

DATE IN 12/21/2015	SUSPENSE	ENGINEER PBC	LOGGED IN 12/23/2015	TYPE SWD	APP NO. PMA1535747084
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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.

Ben Stone  
 Print or Type Name

Signature

Agent for Mescalero Energy, LLC 12/17/15

Title  
 ben@sosconsulting.us  
 e-mail Address

Date

-SWD  
 -Mescalero Energy, LLC  
 370198  
 -Mescalero SWD #  
 30-025-Pending

2015 DEC 21 P. 2:30

RECEIVED OCD

Pool  
 SWD, San Andres  
 96121

**APPLICATION FOR AUTHORIZATION TO INJECT**

- I. PURPOSE: ***Salt Water Disposal – Application Meets Qualifications for Administrative Approval.***
- II. OPERATOR: ***Mescalero Energy, LLC***  
ADDRESS: ***510 Bering Dr. Ste.430, Houston, TX 77057***
- CONTACT PARTY: ***Ricci Susong (713) 384-9317***  
***Agent: SOS Consulting, LLC – Ben Stone (903) 488-9850***
- III. WELL DATA: ***All well data and applicable wellbore diagrams are attached hereto.***
- IV. ***This is not an expansion of an existing project.***
- V. ***A map is ATTACHED*** 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. ***A tabulation is ATTACHED*** of data on all wells of public record within the area of review which penetrate the proposed injection zone. ***(2 AOR wells penetrate the subject interval – 1 P&A.)*** The data includes a description of each well's type, construction, date drilled, location, depth, and a ***schematic of any plugged wells*** illustrating all plugging detail.
- VII. ***The following data is ATTACHED*** 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. ***Appropriate geologic data on the injection zone is ATTACHED*** 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. ***No stimulation program is proposed at this time. New openhole interval may be acidized w/ up to 5000 gals.15% HCl.***
- \*X. ***This is a New Drill SWD. Standard combo log suite will be performed and submitted. Operator may step-rate test the well for potential pressure increase.***
- \*XI. ***State Engineer's records indicate 2 water wells within one mile the proposed salt water disposal well; analyses are ATTACHED.***
- XII. ***An affirmative statement is ATTACHED that available geologic and engineering data has been examined and no evidence was found*** of open faults or any other hydrologic connection between the disposal zone and any underground sources of drinking water.
- XIII. ***"Proof of Notice" section on the next page of this form has been completed. BLM (offsetting mineral interests) has been notified. There are 6 offset lessees and/or operators within ½ mile - all have been noticed via U.S. Certified Mail.***
- 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: ***Ben Stone*** TITLE: ***SOS Consulting, LLC agent / consultant for Mescalero Energy, LLC***

SIGNATURE:  DATE: ***12/17/2015***

E-MAIL ADDRESS: ***ben@sosconsulting.us***

- \* 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:

III. WELL DATA – *The following information and data is included:*

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 *pursuant to the following criteria is attached. Affidavit is ATTACHED.*

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.**

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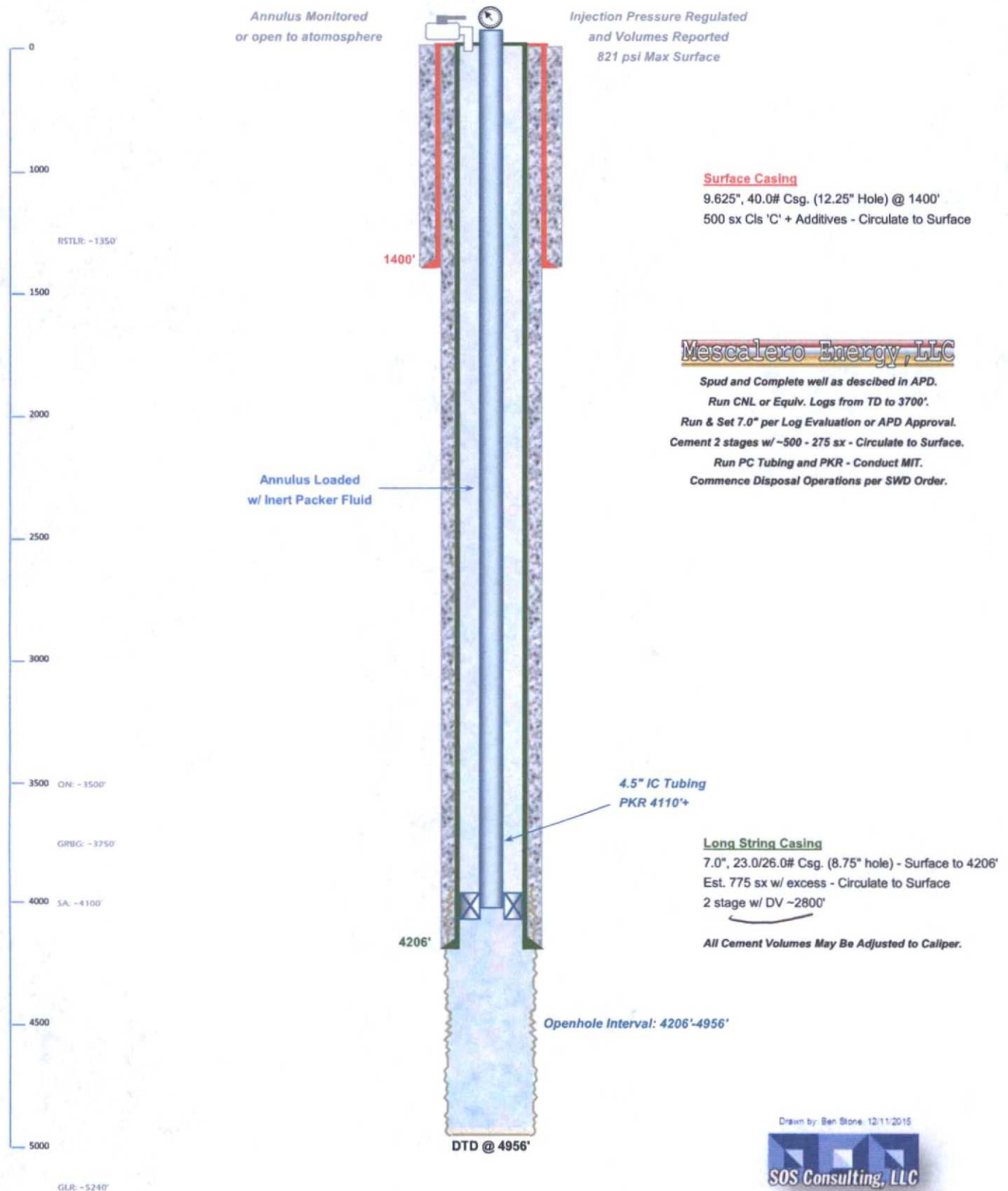
**NOTICE:** Surface owners or offset operators must file any objections or requests for hearing of administrative applications within 15 days from the date this application was mailed to them.



**WELL SCHEMATIC - PROPOSED**  
**McCasland SWD Well No.1**

**API 30-025-00000 (TBD)**  
877' FSL & 2412' FEL, SEC. 6-T21S-R37E  
LEA COUNTY, NEW MEXICO

Pool: 96121; SWD; San Andres  
Spud Date: 3/01/2016



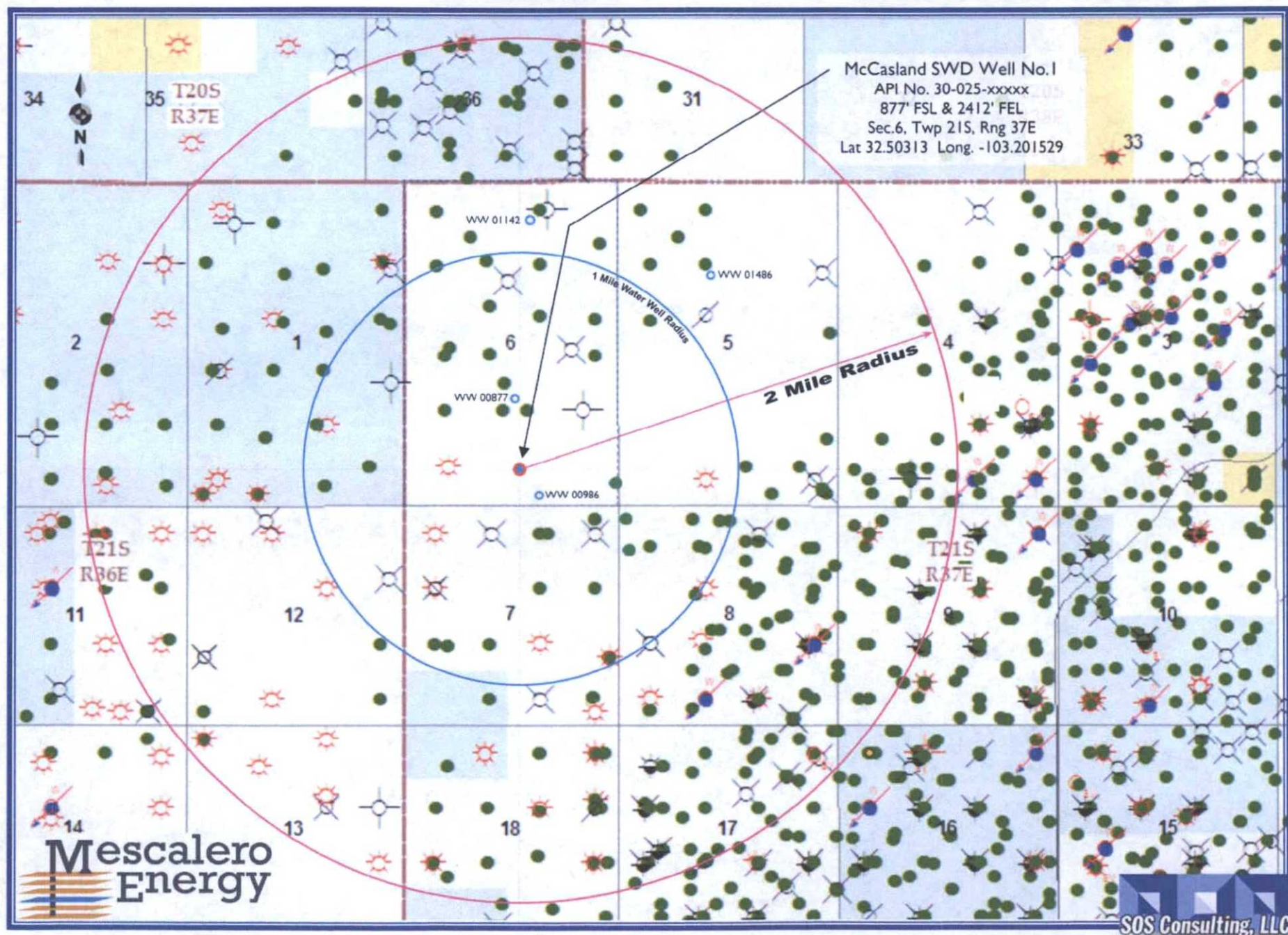
Drawn by: Ben Stone 12/11/2015





# McCasland SWD Well No.1 - Area of Review / 2 Miles

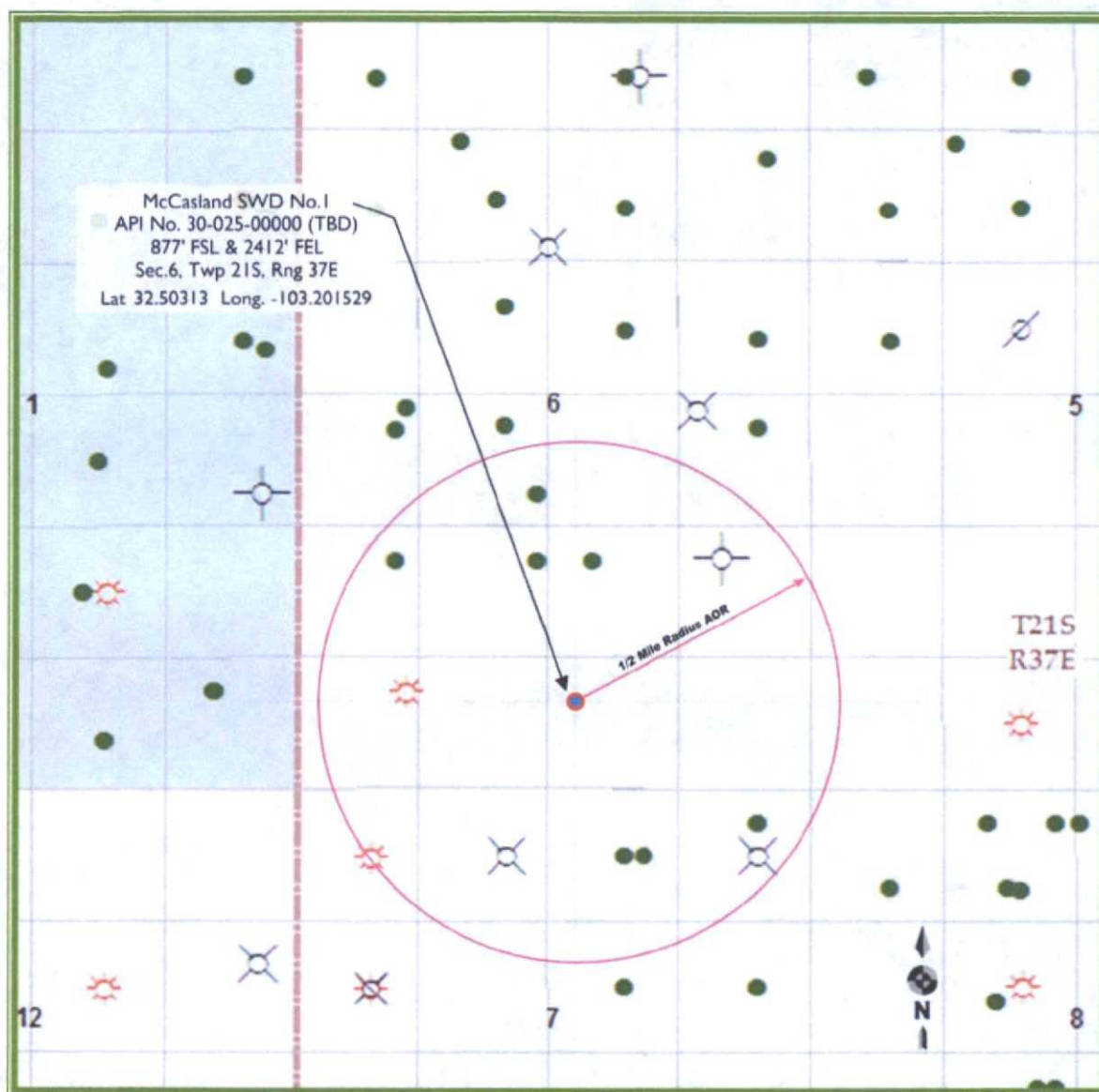
(Attachment to NMOCD Form C-108 - Item V)



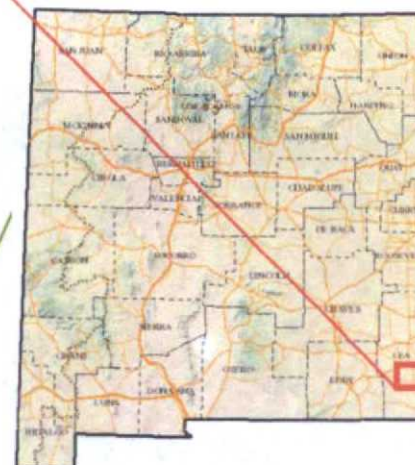


# McCasland SWD Well No.1 - Area of Review / Overview Map

(Attachment to NMOCD Form C-108 - Item V)



