INFORMATION ONLY



Caprock Maljamar Unit #038

CLOSURE REPORT

API No. 30-025-01485

Release Date: October 22, 2014

Unit Letter C, Section 19, Township 17 South, Range 33 East

NMOCD Case #: 1RP-3390

April 18, 2017

Prepared by: Laura Flores Environmental Department Diversified Field Service, Inc. 206 W Snyder Hobbs, NM 88240 Phone: (575)964-8394 Fax: (575)964-8396 Olivia Yu Environmental Specialist NM Oil Conservation District – Division 1 1625 N French Drive Hobbs, NM 88240

RE: Linn Caprock Maljamar Unit #038 – Closure Report UL/C, Section 19, T17S, R33E API No. 30-025-01485 NMOCD Case #: 1R-3390 NMOCD Score: 0

Ms. Yu,

Linn Energy (Linn) has retained Diversified Field Service, Inc. (DFSI) to address environmental issues for the site detailed herein.

The site is located southeast of Maljamar, NM, in Lea County. The spill resulted from failed injection line, releasing a total of 120 barrels of produced water, with 70 barrels recovered. The impacted was on the north and east sides of the caliche pad, with some pasture impact east of the pad. An initial C-141 was submitted to the NMOCD on October 22, 2016, and approved same day (Appendix I).

Site Assessment and Delineation

On March 10, 2015, DFSI personnel were on site to obtain samples within the leak area (Figure 1). Four samples were obtained and field sampled for chloride levels, as well as BTEX. The BTEX samples were performed using a Mini Rae Photoionization Detector (PID). Field samples were submitted for analysis at Cardinal Laboratories of Hobbs, NM to obtain confirmation.

DFSI has conducted a groundwater study of the area and has determined, according to the New Mexico Office of the State Engineer and Chevron Trend Map, the average depth to groundwater at this site is 179 ft below ground surface (bgs). Therefore, no eminent danger of groundwater impact or threat to life is anticipated (Appendix II).

Corrective Action

A Work Plan was submitted to NMOCD on April 15, 2015 and approved same day, with conditions. In fulfillment of the conditions and proposed work, DFSI personnel were on site to scrape the affected area of the caliche pad to 6" bgs and backfill with clean caliche. The areas around SP3 and SP4 were excavated to a depth of 4' bgs and backfilled with native topsoil. Contaminated soil was properly disposed of at NMOCD approved facility. The site was seeded with a BLM-NMOCD approved seed mix (Appendix III).

Based on the report and work completed, any remaining chloride, TPH and BTEX constituents in the vadose zone will not affect groundwater beneath this site, with vegetation expected to return to normal; therefore, DFSI, on behalf of Linn, submits the final C-141 (Appendix IV) and respectfully requests the closure of this regulatory file.

Please feel free to contact Mike Burton at 575-390-5454 with any questions concerning this closure request.

Sincerely,

Laura Horer

Laura Flores Diversified Field Services, Inc. 206 West Snyder | Hobbs, NM 88240 Office: (575)964-8394 | Fax: (575)964-8396 | Email: Iflores@diversifiedfsi.com

Figure: Site Diagram

Appendices: Initial C-141 Groundwater Study Site Photos Final C-141

Site Diagram



Appendix I

INITIAL C-141

Form C-141 Revised August 8, 2011

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505 Submit 1 Copy to appropriate District Office in accordance with 19.15.29 NMAC.

		,										
Release Notification and Corrective Action												
		OPERATOR	\boxtimes	Initial Report	Final Report							
Name of Company Linn Operating Inc.		Contact Brian Wall										
Address 2130 W Bender Blvd Hobbs, NM 88	8240	Telephone No. 575-738-1739										
Facility Name Caprock Maljamar Unit #38		Facility Type Injection										
Surface Owner State	Mineral Owner			API No. 30-025-	01485							

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
С	19	17S	33E	660	North	2047	West	Lea

