

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 _____

-SWD
 -OULSWD
 OPERATING, LLC
 308339
 well
 -McCloy SWD#1
 30-025-Pending
 Pool
 -SWD, Delaware
 96100

[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

2014 OCT 14 A 11:16
 RECEIVED OCD

[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 Owl SWD Operating, LLC 10/10/14 Title	10/10/14 Date
		ben@sosconsulting.us e-mail Address	



October 10, 2014

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

Attn: Ms. Jami Bailey, Director

Re: Application of Owl SWD Operating, LLC to permit for salt water disposal its McCloy SWD No.1, API No.[not assigned], located in Section 15, Township 24 South, Range 32 East, NMPM, Lea County, New Mexico.

Dear Ms. Bailey,

Please find enclosed, form C-108 - Application for Authority to Inject, supporting the above-referenced request to complete for disposal, the McCloy SWD Well No.1. The SWD operation will be for commercial purposes serving operators in the area.

Upon approval of the BLM Application for Permit to Drill (form 3160-3), submitted to the BLM, Carlsbad Field Office on September 2, 2014, Owl SWD Operating will be prepared to move on location depending on availability of a drilling rig and other SWD facility construction contractors.

Published legal notice will run in the October 11, 2014 edition of the Hobbs News-Sun and all offset operators and other interested parties have been notified individually. While the proposed well location is on private land, state of New Mexico and BLM lands surround the area and both agencies were also notified. This application also includes all other required information for a complete Form C-108.

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,

Ben Stone, Partner, SOS Consulting, LLC
Agent for Owl SWD Operating, LLC

Cc: Application attachment and file

APPLICATION FOR AUTHORIZATION TO INJECT

- I. PURPOSE: **Salt Water Disposal** and the application *qualifies* for administrative approval.
- II. OPERATOR: **Owl SWD Operating, LLC**
ADDRESS: **8214 Westchester Dr., Ste.850, Dallas, TX 75255**
- CONTACT PARTY: **Agent: SOS Consulting, LLC – Ben Stone (903) 488-9850**
- III. WELL DATA: **To be Drilled (BLM APD in Process). All well data and applicable wellbore diagrams are ATTACHED.**
- 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. **There is one well in the AOR, P&A'd.**
The data includes a description of each well's type, construction, date drilled, location, depth, and a schematic of any plugged well illustrating all plugging detail. **Schematic for 1 P&A well ATTACHED.**
- 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.**
- *X. **There is no applicable logging and test data on the well. After drilling, logs will be run from TD to approximately 4000' and will be submitted to the OCD. A log strip from an offsetting well 0.8 miles south is ATTACHED.**
- *XI. **There is 3 domestic water wells within one mile of the proposed salt water disposal well. Analysis will be forwarded upon receipt.**
- 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. ATTACHED**
There are 11 offset lessees and/or operators within ½ mile and State & BLM - all have been noticed. ATTACHED
- XIV. Certification: I hereby certify that the information submitted with this application is true and correct to the best of my knowledge and belief.

NAME: **Ben Stone** TITLE: **SOS Consulting, LLC agent for Owl SWD Operating, LLC**

SIGNATURE:  DATE: **10/10/2014**

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 (See ATTACHED Wellbore Schematic):**

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.**

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

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

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

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

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

C-108 - Item III

Subject Well Data

WELL SCHEMATIC

Proposed



WELL SCHEMATIC - PROPOSED McCloy SWD Well No.1

API 30-025-00000 (TBD)

1650' FSL & 430' FWL, SEC. 15-T24S-R32E
LEA COUNTY, NEW MEXICO

Spud Date: 1/15/2015

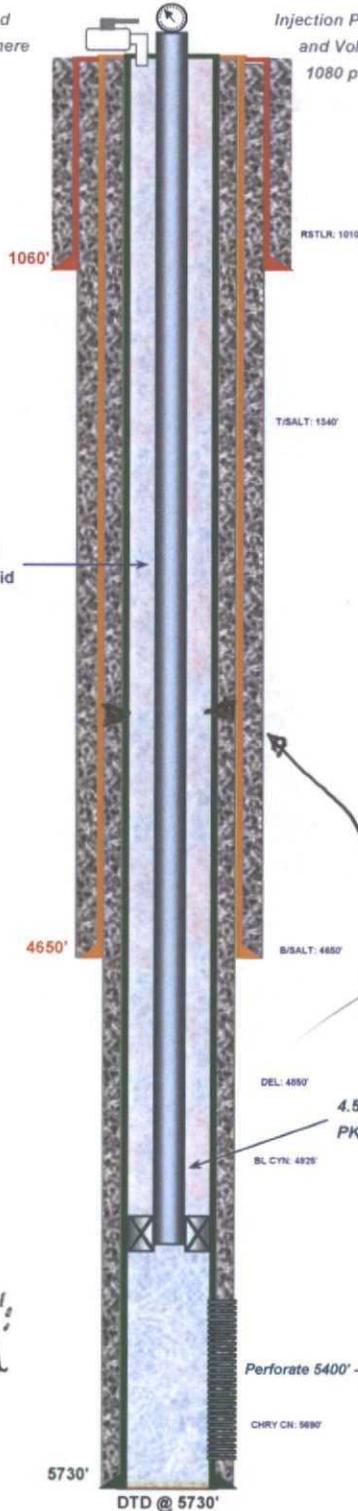
Annulus Monitored
or open to atmosphere

Injection Pressure Regulated
and Volumes Reported
1080 psi Max Surface

Owl SWD Operating, LLC

- Spud and Complete well as described in APD.
- Run CNL or Equiv. Logs from TD to 4500'.
- Run & Set 7.0" Cement to surface.
- Run Porosity Log - Perforate selected intervals.
- Run PC Tubing and PKR - Conduct MIT.
- Commence Disposal Operations per SWD Order.

Annulus Loaded
w/ Inert Packer Fluid



Surface Casing

13.375", 54.5# Csg. (17.5" Hole) @ 1060'
750 sx CIs 'C' + Additives - Circulate to Surface

Intermediate Casing

9.625", 36.0/40.0# Csg. (12.25" Hole) @ 4650'
1460 sx 'C' + 4% Gel/2% CaCl - Circulate to Surface

4.5" IC Tubing
PKR 5305'+

Handwritten: DV tool not shown
Prior completion 2 stage w/ DV ~ 3200

Long String Casing

7.0", 23.0/26.0# Csg - Surface to 5730'
Est. 425 sx w/ excess - Circulate to Surface

All Cement Volumes May Be Adjusted to Caliper.

Perforate 5400' - 5700' (Based on Log Analysis)

CHRY CNL: 5630'

Handwritten: Assume GL of 3590'
Proposed interval based
on sea level:
-1810' to -2110'



Drawn by: Ben Stone, Revised 12/04/2014



WELL SCHEMATIC - PROPOSED
McCloy SWD Well No.1

Replaced by 04/02/2015
Submittal

API 30-025-00000 (TBD)
1650' FSL & 430' FWL, SEC. 15-T24S-R32E
LEA COUNTY, NEW MEXICO

Spud Date: ~10/15/2014

Annulus Monitored
or open to atmosphere

Injection Pressure Regulated
and Volumes Reported
970 psi Max Surface

OWL SWD OPERATING, LLC

- Spud and Complete well as described in APD.
- Run CNL or Equiv. Logs from TD to 4500'.
- Run & Set 7.0" per Delaware Evaluation or APD Approval.
- Cement 2 stages w/ ~550 - 975 sx - Circulate to Surface.
- Run PC Tubing and PKR - Conduct MIT.
- Commence Disposal Operations per SWD Order.

Surface Casing

13.375", 54.5# Csg. (17.5" Hole) @ 1060'
800 sx Cls 'C' + Additives - Circulate to Surface

Annulus Loaded
w/ Inert Packer Fluid

Intermediate Casing

9.625", 36.0/40.0# Csg. (12.25" Hole) @ 4650'
1800 sx 'C' + 4% Gel/2% CaCl - Circulate to Surface

4.5" IC Tubing
PKR 4750'+

Long String Casing

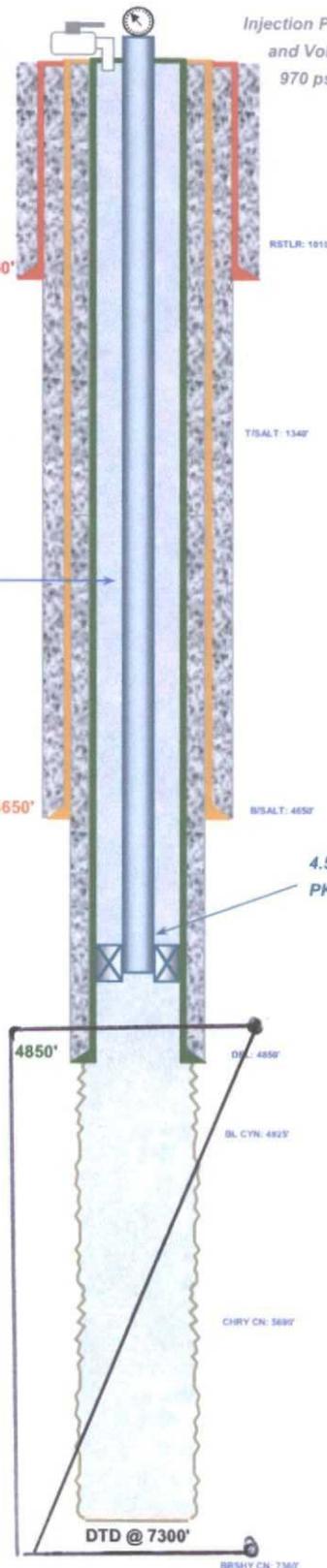
7.0", 23.0/26.0# Csg - Surface to 4850'
Est. 550 sx w/ excess - Circulate to Surface
2 stage w/ DV ~3200'
(Contingency)
7.0", 26.0# Csg - 4850' to 7300'
Est. 425 sx w/ excess - Circulate to Surface
Perforate based on log analysis.
All Cement Volumes May Be Adjusted to Callper.