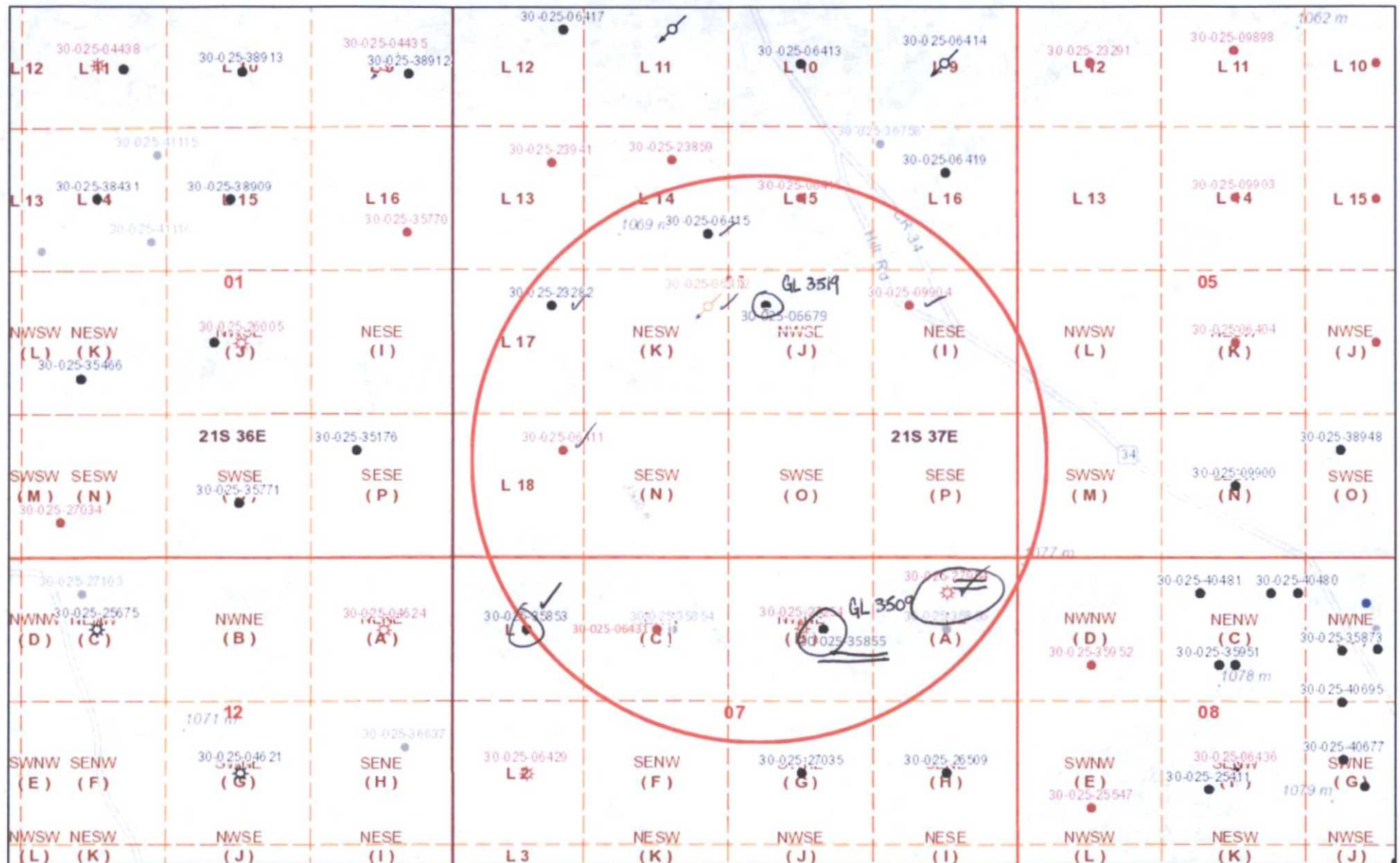
5.8 miles N/NW  
of Eunice, NM



Lea County, New Mexico

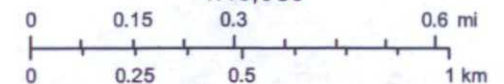


## McCasland SWD No.1 AOR Well Identification



December 16, 2015

1:18,056



Sources: Esri, HERE, DeLorme, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey,

# Form C-108 Item VI - Tabulation of AOR Wells

Top of Proposed SAN ANDRES Interval 4206'

2 Wells Penetrate Subject Formation.

API Number	Current Operator	Well Name	Well No.	Type	Lease	Status	ULSTR	Depth	Note
<b>Section 6 Wells</b>									
30-025-23859	[151228] MAR OIL & GAS CORP.	EUMONT HARDY UNIT	#049	Oil	Private	P-N/R	F-6-215-37E	3773'	DOES NOT PENETRATE
30-025-06415	[151228] MAR OIL & GAS CORP.	EUMONT HARDY UNIT	#043	Oil	Private	Active	F-6-215-37E	3795'	DOES NOT PENETRATE
30-025-06412	[151228] MAR OIL & GAS CORP.	EUMONT HARDY UNIT	#047	Injection	Private	TA	K-6-215-37E	3773'	DOES NOT PENETRATE
30-025-23282	[25504] YARBROUGH OIL LP	MAE CURRIE	#002	Oil	Private	Active	L-6-215-37E	4010'	DOES NOT PENETRATE
30-025-06416	[214263] PRE-ONGARD WELL OPERATOR	PRE-ONGARD WELL	#044	Oil		P&A	O-6-215-37E	3770'	DOES NOT PENETRATE
30-025-09904	[214263] PRE-ONGARD WELL OPERATOR	PRE-ONGARD WELL	#001	Oil		P&A	Q-6-215-37E	3945'	DOES NOT PENETRATE
30-025-06679	[151228] MAR OIL & GAS CORP.	EUMONT HARDY UNIT	#046	Oil	Federal	Active	R-6-215-37E	3827'	39205 DOES NOT PENETRATE
30-025-06411	[214263] PRE-ONGARD WELL OPERATOR	PRE-ONGARD WELL	#001	Oil		P&A	U-6-215-37E	3660'	DOES NOT PENETRATE

## Section 7 Wells

30-025-27954	[778] BP AMERICA PRODUCTION CO.	MAE F CURRY	#002	Gas	Private	P&A	A-7-215-37E	4500'	4450' PBDT SEE P&A DIAGRAM ATTACHED.
30-025-27254	[778] BP AMERICA PRODUCTION CO.	MAE F CURRY	#001	Gas	Private	P&A	B-7-215-37E	3850'	DOES NOT PENETRATE
30-025-06412	[151228] MAR OIL & GAS CORP.	EUMONT HARDY UNIT	#047	Injection	Private	TA	K-6-215-37E	3773'	DOES NOT PENETRATE
30-025-06431	[3630] CAMPBELL & HEDRICK	CURRY	#001	Oil	Private	P&A	C-7-215-37E	3885'	DOES NOT PENETRATE
30-025-35853	[873] APACHE CORP	MAE F CURRY	#003	Oil	Private	Active	1-7-215-37E	6985'	PAD-BLNRY-TUB-DRKD Perfs: 5753' - 6810'; 8.625" (12.25" hole) @ 1295' w/ 600sx - Circ. to Surf.; 5.5" (7.875" hole) @ 6982' w/ 1525 sx - Circ. to Surf.

30-025-35855 Apache Corp

MAE F Curry #005 Oil Private  
SUMMARY: 2 wells penetrate proposed disposal interval. 1 P&A.

5 1/2 - 4679' 4 1/2 - 700' ✓  
OK - 5 1/2 & 4 1/2 cmt seal interval  
but bradenhead issue  
SOS Consulting, LLC  
4818  
48L

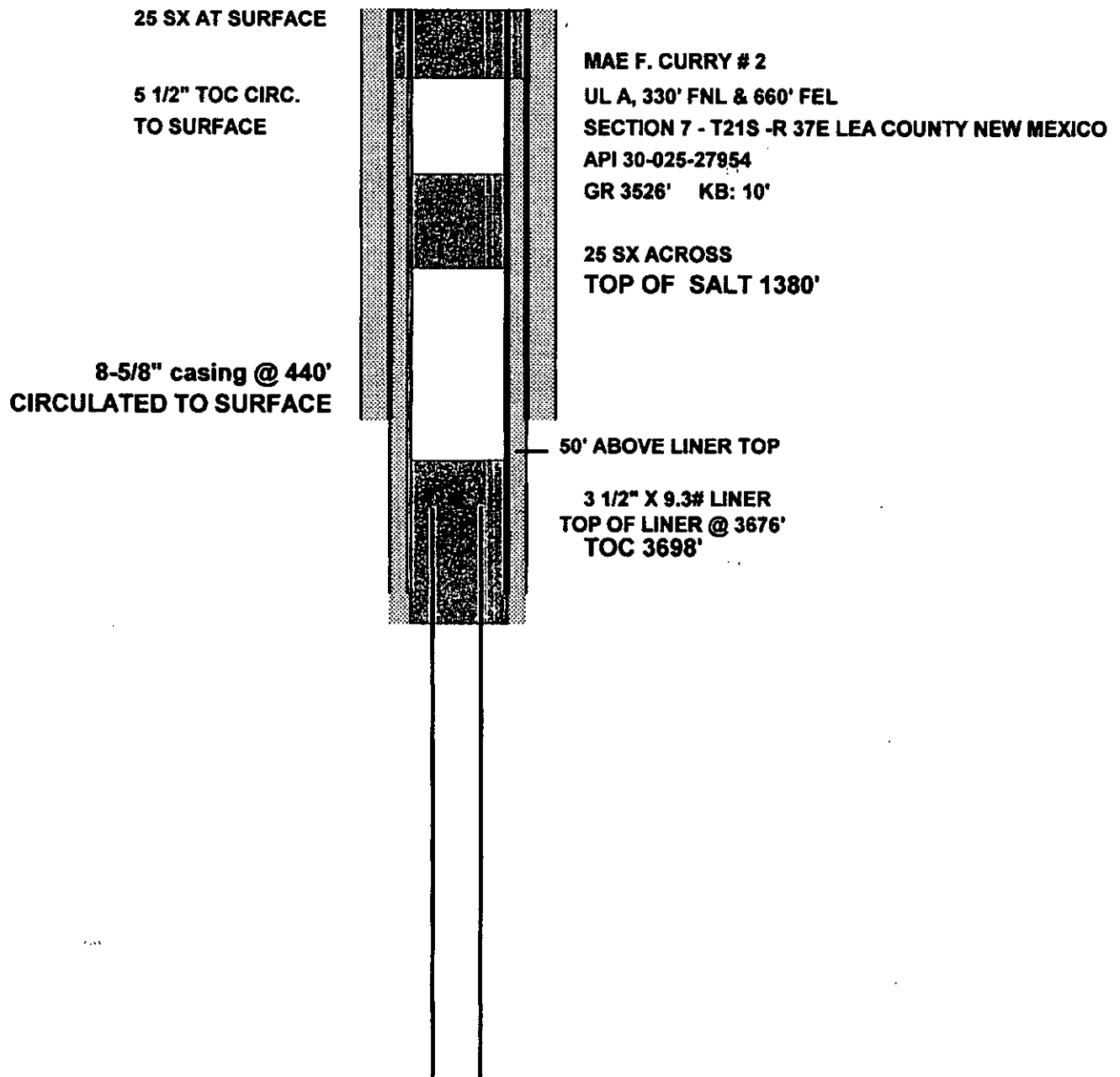


## **C-108 ITEM VI – AOR WELL INFORMATION**

### **Plugged Well Schematics**

# WELLBORE SCHEMATIC

30-025-27954 - PLUGGED BY BP AMERICA PRODUCTION CO.



Submit 3 Copies To Appropriate District  
Office  
District I  
1625 N. French Dr., Hobbs, NM 87240  
District II  
1301 W. Grand Ave., Artesia, NM 88210  
District III  
1000 Rio Brazos Rd., Aztec, NM 87410  
District IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
Energy, Minerals and Natural Resources

OIL CONSERVATION DIVISION  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

Form C-103  
May 27, 2004

WELL API NO. <b>30-025-27954</b>
5. Indicate Type of Lease STATE <input type="checkbox"/> FEE <input checked="" type="checkbox"/>
6. State Oil & Gas Lease No.
7. Lease Name or Unit Agreement Name: <b>CURRY, MAE F.</b>
8. Well Number <b>2</b>
9. OGRID Number <b>000778</b>
10. Pool name or Wildcat <b>EUNICE MONUMENT GRBG SA</b>

**SUNDRY NOTICES AND REPORTS ON WELLS**  
(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)

1. Type of Well: Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other	11. Elevation (Show whether DR, RKB, RT, GR, etc.) <b>3526' GL</b>
2. Name of Operator <b>BP AMERICA PRODUCTION COMPANY</b>	
3. Address of Operator <b>P. O. BOX 3092, ROOM 6.115, HOUSTON, TEXAS 77253</b>	
4. Well Location Unit Letter <b>A</b> : <b>330</b> feet from the <b>NORTH</b> line and <b>660</b> feet from the <b>EAST</b> line Section <b>7</b> Township <b>21S</b> Range <b>37E</b> NMPM County <b>LEA</b>	
Pit or Below-grade Tank Application <input type="checkbox"/> or Closure <input type="checkbox"/> Pit type <b>STEEL</b> Depth to Groundwater <b>85'</b> Distance from nearest fresh water well <b>&gt;1000'</b> Distance from nearest surface water <b>&gt;1000'</b> Pit Liner Thickness: _____ mil Below-Grade Tank: Volume _____ bbls; Construction Material _____	

12. Check Appropriate Box to Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:

- PERFORM REMEDIAL WORK ☐ PLUG AND ABANDON ☐  
TEMPORARILY ABANDON ☐ CHANGE PLANS ☐  
PULL OR ALTER CASING ☐ MULTIPLE COMPLETION ☐  
OTHER: ☐

SUBSEQUENT REPORT OF:

- REMEDIAL WORK ☐ ALTERING CASING ☐  
COMMENCE DRILLING OPERATIONS ☐ PLUG AND ABANDONMENT ☒  
CASING TEST AND CEMENT JOB ☐  
OTHER: ☐

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 1103. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

PLUGGING DATES: JUNE 13 THRU JUNE 17, 2005

POOH WITH TUBING; SET CEMENT RETAINER @ 3620'; SQUEEZED 35 SKS OF CEMENT BELOW RETAINER; SPOTTED 25 SKS OF CEMENT ON TOP OF RETAINER; TAGGED CEMENT @ 3280'; SPOTTED 25 SK CEMENT PLUG @ 2853' & @ 1400'; TAGGED TOP OF CEMENT PLUG @ 1188'; SPOTTED ANOTHER 25 SKS OF CEMENT @ 495'; TAGGED TOP OF CEMENT @ 257'; SPOTTED ANOTHER 10 SK CEMENT PLUG TO SURFACE WITHIN 5 1/2" CASING; CUT WELL HEAD 4' BELOW GROUND LEVEL; INSTALL SURFACE HOLE MARKER.

I hereby certify that the information above is true and complete to the best of my knowledge and belief. I further certify that any pit or below-grade tank has been/will be constructed or closed according to NMOCD guidelines ☐ , a general permit ☐ or an (attached) alternative OCD-approved plan ☐

SIGNATURE Sue Sellers TITLE REGULATORY STAFF ASSISTANT DATE AUGUST 30, 2005

Type or print name **SUE SELLERS**

E-mail address: **sue.sellers@bp.com**  
Telephone No. **281-366-2052**

For State Use Only

APPROVED BY Larry W. Wink

OCD FIELD REPRESENTATIVE II/STAFF MANAGER

TITLE \_\_\_\_\_ DATE **SEP 13 2005**

Conditions of Approval, if any:

Approved as to plugging of the Well Bore.  
Liability under bond is retained until **SEP 13 2005**  
surface restoration is completed.



## **C-108 ITEM X – LOGS and AVAILABLE TEST DATA**

A log strip from the Currie Well No.1, API No.30-025-09900,  
located in N-5-21S-37E is attached.

**LOG STRIP FOLLOWS**



30-025-09900

# ERGER WELL SURVEYING CORPORATION

HOUSTON, TEXAS

SIMULTANEOUS

*Gamma Ray - Neutron*

COMPANY SCHLUMBERGER

WELL OIL CORP.

WELL CURRY #1

FIELD EUNICE-TUBB

LOCATION SEC. 5-21S-37E

COUNTY LEA

STATE NEW MEXICO

Location of Well

660' f SL

1980' f WL

Sec. 5-2 1S-37E

GRN  
(ES-ML)

Elevation: D.F. 3515

Job or G.L.

FILING No.

