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

RECEIVED: 08/27/2019	REVIEWER:	TYPE: SWD	APP NO: pMAM1924046473

ABOVE THIS TABLE FOR	R OCD DIVISION USE ONLY	
NEW MEXICO OIL CONSE - Geological & Enginee		
1220 South St. Francis Drive, S		The state of the s
ADMINISTRATIVE APPLIC	ATION CHECKLIST	
THIS CHECKLIST IS MANDATORY FOR ALL ADMINISTRATIVE AF REGULATIONS WHICH REQUIRE PROCESSING A		
Applicant: BTA OIL PRODUCERS, LLC	OGRID	Number: 206297
Well Name: MESA 8105 SWD #2	API:	
Pool: SWD/DEVONIAN-SILURIAN	Pool C	ode: 97869
SUBMIT ACCURATE AND COMPLETE INFORMATION RE INDICATED E		IE TYPE OF APPLICATION
1) TYPE OF APPLICATION: Check those which apply for		SWD-226
A. Location – Spacing Unit – Simultaneous Dedic	NSP(proration unit)	
B. Check one only for [1] or [11] [1] Commingling – Storage – Measurement		
	□ols □olm	
[II] Injection – Disposal – Pressure Increase – E ☐ WFX ☐ PMX ■ SWD ☐ IPI	Enhanced Oil Recovery □EOR □PPR	/
MIX TIMX		FOR OCD ONLY
2) NOTIFICATION REQUIRED TO: Check those which as	oply.	
A. Offset operators or lease holders		☐ Notice Complete
B. Royalty, overriding royalty owners, revenue	e owners	☐ Application
C. Application requires published notice		Content
D. Notification and/or concurrent approval b	y SLO	
E. Notification and/or concurrent approval b	y BLM	Complete
F. Surface owner		
G. For all of the above, proof of notification o	r publication is attache	ed, and/or,
 CERTIFICATION: I hereby certify that the information 		•
administrative approval is accurate and complete	to the best of my know	vledge. I also
understand that no action will be taken on this app	olication until the requir	ed information and
notifications are submitted to the Division.		
Note: Statement must be completed by an individua	l with managerial and/or super	visory capacity.
	8/27/2019	
Sammy Hajar	Date	
Print or Type Name		
	432-682-3753	
7	Phone Number	
Zam Blya		

SHAJAR@BTAOIL.COM e-mail Address



BTA OIL PRODUCERS, LLC

CARLTON BEAL, JR.
BARRY BEAL
SPENCER BEAL
KELLY BEAL
BARRY BEAL, JR.
STUART BEAL
ROBERT DAVENPORT, JR.

104 SOUTH PECOS STREET MIDLAND, TEXAS 79701-5021 432-682-2753 FAX 432-683-0311 GULF COAST DISTRICT TOTAL PLAZA 1201 LOUISIANA STREET, STE. 570 HOUSTON, TEXAS 77002 713-658-0077 FAX 713-655-0346

ROCKY MOUNTAIN DISTRICT 600 17TH STREET, STE, 2230 SOUTH DENVER, COLORADO 80202 303-534-4404 FAX 303-534-4661

August 27, 2019

In re: Offset Operator Notification

Application for Authorization to Inject

MESA 8105 SWD #2 1150' FNL 200' FEL Section 11, T26S, R32E Lea County, New Mexico

INTERESTED PARTIES:

As Required by NMOCD rules, as an offset operator you are receiving notice of Application for Authorization to Inject for the referenced well. BTA Oil Producers, LLC ("BTA"), operator of the proposed SWD has filed an application with the Bureau of Land Management and the New Mexico Oil Conservation Division for authorization to drill and inject. BTA proposes to dispose into the Silurian and Fusselman formations that are estimated to occur between 17,490' to 20,000'. The Mesa 8105 SWD #2 will be drilled at a location of 1150' FNL, & 200' FEL, Section 11, T26S, R32E, Lea County, New Mexico.

Attached you will find a copy of the submitted OCD from C-108 with corresponding data.

Any Objections to this application must be sent to the New Mexico Oil Conservation Division, 1220 South St. Francis Dr., Santa Fe, NM 87504 within 15 days of receipt of this notification. If additional information is required, please contact Sammy Hajar at 432-682-3753.

Respectfully,

BTA Oil Producers, LLC

Sammy Hajar Regulatory Analyst



BTA OIL PRODUCERS, LLC

CARLTON BEAL, JR. 104 SO
BARRY BEAL MIDLAN
SPENCER BEAL
KELLY BEAL FA
BARRY BEAL, JR.
STUART BEAL
ROBERT DAVENPORT, JR.

104 SOUTH PECOS STREET MIDLAND, TEXAS 79701-5021 432-682-2753 FAX 432-683-0311 GULF COAST DISTRICT TOTAL PLAZA 1201 LOUISIANA STREET, STE. 570 HOUSTON, TEXAS 77002 713-658-0077 FAX 713-655-0346

ROCKY MOUNTAIN DISTRICT 600 17TH STREET, STE. 2230 SOUTH DENVER, COLORADO 80202 303-534-4404 FAX 303-534-4661

August 27, 2019

In re: Application for Authorization to Inject

MESA 8105 SWD #2 150' FNL 200' FEL Section 11, T26S, R32E Lea County, New Mexico

New Mexico Oil Conservation Division 1220 South Francis Drive Santa Fe, New Mexico 87504

Gentlemen:

BTA Oil Producers, LLC ("BTA") hereby seeks administration approval for Authorization to Inject into the Mesa 8105 SWD #2 (API# pending), which is located 1150' FNL & 200' FEL, Section 11, T26S, R32E, Lea County, New Mexico.

The proposed open hole injection interval will be in the Silurian – Fusselman formations, from 17490' to 20,000', with a maximum anticipated injection rate to 60,000 BWPD and a maximum injection pressure of 3,490 psig.

Attached is an OCD form C-108 along with supporting documentation for the referenced well. A copy of the application has been sent to applicable surface land owner and offset operators. Legal Notice was published in the Hobbs Daily News-Sun, the Affidavit of Publication is enclosed.

Your consideration and approval of this application will be greatly appreciated. If additional information is required, please contact me at 432-682-3753, or by email at SHAJAR@BTAOIL.com

Respectfully,

BTA Oil Producers, LLC

Sammy Hajar Regulatory Analyst 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 Recovery Pressure Maintenance X Disposal Storage Application qualifies for administrative approval? Yes No
Π_{σ_i}	OPERATOR: BTA OIL PRODUCERS, LLC
	ADDRESS: 104 S. Pecos Midland, TX. 79701
	CONTACT PARTY: SAMMY HAJAR PHONE: 432-682-3753
III.	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? YesXXXNo 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. ATTACHED
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. <u>ATTACHED. NO WELLS PENETRATE PROPOSED INJECTION ZONE</u>
VII.	Attach data on the proposed operation, including:
	 Proposed average and maximum daily rate and volume of fluids to be injected; MAX: 60,000 BPWD; AVG: 40,000 BWPD Whether the system is open or closed; CLOSED Proposed average and maximum injection pressure; ANTICPATED AVG PRESSURE: 1,200 PSIG; ANTICIPATED MAX PRESSURE: 3,490 PSIG Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water; and, ATTACHED 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.). ATTACHED
*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. ATTACHED
IX.	Describe the proposed stimulation program, if any. WILL BE COMPLETED USING HCLACID, VOLUME TO BE DETERMINED.
*X. *XI.	Attach appropriate logging and test data on the well. (If well logs have been filed with the Division, they need not be resubmitted) NEW DRILL, NO LOGS AVAILABLE 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. ATTACHED
XIII.	Applicants must complete the "Proof of Notice" section on the reverse side of this form. ATTACHED
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: SAMMY HAJAR TITLE: REGULATORY ANALYST
	SIGNATURE: Sangliges DATE: 8/27/19
*	E-MAIL ADDRESS: SHAJAR@BTAOIL.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:
DIST	RIBUTION: Original and one copy to Santa Fe with one copy to the appropriate District Office

III. WELL DATA

- 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; Well No.; Location by Section, Township and Range; and footage location within the section.
 - (2) Each casing string used with its size, setting depth, sacks of cement used, hole size, top of cement, and how such top was determined.
 - (3) A description of the tubing to be used including its size, lining material, and setting depth.
 - (4) The name, model, and setting depth of the packer used or a description of any other seal system or assembly used.

Division District Offices have supplies of Well Data Sheets which may be used or which may be used as models for this purpose. Applicants for several identical wells may submit a "typical data sheet" rather than submitting the data for each well.

- B. The following must be submitted for each injection well covered by this application. All items must be addressed for the initial well. Responses for additional wells need be shown only when different. Information shown on schematics need not be repeated.
 - (1) The name of the injection formation and, if applicable, the field or pool name.
 - (2) The injection interval and whether it is perforated or open-hole.
 - (3) State if the well was drilled for injection or, if not, the original purpose of the well.
 - (4) Give the depths of any other perforated intervals and detail on the sacks of cement or bridge plugs used to seal off such perforations.
 - (5) Give the depth to and the name of the next higher and next lower oil or gas zone in the area of the well, if any.

XIV. PROOF OF NOTICE

All applicants must furnish proof that a copy of the application has been furnished, by certified or registered mail, to the owner of the surface of the land on which the well is to be located and to each leasehold operator within one-half mile of the well location.

