
Reagent	0.69	0.69	0.06	0.06	0.0
	0.92	0.98	0.15		+6.5
	5.77	5.72	0.36	0.18	-0.9
	6.92	6.78	0.42		-2.0
	18.4	18.8	1.04	0.63	+2.1
	23.1	23.2	0.35		+2.4
Drinking	0.69	0.70	0.17	0.17	+1.4
	0.92	0.96	0.20		+4.3
	5.77	5.43	0.52	0.40	-5.9
	6.92	6.29	0.72		-9.1
	18.4	18.0	0.68	0.59	-2.2
	23.1	22.6	1.07		-2.0
Waste	0.69	0.64	0.26	0.09	-7.2
	0.92	0.82	0.28		-10.9
	5.77	5.18	0.66	0.34	-10.2
	6.92	6.24	0.74		-9.8
	18.4	17.6	2.08	1.27	-4.1
	23.1	22.4	0.87		-3.0

TABLE 9. MULTIPLE LABORATORY (n=19) DETERMINATION OF BIAS FOR SULFATE

Water	Amount Added mg/L	Amount Found mg/L	S_i	S_o	Bias %
Reagent	2.85	2.83	0.32	0.52	-0.7
	3.80	3.83	0.92		+0.8
	23.8	24.0	1.67	0.68	+0.8
	28.5	28.5	1.56		-0.1
	76.0	76.8	3.42	2.33	+1.1
	95.0	95.7	3.59		+0.7
Drinking	2.85	1.12	0.37	0.41	-60.7
	3.80	2.26	0.97		-40.3
	23.8	21.8	1.26	0.51	-8.4
	28.5	25.9	2.48		-9.1
	76.0	74.5	4.63	2.70	-2.0
	95.0	92.3	5.19		-2.8
Waste	2.85	1.89	0.37	0.24	-33.7
	3.80	2.10	1.25		-44.7
	23.8	20.3	3.19	0.58	-14.7
	28.5	24.5	3.24		-14.0
	76.0	71.4	5.65	3.39	-6.1
	95.0	90.3	6.80		-5.0