COG / MMSLO / RMR - Cross Border
Settlement

Contracted
injector
interval
to
5400' to
5700'

Internal protected;
interval reduced;
NMOC required
cased hole in

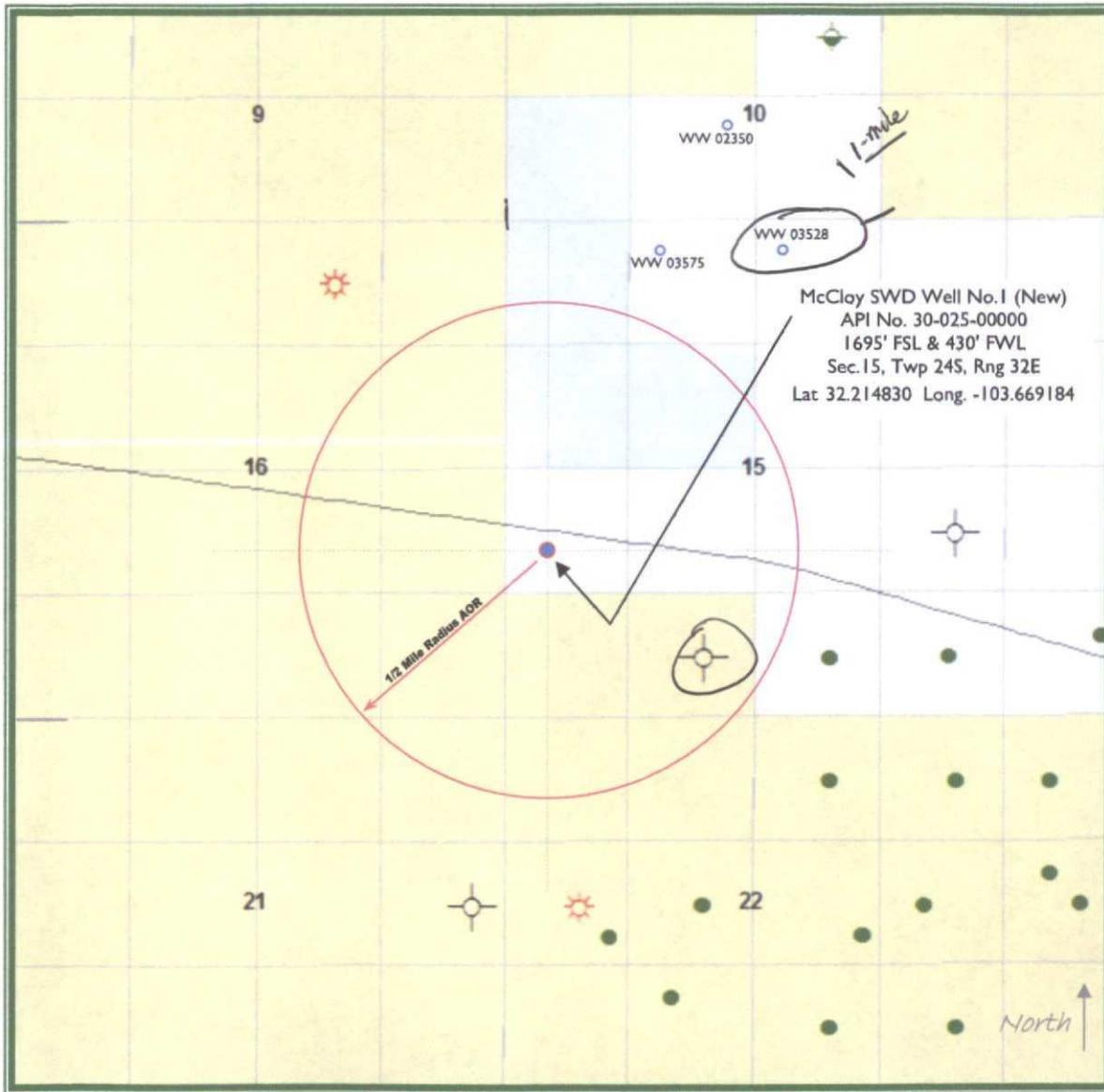
DMG
[Signature]



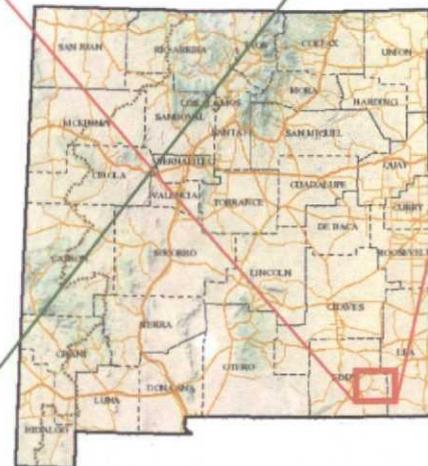
Drawn by: Ben Stone, Revised 9/02/2014

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

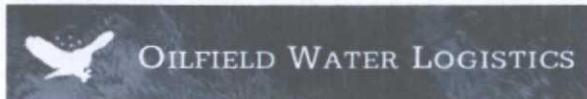
(Attachment to NMOCD Form C-108 - Item V)



~27.7 miles East of Malaga, NM

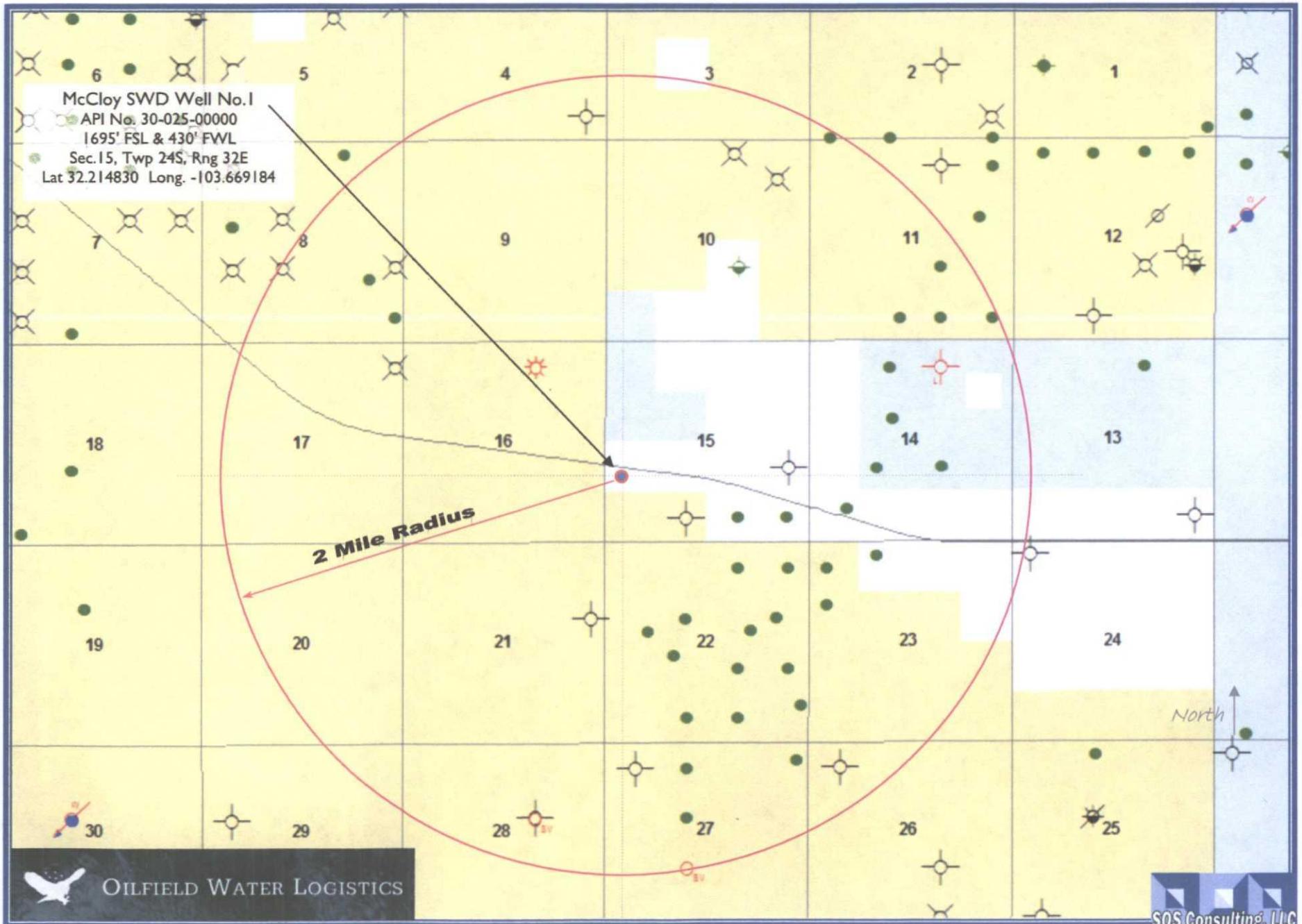


Lea County, New Mexico



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

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



C-108 - Item VI

Area of Review Well Data

PLUGGED WELL SCHEMATICS

There is ϕ 1 well within the AOR and, it also penetrates the proposed injection/disposal interval. The well is P&A'd.

30-025-23612 DTD → 5023'GL

C-108 ITEM VII – PROPOSED OPERATION

McCloy SWD Well No.1

Commercial SWD Facility

Upon approval of all permits for SWD, operations would begin within 30 days. Completion of the well operations will take 3 to 4 weeks. Installation of the tank battery, berms, plumbing and other and associated equipment would be occurring during the same interval. In any event, it is not expected for the construction phase of the project to last more than 60 days beyond the drilling of the well, depending on availability of contractors and equipment. At the time of this submittal, and subject to the availability of the drilling contractor, the anticipated start date is December 1, 2014.

Configure for Salt Water Disposal

Prior to commencing any work, an NOI sundry(ies) will be submitted to configure the well for SWD and will detail the completion workover including all work otherwise described above, any change to the procedure noted herein and to perform mechanical integrity pressure test per OCD test procedures. (Notify NMOCD 24 hours prior.) The casing/tubing annulus will be monitored for communication with injection fluid or loss of casing integrity.

Operational Summary

The SWD facility will be fenced with only the offloading station located outside so that trucks may access for load disposal 24/7.

The well and injection equipment will be a closed system and equipped with pressure limiting devices and volume meters. The annulus, loaded with an inert, anti-corrosion packer fluid, will be open the to atmosphere or monitored for pressure.

The tanks will be equipped with telemetry devices and visual alarms to alert the operator and customers of full tanks or an overflow situation.

Anticipated daily maximum volume is 15,000 bpd and an average of 10,000 bpd at a maximum surface injection pressure of 970 psi (.2 psi/ft gradient). Owl SWD Operating may opt to conduct a step rate test if is determined additional injection pressure is required to obtain desired rates.

old calc based on thicker interval

Potential releases will be contained and cleaned up immediately. The operator shall repair or otherwise correct the situation within 48 hours before resuming operations. OCD within 24 hours of any release greater than 5 bbls. If required, remediation will start as soon as practicable. Operator shall comply with 19.15.29 NMAC and 19.15.30 NMAC, as necessary and appropriate.

C-108 ITEM VIII – GEOLOGIC INFORMATION

Disposal will be into the ^{Bell and upper Cherry} ~~Delaware~~ ^{conglomerate} ~~formations~~ ^{formations}

The Delaware is composed predominately of sandstones and shales. All the Delaware ~~members~~ are interbedded, poorly consolidated, light gray sandstones and shales with occasional dense dolomite horizons. The lateral transmissivities of the sandstone beds are highly variable and often forms elective barriers to the movement of hydrocarbons while allowing down-gradient movement of water. The transmissivity variations are fundamentally due to the very-fine grained nature of the sands and the local percentage of silt and clay. The Delaware sandstone ~~members~~ are typically overlain and underlain by bounding shale, dolomite and/or silty shale horizons.

The top of the Delaware in this area is generally ^{5400 to 5700} ~~4800' to 7300'~~.

Production quality porosity in these intervals is accompanied by low resistivity yielding high water saturations.

Fresh water in the area is available from the Santa Rosa formation at the reported depth of 380 feet. Water in a wider area is generally available between 200 and 400 feet. State Engineer's records show water wells in the township to have an average depth of 537 feet.

There are 3 water wells within one mile of the proposed SWD. Analysis will be forwarded upon receipt.

COG/NMSO & RMR do not agree

} See C-3528 POD 1

C-108 ITEM VIII – GEOLOGIC INFORMATION

Depth to Groundwater

Only one water well record in the township has a reported depth to water at 380 feet. Average well depth is 537 feet not including the one shallow depth of 60 feet.



