

MAY 28 2018 4:03:40

5-23-2018 5/23/2018 MAM 9/2/2018 SUD DMA1814332337

DATE IN	SUSPENSE	ENGINEER	LOGGED IN	TYPE	APP NO.
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ABOVE THIS LINE FOR DIVISION USE ONLY

NEW MEXICO OIL CONSERVATION DIVISION

- Engineering Bureau -

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



ADMINISTRATIVE APPLICATION CHECKLIST

THIS CHECKLIST IS MANDATORY FOR ALL ADMINISTRATIVE APPLICATIONS FOR EXCEPTIONS TO DIVISION RULES AND REGULATIONS WHICH REQUIRE PROCESSING AT THE DIVISION LEVEL IN SANTA FE

Application Acronyms:

[NSL-Non-Standard Location] [NSP-Non-Standard Proration Unit] [SD-Simultaneous Dedication]
 [DHC-Downhole Commingling] [CTB-Lease Commingling] [PLC-Pool/Lease Commingling]
 [PC-Pool Commingling] [OLS - Off-Lease Storage] [OLM-Off-Lease Measurement]
 [WFX-Waterflood Expansion] [PMX-Pressure Maintenance Expansion]
 [SWD-Salt Water Disposal] [IPI-Injection Pressure Increase]
 [EOR-Qualified Enhanced Oil Recovery Certification] [PPR-Positive Production Response]

[1] TYPE OF APPLICATION - Check Those Which Apply for [A]

- [A] Location - Spacing Unit - Simultaneous Dedication
☐ NSL ☐ NSP ☐ SD

Check One Only for [B] or [C]

- [B] Commingling - Storage - Measurement

☐ DHC ☐ CTB ☐ PLC ☐ PC ☐ OLS ☐ OLM

- [C] Injection - Disposal - Pressure Increase - Enhanced Oil Recovery

☐ WFX ☐ PMX ☒ SWD ☐ IPI ☐ EOR ☐ PPR

- [D] Other: Specify _____

[2] NOTIFICATION REQUIRED TO: - Check Those Which Apply, or Does Not Apply

- [A] ☐ Working, Royalty or Overriding Royalty Interest Owners

- [B] ☒ Offset Operators, Leaseholders or Surface Owner

- [C] ☒ Application is One Which Requires Published Legal Notice

- [D] ☒ Notification and/or Concurrent Approval by BLM or SLO
 U.S. Bureau of Land Management - Commissioner of Public Lands, State Land Office

- [E] ☒ For all of the above, Proof of Notification or Publication is Attached, and/or,

- [F] ☐ Waivers are Attached

[3] SUBMIT ACCURATE AND COMPLETE INFORMATION REQUIRED TO PROCESS THE TYPE OF APPLICATION INDICATED ABOVE.

[4] CERTIFICATION: I hereby certify that the information submitted with this application for administrative approval is accurate and complete to the best of my knowledge. I also understand that no action will be taken on this application until the required information and notifications are submitted to the Division.

Note: Statement must be completed by an individual with managerial and/or supervisory capacity.