Method A

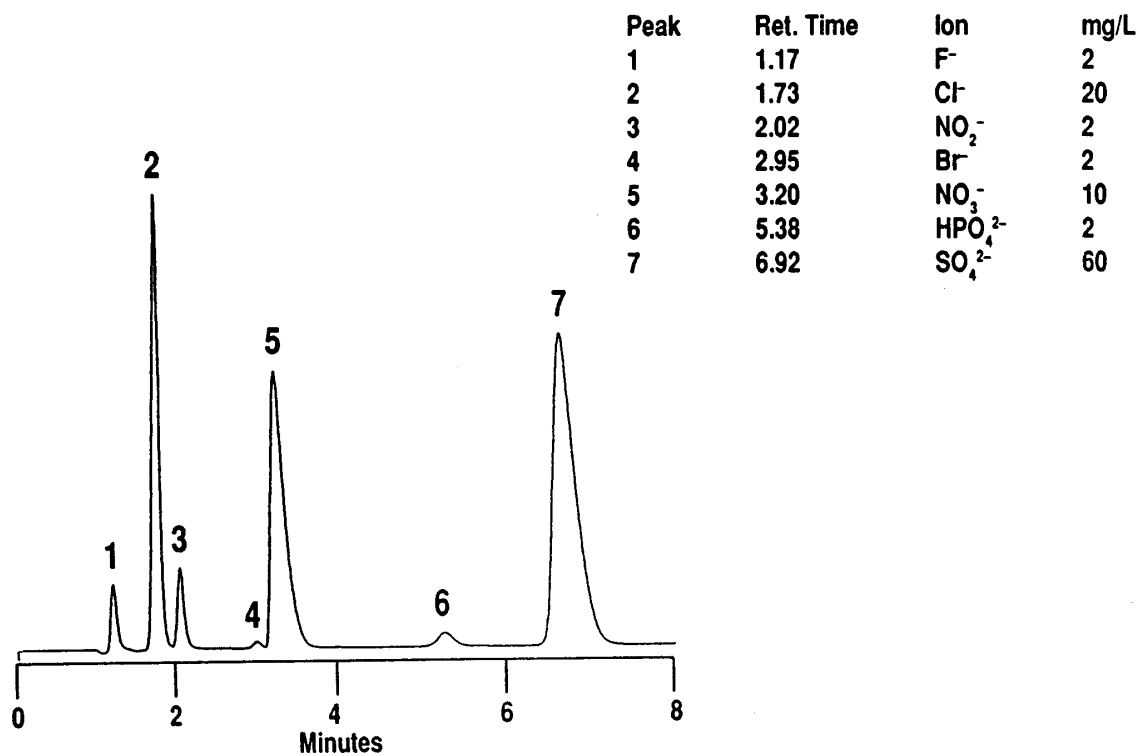


Figure 1. Chromatogram showing separation using the AS4A column

Method B

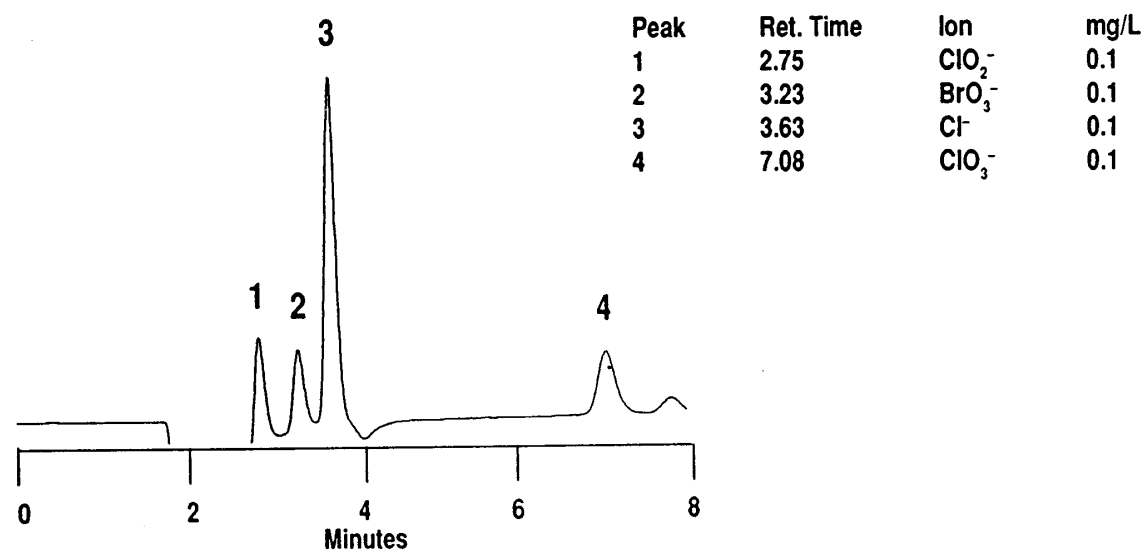


Figure 2. Chromatogram showing separation using the AS9 column

Appendix F: UTL Calculations for Chlorides

1	UCL Statistics for Uncensored Full Data Sets											
2												
3	User Selected Options											
4	Date/Time of Computation			3/8/2018 3:01:31 PM								
5	From File			WorkSheet.xls								
6	Full Precision			OFF								
7	Confidence Coefficient			95%								
8	Number of Bootstrap Operations			2000								
9												
10												
11	chlorides											
12												
13	General Statistics											
14	Total Number of Observations				16		Number of Distinct Observations				15	
15							Number of Missing Observations				0	
16	Minimum				2.55		Mean				32.01	
17	Maximum				191		Median				12.65	
18	SD				46.94		Std. Error of Mean				11.73	
19	Coefficient of Variation				1.466		Skewness				2.956	
20												
21	Normal GOF Test											
22	Shapiro Wilk Test Statistic				0.606		Shapiro Wilk GOF Test					
23	5% Shapiro Wilk Critical Value				0.887		Data Not Normal at 5% Significance Level					
24	Lilliefors Test Statistic				0.273		Lilliefors GOF Test					
25	5% Lilliefors Critical Value				0.222		Data Not Normal at 5% Significance Level					
26	Data Not Normal at 5% Significance Level											
27												
28	Assuming Normal Distribution											
29	95% Normal UCL						95% UCLs (Adjusted for Skewness)					
30	95% Student's-t UCL				52.58		95% Adjusted-CLT UCL (Chen-1995)				60.58	
31							95% Modified-t UCL (Johnson-1978)				54.03	
32												
33	Gamma GOF Test											
34	A-D Test Statistic				0.703		Anderson-Darling Gamma GOF Test					
35	5% A-D Critical Value				0.767		Detected data appear Gamma Distributed at 5% Significance Level					
36	K-S Test Statistic				0.191		Kolmogrov-Smirnoff Gamma GOF Test					
37	5% K-S Critical Value				0.222		Detected data appear Gamma Distributed at 5% Significance Level					
38	Detected data appear Gamma Distributed at 5% Significance Level											
39												
40	Gamma Statistics											
41	k hat (MLE)				0.917		k star (bias corrected MLE)				0.787	
42	Theta hat (MLE)				34.91		Theta star (bias corrected MLE)				40.69	
43	nu hat (MLE)				29.34		nu star (bias corrected)				25.17	
44	MLE Mean (bias corrected)				32.01		MLE Sd (bias corrected)				36.09	