GAMMA RAY CALIBRATION - 840 - 5138 - 180 cps - 100 Divisions - 200 Sens. Cal - 100 Sens. Recorded  
NEUTRON CALIBRATION - 5138 - 232 cps - 100 Divisions - 400 Sens. Cal  
RECORDING SPEED - 100 to 3500 - 4000 fph - 3500 to 6500 - 2000 fph - 1 to 100 fph

REMARKS

Casing Collars  
Recorded Depth  
(12 deep)

NEUTRON

Normalized Counts per Second

Sensitivity Change Noted on Log

Cased Hole - Sensitivity 280 100 to 3500 feet  
140 168 196 224 252 280 308 336 364

Open Hole - Sensitivity 400 3500 to 6500 feet  
160 200 240 280 320 360 400 440 480 520

Casing Collars  
Correct Depth

GAMMA RAY  
Micrograms Radium Equivalent / Ton  
of formation

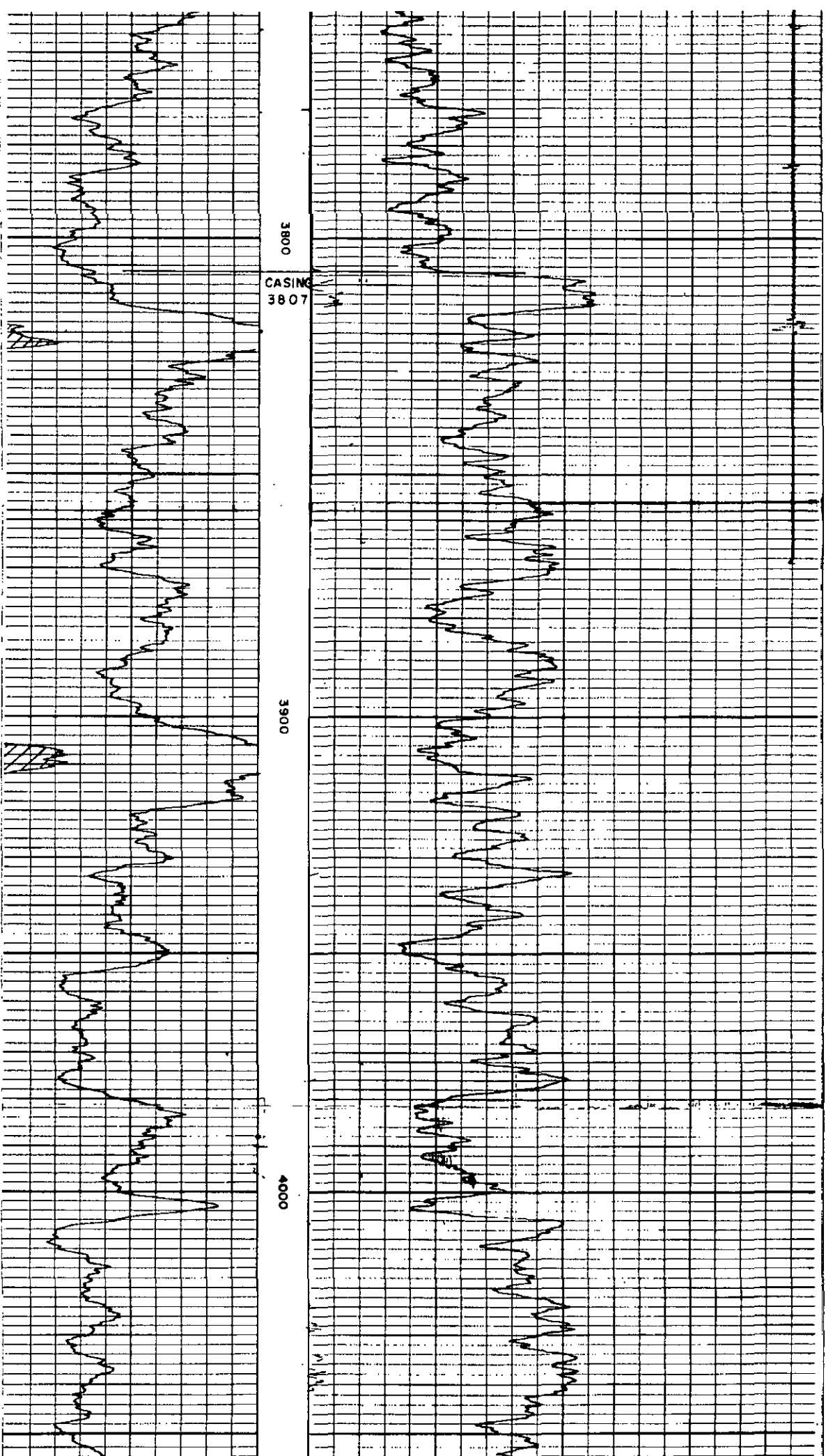
NEUTRON ZERO

GAMMA RAY ZERO

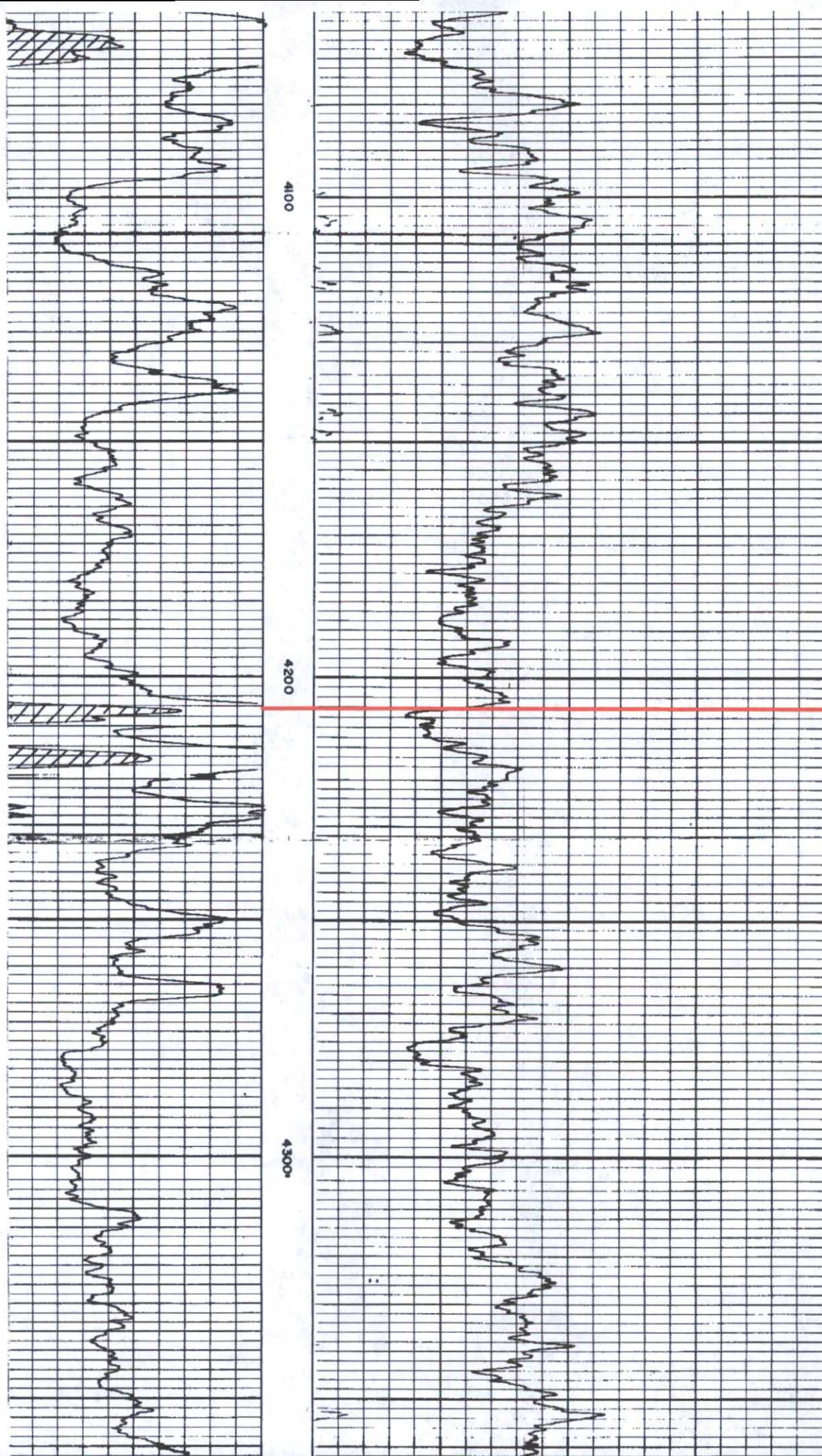
0100

0200

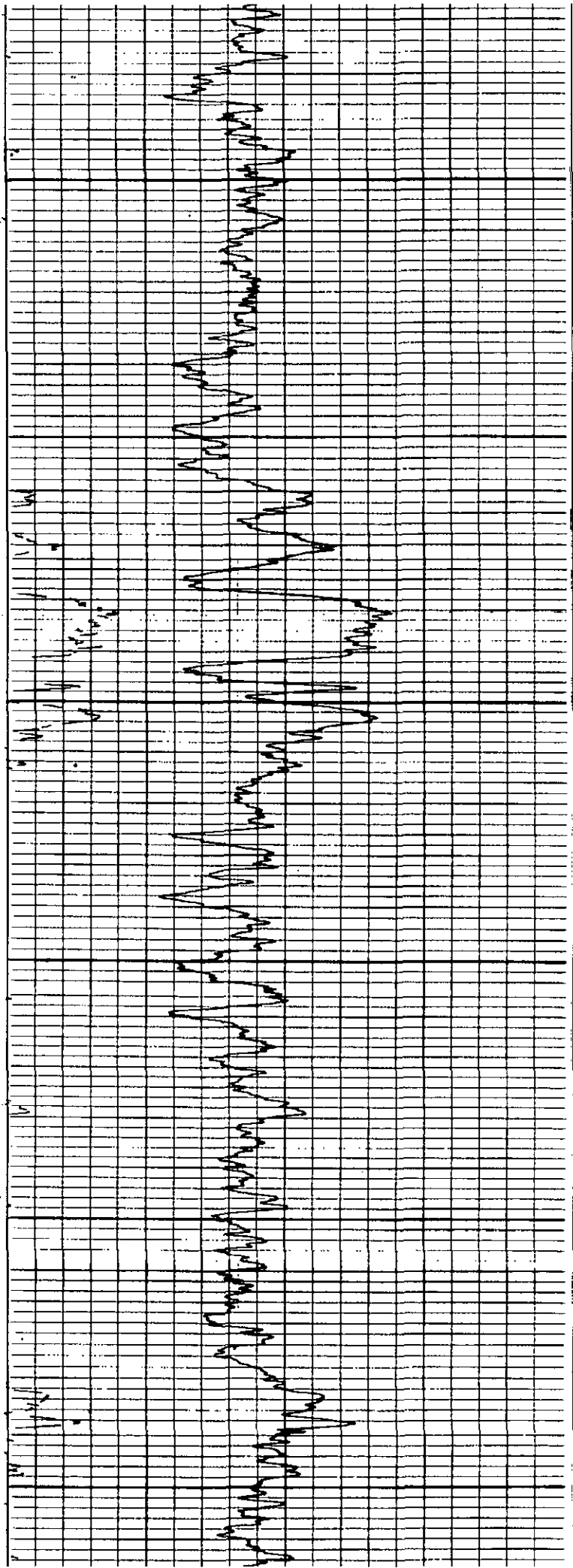
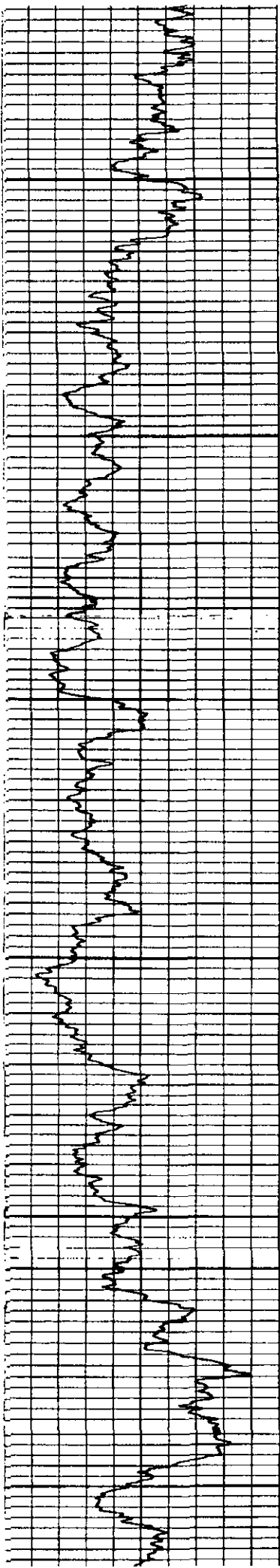
RUN NO.		
Date	8-24-54	
Depth Reference	ROB	
First Reading	6500	
Last Reading	100	
Footage Measured	6400	
Max. Depth Reached	6501	
Bottom Driller	6500	
Maximum Temp. F.	121	
Mud: Nature	Water	
Density		
Viscosity		
Resistivity	6.4 @ 74 F.	@ F.
Casing Size & 1	8 5/8" to 3807.	to
Weight 2	to	to
Open Hole 1	7 7/8" to 10	to
2	to	to
Fluid Level	593'	
Recording Speed (ft/hr)	2000 & 4000	
Sensitivity Tap	GR) 100 N280/400 GR)	NI)
Time Constant	2 1.4 1	
Panel	GNP-B	
Opr. Rig Time	3 Hrs.	
Sonde Size & Type	3 5/8"	
Truck No.	1762-Hobbs	
Observer	Reinders	



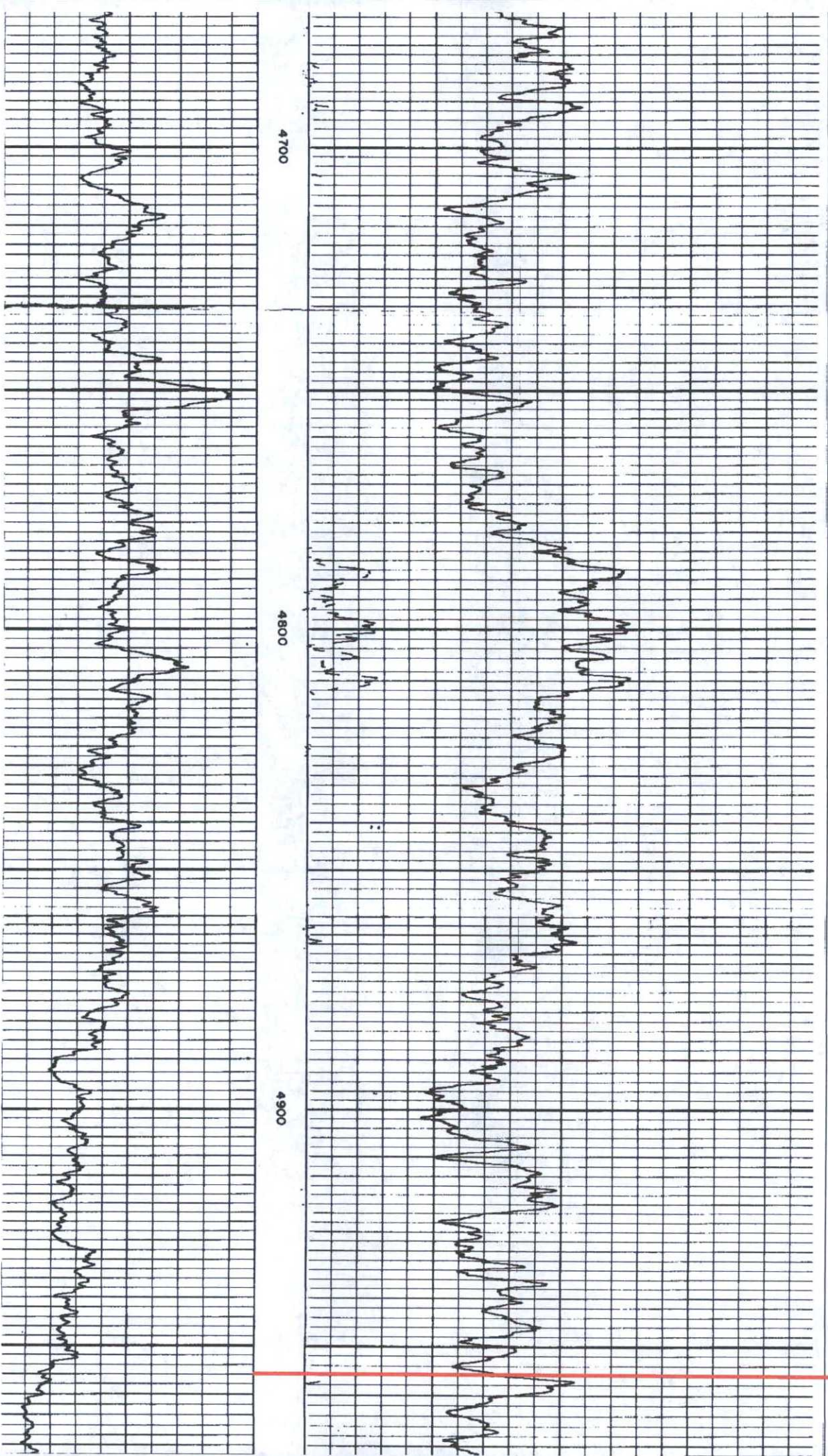




TOP OF  
PROPOSED  
INTERVAL  
4206'

