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Closure Report

White Swan 9 Federal #1 Lea County, New Mexico API# 30-025-32000 1RP-4955

Prepared For:

Devon Energy Production Company 6488 Seven Rivers Hwy Artesia, NM 88210

Prepared By:

TALON/LPE 408 W. Texas Avenue Artesia, New Mexico 88210

April 30, 2020

Page | 1

Mr. Jim Amos Bureau of Land Management 620 East Green Street Carlsbad, NM 88220

Mr. Mike Bratcher **NMOCD District 2** 811 S. 1st Street Artesia, NM 88210

Subject: Closure Report White Swan 9 Federal #1 Lea County, New Mexico API# 30-025-32000 1RP-4955

Dear Mr. Amos & Mr. Bratcher,

Devon Energy Production Company (Devon) has contracted Talon/LPE (Talon) to perform soil assessment at the above-referenced location. The incident description, soil sampling results, liner inspection, and closure request are presented herein.

Site Information

The White Swan 9 Federal #1 is located approximately thirty-two (32) miles east of Carlsbad, New Mexico. The legal location for this release is Unit Letter P, Section 9, Township 22 South and Range 32 East in Lea County, New Mexico. More specifically the latitude and longitude for the release are 32.399542 North and -103.672578 West. A Site Map is presented in Appendix I.

According to the soil survey provided by the United States Department of Agriculture National Resources Conservation Services, the soil in this area is made up of Simona fine sandy loam with 0 to 3 percent slopes. See Appendix II for the referenced soil survey. Per the New Mexico Bureau of Geology and Mineral Resources, the local surface and shallow geology is comprised of eoilian and piedmont deposits, Holocene to middle Pleistocene in age. Drainage courses in this area are well drained.

Ground Water and Site Characterization

The New Mexico Office of the State Engineer Database indicates the nearest reported depth to groundwater is 360-feet below ground surface (BGS). See Appendix II for the referenced groundwater depth. This site is not located within a high potential Karst area.

If a release occurs within the following areas, the responsible party must treat the release as if it occurred less than 50 feet to the groundwater in Table I, New Mexico Oil Conservation Division (NMOCD) Rule 19.15.29 NMAC.

Approximate Depth to	o Groundwater	360 Feet/BGS
□Yes ⊠No	Within 300 feet of any continuously flowing wate any other significant watercourse	ercourse or
□Yes ⊠No	Within 200 feet of any lakebed, sinkhole or a pla	aya lake
□Yes ⊠No	Within 300 feet from an occupied permanent res	sidence,
□Yes ⊠No	Within 500 feet of a spring or a private, domesti well used by less than five households for dome watering purposes	
□Yes ⊠No	Within 1000 feet of any freshwater well or spring	J
∐Yes ⊠No	Within incorporated municipal boundaries or wit municipal freshwater well field covered under a ordinance adopted pursuant to Section 3-2703 I	municipal
□Yes ⊠No	Within 300 feet of a wetland	
□Yes ⊠No	Within the area overlying a subsurface mine	
□Yes ⊠No	Within an unstable area	
□Yes ⊠No	Within a 100-year floodplain	

Because the release did not occur in any of these areas and the depth to groundwater is greater than 100-feet deep, based on the site characterization data the clean up criteria for this site is as follows.

Table I Closure Criteria for Soils Impacted by a Release									
Depth below horizontal extents of release to ground water less than 10,000 mg/I TDS	Constituent	Method	Limit						
>100 feet	Total Chlorides TPH (GRO+DRO+MRO)	EPA 300.0 or SM4500 CI B EPA SW-846 Method 8015M	20,000 mg/kg 2,500 mg/kg						
	GRO+DRO BTEX	EPA SW-846 Method 8015M EPA SW-846 Method 8021B	1,000 mg/kg 50 mg/kg						
		or 8260B	50 mg/kg						
	Benzene	EPA SW-846 Method 8021B or 8260B	10 mg/kg						

Incident Description

On January 21, 2018, the lease operator arrived at the location and noticed oil coming out of the thief hatch of the tank. The operator opened the valve to another tank to lower the filled tanks level and stopped the leak. Approximately 31.89 barrels (bbls) of oil spilled and misted onto the pad and adjacent pasture. A vac truck was dispatched and recovered approximately 16 bbls. Remediation order 1RP-4955 was assigned. The site map is presented in Appendix I.

On March 30, 2020, Talon mobilized personnel to the site conducting a site assessment and collecting soil samples. Sample locations are shown on the attached site map and the results of our sampling event are presented in the following data table.

Sample ID	Sample Date	Depth (BGS)	BTEX mg/kg	Benzene mg/kg	GRO mg/kg	DRO mg/kg	MRO mg/kg	Total TPH mg/kg	Cl mg/kg
	able 1 Closur 9.15.29 NMA		50 mg/kg	10 mg/kg		combined = ng/kg		2500 mg/kg	20,000 mg/kg
		0	ND	ND	ND	896	473	1369	1230
S-1	3/30/2020	0.5	ND	ND	ND	ND	ND	ND	160
3-1	5/ 50/ 2020	1	ND	ND	ND	ND	ND	ND	80
		2-R	ND	ND	ND	ND	ND	ND	112
		0	ND	ND	ND	ND	ND	ND	576
c	2	0.5	ND	ND	ND	15.5	ND	15.5	144
S-2		1	ND	ND	ND	ND	ND	ND	144
		1.5-R	ND	ND	ND	ND	ND	ND	192
		0	ND	ND	ND	ND	ND	ND	32
c	-3	0.5	ND	ND	ND	ND	ND	ND	32
2.	-5	1	ND	ND	ND	ND	ND	ND	16
		2-R	ND	ND	ND	ND	ND	ND	32
		0	ND	ND	ND	ND	ND	ND	ND
c	-4	0.5	ND	ND	ND	ND	ND	ND	32
3.	-4	1	ND	ND	ND	ND	ND	ND	16
		1.5-R	ND	ND	ND	ND	ND	ND	32
BC	6-1	0	ND	ND	ND	ND	ND	ND	80
BC	5-3	0	ND	ND	ND	ND	ND	ND	16
BC	5-4	0	ND	ND	ND	ND	ND	ND	ND
BC	6-5	0	ND	ND	ND	ND	ND	ND	16

Soil Sampling

3-30-20 Soil Sample Laboratory Results

ND-Analyte Not Detected

See Appendix IV for the complete report of laboratory results.

Remedial Actions

• Based upon the results of our sampling event, none of the analytical results exceeded the NMOCD clean up criteria for this site. Therefore there was no need for soil remediation activities.

Closure

Based on this site characterization and analytical results, we request that no further actions be required and that closure with regard to the attached incident be granted.

Should you have any questions or if further information is required, please do not hesitate to contact our office at 575-746-8768.

Respectfully submitted,

TALON/LPE

Chris Jones Project Manager

David J.	Digitally signed by David J. Adkins DN: cn-David J. Adkins, onTalon/ LPE, ou-District Manager.
Adkins	email-dadkinspitalonipe.com, c=US Date: 2020.05.04 16:44:09-06'00'

David J. Adkins District Manager

Attachments:

Appendix I Site Maps, Karst Map, TOPO Map & Locator Map Appendix II Groundwater Data, FEMA Flood Zone, Soil Survey Appendix III Initial and Final C-141's Appendix IV Laboratory Results



