From:	Heather Leven
To:	Yu, Olivia, EMNRD; MNaranjo@slo.state.nm.us
Cc:	Dena; Billings, Bradford, EMNRD
Subject:	RE: Summary of Phone Conference Between KJE and NMOCD
Date:	Thursday, March 15, 2018 1:12:26 PM
Attachments:	SS01 and SS02.pdf Boring Log - SS-01.pdf Revegetation and Noxious Weed Plan.pdf

Ms. Yu,

Thank you for your response. Please see our responses as follows:

1. We acknowledge your request for photo documentation of remedial activities. Based on your approval, we will proceed with liner replacement and backfilling activities.
2. Attached is the resubmittal of the laboratory analytical data for SS-01 as well as the boring log.
3. Understood, as previously discussed, we will carry forward this request in the future. I address this in greater detail for Spill 2.

Additionally, we have previously submitted the revegetation plan to SLO and NMOCD. I have attached again for your reference. Please let us know if you have any questions or require additional information.

Thanks,

Heather Leven, KJE
Project Manager

From: Yu, Olivia, EMNRD [mailto:Olivia.Yu@state.nm.us]
Sent: Thursday, March 15, 2018 12:04 PM
To: Heather Leven <heather@kjenvironmental.com>; Naranjo, Mark <MNaranjo@slo.state.nm.us>
Cc: Dena <dena@kjenvironmental.com>; Billings, Bradford, EMNRD <Bradford.Billings@state.nm.us>
Subject: RE: Summary of Phone Conference Between KJE and NMOCD

Ms. Leven:

Bradford and I have conversed about 1RP-4497. NMOCD will grant approval for the deferral request regarding 1RP-4497 with several clarifications.

1. Liner replacement and backfill approval is granted for the excavated area, outside of the proposed deferred area, as indicated on Figure A1. Please provide photo documentation of remedial activities, including photos of a properly seated and keyed, at minimal 20 mil liner before backfilling.
2. Based on the provided data, SS-1 appears to be in the approximate location of soil bore 32, with the highest impacted depth of chloride contamination, and in adequate proximity to the release point. Please provide (or resubmit) the soil bore log and laboratory analyses for SS-1.
3. Please be advised that the NMOCD standard is laboratory analyses of one soil sample at no

greater than 5 ft. intervals. Unless informed otherwise, there is no data between soil bore 32 at 8 ft. bgs with 11900 mg/kg chlorides and SS-1 at 21 ft. bgs with 93.5 mg/kg chlorides.

Please confirm or inform for clarifications. NMSLO may have revegetation requirements for the aforementioned areas.

Thanks,

Olivia Yu
Environmental Specialist
NMOCD, District I
Olivia.yu@state.nm.us
575-393-6161 x113

From: Heather Leven [mailto:heather@kjenvironmental.com]
Sent: Wednesday, March 14, 2018 3:19 PM
To: Yu, Olivia, EMNRD <Olivia.Yu@state.nm.us>
Cc: Dena <dena@kjenvironmental.com>
Subject: RE: Summary of Phone Conference Between KJE and NMOCD

Good Afternoon Ms. Yu,

I just wanted to take a minute to touch base with you regarding the OWL spills, specifically as it pertains to the last email that we sent to you requesting authorization to remove the fence and replace the liner within the excavation for Spill 1 (1RP-4497). We just received the ROE permit; therefore, we are simply waiting on the NMOCD approval.

Additionally, please find attached, the Workplan for IRP-4963 for your review. Please let us know if you have any questions. I will follow this email up with a phone call. Thanks again for your diligence regarding the matter!

Respectfully Submitted,

Heather Leven, KJE
Project Manager

From: Heather Leven
Sent: Monday, March 05, 2018 10:32 AM

To: 'Yu, Olivia, EMNRD' <Olivia.Yu@state.nm.us>; Billings, Bradford, EMNRD <Bradford.Billings@state.nm.us>
Cc: Dena <dena@kjenvironmental.com>
Subject: Re: Summary of Phone Conference Between KJE and NMOCD

Ms. Yu,

Please find attached, the figures for 1RP-4497 and -4498 as requested. Regarding #2, our understanding is that all work will be done in accordance with already approved plans, which includes a soil boring delineated vertically 10 feet beyond the known impact for purposes of potential groundwater characterization. As such, #2 will apply to future spills. For the spills that are outstanding, only one (1RP-4963) does not have an approved workplan. Regarding the full closure intent, KJE previously provided each exchange between KJE and the NMOCD. As we have stated, we have approached the remediation of each spill with the intent to receive closure, nothing else was ever discussed.

