Souder, Miller & Associates • 201 S. Halagueno St. • Carlsbad, NM 88220 (575) 689-7040



November 4, 2020

SMA #5E29133, BG60

NMOCD District 1 1625 N. French Drive Hobbs, New Mexico 88240

### RE: LINER INSPECTION REPORT (NRM2023050058) HOGNOSE VIPER 23 FED #1H CENTRAL TANK BATTERY

To Whom it May Concern:

Souder, Miller & Associates (SMA) is pleased to submit this letter report on behalf of Devon Energy Production (Devon) summarizing the liner inspection that occurred due to the Hognose Viper #1H Central Tank Battery release. The site is located in Unit Letter M, Section 23, T23S, R33E (N32.283423/W-103.549435) Lea County, New Mexico, on BLM land.

### **Site Characterization**

On August 6, 2020, there was a failure in communication between the transfer pump and the alarms at the Hognose Viper #1H Central Tank Battery location. This allowed the tanks to overflow, and resulted in the release of 291.7 bbls of produced water and 20 bbls of crude oil inside the lined secondary containment of the tank battery. Initial response activities were conducted by the operator and included source elimination and site stabilization, which recovered approximately 291 bbls of produced water and 20 bbls of crude oil.

Based upon New Mexico Office of the State Engineer (NMOSE) and United States Geological Survey (USGS) well data, depth to groundwater in the area is estimated to be 225 feet below grade surface (bgs). There are no water sources within ½-mile of the location, according to the NMOSE and USGS water well databases (https://gis.ose.state.nm.us/gisapps/ose\_pod\_locations/; accessed August 31, 2020; Appendix C).

Due to the lack of supportable groundwater data to confirm the estimated depth-to-groundwater, the applicable NMOCD Closure Criteria for this site is for a groundwater depth of <50 feet bgs.

### **Liner Integrity**

At the request of Devon, SMA conducted a liner integrity inspection per the requirements of 19.15.29.11.A(5)(a) NMAC. NMOCD was notified on October 27, 2020 that the liner inspection was to occur, and the inspection was conducted on October 30, 2020. After a thorough visual inspection of the liner within the tank battery containment, the liner appeared to be intact and had the ability to contain the leak in question. The location where the release occurred was identified, and SMA verified that the release did not occur outside of the containment. A photo log and field notes of the inspection is included in Appendix A.

SMA recommends no further action for this release and requests the closure of NRM2023050058.

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Souder, Miller and Associates appreciates the opportunity to provide environmental services to you. If you have any questions or comments concerning this report, please feel free to call Ashley Maxwell at (505) 325-7535.

Sincerely, Souder, Miller & Associates

Ashley Maxwell Project Scientist Shawna Chubbuck Senior Scientist

5E29133-BG60

#### Attachments:

**Figures** 

Figure 1: Site Map

Figure 2: Surface Water Protection Map Figure 3: Site and Photograph Location Map

### **Appendices**

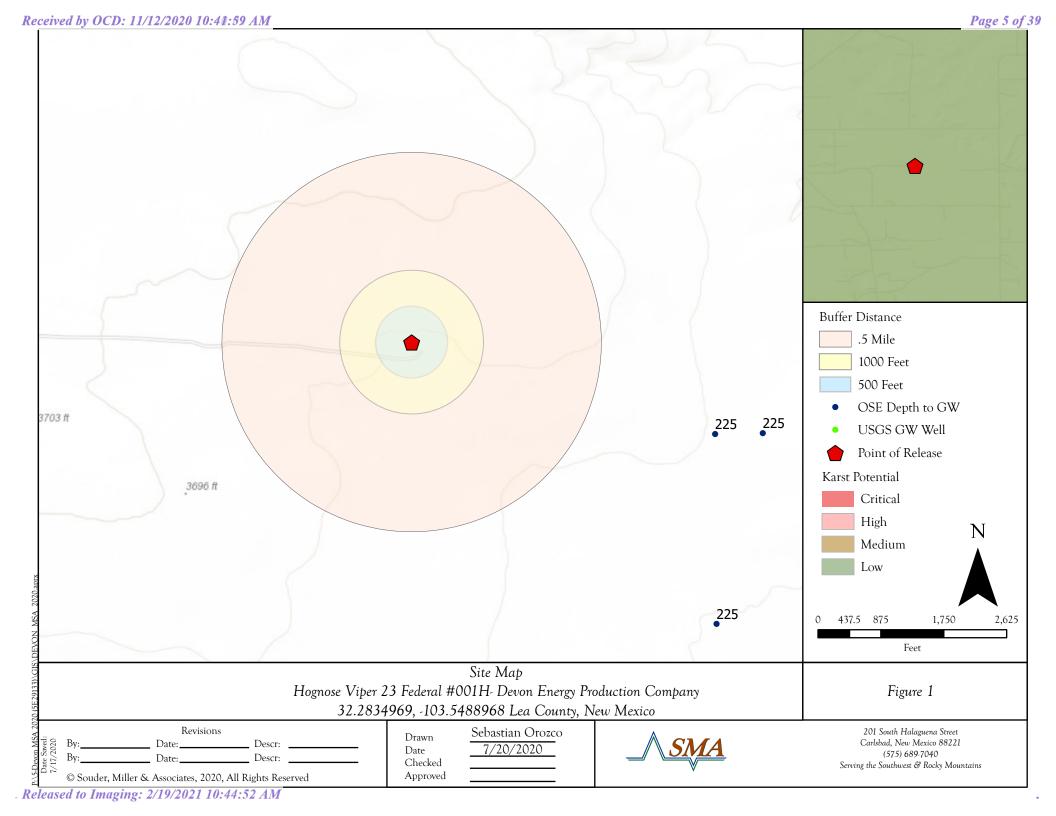
Appendix A: Photo Log, Field Notes & Liner Inspection Form