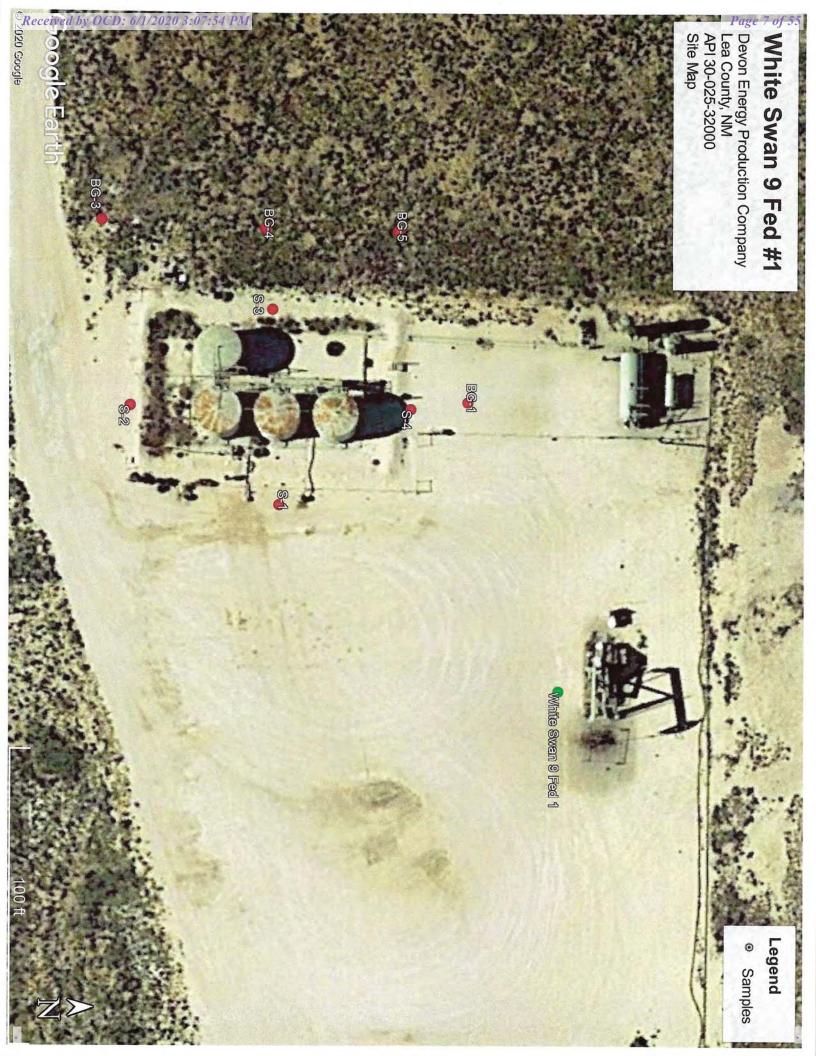
<u>APPENDIX I</u>

SITE MAP

KARST MAP

TOPO MAP

LOCATION MAP













<u>APPENDIX II</u>

GROUNDWATER DATA

SOIL SURVEY

FEMA FLOOD ZONE

been rep	placed,														
	le is		(quarters are 1=NW 2=NE (quarters are smallest to					a ser a s							
cioseu)	-		l	arge	st)				(N	(NAD83 UTM in meters)			(In feet)		
			~	~	~								1.1		
Code		County			- C	200	Two	Dna	v	v	DistanceDe	nthWallDon		Vater	
ooue	C	LE	100					-	624094	3586365	1145	650	inwaterot	Jum	
	CUB	ED		2	3	14	225	32E	627204	3584464*	2579	435	360	7	
	С	LE	2	2	3	14	22S	32E	627303	3584563*	2633	540	340	20	
										Aver	age Depth to W	later:	350 fe	et	
											Minimum De	epth:	340 fe	et	
											Maximum De	epth:	360 fe	et	
is Search	(in met	ers):													
4841			inc	(Y)	: 3	8585	6497.6	575		Radius: 3000					
	been re O=orph: C=the fi closed) Code	POD Sub- Code basin C CUB C	been replaced, O=orphaned, C=the file is closed) POD Sub- Code basin County C LE CUB ED C LE CUB ED C LE	been replaced, O=orphaned, C=the file is closed) POD Sub- Q Code basin County 64 C LE 4 CUB ED C LE 2	been replaced, O=orphaned, C=the file is (qual (qual large POD Sub- Q Q basin County 64 16 C LE 4 4 CUB ED 2 C LE 2 2	been replaced, O=orphaned, C=the file is (quarter (augreen) POD Sub- Q Q Q basin County 64 16 4 5 C LE 4 4 1 CUB ED 2 3 C LE 2 2 3	been replaced, O=orphaned, C=the file is (quarters ar (quarters ar largest) POD Sub- Q Q Q Code basin County 64 16 4 Sec C LE 4 4 1 09 CUB ED 2 3 14 C LE 2 2 3 14 Markowski kalowski k	been replaced, O=orphaned, C=the file is closed) POD Sub- Q Q Q Vote basin County 64 16 4 Sec Tws C LE 4 4 1 09 22S CUB ED 2 3 14 22S C LE 2 2 3 14 22S C LE 2 2 3 14 22S	been replaced, O=orphaned, C=the file is closed) POD Sub- Q Q Q Code basin County 64 16 4 Sec Tws Rng C LE 4 4 1 09 22S 32E CUB ED 2 3 14 22S 32E C LE 2 2 3 14 22S 32E	been replaced, O=orphaned, C=the file is closed) POD Sub- Q Q Q Q Code basin County 64 16 4 Sec Tws Rng X C LE 4 4 1 09 22S 32E 624094 CUB ED 2 3 14 22S 32E 627204 C LE 2 2 3 14 22S 32E 627303	been replaced, O=orphaned, C=the file is closed) POD Sub- Q Q Q Q Code basin County 64 16 4 Sec Tws Rng X Y C LE 4 4 4 1 09 22S 32E 624094 3586365 CUB ED 2 3 14 22S 32E 627204 3584464* Aver Aver	been replaced, O=orphaned, C=the file is closed) POD Sub- C LE 4 4 4 5 CUB ED 2 3 14 22 32 E 624094 3586365 1145 2579 C LE 2 2 3 14 22 32 E 62704 3584464* 2579 C LE 2 2 3 14 22 32 E 627303 3584563* 2633 Average Depth to W Minimum De Maximum De Maximum De	been replaced, O=orphaned, C=the file is closed) POD Sub- V V V V V V V V V V V V V V V V V V V	been replaced, O=orphaned, (quarters are 1=NW 2=NE 3=SW 4=SE) (quarters are smallest to largest) (NAD83 UTM in meters) (In feet) 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 Sub- Q Q (NAD83 UTM in meters) (In feet) Sub- POD Sub- Fragest) (NAD83 UTM in meters) (In feet) Code basin County 64 16 4 Sec Two Signation (Second Second Secon	

WATER

Lea County, New Mexico

SE—Simona fine sandy loam, 0 to 3 percent slopes

Map Unit Setting

National map unit symbol: dmr2 Elevation: 3,000 to 4,200 feet Mean annual precipitation: 10 to 15 inches Mean annual air temperature: 58 to 62 degrees F Frost-free period: 190 to 205 days Farmland classification: Not prime farmland

Map Unit Composition

Simona and similar soils: 85 percent Minor components: 15 percent Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Simona

Setting

Landform: Plains Landform position (three-dimensional): Rise Down-slope shape: Linear Across-slope shape: Linear Parent material: Calcareous eolian deposits derived from sedimentary rock

Typical profile

A - 0 to 8 inches: fine sandy loam Bk - 8 to 16 inches: gravelly fine sandy loam Bkm - 16 to 26 inches: cemented material

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: 7 to 20 inches to petrocalcic
Natural drainage class: Well drained
Runoff class: Very high
Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.06 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum in profile: 35 percent
Gypsum, maximum in profile: 1 percent
Salinity, maximum in profile: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum in profile: 2.0
Available water storage in profile: Very low (about 2.0 inches)

Interpretive groups

Land capability classification (irrigated): 6s

USDA

Map Unit Description: Simona fine sandy loam, 0 to 3 percent slopes---Lea County, New Mexico

Page 14 of 55

Land capability classification (nonirrigated): 7s Hydrologic Soil Group: D Ecological site: Shallow Sandy (R042XC002NM) Hydric soil rating: No

Minor Components

Kimbrough

Percent of map unit: 8 percent Ecological site: Very Shallow 16-21" PZ (R077CY037TX) Hydric soil rating: No

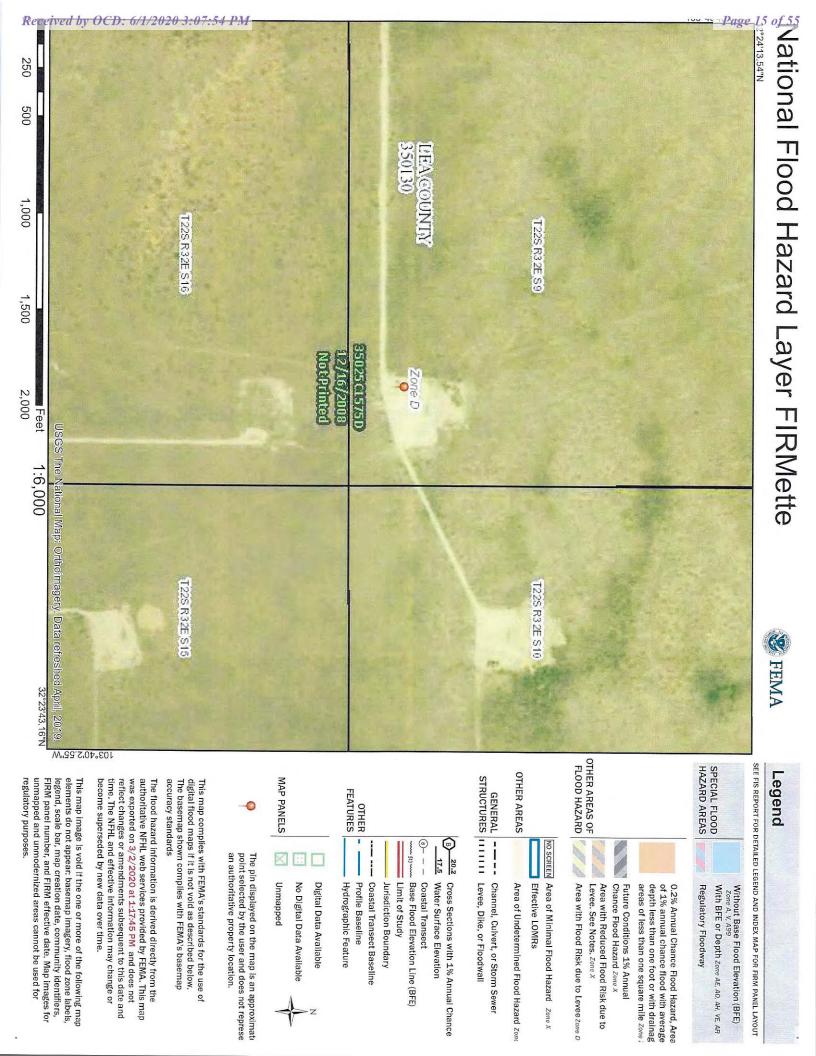
Lea

Percent of map unit: 7 percent Ecological site: Limy Upland 16-21" PZ (R077CY028TX) Hydric soil rating: No

Data Source Information

Soil Survey Area: Lea County, New Mexico Survey Area Data: Version 16, Sep 15, 2019





.



APPENDIX III

INITIAL C-141 & FINAL C-141

State of New Mexico Energy Minerals and Natural Resources

Revised April 3, 2017

API No. 30-025-32000

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

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

Release Notification and Corrective Action

	OPERATOR	Initial Report	Final Report
Name of Company Devon Energy Production Company	Contact Wes Ryan, Production	Foreman	
Address 6488 Seven Rivers Hwy Artesia, NM 88210	Telephone No. 575-390-5436		
Facility Name White Swan 9 Federal 1	Facility Type Oil		

LOCATION OF RELEASE

Mineral Owner Federal

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
Р	9	22S	32E					Lea

Latitude_32.399542_Longitude_103.672578_NAD83

NATURE OF RELEASE

Type of Release Oil	Volume of Release 31.89 bbls	Volume Re	covered
Source of Release	Date and Hour of Occurrence		our of Discovery
Oil tank	January 21, 2018 @ 2:02 PM		2018 @ 2:02 PM MST
	MST		
Was Immediate Notice Given?	If YES, To Whom?		
Yes No Not Required	Olivia Yu, OCD		
	Shelly Tucker, BLM		
By Whom?	Date and Hour	T	
Mike Shoemaker, EHS Representative Was a Watercourse Reached?	January 22, 2018 @ 10:55 AM MS		
\square Yes \square No	If YES, Volume Impacting the Wat	ercourse.	
	N/A		
If a Watercourse was Impacted, Describe Fully.*			
N/A			
Describe Cause of Problem and Remedial Action Taken.*			
The lease operator arrived at the location and saw oil coming out t	hief hatch at the battery. The lease	e operator op	ened the bs line to lower
the level in the tank.			
Describe Area Affected and Cleanup Action Taken.*	A the odia and masteria. A managing		
Approximately 31.89 bbl of oil spilled/misted to the pad surface a			
dispatched vacuum truck. An environmental contractor will be contacted	ed to assist with the delineation and re	mediation of	the affected surface.
I hereby certify that the information given above is true and complete to t	he best of my knowledge and understa	and that pursu	ant to NMOCD rules and
regulations all operators are required to report and/or file certain release n			
public health or the environment. The acceptance of a C-141 report by th			
should their operations have failed to adequately investigate and remediat			
or the environment. In addition, NMOCD acceptance of a C-141 report d			
federal, state, or local laws and/or regulations.			
	OIL CONSERV	ATION I	DIVISION
Signature: Míchael Shoemaker			
	Approved by Environmental Specialis	-++	
Printed Name: Michael Shoemaker	Approved by Environmental Specialis	St.	
Title: Environmental Professional	Approval Date:	Expiration D	ate:
E mail Addresses miles champeler @ torr	Conditions of Approval		
E-mail Address: mike.shoemaker@dvn.com	Conditions of Approval:		Attached
Date: 02/01/18 Phone: 575.748.3371			

