

Site Investigation Report

**BOUNDARY VENTURES, INC., KENNETH OWENS PROPERTY
FACILITY, PERMIT NO. STF-010
COLORADO COUNTY, TEXAS**

Issue Date: April 22, 2019

Terracon Project No. 96187C01



Prepared for:

Railroad Commission of Texas
Oil and Gas Division
Austin, Texas

Prepared by:

Terracon Consultants, Inc.
Austin, Texas

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Terracon

April 22, 2019

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Re: Site Investigation Report
Boundary Ventures, Inc., Kenneth Owens Property Facility, Permit No. STF-010
Colorado County, Texas

Dear Mr. Leckie:

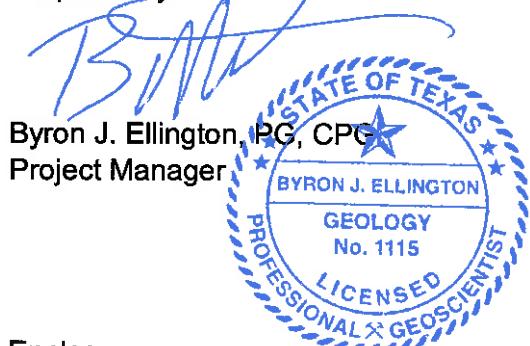
Terracon Consultants, Inc. (Terracon) is pleased to provide the enclosed Site Investigation Report (SIR), prepared for the referenced property. The SIR was completed in general accordance with Railroad Commission of Texas (RRC) Requisition Number 455-18-8654.

We appreciate the opportunity to perform these services for you. Please do not hesitate to contact either of the undersigned if you have questions regarding this project.

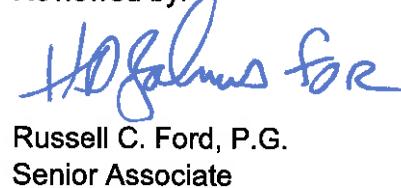
Sincerely,

TERRACON CONSULTANTS, INC.

Prepared by:



Reviewed by:



Enclosure

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**Site Investigation Report
Boundary Ventures, Inc.
Kenneth Owens Property Facility
Colorado County, Texas**

Terracon Project No. 96187C01
April 22, 2019

1.0 INTRODUCTION

1.1 Site Description

Site Name	Boundary Ventures, Inc., Kenneth Owens Property Facility, Permit No. STF-010.
Site Location/Address	Approximate Latitude, Longitude: 29.549535, -96.454857, Southwest Corner of State Highway 71 and Alternate State Highway 90, Altair (Colorado County), Texas
Site Improvements/Waste/Impacts	Cuttings Landfarm and Road Base Recycling Facility - buildings, tank batteries, frac tanks, pug mills, chemical totes, loading / offloading pads, unlined earthen pit, approximately 150 acres.

The Boundary Ventures, Inc., Kenneth Owens Property Facility (site), is located approximately 1.5 miles south of the town of Altair, Colorado County, Texas. The site location is depicted on Exhibit 1 with site details found on Exhibits 2 through 6.

According to file information made available by the Railroad Commission of Texas (RRC), it appears that the site has been the subject of RRC enforcement for many years and may have failed to properly reduce its inventory of oil field waste (mainly impacted drill cuttings), finished recycled product, or to properly address environmental concerns. According to the last available issuance of the facilities permit made available to Terracon (October 21, 2005), the facility was authorized to receive, store, handle, treat, and dispose of certain nonhazardous oil and gas waste. According to the permit, the facility also was authorized to landfarm water-based drilling mud and cuttings and allowed to manufacture road base from cuttings.

To facilitate evaluation and discussion, nine Areas of Concern (AOC1 through 9) are referenced throughout this document and are depicted on Exhibit 2. Each AOC initially had a long-form name (e.g. "AOC-3 Pile 1") but those names have been removed to prevent confusion.

1.2 Scope of Work

The scope of work for this work order includes:

- Consolidate file data regarding the spatial distribution of contaminants of concern (COCs) and waste volumes in the AOCs.
- Install monitoring wells into the uppermost groundwater bearing unit to evaluate impacts to groundwater (if any) from surface operations, determine the flow direction of groundwater in the uppermost groundwater bearing unit, provide monitoring points on which to build future groundwater investigations, and provide monitoring points to monitor future remedy effectiveness.
- Conduct a field investigation to fill spatial data gaps in surface and subsurface soils.
- Conduct a field survey for NORM for the purposes of evaluating whether NORM could be an issue on the site.
- Conduct preliminary remedial alternative analysis (preliminary AA) of the various AOCs with an order of magnitude cost estimate and a subjective remedy effectiveness score. The purpose of the preliminary remedial alternative analysis is to evaluate future remedy selection and to identify data gaps that otherwise would not become apparent.
- Two modifications to the original scope of work are:
 - Collect one surface water grab sample from Skull Creek downstream of the facility (requested March 1, 2019).
 - To characterize the main waste pile, the original scope of work was modified to collect four composite samples from the waste pile and analyze each sample for the expanded suite of analytes plus crop sustenance parameters (modification approximately February 14, 2019).

1.3 Standard of Care

Terracon's services were performed in a manner consistent with generally accepted practices of the profession undertaken in similar studies in the same geographical area during the same time period. Terracon makes no warranties, either express or implied, regarding the findings, conclusions or recommendations. Please note that Terracon does not warrant the work of laboratories, regulatory agencies or other third parties supplying information used in the preparation of the report. These services were performed in accordance with the scope of work agreed with you, our client, as reflected in our proposal and were not restricted by ASTM E1903-97.

1.4 Additional Scope Limitations

Findings, conclusions and recommendations resulting from these services are based upon information derived from the on-site activities and other services performed under this scope of work; such information is subject to change over time. Certain indicators of the presence of hazardous substances, petroleum products, or other constituents may have been latent, inaccessible, unobservable, non-detectable or not present during these services, and we cannot represent that the site contains no hazardous substances, toxic materials, petroleum products, or other latent conditions beyond those identified during this investigation. Subsurface conditions may vary from those encountered at specific borings or wells or during other surveys, tests, assessments, investigations or exploratory services; the data, interpretations, findings, and our recommendations are based solely upon data obtained at the time and within the scope of these services.

1.5 Reliance

This report has been prepared for the exclusive use and reliance of the RRC. Use or reliance by any other party is prohibited without the written authorization of the RRC and Terracon Consultants, Inc. Any unauthorized distribution or reuse is at the client's sole risk. Notwithstanding the foregoing, reliance by authorized parties will be subject to the terms, conditions and limitations stated in the work order scope, SIR, and the Contracts Terms and Conditions (455-18-8654). The limitation of liability defined in the terms and conditions is the aggregate limit of Terracon's liability to the client and all relying parties unless otherwise agreed in writing.

2.0 FIELD ACTIVITIES

2.1 Soil Borings and Monitoring Wells

Terracon's field activities were conducted between February 4, 2019 and March 1, 2019 by Mr. Brian Mann, Mr. Cody Pfund Pulliam, and Mr. Anthony Reid of Terracon. Greater than 48 hours prior to commencing the field activities, Terracon contacted a utility locator (Texas 811/1-800-245-4545) to arrange for underground utility locates at the site.

As part of the approved scope of work, a total of 19 soil borings and five groundwater monitoring wells were installed, an existing pond (Pond A) was evaluated for impacts to surface water and pond sediment, a surface water sample of Skull Creek downstream of the facility was evaluated for impacts, a survey for Naturally Occurring Radioactive Materials (NORM) was conducted, and an aerial survey was conducted to estimate the volume of waste material and product stockpiled above grade.

The locations of the soil borings (SB-1 through SB19), monitoring wells (MW-9 through MW-13),

NORM survey, evaluated pond, and piles which were surveyed are depicted in Exhibit 3 through Exhibit 6 located in Appendix A.

The 24 soil borings were advanced utilizing a track-mounted Geoprobe™ rig capable of a combination of direct-push technology (DPT) and solid flight auger drilling techniques. Soil borings were advanced to between 15 and 40 feet below ground surface (ft bgs) with the overall goal of evaluating the thickness of fill and impacts of chemicals of concern. The drilling operations were conducted by a State of Texas-licensed driller under the supervision of Terracon environmental personnel. Drilling equipment was decontaminated prior to commencing field activities and in between each boring location.

Investigation derived waste (IDW) such as soil cuttings and purged groundwater was spread out on the ground near the soil boring or monitoring well. Except for the main waste pile (AOC-1), no observances of gross contamination requiring special handling were encountered during the advancements of soil borings and monitoring wells.

The Geologic Atlas of Texas, Seguin Sheet, indicates the Beaumont Formation of Pleistocene Age to be outcropping beneath the site. The Beaumont Formation is described as primarily light- to dark-gray and bluish- to greenish-gray clay and silt, intermixed and interbedded; contains beds and lenses of fine sand, decayed organic matter, and many buried organic-rich, oxidized soil zones that contain calcareous and ferruginous nodules. Very light gray to very light yellow-gray sediment cemented by calcium carbonate present in varied forms, veins, laminar zones, burrows, root casts, and nodules. Locally, small gypsum crystals are present. The unit includes plastic and compressible clay and mud deposited in flood basins, coastal lakes, and former stream channels on a deltaic plain.

The generalized materials and lithology encountered during advancement of the borings consisted of the following:

- AOC 1 – Road base material described as sandy silty clay, black, moist, no plasticity, with strong hydrocarbon odor, over non-native material of tan colored clayey sand with gravel, over native material of sand, grey, fine to medium, well-sorted, and moist.
- AOC 2 – Topsoil consisting of silty sand, tan, slightly moist, with organic material, over road base material consisting of sandy silty clay, black, moist, no plasticity. Strong hydrocarbon odor, over native material consisting of sandy clay, tan/orange, moist, moderate plasticity.
- AOC 3 – Road base material consisting of sandy silty clay, black, moist, no plasticity, strong hydrocarbon odor, over native material consisting of sand, tan/orange, fine to medium, poorly-sorted, moist.
- AOC 4 – Non-native and native fill consisting of sand with gravel, tan/orange, moist, poorly sorted, increasing sand content and interbedded sands with depth.
- AOC 5 – Road base material consisting of sandy silty clay, black, moist, no plasticity, strong hydrocarbon odor, over native material consisting of sand, tan/grey, medium to coarse, well-

sorted, moist, contains quartz and chert gravel, over native material of sand, grey, fine to medium, well-sorted, moist, moderate plasticity.

- AOC 6 - Road base material consisting of sandy silty clay, black, moist, no plasticity, strong hydrocarbon odor, over native material consisting of sand, tan/grey, medium to coarse, well-sorted, moist, contains quartz and chert gravel, over native material of sand, grey, fine to medium, well-sorted, moist, moderate plasticity.
- AOC 7 – Road base material consisting of sandy silty clay, black, moist, no plasticity, strong hydrocarbon odor, over native material consisting of sand, grey, medium to coarse, poorly-sorted, moist.
- AOC 8 – Road base material consisting of sandy silty clay, black, moist, no plasticity, strong hydrocarbon odor, over non-native material consisting of sandy clay, white/tan, hard, with nodules of friable white clay, low plasticity and possibly drilling mud, significant quartz and chert gravel, increasing sand content with depth.
- AOC 9 – Non-native fill consisting of silty clay, dark brown, dry, no plasticity, over native material consisting of sand, tan-orange, fine to medium, well-sorted, moist.

The native strata, where observed, was consistent with the description of the Beaumont Formation deposits at the site. Detailed lithologic descriptions of the soil borings are presented on the boring logs included in Appendix B. Soil Profiles constructed to depict the stratigraphy and the apparent thickness of the impacted material are included as Exhibits 7a and 7b.

Five of the soil borings were converted to groundwater monitoring wells using the following methodology:

- Installation of 10 to 20 feet of 2-inch diameter (0.010-inch machine-slotted) PVC well screen with a threaded bottom cap;
- Addition of a pre-sieved 12/20-grade annular silica sand pack to approximately 2 feet above the top of the well screen;
- Addition of hydrated bentonite seal and concrete seal above the sand pack filter zone;
- Installation of 2-inch diameter, threaded, flush joint PVC riser pipe from the well screen to approximately 3 feet above the ground surface;
- A 2'x2' concrete monitoring well pad; and
- A 4-inch steel riser casing fitted with locking cap set into the monitoring well pad, extending approximately three feet above ground surface, with protective bollards set at each corner of the well pad.

Construction details for the groundwater monitoring wells are presented on the boring logs included in Appendix B. Each of the soil borings and monitoring wells were surveyed for their location and elevation relative to mean sea level (msl) (see Table 15).

On February 25, 2019, at least 24 hours prior to sampling, each monitoring well was developed by

first measuring an initial depth to water, surging the well with a new disposal bailer, and pumping each well at a high velocity to remove solids. Each monitoring well was purged between three and five well casing volumes of water or to dryness twice.

2.2 Groundwater Gradient Determination

Five groundwater monitoring wells (to complement the existing eight groundwater monitoring wells) were installed in the first groundwater bearing unit (GBU) at the facility. The top of the first GBU beneath the site appears to occur between 7 and 17 ft bgs. The bottom of the first GBU was not clearly identified during monitoring well boring advancement. Static depth to groundwater was measured in all 13 monitoring wells (MW-1 through MW-13) on February 25, 2019 (see Exhibits 5 and 6 and Table 15). No measurable phase-separated hydrocarbons (PSH) were encountered. In general, groundwater elevations ranged from 200.32 to 171.98 ft msl with a gradient of approximately 0.01. With respect to MW-13, it should be noted that the depth to groundwater is suspect and is currently being evaluated. Therefore, MW-13 was not used in the evaluation of groundwater flow direction or to calculate the average gradient.

2.3 Soil Sampling

Samples were collected continuously and observed to document lithology, color, moisture content and sensory evidence of impairment. The samples were field-screened using a photoionization detector (PID) to indicate the presence of volatile organic compounds (VOCs). Soil cores were also screened for the presence of NORM using a portable Ludlum Model 2241-2 radiation survey meter equipped with a Model 44-2 probe (low energy gamma). Up to two samples per bore hole were sent to the laboratory for analysis per the sampling protocol which was generally as follows:

- All soils samples were analyzed for pH, chlorides, RCRA metals, benzene, toluene, ethylbenzene, xylene (BTEX), extractable organic halogens (EOX), electrical conductivity (EC), and total petroleum hydrocarbons (TPH);
- Select soil samples were also included a broader suite of volatile organic analytes and semi-volatile organic analytes;
- Select soil samples were analyzed for TPH (Texas 1006), sulfates, calcium, magnesium, potassium, sodium, and NORM Constituents (Ra-226, Ra-228, Pb-210, U-238, U-235, K-40, PB-214, Bi-214, Bi-212, Th-228, Ra-223, Ti-208, Cs-137, Co-60, Am-241, and Sc-46).

As part of the approved scope of work, approximately 48 soil samples were collected from the borings, 4 soil/solid samples were collected form the main waste pile, 4 soil/sediment samples were collected from the bottom of Pond A, approximately 20 samples were collected from the soil borings as part of the NORM investigation, and 5 samples were collected as part of the NORM grid survey.

The soil samples from each boring were selected from the interval of apparent hydrocarbon contaminated fill, native materials below the fill, or the apparent capillary fringe zone. Soil/solid and soil/sediment pond samples were collected based on spatial representativeness. With no localized elevated NORM survey readings, the NORM grid samples were collected based on spatial representativeness only.

Except for NORM samples, soil samples were collected in laboratory-prepared glassware and placed in a cooler with ice. NORM samples were collected in Ziplock plastic bags and then placed in laboratory prepared HDPE containers. The sealed sample coolers were sent under Chain of Custody to Pace Analytical National Center for Testing & Innovation, Mt. Juliet, Tennessee.

2.4 Groundwater Sampling

Groundwater samples were collected from the 13 monitoring wells on March 1, 2019 utilizing low-flow sampling techniques. Each monitoring well was purged at less than 0.1 gallon per minute until the physical parameters (i.e. temperature, pH, conductivity, and turbidity) stabilized between successive water quality instrument readings of the groundwater samples. Field notes regarding the monitoring well sampling event can be found in of Appendix F. Samples were collected in laboratory-prepared glassware and placed in a cooler with ice. The sealed sample coolers were sent under Chain of Custody to Pace Analytical National Center for Testing & Innovation, Mt. Juliet, Tennessee.

2.5. NORM Survey

On February 25, 2019, a NORM survey of the entire site was performed. The survey was conducted by Mr. Anthony Reid and Cody Pfund Pulliam. Mr. Reid is a certified NORM surveyor, as recognized by the Texas Department of State Health Services, 25 TAC 289, and the RRC, 16 TAC 4.6. Utilizing a portable Ludlum Model 2241-2 radiation survey meter equipped with a Model 44-2 probe, east-west and north-south transects were traveled on approximately 300-foot centers. Coordinate locations and the corresponding NORM readings where collected at transect intersections, at the end of transects, or at anomalous readings. After completing the NORM survey five grab samples were collected from across the site for further laboratory testing of NORM constituents (Ra-226, Ra-228, Pb-210, U-238, U-235, K-40, PB-214, Bi-214, Bi-212, Th-228, Ra-223, Ti-208, Cs-137, Co-60, Am-241, and Sc-46). Sample selection was based both on high scintillator readings and to demonstrate adequate site coverage and representativeness (see Exhibit 4 and Table 9). Discussions of the findings of the survey are include below as part of **Section 4, Data Evaluation**.

3.0 LABORATORY ANALYTICAL PROGRAM

The soil and groundwater samples collected at the site were analyzed according to the table below. The laboratory analytical results for the soil and groundwater samples are summarized in Tables 1

**Site Investigation Report ■ Boundary Ventures, Inc.,
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through 14 in Appendix C. The executed chain-of-custody forms, Data Usability Summary, and laboratory data reports are provided in Appendix F.

Sampling Program

Sample Type	Analysis	Laboratory Method
Soils	pH	EPA 9045D
Soils ¹	Chlorides	EPA 300.0
Soils ¹	Calcium, Magnesium, Potassium, Sodium	EPA 6010
Soils	RCRA Metals	EPA 6020, 7471
Soils	Benzene, Toluene, Ethylbenzene, Xylene	EPA 8260B+5035
Soils (Selected Samples)	Volatile Organic Analytes	EPA 8260C +5035
Soils	Extractable Organic Halogens	EPA 9023
Soils	Electrical Conductivity	EPA 9050
Soils (Selected Samples)	Semi Volatile Organic Analytes	EPA 8270D
Soils	Total Petroleum Hydrocarbons	Texas 1005, Texas 1006
Soils	NORM Constituents (Ra-226, Ra-228, Pb-210, U-238, U-235, K-40, PB-214, Bi-214, Bi-212, Th-228, Ra-223, Ti-208, Cs-137, Co-60, Am-241, and Sc-46)	EPA 901.1
Water	Electrical Conductivity	EPA 120.1
Water	Benzene, Toluene, Ethylbenzene, Xylene	EPA 5030/8260
Water (Selected Samples)	Volatile Organic Analytes	EPA 8260C
Water	RCRA Metals	EPA 6020, 7470
Water	Total Dissolved Solids	SM 2540C
Water	pH	SM 4500 H+B
Water Water (Selected Samples)	Total Petroleum Hydrocarbons Semi Volatile Organic Analytes	Texas 1005 EPA 8270D

Notes:

1. Select soil samples were analyzed for crop sustenance analytes to aid in remedy evaluation. These analytes included Boron, Sodium, Calcium, Sodium Adsorption Ratio (SAR), Exchangeable Sodium Percentage (ESP), Total Soluble Salts (TSS).

4.0 DATA EVALUATION

The RRC regulates the closure of sites impacted by oil and gas exploration and production activities and has provided a draft guideline document: *Constituents of Concern Guideline for Substance Released* (Version 11, dated July 20, 2015). The draft guideline provides Tier I Human Health Protective Concentration Levels (PCLs) for soil in Table 2 and for groundwater in Table 3. With some exceptions discussed below, the lowest value provided in the RRC guideline is presented for comparison purposes at the bottom each of the analytical tables presented in this document and are collectively referred to as either “screening values,” “Tier 1 values,” or “other applicable values.” Six screening values warranting further explanation are:

- **RCRA Metals.** As suggested by the RRC guidelines, the Texas Median Specific Background (background) value for arsenic, barium, chromium, lead, selenium, and silver have been presented for comparison purposes. Where the median specific background value is higher than the Tier 1 value, the background value was used for comparison purposes.
- **Extractible Organic Halogens.** A soil screening value of 100 mg/Kg Extractible Organic Halogens (EOX) is presented. This value is often used to indicate if refined chlorinated solvents may be present.
- **Specific Conductance.** A soil screening value of 400 umhos/cm was used for comparison purposes. This value is often presented in RRC issued landfarm permits governed by State Wide Rule (16 TAC 30.8).
- **Chlorides.** A screening value of 3,000 mg/kg is presented as a soil screening value. This value is often used as a default groundwater protection value relative to releases at oil and gas sites.
- **Total Petroleum Hydrocarbons.** As suggested by the RRC guidelines, the screening value for TPH has defaulted to the lowest of the calculated TPH mixture PCLs of 16,000 mg/Kg for the $TotSoil_{Comb}$ pathway. As part of the site investigation, five separate TPH mixture protective concentration limits (PCL) were calculated utilizing a combination of analytical methods TX 1005 data, TX 1006 data, and the PCL calculator spreadsheet provided by the RRC (copies of the spreadsheet outputs are included in Appendix D). In all five calculations, the $TotSoil_{Comb}$ pathway returned the lowest value (ranging from 16,000 mg/Kg to 33,000 mg/Kg). Also, in all five calculations the lack of solubility of the individual TPH fractions ruled out the soil to groundwater pathway $^{GW}Soil$. As can be seen in the analytical tables, Terracon presented the lowest of the calculated TPH Mixture PCLs (16,000 mg/Kg) for comparison purposes.

- **Expanded Analytical - Volatile Organic Compounds and Semi-Volatile Organic Compounds.** As presented elsewhere in this report, select soil samples (primarily from AOC-1, AOC-2, AOC-7, and AOC-9) were analyzed for comprehensive list of VOCs and SVOCs utilizing methods SWA 8260C and 8270D, respectively. As can be seen in the analytical tables, Terracon presented the lowest of the corresponding Texas Commission on Environmental Quality's Texas Risk Reduction Rule Program, Tier 1, Protective Concentration Limit (Tier 1 PCL-30TAC350) (TRRP) for comparison purposes.

Field Results

Scintillator readings of cores and cuttings from the soil borings and the NORM survey all appeared to be below a background concentration of 10 µR/hr in all AOCs. Specific to field pH measurements recorded in groundwater during the field sampling event, all measurements ranged between 6.39 and 7.72 standard units (SU). Other field observations for each AOC are presented below.

AOC-1

PID readings were observed in several of the borings near this AOC (20.3 to 333.9 ppm). Strong hydrocarbon odor was reported in the surface road base material which was encountered to at least 17 feet bgs.

AOC-2

PID readings were observed in several of the borings near this AOC (3.8 to 97 ppm). Strong hydrocarbon odor was reported in the surface road base material which was encountered to at least 7 feet bgs.

AOC-3

PID readings were observed in several of the borings near this AOC (2.4 to 206 ppm). Strong hydrocarbon odor was reported in the surface road base material which was encountered to at least 17 feet bgs.

AOC-4

Elevated PID readings were observed only in one of the borings from this AOC (SB-14) with PID reading of 150.4 ppm and a notation of strong hydrocarbon odor. Road base was reported to 9 feet bgs in SB-14. PID reading from the remaining borings ranged from 1.3 to 2.4ppm.

AOC-5

PID readings were observed in several of the borings near this AOC (14 to 333.9 ppm). Strong hydrocarbon odor was reported in the surface road base material which was encountered to at least 10 and 20 feet bgs.

AOC-6

PID readings were observed in one of the borings near this AOC (3.6 to 80 ppm). Strong hydrocarbon odor was reported in the surface road base material which was encountered to at least 6 feet bgs.

AOC-7

PID readings were observed in several of the borings near this AOC (2.4 to 290 ppm). Strong hydrocarbon odor reported in the surface road base material which was encountered to at least 19 feet bgs.

AOC 8

PID readings were observed in several of the borings near this AOC (2 to 138 ppm). Strong hydrocarbon odor reported in the surface road base material which was encountered to at least 10 feet bgs.

AOC-9

Only relatively low PID readings were observed from borings in this AOC (2 to 40.3ppm). Surface fill was reported to 3 feet bgs.

Soil Analytical Results

Specific to soil samples collected and submitted for laboratory analysis, a discussion of the impacts to soils are presented below:

AOC-1

In the vicinity of this AOC, analytical data of the waste pile, surface soils, and subsurface soils noted exceedances of screening values for TPH, Benzene, Toluene, Tetrachloroethene, 1,2,4-Trimethylbenzene, Barium, Arsenic, EC, and Chlorides.

AOC-2

In the vicinity of this AOC, analytical data of the surface and subsurface soils noted exceedances of screening values for TPH, Barium, Arsenic, EC, and Chlorides.

AOC-3

In the vicinity of this AOC, analytical data of the surface and subsurface soils noted exceedances of screening values for TPH, Benzene, Barium, Arsenic, EC, and Chlorides.

AOC-4

In the vicinity of this AOC, analytical data of the surface and subsurface soils noted exceedances of screening values for TPH, Benzene, EC, Barium, Arsenic, Lead, Selenium, EC, and Chlorides.

AOC-5

In the vicinity of this AOC, analytical data of the surface and subsurface soils noted exceedances of screening values for TPH, Benzene, Barium, Arsenic, Lead, EC, and Chlorides.

AOC-6

In the vicinity of this AOC, analytical data of the surface and subsurface soils noted exceedances of screening values for TPH, Benzene, Barium, Arsenic, Lead, EC, and Chlorides.

AOC-7

In the vicinity of this AOC, analytical data of the surface and subsurface soils noted exceedances of screening values for TPH, Benzene, Barium, Arsenic, Lead, Selenium, EC, and Chlorides.

AOC 8

In the vicinity of this AOC, analytical data of the surface and subsurface soils noted exceedances of screening values for TPH, Benzene, Barium, Arsenic, Lead, EC, and Chlorides.

AOC-9

In the vicinity of this AOC, analytical data of the surface and subsurface soils noted exceedances of screening values for TPH, Barium, Arsenic, Lead, EC, Chlorides,

Groundwater Analytical Results

Terracon compared the detected COC concentrations in groundwater to the applicable Tier I Human Health Groundwater Assessment and Cleanup Values as found in RRC COC Guidelines for Substance Released Table 3. Analytical data for groundwater samples can be found on Tables 10-13. Concentration of select COCs in groundwater can be found on Exhibit 6. Observations are as follows:

- All monitoring wells exhibited exceedances of Sodium above its respective screening value. The screening value for sodium (20 mg/L) is likely above the naturally occurring background concentration.
- With the exception of Sodium, groundwater from upgradient monitoring wells (MW-7, 8, 9, 10) do not appear to be impacted with COCs above screening values.
- Groundwater from monitoring wells outside of, but cross-gradient, of the central processing area (MW-1, 7) exhibit concentrations of Chlorides above the screening value of 300 mg/L.
- Groundwater from monitoring well MW-13, which is immediately adjacent to the main waste pile, exhibited concentrations of Barium, Chlorides, Benzene, and TPH above their respective screening value.
- Groundwater from monitoring wells downgradient of the main waste pile exhibited inconsistent impacts of Chlorides and Barium above their respective screening value.

Pond A and Skull Creek Analytical Results

Terracon collected surface water and sediment samples from Pond A at the site (Exhibit 3a) and also collected one surface water sample from Skull Creek downstream of the facility (Exhibit 3b).

Specific to water samples, the laboratory concentrations of the detected COCs were compared to the *TRRP Table 3 Tier 1 Residential GW Ing 4/2018, TRRP Aquatic Life Surface Water Benchmarks (Freshwater, Chronic)*, *TRRP Human Health Surface Water Risk Based Exposure Limits (RBEs)*, *TRRP Tier 1 Contact Recreation Water PCLs*, and other applicable values such as the *Environmental Protection Agency's Secondary Maximum Contaminant Level (MCL) for TDS and chlorides (Other Applicable Values)*. Specific to the Pond A sediment samples, the laboratory concentrations of the detected COCs were compared to the *TRRP Ecological Sediment Benchmarks- FW Chronic*.

It should be noted that specific COCs, in some cases, did not have a screening value. Also, in some cases, the detection limit of a COC exceeded the screening value and, in such situations, an exceedance was not noted. Observations are as follows:

- Pond sediment samples exceeded screening values for TPH, barium, arsenic, lead, mercury, and several poly-aromatic hydrocarbon compounds.
- Pond surface water samples exceeded screening values for TPH, TDS, chlorides, barium, arsenic, magnesium, and lead.
- Skull Creek surface water sample exceeded screening values for lead.

5.0 SURVEY OF WASTE PILES AND VOLUME ESTIMATES

Task 7 of approved scope of work was to estimate the above grade and below grade waste volumes which would be a key component in describing the nature and extent of contamination and to develop the preliminary remedial alternative analysis.

To accomplish this, Terracon subcontracted K.M. Surveying of Rosenberg, Texas (KM). KM had previously surveyed and estimated above grade volumes of the main waste pile for the RRC in 2012. KM utilized an unmanned aircraft system (UAS), also commonly known as drones, to assist with ground survey activities by acquiring photos/video/light detection and ranging (LiDAR) data in controlled flight patterns within the property/project limits. According to KM, all flights were conducted under FAA Part 107 regulations and piloted by current Certified FAA Remote Pilots. KM's above grade estimates were evaluated in light of Terracon's soil boring and analytical program, and a percentage of above grade waste exceeding screening values was then estimated.

To accomplish the below grade estimates, Terracon relied on the soil boring and analytical program

as described above with, care being taken not to include waste volumes that were also captured in the above grade determination.

Terracon's estimates are as follows:

- An estimated 295,502 in place cubic yards (cy) of material above natural grade appears to have been impacted with COCs above their respective screening value.
- An estimated 331,923 in place cy of material present below natural grade appears to have been impacted with COCs above their respective screening value.

KM's survey results are presented in Appendix E. The estimates of impacted material (above grade and below grade) are depicted on Table 15. It should be noted that Terracon's estimates are:

- Preliminary in nature and based on experience with similar projects, initial evaluations of surveyed piles above grade, google earth AOC polygon area measurements, analytical data and depth interval, PID field readings presented in boring logs, lithological breaks presented in boring logs, and cross-sections.
- Not based on a detailed or a mathematical geospatial analysis.
- Not intended to be used as the basis for an engineering level remedial alternative analysis or a remedial alternative cost estimate.

6.0 FINDINGS AND RECOMMENDATIONS

Based on the results of this investigation, Terracon provides the following summary of findings and recommendations:

- Throughout the site, impacts of oil and gas waste (RCRA metals, chlorides, TPH, BTEX, elevated EC) are documented above screening levels in the surface and near surface soils;
- Specific to the main waste pile (AOC 1), analytical results also indicate the presence of Toluene, Tetrachloroethene and 1,2,4-Trimethylbenzene.
- Five TPH Mixture PCLs ($T^{tot}Soil_{Comb}$) ranging from 16,000 mg/Kg to 33,000 mg/Kg have been calculated for soils. The TPH Mixture PCL of 16,000 mg/Kg has been presented as a screening value in this document.
- Impacted soils across the site do not meet the definition of NORM.

- With the exception of the main waste pile, the depth of impact to soils above screening levels is up to 24.5 ft bgs in some areas of the site.
- The main waste pile is approximately 32 to 40 feet above the surrounding grade according to the February 2019 aerial survey of the site. Borings near AOC-1 (B-13 and MW-13) indicate a depth of impact below the surrounding grade (below the base of the main waste pile) of 17 and 11 feet bgs, respectively.
- The volume of material that exceeds screening levels in the main waste pile was estimated to be approximately 205,994 in place CY.
- When summing the volume of material that exceeds screening values for all AOCs, above grade and below grade, there is an estimated 295,502 and 331,923 in place CY, respectively.
- The first GBU beneath the site appears to occur between 7 and 17 ft bgs. The groundwater flow direction is to the south/southeast with an apparent gradient of approximately 0.01.
- Except in the most upgradient monitoring wells (MW-8, 9, and 10) impacts from surface operations appear to have affected groundwater with Barium, Chlorides, Benzene, and TPH exceeding screening values.
- Groundwater impacts have not been fully defined laterally cross-gradient or downgradient with respect to chlorides.
- Surface water and sediment samples from Pond A (AOC 2), exhibit exceedances of screening values for TPH, barium, EC, and arsenic.
- A surface water sample taken from Skull Creek downstream of the site exceeded the screening value for lead.

Based on the results of this investigation, Terracon recommends the following:

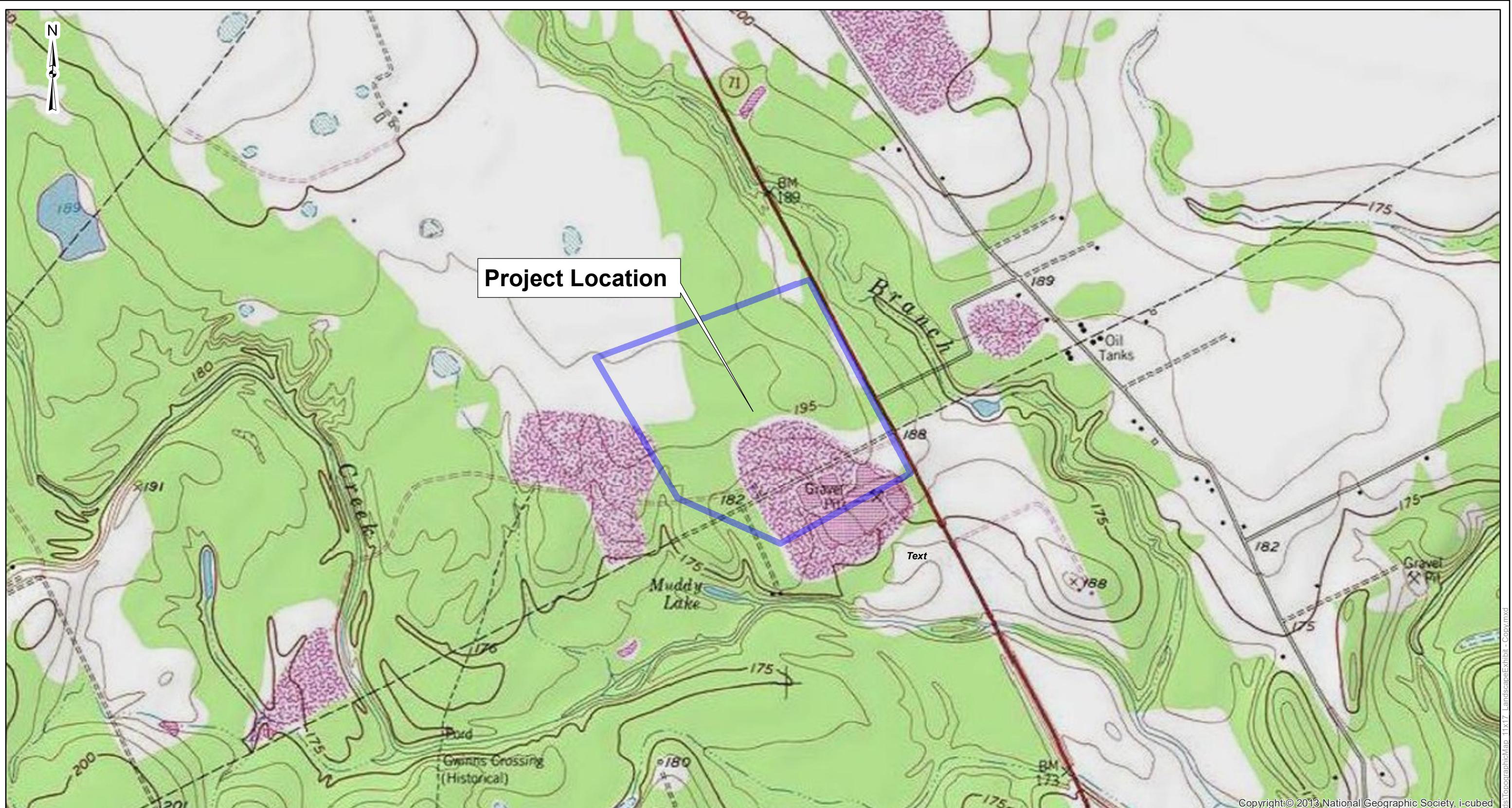
- Completion of the Preliminary Alternative Analysis to facilitate the selection of the most effective remedy(ies) for the site (currently being prepared).
- Conduct additional soil and subsurface investigations to fill spatial data gaps, calculate impacted soil volumes, and to facilitate remedy selection. Additional borings in the following areas appear warranted:
 - Between AOCs 1, 5, and 7.

- AOC 2 between MW-13 and SB-9.
 - East side of AOC 3.
 - AOC 4, south of SB-11
 - AOC 4, south end near AOCs 5 and 9.
 - AOC 5.
 - East side of AOC 7, east of SB-7.
- Install a stratigraphic boring to evaluate the thickness of the impacted upper GWBU.
 - Install additional monitoring wells downgradient and cross-gradient of MW-1, MW-2, MW-3, MW-4, MW-5, and MW-7 to fully establish the downgradient and cross-gradient extent of the impacts from site operations.
 - Continue to conduct groundwater monitoring on a semi-annual basis to evaluate natural attenuation and plume stability trends.
 - Conduct a receptor survey to identify exposed human or ecological receptors, if any.

Appendix A

Exhibits

**Site Investigation Report
Boundary Ventures, Inc.
Kenneth Owens Property Facility
Colorado County, Texas
Terracon Project No. 96187C01**



Legend
 Property Boundary

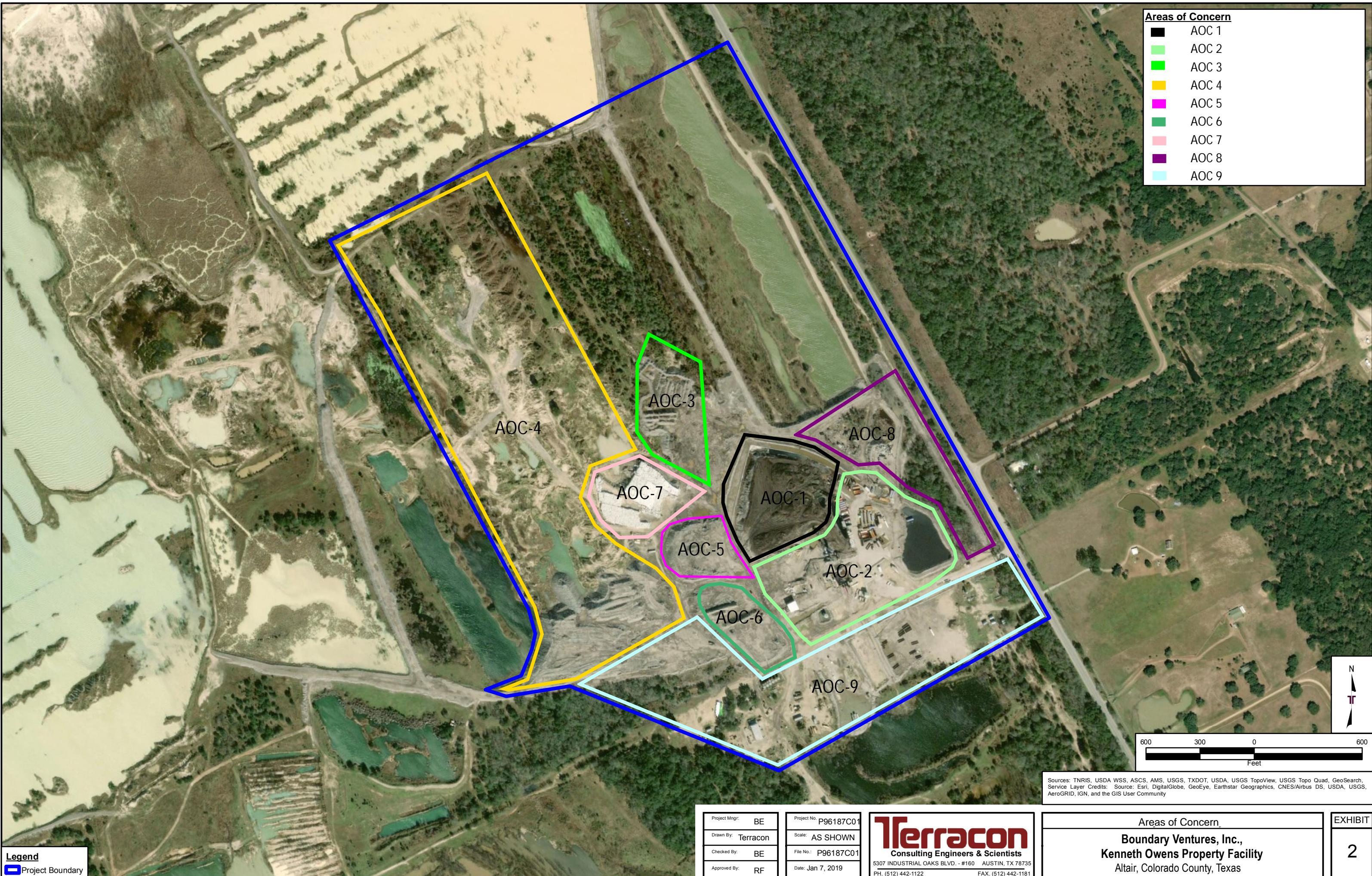
Project No.: 96187C01
 Date: Feb 2019
 Drawn By: AR
 Reviewed By: BE

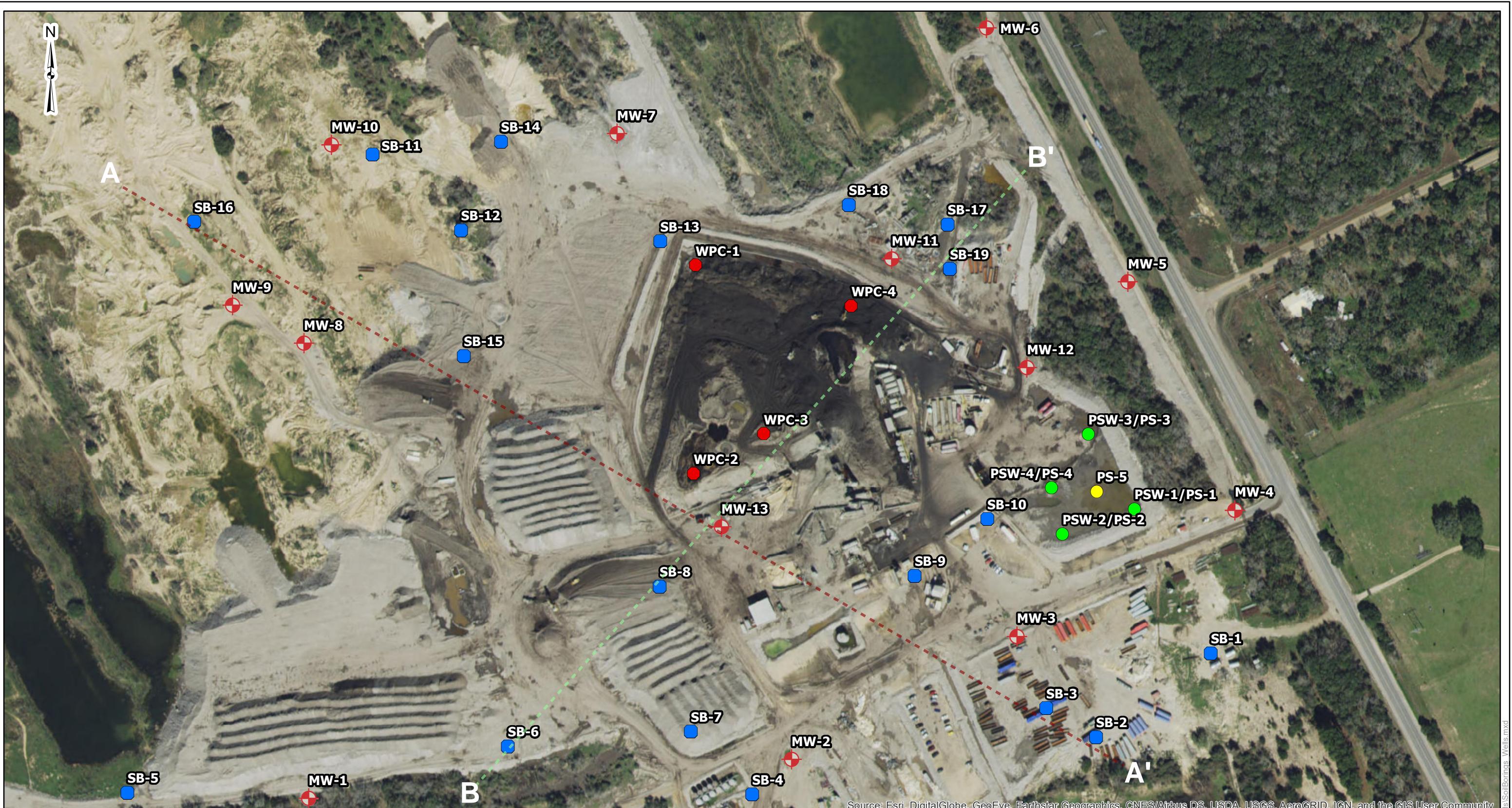
Terracon
 5307 Industrial Oaks Boulevard, Suite 160 Austin, TX 78735
 PH. (512) 442-1122 terracon.com

