District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico Energy Minerals and Natural Resources Department

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505 Form C-141 Revised August 24, 2018 Submit to appropriate OCD District office

Incident ID	1RP-4879
District RP	Nelson Velez
Facility ID	30-025-43754
Application ID	

#### **Release Notification**

#### **Responsible Party**

Responsible Party	Steward Energy II, LLC	C	OGRID
Contact Name B	ll McMann		Contact Telephone 214-297-0500
Contact email b	ll.mcmann@stewardener	rgy.net	Incident # (assigned by OCD) nOY1732657426
Contact mailing a	idress 2600 North Dalla	s Pkwy, Suite 400 Frisc	co, TX 75034
Latitude33.1317		(NAD 83 in decimal de	Release Source  Longitude103.0981685 degrees to 5 decimal places)
	NBERG STATE COM #	6007H —————————	Site Type Well site
Date Release Disco	overed 11/20/2017		API# (if applicable) 30-025-43754
Unit Letter Se	ction Township	Range	County
J 0	4 14S	38E	Lea
Surrace Owner:	State Federal Tr	Nature and Vo	olume of Release
X Crude Oil	Volume Release	d (bbls) 80	Volume Recovered (bbls) 80
X Produced Water	r Volume Release	d (bbls) 80	Volume Recovered (bbls) 80
	Is the concentrate produced water	ion of dissolved chlorid >10,000 mg/l?	
Condensate	Volume Release	d (bbls)	Volume Recovered (bbls)
☐ Natural Gas	Volume Release	d (Mcf)	Volume Recovered (Mcf)
Other (describe	e) Volume/Weight	Released (provide units	ts) Volume/Weight Recovered (provide units)
Cause of Release Equipment Failur shut down and sh	re - Cause of the problem ut in well. Closed off loc	was the 3/8 inch stainle ation. Made calls as rec	less steel nipple on the wellhead failed. Remedial action taken, equired to report and begin cleanup.

Form C-141 Page 2

#### State of New Mexico Oil Conservation Division

Incident ID	1RP-4879	
District RP	Nelson Velez	
Facility ID	30-025-43754	
Application ID		

Was this a major	If YES, for what reason(s) does the respon	sible party consider this a major release?
release as defined by	Incident caused an unauthorized release of	of a volume of greater that 25 barrels.
19.15.29.7(A) NMAC?		
X Yes No		
If VES, was immediate no	otice given to the OCD? By whom? To wh	om? When and by what means (phone, email, etc)?
		,
Yes, Christopher Wilso	on, Lead Operator via phone to NMOCD.	
	Initial Re	esponse
The responsible	party must undertake the following actions immediatel	v unless they could create a safety hazard that would result in injury
X The source of the rele	ease has been stopped	
		the environment
l — ·	as been secured to protect human health and	
I —		ikes, absorbent pads, or other containment devices.
X All free liquids and re	ecoverable materials have been removed and	d managed appropriately.
If all the actions describe	d above have <u>not</u> been undertaken, explain v	why:
Dog 10 15 20 8 P. (4) NIV	AAC the responsible party may commence r	emediation immediately after discovery of a release. If remediation
has begun please attach	a narrative of actions to date. If remedial	efforts have been successfully completed or if the release occurred
within a lined containmen	nt area (see 19.15.29.11(A)(5)(a) NMAC), p	lease attach all information needed for closure evaluation.
I hereby certify that the info	ormation given above is true and complete to the	best of my knowledge and understand that pursuant to OCD rules and
regulations all operators are	required to report and/or file certain release noti	fications and perform corrective actions for releases which may endanger
failed to adequately investig	gate and remediate contamination that pose a thre	OCD does not relieve the operator of liability should their operations have at to groundwater, surface water, human health or the environment. In
addition, OCD acceptance of	of a C-141 report does not relieve the operator of	responsibility for compliance with any other federal, state, or local laws
and/or regulations.		
Printed Name: Vanessa	De Los Santos	Title: Senior Analyst - Regulatory & Environmental
a la	a De you Vater	9/21/22
Signature:	10020, 200 8	Date: 4/4/25
email: vanessa.delossant	tos@stewardenergy.com	Telephone: 214-297-0533
700		
OCD Only		
Received by:		Date:

Form C-141 Page 3

## State of New Mexico Oil Conservation Division

Incident ID	1RP-4879	
District RP	Nelson Velez	
Facility ID	30-025-43754	
Application ID		

#### Site Assessment/Characterization

This information must be provided to the appropriate district office no later than 90 days after the release discovery date.

What is the shallowest depth to groundwater beneath the area affected by the release?	(ft bgs)
Did this release impact groundwater or surface water?	Yes X No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	Yes X No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	☐ Yes 🏻 No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	☐ Yes 🗓 No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	☐ Yes 🏻 No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	Yes X No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	☐ Yes 🗓 No
Are the lateral extents of the release within 300 feet of a wetland?	Yes X No
Are the lateral extents of the release overlying a subsurface mine?	☐ Yes 🏻 No
Are the lateral extents of the release overlying an unstable area such as karst geology?	☐ Yes ☒ No
Are the lateral extents of the release within a 100-year floodplain?	Yes X No
Did the release impact areas <b>not</b> on an exploration, development, production, or storage site?	X Yes No

Attach a comprehensive report (electronic submittals in .pdf format are preferred) demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined. Refer to 19.15.29.11 NMAC for specifics.

Characterization Report Checklist: Each of the following items must be included in the report.	
Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring wells.    X   Field data	
Data table of soil contaminant concentration data	
X   Depth to water determination	
Determination of water sources and significant watercourses within ½-mile of the lateral extents of the release	
X       Boring or excavation logs         X       Photographs including date and GIS information	
▼ Photographs including date and GIS information         ▼ Topographic/Aerial maps	
Laboratory data including chain of custody	

If the site characterization report does not include completed efforts at remediation of the release, the report must include a proposed remediation plan. That plan must include the estimated volume of material to be remediated, the proposed remediation technique, proposed sampling plan and methods, anticipated timelines for beginning and completing the remediation. The closure criteria for a release are contained in Table 1 of 19.15.29.12 NMAC, however, use of the table is modified by site- and release-specific parameters.

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Page 4

# State of New Mexico Oil Conservation Division

Incident ID	1RP-4879	
District RP	Nelson Velez	
Facility ID	30-025-43754	
Application ID		

I hereby certify that the information given above is true and complete to the regulations all operators are required to report and/or file certain release not public health or the environment. The acceptance of a C-141 report by the failed to adequately investigate and remediate contamination that pose a the addition, OCD acceptance of a C-141 report does not relieve the operator and/or regulations.	otifications and perform corrective actions for releases which may endanger to CD does not relieve the operator of liability should their operations have been acted to groundwater, surface water, human health or the environment. In
Printed Name: Vanessa De Los Santos Signature: Valvar De Jos Surtes	Title: Senior Analyst - Regulatory & Environmental  Date: 92/2
email: _vanessa.delossantos@stewardenergy.com	Telephone:214-297-0533
OCD Only	
Received by:	Date:

Form C-141 Page 5 State of New Mexico
Oil Conservation Division

Incident ID	1RP-4879	
District RP	Nelson Velez	
Facility ID	30-025-43754	
Application ID	200 10 600 - 0000000000	

### **Remediation Plan**

Remediation Plan Checklist: Each of the following items must be i	ncluded in the plan.
<ul> <li>Detailed description of proposed remediation technique</li> <li>Scaled sitemap with GPS coordinates showing delineation points</li> <li>Estimated volume of material to be remediated</li> <li>Closure criteria is to Table 1 specifications subject to 19.15.29.12</li> <li>Proposed schedule for remediation (note if remediation plan timel</li> </ul>	(C)(4) NMAC ine is more than 90 days OCD approval is required)
Deferral Requests Only: Each of the following items must be confi	rmed as part of any request for deferral of remediation.
Contamination must be in areas immediately under or around production.	
Extents of contamination must be fully delineated.	
Contamination does not cause an imminent risk to human health,	the environment, or groundwater.
I hereby certify that the information given above is true and complete	to the best of my knowledge and understand that pursuant to OCD
rules and regulations all operators are required to report and/or file cerwhich may endanger public health or the environment. The acceptance liability should their operations have failed to adequately investigate a surface water, human health or the environment. In addition, OCD ac responsibility for compliance with any other federal, state, or local law	tain release notifications and perform corrective actions for releases the of a C-141 report by the OCD does not relieve the operator of and remediate contamination that pose a threat to groundwater, ceptance of a C-141 report does not relieve the operator of
Printed Name: Vanessa De Los Santos Signature: Vanessa De Los Santos	Title: Senior Analyst - Regulatory & Environmental  Date: 9/23/21
email: vanessa.delossantos@stewardenergy.com	Telephone: <u>214-297-0533</u>
OCD Only	
Received by:	Date:
Approved	pproval
Signature:	Pate:

Form C-141 Page 6

# State of New Mexico Oil Conservation Division

Closure Report Attachment Checklist: Each of the following items must be included in the closure report.

Incident ID	1RP-4879	
District RP	Nelson Velez	
Facility ID	30-025-43754	
Application ID		

#### Closure

The responsible party must attach information demonstrating they have complied with all applicable closure requirements and any conditions or directives of the OCD. This demonstration should be in the form of a comprehensive report (electronic submittals in .pdf format are preferred) including a scaled site map, sampling diagrams, relevant field notes, photographs of any excavation prior to backfilling, laboratory data including chain of custody documents of final sampling, and a narrative of the remedial activities. Refer to 19.15.29.12 NMAC.

X A scaled site and sampling diagram as described in 19.15.29.11 NMAC
Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)
X Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling)
Description of remediation activities
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete.  Printed Name: Vanessa De Los Santos  Title: Senior Analyst - Regulatory & Environmental  Date: 124-297-0533  Telephone: 214-297-0533
OCD Only
Received by: Date:
Closure approval by the OCD does not relieve the responsible party of liability should their operations have failed to adequately investigate and remediate contamination that poses a threat to groundwater, surface water, human health, or the environment nor does not relieve the responsible party of compliance with any other federal, state, or local laws and/or regulations.
Closure Approved by: Nelson Velez Date: 01/19/2024
Closure Approved by: Nelson Velez  Printed Name: Nelson Velez  Date: 01/19/2024  Title: Environmenal Specialist - Adv



September 18, 2023

Sphere 3 Project Number: 049998.00

Mr. Nelson Velez EMNRD - Oil Conservation Division 1000 Rio Brazos Road Aztec, New Mexico 87110

## RE: Steward Energy II, LLC (Steward)-nOY1732657426 Heisenberg State Com No. 7H Remediation Results and Closure Request

Dear Mr. Velez:

It is Sphere 3 Environmental's (Sphere 3) understanding from the March 2018 report "Release Characterization Workplan for Heisenberg #007" completed by Remediation & Environmental Xperts, LLC (REX) that on November 20, 2017 at 7:15 am, an unauthorized release of approximately 80 barrels of an oil and produced water mix occurred at the Heisenberg State No. 07H well. The release was reported to New Mexico Energy, Minerals, Natural Resources Department, Oil Conservation Division District 1 (NMOCD) immediately upon discovery by Mr. Christopher Wilson with Steward. The well was shut-in and immediate cleanup efforts began. A vacuum truck was used to recover the entirety of the estimated 80 barrels. The release was primarily restricted to the well pad. A light mist impacted the crop land directly adjacent to the northeast of the well pad. The total impacted area is 16.75 acres, the total offsite impacted area is 16.253 acres. REX conducted site visits in December 2017 and April 2018 to delineate the horizontal and vertical extent of the contaminated area and submitted their findings to the NMOCD. On March 31, 2023, the NMOCD rejected REX's Application ID 202382 for remediation and required additional vertical and horizontal delineation around the areas represented by SP13, SP14, and SP18 (see Site Plan maps). Sphere 3 submitted a workplan for additional delineation at the Heisenberg State Com No. 7H for NMOCD incident nOY1732657426 on May 24, 2023, and it was approved with the addition of several sampling points by Mr. Nelson Velez (NMOCD project contact) on July 6, 2023. On August 23, 2023, 36 samples were collected by Sphere 3 personnel at the Heisenberg State Com No. 07H well pad. Please see the attached site maps for scaled site diagrams. The sample summary table includes Global Positioning System (GPS) coordinates of each sample location and can be found in Attachment E. Laboratory results and chain of custodies can be found in Attachment F.

The sampling activities follow the guidance from Mr. Velez and are in compliance with rule 19.15.29.11.A(5)(b) New Mexico Administrative Code (NMAC) which verifies that the site's delineation sample results are below the 19.15.29.12 NMAC Table 1 Closure Criteria as well as 19.15.29.13 D(1) for the reclamation of areas no longer in use.

#### **Site Assessment and Characterization**

#### Site Classification and Reconnaissance Details

The Site Closure Criteria Determination was found using 19.15.29.12 NMAC Table 1 Closure Criteria for Soils Impacted by a Release. Sphere 3 mapped all recorded water wells found on the New Mexico Office of the State Engineer website as well as the recorded playa lakes and wetlands found in the current National Wetlands Inventory data. No mapped water wells, playa lakes, or wetlands were identified within 1,000

feet of the Heisenberg State Com No. 7H, except water well L 00559 Pod5. However, according to the information collected by REX on their December 1, 2017 site visit, this water well is not actually located within 1,000 feet of the spill area. Aerial imagery places this water well to the southeast outside of the 1,000-foot area of concern.

A water well search was completed on the NMOSE website for the section, township, and range of the facility. The closest water well, based on field reconnaissance, was found to be 1,366' to the southeast of the well pad, identified as L00559 POD5 by the NMOSE. This water well lists the depth to water at 105 feet below ground surface. However, according to REX's March 2018 report "Release Characterization Workplan for Heisenberg #007H", depth to groundwater was determined to be 60.05 feet from the USGS Caprock CRN well. This information was obtained from the USGS National Water Information System: Web interface. Based on this information, the Site Closure Criteria Determination is based on the concentration limit of a site with a minimum depth below groundwater of 51–100 feet.

#### Summary of Delineation and Site Assessment Efforts Performed by REX

Samples collected in December 2017 and April 2018 by REX were compared to 19.15.29.12 NMAC Table 1 Closure Criteria for a minimum depth below groundwater of 51–100 feet as well as 19.15.29.13 D. (1) for the reclamation of areas no longer in use. Sample spots 13, 14, 18, 21 and 22 were found to have concentrations of chloride and/or total petroleum hydrocarbons (TPH) above these limits. A summary of the samples collected by REX and the associated analytical results can be found in Attachment E.

#### Summary of Delineation and Site Assessment Efforts Performed by Sphere 3

Sphere 3 completed additional delineation around SP 13, SP 14, SP 18, SP 21 and SP 22 which was needed to determine the vertical and horizontal extent of the spill area per 19.15.29.12 NMAC Table 1 Closure Criteria and the 1 to 4 feet below ground surface (bgs) delineation per 19.15.29.13 D(1) concentrations. To determine the extent of contamination, additional samples from 1 to 4 feet bgs were collected at 1-foot intervals. A backhoe was used to advance each sample point to a depth of 4' or until impenetrable rock was encountered and equipment refusal occurred. A shovel was used to remove any soil that might have been in contact with the backhoe prior to collecting the sample for chemical analysis. This shovel was decontaminated prior to the collection of each sample. Since the zero to one foot interval consisted of rock and caliche, soil sampling began at the one-foot interval where soil was encountered. Equipment refusal occurred as follows: sample point 25 at 29" bgs; sample point 26 at 36" bgs; sample point 27 at 42" bgs; sample point 28 at 32" bgs; sample point 29 at 32" bgs; sample point 30 at 36" bgs; sample point 32 at 36" bgs; sample point 33 at 36" bgs; and sample point 34 at 36" bgs.

Sample points SP 27, SP 32, and SP 33 were collected to the east, west, and south of sample point 13 (Spot #13) and were analyzed for chlorides and TPH. Sample points SP 31 and SP 34 were collected to the west and south of sample point 14 (Spot #14) and were analyzed for TPH. Sample points SP 24, SP 25, SP 26, and SP 28 were collected to the north, east, west, and south of sample point 18 (Spot #18) and were analyzed for chlorides. Sample points SP 32 and SP 22 were collected to the west and south of sample point 22 (SP22) and analyzed for chlorides and TPH. Sample points SP 29 and SP 30 were collected to the northeast and south of sample point 21 (SP22) and were analyzed for chlorides.

Each sample was screened for volatile organic vapors (VOCs) using a Photo Ionization Detector (PID) and for chlorides using sodium chloride strips. None of the field screening readings yielded elevated results above a 10-ppm reading from the PID or above a 1,500-ppm reading from the chloride strips. Disposable nitrile gloves were used to collect each sample. The gloves were disposed of after each sample had been collected, and new gloves were donned for the next sample. All samples were collected in laboratory

supplied sample containers and placed on ice in a cooler. The cooler was hand-delivered to Cardinal Laboratories in Hobbs, NM for analysis on August 23, 2023.

None of the analytical results from samples collected on August 23, 2023 were above 19.15.29.12 NMAC Table 1 Closure Criteria for a minimum depth below groundwater of 51–100 feet or above 19.15.29.13 D(1) for the reclamation of areas no longer in use concentrations. A summary of the analytical results from the samples collected by Sphere 3 can be found in Attachment E; laboratory results and chain of custodies can be found in Attachment F.

#### **Remediation Activities**

Delineation and remediation of the well site was completed per 19.15.29.13 D(1) for reclamation of areas no longer in use through the first four feet and per 19.15.29.12 NMAC Table 1 Closure Criteria for a minimum depth below groundwater of 51–100 feet. Prior to remediation activities, permission from Mr. Velez was obtained to use the laboratory results from delineation points toward closure.

Steward removed and disposed of contaminated soil above 19.15.29.12 NMAC Table 1 Closure Criteria for a minimum depth below groundwater of 51–100 feet concentrations at the Heisenberg State Com No. 07H well pad for all soils at four feet bgs or deeper and contaminated soil above 19.15.29.13 D(1) for the reclamation of areas no longer in use concentrations for the first four feet of soil.

The two-day district notification was sent to Mr. Velez on September 8, 2023. Excavation started September 13, 2023, and was completed on September 15, 2023. Rain had pooled in the excavation area prior to the remediation activities. A vacuum truck was called to remove the rainwater from the area. Approximately 25-bbls of rainwater was removed by Salty Dawg Trucking for disposal. Approximately 2,080 cubic yards of soil were removed and disposed of at Gandy Marley located in Roswell, NM. The excavation was completed by a track hoe and removed soil was placed directly into trucks for transportation to the disposal facility. Excavation around an active wellhead flow line, active electrical line and anchor points was not conducted due to safety concerns.

During the excavation, soil was periodically screened using a PID and chloride strips. No elevated levels of field screened parameters were encountered except for within the southeastern excavation area. Stained soil exhibiting an TPH odor was encountered around sampling point CS-5. The area was grided off and the soil was screen throughout this area. Any soil with elevated screening results were removed. Five-point composite samples within a 400 square feet area were collected in the areas that had laboratory results which previously exceeded the reclamation closure standards (CS 1, CS 2, CS 3, CS 4, and CS 6) and the area where stained soils were encountered (CS 5). The area around CS 1, CS 2, CS 4, CS 5, and CS 6 were excavated to a depth of four feet below the ground surface. The area around CS 3 and between sample points 22 and 27, 21 and 29, 30 and 17, respectively, were excavated to a depth of one-foot bgs.

Five-point composite closure samples were collected within a 400 square foot area of delineation samples points that yielded elevated concentrations of TPH and/or chlorides (sample points 13, 14, 18, 21 and 22) as well as an additional area of stained soil (CS 6). A shovel was used to remove any soil that might have been in contact with the backhoe prior to collecting the sample for chemical analysis. This shovel was decontaminated prior to the collection of each sample. Each sample was screened for VOCs using a PID and for chlorides using sodium chloride strips. None of the field screening readings yielded elevated results above a 10-ppm reading from the PID or above a 1,500-ppm reading from the chloride strips. Disposable nitrile gloves were used to collect each sample. The gloves were disposed of after each sample had been collected, and new gloves were donned for the next sample. All samples were collected in laboratory supplied sample containers and placed on ice in a cooler. The cooler was hand-delivered to Cardinal Laboratories in Hobbs, NM for analysis for chlorides and TPH on September 15, 2023.

Composite samples CS 1, CS 2, CS 4, CS 5, and CS 6 (from four feet bgs) yielded results below 19.15.29.12 NMAC Table 1 Closure Criteria for a minimum depth below groundwater of 51–100 feet and result from CS 3 (from one foot bgs) yielded results below 19.15.29.13 D (1) for reclamation of areas no longer in use. A summary of the analytical results from the samples collected by Sphere 3 can be found in Attachment E; laboratory results and chain of custodies can be found in Attachment F. Photos of the excavated areas can be found in Attachment D.

#### **Request for Closure**

Approval to back fill the excavation area was received from Mr. Velez on September 18, 2023. Steward back filled all excavated areas with clean dirt on September 19<sup>th</sup> and 20<sup>th</sup>. Steward respectfully requests closure for incident nOY1732657426 Heisenberg State Com No. 7H. Should you have any questions or require any additional information, please call me at 903-297-4673.

Sincerely,

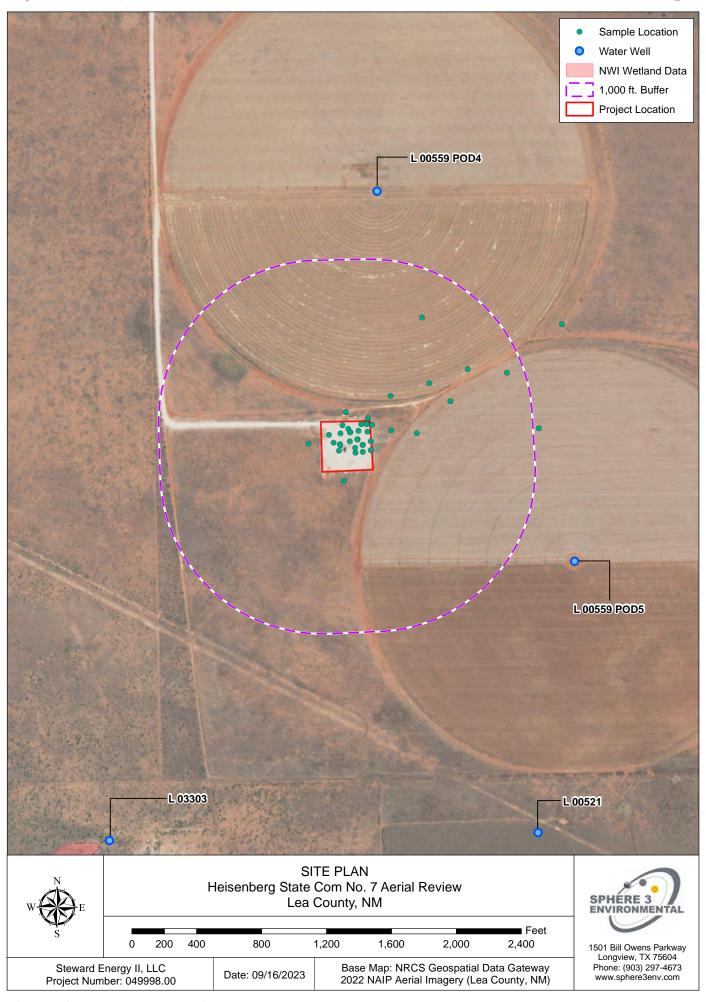
Sphere 3 Environmental, Inc.

Crissy Forrest, P.G.

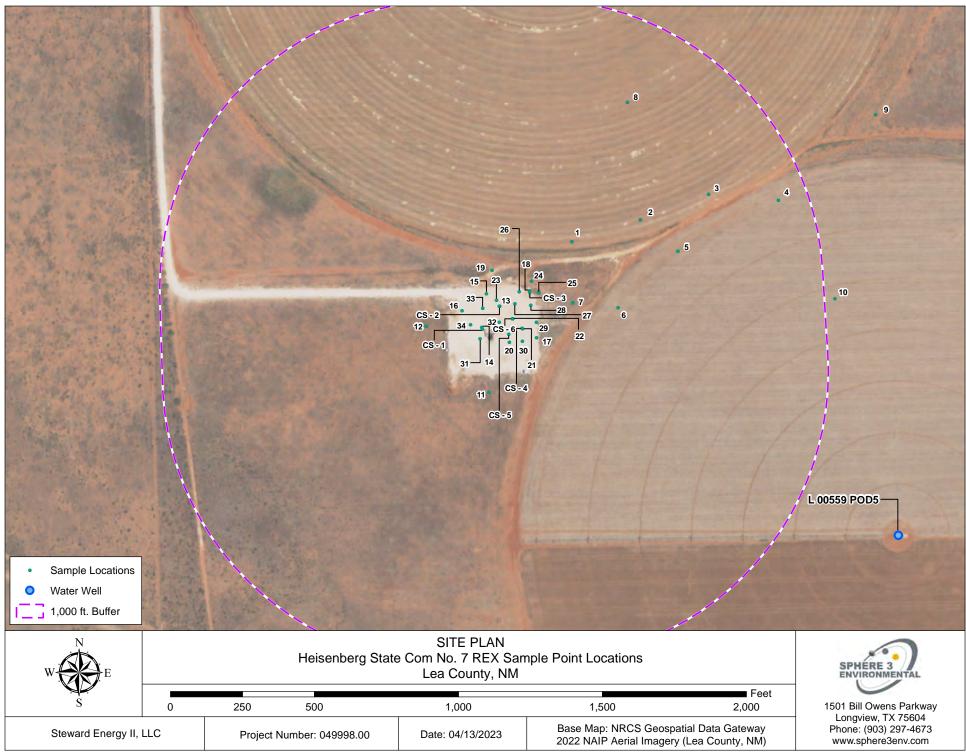
Senior Environmental Scientist

Attachments

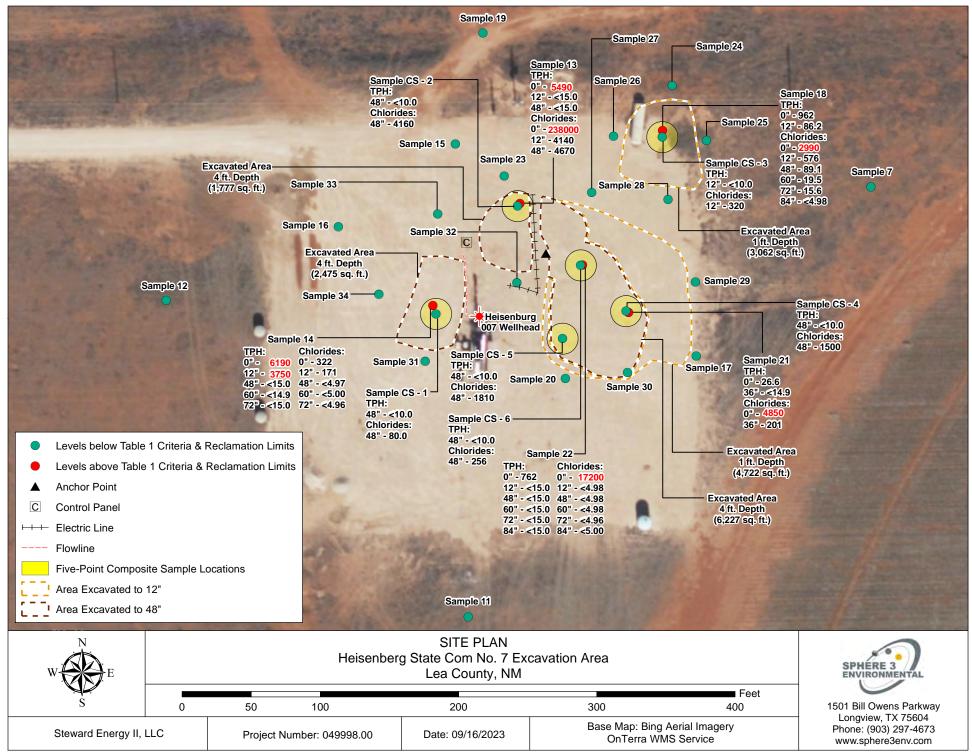
# Attachment A Aerial Map of Area Findings



# Attachment B Map Sample Point Locations collected by REX and Sphere 3



# Attachment C Map of Select Existing Sample Points and Remediated Areas



# Attachment D Photos of Excavation Areas

Photograph: 3

Project I.D. No.: 049998.00

Date: September 15,

2023

**Subject Property:** 

Steward Energy II, LLC's Heisenberg State Com No. 7H

Lea County, NM

#### **Description:**

View of the central excavation area to a depth of 48".



Photograph: 4

Project I.D. No.: 049998.00

Date: September 15, 2023

#### **Subject Property:**

Steward Energy II, LLC's Heisenberg State Com No. 7H

Lea County, NM

#### **Description:**

View of the western excavation area to a depth of 48".