Eddie W. Seay
 Print or Type Name

Eddie W. Seay
 Signature

Agent for (P. TDS) 4/30/18
 Title Date

seay04@leaco.net
 e-mail Address

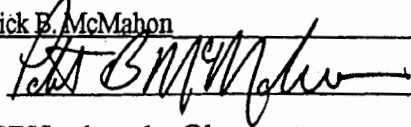
SUD
 - Permian TDS- LLC
 306958

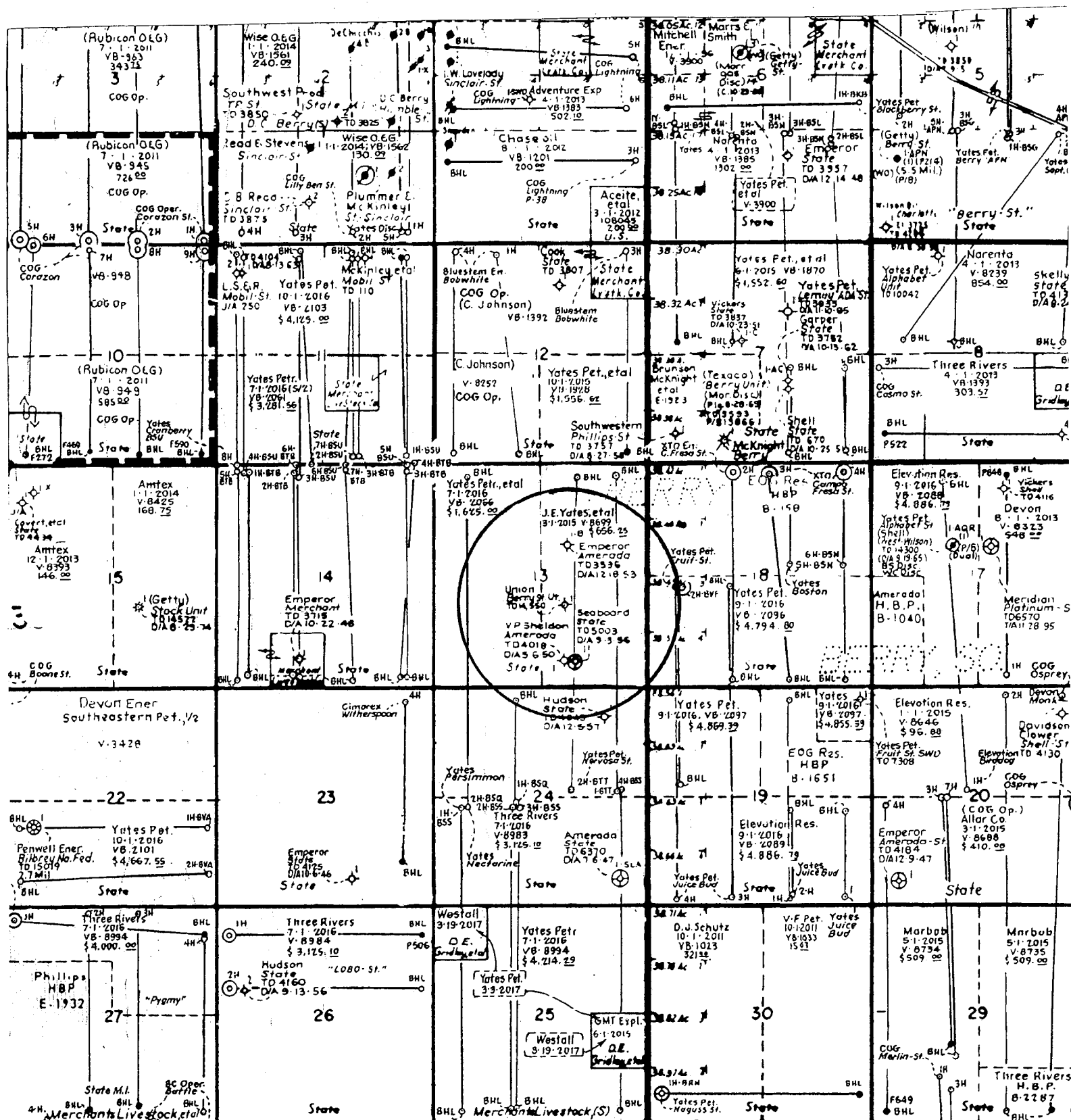
Well
 Berry State

SUD #1
 30-025-27501
 Pool

-SUD, Devonian-
 Silurian
 97865

APPLICATION FOR AUTHORIZATION TO INJECT

- I. PURPOSE: Secondary Recovery Pressure Maintenance X Disposal Storage
Application qualifies for administrative approval? X Yes No
- II. OPERATOR: Permian TDS, LLC
ADDRESS: Box 788 Lovington, NM 88260
CONTACT PARTY: Patrick McMahon PHONE: 575-399-5031
- 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? Yes X No
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:
1. Proposed average and maximum daily rate and volume of fluids to be injected;
 2. Whether the system is open or closed;
 3. Proposed average and maximum injection pressure;
 4. Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water; and,
 5. 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: Patrick E. McMahon TITLE: Owner
SIGNATURE:  DATE: 4/30/18
E-MAIL ADDRESS: hsncpbm@leaco.net
- * 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: logs submitted by previous operator when drilled.
- DISTRIBUTION: Original and one copy to Santa Fe with one copy to the appropriate District Office



ATTACHMENT TO APPLICATION C-108

Berry State #1 (API 30-025-27501)
Unit J, Sect. 13, Tws 21 S., Rng. 33 E.
Lea, NM

III. WELL DATA

- A.
 - 1) See injection well data sheets and attached schematics.
 - 2) See injection well data sheets and attached schematics.
 - 3) 4 ½" coated tubing.
 - 4) 10 k nickel plated double grip retrievable.
- B.
 - 1) Injection formation is the Devonian/Silurian.
 - 2) Injection interval open hole from 14600' to 16075'.
 - 3) This will be re-entry to convert to SWD.
 - 4) The next higher producing zone is the Morrow at approximately 13475'.
The next lower producing zone is the Ordovician, Simpson, McKee and Ellenburger at approximately 17000' if present.

IV. NO

V. MAP ATTACHED.

VI. LIST OF WELLS, wells listed in the AOR do not penetrate the proposed injection zone.

- VII.** Upon approval, Permian will begin re-entry to convert the Berry State #1 to a commercial SWD. Notify OCD, after filing C-103 of proposed actions. Prepare location and move in rig. After drilling out all plugs down to top of Devonian, 7 in casing will be set and cemented. Will continue drilling open hole section down to 16075'. Clean out open hole and acidize as needed. Permian will run 4 ½" IPC tubing and packer set at approximately 14500' or within 100 ft. of upper most open hole section. Lead annulus with anti-corrosive packer fluid, notify OCD and run MIT.
- A C-103 will be filed of all activities along with any logs that are run. Permian will adhere to all OCD rules and regulations and comply with 19-15-29 NMAC and 19-15-30 NMAC, as required.

- 1) Plan to inject approximately 15,000 bpd of produced water from various operators.
- 2) Closed system.

- 3) Average injection pressure should be approximately 0# to 2900# or whatever limit OCD allows.
- 4) Produced water from various sources, Bone Springs, Wolfcamp, Delaware, etc. Water analytical attached.

VIII. The proposed disposal formations are Devonian and Silurian which consists of Dolomite and Carbonate and chert intervals interspersed with some tight limestone intervals.