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 Sub-Code	basin	County	Q 64	Q 16	Q 4	Sec.	Tws.	Rng.	X	Y	Depth Well	Depth Water	Water Column
C 01932	C	ED		3	1	12	24S	32E		628633	3567188*	492		
C 02350		ED		4	3	10	24S	32E		625826	3566333*	60		
C 03527 POD1	C	LE		1	2	3	03	24S	32E	625770	3568487	500		
<u>C 03528 POD1</u>	C	LE		1	1	2	15	24S	32E	626040	3566129	541		
C 03530 POD1	C	LE		3	4	3	07	24S	32E	620886	3566156	550		
C 03555 POD1	C	LE		2	2	1	05	24S	32E	622709	3569231	600	380	220

Average Depth to Water: 380 feet

Minimum Depth: 380 feet

Maximum Depth: 380 feet

Record Count: 6

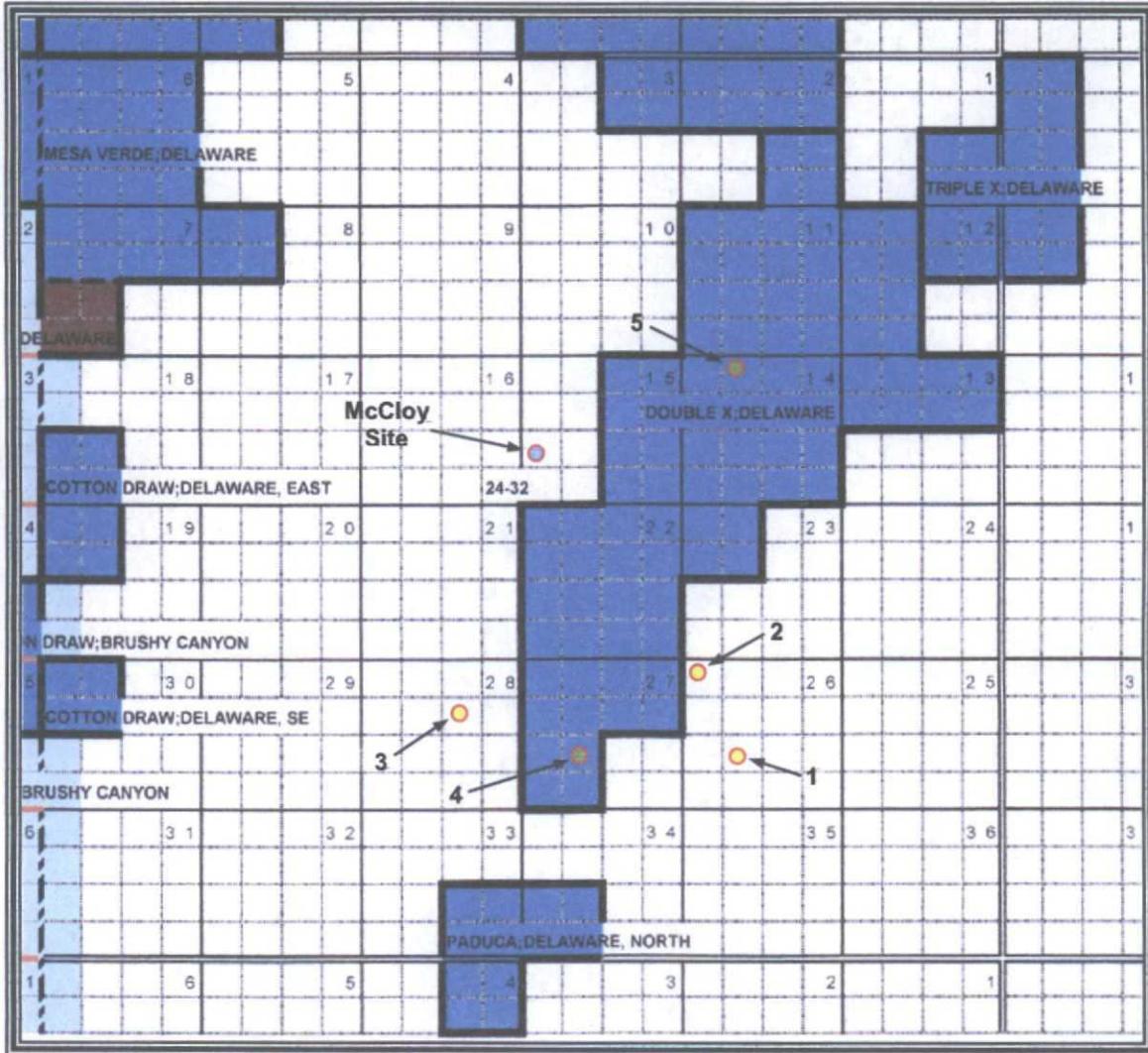
PLSS Search:

Township: 24S

Range: 32E

McCloy SWD Well No.1 – Pool Map
 (Attachment to NMOCD Form C-108, Application for Authority to Inject.)

DELAWARE FORMATION POOLS IN SUBJECT AREA



The proposed McCloy SWD site is not underlain by any existing Delaware Pool.

Other Delaware SWDs in the Area:

1. COG Operating, LLC – Gold Coast 26 Federal SWD No.1 – Sec.26, T24S-R32E
2. Yates Petroleum – Jackson Federal No.1 SWD – Sec.26, T24S-R32E
3. Yates Petroleum – Allen B Federal No.2 SWD – Sec.28, T24S-R32E
4. Exxon A Federal No.2 SWD – Sec.27, T24S-R32E
5. MCI Operating - Jennings Federal No.1 SWD – Sec.14, T24S-R32E

C-108 ITEM X – LOGS and AVAILABLE TEST DATA

A log strip from the Federal 'CG' 22 No.1, API No.30-025-8753,
located in F-22-24S-32E is attached.

This well is approximately 0.8 miles south of the proposed SWD
and the entire subject interval is represented.

SIMULTANEOUS
 COMPENSATED NEUTRON
 LITHO DENSITY

COMPANY MARALO, INC.		WELL 242811	
FEDERAL CG #221 11		FIELD DOUBLE \ OELAVARE (CHERRY CANYON)	
COUNTY LEA		STATE NEW MEXICO	
LOCATION 1980' FNL.		Other Services: DLL	
LAT SERIAL NO 22		RANGE 32-E	
Job No: G.L.		Elev: 3598.8	
Ed From: K.B.		Elev: 3505.8	
Sched From: K.B.		Elev: 3505.8	
		Elev: 3598.8	

The well name, location and borehole reference data were furnished by the customer.

RUN NO	ONE	Type Log	Depth
Service Order No.	415711		
Program Type No.	76.2		
Fluid Level	FULL		
EQUIPMENT DATA			
Module	208		
Telemetry Cart	1234		
Dens. Cart.	800		
Dens. Skid	1730		
Dens. Sonde	1974		
Dens. Source	6472		
Dens. Calibrator			
Neut. Cart.	442		
Neut. Source	535		
Neut. Calibrator	4207		
CR Cart	419		
Commodities	Type BOWSPRING/CALIPER		
Enter Spring	No. 2		
Standard			
In line or None	S. O - inches ECCENT		

All interpretations are opinions based on inference from electrical or other measurements and we cannot, and do not guarantee the accuracy or correctness of any interpretations and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs, damages or expenses incurred or sustained by anyone resulting from any interpretation made by any of our officers, agents or employees. These interpretations are also subject to our General Terms and Conditions as set out in our current Price Schedule.

AFTER SURVEY TOOL CHECK SUMMARY

PERFORMED: 84/10/15
 PROGRAM FILE: LDT (VERSION 26.2 84/08/05)

CNTH TOOL CHECK

JIG
 BEFORE AFTER
 NPHT 2.124 2.121

POROSITY CHANGE (LIME): -.000

LDTG TOOL CHECK

DRS SONDE NUMBER : 1974
 NUCLEAR SERVICE CARTRIDGE NUMBER : 800
 POWERED DETECTOR HOUSING NUMBER : 1730
 POWERED GAMMA-GAMMA DETECTOR NUMBER : 1730
 LDT LOGGING SOURCE NUMBER : 6472
 LBT CALIBRATION MODE : HATE
 MUD DENSITY : 9.90000

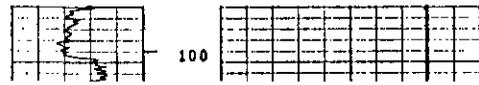
BACKGROUND MEASURED			
	BEFORE	AFTER	UNITS
LL	17.00	17.00	CPS
LU	66.37	66.12	CPS
LS	50.18	50.06	CPS
LITH	5.085	5.09	CPS
SS1	13.21	13.38	CPS
SS2	9.085	9.09	CPS