45							Approximate Chi Square Value (0.05)				14.74	
46	Adjusted Level of Significance				0.0335		Adjusted Chi Square Value				13.84	
47												
48	Assuming Gamma Distribution											
49	95% Approximate Gamma UCL (use when n>=50)				54.65		95% Adjusted Gamma UCL (use when n<50)				58.22	
50												
51	Lognormal GOF Test											
52	Shapiro Wilk Test Statistic				0.97		Shapiro Wilk Lognormal GOF Test					

	A	B	C	D	E	F	G	H	I	J	K	L	
53	5% Shapiro Wilk Critical Value					0.887	Data appear Lognormal at 5% Significance Level						
54	Lilliefors Test Statistic					0.143	Lilliefors Lognormal GOF Test						
55	5% Lilliefors Critical Value					0.222	Data appear Lognormal at 5% Significance Level						
56	Data appear Lognormal at 5% Significance Level												
57													
58	Lognormal Statistics												
59	Minimum of Logged Data					0.936	Mean of logged Data					2.83	
60	Maximum of Logged Data					5.252	SD of logged Data					1.108	
61													
62	Assuming Lognormal Distribution												
63	95% H-UCL					71.18	90% Chebyshev (MVUE) UCL					56.93	
64	95% Chebyshev (MVUE) UCL					69.32	97.5% Chebyshev (MVUE) UCL					86.52	
65	99% Chebyshev (MVUE) UCL					120.3							
66													
67	Nonparametric Distribution Free UCL Statistics												
68	Data appear to follow a Discernible Distribution at 5% Significance Level												
69													
70	Nonparametric Distribution Free UCLs												
71	95% CLT UCL					51.31	95% Jackknife UCL					52.58	
72	95% Standard Bootstrap UCL					50.67	95% Bootstrap-t UCL					89.09	
73	95% Hall's Bootstrap UCL					131.8	95% Percentile Bootstrap UCL					54.33	
74	95% BCA Bootstrap UCL					63.07							
75	90% Chebyshev(Mean, Sd) UCL					67.21	95% Chebyshev(Mean, Sd) UCL					83.16	
76	97.5% Chebyshev(Mean, Sd) UCL					105.3	99% Chebyshev(Mean, Sd) UCL					148.8	
77													
78	Suggested UCL to Use												
79	95% Adjusted Gamma UCL					58.22							
80													
81	Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.												
82	These recommendations are based upon the results of the simulation studies summarized in Singh, Singh, and Iaci (2002)												
83	and Singh and Singh (2003). However, simulations results will not cover all Real World data sets.												
84	For additional insight the user may want to consult a statistician.												
85													