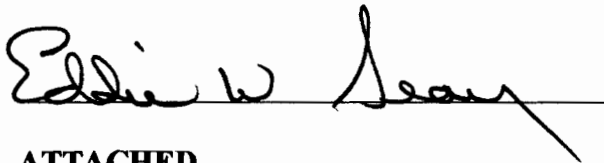
The fresh water formation in the area is the Alluvium which ranges in thickness from 60' to 70' and the Santa Rosa between 400-600'. State Engineers records show one water well within the AOR of the proposed SWD, analytical is within.

IX. ACID AS NEEDED TO CLEAN AND OPEN THE FORMATION.

X. ALL LOGS RUN ON THE WELL WILL BE FILED WITH OCD.

XI. (SEE ATTACHMENT) ONE WATER WELL WITHIN THE AOR OF PROPOSED SWD.

XII. I, Eddie W. Seay, have examined all available geologic and engineering data and find no evidence of open faults or any other hydrologic connection between the disposal zones and any underground source of drinking water pertaining to this well.

A handwritten signature in black ink, reading "Eddie W. Seay", written over a horizontal line.

XIII. ATTACHED.

INJECTION WELL DATA SHEET

OPERATOR: Permian TDS Inc.WELL NAME & NUMBER: Berry State #1 (API 30.025.27501)WELL LOCATION: 1990/S 1980/EJ132133

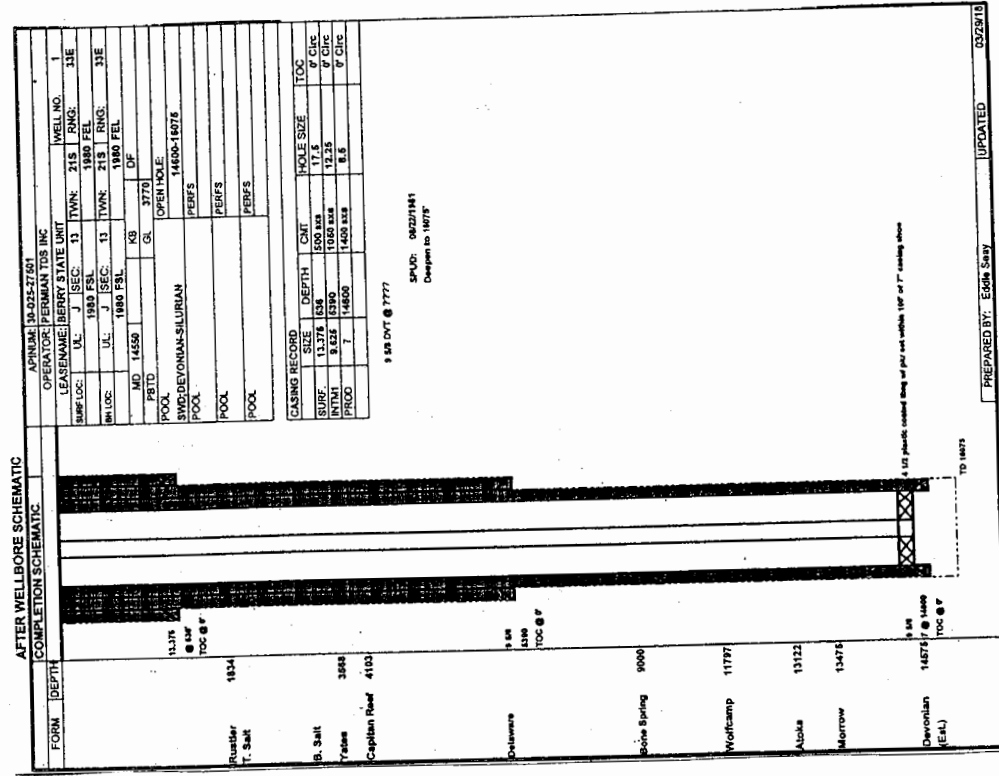
FOOTAGE LOCATION

UNIT LETTER

SECTION

TOWNSHIP

RANGE

WELLBORE SCHEMATICWELL CONSTRUCTION DATASurface CasingHole Size: 17.5 Casing Size: 13.375Cemented with: 500 SX. or ft³Top of Cement: Circ./Surface Method Determined: Circ.
Intermediate CasingHole Size: 12.25 Casing Size: 9.625Cemented with: 1050 SX. or ft³Top of Cement: Circ./Surface Method Determined: Circ.
Production CasingHole Size: 7 Casing Size: 8.5Cemented with: 1400 SX. or ft³Top of Cement: Circ./Surface Method Determined: Circ.Total Depth: 16075

Injection Interval

14600 feet to 16075

(Perforated or Open Hole; indicate which)

INJECTION WELL DATA SHEET

Tubing Size: 4½ Lining Material: IPC
 Type of Packer: 10 K nickel plated double grip retrievable
 Packer Setting Depth: Approx. 14500 or within 100' of open hole
 Other Type of Tubing/Casing Seal (if applicable): NA

Additional Data

1. Is this a new well drilled for injection? Yes X No
 If no, for what purpose was the well originally drilled?
oil and gas production
2. Name of the Injection Formation: Devonian - Silurian
3. Name of Field or Pool (if applicable): NA
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.
See attached schematic
5. Give the name and depths of any oil or gas zones underlying or overlying the proposed injection zone in this area:
Morrow is at approx 13475
Ordovician, Simpson, McEae, Ellenburger at
approx 17000 if present.