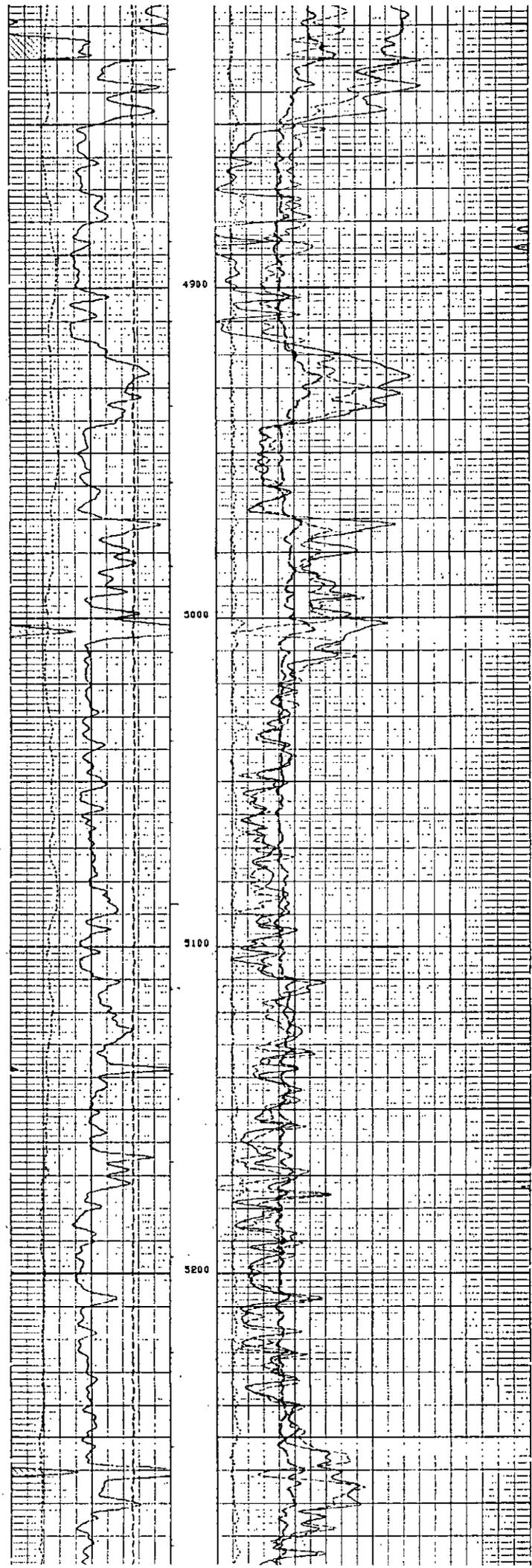
FILE 13 15-OCT-84 01:20

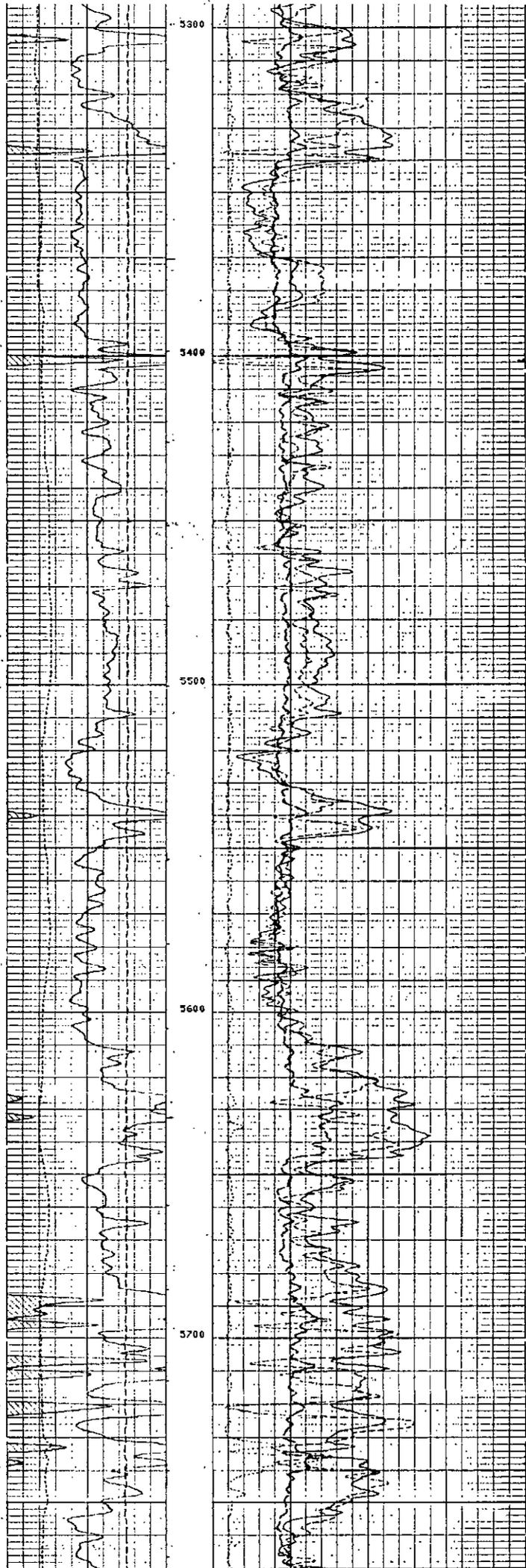
CHANGED PARAMETERS

NAME	VALUE	UNIT	DEPTH (F)	NAME	VALUE	UNIT	DEPTH (F)
DHS	CASE		1100.0				
GR (GAPI)	0.0	200.00					
GR (GAPI)	-100.0	100.00		NPHT	.30000		-1.1000

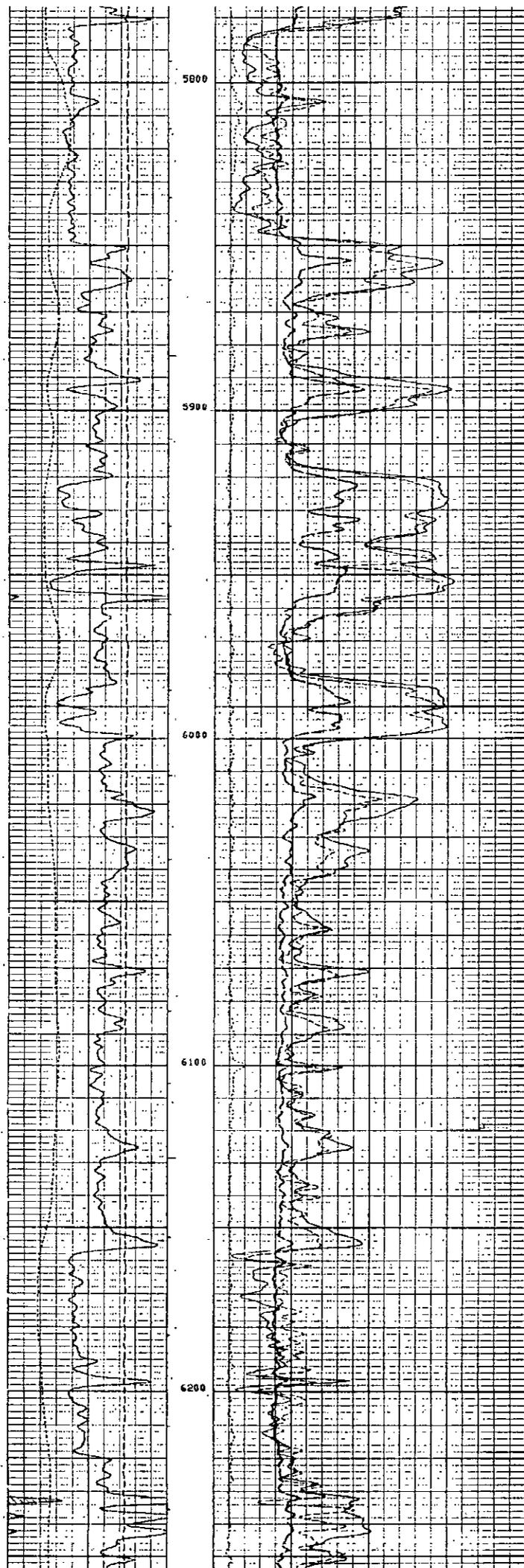
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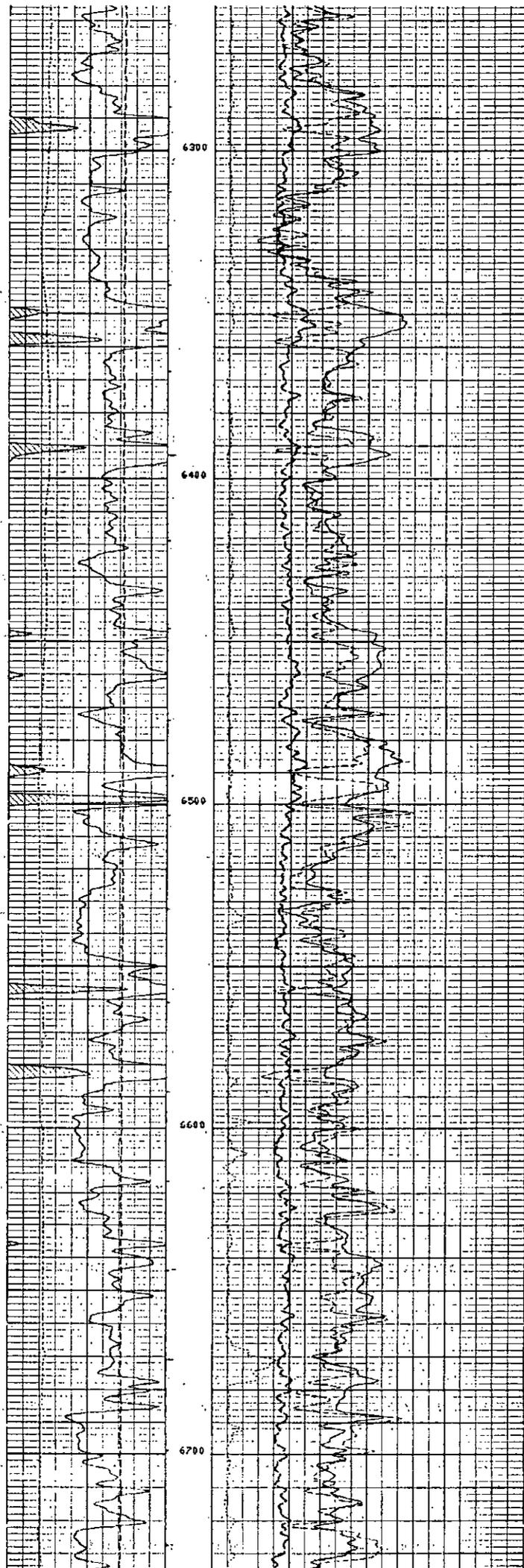


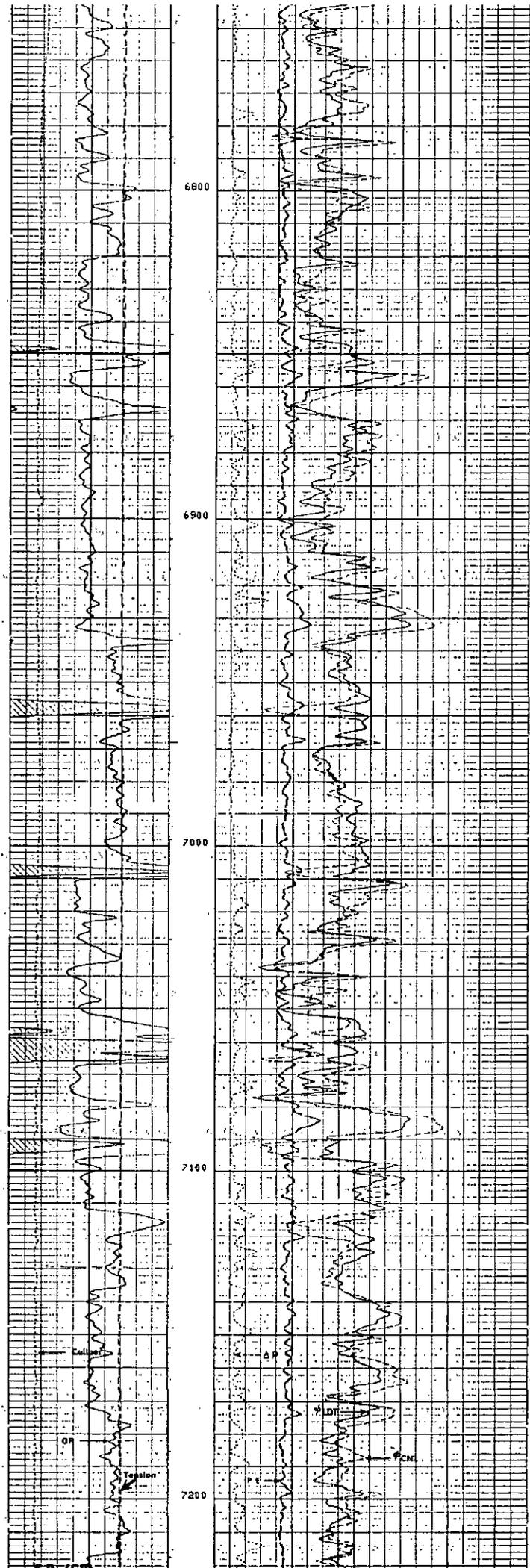




Compressed interval
per settlement







C-108 - Item VII.4

Water Analysis - Disposal Zone - DELAWARE

(Representative of Delaware Formation Water in Area)

WATER ANALYSIS REPORT

Company : YATES PET.
 Address : ARTESIA
 Lease : MEDANO BA V A
 Well : 1
 Sample Pt. : WELLHEAD

