Initial

Application

Part I

Received: <u>08/27/2019</u>

This application is placed in file for record. It MAY or MAY NOT have been reviewed to be determined Administratively Complete

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

Phone: (575) 393-6161 Fax: (575) 393-0720 District II

811 S. First St., Artesia, NM 88210 Phone: (575) 748-1283 Fax: (575) 748-9720

District III 1000 Rio Brazos Road, Aztec, NM 87410 Phone: (505) 334-6178 Fax: (505) 334-6170 District IV

1220 S. St. Francis Dr., Santa Fe, NM 87505 Phone: (505) 476-3460 Fax: (505) 476-3462

State of New Mexico

Form C-101 Revised July 18, 2013

Energy Minerals and Natural Resources

Oil Conservation Division

☐AMENDED REPORT

1220 South St. Francis Dr.

Santa Fe, NM 87505

APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, P	LUGBACK, OR ADD A ZONE
1. Operator Name and Address	2. OGRID Number

Goodnig 5910 N C	ht Mids Central	stream P Expressy	372311 30-025-	² OGRID Number						
4. Prope	erty Code		VERLANDI	ER SWD	^{3.} Property Name			1 6. We	ll No.	
7. Surface Location										
UL - Lot	Section	Township	Range	Lot Idn	Feet from	N/S Line	Feet From	E/W Line	County	
Н	12	21S	36E		2482	N	1277	E	Lea	
				8 Propos	sed Bottom Hol	e Location				
UL - Lot	Section	Township	Range	Lot Idn	Feet from	N/S Line	Feet From	E/W Line	County	
				9. P	ool Information	n				
SWD	SWD; San Andres - Glorieta									
	Additional Wall Information									

^{11.} Work Type	12.	Well Type S	Vell Type S 13. Cable/Rotary R		е Туре	15. Ground Level Elevation 3503.33'
^{16.} Multiple	^{17.} Pr	oposed Depth	^{18.} Formation	19. Con	ractor	^{20.} Spud Date
N	5650'		San Andres - Glorieta	TBD		Upon C-108 approval
Depth to Ground water 154' in CP 00986 PC	DD1		n nearest fresh water well hwest of Robert McCas	sland well		earest surface water

$\fbox{\textbf{X}}$ We will be using a closed-loop system in lieu of lined pits

^{21.} Proposed Casing and Cement Program

Type	Hole Size	Casing Size	Casing Weight/ft	Setting Depth	Sacks of Cement	Estimated TOC				
Surface	12.25"	9.625"	40	1280'	705	GL (circulate)				
Production	8.75"	7"	26	5650'	1475	GL (Circulate/CBL)				

Casing/Cement Program: Additional Comments

^{22.} Proposed Blowout Prevention Program

Туре	Working Pressure	Test Pressure	Manufacturer
Annular & Rams	3000 psi	3000 psi	TBD

^{23.} I hereby certify that the information given above is true and best of my knowledge and belief.		OIL CONSERVATION DIVISION			
I further certify that I have complied with 19.15.14.9 (A) N 19.15.14.9 (B) MAC , if applicable.	MAC 🔽 and/or	Approved By:			
Signature: 1 Ch. A. 1 Ch.					
Printed name: Rich Rehm		Title:			
Title: COO		Approved Date:	Expiration Date:		
E-mail Address: rrehm@goodnightmidstream	n.com				
Date: 7/25/19 Phone: (214) 891-2039		Conditions of Approval Attached			

District I

1625 N. French Dr., Hobbs, NM 88240 Phone: (575) 393-6161 Fax: (575) 393-0720 District II

811 S. First St., Artesia, NM 88210 Phone: (575) 748-1283 Fax: (575) 748-9720

<u>District III</u> 1000 Rio Brazos Road, Aztec, NM 87410 Phone: (505) 334-6178 Fax: (505) 334-6170

District IV

12 Dedicated Acres

¹³ Joint or Infill

⁴ Consolidation Code

1220 S. St. Francis Dr., Santa Fe, NM 87505 Phone: (505) 476-3460 Fax: (505) 476-3462

State of New Mexico Energy, Minerals & Natural Resources Department OIL CONSERVATION DIVISION

1220 South St. Francis Dr. Santa Fe, NM 87505

Form C-102 Revised August 1, 2011 Submit one copy to appropriate District Office

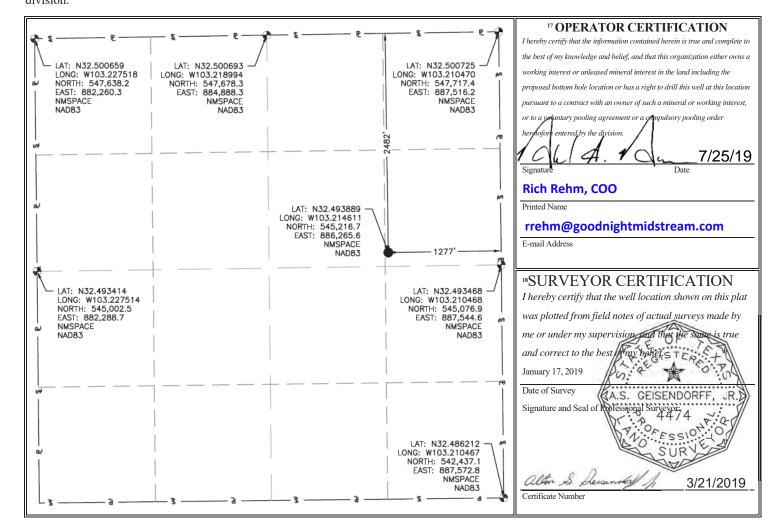
AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number				² Pool Code 372311		³ Pool Name SWD; SAN ANDRES - GLORIETA				A
4 Property Code 5 Property Name VERLANDER SWD								6 1	Well Number #1	
⁷ OGRID No. 8 Operator Name GOODNIGHT MIDSTREAM							C			⁹ Elevation 3503.33'
					¹⁰ Surface 1	Location				
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	Eas	t/West line	County
H	12	21S	36E		2482'	NORTH	1277'		EAST	LEA
	¹¹ Bottom Hole Location If Different From Surface									
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	Eas	t/West line	County

No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.

Order No.



		201	
08/27/2019	REVIEWER:	TYPE: SWD	APP NO: pDHR1924054414

ABOVE THIS TABLE FOR OCD DIVISION USE ONLY

	NEW MEXICO OIL CONSER	VATION DIVISION	SANE OF NEW MEANS
	- Geological & Engineeri	ng Bureau –	
	1220 South St. Francis Drive, Sar	nta Fe, NM 87505	COMMINION OF
	ADMINISTRATIVE APPLICA	TION CHECKLIST	
	THIS CHECKLIST IS MANDATORY FOR ALL ADMINISTRATIVE APPLI REGULATIONS WHICH REQUIRE PROCESSING AT T		ivision rules and
	Goodnight Midstream Permian, LLC	OGRID	Number: <u>372311</u>
Well Name:	VERLANDER SWD #1	API: 30	
Pool: SWD	; San Andres-Glorieta	Pool Co	de: 96127
SUBMIT A	CCURATE AND COMPLETE INFORMATION REQ		TYPE OF APPLICATION
1) TYPE OF	APPLICATION: Check those which apply for	SWD-226	51
	cation – Spacing Unit – Simultaneous Dedicat		
71. 200	하는데 있었다. [1] [1] [1] [1] [1] [1] [1] [1] [1] [1]	ISP (PRORATION UNIT)	
B Ch	eck one only for [I] or [II]		
	Commingling – Storage – Measurement		
1,1		OLS DOLM	
T II	Injection – Disposal – Pressure Increase – En		
Į ii	WFX □PMX ■SWD □IPI □	EOR PPR	
	□ WEY □ EMY ■3WD □IEI □	LOK DILK	FOR OCD ONLY
O) NOTIFIC	ATION RECUIRED TO: Chack those which and	dve	TOR OCD CIVET
	ATION REQUIRED TO: Check those which app Offset operators or lease holders	ny.	Notice Complete
	Royalty, overriding royalty owners, revenue c	Numors	
	Application requires published notice	WI 1613	Application
	Notification and/or concurrent approval by	0.12	☐ Content
	Notification and/or concurrent approval by		Complete
	Surface owner	DLIVI	
	For all of the above, proof of notification or p	sublication is attached	d and/or
	[1] [1] [1] [2] [3] [3] [4] [4] [4] [4] [4] [4] [4] [4] [4] [4	DODICCITOTIS CITACHE	a, ana/or,
п. 🗌	No notice required		
3) CERTIFIC	CATION: I hereby certify that the information s	whmittad with this an	olication for
	trative approval is accurate and complete to	**************************************	
	and that no action will be taken on this applic		- 11 10 - 1 11 11 11 11 11 11 11 11 11 11 11 11
	rions are submitted to the Division.	canon ornii me require	ed information and
Homicui	ions are submitted to the Division.		
	Note: Statement must be completed by an individual w	ith managerial and/or superv	isory capacity.
		7/25/19	
Rich Rehm	coo	Date	
Print or Type N	Name	(214) 391 2039	
1	Λ	Phone Number	
/ . /	/ /	FIIONE NUMBER	
10kl 4	4. 1 Ju	wohm@===d=!=L+	midstroom saw
1011		rrehm@goodnight	miastream.com

e-mail Address

Signature

STATE OF NEW MEXICO ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

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

FORM C-108 Revised June 10, 2003

APPLICATION FOR AUTHORIZATION TO INJECT

I.	PURPOSE:Secondary RecoveryPressure MaintenanceXDisposalStorage Application qualifies for administrative approval?YesNo										
II.	OPERATOR: Goodnight Midstream Permian, LLC (OGRID 372311)										
	ADDRESS:5910 N Central Expressway, Suite 850 Dallas, TX 75206										
	CONTACT PARTY: Agent: Midcon Resource Group, LLC - Thomas Schumacher PHONE: (701) 400-9909										
III.	Agent Email: tom@midcongroup.com WELL DATA: Complete the data required on the reverse side of this form for each well proposed for injection. Additional sheets may be attached if necessary.										
IV.	Is this an expansion of an existing project?YesXNo If yes, give the Division order number authorizing the project:										
V.	Attach a map that identifies all wells and leases within two miles of any proposed injection well with a one-half mile radius circle drawn around each proposed injection well. This circle identifies the well's area of review.										
VI.	Attach a tabulation of data on all wells of public record within the area of review which penetrate the proposed injection zone. Such data shall include a description of each well's type, construction, date drilled, location, depth, record of completion, and a schematic of any plugged well illustrating all plugging detail.										
VII.	Attach data on the proposed operation, including:										
	 Proposed average and maximum daily rate and volume of fluids to be injected; Whether the system is open or closed; Proposed average and maximum injection pressure; Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water; and, If injection is for disposal purposes into a zone not productive of oil or gas at or within one mile of the proposed well, attach a chemical analysis of the disposal zone formation water (may be measured or inferred from existing literature, studies, nearby wells, etc.). 										
*VIII.	Attach appropriate geologic data on the injection zone including appropriate lithologic detail, geologic name, thickness, and depth. Give the geologic name, and depth to bottom of all underground sources of drinking water (aquifers containing waters with total dissolved solids concentrations of 10,000 mg/l or less) overlying the proposed injection zone as well as any such sources known to be immediately underlying the injection interval.										
IX.	Describe the proposed stimulation program, if any.										
*X.	Attach appropriate logging and test data on the well. (If well logs have been filed with the Division, they need not be resubmitted).										
*XI.	Attach a chemical analysis of fresh water from two or more fresh water wells (if available and producing) within one mile of any injection or disposal well showing location of wells and dates samples were taken.										
XII.	Applicants for disposal wells must make an affirmative statement that they have examined available geologic and engineering data and find no evidence of open faults or any other hydrologic connection between the disposal zone and any underground sources of drinking water.										
XIII.	Applicants must complete the "Proof of Notice" section on the reverse side of this form.										
XIV.	Certification: I hereby certify that the information submitted with this application is true and correct to the best of my knowledge and belief.										
	NAME: Rich RehmTITLE: COO										
	SIGNATURE:										
	E-MAIL ADDRESS: rrehm@goodnightmidstream.com										
*	If the information required under Sections VI, VIII, X, and XI above has been previously submitted, it need not be resubmitted. Please show the date and circumstances of the earlier submittal:										

INJECTION WELL DATA SHEET

OPERATOR: Goodnight Midstream Permian, LLC

WELL NAME & NUMBER: VERLANDER SWD #001

WELL LOCATION: 2482' FNL & 1277' FEL H 12 21S 36E

FOOTAGE LOCATION UNIT LETTER SECTION TOWNSHIP RANGE

WELLBORE SCHEMATIC

WELL CONSTRUCTION DATA Surface Casing

							Surface C	asing		
Г	0'	Annulus monitored or open to atmosphere		Injection pressure regulated to <= 850 psi (MAIP2 psi per foot) GL: 3503.3'	Hole Size: 12-	705	sx.		g Size: 9-5/8"	
-	1000′	Anhydrite – 1255'		Surface Casing: 9.625" 40# J-55 set to 1,280' in 12.25" hole with 705 sacks of cement circulated to surface	Top of Cement:	0'	Intermediate		d Determined: _	Circulated
_	2000′	Salt – 1765′	8000000	Production Casing: 7.0" 26# J-55 casing set to	Hole Size:				g Size:	
	3000′	Yates - 2655' 7 Rivers - 2920'		5,650' in 8.75" hole with 1475 sacks of cement circulated to surface	Cemented with: Top of Cement:		1,4500,10		d Determined:	ft³
		Queen – 3420' Grayburg – 3705'		Tubing: 4.5" 11.6# L-80, LT&C fiberglass-lined steel set to 4,200'			Production		_	
	4000'	San Andres – 4015'			Hole Size: 8-3	/4"		Casing	g Size: 7"	-
			200	Packer: 7" Arrowset 1-X stainless packer set at 4,200'	Cemented with:					and the same of the same
	5000'	Glorieta – 5220'		Perforations: 4,251' – 5,550' San Andres - Glorieta	Top of Cement: Total Depth:			Metho	d Determined:	Circulated & CBI
-	6000'	Paddock – 5555' Blinebry – 5765'	(Characelli)	PBTD: ~5,604' Total Depth: 5,650'	Total Depth:	3030	Injection I	nterval		
						4251'	feet	to	5550'	
	7000′				-	(Perforate	ed or Open Ho	ole; indi	cate which)	

INJECTION WELL DATA SHEET

Tuł	Гubing Size:Lining	Material: Fiberglass						
Ty	Type of Packer: 7" Arrowset 1-X Stainless Steel							
Pac	Packer Setting Depth: Proposed-4,200'							
Otl	Other Type of Tubing/Casing Seal (if applicable):							
	Additional D	<u>ata</u>						
1.	1. Is this a new well drilled for injection?	X_YesNo						
	If no, for what purpose was the well originally drill	ed?						
2.	J							
3.	3. Name of Field or Pool (if applicable): SWD; San Ar	ndres-Glorieta (96127)						
4.		Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail, i.e. sacks of cement or plug(s) used. No						
5.	nderlying or overlying the proposed							
	Over: Yates~ (2655'); Seven Rivers ~(2920'); Quee	n ~(3420'); Grayburg ~(3705')						
	Under: Blinebry ~(5765'); Tubb ~(6355'); Drinkard	l ~(6740')						

APPLICATION FOR AUTHORIZATION TO INJECT

VERLANDER SWD #1 – API# 30-025-XXXXX 2482' FNL & 1277' FEL, Unit H of Sec 12-T21S-R36E Lea County, New Mexico

I. PURPOSE: The purpose of this application is to gain approval to drill and complete the VERLANDER SWD #1 well within the San Andres and Glorieta formations. This application DOES qualify for administrative approval.

II. OPERATOR: Goodnight Midstream Permian, LLC (OGRID 372311)

ADDRESS: 5910 N Central Expressway, Suite 850 Dallas, TX 75206 OPERATOR PHONE: (214) 891-2039

AGENT: Midcon Resource Group, LLC – Thomas Schumacher

AGENT PHONE: (701) 400-9909 AGENT EMAIL: tom@midcongroup.com

- II. WELL DATA: Well data for this application is listed below and detailed on the Proposed Wellbore Schematic that is included as Attachment III-1.
 - A. The following well data must be submitted for each injection well covered by this application. The data must be both in tabular and schematic form and shall include:
 - (1) LEASE NAME: VERLANDER SWD LEASE TYPE: Fee WELL NAME & NO.: VERLANDER SWD #1 LOCATION: 2482' FNL & 1277' FEL, Unit H of Sec 12-T21S-R36E
 - (2) SURFACE CASING: The 9.625" 40# J-55 will be set to 1,280' in 12.25" hole and cemented with 705 sacks of cement circulated to surface.
 PRODUCTION CASING: The 7" 26# J-55 production casing will be set to 5,650' in an 8.75" hole and cemented with 1475 sacks of cement circulated to surface and confirmed with CBL.
 - (3) TUBING: 4.5" 11.6# L-80, LT&C fiberglass-lined steel tubing will be set to ~4,200'.
 - (4) PACKER: 7" Arrowset 1-X stainless packer will be set to ~4,200'.
 - B. The following must be submitted for each injection well covered by this application. All items must be addressed for the initial well.
 - (1) INJECTION FORMATION: SWD; San Andres-Glorieta (96127)
 - (2) INJECTION INTERVAL: This application is proposing to perforate the San Andres and Glorieta intervals from 4,251′ 5,550′.
 - (3) WELL'S ORIGINAL PURPOSE: The well will be drilled as a saltwater disposal well.
 - (4) CURRENT PERFORATED INTERVAL STATUS: Well has not yet been drilled.
 - (5) NEXT HIGHER OIL/GAS ZONE:

EUNICE MONUMENT, GRAYBURG-SAN ANDRES. The ROY RIDDEL #3 well (API# 30-025-35486) is approximately 2250' south-southeast from the proposed VERLANDER SWD #1 and produces from this "pool" but was never completed within the San Andres Formation.

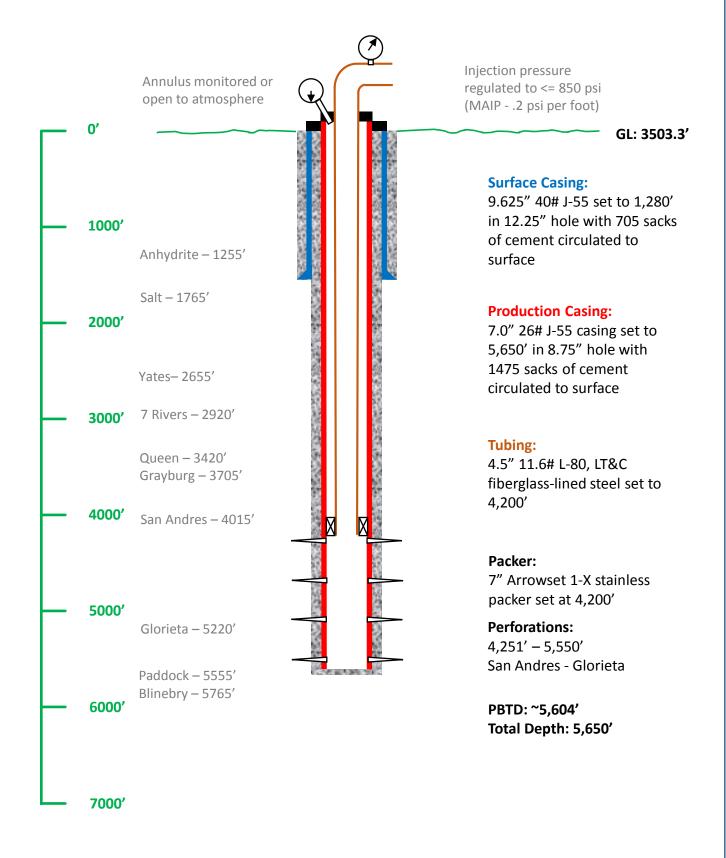
PENROSE SKELLY, GRAYBURG. The ALEXANDER #1 well (API# 30-025-09905) is approximately 2100' east-southeast from the proposed VERLANDER SWD #1 and produces from the Grayburg Formation.

NEXT LOWER OIL/GAS ZONE:

BLINEBRY OIL & GAS. The DECK SATATE 7 #1 well (API# 30-025-33677) is approximately 2450' southwest of the proposed VERLANDER SWD 1 and produces from this pool.

Proposed Wellbore Schematic – Attachment III-1

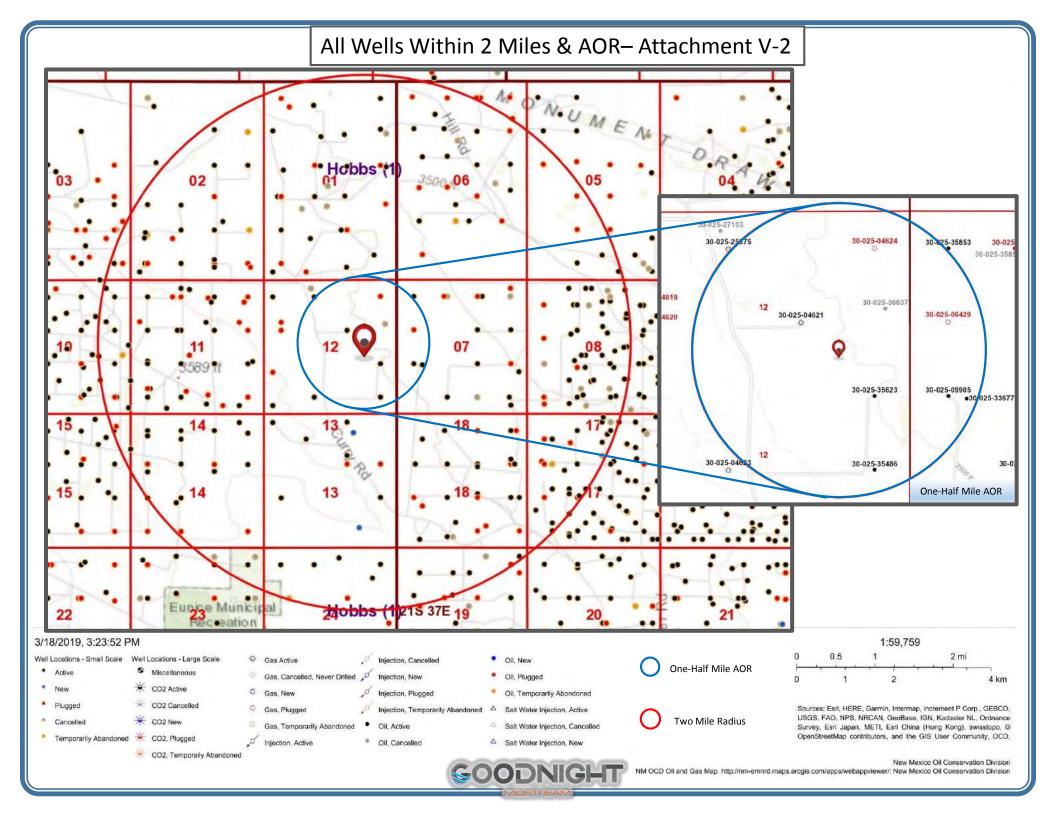
VERLANDER SWD #001 – API# 30-025-XXXXX 2482' FNL & 1277' FEL, Unit H of Sec 12-T21S-R36E Lea County, New Mexico

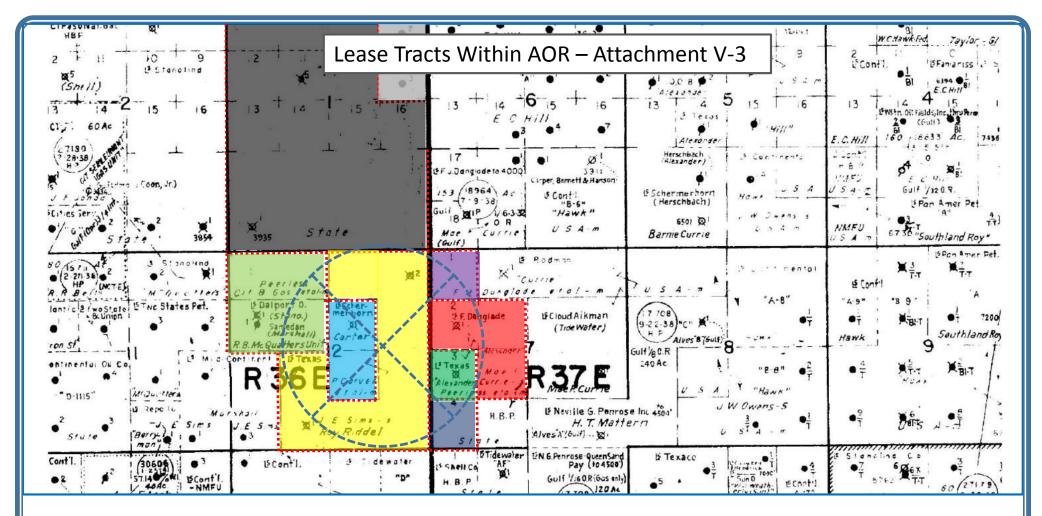




- IV. EXPANSION PROJECT STATUS: This is not an expansion of an existing project. It is a request to complete the proposed VERLANDER SWD #1 within the San Andres and Glorieta intervals from 4,251′ 5,550′.
- V. AREA OF REVIEW MAPS: Maps that identify New Mexico State Land leases and wells within two miles of the proposed VERLANDER SWD #1 are included as Attachments V-1 and V-2. They both include finer detailed one-half mile inset maps. Attachment V-3 details a historic plat overlain with the individual NM and privately leased tracts and a chart that defines these tracts within the AOR.