DISPOSAL WELL

30-025-27501	BERRY STATE UNIT	1	PERMIAN TDS INC	14775	O	P	Lea	S	J	13	21	S	33	E	1980	S	1980	E
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Wells within 1/2 mile of proposed SWD. No wells penetrate proposed disposal interval.

API #	PROPERTY NAME	#	OPERATOR	ID	TYPE	STATUS	CO	LAND	U/I	SEC	TWN	RNG	N/S	EW	Distance				
30-025-01780	AMERADA STATE B	1	EMPEROR OIL CO	3540	O	P	Lea	S	G	13	21	S	33	E	1980	N	1980	E	1320
30-025-01781	NEW MEXICO STATE	1	SEABOARD OIL CO	5000	O	P	Lea	S	O	13	21	S	33	E	660	S	1880	E	1323
30-025-01782	AMERADA STATE	1	VILAS P SHELDON	4018	O	P	Lea	S	O	13	21	S	33	E	660	S	1980	E	1320

COMPLETION SCHEMATIC

PREPARED BY: Eddie Seay	UPDATED 03/29/18
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COMPLETION SCHEMATIC

PREPARED BY: Eddie Seay	UPDATED	03/29/18
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ATTACHMENT

VII (4)

PRODUCED WATER

Water Sample Analysis

	Section	Location Township	Range	Chlorides
Pool	2	25S	37E	45440
North Justis Montoya	2	25S	37E	58220
North Justis McKee	2	25S	37E	68533
North Justis Fusselman	2	25S	37E	34151
North Justis Ellenburger	22	24S	37E	116085
Fowler Blinbry	18	20S	38E	84845
Skaggs Grayburg	18	20S	38E	85910
Warren McKee	19	20S	39E	91600
Warren Abo	30	20S	39E	108855
DK Drinkard	8	21S	38E	38895
Littman San Andres	29	18S	39E	6461
East Hobbs grayburg	18	20S	32E	14768
Halfway Yates	12	18S	38E	7171
Arkansas Junction San Andres	28	19S	35E	114310
Pearl Queen	17	17S	37E	38494
Midway Abo	31	16S	37E	22933
Lovinton Abo	3	16S	37E	4899
Lovington San Andres	31	16S	37E	93720
Lovington Paddock	17	16S	32E	172530
Mesa Queen	27	16S	34E	49345
Kemnitz Wolfcamp	9	16S	34E	124960
Hume Queen	2	16S	32E	11040
Anderson Ranch Wolfcamp	11	16S	32E	25702
Anderson Ranch Devonian	11	16S	32E	23788
Anderson Ranch Unit	9	15S	38E	20874
Caudill Devonian	6	16S	38E	38895
Townsend Wolfcamp	5	16S	37E	44730
Dean Pemo Perin	35	15S	38E	18525
Dean Devonian	26	15S	37E	54315
South Denton Wolfcamp	36	15S	37E	34080
South Denton Devonian	15	15S	38E	39760
Medicine Rock Devonian	29	15S	30E	23288
Little Lucky Lake Devonian	26	21S	37E	132770
Wanitz Abo	18	25S	37E	58220
Crosby Devonian	7	26S	37E	3443(Reef)
Scarborough Yates Seven Rivers	34	23S	37E	114665
Teague Simpson	34	23S	37E	120345
Teague Ellenburger	27	26S	37E	144485
Rhodes Yates 7 Rivers	11	20S	38E	93385
House SA	12	20S	38E	49700
House Drinkard	24	26S	37E	115375
South Leonard Queen	2	21S	38E	65380
Elliot Abo	5	19S	35E	30601
Scharb Bone Springs	13	18S	34E	41890
EK Queen	22	18S	34E	170630
East EK Queen	24	17S	32E	46079
Mallamar Grayburg SA	27	17S	32E	115375
Mallamar Paddock	22	17S	32E	25418
Mallamar Devonian				

DISPOSAL ZONE

DEVONIAN

API No.	3002508483	Lab ID	
Well Name	BELL LAKE UNIT	Sample ID	5733
	006	Sample No	
Location	ULSTR 06 23 S 34 E	Lat / Long	32.32821 -103.50663
	660 S 1980 E	County	Lea
Operator (when sampled)			
	Field BELL LAKE NORTH	Unit	O
Sample Date		Analysis Date	
	Sample Source HEATER/TREATER	Depth (if known)	
	Water Type		
ph	7	alkalinity_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	
calcium_mgL		bicarbonate_mgL	500
iron_mgL		sulfate_mgL	1000
barium_mgL		hydroxide_mgL	
magnesium_mgL		h2s_mgL	
potassium_mgL		co2_mgL	
strontium_mgL		o2_mgL	
manganese_mgL		anionremarks	

Remarks

(Produced water data courtesy of NMT Octane NM WAIDS database.)

