From:	Kayla Scott
To:	Bratcher, Mike, EMNRD
Cc:	Scott Springer; stacie.singleton@dvn.com
Subject:	Devon Laguna Salado Work Plan
Date:	Thursday, February 26, 2015 1:13:10 PM
Attachments:	Devon Laguna Salado work plan_Rev 1.pdf

Good Afternoon Mike,
I have attached the work plan for Devon Energy Laguna Salado.
Please let me know if you have any questions.

Thank You,

Kayla Scott
Project Assistant
ENVIRO CLEAN PERMIAN BASIN
Enviro Clean¦ 2405 E. County Road 123¦ Midland¦ Texas ¦ 79706
Main +1.432.301.0209 ¦kscott@envirocleanps.com

February 23, 2015

Mr. Mike Bratcher
NMOCD District 2
811 S. 1st Street
Artesia, NM

RE: Soil Assessment and Remediation Work Plan
Devon Energy Corporation
Laguna Salado South 1
Eddy County, NM

Dear Mr. Bratcher:

Devon Energy Corporation (Devon) has contracted Enviro Clean Services (ECS) to perform soil assessment and remediation services at the Laguna Salado South 1 (Laguna Salado) site in Eddy County, NM. The results of the soil assessment and proposed remediation activities are presented below.

Site Information

The Laguna Salado site is located 12 miles southeast of Loving in Eddy County, New Mexico. The legal location is Section 22, Township 23S, Range 29E, with a latitude of N32.292463 and a longitude of W103.973938. It consists of approximately 3.5 acres with two wellheads, a bermed area with eight tanks, and a bermed area with one vent tank. The pad is surrounded on the south and east by a saltwater lake, Salt Lake. The Site Plan is provided in **Appendix A**.

According to the US Department of Agriculture Natural Resource Conservation Service soil survey, the soil in this area is made up of Cottonwood-Reeves loams with 0% to 3% slopes. These soils are well drained with little to no runoff. Drainage courses in the area are normally dry. Groundwater in this area is less than 100 feet below ground surface (bgs), according to the New Mexico Office of the State Engineer. See **Appendix B** for the referenced groundwater data.

Ranking for this site, according to the New Mexico-Oil Conservation Division (NMOCD) Environmental Handbook, is **40** based on the following:

Depth to groundwater	<50’
Wellhead protection area	>1,000’
Distance to surface water body	<200’

Incident Description

The release occurred on or around January 25, 2015 when a valve was shut off and crude oil was diverted to the vent tank. Approximately 8 barrels (bbls) of oil were released to the pad around the vent tank, and approximately 2 bbls were recovered by Devon. An approximately 240 square foot area was impacted east and north of the vent tank.

Sample Collection

On January 27, 2015, ECS field staff collected six samples at three locations within the impacted area. One background sample was collected at ground surface northeast of the vent tank approximately 20 ft. Grab samples from the impacted area were collected at the surface and at 6 inches bgs at each of the three locations using a hand auger. These samples were analyzed for Total Petroleum Hydrocarbons (TPH), per Method 8015M. The results are provided in **Table 1**. The laboratory analytical report and chain of custody documentation are provided in **Appendix C**.

Table 1- Summary of Analytical Results

Sample ID	Depth (ft. bgs)	TPH C6-C12 (mg/Kg)	TPH C12-C28 (mg/Kg)	TPH C28-C35 (mg/Kg)	Total TPH C6-C38 (mg/Kg)
001	0	214	343	157	714
001 6”	0.5	37.0	51.9	38.3	127
002	0	949	2600	337	3890
002 6”	0.5	ND	ND	ND	ND
003	0	1040	1390	148	2580
003 6”	0.5	ND	ND	ND	ND
BG	0	ND	ND	ND	ND

TPH levels above the NMOCD action level for soil of 100 mg/Kg exist at sample locations 001, 002, and 003 at ground surface and at 001 at 6 in. bgs.

Proposed Remedial Actions

ECS proposes to till the impacted soil around the vent tank with hand tillers. The tilled area would then be treated with an EnviroClean solution, a hydrocarbon degradation agent that will aid breaking down the TPH. Confirmation samples will be collected approximately three months after the treatment and analyzed for TPH, Method 8015M.

A report detailing the remediation activities and sample results will be generated upon completion of the project and provided to the NMOCD, Artesia Office. If you have any questions

about the information presented in this work plan, please don't hesitate to contact me at (432) 301-0209 or at sspringer@envirocleanps.com.

Sincerely,

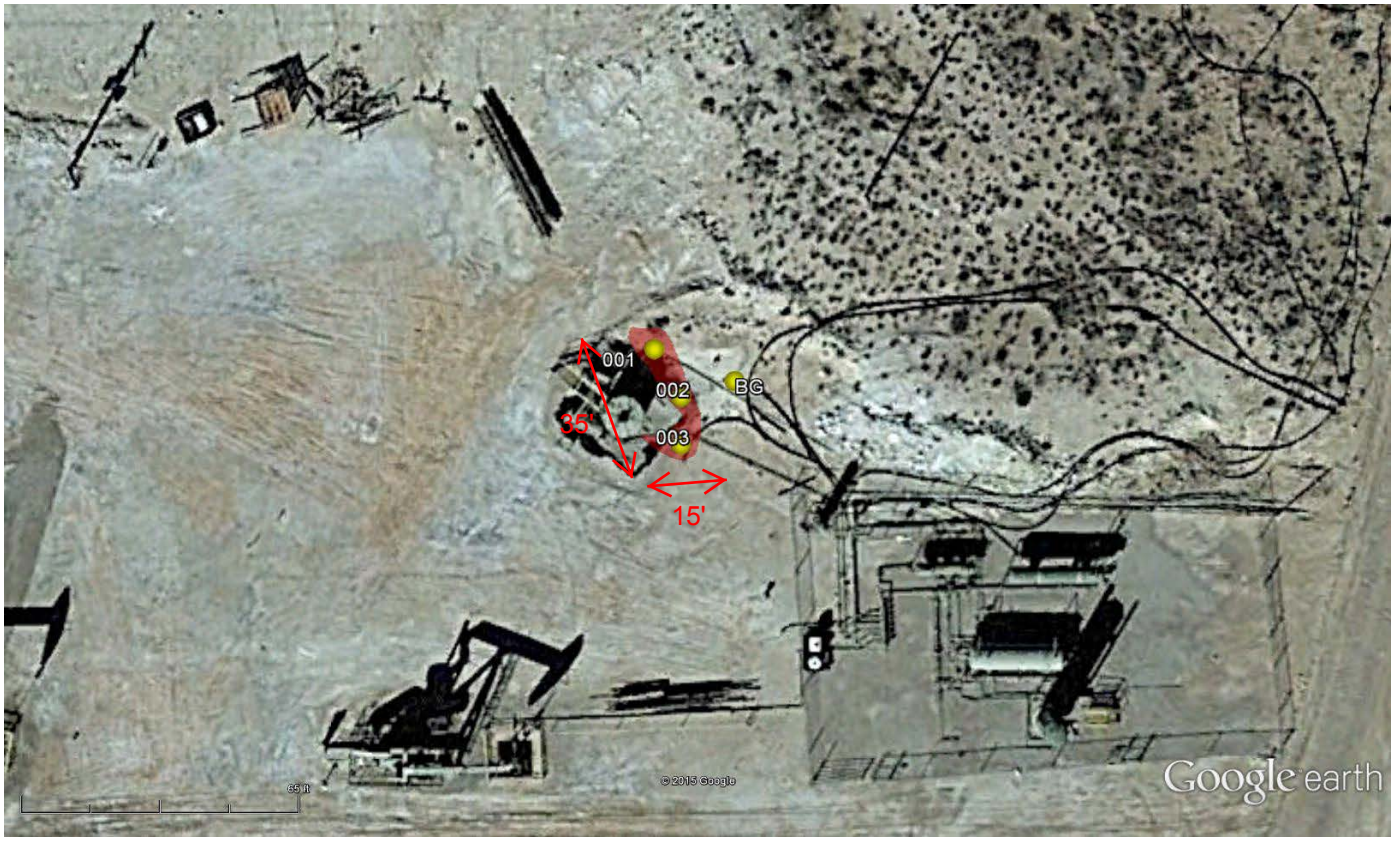
Enviro Clean Services, LLC

Scott Springer
Permian Basin Operations Manager

Attachments: Appendix A: Site Plan
Appendix B: Groundwater Data
Appendix C: Laboratory Analytical Report and Chain of Custody Documentation

APPENDIX A

SITE PLAN



Sample Location GPS Points		
Sample Location	**Latitude**	**Longitude**
001	N32.292510	W103.974710
002	N32.292480	W103.974690
003	N32.292450	W103.974690
BG	N32.292490	W103.974650

Site Plan
Devon Energy Corporation
Laguna Salado South 1
Sec. 22-23S-29E
Eddy County, NM

Scale: 1.25”=65’	ENVIROCLEAN PERMIAN BASIN	Drawn By: ECS
Date: 2/4/2015		Project Mgr.: ECS
2405 E County Road 123,		
Project No.: DVNRNM0013		Figure: 1

APPENDIX B

GROUNDWATER DATA

New Mexico Office of the State Engineer
Water Column/Average Depth to Water

(A CLW##### in the POD suffix indicates the POD has been replaced & no longer serves a water right file.)