Date : 10-22-90
 Date Sampled : 10-19-90
 Analysis No. : 1

ANALYSIS		mg/L	* meq/L	
1.	pH	7.1		
2.	H2S	POS		
3.	Specific Gravity	1.085		
4.	Total Dissolved Solids	115832.4		
5.	Suspended Solids	NR		
6.	Dissolved Oxygen	NR		
7.	Dissolved CO2	NR		
8.	Oil In Water	NR		
9.	Phenolphthalein Alkalinity (CaCO3)			
10.	Methyl Orange Alkalinity (CaCO3)			
11.	Bicarbonate	HCO3 207.0	HCO3	3.4
12.	Chloride	Cl 68799.0	Cl	1940.7
13.	Sulfate	SO4 1750.0	SO4	36.4
14.	Calcium	Ca 1480.0	Ca	73.9
15.	Magnesium	Mg 268.2	Mg	22.1
16.	Sodium (calculated)	Na 43328.2	Na	1884.7
17.	Iron	Fe 0.0		
18.	Barium	Ba 0.0		
19.	Strontium	Sr 0.0		
20.	Total Hardness (CaCO3)	4800.0		

PROBABLE MINERAL COMPOSITION

*milli equivalents per Liter	Compound	Eqiv wt	X meq/L	= mg/L
74: *Ca <----- *HCO3	Ca (HCO3)2	81.0	3.4	275
----- /----->	CaSO4	68.1	36.4	2480
22: *Mg -----> *SO4	CaCl2	55.5	34.0	1898
----- <-----/	Mg (HCO3)2	73.2		
1885: *Na -----> *Cl	MgSO4	60.2		
+-----+	MgCl2	47.6	22.1	1050
Saturation Values Dist. Water 20 C	NaHCO3	84.0		
CaCO3 13 mg/L	Na2SO4	71.0		
CaSO4 * 2H2O 2090 mg/L	NaCl	58.4	1884.7	110139
BaSO4 2.4 mg/L				

REMARKS:

Petrolite Oilfield Chemicals Group

Respectfully submitted,
 L MALLETT

C-108 -- Item VII.4

Water Analysis - Source Water – BONE SPRING



Requested by: T. Ratliff

Laboratory Analysis
Endurance
Jazzmaster 17 State #4H

Sample Date: 1/31/2014
Lea Co. NM

		Water Analysis Measurements		Cations (+)		Anions (-)	
	mg/L		mg/L		mg/L		mg/L
Oxygen (mg/L)	1.00	Oil in Water (ppm)	n/a	Barium (Ba)	0	Carbonate (CO ₃)	0
Carbon Dioxide (mg/L)	699.16	Specific Gravity	1.150	Calcium (Ca)	16,440	Bicarbonate (HCO ₃)	36,600
Hydrogen Sulfide (mg/L)	0.0	Total Dissolved Solids (TDS)		Magnesium (Mg)	380	Chloride (mg/L)	118,520
pH	5.7	(mg/L) Ca	189,969	Sodium (Na) Ca	54,270	Sulfate (SO ₄)	319
Temperature °F	73	Total Hardness (mg/L)	18,000	Iron (Fe)	3.00		
				Manganese (Mn)	0.00		

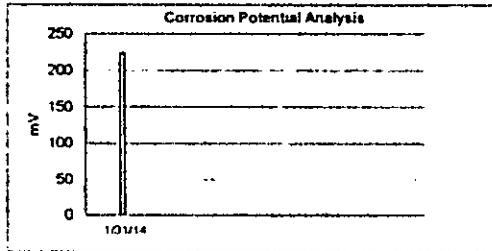
Scaling Potential: Stiff Davis Scale Indicator (SDI)

	1/31/2014								
80° F	0.1								
120° F	-								
200° F	-								

Negative SDI = no scaling potential Positive SDI = scaling potential (scale can form and precipitate) SDI close to zero = borderline scaling potential

Corrosion Potential: ORP Analysis (mV)

1/31/2014									
224.1									



Negative numbers indicate the potential for severe corrosion.

Red & Negative Corrosion
 Yellow & Positive Scale

C-108 - Item XI

Water Wells Within One Mile

EMED OCD
OCT 27 P 3:30

AFFIRMATIVE STATEMENT

State Engineer's records indicate there are three (3) water wells within the area of review. (Water well locations are shown on the AOR map.)

On October 17, 2014, Mr. Ruben Velasquez of Owl SWD Operating, LLC conducted a foot search and was accompanied by employees of the McCloy Ranch. The ranch personnel stated that the only wells they knew of were plugged and abandoned. The State Engineer database showed two of the wells on McCloy Ranch however, ranch personnel indicated a third – all three are shown on an aerial overview shot, shown below.

The third well indicated by State Engineer's records in Section 10 was not located.

This information and the photos were emailed to me by Mr. Velasquez on 10/21/2014.


Ben Stone

Two of the three abandoned water wells on McCloy Ranch.

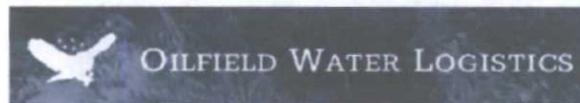
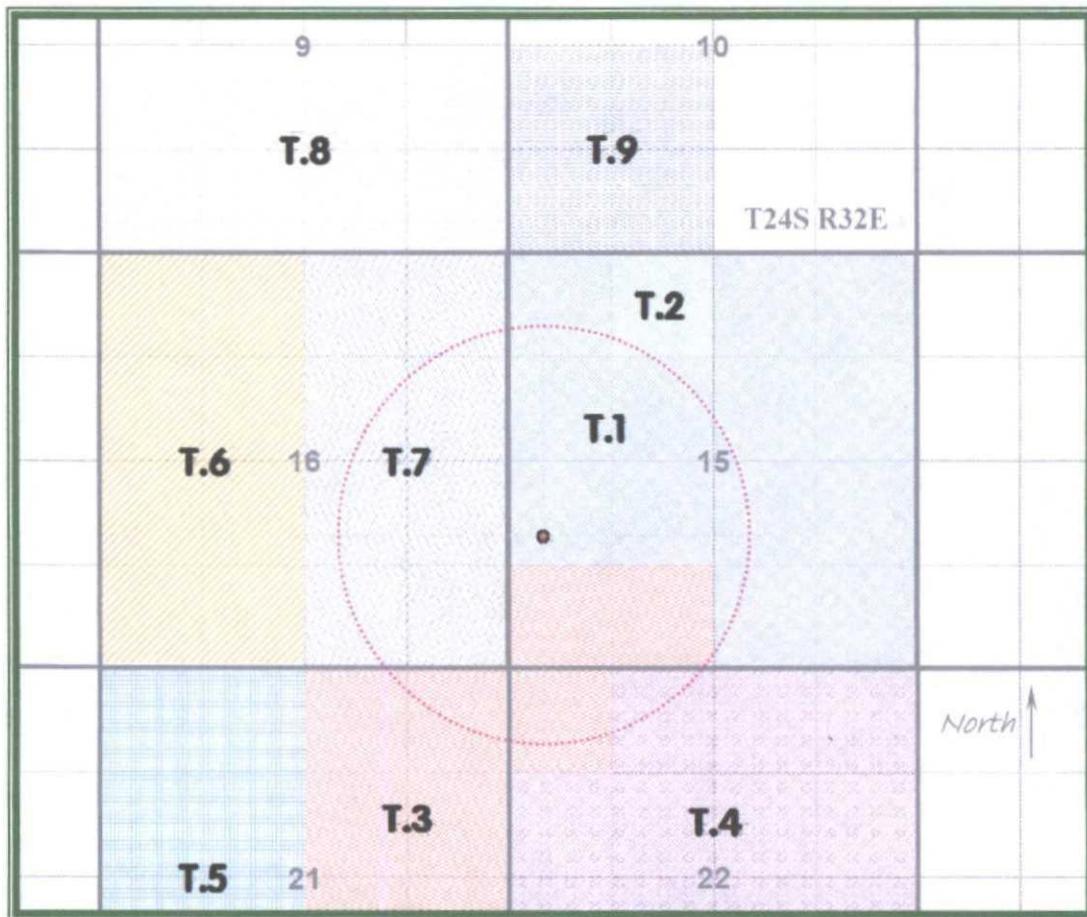


Aerial overview of ranch showing three abandoned water well locations.



McCloy SWD Well No.1 - Leasehold Plat

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



LEGEND

- T.1 – NMNM-0039880 – Chevron USA, Inc.
- T.2 – NMNM-113964 – Devon Energy Production Company, LP
- T.3 – NMNM-029694 – ExxonMobil Corporation
- T.4 – NMLC-0062269A - Apache Corporation, Chisos LTD, others
- T.5 – NMNM-016353 - ExxonMobil Corporation
- T.6 – V0-4095-0000 – Yates Petroleum Corporation
- T.7 – V0-4095-0002 – Devon Energy Production Company, LP
- T.8 – NMNM-055953 – EOG Resources, Inc.
- T.9 – NMNM-119276 – Devon Energy Production Company, LP

Township 24 South Range 32 East of the New Mexico Principal Meridian, New Mexico

County: Lea - 025

BLM Field Office: Carlsbad

BUREAU OF LAND MANAGEMENT
STATUS OF PUBLIC DOMAIN
LAND AND MINERALS



MTP

T24S R32E

Entire Township included
EO Wdl NM 1 Pot Res 6 (3/11/1926)
CI of Public Lands NM 0560202 (CI No 30-06-01)

NOTE: The Serial Numbers displayed are in the Bureau's LR2000 system format. If there is a zero in the 7th position (from the right), the serial number has a "prefix" zero; example NM 002345. If there is not a zero in the 7th position (from the right) then the serial number does not have a "prefix" zero; example NM 022345.



1 inch = 30 chains
1 : 23,760

CAVEAT STATEMENT
This plat is the Bureau's Record of Title, and should be used only as a graphic display of the township survey data. Records hereon do not reflect title changes which may have been affected by lateral movements of rivers or other bodies of water. Refer to the cadastral surveys for official survey information.

T 24 S
R 32 E
NMPM

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

SURFACE OWNER

- 1 McCLOY RANCH (USPS Certified Mail)
Attn: Mark McCloy
P.O. Box 1076
Jal, NM 88252-1076

OFFSET MINERALS LESSEES and OPERATORS (All Notified via USPS Certified Mail)

BLM Lease NMNM-0039880

Lessee

- 2 CHEVRON USA, INC.
P.O. Box 1635
Houston, TX 77251-1635

BLM LeaseS NMNM-113964; NMNM-119276

Lessee

- 3 DEVON ENERGY PRODUCTION CO., LP
333 W. Sheridan Avenue
OKC, OK 73102-5010

BLM Leases NMNM-029694; NMNM-016353

Lessee

- 4 EXXONMOBIL CORPORATION
P.O. Box 4358
Houston, TX 77210-4358

BLM Lease NMLC-0062269A

Lessees

- 5 APACHE CORPORATION
303 Veterans Airpark Lane, Ste.3000
Midland, TX 79705
- 6 CHISOS, LTD
670 Dona Ana Road SW
Deming, NM 88030
- 7 CROSS BORDER RESOURCES, INC.
2515 McKinney Ave., Ste.900
Dallas, TX 75201-1945
- 8 ***Operators***
MCI OPERATING OF NM, LLC
P.O. Box 471
Denver City, TX 79323

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

BLM Lease NMLC-0062269A (cont.)