Topographic Map
 Boundary Ventures, Inc.
 Kenneth Owens Property Facility
 Altair, Colorado County, Texas

Exhibit
 1

Areas of Concern	
AOC 1	
AOC 2	
AOC 3	
AOC 4	
AOC 5	
AOC 6	
AOC 7	
AOC 8	
AOC 9	





Legend

- Monitoring Well (Red dot with cross)
- Soil Boring (Blue square)
- Pond Sediment Sample (Yellow circle)
- Pond Surface Water and Sediment Sample (Green circle)
- Waste Pile Composite Sample (Red circle)

A - - A' Cross Section View (see exhibit 7a)

B - - B' Cross Section View (see exhibit 7b)

DATA SOURCES:
ESRI WMS - World Aerial Imagery, OpenStreetMap

0 250 500 1,000 Feet

1:3,090

Project No.: 96187C01
Date: Mar 2019
Drawn By: AR
Reviewed By: BE

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PH. (512) 442-1122 terracon.com

Sample/Boring/Well Locations

Boundary Ventures, Inc.
Kenneth Owens Property Facility
Altair, Colorado County, Texas

Exhibit
3

**Legend**

- Monitoring Well
- Soil Boring
- Pond sediment and surface water sample

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community
DATA SOURCES:
ESRI WMS - World Aerial Imagery, OpenStreetMap

Project No.:	96187C01
Date:	Mar 2019
Drawn By:	AR
Reviewed By:	BE

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0 75 150 300 Feet 1:1,250

Pond A Sample Locations

Boundary Ventures, Inc.
Kenneth Owens Property Facility
Altair, Colorado County, Texas

3a



Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Legend

Yellow Diamond: Creek Water Sample

DATA SOURCES:
ESRI WMS - World Aerial Imagery, OpenStreetMap

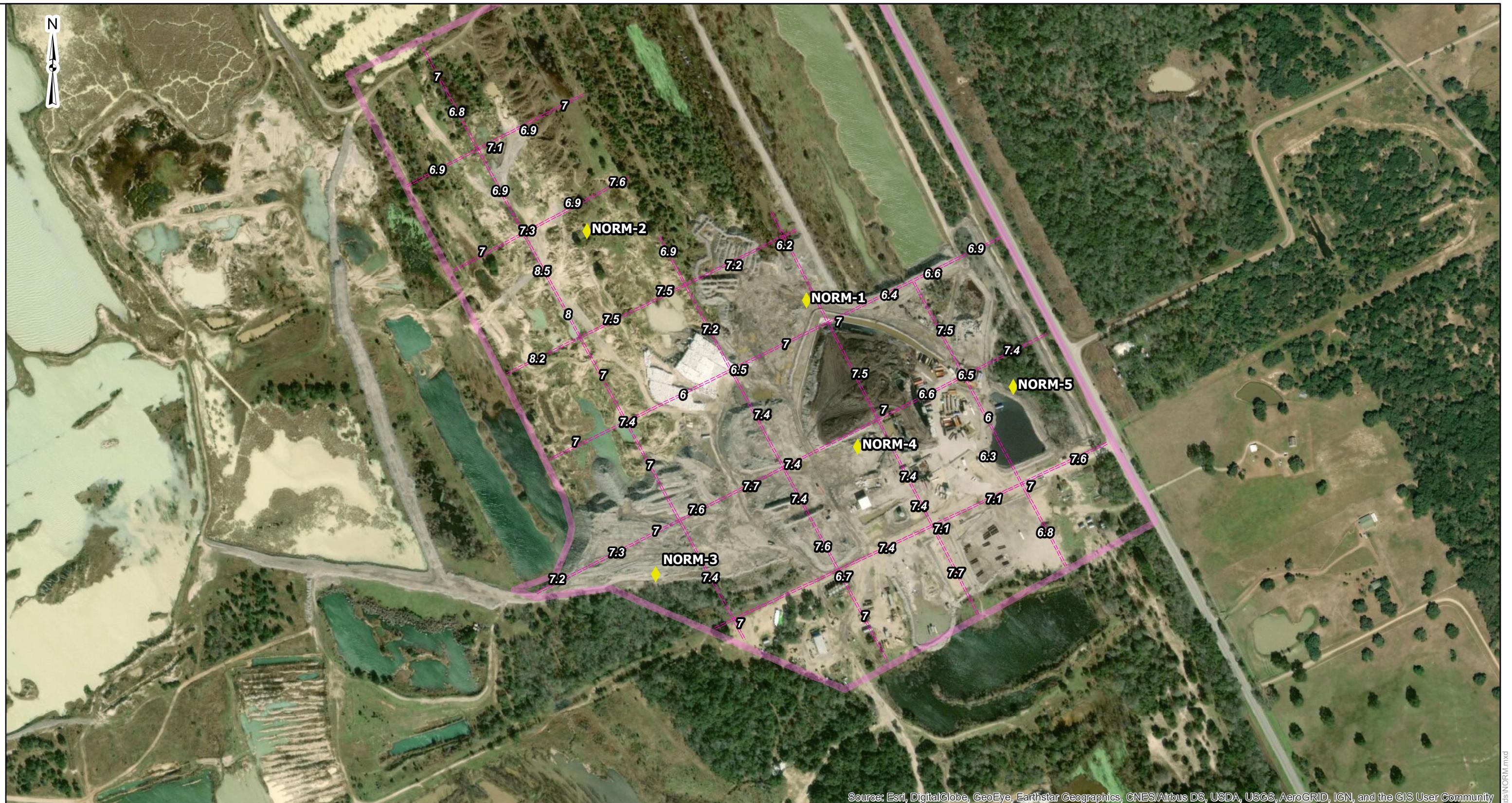
Project No.: 96187C01
Date: Apr 2019
Drawn By: AR
Reviewed By: BE

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Skull Creek Sample Location

Boundary Ventures, Inc.
Kenneth Owens Property Facility
Altair, Colorado County, Texas

3b



Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Legend

NORM Samples NORM Grid

Approximate
Lease
Boundary

7.3—NORM Grid Reading in uR/hr

DATA SOURCES:
ESRI WMS - World Aerial Imagery, OpenStreetMap

Project No.:	96187C01
Date:	Mar 2019
Drawn By:	AR
Reviewed By:	BE

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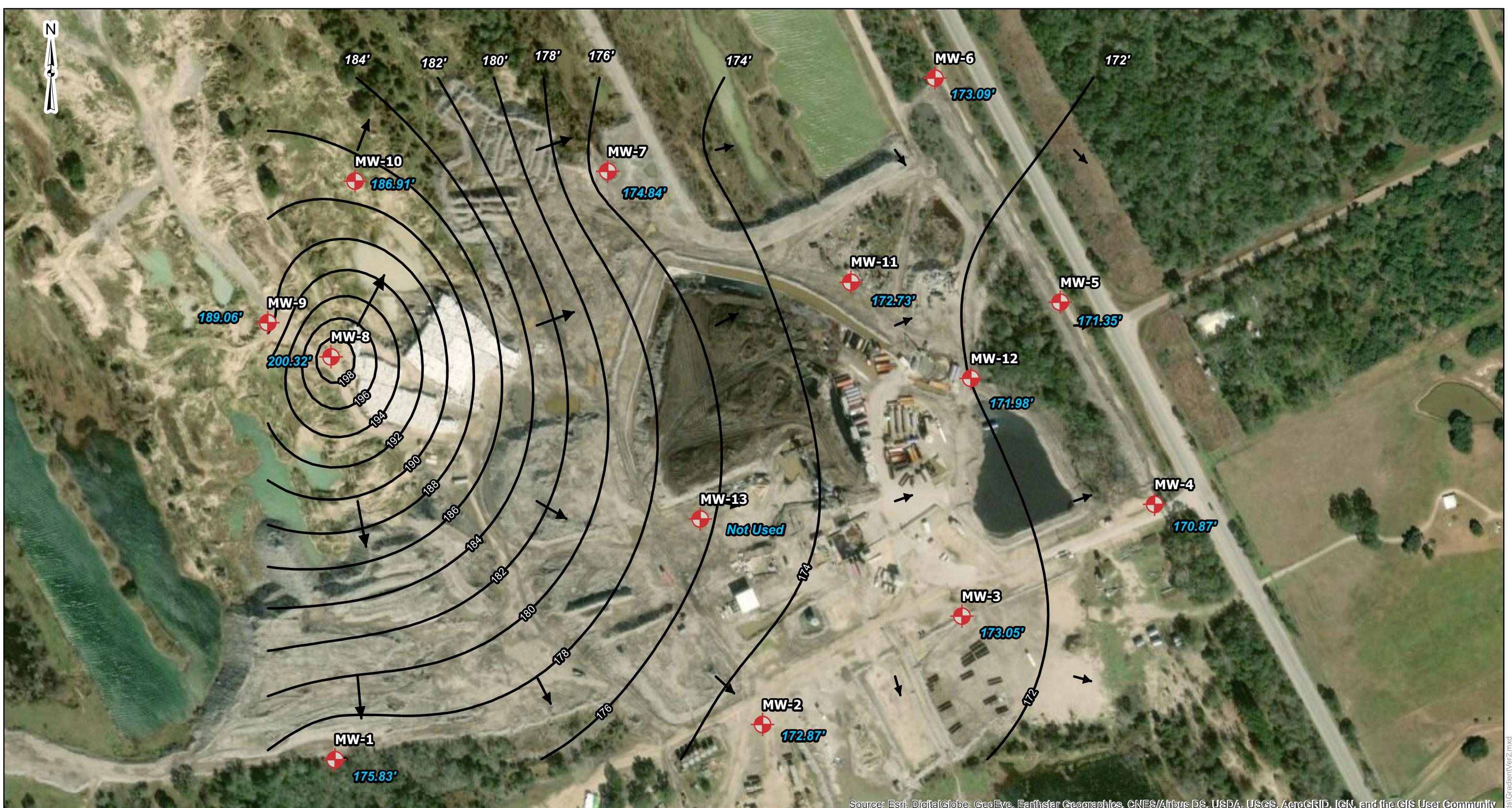
1 Feet
0 350 700 1,400 1:6,300

NORM Grid and Samples

Boundary Ventures, Inc.
Kenneth Owens Property Facility
Altair, Colorado County, Texas

Exhibit

4



Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Legend



177.18' -- Groundwater elevation

Contour interval every 2 feet.

Groundwater elevations measured on 2/25/2019.
Groundwater elevations relative to mean sea-level.

DATA SOURCES:
ESRI WMS - World Aerial Imagery, OpenStreetMap

Project No.:	96187C01
Date:	Apr 2019
Drawn By:	AR
Reviewed By:	BE

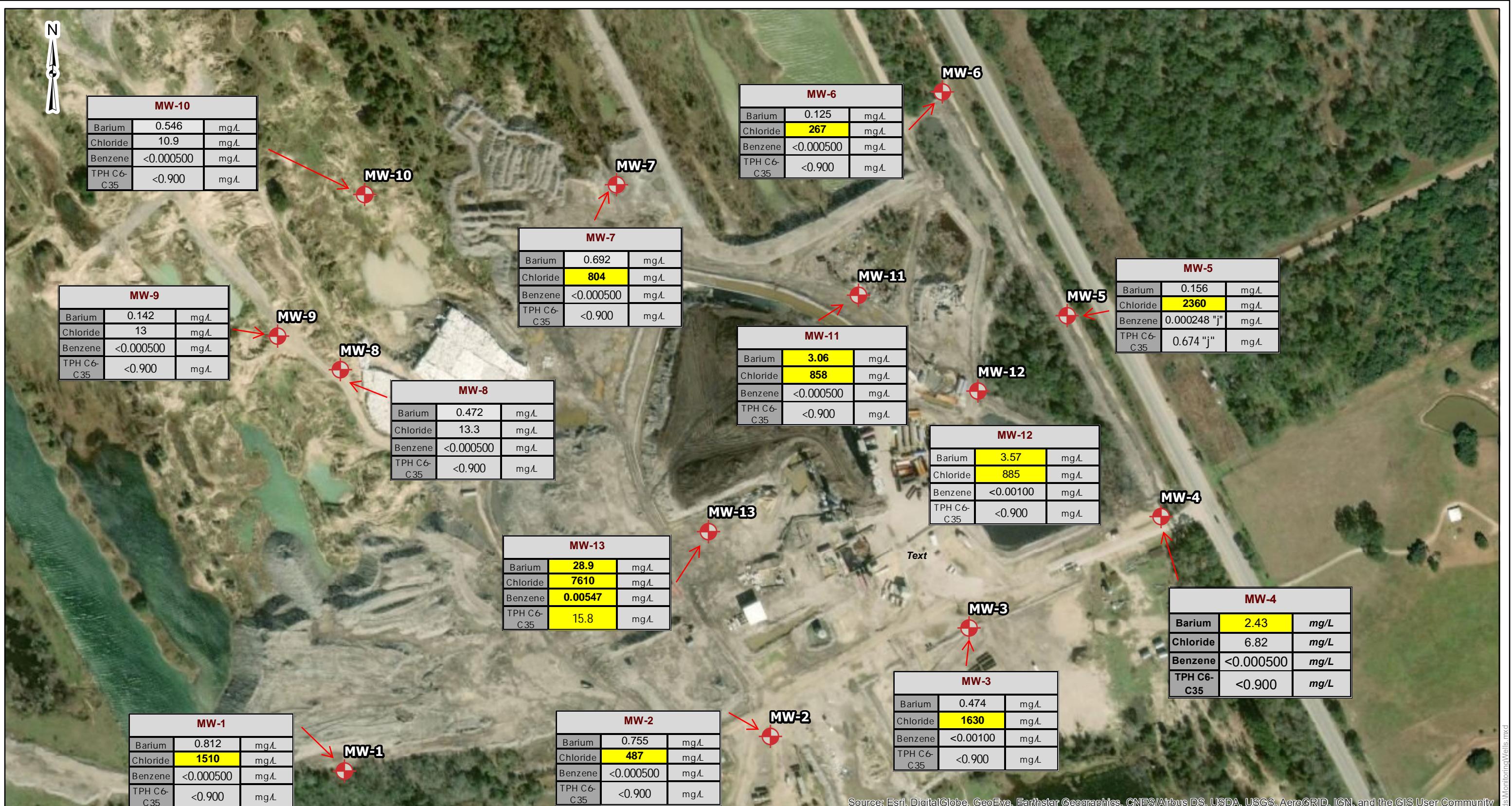
Terracon

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Groundwater Gradient Map, February 25, 2019

Exhibit

5



Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Legend

Monitoring Wells

DATA SOURCES:
ESRI WMS - World Aerial Imagery, OpenStreetMap

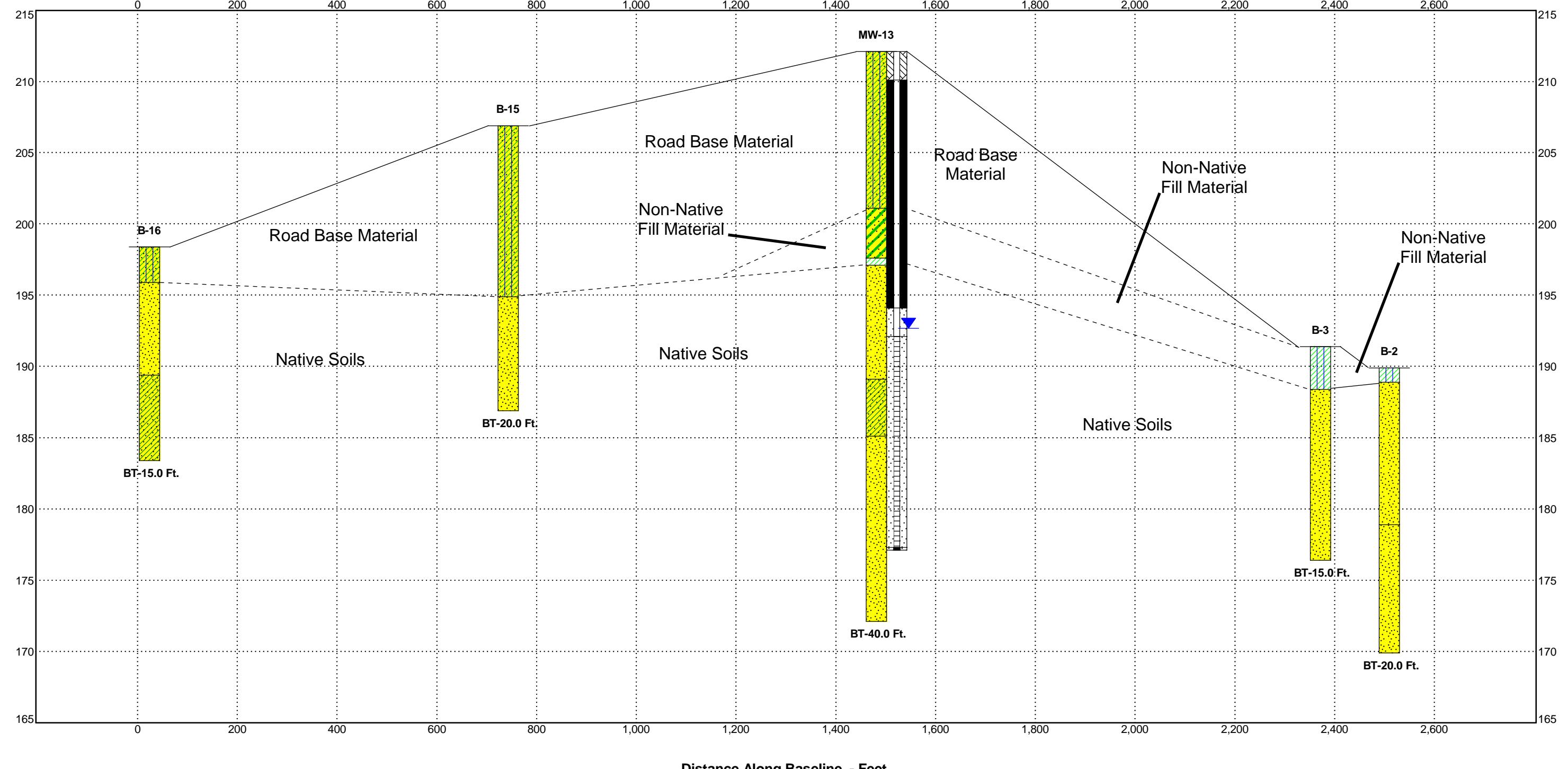
0 250 500 1,000 Feet

1:3,500

Project No.:
96187C01
Date:
Mar 2019
Drawn By:
AR
Reviewed By:
BE



Selected Concentrations in Groundwater	
Boundary Ventures, Inc. Kenneth Owens Property Facility Altair, Colorado County, Texas	Exhibit



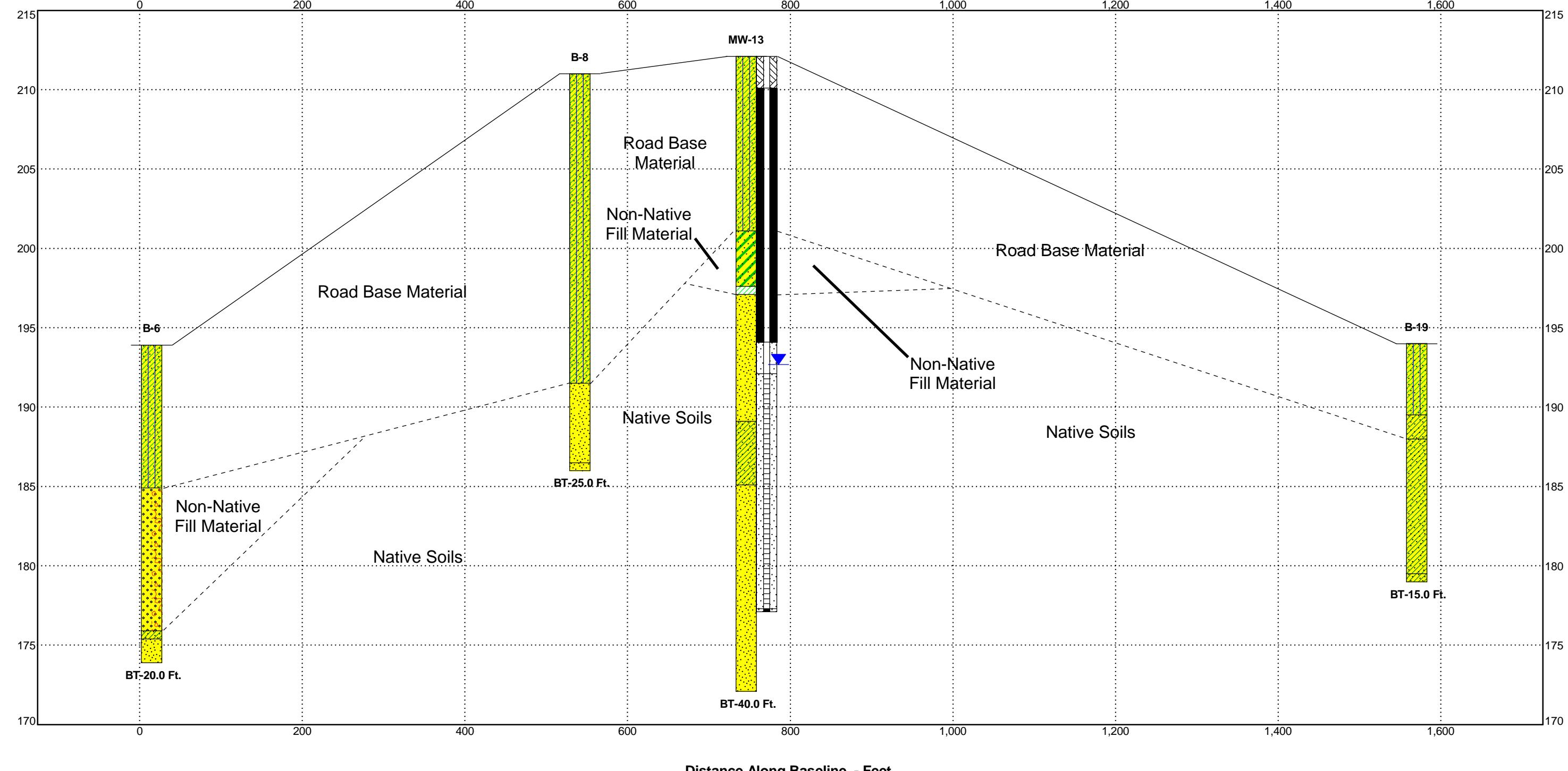
Terracon
5307 Industrial Oaks Blvd, Ste 160
Austin, TX

SUBSURFACE PROFILE
Section A-A'
BOUNDARY VENTURES
1.5 MILES SOUTH OF HWY 71 AND ALT HWY 90
ALTAIR, TX

EXHIBIT
7a

SW

NE

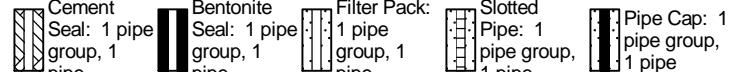
**Explanation**

Moisture Content %w
Sampling (See General Notes)
AR
BT
Water Level Reading at time of drilling.
Water Level Reading after drilling.



Lean Clay

NOTES:
See Exhibit A-2 for orientation of soil profile.
See General Notes in Appendix C for symbols and soil classifications.
Soils profile provided for illustration purposes only.
Soils between borings may differ
AR - Auger Refusal
BT - Boring Termination



Project Manager: CPP/JBM
Drawn by: JBM
Approved by:
Date: 3/19/2019

Terracon
5307 Industrial Oaks Blvd, Ste 160
Austin, TX
PH. 512-442-1122 FAX. 512-442-1181

SUBSURFACE PROFILE
Section B-B'
BOUNDARY VENTURES
1.5 MILES SOUTH OF HWY 71 AND ALT HWY 90
ALTAIR, TX

EXHIBIT

7b

Appendix B

Boring Logs and Texas Water Well Driller's Reports

**Site Investigation Report
Boundary Ventures, Inc.
Kenneth Owens Property Facility
Colorado County, Texas
Terracon Project No. 96187C01**

BORING LOG NO. B-1

Page 1 of 1

PROJECT: Boundary Ventures		CLIENT: Texas Railroad Commission				
SITE: 1.5 Miles South of HWY 71 and Alt HWY 90 Altair, TX						
GRAPHIC LOG	LOCATION See Exhibit A-2 Latitude: 29.548592° Longitude: -96.455204°	DEPTH	MATERIAL DESCRIPTION	Surface Elev.: 189.7 (Ft.) ELEVATION (Ft.)	DEPTH (ft)	WATER LEVEL OBSERVATIONS SAMPLE TYPE O/A/PID (ppm) SAMPLE INTERVAL NORM
		1.5	(NON-NATIVE FILL) Silty Clay, dark brown, dry, no plasticity.	188.2		2.7
		9.0	(NON-NATIVE FILL) Silty sand, tan-orange, poorly sorted, dry.	180.7		2.1 (4'-5') 7-8
		13.5	(NATIVE MATERIAL) Lean clay, white/brown, moderately plastic, dry.	176.2		2.0
		15.0	(NATIVE MATERIAL) Sand, tan-orange, fine to medium, well-sorted, moist.	174.7		1.4 6.1-7
		Boring Terminated at 15 Feet				
The stratification lines represent the approximate transition between differing soil types and/or rock types; in-situ these transitions may be gradual or may occur at different depths than shown.						
Advancement Method: DPT			Notes: Logged by CPP			
Abandonment Method: Boring backfilled with bentonite upon completion.						
WATER LEVEL OBSERVATIONS			Boring Started: 02-04-2019		Boring Completed: 02-04-2019	
			Drill Rig: Geoprobe		Driller: Vortex	
			Project No.: 96187C01		Exhibit:	A-1

BORING LOG NO. B-2

Page 1 of 1

PROJECT: Boundary Ventures		CLIENT: Texas Railroad Commission					
SITE: 1.5 Miles South of HWY 71 and Alt HWY 90 Altair, TX							
GRAPHIC LOG	LOCATION See Exhibit A-2 Latitude: 29.548042° Longitude: -96.45607°	DEPTH	MATERIAL DESCRIPTION	Surface Elev.: 189.9 (Ft.) ELEVATION (Ft.)	DEPTH (ft)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE
		1.0	(NON-NATIVE FILL) Silty Clay, dark brown, dry, no plasticity.	188.9			O/A/PID (ppm)
			(NATIVE MATERIAL) Sand, tan-orange, fine to medium, well-sorted, moist.			3.3	(1'-2')
		11.0		178.9	5	1.5	7.2-7.5
			(NATIVE MATERIAL) Sand, grey, fine to medium, well-sorted, moist.		10	2.1	7-8
		20.0		169.9	15	2.2	5.4-6.5
			Boring Terminated at 20 Feet		20	2.0 (14'-15')	5-8
	The stratification lines represent the approximate transition between differing soil types and/or rock types; in-situ these transitions may be gradual or may occur at different depths than shown.						
Advancement Method: DPT						Notes: Logged by CPP	
Abandonment Method: Boring backfilled with bentonite upon completion.							
WATER LEVEL OBSERVATIONS				Boring Started: 02-04-2019		Boring Completed: 02-04-2019	
				Drill Rig: Geoprobe		Driller: Vortex	
				Project No.: 96187C01		Exhibit: A-12	

BORING LOG NO. B-3

Page 1 of 1

PROJECT: Boundary Ventures		CLIENT: Texas Railroad Commission				
SITE: 1.5 Miles South of HWY 71 and Alt HWY 90 Altair, TX						
GRAPHIC LOG	LOCATION See Exhibit A-2 Latitude: 29.548233° Longitude: -96.456447°	DEPTH	MATERIAL DESCRIPTION	Surface Elev.: 191.4 (Ft.) ELEVATION (Ft.)	DEPTH (ft)	WATER LEVEL OBSERVATIONS SAMPLE TYPE O/A/PID (ppm) SAMPLE INTERVAL NORM
3/12/19	(NON-NATIVE FILL) Silty Clay, dark brown, dry, no plasticity. (NATIVE MATERIAL) Sand, tan-orange, fine to medium, well-sorted, moist.	3.0		188.4		40.3 21.6 5.3 11.4 5-7 5-7
15.0	Wet at 14' Boring Terminated at 15 Feet			176.4	15	
The stratification lines represent the approximate transition between differing soil types and/or rock types; in-situ these transitions may be gradual or may occur at different depths than shown.						
Advancement Method: DPT			Notes: Logged by CPP			
Abandonment Method: Boring backfilled with bentonite upon completion.						
WATER LEVEL OBSERVATIONS			Boring Started: 02-04-2019	Boring Completed: 02-04-2019		
			Drill Rig: Geoprobe	Driller: Vortex		
			Project No.: 96187C01	Exhibit: A-13		

BORING LOG NO. B-4

Page 1 of 1

PROJECT: Boundary Ventures		CLIENT: Texas Railroad Commission					
SITE: 1.5 Miles South of HWY 71 and Alt HWY 90 Altair, TX							
GRAPHIC LOG	LOCATION See Exhibit A-2 Latitude: 29.547666° Longitude: -96.458662°	DEPTH	MATERIAL DESCRIPTION	Surface Elev.: 186.8 (Ft.) ELEVATION (Ft.)	DEPTH (ft)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE
		0.5	(NON-NATIVE FILL) Silty Clay, dark brown, dry, no plasticity. (NATIVE MATERIAL) Sand, grey, fine to medium, well-sorted, moist.	186.3	0	0	O/A/PID (ppm)
		11.0	(NATIVE MATERIAL) Sandy clay, grey, moist, low plasticity.	175.8	5	0.1	
		13.0	(NATIVE MATERIAL) Sand, tan/grey, medium to coarse, well-sorted, moist. Contains quartz and chert gravel.	173.8	10	0.8	
		25.0	Boring Terminated at 25 Feet	161.8	15	0.3	
			The stratification lines represent the approximate transition between differing soil types and/or rock types; in-situ these transitions may be gradual or may occur at different depths than shown.		20	0.4	
	Advancement Method: DPT				25	0.6 (19'-20")	5.4-6.7
	Abandonment Method: Boring backfilled with bentonite upon completion.					0.9	5.3-6.8
	WATER LEVEL OBSERVATIONS						6-7
				Boring Started: 02-04-2019	Boring Completed: 02-04-2019		
				Drill Rig: Geoprobe	Driller: Vortex		
				Project No.: 96187C01	Exhibit: A-14		

BORING LOG NO. B-5

Page 1 of 1

PROJECT: Boundary Ventures		CLIENT: Texas Railroad Commission											
SITE: 1.5 Miles South of HWY 71 and Alt HWY 90 Altair, TX													
GRAPHIC LOG	LOCATION	MATERIAL DESCRIPTION			Surface Elev.: 192.7 (Ft.)	ELEVATION (Ft.)	DEPTH (ft)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	O/V/A/PID (ppm)	SAMPLE INTERVAL	NORM	
	See Exhibit A-2 Latitude: 29.547679° Longitude: -96.463371°	(ROAD BASE MATERIAL) Sandy silty clay, black, moist, no plasticity. Strong hydrocarbon odor.								23.8			
	10.0	(NATIVE MATERIAL) Sandy clay, tan/red, moist, high plasticity.			182.7		5			74.2	(4'-5')	5.3-6.6	
	17.0	(NATIVE MATERIAL) Sand, grey, fine to medium, well-sorted, moist.			175.7		10			22.0		6-8	
	20.0	Boring Terminated at 20 Feet			172.7		15			73.8		6	
							20			17.9		5-6	
										7.4			
										4.3	(17'-18')		
										5.0			
The stratification lines represent the approximate transition between differing soil types and/or rock types; in-situ these transitions may be gradual or may occur at different depths than shown.													
Advancement Method: DPT						Notes: Logged by CPP							
Abandonment Method: Boring backfilled with bentonite upon completion.													
WATER LEVEL OBSERVATIONS						Boring Started: 02-04-2019			Boring Completed: 02-04-2019				
						Drill Rig: Geoprobe			Driller: Vortex				
						Project No.: 96187C01			Exhibit: A-15				

BORING LOG NO. B-6

Page 1 of 1

BORING LOG NO. B-7

Page 1 of 1

PROJECT: Boundary Ventures		CLIENT: Texas Railroad Commission						
SITE: 1.5 Miles South of HWY 71 and Alt HWY 90 Altair, TX								
GRAPHIC LOG	LOCATION	MATERIAL DESCRIPTION						
	See Exhibit A-2 Latitude: 29.548079° Longitude: -96.459126°				Surface Elev.: 209.8 (Ft.) ELEVATION (Ft.)			
DEPTH					DEPTH (ft)			
24.5	(ROAD BASE MATERIAL) Sandy silty clay, black, moist, no plasticity. Strong hydrocarbon odor.				133.8			
29.0	(NATIVE MATERIAL) Sand, tan/grey, medium to coarse, well-sorted, moist. Contains quartz and chert gravel.				212.3			
30.0	(NATIVE MATERIAL) Sand, grey, fine to medium, well-sorted, moist.				293.7			
Boring Terminated at 30 Feet								
The stratification lines represent the approximate transition between differing soil types and/or rock types; in-situ these transitions may be gradual or may occur at different depths than shown.								
Advancement Method: DPT	Abandonment Method: Boring backfilled with bentonite upon completion.		Notes: Logged by CPP					
WATER LEVEL OBSERVATIONS		5307 Industrial Oaks Blvd, Ste 160 Austin, TX	Boring Started: 02-05-2019	Boring Completed: 02-05-2019				
			Drill Rig: Geoprobe	Driller: Vortex				
			Project No.: 96187C01	Exhibit: A-17				

BORING LOG NO. B-8

Page 1 of 1

PROJECT: Boundary Ventures		CLIENT: Texas Railroad Commission				
SITE: 1.5 Miles South of HWY 71 and Alt HWY 90 Altair, TX						
GRAPHIC LOG	LOCATION See Exhibit A-2 Latitude: 29.549029° Longitude: -96.459361°	DEPTH	MATERIAL DESCRIPTION	Surface Elev.: 211 (Ft.) ELEVATION (Ft.)	DEPTH (ft)	WATER LEVEL OBSERVATIONS SAMPLE TYPE O/A/PID (ppm) SAMPLE INTERVAL NORM
19.5	(ROAD BASE MATERIAL) Sandy silty clay, black, moist, no plasticity. Strong hydrocarbon odor.	191.5			138.8	7-9
24.5	(NATIVE MATERIAL) Sand, tan/grey, medium to coarse, well-sorted, moist. Contains quartz and chert gravel.	186.5		253	240.2	
25.0	(NATIVE MATERIAL) Sand, grey, fine to medium, well-sorted, moist.	186		290.6 (9'-10')	253.5	7.1-10
	Boring Terminated at 25 Feet			180.3	210.8	7-8
				64.6	223.7	6-7
				17.0 (24-25')	17.0	7-8
The stratification lines represent the approximate transition between differing soil types and/or rock types; in-situ these transitions may be gradual or may occur at different depths than shown.						
Advancement Method: DPT			Notes: Logged by CPP			
Abandonment Method: Boring backfilled with bentonite upon completion.						
WATER LEVEL OBSERVATIONS			Boring Started: 02-05-2019		Boring Completed: 02-05-2019	
			Drill Rig: Geoprobe		Driller: Vortex	
			Project No.: 96187C01		Exhibit: A-18	

BORING LOG NO. B-9

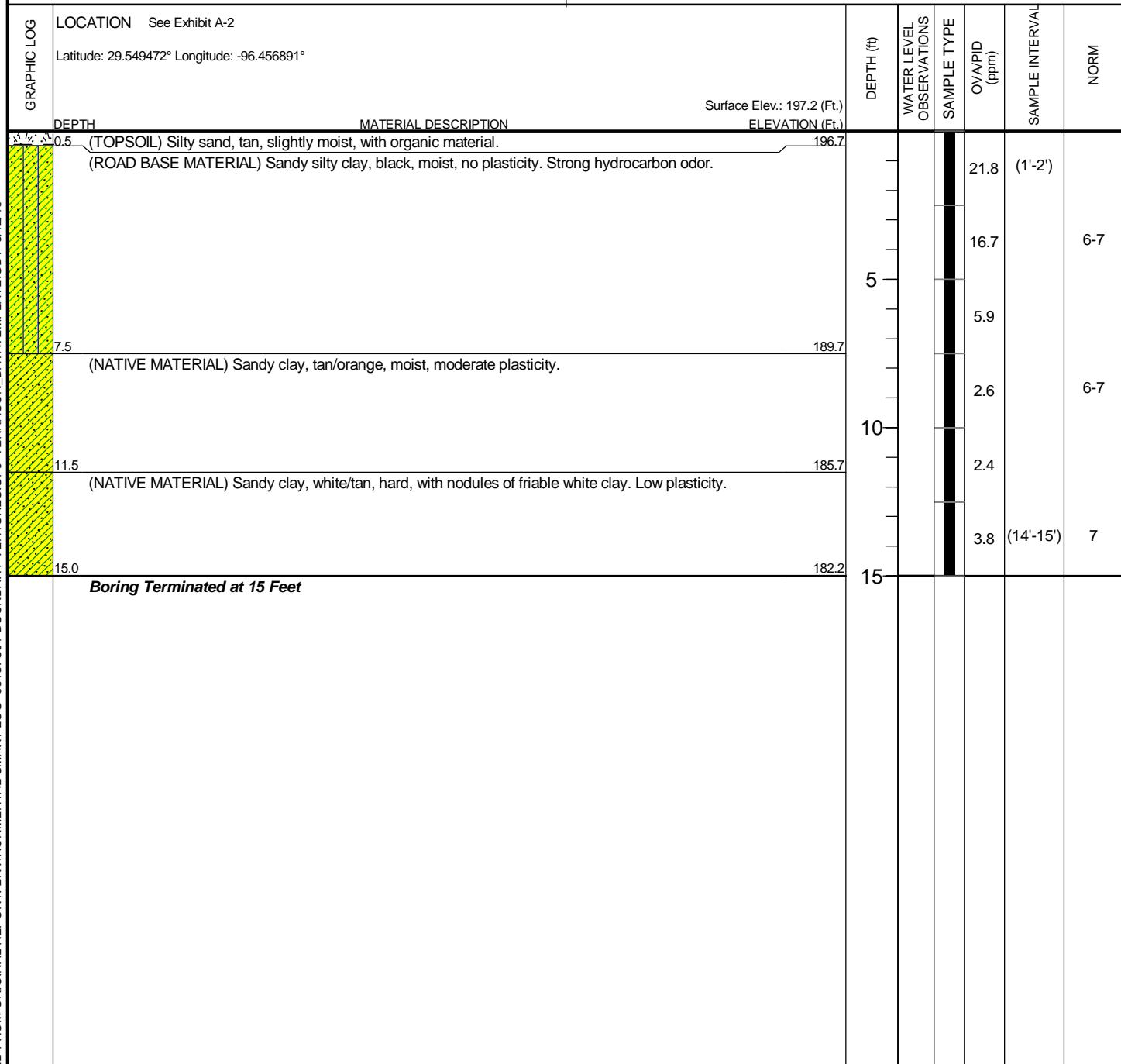
Page 1 of 1

PROJECT: Boundary Ventures		CLIENT: Texas Railroad Commission								
SITE: 1.5 Miles South of HWY 71 and Alt HWY 90 Altair, TX										
GRAPHIC LOG	LOCATION	MATERIAL DESCRIPTION			DEPTH (ft)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	O/A/PID (ppm)	SAMPLE INTERVAL	NORM
DEPTH	Surface Elev.: 195.7 (Ft.) ELEVATION (Ft.)				DEPTH (ft)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	O/A/PID (ppm)	SAMPLE INTERVAL	NORM
19	3/12/19	(ROAD BASE MATERIAL) Sandy silty clay, black, moist, no plasticity. Strong hydrocarbon odor.						80		
18.5		Latitude: 29.549099° Longitude: -96.457437°						97	(4'-5')	7.1-7.8
18.0								3.6		
17.5								16.8		7.2-8.1
17.0		(NON-NATIVE FILL) Sand, grey/tan, poorly sorted, wet, coarse.			189.2			3.6		
16.5		(NATIVE MATERIAL) Sandy clay, tan/orange, moist, moderate plasticity.			188.7					
15.0								3.8		
14.0					181.7			3.6	(14'-15')	6.6-7.3
15.0		(NATIVE MATERIAL) Sand, tan/grey, medium to coarse, well-sorted, moist. Contains quartz and chert gravel.			180.7					
Boring Terminated at 15 Feet										
The stratification lines represent the approximate transition between differing soil types and/or rock types; in-situ these transitions may be gradual or may occur at different depths than shown.										
Advancement Method: DPT					Notes: Logged by CPP					
Abandonment Method: Boring backfilled with bentonite upon completion.										
WATER LEVEL OBSERVATIONS					Boring Started: 02-05-2019	Boring Completed: 02-05-2019				
					Drill Rig: Geoprobe	Driller: Vortex				
					Project No.: 96187C01	Exhibit: A-19				

BORING LOG NO. B-10

Page 1 of 1

PROJECT: Boundary Ventures	CLIENT: Texas Railroad Commission
SITE: 1.5 Miles South of HWY 71 and Alt HWY 90 Altair, TX	



The stratification lines represent the approximate transition between differing soil types and/or rock types; in-situ these transitions may be gradual or may occur at different depths than shown.