Appendix B: C141

Appendix C: Water Well Data

5E28981-BG60

### **FIGURES**



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Checked

Approved

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## Appendix A PHOTO LOG, FIELD NOTES & LINER INSPECTION FORM

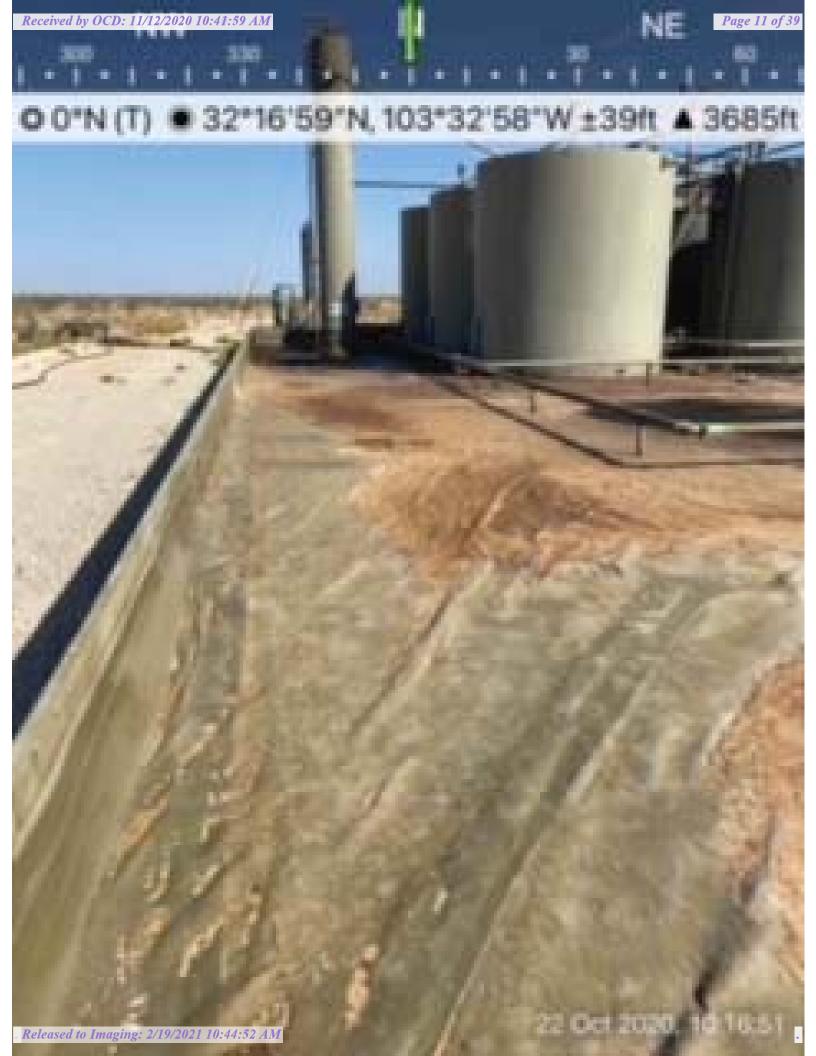
Engineering ◆ Environmental ◆ Surveying

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# Souder, Miller & Associates Liner Inspection Form