## Attachment E Sample Results and Site Classification Table

Received by OCD: 9/21/2023 10:05:59 AM

	Sample Results and Site Classification Table													
					BTEX				TPH				Sample	_ocation
	Sample Depth							Gasoline Range	Diesel Range	Oil Range Organics				
Sample ID	bgs	Date Collected	Benzene	Toluene	Ethylbenzene	Total Xylenes	Total BTEX	Organics (GRO)	_	(ORO)	Total TPH	Chlorides		
Spot #1	0"	12/1/2017	<0.00199			<0.00199	<0.00199	, ,	, ,	, ,	54.9	123	33.13263	-103.09732
Spot #1	12" (1 ft)	12/1/2017	<0.00200		<0.00200	<0.00200	<0.00200				<24.9	22.4	33.13263	-103.09732
Spot #2	0"	12/1/2017	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	<24.9			31.6	129	33.13283	-103.09654
Spot #2	12" (1 ft)	12/1/2017	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	<25.0			<25.0	22.6	33.13283	-103.09654
Spot #3	0"	12/1/2017	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<24.9			<24.9	71.8	33.13306	-103.09576
Spot #3	12" (1 ft)	12/1/2017	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<25.0	<25.0		<25.0	9.37	33.13306	-103.09576
Spot #4	0"	12/1/2017	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<24.9			<24.9	13.4	33.13299	-103.09497
Spot #4	12" (1 ft)	12/1/2017	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	<25.0	<25.0	<25.0	<25.0	<4.98	33.13299	-103.09497
Spot #5	0"	12/1/2017	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<25.0			33.5	32	33.13252	-103.09612
Spot #5	12" (1 ft)	12/1/2017	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<25.0			<25.0	5.87	33.13252	-103.09612
Spot #6	0"	12/1/2017	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<25.0	37.6	<25.0	37.6	76.7	33.13199	-103.09681
Spot #6	12" (1 ft)	12/1/2017	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<25.0			<25.0	<4.97	33.13199	-103.09681
Spot #7	0"	12/1/2017	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<24.9	86.1	<24.9	86.1	112	33.13205	-103.09732
Spot #7	12" (1 ft)	12/1/2017	<0.0100	<0.0100	< 0.0100	<0.0100	<0.0100	<24.9	<24.9	<24.9	<24.9	<4.99	33.13205	-103.09732
Spot #8	0"	12/1/2017	< 0.0100	<0.0100	< 0.0100	<0.0100	< 0.0100	<25.0	<25.0	<25.0	<25.0	21.8	33.13395	-103.09666
Spot #8	12" (1 ft)	12/1/2017	<0.0100	<0.0100	< 0.0100	<0.0100	< 0.0100	<25.0	<25.0	<25.0	<25.0	<4.94	33.13395	-103.09666
Spot #9	0"	12/1/2017	<0.0100	<0.0100	< 0.0100	<0.0100	<0.0100	<25.0	<25.0	<25.0	<25.0	<4.99	33.13379	-103.09385
Spot #9	12" (1 ft)	12/1/2017	<0.0100	<0.0100	< 0.0100	<0.0100	< 0.0100	<24.9	<24.9	<24.9	<24.9	<4.97	33.13379	-103.09385
Spot #10	0"	12/1/2017	<0.0100	<0.0100	< 0.0100	<0.0100	< 0.0100	<25.0	<25.0	<25.0	<25.0	6.45	33.13204	-103.09435
Spot #10	12" (1 ft)	12/1/2017	<0.0100	<0.0100	< 0.0100	<0.0100	<0.0100	<25.0	<25.0	<25.0	<25.0	<4.97	33.13204	-103.09435
Spot #11	0"	12/1/2017	<0.0100	<0.0100	< 0.0100	< 0.0100	< 0.0100	<24.9	<24.9	<24.9	<24.9	93.3	33.13121	-103.09829
Spot #11	12" (1 ft)	12/1/2017	<0.0100	<0.0100	< 0.0100	< 0.0100	< 0.0100	<25.0	<25.0	<25.0	<25.0	321	33.13121	-103.09829
Spot #12	0"	12/1/2017	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<25.0	<25.0	<25.0	<25.0	<4.94	33.13185	-103.09899
Spot #12	12" (1 ft)	12/1/2017	<0.0100	<0.0100	< 0.0100	<0.0100	<0.0100	<24.9	<24.9	<24.9	<24.9	<4.92	33.13185	-103.09899
Spot #13	0"	12/28/2017	<0.00201	<0.00201	0.00331	<0.00201	0.00331	17.6	4850	622	5490	238000	33.13203	-103.09815
Spot #13	12" (1 ft)	12/28/2017	<0.00199	<0.00199	0.00274	< 0.00199	0.00274	<15.0	<15.0		<15.0	4670	33.13203	-103.09815
SP13	48" (4 ft)	4/26/2018						<15.0	<15.0	<15.0	<15.0	4140	33.13203	-103.09815
Spot #14	0"	12/28/2017	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<15.0			6190	322	33.13183	-103.09836
Spot #14	12" (1 ft)	12/28/2017	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	<15.0		1960	3750	171	33.13183	-103.09836
SP14	48" (4 ft)	4/26/2018						<15.0	<15.0	<15.0	<15.0	<4.97	33.13183	-103.09836
SP14	60" (5 ft)	4/26/2018						<14.9			<14.9	<5.00	33.13183	-103.09836
SP14	72" (6 ft)	4/26/2018						<15.0		<15.0	<15.0	<4.96	33.13183	-103.09836
Spot #15	0"	12/28/2017	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	<15.0		59.2	410	169	33.13215	-103.0983
Spot #15	12" (1 ft)	12/28/2017	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201				<15.0	128	33.13215	-103.0983
Spot #16	0"	12/28/2017	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<15.0	115	29	144	123	33.13199	-103.09858
Spot #16	12" (1 ft)	12/28/2017	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199			<15.0	<15.0	12.8	33.13199	-103.09858
Spot #17	0"	12/28/2017	<0.00198	<0.00198	<0.00198	<0.00198	<0.00198	<15.0		24.6	103	133	33.13172	-103.09774
Spot #17	12" (1 ft)	12/28/2017	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	<15.0	<15.0	<15.0	<15.0	8.85	33.13172	-103.09774

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Spot #18	0"	12/28/2017	<0.00200	0.00552	0.0189	0.0249	0.0493	19.1	808	99.2	926	2990	33.13217	-103.09781
Spot #18	12" (1 ft)	12/28/2017	<0.00200	<0.00200	0.00772	0.0137	0.0215	<15.0	86.2	<15.0	86.2	576	33.13217	-103.09781
SP18	48" (4 ft)	4/26/2018										89.1	33.13217	-103.09781
SP18	60" (5 ft)	4/26/2018										19.5	33.13217	-103.09781
SP18	72" (6 ft)	4/26/2018										15.6	33.13217	-103.09781
SP18	84" (7 ft)	4/26/2018										<4.98	33.13217	-103.09781
Spot #19	0"	12/28/2017	<0.00198	<0.00198	<0.00198	<0.00198	<0.00198	<15.0	104	16.5	121	578	33.13237	-103.09823
Spot #19	12" (1 ft)	12/28/2017	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	<15.0	<15.0	<15.0	<15.0	16	33.13237	-103.09823
Spot #20	0"	12/28/2017	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	<15.0	<15.0	<15.0	<15.0	186	33.13168	-103.09805
Spot #20	12" (1 ft)	12/28/2017	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<15.0	<15.0	<15.0	<15.0	<4.97	33.13168	-103.09805
SP21	0"	4/26/2018						<15.0	26.6	<15.0	26.6	4850	33.131809	-103.097898
SP21	36" (3 ft)	4/26/2018						<14.9	<14.9	<14.9	<14.9	201	33.131809	-103.097898
SP22	0"	4/26/2018						<15.0	697	65.4	762	17200	33.131905	-103.098005
SP22	12" (1 ft)	4/26/2018						<15.0	<15.0	<15.0	<15.0	<4.98	33.131905	-103.098005
SP22	48" (4 ft)	4/26/2018						<15.0	<15.0	<15.0	<15.0	<4.98	33.131905	-103.098005
SP22	60" (5 ft)	4/26/2018						<15.0	<15.0	<15.0	<15.0	<4.98	33.131905	-103.098005
SP22	72" (6 ft)	4/26/2018						<15.0	<15.0	<15.0	<15.0	<4.96	33.131905	-103.098005
SP22	84" (7 ft)	4/26/2018						<15.0	<15.0	<15.0	<15.0	<5.00	33.131905	-103.098005
SP23	0"	4/26/2018						17.2	304	50.8	372	475	33.132085	-103.098186
SP23	36" (3 ft)	4/26/2018						<15.0	<15.0	<15.0	<15.0	<4.99	33.132085	-103.098186
SP 24	12" (1ft)	8/23/2023										16	33.13225819	-103.0977849
SP 24	24" (2 ft)	8/23/2023										144	33.13225819	-103.0977849
SP 24	36" (3 ft)	8/23/2023										64	33.13225819	-103.0977849
SP 24	48" (4 ft)	8/23/2023										32	33.13225819	-103.0977849
SP 25	12" (1ft)	8/23/2023										32	33.13214821	-103.0977064
SP 25	24" (2 ft)	8/23/2023										112	33.13214821	-103.0977064
SP 25	29" (2.42 ft)	8/23/2023										544	33.13214821	-103.0977064
SP 26	12" (1ft)	8/23/2023										48	33.13215985	-103.0979259
SP 26	24" (2 ft)	8/23/2023										160	33.13215985	-103.0979259
SP 26	36" (3 ft)	8/23/2023										96	33.13215985	-103.0979259
SP 27	12" (1ft)	8/23/2023						<10.0	<10.0	<10.0	<10.0	112	33.13204877	-103.0979799
SP 27	24" (2 ft)	8/23/2023						<10.0	<10.0	<10.0	<10.0	16	33.13204877	-103.0979799
SP 27	36" (3 ft)	8/23/2023						<10.0	<10.0	<10.0	<10.0	32	33.13204877	-103.0979799
SP 27	42" (3.5 ft)	8/23/2023						<10.0	<10.0	<10.0	<10.0	32	33.13204877	-103.0979799
SP 28	12" (1ft)	8/23/2023										192	33.13203222	-103.0977996
SP 28	24" (2 ft)	8/23/2023										192	33.13203222	-103.0977996
SP 28	32" (2.67 ft)	8/23/2023										160	33.13203222	-103.0977996
SP 29	12" (1 ft)	8/23/2023										80	33.13186746	-103.0977385
SP 29	24" (2 ft)	8/23/2023										432	33.13186746	-103.0977385
SP 29	32" (2.67 ft)	8/23/2023										496	33.13186746	-103.0977385
SP 30	12" (1 ft)	8/23/2023										144	33.13168964	-103.0979027
SP 30	24" (2 ft)	8/23/2023										16	33.13168964	-103.0979027
SP 30	36" (3 ft)	8/23/2023										32	33.13168964	-103.0979027

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SP 31	12" (1 ft)	8/23/2023					<10.0	<10.0	<10.0	<10.0		33.13171947	-103.0983806
SP 31	24" (2 ft)	8/23/2023					<10.0	<10.0	<10.0	<10.0		33.13171947	-103.0983806
SP 31	36" (3 ft)	8/23/2023					<10.0	<10.0	<10.0	<10.0		33.13171947	-103.0983806
SP 31	48" (4 ft)	8/23/2023					<10.0	<10.0	<10.0	<10.0		33.13171947	-103.0983806
SP 32	12" (1 ft)	8/23/2023					<10.0	<10.0	<10.0	<10.0	160	33.13187201	-103.0981605
SP 32	24" (2 ft)	8/23/2023					<10.0	<10.0	<10.0	<10.0	80	33.13187201	-103.0981605
SP 32	36" (3 ft)	8/23/2023					<10.0	<10.0	<10.0	<10.0	144	33.13187201	-103.0981605
SP 33	12" (1 ft)	8/23/2023					<10.0	<10.0	<10.0	<10.0	80	33.13201162	-103.098345
SP 33	24" (2 ft)	8/23/2023					<10.0	<10.0	<10.0	<10.0	16	33.13201162	-103.098345
SP 33	36" (3 ft)	8/23/2023					<10.0	<10.0	<10.0	<10.0	48	33.13201162	-103.098345
SP 34	12" (1 ft)	8/23/2023					<10.0	<10.0	<10.0	<10.0		33.13185396	-103.0984868
SP 34	24" (2 ft)	8/23/2023					<10.0	<10.0	<10.0	<10.0		33.13185396	-103.0984868
SP 34	36" (3 ft)	8/23/2023					<10.0	<10.0	<10.0	<10.0		33.13185396	-103.0984868
CS - 1	48" (4 ft)	9/13/2023					<10.0	<10.0	<10.0	<10.0	80	33.13181294	-103.0983532
CS - 2	48" (4 ft)	9/13/2023					<10.0	<10.0	<10.0	<10.0	4160	33.13202439	-103.0981559
CS - 3	12" (1 ft)	9/15/2023					<10.0	<10.0	<10.0	<10.0	320	33.13215636	-103.097811
CS - 4	48" (4 ft)	9/15/2023					<10.0	<10.0	<10.0	<10.0	1500	33.13181163	-103.0979039
CS - 5	48" (4 ft)	9/15/2023					<10.0	<10.0	<10.0	<10.0	1810	33.13175919	-103.0980553
CS - 6	48" (4 ft)	9/15/2023					<10.0	<10.0	<10.0	<10.0	256	33.13190422	-103.0980092
	•		NMAC	Closure Criteria for Soi	ils Impacted by a Rele	ease Concentration Reclamation lim		epth of groundwat	er 51– 100 feet or			·	
Soil (mg/kg)			10			50	1,	000		2,500	10,000		-
				NMAC Delienation	Requirements from	0' to 4' bgs for Imp	pacted Soils Impac	ted per 19.15.29.1	3 D. (1)				
Soil (mg/kg)			10								600		
				Soil results are rep	orted in mg/kg (milli	igrams per kilogran	n)						

## Attachment F Laboratory Results and Chain of Custodies



September 15, 2023

CRISSY FORREST

SPHERE 3 ENVIRONMENTAL

1501 BILL OWENS PARKWAY

LONGVIEW, TX 75604

RE: HEISENBERG 007 SAMPLING

Enclosed are the results of analyses for samples received by the laboratory on 09/15/23 12:04.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-22-15. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (\*). For a complete list of accredited analytes and matrices visit the TCEQ website at <a href="https://www.tceq.texas.gov/field/ga/lab\_accred\_certif.html">www.tceq.texas.gov/field/ga/lab\_accred\_certif.html</a>.

Cardinal Laboratories is accreditated through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2 Haloacetic Acids (HAA-5)
Method EPA 524.2 Total Trihalomethanes (TTHM)
Method EPA 524.4 Regulated VOCs (V1, V2, V3)

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Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Mike Snyder For Celey D. Keene

Lab Director/Quality Manager



#### Analytical Results For:

SPHERE 3 ENVIRONMENTAL CRISSY FORREST 1501 BILL OWENS PARKWAY LONGVIEW TX, 75604 Fax To: (903) 297-4675

Received: 09/15/2023 Sampling Date: 09/13/2023

Reported: 09/15/2023 Sampling Type: Soil

Project Name: HEISENBERG 007 SAMPLING Sampling Condition: Cool & Intact
Project Number: 049998.00 Sample Received By: Dionica Hinojos

Project Location: LEA COUNTY, NM

#### Sample ID: CS - 1 @ 48" (H235004-01)

Chloride, SM4500Cl-B	mg/kg		Analyze	Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	80.0	16.0	09/15/2023	ND	400	100	400	7.69	
TPH 8015M	mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/15/2023	ND	207	104	200	0.677	
DRO >C10-C28*	<10.0	10.0	09/15/2023	ND	210	105	200	1.20	
EXT DRO >C28-C36	<10.0	10.0	09/15/2023	ND					
Surrogate: 1-Chlorooctane	115	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	137	% 49.1-14	8						

#### Sample ID: CS - 2 @ 48" (H235004-02)

Chloride, SM4500CI-B	mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	4160	16.0	09/15/2023	ND	400	100	400	7.69	
TPH 8015M	mg	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/15/2023	ND	207	104	200	0.677	
DRO >C10-C28*	<10.0	10.0	09/15/2023	ND	210	105	200	1.20	
EXT DRO >C28-C36	<10.0	10.0	09/15/2023	ND					
Surrogate: 1-Chlorooctane	114	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	134	% 49.1-14	8						

Cardinal Laboratories \*=Accredited Analyte

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#### Analytical Results For:

SPHERE 3 ENVIRONMENTAL CRISSY FORREST 1501 BILL OWENS PARKWAY LONGVIEW TX, 75604 Fax To: (903) 297-4675

Received: 09/15/2023 Sampling Date: 09/15/2023

Reported: 09/15/2023 Sampling Type: Soil

Project Name: HEISENBERG 007 SAMPLING Sampling Condition: Cool & Intact
Project Number: 049998.00 Sample Received By: Dionica Hinojos

Project Location: LEA COUNTY, NM

#### Sample ID: CS - 3 @ 12" (H235004-04)

Chloride, SM4500Cl-B	mg/kg		Analyze	Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	320	16.0	09/15/2023	ND	400	100	400	7.69	
TPH 8015M	mg	/kg	Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/15/2023	ND	199	99.5	200	3.77	
DRO >C10-C28*	<10.0	10.0	09/15/2023	ND	204	102	200	3.81	
EXT DRO >C28-C36	<10.0	10.0	09/15/2023	ND					
Surrogate: 1-Chlorooctane	98.0	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	108	% 49.1-14	8						

#### Sample ID: CS - 4 @ 48" (H235004-05)

Chloride, SM4500Cl-B	mg/kg		Analyze	Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1500	16.0	09/15/2023	ND	400	100	400	7.69	
TPH 8015M	mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/15/2023	ND	199	99.5	200	3.77	
DRO >C10-C28*	<10.0	10.0	09/15/2023	ND	204	102	200	3.81	
EXT DRO >C28-C36	<10.0	10.0	09/15/2023	ND					
Surrogate: 1-Chlorooctane	90.6	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	106	% 49.1-14	8						

Cardinal Laboratories \*=Accredited Analyte

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#### Analytical Results For:

SPHERE 3 ENVIRONMENTAL CRISSY FORREST 1501 BILL OWENS PARKWAY LONGVIEW TX, 75604 Fax To: (903) 297-4675

Received: 09/15/2023 Sampling Date: 09/15/2023

Reported: 09/15/2023 Sampling Type: Soil

Project Name: HEISENBERG 007 SAMPLING Sampling Condition: Cool & Intact
Project Number: 049998.00 Sample Received By: Dionica Hinojos

Project Location: LEA COUNTY, NM

#### Sample ID: CS - 5 @ 48" (H235004-06)

Chloride, SM4500Cl-B	mg/kg		Analyze	Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1810	16.0	09/15/2023	ND	400	100	400	7.69	
TPH 8015M	mg	/kg	Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/15/2023	ND	184	91.9	200	4.67	
DRO >C10-C28*	<10.0	10.0	09/15/2023	ND	192	95.8	200	4.12	
EXT DRO >C28-C36	<10.0	10.0	09/15/2023	ND					
Surrogate: 1-Chlorooctane	90.3	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	125	% 49.1-14	8						

#### Sample ID: CS - 6 @ 48" (H235004-07)

Chloride, SM4500Cl-B	mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	256	16.0	09/15/2023	ND	400	100	400	7.69	
TPH 8015M	mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/15/2023	ND	184	91.9	200	4.67	
DRO >C10-C28*	<10.0	10.0	09/15/2023	ND	192	95.8	200	4.12	
EXT DRO >C28-C36	<10.0	10.0	09/15/2023	ND					
Surrogate: 1-Chlorooctane	95.2	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	127	% 49.1-14	8						

Cardinal Laboratories \*=Accredited Analyte

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#### **Notes and Definitions**

ND Analyte NOT DETECTED at or above the reporting limit

RPD Relative Percent Difference

\*\* Samples not received at proper temperature of 6°C or below.

\*\*\* Insufficient time to reach temperature.

- Chloride by SM4500Cl-B does not require samples be received at or below 6°C

Samples reported on an as received basis (wet) unless otherwise noted on report

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# CHAIN-OF-CUSTODY AND ANALYSIS REQUEST



August 29, 2023

CRISSY FORREST

SPHERE 3 ENVIRONMENTAL

1501 BILL OWENS PARKWAY

LONGVIEW, TX 75604

RE: HEISENBERG 007 SAMPLING

Enclosed are the results of analyses for samples received by the laboratory on 08/23/23 12:15.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-22-15. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (\*). For a complete list of accredited analytes and matrices visit the TCEQ website at <a href="https://www.tceq.texas.gov/field/ga/lab">www.tceq.texas.gov/field/ga/lab</a> accred certif.html.

Cardinal Laboratories is accreditated through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2 Haloacetic Acids (HAA-5)
Method EPA 524.2 Total Trihalomethanes (TTHM)
Method EPA 524.4 Regulated VOCs (V1, V2, V3)

Celey D. Keene

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Celey D. Keene

Lab Director/Quality Manager



08/23/2023

#### Analytical Results For:

SPHERE 3 ENVIRONMENTAL CRISSY FORREST 1501 BILL OWENS PARKWAY LONGVIEW TX, 75604 Fax To: (903) 297-4675

Received: 08/23/2023 Sampling Date:

Reported: 08/29/2023 Sampling Type: Soil

Project Name: HEISENBERG 007 SAMPLING Sampling Condition: Cool & Intact
Project Number: 049998.00 Sample Received By: Shalyn Rodriguez

Project Location: LEA COUNTY, NM

Sample ID: SP 24 @ 12" (H234582-01)

Chloride, SM4500Cl-B Analyzed By: AC Reporting Limit Analyzed Method Blank BS % Recovery True Value OC RPD Oualifier Analyte Result Chloride 16.0 16.0 08/25/2023 ND 432 108 400 0.00

Sample ID: SP 24 @ 24" (H234582-02)

Chloride, SM4500Cl-B Analyzed By: AC Analyte Result Reporting Limit Analyzed Method Blank BS % Recovery True Value QC RPD Qualifier Chloride 144 16.0 08/25/2023 ND 432 108 400 0.00

Sample ID: SP 24 @ 36" (H234582-03)

Chloride, SM4500Cl-B Analyzed By: AC Analyte Result Reporting Limit Analyzed Method Blank BS % Recovery True Value QC RPD Qualifier Chloride 64.0 16.0 08/25/2023 400 0.00 ND 432 108

Sample ID: SP 24 @ 48" (H234582-04)

Chloride, SM4500Cl-B Analyzed By: AC Reporting Limit Analyzed Method Blank BS True Value QC RPD Qualifier Analyte Result % Recovery Chloride 32.0 16.0 08/25/2023 ND 432 400 0.00 108

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Celeg D. Freene



#### Analytical Results For:

SPHERE 3 ENVIRONMENTAL **CRISSY FORREST** 1501 BILL OWENS PARKWAY LONGVIEW TX, 75604

Fax To: (903) 297-4675

Received: 08/23/2023 Sampling Date: 08/23/2023

Reported: 08/29/2023 Sampling Type: Soil

Project Name: HEISENBERG 007 SAMPLING Sampling Condition: Cool & Intact Project Number: 049998.00 Sample Received By: Shalyn Rodriguez

Project Location: LEA COUNTY, NM

#### Sample ID: SP 25 @ 12" (H234582-05)

Chloride, SM4500CI-B	mg/kg		Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	08/25/2023	ND	432	108	400	0.00	

#### Sample ID: SP 25 @ 24" (H234582-06)

Chloride, SM4500Cl-B	mg	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	112	16.0	08/25/2023	ND	432	108	400	0.00	

#### Sample ID: SP 25 @ 29" (H234582-07)

Chloride, SM4500Cl-B	mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	544	16.0	08/25/2023	ND	432	108	400	0.00	

#### Sample ID: SP 26 @ 12" (H234582-08)

Chloride, SM4500Cl-B	500CI-B mg/kg			d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	08/25/2023	ND	432	108	400	0.00	

#### Sample ID: SP 26 @ 24" (H234582-09)

Chloride, SM4500Cl-B	Chloride, SM4500CI-B mg/kg			Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	160	16.0	08/25/2023	ND	432	108	400	0.00	

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Celey D. Keine

Celey D. Keene, Lab Director/Quality Manager



#### Analytical Results For:

SPHERE 3 ENVIRONMENTAL CRISSY FORREST 1501 BILL OWENS PARKWAY LONGVIEW TX, 75604 Fax To: (903) 297-4675

Received: 08/23/2023 Sampling Date: 08/23/2023

Reported: 08/29/2023 Sampling Type: Soil

Project Name: HEISENBERG 007 SAMPLING Sampling Condition: Cool & Intact
Project Number: 049998.00 Sample Received By: Shalyn Rodriguez

Project Location: LEA COUNTY, NM

Sample ID: SP 26 @ 36" (H234582-10)

Chloride, SM4500Cl-B Analyzed By: AC Analyte Result Reporting Limit Analyzed Method Blank BS % Recovery True Value QC RPD Qualifier Chloride 96.0 16.0 08/25/2023 ND 432 108 400 0.00

Sample ID: SP 27 @ 12" (H234582-11)

Chloride, SM4500CI-B	mg/kg		Analyze	Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS % Recovery	True Value QC	RPD	Qualifier	
Chloride	112	16.0	08/25/2023	ND	432	108	400	0.00	
TPH 8015M	mg	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/25/2023	ND	157	78.7	200	3.21	
DRO >C10-C28*	<10.0	10.0	08/25/2023	ND	158	79.2	200	5.84	
EXT DRO >C28-C36	<10.0	10.0	08/25/2023	ND					
Surrogate: 1-Chlorooctane	91.1	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	99.2	% 49.1-14	8						

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#### Analytical Results For:

SPHERE 3 ENVIRONMENTAL CRISSY FORREST 1501 BILL OWENS PARKWAY LONGVIEW TX, 75604 Fax To: (903) 297-4675

Received: 08/23/2023 Sampling Date: 08/23/2023

Reported: 08/29/2023 Sampling Type: Soil

Project Name: HEISENBERG 007 SAMPLING Sampling Condition: Cool & Intact
Project Number: 049998.00 Sample Received By: Shalyn Rodriguez

Project Location: LEA COUNTY, NM

#### Sample ID: SP 27 @ 24" (H234582-12)

Chloride, SM4500CI-B	mg	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	16.0	16.0	08/25/2023	ND	432	108	400	0.00	
TPH 8015M	mg	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/25/2023	ND	157	78.7	200	3.21	
DRO >C10-C28*	<10.0	10.0	08/25/2023	ND	158	79.2	200	5.84	
EXT DRO >C28-C36	<10.0	10.0	08/25/2023	ND					
Surrogate: 1-Chlorooctane	90.5	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	97.5	% 49.1-14	8						

#### Sample ID: SP 27 @ 36" (H234582-13)

Chloride, SM4500CI-B	mg/kg		Analyze	Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	08/25/2023	ND	432	108	400	0.00	
TPH 8015M	mg/kg		Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/25/2023	ND	157	78.7	200	3.21	
DRO >C10-C28*	<10.0	10.0	08/25/2023	ND	158	79.2	200	5.84	
EXT DRO >C28-C36	<10.0	10.0	08/25/2023	ND					
Surrogate: 1-Chlorooctane	88.8	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	97.0	% 49.1-14	8						

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#### Analytical Results For:

SPHERE 3 ENVIRONMENTAL CRISSY FORREST 1501 BILL OWENS PARKWAY LONGVIEW TX, 75604 Fax To: (903) 297-4675

Received: 08/23/2023 Sampling Date: 08/23/2023

Reported: 08/29/2023 Sampling Type: Soil

Project Name: HEISENBERG 007 SAMPLING Sampling Condition: Cool & Intact
Project Number: 049998.00 Sample Received By: Shalyn Rodriguez

Project Location: LEA COUNTY, NM

#### Sample ID: SP 27 @ 42" (H234582-14)

Chloride, SM4500Cl-B	mg/kg		Analyze	Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	08/25/2023	ND	432	108	400	0.00	
TPH 8015M	5M mg/kg		Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/25/2023	ND	157	78.7	200	3.21	
DRO >C10-C28*	<10.0	10.0	08/25/2023	ND	158	79.2	200	5.84	
EXT DRO >C28-C36	<10.0	10.0	08/25/2023	ND					
Surrogate: 1-Chlorooctane	103 %	6 48.2-13	4						
Surrogate: 1-Chlorooctadecane	89.9 9	% 49.1-14	'8						

#### Sample ID: SP 28 @ 12" (H234582-15)

Chloride, SM4500Cl-B	mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	192	16.0	08/25/2023	ND	432	108	400	0.00	

#### Sample ID: SP 28 @ 24" (H234582-16)

Chloride, SM4500CI-B	ride, SM4500Cl-B mg/kg			d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	192	16.0	08/25/2023	ND	432	108	400	0.00	

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Celeg D. Keene



400

0.00

#### Analytical Results For:

SPHERE 3 ENVIRONMENTAL CRISSY FORREST 1501 BILL OWENS PARKWAY LONGVIEW TX, 75604 Fax To: (903) 297-4675

Received: 08/23/2023 Sampling Date: 08/23/2023

Reported: 08/29/2023 Sampling Type: Soil

Project Name: HEISENBERG 007 SAMPLING Sampling Condition: Cool & Intact
Project Number: 049998.00 Sample Received By: Shalyn Rodriguez

Project Location: LEA COUNTY, NM

80.0

16.0

#### Sample ID: SP 28 @ 32" (H234582-17)

Chloride, SM4500Cl-B	mg	mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	160	16.0	08/25/2023	ND	432	108	400	0.00	
Sample ID: SP 29 @ 12"	(H234582-18	3)							
Chloride, SM4500CI-B	mg	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier

ND

432

108

#### Sample ID: SP 29 @ 24" (H234582-19)

Chloride

Chloride, SM4500CI-B	mg,	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	432	16.0	08/25/2023	ND	432	108	400	0.00	

08/25/2023

#### Sample ID: SP 29 @ 32" (H234582-20)

Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	496	16.0	08/25/2023	ND	432	108	400	0.00	

#### Sample ID: SP 30 @ 12" (H234582-21)

Chloride, SM4500CI-B	mg	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	144	16.0	08/25/2023	ND	432	108	400	0.00	

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Celey D. Keene



#### Analytical Results For:

SPHERE 3 ENVIRONMENTAL CRISSY FORREST 1501 BILL OWENS PARKWAY LONGVIEW TX, 75604 Fax To: (903) 297-4675

Received: 08/23/2023 Sampling Date: 08/23/2023

Reported: 08/29/2023 Sampling Type: Soil

Project Name: HEISENBERG 007 SAMPLING Sampling Condition: Cool & Intact
Project Number: 049998.00 Sample Received By: Shalyn Rodriguez

Project Location: LEA COUNTY, NM

Sample ID: SP 30 @ 24" (H234582-22)

Chloride, SM4500Cl-B Analyzed By: AC Analyte Result Reporting Limit Analyzed Method Blank BS % Recovery True Value QC RPD Qualifier Chloride 08/25/2023 432 400 0.00 16.0 16.0 ND 108

Sample ID: SP 30 @ 36" (H234582-23)

Chloride, SM4500Cl-B Analyzed By: AC Reporting Limit Analyzed BS True Value QC RPD Analyte Result Method Blank Qualifier % Recovery Chloride 32.0 16.0 08/25/2023 432 400 0.00 ND 108

Sample ID: SP 31 @ 12" (H234582-24)

TPH 8015M	mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/25/2023	ND	157	78.7	200	3.21	
DRO >C10-C28*	<10.0	10.0	08/25/2023	ND	158	79.2	200	5.84	
EXT DRO >C28-C36	<10.0	10.0	08/25/2023	ND					
Surrogate: 1-Chlorooctane	98.6	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	109 9	% 49.1-14	18						

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Celey D. Keene



#### Analytical Results For:

SPHERE 3 ENVIRONMENTAL CRISSY FORREST 1501 BILL OWENS PARKWAY LONGVIEW TX, 75604 Fax To: (903) 297-4675

Received: 08/23/2023 Sampling Date: 08/23/2023

Reported: 08/29/2023 Sampling Type: Soil

Project Name: HEISENBERG 007 SAMPLING Sampling Condition: Cool & Intact
Project Number: 049998.00 Sample Received By: Shalyn Rodriguez

Project Location: LEA COUNTY, NM

#### Sample ID: SP 31 @ 24" (H234582-25)

TPH 8015M	mg,	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/25/2023	ND	157	78.7	200	3.21	
DRO >C10-C28*	<10.0	10.0	08/25/2023	ND	158	79.2	200	5.84	
EXT DRO >C28-C36	<10.0	10.0	08/25/2023	ND					
Surrogate: 1-Chlorooctane	105	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	116	% 49.1-14	8						

#### Sample ID: SP 31 @ 36" (H234582-26)

TPH 8015M	mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/25/2023	ND	157	78.7	200	3.21	
DRO >C10-C28*	<10.0	10.0	08/25/2023	ND	158	79.2	200	5.84	
EXT DRO >C28-C36	<10.0	10.0	08/25/2023	ND					
Surrogate: 1-Chlorooctane	98.7	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	109	% 49.1-14	8						

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Celeg D. Freene



#### Analytical Results For:

SPHERE 3 ENVIRONMENTAL CRISSY FORREST 1501 BILL OWENS PARKWAY LONGVIEW TX, 75604 Fax To: (903) 297-4675

Received: 08/23/2023 Sampling Date: 08/23/2023

Reported: 08/29/2023 Sampling Type: Soil

Project Name: HEISENBERG 007 SAMPLING Sampling Condition: Cool & Intact
Project Number: 049998.00 Sample Received By: Shalyn Rodriguez

