

DATE IN 10/14/2015	SUSPENSE	ENGINEER PRG	LOGGED IN 10/14/2015	TYPE SWD	APP NO. PMA1521255446
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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, Leascholders 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

*[Handwritten Signature]*

Agent for Owl SWD Operating, LLC 10/17/15

Title

Date

ben@sosconsulting.us

e-mail Address

-SWD 1605  
 -Owl SWD operating, LLC  
 308339  
 well  
 -Limestone SWD #2  
 30-025-pending

2015 OCT 19 AM 11:11

RECEIVED OCD

Pod  
 -SWD, Devonian  
 96101



October 15, 2015

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

Attn: Mr. David Catanach, Director

*Re: Application of Owl SWD Operating, LLC to permit for salt water disposal the proposed well Limestone SWD No.2 well, to be located in Section 12, Township 23 South, Range 34 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 for disposal in the undrilled Limestone SWD Well No.2.

Owl SWD Operating 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 October 14, 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 in this application. The 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 state minerals; the C-101 APD is in process at the Hobbs District Office of OCD.

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 are NO WELLS in the subject AOR.**  
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. **NONE.**
- 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. **Due to limited information in the immediate vicinity, geologic information is inferred from existing studies in the region.**
- IX. **Stimulation program – a conventional acid job may be conducted upon completion of the well.**
- \*X. **During drilling, mudlogging will ensure only Devonian interval is targeted. After drilling, logs will be run from TD to approximately 14,000' and will be submitted to the OCD. CBL logs will be run after setting casing.**
- \*XI. **There are NO domestic water wells within one mile of the proposed salt water disposal well.**
- 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 and ATTACHED. There are 15 offset lessees and/or operators within ½ mile and BLM & State minerals - all have been noticed.**
- 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: **10/17/2015**

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 (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.**

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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.

## **C-108 - Item III**

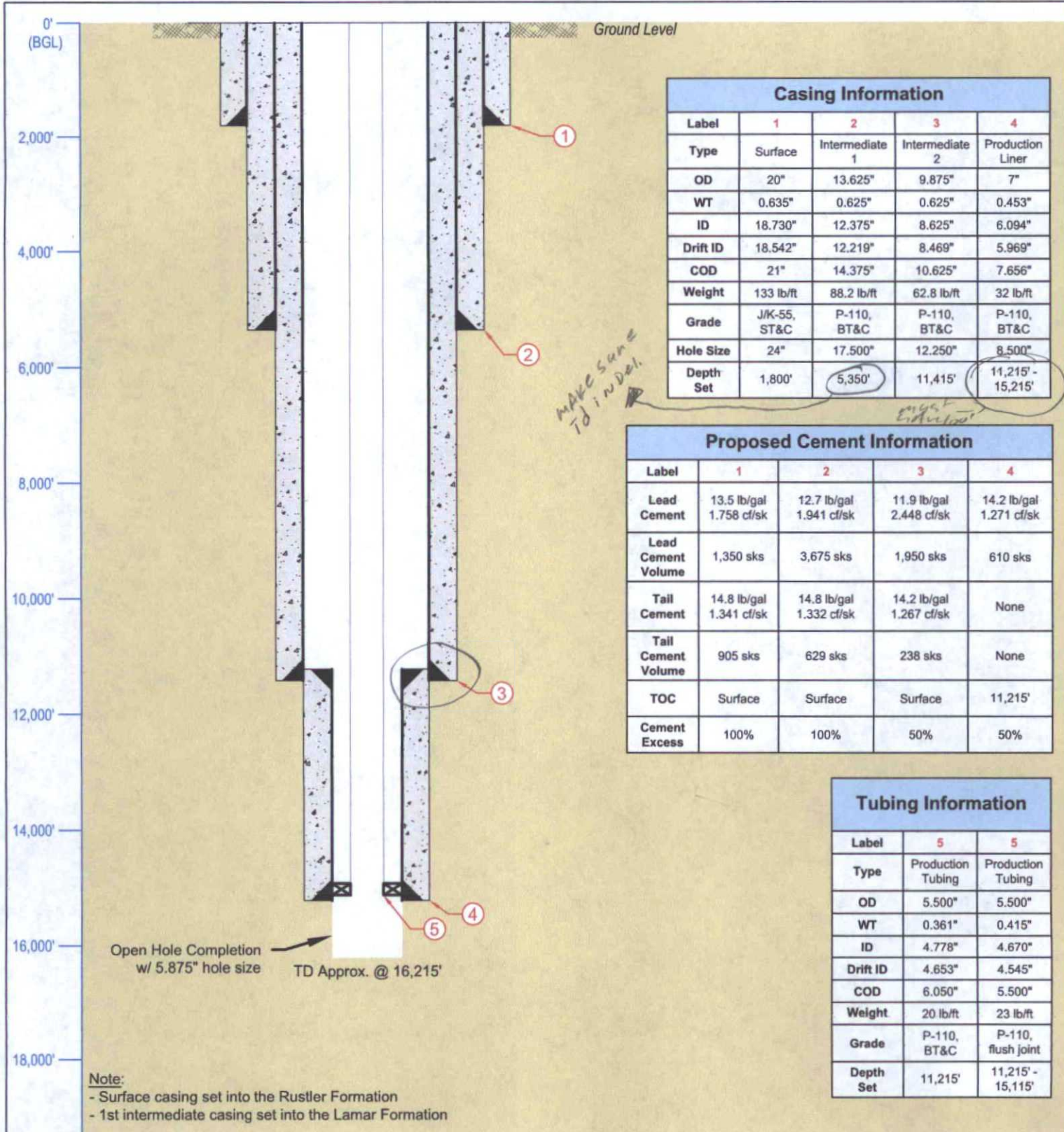
Subject Well Data

### **WELL SCHEMATIC**

#### **Proposed**

With Construction Data Detail

(Approved C-101 attached.)



## LONQUIST & CO. LLC

PETROLEUM ENGINEERS ENERGY ADVISORS

AUSTIN HOUSTON WICHITA CALGARY

Texas License F-8952

3345 Bee Cave Road, Suite 201  
Austin, Texas 78746  
Tel: 512.732.9812  
Fax: 512.732.9816

## OWL SWD Operating, Inc.

Country: USA

Survey/STR: 12-23S-34E

API No.: 30-025-

State ID No.:

Drawn: MMC

Rev No:

## Limestone SWD No. 2

State/Province: New Mexico

Site:

Field: Devonian

Project No: 1249

Reviewed: SLP

Notes:

County/Parish: Lea

Status: To Be Drilled

Ground Elevation:

Date: 9-22-15

Approved: SLP



APD Calculation Summary -  
C295:K384.