1			Background Statistics for Uncensored Full Data Sets								
2	User Selected Options										
3	Date/Time of Computation		3/8/2018 3:02:08 PM								
4	From File		WorkSheet.xls								
5	Full Precision		OFF								
6	Confidence Coefficient		95%								
7	Coverage		95%								
8	New or Future K Observations		1								
9	Number of Bootstrap Operations		2000								
10											
11	chlorides										
12											
13	General Statistics										
14	Total Number of Observations			16	Number of Distinct Observations			15			
15	Minimum			2.55	First Quartile			7.825			
16	Second Largest			80.8	Median			12.65			
17	Maximum			191	Third Quartile			32.83			
18	Mean			32.01	SD			46.94			
19	Coefficient of Variation			1.466	Skewness			2.956			
20	Mean of logged Data			2.83	SD of logged Data			1.108			
21											
22	Critical Values for Background Threshold Values (BTVs)										
23	Tolerance Factor K (For UTL)			2.524	d2max (for USL)			2.443			
24											
25	Normal GOF Test										
26	Shapiro Wilk Test Statistic			0.606	Shapiro Wilk GOF Test						
27	5% Shapiro Wilk Critical Value			0.887	Data Not Normal at 5% Significance Level						
28	Lilliefors Test Statistic			0.273	Lilliefors GOF Test						
29	5% Lilliefors Critical Value			0.222	Data Not Normal at 5% Significance Level						
30	Data Not Normal at 5% Significance Level										
31											
32	Background Statistics Assuming Normal Distribution										
33	95% UTL with	95% Coverage	150.5	90% Percentile (z)			92.16				
34		95% UPL (t)	116.8	95% Percentile (z)			109.2				
35		95% USL	146.7	99% Percentile (z)			141.2				
36											
37	Gamma GOF Test										
38	A-D Test Statistic			0.703	Anderson-Darling Gamma GOF Test						
39	5% A-D Critical Value			0.767	Detected data appear Gamma Distributed at 5% Significance Level						
40	K-S Test Statistic			0.191	Kolmogrov-Smirnoff Gamma GOF Test						
41	5% K-S Critical Value			0.222	Detected data appear Gamma Distributed at 5% Significance Level						
42	Detected data appear Gamma Distributed at 5% Significance Level										
43											
44	Gamma Statistics										
45	k hat (MLE)			0.917	k star (bias corrected MLE)			0.787			
46	Theta hat (MLE)			34.91	Theta star (bias corrected MLE)			40.69			
47	nu hat (MLE)			29.34	nu star (bias corrected)			25.17			
48	MLE Mean (bias corrected)			32.01	MLE Sd (bias corrected)			36.09			
49											
50	Background Statistics Assuming Gamma Distribution										
51	95% Wilson Hilferty (WH) Approx. Gamma UPL			108.2	90% Percentile			78.15			
52	95% Hawkins Wixley (HW) Approx. Gamma UPL			109.8	95% Percentile			104.5			