* Attach Additional Sheets If Necessary

District I 1625 N. French Dr., Hobbs, NM 88240

1000 Rio Brazos Road, Aztec, NM 87410

District IV 1220 S. St. Francis Dr., Santa Fe, NM 87505

811 S. First St., Artesia, NM 88210

District II

District III

State of New Mexico Energy Minerals and Natural Resources

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

Form C-141 Revised April 3, 2017

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

Santa Fe, NM 87505 Release Notification and Corrective Action

and the second se	OPERATOR	Initial Report	K Final Report			
Name of Company Devon Energy Production Company	Contact Amanda Davis Environmental Representative					
Address 6488 Seven Rivers Hwy Artesia, NM 88210	Telephone No. 575-748-0176					
Facility Name White Swan 9 Federal 1	Facility Type Oil					

Surface Owner Federal Minera				Mineral (Owner Federal	. 30-025-32000			
LOCATION OF RELEASE									
Unit Letter P	Section 9	Township 22S	Range 32E	Feet from the	North/South Line	Feet from the	East/West Line	County Lea	

Latitude_32.399542_Longitude_103.672578_NAD83

NATURE OF RELEASE

Type of Release Oil		Volume of Release 31.89 bbls	Volume Recovered 16bbls				
Source of Release Oil tank		Date and Hour of Occurrence January 21, 2018 @ 2:02 PM MST	Date and Hour of Discovery January 21, 2018 @ 2:02 PM MST				
Was Immediate Notice Given?	Yes 🗌 No 🗌 Not Required	If YES, To Whom? Juired Olivia Yu, OCD Shelly Tucker, BLM					
By Whom? Mike Shoemaker, EHS Represent	ative	Date and Hour January 22, 2018 @ 10:55 AM M	IST				
Was a Watercourse Reached?	🗌 Yes 🖾 No	If YES, Volume Impacting the W N/A	atercourse.				
If a Watercourse was Impacted, DN/A	Describe Fully.*						
the level in the tank. Soil sam	he location and saw oil coming out the ples were taken and analyzed at Caro	dinal Laboratory and levels were					
regulations all operators are requi public health or the environment. should their operations have faile	tred to report and/or file certain release no The acceptance of a C-141 report by the d to adequately investigate and remediate NMOCD acceptance of a C-141 report do	otifications and perform corrective a e NMOCD marked as "Final Report e contamination that pose a threat to	stand that pursuant to NMOCD rules and actions for releases which may endanger " does not relieve the operator of liability o ground water, surface water, human health nsibility for compliance with any other				
		OIL CONSER	VATION DIVISION				
Signature: Approved by Environmental Specialist: Printed Name: Chris Jones Approved by Environmental Specialist:							
Title: Environmental Project Ma	nager	Approval Date:	Expiration Date:				
E-mail Address: cjones@talon1p		Conditions of Approval:	Attached				
Date: 4-15-20	Phone: 575.631.6977						

* Attach Additional Sheets If Necessary

.



APPENDIX IV

LABORATORY DATA



April 08, 2020

CHRIS JONES

TALON LPE

408 W. TEXAS AVE.

ARTESIA, NM 88210

RE: WHITE SWAN 9 FED 1

Enclosed are the results of analyses for samples received by the laboratory on 04/01/20 14:40.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-19-12. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

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

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

Cardinal Laboratories is accredited through the State of New Mexico Environment Department for:

Method SM 9223-B	Total Coliform and E. coli (Colilert MMO-MUG)
Method EPA 524.2	Regulated VOCs and Total Trihalomethanes (TTHM)
Method EPA 552.2	Total Haloacetic Acids (HAA-5)

Accreditation applies to public drinking water matrices for State of Colorado and New Mexico.

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

Sincerely,

Celey D. Keine

Celey D. Keene Lab Director/Quality Manager



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Analytical Results For:

TALON LPE 408 W. TEXAS AVE. ARTESIA NM, 88210	Project: WHITE SWAN 9 FED 1 Project Number: 700794.329.01 Project Manager: CHRIS JONES Fax To: (575) 745-8905	Reported: 08-Apr-20 12:08
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Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
5-1 0'	H000972-01	Soil	30-Mar-20 11:00	01-Apr-20 14:40
5 - 1 0.5'	H000972-02	Soil	30-Mar-20 11:05	01-Apr-20 14:40
5-1 1'	H000972-03	Soil	30-Mar-20 11:10	01-Apr-20 14:40
S-1 2'R	H000972-04	Soil	30-Mar-20 11:15	01-Apr-20 14:40
5-2 0'	H000972-05	Soil	30-Mar-20 11:25	01-Apr-20 14:40
5 - 2 0.5'	H000972-06	Soil	30-Mar-20 11:30	01-Apr-20 14:40
5-2 1'	H000972-07	Soil	30-Mar-20 11:35	01-Apr-20 14:40
5-2 1.5' R	H000972-08	Soil	30-Mar-20 11:40	01-Apr-20 14:40
5-3 0'	H000972-09	Soil	30-Mar-20 11:50	01-Apr-20 14:40
5 - 3 0.5'	H000972-10	Soil	30-Mar-20 11:55	01-Apr-20 14:40
5-3 1'	H000972-11	Soil	30-Mar-20 12:00	01-Apr-20 14:40
5-3 2'R	H000972-12	Soil	30-Mar-20 12:05	01-Apr-20 14:40
5-4 0'	H000972-13	Soil	30-Mar-20 12:15	01-Apr-20 14:40
5 - 4 0.5'	H000972-14	Soil	30-Mar-20 12:20	01-Apr-20 14:40
5-4 1'	H000972-15	Soil	30-Mar-20 12:25	01-Apr-20 14:40
5-4 1.5' R	H000972-16	Soil	30-Mar-20 12:30	01-Apr-20 14:40
3G - 1	H000972-17	Soil	30-Mar-20 12:40	01-Apr-20 14:40
3G - 3	H000972-19	Soil	30-Mar-20 12:55	01-Apr-20 14:40
3G - 4	H000972-20	Soil	30-Mar-20 13:05	01-Apr-20 14:40
3G - 5	H000972-21	Soil	30-Mar-20 13:15	01-Apr-20 14:40

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence ar any other cause whitstoewer shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damage including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether su claim is based to reprodued except in full with written approval of Cardinal Lobarotories.

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



TALON LPE 408 W. TEXAS AVE. ARTESIA NM, 88210	Project:WHITE SWAN 9 FED 1Reported:Project Number:700794.329.0108-Apr-20 12:08Project Manager:CHRIS JONESFax To:(575) 745-8905									
			~	-10' 972-01 (Se	oil)					
Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
			Cardina	l Laborat	tories					
Inorganic Compounds										
Chloride	1230		16.0	mg/kg	4	0040215	AC	03-Apr-20	4500-Cl-B	
Volatile Organic Compounds by	EPA Method	8021								
Benzene*	< 0.050		0.050	mg/kg	50	0040208	MS	02-Apr-20	8021B	
Toluene*	< 0.050		0.050	mg/kg	50	0040208	MS	02-Apr-20	8021B	
Ethylbenzene*	< 0.050		0.050	mg/kg	50	0040208	MS	02-Apr-20	8021B	
Total Xylenes*	< 0.150		0.150	mg/kg	50	0040208	MS	02-Apr-20	8021B	
Total BTEX	< 0.300		0.300	mg/kg	50	0040208	MS	02-Apr-20	8021B	
Surrogate: 4-Bromofluorobenzene (PID)			99.3 %	73.3	-129	0040208	MS	02-Apr-20	8021B	
Petroleum Hydrocarbons by GC	FID									
GRO C6-C10*	<10.0		10.0	mg/kg	1	0040204	MS	02-Apr-20	8015B	
DRO >C10-C28*	896		10.0	mg/kg	1	0040204	MS	02-Apr-20	8015B	
EXT DRO >C28-C36	473		10.0	mg/kg	1	0040204	MS	02-Apr-20	8015B	
Surrogate: 1-Chlorooctane			86.0 %	44.3	-144	0040204	MS	02-Apr-20	8015B	
Surrogate: 1-Chlorooctadecane			112 %	42.2	-156	0040204	MS	02-Apr-20	8015B	

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any daim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence ar any other cause whitstoewer shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damage including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether su claim is based to reproduced except in full with written approval of Cardinal Laboratories.

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



TALON LPE Project: WHITE SWAN 9 FED 1 Reported: 408 W. TEXAS AVE. Project Number: 700794.329.01 08-Apr-20 12:08 ARTESIA NM, 88210 Project Manager: CHRIS JONES Fax To: (575) 745-8905 S - 1 0.5' H000972-02 (Soil) 08-00000000000000000000000000000000000										08
			H0009	972-02 (Se	oil)					
Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
			Cardina	l Laborat	tories					
Inorganic Compounds										
Chloride	160		16.0	mg/kg	4	0040215	AC	03-Apr-20	4500-Cl-B	
Volatile Organic Compounds	by EPA Method 8	021								
Benzene*	< 0.050		0.050	mg/kg	50	0040208	MS	02-Apr-20	8021B	
Toluene*	< 0.050		0.050	mg/kg	50	0040208	MS	02-Apr-20	8021B	
Ethylbenzene*	< 0.050		0.050	mg/kg	50	0040208	MS	02-Apr-20	8021B	
Total Xylenes*	< 0.150		0.150	mg/kg	50	0040208	MS	02-Apr-20	8021B	
Total BTEX	< 0.300		0.300	mg/kg	50	0040208	MS	02-Apr-20	8021B	
Surrogate: 4-Bromofluorobenzene (PII	D)		99.6 %	73.3	-129	0040208	MS	02-Apr-20	8021B	
Petroleum Hydrocarbons by	GC FID									
GRO C6-C10*	<10.0		10.0	mg/kg	1	0040204	MS	02-Apr-20	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	0040204	MS	02-Apr-20	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	0040204	MS	02-Apr-20	8015B	
Surrogate: 1-Chlorooctane			96.1 %	44.3	-144	0040204	MS	02-Apr-20	8015B	
Surrogate: 1-Chlorooctadecane			100 %	42.2	-156	0040204	MS	02-Apr-20	8015B	

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Celey D. Keene, Lab Director/Quality Manager



