

3/04/2015 DATE IN	SUSPENSE	WDS ENGINEER	3/03/2015 LOGGED IN	SWD TYPE 1536	PMAM150685719L APP NO.
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ABOVE THIS LINE FOR DIVISION USE ONLY

NEW MEXICO OIL CONSERVATION DIVISION

- Engineering Bureau -

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



ADMINISTRATIVE APPLICATION CHECKLIST

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

Application Acronyms:

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

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

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

Check One Only for [B] or [C]

[B] Commingling - Storage - Measurement
☐ DHC ☐ CTB ☐ PLC ☐ PC ☐ OLS ☐ OLM

[C] Injection - Disposal - Pressure Increase - Enhanced Oil Recovery
☐ WFX ☐ PMX ☒ SWD ☐ IPI ☐ EOR ☐ PPR

[D] Other: Specify _____

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

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

[B] ☒ Offset Operators, Leaseholders or Surface Owner

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

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

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

[F] ☒ Waivers are Attached (Letters from WIPP and Mosaic)

[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.

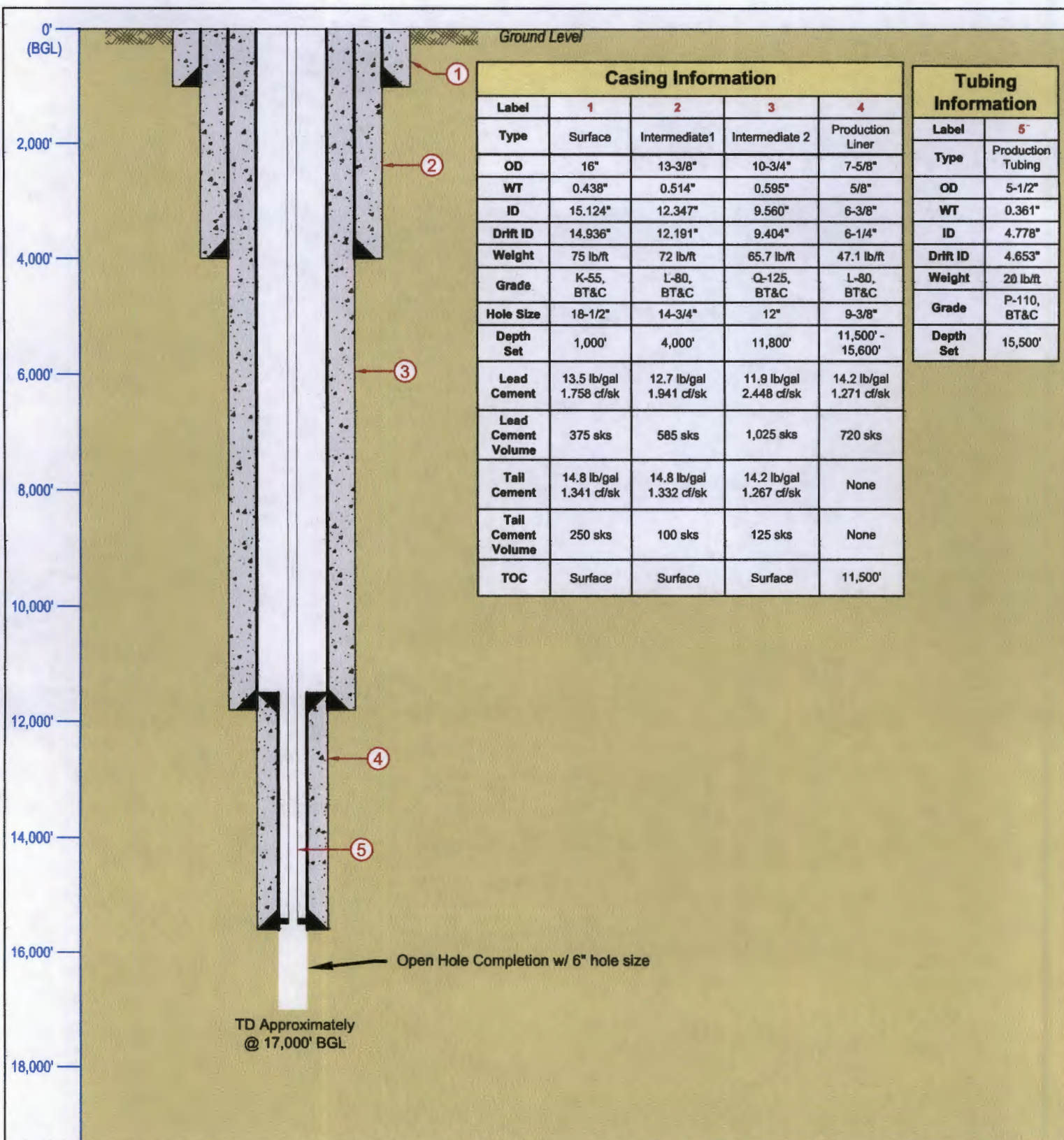
Note: Statement must be completed by an individual with managerial and/or supervisory capacity.