Additionally, regarding Spill 1 (1RP-4497), KJE is requesting to remove the fence and replace the liner within the excavation. Can you respond and indicate if we are allowed to do so at this time?

Thanks,

Heather Leven, KJE
Project Manager

From: Yu, Olivia, EMNRD [mailto:Olivia.Yu@state.nm.us]
Sent: Wednesday, February 28, 2018 5:02 PM
To: Heather Leven <heather@kjenvironmental.com>; Billings, Bradford, EMNRD <Bradford.Billings@state.nm.us>
Cc: Dena <dena@kjenvironmental.com>
Subject: RE: Summary of Phone Conference Between KJE and NMOCD

Ms. Leven:

Thank you for the summary regarding 1RP-4497 and 1RP-4820. Several points of clarification:

- For #1, please demarcate on the map, SS-01 and SS-02 sample locations and release points. Pardon if I missed them.
- Is #2 proposed for 1RP-4497 and 1RP-4498 or in general?
- If available, please provide documentation of full closure intent for 1RP-4498 from the beginning. I asked Tomáš and he told me that he was not aware of this.

Olivia

From: Heather Leven [mailto:heather@kjenvironmental.com]
Sent: Wednesday, February 28, 2018 3:23 PM
To: Yu, Olivia, EMNRD <Olivia.Yu@state.nm.us>; Billings, Bradford, EMNRD

<Bradford.Billings@state.nm.us>
Cc: Dena <dena@kjenvironmental.com>
Subject: Summary of Phone Conference Between KJE and NMOCD

Good Afternoon,

Thank you for taking the time to conduct a phone conference. Below summarizes the agreed-upon actions/ conclusions moving forward:

- For Spills 1 and 2, KJE will provide a map that separates the blending areas for each respective spill.
- In lieu of groundwater monitoring wells, KJE will vertically delineate soil borings to depths 10 feet below the depth of the soil concentrations exhibiting concentrations below NMOCD approved criteria.
- NMOCD will not alter previously approved plans.
- NMOCD requests stockpile sampling be submitted for lab verification on a more frequent basis than 1 per every 200 cubic yards.
- NMOCD mandates that moving forward, all efforts must be made to advance borings beyond refusal. If a boring cannot be advanced to the mandated depth, KJE will notify NMOCD.
- NMOCD mandated 10 foot vertical delineation for 1RP-4820; however, two borings were only delineated to 5 and 6 feet respectively. NMOCD approved the vertical delineation to those depths and does not require further vertical delineation.
- KJE will collect the samples at 2.5 ft intervals and run laboratory analysis, as previously represented.
- KJE will add the release points to the maps.
- KJE will run TPH & BTEX at the point nearest to the release and/or gathering points at every interval and then in a manner sufficient to determine whether the constituents will be present, based on field judgment.
- KJE will provide data regarding the soil amendment to be considered as a remediation option, assuming there are sufficient studies to demonstrate post-remedial, long-term effects in similar environments.

Please feel free to update this bullet list with anything that we may have missed. Thank you both again for taking the time to speak with us!

Sincerely,

KJE
ENVIRONMENTAL & CIVIL ENGINEERING

HEATHER LEVEN
Environmental Project Manager
500 Moseley Rd Cross Roads, TX 76227
O (940)387-0805 F (940)387-0830

Certificate of Analysis Summary 548179

KJE Enviromental & Civil Engineering, Aubrey, TX

Project Name: OWL102816D

Project Id:
Contact: James Fox
Project Location: Owl Bobcat/Redhills Pipeline

Date Received in Lab: Wed Mar-08-17 04:40 pm
Report Date: 15-MAR-17
Project Manager: Holly Taylor