SOURCE ZONE

WOLFCAMP

API No	3001520138	Lab ID	
Well Name	MAHUN STATE	Sample ID	5688
	001	Sample No	
Location	ULSTR 16 22 S 22 E	Lat / Long	32.39340 -104.70979
	1800 N 1980 W	County	Eddy

Operator (when sampled)

Field	ROCKY ARROYO	Unit F
Sample Date	5/17/1968	Analysis Date

Sample Source	DST	Depth (if known)
Water Type		

ph	8.6	alkalinity_as_caco3_mgL	
ph_temp_F		hardness_as_caco3_mgL	
specificgravity		hardness_mgL	
specificgravity_temp_F		resistivity_ohm_cm	
tds_mgL	35495	resistivity_ohm_cm_temp_	
tds_mgL_180C		conductivity	
chloride_mgL	19000	conductivity_temp_F	
sodium_mgL		carbonate_mgL	
calcium_mgL		bicarbonate_mgL	830
iron_mgL		sulfate_mgL	2500
barium_mgL		hydroxide_mgL	
magnesium_mgL		h2s_mgL	
potassium_mgL		co2_mgL	
strontium_mgL		o2_mgL	
manganese_mgL		anionremarks	

Remarks

(Produced water data courtesy of NMT Octane NM WAIDS database.)



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

Analytical Results For:Eddie Seay Consulting
601 W. Illinois
Hobbs NM, 88242Project: CYPRESS 33 #2
Project Number: LAGUNA GRANDE
Project Manager: Eddie Seay
Fax To: (505) 392-6949Reported:
21-Jan-16 16:25**CYPRESS 33 #2**
H600050-01 (Wastewater)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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Cardinal Laboratories**Inorganic Compounds**

Alkalinity, Bicarbonate	142		5.00	mg/L	1	5120206	AP	13-Jan-16	310.1	
Alkalinity, Carbonate	<0.00		0.00	mg/L	1	5120206	AP	13-Jan-16	310.1	
Chloride*	104000		4.00	mg/L	1	6010807	AP	12-Jan-16	4500-Cl-B	
Conductivity*	301000		1.00	uS/cm	1	6011307	AP	14-Jan-16	120.1	
pH*	6.56		0.100	pH Units	1	6011306	AP	14-Jan-16	9045	
Sulfate*	576		83.3	mg/L	8.33	6011202	AP	12-Jan-16	375.4	
TDS*	168000		5.00	mg/L	1	6011104	AP	12-Jan-16	160.1	
Alkalinity, Total*	116		4.00	mg/L	1	5120206	AP	13-Jan-16	310.1	

Green Analytical Laboratories**Total Recoverable Metals by ICP (E200.7)**

Calcium*	8530		5.00	mg/L	250	B601100	JLM	21-Jan-16	EPA200.7	
Magnesium*	1230		25.0	mg/L	250	B601100	JLM	21-Jan-16	EPA200.7	
Potassium*	833		250	mg/L	250	B601100	JLM	21-Jan-16	EPA200.7	
Sodium*	50300		250	mg/L	250	B601100	JLM	21-Jan-16	EPA200.7	

Bone Springs Produced water

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

MORROW FORMATION

BOOTLEG 11 FED COM #2
30-025-37083

BJ Services

WATER ANALYSISPermian Region Laboratory
(915) 530-2667

Operator:	Latigo	Date:	8/21/2006
Well:	Bootleg #2	District:	Artesia
Formation:		Requested:	
Field:		Technician:	3rd Thompson
County:		Source:	
Depth:		PFS Test #:	
		M:Water Analysis:	Customer:

pH:	5.03	Temp (F):	73
Specific Gravity:	1.055	H2S:	

CATIONS

	mg/l	me/l	ppm
Sodium (calc.)	28344	1232.8	26884
	2887	144.1	2737
Magnesium	194	16.0	184
Barium	< 25	—	—
Potassium	< 10	—	—
Iron	3	0.1	3

ANIONS

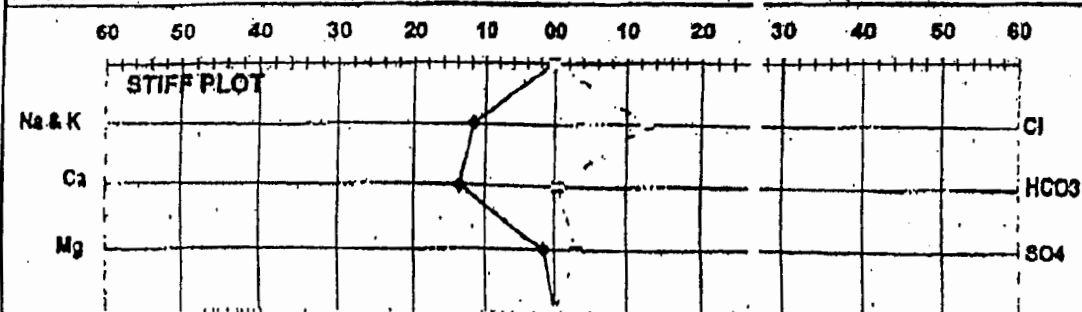
Chloride	48000	1354.0	45498
Sulfate	1600	33.3	1517
Carbonate	< 1	—	—
Bicarbonate	342	6.6	324

Total Dissolved Solids (calc.)	81387	77125
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Total Hardness as CaCO ₃	8010	7593
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COMMENTS:**SCALE ANALYSIS:**

CaCO ₃ Factor	995287.52	Calcium Carbonate Scale Probability	Possible
CaSO ₄ Factor	4819520	Calcium Sulfate Scale Probability	Possible



PETROLITE

Petrolite Corporation
510 West Texas
Artesia, NM 88210-2041

TRETOLITE DIVISION

(505) 746-3588
Fax (505) 746-3580Reply to:
P.O. Box FF
Artesia, NM
88211-7531

WATER ANALYSIS REPORT

Company : POGO PRODUCING
Address : MIDLAND, TX
Lease : COVINGTON "A"
Well : #9
Sample Pt. : WELLHEADDate : 3/17/94
Date Sampled : 3/16/94
Analysis No. : 632