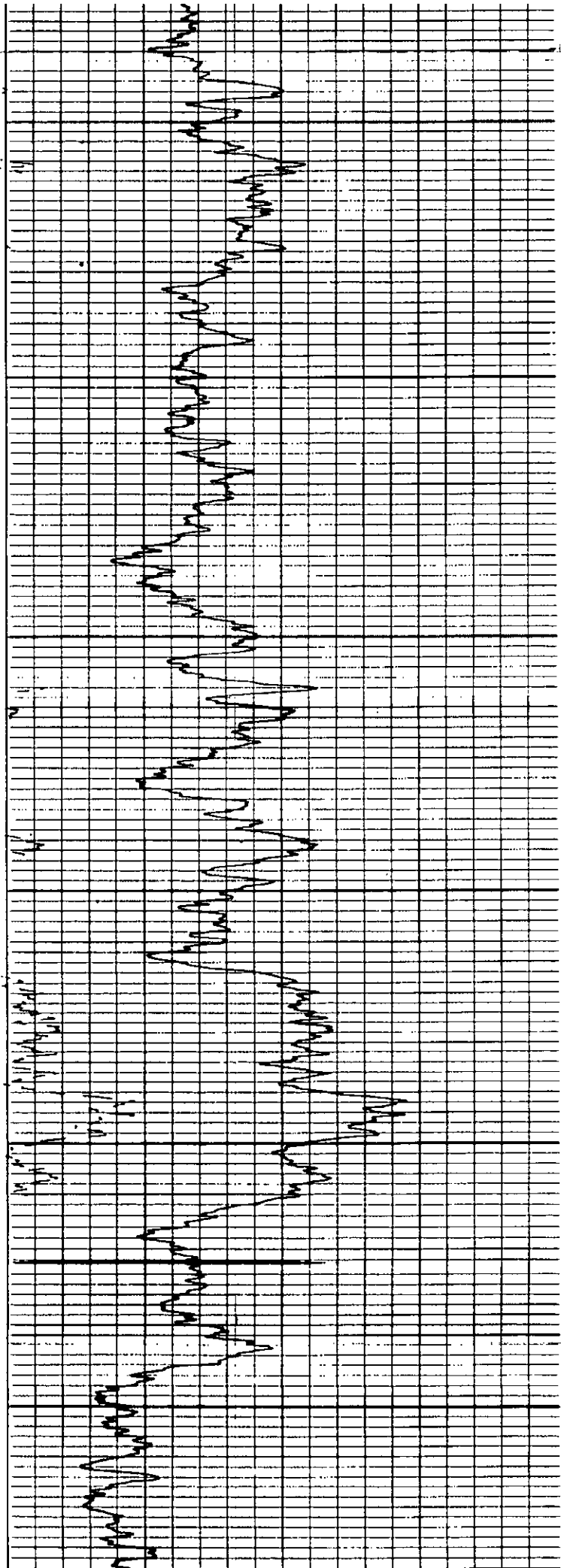
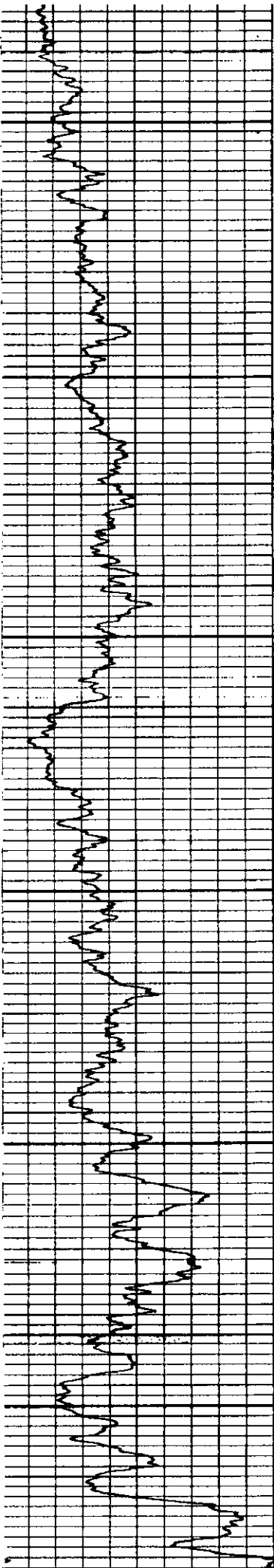






BOTTOM  
PROPOSED  
INTERVAL  
4956'





## **C-108 ITEM VII – PROPOSED OPERATION**

The McCasland SWD Well No.1 will be operated as a commercial disposal service to area operators to facilitate in disposal of produced water from typical producing formations in the area. (Samples are included in this application from Grayburg and Bone Spring formation waters - chlorides and TDS are relative compatible with San Andres formation waters.)

The system will be closed utilizing a tank battery facility located on the well site.

Injection pressure will be 821 psi with rates limited only by that pressure. In the future, Mescalero Energy, LLC may opt to conduct a step rate test if it is determined that greater rates may be required. This would be submitted to OCD as a request to increase the injection pressure.

Routine maintenance will be ongoing and any releases will be reported within 24 hours to OCD on form C-141 pursuant to various portions of 19.15.30 NMAC.

The facility will not be manned but will be available to Mescalero Energy's customers 24/7. The facility will be available for inspections at any time deemed necessary by OCD.

# C-108 - Item VII.4

## Water Analysis - Disposal Zone - SAN ANDRES

# Schlumberger

Company: Panrac  
Lease & Well: State 35  
County, State:  
Formation:  
DIT (F):

Report No.: 3C032  
Service Point: Hobbs Laboratory  
Prepared by: E. Collins  
Prepared for: M. Merchison  
Date: 2/25/2003

Specific gravity: 1.110 @ 74 degrees F pH 8.00

Anions						Ionic Strength		
	Factor	ml	Sample	mg/l	Factor	me/l	(mg/l)	(me/l)
Chlorides	3545	17.40	0.5	123366	0.0282	3476.92	1.7271	1.7395
Sulfates	20	100.0	10	200	0.0208	4.16	0.0042	0.0042
Carbonates	132	0.0	0.5	590	0.0333	19.66	0.0185	0.0197
Bicarbonates	1000	1.10	0.5	2200	0.0164	36.08	0.0176	0.0180
								(ppm)
								111141
								180
								532
								1982

Cations						Ionic Strength		
	Factor	ml	Sample	mg/l	Factor	me/l	(mg/l)	(me/l)
Calcium	401	5.5	0.5	4411	0.0499	220.11	0.2206	0.2201
Magnesium	243	1.50	0.5	729	0.0823	60.00	0.0598	0.0600
Iron	0	0	0	0	0.0358	0.00	0.0000	0.0000
Sodium	0	0	0	74913	0.0435	3256.72	1.6481	1.6294
								(ppm)
								3974
								657
								0
								67489

Total Dissolved Solids: 202409.4

7077.64

Total Ionic Strength: 3.6966 3.6908

### Calcium Carbonate Deposition

Stiff-Davis Equation: Stability Index (SI) = pH - pCa - pAlk - K

pH = 8.00

pCa = 0.95

pAlk = 1.54

K = 1.31

Total Ion Equivalent NaCl Concentration = 185013.6 ppm

SI = 4.20

The Stiff-Davis equation predicts this water does have a tendency toward calcium carbonate deposition.

### Calcium Sulfate Deposition

CaSO<sub>4</sub> Solubility:  $S = 1000 (\text{SQRT}(X^2 + 4 \cdot K) - X)$

Total Ionic Strength = 3.6968

Solubility Constant, K = 0.00250

X = 0.1032

S = 44.47 me/l

Laboratory analysis shows that this water contains 4.16 me/l, therefore the tendency towards calcium sulfate deposition does not exist.

# C-108 - Item VII.4

## Water Analysis – Source Water – GRAYBURG

South Permian Basin Region  
10520 West I-20 Eas  
Odessa, TX 79761  
(915) 498-9191  
Lab Team Leader - Sheila Hernandez  
(915) 495-7241

## Water Analysis Report by Baker Petrolite

Company:	APACHE CORPORATION	Sales RDT:	33102
Region:	PERMIAN BASIN	Account Manager:	MIKE EDWARDS (505) 370-9506
Area:	EUNICE, NM	Sample #:	26347
Lease/Platform:	ARGO	Analysis ID #:	20257
Entity (or well #):	7	Analysis Cost:	\$40.00
Formation:	Grayburg		
Sample Point:	WELLHEAD		

Summary		Analysis of Sample 26347 @ 75 °F					
Sampling Date:	7/24/01	Anions	mg/l	meq/l	Cations	mg/l	meq/l
Analysis Date:	7/26/01	Chloride:	3638.0	102.61	Sodium:	1860.1	80.91
Analyst:	MARILYN BRANNON	Bicarbonate:	712.0	11.67	Magnesium:	359.0	29.53
		Carbonate:	0.0	0.	Calcium:	955.0	47.65
TDS (mg/l or g/m3):	9977.2	Sulfate:	2296.0	47.8	Strontium:	17.0	0.39
Density (g/cm3, tonne/m3):	1.008	Phosphate:			Barium:	0.1	0.
Anion/Cation Ratio:	0.9999999	Borate:			Iron:	2.0	0.07
		Silicate:			Potassium:	138.0	3.53
					Aluminum:		
Carbon Dioxide:		Hydrogen Sulfide:			Chromium:		
Oxygen:		pH at time of sampling:		6.55	Copper:		
Comments:		pH at time of analysis:			Lead:		
		pH used in Calculation:		6.55	Manganese:		
					Nickel:		

Conditions		Values Calculated at the Given Conditions - Amounts of Scale in lb/1000 bbl										
Temp	Gauge Press.	Calcite CaCO <sub>3</sub>		Gypsum CaSO <sub>4</sub> ·2H <sub>2</sub> O		Anhydrite CaSO <sub>4</sub>		Celestite SrSO <sub>4</sub>		Barite BaSO <sub>4</sub>		CO <sub>2</sub> Press
°F	psi	Index	Amount	Index	Amount	Index	Amount	Index	Amount	Index	Amount	psi
80	0	0.32	42.34	0.00	5.21	-0.07	0.00	-0.05	0.00	0.87	0.00	2.19
100	0	0.44	57.61	-0.01	0.00	-0.01	0.00	-0.04	0.00	0.71	0.00	2.84
120	0	0.57	73.22	-0.01	0.00	0.07	111.75	-0.02	0.00	0.59	0.00	3.55
140	0	0.70	88.49	0.00	4.16	0.17	253.34	0.01	0.35	0.49	0.00	4.29

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 five scales.

Note 3: The reported CO2 pressure is actually the calculated CO2 fugacity. It is usually nearly the same as the CO2 partial pressure.



# C-108 - Item VII.4

## Water Analysis - Source Water - BONE SPRING

ENGINEERING DIVISION  
RECEIVED



104 1987 5 11 8 50  
P.O. BOX 2187  
BBS, N.M. 88240

PHONE: (505) 393-7726

### WATER ANALYSIS REPORT

Report for: Lowell Deckert	Date sampled: 04/29/94.
cc: Kenny Kearney	Date reported: 05/01/94
cc:	Lease or well #: Lea Bone Springs
cc:	County: Lea State: N.M.
Company: Subsurface Water Disp. Inc.	Formation:
Address: P.O. Box 1002	Depth:
Service Engineer: K. Kearney	Submitted by: K. Kearney

CHEMICAL COMPOSITION :	mg/L	meq/L
Chloride (Cl)	160000	4513
Iron (Fe) (total)	3.0	
Total hardness	87000	
Calcium (Ca)	23458	1171
Magnesium (Mg)	8925	556
Bicarbonates (HCO3)	36	1
Carbonates (CO3)	0	
Sulfates (SO4)	548	11
Hydrogen sulfide (H2S)	n/a	
Carbon dioxide (CO2)	n/a	
Sodium (Na)	64373	2799
Total dissolved solids	255342	
Barium (Ba)	n/a	
Strontium (Sr)	n/a	

Specific Gravity	1.182
Density (#/gal.)	9.850
pH	5.750
IONIC STRENGTH	5.39

Stiff-Davis (CaCO3) Stability Index :  
SI = pH - pCa - pAlk - K

SI @ 86 F = +0.41  
104 F = +0.64  
122 F = +0.90  
140 F = +1.19  
158 F = +1.51

This water is 90 mg/l (-10.38%) under ITS CALCULATED  
CaSO4 saturation value at 82 F.  
SATURATION= 867 mg/L PRESENT= 777 mg/L

REPORTED BY ROBERT C MIDDLETON  
TECHNICAL SERVICES REPRESENTATIVE

## **C-108 ITEM VIII – GEOLOGIC INFORMATION**

Disposal will be into the San Andres formation.

The San Andres formation is overall a thick, porous dolomite exhibiting excellent porosity. Offset logs indicated porosities are generally in the 15-20% range. These porosity zones are very suitable to allow for the disposal of produced water. Sufficient barriers exist in the upper and lower portion of the San Andres formation to prevent vertical migration upwards or downwards into over or underlying producing formations.

The San Andres is overlain by the Grayburg and upwards to the Queen. It is underlain by the Blinberry, Drinkard and Tubb formations.

Fresh water in the area is generally available from the Ogallala formation. State Engineer's records show water wells in the area to have an average depth of 73 feet and a minimum of 30 feet.

There are 2 water wells located within one mile of the proposed SWD. Average depth to water in these wells is 73 feet.

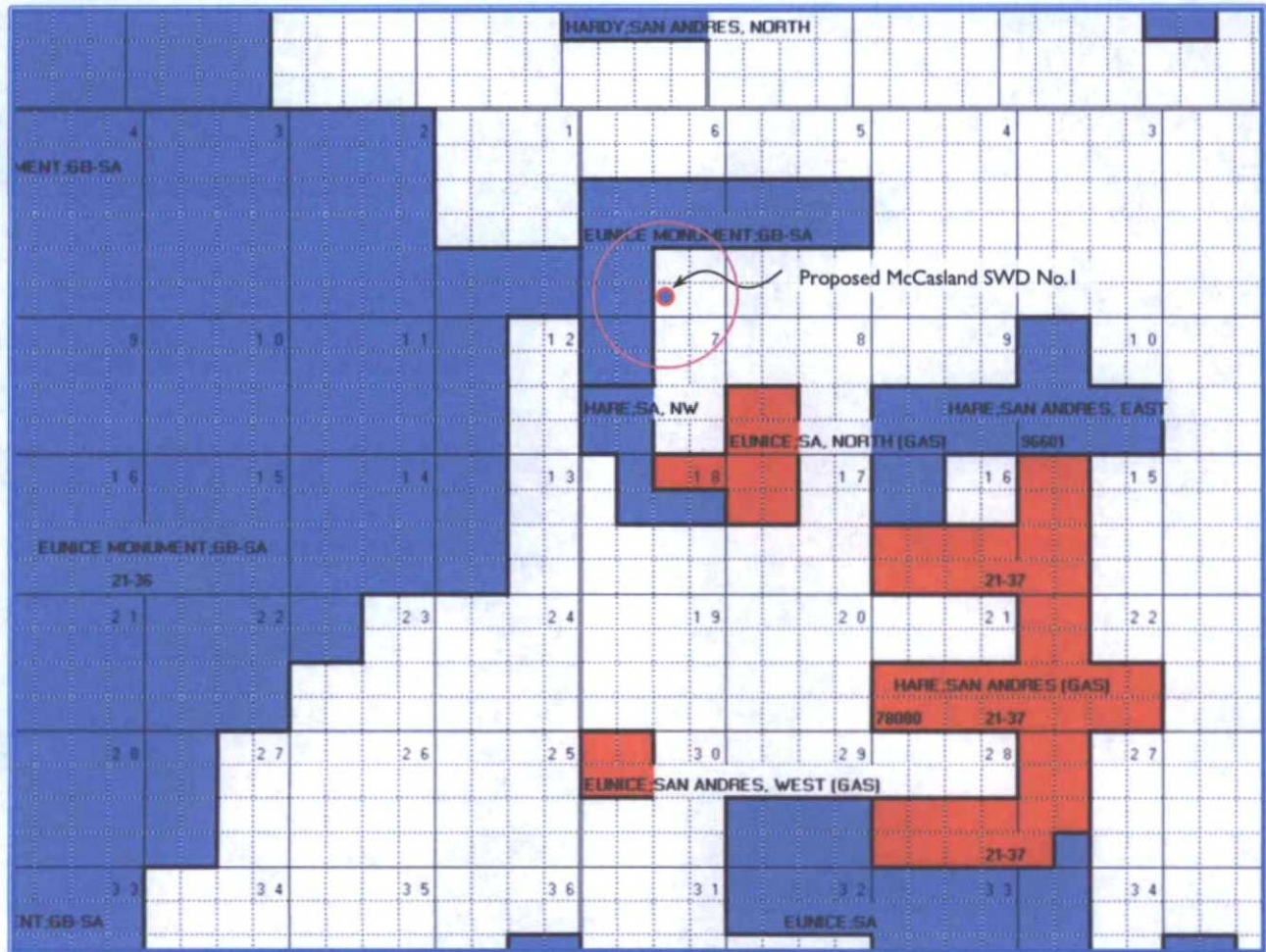
Analyses of both wells is included in the application under Item XII.

