

August 22, 2016

Mr. Jamie Keyes New Mexico Oil Conservation Division 1625 N. French Drive Hobbs, Mexico 88240



P. O. Box 12177 • Odessa TX 79768

Submitted electronically via email

RE: Remediation Closure Report - NMOCD Case No. 1R-3921 EOG Endurance 25 FED #2 SWD Produced Water Release T26S R33E Section 25 Unit Letter E, Lea County, New Mexico

Dear Mr. Jones:

As agent for Energi Insurance Inc. (Energi), Trident Environmental submits this *Remediation Closure Report* and final C-141 form (Attachment A) to describe and document completion of corrective actions at the above-referenced facility. All work was completed in accordance with the NMOCD- and BLM-approved *Corrective Action Plan* (CAP). Copies of the CAP, *Investigation Summary*, initial C-141 forms, and NMOCD/BLM email correspondence are also included in Attachment A.

#### **Background and Chronology of Events**

- An accidental produced water release occurred at the Endurance 25 FED #2 SWD facility (API No. 30-025-41067) on a lease operated by EOG Resources, Inc (EOG) on October 4, 2015. The site is located approximately 21 miles southwest of Jal, New Mexico as depicted in Figure 1 (Location Map). According to the initial form C-141, the estimated volume of the spill was 100 barrels (bbl) with about 40 bbl recovered (60 bbl lost) by a vacuum truck during the late hours on October 4, 2015. The release originated from the load line and flowed approximately 150 ft west across the well pad and then north-northwesterly approximately 300 ft into undeveloped pasture land, as depicted in Figure 2 (Investigation Map).
- EOG retained Larson & Associates Inc. (LAI) to conduct an investigation to delineate the soil impact at the site. On October 16, October 19, and November 2, LAI used a direct push rig to collect soil samples for delineation at nine sample points located in pooled areas along the axis of the release path between the load line (DP-1) and its final resting point (DP-9) as depicted in Figure 2. On November 21, 2015, LAI performed additional investigation with an air rotary rig and jam tube sampler to collect soil samples for vertical delineation at DP-8.
- On behalf of EOG, LAI submitted an *Investigation Summary* to the OCD on November 21, 2015. The report detailed the investigations summarized above and included a remediation plan that was conditionally-approved by OCD on November 23, 2015 (Appendix B of Attachment A).

- Subsequently, under the management directives of Energi Insurance Inc. representing the
  responsible party (Steven Kent Trucking), Trident Environmental submitted an updated
  Corrective Action Plan (Attachment A) to the OCD and BLM on May 13, 2016, which was
  approved by both agencies on May 16, 2016, and May 20, 2016, respectively.
- After proposal and contract matters were completed, corrective action activities commenced on June 6, 2016, as further described below.

#### **Corrective Action Activities**

SDR Enterprises, LLC (SDR) was on site with a trackhoe and front-end loader to begin excavation work on June 6, 2016. The extent of excavation is depicted in Figure 3. Excavated soil was stockpiled along the north end of the SWD well site caliche pad. A 6-point composited soil sample was collected at each stockpile at a rate of approximately 1 sample per 100-200 yd<sup>3</sup>, field tested for chloride content, and submitted to Permian Basin Environmental Lab (PBEL), an accredited laboratory in Midland TX, for laboratory analysis and confirmation of chloride concentration.

Field screening was accomplished by a combination of chloride titration, Hach Quantabs (dip strips), and use of a Hanna Model 98130 conductivity meter using standard accepted procedures, and followed by accredited laboratory analysis for confirmation. The field titration method, as described in Attachment B, was conducted in a manner consistent with the standard titration method (SM 4500Cl-B) performed at accredited laboratories. Laboratory analyses indicated that the use of a conductivity meter performed best for field guidance of excavation activities. The titration method worked well also with a mean (average) of 2,243 mg/kg as compared to a mean of 2,407 mg/kg for lab analyzed samples. In all cases, a 1:3 ratio of soil (grams) to water (milliliters) was used to prepare a 10 ml field screen sample for measurement. Table 1 summarizes the chloride field testing and laboratory analytical results for excavation bottom samples. Table 2 summarizes the chloride field testing and laboratory analytical results for the excavated stockpiles and imported top soil. Laboratory analytical reports for all sampling results are included in Attachment C.

Based on the criteria established by the OCD (*Guidelines for Remediation of Leaks, Spills and Releases, August 13, 1993*), and a score of zero, the NMOCD recommended remediation action levels (RRALs) for chlorides are 1,000 mg/kg (protective of groundwater), as approved by OCD and BLM in the CAP.

A total area of approximately 32,000 ft<sup>2</sup> was excavated at the site. The boundary of excavation at the site was determined by field screening of chloride content and the distinct outline of stressed vegetation. Excavation proceeded to a maximum depth of 8 feet, except in an area south of DP-7 and west of DP-6 where field screening of chlorides with laboratory analysis confirmation resulted in a concentration less than the established RRAL of less than 1,000 mg/kg at 4-ft depth. An area northwest of DP-9 that exhibited stressed vegetation was also excavated to a depth of 2 feet where impact tested negligible.

During the excavation activities the soil lithology was observed to consist primarily of a loamy fine sand in the upper zones, however silt and clay content increased with depth to approximately 8-10 feet below ground surface (ft bgs) where a more indurated caliche layer was present. Below 8-10 ft bgs chloride content rapidly decreased due to the lower permeability of the silt, clay and caliche zones.

Approximately 1,000 yd<sup>3</sup> (980 tons) of excavated soils were transported to the Lea Land LLC landfill (permit #NM-1-35). The completed form C-138 and non-hazardous waste manifests are included in Attachment D. Excavated soils below 1,000 mg/kg were returned to the excavation.

Backfilling of the excavated areas around previously established Direct Push sample locations DP-1, DP-5, DP-6, DP-7, DP-8, and DP-9, continued up to a level of 4 ft bgs followed by placement of a 20-mil reinforced polyliner. Backfilling continued to surface with the final 1-2 ft capped with clean top soil brought in from Lea Land Landfill.

On August 2 and 3, 2016, eight (8) pounds (lb) of BLM Mix #2 and 2 lb of BLM Mix #1 grass seed was broadcast and raked over the whole area that had been excavated and backfilled. Photographic documentation of the above-described corrective action activities are included in Attachment E.

#### **Summary and Closure request**

The produced water release was remediated in accordance with the OCD and BLM approved CAP as detailed above and summarized below. An approximately 32,000 ft<sup>2</sup> area was excavated where the release occurred. Chloride impacted soil exceeding the 1,000 mg/kg RRAL was transported to the OCD-permitted Lea Land landfill. Excavated areas were backfilled with clean soil, 20-mil reinforced polyliners installed at 4 ft bgs, and then backfilled with clean soil and capped with top soil. The entire area was then seeded with a BLM-approved native seed mix to re-establish vegetation cover. Based on the results of the investigations and corrective actions taken, Energi requests closure be granted for this release (1R-3921). The final form C-141 is enclosed in Attachment A for your approval.

If you have any questions please contact me at 432-638-8740 (gil@trident-environmental.com), or Dan Bergsten at 978-531-1822, ext. 870 (dbergsten@energi.com).

Sincerely,

Gilbert J. Van Deventer, PG

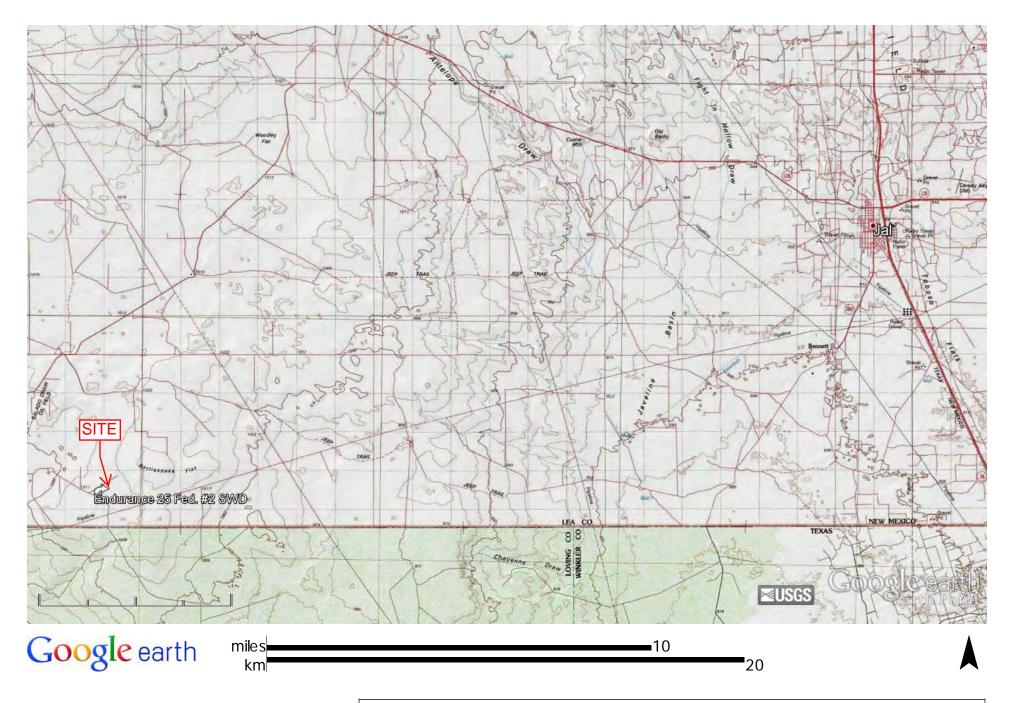
Attachments: Figures, tables, Final C-141, laboratory reports, and other documentation

cc: Shelly Tucker (BLM-Carlsbad NM)
Dan Bergsten (Energi-Carlsbad CA)
Zane Kurtz (EOG-Midland TX)

Gilbert O Van Severter

### **FIGURES**

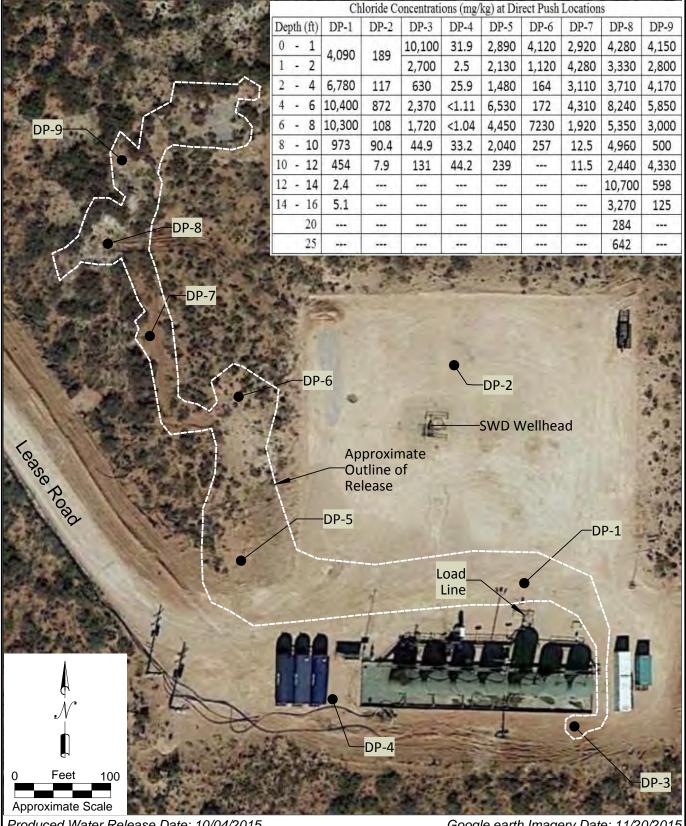
- Figure 1: Site Location Map
- Figure 2: Site Investigation Map
- Figure 3: Remediation Map





EOG RESOURCES, INC. Endurance 25 Federal #2 SWD T26S - R33E - Section 25 - Unit E Lea County, New Mexico

FIGURE 1 Location Map



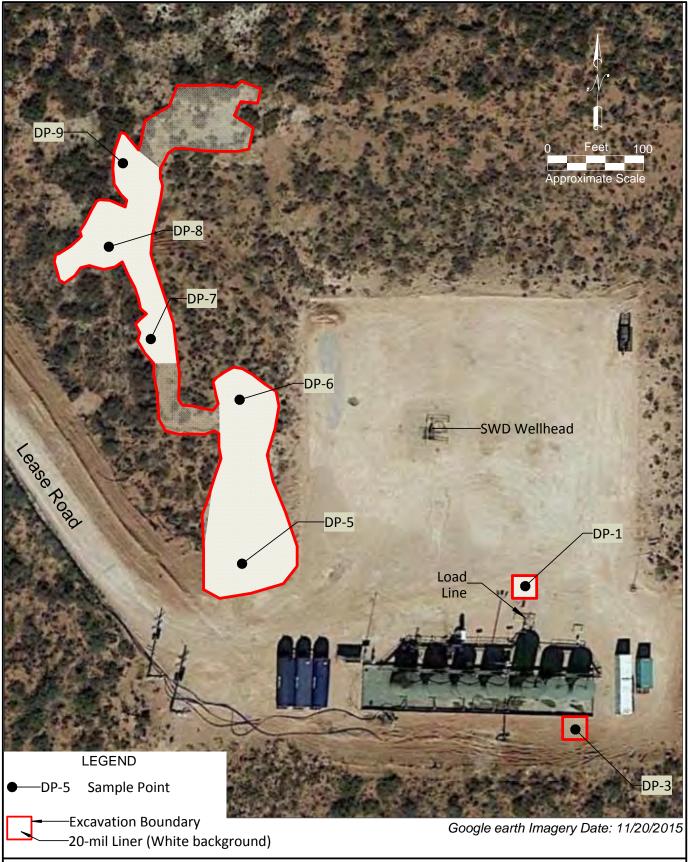
Produced Water Release Date: 10/04/2015

Google earth Imagery Date: 11/20/2015



EOG RESOURCES, INC. Endurance 25 Federal #2 SWD T26S - R33E - Section 25 - Unit E Lea County, New Mexico

FIGURE 2 **Investigation Map** 





EOG RESOURCES, INC. Endurance 25 Federal #2 SWD T26S - R33E - Section 25 - Unit E Lea County, New Mexico

FIGURE 3

Remediation Map

# **TABLES**

- Table 1: Chloride Concentrations at Excavation Points
- Table 2: Chloride Concentrations of Excavated Stockpiles and Top Soil

Table 1
Chloride Concentrations at Excavation Points

(Sample IDs referenced to previously established Direct Push sample locations)

Sample ID	Date	Depth	Lab Chloride	Field Chloride	SC
Sample 10	Date	(ft)	(mg/kg)	(mg/kg)	(μS)
		4	2,560	2,430	2.69
		5	3,260	2,800	3.20
DP-1	06/22/16	6	3,740	3,100	3.70
DP-1	00/22/10	7	6,700	5,400	5.73
		8	5,860	4,900	5.19
		10	206	60	0.16
DP-3	06/14/16	4	2,140	2,730	3.12
DF-5	00/14/10	8	2,590	2,280	2.58
50' S. DP-5	06/10/16	8	1,910	2,250	2.73
DP-5	06/07/16	4	4,350	4,560	4.71
DF-3	00/07/10	8	5,840	4,260	4.40
30' N. DP-5	06/09/16	4	3,610	3,600	3.77
80' NE DP-5	06/10/16	8	2,560	2,850	3.26
50' S. DP-6	06/09/16	4	5,200	5,100	5.49
30 3. DF-0		8	1,830	3,390	3.43
25' S. DP-6	06/09/16	4	1,290	1,980	2.15
25 3. DF-0	00/03/10	8	547	630	0.87
50' S. 20' W. DP-7	06/13/16	4	33.3	180	0.32
30' S. DP-7	06/07/16	4	275	370	0.52
30 3. DF-7	00/07/10	8	754	920	1.07
DP-7	06/13/16	8	314	270	0.99
20' N. DP-7	06/07/16	4	1,350	1,610	2.03
20 N. DP-7	00/07/10	8	1,190	1,430	1.67
DP-8	06/07/16	4	747	1,140	
DP-6	00/07/10	8	3,370	3,630	
DP-9	06/07/16	4	1,530	1,760	
DF-9	00/07/10	8	1,250	1,780	

Laboratory analysis performed by Permian Basin Environmental Lab (Midland TX) using Standard Method 4500Cl-B. Laboratory reports included in Attachment C.

Field chlorides measured using titration as described in Attachment B.

Specific Conductivity (SC) readings obtained using Hanna Model 98130 meter.

Table 2
Chloride Concentrations of Excavated Stockpiles and Top Soil

Sample ID	Date	Lab Chloride (mg/kg)	Field Chloride (mg/kg)	SC (μS)
Stockpile A	06/07/16	527	650	0.80
Stockpile B	06/07/16	540	790	0.99
Stockpile C	06/07/16	638	900	1.17
Stockpile D	06/07/16	509	730	0.91
Stockpile E	06/07/16	2,090	2,090	2.32
Stockpile F	06/07/16	1,900	1,870	2.18
Stockpile G	06/08/16	1,500	1,650	2.04
Stockpile H	06/08/16	2,360	2,849	2.98
Stockpile I	06/09/16	901	1,150	1.62
Stockpile J	06/09/16	1,590	1,720	1.85
Stockpile K	06/09/16	490	1,280	1.53
Stockpile L	06/09/16	1,080	1,080	1.77
Stockpile M	06/09/16	1,000	1,000	1.38
Stockpile N	06/09/16	1,220	1,580	1.77
Stockpile O	06/10/16	1,550	1,800	
Stockpile P	06/10/16	2,690	3,000	
Stockpile Q	06/10/16	2,670	2,850	
SP-3	06/14/16	2,840	2,580	2.92
SP-6	06/10/16	2,320	2,500	2.70
SP-7	06/10/16	545	790	0.93
Topsoil	06/14/16	209	300	0.40

Laboratory analysis performed by Permian Basin Environmental Lab (Midland TX) using Standard Method 4500Cl-B. Laboratory reports included in Attachment C.

Field chlorides measured using titration as described in Attachment B.

Specific Conductivity (SC) readings obtained using Hanna Model 98130 meter.

### **ATTACHMENT A**

- Final Form C-141
- OCD/BLM Approval Correspondence
- Corrective Action Plan
- Approved Form C-141 with Investigation Report (text only)
- and DP-8 Vertical Delineation Lab Report

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

\* Remediation Report attached

# State of New Maxico Energy Minerals and Natural Resources

Oil Conservation Division

1220 South St. Francis Dr. Santa Fe, NM 87505 Form C-141 Revised August 8, 2011

Submit 1 Copy to appropriate District Office in accordance with 19.15.29 NMAC.

1RP-3921

			Dala	ease Notific	ation	and Co	rrective Ac	ction				
			Kelt	ase Houli		OPERAT		<b>.</b>	] Initia	l Report	⊠ Fin	nal Report
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Name of Co	nnpany: EC	OG Resource	es, Inc.	TY 70705		Contact: Zane Kurtz Telephone No.: 432-425-2023						
Address: 55	Uy Champ	pions Drive, N	viidland	IA 19103			no.: 432-423-202 ne: Salt Water Di					
racility Nan	ne. Endura	ance 25 Fed #	π∠ 3WD						ADEST	.: 30-025	-41067	
Surface Own	ner: U.S. (	BLM)				U.S. (BLM)			API No	30-023	. 1100/	
				LOCA		OF REI				Court		
Unit Letter D	Section 25	Township 26S	Range 33E	Feet from the 2310	North/S	South Line North	Feet from the 990		Vest Line Vest	County Lea		
	Latitude 32.0153° Longitude -103.5315°											
						OF RELI	EASE		•		1. 40 L11	
Type of Relea	se: Produc	ed Water		- 14 - 1		Volume of	f Release: 100 bbl	PW			1: 40 bbl PW	
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Was Immedia	ate Notice (	Jiven:	Yes 🛚	No Not Re	equired							
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the pad into pa 10/16/15, 10/1 Subsequent Co Describe Area Remediation a 32,000 ft <sup>2</sup> area NMOCD-perm backfilled with	Describe Cause of Problem and Remedial Action Taken.*  Load line valve did not remain closed after driver for Steve Kent Trucking pulled truck away causing produced water to spill on pad and migrate west off the pad into pasture land about 350 ft. Valve was closed and liquid picked up with vacuum truck. A soil sampling investigation was conducted on 10/16/15, 10/19/15, 11/02/15 and 11/21/15 to delineate impact. <i>Investigation Summary</i> and <i>Remediation Plan</i> submitted to NMOCD on 11/21/15. Subsequent <i>Corrective Action Plan</i> submitted to NMOCD and BLM on 05/13/16 and approved.  Describe Area Affected and Cleanup Action Taken.*  Remediation activities were performed in accordance to NMOCD guidelines and NMOCD/BLM approved Corrective Action Plan. An approximate 32,000 ft² area was excavated where the release occurred. 980 tons of chloride impacted soil exceeding the 1,000 mg/kg RRAL were transported to the NMOCD-permitted Lea Land LLC landfill. Excavated areas were backfilled with clean soil, 20-mil reinforced poly liners installed at 4 ft bgs, and then backfilled with clean soil and capped with top soil. The entire area was then seeded with a BLM-approved native seed mix to re-establish vegetation cover.											
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD 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 NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD 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.												
				ZaneKull	名		OIL CO	NSER	VATIO	N DIV	ISION	
Signature:	Ja	-/4	7	8-18-16		Approved h	by Environmental	Special	list: Ja	im X lhyer		
Printed Name:	Zane Kurt.	٤						•	T			
Title: Environn	mental Rep	resentative			$\rightarrow$	Approval L	Oate: 08/23/2016	. <b>b</b>	Expirat	ion Date:		
E-mail Address	s: zane.kuri	tz@eogresou	rces.com			Conditions	of Approval:			At	ttached	1RP-39
Date:			Phone	: 432-425-2023		000 000 000 000 000 000 000 000 000 00						

**Scanned by CamScanner** 

Subject: Re: 1R-3921 - Corrective Action Plan for the EOG Endurance FED 25 #2 Produced Water Release

From: "Tucker, Shelly" <stucker@blm.gov>

Date: 5/20/2016 11:33 AM

To: Gil Van Deventer < gil@trident-environmental.com>

CC: "Keyes, Jamie, EMNRD" < Jamie. Keyes@state.nm.us>, Daniel Bergsten < dbergsten@energi.com>, David Williams

<dwilliams@energi.com>, James Lombard <jlombard@energi.com>

BLM concurs with NMOCD approval.

If you have any questions or concerns, please do not hesitate to contact me.