TALON LPE 408 W. TEXAS AVE. ARTESIA NM, 88210		Project:WHITE SWAN 9 FED 1Reported:Project Number:700794.329.0108-Apr-20 12:08Project Manager:CHRIS JONESFax To:(575) 745-8905								
			~	-1 1'	•1\					
			H000	972-03 (Se	01l)					
Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
			Cardina	l Laborat	ories					
Inorganic Compounds										
Chloride	80.0		16.0	mg/kg	4	0040215	AC	03-Apr-20	4500-Cl-B	
Volatile Organic Compounds	s by EPA Method 80)21								
Benzene*	< 0.050		0.050	mg/kg	50	0040208	MS	02-Apr-20	8021B	
Toluene*	< 0.050		0.050	mg/kg	50	0040208	MS	02-Apr-20	8021B	
Ethylbenzene*	< 0.050		0.050	mg/kg	50	0040208	MS	02-Apr-20	8021B	
Total Xylenes*	< 0.150		0.150	mg/kg	50	0040208	MS	02-Apr-20	8021B	
Total BTEX	< 0.300		0.300	mg/kg	50	0040208	MS	02-Apr-20	8021B	
Surrogate: 4-Bromofluorobenzene (Pl	(D)		99.5 %	73.3	-129	0040208	MS	02-Apr-20	8021B	
Petroleum Hydrocarbons by	GC FID									
GRO C6-C10*	<10.0		10.0	mg/kg	1	0040204	MS	02-Apr-20	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	0040204	MS	02-Apr-20	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	0040204	MS	02-Apr-20	8015B	
Surrogate: 1-Chlorooctane			98.5 %	44.3	-144	0040204	MS	02-Apr-20	8015B	
Surrogate: 1-Chlorooctadecane			102 %	42.2	-156	0040204	MS	02-Apr-20	8015B	

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Celey D. Keene, Lab Director/Quality Manager



TALON LPE 408 W. TEXAS AVE. ARTESIA NM, 88210		Project:WHITE SWAN 9 FED 1Reported:Project Number:700794.329.0108-Apr-20 12:08Project Manager:CHRIS JONESFax To:(575) 745-8905								
				- 1 2' R 972-04 (So	oil)					
Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
			Cardina	ıl Laborat	ories					
Inorganic Compounds										
Chloride	112		16.0	mg/kg	4	0040215	AC	03-Apr-20	4500-Cl-B	
Volatile Organic Compounds	s by EPA Method 802	21								
Benzene*	< 0.050		0.050	mg/kg	50	0040208	MS	02-Apr-20	8021B	
Toluene*	< 0.050		0.050	mg/kg	50	0040208	MS	02-Apr-20	8021B	
Ethylbenzene*	< 0.050		0.050	mg/kg	50	0040208	MS	02-Apr-20	8021B	
Total Xylenes*	< 0.150		0.150	mg/kg	50	0040208	MS	02-Apr-20	8021B	
Total BTEX	< 0.300		0.300	mg/kg	50	0040208	MS	02-Apr-20	8021B	
Surrogate: 4-Bromofluorobenzene (Pl	D)		99.2 %	73.3	-129	0040208	MS	02-Apr-20	8021B	
Petroleum Hydrocarbons by	GC FID									
GRO C6-C10*	<10.0		10.0	mg/kg	1	0040204	MS	02-Apr-20	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	0040204	MS	02-Apr-20	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	0040204	MS	02-Apr-20	8015B	
Surrogate: 1-Chlorooctane			96.8 %	44.3	-144	0040204	MS	02-Apr-20	8015B	
Surrogate: 1-Chlorooctadecane			101 %	42.2	-156	0040204	MS	02-Apr-20	8015B	

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TALON LPEProject:WHITE SWAN 9 FED 1Reported:408 W. TEXAS AVE.Project Number:700794.329.0108-Apr-20 12:08ARTESIA NM, 88210Project Manager:CHRIS JONESFax To:(575) 745-8905'										
Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
			Cardina	l Laborat	ories					
<u>Inorganic Compounds</u> Chloride	576		16.0	mg/kg	4	0040215	AC	03-Apr-20	4500-Cl-B	
Volatile Organic Compounds	by EPA Method 8	021								
Benzene*	< 0.050		0.050	mg/kg	50	0040208	MS	02-Apr-20	8021B	
Toluene*	< 0.050		0.050	mg/kg	50	0040208	MS	02-Apr-20	8021B	
Ethylbenzene*	< 0.050		0.050	mg/kg	50	0040208	MS	02-Apr-20	8021B	
Total Xylenes*	< 0.150		0.150	mg/kg	50	0040208	MS	02-Apr-20	8021B	
Total BTEX	< 0.300		0.300	mg/kg	50	0040208	MS	02-Apr-20	8021B	
Surrogate: 4-Bromofluorobenzene (PIL))		99.2 %	73.3	-129	0040208	MS	02-Apr-20	8021B	
Petroleum Hydrocarbons by	GC FID									
GRO C6-C10*	<10.0		10.0	mg/kg	1	0040204	MS	02-Apr-20	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	0040204	MS	02-Apr-20	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	0040204	MS	02-Apr-20	8015B	
Surrogate: 1-Chlorooctane			87.0 %	44.3	-144	0040204	MS	02-Apr-20	8015B	
Surrogate: 1-Chlorooctadecane			90.2 %	42.2	-156	0040204	MS	02-Apr-20	8015B	

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Celey D. Keene, Lab Director/Quality Manager



TALON LPE 408 W. TEXAS AVE. ARTESIA NM, 88210		Project:WHITE SWAN 9 FED 1Reported:Project Number:700794.329.0108-Apr-20 12:08Project Manager:CHRIS JONESFax To:(575) 745-8905								
				- 2 0.5' 972-06 (Se	oil)					
Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
			Cardina	l Laborat	ories					
Inorganic Compounds										
Chloride	144		16.0	mg/kg	4	0040215	AC	03-Apr-20	4500-Cl-B	
Volatile Organic Compound	s by EPA Method 8	021								
Benzene*	< 0.050		0.050	mg/kg	50	0040208	MS	02-Apr-20	8021B	
Toluene*	< 0.050		0.050	mg/kg	50	0040208	MS	02-Apr-20	8021B	
Ethylbenzene*	< 0.050		0.050	mg/kg	50	0040208	MS	02-Apr-20	8021B	
Total Xylenes*	< 0.150		0.150	mg/kg	50	0040208	MS	02-Apr-20	8021B	
Total BTEX	< 0.300		0.300	mg/kg	50	0040208	MS	02-Apr-20	8021B	
Surrogate: 4-Bromofluorobenzene (PL	ID)		99.7 %	73.3	-129	0040208	MS	02-Apr-20	8021B	
Petroleum Hydrocarbons by	GC FID									
GRO C6-C10*	<10.0		10.0	mg/kg	1	0040209	MS	02-Apr-20	8015B	
DRO >C10-C28*	15.5		10.0	mg/kg	1	0040209	MS	02-Apr-20	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	0040209	MS	02-Apr-20	8015B	
Surrogate: 1-Chlorooctane			89.0 %	44.3	-144	0040209	MS	02-Apr-20	8015B	_
Surrogate: 1-Chlorooctadecane			92.2 %	42.2	-156	0040209	MS	02-Apr-20	8015B	

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Celey D. Keene, Lab Director/Quality Manager



TALON LPE 408 W. TEXAS AVE. ARTESIA NM, 88210	W. TEXAS AVE. Project Number: 700794.329.01 08-Apr-20 12:08										
Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes	
			Cardina	l Laborat	ories						
<u>Inorganic Compounds</u> Chloride	144		16.0	mg/kg	4	0040215	AC	03-Apr-20	4500-Cl-B		
Volatile Organic Compounds b	y EPA Method 8	8021									
Benzene*	< 0.050		0.050	mg/kg	50	0040218	MS	02-Apr-20	8021B		
Toluene*	< 0.050		0.050	mg/kg	50	0040218	MS	02-Apr-20	8021B		
Ethylbenzene*	< 0.050		0.050	mg/kg	50	0040218	MS	02-Apr-20	8021B		
Total Xylenes*	< 0.150		0.150	mg/kg	50	0040218	MS	02-Apr-20	8021B		
Total BTEX	< 0.300		0.300	mg/kg	50	0040218	MS	02-Apr-20	8021B		
Surrogate: 4-Bromofluorobenzene (PID)			101 %	73.3	-129	0040218	MS	02-Apr-20	8021B		
Petroleum Hydrocarbons by G	C FID										
GRO C6-C10*	<10.0		10.0	mg/kg	1	0040209	MS	02-Apr-20	8015B		
DRO >C10-C28*	<10.0		10.0	mg/kg	1	0040209	MS	02-Apr-20	8015B		
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	0040209	MS	02-Apr-20	8015B		
Surrogate: 1-Chlorooctane			89.5 %	44.3	-144	0040209	MS	02-Apr-20	8015B		
Surrogate: 1-Chlorooctadecane			94.8 %	42.2	-156	0040209	MS	02-Apr-20	8015B		

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Celey D. Keene, Lab Director/Quality Manager



TALON LPE 408 W. TEXAS AVE. ARTESIA NM, 88210		Project:WHITE SWAN 9 FED 1Reported:Project Number:700794.329.0108-Apr-20 12:08Project Manager:CHRIS JONESFax To:(575) 745-8905								
				2 1.5' R 972-08 (Se	-					
Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
			Cardina	l Laborat	tories					
Inorganic Compounds Chloride	192		16.0	mg/kg	4	0040215	AC	03-Apr-20	4500-Cl-B	
Volatile Organic Compound		31	10.0	ing/kg	ï	0010215	ne	00 Apr 20	1500 61 5	
Benzene*	<0.050	21	0.050	mg/kg	50	0040218	MS	02-Apr-20	8021B	
Toluene*	< 0.050		0.050	mg/kg	50	0040218	MS	02-Apr-20	8021B	
Ethylbenzene*	< 0.050		0.050	mg/kg	50	0040218	MS	02-Apr-20	8021B	
Total Xylenes*	< 0.150		0.150	mg/kg	50	0040218	MS	02-Apr-20	8021B	
Total BTEX	< 0.300		0.300	mg/kg	50	0040218	MS	02-Apr-20	8021B	
Surrogate: 4-Bromofluorobenzene (P.	ID)		101 %	73.3	-129	0040218	MS	02-Apr-20	8021B	
Petroleum Hydrocarbons by	GC FID									
GRO C6-C10*	<10.0		10.0	mg/kg	1	0040209	MS	02-Apr-20	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	0040209	MS	02-Apr-20	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	0040209	MS	02-Apr-20	8015B	
Surrogate: 1-Chlorooctane			80.1 %	44.3	-144	0040209	MS	02-Apr-20	8015B	
Surrogate: 1-Chlorooctadecane			84.3 %	42.2	-156	0040209	MS	02-Apr-20	8015B	