# C-108 – Item VIII – Geologic Data

## SUPPLEMENTAL INFORMATION – POOL DATA

*There is significant San Andres pool development in the general area, most notably the Eunice Monument Grayburg/San Andres Pool located to the west. However, in the immediate vicinity, there is much less San Andres production.*

*The other area Salt Water Disposal wells are also completed in the San Andres. The ½ mile and 1 mile AORs are clear of SA production in the proposed interval.*



Pool Maps courtesy of Paul Kautz

## C-108 ITEM XI – WATER WELLS IN AOR

### McCASLAND SWD NO.1 – LOCATION & ACCESS ROUTE MAP TO WATER WELLS

A search of the State Engineer's database indicates there are 2 water wells within one mile of the proposed salt water disposal well. The well locations shown below are also indicated on the 2 Mile AOR Map. Samples will be taken and the analyses will be forwarded to OCD upon receipt.



### New Mexico Office of the State Engineer Active & Inactive Points of Diversion (with Ownership Information)

(acre ft per annum)					(ft=POD has been replaced and no longer serves this file, C=the file is closed)		(quarters are 1=NW 2=NE 3=SW 4=SE) (quarters are smallest to largest) (NAD83 UTM in meters)								
WR File Nbr	Sub basin	Use	Diversion	Owner	County	POD Number	Code	Grant	Source	6416 4	Sec	Tws	Rng	X	Y
<a href="#">CP 00877</a>	STK	3	DALLAS MCCASLAND		LE	<a href="#">CP 00877</a>			Shallow	06	21S	37E		668920	3598153
<a href="#">CP 00986</a>	DOM	1	ROBERT MCCASLAND		LE	<a href="#">CP 00986</a> POD1			Shallow	4	3	4	06	21S	37E
<a href="#">CP 01142</a>	MON	0	STRAUB CORPORATION		LE	<a href="#">CP 01142</a> POD1				3	1	2	06	21S	37E
<a href="#">CP 01486</a>	DOL	3	MCCASLAND RANCH, INC.		LE	<a href="#">CP 01486</a> POD 1		NON		4	2	1	05	21S	37E

Record Count: 4

**PLSS Search:**

Section(s): 5, 6, 7, 8 Township: 21S Range: 37E

No PODs found.

**PLSS Search:**

Section(s): 1, 12 Township: 21S Range: 36E

The data is furnished by the NMOS/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.  
12/8/15 10:34 AM Page 1 of 1 ACTIVE & INACTIVE POINTS OF DIVERSION

(Red rectangle indicates wells located within one mile of subject well.)



## **C-108 ITEM XI – WATER WELL ANALYSIS**

An analysis of one or more of any water wells  
located within a one-mile radius  
of the subject well follow this page.





# Refinery Specialties, Inc.

Specialty Products for the Oil and Gas Industry



## WATER ANALYSIS

Company McCasland Ranch New Mexico  
Field \_\_\_\_\_  
Sample Date 3/10/2015

Account Manager Brad Sears  
Well Water Wells #1  
Analysis Date 3/23/2015

Cations	mg/l	meq/l
Aluminum	0	0
Barium	0	0
Boron	0	0
Calcium	101	4
Iron	0	0
Lead	0	0
Lithium	0	0
Magnesium	19	1
Manganese	0	0
Potassium	2	0
Sodium	101	4
Strontium	1	0
Zinc	0	0

Anions	mg/l	meq/l
Chloride	112	3
Bicarbonate	342	6
Sulfate	142	3

PARAMETERS		
pH	7.47	
Ionic Strength	0	
TDS	820	mg/l

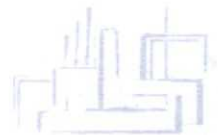
Temp °F	CaCO <sub>3</sub> Calcite	CaSO <sub>4</sub> ·2H <sub>2</sub> O Gypsum	CaSO <sub>4</sub> Anhydrite	BaSO <sub>4</sub> Barite	SrSO <sub>4</sub> Celestite	CaSO <sub>4</sub> ·~0.5H <sub>2</sub> O Hemihydrate
80	0.33	-2.11	-2.43	0.00	-1.87	-1.84
102	0.55	-2.09	-2.25	0.00	-1.83	-1.86
124	0.77	-2.07	-2.07	0.00	-1.79	-1.87
147	1.00	-2.06	-1.89	0.00	-1.74	-1.87
169	1.23	-2.04	-1.72	0.00	-1.69	-1.87
191	1.45	-2.02	-1.56	0.00	-1.64	-1.85
213	1.67	-2.00	-1.40	0.00	-1.58	-1.83
236	1.90	-1.99	-1.23	0.00	-1.52	-1.80
258	2.13	-1.97	-1.08	0.00	-1.46	-1.75
280	2.35	-1.95	-0.92	0.00	-1.39	-1.70

Notes:

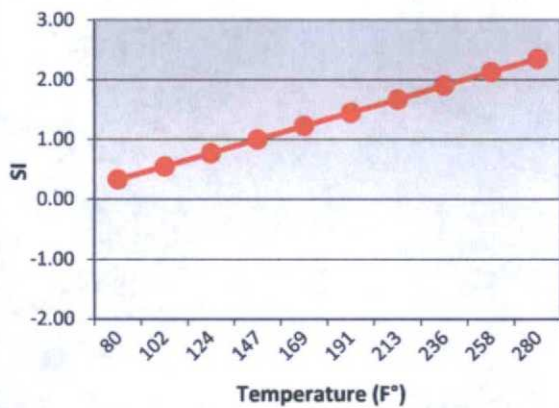


# Refinery Specialties, Inc.

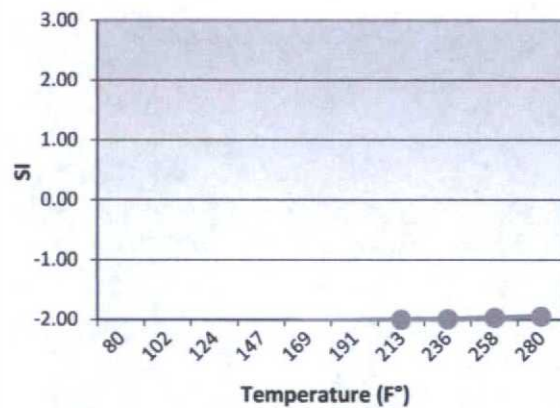
Specialty Products for the Oil and Gas Industry



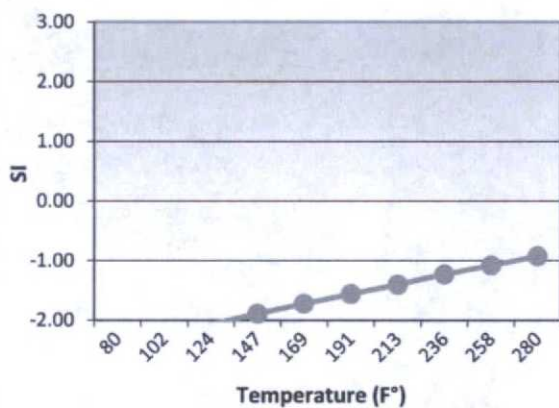
**Calcite**



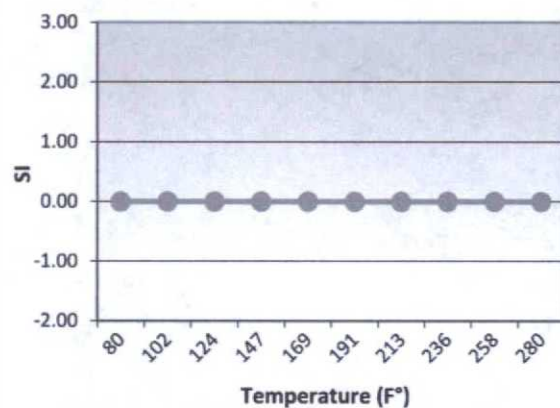
**Gypsum**



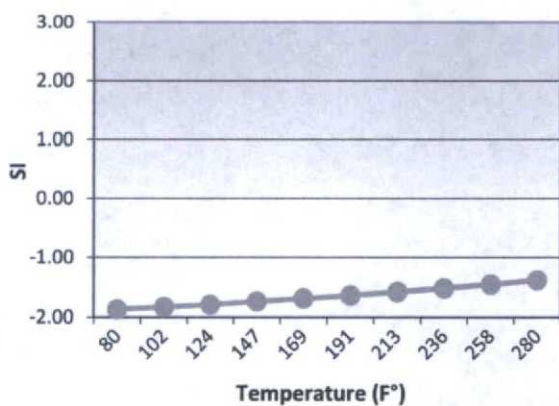
**Anhydrite**



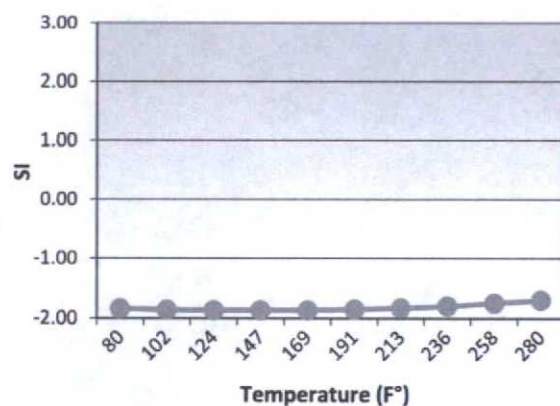
**Barite**



**Celestite**



**Hemihydrate**



Lease:

Well: Water Wells #1



# Refinery Specialties, Inc.

Specialty Products for the Oil and Gas Industry



## WATER ANALYSIS

Company McCasland Ranch New Mexico  
Field \_\_\_\_\_  
Sample Date 3/10/2015

Account Manager Brad Sears  
Well Water Wells #2  
Analysis Date 3/23/2015

Cations	mg/l	meq/l
Aluminum	0	0
Barium	0	0
Boron	0	0
Calcium	109	5
Iron	0	0
Lead	0	0
Lithium	0	0
Magnesium	36	2
Manganese	0	0
Potassium	5	0
Sodium	204	9
Strontium	1	0
Zinc	0	0

Anions	mg/l	meq/l
Chloride	236	7
Bicarbonate	354	6
Sulfate	264	5

PARAMETERS		
pH	7.40	
Ionic Strength	0	
TDS	1210	mg/l

	CaCO <sub>3</sub>	CaSO <sub>4</sub> ·2H <sub>2</sub> O	CaSO <sub>4</sub>	BaSO <sub>4</sub>	SrSO <sub>4</sub>	CaSO <sub>4</sub> ·~0.5H <sub>2</sub> O
Temp °F	Calcite	Gypsum	Anhydrite	Barite	Celestite	Hemihydrate
80	0.31	-1.85	-2.17	0.00	-1.65	-1.58
102	0.53	-1.84	-2.00	0.00	-1.61	-1.60
124	0.75	-1.83	-1.83	0.00	-1.58	-1.62
147	0.98	-1.81	-1.65	0.00	-1.53	-1.63
169	1.20	-1.80	-1.49	0.00	-1.49	-1.63
191	1.43	-1.79	-1.33	0.00	-1.44	-1.62
213	1.65	-1.78	-1.17	0.00	-1.39	-1.60
236	1.88	-1.77	-1.01	0.00	-1.34	-1.58
258	2.11	-1.76	-0.86	0.00	-1.28	-1.54
280	2.33	-1.74	-0.71	0.00	-1.21	-1.49

Notes:



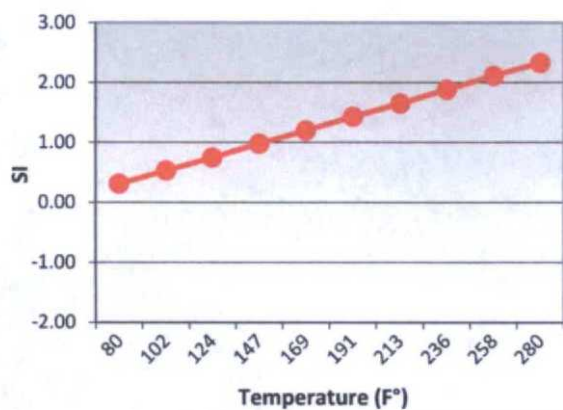


# Refinery Specialties, Inc.

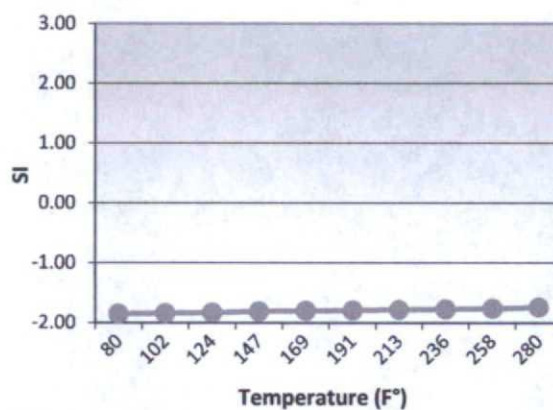
Specialty Products for the Oil and Gas Industry



