

EOG RESOURCES PROPERTY

REVISIONS:

THIS DRAWING IS TO
BE USED FOR PERMIT
INFORMATION
PURPOSES ONLY

500 Moseley Road
Cross Roads, TX 76227
Phone (940) 387-0805
Fax (940) 387-0830

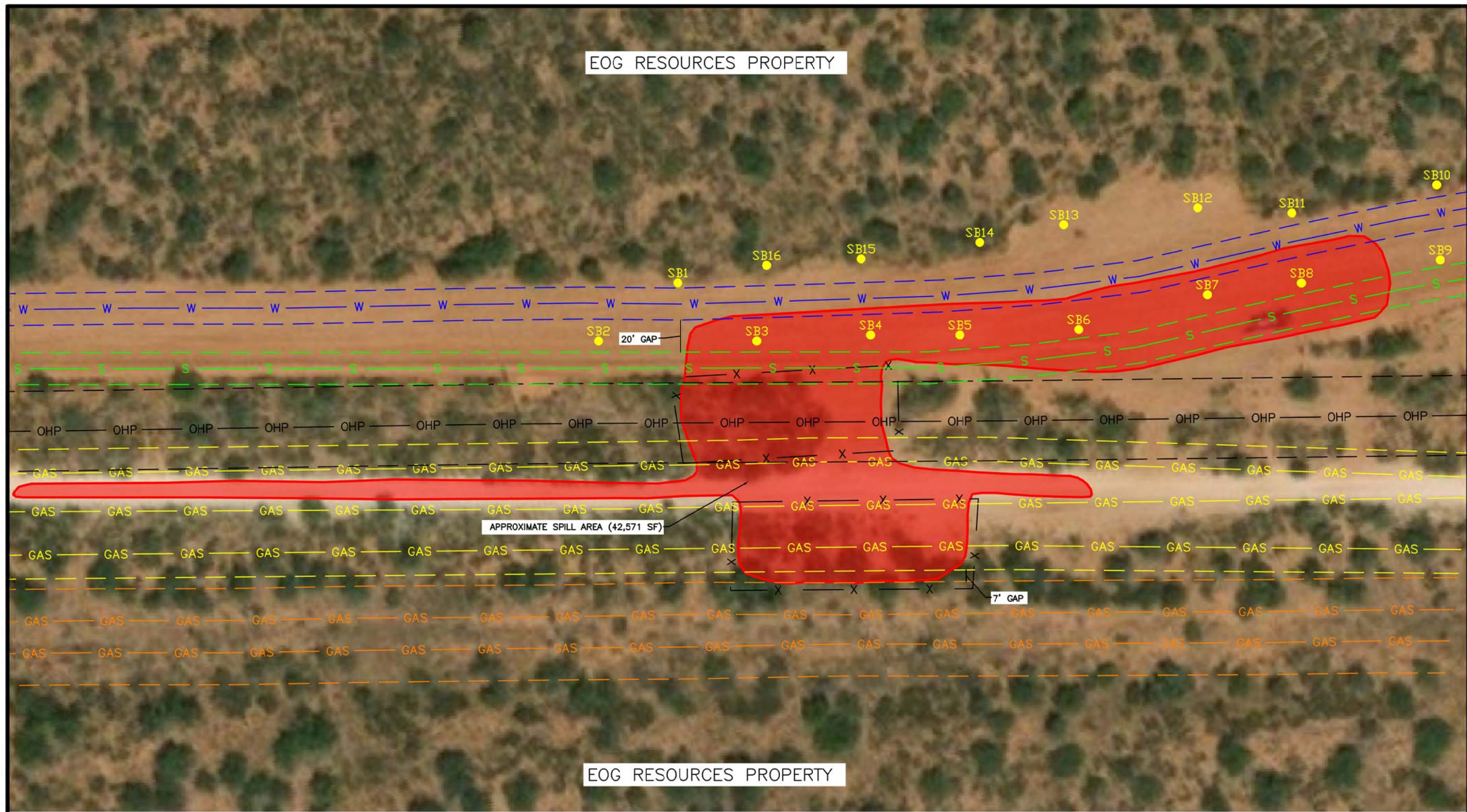


K&E
ENVIRONMENTAL & CIVIL ENGINEERING

DETAILED VIEW OF RELEASE
OWL SWD OPERATING, LLC
JAL, NEW MEXICO
UNITS M, N, C AND D;
SECTIONS 9 AND 4;
TOWNSHIP 26S RANGE 36E

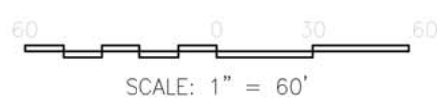
DATE:
1/31/2018

SHEET:
A1



EOG RESOURCES PROPERTY

NOTES:
1. GOOGLE EARTH WAS USED AS AN UNDERLAY IMAGE FOR THIS MAP.
(<http://earth.google.com/>)



LEGEND

- SOIL BORING (TOTAL: 16)
- ==W== RANCH WATER LINE (WITH 10' BUFFER ON EACH SIDE)
- ==S== OWL SALTWATER LINE (WITH 10' BUFFER ON EACH SIDE)
- x-x- TEMPORARY FENCE
- ==OHP== OVER HEAD POWER LINE (WITH 25' BUFFER ON EACH SIDE)
- ==ETG== ENERGY TRANSFER GAS LINE (WITH 15' BUFFER ON EACH SIDE)
- ==KM== KINDER MORGAN GAS LINE (WITH 20' BUFFER ON EACH SIDE)





Certificate of Analysis Summary 574340

OWL SWD Operating LLC, Dallas, TX

Project Name: OWL 102217D



Project Id: IRP-4860
Contact: Phillip Sanders
Project Location: Jal, NM

Date Received in Lab: Wed Jan-24-18 08:20 am
Report Date: 31-JAN-18