Project Location: LEA COUNTY, NM

#### Sample ID: SP 31 @ 48" (H234582-27)

TPH 8015M	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/25/2023	ND	157	78.7	200	3.21	
DRO >C10-C28*	<10.0	10.0	08/25/2023	ND	158	79.2	200	5.84	
EXT DRO >C28-C36	<10.0	10.0	08/25/2023	ND					
Surrogate: 1-Chlorooctane	96.5 9	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	105 %	% 49.1-14	'8						

#### Sample ID: SP 32 @ 12" (H234582-28)

Chloride, SM4500Cl-B	mg	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	160	16.0	08/25/2023	ND	432	108	400	0.00	
TPH 8015M	mg	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/25/2023	ND	157	78.7	200	3.21	
DRO >C10-C28*	<10.0	10.0	08/25/2023	ND	158	79.2	200	5.84	
EXT DRO >C28-C36	<10.0	10.0	08/25/2023	ND					
Surrogate: 1-Chlorooctane	99.6	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	109	% 49.1-14	8						

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#### Analytical Results For:

SPHERE 3 ENVIRONMENTAL CRISSY FORREST 1501 BILL OWENS PARKWAY LONGVIEW TX, 75604 Fax To: (903) 297-4675

 Received:
 08/23/2023
 Sampling Date:
 08/23/2023

 Reported:
 08/29/2023
 Sampling Type:
 Soil

Project Name: HEISENBERG 007 SAMPLING Sampling Condition: Cool & Intact
Project Number: 049998.00 Sample Received By: Shalyn Rodriguez

Project Location: LEA COUNTY, NM

#### Sample ID: SP 32 @ 24" (H234582-29)

Chloride, SM4500CI-B	mg	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	80.0	16.0	08/25/2023	ND	432	108	400	0.00	
TPH 8015M	mg	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/24/2023	ND	159	79.3	200	1.82	
DRO >C10-C28*	<10.0	10.0	08/24/2023	ND	169	84.3	200	3.93	
EXT DRO >C28-C36	<10.0	10.0	08/24/2023	ND					
Surrogate: 1-Chlorooctane	85.4	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	97.1	% 49.1-14	8						

#### Sample ID: SP 32 @ 36" (H234582-30)

Chloride, SM4500CI-B	mg	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	144	16.0	08/25/2023	ND	432	108	400	0.00	
TPH 8015M	mg	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/24/2023	ND	159	79.3	200	1.82	
DRO >C10-C28*	<10.0	10.0	08/24/2023	ND	169	84.3	200	3.93	
EXT DRO >C28-C36	<10.0	10.0	08/24/2023	ND					
Surrogate: 1-Chlorooctane	87.0	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	97.6	% 49.1-14	8						

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Celey D. Kune



#### Analytical Results For:

SPHERE 3 ENVIRONMENTAL CRISSY FORREST 1501 BILL OWENS PARKWAY LONGVIEW TX, 75604 Fax To: (903) 297-4675

Received: 08/23/2023 Sampling Date: 08/23/2023

Reported: 08/29/2023 Sampling Type: Soil

Project Name: HEISENBERG 007 SAMPLING Sampling Condition: Cool & Intact
Project Number: 049998.00 Sample Received By: Shalyn Rodriguez

Project Location: LEA COUNTY, NM

#### Sample ID: SP 33 @ 12" (H234582-31)

Chloride, SM4500Cl-B	mg	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	80.0	16.0	08/25/2023	ND	432	108	400	0.00	
TPH 8015M	mg	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/24/2023	ND	159	79.3	200	1.82	
DRO >C10-C28*	<10.0	10.0	08/24/2023	ND	169	84.3	200	3.93	
EXT DRO >C28-C36	<10.0	10.0	08/24/2023	ND					
Surrogate: 1-Chlorooctane	81.4	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	91.1	% 49.1-14	8						

#### Sample ID: SP 33 @ 24" (H234582-32)

Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	16.0	16.0	08/25/2023	ND	432	108	400	0.00	
TPH 8015M	mg	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/24/2023	ND	159	79.3	200	1.82	
DRO >C10-C28*	<10.0	10.0	08/24/2023	ND	169	84.3	200	3.93	
EXT DRO >C28-C36	<10.0	10.0	08/24/2023	ND					
Surrogate: 1-Chlorooctane	92.8	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	103	% 49.1-14	8						

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#### Analytical Results For:

SPHERE 3 ENVIRONMENTAL CRISSY FORREST 1501 BILL OWENS PARKWAY LONGVIEW TX, 75604 Fax To: (903) 297-4675

Received: 08/23/2023 Sampling Date: 08/23/2023

Reported: 08/29/2023 Sampling Type: Soil

Project Name: HEISENBERG 007 SAMPLING Sampling Condition: Cool & Intact
Project Number: 049998.00 Sample Received By: Shalyn Rodriguez

Project Location: LEA COUNTY, NM

#### Sample ID: SP 33 @ 36" (H234582-33)

Chloride, SM4500Cl-B	mg	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	08/25/2023	ND	432	108	400	0.00	
TPH 8015M	mg	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/24/2023	ND	159	79.3	200	1.82	
DRO >C10-C28*	<10.0	10.0	08/24/2023	ND	169	84.3	200	3.93	
EXT DRO >C28-C36	<10.0	10.0	08/24/2023	ND					
Surrogate: 1-Chlorooctane	91.0	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	100	% 49.1-14	8						

#### Sample ID: SP 34 @ 12" (H234582-34)

TPH 8015M	mg	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/24/2023	ND	159	79.3	200	1.82	
DRO >C10-C28*	<10.0	10.0	08/24/2023	ND	169	84.3	200	3.93	
EXT DRO >C28-C36	<10.0	10.0	08/24/2023	ND					
Surrogate: 1-Chlorooctane	86.2	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	93.9	% 49.1-14	8						

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#### Analytical Results For:

SPHERE 3 ENVIRONMENTAL CRISSY FORREST 1501 BILL OWENS PARKWAY LONGVIEW TX, 75604 Fax To: (903) 297-4675

Received: 08/23/2023 Sampling Date: 08/23/2023

Reported: 08/29/2023 Sampling Type: Soil

Project Name: HEISENBERG 007 SAMPLING Sampling Condition: Cool & Intact
Project Number: 049998.00 Sample Received By: Shalyn Rodriguez

Project Location: LEA COUNTY, NM

#### Sample ID: SP 34 @ 24" (H234582-35)

TPH 8015M	mg,	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/24/2023	ND	159	79.3	200	1.82	
DRO >C10-C28*	<10.0	10.0	08/24/2023	ND	169	84.3	200	3.93	
EXT DRO >C28-C36	<10.0	10.0	08/24/2023	ND					
Surrogate: 1-Chlorooctane	86.1	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	97.5	% 49.1-14	8						

#### Sample ID: SP 34 @ 36" (H234582-36)

TPH 8015M	mg	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/25/2023	ND	159	79.3	200	1.82	
DRO >C10-C28*	<10.0	10.0	08/25/2023	ND	169	84.3	200	3.93	
EXT DRO >C28-C36	<10.0	10.0	08/25/2023	ND					
Surrogate: 1-Chlorooctane	77.3	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	84.2	% 49.1-14	8						

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#### **Notes and Definitions**

BS-3 Blank spike recovery outside of lab established statistical limits, but still within method limits. Data is not adversely affected.

ND Analyte NOT DETECTED at or above the reporting limit

RPD Relative Percent Difference

\*\* Samples not received at proper temperature of 6°C or below.

\*\*\* Insufficient time to reach temperature.

- Chloride by SM4500Cl-B does not require samples be received at or below 6°C

Samples reported on an as received basis (wet) unless otherwise noted on report

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Delivered By: (Circle One)
Sampler - UPS - Bus - Other:

Time:

250

in

Sample Condition

CHECKED BY:

Turnaround Time:
Thermometer ID -#443-

Standard

Bacteria (only) Sample Condition
Cool Intact Observed Temp. °C

Yes Yes
No Corrected Temp. °C

千年。世

# CHAIN-OF-CUSTODY AND ANALYSIS REQUEST



Company Name: Sphere 3 Environmental Project Manager: Crissy Forrest	ental		P.O. #: 049998.00	0		ANALYSIS	REQUEST
Project Manager: Crissy Forrest			P.O. #: 049998.0	0			
Address: 1501 Bill Owens Parkway			Company: Sphere 3	8			
City: Longview	State: TX	Zip: 75604	Attn: Jackie Starts	S	_		
Phone #: 903-297-4673	Fax #: 903-297-4675	97-4675	Address: 1501 Bill Owens Pkwy	ill Owens Pkwy			
Project #: 049998.00	Project Owr	Project Owner: Sphere 3	City: Longview				
Project Name: Heisenberg 007 Sampling	ng		State: TX Zip	Zip: 75604			
Project Location: Lea County, NM			Phone #: 903-297-4673	7-4673			
Sampler Name: Crissy Forrest			Fax #: 903-297-4675	675			
FOR LAB USE ONLY		MATRIX	IX PRESERV.	SAMPLING			
		RS TER ER					
Lab I.D. Sample I.D.	.D.	(G)RAB OR ( # CONTAINE GROUNDWA WASTEWATE SOIL	SLUDGE OTHER : ACID/BASE: ICE / COOL OTHER :	DATE TIME	TPH (EPA S		
1 0429 1	2"	1 ×	×	S CHO 1	#		
2622402	4,	G 1 X	× 8123		* #		
352 24 @ 3	36"	G 1 X	× 8123	1	X F		
1 @ HZ 25 h	1,67	G 1 X	× 8123		* #		
557150	12"	G 1 ×	× 6113		#		
657 750 1	4	G 1 X	× 8123	. \	H 7		
7	" Pr	G 1 ×	× 8123	1117 51	F		
1 602 278	2"	G 1 X	× 9124	1 SIT 53	4 4		
9 53 7400 2	7:	G 1 X	×	1 Solit 521	F.		
9	3611	G 1 X	C21/8 ×	13 721 1	( <del>+</del>		
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Relinquished By:		Received By:	SOCIA CHIRILI IS DISSEN UPOLITI BIT IN VITE BOOKE SHIPLE SOCIA	Verbal Result:	t:   Yes   No	Add'l Phone #:	
Present	Time:	200	inner!	All Results are emailed.	100	≤.	Š.
Relinquished By:	Date:	Received By:	Garlin	REMARKS:			

# CHAIN-OF-CUSTODY AND ANALYSIS REQUEST



Company Nam	Company Name: Sphere 3 Environmental			BILL TO	75		ANA		
Project Manag	Project Manager: Crissy Forrest			P.O. #: 049998.00	0	7	AMAL	ANALISIS REQUEST	+
Address: 1501	Address: 1501 Bill Owens Parkway			Company: Sphere 3	2	_			
City: Longview	State: TX		Zip: 75604	Attn: Jackie Starts	<i>S</i>	_			
Phone #: 903-297-4673	97-4673 Fax #: 903-297-4675	-297-4675		Address: 1501 Bill Owens Pkwy	ill Owens Pkwy	_			_
Project #: 049998.00	98.00 Project Owner: Sphere	vner: Sphe	ere 3	City: Longview					
Project Name:	Project Name: Heisenberg 007 Sampling			State: TX Zip:	Zip: 75604				
<b>Project Locatio</b>	Project Location: Lea County, NM			903	4673		_		
Sampler Name: Crissy Forrest	Crissy Forrest			Fax #: 903-297-4675	875				
FOR LAB USE ONLY		1	MATRIX	opeocov.	OH THE PARTY OF TH		_		
Lab I.D.	Sample I.D.	AB OR (C)OMP.	UNDWATER TEWATER	ER: /BASE: COOL ER:	Soul Find	rides (EPA 300.0			
1	, 21 @ t.2 ds		× s	A × 10	123 7.76	1			1
12	"HT OFT 25	G 1	×	× 5123		*			
13	24036	G 1	×	× 2123		<u>۸</u>			
14		G 1	×	× 8/23		1-			1
1/5		G 1	×	521G ×		F			
14	28 @	G 1	×	× 8173		*			
17	25 @	G 1	×	× 8125		X			
10	17.	G 1	×	× 8123		¥ 7			
27	57 290 27"	G G	< ×	\$215 ×		T			
PLEASE NOTE: Liability and Darr analyses. All claims including thos service. In no event shall Cardinal	e for la	for any claim arisi be deemed waiv iding without limit	ing whether based in contract ved unless made in writing and ation, business interruptions.	any claim arising whether based in contract or fort, shall be limited to the amount paid by the client for the e deemed waiwed unless made in writing and received by Cardinal within 30 days after completion of the a for without limitation, business interruptors, loss of use or loss of profits incurred the rilent is a shareful to without limitation, business interruptors, loss of use or loss of profits incurred the rilent is a shareful to the contract of	ount paid by the client for the ays after completion of the a	pplicable			Ė
Relinquished By	ad By: Date: Receive	Recei	Received By:	s based upon any of the above st	Verbal Result:	it: 🗆 Yes	□ No Add'l Phone #:	ione 共	
Cres-to	¥†	2	SEG	Men	All Results a	re emailed.	All Results are emailed. Please provide Email address:	address:	
Kelinquished By:	Date:	Recei	Received By:	9	REMARKS:	5	7		
Delivered By: (Circle One)	Opserved Temp.	, Z ,	Sample Condition	on CHECKED BY:	Turn	2	4	Bacteria (only) Sample Condition	
Sampler - UPS - Bus - Other:	Corrected Temp.	S.S.	Yes Yes	Ritials	Thermometer ID #443	D #443	5 0	Cool Infact Observed Temp. °C	
FURM-UUD K	3.2 10/0//21		•		Carraction I ac	tor allaho	5	No Corrected Temp. °C	_

# CHAIN-OF-CUSTODY AND ANALYSIS REQUEST



Company Name	Company Name: Sphere 3 Environmental					BILL TO				OLON IVIN			
Project Manager: Crissy Forrest	r: Crissy Forrest				P.O. #: 049998.00	19998.00		1	1	ANALTSIS	KEQUESI	3	+
Address: 1501 E	Address: 1501 Bill Owens Parkway				Company: Sphere 3	: Sphere 3							
City: Longview		State: TX	Zip: 75604	5604	Attn: Jackie Starts	ie Starts				_		_	_
Phone #: 903-297-4673		Fax #: 903-297-4675	297-4675		Address:	Address: 1501 Bill Owens Pkwy	ens Pkwy	_				_	_
Project #: 049998.00		Project Owner: Sphere	er: Spher	е 3	City: Longview	view				_			_
Project Name: H	Project Name: Heisenberg 007 Sampling				State: TX	Zip: 75604	4						_
<b>Project Location</b>	Project Location: Lea County, NM				Phone #: 9	Phone #: 903-297-4673							_
Sampler Name: Crissy Forrest	Crissy Forrest				Fax #: 903	903-297-4675		_					_
FOR LAB USE ONLY				MATRIX	PRE		SAMPLING						
Lab I.D.	Sample I.D.		(G)RAB OR (C)OMP. # CONTAINERS	GROUNDWATER WASTEWATER SOIL OIL	SLUDGE OTHER : ACID/BASE: ICE / COOL	DA	TIME	Chlorides (EPA 300. TPH (EPA SW-846 /					
21	0		_	×	×	5313	40.8	ナ		1	1	+	$^{\dagger}$
200	57 30 024"		G 1	×	×	8123	8:13	F					
200	57 30 @ 36°		6	×	×	8125	8:IT Y	F					
200	210 10 12		9 6	×	×		1 52:3	+ ×					
9			) G	×	×		1 52:3	*					
200	57 31 6 48		G (	× >	× ×	200	2000	= =					
86	2 200 12		G 1	×	×		8:43	4			1		
de	32024		G 1	×	×		8:50	+			1		
PLEASE NOTE: Liability and analyses, All claims including	PLEASE NOTE: Liability and Damages. Castraria's liability and client's exclusive remedy for any claim arising whether based in contract or fort, shall be limited to the amount paid by the client to the annual paid to the amount paid by the client to the shall be client to the shall be limited to the amount paid by the client to the	axclusive remedy for e whatsoever shall be	G 1 any claim arising	whether based in control unless made in writing	G 1 X State of the same discontinuous and received by Cardinal within 20 or any claim arising whether based in contract or bot, shall be limited to the arm shall be deemed waterd unless made in writing and received by Cardinal within 20 or shall be deemed waterd unless made in writing and received by Cardinal within 20 or shall be deemed waterd.	9123 d to the amount paid t	8:55 Y	X					
Relinquished By:	filides or suppossors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated resource or otherwise.  Pate: A Received By:  Received By:	ices hereunder by C	Cardinal, regardless of who	less of whether such claim is be	im is based upon any of	upon any of the above stated reas	ons or otherwise.	□ Vas					
Carry Com		12:12 Ilme:	8	9/00	me	2	All Results are emailed.	2	ase provide	ease provide Email address:	99		
will dustied by.	Tī <sub>1</sub>	Time:	Received By:	ed By:	0	9	REMARKS:	H	5				
Delivered By: (Circle One)		S. duel pe	'n	0		BY:	Turnaround Time:	•	Standard H	1	only) Sampl	Bacteria (only) Sample Condition	
Sampler - UPS - Bus - Other		Corrected Temp. C	8	Yes Xes	9	Onitials)	Thermometer ID -#113	6.11		_		Observed Temp. °C	
M GWW-WWD	3/11/11/1/						The Party of the P		-	- NO		,	

# CHAIN-OF-CUSTODY AND ANALYSIS REQUEST



Company Name	Company Name: Sphere 3 Environmental		BILL TO			
Project Manager: Crissy Forrest	r: Crissy Forrest		P.O. #: 049998.00	-	ANALYSIS REQUEST	1
Address: 1501 E	Address: 1501 Bill Owens Parkway		Company: Sphere 3			
City: Longview	State: TX	X Zip: 75604	Attn: Jackie Starts			
Phone #: 903-297-4673		Fax #: 903-297-4675	Address: 1501 Bill Owens Pkwy	vens Pkwv		_
Project #: 049998.00		Project Owner: Sphere 3	City: Longview			
Project Name: H	Project Name: Heisenberg 007 Sampling		State: TX Zip: 75604	(1 B)		
<b>Project Location</b>	Project Location: Lea County, NM		903	00 C		
Sampler Name: Crissy Forrest	Crissy Forrest		Fax #: 903-297-4675	M45		_
EOR LAR LISE ONLY			Tax #. 505-251-1015	SI		_
TON DAB USE ONLY			PRESERV. SAN			
Lab I.D.	Sample I.D.	(G)RAB OR (C)OM # CONTAINERS GROUNDWATER WASTEWATER SOIL OIL SLUDGE	OTHER: ACID/BASE: CE/COOL OTHER:	Chlorides (EPA 3		
3/	52 33 012'	→ # \ × 8	× 111	9'07 V V		+
نک	50 33 0 W	G 1 ×	× 8123	4 23:19		
CU	33 0	G 1 X	× 8123	Q'II V		
-	SP 340 12"	G 1 ×	£216 ×	4.12 H		
25	57 340 24	G 1 ×	× 5123	4:21 X		-
36	ST 34 0 36'	G 1	8216 ×	_		
		G 1 ×	×			
		G 	×			
		G G	××			
Pricase NOTE: Liability and I analyses. All claims including i service. In no event shall Card affiliates or successors arising i	smages. Cardinal's liability and client's exciose for negligence and any other cause what oee for negligence and any other cause what be liable for incidental or consequental of or related to the performance of service.	exclusive remedy for any claim arising whether based in contract or tort, shall be limited to the amount paid by the client for the el whatsoever shall be deemed varied unless made in witing and received by Cardinal within 30 days after completion of the a stal damages, including without limitation, business interruptions, loss of use, or loss of profits notured by client, its subsidiaries, enforces thereunder by Cardinal, regardless of whether such claim is bened unou any of the above attention and the subsidiaries.	or tort, shall be limited to the amount pak I received by Cardinal within 30 days after oss of use, or loss of profits incurred by or is based upon any of the abous stated or	nount paid by the client for the days after completion of the applicable tree by client, its subsidiaries.		E
A GRAFIN	YOR	Received By:	mell	Verbal Result: ☐ Yes ☐ No Add'l Phone #: All Results are emailed. Please provide Email address:	□ No Add'I Phone #: pase provide Email address:	
Kelinquished By:	Date:	Received By:	0	REMARKS:		
Delivered By: (Circle One)		-	on CHECKED BY:	Turnaround Time: Standard	7	
Sampler - UPS - Bus - Other:	is - Other: Corrected Tamp of Sc	Cool Intact	(patterns)	Rush		
FURM-006 K	3.2 10/07/21	H	01	Correction Factor 0.586	No No Corrected Temp of	

# **Analytical Report 569997**

#### for

# Remediation and Environmental Xperts, LLC

Project Manager: Rex Rainey
Steward

05-DEC-17

Collected By: Client





#### 1211 W. Florida Ave, Midland TX 79701

Xenco-Houston (EPA Lab code: TX00122): Texas (T104704215-17-23), Arizona (AZ0765), Florida (E871002-24), Louisiana (03054) Oklahoma (2017-142)

> Xenco-Dallas (EPA Lab code: TX01468): Texas (T104704295-17-15), Arizona (AZ0809), Arkansas (17-063-0)

Xenco-El Paso (EPA Lab code: TX00127): Texas (T104704221-17-12)
Xenco-Lubbock (EPA Lab code: TX00139): Texas (T104704219-17-16)
Xenco-Odessa (EPA Lab code: TX00158): Texas (T104704400-17-13)
Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-17-3)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona(AZ0757)
Xenco-Phoenix Mobile (EPA Lab code: AZ00901): Arizona (AZM757)





05-DEC-17

Project Manager: Rex Rainey

Remediation and Environmental Xperts, LLC

P.O. Box 2699

Big Spring, TX 79720

Reference: XENCO Report No(s): 569997

Steward

Project Address: Heisenberg State Com 7H

#### **Rex Rainey**:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number(s) 569997. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. The uncertainty of measurement associated with the results of analysis reported is available upon request. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 569997 will be filed for 45 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

We thank you for selecting XENCO Laboratories to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

thely Taylor

**Holly Taylor** 

Project Manager

Recipient of the Prestigious Small Business Administration Award of Excellence in 1994.

Certified and approved by numerous States and Agencies.

A Small Business and Minority Status Company that delivers SERVICE and QUALITY

Houston - Dallas - Midland - San Antonio - Phoenix - Oklahoma - Latin America



# **Sample Cross Reference 569997**



# Remediation and Environmental Xperts, LLC, Big Spring, 7

Steward

Sample Id	Matrix	<b>Date Collected</b>	Sample Depth	Lab Sample Id
Spot 1	S	12-01-17 09:30	Surface	569997-001
Spot 1	S	12-01-17 10:00	12 In	569997-002
Spot 2	S	12-01-17 10:30	Surface	569997-003
Spot 2	S	12-01-17 11:00	12 In	569997-004
Spot 3	S	12-01-17 11:30	Surface	569997-005
Spot 3	S	12-01-17 12:00	12 In	569997-006
Spot 4	S	12-01-17 12:30	Surface	569997-007
Spot 4	S	12-01-17 13:00	12 In	569997-008
Spot 5	S	12-01-17 13:30	Surface	569997-009
Spot 5	S	12-01-17 14:00	12 In	569997-010
Spot 6	S	12-01-17 09:00	Surf	569997-011
Spot 6	S	12-01-17 09:30	12 In	569997-012
Spot 7	S	12-01-17 10:00	Surf	569997-013
Spot 7	S	12-01-17 10:30	12 In	569997-014
Spot 8	S	12-01-17 11:00	Surf	569997-015
Spot 8	S	12-01-17 11:30	12 In	569997-016
Spot 9	S	12-01-17 12:00	Surf	569997-017
Spot 9	S	12-01-17 12:30	12 In	569997-018
Spot 10	S	12-01-17 13:00	Surf	569997-019
Spot 10	S	12-01-17 13:30	12 In	569997-020
Spot 12	S	12-01-17 14:30	Surf	569997-021
Spot 12	S	12-01-17 15:00	12 In	569997-022
Spot 11	S	12-01-17 15:30	Surf	569997-023
Spot 11	S	12-01-17 16:00	12 In	569997-024

#### CASE NARRATIVE

Client Name: Remediation and Environmental Xperts, LLC Project Name: Steward

05-DEC-17 Project ID: Report Date: Work Order Number(s): 569997 Date Received: 12/04/2017

#### Sample receipt non conformances and comments:

#### Sample receipt non conformances and comments per sample:

None

#### **Analytical non conformances and comments:**

Batch: LBA-3034895 BTEX by EPA 8021B

Soil samples were not received in Terracore kits and therefore were prepared by method 5030.

Batch: LBA-3034937 BTEX by EPA 8021B

Soil samples were not received in Terracore kits and therefore were prepared by method 5030. Lab Sample ID 569997-011 was randomly selected for Matrix Spike/Matrix Spike Duplicate (MS/MSD). o-Xylene recovered below QC limits in the Matrix Spike Duplicate. Outlier/s are due to possible matrix interference. Samples in the analytical batch are: 569997-010, -011, -012, -013, -014, -015, -016, -017, -018, -019, -020, -021, -022, -023, -024.

The Laboratory Control Sample for o-Xylene is within laboratory Control Limits, therefore the data was accepted.





# Remediation and Environmental Xperts, LLC, Big Spring, TX

Steward

Soil

Sample Id: Spot 1

Matrix:

Date Prep:

Date Received:12.04.17 10.50

Lab Sample Id: 569997-001

Date Collected: 12.01.17 09.30

Sample Depth: Surface

Analytical Method: Chloride by EPA 300

Prep Method: E300P

% Moisture:

Basis:

Tech: Analyst: MNV MNV

12.04.17 17.00

Wet Weight

Seq Number: 3034981

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	123	4.94	mg/kg	12.04.17 22.58		1

Analytical Method: TPH by Texas1005

Prep Method: TX1005P

Tech:

Seq Number: 3034997

ARM

% Moisture:

ARM Analyst:

12.04.17 11.00 Date Prep:

Basis:

Wet Weight

Cas Number Result Parameter RLUnits

Parameter	Cas Number	Result	RL		Units	<b>Analysis Date</b>	Flag	Dil
C6-C12 Gasoline Range Hydrocarbons	PHC612	<25.0	25.0		mg/kg	12.04.17 14.19	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1228	54.9	25.0		mg/kg	12.04.17 14.19		1
C28-C35 Oil Range Hydrocarbons	PHCG2835	<25.0	25.0		mg/kg	12.04.17 14.19	U	1
Total TPH 1005	PHC635	54.9	25.0		mg/kg	12.04.17 14.19		1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane		111-85-3	91	%	70-135	12.04.17 14.19		
o-Terphenyl		84-15-1	88	%	70-130	12.04.17 14.19		





# Remediation and Environmental Xperts, LLC, Big Spring, TX

Steward

Soil

Sample Id: Spot 1 Matrix:

Date Received:12.04.17 10.50

Lab Sample Id: 569997-001

Date Collected: 12.01.17 09.30

Sample Depth: Surface

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: ALJ

Basis:

% Moisture:

Analyst: ALJ

Date Prep:

12.04.17 11.15

Wet Weight

Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
Benzene	71-43-2	< 0.00199	0.00199		mg/kg	12.04.17 14.04	U	1
Toluene	108-88-3	< 0.00199	0.00199		mg/kg	12.04.17 14.04	U	1
Ethylbenzene	100-41-4	< 0.00199	0.00199		mg/kg	12.04.17 14.04	U	1
m,p-Xylenes	179601-23-1	< 0.00398	0.00398		mg/kg	12.04.17 14.04	U	1
o-Xylene	95-47-6	< 0.00199	0.00199		mg/kg	12.04.17 14.04	U	1
Total Xylenes	1330-20-7	< 0.00199	0.00199		mg/kg	12.04.17 14.04	U	1
Total BTEX		< 0.00199	0.00199		mg/kg	12.04.17 14.04	U	1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene		460-00-4	89	%	80-120	12.04.17 14.04		
1,4-Difluorobenzene		540-36-3	94	%	80-120	12.04.17 14.04		





#### Remediation and Environmental Xperts, LLC, Big Spring, TX

Steward

Soil

Sample Id: Spot 1

Matrix:

Date Received:12.04.17 10.50

Lab Sample Id: 569997-002

Date Collected: 12.01.17 10.00

Sample Depth: 12 In

Analytical Method: Chloride by EPA 300

Prep Method: E300P

MNV Tech:

% Moisture:

Analyst:

MNV

Date Prep: 12.04.17 17.00 Basis:

Wet Weight

Seq Number: 3034981

Parameter Cas Number Result RLUnits **Analysis Date** Flag Dil Chloride 16887-00-6 12.05.17 10.01 22.4 4.97 mg/kg 1

Analytical Method: TPH by Texas 1005

Prep Method: TX1005P

% Moisture:

Tech: Analyst: ARM

ARM

12.04.17 11.00 Date Prep:

Basis:

Wet Weight

Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
C6-C12 Gasoline Range Hydrocarbons	PHC612	<24.9	24.9		mg/kg	12.04.17 15.20	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1228	<24.9	24.9		mg/kg	12.04.17 15.20	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	<24.9	24.9		mg/kg	12.04.17 15.20	U	1
Total TPH 1005	PHC635	<24.9	24.9		mg/kg	12.04.17 15.20	U	1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane		111-85-3	99	%	70-135	12.04.17 15.20		
o-Terphenyl		84-15-1	98	%	70-130	12.04.17 15.20		





# Remediation and Environmental Xperts, LLC, Big Spring, TX

Steward

Sample Id: Spot 1

Matrix:

Soil

Date Received:12.04.17 10.50

Lab Sample Id: 569997-002

Date Collected: 12.01.17 10.00

Sample Depth: 12 In

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech:

Analyst:

ALJ ALJ

Date Prep: 12.04.17 11.15

% Moisture: Basis:

Wet Weight

Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
Benzene	71-43-2	< 0.00200	0.00200		mg/kg	12.04.17 14.23	U	1
Toluene	108-88-3	< 0.00200	0.00200		mg/kg	12.04.17 14.23	U	1
Ethylbenzene	100-41-4	< 0.00200	0.00200		mg/kg	12.04.17 14.23	U	1
m,p-Xylenes	179601-23-1	< 0.00400	0.00400		mg/kg	12.04.17 14.23	U	1
o-Xylene	95-47-6	< 0.00200	0.00200		mg/kg	12.04.17 14.23	U	1
Total Xylenes	1330-20-7	< 0.00200	0.00200		mg/kg	12.04.17 14.23	U	1
Total BTEX		< 0.00200	0.00200		mg/kg	12.04.17 14.23	U	1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene		460-00-4	89	%	80-120	12.04.17 14.23		
1.4-Difluorobenzene		540-36-3	95	%	80-120	12.04.17 14.23		





#### Remediation and Environmental Xperts, LLC, Big Spring, TX

Steward

Sample Id: Spot 2

Matrix: Soil Date Received:12.04.17 10.50

Lab Sample Id: 569997-003

Date Collected: 12.01.17 10.30

Sample Depth: Surface

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech:

MNV

% Moisture:

Wet Weight

Analyst:

MNV

Date Prep:

12.04.17 17.00

Basis:

Seq Number: 3034981

Parameter Cas Number Result RLUnits **Analysis Date** Flag Dil Chloride 16887-00-6 12.05.17 10.10 129 4.96 mg/kg 1

Analytical Method: TPH by Texas 1005

Prep Method: TX1005P

Tech:

Analyst:

ARM ARM

Date Prep:

12.04.17 11.00

% Moisture: Basis:

Wet Weight

Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
C6-C12 Gasoline Range Hydrocarbons	PHC612	<24.9	24.9		mg/kg	12.04.17 15.40	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1228	31.6	24.9		mg/kg	12.04.17 15.40		1
C28-C35 Oil Range Hydrocarbons	PHCG2835	<24.9	24.9		mg/kg	12.04.17 15.40	U	1
Total TPH 1005	PHC635	31.6	24.9		mg/kg	12.04.17 15.40		1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane		111-85-3	86	%	70-135	12.04.17 15.40		
o-Terphenyl		84-15-1	85	%	70-130	12.04.17 15.40		





# Remediation and Environmental Xperts, LLC, Big Spring, TX

Steward

Sample Id: Spot 2 Matrix: Soil Date Received:12.04.17 10.50

Lab Sample Id: 569997-003

Date Collected: 12.01.17 10.30

Sample Depth: Surface

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech:

ALJ

% Moisture:

Analyst:

ALJ

12.04.17 11.15 Date Prep:

Basis: Wet Weight

Parameter	Cas Number	Result	RL		Units	<b>Analysis Date</b>	Flag	Dil
Benzene	71-43-2	< 0.00201	0.00201		mg/kg	12.04.17 14.42	U	1
Toluene	108-88-3	< 0.00201	0.00201		mg/kg	12.04.17 14.42	U	1
Ethylbenzene	100-41-4	< 0.00201	0.00201		mg/kg	12.04.17 14.42	U	1
m,p-Xylenes	179601-23-1	< 0.00402	0.00402		mg/kg	12.04.17 14.42	U	1
o-Xylene	95-47-6	< 0.00201	0.00201		mg/kg	12.04.17 14.42	U	1
Total Xylenes	1330-20-7	< 0.00201	0.00201		mg/kg	12.04.17 14.42	U	1
Total BTEX		< 0.00201	0.00201		mg/kg	12.04.17 14.42	U	1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene		460-00-4	91	%	80-120	12.04.17 14.42		
1,4-Difluorobenzene		540-36-3	95	%	80-120	12.04.17 14.42		





#### Remediation and Environmental Xperts, LLC, Big Spring, TX

Steward

Sample Id: Spot 2

Matrix: Soil Date Received:12.04.17 10.50

Lab Sample Id: 569997-004

Date Collected: 12.01.17 11.00

Sample Depth: 12 In

Analytical Method: Chloride by EPA 300

Prep Method: E300P % Moisture:

Tech:

MNV

Basis:

Wet Weight

Analyst:

Chloride

MNV

Date Prep: 12.04.17 17.00

Seq Number: 3034981

Parameter

Cas Number 16887-00-6

RL4.92 Units

**Analysis Date** 12.05.17 10.18 mg/kg

Flag Dil 1

Analytical Method: TPH by Texas 1005

Prep Method: TX1005P

% Moisture:

Tech: Analyst: ARM ARM

Date Prep:

Result

22.6

12.04.17 11.00

Basis:

Wet Weight

Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
C6-C12 Gasoline Range Hydrocarbons	PHC612	<25.0	25.0		mg/kg	12.04.17 16.01	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1228	<25.0	25.0		mg/kg	12.04.17 16.01	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	<25.0	25.0		mg/kg	12.04.17 16.01	U	1
Total TPH 1005	PHC635	<25.0	25.0		mg/kg	12.04.17 16.01	U	1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane		111-85-3	93	%	70-135	12.04.17 16.01		
o-Terphenyl		84-15-1	92	%	70-130	12.04.17 16.01		





# Remediation and Environmental Xperts, LLC, Big Spring, TX

Steward

Soil

Sample Id: Spot 2
Lab Sample Id: 569997-004

Matrix:

Date Received:12.04.17 10.50

Date Collected: 12.01.17 11.00

Sample Depth: 12 In

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

% Moisture:

Tech: Analyst: ALJ ALJ

Date Prep:

12.04.17 11.15

Basis:

Wet Weight

Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
Benzene	71-43-2	< 0.00202	0.00202		mg/kg	12.04.17 15.00	U	1
Toluene	108-88-3	< 0.00202	0.00202		mg/kg	12.04.17 15.00	U	1
Ethylbenzene	100-41-4	< 0.00202	0.00202		mg/kg	12.04.17 15.00	U	1
m,p-Xylenes	179601-23-1	< 0.00404	0.00404		mg/kg	12.04.17 15.00	U	1
o-Xylene	95-47-6	< 0.00202	0.00202		mg/kg	12.04.17 15.00	U	1
Total Xylenes	1330-20-7	< 0.00202	0.00202		mg/kg	12.04.17 15.00	U	1
Total BTEX		< 0.00202	0.00202		mg/kg	12.04.17 15.00	U	1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene		540-36-3	96	%	80-120	12.04.17 15.00		
4-Bromofluorobenzene		460-00-4	89	%	80-120	12.04.17 15.00		





### Remediation and Environmental Xperts, LLC, Big Spring, TX

Steward

Soil

Sample Id: Spot 3

Matrix:

Date Received:12.04.17 10.50

Lab Sample Id: 569997-005

Date Collected: 12.01.17 11.30

RL

4.95

Sample Depth: Surface

Analytical Method: Chloride by EPA 300

Prep Method: E300P

**Analysis Date** 

12.05.17 10.47

Tech: Analyst:

Parameter

Chloride

MNV MNV % Moisture:

Units

mg/kg

Wet Weight

Seq Number: 3034991

Date Prep:

71.8

Result

Cas Number

16887-00-6

12.05.17 09.00

Basis:

Flag

Dil

1

Prep Method: TX1005P

Tech: Analyst:

Analytical Method: TPH by Texas 1005 ARM

ARM

12.04.17 11.00 Date Prep:

% Moisture: Basis:

Wet Weight

Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
C6-C12 Gasoline Range Hydrocarbons	PHC612	<24.9	24.9		mg/kg	12.04.17 16.21	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1228	<24.9	24.9		mg/kg	12.04.17 16.21	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	<24.9	24.9		mg/kg	12.04.17 16.21	U	1
Total TPH 1005	PHC635	<24.9	24.9		mg/kg	12.04.17 16.21	U	1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane		111-85-3	95	%	70-135	12.04.17 16.21		
o-Terphenyl		84-15-1	97	%	70-130	12.04.17 16.21		





# Remediation and Environmental Xperts, LLC, Big Spring, TX

Steward

Sample Id: Spot 3

Matrix: Soil

Date Received:12.04.17 10.50

Lab Sample Id: 569997-005

Date Collected: 12.01.17 11.30

Sample Depth: Surface

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech:

ALJ

% Moisture:

Analyst: ALJ

Date Prep:

12.04.17 11.15

Basis:

Wet Weight

Parameter	Cas Number	Result	RL		Units	<b>Analysis Date</b>	Flag	Dil
Benzene	71-43-2	< 0.00200	0.00200		mg/kg	12.04.17 15.19	U	1
Toluene	108-88-3	< 0.00200	0.00200		mg/kg	12.04.17 15.19	U	1
Ethylbenzene	100-41-4	< 0.00200	0.00200		mg/kg	12.04.17 15.19	U	1
m,p-Xylenes	179601-23-1	< 0.00401	0.00401		mg/kg	12.04.17 15.19	U	1
o-Xylene	95-47-6	< 0.00200	0.00200		mg/kg	12.04.17 15.19	U	1
Total Xylenes	1330-20-7	< 0.00200	0.00200		mg/kg	12.04.17 15.19	U	1
Total BTEX		< 0.00200	0.00200		mg/kg	12.04.17 15.19	U	1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene		540-36-3	99	%	80-120	12.04.17 15.19		
4-Bromofluorobenzene		460-00-4	93	%	80-120	12.04.17 15.19		





### Remediation and Environmental Xperts, LLC, Big Spring, TX

Steward

Soil

Sample Id: Spot 3

Matrix:

Date Received:12.04.17 10.50

Lab Sample Id: 569997-006

Date Collected: 12.01.17 12.00

Sample Depth: 12 In

Analytical Method: Chloride by EPA 300

Prep Method: E300P % Moisture:

Tech: Analyst: MNV MNV

Date Prep:

Basis: 12.05.17 09.00

Wet Weight

Flag

Dil

1

Seq Number: 3034991

Parameter Cas Number Result RLUnits **Analysis Date** Chloride 16887-00-6 12.05.17 11.05 9.37 4.97 mg/kg

Analytical Method: TPH by Texas 1005

Prep Method: TX1005P

ARM

% Moisture:

ARM Analyst:

Tech:

12.04.17 11.00 Date Prep:

Wet Weight Basis:

Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
C6-C12 Gasoline Range Hydrocarbons	PHC612	<25.0	25.0		mg/kg	12.04.17 16.41	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1228	<25.0	25.0		mg/kg	12.04.17 16.41	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	<25.0	25.0		mg/kg	12.04.17 16.41	U	1
Total TPH 1005	PHC635	<25.0	25.0		mg/kg	12.04.17 16.41	U	1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane		111-85-3	94	%	70-135	12.04.17 16.41		
o-Terphenyl		84-15-1	97	%	70-130	12.04.17 16.41		





# Remediation and Environmental Xperts, LLC, Big Spring, TX

Steward

Sample Id: Spot 3

ot 3

Matrix: Soil

Date Received:12.04.17 10.50

Lab Sample Id: 569997-006

Date Collected: 12.01.17 12.00

Sample Depth: 12 In

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: Analyst: ALJ ALJ

Date Prep: 12.04.17 11.15

% Moisture: Basis:

Wet Weight

Parameter	Cas Number	Result	RL		Units	<b>Analysis Date</b>	Flag	Dil
Benzene	71-43-2	< 0.00199	0.00199		mg/kg	12.04.17 15.39	U	1
Toluene	108-88-3	< 0.00199	0.00199		mg/kg	12.04.17 15.39	U	1
Ethylbenzene	100-41-4	< 0.00199	0.00199		mg/kg	12.04.17 15.39	U	1
m,p-Xylenes	179601-23-1	< 0.00398	0.00398		mg/kg	12.04.17 15.39	U	1
o-Xylene	95-47-6	< 0.00199	0.00199		mg/kg	12.04.17 15.39	U	1
Total Xylenes	1330-20-7	< 0.00199	0.00199		mg/kg	12.04.17 15.39	U	1
Total BTEX		< 0.00199	0.00199		mg/kg	12.04.17 15.39	U	1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene		460-00-4	91	%	80-120	12.04.17 15.39		
1,4-Difluorobenzene		540-36-3	96	%	80-120	12.04.17 15.39		





### Remediation and Environmental Xperts, LLC, Big Spring, TX

Steward

Soil

Sample Id: Spot 4

Matrix:

Date Prep:

Date Received:12.04.17 10.50

Lab Sample Id: 569997-007

Date Collected: 12.01.17 12.30

Sample Depth: Surface

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: Analyst: MNV MNV

Basis: 12.05.17 09.00

% Moisture:

Wet Weight

Seq Number: 3034991

Parameter Cas Number Result RLUnits **Analysis Date** Flag Dil Chloride 16887-00-6 12.05.17 11.11 13.4 4.95 mg/kg 1

Analytical Method: TPH by Texas 1005

Prep Method: TX1005P

% Moisture:

Tech: Analyst: ARM ARM

12.04.17 11.00 Date Prep:

Basis:

Wet Weight

Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
C6-C12 Gasoline Range Hydrocarbons	PHC612	<24.9	24.9		mg/kg	12.04.17 17.01	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1228	<24.9	24.9		mg/kg	12.04.17 17.01	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	<24.9	24.9		mg/kg	12.04.17 17.01	U	1
Total TPH 1005	PHC635	<24.9	24.9		mg/kg	12.04.17 17.01	U	1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane		111-85-3	90	%	70-135	12.04.17 17.01		
o-Terphenyl		84-15-1	88	%	70-130	12.04.17 17.01		





# Remediation and Environmental Xperts, LLC, Big Spring, TX

Steward

Sample Id: Spot 4
Lab Sample Id: 569997-007

4

Matrix: Soil

Date Received:12.04.17 10.50

Date Collected: 12.01.17 12.30

Sample Depth: Surface

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: ALJ

Analyst: ALJ

Date Prep: 12.04.17 11.15

% Moisture: Basis:

Wet Weight

Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
Benzene	71-43-2	< 0.00200	0.00200		mg/kg	12.04.17 15.58	U	1
Toluene	108-88-3	< 0.00200	0.00200		mg/kg	12.04.17 15.58	U	1
Ethylbenzene	100-41-4	< 0.00200	0.00200		mg/kg	12.04.17 15.58	U	1
m,p-Xylenes	179601-23-1	< 0.00399	0.00399		mg/kg	12.04.17 15.58	U	1
o-Xylene	95-47-6	< 0.00200	0.00200		mg/kg	12.04.17 15.58	U	1
Total Xylenes	1330-20-7	< 0.00200	0.00200		mg/kg	12.04.17 15.58	U	1
Total BTEX		< 0.00200	0.00200		mg/kg	12.04.17 15.58	U	1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene		540-36-3	93	%	80-120	12.04.17 15.58		
4-Bromofluorobenzene		460-00-4	91	%	80-120	12.04.17 15.58		





### Remediation and Environmental Xperts, LLC, Big Spring, TX

Steward

Soil

Sample Id:

Spot 4

Matrix:

Date Received:12.04.17 10.50

Lab Sample Id: 569997-008

Date Collected: 12.01.17 13.00

Sample Depth: 12 In

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech:

MNV

% Moisture:

Analyst:

MNV

Date Prep: 12.05.17 09.00 Basis:

Wet Weight

Seq Number: 3034991

Parameter Cas Number Result RLUnits **Analysis Date** Flag Dil Chloride 16887-00-6 12.05.17 11.16 U <4.98 4.98 mg/kg 1

Date Prep:

Analytical Method: TPH by Texas 1005

Prep Method: TX1005P

% Moisture:

Tech: Analyst: ARM ARM

12.04.17 11.00

Basis:

Wet Weight

Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
C6-C12 Gasoline Range Hydrocarbons	PHC612	<25.0	25.0		mg/kg	12.04.17 17.21	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1228	<25.0	25.0		mg/kg	12.04.17 17.21	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	<25.0	25.0		mg/kg	12.04.17 17.21	U	1
Total TPH 1005	PHC635	<25.0	25.0		mg/kg	12.04.17 17.21	U	1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane		111-85-3	83	%	70-135	12.04.17 17.21		
o-Terphenyl		84-15-1	86	%	70-130	12.04.17 17.21		





# Remediation and Environmental Xperts, LLC, Big Spring, TX

Steward

Sample Id: Spot 4

Matrix: Soil

Date Received:12.04.17 10.50

Lab Sample Id: 569997-008

Date Collected: 12.01.17 13.00

Sample Depth: 12 In

12.04.17 16.17

80-120

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: Analyst: ALJ ALJ

Date Prep: 12.04.17 11.15

95

% Moisture: Basis:

Wet Weight

Seq Number: 3034895

1,4-Difluorobenzene

Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
Benzene	71-43-2	< 0.00202	0.00202		mg/kg	12.04.17 16.17	U	1
Toluene	108-88-3	< 0.00202	0.00202		mg/kg	12.04.17 16.17	U	1
Ethylbenzene	100-41-4	< 0.00202	0.00202		mg/kg	12.04.17 16.17	U	1
m,p-Xylenes	179601-23-1	< 0.00403	0.00403		mg/kg	12.04.17 16.17	U	1
o-Xylene	95-47-6	< 0.00202	0.00202		mg/kg	12.04.17 16.17	U	1
Total Xylenes	1330-20-7	< 0.00202	0.00202		mg/kg	12.04.17 16.17	U	1
Total BTEX		< 0.00202	0.00202		mg/kg	12.04.17 16.17	U	1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene		460-00-4	88	%	80-120	12.04.17 16.17	O	

540-36-3





#### Remediation and Environmental Xperts, LLC, Big Spring, TX

Steward

Soil

Sample Id: Spot 5

Matrix:

Date Received:12.04.17 10.50

Lab Sample Id: 569997-009

Date Collected: 12.01.17 13.30

Sample Depth: Surface

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech:

MNV

% Moisture:

Analyst:

MNV

Date Prep: 12.05.17 09.00 Basis:

Wet Weight

Seq Number: 3034991

Parameter Cas Number Result RLUnits **Analysis Date** Flag Dil Chloride 16887-00-6 12.05.17 11.22 32.0 4.99 mg/kg 1

Analytical Method: TPH by Texas 1005

Prep Method: TX1005P

% Moisture:

Tech: Analyst: ARM ARM

12.04.17 11.00 Date Prep:

Basis:

Wet Weight

Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
C6-C12 Gasoline Range Hydrocarbons	PHC612	<25.0	25.0		mg/kg	12.04.17 17.41	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1228	33.5	25.0		mg/kg	12.04.17 17.41		1
C28-C35 Oil Range Hydrocarbons	PHCG2835	<25.0	25.0		mg/kg	12.04.17 17.41	U	1
Total TPH 1005	PHC635	33.5	25.0		mg/kg	12.04.17 17.41		1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane		111-85-3	83	%	70-135	12.04.17 17.41		
o-Terphenyl		84-15-1	81	%	70-130	12.04.17 17.41		





# Remediation and Environmental Xperts, LLC, Big Spring, TX

Steward

Sample Id: Spot 5

oot 5

Matrix: Soil

Date Received:12.04.17 10.50

Lab Sample Id: 569997-009

Date Collected: 12.01.17 13.30

Sample Depth: Surface

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech:

ALJ

Date Prep: 12.04.17 11.15

% Moisture: Basis:

Wet Weight

Analyst: ALJ

Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
Benzene	71-43-2	< 0.00200	0.00200		mg/kg	12.04.17 16.37	U	1
Toluene	108-88-3	< 0.00200	0.00200		mg/kg	12.04.17 16.37	U	1
Ethylbenzene	100-41-4	< 0.00200	0.00200		mg/kg	12.04.17 16.37	U	1
m,p-Xylenes	179601-23-1	< 0.00401	0.00401		mg/kg	12.04.17 16.37	U	1
o-Xylene	95-47-6	< 0.00200	0.00200		mg/kg	12.04.17 16.37	U	1
Total Xylenes	1330-20-7	< 0.00200	0.00200		mg/kg	12.04.17 16.37	U	1
Total BTEX		< 0.00200	0.00200		mg/kg	12.04.17 16.37	U	1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene		460-00-4	90	%	80-120	12.04.17 16.37		
1,4-Difluorobenzene		540-36-3	95	%	80-120	12.04.17 16.37		





#### Remediation and Environmental Xperts, LLC, Big Spring, TX

Steward

Soil

Sample Id: Spot 5

Matrix:

Date Received:12.04.17 10.50

Lab Sample Id: 569997-010

Date Collected: 12.01.17 14.00

Sample Depth: 12 In

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech:

MNV

% Moisture:

Wet Weight

MNV Analyst:

Date Prep:

5.87

Result

12.05.17 09.00

Basis:

Seq Number: 3034991

**Parameter** 

Cas Number Chloride 16887-00-6

RL4.99

Units mg/kg

**Analysis Date** Flag 12.05.17 11.40

Dil 1

Analytical Method: TPH by Texas 1005

Prep Method: TX1005P

% Moisture:

Tech: Analyst: ARM ARM

Date Prep:

12.04.17 11.00

Basis:

Wet Weight

Seq Number: 3034997

Cas Number Result RL**Parameter** Units **Analysis Date** Flag Dil C6-C12 Gasoline Range Hydrocarbons PHC612 <25.0 25.0 12.04.17 18.01 mg/kg U 1 C12-C28 Diesel Range Hydrocarbons PHCG1228 <25.0 25.0 mg/kg 12.04.17 18.01 U 1 C28-C35 Oil Range Hydrocarbons PHCG2835 <25.0 25.0 12.04.17 18.01 U mg/kg Total TPH 1005 PHC635 <25.0 25.0 mg/kg 12.04.17 18.01 U 1 % Surrogate Cas Number Units Limits **Analysis Date** Flag Recovery

1-Chlorooctane 111-85-3 70-135 12.04.17 18.01 93 % o-Terphenyl 84-15-1 98 70-130 12.04.17 18.01





## Remediation and Environmental Xperts, LLC, Big Spring, TX

Steward

Soil

12.04.17 11.20

Sample Id: Spot 5 Matrix:

Date Received:12.04.17 10.50

Lab Sample Id: 569997-010

Date Collected: 12.01.17 14.00

Sample Depth: 12 In

Analytical Method: BTEX by EPA 8021B

ALJ

Prep Method: SW5030B

Tech: ALJ

Analyst:

% Moisture:

Basis:

Wet Weight

Seq Number: 3034937

Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
Benzene	71-43-2	< 0.0100	0.0100		mg/kg	12.04.17 19.45	U	1
Toluene	108-88-3	< 0.0100	0.0100		mg/kg	12.04.17 19.45	U	1
Ethylbenzene	100-41-4	< 0.0100	0.0100		mg/kg	12.04.17 19.45	U	1
m,p-Xylenes	179601-23-1	< 0.0200	0.0200		mg/kg	12.04.17 19.45	U	1
o-Xylene	95-47-6	< 0.0100	0.0100		mg/kg	12.04.17 19.45	U	1
Total Xylenes	1330-20-7	< 0.0100	0.0100		mg/kg	12.04.17 19.45	U	1
Total BTEX		< 0.0100	0.0100		mg/kg	12.04.17 19.45	U	1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene		460-00-4	85	%	80-120	12.04.17 19.45		
1,4-Difluorobenzene		540-36-3	91	%	80-120	12.04.17 19.45		

Date Prep:





#### Remediation and Environmental Xperts, LLC, Big Spring, TX

Steward

Sample Id: Spot 6

Seq Number: 3034991

Matrix: Soil Date Received:12.04.17 10.50

Lab Sample Id: 569997-011

Date Collected: 12.01.17 09.00

RL

4.98

Sample Depth: Surf

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech:

Parameter

Chloride

MNV

% Moisture:

Units

mg/kg

MNV Analyst:

Date Prep:

Result

76.7

Cas Number

16887-00-6

12.05.17 09.00

Basis:

Flag

Dil

1

Wet Weight

Analytical Method: TPH by Texas 1005

Prep Method: TX1005P

**Analysis Date** 

12.05.17 11.46

% Moisture:

Tech: Analyst: ARM ARM

Date Prep:

12.04.17 11.00

Basis:

Wet Weight

Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
C6-C12 Gasoline Range Hydrocarbons	PHC612	<25.0	25.0		mg/kg	12.04.17 19.06	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1228	37.6	25.0		mg/kg	12.04.17 19.06		1
C28-C35 Oil Range Hydrocarbons	PHCG2835	<25.0	25.0		mg/kg	12.04.17 19.06	U	1
Total TPH 1005	PHC635	37.6	25.0		mg/kg	12.04.17 19.06		1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane		111-85-3	88	%	70-135	12.04.17 19.06		
o-Terphenyl		84-15-1	85	%	70-130	12.04.17 19.06		





## Remediation and Environmental Xperts, LLC, Big Spring, TX

Steward

Sample Id: Spot 6

Matrix:

Date Prep:

Soil

12.04.17 11.20

Date Received:12.04.17 10.50

Lab Sample Id: 569997-011

Date Collected: 12.01.17 09.00

Sample Depth: Surf

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech:

Analyst:

ALJ ALJ % Moisture:

Basis:

Wet Weight

Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
Benzene	71-43-2	< 0.0100	0.0100		mg/kg	12.04.17 19.26	U	1
Toluene	108-88-3	< 0.0100	0.0100		mg/kg	12.04.17 19.26	U	1
Ethylbenzene	100-41-4	< 0.0100	0.0100		mg/kg	12.04.17 19.26	U	1
m,p-Xylenes	179601-23-1	< 0.0200	0.0200		mg/kg	12.04.17 19.26	U	1
o-Xylene	95-47-6	< 0.0100	0.0100		mg/kg	12.04.17 19.26	U	1
Total Xylenes	1330-20-7	< 0.0100	0.0100		mg/kg	12.04.17 19.26	U	1
Total BTEX		< 0.0100	0.0100		mg/kg	12.04.17 19.26	U	1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene		540-36-3	92	%	80-120	12.04.17 19.26		
4-Bromofluorobenzene		460-00-4	93	%	80-120	12.04.17 19.26		





#### Remediation and Environmental Xperts, LLC, Big Spring, TX

Steward

Soil

Sample Id: Spot 6

Matrix:

Date Received:12.04.17 10.50

Lab Sample Id: 569997-012

Date Collected: 12.01.17 09.30

Sample Depth: 12 In

Analytical Method: Chloride by EPA 300

Prep Method: E300P

% Moisture:

Wet Weight

Tech:

Chloride

Tech: Analyst: MNV

MNV Analyst:

Date Prep:

Result

Result

<25.0

<25.0

<25.0

<25.0

12.05.17 09.00

Basis:

Seq Number: 3034991

**Parameter** 

Cas Number 16887-00-6

Cas Number

PHC612

PHCG1228

PHCG2835

RL<4.97 4.97

Units mg/kg

**Analysis Date** 12.05.17 11.52 Flag Dil U 1

Analytical Method: TPH by Texas 1005

ARM

ARM

Date Prep: 12.04.17 11.00

RL

25.0

25.0

25.0

25.0

% Moisture:

Basis:

Prep Method: TX1005P

Wet Weight

Flag

U

U

U

U

Dil

1

1

1

Seq Number: 3034997

1-Chlorooctane

o-Terphenyl

**Parameter** C6-C12 Gasoline Range Hydrocarbons C12-C28 Diesel Range Hydrocarbons C28-C35 Oil Range Hydrocarbons

Total TPH 1005 PHC635 Surrogate

% Cas Number Recovery 111-85-3 84-15-1

Units 107 % 110

mg/kg Limits 70-135

Units

mg/kg

mg/kg

mg/kg

12.04.17 19.27 **Analysis Date** Flag

**Analysis Date** 

12.04.17 19.27

12.04.17 19.27

12.04.17 19.27

12.04.17 19.27 70-130 12.04.17 19.27





## Remediation and Environmental Xperts, LLC, Big Spring, TX

Steward

Sample Id: Spot 6

Matrix: Soil

Date Received:12.04.17 10.50

Lab Sample Id: 569997-012

Date Collected: 12.01.17 09.30

Sample Depth: 12 In

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech:

ALJ

% Moisture:

Analyst: ALJ

Date Prep: 12.04.17 11.20

Basis: Wet Weight

Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
Benzene	71-43-2	< 0.0100	0.0100		mg/kg	12.04.17 20.02	U	1
Toluene	108-88-3	< 0.0100	0.0100		mg/kg	12.04.17 20.02	U	1
Ethylbenzene	100-41-4	< 0.0100	0.0100		mg/kg	12.04.17 20.02	U	1
m,p-Xylenes	179601-23-1	< 0.0200	0.0200		mg/kg	12.04.17 20.02	U	1
o-Xylene	95-47-6	< 0.0100	0.0100		mg/kg	12.04.17 20.02	U	1
Total Xylenes	1330-20-7	< 0.0100	0.0100		mg/kg	12.04.17 20.02	U	1
Total BTEX		< 0.0100	0.0100		mg/kg	12.04.17 20.02	U	1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene		460-00-4	87	%	80-120	12.04.17 20.02		
1,4-Difluorobenzene		540-36-3	94	%	80-120	12.04.17 20.02		





Dil

1

#### Remediation and Environmental Xperts, LLC, Big Spring, TX

Steward

Sample Id: Spot 7

Matrix: Soil

Date Received:12.04.17 10.50

Lab Sample Id: 569997-013

Date Collected: 12.01.17 10.00

Sample Depth: Surf

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MNV

Analyst: MNV

Date Prep: 12.05.17 09.00

% Moisture:

Basis:

Wet Weight

Seq Number: 3034991

 Parameter
 Cas Number
 Result
 RL
 Units
 Analysis Date
 Flag

 Chloride
 16887-00-6
 112
 4.98
 mg/kg
 12.05.17 11.58

Analytical Method: TPH by Texas 1005

Prep Method: TX1005P

% Moisture:

Tech: Analyst: ARM ARM

Date Prep: 12.04.17 11.00

Basis:

Wet Weight

Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
C6-C12 Gasoline Range Hydrocarbons	PHC612	<24.9	24.9		mg/kg	12.04.17 19.48	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1228	86.1	24.9		mg/kg	12.04.17 19.48		1
C28-C35 Oil Range Hydrocarbons	PHCG2835	<24.9	24.9		mg/kg	12.04.17 19.48	U	1
Total TPH 1005	PHC635	86.1	24.9		mg/kg	12.04.17 19.48		1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane		111-85-3	92	%	70-135	12.04.17 19.48		
o-Terphenyl		84-15-1	91	%	70-130	12.04.17 19.48		





## Remediation and Environmental Xperts, LLC, Big Spring, TX

Steward

Sample Id: Spot 7 Matrix:

Soil

Date Received:12.04.17 10.50

Lab Sample Id: 569997-013

Date Collected: 12.01.17 10.00

Sample Depth: Surf

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech:

Total BTEX

ALJ

% Moisture:

Analyst: ALJ

Seq Number: 3034937

Date Prep: 12.04.17 11.20 Basis:

12.04.17 20.21

mg/kg

Wet Weight

U

Parameter	Cas Number	Result	RL	Units	<b>Analysis Date</b>	Flag	Dil
Benzene	71-43-2	< 0.0100	0.0100	mg/kg	12.04.17 20.21	U	1
Toluene	108-88-3	< 0.0100	0.0100	mg/kg	12.04.17 20.21	U	1
Ethylbenzene	100-41-4	< 0.0100	0.0100	mg/kg	12.04.17 20.21	U	1
m,p-Xylenes	179601-23-1	< 0.0200	0.0200	mg/kg	12.04.17 20.21	U	1
o-Xylene	95-47-6	< 0.0100	0.0100	mg/kg	12.04.17 20.21	U	1
Total Xylenes	1330-20-7	< 0.0100	0.0100	mg/kg	12.04.17 20.21	U	1

0.0100

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	91	%	80-120	12.04.17 20.21	
1,4-Difluorobenzene	540-36-3	100	%	80-120	12.04.17 20.21	

< 0.0100





#### Remediation and Environmental Xperts, LLC, Big Spring, TX

Steward

Sample Id: Spot 7

Matrix:

Soil

Date Received:12.04.17 10.50

Lab Sample Id: 569997-014

Date Collected: 12.01.17 10.30

Sample Depth: 12 In

Analytical Method: Chloride by EPA 300

Prep Method: E300P % Moisture:

MNV Tech:

MNV Analyst:

Date Prep: 12.05.17 09.00 Basis:

Wet Weight

Seq Number: 3034991

Parameter Cas Number Result RLUnits **Analysis Date** Flag Dil Chloride 16887-00-6 12.05.17 12.04 U <4.99 4.99 mg/kg 1

Analytical Method: TPH by Texas 1005

Prep Method: TX1005P

% Moisture:

ARM ARM 12.04.17 11.00 Date Prep:

Basis:

Wet Weight

Seq Number: 3034997

Tech:

Analyst:

Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
C6-C12 Gasoline Range Hydrocarbons	PHC612	<24.9	24.9		mg/kg	12.04.17 20.08	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1228	<24.9	24.9		mg/kg	12.04.17 20.08	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	<24.9	24.9		mg/kg	12.04.17 20.08	U	1
Total TPH 1005	PHC635	<24.9	24.9		mg/kg	12.04.17 20.08	U	1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane		111-85-3	94	%	70-135	12.04.17 20.08		
o-Terphenyl		84-15-1	95	%	70-130	12.04.17 20.08		





## Remediation and Environmental Xperts, LLC, Big Spring, TX

Steward

Sample Id: Spot 7

Matrix:

Soil

Date Received:12.04.17 10.50

Lab Sample Id: 569997-014

Date Collected: 12.01.17 10.30

Sample Depth: 12 In

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech:

ALJ

% Moisture:

sture.