ANALYSIS		mg/L	* meq/L
1. pH	5.7		
2. H ₂ S	NEG		
3. Specific Gravity	1.160		
4. Total Dissolved Solids		254252.3	
5. Suspended Solids		NR	
6. Dissolved Oxygen		NR	
7. Dissolved CO ₂		NR	
8. Oil In Water		NR	
9. Phenolphthalein Alkalinity (CaCO ₃)			
10. Methyl Orange Alkalinity (CaCO ₃)			
11. Bicarbonate	HCO ₃	122.0	HCO ₃ 2.0
12. Chloride	Cl	157833.0	Cl 4452.3
13. Sulfate	SO ₄	75.0	SO ₄ 1.6
14. Calcium	Ca	19800.0	Ca 988.0
15. Magnesium	Mg	3705.0	Mg 304.8
16. Sodium (calculated)	Na	72717.3	Na 3163.0
17. Iron	Fe	NR	
18. Barium	Ba	NR	
19. Strontium	Sr	NR	
20. Total Hardness (CaCO ₃)		64700.0	

PROBABLE MINERAL COMPOSITION

*milli equivalents per Liter	Compound	Equiv wt X meq/L	= mg/L
988 *Ca <----- *HCO ₃	Ca(HCO ₃) ₂	81.0	2.0 162
/----->	CaSO ₄	68.1	1.6 106
305 *Mg -----> *SO ₄	CaCl ₂	55.5	984.5 54628
<-----/	Mg(HCO ₃) ₂	73.2	
3163 *Na -----> *Cl	MgSO ₄	60.2	
	MgCl ₂	47.6	304.8 14511
Saturation Values Dist. Water 20 C	NaHCO ₃	84.0	
CaCO ₃ 13 mg/L	Na ₂ SO ₄	71.0	
CaSO ₄ * 2H ₂ O 2090 mg/L	NaCl	58.4	3163.0 184845
BaSO ₄ 2.4 mg/L			

Petrolite Oilfield Chemicals Group

Respectfully submitted,
A. MILLER

ATOKA FORMATION

COVINGTON A FED #1
30-025-24947

Endura Products Corp.

P.O. Box 3394 Midland, Texas 79706
Phone (915) 684-4233 * Fax (915) 684-4277

WATER ANALYSIS

Date 8/19/95 Nutro Rep TERRY SOLANSKY
Sampling Point/Date WELL HEAD - 8/18/95
Company POGO PRODUCING
Field Lease COVINGTON

Code W-0147
State NEW MEXICO
County EDDY
Well A-1

DISSOLVED SOLIDS

<u>CATIONS</u>	mg/l	me/l
Sodium, Na- (Calc.)	78,338	3,406
Total Hardness as Ca-	1,400	0
Calcium, Ca-	840	42
Magnesium, Mg-	341	28
Barium, Ba-	0	0
Iron (Total) Fe---	60	3

ANIONS

Chlorides, Cl-	119,000	3,352
Sulfate, SO4-	4,200	88
Carbonate, CO3-	0	0
Bicarbonate, HCO3-	2,366	39
Sulfide, S--	0	0
Total Dissolved Solids (Calc.)	205,145	