Project Manager: Kelsey Brooks

<i>Analysis Requested</i>	<i>Lab Id:</i>	574340-001	574340-002	574340-003	574340-004	574340-005	574340-006
	<i>Field Id:</i>	SB6 0-2	SB6 2-4	SB6 4-6	SB6 6-8	SB6 8-10	SB6 10-12
	<i>Depth:</i>	2- ft	4- ft	6- ft	8- ft	10- ft	12- ft
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	Jan-23-18 13:30	Jan-23-18 13:35	Jan-23-18 13:40	Jan-23-18 13:45	Jan-23-18 13:50	Jan-23-18 13:55
Chloride by EPA 300	<i>Extracted:</i>	Jan-26-18 16:20	Jan-26-18 16:20	Jan-26-18 16:20	Jan-26-18 16:20	Jan-26-18 16:20	Jan-26-18 16:20
	<i>Analyzed:</i>	Jan-27-18 01:55	Jan-27-18 02:02	Jan-27-18 02:09	Jan-27-18 02:16	Jan-27-18 02:23	Jan-27-18 02:30
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		2600 25.0	2370 25.0	3570 25.0	1180 4.90	19.6 5.00	231 5.00

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

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

Kelsey Brooks
Project Manager



Certificate of Analysis Summary 574340

OWL SWD Operating LLC, Dallas, TX

Project Name: OWL 102217D



Project Id: IRP-4860
Contact: Phillip Sanders
Project Location: Jal, NM

Date Received in Lab: Wed Jan-24-18 08:20 am
Report Date: 31-JAN-18
Project Manager: Kelsey Brooks