(R=POD has been replaced, O=orphaned, C=the file is closed)

(quarters are 1=NW 2=NE 3=SW 4=SE)
(quarters are smallest to largest) (NAD83 UTM in meters) (In feet)

POD Number	POD Sub-basin	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Distance	Depth Well	Depth Water	Water Column
C 02797		ED		2	3	22	23S	29E	596540	3572895*	426	200		
C 02716		ED	4	4	4	16	23S	29E	595818	3574002*	1048	400		
C 02715		ED	4	1	3	15	23S	29E	596221	3574411*	1162	400		
C 02717		ED	4	2	4	16	23S	29E	595817	3574407*	1349	400		
C 01217 S		ED	4	1	4	16	23S	29E	595413	3574403*	1617	350		
C 02718		ED	4	4	2	16	23S	29E	595816	3574812*	1694	400		
C 02720		ED		2	1	21	23S	29E	594911	3573690*	1740	150		
C 02721		ED		2	3	21	23S	29E	594915	3572879*	1751	150		
C 02707	C	ED			2	28	23S	29E	595535	3571868*	1803	40	18	22
C 03057 EXPLORE		ED	4	1	1	21	23S	29E	594605	3573586*	2024	150		
C 02808		ED		2	3	16	23S	29E	594909	3574501*	2074	100		
C 02809		ED		2	3	16	23S	29E	594909	3574501*	2074	100		
C 02613		ED	4	4	2	20	23S	29E	594203	3573176*	2412	400		
C 02794		ED		4	3	10	23S	29E	596518	3575731*	2416	100		
C 02795		ED		4	3	10	23S	29E	596518	3575731*	2416	200		
C 01627	C	ED	1	4	4	28	23S	29E	595649	3570959*	2545	170		
C 03058 EXPLORE		ED	4	1	1	16	23S	29E	594605	3575206*	2756	150		
C 02608		ED	3	1	4	17	23S	29E	593598	3574387*	3197	400		
C 02705	C	ED			2	17	23S	29E	593902	3575093*	3239	68	28	40
C 03059 EXPLORE		ED	4	1	3	17	23S	29E	592993	3574378*	3770		65	
C 03587 POD1	CUB	ED	1	4	3	29	23S	29E	593338	3570754	4156	99	44	55
C 02806		ED		1	1	09	23S	29E	594473	3576927*	4196	100		
C 02807		ED		1	1	09	23S	29E	594473	3576927*	4196	100		
C 02792		ED		4	3	04	23S	29E	594868	3577336*	4381	200		
C 02793		ED		4	3	04	23S	29E	594868	3577336*	4381	100		
C 02706	C	ED			4	18	23S	29E	592302	3574291*	4418	17	10	7

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

(A CLW##### in the POD suffix indicates the POD has been replaced & no longer serves a water right file.)

(R=POD has been replaced, O=orphaned, C=the file is closed)

(quarters are 1=NW 2=NE 3=SW 4=SE)

(quarters are smallest to largest) (NAD83 UTM in meters) (In feet)

POD Number	POD Code	Sub-basin	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Distance	Depth Well	Depth Water	Water Column
C 03587 POD2		CUB	ED	1	2	4	19	23S	29E	592213	3572706	4440	77	16	61
C 02486		C	ED	3	2	3	19	23S	30E	601304	3572832*	4717	350		
C 02182		C	ED			4	30	23S	29E	592328	3571048*	4846	75	30	45
C 02804			ED		2	1	08	23S	29E	593262	3576905*	4908	100		
C 02805			ED		2	1	08	23S	29E	593262	3576905*	4908	100		
C 02704		C	ED			1	19	23S	29E	591531	3573493*	5083	174		
C 00571		C	ED	1	3	3	30	23S	29E	591241	3570957*	5865	89	38	51
C 00571 CLW241602	O		ED	3	3	3	30	23S	29E	591241	3570757*	5948	89	38	51
C 00136 A		C	ED	4	4	4	25	23S	28E	591037	3570753*	6135	100	60	40
C 02702		C	ED			2	13	23S	28E	590715	3575108*	6162	38	20	18
C 02743			ED	2	1	4	34	22S	29E	596989	3579473*	6168	377		
C 00136 S			ED	1	1	2	25	23S	28E	590426	3572167*	6290	122	45	77
C 00136			ED	3	1	2	25	23S	28E	590426	3571967*	6330	200	42	158
C 00136 CLW194026	O		ED	3	1	2	25	23S	28E	590426	3571967*	6330	200	52	148
C 00136 CLW235233	O		ED	3	1	2	25	23S	28E	590426	3571967*	6330	200	42	158
C 03001 EXPLORE			ED	1	1	4	25	23S	28E	590430	3571355*	6484	140		
C 01215			ED	4	2	3	13	23S	28E	590210	3574397*	6491	104	15	89
C 01967		C	ED		2	3	13	23S	28E	590111	3574498*	6606	264	200	64
C 01443		C	ED		2	1	25	23S	28E	590123	3572064*	6607	50	27	23
C 03615 POD2		CUB	ED	4	2	4	06	24S	29E	592661	3568013	6611	60	26	34
C 03615 POD1		CUB	ED	1	3	2	06	24S	29E	591964	3568500	6692	60	36	24
C 01214			ED	1	2	3	13	23S	28E	590010	3574597*	6724	70	20	50
C 00500			ED	4	3	1	24	23S	28E	589811	3573176*	6801	130		
C 00868			ED	4	3	1	24	23S	28E	589811	3573176*	6801	190		

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

Average Depth to Water: **41 feet**

Minimum Depth: **10 feet**

Maximum Depth: **200 feet**

Record Count: 50

UTMNAD83 Radius Search (in meters):

Easting (X): 596611.1 **Northing (Y):** 3573315.9 **Radius:** 7000

APPENDIX C

LABORATORY ANALYTICAL REPORT AND CHAIN OF CUSTODY DOCUMENTATION

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

PBELAB

Analytical Report

Prepared for:

Joel Ortiz
EnviroClean PS
2405 E CR 123
Midland, TEXAS 79706

Project: Devon Laguna Salado south 1
Project Number: DVNRNM0013
Location: New Mexico

Lab Order Number: 5A28006

NELAP ACCREDITED TNI LABORATORY

NELAP/TCEQ # T104704156-13-3

Report Date: 02/03/15

EnviroClean PS
2405 E CR 123
Midland TEXAS, 79706

Project: Devon Laguna Salado south 1
Project Number: DVNRNM0013
Project Manager: Joel Ortiz

Fax: (432) 301-0176

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
sample 001	5A28006-01	Soil	01/27/15 15:48	01-28-2015 13:00
sample 001 6"	5A28006-02	Soil	01/27/15 15:50	01-28-2015 13:00
sample 002	5A28006-03	Soil	01/27/15 15:51	01-28-2015 13:00
sample 002 6"	5A28006-04	Soil	01/27/15 15:55	01-28-2015 13:00
sample 003	5A28006-05	Soil	01/27/15 15:59	01-28-2015 13:00
sample 003 6"	5A28006-06	Soil	01/27/15 16:00	01-28-2015 13:00
BG	5A28006-07	Soil	01/27/15 16:15	01-28-2015 13:00

EnviroClean PS	Project: Devon Laguna Salado south 1	Fax: (432) 301-0176
2405 E CR 123	Project Number: DVNRNM0013	
Midland TEXAS, 79706	Project Manager: Joel Ortiz	

sample 001

5A28006-01 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Permian Basin Environmental Lab, L.P.									
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**230**	1.14	mg/kg dry	1	P5B0301	01/30/15	02/03/15	EPA 300.0	
% Moisture	**12.0**	0.1	%	1	P5A2902	01/29/15	01/29/15	% calculation	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	**214**	28.4	mg/kg dry	1	P5A2906	01/28/15	01/28/15	TPH 8015M	
>C12-C28	**343**	28.4	mg/kg dry	1	P5A2906	01/28/15	01/28/15	TPH 8015M	
>C28-C35	**157**	28.4	mg/kg dry	1	P5A2906	01/28/15	01/28/15	TPH 8015M	
Surrogate: 1-Chlorooctane		*112 %*	*70-130*		*P5A2906*	*01/28/15*	*01/28/15*	*TPH 8015M*	
Surrogate: o-Terphenyl		*115 %*	*70-130*		*P5A2906*	*01/28/15*	*01/28/15*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	**714**	28.4	mg/kg dry	1	[CALC]	01/28/15	01/28/15	calc	

EnviroClean PS	Project: Devon Laguna Salado south 1	Fax: (432) 301-0176
2405 E CR 123	Project Number: DVNRNM0013	
Midland TEXAS, 79706	Project Manager: Joel Ortiz	

sample 001 6"

5A28006-02 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Permian Basin Environmental Lab, L.P.									
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**98.9**	1.15	mg/kg dry	1	P5B0301	01/30/15	02/03/15	EPA 300.0	
% Moisture	**13.0**	0.1	%	1	P5A2902	01/29/15	01/29/15	% calculation	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	**37.0**	28.7	mg/kg dry	1	P5A2906	01/28/15	01/28/15	TPH 8015M	
>C12-C28	**51.9**	28.7	mg/kg dry	1	P5A2906	01/28/15	01/28/15	TPH 8015M	
>C28-C35	**38.3**	28.7	mg/kg dry	1	P5A2906	01/28/15	01/28/15	TPH 8015M	
Surrogate: 1-Chlorooctane		*112 %*	*70-130*		*P5A2906*	*01/28/15*	*01/28/15*	*TPH 8015M*	
Surrogate: o-Terphenyl		*123 %*	*70-130*		*P5A2906*	*01/28/15*	*01/28/15*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	**127**	28.7	mg/kg dry	1	[CALC]	01/28/15	01/28/15	calc	

EnviroClean PS	Project: Devon Laguna Salado south 1	Fax: (432) 301-0176
2405 E CR 123	Project Number: DVNRNM0013	
Midland TEXAS, 79706	Project Manager: Joel Ortiz	

sample 002

5A28006-03 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Permian Basin Environmental Lab, L.P.									
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**5640**	31.2	mg/kg dry	25	P5B0301	01/30/15	02/03/15	EPA 300.0	
% Moisture	**20.0**	0.1	%	1	P5A2902	01/29/15	01/29/15	% calculation	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	**949**	156	mg/kg dry	5	P5A2906	01/28/15	01/28/15	TPH 8015M	
>C12-C28	**2600**	156	mg/kg dry	5	P5A2906	01/28/15	01/28/15	TPH 8015M	
>C28-C35	**337**	156	mg/kg dry	5	P5A2906	01/28/15	01/28/15	TPH 8015M	
Surrogate: 1-Chlorooctane		*124 %*	*70-130*		*P5A2906*	*01/28/15*	*01/28/15*	*TPH 8015M*	
Surrogate: o-Terphenyl		*130 %*	*70-130*		*P5A2906*	*01/28/15*	*01/28/15*	*TPH 8015M*	*S-GC*
Total Petroleum Hydrocarbon C6-C35	**3890**	156	mg/kg dry	5	[CALC]	01/28/15	01/28/15	calc	

EnviroClean PS	Project: Devon Laguna Salado south 1	Fax: (432) 301-0176
2405 E CR 123	Project Number: DVNRNM0013	
Midland TEXAS, 79706	Project Manager: Joel Ortiz	

sample 002 6"