All Leases Within 2 Miles & AOR – Attachment V-1 A0137550 B08518 NMNM : 002512 EUMONT HARDY: B0148118 A0135012B01167 NMNM 094867 A0137555 B0 03350 B015350000 Hobbs (1) B02291 B01557 NMLG 0031741B MNM MENT SOUTH Private B0148118 5 36E B02301 A0137552B0252712 10 07 W BLINE UNI Private leases described MONUMENT SOUTH B015370 MANNA in Attachments V-3 0574B0252715 B0116742B 11300 14 NMLC)32099B_{/9} **13** B B02301150153 B02301 NMNM One-Half Mile AOR B02291 1 8015370 W BLINEBRY DRINKARD; 14IMLC 0032099B0999 13 B081054 30155315 A015738 0032591B NMLC 0032591A B017321 96Mate 8A0 37552 B01048 NE DRI 21 20 3/18/2019, 3:07:58 PM 1:59,759 OCD Districts 0.5 2 mi BLM Fluid Min Leases (Updated 6-1-2017) One-Half Mile AOR * OCD District Offices Comm Agreements (Updated 6-1-2017) PLSS First Division Participating Areas (Updated 6-1-2017) U.S. BLM, Sources: Esri, HERE, Garmin, Intermap, increment P PLSS Townships Land Ownership **FWS** Two Mile Radius Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong BLM NMSLO Oil and Gas Leases (Updated Weekly) Kong), swisstopo, @ OpenStreetMap contributors, and the GIS User BOR BOR BLM Fluid Min Units (Updated 6-1-2017) New Mexico Oil Conservation Division NM OCD Oil and Gas Map. http://nm-emnrd.maps.arcgis.com/apps/webappviewer/: New Mexico Oil Conservation Division





		LEAS	SE DETAILS WITHIN AOR		
Tract in AOR	Color on Map	Lessor	Lessee	Well Operator(s)	Notification Requirement
Section 1-21S-36E Less L1, L8, L9		NMSLO (B015350000)	Conoco Phillips Co.	ConocoPhillips Co.	Operator and NMSLO
N2NW; S2NW Section 12-21S-36E		Private	See Attachments XIII-1 & XIII-1.1	Petroleum Exploration Company Ltd., Limited	Operator and mineral owners
NWSE; SWNE Section 12-21S-36E		Private	See Attachments XIII-2 & XIII-2.1	Special Energy Corp.	Operator and mineral owners
NWNE; E2NE; E2SE; SWSE; E2SW Section 12-21S-36E		Private	See Attachment XIII-3 & XIII-3.1	Chevron U S A INC	Operator and mineral owners
Lot 1 (NWNW) Section 7-21S-37E		Private	See Attachment XIII-4	Apache Corporation	Operator
Lot 2 (SWNW); SENW; NESW Section 7-21S-37E		Private	See Attachment XIII-5 & XIII-5.1	None	Mineral owners
Lot 3 (NWSW) Section 7-21S-37E		Private	See Attachment XIII-6	Upland Production Company/Penroc Oil Corp.	Operators
Lot 4 (SWSW) Section 7-21S-37E		NMSLO (E01057000)	Fulfer Oil & Cattle LLC	None	Operator & NMSLO



One-Half Mile AOR



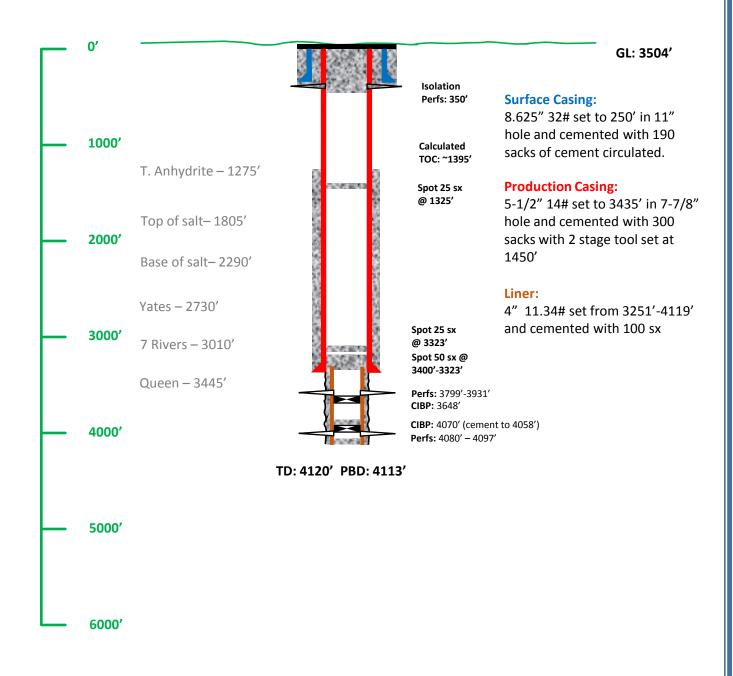
*VI. DATA ON WELLS IN AOR: OCD GIS details 8 wells within the one-half mile AOR consisting of 4 active producers, 3 P&A's and 1 cancelled APD. A tabulation of data of public record for these wells is included as Attachment VI-1. It includes each well's type, status, pool, construction, location, GL, and TVD. Detailed schematics are included as Attachments VI-2, VI-3, VI-4 and VI-5 for four wells that may have penetrated the proposed injection zone.