Sincerely,

Shelly J Tucker

Environmental Protection Specialist Bureau of Land Management

620 E. Greene St Carlsbad, NM 88220

575.234.5905 - Direct 575.361.0084 - Cellular

stucker@blm.gov



The <u>BLM acceptance/approval does not</u> relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that may pose a threat to groundwater, surface water, human health or the environment or if the location fails to reclaim properly. In such an event that the location does not revegetate, or future issues with contaminants are encountered, the operator will be asked to address the issues until the contaminant issues are fully mitigated and the location is successfully reclaimed. In addition, BLM approval does not relieve the operator of responsibility for compliance with any other federal, state or local laws/regulations.

<u>Confidentiality Warning:</u> This message along with any attachments are intended only for use of the individual or entity to which it is addressed and may contain information that is privileged or confidential and exempt from disclosure under applicable law. If the reader of this message is not the intended recipient or the employee or agent responsible for delivering this message to the intended recipient, you are hereby notified that any dissemination, distribution, or copying of this communication is strictly prohibited. If you have received this communication in error, please notify the sender immediately.

On Tue, May 17, 2016 at 6:44 AM, Gil Van Deventer < gil@trident-environmental.com > wrote:

Good morning Shelley,

Does BLM concur with NMOCD's approval of the CAP?

Thanks, Gil

Gilbert J. Van Deventer, REM, PG

Partner - Project Manager - Sr. Hydrogeologist

Environmental Consultants Groundwater Resource Investigations



Trident Environmental P. O. Box 12177 Odessa, Texas 79768-2177

Office/Mobile 432.638.8740 gil@trident-environmental.com www.trident-environmental.com On 5/16/2016 9:37 AM, Keyes, Jamie, EMNRD wrote: Good morning, The work plan has been approved. Ensure BLM concurrence/approval. Thank you, Jamie From: Gil Van Deventer [mailto:gil@trident-environmental.com] Sent: Friday, May 13, 2016 10:21 AM To: Keyes, Jamie, EMNRD Cc: Shelley Tucker; Daniel Bergsten; David Williams; James Lombard Subject: 1R-3921 - Corrective Action Plan for the EOG Endurance FED 25 #2 Produced Water Release Jaime Attached please find the Corrective Action Plan for the EOG Endurance FED 25 #2 Produced Water Release (NMOCD Case No. 1R-3921). The proposed corrective actions are in accordance with previous OCD/BLM approvals and my recent conversations with you and Shelly.

We look forward to your review and approval of this plan so we can move forward with remediation.

Thank you, Gil

Gilbert J. Van Deventer, REM, PG Partner - Project Manager - Sr. Hydrogeologist

> **Environmental Consultants** Groundwater Resource Investigations



Trident Environmental P. O. Box 12177 Odessa, Texas 79768-2177

Office/Mobile 432,638,8740 gil@trident-environmental.com www.trident-environmental.com



P. O. Box 12177 • Odessa TX 79768

May 13, 2016

Submitted electronically via email

Mr. Jamie Keyes New Mexico Oil Conservation Division 1625 N. French Drive Hobbs, Mexico 88240

RE: Corrective Action Plan

NMOCD Case No. 1R-3921

EOG Endurance FED 25 #2 Produced Water Release

T26S R33E Section 25 Unit Letter E

Lea County, New Mexico

Dear Ms. Jones:

Trident Environmental was retained by Energi Insurance Inc.(Energi), insurance agent for Steve Kent Trucking NM LLC (SKT), to prepare and submit this *Corrective Action Plan* (CAP) to the New Mexico Oil Conservation Division (OCD) and U.S. Bureau of Land Management (BLM) for the site referenced above.

#### Background

An accidental produced water release occurred at the Endurance FED 25 #2 salt water disposal (SWD) facility (API No. 30-025-41067) on a lease operated by EOG Resources Inc (EOG). The site is located approximately 21 miles southwest of Jal, New Mexico as depicted in Figure 1 (Site Location Map). The initial form C-141 (Appendix A) submitted to the OCD on October 15, 2015 by EOG incorrectly reported that the release occurred on October 4, 2015, when it actually occurred between the evening hours on October 11, 2015 and early morning hours of October 12, 2015. The release occurred sometime after a driver for Steve Kent Trucking Inc. unloaded his tank truck into the produced water load line at the facility. The cause of the release is not exactly known but is suspected to be the failure of the driver to close the load valve prior to leaving the location, however it was also due to the failure of the backflow prevention check valve between the load valve and produced water tank. According to the initial form C-141, the estimated volume of the spill was 100 barrels (bbl) with about 40 bbl recovered (60 bbl lost) by a vacuum truck during the early morning hours on October 12, 2015. The release originated from the load line and flowed approximately 150 ft west across the well pad and then north-northwesterly approximately 300 ft into undeveloped pasture land, as depicted in Figure 2.

#### **Site Setting**

- The topography is slightly undulating and regionally slopes to the southwest at about 50 ft/mile and locally slopes gently to the north-northwest;
- The surface soils consist of fine loamy sand belonging to the Pyote and Maljamar soil map unit.
- Groundwater in the area occurs within the Ogallala Aquifer under unconfined conditions.
- No fresh water wells are located within 1-mile of the Site according New Mexico Office of the State Engineer (OSE) database records;
- The nearest water well (C-2270/3577) is located approximately 1.7 miles west of the site (Section 22) with a surface elevation of 3252 ft AMSL according to USGS topography. OSE records report that depth to water at this well is 125 ft below ground surface (bgs) which correlates to a groundwater elevation of 3127 ft AMSL.
- With a surface elevation of 3340 ft at the release site and groundwater elevation of 3127 ft, depth to groundwater is greater than 200 feet bgs.
- Based on the criteria established by the OCD (Guidelines for Remediation of Leaks, Spills and Releases, August 13, 1993), and a score of zero, the NMOCD recommended remediation action levels (RRALs) for chlorides are 1,000 mg/kg (protective of groundwater).

A Point of Diversion summary of active and inactive water wells in Township 26S, Ranges 33E and 34E, with reported depths to groundwater listed is provided in Appendix A.

#### **Investigation Summary**

Soon after the release, Larson & Associates Inc. (LAI) was retained by EOG to conduct an initial investigation to delineate the soil impact at the site. On October 16, October 19, November 2, and November 21, 2015, LAI used a direct push rig to collect soil samples at depth for vertical delineation of nine sample points located in pooled areas along the axis of the release path between the load line (DP-1) and its final resting point (DP-9) as depicted in Figure 2.

Total petroleum hydrocarbons (TPH) were well below the RRAL in all samples. Chloride was delineated vertically to 250 milligrams per kilogram (mg/kg) at all soil locations with the exception of samples DP-6 at 12 feet (451 mg/kg) and DP-8 at 16 feet (3,270 mg/kg).

On behalf of EOG, LAI submitted an *Investigation Report* to the OCD on November 21, 2015. The investigation report detailed the results summarized above and included a remediation plan that was conditionally-approved by OCD on November 23, 2015 (Appendix B).

On November 21, 2015, LAI performed additional investigation by retaining Scarborough Drilling, Inc. to use an air rotary rig and jam tube sampler to complete vertical delineation at DP-8. Soil samples were collected at 20 and 25 feet bgs, and submitted to Permian Basin Analytical Laboratory (Midland TX) for chloride analysis with results of 284 mg/kg and 642 mg/kg, respectively. Lab reports are included in Appendix B.

#### **Corrective Action Plan**

The CAP herein has been developed to address only the reported release (1R-3921), while it is not technically feasible to separately delineate the impacts from any potential releases which may have occurred before or after the reported October 12, 2015 release. The following corrective actions are described below:

- 1. The spill area below sample points DP-2 and DP-4 will not require excavation because delineation shows these areas to be well below the 1,000 mg/kg RRAL.
- 2. The spill area below sampling points DP-1, DP-3, DP-6, and DP-7 will be excavated to 8 ft, where they meet the 1,000 mg/kg RRAL criteria based on the LAI investigation, and then backfilled with soil less than 1,000 mg/kg.
- 3. The spill area below sampling points DP-5, DP-8, and DP-9 will be excavated to 8 ft, backfilled with soil less than the 1,000 mg/kg RRAL to 4 ft, lined with 20-ml plastic at 4 ft, and then backfilled with soil less than 1,000 mg/kg.
- 4. The final 1 ft of backfill will consist of top soil as the final surface layer, except for the drilling pad area which will be backfilled with caliche as it is an active SWD facility (interim layer prior to final site reclamation).
- 5. During excavation activities, delineation soil samples will be field tested for chloride (Appendix C) in a manner consistent with the standard titration method (SM 4500Cl-B) performed at accredited laboratories. When maximum depth has been reached bottom grab samples will be collected for chloride analysis by an accredited laboratory (Cardinal Lab in Hobbs NM and/or Permian Basin Environmental Lab in Midland TX) to confirm when RRAL criteria have been met.
- 6. A six-point composite sample will be collected from each individual soil stockpile and submitted for chloride analysis by the accredited laboratory to determine disposition (backfill or disposal) of the stockpiles.
- 7. Excavated soil stockpiles above the 1,000 mg/kg RRAL will be transported to a NMOCD-permitted landfarm or landfill facility for disposal.
- 8. The backfilled excavation will be reseeded with BLM #2 mix (Sand dropseed, Little Bluestem, Coreopsis, Plains Bristlegrass, and Sideoats grama) at the recommended application rate, to restore the native vegetation to pre-existing conditions.

The diagram below illustrates the above-described excavation, backfill, liner, and top soil depths.

Depth (ft)	DP-1	DP-3	DP-5	DP-6	DP-7	DP-8	DP-9			
0-1	TOPSOIL (Chloride <250 mg/kg)									
1-4	Backfill	Backfill	Backfill <1000 LINER	Backfill	Backfill <1000	Backfill <1000 LINER	Backfill <1000 LINER			
4 - 8	<1000	<1000	Backfill <1000	<1000		Backfill <1000	Backfill <1000			
8 - 10	973	44.9	2,040	257	12.5	4,960	500			
10 - 12	454	131	239		11.5	2,440	4,330			
12 - 14	2.4					10,700	598			
14 - 16	5.1					3,270	125			
20						284	1 1			
25						642				

Following the completion of the actions described above, Trident Environmental will submit a closure report and final C-141 to the OCD and BLM.

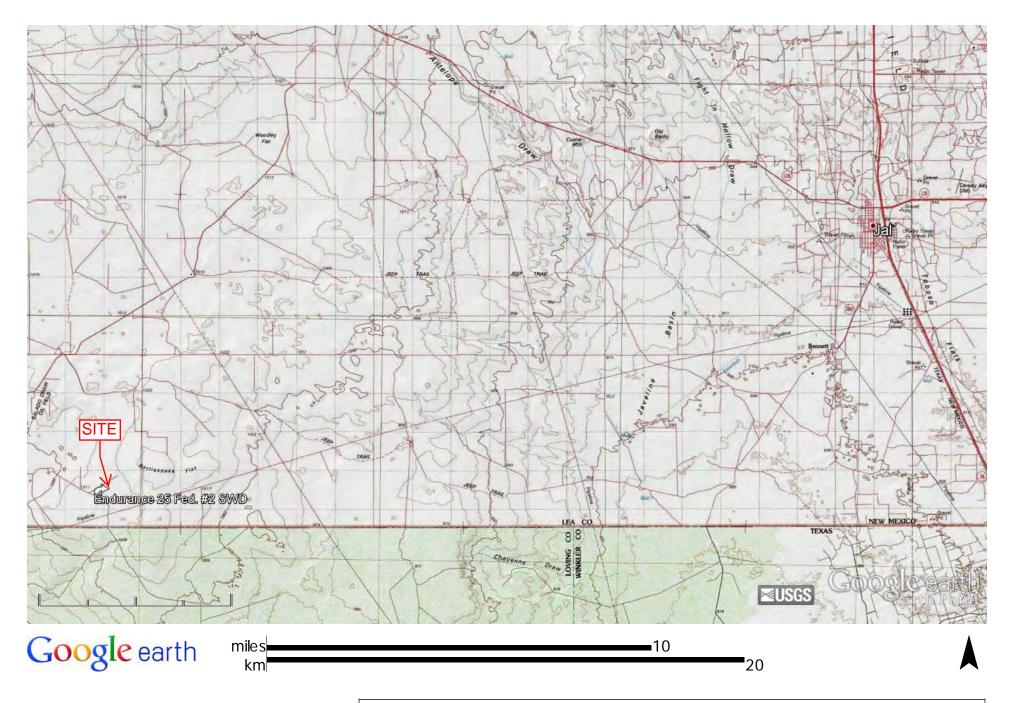
We look forward to your approval to move forward with this proposed *Corrective Action Plan*. We can be contacted at 432-638-8740 (gil@trident-environmental.com), or Dan Bergsten at 978-531-1822, ext. 870 (dbergsten@energi.com).

Sincerely,

Gilbert J. Van Deventer, PG, REM

cc: Shelly Tucker (BLM-Carlsbad NM)
Dan Bergsten (Energi - Carlsbad CA)
Zane Kurtz (EOG - Midland TX)

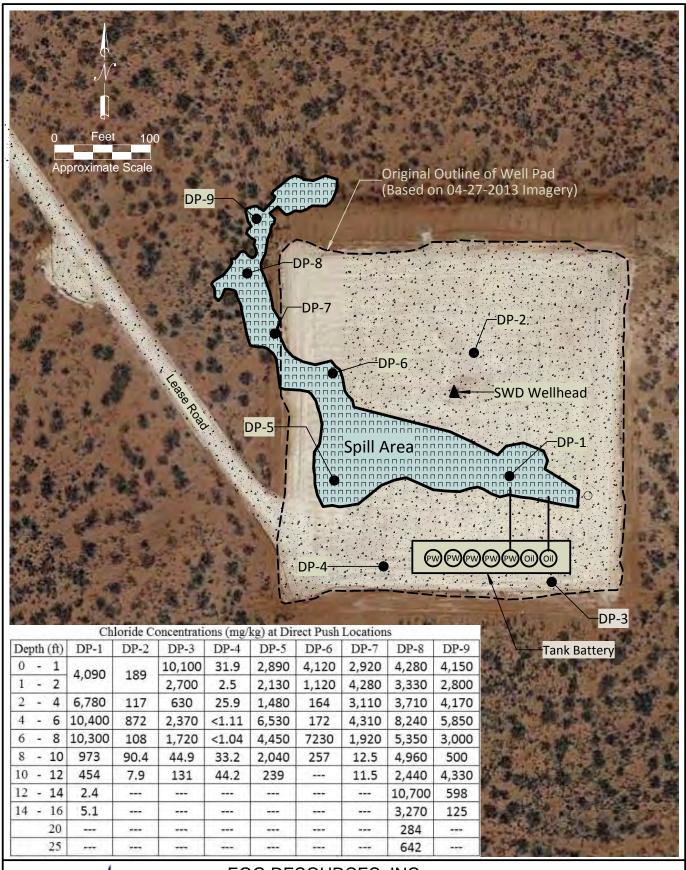






EOG RESOURCES, INC. Endurance 25 Federal #2 SWD T26S - R33E - Section 25 - Unit E Lea County, New Mexico

FIGURE 1 Location Map





EOG RESOURCES, INC. Endurance 25 Federal #2 SWD T26S - R33E - Section 25 - Unit E Lea County, New Mexico

FIGURE 2 Site Map

## **APPENDIX A**

Point of Diversion Summaries for Township 26S, Ranges 33E and 34E



# New Mexico Office of the State Engineer

# **Active & Inactive Points of Diversion**

(with Well Drill Dates & Depths)

(R=POD has been replaced
and no longer serves this file, (quarters are 1=NW 2=NE 3=SW 4=SE)

(acre ft per annum)

C=the file is closed)

(quarters are smallest to largest)

(NAD83 UTM in meters)

	(acre ft p	per annum)	C=the file is closed)	(quarters are smallest to largest)	(NAD83 UTI	/I in meters)		(in fe	et)
WR File Nb	Sub	rsion County POD Number	Code Grant	q q q Source 6416 4 Sec Tws Rng	X	Y Start Dat	e Finish Date	Depth Well	
C 02270	CUB PLS	3 LE <u>C 02270</u>	Code Grant	Shallow 1 1 2 27 26S 33E			92 12/31/1910	150	125
<u>C 02273</u>	CUB PDL	3 LE <u>C 02273</u>		1 2 21 26S 33E	634549	3545134*	12/31/1930	160	120
<u>C 02285</u>	CUB PLS	3 LE <u>C 02285 POD1</u>		Shallow 1 4 4 03 26S 33E	636613	3548855 🌑	12/31/1982	220	220
<u>C 02286</u>	CUB PLS	3 LE <u>C 02286</u>		3 4 4 03 26S 33E	636470	3548714 🌑	12/31/1974	220	175
C 02287	CUB STK	3 LE <u>C 02287</u>		3 4 4 03 26S 33E	636427	3548708 🌕		220	
		LE <u>C 02287 POD2</u>		4 4 4 03 26S 33E	636612	3548675*			
<u>C 02288</u>	CUB PLS	3 LE <u>C 02288</u>		4 4 4 03 26S 33E	636646	3548758 🌑	12/31/1982	220	180
<u>C 02289</u>	CUB PLS	3 LE <u>C 02289</u>		4 4 4 03 26S 33E	636612	3548675*	12/31/1949	200	160
<u>C 02290</u>	CUB PLS	3 LE <u>C 02290</u>		4 4 4 03 26S 33E	636538	3548770 🌑	12/31/1949	200	160
C 02293	CUB PLS	3 LE <u>C 02293</u>		2 2 1 14 26S 33E	637501	3546975 🌍	12/31/1949	200	135
C 02294	CUB PLS	3 LE <u>C 02294</u>		4 4 3 11 26S 33E	637465	3547003 🌍	12/31/1949	200	145
C 02295	CUB PLS	3 LE <u>C 02295</u>		2 2 4 12 26S 33E	639850	3547710*	12/31/1949	250	200
<u>C 03494</u>	C PRO	0 LE <u>C 02285 POD1</u>		Shallow 1 4 4 03 26S 33E	636613	3548855 🌍	12/31/1982	220	220
<u>C 03495</u>	C PRO	0 LE <u>C 02286</u>		3 4 4 03 26S 33E	636470	3548714 🌍	12/31/1974	220	175
<u>C 03496</u>	C PRO	0 LE <u>C 02287</u>		3 4 4 03 26S 33E	636427	3548708		220	
<u>C 03497</u>	C PRO	0 LE <u>C 02288</u>		4 4 4 03 26S 33E	636646	3548758	12/31/1982	220	180
<u>C 03498</u>	C PRO	0 LE <u>C 02290</u>		4 4 4 03 26S 33E	636538	3548770 🌍	12/31/1949	200	160
<u>C 03499</u>	C PRO	0 LE <u>C 02293</u>		2 2 1 14 26S 33E	637501	3546975 🌍	12/31/1949	200	135

\*UTM location was derived from PLSS - see Help

(in feet)

(R=POD has been replaced

and no longer serves this file, (quarters are 1=NW 2=NE 3=SW 4=SE)

	(acre ft p	per annum)	C=the file is closed)	(quarters are smallest to largest)	(NAD83 UTM	in meters)		(in fe	et)
	Sub			qqq				Depth	Depth
WR File Nbr	basin Use Dive	ersion County POD Number	Code Grant	Source 6416 4 Sec Tws Rng	X	Y Start Date Fir	nish Date	Well	Water
<u>C 03500</u>	C PRO	0 LE <u>C 02294</u>		4 4 3 11 26S 33E	637465	3547003 6 12	/31/1949	200	145
<u>C 03539</u>	C PRO	0 LE <u>C 02270</u>		Shallow 1 1 2 27 26S 33E	636063	3543722 08/28/1992 12/	/31/1910	150	125
<u>C 03540</u>	C PRO	0 LE <u>C 02270</u>		Shallow 1 1 2 27 26S 33E	636063	3543722 08/28/1992 12	/31/1910	150	125
C 03541	C PRO	0 LE <u>C 02270</u>		Shallow 1 1 2 27 26S 33E	636063	3543722 08/28/1992 12/	/31/1910	150	125
C 03577	CUB EXP	0 LE <u>C 03577 POD1</u>		Shallow 3 3 3 22 26S 33E	636010	3543771 11/19/2012 11/	/20/2012	750	110
C 03592	C PRO	0 LE <u>C 03577 POD1</u>		Shallow 3 3 3 22 26S 33E	636010	3543771 11/19/2012 11/	/20/2012	750	110
C 03593	C PRO	0 LE <u>C 03577 POD1</u>		Shallow 3 3 3 22 26S 33E	636010	3543771 11/19/2012 11/	/20/2012	750	110
C 03594	C PRO	0 LE <u>C 03577 POD1</u>		Shallow 3 3 3 22 26S 33E	636010	3543771 11/19/2012 11/	/20/2012	750	110
C 03596	C STK	3 LE <u>C 03596 POD1</u>		Shallow 3 3 4 22 26S 33E	636017	3543756 07/21/2010 07/	//21/2010	225	
C 03597	C PRO	0 LE <u>C 03596 POD1</u>		Shallow 3 3 4 22 26S 33E	636017	3543756 07/21/2010 07/	//21/2010	225	
C 03598	C PRO	0 LE <u>C 03596 POD1</u>		Shallow 3 3 4 22 26S 33E	636017	3543756 07/21/2010 07/	//21/2010	225	
C 03599	C PRO	0 LE <u>C 03596 POD1</u>		Shallow 3 3 4 22 26S 33E	636017	3543756 07/21/2010 07/	//21/2010	225	
<u>C 03676</u>	C PRO	0 LE <u>C 03577 POD1</u>		Shallow 3 3 3 22 26S 33E	636010	3543771 11/19/2012 11/	/20/2012	750	110
C 03677	C PRO	0 LE <u>C 03577 POD1</u>		Shallow 3 3 3 22 26S 33E	636010	3543771 🎒 11/19/2012 11/	/20/2012	750	110

Record Count: 33

C 03678

PLSS Search:

Township: 26S Range: 33E

C PRO 0 LE C 03577 POD1

Sorted by: File Number

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.