Analyst: ALJ

Date Prep:

12.04.17 11.20

Basis: Wet Weight

Parameter	Cas Number	Result	RL		Units	<b>Analysis Date</b>	Flag	Dil
Benzene	71-43-2	< 0.0100	0.0100		mg/kg	12.04.17 20.40	U	1
Toluene	108-88-3	< 0.0100	0.0100		mg/kg	12.04.17 20.40	U	1
Ethylbenzene	100-41-4	< 0.0100	0.0100		mg/kg	12.04.17 20.40	U	1
m,p-Xylenes	179601-23-1	< 0.0200	0.0200		mg/kg	12.04.17 20.40	U	1
o-Xylene	95-47-6	< 0.0100	0.0100		mg/kg	12.04.17 20.40	U	1
Total Xylenes	1330-20-7	< 0.0100	0.0100		mg/kg	12.04.17 20.40	U	1
Total BTEX		< 0.0100	0.0100		mg/kg	12.04.17 20.40	U	1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene		460-00-4	84	%	80-120	12.04.17 20.40		
1,4-Difluorobenzene		540-36-3	91	%	80-120	12.04.17 20.40		





#### Remediation and Environmental Xperts, LLC, Big Spring, TX

Steward

Soil

Sample Id: Spot 8 Matrix:

Date Received:12.04.17 10.50

Lab Sample Id: 569997-015

Date Collected: 12.01.17 11.00

Sample Depth: Surf

Analytical Method: Chloride by EPA 300

Prep Method: E300P

**Analysis Date** 

12.05.17 12.10

MNV

Tech: Analyst: MNV % Moisture:

Units

mg/kg

Wet Weight

Seq Number: 3034991

Date Prep:

21.8

Result

Cas Number

16887-00-6

12.05.17 09.00

Basis:

Dil

1

Flag

Prep Method: TX1005P

Tech: Analyst:

Parameter

Chloride

Analytical Method: TPH by Texas 1005 ARM

ARM

12.04.17 11.00 Date Prep:

RL

4.95

% Moisture: Basis:

Wet Weight

Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
C6-C12 Gasoline Range Hydrocarbons	PHC612	<25.0	25.0		mg/kg	12.04.17 20.30	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1228	<25.0	25.0		mg/kg	12.04.17 20.30	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	<25.0	25.0		mg/kg	12.04.17 20.30	U	1
Total TPH 1005	PHC635	<25.0	25.0		mg/kg	12.04.17 20.30	U	1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane		111-85-3	88	%	70-135	12.04.17 20.30		
o-Terphenyl		84-15-1	84	%	70-130	12.04.17 20.30		





## Remediation and Environmental Xperts, LLC, Big Spring, TX

Steward

Sample Id: Spot 8 Matrix: Soil Date Received:12.04.17 10.50

Lab Sample Id: 569997-015

Date Collected: 12.01.17 11.00

Sample Depth: Surf

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech:

ALJ

% Moisture:

Analyst:

ALJ

Date Prep: 12.04.17 11.20 Basis: Wet Weight

Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
Benzene	71-43-2	< 0.0100	0.0100		mg/kg	12.04.17 20.59	U	1
Toluene	108-88-3	< 0.0100	0.0100		mg/kg	12.04.17 20.59	U	1
Ethylbenzene	100-41-4	< 0.0100	0.0100		mg/kg	12.04.17 20.59	U	1
m,p-Xylenes	179601-23-1	< 0.0200	0.0200		mg/kg	12.04.17 20.59	U	1
o-Xylene	95-47-6	< 0.0100	0.0100		mg/kg	12.04.17 20.59	U	1
Total Xylenes	1330-20-7	< 0.0100	0.0100		mg/kg	12.04.17 20.59	U	1
Total BTEX		< 0.0100	0.0100		mg/kg	12.04.17 20.59	U	1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene		540-36-3	94	%	80-120	12.04.17 20.59		
4-Bromofluorobenzene		460-00-4	89	%	80-120	12.04.17 20.59		





#### Remediation and Environmental Xperts, LLC, Big Spring, TX

Steward

Sample Id: Spot 8

Matrix:

Date Prep:

Date Prep:

Soil

12.05.17 09.00

Date Received:12.04.17 10.50

Lab Sample Id: 569997-016

Date Collected: 12.01.17 11.30

Sample Depth: 12 In

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: Analyst: MNV MNV % Moisture:

Basis:

Wet Weight

Seq Number: 3034991

Parameter Cas Number Result RLUnits **Analysis Date** Flag Dil Chloride 16887-00-6 12.05.17 12.28 U <4.94 4.94 mg/kg 1

Analytical Method: TPH by Texas 1005

Prep Method: TX1005P

Tech: Analyst: ARM ARM

12.04.17 11.00

% Moisture: Basis:

Wet Weight

Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
C6-C12 Gasoline Range Hydrocarbons	PHC612	<25.0	25.0		mg/kg	12.04.17 20.51	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1228	<25.0	25.0		mg/kg	12.04.17 20.51	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	<25.0	25.0		mg/kg	12.04.17 20.51	U	1
Total TPH 1005	PHC635	<25.0	25.0		mg/kg	12.04.17 20.51	U	1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane		111-85-3	80	%	70-135	12.04.17 20.51		
o-Terphenyl		84-15-1	84	%	70-130	12.04.17 20.51		





## Remediation and Environmental Xperts, LLC, Big Spring, TX

Steward

Sample Id: Spot 8

Matrix:

Soil

Date Received:12.04.17 10.50

Lab Sample Id: 569997-016

Date Collected: 12.01.17 11.30

Sample Depth: 12 In

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech:

ALJ

Date Prep: 12.04.17 11.20

% Moisture: Basis:

Wet Weight

Analyst: ALJ Seq Number: 3034937

Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
Benzene	71-43-2	< 0.0100	0.0100		mg/kg	12.04.17 21.17	U	1
Toluene	108-88-3	< 0.0100	0.0100		mg/kg	12.04.17 21.17	U	1
Ethylbenzene	100-41-4	< 0.0100	0.0100		mg/kg	12.04.17 21.17	U	1
m,p-Xylenes	179601-23-1	< 0.0200	0.0200		mg/kg	12.04.17 21.17	U	1
o-Xylene	95-47-6	< 0.0100	0.0100		mg/kg	12.04.17 21.17	U	1
Total Xylenes	1330-20-7	< 0.0100	0.0100		mg/kg	12.04.17 21.17	U	1
Total BTEX		< 0.0100	0.0100		mg/kg	12.04.17 21.17	U	1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene		540-36-3	81	%	80-120	12.04.17 21.17		
4-Bromofluorobenzene		460-00-4	89	%	80-120	12.04.17 21.17		





#### Remediation and Environmental Xperts, LLC, Big Spring, TX

Steward

Sample Id: Spot 9

Matrix:

Date Received:12.04.17 10.50

Lab Sample Id: 569997-017

Soil Date Collected: 12.01.17 12.00

RL

4.99

Sample Depth: Surf

Analytical Method: Chloride by EPA 300

Prep Method: E300P % Moisture:

Tech:

MNV

Units

mg/kg

MNV Analyst:

Seq Number: 3034991

Parameter

Chloride

Date Prep:

<4.99

Result

Cas Number

16887-00-6

12.05.17 09.00

Basis:

Wet Weight

Flag

U

Dil

1

Analytical Method: TPH by Texas 1005

Prep Method: TX1005P

**Analysis Date** 

12.05.17 12.34

Tech:

ARM

% Moisture:

ARM Analyst:

12.04.17 11.00 Date Prep:

Basis:

Wet Weight

Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
C6-C12 Gasoline Range Hydrocarbons	PHC612	<25.0	25.0		mg/kg	12.04.17 21.12	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1228	<25.0	25.0		mg/kg	12.04.17 21.12	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	<25.0	25.0		mg/kg	12.04.17 21.12	U	1
Total TPH 1005	PHC635	<25.0	25.0		mg/kg	12.04.17 21.12	U	1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane		111-85-3	91	%	70-135	12.04.17 21.12		
o-Terphenyl		84-15-1	93	%	70-130	12.04.17 21.12		





## Remediation and Environmental Xperts, LLC, Big Spring, TX

Steward

Sample Id: Spot 9

Matrix:

Soil

Date Received:12.04.17 10.50

Lab Sample Id: 569997-017

Date Collected: 12.01.17 12.00

Sample Depth: Surf

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: ALJ

Seq Number: 3034937

70

% Moisture:

Analyst:

ALJ

Date Prep: 12.04.17 11.20

Basis:

Wet Weight

Flag

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	< 0.0100	0.0100	mg/kg	12.04.17 21.36	U	1
Toluene	108-88-3	< 0.0100	0.0100	mg/kg	12.04.17 21.36	U	1
Ethylbenzene	100-41-4	< 0.0100	0.0100	mg/kg	12.04.17 21.36	U	1
m,p-Xylenes	179601-23-1	< 0.0200	0.0200	mg/kg	12.04.17 21.36	U	1
o-Xylene	95-47-6	< 0.0100	0.0100	mg/kg	12.04.17 21.36	U	1
Total Xylenes	1330-20-7	< 0.0100	0.0100	mg/kg	12.04.17 21.36	U	1
Total BTEX		< 0.0100	0.0100	mg/kg	12.04.17 21.36	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date
1,4-Difluorobenzene	540-36-3	94	%	80-120	12.04.17 21.36
4-Bromofluorobenzene	460-00-4	84	%	80-120	12.04.17 21.36





#### Remediation and Environmental Xperts, LLC, Big Spring, TX

Steward

Sample Id: Spot 9

Matrix:

Date Received:12.04.17 10.50

Lab Sample Id: 569997-018

Soil Date Collected: 12.01.17 12.30

RL

4.97

Sample Depth: 12 In

**Analysis Date** 

12.05.17 12.51

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech:

Parameter

Chloride

MNV MNV

% Moisture:

Wet Weight

Analyst:

Seq Number: 3034991

Date Prep:

<4.97

Result

Cas Number

16887-00-6

12.05.17 09.00

Basis:

Units

mg/kg

Flag

U

Dil

1

Analytical Method: TPH by Texas 1005

Prep Method: TX1005P

% Moisture:

Tech: Analyst: ARM

ARM

12.04.17 11.00 Date Prep:

Basis:

Wet Weight

Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
C6-C12 Gasoline Range Hydrocarbons	PHC612	<24.9	24.9		mg/kg	12.04.17 21.34	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1228	<24.9	24.9		mg/kg	12.04.17 21.34	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	<24.9	24.9		mg/kg	12.04.17 21.34	U	1
Total TPH 1005	PHC635	<24.9	24.9		mg/kg	12.04.17 21.34	U	1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane		111-85-3	77	%	70-135	12.04.17 21.34		
o-Terphenyl		84-15-1	78	%	70-130	12.04.17 21.34		





## Remediation and Environmental Xperts, LLC, Big Spring, TX

Steward

Sample Id: Spot 9

Matrix:

Soil

Date Received:12.04.17 10.50

Lab Sample Id: 569997-018

Date Collected: 12.01.17 12.30

Sample Depth: 12 In

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: Analyst: ALJ ALJ

Date Prep: 12.04.17 11.20

% Moisture: Basis:

Wet Weight

Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
Benzene	71-43-2	< 0.0100	0.0100		mg/kg	12.04.17 21.55	U	1
Toluene	108-88-3	< 0.0100	0.0100		mg/kg	12.04.17 21.55	U	1
Ethylbenzene	100-41-4	< 0.0100	0.0100		mg/kg	12.04.17 21.55	U	1
m,p-Xylenes	179601-23-1	< 0.0200	0.0200		mg/kg	12.04.17 21.55	U	1
o-Xylene	95-47-6	< 0.0100	0.0100		mg/kg	12.04.17 21.55	U	1
Total Xylenes	1330-20-7	< 0.0100	0.0100		mg/kg	12.04.17 21.55	U	1
Total BTEX		< 0.0100	0.0100		mg/kg	12.04.17 21.55	U	1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene		540-36-3	92	%	80-120	12.04.17 21.55		
4-Bromofluorobenzene		460-00-4	85	%	80-120	12.04.17 21.55		





#### Remediation and Environmental Xperts, LLC, Big Spring, TX

Steward

Sample Id: Spot 10

Matrix: Soil Date Received:12.04.17 10.50

Lab Sample Id: 569997-019

Date Collected: 12.01.17 13.00

Sample Depth: Surf

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: Analyst: MNV MNV

Date Prep:

12.05.17 09.00

% Moisture: Basis:

Wet Weight

Seq Number: 3034991

Parameter Cas Number Result RLUnits **Analysis Date** Flag Dil Chloride 16887-00-6 12.05.17 12.57 6.45 4.94 mg/kg 1

Analytical Method: TPH by Texas 1005

Prep Method: TX1005P

% Moisture:

Tech: Analyst: ARM ARM

12.04.17 11.00 Date Prep:

Basis:

Wet Weight

Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
C6-C12 Gasoline Range Hydrocarbons	PHC612	<25.0	25.0		mg/kg	12.04.17 21.55	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1228	<25.0	25.0		mg/kg	12.04.17 21.55	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	<25.0	25.0		mg/kg	12.04.17 21.55	U	1
Total TPH 1005	PHC635	<25.0	25.0		mg/kg	12.04.17 21.55	U	1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane		111-85-3	92	%	70-135	12.04.17 21.55		
o-Terphenyl		84-15-1	94	%	70-130	12.04.17 21.55		





## Remediation and Environmental Xperts, LLC, Big Spring, TX

Steward

Sample Id: Spot 10

Matrix: Soil

Date Received:12.04.17 10.50

Lab Sample Id: 569997-019

Date Collected: 12.01.17 13.00

Sample Depth: Surf

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech:

ALJ

% Moisture:

Analyst: ALJ

Date Prep:

12.04.17 11.20

Basis: Wet Weight

Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
Benzene	71-43-2	< 0.0100	0.0100		mg/kg	12.04.17 22.14	U	1
Toluene	108-88-3	< 0.0100	0.0100		mg/kg	12.04.17 22.14	U	1
Ethylbenzene	100-41-4	< 0.0100	0.0100		mg/kg	12.04.17 22.14	U	1
m,p-Xylenes	179601-23-1	< 0.0200	0.0200		mg/kg	12.04.17 22.14	U	1
o-Xylene	95-47-6	< 0.0100	0.0100		mg/kg	12.04.17 22.14	U	1
Total Xylenes	1330-20-7	< 0.0100	0.0100		mg/kg	12.04.17 22.14	U	1
Total BTEX		< 0.0100	0.0100		mg/kg	12.04.17 22.14	U	1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene		540-36-3	91	%	80-120	12.04.17 22.14		
4-Bromofluorobenzene		460-00-4	82	%	80-120	12.04.17 22.14		





#### Remediation and Environmental Xperts, LLC, Big Spring, TX

Steward

Soil

Sample Id: Spot 10

Matrix:

Cas Number

16887-00-6

Result

<4.97

Date Received:12.04.17 10.50

Lab Sample Id: 569997-020

Date Collected: 12.01.17 13.30

Sample Depth: 12 In

Analytical Method: Chloride by EPA 300

Prep Method: E300P

**Analysis Date** 

12.05.17 13.03

Tech: MNV

Analyst: MNV

% Moisture:

Units

mg/kg

Wet Weight

Seq Number: 3034991

seq Number. 3034771

Date Prep: 12.05.17 09.00

RL

4.97

Basis:

Dil

1

Flag

U

Analytical Method: TPH by Texas1005

Prep Method: TX1005P

Tech:

Parameter

Chloride

ARM

% Moisture:

Analyst: ARM

Date Prep: 12.04.17 11.00

Basis: Wet Weight

Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
C6-C12 Gasoline Range Hydrocarbons	PHC612	<25.0	25.0		mg/kg	12.04.17 22.14	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1228	<25.0	25.0		mg/kg	12.04.17 22.14	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	<25.0	25.0		mg/kg	12.04.17 22.14	U	1
Total TPH 1005	PHC635	<25.0	25.0		mg/kg	12.04.17 22.14	U	1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane		111-85-3	91	%	70-135	12.04.17 22.14		
o-Terphenyl		84-15-1	91	%	70-130	12.04.17 22.14		





## Remediation and Environmental Xperts, LLC, Big Spring, TX

Steward

Sample Id: Spot 10

Matrix:

Soil

Date Received:12.04.17 10.50

Lab Sample Id: 569997-020

Date Collected: 12.01.17 13.30

Sample Depth: 12 In

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech:

ALJ

% Moisture: Basis:

Analyst: ALJ

Date Prep:

12.04.17 11.20

Wet Weight

Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
Benzene	71-43-2	< 0.0100	0.0100		mg/kg	12.04.17 23.10	U	1
Toluene	108-88-3	< 0.0100	0.0100		mg/kg	12.04.17 23.10	U	1
Ethylbenzene	100-41-4	< 0.0100	0.0100		mg/kg	12.04.17 23.10	U	1
m,p-Xylenes	179601-23-1	< 0.0200	0.0200		mg/kg	12.04.17 23.10	U	1
o-Xylene	95-47-6	< 0.0100	0.0100		mg/kg	12.04.17 23.10	U	1
Total Xylenes	1330-20-7	< 0.0100	0.0100		mg/kg	12.04.17 23.10	U	1
Total BTEX		< 0.0100	0.0100		mg/kg	12.04.17 23.10	U	1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene		460-00-4	89	%	80-120	12.04.17 23.10		
1,4-Difluorobenzene		540-36-3	96	%	80-120	12.04.17 23.10		





## Remediation and Environmental Xperts, LLC, Big Spring, TX

Steward

Sample Id: Spot 12

Matrix: Soil Date Received:12.04.17 10.50

Lab Sample Id: 569997-021

Date Collected: 12.01.17 14.30

Sample Depth: Surf

Analytical Method: Chloride by EPA 300

Prep Method: E300P

% Moisture:

Tech: MNV

MNV Analyst:

Date Prep: 12.05.17 09.00 Basis:

Wet Weight

Seq Number: 3034991

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<4.94	4.94	mg/kg	12.05.17 13.09	U	1

Analytical Method: TPH by Texas1005

Prep Method: TX1005P

% Moisture:

Tech: Analyst: ARMARM

12.04.17 11.00 Date Prep:

Basis:

Wet Weight

Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
C6-C12 Gasoline Range Hydrocarbons	PHC612	<25.0	25.0		mg/kg	12.04.17 17.50	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1228	<25.0	25.0		mg/kg	12.04.17 17.50	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	<25.0	25.0		mg/kg	12.04.17 17.50	U	1
Total TPH 1005	PHC635	<25.0	25.0		mg/kg	12.04.17 17.50	U	1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane		111-85-3	91	%	70-135	12.04.17 17.50		
o-Terphenyl		84-15-1	82	%	70-130	12.04.17 17.50		





## Remediation and Environmental Xperts, LLC, Big Spring, TX

Steward

Sample Id: Spot 12

Matrix: Soil

Date Received:12.04.17 10.50

Lab Sample Id: 569997-021

Date Collected: 12.01.17 14.30

Sample Depth: Surf

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: AI

ALJ

% Moisture:

Analyst: ALJ

Date Prep: 12.04.17 11.20

Basis:

Wet Weight

Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
Benzene	71-43-2	< 0.0100	0.0100		mg/kg	12.04.17 23.29	U	1
Toluene	108-88-3	< 0.0100	0.0100		mg/kg	12.04.17 23.29	U	1
Ethylbenzene	100-41-4	< 0.0100	0.0100		mg/kg	12.04.17 23.29	U	1
m,p-Xylenes	179601-23-1	< 0.0200	0.0200		mg/kg	12.04.17 23.29	U	1
o-Xylene	95-47-6	< 0.0100	0.0100		mg/kg	12.04.17 23.29	U	1
Total Xylenes	1330-20-7	< 0.0100	0.0100		mg/kg	12.04.17 23.29	U	1
Total BTEX		< 0.0100	0.0100		mg/kg	12.04.17 23.29	U	1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene		460-00-4	89	%	80-120	12.04.17 23.29		
1,4-Difluorobenzene		540-36-3	91	%	80-120	12.04.17 23.29		





## Remediation and Environmental Xperts, LLC, Big Spring, TX

Steward

Sample Id: Spot 12

Matrix:

Soil Date Collected: 12.01.17 15.00 Date Received:12.04.17 10.50

Lab Sample Id: 569997-022

Sample Depth: 12 In

Analytical Method: Chloride by EPA 300

Prep Method: E300P % Moisture:

Tech: Analyst: MNV MNV

Date Prep:

12.05.17 09.00

Basis:

Wet Weight

Seq Number: 3034991

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<4.92	4.92	mg/kg	12.05.17 13.15	U	1

Analytical Method: TPH by Texas1005

Prep Method: TX1005P

12.04.17 18.10

% Moisture:

Tech:

ARM

ARM Analyst: Seq Number: 3034916

o-Terphenyl

12.04.17 11.00 Date Prep:

Basis:

70-130

Wet Weight

Parameter	Cas Number	Result	RL		Units	<b>Analysis Date</b>	Flag	Dil
C6-C12 Gasoline Range Hydrocarbons	PHC612	<24.9	24.9		mg/kg	12.04.17 18.10	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1228	<24.9	24.9		mg/kg	12.04.17 18.10	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	<24.9	24.9		mg/kg	12.04.17 18.10	U	1
Total TPH 1005	PHC635	<24.9	24.9		mg/kg	12.04.17 18.10	U	1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane		111-85-3	94	%	70-135	12.04.17 18.10		

84-15-1





## Remediation and Environmental Xperts, LLC, Big Spring, TX

Steward

Sample Id: Spot 12

Matrix:

Soil

Date Received:12.04.17 10.50

Lab Sample Id: 569997-022

Date Collected: 12.01.17 15.00

Sample Depth: 12 In

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: Analyst: ALJ ALJ

Date Prep: 12.04.17 11.20

% Moisture: Basis:

Wet Weight

Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
Benzene	71-43-2	< 0.0100	0.0100		mg/kg	12.04.17 23.48	U	1
Toluene	108-88-3	< 0.0100	0.0100		mg/kg	12.04.17 23.48	U	1
Ethylbenzene	100-41-4	< 0.0100	0.0100		mg/kg	12.04.17 23.48	U	1
m,p-Xylenes	179601-23-1	< 0.0200	0.0200		mg/kg	12.04.17 23.48	U	1
o-Xylene	95-47-6	< 0.0100	0.0100		mg/kg	12.04.17 23.48	U	1
Total Xylenes	1330-20-7	< 0.0100	0.0100		mg/kg	12.04.17 23.48	U	1
Total BTEX		< 0.0100	0.0100		mg/kg	12.04.17 23.48	U	1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene		540-36-3	93	%	80-120	12.04.17 23.48		
4-Bromofluorobenzene		460-00-4	87	%	80-120	12.04.17 23.48		





#### Remediation and Environmental Xperts, LLC, Big Spring, TX

Steward

Sample Id: Spot 11

Matrix: Soil Date Received:12.04.17 10.50

Lab Sample Id: 569997-023

Date Collected: 12.01.17 15.30

Sample Depth: Surf

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: Analyst: MNV

MNV

12.05.17 09.00

% Moisture: Basis:

Wet Weight

Seq Number: 3034991

Parameter Cas Number Result RLUnits **Analysis Date** Flag Dil Chloride 16887-00-6 12.05.17 13.21 93.3 4.92 mg/kg 1

Date Prep:

Analytical Method: TPH by Texas 1005

Prep Method: TX1005P

% Moisture:

Tech: Analyst: ARM ARM

12.04.17 11.00 Date Prep:

Basis:

Wet Weight

Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
C6-C12 Gasoline Range Hydrocarbons	PHC612	<24.9	24.9		mg/kg	12.04.17 18.31	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1228	<24.9	24.9		mg/kg	12.04.17 18.31	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	<24.9	24.9		mg/kg	12.04.17 18.31	U	1
Total TPH 1005	PHC635	<24.9	24.9		mg/kg	12.04.17 18.31	U	1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane		111-85-3	93	%	70-135	12.04.17 18.31		
o-Terphenyl		84-15-1	84	%	70-130	12.04.17 18.31		





## Remediation and Environmental Xperts, LLC, Big Spring, TX

Steward

Sample Id: Spot 11

Matrix: Soil Date Received:12.04.17 10.50

Lab Sample Id: 569997-023

Date Collected: 12.01.17 15.30

Sample Depth: Surf

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech:

ALJ

Basis:

% Moisture:

Analyst: ALJ

Date Prep:

12.04.17 11.20

Wet Weight

Parameter	Cas Number	Result	RL		Units	<b>Analysis Date</b>	Flag	Dil
Benzene	71-43-2	< 0.0100	0.0100		mg/kg	12.05.17 00.06	U	1
Toluene	108-88-3	< 0.0100	0.0100		mg/kg	12.05.17 00.06	U	1
Ethylbenzene	100-41-4	< 0.0100	0.0100		mg/kg	12.05.17 00.06	U	1
m,p-Xylenes	179601-23-1	< 0.0200	0.0200		mg/kg	12.05.17 00.06	U	1
o-Xylene	95-47-6	< 0.0100	0.0100		mg/kg	12.05.17 00.06	U	1
Total Xylenes	1330-20-7	< 0.0100	0.0100		mg/kg	12.05.17 00.06	U	1
Total BTEX		< 0.0100	0.0100		mg/kg	12.05.17 00.06	U	1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene		460-00-4	86	%	80-120	12.05.17 00.06		
1,4-Difluorobenzene		540-36-3	92	%	80-120	12.05.17 00.06		





## Remediation and Environmental Xperts, LLC, Big Spring, TX

Steward

Sample Id: Spot 11 Matrix: Soil Date Received:12.04.17 10.50

Lab Sample Id: 569997-024

Date Collected: 12.01.17 16.00

Sample Depth: 12 In

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech:

MNV

% Moisture:

Analyst:

MNV

Date Prep: 12.05.17 09.00

12.04.17 11.00

Basis:

Wet Weight

Seq Number: 3034991

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	321	4.95	mg/kg	12.05.17 13.27		1

Date Prep:

Analytical Method: TPH by Texas1005

Prep Method: TX1005P

Tech:

ARM

% Moisture:

Basis: Wet Weight

ARM Analyst:

Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
C6-C12 Gasoline Range Hydrocarbons	PHC612	<25.0	25.0		mg/kg	12.04.17 18.52	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1228	<25.0	25.0		mg/kg	12.04.17 18.52	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	<25.0	25.0		mg/kg	12.04.17 18.52	U	1
Total TPH 1005	PHC635	<25.0	25.0		mg/kg	12.04.17 18.52	U	1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane		111-85-3	94	%	70-135	12.04.17 18.52		
o-Terphenyl		84-15-1	88	%	70-130	12.04.17 18.52		





## Remediation and Environmental Xperts, LLC, Big Spring, TX

Steward

Sample Id: Spot 11 Matrix: Soil Date Received:12.04.17 10.50

Lab Sample Id: 569997-024

Date Collected: 12.01.17 16.00

Sample Depth: 12 In

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech:

ALJ

% Moisture:

Analyst:

ALJ

Date Prep: 12.04.17 11.20 Basis:

Wet Weight

Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
Benzene	71-43-2	< 0.0100	0.0100		mg/kg	12.05.17 00.24	U	1
Toluene	108-88-3	< 0.0100	0.0100		mg/kg	12.05.17 00.24	U	1
Ethylbenzene	100-41-4	< 0.0100	0.0100		mg/kg	12.05.17 00.24	U	1
m,p-Xylenes	179601-23-1	< 0.0200	0.0200		mg/kg	12.05.17 00.24	U	1
o-Xylene	95-47-6	< 0.0100	0.0100		mg/kg	12.05.17 00.24	U	1
Total Xylenes	1330-20-7	< 0.0100	0.0100		mg/kg	12.05.17 00.24	U	1
Total BTEX		< 0.0100	0.0100		mg/kg	12.05.17 00.24	U	1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene		460-00-4	86	%	80-120	12.05.17 00.24		
1,4-Difluorobenzene		540-36-3	91	%	80-120	12.05.17 00.24		





# Flagging Criteria



- X In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to affect the recovery of the spike concentration. This condition could also affect the relative percent difference in the MS/MSD.
- **B** A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.
- **D** The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.
- E The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.
- F RPD exceeded lab control limits.
- J The target analyte was positively identified below the quantitation limit and above the detection limit.
- U Analyte was not detected.
- L The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.
- **H** The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.
- **K** Sample analyzed outside of recommended hold time.
- **JN** A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.
- \*\* Surrogate recovered outside laboratory control limit.
- BRL Below Reporting Limit.
- **RL** Reporting Limit

MDL Method Detection Limit	SDL Sample Detection Limit	LOD Limit of Detection

PQL Practical Quantitation Limit MQL Method Quantitation Limit LOQ Limit of Quantitation

**DL** Method Detection Limit

NC Non-Calculable

- + NELAC certification not offered for this compound.
- \* (Next to analyte name or method description) = Outside XENCO's scope of NELAC accreditation

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5332 Blackberry Drive, San Antonio TX 78238	(210) 509-3334	(210) 509-3335
1211 W Florida Ave, Midland, TX 79701	(432) 563-1800	(432) 563-1713
2525 W. Huntington Dr Suite 102 Tempe A7 85282	(602) 437 0330	

Flag

Date



Seq Number:

#### **QC Summary** 569997

#### Remediation and Environmental Xperts, LLC

Steward

Analytical Method: Chloride by EPA 300

3034981 Matrix: Solid

Date Prep: 12.04.17

Prep Method:

E300P

LCS Sample Id: 7635398-1-BKS MB Sample Id: 7635398-1-BLK

LCSD Sample Id: 7635398-1-BSD

MB Spike LCS LCS Limits %RPD **RPD** LCSD LCSD Units Analysis **Parameter** Result Result Limit Amount %Rec %Rec Result

Chloride 90-110 20 12.04.17 19:08 < 5.00 250 248 99 249 100 0 mg/kg

Analytical Method: Chloride by EPA 300

3034991

E300P Prep Method:

Seq Number: Matrix: Solid Date Prep:

12.05.17

LCS Sample Id: 7635431-1-BKS LCSD Sample Id: 7635431-1-BSD MB Sample Id: 7635431-1-BLK

MB Spike LCS LCS Limits %RPD RPD Units LCSD LCSD Analysis Flag **Parameter** Result Amount Result %Rec Limit Date Result %Rec

Chloride < 5.00 250 247 99 246 98 90-110 0 20 mg/kg 12.05.17 10:35

Analytical Method: Chloride by EPA 300

Seq Number: 3034981

Prep Method: E300P Matrix: Soil

Limits

%RPD

Date Prep: 12.04.17

569113-013 S MS Sample Id: MSD Sample Id: 569113-013 SD Parent Sample Id: 569113-013