Data on Wells in AOR – Attachment VI-1

APP WIND WIND Operator	•		•	VERLAND	ER SV	VD 1 Area of Review Wells				
This is a vertical gas well that was spud on 01/3/1954. 8-5/8" surface casing was set to 1350" and cemented with 500 sacks circulated to surface. 88 joints of 5-1/2" casing was set to 3416" and cemented with 300 sacks. The well was then performed allow 28/4954. This well one performed the San Andres or Giorieta. 30-20-504624 ROY RIDDEL MOO2 TEMACO EXPLORATION & PRODUCTION INC. PRAR Released 30-20-504624 ROY RIDDEL MOO2 TEMACO EXPLORATION & PRODUCTION INC. PRAR Released 30-20-504624 ROY RIDDEL MOO2 TEMACO EXPLORATION & PRODUCTION INC. PRAR Released 30-20-504624 ROY RIDDEL MOO2 TEMACO EXPLORATION & PRODUCTION INC. PRAR Released 30-20-504624 BLEANDER ROID This is a vertical gas well that was spud on 5/13/1955. so 11/14/19/1955. on 11/14/19/1956. on 11/14/19/1955. on 11/14/19/1956. on 11/14/14/19/1956. on 11/14/19/1956. on 11/14/19/1956. on 11/14/19/1956. on 11/14/19/1956. on 11/14/19/1956. on 11/14/19/1956. on 11/14/14/19/1956. on 11/14/19/1956. on 11/14/14/19/1956. on 11/14/14/19	# API #	Well Name	Operator	Status	Туре	Well Completions	Location	GL	TVD	X SA?
3430** 3450** and *Completed on 9/28/1954. This well never penetrated the San Andres or Gloriesta. 3400** 15025-04624 ROY RIDDEL R002 TEXACO EXPORATION & PRODUCTION INC P&A Released Gas [76480] EUMONT, YATES* RVRS*-QUEEN (GAS) A 12-215-36E 3501* 3676* No This is a vertical gas well that was spud on 5/13/1955. 8-788* surface casing was set to 1328* and cemented with 500 sack; 5-1/2 production casing was set to 3330* and cemented with 500 sack; The well was then drilled out to 3676* and an ormpleted open hole on 6/1/1955. 00 A/1/3/1954 operator pulled 2200* of 5-1/2* casing; spotted 30 sx plug; 9 3676* and 3505*; 15 sx plugs at top of unrecoverable 5-1/2* and g bottom of 8-5/8* surface casing and another 5 sx plug as surface pulled and the well was spad on 5/24/1954. 8-5/8* surface casing was set to 3330* and cemented with 300 sack from the well was then drilled out to 3650* and completed open hole. After depletion, the well was settled to 119; a liner was run, perfed, and was suproductive. The well was plugged back to 4058* and perfed from 3799-3931*. The well was settled to 119; a liner was run, perfed, and was unproductive. The well was plugged back to 4058* and perfed from 3799-3931*. The well was settled to 119; a liner was run, perfed, and was unproductive. The well was plugged back to 4058* and perfed from 3799-3931*. The well was settled to 119; a liner was run, perfed, and was unproductive. The well was plugged back to 4058* and perfed from 3799-3931*. The well was settled to 119; a liner was run, perfed, and was unproductive. The well was plugged back to 4058* and perfed from 3799-3931*. The well was settled to 119; a liner was run, perfed, and was unproductive. The well was plugged back to 4058* and perfed from 3799-3931*. The well was settled to 119; a liner was run, perfed, and was unproductive. The well was plugged back for 4058* and perfed from 3799-3931*. The well was settled to 1000* and settled as 415*. This is a vertical perfect of the settled of 119; a liner was run, perfed, a	1 30-025-04621	CARTER #001	SPECIAL ENERGY CORP	Active	Gas	[76480] EUMONT, YATES-7 RVRS-QUEEN (GAS)	G-12-21S-36E	3616'	3630'	No
30.025-06424 ROY RIDDEL 4002 TEXACO EXPLORATION & PRODUCTION INC PRA Released Gas [7.6480] EUMONT, YATES 7 RVRS-QUEEN (GAS) A.12-215-36E 3501 3676 No This is a vertical gas well that was spud on 5/13/1955. 8-5/8" surface casing was set to 1328 and cemented with 800 sack; 5-1/2" production casing was set to 3350" and generated with 500 sack; 5-10/2" roduction casing was set to 3350" and generated with 500 sack; 5-10/2" roduction casing was set to 3530" and generated with 500 sack; 5-10/2" roduction casing was set to 3200 and cemented with 500 sack; 5-10/2" roduction casing was set to 3530" and generated for some of so	This is a vertica	I gas well that was spud on 9/	19/1954. 8-5/8" surface casing was set to 1350	0' and cemented with 50	00 sac	ks circulated to surface. 88 joints of 5-1/2" casing was set to 3416' and cemented with 3 $$	00 sacks. The well w	as then	perforat	ted from
This is a vertical gas well that was spud on \$/13/1955. 8-3/8" surface casing was set to 1328" and cemented with 800 sack; 5-1/2" production casing was set to 3380" and cemented with 500 sack; The well was then drilled out to 3676" and all completed open hole on 61/1955. On 41/4/1966 or 40/14/1960 perceptor pulled 2200" of 5-1/2" casing; spotted 30 sx plugs 98/676" and 3505"; 15 sx plugs at 100 or	3430' - 3630' ar	nd completed on 9/28/1954. T	his well never penetrated the San Andres or Gl	orieta.						
open hole on 6/1/1955. On 4/14/1964 operator pulled 2200 of 5-1/2" casing: spotted 30 sx plugs @ 3676 and 3505; 15 sx plugs at top of unrecoverable 5-1/2" and @ bottom of 8-5/8" surface casing; and another 5 sx plug as surface plug and the well was P&A/d. This well never penetrated the San Andres or Glorieta. 30-025-06429 ALEXANDER #001 MILARD DECK ESTATE P&A Released Gas (76480) EUMONT, VATES-7 RVRS-QUEEN (GAS) E (Lot2)-7-215-37E 3504° 4119° Yes This is a vertical gas well that was spud on 9/29/1954, 8-5/8" surface casing was set @ 250° and cemented to surface with 190 sx; 5-1/2" production casing was ran to 3439° and cemented with 300 sx of cement using 2 stage cementing tool. The well was then dilled out to 3650° and completed open hole. After depletion, the well was set mode do 4.119.9 in the rws srun, perfed, and was unproductive. The well was 1900 and was unproductive. The well was 1900 and was unproductive. The well was 1900 and 1900	2 30-025-04624	ROY RIDDEL #002	TEXACO EXPLORATION & PRODUCTION INC	P&A Released	Gas	[76480] EUMONT, YATES-7 RVRS-QUEEN (GAS)	A-12-21S-36E	3501'	3676'	No
was P8A*0. This well never penetrated the San Andres or Glorieta. Active Oil Godd Godd Elevator Godd Elev		•	· · · · · · · · · · · · · · · · · · ·			· · · · · ·				•
30-025-06429 ALEXANDER #R001 MILLARD DECK ESTATE P&A Released Gas 76480] EUMONT, YATES-7 RVRS-QUEEN (GAS) E (Lot2)-7-215-37E 3504* 4119* Yes This is a vertical gas well that was spud on 9/29/1595. 8/6" surface casing was set @ 250* and cemented to surface with 190 sx; 5-1/2" production casing was ran to 3435' and cemented with 300 sx of cement using 2 stage cementing tool. The well was perfected post 1919, a liner was run, feed, and was unproductive. The well was plugged back to 4058' and perfed from 3799-3931*. The well was PARJ 88/27006 with 50 sx plug @ 3400*-3323*; 25 sx plug @ 3323*; 25 sx plug @ 3323*; 25 sx plug @ 3325* and 92 sx plug @ 350* thru perfs to surface and the site released. This well may have penetrated the upper San Andres but no record of production can be found and the calculated cement top adequately isolates the proposed injection zone sematic is included as Attachment VI-2 30-025-09905 ALEXANDER #001 UPLAND PRODUCTION COMPANY Active 01 [50350] PENROSE SKELLY, GRAYBURG L (Lo13)-7-215-378 3504* 3835* No This is a vertical oil well that was spud on 5/13/1936. 13-5/8" casing was set at 239* cemented with 250 sx, 9-5/8* casing set to 3139* with 800 sx and 7" casing to 3157* cemented with 235 sx. The well was apparently drilled out to 3835 and completed open hole then plugged back from 3829* to 3817* idue to a high oil/gas ratio and shot from 3760* to 3817*. This well never penetrated the San Andres or Glorieta. This is a vertical oil well that was spud on 12/17/1996, 13-3/8" surface casing was set ed 350 with 455 sx (circulated). Feed with 250 sx, Perfs (circulated). Feed with 250 sx, Perf				x plugs @ 3676' and 350)5'; 15	6 sx plugs at top of unrecoverable $$ 5-1/2" and $$ @ bottom of 8-5/8" surface casing; and an	other 5 sx plug as su	rface plu	ıg and tl	ne well
This is a vertical gas well that was spud on 9/29/1954. 8-5/8" surface casing was set @ 250' and compeleted to 9/1954, 8-5/8" surface casing was set @ 250' and compeleted open hole. After depletion, the well was extended to 4119, a liner was run, perfed, and was unproductive. The well was plugged back to 4058' and perfed from 3799-3931'. The well was P&A'd 8/2/2006 with 50 sx plug@ 3400' 3402 sx plug@ 350' thru perfs to surface and the site refered, and was unproductive. The well was plugged back to 4058' and perfed from 3799-3931'. The well was P&A'd 8/2/2006 with 50 sx plug@ 3400' 3402 sx plug@ 350' thru perfs to surface and the site refered, and was unproductive. The well was plugged back to 4058' and perfed from 3799-3931'. The well was part of the proposed injection zone. Wellbore scematic is included as Attachment VI-2 30-025-99905 ALEXANDER #001 UPLAND PRODUCTION COMPANY Active Oil [50350] PENROSE SKELLY, GRAYBURG Li(1013)-7-215-37E 3504' 3815' No This is a vertical oil well that was spud on 5/13/1936. 31-5/8" casing was set at 239' cemented with 250 sx. 9-5/8" casing set to 1319' with 800 sx and 7" casing to 3157' cemented with 235 sx. The well was apparently drilled out to 3835' and completed on the horizon open hole then plugged back from 3829' to 3817' due to a high oil/gas ratio and shot from 3760' to 3817'. This well never penetrated the San Andres or Glorieta. 30-025-33677 DECK ESTATE 7 #001 PENROC OIL CORP Active Oil [6660] BLINERRY OIL AND GAS (OIL); [29760] HARDN, TUBB-DRINKARD; [96705] Li(1013)-7-215-37E 3490' 10100' Yes United San Andres Set to 4000' with 1900 sx (circulated); and 5-1/2" production casing was set to 10100' and cemented with 256 sx. The well was perforated @ 9600'-9950' and completed in the Melkee on 3/25/1997. The well was soon plugged back, the Glorieta and San Andres were perforated and tested on the way out of the hole and the well P&A'd on 7/9/1998. No commercial production was ever recorded for the San Andres or Glorieta. The well wa	was P&A'd. This	s well never penetrated the Sa	n Andres or Glorieta.							
then drilled out to 3650' and completed open hole. After depletion, the well was extended to 4119', a liner was run, perfed, and was unproductive. The well was plugged back to 4058' and perfed from 3799-3931'. The well was P&A'd 8/2/2006 with 50 sx plug @ 3323'; 25 sx plug @ 3323'; 25 sx plug @ 3323'; 25 sx plug @ 352' intro 92 sx plug @ 350' intro perfet to surface and the site released on the site of site released on the site of site released o	3 30-025-06429	ALEXANDER #001	MILLARD DECK ESTATE	P&A Released	Gas	[76480] EUMONT, YATES-7 RVRS-QUEEN (GAS)	E (Lot2)-7-21S-37E	3504'	4119'	Yes
plug @ 3400-3323*; 25 sx plug @ 3323*; 25 sx plug @ 350* thru perfs to surface and the site released. This well may have penetrated the upper San Andres but no record of production can be found and the calculated cement top adequately isolates the proposed injection zone. Wellboor scenaria is included as Attachment VI-2 30-025-0990S ALEXANDER #001 UPLAND PRODUCTION COMPANY Active Oil [50350] PENROSE SKELLY, GRAYBURG L(L013)-7-215-37E 3504 3835 No This is a vertical oil well that was spud on 5/13/1936. 13-5/8* casing was set at 239' cemented with 250 sx, 9-5/8* casing set to 1319' with 800 x and 7* casing to 3157' cemented with 235 sx. The well was apparently drilled out to 3835 and completed open hole then plugged back from 3829' to 3817' due to a high oil/gas ratio and shot from 3760' to 3817. This well never penetrated the San Andres or Glorieta. 30-025-33677 DECK ESTATE 7 #001 PENROC OIL CORP Active Oil (6660] BlinbEBRY OIL AND GAS (OIL); [29760] HARDY, TUBB-DRINKARD; [967055] L(L013)-7-215-37E 3490' 10100' Yes EUNICE, MCKEE, NORTH; [96835] HARE, SAN ANDRES, NORTHWEST San Andres were perforated on 9600'-995'0' and completed in the McKee on 3/25/1997. The well was one of 3/25/1997. The well was not provided by the san Andres or Glorieta. The well was not provided for the San Andres or Glorieta. The well was not provided for the San Andres or Glorieta. The well was not provided for the San Andres or Glorieta. The well was not provided for the San Andres or Glorieta. The well was not provided for the San Andres or Glorieta. The well was not provided for the San Andres or Glorieta. The well was never perforated and tested on the way out of the hole and the well P&A or 7/9/1998. No commercial production was ever recorded for the San Andres or Glorieta. The well was never perforated of the San Andres or Glorieta. The well was never perforated from 5659'-5659'-36659'-36659'-36659'-36659'-36659'-36659'-36659'-36659'-36659'-36659'-36659'-36659'-36659'-36659'-36659'-36659'-36659	This is a vertica	I gas well that was spud on 9/	29/1954. 8-5/8" surface casing was set @ 250'	and cemented to surfa	ce wit	th 190 sx; 5-1/2" production casing was ran to 3435' and cemented with 300 sx of cemen	nt using 2 stage ceme	nting to	ol. The v	well was
adequately isolates the proposed injection zone. Wellbore scematic is included as Attachment VI-2 30-025-09905 ALEXANDER #001 UPLAND PRODUCTION COMPANY Active Oil [50350] PENROSE SKELLY, GRAYBURG L (Lot3)-7-21S-37E 3504 3835 No This is a vertical following the proposed injection zone hole the fine plugged back from 3829 to 3817 'due to a high oil/gas ratio and shot from 3760' to 3817. This well never penetrated the San Andres or Glorotea. 30-025-33677 DECK ESTATE 7 #001 PENROC OIL CORP Active Oil [6660] BLINEBRY OIL AND GAS (OIL); [29760] HARDY, TUBB-DRINKARD; [96705] L (Lot3)-7-21S-37E 3490' 10100' Yes Tubb or a vertical oil well that was spud on 12/17/1996, 13-3/8" surface casing was set a days with 455 sx (circulated); 8-5/8" intermediate casing was set to 4000' with 1900 sx (circulated); and 5-1/2" production casing was set to 4000' with 1900 sx (circulated) and 5-1/2" production casing was set to 4000' with 1900 sx (circulated) in the Micke on 3/25/1997. The well was soon plugged back, the Glorieta and San Andres were perforated and tested on the way out of the hole and the well P&A'd on 7/9/1998. No commercial procurs of the San Andres & Glorieta Formations but the calculated cement top adequately isolates the proposed injection zone. Wellbore scematic is included as Attachment VI-3 30-025-35486 ROY RIDDEL #003 CHEVRON U S A INC Active Oil [22800] EUMONT, YATES-7 RVRS-QUEEN (OIL); [23000] EUNICE MONUMENT, P-12-21S-36E 3498' 4000' ? (RAYBURG-SAMA) Andres or Clorieta and San Andres Set o 4000' with 325 sx and sate of 4000' with 325 sx, and sate of 4000' with 325 s			· · · · · · · · · · · · · · · · · · ·							
30-025-0905 ALEXANDER #001 UPLAND PRODUCTION COMPANY Active Oil [50350] PENROSE SKELLY, GRAYBURG L (Lot3)-7-215-37E 3504' 3835' No This is a vertical oil well that was spud on 5/13/1936. 13-5/8" casing was set at 239' cemented with 250 sx, 9-5/8" casing set to 1319' with 800 sx and 7" casing to 3157' cemented with 235 sx. The well was apparently drilled out to 3835 and completed open hole then plugged back from 3829' to 3817' due to a high oil/gas ratio and shot from 3760' to 3817. This well never penetrated the San Andres or Glorieat. 30-025-33677 DECK ESTATE 7 #001 PENROC OIL CORP Active Oil [660] BLINEBRY OIL AND GAS (OIL); [29760] HARDY, TUBB-DRINKARD; [96705] L (Lot3)-7-215-37E 3490' 10100' Yes EUNICE, MCKEE, NORTH; [96835] HARE, SAN ANDRES, NORTHWEST EUNICE, MCKEE, NORTH; [96835] HARE, SAN ANDRES, NORTHWEST Commercial production was ever recorded for the San Andres or Glorieat. The well was re-entered on 12/6/04 and perforated and san Andres were perforated and tested on the way out of the hole and the well P&A'd on 7/9/1998. No commercial production was ever recorded for the San Andres or Glorieat. The well was re-entered on 12/6/04 and perforated from 5659'-5656's and 584'-6832' and completed in the Blinebry Oil & Gas and Hardy Tubb Drinkard pools. The well penetrates the San Andres & Glorieat formations but the calculated cement top adequately isolates the proposed injection zone. Wellbore scematic is included as Attachment VI-3 30-025-35486 ROY RIDDEL #003 CHEVRON U S A INC Active Oil [22800] EUMONT, YATES-7 RVRS-QUEEN (OIL); [23000] EUMICE MONUMENT, P-12-215-36E 3506' and 587' and so year and set to 4000' with 750 sx, both were circulated. The well was perforated in the Grayburg from 3871'-3945'and was isolated with a retainer @ 3855' and squezeed after flowing 17 bbls SW/hr. The Grayburg was again perfed from 3749'-3831' and 3527'-3679'. This well was spud on 7/1/2001, 8-5/8" surface casing was set to 4000' with 750 sx, both were circulated. The well was perforated in the Garyburg from 3871'-3945'	. •				relea	sed. This well may have penetrated the upper San Andres but no record of production ca	n be found and the o	alculate	d cemer	nt top
This is a vertical oil well that was spud on 5/13/1936. 13-5/8" casing was set at 239' cemented with 250 sx, 9-5/8" casing was set at 239' cemented with 250 sx, 9-5/8" casing was set to 1319' with 800 sx and 7" casing to 3157' cemented with 235 sx. The well was apparently drilled out to 3835 and completed open hole then plugged back from 3829' to 3817' due to a high oil/gas ratio and shot from 3760' to 3817'. This well never penetrated the San Andres or Glorieta. 30-025-33677 DECK ESTATE 7 #001 PENCO CIIL CORP Active Oil [6660] BLINEBRY OIL AND GAS (OIL); [29760] HARDY, TUBB-DRINKARD; [96705] L (Lot3)-7-215-37E 3490' 10100' Yes	adequately isol	ates the proposed injection zo	one. Wellbore scematic is included as Attachme	ent VI-2						
Open hole then plugged back from 3829' to 3817' due to a high oil/gas ratio and shot from 3760' to 3817'. This well never penetrated the San Andres or Glorieta. 30-025-33677 DECK ESTATE 7 #001 PENROC OIL CORP Active Oil [6660] BLINEBRY OIL AND GAS (OIL); [29750] HARDY, TUBB-DRINKARD; [96705] L (Lot3)-7-215-37E 3490' 10100' Yes EUNICE, MCKEE, NORTH; [96835] HARE, SAN ANDRES, NORTHWEST. This is a vertical oil well that was spud on 12/17/1996, 13-3/8" surface casing was set @435' with 455 sx (circulated); 8-5/8" intermediate casing was set to 4000' with 1900 sx (circulated); and 5-1/2" production casing was set to 10100' and cemented with 2565 sx. The well was perforated @ 9600'-9950' and completed in the McKee on 3/25/1997. The well was soon plugged back, the Glorieta and San Andres were perforated and tested on the way out of the hole and the well P&A'd on 7/9/1998. No commercial production was ever recorded for the San Andres or Glorieta. The well was re-entered on 1/26/04 and perforated from 5659'-5665' and 6784'-6832' and completed in the Blinebry Oil & Gas and Hardy Tubb Drinkard pools. The well penetrates the San Andres & Glorieta formations but the calculated cement top adequately isolates the proposed injection zone. Wellbore scematic is included as Attachment VI-3 30-025-35486 ROY RIDBEL #003 CHEVRON U S A INC Active Oil [22800] EUMONT, YATE5-7 RVRS-QUEEN (OIL); [23000] EUNICE MONUMENT, P.12-215-36E 3505' 4000' P.12-215-36E 3505' ANDRES This well was spud on 4/11/2001, 8-5/8" surface casing was set to 382' with 300 sx and 5-1/2" production casing was set to 4000' with 750 sx, both were circulated. The well was perforated in the Grayburg from 3871'- 3945'and was isolated with a retainer @ 3855' and \$3000 sylloge and the standard of the san Andres. Wellbore scematic is included as Attachment VI-4 30-025-35623 ROY RIDDEL #004 CHEVRON U S A INC P&A Not Released Oil [22800] EUMONT, YATE5-7 RVRS-QUEEN (OIL) P.12-215-36E 3498' 4000' P.12-215-36E 3498' 4000' P.12-215-36E 3498' 4000' P.12-215-36E 3498' 4000'	4 30-025-09905	ALEXANDER #001	UPLAND PRODUCTION COMPANY	Active	Oil	[50350] PENROSE SKELLY, GRAYBURG	L (Lot3)-7-21S-37E	3504'	3835'	No
30-025-33677 DECK ESTATE 7 #001 PERROC OIL CORP Active Oil [6660] BLINEBRY OIL AND GAS (OIL); [29760] HARDY, TUBB-DRINKARD; [96705] L (Lot3)-7-215-37E 3490' 10100' Yes EUNICE, MCKEE, NORTH, [96835] HARE, SAN ANDRES, NORTHWEST L (Lot3)-7-215-37E 3490' 10100' Yes EUNICE, MCKEE, NORTH, [96835] HARE, SAN ANDRES, NORTHWEST L (Lot3)-7-215-37E 3490' 10100' And commented with 42565 sx. The well was perforated @ 9600'-9950' and completed in the McKee on 3/25/1997. The well was soon plugged back, the Glorieta and San Andres were perforated and tested on the way out of the hole and the well P&A'd on 7/9/1998. No commercial production was ever recorded for the San Andres or Glorieta. The well was re-entered on 1/26/04 and perforated from 5659'-5665' and 6784'-6832' and completed in the Blinebry Oil & Gas and Hardy Tubb Drinkard pools. The well penetrates the San Andres & Glorieta formations but the calculated cement top adequately isolates the proposed injection zone. Wellbore scematic is included as Attachment VI-3 30-025-35486 ROY RIDDEL #003 CHEVRON U S A INC Active Oil [22800] EUMONT, YATES-7 RVRS-QUEEN (OIL); [23000] EUNICE MONUMENT, P-12-21S-36E 3506' 4000' ? GRAYBURG-SAN ANDRES This well was spud on 4/11/2001, 8-5/8" surface casing was set to 382' with 300 sx and 5-1/2" production casing was set to 4000' with 750 sx, both were circulated. The well was perforated in the Grayburg from 3871'- 3945' and was isolated with a retainer @ 3855' and squeezed after flowing 17 bbls SW/hr. The Grayburg was again perfed from 3749'-3831' and 3527'-3679'. This well produces from the Eunice Monument, Grayburg-"San Andres" Pool but was not completed in the San Andres. Wellbore scematic is included as Attachment VI-4 30-025-35623 ROY RIDDEL #004 CHEVRON U S A INC P&A Not Released Oil [22800] EUMONT, YATES-7 RVRS-QUEEN (OIL) I-12-215-36E 3498' 4000' ? This well was spud on 7/1/2001, 8-5/8" surface casing was set to 408' with 325 sx and 5-1/2" production casing was set to 4000' with 875 sx, both were circulated to surface. The well	This is a verti	ical oil well that was spud on 5	5/13/1936. 13-5/8" casing was set at 239' ceme	ented with 250 sx, 9-5/8	B" casi	ng set to 1319' with 800 sx and 7" casing to 3157' cemented with 235 sx. The well was a	pparently drilled out	to 3835	and cor	mpleted
EUNICE, MCKEE, NORTH; [96835] HARE, SAN ANDRES, NORTHWEST This is a vertical oil well that was spud on 12/17/1996, 13-3/8" surface casing was set @435' with 455 sx (circulated); 8-5/8" intermediate casing was set to 4000' with 1900 sx (circulated); and 5-1/2" production casing was set to 10100' and cemented with 2565 sx. The well was perforated @ 9600'-9950' and completed in the McKee on 3/25/1997. The well was soon plugged back, the Glorieta and San Andres were perforated and tested on the way out of the hole and the well P&A'd on 7/9/1998. No commercial production was ever recorded for the San Andres of Glorieta. The well was re-entered on 1/26/04 and perforated from 5659'-5665' and 6784'-6832' and completed in the Blinebry Oil & Gas and Hardy Tubb Drinkard pools. The well penetrates the San Andres & Glorieta formations but the calculated cement top adequately isolates the proposed injection zone. Wellbore scenatic is included as Attachment VI-3 30-025-35486 ROY RIDDEL #003 CHEVRON U S A INC Active Oil [22800] EUMONT, YATES-7 RVRS-QUEEN (OIL); [23000] EUNICE MONUMENT, P-12-215-36E 356' 4000' ? GRAYBURG-SAN ANDRES This well was spud on 4/11/2001, 8-5/8" surface casing was set to 382' with 300 sx and 5-1/2" production casing was set to 4000' with 750 sx, both were circulated. The well was perforated in the Grayburg from 3871'- 3945'and was isolated with a retainer @ 3855' and squeezed after flowing 17 bils SW/hr. The Grayburg was again perfed from 3749'-3831' and 3527'-3679'. This well produces from the Eunice Monument, Grayburg. "San Andres" Pool but was not completed in the San Andres. Wellbore scenatic is included as Attachment VI-4 30-025-35623 ROY RIDDEL #004 CHEVRON U S A INC P&A Not Released Oil [22800] EUMONT, YATES-7 RVRS-QUEEN (OIL) I-12-215-36E 3498' 4000' ? This well was spud on 7/1/2001, 8-5/8" surface casing was set to 408' with 325 sx and 5-1/2" production casing was set to 4000' with 875 sx, both were circulated to surface. The well was perforated from 3540'-3687' and is completd in the Eu			open hole then plugged back from 3829' to 3	3817' due to a high oil/g	gas ra	tio and shot from 3760' to 3817'. This well never penetrated the San Andres or Glorieta.				
This is a vertical oil well that was spud on 12/17/1996, 13-3/8" surface casing was set @435' with 455 sx (circulated); 8-5/8" intermediate casing was set to 4000' with 1900 sx (circulated); and 5-1/2" production casing was set to 10100' and cemented with 2565 sx. The well was perforated @ 9600'-9950' and completed in the McKee on 3/25/1997. The well was soon plugged back, the Glorieta and San Andres were perforated and tested on the way out of the hole and the well P&A'd on 7/9/1998. No commercial production was ever recorded for the San Andres or Glorieta. The well was re-entered on 1/26/04 and perforated from 5659'-5665' and 6784'-6832' and completed in the Blinebry Oil & Gas and Hardy Tubb Drinkard pools. The well penetrates the San Andres & Glorieta formations but the calculated cement top adequately isolates the proposed injection zone. Wellbore scenatic is included as Attachment VI-3 30-025-35486 ROY RIDDEL #003 CHEVRON U S A INC Active Oil [22800] EUMONT, YATES-7 RVRS-QUEEN (OIL); [23000] EUNICE MONUMENT, P-12-21S-36E 3506' 4000' ? GRAYBURG-SAN ANDRES This well was spud on 4/11/2001, 8-5/8" surface casing was set to 382' with 300 sx and 5-1/2" production casing was set to 4000' with 750 sx, both were circulated. The well was perforated in the Grayburg from 3871'- 3945'and was isolated with a retainer @ 3855' and squeezed after flowing 17 bbls SW/hr. The Grayburg was again perfed from 3749'-3831' and 3527'-3679'. This well produces from the Eunice Monument, Grayburg-"San Andres" Pool but was not completed in the San Andres. Wellbore scenatic is included as Attachment VI-4 30-025-35623 ROY RIDDEL #004 CHEVRON U S A INC P&A Not Released Oil [22800] EUMONT, YATES-7 RVRS-QUEEN (OIL) This well was spud on 7/1/2001, 8-5/8" surface casing was set to 408' with 325 sx and 5-1/2" production casing was set to 4000' with 875 sx, both were circulated to surface. The well was perforated from 3540'-3687' and is completed in the Eumont Pool. This well was never completed in the San Andres. The well was P&A on 3/11/	5 30-025-33677	DECK ESTATE 7 #001	PENROC OIL CORP	Active	Oil	[6660] BLINEBRY OIL AND GAS (OIL); [29760] HARDY, TUBB-DRINKARD; [96705]	L (Lot3)-7-21S-37E	3490'	10100'	Yes
2565 sx. The well was perforated @ 9600'-9950' and completed in the McKee on 3/25/1997. The well was soon plugged back, the Glorieta and San Andres were perforated and tested on the way out of the hole and the well P&A'd on 7/9/1998. No commercial production was ever recorded for the San Andres or Glorieta. The well was re-entered on 1/26/04 and perforated from 5659'-5665' and 6784'-6832' and completed in the Blinebry Oil & Gas and Hardy Tubb Drinkard pools. The well penetrates the San Andres & Glorieta formations but the calculated cement top adequately isolates the proposed injection zone. Wellbore scematic is included as Attachment VI-3 30-025-35486 ROY RIDDEL #003 CHEVRON U S A INC Active Oil [22800] EUMONT, YATES-7 RVRS-QUEEN (OIL); [23000] EUNICE MONUMENT, P-12-21S-36E 3506' 4000' ? GRAYBURG-SAN ANDRES This well was spud on 4/11/2001, 8-5/8" surface casing was set to 382' with 300 sx and 5-1/2" production casing was set to 4000' with 750 sx, both were circulated. The well was perforated in the Grayburg from 3871'- 3945'and was isolated with a retainer @ 3855' and squeezed after flowing 17 bbls SW/hr. The Grayburg was again perfed from 3749'-3831' and 3527'-3679'. This well produces from the Eunice Monument, Grayburg-"San Andres" Pool but was not completed in the San Andres. Wellbore scematic is included as Attachment VI-4 30-025-35623 ROY RIDDEL #004 CHEVRON U S A INC P&A Not Released Oil [22800] EUMONT, YATES-7 RVRS-QUEEN (OIL) Fish well was spud on 7/1/2001, 8-5/8" surface casing was set to 408' with 325 sx and 5-1/2" production casing was set to 4000' with 875 sx, both were circulated to surface. The well was perforated from 3540'-3687' and is completed in the Eumont Pool. This well was never completed in the San Andres. The well was P&A on 3/11/2019. A wellbore scematic is included as Attachment VI-5 30-025-36637 DECK ESTATE 12 #001 CONOCOPHILLIPS COMPANY Cancelled APD Oil [29710] HARDY, BLINEBRY; [29760] HARDY, TUBB-DRINKARD H-12-21S-36E NA NA NO						EUNICE, MCKEE, NORTH; [96835] HARE, SAN ANDRES, NORTHWEST				
commercial production was ever recorded for the San Andres or Glorieta. The well was re-entered on 1/26/04 and perforated from 5659'-5665' and 6784'-6832' and completed in the Blinebry Oil & Gas and Hardy Tubb Drinkard pools. The well penetrates the San Andres & Glorieta formations but the calculated cement top adequately isolates the proposed injection zone. Wellbore scematic is included as Attachment VI-3 30-025-35486 ROY RIDDEL #003 CHEVRON U S A INC Oil [22800] EUMONT, YATES-7 RVRS-QUEEN (OIL); [23000] EUNICE MONUMENT, P-12-21S-36E 3506' 4000' ? GRAYBURG-SAN ANDRES This well was spud on 4/11/2001, 8-5/8" surface casing was set to 382' with 300 sx and 5-1/2" production casing was set to 4000' with 750 sx, both were circulated. The well was perforated in the Grayburg from 3871'- 3945'and was isolated with a retainer @ 3855' and squeezed after flowing 17 bbls SW/hr. The Grayburg was again perfed from 3749'-3831' and 3527'-3679'. This well produces from the Eunice Monument, Grayburg-"San Andres" Pool but was not completed in the San Andres. Wellbore scematic is included as Attachment VI-4 30-025-35623 ROY RIDDEL #004 CHEVRON U S A INC P&A Not Released Oil [22800] EUMONT, YATES-7 RVRS-QUEEN (OIL) I-12-21S-36E 3498' 4000' ? This well was spud on 7/1/2001, 8-5/8" surface casing was set to 408' with 325 sx and 5-1/2" production casing was set to 4000' with 875 sx, both were circulated to surface. The well was perforated from 3540'-3687' and is completed in the Eumont Pool. This well was never completed in the San Andres. The well was P&A on 3/11/2019. A wellbore scematic is included as Attachment VI-5 30-025-36637 DECK ESTATE 12 #001 CONOCOPHILLIPS COMPANY Cancelled APD Oil [29710] HARDY, BLINEBRY; [29760] HARDY, TUBB-DRINKARD H-12-21S-36E NA NA NA NO	This is a vertica	I oil well that was spud on 12/	17/1996, 13-3/8" surface casing was set @435	b' with 455 sx (circulated	d); 8-5	/8" intermediate casing was set to 4000' with 1900 sx (circulated); and 5-1/2" production	n casing was set to 1	0100' ar	d ceme	nted with
the San Andres & Glorieta formations but the calculated cement top adequately isolates the proposed injection zone. Wellbore scematic is included as Attachment VI-3 30-025-35486 ROY RIDDEL #003 CHEVRON U S A INC Active Oil [22800] EUMONT, YATES-7 RVRS-QUEEN (OIL); [23000] EUNICE MONUMENT, P-12-215-36E 3506' 4000' ? GRAYBURG-SAN ANDRES This well was spud on 4/11/2001, 8-5/8" surface casing was set to 382' with 300 sx and 5-1/2" production casing was set to 4000' with 750 sx, both were circulated. The well was perforated in the Grayburg from 3871'- 3945'and was isolated with a retainer @ 3855' and squeezed after flowing 17 bbls SW/hr. The Grayburg was again perfed from 3749'-3831' and 3527'-3679'. This well produces from the Eunice Monument, Grayburg-"San Andres" Pool but was not completed in the San Andres. Wellbore scematic is included as Attachment VI-4 30-025-35623 ROY RIDDEL #004 CHEVRON U S A INC P&A Not Released Oil [22800] EUMONT, YATES-7 RVRS-QUEEN (OIL) I-12-215-36E 3498' 4000' ? This well was spud on 7/1/2001, 8-5/8" surface casing was set to 408' with 325 sx and 5-1/2" production casing was set to 4000' with 875 sx, both were circulated to surface. The well was perforated from 3540'-3687' and is completed in the Eumont Pool. This well was never completed in the San Andres. The well was P&A on 3/11/2019. A wellbore scematic is included as Attachment VI-5 30-025-36637 DECK ESTATE 12 #001 CONOCOPHILLIPS COMPANY Cancelled APD Oil [29710] HARDY, BLINEBRY; [29760] HARDY, TUBB-DRINKARD H-12-215-36E NA NA NA NO	2565 sx. The we	ell was perforated @ 9600'-99	950' and completed in the McKee on 3/25/1997	7. The well was soon plu	ıgged	back, the Glorieta and San Andres were perforated and tested on the way out of the hole	e and the well P&A'd	on 7/9/	1998. N	0
30-025-35486 ROY RIDDEL #003 CHEVRON U S A INC Active Oil [22800] EUMONT, YATES-7 RVRS-QUEEN (OIL); [23000] EUNICE MONUMENT, P-12-21S-36E 3506' 4000' ? This well was spud on 4/11/2001, 8-5/8" surface casing was set to 382' with 300 sx and 5-1/2" production casing was set to 4000' with 750 sx, both were circulated. The well was perforated in the Grayburg from 3871'- 3945'and was isolated with a retainer @ 3855' and squeezed after flowing 17 bbls SW/hr. The Grayburg was again perfed from 3749'-3831' and 3527'-3679'. This well produces from the Eunice Monument, Grayburg-"San Andres" Pool but was not completed in the San Andres. Wellbore scematic is included as Attachment VI-4 30-025-35623 ROY RIDDEL #004 CHEVRON U S A INC P&A Not Released Oil [22800] EUMONT, YATES-7 RVRS-QUEEN (OIL) I-12-21S-36E 3498' 4000' ? This well was spud on 7/1/2001, 8-5/8" surface casing was set to 408' with 325 sx and 5-1/2" production casing was set to 4000' with 875 sx, both were circulated to surface. The well was perforated from 3540'-3687' and is completed in the Eumont Pool. This well was never completed in the San Andres. The well was P&A on 3/11/2019. A wellbore scematic is included as Attachment VI-5 30-025-36637 DECK ESTATE 12 #001 CONOCOPHILLIPS COMPANY Cancelled APD Oil [29710] HARDY, BLINEBRY; [29760] HARDY, TUBB-DRINKARD H-12-21S-36E NA NA NA NO	•					· · · · · · · · · · · · · · · · · · ·	rdy Tubb Drinkard po	ols. The	well pe	netrates
GRAYBURG-SAN ANDRES This well was spud on 4/11/2001, 8-5/8" surface casing was set to 382' with 300 sx and 5-1/2" production casing was set to 4000' with 750 sx, both were circulated. The well was perforated in the Grayburg from 3871'- 3945'and was isolated with a retainer @ 3855' and squeezed after flowing 17 bbls SW/hr. The Grayburg was again perfed from 3749'-3831' and 3527'-3679'. This well produces from the Eunice Monument, Grayburg-"San Andres" Pool but was not completed in the San Andres. Wellbore scematic is included as Attachment VI-4 30-025-35623 ROY RIDDEL #004 CHEVRON U S A INC P&A Not Released Oil [22800] EUMONT, YATES-7 RVRS-QUEEN (OIL) This well was spud on 7/1/2001, 8-5/8" surface casing was set to 408' with 325 sx and 5-1/2" production casing was set to 4000' with 875 sx, both were circulated to surface. The well was perforated from 3540'-3687' and is completed in the Eumont Pool. This well was never completed in the San Andres. The well was P&A on 3/11/2019. A wellbore scematic is included as Attachment VI-5 30-025-36637 DECK ESTATE 12 #001 CONOCOPHILLIPS COMPANY Cancelled APD Oil [29710] HARDY, BLINEBRY; [29760] HARDY, TUBB-DRINKARD H-12-21S-36E NA NA NA No					_		I			_
This well was spud on 4/11/2001, 8-5/8" surface casing was set to 382' with 300 sx and 5-1/2" production casing was set to 4000' with 750 sx, both were circulated. The well was perforated in the Grayburg from 3871'- 3945'and was isolated with a retainer @ 3855' and squeezed after flowing 17 bbls SW/hr. The Grayburg was again perfed from 3749'-3831' and 3527'-3679'. This well produces from the Eunice Monument, Grayburg-"San Andres" Pool but was not completed in the San Andres. Wellbore scematic is included as Attachment VI-4 30-025-35623 ROY RIDDEL #004 CHEVRON U S A INC P&A Not Released Oil [22800] EUMONT, YATES-7 RVRS-QUEEN (OIL) This well was spud on 7/1/2001, 8-5/8" surface casing was set to 408' with 325 sx and 5-1/2" production casing was set to 4000' with 875 sx, both were circulated to surface. The well was perforated from 3540'-3687' and is completed in the Eumont Pool. This well was never completed in the San Andres. The well was P&A on 3/11/2019. A wellbore scematic is included as Attachment VI-5 30-025-36637 DECK ESTATE 12 #001 CONOCOPHILLIPS COMPANY Cancelled APD Oil [29710] HARDY, BLINEBRY; [29760] HARDY, TUBB-DRINKARD H-12-21S-36E NA NA NA No	6 30-025-35486	ROY RIDDEL #003	CHEVRON U S A INC	Active	Oil		P-12-21S-36E	3506'	4000'	?
@ 3855' and squeezed after flowing 17 bbls SW/hr. The Grayburg was again perfed from 3749'-3831' and 3527'-3679'. This well produces from the Eunice Monument, Grayburg-"San Andres" Pool but was not completed in the San Andres. Wellbore scematic is included as Attachment VI-4 30-025-35623 ROY RIDDEL #004 CHEVRON U S A INC P&A Not Released Oil [22800] EUMONT, YATES-7 RVRS-QUEEN (OIL) I-12-21S-36E 3498' 4000' ? This well was spud on 7/1/2001, 8-5/8" surface casing was set to 408' with 325 sx and 5-1/2" production casing was set to 4000' with 875 sx, both were circulated to surface. The well was perforated from 3540'-3687' and is completed in the Eumont Pool. This well was never completed in the San Andres. The well was P&A on 3/11/2019. A wellbore scematic is included as Attachment VI-5 30-025-36637 DECK ESTATE 12 #001 CONOCOPHILLIPS COMPANY Cancelled APD Oil [29710] HARDY, BLINEBRY; [29760] HARDY, TUBB-DRINKARD H-12-21S-36E NA NA NA No						GRAYBURG-SAN ANDRES				
scematic is included as Attachment VI-4 30-025-35623 ROY RIDDEL #004 CHEVRON U S A INC P&A Not Released Oil [22800] EUMONT, YATES-7 RVRS-QUEEN (OIL) This well was spud on 7/1/2001, 8-5/8" surface casing was set to 408' with 325 sx and 5-1/2" production casing was set to 4000' with 875 sx, both were circulated to surface. The well was perforated from 3540'-3687' and is completed in the Eumont Pool. This well was never completed in the San Andres. The well was P&A on 3/11/2019. A wellbore scematic is included as Attachment VI-5 30-025-36637 DECK ESTATE 12 #001 CONOCOPHILLIPS COMPANY Cancelled APD Oil [29710] HARDY, BLINEBRY; [29760] HARDY, TUBB-DRINKARD H-12-215-36E NA NA NA NO			·			· · · · · · · · · · · · · · · · · · ·				
30-025-35623 ROY RIDDEL #004 CHEVRON U S A INC P&A Not Released Oil [22800] EUMONT, YATES-7 RVRS-QUEEN (OIL) I-12-21S-36E 3498' 4000' ? This well was spud on 7/1/2001, 8-5/8" surface casing was set to 408' with 325 sx and 5-1/2" production casing was set to 4000' with 875 sx, both were circulated to surface. The well was perforated from 3540'-3687' and is completed in the Eumont Pool. This well was never completed in the San Andres. The well was P&A on 3/11/2019. A wellbore scematic is included as Attachment VI-5 30-025-36637 DECK ESTATE 12 #001 CONOCOPHILLIPS COMPANY Cancelled APD Oil [29710] HARDY, BLINEBRY; [29760] HARDY, TUBB-DRINKARD H-12-21S-36E NA NA NA NO	-	•	SW/hr. The Grayburg was again perfed from 374	49'-3831' and 3527'-36	79'. Th	nis well produces from the Eunice Monument, Grayburg-"San Andres" Pool but was not c	ompleted in the San	Andres.	Wellbor	e
This well was spud on 7/1/2001, 8-5/8" surface casing was set to 408' with 325 sx and 5-1/2" production casing was set to 4000' with 875 sx, both were circulated to surface. The well was perforated from 3540'-3687' and is completed in the Eumont Pool. This well was never completed in the San Andres. The well was P&A on 3/11/2019. A wellbore scematic is included as Attachment VI-5 30-025-36637 DECK ESTATE 12 #001 CONOCOPHILLIPS COMPANY Cancelled APD Oil [29710] HARDY, BLINEBRY; [29760] HARDY, TUBB-DRINKARD H-12-215-36E NA NA No	scematic is incl	uded as Attachment VI-4								
This well was never completed in the San Andres. The well was P&A on 3/11/2019. A wellbore scematic is included as Attachment VI-5 30-025-36637 DECK ESTATE 12 #001 CONOCOPHILLIPS COMPANY Cancelled APD Oil [29710] HARDY, BLINEBRY; [29760] HARDY, TUBB-DRINKARD H-12-215-36E NA NA NO	7 30-025-35623	ROY RIDDEL #004	CHEVRON U S A INC	P&A Not Released	Oil	[22800] EUMONT, YATES-7 RVRS-QUEEN (OIL)	I-12-21S-36E	3498'	4000'	?
30-025-36637 DECK ESTATE 12 #001 CONOCOPHILLIPS COMPANY Cancelled APD Oil [29710] HARDY, BLINEBRY; [29760] HARDY, TUBB-DRINKARD H-12-21S-36E NA NA NO	This well was sp	pud on 7/1/2001, 8-5/8" surfa	ce casing was set to 408' with 325 sx and 5-1/2	" production casing wa	s set t	o 4000' with 875 sx, both were circulated to surface. The well was perforated from 3540	0'-3687' and is compl	etd in th	e Eumo	nt Pool.
1	This well was no	ever completed in the San And	dres. The well was P&A on 3/11/2019. A wellbo	ore scematic is included	l as At	tachment VI-5				
This well was never drilled.	8 30-025-36637	DECK ESTATE 12 #001	CONOCOPHILLIPS COMPANY	Cancelled APD	Oil	[29710] HARDY, BLINEBRY; [29760] HARDY, TUBB-DRINKARD	H-12-21S-36E	NA	NA	No
	This well was no	ever drilled.								