Analysis Requested							
	Lab Id:	548179-001		548179-002			
	Field Id:	SS001		SS002			
	Depth:	21 ft		296 In			
	Matrix:	SOIL		SOIL			
	Sampled:	Mar-08-17 12:15		Mar-08-17 08:45			
BTEX by SW 8260B SUB: TX104704215	***Extracted:***	Mar-14-17 12:45					
	Analyzed:	Mar-14-17 15:24					
	Units/RL:	mg/kg	RL				
Benzene		<0.00109	0.00109				
Toluene		<0.00109	0.00109				
Ethylbenzene		<0.00109	0.00109				
m,p-Xylenes		<0.00218	0.00218				
o-Xylene		<0.00109	0.00109				
Total Xylenes		<0.00109	0.00109				
Total BTEX		<0.00109	0.00109				
Inorganic Anions by EPA 300/300.1	***Extracted:***	Mar-10-17 14:20		Mar-10-17 14:20			
	Analyzed:	Mar-10-17 14:53		Mar-10-17 15:29			
	Units/RL:	mg/kg	RL	mg/kg	RL		
Chloride		93.5	5.00	13.1	4.91		
Percent Moisture	***Extracted:***						
	Analyzed:	Mar-10-17 11:48					
	Units/RL:	%	RL				
Percent Moisture		7.90	1.00				
TPH by Texas1005	***Extracted:***	Mar-09-17 14:00					
	Analyzed:	Mar-10-17 08:22					
	Units/RL:	mg/kg	RL				
C6-C12 Gasoline Range Hydrocarbons		<25.4	25.4				
C12-C28 Diesel Range Hydrocarbons		<25.4	25.4				
C28-C35 Oil Range Hydrocarbons		<25.4	25.4				
Total TPH 1005		<25.4	25.4				

Holly Taylor
Project Manager

Analytical Report 548179

for

KJE Enviromental & Civil Engineering

Project Manager: James Fox

OWL102816D

15-MAR-17

Collected By: Client

1211 W. Florida Ave, Midland TX 79701

Xenco-Houston (EPA Lab code: TX00122):
Texas (T104704215), Arizona (AZ0765), Florida (E871002), Louisiana (03054)
Oklahoma (9218)

Xenco-Dallas (EPA Lab code: TX01468): Texas (T104704295)
Xenco-Odessa (EPA Lab code: TX00158): Texas (T104704400)
Xenco-San Antonio: Texas (T104704534)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona(AZ0757)
Xenco-Phoenix Mobile (EPA Lab code: AZ00901): Arizona (AZM757)

15-MAR-17

Project Manager: **James Fox**
KJE Enviromental & Civil Engineering
500 Mosley Rd
Aubrey, TX 76227

Reference: XENCO Report No(s): **548179**
OWL102816D
Project Address: Owl Bobcat/Redhills Pipeline

James Fox:

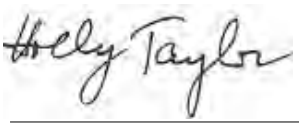
We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number(s) 548179. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory 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. 548179 will be filed for 60 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,



Holly Taylor
Project Manager

Sample Cross Reference 548179

KJE Enviromental & Civil Engineering, Aubrey, TX

OWL102816D

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
SS001	S	03-08-17 12:15	- 21 ft	548179-001
SS002	S	03-08-17 08:45	- 296 In	548179-002

CASE NARRATIVE

Client Name: KJE Enviromental & Civil Engineering
Project Name: OWL102816D

Project ID:
Work Order Number(s): *548179*

Report Date: *15-MAR-17*
Date Received: *03/08/2017*

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

Certificate of Analytical Results 548179

KJE Enviromental & Civil Engineering, Aubrey, TX

OWL102816D

Sample Id:	**SS001**	Matrix:	Soil	Date Received:	03.08.17 16.40
Lab Sample Id:	548179-001	Date Collected:	03.08.17 12.15	Sample Depth:	21 ft

Analytical Method:	Inorganic Anions by EPA 300/300.1			Prep Method:	E300P
Tech:	MGO			% Moisture:	
Analyst:	MGO	Date Prep:	03.10.17 14.20	Basis:	Wet Weight
Seq Number:	3012195				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**93.5**	5.00	mg/kg	03.10.17 14.53		1

Analytical Method:	TPH by Texas1005			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	7.9
Analyst:	ARM	Date Prep:	03.09.17 14.00	Basis:	Dry Weight
Seq Number:	3012071				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
C6-C12 Gasoline Range Hydrocarbons	PHC612	<25.4	25.4	mg/kg	03.10.17 08.22	U	1
C12-C28 Diesel Range Hydrocarbons	PHCG1228	<25.4	25.4	mg/kg	03.10.17 08.22	U	1
C28-C35 Oil Range Hydrocarbons	PHCG2835	<25.4	25.4	mg/kg	03.10.17 08.22	U	1
Total TPH 1005	PHC635	<25.4	25.4	mg/kg	03.10.17 08.22	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	105	%	70-135	03.10.17 08.22	
o-Terphenyl	84-15-1	107	%	70-130	03.10.17 08.22	