	A	B	C	D	E	F	G	H	I	J	K	L
53	95% WH Approx. Gamma UTL with				95% Coverage	172.4	99% Percentile					166.7
54	95% HW Approx. Gamma UTL with				95% Coverage	184.5						
55					95% WH USL	164.2	95% HW USL					174.6
56												
57	Lognormal GOF Test											
58	Shapiro Wilk Test Statistic				0.97	Shapiro Wilk Lognormal GOF Test						
59	5% Shapiro Wilk Critical Value				0.887	Data appear Lognormal at 5% Significance Level						
60	Lilliefors Test Statistic				0.143	Lilliefors Lognormal GOF Test						
61	5% Lilliefors Critical Value				0.222	Data appear Lognormal at 5% Significance Level						
62	Data appear Lognormal at 5% Significance Level											
63												
64	Background Statistics assuming Lognormal Distribution											
65	95% UTL with		95% Coverage	277.5	90% Percentile (z)					70.07		
66			95% UPL (t)	125.4	95% Percentile (z)					104.8		
67			95% USL	253.7	99% Percentile (z)					222.9		
68												
69	Nonparametric Distribution Free Background Statistics											
70	Data appear Gamma Distributed at 5% Significance Level											
71												
72	Nonparametric Upper Limits for Background Threshold Values											
73	Order of Statistic, r			16	95% UTL with 95% Coverage					191		
74	Approximate f			0.842	Confidence Coefficient (CC) achieved by UTL					0.56		
75	95% Percentile Bootstrap UTL with		95% Coverage	191	95% BCA Bootstrap UTL with		95% Coverage	191				
76			95% UPL	191			90% Percentile	62.5				
77			90% Chebyshev UPL	177.2			95% Percentile	108.4				
78			95% Chebyshev UPL	242.9			99% Percentile	174.5				
79			95% USL	191								
80												
81	Note: The use of USL to estimate a BTV is recommended only when the data set represents a background											
82	data set free of outliers and consists of observations collected from clean unimpacted locations.											
83	The use of USL tends to provide a balance between false positives and false negatives provided the data											
84	represents a background data set and when many onsite observations need to be compared with the BTV.											
85												

Appendix G: Documentation of Disposal

TEX MEX SERVICES, LLC
NON-HAZARDOUS OIL FIELD WASTE MANIFEST

PLEASE PRINT NEATLY WHEN FILLING IN INFORMATION BELOW

I. PICK-UP LOCATION:

1. FIELD

2. LEASE/SITE:

State AB SWD 1

3. TRANSPORTER NAME:

Tex Mex

4. DRIVER NAME:

Isela Marquez

UNIT NO:

29

II. DESCRIPTION

1. WASTE:

<input type="checkbox"/>
<input type="checkbox"/>
<input type="checkbox"/>
<input type="checkbox"/>

TANK BOTTOMS

DRILLING FLUIDS

PRODUCED WATER

PRODUCED WATER CONTAMINATED SOIL

<input checked="" type="checkbox"/>
<input type="checkbox"/>
<input type="checkbox"/>

CRUDE OIL CONTAMINATED SOIL

COMPLETION FLUIDS

WORKOVER FLUIDS

III. DESTINATION:

1. SITE NAME:

Sundance Services

2. SITE ADDRESS:

Ennice NM

3. SITE OPERATOR:

DATE:

IV. JOB SUPERVISOR

SIGNATURE:



DATE:

3-13-18



SUNDANCE SERVICES, Inc.

P.O. Box 1737 Eunice, New Mexico 88231
(575) 394-2511

TICKET No. 452405

LEASE OPERATOR/SHIPPER/COMPANY: (4) Well Service	
LEASE NAME: S. C. A. B. 41	
TRANSPORTER COMPANY: T. X. 111X	TIME: 7:45 (AM/PM)
DATE: 5/1/18	VEHICLE NO: 29
GENERATOR COMPANY MAN'S NAME: K. M. Lopez	
CHARGE TO: T. X. 111X	RIG NAME AND NUMBER: 111X-1001

#216760

TYPE OF MATERIAL

- | | | |
|---|---|-----------------------------------|
| <input type="checkbox"/> Production Water | <input type="checkbox"/> Drilling Fluids | <input type="checkbox"/> Rinsate |
| <input type="checkbox"/> Tank Bottoms | <input checked="" type="checkbox"/> Contaminated Soil | <input type="checkbox"/> Jet Out |
| <input type="checkbox"/> Solids | <input type="checkbox"/> BS&W Content: | <input type="checkbox"/> Call Out |