<i>Analysis Requested</i>	<i>Lab Id:</i>	574340-007	574340-008	574340-009	574340-010	574340-011	574340-012
	<i>Field Id:</i>	SB6 12-14	SB6 14-16	SB6 16-18	SB6 18-20	SB6 20-22	SB3 0-2
	<i>Depth:</i>	14- ft	16- ft	18- ft	20- ft	22- ft	2- ft
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	Jan-23-18 14:00	Jan-23-18 14:05	Jan-23-18 14:10	Jan-23-18 14:15	Jan-23-18 14:20	Jan-23-18 15:30
Chloride by EPA 300	<i>Extracted:</i>	Jan-29-18 09:00	Jan-29-18 09:00	Jan-29-18 09:00	Jan-29-18 09:00	Jan-29-18 09:00	Jan-29-18 09:00
	<i>Analyzed:</i>	Jan-29-18 09:45	Jan-29-18 10:06	Jan-29-18 10:13	Jan-29-18 10:20	Jan-29-18 10:27	Jan-29-18 10:48
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		<5.00 5.00	<5.00 5.00	11.8 5.00	206 4.90	265 4.90	2420 25.0

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

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

Kelsey Brooks
Project Manager



Certificate of Analysis Summary 574340

OWL SWD Operating LLC, Dallas, TX

Project Name: OWL 102217D



Project Id: IRP-4860
Contact: Phillip Sanders
Project Location: Jal, NM

Date Received in Lab: Wed Jan-24-18 08:20 am
Report Date: 31-JAN-18
Project Manager: Kelsey Brooks

Analysis Requested	Lab Id:	574340-013	574340-014	574340-015	574340-016	574340-017	574340-018
	Field Id:	SB3 2-4	SB3 4-6	SB3 6-8	SB3 8-10	SB3 10-12	SB3 12-14
	Depth:	4- ft	6- ft	8- ft	10- ft	12- ft	14- ft
	Matrix:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	Sampled:	Jan-23-18 15:40	Jan-23-18 15:50	Jan-23-18 16:00	Jan-23-18 16:10	Jan-23-18 16:20	Jan-23-18 16:30
Chloride by EPA 300	Extracted:	Jan-29-18 09:00	Jan-29-18 09:00	Jan-29-18 09:00	Jan-29-18 09:00	Jan-29-18 09:00	Jan-29-18 09:00
	Analyzed:	Jan-30-18 14:28	Jan-29-18 11:02	Jan-29-18 11:09	Jan-29-18 11:16	Jan-29-18 11:23	Jan-29-18 11:43
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		2010 25.0	3880 24.5	389 5.00	398 5.00	<5.00 5.00	<5.00 5.00

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

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

Kelsey Brooks
Project Manager



Certificate of Analysis Summary 574340

OWL SWD Operating LLC, Dallas, TX

Project Name: OWL 102217D



Project Id: IRP-4860
Contact: Phillip Sanders
Project Location: Jal, NM

Date Received in Lab: Wed Jan-24-18 08:20 am
Report Date: 31-JAN-18
Project Manager: Kelsey Brooks

Analysis Requested	Lab Id:	574340-019					
	Field Id:	SB3 14-16					
	Depth:	16- ft					
	Matrix:	SOIL					
	Sampled:	Jan-23-18 16:40					
Chloride by EPA 300	Extracted:	Jan-29-18 09:00					
	Analyzed:	Jan-29-18 11:50					
	Units/RL:	mg/kg RL					
Chloride		<4.90 4.90					

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

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

Kelsey Brooks
Project Manager

Analytical Report 574340

for OWL SWD Operating LLC

Project Manager: Phillip Sanders

OWL 102217D

IRP-4860

31-JAN-18

Collected By: Client



1211 W. Florida Ave, Midland TX 79701

Xenco-Houston (EPA Lab code: TX00122):

Texas (T104704215-17-23), Arizona (AZ0765), Florida (E871002-24), Louisiana (03054)
Oklahoma (2017-142)

Xenco-Dallas (EPA Lab code: TX01468):

Texas (T104704295-17-15), Arizona (AZ0809), Arkansas (17-063-0)