2nd Dia

20	surface csg in a	24	inch hole.	Design Factors				SURFACE	
Segment	#/ft	Grade	Coupling	Joint	Collapse	Burst	Length	Weight	
"A"	133.00	K 55	ST&C	5.23	1.51	1.02	1,800	239,400	
"B"							0	0	
w/8.4#/g mud, 30min Sfc Csg Test psig: 1,357				Tail Cmt	does not	circ to sfc.	Totals:	1,800	239,400
Comparison of Proposed to Minimum Required Cement Volumes									
Hole Size	Annular Volume	1 Stage Cmt Sx	1 Stage CuFt Cmt	Min Cu Ft	1 Stage % Excess	Drilling Mud Wt	Calc MASP	Req'd BOPE	Min Dist Hole-Cplg
24	0.9599	2255	3587	1804	99	10.60	1825	2M	1.50

3rd Dia

13 5/8	casing inside the	20		Design Factors				INTERMEDIATE	
Segment	#/ft	Grade	Coupling	Joint	Collapse	Burst	Length	Weight	
"A"	88.20	P 110	BUTT	4.58	1.52	1.31	5,350	471,870	
"B"							0	0	
w/8.4#/g mud, 30min Sfc Csg Test psig:							Totals:	5,350	471,870
The cement volume(s) are intended to achieve a top of				0	ft from surface or a			1800	overlap.
Hole Size	Annular Volume	1 Stage Cmt Sx	1 Stage CuFt Cmt	Min Cu Ft	1 Stage % Excess	Drilling Mud Wt	Calc MASP	Req'd BOPE	Min Dist Hole-Cplg
17 1/2	0.6578	4304	7971	3994	100	10.80	4249	5M	8.75

4th Dia

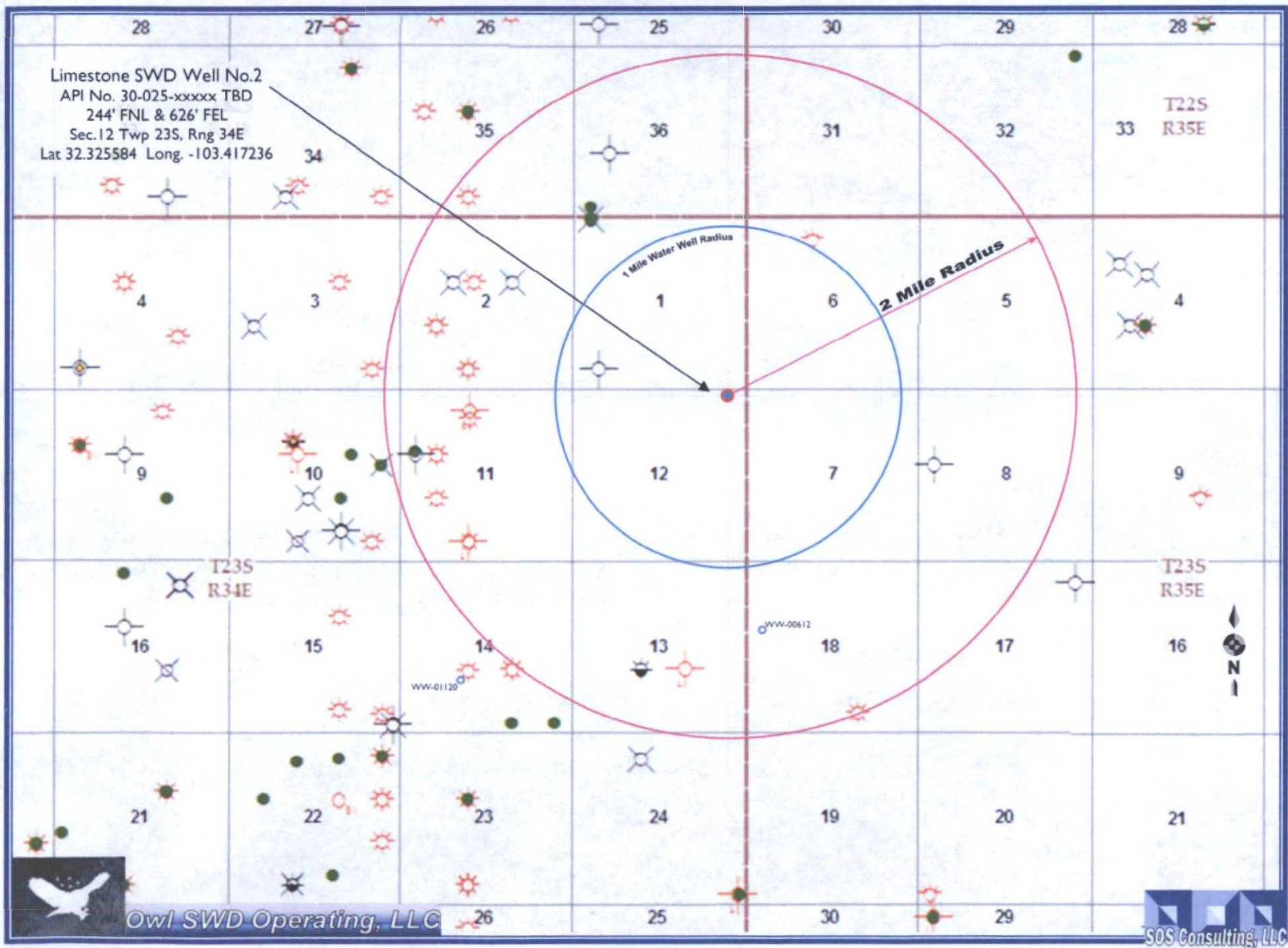
9 7/8	casing inside the	13 5/8		Design Factors				PRODUCTION	
Segment	#/ft	Grade	Coupling	Joint	Collapse	Burst	Length	Weight	
"A"	62.80	P 110	BUTT	2.21	1.52	1.27	11,415	716,862	
"B"							0	0	
w/8.4#/g mud, 30min Sfc Csg Test psig: 2,511							Totals:	11,415	716,862
The cement volume(s) are intended to achieve a top of				0	ft from surface or a			5350	overlap.
Hole Size	Annular Volume	1 Stage Cmt Sx	1 Stage CuFt Cmt	Min Cu Ft	1 Stage % Excess	Drilling Mud Wt	Calc MASP	Req'd BOPE	Min Dist Hole-Cplg
12 1/4	0.2866	2188	5075	3379	50	11.40	6216	10M	0.81
Class 'H' tail cmt yld > 1.20				MASP is within 10% of 5000psig, need exrta equip?					