Where an application is subject to administrative approval, a proof of publication must be submitted. Such proof shall consist of a copy of the legal advertisement which was published in the county in which the well is located. The contents of such advertisement must include:

- (1) The name, address, phone number, and contact party for the applicant:
- (2) The intended purpose of the injection well; with the exact location of single wells or the Section, Township, and Range location of multiple wells;
- (3) The formation name and depth with expected maximum injection rates and pressures; and,
- (4) A notation that interested parties must file objections or requests for hearing with the Oil Conservation Division, 1220 South St. Francis Dr., Santa Fe, New Mexico 87505, within 15 days.

NO ACTION WILL BE TAKEN ON THE APPLICATION UNTIL PROPER PROOF OF NOTICE HAS BEEN SUBMITTED.

NOTICE: Surface owners or offset operators must file any objections or requests for hearing of administrative applications within 15 days from the date this application was mailed to them.

INJECTION WELL DATA SHEET

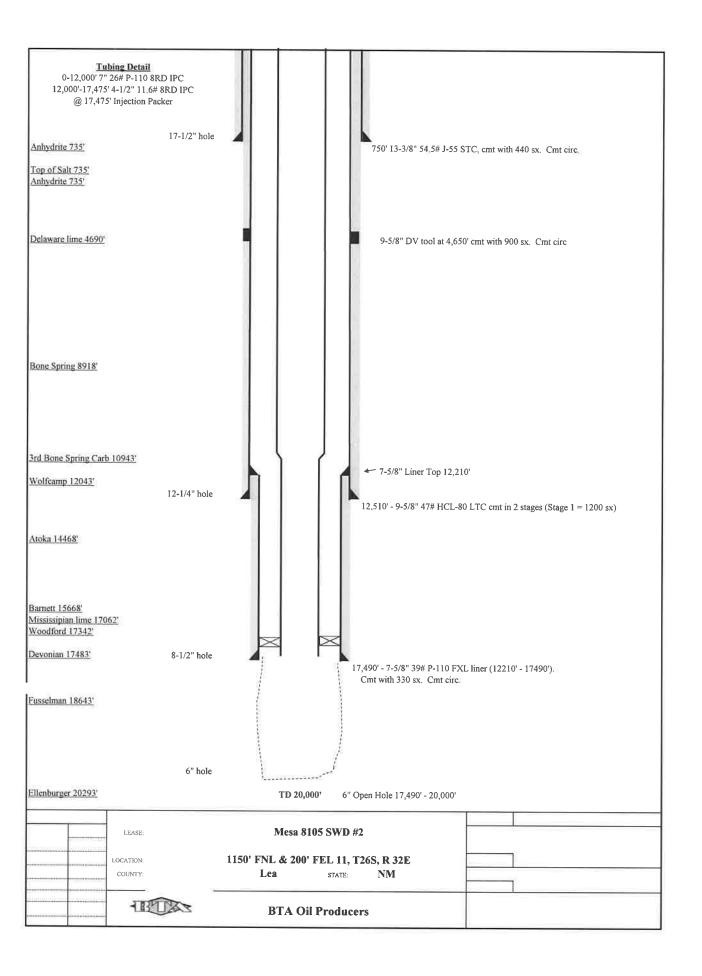
OPERATOR:	BTA OIL PRODUCERS, LLC				
WELL NAME & NUM	MBER: Mesa 8105 SWD #2				
WELL LOCATION:_	1150' FNL 200' FEL		11	26-S	32-E
	FOOTAGE LOCATION	UNIT LETTER	SECTION	TOWNSHIP	RANGE
<u>WELL</u>	BORE SCHEMATIC		WELL C Surface	CONSTRUCTION DAY Casing	<u>TA</u>
		Hole Size: 17-1/2"		Casing Size: 1	3-3/8"
		Cemented with:	sx.	or	ft^3
		Top of Cement: Surfa	ace	Method Determine	d:
			Intermediate Ca	sing: STAGE 1	
		Hole Size:12-1/	/4"	Casing Size:	9-5/8"
		Cemented with:	1200sx.	or	ft³
		Top of Cement:	4650"	Method Determine	d:
			9-5/8" DV TO	OL AT 4650'	
			Intermediate Ca	sing: STAGE 2	
		Hole Size:12-1/-	4"	Casing Size:	9-5/8"
		Cemented with:	900sx.	Or	ft ³
		Top of Cement: Su	rface	Method Determined	d:

Production Casing

Hole Size: 8-1/2"		Casin	g Size: <u>7-5/8"</u>	
Cemented with: 330	SX.	or,		ft³
Top of Cement: 12,210'		Metho	od Determined: _	
Total Depth:				
	Injection In	iterval		
17,490'	feet	to	20,000	Open Hole
(Perforated	or Open Ho	le; indi	cate which)	

INJECTION WELL DATA SHEET

Tul	bing Size:	7" x 4-1/2"	Lining Material: <u>Plastic Coat</u>
Tyj	pe of Packer:	Anchor Latch or Equiv	alent
Pac	cker Setting De	epth:17475'	
Oth	ner Type of Tu	bing/Casing Seal (if ap	oplicable):
			Additional Data
1.	Is this a new	well drilled for injection	on? <u>X</u> YesNo
	If no, for wha	at purpose was the well	l originally drilled?
2.	Name of the	Injection Formation:	Silurian/Fusselman
3.	Name of Fiel	d or Pool (if applicable	e): SWD ; Silurian
4.			n any other zone(s)? List all such perforated e.e. sacks of cement or plug(s) used. No Other Perforations
5.	injection zon		l or gas zones underlying or overlying the proposed re 4690, Bone Spring 8918', Third Bone Spring 10943', 4468'



DISTRICT I
1625 N French Dr., Hobbs, NM 88240
Phone (575) 393-6161 Fax: (575) 393-0720
DISTRICT II
811 S Ferst St., Artesan, NM 88210
Phone (575) 748-1283 Fax: (575) 748-9720
DISTRICT III
1000 Rio Grazon Road, Astec, NM 87410
Phone: (505) 334-6178 Fax: (305) 334-6170
DISTRICT IV
1220 S St. Frances Dr., Santas Fe, NM 87505
Phone (505) 476-3460 Fax: (505) 476-3462

API Number

State of New Mexico Energy, Minerals & Natural Resources Department OIL CONSERVATION DIVISION 1220 South St. Francis Dr. Santa Fe, New Mexico 87505

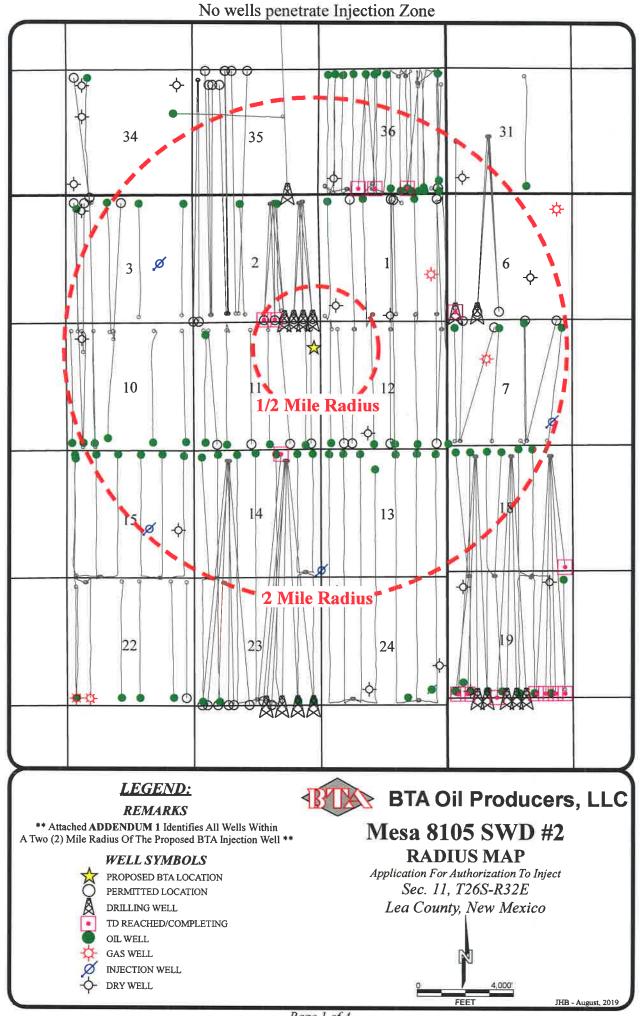
Form C-102 Revised August I, 2011 Submit one copy to appropriate District Office

DAMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

Pool Code

OGRID 1 26029 UL or lot No	No.					S.	WD; SILU		
26029 UL or lot No				N	Wel	Well Number 2			
				ВТА С	Operator Nam OIL PRODU	EERS, LLC		S-22	evation 3265'
					Surface Local	ion			
A	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
	11	26-S	32-E		1150	NORTH	200	EAST	LEA
	9 .:	T =				ferent From Surface			
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
Dedicated Acres	Joint or	Infill C	onsolidation C	ode Ord	ler No				
		GEODETIC CON NAD 27 SURFACE LI Y=38687: X=715686 LAT.=32.06 LONG.=103.6	NME OCATION 4.9 N 8.8 E 1722' N	NAD SURFAC Y=38 X=75 LAT.=32	COORDWATES 83 NME E LOCATION 6932.3 N 6855.7 E 2.061847 N 13.637627 W	S.L 200	I hereby o complete to complete to the thire are a molecular the of such an pooling as hereboth and the such as the pooling as hereby as the SHA E-mail A SUR' I hereby own plotter are or under	AJAR@BTAC Address VEYOR CERTIFI with that the well location if from field notes of accusal or my supervision, and that to the bost of my belief.	terein is true and o and ballet, and oraching interest or including the is right to drill the strait with an own in to a voluntary cooling order 8/19/19 Date CATION allows on this plic surveys made by
		_ : :					Date of Signature	JULY 23, 20	