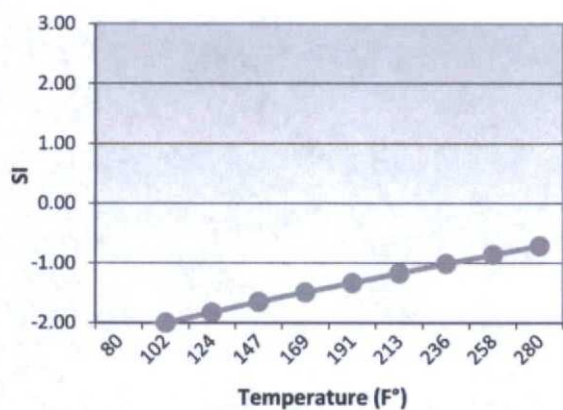
**Calcite**



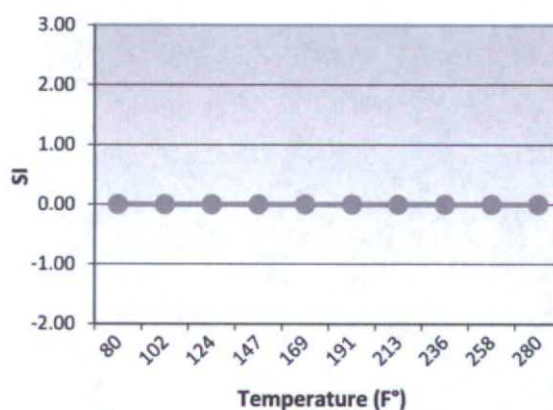
**Gypsum**



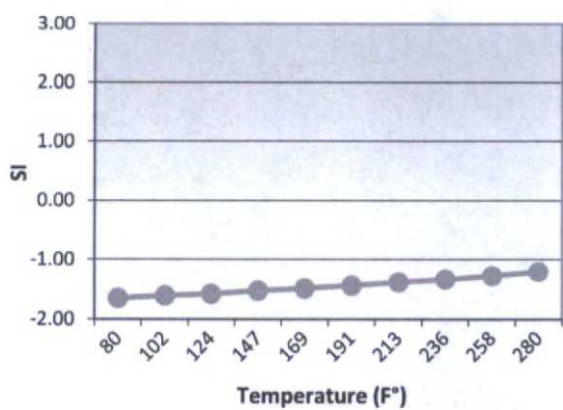
**Anhydrite**



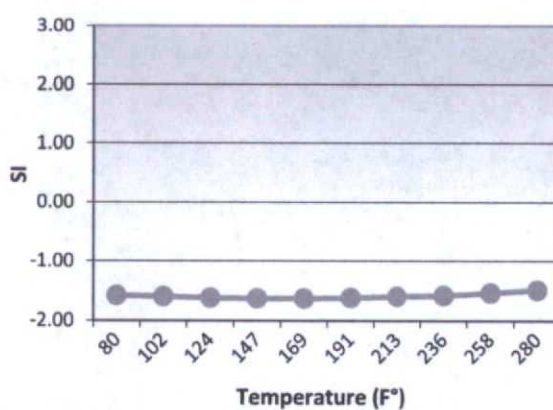
**Barite**



**Celestite**



**Hemihydrate**

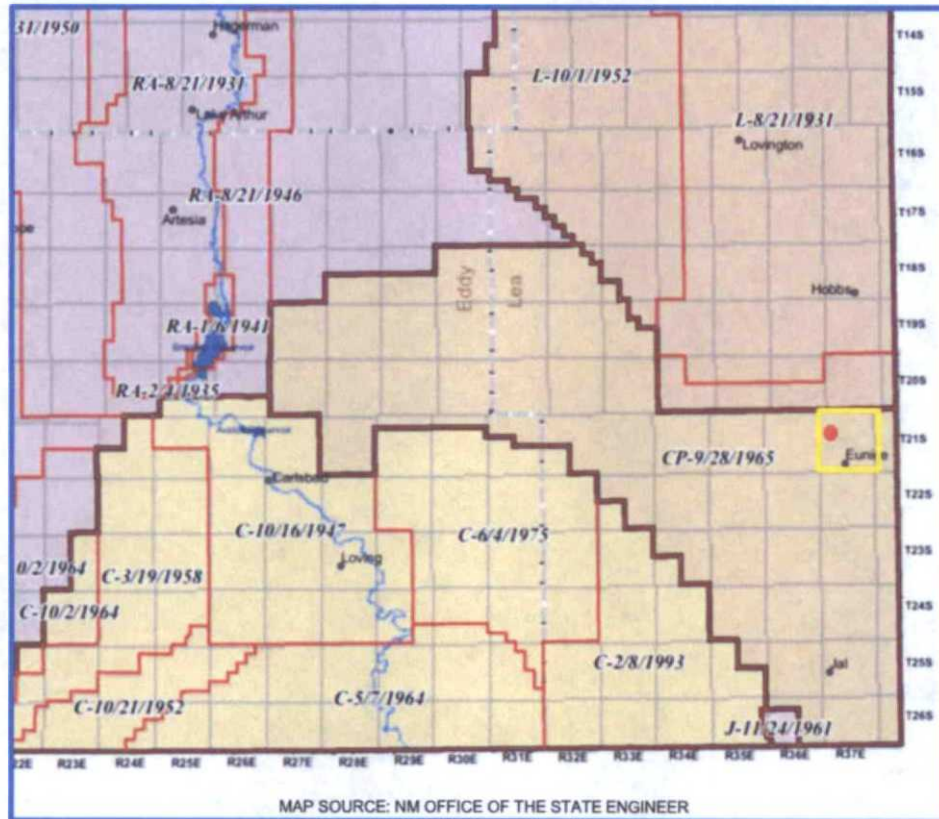


Lease:

Well: Water Wells #2

## C-108 - Item XI

### Groundwater Basins - Water Column / Depth to Groundwater



The subject well is located within the Capitan Basin, 1 township south of the Lea County Basin.

*Handwritten notes:* Alluvial / Possible Santa Rosa Dolomite - see USGS SIM 3044

Fresh water in the area is generally available from the Ogallala; High Plains Aquifer. State Engineer's records show water wells in 7-21S-37E with an average depth to water at 73 feet.

There are two (2) water wells located within one mile of the proposed SWD. Analyses will be forwarded as soon as available.





# 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	POD		Q Q Q			Sec	Tws	Rng	X	Y	Depth Well	Depth Water	Water Column
	Sub-	Code	basin	County	64 16 4								
CP 00877				LE		06	21S	37E	668920	3598153*	150	73	77
CP 00986 POD1				LE	4 3 4	06	21S	37E	669110	3597437	154		

Average Depth to Water: 73 feet

Minimum Depth: 73 feet

Maximum Depth: 73 feet

Record Count: 2

### PLSS Search:

Section(s): 6

Township: 21S


Range: 37E

\*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.

## C-108 ITEM XII – GEOLOGIC AFFIRMATION

We have examined available geologic and engineering data and have found no evidence of open faults or other hydrologic connection between the disposal interval and any underground sources of drinking water.

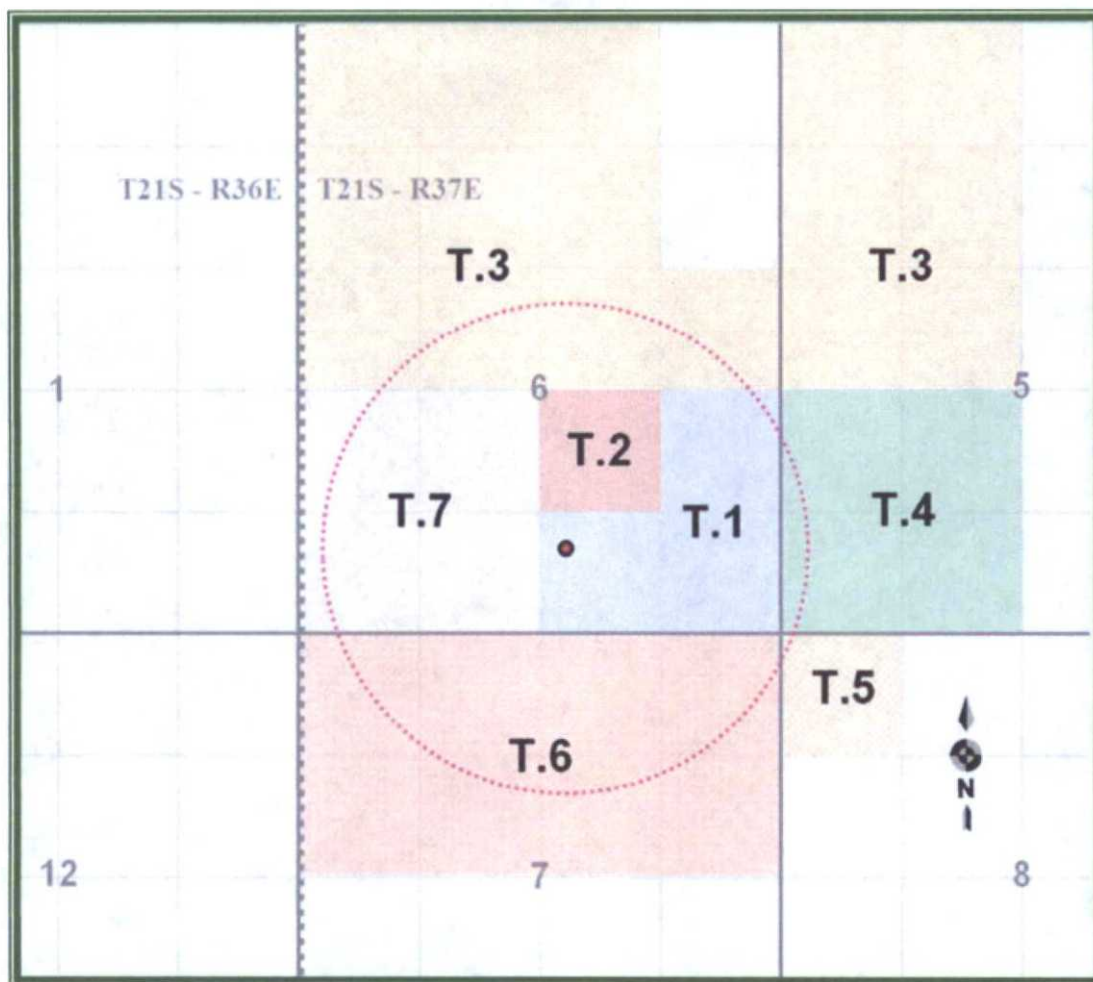
A handwritten signature in black ink, appearing to read "Ben Stone", is written over a horizontal line.

Ben Stone, Partner  
SOS Consulting, LLC

Project: Mescalero Energy, LLC  
McCasland SWD No.1  
Reviewed 11/20/2015

# McCasland SWD Well No.1 - Leasehold Plat

(Attachment to NMOCD Form C-108, Application for Authority to Inject.)



## LEGEND

- T.1 – NMNM-125793 – Apache Corporation
- T.2 – NMLC-0031741B – Apache Corporation
- T.3 – Fee – Farm & Ranch Ltd. Partnership (McCasland) / MAR O&G Corp.
- T.4 – Fee - McCasland Limited Partnership Lea I / Apache Corporation
- T.5 – NMNM-125795 – Apache Corporation
- T.6 – Fee - McCasland Limited Partnership Lea I / Apache Corporation;  
J.R. Oil Ltd., Corporation
- T.7 – Fee - McCasland Limited Partnership Lea I / Apache Corporation

**C-108 ITEM XIII – PROOF OF NOTIFICATION  
INTERESTED PARTIES LIST**

**SURFACE OWNER**

- 1 McCASLAND LIMITED PARTNERSHIP I (USPS Certified Mail)  
P.O. Box 205  
Eunice, NM 88231

**OFFSET MINERALS LESSEES, OPERATORS and SURFACE OWNERS (As applicable.)**  
(All Notified via USPS Certified Mail)

- BLM Leases NMNM-125795; NMLC-0031741B; NMNM-12793 (T.1, T.2 and T.5 on plat.)**  
***Lessee / Operator***
- 2 APACHE CORPORATION  
303 Veterans Airpark Lane, Ste.3000  
Midland, TX 79705

- Fee Lease – Farm & Ranch Limited Partnership (McCasland - T.3 on attached plat.)**  
***Lessee / Operator***
- 3 MAR OIL & GAS CORPORATION  
Attn: Leon Romero  
21 Bisbee Ct. Suite H  
Santa Fe, NM 87508

- Fee Lease – McCasland Limited Partnership I (T.4 and T.7 on attached plat.)**  
***Lessee / Operator***
- APACHE CORPORATION  
303 Veterans Airpark Lane, Ste.3000  
Midland, TX 79705
- Opeator (T.4 - Additional to Lessee)***
- 4 CIMEREX ENERGY COMPANY  
600 N. Marienfeld Street, Ste.600  
Midland, TX 79701

- Fee Lease – McCasland Limited Partnership I (T.6 on attached plat.)**  
***Lessees / Operators***
- APACHE CORPORATION  
303 Veterans Airpark Lane, Ste.3000  
Midland, TX 79705
- 5 JR OIL, LTD COMPANY  
3500 Acoma  
Hobbs, NM 88240



**C-108 ITEM XIII – PROOF OF NOTIFICATION  
INTERESTED PARTIES LIST (cont.)**

**OFFSET MINERALS OWNER** (Noticed as Regulator via FedEx)

U.S. DEPARTMENT OF INTERIOR  
Bureau of Land Management  
Oil & Gas Division  
620 E. Greene St.  
Carlsbad, NM 88220

**REGULATORY**

NEW MEXICO OIL CONSERVATION DIVISION (FedEx'ed original and copy)  
1220 S. St. Francis Dr.  
Santa Fe, NM 87505

NEW MEXICO OIL CONSERVATION DIVISION (FedEx'ed copy)  
1625 S. French Drive  
Hobbs, NM 88240

U.S. DEPARTMENT OF INTERIOR  
Bureau of Land Management  
Oil & Gas Division  
620 E. Greene St.  
Carlsbad, NM 88220



~~Oil & Gas Accounting, Regulation, Processing Assistance, Oilfield Technical Assistance~~

December 17, 2015

**NOTIFICATION TO INTERESTED PARTIES**

**Via U.S. Certified Mail**

To Whom It May Concern:

Mescalero Energy, LLC, Houston, Texas has made application to the New Mexico Oil Conservation Division to drill and complete for salt water disposal the McCasland SWD Well No.1. The proposed SWD will be for commercial operation available to area operators. As indicated in the notice below, the well is located in Section 6, Township 21 South, Range 37 East in Lea County, New Mexico.

The disposal interval will be through an openhole completion from 4206 feet to 4956 feet in the San Andres formation.

Following is the legal notice published in the Hobbs News-Sun, Hobbs, New Mexico on or about December 10, 2015.

**LEGAL NOTICE**

Mescalero Energy, LLC, 510 Bering Dr. Ste.430, Houston, TX 77057, is filing Form C-108 (Application for Authority to Inject) with the New Mexico Oil Conservation Division for administrative approval to permit for salt water disposal its McCasland SWD Well No.1. The undrilled well will be located 877' FSL & 2412' FEL in Section 6, Township 21 South, Range 37 East in Lea County, New Mexico. The commercial SWD well will be used to dispose of area produced water into the San Andres formation through an openhole interval from maximum top of 4206 feet to a maximum depth of 4956 feet. (This interval was selected to adequately protect offsetting interests.) Maximum injection pressure will be 841 psi with a maximum rate limited only by such pressure.

Interested parties wishing to object to the proposed application must file with the New Mexico Oil Conservation Division, 1220 St. Francis Dr., Santa Fe, NM 87505, (505)476-3460 within 15 days of the date of this notice. Additional information may be obtained from the applicant's agent, SOS Consulting, LLC, (903)488-9850 or, email [info@sosconsulting.us](mailto:info@sosconsulting.us).

***You have been identified as a party who may be interested as an offset lessee or operator.***

You are entitled to a full copy of the application. A full copy in PDF format on a mini-CD will be arriving within a few days of this notice. If you do not receive it, please call or email SOS Consulting, LLC at 903-488-9850, [info@sosconsulting.us](mailto:info@sosconsulting.us), and a copy will be expedited to you and may also be sent via email if preferred.

Thank you for your attention in this matter.

Best regards,

A handwritten signature in black ink, appearing to read "Ben Stone". The signature is fluid and cursive, with the first name "Ben" and last name "Stone" clearly distinguishable.

Ben Stone, SOS Consulting, LLC  
Agent for Mescalero Energy, LLC

Cc: Application File

# C-108 - Item XIV

Proof of Notice (Certified Mail Receipts)

7015 0640 0007 9482 7114

**U.S. Postal Service™**  
**CERTIFIED MAIL® RECEIPT**  
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Postage \$ 49

Total Postage and Fees \$ 674

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Street and City, State

CIMEREX ENERGY COMPANY  
 600 N. Marienfeld Street, Ste. 600  
 Midland, TX 79701

PS Form 3800, October 2011

DEC 17 2015

7015 0640 0007 9482 6229

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APACHE CORPORATION  
 303 Veterans Airpark Lane, Ste. 3000  
 Midland, TX 79705

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<input type="checkbox"/> Adult Signature Required	\$
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Postage \$ 49

Total Postage and Fees \$ 674

Sent To

Street and City, State

JR OIL, LTD COMPANY  
 3500 Acoma  
 Hobbs, NM 88240

PS Form 3800, October 2011

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<input type="checkbox"/> Certified Mail Restricted Delivery	\$
<input type="checkbox"/> Adult Signature Required	\$
<input type="checkbox"/> Adult Signature Restricted Delivery	\$

Postage \$ 49

Total Postage and Fees \$ 674

Sent To

Street and City, State

MAR OIL & GAS CORPORATION  
 Attn: Leon Romero  
 21 Bisbee Ct. Suite H  
 Santa Fe, NM 87508

PS Form 3800, October 2011

DEC 17 2015



**C-108 ITEM XIII – PROOF OF NOTIFICATION  
Regulatory Filings**

**Mescalero Energy, LLC**

**McCasland SWD No.1**

**C-108 sent 12/17/15**

FedEx Tracking Nos.

OCD SF – 7752 4086 4396

OCD Hobbs – 7752 4088 6162

BLM – 7752 4091 1650

I hereby certify that a full copy of the subject C-108 application was sent to the applicable regulatory agencies as indicated above.

A handwritten signature in black ink, appearing to read "Ben Stone".

Ben Stone, Partner  
SOS Consulting, LLC  
Agent for Mescalero Energy, LLC

# Affidavit of Publication

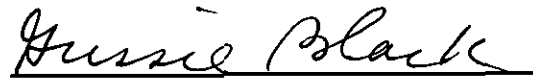
STATE OF NEW MEXICO  
COUNTY OF LEA

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).

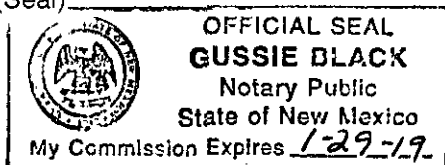
Beginning with the issue dated  
December 10, 2015  
and ending with the issue dated  
December 10, 2015.

  
Publisher

Sworn and subscribed to before me this  
10th day of December 2015.