MS RPD Parent Spike MS **MSD MSD** Limits %RPD Units Analysis Flag **Parameter** Result Limit Date Result Amount %Rec Result %Rec 20 12.04.17 21:38 Chloride 710 249 964 102 965 102 90-110 0 mg/kg

Analytical Method: Chloride by EPA 300

Seq Number:

3034991 Matrix: Soil

E300P Prep Method:

> 12.05.17 Date Prep:

MS Sample Id: 569997-005 S MSD Sample Id: 569997-005 SD Parent Sample Id: 569997-005

RPD MS MS %RPD Parent Spike MSD **MSD** Limits Units Analysis Flag **Parameter** Result Limit Result Amount %Rec Date Result %Rec

12.05.17 10:53 Chloride 71.8 248 322 101 316 98 90-110 2 20 mg/kg

Analytical Method: Chloride by EPA 300

Parent

Seq Number: 3034991 Matrix: Soil

MS

E300P Prep Method:

Date Prep:

**RPD** 

12.05.17

Units

MS Sample Id: 569997-015 S MSD Sample Id: 569997-015 SD Parent Sample Id: 569997-015

MS

Spike **MSD** Analysis **MSD** Flag **Parameter** Result Limit Date Result Amount %Rec Result %Rec 90-110 12.05.17 12:16 Chloride 21.8 248 282 105 286 107 20 mg/kg

Flag



# QC Summary 569997

#### Remediation and Environmental Xperts, LLC

Steward

Analytical Method:TPH by Texas1005Prep Method:TX1005PSeq Number:3034916Matrix:SolidDate Prep:12.04.17

MB Sample Id: 7635383-1-BLK LCS Sample Id: 7635383-1-BKS LCSD Sample Id: 7635383-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
C6-C12 Gasoline Range Hydrocarbons	<25.0	1000	1010	101	944	94	70-135	7	35	mg/kg	12.04.17 12:40	
C12-C28 Diesel Range Hydrocarbons	<25.0	1000	1010	101	967	97	70-135	4	35	mg/kg	12.04.17 12:40	

LCS LCSD MB MB LCS LCSD Limits Units Analysis **Surrogate** %Rec %Rec Flag Flag Flag Date %Rec 1-Chlorooctane 98 116 109 70-135 % 12.04.17 12:40 o-Terphenyl 95 113 102 70-130 % 12.04.17 12:40

Analytical Method: TPH by Texas1005 Prep Method: TX1005P

 Seq Number:
 3034997
 Matrix:
 Solid
 Date Prep:
 12.04.17

 MB Sample Id:
 7635408-1-BLK
 LCS Sample Id:
 7635408-1-BKS
 LCSD Sample Id:
 7635408-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	
C6-C12 Gasoline Range Hydrocarbons	<25.0	1000	850	85	933	93	70-135	9	35	mg/kg	12.04.17 13:23	
C12-C28 Diesel Range Hydrocarbons	<25.0	1000	802	80	980	98	70-135	20	35	mg/kg	12.04.17 13:23	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	96		72		99		70-135	%	12.04.17 13:23
o-Terphenyl	101		77		97		70-130	%	12.04.17 13:23

 Analytical Method:
 TPH by Texas1005
 Prep Method:
 TX1005P

 Seq Number:
 3034916
 Matrix:
 Soil
 Date Prep:
 12.04.17

 Parent Sample Id:
 569990-016
 MS Sample Id:
 569990-016 S
 MSD Sample Id:
 569990-016 SD

%RPD RPD MS MS Units Analysis Parent Spike Limits **MSD** MSD **Parameter** Flag Result Result **Amount** %Rec %Rec Limit Date Result C6-C12 Gasoline Range Hydrocarbons 35 mg/kg 12.04.17 17:07 <25.0 999 928 93 967 97 70-135 4 C12-C28 Diesel Range Hydrocarbons 54.7 999 1020 97 1030 98 70-135 1 35 12.04.17 17:07 mg/kg

MS MSMSD MSD Limits Units Analysis **Surrogate** %Rec Flag Flag Date %Rec 1-Chlorooctane 108 107 70-135 % 12.04.17 17:07 o-Terphenyl 97 99 70-130 12.04.17 17:07 %

Flag

Flag

TX1005P



# QC Summary 569997

#### Remediation and Environmental Xperts, LLC

Steward

Analytical Method:TPH by Texas1005Prep Method:Seq Number:3034997Matrix: SoilDate Prep:

 Seq Number:
 3034997
 Matrix:
 Soil
 Date Prep:
 12.04.17

 Parent Sample Id:
 569997-001
 MS Sample Id:
 569997-001 SD
 MSD Sample Id:
 569997-001 SD

Spike MS MS Limits %RPD **RPD** Parent **MSD MSD** Units Analysis Flag **Parameter** Result %Rec Limit Date Result Amount Result %Rec C6-C12 Gasoline Range Hydrocarbons 12.04.17 14:39 <25.0 998 930 93 847 85 70-135 9 35 mg/kg C12-C28 Diesel Range Hydrocarbons 998 1030 98 948 70-135 8 35 12.04.17 14:39 54.9 89 mg/kg

MS MS **MSD MSD** Limits Units Analysis **Surrogate** Flag %Rec %Rec Flag Date 1-Chlorooctane 99 80 70-135 % 12.04.17 14:39 o-Terphenyl 93 90 70-130 % 12.04.17 14:39

Analytical Method: BTEX by EPA 8021B Prep Method: SW5030B

 Seq Number:
 3034895
 Matrix:
 Solid
 Date Prep:
 12.04.17

 MB Sample Id:
 7635368-1-BLK
 LCS Sample Id:
 7635368-1-BSD

LCS LCS %RPD RPD MB Limits Units Spike Analysis **LCSD** LCSD **Parameter** Result Amount Result %Rec Result %Rec Limit Date 0.116 70-130 3 35 12.04.17 07:42 Benzene < 0.00200 0.100 0.113 113 115 mg/kg < 0.00200 12.04.17 07:42 Toluene 0.100 0.108 108 0.109 108 70-130 35 1 mg/kg 12.04.17 07:42 71-129 Ethylbenzene 0.100 0.104 104 0.106 105 2 35 < 0.00200 mg/kg 12.04.17 07:42 m,p-Xylenes < 0.00401 0.200 0.200 100 0.204 101 70-135 2 35 mg/kg 0.0988 71-133 35 12.04.17 07:42 o-Xylene < 0.00200 0.100 0.0971 98 mg/kg

MB LCSD MB LCS LCS LCSD Limits Units Analysis **Surrogate** %Rec Flag %Rec Flag Flag Date %Rec 12.04.17 07:42 1.4-Difluorobenzene 92 98 98 80-120 % 12.04.17 07:42 4-Bromofluorobenzene 80 93 97 80-120 %

Analytical Method: BTEX by EPA 8021B Prep Method: SW5030B

 Seq Number:
 3034937
 Matrix:
 Solid
 Date Prep:
 12.04.17

 MB Sample Id:
 7635396-1-BLK
 LCS Sample Id:
 7635396-1-BSD

MB LCS LCS Limits %RPD **RPD** Units Spike LCSD LCSD Analysis **Parameter** Result Amount Result %Rec Limit Date Result %Rec < 0.0100 35 12.04.17 17:15 0.500 0.566113 0.558 70-130 Benzene 112 1 mg/kg Toluene < 0.0100 0.500 0.526 105 0.527 105 70-130 0 35 mg/kg 12.04.17 17:15 0.500 12.04.17 17:15 Ethylbenzene < 0.0100 0.506 101 0.503 101 71-129 1 35 mg/kg 1.00 0.966 70-135 35 12.04.17 17:15 < 0.0200 0.976 98 97 1 m,p-Xylenes mg/kg 12.04.17 17:15 0.500 0.475 95 0.474 71-133 35 o-Xylene < 0.0100 95 mg/kg

MB LCS LCS LCSD MB LCSD Limits Units Analysis **Surrogate** %Rec Flag %Rec Flag %Rec Flag Date 1,4-Difluorobenzene 95 80-120 % 12.04.17 17:15 89 95 4-Bromofluorobenzene 81 89 95 80-120 % 12.04.17 17:15



#### **QC Summary** 569997

#### Remediation and Environmental Xperts, LLC

Steward

Analytical Method: BTEX by EPA 8021B Prep Method: SW5030B 3034895 Seq Number: Matrix: Soil Date Prep: 12.04.17 MS Sample Id: 569948-001 S MSD Sample Id: 569948-001 SD Parent Sample Id: 569948-001

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	< 0.00199	0.0996	0.0883	89	0.0926	93	70-130	5	35	mg/kg	12.04.17 08:20	
Toluene	0.00636	0.0996	0.0833	77	0.0891	83	70-130	7	35	mg/kg	12.04.17 08:20	
Ethylbenzene	< 0.00199	0.0996	0.0691	69	0.0743	74	71-129	7	35	mg/kg	12.04.17 08:20	X
m,p-Xylenes	< 0.00398	0.199	0.135	68	0.142	71	70-135	5	35	mg/kg	12.04.17 08:20	X
o-Xylene	< 0.00199	0.0996	0.0629	63	0.0707	71	71-133	12	35	mg/kg	12.04.17 08:20	X

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	106		97		80-120	%	12.04.17 08:20
4-Bromofluorobenzene	104		98		80-120	%	12.04.17 08:20

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B Seq Number: 3034937 Matrix: Soil Date Prep: 12.04.17 569997-011 MS Sample Id: 569997-011 S MSD Sample Id: 569997-011 SD Parent Sample Id:

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	< 0.0100	0.500	0.474	95	0.487	97	70-130	3	35	mg/kg	12.04.17 17:53	
Toluene	< 0.0100	0.500	0.422	84	0.421	84	70-130	0	35	mg/kg	12.04.17 17:53	
Ethylbenzene	< 0.0100	0.500	0.379	76	0.368	74	71-129	3	35	mg/kg	12.04.17 17:53	
m,p-Xylenes	< 0.0200	1.00	0.719	72	0.712	71	70-135	1	35	mg/kg	12.04.17 17:53	
o-Xylene	< 0.0100	0.500	0.356	71	0.351	70	71-133	1	35	mg/kg	12.04.17 17:53	X

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	96		96		80-120	%	12.04.17 17:53
4-Bromofluorobenzene	95		95		80-120	%	12.04.17 17:53

Setting the Standard since 1990 Stafford, Texas (281-240-4200) Dallas Texas (214-902-0300)

Tafford, 1 exas (287-240-4200) Tallas Texas (214-902-0300)	Midia Midia	San Antonio, Texas (210-509-3 Midland, Texas (432-704-5251)	San Antonio, Texas (210-509-3334) Midland, Texas (432-704-5251)		Phoenix,	Phoenix, Arizona (480-355-0900)	55-0900)		
			www.xenco.com		Xenco Quote #	*	Xenco Job #	56999	797
						Analytical	Analytical information		Matrix Codes
pany Name / Branch: C, LLC	Projec	Name/Number	Project Name/Number S eman						W = Water
pany Address: BOX 2699 SPRING, TX 79721	Projec	Project Location:	HITT DISC	HL WOU					GW =Ground Water DW = Drinking Water
t: admin@oilandsattremediation.com  10.1003016.udsattremediation.com  20.1003016.udsattremediation.com	Involce	io:				021			SW = Surface water SL = Sludge
ct Contact: Rainey and/or Roylyn Welch	PO Number:		KEX MC			8			WI = Wipe
olors's Name									WW= Waste Water
	Collection	ction	Nun	Number of preserved bottles		X			A = Air
Field ID / Point of Collection	Sample Depth Date	o Time	Marrix bottles	HNO3 H2SO4 NaOH NaHSO4	NONE Chloride	BTE			Field Comments
SPOT	SUK 121	9:30	_			+			
.500+ 1	12" 12/	1 (0:00			5	-			
Sp01 2	SVK 12/	10:30			(				
SPOT L	121"  2/	11:00			< <				
SP0+ 3	SUK 12/	1 11:30			< <				
SPUT 5	2" 12	17:00			< <				
(P)+ H	71,12	- 200			< <				
Spot 5-	13/1/2	1:30							
SPOT 5	12" 121	- 200			<				
Turnaround Time ( Business days)			Data Deliverable Information	nation			Notes:		
Same Day TAT 5 Day TAT			Level II Std QC	Level IV (Full Data Pkg /raw data)	a Pkg /raw data)		)		
Next Day EMERGENCY 7 Day TAT			Level III Std QC+ Forms	TRRP Level IV			Temp: ひ. 9		IR ID:R-8
2 Day EMERGENCY Contract TAT	4		Level 3 (CLP Forms)	UST / RG -411			CF:(0-6: -0.2°C)	0.2°C)	
3 Day EMERGENCY			TRRP Checklist				Corrected	Corrected Temp: (4)	
TAT Starts Day received by Lab, if received by 5:00 pm	5:00 pm					PE		.1.	
elinguished by Sampler:	Date Time:	Received By:	M MAIND	Relinquished By:	OUNIER DELIVERY	Date Time:	Received By:	+ ×	
elinquished by:	Date Time:	Received By:	d By:	Relinquished By:		Date Time:	Received B	y;	9
elinquished by:	Date Time:	Received By:	d By:	Custody Seal #	Pres	Preserved where applicable		On Ice Cooler	Cooler Temp. Thermo. Corr. Factor
s: Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Xenco will be liable only for the cost of samples and shall not assume any responsibility for any	nstitutes a valid purchase ones beyond the control of >	rder from client co	ompany to Xenco, its affiliates and charge of \$75 will be applied to ea	subcontractors, it assigns stand	lard terms and condition	ons of service. Xe	nco will be liable only for t	he cost of samples and	shall not assume any responsibility for any

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CHAIN OF CUSTODY

Starrord, 1 exas (281-240-4200)  Dallas Texas (214-902-0300)	San /	San Antonio, Texas (210-509-3334) Midland. Texas (432-704-5251)	-3334)		Phoenix, Arizona (480-355-0900)	)-355-0900)	
		W	www.xenco.com		Xenco Quote #	Xenco Job #	569997
					Analytic	Analytical Information	Matrix Codes
Client / Reporting Information Company Name / Branch:	Projec	Project Information Project Name/Number:	VIW MIN				W≔ Water
Company Address:	Projec	Project Location:	CHAR CO	N N 1			S = Soll/Sed/Solld GW =Ground Water DW = Drinking Water
mail: admin@oilandsaltremediation.com 4322133105 4441.1030   Gud Saft Raeduction .com excoollandsaltremediation.com	05 Involce To	0 V					SW = Surface water SL = Sludge
roject Contact: Rex Rainey and/or Roylyn Welch	DO Mushar	KEN KONTIEN	188				WI ≈ Wipe
ampiors's Name	1000	in both					O = Oil
	Colle	Collection	Number of	Number of preserved bottles			A = Air
No. Field ID / Point of Collection	Sample Depth Date	Time Matrix	bottles HCI NaOH/Zn Acetate HNO3	H2SO4 NaOH NaHSO4 MEOH NONE	Chloride TPH BTEX		Field Comments
1 Spot 6	SUK P				-		
2 SPOT W	12" 12	1 9:30			< <		
3 Spot 7	SUT 12/	10:00					
4 Spot 7	12"	10:30					
5 500 +	SUI	00:11			()		
6 7 701 X	1	11:50			7 /		
7 John G	SUI	17:00			7		
V V V V V V V V V V V V V V V V V V V	20	10.00			1		
	10.	1.00					
Turnaround Time ( Business days)		T	Data Deliverable Information		4	Notes:	
Same Day TAT	7	Level II Std QC		Level IV (Full Data Pkg Iraw data)	Iraw data)		
Next Day EMERGENCY 7 Day TAT		Level III Std QC+ Forms	C+ Forms	TRRP Level IV		Temp: 3.9	IB ID:B-8
2 Day EMERGENCY Contract TAT	TAT	Level 3 (CLP Forms)	Forms)	UST / RG -411		CF:(0-6: -0.2°C)	0
3 Day EMERGENCY		TRRP Checklist	İst			(6-23: +0.2°C)	0.2°C)
TAT Starts Day received by Lab, if received by 5:00 pm	y 5:00 pm					FED-E Corrected Temp: 4.	emp: 4.1
Relinguished by Sampler:	Date Time:	Date Time: Received By:	SAMIFLES CHANGE POSSE	Relinquished By:	Date Time:	Received By:	7 //
Relinquished by:	Date Time:	Received By:	7	Relinquished By:		Received By:	1
Relinquished by:	Date Time:	Received By:		Custody Seal #	where	applicable On ice	Cooler Temp. Thermo. Corr. Factor
dides. Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Xenco will be liable only for the cost of samples and shall not assume any responsibility for any	constitutes a valid purchase o	rder from client company to Xer	nco, its affiliates and subcontr	ractors. It assigns standard ter	rms and conditions of service.	Xenco will be liable only for the cost of	samples and shall not assume any responsibility for any

Setting the Standard since 1990 Stafford, Texas (281-240-4200)

Page	AN
00	OH
W	CUSTODY

Dallas Texas (214-902-0300)	Midland, Texas (432-704-5251)	
	Www.xenco.com	Xenco Quote \$ Xenco Job # 569997
Client / Reporting Information	Dertail Information	Analytical information Matrix Codes
Company Name / Branch: REX, LLC	Project Name/Number: Stranger	W= Water
Company Address: P. O. BOX 2699 BIG SPRING, TX 79721	Project Location: ANDERO STOLE COM	S = Soil/Sed/Soild GW =Ground Water DW = Drinking Water
Email: admin@oilandsaltremediation.com  Ann. 1000 1010 5-41 p. medication.com  tex@oilandsaltremediation.com	invoice To:	SW = Surface water SL = Sludge
Project Contact: Rex Rainey and/or Roylyn Welch Samplers's Name	PO Number:	OW = Ocean/Sea Water WI = Wipe O = Oil
	Collection Number of preserved bottles	WW= Waste Water  A = Air
No. FING 12 / FORK OF CORECTION	Depth Date Time Markix bottless HCI Legistre HNO3 Legistre	
1 J PO+ 12	141 2:30	1
2 S POt 12	2" 121 3:00	
3 701	_	
5	1/21 1/21	
6		
7		
00		
10		
Turnaround Time ( Business days)	Data Deliverable Information	Notes:
Same Day TAT 5 Day TAT	Level II Std QC Level IV (Full Data Pkg Iraw	duta) Temp. 3.9
Next Day EMERGENCY 7 Day TAT	Level III Std QC+ Forms TRRP Level IV	CF:(0-6: -0.2°C)
2 Day EMERGENCY Contract TAT		(6-23: +0.2°C)
TAT Starts Day received by Lab, if received by 5:00 pm	5:00 pm	COLLECTED TELLIP. C.
	OCUMENTED	
Relinquished by:	Date Time: Received By: Received By: Date Time: Received By: Date Time: Received By:	1
3 Relinquished by:	an to	Date Time: Received By:
illo the control by.	Date time: Received By: Custody Seal #	Gustody Seal # Preserved where applicable On its Cooler Temp. Themso. Corr. Factor
folice: Notice: Signature of this document and relinant homest of	The state of the s	



# XENCO Laboratories Prelogin/Nonconformance Report- Sample Log-In



Client: Remediation and Environmental Xperts,

Date/ Time Received: 12/04/2017 10:50:00 AM

Acceptable Temperature Range: 0 - 6 degC Air and Metal samples Acceptable Range: Ambient

Work Order #: 569997

Temperature Measuring device used: R8

Sample Receipt Checklist		Comments
#1 *Temperature of cooler(s)?	4.1	
#2 *Shipping container in good condition?	Yes	
#3 *Samples received on ice?	Yes	
#4 *Custody Seals intact on shipping container/ cooler?	N/A	
#5 Custody Seals intact on sample bottles?	N/A	
#6*Custody Seals Signed and dated?	N/A	
#7 *Chain of Custody present?	Yes	
#8 Any missing/extra samples?	No	
#9 Chain of Custody signed when relinquished/ received?	Yes	
#10 Chain of Custody agrees with sample labels/matrix?	Yes	
#11 Container label(s) legible and intact?	Yes	
#12 Samples in proper container/ bottle?	Yes	
#13 Samples properly preserved?	Yes	
#14 Sample container(s) intact?	Yes	
#15 Sufficient sample amount for indicated test(s)?	Yes	
#16 All samples received within hold time?	Yes	
#17 Subcontract of sample(s)?	No	
#18 Water VOC samples have zero headspace?	N/A	

Must be	completed for after-hours de	livery of samples prior to placi	ng in the refrigerator
Analyst:		PH Device/Lot#:	
	Checklist completed by:	Connie Hernandez	Date: <u>12/04/2017</u>
	Checklist reviewed by:	Holly Taylor Holly Taylor	Date: <u>12/04/2017</u>



# Certificate of Analysis Summary 572250

#### Remediation and Environmental Xperts, LLC, Big Spring, TX

**Project Name: Steward** 

EN ACG Page

**Project Id:** 

**Project Location:** 

**Contact:** 

Rex Rainey

Heisenberg 7H

Date Received in Lab: Thu Dec-28-17 03:00 pm

**Report Date:** 04-JAN-18 **Project Manager:** Holly Taylor

	Lab Id:	572250-	001	572250-0	002	572250-0	003	572250-	004	572250-	005	572250-0	006
Analysis Requested	Field Id:	Spot 1	3	Spot 1	3	Spot 1	4	Spot 1	4	Spot 1	5	Spot 1	5
Analysis Requesieu	Depth:	Surface	-	12- In		Surface-		12- It	ı	Surface-	In	12- In	ı
	Matrix:	SOIL		SOIL		SOIL		SOIL	,	SOIL	.	SOIL	,
	Sampled:	Dec-28-17	08:06	Dec-28-17	08:15	Dec-28-17	08:30	Dec-28-17	08:45	Dec-28-17	09:00	Dec-28-17	09:15
BTEX by EPA 8021B	Extracted:	Dec-29-17	08:00	Dec-29-17	08:00	Dec-29-17	08:00	Dec-29-17	08:00	Dec-29-17	08:00	Dec-29-17	08:00
	Analyzed:	Dec-29-17	22:21	Dec-29-17	16:16	Dec-29-17	14:59	Dec-29-17	16:35	Dec-29-17	17:18	Dec-29-17	17:37
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene	·	< 0.00201	0.00201	< 0.00199	0.00199	< 0.00200	0.00200	< 0.00202	0.00202	< 0.00201	0.00201	< 0.00201	0.00201
Toluene		< 0.00201	0.00201	< 0.00199	0.00199	< 0.00200	0.00200	< 0.00202	0.00202	< 0.00201	0.00201	< 0.00201	0.00201
Ethylbenzene		0.00331	0.00201	0.00274	0.00199	< 0.00200	0.00200	< 0.00202	0.00202	< 0.00201	0.00201	< 0.00201	0.00201
m,p-Xylenes		< 0.00402	0.00402	< 0.00398	0.00398	< 0.00399	0.00399	< 0.00403	0.00403	< 0.00402	0.00402	< 0.00402	0.00402
o-Xylene		< 0.00201	0.00201	< 0.00199	0.00199	< 0.00200	0.00200	< 0.00202	0.00202	< 0.00201	0.00201	< 0.00201	0.00201
Total Xylenes		< 0.00201	0.00201	< 0.00199	0.00199	< 0.00200	0.00200	< 0.00202	0.00202	< 0.00201	0.00201	< 0.00201	0.00201
Total BTEX		0.00331	0.00201	0.00274	0.00199	< 0.00200	0.00200	< 0.00202	0.00202	< 0.00201	0.00201	< 0.00201	0.00201
Chloride by EPA 300	Extracted:	Dec-29-17	10:00	Dec-29-17	10:00	Dec-29-17 10:00		Dec-29-17 10:00		Dec-29-17 10:00		Dec-29-17 10:00	
	Analyzed:	Jan-02-18	11:39	Jan-02-18	1:46	Dec-29-17	13:52	Dec-29-17	14:13	Dec-29-17	14:20	Dec-29-17	14:27
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		238000	2480	4670	50.0	322	4.97	171	4.94	169	4.92	128	4.92
TPH by SW8015 Mod	Extracted:	Dec-28-17	15:00	Dec-28-17	15:00	Dec-28-17	15:00	Dec-28-17	15:00	Dec-28-17	15:00	Dec-28-17	15:00
	Analyzed:	Dec-29-17	07:58	Dec-29-17	00:36	Dec-29-17	06:02	Dec-29-17	00:55	Dec-29-17	01:16	Dec-29-17	01:38
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Gasoline Range Hydrocarbons (GRO)	·	17.6	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0
Diesel Range Organics (DRO)		4850	15.0	<15.0	15.0	2820	15.0	1790	15.0	351	15.0	<15.0	15.0
Oil Range Hydrocarbons (ORO)		622	15.0	<15.0	15.0	3370	15.0	1960	15.0	59.2	15.0	<15.0	15.0
Total TPH		5490	15.0	<15.0	15.0	6190	15.0	3750	15.0	410	15.0	<15.0	15.0

This analytical report, and the entire data package it represents, has been made for your exclusive and confidential use. The interpretations and results expressed throughout this analytical report represent the best judgment of XENCO Laboratories. XENCO Laboratories assumes no responsibility and makes no warranty to the end use of the data hereby presented. Our liability is limited to the amount invoiced for this work order unless otherwise agreed to in writing.

Houston - Dallas - San Antonio - Atlanta - Tampa - Boca Raton - Latin America - Odessa - Corpus Christi

Holly Taylor Project Manager



# Certificate of Analysis Summary 572250

### Remediation and Environmental Xperts, LLC, Big Spring, TX

**Project Name: Steward** 

FROOM

Project Id: Contact:

Rex Rainey

**Project Location:** Heisenberg 7H

Date Received in Lab: Thu Dec-28-17 03:00 pm

**Report Date:** 04-JAN-18 **Project Manager:** Holly Taylor

	Lab Id:	572250-0	007	572250-0	008	572250-0	009	572250-	010	572250-	011	572250-0	012
Analusia Banasata I	Field Id:	Spot 1	6	Spot 1	6	Spot 1	7	Spot 1	7	Spot 1	.8	Spot 1	8
Analysis Requested	Depth:	Surface-	In	12- In	ι	Surface-	In	12- It	ı	Surface-	In	12- Ir	ı
	Matrix:	SOIL		SOIL	,	SOIL	,	SOIL		SOIL	.	SOIL	
	Sampled:	Dec-28-17	09:30	Dec-28-17	09:45	Dec-28-17	10:00	Dec-28-17	10:15	Dec-28-17	10:30	Dec-28-17	10:45
BTEX by EPA 8021B	Extracted:	Dec-29-17	08:00	Dec-29-17	08:00	Dec-29-17	08:00	Dec-29-17	08:00	Dec-29-17	08:00	Dec-29-17	08:00
	Analyzed:	Dec-29-17	17:57	Dec-29-17	22:02	Dec-29-17	21:43	Dec-29-17	21:24	Dec-29-17	19:29	Dec-29-17	19:49
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		< 0.00199	0.00199	< 0.00199	0.00199	< 0.00198	0.00198	< 0.00202	0.00202	< 0.00200	0.00200	< 0.00200	0.00200
Toluene		< 0.00199	0.00199	< 0.00199	0.00199	< 0.00198	0.00198	< 0.00202	0.00202	0.00552	0.00200	< 0.00200	0.00200
Ethylbenzene		< 0.00199	0.00199	< 0.00199	0.00199	< 0.00198	0.00198	< 0.00202	0.00202	0.0189	0.00200	0.00772	0.00200
m,p-Xylenes		< 0.00398	0.00398	< 0.00398	0.00398	< 0.00396	0.00396	< 0.00404	0.00404	0.0142	0.00401	0.00895	0.00399
o-Xylene		< 0.00199	0.00199	< 0.00199	0.00199	< 0.00198	0.00198	< 0.00202	0.00202	0.0107	0.00200	0.00479	0.00200
Total Xylenes		< 0.00199	0.00199	< 0.00199	0.00199	< 0.00198	0.00198	< 0.00202	0.00202	0.0249	0.00200	0.0137	0.00200
Total BTEX		< 0.00199	0.00199	< 0.00199	0.00199	< 0.00198	0.00198	< 0.00202	0.00202	0.0493	0.00200	0.0215	0.00200
Chloride by EPA 300	Extracted:	Dec-29-17	10:00	Dec-29-17 10:00									
	Analyzed:	Dec-29-17	14:34	Dec-29-17	14:41	Dec-29-17	14:55	Dec-29-17	15:15	Dec-29-17	15:36	Dec-29-17	15:43
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		123	4.99	12.8	4.93	133	4.90	8.85	4.90	2990	24.8	576	4.99
TPH by SW8015 Mod	Extracted:	Dec-28-17	15:00	Dec-28-17	15:00	Dec-28-17	15:00	Dec-28-17	15:00	Dec-28-17	15:00	Dec-28-17	15:00
	Analyzed:	Dec-29-17	02:00	Dec-29-17	02:20	Dec-29-17	05:02	Dec-29-17	05:22	Dec-29-17 15:21		Dec-29-17	03:41
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Gasoline Range Hydrocarbons (GRO)		<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0	19.1	15.0	<15.0	15.0
Diesel Range Organics (DRO)		115	15.0	<15.0	15.0	78.2	15.0	<15.0	15.0	808	15.0	86.2	15.0
Oil Range Hydrocarbons (ORO)		29.0	15.0	<15.0	15.0	24.6	15.0	<15.0	15.0	99.2	15.0	<15.0	15.0
Total TPH		144	15.0	<15.0	15.0	103	15.0	<15.0	15.0	926	15.0	86.2	15.0

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Holly Taylor Project Manager



# Certificate of Analysis Summary 572250

#### Remediation and Environmental Xperts, LLC, Big Spring, TX

**Project Name: Steward** 

TNI Page

Project Id: Contact:

**Project Location:** 

Rex Rainey Heisenberg 7H

Date Received in Lab: Thu Dec-28-17 03:00 pm

**Report Date:** 04-JAN-18 **Project Manager:** Holly Taylor

	Lab Id:	572250-0	)13	572250-0	014	572250-0	)15	572250-	016		
Analysis Paguastad	Field Id:	Spot 19	9	Spot 1	9	Spot 20	0	Spot 2	.0		
Analysis Requested	Depth:	surface-	In	12- In	ı	Surface- In		12- In			
	Matrix:	SOIL		SOIL		SOIL		SOIL			
	Sampled:	Dec-28-17	Dec-28-17 11:00		Dec-28-17 11:15		Dec-28-17 11:30		11:45		
BTEX by EPA 8021B	Extracted:	Dec-29-17	08:00	Dec-29-17	08:00	Dec-29-17	08:00	Dec-29-17	08:00		
	Analyzed:	Dec-29-17	20:08	Dec-29-17	20:27	Dec-29-17	20:46	Dec-29-17	21:05		
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL		
Benzene		< 0.00198	0.00198	< 0.00201	0.00201	< 0.00202	0.00202	< 0.00199	0.00199		
Toluene		< 0.00198	0.00198	< 0.00201	0.00201	< 0.00202	0.00202	< 0.00199	0.00199		
Ethylbenzene		< 0.00198	0.00198	< 0.00201	0.00201	< 0.00202	0.00202	< 0.00199	0.00199		
m,p-Xylenes		< 0.00397	0.00397	< 0.00402	0.00402	< 0.00403	0.00403	< 0.00398	0.00398		
o-Xylene		< 0.00198	0.00198	< 0.00201	0.00201	< 0.00202	0.00202	< 0.00199	0.00199		
Total Xylenes		< 0.00198	0.00198	< 0.00201	0.00201	< 0.00202	0.00202	< 0.00199	0.00199		
Total BTEX		< 0.00198	0.00198	< 0.00201	0.00201	< 0.00202	0.00202	< 0.00199	0.00199		
Chloride by EPA 300	Extracted:	Dec-29-17	10:00	Dec-29-17	10:00	Dec-29-17	10:00	Dec-29-17	10:00		
	Analyzed:	Dec-29-17	15:50	Dec-29-17	15:57	Dec-29-17	16:04	Dec-29-17	16:11		
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL		
Chloride		578	4.91	16.0	4.91	186	4.95	<4.97	4.97		
TPH by SW8015 Mod	Extracted:	Dec-28-17	15:00	Dec-28-17	15:00	Dec-28-17	15:00	Dec-28-17	15:00		
	Analyzed:	Dec-29-17	05:42	Dec-29-17	04:02	Dec-29-17	04:22	Dec-29-17	04:42		
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL		
Gasoline Range Hydrocarbons (GRO)		<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0		
Diesel Range Organics (DRO)		104	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0		
Oil Range Hydrocarbons (ORO)		16.5	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0		
Total TPH		121	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0		

This analytical report, and the entire data package it represents, has been made for your exclusive and confidential use. The interpretations and results expressed throughout this analytical report represent the best judgment of XENCO Laboratories. XENCO Laboratories assumes no responsibility and makes no warranty to the end use of the data hereby presented. Our liability is limited to the amount invoiced for this work order unless otherwise agreed to in writing.