Shallow 3 3 3 22 26S 33E 636010 3543771 11/19/2012 11/20/2012 750 110



# New Mexico Office of the State Engineer

# **Active & Inactive Points of Diversion**

(with Well Drill Dates & Depths)

(R=POD has been replaced

and no longer serves this file, (quarters are 1=NW 2=NE 3=SW 4=SE)

(acre ft per annum) C=the file is closed) (quarters are smallest to largest) (NAD83 UTM in meters)

(in feet)

	(acre ft pe	er annum)	C=the file is closed)	(quarters are smallest to largest)	(NAD83 UTM in meters)		(in fee	∋t)
WR File Nbr	Sub basin Use Divers	sion County POD Number	Code Grant	q q q Source 6416 4 Sec Tws Rng	X Y	Start Date Finish Date	Depth Well	Depth Water
C 02291	CUB PLS	3 LE <u>C 02291</u>		1 1 2 06 26S 34E	640825 3550140*	12/31/1949	220	160
C 02292	CUB PLS	3 LE <u>C 02292 POD1</u>		4 1 2 06 26S 34E	640992 3549987	12/31/1949	200	140
<u>C 03441</u>	C STK	3 LE <u>C 03441 POD1</u>		Shallow 4 1 2 06 26S 34E	640971 3550039	05/03/2010 05/03/2010	250	
C 03442	C STK	3 LE <u>C 03442 POD1</u>		Shallow 4 1 2 06 26S 34E	641056 3550028	05/03/2010 05/03/2010	251	
<u>C 03477</u>	C PRO	0 LE <u>C 03442 POD1</u>		Shallow 4 1 2 06 26S 34E	641056 3550028	05/03/2010 05/03/2010	251	
<u>C 03491</u>	C PRO	0 LE <u>C 03441 POD1</u>		Shallow 4 1 2 06 26S 34E	640971 3550039	05/03/2010 05/03/2010	250	
C 03492	C PRO	0 LE <u>C 03442 POD1</u>		Shallow 4 1 2 06 26S 34E	641056 3550028	05/03/2010 05/03/2010	251	
<u>C 03493</u>	C PRO	0 LE <u>C 02292 POD1</u>		4 1 2 06 26S 34E	640992 3549987	12/31/1949	200	140

**Record Count:** 8

**PLSS Search:** 

Township: 26S Range: 34E

Sorted by: File Number

#### \*UTM location was derived from PLSS - see Help

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.

# **APPENDIX B**

Approved Form C-141 with Investigation Report (text only) and DP-8 Vertical Delineation Lab Report

1625 N. French Dr., Hobbs, NM 88240 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

Form C-141 Revised August 8, 2011

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505

Submit 1 Copy to appropriate District Office in accordance with 19.15.29 NMAC.

#### Release Notification and Corrective Action **OPERATOR** ☐ Final Report Name of Company: EOG Resources, Inc. Contact: Zane Kurtz Address: 5509 Champions Dr., Midland, TX 79705 Telephone No." 432-425-2023 Facility Name: Endurance 25 Fed #2 SWD Facility Type: Salt Water Disposal Surface Owner: U.S. (BLM) Mineral Owner: U.S (BLM) API No.30-025-41067

				LOCA	ATION OF RE	ELEASE		
Unit Letter D	Section 25	Township 26S	Range 33E	Feet from the 2310	North/South Line North	Feet from the 990	East/West Line West	County Lea
· · · · · ·				Latitude 32	2.0153° Longitu	de -103.5315°		
				NAT	URE OF REI	EASE		
Type of Rele	ease: Produ	ced Water				of Release: 100 bb	Volume	Recovered: 40 bbl
Source of Re	elease: Load	Line Valve				Hour of Occurrence 15/12:00 hrs	£ 2.1	Hour of Discovery: 15/02:00hrs
Was Immedi	ate Notice (		Yes 🗵	No □ Not R		o Whom?		
By Whom?					Date and			
Was a Water	course Read		Yes 🗵	No	If YES, V	olume Impacting	the Watercourse.	
Describe Are about 50 fee I hereby cert regulations a public health should their or the enviro	ea Affected t. Samples ify that the ill operators or the envi	and Cleanup will be collect information g are required to ronment. The	Action Talled to delin	off location into particle.  *Spill occurrence TPH and che  e is true and compand/or file certain rece of a C-141 reparticle.	for Kent Trucking fasture. Valve was clear to a line and faloride in soil for rendered to the best of melease notifications for the the NMOCD remediate contaminations.	orgot to close valvosed and liquid pictored south off local local liquid pictored and south off local liquid pictored liquid pictored liquid pictored liquid pictored liquid pictored liquid li	cation into pasture anderstand that purctive actions for releport" does not relepart to ground water	to pulling truck away causing
	<u></u>	11/2				OIL CON	SERVATION	DIVISION
Signature: Printed Nam	e: Jamon H	Johensee, EO	G Resourc	es, Inc.	Approved b	y Environmental S	Specialist:	200
Title: Enviro	onmental Re	ер.			Approval D	ate: 10/16/2015	Expiration	Date: 12/16/2015
	ess: jamon 16-2015	hohensee@e		es.com ne: 432-556-8074	Site sample	of Approval: required. Delinea CD guides. Geota		Attached

remediation required.

\* Attach Additional Sheets If Necessary

nKJ1528936186 pKJ1528936421

### REVIEWED

By Kellie Jones at 9:36 am, Nov 23, 2015

ociates, Inc

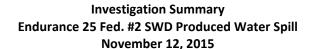
**Environmental Consultants** 



ONDITIONAL

By Kellie Jones at 9:36 am, Nov 23, 2015

- 1. Ensure DP-8 is vertically delineated.
- 2. Provide documentation in regards to the depth to groundwater.
- .3. For samples DP1, DP5, DP7, DP8, and DP9, we believe going down to 8 feet in these areas will get the majority of the release.
- 4. Ensure BLM approval/concurrence.



Page 1 of 2

#### Introduction

This investigation summary is prepared on behalf of EOG Resources, Inc. (EOG) for submittal to the New Mexico oil Conservation Division (OCD) and U.S. Bureau of Land Management (BLM) for a produced water spill at the EOG Endurance 25 Fed #2 SWD tank battery (Site). The Site is located in Unit E (NW/4, SE/4), Section 25, Township 26 South, Range 33 East, in Lea County, New Mexico. The approximate geodetic position is north 32° 00′ 53.75″ and west 103° 31′ 53.07″. The spill occurred on October 4, 2015, due a value being left open at the load line prior to pulling the transport truck away. The estimated volume of the spill was 100 barrels (bbl) with about 40 bbl recovered. The spill flowed north into a pasture and covered an area measuring about 54,450 square feet or 1.2 acres. The initial C-141 was submitted to OCD District 1 on October 15, 2015. The OCD assigned the spill remediation project number 1RP-3921. Figure 1 presents a topographic map. Figure 2 presents an aerial map.

#### Setting

The setting is as follows:

- The surface elevation is about 3,340 feet above mean sea level (MSL);
- The topography is slightly undulating and slopes to the southeast;
- Surface water run-off is the northwest in the general direction of the spill;
- The nearest surface water feature is an intermittent drainage located about 1,050 feet southwest of the Site;
- The soils are designated as "Berino-Cacique loamy fine sands association", consisting of loamy fine sand to about 05 feet bgs and sandy clay loam to about 5 feet bgs, derived from reworking the Blackwater Draw (Pleistocene) and Ogallala (Pliocene) formations, in descending order;
- Groundwater is greater than 200 feet bgs according to records from the New Mexico Office of the State Engineer (OSE);
- The nearest fresh water well is located about 1.7 miles west of the Site, in Unit C (SE/4, SW/4), Section 22, Township 26 south, Range 33 East, with depth to water reported at approximately 125 feet below ground surface (bgs);

#### **Remediation Action Levels**

Remediation action levels (RRAL) were calculated for benzene, BTEX and TPH based on the following criteria established by the OCD (*Guidelines for Remediation of Leaks, Spills and Releases, August 13,* 1993):

Criteria	Result	Score
Depth-to-Groundwater	>100 feet	0
Wellhead Protection Area	No	0
Distance to Surface Water Body	> 1000 Horizontal Feet	0

The following RRAL apply to the release for ranking score:

Benzene 10 mg/Kg
 BTEX 50 mg/Kg
 TPH 5,000 mg/Kg

#### **Initial Samples and Analysis**

Initial samples were collected on October 16, 2015, October 29, 2015, and November 2, 2015, to delineate the spill. LAI personnel used a direct push (Terraprobe®) rig to collect soil samples at nine (9) locations (DP-1 through DP-9) between approximately 12 and 16 feet bgs. Permian Basin Environmental Lab (PBEL) in Midland, Texas, analyzed the upper sample (0 to 1 foot) for total petroleum hydrocarbons (TPH) by SW-846 method 8015 modified. All samples were analyzed for chloride by method 300. Table 1 presents the analytical data summary. Figure 3 presents the sample locations. Attachment A presents the laboratory report.

Referring to Table 1, TPH was below the RRAL in all samples. TPH was also below the Reporting Limit (RL) in all samples except DP-1 (27.2 mg/Kg). Chloride was delineated vertically to 250 milligrams per kilogram (mg/Kg) in all borings except DP-6 and DP-8. Chloride decreased below 250 mg/Kg between about 0 feet (DP-4) and 14 feet (DP-9). Chloride was 451 mg/Kg and 3,270 mg/Kg in the deepest samples from DP-6, 10 to 12 feet and DP-8, 14 to 16 feet, respectively.

#### Remediation Plan:

- Excavate soil to approximately 4 feet bgs from area shown on Figure 4 and install 20 mil thickness poly liner in bottom of excavation;
- Backfill excavations with clean topsoil and seed;
- Dispose contaminated soil at OCD approved landfill; and
- Prepare final report for submission to OCD and BLM.

Kimberly Huckaba Staff Geologist Table 1
Investigation Soil Sample Analytical Data Summary
EOG Resources, Inc., Endurance 25 Fed #2 SWD Spill
UL D Section 25, Township 26 South, Range 33 East
Lea County, New Mexico
1RP-3921

			1RP-39				
Sample	Depth	Collection	C6 - C12	>C12 - C28	>C28 - C35	TPH	Chloride
000 004	(Feet)	Date	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)
OCD RRAL:		1 ,					
DP-1	0 - 2	10/16/2015	<26.0	27.2	<26.0	27.2	4,090
	2 - 4	10/16/2015					6,780
	4 - 6	10/16/2015					10,400
	6 - 8	10/16/2015					10,300
	8 -10	10/16/2015					973
	10 - 12	10/16/2015					454
	12 - 14	10/29/2015					2.40
	14 - 16	10/29/2015					5.10
DP-2	0 - 2	10/16/2015	120.0	420.0	120.0	120.0	100
DP-Z		10/16/2015	<26.9	<26.9	<26.9	<26.9	189
	2 - 4	10/16/2015					117
	4 - 6	10/16/2015					872
	6 - 8	10/16/2015					108
	8 -10	10/16/2015					90.4
	10 - 12	10/16/2015					7.9
DP-3	0 - 1	10/19/2015	<28.4	<28.4	<28.4	<28.4	10,100
	1 - 2	10/19/2015					2,700
	2 - 4	10/19/2015					630
	4 - 6	10/16/2015					2,370
	6 - 8	10/16/2015					1,720
	8 -10	10/16/2015					44.9
	10 - 12	10/16/2015					131
DP-4	0 - 1	10/19/2015	<27.5	<27.5	<27.5	<27.5	31.9
	1 - 2	10/19/2015					2.5
	2 - 4	10/19/2015					25.9
	4 - 6	10/16/2015					<1.11
	6 - 8	10/16/2015					<1.04
	8 -10	10/16/2015					33.2
	10 - 12	10/16/2015					44.2
	0.1	40/40/2045	27.0	27.2	27.0	27.0	0.000
DP-5	0 - 1	10/19/2015	<25.8	<25.8	<25.8	<25.8	2,890
	1 - 2	10/19/2015					2,130
	2 - 4	10/19/2015					1,480
	4 - 6	10/16/2015					6,530
	6 - 8	10/16/2015					4,450
	8 -10	10/16/2015					2,040
	10 - 12	10/16/2015					239

Table 1
Investigation Soil Sample Analytical Data Summary
EOG Resources, Inc., Endurance 25 Fed #2 SWD Spill
UL D Section 25, Township 26 South, Range 33 East
Lea County, New Mexico

1RP-3921

_	_	_	1KP-39		<u>-</u>		_
DP-6	0 - 1	10/19/2015	<26.6	<26.6	<26.6	<26.6	4,120
	1 - 2	10/19/2015					1,120
	2 - 4	10/19/2015					164
	4 - 6	10/16/2015					172
	6 - 8	10/16/2015					7230
	8 -10	10/16/2015					257
	10 - 12	10/16/2015					451
DP-7	0 - 1	10/19/2015	<25.5	<25.5	<25.5	<25.5	2,920
	1 - 2	10/19/2015					4,280
	2 - 4	10/19/2015					3,110
	4 - 6	10/16/2015					4,310
	6 - 8	10/16/2015					1,920
	8 -10	10/16/2015					12.5
	10 - 12	10/16/2015					11.5
DP-8	0 - 1	10/19/2015	<26.0	<26.0	<26.0	<26.0	4,280
	1 - 2	10/19/2015					3,330
	2 - 4	10/19/2015					3,710
	4 - 6	10/16/2015					8,240
	6 - 8	10/16/2015					5,350
	8 -10	10/16/2015					4,960
	10 - 12	10/16/2015					2,440
	12 - 14	11/2/2015					10,700
	14 - 16	11/2/2015					3,270
DP-9	0 - 1	10/19/2015	<25.8	<25.8	<25.8	<25.8	4,150
	1 - 2	10/19/2015					2,800
	2 - 4	10/19/2015					4,170
	4 - 6	10/16/2015					5,850
	6 - 8	10/16/2015					3,000
	8 -10	10/16/2015					500
	10 - 12	10/16/2015					4,330
	12 - 14	11/2/2015					598
	14 - 16	11/2/2015					125

Notes: Laboratory analysis performed by Permian Basin Environmental Lab, Midland, Texas

TPH by EPA SW-846 method 8015 (GRO and DRO)

Chloride by method 300.0

Depth in feet below ground surface (bgs)

mg/Kg: milligrams per kilogram equivalent to parts per million (ppm)

RRAL: Recommended Remediation Action Level (RRAL) calculated from OCD guidance document (August 13, 1993)

--: Sample not analyzed

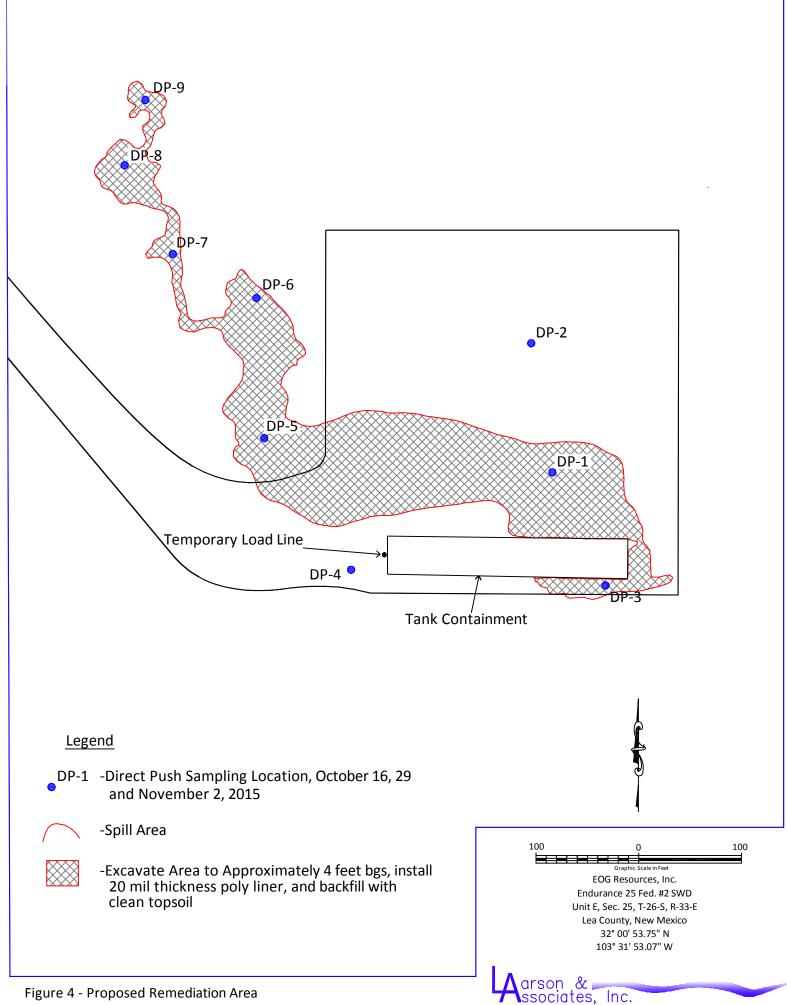


Figure 4 - Proposed Remediation Area

#### Mark Larson

From:

Friday, November 27, 2015 9:59 AM Sent:

Mark Larson: dan

To: Subject: Fwd: 1RP-3921 - Endurance 25 Fed #2 SWD Investigation Summary

#### Sent from my iPhone

#### Begin forwarded message:

From: "Jones, Kellie, EMNRD" < Kellie.Jones@state.nm.us>

Date: November 23, 2015 at 9:04:22 AM PST

To: Kimberly Huckaba < khuckaba@laenvironmental.com >

Cc: "stucker@blm.gov" <stucker@blm.gov>, "Oberding, Tomas, EMNRD" <Tomas.Oberding@state.nm.us>, Mark Larson

<Mark@laenvironmental.com>, "Keyes, Jamie, EMNRD" <Jamie.Keyes@state.nm.us>

Subject: RE: 1RP-3921 - Endurance 25 Fed #2 SWD Investigation Summary

#### Kimberly,

Good morning. My comments are below in regards to the recent submittal.

- Ensure DP-8 is vertically delineated.
- Provide documentation in regards to the depth to groundwater. 2
- For samples DP1, DP5, DP7, DP8, and DP9, we believe going down to 8 feet in these areas will get the majority of the release. 3.
- Ensure BLM approval/concurrence.

If you have any questions, please feel free to contact me.

Have a great day!

Kellie Jones Environmental Specialist, District 1 Oil Conservation Division, EMNRD 575-393-6161 ext. 111 575-370-3180 (emergency-cell)

E-Mail: kellie.jones@state.nm.us

OCD approval does not relieve the operator of liability should their operations fail to adequately investigate and remediate contamination that may pose a threat to ground water, surface water, human health or the environment. In addition, OCD approval does not relieve the operator of responsibility for compliance with any other federal, state, local laws and/or regulations.

From: Kimberly Huckaba [mailto:khuckaba@laenvironmental.com]

Sent: Wednesday, November 18, 2015 7:18 AM

To: Jones, Kellie, EMNRD

Cc: stucker@blm.gov; Oberding, Tomas, EMNRD; Mark Larson Subject: 1RP-3921 - Endurance 25 Fed #2 SWD Investigation Summary

Please find the attached summary which is submitted to the Oil Conservation Division (OCD) on behalf of EOG Resources, Inc. (EOG), to document the investigation and remediation plan of a produced water spill at the Endurance 25 Fed #2 SWD located in Lea County, New Mexico. The remediation plan proposes to excavate soil to about 4 feet below ground surface (bgs), install a 20 mil thickness polyethylene liner, backfill with clean soil and seed to BLM requirements. A temporary load line is proposed near the west end of the tank battery to allow trucks access the facility during the remediation. Please do not hesitate to contact Mark Larson at (432) 556-8685 or me with any questions you may have.

Sincerely,

Kimberly Huckaba

Larson & Associates, Inc. Staff Geologist 432.687.0901 (O) 432.557.9703 (C)

This message has been scanned for viruses and dangerous content by MailScanner, and is believed to be clean.

#### Mark Larson

From:

Tucker, Shelly [stucker@blm.gov] Monday, November 23, 2015 11:46 AM Jones, Kellie, EMNRD

Sent:

To:

Kimberly Huckaba; Oberding, Tomas, EMNRD; Mark Larson; Keyes, Jamie, EMNRD Re: 1RP-3921 - Endurance 25 Fed #2 SWD Investigation Summary

Subject:

BLM concurs with NMOCD stipulations

If you have any questions or concerns, please do not hesitate to contact me.

Sincerely,

Shelly & Tucker

**Environmental Protection Specialist** Bureau of Land Management

620 E. Greene St Carlsbad, NM 88220

575,234,5905 - Direct 575.361.0084 - Cellular

stucker@blm.gov



The <u>BLM acceptance/approval does not</u> relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that may pose a threat to groundwater, surface water, human health or the environment or if the location fails to reclaim properly. In such an event that the location does not revegetate, or future issues with contaminants are encountered, the operator will be asked to address the issues until the contaminant issues are fully mitigated and the location is successfully reclaimed. In addition, BLM approval does not relieve the operator of responsibility for compliance with any other federal, state or local laws/regulations.

Confidentiality Warning: This message along with any attachments are intended only for use of the individual or entity to which it is addressed and may contain information that is privileged or confidential and exempt from disclosure under applicable law. If the reader of this message is not the intended recipient or the employee or agent responsible for delivering this message to the intended recipient, you are hereby notified that any dissemination, distribution, or copying of this communication is strictly prohibited. If you have received this communication in error, please notify the sender immediately.

On Mon, Nov 23, 2015 at 10:04 AM, Jones, Kellie, EMNRD < Kellie Jones@state.nm.us> wrote:

Kimberly,

Good morning. My comments are below in regards to the recent submittal.

- Ensure DP-8 is vertically delineated. 1.
- Provide documentation in regards to the depth to groundwater. 2.
- For samples DP1, DP5, DP7, DP8, and DP9, we believe going down to 8 feet in these areas will get the majority of the release. 3.
- Ensure BLM approval/concurrence. 4.

If you have any questions, please feel free to contact me.

Have a great day!