Description: 111X

RRC or API # C-133#

VOLUME OF MATERIAL [] BBLs. : [X] YARD 10 : []

@ 25.00

AS A CONDITION TO SUNDANCE SERVICES, INC.'S ACCEPTANCE OF THE MATERIALS SHIPPED WITH THIS JOB TICKET, OPERATOR/SHIPPER REPRESENTS AND WARRANTS THAT THE WASTE MATERIAL SHIPPED HERewith IS MATERIAL EXEMPT FROM THE RESOURCE, CONSERVATION AND RECOVERY ACT OF 1976, AS AMENDED FROM TIME TO TIME, 40 U.S.C. § 6901, et seq., THE NM HEALTH AND SAF. CODE § 361.001 et seq., AND REGULATIONS RELATED THERETO, BY VIRTUE OF THE EXEMPTION AFFORDED DRILLING FLUIDS, PRODUCED WATERS, AND OTHER WASTE ASSOCIATED WITH THE EXPLORATION, DEVELOPMENT OR PRODUCTION OF CRUDE OIL OR NATURAL GAS OR GEOTHERMAL ENERGY.

ALSO AS A CONDITION TO SUNDANCE SERVICES, INC.'S ACCEPTANCE OF THE MATERIALS SHIPPED WITH THIS JOB TICKET, TRANSPORTER REPRESENTS AND WARRANTS THAT ONLY THE MATERIAL DELIVERED BY OPERATOR/SHIPPER TO TRANSPORTER IS NOW DELIVERED BY TRANSPORTER TO SUNDANCE SERVICES, INC.'S FACILITY FOR DISPOSAL.

THIS WILL CERTIFY that the above Transporter loaded the material represented by this Transporter Statement at the above described location, and that it was tendered by the above described shipper. This will certify that no additional materials were added to this load, and that the material was delivered without incident.

DRIVER: [Signature]
(SIGNATURE)

FACILITY REPRESENTATIVE: [Signature]
(SIGNATURE)

White - Sundance Canary - Sundance Acct #1 Pink - Transporter



SUNDANCE SERVICES, Inc.

P.O. Box 1737 Eunice, New Mexico 88231
(575) 394-2511

TICKET No. 452469

LEASE OPERATOR/SHIPPER/COMPANY:

LEASE NAME:

TRANSPORTER COMPANY:

DATE: 3-13-15

VEHICLE NO:

GENERATOR COMPANY
MAN'S NAME:

TIME: 7:27 AM/PM

CHARGE TO:

RIG NAME
AND NUMBER:

TYPE OF MATERIAL

☐ Production Water

☐ Drilling Fluids

☐ Rinsate

☐ Tank Bottoms

☒ Contaminated Soil

☐ Jet Out

☐ Solids

☐ BS&W Content:

☐ Call Out

Description:

RRC or API #

VOLUME OF MATERIAL

☐ BBLs.

☒ YARD

☐

AS A CONDITION TO SUNDANCE SERVICES, INC.'S ACCEPTANCE OF THE MATERIALS SHIPPED WITH THIS JOB TICKET, OPERATOR/SHIPPER REPRESENTS AND WARRANTS THAT THE WASTE MATERIAL SHIPPED HERewith IS MATERIAL EXEMPT FROM THE RESOURCE, CONSERVATION AND RECOVERY ACT OF 1976, AS AMENDED FROM TIME TO TIME, 40 U.S.C. § 6901, et seq., THE NM HEALTH AND SAF. CODE § 361.001 et seq., AND REGULATIONS RELATED THERETO, BY VIRTUE OF THE EXEMPTION AFFORDED DRILLING FLUIDS, PRODUCED WATERS, AND OTHER WASTE ASSOCIATED WITH THE EXPLORATION, DEVELOPMENT OR PRODUCTION OF CRUDE OIL OR NATURAL GAS OR GEOTHERMAL ENERGY.