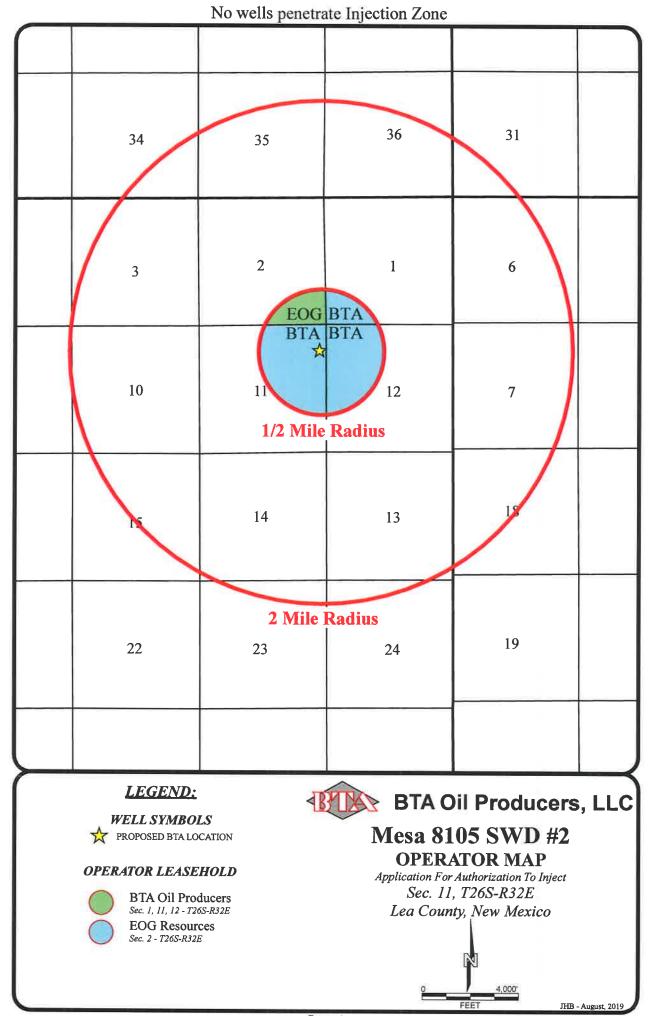
ADDENDUM 1 - MESA 8105 SWD #2 - WELLS WITHIN 2 MILE RADIUS												
LINACI (ADIALum)	Onembro						Surface Hole	Surface Hole	Bottom Hole	Botom Hole	r -	
UWI (APINum)	Operator	Well Name	Well No.	Sec.	Twp.	Rng.	Latitude	Longitude	Latitude	Longitude	TD	Current Status
30-025-45505 30-025-45829	COG	FEARLESS 26 FED COM HARRIER FED COM	503H	26	255	32E	32,1076194		32,0799115	-103.640884		DRILLING WELL
30-025-40572	cog	HARRIER 35 FED COM	103H	35	25S 25S	32E 32E	32,0928918 32,0886653		32.0649729	-103.6536857	15.004	PERMITTED LOCATION
30-025-45831	cog	HARRIER FED COM	202H	35	255	32E	32.092892	-103.6414659 -103.6528788	32.0890088 32.0649801	-103.6563995 -103.6529433	16,394	PERMITTED LOCATION
30-025-08248	FULLERTON	BRADLEY	1	36	25S	32E	32.0814767	-103.6346052	32,0043801	-103.0329433	4.953	DRY WELL
30-025-44263	EOG	GEM 36 STATE COM	005H	36	255	32E	32.080295		32.093496	-103.6273608		·
30-025-44264	EOG	GEM 36 STATE COM	006H	36	255	32E	32.0802945	-103.6294065	32,0935205	-103.6289692		OIL WELL
30-025-45526	EOG	GEM 36 STATE COM	102H	36	255	32E	32.0933206	-103.6247143	32.0800546	-103.6241255	14,228	OIL WELL
30-025-41825	EOG	GEM 36 STATE COM	1H	36	255	32E	32.0803364	-103.6213347	32.0936022	-103.620426	_	OIL WELL
30-025-45527 30-025-45528	EOG	GEM 36 STATE COM	201H	36	255	32E	32.092525	-103.6231369	32.0800236	-103.6222768		OIL WELL
30-025-44947	EOG	GEM 36 STATE COM GEM 36 STATE COM	202H 301H	36 36	25S 25S	32E	32.0933197	-103.6248209	32.0800467	-103.6255166	14,450	
30-025-45529	EOG	GEM 36 STATE COM	501H	36	255	32E	32.0923357 32.092468	-103.6199884 -103.6230528	32.0803684 32.0800296	-103,6204567	45.053	PERMITTED LOCATION
30-025-45524	EOG	GEM 36 STATE COM	502H	36	255	32E	32.0925821	-103.6230328	32.0800298	-103.6203191 -103.6230929	_	OIL WELL
30-025-44567	EOG	GEM 36 STATE COM	601H	36	255	32E	32.0805633	-103.6358015	32.0935443	-103.6230929		OIL WELL
30-025-42780	EOG	GEM 36 STATE COM	701H	36	255	32E	32.0936435	-103.6200655	32.0812367	-103.6203407		OIL WELL
30-025-42948	EOG	GEM 36 STATE COM	702Y	36	255	32E	32.0936415	-103.6203238	32.0804352	-103.6224019		
30-025-43782	EOG	GEM 36 STATE COM	703H	36	255	32E	32.0932963	-103.6256861	32.0803369	-103.6246328	17,017	OIL WELL
30-025-42892	EOG	GEM 36 STATE COM	704H	36	255	32E	32.0921734	-103.6231006	32.0803469	-103.6246213	16,932	TD REACHED/COMPLETING
30-025-43783	EOG	GEM 36 STATE COM	704H	36	255	32E	32.0932954	-103.6258024	32.0803294	-103.6268618		
30-025-43784 30-025-44440	EOG	GEM 36 STATE COM	705H	36	255	32E	32.0932614	-103.6300365	32.0803241	-103.6290089		TD REACHED/COMPLETING
30-025-44440	EOG	GEM 36 STATE COM	705H	36	255	32E	32.0808448	-103.6293073	32.0937687	-103.6286108		OIL WELL
30-025-44441	EOG	GEM 36 STATE COM GEM 36 STATE COM	706H 706H	36 36	25S 25S	32E	32.0932605 32.0808442	-103.6301495 -103.6294139	32.0803122	-103.6312853		TD REACHED/COMPLETING
30-025-44265	ÉOG	GEM 36 STATE COM	705H	36	25S 25S	32E	32.0808442	-103.6294139	32.093545 32.0935463	-103.6301666 -103.6318418	_	OIL WELL
	EOG	GEM 36 STATE COM	708H	36	255	32E	32.0802773	-103.6327969	32.0933463	-103.6318418	17.074	
30-025-44267	EOG	GEM 36 STATE COM	709H	36	255	32E	32.0802762	-103.6329034	32.0934682	-103.6352883	17,069	OIL WELL
30-025-44568	EOG	GEM 36 STATE COM	721H	36	255	32E	32.080654	-103.6358033	32.0935308	-103.6342992		OIL WELL
30-025-08393	TENNESSEE GAS	RICHARDSON-BASS-FED	1	31	255	33E	32.0815508	-103.6171662				DRY WELL
30-025-45418	KAISER-FRANCIS	RED HILLS FED	003H	31	255	33E	32.0863242	-103.6135764	32.0660687	-103.6122499		PERMITTED LOCATION
30-025-45383	KAISER-FRANCIS	RED HILLS	101H	31	255	33E	32.0857723	-103.6180146	32.0660633	-103.6181634		DRILLING WELL
30-025-45385	KAISER-FRANCIS	RED HILLS	103H	31	255	33E	32,0863244	-103.613641	32.0660687	-103.6122499		PERMITTED LOCATION
30-025-45572 30-025-45572	KAISER-FRANCIS KAISER-FRANCIS	RED HILLS RED HILLS	401H	31	255	33E	32.0856898	-103.6180144	32.0660633	-103.6181634		
	KAISER-FRANCIS	RED HILLS FED	401H 402H	31	25S 25S	33E 33E	32.0856898 32.086324	-103.6180144	32,0660633	-103,6181634	19,662'	TO REACHED/COMPLETING
30-025-45708	KAISER-FRANCIS	RED HILLS FED	403H	31	255	33E	32.0863239	-103.6135119 -103.6134473	32.066066 32.0660687	-103.6152066 -103.6122499		PERMITTED LOCATION
30-025-45384	KAISER-FRANCIS	RED HILLS	602H	31	255	33E	32.0863247	-103.6137701	32.066066	-103.6122499		PERMITTED LOCATION