Certificate of Analytical Results 548179

KJE Enviromental & Civil Engineering, Aubrey, TX

OWL102816D

Sample Id:	**SS001**	Matrix:	Soil	Date Received:	03.08.17 16.40
Lab Sample Id:	548179-001	Date Collected:	03.08.17 12.15	Sample Depth:	21 ft
Analytical Method:	BTEX by SW 8260B			Prep Method:	SW5035
Tech:	JTR			% Moisture:	7.9
Analyst:	JTR	Date Prep:	03.14.17 12.45	Basis:	Dry Weight
Seq Number:	3012380			SUB:	TX104704215

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00109	0.00109	mg/kg	03.14.17 15.24	U	1
Toluene	108-88-3	<0.00109	0.00109	mg/kg	03.14.17 15.24	U	1
Ethylbenzene	100-41-4	<0.00109	0.00109	mg/kg	03.14.17 15.24	U	1
m,p-Xylenes	179601-23-1	<0.00218	0.00218	mg/kg	03.14.17 15.24	U	1
o-Xylene	95-47-6	<0.00109	0.00109	mg/kg	03.14.17 15.24	U	1
Total Xylenes	1330-20-7	<0.00109	0.00109	mg/kg	03.14.17 15.24	U	1
Total BTEX		<0.00109	0.00109	mg/kg	03.14.17 15.24	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	107	%	74-126	03.14.17 15.24	
1,2-Dichloroethane-D4	17060-07-0	106	%	80-120	03.14.17 15.24	
Toluene-D8	2037-26-5	94	%	73-132	03.14.17 15.24	

Certificate of Analytical Results 548179

KJE Enviromental & Civil Engineering, Aubrey, TX

OWL102816D

Sample Id:	**SS002**	Matrix:	Soil	Date Received:	03.08.17 16.40
Lab Sample Id:	548179-002	Date Collected:	03.08.17 08.45	Sample Depth:	296 In
Analytical Method:	Inorganic Anions by EPA 300/300.1			Prep Method:	E300P
Tech:	MGO			% Moisture:	
Analyst:	MGO	Date Prep:	03.10.17 14.20	Basis:	Wet Weight
Seq Number:	3012195				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**13.1**	4.91	mg/kg	03.10.17 15.29		1

Flagging Criteria

X In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to affect the recovery of the spike concentration. This condition could also affect the relative percent difference in the MS/MSD.

B A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.

D The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.

E The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.

F RPD exceeded lab control limits.

J The target analyte was positively identified below the quantitation limit and above the detection limit.

U Analyte was not detected.

L The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.

H The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.

K Sample analyzed outside of recommended hold time.

JN A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.

** Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit.

RL Reporting Limit

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

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

DL Method Detection Limit

NC Non-Calculable

+ NELAC certification not offered for this compound.

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

QC Summary 548179

KJE Enviromental & Civil Engineering

OWL102816D

Analytical Method: **Inorganic Anions by EPA 300/300.1** Prep Method: E300P
Seq Number: 3012195 Matrix: Solid Date Prep: 03.10.17
MB Sample Id: 721309-1-BLK LCS Sample Id: 721309-1-BKS LCSD Sample Id: 721309-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<4.98	249	243	98	251	101	90-110	3	20	mg/kg	03.10.17 14:38	

Analytical Method: **Inorganic Anions by EPA 300/300.1** Prep Method: E300P
Seq Number: 3012195 Matrix: Soil Date Prep: 03.10.17
Parent Sample Id: 547991-007 MS Sample Id: 547991-007 S MSD Sample Id: 547991-007 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	21.8	247	272	101	274	102	90-110	1	20	mg/kg	03.10.17 16:43	

Analytical Method: **Inorganic Anions by EPA 300/300.1** Prep Method: E300P
Seq Number: 3012195 Matrix: Soil Date Prep: 03.10.17
Parent Sample Id: 548179-001 MS Sample Id: 548179-001 S MSD Sample Id: 548179-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	93.5	250	341	99	340	99	90-110	0	20	mg/kg	03.10.17 15:00	