Xenco-El Paso (EPA Lab code: TX00127): Texas (T104704221-17-12)

Xenco-Lubbock (EPA Lab code: TX00139): Texas (T104704219-17-16)

Xenco-Odessa (EPA Lab code: TX00158): Texas (T104704400-17-13)

Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-17-3)

Xenco Phoenix (EPA Lab Code: AZ00901): Arizona (AZ0757)

Xenco-Phoenix Mobile (EPA Lab code: AZ00901): Arizona (AZM757)



31-JAN-18

Project Manager: **Phillip Sanders**
OWL SWD Operating LLC
8214 Westchester Dr. Suite 850
Dallas, TX 75225

Reference: XENCO Report No(s): **574340**
OWL 102217D
Project Address: Jal, NM

Phillip Sanders:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number(s) 574340. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

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

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 574340 will be filed for 45 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

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

Respectfully,

Kelsey Brooks

Project Manager

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

Certified and approved by numerous States and Agencies.

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

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



Sample Cross Reference 574340



OWL SWD Operating LLC, Dallas, TX

OWL 102217D

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
SB6 0-2	S	01-23-18 13:30	2 ft	574340-001
SB6 2-4	S	01-23-18 13:35	4 ft	574340-002
SB6 4-6	S	01-23-18 13:40	6 ft	574340-003
SB6 6-8	S	01-23-18 13:45	8 ft	574340-004
SB6 8-10	S	01-23-18 13:50	10 ft	574340-005
SB6 10-12	S	01-23-18 13:55	12 ft	574340-006
SB6 12-14	S	01-23-18 14:00	14 ft	574340-007
SB6 14-16	S	01-23-18 14:05	16 ft	574340-008
SB6 16-18	S	01-23-18 14:10	18 ft	574340-009
SB6 18-20	S	01-23-18 14:15	20 ft	574340-010
SB6 20-22	S	01-23-18 14:20	22 ft	574340-011
SB3 0-2	S	01-23-18 15:30	2 ft	574340-012
SB3 2-4	S	01-23-18 15:40	4 ft	574340-013
SB3 4-6	S	01-23-18 15:50	6 ft	574340-014
SB3 6-8	S	01-23-18 16:00	8 ft	574340-015
SB3 8-10	S	01-23-18 16:10	10 ft	574340-016
SB3 10-12	S	01-23-18 16:20	12 ft	574340-017
SB3 12-14	S	01-23-18 16:30	14 ft	574340-018
SB3 14-16	S	01-23-18 16:40	16 ft	574340-019



CASE NARRATIVE

Client Name: OWL SWD Operating LLC

Project Name: OWL 102217D

Project ID: *IRP-4860*
Work Order Number(s): *574340*

Report Date: *31-JAN-18*
Date Received: *01/24/2018*

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None



Certificate of Analytical Results 574340



OWL SWD Operating LLC, Dallas, TX

OWL 102217D

Sample Id: **SB6 0-2**
Lab Sample Id: 574340-001

Matrix: Soil
Date Collected: 01.23.18 13.30

Date Received: 01.24.18 08.20
Sample Depth: 2 ft

Analytical Method: Chloride by EPA 300

Tech: OJS

Analyst: OJS

Seq Number: 3039502

Date Prep: 01.26.18 16.20

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	2600	25.0	mg/kg	01.27.18 01.55		5



Certificate of Analytical Results 574340



OWL SWD Operating LLC, Dallas, TX

OWL 102217D

Sample Id: **SB6 2-4**
Lab Sample Id: 574340-002

Matrix: Soil
Date Collected: 01.23.18 13.35

Date Received: 01.24.18 08.20
Sample Depth: 4 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: OJS

% Moisture:

Analyst: OJS

Date Prep: 01.26.18 16.20

Basis: Wet Weight

Seq Number: 3039502

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	2370	25.0	mg/kg	01.27.18 02.02		5