SMA	4
	_

Date: 10/30/20	Date:
SMA INSPECTOR SIGNATURE	CLIENT REPRESENTATIVE
Additional Comments:	
See Subparagraph (e) Paragraph (5) of	Subsection A 19.15.29.11 NMAC
See Table 1 19.15.29.12 NMAC	
Responsible Party Must Delineate Horizontal & Depending on Release:	2 Vertical Extent
If NO to Any of Above:	
Certify on Form C-141 That Liner Remains Int	act
If YES:	
Liner Was Able to Contain the Leak	(Y/N):
Release Was Contained to Lined Containment Area	(Y/N):
Liner Integrity Was Maintained (per SMA Inspection)	(Y/N): <u>\</u>
To Be Completed by Client Representative: Can Responsible Party Demonstrate:	
All Damaged Areas Observed Marked in White Paint on Line Photos and Field Notes Detailing Failures Attached to	
INSPECTION: Liner Thoroughly Inspected for Damage	(Y/N):
Affected Areas Exposed by Client	(Y/N): <u>Y</u>
Material Covering Liner Removed by Client	(Y/N): <u>Y</u>
	2100
PRIOR TO INSPECTION: Two (2) Business Day Notification of Inspection to Appropria Date of Notice: 10/27/20	te Division Office (Y/N):
Inspection Parameters as Outlined in 19.15.29.11.A(5) NM	AC
Project Location: 12 Crat Lea Latitude:	32.283423 Longitude: -103.54943
SMA Inspector(s): Phil Sm. th  Project Location: Reval Lea Latitude:	
Client Representative(s): Cope Corresco	
Client Name: Devon Energy	
Project Name: Hanse Vi Per 23 Feel Inspect	ion Date: 10/30/20