5A28006-04 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Permian Basin Environmental Lab, L.P.									
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**190**	1.18	mg/kg dry	1	P5B0301	01/30/15	02/03/15	EPA 300.0	
% Moisture	**15.0**	0.1	%	1	P5A2902	01/29/15	01/29/15	% calculation	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	ND	29.4	mg/kg dry	1	P5A2906	01/28/15	01/28/15	TPH 8015M	
>C12-C28	ND	29.4	mg/kg dry	1	P5A2906	01/28/15	01/28/15	TPH 8015M	
>C28-C35	ND	29.4	mg/kg dry	1	P5A2906	01/28/15	01/28/15	TPH 8015M	
Surrogate: 1-Chlorooctane		*103 %*	*70-130*		*P5A2906*	*01/28/15*	*01/28/15*	*TPH 8015M*	
Surrogate: o-Terphenyl		*112 %*	*70-130*		*P5A2906*	*01/28/15*	*01/28/15*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	ND	29.4	mg/kg dry	1	[CALC]	01/28/15	01/28/15	calc	

EnviroClean PS	Project: Devon Laguna Salado south 1	Fax: (432) 301-0176
2405 E CR 123	Project Number: DVNRNM0013	
Midland TEXAS, 79706	Project Manager: Joel Ortiz	

sample 003

5A28006-05 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Permian Basin Environmental Lab, L.P.									
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**1140**	1.16	mg/kg dry	1	P5B0301	01/30/15	02/03/15	EPA 300.0	
% Moisture	**14.0**	0.1	%	1	P5A2902	01/29/15	01/29/15	% calculation	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	**1040**	145	mg/kg dry	5	P5A2906	01/28/15	01/28/15	TPH 8015M	
>C12-C28	**1390**	145	mg/kg dry	5	P5A2906	01/28/15	01/28/15	TPH 8015M	
>C28-C35	**148**	145	mg/kg dry	5	P5A2906	01/28/15	01/28/15	TPH 8015M	
Surrogate: 1-Chlorooctane		*119 %*	*70-130*		*P5A2906*	*01/28/15*	*01/28/15*	*TPH 8015M*	
Surrogate: o-Terphenyl		*120 %*	*70-130*		*P5A2906*	*01/28/15*	*01/28/15*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	**2580**	145	mg/kg dry	5	[CALC]	01/28/15	01/28/15	calc	

EnviroClean PS	Project: Devon Laguna Salado south 1	Fax: (432) 301-0176
2405 E CR 123	Project Number: DVNRNM0013	
Midland TEXAS, 79706	Project Manager: Joel Ortiz	

sample 003 6"

5A28006-06 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Permian Basin Environmental Lab, L.P.									
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**230**	1.14	mg/kg dry	1	P5B0301	01/30/15	02/03/15	EPA 300.0	
% Moisture	**12.0**	0.1	%	1	P5A2902	01/29/15	01/29/15	% calculation	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	ND	28.4	mg/kg dry	1	P5A2906	01/28/15	01/28/15	TPH 8015M	
>C12-C28	ND	28.4	mg/kg dry	1	P5A2906	01/28/15	01/28/15	TPH 8015M	
>C28-C35	ND	28.4	mg/kg dry	1	P5A2906	01/28/15	01/28/15	TPH 8015M	
Surrogate: 1-Chlorooctane		*100 %*	*70-130*		*P5A2906*	*01/28/15*	*01/28/15*	*TPH 8015M*	
Surrogate: o-Terphenyl		*115 %*	*70-130*		*P5A2906*	*01/28/15*	*01/28/15*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	ND	28.4	mg/kg dry	1	[CALC]	01/28/15	01/28/15	calc	

EnviroClean PS	Project: Devon Laguna Salado south 1	Fax: (432) 301-0176
2405 E CR 123	Project Number: DVNRNM0013	
Midland TEXAS, 79706	Project Manager: Joel Ortiz	

BG

5A28006-07 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Permian Basin Environmental Lab, L.P.									
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**44100**	56.8	mg/kg dry	50	P5B0301	01/30/15	02/03/15	EPA 300.0	
% Moisture	**12.0**	0.1	%	1	P5A2902	01/29/15	01/29/15	% calculation	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	ND	28.4	mg/kg dry	1	P5A2906	01/28/15	01/29/15	TPH 8015M	
>C12-C28	ND	28.4	mg/kg dry	1	P5A2906	01/28/15	01/29/15	TPH 8015M	
>C28-C35	ND	28.4	mg/kg dry	1	P5A2906	01/28/15	01/29/15	TPH 8015M	
Surrogate: 1-Chlorooctane		*94.3 %*	*70-130*		*P5A2906*	*01/28/15*	*01/29/15*	*TPH 8015M*	
Surrogate: o-Terphenyl		*108 %*	*70-130*		*P5A2906*	*01/28/15*	*01/29/15*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	ND	28.4	mg/kg dry	1	[CALC]	01/28/15	01/29/15	calc	

EnviroClean PS	Project: Devon Laguna Salado south 1	Fax: (432) 301-0176
2405 E CR 123	Project Number: DVNRNM0013	
Midland TEXAS, 79706	Project Manager: Joel Ortiz	

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 P5A2902 - * DEFAULT PREP *** **										
Blank (P5A2902-BLK1)				Prepared & Analyzed: 01/29/15						
% Moisture	ND	0.1	%							
Duplicate (P5A2902-DUP1)	**Source: 5A28002-01**			Prepared & Analyzed: 01/29/15						
% Moisture	6.0	0.1	%		6.0			0.00	20	
Duplicate (P5A2902-DUP2)	**Source: 5A28002-03**			Prepared & Analyzed: 01/29/15						
% Moisture	7.0	0.1	%		6.0			15.4	20	
Batch P5B0301 - * DEFAULT PREP *** **										
Blank (P5B0301-BLK1)				Prepared & Analyzed: 02/03/15						
Chloride	ND	1.00	mg/kg wet							
LCS (P5B0301-BS1)				Prepared & Analyzed: 02/03/15						
Chloride	102	1.00	mg/kg wet	100		102	80-120			
LCS Dup (P5B0301-BSD1)				Prepared & Analyzed: 02/03/15						
Chloride	100	1.00	mg/kg wet	100		100	80-120	1.48	20	
Duplicate (P5B0301-DUP1)	**Source: 5A27002-01**			Prepared & Analyzed: 02/03/15						
Chloride	4590	5.56	mg/kg dry		4540			1.11	20	
Duplicate (P5B0301-DUP2)	**Source: 5A28006-01**			Prepared & Analyzed: 02/03/15						
Chloride	226	1.14	mg/kg dry		230			1.80	20	
Matrix Spike (P5B0301-MS1)	**Source: 5A27002-01**			Prepared & Analyzed: 02/03/15						
Chloride	4970	5.56	mg/kg dry	444	4540	97.3	80-120			

EnviroClean PS	Project: Devon Laguna Salado south 1	Fax: (432) 301-0176
2405 E CR 123	Project Number: DVNRNM0013	
Midland TEXAS, 79706	Project Manager: Joel Ortiz	

Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M - 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 P5A2906 - TX 1005										
Blank (P5A2906-BLK1)				Prepared & Analyzed: 01/28/15						
C6-C12	ND	25.0	mg/kg wet							
>C12-C28	ND	25.0	"							
>C28-C35	ND	25.0	"							
Surrogate: 1-Chlorooctane	*99.5*		*"*	*100*		*99.5*	*70-130*			
Surrogate: o-Terphenyl	*54.0*		*"*	*50.0*		*108*	*70-130*			
LCS (P5A2906-BS1)				Prepared & Analyzed: 01/28/15						
C6-C12	875	25.0	mg/kg wet	1000		87.5	75-125			
>C12-C28	986	25.0	"	1000		98.6	75-125			
Surrogate: 1-Chlorooctane	*120*		*"*	*100*		*120*	*70-130*			
Surrogate: o-Terphenyl	*53.5*		*"*	*50.0*		*107*	*70-130*			
LCS Dup (P5A2906-BSD1)				Prepared & Analyzed: 01/28/15						
C6-C12	921	25.0	mg/kg wet	1000		92.1	75-125	5.07	20	
>C12-C28	1010	25.0	"	1000		101	75-125	1.98	20	
Surrogate: 1-Chlorooctane	*128*		*"*	*100*		*128*	*70-130*			
Surrogate: o-Terphenyl	*62.2*		*"*	*50.0*		*124*	*70-130*			

EnviroClean PS	Project: Devon Laguna Salado south 1	Fax: (432) 301-0176
2405 E CR 123	Project Number: DVNRNM0013	
Midland TEXAS, 79706	Project Manager: Joel Ortiz	

Notes and Definitions

S-GC	Surrogate recovery outside of control limits. The data was accepted based on valid recovery of the remaining surrogate.
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

Report Approved By: Brent Barron Date: 2/3/2015

Brent Barron, Laboratory Director/Technical Director

PBELAB

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

Permian Basin Environmental Lab, LP
10014 S. County Road 1213
Midland, Texas 79706

Phone: 432-686-7235

Project Manager: Joel Ortiz

Company Name: EnviroClean PS

Company Address: 2405 E CR 123

City/State/Zip: Midland Texas 79706

Telephone No: 432-301-0209 Fax No:

Sampler Signature: Joel Ortiz e-mail: sspringer@envirocleanps.com, jortiz@envirocleanps.com, dbecker@envirocleanps.com, hevans@envirocleanps.com

Project Name: Devon Laguna Salado south 1

Project #: DVNRNM0013

Project Loc: NEW Mexico

PO #: dvnrnm0013

Report Format: [x] Standard [ ] TRRP [ ] NPDES

(lab use only)
ORDER #: 5A28001o

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total # of Containers	Preservation & # of Containers: Ice	HNO_3	HCl	H_2SO_4	NaOH	$Na_2S_2O_3$	None	Other (Specify)	Matrix: DW=Drinking Water SL=Sludge GW = Groundwater S=Soil/Solid NP=Non-Potable Specify Other	Analyze For: TCLP: TPH: 8015B	TOTAL: TPH: 418.1	8015M	TX 1005	TX 1006	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, Alkalinity)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	BTEX 8021 B/5030 or BTEX 8260	RCI	N.O.R.M.	RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT
1	sample 001			11/27/15	15:48		1							X		S	X					X									X
2	sample 001 6"				15:50																										
3	sample 002				15:51																										
4	sample 002 6"				15:55																										
5	sample 003				15:59																										
6	sample 003 6"				16:00																										
7	BG				16:15																										

Special Instructions:

Relinquished by:	Date	Time	Received by:	Date	Time
Joel Ortiz	11/28/15	13:00			
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by PBEL:	Date	Time
				11/28/15	13:00

Laboratory Comments:

Sample Containers Intact?	Y N
VOCs Free of Headspace?	Y N
Labels on container(s)	Y N
Custody seals on container(s)	Y N
Custody seals on cooler(s)	Y N
Sample Hand Delivered by Sampler/Client Rep ?	Y N
by Courier? UPS DHL FedEx Lone Star	
Temperature Upon Receipt:	
Received: -5.4 °C	
Adjusted: °C Factor	

From: Bratcher, Mike, EMNRD
To: "Kayla Scott"
Cc: Scott Springer; stacie.singleton@dvn.com; Patterson, Heather, EMNRD
Subject: RE: Devon Laguna Salado Work Plan
Date: Thursday, February 26, 2015 1:35:00 PM

Ladies and Gentlemen,

OCD has no record of receipt of an initial report C-141 for this release. Please advise. Also, is there an MSDS sheet, or any other information available for the proposed EnviroClean amendment?