Schematic of Wellbore that may Penetrate Injection Zone – Attachment VI-2

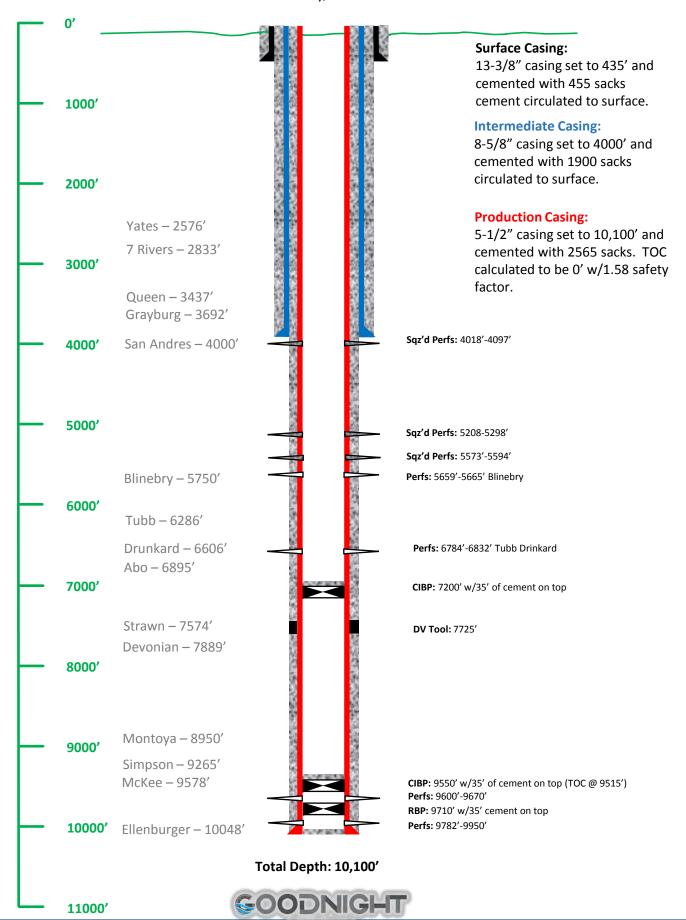
ALEXANDER #001 – API# 30-025- 06429 1980 FNL & 660 FWL, Unit E (Lot 2) of Sec 7-T21S-R37E Lea County, New Mexico





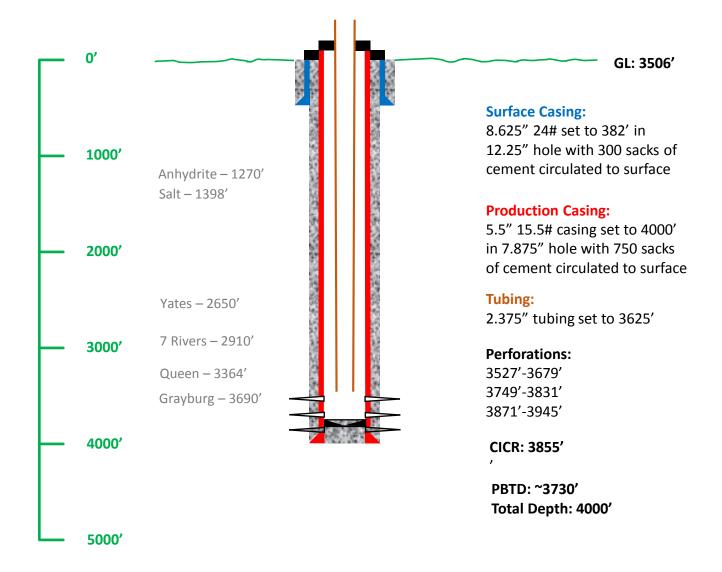
Schematic of Wellbore that may Penetrate Injection Zone – Attachment VI-3

DECK ESTATE 7 #001— API# 30-025- 33677 1930 FSL & 990 FWL, Unit L of Sec 7-T21S-R37E Lea County, New Mexico



Schematic of Wellbores that may Penetrates Injection Zone – Attachment VI-4

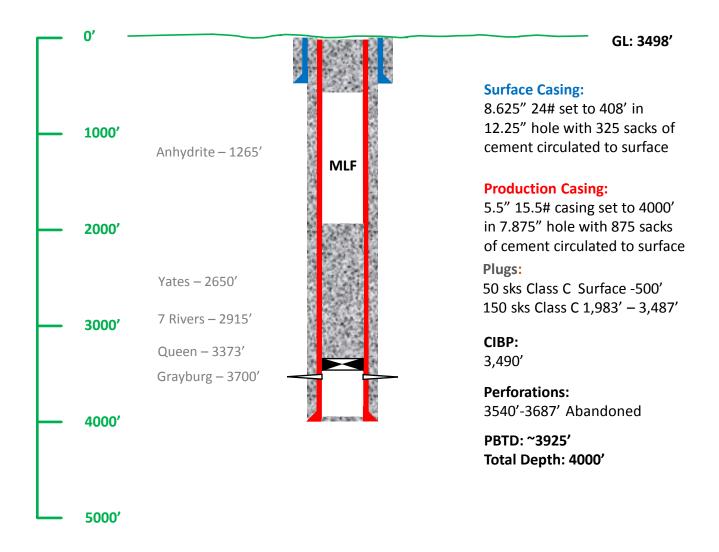
ROY RIDDLE #003— API# 30-025-35486 660 FSL & 660 FEL, Unit P of Sec 12-T21S-R36E Lea County, New Mexico





Schematic of Wellbores that may Penetrate Injection Zone – Attachment VI-5

ROY RIDDLE #004– API# 30-025- 35623 1980 FSL & 660 FEL, Unit I of Sec 12-T21S-R36E Lea County, New Mexico





VII. OPERATIONAL DATA

- (1) PROPOSED AVERAGE & MAXIMUM DAILY RATE: Average Daily Rate ~15,000 bpd/Maximum Daily Rate Limited by MIP (850 psi) only.
- (2) SYSTEM OPEN/CLOSED: System will be closed. Goodnight Midstream Permian, LLC is building a several dozen mile gathering system across multiple townships.
- (3) PROPOSED AVERAGE & MAXIMUM INJECTION PRESSURE: Average Injection Pressure will be ~600 psi. Maximum Injection Pressure will be 850 psi based on the proposed depth to top perf. (0.2 psi/foot X 4251' = 850 psi)
- (4) INJECTION FLUID ANALYSIS: Injection fluid will be produced water from Permian Basin wells including Yates, Seven Rivers, Queen, Grayburg, San Andres, Delaware, Blinebry, Drinkard, Tubb, Bone Spring, Wolfcamp, Strawn, Pennsylvanian, and Morrow. Attachment VII-4.1 details water analysis data from the NM Produced Water Quality Database V.2 of many of these zones from nearby wells in Township 21S, Range 37E. Attachment VII-4.2 details produced water samples from wells in other townships and Attachment VII-4.3 is a recent analysis of typical produced water that is currently being disposed through Goodnight's pipeline/disposal system in this area.
 - COMPATABILITY EOG's RED HAT STATE SWD #1 (API# 30-025-31110) is a similar SWD; San Andres-Glorieta disposal well in Lea County. A total of 2,259,695 barrels have been disposed through this well with no reported problems.
- (5) DISPOSAL ZONE DATA: The most recent sample of San Andres Glorieta formation water was swabbed during the original completion of the neighboring TED 28 SWD #1 located approximately 4.5 miles southwest of the VERLANDER SWD #1 site. The samples were analyzed and the results submitted to the OCD. Those results are included as Attachment VII-5.1

See also Section VIII, Appropriate Geologic Data for additional disposal zone information

	1		_	hip 21S, Range 37E - Attachmen				
Well Name	API	Section	Unit	Formation	TDS	Chloride	Carbonate	Sulfate
TUDNED #000	2000524502	00		ADO	mg/l	mg/l	mg/l	mg/l
TURNER #020	3002534592	22	Р	ABO	102364	64870	327	2545
EASTBLINEBRY DRINKARD UNIT #026	3002506536	11	G	ABO	203532	140598	246	931
TURNER #020	3002534592	22	Р	ABO	206373	142558	487	1976
ROY BARTON #001	3002506763	23	G	ABO	81045	46135	544	4012
EASTBLINEBRY DRINKARD UNIT #049	3002506582	14	G	ABO	182624			
J G HARE #006	3002506966	33	L	ABO	104072	62570	81	1939
OWEN #001	3002507021	35	Р	ABO		25600		3880
WANTZ FEDERAL#003	3002529688	1	Χ	ABO	136800	74600	117	1100
WANTZ FEDERAL#004	3002529728	1	Q	ABO	134300	72600	68	1000
L G WARLICK A #001	3002506664	19	- 1	ARTESIA	56761	35250	282	1564
EUNICE COM #001	3002506667	19	K	ARTESIA	8324	2751	1004	1757
E 0 CARSON #022	3002506876	28	L	ARTESIA	85857	48380	424	4244
CORDELIA HARDY #002	3002506890	29	D	ARTESIA	10869	4729	2189	329
CORDELIA HARDY #002	3002506890	29	D	ARTESIA	8484	3555	1339	604
CORDELIA HARDY #004	3002506892	29	F	ARTESIA	8251	3300	1338	604
EAST BIINEBRY DRINKARD UNIT #016	3002506526	11	Α	BLINEBRY	172622	116637	204	1402
HUMBLE FEDERAL#001	3002506331	1	Х	BLINEBRY	149754			
WEST BIINEBRY DRINKARD UNIT #041	3002506434	8	- 1	BLINEBRY	163873	102000	493	1560
WEST BliNEBRY DRINKARD UNIT #037	3002506439	9	Р	BLINEBRY	154648	94000	280	2320
EASTBINEBRY DRINKARD UNIT #047	3002506551	12	J	BLINEBRY	162400	98400	610	1249
EASTBINEBRY DRINKARD UNIT #054	3002506567	13	В	BLINEBRY	139864	30400	010	1249
WEST BliNEBRY DRINKARD UNIT #061	3002506629	16	D	BLINEBRY		07720	770	1044
M E WANTZ #001	3002506706	21	N	BLINEBRY	156109	97730	772	1041
ELLIOTTA #004	3002506719	21	Н	BLINEBRY	144900	78550	74	1082
ELMER CHILL #001	3002506790		P	BLINEBRY	112888	68410	796	1499
		26 27		BLINEBRY	154917	93510	148	1330
MARSHALL B #008	3002506825		L		94670	56800	340	2500
D HARDY #003	3002506897	29	Н	BLINEBRY	70206	40630	265	2835
V M HENDERSON#003	3002506909	30	Н	BLINEBRY	86101			
V M HENDERSON#003	3002506909	30	Н	BLINEBRY	193811			
MARK OWEN #004	3002507003	34	J	BLINEBRY	159553	97920	856	1530
OWEN #007	3002507028	35	- 1	BLINEBRY	23710	12400	2400	220
STATE C TRACT 13 #005	3002507051	36	E	BLINEBRY	86043	53010	464	985
ELMER CHILL #001 FIELDS#001	3002506790 3002506553	26	P 0	BLINEBRY	188764	115958	121	1702
EO CARSON #014	3002506985	12 33	C	BLINEBRY BLINEBRY	150574 124310	91350 78802	488 280	1833 1120
ELMER CHILL #001	3002506790	26	р	BLINEBRY	173214	106456	291	1223
NORTHEAST DRINKARD UNIT #520	3002534602	10	0	BLINEBRY/TUBB/DRINKARD	30958	16709	688	2708
NORTHEAST DRINKARD UNIT #220	3002506358	2	J	BLINEBRY/TUBB/DRINKARD	33622	18219	475	2940
NORTHEAST DRINKARD UNIT #306	3002506507	3	R	BLINEBRY/TUBB/DRINKARD	19094	8981	881	2745
NORTHEAST DRINKARD UNIT #401	3002506459	10	D	BLINEBRY/TUBB/DRINKARD	53498	32154	739	1857
NORTHEAST DRINKARD UNIT #204	3002506506	3	L	BLINEBRY/TUBB/DRINKARD	29171	15870	1102	1905
NORTHEAST DRINKARD UNIT #619	3002534410	15	Α	BLINEBRY/TUBB/DRINKARD	16289	7411	1014	2237
NORTHEAST DRINKARD UNIT #107	3002520315	3	F	BLINEBRY/TUBB/DRINKARD	110630	66400	670	1570
NORTHEAST DRINKARD UNIT #924	3002534595	23	M	BLINEBRY/TUBB/DRINKARD	83002	52796	789	1672
WEST BLINEBRY DRINKARD UNIT #041	3002506434	8	I	BLINEBRY/TUBB/ DRINKARD	112968	81309	265	887
WEST BLINEBRY DRINKARD UNIT #039	3002506441	9	M	BLINEBRY/TUBB/ DRINKARD	161776	108281	203	1545
WEST BLINEBRY DRINKARD UNIT #037	3002506439	9	р	BLINEBRY/TUBB/ DRINKARD	185366	127549	279	1058
NORTHEAST DRINKARD UNIT #233	3002534431	3	K	BLINEBRY/TUBB/ DRINKARD	77148	46967	451	2786
NORTHEAST DRINKARD UNIT #120	3002506357	2	В	BLINEBRY/TUBB/ DRINKARD	65372	38518	333	3662
NORTHEAST DRINKARD UNIT #220	3002506358	2	J	BLINEBRY/TUBB/ DRINKARD	44602	25713	265	2814
NORTHEAST DRINKARD UNIT #311	3002506367	2	T	BLINEBRY/TUBB/ DRINKARD	61709	37295	677	2085
NORTHEAST DRINKARD UNIT #213	3002506368	2	D	BLINEBRY/TUBB/ DRINKARD	73938	46169	270	1869
NORTHEAST DRINKARD UNIT #406	3002506451	10	В	BLINEBRY/TUBB/ DRINKARD	37392	21216	895	2104