Released to Imaging: 2/19/2021 10:44:52 AM

2 Oct 2020 10 16:56

O 282°W (T) ■ 32°17'0°N, 103°32'57"W ±13ft ▲ 3685ft





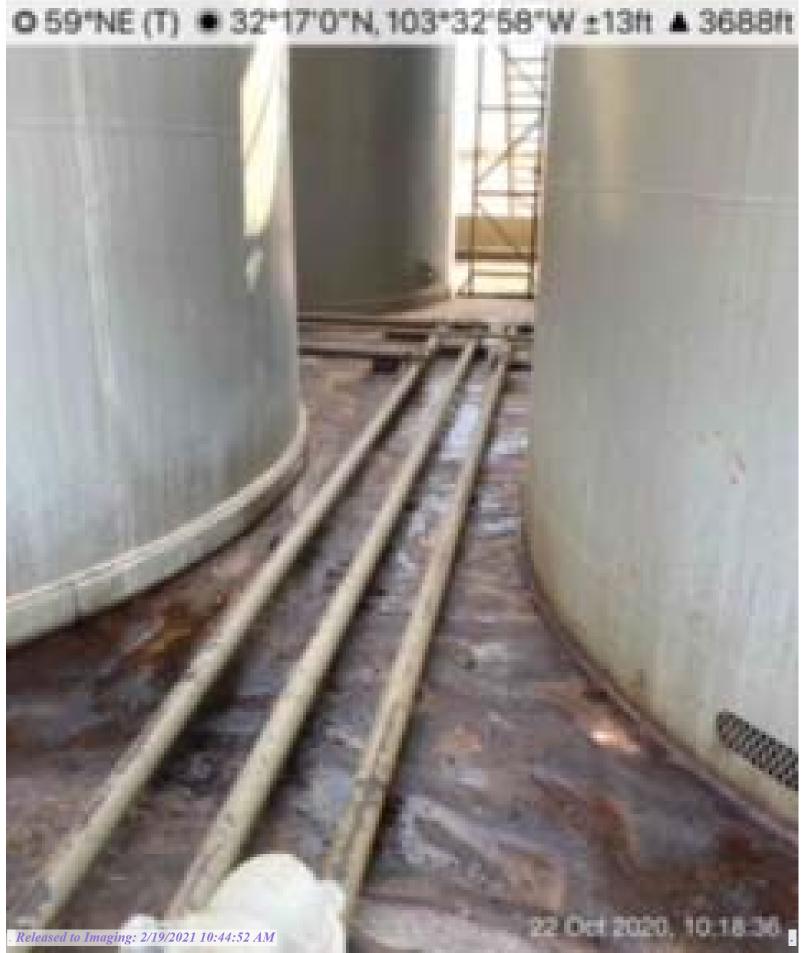




O 76°E (T) ■ 32°17'0"N, 103°32'58"W ±13ft ▲ 3687ft



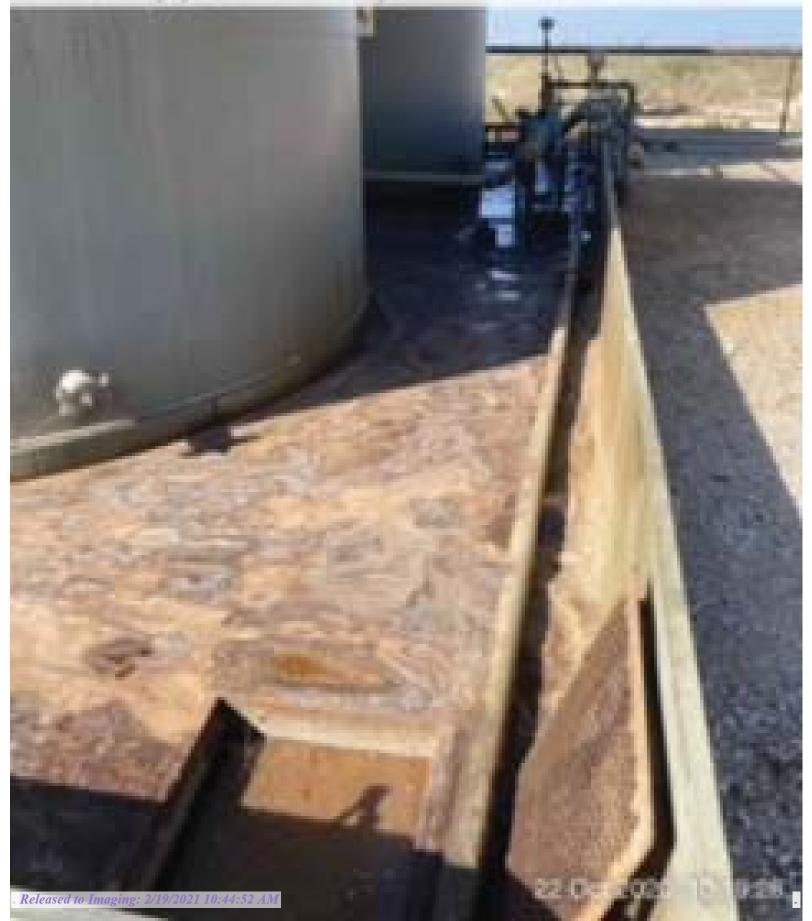








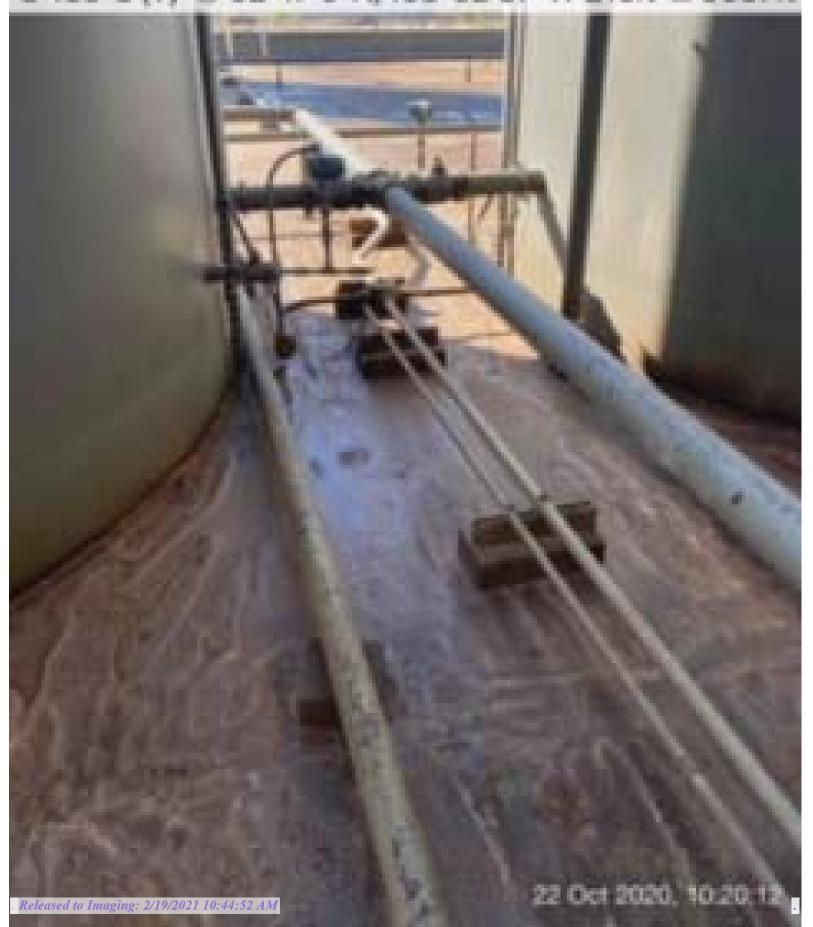
O 256°W (T) ■ 32°17'1"N, 103°32'57"W ±13ft ▲ 3689ft