Thank you,

Mike Bratcher
NMOCD District 2
811 S. First Street
Artesia, NM 88210
O: 575-748-1283 X108
C: 575-626-0857
F: 575-748-9720

From: Kayla Scott [mailto:KScott@envirocleanps.com]
Sent: Thursday, February 26, 2015 1:11 PM
To: Bratcher, Mike, EMNRD
Cc: Scott Springer; stacie.singleton@dvn.com
Subject: Devon Laguna Salado Work Plan

Good Afternoon Mike,
I have attached the work plan for Devon Energy Laguna Salado.
Please let me know if you have any questions.

Thank You,

Kayla Scott
Project Assistant
ENVIRO CLEAN PERMIAN BASIN
Enviro Clean¦ 2405 E. County Road 123¦ Midland¦ Texas ¦ 79706
Main +1.432.301.0209 ¦kscott@envirocleanps.com

From: Scott Springer
To: Bratcher, Mike, EMNRD; Kayla Scott
Cc: stacie.singleton@dvn.com; Patterson, Heather, EMNRD
Subject: RE: Devon Laguna Salado Work Plan
Date: Thursday, February 26, 2015 2:18:38 PM
Attachments: EnviroClean_Technical Data Sheet__03-17-2010.pdf
EnviroClean__SDS.pdf

Hi Mike,
Here is the technical data sheet and SDS for the EC product. Let me know if you need any more info.
Thanks,

Scott Springer, PG
Regional Manager, Permian Area
432-301-0209 office
432-301-0208 cell

From: Bratcher, Mike, EMNRD [mailto:mike.bratcher@state.nm.us]
Sent: Thursday, February 26, 2015 2:35 PM
To: Kayla Scott
Cc: Scott Springer; stacie.singleton@dvn.com; Patterson, Heather, EMNRD
Subject: RE: Devon Laguna Salado Work Plan

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Thank You,

Kayla Scott
Project Assistant
ENVIRO CLEAN PERMIAN BASIN
Enviro Clean¦ 2405 E. County Road 123¦ Midland¦ Texas ¦ 79706
Main +1.432.301.0209 ¦kscott@envirocleanps.com

EnviroClean
Degassing/Hydrocarbon Removal/Remediation Chemistry

Contents

PHYSICAL PROPERTIES

Product Name	EnviroClean
Physical Form	Clear Liquid
Color	Colorless unless dyed
Specific Gravity (Water = 1)	1.028 +/- .01
Solubility in Water	100%
Freezing/Melting Point	NE
Flash Point (^{0}F)	>200^0 F
pH	8.5 +/- .25
Reportable Quantity (RQ)	None

Complete information on health hazards, protective equipment, handling precautions, environmental hazards and disposal is listed in the current EnviroClean Material Safety Data Sheet (MSDS) for this product.

SUMMARY

EnviroClean is a non-flammable, non-toxic, water-based, proprietary blend of non-ionic ethoxylated octylphenolic surfactants that has been specifically engineered as a cleanup/mitigation agent for a wide range of hydrocarbon products. EnviroClean has been shown to be effective for quickly and effectively suppressing or completely eliminating VOCs, LEL's, benzene and low levels of H_2S and mercaptans in open or confined spaces.

EnviroClean has been used for cleanup of hydrocarbon spills and soil remediation. In these applications, EnviroClean effectively conditions (physically) the hydrocarbon such that the microbes that naturally occur can more readily consume it. It turns hydrocarbons into a nutrient source for the microbes. When sufficiently mixed with hydrocarbon and water, the EnviroClean forms a homogeneous solution of hydrocarbon, EnviroClean and water, which is very stable.

EnviroClean is a concentrated product that readily biodegrades.

EnviroClean is commercially available in 5-gallon units, 55-gallon drums, 275 and 330-gallon totes and bulk from Oklahoma City, Oklahoma, Wappingers Falls, New York, and Houston, Texas.

FLUID DESIGN

EnviroClean is a proprietary blend of surfactants that needs to be diluted to be effective and it is very safe to workers and the environment. EnviroClean does **not** contain caustic, therefore does not have the common harmful side effects associated with caustic based products. The product is designed for use as a degassing agent and a cleaner/degreaser for remediation. The product does not contain any enzymes or biomass itself. It works by conditioning the hydrocarbon so that the naturally occurring microbes (bacteria) are able to readily consume it. Through the application of the appropriate dilution and mixing, the EnviroClean will capture the hydrocarbon and tie it up in a solution that is very stable. The formation of this solution results in extremely small particles that will not recoalesce. It is important to note that if EnviroClean reaches its saturation point the oversaturated hydrocarbon will breakout of solution very quickly. This will allow for easy removal or reclamation of any hydrocarbon that is not preconditioned for remediation.

In addition to tying up the hydrocarbon in solution, the product is very effective when contacted with hydrocarbon vapors at suppressing volatile organic vapors, gases, and odors. Once combustible and flammable hydrocarbon vapors are tied up in the resultant solution, the solution will be very difficult to ignite. It also accelerates the biodegradation process of the hydrocarbon, thereby enhancing recycling or reclamation of water.

EnviroClean has been demonstrated to be effective on gas, oil, lube oil, hydraulic oil, most petroleum-based products, animal and vegetable oils, fats, and tallow oils. EnviroClean cleans the heavy tar build-up, asphaltenes or oily residue from inside of tanks and vessels. Furthermore, once a surface has been cleaned with EnviroClean, the cleaned surface will resist the deposition of oily materials.

EnviroClean can be used to cleanup oil spills whether in/on soil or hard surfaces. The first step in this process is to remove as much of the free oil as possible. This step is followed by contacting the contaminated surface appropriately with the proper dilution of EnviroClean and water. The treatment solution will contact the hydrocarbon molecules and change their behavior such that they are now essentially water soluble. The large increase in interfacial surface area creates conditions that are favorable to degradation and consumption by bacteria and microbes. The product converts hydrocarbons into a very good nutrient source for bacteria and microbes.

EnviroClean is typically fed at concentrations between 1% and 6%, depending on the nature of the hydrocarbon contamination problem. It can be diluted with most types of water – hard, soft or brackish water. The product has an unlimited shelf life when unopened. EnviroClean is effective at ambient temperatures. However, the **effectiveness will increase as the temperature of the application is increased**. EnviroClean does not require the use of steam, but has been shown to be very effective when injected into the steam (vapor) phase.

FIELD MIXING PROCEDURES

Mixing Concentrates

EnviroClean is usually delivered as a concentrate and **must** be diluted with water to work properly. Cleaning solutions can be formulated by premixing or eduction. It is not necessary to provide high shear agitation when preparing a batch of cleaning solution since EnviroClean is 100% soluble in water. It is recommended that when preparing the cleaning solution you first add the water into the mix container and then follow by the addition of EnviroClean. This will minimize foaming as the EnviroClean and water form a homogeneous solution.

For premixing, the following procedure may be used:

1. Add the correct amount of water to the container.
2. Depending on the desired strength, add the correct amount of EnviroClean to the container.
3. If the final solution is not a consistent pink color, mild agitation may be required until a consistent pink color is achieved.

Quality Control Testing

There is no easy field testing procedure to monitor the concentration of active ingredients in the EnviroClean formulation. Visually the color changes from rose color to lighter pink as the product is further diluted. Effectiveness can also be predicted by quantifying the amount of hydrocarbon that is to be picked up. By observing the effluent from the use of EnviroClean, an adjustment in the cleaning solution concentration can be made. If it is observed that free oil is floating on the effluent solution, then the concentration should be increased.

MATERIAL REQUIREMENTS

For specific protocols and application rates, please refer to the available **Product Usage Guide**, product label, or consult with the manufacturer or authorized distributor for additional guidance.

Equipment Cleaning & Parts Washing

EnviroClean is very effective for equipment cleaning applications. EnviroClean is used at light dilutions and has a significant “life of batch” as well as low foaming tendencies. The surfactants in EnviroClean desorb and micro-emulsify grease and oil contamination and separate it from solids (metal shavings, grit, etc.) allowing them to settle without accumulating oily sludges. These factors make EnviroClean ideal for spray wash systems as well as dip/agitating equipment. Some agitation or circulation of the fluid is required for thorough cleaning. For

equipment cleaning applications, EnviroClean is normally diluted to a 3% - 6% solution with water.

Soil Remediation

Calculate the volume of hydrocarbon contained in the contaminated area. It is important to determine accurately the depth of oil penetration into the soil. It will be important to agitate the soil to just below the depth of penetration. Once the estimate of hydrocarbon is known, the amount of the normal dilution of EnviroClean for soil remediation is 32 parts water to 1 part EnviroClean (3% solution). The EnviroClean solution will use the naturally occurring bacteria in the soil and begin to consume the hydrocarbon, which has been put into a form that can be quickly consumed. The remediation process normally occurs over 4 to 12 weeks.