5th Dia

7	Liner w/top @	11215		Design Factors				LINER	
Segment	#/ft	Grade	Coupling	Body	Collapse	Burst	Length	Weight	
"A"	32.00	P 110	BUTT	2.11	1.13	1.22	4,000	128,000	
"B"							0	0	
w/8.4#/g mud, 30min Sfc Csg Test psig: 3,347							Totals:	4,000	128,000
The cement volume(s) are intended to achieve a top of				11215	ft from surface or a			200	overlap.
Hole Size	Annular Volume	1 Stage Cmt Sx	1 Stage CuFt Cmt	Min Cu Ft	1 Stage % Excess	Drilling Mud Wt	Calc MASP	Req'd BOPE	Min Dist Hole-Cplg
8 1/2	0.1268	610	775	518	50	12.10			0.422
Capitan Reef est top XXXX.				MASP is within 10% of 5000psig, need exrta equip?					

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

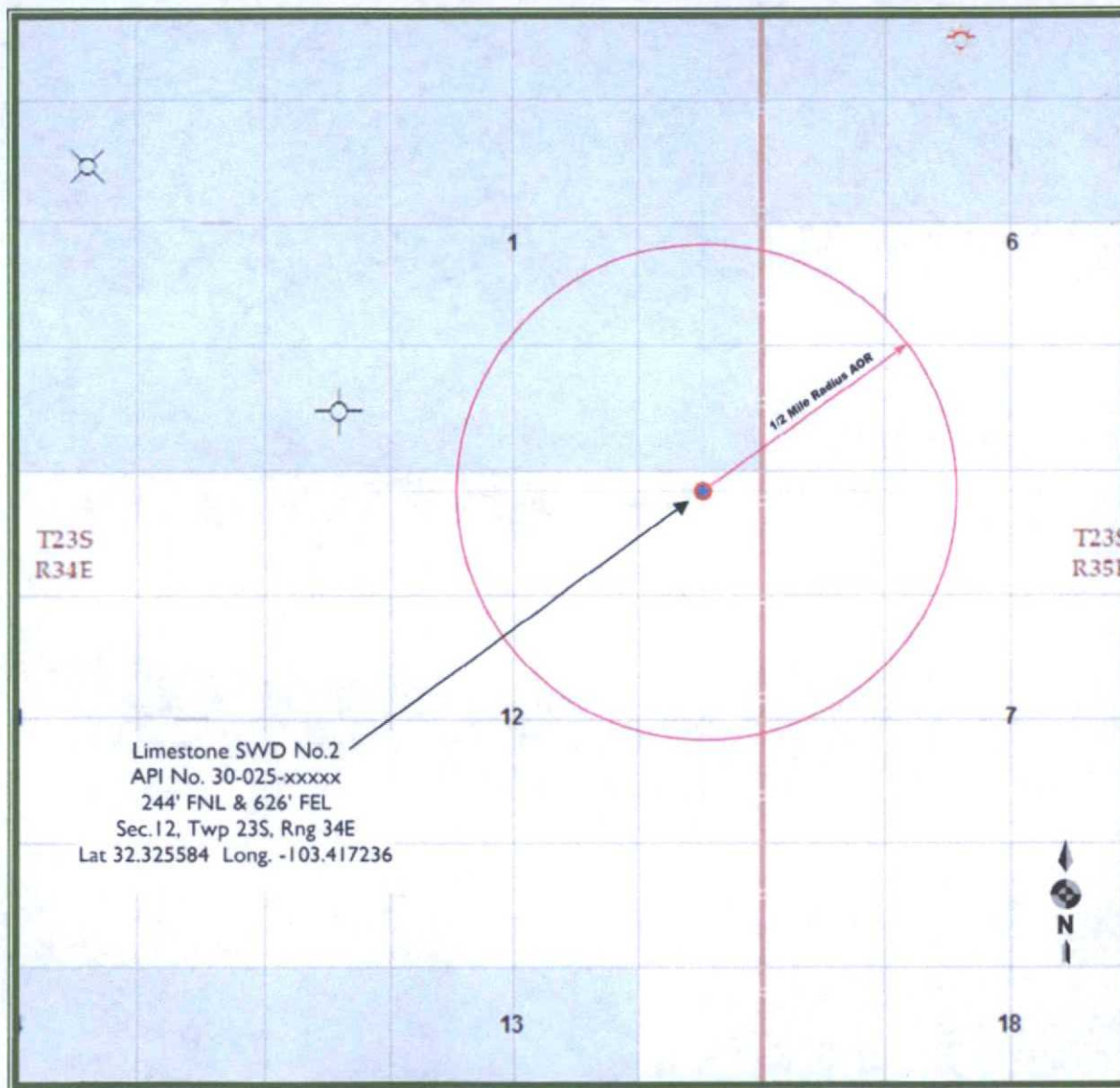
(Attachment to NMOCD Form C-108 - Item V)





# Limestone SWD Well No.2 - Area of Review / Overview Map

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



~16.7 miles W/SW of Eunice, NM



Lea County, New Mexico



Owl SWD Operating, LLC



## **C-108 - Item VI**

Area of Review Well Data

**THERE ARE NO WELLS IN THE ONE-HALF MILE  
AREA of REVIEW**

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

### **Limestone SWD Well No.2**

#### ***Commercial SWD Facility***

Upon approval of all permits for SWD, operations would begin within 30 days. Completion of the well operations will take six to seven weeks. Facility construction including installation of the tank battery, berms, plumbing and other and associated equipment would be occurring during the same interval but at a different location from the well. In any event, it is not expected for the construction phase of the project to last more than 60 days, 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 November 15, 2015.

#### ***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 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 20,000 bpd and an average of 15,000 bpd at a maximum surface injection pressure of 3043 psi (.2 psi/ft gradient) with an average pressure of approximately 2000 psi.