Analytical Method: **Percent Moisture**
Seq Number: 3012308 Matrix: Solid
MB Sample Id: 3012308-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Percent Moisture	<1.00	%	03.10.17 11:48	

Analytical Method: **Percent Moisture**
Seq Number: 3012308 Matrix: Soil
Parent Sample Id: 548179-001 MD Sample Id: 548179-001 D

Parameter	Parent Result	MD Result	%RPD	RPD Limit	Units	Analysis Date	Flag
Percent Moisture	7.90	7.76	2	20	%	03.10.17 11:48	

QC Summary 548179

KJE Enviromental & Civil Engineering

OWL102816D

Analytical Method: TPH by Texas1005 | Prep Method: TX1005P
Seq Number: 3012071 | Matrix: Solid | Date Prep: 03.09.17
MB Sample Id: 721306-1-BLK | LCS Sample Id: 721306-1-BKS | LCSD Sample Id: 721306-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
C6-C12 Gasoline Range Hydrocarbons	<25.0	1000	1000	100	1010	101	70-135	1	35	mg/kg	03.10.17 00:05	
C12-C28 Diesel Range Hydrocarbons	<25.0	1000	1030	103	1040	104	70-135	1	35	mg/kg	03.10.17 00:05	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	105		124		126		70-135	%	03.10.17 00:05
o-Terphenyl	111		127		126		70-130	%	03.10.17 00:05

Analytical Method: TPH by Texas1005 | Prep Method: TX1005P
Seq Number: 3012071 | Matrix: Soil | Date Prep: 03.09.17
Parent Sample Id: 548133-005 | MS Sample Id: 548133-005 S | MSD Sample Id: 548133-005 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
C6-C12 Gasoline Range Hydrocarbons	<25.0	999	862	86	851	85	70-135	1	35	mg/kg	03.10.17 01:44	
C12-C28 Diesel Range Hydrocarbons	<25.0	999	860	86	862	86	70-135	0	35	mg/kg	03.10.17 01:44	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	109		101		70-135	%	03.10.17 01:44
o-Terphenyl	106		97		70-130	%	03.10.17 01:44

Analytical Method: BTEX by SW 8260B | Prep Method: SW5035
Seq Number: 3012380 | Matrix: Solid | Date Prep: 03.14.17
MB Sample Id: 721516-1-BLK | LCS Sample Id: 721516-1-BKS | LCSD Sample Id: 721516-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00100	0.100	0.0918	92	0.0926	93	62-132	1	25	mg/kg	03.14.17 08:32	
Toluene	<0.00100	0.100	0.0851	85	0.0895	90	66-124	5	25	mg/kg	03.14.17 08:32	
Ethylbenzene	<0.00100	0.100	0.0905	91	0.0922	92	71-134	2	25	mg/kg	03.14.17 08:32	
m,p-Xylenes	<0.00200	0.200	0.182	91	0.193	97	69-128	6	25	mg/kg	03.14.17 08:32	
o-Xylene	<0.00100	0.100	0.0871	87	0.0914	91	72-131	5	25	mg/kg	03.14.17 08:32	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
Dibromofluoromethane	102		96		99		74-126	%	03.14.17 08:32
1,2-Dichloroethane-D4	119		86		89		80-120	%	03.14.17 08:32
Toluene-D8	95		96		103		73-132	%	03.14.17 08:32

QC Summary 548179

KJE Enviromental & Civil Engineering

OWL102816D

Analytical Method: **BTEX by SW 8260B** Prep Method: SW5035

Seq Number: 3012380 Matrix: Soil Date Prep: 03.14.17

Parent Sample Id: 548079-001 MS Sample Id: 548079-001 S

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	Limits	Units	Analysis Date	Flag
Benzene	<0.000759	0.0759	0.0773	102	62-132	mg/kg	03.14.17 12:28	
Toluene	<0.000759	0.0759	0.0683	90	66-124	mg/kg	03.14.17 12:28	
Ethylbenzene	<0.000759	0.0759	0.0717	94	71-134	mg/kg	03.14.17 12:28	
m,p-Xylenes	<0.00152	0.152	0.151	99	69-128	mg/kg	03.14.17 12:28	
o-Xylene	<0.000759	0.0759	0.0703	93	72-131	mg/kg	03.14.17 12:28	

Surrogate	MS %Rec	MS Flag	Limits	Units	Analysis Date
Dibromofluoromethane	96		74-126	%	03.14.17 12:28
1,2-Dichloroethane-D4	93		80-120	%	03.14.17 12:28
Toluene-D8	90		73-132	%	03.14.17 12:28