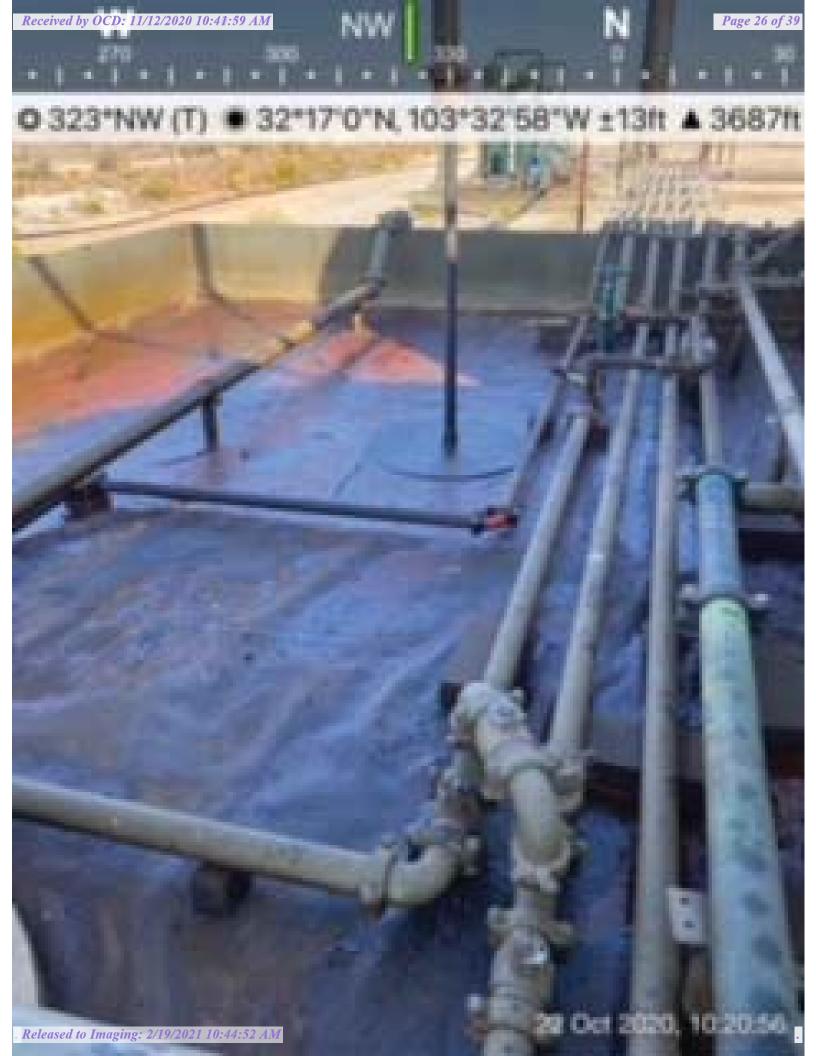














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O 72°E (T) ■ 32°16'59"N, 103°32'58"W ±42ft ▲ 3685ft



5E28981-BG60

### APPENDIX B C141

<u>District I</u> 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 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