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 will be notified 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**

The rocks immediately underlying the Upper Devonian Woodford shale and the pre-Woodford unconformity in Lea County have been commonly labelled "Devonian." However, recent biostratigraphic work has revealed these rocks are actually comprised of the Lower Devonian Thirtyone formation in southeastern Lea County and, where the Thirtyone has been removed by pre-Woodford erosion, the subjacent Upper Silurian Wristen group.

The Thirtyone consists of siliceous carbonates and calcareous chert. It was deposited contemporaneously with the famous Caballos Novaculite of the Marathon region.

The Wristen group is divided into a basal Wink member, the Frame member, and the uppermost Faskin formation. The Wink is a gray limestone with some terrigenous clay and silt. It is characteristically more radioactive on gamma ray logs than the underlying Fusselman formation. The Wink grades upwards into the siltier and more argillaceous Frame member. The uppermost member of the Wristen group, the Faskin formation, contains most of the hydrocarbon reservoirs. The Faskin is made up of wackestones, grainstones, and boundstones, and forms platform-margin buildups in Texas. Karst-related features and dolomite are common.

The Limestone SWD No.2 is expected to encounter the top of the Siluro-Devonian at a measured depth of 15,208 feet. The injection interval will extend from this point to the top of the Fusselman, which is expected to be encountered at a measured depth of 16,348 feet.

Fresh water in the area is generally available from the Santa Rosa formation. State Engineer's records show water wells in the area to have an average depth of 252 feet.

There are NO water wells located within one mile of the proposed SWD.

# C-108 - Item VII.5

## Water Analysis - Disposal Zone - DEVONIAN

NM WAIDS DATA				
S-T-R	FIELD	FORMATION	TDS	CHLRD
24-23S-29E	REMUDA	DEVONIAN	64582	37500
24-23S-29E	REMUDA	DEVONIAN	56922	29000
06-23S-34E	BELL LAKE NORTH	DEVONIAN	71078	42200
34-23S-34E	ANTELOPE RIDGE	DEVONIAN	80187	47900

## Water Analysis - Source Zone - BONE SPRING

**BioTech** LLC

Requested by: T. Ratliff Laboratory Analysis: Endurance Sample Date: 1/31/2014  
Jazzmaster 17 State #4H Lea Co. NM

Water Analysis Measurements		Cations (+)		Anions (-)	
Oxygen (mg/L)	100	Barium (Ba)	0	Carbonate (CO <sub>3</sub> )	0
Carbon Dioxide (mg/L)	890	Calcium (Ca)	18,440	Bicarbonate (HCO <sub>3</sub> )	18,600
Hydrogen Sulfide (mg/L)	00	Magnesium (Mg)	300	Chloride (mg/L)	118,520
pH	5.7	Sodium (Na) & Cl	54,270	Sulfate (SO <sub>4</sub> )	318
Temperature °F	73	Iron (Fe)	100		
		Manganese (Mn)	000		
Oil in Water (ppm)	na				
Specific Gravity	1.150				
Total Dissolved Solids (TDS)	180,500				
(mg/L) (µm)	18,100				
Total Hardness (mg/L)	18,100				

## Water Analysis - Source Zone - DELAWARE

**Martin Water Laboratories, Inc.**

7000 N. 140th Ave. Midland, Texas 79706 Phone 409-683-1121

RESULT OF WATER ANALYSES

TO: Mr. Joe Small LABORATORY NO. 99293  
P.O. Box 21810, Midland, TX 79710 SAMPLE RECEIVED 9-16-92  
RESULTS REPORTED 9-18-92

COMPANY: Meridian Oil Company LEASE: Dagger Lake #1  
 FIELD OR POOL: Wildcat  
 SECTION: Block SURVEY: Lea COUNTY: Lea STATE: NM  
 SOURCE OF SAMPLE AND DATE TAKEN: NO 1 Recovered water - taken from Dagger Lake #1. 9-9-92  
 NO 2: \_\_\_\_\_  
 NO 3: \_\_\_\_\_  
 NO 4: \_\_\_\_\_

REMARKS: Delaware

CHEMICAL AND PHYSICAL PROPERTIES				
	NO. 1	NO. 2	NO. 3	NO. 4
Specific Gravity at 60°F	1.1462			
api Gravity Sampled				
api Gravity Recieved	6.26			
Oil Content as H <sub>2</sub> O	146			
Solids Content as CaCO <sub>3</sub>				
Unsoluble Solids as CaCO <sub>3</sub>				
Total Hardness as CaCO <sub>3</sub>	50,500			
Calcium as Ca	18,000			
Magnesium as Mg	1,334			
Sodium and Potassium	68,483			
Sulfate as SO <sub>4</sub>	947			
Chloride as Cl	140,618			
Iron as Fe	99.0			
Barium as Ba				
Sulfate & Sulfide				
Oil as Oil				
Total Solids Content	229,531			
Temperature °F				
Carbon Dioxide Content as				
Dissolved Oxygen				
Hydrogen Sulfide	0.0			
Hydrogen Sulfide at 111°F	0.053			
Sulfur Dioxide				
Free Acid Solids as mg/L				
Total Free Acid as				
Total Dissolved Solids @ 180°C	184,361			

## C-108 ITEM XI – WATER WELLS IN AOR

A search of the State Engineer's database indicates there are NO water wells within one mile of the proposed salt water disposal well. The well locations are indicated on the AOR Map. The 2 wells identified by the search criteria fall well beyond one mile of the subject proposed well.



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

WR File Nbr	Sub basin Use Diversion Owner	County POD Number	Code Grant	Source	6416 4 Sec Tws Rng	X	Y
CP 01120	STK 3 LIMESTONE LIVESTOCK LLC	LE CP 01120 POD1		Shallow	2 3 3 14 23S 34E	646366	3574753

Record Count: 1

**PLSS Search:**

Section(s): 1, 2, 11, 12, 13, Township: 23S Range: 34E  
14

Sorted by: File Number

WR File Nbr	Sub basin Use Diversion Owner	County POD Number	Code Grant	Source	6416 4 Sec Tws Rng	X	Y
CP 00612	PRO 0 J.C. MILLS	LE CP 00612			4 4 1 18 23S 35E	649900	3575408

Record Count: 1

**PLSS Search:**

Section(s): 6, 7, 18 Township: 23S Range: 35E

Sorted by: File Number

\*UTM location was derived from PLSS - see Help

The data is furnished by the NMOS&SC and is accepted by the recipient with the expressed understanding that the OSE&SC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.