Houston - Dallas - San Antonio - Atlanta - Tampa - Boca Raton - Latin America - Odessa - Corpus Christi

Holly Taylor Project Manager

# **Analytical Report 572250**

#### for

# Remediation and Environmental Xperts, LLC

Project Manager: Rex Rainey
Steward

04-JAN-18

Collected By: Client





#### 1211 W. Florida Ave, Midland TX 79701

Xenco-Houston (EPA Lab code: TX00122): Texas (T104704215-17-23), Arizona (AZ0765), Florida (E871002-24), Louisiana (03054) Oklahoma (2017-142)

> Xenco-Dallas (EPA Lab code: TX01468): Texas (T104704295-17-15), Arizona (AZ0809), Arkansas (17-063-0)

Xenco-El Paso (EPA Lab code: TX00127): Texas (T104704221-17-12)
Xenco-Lubbock (EPA Lab code: TX00139): Texas (T104704219-17-16)
Xenco-Odessa (EPA Lab code: TX00158): Texas (T104704400-17-13)
Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-17-3)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona(AZ0757)
Xenco-Phoenix Mobile (EPA Lab code: AZ00901): Arizona (AZM757)





04-JAN-18

Project Manager: Rex Rainey

Remediation and Environmental Xperts, LLC

P.O. Box 2699

Big Spring, TX 79720

Reference: XENCO Report No(s): 572250

Steward

Project Address: Heisenberg 7H

#### **Rex Rainey**:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number(s) 572250. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. The uncertainty of measurement associated with the results of analysis reported is available upon request. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 572250 will be filed for 45 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

We thank you for selecting XENCO Laboratories to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

thely Taylor

**Holly Taylor** 

Project Manager

Recipient of the Prestigious Small Business Administration Award of Excellence in 1994.

Certified and approved by numerous States and Agencies.

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Houston - Dallas - Midland - San Antonio - Phoenix - Oklahoma - Latin America



# **Sample Cross Reference 572250**



# Remediation and Environmental Xperts, LLC, Big Spring, 7

#### Steward

Sample Id	Matrix	<b>Date Collected</b>	Sample Depth	Lab Sample Id
Spot 13	S	12-28-17 08:06	Surface	572250-001
Spot 13	S	12-28-17 08:15	12 In	572250-002
Spot 14	S	12-28-17 08:30	Surface	572250-003
Spot 14	S	12-28-17 08:45	12 In	572250-004
Spot 15	S	12-28-17 09:00	Surface In	572250-005
Spot 15	S	12-28-17 09:15	12 In	572250-006
Spot 16	S	12-28-17 09:30	Surface In	572250-007
Spot 16	S	12-28-17 09:45	12 In	572250-008
Spot 17	S	12-28-17 10:00	Surface In	572250-009
Spot 17	S	12-28-17 10:15	12 In	572250-010
Spot 18	S	12-28-17 10:30	Surface In	572250-011
Spot 18	S	12-28-17 10:45	12 In	572250-012
Spot 19	S	12-28-17 11:00	surface In	572250-013
Spot 19	S	12-28-17 11:15	12 In	572250-014
Spot 20	S	12-28-17 11:30	Surface In	572250-015
Spot 20	S	12-28-17 11:45	12 In	572250-016

#### **CASE NARRATIVE**

Client Name: Remediation and Environmental Xperts, LLC

Project Name: Steward

Project ID: Report Date: 04-JAN-18 Work Order Number(s): 572250 Date Received: 12/28/2017

#### Sample receipt non conformances and comments:

#### Sample receipt non conformances and comments per sample:

None

#### Analytical non conformances and comments:

Batch: LBA-3037330 BTEX by EPA 8021B

Lab Sample ID 572250-003 was randomly selected for Matrix Spike/Matrix Spike Duplicate (MS/MSD). Benzene, Ethylbenzene, Toluene, m,p-Xylenes, o-Xylene recovered below QC limits in the Matrix Spike and Matrix Spike Duplicate. Outlier/s are due to possible matrix interference. Samples in the analytical batch are: 572250-001, -002, -003, -004, -005, -006, -007, -008, -009, -010, -011, -012, -013, -014, -015, -016.

The Laboratory Control Sample for Toluene, Benzene, m,p-Xylenes, Ethylbenzene, o-Xylene is within laboratory Control Limits, therefore the data was accepted.

Soil samples were not received in Terracore kits and therefore were prepared by method 5030.





#### Remediation and Environmental Xperts, LLC, Big Spring, TX

Steward

Sample Id: Spot 13

Matrix: Soil Date Received:12.28.17 15.00

Lab Sample Id: 572250-001

Date Collected: 12.28.17 08.06

Sample Depth: Surface

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech:

OJS

% Moisture:

Analyst:

OJS

Date Prep: 12.29.17 10.00 Basis:

Wet Weight

Seq Number: 3037205

Parameter Cas Number Result RLUnits **Analysis Date** Flag Dil Chloride 16887-00-6 2480 01.02.18 11.39 238000 mg/kg 500

Analytical Method: TPH by SW8015 Mod

Prep Method: TX1005P

Tech:

JUM

% Moisture:

JUM Analyst:

Date Prep: 12.28.17 15.00 Basis: Wet Weight

Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	17.6	15.0		mg/kg	12.29.17 07.58		1
Diesel Range Organics (DRO)	C10C28DRO	4850	15.0		mg/kg	12.29.17 07.58		1
Oil Range Hydrocarbons (ORO)	PHCG2835	622	15.0		mg/kg	12.29.17 07.58		1
Total TPH	PHC635	5490	15.0		mg/kg	12.29.17 07.58		1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane		111-85-3	82	%	70-135	12.29.17 07.58		
o-Terphenyl		84-15-1	86	%	70-135	12.29.17 07.58		





### Remediation and Environmental Xperts, LLC, Big Spring, TX

Steward

Sample Id: Spot 13 Matrix: Soil

Date Prep:

Date Received:12.28.17 15.00

Lab Sample Id: 572250-001

Date Collected: 12.28.17 08.06

Sample Depth: Surface

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech:

ALJ

% Moisture: Basis: 12.29.17 08.00

Wet Weight

ALJ Analyst: Seq Number: 3037330

Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
Benzene	71-43-2	< 0.00201	0.00201		mg/kg	12.29.17 22.21	U	1
Toluene	108-88-3	< 0.00201	0.00201		mg/kg	12.29.17 22.21	U	1
Ethylbenzene	100-41-4	0.00331	0.00201		mg/kg	12.29.17 22.21		1
m,p-Xylenes	179601-23-1	< 0.00402	0.00402		mg/kg	12.29.17 22.21	U	1
o-Xylene	95-47-6	< 0.00201	0.00201		mg/kg	12.29.17 22.21	U	1
Total Xylenes	1330-20-7	< 0.00201	0.00201		mg/kg	12.29.17 22.21	U	1
Total BTEX		0.00331	0.00201		mg/kg	12.29.17 22.21		1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene		460-00-4	86	%	80-120	12.29.17 22.21		
1,4-Difluorobenzene		540-36-3	99	%	80-120	12.29.17 22.21		





### Remediation and Environmental Xperts, LLC, Big Spring, TX

Steward

Sample Id: Spot 13

Matrix: Soil Date Received:12.28.17 15.00

Lab Sample Id: 572250-002

Date Collected: 12.28.17 08.15

Sample Depth: 12 In

Analytical Method: Chloride by EPA 300

Prep Method: E300P

% Moisture:

Tech:

Tech:

Analyst:

OJS

Basis:

Wet Weight

Analyst:

OJS

Date Prep: 12.29.17 10.00

Seq Number: 3037205

Parameter	Cas Number	Result	RL	Units	<b>Analysis Date</b>	Flag	Dil
Chloride	16887-00-6	4670	50.0	mg/kg	01.02.18 11.46		10

Analytical Method: TPH by SW8015 Mod

JUM

JUM

Date Prep:

12.28.17 15.00

Prep Method: TX1005P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0		mg/kg	12.29.17 00.36	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0		mg/kg	12.29.17 00.36	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0		mg/kg	12.29.17 00.36	U	1
Total TPH	PHC635	<15.0	15.0		mg/kg	12.29.17 00.36	U	1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane		111-85-3	77	%	70-135	12.29.17 00.36		
o-Terphenyl		84-15-1	79	%	70-135	12.29.17 00.36		





### Remediation and Environmental Xperts, LLC, Big Spring, TX

Steward

Sample Id: Spot 13 Matrix: Soil Date Received:12.28.17 15.00

Lab Sample Id: 572250-002

Date Collected: 12.28.17 08.15

Sample Depth: 12 In

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech:

% Moisture:

Analyst:

ALJ ALJ

Date Prep: 12.29.17 08.00 Basis:

Wet Weight

Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
Benzene	71-43-2	< 0.00199	0.00199		mg/kg	12.29.17 16.16	U	1
Toluene	108-88-3	< 0.00199	0.00199		mg/kg	12.29.17 16.16	U	1
Ethylbenzene	100-41-4	0.00274	0.00199		mg/kg	12.29.17 16.16		1
m,p-Xylenes	179601-23-1	< 0.00398	0.00398		mg/kg	12.29.17 16.16	U	1
o-Xylene	95-47-6	< 0.00199	0.00199		mg/kg	12.29.17 16.16	U	1
Total Xylenes	1330-20-7	< 0.00199	0.00199		mg/kg	12.29.17 16.16	U	1
Total BTEX		0.00274	0.00199		mg/kg	12.29.17 16.16		1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene		460-00-4	81	%	80-120	12.29.17 16.16		
1,4-Difluorobenzene		540-36-3	88	%	80-120	12.29.17 16.16		





### Remediation and Environmental Xperts, LLC, Big Spring, TX

Steward

Sample Id: Spot 14

Matrix: Soil Date Received:12.28.17 15.00

Lab Sample Id: 572250-003

Date Collected: 12.28.17 08.30

Sample Depth: Surface

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech:

OJS

% Moisture:

Analyst:

OJS

Date Prep: 12.29.17 10.00 Basis:

Wet Weight

Seq Number: 3037205

Parameter	Cas Number	Result	RL	Units	<b>Analysis Date</b>	Flag	Dil
Chloride	16887-00-6	322	4.97	mg/kg	12.29.17 13.52		1

Analytical Method: TPH by SW8015 Mod

Prep Method: TX1005P

% Moisture:

Tech: Analyst: JUM JUM

12.28.17 15.00 Date Prep:

Basis:

Wet Weight

Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0		mg/kg	12.29.17 06.02	U	1
Diesel Range Organics (DRO)	C10C28DRO	2820	15.0		mg/kg	12.29.17 06.02		1
Oil Range Hydrocarbons (ORO)	PHCG2835	3370	15.0		mg/kg	12.29.17 06.02		1
Total TPH	PHC635	6190	15.0		mg/kg	12.29.17 06.02		1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane		111-85-3	74	%	70-135	12.29.17 06.02		
o-Terphenyl		84-15-1	78	%	70-135	12.29.17 06.02		





### Remediation and Environmental Xperts, LLC, Big Spring, TX

Steward

Soil

Sample Id: Spot 14

Matrix:

Γ

Date Received:12.28.17 15.00

Lab Sample Id: 572250-003

Date Collected: 12.28.17 08.30

Sample Depth: Surface

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Basis:

Tech:

ALJ

% Moisture:

Wet Weight

Analyst: ALJ

Date Prep:

12.29.17 08.00

Parameter	Cas Number	Result	RL		Units	<b>Analysis Date</b>	Flag	Dil
Benzene	71-43-2	< 0.00200	0.00200		mg/kg	12.29.17 14.59	U	1
Toluene	108-88-3	< 0.00200	0.00200		mg/kg	12.29.17 14.59	U	1
Ethylbenzene	100-41-4	< 0.00200	0.00200		mg/kg	12.29.17 14.59	U	1
m,p-Xylenes	179601-23-1	< 0.00399	0.00399		mg/kg	12.29.17 14.59	U	1
o-Xylene	95-47-6	< 0.00200	0.00200		mg/kg	12.29.17 14.59	U	1
Total Xylenes	1330-20-7	< 0.00200	0.00200		mg/kg	12.29.17 14.59	U	1
Total BTEX		< 0.00200	0.00200		mg/kg	12.29.17 14.59	U	1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene		460-00-4	86	%	80-120	12.29.17 14.59		
1,4-Difluorobenzene		540-36-3	95	%	80-120	12.29.17 14.59		





#### Remediation and Environmental Xperts, LLC, Big Spring, TX

Steward

Sample Id: Spot 14

Matrix:

Date Received:12.28.17 15.00

Lab Sample Id: 572250-004

Soil Date Collected: 12.28.17 08.45

Sample Depth: 12 In

Analytical Method: Chloride by EPA 300

Prep Method: E300P

% Moisture:

OJS Tech:

OJS

Wet Weight

Analyst:

Seq Number: 3037205

Date Prep: 12.29.17 10.00 Basis:

Parameter Cas Number Result RLUnits **Analysis Date** Flag Dil Chloride 16887-00-6 171 12.29.17 14.13 4.94 mg/kg 1

Analytical Method: TPH by SW8015 Mod

Prep Method: TX1005P

Tech:

JUM

% Moisture:

JUM Analyst:

Date Prep: 12.28.17 15.00

Wet Weight Basis:

Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0		mg/kg	12.29.17 00.55	U	1
Diesel Range Organics (DRO)	C10C28DRO	1790	15.0		mg/kg	12.29.17 00.55		1
Oil Range Hydrocarbons (ORO)	PHCG2835	1960	15.0		mg/kg	12.29.17 00.55		1
Total TPH	PHC635	3750	15.0		mg/kg	12.29.17 00.55		1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane		111-85-3	82	%	70-135	12.29.17 00.55		
o-Terphenyl		84-15-1	83	%	70-135	12.29.17 00.55		





### Remediation and Environmental Xperts, LLC, Big Spring, TX

Steward

Sample Id: Spot 14

Matrix: Soil Date Received:12.28.17 15.00

Lab Sample Id: 572250-004

Date Collected: 12.28.17 08.45

Sample Depth: 12 In

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech:

ALJ

% Moisture:

Analyst:

ALJ

Date Prep: 12.29.17 08.00 Basis: Wet Weight

Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
Benzene	71-43-2	< 0.00202	0.00202		mg/kg	12.29.17 16.35	U	1
Toluene	108-88-3	< 0.00202	0.00202		mg/kg	12.29.17 16.35	U	1
Ethylbenzene	100-41-4	< 0.00202	0.00202		mg/kg	12.29.17 16.35	U	1
m,p-Xylenes	179601-23-1	< 0.00403	0.00403		mg/kg	12.29.17 16.35	U	1
o-Xylene	95-47-6	< 0.00202	0.00202		mg/kg	12.29.17 16.35	U	1
Total Xylenes	1330-20-7	< 0.00202	0.00202		mg/kg	12.29.17 16.35	U	1
Total BTEX		< 0.00202	0.00202		mg/kg	12.29.17 16.35	U	1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene		460-00-4	90	%	80-120	12.29.17 16.35		
1.4-Difluorobenzene		540-36-3	92	%	80-120	12.29.17 16.35		





#### Remediation and Environmental Xperts, LLC, Big Spring, TX

Steward

Sample Id: Spot 15

Matrix: Soil Date Received:12.28.17 15.00

Lab Sample Id: 572250-005

Date Collected: 12.28.17 09.00

Sample Depth: Surface In

Analytical Method: Chloride by EPA 300

Prep Method: E300P % Moisture:

Tech: Analyst:

Parameter

Chloride

OJS OJS

169

Result

Units

mg/kg

Seq Number: 3037205

Date Prep: 12.29.17 10.00

RL

4.92

Basis: Wet Weight

**Analysis Date** 

12.29.17 14.20

Flag Dil

1

Analytical Method: TPH by SW8015 Mod

JUM

Tech: JUM Analyst:

Seq Number: 3037191

Date Prep:

Cas Number

16887-00-6

12.28.17 15.00

Prep Method: TX1005P

% Moisture:

Basis:

Wet Weight

Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0		mg/kg	12.29.17 01.16	U	1
Diesel Range Organics (DRO)	C10C28DRO	351	15.0		mg/kg	12.29.17 01.16		1
Oil Range Hydrocarbons (ORO)	PHCG2835	59.2	15.0		mg/kg	12.29.17 01.16		1
Total TPH	PHC635	410	15.0		mg/kg	12.29.17 01.16		1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane		111-85-3	81	%	70-135	12.29.17 01.16		
o-Terphenyl		84-15-1	81	%	70-135	12.29.17 01.16		





### Remediation and Environmental Xperts, LLC, Big Spring, TX

Steward

Sample Id: Spot 15 Matrix:

Date Prep:

Soil

Date Received:12.28.17 15.00

Lab Sample Id: 572250-005

Date Collected: 12.28.17 09.00

Sample Depth: Surface In

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B % Moisture:

Tech:

ALJ

Basis:

12.29.17 08.00

Wet Weight

Flag

U

Dil

1

Analyst: ALJ Seg Number: 3037330

seq (valiber: 3037330					
Parameter	Cas Number	Result	RL	Units	Analysis Date
Benzene	71-43-2	< 0.00201	0.00201	mg/kg	12.29.17 17.18
Toluene	108-88-3	< 0.00201	0.00201	mg/kg	12.29.17 17.18

Toluene	108-88-3	< 0.00201	0.00201	mg/kg	12.29.17 17.18	U	1
Ethylbenzene	100-41-4	< 0.00201	0.00201	mg/kg	12.29.17 17.18	U	1
m,p-Xylenes	179601-23-1	< 0.00402	0.00402	mg/kg	12.29.17 17.18	U	1
o-Xylene	95-47-6	< 0.00201	0.00201	mg/kg	12.29.17 17.18	U	1
Total Xylenes	1330-20-7	< 0.00201	0.00201	mg/kg	12.29.17 17.18	U	1
Total BTEX		< 0.00201	0.00201	mg/kg	12.29.17 17.18	U	1
•	1330-20-7					U	1

Surrogate	Cas Number	%	Units	Limits	Analysis Date	Flag
Burrogate	Cas i tallibei	Recovery	Cinto	Lilling	marysis Date	Tiug
4-Bromofluorobenzene	460-00-4	87	%	80-120	12.29.17 17.18	
1,4-Difluorobenzene	540-36-3	94	%	80-120	12.29.17 17.18	





#### Remediation and Environmental Xperts, LLC, Big Spring, TX

Steward

Soil

Sample Id: Spot 15

Matrix:

Date Received:12.28.17 15.00

Lab Sample Id: 572250-006

Date Collected: 12.28.17 09.15

Sample Depth: 12 In

Analytical Method: Chloride by EPA 300

Prep Method: E300P

% Moisture:

Tech: Analyst: OJS OJS

Date Prep:

12.29.17 10.00

Basis:

Wet Weight

Seq Number: 3037205

Parameter Cas Number Result RLUnits **Analysis Date** Flag Dil Chloride 16887-00-6 12.29.17 14.27 128 4.92 mg/kg 1

Analytical Method: TPH by SW8015 Mod

Prep Method: TX1005P

% Moisture:

Tech: Analyst: JUM JUM

Date Prep: 12.28.17 15.00 Basis:

Wet Weight

Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0		mg/kg	12.29.17 01.38	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0		mg/kg	12.29.17 01.38	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0		mg/kg	12.29.17 01.38	U	1
Total TPH	PHC635	<15.0	15.0		mg/kg	12.29.17 01.38	U	1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane		111-85-3	84	%	70-135	12.29.17 01.38		
o-Terphenyl		84-15-1	86	%	70-135	12.29.17 01.38		





### Remediation and Environmental Xperts, LLC, Big Spring, TX

Steward

Sample Id: Spot 15 Matrix: Soil Date Received:12.28.17 15.00

Lab Sample Id: 572250-006

Date Collected: 12.28.17 09.15

Sample Depth: 12 In

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech:

ALJ

% Moisture:

Analyst:

ALJ

Date Prep: 12.29.17 08.00 Basis: Wet Weight

Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
Benzene	71-43-2	< 0.00201	0.00201		mg/kg	12.29.17 17.37	U	1
Toluene	108-88-3	< 0.00201	0.00201		mg/kg	12.29.17 17.37	U	1
Ethylbenzene	100-41-4	< 0.00201	0.00201		mg/kg	12.29.17 17.37	U	1
m,p-Xylenes	179601-23-1	< 0.00402	0.00402		mg/kg	12.29.17 17.37	U	1
o-Xylene	95-47-6	< 0.00201	0.00201		mg/kg	12.29.17 17.37	U	1
Total Xylenes	1330-20-7	< 0.00201	0.00201		mg/kg	12.29.17 17.37	U	1
Total BTEX		< 0.00201	0.00201		mg/kg	12.29.17 17.37	U	1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene		540-36-3	90	%	80-120	12.29.17 17.37		
4-Bromofluorobenzene		460-00-4	89	%	80-120	12.29.17 17.37		





#### Remediation and Environmental Xperts, LLC, Big Spring, TX

Steward

Sample Id: Spot 16

Matrix: Soil

Date Received:12.28.17 15.00

Lab Sample Id: 572250-007

Date Collected: 12.28.17 09.30

Sample Depth: Surface In

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech:
Analyst:

OJS OJS % Moisture:

Date Prep: 12.29.17 10.00

Basis:

Wet Weight

Seq Number: 3037205

**...** 

 Parameter
 Cas Number
 Result
 RL
 Units
 Analysis Date
 Flag
 Dil

 Chloride
 16887-00-6
 123
 4.99
 mg/kg
 12.29.17 14.34
 1

Analytical Method: TPH by SW8015 Mod

Prep Method: TX1005P

Tech:

JUM

% Moisture:

Analyst: JUM

Date Prep: 12.28.17 15.00

Basis:

Wet Weight

Parameter	Cas Number	Result	RL		Units	<b>Analysis Date</b>	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0		mg/kg	12.29.17 02.00	U	1
Diesel Range Organics (DRO)	C10C28DRO	115	15.0		mg/kg	12.29.17 02.00		1
Oil Range Hydrocarbons (ORO)	PHCG2835	29.0	15.0		mg/kg	12.29.17 02.00		1
Total TPH	PHC635	144	15.0		mg/kg	12.29.17 02.00		1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane		111-85-3	73	%	70-135	12.29.17 02.00		
o-Terphenyl		84-15-1	70	%	70-135	12.29.17 02.00		





### Remediation and Environmental Xperts, LLC, Big Spring, TX

Steward

Sample Id: Spot 16

Matrix: Soil

Date Received:12.28.17 15.00

Lab Sample Id: 572250-007

Date Collected: 12.28.17 09.30

12.29.17 08.00

Sample Depth: Surface In

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech:

ALJ

% Moisture:

Analyst: ALJ

Date Prep:

Basis:

Wet Weight

Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
Benzene	71-43-2	< 0.00199	0.00199		mg/kg	12.29.17 17.57	U	1
Toluene	108-88-3	< 0.00199	0.00199		mg/kg	12.29.17 17.57	U	1
Ethylbenzene	100-41-4	< 0.00199	0.00199		mg/kg	12.29.17 17.57	U	1
m,p-Xylenes	179601-23-1	< 0.00398	0.00398		mg/kg	12.29.17 17.57	U	1
o-Xylene	95-47-6	< 0.00199	0.00199		mg/kg	12.29.17 17.57	U	1
Total Xylenes	1330-20-7	< 0.00199	0.00199		mg/kg	12.29.17 17.57	U	1
Total BTEX		< 0.00199	0.00199		mg/kg	12.29.17 17.57	U	1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene		460-00-4	88	%	80-120	12.29.17 17.57		
1,4-Difluorobenzene		540-36-3	94	%	80-120	12.29.17 17.57		





#### Remediation and Environmental Xperts, LLC, Big Spring, TX

Steward

Soil

Sample Id: Spot 16

Matrix:

Date Received:12.28.17 15.00

Lab Sample Id: 572250-008

Date Collected: 12.28.17 09.45

Sample Depth: 12 In

Analytical Method: Chloride by EPA 300

Prep Method: E300P % Moisture:

Tech: Analyst: OJS OJS

Date Prep:

Basis: 12.29.17 10.00

Wet Weight

Seq Number: 3037205

Parameter Cas Number Result RLUnits **Analysis Date** Flag Dil Chloride 16887-00-6 12.29.17 14.41 12.8 4.93 mg/kg 1

Analytical Method: TPH by SW8015 Mod

Prep Method: TX1005P

% Moisture:

Tech: Analyst: JUM JUM

Date Prep: 12.28.17 15.00 Basis:

Wet Weight

Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0		mg/kg	12.29.17 02.20	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0		mg/kg	12.29.17 02.20	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0		mg/kg	12.29.17 02.20	U	1
Total TPH	PHC635	<15.0	15.0		mg/kg	12.29.17 02.20	U	1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane		111-85-3	83	%	70-135	12.29.17 02.20		
o-Terphenyl		84-15-1	83	%	70-135	12.29.17 02.20		





### Remediation and Environmental Xperts, LLC, Big Spring, TX

Steward

Sample Id: Spot 16

Matrix: Soil Date Received:12.28.17 15.00

Lab Sample Id: 572250-008

Date Collected: 12.28.17 09.45

Sample Depth: 12 In

Analytical Method: BTEX by EPA 8021B

ALJ

Prep Method: SW5030B

Tech: ALJ

% Moisture:

Date Prep:

12.29.17 08.00

Basis:

Wet Weight

Seq Number: 3037330

Analyst:

Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
Benzene	71-43-2	< 0.00199	0.00199		mg/kg	12.29.17 22.02	U	1
Toluene	108-88-3	< 0.00199	0.00199		mg/kg	12.29.17 22.02	U	1
Ethylbenzene	100-41-4	< 0.00199	0.00199		mg/kg	12.29.17 22.02	U	1
m,p-Xylenes	179601-23-1	< 0.00398	0.00398		mg/kg	12.29.17 22.02	U	1
o-Xylene	95-47-6	< 0.00199	0.00199		mg/kg	12.29.17 22.02	U	1
Total Xylenes	1330-20-7	< 0.00199	0.00199		mg/kg	12.29.17 22.02	U	1
Total BTEX		< 0.00199	0.00199		mg/kg	12.29.17 22.02	U	1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene		460-00-4	84	%	80-120	12.29.17 22.02		
1,4-Difluorobenzene		540-36-3	93	%	80-120	12.29.17 22.02		





#### Remediation and Environmental Xperts, LLC, Big Spring, TX

Steward

Sample Id: Spot 17

Matrix: Soil

Date Received:12.28.17 15.00

Lab Sample Id: 572250-009

Date Collected: 12.28.17 10.00

Sample Depth: Surface In

Analytical Method: Chloride by EPA 300

Prep Method: E300P % Moisture:

Tech:
Analyst:

OJS OJS

Date Prep:

12.29.17 10.00 Basis:

Wet Weight

Seq Number: 3037205

-

 Parameter
 Cas Number
 Result
 RL
 Units
 Analysis Date
 Flag
 Dil

 Chloride
 16887-00-6
 133
 4.90
 mg/kg
 12.29.17 14.55
 1

Analytical Method: TPH by SW8015 Mod

Prep Method: TX1005P

Tech:

JUM

% Moisture:

Analyst: JUM

Date Prep: 12.28.17 15.00

Basis: Wet Weight

Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0		mg/kg	12.29.17 05.02	U	1
Diesel Range Organics (DRO)	C10C28DRO	78.2	15.0		mg/kg	12.29.17 05.02		1
Oil Range Hydrocarbons (ORO)	PHCG2835	24.6	15.0		mg/kg	12.29.17 05.02		1
Total TPH	PHC635	103	15.0		mg/kg	12.29.17 05.02		1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane		111-85-3	72	%	70-135	12.29.17 05.02		
o-Terphenyl		84-15-1	70	%	70-135	12.29.17 05.02		





### Remediation and Environmental Xperts, LLC, Big Spring, TX

Steward

Sample Id: Spot 17

Matrix: Soil

Date Received:12.28.17 15.00

Lab Sample Id: 572250-009

Date Collected: 12.28.17 10.00

Sample Depth: Surface In

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech:

ALJ

% Moisture:

Basis:

Analyst: ALJ

Date Prep:

12.29.17 08.00

Wet Weight

Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
Benzene	71-43-2	< 0.00198	0.00198		mg/kg	12.29.17 21.43	U	1
Toluene	108-88-3	< 0.00198	0.00198		mg/kg	12.29.17 21.43	U	1
Ethylbenzene	100-41-4	< 0.00198	0.00198		mg/kg	12.29.17 21.43	U	1
m,p-Xylenes	179601-23-1	< 0.00396	0.00396		mg/kg	12.29.17 21.43	U	1
o-Xylene	95-47-6	< 0.00198	0.00198		mg/kg	12.29.17 21.43	U	1
Total Xylenes	1330-20-7	< 0.00198	0.00198		mg/kg	12.29.17 21.43	U	1
Total BTEX		< 0.00198	0.00198		mg/kg	12.29.17 21.43	U	1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene		460-00-4	91	%	80-120	12.29.17 21.43		
1,4-Difluorobenzene		540-36-3	94	%	80-120	12.29.17 21.43		





### Remediation and Environmental Xperts, LLC, Big Spring, TX

Steward

Sample Id: Spot 17

Matrix:

Date Received:12.28.17 15.00

Lab Sample Id: 572250-010

Soil Date Collected: 12.28.17 10.15

Sample Depth: 12 In

Analytical Method: Chloride by EPA 300

Prep Method: E300P % Moisture:

Tech: Analyst: OJS

OJS

Date Prep: 12.29.17 10.00 Basis:

Wet Weight

Seq Number: 3037205

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	8.85	4.90	mg/kg	12.29.17 15.15		1

Analytical Method: TPH by SW8015 Mod

Prep Method: TX1005P

% Moisture:

Tech: Analyst: JUM JUM

Date Prep: 12.28.17 15.00 Basis:

Wet Weight

Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0		mg/kg	12.29.17 05.22	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0		mg/kg	12.29.17 05.22	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0		mg/kg	12.29.17 05.22	U	1
Total TPH	PHC635	<15.0	15.0		mg/kg	12.29.17 05.22	U	1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane		111-85-3	80	%	70-135	12.29.17 05.22		
o-Terphenyl		84-15-1	81	%	70-135	12.29.17 05.22		





### Remediation and Environmental Xperts, LLC, Big Spring, TX

Steward

Soil

Sample Id: Spot 17

Matrix:

Date Received:12.28.17 15.00

Lab Sample Id: 572250-010

Date Collected: 12.28.17 10.15

Sample Depth: 12 In

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

% Moisture:

Tech: Analyst: ALJ ALJ

Date Prep:

12.29.17 08.00

Basis:

Wet Weight

Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
Benzene	71-43-2	< 0.00202	0.00202		mg/kg	12.29.17 21.24	U	1
Toluene	108-88-3	< 0.00202	0.00202		mg/kg	12.29.17 21.24	U	1
Ethylbenzene	100-41-4	< 0.00202	0.00202		mg/kg	12.29.17 21.24	U	1
m,p-Xylenes	179601-23-1	< 0.00404	0.00404		mg/kg	12.29.17 21.24	U	1
o-Xylene	95-47-6	< 0.00202	0.00202		mg/kg	12.29.17 21.24	U	1
Total Xylenes	1330-20-7	< 0.00202	0.00202		mg/kg	12.29.17 21.24	U	1
Total BTEX		< 0.00202	0.00202		mg/kg	12.29.17 21.24	U	1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene		460-00-4	87	%	80-120	12.29.17 21.24		
1,4-Difluorobenzene		540-36-3	93	%	80-120	12.29.17 21.24		





#### Remediation and Environmental Xperts, LLC, Big Spring, TX

Steward

Sample Id: Spot 18

Matrix: Soil Date Received:12.28.17 15.00

Lab Sample Id: 572250-011

Date Collected: 12.28.17 10.30

Sample Depth: Surface In

Analytical Method: Chloride by EPA 300

Prep Method: E300P % Moisture:

Tech: Analyst: OJS

OJS

Date Prep: 12.29.17 10.00 Basis:

Wet Weight

Seq Number: 3037205

Parameter Cas Number Result RLUnits **Analysis Date** Flag Dil Chloride 16887-00-6 24.8 12.29.17 15.36 2990 mg/kg 5

Analytical Method: TPH by SW8015 Mod

Prep Method: TX1005P

Tech: Analyst: JUM

JUM

Date Prep: 12.28.17 15.00 % Moisture: Basis:

Wet Weight

Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	19.1	15.0		mg/kg	12.29.17 15.21		1
Diesel Range Organics (DRO)	C10C28DRO	808	15.0		mg/kg	12.29.17 15.21		1
Oil Range Hydrocarbons (ORO)	PHCG2835	99.2	15.0		mg/kg	12.29.17 15.21		1
Total TPH	PHC635	926	15.0		mg/kg	12.29.17 15.21		1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane		111-85-3	75	%	70-135	12.29.17 15.21		
o-Terphenyl		84-15-1	77	%	70-135	12.29.17 15.21		





### Remediation and Environmental Xperts, LLC, Big Spring, TX

Steward

Sample Id: Spot 18

Matrix: Soil

Date Received:12.28.17 15.00

Lab Sample Id: 572250-011

Date Collected: 12.28.17 10.30

Sample Depth: Surface In

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: Analyst: ALJ ALJ

Date Prep: 12.29.17 08.00

% Moisture: Basis:

Wet Weight

Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
Benzene	71-43-2	< 0.00200	0.00200		mg/kg	12.29.17 19.29	U	1
Toluene	108-88-3	0.00552	0.00200		mg/kg	12.29.17 19.29		1
Ethylbenzene	100-41-4	0.0189	0.00200		mg/kg	12.29.17 19.29		1
m,p-Xylenes	179601-23-1	0.0142	0.00401		mg/kg	12.29.17 19.29		1
o-Xylene	95-47-6	0.0107	0.00200		mg/kg	12.29.17 19.29		1
<b>Total Xylenes</b>	1330-20-7	0.0249	0.00200		mg/kg	12.29.17 19.29		1
Total BTEX		0.0493	0.00200		mg/kg	12.29.17 19.29		1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene		460-00-4	90	%	80-120	12.29.17 19.29		
1,4-Difluorobenzene		540-36-3	88	%	80-120	12.29.17 19.29		





### Remediation and Environmental Xperts, LLC, Big Spring, TX

Steward

Sample Id: Spot 18

Matrix: Soil Date Received:12.28.17 15.00

Lab Sample Id: 572250-012

Date Collected: 12.28.17 10.45

Sample Depth: 12 In

Analytical Method: Chloride by EPA 300

Prep Method: E300P % Moisture:

Tech: Analyst: OJS OJS

Date Prep:

12.29.17 10.00

Basis:

Wet Weight

Seq Number: 3037205

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	576	4.99	mg/kg	12.29.17 15.43		1

Analytical Method: TPH by SW8015 Mod

Prep Method: TX1005P

% Moisture:

Tech: Analyst: JUM JUM

Date Prep:

12.28.17 15.00

Basis:

Wet Weight

Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0		mg/kg	12.29.17 03.41	U	1
Diesel Range Organics (DRO)	C10C28DRO	86.2	15.0		mg/kg	12.29.17 03.41		1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0		mg/kg	12.29.17 03.41	U	1
Total TPH	PHC635	86.2	15.0		mg/kg	12.29.17 03.41		1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane		111-85-3	74	%	70-135	12.29.17 03.41		
o-Terphenyl		84-15-1	73	%	70-135	12.29.17 03.41		





### Remediation and Environmental Xperts, LLC, Big Spring, TX

Steward

Sample Id: Spot 18 Matrix: Soil Date Received:12.28.17 15.00

Lab Sample Id: 572250-012

Date Collected: 12.28.17 10.45

Sample Depth: 12 In

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech:

ALJ

% Moisture:

Analyst:

Seq Number: 3037330

ALJ

Date Prep:

12.29.17 08.00

Basis:

Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	< 0.00200	0.00200	mg/kg	12.29.17 19.49	U	1
Toluene	108-88-3	< 0.00200	0.00200	mg/kg	12.29.17 19.49	U	1
Ethylbenzene	100-41-4	0.00772	0.00200	mg/kg	12.29.17 19.49		1
m,p-Xylenes	179601-23-1	0.00895	0.00399	mg/kg	12.29.17 19.49		1
o-Xylene	95-47-6	0.00479	0.00200	mg/kg	12.29.17 19.49		1
Total Xylenes	1330-20-7	0.0137	0.00200	mg/kg	12.29.17 19.49		1
Total BTEX		0.0215	0.00200	mg/kg	12.29.17 19.49		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	94	%	80-120	12.29.17 19.49	
1,4-Difluorobenzene	540-36-3	94	%	80-120	12.29.17 19.49	





#### Remediation and Environmental Xperts, LLC, Big Spring, TX

Steward

Soil

Sample Id: Spot 19

Date Received:12.28.17 15.00

Lab Sample Id: 572250-013

Date Collected: 12.28.17 11.00

Sample Depth: surface In

Analytical Method: Chloride by EPA 300

Prep Method: E300P % Moisture:

Tech: Analyst: OJS

OJS

Date Prep: 12.29.17 10.00 Basis:

Wet Weight

Seq Number: 3037205

Parameter Cas Number Result RLUnits **Analysis Date** Flag Dil Chloride 16887-00-6 12.29.17 15.50 578 4.91 mg/kg 1

Matrix:

Analytical Method: TPH by SW8015 Mod

Prep Method: TX1005P

% Moisture:

Tech:

JUM

JUM Analyst:

Date Prep: 12.28.17 15.00 Basis:

Wet Weight

Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0		mg/kg	12.29.17 05.42	U	1
Diesel Range Organics (DRO)	C10C28DRO	104	15.0		mg/kg	12.29.17 05.42		1
Oil Range Hydrocarbons (ORO)	PHCG2835	16.5	15.0		mg/kg	12.29.17 05.42		1
Total TPH	PHC635	121	15.0		mg/kg	12.29.17 05.42		1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane		111-85-3	71	%	70-135	12.29.17 05.42		
o-Terphenyl		84-15-1	71	%	70-135	12.29.17 05.42		





### Remediation and Environmental Xperts, LLC, Big Spring, TX

Steward

Soil

Sample Id: Spot 19

Matrix:

Date Received:12.28.17 15.00

Lab Sample Id: 572250-013

Date Collected: 12.28.17 11.00

Sample Depth: surface In

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech:

ALJ

% Moisture:

Basis:

Analyst: ALJ

Date Prep:

12.29.17 08.00

Wet Weight

Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
Benzene	71-43-2	< 0.00198	0.00198		mg/kg	12.29.17 20.08	U	1
Toluene	108-88-3	< 0.00198	0.00198		mg/kg	12.29.17 20.08	U	1
Ethylbenzene	100-41-4	< 0.00198	0.00198		mg/kg	12.29.17 20.08	U	1
m,p-Xylenes	179601-23-1	< 0.00397	0.00397		mg/kg	12.29.17 20.08	U	1
o-Xylene	95-47-6	< 0.00198	0.00198		mg/kg	12.29.17 20.08	U	1
Total Xylenes	1330-20-7	< 0.00198	0.00198		mg/kg	12.29.17 20.08	U	1
Total BTEX		< 0.00198	0.00198		mg/kg	12.29.17 20.08	U	1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene		540-36-3	94	%	80-120	12.29.17 20.08		
4-Bromofluorobenzene		460-00-4	94	%	80-120	12.29.17 20.08		





#### Remediation and Environmental Xperts, LLC, Big Spring, TX

Steward

Sample Id: Spot 19 Matrix:

Date Received:12.28.17 15.00

Lab Sample Id: 572250-014

Soil Date Collected: 12.28.17 11.15

Sample Depth: 12 In

Analytical Method: Chloride by EPA 300

Prep Method: E300P % Moisture:

Tech:

OJS

Wet Weight

Analyst: Seq Number: 3037205

OJS

Date Prep:

12.29.17 10.00

Basis:

Parameter Chloride

Cas Number

16887-00-6

Result RL16.0 4.91

Units mg/kg

**Analysis Date** 12.29.17 15.57 Flag Dil 1

Analytical Method: TPH by SW8015 Mod

Prep Method: TX1005P

% Moisture:

Tech: Analyst: JUM JUM

Date Prep:

12.28.17 15.00

Basis:

Wet Weight

Seq Number: 3037191

Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0		mg/kg	12.29.17 04.02	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0		mg/kg	12.29.17 04.02	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0		mg/kg	12.29.17 04.02	U	1
Total TPH	PHC635	<15.0	15.0		mg/kg	12.29.17 04.02	U	1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	

1-Chlorooctane 111-85-3 70-135 12.29.17 04.02 73 o-Terphenyl 84-15-1 73 70-135 12.29.17 04.02





## Remediation and Environmental Xperts, LLC, Big Spring, TX

Steward

Soil

12.29.17 08.00

Sample Id: Spot 19

Matrix:

Date Received:12.28.17 15.00

Lab Sample Id: 572250-014

Date Collected: 12.28.17 11.15

Sample Depth: 12 In

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech:

ALJ

% Moisture:

Analyst: ALJ

Date Prep:

Basis:

Wet Weight

Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
Benzene	71-43-2	< 0.00201	0.00201		mg/kg	12.29.17 20.27	U	1
Toluene	108-88-3	< 0.00201	0.00201		mg/kg	12.29.17 20.27	U	1
Ethylbenzene	100-41-4	< 0.00201	0.00201		mg/kg	12.29.17 20.27	U	1
m,p-Xylenes	179601-23-1	< 0.00402	0.00402		mg/kg	12.29.17 20.27	U	1
o-Xylene	95-47-6	< 0.00201	0.00201		mg/kg	12.29.17 20.27	U	1
Total Xylenes	1330-20-7	< 0.00201	0.00201		mg/kg	12.29.17 20.27	U	1
Total BTEX		< 0.00201	0.00201		mg/kg	12.29.17 20.27	U	1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene		540-36-3	89	%	80-120	12.29.17 20.27		
4-Bromofluorobenzene		460-00-4	86	%	80-120	12.29.17 20.27		





## Remediation and Environmental Xperts, LLC, Big Spring, TX

Steward

Sample Id: Spot 20

Matrix:

Soil

Date Received:12.28.17 15.00

Lab Sample Id: 572250-015

Date Collected: 12.28.17 11.30

Sample Depth: Surface In

Analytical Method: Chloride by EPA 300

Prep Method: E300P % Moisture:

Tech: Analyst: OJS OJS

Date Prep:

12.29.17 10.00

Basis:

Wet Weight

Seq Number: 3037205

----

Parameter	Cas Number	Result	RL	Units	<b>Analysis Date</b>	Flag	Dil
Chloride	16887-00-6	186	4.95	mg/kg	12.29.17 16.04		1

Analytical Method: TPH by SW8015 Mod

Prep Method: TX1005P

JUM

% Moisture:

Analyst: JUM

Tech:

Date Prep: 12.28.17 15.00

Basis:

Wet Weight

Parameter	Cas Number	Result	RL		Units	<b>Analysis Date</b>	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0		mg/kg	12.29.17 04.22	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0		mg/kg	12.29.17 04.22	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0		mg/kg	12.29.17 04.22	U	1
Total TPH	PHC635	<15.0	15.0		mg/kg	12.29.17 04.22	U	1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane		111-85-3	72	%	70-135	12.29.17 04.22		
o-Terphenyl		84-15-1	70	%	70-135	12.29.17 04.22		





## Remediation and Environmental Xperts, LLC, Big Spring, TX

Steward

Sample Id: Spot 20

Matrix: Soil

Date Received:12.28.17 15.00

Lab Sample Id: 572250-015

Date Collected: 12.28.17 11.30

Sample Depth: Surface In

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech:

ALJ

% Moisture:

Analyst: ALJ

Date Prep:

12.29.17 08.00

Basis: Wet Weight

Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
Benzene	71-43-2	< 0.00202	0.00202		mg/kg	12.29.17 20.46	U	1
Toluene	108-88-3	< 0.00202	0.00202		mg/kg	12.29.17 20.46	U	1
Ethylbenzene	100-41-4	< 0.00202	0.00202		mg/kg	12.29.17 20.46	U	1
m,p-Xylenes	179601-23-1	< 0.00403	0.00403		mg/kg	12.29.17 20.46	U	1
o-Xylene	95-47-6	< 0.00202	0.00202		mg/kg	12.29.17 20.46	U	1
Total Xylenes	1330-20-7	< 0.00202	0.00202		mg/kg	12.29.17 20.46	U	1
Total BTEX		< 0.00202	0.00202		mg/kg	12.29.17 20.46	U	1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene		460-00-4	93	%	80-120	12.29.17 20.46		
1,4-Difluorobenzene		540-36-3	93	%	80-120	12.29.17 20.46		





## Remediation and Environmental Xperts, LLC, Big Spring, TX

Steward

Soil

Sample Id: Spot 20

Matrix:

Date Received:12.28.17 15.00

Lab Sample Id: 572250-016

Date Collected: 12.28.17 11.45

Sample Depth: 12 In

Analytical Method: Chloride by EPA 300

Prep Method: E300P % Moisture:

Tech: Analyst: OJS OJS

Date Prep:

12.29.17 10.00

Basis:

Wet Weight

Seq Number: 3037205

Parameter Cas Number Result RLUnits **Analysis Date** Flag Dil Chloride 16887-00-6 12.29.17 16.11 U <4.97 4.97 mg/kg 1

Analytical Method: TPH by SW8015 Mod

Prep Method: TX1005P

% Moisture:

Tech: Analyst: JUM JUM

Date Prep: 12.28.17 15.00 Basis:

Wet Weight

Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0		mg/kg	12.29.17 04.42	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0		mg/kg	12.29.17 04.42	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0		mg/kg	12.29.17 04.42	U	1
Total TPH	PHC635	<15.0	15.0		mg/kg	12.29.17 04.42	U	1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane		111-85-3	76	%	70-135	12.29.17 04.42		
o-Terphenyl		84-15-1	75	%	70-135	12.29.17 04.42		





## Remediation and Environmental Xperts, LLC, Big Spring, TX

Steward

Sample Id: Spot 20

Matrix: Soil Date Received:12.28.17 15.00

Lab Sample Id: 572250-016

Date Collected: 12.28.17 11.45

Sample Depth: 12 In

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

% Moisture:

Tech: ALJ

ALJ Analyst:

Date Prep: 12.29.17 08.00 Basis: Wet Weight

Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
Benzene	71-43-2	< 0.00199	0.00199		mg/kg	12.29.17 21.05	U	1
Toluene	108-88-3	< 0.00199	0.00199		mg/kg	12.29.17 21.05	U	1
Ethylbenzene	100-41-4	< 0.00199	0.00199		mg/kg	12.29.17 21.05	U	1
m,p-Xylenes	179601-23-1	< 0.00398	0.00398		mg/kg	12.29.17 21.05	U	1
o-Xylene	95-47-6	< 0.00199	0.00199		mg/kg	12.29.17 21.05	U	1
Total Xylenes	1330-20-7	< 0.00199	0.00199		mg/kg	12.29.17 21.05	U	1
Total BTEX		< 0.00199	0.00199		mg/kg	12.29.17 21.05	U	1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene		460-00-4	89	%	80-120	12.29.17 21.05		
1,4-Difluorobenzene		540-36-3	94	%	80-120	12.29.17 21.05		





# Flagging Criteria



- X In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to affect the recovery of the spike concentration. This condition could also affect the relative percent difference in the MS/MSD.
- **B** A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.
- **D** The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.
- E The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.
- F RPD exceeded lab control limits.
- J The target analyte was positively identified below the quantitation limit and above the detection limit.
- U Analyte was not detected.
- L The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.
- **H** The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.
- **K** Sample analyzed outside of recommended hold time.
- **JN** A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.
- \*\* Surrogate recovered outside laboratory control limit.
- BRL Below Reporting Limit.
- **RL** Reporting Limit

PQL Practical Quantitation Limit MQL Method Quantitation Limit LOQ Limit of Quantitation

**DL** Method Detection Limit

NC Non-Calculable

- + NELAC certification not offered for this compound.
- \* (Next to analyte name or method description) = Outside XENCO's scope of NELAC accreditation

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(602) 437-0330	
	(281) 240-4200 (214) 902 0300 (210) 509-3334 (432) 563-1800

Flag

Flag



Seq Number:

**Parameter** 

Seq Number:

#### **QC Summary** 572250

## Remediation and Environmental Xperts, LLC

Steward

LCSD

LCSD

Limits

Analytical Method: Chloride by EPA 300

3037205

MR

MB

Spike

Matrix: Solid

Spike

Prep Method: Date Prep:

12.29.17

LCS Sample Id: 7636757-1-BKS MB Sample Id: 7636757-1-BLK LCS

LCSD Sample Id: 7636757-1-BSD %RPD RPD Limit Units Analysis

E300P

Result Amount Result %Rec Date Result %Rec

Chloride 12.29.17 12:56 < 5.00 250 248 99 241 96 90-110 3 20 mg/kg

LCS

Analytical Method: Chloride by EPA 300

3037205

Matrix: Soil

E300P Prep Method:

Date Prep: 12.29.17

Parent Sample Id: 572154-003 MS Sample Id: 572154-003 S MSD Sample Id: 572154-003 SD

Spike MS MS %RPD RPD Limit Units Parent **MSD MSD** Limits Analysis **Parameter** Result Date Result Amount %Rec Result %Rec

Chloride 179 248 425 99 440 105 90-110 3 20 mg/kg 12.29.17 13:17

Analytical Method: Chloride by EPA 300

Seq Number:

Prep Method:

E300P

3037205 Matrix: Soil Date Prep:

12.29.17

MS Sample Id: 572250-009 S MSD Sample Id: 572250-009 SD Parent Sample Id: 572250-009

MS MS %RPD RPD Limit Units Parent Spike **MSD MSD** Limits Analysis Flag **Parameter** Result Date Result %Rec Amount Result %Rec 12.29.17 15:02 Chloride 133 245 388 104 375 99 90-110 3 20 mg/kg

Analytical Method: TPH by SW8015 Mod

Prep Method:

%RPD RPD Limit Units

Limits

TX1005P

Analysis

Flag

Seq Number: 3037191 Matrix: Solid 12.28.17 Date Prep: LCSD Sample Id: 7636779-1-BSD MB Sample Id: 7636779-1-BLK

LCS

LCS Sample Id: 7636779-1-BKS

LCSD

LCSD

**Parameter** Result %Rec Date Result Amount Result %Rec 12.28.17 22:15 Gasoline Range Hydrocarbons (GRO) 840 84 918 92 70-135 9 <15.0 1000 35 mg/kg 12.28.17 22:15 838 84 917 70-135 9 35 Diesel Range Organics (DRO) 1000 92 <15.0 mg/kg

LCS

MB MB LCS LCSD LCS LCSD Limits Units Analysis **Surrogate** %Rec Flag %Rec Flag %Rec Flag Date 12.28.17 22:15 1-Chlorooctane 92 89 96 70-135 % 91 100 12.28.17 22:15 o-Terphenyl 91 70-135 %

MS/MSD Percent Recovery Relative Percent Difference LCS/LCSD Recovery

[D] = 100\*(C-A) / BRPD = 200\* | (C-E) / (C+E) |[D] = 100 \* (C) / [B]

LCS = Laboratory Control Sample A = Parent Result

= MS/LCS Result E = MSD/LCSD Result MS = Matrix Spike B = Spike Added D = MSD/LCSD % Rec

TX1005P

SW5030B

Flag

Prep Method:

Prep Method:



#### **QC Summary** 572250

## Remediation and Environmental Xperts, LLC

Steward

Analytical Method: TPH by SW8015 Mod

Seq Number: 3037191 Matrix: Soil Date Prep: 12.28.17

MS Sample Id: 572154-003 S MSD Sample Id: 572154-003 SD 572154-003 Parent Sample Id:

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Lim	it Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<15.0	1000	787	79	881	88	70-135	11	35	mg/kg	12.28.17 23:56	
Diesel Range Organics (DRO)	<15.0	1000	777	78	877	88	70-135	12	35	mg/kg	12.28.17 23:56	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	85		105		70-135	%	12.28.17 23:56
o-Terphenyl	83		92		70-135	%	12.28.17 23:56

Analytical Method: BTEX by EPA 8021B

Seq Number: 3037330 Matrix: Solid Date Prep: 12.29.17 LCS Sample Id: 7636889-1-BKS LCSD Sample Id: 7636889-1-BSD 7636889-1-BLK MB Sample Id:

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limi	t Units	Analysis Date
Benzene	< 0.00200	0.100	0.0885	89	0.0859	86	70-130	3	35	mg/kg	12.29.17 12:46
Toluene	< 0.00200	0.100	0.0830	83	0.0809	81	70-130	3	35	mg/kg	12.29.17 12:46
Ethylbenzene	< 0.00200	0.100	0.0932	93	0.0898	90	71-129	4	35	mg/kg	12.29.17 12:46
m,p-Xylenes	< 0.00401	0.200	0.184	92	0.177	89	70-135	4	35	mg/kg	12.29.17 12:46
o-Xylene	< 0.00200	0.100	0.0857	86	0.0828	83	71-133	3	35	mg/kg	12.29.17 12:46

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	93		95		99		80-120	%	12.29.17 12:46
4-Bromofluorobenzene	91		98		97		80-120	%	12.29.17 12:46

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B Seq Number: 3037330 Matrix: Soil Date Prep: 12.29.17 MS Sample Id: 572250-003 S MSD Sample Id: 572250-003 SD Parent Sample Id: 572250-003

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limi	it Units	Analysis Date	Flag
Benzene	< 0.00199	0.0996	0.0669	67	0.0538	54	70-130	22	35	mg/kg	12.29.17 13:23	X
Toluene	< 0.00199	0.0996	0.0468	47	0.0365	37	70-130	25	35	mg/kg	12.29.17 13:23	X
Ethylbenzene	< 0.00199	0.0996	0.0365	37	0.0276	28	71-129	28	35	mg/kg	12.29.17 13:23	X
m,p-Xylenes	< 0.00398	0.199	0.0696	35	0.0522	26	70-135	29	35	mg/kg	12.29.17 13:23	X
o-Xylene	< 0.00199	0.0996	0.0348	35	0.0263	26	71-133	28	35	mg/kg	12.29.17 13:23	X

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	103		100		80-120	%	12.29.17 13:23
4-Bromofluorobenzene	102		102		80-120	%	12.29.17 13:23

MS/MSD Percent Recovery Relative Percent Difference LCS/LCSD Recovery

[D] = 100\*(C-A) / B $RPD = 200* \mid (C-E) \mid (C+E) \mid$ [D] = 100 \* (C) / [B]

LCS = Laboratory Control Sample

A = Parent Result C = MS/LCS Result

E = MSD/LCSD Result

 $MS = Matrix \; Spike$ B = Spike Added D = MSD/LCSD % Rec

Stafford, Texas (281-240-4200) Setting the Standard since 1990

San Antonio, Texas (210-509-3334)

Phoenix, Arizona (480-355-0900)

Client / Reporting Information		Project Information		
Company Name / Branch: REX, LLC	Pro	Project NamelNumber: Steward		
99 99	Pro	Project Location:		
Email: admin@oilandsaltremediation.com	105		5	
Annie Balandselfenedistion com		\$	015	
Project Contact: Rex Rainey and/or Roylyn Welch		PO Number:	8	
Samplors's Name			3	
	00	Collection Number	5 h	
No. Field ID / Point of Collection	Sample Depth	Time Matrix bottles T	NONE Chloride	
1 5007 18	-	8:06		
2 Spot 18	-		7 7 7	
	è	-	4 4 4	
4 Spot 14	1		1 1 1	
5 Spot 15		000 P N 141	4 4 4	
Spot		71:12 44 41	1 1 1	
7 Spot 16	6	12/28 9:36	4 4	
8 Spot 16		12/18 4:45	~ ~ ~	
9 Spot 17	Surface 13	12/24 10:00	0 1	
10 Spot 17	12" 12	12/28 16:15	~ ~ ~ ~ ~ ~	
Turnaround Time ( Business days)		Data Deliverable Information		Notes:
Same Day TAT	5 Day TAT	Level II Std QC	Level IV (Full Data Pkg /raw data)	Temp: 54
Next Day EMERGENCY	7 Day TAT	Level III Std QC+ Forms	TRRP Level IV	CF:(0-6: -0.2°C)
2 Day EMERGENCY	Contract TAT	Level 3 (CLP Forms)	UST/RG-411	(6-23: +0.2°C)
3 Day EMERGENCY		TRRP Checklist		Corrected Lemp.
TAT Starts Day received by Lab, if received by 5:00 pm	if received by 5:00 pm	()		FED-Ex. ura: Iracking #
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Relinquished by:	Date Time:	Refinquished by:  Date Time: Received By: Custody Seal # Preserved where applicable On its Cooler Temp. Themso. Con. Factor	Custody Seal # Preserved	Preserved where applicable On let

Setting the Standard since 1990 Stafford, Texas (281-240-4200)

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Projec		eward				
Projec	Ke	7				
Involc	00					
PONU	1 2 2 2	1				
Colle	ction	Number	of preserved bottles			
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+	Time	bolles H	Ma Na Ma	, C		
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-	16:11 4			1 1 1		
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	Level II	ISId QC+ Forms	TRRP Level IV		2	(CF:(U-6: -U.2 C)
Contract TAT	Level 3	(CLP Forms)	UST/RG-411		2	Corrected Temp:
	TRRP C	hecklist				
TAT Starts Day received by Lab, if received by 5:00 pm	1/				FED-EX/UP	5: Tracking #
Date Time:	Received By:	TIME SAMPLES CHANGE POSS	Relinguished By:	DELIVERY		ocaluad Bu
		MARION LONG	Relinquished By:	Dato 1		Received By: 2
Date Time;	Received By:	2.28		Date 1		Received By:
Date Time:	Received By:	Relinquished by:  Date Time: Received By: Custody Seal # Preserved where applicable Onlice Cooler Temp. Thermo. Corr. Factor	Custody Seal #	Preserved v	here applicable	Onlice
	Project Projec	Midland, Texas (432-704-6251)  Midland, Texas (432-704-6251)  Project Name/Number: Stew bery Invoice To:    Project Location: Heisen bery	Project Information  ### Collection  Collection  Date Time:  Project Information  Project Information  #### Project Information  #### Project Information  ###################################	Project Information Project Information Project Information Project Number: \$\frac{1}{2}\text{Auxard}\$ Project	Project Information   Project Information	Midland, Toxas (432-704-9261)    Project Information



# XENCO Laboratories Prelogin/Nonconformance Report- Sample Log-In



Client: Remediation and Environmental Xperts,

Date/ Time Received: 12/28/2017 03:00:00 PM

Acceptable Temperature Range: 0 - 6 degC
Air and Metal samples Acceptable Range: Ambient

Work Order #: 572250

Temperature Measuring device used: R8

	Sample Receipt Checklist	Comments
#1 *Temperature of cooler(s)?		5.2
#2 *Shipping container in good condition	?	Yes
#3 *Samples received on ice?		Yes
#4 *Custody Seals intact on shipping cor	ntainer/ cooler?	N/A
#5 Custody Seals intact on sample bottle	es?	N/A
#6*Custody Seals Signed and dated?		N/A
#7 *Chain of Custody present?		Yes
#8 Any missing/extra samples?		No
#9 Chain of Custody signed when relinqu	uished/ received?	Yes
#10 Chain of Custody agrees with sampl	e labels/matrix?	Yes
#11 Container label(s) legible and intact?	?	Yes
#12 Samples in proper container/ bottle?	•	Yes
#13 Samples properly preserved?		Yes
#14 Sample container(s) intact?		Yes
#15 Sufficient sample amount for indicate	ed test(s)?	Yes
#16 All samples received within hold time	e?	Yes
#17 Subcontract of sample(s)?		No
#18 Water VOC samples have zero head	dspace?	N/A
* Must be completed for after-hours de		n the refrigerator
Analyst:	PH Device/Lot#:	
Checklist completed by:	Skaunee SynAto	Date: 12/28/2017

Shawnee Smith

Checklist reviewed by: Holly Taylor
Holly Taylor

Date: 12/29/2017

District I
1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720 District II

811 S. First St., Artesia, NM 88210 Phone:(575) 748-1283 Fax:(575) 748-9720

District III 1000 Rio Brazos Rd., Aztec, NM 87410 Phone:(505) 334-6178 Fax:(505) 334-6170

1220 S. St Francis Dr., Santa Fe, NM 87505 Phone:(505) 476-3470 Fax:(505) 476-3462

**State of New Mexico Energy, Minerals and Natural Resources Oil Conservation Division** 1220 S. St Francis Dr. **Santa Fe, NM 87505** 

CONDITIONS

Action 266674

## **CONDITIONS**

Operator:	OGRID:
STEWARD ENERGY II, LLC	371682
2600 Dallas Parkway	Action Number:
Frisco, TX 75034	266674
	Action Type:
	[C-141] Release Corrective Action (C-141)

#### CONDITIONS

Created By		Condition Date
nvelez	None	1/19/2024