Kellie Jones

Environmental Specialist, District 1

Oil Conservation Division, EMNRD

575-393-6161 ext. 111

575-370-3180 (emergency-cell)

E-Mail: kellie jones@state.nm.us

### PERMIAN BASIN ENVIRONMENTAL LAB, LP 10014 SCR 1213 Midland, TX 79706



# Analytical Report

#### **Prepared for:**

Mark Larson
Larson & Associates, Inc.
P.O. Box 50685
Midland, TX 79710

Project: EOG Endurance 25
Project Number: 15-0160-01
Location: Lea County, New Mexico

Lab Order Number: 5K23001



NELAP/TCEQ # T104704156-13-3

Report Date: 11/24/15

Larson & Associates, Inc. Project: EOG Endurance 25

P.O. Box 50685 Project Number: 15-0160-01 Midland TX, 79710 Project Manager: Mark Larson

#### ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
DP-8 20'	5K23001-01	Soil	11/21/15 11:59	11-23-2015 08:57
DP-8 25'	5K23001-02	Soil	11/21/15 12:06	11-23-2015 08:57

Fax: (432) 687-0456

P.O. Box 50685 Project Number: 15-0160-01 Midland TX, 79710 Project Manager: Mark Larson

> DP-8 20' 5K23001-01 (Soil)

		Reporting							
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

### Permian Basin Environmental Lab, L.P.

Chloride	284	1.11 mg/kg dry	1	P5K2401	11/24/15	11/24/15	EPA 300.0
% Moisture	10.0	0.1 %	1	P5K2402	11/24/15	11/24/15	% calculation

P.O. Box 50685 Project Number: 15-0160-01 Midland TX, 79710 Project Manager: Mark Larson

> DP-8 25' 5K23001-02 (Soil)

									1
		Reporting							
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

### Permian Basin Environmental Lab, L.P.

Chloride	642	1.05 mg/kg dry	1	P5K2401	11/24/15	11/24/15	EPA 300.0
% Moisture	5.0	0.1 %	1	P5K2402	11/24/15	11/24/15	% calculation

P.O. Box 50685 Project Number: 15-0160-01 Midland TX, 79710 Project Manager: Mark Larson

## General Chemistry Parameters by EPA / Standard Methods - Quality Control Permian Basin Environmental Lab, L.P.

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch P5K2401 - *** DEFAULT PREP ***										
Blank (P5K2401-BLK1)				Prepared &	Analyzed:	11/24/15				
Chloride	ND	1.00	mg/kg wet							
LCS (P5K2401-BS1)				Prepared &	z Analyzed:	11/24/15				
Chloride	210	1.00	mg/kg wet	200		105	80-120			
LCS Dup (P5K2401-BSD1)				Prepared &	Analyzed:	11/24/15				
Chloride	207	1.00	mg/kg wet	200		103	80-120	1.66	20	
Duplicate (P5K2401-DUP1)	Sour	rce: 5K20001	1-01	Prepared &	Analyzed:	11/24/15				
Chloride	5160	29.4	mg/kg dry		5180			0.341	20	
Duplicate (P5K2401-DUP2)	Sou	rce: 5K20001	1-09	Prepared &	Analyzed:	11/24/15				
Chloride	ND	1.15	mg/kg dry		174				20	
Batch P5K2402 - % Solids										
Blank (P5K2402-BLK1)				Prepared &	Analyzed:	11/24/15				
% Moisture	ND	0.1	%							
Duplicate (P5K2402-DUP1)	Sou	rce: 5K20001	1-04	Prepared &	Analyzed:	11/24/15				
% Moisture	13.0	0.1	%		14.0			7.41	20	
Duplicate (P5K2402-DUP2)	Sou	rce: 5K23002	2-04	Prepared &	a Analyzed:	11/24/15				
% Moisture	7.0	0.1	%		11.0			44.4	20	

P.O. Box 50685 Project Number: 15-0160-01
Midland TX, 79710 Project Manager: Mark Larson

#### **Notes and Definitions**

DET Analyte DETECTED

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

dry Sample results reported on a dry weight basis

RPD Relative Percent Difference

LCS Laboratory Control Spike

MS Matrix Spike

Dup Duplicate

	Drew	Darron			
Report Approved By:			Date:	11/24/2015	

Brent Barron, Laboratory Director/Technical Director

This material is intended only for the use of the individual (s) or entity to whom it is addressed, and may contain information that is privileged and confidential.

If you have received this material in error, please notify us immediately at 432-686-7235.

Agron &

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CISCIT &	Midland TX 79701	PO #: LAB WORK ORDER #:
Environmental Consultants	432-687-0901	PROJECT LOCATION OR NAME: $EOG$ Endurance 25
eported to:		LAI PROJECT #: 15-0160-01 COLLECTOR: Michael Cart
report?   S=SOIL P=PAINT   W=WATER SL=SLUDGE	PRESERVATION	

	RELINQUISHED BY:(Signature)		RELINQUISHED BY: (Signature)	RELINOUISHED BY: (Signature)	TOTAL										DP-8 40	DP-8 35'		DP-8 25,	DP-8 20'	Field Sample I.D.	MST/N/A	TIME ZONE: Time zone/State:	Yes		Data Reported to:
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### ATTACHMENT B

### **Field Chloride Titration Procedure**

#### **Procedure:**

- 1. Make sure scale is reading in grams (g) with one-tenth of a gram precision.
- 2. Zero-out (tare) the weight on the scale containing a clean, dry 40-ml vial without lid attached.
- 3. Add approximately 10 grams of soil to the vial and record the weight, and re-zero (tare) the scale.
- 4. Using a 10 ml pipette add about 30 ml of distilled water to the vial and record the weight.
- 5. Place lid on vial and agitate for 20 seconds, then allow up to 20 minutes for the soil and water to separate.
- 6. Place a clean, dry paper cup on the scale and zero it out (tare).
- 7. Using a 10 ml pipette, remove and measure approximately 10 ml of the free liquid extract from the vial (<u>record the volume</u>) and place in the paper cup.
- 8. Swirl in 3 drops of Potassium Chromate to the solution in the paper cup.
- 9. Using the small pipette, add 0.141N Silver Nitrate to the solution in the paper cup drop by drop while swirling until the solution turns brick red. Record the volume (ml) of Silver Nitrate used.
- 10. Perform calculations as follows:

Parameters Water (g) Soil (g) Silver Nitrate (ml) Solution (ml) Constant = Chloride mole Weight x AgNO<sub>3</sub> normal  $(35,450 \times 0.141) = (4,998)$ 

#### Calculation of chloride concentration in soil:

$$Csoil(mg/kg) = (Clmol - wt \times normal) \times \frac{Water(g)}{Soil(g)} \times \frac{AgNO_3(ml)}{Solution(ml)}$$

or

$$Csoil(mg/kg) = (9997) \times \frac{Water(g)}{Soil(g)} \times \frac{AgNO_3(ml)}{Solution(ml)}$$



### Field Chloride Titration Results (0.141N AgNO 3)

Site: Endurance Fed 25 #2 SWD Site: T26S-R33E-Section 25-Unit E Date:

No.	Sample ID	Sample Depth (feet)		Soil Weight (grams)		AgNO <sub>3</sub> Volume (ml)	1	Extract Volume (ml)	x	Corr. Fact.	=	Chloride Conc. (mg/kg)	SC (mS)
	Example	1	30.0 /	10.0	Х	0.17	/	10.0	Х	4998	=	255	
	Example	2	30.0 /	10.0	Х	0.67	/	10.0	х	4998	=	1,005	
			/		Х		/	10.0	Х	4998	=		
			/		Х		/	10.0	х	4998	=		
			/		Х		/	10.0	х	4998	=		
			/		Х		/	10.0	Х	4998	=		
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### **ATTACHMENT C**

**Laboratory Analytical Reports** 

### PERMIAN BASIN ENVIRONMENTAL LAB, LP 1400 Rankin Hwy Midland, TX 79701



## Analytical Report

### **Prepared for:**

Gilbert Vandeventer Trident Environmental P.O. Box 12177 Odessa, TX 79768

Project: Endurance Fed 25 SWD #2

Project Number: [none]

Location: T26S R33E Sec. 25 Unit E

Lab Order Number: 6F07016



NELAP/TCEQ # T104704156-13-3

Report Date: 08/18/16

Trident Environmental Project: Endurance Fed 25 SWD #2

P.O. Box 12177 Project Number: [none]

Odessa TX, 79768 Project Manager: Gilbert Vandeventer

### ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Stockpile A	6F07016-01	Soil	06/07/16 14:50	06-07-2016 20:10
Stockpile B	6F07016-02	Soil	06/07/16 14:55	06-07-2016 20:10
Stockpile C	6F07016-03	Soil	06/07/16 15:00	06-07-2016 20:10
Stockpile D	6F07016-04	Soil	06/07/16 15:05	06-07-2016 20:10
Stockpile E	6F07016-05	Soil	06/07/16 15:10	06-07-2016 20:10
Stockpile F	6F07016-06	Soil	06/07/16 15:15	06-07-2016 20:10

Fax: (432) 413-9968

P.O. Box 12177 Project Number: [none]

Odessa TX, 79768 Project Manager: Gilbert Vandeventer

### Stockpile A 6F07016-01 (Soil)

		Reporting							
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

### Permian Basin Environmental Lab, L.P.

Chloride	527	1.02 mg/kg dry	1	P6F0801	06/07/16	06/07/16	EPA 300.0
% Moisture	2.0	0.1 %	1	P6F0802	06/07/16	06/08/16	% calculation

P.O. Box 12177 Project Number: [none]

Odessa TX, 79768 Project Manager: Gilbert Vandeventer

Stockpile B 6F07016-02 (Soil)

									I .
		Reporting							
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

### Permian Basin Environmental Lab, L.P.

Chloride	540	1.02 mg/kg dry	1	P6F0801	06/07/16	06/07/16	EPA 300.0
% Moisture	2.0	0.1 %	1	P6F0802	06/07/16	06/08/16	% calculation

P.O. Box 12177 Project Number: [none]

Odessa TX, 79768 Project Manager: Gilbert Vandeventer

Stockpile C 6F07016-03 (Soil)

		Reporting							
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

Permian Basin Environmental Lab, L.P.

Chloride	638	1.02 mg/kg dry	1	P6F0801	06/07/16	06/07/16	EPA 300.0
% Moisture	2.0	0.1 %	1	P6F0802	06/07/16	06/08/16	% calculation

P.O. Box 12177 Project Number: [none]

Odessa TX, 79768 Project Manager: Gilbert Vandeventer

Stockpile D 6F07016-04 (Soil)

									I .
		Reporting							
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

Permian Basin Environmental Lab, L.P.

Chloride	683	1.37 mg/kg dry	1	P6F0801	06/07/16	06/07/16	EPA 300.0
% Moisture	27.0	0.1 %	1	P6F0802	06/07/16	06/08/16	% calculation

P.O. Box 12177 Project Number: [none]

Odessa TX, 79768 Project Manager: Gilbert Vandeventer

Stockpile E 6F07016-05 (Soil)

		Reporting							
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

Permian Basin Environmental Lab, L.P.

Chloride	2090	10.5 mg/kg dry	10	P6F0801	06/07/16	06/07/16	EPA 300.0
% Moisture	5.0	0.1 %	1	P6F0802	06/07/16	06/08/16	% calculation

P.O. Box 12177 Project Number: [none]

Odessa TX, 79768 Project Manager: Gilbert Vandeventer

### Stockpile F 6F07016-06 (Soil)

									I .
		Reporting							
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

### Permian Basin Environmental Lab, L.P.

Chloride	1980	10.9 mg/kg dry	10	P6F0801	06/07/16	06/07/16	EPA 300.0
% Moisture	8.0	0.1 %	1	P6F0802	06/07/16	06/08/16	% calculation

P.O. Box 12177 Project Number: [none]

Odessa TX, 79768 Project Manager: Gilbert Vandeventer

# General Chemistry Parameters by EPA / Standard Methods - Quality Control Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P6F0801 - *** DEFAULT PREP ***										
Blank (P6F0801-BLK1)				Prepared &	& Analyzed:	06/07/16				
Chloride	ND	1.00	mg/kg wet	-						
LCS (P6F0801-BS1)				Prepared &	& Analyzed:	06/07/16				
Chloride	172	1.00	mg/kg wet	200		85.8	80-120			
LCS Dup (P6F0801-BSD1)				Prepared &	& Analyzed:	06/07/16				
Chloride	175	1.00	mg/kg wet	200		87.3	80-120	1.79	20	
Duplicate (P6F0801-DUP1)	Sou	rce: 6F06002	2-01	Prepared &	& Analyzed:	06/07/16				
Chloride	3370	31.2	mg/kg dry		3410			1.20	20	
Duplicate (P6F0801-DUP2)	Sou	rce: 6F07016	5-05	Prepared &	& Analyzed:	06/07/16				
Chloride	2100	10.5	mg/kg dry		2090			0.351	20	
Matrix Spike (P6F0801-MS1)	Sou	rce: 6F06002	2-01	Prepared &	& Analyzed	06/07/16				
Chloride	10300	39.1	mg/kg dry	5000	3410	139	80-120			QM-0°
Batch P6F0802 - *** DEFAULT PREP ***										
Blank (P6F0802-BLK1)				Prepared:	06/07/16 A	nalyzed: 06	5/08/16			
% Moisture	ND	0.1	%	*						
Duplicate (P6F0802-DUP1)	Sou	rce: 6F07016	5-01	Prepared:	06/07/16 A	nalyzed: 06	5/08/16			
% Moisture	2.0	0.1	%		2.0			0.00	20	
Duplicate (P6F0802-DUP2)	Sou	rce: 6F06002	2-01	Prepared:	06/07/16 A	nalyzed: 06	5/08/16			
% Moisture	19.0	0.1	%		20.0			5.13	20	

P.O. Box 12177 Project Number: [none]

Odessa TX, 79768 Project Manager: Gilbert Vandeventer

## General Chemistry Parameters by EPA / Standard Methods - Quality Control Permian Basin Environmental Lab, L.P.

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch P6F0802 - *** DEFAULT PREP ***										
Duplicate (P6F0802-DUP3)	Sour	ce: 6F06002-	25	Prepared: 0	06/07/16 A	nalyzed: 06	/08/16			
% Moisture	9.0	0.1	%		9.0			0.00	20	
Duplicate (P6F0802-DUP4)	Sour	ce: 6F06002-	49	Prepared: 0	06/07/16 A	nalyzed: 06	/08/16			
% Moisture	4.0	0.1	%		5.0			22.2	20	
Duplicate (P6F0802-DUP5)	Sour	ce: 6F06003-	02	Prepared: 0	06/07/16 A	nalyzed: 06	/08/16			
% Moisture	15.0	0.1	%		16.0			6.45	20	

P.O. Box 12177 Project Number: [none]

Odessa TX, 79768 Project Manager: Gilbert Vandeventer

#### **Notes and Definitions**

QM-07 The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS

recovery.

DET Analyte DETECTED

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

dry Sample results reported on a dry weight basis

RPD Relative Percent Difference

LCS Laboratory Control Spike

MS Matrix Spike

Dup Duplicate

	Drew	Darron			
Report Approved By:			Date:	8/18/2016	

Brent Barron, Laboratory Director/Technical Director

This material is intended only for the use of the individual (s) or entity to whom it is addressed, and may contain information that is privileged and confidential.

If you have received this material in error, please notify us immediately at 432-686-7235.

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Relinquished by:	Relinquished by:	Relinquished by Late Cylis	Special Instructions:				6 Stockpile P	Stock pile E	4 Stock pile D	3 Stockoll C	2 Stockpile B	· Stockpile A	FIELD CODE	(lab use only)  ORDER #: 6 F 670 F 6	Sampler Signature:	Telephone No: 437 - 638	City/State/Zip: OdesCa TX	Company Address: PBB 1217	Company Name Trident En	Project Manager: Gil WW	CHAIN OF C
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### PERMIAN BASIN ENVIRONMENTAL LAB, LP 1400 Rankin Hwy Midland, TX 79701



## Analytical Report

### **Prepared for:**

Gilbert Vandeventer Trident Environmental P.O. Box 12177 Odessa, TX 79768

Project: Endurance Fed 25 SWD #2

Project Number: [none]

Location: T26S R33E Sec. 25 Unit E

Lab Order Number: 6F07017



NELAP/TCEQ # T104704156-13-3

Report Date: 08/18/16

Trident Environmental Project: Endurance Fed 25 SWD #2

Project Number: [none]

Odessa TX, 79768 Project Manager: Gilbert Vandeventer

P.O. Box 12177

### ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
DP-8 (4')	6F07017-01	Soil	06/07/16 11:30	06-07-2016 20:10
DP-8 (8')	6F07017-02	Soil	06/07/16 12:00	06-07-2016 20:10
DP-9 (4')	6F07017-03	Soil	06/07/16 11:00	06-07-2016 20:10
DP-9 (4')	6F07017-04	Soil	06/07/16 11:10	06-07-2016 20:10
20' N. DP-7 (4')	6F07017-05	Soil	06/07/16 14:00	06-07-2016 20:10
20' N. DP-7 (8')	6F07017-06	Soil	06/07/16 14:05	06-07-2016 20:10
30' S. DP-7 (4')	6F07017-07	Soil	06/07/16 14:10	06-07-2016 20:10
30' S. DP-7 (8')	6F07017-08	Soil	06/07/16 14:15	06-07-2016 20:10

Fax: (432) 413-9968

P.O. Box 12177 Project Number: [none]

Odessa TX, 79768 Project Manager: Gilbert Vandeventer

### DP-8 (4') 6F07017-01 (Soil)

		Reporting							
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

### Permian Basin Environmental Lab, L.P.

Chloride	732	1.03 mg/kg dry	1	P6F0801	06/07/16	06/07/16	EPA 300.0
% Moisture	3.0	0.1 %	1	P6F0802	06/07/16	06/08/16	% calculation

P.O. Box 12177 Project Number: [none]

Odessa TX, 79768 Project Manager: Gilbert Vandeventer

DP-8 (8') 6F07017-02 (Soil)

									I .
		Reporting							
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

Permian Basin Environmental Lab, L.P.

Chloride	3370	26.3 mg/kg dry	25	P6F0801	06/07/16	06/07/16	EPA 300.0
% Moisture	5.0	0.1 %	1	P6F0802	06/07/16	06/08/16	% calculation

P.O. Box 12177 Project Number: [none]

Odessa TX, 79768 Project Manager: Gilbert Vandeventer

DP-9 (4') 6F07017-03 (Soil)

									I .
		Reporting							
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

Permian Basin Environmental Lab, L.P.

Chloride	1530	5.21 mg/kg dry	5	P6F0801	06/07/16	06/07/16	EPA 300.0
% Moisture	4.0	0.1 %	1	P6F0802	06/07/16	06/08/16	% calculation

P.O. Box 12177 Project Number: [none]

Odessa TX, 79768 Project Manager: Gilbert Vandeventer

DP-9 (4') 6F07017-04 (Soil)

									I
		Reporting							
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

### Permian Basin Environmental Lab, L.P.

Chloride	1250	5.21 mg/kg dry	5	P6F0801	06/07/16	06/07/16	EPA 300.0
% Moisture	4.0	0.1 %	1	P6F0802	06/07/16	06/08/16	% calculation

P.O. Box 12177 Project Number: [none]

Odessa TX, 79768 Project Manager: Gilbert Vandeventer

20' N. DP-7 (4') 6F07017-05 (Soil)

									I .
		Reporting							
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

### Permian Basin Environmental Lab, L.P.

Chloride	1350	5.32 mg/kg dry	5	P6F0801	06/07/16	06/07/16	EPA 300.0
% Moisture	6.0	0.1 %	1	P6F0802	06/07/16	06/08/16	% calculation

P.O. Box 12177 Project Number: [none]

Odessa TX, 79768 Project Manager: Gilbert Vandeventer

20' N. DP-7 (8') 6F07017-06 (Soil)

Reporting

Analyte Result Limit Units Dilution Batch Prepared Analyzed Method Notes

Permian Basin Environmental Lab, L.P.

**General Chemistry Parameters by EPA / Standard Methods** 

 Chloride
 1190
 5.21 mg/kg dry
 5
 P6F0801 06/07/16 06/07/16
 06/07/16 06/07/16
 EPA 300.0

 % Moisture
 4.0
 0.1 % 1
 1 P6F0802 06/07/16 06/08/16
 06/08/16 % calculation

P.O. Box 12177 Project Number: [none]

Odessa TX, 79768 Project Manager: Gilbert Vandeventer

30' S. DP-7 (4') 6F07017-07 (Soil)

Reporting

Analyte Result Limit Units Dilution Batch Prepared Analyzed Method Notes

Permian Basin Environmental Lab, L.P.

**General Chemistry Parameters by EPA / Standard Methods** 

 Chloride
 275
 1.12 mg/kg dry
 1 P6F0801
 06/07/16 06/07/16
 EPA 300.0

 % Moisture
 11.0
 0.1 %
 1 P6F0802
 06/07/16 06/07/16
 % calculation

P.O. Box 12177 Project Number: [none]

Odessa TX, 79768 Project Manager: Gilbert Vandeventer

30' S. DP-7 (8') 6F07017-08 (Soil)

									I .
		Reporting							
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

### Permian Basin Environmental Lab, L.P.

Chloride	754	1.04 mg/kg dry	1	P6F0801	06/07/16	06/07/16	EPA 300.0
% Moisture	4.0	0.1 %	1	P6F0802	06/07/16	06/08/16	% calculation

P.O. Box 12177 Project Number: [none]

Odessa TX, 79768 Project Manager: Gilbert Vandeventer

# General Chemistry Parameters by EPA / Standard Methods - Quality Control Permian Basin Environmental Lab, L.P.

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch P6F0801 - *** DEFAULT PREP ***										
Blank (P6F0801-BLK1)				Prepared &	& Analyzed:	06/07/16				
Chloride	ND	1.00	mg/kg wet							
LCS (P6F0801-BS1)				Prepared &	& Analyzed:	06/07/16				
Chloride	172	1.00	mg/kg wet	200		85.8	80-120			
LCS Dup (P6F0801-BSD1)				Prepared &	& Analyzed:	06/07/16				
Chloride	175	1.00	mg/kg wet	200		87.3	80-120	1.79	20	
Duplicate (P6F0801-DUP1)	Sou	rce: 6F06002	-01	Prepared &	& Analyzed:	06/07/16				
Chloride	3370	31.2	mg/kg dry		3410			1.20	20	
Duplicate (P6F0801-DUP2)	Sou	rce: 6F07016	-05	Prepared &	& Analyzed:	06/07/16				
Chloride	2100	10.5	mg/kg dry		2090			0.351	20	
Matrix Spike (P6F0801-MS1)	Sou	rce: 6F06002	-01	Prepared & Analyzed: 06/07/16						
Chloride	10300	39.1	mg/kg dry	5000	3410	139	80-120			QM-0'
Batch P6F0802 - *** DEFAULT PREP ***										
Blank (P6F0802-BLK1)				Prepared:	06/07/16 A:	nalyzed: 06	5/08/16			
% Moisture	ND	0.1	%							
Duplicate (P6F0802-DUP1)	Sou	rce: 6F07016	-01	Prepared:	06/07/16 A	nalyzed: 06	5/08/16			
% Moisture	2.0	0.1	%		2.0			0.00	20	
Duplicate (P6F0802-DUP2)	Sou	rce: 6F06002	-01	Prepared:	06/07/16 A	nalyzed: 06	5/08/16			
% Moisture	19.0	0.1	%		20.0			5.13	20	

P.O. Box 12177 Project Number: [none]

Odessa TX, 79768 Project Manager: Gilbert Vandeventer

## General Chemistry Parameters by EPA / Standard Methods - Quality Control Permian Basin Environmental Lab, L.P.

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch P6F0802 - *** DEFAULT PREP ***										
Duplicate (P6F0802-DUP3)	Sour	ce: 6F06002-	25	Prepared: 0	06/07/16 A	nalyzed: 06	/08/16			
% Moisture	9.0	0.1	%		9.0			0.00	20	
Duplicate (P6F0802-DUP4)	Sour	ce: 6F06002-	49	Prepared: 0	06/07/16 A	nalyzed: 06	/08/16			
% Moisture	4.0	0.1	%		5.0			22.2	20	
Duplicate (P6F0802-DUP5)	Sour	ce: 6F06003-	02	Prepared: 0	06/07/16 A	nalyzed: 06	/08/16			
% Moisture	15.0	0.1	%		16.0			6.45	20	

P.O. Box 12177 Project Number: [none]

Odessa TX, 79768 Project Manager: Gilbert Vandeventer

#### **Notes and Definitions**

r	DM-07	The snike recovery	was outside accent	ance limits for the	MS and/or MSD	The batch was acce	epted based on acceptable LCS
Ų	/1V1-U /	THE SPIKE ICCOVER	was outside accept	ance minus for the	IVIS allu/ol IVISD.	THE Datell was acce	picu bascu on acceptable LCS

recovery.