The following step-by-step procedure can be used for soil remediation using EnviroClean:

1. If contaminated soil is deeper than 12", excavate the soil and spread at the surface to a depth of 10" – 12" and then proceed with this protocol. If contaminated soil is 12" in depth or less, thoroughly mix and aerate the soil in place utilizing a roto-tiller or similar equipment. If soil is extremely oily or gummy, mix clean soil with oily soil to expedite clean up and to make it easier to work with.

2. Utilizing local soil or rock, build a small berm surrounding the treatment area to prevent rain water run off from the site.

3. To determine treatment volumes of EnviroClean, measure the square footage area of the treatment cell and divide that number by 27 to find cubic yards per foot of depth (i.e. treatment area is 100' x 50': 100 x 50 ÷ 27 = 185). Multiply that number x .06 to determine the amount of EnviroClean to utilize in the treatment (i.e. 185 x .06 = 11 gallons EnviroClean). Dilute the EnviroClean to approximately a 3% solution (32 to 1 or 352 gallons water to 11 gallons EnviroClean). Spray the 3% EnviroClean solution over the entire treatment cell.

4. If, after a week, little to no rainfall has fallen, water the site thoroughly.

5. Wait another week and repeat steps 1 and 3, if needed.

6. Monitor and continue the treatment protocol until desired clean up levels are reached.

Samples can be taken and analyzed for Total Petroleum Hydrocarbons (TPH) to track the progress of the remediation. If the TPH were to appear to stabilize and not continue to decline, a second application of EnviroClean may be required.

***Note*:** It can be helpful, but not required, to add a highly soluble, high nitrogen fertilizer such as Miracle Grow or Sam's Choice to the first 3% EnviroClean solution.

The addition of bacteria is not typically required. The EnviroClean solution will stimulate the activity level of the naturally occurring bacteria.

In the fall and winter, it helps to expedite the job if the treatment cell is covered with plastic between treatments. This tends to hold in heat and generate additional moisture.

Keeping the soil moist is an integral part of the clean up.

Emergency Response & Spill Cleanup

Small Spill Cleanup: Dilute EnviroClean to a 10% solution. On small spills apply with 2 ½ gallon pressure sprayer or similar device. Cover the entire spill working in a circular motion from outside perimeter toward the center of the spill. After application of EnviroClean has been completed, agitate spill area with forcible stream of water or broom and rinse thoroughly. EnviroClean helps to reduce or eliminate any VOC concerns associated with the cleanup by micro-emulsifying the hydrocarbon on contact drastically reducing the LEL levels in a very short time frame. EnviroClean also eliminates sheens.

On Roadways & Pavement: EnviroClean can be applied with a pressure sprayer or applied through a foam eductor at a 6% setting. EnviroClean will instantly stop the deterioration of asphalt by diesel or gas and eliminate slippery conditions. Dispose in accordance with local rules and regulations.

***Note*:** For use with absorbents, EnviroClean will increase effectiveness by allowing the contaminate to more easily penetrate into the absorbent.

Degassing & Cleaning of Tanks & Equipment

EnviroClean is effective for the degassing and cleaning of all types of petroleum storage tanks. For small tanks of less than 50,000 gallons,

EnviroClean should be utilized through a power washer at dilutions between 2% and 6% depending on the type of product within the vessel and the degree of contamination. Typically for flammables, a 6% solution is utilized to completely agitate the tank residue and to scour the wall of the vessel prior to and during pump out. Lower dilutions may be utilized for products not representing a vapor hazard. EnviroClean is also effective for reducing H2S, Benzene and other VOC's.

Tank Bed Remediation

A common and effective means of mitigating the vapor hazard and remediating the tank bedding is to utilize a "flushing and recovery" technique with a diluted solution of EnviroClean. Typically a 3% to 6% solution of EnviroClean and water is utilized in a batch process to treat the impacted portions of the tank floor area. Simply perforating the affected area with a "buster" or hole saw and allowing the EnviroClean solution to flood the affected bedding will eliminate immediate, and future, recurrences of vapor generation. The process also serves to remediate the contamination by flushing entrained hydrocarbon out of the bedding for recovery and disposal, or re-processing. If necessary, the entire sub-floor area may be treated by saturating the zone of contamination and flushing the fluid to the sump, or other collection point, and recovering the rinsate for disposal. Depending upon the severity of the leak, and the resultant degree of subfloor contamination, the EnviroClean solution can be applied so as to simply saturate the bedding material, or it can be injected so as to flush and recover gross quantities of hydrocarbon.

Chemical Pipeline Pigging

As a general guideline, pump a slug of 3% to 6% solution and chase with water.

VOC Vapor Mitigation & Odor Control

EnviroClean is typically applied at a concentration of 3 – 6% for vapor and/or odor control. Circulate the solution through a manway cannon or other device in order to provide sufficient saturation of the vapor space of the vessel that is being degassed. Check the vapor level of the tank before circulation begins. Circulate for about 2 hours and let the tank settle for about 2 hours. Check the vapor level in the tank. More than one circulation may be required for complete vapor suppression. The holding capacity of EnviroClean may require sweetening or circulation with a fresh batch of product, depending on the amount of hydrocarbon vapors originally contained in the vessel.

Dilute EnviroClean to a 3% to 6% solution. Coverage is normally at 3 to 4 square yards of surface area per gallon. Heavy contamination or mercaptan type odors may require a stronger solution of EnviroClean.

Typically, 1 gallon of EnviroClean concentrate diluted to a 3% to 6% solution will render up to 6 gallons of petroleum product nonflammable when properly applied.

Hard Surface Cleaning & Decontamination

For heavy soiled oil and grease on hard surfaces: Mix a 6% solution of concentrate with clean water in quantity sufficient to cover contaminated area. Apply generous amounts with spray applicator, or equivalent and allow reasonable time for the surfactants in EnviroClean to penetrate and break down the hydrocarbon and grime. Once applied, solution may be scrubbed or brushed in for stubborn soiling. Next, apply EnviroClean at a 1% - 2% solution through a power washer (heated power wash system will expedite the process). Flush residue to containment and dispose of as local rules apply.

For lightly soiled or freshly oiled surfaces: EnviroClean may be used through any power washer or steam jenny currently available. Operating temperatures of 140 degrees F. will maximize effectiveness. Solution strengths of 1 – 2% may be used for lighter decontamination duties. For small applications, a 5% solution (16 oz. EnviroClean concentrate to 2.5 gallons water) may be applied with a small pump sprayer and scrubbed or brushed into surface.

Insitu Free Product Recovery Enhancement

EnviroClean is effective for the insitu solubilization and recovery enhancement of entrained Free Product Hydrocarbon in the subsurface to facilitate recovery or biodegradation. Dilutions of 2% v/v are typical for light ends (i.e. gasoline) while concentrations of 3% to 6% are effective for Diesel Range Organic (DRO's) and heavier oils. Applications vary, however the EnviroClean solution is injected into the contaminated zone followed typically by a recovery event.

Soil Flushing and Recovery

EnviroClean is effective for the insitu solubilization and recovery enhancement of entrained Free Product Hydrocarbon in surface and sub-surface soil to facilitate recovery or biodegradation. Dilutions of 2% v/v are typical for light ends (i.e. gasoline) while concentrations of 3% to 6% are effective for Diesel Range Organic (DRO's) and heavier oils. Applications vary, however the EnviroClean solution is injected into or flushed through the contaminated zone.

Surface Washing & Shoreline Cleanup

Dilute EnviroClean to a 2% solution. On small spills apply with 2.5 gallon pressure sprayer or similar device. Cover entire spill, working in a circular motion, from outside perimeter toward the center of the spill. After application of EnviroClean has been completed, agitate spill area with forcible stream of water or broom and rinse thoroughly.

On larger spills, specific applications and protocols should be developed taking into account local risks and considerations.

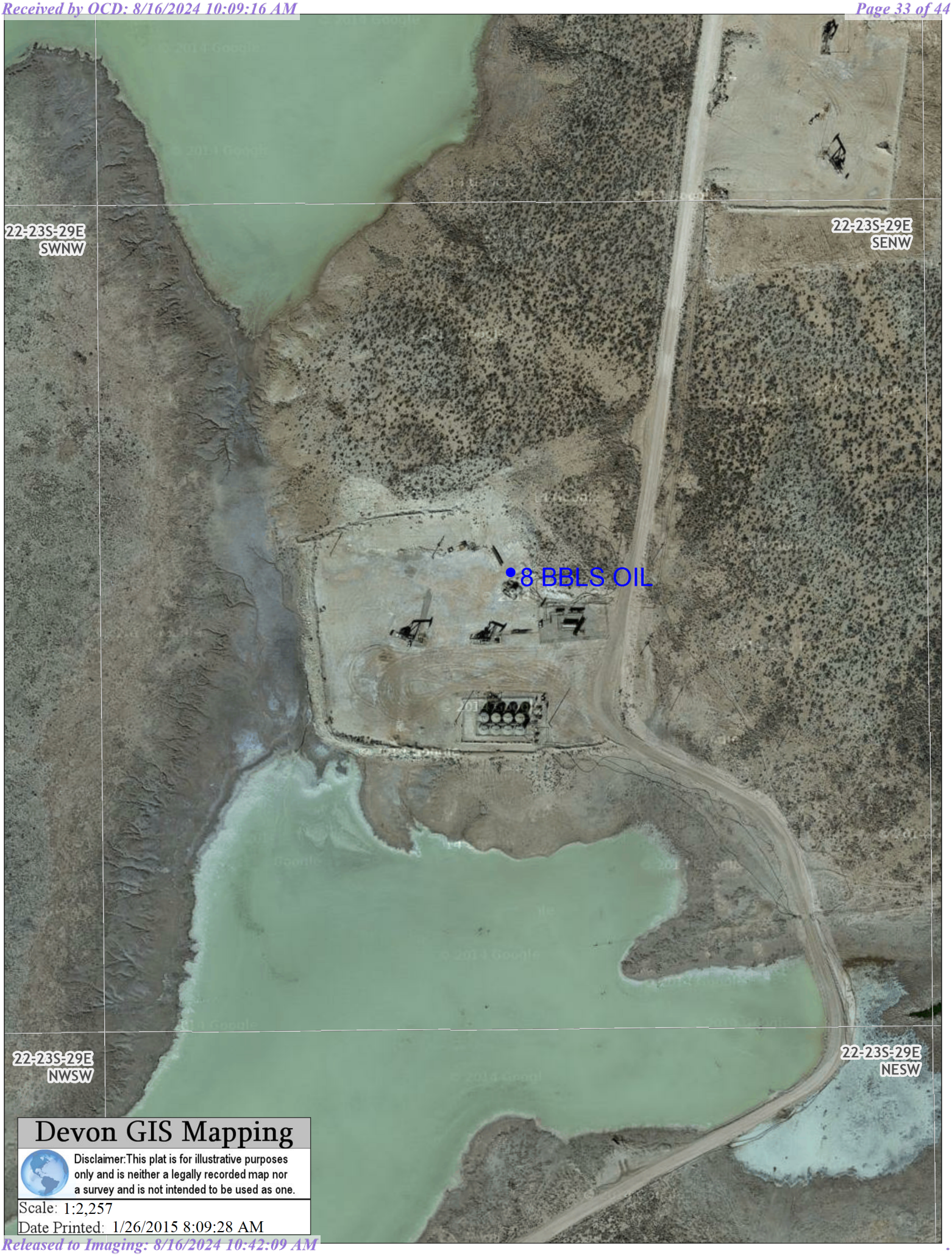
***Note*:** EnviroClean is listed on the U.S. E.P.A. NCP Product Schedule as a Surface Washing Agent (listed SW #31). This listing does *not* mean that U.S. E.P.A. approves, licenses, certifies, or authorizes the use of EnviroClean on an oil discharge. This listing means only that data have been submitted to EPA as required by subpart J of the National Contingency Plan § 300.915.