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TALON LPEProject:WHITE SWAN 9 FED 1Reported:408 W. TEXAS AVE.Project Number:700794.329.0108-Apr-20 12:08ARTESIA NM, 88210Project Manager:CHRIS JONESFax To:(575) 745-89050'H000972-09 (Soil)										08
Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
			Cardina	l Laborat	tories					
<u>Inorganic Compounds</u> Chloride	32.0		16.0	mg/kg	4	0040215	AC	03-Apr-20	4500-Cl-B	
Volatile Organic Compounds b	y EPA Method 8	8021								
Benzene*	< 0.050		0.050	mg/kg	50	0040218	MS	02-Apr-20	8021B	
Toluene*	< 0.050		0.050	mg/kg	50	0040218	MS	02-Apr-20	8021B	
Ethylbenzene*	< 0.050		0.050	mg/kg	50	0040218	MS	02-Apr-20	8021B	
Total Xylenes*	< 0.150		0.150	mg/kg	50	0040218	MS	02-Apr-20	8021B	
Total BTEX	< 0.300		0.300	mg/kg	50	0040218	MS	02-Apr-20	8021B	
Surrogate: 4-Bromofluorobenzene (PID)			101 %	73.3	-129	0040218	MS	02-Apr-20	8021B	
Petroleum Hydrocarbons by G	C FID									
GRO C6-C10*	<10.0		10.0	mg/kg	1	0040207	MS	02-Apr-20	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	0040207	MS	02-Apr-20	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	0040207	MS	02-Apr-20	8015B	
Surrogate: 1-Chlorooctane			94.9 %	44.3	-144	0040207	MS	02-Apr-20	8015B	
Surrogate: 1-Chlorooctadecane			98.0 %	42.2	-156	0040207	MS	02-Apr-20	8015B	

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Celey D. Keene, Lab Director/Quality Manager



TALON LPEProject:WHITE SWAN 9 FED 1Reported:408 W. TEXAS AVE.Project Number:700794.329.0108-Apr-20 12:08ARTESIA NM, 88210Project Manager:CHRIS JONESFax To:(575) 745-89055										08
			Reporting	972-10 (80)11)					
Analyte	Result	MDL	Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
			Cardina	l Laborat	ories					
Inorganic Compounds										
Chloride	32.0		16.0	mg/kg	4	0040215	AC	03-Apr-20	4500-Cl-B	
Volatile Organic Compounds	oy EPA Method 8	8021								
Benzene*	< 0.050		0.050	mg/kg	50	0040218	MS	02-Apr-20	8021B	
Toluene*	< 0.050		0.050	mg/kg	50	0040218	MS	02-Apr-20	8021B	
Ethylbenzene*	< 0.050		0.050	mg/kg	50	0040218	MS	02-Apr-20	8021B	
Total Xylenes*	< 0.150		0.150	mg/kg	50	0040218	MS	02-Apr-20	8021B	
Total BTEX	< 0.300		0.300	mg/kg	50	0040218	MS	02-Apr-20	8021B	
Surrogate: 4-Bromofluorobenzene (PID))		100 %	73.3	-129	0040218	MS	02-Apr-20	8021B	
Petroleum Hydrocarbons by G	GC FID									
GRO C6-C10*	<10.0		10.0	mg/kg	1	0040207	MS	02-Apr-20	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	0040207	MS	02-Apr-20	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	0040207	MS	02-Apr-20	8015B	
Surrogate: 1-Chlorooctane			97.7 %	44.3	-144	0040207	MS	02-Apr-20	8015B	
Surrogate: 1-Chlorooctadecane			101 %	42.2	-156	0040207	MS	02-Apr-20	8015B	

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Celey D. Keene, Lab Director/Quality Manager



TALON LPE 408 W. TEXAS AVE. ARTESIA NM, 88210	Project:WHITE SWAN 9 FED 1Reported:Project Number:700794.329.0108-Apr-20 12:08Project Manager:CHRIS JONESFax To:(575) 745-8905								08	
			~	- 3 1' 972-11 (So	oil)					
Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
			Cardina	l Laborat	ories					
Inorganic Compounds										
Chloride	16.0		16.0	mg/kg	4	0040215	AC	03-Apr-20	4500-Cl-B	
Volatile Organic Compounds	s by EPA Method 80	21								
Benzene*	< 0.050		0.050	mg/kg	50	0040218	MS	02-Apr-20	8021B	
Toluene*	< 0.050		0.050	mg/kg	50	0040218	MS	02-Apr-20	8021B	
Ethylbenzene*	< 0.050		0.050	mg/kg	50	0040218	MS	02-Apr-20	8021B	
Total Xylenes*	< 0.150		0.150	mg/kg	50	0040218	MS	02-Apr-20	8021B	
Total BTEX	< 0.300		0.300	mg/kg	50	0040218	MS	02-Apr-20	8021B	
Surrogate: 4-Bromofluorobenzene (Pl	D)		100 %	73.3	-129	0040218	MS	02-Apr-20	8021B	
Petroleum Hydrocarbons by	GC FID									
GRO C6-C10*	<10.0		10.0	mg/kg	1	0040207	MS	02-Apr-20	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	0040207	MS	02-Apr-20	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	0040207	MS	02-Apr-20	8015B	
Surrogate: 1-Chlorooctane			90.7 %	44.3	-144	0040207	MS	02-Apr-20	8015B	_
Surrogate: 1-Chlorooctadecane			93.1 %	42.2	-156	0040207	MS	02-Apr-20	8015B	

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Celey D. Keene, Lab Director/Quality Manager



TALON LPE 408 W. TEXAS AVE. ARTESIA NM, 88210			Project Num Project Mana Fax	, ber: 700 ger: CHF		-		(Reported: 08-Apr-20 12:1	08
			H0009	972-12 (Se	oil)					
Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
			Cardina	l Laborat	tories					
Inorganic Compounds										
Chloride	32.0		16.0	mg/kg	4	0040215	AC	03-Apr-20	4500-Cl-B	
Volatile Organic Compounds	by EPA Method 8	8021								
Benzene*	< 0.050		0.050	mg/kg	50	0040218	MS	02-Apr-20	8021B	
Toluene*	< 0.050		0.050	mg/kg	50	0040218	MS	02-Apr-20	8021B	
Ethylbenzene*	< 0.050		0.050	mg/kg	50	0040218	MS	02-Apr-20	8021B	
Total Xylenes*	< 0.150		0.150	mg/kg	50	0040218	MS	02-Apr-20	8021B	
Total BTEX	< 0.300		0.300	mg/kg	50	0040218	MS	02-Apr-20	8021B	
Surrogate: 4-Bromofluorobenzene (PID))		99.9 %	73.3	-129	0040218	MS	02-Apr-20	8021B	
Petroleum Hydrocarbons by (GC FID									
GRO C6-C10*	<10.0		10.0	mg/kg	1	0040207	MS	02-Apr-20	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	0040207	MS	02-Apr-20	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	0040207	MS	02-Apr-20	8015B	
Surrogate: 1-Chlorooctane			94.5 %	44.3	-144	0040207	MS	02-Apr-20	8015B	
Surrogate: 1-Chlorooctadecane			97.8 %	42.2	-156	0040207	MS	02-Apr-20	8015B	

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Celey D. Keene, Lab Director/Quality Manager



TALON LPEProject:WHITE SWAN 9 FED 1Reported:408 W. TEXAS AVE.Project Number:700794.329.0108-Apr-20 12:08ARTESIA NM, 88210Project Manager:CHRIS JONESFax To:(575) 745-89055										08
Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
			Cardina	l Labora	tories					
Inorganic Compounds Chloride	<16.0		16.0	mg/kg	4	0040215	AC	03-Apr-20	4500-Cl-B	
Volatile Organic Compounds	oy EPA Method 8	021								
Benzene*	< 0.050		0.050	mg/kg	50	0040218	MS	02-Apr-20	8021B	
Toluene*	< 0.050		0.050	mg/kg	50	0040218	MS	02-Apr-20	8021B	
Ethylbenzene*	< 0.050		0.050	mg/kg	50	0040218	MS	02-Apr-20	8021B	
Total Xylenes*	< 0.150		0.150	mg/kg	50	0040218	MS	02-Apr-20	8021B	
Total BTEX	< 0.300		0.300	mg/kg	50	0040218	MS	02-Apr-20	8021B	
Surrogate: 4-Bromofluorobenzene (PID)			99.4 %	73.3	-129	0040218	MS	02-Apr-20	8021B	
Petroleum Hydrocarbons by C	C FID									
GRO C6-C10*	<10.0		10.0	mg/kg	1	0040207	MS	02-Apr-20	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	0040207	MS	02-Apr-20	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	0040207	MS	02-Apr-20	8015B	
Surrogate: 1-Chlorooctane			87.0 %	44.3	-144	0040207	MS	02-Apr-20	8015B	
Surrogate: 1-Chlorooctadecane			87.0 %	42.2	-156	0040207	MS	02-Apr-20	8015B	

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Celey D. Keene, Lab Director/Quality Manager



TALON LPEProject:WHITE SWAN 9 FED 1Reported:408 W. TEXAS AVE.Project Number:700794.329.0108-Apr-20 12:08ARTESIA NM, 88210Project Manager:CHRIS JONESFax To:(575) 745-89055										08
Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
				l Laborat	tories			-		
Inorganic Compounds										
Chloride	32.0		16.0	mg/kg	4	0040215	AC	03-Apr-20	4500-Cl-B	
Volatile Organic Compounds b	y EPA Method 8	8021								
Benzene*	< 0.050		0.050	mg/kg	50	0040218	MS	02-Apr-20	8021B	
Toluene*	< 0.050		0.050	mg/kg	50	0040218	MS	02-Apr-20	8021B	
Ethylbenzene*	< 0.050		0.050	mg/kg	50	0040218	MS	02-Apr-20	8021B	
Total Xylenes*	< 0.150		0.150	mg/kg	50	0040218	MS	02-Apr-20	8021B	
Total BTEX	< 0.300		0.300	mg/kg	50	0040218	MS	02-Apr-20	8021B	
Surrogate: 4-Bromofluorobenzene (PID)			99.7 %	73.3	-129	0040218	MS	02-Apr-20	8021B	
Petroleum Hydrocarbons by G	C FID									
GRO C6-C10*	<10.0		10.0	mg/kg	1	0040207	MS	02-Apr-20	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	0040207	MS	02-Apr-20	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	0040207	MS	02-Apr-20	8015B	
Surrogate: 1-Chlorooctane			92.3 %	44.3	-144	0040207	MS	02-Apr-20	8015B	
Surrogate: 1-Chlorooctadecane			95.2 %	42.2	-156	0040207	MS	02-Apr-20	8015B	