OTHER PROPERTIES

pH*	6.800
Specific Gravity, 60-/60 F	1.109
TURBIDITY	100

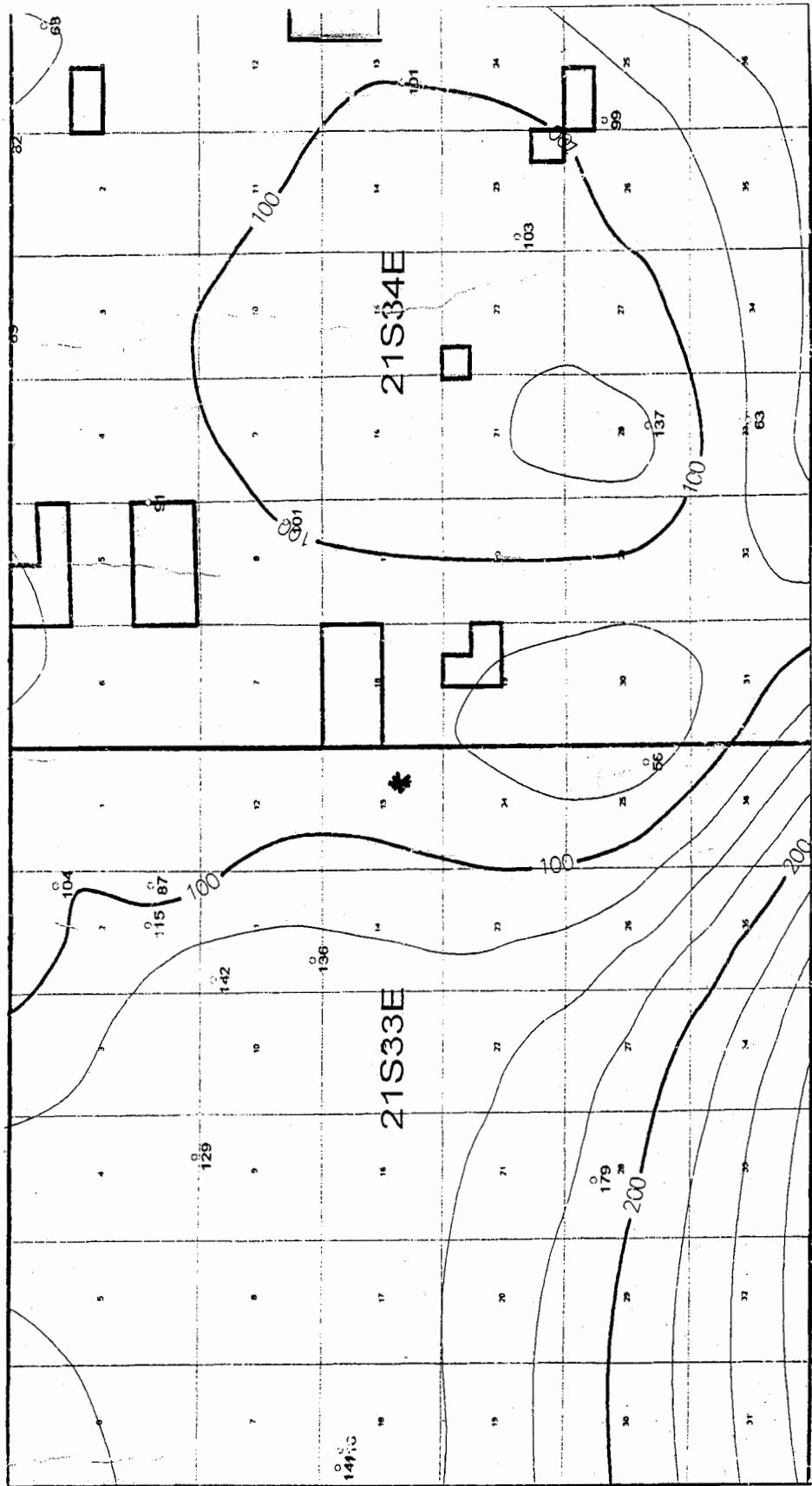
SCALING INDICIES

<u>TEMP, F</u>	<u>CA CO3</u>	<u>CASO4*2H2O</u>	<u>CA SO4</u>	<u>BA SO4</u>
80	0.9037	-0.4808	-0.7533	-29.3552
120	1.3079	-0.4920	-0.5840	-29.5395
160	1.9281	-0.5147	-0.4340	-29.7651

ATTACHMENT

XI

FRESH WATER



Groundwater Map Lea Co.



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)

POD Number	Code	Sub-basin	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Depth Well	Depth Water Column
<u>CP 00765 POD1</u>		CP	LE	3	2	13	21S	33E		638698	3594668*	508	
<u>CP 00766 POD1</u>		CP	LE	3	2	13	21S	33E		638698	3594668*	510	

Average Depth to Water: --

Minimum Depth: --

Maximum Depth: --

Record Count: 2

Basin/County Search:

County: Lea

PLSS Search:

Section(s): 13

Township: 21S

Range: 33E

*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.

11/9/17 10:20 AM

WATER COLUMN/ AVERAGE
DEPTH TO WATER

Analytical Report

Lab Order 1804D41

Date Reported: 4/30/2018

Hall Environmental Analysis Laboratory, Inc.**CLIENT:** Permian TDS, LLC**Client Sample ID:** CP 00766**Project:** Barry State SWD**Collection Date:** 4/23/2018 10:30:00 AM**Lab ID:** 1804D41-001**Matrix:** AQUEOUS**Received Date:** 4/26/2018 9:15:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Fluoride	1.7	0.10		mg/L	1	4/26/2018 8:32:02 PM	R50859
Chloride	140	10		mg/L	20	4/26/2018 9:09:16 PM	R50859
Nitrogen, Nitrite (As N)	ND	0.10	H	mg/L	1	4/26/2018 8:32:02 PM	R50859
Bromide	1.2	0.10		mg/L	1	4/26/2018 8:32:02 PM	R50859
Nitrogen, Nitrate (As N)	7.9	0.10	H	mg/L	1	4/26/2018 8:32:02 PM	R50859
Phosphorus, Orthophosphate (As P)	ND	0.50	H	mg/L	1	4/26/2018 8:32:02 PM	R50859
Sulfate	140	10		mg/L	20	4/26/2018 9:09:16 PM	R50859

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Detection Limit
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

ATTACHMENT

XIII

NOTICE REQUIREMENTS

PERMIAN TDS, LLC

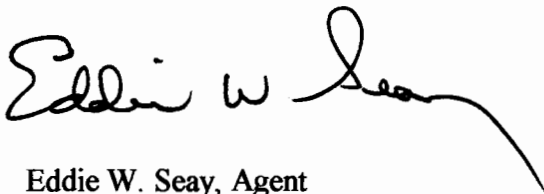
RE: Berry State #1 (API 30-025-27501)
Unit J, Sect. 13, T. 21 S., R. 33 E.

Dear Sir:

In accordance with the Rules and Regulations of the Oil Conservation Division of the State of New Mexico, you are being provided a copy of the C-108, Application for Authorization to Inject into the above captioned well to be drilled.