30-025-45899	KAISER-FRANCIS	RED HILLS	603H	31	255	33E	32.0863245	-103.6137056	32.0660687	-103.6122499		PERMITTED LOCATION
30-025-12766	HUMBLE	F L NEWTON	1	1	265	32E	32.065673	-103.627022			2,027	DRY WELL
30-025-21861	ROBERT WOOD	RICHARDSON-FED	1	1	265	32E	32.0668127	-103.6343802			4,900	DRY WELL
	BTA	MESA 8105 JV-P	1	1	265	32E	32.0704184	-103.6214331			16,100	GAS WELL
	BTA	MESA 8105 JV-P	1	1	265	32E	32.0704184	-103.6214331			16,100	GAS WELL
	BTA	MESA 8105 JV-P	003H	1	265	32E	32.0656128	-103.6358661	32.07882	-103.6355513		OIL WELL
	BTA BTA	MESA 8105 JV-P	011H	1	265	32E	32.065842	-103.6293313	32.0508342	-103.6292623	-	OIL WELL
	BTA	MESA 8105 JV-P MESA 8105 JV-P	013H 014H	1	26S 26S	32E	32.0657405	-103.6236234	32.0508327	-103,6233702	14,965	OIL WELL
	BTA	MESA 8105 JV-P	014H	1	26S	32E	32,0658269 32.0658466	-103.6207598 -103.6294618	32.0508958 32.0790891	-103.6207758 -103.6297592	14 040	PERMITTED LOCATION OIL WELL
	BTA	MESA 8150 JV-P	017H	1	26S	32E	32.0658366	-103.6262085	32.0790891	-103.6297392	14,848	PERMITTED LOCATION
30-025-42853	ВТА	MESA 8105 JV-P	018H	1	265	32E	32.0658317	-103.6234841	32.0791208		14 645	
30-025-42854	BTA	MESA 8105 JV-P	019H	1	265	32E	32.0658266		32.0791031	-103.6206174	2.00.15	PERMITTED LOCATION
30-025-43724	BTA	MESA 8105 JV-P	030H	1	265	32E	32.0787174	-103.6206491	32.0508545	-103.6192003	20,030	
	BTA	MESA 8105 JV-P	031H	1	265	32E	32.0786576	-103.6254183	32,050867	-103.626456	20,008	OIL WELL
	cog	ZAPATA BQZ STATE COM	001H	2	265	32E	32.0658106	-103.6466863	32.078551	-103.6474562	13,660'	OIL WELL
	cog	HARRIER FED COM	101H	2	265	32E	32.0659127	-103.6489142	32.0939567	-103.6492621		PERMITTED LOCATION
	COG	HARRIER FED COM	102H	2	265	32E	32.0657658	-103.651302	32.092331	-103.6515004		PERMITTED LOCATION
	COG	QUIJOTE BQJ STATE COM HARRIER FED COM	1H 201H	2	26S 26S	32E	32.06627 32.0659099	-103.641827	32.0785607	-103.6424151	13,428'	OIL WELL
	cog	HARRIER FED COM	301H	2	265	32E	32.0659259	-103.6492047 -103.6475586	32.0923336 32.093962	-103.6500474 -103.6462591		PERMITTED LOCATION PERMITTED LOCATION
30-025-45833	cog	HARRIER FED COM	302H	2	265	32E	32.0659221	-103.6479459	32.0939583	-103.6483902		PERMITTED LOCATION
	COG	HARRIER FED COM	303H	2	265	32E	32,0659118	-103.6490111	32.0939566	-103.6483302		PERMITTED LOCATION
	cog	HARRIER FED COM	304H	2	265	32E	32.0657668	-103.6512052	32.0923318	-103.651016		PERMITTED LOCATION
30-025-45836	COG	HARRIER FED COM	305H	2	26S	32E	32.0657649	-103.6513988	32.0939519	-103.6519744		PERMITTED LOCATION
	EOG	QUIJOTE 2 STATE COM	501H	2	265	32E	32.0786531	-103.6391928	32.0652667	-103.6375457		PERMITTED LOCATION
	EOG	QUIJOTE 2 STATE COM	502H	2	265	32E	32.0786527	-103.6392993	32.0652545	-103.6388207		PERMITTED LOCATION
	EOG	QUIJOTE 2 STATE COM	503H	2	26S	32E	32.0786523	-103.6394059	32.0652422	-103.6400956		PERMITTED LOCATION
	EOG	QUIJOTE 2 STATE COM	504H	2	265	32E	32.0786396	-103.642996	32.0652299	-103.6413705		PERMITTED LOCATION
	EOG	QUIJOTE 2 STATE COM QUIJOTE 2 STATE COM	505H	2	265	32E	32.0785741	-103.6431875	32.0651349	-103.6426592	_	PERMITTED LOCATION
	EOG	QUIJOTE 2 STATE COM	506H 702H	2	26S 26S	32E	32.0785739 32.078819	-103.643294 -103.6388926	32.0651348	-103.6441247		PERMITTED LOCATION
	EOG	QUIJOTE 2 STATE COM	704H	2	26S	32E	32.0788059	-103.6388926	32.0652545 32.0652299	-103.6388207 -103.6413705		DRILLING WELL DRILLING WELL
	EOG	QUIJOTE 2 STATE COM	704H	2	265	32E	32.0788052	-103.6428024	32.0652034		17.043	TD REACHED/COMPLETING
	EOG	QUIJOTE 2 STATE COM	711H	2	26S	32E	32.0788194	-103.638786	32.0652667	-103.6375457	A. 1043	DRILLING WELL
	EOG	QUIJOTE 2 STATE COM	713H	2	265	32E	32.0788187	-103.6389991	32.0652422	-103.6400956		DRILLING WELL
30-025-46029	EOG	QUIJOTE 2 STATE COM	715H	2	26S	32É	32.0788056	-103.6426958	32.0652175	-103.6426455	17,333'	TD REACHED/COMPLETING
	COG	PINTAIL 3 FED SWD	1	3	268	32E	32.0716989	-103.6582793				INJECTION WELL
	COG	PINTAIL 3 FED	1H	3	265	32E	32.0655364	-103.6611132	32.0786037	-103.661171		OIL WELL
30-025-40685	COG	PINTAIL 3 FED	2H	3	265	32E	32.0657395	-103.6552721	32.0786822	-103.6548688		OIL WELL
	MARSH	FED-HALL	1	10	265	32E	32.0629939	-103.6688136			4,590	DRY WELL
	MEWBOURNE	RED HILLS WEST UNIT	015H	10	265	32E	32.0629881	-103.6645367	32.0786749	-103.6634594		PERMITTED LOCATION
	MEWBOURNE	RED HILLS WEST UNIT	017H	10	265	32E	32.06151	-103.66864	32.0786704	-103.6684311		PERMITTED LOCATION
	MEWBOURNE	RED HILLS WEST UNIT	021H	10	265	32E	32.050545	-103.6687104	32.0786691	-103.6698515		PERMITTED LOCATION