Incident ID	NRM2023050058
District RP	
Facility ID	
Application ID	

### **Release Notification**

			Resp	onsi	bie Party	y			
Responsible Party Devon Energy				OGRID 6137					
Contact Name Lupe Carrasco				Contact Telephone 575-748-0165					
		rasco@dvn.c	om		Incident #	(assigned by OCD)	)		
Contact mail	ling address	6488 Seven F	Rivers Highwa	y Arte	esia, NM 8	88210			
			Location	01 K	telease So				
Latitude3	32.283423	3			Longitude _	-103.549	435		
			(NAD 83 in de	cimal de	grees to 5 decim				
		Viper CTB #1			Site Type	Battery			
Date Release	Discovered	8/6/20			API# (if app				
TT '. T	[	T 1:				,			
Unit Letter	Section	Township	Range	County					
М	23 23S 33E Lea								
Surface Owne	r:  State	Federal T	ribal	Name:			)		
			Nature and	d Vo	lume of <b>F</b>	Release			
				calcula	tions or specific		e volumes provided below)		
Crude Oi	1	Volume Release	ed (bbls) 20			Volume Recovered (bbls) 20			
☑ Produced	Water	Volume Release	ed (bbls) 291.7			Volume Recovered (bbls) 291			
			tion of dissolved c	hlorid	e in the Yes No				
produced water >10,000 mg/l?  Condensate Volume Released (bbls)				Volume Recovered (bbls)					
☐ Natural Gas Volume Released (Mcf)					Volume Recovered (Mcf)				
Other (describe) Volume/Weight Released (provide units			, , ,						
					gue rece (pro riae wine)				
Cause of Rel	lease The	release was d	lue to a failur	- with	the trans	fer numn ar	nd the alarms causing the		
	tanks	to run over.	The release o	ccurr	ed witnin	a lined cont	ainment and all fluid contained.		

Received by OCD: 11/12/2020 10:41:59 AM
State of New Mexico Oil Conservation Division Page 2

Page 31 of 39 NRM2023050058 Incident ID District RP Facility ID Application ID

Was this a major release as defined by	If YES, for what reason(s) does the responsible > 25 barrels	nsible party consider this a major release?
19.15.29.7(A) NMAC?		
☑ Yes ☐ No		
If VFS, was immediate n	otice given to the OCD? By whom? To wh	om? When and by what means (phone, email, etc)?
		gh email portal to the BLM and Lea County NMOCD.
	Initial Ro	esponse
The responsible	party must undertake the following actions immediatel	y unless they could create a safety hazard that would result in injury
✓ The source of the rele	ease has been stopped.	
☑ The impacted area ha	s been secured to protect human health and	the environment.
☑ Released materials ha	ave been contained via the use of berms or c	ikes, absorbent pads, or other containment devices.
✓ All free liquids and re	ecoverable materials have been removed and	l managed appropriately.
If all the actions described	d above have <u>not</u> been undertaken, explain	why:
has begun, please attach	a narrative of actions to date. If remedial	emediation immediately after discovery of a release. If remediation efforts have been successfully completed or if the release occurred lease attach all information needed for closure evaluation.
regulations all operators are public health or the environr failed to adequately investig	required to report and/or file certain release noti ment. The acceptance of a C-141 report by the C ate and remediate contamination that pose a thre	pest of my knowledge and understand that pursuant to OCD rules and fications and perform corrective actions for releases which may endanger CD does not relieve the operator of liability should their operations have at to groundwater, surface water, human health or the environment. In responsibility for compliance with any other federal, state, or local laws
Printed Name: Lupe	Carrasco	Title: EHS Professional
Signature: Lupa C	arrasco	Date: 8/17/20
email: Lupe.Carr	rasco@dvn.com	Telephone: <u>575-748-0165</u>
OCD Only		
Received by: Ramon	a Marcus	Date: 8/17/2020
Tiboot, od oy		

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Incident ID	NRM2023050058
District RP	
Facility ID	
Application ID	

### **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>225 (</u> ft bgs)				
Did this release impact groundwater or surface water?					
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?					
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?					
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?					
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 <b>not</b> 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 ver contamination associated with the release have been determined. Refer to 19.15.29.11 NMAC for specifics.	tical extents of soil				
Characterization Report Checklist: Each of the following items must be included in the report.					
<ul> <li>Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring well</li> <li>Field data</li> <li>Data table of soil contaminant concentration data</li> <li>Depth to water determination</li> <li>Determination of water sources and significant watercourses within ½-mile of the lateral extents of the release</li> <li>Boring or excavation logs</li> <li>Photographs including date and GIS information</li> <li>Topographic/Aerial maps</li> <li>Laboratory data including chain of custody</li> </ul>	ls.				

If the site characterization report does not include completed efforts at remediation of the release, the report must include a proposed remediation plan. That plan must include the estimated volume of material to be remediated, the proposed remediation technique, proposed sampling plan and methods, anticipated timelines for beginning and completing the remediation. The closure criteria for a release are contained in Table 1 of 19.15.29.12 NMAC, however, use of the table is modified by site- and release-specific parameters.