Any questions about the permit can be directed to Eddie W. Seay, (575)392-2236. Any objections or request for hearing must be filed with the Oil Conservation Division within fifteen (15) days from the date received. The OCD address is 1220 S. Saint Francis Drive, Santa Fe, NM 87504, (505)476-3440.

Thank you,

A handwritten signature in black ink, appearing to read "Eddie W. Seay", with a long, sweeping horizontal line extending to the right.

Eddie W. Seay, Agent
Eddie Seay Consulting
601 W. Illinois
Hobbs, NM 88242
(575)392-2236
seay04@leaco.net

Surface and Mineral

	13 • State	18 State
	24 State	19 State

State of New Mexico - Surface + Mineral owner
Sections 13, 18, 24, 19

Merchant Livestock Co. - Surface leasee
Sections 13, 18, 24, 19

EOG Resources - Mineral leasee
Sections 13, 18, 24, 19
Property Purchased from Yates

OFFSET OPERATORS AND MINERALS

LAND LEASEE

Merchant Livestock, et al
P.O. Box 1105
Eunice, NM 88231

SURFACE AND MINERAL OWNER

State of NM-State Land Office
310 Old Santa Fe Trail
Box 1148
Santa Fe, NM 87504-1148

OFFSET OPERATORS

NO PRODUCING WELLS IN AOR FOR PROPOSED SWD

MINERAL LEASEES

EOG Resources, Inc.
Box 2267
Midland, TX 79702

7017 4768 0000 0490 5102

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For delivery information, visit our website at www.usps.com ®.	
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Certified Mail Fee \$ <u>3.45</u> Extra Services & Fees (check box, add fee as appropriate) ☐ Return Receipt (hardcopy) \$ <u>2.75</u> ☐ Return Receipt (electronic) \$ _____ ☐ Certified Mail Restricted Delivery \$ _____ ☐ Adult Signature Required \$ _____ ☐ Adult Signature Restricted Delivery \$ _____ Postage \$ <u>2.05</u> Total Postage and Fees \$ <u>8.25</u>	USPS Postmark Here MAY 03 2018 HOBBS, NM 88240
Sent To State of NM - State Land Office 310 Old Santa Fe Trail Box 1148 Street and Apt. No. or PO Box No. Santa Fe, NM 87504-1148 City, State, ZIP+4®	
PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions	

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Sent To Merchant Livestock, et al P.O. Box 1105 Street and Apt. No. or PO Box No. Emmelle, NM 88231 City, State, ZIP+4®	
PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions	

926D 2HE8 T000 0490 5102

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Sent To EOG Resources, Inc. Box 2267 Street and Apt. No. or PO Box No. Midland, TX 79702 City, State, ZIP+4®	
PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions	

LEGAL NOTICE

Pursuant to the rules and regulations of the Oil Conservation Division of the State of New Mexico, Permian TDS LLC, Box 788 Lovington, NM, is filing a C-108 Application for Salt Water Disposal. This will be a re-entry to convert to a commercial SWD. The well being applied for is P&A, Berry State #1 (API 30-025-27501), located in Unit J (1980/S 1980/E), Section 13, Township 21 South, Range 33 East, Lea Co., NM. The injection formations are the Devonian and Silurian from 14600' to 16075' below surface.

Expected maximum injection rate is 15,000 bpd., and the expected maximum injection pressure is 2900 psi or what the OCD allows. Any questions about the application can be directed to Eddie W. Seay, (575)392-2236, or any objection or request for hearing must be directed to the Oil Conservation Division, (505)476-3440, 1220 South Saint Francis Drive, Santa Fe, NM 87504, within fifteen (15) days.

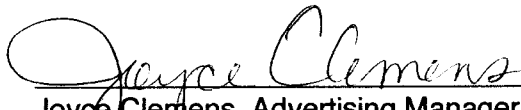
Affidavit of Publication

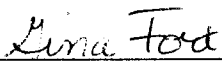
STATE OF NEW MEXICO)
) ss.
COUNTY OF LEA)

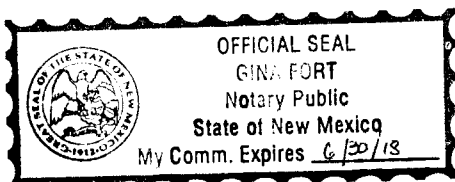
Joyce Clemens being first duly sworn on oath deposes and says that she is Advertising Manager of THE LOVINGTON LEADER, a once a week newspaper of general paid circulation published in the English language at Lovington, Lea County, New Mexico; that said newspaper has been so published in such county continuously and uninterruptedly for a period in excess of Twenty-six (26) consecutive weeks next prior to the first publication of the notice hereto attached as hereinafter shown; and that said newspaper is in all things duly qualified to publish legal notices within the meaning of Chapter 167 of the 1937 Session Laws of the State of New Mexico.

That the notice which is hereto attached, entitled Legal Notice was published in a regular and entire issue of THE LOVINGTON LEADER and not in any supplement thereof, for one (1) day(s), beginning with the issue of May 10, 2018 and ending with the issue of May 10 , 2018.

And that the cost of publishing said notice is the sum of \$ 27.70 which sum has been (Paid) as Court Costs.


Joyce Clemens, Advertising Manager
Subscribed and sworn to before me this 10th day of May , 2018.


Gina Fort
Notary Public, Lea County, New Mexico
My Commission Expires June 30, 2018



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Published in the Lovington Leader May 10, 2018.