Advancement Method: DPT		Notes: Logged by CPP
Abandonment Method: Boring backfilled with bentonite upon completion.		
WATER LEVEL OBSERVATIONS		Boring Started: 02-05-2019
		Boring Completed: 02-05-2019
	5307 Industrial Oaks Blvd, Ste 160 Austin, TX	Drill Rig: Geoprobe
		Driller: Vortex
		Project No.: 96187C01
		Exhibit: A-2

BORING LOG NO. B-11

Page 1 of 1

PROJECT: Boundary Ventures		CLIENT: Texas Railroad Commission					
SITE: 1.5 Miles South of HWY 71 and Alt HWY 90 Altair, TX							
GRAPHIC LOG	LOCATION See Exhibit A-2 Latitude: 29.551861° Longitude: -96.461526°	DEPTH	MATERIAL DESCRIPTION	Surface Elev.: 193.8 (Ft.) ELEVATION (Ft.)	DEPTH (ft)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE
		2.0	(NON-NATIVE FILL) Sand with gravel, tan/orange, moist, poorly sorted.	191.8			O/A/PID (ppm)
			(NATIVE MATERIAL) Sandy clay, tan/grey, moist, moderate plasticity.		5	1.3 (1'-2')	2
					10	2.6	2.7
			Increased sand content.		15	2.8 (10'-11')	2.1
		15.0	Boring Terminated at 15 Feet	178.8			
The stratification lines represent the approximate transition between differing soil types and/or rock types; in-situ these transitions may be gradual or may occur at different depths than shown.							
Advancement Method: DPT					Notes: Logged by CPP		
Abandonment Method: Boring backfilled with bentonite upon completion.							
WATER LEVEL OBSERVATIONS				Boring Started: 02-06-2019	Boring Completed: 02-06-2019		
				Drill Rig: Geoprobe	Driller: Vortex		
				Project No.: 96187C01	Exhibit: A-3		

BORING LOG NO. B-12

Page 1 of 1

PROJECT: Boundary Ventures		CLIENT: Texas Railroad Commission								
SITE: 1.5 Miles South of HWY 71 and Alt HWY 90 Altair, TX										
GRAPHIC LOG	LOCATION See Exhibit A-2 Latitude: 29.551365° Longitude: -96.460857°			Surface Elev.: 197.2 (Ft.) ELEVATION (Ft.)	DEPTH (ft)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	OVA/PID (ppm)	SAMPLE INTERVAL	NORM
	DEPTH	MATERIAL DESCRIPTION								
3/12/19	3.0	(NON-NATIVE FILL) Sand with gravel, tan/orange, moist, poorly sorted.		194.2				3.1		
	20.0	(NATIVE MATERIAL) Sandy clay, tan/grey, moist, moderate plasticity. Interbedded with sands after 15'.		177.2	5	5.5 (4'-5')	7-8	5.3		
					10	4.9	8-9	3.7		
					15	2.4	8	3.4		
					20	2.4 (19'-20')	8			
		Boring Terminated at 20 Feet								
The stratification lines represent the approximate transition between differing soil types and/or rock types; in-situ these transitions may be gradual or may occur at different depths than shown.										
Advancement Method: DPT					Notes: Logged by CPP					
Abandonment Method: Boring backfilled with bentonite upon completion.										
WATER LEVEL OBSERVATIONS						Boring Started: 02-06-2019	Boring Completed: 02-06-2019			
						Drill Rig: Geoprobe	Driller: Vortex			
						Project No.: 96187C01	Exhibit: A-4			

BORING LOG NO. B-13

Page 1 of 1

PROJECT: Boundary Ventures		CLIENT: Texas Railroad Commission				
SITE: 1.5 Miles South of HWY 71 and Alt HWY 90 Altair, TX						
GRAPHIC LOG	LOCATION See Exhibit A-2 Latitude: 29.551294° Longitude: -96.459355°	DEPTH	MATERIAL DESCRIPTION	Surface Elev.: 203.9 (Ft.) ELEVATION (Ft.)	DEPTH (ft)	WATER LEVEL OBSERVATIONS SAMPLE TYPE O/A/PID (ppm) SAMPLE INTERVAL NORM
	(ROAD BASE MATERIAL) Sandy silty clay, black, moist, no plasticity. Strong hydrocarbon odor.	17.0		186.9	51.6	8
	(NATIVE MATERIAL) Sand, grey, fine to medium, well-sorted, moist.	18.5		185.4	101.0	7
	(NATIVE MATERIAL) Sandy clay, tan/grey, moist, moderate plasticity.	20.0		183.9	58	7
	Boring Terminated at 20 Feet					172.0
	The stratification lines represent the approximate transition between differing soil types and/or rock types; in-situ these transitions may be gradual or may occur at different depths than shown.					206 (14'-15')
Advancement Method: DPT			Notes: Logged by CPP			
Abandonment Method: Boring backfilled with bentonite upon completion.						
WATER LEVEL OBSERVATIONS		5307 Industrial Oaks Blvd, Ste 160 Austin, TX	Boring Started: 02-06-2019	Boring Completed: 02-06-2019	Drill Rig: Geoprobe	Driller: Vortex
			Project No.: 96187C01	Exhibit: A-5		

BORING LOG NO. B-14

Page 1 of 1

PROJECT: Boundary Ventures		CLIENT: Texas Railroad Commission						
SITE: 1.5 Miles South of HWY 71 and Alt HWY 90 Altair, TX								
GRAPHIC LOG	LOCATION See Exhibit A-2 Latitude: 29.551946° Longitude: -96.460556°	DEPTH	MATERIAL DESCRIPTION	Surface Elev.: 207.1 (Ft.) ELEVATION (Ft.)	DEPTH (ft)	WATER LEVEL OBSERVATIONS SAMPLE TYPE O/A/PID (ppm) SAMPLE INTERVAL NORM		
19	(ROAD BASE MATERIAL) Sandy silty clay, black, moist, no plasticity. Strong hydrocarbon odor.	9.0		198.1	118.9	6.1-7		
15.0	(NATIVE MATERIAL) Sand, tan/orange, fine to medium, poorly-sorted, moist.			192.1	131.8 109.1 150.4 (9'-10') 20 8.2 (13'-14')	6.9-7.8 7.3-8.1		
Boring Terminated at 15 Feet								
The stratification lines represent the approximate transition between differing soil types and/or rock types; in-situ these transitions may be gradual or may occur at different depths than shown.								
Advancement Method: DPT	Abandonment Method: Boring backfilled with bentonite upon completion.			Notes: Logged by CPP				
WATER LEVEL OBSERVATIONS		5307 Industrial Oaks Blvd, Ste 160 Austin, TX		Boring Started: 02-06-2019	Boring Completed: 02-06-2019			
				Drill Rig: Geoprobe	Driller: Vortex			
				Project No.: 96187C01	Exhibit: A-6			

BORING LOG NO. B-15

Page 1 of 1

PROJECT: Boundary Ventures		CLIENT: Texas Railroad Commission				
SITE: 1.5 Miles South of HWY 71 and Alt HWY 90 Altair, TX						
GRAPHIC LOG	LOCATION See Exhibit A-2 Latitude: 29.55054° Longitude: -96.460837°	DEPTH	MATERIAL DESCRIPTION	Surface Elev.: 206.9 (Ft.) ELEVATION (Ft.)	DEPTH (ft)	WATER LEVEL OBSERVATIONS SAMPLE TYPE O/A/PID (ppm) SAMPLE INTERVAL NORM
	(ROAD BASE MATERIAL) Sandy silty clay, black, moist, no plasticity. Strong hydrocarbon odor.	12.0		194.9	109 124 223 178 47.3 14 13.4 2.4 (19'-20')	(5'-6') 6.7-7.2 6.9-7.1 7-8 2.4 (19'-20')
	(NATIVE MATERIAL) Sand, grey, medium to coarse, poorly-sorted, moist.	20.0	Boring Terminated at 20 Feet	186.9	20	
The stratification lines represent the approximate transition between differing soil types and/or rock types; in-situ these transitions may be gradual or may occur at different depths than shown.						
Advancement Method: DPT			Notes: Logged by CPP			
Abandonment Method: Boring backfilled with bentonite upon completion.						
WATER LEVEL OBSERVATIONS			Boring Started: 02-06-2019	Boring Completed: 02-06-2019		
			Drill Rig: Geoprobe	Driller: Vortex		
			Project No.: 96187C01	Exhibit: A-7		

BORING LOG NO. B-16

Page 1 of 1

PROJECT: Boundary Ventures		CLIENT: Texas Railroad Commission							
SITE: 1.5 Miles South of HWY 71 and Alt HWY 90 Altair, TX									
GRAPHIC LOG	LOCATION			TEST RESULTS					
	DEPTH	MATERIAL DESCRIPTION	Surface Elev.: 198.4 (Ft.) ELEVATION (Ft.)	DEPTH (ft)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	O/A/PID (ppm)		
3/12/19 THIS BORING LOG IS NOT VALID IF SEPARATED FROM ORIGINAL REPORT. ENVIRONMENTAL SMART LOG 96187C01-BOUNDARY VENTURES.GPJ TERRACON DATA TEMPLATE.GDT	2.5	(ROAD BASE MATERIAL) Sandy silty clay, black, moist, no plasticity. Strong hydrocarbon odor.	195.9	1.8					
	9.0	(NATIVE MATERIAL) Sand, grey/tan, medium to coarse, poorly-sorted, moist.	189.4	1					
	15.0	(NATIVE MATERIAL) Sandy clay, tan/grey, moist, moderate plasticity.	183.4	1.3	1.3 (9'-10')	7.7-9			
	Boring Terminated at 15 Feet								
	The stratification lines represent the approximate transition between differing soil types and/or rock types; in-situ these transitions may be gradual or may occur at different depths than shown.								
Advancement Method: DPT	Abandonment Method: Boring backfilled with bentonite upon completion.			Notes: Logged by CPP					
WATER LEVEL OBSERVATIONS		5307 Industrial Oaks Blvd, Ste 160 Austin, TX	Boring Started: 02-06-2019	Boring Completed: 02-06-2019					
			Drill Rig: Geoprobe	Driller: Vortex					
			Project No.: 96187C01	Exhibit: A-8					

BORING LOG NO. B-17

Page 1 of 1

PROJECT: Boundary Ventures		CLIENT: Texas Railroad Commission				
SITE: 1.5 Miles South of HWY 71 and Alt HWY 90 Altair, TX						
GRAPHIC LOG	LOCATION	MATERIAL DESCRIPTION	Surface Elev.: 192.8 (Ft.)	ELEVATION (Ft.)	DEPTH (ft)	WATER LEVEL OBSERVATIONS
DEPTH						SAMPLE TYPE
3/12/19	2.5	(ROAD BASE MATERIAL) Sandy silty clay, black, moist, no plasticity. Strong hydrocarbon odor.	190.3			O/A/PID (ppm)
	8.5	(NON-NATIVE MATERIAL) Sandy clay, white/tan, hard, with nodules of friable white clay. Low plasticity. Possibly drilling mud.	184.3		5	1.1
	11.0	(NON-NATIVE MATERIAL) Clay, white, hard, friable. Low plasticity. Possibly drilling mud.	181.8		10	2.6 (4'-5')
	15.0	(NATIVE MATERIAL) Sand, tan/grey, medium to coarse, well-sorted, moist. Contains significant quartz and chert gravel.	177.8		15	1.5
		Boring Terminated at 15 Feet				1.4
		The stratification lines represent the approximate transition between differing soil types and/or rock types; in-situ these transitions may be gradual or may occur at different depths than shown.				3.4 (11'-12')
	Advancement Method: DPT		Notes: Logged by CPP			0.5
	Abandonment Method: Boring backfilled with bentonite upon completion.					6-7
WATER LEVEL OBSERVATIONS			Boring Started: 02-07-2019	Boring Completed: 02-07-2019		
			Drill Rig: Geoprobe	Driller: Vortex		
			Project No.: 96187C01	Exhibit: A-9		

BORING LOG NO. B-18

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PROJECT: Boundary Ventures		CLIENT: Texas Railroad Commission									
SITE: 1.5 Miles South of HWY 71 and Alt HWY 90 Altair, TX											
GRAPHIC LOG	LOCATION See Exhibit A-2 Latitude: 29.551531° Longitude: -96.457935°	DEPTH	MATERIAL DESCRIPTION	Surface Elev.: 194.8 (Ft.) ELEVATION (Ft.)	DEPTH (ft)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE O/A/PID (ppm)	SAMPLE INTERVAL	NORM		
3/12/19	(ROAD BASE MATERIAL) Sandy silty clay, black, moist, no plasticity. Strong hydrocarbon odor.	2.5		192.3		83	(1'-2')				
	(NON-NATIVE MATERIAL) Sandy clay, grey/tan, low plasticity, dry.	7.5		187.3	5	24	32.5	6.8-6.5			
	(NON-NATIVE MATERIAL) Clay, white, hard, friable. Low plasticity. Possibly drilling mud.	14.5		180.3	10	6.9	4.9	6.3-7.2			
	(NATIVE MATERIAL) Sand, tan/grey, medium to coarse, well-sorted, moist. Contains significant quartz and chert gravel.	15.0		179.8	15	1.1	(14'-15')	6.9-7.1			
Boring Terminated at 15 Feet											
The stratification lines represent the approximate transition between differing soil types and/or rock types; in-situ these transitions may be gradual or may occur at different depths than shown.											
Advancement Method: DPT				Notes: Logged by CPP							
Abandonment Method: Boring backfilled with bentonite upon completion.											
WATER LEVEL OBSERVATIONS				Boring Started: 02-07-2019		Boring Completed: 02-07-2019					
				Drill Rig: Geoprobe		Driller: Vortex					
				Project No.: 96187C01		Exhibit: A-10					

BORING LOG NO. B-19

Page 1 of 1

PROJECT: Boundary Ventures		CLIENT: Texas Railroad Commission								
SITE: 1.5 Miles South of HWY 71 and Alt HWY 90 Altair, TX										
GRAPHIC LOG	LOCATION See Exhibit A-2 Latitude: 29.551112° Longitude: -96.457172°			Surface Elev.: 194 (Ft.) ELEVATION (Ft.)	DEPTH (ft)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	OVA/PID (ppm)	SAMPLE INTERVAL	NORM
	DEPTH	MATERIAL DESCRIPTION								
3/12/19	4.5	(ROAD BASE MATERIAL) Sandy silty clay, black, moist, no plasticity. Strong hydrocarbon odor.	189.5					109	(1'-2')	7-8
	6.0	(NON-NATIVE MATERIAL) Sandy clay, grey/tan, low plasticity, dry.	188					105		
	14.5	(NATIVE MATERIAL) Sandy clay, tan/orange, moist, moderate plasticity.						19.2		7-8
	15.0	(NATIVE MATERIAL) Sandy clay, white/tan, hard, with nodules of friable white clay. Low plasticity.	179.5					10.8		
		Boring Terminated at 15 Feet	179					7.8		
								5.4	(14'-15')	7-8
								15		
The stratification lines represent the approximate transition between differing soil types and/or rock types; in-situ these transitions may be gradual or may occur at different depths than shown.										
Advancement Method: DPT					Notes: Logged by CPP					
Abandonment Method: Boring backfilled with bentonite upon completion.										
WATER LEVEL OBSERVATIONS			5307 Industrial Oaks Blvd, Ste 160 Austin, TX	Boring Started: 02-07-2019		Boring Completed: 02-07-2019				
				Drill Rig: Geoprobe		Driller: Vortex				
				Project No.: 96187C01		Exhibit: A-11				

WELL LOG NO. MW-9

Page 1 of 1

PROJECT: Boundary Ventures		CLIENT: Texas Railroad Commission								
SITE: 1.5 Miles South of HWY 71 and Alt HWY 90 Altair, TX										
GRAPHIC LOG	LOCATION See Exhibit A-2 Latitude: 29.550873° Longitude: -96.46258°	DEPTH	MATERIAL DESCRIPTION	Surface Elev.: 211.04 (Ft.) ELEVATION (Ft.)	INSTALLATION DETAILS	DEPTH (ft)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE		
	(NON-NATIVE FILL) Sand with gravel, tan/orange, moist, poorly sorted.				Well Completion: Cement Surface Seal Bentonite Well Seal 2" Diameter PVC Well Casing		O/A/PID (ppm)	SAMPLE INTERVAL		
		17.0		194	12/20 Graded Silica Sand Filter Pack	5	5.3	NORM		
	(NATIVE MATERIAL) Sandy clay, tan/grey, moist, moderate plasticity.				2" Diameter, Machine-slotted PVC Well Screen	10	4.1	6.2-7.6		
		30.0		181		15	1	6.8-7.0		
	Boring Terminated at 30 Feet									
The stratification lines represent the approximate transition between differing soil types and/or rock types; in-situ these transitions may be gradual or may occur at different depths than shown.										
Advancement Method: DPT/SFA				Notes: Logged by CPP						
Abandonment Method:										
WATER LEVEL OBSERVATIONS		5307 Industrial Oaks Blvd, Ste 160 Austin, TX		Well Started:		Well Completed:				
 21.98'-GW observation on 2/25/2019				Drill Rig:		Driller: Vortex				
				Project No.: 96187C01		Exhibit: A-5				

WELL LOG NO. MW-10

Page 1 of 1

PROJECT: Boundary Ventures		CLIENT: Texas Railroad Commission						
SITE: 1.5 Miles South of HWY 71 and Alt HWY 90 Altair, TX								
GRAPHIC LOG	LOCATION See Exhibit A-2 Latitude: 29.551924° Longitude: -96.461836°	MATERIAL DESCRIPTION	Surface Elev.: 200.46 (Ft.)	ELEVATION (Ft.)	INSTALLATION DETAILS	DEPTH (ft)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE
DEPTH	(NATIVE MATERIAL) Sand, grey/tan, medium to coarse, poorly-sorted, moist.				Well Completion: Cement Surface Seal Bentonite Well Seal 2" Diameter PVC Well Casing 12/20 Graded Silica Sand Filter Pack 2" Diameter, Machine-slotted PVC Well Screen		O/A/PID (ppm)	SAMPLE INTERVAL
3/12/19 96187C01-BOUNDARY VENTURES (WELLS).GPD TERRACON DATA TEMPLATE.GDT	7.0	(NATIVE MATERIAL) Sandy clay, tan/grey , moist, moderate plasticity. Interbedded with coarse sand.	193.5	175.5		3.1 4.3 5 1 1.8 3.4 4.1 3.3	(6'-7') (14'-15')	7.4-8.3 7.7-9.1 7.6-8.4 7-9
	Boring Terminated at 25 Feet							
The stratification lines represent the approximate transition between differing soil types and/or rock types; in-situ these transitions may be gradual or may occur at different depths than shown.								
Advancement Method: DPT/SFA					Notes: Logged by CPP			
Abandonment Method:								
WATER LEVEL OBSERVATIONS					Well Started:		Well Completed:	
13.55'-GW observation on 2/25/2019					Drill Rig:		Driller: Vortex	
					Project No.: 96187C01		Exhibit: A-1	
5307 Industrial Oaks Blvd, Ste 160 Austin, TX								

WELL LOG NO. MW-11

Page 1 of 1

PROJECT: Boundary Ventures		CLIENT: Texas Railroad Commission											
SITE: 1.5 Miles South of HWY 71 and Alt HWY 90 Altair, TX													
GRAPHIC LOG	LOCATION			INSTALLATION DETAILS		DEPTH (ft)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	SAMPLE INTERVAL	NORM			
	DEPTH	MATERIAL DESCRIPTION		Surface Elev.: 200.23 (Ft.)	ELEVATION (Ft.)								
3/12/19	5.0	(ROAD BASE MATERIAL) Sandy silty clay, black, moist, no plasticity. Strong hydrocarbon odor.		195.2		Well Completion: Cement Surface Seal Bentonite Well Seal 2" Diameter PVC Well Casing			138 (1'-2')	8-9			
	17.5	(NON-NATIVE MATERIAL) Sandy clay, white/tan, hard, with nodules of friable white clay. Low plasticity. Possibly drilling mud.		182.7		12/20 Graded Silica Sand Filter Pack 2" Diameter, Machine-slotted PVC Well Screen			109 37 19 9 3.8 2 6.2 0.7 (20'-21') 1.4	7-8 7-8 7			
	30.0	(NATIVE MATERIAL) Sand, tan/grey, medium to coarse, well-sorted, moist. Contains quartz and chert gravel.		170.2									
Boring Terminated at 30 Feet													
The stratification lines represent the approximate transition between differing soil types and/or rock types; in-situ these transitions may be gradual or may occur at different depths than shown.													
Advancement Method: DPT/SFA						Notes: Logged by CPP							
Abandonment Method:													
WATER LEVEL OBSERVATIONS			5307 Industrial Oaks Blvd, Ste 160 Austin, TX			Well Started:	Well Completed:						
 27.5'-GW observation on 2/25/2019						Drill Rig:	Driller: Vortex						
						Project No.: 96187C01	Exhibit: A-2						

WELL LOG NO. MW-12

Page 1 of 1

PROJECT: Boundary Ventures		CLIENT: Texas Railroad Commission								
SITE: 1.5 Miles South of HWY 71 and Alt HWY 90 Altair, TX										
GRAPHIC LOG	LOCATION	MATERIAL DESCRIPTION		INSTALLATION DETAILS		DEPTH (ft)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	SAMPLE INTERVAL	NORM
DEPTH		Surface Elev.: 204.63 (Ft.)	ELEVATION (Ft.)	Well Completion:			O/A/PID (ppm)			
3/12/19		(ROAD BASE MATERIAL) Sandy silty clay, black, moist, no plasticity. Strong hydrocarbon odor.		Cement Surface Seal		23				
	10.0		194.6	Bentonite Well Seal		24				6.1-6.7
	17.0	(NON-NATIVE MATERIAL) Sandy clay, white/tan, hard, with nodules of friable white clay. Low plasticity. Possibly drilling mud.	187.6	2" Diameter PVC Well Casing		48				
	24.5	(NON-NATIVE MATERIAL) Clay, white, hard, friable. Low plasticity. Possibly drilling mud.	180.1	2" Diameter, Machine-slotted PVC Well Screen		67	(9'-10')			6-7
	27.0	(NATIVE MATERIAL) Sand, tan/grey, medium to coarse, well-sorted, moist.	177.6	12/20 Graded Silica Sand Filter Pack		10				6-8
	35.0	(NATIVE MATERIAL) Sand, tan/grey, medium to coarse, well-sorted, moist. Contains quartz and chert gravel.	169.6			13.5				7-8
	Boring Terminated at 35 Feet					20				
	The stratification lines represent the approximate transition between differing soil types and/or rock types; in-situ these transitions may be gradual or may occur at different depths than shown.									
Advancement Method: DPT/SFA			Notes: Logged by CPP							
Abandonment Method:										
WATER LEVEL OBSERVATIONS			Well Started: _____							
 32.65'-GW observation on 2/25/2019			Well Completed: _____							
			Drill Rig: _____							
			Driller: Vortex							
			Project No.: 96187C01							
			Exhibit: A-3							

WELL LOG NO. MW-13

Page 1 of 1

PROJECT: Boundary Ventures		CLIENT: Texas Railroad Commission						
SITE: 1.5 Miles South of HWY 71 and Alt HWY 90 Altair, TX								
GRAPHIC LOG	LOCATION See Exhibit A-2 Latitude: 29.549419° Longitude: -96.458896°	DEPTH	MATERIAL DESCRIPTION	Surface Elev.: 212.1 (Ft.) ELEVATION (Ft.)	INSTALLATION DETAILS	DEPTH (ft)	WATER LEVEL OBSERVATIONS SAMPLE TYPE O/A/PID (ppm)	SAMPLE INTERVAL NORM
3/12/19	(ROAD BASE MATERIAL) Sandy silty clay, black, moist, no plasticity. Strong hydrocarbon odor.	11.0	(NON-NATIVE MATERIAL) Clayey sand, tan, dry, contains gravel.	201.1	Cement Surface Seal	208.1		
		14.5	(NON-NATIVE MATERIAL) Sand, grey, fine to medium, well-sorted, moist. Wet interval.	197.6	Bentonite Well Seal	218.3		7
		15.0	(NATIVE MATERIAL) Sand, tan/grey, medium to coarse, well-sorted, moist. Contains significant quartz and chert gravel.	197.1	2" Diameter PVC Well Casing	333.9 (5'-6')		
		23.0	(NATIVE MATERIAL) Sandy clay, tan/grey, moist, moderate plasticity.	189.1	2" Diameter, Machine-slotted PVC Well Screen	284.5		7
		27.0	(NATIVE MATERIAL) Sand, grey/tan, medium to coarse, poorly-sorted, moist.	185.1	12/20 Graded Silica Sand Filter Pack	119.2		
		40.0		172.1		127 (14'-15')		7
Boring Terminated at 40 Feet								
The stratification lines represent the approximate transition between differing soil types and/or rock types; in-situ these transitions may be gradual or may occur at different depths than shown.								
Advancement Method: DPT/SFA				Notes: Logged by CPP				
Abandonment Method:								
WATER LEVEL OBSERVATIONS  19.42'-GW observation on 2/25/2019				Well Started:		Well Completed:		
				Drill Rig:		Driller: Vortex		
				Project No.: 96187C01		Exhibit: A-4		

STATE OF TEXAS WELL REPORT for Tracking #504239

Owner:	Railroad Commission of Texas	Owner Well #:	MW-9
Address:	P.O. Box 12967 Austin , TX 78711	Grid #:	66-29-4
Well Location:	Highway 71 Altair, TX 77442	Latitude:	29° 33' 03.14" N
	1.5 Miles South of Highway 71 and Alternate Highway 90.	Longitude:	096° 27' 45.29" W
Well County:	Colorado		
Type of Work:	New Well	Proposed Use:	Monitor

Drilling Start Date: **2/4/2019** Drilling End Date: **2/8/2019**

	<i>Diameter (in.)</i>	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>
Borehole:	7.25	0	30

Drilling Method: **Hollow Stem Auger**

Borehole Completion: **Filter Packed**

	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>	<i>Filter Material</i>	<i>Size</i>
Filter Pack Intervals:	13	30	Sand	12/20

	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>	<i>Description (number of sacks & material)</i>
Annular Seal Data:	0	2	Concrete 0.88 Bags/Sacks
	2	13	Bentonite 3.81 Bags/Sacks

Seal Method: **Hand Mixed**

Distance to Property Line (ft.): **No Data**

Sealed By: **Driller**

Distance to Septic Field or other
concentrated contamination (ft.): **No Data**

Distance to Septic Tank (ft.): **No Data**

Method of Verification: **No Data**

Surface Completion: **Surface Sleeve Installed**

Surface Completion by Driller

Water Level: **No Data**

Packers: **No Data**

Type of Pump: **No Data**

Well Tests: **No Test Data Specified**

Water Quality:	Strata Depth (ft.)	Water Type
	No Data	No Data

Chemical Analysis Made: **No**

Did the driller knowingly penetrate any strata which contained injurious constituents?: **No**

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in the report(s) being returned for completion and resubmittal.

Company Information: **Vortex Drilling**

**4412 Bluemel
San Antonio, TX 78240**

Driller Name: **Juan R. Martinez** License Number: **59856**

Apprentice Name: **Steven Stackhouse** Apprentice Number: **60326**

Comments: **No Data**

Lithology:

DESCRIPTION & COLOR OF FORMATION MATERIAL

Top (ft.)	Bottom (ft.)	Description
0	17	(NON-NATIVE FILL) Sand with gravel, tan/orange, moist, poorly sorted.
17	30	(NATIVE MATERIAL) Sandy clay, tan/grey, moist, moderate plasticity.

Casing:

BLANK PIPE & WELL SCREEN DATA

Dia (in.)	Type	Material	Sch./Gage	Top (ft.)	Bottom (ft.)
2	Top Cap (Locking)	New Plastic (PVC)	40		
2	Bottom Cap	New Plastic (PVC)	40		
2	Riser	New Plastic (PVC)	40	-3	15
2	Screen	New Plastic (PVC)	40 0.010	15	25
2	PrePacked Screen	New Plastic (PVC)	40 0.010	25	30

IMPORTANT NOTICE FOR PERSONS HAVING WELLS DRILLED CONCERNING CONFIDENTIALITY

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**Texas Department of Licensing and Regulation
P.O. Box 12157
Austin, TX 78711
(512) 334-5540**

STATE OF TEXAS WELL REPORT for Tracking #504224

Owner:	Railroad Commission of Texas	Owner Well #:	MW-10
Address:	P.O. Box 12967 Austin , TX 78711	Grid #:	66-29-4
Well Location:	Highway 71 Altair, TX 77442	Latitude:	29° 33' 06.93" N
	1.5 Miles South of Highway 71 and Alternate Highway 90.	Longitude:	096° 27' 42.61" W
Well County:	Colorado		
Type of Work:	New Well	Proposed Use:	Monitor

Drilling Start Date: **2/4/2019** Drilling End Date: **2/8/2019**

	<i>Diameter (in.)</i>	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>
Borehole:	7.25	0	25

Drilling Method: **Hollow Stem Auger**

Borehole Completion: **Filter Packed**

	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>	<i>Filter Material</i>	<i>Size</i>
Filter Pack Intervals:	8	25	Sand	12/20

	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>	<i>Description (number of sacks & material)</i>
Annular Seal Data:	0	2	Concrete 0.88 Bags/Sacks
	2	8	Bentonite 2.08 Bags/Sacks

Seal Method: **Hand Mixed**

Distance to Property Line (ft.): **No Data**

Sealed By: **Driller**

Distance to Septic Field or other
concentrated contamination (ft.): **No Data**

Distance to Septic Tank (ft.): **No Data**

Method of Verification: **No Data**

Surface Completion: **Surface Sleeve Installed**

Surface Completion by Driller

Water Level: **No Data**

Packers: **No Data**

Type of Pump: **No Data**

Well Tests: **No Test Data Specified**

Water Quality:	Strata Depth (ft.)	Water Type
	No Data	No Data

Chemical Analysis Made: **No**

Did the driller knowingly penetrate any strata which contained injurious constituents?: **No**

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in the report(s) being returned for completion and resubmittal.

Company Information: **Vortex Drilling**

**4412 Bluemel
San Antonio, TX 78240**

Driller Name: **Juan R. Martinez** License Number: **59856**

Apprentice Name: **Steven Stackhouse** Apprentice Number: **60326**

Comments: **No Data**

Lithology:

DESCRIPTION & COLOR OF FORMATION MATERIAL

Top (ft.)	Bottom (ft.)	Description
0	7	(NATIVE MATERIAL) Sand, grey/tan, medium to coarse, poorly-sorted, moist.
7	25	(NATIVE MATERIAL) Sandy clay, tan/grey , moist, moderate plasticity. Interbedded with coarse sand.

Casing:

BLANK PIPE & WELL SCREEN DATA

Dia (in.)	Type	Material	Sch./Gage	Top (ft.)	Bottom (ft.)
2	Top Cap (Locking)	New Plastic (PVC)	40		
2	Bottom Cap	New Plastic (PVC)	40		
2	Riser	New Plastic (PVC)	40	-3	10
2	Screen	New Plastic (PVC)	40 0.010	10	20
2	PrePacked Screen	New Plastic (PVC)	40 0.010	20	25

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**Texas Department of Licensing and Regulation
P.O. Box 12157
Austin, TX 78711
(512) 334-5540**

STATE OF TEXAS WELL REPORT for Tracking #504229

Owner:	Railroad Commission of Texas	Owner Well #:	MW-11
Address:	P.O. Box 12967 Austin , TX 78711	Grid #:	66-29-5
Well Location:	Highway 71 Altair, TX 77442	Latitude:	29° 33' 04.23" N
	1.5 Miles South of Highway 71 and Alternate Highway 90.	Longitude:	096° 27' 27.4" W
Well County:	Colorado		
Type of Work:	New Well	Proposed Use:	Monitor

Drilling Start Date: **2/4/2019** Drilling End Date: **2/8/2019**

	<i>Diameter (in.)</i>	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>
Borehole:	7.25	0	30

Drilling Method: **Hollow Stem Auger**

Borehole Completion: **Filter Packed**

	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>	<i>Filter Material</i>	<i>Size</i>
Filter Pack Intervals:	13	30	Sand	12/20

	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>	<i>Description (number of sacks & material)</i>
Annular Seal Data:	0	2	Concrete 0.88 Bags/Sacks
	2	13	Bentonite 3.81 Bags/Sacks

Seal Method: **Hand Mixed**

Distance to Property Line (ft.): **No Data**

Sealed By: **Driller**

Distance to Septic Field or other
concentrated contamination (ft.): **No Data**

Distance to Septic Tank (ft.): **No Data**

Method of Verification: **No Data**

Surface Completion: **Surface Sleeve Installed**

Surface Completion by Driller

Water Level: **No Data**

Packers: **No Data**

Type of Pump: **No Data**

Well Tests: **No Test Data Specified**

Water Quality:	Strata Depth (ft.)	Water Type
	No Data	No Data

Chemical Analysis Made: **No**

Did the driller knowingly penetrate any strata which contained injurious constituents?: **No**

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in the report(s) being returned for completion and resubmittal.

Company Information: **Vortex Drilling**
4412 Bluemel
San Antonio, TX 78240

Driller Name: **Juan R. Martinez** License Number: **59856**

Apprentice Name: **Steven Stackhouse** Apprentice Number: **60326**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

Casing:
BLANK PIPE & WELL SCREEN DATA

Top (ft.)	Bottom (ft.)	Description
0	5	(ROAD BASE MATERIAL) Sandy silty clay, black, moist, no plasticity. Strong hydrocarbon odor.
5	17.5	(NON-NATIVE MATERIAL) Sandy clay, white/tan, hard, with nodules of friable white clay. Low plasticity. Possibly drilling mud.
17.5	30	(NATIVE MATERIAL) Sand, tan/grey, medium to coarse, well-sorted, moist. Contains quartz and chert gravel.

Dia (in.)	Type	Material	Sch./Gage	Top (ft.)	Bottom (ft.)
2	Top Cap (Locking)	New Plastic (PVC)	40		
2	Bottom Cap	New Plastic (PVC)	40		
2	Riser	New Plastic (PVC)	40	-3	15
2	Screen	New Plastic (PVC)	40 0.010	15	25
2	PrePacked Screen	New Plastic (PVC)	40 0.010	25	30

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Texas Department of Licensing and Regulation
P.O. Box 12157
Austin, TX 78711
(512) 334-5540

STATE OF TEXAS WELL REPORT for Tracking #504232

Owner:	Railroad Commission of Texas	Owner Well #:	MW-12
Address:	P.O. Box 12967 Austin , TX 78711	Grid #:	66-29-5
Well Location:	Highway 71 Altair, TX 77442	Latitude:	29° 33' 01.67" N
	1.5 Miles South of Highway 71 and Alternate Highway 90.	Longitude:	096° 27' 23.73" W
Well County:	Colorado		
Type of Work:	New Well	Proposed Use:	Monitor

Drilling Start Date: **2/4/2019** Drilling End Date: **2/8/2019**

	<i>Diameter (in.)</i>	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>
Borehole:	7.25	0	35

Drilling Method: **Hollow Stem Auger**

Borehole Completion: **Filter Packed**

	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>	<i>Filter Material</i>	<i>Size</i>
Filter Pack Intervals:	18	35	Sand	12/20

	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>	<i>Description (number of sacks & material)</i>
Annular Seal Data:	0	2	Concrete 0.88 Bags/Sacks
	2	18	Bentonite 5.54 Bags/Sacks

Seal Method: **Hand Mixed**

Distance to Property Line (ft.): **No Data**

Sealed By: **Driller**

Distance to Septic Field or other
concentrated contamination (ft.): **No Data**

Distance to Septic Tank (ft.): **No Data**

Method of Verification: **No Data**

Surface Completion: **Surface Sleeve Installed**

Surface Completion by Driller

Water Level: **No Data**

Packers: **No Data**

Type of Pump: **No Data**

Well Tests: **No Test Data Specified**

Water Quality:	Strata Depth (ft.)	Water Type
	No Data	No Data

Chemical Analysis Made: **No**

Did the driller knowingly penetrate any strata which contained injurious constituents?: **No**

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in the report(s) being returned for completion and resubmittal.

Company Information: **Vortex Drilling**

**4412 Bluemel
San Antonio, TX 78240**

Driller Name: **Juan R. Martinez** License Number: **59856**

Apprentice Name: **Steven Stackhouse** Apprentice Number: **60326**

Comments: **No Data**

Lithology:

DESCRIPTION & COLOR OF FORMATION MATERIAL

Top (ft.)	Bottom (ft.)	Description
0	10	(ROAD BASE MATERIAL) Sandy silty clay, black, moist, no plasticity. Strong hydrocarbon odor.
10	17	(NON-NATIVE MATERIAL) Sandy clay, white/tan, hard, with nodules of friable white clay. Low plasticity. Possibly drilling mud.
17	24.5	(NON-NATIVE MATERIAL) Clay, white, hard, friable. Low plasticity. Possibly drilling mud.
24.5	27	(NATIVE MATERIAL) Sand, tan/grey, medium to coarse, well-sorted, moist.
27	35	(NATIVE MATERIAL) Sand, tan/grey, medium to coarse, well-sorted, moist. Contains quartz and chert gravel.

Casing:

BLANK PIPE & WELL SCREEN DATA

Dia (in.)	Type	Material	Sch./Gage	Top (ft.)	Bottom (ft.)
2	Top Cap (Locking)	New Plastic (PVC)	40		
2	Bottom Cap	New Plastic (PVC)	40		
2	Riser	New Plastic (PVC)	40	-3	20
2	Screen	New Plastic (PVC)	40 0.010	20	30
2	PrePacked Screen	New Plastic (PVC)	40 0.010	30	35

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Texas Department of Licensing and Regulation
P.O. Box 12157
Austin, TX 78711
(512) 334-5540

STATE OF TEXAS WELL REPORT for Tracking #504236

Owner:	Railroad Commission of Texas	Owner Well #:	MW-13
Address:	P.O. Box 12967 Austin , TX 78711	Grid #:	66-29-4
Well Location:	Highway 71 Altair, TX 77442	Latitude:	29° 32' 57.91" N
	1.5 Miles South of Highway 71 and Alternate Highway 90.	Longitude:	096° 27' 32.03" W
Well County:	Colorado		
Type of Work:	New Well	Proposed Use:	Monitor

Drilling Start Date: **2/4/2019** Drilling End Date: **2/8/2019**

	<i>Diameter (in.)</i>	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>
Borehole:	7.25	0	40

Drilling Method: **Hollow Stem Auger**

Borehole Completion: **Filter Packed**

	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>	<i>Filter Material</i>	<i>Size</i>
Filter Pack Intervals:	18	35	Sand	12/20

	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>	<i>Description (number of sacks & material)</i>
Annular Seal Data:	0	2	Concrete 0.88 Bags/Sacks
	2	18	Bentonite 5.54 Bags/Sacks
	35	40	Spoil Sloughing

Seal Method: **Hand Mixed**

Distance to Property Line (ft.): **No Data**

Sealed By: **Driller**

Distance to Septic Field or other
concentrated contamination (ft.): **No Data**

Distance to Septic Tank (ft.): **No Data**

Method of Verification: **No Data**

Surface Completion: **Surface Sleeve Installed**

Surface Completion by Driller

Water Level: **No Data**

Packers: **No Data**

Type of Pump: **No Data**

Well Tests: **No Test Data Specified**

Water Quality:	Strata Depth (ft.)	Water Type
	No Data	No Data

Chemical Analysis Made: No

Did the driller knowingly penetrate any strata which contained injurious constituents?: No

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in the report(s) being returned for completion and resubmittal.

Company Information: **Vortex Drilling**

**4412 Bluemel
San Antonio, TX 78240**

Driller Name: **Juan R. Martinez** License Number: **59856**

Apprentice Name: **Steven Stackhouse** Apprentice Number: **60326**

Comments: **No Data**

Lithology:

DESCRIPTION & COLOR OF FORMATION MATERIAL

Top (ft.)	Bottom (ft.)	Description
0	11	(ROAD BASE MATERIAL) Sandy silty clay, black, moist, no plasticity. Strong hydrocarbon odor.
11	14.5	(NON-NATIVE MATERIAL) Clayey sand, tan, dry, contains gravel.
14.5	15	(NON-NATIVE MATERIAL) Sand, grey, fine to medium, well-sorted, moist. Wet interval.
15	23	(NATIVE MATERIAL) Sand, tan/grey, medium to coarse, well-sorted, moist. Contains significant quartz and chert gravel.
23	27	(NATIVE MATERIAL) Sandy clay, tan/grey, moist, moderate plasticity.
27	40	(NATIVE MATERIAL) Sand, grey/tan, medium to coarse, poorly-sorted, moist.

Casing:

BLANK PIPE & WELL SCREEN DATA

Dia (in.)	Type	Material	Sch./Gage	Top (ft.)	Bottom (ft.)
2	Top Cap (Locking)	New Plastic (PVC)	40		
2	Bottom Cap	New Plastic (PVC)	40		
2	Riser	New Plastic (PVC)	40	-3	20
2	Screen	New Plastic (PVC)	40 0.010	20	30
2	PrePacked Screen	New Plastic (PVC)	40 0.010	30	35

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Texas Department of Licensing and Regulation
P.O. Box 12157
Austin, TX 78711
(512) 334-5540

STATE OF TEXAS WELL REPORT for Tracking #504265

Owner:	Railroad Commission of Texas	Owner Well #:	B-1
Address:	P.O. Box 12967 Austin , TX 78711	Grid #:	66-29-5
Well Location:	Highway 71 Altair, TX 77442	Latitude:	29° 32' 54.93" N
	1.5 Miles South of Highway 71 and Alternate Highway 90.	Longitude:	096° 27' 18.73" W
Well County:	Colorado		
Type of Work:	New Well	Proposed Use:	Environmental Soil Boring

Drilling Start Date: **2/4/2019** Drilling End Date: **2/8/2019**

	<i>Diameter (in.)</i>	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>
Borehole:	3	0	15

Drilling Method: **Direct Push**

Borehole Completion: **Plugged**

Annular Seal Data: **No Data**

Seal Method: **Hand Mixed**

Distance to Property Line (ft.): **No Data**

Sealed By: **Driller**

Distance to Septic Field or other
concentrated contamination (ft.): **No Data**

Distance to Septic Tank (ft.): **No Data**

Method of Verification: **No Data**

Surface Completion: **No Data**

Water Level: **No Data**

Packers: **No Data**

Type of Pump: **No Data**

Well Tests: **No Test Data Specified**

<i>Description (number of sacks & material)</i>	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>
	0	2
	2	15

Water Quality:	Strata Depth (ft.)	Water Type
	No Data	No Data

Chemical Analysis Made: **No**

Did the driller knowingly penetrate any strata which contained injurious constituents?: **No**

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in the report(s) being returned for completion and resubmittal.

Company Information: **Vortex Drilling**
4412 Bluemel
San Antonio, TX 78240

Driller Name: **Juan R. Martinez** License Number: **59856**

Apprentice Name: **Steven Stackhouse** Apprentice Number: **60326**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

Casing:
BLANK PIPE & WELL SCREEN DATA

Top (ft.)	Bottom (ft.)	Description
0	1.5	(NON-NATIVE FILL) Silty Clay, dark brown, dry, no plasticity.
1.5	9	(NON-NATIVE FILL) Silty sand, tan-orange, poorly sorted, dry.
9	13.5	(NATIVE MATERIAL) Lean clay, white/brown, moderately plastic, dry.
13.5	15	(NATIVE MATERIAL) Sand, tan-orange, fine to medium, well-sorted, moist.

Dia. (in.)	New/Used	Type	Setting From/To (ft.)
No Data			

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Texas Department of Licensing and Regulation
P.O. Box 12157
Austin, TX 78711
(512) 334-5540

STATE OF TEXAS WELL REPORT for Tracking #504267

Owner:	Railroad Commission of Texas	Owner Well #:	B-2
Address:	P.O. Box 12967 Austin , TX 78711	Grid #:	66-29-5
Well Location:	Highway 71 Altair, TX 77442 1.5 Miles South of Highway 71 and Alternate Highway 90.	Latitude:	29° 32' 52.95" N
		Longitude:	096° 27' 21.85" W
Well County:	Colorado	Elevation:	190 ft. above sea level
Type of Work:	New Well	Proposed Use:	Environmental Soil Boring

Drilling Start Date: **2/4/2019** Drilling End Date: **2/8/2019**

	Diameter (in.)	Top Depth (ft.)	Bottom Depth (ft.)
Borehole:	3	0	20

Drilling Method: **Direct Push**

Borehole Completion: **Plugged**

Annular Seal Data: **No Data**

Seal Method: **Hand Mixed**

Distance to Property Line (ft.): **No Data**

Sealed By: **Driller**

Distance to Septic Field or other
concentrated contamination (ft.): **No Data**

Distance to Septic Tank (ft.): **No Data**

Method of Verification: **No Data**

Surface Completion: **No Data**

Water Level: **No Data**

Packers: **No Data**

Type of Pump: **No Data**

Well Tests: **No Test Data Specified**

Description (number of sacks & material)	Top Depth (ft.)	Bottom Depth (ft.)
	0	2
	2	20

Water Quality:	Strata Depth (ft.)	Water Type
	No Data	No Data

Chemical Analysis Made: **No**

Did the driller knowingly penetrate any strata which contained injurious constituents?: **No**

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in the report(s) being returned for completion and resubmittal.

Company Information: **Vortex Drilling**
4412 Bluemel
San Antonio, TX 78240

Driller Name: **Juan R. Martinez** License Number: **59856**

Apprentice Name: **Steven Stackhouse** Apprentice Number: **60326**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

Casing:
BLANK PIPE & WELL SCREEN DATA

Top (ft.)	Bottom (ft.)	Description
0	1	(NON-NATIVE FILL) Silty Clay, dark brown, dry, no plasticity.
1	11	(NATIVE MATERIAL) Sand, tan-orange, fine to medium, well-sorted, moist.
11	20	(NATIVE MATERIAL) Sand, grey, fine to medium, well-sorted, moist.

Dia. (in.)	New/Used	Type	Setting From/To (ft.)
No Data			

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P.O. Box 12157
Austin, TX 78711
(512) 334-5540

STATE OF TEXAS WELL REPORT for Tracking #504274

Owner:	Railroad Commission of Texas	Owner Well #:	B-3
Address:	P.O. Box 12967 Austin , TX 78711	Grid #:	66-29-5
Well Location:	Highway 71 Altair, TX 77442 1.5 Miles South of Highway 71 and Alternate Highway 90.	Latitude:	29° 32' 53.64" N
		Longitude:	096° 27' 23.21" W
Well County:	Colorado	Elevation:	191 ft. above sea level
Type of Work:	New Well	Proposed Use:	Environmental Soil Boring

Drilling Start Date: **2/4/2019** Drilling End Date: **2/8/2019**

	Diameter (in.)	Top Depth (ft.)	Bottom Depth (ft.)
Borehole:	3	0	15

Drilling Method: **Direct Push**

Borehole Completion: **Plugged**

Annular Seal Data: **No Data**

Seal Method: **Hand Mixed**

Distance to Property Line (ft.): **No Data**

Sealed By: **Driller**

Distance to Septic Field or other
concentrated contamination (ft.): **No Data**

Distance to Septic Tank (ft.): **No Data**

Method of Verification: **No Data**

Surface Completion: **No Data**

Water Level: **No Data**

Packers: **No Data**

Type of Pump: **No Data**

Well Tests: **No Test Data Specified**

Description (number of sacks & material)	Top Depth (ft.)	Bottom Depth (ft.)
	0	2
	2	15

Water Quality:	<i>Strata Depth (ft.)</i>	<i>Water Type</i>
	No Data	No Data

Chemical Analysis Made: **No**

Did the driller knowingly penetrate any strata which contained injurious constituents?: **No**

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in the report(s) being returned for completion and resubmittal.

Company Information: **Vortex Drilling**
4412 Bluemel
San Antonio, TX 78240

Driller Name: **Juan R. Martinez** License Number: **59856**

Apprentice Name: **Steven Stackhouse** Apprentice Number: **60326**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

Casing:
BLANK PIPE & WELL SCREEN DATA

<i>Top (ft.)</i>	<i>Bottom (ft.)</i>	<i>Description</i>
0	3	(NON-NATIVE FILL) Silty Clay, dark brown, dry, no plasticity.
3	15	(NATIVE MATERIAL) Sand, tan-orange, fine to medium, well-sorted, moist.

<i>Dia. (in.)</i>	<i>New/Used</i>	<i>Type</i>	<i>Setting From/To (ft.)</i>
No Data			

IMPORTANT NOTICE FOR PERSONS HAVING WELLS DRILLED CONCERNING CONFIDENTIALITY

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Texas Department of Licensing and Regulation
P.O. Box 12157
Austin, TX 78711
(512) 334-5540

STATE OF TEXAS WELL REPORT for Tracking #504277

Owner:	Railroad Commission of Texas	Owner Well #:	B-4
Address:	P.O. Box 12967 Austin , TX 78711	Grid #:	66-29-5
Well Location:	Highway 71 Altair, TX 77442 1.5 Miles South of Highway 71 and Alternate Highway 90.	Latitude:	29° 32' 53.64" N
		Longitude:	096° 27' 23.21" W
		Elevation:	187 ft. above sea level
Well County:	Colorado		
Type of Work:	New Well		
	Proposed Use: Environmental Soil Boring		

Drilling Start Date: **2/4/2019** Drilling End Date: **2/8/2019**

	<i>Diameter (in.)</i>	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>
Borehole:	3	0	25

Drilling Method: **Direct Push**

Borehole Completion: **Plugged**

Annular Seal Data: **No Data**

Seal Method: **Hand Mixed**

Distance to Property Line (ft.): **No Data**

Sealed By: **Driller**

Distance to Septic Field or other
concentrated contamination (ft.): **No Data**

Distance to Septic Tank (ft.): **No Data**

Method of Verification: **No Data**

Surface Completion: **No Data**

Water Level: **No Data**

Packers: **No Data**

Type of Pump: **No Data**

Well Tests: **No Test Data Specified**

<i>Description (number of sacks & material)</i>	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>
	0	2
	2	25

Water Quality:	Strata Depth (ft.)	Water Type
	No Data	No Data

Chemical Analysis Made: **No**

Did the driller knowingly penetrate any strata which contained injurious constituents?: **No**

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in the report(s) being returned for completion and resubmittal.