Received by OCD: 11/12/2020 10:41:59 AM State of New Mexico
Page 4 Oil Conservation Division

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Incident ID	NRM2023050058
District RP	
Facility ID	
Application ID	

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:Lupe Carrasco	Title:EHS Professional					
Signature: Lupe Carrasco	Date:11/12/20					
email:Lupe.Carrasco@dvn.com	Telephone:575-748-0165					
OCD Only						
Received by:	Date:					

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Incident ID	NRM2023050058
District RP	
Facility ID	
Application ID	

### 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.

Closure Report Attachment Checklist: Each of the following	items must be in	cluded in the closure report.					
Photographs of the remediated site prior to backfill or photomust be notified 2 days prior to liner inspection)	os of the liner inte	grity if applicable (Note: appropriate OCD District office					
☐ Laboratory analyses of final sampling (Note: appropriate Of	OC District office	must be notified 2 days prior to final sampling)					
□ Description of remediation activities							
I hereby certify that the information given above is true and comp and regulations all operators are required to report and/or file certa may endanger public health or the environment. The acceptance of should their operations have failed to adequately investigate and rehuman health or the environment. In addition, OCD acceptance of compliance with any other federal, state, or local laws and/or regulatore, reclaim, and re-vegetate the impacted surface area to the caccordance with 19.15.29.13 NMAC including notification to the	ain release notific of a C-141 report emediate contami f a C-141 report of lations. The resp conditions that exi OCD when reclar	ations and perform corrective actions for releases which by the OCD does not relieve the operator of liability nation that pose a threat to groundwater, surface water, loes not relieve the operator of responsibility for onsible party acknowledges they must substantially sted prior to the release or their final land use in nation and re-vegetation are complete.					
Printed Name:Lupe Carrasco							
Signature: <u>Lupe Carrasco</u>	_ Date:1	1/12/20					
email:Lupe.Carrasco@dvn.com	Telephone:	575-725-0787					
OCD Only							
Received by: Chad Hensley	Date: _	02/19/2021					
Closure approval by the OCD does not relieve the responsible part remediate contamination that poses a threat to groundwater, surface party of compliance with any other federal, state, or local laws and	e water, human he						
Closure Approved by:	Date	: 02/19/2021					
Printed Name: Chad Hensley		Environmental Specialist Advanced					

5E28981-BG60

## APPENDIX C WATER WELL DATA

Engineering ◆ Environmental ◆ Surveying

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### New Mexico Office of the State Engineer **Water Right Summary**

**WR File Number:** C 02282 Subbasin: CUB

**Cross** Reference:

get image list

**Primary Purpose:** STK 72-12-1 LIVESTOCK WATERING

**Primary Status:** DCL **DECLARATION** 

**Total Acres:** 0 Subfile: Cause/Case: -

Header: -

**Total Diversion:** 

**HUGHES PROPERTIES LLC** Owner:

Contact:

TREY HUGHES

Owner:

BRININSTOOL XL RANCH LLC

Contact:

CHRISTINE BRININSTOOL, MORTGAGEE

#### **Documents on File**

				Sta	itus		From/		
	Trn #	Doc	File/Act	1	2	Transaction Desc.	То	Acres	${\bf Diversion Consumptive}$
images	614472	COWNF	2017-09-25	CHG	PRC	C 02282	Т	0	0
	439874	COWNF	2009-07-29	CHG	PRC	C 02282	Т	0	0
	234011	COWNF	2002-06-25	CHG	PRC	C 02282	Т	0	0
	198409	DCL 19	<u>991-05-21</u>	DCL	PRC	C 02282	Т	0	4.8

### **Current Points of Diversion**

**POD Number** 

C 02282

(NAD83 UTM in meters)

Well Tag Source 64Q16Q4SecTwsRng

3 1 1 25 23S 33E

Other Location Desc

638098 3572436\*

\*An (\*) after northing value indicates UTM location was derived from PLSS - see Help

### Place of Use

256 64 Q16 Q4SecTwsRng	Acres	Diversion	CU Use Priority	Status Other Location Desc
	0	4.8	STK	DCL NO PLACE OF USE GIVEN.