Ben Stone		Agent for Owl SWD Operating, LLC 3/03/15
Print or Type Name	Signature	Title
		ben@sosconsulting.us
		e-mail Address

- Check Proposed Location U.S. BLM's LOCATION

- SWD
 - Owl SWD Operating, LLC
 308339
 W-11
 - W-11 SR Anch SWD #1
 30-015-4592

2015 MAR - 9 PM 3:19
 PRODUCTION



LONQUIST

FIELD SERVICE

AUSTIN HOUSTON WICHITA CALGARY

Texas License F-8652

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: S-06 T-23S R-31E

API No.: 30-015-44590

State ID No.: 40055

Drawn: MMC

Rev No:

Mills Ranch SWD No. 1 - New Location

State/Province: New Mexico

Site: Mills Ranch

Field: Mills Ranch

Project No: 1117

Reviewed: SLP

Notes:

County/Parish: Eddy

Status: To Be Drilled

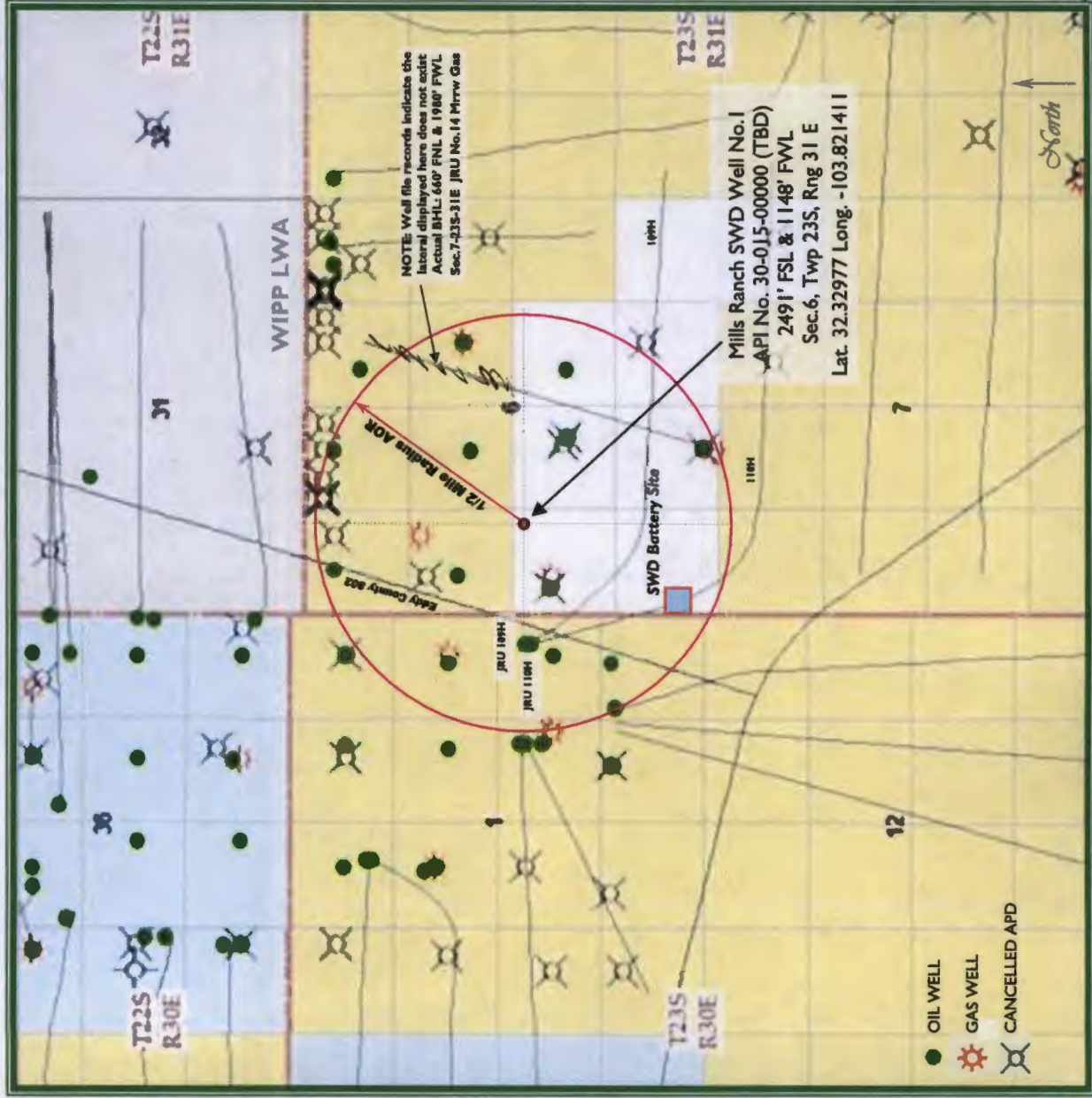
Ground Elevation: 3,299'