No wells penetrate Injection Zone

ADDENDUM 1 - MESA 8105 SWD #2 - WELLS WITHIN 2 MILE RADIUS												
LIMI (ADINUM)	Onember						Surface Hole	Surface Hole	Bottom Hole	Botom Hole		
UWI (APINum)	Operator	Well Name	Well No.	Sec.	Twp.	Rng.	Latitude	Longitude	Latitude	Longitude	TD	Current Status
30-025-44605 30-025-42336	MEWBOURNE	RED HILLS WEST UNIT	022H	10	265	32E	32.050539	-103.6669998	32.0793033	-103.6677189		PERMITTED LOCATION
30-025-42336	MEWBOURNE	RED HILLS WEST UNIT	11H 12H	10	26S 26S	32E	32.0638984 32.063901	-103.6702576 -103.6688212	32.051026		_	
30-025-39911	MEWBOURNE	RED HILLS WEST 10 FED	1H	10	265	32E	32,0639088	-103,6645604	32.0510413 32.0515681	-103.6686417 -103.6652745	-	OIL WELL
30-025-40423	COG	BUFFLEHEAD 10 FED	1H	10	265	32E	32,0639186	-103.6590391	32,0510053	-103.6589849	_	OIL WELL
30-025-40594	COG	BUFFLEHEAD 10 FED	2H	10	265	32E	32.0639254	-103.6552627	32,0511062	-103.6547641		OIL WELL
30-025-40687	MEWBOURNE	RED HILLS WEST UNIT 3	4H	10	265	32E	32,0637979	-103,6650114	32.0787281	-103,6653789	_	OIL WELL
30-025-41136	MEWBOURNE	RED HILLS WEST UNIT	5H	10	265	32E	32.0639001	-103.6693377	32.0779808	-103.6694979	15,650	OIL WELL
30-025-41849	MEWBOURNE	RED HILLS WEST UNIT	7H	10	265	32E	32.0639039	-103.6672396	32.0510222	-103.6671012	13,403	OIL WELL
20.025.41200	BTA	Mesa SWD	2	11	265	32E	32.0618347	-103.6371207				PROPOSED BTA LOCATION
30-025-41289 30-025-42842	BTA	MESA 8105 JV-P	002H	11	265	32E	32.0639415	-103.6523254	32.0634325	-103.6520927		
30-025-42845	BTA	MESA 8105 JV-P	004H 007H	11	26S	32E	32.063972 32.0640414	-103.6491978	32.050805	-103.6492048	14,355	OIL WELL
30-025-42846	BTA	MESA 8105 JV-P	007H	11	26S	32E	32.0640414	-103.6420265 -103.637766	32.0508841 32.0509183	-103.6406355 -103.6377806		PERMITTED LOCATION PERMITTED LOCATION
30-025-42855	ВТА	MESA 8105 JV-P	020H	11	265	32E	32.0639477	-103.6516799	32,0507919	-103.6505213		PERMITTED LOCATION
30-025-42856	BTA	MESA 8105 JV-P	021H	11	265	32E	32.0640031	-103.6459735	32.0508391	-103.6458767		PERMITTED LOCATION
30-025-42857	BTA	MESA 8105 JV-P	022H	11	265	32E	32.0640762	-103,6384116	32.0507428	-103.6385368	14,554	OIL WELL
30-025-42844	BTA	MESA 8105 JV-P	6H	11	265	32E	32.0640264	-103.6435693	32.0508311	-103.6433945	14,445	OIL WELL
30-025-08255	HOMESTEAD	CLIFFORD	1	12	265	32E	32.0520866	-103.6300849			4,868	DRY WELL
30-025-43079	BTA	MESA 8105 JV-P	009H	12	265	32E	32,0640923	-103,6349579	32.0509723	-103.6350856	14,600	
30-025-42960 30-025-42961	BTA	MESA 8105 JV-P	010H	12	265	32E	32.0640872	-103.6319561	32.0509297	-103.6322159		PERMITTED LOCATION
30-025-42961	BTA	MESA 8105 JV-P MESA 8105 JV-P	015H 023H	12	26S 26S	32E	32.0640871 32.064091	-103,631827	32.0790416	-103.6324458	-	PERMITTED LOCATION
30-025-42951	BTA	MESA 8105 JV-P	023H 024H	12	265	32E	32.064091	-103.6341832 -103.6270235	32.0509404 32.0509018	-103.6333267 -103.6270368	-	PERMITTED LOCATION
30-025-42952	BTA	MESA 8105 JV-P	024H	12	265	32E	32.0640788	-103.6270235	32.0509018	-103.6270368		PERMITTED LOCATION PERMITTED LOCATION
30-025-42964	ВТА	MESA 8105 JV-P	027H	12	26S	32E	32.0640786	-103.6268944	32.0790707	-103.6268804		PERMITTED LOCATION
30-025-42965	ВТА	MESA 8105 JV-P	028H	12	265	32E	32.0640663	-103.619987	32.0791031	-103.6206174		PERMITTED LOCATION
30-025-42354	MESQUITE SWD	SALADO DRAW SWD 13	1	13	265	32E	32.0363192	-103,6364428			18,675	
30-025-42354	CHEVRON	SALADO DRAW SWD 13	1	13	265	32E	32.0363192	-103.6364428			18,256	DRY WELL
30-025-42354	MESQUITE SWD	SALADO DRAW SWD 13	1	13	265	32E	32.0363192	-103.6364428			19,460'	TO REACHED/COMPLETING
30-025-45867	CHEVRON	SD 14 23 FED P18	009H	14	265	32E	32.04893	-103.64922	32.0207796	-103.6526372		PERMITTED LOCATION
30-025-45819 30-025-45820	CHEVRON	SD 14 23 P18 FED	010H	14	265	32E	32.04893	-103.649139	32.0207892	-103.6505078		PERMITTED LOCATION
30-025-45821	CHEVRON	SD 14 23 FED P18 SD 14 23 FED P18	011H 012H	14	26S 26S	32E	32.0489089	-103.6490463	32.0207987	-103.6483784		PERMITTED LOCATION
30-025-45822	CHEVRON	SD 14 23 FED P18	012H	14	26S	32E	32.0489088 32.0489088	-103.6489656 -103.6488849	32.0208081 32.0207828	-103.646249 -103.6519274	-	PERMITTED LOCATION
30-025-45823	CHEVRON	SD 14 23 FED P18	014H	14	26S	32E	32.0489088	-103.6488042	32.0207828	-103.6319274		PERMITTED LOCATION PERMITTED LOCATION
30-025-45705	CHEVRON	SD 14 23 FED P19	015H	14	265	32E	32.048929	-103.641387	32.0212424	-103.644391		PERMITTED LOCATION
30-025-45824	CHEVRON	SD 14 23 FED P19	016H	14	265	32E	32.04893	-103.641307	32.0208213	-103.643263		PERMITTED LOCATION
30-025-45706	CHEVRON	SD 14 23 FED P19	017H	14	265	32E	32.04893	-103.641226	32.0208182	-103.6439728		DRILLING WELL
30-025-45825	CHEVRON	SD 14 23 FED P19	018H	14	265	32E	32.04893	-103.641145	32.0208276	-103.6418434		DRILLING WELL
30-025-45707	CHEVRON	SD 14 23 FED P19	019H	14	26\$	32E	32.04893	-103.641065	32.0208369	-103.639714		DRILLING WELL
30-025-45826	CHEVRON	SD 14 23 FED P19	020H	14	265	32E	32.0489064	-103.6409604	32.0208462	-103.6375846		DRILLING WELL
30-025-42800 30-025-42801	CHEVRON	SD WE 14 FED P5	1H	14	265	32E	32.0354694	-103.6516458	32.0493268	-103.6526363		
30-025-43086	CHEVRON	SD WE 14 FED PS SD WE 14 FED P7	2H 3H	14	26S 26S	32E	32.0354703	-103.6514845	32.0496434	-103.6504292		
30-025-43088	CHEVRON	SD WE 23 FED P7	3H	14	265	32E	32.0361013 32.0361018	-103.6387275 -103.6386468	32.0497068 32.0213002	-103.6396746		OIL WELL
30-025-43087	CHEVRON	SD WE 14 FED P7	4H	14	265	328	32.0361012	-103.6385661	32.0213002	-103.6396591 -103.6375793	13,816	OIL WELL
30-025-43089	CHEVRON	SD WE 23 FED P7	4H	14	265	32E	32.0361026	-103.6384855	32.0212788	-103.6374662	_	OIL WELL
30-025-08256	TOM BROWN	BEN-FED	1	15	265	32E	32,0409454	-103.6558053	0210222700	105.057.4002		DRY WELL
30-025-45127	CHEVRON	MAELSTROM SWD	1	15	265	32E	32,0410818	-103.6594422	32.0411205	-103.6597663		INJECTION WELL
30-025-43594	CHEVRON	SD WE 15 FED P12	002H	15	265	32E	32.0356082	-103.6663784	32.0496795	-103.6669133	13,872	OIL WELL
30-025-43595	CHEVRON	SD WE 15 FED P12	003H	15	265	32E	32.035608	-103.6662978	32.0496945	-103.6639675		
30-025-43640	CHEVRON	SD WE 15 FED P9	005H	15	265	32E	32,035477	-103.6584028	32.0496454			
30-025-43641 30-025-43642	CHEVRON	SD WE 15 FED P9	006H	15	265	32E	32.0354768	-103.6583221	32.0496688	-103.6579771		
30-025-43642	CHEVRON	SD WE 15 FED P9 SD WE 23 FED P25	007H 001H	15	265	32E	32.0354766	-103.6582414	32.0495067	-103.6550498		
30-025-43462	CHEVRON	SD WE 23 FED P25	001H	23	26S 26S	32E	32.0214583 32.021459	-103.6453016 -103.6451403	32.0496194 32.0496709	-103.6478442 -103.6425123		
	CHEVRON	SD WE 23 FED P25	006H	23	26S	32E	32.0214586	-103.645221	32.0497982	-103.6453438		
30-025-43463	CHEVRON	SD WE 23 FED P25	4H	23	265	32E	32.0214593	-103.6450597	32.0497212			TD REACHED/COMPLETING
30-025-20448	GULF	LITTLEFIELD-FRAL DR	2	24	265	32E	32.0337081	-103.634351				DRY WELL
30-025-43674	CHEVRON	SD WE 24 FED P24	005H	24	265	32E	32,0213206	-103.6234284	32.0496741	-103.6263609		
30-025-43673	CHEVRON	SD WE 24 FED P24	006H	24	265	32E	32.0213205	-103.6233477	32.0497249	-103.6234741	19,286	OIL WELL
30-025-43675	CHEVRON	SD WE 24 FED P24	007H	24	265	32E	32.0213204	-103.6232671	32.049685	-103.620948		
	CHEVRON	SD WE 24 FED P23	1H	24	265	32E	32.0214934	-103.6323786	32.0496997	-103.6353806	-	
	CHEVRON	SD WE 24 FED P23	2H	24	265	32E	32.0214933	-103.6322979	32.0497344	-103.6334481	_	
30-025-43297	CHEVRON	SD WE 24 FED P23 SD WE 24 FED P23	3H 4H	24	26S 26S	32E	32.0214933	-103.6322173	32.0496856	-103.6311516	-	
30-025-08401	SAM JOLLIFFE	JM JONES-FED	1 1	6	26S	32E 33E	32.0214932 32.0699756	-103.6321366 -103.607954	32.0479112	-103.6291367		DRY WELL
	BTA	MESA B 8105 JV-P	1	7	265	33E	32.0699736	-103.607954				GAS WELL
	ВТА	MESA B SWD 8115 JV-P	2	7	265	33E	32.0533749	-103,605114				INJECTION WELL
	ВТА	MESA B 8115 JV-P COM	003H	7	26S	33E	32.0511817	-103.6094042	32.0647219	-103.60887		
30-025-42128	ВТА	MESA B 8115 JV-P COM	005H	7	265	33E	32.0511543	-103.6182868	32.0642114	-103.6182928		
	ВТА	MESA B 8115 7	006H	7	265	33E	32.0511835	-103.6176413	32.0650197	-103.6171633		PERMITTED LOCATION
	ВТА	MESA B 8115 7	007H	7	265	33E	32.0511838	-103.6175445	32.064254	-103.6129058		PERMITTED LOCATION
	ВТА	MESA B 8115 7	008H	7	265	33E	32.0512077	-103.6086063	32.0650273	-103.6087169		PERMITTED LOCATION
	BTA	MESA B 8115 7	009H	7	265	33E	32.0512079	-103.6085095	32.065031	-103.6044561		PERMITTED LOCATION
	BTA	8115 JV-P MESA B COM	2H	7	265	33E	32.0511876	-103.6057727	32.0642196	-103.6038513		
	BTA CHEVRON	8115 JV-P MESA B COM	4H	7	265	33E	32.0511677	-103.6132843	32.0641702	-103.6122535	_	
30-025-44113	CHEVRON	SD EA 18 19 P13 FED COM SD EA 18 19 FED COM P13	008H 009H	18	26S 26S	33E	32.0493885 32.0493887	-103.6156409	32.0220598			TD REACHED/COMPLETING
30-025-44130	CHEVRON	SD EA 18 19 P13 FED COM	010H	18	26S	33E	32.0493887	-103.6155602 -103.6154795	32.0220633 32.0216408	-103.6166712 -103.6153497		TD REACHED/COMPLETING
	w.mrnen	DO EN 40 15 15 ED COM	OTOH	10	203	JJE	32.0433663	-103-0134/95	52.0216408	-103.013349/		DRILLING WELL