NORTHEAST DRINKARD UNIT #410	3002506453	10	Н	BLINEBRY/TUBB/ DRINKARD	161505	109855	136	1365
NORTHEAST DRINKARD UNIT #217	3002506485	2	K	BLINEBRY/TUBB/DRINKARD	28464	15035	1099	2190
NORTHEAST DRINKARD UNIT #219	3002506486	2	Ν	BLINEBRY/TUBB/DRINKARD	34651	19115	615	2581
NORTHEAST DRINKARD UNIT #316	3002506487	2	S	BLINEBRY/TUBB/DRINKARD	34607	19025	1131	2269
NORTHEAST DRINKARD UNIT #317	3002506488	2	V	BLINEBRY/TUBB/DRINKARD	52388	31034	647	2130
NORTHEAST DRINKARD UNIT #310	3002506497	3	X	BLINEBRY/TUBB/DRINKARD	19312	9120	1277	2208
NORTHEAST DRINKARD UNIT #513	3002506533	11	N	BLINEBRY/TUBB/DRINKARD				
					83385	52667	220	1764
NORTHEAST DRINKARD UNIT #705	3002506602	15	N	BLINEBRY/TUBB/DRINKARD	177936	120760	192	1405
NORTHEAST DRINKARD UNIT #609	3002506610	15	В	BLINEBRY/TUBB/DRINKARD	56067	33596	280	2364
NORTHEASTDRINKARD UNIT #805	3002506736	22	F	BLINEBRY/TUBB/DRINKARD	18427	8868	1312	1821
NORTHEAST DRINKARD UNIT #915	3002506766	23	J	BLINEBRY/TUBB/DRINKARD	163742	110730	298	1189
NORTHEAST DRINKARD UNIT #810	3002506770	23	D	BLINEBRY/TUBB/DRINKARD	23491	12014	722	2381
NORTHEAST DRINKARD UNIT #702	3002509911	15	М	BLINEBRY/TUBB/DRINKARD	35019	19818	464	2202
NORTHEAST DRINKARD UNIT #602	3002509914	15	Е	BLINEBRY/TUBB/DRINKARD	20364	9863	707	2241
NORTHEAST DRINKARD UNIT #701	3002509916	15	L	BLINEBRY/TUBB/DRINKARD	34550	19443	526	2239
NORTHEAST DRINKARD UNIT #704		15	N					
	3002509917			BLINEBRY/TUBB/DRINKARD	64379	39321	665	2030
NORTHEAST DRINKARD UNIT #510	3002520218	11	L	BLINEBRY/TUBB/DRINKARD	147901	99247	229	1193
NORTHEAST DRINKARD UNIT #918	3002521349	23	Р	BLINEBRY/TUBB/DRINKARD	167463	113402	246	1307
NORTHEAST DRINKARD UNIT #321	3002506352	2	X	BLINEBRY/TUBB/DRINKARD	8744	3729	1357	678
NORTHEAST DRINKARD UNIT #120	3002506357	2	В	BLINEBRY/TUBB/DRINKARD	98092	59550	304	612
NORTHEAST DRINKARD UNIT #323	3002506361	2	J	BLINEBRY/TUBB/DRINKARD	173597	107200	90	561
NORTHEAST DRINKARD UNIT #322	3002506372	2	S	BLINEBRY/TUBB/DRINKARD	168128	104100	305	481
NORTHEAST DRINKARD UNIT #203	3002506398	4	Р	BLINEBRY/TUBB/DRINKARD	169600			
NORTHEAST DRINKARD UNIT #106	3002506410	3	С	BLINEBRY/TUBB/DRINKARD	118561	70520	434	2496
NORTHEAST DRINKARD UNIT #511	3002506532	11	М	BLINEBRY/TUBB/DRINKARD	123872	77030	183	1085
NORTHEAST DRINKARD UNIT #514	3002530913	10	L	BLINEBRY/TUBB/DRINKARD	16642	7798	1113	1902
			Ī					
NORTHEAST DRINKARD UNIT #225	3002534249	2		BLINEBRY/TUBB/DRINKARD	31396	17092	550	2590
NORTHEAST DRINKARD UNIT #326	3002534365	3	р	BLINEBRY/TUBB/DRINKARD	32205	17459	614	2426
NORTHEAST DRINKARD UNIT #327	3002534366	3	J	BLINEBRY/TUBB/DRINKARD	34403	19343	451	2342
NORTHEAST DRINKARD UNIT #328	3002534367	10	В	BLINEBRY/TUBB/DRINKARD	27050	14299	573	2562
NORTHEAST DRINKARD UNIT #226	3002534380	3	Q	BLINEBRY/TUBB/DRINKARD	76889	47794	439	2290
NORTHEAST DRINKARD UNIT #330	3002534414	2	U	BLINEBRY/TUBB/DRINKARD	67748	41366	448	2335
NORTHEAST DRINKARD UNIT #126	3002534415	2	Ε	BLINEBRY/TUBB/DRINKARD	52064	30521	572	2703
NORTHEAST DRINKARD UNIT #227	3002534428	3	J	BLINEBRY/TUBB/DRINKARD	33767	18682	576	2422
NORTHEAST DRINKARD UNIT #329	3002534432	3	W	BLINEBRY/TUBB/DRINKARD	27499	14645	537	2537
NORTHEAST DRINKARD UNIT #414	3002534435	10	J	BLINEBRY/TUBB/DRINKARD	91968	58277	313	2158
NORTHEAST DRINKARD UNIT #412	3002534490	10	В	BLINEBRY/TUBB/DRINKARD				
					30501	16825	438	2371
NORTHEAST DRINKARD UNIT #223	3002506355	2	Р	BLINEBRY/TUBB/DRINKARD	77777	47830	360	2563
NORTHEAST DRINKARD UNIT #223	3002506355	2	Р	BLINEBRY/TUBB/DRINKARD	62724	37894	293	2433
NORTHEAST DRINKARD UNIT #106	3002506410	3	С	BLINEBRY/TUBB/DRINKARD	152012	100384	174	2136
NORTHEAST DRINKARD UNIT #401	3002506459	10	D	BLINEBRY/TUBB/DRINKARD	72664	43349	467	1910
NORTHEAST DRINKARD UNIT #204	3002506506	3	L	BLINEBRY/TUBB/DRINKARD	30555	16047	1148	2567
NORTHEAST DRINKARD UNIT #207	3002506519	3	14	BLINEBRY/TUBB/DRINKARD	72037	44303	936	1812
NORTHEAST DRINKARD UNIT #207	3002506519	3	14	BLINEBRY/TUBB/DRINKARD	84881	52777	270	2670
NORTHEAST DRINKARD UNIT #107	3002520315	3	F	BLINEBRY/TUBB/DRINKARD	37908	20521	1017	2960
NORTHEAST DRINKARD UNIT #124	3002534424	3	K	BLINEBRY/TUBB/DRINKARD	62611	37355	445	2837
NORTHEAST DRINKARD UNIT #125	3002534425	3	J	BLINEBRY/TUBB/DRINKARD	109980	70101	183	2481
NORTHEAST DRINKARD UNIT #228	3002534427	3	J	BLINEBRY/TUBB/DRINKARD		40921	268	2754
					67571			
NORTHEAST DRINKARD UNIT #306	3002506507	3	R	BLINEBRY/TUBB/DRINKARD	20617	9962	1017	2455
NORTHEAST DRINKARD UNIT #614	3002506579	14	D	BLINEBRY/TUBB/DRINKARD	68924	41546	1023	2184
NORTHEAST DRINKARD UNIT #617	3002506580	14	F	BLINEBRY/TUBB/DRINKARD	189339	129128	179	1244
A T TURNER #009	3002506751	22	K	ELLENBURGER	94230	52400	540	5700
EO CARSON #016	3002506987	33	D	FUSSELMAN	100876	59330	878	2929
V M HENDERSON #002	3002506908	30	Α	GLORIETA	138153	81610	744	2735
ARGO #007	3002509915	15	L	GRAYBURG	123777			
HAWK FEDERAL B 1 #012	3002506435	8	0	GRAYBURG	18553	11206	252	103
WEST BLINEBRYDRINKARD UNIT #043	3002526601	8	N	GRAYBURG	13256	7329	180	738
LOCKHART B 11 #003	30025266525	11	E	GRAYBURG		53772	199	
					85125			1831
TURNER #004	3002506746	22	M	GRAYBURG	95429	59121	861	3066

TURNER #011	3002506753	22	Ν	GRAYBURG	106450	67814	525	2271
HARRY LEONARD NCT E #005	3002506624	16	Н	GRAYBURG	198705			
ARGO A #007	3002506739	22	Е	GRAYBURG	238149	166197	295	1829
ARGO A #008	3002506740	22	D	GRAYBURG	118524	76444	275	1602
LOCKHART A 17#002	3002506637	17	I	GRAYBURG	147051	89860	88	1325
H T MATTERN NCT C #001	3002506657	18	I	GRAYBURG	23006	10150	2040	2517
LG WARLICK B #001	3002506665	19	Н	GRAYBURG	134673	79530	791	3055
EUNICE KING #001	3002506837	28	Ε	GRAYBURG	16028	6881	3007	479
EUNICE KING #003	3002506839	28	F	GRAYBURG	14405	6347	1614	959
V M HENDERSON #001	3002506907	30	Н	GRAYBURG	12182	3794	2785	1574
ARGO #007	3002509915	15	L	GRAYBURG	123162	75000	153	1138
W W WEATHERLY #001	3002506644	17	K	GRAYBURG	11484	4241	2880	466
TEXACO #001	3002535373	3	Т	GRAYBURG	54027	26650	330	1770
W W WEATHERLY #001	3002506644	17	K	GRAYBURG	14238	4702	4037	716
WEST BLINEBRY DRINKARD UNIT #072	3002506645	17	J	GRAYBURG	15453	7280	1958	630
H STURNER #002	3002506884	29	M	GRAYBURG	15574	7136	2488	395
C L HARDY #004	3002506705	20	Μ	PADDOCK	132840	78800	790	2500
J N CARSON NCT C #009	3002506836	28	- 1	PADDOCK	91426	51970	309	4579
C L HARDY #002	3002506685	20	Ν	PADDOCK		72800	800	3700
V M HENDERSON #005	3002506911	30	В	PENROSE	13143	3996	2926	1826
EUNICE KING #024	3002506864	28	Ε	SAN ANDRES	97871	57350	223	3405
EUNICE KING #024	3002506864	28	Е	SAN ANDRES	57304	31970	618	3301
HAWK B 10 #005	3002506455	10	В	SIMPSON	169290	115417	256	18
HARRY LEONARD NCT F #015	3002506359	2	G	SIMPSON	168218	103100	28	1120
LOCKHART B 12 #005	3002506540	12	Ε	SIMPSON	13070	6841	150	241
EUNICE KING #007	3002506843	28	G	SIMPSON	75060	42400	410	4150
NORTHEAST DRINKARD UNIT #723	3002506605	15	M	SIMPSON	118800	73000	122	1004
NORTHEAST DRINKARD UNIT #723	3002506605	15	M	SIMPSON	124500	76050	336	1140
AM YORK #002	3002509924	20	Α	TUBB	158624			
WEST BLINEBRY DRINKARD UNIT #032	3002506437	9	F	TUBB	195187	118000	158	3250
WEST BLINEBRY DRINKARD UNIT #037	3002506439	9	Р	TUBB	195890	118000	390	2750
WEST BLINEBRY DRINKARD UNIT #006	3002506443	9	В	TUBB	131370	81170	143	275
NEW MEXICO V STATE #007	3002506469	10	Ν	TUBB	174558	107000	488	1270
LG WARLICK A #001	3002506664	19	- 1	TUBB	163230	105700	189	801
NANCY STEPHENS #001	3002506774	24	D	TUBB	188423	115300	622	1301
WEST BLINEBRY DRINKARD UNIT #073	3002506646	17	G	TUBB	158923	97412	122	1261
WEST BLINEBRY DRINKARD UNIT #073	3002506646	17	G	TUBB	9666	4300	1693	160
AM YORK #002	3002509924	20	Α	TUBB	198080	119774	252	3350
C L HARDY #002	3002506685	26	K	TUBB	184903	114000	610	700
STATE C TR 13 #008	3002507050	36	D	YESO	144570	90010	779	420

		Other Produc	ed Wa	ter Samples - Att	achment	VII-4.2		
API	Section	Township R	ange	Formation	TDS	Chloride	Bicarbonate	Sulfate
					mg/l	mg/l	mg/l	mg/l
30-025-02424	11	20S	34E	BONE SPRING	29436	16720	634	1142
30-025-02427	12	20S	34E	BONE SPRING	15429			
30-025-02427	12	20S	34E	BONE SPRING	180701	108300	1016	670
30-025-02429	12	20S	34E	BONE SPRING	202606	118100	5196	992
30-025-02429	12	20S	34E	BONE SPRING	121800			
30-025-02431	12	20S	34E	BONE SPRING	147229	89640	108	1038
30-025-31696	2	20S	34E	DELAWARE	152064	102148	404	691
30-025-32105	2	20S	34E	DELAWARE	296822	215237	143	294
30-025-32466	2	20S	34E	DELAWARE	340838	245270	229	147
30-025-02427	12	20S	34E	DELAWARE	214787	132700	208	1816
30-025-02431	12	20S	34E	DEVONIAN	33414	18570	227	1961
30-025-02432	13	20S	34E	DEVONIAN	45778	26440	1145	729
30-025-01912	16	16S	34E	WOLFCAMP	164004	102500	4204	1249
30-025-01922	20	16S	34E	WOLFCAMP	104541	64290	280	541
30-025-01922	20	16S	34E	WOLFCAMP	104033	64080	268	515
30-025-01922	20	16S	34E	WOLFCAMP	105175	65570	207	192
30-025-01925	21	16S	34E	WOLFCAMP	86355	51800	610	665
30-025-01928	21	16S	34E	WOLFCAMP	119102	73300	227	454
30-025-01928	21	16S	34E	WOLFCAMP	35422	19170	979	1949
30-025-01930	22	16S	34E	WOLFCAMP	30015	14800	750	3300
30-025-01931	22	16S	34E	WOLFCAMP	87680	53000	301	681
30-025-01933	28	16S	34E	WOLFCAMP	59960	35100	515	1500
30-025-01933	28	16S	34E	WOLFCAMP	60309	35350	586	1297
30-025-01940	30	16S	34E	WOLFCAMP	82422	49890	361	787
30-025-01944	30	16S	34E	WOLFCAMP	83960	51410	418	641
30-025-20222	27	16S	34E	WOLFCAMP	85457	51020	544	1201
30-015-42895	2	23S	31E	WOLFCAMP	119472	73173		1036



Result

Fenway Produced Water Analysis – Attachment VII-4.3 Page 1 of 2

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

Etech Environmental & Safety Solutions

P.O. Box 301

Analyte

Lovington NM, 88260

Project: GOODNIGHT MIDSTREAM

Project Number: NONE GIVEN

Project Manager: LANCE CRENSHAW

Fax To: (575) 396-1429

Reported: 05-Feb-19 17:18

FENWAY H900304-03 (Water)

MDL	Reporting	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes

		Cardi	nal Laborato	ries				
Inorganic Compounds								
Alkalinity, Bicarbonate	1630	5.00	mg/L	1	9012407	AC	30-Jan-19	310.1
Alkalinity, Carbonate	<1.00	1.00	mg/L	1	9012407	AC	30-Jan-19	310.1
Chloride*	73000	4.00	mg/L	1	9012811	AC	31-Jan-19	4500-Cl-B
Conductivity*	146000	1.00	uS/em	1	9013002	AC	30-Jan-19	120.1
pH*	7.25	0.100	pH Units	1	9013002	AC	30-Jan-19	150.1
Resistivity	0.0684		Ohms/m	1	9013002	AC	30-Jan-19	120.1
Specific Gravity @ 60° F	1.076	0.000	[blank]	1	9013007	AC	30-Jan-19	SM 2710F
Sulfate*	1810	250	mg/L	25	9013006	AC	30-Jan-19	375.4
TDS*	107000	5.00	mg/L	1	9012801	AC	31-Jan-19	160.1
Alkalinity, Total*	1340	4.00	mg/L	1	9012407	AC	30-Jan-19	310.1
		Green An	alytical Labo	ratories				
Total Recoverable Metals by	ICP (E200.7)		- 60 (0)					
Darium*	<10.0	10.0	mo/f	200	B001226	AFS	04-Feb-10	EPA200.7

TOTHS TIPES I STRONG THE STRONG	10 03 101 (111)								
Barium*	<10.0	10.0	mg/L	200	B901226	AES	04-Feb-19	EPA200.7	
Calcium*	1730	20.0	mg/L	200	B901226	AES	04-Feb-19	EPA200.7	
Iron*	10.2	10.0	mg/L	200	B901226	AES	04-Feb-19	EPA200.7	
Magnesium*	271	20.0	mg/L	200	B901226	AES	04-Feb-19	EPA200.7	
Potassium*	1100	200	mg/L	200	B901226	AES	04-Feb-19	EPA200.7	
Sodium*	48600	200	mg/L	200	B901226	AES	04-Feb-19	EPA200.7	

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 arising 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 succious profits are used upon any of the above stated reasons or otherwise. Results relate only to the samples identified above.

Celeg & Keine

CARDINAL LABORATORIES SCALE INDEX WATER ANALYSIS REPORT

Company : GOODNIGHT MIDSTREAM Date Sampled : 01/28/19

Lease Name : LAB # H900304-03 Company Rep. : RALPH TIJERINA

Well Number : FENWAY

Location : 32.456025 -103.274594

ANALYSIS

ANALYSIS						
pH	7.25					
Specific Gravity @ 60/60 F.	1.0760					
CaCO3 Saturation Index @ 80 F.	+1.103	•	Calcium C	Carbo	onate Scale	Possible'
@ 140 F.	+2.013		Calcium C	Carbo	onate Scale	Possible'
Dissolved Gasses						
Hydrogen Sulfide	ND	1	PPM			
Carbon Dioxide	ND	-	PPM			
Dissolved Oxygen	ND	-	PPM			
Cations		1	Eq. Wt.	=	MEQ/L	
Calcium (Ca++)	1,730.00	1	20.1	=	86.07	
Magnesium (Mg++)	271.00	1	12.2	=	22.21	
Sodium (Na+)	48,600	1	23.0	=	2,011.82	
Barium (Ba++)	0.000	1	68.7	=	0.00	
Anions						
Hydroxyl (OH-)	0	1	17.0	=	0.00	
Carbonate (CO3=)	0	1	30.0	=	0.00	
Bicarbonate (HCO3-)	1,630	1	61.1	=	26.68	
Sulfate (SO4=)	1,810	1	48.8	=	37.09	
Chloride (CI-)	73,000	1	35.5	=	2,056.34	
Other						
Total Iron (Fe)	10.200	1	18.2	=	0.56	
Total Dissolved Solids	107,000					
Total Hardness As CaCO3	5,436.0					
Calcium Sulfate Solubility @ 90 F.	5,879					
Resistivity (Measured)	0.068	(Ohm/Mete	ers	@ 77	Degrees (F)
	pH Specific Gravity @ 60/60 F. CaCO3 Saturation Index @ 80 F. @ 140 F. Dissolved Gasses Hydrogen Sulfide Carbon Dioxide Dissolved Oxygen Cations Calcium (Ca++) Magnesium (Mg++) Sodium (Na+) Barium (Ba++) Anions Hydroxyl (OH-) Carbonate (CO3=) Bicarbonate (HCO3-) Sulfate (SO4=) Chloride (CI-) Other Total Iron (Fe) Total Hardness As CaCO3 Calcium Sulfate Solubility @ 90 F.	. pH	. pH	. pH	. pH 7.25 . Specific Gravity @ 60/60 F. 1.0760 . CaCO3 Saturation Index @ 80 F.	. pH 7.25 . Specific Gravity @ 60/60 F. 1.0760 . CaCO3 Saturation Index @ 80 F.

Logarithmic Water Pattern

PROBABLE MINERAL COMPOSITION

	, , , , , , , , , , , , , , , , , , ,				
COMPOUND	Eq. Wt.	X	MEQ/L	=	mg/L
Ca(HCO3)2	81.04	X	26.68	=	2,162
CaSO4	68.07	X	37.09	=	2,525
CaCl2	55.50	X	22.30	=	1,238
Mg(HCO3)2	73.17	X	0.00	=	0
MgSO4	60.19	X	0.00	=	0
MgCl2	47.62	X	22.21	=	1,058
NaHCO3	84.00	X	0.00	=	0
NaSO4	71.03	X	0.00	=	0
NaCl	58.46	X	2,011.82	=	117,611

ND = Not Determined





PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

Safety & Environmental Solutions

Project: TED WILLIAMS SWD #1

Reported:

703 East Clinton

Project Number: CAM - 18-001

21-Sep-18 08:43

Hobbs NM, 88240

Project Manager: Bob Allen

Fax To: (575) 393-4388

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
LOWER ZONE # 1 SWAB	H802574-01	Water	10-Sep-18 08:50	11-Sep-18 16:43
LOWER ZONE # 2 SWAB	H802574-02	Water	10-Sep-18 09:05	11-Sep-18 16:43
LOWER ZONE # 3 SWAB	H802574-03	Water	10-Sep-18 09:25	11-Sep-18 16:43
LOWER ZONE # 4 SWAB	H802574-04	Water	10-Sep-18 09:40	11-Sep-18 16:43
UPPER ZONE # 1 SWAB	H802574-05	Water	10-Sep-18 12:15	11-Sep-18 16:43
UPPER ZONE # 2 SWAB	H802574-06	Water	10-Sep-18 12:29	11-Sep-18 16:43
UPPER ZONE # 3 SWAB	H802574-07	Water	10-Sep-18 12:42	11-Sep-18 16:43
UPPER ZONE # 4 SWAB	H802574-08	Water	10-Sep-18 12:55	11-Sep-18 16:43

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remody 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 at any other cause whatsoever 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 internuptions, 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 successions are provided and the performance of the services hereunder by Cardinal, regardless of whether successions arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether successions arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether successions.

Colog Litiens

Celey D. Keene, Lab Director/Quality Manager

Swabbed Formation Water Analyses – Attachment VII-5.1 Page 2 of 9



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

Safety & Environmental Solutions

703 East Clinton Hobbs NM, 88240 Project: TED WILLIAMS SWD #1

Project Number: CAM - 18-001

Project Manager: Bob Allen

Fax To: (575) 393-4388

Reported:

21-Sep-18 08:43

LOWER ZONE #1 SWAB H802574-01 (Water)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
			Cardina	il Laborat	tories					
Inorganic Compounds				in the second						
Chloride*	5300		4.00	mg/L	1	8090703	AC	14-Sep-18	4500-CI-B	
ΓDS*	9400		5.00	mg/L	1	8090710	AC	13-Sep-18	160.1	
Volatile Organic Compounds by	EPA Method	8021								
Benzene*	0.067		0.001	mg/L	1	8091213	MS	13-Sep-18	8021B	
Foluene*	0.010		0.001	mg/L	1	8091213	MS	13-Sep-18	8021B	
Ethylbenzene*	0.001		0.001	mg/L	1	8091213	MS	13-Sep-18	8021B	
Total Xylenes*	0.005		0.003	mg/L	1	8091213	MS	13-Sep-18	8021B	
Total BTEX	0.083		0.006	mg/L	1	8091213	MS	13-Sep-18	8021B	
Surrogate: 4-Bromofluorohenzene (PID)			95.4%	81.3	-128	8091213	MS	13-Sep-18	8021B	

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 torit, shall be limited to the amount paid by client for analyses. All claims, including those for negligence arising other cause whatsoever shall be deemed weived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be lable for incidental or consequential damage including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiances, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether su claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celeg thema-

Swabbed Formation Water Analyses— Attachment VII-5.1 Page 3 of 9



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

Safety & Environmental Solutions

703 East Clinton

Hobbs NM, 88240

Project: TED WILLIAMS SWD #1

Project Number: CAM - 18-001 Project Manager: Bob Allen

Fax To: (575) 393-4388

Reported:

21-Sep-18 08:43

LOWER ZONE #2 SWAB

H802574-02 (Water)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
			Cardin	al Laborat	ories				<u> </u>	
Inorganic Compounds										
Chloride*	13300		4.00	mg/L	ı	8090703	AC	14-Sep-18	4500-CI-B	
TDS*	19800		5.00	mg/L	1	8090710	AC	13-Sep-18	160.1	
Volatile Organic Compounds b	v EPA Method	8021								
Benzene*	0.013		0.001	mg/L	1	8091213	MS	13-Sep-18	8021B	
Foluene*	0.003		100.0	mg/L	1	8091213	MS	13-Sep-18	8021B	
Ethylbenzene*	< 0.001		0.001	mg/L	1	8091213	MS	13-Sep-18	8021B	
Total Xylenes*	< 0.003		0.003	mg/L	1	8091213	MS	13-Sep-18	8021B	
Total BTEX	0.016		0.006	mg/L	1_	8091213	MS	13-Sep-18	8021B	
Surrogate: 4-Bromofluorobenzene (PID)			94.3 %	81.3	-128	8091213	MS	13-Sep-18	8021B	

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 any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after competion 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 inclurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether successors arising out of or related to the performance of the services hereunder by Cardinal is aborationes.