Certificate of Analytical Results 574340



OWL SWD Operating LLC, Dallas, TX

OWL 102217D

Sample Id: **SB6 4-6**
Lab Sample Id: 574340-003

Matrix: Soil
Date Collected: 01.23.18 13.40

Date Received: 01.24.18 08.20
Sample Depth: 6 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: OJS

% Moisture:

Analyst: OJS

Date Prep: 01.26.18 16.20

Basis: Wet Weight

Seq Number: 3039502

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	3570	25.0	mg/kg	01.27.18 02.09		5



Certificate of Analytical Results 574340



OWL SWD Operating LLC, Dallas, TX

OWL 102217D

Sample Id: **SB6 6-8**
Lab Sample Id: 574340-004

Matrix: Soil
Date Collected: 01.23.18 13.45

Date Received: 01.24.18 08.20
Sample Depth: 8 ft

Analytical Method: Chloride by EPA 300

Tech: OJS

Analyst: OJS

Seq Number: 3039502

Date Prep: 01.26.18 16.20

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1180	4.90	mg/kg	01.27.18 02.16		1



Certificate of Analytical Results 574340



OWL SWD Operating LLC, Dallas, TX

OWL 102217D

Sample Id: **SB6 8-10**

Matrix: Soil

Date Received: 01.24.18 08.20

Lab Sample Id: 574340-005

Date Collected: 01.23.18 13.50

Sample Depth: 10 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: OJS

% Moisture:

Analyst: OJS

Date Prep: 01.26.18 16.20

Basis: Wet Weight

Seq Number: 3039502

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	19.6	5.00	mg/kg	01.27.18 02.23		1



Certificate of Analytical Results 574340



OWL SWD Operating LLC, Dallas, TX

OWL 102217D

Sample Id: **SB6 10-12**

Matrix: Soil

Date Received: 01.24.18 08.20

Lab Sample Id: 574340-006

Date Collected: 01.23.18 13.55

Sample Depth: 12 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: OJS

% Moisture:

Analyst: OJS

Date Prep: 01.26.18 16.20

Basis: Wet Weight

Seq Number: 3039502

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	231	5.00	mg/kg	01.27.18 02.30		1



Certificate of Analytical Results 574340



OWL SWD Operating LLC, Dallas, TX

OWL 102217D

Sample Id: **SB6 12-14**

Matrix: Soil

Date Received: 01.24.18 08.20

Lab Sample Id: 574340-007

Date Collected: 01.23.18 14.00

Sample Depth: 14 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: OJS

% Moisture:

Analyst: OJS

Date Prep: 01.29.18 09.00

Basis: Wet Weight

Seq Number: 3039604

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<5.00	5.00	mg/kg	01.29.18 09.45	U	1



Certificate of Analytical Results 574340



OWL SWD Operating LLC, Dallas, TX

OWL 102217D

Sample Id: **SB6 14-16**

Matrix: Soil

Date Received: 01.24.18 08.20

Lab Sample Id: 574340-008

Date Collected: 01.23.18 14.05

Sample Depth: 16 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: OJS

% Moisture:

Analyst: OJS

Date Prep: 01.29.18 09.00

Basis: Wet Weight

Seq Number: 3039604

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<5.00	5.00	mg/kg	01.29.18 10.06	U	1



Certificate of Analytical Results 574340



OWL SWD Operating LLC, Dallas, TX

OWL 102217D

Sample Id: **SB6 16-18**

Matrix: Soil

Date Received: 01.24.18 08.20

Lab Sample Id: 574340-009

Date Collected: 01.23.18 14.10

Sample Depth: 18 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: OJS

% Moisture:

Analyst: OJS

Date Prep: 01.29.18 09.00

Basis: Wet Weight

Seq Number: 3039604

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	11.8	5.00	mg/kg	01.29.18 10.13		1