ALSO AS A CONDITION TO SUNDANCE SERVICES, INC.'S ACCEPTANCE OF THE MATERIALS SHIPPED WITH THIS JOB TICKET, TRANSPORTER REPRESENTS AND WARRANTS THAT ONLY THE MATERIAL DELIVERED BY OPERATOR/SHIPPER TO TRANSPORTER IS NOW DELIVERED BY TRANSPORTER TO SUNDANCE SERVICES, INC.'S FACILITY FOR DISPOSAL.

THIS WILL CERTIFY that the above Transporter loaded the material represented by this Transporter Statement at the above described location, and that it was tendered by the above described shipper. This will certify that no additional materials were added to this load, and that the material was delivered without incident.

DRIVER:

(SIGNATURE)

FACILITY REPRESENTATIVE:

(SIGNATURE)

White - Sundance

Canary - Sundance Acct #1

Pink - Transporter

TEX MEX SERVICES, LLC
NON-HAZARDOUS OIL FIELD WASTE MANIFEST

PLEASE PRINT NEATLY WHEN FILLING IN INFORMATION BELOW

I. PICK-UP LOCATION:

1. FIELD

2. LEASE/SITE: State AB SWD 1

3. TRANSPORTER NAME: Tex Mex

4. DRIVER NAME: Manuel Lopez UNIT NO: 26

II. DESCRIPTION

1. WASTE:

<input type="checkbox"/>
<input type="checkbox"/>
<input type="checkbox"/>
<input type="checkbox"/>

TANK BOTTOMS

DRILLING FLUIDS

PRODUCED WATER

PRODUCED WATER CONTAMINATED SOIL

<input checked="" type="checkbox"/>
<input type="checkbox"/>
<input type="checkbox"/>

CRUDE OIL CONTAMINATED SOIL

COMPLETION FLUIDS

WORKOVER FLUIDS

III. DESTINATION:

1. SITE NAME: Sundance Services

2. SITE ADDRESS: Ennice NM

3. SITE OPERATOR:

DATE:

IV. JOB SUPERVISOR

SIGNATURE: Ram

DATE: 3-13-18



SUNDANCE SERVICES, Inc.

P.O. Box 1737 Eunice, New Mexico 88231
(575) 394-2511

TICKET No. 452470

LEASE OPERATOR/SHIPPER/COMPANY:

LEASE NAME:

TRANSPORTER COMPANY:

DATE: 3/13/18

VEHICLE NO:

GENERATOR COMPANY
MAN'S NAME:

TIME 1:31 AM/PM

CHARGE TO:

RIG NAME
AND NUMBER

#216760

TYPE OF MATERIAL

☐ Production Water

☐ Drilling Fluids

☐ Rinsate

☐ Tank Bottoms

☒ Contaminated Soil

☐ Jet Out

☐ Solids

☐ BS&W Content:

☐ Call Out

Description:

RRC or API #

C-133#

VOLUME OF MATERIAL

☐ BBLs.

☒ YARD

12

☐

@ 25.00

AS A CONDITION TO SUNDANCE SERVICES, INC.'S ACCEPTANCE OF THE MATERIALS SHIPPED WITH THIS JOB TICKET, OPERATOR/SHIPPER REPRESENTS AND WARRANTS THAT THE WASTE MATERIAL SHIPPED HERewith IS MATERIAL EXEMPT FROM THE RESOURCE, CONSERVATION AND RECOVERY ACT OF 1976, AS AMENDED FROM TIME TO TIME, 40 U.S.C. § 6901, et seq., THE NM HEALTH AND SAF. CODE § 361.001 et seq., AND REGULATIONS RELATED THERETO, BY VIRTUE OF THE EXEMPTION AFFORDED DRILLING FLUIDS, PRODUCED WATERS, AND OTHER WASTE ASSOCIATED WITH THE EXPLORATION, DEVELOPMENT OR PRODUCTION OF CRUDE OIL OR NATURAL GAS OR GEOTHERMAL ENERGY.