Operators

- 9 ROBERT H. FORREST JR, OIL LLC
609 Elora Drive
Carlsbad, NM 88220

State Lease V0-4095-0000

Lessee

- 10 YATES PETROLEUM CORPORATION
105 S. 4th Street
Artesia, NM 88210

State Lease V0-4095-0002

Lessee

DEVON ENERGY PRODUCTION CO., LP
333 W. Sheridan Avenue
OKC, OK 73102-5010

BLM Lease NMNM-055953

Lessee

- 11 EOG RESOURCES, INC.
P.O. Box 2267
Midland, TX 79702-2267

OFFSET MINERALS OWNERS (All Notified via USPS Certified Mail)

- 12 U.S. DEPARTMENT OF INTERIOR
Bureau of Land Management
Oil & Gas Division
620 E. Greene St.
Carlsbad, NM 88220
- 13 NEW MEXICO STATE LAND OFFICE
Commissioner of Public Lands
310 Old Santa Fe Trail
Santa Fe, NM

REGULATORY

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

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

REGULATORY (cont.)

NEW MEXICO OIL CONSERVATION DIVISION (FedEx'ed copy)
811 S. First St.
Artesia, NM 88210

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



October 8, 2014

NOTIFICATION TO INTERESTED PARTIES
via U.S. Certified Mail

To Whom It May Concern:

Owl SWD Operating, LLC, Dallas, Texas, has made application to the New Mexico Oil Conservation Division to complete for salt water disposal its McCloy SWD Well No.1. The proposed SWD will be for commercial use. As indicated in the notice below, the well will be located in Section 15, Township 24 South, Range 32 East in Lea County, New Mexico.

The disposal interval will be through openhole from 4850 feet to 7300 feet in the Delaware formation.

Following is the legal notice published in the Hobbs News-Sun, Hobbs, New Mexico on or about October 10, 2014.

LEGAL NOTICE

Owl SWD Operating, LLC, 8214 Westchester Dr., Ste.850, Dallas, TX 75255 is filing Form C-108 (Application for Authority to Inject) with the New Mexico Oil Conservation Division for administrative approval to complete for salt water disposal its McCloy SWD Well No.1. The well will be drilled 1695' FSL & 430' FWL in Section 15, Township 24 South, Range 32 East in Lea County, New Mexico. The commercial SWD well will be used dispose of area operators' produced water into the Delaware formation through an openhole completion from a top of 4850 feet to a maximum depth of 7300 feet. Maximum injection pressure will be 970 psi with a maximum rate limited only by such pressure. The operator may conduct a step rate test in the future if it is determined that higher pressures are necessary.

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.

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, 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 Owl SWD Operating, LLC

Cc: Application File

C-108 - Item XIV

Proof of Notice (Certified Mail Receipts)

7014 0510 0001 2766 1911

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McCLOY RANCH
 Attn: Mark McCloy
 P.O. Box 1076
 Jal, NM 88252-1076

PS Form 3800, June 2013

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 1400 Smith Street
 Houston, TX 77002-7327

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DEVON ENERGY PRODUCTION COMPANY, LP
 333 W. Sheridan Ave.
 OKC, OK 73102

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 Houston, TX 77210-4358

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C-108 - Item XIV

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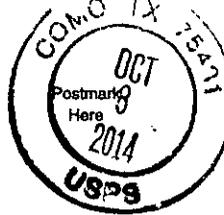
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APACHE CORPORATION
 303 Veterans Airpark Lane, Ste. 3000
 Midland, TX 79705

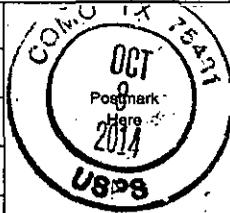
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CROSS BORDER RESOURCES, INC.
 2515 McKinney Ave., Ste. 900
 Dallas, TX 75201-1945

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CHISOS, LTD
 670 Dona Ana Road SW
 Deming, NM 88030

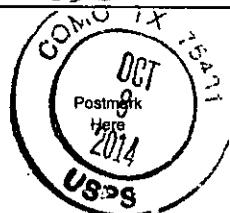
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 P.O. Box 471
 Denver City, TX 79323

C-108 - Item XIV

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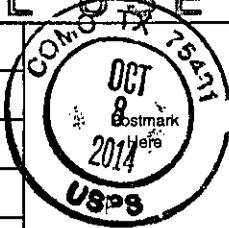
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ROBERT H. FORREST JR, OIL LLC
 609 Elora Drive
 Carlsbad, NM 88220

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 P.O. Box 2267
 Midland, TX 79702-2267

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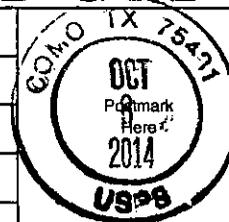
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 105 S. 4th Street
 Artesia, NM 88210

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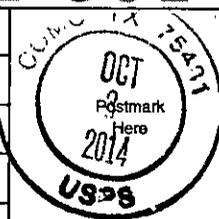
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 Oil & Gas Division
 310 Old Santa Fe Trail
 Santa Fe, NM

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Bureau of Land Management
 Carlsbad Field Office - O&G Division
 620 E. Greene St.
 Carlsbad, NM 88220

PS Form 3800
OFFICIAL USE

C-108 - Item XIV

Proof of Notice – Legal Notice
Newspaper of General Circulation

LEGAL NOTICE October 11, 2014

Owl SWD Operating, LLC.
8214 Westchester Dr.,
Ste.850, Dallas, TX 75255
is filing Form C-108
(Application for Authority to
Inject) with the New Mexico
Oil Conservation Division for
administrative approval to
complete for salt water
disposal its McCloy SWD
Well No.1. The well will be
drilled 1695' FSL & 430'
FWL in Section 15,
Township 24 South, Range
32 East in Lea County, New
Mexico. The commercial
SWD well will be used
dispose of area operators'
produced water into the
Delaware formation through
an openhole completion
from a top of 4850 feet to a
maximum depth of 7300
feet. Maximum injection
pressure will be 970 psi with
a maximum rate limited only
by such pressure. The
operator may conduct a step
rate test in the future if it is
determined that higher
pressures are necessary.

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.
#29473

The above is the "Proof Copy" sent from the Hobbs New-Sun.
The affidavit of publication will be forwarded as soon as it is received.

Affidavit of Publication

STATE OF NEW MEXICO
COUNTY OF LEA

RECEIVED OGD
2014 OCT 21 P 3:04

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
October 11, 2014
and ending with the issue dated
October 11, 2014.



Publisher

Sworn and subscribed to before me this
11th day of October 2014.



My commission expires
January 14, 2015
(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

LEGAL NOTICE
October 11, 2014

Owl SWD Operating, LLC,
8214 Westchester Dr.,
Ste. 850, Dallas, TX 75255
is filing Form C-108
(Application for Authority to
Inject) with the New Mexico
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disposal its McCloy SWD
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pressure will be 970 psi with
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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.
#29473

67104420

00145676

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



C-108 Review Checklist: Received 10/14/14 * Protected - NMSLO / COG / RMA - Cross Border
 Add. Request: April/2015 Reply Date: _____ Suspended: 10/23/14 [Ver 15]

ORDER TYPE: WFX / PMX / SWD Number: 1549 Order Date: 05/05/15 Legacy Permits/Orders: NA

Well No. 1 Well Name(s): McClay SWD

API: 30-025-Pending Spud Date: TBD New or Old: New (UIC Class II Primacy 03/07/1982)

Footages 1650 FSL / 430 FWL Lot - or Unit L Sec 15 Tsp 245 Rge 32E County Lea

General Location: NE of Junction 128 & 1/27mi W of Sal (McClay Ranch) Pool: SWD; Delaware / SWD; Bell Canyon - Cherry Canyon Pool No.: 96802

BLM 100K Map: Sal Operator: OWL SWD LLC OGRID: 308339 Contact: B. Stone / SOS consulting

COMPLIANCE RULE 5.9: Total Wells: 8 Inactive: 0 Fincl Assur: OK Compl. Order? No IS 5.9 OK? Yes Date: 05/05/15

WELL FILE REVIEWED Current Status: No APD or well file; *original proposed interval 4850' to 7300' / open-hole

WELL DIAGRAMS: NEW: Proposed or RE-ENTER: Before Conv. After Conv. Logs in Imaging: NA

Planned Rehab Work to Well: * [New well design submitted 04/02/2015 - cased & perfed 5400' to 5700']

Well Construction Details	Sizes (in) Borehole / Pipe	Setting Depths (ft)	Stage Tool	Cement Sx or Cf	Cement Top and Determination Method
Planned <input checked="" type="checkbox"/> or Existing <input type="checkbox"/> Surface	17 1/2 / 13 3/8	0 to 1060		750	Circulate to surf.
Planned <input checked="" type="checkbox"/> or Existing <input type="checkbox"/> Intern/Prod	12 1/4 / 9 5/8	0 to 4650	None	1460	Circulate to surf.
Planned <input checked="" type="checkbox"/> or Existing <input type="checkbox"/> Intern/Prod	8 3/4 / 7	0 to 5730	3300' DI tool	425 not enough - only lead	Circulate to surf.
Planned <input type="checkbox"/> or Existing <input type="checkbox"/> Prod/Liner	-	-	MISSING	-	-
Planned <input type="checkbox"/> or Existing <input type="checkbox"/> Liner	-	-	-	-	-
Planned <input checked="" type="checkbox"/> or Existing <input type="checkbox"/> OH / PERF	8 3/4 / 7	* 5400 to 5700	Inj Length 300	Completion/Operation Details:	
Injection Lithostratigraphic Units:	Depths (ft)	Injection or Confining Units	Tops	Drilled TD	PBTD
Adjacent Unit: Litho. Struc. Por.		Salado		NEW TD	NEW PBTD
Confining Unit: Litho. Struc. Por.	~ 75'	DMG top	4850	NEW Open Hole	or NEW Perfs
Proposed Inj Interval TOP:	5400	Bell Canyon	4925	Tubing Size	4 1/2 in. Inter Coated?
Proposed Inj Interval BOTTOM:	5700	Cherry Canyon	5690	Proposed Packer Depth	NA ft
Confining Unit: Litho. Struc. Por.	~ 1660'	Brushy Canyon	7360	Min. Packer Depth	5300 (100-ft limit)
Adjacent Unit: Litho. Struc. Por.		Bob Spring		Proposed Max. Surface Press.	1080 psi
AOR: Hydrologic and Geologic Information				Admin. Inj. Press.	1080 (0.2 psi per ft)
POTASH: R-111-P	No Noticed? NA	BLM Sec Ord	No WIPP Noticed? NA	Salt/Salado T:	B: NW: Cliff House fm NA
FRESH WATER: Aquifer	Alluvial + Santa Rosa	Max Depth	550'	HYDRO AFFIRM STATEMENT By Qualified Person	
NMOSE Basin:	Carlsbad	CAPITAN REEF: thru	adj	NA	No. Wells within 1-Mile Radius? <u>1 active</u> FW Analysis <u>No</u>
Disposal Fluid: Formation Source(s)	Bone Spring / Delaware	Analysis?	Yes/BS	On Lease	Operator Only or Commercial
Disposal Int: Inject Rate (Avg/Max BWPD)	10,000 / 15,000	Protectable Waters?		Source:	1990 Pct/location System: Closed or Open
HC Potential: Producing Interval?	No	Formerly Producing?	No	Method: Logs/DST/P&A/Other	Hearing Exhibits for P&A of SWD in area
AOR Wells: 1/2-M Radius Map?	Yes	Well List?	Yes	Total No. Wells Penetrating Interval:	Horizontals?
Penetrating Wells: No. Active Wells	0	Num Repairs?	0	on which well(s)?	Diagrams? NA
Penetrating Wells: No. P&A Wells	0	Num Repairs?	0	on which well(s)?	P&A well too shallow for 5400' Diagrams? Yes
NOTICE: Newspaper Date	10/11/14	Mineral Owner	BLM / retained	Surface Owner	McClay Ranch / N. Date 10/8/14
RULE 26.7(A): Identified Tracts?	Yes	Affected Persons:	10 parties + BLM + SLO	Mark McCloy	N. Date 10/8/14