Certificate of Analytical Results 574340



OWL SWD Operating LLC, Dallas, TX

OWL 102217D

Sample Id: **SB6 18-20**

Matrix: Soil

Date Received: 01.24.18 08.20

Lab Sample Id: 574340-010

Date Collected: 01.23.18 14.15

Sample Depth: 20 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: OJS

% Moisture:

Analyst: OJS

Date Prep: 01.29.18 09.00

Basis: Wet Weight

Seq Number: 3039604

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	206	4.90	mg/kg	01.29.18 10.20		1



Certificate of Analytical Results 574340



OWL SWD Operating LLC, Dallas, TX

OWL 102217D

Sample Id: **SB6 20-22**

Matrix: Soil

Date Received: 01.24.18 08.20

Lab Sample Id: 574340-011

Date Collected: 01.23.18 14.20

Sample Depth: 22 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: OJS

% Moisture:

Analyst: OJS

Date Prep: 01.29.18 09.00

Basis: Wet Weight

Seq Number: 3039604

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	265	4.90	mg/kg	01.29.18 10.27		1



Certificate of Analytical Results 574340



OWL SWD Operating LLC, Dallas, TX

OWL 102217D

Sample Id: **SB3 0-2**
Lab Sample Id: 574340-012

Matrix: Soil
Date Collected: 01.23.18 15.30

Date Received: 01.24.18 08.20
Sample Depth: 2 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: OJS

% Moisture:

Analyst: OJS

Date Prep: 01.29.18 09.00

Basis: Wet Weight

Seq Number: 3039604

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	2420	25.0	mg/kg	01.29.18 10.48		5



Certificate of Analytical Results 574340



OWL SWD Operating LLC, Dallas, TX

OWL 102217D

Sample Id: **SB3 2-4**
Lab Sample Id: 574340-013

Matrix: Soil
Date Collected: 01.23.18 15.40

Date Received: 01.24.18 08.20
Sample Depth: 4 ft

Analytical Method: Chloride by EPA 300

Tech: OJS

Analyst: OJS

Seq Number: 3039604

Date Prep: 01.29.18 09.00

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	2010	25.0	mg/kg	01.30.18 14.28		5



Certificate of Analytical Results 574340



OWL SWD Operating LLC, Dallas, TX

OWL 102217D

Sample Id: **SB3 4-6**
Lab Sample Id: 574340-014

Matrix: Soil
Date Collected: 01.23.18 15.50

Date Received: 01.24.18 08.20
Sample Depth: 6 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: OJS

% Moisture:

Analyst: OJS

Date Prep: 01.29.18 09.00

Basis: Wet Weight

Seq Number: 3039604

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	3880	24.5	mg/kg	01.29.18 11.02		5



Certificate of Analytical Results 574340



OWL SWD Operating LLC, Dallas, TX

OWL 102217D

Sample Id: **SB3 6-8**
Lab Sample Id: 574340-015

Matrix: Soil
Date Collected: 01.23.18 16.00

Date Received: 01.24.18 08.20
Sample Depth: 8 ft

Analytical Method: Chloride by EPA 300

Tech: OJS

Analyst: OJS

Seq Number: 3039604

Date Prep: 01.29.18 09.00

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	389	5.00	mg/kg	01.29.18 11.09		1



Certificate of Analytical Results 574340



OWL SWD Operating LLC, Dallas, TX

OWL 102217D

Sample Id: **SB3 8-10**

Matrix: Soil

Date Received: 01.24.18 08.20

Lab Sample Id: 574340-016

Date Collected: 01.23.18 16.10

Sample Depth: 10 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: OJS

% Moisture:

Analyst: OJS

Date Prep: 01.29.18 09.00

Basis: Wet Weight

Seq Number: 3039604

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	398	5.00	mg/kg	01.29.18 11.16		1