Fire Fighting for Class A & B Fires

Proportioning Rate:	6%
GPM Flow Rate:	95 – 110
PSI at Eductor:	200 or MFG's recommendations
Hose Length:	As per MFG's suggestion
Nozzle Type:	Standard adjustable or automatic
Coverage:	0.2 gpm per square foot
Nozzle Pattern:	Hard cone to coarse stream
Application:	Starting from the outside perimeter, using a stirring, mixing action.

Contaminated Soil Excavation

In most cases a 3% solution of EnviroClean will be adequate to keep vapor emissions within acceptable limits. Dilute EnviroClean concentrate with water at a ratio of 1 part EnviroClean to 32 parts water to make a 3% solution. The EnviroClean solution should be applied evenly to the soil surface in sufficient quantity to dampen the surface well. As a general rule, 1 gallon of solution will cover approximately 4 sq. yd. of soil surface area.



Devon GIS Mapping

Disclaimer:This plat is for illustrative purposes only and is neither a legally recorded map nor a survey and is not intended to be used as one.

Scale: 1:2,257

Date Printed: 1/26/2015 8:09:28 AM

From: Bratcher, Mike, EMNRD
To: "Kayla Scott"
Cc: Scott Springer; stacie.singleton@dvn.com; Patterson, Heather, EMNRD
Subject: RE: Devon Laguna Salado Work Plan
Date: Wednesday, March 04, 2015 7:59:00 AM

RE: Devon Energy * Laguna Salado South 1 * 30-015-26407 * F-22-23s-29e * Eddy County, NM
NMOCD tracking number: **2RP-2845** Date of release: 1/22/15

Greetings,

Your proposal for remediation of the above referenced release is approved. Please advise once work has been scheduled. Federal sites will require like approval from BLM.

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.

If you have any questions or concerns, and for notification, please contact me.

Mike Bratcher
NMOCD District 2
811 S. First Street
Artesia, NM 88210
O: 575-748-1283 X108
C: 575-626-0857
F: 575-748-9720

From: Kayla Scott [mailto:KScott@envirocleanps.com]
Sent: Thursday, February 26, 2015 1:11 PM
To: Bratcher, Mike, EMNRD
Cc: Scott Springer; stacie.singleton@dvn.com
Subject: Devon Laguna Salado Work Plan

Good Afternoon Mike,
I have attached the work plan for Devon Energy Laguna Salado.
Please let me know if you have any questions.

Thank You,

Kayla Scott
Project Assistant
ENVIRO CLEAN PERMIAN BASIN
Enviro Clean¦ 2405 E. County Road 123¦ Midland¦ Texas ¦ 79706

Main +1.432.301.0209 ¦kscott@envirocleanps.com

From: Weaver, Crystal, EMNRD
To: "Tara Hodges"; Bratcher, Mike, EMNRD; Groves, Amber; Mike Shoemaker; Brett Fulks
Cc: ballen@sesi-nm.com; books2@sesi-nm.com
Subject: RE: Devon Laguna Salado Work Plan
Date: Wednesday, June 14, 2017 2:58:00 PM
Attachments: Initial C-141 for 2RP-2845.pdf
Last document for 2RP-2845.pdf

Hello all,

So I have finally gotten around to looking over the work plan. Sorry we have been swamped over here as usual.

I spoke with Bob Allen on the phone 6/14/17 and we talked about the things that OCD is needing to see moving forward on this project.

Here is what we discussed:

- OCD needs AH-1 location vertically delineated to where we have clean chloride numbers at or below 250mg/kg which will thus also give direction on the depth at which excavation needs to occur in this area of the spill. Ground water analysis showed potential water depth in the area to be at an average around 31 ft. with a site showing water as low as at 10' bgs.
- The site map shows sample points 2, 3, 4, and 5 and I think it is supposed to say AH-1 through AH-4 instead. So Bob and I agreed that would get fixed. Along with a small typo that was made in the data table where it should say AH-1 @5' it says AH-5 @5'.
- Based on all sample points at surface depth across the area of the spill coming back with high chloride numbers, OCD requests that the surface be scraped across the spill area to a depth of 1' bgs.
- Per OCD's Conditions of Approval (COAs) we require that EPA Method 300.0 be utilized for all lab tested samples of chlorides.

Also one other item that I did not discuss with Bob on the phone but that I do need to mention is there is an older release that had occurred at the Laguna Salado South #1 back on 1/22/15 and was given OCD tracking number 2RP-2845. I have attached copies of the initial C-141 and the last correspondence OCD has on file for 2RP-2845 which is OCD giving approval of a remediation proposal from EnviroClean back on 3/4/15. Please follow up with us on that release.

Please let us know when the above requested items are completed and upon OCD review of the results an approval will be reconsidered.

Thank you and as always if you have any questions or concerns please contact myself or Mike Bratcher here at the OCD District II Office.

Thanks again,

Crystal Weaver
Environmental Specialist
OCD – Artesia District II
811 S. 1st Street
Artesia, NM 88210
Office: 575-748-1283 ext. 101
Cell: 575-840-5963
Fax: 575-748-9720

From: Tara Hodges [mailto:office2@sesi-nm.com]
Sent: Friday, May 26, 2017 7:30 AM
To: Weaver, Crystal, EMNRD <Crystal.Weaver@state.nm.us>; Bratcher, Mike, EMNRD <mike.bratcher@state.nm.us>; Groves, Amber <agroves@slo.state.nm.us>; Mike Shoemaker <mike.shoemaker@dvn.com>; Brett Fulks <Brett.fulks@dvn.com>
Cc: ballen@sesi-nm.com; books2@sesi-nm.com
Subject: Devon Laguna Salado Work Plan