Celing & Kuns -

Celey D. Keene, Lab Director/Quality Manager

Swabbed Formation Water Analyses— Attachment VII-5.1 Page 4 of 9



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

Safety & Environmental Solutions

703 East Clinton

Hobbs NM, 88240

Project: TED WILLIAMS SWD #1

Project Number: CAM - 18-001

Project Manager: Bob Allen

Fax To: (575) 393-4388

Reported:

21-Sep-18 08:43

LOWER ZONE #3 SWAB H802574-03 (Water)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
			Cardin	al Labora	tories	1/6			3 8 8	
Inorganic Compounds										
Chloride*	8800		4.00	mg/L	1	8090703	AC	14-Sep-18	4500-CI-B	
TDS*	14200		5.00	mg/L	1	8090710	AC	13-Sep-18	160.1	
Volatile Organic Compounds	by EPA Method	8021								
Benzene*	0.045	1.1	0.001	mg/L	1	8091213	MS	13-Sep-18	8021B	
Toluene*	0.007		0.001	mg/L	1	8091213	MS	13-Sep-18	8021B	
Ethylbenzene*	< 0.001		0.001	mg/L	1	8091213	MS	13-Sep-18	8021B	
Total Xylenes*	< 0.003		0.003	mg/L	1	8091213	MS	13-Sep-18	8021B	
Total BTEX	0.052		0.006	mg/L	1	8091213	MS	13-Sep-18	8021B	
Surrogate: 4-Bromofluorobenzene (PIL))		93.1 %	81.3	-128	8091213	MS	13-Sep-18	8021B	74-043

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remety 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 as any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal inthin 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 suclaim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celleg & Keens

Swabbed Formation Water Analyses— Attachment VII-5.1 Page 5 of 9



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

Safety & Environmental Solutions

703 East Clinton Hobbs NM, 88240 Project: TED WILLIAMS SWD #1

Project Number: CAM - 18-001

Project Manager: Bob Allen

Fax To: (575) 393-439

Reported: 21-Sep-18 08:43

Fax To: (575) 393-4388

LOWER ZONE #4 SWAB H802574-04 (Water)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
			Cardina	al Laborat	ories					
Inorganic Compounds										
Chloride*	23700		4.00	mg/L	1	8090703	AC	14-Sep-18	4500-C1-B	
TDS*	40100		5.00	mg/L	1	8090710	AC	13-Sep-18	160.1	
Volatile Organic Compounds	by EPA Method	8021								
Benzene*	2.78		0.050	mg/L	50	8091213	MS	13-Sep-18	8021B	
Toluene*	0.223		0.050	mg/L	50	8091213	MS	13-Sep-18	8021B	
Ethylbenzene*	< 0.050		0.050	mg/L	50	8091213	MS	13-Sep-18	8021B	
Total Xylenes*	< 0.150		0.150	mg/L	50	8091213	MS	13-Sep-18	8021B	
Total BTEX	3.00		0.300	mg/L	50	8091213	MS	13-Sep-18	8021B	
Surrogate: 4-Bromofluorobenzene (PIL)))		96.2 %	81.3-	128	8091213	MS	13-Sep-18	8021B	

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 are any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after competion 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 such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celeg & Keens

Swabbed Formation Water Analyses – Attachment VII-5.1 Page 6 of 9



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

Safety & Environmental Solutions

703 East Clinton Hobbs NM, 88240 Project: TED WILLIAMS SWD #1

Project Number: CAM - 18-001 Project Manager: Bob Allen

Fax To: (575) 393-4388

Reported:

21-Sep-18 08:43

UPPER ZONE # 1 SWAB H802574-05 (Water)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
			Cardin	al Laborat	tories				22	
Inorganic Compounds										
Chloride*	48500		4.00	mg/L	1	8090703	AC	14-Sep-18	4500-CI-B	98.00
TDS*	80100		5.00	mg/L	1	8090710	AC	13-Sep-18	160.1	
Volatile Organic Compounds b	v EPA Method	8021	200							
Benzene*	0.380		0.010	mg/L	10	8091213	MS	13-Sep-18	8021B	
Toluene*	0.045		0.010	mg/L	10	8091213	MS	13-Sep-18	8021B	
Ethylbenzene*	< 0.010		0.010	mg/L	10	8091213	MS	13-Sep-18	8021B	
Total Xylenes*	< 0.030		0.030	mg/L	10	8091213	MS	13-Sep-18	8021B	
Total BTEX	0.425		0.060	mg/L	10	8091213	MS	13-Sep-18	8021B	
Surrogate: 4-Bromofluorohenzene (PID)			98.7 %	81.3	-128	8091213	MS	13-Sep-18	8021B	

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's leability and client's exclusive remody 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 at any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (20) 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 successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether successors arising out of or related to the performance of the services have been successors.

Celeg & Keens

Swabbed Formation Water Analyses – Attachment VII-5.1 Page 7 of 9



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

Safety & Environmental Solutions

703 East Clinton Hobbs NM, 88240 Project: TED WILLIAMS SWD #1

Project Number: CAM - 18-001

Project Manager: Bob Allen Fax To: (575) 393-4388 Reported:

21-Sep-18 08:43

UPPER ZONE #2 SWAB H802574-06 (Water)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
			Cardin	al Laborat	tories					
Inorganic Compounds										
Chloride*	49500		4.00	mg/L	1.	8090703	AC	14-Sep-18	4500-CI-B	
TDS*	81500		5.00	mg/L	1	8090710	AC	13-Sep-18	160.1	
Volatile Organic Compounds	by EPA Method	8021								
Benzene*	0.085		0.001	mg/L	1	8091213	MS	13-Sep-18	8021B	
Toluene*	0.014		0.001	mg/L	1	8091213	MS	13-Sep-18	8021B	
Ethylbenzene*	< 0.001		0.001	mg/L	1	8091213	MS	13-Sep-18	8021B	
Total Xylenes*	0.004		0.003	mg/L	1	8091213	MS	13-Sep-18	8021B	
Total BTEX	0.103		0.006	mg/L	ı	8091213	MS	13-Sep-18	8021B	
Surrogate: 4-Bromofluorobenzene (P1E	")		86.3 %	81.3	-128	8091213	MS	13-Sep-18	8021B	

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's enclusive remedy for any claim orising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence are any other cause whatsoever 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 liabile 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 succiam is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celly D. Keens

Swabbed Formation Water Analyses – Attachment VII-5.1 Page 8 of 9



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

Safety & Environmental Solutions

703 East Clinton

Hobbs NM, 88240

Project: TED WILLIAMS SWD #1

Project Number: CAM - 18-001

Project Manager: Bob Allen

Fax To: (575) 393-4388

Reported:

21-Sep-18 08:43

UPPER ZONE #3 SWAB H802574-07 (Water)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
			Cardina	al Laborat	tories					
Inorganic Compounds										
Chloride*	21200		4.00	mg/L	1	8090703	AC	14-Sep-18	4500-CI-B	300
TDS*	40400		5.00	mg/L	1	8090710	AC	13-Sep-18	160.1	
Volatile Organic Compound	ds by EPA Method	8021								
Benzene*	4.33		0.050	mg/L	50	8091213	MS	13-Sep-18	8021B	
Toluene*	0.551		0.050	mg/L	50	8091213	MS	13-Sep-18	8021B	
Ethylbenzene*	< 0.050		0.050	mg/L	50	8091213	MS	13-Sep-18	8021B	
Total Xylenes*	0.289		0.150	mg/L	50	8091213	MS	13-Sep-18	8021B	
Total BTEX	5.17		0.300	mg/L	50	8091213	MS	13-Sep-18	8021B	
Surrogate: 4-Bromofluorobenzene (I	PID)		95.1 %	81.3	-128	8091213	MS	13-Sep-18	8021B	

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and ciern's exclusive remody for any claim arising, whether based in contract or tort, shall be limited to the amount paid by ciert for analyses. All claims, including those for negligence at any other cause whatsoever shall be deemed waved 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 such clients in the performance of the services hereunder by Cardinal, regardless of whether such clients approved of Cardinal Laboratories.

Celeg Titreene

Swabbed Formation Water Analyses – Attachment VII-5.1 Page 9 of 9



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

Safety & Environmental Solutions

703 East Clinton Hobbs NM, 88240 Project: TED WILLIAMS SWD #1

Project Number: CAM - 18-001

Project Manager: Bob Allen

Fax To: (575) 393-4388

Reported:

21-Sep-18 08:43

UPPER ZONE #4 SWAB H802574-08 (Water)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
			Cardina	ıl Laborat	tories		e			
Inorganic Compounds										
Chloride*	9800		4.00	mg/L	1	8090703	AC	14-Sep-18	4500-C1-B	
ΓÐS*	16400		5.00	mg/L	1	8091202	AC	13-Sep-18	160.1	
Volatile Organic Compound	s by EPA Method	8021								
Benzene*	6.20		0.100	mg/L	100	8091213	MS	13-Sep-18	8021B	
Toluene*	0.664		0.100	mg/L	100	8091213	MS	13-Sep-18	8021B	
Ethylbenzene*	< 0.100		0.100	mg/L	100	8091213	MS	13-Sep-18	8021B	
Total Xylenes*	< 0.300		0.300	mg/L	100	8091213	MS	13-Sep-18	8021B	
Total BTEX	6.86		0.600	mg/L	100	8091213	MS	13-Sep-18	8021B	
Surrogate: 4-Bromofluorobenzene (P.	ID)		94.7 %	81.3	-128	8091213	MS	13-Sep-18	8021B	

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 as any other cause whatsoever shall be deemed waved unless made in writing and received by Cardinal within thiny (30) days after completion of the applicable service. In no event shall be identified to incidental or corresponded 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 successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether successors arising out of or related to the performance of the services hereunder by Cardinal and the services hereunder to the services hereunder by Cardinal and the services hereunder to the services hereunder by Cardinal and the services hereunder to the services hereunder by Cardinal and the services hereunder by Cardinal and the services hereunder to the services hereunder by Cardinal and the services hereunder to the services her

Colory Theren

Celey D. Keene, Lab Director/Quality Manager

*VIII.APPROPRIATE GEOLOGIC DATA: The red beds are the nearest underground source of drinking water above the proposed disposal interval. They are reportedly 1,265' deep in the ROY RIDDEL #4 well (API# 30-025-35623) that is approximately 1,050' southeast of the VERLANDER SWD #1. There is approximately 2,760' of vertical separation and more than a thousand feet of anhydrite and salt between the bottom of the only likely underground water source (red beds) and the top of the San Andres.

Attachment VIII-1 is a NM State Engineer report that details the nearest recorded freshwater well, CP-00986-POD1 to be approximately one mile northeast and an additional ten wells within two miles. The deepest well is 340'. No underground sources of drinking water are below the proposed disposal interval and the Ogallala aquifer is approximately 3 miles north of this proposed well as detailed in Attachment VIII-2

Estimated formation tops at the proposed VERLANDER SWD 1 location are as follows:

Anhydrite — 1255'

Salt — 1765'

Yates — 2655'

Seven Rivers — 2920'

Queen — 3420'

Grayburg = 3705'

San Andres = 4015'

Glorieta = 5220'

Paddock = 5555'

Geologic Discussion of formations Grayburg through Blinebry; reservoirs and permeability barriers.

Reference wells: 30 025 35853 Lot D section 7 and 30 025 33677 Lot L section 7.

At these locations (the Verlander SWD will be between them but offset to the west) the Grayburg is part of the barrier that will prevent water from reaching the hydrocarbon producing zones above. The upper Grayburg is tight rock consisting of anhydrite and low porosity dolomite. The porosity is less than 5% averaging 2-3%. This interval is 150 feet thick in the 35853 well and 220 feet thick in the 33677 well.

Below the tight upper Grayburg is an interval with mostly anhydrite-low porosity dolomite with thin shale and siltstone interbeds. These do have some fluid storage capacity 6-9% porosity but are low permeability. When they are hydrocarbon charged, they can be stratigraphic traps for oil below the regional oil water contact of the Eunice Monument South Unit (EMSU). There are no hydrocarbon charged stratigraphic traps in the area. This interval is 150 feet thick and has tested salt water at this elevation. The combined 300 feet of thickness will act as part of the permeability barrier.

In addition, the top 100 feet of the San Andres is dominantly anhydrite. This is a very good barrier. The San Andres barrier is 100 feet thick in both the 35853 and the 33677 wells. The Verlander location is expected to be similar in thickness.

The San Andres injection interval, 4251 feet to 5200 feet MD will be alternating layers of porous dolomite and limestone. The dolomite ranges from 8% porosity up to 15% with excellent fluid transmissivity properties in the top, to porous dolomite and limestone with porosities from 3% to 8% in the bottom. The disposal reservoir will have a net thickness of 280 feet out of a gross thickness of 950.

NOTE: The well history of the 33677 well shows the operator requested an oil pool designation for the San Andres. This was done in June of 1998. The zone was tested and no oil was produced. The well was plugged back in July of 1998; San Andres was abandoned. The cumulative oil sold under that pool was zero (0). The well still has the "San Andres oil pool" designation in the OCD files, although it never sold any oil.

The basal San Andres lithologic unit is an 80 to 100 foot limestone interval with very low porosity, 1% - 3%. This interval is the barrier between the Glorieta and San Andres reservoirs.

The Glorieta in the 35853 is 340 feet of thin-bedded dolomitic siltstones and silty to sandy dolomites. Porosities are good, ranging from 5% to 11%. Thicknesses and rock properties are the same in the 33677 well. This will be a good reservoir for the disposal of fluid; very large area and thickness.

The interval below the Glorieta is the Paddock; Paddock in name. The lithology that produces oil in other wells is not present at this location. The rock type is similar to the Glorieta above, interbedded shales and dolomitic siltstones. In effect it is more Glorieta although operators in the area call the "Paddock" top at this depth.

Below the Paddock is the Blinebry interval. The Blinebry is 750' of tight dolomite in both wells. This is an excellent, exceptionally thick barrier to flow.

A cross-section detailing appropriate geologic data of the confining zones and the San Andres – Glorieta injection zone is included as Attachment VIII-3. It describes lithologic detail, geologic name, thickness and depth.

NMOSE Reported Freshwater Well Data – Attachment VIII-1

VERLANDER SWD #001 – API# 30-025-XXXXX 2482' FNL & 1277' FEL, Unit H of Sec 21-T21S-R36E Lea County, New Mexico



New Mexico Office of the State Engineer

Water Column/Average Depth to Water

(A CLW##### in the POD suffix indicates the POD has been replaced & no longer serves a water right file.) (R=POD has been replaced, O=orphaned, C=the file is

closed)

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

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

(In feet)

	crosca)			`	1					-87		/		/	
		POD Sub-		Q	Q	Q									Water
POD Number	Code	basin	County	64	16	4	Sec	Tws	Rng	X	Y	DistanceDep	othWellDe	pthWater	Column
CP 00986 POD1		CP	LE	4	3	4	06	21S	37E	669110	3597437	1612	154	1-Mile	
<u>CP 00685 POD1</u>		CP	LE	2	3	4	11	21S	36E	666038	3595997*	1801	220		
<u>CP 00877</u>		CP	LE				06	21S	37E	668920	3598153*	1961	150	73	77
<u>CP 00446 POD1</u>		CP	LE	1	4	4	13	21S	36E	667871	3594424*	2165	185	148	37
<u>CP 00446 POD2</u>		CP	LE	1	4	4	13	21S	36E	667871	3594424*	2165	200	151	49
<u>CP 01245 POD1</u>		CP	LE			4	18	21S	37E	668676	3594411	2367	220		
<u>CP 01026 POD1</u>		CP	LE	1	1	3	17	21S	37E	669809	3594958	2631	167	95	72
<u>CP 00447 POD1</u>		CP	LE	2	4	4	18	21S	37E	669647	3594451*	2862	95		
<u>CP 00448 POD1</u>		CP	LE	2	4	4	18	21S	37E	669647	3594451*	2862	100		
<u>CP 00676</u>		CP	LE		4	4	18	21S	37E	669548	3594352*	2873	140	106	34
<u>CP 00690</u>		CP	LE		4	4	03	21S	36E	664706	3597487*	3165	340		

Average Depth to Water:

114 feet

Minimum Depth:

73 feet

Maximum Depth:

151 feet

Record Count: 11

Basin/County Search:

County: Lea

UTMNAD83 Radius Search (in meters):

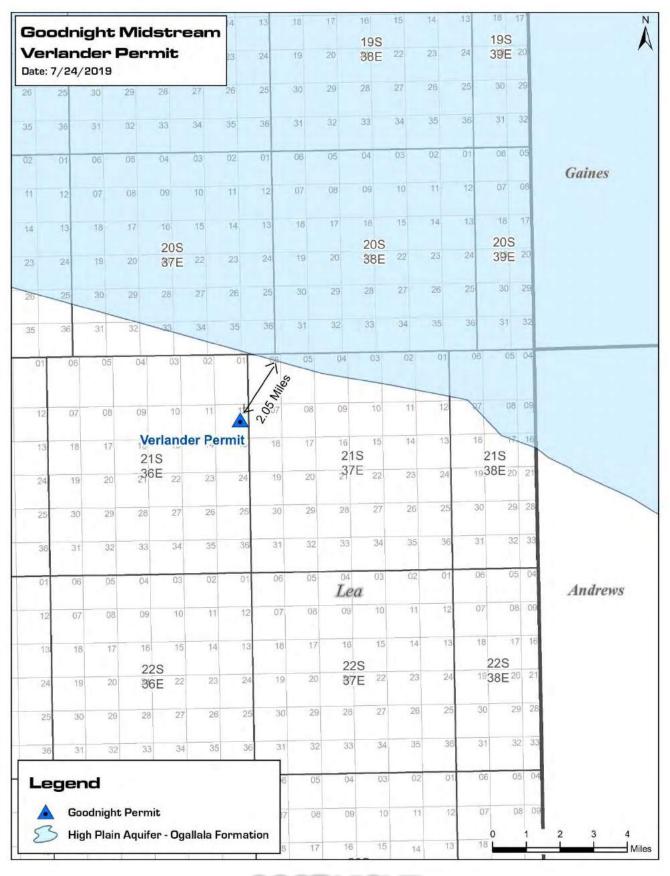
Easting (X): 667740.866 Northing (Y): 3596585.949 Radius: 3220

*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.

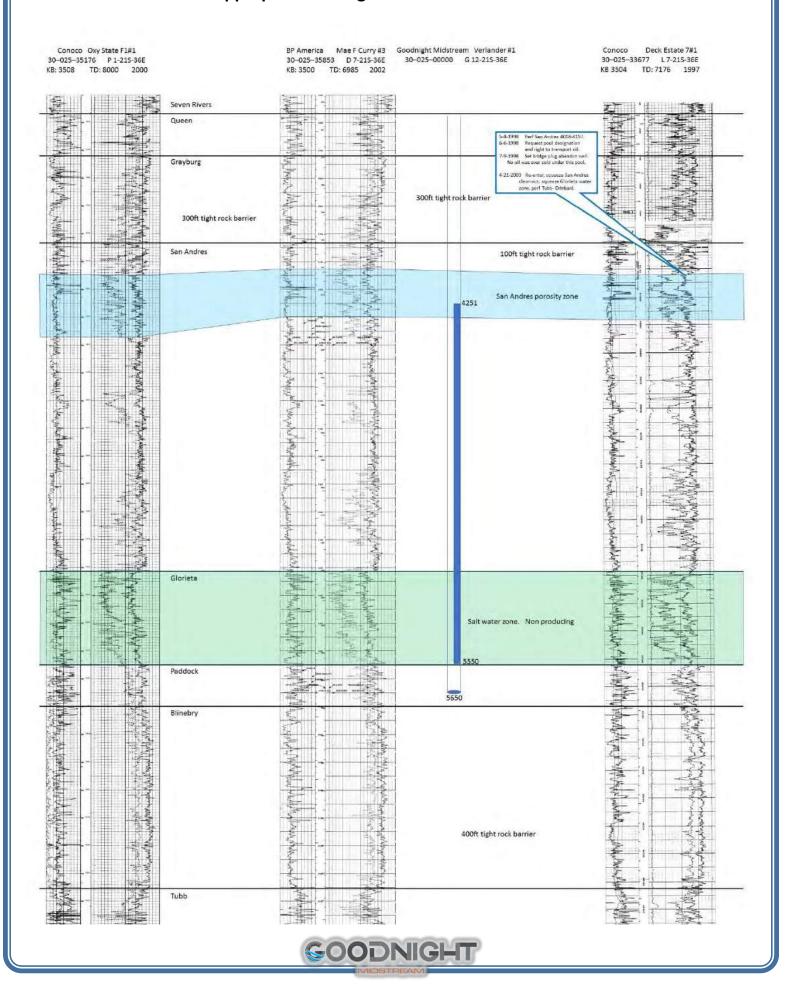
WATER COLUMN/ AVERAGE DEPTH TO WATER

Map of High Plains/Ogallala Aquifer- Attachment VIII-2





Appropriate Geologic Data- Attachment VIII-3



- IX. STIMULATION PROGRAM: A conventional acid job may be performed on the proposed San Andres/Glorieta perforated interval from 4,251′ 5,550′ to clean and open the formation.
- *X. LOGGING & TEST DATA: Cement Bond, Gamma-Ray/CCL, and Composite Logs will be submitted to the OCD after completion of this well and prior to first injection.
- *XI. FRESHWATER ANALYSES: Three freshwater wells were found within one mile of the proposed VERLANDER SWD #1 and sampled on March 19, 2019. The Dasco Land Corp well seems to correlate to CP-00685-POD1 found on the NM State Engineer report but the location was found to be approximately 1,000' east of the state's documented location. The other two freshwater wells, the Robert McCasland and Sample #2, are not found on the NM State Engineer report. Analyses of these three wells are included as Attachments XI-1, XI-2 and XI-3 while Attachment XI-4 details their locations.