ALSO AS A CONDITION TO SUNDANCE SERVICES, INC.'S ACCEPTANCE OF THE MATERIALS SHIPPED WITH THIS JOB TICKET, TRANSPORTER REPRESENTS AND WARRANTS THAT ONLY THE MATERIAL DELIVERED BY OPERATOR/SHIPPER TO TRANSPORTER IS NOW DELIVERED BY TRANSPORTER TO SUNDANCE SERVICES, INC.'S FACILITY FOR DISPOSAL.

THIS WILL CERTIFY that the above Transporter loaded the material represented by this Transporter Statement at the above described location, and that it was tendered by the above described shipper. This will certify that no additional materials were added to this load, and that the material was delivered without incident.

DRIVER:

(SIGNATURE)

FACILITY REPRESENTATIVE:

(SIGNATURE)

White - Sundance

Canary - Sundance Acct #1

Pink - Transporter



SUNDANCE SERVICES, Inc.

P.O. Box 1737 Eunice, New Mexico 88231
(575) 394-2511

TICKET No. 452406

LEASE OPERATOR/SHIPPER/COMPANY: CTS

LEASE NAME: Shell H/S 2100 #1

TRANSPORTER COMPANY: TAY RIG

TIME 1:45 AM/PM

DATE: 5/2/18 VEHICLE NO: 76

GENERATOR COMPANY
MAN'S NAME: L. J. JAMES

CHARGE TO: TAY RIG

RIG NAME
AND NUMBER: (1) 2100

#216760

TYPE OF MATERIAL

- | | | |
|---|--|-----------------------------------|
| <input type="checkbox"/> Production Water | <input type="checkbox"/> Drilling Fluids | <input type="checkbox"/> Rinsate |
| <input type="checkbox"/> Tank Bottoms | <input type="checkbox"/> Contaminated Soil | <input type="checkbox"/> Jet Out |
| <input type="checkbox"/> Solids | <input type="checkbox"/> BS&W Content: | <input type="checkbox"/> Call Out |

Description: _____

RRC or API #

C-133#

VOLUME OF MATERIAL ☐ BBLs. _____ ☒ YARD 25.00 ☐ _____

AS A CONDITION TO SUNDANCE SERVICES, INC.'S ACCEPTANCE OF THE MATERIALS SHIPPED WITH THIS JOB TICKET, OPERATOR/SHIPPER REPRESENTS AND WARRANTS THAT THE WASTE MATERIAL SHIPPED HERewith IS MATERIAL EXEMPT FROM THE RESOURCE, CONSERVATION AND RECOVERY ACT OF 1976, AS AMENDED FROM TIME TO TIME, 40 U.S.C. § 6901, et seq., THE NM HEALTH AND SAF. CODE § 361.001 et seq., AND REGULATIONS RELATED THERETO, BY VIRTUE OF THE EXEMPTION AFFORDED DRILLING FLUIDS, PRODUCED WATERS, AND OTHER WASTE ASSOCIATED WITH THE EXPLORATION, DEVELOPMENT OR PRODUCTION OF CRUDE OIL OR NATURAL GAS OR GEOTHERMAL ENERGY.

ALSO AS A CONDITION TO SUNDANCE SERVICES, INC.'S ACCEPTANCE OF THE MATERIALS SHIPPED WITH THIS JOB TICKET. TRANSPORTER REPRESENTS AND WARRANTS THAT ONLY THE MATERIAL DELIVERED BY OPERATOR/SHIPPER TO TRANSPORTER IS NOW DELIVERED BY TRANSPORTER TO SUNDANCE SERVICES, INC.'S FACILITY FOR DISPOSAL.

THIS WILL CERTIFY that the above Transporter loaded the material represented by this Transporter Statement at the above described location, and that it was tendered by the above described shipper. This will certify that no additional materials were added to this load, and that the material was delivered without incident.

DRIVER: _____
(SIGNATURE)

FACILITY REPRESENTATIVE: _____
(SIGNATURE)

White - Sundance

Canary - Sundance Acct #1

Pink - Transporter