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Celey D. Keene, Lab Director/Quality Manager



TALON LPEProject:WHITE SWAN 9 FED 1Reported:408 W. TEXAS AVE.Project Number:700794.329.0108-Apr-20 12:08ARTESIA NM, 88210Project Manager:CHRIS JONES Fax To:675) 745-8905S - 4 1'H000972-15 (Soil)										08
				972-15 (50)11)					
Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
			Cardina	l Laborat	ories					
Inorganic Compounds Chloride	16.0		16.0	mg/kg	4	0040215	AC	03-Apr-20	4500-Cl-B	
Volatile Organic Compounds by	y EPA Method	8021								
Benzene*	< 0.050		0.050	mg/kg	50	0040218	MS	02-Apr-20	8021B	
Toluene*	< 0.050		0.050	mg/kg	50	0040218	MS	02-Apr-20	8021B	
Ethylbenzene*	< 0.050		0.050	mg/kg	50	0040218	MS	02-Apr-20	8021B	
Total Xylenes*	< 0.150		0.150	mg/kg	50	0040218	MS	02-Apr-20	8021B	
Total BTEX	< 0.300		0.300	mg/kg	50	0040218	MS	02-Apr-20	8021B	
Surrogate: 4-Bromofluorobenzene (PID)			99.6 %	73.3	-129	0040218	MS	02-Apr-20	8021B	
Petroleum Hydrocarbons by G	C FID									
GRO C6-C10*	<10.0		10.0	mg/kg	1	0040207	MS	02-Apr-20	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	0040207	MS	02-Apr-20	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	0040207	MS	02-Apr-20	8015B	
Surrogate: 1-Chlorooctane			96.2 %	44.3	-144	0040207	MS	02-Apr-20	8015B	
Surrogate: 1-Chlorooctadecane			<i>98.3 %</i>	42.2	-156	0040207	MS	02-Apr-20	8015B	

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Celey D. Keene, Lab Director/Quality Manager



TALON LPEProject:WHITE SWAN 9 FED 1Reported:408 W. TEXAS AVE.Project Number:700794.329.0108-Apr-20 1ARTESIA NM, 88210Project Manager:CHRIS JONESFax To:(575) 745-89055								Reported: 18-Apr-20 12:1	08	
Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
			Cardina	l Laborat	tories					
Inorganic Compounds										
Chloride	32.0		16.0	mg/kg	4	0040215	AC	03-Apr-20	4500-Cl-B	
Volatile Organic Compounds	by EPA Method 8	8021								
Benzene*	< 0.050		0.050	mg/kg	50	0040218	MS	02-Apr-20	8021B	
Toluene*	< 0.050		0.050	mg/kg	50	0040218	MS	02-Apr-20	8021B	
Ethylbenzene*	< 0.050		0.050	mg/kg	50	0040218	MS	02-Apr-20	8021B	
Total Xylenes*	< 0.150		0.150	mg/kg	50	0040218	MS	02-Apr-20	8021B	
Total BTEX	< 0.300		0.300	mg/kg	50	0040218	MS	02-Apr-20	8021B	
Surrogate: 4-Bromofluorobenzene (PID))		100 %	73.3	-129	0040218	MS	02-Apr-20	8021B	
Petroleum Hydrocarbons by C	FID									
GRO C6-C10*	<10.0		10.0	mg/kg	1	0040207	MS	02-Apr-20	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	0040207	MS	02-Apr-20	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	0040207	MS	02-Apr-20	8015B	
Surrogate: 1-Chlorooctane			92.1 %	44.3	-144	0040207	MS	02-Apr-20	8015B	
Surrogate: 1-Chlorooctadecane			97.5 %			0040207	MS	02-Apr-20	8015B	

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Celey D. Keene, Lab Director/Quality Manager



TALON LPE 408 W. TEXAS AVE. ARTESIA NM, 88210	Project: WHITE SWAN 9 FED 1 Project Number: 700794.329.01 Project Manager: CHRIS JONES Fax To: (575) 745-8905						Reported: 08-Apr-20 12:08			
				BG - 1 972-17 (So	oil)					
Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
	Cardinal Laboratories									
<u>Inorganic Compounds</u> Chloride	80.0		16.0	mg/kg	4	0040307	AC	03-Apr-20	4500-Cl-B	
Volatile Organic Compounds	by EPA Method 8	8021								
Benzene*	< 0.050		0.050	mg/kg	50	0040218	MS	02-Apr-20	8021B	
Toluene*	< 0.050		0.050	mg/kg	50	0040218	MS	02-Apr-20	8021B	
Ethylbenzene*	< 0.050		0.050	mg/kg	50	0040218	MS	02-Apr-20	8021B	
Total Xylenes*	< 0.150		0.150	mg/kg	50	0040218	MS	02-Apr-20	8021B	
Total BTEX	< 0.300		0.300	mg/kg	50	0040218	MS	02-Apr-20	8021B	
Surrogate: 4-Bromofluorobenzene (PII))		99.4 %	73.3	-129	0040218	MS	02-Apr-20	8021B	
Petroleum Hydrocarbons by	GC FID									
GRO C6-C10*	<10.0		10.0	mg/kg	1	0040204	MS	02-Apr-20	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	0040204	MS	02-Apr-20	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	0040204	MS	02-Apr-20	8015B	
Surrogate: 1-Chlorooctane			90.9 %	44.3	-144	0040204	MS	02-Apr-20	8015B	
Surrogate: 1-Chlorooctadecane			94.8 %			0040204	MS	02-Apr-20	8015B	

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Celey D. Keene, Lab Director/Quality Manager



TALON LPE 408 W. TEXAS AVE. ARTESIA NM, 88210		Project: WHITE SWAN 9 FED 1 Project Number: 700794.329.01 Project Manager: CHRIS JONES Fax To: (575) 745-8905						Reported: 08-Apr-20 12:08		
				BG - 3 972-19 (So	,il)					
			11000	972-19 (30	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,					
Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
	Cardinal Laboratories									
Inorganic Compounds										
Chloride	16.0		16.0	mg/kg	4	0040307	AC	03-Apr-20	4500-Cl-B	
Volatile Organic Compound	s by EPA Method 80	21								
Benzene*	< 0.050		0.050	mg/kg	50	0040218	MS	02-Apr-20	8021B	
Toluene*	< 0.050		0.050	mg/kg	50	0040218	MS	02-Apr-20	8021B	
Ethylbenzene*	< 0.050		0.050	mg/kg	50	0040218	MS	02-Apr-20	8021B	
Total Xylenes*	< 0.150		0.150	mg/kg	50	0040218	MS	02-Apr-20	8021B	
Total BTEX	< 0.300		0.300	mg/kg	50	0040218	MS	02-Apr-20	8021B	
Surrogate: 4-Bromofluorobenzene (P	ID)		99.7 %	73.3	-129	0040218	MS	02-Apr-20	8021B	
Petroleum Hydrocarbons by	GC FID									
GRO C6-C10*	<10.0		10.0	mg/kg	1	0040209	MS	02-Apr-20	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	0040209	MS	02-Apr-20	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	0040209	MS	02-Apr-20	8015B	
Surrogate: 1-Chlorooctane			81.7 %	44.3	-144	0040209	MS	02-Apr-20	8015B	
Surrogate: 1-Chlorooctadecane			88.8 %	88.8 % 42.2-156		0040209	MS	02-Apr-20	8015B	

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Celey D. Keene, Lab Director/Quality Manager



TALON LPE 408 W. TEXAS AVE. ARTESIA NM, 88210		Project: WHITE SWAN Project Number: 700794.329.01 Project Manager: CHRIS JONES Fax To: (575) 745-890						C	Reported:)8-Apr-20 12:(08
				BG - 4	.:1)					
	H000972-20 (Soil)									
Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
	Cardinal Laboratories									
Inorganic Compounds										
Chloride	<16.0		16.0	mg/kg	4	0040307	AC	03-Apr-20	4500-Cl-B	
Volatile Organic Compound	s by EPA Method 8	021								
Benzene*	< 0.050		0.050	mg/kg	50	0040218	MS	02-Apr-20	8021B	
Toluene*	< 0.050		0.050	mg/kg	50	0040218	MS	02-Apr-20	8021B	
Ethylbenzene*	< 0.050		0.050	mg/kg	50	0040218	MS	02-Apr-20	8021B	
Total Xylenes*	< 0.150		0.150	mg/kg	50	0040218	MS	02-Apr-20	8021B	
Total BTEX	< 0.300		0.300	mg/kg	50	0040218	MS	02-Apr-20	8021B	
Surrogate: 4-Bromofluorobenzene (P.	ID)		99.3 %	73.3	-129	0040218	MS	02-Apr-20	8021B	
Petroleum Hydrocarbons by	GC FID									
GRO C6-C10*	<10.0		10.0	mg/kg	1	0040209	MS	02-Apr-20	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	0040209	MS	02-Apr-20	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	0040209	MS	02-Apr-20	8015B	
Surrogate: 1-Chlorooctane			86.9 %	44.3	-144	0040209	MS	02-Apr-20	8015B	
Surrogate: 1-Chlorooctadecane			92.0 %	92.0% 42.2-156		0040209	MS	02-Apr-20	8015B	

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Celey D. Keene, Lab Director/Quality Manager



TALON LPE 408 W. TEXAS AVE. ARTESIA NM, 88210		Project: WHITE SWAN 9 FED 1 Project Number: 700794.329.01 Project Manager: CHRIS JONES Fax To: (575) 745-8905						Reported: 08-Apr-20 12:08		
				BG - 5 972-21 (So	,il)					
			11000	972-21 (30	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,					
Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
	Cardinal Laboratories									
Inorganic Compounds										
Chloride	16.0		16.0	mg/kg	4	0040307	AC	03-Apr-20	4500-Cl-B	
Volatile Organic Compound	s by EPA Method 8	021								
Benzene*	< 0.050		0.050	mg/kg	50	0040218	MS	02-Apr-20	8021B	
Toluene*	< 0.050		0.050	mg/kg	50	0040218	MS	02-Apr-20	8021B	
Ethylbenzene*	< 0.050		0.050	mg/kg	50	0040218	MS	02-Apr-20	8021B	
Total Xylenes*	< 0.150		0.150	mg/kg	50	0040218	MS	02-Apr-20	8021B	
Total BTEX	< 0.300		0.300	mg/kg	50	0040218	MS	02-Apr-20	8021B	
Surrogate: 4-Bromofluorobenzene (P	ID)		99.6 %	73.3	-129	0040218	MS	02-Apr-20	8021B	
Petroleum Hydrocarbons by	GC FID									
GRO C6-C10*	<10.0		10.0	mg/kg	1	0040209	MS	02-Apr-20	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	0040209	MS	02-Apr-20	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	0040209	MS	02-Apr-20	8015B	
Surrogate: 1-Chlorooctane			87.4 %	44.3	-144	0040209	MS	02-Apr-20	8015B	
Surrogate: 1-Chlorooctadecane			92.0 %	92.0 % 42.2-156		0040209	MS	02-Apr-20	8015B	