Latitude 32.8254613924331 Longitude -103.704645184513

NATURE OF RELEASE

Type of Release Produced Water	Volume of Release 120 bbls	Volume Re	ecovered 70 bbls
Source of Release High Pressure Hose	Date and Hour of Occurrence		lour of Discovery
	10/20/2014	10/20/2014	8am
Was Immediate Notice Given?	If YES, To Whom?		
🛛 Yes 🗌 No 🗌 Not Require	d Jeff Robertson –BLM Tomas O	berding- NM	OCD
By Whom? Brian Wall	Date and Hour 10/22/2014 0800		
Was a Watercourse Reached?	If YES, Volume Impacting the Wa	tercourse.	
🗌 Yes 🖾 No			
If a Watercourse was Impacted, Describe Fully.*			
Describe Cause of Problem and Remedial Action Taken.* Electricians	called me and mentioned seeing a leak	on the ground	Went to location and saw
water being ejected into the air and spraying location with water. We sh			
connects to the inj well and the well head. Called Benco Svcs to vacuut			
taking water prior to incident.			BanJ • • • • • • • • • • • • • • • • •
Describe Area Affected and Cleanup Action Taken.* approximately 3			
Directions to site: Turn south on 126 from maljamar for approx. 1 mile		nue east for ap	pprox 5 miles until you hit
lease rd W3. turn left and continue 1 mile. Turn right and continue for a	bout 200 yds. Turn right to location		
	de la set a Cara da se da da se da set a da set		
I hereby certify that the information given above is true and complete to			
regulations all operators are required to report and/or file certain release public health or the environment. The acceptance of a C-141 report by			
should their operations have failed to adequately investigate and remed			
or the environment. In addition, NMOCD acceptance of a C-141 report			
federal, state, or local laws and/or regulations.	t does not reneve the operator of respon	Sibility for Co.	inpliance with any other
	OIL CONSER		NUSION
DA II	<u>OIL CONSER</u>	VATION	<u>JIVISION</u>
Signature:			
	Approved by Environmental Special	ct.	
Printed Name: Brian Wall	Approved by Environmental Special	.51.	
Title: Construction Foreman II	Approval Date:	Expiration D	ate:
E-mail Address: <u>bwall@linnnenergy.com</u>	Conditions of Approval:		Attached
Date: 10/22/2014 Phone: 806-367-0645			

* Attach Additional Sheets If Necessary

Appendix II

GROUNDWATER STUDY

	Wa									Enginee th to	er Water
A CLW##### in the POD suffix indicates the POD has been replaced & no longer serves a water right file.)	(R=POD replaced, O=orpha C=the file closed)	med,	(1	arters an			E 3=SW urgest)	/	3 UTM in mete	rs)	(In feet)
		POD					0 /	× ×		,	
		Sub-		QQ	~	_	_				Water
POD Number	Code	basin	County				-	Х	Y	1	DepthWater Colum
<u>ra 11911 pod1</u>			LE	1 3	1 24	4 17S	32E	619192	3632296	35	
								А	verage Depth	to Water:	
									Minim	um Depth:	
									Maxim	ım Depth:	
Record Count: 1											
PLSS Search:											
Section(s): 13, 24	4, 25	Townshi	o: 17S	Rar	ige: 3	2E					

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WATER COLUMN/ AVERAGE DEPTH TO WATER



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

(A CLW##### in the POD suffix indicates the POD has been replaced & no longer serves a water right file.)	(R=POD has be replaced, O=orphaned, C=the file is closed)	(q					7 2=NI st to la		7 4=SE) (NAD8	3 UTM in meters	·) (In	feet)	
	POI Sub		0	Q	0							W	ater
POD Number		n County	_	_	_	Sec	Tws	Rng	Х	Y	DepthWellDepth		
<u>L 02770</u>	L	LE				18	17S	33E	621836	3634093* 🧉	216	179	37
<u>L 02770 S2</u>	L	LE	2	2	3	18	17S	33E	621338	3633583* 🌍	214	184	30
<u>L 02770 S3</u>	L	LE	2	2	3	18	17S	33E	621338	3633583* 🥌	220	202	18
<u>L 02875</u>	L	LE		2	2	20	17S	33E	623662	3632717* 🌍	250	190	60
<u>L 03622</u>	L	LE				17	17S	33E	623053	3633703* 🌍	226	180	46
<u>L 03726</u>	L	LE	1	2	2	18	17S	33E	621930	3634400* 🌍	208	188	20
<u>L 12974 POD1</u>	L	LE	3	4	3	18	17S	33E	621233	3632940 🌍	140	130	10
<u>RA 11936 POD1</u>		LE	1	4	1	19	17S	33E	621246	3632321 🌍	92		
<u>RA 11937 POD1</u>		LE	1	4	1	19	17S	33E	621244	3632281 🌍	95		
<u>RA 11957 POD1</u>		LE	3	4	1	19	17S	33E	621177	3632200 🌍	55		
									1	Average Depth to	Water:	179 feet	
										Minimu	m Depth:	130 feet	
										Maximur	n Depth:	202 feet	
Record Count: 10													

PLSS Search:

Section(s): 17, 18, 19, 20, Township: 17S Range: 33E 29, 30

*UTM location was derived from PLSS - see Help

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.