For New Interval

Order Conditions: Issues: Hydrocarbon potential; salinity - 1990 sample from?; casing; fresh-water well

Add Order Cond: Mudlog / salinity calc / sample C-03528 and submit to SF office



WELL RECORD & LOG

OFFICE OF THE STATE ENGINEER

www.ose.state.nm.us

4-23-12

Corrected well log

1. GENERAL AND WELL LOCATION	POD NUMBER (WELL NUMBER) C-03528-POD1				OSE FILE NUMBER(S) C-03528-POD1									
	WELL OWNER NAME(S) MARK & ANNETTE MCCLOY				PHONE (OPTIONAL) 432-940-4459									
	WELL OWNER MAILING ADDRESS PO BOX 1076				CITY JAL		STATE NM		ZIP 88252					
	WELL LOCATION (FROM GPS)		DEGREES LATITUDE 32		MINUTES 13		SECONDS 29.00 N		* ACCURACY REQUIRED: ONE TENTH OF A SECOND					
		LONGITUDE 103		39		44.60 W		* DATUM REQUIRED: WGS 84						
DESCRIPTION RELATING WELL LOCATION TO STREET ADDRESS AND COMMON LANDMARKS <i>Coordinates Based on map (Non-GPS)</i>														
2. OPTIONAL	(2.5 ACRE) NW 1/4		(10 ACRE) NW 1/4		(40 ACRE) NW 1/4		(160 ACRE) NE 1/4		SECTION 15					
	SUBDIVISION NAME <i>Located on</i>				LOT NUMBER		TOWNSHIP 24		RANGE 32					
	HYDROGRAPHIC SURVEY				MAP NUMBER		BLOCK NUMBER		UNIT/TRACT					
3. DRILLING INFORMATION	LICENSE NUMBER WD1682		NAME OF LICENSED DRILLER JOHN NORRIS				NAME OF WELL DRILLING COMPANY HUNGRY HORSE, LLC							
	DRILLING STARTED 2-20-12		DRILLING ENDED 3-12-12		DEPTH OF COMPLETED WELL (FT) 541		BORE HOLE DEPTH (FT) 541		DEPTH WATER FIRST ENCOUNTERED (FT) 133					
	COMPLETED WELL IS: <input type="checkbox"/> ARTESIAN <input type="checkbox"/> DRY HOLE <input checked="" type="checkbox"/> SHALLOW (UNCONFINED)				STATIC WATER LEVEL IN COMPLETED WELL (FT)									
	DRILLING FLUID: <input type="checkbox"/> AIR <input checked="" type="checkbox"/> MUD <input type="checkbox"/> ADDITIVES - SPECIFY:													
	DRILLING METHOD: <input checked="" type="checkbox"/> ROTARY <input type="checkbox"/> HAMMER <input type="checkbox"/> CABLE TOOL <input type="checkbox"/> OTHER - SPECIFY:													
	DEPTH (FT)		BORE HOLE DIA. (IN)		CASING MATERIAL		CONNECTION TYPE (CASING)		INSIDE DIA. CASING (IN)		CASING WALL THICKNESS (IN)		SLOT SIZE (IN)	
	FROM	TO												
0	541	8 3/4		PVC		GLUED		6"		3/8		1/8		
4. WATER BEARING STRATA	DEPTH (FT)		THICKNESS (FT)		FORMATION DESCRIPTION OF PRINCIPAL WATER-BEARING STRATA (INCLUDE WATER-BEARING CAVITIES OR FRACTURE ZONES)						YIELD (GPM)			
	FROM	TO												
	133	152	19		SAND						UK			
METHOD USED TO ESTIMATE YIELD OF WATER-BEARING STRATA N/A										TOTAL ESTIMATED WELL YIELD (GPM)				

STATE ENGINEER'S OFFICE
ROSWELL
APR 30 11:41 AM 2012

FOR OSE INTERNAL USE

WELL RECORD & LOG (Version 6/9/08)

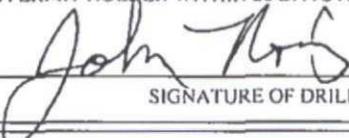
FILE NUMBER	C-3528	POD NUMBER	C-03528-POD1	TRN NUMBER	491386
LOCATION	24.32.15.2111				PAGE 1 OF 2

5. SEAL AND PUMP	TYPE OF PUMP: <input type="checkbox"/> SUBMERSIBLE <input type="checkbox"/> JET <input type="checkbox"/> NO PUMP - WELL NOT EQUIPPED <input type="checkbox"/> TURBINE <input type="checkbox"/> CYLINDER <input type="checkbox"/> OTHER - SPECIFY: UNKNOWN						
	ANNULAR SEAL AND GRAVEL PACK	DEPTH (FT)		BORE HOLE DIA. (IN)	MATERIAL TYPE AND SIZE	AMOUNT (CUBIC FT)	METHOD OF PLACEMENT
		FROM	TO				
		0	20	8 3/4	GROUT & CEMENT	8	TOP

6. GEOLOGIC LOG OF WELL	DEPTH (FT)		THICKNESS (FT)	COLOR AND TYPE OF MATERIAL ENCOUNTERED (INCLUDE WATER-BEARING CAVITIES OR FRACTURE ZONES)	WATER BEARING?
	FROM	TO			
	0	3	3	TOPSOIL	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
	3	18	15	CALICHE	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
	18	26	8	SAND	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
	26	133	107	RED CLAY	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
	133	152	19	SAND	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
	152	318	166	RED CLAY	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
	318	345	27	SAND	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
	345	384	39	RED CLAY AND ROCK	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
	384	418	34	SAND	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
	418	444	26	RED CLAY AND ROCK	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
	444	468	24	SAND	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
	468	500	32	RED CLAY	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
500	508	8	SAND	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	
508	541	33	RED CLAY AND ROCK	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	
				<input type="checkbox"/> YES <input type="checkbox"/> NO	
				<input type="checkbox"/> YES <input type="checkbox"/> NO	
				<input type="checkbox"/> YES <input type="checkbox"/> NO	

ATTACH ADDITIONAL PAGES AS NEEDED TO FULLY DESCRIBE THE GEOLOGIC LOG OF THE WELL.

7. TEST & ADDITIONAL INFO	WELL TEST	METHOD: <input type="checkbox"/> BAILER <input type="checkbox"/> PUMP <input type="checkbox"/> AIR LIFT <input type="checkbox"/> OTHER - SPECIFY: N/A
		TEST RESULTS - ATTACH A COPY OF DATA COLLECTED DURING WELL TESTING, INCLUDING START TIME, END TIME, AND A TABLE SHOWING DISCHARGE AND DRAWDOWN OVER THE TESTING PERIOD.
	ADDITIONAL STATEMENTS OR EXPLANATIONS:	

8. SIGNATURE	THE UNDERSIGNED HEREBY CERTIFIES THAT, TO THE BEST OF HIS OR HER KNOWLEDGE AND BELIEF, THE FOREGOING IS A TRUE AND CORRECT RECORD OF THE ABOVE DESCRIBED HOLE AND THAT HE OR SHE WILL FILE THIS WELL RECORD WITH THE STATE ENGINEER AND THE PERMIT HOLDER WITHIN 20 DAYS AFTER COMPLETION OF WELL DRILLING:	
		4-23-12
	SIGNATURE OF DRILLER	DATE

FOR OSE INTERNAL USE		WELL RECORD & LOG (Version 6/9/08)	
FILE NUMBER C-3528	POD NUMBER C-03528-P001	TRN NUMBER 491386	
LOCATION 24.32.15.2111			PAGE 2 OF 2

Locator Tool Report

General Information:

Application ID:29 Date: 04-03-2012 Time: 08:10:09

WR File Number: C-03528-POD1
Purpose: POINT OF DIVERSION

Applicant First Name: MARK & ANNETTE MCCLOY
Applicant Last Name: NEW STOCK WELL (COTTON PLACE)(WELL LOG LOCATION)

GW Basin: CARLSBAD
County: LEA

*(Based on Application
not Driller GPS)*

Critical Management Area Name(s): NONE
Special Condition Area Name(s): NONE
Land Grant Name: NON GRANT

PLSS Description (New Mexico Principal Meridian):

NW 1/4 of NW 1/4 of NW 1/4 of NE 1/4 of Section 15, Township 24S, Range 32E.

Coordinate System Details:

Geographic Coordinates:

Latitude: 32 Degrees 13 Minutes 29.0 Seconds N
Longitude: 103 Degrees 39 Minutes 44.6 Seconds W

Universal Transverse Mercator Zone: 13N

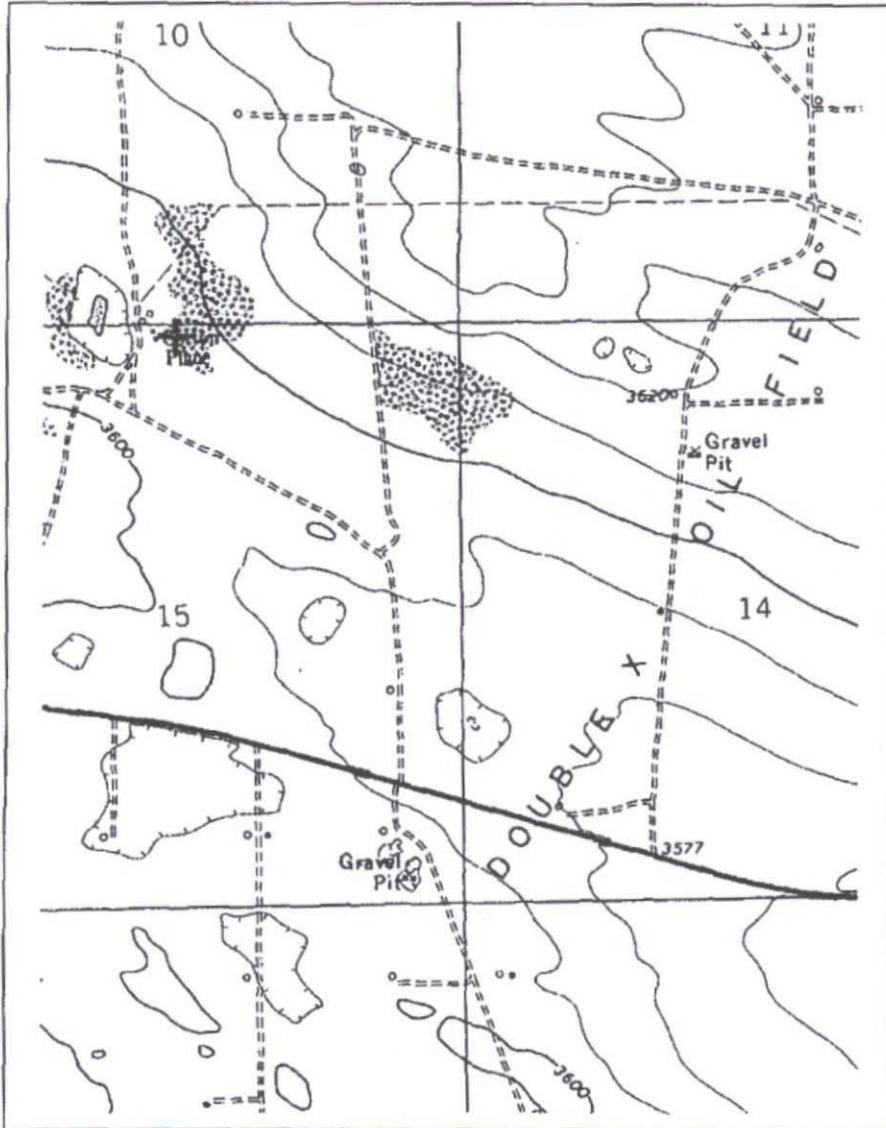
NAD 1983(92) (Meters)	N: 3,566,130	E: 626,040
NAD 1983(92) (Survey Feet)	N: 11,699,877	E: 2,053,934
NAD 1927 (Meters)	N: 3,565,928	E: 626,089
NAD 1927 (Survey Feet)	N: 11,699,215	E: 2,054,092