8/11/15 4:17 PM

Page 1 of 1

ACTIVE & INACTIVE POINTS OF DIVERSION



# 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 03620 POD1	C	LE		1	4	3	32	23S	34E	641790	3569941	480	130	350
CP 00556		LE		4	4	3	08	23S	34E	641762	3576206	497	255	242
CP 00580		LE		3	4	3	23	23S	34E	646524	3572948*	220		
CP 00606		LE		4	1	23	23S	34E	34E	646613	3573854*	650	265	385
CP 00618		LE		1	2	4	22	23S	34E	645713	3573539*	428	295	133
CP 00637		LE		3	3	4	15	23S	34E	645293	3574541*	430	430	0
CP 00872		LE		1	1	1	08	23S	34E	641225	3577504*	500	305	195
CP 01075 POD1		LE		1	1	1	08	23S	34E	641278	3577525	430	20	410
CP 01120 POD1		LE		2	3	3	14	23S	34E	646366	3574753	397	318	79
CP 01258 POD1		LE		1	4	3	22	23S	34E	645015	3573221	25		
CP 01258 POD2		LE		1	4	3	22	23S	34E	644941	3572883	65		
CP 01258 POD3		LE		1	4	3	22	23S	34E	644941	3572883	25		

Average Depth to Water: **252 feet**

Minimum Depth: **20 feet**

Maximum Depth: **430 feet**

Record Count: 12

PLSS Search:

Township: 23S

Range: 34E

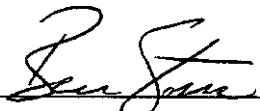
\*UTM location was derived from PLSS - see Help

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

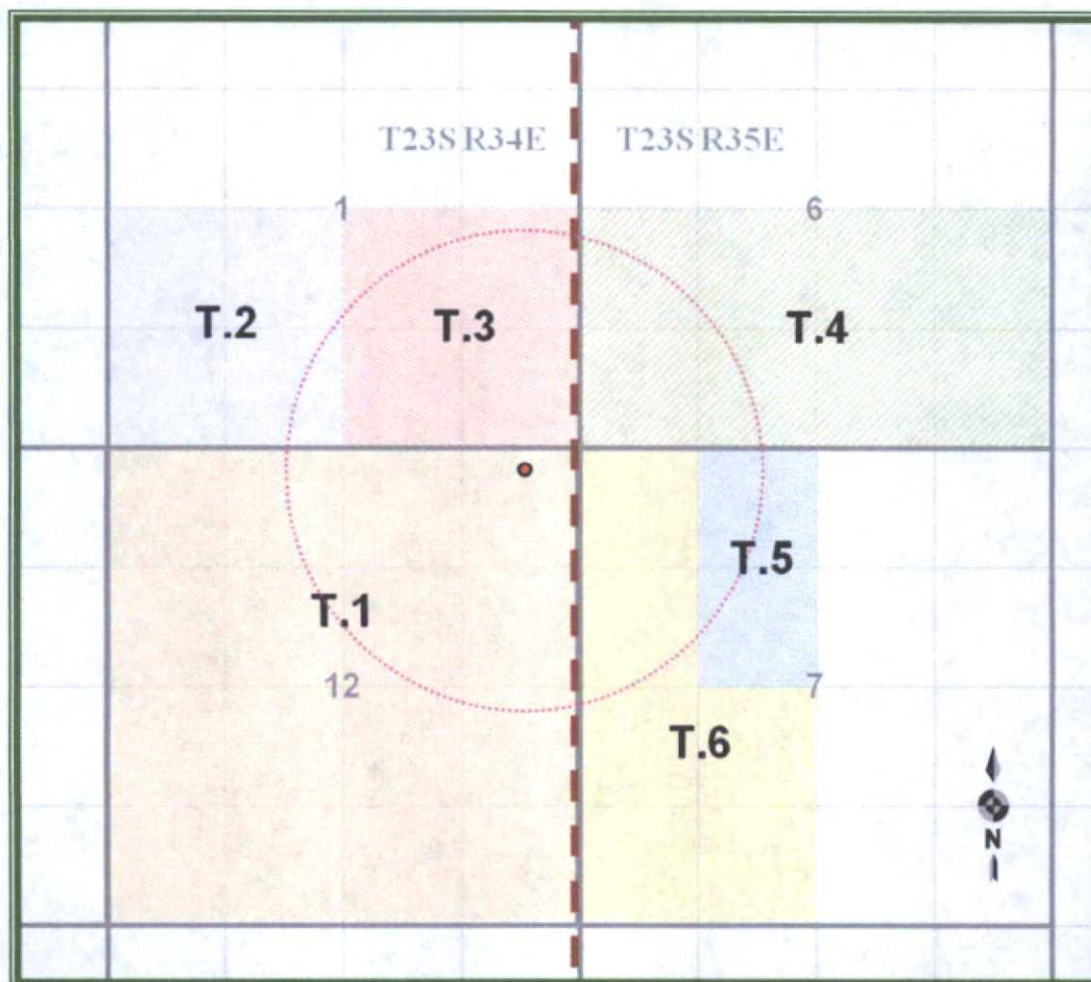
We have examined available geologic and engineering data and have found no evidence of open faults or other hydrologic connection between the disposal interval and any underground sources of drinking water.

  
\_\_\_\_\_  
Ben Stone, Partner  
SOS Consulting, LLC

Project: Owl SWD Operating, LLC  
Limestone SWD No.2  
Reviewed 9/15/2015

# Limestone SWD Well No.2 - Leasehold Plat

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



Owl SWD Operating, LLC

## LEGEND

- T.1 – Fee Lease – Limestone Livestock, LLC to Energex, GMT Exploration, OXY USA, Chesapeake, others
- T.2 – E0-1310-0000 – Slash Exploration, LLC
- T.3 – E0-1932-0001 – ConocoPhillips Company
- T.4 – VB-2076-0001 – GMT Exploration Company, LLC
- T.5 – NMNM-115425 – Yates Petroleum Corporation
- T.6 – NMNM-128370 – GMT Exploration Company, LLC

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

**SURFACE OWNER**

- 1 LIMESTONE LIVESTOCK (USPS Certified Mail)  
Attn: Darr Angell  
P.O. Box 190  
Lovington, NM 88260

**OFFSET MINERALS LESSEES**

(All Notified via USPS Certified Mail)