Certificate of Analytical Results 574340



OWL SWD Operating LLC, Dallas, TX

OWL 102217D

Sample Id: **SB3 10-12**

Matrix: Soil

Date Received: 01.24.18 08.20

Lab Sample Id: 574340-017

Date Collected: 01.23.18 16.20

Sample Depth: 12 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: OJS

% Moisture:

Analyst: OJS

Date Prep: 01.29.18 09.00

Basis: Wet Weight

Seq Number: 3039604

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<5.00	5.00	mg/kg	01.29.18 11.23	U	1



Certificate of Analytical Results 574340



OWL SWD Operating LLC, Dallas, TX

OWL 102217D

Sample Id: **SB3 12-14**

Matrix: Soil

Date Received: 01.24.18 08.20

Lab Sample Id: 574340-018

Date Collected: 01.23.18 16.30

Sample Depth: 14 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: OJS

% Moisture:

Analyst: OJS

Date Prep: 01.29.18 09.00

Basis: Wet Weight

Seq Number: 3039604

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<5.00	5.00	mg/kg	01.29.18 11.43	U	1



Certificate of Analytical Results 574340



OWL SWD Operating LLC, Dallas, TX

OWL 102217D

Sample Id: **SB3 14-16**

Matrix: Soil

Date Received: 01.24.18 08.20

Lab Sample Id: 574340-019

Date Collected: 01.23.18 16.40

Sample Depth: 16 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: OJS

% Moisture:

Analyst: OJS

Date Prep: 01.29.18 09.00

Basis: Wet Weight

Seq Number: 3039604

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<4.90	4.90	mg/kg	01.29.18 11.50	U	1

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

** Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit.

RL Reporting Limit

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

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

DL Method Detection Limit

NC Non-Calculable

+ NELAC certification not offered for this compound.

* (Next to analyte name or method description) = Outside XENCO's scope of NELAC accreditation

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

Certified and approved by numerous States and Agencies.

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

Houston - Dallas - San Antonio - Atlanta - Midland/Odessa - Tampa/Lakeland - Phoenix - Latin America

4147 Greenbriar Dr, Stafford, TX 77477
 9701 Harry Hines Blvd, Dallas, TX 75220
 5332 Blackberry Drive, San Antonio TX 78238
 1211 W Florida Ave, Midland, TX 79701
 2525 W. Huntington Dr. - Suite 102, Tempe AZ 85282

Phone	Fax
(281) 240-4200	(281) 240-4280
(214) 902 0300	(214) 351-9139
(210) 509-3334	(210) 509-3335
(432) 563-1800	(432) 563-1713
(602) 437-0330	



QC Summary 574340

OWL SWD Operating LLC OWL 102217D

Analytical Method: Chloride by EPA 300

Seq Number: 3039502

MB Sample Id: 7638129-1-BLK

Matrix: Solid

LCS Sample Id: 7638129-1-BKS

Prep Method: E300P

Date Prep: 01.26.18

LCSD Sample Id: 7638129-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<5.00	250	258	103	256	102	90-110	1	20	mg/kg	01.26.18 23:07	

Analytical Method: Chloride by EPA 300

Seq Number: 3039604

MB Sample Id: 7638224-1-BLK

Matrix: Solid

LCS Sample Id: 7638224-1-BKS

Prep Method: E300P

Date Prep: 01.29.18

LCSD Sample Id: 7638224-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<5.00	250	250	100	252	101	90-110	1	20	mg/kg	01.29.18 09:31	

Analytical Method: Chloride by EPA 300

Seq Number: 3039502

Parent Sample Id: 574231-002

Matrix: Soil

MS Sample Id: 574231-002 S

Prep Method: E300P

Date Prep: 01.26.18

MSD Sample Id: 574231-002 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	695	248	902	83	913	88	90-110	1	20	mg/kg	01.26.18 23:28	X