CHAIN OF CUSTODY

Page 1 Of 1

XENCO LABORATORIES

Setting the Standard since 1990

Stafford,Texas (281-240-4200)

Dallas Texas (214-902-0300)

Service Center - San Antonio, Texas (210-509-3334)

Odessa, Texas (432-563-1800)

Norcross, Georgia (770-449-8800)

Lakeland, Florida (863-646-8526)

Tampa, Florida (813-620-2000)

www.xenco.com

Xenco Quote #

Xenco Job # 548179

Client / Reporting Information

Company Name / Branch: KJE, Enviromental & Civil Engineering

Company Address: 500 Mosely Road, Cross Roads, Texas 76227

Email: james@kjenviromental.com Phone No: (940)387-0805

dena@kjenvironmentalco m

Project Contact: James Fox

Samplers's Name

Project Information

Project Name/Number: OWL102816D

Project Location: OWL Bobcat/Redhills Pipeline

Invoice To: Oilfield Water Logistics

PO Number:

Analytical Information

Matrix Codes

S = Soil/Sed/Solid
GW =Ground Water
DW = Drinking Water
P = Product
SW = Surface water
SL = Sludge
OW =Ocean/Sea Water
W = Wipe
O = Oil
WW= Waste Water
A = Air

No.	Field ID / Point of Collection	Collection: Sample Depth	Collection: Date	Collection: Time	Matrix	# of bottles	Number of preserved bottles: HCl	NaOH/Zn Acetate	HNO3	H2SO4	NaOH	NaHSO4	MEOH	NONE	BTEX 8260 (5035)	TPH	CHLORIDES	Field Comments
1	SS001	21'	3/8	1215	S	6	X						X		X	X	X	
2	SS002	24'8"	3/8	845	S	1								X			X	
3																		
4																		
5																		
6																		
7																		
8																		
9																		
10																		

Turnaround Time (Business days)

- [ ] Same Day TAT
- [x] 5 Day TAT
- [ ] Next Day EMERGENCY
- [ ] 7 Day TAT
- [ ] 2 Day EMERGENCY
- [ ] Contract TAT
- [ ] 3 Day EMERGENCY

TAT Starts Day received by Lab, if received by 5:00 pm

Data Deliverable Information

- [ ] Level II Std QC
- [ ] Level IV (Full Data Pkg /raw data)
- [ ] Level III Std QC+ Forms
- [ ] TRRP Level IV
- [ ] Level 3 (CLP Forms)
- [ ] UST / RG -411
- [ ] TRRP Checklist

Notes:

FED-EX / UPS: Tracking #

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION, INCLUDING COURIER DELIVERY

	Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1	James Fox	3/8/17 1040	1	2		2
3			3	4		4
5			5	Custody Seal #	Preserved where applicable	On Ice

Temp: IR ID:R-8
CF:+ 0.1
Corrected Temp: 5.2

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to XENCO Laboratories and its affiliates, subcontractors and assigns XENCO's standard terms and conditions of service unless previously negic

Final 1.000

Page 13 of 14

XENCO Laboratories
Prelogin/Nonconformance Report- Sample Log-In

Client: KJE Enviromental & Civil Engineering

Date/ Time Received: 03/08/2017 04:40:00 PM

Work Order #: 548179

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)?	5.2	
#2 *Shipping container in good condition?	**Yes**	
#3 *Samples received on ice?	**Yes**	
#4 *Custody Seal present on shipping container/ cooler?	**N/A**	
#5 *Custody Seals intact on shipping container/ cooler?	**N/A**	
#6 Custody Seals intact on sample bottles?	**N/A**	
#7 *Custody Seals Signed and dated?	**N/A**	
#8 *Chain of Custody present?	**Yes**	
#9 Sample instructions complete on Chain of Custody?	**Yes**	
#10 Any missing/extra samples?	**No**	
#11 Chain of Custody signed when relinquished/ received?	**Yes**	
#12 Chain of Custody agrees with sample label(s)?	**Yes**	
#13 Container label(s) legible and intact?	**Yes**	
#14 Sample matrix/ properties agree with Chain of Custody?	**Yes**	
#15 Samples in proper container/ bottle?	**Yes**	
#16 Samples properly preserved?	**Yes**	
#17 Sample container(s) intact?	**Yes**	
#18 Sufficient sample amount for indicated test(s)?	**Yes**	
#19 All samples received within hold time?	**Yes**	
#20 Subcontract of sample(s)?	**Yes**	Houston
#21 VOC samples have zero headspace?	**N/A**	
#22 <2 for all samples preserved with HNO3,HCL, H2SO4? Except for samples for the analysis of HEM or HEM-SGT which are verified by the analysts.	**N/A**	
#23 >10 for all samples preserved with NaAsO2+NaOH, ZnAc+NaOH?	**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: 03/09/2017