No wells penetrate Injection Zone

	1 3													
		ADDENDUM	1 - MES	6A 8	105	SWI) #2 - WEL	LS WITHIN	2 MILE RA	DIUS				
UWI (APINum)	Operator	Well Name	Well No.	Sec.	Twp.	Rng.	Surface Hole Latitude	Surface Hole Longitude	Bottom Hole Latitude	Botom Hole Longitude	TD	Current Status		
30-025-44131	CHEVRON	SD EA 18 19 FED COM P13	011H	18	265	33E	32.0493892	-103.6153988	32.0216444	-103.6140269		DRILLING WELL		
30-025-44132	CHEVRON	SD EA 18 19 FED P14	012H	18	265	33E	32,0494015	-103.610788	32.0216479	-103.6127041	23,000'	TD REACHED/COMPLETING		
30-025-44133	CHEVRON	SD EA 18 19 FED P14	013H	18	265	33E	32.0494017	-103.6107073	32.0216514	-103.6113813		DRILLING WELL		
30-025-44139	CHEVRON	SD EA 18 19 FED P14	014H	18	265	33E	32.0494019	-103.6106266	32.0216549	-103.6100453		DRILLING WELL		
30-025-44134	CHEVRON	SD EA 18 19 FED P14	015H	18	265	33E	32,0494021	-103.6105459	32.0216584	-103.6087225		DRILLING WELL		
30-025-42659	CHEVRON	SALADO DRAW 18 26 33 FED	1H	19	26S	33E	32.0355911	-103.6165547	32,0498626	-103.6182092	14,042'	OIL WELL		
30-025-42660	CHEVRON	SALADO DRAW 18 26 33 FED	2H	19	265	33E	32.0355915	-103.6163934	32.0498678	-103.6162567	14,135	OIL WELL		
30-025-42278	CHEVRON	SALADO DRAW 18 26 33 FED	3H	19	265	33E	32.0356005	-103,613102	32.049874	-103.6139653	_			
30-025-42279	CHEVRON	SALADO DRAW 18 26 33 FED	4H	19	265	33E	32.035601	-103.6129407	32.0498792	-103.6120128	13,900'	OIL WELL		
30-025-42795	CHEVRON	SD EA 18 FED P6	5H	19	265	33E	32.0354327	-103.6080656	32.0502119	-103.609708	14,214	OIL WELL		
30-025-42796	CHEVRON	SD EA 18 FED P6	6H	19	26S	33E	32.0354851	-103.6080169	32.0501851	-103.6078189				



MESA 8105 SWD #2

1150' FNL 200' FEL Sec. 11 T26S R32E

Lea County, NM

SURFACE OWNER & OFFSET OPERATORS

SURFACE OWNER:

 Name
 ADDRESS
 CITY, STATE, & ZIP
 Certified #

 BLM
 301 Dinosaur Trail
 Santa Fe, NM 87508
 7013 0600 0001 8498 9730

OFFSET OPERATOR:

 Name
 ADDRESS
 CITY, STATE, & ZIP
 Certified #

 EOG Resources, INC
 111 Bagby St. #28
 Houston, TX 77002
 7015 0640 0001 5098 7445



Permian Basin Area Laboratory 2101 Market Street, Midland, Texas 79703 **Upstream Chemicals**

REPORT DATE:

5/20/2019

COMPLETE WATER ANALYSIS REPORT SSP v.2010

CUSTOMER:

DISTRICT: AREA/LEASE: NEW MEXICO

SAMPLE POINT NAME

SALADO DRAW SALADO DRAW 24 CTB WTP

SITE TYPE: SAMPLE POINT DESCRIPTION:

FACILITY
TRANSFER PUMP

ACCOUNT REP: SAMPLE ID: SAMPLE DATE:

ANALYSIS DATE: ANALYST: HECTOR M ESPINOZA 201901014293 2/15/2019

2/27/2019

FIE	D DATA	In the second		ANALYSIS OF S	AMPLE		-
		ANIONS	mg/L	meq/L	CATIONS:	mg/L	meq/L
Initial Temperature (°F):		250 Chloride (Cl'):	118901.2	3354.1 9	Sodium (Na*):	61261.6	2665.
Final Temperature ("F):		80 Sulfate (50 ₄ 2):	2145.5	23.9 (Potassium (K*);	1049.8	26.
Initial Pressure (psi):		100 Borate (H ₃ BO ₃):	248.7	4.0 (Magnesium (Ma²+):	1313.6	108.
Final Pressure (psi):		15 Fluoride (F):	ND		Calcium (Ca ²⁺):	8145.6	406.
		Bromide (Br):	ND	9	Strontium (Sr2+):	820.6	18.
pH:		Nitrite (NO ₂):	ND		Barlum (Ba ²⁺):	2.7	0.0
pH at time of sampling:		5.8 Nitrate (NO ₃ '):	ND		ron (Fe ²⁺);	58.2	2.1
		Phosphate (PO ₄ ³⁻):	ND		Manganese (Mn²*):	2.0	0.1
		Silica (SIO ₂):	ND		end (Pb ²):	NO	4
				2	Zinc (Zn²*):	0.0	0.6
ALKALINITY BY TITRATION:	mg/L	meq/L					
licarbonate (HCO ₃ '):	760.8	12.8			Numinum (AJ³*):	0.0	0.0
Carbonate (CO ₃ 2'):	ND				Chromlum (Cr ³⁺):	ND	0.0
Hydroxide (OH'):	ND				Cobalt (Co²+):	ND	
		ORGANIC ACIDS:	mg/L		Copper (Cu ²⁺):	0.0	0.6
queous CO ₂ (ppm):		900.0 Formic Acid:	ND		Nolybdenum (Mo²*):	ND	-
iqueous H₂S (ppm):		0.0 Acetic Acid:	ND		lickel (Ni ² *):	ND	
queous O2 (ppb):		ND Propionic Acid:	ND		'in (Sn²*):	ND	
		Butyric Acid:	ND		itenium (Ti ² '):	ND	
alculated TDS (mg/L):		193482 Valeric Acid:	ND		/anadium (V ²⁺):	ND	
Pensity/Specific Gravity ((g/cm³):	1.1221			(Irsonium (Zr ²⁺):	ND	
deasured Specific Gravity	y	1.1315			Ithium (Li):	11.5	
Conductivity (mmhos):		ND		_		24.0	
lesistivity:		ND		т	otal Hardness	26714	N/A
ACF/D:		No Data		•		20/24	N/A
IOPD:		No Data					
WPD:		No Data Anion/Cation Ratio:		1.05	ND = Not D	stermined	

SCALE PREDICTIONS BASED ON FIELD PROVIDED DATA; PUTHER MODELING MAY BE REQUIRED FOR VALIDATION OF SCALE PREDICTION RESULTS.

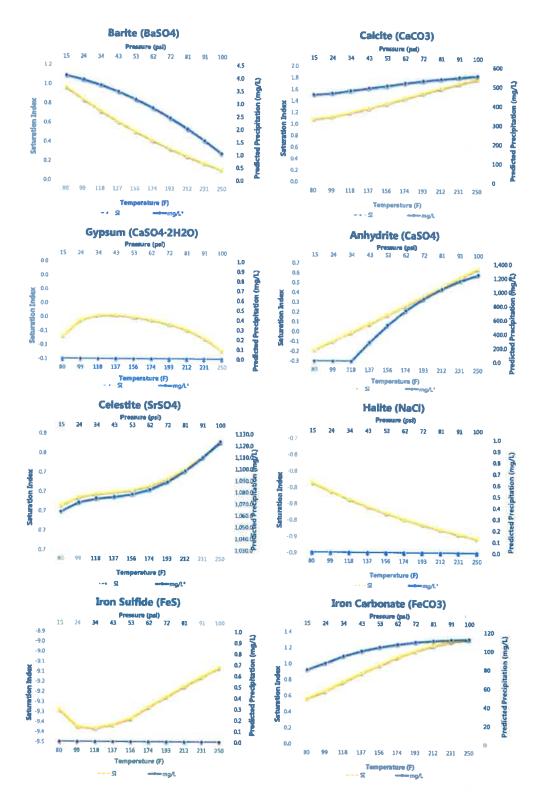
Cond	litions	Anrite (BaSO ₄)	Calcite	(CaCO ₃)	Gypsum (C	ISO ₍ -2N ₂ O)	Anhydrit	e (CaSQ.)
Temp	Press.	Index	Amt (ptb)	Enclesc	Amt (ptb)	Index	Aret (ptb)	Index	Amt (ptb)
80°F	15 psi	0.96	1,428	1.09	158 445	-0.05	0.000	-0.18	0.000
99°F	24 psi	0.84	1.370	1.13	160 970	-0.04	0.000	-0.09	0.000
118°F	34 psi	0 72	1 297	1 20	165 819	-0.04	0.000	-0.01	0.000
137°F	43 psi	0.61	1 209	1.28	170 861	-0.04	0.000	0.08	94,778
156°F	53 psi	0.51	1,106	1.36	175 536	-0.04	0 000	0.17	181 202
174°F	62 psi	0.42	0.987	1.46	180 440	-0.04	0.000	0.27	254 078
193°F	72 psi	0.33	0.854	1.55	184 759	-0.04	0.000	0.36	314 704
212°F	81 psi	0.25	0.707	1.64	188 500	-0.05	0.000	0.46	364 372
231°F	91 psi	0.18	0,546	172	191 786	-0.05	0.000	0.56	404.452
250°F	100 psi	0.11	0.370	1 80	194.709	-0.06	0.000	0.65	436 340
Condi	klons	Calestita	(SrSO ₄)	Hallto (NaCt)		Iron Sulfide (FeS)		iron Carbon	ate (FeCO ₄)
Temp	Press.	Index	Amt (pth)	Index	Amt (pth)	Index	Amt (pth)	Index	Amt (atb)
80°F	15 psi	0.71	371 955	-0.79	0.000	-9.29	0.000	0.56	27.628
99°F	24 psi	0.71	374.720	-0.80	0.000	-9.37	0.000	0.65	30 149
118'F	34 psi	0.72	375,859	-0 81	0 000	-9.38	0 000	0.77	32.757
137°F	43 psi	0.72	376.444	-0.82	0.000	-9 36	0.000	0.86	34 764
156°F	53 psi	0.72	377.223	-0.83	0.000	-9 33	0.000	0.98	36 224
174°F	62 psi	0,73	378.670	-0.84	0.000	-9 28	0.000	1.08	37.410
193°F	72 psi	0.73	381 026	-0.85	0.000	-9 22	0.000	1.17	38 212
212°F	81 psi	0.74	384,330	-0.85	0.000	-917	0.000	1.23	38.760
231°F	91 psl	0 76	388.457	-0.86	0.000	-913	0.000	1.28	39.134
250°F	100 psi	077	393 145	-0.86	0.000	-9.08	0 000	1.32	39.384
							- 500		-5.507