  
Business Manager

My commission expires  
January 29, 2019  
(Seal)



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
<b>LEGAL NOTICE</b> December 10, 2015
Mescalero Energy, LLC, 510 Bering Dr. Ste.430, Houston, TX 77057, is filing Form C-108 (Application for Authority to Inject) with the New Mexico Oil Conservation Division for administrative approval to permit for salt water disposal its McCasland SWD Well No.1. The undrilled well will be located 877' FSL & 2412' FEL in Section 6, Township 21 South, Range 37 East in Lea County, New Mexico. The commercial SWD well will be used to dispose of area produced water into the San Andres formation through an openhole interval from maximum top of 4206 feet to a maximum depth of 4956 feet. (This interval was selected to adequately protect offsetting interests.) Maximum injection pressure will be 841 psi with a maximum rate limited only by such pressure.
Interested parties wishing to object to the proposed application must file with the New Mexico Oil Conservation Division, 1220 St. Francis Dr., Santa Fe, NM 87505, (505)476-3460 within 15 days of the date of this notice. Additional information may be obtained from the applicant's agent, SOS Consulting, LLC, (903)488-9850 or, email info@sosconsulting.us. #30544

67104420

00167662

BEN STONE  
SOS CONSULTING, LLC.  
P.O. BOX 300  
COMO, TX 75431



December 17, 2015

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

Attn: Mr. David Catanach, Director

*Re: Application of Mescalero Energy, LLC to permit for salt water disposal the proposed well McCasland SWD No.1 well located in Section 6, Township 21 South, Range 37 East, NMPM, Lea County, New Mexico.*

Dear Mr. Catanach,

Please find enclosed form C-108 Application for Authority to Inject, supporting the above-referenced request to covert for disposal, the McCasland SWD Well No.1.

Mescalero Energy seeks to create additional solutions for disposal in various locations in southeast New Mexico. Approval of this application is consistent with that goal as well as the NMOCD's mission of preventing waste and protection of correlative rights.

Published legal notice ran in the December 10, 2015 edition of the Hobbs News-Sun and all offset operators and other interested parties have been notified individually. The legal notice affidavit is included with the application. This application also includes wellbore schematics, area of review maps, leaseholder plats and other required information for a complete Form C-108. The well is located on private land and minerals.

I respectfully request that the approval of this salt water disposal well proceed swiftly and if you or your staff requires additional information or has any questions, please do not hesitate to call or email me.

Best regards,

A handwritten signature in black ink, appearing to read 'Ben Stone', is written over a horizontal line.

Ben Stone, Partner  
SOS Consulting, LLC  
Agent for Mescalero Energy, LLC

Cc: Application attachment and file

**C-108 Review Checklist:**Received 12/21/15 Add. Request: 04/28/16 Reply Date: 01/29/16 Suspended: 12/22/16 [Ver 16]ORDER TYPE: WFX / PMX / SWD Number: 1666 Order Date: 2/8/2016 Legacy Permits/Orders: NAWell No. 1 Well Name(s): McCasland SWDAPI: 30-0 25-Pending Spud Date: TBD New or Old: New (UIC Class II Primacy 03/07/1982)Footages 877 FSL / 2412 FEL Lot 1 or Unit 0 Sec 6 Tsp 21S Rge 37E County LeaGeneral Location: 4.5 miles NW of Eunice Pool: SWD; San Andres Pool No.: 96121BLM 100K Map: Hobbs (Southland) Operator: Mescalero Energy, LLC OGRID: 370198 Contact: Ben Stone SOS ConsultingCOMPLIANCE RULE 5.9: Total Wells: 1 Inactive: 0 Fincl Assur: Blanket bond in place Compl. Order? NO IS 5.9 OK? Yes Date: 2/8/16WELL FILE REVIEWED ☒ Current Status: No APD posted - no applicationWELL DIAGRAMS: NEW: Proposed ☒ or RE-ENTER: Before Conv. ☐ After Conv. ☐ Logs in Imaging: TBD/minimumPlanned Rehab Work to Well: NA GR/CNL - mudlog

Well Construction Details*		Sizes (in) Borehole / Pipe	Setting Depths (ft)	Cement Sx of Cf	Cement Top and Determination Method
Planned <input checked="" type="checkbox"/> or Existing <input type="checkbox"/> Surface		12 1/4 / 9 5/8	1400	500	Cir to surface
Planned <input checked="" type="checkbox"/> or Existing <input type="checkbox"/> Intern/Prod		8 7/8 / 7	4206	775 (total)	Cir to surface
Planned <input type="checkbox"/> or Existing <input type="checkbox"/> Intern/Prod		—	—	—	—
Planned <input type="checkbox"/> or Existing <input type="checkbox"/> Prod/Liner		—	—	—	—
Planned <input type="checkbox"/> or Existing <input type="checkbox"/> Liner		—	—	—	—
Planned <input checked="" type="checkbox"/> or Existing <input type="checkbox"/> OH/PERF		5 1/2	4206 to 4956	Inj Length 750'	

Injection Lithostratigraphic Units:		Depths (ft)	Injection or Confining Units	Approx Tops	Completion/Operation Details:
Adjacent Unit: Litho. Struc. Por.			Queen	3625'	Drilled TD — PBDT —
Confining Unit: (Litho) Struc. (Por)		± 250'	Grayburg	3790'	NEW TD <u>4956</u> NEW PBDT —
Proposed Inj Interval TOP:		4206	San Andres	3940'	NEW Open Hole <input checked="" type="checkbox"/> or NEW Perfs <input type="checkbox"/>
Proposed Inj Interval BOTTOM:		4956	—	—	Tubing Size <u>4 1/2</u> in. Inter Coated? <u>Yes</u>
Confining Unit: (Litho) Struc. (Por)		± 300'	Glorieta	5250'	Proposed Packer Depth <u>4410</u> ft
Adjacent Unit: Litho. Struc. Por.			Paddock	5285'	Min. Packer Depth <u>4106</u> (100-ft limit)
					Proposed Max. Surface Press. <u>821</u> psi
					Admin. Inj. Press. <u>841-2</u> (0.2 psi per ft)

**AOR: Hydrologic and Geologic Information**POTASH: R-111-P NA Noticed? NA BLM Sec Ord NO WIPP NO Noticed? NA Salt/Salado T: — B: — NW: Cliff House fm NAFRESH WATER: Aquifer: Alluvial / Santa Rosa Dock Depth: 73' / 1200' HYDRO AFFIRM STATEMENT By Qualified Person ☒NMOSE Basin: Capitan CAPITAN REEF: thru adj NO No GW Wells in 1-Mile Radius? 2 FW Analysis? YesDisposal Fluid: Formation Source(s) Grayburg SA & Bone Springs Analysis? Yes On Lease ☐ Operator Only ☐ or Commercial ☒Disposal Interval: Inject Rate (Avg/Max BWPD): est. 5000 Protectable Waters? Low probability - NO assoc. with Hobbs - one flow System: Closed or Open OpenHC Potential: Producing Interval? In Area / General Formerly Producing? NO Method: Logs/DST/P&A/Other HC potential unknown 2-Mile Radius Pool Map ☒AOR Wells: 1/2-M Radius Map? Yes Well List? Yes Total No. Wells Penetrating Interval: 3 Horizontals? 0Penetrating Wells: No. Active Wells 2 Num Repairs? 0 on which well(s)? 30-025-35855 Diagrams? Yes & NoPenetrating Wells: No. P&A Wells 1 Num Repairs? 0 on which well(s)? (well not identified in application) Diagrams? YesNOTICE: Newspaper Date 12/10/15 Mineral Owner BLM Surface Owner Private (McCasland) N. Date 12/17/15RULE 26.7(A): Identified Tracts? Yes Affected Persons: Apache / Mar Oil & Gas / Cimerex / JR oil N. Date 12/17/15Order Conditions: Issues: BLM protest: HC potential and well construction (Onshore #2); BradenAdd Order Cond: Evaluation report / BLM concur; \*well const. final; Remedial cmt on of AORMae Curry No 5





## INSTRUCTIONS

This form is to be filed with the appropriate District Office of the Division not later than 20 days after the completion of any newly-drilled or deepened well and not later than 60 days after completion of closure. When submitted as a completion report, this shall be accompanied by one copy of all electrical and radio-activity logs run on the well and a summary of all special tests conducted, including drill stem tests. All depths reported shall be measured depths. In the case of directionally drilled wells, true vertical depths shall also be reported. For multiple completions, items 11, 12 and 26-31 shall be reported for each zone.

INDICATE FORMATION TOPS IN CONFORMANCE WITH GEOGRAPHICAL SECTION OF STATE

Southeastern New Mexico		Northwestern New Mexico	
T. Anhy	T. Canyon	T. Ojo Alamo	T. Penn A"
T. Salt	T. Strawn	T. Kirtland	T. Penn. "B"
B. Salt	T. Atoka	T. Fruitland	T. Penn. "C"
T. Yates 3052'	T. Miss	T. Pictured Cliffs	T. Penn. "D"
T. 7 Rivers 3318'	T. Devonian	T. Cliff House	T. Leadville
T. Queen 3630'	T. Silurian	T. Menefee	T. Madison
T. Grayburg 3790'	T. Montoya	T. Point Lookout	T. Elbert
T. San Andres 3946'	T. Simpson	T. Mancos	T. McCracken
T. Glorieta 5250'	T. McKee	T. Gallup	T. Ignacio Otzte
T. Paddock 5288'	T. Ellenburger	Base Greenhorn	T. Granite
T. Blinney 5735'	T. Gr. Wash	T. Dakota	
T. Tubb 6336'	T. Delaware Sand	T. Morrison	
T. Drinkard 6750'	T. Bone Springs	T. Todilto	
T. Abo 6904'	T. Rustler	T. Entrada	
T. Wolfcamp	T. Tansill	T. Wingate	
T. Penn	T. Penrose	T. Chinle	
T. Cisco (Bough C)	T. Bowers-SD	T. Permian	

OIL OR GAS  
SANDS OR ZONES

No. 1, from.....to.....  
No. 2, from.....to.....  
No. 3, from.....to.....  
No. 4, from.....to.....

## IMPORTANT WATER SANDS

Include data on rate of water inflow and elevation to which water rose in hole.

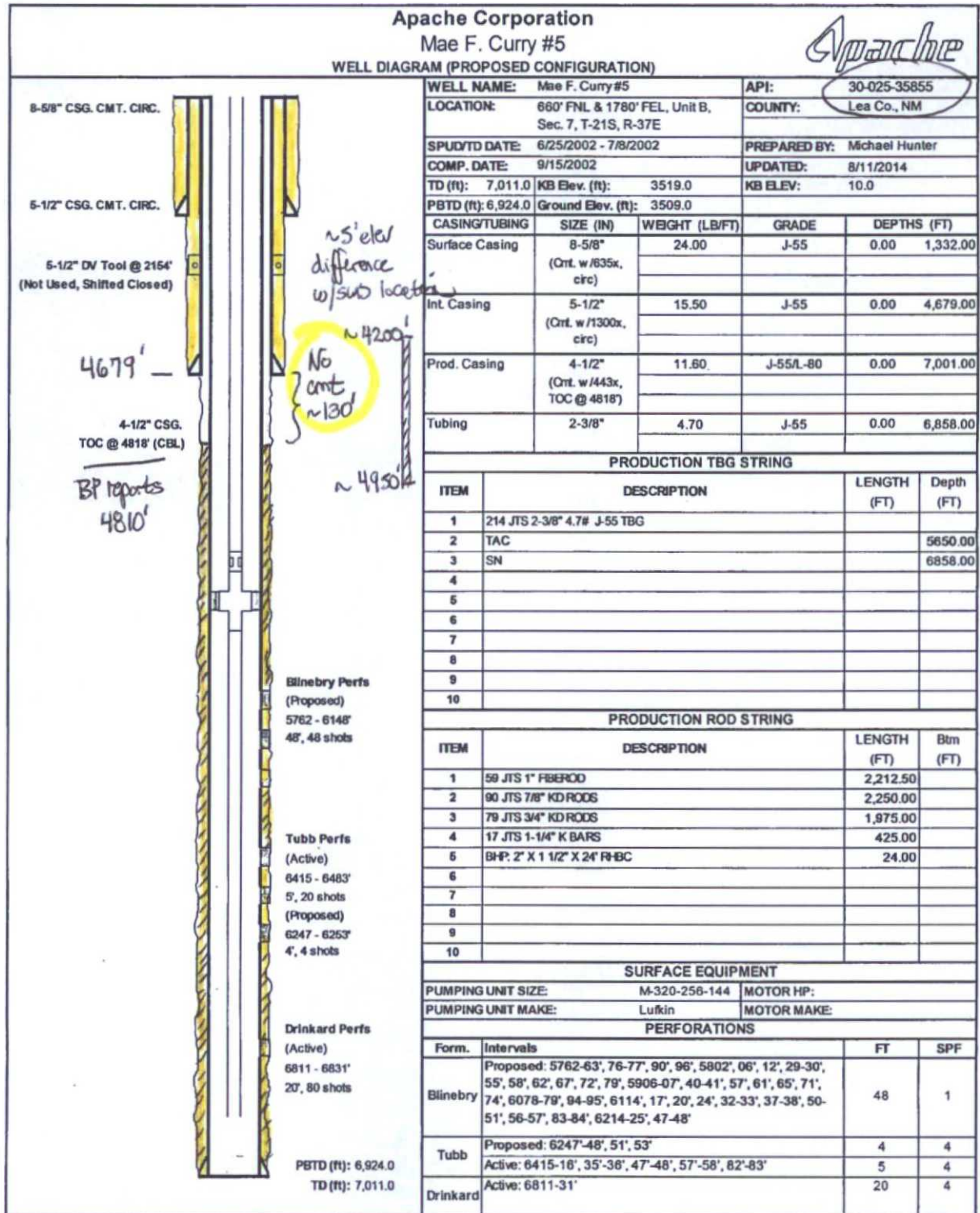
No. 1, from.....to.....feet.....  
No. 2, from.....to.....feet.....  
No. 3, from.....to.....feet.....

## LITHOLOGY RECORD (Attach additional sheet if necessary)

From	To	Thickness In Feet	Lithology

From	To	Thickness In Feet	Lithology

# Proposed Wellbore Diagram



RKB 3538'  
GL 3526'

**MAE F. CURRY # 2**  
Eunice Monument Field

330' FNL & 660' FEL, Section 7  
Unit Letter A  
T-21-S, R-37-E  
Lea County, New Mexico

API # 30-025-27954

Original Spud 11/18/82  
Spud on Deepening  
7/1/2002

Completion in Grayburg  
San Andres July 2002

8 5/8", 24#, K-55 @ 437'  
Cmt w/ 175 sx  
Top out to surface w/ 50 sx

4 Plugs

2 3/8", 4.7#, J-55 tubing  
Rods & pump

Retainer at 3620'

Yates-Seven Rivers-Queen

Backed off the 3 1/2"  
to leave

Top of liner @ 3676'

TOC on 3 1/2" @ 3686'

3656, 58, 62, 70, 3674'

5 shots

3678, 3685' — Squeezed 35 sacks below  
retainer

2 shots

3690, 94, 98, 3700, 08, 3713'

6 shots

3733, 38, 43, 47, 58, 65, 67, 83, 85, 3802'

10 shots

5 1/2", 15.5#, K-55 @ 3850'  
Cmt w/ 1230 sx to surface

Grayburg-San Andres

4032' 4 shots

4138' 4 shots

4206' 4 shots

4226' 4 shots

4259' 4 shots

3 1/2", 9.3#, L-80, EUE 8rd @ 3676-4497'  
Cmt w/ 60 sx  
TOC 3686' by CBL

TD 4500'

PBTD 4470'

DLT 5/20/05

Submit 3 Copies To Appropriate District  
Office  
District I  
1625 N. French Dr., Hobbs, NM 87240  
District II  
1301 W. Grand Ave., Artesia, NM 88210  
District III  
1000 Rio Brazos Rd., Aztec, NM 87410  
District IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
Energy, Minerals and Natural Resources