DET Analyte DETECTED

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

dry Sample results reported on a dry weight basis

RPD Relative Percent Difference

LCS Laboratory Control Spike

MS Matrix Spike

Dup Duplicate

	Bren	Sarron			
Report Approved By:			Date:	8/18/2016	

Brent Barron, Laboratory Director/Technical Director

This material is intended only for the use of the individual (s) or entity to whom it is addressed, and may contain information that is privileged and confidential.

If you have received this material in error, please notify us immediately at 432-686-7235.

	Relinquished by:	(	The less with		Special Instructions:		8 30' S. pp-7 (8')	7 30' S, DR-7 (4')	6 20' N. DP-7 (87)	5 20' N. DP-7(4')	9 (87)	9(4)	Z DP-8(8')	8(4)	FIELD CODE	ORDER#: 6F07017		Sampler Signature:	Telephone No: 432-638-8	City/State/Zip: O dessa Tx	Company Address: POB 12177	Company Name To dent Environmenta	Project Manager: Gil Var lew		CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST
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### PERMIAN BASIN ENVIRONMENTAL LAB, LP 1400 Rankin Hwy Midland, TX 79701



## Analytical Report

### **Prepared for:**

Gilbert Vandeventer Trident Environmental P.O. Box 12177 Odessa, TX 79768

Project: Endurance Fed 25 SWD #4

Project Number: [none]

Location: T16S R33E Sec 25 Unit E

Lab Order Number: 6F09002



NELAP/TCEQ # T104704156-13-3

Report Date: 06/22/16

Trident Environmental Project: Endurance Fed 25 SWD #4

P.O. Box 12177 Project Number: [none]

Odessa TX, 79768 Project Manager: Gilbert Vandeventer

### ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
DP-5 (4')	6F09002-01	Soil	06/08/16 13:30	06-08-2016 21:00
DP-5 (8')	6F09002-02	Soil	06/08/16 12:30	06-08-2016 21:00
Stockpile G	6F09002-03	Soil	06/08/16 14:30	06-08-2016 21:00
Stockpile H	6F09002-04	Soil	06/08/16 14:40	06-08-2016 21:00

Fax: (432) 413-9968

P.O. Box 12177 Project Number: [none]

Odessa TX, 79768 Project Manager: Gilbert Vandeventer

## DP-5 (4') 6F09002-01 (Soil)

		Reporting							
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

#### Permian Basin Environmental Lab, L.P.

Chloride	4350	27.2 mg/kg dry	25	P6F1401	06/14/16	06/14/16	EPA 300.0
% Moisture	8.0	0.1 %	1	P6F1007	06/10/16	06/10/16	% calculation

P.O. Box 12177 Project Number: [none]

Odessa TX, 79768 Project Manager: Gilbert Vandeventer

DP-5 (8') 6F09002-02 (Soil)

		Reporting							
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

#### Permian Basin Environmental Lab, L.P.

Chloride	5840	27.8 mg/kg dry	25	P6F1401	06/14/16	06/14/16	EPA 300.0
% Moisture	10.0	0.1 %	1	P6F1007	06/10/16	06/10/16	% calculation

P.O. Box 12177 Project Number: [none]

Odessa TX, 79768 Project Manager: Gilbert Vandeventer

Stockpile G 6F09002-03 (Soil)

									I .
		Reporting							
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

#### Permian Basin Environmental Lab, L.P.

Chloride	1500	10.5 mg/kg dry	10	P6F1401	06/14/16	06/14/16	EPA 300.0
% Moisture	5.0	0.1 %	1	P6F1007	06/10/16	06/10/16	% calculation

P.O. Box 12177 Project Number: [none]

Odessa TX, 79768 Project Manager: Gilbert Vandeventer

## Stockpile H 6F09002-04 (Soil)

									I .
		Reporting							
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

#### Permian Basin Environmental Lab, L.P.

Chloride	2360	10.5 mg/kg dry	10	P6F1401	06/14/16	06/14/16	EPA 300.0
% Moisture	5.0	0.1 %	1	P6F1007	06/10/16	06/10/16	% calculation

P.O. Box 12177 Project Number: [none]

Odessa TX, 79768 Project Manager: Gilbert Vandeventer

# General Chemistry Parameters by EPA / Standard Methods - Quality Control Permian Basin Environmental Lab, L.P.

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch P6F1007 - *** DEFAULT PREP ***										
Blank (P6F1007-BLK1)				Prepared &	ն Analyzed:	06/10/16				
% Moisture	ND	0.1	%							
Duplicate (P6F1007-DUP1)	Sour	rce: 6F09002-	02	Prepared &	ե Analyzed:	06/10/16				
% Moisture	10.0	0.1	%		10.0			0.00	20	
Duplicate (P6F1007-DUP2)	<b>Source: 6F09007-08</b> Pre		Prepared &	ե Analyzed:	06/10/16					
% Moisture	11.0	0.1	%		12.0			8.70	20	
Duplicate (P6F1007-DUP3)	<b>Source: 6F09007-21</b> Pre		Prepared &	k Analyzed:	06/10/16					
% Moisture	11.0	0.1	%		11.0			0.00	20	
Duplicate (P6F1007-DUP4)	Source: 6F09011-04 Pr		Prepared &	ե Analyzed:	06/10/16					
% Moisture	4.0	0.1	%		4.0			0.00	20	
Batch P6F1401 - *** DEFAULT PREP ***										
Blank (P6F1401-BLK1)				Prepared: (	06/14/16 A	nalyzed: 06	5/16/16			
Chloride	ND	1.00	mg/kg wet							
LCS (P6F1401-BS1)				Prepared: (	06/14/16 A	nalyzed: 06	5/16/16			
Chloride	177	1.00	mg/kg wet	200		88.4	80-120			
LCS Dup (P6F1401-BSD1)				Prepared: (	06/14/16 A	nalyzed: 06	5/16/16			
Chloride	180	1.00	mg/kg wet	200		89.8	80-120	1.63	20	
Duplicate (P6F1401-DUP1)	Sour	rce: 6F09002-	01	Prepared: (	06/14/16 A	nalyzed: 06	5/16/16			
Chloride	4320	27.2	mg/kg dry		4350			0.627	20	

P.O. Box 12177 Project Number: [none]

Odessa TX, 79768 Project Manager: Gilbert Vandeventer

## General Chemistry Parameters by EPA / Standard Methods - Quality Control Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Datab DCE1401 *** DEEATH T DDED ***										

Batch P6F1401	- ***	DEFAULT	PREP ***
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Duplicate (P6F1401-DUP2)	Source: 6D15005-05		Prepared: 0	6/14/16 Ar	nalyzed: 06				
Chloride	1030	5.62 mg/kg dry		1090			5.77	20	
Matrix Spike (P6F1401-MS1)	Source: 6F09002-01		Prepared: 0	6/14/16 Ar	nalyzed: 06	/16/16			
Chloride	771	mg/kg	350	400	106	80-120			

P.O. Box 12177 Project Number: [none]

Odessa TX, 79768 Project Manager: Gilbert Vandeventer

#### **Notes and Definitions**

DET Analyte DETECTED

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

dry Sample results reported on a dry weight basis

RPD Relative Percent Difference

LCS Laboratory Control Spike

MS Matrix Spike

Dup Duplicate

	Burn Barron		
Report Approved By:		Date:	6/22/2016

Brent Barron, Laboratory Director/Technical Director

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If you have received this material in error, please notify us immediately at 432-686-7235.

Reiniquished by:	Date Time	Left 6130 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	ictions:			U STATE	J 97	03 Stockoile 6	102   09-5 (8)		LAB # (lab use only)	ORDER #: (MF09002_	Sampler Signature: Milla Want	Telephone No: 486638-8740	City/State/Zip: Odessa 7x 79768	ss: 80 Bex 12177	Company Name Trident Environ me	Project Manager: G; / Van Devenn	PBBLAGE CHAIN OF CUSTODY RE
Management of the second of th	Received by:						110041 9-89	P-8-10 1430 11 11	6-8-16 1230 11 1	6-8-16 (330 N)	Date Sampled  Time Sampled  Field Filtered  Total #, of Containers Ice  HNO <sub>3 250,ml Poly</sub> HCI	Preservation	e-mail: 9 1/20	Fax No:			mental	ter	CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST Permian Basin Envi
pais time remperatured Received Adjusted	9	Date Time Label Custo Custo				¢				·	H <sub>2</sub> SO <sub>4</sub> NaOH  Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> None   L Poly  NaOH/ZnAc  DW=Drinking Water SL=Sludge  GW = Groundwater S=Soil/Solid  NP=Non-Potable Specify Other  TPH by TX 1005 8015B 8015M  Chloride  BTEX by 8021B	&# of Containers Matrix</td><td>to ident-environmental.</td><td>Report Format:</td><td>PO#:</td><td>Project Loc:</td><td>Project #:</td><td>79701 Project Name:</td><td>vironmental Lab, LP</td></tr><tr><td>sted: 18 °C Factor 19 C 15 C/</td><td>Sample Hand Delivered N N SamplerClient Rep. 2 N N Dy Courier? UPS DHL FedEx Lone Star</td><td>Labels on container(s)  Custody seals on container(s)  N  Custody seals on cooler(s)  N</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>Rush 24 48 72 (Pleas</td><td></td><td><i>COV</i>∽ Analyze For:</td><td>⊋ Standard ☐ TRRP ☐ NPDES</td><td></td><td>T165 R336 Sec 25 Unit</td><td></td><td>Endurance Fed 25 SWI</td><td>Phone: 432-686-7235</td></tr></tbody></table>							

## PERMIAN BASIN ENVIRONMENTAL LAB, LP 1400 Rankin Hwy Midland, TX 79701



## Analytical Report

## **Prepared for:**

Gilbert Vandeventer Trident Environmental P.O. Box 12177 Odessa, TX 79768

Project: Endurance Fed 24 SWD #2

Project Number: [none]

Location: TS265 R33E Sec 25 Unit E

Lab Order Number: 6F09014



NELAP/TCEQ # T104704156-13-3

Report Date: 06/13/16

Trident Environmental Project: Endurance Fed 24 SWD #2

Project Number: [none]

Odessa TX, 79768 Project Manager: Gilbert Vandeventer

P.O. Box 12177

#### ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Stockpile I	6F09014-01	Soil	06/09/16 13:30	06-09-2016 18:30
Stockpile J	6F09014-02	Soil	06/09/16 13:40	06-09-2016 18:30
Stockpile K	6F09014-03	Soil	06/09/16 13:50	06-09-2016 18:30
Stockpile L	6F09014-04	Soil	06/09/16 14:00	06-09-2016 18:30
Stockpile M	6F09014-05	Soil	06/09/16 14:10	06-09-2016 18:30
Stockpile N	6F09014-06	Soil	06/09/16 14:20	06-09-2016 18:30
30' n. DO5 (4')	6F09014-07	Soil	06/09/16 08:30	06-09-2016 18:30
50' S. DP-6 (4')	6F09014-08	Soil	06/09/16 09:00	06-09-2016 18:30
50 S. DP-6 (8')	6F09014-09	Soil	06/09/16 09:05	06-09-2016 18:30
25'S. DP-6 (4')	6F09014-10	Soil	06/09/16 10:00	06-09-2016 18:30
25"S. DP-6 (8')	6F09014-11	Soil	06/09/16 10:05	06-09-2016 18:30

Fax: (432) 413-9968

P.O. Box 12177 Project Number: [none]

Odessa TX, 79768 Project Manager: Gilbert Vandeventer

## Stockpile I 6F09014-01 (Soil)

								1
	Reporting							
Analyte Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

#### Permian Basin Environmental Lab, L.P.

Chloride	901	5.21 mg/kg dry	5	P6F1002	06/10/16	06/10/16	EPA 300.0
% Moisture	4.0	0.1 %	1	P6F1001	06/10/16	06/10/16	% calculation

P.O. Box 12177 Project Number: [none]

Odessa TX, 79768 Project Manager: Gilbert Vandeventer

Stockpile J 6F09014-02 (Soil)

		Reporting							
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

#### Permian Basin Environmental Lab, L.P.

Chloride	1590	5.21 mg/kg dry	5	P6F1002	06/10/16	06/10/16	EPA 300.0
% Moisture	4.0	0.1 %	1	P6F1001	06/10/16	06/10/16	% calculation

P.O. Box 12177 Project Number: [none]

Odessa TX, 79768 Project Manager: Gilbert Vandeventer

Stockpile K 6F09014-03 (Soil)

		Reporting							
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

#### Permian Basin Environmental Lab, L.P.

Chloride	490	5.21 mg/kg dry	5	P6F1002	06/10/16	06/10/16	EPA 300.0
% Moisture	4.0	0.1 %	1	P6F1001	06/10/16	06/10/16	% calculation

P.O. Box 12177 Project Number: [none]

Odessa TX, 79768 Project Manager: Gilbert Vandeventer

### Stockpile L 6F09014-04 (Soil)

									I .
		Reporting							
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

#### Permian Basin Environmental Lab, L.P.

Chloride	1080	5.21 mg/kg dry	5	P6F1002	06/10/16	06/10/16	EPA 300.0
% Moisture	4.0	0.1 %	1	P6F1001	06/10/16	06/10/16	% calculation

P.O. Box 12177 Project Number: [none]

Odessa TX, 79768 Project Manager: Gilbert Vandeventer

## Stockpile M 6F09014-05 (Soil)

		Reporting							
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

#### Permian Basin Environmental Lab, L.P.

Chloride	1000	5.15 mg/kg dry	5	P6F1002	06/10/16	06/10/16	EPA 300.0
% Moisture	3.0	0.1 %	1	P6F1001	06/10/16	06/10/16	% calculation

P.O. Box 12177 Project Number: [none]

Odessa TX, 79768 Project Manager: Gilbert Vandeventer

## Stockpile N 6F09014-06 (Soil)

		Reporting							
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

#### Permian Basin Environmental Lab, L.P.

Chloride	1220	5.21 mg/kg dry	5	P6F1002	06/10/16	06/10/16	EPA 300.0
% Moisture	4.0	0.1 %	1	P6F1001	06/10/16	06/10/16	% calculation

P.O. Box 12177 Project Number: [none]

Odessa TX, 79768 Project Manager: Gilbert Vandeventer

30' n. DO5 (4') 6F09014-07 (Soil)

		Reporting							
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

#### Permian Basin Environmental Lab, L.P.

Chloride	3610	27.8 mg/kg dry	25	P6F1002	06/10/16	06/10/16	EPA 300.0
% Moisture	10.0	0.1 %	1	P6F1001	06/10/16	06/10/16	% calculation

P.O. Box 12177 Project Number: [none]

Odessa TX, 79768 Project Manager: Gilbert Vandeventer

50' S. DP-6 (4') 6F09014-08 (Soil)

Reporting

Analyte Result Limit Units Dilution Batch Prepared Analyzed Method Notes

Permian Basin Environmental Lab, L.P.

**General Chemistry Parameters by EPA / Standard Methods** 

 Chloride
 5200
 27.5
 mg/kg dry
 25
 P6F1002
 06/10/16
 06/10/16
 EPA 300.0

 % Moisture
 9.0
 0.1
 %
 1
 P6F1001
 06/10/16
 06/10/16
 % calculation

P.O. Box 12177 Project Number: [none]

Odessa TX, 79768 Project Manager: Gilbert Vandeventer

50 S. DP-6 (8') 6F09014-09 (Soil)

									I .
		Reporting							
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

#### Permian Basin Environmental Lab, L.P.

Chloride	1830	25.8 mg/kg dry	25	P6F1002	06/10/16	06/10/16	EPA 300.0
% Moisture	3.0	0.1 %	1	P6F1001	06/10/16	06/10/16	% calculation

P.O. Box 12177 Project Number: [none]

Odessa TX, 79768 Project Manager: Gilbert Vandeventer

25'S. DP-6 (4') 6F09014-10 (Soil)

Reporting

Analyte Result Limit Units Dilution Batch Prepared Analyzed Method Notes

Permian Basin Environmental Lab, L.P.

**General Chemistry Parameters by EPA / Standard Methods** 

 Chloride
 1290
 10.4 mg/kg dry
 10 P6F1002
 06/10/16 06/10/16
 EPA 300.0

 % Moisture
 4.0
 0.1 %
 1 P6F1001
 06/10/16 06/10/16
 % calculation

P.O. Box 12177 Project Number: [none]

Odessa TX, 79768 Project Manager: Gilbert Vandeventer

25"S. DP-6 (8') 6F09014-11 (Soil)

									1
		Reporting							
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

#### Permian Basin Environmental Lab, L.P.

Chloride	547	10.4 mg/kg dry	10	P6F1002	06/10/16	06/10/16	EPA 300.0
% Moisture	4.0	0.1 %	1	P6F1001	06/10/16	06/10/16	% calculation

P.O. Box 12177 Project Number: [none]

Odessa TX, 79768 Project Manager: Gilbert Vandeventer

# General Chemistry Parameters by EPA / Standard Methods - Quality Control Permian Basin Environmental Lab, L.P.

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch P6F1001 - *** DEFAULT PREP ***										
Blank (P6F1001-BLK1)				Prepared &	Analyzed:	06/10/16				
% Moisture	ND	0.1	%							
Duplicate (P6F1001-DUP1)	Sou	rce: 6F09014	-11	Prepared &	z Analyzed:	06/10/16				
% Moisture	4.0	0.1	%		4.0			0.00	20	
Batch P6F1002 - *** DEFAULT PREP ***										
Blank (P6F1002-BLK1)				Prepared &	Analyzed:	06/10/16				
Chloride	ND	1.00	mg/kg wet							
LCS (P6F1002-BS1)				Prepared &	Analyzed:	06/10/16				
Chloride	179	1.00	mg/kg wet	200		89.6	80-120			
LCS Dup (P6F1002-BSD1)				Prepared &	Analyzed:	06/10/16				
Chloride	180	1.00	mg/kg wet	200		89.8	80-120	0.279	20	
Duplicate (P6F1002-DUP1)	Sou	rce: 6F09014	-01	Prepared &	Analyzed:	06/10/16				
Chloride	910	5.21	mg/kg dry		901			0.932	20	
Duplicate (P6F1002-DUP2)	Sou	rce: 6F09014	-11	Prepared &	z Analyzed:	06/10/16				
Chloride	549	10.4	mg/kg dry		547			0.380	20	

P.O. Box 12177 Project Number: [none]

Odessa TX, 79768 Project Manager: Gilbert Vandeventer

#### **Notes and Definitions**

DET Analyte DETECTED

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

dry Sample results reported on a dry weight basis

RPD Relative Percent Difference

LCS Laboratory Control Spike

MS Matrix Spike

Dup Duplicate

	Drew	Darron			
Report Approved By:			Date:	6/13/2016	

Brent Barron, Laboratory Director/Technical Director

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by Co Temperat Received Adjusted	Sample Hand Delivered by Sampler/Client Rep	Custody seals on container(s) Custody seals on cooler(s)	VOCs Free of Headspace?	Labo		$\vdash \downarrow$								<u> </u>	Cations (Ca, Mg, Na, K)
by Courier UPS Temperature Upon Receipt Received "C Adjusted: 20 °C F	nple Hand Delivered by Sampler/Client Rep. ?	dy se	Free	Laboratory Comments:											Anions (CI, SO4, Alkalinity)  SAR / ESP / CEC  Metals: As Ag Ba Cd Cr Pb Hg Se  Ana  Ana  Ana  Ana  Anions (CI, SO4, Alkalinity)  Ti Di
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## PERMIAN BASIN ENVIRONMENTAL LAB, LP 1400 Rankin Hwy Midland, TX 79701



## Analytical Report

## **Prepared for:**

Gilbert Vandeventer Trident Environmental P.O. Box 12177 Odessa, TX 79768

Project: Endurance Fed 25 SWD #2

Project Number: [none]

Location: T16S R33E Sec 25 Unit E

Lab Order Number: 6F13011



NELAP/TCEQ # T104704156-13-3

Report Date: 07/07/16

Trident Environmental Project: Endurance Fed 25 SWD #2 P.O. Box 12177

Project Number: [none]

Odessa TX, 79768 Project Manager: Gilbert Vandeventer

#### ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
80' NE DP-5 (8')	6F13011-01	Soil	06/13/16 14:20	06-13-2016 19:00
50' S DP-5 (8')	6F13011-02	Soil	06/13/16 14:30	06-13-2016 19:00
50- S 20' W DP-7 (4')	6F13011-03	Soil	06/13/16 12:30	06-13-2016 19:00
DP-7 (8')	6F13011-04	Soil	06/13/16 12:40	06-13-2016 19:00
Stockpile O	6F13011-05	Soil	06/13/16 15:00	06-13-2016 19:00
Stockpile P	6F13011-06	Soil	06/13/16 15:10	06-13-2016 19:00
Stockpile Q	6F13011-07	Soil	06/13/16 15:20	06-13-2016 19:00
SP-6	6F13011-08	Soil	06/13/16 14:00	06-13-2016 19:00
SP-7	6F13011-09	Soil	06/13/16 14:20	06-13-2016 19:00
Top Soil (Lea Land)	6F13011-10	Soil	06/13/16 15:30	06-13-2016 19:00

Fax: (432) 413-9968

P.O. Box 12177 Project Number: [none]

Odessa TX, 79768 Project Manager: Gilbert Vandeventer

## 80' NE DP-5 (8') 6F13011-01 (Soil)

								1
	Reporting							
Analyte Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

#### Permian Basin Environmental Lab, L.P.

Chloride	2560	10.4 mg/kg dry	10	P6F2013	06/20/16	06/20/16	EPA 300.0
% Moisture	4.0	0.1 %	1	P6F1506	06/15/16	06/16/16	% calculation

P.O. Box 12177 Project Number: [none]

Odessa TX, 79768 Project Manager: Gilbert Vandeventer

50' S DP-5 (8') 6F13011-02 (Soil)

		Reporting							
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

#### Permian Basin Environmental Lab, L.P.

Chloride	1910	10.4 mg/kg dry	10	P6F2013	06/20/16	06/20/16	EPA 300.0
% Moisture	4.0	0.1 %	1	P6F1506	06/15/16	06/16/16	% calculation

P.O. Box 12177 Project Number: [none]

Odessa TX, 79768 Project Manager: Gilbert Vandeventer

50- S 20' W DP-7 (4') 6F13011-03 (Soil)

Reporting

Analyte Result Limit Units Dilution Batch Prepared Analyzed Method Notes

Permian Basin Environmental Lab, L.P.