Note 1: When assessing the severity of the scale problem, both the saturation index (SI) and amount of scale must be considered

Note 2 Precipitation of each scale is considered separately Total scale will be less than the sum of the amounts of the eight (8) scales

Note 3: Saturation index predictions on this sheet use pH and alkalinity; %CO₂ is not included in the calculations

ScaleSoftPitzerTM SSP2010



SCALE PREDICTIONS BASED ON FIELD PROVIDED DATA; FUTHER MODELING MAY BE REQUIRED FOR VALIDATION OF SCALE PREDICTION RESULTS.

Well Name	AM	Let	Long	Sect	Twn	Range	County	ST	Field	formation	samplesource	hds med	chloride mgt
ANTELOPE RIDGE UNIT	3002521082	32.259	-103.461	34	23 5	ME	Lea	NM	ANTELOPE RIDGE	DEVONIAN		80187	47900
FARNSWORTH FEDERAL	3002511950	32.078	-103.162	4	26 S	37 E	Lea	NM	CROSSY	DEVONIAN	UNKNOWN	31931	20450
ARNOTT RAMSAY	3002511863	32.092	-103,178	32	25 S	37€	Lea		CROSBY	DEVONIAN	SIRRICAN	32331	100382
COPPER	3002511818	32.099	-103.165	28	255	37E	Lea	NM	CROSBY	DEVONIAN	UNKNOWN	27506	15270
STATE NJ A	3002511398	32.165	-103.127	2	25 5	37 E	Lea	NM	JUSTIS NORTH	DEVONIAN	DST	105350	59300
WEST DOLLARHIDE DEVONIAN	3002512297	32.172	·103.076	32	245	38 E	Lea	NM	DOLLARHIDE	DEVONIAN	WELLHEAD	50858	30200
STATE B COM	3002509716	32.179	-103.221	36	24 5	36 E	Lea	NM	CUSTER	DEVONIAN	UNKNOWN	176234	107400
EC HILL O FEDERAL	3002510950	32.265	-103.144	34	23 5	37 E	Lea	NM	TEAGUE	DEVONIAN	UNKNOWN	236252	147000
E CHILL B FEDERAL	3002510945	32.266	-103.144	34	23 \$	37 E	Lea	NM	TEAGUE	DEVONIAN	UNKNOWN	112959	67390
CLINE FEDERAL	3002510717	32.302	-103.136	14	23 S	37 E	Lea	NM	CLINE	DEVONIAN	PRODUCTION TEST	118979	71,280
BELL LAKE UNIT	3002508483	32.328	-103.507	6	23 S	34 E	Lea	NM	BELL LAKE NORTH	DEVONIAN	HEATER/TREATER	71078	42200
											Average	101133	54434

The data table above represents all water analysis of wells within 30 miles of proposed SWD well in Lea County, New Mexico. The data was supplied by Martha Cather from the PRRC (Petroleum Recovery Resource Center) at New Mexico Tech in Socorro, New Mexico. The water analysis was performed on water samples from the 'Devonian', which covers both Silurian and Devonian aged rocks.

For most wells the chloride count and total dissolved solids count (tds in milligrams) was available. The sodium count, which was not available for these wells, is always about half the chloride count, and is included in the total dissolved solids count. With this assumption, the dissolved sodium and chloride count comprises $\sim 90\%$ of the total dissolved solids. The average value for the chloride count in the 11 wells below is 64,000 mlg, which equates to $\sim 100,000$ mgl sodium and chloride. Some of the Devono-Silurian wells have total dissolved solid counts as high as 236,000 mlg.

As previously seen in the water analysis from the Wolfcamp, the dissolved sodium and chloride content is ~104,000 mgl which is similar to the salinity of the Silurian formation that will receive the injected water.

1. FORMATION TOPS

FORMATION	KBTVD	MD
RUSLTER	735	735
TOP SALT	1095	1095
BASE SALT	4460	4460
DELAWARE	4690	4690
BELL CANYON	4720	4720
CHERRY CANYON	5730	5730
BRUSHY CANYON	7310	7310
BONE SPRING LIME	8918	8918
FIRST BONE SPRING SAND	9803	9803
SECOND BONE SPRING SAND	10443	10443
THIRD BONE SPRING CARBONATE	10943	10943
TOP WOLFCAMP	12043	12043
LOWER WOLFCAMP A	12793	12793
ATOKA	14468	14468
BARNETT	15668	15668
MISSISSIPPI LIME	17062	17062
WOODFORD	17342	17342
DEVONIAN	17483	17483
FUSSELMAN	18643	18643
ELLENBURGER	20293	20293

2. ESTIMATED DEPTH OF WATER, OIL, GAS & OTHER MINERAL BEARING FORMATIONS The estimated depths at which the top and bottom of the anticipated water, oil, gas, or other mineral bearing formations are expected and to be encountered as follows

SUBSTANCE	FORMATION	KBTVD	MD
Deepest Exp	Deepest Expected Base of Fresh Water		
W	TOP SALT	1095	1095
W	BASE SALT	4460	4460
O/W	DELAWARE	4690	4690
O/W	BELL CANYON	4720	4720
O/G/W	CHERRY CANYON	5730	5730
O/G/W	BRUSHY CANYON	7310	7310
O/G/W	BONE SPRING LIME	8918	8918
O/G/W	FIRST BONE SPRING SAND	9803	9803
O/G/W	SECOND BONE SPRING SAND	10443	10443
O/G/W	THIRD BONE SPRING CARBONATE	10943	10943
O/G/W	TOP WOLFCAMP	12043	12043
O/G/W	LOWER WOLFCAMP A	12793	12793
O/G/W	АТОКА	14468	14468
O/G/W	BARNETT	15668	15668
O/G/W	MISSISSIPPI LIME	17062	17062
O/G/W	WOODFORD	17342	17342
O/G/W	DEVONIAN	17483	17483
O/G/W	FUSSELMAN	18643	18643
O/G/W	ELLENBURGER	20293	20293



New Mexico Office of the State Engineer

Active & Inactive Points of Diversion

(with Ownership Information)

No PODs found.

POD Search:

POD Basin: Carlsbad

Well Tag Search:

Well Tag: [ALL]

UTMNAD83 Radius Search (in meters):

Easting (X): 628602.29

Northing (Y): 3548102.71

Radius: 1609

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.



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

No records found.

Basin/County Search:

Basin: Carlsbad

UTMNAD83 Radius Search (in meters):

Easting (X): 628602.29 Northing (Y): 3548102.71 Radius: 1609



BTA OIL PRODUCERS, LLC

CARLTON BEAL, JR.
BARRY BEAL
SPENCER BEAL
KELLY BEAL
BARRY BEAL, JR.
STUART BEAL
ROBERT DAVENPORT, JR.

104 SOUTH PECOS STREET MIDLAND, TEXAS 79701-5021 432-682-2753 FAX 432-683-0311 GULF COAST DISTRICT TOTAL PLAZA 1201 LOUISIANA STREET, STE. 570 HOUSTON, TEXAS 77002 713-658-0077 FAX 713-655-0346

ROCKY MOUNTAIN DISTRICT 600 17TH STREET, STE. 2230 SOUTH DENVER, COLORADO 80202 303-534-4404 FAX 303-534-4661

August 27, 2019

In re: Mesa 8105 SWD #2 Geologic Statement

After examining the available geologic and engineering data, including horizontal wells in the Avalon formation flanking the proposed SWD well location and 2D seismic surrounding the proposed SWD well location, no evidence was found of open faults or any hydrologic connection between the disposal zone and any underground sources of drinking water.