OIL CONSERVATION DIVISION  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

Form C-103  
May 27, 2004

<b>SUNDRY NOTICES AND REPORTS ON WELLS</b> (DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)		WELL API NO. <b>30-025-27954</b>
1. Type of Well: Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other <input type="checkbox"/>		5. Indicate Type of Lease STATE <input type="checkbox"/> FEE <input checked="" type="checkbox"/>
2. Name of Operator <b>BP AMERICA PRODUCTION COMPANY</b>		6. State Oil & Gas Lease No.
3. Address of Operator <b>P. O. BOX 3092, ROOM 6.115, HOUSTON, TEXAS 77253</b>		7. Lease Name or Unit Agreement Name: <b>CURRY, MAE F.</b>
4. Well Location Unit Letter <b>A</b> : <b>330</b> feet from the <b>NORTH</b> line and <b>660</b> feet from the <b>EAST</b> line Section <b>7</b> Township <b>21S</b> Range <b>37E</b> NMPM County <b>LEA</b>		8. Well Number <b>2</b>
11. Elevation (Show whether DR, RKB, RT, GR, etc.) <b>3526' GL</b>		9. OGRID Number <b>000778</b>
Pit or Below-grade Tank Application <input type="checkbox"/> or Closure <input type="checkbox"/> Pit type <b>STEEL</b> Depth to Groundwater <b>85'</b> Distance from nearest fresh water well <b>&gt;1000'</b> Distance from nearest surface water <b>&gt;1000'</b> Pit Liner Thickness: _____ mil Below-Grade Tank: Volume _____ bbls; Construction Material _____		10. Pool name or Wildcat <b>EDNICE MONUMENT GRBG SA</b>

12. Check Appropriate Box to Indicate Nature of Notice, Report, or Other Data.

NOTICE OF INTENTION TO:

PERFORM REMEDIAL WORK ☐ PLUG AND ABANDON ☐  
TEMPORARILY ABANDON ☐ CHANGE PLANS ☐  
PULL OR ALTER CASING ☐ MULTIPLE COMPLETION ☐  
OTHER: ☐

SUBSEQUENT REPORT OF:

REMEDIAL WORK ☐ ALTERING CASING ☐  
COMMENCE DRILLING OPERATIONS ☐ PLUG AND ABANDONMENT ☒  
CASING TEST AND CEMENT JOB ☐  
OTHER: ☐

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 1103. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

**PLUGGING DATES: JUNE 13 THRU JUNE 17, 2005**

**POOH WITH TUBING; SET CEMENT RETAINER @ 3620'; SQUEEZED 35 SKS OF CEMENT BELOW RETAINER; SPOTTED 25 SKS OF CEMENT ON TOP OF RETAINER; TAGGED CEMENT @ 3280'; SPOTTED 25 SK CEMENT PLOG @ 2853' & @ 1400'; TAGGED TOP OF CEMENT PLOG @ 1188'; SPOTTED ANOTHER 25 SKS OF CEMENT @ 495'; TAGGED TOP OF CEMENT @ 257'; SPOTTED ANOTHER 10 SK CEMENT PLOG TO SURFACE WITHIN 5 1/2" CASING; CUT WELL HEAD 4' BELOW GROUND LEVEL; INSTALL SURFACE HOLE MARKER.**

I hereby certify that the information above is true and complete to the best of my knowledge and belief. I further certify that any pit or below-grade tank has been/will be constructed or closed according to NMOC guidelines ☐ , a general permit ☐ or an (attached) alternative OCD-approved plan ☐

SIGNATURE Sue Sellers TITLE REGULATORY STAFF ASSISTANT DATE AUGUST 30, 2005

Type or print name SUE SELLERS

E-mail address: sue.sellers@bp.com  
Telephone No. 281-366-2052

For State Use Only

APPROVED BY Larry W. Wink

OCD FIELD REPRESENTATIVE II/STAFF MANAGER

TITLE \_\_\_\_\_ DATE SEP 13 2005

Conditions of Approval, if any:

Approved as to plugging of the Well Bore.  
Liability under bond is retained until SEP 13 2005  
surface restoration is completed.

## Goetze, Phillip, EMNRD

---

**From:** Goetze, Phillip, EMNRD  
**Sent:** Friday, January 29, 2016 7:51 AM  
**To:** 'Swartz, Paul'  
**Cc:** Ben Stone  
**Subject:** RE: Paying Quantities of Hydrocarbons

Thanks Paul. The requested information will be made part of the order. PRG

Phillip R. Goetze, PG  
Engineering and Geological Services Bureau  
Oil Conservation Division  
New Mexico Energy, Minerals and Natural Resources Department  
1220 South St. Francis Drive  
Santa Fe, NM 87505  
Direct: 505.476.3466  
e-mail: phillip.goetze@state.nm.us

-----Original Message-----

From: Swartz, Paul [mailto:pswartz@blm.gov]  
Sent: Thursday, January 28, 2016 6:06 PM  
To: Ben Stone <ben@sosconsulting.us>; Goetze, Phillip, EMNRD <Phillip.Goetze@state.nm.us>  
Subject: Paying Quantities of Hydrocarbons

Perhaps to help answer Phillip Goetze question on what the BLM needs to evaluate that the disposal zone cannot produce hydrocarbons in paying quantities, here is better clarification.

- Operator to submit open hole electric logs – GR and CNL with resistivity along with mud logs
- Operator to swab test the injection formation if necessary obtain a water analysis of the formation (Swab testing should at continue for 24 hrs - but this can be determined on a case by case basis)

Provide connate water saturation and insitu water salinity based on open-hole logs

Operator can submit a written report with backup documentation formally stating that based on their evaluation with the supporting documentations that the injection zone cannot produce hydrocarbons in paying quantities.

This written report can and should include data from offset wells both vertical and horizontal completions.

A good example is from R360; in this case R360 submitted all the required data/documentation and then submitted the attached report.



(note: R360 on the Halfway SWD swab tested for a day and and obtained formation water samples for analysis)

Geolex agent for DCP Midstream and Frontier also submits good reports attached to Sundries.

I admit that these reports do not necessarily need to be like the attached example or what Geolex provides on the Acid gas wells; but these companies have the staff and time to start paying attention to these water disposal formations. There are also reservoir Engineers and Geologist working as independent contractors that will do this type of reports/work.

This information will be reviewed by the BLM Engineering/Geological department at the Carlsbad filed office.

Paul as you indicated you can handle the casing design.

You can forward this on to Phillip

Edward G. Fernandez  
Petroleum Engineer  
BUREAU OF LAND MANAGEMENT  
CARLSBAD FIELD OFFICE  
620 E. Greene St  
Carlsbad, NM 88220  
Ph: (575) 234-2220  
FAX: (575) 234-5927

## Goetze, Phillip, EMNRD

---

**From:** Swartz, Paul <pswartz@blm.gov>  
**Sent:** Tuesday, January 12, 2016 2:39 PM  
**To:** Goetze, Phillip, EMNRD  
**Subject:** Mescalero - McCasland No.1 C-108...

Phillip,

Your email to Ben Stone regarding the Mescalero - McCasland No.1 C-108 has the statement:

"OCD will include any negotiated limitations as part of an injection order. And OCD will have no issues with regards to BLM requirements for well construction under Onshore No. 2. PRG"

In the situation where a proposed disposal well penetrates federal minerals with federal surface, BLM approves the casing design, and BLM conditions of approval include the statement:

"Operator shall submit an evaluation of existing logs to include the mud logs and shall perform production tests to verify that the disposal formation cannot produce hydrocarbons in paying quantities.

*That evaluation is to be reviewed by BLM prior to initiating injection."*

Handling of wells on State or Fee surface with Federal minerals is awkward for the BLM Carlsbad Field Office. BLM takes the position that every well drilled into federal minerals is a producer until proven otherwise. Which makes it imperative that BLM approve the wellbore design and has documented information showing that the formation is void of hydrocarbons. Presently we work off of the received C-108 to contact the Operator/OCD and voice our concerns. Operators and OCD have been cooperative when contacted, although the resolution process is awkward. Usually because of BLM's overlooking the situation, our chance of addressing those concerns in time for resolution can slip by. Both the Operator's and OCD have been supportive when contacted.

Meeting the goals of approving the well's casing design, documenting that the well is void of hydrocarbons, and protecting ultimate recovery of other natural resources of federal minerals is a charge of BLM's Carlsbad Field Office where federal minerals are affected.

Ben Stone's thoughtful request and your response brought to light a possible approach that possibly could bring the BLM process nearer to harmony. In short, for disposal wells in Eddy and Lea Counties with State or Fee surface rights and Federal minerals, could these concerns or a requirement for joint approval be included as part of the SWD Administrative Order?

pswartz  
575-200-7902

## Goetze, Phillip, EMNRD

---

**From:** Goetze, Phillip, EMNRD  
**Sent:** Thursday, January 28, 2016 12:26 PM  
**To:** Ben Stone (ben@sosconsulting.us); Swartz, Paul (pswartz@blm.gov)  
**Cc:** Catanach, David, EMNRD; Jones, William V, EMNRD; McMillan, Michael, EMNRD; Lowe, Leonard, EMNRD  
**Subject:** Pending Application for the McCasland SWD No. 1

RE: McCasland SWD No. 1 (Application No. pMAM1535147084; API 30-025-Pending) 877' FSL & 2412' FEL, Sec 6, T21S, R37E, NMPM

Mr. Stone and Mr. Swartz:

Gentlemen, first, let's resolve the issue of the well design. Mr. Stone, your statement that the well design need not be finalized for the application and can be changed during the APD process is appropriate as to minor changes. Since I do not have any knowledge as to the agreed changes that the BLM has stipulated, I do not know if the proposed changes provide a significant change in the design as submitted in the original application. Additionally, the permitting process does dictate a well completion diagram be included in the application that is the best and most accurate representation based on the available information. This information now includes new specifications for resolution of a formal protest of the application by the BLM and becomes a document of record showing the resolution of the protest without going to hearing (emphasis added). Therefore, I am requesting that the applicant provide a new well completion diagram (and updated portions of the original C-108 application which are also impacted) that includes the changes requested by the BLM that addresses their concerns. A copy should be provided to the BLM for their consideration.

Second, the economic evaluation of the injection interval as stipulated for the resolution of the protest. Mr. Swartz, BLM has requested the operator (applicant) to submit *an evaluation of existing logs to include the mud log and to perform production tests to verify that the disposal formation cannot produce hydrocarbons in paying quantities*. I'll need some clarification of the two statements.

1. Other than the mud log, what minimum log suite would the BLM wish to have included in the Order?
2. Is there any specific production test required? Remember, OCD considers hydrocarbon potential (payable quantities) based on both vertical completion and comparative assessment for a horizontal completion. I am also assuming that this evaluation would be a written report by a qualified person, not just a Sundry Notice with logs and a DST attached.
3. Who at the BLM will be the individual (contact) for confirming that these items have been satisfied?

If you could please provide this information as soon as possible, OCD will ensure that these items are included in the order and the applicant knows the minimum requirements for final approval of the injection authority.

Meanwhile, without the specifics as to what was the final resolution of the protest between the two parties, OCD cannot move through the administrative process for approval of this application. If the parties believe that a proper resolution has not been obtained or find that the requested items too onerous, then I would suggest that application for hearing be completed as soon as possible in order to be on the next docket. Please contact me with any questions regarding the content of this e-mail or the information requested. Thank you for your time and effort in completing this matter. PRG

Phillip R. Goetze, PG  
Engineering and Geological Services Bureau  
Oil Conservation Division  
New Mexico Energy, Minerals and Natural Resources Department  
1220 South St. Francis Drive  
Santa Fe, NM 87505  
Direct: 505.476.3466

**Goetze, Phillip, EMNRD**

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**From:** Ben Stone <ben@sosconsulting.us>  
**Sent:** Tuesday, January 26, 2016 9:35 AM  
**To:** Goetze, Phillip, EMNRD; Jones, William V, EMNRD  
**Subject:** Mescalero McCasland No.1 C-108...

Gentlemen:

Can one of you tell me if a permit can be issued with the recommended condition that BLM and I agreed to? Paul Swartz had sent you guys an email and he and I have since talked on the phone about it.

Essentially, the condition would provide that prior to commencing **anything**, the APD would have to have an approved well design including all casing, etc. Also, the formation would be tested for hydrocarbons during drilling and completion.

My point to Paul was that the C-108 should address injection intervals, formation, compatible waters, AOR wells and other items specifically addressing the suitability of injection operations. As the proposed well is undrilled AND, has not yet had an APD submitted, his concerns of getting casing specs just right for BLM should not be a show-stopping issue for the C-108. Those details will be addressed and approvable by BLM during the C-101 APD process.

Please let me know your position and if I need to do anything else to move this application forward.

Thanks for your attention to this matter.

Ben

*Don Jones*



**Ph. 903.488.9850 Fax 866.400.7628**

**P.O. Box 300 - Como, TX 75431**

*Visit us on the web at [sosconsulting.us](http://sosconsulting.us)*

**CONFIDENTIALITY NOTICE:** This message is confidential and may be privileged. If you believe that this email has been sent to you in error, please reply to the sender that you wrongly received the message; then please delete this email. Thank You.



## Goetze, Phillip, EMNRD

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**From:** Goetze, Phillip, EMNRD  
**Sent:** Wednesday, January 13, 2016 4:40 PM  
**To:** Ben Stone (ben@sosconsulting.us)  
**Cc:** Stephen Caffey (scaffey@blm.gov); Jones, William V, EMNRD; Lowe, Leonard, EMNRD; McMillan, Michael, EMNRD; Zelenka, Thomas J (tzelenka@blm.gov)  
**Subject:** Protest of Application to Inject - McCasland SWD No. 1

RE: McCasland SWD No. 1 (Application No. pMAM1535147084; API 30-025-Pending) 877' FSL & 2412' FEL, Sec 6, T21S, R37E, NMPM

Mr. Stone:

OCD was notified that the Bureau of Land Management (Carlsbad Field Office) is protesting this application for approval of a salt water disposal well. This party is identified as an affected person for the location. Therefore, you are being notified that if Mescalero Energy, LLC wishes for this application to be considered, it must either go to hearing or may be reviewed administratively if the protest is withdrawn as a result of a negotiated resolution with this party. The application will be retained by OCD, but suspended from further administrative review. Please contact OCD once you have made a decision regarding the application within the next 30 days. If the protest remains after 30 days, OCD will initiate the process for the application to be reviewed at hearing. Please call/e-mail me with any questions regarding this matter. Thank you. PRG

**Contact Information:**

Steve Caffey  
Assistant Field Manager – Lands and Minerals  
BLM - Carlsbad Field Office  
620 E. Greene Street  
Carlsbad, NM 88220-6292  
Phone: 575.234.5972  
E-mail: Stephen Caffey <scaffey@blm.gov>

**Phillip R. Goetze, PG**

Engineering and Geological Services Bureau  
Oil Conservation Division  
New Mexico Energy, Minerals and Natural Resources Department  
1220 South St. Francis Drive  
Santa Fe, NM 87505  
Direct: 505.476.3466  
e-mail: [phillip.goetze@state.nm.us](mailto:phillip.goetze@state.nm.us)





UNITED STATES DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

Carlsbad Field Office  
620 E. Greene St.  
Carlsbad, NM 88220-6292  
Tel. (575) 234-5972  
Fax (575) 885-9264

IN REPLY REFER TO:  
Conversion to SWD  
43CFR3162.3-2(a)

**Mr. Phillip Goetze, P.G.**  
**Oil Conservation Division**  
**1220 South St. Francis Drive**  
**Santa Fe, NM 87505**

RECEIVED OCD  
2016 JAN 11 P 3:17

**Re: SWD Application from Mescalero Energy, LLC Name: McCasland SWD No. 1 – Sec 6, T21S-R37E, 877'FSL & 2412'FEL Lea County New Mexico.**

**Gentlemen:**

**The Bureau of Land Management, Carlsbad Field Office, is objecting to the drilling of the referenced well to a salt water disposal well.**

**Leasable and Locatable Minerals are defined by the Mineral Leasing Act of 1920 and the General Mining Law of 1872 and any adverse effect to the beneficial recovery of federal mineral resources is to be evaluated.**

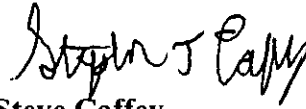
**The proposed injection formation has not been proven to be void of resources and has probable adverse effect to the beneficial recovery of other federal mineral resources.**

**In order to protect other natural resources, the environmental quality, protect life and property, and promote maximum ultimate recovery of minerals this objection is tendered.**

**Removal of this objection may be achieved by assuring that all operations will be conducted in a manner acceptable to the designated authorized officer of this office.**

If clarification is needed, please contact the signatory at 575-234-5925.

Sincerely,

A handwritten signature in black ink, appearing to read "Steve Caffey". The signature is fluid and cursive, with the first name "Steve" and last name "Caffey" clearly distinguishable.

**Steve Caffey**  
**Assistant Field Manager-Lands & Minerals**  
**Bureau of Land Management**  
**Carlsbad Field Office**

**cc: Mr. Tom Zelenka Petroleum Engineer.**  
**New Mexico State Office**  
**301 Dinosaur Trail**  
**Santa Fe, NM 87508-1560**