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TALON LPE 408 W. TEXAS AVE. ARTESIA NM, 88210	Project: WHITE S Project Number: 700794.3 Project Manager: CHRIS JO Fax To: (575) 74	329.01 ONES	Reported: 08-Apr-20 12:08
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Inorganic Compounds - Quality Control

Cardinal Laboratories

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 0040215 - 1:4 DI Water										
Blank (0040215-BLK1)				Prepared &	Analyzed:	02-Apr-20				
Chloride	ND	16.0	mg/kg							
LCS (0040215-BS1)				Prepared &	Analyzed:	02-Apr-20				
Chloride	416	16.0	mg/kg	400		104	80-120			
LCS Dup (0040215-BSD1)				Prepared &	Analyzed:	02-Apr-20				
Chloride	432	16.0	mg/kg	400		108	80-120	3.77	20	
Batch 0040307 - 1:4 DI Water										
Blank (0040307-BLK1)				Prepared &	Analyzed:	03-Apr-20				
Chloride	ND	16.0	mg/kg							
LCS (0040307-BS1)				Prepared &	Analyzed:	03-Apr-20				
Chloride	416	16.0	mg/kg	400		104	80-120			
LCS Dup (0040307-BSD1)				Prepared & Analyzed: 03-Apr-20						
Chloride	400	16.0	mg/kg	400		100	80-120	3.92	20	

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TALON LPE 408 W. TEXAS AVE. ARTESIA NM, 88210	Project Number: Project Manager:		Reported: 08-Apr-20 12:08	
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Volatile Organic Compounds by EPA Method 8021 - Quality Control

Cardinal Laboratories

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0040208 - Volatiles										
Blank (0040208-BLK1)				Prepared &	Analyzed:	02-Apr-20				
Benzene	ND	0.050	mg/kg	1	2	1				
Toluene	ND	0.050	mg/kg							
Ethylbenzene	ND	0.050	mg/kg							
Total Xylenes	ND	0.150	mg/kg							
Total BTEX	ND	0.300	mg/kg							
Surrogate: 4-Bromofluorobenzene (PID)	ND		mg/kg	0.0500		99.8	73.3-129			
LCS (0040208-BS1)				Prepared &	Analyzed:	02-Apr-20				
Benzene	2.09	0.050	mg/kg	2.00		105	72.2-131			
Toluene	2.12	0.050	mg/kg	2.00		106	71.7-126			
Ethylbenzene	2.15	0.050	mg/kg	2.00		107	68.9-126			
Fotal Xylenes	6.28	0.150	mg/kg	6.00		105	71.4-125			
Surrogate: 4-Bromofluorobenzene (PID)	0.0511		mg/kg	0.0500		102	73.3-129			
LCS Dup (0040208-BSD1)				Prepared &	Analyzed:	02-Apr-20				
Benzene	2.02	0.050	mg/kg	2.00		101	72.2-131	3.76	14.6	
Toluene	2.04	0.050	mg/kg	2.00		102	71.7-126	3.87	17.4	
Ethylbenzene	2.06	0.050	mg/kg	2.00		103	68.9-126	4.04	18.9	
Fotal Xylenes	6.02	0.150	mg/kg	6.00		100	71.4-125	4.32	18.5	
Surrogate: 4-Bromofluorobenzene (PID)	0.0507		mg/kg	0.0500		101	73.3-129			
Batch 0040218 - Volatiles										
Blank (0040218-BLK1)				Prepared &	Analyzed:	02-Apr-20	1			
Benzene	ND	0.050	mg/kg							
Toluene	ND	0.050	mg/kg							
Ethylbenzene	ND	0.050	mg/kg							
Total Xylenes	ND	0.150	mg/kg							
Total BTEX	ND	0.300	mg/kg							
Surrogate: 4-Bromofluorobenzene (PID)	0.0503		mg/kg	0.0500		101	73.3-129			

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TALON LPE 408 W. TEXAS AVE. ARTESIA NM, 88210	Project: WHITE SWAN 9 FED 1 Project Number: 700794.329.01 Project Manager: CHRIS JONES Fax To: (575) 745-8905	Reported: 08-Apr-20 12:08
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Volatile Organic Compounds by EPA Method 8021 - Quality Control

Cardinal Laboratories

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 0040218 - Volatiles										
LCS (0040218-BS1)				Prepared &	Analyzed:	02-Apr-20				
Benzene	2.17	0.050	mg/kg	2.00		108	72.2-131			
Toluene	2.17	0.050	mg/kg	2.00		108	71.7-126			
Ethylbenzene	2.19	0.050	mg/kg	2.00		109	68.9-126			
Total Xylenes	6.40	0.150	mg/kg	6.00		107	71.4-125			
Surrogate: 4-Bromofluorobenzene (PID)	0.0501		mg/kg	0.0500		100	73.3-129			
LCS Dup (0040218-BSD1)				Prepared &	Analyzed:	02-Apr-20				
Benzene	1.99	0.050	mg/kg	2.00		99.7	72.2-131	8.35	14.6	
Toluene	2.00	0.050	mg/kg	2.00		99.9	71.7-126	8.12	17.4	
Ethylbenzene	2.01	0.050	mg/kg	2.00		101	68.9-126	8.33	18.9	
Total Xylenes	5.88	0.150	mg/kg	6.00		97.9	71.4-125	8.48	18.5	
Surrogate: 4-Bromofluorobenzene (PID)	0.0500		mg/kg	0.0500		100	73.3-129			

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Celey D. Keene, Lab Director/Quality Manager



	Drojectu		Deported	
TALON LPE	Project.	WHITE SWAN 9 FED 1	Reported:	
408 W. TEXAS AVE.	Project Number:	700794.329.01	08-Apr-20 12:08	
ARTESIA NM, 88210	Project Manager:	CHRIS JONES		
,	Fax To:	(575) 745-8905		

Petroleum Hydrocarbons by GC FID - Quality Control

Cardinal	Laboratories

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0040204 - General Prep - Organics										
Blank (0040204-BLK1)				Prepared &	Analyzed:	02-Apr-20	1			
GRO C6-C10	ND	10.0	mg/kg							
DRO >C10-C28	ND	10.0	mg/kg							
EXT DRO >C28-C36	ND	10.0	mg/kg							
Surrogate: 1-Chlorooctane	47.1		mg/kg	50.0		94.3	44.3-144			
Surrogate: 1-Chlorooctadecane	48.3		mg/kg	50.0		96.6	42.2-156			
LCS (0040204-BS1)				Prepared &	Analyzed:	02-Apr-20	1			
GRO C6-C10	185	10.0	mg/kg	200		92.7	78.8-127			
DRO >C10-C28	178	10.0	mg/kg	200		89.1	80-132			
Total TPH C6-C28	364	10.0	mg/kg	400		90.9	81.3-128			
Surrogate: 1-Chlorooctane	50.1		mg/kg	50.0		100	44.3-144			
Surrogate: 1-Chlorooctadecane	51.2		mg/kg	50.0		102	42.2-156			
LCS Dup (0040204-BSD1)				Prepared &	Analyzed:	02-Apr-20	1			
GRO C6-C10	185	10.0	mg/kg	200		92.7	78.8-127	0.00809	15.1	
DRO >C10-C28	181	10.0	mg/kg	200		90.6	80-132	1.72	17.1	
Total TPH C6-C28	367	10.0	mg/kg	400		91.7	81.3-128	0.852	15	
Surrogate: 1-Chlorooctane	49.9		mg/kg	50.0		99.7	44.3-144			
Surrogate: 1-Chlorooctadecane	50.2		mg/kg	50.0		100	42.2-156			
Batch 0040207 - General Prep - Organics										
Dissle (0040207 DI V1)				D	A	02 4				

Blank (0040207-BLK1)				Prepared & Analy	yzed: 02-Apr-20)		
GRO C6-C10	ND	10.0	mg/kg					
DRO >C10-C28	ND	10.0	mg/kg					
EXT DRO >C28-C36	ND	10.0	mg/kg					
Surrogate: 1-Chlorooctane	45.4		mg/kg	50.0	90.8	44.3-144		
Surrogate: 1-Chlorooctadecane	45.3		mg/kg	50.0	90.6	42.2-156		

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Petroleum Hydrocarbons by GC FID - Quality Control

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Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Anaryte	Kesuit	Liiiit	Ollits	Level	Kesuit	70KEC	Lillits	KF D	Liiiit	Notes
Batch 0040207 - General Prep - Organics										
LCS (0040207-BS1)				Prepared &	Analyzed:	02-Apr-20	I			
GRO C6-C10	187	10.0	mg/kg	200		93.3	78.8-127			
DRO >C10-C28	184	10.0	mg/kg	200		91.8	80-132			
Total TPH C6-C28	370	10.0	mg/kg	400		92.6	81.3-128			
Surrogate: 1-Chlorooctane	48.1		mg/kg	50.0		96.2	44.3-144			
Surrogate: 1-Chlorooctadecane	49.0		mg/kg	50.0		98.1	42.2-156			
LCS Dup (0040207-BSD1)				Prepared &	Analyzed:	02-Apr-20				
GRO C6-C10	191	10.0	mg/kg	200		95.4	78.8-127	2.26	15.1	
DRO >C10-C28	194	10.0	mg/kg	200		97.2	80-132	5.64	17.1	
Total TPH C6-C28	385	10.0	mg/kg	400		96.3	81.3-128	3.95	15	
Surrogate: 1-Chlorooctane	47.7		mg/kg	50.0		95.5	44.3-144			
Surrogate: 1-Chlorooctadecane	48.8		mg/kg	50.0		97.5	42.2-156			
Batch 0040209 - General Prep - Organics										
Blank (0040209-BLK1)				Prepared &	Analyzed:	02-Apr-20				
GRO C6-C10	ND	10.0	mg/kg							
DRO >C10-C28	ND	10.0	mg/kg							
EXT DRO >C28-C36	ND	10.0	mg/kg							
Surrogate: 1-Chlorooctane	42.3		mg/kg	50.0		84.7	44.3-144			
Surrogate: 1-Chlorooctadecane	45.1		mg/kg	50.0		90.2	42.2-156			
LCS (0040209-BS1)				Prepared &	Analyzed:	02-Apr-20				
GRO C6-C10	167	10.0	mg/kg	200		83.7	78.8-127			
DRO >C10-C28	163	10.0	mg/kg	200		81.7	80-132			
Total TPH C6-C28	331	10.0	mg/kg	400		82.7	81.3-128			
Surrogate: 1-Chlorooctane	42.0		mg/kg	50.0		84.0	44.3-144			
Surrogate: 1-Chlorooctadecane	44.5		mg/kg	50.0		88.9	42.2-156			