Date: 02/09/2015

Approved: SLP

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

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



~20 miles East of Loving, NM



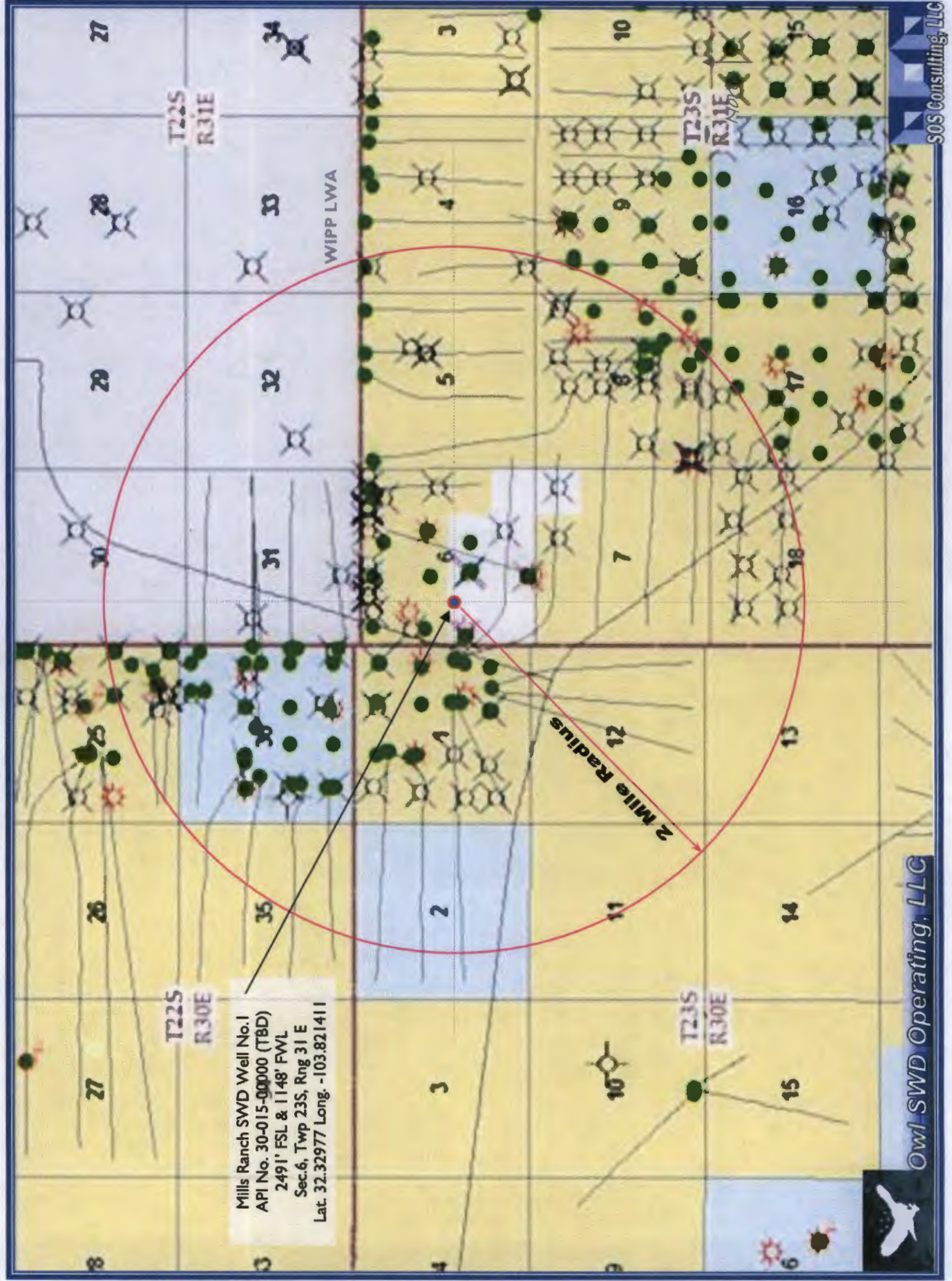
Eddy County, New Mexico

Owl SWD Operating, LLC

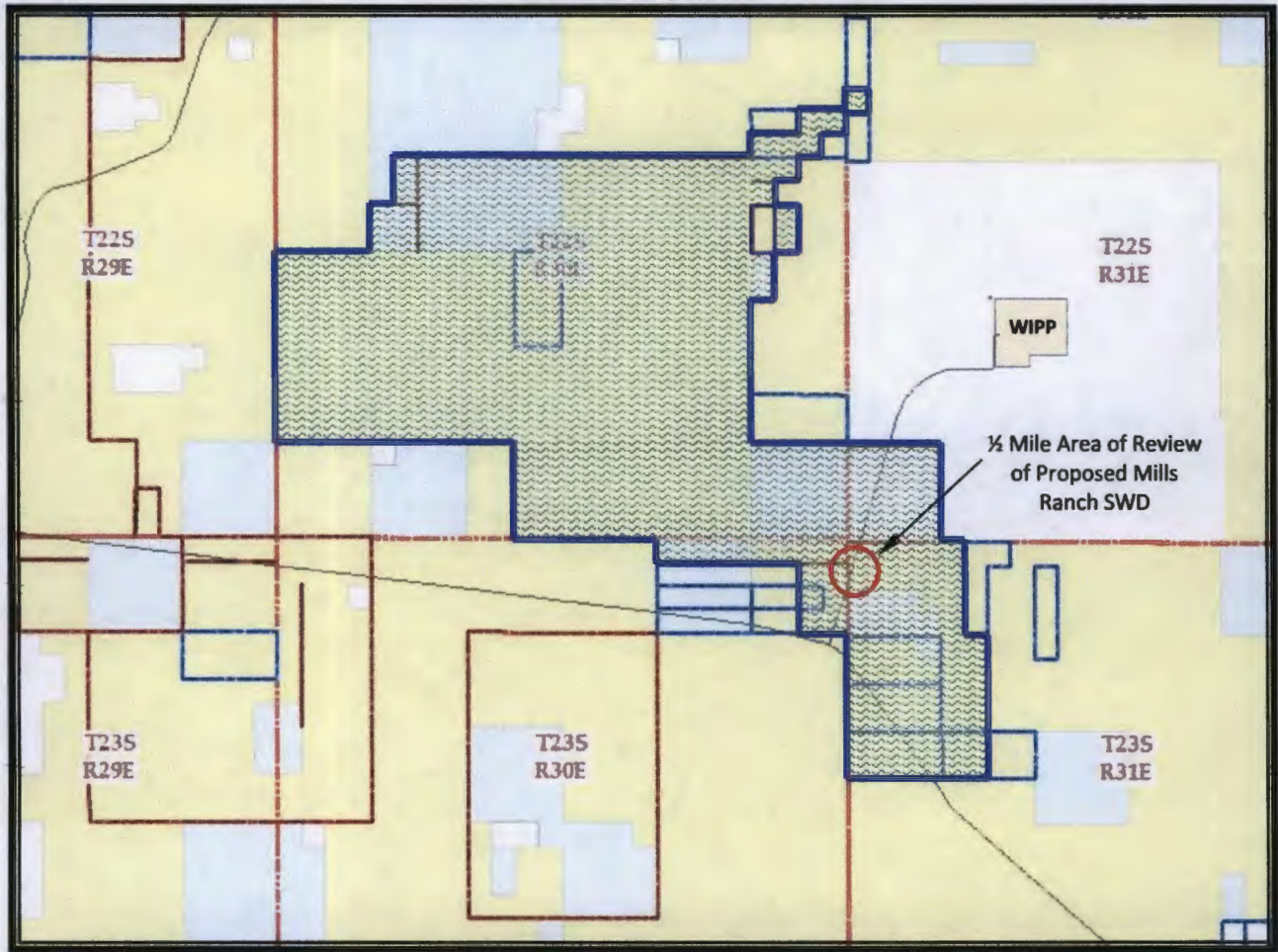
SOS Consulting, LLC

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

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



James Ranch Unit BOPCO, L.P.



Eddy County, New Mexico