Checklist reviewed by: Holly Taylor
Holly Taylor
Date: 03/09/2017

RECORD OF SUBSURFACE EXPLORATION

KJ Environmental & Civil Engineering
500 Moseley Road • Cross Roads, TX 76227
940-387-0805 • FAX 940-387-0830

Client Name:	OWL SWD Operating, LLC			**Well/Boring #**	SS-01	**Date Drilled:**	March 8, 2017
Client Address:	8214 Westchester Drive Suite #850, Dallas, Texas 75225			**Depth of Boring:**	21’	**Diameter of Boring:**	4”
Project Name:	Produced Water Pipeline Releases Nearby OWL SWD			**Depth of Well:**	N/A	**Diameter of Screen:**	N/A
Project Address:	32.095118/ -103.218947 NAD 83			**Length of Screen:**	N/A	**Diameter of Casing:**	N/A
Driller:	Atkins Engineering Associates Inc.			**Length of Casing:**	N/A	**Slot Size:**	N/A
Drilling Method:	CME Rig	**Sampling Method:**	Split Spoon	**Logged By:**	James F.	**Well Material:**	N/A

Description / Remarks (Color, Grain Size, Texture, Structure, Consistency, Moisture)	**Depth (feet)**	**Sample Interval (feet)**	**PID (ppm)**	**Chloride Screening (ppm)**	**Sample Core Zone**	**Well Completion** *(graphical representation only, not to scale)*
Surface Type: Topsoil, Light Red fine SAND, (SP), poorly graded, dry						Bentonite
Sub-surface Type: Red/light red SAND, (SP), poorly graded, dry	-1-	0.0-2.0	4.3	640		
	-2- -3-	2.0-4.0	8.3	420		
	-4- -5-	4.0-6.0	6.6	470		
	-6- -7-	6.0-8.0	4.6	820		
	-8- -9-	8.0-10.0	0.2	NA		
NOTE: No water was encountered throughout installation this boring	-10- -11-	10.0-12.0	NA	NA		
	-12- -13- -14-	12.0-14.0	0.2	5		
	-15- -16-	14.0-16.0	0.2	5		
	-17- -18-	16.0-18.0	0.2	5		
	-19- -20-	18.0-20.0	0.2	5		
	-21-	20.0-21.0	0.2	5		

These logs should not be used separately from the original report.

ENVIRONMENTAL & CIVIL ENGINEERING
500 Moseley Road
Cross Roads, Texas 76227
Phone: 940-387-0805
Fax: 940-387-0830

Ms. Amber Groves
New Mexico State Land Office
2827 North Dal Paso, Suite 117
Hobbs, New Mexico 88260

Re: OWL SWD Operating, LLC
October 28, 2016 Spill
Jal, New Mexico
1RP 4497

At the SLO's request, in an effort to "achieve native plant cover and diversity levels equal to or exceeding the natural potential levels in undisturbed soils adjacent to the project area", OWL will comply with the following Revegetation and Noxious Weed Plan.

Revegetation and Noxious Weed Plan

OWL, or their contractor, will broadcast apply BLM mix No. 2, for sandy soil, on the remediation area outside of the road right-of-way. The mix will be modified to replace the Lovegrass and will include Sand Dropseed, Plains Bristlegrass, and Sideoats Grama. The seed mix will be applied at the rate specified by the supplier (8 lbs of seed/acre; consisting of 2 lbs Sand Dropseed, 2 lbs Sideoats Grama, and 4 lbs Plains Bristlegrass). A certification of purity from Curtis & Curtis, Inc. is being submitted concurrently with this Plan for your review. OWL will complete a one-time watering with a water truck to help establish growth, if a sufficient rainfall event is not forecast within 72 hours after application. The site will be monitored on a monthly basis to visually assess the establishment of growth and the absence of noxious weeds. The seed mix will contain no primary or secondary noxious weeds; however, if noxious weeds are observed during the monitoring events, the weeds will be mechanically removed. Pictures will be taken for documentation of the monitoring. If no growth is present after one year, the site will be reseeded and monitored until revegetation is achieved. A final report will be submitted once revegetation is complete, which will document the seeding and monitoring efforts and will include pictures of the seeding process, monitoring efforts, and revegetated area.