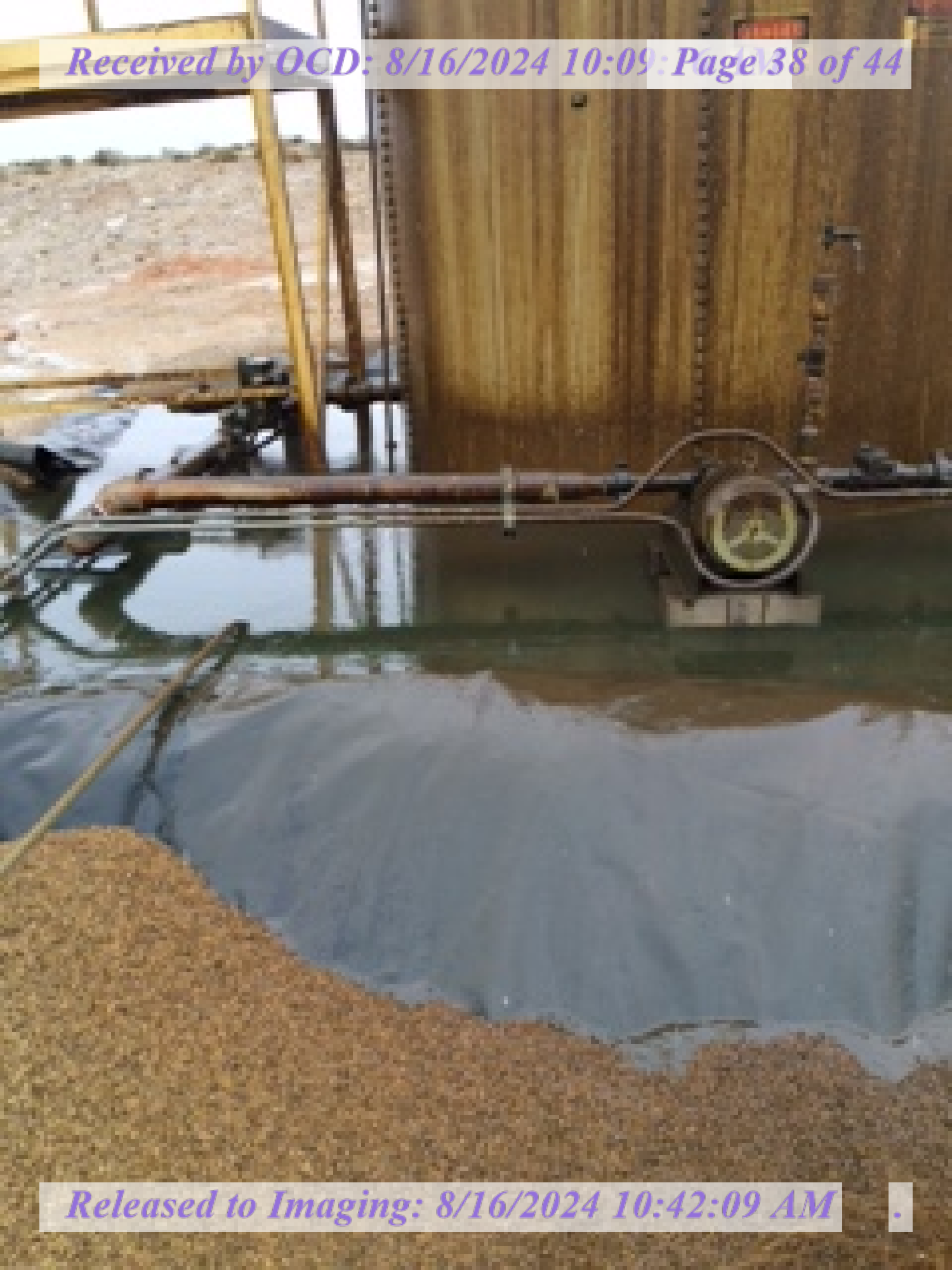
Hello,

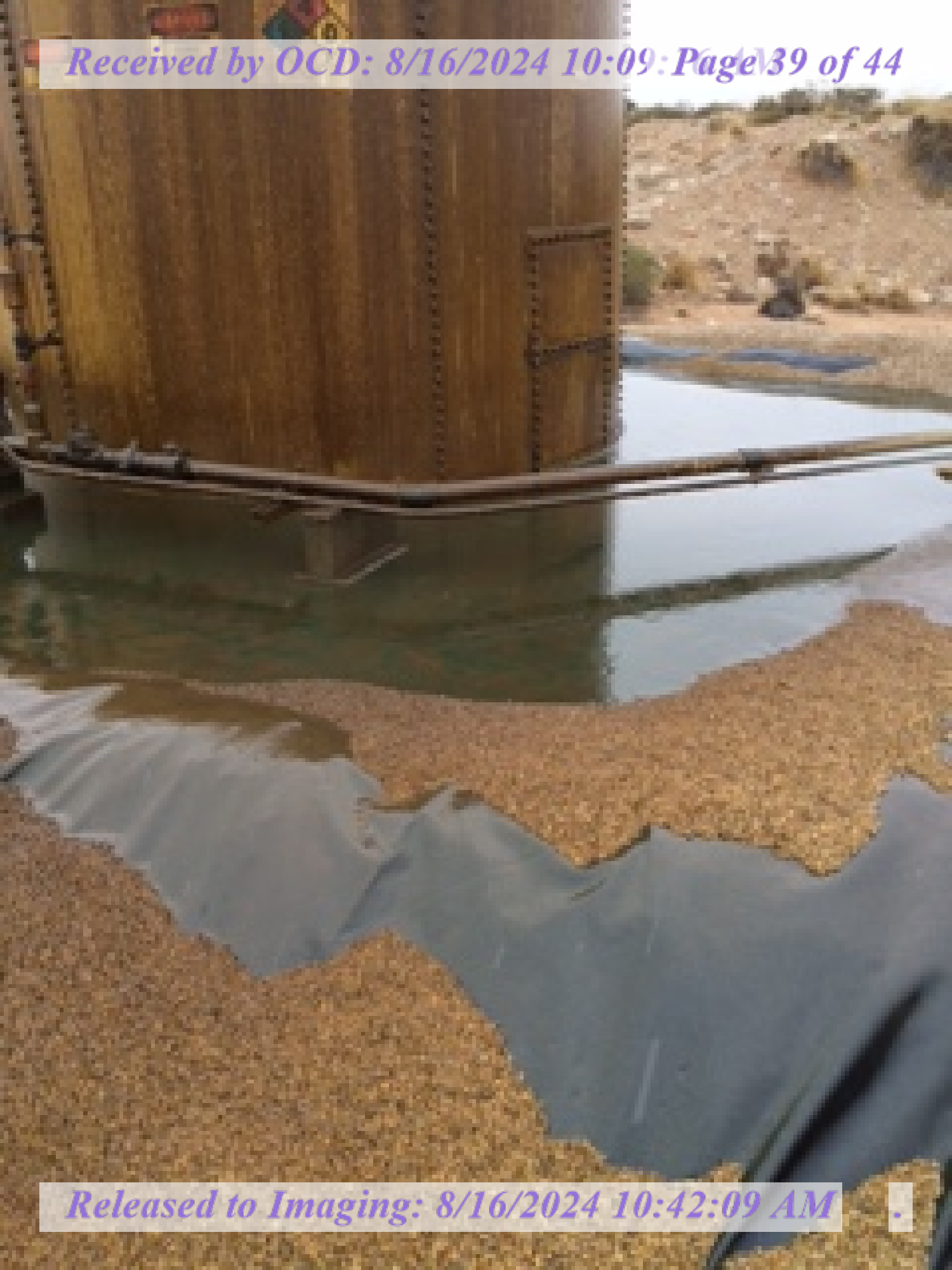
I have attached, per Bob Allen SESI, the proposed Work Plan for the Devon Laguna Salado. We will send the corrected C-141, stating the correct Land and Mineral Owner, once it is received.