Company Information: **Vortex Drilling**
4412 Bluemel
San Antonio, TX 78240

Driller Name: **Juan R. Martinez** License Number: **59856**

Apprentice Name: **Steven Stackhouse** Apprentice Number: **60326**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

Casing:
BLANK PIPE & WELL SCREEN DATA

Top (ft.)	Bottom (ft.)	Description
0	0.5	(NON-NATIVE FILL) Silty Clay, dark brown, dry, no plasticity.
0.5	11	(NATIVE MATERIAL) Sand, grey, fine to medium, well-sorted, moist.
11	13	(NATIVE MATERIAL) Sandy clay, grey, moist, low plasticity.
13	25	(NATIVE MATERIAL) Sand, tan/grey, medium to coarse, well-sorted, moist. Contains quartz and chert gravel.

Dia. (in.)	New/Used	Type	Setting From/To (ft.)
No Data			

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Texas Department of Licensing and Regulation
P.O. Box 12157
Austin, TX 78711
(512) 334-5540

STATE OF TEXAS WELL REPORT for Tracking #504279

Owner:	Railroad Commission of Texas	Owner Well #:	B-5
Address:	P.O. Box 12967 Austin , TX 78711	Grid #:	66-29-4
Well Location:	Highway 71 Altair, TX 77442 1.5 Miles South of Highway 71 and Alternate Highway 90.	Latitude:	29° 32' 51.64" N
		Longitude:	096° 27' 48.14" W
Well County:	Colorado	Elevation:	193 ft. above sea level
Type of Work:	New Well	Proposed Use:	Environmental Soil Boring

Drilling Start Date: **2/4/2019** Drilling End Date: **2/8/2019**

	Diameter (in.)	Top Depth (ft.)	Bottom Depth (ft.)
Borehole:	3	0	20

Drilling Method: **Direct Push**

Borehole Completion: **Plugged**

Annular Seal Data: **No Data**

Seal Method: **Hand Mixed**

Distance to Property Line (ft.): **No Data**

Sealed By: **Driller**

Distance to Septic Field or other
concentrated contamination (ft.): **No Data**

Distance to Septic Tank (ft.): **No Data**

Method of Verification: **No Data**

Surface Completion: **No Data**

Water Level: **No Data**

Packers: **No Data**

Type of Pump: **No Data**

Well Tests: **No Test Data Specified**

Description (number of sacks & material)	Top Depth (ft.)	Bottom Depth (ft.)
	0	2
	2	20

Water Quality:	Strata Depth (ft.)	Water Type
	No Data	No Data

Chemical Analysis Made: **No**

Did the driller knowingly penetrate any strata which contained injurious constituents?: **No**

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in the report(s) being returned for completion and resubmittal.

Company Information: **Vortex Drilling**
4412 Bluemel
San Antonio, TX 78240

Driller Name: **Juan R. Martinez** License Number: **59856**

Apprentice Name: **Steven Stackhouse** Apprentice Number: **60326**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

Casing:
BLANK PIPE & WELL SCREEN DATA

Top (ft.)	Bottom (ft.)	Description
0	10	(ROAD BASE MATERIAL) Sandy silty clay, black, moist, no plasticity. Strong hydrocarbon odor.
10	17	(NATIVE MATERIAL) Sandy clay, tan/red, moist, high plasticity.
17	20	(NATIVE MATERIAL) Sand, grey, fine to medium, well-sorted, moist.

Dia. (in.)	New/Used	Type	Setting From/To (ft.)
No Data			

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Texas Department of Licensing and Regulation
P.O. Box 12157
Austin, TX 78711
(512) 334-5540

STATE OF TEXAS WELL REPORT for Tracking #504280

Owner:	Railroad Commission of Texas	Owner Well #:	B-6
Address:	P.O. Box 12967 Austin , TX 78711	Grid #:	66-29-4
Well Location:	Highway 71 Altair, TX 77442 1.5 Miles South of Highway 71 and Alternate Highway 90.	Latitude:	29° 32' 52.73" N
		Longitude:	096° 27' 37.82" W
Well County:	Colorado	Elevation:	194 ft. above sea level
Type of Work:	New Well	Proposed Use:	Environmental Soil Boring

Drilling Start Date: **2/4/2019** Drilling End Date: **2/8/2019**

	Diameter (in.)	Top Depth (ft.)	Bottom Depth (ft.)
Borehole:	3	0	20

Drilling Method: **Direct Push**

Borehole Completion: **Plugged**

Annular Seal Data: **No Data**

Seal Method: **Hand Mixed**

Distance to Property Line (ft.): **No Data**

Sealed By: **Driller**

Distance to Septic Field or other
concentrated contamination (ft.): **No Data**

Distance to Septic Tank (ft.): **No Data**

Method of Verification: **No Data**

Surface Completion: **No Data**

Water Level: **No Data**

Packers: **No Data**

Type of Pump: **No Data**

Well Tests: **No Test Data Specified**

Description (number of sacks & material)	Top Depth (ft.)	Bottom Depth (ft.)
	0	2
	2	20

Water Quality:	Strata Depth (ft.)	Water Type
	No Data	No Data

Chemical Analysis Made: **No**

Did the driller knowingly penetrate any strata which contained injurious constituents?: **No**

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in the report(s) being returned for completion and resubmittal.

Company Information: **Vortex Drilling**
4412 Bluemel
San Antonio, TX 78240

Driller Name: **Juan R. Martinez** License Number: **59856**

Apprentice Name: **Steven Stackhouse** Apprentice Number: **60326**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

Casing:
BLANK PIPE & WELL SCREEN DATA

Top (ft.)	Bottom (ft.)	Description
0	9	(ROAD BASE MATERIAL) Sandy silty clay, black, moist, no plasticity. Strong hydrocarbon odor.
9	18	(NON-NATIVE FILL) Sand with gravel, grey, moist, poorly sorted.
18	18.5	(NATIVE MATERIAL) Sand, grey, fine to medium, well-sorted, moist.
18.5	20	(NATIVE MATERIAL) Sand, grey, fine to medium, well-sorted, moist.

Dia. (in.)	New/Used	Type	Setting From/To (ft.)
No Data			

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Texas Department of Licensing and Regulation
P.O. Box 12157
Austin, TX 78711
(512) 334-5540

STATE OF TEXAS WELL REPORT for Tracking #504285

Owner:	Railroad Commission of Texas	Owner Well #:	B-7
Address:	P.O. Box 12967 Austin , TX 78711	Grid #:	66-29-4
Well Location:	Highway 71 Altair, TX 77442 1.5 Miles South of Highway 71 and Alternate Highway 90.	Latitude:	29° 32' 53.08" N
		Longitude:	096° 27' 32.85" W
Well County:	Colorado	Elevation:	210 ft. above sea level
Type of Work:	New Well	Proposed Use:	Environmental Soil Boring

Drilling Start Date: **2/4/2019** Drilling End Date: **2/8/2019**

	Diameter (in.)	Top Depth (ft.)	Bottom Depth (ft.)
Borehole:	3	0	30

Drilling Method: **Direct Push**

Borehole Completion: **Plugged**

Annular Seal Data: **No Data**

Seal Method: **Hand Mixed**

Distance to Property Line (ft.): **No Data**

Sealed By: **Driller**

Distance to Septic Field or other
concentrated contamination (ft.): **No Data**

Distance to Septic Tank (ft.): **No Data**

Method of Verification: **No Data**

Surface Completion: **No Data**

Water Level: **No Data**

Packers: **No Data**

Type of Pump: **No Data**

Well Tests: **No Test Data Specified**

Description (number of sacks & material)	Top Depth (ft.)	Bottom Depth (ft.)
	0	2
	2	30

Water Quality:	Strata Depth (ft.)	Water Type
	No Data	No Data

Chemical Analysis Made: **No**

Did the driller knowingly penetrate any strata which contained injurious constituents?: **No**

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in the report(s) being returned for completion and resubmittal.

Company Information: **Vortex Drilling**
4412 Bluemel
San Antonio, TX 78240

Driller Name: **Juan R. Martinez** License Number: **59856**

Apprentice Name: **Steven Stackhouse** Apprentice Number: **60326**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

Casing:
BLANK PIPE & WELL SCREEN DATA

Top (ft.)	Bottom (ft.)	Description
0	24.5	(ROAD BASE MATERIAL) Sandy silty clay, black, moist, no plasticity. Strong hydrocarbon odor.
24.5	29	(NATIVE MATERIAL) Sand, tan/grey, medium to coarse, well-sorted, moist. Contains quartz and chert gravel.
29	30	(NATIVE MATERIAL) Sand, grey, fine to medium, well-sorted, moist.

Dia. (in.)	New/Used	Type	Setting From/To (ft.)
No Data			

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Texas Department of Licensing and Regulation
P.O. Box 12157
Austin, TX 78711
(512) 334-5540

STATE OF TEXAS WELL REPORT for Tracking #504289

Owner:	Railroad Commission of Texas	Owner Well #:	B-8
Address:	P.O. Box 12967 Austin , TX 78711	Grid #:	66-29-4
Well Location:	Highway 71 Altair, TX 77442 1.5 Miles South of Highway 71 and Alternate Highway 90.	Latitude:	29° 32' 56.5" N
		Longitude:	096° 27' 33.7" W
Well County:	Colorado	Elevation:	211 ft. above sea level
Type of Work:	New Well	Proposed Use:	Environmental Soil Boring

Drilling Start Date: **2/4/2019** Drilling End Date: **2/8/2019**

	Diameter (in.)	Top Depth (ft.)	Bottom Depth (ft.)
Borehole:	3	0	25

Drilling Method: **Direct Push**

Borehole Completion: **Plugged**

Annular Seal Data: **No Data**

Seal Method: **Hand Mixed**

Distance to Property Line (ft.): **No Data**

Sealed By: **Driller**

Distance to Septic Field or other
concentrated contamination (ft.): **No Data**

Distance to Septic Tank (ft.): **No Data**

Method of Verification: **No Data**

Surface Completion: **No Data**

Water Level: **No Data**

Packers: **No Data**

Type of Pump: **No Data**

Well Tests: **No Test Data Specified**

Description (number of sacks & material)	Top Depth (ft.)	Bottom Depth (ft.)
	0	2
	2	25

Water Quality:	Strata Depth (ft.)	Water Type
	No Data	No Data

Chemical Analysis Made: **No**

Did the driller knowingly penetrate any strata which contained injurious constituents?: **No**

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in the report(s) being returned for completion and resubmittal.

Company Information: **Vortex Drilling**
4412 Bluemel
San Antonio, TX 78240

Driller Name: **Juan R. Martinez** License Number: **59856**

Apprentice Name: **Steven Stackhouse** Apprentice Number: **60326**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

Casing:
BLANK PIPE & WELL SCREEN DATA

Top (ft.)	Bottom (ft.)	Description
0	19.5	(ROAD BASE MATERIAL) Sandy silty clay, black, moist, no plasticity. Strong hydrocarbon odor.
19.5	24.5	(NATIVE MATERIAL) Sand, tan/grey, medium to coarse, well-sorted, moist. Contains quartz and chert gravel.
24.5	25	(NATIVE MATERIAL) Sand, grey, fine to medium, well-sorted, moist.

Dia. (in.)	New/Used	Type	Setting From/To (ft.)
No Data			

IMPORTANT NOTICE FOR PERSONS HAVING WELLS DRILLED CONCERNING CONFIDENTIALITY

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Texas Department of Licensing and Regulation
P.O. Box 12157
Austin, TX 78711
(512) 334-5540

STATE OF TEXAS WELL REPORT for Tracking #504291

Owner:	Railroad Commission of Texas	Owner Well #:	B-9
Address:	P.O. Box 12967 Austin , TX 78711	Grid #:	66-29-5
Well Location:	Highway 71 Altair, TX 77442	Latitude:	29° 32' 56.76" N
	1.5 Miles South of Highway 71 and Alternate Highway 90.	Longitude:	096° 27' 26.77" W
Well County:	Colorado		
Type of Work:	New Well	Proposed Use:	Environmental Soil Boring

Drilling Start Date: **2/4/2019** Drilling End Date: **2/8/2019**

	<i>Diameter (in.)</i>	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>
Borehole:	3	0	15

Drilling Method: **Direct Push**

Borehole Completion: **Plugged**

Annular Seal Data: **No Data**

Seal Method: **Hand Mixed**

Distance to Property Line (ft.): **No Data**

Sealed By: **Driller**

Distance to Septic Field or other
concentrated contamination (ft.): **No Data**

Distance to Septic Tank (ft.): **No Data**

Method of Verification: **No Data**

Surface Completion: **No Data**

Water Level: **No Data**

Packers: **No Data**

Type of Pump: **No Data**

Well Tests: **No Test Data Specified**

<i>Description (number of sacks & material)</i>	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>
	0	2
	2	15

Water Quality:	Strata Depth (ft.)	Water Type
	No Data	No Data

Chemical Analysis Made: **No**

Did the driller knowingly penetrate any strata which contained injurious constituents?: **No**

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in the report(s) being returned for completion and resubmittal.

Company Information: **Vortex Drilling**

**4412 Bluemel
San Antonio, TX 78240**

Driller Name: **Juan R. Martinez** License Number: **59856**

Apprentice Name: **Steven Stackhouse** Apprentice Number: **60326**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

Casing:
BLANK PIPE & WELL SCREEN DATA

Top (ft.)	Bottom (ft.)	Description
0	6.5	(ROAD BASE MATERIAL) Sandy silty clay, black, moist, no plasticity. Strong hydrocarbon odor.
6.5	7	(NON-NATIVE FILL) Sand, grey/tan, poorly sorted, wet, coarse.
7	14	(NATIVE MATERIAL) Sandy clay, tan/orange, moist, moderate plasticity.
14	15	(NATIVE MATERIAL) Sand, tan/grey, medium to coarse, well-sorted, moist. Contains quartz and chert gravel.

Dia. (in.)	New/Used	Type	Setting From/To (ft.)
No Data			

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**Texas Department of Licensing and Regulation
P.O. Box 12157
Austin, TX 78711
(512) 334-5540**

STATE OF TEXAS WELL REPORT for Tracking #504296

Owner:	Railroad Commission of Texas	Owner Well #:	B-10
Address:	P.O. Box 12967 Austin , TX 78711	Grid #:	66-29-5
Well Location:	Highway 71 Altair, TX 77442 1.5 Miles South of Highway 71 and Alternate Highway 90.	Latitude:	29° 32' 58.1" N
		Longitude:	096° 27' 24.81" W
Well County:	Colorado	Elevation:	197 ft. above sea level
Type of Work:	New Well	Proposed Use:	Environmental Soil Boring

Drilling Start Date: **2/4/2019** Drilling End Date: **2/8/2019**

	Diameter (in.)	Top Depth (ft.)	Bottom Depth (ft.)
Borehole:	3	0	15

Drilling Method: **Direct Push**

Borehole Completion: **Plugged**

Annular Seal Data: **No Data**

Seal Method: **Hand Mixed**

Distance to Property Line (ft.): **No Data**

Sealed By: **Driller**

Distance to Septic Field or other
concentrated contamination (ft.): **No Data**

Distance to Septic Tank (ft.): **No Data**

Method of Verification: **No Data**

Surface Completion: **No Data**

Water Level: **No Data**

Packers: **No Data**

Type of Pump: **No Data**

Well Tests: **No Test Data Specified**

Description (number of sacks & material)	Top Depth (ft.)	Bottom Depth (ft.)
	0	2
	2	15

Water Quality:	<i>Strata Depth (ft.)</i>	<i>Water Type</i>
	No Data	No Data

Chemical Analysis Made: **No**

Did the driller knowingly penetrate any strata which contained injurious constituents?: **No**

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in the report(s) being returned for completion and resubmittal.

Company Information: **Vortex Drilling**

**4412 Bluemel
San Antonio, TX 78240**

Driller Name: **Juan R. Martinez** License Number: **59856**

Apprentice Name: **Steven Stackhouse** Apprentice Number: **60326**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

Casing:
BLANK PIPE & WELL SCREEN DATA

<i>Top (ft.)</i>	<i>Bottom (ft.)</i>	<i>Description</i>
0	0.5	(TOPSOIL) Silty sand, tan, slightly moist, with organic material.
0.5	7.5	(ROAD BASE MATERIAL) Sandy silty clay, black, moist, no plasticity. Strong hydrocarbon odor.
7.5	11.5	(NATIVE MATERIAL) Sandy clay, tan/orange, moist, moderate plasticity.
11.5	15	(NATIVE MATERIAL) Sandy clay, white/tan, hard, with nodules of friable white clay. Low plasticity.

<i>Dia. (in.)</i>	<i>New/Used</i>	<i>Type</i>	<i>Setting From/To (ft.)</i>
No Data			

IMPORTANT NOTICE FOR PERSONS HAVING WELLS DRILLED CONCERNING CONFIDENTIALITY

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Texas Department of Licensing and Regulation
P.O. Box 12157
Austin, TX 78711
(512) 334-5540

STATE OF TEXAS WELL REPORT for Tracking #504298

Owner:	Railroad Commission of Texas	Owner Well #:	B-11
Address:	P.O. Box 12967 Austin , TX 78711	Grid #:	66-29-4
Well Location:	Highway 71 Altair, TX 77442 1.5 Miles South of Highway 71 and Alternate Highway 90.	Latitude:	29° 33' 06.7" N
		Longitude:	096° 27' 41.49" W
Well County:	Colorado	Elevation:	194 ft. above sea level
Type of Work:	New Well	Proposed Use:	Environmental Soil Boring

Drilling Start Date: **2/4/2019** Drilling End Date: **2/8/2019**

	Diameter (in.)	Top Depth (ft.)	Bottom Depth (ft.)
Borehole:	3	0	15

Drilling Method: **Direct Push**

Borehole Completion: **Plugged**

Annular Seal Data: **No Data**

Seal Method: **Hand Mixed**

Distance to Property Line (ft.): **No Data**

Sealed By: **Driller**

Distance to Septic Field or other
concentrated contamination (ft.): **No Data**

Distance to Septic Tank (ft.): **No Data**

Method of Verification: **No Data**

Surface Completion: **No Data**

Water Level: **No Data**

Packers: **No Data**

Type of Pump: **No Data**

Well Tests: **No Test Data Specified**

Description (number of sacks & material)	Top Depth (ft.)	Bottom Depth (ft.)
	0	2
	2	15

Water Quality:	Strata Depth (ft.)	Water Type
	No Data	No Data

Chemical Analysis Made: **No**

Did the driller knowingly penetrate any strata which contained injurious constituents?: **No**

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in the report(s) being returned for completion and resubmittal.

Company Information: **Vortex Drilling**
4412 Bluemel
San Antonio, TX 78240

Driller Name: **Juan R. Martinez** License Number: **59856**

Apprentice Name: **Steven Stackhouse** Apprentice Number: **60326**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

Casing:
BLANK PIPE & WELL SCREEN DATA

Top (ft.)	Bottom (ft.)	Description
0	2	(NON-NATIVE FILL) Sand with gravel, tan/orange, moist, poorly sorted.
2	15	(NATIVE MATERIAL) Sandy clay, tan/grey, moist, moderate plasticity.

Dia. (in.)	New/Used	Type	Setting From/To (ft.)
No Data			

IMPORTANT NOTICE FOR PERSONS HAVING WELLS DRILLED CONCERNING CONFIDENTIALITY

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Texas Department of Licensing and Regulation
P.O. Box 12157
Austin, TX 78711
(512) 334-5540

STATE OF TEXAS WELL REPORT for Tracking #504300

Owner:	Railroad Commission of Texas	Owner Well #:	B-12
Address:	P.O. Box 12967 Austin , TX 78711	Grid #:	66-29-4
Well Location:	Highway 71 Altair, TX 77442 1.5 Miles South of Highway 71 and Alternate Highway 90.	Latitude:	29° 33' 04.91" N
		Longitude:	096° 27' 39.09" W
Well County:	Colorado	Elevation:	197 ft. above sea level
Type of Work:	New Well	Proposed Use:	Environmental Soil Boring

Drilling Start Date: **2/4/2019** Drilling End Date: **2/8/2019**

	Diameter (in.)	Top Depth (ft.)	Bottom Depth (ft.)
Borehole:	3	0	20

Drilling Method: **Direct Push**

Borehole Completion: **Plugged**

Annular Seal Data: **No Data**

Seal Method: **Hand Mixed**

Distance to Property Line (ft.): **No Data**

Sealed By: **Driller**

Distance to Septic Field or other
concentrated contamination (ft.): **No Data**

Distance to Septic Tank (ft.): **No Data**

Method of Verification: **No Data**

Surface Completion: **No Data**

Water Level: **No Data**

Packers: **No Data**

Type of Pump: **No Data**

Well Tests: **No Test Data Specified**

Description (number of sacks & material)	Top Depth (ft.)	Bottom Depth (ft.)
	0	2
	2	20

Water Quality:	Strata Depth (ft.)	Water Type
	No Data	No Data

Chemical Analysis Made: **No**

Did the driller knowingly penetrate any strata which contained injurious constituents?: **No**

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in the report(s) being returned for completion and resubmittal.

Company Information: **Vortex Drilling**
4412 Bluemel
San Antonio, TX 78240

Driller Name: **Juan R. Martinez** License Number: **59856**

Apprentice Name: **Steven Stackhouse** Apprentice Number: **60326**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

Casing:
BLANK PIPE & WELL SCREEN DATA

Top (ft.)	Bottom (ft.)	Description
0	3	(NON-NATIVE FILL) Sand with gravel, tan/orange, moist, poorly sorted.
3	20	(NATIVE MATERIAL) Sandy clay, tan/grey, moist, moderate plasticity.
15	20	Interbedded with sands after 15'.

Dia. (in.)	New/Used	Type	Setting From/To (ft.)
No Data			

IMPORTANT NOTICE FOR PERSONS HAVING WELLS DRILLED CONCERNING CONFIDENTIALITY

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Please include the report's Tracking Number on your written request.

Texas Department of Licensing and Regulation
P.O. Box 12157
Austin, TX 78711
(512) 334-5540

STATE OF TEXAS WELL REPORT for Tracking #504308

Owner:	Railroad Commission of Texas	Owner Well #:	B-13
Address:	P.O. Box 12967 Austin , TX 78711	Grid #:	66-29-4
Well Location:	Highway 71 Altair, TX 77442 1.5 Miles South of Highway 71 and Alternate Highway 90.	Latitude:	29° 33' 04.66" N
		Longitude:	096° 27' 33.68" W
Well County:	Colorado	Elevation:	204 ft. above sea level
Type of Work:	New Well	Proposed Use:	Environmental Soil Boring

Drilling Start Date: **2/4/2019** Drilling End Date: **2/8/2019**

	Diameter (in.)	Top Depth (ft.)	Bottom Depth (ft.)
Borehole:	3	0	20

Drilling Method: **Direct Push**

Borehole Completion: **Plugged**

Annular Seal Data: **No Data**

Seal Method: **Hand Mixed**

Distance to Property Line (ft.): **No Data**

Sealed By: **Driller**

Distance to Septic Field or other
concentrated contamination (ft.): **No Data**

Distance to Septic Tank (ft.): **No Data**

Method of Verification: **No Data**

Surface Completion: **No Data**

Water Level: **No Data**

Packers: **No Data**

Type of Pump: **No Data**

Well Tests: **No Test Data Specified**

Description (number of sacks & material)	Top Depth (ft.)	Bottom Depth (ft.)
	0	2
	2	20

Water Quality:	Strata Depth (ft.)	Water Type
	No Data	No Data

Chemical Analysis Made: **No**

Did the driller knowingly penetrate any strata which contained injurious constituents?: **No**

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in the report(s) being returned for completion and resubmittal.

Company Information: **Vortex Drilling**
4412 Bluemel
San Antonio, TX 78240

Driller Name: **Juan R. Martinez** License Number: **59856**

Apprentice Name: **Steven Stackhouse** Apprentice Number: **60326**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

Casing:
BLANK PIPE & WELL SCREEN DATA

Top (ft.)	Bottom (ft.)	Description
0	17	(ROAD BASE MATERIAL) Sandy silty clay, black, moist, no plasticity. Strong hydrocarbon odor.
17	18.5	(NATIVE MATERIAL) Sand, grey, fine to medium, well-sorted, moist.
18.5	20	(NATIVE MATERIAL) Sandy clay, tan/grey, moist, moderate plasticity.

Dia. (in.)	New/Used	Type	Setting From/To (ft.)
No Data			

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Texas Department of Licensing and Regulation
P.O. Box 12157
Austin, TX 78711
(512) 334-5540

STATE OF TEXAS WELL REPORT for Tracking #504313

Owner:	Railroad Commission of Texas	Owner Well #:	B-14
Address:	P.O. Box 12967 Austin , TX 78711	Grid #:	66-29-4
Well Location:	Highway 71 Altair, TX 77442 1.5 Miles South of Highway 71 and Alternate Highway 90.	Latitude:	29° 33' 07.01" N
		Longitude:	096° 27' 38" W
		Elevation:	207 ft. above sea level
Well County:	Colorado		
Type of Work:	New Well		
	Proposed Use: Environmental Soil Boring		

Drilling Start Date: **2/4/2019** Drilling End Date: **2/8/2019**

	<i>Diameter (in.)</i>	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>
Borehole:	3	0	15

Drilling Method: **Direct Push**

Borehole Completion: **Plugged**

Annular Seal Data: **No Data**

Seal Method: **Hand Mixed**

Distance to Property Line (ft.): **No Data**

Sealed By: **Driller**

Distance to Septic Field or other
concentrated contamination (ft.): **No Data**

Distance to Septic Tank (ft.): **No Data**

Method of Verification: **No Data**

Surface Completion: **No Data**

Water Level: **No Data**

Packers: **No Data**

Type of Pump: **No Data**

Well Tests: **No Test Data Specified**

<i>Description (number of sacks & material)</i>	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>
	0	2
	2	15

Water Quality:	Strata Depth (ft.)	Water Type
	No Data	No Data

Chemical Analysis Made: **No**

Did the driller knowingly penetrate any strata which contained injurious constituents?: **No**

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in the report(s) being returned for completion and resubmittal.

Company Information: **Vortex Drilling**
4412 Bluemel
San Antonio, TX 78240

Driller Name: **Juan R. Martinez** License Number: **59856**

Apprentice Name: **Steven Stackhouse** Apprentice Number: **60326**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

Casing:
BLANK PIPE & WELL SCREEN DATA

Top (ft.)	Bottom (ft.)	Description
0	9	(ROAD BASE MATERIAL) Sandy silty clay, black, moist, no plasticity. Strong hydrocarbon odor.
9	15	(NATIVE MATERIAL) Sand, tan/orange, fine to medium, poorly-sorted, moist.

Dia. (in.)	New/Used	Type	Setting From/To (ft.)
No Data			

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Texas Department of Licensing and Regulation
P.O. Box 12157
Austin, TX 78711
(512) 334-5540

STATE OF TEXAS WELL REPORT for Tracking #504314

Owner:	Railroad Commission of Texas	Owner Well #:	B-15
Address:	P.O. Box 12967 Austin , TX 78711	Grid #:	66-29-4
Well Location:	Highway 71 Altair, TX 77442 1.5 Miles South of Highway 71 and Alternate Highway 90.	Latitude:	29° 33' 01.94" N
		Longitude:	096° 27' 39.01" W
Well County:	Colorado	Elevation:	207 ft. above sea level
Type of Work:	New Well	Proposed Use:	Environmental Soil Boring

Drilling Start Date: **2/4/2019** Drilling End Date: **2/8/2019**

	Diameter (in.)	Top Depth (ft.)	Bottom Depth (ft.)
Borehole:	3	0	20

Drilling Method: **Direct Push**

Borehole Completion: **Plugged**

Annular Seal Data: **No Data**

Seal Method: **Hand Mixed**

Distance to Property Line (ft.): **No Data**

Sealed By: **Driller**

Distance to Septic Field or other
concentrated contamination (ft.): **No Data**

Distance to Septic Tank (ft.): **No Data**

Method of Verification: **No Data**

Surface Completion: **No Data**

Water Level: **No Data**

Packers: **No Data**

Type of Pump: **No Data**

Well Tests: **No Test Data Specified**

Description (number of sacks & material)	Top Depth (ft.)	Bottom Depth (ft.)
	0	2
	2	20

Water Quality:	Strata Depth (ft.)	Water Type
	No Data	No Data

Chemical Analysis Made: **No**

Did the driller knowingly penetrate any strata which contained injurious constituents?: **No**

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in the report(s) being returned for completion and resubmittal.

Company Information: **Vortex Drilling**
4412 Bluemel
San Antonio, TX 78240

Driller Name: **Juan R. Martinez** License Number: **59856**

Apprentice Name: **Steven Stackhouse** Apprentice Number: **60326**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

Casing:
BLANK PIPE & WELL SCREEN DATA

Top (ft.)	Bottom (ft.)	Description
0	12	(ROAD BASE MATERIAL) Sandy silty clay, black, moist, no plasticity. Strong hydrocarbon odor.
12	20	(NATIVE MATERIAL) Sand, grey, medium to coarse, poorly-sorted, moist.

Dia. (in.)	New/Used	Type	Setting From/To (ft.)
No Data			

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Texas Department of Licensing and Regulation
P.O. Box 12157
Austin, TX 78711
(512) 334-5540

STATE OF TEXAS WELL REPORT for Tracking #504315

Owner:	Railroad Commission of Texas	Owner Well #:	B-16
Address:	P.O. Box 12967 Austin , TX 78711	Grid #:	66-29-4
Well Location:	Highway 71 Altair, TX 77442	Latitude:	29° 33' 05.11" N
	1.5 Miles South of Highway 71 and Alternate Highway 90.	Longitude:	096° 27' 46.33" W
Well County:	Colorado		
Type of Work:	New Well	Proposed Use:	Environmental Soil Boring

Drilling Start Date: **2/4/2019** Drilling End Date: **2/8/2019**

	<i>Diameter (in.)</i>	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>
Borehole:	3	0	15

Drilling Method: **Direct Push**

Borehole Completion: **Plugged**

Annular Seal Data: **No Data**

Seal Method: **Hand Mixed**

Distance to Property Line (ft.): **No Data**

Sealed By: **Driller**

Distance to Septic Field or other
concentrated contamination (ft.): **No Data**

Distance to Septic Tank (ft.): **No Data**

Method of Verification: **No Data**

Surface Completion: **No Data**

Water Level: **No Data**

Packers: **No Data**

Type of Pump: **No Data**

Well Tests: **No Test Data Specified**

<i>Description (number of sacks & material)</i>	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>
	0	2
	2	15

Water Quality:	Strata Depth (ft.)	Water Type
	No Data	No Data

Chemical Analysis Made: **No**

Did the driller knowingly penetrate any strata which contained injurious constituents?: **No**

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in the report(s) being returned for completion and resubmittal.

Company Information: **Vortex Drilling**
4412 Bluemel
San Antonio, TX 78240

Driller Name: **Juan R. Martinez** License Number: **59856**

Apprentice Name: **Steven Stackhouse** Apprentice Number: **60326**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

Casing:
BLANK PIPE & WELL SCREEN DATA

Top (ft.)	Bottom (ft.)	Description
0	2.5	(ROAD BASE MATERIAL) Sandy silty clay, black, moist, no plasticity. Strong hydrocarbon odor.
2.5	9	(NATIVE MATERIAL) Sand, grey/tan, medium to coarse, poorly-sorted, moist.
9	15	(NATIVE MATERIAL) Sandy clay, tan/grey, moist, moderate plasticity.

Dia. (in.)	New/Used	Type	Setting From/To (ft.)
No Data			

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Texas Department of Licensing and Regulation
P.O. Box 12157
Austin, TX 78711
(512) 334-5540

STATE OF TEXAS WELL REPORT for Tracking #504317

Owner:	Railroad Commission of Texas	Owner Well #:	B-17
Address:	P.O. Box 12967 Austin , TX 78711	Grid #:	66-29-5
Well Location:	Highway 71 Altair, TX 77442 1.5 Miles South of Highway 71 and Alternate Highway 90.	Latitude:	29° 33' 05.05" N
		Longitude:	096° 27' 25.88" W
Well County:	Colorado	Elevation:	193 ft. above sea level
Type of Work:	New Well	Proposed Use:	Environmental Soil Boring

Drilling Start Date: **2/4/2019** Drilling End Date: **2/8/2019**

	Diameter (in.)	Top Depth (ft.)	Bottom Depth (ft.)
Borehole:	3	0	15

Drilling Method: **Direct Push**

Borehole Completion: **Plugged**

Annular Seal Data: **No Data**

Seal Method: **Hand Mixed**

Distance to Property Line (ft.): **No Data**

Sealed By: **Driller**

Distance to Septic Field or other
concentrated contamination (ft.): **No Data**

Distance to Septic Tank (ft.): **No Data**

Method of Verification: **No Data**

Surface Completion: **No Data**

Water Level: **No Data**

Packers: **No Data**

Type of Pump: **No Data**

Well Tests: **No Test Data Specified**

Description (number of sacks & material)	Top Depth (ft.)	Bottom Depth (ft.)
	0	2
	2	15

Water Quality:	Strata Depth (ft.)	Water Type
	No Data	No Data

Chemical Analysis Made: **No**

Did the driller knowingly penetrate any strata which contained injurious constituents?: **No**

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in the report(s) being returned for completion and resubmittal.

Company Information: **Vortex Drilling**

**4412 Bluemel
San Antonio, TX 78240**

Driller Name: **Juan R. Martinez** License Number: **59856**

Apprentice Name: **Steven Stackhouse** Apprentice Number: **60326**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

Casing:
BLANK PIPE & WELL SCREEN DATA

Top (ft.)	Bottom (ft.)	Description
0	2.5	(ROAD BASE MATERIAL) Sandy silty clay, black, moist, no plasticity. Strong hydrocarbon odor.
2.5	8.5	(NON-NATIVE MATERIAL) Sandy clay, white/tan, hard, with nodules of friable white clay. Low plasticity. Possibly drilling mud.
8.5	11	(NON-NATIVE MATERIAL) Clay, white, hard, friable. Low plasticity. Possibly drilling mud.
11	15	(NATIVE MATERIAL) Sand, tan/grey, medium to coarse, well-sorted, moist. Contains significant quartz and chert gravel.

Dia. (in.)	New/Used	Type	Setting From/To (ft.)
No Data			

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**Texas Department of Licensing and Regulation
P.O. Box 12157
Austin, TX 78711
(512) 334-5540**

STATE OF TEXAS WELL REPORT for Tracking #504319

Owner:	Railroad Commission of Texas	Owner Well #:	B-18
Address:	P.O. Box 12967 Austin , TX 78711	Grid #:	66-29-5
Well Location:	Highway 71 Altair, TX 77442 1.5 Miles South of Highway 71 and Alternate Highway 90.	Latitude:	29° 33' 05.51" N
		Longitude:	096° 27' 28.57" W
Well County:	Colorado	Elevation:	195 ft. above sea level
Type of Work:	New Well	Proposed Use:	Environmental Soil Boring

Drilling Start Date: **2/4/2019** Drilling End Date: **2/8/2019**

	Diameter (in.)	Top Depth (ft.)	Bottom Depth (ft.)
Borehole:	3	0	15

Drilling Method: **Direct Push**

Borehole Completion: **Plugged**

Annular Seal Data: **No Data**

Seal Method: **Hand Mixed**

Distance to Property Line (ft.): **No Data**

Sealed By: **Driller**

Distance to Septic Field or other
concentrated contamination (ft.): **No Data**

Distance to Septic Tank (ft.): **No Data**

Method of Verification: **No Data**

Surface Completion: **No Data**

Water Level: **No Data**

Packers: **No Data**

Type of Pump: **No Data**

Well Tests: **No Test Data Specified**

Description (number of sacks & material)	Top Depth (ft.)	Bottom Depth (ft.)
	0	2
	2	15

Water Quality:	Strata Depth (ft.)	Water Type
	No Data	No Data

Chemical Analysis Made: **No**

Did the driller knowingly penetrate any strata which contained injurious constituents?: **No**

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in the report(s) being returned for completion and resubmittal.

Company Information: **Vortex Drilling**

**4412 Bluemel
San Antonio, TX 78240**

Driller Name: **Juan R. Martinez** License Number: **59856**

Apprentice Name: **Steven Stackhouse** Apprentice Number: **60326**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

Casing:
BLANK PIPE & WELL SCREEN DATA

Top (ft.)	Bottom (ft.)	Description
0	2.5	(ROAD BASE MATERIAL) Sandy silty clay, black, moist, no plasticity. Strong hydrocarbon odor.
2.5	7.5	(NON-NATIVE MATERIAL) Sandy clay, grey/tan, low plasticity, dry.
7.5	14.5	(NON-NATIVE MATERIAL) Clay, white, hard, friable. Low plasticity. Possibly drilling mud.
14.5	15	(NATIVE MATERIAL) Sand, tan/grey, medium to coarse, well-sorted, moist. Contains significant quartz and chert gravel.

Dia. (in.)	New/Used	Type	Setting From/To (ft.)
No Data			

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**Texas Department of Licensing and Regulation
P.O. Box 12157
Austin, TX 78711
(512) 334-5540**

STATE OF TEXAS WELL REPORT for Tracking #504320

Owner:	Railroad Commission of Texas	Owner Well #:	B-19
Address:	P.O. Box 12967 Austin , TX 78711	Grid #:	66-29-5
Well Location:	Highway 71 Altair, TX 77442 1.5 Miles South of Highway 71 and Alternate Highway 90.	Latitude:	29° 33' 04" N
		Longitude:	096° 27' 25.82" W
Well County:	Colorado	Elevation:	194 ft. above sea level
Type of Work:	New Well	Proposed Use:	Environmental Soil Boring

Drilling Start Date: **2/4/2019** Drilling End Date: **2/8/2019**

	Diameter (in.)	Top Depth (ft.)	Bottom Depth (ft.)
Borehole:	3	0	15

Drilling Method: **Direct Push**

Borehole Completion: **Plugged**

Annular Seal Data: **No Data**

Seal Method: **Hand Mixed**

Distance to Property Line (ft.): **No Data**

Sealed By: **Driller**

Distance to Septic Field or other
concentrated contamination (ft.): **No Data**

Distance to Septic Tank (ft.): **No Data**

Method of Verification: **No Data**

Surface Completion: **No Data**

Water Level: **No Data**

Packers: **No Data**

Type of Pump: **No Data**

Well Tests: **No Test Data Specified**

Description (number of sacks & material)	Top Depth (ft.)	Bottom Depth (ft.)
	0	2
	2	15

Water Quality:	Strata Depth (ft.)	Water Type
	No Data	No Data

Chemical Analysis Made: **No**

Did the driller knowingly penetrate any strata which contained injurious constituents?: **No**

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in the report(s) being returned for completion and resubmittal.

Company Information: **Vortex Drilling**

**4412 Bluemel
San Antonio, TX 78240**

Driller Name: **Juan R. Martinez** License Number: **59856**

Apprentice Name: **Steven Stackhouse** Apprentice Number: **60326**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

Casing:
BLANK PIPE & WELL SCREEN DATA

Top (ft.)	Bottom (ft.)	Description
0	4.5	(ROAD BASE MATERIAL) Sandy silty clay, black, moist, no plasticity. Strong hydrocarbon odor.
4.5	6	(NON-NATIVE MATERIAL) Sandy clay, grey/tan, low plasticity, dry.
6	14.5	(NATIVE MATERIAL) Sandy clay, tan/orange, moist, moderate plasticity.
14.5	15	(NATIVE MATERIAL) Sandy clay, white/tan, hard, with nodules of friable white clay. Low plasticity.

Dia. (in.)	New/Used	Type	Setting From/To (ft.)
No Data			

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Please include the report's Tracking Number on your written request.