Source

**Acres Diversion Priority Source Description** Use STK GW

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

8/31/20 10:37 AM

WATER RIGHT **SUMMARY** 



### New Mexico Office of the State Engineer **Water Right Summary**

**WR File Number:** C 02283 Subbasin: CUB

Cross Reference:

get image list

**Primary Purpose:** STK

72-12-1 LIVESTOCK WATERING

**Primary Status:** DCL **DECLARATION** 

**Total Acres:** 0 Subfile:

Header: -

**Total Diversion:** 4.8

Cause/Case: -BRININSTOOL XL RANCH LLC

Owner: Contact:

CHRISTINE BRININSTOOL, MORTGAGEE

Owner:

**HUGHES PROPERTIES LLC** 

Contact:

TREY HUGHES

### **Documents on File**

				518	เนนร		From/		
	Trn #	Doc	File/Act	1	2	Transaction Desc.	То	Acres	<b>Diversion Consumptive</b>
g <u>et</u> images	614473	COWNF	2017-09-25	CHG	PRC	C 02283	T	0	0
	439875	COWNF	2009-07-29	CHG	PRC	C 02283	T	0	0
	234010	COWNF	2002-06-25	CHG	PRC	C 02283	T	0	0
	<u>198411</u>	DCL 19	991-05-21	DCL	PRC	C 02283	Т	0	4.8

### **Current Points of Diversion**

**POD Number** 

C 02283

(NAD83 UTM in meters)

Q Well Tag Source 64Q16Q4SecTwsRng 4 2 2 26 23S 33E

637896 3572431\*

Other Location

Desc

\*An (\*) after northing value indicates UTM location was derived from PLSS - see Help

### Place of Use

256 64 Q16 Q4SecTwsRng

**Diversion** Acres 4.8 **CU** Use Priority STK

**Status Other Location Desc** DCL NO PLACE OF USE GIVEN.

Source

**Acres Diversion** 

Use

**Source Description** 

STK GW

**Priority** 

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

8/31/20 10:29 AM

**WATER RIGHT SUMMARY** 



### New Mexico Office of the State Engineer **Water Right Summary**

**WR File Number:** C 02284 Subbasin: CUB

**Cross** Reference:

get image list

**Primary Purpose:** STK

72-12-1 LIVESTOCK WATERING DCL

**Primary Status:** 0 **DECLARATION** 

**Total Acres:** 

Subfile:

Header: -

**Total Diversion:** 4.8 Cause/Case: -

Owner:

BRININSTOOL XL RANCH LLC

Contact:

CHRISTINE BRININSTOOL, MORTGAGEE

Owner:

**HUGHES PROPERTIES LLC** 

TREY HUGHES Contact:

#### **Documents on File**

			Status			From/			
	Trn#	Doc	File/Act	1	2	Transaction Desc.	То	Acres	<b>Diversion Consumptive</b>
images	614474	COWNF	2017-09-25	CHG	PRC	C 02284	Т	0	0
	439877	COWNF	2009-07-29	CHG	PRC	C 02284	Т	0	0
	234008	COWNF	2002-06-25	CHG	PRC	C 02284	T	0	0
	<u>198413</u>	DCL 19	<u>991-05-21</u>	DCL	PRC	C 02284	Т	0	4.8

### **Current Points of Diversion**

**POD Number** 

C 02284

(NAD83 UTM in meters)

Q Well Tag Source 64Q16Q4SecTwsRng 4 2 4 26 23S 33E

Other Location Desc

637907 3571626\*

\*An (\*) after northing value indicates UTM location was derived from PLSS - see Help

### Place of Use

Q Q 256 64 Q16 Q4SecTwsRng	Acres	Diversion	CU Use Priority	Status Other Location Desc
· ·	0	4.8	STK	DCL NO PLACE OF USE GIVEN.

Source

**Acres Diversion Priority Source Description** Use STK GW

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

8/31/20 10:37 AM

WATER RIGHT **SUMMARY** 

<u>District I</u> 1625 N. French Dr., Hobbs, NM 88240 Phone:(575) 393-6161 Fax:(575) 393-0720

811 S. First St., Artesia, NM 88210 Phone:(575) 748-1283 Fax:(575) 748-9720 District III
1000 Rio Brazos Rd., Aztec, NM 87410

Phone:(505) 334-6178 Fax:(505) 334-6170 1220 S. St Francis Dr., Santa Fe, NM 87505 Phone:(505) 476-3470 Fax:(505) 476-3462

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

CONDITIONS

Action 11172

#### **CONDITIONS OF APPROVAL**

Operator:			OGRID:	Action Number:	Action Type:
DEVON ENERGY PRODUCTION COMPAN	333 West Sheridan Ave.	Oklahoma City, OK73102	6137	11172	C-141

OCD Reviewer	Condition
chensley	None