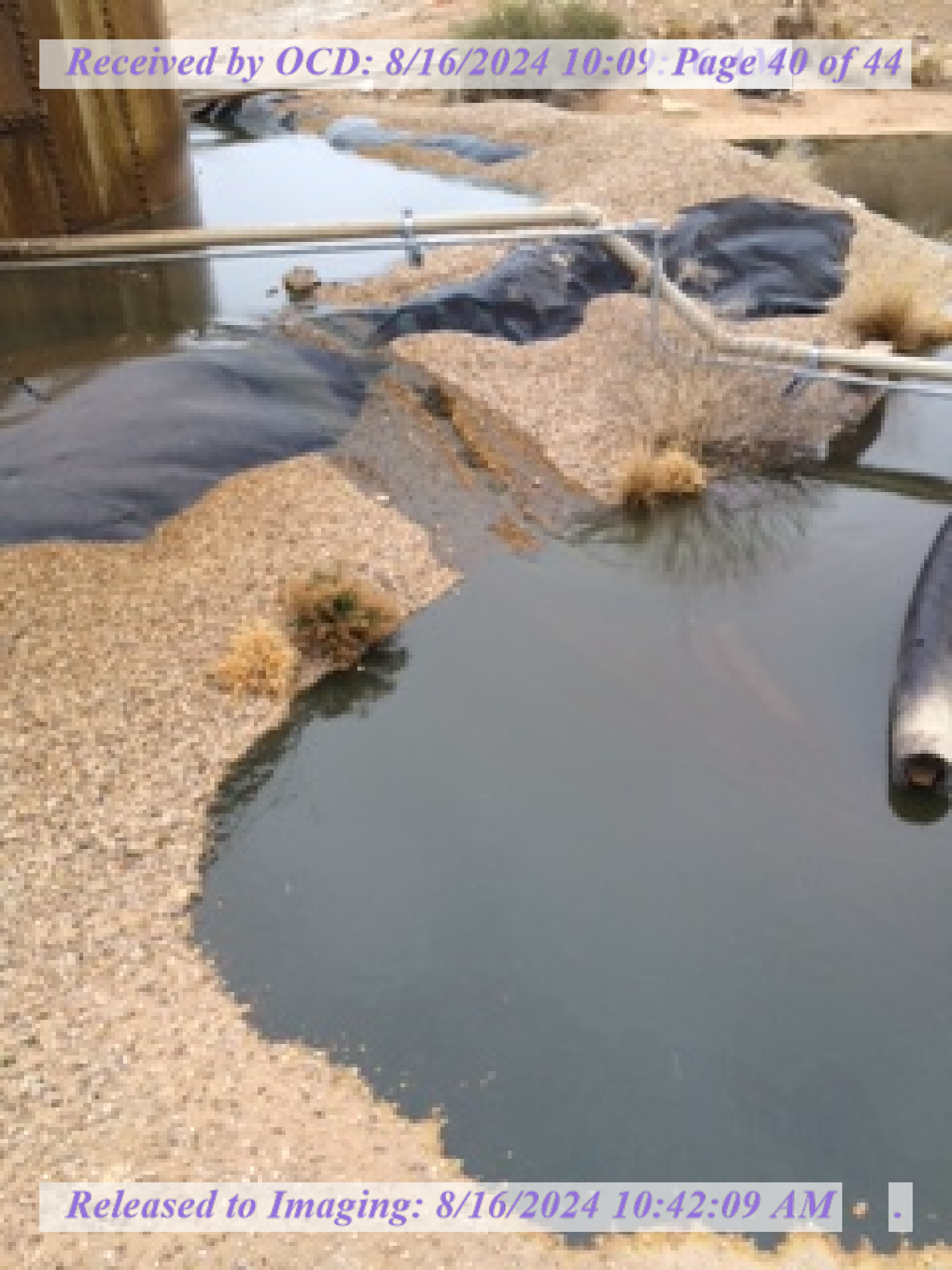
Thank You

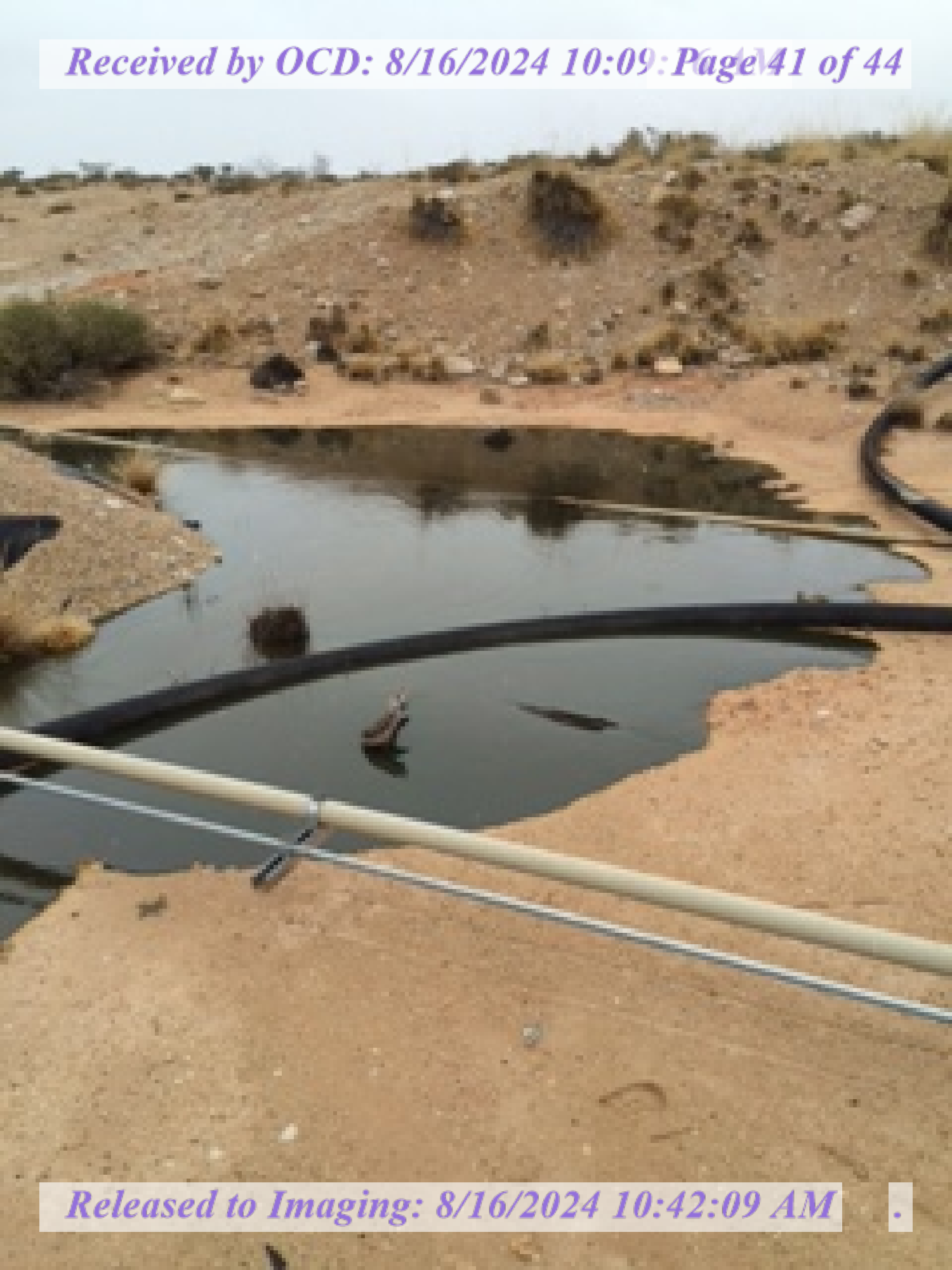
Tara Hodges

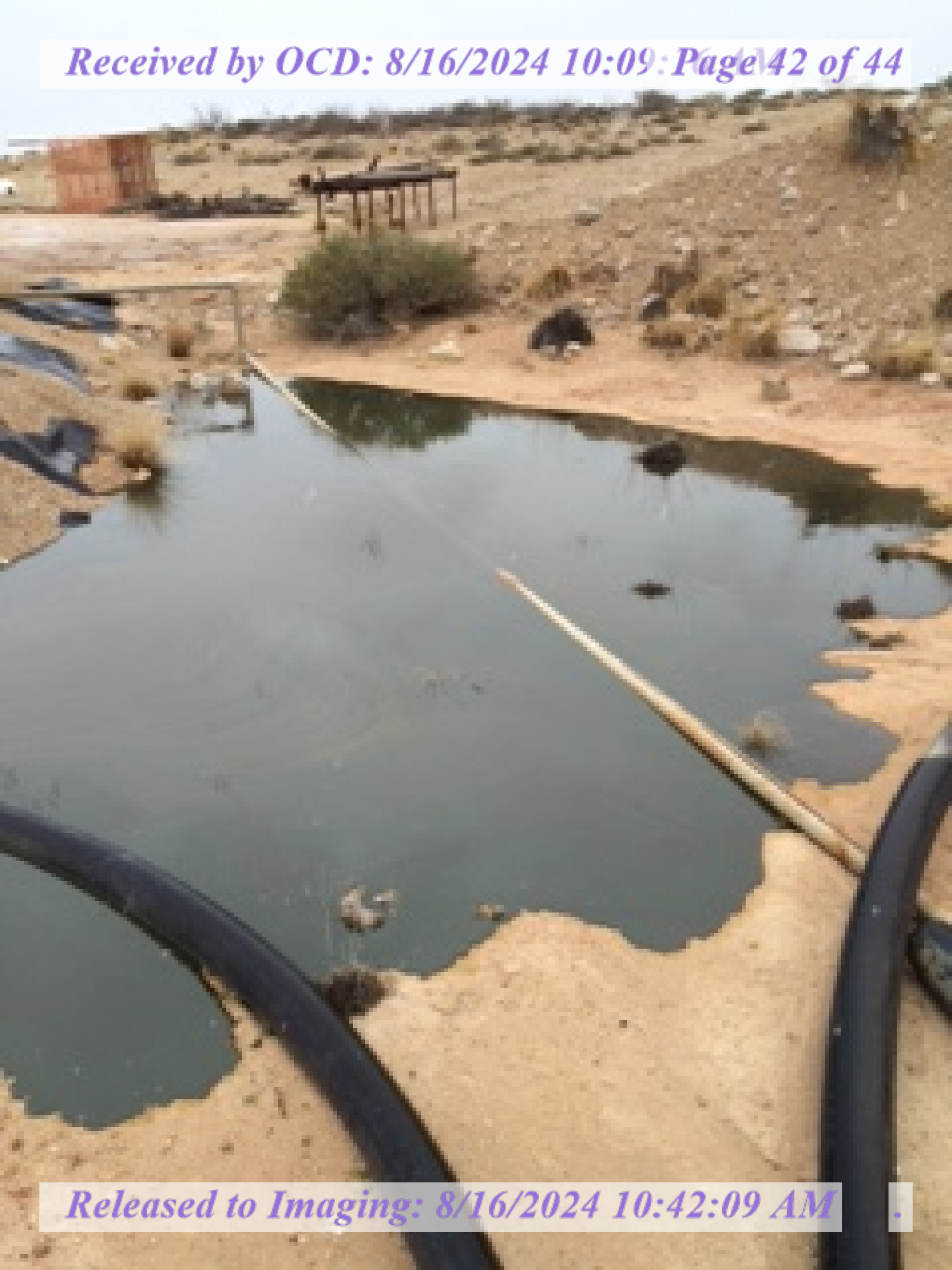
Safety & Environmental Solutions, Inc.
703 East Clinton Street
Hobbs, NM 88240
Office: (575) 397-0510

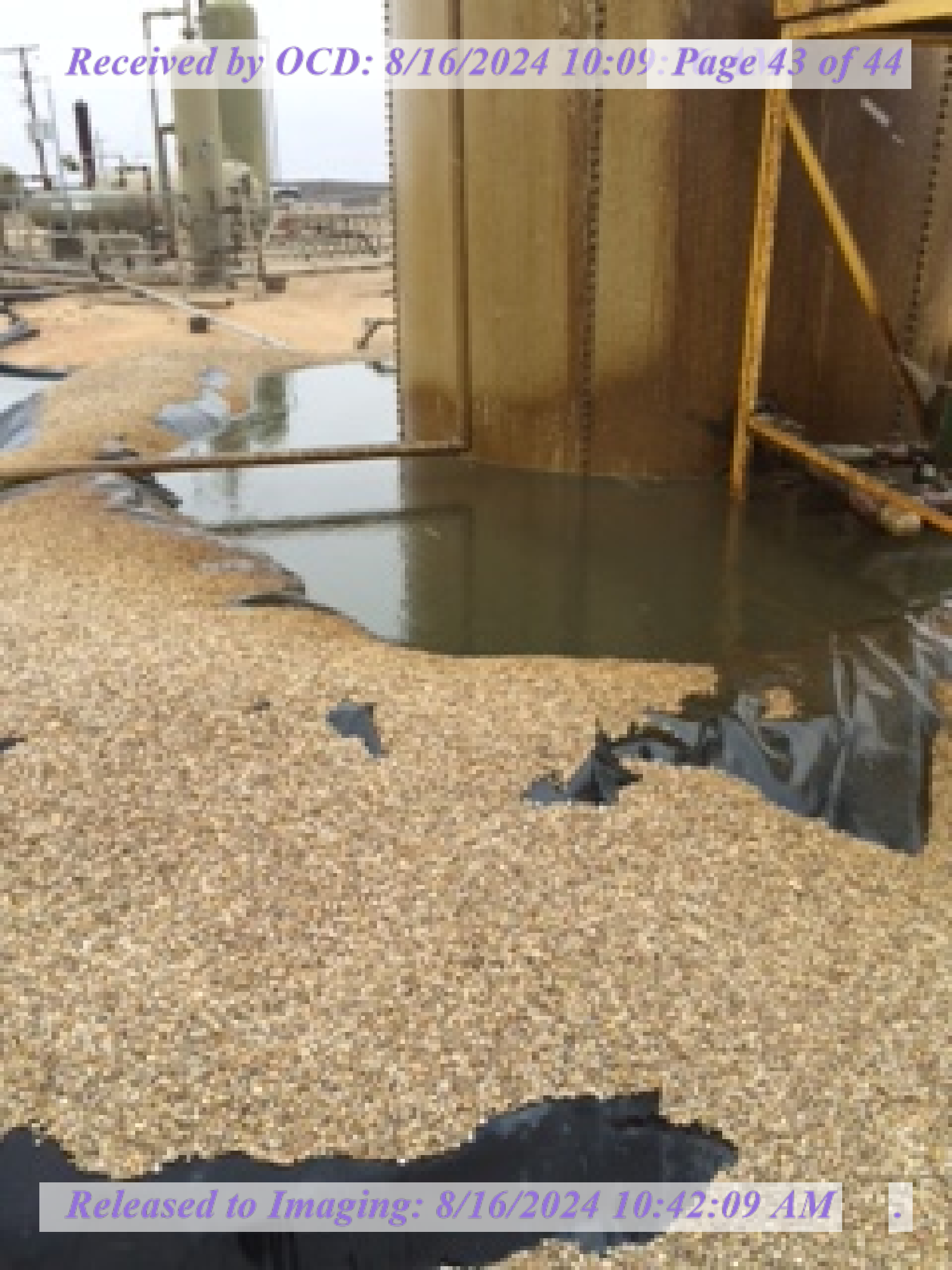












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State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

CONDITIONS

Action 374649

CONDITIONS

Operator: DEVON ENERGY PRODUCTION COMPANY, LP 333 West Sheridan Ave. Oklahoma City, OK 73102	OGRID: 6137
	Action Number: 374649
	Action Type: [REPORT] Alternative Remediation Report (C-141AR)

CONDITIONS

Created By	Condition	Condition Date
scwells	None	8/16/2024