Of Interest:

The James Ranch Unit Agreement was executed in May 1953 by Richardson and Bass. The unit agreement has been amended and participating areas expanded several times. BOPCO is the current operator.

The JRU Agreement, Paragraph 3 provides that, Unitized Substances – All oil and gas in any and all formations of the unitized lands are unitized under the terms of this agreement and are herein called, "unitized substances". The significant majority of the JRU is federal acreage. Approximately 2000 acres are state and 280 private.

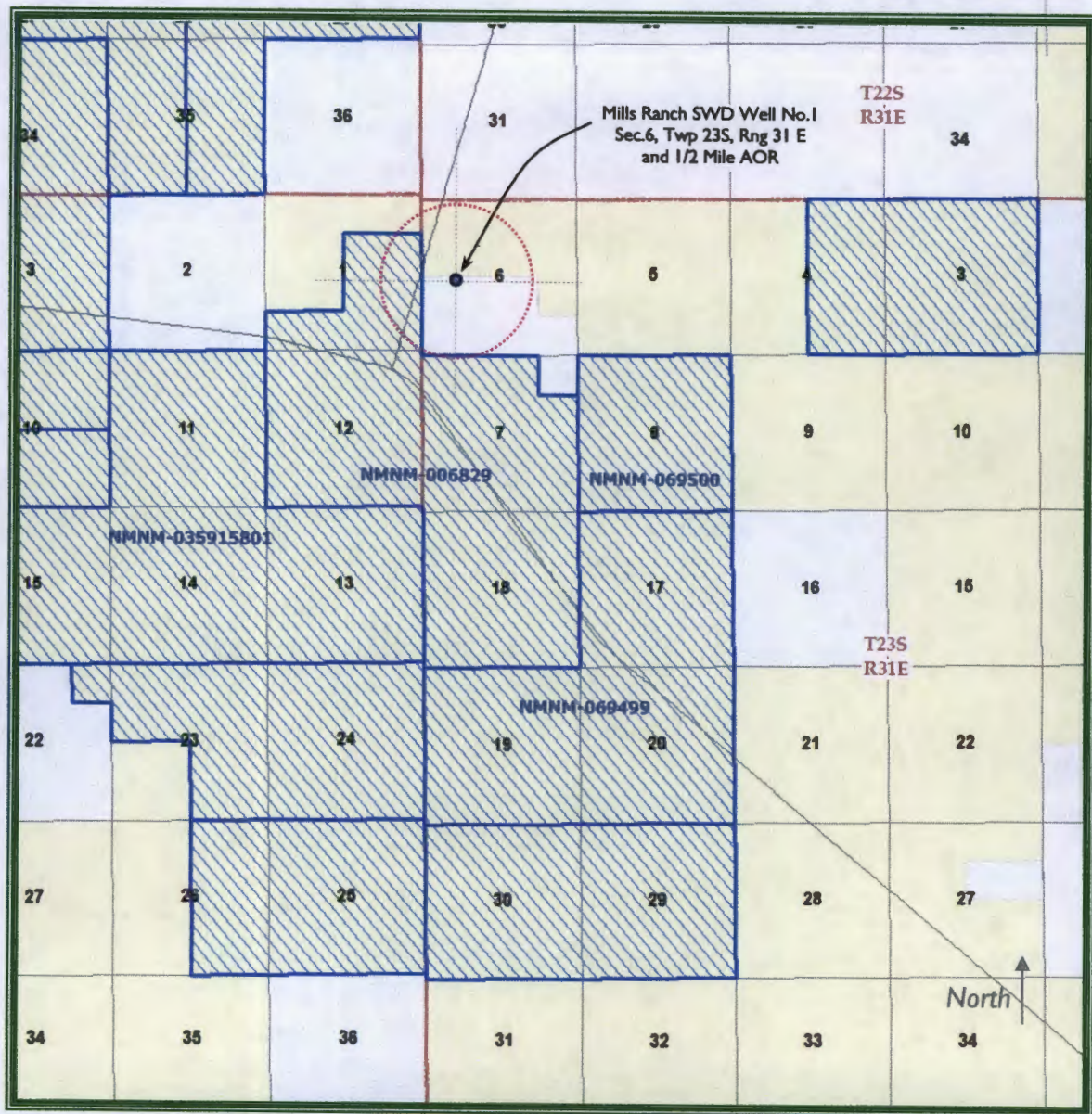
The proposed Mills Ranch SWD is located on a portion of private land (NW/SW of Section 6, Twp 23 S, Rng 31 E), the owner being Mr. Stacey Mills (Mills Ranch, et al). Mr. Mills has leased this tract to Owl SWD Operating, LLC for the development of a salt water disposal well and facility. The facility will be located approximately 1/4 mile south and west of the well site.