Texas Department of Licensing and Regulation
P.O. Box 12157
Austin, TX 78711
(512) 334-5540

Appendix C

Tables

**Site Investigation Report
Boundary Ventures, Inc.
Kenneth Owens Property Facility
Colorado County, Texas
Terracon Project No. 96187C01**

Analytical Tables
Boundary Ventures
Altair, Colorado County, Texas

Notes

1. In the interest of report brevity, the VOC analytical data for surface water is included with the Groundwater VOC data.
2. Unless noted, comparison screening values are from *Constituents of Concern Guideline for Substance Released (Version 11, dated July 20, 2015)* or *Tier 1 Texas Risk Reduction Program (TRRP) Protective Concentration Level (PCLs) tables* (30TAC350).
3. Other Applicable Values - Where noted other applicable values are used for screening. The source of these other applicable values include Statewide Rule (SWR) 8 (16TAC3.8), TRRP Medium Specific Background Values, site-specific calculated TPH mixture PCLs, and common crop sustenance values. Refer to

mg/kg - milligrams/kilograms

mg/L - milligrams/liter

SU - standard units

pCi/g - Average Picocuries/gram

µmhos/cm - micro mhos/cm

Qualifiers:

- T8: *Sample(s) received past/too close to holding time expiration.*
- B: *The same analyte is found in the associated blank.*
- J: *The identification of the analyte is acceptable; the reported value is an estimate.*
- J1: *Surrogate recovery limits have been exceeded; values are outside upper control limits.*
- J2: *Surrogate recovery limits have been exceeded; values are outside lower control limits*
- J3: *The associated batch QC was outside the established quality control range for precision.*
- J4: *The associated batch QC was outside the established quality control range for accuracy*
- J5: *The sample matrix interfered with the ability to make any accurate determination; spike value is high*
- J6: *The sample matrix interfered with the ability to make any accurate determination; spike value is low*
- J7: *Surrogate recovery cannot be used for control limit evaluation due to dilution failures indicate matrix interference.*
- P1: *RPD value not applicable for sample concentrations less than 5 times the reporting limit.*
- T8: *Sample(s) received past/too close to holding time expiration.*
- V: *The sample concentration is too high to evaluate accurate spike recoveries.*



TABLE 1
TPH-Soil Analytical Results
Boundary Ventures
Altair, Colorado County, Texas

Method			TCEQ Method 1005		TCEQ Method 1005		TCEQ Method 1005		TCEQ Method 1005	
Analyte			TPH C6 - C12		TPH C12 - C28		TPH C28 - C35		TPH C6 - C35	
Units			mg/Kg		mg/Kg		mg/Kg		mg/Kg	
Lab Sample ID	Client Sample ID	Date Collected	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
L1067476-01	B-1 (4'-5')	02/04/2019	<53.3		<53.3		<53.3		<53.3	
L1067476-02	B-1 (14'-15')	02/04/2019	<53.2		<53.2		<53.2		<53.2	
L1067476-03	B-2 (1'-2')	02/04/2019	<62.8		276		31.2	J	308	
L1067476-04	B-2 (14'-15')	02/04/2019	<62.0		<62.0		<62.0		<62.0	
L1067476-05	B-3 (1'-2')	02/04/2019	528		11800		303		12600	
L1067476-06	B-3 (9-10')	02/04/2019	<52.0		<52.0		<52.0		<52.0	
L1067476-07	B-4 (14-15')	02/04/2019	<55.8		<55.8		<55.8		<55.8	
L1067476-08	B-4 (19-20')	02/04/2019	<56.2		<56.2		<56.2		<56.2	
L1067476-09	B-5 (4'-5')	02/04/2019	434		4340		107		4890	
L1067476-10	B-5 (17'-18')	02/04/2019	<55.4		<55.4		<55.4		<55.4	
L1067476-11	B-6 (5'-6')	02/04/2019	2380		15000		321		17800	
L1067476-12	B-6 (8'-9')	02/04/2019	<57.3		154		<57.3		154	
L1067476-13	B-7 (10-11')	02/05/2019	4040		27100		433		31500	
L1067476-14	B-7 (24-25')	02/05/2019	231		2030		40.4	J	2300	
L1067476-15	B-8 (9-10')	02/05/2019	4090		26000		316		26000	
L1067476-16	B-8 (24-25')	02/05/2019	<53.1		<53.1		<53.1		<53.1	
L1067476-19	B-9 (4-5')	02/05/2019	1350		8600		174		10100	
L1067476-20	B-9 (14-15')	02/05/2019	<57.0		<57.0		<57.0		<57.0	
L1067476-21	B-10 (1-2')	02/05/2019	77.5		1300		39.1	J	1420	
L1067476-22	B-10 (14-15')	02/05/2019	<58.5		<58.5		<58.5		<58.5	
L1068318-21	B-11 (1-2')	02/06/2019	<54.1		<54.1		<54.1		<54.1	
L1068318-22	B-11 (10-11')	02/06/2019	<57.1		<57.1		<57.1		<57.1	
L1068318-23	B-12 (4-5')	02/06/2019	<59.7		<59.7		<59.7		<59.7	
L1068318-24	B-12 (19-20')	02/06/2019	<57.9		<57.9		<57.9		<57.9	
L1068318-27	B-13 (14-15')	02/06/2019	1110		7920		311	J	9160	
L1068318-28	B-13 (16-17')	02/06/2019	70.7		305		<63.6		377	
L1068318-11	B-14 (9-10')	02/06/2019	3920		29600		528		34100	
L1068318-12	B-14 (13-14')	02/06/2019	<59.6		<59.6		<59.6		<59.6	
TX Table 1 Tier 1 Residential Total Soil Comb 0_5 Acre 4/2018			1600		2300		2300			
Other Applicable Values									16000*	

TABLE 1
TPH-Soil Analytical Results
Boundary Ventures
Altair, Colorado County, Texas

Method			TCEQ Method 1005		TCEQ Method 1005		TCEQ Method 1005		TCEQ Method 1005	
Analyte			TPH C6 - C12		TPH C12 - C28		TPH C28 - C35		TPH C6 - C35	
Units			mg/Kg		mg/Kg		mg/Kg		mg/Kg	
Lab Sample ID	Client Sample ID	Date Collected	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
L1068318-13	B-15 (5-6')	02/06/2019	3330		23700		434		27500	
L1068318-14	B-15 (19-20')	02/06/2019	<57.6		<57.6		<57.6		<57.6	
L1068318-15	B-16 (9-10')	02/06/2019	<57.4		<57.4		<57.4		<57.4	
L1068318-16	B-16 (14-15')	02/06/2019	<57.6		<57.6		<57.6		<57.6	
L1068318-19	B-17 (4-5')	02/07/2019	<59.3		<59.3		<59.3		<59.3	
L1068318-20	B-17 (11-12')	02/07/2019	<55.8		<55.8		<55.8		<55.8	
L1068318-01	B-18 (1-2')	02/07/2019	2260		18500		292		21000	
L1068318-02	B-18 (14-15)	02/07/2019	<59.8		<59.8		<59.8		<59.8	
L1068318-07	B-19 (1-2')	02/07/2019	43.9	J	1020		38.2	J	1110	
L1068318-08	B-19 (14-15')	02/07/2019	<59.1		<59.1		<59.1		<59.1	
L1068318-17	MW-9 (9-10')	02/06/2019	<53.1		<53.1		<53.1		<53.1	
L1068318-18	MW-9 (24-25')	02/06/2019	<57.1		<57.1		<57.1		<57.1	
L1068318-25	MW-10 (6-7')	02/06/2019	<58.2		<58.2		<58.2		<58.2	
L1068318-26	MW-10 (14-15')	02/06/2019	<61.0		<61.0		<61.0		<61.0	
L1068318-03	MW-11 (1-2)	02/07/2019	1200		17800		345		19400	
L1068318-04	MW-11 (20-21')	02/07/2019	<50.9		<50.9		<50.9		<50.9	
L1068318-05	MW-12 (9-10)	02/07/2019	137		1250		51.9	J	1440	
L1068318-06	MW-12 (24-25')	02/07/2019	<57.3		71.9		<57.3		71.9	
L1067476-17	MW-13 (5'-6')	02/05/2019	2330		16500		504		19300	
L1067476-18	MW-13 (14'-15')	02/05/2019	<52.3		<52.3		<52.3		<52.3	
L1073696-01	WPC-1	02/25/2019	<66.6		2210		160		2370	
L1073696-02	WPC-2	02/25/2019	<68.1		985		61.4	J	1050	
L1073696-03	WPC-3	02/25/2019	126		22100		1660		23900	
L1073696-04	WPC-4	02/25/2019	4080		31600		3020		38600	
L1075168-20	PS-1	03/01/2019	<79.0		349		59.7	J	409	
L1075168-21	PS-2	03/01/2019	332	J	12800		6420		19500	
L1075168-22	PS-3	03/01/2019	<83.2		225		39.6	J	265	
L1075168-23	PS-4	03/01/2019	99.5		1720		197		2020	
L1075168-24	PS-5	03/01/2019	142		4650		153		4950	
L1068318-09	DUPLICATE B-19 (1'-2')	02/07/2019	37.7	J	855		29.4	J	922	
L1068318-10	DUPLICATE B-19 (14'-15')	02/07/2019	<61.3		<61.3		<61.3		<61.3	
L1073696-05	DUPLICATE WPC-2	02/25/2019	<66.4		822		55.9	J	878	
TX Table 1 Tier 1 Residential Total Soil Comb 0_5 Acre 4/2018			1600		2300		2300			
Other Applicable Values									16000*	



TABLE 2
Extended Semi-VOCs Soil Analytical Results
Boundary Ventures
Altair, Colorado County, Texas

Method			8270D		8270D		8270D		8270D		8270D		8270D		8270D		8270D			
Analyte			ACENAPHTHENE		ACENAPHTHYLENE		ANTHRACENE		BENZIDINE		BENZO(A) ANTHRACENE		BENZO(B)FLUORANTHENE		BENZO(K)FLUORANTHENE		BENZO(G,H,I) PERYLENE		BENZO(A)PYRENE	
Units			mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg	
Lab Sample ID	Client Sample ID	Date Collected	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
L1067476-05	B-3 (1'-2')	02/04/2019	<0.427		<0.427		<0.427		<42.7		<4.27		<0.427		<0.427		<0.427		<0.427	
L1067476-06	B-3 (9-10')	02/04/2019	<0.0346		<0.0346		<0.0346		<0.346		<0.0346		<0.0346		<0.0346		<0.0346		<0.0346	
L1067476-19	B-9 (4-5')	02/05/2019	<0.387		<0.387		<0.387		<3.87		0.0595	J	<0.387		<0.387		<0.387		<0.387	
L1067476-20	B-9 (14-15')	02/05/2019	<0.0380		<0.0380		<0.0380		<0.380		<0.0380		<0.0380		<0.0380		<0.0380		<0.0380	
L1067476-21	B-10 (1-2')	02/05/2019	<0.869		<0.869		<0.869		<0.869		0.0187	J	0.0207	J	<0.0869		<0.0869		<0.0869	
L1067476-22	B-10 (14-15')	02/05/2019	<0.0390		<0.0390		<0.0390		<0.390		<0.0390		<0.0390		<0.0390		<0.0390		<0.0390	
L1068318-19	B-17 (4-5')	02/07/2019	<0.0395		<0.0395		<0.0395		<0.395		<0.0395		<0.0395		<0.0395		<0.0395		<0.0395	
L1068318-20	B-17 (11-12')	02/07/2019	<0.0371		<0.0371		<0.0371		<0.371		<0.0371		<0.0371		<0.0371		<0.0371		<0.0371	
L1068318-01	B-18 (1-2')	02/07/2019	<0.449		<0.449		<0.449		<4.49		<0.449		<0.449		<0.449		<0.449		<0.449	
L1068318-02	B-18 (14-15)	02/07/2019	<0.0398		<0.0398		<0.0398		<0.398		<0.0398		<0.0398		<0.0398		<0.0398		<0.0398	
L1068318-08	B-19 (14-15')	02/07/2019	<0.0393		<0.0393		<0.0393		<0.393		<0.0393		<0.0393		<0.0393		<0.0393		<0.0393	
L1068318-17	MW-9 (9-10')	02/06/2019	<0.0354		<0.0354		<0.0354		<0.354		<0.0354		<0.0354		<0.0354		<0.0354		<0.0354	
L1068318-18	MW-9 (24-25')	02/06/2019	<0.0380		<0.0380		<0.0380		<0.380		<0.0380		<0.0380		<0.0380		<0.0380		<0.0380	
L1068318-25	MW-10 (6-7')	02/06/2019	<0.0387		<0.0387		<0.0387		<0.387		<0.0387		<0.0387		<0.0387		<0.0387		<0.0387	
L1068318-26	MW-10 (14-15')	02/06/2019	<0.0406		<0.0406		<0.0406		<0.406		<0.0406		<0.0406		<0.0406		<0.0406		<0.0406	
L1068318-04	MW-11 (20-21')	02/07/2019	<0.0339		<0.0339		<0.0339		<0.339		<0.0339		<0.0339		<0.0339		<0.0339		<0.0339	
L1068318-05	MW-12 (9-10)	02/07/2019	<0.389		<0.389		<0.389		<3.89		<0.389		<0.389		<0.389		<0.389		<0.389	
L1068318-06	MW-12 (24-25')	02/07/2019	<0.0382		<0.0382		<0.0382		<0.382		<0.0382		<0.0382		<0.0382		<0.0382		<0.0382	
L1067476-17	MW-13 (5'-6')	02/05/2019	2.51		<0.804		<0.804		<8.04		0.117	J	<0.804		<0.804		<0.804		<0.804	
L1067476-18	MW-13 (14'-15')	02/05/2019	<0.0348		<0.0348		<0.0348		<0.348		<0.0348		<0.0348		<0.0348		<0.0348		<0.0348	
L1068318-10	DUPLICATE B-19 (14'-15')	02/07/2019	0.022	J	0.0167	J	0.0361	J	<0.408		0.0188	J	0.00854	J	<0.0408		<0.0408		<0.0408	
able 1 Tier 1 Residential GW Soil Ing 0_5 Acre 4/201			240		410		6900		0.000011		130		440		4500		46000		7.6	
Other Applicable Values																				



TABLE 2
Extended Semi-VOCs Soil Analytical Results
Boundary Ventures
Altair, Colorado County, Texas

Method			8270D		8270D		8270D		8270D		8270D		8270D		8270D		8270D			
Analyte			BIS(2-CHLORETHOXY)METHANE		BIS(2-CHLOROETHYL) ETHER		BIS(2-CHLOROISOPROPYL) ETHER		4-BROMOPHENYL-PHENYLETHER		2-CHLORONAPHTHALENE		4-CHLOROPHENYL-PHENYLETHER		CHRYSENE		DIBENZ(A,H)ANTHRACENE		3,3-DICHLOROBENZIDINE	
Units			mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg	
Lab Sample ID	Client Sample ID	Date Collected	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
L1067476-05	B-3 (1'-2')	02/04/2019	<4.27		<4.27		<4.27		<4.27		<0.427		<4.27		<4.27		<0.427		<42.7	
L1067476-06	B-3 (9-10')	02/04/2019	<0.346		<0.346		<0.346		<0.346		<0.0346		<0.346		<0.0346		<0.0346		<0.346	
L1067476-19	B-9 (4-5')	02/05/2019	<3.87		<3.87		<3.87		<3.87		<0.387		<3.87		0.0825	J	<0.387		<3.87	
L1067476-20	B-9 (14-15')	02/05/2019	<0.380		<0.380		<0.380		<0.380		<0.0380		<0.380		<0.0380		<0.0380		<0.380	
L1067476-21	B-10 (1-2')	02/05/2019	<0.869		<0.869		<0.869		<8.69		<0.869		<8.69		0.0252	J	<0.869		<0.869	
L1067476-22	B-10 (14-15')	02/05/2019	<0.390		<0.390		<0.390		<0.390		<0.0390		<0.390		<0.0390		<0.0390		<0.390	
L1068318-19	B-17 (4-5')	02/07/2019	<0.395		<0.395		<0.395		<0.395		<0.0395		<0.395		<0.0395		<0.0395		<0.395	
L1068318-20	B-17 (11-12')	02/07/2019	<0.371		<0.371		<0.371		<0.371		<0.0371		<0.371		<0.0371		<0.0371		<0.371	
L1068318-01	B-18 (1-2')	02/07/2019	<4.49		<4.49		<4.49		<4.49		<0.449		<4.49		<0.449		<0.449		<4.49	
L1068318-02	B-18 (14-15)	02/07/2019	<0.398		<0.398		<0.398		<0.398		<0.0398		<0.398		<0.0398		<0.0398		<0.398	
L1068318-08	B-19 (14-15')	02/07/2019	<0.393		<0.393		<0.393		<0.393		<0.0393		<0.393		<0.0393		<0.0393		<0.393	
L1068318-17	MW-9 (9-10')	02/06/2019	<0.354		<0.354		<0.354		<0.354		<0.0354		<0.354		<0.0354		<0.0354		<0.354	
L1068318-18	MW-9 (24-25')	02/06/2019	<0.380		<0.380		<0.380		<0.380		<0.0380		<0.380		<0.0380		<0.0380		<0.380	
L1068318-25	MW-10 (6-7')	02/06/2019	<0.387		<0.387		<0.387		<0.387		<0.0387		<0.387		<0.0387		<0.0387		<0.387	
L1068318-26	MW-10 (14-15')	02/06/2019	<0.406		<0.406		<0.406		<0.406		<0.0406		<0.406		<0.0406		<0.0406		<0.406	
L1068318-04	MW-11 (20-21')	02/07/2019	<0.339		<0.339		<0.339		<0.339		<0.0339		<0.339		<0.0339		<0.0339		<0.339	
L1068318-05	MW-12 (9-10)	02/07/2019	<3.89		<3.89		<3.89		<3.89		<0.389		<3.89		<0.389		<0.389		<3.89	
L1068318-06	MW-12 (24-25')	02/07/2019	<0.382		<0.382		<0.382		<0.382		<0.0382		<0.382		<0.0382		<0.0382		<0.382	
L1067476-17	MW-13 (5'-6')	02/05/2019	<8.04		<8.04		<8.04		<8.04		<0.804		<8.04	0.18	J	<0.804		<8.04		
L1067476-18	MW-13 (14'-15')	02/05/2019	<0.348		<0.348		<0.348		<0.348		<0.0348		<0.348	<0.0348		<0.0348		<0.348		
L1068318-10	DUPLICATE B-19	02/07/2019	<0.408		<0.408		<0.408		<0.408		0.0184	J	<0.408	0.0189	J	<0.0408		<0.408		
able 1 Tier 1 Residential GW Soil Ing 0_5 Acre 4/201			0.012		0.0021		0.35		670		0.032		11000		15		0.063			
Other Applicable Values																				



TABLE 2
Extended Semi-VOCs Soil Analytical Results
Boundary Ventures
Altair, Colorado County, Texas

Method			8270D		8270D		8270D		8270D		8270D		8270D		8270D		8270D			
Analyte			2,4-DINITROTOLUENE		2,6-DINITROTOLUENE		FLUORANTHENE		FLUORENE		HEXACHLORO BENZENE		HEXACHLORO-1,3-BUTADIENE		HEXACHLORO CYCLOPENTADIENE		HEXACHLORO ETHANE		INDENO(1,2,3-CD)PYRENE	
Units			mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg	
Lab Sample ID	Client Sample ID	Date Collected	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
L1067476-05	B-3 (1'-2')	02/04/2019	<4.27		<4.27		<0.427		<0.427		<4.27		<4.27		<4.27		<4.27		<4.27	
L1067476-06	B-3 (9-10')	02/04/2019	<0.346		<0.346		<0.0346		<0.0346		<0.346		<0.346		<0.346		<0.346		<0.0346	
L1067476-19	B-9 (4-5')	02/05/2019	<3.87		<3.87		<0.387		<0.387		<3.87		<3.87		<3.87		<3.87		<0.387	
L1067476-20	B-9 (14-15')	02/05/2019	<0.380		<0.380		<0.0380		<0.0380		<0.380		<0.380		<0.380		<0.380		<0.0380	
L1067476-21	B-10 (1-2')	02/05/2019	<8.69		<8.69		<0.869		<0.869		<8.69		<0.869		<8.69		<0.869		<0.0869	
L1067476-22	B-10 (14-15')	02/05/2019	<0.390		<0.390		<0.0390		<0.0390		<0.390		<0.390		<0.390		<0.390		<0.0390	
L1068318-19	B-17 (4-5')	02/07/2019	<0.395		<0.395		<0.0395		<0.0395		<0.395		<0.395		<0.395		<0.395		<0.0395	
L1068318-20	B-17 (11-12')	02/07/2019	<0.371		<0.371		<0.0371		<0.0371		<0.371		<0.371		<0.371		<0.371		<0.0371	
L1068318-01	B-18 (1-2')	02/07/2019	<4.49		<4.49		<0.449		1.52		<4.49		<4.49		<4.49		<4.49		<0.449	
L1068318-02	B-18 (14-15)	02/07/2019	<0.398		<0.398		<0.0398		<0.0398		<0.398		<0.398		<0.398		<0.398		<0.0398	
L1068318-08	B-19 (14-15')	02/07/2019	<0.393		<0.393		<0.0393		<0.0393		<0.393		<0.393		<0.393		<0.393		<0.0393	
L1068318-17	MW-9 (9-10')	02/06/2019	<0.354		<0.354		<0.0354		<0.0354		<0.354		<0.354		<0.354		<0.354		<0.0354	
L1068318-18	MW-9 (24-25')	02/06/2019	<0.380		<0.380		<0.0380		<0.0380		<0.380		<0.380		<0.380		<0.380		<0.0380	
L1068318-25	MW-10 (6-7')	02/06/2019	<0.387		<0.387		<0.0387		<0.0387		<0.387		<0.387		<0.387		<0.387		<0.0387	
L1068318-26	MW-10 (14-15')	02/06/2019	<0.406		<0.406		<0.0406		<0.0406		<0.406		<0.406		<0.406		<0.406		<0.0406	
L1068318-04	MW-11 (20-21')	02/07/2019	<0.339		<0.339		<0.0339		<0.0339		<0.339		<0.339		<0.339		<0.339		<0.0339	
L1068318-05	MW-12 (9-10)	02/07/2019	<3.89		<3.89		<0.389		<0.389		<3.89		<3.89		<3.89		<3.89		<0.389	
L1068318-06	MW-12 (24-25')	02/07/2019	<0.382		<0.382		<0.0382		<0.0382		<0.382		<0.382		<0.382		<0.382		<0.0382	
L1067476-17	MW-13 (5'-6')	02/05/2019	<8.04		<8.04		0.489	J	3.95		<8.04		<8.04		<8.04		<8.04		<0.804	
L1067476-18	MW-13 (14'-15')	02/05/2019	<0.348		<0.348		<0.0348		<0.0348		<0.348		<0.348		<0.348		<0.348		<0.0348	
L1068318-10	DUPLICATE B-19	02/07/2019	<0.408		<0.408		0.0395	J	0.0276	J	0.0541	J	<0.408		<0.408		<0.408		<0.0408	
able 1 Tier 1 Residential GW Soil Ing 0_5 Acre 4/201			0.0053		0.0048		1900		300		1.1		3.3		19		1.3		1300	
Other Applicable Values																				



TABLE 2
Extended Semi-VOCs Soil Analytical Results
Boundary Ventures
Altair, Colorado County, Texas

Method			8270D		8270D		8270D		8270D		8270D		8270D		8270D		8270D			
Analyte			ISOPHORONE		NAPHTHALENE		NITROBENZENE		N-NITROSODIMETHYL AMINE		N-NITROSODIPHENYL AMINE		N-NITROSODI-N-PROPYLAMINE		PHENANTHRENE		BENZYLBUTYL PHTHALATE		BIS(2-ETHYLHEXYL) PHTHALATE	
Units			mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg	
Lab Sample ID	Client Sample ID	Date Collected	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
L1067476-05	B-3 (1'-2')	02/04/2019	<4.27		1.19		<4.27		<4.27		<4.27		<4.27		1.24		<42.7		<42.7	
L1067476-06	B-3 (9-10')	02/04/2019	<0.346		<0.0346		<0.346		<0.346		<0.346		<0.346		<0.0346		<0.346		<0.346	
L1067476-19	B-9 (4-5')	02/05/2019	<3.87		4.65		<3.87		<3.87		<3.87		<3.87		2.42		<3.87		0.149	J
L1067476-20	B-9 (14-15')	02/05/2019	<0.380		<0.0380		<0.380		<0.380		<0.380		<0.380		<0.0380		<0.380		<0.380	
L1067476-21	B-10 (1-2')	02/05/2019	<0.869		<0.0869		<0.869		<0.869		<8.69		<0.869		0.501	J	<0.869		0.124	J
L1067476-22	B-10 (14-15')	02/05/2019	<0.390		<0.0390		<0.390		<0.390		<0.390		<0.390		<0.0390		<0.390		<0.390	
L1068318-19	B-17 (4-5')	02/07/2019	<0.395		<0.0395		<0.395		<0.395		<0.395		<0.395		<0.0395		<0.395		<0.395	
L1068318-20	B-17 (11-12')	02/07/2019	<0.371		<0.0371		<0.371		<0.371		<0.371		<0.371		<0.0371		<0.371		<0.371	
L1068318-01	B-18 (1-2')	02/07/2019	<4.49		3.94		<4.49		<4.49		<4.49		<4.49		1.99		<4.49		0.359	J
L1068318-02	B-18 (14-15)	02/07/2019	<0.398		<0.0398		<0.398		<0.398		<0.398		<0.398		<0.0398		<0.398		<0.398	
L1068318-08	B-19 (14-15')	02/07/2019	<0.393		<0.0393		<0.393		<0.393		<0.393		<0.393		<0.0393		<0.393		<0.393	
L1068318-17	MW-9 (9-10')	02/06/2019	<0.354		<0.0354		<0.354		<0.354		<0.354		<0.354		<0.0354		<0.354		<0.354	
L1068318-18	MW-9 (24-25')	02/06/2019	<0.380		<0.0380		<0.380		<0.380		<0.380		<0.380		<0.0380		<0.380		<0.380	
L1068318-25	MW-10 (6-7')	02/06/2019	<0.387		<0.0387		<0.387		<0.387		<0.387		<0.387		<0.0387		<0.387		<0.387	
L1068318-26	MW-10 (14-15')	02/06/2019	<0.406		<0.0406		<0.406		<0.406		<0.406		<0.406		<0.0406		<0.406		<0.406	
L1068318-04	MW-11 (20-21')	02/07/2019	<0.339		<0.0339		<0.339		<0.339		<0.339		<0.339		<0.0339		<0.339		<0.339	
L1068318-05	MW-12 (9-10)	02/07/2019	<3.89		0.944		<3.89		<3.89		<3.89		<3.89		0.809		<3.89		<3.89	
L1068318-06	MW-12 (24-25')	02/07/2019	<0.382		<0.0382		<0.382		<0.382		<0.382		<0.382		<0.0382		<0.382		<0.382	
L1067476-17	MW-13 (5'-6')	02/05/2019	<8.04		16.3		<8.04		<8.04		<8.04		<8.04		11.4		<8.04		0.457	J
L1067476-18	MW-13 (14'-15')	02/05/2019	<0.348		<0.0348		<0.348		<0.348		<0.348		<0.348		<0.0348		<0.348		<0.348	
L1068318-10	DUPLICATE B-19	02/07/2019	<0.408		<0.0408		<0.408		<0.408		<0.408		<0.408		0.0389	J	<0.408		<0.408	
able 1 Tier 1 Residential GW Soil Ing 0_5 Acre 4/201			3		31		0.35		0.000037		2.8		0.00035		420		260		160	
Other Applicable Values																				



TABLE 2
Extended Semi-VOCs Soil Analytical Results
Boundary Ventures
Altair, Colorado County, Texas

Method			8270D		8270D		8270D		8270D		8270D		8270D		8270D		8270D			
Analyte			DI-N-BUTYL PHTHALATE		DIETHYL PHTHALATE		DIMETHYL PHTHALATE		DI-N-OCTYL PHTHALATE		PYRENE		1,2,4-TRICHLOROBENZENE		4-CHLORO-3-METHYLPHENOL		2-CHLOROPHENOL		2,4-DICHLOROPHENOL	
Units			mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg	
Lab Sample ID	Client Sample ID	Date Collected	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
L1067476-05	B-3 (1'-2')	02/04/2019	<4.27		<4.27		<4.27		<42.7		1.64	J	<4.27		<4.27		<4.27		<4.27	
L1067476-06	B-3 (9-10')	02/04/2019	<0.346		<0.346		<0.346		<0.346		<0.0346		<0.346		<0.346		<0.346		<0.346	
L1067476-19	B-9 (4-5')	02/05/2019	<3.87		<3.87		<3.87		<3.87		1.19		<3.87		<3.87		<3.87		<3.87	
L1067476-20	B-9 (14-15')	02/05/2019	<0.380		<0.380		<0.380		<0.380		<0.0380		<0.380		<0.380		<0.380		<0.380	
L1067476-21	B-10 (1-2')	02/05/2019	<8.69		<8.69		<8.69		<0.869		0.311		<0.869		<0.869		<0.869		<0.869	
L1067476-22	B-10 (14-15')	02/05/2019	<0.390		<0.390		<0.390		<0.390		<0.0390		<0.390		<0.390		<0.390		<0.390	
L1068318-19	B-17 (4-5')	02/07/2019	<0.395		<0.395		<0.395		<0.395		<0.0395		<0.395		<0.395		<0.395		<0.395	
L1068318-20	B-17 (11-12')	02/07/2019	<0.371		<0.371		<0.371		<0.371		<0.0371		<0.371		<0.371		<0.371		<0.371	
L1068318-01	B-18 (1-2')	02/07/2019	<4.49		<4.49		<4.49		<4.49		2.16		<4.49		<4.49		<4.49		<4.49	
L1068318-02	B-18 (14-15)	02/07/2019	<0.398		<0.398		<0.398		<0.398		<0.0398		<0.398		<0.398		<0.398		<0.398	
L1068318-08	B-19 (14-15')	02/07/2019	<0.393		<0.393		<0.393		<0.393		<0.0393		<0.393		<0.393		<0.393		<0.393	
L1068318-17	MW-9 (9-10')	02/06/2019	<0.354		<0.354		<0.354		<0.354		<0.0354		<0.354		<0.354		<0.354		<0.354	
L1068318-18	MW-9 (24-25')	02/06/2019	<0.380		<0.380		<0.380		<0.380		<0.0380		<0.380		<0.380		<0.380		<0.380	
L1068318-25	MW-10 (6-7')	02/06/2019	<0.387		<0.387		<0.387		<0.387		<0.0387		<0.387		<0.387		<0.387		<0.387	
L1068318-26	MW-10 (14-15')	02/06/2019	<0.406		<0.406		<0.406		<0.406		<0.0406		<0.406		<0.406		<0.406		<0.406	
L1068318-04	MW-11 (20-21')	02/07/2019	<0.339		<0.339		<0.339		<0.339		<0.0339		<0.339		<0.339		<0.339		<0.339	
L1068318-05	MW-12 (9-10)	02/07/2019	<3.89		<3.89		<3.89		<3.89		0.172	J	<3.89		<3.89		<3.89		<3.89	
L1068318-06	MW-12 (24-25')	02/07/2019	<0.382		<0.382		<0.382		<0.382		<0.0382		<0.382		<0.382		<0.382		<0.382	
L1067476-17	MW-13 (5'-6')	02/05/2019	<8.04		<8.04		<8.04		<8.04		1.79		<8.04		<8.04		<8.04		<8.04	
L1067476-18	MW-13 (14'-15')	02/05/2019	<0.348		<0.348		<0.348		<0.348		<0.0348		<0.348		<0.348		<0.348		<0.348	
L1068318-10	DUPLICATE B-19	02/07/2019	<0.408		<0.408		<0.408		<0.408		0.0352	J	<0.408		<0.408		<0.408		<0.408	
able 1 Tier 1 Residential GW Soil Ing 0_5 Acre 4/201			3300		160		62		810000		1100		4.8		4.5		1.6		0.35	
Other Applicable Values																				

TABLE 2
Extended Semi-VOCs Soil Analytical Results
Boundary Ventures
Altair, Colorado County, Texas

Method			8270D		8270D		8270D		8270D		8270D		8270D		8270D			
Analyte			2,4-DIMETHYL PHENOL		4,6-DINITRO-2-METHYLPHENOL		2,4-DINITROPHENOL		2-NITROPHENOL		4-NITROPHENOL		PENTACHLOROPHENOL		PHENOL		2,4,6-TRICHLOROPHENOL	
Units			mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg	
Lab Sample ID	Client Sample ID	Date Collected	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
L1067476-05	B-3 (1'-2')	02/04/2019	<4.27		<4.27		<4.27		<4.27		<4.27		<4.27		<4.27		<4.27	
L1067476-06	B-3 (9-10')	02/04/2019	<0.346		<0.346		<0.346		<0.346		<0.346		<0.346		<0.346		<0.346	
L1067476-19	B-9 (4-5')	02/05/2019	<3.87	J4	<3.87		<3.87		<3.87		<3.87		<3.87		<3.87		<3.87	
L1067476-20	B-9 (14-15')	02/05/2019	<0.380	J4	<0.380		<0.380		<0.380		<0.380		<0.380		<0.380		<0.380	
L1067476-21	B-10 (1-2')	02/05/2019	<0.869	J4	<8.69		<8.69		<8.69		<8.69		<8.69		<8.69		<8.69	
L1067476-22	B-10 (14-15')	02/05/2019	<0.390	J4	<0.390		<0.390		<0.390		<0.390		<0.390		<0.390		<0.390	
L1068318-19	B-17 (4-5')	02/07/2019	<0.395		<0.395		<0.395		<0.395		<0.395		<0.395		<0.395		<0.395	
L1068318-20	B-17 (11-12')	02/07/2019	<0.371		<0.371		<0.371		<0.371		<0.371		<0.371		<0.371		<0.371	
L1068318-01	B-18 (1-2')	02/07/2019	<4.49		<4.49		<4.49		<4.49		<4.49		<4.49		<4.49		<4.49	
L1068318-02	B-18 (14-15)	02/07/2019	<0.398		<0.398		<0.398		<0.398		<0.398		<0.398		<0.398		<0.398	
L1068318-08	B-19 (14-15')	02/07/2019	<0.393		<0.393		<0.393		<0.393		<0.393		<0.393		<0.393		<0.393	
L1068318-17	MW-9 (9-10')	02/06/2019	<0.354		<0.354		<0.354		<0.354		<0.354		<0.354		<0.354		<0.354	
L1068318-18	MW-9 (24-25')	02/06/2019	<0.380		<0.380		<0.380		<0.380		<0.380		<0.380		<0.380		<0.380	
L1068318-25	MW-10 (6-7')	02/06/2019	<0.387		<0.387		<0.387		<0.387		<0.387		<0.387		<0.387		<0.387	
L1068318-26	MW-10 (14-15')	02/06/2019	<0.406		<0.406		<0.406		<0.406		<0.406		<0.406		<0.406		<0.406	
L1068318-04	MW-11 (20-21')	02/07/2019	<0.339		<0.339		<0.339		<0.339		<0.339		<0.339		<0.339		<0.339	
L1068318-05	MW-12 (9-10)	02/07/2019	<3.89		<3.89		<3.89		<3.89		<3.89		<3.89		<3.89		<3.89	
L1068318-06	MW-12 (24-25')	02/07/2019	<0.382		<0.382		<0.382		<0.382		<0.382		<0.382		<0.382		<0.382	
L1067476-17	MW-13 (5'-6')	02/05/2019	<8.04	J4	<8.04		<8.04		<8.04		<8.04		<8.04		<8.04		<8.04	
L1067476-18	MW-13 (14'-15')	02/05/2019	<0.348	J4	<0.348		<0.348		<0.348		<0.348		<0.348		<0.348		<0.348	
L1068318-10	DUPLICATE B-19	02/07/2019	<0.408		<0.408		<0.408		<0.408		<0.408		<0.408		0.0186	J	<0.408	
able 1 Tier 1 Residential GW Soil Ing 0_5 Acre 4/201			3.2		0.0047		0.094		0.13		0.13		0.1		0.018		19	
Other Applicable Values																		



TABLE 3
BTEX Soil Analytical Results
Boundary Ventures
Altair, Colorado County, Texas

Method			8260C		8260C		8260C		8260C	
Analyte			BENZENE		TOLUENE		ETHYLBENZENE		XYLEMES, TOTAL	
Units			mg/kg		mg/kg		mg/kg		mg/kg	
Lab Sample ID	Client Sample ID	Date Collected	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
L1067476-01	B-1 (4'-5')	02/04/2019	<0.00107		0.00186	J	<0.00267		<0.00693	
L1067476-02	B-1 (14'-15')	02/04/2019	<0.00106		<0.00532		<0.00266		<0.00691	
L1067476-03	B-2 (1'-2')	02/04/2019	<0.00126		<0.00628		<0.00314		<0.00817	
L1067476-04	B-2 (14'-15')	02/04/2019	<0.00124		0.00189	J	<0.00310		<0.00806	
L1067476-05	B-3 (1'-2')	02/04/2019	<0.00128		0.00222	J	0.00554		0.128	
L1067476-06	B-3 (9'-10')	02/04/2019	<0.00104		<0.00520		<0.00260		<0.00676	
L1067476-07	B-4 (14'-15')	02/04/2019	<0.00112		<0.00558		<0.00279		<0.00725	
L1067476-08	B-4 (19'-20')	02/04/2019	<0.00112		<0.00562		<0.00281		<0.00730	
L1067476-09	B-5 (4'-5')	02/04/2019	0.0103		0.0357		0.0625		0.522	
L1067476-10	B-5 (17'-18')	02/04/2019	<0.00111		<0.00554		<0.00277		0.0054	B J
L1067476-11	B-6 (5'-6')	02/04/2019	0.0512		1.9		0.618		6.8	
L1067476-12	B-6 (8'-9')	02/04/2019	0.00395		0.0457		0.0312		0.5	
L1067476-13	B-7 (10'-11')	02/05/2019	0.175		1.71		0.737		5.83	
L1067476-14	B-7 (24'-25')	02/05/2019	0.0094		0.181		0.0944		0.982	
L1067476-15	B-8 (9'-10')	02/05/2019	0.223		3.67		2.48		20.8	
L1067476-16	B-8 (24'-25')	02/05/2019	<0.00106		0.00183	J	<0.00265		0.0054	B J
L1067476-19	B-9 (4'-5')	02/05/2019	0.0612		0.965		0.999		10.8	
L1067476-20	B-9 (14'-15')	02/05/2019	<0.00114		<0.00570		<0.00285		<0.00742	
L1067476-21	B-10 (1-2')	02/05/2019	0.000885	J	0.00437	J	0.00168	J	0.0176	
L1067476-22	B-10 (14'-15')	02/05/2019	<0.00117		<0.0234		<0.00292		<0.00760	
L1068318-21	B-11 (1-2')	02/06/2019	<0.00108		<0.00541		<0.00271		<0.00703	
L1068318-22	B-11 (10'-11')	02/06/2019	<0.00114		<0.00571		<0.00286		<0.00743	
L1068318-23	B-12 (4'-5')	02/06/2019	<0.00118		<0.00591		<0.00295		<0.00768	
L1068318-24	B-12 (19'-20')	02/06/2019	<0.00116		<0.00579		<0.00289		<0.00752	
L1068318-27	B-13 (14'-15')	02/06/2019	0.152		0.00452	J	0.819		1.75	
L1068318-28	B-13 (16'-17')	02/06/2019	0.0377		0.0114		0.377		0.197	
L1068318-11	B-14 (9'-10')	02/06/2019	0.0155		0.279		0.332		2.58	
L1068318-12	B-14 (13'-14')	02/06/2019	0.000481	J	0.00252	J	0.00208	J	0.0206	
L1068318-13	B-15 (5'-6')	02/06/2019	0.0988		1.98		1.28		11.9	
L1068318-14	B-15 (19'-20')	02/06/2019	0.000551	J	0.00829		0.00573		0.052	
L1068318-15	B-16 (9'-10')	02/06/2019	<0.00115		0.00153	J	<0.00287		<0.00746	
L1068318-16	B-16 (14'-15')	02/06/2019	<0.00115		0.00242	J	<0.00288		<0.00749	
L1068318-19	B-17 (4'-5')	02/07/2019	<0.00119		0.0131		0.00286	J	0.0178	
L1068318-20	B-17 (11'-12')	02/07/2019	<0.00112		0.00564		0.00105	J	0.00796	
L1068318-01	B-18 (1-2')	02/07/2019	0.0237		0.569		0.688		5.26	
L1068318-02	B-18 (14'-15')	02/07/2019	<0.00120		0.00252	J	0.000705	J	<0.00777	
L1068318-07	B-19 (1-2')	02/07/2019	0.00529		0.123		0.0514		0.538	
L1068318-08	B-19 (14'-15')	02/07/2019	0.000503	J	0.0173		0.00366		0.0222	
L1068318-09	DUPLICATE B-19	02/07/2019	0.00566		0.133		0.0442		0.415	
	DUPLICATE B-19	(14'-15')	<0.00123		0.00698		0.00127	J	0.00854	
L1068318-10										
X Table 1 Tier 1 Residential GW Soil Ing 0_5 Acre 4/201			0.026		8.2		7.6		120	
Other Applicable Values										



TABLE 3
BTEX Soil Analytical Results
Boundary Ventures
Altair, Colorado County, Texas

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TABLE 3
 BTEX Soil Analytical Results
 Boundary Ventures
 Altair, Colorado County, Texas

Method			8260C		8260C		8260C		8260C	
Analyte			BENZENE		TOLUENE		ETHYLBENZENE		XYLEMES, TOTAL	
Units			mg/kg		mg/kg		mg/kg		mg/kg	
Lab Sample ID	Client Sample ID	Date Collected	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
L1068318-17	MW-9 (9-10')	02/06/2019	<0.00106		<0.00531		<0.00266		<0.00690	
L1068318-18	MW-9 (24-25')	02/06/2019	<0.00114		<0.00571		<0.00285		<0.00742	
L1068318-25	MW-10 (6-7')	02/06/2019	<0.00116		<0.00582		<0.00291		<0.00756	
L1068318-26	MW-10 (14-15')	02/06/2019	<0.00122		<0.00610		<0.00305		<0.00793	
L1068318-03	MW-11 (1-2)	02/07/2019	0.00637		0.139		0.11		2.19	
L1068318-04	MW-11 (20-21')	02/07/2019	<0.0102		0.0196	J	<0.0255		<0.0662	
L1068318-05	MW-12 (9-10)	02/07/2019	0.00579		0.0199		0.0528		0.585	
L1068318-06	MW-12 (24-25')	02/07/2019	<0.00115		<0.00573		<0.00287		<0.00745	
L1067476-17	MW-13 (5'-6')	02/05/2019	0.138		2.81		1.66		16.9	
L1067476-18	MW-13 (14'-15')	02/05/2019	<0.00105		<0.00523		<0.00261		<0.00679	
K Table 1 Tier 1 Residential GW Soil Ing 0_5 Acre 4/201			0.026		8.2		7.6		120	
Other Applicable Values										



TABLE 4
Extended Soil VOCs Analytical Results
Boundary Ventures
Altair, Colorado County, Texas

Method			8260C		8260C		8260C		8260C		8260C		8260C		8260C		8260C			
Analyte			ACETONE		ACRYLONITRILE		BROMOBENZENE		BROMODICHLOROMETHANE		BROMOFORM		BROMOMETHANE		N-BUTYLBENZENE		SEC-BUTYLBENZENE		TERT-BUTYLBENZENE	
Units			mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg	
Lab Sample ID	Client Sample ID	Date Collected	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
L1067476-05	B-3 (1'-2')	02/04/2019	0.0299	J	<0.0160		<0.0160		<0.00321		<0.0321		<0.0160		0.0592		0.0492		<0.00641	
L1067476-06	B-3 (9-10')	02/04/2019	<0.0260		<0.0130		<0.0130		<0.00260		<0.0260		<0.0130		<0.0130		<0.0130		<0.00520	
L1067476-19	B-9 (4-5')	02/05/2019	<0.581		<0.0145		<0.0145		<0.00291		<0.0291		<0.0145		2.53		1.42		<0.00581	
L1067476-20	B-9 (14-15')	02/05/2019	<0.0285		<0.0143		<0.0143		<0.00285		<0.0285		<0.0143		<0.0143		0.00374	J	<0.00570	
L1067476-21	B-10 (1-2')	02/05/2019	<0.0652		<0.0163		<0.0163		<0.00326		<0.0326		<0.0163		<0.0163		0.00452	J	<0.00652	
L1067476-22	B-10 (14-15')	02/05/2019	<0.117		<0.0146		<0.0146		<0.00292		<0.0292		<0.0146		<0.0146		<0.0146		<0.00585	
L1068318-19	B-17 (4-5')	02/07/2019	<0.0297		<0.0148		<0.0148		<0.00297		<0.0297		<0.0148		<0.0148		<0.0148		<0.00593	
L1068318-20	B-17 (11-12')	02/07/2019	<0.0279		<0.0139		<0.0139		<0.00279		<0.0279		<0.0139		<0.0139		<0.0139		<0.00558	
L1068318-01	B-18 (1-2')	02/07/2019	1.24		<0.0337		<0.0337		<0.00674		<0.0674		<0.0337		1.31		0.66		<0.0539	
L1068318-02	B-18 (14-15)	02/07/2019	<0.0299		<0.0149		<0.0149		<0.00299		<0.0299		<0.0149		<0.0149		<0.0149		<0.00598	
L1068318-08	B-19 (14-15')	02/07/2019	<0.0295		<0.0148		<0.0148		<0.00295		<0.0295		<0.0148		<0.0148		<0.0148		<0.00591	
L1068318-17	MW-9 (9-10')	02/06/2019	<0.0266		<0.0133		<0.0133		<0.00266		<0.0266		<0.0133		<0.0133		<0.0133		<0.00531	
L1068318-18	MW-9 (24-25')	02/06/2019	<0.0285		<0.0143		<0.0143		<0.00285		<0.0285		<0.0143		<0.0143		<0.0143		<0.00571	
L1068318-25	MW-10 (6-7')	02/06/2019	<0.0291		<0.0145		<0.0145		<0.00291		<0.0291		<0.0145		<0.0145		<0.0145		<0.00582	
L1068318-26	MW-10 (14-15')	02/06/2019	<0.0305		<0.0153		<0.0153		<0.00305		<0.0305		<0.0153		<0.0153		<0.0153		<0.00610	
L1068318-04	MW-11 (20-21')	02/07/2019	<0.255		<0.127		<0.127		<0.0255		<0.255		<0.127		<0.127		<0.127	J4	<0.0509	J4
L1068318-05	MW-12 (9-10)	02/07/2019	<0.233		<0.0146		<0.0146	J4	<0.00292		<0.0292		<0.0146		0.399		0.347		<0.00583	
L1068318-06	MW-12 (24-25')	02/07/2019	<0.0287		<0.0143		<0.0143	J4	<0.00287		<0.0287		<0.0143		<0.0143		<0.0143		<0.00573	
L1067476-17	MW-13 (5-6')	02/05/2019	<1.21		<0.604		<0.604		<0.121		<1.21		<0.604		3.6		1.93		0.0939	J
L1067476-18	MW-13 (14'-15')	02/05/2019	<0.0261		<0.0131		<0.0131		<0.00261		<0.0261		<0.0131		<0.0131		<0.0131		<0.00523	
L1068318-10	DUPLICATE B-19 (14'-15')		<0.0307		<0.0153		<0.0153		<0.00307		<0.0307		<0.0153		<0.0153		<0.00613			
	TX Table 1 Tier 1 Residential GW Soil Ing 0_5 Acre 4/2018			43		0.0033		2.3		0.065		0.63		0.13		150		85	100	
Other Applicable Values																				

Terracon

TABLE 4
Extended Soil VOCs Analytical Results
Boundary Ventures
Altair, Colorado County, Texas