Dasco Land Sample #1 Analysis - Attachment XI-1

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

Etech Environmental & Safety Solutions

P.O. Box 301

Lovington NM, 88260

Project: VERLANDER SWD #1

Project Number: #10433

Project Manager: LANCE CRENSHAW

Fax To: (575) 396-1429

Reported:

29-Mar-19 17:07

DASCO LAND CORP. 32.48821-103.2297

H901049-01 (Water)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
- ,	_		Cardin	al Laborat	ories					
Inorganic Compounds										
Alkalinity, Bicarbonate	288		5.00	mg/L	1	9031804	AC	20-Mar-19	310,1	
Alkalinity, Carbonate	<1.00		1.00	mg/L	1	9031804	AC	20-Mar-19	310.1	
Chloride*	96.0		4.00	mg/L	1	9031903	AC	20-Mar-19	4500-Cl-B	
Conductivity*	716		1.00	uS/cm	1	9031901	AC	19-Mar-19	120.1	
pH*	8.97		0.100	pH Units	1	9031901	AC	19-Mar-19	150.1	
Specific Gravity @ 60° F	1.000		0.000	[blank]	1	9032010	AC	20-Mar-19	SM 2710F	
Sulfate*	87.3		25.0	mg/L	2.5	9032002	AC	20-Mar-19	375.4	
ΓDS*	408		5.00	mg/L	1	9032001	AC	22-Mar-19	160.1	
Alkalinity, Total*	236		4.00	mg/L	1	9031804	AC	20-Mar-19	310.1	
			Green Ana	lytical Lab	oratories					
Total Recoverable Metals by	ICP (E200.7)									
Calcium*	29.9		0.500	mg/L	5	B903196	AES	25-Mar-19	EPA200.7	
Magnesium*	24.5		0.500	mg/L	5	B903196	AES	25-Mar-19	EPA200.7	
Potassium*	5.23		5.00	mg/L	5	B903196	AES	25-Mar-19	EPA200.7	
Sodium*	85.5		5.00	mg/L	5	B903196	AES	25-Mar-19	EPA200.7	

Cardinal Laboratories *=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any dalm arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence are any other cause whatsoever 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 suclaims is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celeg & Keine





PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

Etech Environmental & Safety Solutions

P.O. Box 301

Potassium* Sodium*

Lovington NM, 88260

Project: VERLANDER SWD #1

Project Number: #10433

Project Manager: LANCE CRENSHAW

Fax To: (575) 396-1429

Reported: 29-Mar-19 17:07

SAMPLE #2 32.482796-103.213849

H901049-02 (Water)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
			Cardin	nal Laborat	ories					
Inorganic Compounds										
Alkalinity, Bicarbonate	322		5.00	mg/L	1	9031804	AC	20-Mar-19	310.1	
Alkalinity, Carbonate	<1.00		1.00	mg/L	1	9031804	AC	20-Mar-19	310.1	
Chloride*	72.0		4.00	mg/L	1	9031903	AC	20-Mar-19	4500-Cl-B	
Conductivity*	743		1.00	uS/cm	1	9031901	AC	19-Mar-19	120.1	
pH*	8.14		0.100	pH Units	1	9031901	AC	19-Mar-19	150.1	
Specific Gravity @ 60° F	1.002		0.000	[blank]	1	9032010	AC	20-Mar-19	SM 2710F	
Sulfate*	99.0		25.0	mg/L	2.5	9032002	AC	20-Mar-19	375.4	
TDS*	452		5.00	mg/L	1	9032001	AC	22-Mar-19	160.1	
Alkalinity, Total*	264		4.00	mg/L	1	9031804	AC	20-Mar-19	310.1	
			Green Ana	lytical Lab	oratories					
Total Recoverable Metals by	ICP (E200.7)									
Calcium*	43.3		0.500	mg/L	5	B903196	AES	25-Mar-19	EPA200.7	
Magnesium*	20.3		0.500	mg/L	5	B903196	AES	25-Mar-19	EPA200.7	

5

B903196

B903196

AES

AES

25-Mar-19

25-Mar-19

EPA200.7

EPA200.7

5.00

5.00

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 arising 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 autobidiance, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether suclaims is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above.

Celey & Keine

5.54

80.9





PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

Etech Environmental & Safety Solutions

P.O. Box 301

Lovington NM, 88260

Project: VERLANDER SWD #1

Project Number: #10433

Project Manager: LANCE CRENSHAW

Fax To: (575) 396-1429

Reported: 29-Mar-19 17:07

ROBERT MCCASLAND SAMPLE #3 32.498742-103.206514

H901049-03 (Water)

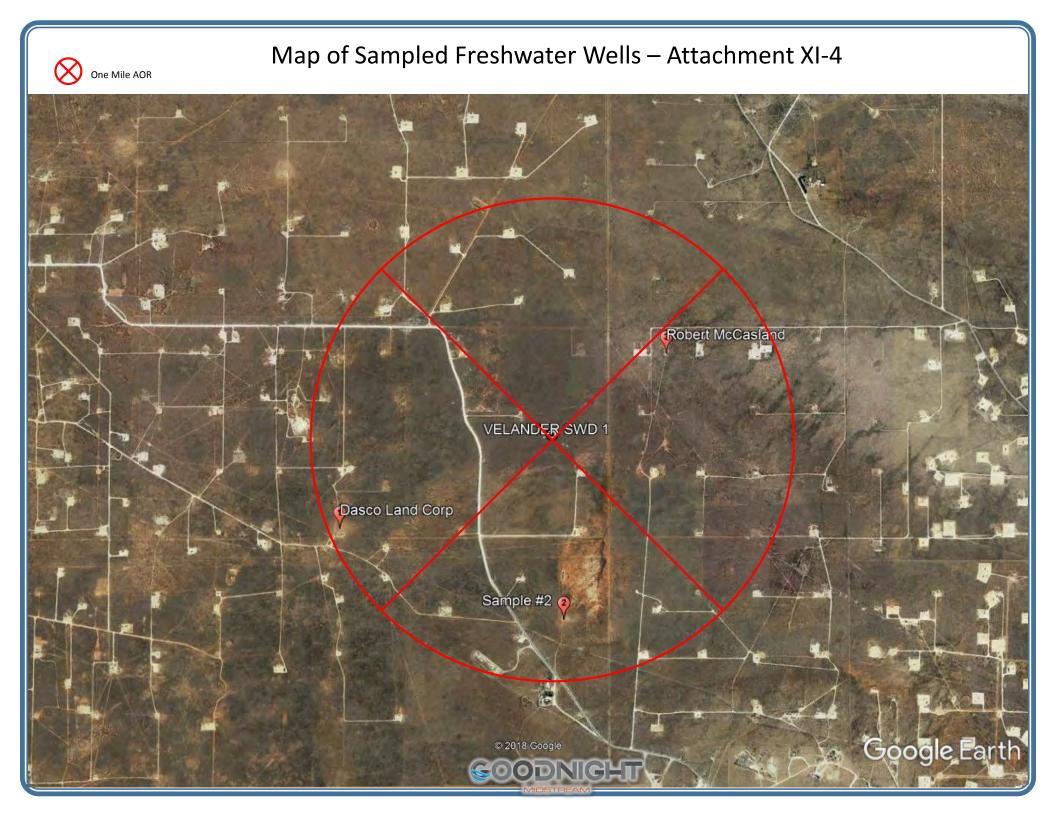
Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
			Cardii	nal Laborat	ories					
Inorganic Compounds										
Alkalinity, Bicarbonate	239		5.00	mg/L	1	9031804	AC	20-Mar-19	310.1	
Alkalinity, Carbonate	<1.00		1.00	mg/L	1	9031804	AC	20-Mar-19	310.1	
Chloride*	64.0		4.00	mg/L	1	9031903	AC	20-Mar-19	4500-Cl-B	
Conductivity*	645		1.00	uS/cm	1	9031901	AC	19-Mar-19	120.1	
pH*	8.75		0.100	pH Units	1	9031901	AC	19-Mar-19	150.1	
Specific Gravity @ 60° F	1.003		0.000	[blank]	1	9032010	AC	20-Mar-19	SM 2710F	
Sulfate*	98.0		25.0	mg/L	2.5	9032002	AC	20-Mar-19	375.4	
TDS*	394		5.00	mg/L	1	9032001	AC	22-Mar-19	160.1	
Alkalinity, Total*	196		4.00	mg/L	1	9031804	AC	20-Mar-19	310.1	
			Green Ana	lytical Lab	oratories					
Total Recoverable Metals by	ICP (E200.7)		- 107							
Calcium*	35.3		0.500	mg/L	5	B903196	AES	25-Mar-19	EPA200.7	

ov ICP (E200.7)								
35.3	0.500	mg/L	5	B903196	AES	25-Mar-19	EPA200.7	
22.6	0.500	mg/L	5	B903196	AES	25-Mar-19	EPA200.7	
< 5.00	5.00	mg/L	5	B903196	AES	25-Mar-19	EPA200.7	
63.0	5.00	mg/L	5	B903196	AES	25-Mar-19	EPA200.7	
	35.3 22.6 <5.00	35.3 0,500 22.6 0,500 <5.00 5.00	35.3 0.500 mg/L 22.6 0.500 mg/L <5.00 5.00 mg/L	35.3 0.500 mg/L 5 22.6 0.500 mg/L 5 <5.00 5.00 mg/L 5	35.3 0.500 mg/L 5 B903196 22.6 0.500 mg/L 5 B903196 <5.00 5.00 mg/L 5 B903196	35.3 0.500 mg/L 5 B903196 AES 22.6 0.500 mg/L 5 B903196 AES <5.00	35.3 0.500 mg/L 5 B903196 AES 25-Mar-19 22.6 0.500 mg/L 5 B903196 AES 25-Mar-19 <5.00	35.3 0,500 mg/L 5 B903196 AES 25-Mar-19 EPA200.7 22.6 0.500 mg/L 5 B903196 AES 25-Mar-19 EPA200.7 <5.00

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 arising any other cause whatsoever 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 autobidiantes, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether suclaims is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above.

Celeg & Keine



XII. AFFIRMATIVE STATEMENT: A hydrogeologic study stating no evidence of faulting or communication was found is included as Attachment XII-1.



Steve Drake V.P. Geology and Reservoir Engineering Goodnight Midstream, LLC 5910 North Central Expressway, Suite 850 Dallas, Texas 75206

RE: Goodnight Midstream, LLC Verlander SWD well permit

Lot H, Section 12, Township 21S Range 36E Lea County, New Mexico

Goodnight Midstream conducted a hydrogeologic investigation related to the proposed injection well. The scope of the investigation was to determine if there is any hydrologic connection between the proposed injection interval and any sources of underground drinking water.

Goodnight geologist performed an analysis of subsurface well log data. It is our conclusion that there is no evidence of faulting in the data we evaluated at the depths that are being considered. There are small scale flexures which may or may not be associated with small scale faults. None of these flexures extend above the Wolfcamp unconformity and are not seen in the Leonard intervals.

Goodnight acquired and evaluated 3D seismic covering the lands to the west of the proposed salt water disposal well. This data does not cover the proposed location but it does show the geologic setting in the nearby area. No faults are seen in the Artesia Group, San Andres, Glorieta, or Leonard series.

We see no evidence of faulting that would extend to or form a connection between the injection zone and any underground sources of drinking water.

Steve Drake

V.P. Geology and Reservoir Engineering

Goodnight Midstream, LLC

3-25-2019 Date

XIII. PROPER NOTICE:

All operators and lessees of record within the tracts of the area of review have been accounted for and were previously detailed on Attachment V-3. A thorough lease and mineral ownership investigation was performed upon all private tracts within the AOR by MLT Land Services, LLC. Their findings are included as Attachment XIII-1 through XIII-6.

The surface owner for the VERLANDER SWD 1 site is the Dasco Cattle Co, LLC. Contact information for all operators, lessees, surface and mineral owners is included as Attachment XIII-7. A copy of the C-108 and proper notice of application for disposal into the San Andres & Glorieta (4,251'–5,550') was given via letter to all parties listed. A copy of a typical letter and certified mail receipts are included as Attachment XIII-8 & XIII-9 as "proof of notice".

A legal notice was also published in the Hubb News-Sun. A proof copy of the published notice is included as Attachment XIII-10.

XIV. CERTIFICATION: See certification on original C-108

3001 West Loop North 250, North Ste C105-150, Midland, Texas 79705 | (940)999-4272 | Brad@MLTLandservices.com

April 16, 2019

RE: Verlander SWD Well - N2 NW/4 and the S/2 NW/4 Section 12 T21S R36E Lea County, NM

Tom Schumacher MidCon Resource Group, LLC 701-400-9909

Dear Mr. Schumacher,

The active leases for the tract of land cited above are for the McQuatters #001 – API # 30-025-25675 and the McQuatters #002 – API # 30-025-26531 wells. These are included in the Eumont Gas Pool as a Standard 160 acre Gas Proration Unit and the includes entire 160 acres of the NW/4 of Section 12, T21S R36E in the pool. These wells were drilled through the Queen Formation to a depth of approximately 3,750 feet and the producing zone of these wells are in the Queen formation with producing zones from about the 3,507 foot depth to the 3,685 foot depth. Neither of these wells are producing in the proposed Verlander SWD Well zone. According to the State of New Mexico Records for these wells, the operator is the Petroleum Exploration Company Ltd.

The entire mineral ownership of the N/2 of the NW/4 is held by production from the original lease dated 7/7/1927 and filed in the Oil & Gas Records of Lea County, NM under Vol 8, Page 195. There were not depth restrictions of Pugh Clauses included in the lease. Therefore, by contacting the operator of the well, you would meet the requirements of the State of New Mexico.

The S/2 NW/4 of Section 12 T21S R36E has all the minerals forced pooled in the above unit to 4,000 feet. All the depths below 4,000 feet are open for lease and the mineral owners to report to are listed in the separate report. By contacting the above stated operator of the well and the listed mineral owners, you would meet the requirements of the State of New Mexico.

Sincerely yours,

Thomas A. Sewall

Senior Right-of-Way Agent and Landman

	Verlande	r W	ell	
S/2 NW	/4 Section	12	T21S	R36E

Commerce Trust Company, Agent for

Patterson 1976 Trust Investments, LLC

by Farmers National Company, Agent

5110 South Yale Ave

Suite 400

Tulsa, OK 74135

Etz Oil Properties, Ltd.

P. O. Box 73406

Phoenix AZ 85050

George H. Etz, Jr., Trustee

1105 Xanthisma

McAllen, TX 78504

Lincicome Oil & Gas, LLC

7 Woodland Drive

Vienna, WV 26105

Keohane, Inc.

3619 E 2nd Street

Roswell, NM 88201

Toles-Com-Ltd, LLC

P. O. Box 1300

Roswell, NM 88202-1300

Graham Family Investments, LLC

P. O. Box 1835

Roswell, NM 88202-1835

3001 West Loop North 250, North Ste C105-150, Midland, Texas 79705 | (940)999-4272 | Brad@MLTLandservices.com

April 16, 2019

RE: Verlander SWD Well – 80 acres being the SW/4 NE/4 and NW/4 SE/4 of Section 12 T21S R36E Lea County, NM

Tom Schumacher MidCon Resource Group, LLC 701-400-9909

Dear Mr. Schumacher,

The active lease for the tracts of land cited above is for the Carter #001 – API # 30-025-04621 well. This well is included in the Eumont Gas Pool as a Non-Standard 80 acre Gas Proration Unit and includes the entire 80 acres of the SW/4 NE/4 and NW/4 SE/4 of Section 12, T21S R36E in the pool. This well was drilled through the Queen Formation to a pool depth of approximately 4,000 feet and the producing zone of this well is in the Queen formation. This well is not producing in the proposed Verlander SWD Well zone. According to the State of New Mexico Records for this well, the operator is Special Energy Corp.

The mineral ownership of these tracts is under leases held by the operator. These leases were filed under V 118, P 66; V118, P 68; V118. P 70; V118, P73; V118, P75; V118, P77; V118, P80 and V118, P83 of the Oil & Gas Records of Lea County, NM, some of which included depth restrictions below 4,000 feet and two of the leases were only for the NW/4 SE/4 of Section 12 T21S R36E. Leases filed under V118, P70 and V118, P83 only lease the acreage to 4,000 feet. Leases filed under V118, P75 and V118, P80 were only for the NW/4 SE4. A list of these mineral owners and their assigns is attached. Therefore, by contacting the operator of the well and the list of attached mineral owners, you would meet the requirements of the State of New Mexico.

Sincerely yours

Thomas A. Sewall

Senior Right-of-Way Agent and Landman

Private Lease & Mineral Owner Investigation – Attachment XIII-2.1

MINERAL OWNERS FOR NOTIFICATION: SW/4 NE/4 NW/4 SE/4 Sec 12 T21s R36E

Beverly Carter - Trustee of the Powhatan and Beverly T. Carter Revocable Trust

P. O. Box 328

Ft. Sumner, NM 88203

LFN Cone Properties

3102 S. Oak Drive

Austin, TX 78704

Mildred M. Montgomery

82 April Wind South Drive

Montgomery, Texas 77356

Carter Family Minerals

464 East Main Street

Fort Summer, NM 88119

Thomas R. Cone

P. O. Box 400

Southwest City, MO 64863

College of the Southwest Foundation

6610 Lovington Highway

Hobbs, NM 88240

Cathie Cone McCown

as Trustee for the Auvenshine Children's Testamentary Trust

P. O. Box 658

Dripping Springs, Texas 78620

Cathie Cone McCown

P. O. Box 658

Dripping Springs, Texas 78620

Kayla Cone

P. O. Box 746

Fayeteville, AR 72702

Karen Cone

P. O. Box 8357

Fayetteville, AR 72703

3001 West Loop North 250, North Ste C105-150, Midland, Texas 79705 | (940)999-4272 | Brad@MLTLandservices.com

April 16, 2019

RE: Verlander SWD Well – 320 acres being the NW/4 NE/4 and E/2 NE/4 and E/2 SE/4 and SW/4 SE/4 and E/2 SW/4 of Section 12 T21S R36E Lea County, NM

Tom Schumacher MidCon Resource Group, LLC 701-400-9909

Dear Mr. Schumacher,

The active lease for the tracts of land cited above is for the Roy Riddel #003 – API # 30-025-35486 well. This well is included in the Eumont Gas Pool as a Non-Standard 320 acre Gas Proration Unit and includes the entire 320 acres of the NW/4 NE/4 and E/2 NE/4 and E/2 SE/4 and SW/4 SE/4 and E/2 SW/4 of Section 12, T21S R36E in the pool. This well was drilled through the Queen Formation to a pool depth of approximately 4,000 feet and the producing zone of this well is in the Queen formation. This well is not producing in the proposed Verlander SWD Well zone. According to the State of New Mexico Records for this well, the operator is Chevron USA Inc.

The mineral ownership of these tracts is under leases held by the operator. These leases were filed under V 42, P 505; V48, P 311; V48. P 316; V48, P320; V63, P134; V90, P325 of the Oil & Gas Records of Lea County, NM which included no depth restrictions or Pugh Clauses. Leases filed under V104, P280; V104, P282; V104, P293 and V104, P448 only lease the acreage to 4,000 feet. A list of these mineral owners and their assigns is attached. Therefore, by contacting the operator of the well and the list of attached mineral owners, you would meet the requirements of the State of New Mexico.

Sincerely yours,

Thomas A. Sewall

Senior Right-of-Way Agent and Landman

Private Lease & Mineral Owner Investigation – Attachment XIII-3.1

MINERAL OWNERS FOR NOTIFICATION:

NW/4 NE/4 and E/2 NE/4 asnd E/2 SE/4 and SW/4 SE/4 and E/2 SW/4 Sec 12 T21S R36E

Prosperity Bank, as Trustee of the Williams Trust FOB MMP dated 4-10-1996

Trust Dept.

1401 Avenue O

S. E. Cone, Jr.

P. O. Box 10321

Lubbuck, TX 79408

Eleanor Christie Corrigan Trust

P. O. Box 63869

Colorado Springs, CO 80962

Pat Corrigan, Trustee of the Pat Corrigan Trust uwo Hugh Corrigan II, Hugh Daniels Corrigan, Trustee of the CEC Trust for the benefit of Hugh Daniels Corrigan, and James Patrick Corrigan, Jr., Trustee of the CEC Trust for the benefit of James Patrick Corrigan, Jr.

310 West Wall Street, Suite 1200

Midland, TX 79701

Corrigan Southern Land and Cattle Company, LLC

8117 Preston Road, Suite 610

Dallas, TX 75225

LFN Cone Properties

3102 S. Oak Drive

Austin, TX 78704

James Patrick Corrigan, Jr. Trust

P. O. Box 69068

Vero Beach, FL 32969

Hugh Corrigan, IV, Power of Appointment Trust,

William E. Corrigan, as Trustee

8117 Preston Road

Suite 610

Dallas, Texas 75225

C. E. Corrigan Trust

P. O. Box 643726

Vero Beach, FL 32964-3726

3001 West Loop North 250, North Ste C105-150, Midland, Texas 79705 | (940)999-4272 | Brad@MLTLandservices.com

April 16, 2019

RE: Verlander SWD Well - Lot 1 (a/k/a the NW/4 NW/4 of Section 7 T21S R37E Lea County, NM

Tom Schumacher MidCon Resource Group, LLC 701-400-9909

Dear Mr. Schumacher,

The active lease for the tract of land cited above is for the Mae F. Curry #003 – API # 30-025-35853 well. This well is an oil and includes the entire area of Lot 1 of Section 7, T21S R37E. This well is in the Hardy; Tubb- Drinkard and the Hardy; Blinebry pool with a total depth of 6,985 feet and a production zone from 5,758 feet to 6,810 feet. This well is not producing in the proposed Verlander SWD Well zone. According to the State of New Mexico Records for this well, the operator is the Apache Corporation.

The mineral ownership of this tract is under a lease held by the operator and is totally held by production. This lease was filed under V 13, P 74 of the Oil & Gas Records of Lea County, NM. The lease did not have any depth restrictions and it did not contain a Pugh Clause. There are no mineral owners that need to be contacted for this tract. Therefore, by contacting the operator of the well you would meet the requirements of the State of New Mexico.

Sincerely yours,

Thomas A. Sewall

Senior Right-of-Way Agent and Landman

3001 West Loop North 250, North Ste C105-150, Midland, Texas 79705 | (940)999-4272 | Brad@MLTLandservices.com

April 16, 2019

RE: Verlander SWD Well – Lot 2 (aka SW/4 NW/4) and SE/4 NW/4 and NE/4 SW/4 of Section 7 T21S R37E Lea County, NM

Tom Schumacher MidCon Resource Group, LLC 701-400-9909

Dear Mr. Schumacher,

The are no active wells or leases controlling the common mineral ownership of the above stated tracts of land. These are all open tracts of land.

I have compiled and attached a list of all the known mineral owners of these tracts of land using the records of Lea County, NM. Therefore, by contacting all the mineral owners of these tracts of land, you would meet the requirements of the State of New Mexico.