**General Chemistry Parameters by EPA / Standard Methods** 

 Chloride
 33.3
 1.06 mg/kg dry
 1 P6F2013 06/20/16 06/20/16 06/20/16
 EPA 300.0

 % Moisture
 6.0
 0.1 % 1 P6F1506 06/15/16 06/15/16 06/15/16 % calculation

P.O. Box 12177 Project Number: [none]

Odessa TX, 79768 Project Manager: Gilbert Vandeventer

DP-7 (8') 6F13011-04 (Soil)

									I .
		Reporting							
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

#### Permian Basin Environmental Lab, L.P.

Chloride	314	1.01 mg/kg dry	1	P6F2013	06/20/16	06/20/16	EPA 300.0
% Moisture	1.0	0.1 %	1	P6F1506	06/15/16	06/16/16	% calculation

P.O. Box 12177 Project Number: [none]

Odessa TX, 79768 Project Manager: Gilbert Vandeventer

## Stockpile O 6F13011-05 (Soil)

									I .
		Reporting							
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

#### Permian Basin Environmental Lab, L.P.

Chloride	1550	5.62 mg/kg dry	5	P6F1401	06/14/16	06/14/16	EPA 300.0
% Moisture	11.0	0.1 %	1	P6F1506	06/15/16	06/16/16	% calculation

P.O. Box 12177 Project Number: [none]

Odessa TX, 79768 Project Manager: Gilbert Vandeventer

## Stockpile P 6F13011-06 (Soil)

		Reporting							
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

#### Permian Basin Environmental Lab, L.P.

Chloride	2690	10.6 mg/kg dry	10	P6F1401	06/14/16	06/14/16	EPA 300.0
% Moisture	6.0	0.1 %	1	P6F1506	06/15/16	06/16/16	% calculation

P.O. Box 12177 Project Number: [none]

Odessa TX, 79768 Project Manager: Gilbert Vandeventer

## Stockpile Q 6F13011-07 (Soil)

									I .
		Reporting							
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

#### Permian Basin Environmental Lab, L.P.

Chloride	2670	10.6 mg/kg dry	10	P6F1401	06/14/16	06/14/16	EPA 300.0
% Moisture	6.0	0.1 %	1	P6F1506	06/15/16	06/16/16	% calculation

P.O. Box 12177 Project Number: [none]

Odessa TX, 79768 Project Manager: Gilbert Vandeventer

SP-6 6F13011-08 (Soil)

									I .
		Reporting							
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

#### Permian Basin Environmental Lab, L.P.

Chloride	2320	10.5 mg/kg dry	10	P6F1401	06/14/16	06/14/16	EPA 300.0
% Moisture	5.0	0.1 %	1	P6F1506	06/15/16	06/16/16	% calculation

P.O. Box 12177 Project Number: [none]

Odessa TX, 79768 Project Manager: Gilbert Vandeventer

SP-7 6F13011-09 (Soil)

		Reporting							
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

#### Permian Basin Environmental Lab, L.P.

Chloride	545	1.03 mg/kg dry	1	P6F1401	06/14/16	06/14/16	EPA 300.0
% Moisture	3.0	0.1 %	1	P6F1506	06/15/16	06/16/16	% calculation

P.O. Box 12177 Project Number: [none]

Odessa TX, 79768 Project Manager: Gilbert Vandeventer

Top Soil (Lea Land) 6F13011-10 (Soil)

									I .
		Reporting							
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

#### Permian Basin Environmental Lab, L.P.

Chloride	209	1.08 mg/kg dry	1	P6F2014	06/20/16	06/20/16	EPA 300.0
% Moisture	7.0	0.1 %	1	P6F1506	06/15/16	06/16/16	% calculation

P.O. Box 12177 Project Number: [none]

Odessa TX, 79768 Project Manager: Gilbert Vandeventer

# General Chemistry Parameters by EPA / Standard Methods - Quality Control Permian Basin Environmental Lab, L.P.

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch P6F1401 - *** DEFAULT PREP ***										
Blank (P6F1401-BLK1)				Prepared: (	06/14/16 A	nalyzed: 06	/16/16			
Chloride	ND	1.00	mg/kg wet							
LCS (P6F1401-BS1)				Prepared: (	06/14/16 A	nalyzed: 06	/16/16			
Chloride	177	1.00	mg/kg wet	200		88.4	80-120			
LCS Dup (P6F1401-BSD1)				Prepared: (	06/14/16 A	nalyzed: 06	/16/16			
Chloride	180	1.00	mg/kg wet	200		89.8	80-120	1.63	20	
Duplicate (P6F1401-DUP1)	Sou	rce: 6F09002	-01	Prepared: (	06/14/16 A	nalyzed: 06	/16/16			
Chloride	4320	27.2	mg/kg dry		4350			0.627	20	
Duplicate (P6F1401-DUP2)	Sou	rce: 6D15005	5-08	Prepared &	k Analyzed:	06/14/16				
Chloride	1040	5.68	mg/kg dry		1100			5.76	20	
Matrix Spike (P6F1401-MS1)	Sou	rce: 6F09002	-01	Prepared: (	06/14/16 A	nalyzed: 06	/16/16			
Chloride	771		mg/kg	350	400	106	80-120			
Batch P6F1506 - *** DEFAULT PREP ***										
Blank (P6F1506-BLK1)				Prepared: (	06/15/16 A	nalyzed: 06	/16/16			
% Moisture	ND	0.1	%	•		<u> </u>				
Duplicate (P6F1506-DUP1)	Sou	rce: 6F09009	-34	Prepared: (	06/15/16 A	nalyzed: 06	/16/16			
% Moisture	5.0	0.1	%	·	5.0	·		0.00	20	
Batch P6F2013 - *** DEFAULT PREP ***										
Blank (P6F2013-BLK1)				Prepared &	k Analyzed:	06/20/16				
Chloride	ND	1.00	mg/kg wet							

P.O. Box 12177 Project Number: [none]

Odessa TX, 79768 Project Manager: Gilbert Vandeventer

## General Chemistry Parameters by EPA / Standard Methods - Quality Control Permian Basin Environmental Lab, L.P.

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch P6F2013 - *** DEFAULT PREP ***										
LCS (P6F2013-BS1)				Prepared &	& Analyzed:	06/20/16				
Chloride	185	1.00	mg/kg wet	200		92.3	80-120			
LCS Dup (P6F2013-BSD1)				Prepared &	& Analyzed:	06/20/16				
Chloride	184	1.00	mg/kg wet	200		92.0	80-120	0.364	20	
Duplicate (P6F2013-DUP1)	Sou	rce: 6F09010	-11	Prepared &	& Analyzed:	06/20/16				
Chloride	7170	29.1	mg/kg dry		7170			0.0284	20	
Duplicate (P6F2013-DUP2)	Sou	rce: 6F09010	-21	Prepared &	& Analyzed:	06/20/16				
Chloride	1050	5.88	mg/kg dry		1050			0.212	20	
Matrix Spike (P6F2013-MS1)	Sou	rce: 6F09010	-11	Prepared &	& Analyzed:	06/20/16				
Chloride	11400	29.1	mg/kg dry	4650	7170	91.8	80-120			
Batch P6F2014 - *** DEFAULT PREP ***										
Blank (P6F2014-BLK1)				Prepared &	& Analyzed:	06/20/16				
Chloride	ND	1.00	mg/kg wet	-	-					
LCS (P6F2014-BS1)				Prepared &	& Analyzed:	06/20/16				
Chloride	186	1.00	mg/kg wet	200		93.0	80-120			
LCS Dup (P6F2014-BSD1)				Prepared &	k Analyzed:	06/20/16				
Chloride	187	1.00	mg/kg wet	200		93.3	80-120	0.295	20	
Duplicate (P6F2014-DUP1)	Sou	rce: 6F13011	-10	Prepared &	k Analyzed:	06/20/16				
Chloride	212	1.08	mg/kg dry		209			1.25	20	<u> </u>

Fax: (432) 413-9968 Trident Environmental Project: Endurance Fed 25 SWD #2

P.O. Box 12177 Project Number: [none]

Odessa TX, 79768 Project Manager: Gilbert Vandeventer

### General Chemistry Parameters by EPA / Standard Methods - Quality Control Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P6F2014 - *** DEFAULT PREP ***										

Batch P6F2014 - ***	* DEFAULT PREP ***
---------------------	--------------------

Duplicate (P6F2014-DUP2)	Source	: 6F09009-17	Prepared &	: Analyzed:	06/20/16				
Chloride	3.75	1.04 mg/kg dry		3.91			4.08	20	
Matrix Spike (P6F2014-MS1)	Source	: 6F13011-10	Prepared &	Analyzed:	06/20/16				
Chloride	384	1.08 mg/kg dry	215	209	81.5	80-120			

P.O. Box 12177 Project Number: [none]

Odessa TX, 79768 Project Manager: Gilbert Vandeventer

#### **Notes and Definitions**

DET Analyte DETECTED

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

dry Sample results reported on a dry weight basis

RPD Relative Percent Difference

LCS Laboratory Control Spike

MS Matrix Spike

Dup Duplicate

	Drew	Darron			
Report Approved By:			Date:	7/7/2016	

Brent Barron, Laboratory Director/Technical Director

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If you have received this material in error, please notify us immediately at 432-686-7235.

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### PERMIAN BASIN ENVIRONMENTAL LAB, LP 1400 Rankin Hwy Midland, TX 79701



## Analytical Report

#### **Prepared for:**

Gilbert Vandeventer Trident Environmental P.O. Box 12177 Odessa, TX 79768

Project: Endurance Fed 25 SWD #2

Project Number: [none]
Location: Lea County, NM

Lab Order Number: 6F14006



NELAP/TCEQ # T104704156-13-3

Report Date: 07/07/16

Trident Environmental Project: Endurance Fed 25 SWD #2

Project Number: [none]

Odessa TX, 79768 Project Manager: Gilbert Vandeventer

P.O. Box 12177

#### ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SP-3	6F14006-01	Soil	06/14/16 13:40	06-14-2016 18:30
DP-3 (4')	6F14006-02	Soil	06/14/16 13:13	06-14-2016 18:30
DP-3 (8')	6F14006-03	Soil	06/14/16 13:50	06-14-2016 18:30

Fax: (432) 413-9968

P.O. Box 12177 Project Number: [none]

Odessa TX, 79768 Project Manager: Gilbert Vandeventer

SP-3 6F14006-01 (Soil)

		Reporting							
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

#### Permian Basin Environmental Lab, L.P.

Chloride	2840	29.1 mg/kg dry	25	P6F1605	06/14/16	06/14/16	EPA 300.0
% Moisture	14.0	0.1 %	1	P6F1508	06/15/16	06/15/16	% calculation

P.O. Box 12177 Project Number: [none]

Odessa TX, 79768 Project Manager: Gilbert Vandeventer

DP-3 (4') 6F14006-02 (Soil)

									I .
		Reporting							
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

#### Permian Basin Environmental Lab, L.P.

Chloride	2140	10.6 mg/kg dry	10	P6F2016	06/20/16	06/20/16	EPA 300.0
% Moisture	6.0	0.1 %	1	P6F1508	06/15/16	06/15/16	% calculation

P.O. Box 12177 Project Number: [none]

Odessa TX, 79768 Project Manager: Gilbert Vandeventer

DP-3 (8') 6F14006-03 (Soil)

		Reporting							
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

#### Permian Basin Environmental Lab, L.P.

Chloride	2590	27.5 mg/kg dry	25	P6F2016	06/20/16	06/20/16	EPA 300.0
% Moisture	9.0	0.1 %	1	P6F1508	06/15/16	06/15/16	% calculation

P.O. Box 12177 Project Number: [none]

Odessa TX, 79768 Project Manager: Gilbert Vandeventer

# General Chemistry Parameters by EPA / Standard Methods - Quality Control Permian Basin Environmental Lab, L.P.

_		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch P6F1508 - *** DEFAULT PREP ***										
Blank (P6F1508-BLK1)				Prepared &	z Analyzed:	06/15/16				
% Moisture	ND	0.1	%							
Duplicate (P6F1508-DUP1)	Sou	rce: 6F14004	-01	Prepared &	Analyzed:	06/15/16				
% Moisture	3.0	0.1	%		3.0			0.00	20	
Duplicate (P6F1508-DUP2)	Sou	rce: 6F14005	-21	Prepared &	t Analyzed:	06/15/16				
% Moisture	7.0	0.1	%		6.0			15.4	20	
Batch P6F1605 - *** DEFAULT PREP ***										
Blank (P6F1605-BLK1)				Prepared &	Analyzed:	06/14/16				
Chloride	ND	1.00	mg/kg wet							
LCS (P6F1605-BS1)				Prepared &	t Analyzed:	06/14/16				
Chloride	178	1.00	mg/kg wet	200		88.9	80-120			
LCS Dup (P6F1605-BSD1)				Prepared &	k Analyzed:	06/14/16				
Chloride	182	1.00	mg/kg wet	200		90.9	80-120	2.25	20	
Duplicate (P6F1605-DUP1)	Sou	rce: 6F07014	-03	Prepared &	k Analyzed:	06/14/16				
Chloride	1200	5.56	mg/kg dry		1170			2.69	20	
Duplicate (P6F1605-DUP2)	Sou	rce: 6F07014	-14	Prepared: (	06/14/16 A	nalyzed: 06	/15/16			
Chloride	4200	11.0	mg/kg dry		4160			0.951	20	
Matrix Spike (P6F1605-MS1)	Sou	rce: 6F07014	-03	Prepared &	Analyzed:	06/14/16				
Chloride	179		mg/kg	60.0	105	123	80-120			QM-0

P.O. Box 12177 Project Number: [none]

Odessa TX, 79768 Project Manager: Gilbert Vandeventer

## General Chemistry Parameters by EPA / Standard Methods - Quality Control Permian Basin Environmental Lab, L.P.

				~	~					
		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch P6F2016 - *** DEFAULT PREP ***										
Blank (P6F2016-BLK1)				Prepared &	& Analyzed:	06/20/16				
Chloride	ND	1.00	mg/kg wet							
LCS (P6F2016-BS1)				Prepared &	& Analyzed:	06/20/16				
Chloride	170	1.00	mg/kg wet	200		85.0	80-120			
LCS Dup (P6F2016-BSD1)				Prepared &	& Analyzed:	06/20/16				
Chloride	169	1.00	mg/kg wet	200		84.4	80-120	0.644	20	
Duplicate (P6F2016-DUP1)	Sou	rce: 6F14003	-08	Prepared &	& Analyzed:	06/20/16				
Chloride	15.7	1.04	mg/kg dry		15.4			2.01	20	
Duplicate (P6F2016-DUP2)	Sou	rce: 6F16007	-01	Prepared &	& Analyzed:	06/20/16				
Chloride	227	1.03	mg/kg dry		234			3.08	20	
Matrix Spike (P6F2016-MS1)	Sou	rce: 6F14003	-08	Prepared &	& Analyzed:	06/20/16				
Chloride	187	1.04	mg/kg dry	208	15.4	82.6	80-120			

P.O. Box 12177 Project Number: [none]

Odessa TX, 79768 Project Manager: Gilbert Vandeventer

#### **Notes and Definitions**

QM-07 The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS

recovery.

DET Analyte DETECTED

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

dry Sample results reported on a dry weight basis

RPD Relative Percent Difference

LCS Laboratory Control Spike

MS Matrix Spike

Dup Duplicate

	Bren	Darron			
Report Approved By:			Date:	7/7/2016	

Brent Barron, Laboratory Director/Technical Director

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If you have received this material in error, please notify us immediately at 432-686-7235.

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### PERMIAN BASIN ENVIRONMENTAL LAB, LP 1400 Rankin Hwy Midland, TX 79701



## Analytical Report

#### **Prepared for:**

Gilbert Vandeventer
Trident Environmental
P.O. Box 12177
Odessa, TX 79768

Project: Endurance Fed 25 SWD #2

Project Number: [none]

Location: T26S R33E Sec 25 Unit E, Lea County NM

Lab Order Number: 6F30005



NELAP/TCEQ # T104704156-13-3

Report Date: 07/12/16

Trident Environmental Project: Endurance Fed 25 SWD #2

P.O. Box 12177 Project Number: [none]

Odessa TX, 79768 Project Manager: Gilbert Vandeventer

#### ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
DP-1 (4')	6F30005-01	Soil	06/22/16 09:10	06-30-2016 13:00
DP-1 (5')	6F30005-02	Soil	06/22/16 09:30	06-30-2016 13:00
DP-1 (6')	6F30005-03	Soil	06/22/16 09:45	06-30-2016 13:00
DP-1 (7')	6F30005-04	Soil	06/22/16 09:55	06-30-2016 13:00
DP-1 (8')	6F30005-05	Soil	06/22/16 10:05	06-30-2016 13:00
DP-1 (10')	6F30005-06	Soil	06/22/16 10:45	06-30-2016 13:00

Fax: (432) 413-9968

P.O. Box 12177 Project Number: [none]

Odessa TX, 79768 Project Manager: Gilbert Vandeventer

#### DP-1 (4') 6F30005-01 (Soil)

		Reporting							
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

#### Permian Basin Environmental Lab, L.P.

Chloride	2560	27.2 mg/kg dry	25	P6G0803	07/08/16	07/08/16	EPA 300.0
% Moisture	8.0	0.1 %	1	P6G0101	07/01/16	07/01/16	% calculation

P.O. Box 12177 Project Number: [none]

Odessa TX, 79768 Project Manager: Gilbert Vandeventer

DP-1 (5') 6F30005-02 (Soil)

		Reporting							
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

#### Permian Basin Environmental Lab, L.P.

Chloride	3260	27.5 mg/kg dry	25	P6G0803	07/08/16	07/08/16	EPA 300.0
% Moisture	9.0	0.1 %	1	P6G0101	07/01/16	07/01/16	% calculation

P.O. Box 12177 Project Number: [none]

Odessa TX, 79768 Project Manager: Gilbert Vandeventer

DP-1 (6') 6F30005-03 (Soil)

		Reporting							
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

#### Permian Basin Environmental Lab, L.P.

Chloride	3740	28.1 mg/kg dry	25	P6G0803	07/08/16	07/08/16	EPA 300.0
% Moisture	11.0	0.1 %	1	P6G0101	07/01/16	07/01/16	% calculation

P.O. Box 12177 Project Number: [none]

Odessa TX, 79768 Project Manager: Gilbert Vandeventer

DP-1 (7') 6F30005-04 (Soil)

		Reporting							
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

#### Permian Basin Environmental Lab, L.P.

Chloride	6700	29.8 mg/kg dry	25	P6G0803	07/08/16	07/08/16	EPA 300.0
% Moisture	16.0	0.1 %	1	P6G0101	07/01/16	07/01/16	% calculation

P.O. Box 12177 Project Number: [none]

Odessa TX, 79768 Project Manager: Gilbert Vandeventer

DP-1 (8') 6F30005-05 (Soil)

									I .
		Reporting							
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

#### Permian Basin Environmental Lab, L.P.

Chloride	5860	27.5 mg/kg dry	25	P6G0803	07/08/16	07/08/16	EPA 300.0
% Moisture	9.0	0.1 %	1	P6G0101	07/01/16	07/01/16	% calculation

P.O. Box 12177 Project Number: [none]

Odessa TX, 79768 Project Manager: Gilbert Vandeventer

DP-1 (10')

6F30005-06 (Soil)

Reporting

Analyte Result Limit Units Dilution Batch Prepared Analyzed Method Notes

Permian Basin Environmental Lab, L.P.

**General Chemistry Parameters by EPA / Standard Methods** 

 Chloride
 206
 27.8 mg/kg dry
 25 P6G0803
 07/08/16 07/08/16
 EPA 300.0

 % Moisture
 10.0
 0.1 %
 1 P6G0101
 07/01/16 07/01/16
 % calculation

P.O. Box 12177 Project Number: [none]

Odessa TX, 79768 Project Manager: Gilbert Vandeventer

### General Chemistry Parameters by EPA / Standard Methods - Quality Control Permian Basin Environmental Lab, L.P.

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch P6G0101 - *** DEFAULT PREP ***										
Blank (P6G0101-BLK1)				Prepared &	k Analyzed:	07/01/16				
% Moisture	ND	0.1	%							
Duplicate (P6G0101-DUP1)	Sou	rce: 6F30005-	01	Prepared &	ե Analyzed:	07/01/16				
% Moisture	8.0	0.1	%		8.0			0.00	20	
Duplicate (P6G0101-DUP2)	Source: 6F30005-06 Pr		Prepared &	ե Analyzed:	07/01/16					
% Moisture	9.0	0.1	%		10.0			10.5	20	
Batch P6G0803 - *** DEFAULT PREP ***										
Blank (P6G0803-BLK1)				Prepared &	ե Analyzed:	07/08/16				
Chloride	ND	1.00	mg/kg wet							
LCS (P6G0803-BS1)				Prepared &	ե Analyzed:	07/08/16				
Chloride	177	1.00	mg/kg wet	200		88.5	80-120			
LCS Dup (P6G0803-BSD1)				Prepared &	ն Analyzed:	07/08/16				
Chloride	177	1.00	mg/kg wet	200	-	88.3	80-120	0.170	20	
Duplicate (P6G0803-DUP1)	Sou	rce: 6G07002-	-01	Prepared &	ն Analyzed:	07/08/16				
Chloride	25500	56.2	mg/kg dry	<del>-</del>	24100			5.77	20	
Duplicate (P6G0803-DUP2)	Sou	rce: 6F30005-	06	Prepared &	k Analyzed:	07/08/16				
Chloride	203	27.8	mg/kg dry		206			1.22	20	
Matrix Spike (P6G0803-MS1)	Sou	rce: 6G07002-	-01	Prepared &	ն Analyzed:	07/08/16				
Chloride	34300	56.2	mg/kg dry	8990	24100	114	80-120			

P.O. Box 12177 Project Number: [none]

Odessa TX, 79768 Project Manager: Gilbert Vandeventer

#### **Notes and Definitions**

DET Analyte DETECTED

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

dry Sample results reported on a dry weight basis

RPD Relative Percent Difference

LCS Laboratory Control Spike

MS Matrix Spike

Dup Duplicate

	Drew	Darron			
Report Approved By:			Date:	7/12/2016	

Brent Barron, Laboratory Director/Technical Director

This material is intended only for the use of the individual (s) or entity to whom it is addressed, and may contain information that is privileged and confidential.

If you have received this material in error, please notify us immediately at 432-686-7235.

### **ATTACHMENT D**

Form C-138
Non-hazardous Waste Manifests

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

### **Energy Minerals and Natural Resources**

\*Surface Waste Management Facility Operator and Generator shall maintain and make this documentation available for Division inspection.