BTA OIL Producers, LLC

Bradley W. Jones Chief Geophysicist

MESA 8105 SWD #2

1150' FNL 200' FEL

Sec. 11 T26S R32E

Lea County, NM

SURFACE OWNER & OFFSET OPERATORS

SURFACE OWNER:

Name ADDRESS CITY, STATE, & ZIP Certified #

BLM 301 Dinosaur Trail Santa Fe, NM 87508 7013 0600 0001 8498 9730

OFFSET OPERATOR:

 Name
 ADDRESS
 CITY, STATE, & ZIP
 Certified #

 EOG Resources, INC
 111 Bagby St. #28
 Houston, TX 77002
 7015 0640 0001 5098 7445

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 August 21, 2019 and ending with the issue dated August 21, 2019.

Publisher

Sworn and subscribed to before me this 21st day of August 2019.

Business Manager

My commission expires

(Seal)

OFFICIAL SEAL
GUSSIE BLACK
Notary Public
State of Now Mexico

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 AUGUST 21, 2019

BTA Oil Producers, LLC. 104 S. Pecos, Midland, TX. 79701, will file form C-108 (Application for Authorization to Inject) with the New Mexico Oil Conservation Division as each ing administrative approval for a sait water disposal well. The proposed well, the Mesa 8105 SWD #2 is located 1150 FNL & 200 FEL, Unit Letter A, Section 11, T26S, R32E, Lea County, New Mexico. The formations will be Silurian/Fusselman with an open hole interval of 17,490 - 20,000. The maximum anticipated injection rate will be 60,000 BPWD at a maximum injection pressure of 3,490 psig. Interested parties should file objections or requests for hearing with the Oil Conservation Division, 1220 South St Francis Dr. Santa Fe, New Mexico 87505, within 15 days. Inquiries regarding this application should be directed to BTA Oil Producers, LLC. Attn. Sammy Hajar, 104 S. Pecos, Midland, TX 79701.

01101299

PAM INSKEEP BTA OIL PRODUCERS 104 SOUTH PECOS MIDLAND, TX 79701 00232354



BTA OIL PRODUCERS, LLC

CARLTON BEAL, JR.
BARRY BEAL
SPENCER BEAL
KELLY BEAL
BARRY BEAL, JR.
STUART BEAL
ROBERT DAVENPORT, JR.

104 S. PECOS MIDLAND, TEXAS 79701-5099 432-682-3753 FAX 432-683-0314 **GULF COAST DISTRICT**

TOTAL PLAZA 1201 LOUISIANA STREET, STE. 570 HOUSTON, TEXAS77002 713-658-0077 FAX 713-655-0346

ROCKY MOUNTAIN DISTRICT 600 17TH STREET, STE. 2230 SOUTH DENVER, COLORADO80202 303-534-4404 FAX 303-534-4661

August 28, 2019

In re: Notification Statement

Mr. McMillan,

BTA Oil Producers, LLC ("BTA") has sent notice to the BLM, EOG Resources, INC., and the New Mexico State Land Office of our Application for Authorization to Inject for the MESA 8105 SWD #2 to be drilled at a location of 1150' FNL, & 200' FEL, Sec 11, T26S, R32E, Lea County, New Mexico.

Respectfully,

Sammy Hajar Regulatory Analyst

BTA Oil Producers, LLC

shajar@btaoil.comO: 432-682-3753C: 432-934-2198

MESA 8105 SWD #2

1150' FNL 200' FEL

Sec. 11 T26S R32E

Lea County, NM

SURFACE OWNER & OFFSET OPERATORS

SURFACE OWNER:

 Name
 ADDRESS
 CITY, STATE, & ZIP
 Certified #

 BLM
 301 Dinosaur Trail
 Santa Fe, NM 87508
 7013 0600 0001 8498 9730

OFFSET OPERATOR:

 Name
 ADDRESS
 CITY, STATE, & ZIP
 Certified #

 EOG Resources, INC
 111 Bagby St. #28
 Houston, TX 77002
 7015 0640 0001 5098 7445

ALSO NOTIFIED:

 Name
 ADDRESS
 CITY, STATE, & ZIP
 Certified #

 NM SLO
 310 Old Santa Fe Trail
 Santa Fe, NM 87501
 7015 0640 0001 5098 7452

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DELAWARE

Lab ID

API No 3002508367 Sample ID

4347

391

749

Well Name

BELL LAKE UNIT

007

Sample No

Location ULSTR 01 24 S 33 Ε Lat / Long 32.25143

-103.51924

660 660 Е County Lea

Operator (when sampled)

Field

SWD

Unit 1

Sample Date

Analysis Date

Sample Sourc UNKNOWN

Water Typ

Depth (if known)

ph_temp_F

ph

alkalinity_as_caco3_mgL hardness_as_caco3_mgL

specificgravity

hardness_mgL

specificgravity_temp_F

resistivity_ohm_cm

tds_mgL

87686

resistivity_ohm_cm_temp_

tds_mgL_180C

conductivity

chloride_mgL

53920 conductivity_temp_F

sodium_mgL

carbonate_mgL

calcium_mgL

bicarbonate_mgL

sulfate_mgL

iron_mgL

hydroxide_mgL

barium_mgL

magnesium_mgL

h2s_mgL

potasslum_mgL

co2_mgL

strontium_mgL

o2_mgL

manganese_mgL

anionremarks

BONE SPRING

Leb ID

Sample ID

4916

API No

3002502429

Sample No

Well Name

LEA UNIT

Location ULSTR 12 20

005

Lat/Long 32.58504

-103.51106

1980 S 1980 Ę

S 34

County Lea

Operator (when sampled)

Fleld LEA

202606

118100

Ε

Unit J

Sample Date

Sample Sourc DST

Water Typ

ph

ph_temp_F

specificgravity specificgravity_temp_F

tds_mgL

tds_mgL_180C

chloride_mgL

sodium_mgL

calcium_mgL

Iron_mgL

barlum_mgL

magneslum_mgL

potassium_mgL strontium_mgL

manganese_mgL

Analysis Date

Depth (if known)

alkalnity_as_caco3_mgL hardness_as_caco3_mgL

hardness_mgL

resistivity_ohm_cm

resistivity_ohm_cm_temp_

conductivity

conductivity_temp_F

carbonate_mgL

blcarbonate_mgL

5198 992

sulfate_mgL hydroxide_mgL

h2s_mgL

co2_mgL

o2_mgL

antonremarks

WOLFCAMP

Lab ID

Sample ID

API No

3001520138

5688

Well Name

MAHUN STATE

001

Sample No

Lat/Long 32.39340

-104.70979

1800 1980 N

22

County

Eddy

Operator (when sampled)

Location ULSTR 16

Field

ROCKY ARROYO

E

Unit F

Sample Date

5/17/1988

S 22

Analysis Date

Sample Sourc DST

Water Typ

ph

8.6

Depth (if known)

alkalnity_as_caco3_mgL hardness_as_caco3_mgL

ph_temp_F specificgravity

hardness_mgL

specificgravity_temp_F

resistivity_ohm_cm

35495

resistivity_ohm_cm_temp_

tds_mgL_180C

tde_mgL

conductivity

chloride_mgL sodlum_mgL

19000

conductivity_temp_F

calclum_mgL

carbonate_mgL

bicarbonate_mgL

830 2500

iron_mgL

sulfate_mgl_

barium_mgL

hydroxide_mgL

magnesium_mgL

h2s_mgL

potassium_mgL

co2_mgL

strontium_mgL

o2_mgL

manganese_mgL

anionremarks

MORROW

Lab ID

2434

API No

3002520756

Sample ID

Sample No

Well Name

CUSTER MOUNTAIN UNIT

Lat / Long 32.22999

-103.37431

Location ULSTR 09 24 S 35 E 1980 S 1980 W

County Lea

Operator (when sampled)

CINTA ROJA

Unit K

Sample Date

Analysis Date

Sample Sourc DST

001

Depth (if known)

Water Typ

ph

ph_temp_F

alkainity_as_caco3_mgL

hardness_as_caco3_mgL

specificgravity

hardness_mgL resistivity_ohm_cm

specificgravity_temp_F

282741

resistivity_ohm_cm_temp_

tds_mgL_180C

tds_mgL

conductivity

176800 chloride_mgL

conductivity_temp_F

sodlum_mgL

carbonate_mgl.

calcium_mgL

bicarbonate_mgL

161 650

iron_mgL

sulfate_mgl. hydroxide_mgL

barlum_mgL

h2e_mgL

magnesium_mgL

potassium_mgL

co2_mgL

strontium_mgL

o2_mgl.

manganese_mgL

anionremaris

DISPOSAL ZONE

DEVONIAN

Lab ID

API No.

3002508483

Sample ID Sample No

5733

Well Name

BELL LAKE UNIT

006

Location ULSTR 08 23 S 34

Lat/Long 32.32821

-103.50663

660 S 1980 E

County Lea

Operator (when sampled)

Field

BELL LAKE NORTH

Ε

Unit O

Sample Date

Analysis Date

Sample Source HEATER/TREATER

Depth (If known)

Water Type

ph

7

alkalnity_as_caco3_mgL

ph_temp_F

hardness_as_caco3_mgL

specificgravity

hardness_mgL

specificgravity_temp_F

resistivity_ohm_cm

tds_mgL

71078

resistivity_ohm_cm_temp_

tds_mgL_180C

conductivity

chloride_mgl.

42200

conductivity_temp_F

sodium_mgL

carbonate_mgL

calclum_mgL

bicarbonate_mgL

sulfate_mgL

500 1000

iron_mgL barium_mgL

hydroxide_mgL

magnesium_mgL

h2s_mgL

potaesium_mgL

co2_mgL

strontium_mgL

o2_mgL

manganese_mgL

anionremarks