**Fee Lease (T.1 on attached plat.)**

- Lessee (SE4SE4; NE4SW4; NW4NW4; SW4SE4; S2NW4; NE4SE4; NW4SE4; NE4NE4; SE4NE4; NW4NE4; SW4NE4)*
- 2 ENERGEX, LLC  
4425 98th Street, Suite 200  
Lubbock, TX 79424
  

*Lessee (NW4NW4; S2NW4; NE4; N2SE4; SW4SE4; NW4SE4; NE4SW4; SE4SE4; SW4SW4)*

  - 3 GMT EXPLORATION COMPANY, LLC  
1560 Broadway, Suite 2000  
Denver, CO 80202
  

*Lessee (SE4SE4; NE4SW4; SW4SEW4)*

  - 4 OXY USA WTP, LP  
5 Greenway Plaza, Suite 110  
Houston, TX 77046
  

*Lessee (SW4SE4; NW4NW4; NW4SE4; N2NE4NW4; S2NW4)*

  - 5 CHESAPEAKE EXPLORATION, LLC  
P.O. Box 18496  
Oklahoma City, OK 73154
  

*Lessee (N2NE4NW4; NW4SW4)*

  - 6 CHEVRON USA, INC.  
Attn: Jason Levine  
1400 Smith Street  
Houston, TX 77002
  

*Lessee (N2NE4; S2NE4NW4; N2SE4; NW4NE4; SE4NE4)*

  - 7 MRC PERMIAN COMPANY  
5400 LBJ Freeway, Suite 1500  
Dallas, TX 75240
  

*Lessee (SE4NE4)*

  - 8 MADISON M. HINKLE  
P.O. Box 2292  
Roswell, NM 88202-2292

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

**Fee Lease (T.1 on attached plat - cont.)**

9     **Lessee (NE4; N2SE4)**  
BC OPERATING, INC.  
P.O. Box 50820  
Midland, TX 79710

10    **Lessee (NW4SE4)**  
INLAND TITLE LLC  
100 N. Pennsylvania Ave.  
Roswell, NM 88203

**State Leases E0-1310-0000 (T.2 on attached plat.)**

11    **Lessee / Operator**  
SLASH EXPLORATION, LP  
PO Box 1973  
Roswell, New Mexico 88202

**State Lease E0-1932-0001 (T.3 on attached plat.)**

12    **Lessee**  
CONOCOPHILLIPS  
P.O. Box 7500  
Bartlesville , OK 74005

**State Lease VB-2076-001 (T.4 on attached plat.)**

**Lessee**  
GMT EXPLORATION COMPANY, LLC  
1560 Broadway, Suite 2000  
Denver, CO 80202

**BLM Leases NMNM-115425 (T.5 on attached plat.)**

13    YATES PETROLEUM CORPORATION  
105 S. 4<sup>th</sup> Street  
Artesia, NM 88210

**BLM Leases NMNM-128370 (T.6 on attached plat.)**

GMT EXPLORATION COMPANY, LLC  
1560 Broadway, Suite 2000  
Denver, CO 80202



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

**OFFSET MINERALS OWNER** (All Notified via USPS Certified Mail)

14 NEW MEXICO STATE LAND OFFICE  
Commissioner of Public Lands  
310 Old Santa Fe Trail  
Santa Fe, NM 87501

15 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

### Proof of Notice (Certified Mail Receipts)

2015 0640 0007	2015 0640 0007	2015 0640 0007
2015 0640 0007	2015 0640 0007	2015 0640 0007

Account	2015 0640 0000	2015 0640 0000	2015 0640 0000	2015 0640 0000
7336	9482	5102	0490	2000

# C-108 - Item XIV

Proof of Notice (Certified Mail Receipts - cont.)

7015 0640 0007 9482 7411

**U.S. Postal Service™**  
**CERTIFIED MAIL® RECEIPT**  
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For delivery information, visit our website at [www.usps.com](http://www.usps.com)®.

**OFFICIAL USE**

Certified Mail Fee  
 \$

Extra Services & Fees (check box, add fee as appropriate)

<input type="checkbox"/> Return Receipt (hardcopy)	\$
<input type="checkbox"/> Return Receipt (electronic)	\$
<input type="checkbox"/> Certified Mail Restricted Delivery	\$
<input type="checkbox"/> Adult Signature Required	\$
<input type="checkbox"/> Adult Signature Restricted Delivery	\$

Postage  
 \$

**Total Postage and Fees**  
 \$

Sent To  
 Street and  
 City, State

BC OPERATING, INC.  
 P.O. Box 50820  
 Midland, TX 79710

PS Form 38

☐ Return Receipt (electronic) \$  
☐ Certified Mail Restricted Delivery \$  
☐ Adult Signature Required \$  
☐ Adult Signature Restricted Delivery \$

Postage  
 \$

**Total Postage and Fees**  
 \$

Sent To  
 Street and  
 City, State

SLASH EXPLORATION, LP  
 PO Box 1973  
 Roswell, New Mexico 88202

PS Form 38

☐ Return Receipt (electronic) \$  
☐ Certified Mail Restricted Delivery \$  
☐ Adult Signature Required \$  
☐ Adult Signature Restricted Delivery \$

Postage  
 \$

**Total Postage and Fees**  
 \$

Sent To  
 Street and  
 City, State

YATES PETROLEUM CORP  
 105 S. 4th Street  
 Artesia, NM 88210

PS Form 38

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☐ Certified Mail Restricted Delivery \$  
☐ Adult Signature Required \$  
☐ Adult Signature Restricted Delivery \$

Postage  
 \$

**Total Postage and Fees**  
 \$

Sent To  
 Street and  
 City, State

7015 0640 0007 9482 7428

**U.S. Postal Service™**  
**CERTIFIED MAIL® RECEIPT**  
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For delivery information, visit our website at [www.usps.com](http://www.usps.com)®.