Form C-138 Revised August 1, 2011

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505

AEQUEDITORATINOTAL TO ACCELLOOM WASTE	
1. Generator Name and Address:	
EOG RESOURCES, 5509 Champions Dr., Midland, TX 79705	
2. Originating Site:	
Endurance 25 Fed. SWD #2	
3. Location of Material (Street Address, City, State or ULSTR):	
Unit E, Sec 25, T265, R33E	
4. Source and Description of Waste:	
Produced water impacted soils	
	980 tons,
Estimated Volume 3,000 yd3/bbls Known Volume (to be entered by the operator at the end of the haul)	~1,000 yd <sup>3</sup> /bbls
	4.1.
I, Zane Kettz Juky representative or authorized agent for EGG RESOVICES, INC.	do hereby
certify that according to the Resource Conservation and Recovery Act (RCRA) and the US Environmental Protection regulatory determination, the above described waste is: (Check the appropriate classification)	Agency's July 1988
RCRA Exempt: Oil field wastes generated from oil and gas exploration and production operations and are nexempt waste.	ot mixed with non-
RCRA Non-Exempt: Oil field waste which is non-hazardous that does not exceed the minimum standards for characteristics established in RCRA regulations, 40 CFR 261.21-261.24, or listed hazardous waste as defined in 4 subpart D, as amended. The following documentation is attached to demonstrate the above-described waste is not the appropriate items)	10 CFR, part 261,
☐ MSDS Information ☐ RCRA Hazardous Waste Analysis ☐ Process Knowledge ☐ Other (Provide descrip	ption in Box 4)
GENERATOR 19.15.36.15 WASTE TESTING CERTIFICATION STATEMENT FOR LANDFAR	MS
I,do hereby c	ertify that
representative samples of the oil field waste have been subjected to the paint filter test and tested for chloride content have been found to conform to the specific requirements applicable to landfarms pursuant to Section 15 of 19.15.36 N of the representative samples are attached to demonstrate the above-described waste conform to the requirements of S 19.15.36 NMAC.	and that the samples IMAC. The results
5. Transporter:	
SDR Enterprises, LLC	
OCD Permitted Surface Waste Management Facility	
Name and Facility Permit #: Lea Land, LLC, Permit # WM-1-035  Address of Facility: MM 64, HWY 62/180 EAST, Carlsbad, MM 88220	
Address of Facility: MM 64, HWY 62/180 EAST, Carls bad, NM 88220	
Method of Treatment and/or Disposal:	
☐ Evaporation ☐ Injection ☐ Treating Plant ☐ Landfarm ☐ Landfill ☐ Other	
Waste Acceptance Status:  APPROVED DENIED (Must Be Maintained As )	Parmanant Pasard)
PRINT NAME: Saralyn Hall TITLE: Mkg. Manager DATE	
SIGNATURE: Divide Surface Waste Management Facility Authorized Agent  TELEPHONE NO.: 405-579-118-7	· ·

MILE MARKER #64 US HWY 62/180 • 30 MILES EAST OF CARLSBAD, NM • PHONE (575) 887-4048

### LEA LAND, LLC

1300 WEST MAIN STREET • OKLAHOMA CITY, OK 73106 • PHONE (405) 236-4257

NOI	N-HAZARDOUS WASTE MANIFE	ST NO	14693	1. PA	GEOF_	2. TRAII	LER NO.			
		. ADDRESS			5. P	ICK-UP DATE				
G						NECCIE NO				
	PHONE NO.	CITY	STATE		ZIP 6. T	'NRCC I.D. NC	CC I.D. NO.			
E				8 CON	TAINERS	9. TOTAL	10. UNIT	11. TEXAS		
	7. NAME OR DESCRIPTION OF WASTE SHIPPED:	·		No.	Туре	QUANTITY	Wt/Vol.	WASTE ID#		
N										
	b.					<u> </u>				
E	c.									
R	d (1) 40() 41	T(y)								
	12. COMMENTS OR SPECIAL INSTRUCTIONS:					13. WASTE I	PROFILE N	O.		
A										
	14. IN CAS	SE OF EMERG	ENCY OR SPIL	L, CO	NTACT					
Т	NAME	PHONE NO				24-HOU	R EMERGE	NCY NO.		
•										
o	15. <b>GENERATOR'S CERTIFICATION:</b> I shipping name and are classified, packed, marked, and	labeled and are in a	Il respects in proper co	ndition f	or transport	t by highway ac	cording to a	applicable		
	international and national government regulations, incl	luding applicable sta	te regulations, and are	the same	e materials	previously appr	oved by LI	EA LAND, LLC		
R	PRINTED/TYPED NAME		SIGNATURE					DATE		
K	l de la companya de									
Т	16. TRANSPORTER (1)	· · · · · · · · · · · · · · · · · · ·	17. TRANSPORTER (2)							
R	NAME: [[[]] [] [] [] [] [] [] [] [] [] [] []		NAME:							
A N	TEXAS I.D. NO.		TEXAS I.D. NO.							
S	IN CASE OF EMERGENCY CONTACT:		IN CASE OF EMERGENCY CONTACT:							
P										
R	EMERGENCY PHONE:  18. <b>TRANSPORTER</b> (1): Acknowledgment of	f receipt of material	EMERGENCY PHONE:  19. TRANSPORTER (2): Acknowledgment of receipt of material							
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R	PRINTED/TYPED NAME		PRINTED/TTPE	DIMMI	·			<del></del>		
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		ADDRESS:	· · · · · · · · · · · · · · · · · · ·			PHONE				
	Lea Land, LLC		e Marker 64, U		•	80,	575-8	87-4048		
D I	` <b>.</b>	30 ]	Miles East of C	arlsba	d, NM					
			20. COMMENTS							
S	PERMIT NO.	· a a	20, COMMENTS							
S (P)	PERMIT NO. WM-01-035 - New Mexi									
S (P 1 O 1 S 1	PERMIT NO.  WM-01-035 - New Mexical DISPOSAL FACILITY'S CERTIFICATION Could be a supported to receive such was a supported to	ATION: I Hereby		described	d wastes we	ere delivered to	this facility	, that the		
S ( P 1 O 1	PERMIT NO.  WM-01-035 - New Mexical Section 1. WM-0	ATION: I Hereby		described	d wastes we			t, that the		
S (P   1   O   1   S   1   A   7   A   A	WM-01-035 - New Mexical Mexical Permit No.  WM-01-035 - New Mexical Permit No.  21. DISPOSAL FACILITY'S CERTIFICATE facility is authorized and permitted to receive such with AUTHORIZED SIGNATURE	ATION: I Hereby	certify that the above	described						

GENERATOR: COPIES 1 & 6

DISPOSAL SITE: COPIES 2 & 3

MILE MARKER #64 US HWY 62/180 • 30 MILES EAST OF CARLSBAD, NM • PHONE (575) 887-4048

### LEA LAND, LLC

1300 WEST MAIN STREET • OKLAHOMA CITY, OK 73106 • PHONE (405) 236-4257

NON	-HAZARDOUS WASTE MANIFI	EST NO	114694	1. PAGE	OF	_ 2. TRAILI	ER NO.	1/2			
		4. ADDRESS			5. PI	CK-UP DATE					
G	PHONE NO.	CITY	STATE	Z1P	6. TN	IRCC I.D. NO.					
E	7. NAME OR DESCRIPTION OF WASTE SHIPPED	D:		8. CONTAI		9. TOTAL QUANTITY	10. UNIT Wt/Vol.	11. TEXAS WASTE ID #			
N	a.	-						: :			
	b.										
E	c.										
R	d. 41(0)() 41()										
K	12. COMMENTS OR SPECIAL INSTRUCTIONS:			•		13. WASTE PI	ROFILE N	Ю.			
A											
Т	14. IN CASE OF EMERGENCY OR SPILL, CONTACT NAME PHONE NO 24-HOUR EMERGENCY NO.										
0	15.GENERATOR'S CERTIFICATION: shipping name and are classified, packed, marked, an international and national government regulations, in	d labalad and are in	all respects in proper (	condition for t	ransport	ov mignway acc	orums to	applicable			
R	PRINTED/TYPED NAME					DATE					
Т	16. TRANSPORTER (1)		17.	17. TRANSPORTER (2)							
R A	NAME:		NAME:	NAME:							
N S	TEXAS I.D. NO.		TEXAS I.D. NO.	TEXAS I.D. NO.							
P	IN CASE OF EMERGENCY CONTACT:		IN CASE OF EN	MERGENCY	CONTAC	CT:					
O R	EMERGENCY PHONE: 18. TRANSPORTER (1): Acknowledgment	of receipt of materi		EMERGENCY PHONE:  19. TRANSPORTER (2): Acknowledgment of receipt of material							
T E	PRINTED/TYPED NAME			PRINTED/TYPED NAME							
R S	SIGNATURE	DATE	SIGNATURE _	SIGNATURE DATE							
D F	Lea Land, LLC		file Marker 64, 1	-		PHONE:		87-4048			
I A S C P I	PERMIT NO. WM-01-035 - New Mex	xico	20. COMMENTS								
O I S I A I	21.DISPOSAL FACILITY'S CERTIFIC facility is authorized and permitted to receive such	CATION: I Here wastes.	by certify that the abov	e described w	astes we	re delivered to	this facilit	y, that the			
LY	AUTHORIZED SIGNATURE	CELL NO.	and a second of the second of	DAT	E		TIME				

MILE MARKER #64 US HWY 62/180 • 30 MILES EAST OF CARLSBAD, NM • PHONE (575) 887-4048

### LEA LAND, LLC

1300 WEST MAIN STREET • OKLAHOMA CITY, OK 73106 • PHONE (405) 236-4257

NO	N.	HAZARDOUS WASTE MANIFE	est <sub>no</sub> 1	14707	1. PAG	EOF_	2. TRAII	LER NO.	1116
			4. ADDRESS		<u> </u>	5. P	ICK-UP DATE	,	·
G	1.	PHONE NO.	CITY	STATE	Z	ZIP 6. T	NRCC I.D. NC	),	
E		THOME IVO.				e e egue			
12	Ī	7. NAME OR DESCRIPTION OF WASTE SHIPPED	);		8. CONT No.	AINERS Type	9. TOTAL QUANTITY	10. UNIT Wt/Vol.	11. TEXAS WASTE ID #
N	á	<b>L</b>							
	1	).							
E	ŀ	2.		·					
R	ŀ	1 20 4							
K	ŀ	12. COMMENTS OR SPECIAL INSTRUCTIONS:	· · · · · · · · · · · · · · · · · · ·	<u> </u>	-	13. WASTE I	PROFILE N	10.	
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	L	14. IN CA	SE OF EMERG	ENCY OR SPIL	L, CON	TACT	24-HOUI	R EMERGI	ENCY NO.
T		NAME			_				
o	- 1	15. GENERATOR'S CERTIFICATION: I shipping name and are classified, packed, marked, and international and national government regulations, inc	Habeled and are in all	l respects in proper co	ondition to	r transport	t by highway ac	cording to	applicable
R	Ì	PRINTED/TYPED NAME SIGNATURE							DATE
_^							DEED (A)		
T R		16. TRANSPORTER (1)		17.	TF	KANSPO	ORTER (2)		•
A N	- 1	NAME:		NAME: TEXAS I.D. NO.					
S P		TEXAS I.D. NO. IN CASE OF EMERGENCY CONTACT:		IN CASE OF EMERGENCY CONTACT:					
О		EMERGENCY PHONE:		EMERGENCY PHONE:					
R T		18. TRANSPORTER (1): Acknowledgment of	of receipt of material	19. TRANSPO	RTER (	( <b>2):</b> Ackr	nowledgment of	receipt of	material
E R		PRINTED/TYPED NAME	30100	PRINTED/TYPE	D NAME		•		
S		SIGNATURE	DATE	SIGNATURE				DATE	
		Loo Lond LLC	ADDRESS:	e Marker 64, U	IS H	v 62/1:	PHONE		87-4048
D	F	Lea Land, LLC		Miles East of C				373 0	07 10 10
1	A C I	PERMIT NO. WM-01-035 - New Mex	tico	20. COMMENTS			<u> </u>		
O S A	L I T	21.DISPOSAL FACILITY'S CERTIFIC facility is authorized and permitted to receive such v	CATION: I Hereby wastes.	certify that the above	described	wastes we	ere delivered to	this facility	y, that the
A T L Y	_	AUTHORIZED SIGNATURE		CELL NO.	agent for expensive and a second of	DA	ГЕ	7	TIME

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NON	-HAZARDOUS WASTE MANIF	EST NO	14711	1. PAG	GEOF_	2. TRAIL	ER NO.	1
,	3. COMPANY NAME	4. ADDRESS			5. F	PICK-UP DATE		
G	PHONE NO.	CITY	STATE	;	ZIP 6. T	NRCC I.D. NO		
TC:	THORE NO.		SIMILE					İ
E	7. NAME OR DESCRIPTION OF WASTE SHIPPE	D:		8. CON'	TAINERS Type	9. TOTAL QUANTITY	10. UNIT Wt/Vol.	11. TEXAS WASTE ID #
N	a.			140.	турс	QOMMITT	770 701.	WASTE IS W
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E	¢.							
		NOT 100						
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	12. COMMENTS OR SPECIAL INSTRUCTIONS:					13. WASTE P	ROFILE N	0.
A					·			
	14. IN CA	ASE OF EMERG PHONE NO	ENCY OR SPIL	L, CO	NTACT	24-HOUR	EMERGE	NCY NO.
T	NAME	FIIONE NO				2111001	DIVIDICOL	
0	15.GENERATOR'S CERTIFICATION: I Hereby declare that the contents of this consignment are fully and accurately described above by purposes shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable							
	international and national government regulations, in	ncluding applicable sta		the same	materials	previously appr	oved by LE	***************************************
R	PRINTED/TYPED NAME		SIGNATURE					DATE
Т	16. TRANSPORTER (1)		17.	TI	RANSPO	ORTER (2)		· · · · · · · · · · · · · · · · · · ·
R	NAME:		NAME:			( )		
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P O	EMERGENCY PHONE:		EMERGENCY PH					
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E R	PRINTED/TYPED NAME		PRINTED/TYPEI	O NAME				
S	SIGNATURE	DATE	SIGNATURE			]	DATE	
		ADDRESS:			(2)	PHONE:		07.4040
D F	Lea Land, LLC	1	e Marker 64, U Miles East of C		•	80,	5/5-88	37-4048
I A	PERMIT NO.	30 1	20. COMMENTS	arispai	u, 19191			
S C P I	WM-01-035 - New Mex	xico					_	
O L S I A T	21.DISPOSAL FACILITY'S CERTIFIC facility is authorized and permitted to receive such	CATION: I Hereby wastes.	Iereby certify that the above described wastes were delivered to this facility, that the				that the	
L Y	AUTHORIZED SIGNATURE		CELL NO.	DATE TIME			ме	
	Joseph Committee							

GENERATOR: COPIES 1 & 6

DISPOSAL SITE: COPIES 2 & 3

MILE MARKER #64 US HWY 62/180 • 30 MILES EAST OF CARLSBAD, NM • PHONE (575) 887-4048

### LEA LAND, LLC

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NON	-HAZARDOUS WASTE MANIF	EST NO	114734	1. PAGE	OF_	_ 2. TRAIL	ER NO.	tra Comment Comment
	3. COMPANY NAME	4. ADDRESS			5. P	CK-UP DATE		
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	PHONE NO.	CITY	STATE	ZIP		NRCC I.D. NO	).	
E								
Ŀ	7. NAME OR DESCRIPTION OF WASTE SHIPPE	D:		8. CONTAI No.	INERS Type	9. TOTAL QUANTITY	10. UNIT Wt/Vol.	11. TEXAS WASTE ID #
N	a. 14. 18. 1. 18. 1. 16. 16. 16. 16. 16. 16. 16. 16. 16.							
	b.							
E	С.			1 1				
R	a. 43(100 40)	-						
K	12. COMMENTS OR SPECIAL INSTRUCTIONS:					13. WASTE F	ROFILE N	O.
•	Secretary to the second					:		
A	n G	CE OF EME	DCENCY OD SDI	II CONT	гаст			
_	14. IN CA	PHONE NO	RGENCY OR SPII	LL, CONT	ACI	24-HOUF	R EMERGE	NCY NO.
T		9.2.						
o	15. <b>GENERATOR'S CERTIFICATION:</b> I Hereby declare that the contents of this consignment are fully and accurately described above shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applic international and national government regulations, including applicable state regulations, and are the same materials previously approved by LEA Laboratory.							
R	PRINTED/TYPED NAME		SIGNATURE					DATE
T	16. TRANSPORTER (1)		17.	TRA	ANSPO	ORTER (2)		
R	NAME: 1915   1915   1916   191		NAME:					
A N	TEXAS I.D. NO.		TEXAS I.D. NO.	TEXAS I.D. NO.				
S				IN CASE OF EMERGENCY CONTACT:				
P	IN CASE OF EMERGENCY CONTACT:				001111			
R	EMERGENCY PHONE: 18. TRANSPORTER (1): Acknowledgment	of receipt of mate	erial 19. <b>TRANSPO</b>	ORTER (2	2): Ackn	owledgment of	receipt of r	naterial
T E	【	From the state of						
R	PRINTED/TYPED NAME	- 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	PRINTED/TYPI	ED NAME				
S	SIGNATURE	DATE	SIGNATURE				DATE	
<b>-</b>		ADDRESS:				PHONE		
	Lea Land, LLC		Mile Marker 64, I			80,	575-8	87-4048
D F			30 Miles East of o	Carlsbad,	NM			
I A S C P I	PERMIT NO. WM-01-035 - New Me	20. COMMENTS						
O I S I A T	I 21.DISPOSAL FACILITY'S CERTIFICATION: I Hereby certify that the above described wastes were delivered to this facility, that the facility is authorized and permitted to receive such wastes.				, that the			
LY		CELL NO.	and the second	DA	ΓE	T	IME	
L		No. 19 17						

MILE MARKER #64 US HWY 62/180 • 30 MILES EAST OF CARLSBAD, NM • PHONE (575) 887-4048

### LEA LAND, LLC

1300 WEST MAIN STREET • OKLAHOMA CITY, OK 73106 • PHONE (405) 236-4257

NON	-HAZARDOUS WASTE MANIF	EST NO	114735	1. PA	GE_OF	2. TRAII	ER NO.	OXX
	3. COMPANY NAME	4. ADDRESS	<del> </del>		5. I	PICK-UP DATE		
G						1961 - 1862		
	PHONE NO.	CITY	STATE	2	ZIP 6. 7	TNRCC I.D. NC	).	
$\mathbf{E}$	and the state of t				1.77			
	7. NAME OR DESCRIPTION OF WASTE SHIPPE	D:		1	TAINERS	9. TOTAL QUANTITY	10. UNIT Wt/Vol.	11. TEXAS WASTE ID #
				No.	Type	QUANTITI	WU VOI.	WASTE ID#
N	a. The transfer of the second second second							
	b.							
E	C.							
R	a 40 70 44 040	)						1
K	12. COMMENTS OR SPECIAL INSTRUCTIONS:	<del> </del>		<u>.                                    </u>	<u>.</u>	13. WASTE F	PROFILE N	O.
A								
			GENCY OR SPIL	L, CO	NTACT	24 HOUE	R EMERGE	NOV NO
T	NAME	PHONE NO				24-HOUR	CEMERGE	INCT NO.
0	15.GENERATOR'S CERTIFICATION: shipping name and are classified, packed, marked, an	I Hereby declare the	at the contents of this co	onsignme ondition fo	nt are fully or transpor	vand accurately t by highway ac	described a cording to a	above by proper a applicable
U	international and national government regulations, ir	cluding applicable	state regulations, and are	the same	e materials	previously appr	oved by LE	A LAND, LLC
	PRINTED/TYPED NAME		SIGNATURE					DATE
R								
/ID	16. TRANSPORTER (1)		17.	T	RANSPO	ORTER (2)		
T R	16. TRANSPORTER (1)		17.		IMI IDI I	OKILK (2)		
A	NAME:	* 1	NAME:					
N	TEXAS I.D. NO.		TEXAS I.D. NO.					
S P	IN CASE OF EMERGENCY CONTACT:		IN CASE OF EM	ERGENC	Y CONTA	ACT:		
o			EMERGENCY PI	HONE				
R	EMERGENCY PHONE:  18. <b>TRANSPORTER (1):</b> Acknowledgment	of receipt of materi			(2): Ackı	nowledgment of	receipt of 1	naterial
T E	PRINTED/TYPED NAME	Shar15	,					
R	PRINTED/TYPED NAME	1	PRINTED/TYPE	D NAME	·			
S	SIGNATURE	DATE	SIGNATURE				DATE	·
_		ADDRESS:			****	PHONE		
	Lea Land, LLC		lile Marker 64, U	IS Hv	vv 62/1	I		87-4048
DБ	Lea Land, LLC	1	) Miles East of C		-	00,	373 0	0, 1010
I A			20. COMMENTS	arisoa	C, 1111			
S C	PERMIT NO. WM-01-035 - New Mex	xico	20. COMMENTS					
P I O L								
S I A T	21. <b>DISPOSAL FACILITY'S CERTIFIC</b> facility is authorized and permitted to receive such	CATION: I Here wastes.	reby certify that the above described wastes were delivered to this facility, that the				, that the	
LY	AUTHORIZED SIGNATURE		CELL NO.	NO. DATE TIME		IME		
	1 /	JUTHORIZED SIGNATURE						
<u> </u>		The state of the s				<del></del>	'	CODIES 4 & 5

GENERATOR: COPIES 1 & 6

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DISPOSAL SITE: COPIES 2 & 3

MILE MARKER #64 US HWY 62/180 • 30 MILES EAST OF CARLSBAD, NM • PHONE (575) 887-4048

### LEA LAND, LLC

1300 WEST MAIN STREET • OKLAHOMA CITY, OK 73106 • PHONE (405) 236-4257

NON	-HAZARDOUS WASTE MANIF	EST NO	114744	1. PAGE_	OF	2. TRAIL	ER NO.				
	3. COMPANY NAME	4. ADDRESS	<u>-</u>	1	5. PICK	-UP DATE					
G			. 4.		( ====	OO LD 312					
	PHONE NO.	CITY	STATE	ZIP	6. TNR	CC I.D. NO	•				
E		1	*	8. CONTAIN	NERS 9	. TOTAL	10. UNIT	11. TEXAS			
	7. NAME OR DESCRIPTION OF WASTE SHIPPE	D:		l.		UANTITY	Wt/Vol.	WASTE ID #			
N	<b>a.</b>										
ļ	b.		÷								
E	C.			<del>  </del> -							
				1							
R	<b>d.</b> 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1										
-	12. COMMENTS OR SPECIAL INSTRUCTIONS: 13. WASTE PROFILE NO.										
A											
	14. IN CASE OF EMERGENCY OR SPILL, CONTACT										
Т	NAME PHONE NO 24-HOUR EMERGENCY NO.										
	TODAY CENTRAL ATTODAY AND A Land and the consistence of this consistence to fully and accurately described above by proper										
O	15.GENERATOR'S CERTIFICATION: I Hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, including applicable state regulations, and are the same materials previously approved by LEA LAND, LLC										
R	PRINTED/TYPED NAME	SIGNATURE					DATE				
K											
Т	16. TRANSPORTER (1)		17.	TRA	NSPOR	TER (2)					
R A	NAME:		NAME:								
N	TEXAS I.D. NO.		TEXAS I.D. NO	TEXAS I.D. NO.							
S P	IN CASE OF EMERGENCY CONTACT:		IN CASE OF EM	IN CASE OF EMERGENCY CONTACT:							
o	EMERGENCY PHONE:		EMERGENCY I	EMERGENCY PHONE:							
R	18. TRANSPORTER (1): Acknowledgment	t of receipt of mater	ial 19. TRANSP	ORTER (2)	): Acknow	ledgment of	receipt of	material			
T E	PRINTED/TYPED NAME	She yer it	PRINTED/TYP	ED NAME							
R	PRINTED IT IT IS IN THE STATE OF THE STATE O										
S	SIGNATURÈ	DATE	SIGNATURE _				DATE				
		ADDRESS:			(2/100	PHONE		27 1010			
D F	Lea Land, LLC		Mile Marker 64,			,	5/5 <b>-</b> 8	387-4048			
D H	\ <del>                                    </del>		0 Miles East of		TATAT						
S C P I	. 1 WM 01 035 - New Me	Zu. COMMENTS									
O I S I A 7	21.DISPOSAL FACILITY'S CERTIFI	eby certify that the abov	y certify that the above described wastes were delivered to this facility, that the								
L		-	CELL NO.		DATE			TIME			
	1/2000	ACTIONIZED SIGNATURE						(14)			
1		100			<u> </u>						