Analytical Method: Chloride by EPA 300

Seq Number: 3039502

Parent Sample Id: 574237-010

Matrix: Soil

MS Sample Id: 574237-010 S

Prep Method: E300P

Date Prep: 01.26.18

MSD Sample Id: 574237-010 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	383	251	603	88	605	88	90-110	0	20	mg/kg	01.27.18 01:06	X

Analytical Method: Chloride by EPA 300

Seq Number: 3039604

Parent Sample Id: 574340-007

Matrix: Soil

MS Sample Id: 574340-007 S

Prep Method: E300P

Date Prep: 01.29.18

MSD Sample Id: 574340-007 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<5.00	250	271	108	272	109	90-110	0	20	mg/kg	01.29.18 09:52	

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

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

LCS = Laboratory Control Sample
A = Parent Result
C = MS/LCS Result
E = MSD/LCSD Result

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



QC Summary 574340

OWL SWD Operating LLC

OWL 102217D

Analytical Method: Chloride by EPA 300

Seq Number: 3039604

Parent Sample Id: 574340-017

Matrix: Soil

MS Sample Id: 574340-017 S

Prep Method: E300P

Date Prep: 01.29.18

MSD Sample Id: 574340-017 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<5.00	250	262	105	253	101	90-110	3	20	mg/kg	01.29.18 11:30	

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

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

LCS = Laboratory Control Sample
A = Parent Result
C = MS/LCS Result
E = MSD/LCSD Result

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

Service Center- Amarillo, TX (806)678-4514
Service Center- Hobbs NM (575) 392-7550

574340

[illegible]

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Xenco will be liable only for the cost of samples and shall not assume any responsibility for losses or expenses incurred by the Client if such losses are due to circumstances beyond the control of Xenco. A minimum charge of \$75 will be applied to each project. Xenco's liability will be limited to the cost of samples. Any samples received by Xenco but not analyzed will be invoiced at \$5 per sample. These terms will be enforced unless previously negotiated under a fully executed client contract.

574340

Notice: Signature of this document and relinquish of all samples constitutes a valid purchase order from client company to Xenoco. Its affiliates and subcontractors. It assigns standard terms and conditions of service. Xenoco will be liable only for the cost of samples and shall not assume any responsibility for losses or expenses incurred by the Client if such losses are due to circumstances beyond the control of Xenoco. A minimum charge of \$75 will be applied to the cost of samples. Any samples received by Xenoco but not analyzed will be invoiced at \$5 per sample. These terms will be enforced unless previously negotiated under a fully executed client contract.



XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In



Client: OWL SWD Operating LLC

Date/ Time Received: 01/24/2018 08:20:00 AM

Work Order #: 574340

Acceptable Temperature Range: 0 - 6 degC

Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used : R8

Sample Receipt Checklist

Comments

#1 *Temperature of cooler(s)?	3.1
#2 *Shipping container in good condition?	Yes
#3 *Samples received on ice?	Yes
#4 *Custody Seals intact on shipping container/ cooler?	N/A
#5 Custody Seals intact on sample bottles?	N/A
#6 *Custody Seals Signed and dated?	N/A
#7 *Chain of Custody present?	Yes
#8 Any missing/extra samples?	No
#9 Chain of Custody signed when relinquished/ received?	Yes
#10 Chain of Custody agrees with sample labels/matrix?	Yes
#11 Container label(s) legible and intact?	Yes
#12 Samples in proper container/ bottle?	Yes
#13 Samples properly preserved?	Yes
#14 Sample container(s) intact?	Yes
#15 Sufficient sample amount for indicated test(s)?	Yes
#16 All samples received within hold time?	Yes
#17 Subcontract of sample(s)?	N/A
#18 Water VOC samples have zero headspace?	N/A

*** Must be completed for after-hours delivery of samples prior to placing in the refrigerator**

Analyst:

PH Device/Lot#:

Checklist completed by:

Jessica Kramer

Jessica Kramer

Date: 01/25/2018

Checklist reviewed by:

Holly Taylor

Holly Taylor

Date: 01/25/2018