**OFFICIAL USE**

Certified Mail Fee  
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Extra Services & Fees (check box, add fee as appropriate)

<input type="checkbox"/> Return Receipt (hardcopy)	\$
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Postage  
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**Total Postage and Fees**  
 \$

Sent To  
 Street and  
 City, State

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

PS Form 38

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Postage  
 \$

**Total Postage and Fees**  
 \$

Sent To  
 Street and  
 City, State, Zi

INLAND TITLE LLC  
 100 N. Pennsylvania Ave.  
 Roswell, NM 88203

PS Form 38

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☐ Adult Signature Restricted Delivery \$

Postage  
 \$

**Total Postage and Fees**  
 \$

Sent To  
 Street  
 City, State

CONOCO PHILLIPS  
 P.O. Box 7500  
 Bartlesville, OK 74005-7500

PS Form 38

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☐ Adult Signature Restricted Delivery \$

Postage  
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Sent To  
 Street and  
 City, State

NEW MEXICO STATE LAND OFFICE  
 Oil & Gas Division  
 310 Old Santa Fe Trail  
 Santa Fe, NM 87501

PS Form 38

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☐ Adult Signature Restricted Delivery \$

Postage  
 \$

**Total Postage and Fees**  
 \$

Sent To  
 Street and  
 City, State

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

**Owl SWD Operating, LLC**

**Limestone SWD No.2**

**C-108 sent 10/16/15**

FedEx Tracking Nos.

OCD SF – 7747 5550 5686

OCD Hobbs – 7747 5551 7782

SLO – 7747 5553 1422

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", is positioned above the printed name.

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



## **C-108 - Item XIV**

### **Proof of Notice – Legal Notice Newspaper of General Circulation**

#### **LEGAL NOTICE October 14, 2015**

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  
[drill and] permit for salt  
water disposal its Limestone  
SWD Well No.2. The well  
will be located 244' FNL &  
626' FEL in Section 12,  
Township 23 South, Range  
34 East in Lea County, New  
Mexico. Produced water  
from area production will be  
commercially disposed into  
the [Situro-] Devonian  
formation through an  
openhole interval between a  
maximum applied for top of  
15,000 feet to maximum  
depth of 16,500 feet.  
(Expected interval is 15,215'  
to 16,348' but may alter  
slightly based on logging.)  
The maximum injection  
pressure will be 3043 psi  
surface (0.2 psi/ft gradient)  
and 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.  
#30400

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

# 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  
October 14, 2015  
and ending with the issue dated  
October 14, 2015.



Publisher

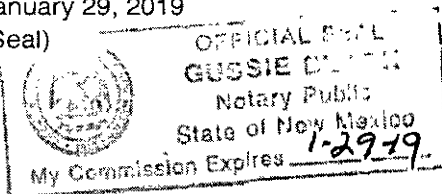
Sworn and subscribed to before me this  
14th day of October 2015.



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

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Township 23 South, Range  
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formation through an  
openhole interval between a  
maximum applied for top of  
15,000' feet to maximum  
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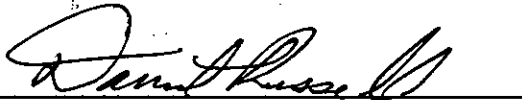
BEN STONE  
SOS CONSULTING, LLC.  
P.O. BOX 300  
COMO, TX 75431

# Affidavit of Publication

STATE OF NEW MEXICO  
COUNTY OF LEA

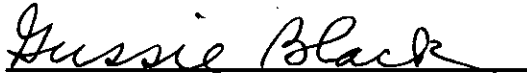
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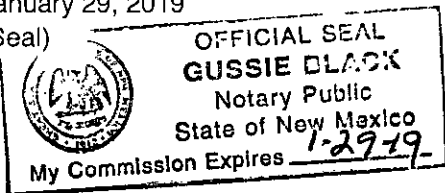
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14th day of October 2015.



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

RECEIVED OGD

2015 OCT 22 P. 3: 09

Email version  
received 10-19-2015  
mm

## LEGALS

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SOS Consulting, LLC,  
(903) 488-9850 or, email  
info@sosconsulting.us.  
#30400

67104420

00164706

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



C-108 Review Checklist: Received 10/19 Add. Request: 10/19 Reply Date: 10/19 Suspended: \_\_\_\_\_ [Ver 15]

ORDER TYPE: WFX / PMX (SWD) Number: 1605 Order Date: \_\_\_\_\_ Legacy Permits/Orders: \_\_\_\_\_

Well No. 2 Well Name(s): Limestone SWD

API: 30-0 25-Pending Spud Date: TBD New or Old: N (UIC Class II Primacy 03/07/1982)

Footages 244 FNL  
626 FEL Lot \_\_\_\_\_ or Unit A Sec 12 Tsp 23S Rge 34E County LEG

General Location: 15 miles S of E 41st Pool: SWD, Devonian Pool No.: 9619

BLM 100K Map: JA1 Operator: OW SWD operating OGRID: 308331 Contact: BOW STON

COMPLIANCE RULE 5.9: Total Wells: 18 Inactive: 2 Fincl Assur: Y Compl. Order? Y IS 5.9 OK? Y Date: 12-18-24

WELL FILE REVIEWED ☐ Current Status: PROPOSED

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

Planned Rehab Work to Well: CBL 7" Linen/Surface

Well Construction Details		Sizes (in) Borehole / Pipe	Setting Depths (ft)	Cement St or Cf	Cement Top and Determination Method
* Planned ___ or Existing ___ Surface		<u>24" / 20"</u>	<u>1800</u>	<u>2255</u>	<u>SURFACE / VISUAL</u>
Planned ___ or Existing ___ Interm/Prod		<u>12 1/2" / 8 5/8"</u>	<u>*5350</u>	<u>4304</u>	<u>SURFACE / VISUAL</u>
Planned ___ or Existing ___ Interm/Prod		<u>12 1/4" / 9 5/8"</u>	<u>11415</u>	<u>2188</u>	<u>SURFACE / VISUAL</u>
Planned ___ or Existing ___ Prod/Liner		<u>8 1/2" / 7"</u>	<u>15215</u>	<u>11215</u>	
Planned ___ or Existing ___ Liner					
Planned ___ or Existing ___ OH/ PERF		<u>1500 / 16500</u>			

Injection Lithostratigraphic Units:		Depths (ft)	Injection or Confining Units	Tops	Completion/Operation Details:	
Adjacent Unit: Litho. Struc. Por.			<u>DV</u>	<u>15200</u>	Drilled TD <u>16500</u>	PBTD _____
Confining Unit: Litho. Struc. Por.					NEW TD _____	NEW PBTD _____
Proposed Inj Interval TOP:		<u>15263215</u>			NEW Open Hole <input checked="" type="radio"/> or NEW Perfs <input type="radio"/>	
Proposed Inj Interval BOTTOM:		<u>16500</u>			Tubing Size <u>5 1/2</u> in. Inter Coated? <u>Y</u>	
Confining Unit: Litho. Struc. Por.					Proposed Packer Depth <u>15115</u> ft	
Adjacent Unit: Litho. Struc. Por.					Min. Packer Depth <u>15115</u> (100-ft limit)	
					Proposed Max. Surface Press. <u>3043</u> psi	
					Admin. Inj. Press. <u>3043</u> (0.2 psi per ft)	