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WATER COLUMN/ AVERAGE DEPTH TO WATER

Appendix III

SITE PHOTOS



Caprock Maljamar Unit #38

PHOTO PAGE



Spill area on caliche pad



Spill area in pasture



Contaminated area around wellhead



Contaminated area on caliche pad



Scraping caliche pad down to 6" bgs



Excavating pasture area to 4' bgs



Excavated area on pad and in pasture



Backfilled area with clean caliche



Backfilled pad and pasture area with caliche and topsoil, finished location

Appendix IV

FINAL C-141

State of New Mexico **Energy Minerals and Natural Resources**

Oil Conservation Division

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

District IV 1220 S. St. Fran	,	,	5			St. France, NM 875	·			.cordunce w		5.27 HMIAC			
		-	Rel	ease Notific		·		ction				_			
						OPERA'	ΓOR		🗋 Initia	al Report	\bowtie	Final Repo			
Name of Co	ompany: l	Linn Energy				Contact: Aa	ron Hickert		—						
		der, Hobbs,				Telephone No. 432-363-9496									
Facility Na	me: Caproo	ck Maljamar	Unit #03	38		Facility Typ	e: Injection					_			
Surface Ow	ner: State			Mineral C)wner:				API No	. 30-025-0	1485				
				LOCA	TIO	N OF RE	LEASE								
Unit Letter C	Unit Letter Section Township Range Feet from the No					South Line Iorth	Feet from 2047	East/W We	est Line st	County Lea					
			Latit	ude: 32.825461	392433	1 Longitud	e: -103.704645	184513							
				NAT	URE	OF REL				_					
Type of Rele		ed Water h Pressure Ho					Release: 120 bbl			Recovered: / Hour of Dis					
Source of Ke	iease: riigi	n Pressure no	se			10/20/2014		ce		4 8:00 AM	covery				
Was Immedi	ate Notice C					If YES, To	Whom?								
			Yes L	No 🗌 Not Re	equired		tson – BLM, Ton			OCD					
By Whom? Was a Water		hada				Date and Hour: 10/22/2014 8:00 AM If YES, Volume Impacting the Watercourse.									
was a water	course Read		Yes 🗵	No			nume impacting	the water	rcourse.						
	loses and re			ater. Leak was car n well was not tak											
On March 10 as well as BT Cardinal Lab conditions. 1 backfill with	, 2015, DFS EX. The B oratories of n fulfillmen clean calich	TEX samples Hobbs, NM to t of the condition. The areas a	vere on sit were perf o obtain c tions and j around SP.	ten. e to obtain sample formed using a M onfirmation. A W proposed work, D 3 and SP4 were e: ity. The site was	ini Rae F ork Plan FSI pers xcavated	Photoionization was submitted onnel were on to a depth of	on Detector (PID) ed to NMOCD of n site to scrape the f 4' bgs and back). Field s n April 15 he affected filled with	amples we 5, 2015 and d area of the h native to	re submitted d approved s he caliche pa	l for an same da ad to 6'	alysis at 1y, with ' bgs and			
regulations al public health should their c or the enviror	I operators : or the envir operations have ment. In a	are required to conment. The ave failed to a	o report ar acceptanc dequately CD accep	is true and comp ind/or file certain m e of a C-141 report investigate and m tance of a C-141	elease no ort by the emediate	otifications and NMOCD m	nd perform correct arked as "Final R on that pose a thr e the operator of	ctive action Report" do reat to gro responsib	ons for rele bes not reli bund water bility for co	eases which eve the oper , surface wa ompliance w	may en ator of ter, hur ith any	danger liability nan health			
Signature:	Ja	X	T				OIL CON			DIVISIC	<u>N</u>				
Printed Name	:: Aaron Hic	kert				Approved by	Environmental S	pecialist:							
Title: Sr EH&	S Represen	itative				Approval Dat	e:	E	xpiration I	Date:					
		@linnenergy.				Conditions of	Approval:			Attached					
Date: 04/	17/2017	Phone: 432-3	505-9496							1					

* Attach Additional Sheets If Necessary