Method			8260C		8260C		8260C		8260C		8260C		8260C		8260C		8260C			
Analyte			CARBON TETRACHLORIDE		CHLOROBENZENE		CHLORO DIBROMOMETHANE		CHLOROETHANE		CHLOROFORM		CHLOROMETHANE		2-CHLORTOLUENE		4-CHLORTOLUENE		1,2-DIBROMO-3-CHLOROPROPANE	
Units			mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg	
Lab Sample ID	Client Sample ID	Date Collected	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
L1067476-05	B-3 (1'-2')	02/04/2019	<0.00641		<0.00321		<0.00321		<0.00641		<0.00321		<0.0160		<0.00321		<0.00641		<0.0321	
L1067476-06	B-3 (9-10')	02/04/2019	<0.00520		<0.00260		<0.00260		<0.00520		<0.00260		<0.0130		<0.00260		<0.00520		<0.0260	
L1067476-19	B-9 (4-5')	02/05/2019	<0.00581		<0.00291		<0.00291		<0.00581		<0.00291		<0.0145		<0.00291		<0.00581		<0.0291	
L1067476-20	B-9 (14-15')	02/05/2019	<0.00570		<0.00285		<0.00285		<0.00570		<0.00285		<0.0143		<0.00285		<0.00570		<0.0285	
L1067476-21	B-10 (1-2')	02/05/2019	<0.00652		<0.00326		<0.00326		<0.00652		<0.00326		<0.0163		<0.00326		<0.00652		<0.0326	
L1067476-22	B-10 (14-15')	02/05/2019	<0.00585		<0.00292		<0.00292		<0.00585		<0.00292		<0.0146		<0.00292		<0.00585		<0.0292	
L1068318-19	B-17 (4-5')	02/07/2019	<0.00593		<0.00297		<0.00297		<0.00593		<0.00297		<0.0148		<0.00297		<0.00593		<0.0297	
L1068318-20	B-17 (11-12')	02/07/2019	<0.00558		<0.00279		<0.00279		<0.00558		<0.00279		<0.0139		<0.00279		<0.00558		<0.0279	
L1068318-01	B-18 (1-2')	02/07/2019	<0.0135		<0.00674		<0.00674	J4	<0.0135		<0.00674		<0.0337		<0.00674		<0.0135		<0.0674	
L1068318-02	B-18 (14-15)	02/07/2019	<0.00598		<0.00299		<0.00299	J4	<0.00598		<0.00299		<0.0149		<0.00299		<0.00598		<0.0299	
L1068318-08	B-19 (14-15')	02/07/2019	<0.00591		<0.00295		<0.00295		<0.00591		<0.00295		<0.0148		<0.00295		<0.00591		<0.0295	
L1068318-17	MW-9 (9-10')	02/06/2019	<0.00531		<0.00266		<0.00266		<0.00531		<0.00266		<0.0133		<0.00266		<0.00531		<0.0266	
L1068318-18	MW-9 (24-25')	02/06/2019	<0.00571		<0.00285		<0.00285		<0.00571		<0.00285		<0.0143		<0.00285		<0.00571		<0.0285	
L1068318-25	MW-10 (6-7')	02/06/2019	<0.00582		<0.00291		<0.00291		<0.00582		<0.00291		<0.0145		<0.00291		<0.00582		<0.0291	
L1068318-26	MW-10 (14-15')	02/06/2019	<0.00610		<0.00305		<0.00305		<0.00610		<0.00305		<0.0153		<0.00305		<0.00610		<0.0305	
L1068318-04	MW-11 (20-21')	02/07/2019	<0.0509	J4	<0.0255		<0.0255	J4	<0.0509		<0.0255		<0.127		<0.0255		<0.0509		<0.255	
L1068318-05	MW-12 (9-10)	02/07/2019	<0.00583		<0.00292		<0.00292		<0.00583		<0.00292		<0.0146		<0.00292		<0.00583		<0.0292	
L1068318-06	MW-12 (24-25')	02/07/2019	<0.00573		<0.00287		<0.00287		<0.00573		<0.00287		<0.0143		<0.00287		<0.00573		<0.0287	
L1067476-17	MW-13 (5-6')	02/05/2019	<0.242		<0.121		<0.121		<0.242		<0.121		<0.604		<0.121		<0.242		<1.21	
L1067476-18	MW-13 (14'-15')	02/05/2019	<0.00523		<0.00261		<0.00261		<0.00523		<0.00261		<0.0131		<0.00261		<0.00523		<0.0261	
L1068318-10	DUPLICATE B-T9	02/07/2019	<0.00613		<0.00307		<0.00307		<0.00613		<0.00307		<0.0153		<0.00307		<0.00613		<0.0307	
TX Table 1 Tier 1 Residential GW Soil Ing 0_5 Acre			0.062		1.1		0.049		31		1		0.41		9.1		11		0.0017	
Other Applicable Values																				

TABLE 4
Extended Soil VOCs Analytical Results
Boundary Ventures
Altair, Colorado County, Texas

Method			8260C		8260C		8260C		8260C		8260C		8260C		8260C		8260C			
Analyte			1,2-DIBROMOETHANE		DIBROMOMETHANE		1,2-DICHLOROBENZENE		1,3-DICHLOROBENZENE		1,4-DICHLOROBENZENE		DICHLORODIFLUOROMETHANE		1,1-DICHLOROETHANE		1,2-DICHLOROETHANE		1,1-DICHLOROETHENE	
Units			mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg	
Lab Sample ID	Client Sample ID	Date Collected	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
L1067476-05	B-3 (1'-2')	02/04/2019	<0.00321		<0.00641		<0.00641		<0.00641		<0.00641		<0.00321		<0.00321		<0.00321		<0.00321	
L1067476-06	B-3 (9-10')	02/04/2019	<0.00260		<0.00520		<0.00520		<0.00520		<0.00520		<0.00260		<0.00260		<0.00260		<0.00260	
L1067476-19	B-9 (4-5')	02/05/2019	<0.00291		<0.00581		<0.00581		<0.00581		<0.00581		<0.00291		<0.00291		<0.00291		<0.00291	
L1067476-20	B-9 (14-15')	02/05/2019	<0.00285		<0.00570		<0.00570		<0.00570		<0.00570		<0.00285		<0.00285		<0.00285		<0.00285	
L1067476-21	B-10 (1-2')	02/05/2019	<0.00326		<0.00652		<0.00652		<0.00652		<0.00652		<0.00326		<0.00326		<0.00326		<0.00326	
L1067476-22	B-10 (14-15')	02/05/2019	<0.00292		<0.00585		<0.00585		<0.00585		<0.00585		<0.00292		<0.00292		<0.00292		<0.00292	
L1068318-19	B-17 (4-5')	02/07/2019	<0.00297		<0.00593		<0.00593		<0.00593		<0.00593		<0.00297		<0.00297		<0.00297		<0.00297	
L1068318-20	B-17 (11-12')	02/07/2019	<0.00279		<0.00558		<0.00558		<0.00558		<0.00558		<0.00279		<0.00279		<0.00279		<0.00279	
L1068318-01	B-18 (1-2')	02/07/2019	<0.00674		<0.0135		<0.0135		<0.0135		<0.0135		<0.00674		<0.00674		<0.0270		<0.00674	
L1068318-02	B-18 (14-15)	02/07/2019	<0.00299		<0.00598		<0.00598		<0.00598		<0.00598		<0.00299		<0.00299		<0.00299		<0.00299	
L1068318-08	B-19 (14-15')	02/07/2019	<0.00295		<0.00591		<0.00591		<0.00591		<0.00591		<0.00295		<0.00295		<0.00295		<0.00295	
L1068318-17	MW-9 (9-10')	02/06/2019	<0.00266		<0.00531		<0.00531		<0.00531		<0.00531		<0.00266		<0.00266		<0.00266		<0.00266	
L1068318-18	MW-9 (24-25')	02/06/2019	<0.00285		<0.00571		<0.00571		<0.00571		<0.00571		<0.00285		<0.00285		<0.00285		<0.00285	
L1068318-25	MW-10 (6-7')	02/06/2019	<0.00291		<0.00582		<0.00582		<0.00582		<0.00582		<0.00291		<0.00291		<0.00291		<0.00291	
L1068318-26	MW-10 (14-15')	02/06/2019	<0.00305		<0.00610		<0.00610		<0.00610		<0.00610		<0.00305		<0.00305		<0.00305		<0.00305	
L1068318-04	MW-11 (20-21')	02/07/2019	<0.0255		<0.0509		<0.0509		<0.0509		<0.0509		<0.0255		<0.0255		<0.0255		<0.0255	
L1068318-05	MW-12 (9-10)	02/07/2019	<0.00292		<0.00583		<0.00583		<0.00583		<0.00583		<0.00292		<0.00292		<0.00292		<0.00292	
L1068318-06	MW-12 (24-25')	02/07/2019	<0.00287		<0.00573		<0.00573		<0.00573		<0.00573		<0.00287		<0.00287		<0.00287		<0.00287	
L1067476-17	MW-13 (5'-6')	02/05/2019	<0.121		<0.242		<0.242		<0.242		<0.242		<0.121		<0.121		<0.121		<0.121	
L1067476-18	MW-13 (14'-15')	02/05/2019	<0.00261		<0.00523		<0.00523		<0.00523		<0.00523		<0.00261		<0.00261		<0.00261		<0.00261	
L1068318-10	DUPLICATE B-19	02/07/2019	<0.00307		<0.00613		<0.00613		<0.00613		<0.00613		<0.00307		<0.00307		<0.00307		<0.00307	
TX Table 1 Tier 1 Residential GW Soil Ing 0_5 Acre			0.00021		1.1		18		6.7		2.1		240		18		0.014		0.05	
Other Applicable Values																				



TABLE 4
Extended Soil VOCs Analytical Results
Boundary Ventures
Altair, Colorado County, Texas

Method			8260C		8260C		8260C		8260C		8260C		8260C		8260C		8260C			
Analyte			CIS-1,2-DICHLOROETHENE		TRANS-1,2-DICHLOROETHENE		1,2-DICHLOROPROPANE		1,1-DICHLOROPROPENE		1,3-DICHLOROPROPANE		CIS-1,3-DICHLOROPROPENE		TRANS-1,3-DICHLOROPROPENE		2,2-DICHLOROPROPANE		DI-ISOPROPYL ETHER	
Units			mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg	
Lab Sample ID	Client Sample ID	Date Collected	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
L1067476-05	B-3 (1'-2')	02/04/2019	<0.00321	J4	<0.00641		<0.00641	J4	<0.00321		<0.00641		<0.00321		<0.00641		<0.00321		<0.00128	
L1067476-06	B-3 (9-10')	02/04/2019	<0.00260	J4	<0.00520		<0.00520	J4	<0.00260		<0.00520		<0.00260		<0.00520		<0.00260		<0.00104	
L1067476-19	B-9 (4-5')	02/05/2019	<0.00291	J4	<0.00581		<0.116	J4	<0.00291		<0.00581		<0.00291		<0.00581		<0.00291		<0.00116	
L1067476-20	B-9 (14-15')	02/05/2019	<0.00285	J4	<0.00570		<0.00570	J4	<0.00285		<0.00570		<0.00285		<0.00570		<0.00285		<0.00114	
L1067476-21	B-10 (1-2')	02/05/2019	<0.00326	J4	<0.00652		<0.0130	J4	<0.00326		<0.00652		<0.00326		<0.00652		<0.00326		<0.00130	
L1067476-22	B-10 (14-15')	02/05/2019	<0.00292	J4	<0.00585		<0.0234	J4	<0.00292		<0.00585		<0.00292		<0.00585		<0.00292		<0.00117	
L1068318-19	B-17 (4-5')	02/07/2019	<0.00297		<0.00593		<0.00593		<0.00297		<0.00593		<0.00297		<0.00593		<0.00297		<0.00119	
L1068318-20	B-17 (11-12')	02/07/2019	<0.00279		<0.00558		<0.00558		<0.00279		<0.00558		<0.00279		<0.00558		<0.00279		<0.00112	
L1068318-01	B-18 (1-2')	02/07/2019	<0.00674		<0.0135		<0.0135		<0.00674		<0.0135		<0.00674		<0.0135		<0.00674		<0.00270	
L1068318-02	B-18 (14-15)	02/07/2019	<0.00299		<0.00598		<0.00598		<0.00299		<0.00598		<0.00299		<0.00598		<0.00299		<0.00120	
L1068318-08	B-19 (14-15')	02/07/2019	<0.00295		<0.00591		<0.00591		<0.00295		<0.00591		<0.00295		<0.00591		<0.00295		<0.00118	
L1068318-17	MW-9 (9-10')	02/06/2019	<0.00266		<0.00531		<0.00531		<0.00266		<0.00531		<0.00266		<0.00531		<0.00266		<0.00106	
L1068318-18	MW-9 (24-25')	02/06/2019	<0.00285		<0.00571		<0.00571		<0.00285		<0.00571		<0.00285		<0.00571		<0.00285		<0.00114	
L1068318-25	MW-10 (6-7')	02/06/2019	<0.00291		<0.00582		<0.00582		<0.00291		<0.00582		<0.00291		<0.00582		<0.00291		<0.00116	
L1068318-26	MW-10 (14-15')	02/06/2019	<0.00305		<0.00610		<0.00610		<0.00305		<0.00610		<0.00305		<0.00610		<0.00305		<0.00122	
L1068318-04	MW-11 (20-21')	02/07/2019	<0.0255		<0.0509		<0.0509	J4	<0.0255		<0.0509		<0.0255		<0.0509		<0.0255	J4	<0.0102	
L1068318-05	MW-12 (9-10)	02/07/2019	<0.00292	J4	<0.00583		<0.0467	J4	<0.00292		<0.00583		<0.00292		<0.00583		<0.00292		<0.00117	
L1068318-06	MW-12 (24-25')	02/07/2019	<0.00287	J4	<0.00573		<0.00573	J4	<0.00287		<0.00573		<0.00287		<0.00573		<0.00287		<0.00115	
L1067476-17	MW-13 (5-6')	02/05/2019	<0.121		<0.242		<0.242		<0.121		<0.242		<0.121		<0.242		<0.121		<0.0483	
L1067476-18	MW-13 (14-15')	02/05/2019	<0.00261	J4	<0.00523		<0.00523	J4	<0.00261		<0.00523		<0.00261		<0.00523		<0.00261		<0.00105	
L1068318-10	DUPLICATE B-19	02/07/2019	<0.00307		<0.00613		<0.00613		<0.00307		<0.00613		<0.00307		<0.00613		<0.00307		<0.00123	
TX Table 1 Tier 1 Residential GW Soil Ing 0_5 Acre			0.25		0.49		0.023		0.13		0.064		0.0066		0.036		0.12		12	
Other Applicable Values																				

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TABLE 4
Extended Soil VOCs Analytical Results
Boundary Ventures
Altair, Colorado County, Texas

Method			8260C		8260C		8260C		8260C		8260C		8260C		8260C		8260C			
Analyte			HEXACHLORO-1,3-BUTADIENE		ISOPROPYLBENZENE		P-ISOPROPYLtolUENE		2-BUTANONE (MEK)		METHYLENE CHLORIDE		4-METHYL-2-PENTANONE (MIBK)		METHYL TERT-BUTYL ETHER		NAPHTHALENE		N-PROPYLBENZENE	
Units			mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg	
Lab Sample ID	Client Sample ID	Date Collected	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
L1067476-05	B-3 (1'-2')	02/04/2019	<0.0321		0.0124		0.0494		<0.0321		<0.0321		<0.0321		<0.00128		0.509		0.0385	
L1067476-06	B-3 (9-10')	02/04/2019	<0.0260		<0.00260		<0.00520		<0.0260		<0.0260		<0.0260		<0.00104		<0.0130		<0.00520	
L1067476-19	B-9 (4-5')	02/05/2019	<0.0291		0.54		1.31		<0.0291		<0.0291		<0.0291		<0.00116		2.41		1.59	
L1067476-20	B-9 (14-15')	02/05/2019	<0.0285		<0.00285		0.00318	J	<0.0285		<0.0285		<0.0285		<0.00114		<0.0143		<0.00570	
L1067476-21	B-10 (1-2')	02/05/2019	<0.0326		<0.00326		0.0353		<0.0326		<0.0326		<0.0326		<0.00130		0.0527		<0.00652	
L1067476-22	B-10 (14-15')	02/05/2019	<0.0292		<0.00292		<0.00585		<0.0292		<0.0292		<0.0292		<0.00117		<0.0585		<0.00585	
L1068318-19	B-17 (4-5')	02/07/2019	<0.0297		<0.00297		<0.00593		<0.0297		<0.0297		<0.0297		<0.00119		<0.0148		<0.00593	
L1068318-20	B-17 (11-12')	02/07/2019	<0.0279		<0.00279		<0.00558		<0.0279		<0.0279		<0.0279		<0.00112		<0.0139		<0.00558	
L1068318-01	B-18 (1-2')	02/07/2019	<0.0674		0.253		0.742		0.257		<0.0674		0.229	J4	<0.00270		2.04		1.03	
L1068318-02	B-18 (14-15)	02/07/2019	<0.0299		<0.00299		<0.00598		<0.0299		<0.0299		<0.0299	J4	<0.00120		<0.0149		<0.00598	
L1068318-08	B-19 (14-15')	02/07/2019	<0.0295		<0.00295		<0.00591		<0.0295		<0.0295		<0.0295		<0.00118		0.0202		<0.00591	
L1068318-17	MW-9 (9-10')	02/06/2019	<0.0266		<0.00266		<0.00531		<0.0266		<0.0266		<0.0266		<0.00106		<0.0133		<0.00531	
L1068318-18	MW-9 (24-25')	02/06/2019	<0.0285		<0.00285		<0.00571		<0.0285		<0.0285		<0.0285		<0.00114		<0.0143		<0.00571	
L1068318-25	MW-10 (6-7')	02/06/2019	<0.0291		<0.00291		<0.00582		<0.0291		<0.0291		<0.0291		<0.00116		<0.0145		<0.00582	
L1068318-26	MW-10 (14-15')	02/06/2019	<0.0305		<0.00305		<0.00610		<0.0305		<0.0305		<0.0305		<0.00122		<0.0153		<0.00610	
L1068318-04	MW-11 (20-21')	02/07/2019	<0.255		<0.0255		<0.0509		<0.255		<0.255		<0.255		<0.0102		0.0546	J	<0.0509	
L1068318-05	MW-12 (9-10)	02/07/2019	<0.0292		0.0482		0.432		<0.0292		<0.0292		<0.0292		<0.00117		0.898		0.201	
L1068318-06	MW-12 (24-25')	02/07/2019	<0.0287		<0.00287		<0.00573		<0.0287		<0.0287		<0.0287		<0.00115		<0.0143		<0.00573	
L1067476-17	MW-13 (5'-6')	02/05/2019	<1.21		0.987		2.25		<1.21		<1.21		<1.21		<0.0483		23.2		2.14	
L1067476-18	MW-13 (14'-15')	02/05/2019	<0.0261		<0.00261		<0.00523		<0.0261		<0.0261		<0.0261		<0.00105		0.0078	J	<0.00523	
L1068318-10	DUPLICATE B-19	02/07/2019	<0.0307		<0.00307		<0.00613		<0.0307		<0.0307		<0.0307		<0.00123		0.0118	J	<0.00613	
TX Table 1 Tier 1 Residential GW Soil Ing 0_5 Acre			3.3		350		230		29		0.013		4.9		0.62		31		45	
Other Applicable Values																				

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TABLE 4
Extended Soil VOCs Analytical Results
Boundary Ventures
Altair, Colorado County, Texas

Method			8260C		8260C		8260C		8260C		8260C		8260C		8260C		8260C			
Analyte			STYRENE		1,1,1,2-TETRACHLOROETHANE		1,1,2,2-TETRACHLOROETHANE		1,1,2-TRICHLOROTRIFLUOROETHANE		TETRACHLOROETHENE		1,2,3-TRICHLOROBENZENE		1,2,4-TRICHLOROBENZENE		1,1,1-TRICHLOROETHANE		1,1,2-TRICHLOROETHANE	
Units			mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg	
Lab Sample ID	Client Sample ID	Date Collected	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
L1067476-05	B-3 (1'-2')	02/04/2019	<0.0160		<0.00321		<0.00321		<0.00321		<0.00321		<0.00321		<0.0160		<0.00321		<0.00321	J4
L1067476-06	B-3 (9-10')	02/04/2019	<0.0130		<0.00260		<0.00260		<0.00260		<0.00260		<0.00260		<0.0130		<0.00260		<0.00260	J4
L1067476-19	B-9 (4-5')	02/05/2019	0.032		<0.00291		<0.00291		<0.0581		<0.00291		<0.00291		<0.0145		<0.00291		<0.00291	J4
L1067476-20	B-9 (14-15')	02/05/2019	<0.0143		<0.00285		<0.00285		<0.00285		<0.00285		<0.00285		<0.0143		<0.00285		<0.00285	J4
L1067476-21	B-10 (1-2')	02/05/2019	<0.0163		<0.00326		<0.00326		<0.00652		<0.00326		<0.00326		<0.0163		<0.00326		<0.00326	J4
L1067476-22	B-10 (14-15')	02/05/2019	<0.0146		<0.00292		<0.00292		<0.0117		<0.00292		<0.00292		<0.0146		<0.00292		<0.00292	J4
L1068318-19	B-17 (4-5')	02/07/2019	<0.0148		<0.00297		<0.00297		<0.00297		<0.00297		<0.00297		<0.0148		<0.00297		<0.00297	
L1068318-20	B-17 (11-12')	02/07/2019	<0.0139		<0.00279		<0.00279		<0.00279		<0.00279		<0.00279		<0.0139		<0.00279		<0.00279	
L1068318-01	B-18 (1-2')	02/07/2019	<0.0337		<0.00674		<0.00674		<0.00674		0.00285	J	<0.00674		<0.0337		<0.00674		<0.00674	
L1068318-02	B-18 (14-15)	02/07/2019	<0.0149		<0.00299		<0.00299		<0.00299		<0.00299		<0.00299		<0.0149		<0.00299		<0.00299	
L1068318-08	B-19 (14-15')	02/07/2019	<0.0148		<0.00295		<0.00295		<0.00295		<0.00295		<0.00295		<0.0148		<0.00295		<0.00295	
L1068318-17	MW-9 (9-10')	02/06/2019	<0.0133		<0.00266		<0.00266		<0.00266		<0.00266		<0.00266		<0.0133		<0.00266		<0.00266	
L1068318-18	MW-9 (24-25')	02/06/2019	<0.0143		<0.00285		<0.00285		<0.00285		<0.00285		<0.00285		<0.0143		<0.00285		<0.00285	
L1068318-25	MW-10 (6-7')	02/06/2019	<0.0145		<0.00291		<0.00291		<0.00291		<0.00291		<0.00291		<0.0145		<0.00291		<0.00291	
L1068318-26	MW-10 (14-15')	02/06/2019	<0.0153		<0.00305		<0.00305		<0.00305		<0.00305		<0.00305		<0.0153		<0.00305		<0.00305	
L1068318-04	MW-11 (20-21')	02/07/2019	<0.127		<0.0255		<0.0255		<0.0255		<0.0255		<0.0255		<0.127		<0.0255	J4	<0.0255	
L1068318-05	MW-12 (9-10)	02/07/2019	<0.0146		<0.00292		<0.00292		<0.0233		<0.00292		<0.00292		<0.0146		<0.00292		<0.00292	
L1068318-06	MW-12 (24-25')	02/07/2019	<0.0143		<0.00287		<0.00287		<0.00287		<0.00287		<0.00287		<0.0143		<0.00287		<0.00287	
L1067476-17	MW-13 (5-6')	02/05/2019	<0.604		<0.121		<0.121		<0.121		<0.121		<0.121		<0.604		<0.121		<0.121	
L1067476-18	MW-13 (14-15')	02/05/2019	<0.0131		<0.00261		<0.00261		<0.00261		<0.00261		<0.00261		<0.0131		<0.00261		<0.00261	J4
L1068318-10	DUPLICATE B-19	02/07/2019	<0.0153		<0.00307		<0.00307		<0.00307		<0.00307		<0.00307		<0.0153		<0.00307		<0.00307	
TX Table 1 Tier 1 Residential GW Soil Ing 0_5 Acre			3.3		1.4		0.023		80000		0.05		26		4.8		1.6		0.02	
Other Applicable Values																				

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TABLE 4
Extended Soil VOCs Analytical Results
Boundary Ventures
Altair, Colorado County, Texas

Method			8260C		8260C		8260C		8260C		8260C		8260C			
Analyte			TRICHLOROETHENE		TRICHLOROFLUOROMETHANE		1,2,3-TRICHLOROPROPANE		1,2,4-TRIMETHYLBENZENE		1,2,3-TRIMETHYLBENZENE		VINYL CHLORIDE		1,3,5-TRIMETHYLBENZENE	
Units			mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg	
Lab Sample ID	Client Sample ID	Date Collected	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
L1067476-05	B-3 (1'-2')	02/04/2019	<0.00128		<0.00321		<0.0160		0.659		0.525		<0.00321		0.264	
L1067476-06	B-3 (9-10')	02/04/2019	<0.00104		<0.00260		<0.0130		<0.00520		0.00146	J	<0.00260		<0.00520	
L1067476-19	B-9 (4-5')	02/05/2019	<0.0232		<0.00291		<0.0145		19.1		7.62		<0.00291		8.16	
L1067476-20	B-9 (14-15')	02/05/2019	<0.00114		<0.00285		<0.0143		<0.00570		<0.00570		<0.00285		<0.00570	
L1067476-21	B-10 (1-2')	02/05/2019	<0.00261		<0.00326		<0.0163		0.0153		0.235		<0.00326		0.0907	
L1067476-22	B-10 (14-15')	02/05/2019	<0.00468		<0.00292		<0.0146		<0.0234		0.00575	J	<0.00292		<0.0234	
L1068318-19	B-17 (4-5')	02/07/2019	<0.00119		<0.00297		<0.0148		0.00417	J	0.00238	J	<0.00297		0.00215	J
L1068318-20	B-17 (11-12')	02/07/2019	<0.00112		<0.00279		<0.0139		0.00248	J	0.00173	J	<0.00279		<0.00558	
L1068318-01	B-18 (1-2')	02/07/2019	<0.00270		<0.00674		<0.0337		3.75		5.04		<0.00674		2.61	
L1068318-02	B-18 (14-15)	02/07/2019	<0.00120		<0.00299		<0.0149		0.00162	B J	<0.00598		<0.00299		<0.00598	
L1068318-08	B-19 (14-15')	02/07/2019	<0.00118		<0.00295		<0.0148		0.00959		0.00816		<0.00295		0.004	J
L1068318-17	MW-9 (9-10')	02/06/2019	<0.00106		<0.00266		<0.0133		0.00348	J	0.00211	J	<0.00266		0.00127	J
L1068318-18	MW-9 (24-25')	02/06/2019	<0.00114		<0.00285		<0.0143		0.00293	J	0.00171	J	<0.00285		<0.00571	
L1068318-25	MW-10 (6-7')	02/06/2019	<0.00116		<0.00291		<0.0145		<0.00582		<0.00582		<0.00291		<0.00582	
L1068318-26	MW-10 (14-15')	02/06/2019	<0.00122		<0.00305		<0.0153		<0.00610		<0.00610		<0.00305		<0.00610	
L1068318-04	MW-11 (20-21')	02/07/2019	<0.0102		<0.0255		<0.127		0.05	J	0.0461	J	<0.0255		0.0247	J
L1068318-05	MW-12 (9-10)	02/07/2019	<0.00933		<0.00292		<0.0146		4.45		3.74		<0.00292		1.26	
L1068318-06	MW-12 (24-25')	02/07/2019	<0.00115		<0.00287		<0.0143		<0.00573		<0.00573		<0.00287		<0.00573	
L1067476-17	MW-13 (5-6')	02/05/2019	<0.0483		<0.121		<0.604		22.5		14		<0.121		7.67	
L1067476-18	MW-13 (14-15')	02/05/2019	<0.00105		<0.00261		<0.0131		0.00125	J	0.00138	J	<0.00261		<0.00523	
L1068318-10	DUPLICATE B-19	02/07/2019	<0.00123		<0.00307		<0.0153		0.00385	J	0.00352	J	<0.00307		0.00156	J
TX Table 1 Tier 1 Residential GW Soil Ing 0_5 Acre			0.034		130		0.00053		33		21		0.022		36	
Other Applicable Values																



TABLE 5
 Soil VOCs and Semi-VOCs
 Analytical Results
 Pond Sediment and Waste Pile Composite Samples
 Boundary Ventures
 Altair, Colorado County, Texas

Method		8260B		8260B		8260B		8260B		8260B		8260B		8260B		8260B		
Analyte		ACETONE		ACRYLONITRILE		BENZENE		BROMOBENZENE		BROMODICHLOROMETHANE		BROMOFORM		BROMOMETHANE		N-BUTYLBENZENE		
Units		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		
Lab Sample ID	Client Sample ID	Date Collected	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
L1073696-01	WPC-1	02/25/2019	0.0396		<0.0167		0.00126	J	<0.0167		<0.00333		<0.0333		<0.0167		<0.0167	
L1073696-02	WPC-2	02/25/2019	0.0419		<0.0167		0.00115	J	<0.0167		<0.00334		<0.0334		<0.0167		<0.0167	
L1073696-03	WPC-3	02/25/2019	0.0341	J	<0.0171		0.00144		<0.0171		<0.00343		<0.0343		<0.0171		<0.0171	
L1073696-04	WPC-4	02/25/2019	<0.677		<0.339		0.249		<0.339		<0.0677		<0.677		<0.339	1.19	<0.339	
L1075168-20	PS-1	03/01/2019	0.12		<0.0197		0.00171		<0.0197		<0.00395		<0.0395		<0.0197		<0.0197	
L1075168-21	PS-2	03/01/2019	<0.0432		<0.0216		0.00225		<0.0216		<0.00432		<0.0432		<0.0216		<0.0216	
L1075168-22	PS-3	03/01/2019	0.135		<0.0208		0.0156		<0.0208		<0.00416		<0.0416		<0.0208		<0.0208	
L1075168-23	PS-4	03/01/2019	<0.0397		<0.0199		0.00214		<0.0199		<0.00397		<0.0397		<0.0199	J	0.0155	J
L1075168-24	PS-5	03/01/2019	<0.0447		<0.0223		0.0152		<0.0223		<0.00447		<0.0447		<0.0223	J	0.00715	J
DUPLICATE																		
L1073696-05	WPC-2	02/25/2019	0.0436		<0.0166		<0.00133		<0.0166		<0.00332		<0.0332		<0.0166		<0.0166	
TX Table 1 Tier 1 Residential GW Soil Ing 0_5 Acre 4/2018		43	0.0033		0.026		2.3		0.065		0.63		0.13		150		85	
Ecological Sediment Benchmarks- FW Chronic		60.03	0.55		0.16				2.46		0.22				1.09		0.88	
Other Applicable Values																		



TABLE 5
 Soil VOCs and Semi-VOCs
 Analytical Results
 Pond Sediment and Waste Pile Composite Samples
 Boundary Ventures
 Altair, Colorado County, Texas

Method			8260B		8260B		8260B		8260B		8260B		8260B		8260B		8260B			
Analyte			TERT-BUTYL BENZENE		CARBON TETRACHLORIDE		CHLORO BENZENE		CHLORO DIBROMOMETHANE		CHLOROETHANE		CHLOROFORM		CHLORO METHANE		2-CHLOROTOLUENE		4-CHLOR TOLUENE	
Units			mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg	
Lab Sample ID	Client Sample ID	Date Collected	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
L1073696-01	WPC-1	02/25/2019	<0.00666		<0.00666		<0.00333		<0.00333		<0.00666		<0.00333		<0.0167		<0.00333		<0.00666	
L1073696-02	WPC-2	02/25/2019	<0.00667		<0.00667		<0.00334		<0.00334		<0.00667		<0.00334		<0.0167		<0.00334		<0.00667	
L1073696-03	WPC-3	02/25/2019	<0.00686		<0.00686		<0.00343		<0.00343		<0.00686		<0.00343		<0.0171		<0.00343		<0.00686	
L1073696-04	WPC-4	02/25/2019	<0.135		<0.135		<0.0677		<0.0677		<0.135		<0.0677		<0.339		<0.0677		<0.135	
L1075168-20	PS-1	03/01/2019	<0.00790		<0.00790		<0.00395		<0.00395		<0.00790		<0.00395		<0.0197		<0.00395		<0.00790	
L1075168-21	PS-2	03/01/2019	<0.00865		<0.00865		<0.00432		<0.00432		<0.00865		<0.00432		<0.0216		<0.00432		<0.00865	
L1075168-22	PS-3	03/01/2019	<0.00832		<0.00832		<0.00416		<0.00416		<0.00832		<0.00416		<0.0208		<0.00416		<0.00832	
L1075168-23	PS-4	03/01/2019	<0.00795		<0.00795		<0.00397		<0.00397		<0.00795		<0.00397		<0.0199		<0.00397		<0.00795	
L1075168-24	PS-5	03/01/2019	<0.00893	J	0.00544		<0.00447		<0.00447		<0.00893		<0.00447		<0.0223		<0.00447		<0.00893	
L1073696-05	DUPLICATE	02/25/2019	<0.00664		<0.00664		<0.00332		<0.00332		<0.00664		<0.00332		<0.0166		<0.00332		<0.00664	
TX Table 1 Tier 1 Residential GW Soil Ing 0_5 Acre 4/2018			100		0.062		1.1		0.049		31		1		0.41		9.1		11	
Ecological Sediment Benchmarks- FW Chronic			1.21		1.2		0.74		0.16				1.889		17.8					
Other Applicable Values																				



TABLE 5
 Soil VOCs and Semi-VOCs
 Analytical Results
 Pond Sediment and Waste Pile Composite Samples
 Boundary Ventures
 Altair, Colorado County, Texas

Method		8260B		8260B		8260B		8260B		8260B		8260B		8260B		8260B			
Analyte		1,2-DIBROMO-3-CHLORO PROPANE		1,2-DIBROMOETHANE		DIBROMO METHANE		1,2-DICHLOROBENZENE		1,3-DICHLORO BENZENE		1,4-DICHLORO BENZENE		DICHLORO DIFLUOROMETHANE		1,1-DICHLOROETHANE		1,2-DICHLOROETHANE	
Units		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg	
Lab Sample ID	Client Sample ID	Date Collected	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	
L1073696-01	WPC-1	02/25/2019	<0.033		<0.00333		<0.00666	J4	<0.00666		<0.00666		<0.00666		<0.00333		<0.00333	J4	
L1073696-02	WPC-2	02/25/2019	<0.034		<0.00334		<0.00667	J4	<0.00667		<0.00667		<0.00667		<0.00334		<0.00334	J4	
L1073696-03	WPC-3	02/25/2019	<0.0343		<0.00343		<0.00686	J4	<0.00686		<0.00686		<0.00686		<0.00343		<0.00343	J4	
L1073696-04	WPC-4	02/25/2019	<0.677		<0.0677		<0.135		<0.135		<0.135		<0.135		<0.0677		<0.0677		
L1075168-20	PS-1	03/01/2019	<0.0395		<0.00395		<0.00790	J4	<0.00790		<0.00790		<0.00790		<0.00395		<0.00395		
L1075168-21	PS-2	03/01/2019	<0.0432		<0.00432		<0.00865		<0.00865		<0.00865		<0.00865		<0.00432		<0.00432		
L1075168-22	PS-3	03/01/2019	<0.0416		<0.00416		<0.00832		<0.00832		<0.00832		<0.00832		<0.00416		<0.00416		
L1075168-23	PS-4	03/01/2019	<0.0397		<0.00397		<0.00795		<0.00795		<0.00795		<0.00795		<0.00397		<0.00397		
L1075168-24	PS-5	03/01/2019	<0.0447		<0.00447		<0.00893		<0.00893		<0.00893		<0.00893		<0.00447		<0.00447		
L1073696-05	DUPLICATE	02/25/2019	<0.0332		<0.00332		<0.00664		<0.00664		<0.00664		<0.00664		<0.00332		<0.00332		
TX Table 1 Tier 1 Residential GW Soil Ing 0_5 Acre 4/2018		0.0017	0.00021	1.1	18	6.7	2.1	240	18	0.014									
Ecological Sediment Benchmarks- FW Chronic					0.83	0.19			3.68		2.32		3.56						
Other Applicable Values																			



TABLE 5
 Soil VOCs and Semi-VOCs
 Analytical Results
 Pond Sediment and Waste Pile Composite Samples
 Boundary Ventures
 Altair, Colorado County, Texas

Method		8260B		8260B		8260B		8260B		8260B		8260B		8260B		8260B			
Analyte		1,1-DICHLORO ETHENE		CIS-1,2-DICHLORO ETHENE		TRANS-1,2-DICHLORO ETHENE		1,2-DICHLOROPROPANE		1,1-DICHLORO PROPENE		1,3-DICHLORO PROPENE		CIS-1,3-DICHLORO PROPENE		TRANS-1,3-DICHLORO PROPENE		2,2-DICHLORO PROPANE	
Units		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg	
Lab Sample ID	Client Sample ID	Date Collected	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	
L1073696-01	WPC-1	02/25/2019	<0.00333		<0.00333		<0.00666		<0.00666		<0.00333		<0.00666		<0.00333		<0.00666		
L1073696-02	WPC-2	02/25/2019	<0.00334		<0.00334		<0.00667		<0.00667		<0.00334		<0.00667		<0.00334		<0.00667		
L1073696-03	WPC-3	02/25/2019	<0.00343		<0.00343		<0.00686		<0.00686		<0.00343		<0.00686		<0.00343		<0.00686		
L1073696-04	WPC-4	02/25/2019	<0.0677		<0.0677	J4	<0.135		<0.135		<0.0677		<0.135		<0.0677		<0.135		
L1075168-20	PS-1	03/01/2019	<0.00395		<0.00395		<0.00790		<0.00790		<0.00395		<0.00790		<0.00395		<0.00790		
L1075168-21	PS-2	03/01/2019	<0.00432		<0.00432		<0.00865		<0.00865		<0.00432		<0.00865		<0.00432		<0.00865		
L1075168-22	PS-3	03/01/2019	<0.00416		<0.00416		<0.00832		<0.00832		<0.00416		<0.00832		<0.00416		<0.00832		
L1075168-23	PS-4	03/01/2019	<0.00397		<0.00397		<0.00795		<0.00795		<0.00397		<0.00795		<0.00397		<0.00795		
L1075168-24	PS-5	03/01/2019	<0.00447		<0.00447		<0.00893		<0.00893		<0.00447		<0.00893		<0.00447		<0.00893		
L1073696-05	DUPLICATE	02/25/2019	<0.00332		<0.00332	J4	<0.00664		<0.00664		<0.00332		<0.00664		<0.00332		<0.00664		
TX Table 1 Tier 1 Residential GW Soil Ing 0_5 Acre 4/2018			0.05		0.25		0.49		0.023		0.13		0.064		0.0066		0.036		0.12
Ecological Sediment Benchmarks- FW Chronic			3.74		12.28		23.95		7.05										
Other Applicable Values																			



TABLE 5
 Soil VOCs and Semi-VOCs
 Analytical Results
 Pond Sediment and Waste Pile Composite Samples
 Boundary Ventures
 Altair, Colorado County, Texas

Method		8260B		8260B		8260B		8260B		8260B		8260B		8260B		8260B			
Analyte		DI-ISOPROPYL ETHER		ETHYL BENZENE		HEXACHLORO-1,3- BUTADIENE		ISOPROPYL BENZENE		P-ISOPROPYL TOLUENE		2-BUTANONE (MEK)		METHYLENE CHLORIDE		4-METHYL-2- PENTANONE (MIBK)		METHYL TERT- BUTYL ETHER	
Units		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg	
Lab Sample ID	Item Sample ID	Date Collected	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	
L1073696-01	WPC-1	02/25/2019	<0.00133		0.0013 J		<0.0333		<0.00333		<0.00666		<0.0333		<0.0333		<0.0333	0.00068 J	
L1073696-02	WPC-2	02/25/2019	<0.00133		0.00272 J		<0.0334		<0.00334		<0.00667		<0.0334		0.00959 J		<0.0334	0.00066 J	
L1073696-03	WPC-3	02/25/2019	<0.00137		0.00515		<0.0343		<0.00343		<0.00686		<0.0343		<0.0343		<0.0343	<0.00137	
L1073696-04	WPC-4	02/25/2019	<0.0271		7.48		<0.677		2.01		<0.135		<0.677		<0.677		<0.677	<0.0271	
L1075168-20	PS-1	03/01/2019	<0.00158		0.148		<0.0395		0.00499		<0.00790		<0.0395		<0.0395		<0.0395	<0.00158	
L1075168-21	PS-2	03/01/2019	<0.00173		0.0612		<0.0432		0.0021 J		<0.00865		0.0242 J		<0.0432		<0.0432	<0.00173	
L1075168-22	PS-3	03/01/2019	<0.00166		0.107		<0.0416		0.00217 J		<0.00832		0.04 J		<0.0416		<0.0416	<0.00166	
L1075168-23	PS-4	03/01/2019	<0.00159		0.527		<0.0397		0.0242		0.0127		<0.0397		<0.0397		<0.0397	<0.00159	
L1075168-24	PS-5	03/01/2019	<0.00179		0.0888		<0.0447		<0.00447		0.00783 J		<0.0447		<0.0447		<0.0447	<0.00179	
L1073696-05	DUPLICATE	02/25/2019	<0.00133		0.00356		<0.0332		<0.00332		<0.00664		<0.0332		0.00912 B J		<0.0332	<0.00133	
TX Table 1 Tier 1 Residential GW Soil Ing 0_5 Acre 4/2018		12	7.6		3.3	350		230		29		0.013		4.9		0.62			
Ecological Sediment Benchmarks- FW Chronic			2.63		0.055	8.99		1		25.71		15.51		19.43					
Other Applicable Values																			



TABLE 5
 Soil VOCs and Semi-VOCs
 Analytical Results
 Pond Sediment and Waste Pile Composite Samples
 Boundary Ventures
 Altair, Colorado County, Texas

Method		8260B		8260B		8260B		8260B		8260B		8260B		8260B		8260B			
Analyte		NAPHTHALENE		N-PROPYLBENZENE		STYRENE		1,1,1,2-TETRACHLOROETHANE		1,1,2,2-TETRACHLOROETHANE		1,1,2-TRICHLOROETHANE		TETRACHLOROETHENE		TOLUENE		1,2,3-TRICHLOROBENZENE	
Units		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg	
Lab Sample ID	Client Sample ID	Date Collected	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	
L1073696-01	WPC-1	02/25/2019	0.0128	J	<0.00666		<0.0167		<0.00333		<0.00333		<0.00333		0.00593	J	<0.00333		
L1073696-02	WPC-2	02/25/2019	0.00689	J	0.00205	J	<0.0167		<0.00334		<0.00334		<0.00334		0.00684		<0.00334		
L1073696-03	WPC-3	02/25/2019	<0.0171		<0.00686		<0.0171		<0.00343		<0.00343		<0.00343		0.0109		<0.00343		
L1073696-04	WPC-4	02/25/2019	7.98		6.71		<0.339		<0.0677		<0.0677		<0.0677		0.223		14		
L1075168-20	PS-1	03/01/2019	0.0524		0.0094		<0.0197		<0.00395		<0.00395	J4	<0.00395		0.294		<0.00395		
L1075168-21	PS-2	03/01/2019	0.0587	B	0.00433	J	<0.0216		<0.00432		<0.00432		<0.00432		0.116		<0.00432		
L1075168-22	PS-3	03/01/2019	0.0458	B	0.00464	J	<0.0208		<0.00416		<0.00416		<0.00416		0.619		<0.00416		
L1075168-23	PS-4	03/01/2019	0.324		0.0705		<0.0199		<0.00397		<0.00397		<0.00397		1.24		<0.00397		
L1075168-24	PS-5	03/01/2019	0.0641	B	0.0147		<0.0223		<0.00447		<0.00447		<0.00447		0.526		<0.00447		
L1073696-05	DUPLICATE WPC-2	02/25/2019	0.0209		0.00219	J	<0.0166		<0.00332		<0.00332		<0.00332		0.0121		<0.00332		
TX Table 1 Tier 1 Residential GW Soil Ing 0_5 Acre 4/2018		31		45		3.3		1.4		0.023		80000		0.05		8.2		26	
Ecological Sediment Benchmarks- FW Chronic		0.176		0.72		10.24				0.63		2.78		2.74		6.76			
Other Applicable Values																			

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TABLE 5
 Soil VOCs and Semi-VOCs
 Analytical Results
 Pond Sediment and Waste Pile Composite Samples
 Boundary Ventures
 Altair, Colorado County, Texas

Method		8260B		8260B		8260B		8260B		8260B		8260B		8260B		8260B			
Analyte		1,2,4-TRICHLOR BENZENE		1,1,1-TRICHLOR ETHANE		1,1,2-TRICHLOR ETHANE		TRICHLOROETHENE		TRICHLORO FLUOROMETHANE		1,2,3-TRICHLOR PROPANE		1,2,4-TRIMETHYL BENZENE		1,2,3-TRIMETHYL BENZENE		1,3,5-TRIMETHYL BENZENE	
Units		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg	
Lab Sample ID	Client Sample ID	Date Collected	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	
L1073696-01	WPC-1	02/25/2019	<0.0167		<0.00333		<0.00333		<0.00133		<0.00333	<0.0167	J4	0.0165		0.105		0.0892	
L1073696-02	WPC-2	02/25/2019	<0.0167		<0.00334		<0.00334		<0.00133		<0.00334	<0.0167	J4	0.01		0.00874		0.00487 J	
L1073696-03	WPC-3	02/25/2019	<0.0171		<0.00343		<0.00343		<0.00137		<0.00343	<0.0171	J4	0.01		0.0139		0.00681 J	
L1073696-04	WPC-4	02/25/2019	<0.339		<0.0677		<0.0677		<0.0271		<0.0677	<0.339		33.4		12.9		13	
L1075168-20	PS-1	03/01/2019	<0.0197		<0.00395		<0.00395		<0.00158		<0.00395	<0.0197		0.0648		0.0237		0.0172	
L1075168-21	PS-2	03/01/2019	<0.0216		<0.00432		<0.00432		<0.00173		<0.00432	<0.0216		0.0272		0.0104		0.00825 J	
L1075168-22	PS-3	03/01/2019	<0.0208		<0.00416		<0.00416		<0.00166		<0.00416	<0.0208		0.0265		<0.00832		0.00787 J	
L1075168-23	PS-4	03/01/2019	<0.0199		<0.00397		<0.00397		<0.00159		<0.00397	<0.0199		0.424		0.171		0.138	
L1075168-24	PS-5	03/01/2019	<0.0223		<0.00447		<0.00447		<0.00179		<0.00447	<0.0223		0.102		0.0802		0.0486	
L1073696-05	DUPLICATE	02/25/2019	<0.0166		<0.00332		<0.00332		<0.00133		<0.00332	<0.0166		0.0148		<0.00664		0.0051 J	
TX Table 1 Tier 1 Residential GW Soil Ing 0_5 Acre 4/2018			4.8		1.6		0.02		0.034		130		0.00053		33		21		36
Ecological Sediment Benchmarks- FW Chronic			0.88		8.27		0.38		4.56		1.69			0.76				0.77	
Other Applicable Values																			

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TABLE 5
 Soil VOCs and Semi-VOCs
 Analytical Results
 Pond Sediment and Waste Pile Composite Samples
 Boundary Ventures
 Altair, Colorado County, Texas