#### AOR: Hydrologic and Geologic Information

POTASH: R-111-NA Noticed? \_\_\_\_\_ BLM Sec Ord ☐ WIPP ☐ Noticed? \_\_\_\_\_ Salt/Salado T: \_\_\_\_\_ B: \_\_\_\_\_ NW: Cliff House fm \_\_\_\_\_

FRESH WATER: Aquifer 4200 G Water Max Depth 430 HYDRO AFFIRM STATEMENT By Qualified Person ☒

NMOSE Basin: CAPITAN CAPITAN REEF (thru) adj. NA No. Wells within 1-Mile Radius? 0 FW Analysis

Disposal Fluid: Formation Source(s) Delaware, Bone Spring Analysis? Y On Lease ☐ Operator Only ☐ or Commercial ☒

Disposal Int: Inject Rate (Avg/Max BWPD): 15,000/20,000 Protectable Waters? \_\_\_\_\_ Source: \_\_\_\_\_ System: Closed or Open

HC Potential: Producing Interval? NA Formerly Producing? \_\_\_\_\_ Method: Logs/DST/P&A/Other \_\_\_\_\_ 2-Mile Radius Pool Map ☐

AOR Wells: 1/2-M Radius Map? ☒ Well List? \_\_\_\_\_ Total No. Wells Penetrating Interval: 0 Horizontals? \_\_\_\_\_

Penetrating Wells: No. Active Wells 0 Num Repairs? \_\_\_\_\_ on which well(s)? \_\_\_\_\_ Diagrams? \_\_\_\_\_

Penetrating Wells: No. P&A Wells 0 Num Repairs? \_\_\_\_\_ on which well(s)? \_\_\_\_\_ Diagrams? \_\_\_\_\_

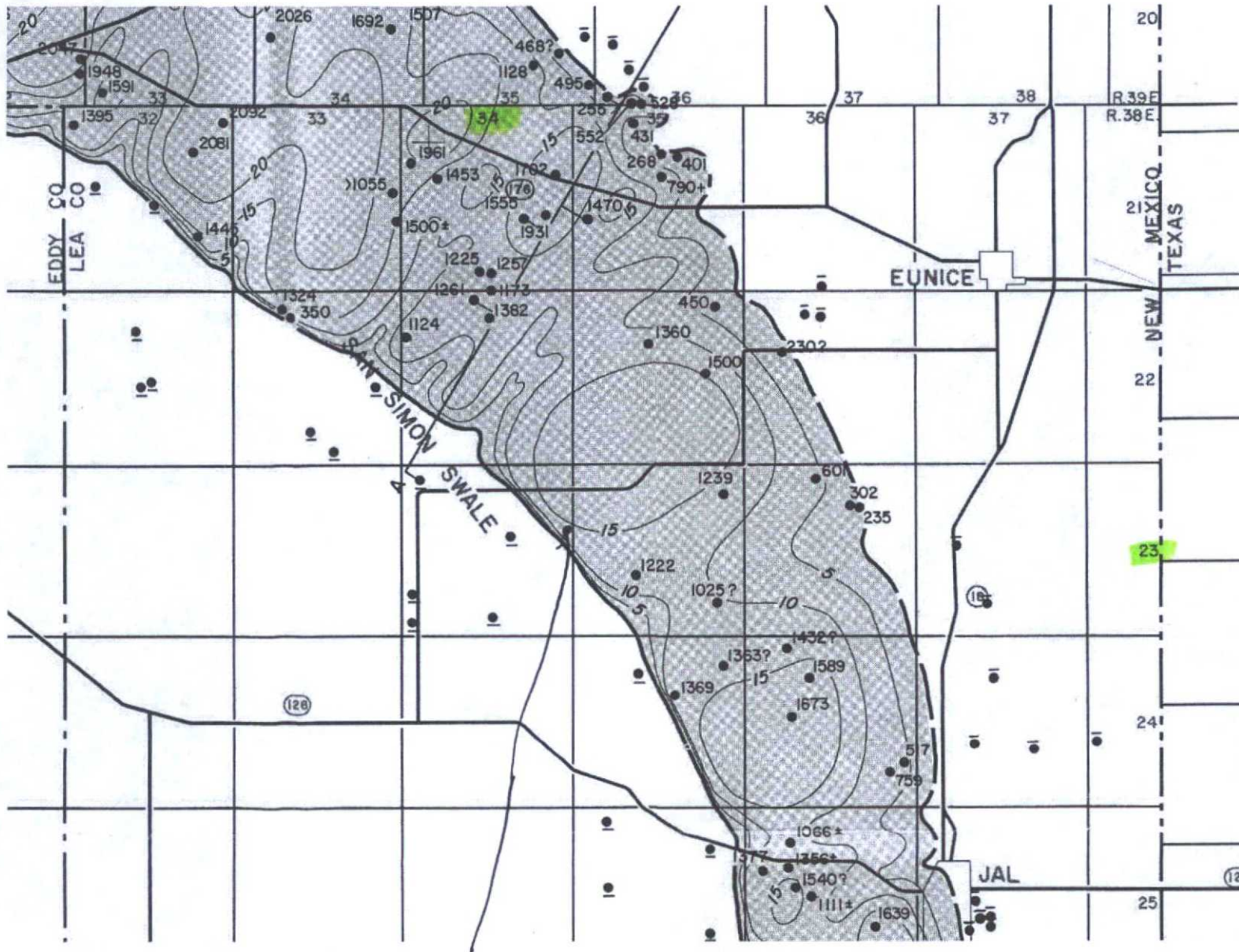
NOTICE: Newspaper Date 10/14/2015 Mineral Owner Limestone Surface Owner Limestone N. Date 10-13

RULE 26.7(A): Identified Tracts? Y Affected Persons: G. T. Chesapeake OX N. Date 10-13

Order Conditions: Issues: Make the 1st Intermediate Set in Bell and

Add Order Cond: \* must run the 1st Intermediate through the 1st in Bell Canyon

# Capitan Reef



Approximate well location



# Capitan Reef