State Plane Coordinate System Zone: New Mexico East

NAD 1983(92) (Meters)	N: 135,982	E: 228,239
NAD 1983(92) (Survey Feet)	N: 446,136	E: 748,815
NAD 1927 (Meters)	N: 135,964	E: 215,686
NAD 1927 (Survey Feet)	N: 446,077	E: 707,631

NEW MEXICO OFFICE OF STATE ENGINEER

Locator Tool Report



WR File Number: C-03528-POD1 Scale: 1:19,970

Northing/Easting: UTM83(92) (Meter): N: 3,566,130 E: 626,040

Northing/Easting: SPCS83(92) (Feet): N: 446,136 E: 748,815

GW Basin: Carlsbad

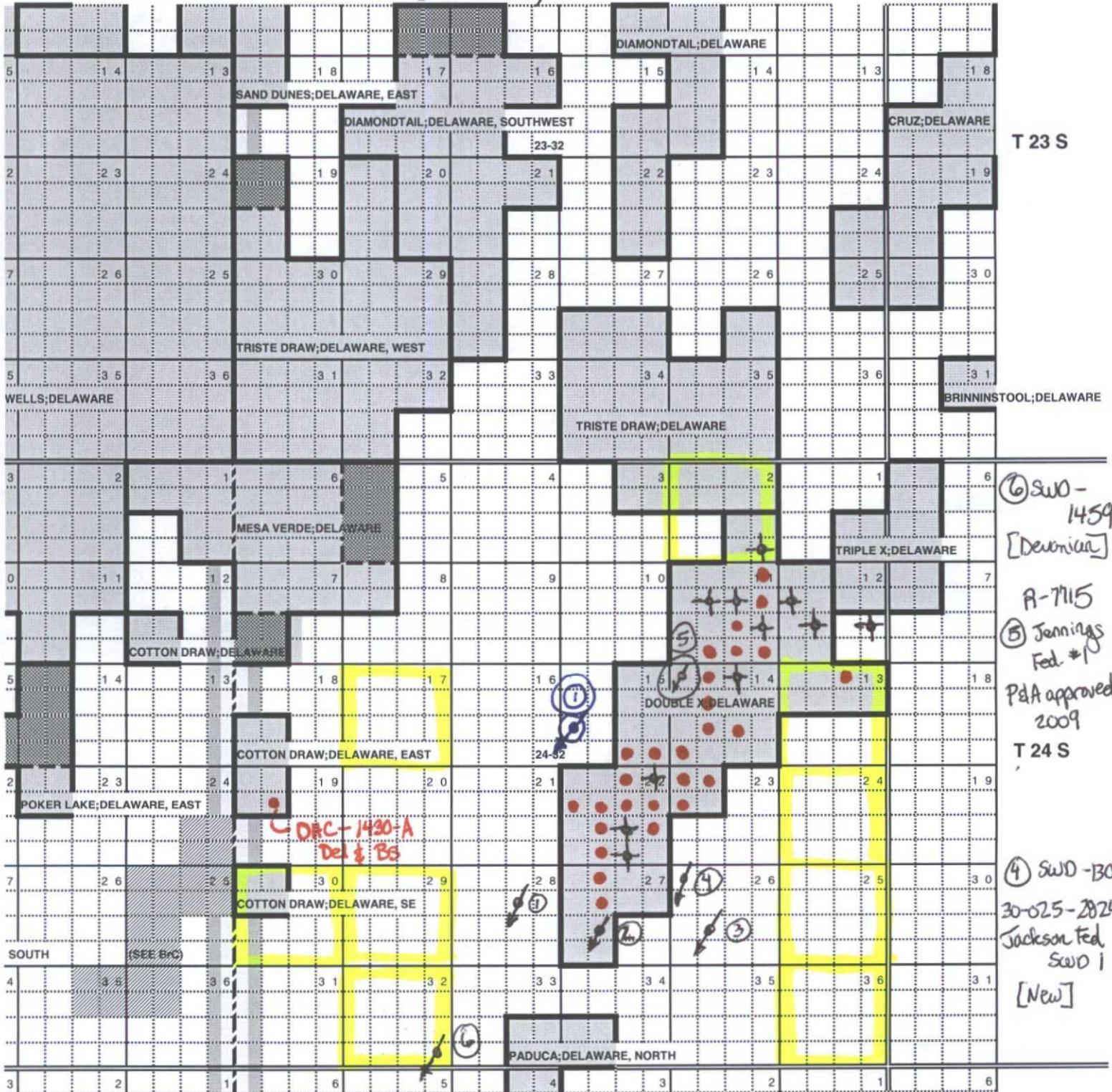
Numerous Horizontals Proposed: some Completions Proposed SWD

Double X - Delaware

- Bone Springs in Sec 25 (Devon); Sec 17 (COG); Sec. 32 (Devon); Sec 24 (COG)
- New Production in Sec 29 (BS/COG); Sec. 30 (BS/COG); Sec 32 (BS/Devon); Sec 36 (Vates)

① McClay SWD #1

- - Currently producing
- ✦ - P&A



- ⑥ SWD - 1459 [Devonian]
- R-7115
- ⑤ Jennings Fed #1 P&A approved 2009
- T 24 S
- ④ SWD - 1308 30-025-28242 Jackson Fed SWD 1 [New]

24S/32E

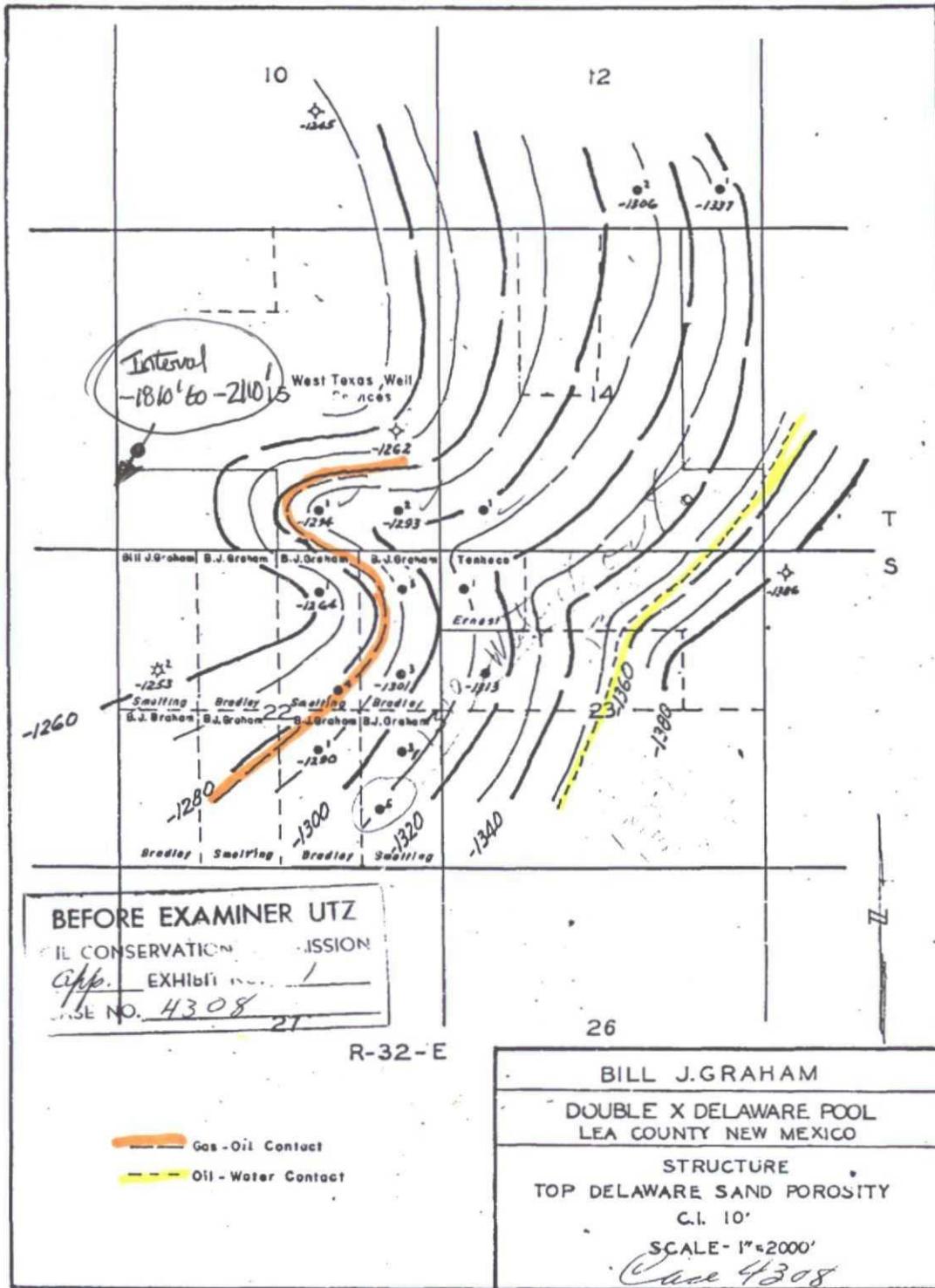
Active

SWD(s):

① SWD-1301
Allen B Fed SWD 1
30-025-28237
Del.: 5220' to 6460'

② R-7806
Exxon A Fed. 2
30-025-28202

③ SWD - 1391
Gold Coast 25 Fed SWD 1
Del: Bell Canyon
4900 to 7200



Hearing for US Smelting Fed SUD No. 5
 30-025-08161
 [Injection 1993 ~~is~~ ongoing]

- R-3927 / well started injection
 March 14, 1970