Method			8260B		8260B	
Analyte			VINYL CHLORIDE		XYLEMES, TOTAL	
Units			mg/kg		mg/kg	
Lab Sample ID	Client Sample ID	Date Collected	Result	Qualifier	Result	Qualifier
L1073696-01	WPC-1	02/25/2019	<0.00333		0.0241	
L1073696-02	WPC-2	02/25/2019	<0.00334		0.0178	
L1073696-03	WPC-3	02/25/2019	<0.00343		0.0315	
L1073696-04	WPC-4	02/25/2019	<0.0677		65.1	
L1075168-20	PS-1	03/01/2019	<0.00395		1.05	
L1075168-21	PS-2	03/01/2019	<0.00432		0.477	
L1075168-22	PS-3	03/01/2019	<0.00416		0.726	
L1075168-23	PS-4	03/01/2019	<0.00397		3.51	
L1075168-24	PS-5	03/01/2019	<0.00447		0.654	
DUPLICATE						
L1073696-05	WPC-2	02/25/2019	<0.00332		0.0337	
TX Table 1 Tier 1 Residential GW Soil Ing 0_5 Acre 4/2018			0.022		120	
Ecological Sediment Benchmarks- FW Chronic			1.96		4	
Other Applicable Values						

TABLE 5
Soil VOCs and Semi-VOCs
Analytical Results
Pond Sediment and Waste Pile Composite Samples
Boundary Ventures
Altair, Colorado County, Texas

TABLE 5
Soil VOCs and Semi-VOCs
Analytical Results
Pond Sediment and Waste Pile Composite Samples
Boundary Ventures
Altair, Colorado County, Texas

TABLE 5
 Soil VOCs and Semi-VOCs
 Analytical Results
 Pond Sediment and Waste Pile Composite Samples
 Boundary Ventures
 Altair, Colorado County, Texas

Method			8270C		8270C		8270C		8270C		8270C		8270C		8270C		8270C		8270C						
Analyte		HEXACHLORO-1,3-BUTADIENE	HEXACHLOROCYCLOPENTADIENE	HEXACHLOROETHANE	INDENO(1,2,3-CD)PYRENE	ISOPHORONE	NAPHTHALENE	NITROBENZENE	N-NITROSODIMETHYLAMINE	N-NITROSODIPHENYLAMINE	N-NITROSODI-N-PROPYLAMINE	PHENANTHRENE	BENZYLBUTYL PHTHALATE	BIS(2-ETHYLHEXYL)PHTHALATE	DI-N-BUTYL PHTHALATE										
Units			mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg						
Lab Sample ID	Sample ID	Date	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier					
L1073696-01	WPC-1	2/25/2019	<0.133		<0.782		<0.179		<0.103		<0.0695		<0.118		<0.0926		<0.862		<1.20		<0.121				
L1073696-02	WPC-2	2/25/2019	<0.133		<0.784	J6	<0.179		<0.103		<0.0697		<0.119		<0.0928		<0.864	J6	<1.20	J5	<0.121				
L1073696-03	WPC-3	2/25/2019	<0.137		<0.805		<0.184		<0.106		<0.0716		<0.122		<0.0953		<0.887		<1.23		<0.124				
L1073696-04	WPC-4	2/25/2019	<1.35		<7.95		<0.363		0.389	J	<0.707		17.5		<0.941		<1.75		<12.2		<0.245				
L1073696-05	DUPLICATE WPC-2	2/25/2019	<0.133		<0.779		<0.178		<0.102		<0.0693		<0.118		<0.0923		<0.859		<1.19		<0.120				
L1075168-20	PS-1	3/1/2019	<0.0316		<0.185		<0.0423		0.0499	J	<0.0165		0.136		<0.0220		<0.204		<0.284		<0.0286				
L1075168-21	PS-2	3/1/2019	<0.346		<2.03		<0.464		0.777	J	<0.181		<0.308		<0.240		<2.24		<3.11		<0.313				
L1075168-22	PS-3	3/1/2019	<0.0333		<0.195		<0.0446		<0.0257		<0.0174		0.0296	J	<0.0231		<0.215		<0.300		<0.0302				
L1075168-23	PS-4	3/1/2019	<0.159		<0.933		<0.213		0.612		<0.0830		1.3		<0.110		<1.03		2.56	J	<0.144				
L1075168-24	PS-5	3/1/2019	<0.0357		<10.5		<0.0479		<0.0276		<0.0187		<0.0318		<0.0248		<0.231		<16.1		<0.0324				
TX Table 2 Tier 1 Com/Ind GW Soil Ing 0_5			7.4		19		3.8		2800		6.7		93		1		0.000083		6.3		0.00079				
Ecological Sediment Benchmarks- FW													0.176								1200		590		
Other Applicable Values																						160		9900	

TABLE 5
 Soil VOCs and Semi-VOCs
 Analytical Results
 Pond Sediment and Waste Pile Composite Samples
 Boundary Ventures
 Altair, Colorado County, Texas

Method		8270C		8270C		8270C		8270C		8270C		8270C		8270C		8270C		8270C		8270C		8270C		8270C						
Analyte		DIETHYL PHTHALATE		DIMETHYL PHTHALATE		DI-N-OCTYL PHTHALATE		PYRENE		1,2,4-TRICHLOROBENZENE		4-CHLORO-3-METHYLPHENOL		2-CHLOROPHENOL		2,4-DICHLOROPHENOL		2,4-DIMETHYLPHENOL		4,6-DINITRO-2-METHYLPHENOL		2,4-DINITROPHENOL		2-NITROPHENOL		4-NITROPHENOL		PENTACHLOROPHENOL		
Units		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg				
Lab Sample ID	Sample ID	Date	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier		
L1073696-01	WPC-1	2/25/2019	<0.0921		<0.0719		<0.121		0.85		<0.117		<0.0635		<0.111		<0.0994		<0.627		<1.65		<1.31		<0.173		<0.699		<0.639	
L1073696-02	WPC-2	2/25/2019	<0.0922		<0.0721		<0.121		<0.164		<0.117		<0.0637		<0.111		<0.0996		<0.629	J6	<1.66	J6	<1.31	J6	<0.174		<0.701	J6	<0.641	J6
L1073696-03	WPC-3	2/25/2019	<0.0948		<0.0741		<0.124		1.27		<0.120		<0.0654		<0.114		<0.102		<0.646		<1.70		<1.34		<0.178		<0.720		<0.658	
L1073696-04	WPC-4	2/25/2019	<0.936		<0.731		<0.246		10		<1.19		<0.646		<0.225		<1.01		<6.38		<16.8		<13.3		<1.76		<7.11		<6.50	
L1073696-05	DUPLICATE WPC-2	2/25/2019	<0.0917		<0.0717		<0.120		0.179	J	<0.116		<0.0633		<0.110		<0.0990		<0.625		<1.65		<1.30		<0.173		<0.697		<0.637	
L1075168-20	PS-1	3/1/2019	<0.0218		<0.0171		<0.0286		0.449		<0.0277		<0.0151		<0.0262		<0.0236		0.218	J	<0.392		<0.310		<0.0411		<0.166		<0.152	
L1075168-21	PS-2	3/1/2019	<0.239		<0.187		<0.314		3.55		<0.303		<0.165		<0.287		<0.258		<1.63		<4.29		<3.39		<0.450		<1.82		<1.66	
L1075168-22	PS-3	3/1/2019	<0.0230		<0.0180		<0.0302		0.143		<0.0292		<0.0159		<0.0277		<0.0248		<0.157		<0.413		<0.326		<0.0433		<0.175		<0.160	
L1075168-23	PS-4	3/1/2019	<0.110		<0.0858		<0.144		4.67		<0.139		<0.0758		<0.132		<0.119		<0.749		<1.97		<1.56		<0.207		<0.834		<0.763	
L1075168-24	PS-5	3/1/2019	<1.23		<0.965		<0.0324		1.61		<0.0313		<0.0170		<0.0297		<0.0267		<0.168		<22.2		<17.5		<0.0465		<9.38		<8.58	
TX Table 2 Tier 1 Com/Ind GW Soil Ing 0_5			470		190		1000000		3300		4.8		14		4.9		1.1		9.7		0.014		0.28		0.4		0.3		0.018	
Ecological Sediment Benchmarks- FW									0.195		0.88																		1.2	
Other Applicable Values																														

Method		8270C		8270C		8270C		8270C		9045D		9050AMod		9056A		
Analyte		PHENOL		2,4,6-TRICHLOROPHENOL		PHENOL		2,4,6-TRICHLOROPHENOL		PH		SPECIFIC CONDUCTANCE		CHLORIDE		
Units		mg/kg		mg/kg		mg/kg		mg/kg		su		umhos/cm		mg/kg		
Lab Sample ID	Sample ID	Date	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
L1073696-01	WPC-1	2/25/2019	<0.0926		<0.104		<0.0926		<0.104		8.13	T8	611		159	
L1073696-02	WPC-2	2/25/2019	<0.0928		<0.104		<0.0928		<0.104		8.26	T8	740		109	
L1073696-03	WPC-3	2/25/2019	<0.0953		<0.107		<0.0953		<0.107		7.72	T8	2880		2150	
L1073696-04	WPC-4	2/25/2019	<0.188		<1.06		<0.188		<1.06		11.6	T8	15800		3980	
L1073696-05	DUPLICATE WPC-2	2/25/2019	<0.0923		<0.103		<0.0923		<0.103		8.31	T8	815		56.4	
L1075168-20	PS-1	3/1/2019	0.0428	J	<0.0246		0.0428	J	<0.0246				933		265	
L1075168-21	PS-2	3/1/2019	<0.240		<0.269		<0.240		<0.269				964		44	

TABLE 6
TPH 1006 Soil Analytical Results
Boundary Ventures
Altair, Colorado County, Texas

Method			TCEQ Method 1006		TCEQ Method 1006		TCEQ Method 1006		TCEQ Method 1006		TCEQ Method 1006		TCEQ Method 1006		TCEQ Method 1006		TCEQ Method 1006		TCEQ Method 1006			
Analyte			C6 ALIPHATICS		C6-C8 ALIPHATICS		C8-C10 ALIPHATICS		C10-C12 ALIPHATICS		C12-C16 ALIPHATICS		C16-C21 ALIPHATICS		C21-C35 ALIPHATICS		C7-C8 AROMATICS		C8-C10 AROMATICS		C10-C12 AROMATICS	
Units			mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg	
Lab Sample ID	Client Sample ID	Date Collected	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
L1075492-04	B-7 (10-11')	02/05/2019	<26.0	T8	20.6	J T8	449	T8	2210	T8	7840	T8	5720	T8	1640	T8	<26.0	T8	158	T8	762 587	T8 T8
L1075492-11	B-14 (9-10')	02/06/2019	<25.5		<25.5		380		1910		7290		6070		2360		<25.5		99.2		624 489	
L1075492-09	MW-11 (1-2)	02/07/2019	<25.6		<25.6		150		1030		5370		5830		2360		<25.6		34.6		274 214	
L1075492-08	B-18 (1-2')	02/07/2019	<27.0		<27.0		253		1290		4560		3850		1440		<27.0		80.2		425 315	
L1075492-15	WPC-3	02/25/2019	<27.4		<27.4		<27.4		94.5		1500		6720		6100		<27.4		<27.4		<27.4 <20.0	
Table 1 Tier 1 Residential GW Soil Ing 0_5 Acre 4/2018			170		420		3600		25000		490000		1000000		1000000		20		65		100	
Other Applicable Values																						



TABLE 6
 TPH 1006 Soil Analytical Results
 Boundary Ventures
 Altair, Colorado County, Texas

Method			TCEQ Method 1006		TCEQ Method 1006		TCEQ Method 1006		TCEQ Method 1006	
Analyte			C12-C16 AROMATICS		C16-C21 AROMATICS		C21-C35 AROMATICS		TPH C6 - C35	
Units			mg/kg		mg/kg		mg/kg		mg/kg	
Lab Sample ID	Client Sample ID	Date Collected	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
L1075492-04	B-7 (10-11')	02/05/2019	3310	T8	2130	T8	517	T8		
L1075492-11	B-14 (9-10')	02/06/2019	2580		1620		460			
L1075492-09	MW-11 (1-2)	02/07/2019	1810		1550		456		<25.6	J3 J4
L1075492-08	B-18 (1-2')	02/07/2019	1730		1090		297		<27.0	J3 J4
L1075492-15	WPC-3	02/25/2019	283		1370		1160		<27.4	
Table 1 Tier 1 Residential GW Soil Ing 0_5 Acre 4/2018			200		470		3700			
Other Applicable Values										



TABLE 7
Soil Inorganics and TOX Analytical Results
Boundary Ventures
Altair, Colorado County, Texas

Method			2540 G-2011		6010B		6010B		6010B		6010B		6010B		7471A		9023		9045D		9050AMod		9056A						
Analyte			TOTAL SOLIDS		ARSENIC		BARIUM		CADMIUM		CHROMIUM		LEAD		SELENIUM		SILVER		MERCURY		EXTRACTED TOX		PH		SPECIFIC CONDUCTANCE		CHLORIDE		
Units			%		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		su		μmhos/cm		mg/kg		
Lab Sample ID	Client Sample ID	Date Collected	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	
L1067476-01	B-1 (4'-5')	02/04/2019	93.8		1.28	J	238		<0.533		4.88		3.47	B	<2.13		<1.07		<0.0213				7.89	T8	401		46.7	B P1	
L1067476-02	B-1 (14'-15')	02/04/2019	94.1		2.26		14.5		<0.532		3.95		1.61	B	<2.13		<1.06		<0.0213				8.33	T8	302		13.2	B	
L1067476-03	B-2 (1'-2')	02/04/2019	79.6		4.72		17500		<3.14		26.3		45.2		<2.51		<1.26		2.07				7.56	T8	2480		80.2		
L1067476-04	B-2 (14'-15')	02/04/2019	80.6		<2.48		21		<0.620		3.07		0.879	B	<2.48		<1.24		<0.0248				6.74	T8	181		46.4	B	
L1067476-05	B-3 (1'-2')	02/04/2019	78		22.2		16100		<3.21		30.5		62		<2.57		<1.28		0.907							11.2		6100	
L1067476-06	B-3 (9-10')	02/04/2019	96.1		<2.08		20.8		<0.520		3.57		1.25	B	<2.08		<1.04		<0.0208						239		183		
L1067476-07	B-4 (14-15')	02/04/2019	89.6		1.5	J	53.7		<0.558		11.7		2.58	B	<2.23		<1.12		<0.0223				7.12	T8	300		72.2		
L1067476-08	B-4 (19-20')	02/04/2019	89		<2.25		30		<0.562		4.01		1.72	B	<2.25		<1.12		<0.0225				6.81	T8	147		210		
L1067476-09	B-5 (4'-5')	02/04/2019	78.6		16.2		16900		<3.18		27.3		52.7		<2.55		<1.27		0.508				8	T8	3540		1760		
L1067476-10	B-5 (17'-18')	02/04/2019	90.3		<2.21		19.2	O1	<0.554		5.4		0.964	B	<2.21		<1.11		<0.0221				8.46	T8	766		196		
L1067476-11	B-6 (5'-6')	02/04/2019	79.9		33		15700		<3.13		31		76.3		<2.50		<1.25		1.03				11.3	T8	4100		1780		
L1067476-12	B-6 (8'-9')	02/04/2019	87.3		0.983	J	1120		<0.573		5.7		4.61		<2.29		<1.15		0.00655	J			10.9	T8	2490		883		
L1067476-13	B-7 (10-11')	02/05/2019	77.1		17.8		13500		<3.24		29.9		41.1		<2.60		<1.30		0.71				11.5	T8	4500		2230		
L1067476-14	B-7 (24-25')	02/05/2019	89.2		3.39		6470		<2.80		10.7		11.4		<2.24		<1.12		0.0895				10.8	T8	1510		507		
L1067476-15	B-8 (9-10')	02/05/2019	83.8		43.2		12600		<2.98		40.8		111		0.829	J	<1.19		1.13				11.8	T8	6240		2500		
L1067476-16	B-8 (24-25')	02/05/2019	94.2		1.36	J	54.4		<0.531		6.34		2.89	B	<2.12		<1.06		<0.0212				6.75	T8	812		258		
L1067476-19	B-9 (4-5')	02/05/2019	86		6.51		12600		<2.91		15.2		26.3		<2.32		<1.16		0.345				11.2	T8	2760		919		
L1067476-20	B-9 (14-15')	02/05/2019	87.7		1.65	J	37.8		<0.570		12.1		3.54	B	<2.28		<1.14		<0.0228				8.18	T8	803		506		
L1067476-21	B-10 (1-2')	02/05/2019	76.6		24.1		16400		<3.26		27.5		64.8		<13.0		<6.52		0.977				9.63	T8	2450		739		
L1067476-22	B-10 (14-15')	02/05/2019	85.5		<2.34		40.6		0.107	J	10.9		5.96		<2.34		<1.17		<0.0234				8.9	T8	614		212		
L1068318-21	B-11 (1-2')	02/06/2019	92.4		0.627	J	81.7		<0.541		2.88		1.6		<2.16		<1.08		<0.0216				2.62	T8	159		13.4		
L1068318-22	B-11 (10-11')	02/06/2019	87.5		1.69	J	170		<0.571		5.91		1.52		<2.29		<1.14		<0.0229				8.83	T8	311		94.6		
L1068318-23	B-12 (4-5')	02/06/2019	84.6		6.09		152		<0.591		13.3		6.09		<2.36		<1.18		<0.0236				8.59	T8	215		13.7		
L1068318-24	B-12 (19-20')	02/06/2019	86.4		5.67		133		<0.579		14.5		6.45		<2.31		<1.16		<0.0231				9.16	T8	303		56		
L1068318-27	B-13 (14-15')	02/06/2019	75.6		2.3	J	108		<0.661		18		6.61		<2.64		<1.32		<0.0264				6.36	T8	5010		1630		
L1068318-28	B-13 (16-17')	02/06/2019	78.6		1.96	J	56.7		<0.636		6.14		2.35		<2.54		<1.27		<0.0254				7.82	T8					

TABLE 7
 Soil Inorganics and TOX Analytical Results
 Boundary Ventures
 Altair, Colorado County, Texas

Method			2540 G-2011		6010B		6010B		6010B		6010B		6010B		6010B		7471A		9023		9045D		9050AMod		9056A					
Analyte			TOTAL SOLIDS		ARSENIC		BARIUM		CADMIUM		CHROMIUM		LEAD		SELENIUM		SILVER		MERCURY		EXTRACTED TOX		PH		SPECIFIC CONDUCTANCE		CHLORIDE			
Units			% mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		su μmhos/cm		mg/kg					
Lab Sample ID	Client Sample ID	Date Collected	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier				
L1068318-17	MW-9 (9-10')	02/06/2019	94.1		1.25	J	88.5	J3 J5	<0.531		9.13		0.552		<2.12		<1.06		<0.0212				9.1	T8	98.6		7.12	J		
L1068318-18	MW-9 (24-25')	02/06/2019	87.6		1.01	J	33.9		<0.571		7.74		4.58		<2.28		<1.14		<0.0228				8.72	T8	233		9.44	J		
L1068318-25	MW-10 (6-7')	02/06/2019	86		1.32	J	79		<0.582		12.2		8.01		<2.33		<1.16		<0.0233				8.54	T8	117		9.96	J		
L1068318-26	MW-10 (14-15')	02/06/2019	82		2.71		15300		<3.05		8.61		7.7		<2.44		<1.22		<0.0244				9.3	T8	211		38.8			
L1068318-03	MW-11 (1-2)	02/07/2019	78		17.5		17100		<0.641		26		66.8		2.3	J	<1.28		0.405		<32.0				9.15	T8	13200		3820	
L1068318-04	MW-11 (20-21')	02/07/2019	98.2		0.636	J	9.74		<0.509		2.37		1.26		1.01	J	<1.02		<0.0204				8.9	T8	101		12.2	B		
L1068318-05	MW-12 (9-10)	02/07/2019	85.7		3.52		12900		<0.583		11.3		22.1		<2.33		<1.17		0.588				10.2	T8	4520		435			
L1068318-06	MW-12 (24-25')	02/07/2019	87.2		<2.29		28.7		<0.573		16.8		6.4		<2.29		<1.15		<0.0229				8.26	T8	1270		527			
L1067476-17	MW-13 (5'-6')	02/05/2019	82.8		10.3		18300		<3.02		32.5		49.8		<2.42		<1.21		1.07				11.5	T8	7440		3730			
L1067476-18	MW-13 (14'-15')	02/05/2019	95.7		1.71	J	44.2		<0.523		3.84		1.32	B	<2.09		<1.05		<0.0209				8.69	T8	1110		339			
L1073696-01	WPC-1	02/25/2019	75.1		37.1		16900		<3.33		24.2		135		1.24	J	<1.33		1.37				8.13	T8	611		159			
L1073696-02	WPC-2	02/25/2019	74.9		20.5		22500		<3.34		20.4		67.2		1.55	J	<1.33		0.748		<33.4	J5			8.26	T8	740		109	
L1073696-03	WPC-3	02/25/2019	72.9		14.3		18500		<3.43		20.8		60		1.81	J	<1.37		1.25				7.72	T8	2880		2150			
L1073696-04	WPC-4	02/25/2019	73.8		5.71		11500		<0.677		17.1		29.2		1.36	J	<1.35		0.972				11.6	T8	15800		3980			
L1075168-20	PS-1	03/01/2019	63.3		17.2		23500		<3.95		28		61.3		1.1	J	<1.58		0.748								933		265	
L1075168-21	PS-2	03/01/2019	57.8		20.8		24400		<4.32		28.5		68.2		1.25	J	<1.73		1.74								964		444	
L1075168-22	PS-3	03/01/2019	60.1		18.9		26300		<4.16		30.1		68.9		1.88	J	<1.66		0.641								1100		664	
L1075168-23	PS-4	03/01/2019	62.9		21		23300		<3.97		36.9		77.9		<3.18		<1.59		0.872								2630		909	
L1075168-24	PS-5	03/01/2019	56		20.2		25200		<4.47		47		78.9		<3.57		<1.79		0.758								1020		498	
L1068318-09	DUPLICATE B-19 (1'-2')	02/07/2019	77.4		26.6		18100		<0.646		26.1		105		<2.58		<1.29		1.65		<32.3				9.71	T8	8770		3270	
L1068318-10	DUPLICATE B-19 (14'-15')	02/07/2019	81.5		3.44		84		0.108	J	18.5		8.39		<2.45		<1.23		<0.0245					8.24	T8	471		191		
L1073696-05	DUPLICATE WPC-2	02/25/2019	75.3		17.5		18900		<3.32		21		64.7		1.78	J	<1.33		0.96		<33.2				8.31	T8	815		56.4	
TX Table 1 Tier 1 Residential GW Soil Ing 0_5 Acre			5		440		1.5		2400		3		2.3		0.48		2.1													
Other Applicable Values			5.9		300		30		15		0.3		0.04										4000		3000					

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TABLE 8
 Soil Crop Sustenance Analytical Results
 Boundary Ventures
 Altair, Colorado County, Texas

Method			2520 B-2011		2540 G-2011		6010B		6010B		6010B		Calc		USDA 4F	
Analyte			SALINITY		TOTAL SOLIDS		BORON		CALCIUM		SODIUM		SODIUM ADSORPTION RATIO		ESP	
Units			PSU		%		mg/kg		mg/kg		mg/kg				%	
Lab Sample ID	Client Sample ID	Date Collected	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
L1075492-01	B-3 (1'-2')	02/04/2019	7.12	T8	78		28.8		96500		2430		7.5		8.92	
L1075492-02	B-5 (4'-5')	02/04/2019	1.57	T8	78.6		27.5		55700		1130		6.38		7.54	
L1075492-03	B-6 (5'-6')	02/04/2019	2.16	T8	79.9		22.6		77600		1170		9.25		11	
L1075492-04	B-7 (10-11')	02/05/2019			77.1											
L1075492-05	B-8 (9-10')	02/05/2019	3.83	T8	83.8		31		100000		2180		28.6		29	
L1075492-06	MW-13 (5'-6')	02/05/2019	4.39	T8	82.8		16.5		47100		2310		16.5		18.8	
L1075492-07	B-9 (4-5')	02/05/2019	1.59	T8	86		14		48200		963		11.2		13.3	
L1075492-08	B-18 (1-2')	02/07/2019	3.77		74.2		31.1		90400		2390		10.3		12.2	
L1075492-09	MW-11 (1-2)	02/07/2019	4.78		78		28.3		82400		2880		10.7		12.7	
L1075492-10	B-19 (1-2')	02/07/2019	4.18		74.8		18.7		61900		3310		16.8		19	
L1075492-11	B-14 (9-10')	02/06/2019	3.92		78.4		29.5		77800	O1 V	3160		17.7		19.9	
L1075492-12	B-15 (5-6')	02/06/2019	3.34		70.9		33.6		99600		2170		15.2		17.5	
L1075492-13	B-13 (14-15')	02/06/2019	1.44		75.6		<13.2		1930		1380		9.35		11.1	
L1075492-14	WPC-1	02/25/2019	0.261		75.1		18.9		74200		579		1.49		0.925	
L1075492-15	WPC-3	02/25/2019			72.9											
TX Table 1 Tier 1 Residential GW Soil Ing 0_5 Acre 4/2018																
Other Applicable Values															12	15



TABLE 9
Soil NORM Analytical Results
Boundary Ventures
Altair, Colorado County, Texas

Method			DOE Ga-01-R/901.1 (5 day)		DOE Ga-01-R/901.1 (5 day)		DOE Ga-01-R/901.1 (5 day)		DOE Ga-01-R/901.1 (5 day)		DOE Ga-01-R/901.1 (5 day)		DOE Ga-01-R/901.1 (5 day)		DOE Ga-01-R/901.1 (5 day)		DOE Ga-01-R/901.1 (5 day)		DOE Ga-01-R/901.1 (5 day)			
Analyte			ACTINIUM-228 (RA-228)		BISMUTH-212		BISMUTH-214 (RA-226)		LEAD-210		LEAD-214		POTASSIUM-40		RADIIUM-226 (186 KEV)		SCANDIUM-46		THALLIUM-208			
Units			pCi/g		pCi/g		pCi/g		pCi/g		pCi/g		pCi/g		pCi/g		pCi/g		pCi/g			
Lab Sample ID	Client Sample ID	Date Collected	Result	Qualifier	Result	Qualifier																
L1068304-04	B-14 (9-10')	02/06/2019	0.477		0.363		0.517		7.9		0.519		6.14		-0.109		0.249		0.0342		0.151	
L1068304-05	B-15 (5-6')	02/06/2019	0.542		0.41		1.08		-0.979		1.18		10.9		-1.81		1.27		-0.00881		0.338	
L1068304-02	B-19 (1-2')	02/07/2019	0.586		0.539		0.541		-0.651		0.506		9.46		-0.662		0.952		0.05		0.17	
L1068304-01	MW-11 (1-2)	02/07/2019	0.555		0.787		0.856		2.8		0.805		7.76		0.0688		1.68		0.0248		0.236	
L1073296-01	NORM-1	02/25/2019	0.553		0.545		0.807		0.433		0.903		8		-0.0347		0.898		0.00477		0.178	
L1073296-02	NORM-2	02/25/2019	0.173		0.335		0.12		-0.612		0.215		12.8		-0.0769		0.268		-0.00261		0.069	
L1073296-03	NORM-3	02/25/2019	0.382		0.688		0.943		-0.484		0.801		8.88		-0.875		0.884		0.0257		0.162	
L1073296-04	NORM-4	02/25/2019	0.508		0.538		0.748		-9.55		0.884		8.35		-0.198		1.57		-0.000814		0.196	
L1073296-05	NORM-5	02/25/2019	0.55		0.292		0.858		-7.21		0.854		7.95		0.0489		1.1		-0.00546		0.157	
L1073699-01	WPC-2	02/25/2019	0.578		0.575		1.09		-1.16		0.973		8.59		-1.13		1.13		-0.0152		0.216	
L1068304-03	DUPLICATE B-19 (1-2')	02/07/2019	0.381		0.71		0.719		-0.0808		0.757		8.42		-0.293		0.867		0.00353		0.211	
L1073699-02	DUPLICATE WPC-2	02/25/2019	0.675		1.4		1.01		-5790		0.888		10.9		0.0353		0.683		-0.0778		0.255	
Table 2 Tier 1 Limits			30		150		150		150		150		150		150		30		150		150	

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TABLE 9
 Soil NORM Analytical Results
 Boundary Ventures
 Altair, Colorado County, Texas

Method			DOE Ga-01-		DOE Ga-01-		DOE Ga-01-		DOE Ga-01-		DOE Ga-01-		DOE Ga-01-	
Analyte			URANIUM-235		THORIUM-234 (U-238)		THORIUM-228		COBALT-60		CESIUM-137		AMERICIUM-241	
Units			pCi/g		pCi/g		pCi/g		pCi/g		pCi/g		pCi/g	
Lab Sample ID	Client Sample ID	Date Collected	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
L1068304-04	B-14 (9-10')	02/06/2019	-0.013		-1.58		0.431		-0.0049		-9E-04		-0.297	
L1068304-05	B-15 (5-6')	02/06/2019	0.12		0.803		0.965		-0.0168		0.0483		0.103	
L1068304-02	B-19 (1-2')	02/07/2019	0.097		0.306		0.485		0.0243		-0.029		0.0565	
L1068304-01	MW-11 (1-2)	02/07/2019	0.176		-0.029		0.675		-0.0229		-0.019		-0.055	
L1073296-01	NORM-1	02/25/2019	0.092		0.423		0.509		0.0278		-0.008		0.0145	
L1073296-02	NORM-2	02/25/2019	0.028		-0.133		0.197		0.00774		-0.003		-0.024	
L1073296-03	NORM-3	02/25/2019	0.066		0.844		0.461		0.0223		0.0039		0.0801	
L1073296-04	NORM-4	02/25/2019	0.16		0.349		0.561		-0.0046		-0.016		-0.022	
L1073296-05	NORM-5	02/25/2019	0.091		0.579		0.449		-0.0133		0.0068		0.0078	
L1073699-01	WPC-2	02/25/2019	0.077		0.476		0.617		0.0121		-0.038		-0.027	
L1068304-03	DUPLICATE B-19 (1-2')	02/07/2019	0.066		-0.216		0.602		-0.0032		-0.026		0.0443	
L1073699-02	DUPLICATE WPC-2	02/25/2019	0.064		0.204		0.728		0.00613		-0.013		0.212	
Table 2 Tier 1 Limits			150		150		150		150		150		150	
Qualifiers: None														

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TABLE 10
 Groundwater Metals Analytical Results
 Boundary Ventures
 Altair, Colorado County, Texas

Method			2320 B-2011		2540 C-2011		300		300		6020		6020		6020		6020			
Analyte			ALKALINITY		DISSOLVED SOLIDS		CHLORIDE		SULFATE		ARSENIC		BARIUM		CADMIUM		CALCIUM		CHROMIUM	
Units			mg/l		mg/l		mg/l		mg/l		mg/l		mg/l		mg/l		mg/l		mg/l	
Lab Sample ID	Client Sample ID	Date Collected	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
L1075168-01	MW-1	3/1/2019	157		2960		1510		2.85	J	0.104		0.812		0.000204	J	252		<0.00200	
L1075168-02	MW-2	3/1/2019	285		1300		487		99.3		0.00617		0.755		<0.00100		160		<0.00200	
L1075168-03	MW-3	3/1/2019	214		3640		1630		200		0.00412		0.478		<0.00100		436		<0.00200	
L1075168-04	MW-4	3/1/2019	382		1700		682		16.3		0.00198	J	2.43	V	<0.00100		211	V	<0.00200	
L1075168-05	MW-5	3/1/2019	295		5200		2360		443		0.00189	J	0.156		0.000194	J	628		<0.00200	
L1075168-06	MW-6	3/1/2019	416		1120	J3	267		135		0.00161	J	0.125		<0.00100		144		<0.00200	
L1075168-07	MW-7	3/1/2019	432		2030		804		127		0.0174		0.692		<0.00100		277		<0.00200	
L1075168-08	MW-8	3/1/2019	176		287		13.3		10.7		0.0072		0.472		0.000219	J	39.8		0.0137	
L1075168-09	MW-9	3/1/2019	231		301		13		19.9		0.00114	J	0.142		<0.00100		14.8		0.000997	BJ
L1075168-10	MW-10	3/1/2019	277		331		10.9		5.99		0.00397		0.546		<0.00100		58.4		<0.00200	
L1075168-11	MW-11	3/1/2019	298		2110		858		14.9		0.0199		3.06		<0.00100		265		<0.00200	
L1075168-12	MW-12	3/1/2019	361		2520		885		18.5		0.00129	J	3.57		<0.00100		260		<0.00200	
L1075168-13	MW-13	3/1/2019	123		15600		7610		0.291	J	0.0582		28.9		<0.00100		1480		0.0014	BJ
TX Table 3 Tier 1 Residential GW Ing 4/2018											0.01		2		0.005				0.1	
Other Applicable Values					1000		300*		300*											



TABLE 10
Groundwater Metals Analytical Results
Boundary Ventures
Altair, Colorado County, Texas

Method			6020		6020		6020		6020		6020		7470A			
Analyte			LEAD		MAGNESIUM		POTASSIUM		SELENIUM		SILVER		SODIUM		MERCURY	
Units			mg/l		mg/l		mg/l		mg/l		mg/l		mg/l		mg/l	
Lab Sample ID	Client Sample ID	Date Collected	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
L1075168-01	MW-1	3/1/2019	<0.00200		43.7		6.1		6E-04	J	<0.00200		496		<0.000200	J6
L1075168-02	MW-2	3/1/2019	<0.00200		43		6.16		6E-04	J	<0.00200		176		<0.000200	
L1075168-03	MW-3	3/1/2019	<0.00200		49.7		8.67		<0.00200		<0.00200		367		<0.000200	
L1075168-04	MW-4	3/1/2019	<0.00200		22.8		1.78		<0.00200		<0.00200		279	V	<0.000200	
L1075168-05	MW-5	3/1/2019	<0.00200		75.1		29.2		0.002	J	<0.00200		688		0.0000675	J
L1075168-06	MW-6	3/1/2019	<0.00200		19.4		4		0.002	J	<0.00200		212		<0.000200	
L1075168-07	MW-7	3/1/2019	<0.00200		28.7		3.59		<0.00200		<0.00200		319		<0.000200	
L1075168-08	MW-8	3/1/2019	0.009		8.83		2.54		0.002	J	<0.00200		39.8		<0.000200	
L1075168-09	MW-9	3/1/2019	4E-04	J	4.26		0.423	J	5E-04	J	<0.00200		95.9		<0.000200	
L1075168-10	MW-10	3/1/2019	<0.00200		11.1		0.277	J	<0.00200		<0.00200		46.8		<0.000200	
L1075168-11	MW-11	3/1/2019	<0.00200		27.9		4.83		<0.00200		<0.00200		270		<0.000200	
L1075168-12	MW-12	3/1/2019	<0.00200		27		3.88		<0.00200		<0.00200		307		<0.000200	
L1075168-13	MW-13	3/1/2019	6E-04	J	4		156		0.002	J	<0.00200		2670		0.0000566	J
TX Table 3 Tier 1 Residential GW Ing 4/2018			0.015						0.05		0.12				0.002	
Other Applicable Values													20			



TABLE 11
 Groundwater BTEX Analytical Results
 Boundary Ventures
 Altair, Colorado County, Texas

Method			8021B		8021B		8021B		8021B	
Analyte			BENZENE		TOLUENE		ETHYLBENZENE		XYLENES, TOTAL	
Units			mg/l		mg/l		mg/l		mg/l	
Lab Sample ID	Client Sample ID	Date Collected	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
L1075168-01	MW-1	3/1/2019	<0.000500		<0.00100		<0.000500		<0.00150	
L1075168-02	MW-2	3/1/2019	<0.000500		<0.00100		<0.000500		<0.00150	
L1075168-04	MW-4	3/1/2019	<0.000500		<0.00100		<0.000500		<0.00150	
L1075168-05	MW-5	3/1/2019	0.000248	J	<0.00100		<0.000500	J3	<0.00150	J3
L1075168-06	MW-6	3/1/2019	<0.000500		<0.00100		<0.000500	J3	<0.00150	J3
L1075168-07	MW-7	3/1/2019	<0.000500		<0.00100		<0.000500	J3	<0.00150	J3
L1075168-08	MW-8	3/1/2019	<0.000500		<0.00100		<0.000500		<0.00150	
L1075168-09	MW-9	3/1/2019	<0.000500		<0.00100		<0.000500	J3	<0.00150	J3
L1075168-10	MW-10	3/1/2019	<0.000500		<0.00100		<0.000500	J3	<0.00150	J3
L1075168-11	MW-11	3/1/2019	<0.000500		<0.00100		<0.000500		0.00057	JJ6
TX Table 3 Tier 1 Residential GW Ing 4/2018			0.005		1		0.7		10	
Other Applicable Values										

*Samples MW-3, MW-12, and MW-13 were run with an expanded analytical suit and can be found on Table 13



TABLE 12
 Groundwater pH, Specific Conductance, and
 TPH Analytical Results
 Boundary Ventures
 Altair, Colorado County, Texas

Method			9040C		9050A		TCEQ Method 1005							
Analyte			PH		SPECIFIC CONDUCTANCE		TPH C6 - C12		TPH C12 - C28		TPH C28 - C35		TPH C6 - C35	
Units			su		umhos/cm		mg/l		mg/l		mg/l		mg/l	
Lab Sample ID	Client Sample ID	Date Collected	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
L1075168-01	MW-1	3/1/2019	6.54	T8	4510		<0.900		<0.900		<0.900		<0.900	
L1075168-02	MW-2	3/1/2019	6.67	T8	2180		<0.900		<0.900		<0.900		<0.900	
L1075168-03	MW-3	3/1/2019	6.57	T8	4730		<0.900		<0.900		<0.900		<0.900	
L1075168-04	MW-4	3/1/2019	6.78	T8	2730		<0.900		<0.900		<0.900		<0.900	
L1075168-05	MW-5	3/1/2019	6.62	T8	7010		<0.900		0.674	J	<0.900		0.674	J
L1075168-06	MW-6	3/1/2019	6.9	T8	1830		<0.900		<0.900		<0.900		<0.900	
L1075168-07	MW-7	3/1/2019	6.76	T8	3300		<0.900		<0.900		<0.900		<0.900	
L1075168-08	MW-8	3/1/2019	7.23	T8	405		<0.900		<0.900		<0.900		<0.900	
L1075168-09	MW-9	3/1/2019	7.12	T8	524		<0.900		<0.900		<0.900		<0.900	
L1075168-10	MW-10	3/1/2019	7.46	T8	564		<0.900		<0.900		<0.900		<0.900	
L1075168-11	MW-11	3/1/2019	6.95	T8	3090		<0.900		<0.900		<0.900		<0.900	
L1075168-12	MW-12	3/1/2019	6.88	T8	3250		<0.900		<0.900		<0.900		<0.900	
L1075168-13	MW-13	3/1/2019	6.16	T8	21200		1.39		14.4		<0.900		15.8	
TX Table 3 Tier 1 Residential GW Ing 4/2018							0.98		0.98		0.98			
Other Applicable Values														



TABLE 13
Surface and Groundwater VOCs and Semi-VOCs Analytical Results
Boundary Ventures
Altair, Colorado County, Texas

Method			8260C		8260C		8260C		8260C		8260C		8260C		8260C			
Analyte			ACETONE		ACROLEIN		ACRYLONITRILE		BENZENE		BROMOBENZENE		BROMODICHLOROMETHANE		BROMOFORM		BROMOMETHANE	
Units			mg/l		mg/l		mg/l		mg/l		mg/l		mg/l		mg/l		mg/l	
Lab Sample ID	Client Sample ID	Date Collected	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
L1075168-03	MW-3	3/1/2019	<0.0500		<0.0500		<0.0100		<0.00100		<0.00100		<0.00100		<0.00100		<0.00500	
L1075168-12	MW-12	3/1/2019	<0.0500		<0.0500		<0.0100		<0.00100		<0.00100		<0.00100		<0.00100		<0.00500	
L1075168-13	MW-13	3/1/2019	0.036	J	<0.0500		<0.0100		0.00547		<0.00100		<0.00100		<0.00100		<0.00500	
L1075168-14	PSW-1	3/1/2019	0.228		<0.0500		<0.0100		0.000375	J	<0.00100		<0.00100		<0.00100		<0.00500	
L1075168-15	PSW-2	3/1/2019	0.244		<0.0500		<0.0100		0.000379	J	<0.00100		<0.00100		<0.00100		<0.00500	
L1075168-16	PSW-3	3/1/2019	0.266		<0.0500		<0.0100		0.000338	J	<0.00100		<0.00100		<0.00100		<0.00500	
L1075168-17	PSW-4	3/1/2019	0.0999		<0.0500		<0.0100		0.000368	J	<0.00100		<0.00100		<0.00100		<0.00500	
L1075168-18	SK-1	3/1/2019	<0.0500		<0.0500		<0.0100		0.00382		<0.00100		<0.00100		0.00345		<0.00500	
L1075168-19	DUPLICATE PS-3	3/1/2019	0.118		<0.0500		<0.0100		<0.00100		<0.00100		<0.00100		<0.00100		<0.00500	
TX Table 3 Tier 1 Residential GW Ing 4/2018			22		0.012		0.0017		0.005		0.2		0.015		0.12		0.034	
Human Health SurfWtr RBEL Wtr and FW Fish					0.19		0.00128		0.005				0.0055		0.043		0.047	
TX Aquatic Life SurfWtr RBEL - FW Chronic			203		0.0027		0.076		0.13				4.32		0.149		0.22	
Ecological Surface Water Benchmarks- FW Chronic			101.2		0.003		0.92		0.13				2.16		0.149		0.11	
TCEQ Tier 1 Contact Recreation Water PCLs					0.426		0.0757		0.235		4.2		0.477		4.3		0.902	



TABLE 13
 Surface and Groundwater VOCs and Semi-VOCs Analytical Results
 Boundary Ventures
 Altair, Colorado County, Texas

Method			8260C		8260C		8260C		8260C		8260C		8260C			
Analyte			N-BUTYLBENZENE		SEC-BUTYLBENZENE		TERT-BUTYLBENZENE		CARBON TETRACHLORIDE		CHLOROBENZENE		CHLORODIBROMOMETHANE		CHLOROETHANE	
Units			mg/l		mg/l		mg/l		mg/l		mg/l		mg/l		mg/l	
Lab Sample ID	Client Sample ID	Date Collected	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
L1075168-03	MW-3	3/1/2019	<0.00100		<0.00100		<0.00100		<0.00100		<0.00100		<0.00100		<0.00500	
L1075168-12	MW-12	3/1/2019	<0.00100		<0.00100		<0.00100		<0.00100		<0.00100		<0.00100		<0.00500	
L1075168-13	MW-13	3/1/2019	<0.00100		<0.00100		<0.00100		<0.00100		<0.00100		<0.00100		<0.00500	
L1075168-14	PSW-1	3/1/2019	<0.00100		<0.00100		<0.00100		<0.00100		<0.00100		<0.00100		<0.00500	
L1075168-15	PSW-2	3/1/2019	<0.00100		<0.00100		<0.00100		<0.00100		<0.00100		<0.00100		<0.00500	
L1075168-16	PSW-3	3/1/2019	<0.00100		<0.00100		<0.00100		<0.00100		<0.00100		<0.00100		<0.00500	
L1075168-17	PSW-4	3/1/2019	<0.00100		<0.00100		<0.00100		<0.00100		<0.00100		<0.00100		<0.00500	
L1075168-18	SK-1	3/1/2019	0.000593	J	0.000517	J	<0.00100		<0.00100		<0.00100		<0.00100		<0.00500	
L1075168-19	DUPLICATE PS-3	3/1/2019	<0.00100		<0.00100		<0.00100		<0.00100		<0.00100		<0.00100		<0.00500	
TX Table 3 Tier 1 Residential GW Ing 4/2018			1.2		0.98		0.98		0.005		0.1		0.011		9.8	
Human Health SurfWtr RBEL Wtr and FW Fish									0.00376		0.776		0.004			
TX Aquatic Life SurfWtr RBEL - FW Chronic			0.071		0.082		0.048		0.0098		0.064		0.257			
Ecological Surface Water Benchmarks- FW Chronic			0.036						0.0098		0.64		0.129			
TCEQ Tier 1 Contact Recreation Water PCLs			1.2		1.58		1.4		0.103		1.58		0.383		175	



TABLE 13
Surface and Groundwater VOCs and Semi-VOCs Analytical Results
Boundary Ventures
Altair, Colorado County, Texas