Sincerely yours,

Thomas A. Sewall

Senior Right-of-Way Agent and Landman

and NE/4 SW/4 of
1 5 51 1
ck E. Blake,
ompany
accessors in Trust,
9, 1996 and
a Texas limited

Kinney, Inc.	
106 SW 9th Street	
Andrews, TX 79714	
Mark L. Shidler and wife, Mitzi Shidler	
1010 Lamar	
#500	
Houston, TX 77002	
Dennis Mitchell	
P. O. Box 711	
Yankton, SD 57078	
Ronald E. Slover	
3614 Royal Road	
Amarillo, TX 79109	
Zeus Petroleum, Inc.	
P. O. Box 458	
Bellaire, TX 77402-0458 John E. Donnellan and wife Gail Donnellan	
P. O. Box 1433	
Chickasha, OK 73023 Partin Petroleum, Inc.	
P. O. Box 57425	
Houston, TX 77257-2425 Suzanne Thomas	
3936 Byron Street	
Houston, TX 77005	
Cynthia Stratton O'Malley	
9575 Katy Freeway	
Suite 440	
Houston, TX 77024-1408	
Trio Production company, LLC	
1601 East 19th Street	
Edmond, OK 73013	
Kathleen P. Henderson	
5519 Tupper Lake	
Houston, TX 77056	
Charles E. Hinkle	
P. O. Box 1030	
King City, CA 93930	
Lisle Q. Tannehill	
2511 Garden Road	
Suite A-180	
Monterey, CA 93940	
John W. Tannehill	
P. O. Box 819	
Paso Robles, CA 93447	
First United Methodist Church of Amory, Mississippi	
P. O. Box 147	
Amory, M?S 38821-0147	

Nancy Myers

2119 Ernest Avenue

#3

Redondo Beach, CA 90278

Alice Meyers Riley

4 Benton Street

Hadleigh, Suffock, IP75AT England

Collene Alexander, Trustee of the Joe and Paudene Alexander

Family Trust, dated April 27, 2000

5206 Saddle Ridge Trail

San Angelo, TX 76904 Greg Segovia, Jr.

2 Walker Cane Lane

Roswell, NM 88201

Bettianne H. Bowen, Trustee of the Bettianne H. Bowen Living

Trust dated April 24, 1996

1902 Ivanhoe Lane

Abilene, TX 79605

3001 West Loop North 250, North Ste C105-150, Midland, Texas 79705 | (940)999-4272 | Brad@MLTLandservices.com

April 16, 2019

RE: Verlander SWD Well - Lot 3 (aka NW/4 SW/4) of Section 7 T21S R37E Lea County, NM

Tom Schumacher MidCon Resource Group, LLC 701-400-9909

Dear Mr. Schumacher.

The active leases for the tract of land cited above are for the Alexander #001 – API # 30-025-09905 and the Deck Estate 7 #001 – API # 30-025-33677 wells. The operators of these two wells, Upland Production Company for the Alexander #001 well and Penroc Oil Corp for the Deck Estate 7 #001 well control all of the mineral interest for Lot 3 of Section 7, T21S R37E. Neither of these wells are producing in the proposed Verlander SWD Well zone.

The entire mineral ownership of Lot 3 is held by production by these two wells. Therefore, by contacting the operators of the wells, you would meet the requirements of the State of New Mexico.

Sincerely yours,

Thomas A. Sewall

Senior Right-of-Way Agent and Landman

Affected Party Notification List— Attachment XIII-7 Page 1 of 3

Mineral Owners

COMMERCE TRUST COMPANY AGENT FOR PATTERSON 1976 TRUST INVESTMENTS, LLC BY FARMERS NATIONAL CO, AGENT 5110 S YALE AVE SUITE 400 TULSA OK 74135

ETZ OIL PROPERTIES LTD P O BOX 73406 PHOENIX AZ 85050

GEORGE H ETZ JR TRUSTEE 1105 XANTHISMA MCALLEN TX 78504

LINCICOME OIL & GAS LLC 7 WOODLAND DRIVE VIENNA WV 26105

KEOHANE INC 3619 E 2ND STREET ROSWELL NM 88201

TOLES-COM-LTD LLC P O BOX 1300 ROSWELL NM 88202-1300

GRAHAM FAMILY
INVESTMENTS LLC
P O BOX 1835
ROSWELL NM 88202-1835

BEVERLY CARTER - TRUSTEE OF THE POWHATAN AND BEVERLY T CARTER REVOCABLE TRUST PO BOX 328 FT. SUMNER NM 88119-0328

LFN CONE PROPERTIES 3102 S OAK DRIVE AUSTIN TX 78704-6036

MILDRED M MONTGOMERY 82 APRIL WIND SOUTH DRIVE MONTGOMERY TEXAS 77356-5966

CARTER FAMILY MINERALS 464 EAST MAIN AVE. FORT SUMNER NM 88119-9238

THOMAS R CONE PO BOX 400 SOUTHWEST CITY MO 64863-0400

COLLEGE OF THE SOUTHWEST FOUNDATION 6610 N LOVINGTON HIGHWAY HOBBS NM 88240

CATHIE CONE MCCOWN AS TRUSTEE FOR THE AUVENSHINE CHILDREN'S TESTAMENTARY TRUST PO BOX 658

DRIPPING SPRINGS TX 78620-0658

CATHIE CONE MCCOWN PO BOX 658 DRIPPING SPRINGS TX 78620-0658

KAYLA CONE PO BOX 746 FAYETEVILLE AR 72702-0746

KAREN CONE PO BOX 8357 FAYETTEVILLE AR 72703 PROSPERITY BANK, AS TRUSTEE OF THE WILLIAMS TRUST FOB MMP DATED 4-10-1996 TRUST DEPT 1401 AVENUE Q LUBBOCK TX 79401-3819

SE CONE JR PO BOX 10321 LUBBUCK TX 79408-3321

ELEANOR CHRISTIE CORRIGAN TRUST PO BOX 63869 COLORADO SPRGS CO 80962-3869

PAT CORRIGAN TRUSTEE OF THE PAT CORRIGAN TRUST UWO HUGH CORRIGAN II 310 W WALL STREET SUITE 1200 MIDLAND TX 79701-5186

HUGH DANIELS CORRIGAN TRUSTEE OF THE CEC TRUST FBO HUGH DANIELS CORRIGAN & JAMES PATRICK CORRIGAN JR TRUSTEE OF THE CEC TRUST FBO JAMES PATRICK CORRIGAN, JR.

310 W WALL STREET SUITE 1200 MIDLAND TX 79701-5186

CORRIGAN SOUTHERN LAND AND CATTLE COMPANY LLC 8117 PRESTON ROAD SUITE 610 DALLAS TX 75225-6366

LFN CONE PROPERTIES 3102 S OAK DRIVE AUSTIN TX 78704-6036

JAMES PATRICK CORRIGAN JR TRUST PO BOX 69068 VERO BEACH FL 32969

HUGH CORRIGAN IV POWER OF APPOINTMENT TRUST WILLIAM E CORRIGAN AS TRUSTEE 8117 PRESTON ROAD SUITE 610 DALLAS TX 75225-6366

CE CORRIGAN TRUST PO BOX 643726 VERO BEACH FL 32964-3726

Mineral Owners

DONALD M NORWOOD PARTIN PETROLEUM INC CAROL JO BLAKE 400 NORTH MAIN STREET 3070 STROLLING HILL ROAD 13831 NORTHWEST FWY STE 500 MIDLAND TEXAS 79701 **CAMERON PARK CA 95682 HOUSTON TX 77040** CAROL JO BLAKE, TRUSTEE OF JANICE E GILBERTSON SUZANNE THOMAS TRUST "A" U/W/O JACK E BLAKE 43345 CANYON CREEK ROAD 3936 BYRON STREET **400 NORTH MAIN STREET** KING CITY CA 93930 **HOUSTON TX 77005** MIDLAND TEXAS 79701 LML, LLC STEVEN T DUNN CYNTHIA STRATTON O'MALLEY 105-A OASIS ROAD 9575 KATY FREEWAY 6565 AMERICAS PARKWAY NE STE 1000 KING CITY CA 93930 SUITE 440 **ALBUQUERQUE NM 87110** HOUSTON TX 77024-1408 JOHN T HINKLE AND LINDA J HINKLE THEIR KINNEY INC TRIO PRODUCTION COMPANY LLC SUCCESSORS IN TRUST, UNDER THE HINKLE LIVING 106 SW 9TH STREET 1601 EAST 19TH STREET TRUST DATED JANUARY 9, 1996 **EDMOND OK 73013** ANDREWS TX 79714 PO BOX 1793 ROSWELL NM 88202-1793 MARK L SHIDLER KATHLEEN P HENDERSON MARY L CROCKETT 43 W CROCKETT ROAD 1313 CAMPBELL RD 5519 TUPPER LAKE BUILDING "D" **HOUSTON TX 77056 LOVINGTON NM 88260 HOUSTON TX 77055** MITZI SHIDLER CHARLES E HINKLE DEBORAH HUNTLEY 11727 FOREST GLEN ST PO BOX 1030 4531 FRANKLIN BLVD SPC 94 **HOUSTON TX 77024** KING CITY CA 93930 EUGENE OR 97403-2460 LISLE Q TANNEHILL **DENNIS MITCHELL** DANGLADE SPEIGHT FAMILY OIL 2511 GARDEN ROAD PO BOX 711 AND GAS I LP A TEXAS LP SUITE A-180 YANKTON SD 57078 777 MAIN ST SUITE 3250 **MONTEREY CA 93940** FORT WORTH TX 76102 **RONALD E SLOVER** KRISTEN HINKLE COOMES JOHN W TANNEHILL 265 259TH AVENUE NE 3614 ROYAL ROAD PO BOX 819 **AMARILLO TX 79109** SAMMAMASH WA 98074 PASO ROBLES CA 93447 ZEUS PETROLEUM INC JENNA HINKLE SARTORI FIRST UNITED METHODIST CHURCH **5710 HATCHERY COURT PO BOX 458** OF AMORY MISSISSIPPI BELLAIRE TX 77402-0458 PENNGROVE CA 94951 **PO BOX 147** AMORY MS 38821-0147

JOHN E & GAIL DONNELLAN

CHICKASHA OK 73023

PO BOX 1433

NANCY MYERS

2119 ERNEST AVENUE #3

REDONDO BEACH CA 90278

GARY A HUDSON

1127 ROSARIO STREET

EL MACERO CA 95618

Mineral Owners

ALICE MEYERS RILEY
4 BENTON STREET
HADLEIGH SUFFOCK IP75AT
ENGLAND

COLLENE ALEXANDER, TRUSTEE OF THE JOE & PAUDENE ALEXANDER FAMILY TRUST DATED APRIL 27 2000 5206 SADDLE RIDGE TRAIL SAN ANGELO TX 76904

GREG SEGOVIA JR 2 WALKING CANE LN ROSWELL NM 88201

BETTIANNE H BOWEN, TRUSTEE OF THE BETTIANNE H BOWEN LIVING TRUST DATED APRIL 24 1996 1902 IVANHOE LANE ABILENE TX 79605

Operators/Lessees

CHEVRON USA INC 6301 DEAUVILLE BLVD MIDLAND TX 79706

PENROC OIL CORP P O BOX 2769 HOBBS NM 88241-2769

SPECIAL ENERGY CORP PO DRAWER 369 STILLWATER OK 74076

FULFER OIL & CATTLE LLC PO BOX 1224 JAL NM88252

PENROC OIL CORP. PO BOX 2769 HOBBS NM 88241-2769

APACHE CORP 303 VETERANS AIRPARK LN #1000 MIDLAND TX 79705

CONOCOPHILIPS CO PO BOX 2197 OFFICE EC3-10-W285 HOUSTON TX 77252

PETROLEUM EXPLORATION CO LTD LIMITED P PO BOX 548 BRECKENRIDGE TX 76424

STATE OF NEW MEXICO
OIL, GAS AND MINERALS DIVISION
310 OLD SANTA FE TRAIL
SANTA FE NM 87501

NMSLO PO BOX 1148 SANTA FE NM 87504 UPLAND PRODUCTION CO PO BOX 481 MIDLAND TX 79702

Surface Owner

DASCO CATTLE CO LLC PO BOX 727 HOBBS NM 88241 July 26, 2019

NOTIFICATION TO INTERESTED PARTIES

Via U.S. Certified Mail - Return Receipt Requested

To whom it may concern:

This letter is to advise you that Goodnight Midstream Permian, LLC, 5910 N Central Expressway Suite 850, Dallas, TX 75206 is applying for authorization to inject into the San Andres and Glorieta Formations at the VERLANDER SWD #1. The attached Form C-108 is being filed with the New Mexico Oil Conservation Division in Santa Fe, NM and is included with this letter as part of the application process.

The VERLANDER SWD #1 will be located at 2,482' FNL and 1,277' FEL, Unit H of Section 12, T21S, R36E, Lea County, New Mexico which is approximately three miles east of Oil Center, New Mexico. Produced water from area oil & gas production will be commercially disposed into the San Andres and Glorieta Formations at a proposed interval depth of 4,251' to 5,550', a maximum surface pressure of 850 psi, and a rate limited only by such pressure.

This letter is a notice only. No action is needed unless you have questions or objections. You are entitled to a full copy of this application. For general inquiries or to receive a PDF file copy of the complete application, you may call the applicant's agent, MidCon Resource Group, LLC, at (701) 400-9909 or email tom@midcongroup.com.

Interested parties wishing to object to the application or request a hearing must file with the New Mexico Oil Conservation Division at 1220 South St. Francis Dr., Santa Fe, NM 87505 within fifteen days.

Sincerely,

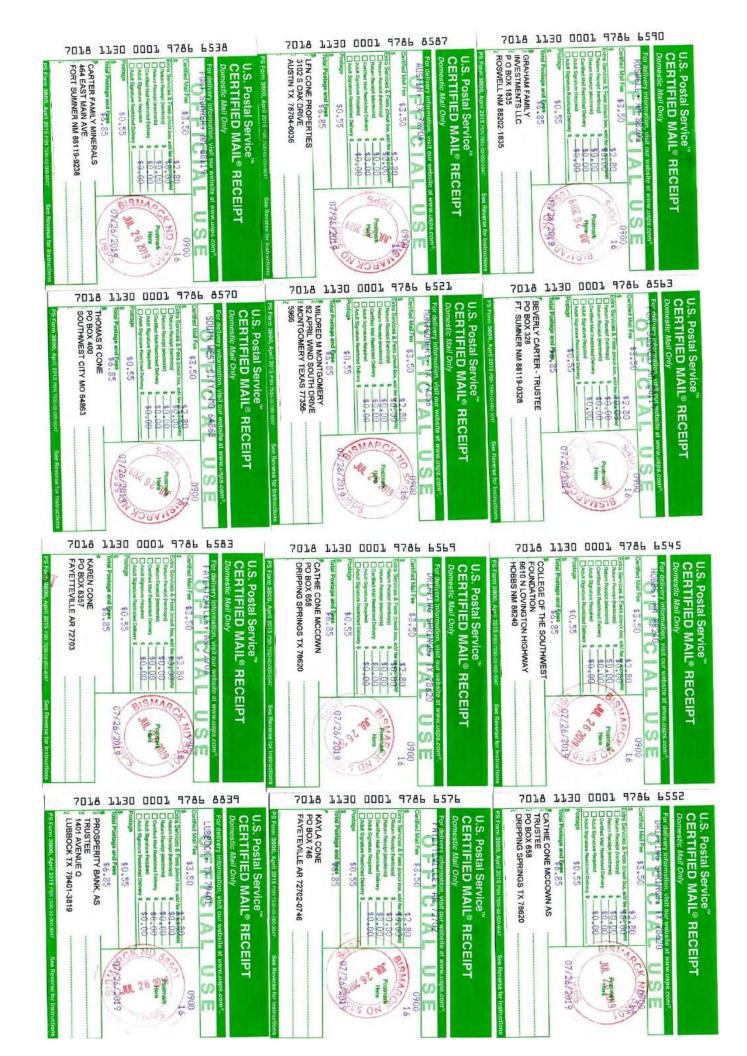
Thomas Schumacher

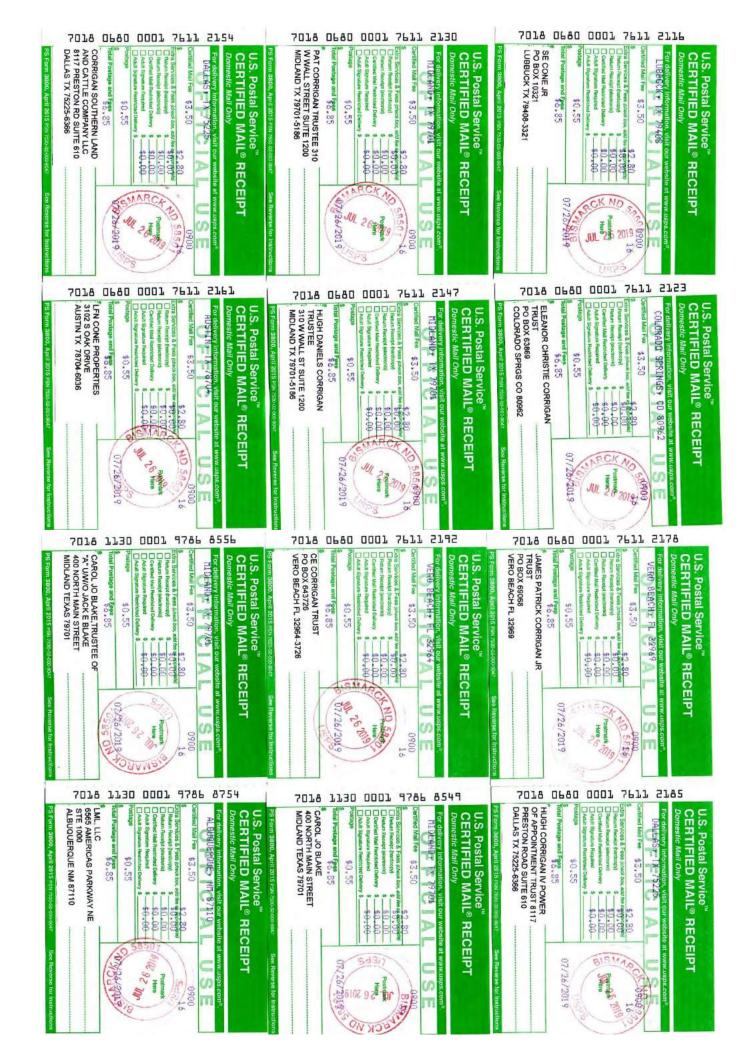
MidCon Resource Group, LLC

Agent for Goodnight Midstream Permian, LLC

Cc: Form C-108

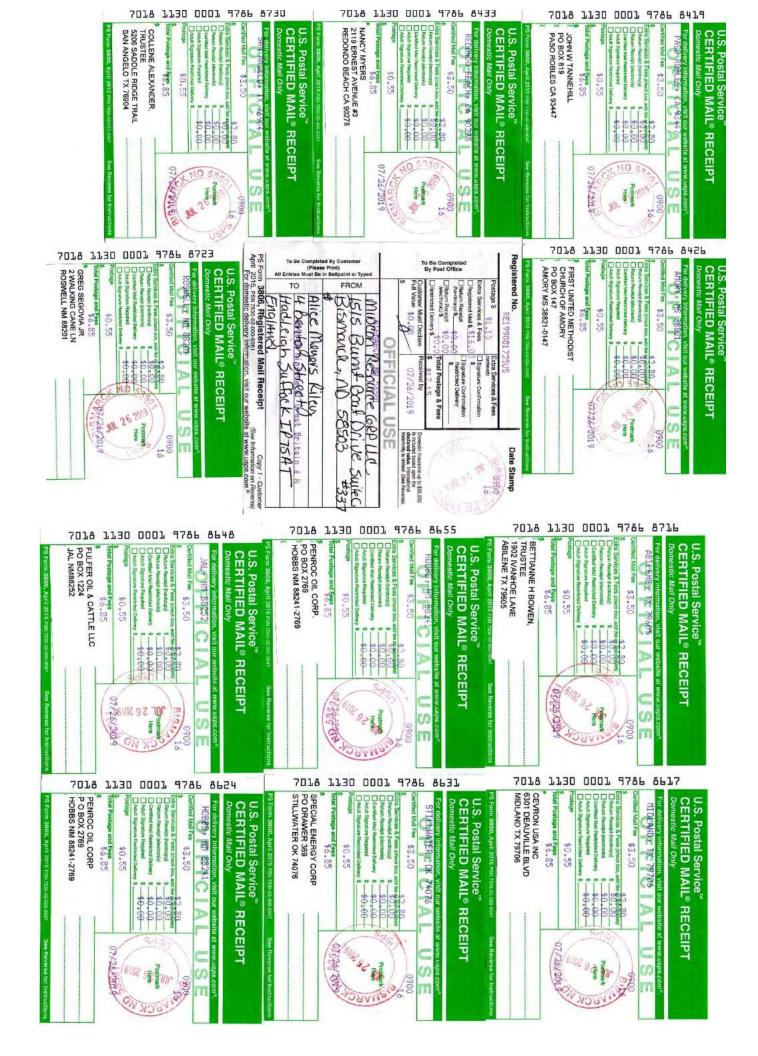
















Affidavit of Publication

STATE OF NEW MEXICO COUNTY OF LEA

I, Daniel Russell, Publisher of the Hobbs News-Sun, a newspaper published at Hobbs, New Mexico, solemnly swear that the clipping attached hereto was published in the regular and entire issue of said newspaper, and not a supplement thereof for a period of 1 issue(s).

> Beginning with the issue dated July 26, 2019 and ending with the issue dated July 26, 2019.

Publisher

Sworn and subscribed to before me this 26th day of July 2019.

Business Manager

My commission expires

January 29, 2023

(Seal)

OFFICIAL SEAL
GUSSIE BLACK
Notary Public
State of New Mexico
My Commission Expires 29-23

This newspaper is duly qualified to publish legal notices or advertisements within the meaning of Section 3, Chapter 167, Laws of 1937 and payment of fees for said

LEGALS

LEGAL NOTICE JULY 26, 2019

Notice is hereby given of the application by Goodnight Midstream Permian, LLC, 5910 N Central Expressway Suite 850, Dallas, TX 75206 for authorization to inject into the San Andres and Glorieta Formations at the proposed VERLANDER SWD #1 well.

The VERLANDER SWD #1 will be located at 2,482' FNL and 1,277' FEL, Unit H of Section 12, T21S, R36E, Lea County, New Mexico which is approximately three miles east of Oil Center, New Mexico. Produced water from area oil & gas production will be commercially disposed into the San Andres and Glorieta Formations at a proposed interval depth of 4,251' to 5,550', a maximum surface pressure of 850 psi, and a rate limited only by such pressure.

Interested parties wishing to object to the application must file with the New Mexico Oil Conservation Division at 1220 South St. Francis Drive, Santa Fe, NM 87505 within fifteen days. Other inquiries regarding this application should be directed to the applicant's agent, MidCon Resource Group, LLC, at (701) 400-9909 or by email at tom@midcongroup.com.#34497

67115619

00231314

TOM SCHUMACHER MIDCON RESOURCE GROUP LLC, 1730 CONTESSA DR BISMARCK, ND 58503