If we can be of further assistance, please do not hesitate to contact us at 940-387-0805. We look forward to proceeding with the remediation efforts and site closure.

Regards,

Dena M. Vandenberg, REM, LEED AP
Director of Environmental Services

Kevin J. Ware, QEP, REM
Principal

Curtis & Curtis, Inc.

4500 N. Prince St.
PHONE (575) 762-4759 / FAX (575) 763-4213
seed@curtisseed.com
www.curtisseed.com
CLOVIS, NEW MEXICO 88101

IRRIGATED PASTURE GRASSES
MOUNTAIN PASTURE GRASSES
NATIVE PASTURE GRASSES
SORGHUMS

GRASS SEED SPECIALISTS

YARD AND PLAYGROUND GRASSES
GOLF COURSE GRASSES
ALFALFA / CLOVERS
FORAGES

SUBMITTAL

November 16, 2017
KI Environmental

3.5 Acre Modified BLM #2

To Whom It May Concern:

Curtis & Curtis, Inc certifies that each container of seed is mixed and labeled in accordance with the Federal Seed Act and is at least equal to the requirements indicated below.

Kind	Origin	Lot #	Purity	X	Germ & Dormant	=	PLS %
Sand Dropseed Not Stated	Colorado	19557	99.44%		90.00%		89.50%
Sideoats Grama El Reno	Texas	18990	85.69%		98.00%		83.98%
Plains Bristlegrass Not Stated	Oklahoma	19495	90.60%		98.00%		88.79%

Sincerely,

Tyler Stuemky

CURTIS & CURTIS, INC.

4500 North Prince, Clovis, New Mexico 88101
PH: 575-762-4759 FAX: 575-763-4213

Irrigated Pasture Grasses
Mountain Pasture Grasses
Native Pasture Grasses

Yard and Playground Grasses
Golf Course Grasses
Alfalfa/Clovers

PRICE QUOTATION

TO:	KJ Environmental	DATE:	November 16, 2017
ATTENTION:	Dena	SALESPERSON:	Tyler Stuemky
PHONE:	940-387-0805	SHIPPING DATE:	As Directed
EMAIL:	dena@kjenvironmental.com	FOB:	Clovis
PROJECT:	3.5 Acre Modified BLM #2	TERMS:	TBD

DESCRIPTION	PRICE	AMOUNT
Modified BLM #2:	$100.00/Acre	$350.00

Broadcast Rates

COMMON NAME	BOTANICAL NAME	PLS/ACRE
Sand Dropseed	*Sporobolus cryptandrus*	2.0
~~Sand Lovegrass~~ Sub. Sideoats Grama	*Bouteloua curtipendula*	2.0
Plains Bristlegrass	*Setaria leucopila*	4.0

*****THIS QUOTE IS GOOD FOR 10 DAYS*****
*****ALL PRICES SUBJECT TO AVAILABILITY**SUBJECT TO BEING UNSOLD*****

Here is our quotation on the goods named, subject to the conditions noted:

The prices and terms on this quotation are not subject to verbal changes or other agreements unless approved in writing by the Home Office of the Seller. All quotations and agreements are contingent upon strikes, accidents, fires, availability of materials and all other causes beyond our control. Prices are based on costs and conditions existing on date of quotation and are subject to change by the Seller before final acceptance.

Typographical and stenographic errors are subject to correction. Purchaser agrees to accept either overage or shortage not in excess of ten percent to be charged for pro-rata. Purchaser assumes liability for patent and copyright infringement when goods are made to Purchaser's specifications. When quotation specifies material to be furnished by the purchaser, ample allowance must be made for reasonable spoilage and material must be of suitable quality to facilitate efficient production. Conditions not specifically stated herein shall be governed by established trade customs. Terms inconsistent with those stated herein, which may appear on Purchaser's formal order will not be binding on the Seller.

THIS AGREEMENT IS BETWEEN:

Buyer: _____ Date: _____ Seller: _____ Date: November 16, 2017