Method			8260C		8260C		8260C		8260C		8260C		8260C			
Analyte			CHLOROFORM		CHLOROMETHANE		2-CHLOROTOLUENE		4-CHLOROTOLUENE		1,2-DIBROMO-3-CHLOROPROPANE		1,2-DIBROMOETHANE		DIBROMOMETHANE	
Units			mg/l		mg/l		mg/l		mg/l		mg/l		mg/l		mg/l	
Lab Sample ID	Client Sample ID	Date Collected	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
L1075168-03	MW-3	3/1/2019	<0.00500		<0.00250		<0.00100		<0.00100		<0.00500		<0.00100		<0.00100	
L1075168-12	MW-12	3/1/2019	<0.00500		<0.00250		<0.00100		<0.00100		<0.00500		<0.00100		<0.00100	
L1075168-13	MW-13	3/1/2019	<0.00500		<0.00250		<0.00100		<0.00100		<0.00500		<0.00100		<0.00100	
L1075168-14	PSW-1	3/1/2019	<0.00500		<0.00250		<0.00100		<0.00100		<0.00500		<0.00100		<0.00100	
L1075168-15	PSW-2	3/1/2019	<0.00500		<0.00250		<0.00100		<0.00100		<0.00500		<0.00100		<0.00100	
L1075168-16	PSW-3	3/1/2019	<0.00500		<0.00250		<0.00100		<0.00100		<0.00500		<0.00100		<0.00100	
L1075168-17	PSW-4	3/1/2019	<0.00500		<0.00250		<0.00100		<0.00100		<0.00500		<0.00100		<0.00100	
L1075168-18	SK-1	3/1/2019	<0.00500		<0.00250		0.000869	J	<0.00100		<0.00500		<0.00100		0.000372	J
L1075168-19	DUPLICATE PS-3	3/1/2019	<0.00500		<0.00250		<0.00100		<0.00100		<0.00500		<0.00100		<0.00100	
TX Table 3 Tier 1 Residential GW Ing 4/2018			0.24		0.07		0.49		0.49		0.0002		0.00005		0.12	
Human Health SurfWtr RBEL Wtr and FW Fish			0.1										0.000014			
TX Aquatic Life SurfWtr RBEL - FW Chronic			0.89		55											
Ecological Surface Water Benchmarks- FW Chronic			1.79		28											
TCEQ Tier 1 Contact Recreation Water PCls			2.35		1.95		2.42		2.12		0.0113		0.000283		4.3	



TABLE 13
 Surface and Groundwater VOCs and Semi-VOCs Analytical Results
 Boundary Ventures
 Altair, Colorado County, Texas

Method			8260C		8260C		8260C		8260C		8260C		8260C			
Analyte			1,2-DICHLORO BENZENE		1,3-DICHLORO BENZENE		1,4-DICHLORO BENZENE		DICHLORO DIFLUOROMETHANE		1,1-DICHLOROETHANE		1,2-DICHLOROETHANE		1,1-DICHLOROETHENE	
Units			mg/l		mg/l		mg/l		mg/l		mg/l		mg/l		mg/l	
Lab Sample ID	Client Sample ID	Date Collected	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
L1075168-03	MW-3	3/1/2019	<0.00100		<0.00100		<0.00100		<0.00500		<0.00100		<0.00100		<0.00100	
L1075168-12	MW-12	3/1/2019	<0.00100		<0.00100		<0.00100		<0.00500		<0.00100		<0.00100		<0.00100	
L1075168-13	MW-13	3/1/2019	<0.00100		<0.00100		<0.00100		<0.00500		<0.00100		<0.00100		<0.00100	
L1075168-14	PSW-1	3/1/2019	<0.00100		<0.00100		<0.00100		<0.00500		<0.00100		<0.00100		<0.00100	
L1075168-15	PSW-2	3/1/2019	<0.00100		<0.00100		<0.00100		<0.00500		<0.00100		<0.00100		<0.00100	
L1075168-16	PSW-3	3/1/2019	<0.00100		<0.00100		<0.00100		<0.00500		<0.00100		<0.00100		<0.00100	
L1075168-17	PSW-4	3/1/2019	<0.00100		<0.00100		<0.00100		<0.00500		<0.00100		<0.00100		<0.00100	
L1075168-18	SK-1	3/1/2019	<0.00100		<0.00100		<0.00100		<0.00500		<0.00100		<0.00100		<0.00100	
L1075168-19	DUPLICATE PS-3	3/1/2019	<0.00100		<0.00100		<0.00100		<0.00500		<0.00100		<0.00100		<0.00100	
TX Table 3 Tier 1 Residential GW Ing 4/2018			0.6		0.73		0.075		4.9		4.9		0.005		0.007	
Human Health SurfWtr RBEL Wtr and FW Fish			0.42		0.32		0.075						0.005		0.00163	
TX Aquatic Life SurfWtr RBEL - FW Chronic			0.11		0.085		0.11		1.96		5.13		6.3		3	
Ecological Surface Water Benchmarks- FW Chronic			0.11		0.085		0.11		1.963		0.21		12.56		3.03	
TCEQ Tier 1 Contact Recreation Water PCLs			11.3		3.78		0.186		37.6		45.8		0.196		16.6	



TABLE 13
 Surface and Groundwater VOCs and Semi-VOCs Analytical Results
 Boundary Ventures
 Altair, Colorado County, Texas

Method			8260C		8260C		8260C		8260C		8260C		8260C			
Analyte			CIS-1,2-DICHLORO ETHENE		TRANS-1,2-DICHLORO ETHENE		1,2-DICHLORO PROPANE		1,1-DICHLORO PROPENE		1,3-DICHLORO PROPANE		CIS-1,3-DICHLORO PROPENE		TRANS-1,3-DICHLORO PROPENE	
Units			mg/l		mg/l		mg/l		mg/l		mg/l		mg/l		mg/l	
Lab Sample ID	Client Sample ID	Date Collected	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
L1075168-03	MW-3	3/1/2019	<0.00100		<0.00100		<0.00100		<0.00100		<0.00100		<0.00100		<0.00100	
L1075168-12	MW-12	3/1/2019	<0.00100		<0.00100		<0.00100		<0.00100		<0.00100		<0.00100		<0.00100	
L1075168-13	MW-13	3/1/2019	<0.00100		<0.00100		<0.00100		<0.00100		<0.00100		<0.00100		<0.00100	
L1075168-14	PSW-1	3/1/2019	<0.00100		<0.00100		<0.00100		<0.00100		<0.00100		<0.00100		<0.00100	
L1075168-15	PSW-2	3/1/2019	<0.00100		<0.00100		<0.00100		<0.00100		<0.00100		<0.00100		<0.00100	
L1075168-16	PSW-3	3/1/2019	<0.00100		<0.00100		<0.00100		<0.00100		<0.00100		<0.00100		<0.00100	
L1075168-17	PSW-4	3/1/2019	<0.00100		<0.00100		<0.00100		<0.00100		<0.00100		<0.00100		<0.00100	
L1075168-18	SK-1	3/1/2019	<0.00100		<0.00100		<0.00100		<0.00100		<0.00100		<0.00100		<0.00100	
L1075168-19	DUPLICATE PS-3	3/1/2019	<0.00100		<0.00100		<0.00100		<0.00100		<0.00100		<0.00100		<0.00100	
TX Table 3 Tier 1 Residential GW Ing 4/2018			0.07		0.1		0.005		0.0091		0.0091		0.0017		0.0091	
Human Health SurfWtr RBEL Wtr and FW Fish					0.1		0.005									
TX Aquatic Life SurfWtr RBEL - FW Chronic					22		3.73									
Ecological Surface Water Benchmarks- FW Chronic			14		22		5.99									
TCEQ Tier 1 Contact Recreation Water PCls			4.18		6.95		0.186		0.0622		0.129		0.0463		0.025	



TABLE 13
 Surface and Groundwater VOCs and Semi-VOCs Analytical Results
 Boundary Ventures
 Altair, Colorado County, Texas

Method			8260C		8260C		8260C		8260C		8260C		8260C		8260C			
Analyte			2,2-DICHLOROPROPANE		DI-ISOPROPYL ETHER		ETHYLBENZENE		HEXACHLORO-1,3-BUTADIENE		ISOPROPYL BENZENE		P-ISOPROPYL TOLUENE		2-BUTANONE (MEK)		METHYLENE CHLORIDE	
Lab Sample ID	Client Sample ID	Date Collected	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
L1075168-03	MW-3	3/1/2019	<0.00100		<0.00100		<0.00100		<0.00100		<0.00100		<0.00100		<0.0100		<0.00500	
L1075168-12	MW-12	3/1/2019	<0.00100		<0.00100		<0.00100		<0.00100		<0.00100		<0.00100		<0.0100		<0.00500	
L1075168-13	MW-13	3/1/2019	<0.00100		<0.00100		0.00434		<0.00100		0.00043	J	<0.00100		0.00713	J	<0.00500	
L1075168-14	PSW-1	3/1/2019	<0.00100		<0.00100		0.00254		<0.00100		<0.00100		<0.00100		0.00707	J	<0.00500	
L1075168-15	PSW-2	3/1/2019	<0.00100		<0.00100		0.00215		<0.00100		<0.00100		<0.00100		0.0122		<0.00500	
L1075168-16	PSW-3	3/1/2019	<0.00100		<0.00100		0.00222		<0.00100		<0.00100		<0.00100		0.0123		<0.00500	
L1075168-17	PSW-4	3/1/2019	<0.00100		<0.00100		0.00222		<0.00100		<0.00100		<0.00100		0.00894	J	<0.00500	
L1075168-18	SK-1	3/1/2019	<0.00100		<0.00100		0.0281		<0.00100		0.00155		<0.00100		<0.0100		<0.00500	
L1075168-19	DUPLICATE PS-3	3/1/2019	<0.00100		<0.00100		0.00193		<0.00100		<0.00100		<0.00100		0.00701	J	<0.00500	
TX Table 3 Tier 1 Residential GW Ing 4/2018			0.013		2.4		0.7		0.012		2.4		2.4		15		0.005	
Human Health SurfWtr RBEL Wtr and FW Fish							0.53		0.00299						52.9		0.005	
TX Aquatic Life SurfWtr RBEL - FW Chronic							2.18		0.00093		0.255		0.085		84.8		22	
Ecological Surface Water Benchmarks- FW Chronic							1				0.255		0.042		42.4		22	
TCEQ Tier 1 Contact Recreation Water PCLs			0.163		32		12.8		0.0069		8.44		3.7		491		3.37	



TABLE 13
 Surface and Groundwater VOCs and Semi-VOCs Analytical Results
 Boundary Ventures
 Altair, Colorado County, Texas

Method			8260C		8260C		8260C		8260C		8260C		8260C			
Analyte			4-METHYL-2-PENTANONE (MIBK)		METHYL TERT-BUTYL ETHER		NAPHTHALENE		N-PROPYLBENZENE		STYRENE		1,1,1,2-TETRACHLORO ETHANE		1,1,2,2-TETRACHLORO ETHANE	
Units			mg/l		mg/l		mg/l		mg/l		mg/l		mg/l		mg/l	
Lab Sample ID	Client Sample ID	Date Collected	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
L1075168-03	MW-3	3/1/2019	<0.0100		<0.00100		<0.00500		<0.00100		<0.00100		<0.00100		<0.00100	
L1075168-12	MW-12	3/1/2019	<0.0100		<0.00100		<0.00500		<0.00100		<0.00100		<0.00100		<0.00100	
L1075168-13	MW-13	3/1/2019	0.0656		0.00101		0.0249		0.000559	J	<0.00100		<0.00100		<0.00100	
L1075168-14	PSW-1	3/1/2019	<0.0100		<0.00100		0.00147	J	0.000442	J	<0.00100		<0.00100		<0.00100	
L1075168-15	PSW-2	3/1/2019	<0.0100		<0.00100		0.00118	J	0.00046	J	<0.00100		<0.00100		<0.00100	
L1075168-16	PSW-3	3/1/2019	<0.0100		<0.00100		0.00124	J	0.000371	J	<0.00100		<0.00100		<0.00100	
L1075168-17	PSW-4	3/1/2019	<0.0100		<0.00100		0.00116	J	0.000528	J	<0.00100		<0.00100		<0.00100	
L1075168-18	SK-1	3/1/2019	<0.0100		0.000432	J	0.00525		0.00394		0.000574	J	<0.00100		<0.00100	
L1075168-19	DUPLICATE PS-3	3/1/2019	<0.0100		<0.00100		0.0011	J	<0.00100		<0.00100		<0.00100		<0.00100	
TX Table 3 Tier 1 Residential GW Ing 4/2018			2		0.24		0.49		0.98		0.1		0.035		0.0046	
Human Health SurfWtr RBEL Wtr and FW Fish															0.0017	
TX Aquatic Life SurfWtr RBEL - FW Chronic			52.7		11.1		0.49		0.128		2.5				0.465	
Ecological Surface Water Benchmarks- FW Chronic			26.4		51				0.064		1.25				0.465	
TCEQ Tier 1 Contact Recreation Water PCls			52.7		5.47		2.55		2.35		29.8		31.2		938	

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TABLE 13
 Surface and Groundwater VOCs and Semi-VOCs Analytical Results
 Boundary Ventures
 Altair, Colorado County, Texas

Method			8260C		8260C		8260C		8260C		8260C		8260C			
Analyte			1,1,2-TRICHLORO TRIFLUORO ETHANE		TETRA CHLOROETHENE		TOLUENE		1,2,3-TRICHLORO BENZENE		1,2,4-TRICHLORO BENZENE		1,1,1-TRICHLORO ETHANE		1,1,2-TRICHLOROETHANE	
Units			mg/l		mg/l		mg/l		mg/l		mg/l		mg/l		mg/l	
Lab Sample ID	Client Sample ID	Date Collected	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
L1075168-03	MW-3	3/1/2019	<0.00100		<0.00100		<0.00100		<0.00100		<0.00100		<0.00100		<0.00100	
L1075168-12	MW-12	3/1/2019	<0.00100		<0.00100		<0.00100		<0.00100		<0.00100		<0.00100		<0.00100	
L1075168-13	MW-13	3/1/2019	<0.00100		<0.00100		0.0036		<0.00100		<0.00100		<0.00100		<0.00100	
L1075168-14	PSW-1	3/1/2019	<0.00100		<0.00100		0.0075		<0.00100		<0.00100		<0.00100		<0.00100	
L1075168-15	PSW-2	3/1/2019	<0.00100		<0.00100		0.00635		<0.00100		<0.00100		<0.00100		<0.00100	
L1075168-16	PSW-3	3/1/2019	<0.00100		<0.00100		0.00691		<0.00100		<0.00100		<0.00100		<0.00100	
L1075168-17	PSW-4	3/1/2019	<0.00100		<0.00100		0.00697		<0.00100		<0.00100		<0.00100		<0.00100	
L1075168-18	SK-1	3/1/2019	<0.00100		<0.00100		0.0605		<0.00100		<0.00100		<0.00100		<0.00100	
L1075168-19	DUPLICATE PS-3	3/1/2019	<0.00100		<0.00100		0.00576		<0.00100		<0.00100		<0.00100		<0.00100	
TX Table 3 Tier 1 Residential GW Ing 4/2018			730		0.005		1		0.073		0.07		0.2		0.005	
Human Health SurfWtr RBEL Wtr and FW Fish					0.005		1				0.035		0.2		0.005	
TX Aquatic Life SurfWtr RBEL - FW Chronic					0.79		2.9				0.051		4.9		1.8	
Ecological Surface Water Benchmarks- FW Chronic			0.207		1.28		3.4		0.008		0.0515		4.91		0.9	
TCEQ Tier 1 Contact Recreation Water PCLs			6040		0.148		16.5		0.171		0.65		47.2		32.5	



TABLE 13
 Surface and Groundwater VOCs and Semi-VOCs Analytical Results
 Boundary Ventures
 Altair, Colorado County, Texas

Method			8260C		8260C		8260C		8260C		8260C		8260C	
Analyte			TRICHLORO ETHENE		TRICHLORO FLUOROMETHANE		1,2,3-TRICHLORO PROPANE		1,2,4-TRIMETHYL BENZENE		1,2,3-TRIMETHYL BENZENE		1,3,5-TRIMETHYL BENZENE	
Units			mg/l		mg/l		mg/l		mg/l		mg/l		mg/l	
Lab Sample ID	Client Sample ID	Date Collected	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
L1075168-03	MW-3	3/1/2019	<0.00100		<0.00500		<0.00250		<0.00100		<0.00100		<0.00100	
L1075168-12	MW-12	3/1/2019	<0.00100		<0.00500		<0.00250		<0.00100		<0.00100		<0.00100	
L1075168-13	MW-13	3/1/2019	<0.00100		<0.00500		<0.00250		0.00261		0.0187		0.00088	J
L1075168-14	PSW-1	3/1/2019	<0.00100		<0.00500		<0.00250		0.00266		0.00106		0.000981	J
L1075168-15	PSW-2	3/1/2019	<0.00100		<0.00500		<0.00250		0.00263		0.00101		0.000993	J
L1075168-16	PSW-3	3/1/2019	<0.00100		<0.00500		<0.00250		0.00256		0.000975	J	0.000917	J
L1075168-17	PSW-4	3/1/2019	<0.00100		<0.00500		<0.00250		0.0026		0.00102		0.00103	
L1075168-18	SK-1	3/1/2019	<0.00100		<0.00500		<0.00250		0.0128		0.00396		0.00712	
L1075168-19	DUPLICATE PS-3	3/1/2019	<0.00100		<0.00500		<0.00250		0.00192		0.000762	J	0.000715	J
TX Table 3 Tier 1 Residential GW Ing 4/2018			0.005		7.3		0.00003		0.83		0.83		0.83	
Human Health SurfWtr RBEL Wtr and FW Fish			0.005										0.002	
TX Aquatic Life SurfWtr RBEL - FW Chronic					1.74				0.077				0.071	
Ecological Surface Water Benchmarks- FW Chronic			3		0.871				0.077				0.071	
TCEQ Tier 1 Contact Recreation Water PCls			1.01		43.3		0.00171		3.26		3.7		3.05	
													0.0113	



TABLE 13
 Surface and Groundwater VOCs and Semi-VOCs Analytical Results
 Boundary Ventures
 Altair, Colorado County, Texas

Method			8260C		8270D		8270D		8270D	
Analyte			XYLEMES, TOTAL		ACENAPHTHENE		ACENAPHTHYLENE		ANTHRACENE	
Units			mg/l		mg/l		mg/l		mg/l	
Lab Sample ID	Client Sample ID	Date Collected	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
L1075168-03	MW-3	3/1/2019	<0.00300		<0.00100		<0.00100		<0.00100	
L1075168-12	MW-12	3/1/2019	<0.00300		<0.00100		<0.00100		<0.00100	
L1075168-13	MW-13	3/1/2019	0.0113		<0.00100		<0.00100		<0.00100	
L1075168-14	PSW-1	3/1/2019	0.0214		<0.0100		<0.0100		<0.0100	J3
L1075168-15	PSW-2	3/1/2019	0.0182		<0.0100		<0.0100		<0.0100	J3
L1075168-16	PSW-3	3/1/2019	0.02		<0.0100		<0.0100		<0.0100	J3
L1075168-17	PSW-4	3/1/2019	0.0186		<0.0100		<0.0100		<0.0100	J3
L1075168-18	SK-1	3/1/2019	0.213		<0.00100		<0.00100		<0.00100	J3
L1075168-19	DUPLICATE PS-3	3/1/2019	0.0162		<0.0100		<0.0100		<0.0100	J3
TX Table 3 Tier 1 Residential GW Ing 4/2018			10		1.5		1.5		7.3	
Human Health SurfWtr RBEL Wtr and FW Fish					0.67				8.3	
TX Aquatic Life SurfWtr RBEL - FW Chronic			1.34		0.023				0.0003	
Ecological Surface Water Benchmarks- FW Chronic			1.34		0.023				0.0003	
TCEQ Tier 1 Contact Recreation Water PCLs			24		2.44		3.26		10.7	
									0.924	
									0.000158	



TABLE 13
 Surface and Groundwater VOCs and Semi-VOCs Analytical Results
 Boundary Ventures
 Altair, Colorado County, Texas

Method			8270D		8270D		8270D		8270D		8270D		8270D			
Analyte			BENZO(A)ANTHRACENE		BENZO(B)-FLUORANTHENE		BENZO(K)-FLUORANTHENE		BENZO(G,H,I)PERYLENE		BENZO(A)PYRENE		BIS(2-CHLORETHOXY)METHANE		BIS(2-CHLOROETHYL)ETHER	
Units			mg/l		mg/l		mg/l		mg/l		mg/l		mg/l		mg/l	
Lab Sample ID	Client Sample ID	Date Collected	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
L1075168-03	MW-3	3/1/2019	<0.00100		<0.00100		<0.00100		<0.00100		<0.00100		<0.0100		<0.0100	
L1075168-12	MW-12	3/1/2019	<0.00100		<0.00100		<0.00100		<0.00100		<0.00100		<0.0100		<0.0100	
L1075168-13	MW-13	3/1/2019	<0.00100		<0.00100		<0.00100		<0.00100		<0.00100		<0.0100		<0.0100	
L1075168-14	PSW-1	3/1/2019	<0.0100		<0.0100		<0.0100		<0.0100		<0.0100		<0.100		<0.100	
L1075168-15	PSW-2	3/1/2019	<0.0100		<0.0100		<0.0100		<0.0100		<0.0100		<0.100		<0.100	
L1075168-16	PSW-3	3/1/2019	<0.0100		<0.0100		<0.0100		<0.0100		<0.0100		<0.100		<0.100	
L1075168-17	PSW-4	3/1/2019	<0.0100		<0.0100		<0.0100		<0.0100		<0.0100		<0.100		<0.100	
L1075168-18	SK-1	3/1/2019	<0.00100		<0.00100		<0.00100		<0.00100		<0.00100		<0.0100		<0.0100	
L1075168-19	DUPLICATE PS-3	3/1/2019	<0.0100		<0.0100		<0.0100		<0.0100		<0.0100		<0.100		<0.100	
TX Table 3 Tier 1 Residential GW Ing 4/2018			0.0091		0.0091		0.091		0.73		0.0002		0.00083		0.00083	
Human Health SurfWtr RBEL Wtr and FW Fish			0.000099		0.000038		0.000038				0.000099				0.0003	
TX Aquatic Life SurfWtr RBEL - FW Chronic			0.0001								0.000014				12	
Ecological Surface Water Benchmarks- FW Chronic			0.0346								0.000014					
TCEQ Tier 1 Contact Recreation Water PCLs											0.0123		0.0258			



TABLE 13
 Surface and Groundwater VOCs and Semi-VOCs Analytical Results
 Boundary Ventures
 Altair, Colorado County, Texas

Method			8270D		8270D		8270D		8270D		8270D		8270D		8270D	
Analyte			BIS(2-CHLOROISO-PROPYL)ETHER	4-BROMOPHENYL-PHENYLETHER	2-CHLORONAPHTHALENE	4-CHLOROPHENYL-PHENYLETHER	CHRYSENE	DIBENZ(A,H)ANTHRACENE	3,3-DICHLOROBENZIDINE	2,4-DINITROTOLUENE						
Units			mg/l		mg/l		mg/l		mg/l		mg/l		mg/l		mg/l	
Lab Sample ID	Client Sample ID	Date Collected	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
L1075168-03	MW-3	3/1/2019	<0.0100		<0.0100		<0.00100		<0.0100		<0.00100		<0.00100		<0.0100	
L1075168-12	MW-12	3/1/2019	<0.0100		<0.0100		<0.00100		<0.0100		<0.00100		<0.00100		<0.0100	
L1075168-13	MW-13	3/1/2019	<0.0100		<0.0100		<0.00100		<0.0100		<0.00100		<0.00100		<0.0100	
L1075168-14	PSW-1	3/1/2019	<0.100		<0.100		<0.0100		<0.100		<0.0100		<0.0100		<0.100	
L1075168-15	PSW-2	3/1/2019	<0.100		<0.100		<0.0100		<0.100		<0.0100		<0.0100		<0.100	
L1075168-16	PSW-3	3/1/2019	<0.100		<0.100		<0.0100		<0.100		<0.0100		<0.0100		<0.100	
L1075168-17	PSW-4	3/1/2019	<0.100		<0.100		<0.0100		<0.100		<0.0100		<0.0100		<0.100	
L1075168-18	SK-1	3/1/2019	<0.0100		<0.0100		<0.00100		<0.0100		<0.00100		<0.00100		<0.0100	
L1075168-19	DUPLICATE PS-3	3/1/2019	<0.100		<0.100		<0.0100		<0.100		<0.0100		<0.0100		<0.100	
TX Table 3 Tier 1 Residential GW Ing 4/2018			0.000061		2		0.000061		0.91		0.0002		0.002		0.0013	
Human Health SurfWtr RBEL Wtr and FW Fish			1.4		1				0.000417		0.000038		0.00021		0.0011	
TX Aquatic Life SurfWtr RBEL - FW Chronic			0.0015		0.054				0.007				0.105		2.43	
Ecological Surface Water Benchmarks- FW Chronic			6.308		0.0015		0.054		0.007		0.005				1.22	
TCEQ Tier 1 Contact Recreation Water PCls			0.181				5.48						0.0207		0.03	



TABLE 13
 Surface and Groundwater VOCs and Semi-VOCs Analytical Results
 Boundary Ventures
 Altair, Colorado County, Texas

Method			8270D		8270D		8270D		8270D		8270D		8270D		8270D			
Analyte			2,6-DINITROTOLUENE		FLUORANTHENE		FLUORENE		HEXACHLOROBENZENE		HEXACHLORO-1,3-BUTADIENE		HEXACHLORO CYCLOPENTADIENE		HEXACHLOROETHANE		INDENO(1,2,3-CD)PYRENE	
Units			mg/l		mg/l		mg/l		mg/l		mg/l		mg/l		mg/l		mg/l	
Lab Sample ID	Client Sample ID	Date Collected	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
L1075168-03	MW-3	3/1/2019	<0.0100		<0.00100		<0.00100		<0.00100		<0.0100		<0.0100		<0.0100		<0.00100	
L1075168-12	MW-12	3/1/2019	<0.0100		<0.00100		<0.00100		<0.00100		<0.0100		<0.0100		<0.0100		<0.00100	
L1075168-13	MW-13	3/1/2019	<0.0100		<0.00100		<0.00100		<0.00100		<0.0100		<0.0100		<0.0100		<0.00100	
L1075168-14	PSW-1	3/1/2019	<0.100		<0.0100		<0.0100		<0.0100		<0.100		<0.100		<0.100		<0.0100	
L1075168-15	PSW-2	3/1/2019	<0.100		<0.0100		<0.0100		<0.0100		<0.100		<0.100		<0.100		<0.0100	
L1075168-16	PSW-3	3/1/2019	<0.100		<0.0100		<0.0100		<0.0100		<0.100		<0.100		<0.100		<0.0100	
L1075168-17	PSW-4	3/1/2019	<0.100		<0.0100		<0.0100		<0.0100		<0.100		<0.100		<0.100		<0.0100	
L1075168-18	SK-1	3/1/2019	<0.0100		0.000367	J	0.00037	J	<0.00100		<0.0100		<0.0100		<0.0100		<0.00100	
L1075168-19	DUPLICATE PS-3	3/1/2019	<0.100		<0.0100		<0.0100		<0.0100		<0.100		<0.100		<0.100		<0.0100	
TX Table 3 Tier 1 Residential GW Ing 4/2018			0.0013		0.98		0.98		0.001		0.012		0.05		0.017		0.0091	
Human Health SurfWtr RBEL Wtr and FW Fish					0.13		1.1		0.0000194		0.00299		0.04		0.0842		0.000038	
TX Aquatic Life SurfWtr RBEL - FW Chronic					0.00616		0.011				0.00093		0.00007		0.012			
Ecological Surface Water Benchmarks- FW Chronic					0.00616		0.011				0.00436		0.00007		0.012			
TCEQ Tier 1 Contact Recreation Water PCLs			0.03				2.11				0.0069		0.256		0			



TABLE 13
 Surface and Groundwater VOCs and Semi-VOCs Analytical Results
 Boundary Ventures
 Altair, Colorado County, Texas

Method			8270D		8270D		8270D		8270D		8270D		8270D		8270D			
Analyte			ISOPHORONE		NAPHTHALENE		NITROBENZENE		N-NITROSODI-METHYLAMINE		N-NITROSODIPHENYLAMINE		N-NITROSODI-N-PROPYLAMINE		PHENANTHRENE		BENZYLBUTYL PHTHALATE	
Units			mg/l		mg/l		mg/l		mg/l		mg/l		mg/l		mg/l		mg/l	
Lab Sample ID	Client Sample ID	Date Collected	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
L1075168-03	MW-3	3/1/2019	<0.0100		<0.00100		<0.0100		<0.0100		<0.0100		<0.0100		<0.00100		<0.00300	
L1075168-12	MW-12	3/1/2019	<0.0100		<0.00100		<0.0100		<0.0100		<0.0100		<0.0100		<0.00100		<0.00300	
L1075168-13	MW-13	3/1/2019	<0.0100		0.00168		<0.0100		<0.0100		<0.0100		<0.0100		<0.00100		<0.00300	
L1075168-14	PSW-1	3/1/2019	<0.100		<0.0100		<0.100		<0.100		<0.100		<0.100		<0.0100		<0.0300	
L1075168-15	PSW-2	3/1/2019	<0.100		<0.0100		<0.100		<0.100		<0.100		<0.100		<0.0100		<0.0300	
L1075168-16	PSW-3	3/1/2019	<0.100		<0.0100		<0.100		<0.100		<0.100		<0.100		<0.0100		<0.0300	
L1075168-17	PSW-4	3/1/2019	<0.100		<0.0100		<0.100		<0.100		<0.100		<0.100		<0.0100		<0.0300	
L1075168-18	SK-1	3/1/2019	<0.0100		<0.00100		<0.0100		<0.0100		<0.0100		<0.0100		<0.00100		<0.00300	
L1075168-19	DUPLICATE PS-3	3/1/2019	<0.100		<0.0100		<0.100		<0.100		<0.100		<0.100		<0.0100		<0.0300	
TX Table 3 Tier 1 Residential GW Ing 4/2018			0.96		0.49		0.049		0.000018		0.19		0.000013		0.73		0.48	
Human Health SurfWtr RBEL Wtr and FW Fish			0.35				0.0373		0.0000069		0.033		0.00005				1.5	
TX Aquatic Life SurfWtr RBEL - FW Chronic			12		0.49		0.27		94		0.58		0.02		0.03		0.093	
Ecological Surface Water Benchmarks- FW Chronic			6		0.25		1.1		47		0.29		0.02		0.03		0.093	
TCEQ Tier 1 Contact Recreation Water PCLs			0.104		2.55		0.248		0.000962		0.421		0.00198		1.07			



TABLE 13
 Surface and Groundwater VOCs and Semi-VOCs Analytical Results
 Boundary Ventures
 Altair, Colorado County, Texas

Method			8270D		8270D		8270D		8270D		8270D		8270D		8270D		
Analyte		BIS(2-ETHYLHEXYL)PHTHALATE	DI-N-BUTYL PHTHALATE		DIETHYL PHTHALATE		DIMETHYL PHTHALATE		DI-N-OCTYL PHTHALATE		PYRENE		1,2,4-TRICHLOROBENZENE		4-CHLORO-3-METHYLPHENOL		
Units			mg/l		mg/l		mg/l		mg/l		mg/l		mg/l		mg/l		
Lab Sample ID	Client Sample ID	Date Collected	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	
L1075168-03	MW-3	3/1/2019	<0.00300		<0.00300		0.000716	J	<0.00300		<0.00300		<0.00100		<0.0100		
L1075168-12	MW-12	3/1/2019	<0.00300		<0.00300		0.000491	J	<0.00300		<0.00300		<0.00100		<0.0100		
L1075168-13	MW-13	3/1/2019	<0.00300		<0.00300		<0.00300		<0.00300		<0.00300		<0.00100		<0.0100		
L1075168-14	PSW-1	3/1/2019	<0.0300		<0.0300		<0.0300		<0.0300		<0.0300		<0.0100		<0.100		
L1075168-15	PSW-2	3/1/2019	<0.0300		<0.0300		<0.0300		<0.0300		<0.0300		<0.0100		<0.100		
L1075168-16	PSW-3	3/1/2019	<0.0300		<0.0300		<0.0300		<0.0300		<0.0300		<0.0100		<0.100		
L1075168-17	PSW-4	3/1/2019	<0.0300		<0.0300		<0.0300		<0.0300		<0.0300		<0.0100		<0.100		
L1075168-18	SK-1	3/1/2019	<0.00300		<0.00300		<0.00300		<0.00300		<0.00300		<0.00100		<0.0100		
L1075168-19	DUPLICATE PS-3	3/1/2019	<0.0300		<0.0300		<0.0300		<0.0300		<0.0300		<0.0100		<0.100		
TX Table 3 Tier 1 Residential GW Ing 4/2018			0.006		2.4		20		20		0.24		0.73		0.07		0.12
Human Health SurfWtr RBEL Wtr and FW Fish			0.006		2		17		270				0.83		0.035		
TX Aquatic Life SurfWtr RBEL - FW Chronic			0.007		0.007		2.09		0.33		0.022		0.007		0.051		0.0003
Ecological Surface Water Benchmarks- FW Chronic			0.02		0.007		1.043		1.65		0.022		0.007		0.0515		0.1
TCEQ Tier 1 Contact Recreation Water PCls															0.65		0.87



TABLE 13
 Surface and Groundwater VOCs and Semi-VOCs Analytical Results
 Boundary Ventures
 Altair, Colorado County, Texas

Method			8270D		8270D		8270D		8270D		8270D		8270D		8270D			
Analyte			2-CHLOROPHENOL		2,4-DICHLOROPHENOL		2,4-DIMETHYLPHENOL		4,6-DINITRO-2-METHYLPHENOL		2,4-DINITROPHENOL		2-NITROPHENOL		4-NITROPHENOL			
Units			mg/l		mg/l		mg/l		mg/l		mg/l		mg/l		mg/l			
Lab Sample ID	Client Sample ID	Date Collected	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
L1075168-03	MW-3	3/1/2019	<0.0100		<0.0100		<0.0100		<0.0100		<0.0100		<0.0100		<0.0100		<0.0100	J3
L1075168-12	MW-12	3/1/2019	<0.0100		<0.0100		<0.0100		<0.0100		<0.0100		<0.0100		<0.0100		<0.0100	J3
L1075168-13	MW-13	3/1/2019	<0.0100		<0.0100		0.00584	J	<0.0100		<0.0100		<0.0100		<0.0100		<0.0100	J3
L1075168-14	PSW-1	3/1/2019	<0.100		<0.100		0.016	J	<0.100		<0.100		<0.100		<0.100		<0.100	
L1075168-15	PSW-2	3/1/2019	<0.100		<0.100		0.0274	J	<0.100		<0.100		<0.100		<0.100		<0.100	
L1075168-16	PSW-3	3/1/2019	<0.100		<0.100		0.0174	J	<0.100		<0.100		<0.100		<0.100		<0.100	
L1075168-17	PSW-4	3/1/2019	<0.100		<0.100		0.0191	J	<0.100		<0.100		<0.100		<0.100		<0.100	
L1075168-18	SK-1	3/1/2019	<0.0100		<0.0100		<0.0100		<0.0100		<0.0100		<0.0100		<0.0100		<0.0100	
L1075168-19	DUPLICATE PS-3	3/1/2019	<0.100		<0.100		0.0122	J	<0.100		<0.100		<0.100		<0.100		<0.100	
TX Table 3 Tier 1 Residential GW Ing 4/2018			0.12		0.073		0.49		0.0024		0.049		0.049		0.049		0.001	
Human Health SurfWtr RBEL Wtr and FW Fish			0.081		0.077		0.38		0.013		0.069						0.001	
TX Aquatic Life SurfWtr RBEL - FW Chronic			0.13		0.085		0.21		0.023		0.062		1.92		1.06			
Ecological Surface Water Benchmarks- FW Chronic			0.13		0.085		0.105		0.012		0.031		0.959		0.532		0.00245	
TCEQ Tier 1 Contact Recreation Water PCLs			1.93		0.739				1.1		1.27		0.686		1.12		0.00992	



TABLE 13
 Surface and Groundwater VOCs and Semi-VOCs Analytical Results
 Boundary Ventures
 Altair, Colorado County, Texas

Method			8270D		8270D	
Analyte			PHENOL		2,4,6-TRICHLOROPHENOL	
Units			mg/l		mg/l	
Lab Sample ID	Client Sample ID	Date Collected	Result	Qualifier	Result	Qualifier
L1075168-03	MW-3	3/1/2019	0.00266	J	<0.0100	
L1075168-12	MW-12	3/1/2019	0.00127	J	<0.0100	
L1075168-13	MW-13	3/1/2019	0.00244	J	<0.0100	
L1075168-14	PSW-1	3/1/2019	<0.100		<0.100	
L1075168-15	PSW-2	3/1/2019	<0.100		<0.100	
L1075168-16	PSW-3	3/1/2019	<0.100		<0.100	
L1075168-17	PSW-4	3/1/2019	0.00646	J	<0.100	
L1075168-18	SK-1	3/1/2019	0.0014	J	<0.0100	
L1075168-19	DUPLICATE PS-3	3/1/2019	<0.100		<0.100	
TX Table 3 Tier 1 Residential GW Ing 4/2018			7.3		0.024	
Human Health SurfWtr RBEL Wtr and FW Fish			21		0.014	
TX Aquatic Life SurfWtr RBEL - FW Chronic			0.11		0.0135	
Ecological Surface Water Benchmarks- FW Chronic			0.11		0.0135	
TCEQ Tier 1 Contact Recreation Water PCLs			160		0.455	



TABLE 14
 Surface Water TPH and Inorganic Analytical Results
 Boundary Ventures
 Altair, Colorado County, Texas

Method			2320 B-2011		2540 C-2011		300		300		6020		6020		6020		6020			
Analyte			ALKALINITY		DISSOLVED SOLIDS		CHLORIDE		SULFATE		ARSENIC		BARIUM		CADMIUM		CALCIUM		CHROMIUM	
Units			mg/l		mg/l		mg/l		mg/l		mg/l		mg/l		mg/l		mg/l		mg/l	
Lab Sample ID	Client Sample ID	Date Collected	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
L1075168-14	PSW-1	3/1/2019	346		1590		584		105		0.025		1.7		<0.00100		102		0.00374	B
L1075168-15	PSW-2	3/1/2019	348		1650		595		107		0.0249		1.4		<0.00100		102		0.0037	B
L1075168-16	PSW-3	3/1/2019	347		1610		601		107		0.0258		2.82		<0.00100		108		0.00475	B
L1075168-17	PSW-4	3/1/2019	348		1640		601		111		0.026		3.17		<0.00100		110		0.00612	
L1075168-18	SK-1	3/1/2019	34		116	J3	15.7		4.61	J	0.00178	J	0.282		<0.00100		10.8		0.00337	B
L1075168-19	DUPLICATE PS-3	3/1/2019	339		1620		606		118		0.0257		1.52		<0.00100		102		0.0039	B
TX Table 3 Tier 1 Residential GW Ing 4/2018									0.01		2		0.005				0.1			
TCEQ Aquatic Life Surface Water Benchmark (Freshwater, Chronic)							230				0.15		16		0.00015				0.42	
Human Health Surface Water RBELs									10		2000		5				62			
TCEQ Tier 1 Contact Recreation Water PCLs									0.0285		649		0.149				0.243			
Other Applicable Values					1000		300		300											



TABLE 14
 Surface Water TPH and Inorganic Analytical Results
 Boundary Ventures
 Altair, Colorado County, Texas

Method			6020		6020		6020		6020		6020		6020		7470A	
Analyte			LEAD		MAGNESIUM		POTASSIUM		SELENIUM		SILVER		SODIUM		MERCURY	
Units			mg/l		mg/l		mg/l		mg/l		mg/l		mg/l		mg/l	
Lab Sample ID	Client Sample ID	Date Collected	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
L1075168-14	PSW-1	3/1/2019	0.00526		7.58		17.7		0.00166	J	<0.00200		433		0.0000997	J
L1075168-15	PSW-2	3/1/2019	0.00392		7.7		17.8		0.00153	J	<0.00200		439		0.0000997	J
L1075168-16	PSW-3	3/1/2019	0.00803		7.87		17.7		0.00167	J	<0.00200		438		0.000104	J
L1075168-17	PSW-4	3/1/2019	0.00902		8.27		18		0.00225		<0.00200		442		0.000109	J
L1075168-18	SK-1	3/1/2019	0.00231		2.55		3		0.00073	J	<0.00200		12.1		<0.000200	
L1075168-19	DUPLICATE PS-3	3/1/2019	0.00436		7.74		17.9		0.00153	J	<0.00200		436		0.0000943	J
TX Table 3 Tier 1 Residential GW Ing 4/2018			0.015				0.05		0.12		0.002					
TCEQ Aquatic Life Surface Water Benchmark (Freshwater, Chronic)			0.00117		3.235		0.005		0.0001				0.0013			
Human Health Surface Water RBELs			1.15						50				0.0122			
TCEQ Tier 1 Contact Recreation Water PCLs							4.13		1.57				0.0973			
Ecological Surface Water Benchmarks- FW Chronic			0.00117		3.235				0.0001				0.0013			
Other Applicable Values									20							



TABLE 14
 Surface Water TPH and Inorganic Analytical Results
 Boundary Ventures
 Altair, Colorado County, Texas

Method			9040C		9050A		TCEQ Method 1005							
Analyte			PH		SPECIFIC		TPH C6 - C12		TPH C12 - C28		TPH C28 - C35		TPH C6 - C35	
Units			su		umhos/cm		mg/l		mg/l		mg/l		mg/l	
Lab Sample ID	Client Sample ID	Date Collected	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
L1075168-14	PSW-1	3/1/2019	7.77	T8	2690		<0.900		9.56		0.749	J	10.3	
L1075168-15	PSW-2	3/1/2019	7.88	T8	2670		<0.900		10.3		0.817	J	11.1	
L1075168-16	PSW-3	3/1/2019	7.91	T8	2700		0.641	J	9.26		0.762	J	10.7	
L1075168-17	PSW-4	3/1/2019	7.86	T8	2700		<0.900		9.96		0.754	J	10.7	
L1075168-18	SK-1	3/1/2019	6.89	T8	138		0.622	J	0.816	J	<0.900		1.44	
L1075168-19	DUPLICATE PS-3	3/1/2019	7.7	T8	2690		<0.900		8.96		0.683	J	9.64	
TX Table 3 Tier 1 Residential GW Ing 4/2018							0.98		0.98		0.98			
TCEQ Aquatic Life Surface Water Benchmark														
Human Health Surface Water RBELs														
TCEQ Tier 1 Contact Recreation Water PCLs														
Other Applicable Values														

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Table 15
 Monitoring Well Survey Data and Grundwater Elevations
 Boundary Ventures
 Altair, Colorado County, Texas

Well ID	Date	Top of Casing Elevation (ft MSL)¹	Depth to Product (ft)	Depth to Groundwater (ft)	Groundwater Elevation (ft MSL)
MW 1	2/25/2019	195.60	-	19.77	175.83
			-		
			-		
			-		
			-		
MW-2	2/25/2019	191.20	-	18.33	172.87
			-		
			-		
			-		
			-		
MW-3	2/25/2019	194.24	-	21.19	173.05
			-		
			-		
			-		
			-		
MW-4	2/25/2019	193.05	-	22.18	170.87
			-		
			-		
			-		
			-		
MW-5	2/25/2019	193.46	-	21.70	171.76
			-		
			-		
			-		
			-		
MW-6	2/25/2019	193.06	-	19.96	173.10
			-		
			-		
			-		
			-		
MW-7	2/25/2019	199.16	-	24.32	174.84
			-		
			-		
			-		
			-		
MW 8	2/25/2019	222.84	-	22.52	200.32
			-		
			-		
			-		
			-		
MW-9	2/25/2019	211.04	-	21.98	189.06
			-		
			-		
			-		
			-		
MW 10	2/25/2019	200.46	-	13.55	186.91
			-		
			-		
			-		
			-		
MW 11	2/25/2019	200.23	-	27.50	172.73
			-		
			-		
			-		
			-		
MW 12.	2/25/2019	204.6	-	32.65	171.98
			-		
			-		
			-		
			-		
MW-13*	2/25/2019	212.11	-	19.42	192.69
			-		
			-		
			-		
			-		

Notes:

- Elevations surveyed relative to mean sea level.

*MW-13 was not used in the constructin of the February 25, 2019 groundwater gradient map. The depth to groundwater is suspect due to the possibility of equipment failure during gaging and is being evaluated.

Table 16
 Estimated Volumes of Impacted Soils and Waste
 Boundary Ventures
 Altair, Colorado County, Texas



AOC	Preliminary Estimated Volumes Above Grade			Preliminary Estimated Volumes Below Grade		
	Estimated Surveyed Volumes Above Grade	Estimated Material Exceeding Screening Values	Estimated Material Exceeding Screening Values	Size of AOC	Estimated Average Depth of Impact	Preliminary Estimated Volume Below Grade Exceeding Screening Value
Units	cubic yards	%	cubic yards	Square Feet	feet	cubic yards
AOC 1	204,994	100	204,994	193,750	12.0	86,111
AOC 2	42,789	25	10,697	562,592	5.0	104,184
AOC 3	44,156	25	11,039	187,524	2.0	13,891
AOC 4	210,168	10	21,017	2,326,217	0.5	43,078
AOC 5	45,521	50	22,761	124,157	5.0	22,992
AOC 6	31,975	50	15,988	124,302	6.0	27,623
AOC 7	18,621	10	1,862	164,219	4.0	24,329
AOC 8	31,865	20	6,373	258,478	1.0	9,573
AOC 9	7,723	10	772	7,723	0.5	143
Totals	637,812	-	295,502			331,923

Notes:

1. All volume estimates are preliminary in nature and based on initial evaluations of surveyed piles above grade, google earth AOC polygon area measurements, analytical data and depth interval, PID field readings presented in boring logs, lithological breaks presented in boring logs, and cross-sections.
2. A detailed or a mathematical geospatial analysis has not been performed.
3. Volume estimates are not intended to be used as the basis for an engineering level remedial alternative analysis or a remedial alternative cost estimate.