GENERATOR: COPIES 1 & 6

DISPOSAL SITE: COPIES 2 & 3

MILE MARKER #64 US HWY 62/180 • 30 MILES EAST OF CARLSBAD, NM • PHONE (575) 887-4048

### LEA LAND, LLC

1300 WEST MAIN STREET • OKLAHOMA CITY, OK 73106 • PHONE (405) 236-4257.

NON	-HAZARDOUS WASTE MANIF	EST NO	11	4745	1. PA	GEOF	2. TRA	LER NO.	
	3. COMPANY NAME	4. ADDRESS				5.	PICK-UP DAT	Е	,
G			e . i .	EATE:		7ID (6)	TNDCC LD N	0	
	PHONE NO.	CITY	Si	ГАТЕ		ZIP 6.	TNRCC I.D. N	0.	
$\mathbf{E}$	TO DESCRIPTION OF WASTE CHAPTE	<u> </u>			8. CON	TAINERS	9. TOTAL	10. UNI	T 11. TEXAS
	7. NAME OR DESCRIPTION OF WASTE SHIPPE	ED:			No.	Type	QUANTITY	Wt/Vol	. WASTE ID#
N	<b>a.</b> - :				i				
	b.								
E	c.						<del>                                     </del>		
	d. / / /	24.							
R									
	12. COMMENTS OR SPECIAL INSTRUCTIONS:	:					13. WASTE	PROFILE	NO.
A									
	14. IN CA		ERGEN	CY OR SPIL	L, CO	NTACT	24 1101	D. EL CED C	YENGV NO
T	NAME	PHONE NO					24-HOU	R EMERC	GENCY NO.
	15.GENERATOR'S CERTIFICATION:	I Harabu daelara	that the	contents of this co	nsianme	nt are full	v and accuratel	v described	l above by proper
o	shipping name and are classified, packed, marked, ar international and national government regulations, in	e in all res	nects in proper co	ndition f	or transpo	rt by highway a	ecording to	applicable	
		ncluding applicab			the same	e materials			DATE
R	PRINTED/TYPED NAME		SIG	GNATURE					DATE
	The Management (1)				т.	DANCD	ORTER (2)		
T R	16. TRANSPORTER (1)			17.	1.	KANSF	OKIEK (2)		
A	NAME:		N	IAME:					
N S	TEXAS I.D. NO.		Т	TEXAS I.D. NO.					4
P	IN CASE OF EMERGENCY CONTACT:		l II	IN CASE OF EMERGENCY CONTACT:					
O R	EMERGENCY PHONE:			EMERGENCY PH		(2): 1.1		C	C
T	18. TRANSPORTER (1): Acknowledgment	of receipt of mate	erial l	9. TRANSPO	KILK	(2): Ack	nowledgment o	receipt of	i materiai
E R	PRINTED/TYPED NAME		F	PRINTED/TYPEI	O NAME				<del></del>
S	SIGNATURE	DATE	s	SIGNATURE				DATE	
		ADDRESS:					PHON	3:	
	Lea Land, LLC	l .	Mile M	larker 64, U	S. Hv	vy 62/1			887-4048
D F	,		30 Mile	es East of C	arlsba	d, NM			
I A S C	PERMIT NO.		20.	. COMMENTS					
PΙ	WM-01-035 - New Me	xico				4			
O L S I	21.DISPOSAL FACILITY'S CERTIFIC		reby certi	fy that the above of	described	l wastes	delivered to	this facili	ty, that the
A T	facility is authorized and permitted to receive such	wastes.							
L Y	AUTHORIZED SIGNATURE			CELL NO.		DA	TE		TIME
				Late of the Control o					

GENERATOR: COPIES 1 & 6

DISPOSAL SITE: COPIES 2 & 3

MILE MARKER #64 US HWY 62/180 • 30 MILES EAST OF CARLSBAD, NM • PHONE (575) 887-4048

LEA LAND, LLC

1300 WEST MAIN STREET • OKLAHOMA CITY, OK 73106 • PHONE (405) 236-4257

NON	-HAZARDOUS WASTE MANIFI	EST NO	114753	1. PAGE	EOF_	2. TRAIL	ER NO.	
	3. COMPANY NAME	4. ADDRESS			5. PI	CK-UP DATE		
G		CYTY	CTATE	711	D ( T)	NRCC I.D. NC		
	PHONE NO.	CITY	STATE	ZI	P   6.11	NRCC I.D. NC		
E	7. NAME OR DESCRIPTION OF WASTE SHIPPE	D:		8. CONTA	INERS	9. TOTAL	10. UN1T	11. TEXAS
	a.		<u> </u>	No.	Туре	QUANTITY	Wt/Vol.	WASTE ID#
N				<del>                                     </del>				
TC'	b.							
E	c.							
R	d. // // // // // // // // // // // // //	1,331						
K	12. COMMENTS OR SPECIAL INSTRUCTIONS:			<u> </u>		13. WASTE P	ROFILE N	O.
A								
	14. IN CA	SE OF EMER	GENCY OR SPII	LL, CON	ГАСТ			
T	NAME	PHONE NO				24-HOUR	EMERGE	NCY NO.
	CENTED ATTORIC CERTIFICATION.	Y 77 1 1 1 1 1			ama fuller	and accurately	described (	hove by proper
o	15.GENERATOR'S CERTIFICATION: I Hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, including applicable state regulations, and are the same materials previously approved by LEA LAND, LLC							pplicable
		SIGNATURE	e the same n	nateriais p		Oved by EL	DATE	
R	PRINTED/TYPED NAME		SIGNATURE					Ditte
T	16. TRANSPORTER (1)	17.	TRA	ANSPO	RTER (2)			
R	NAME:		NAME:					•
A N	TEXAS I.D. NO.		TEXAS I.D. NO.					
S P	IN CASE OF EMERGENCY CONTACT:		IN CASE OF EMERGENCY CONTACT:					
o	EMERGENCY PHONE:		EMERGENCY P					
R T	18. TRANSPORTER (1): Acknowledgment		19. TRANSPO	ORTER (2	2): Ackno	wledgment of	receipt of r	material
E	PRINTED/TYPED NAME	RATICAL	PRINTED/TYPE	ED NAME _				
R S	SIGNATURE	DATE	SIGNATURE				DATE	
	SIGNATORE	ADDRESS:				PHONE		
	Lea Land, LLC		le Marker 64, U	J.S. Hwy	62/18			87-4048
DF	,	30	Miles East of C					· · · · · · · · · · · · · · · · · · ·
I A S C	PERMIT NO. WM-01-035 - New Mex	dico 40%	20 COMMENTS					
P I O L		715	13 100	10+				
S I	21.DISPOSAL FACILITY'S CERTIFIC facility is authorized and permitted to receive such	CATION: I Hereb wastes.	y certify that the above	described w	astes wer	e delivered to	this facility	, that the
A T L Y	AUTHORIZED SIGNATURE		CELL NO.	and the second second second second	DAT	E	Т	IME

GENERATOR: COPIES 1 & 6

DISPOSAL SITE: COPIES 2 & 3

MILE MARKER #64 US HWY 62/180 • 30 MILES EAST OF CARLSBAD, NM • PHONE (575) 887-4048

### LEA LAND, LLC

1300 WEST MAIN STREET • OKLAHOMA CITY, OK 73106 • PHONE (405) 236-4257

NON	-HAZARDOUS WASTE MANIFE	ST NO	14754	1. PA	GEOF_	2. TRAIL	ER NO.			
	3. COMPANY NAME 4	ADDRESS			5. P	ICK-UP DATE				
G	THO: E i.o.	CITY Finance	STATE		ZIP 6. T	NRCC I.D. NO	10. UNIT Wt/Vol.  PROFILE NO  described at cording to ag oved by LEA			
E	7. NAME OR DESCRIPTION OF WASTE SHIPPED	:		8. CON No.	TAINERS Type	9. TOTAL QUANTITY		11. TEXAS WASTE ID #		
N	a.									
E	b.									
R	a. 7 (%) 9/04/	4E)								
•	12. COMMENTS OR SPECIAL INSTRUCTIONS:  13. WASTE PROFILE NO.									
A IN CASE OF EMERGENCY OR SPILL, CONTACT										
T	NAME	PHONE NO	ENCT OK SITE	<u> </u>	MACI	24-HOUI	R EMERGE	NCY NO.		
o	15.GENERATOR'S CERTIFICATION: I Hereby declare that the contents of this consignment are fully and accurately described above shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicate international and national government regulations, including applicable state regulations, and are the same materials previously approved by LEA LA									
R	PRINTED/TYPED NAME		SIGNATURE					DATE		
Т	16. <b>TRANSPORTER (1)</b> 17.				RANSPO	ORTER (2)		·		
R	NAME:	, ¥ <u>.</u>	NAME:							
N		TEXAS I.D. NO.								
	TEXAS I.D. NO.		TEXAS I.D. NO.							
S P	TEXAS I.D. NO.  IN CASE OF EMERGENCY CONTACT:	m, ee e	TEXAS I.D. NO. IN CASE OF EM	1ERGEN	CY CONTA	ACT:				
P O R	IN CASE OF EMERGENCY CONTACT: EMERGENCY PHONE:	of receipt of material	IN CASE OF EM	HONE:	_		f receipt of	material		
O R T	IN CASE OF EMERGENCY CONTACT:  EMERGENCY PHONE:  18. TRANSPORTER (1): Acknowledgment of		IN CASE OF EMERGENCY P	HONE: ORTER	R (2): Ackr		f receipt of	material		
O R	IN CASE OF EMERGENCY CONTACT:  EMERGENCY PHONE:  18. TRANSPORTER (1): Acknowledgment of the printed/typed name/ 13 acros 6 acr		IN CASE OF EM	PHONE: ORTER ED NAM	R (2): Ackr		f receipt of	material		
O R T E R S	IN CASE OF EMERGENCY CONTACT:  EMERGENCY PHONE:  18. TRANSPORTER (1): Acknowledgment of PRINTED/TYPED NAME/ SOLVE SIGNATURY L. SOLVE GOVERNMENT OF PRINTED/TYPED NAME/ Lea Land, LLC	DATE  ADDRESS:  Mi	IN CASE OF EMERGENCY P 19. TRANSPO PRINTED/TYPE SIGNATURE	PHONE: DRTER ED NAM  J.S. H	E	nowledgment o	DATE E:	material		
O R T E R S	IN CASE OF EMERGENCY CONTACT:  EMERGENCY PHONE:  18. TRANSPORTER (1): Acknowledgment of PRINTED/TYPED NAME/TO GO SIGNATURE Lea Land, LLC  PERMIT NO.  WM-01-035 - New Mex	DATE  ADDRESS:  Mi 30	IN CASE OF EMERGENCY P 19. TRANSPO PRINTED/TYPE SIGNATURE LE Marker 64, U Miles East of 0 20. COMMENTS	PHONE: DRTER ED NAM  U.S. H  Carlsb:	e (2): Ackr E wy 62/1 ad, NM	PHONI	DATE 3: 575-8	87-4048		
O R T E R S	IN CASE OF EMERGENCY CONTACT:  EMERGENCY PHONE:  18. TRANSPORTER (1): Acknowledgment of PRINTED/TYPED NAME SIGNATURE  Lea Land, LLC  PERMIT NO.  WM-01-035 - New Mexical Control of Printed Control of Prin	DATE  ADDRESS:  Mi 30  CATION: 1 Hereby	IN CASE OF EMERGENCY P 19. TRANSPO PRINTED/TYPE SIGNATURE LE Marker 64, U Miles East of 0 20. COMMENTS	PHONE: DRTER ED NAM  U.S. H  Carlsb:	e (2): Ackr E wy 62/1 ad, NM	PHONI	DATE 3: 575-8	87-4048		

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MILE MARKER #64 US HWY 62/180 • 30 MILES EAST OF CARLSBAD, NM • PHONE (575) 887-4048

### LEA LAND, LLC

	1300 WEST MAIN STE	CEI • OKLAHOM	4 CIT 1, OK 73100 • 1	FHORE (40			A second			
NON	-HAZARDOUS WASTE MANIFI	EST NO	L14777	1. PAG	EOF_			$M_{\rm c}$		
		4. ADDRESS	N		5. P	ICK-UP DATE	3 .			
G	The Marian	CYMY F	GTATE:	_	, L	NID COLLD ALC				
	PHONE NO.	CITY	STATE	Z	TP 6. T	NRCC I.D. NO	).			
E				8. CONT	AINERS	9. TOTAL	10. UNIT	11. TEXAS		
	7. NAME OR DESCRIPTION OF WASTE SHIPPEI	D:		No.	Туре	QUANTITY	Wt/Vol.	WASTE ID #		
N	a. The second of					İ				
	b.		<u> </u>	+ +			<del>                                     </del>			
E			<u> </u>	1						
	c.									
R	d. 434	<i>90</i>								
K	12. COMMENTS OR SPECIAL INSTRUCTIONS:			<u> </u>		13. WASTE I	PROFILE N	O.		
$\mathbf{A}$				(T. CO)	ION A COUNT					
	14. IN CA	SE OF EMERO PHONE NO	ENCY OR SPII	LL, CON	TACT	24-HOU	R EMERGE	NCY NO.		
T	INAME	THORE NO								
	15.GENERATOR'S CERTIFICATION:	I Hereby declare that	the contents of this c	consignmen	t are fully	and accurately	described a	above by proper		
0										
								DATE		
R	PRINTED/TYPED NAME		SIGNATURE					Bill		
				T T	ANCDO	DTED (2)				
T R	16. TRANSPORTER (1)		17.	118	(ANSPU	ORTER (2)				
A	NAME:		NAME:							
N	TEXAS I.D. NO.		TEXAS I.D. NO.							
S P	IN CASE OF EMERGENCY CONTACT:		IN CASE OF EM	IERGENC	Y CONTA	CT:				
О	EMERGENCY PHONE:		EMERGENCY P							
R T	18. TRANSPORTER (1): Acknowledgment	of receipt of material	19. TRANSPO	ORTER (	( <b>2):</b> Ackn	owledgment of	f receipt of	material		
E	PRINTED/TYPED NAME	PBRITE CC	) PRINTED/TYPE	ED NAME						
R										
S	SIGNATURE	DATE	SIGNATURE				DATE			
		ADDRESS:				PHONE		07 40 40		
	Lea Land, LLC	1	le Marker 64, U			80,	575-8	87-4048		
D F I A		30	Miles East of C	<u>Jarisbac</u>	1, NM_					
S C	PERMIT NO.	vico	20. COMMENTS							
P I O L	WM-01-035 - New Mex									
O L S I A T	21. DISPOSAL FACILITY'S CERTIFIC facility is authorized and permitted to receive such	21. <b>DISPOSAL FACILITY'S CERTIFICATION:</b> I Hereby certify that the alfacility is authorized and permitted to receive such wastes.				ere delivered to	this facility	that the		
L Y	AUTHORIZED SIGNATURE		CELL NO.		DAT	re	Ţ	IME		
	1/ 11/2 / 17/2	avas	The second secon					1.30		
1	コメートはこしご ニュス・シグノムド	1. S. A. A.								

GENERATOR: COPIES 1 & 6

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DISPOSAL SITE: COPIES 2 & 3

MILE MARKER #64 US HWY 62/180 • 30 MILES EAST OF CARLSBAD, NM • PHONE (575) 887-4048

### LEA LAND, LLC

1300 WEST MAIN STREET • OKLAHOMA CITY, OK 73106 • PHONE (405) 236-4257

NON	-HAZARDOUS WASTE MANIFI	EST NO	114778	1. PAGE	EOF_	2. TRAIL	ER NO.	
	3. COMPANY NAME	4. ADDRESS		<u> </u>	5. P	ICK-UP DATE	. "	· · · · · · · · · · · · · · · · · · ·
G	PHONE NO.	CITY	STATE	ZI	P 6. T	NRCC I.D. NO		
E	7. NAME OR DESCRIPTION OF WASTE SHIPPED	D:	· · · · · · · · · · · · · · · · · · ·	8. CONTA No.	INERS Type	9. TOTAL QUANTITY	10. UNIT Wt/Vol.	11. TEXAS WASTE ID #
N	a.							
	b.					-		
Е	c.							
R	d. 01000 1690	D						
	12. COMMENTS OR SPECIAL INSTRUCTIONS:	•				13. WASTE P	ROFILE N	IO.
A								
T	14. IN CA	ENCY OR SPIL	LL, CONT	<u> FACT</u>	24-HOUR	EMERGE	NCY NO.	
15.GENERATOR'S CERTIFICATION: I Hereby declare that the contents of this consignment are fully and accurately described above shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicating international and national government regulations, including applicable state regulations, and are the same materials previously approved by LEA LA								hara bry muomon
								applicable
R	PRINTED/TYPED NAME	SIGNATURE					DATE	
Т	16. TRANSPORTER (1)		17.	TRA	NSPO	RTER (2)		
R	NAME:	la a	NAME:					
A N	TEXAS I.D. NO.		TEXAS I.D. NO.					
S P	IN CASE OF EMERGENCY CONTACT:	to the action of the	IN CASE OF EMERGENCY CONTACT:					
O R	EMERGENCY PHONE: 18. TRANSPORTER (1): Acknowledgment of	frequint of material	EMERGENCY PI		)• Ackne	owledgment of	receint of i	material
T E	PRINTED/TYPED NAME TS 30 YO S	Sreva A	1	,	,,,		<b>I</b>	!
R S	SIGNATURE TO GOYOLO	31/. :						<del></del>
	SIGNATURE		SIGNATURE	<u></u>		PHONE:	DATE	
D F	Lea Land, LLC		e Marker 64, U	-				87-4048
I A	PERMIT NO.	30	Miles East of C	arisbad,	ININI			
S C P I	WM-01-035 - New Mex	ico						
O L S I A T	21.DISPOSAL FACILITY'S CERTIFIC facility is authorized and permitted to receive such w	ATION: I Hereby vastes.	certify that the above	described w	rastes we	re delivered to	this facility	that the
A T L Y	AUTHORIZED SIGNATURE	CELL NO.		DAT	E	T	IME.	
	LINE LINE	The same and a second			· · · · · · · · · · · · · · · · · · ·		1 1	

GENERATOR: COPIES 1 & 6

nai Com

DISPOSAL SITE: COPIES 2 & 3

### **ATTACHMENT E**

**Photographic Documentation** 



DP-1 area at release source (loading valve) excavated to depth of 8' bgs.



DP-1 area at release source (loading valve) backfilled to



DP-3 area behind southeast corner of tank battery excavated to depth of 8' bgs.



Stockpiles of excavated soil as of 6/9/16.



DP-5 area excavated to depth of 8' bgs (facing north).



DP-6 area excavated to 8' bgs (facing south on 6/14/16).



DP-5 and DP-6 areas backfilled to 4' bgs with 20-mil reinforced liner and backfilling activities (facing south).



DP-7 area excavated and backfiled to 4' bgs prior to liner installation (facing south).



DP-8 area excavated and then backfilled to depth of 4' bgs with 20-mil reinforced liner (facing SW on 6/10/16).



DP-9 area excavated and then backfilled to depth of 4' bgs with 20-mil reinforced liner (facing NW on 6/10/16).



Loading belly dump with  $^{\sim}20~\text{yd}^3$  of chloride-impacted soil for disposal at Lea Land landfill.



Unloading topsoil obtained from Lea Land LLC facility.



View facing north showing stockpiles of excavated chloride-impacted soil on 6/13/16.



Wide angle view facing northwest showing various activities on 6/14/16.



View of DP-5, DP-6, DP-7, DP-8, and DP-9 areas facing northwest on 6/23/16 showing final topsoil cover.



Clean topsoil imported from Lea Land LLC

#### Bamert Seed Company Inc.

	Muleshoe, TX 79347 pounds in 25# bag		(800) 262-9892			TX00905 2
Description		Pure Seed	Germ	Dormant	Hard Seed	Origin
Bristlegrass Plains,	"VNS" (Setaria vulpiseta)	40.74%	1.00%	89.00%	0.00%	TX
Dropseed, "Sand" " cryptandrus)	/NS* (Sporobolus	19.46%	94.00%	0.00%	0.00%	co
	end" (Eragrostis trichodes)	19.34%	31.00%	64.00%	0.00%	TX
Purity: 79.54%	Inert Matter: 19.67%	Other Cr	op Seed: 0	.03%	Weed Se	eed: 0.76%

Bamert Seed Company Inc.

1897 CR 1018 BLM # 1	1897 CR 1018 Muleshoe, TX 79347 BLM # 1		262-98	INV56649		
Description		Pure Seed	Germ	Dormant	Hard Seed	Origin
Dropseed, "Sand" "\ cryptandrus)	/NS* (Sporobolus	10.37%	15.00%	81.00%	0.00%	TX
Grama, Sideoats "V curtipendula)	NS" (Bouteloua	55.75%	89.00%	0.00%	0.00%	TX
Lovegrass Sand, *B	end" (Eragrostis trichodes)	5.14%	15.00%	82.00%	0.00%	TX
Purity: 71.26%	Inert Matter: 27.75%	Other Cr	op Seed: 0	02%	Weed Se	ed: 0.98%

Composition of seed broadcasted on site.



Tools used to broadcast and rake seeds into topsoil.



View of topsoil over DP-5 area after seed broadcasting and raking (8/2/16).



View of raking broadcast seed in area DP-6 (8/2/16).



View facing northwest showing whole area where seed was broadcasted and raked (8/2/16).