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TALON LPE 408 W. TEXAS AVE. ARTESIA NM, 88210	Project Number: 70 Project Manager: CH		Reported: 08-Apr-20 12:08
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Petroleum Hydrocarbons by GC FID - Quality Control

Cardinal Laboratories

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0040209 - General Prep - Organics										
LCS Dup (0040209-BSD1)				Prepared &	analyzed:	02-Apr-20	I			
GRO C6-C10	195	10.0	mg/kg	200		97.6	78.8-127	15.3	15.1	QR-02
DRO >C10-C28	184	10.0	mg/kg	200		92.0	80-132	12.0	17.1	
Total TPH C6-C28	379	10.0	mg/kg	400		94.8	81.3-128	13.6	15	
Surrogate: 1-Chlorooctane	47.8		mg/kg	50.0		95.5	44.3-144			
Surrogate: 1-Chlorooctadecane	49.1		mg/kg	50.0		<i>98.2</i>	42.2-156			

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



Notes and Definitions

QR-02	The RPD result exceeded the QC control limits; however, both percent recoveries were acceptable. Sample results for the QC batch were accepted based on percent recoveries and completeness of QC data.
ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C
	Samples reported on an as received basis (wet) unless otherwise noted on report

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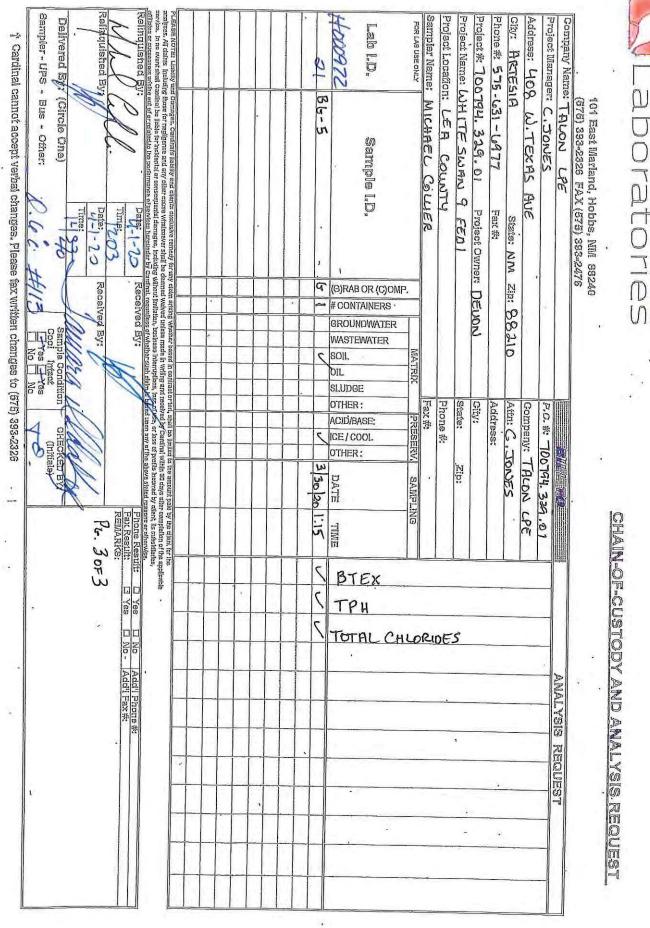
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District I 1625 N. French Dr., Hobbs, NM 88240 District II 811 S. First St., Artesia, NM 88210 District III 1000 Rio Brazos Road, Aztec, NM 87410 District IV 1220 S. St. Francis Dr., Santa Fe, NM 87505 State of New Mexico Energy Minerals and Natural Resources Department

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

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Incident ID	nOY1803742692
District RP	1RP-4955
Facility ID	
Application ID	pOY1803742877

Site Assessment/Characterization

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

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

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

Characterization Report Checklist: Each of the following items must be included in the report.

Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring wells.

Field data

Data table of soil contaminant concentration data

 \square Depth to water determination

Determination of water sources and significant watercourses within ¹/₂-mile of the lateral extents of the release

Boring or excavation logs

Photographs including date and GIS information

Topographic/Aerial maps

Laboratory data including chain of custody

Incident ID nOY1803742692 District RP IRP-4955 Facility ID	<i>eceived by OCD: 6/1/2</i> orm C-141	2020 3:07:54 PM State of New M	lexico		Page 53
District NI Intervision Facility ID					
Application ID pOY1803742877 f the site characterization report does not include completed efforts at remediation of the release, the report must include a proposed remulan. That plan must include the estimated volume of material to be remediated, the proposed remediation technique, proposed samplind methods, anticipated timelines for beginning and completing the remediation. The closure criteria for a release are contained in Ta 9.15.29.12 NMAC, however, use of the table is modified by site- and release-specific parameters. I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endang public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations ha failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local law and/or regulations. Printed Name: Tom Bynum Title: EHS Consultant Signature: Tom Bynum Date: 5/5/2020 email: tom.bynum@dvn.com Telephone: 575-748-0176	age 2	On Conservation	DIVISION		1RP-4955
f the site characterization report does not include completed efforts at remediation of the release, the report must include a proposed remelant. That plan must include the estimated volume of material to be remediated, the proposed remediation technique, proposed samplind methods, anticipated timelines for beginning and completing the remediation. The closure criteria for a release are contained in Ta 9.15.29.12 NMAC, however, use of the table is modified by site- and release-specific parameters. Thereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release not infications and perform corrective actions for releases which may endang public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations hat failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. The acceptance of a C-141 report of responsibility for compliance with any other federal, state, or local law and/or regulations. Printed Name: Tom Bynum Title: EHS Consultant Signature: Tom Bynum Title: 5/5/2020 5/5/2020 email: tom.bynum@dvn.com Telephone: 575-748-0176					
Ian. That plan must include the estimated volume of material to be remediated, the proposed remediation technique, proposed sampling methods, anticipated timelines for beginning and completing the remediation. The closure criteria for a release are contained in Ta 9.15.29.12 NMAC, however, use of the table is modified by site- and release-specific parameters. Thereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endang public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations hat failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local law and/or regulations. Printed Name: Tom Bynum Title: EHS Consultant Signature:Tom Bynum Date:5/5/2020 email:tom.bynum@dvn.com Telephone:575-748-0176				Application ID	pOY1803742877
Printed Name: Tom Bynum Title: EHS Consultant Signature: Tom Bynum Date: 5/5/2020 email: tom.bynum@dvn.com Telephone: 575-748-0176	9.15.29.12 NMAC, how I hereby certify that the regulations all operators	wever, use of the table is modified b information given above is true and con are required to report and/or file certain	nplete to the best of my known release notifications and	fic parameters. owledge and understand that pur perform corrective actions for re	suant to OCD rules and leases which may endanger
email: tom.bynum@dvn.com Telephone: 575-748-0176	failed to adequately inve addition, OCD acceptance	estigate and remediate contamination that	at pose a threat to groundw	ater, surface water, human healt	h or the environment. In
	failed to adequately inve addition, OCD acceptane and/or regulations.	estigate and remediate contamination that ce of a C-141 report does not relieve the	at pose a threat to groundw e operator of responsibility	ater, surface water, human healt for compliance with any other f	h or the environment. In
OCD Only	failed to adequately inve addition, OCD acceptand and/or regulations. Printed Name:	estigate and remediate contamination the ce of a C-141 report does not relieve the Fom Bynum	at pose a threat to groundw e operator of responsibility 	ater, surface water, human healt for compliance with any other f <u>EHS Consultant</u>	h or the environment. In
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Received by: Date:	failed to adequately inve addition, OCD acceptance and/or regulations. Printed Name: 7 Signature: 7 email: tom.byn	estigate and remediate contamination that ce of a C-141 report does not relieve the Fom Bynum	at pose a threat to groundwe operator of responsibility Title: Date:	ater, surface water, human healt for compliance with any other f <u>EHS Consultant</u> 5/5/2020	h or the environment. In

Received by OCD: 6/1/2020 3:07:54 PM Form C-141 State of New Mexico

Oil Conservation Division

Remediation Plan Checklist: Each of the following items must be included in the plan.

Incident ID	nOY1803742692
District RP	1RP-4955
Facility ID	
Application ID	pOY1803742877

Remediation Plan

Detailed description of proposed remediation technique Scaled sitemap with GPS coordinates showing delineation points \boxtimes Estimated volume of material to be remediated Closure criteria is to Table 1 specifications subject to 19.15.29.12(C)(4) NMAC Proposed schedule for remediation (note if remediation plan timeline is more than 90 days OCD approval is required) Deferral Requests Only: Each of the following items must be confirmed as part of any request for deferral of remediation. Contamination must be in areas immediately under or around production equipment where remediation could cause a major facility deconstruction. Extents of contamination must be fully delineated. Contamination does not cause an imminent risk to human health, the environment, or groundwater. I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. Printed Name: Tom Bynum Title: EHS Consultant Signature: <u>Tom Bynum</u> Date: <u>5/5/2020</u> email: tom.bynum@dvn.com Telephone: 575-748-0176 OCD Only Received by: Date: Denied Approved Approved with Attached Conditions of Approval Deferral Approved Signature: Date:

Page 3

Page 4

Oil Conservation Division

Incident ID	nOY1803742692
District RP	1RP-4955
Facility ID	
Application ID	pOY1803742877

Closure

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

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

A scaled site and sampling diagram as described in 19.15.29.11 NMAC

Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)

Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling)

 \boxtimes Description of remediation activities

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete.

Printed Name: Tom Bynum	Title: EHS Consultant			
Signature: Tom Bynum	_ Date: 5/5/2020			
email: tom.bynum@dvn.com	Telephone: 575-748-0176			
OCD Only				
Received by:	Date:			
Closure approval by the OCD does not relieve the responsible party of liability should their operations have failed to adequately investigate and remediate contamination that poses a threat to groundwater, surface water, human health, or the environment nor does not relieve the responsible party of compliance with any other federal, state, or local laws and/or regulations.				
Closure Approved by:	Date:			
Printed Name:	Title:			