The proposed Mills Ranch SWD will be completed in the Devonian formation at depths from 15,600' to 17,000'. A SWD completion at this depth will pose no risk to hydrocarbon production or to area potash production or leases nor will it be a participatory part of the James Ranch Unit.

BOPCO and Mesquite operate Devonian SWDs in or nearby the James Ranch Unit to the northwest. There are also several Delaware SWDs in the general vicinity.

Mills Ranch SWD Well No.1 - Potash Map

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



Owl SWD Operating, LLC

LEGEND



NMNM-069500; NMNM-069499;
NMNM-035915801; NMNM-006829
Western-Ag Minerals Company
(Operated by Mosaic Potash Company)



March 5, 2015

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

Attn: Mr. David Catanach, Director

Re: New Location / Revised Application of Owl SWD Operating, LLC to permit for salt water disposal its Mills Ranch SWD No.1, located in Section 6, Township 23 South, Range 31 East, NMPM, Eddy County, New Mexico.

Dear Mr. Catanach,

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

As you may recall, this proposed well was recently permitted for salt water disposal by the NMOCD. Subsequent to the issuance of that permit and wishing to be good neighbors, Owl personnel continued to engage in negotiations with the Mosaic Potash Company and the landowner, Mr. Stacey Mills. This new application is the result of an alternate location agreed to by all parties. Also, as the new location brought the proposed well site within one mile of the WIPP site, we contacted the appropriate persons at WIPP to discuss the siting of the well and the proposed operations. After reviewing the data, WIPP confirmed in writing that the operation of a salt water disposal well at the proposed site and depth will have no adverse impact to WIPP operational or safety concerns. Mosaic Potash and WIPP both provided letters of consent and/or waiver; copies of both letters are included in this application behind the 'Notice and Publication' item heading.

Additionally, the relocation moved the site from private land and minerals to a site still private surface but with federal minerals underlying the subject tract of land. Therefore, Owl is also now submitting a new Application for Permit to Drill (Form 3160-3) to the BLM Carlsbad Field Office. Personnel at that office have indicated they too are comfortable with the siting and have offered to assist by expediting the processing of the APD as practicable.

Further, the new site is still located within the surface boundary of the James Ranch Unit operated by BOPCO, LP. BOPCO did not object to the original application nor did they offer support however, during the development of the lease and prospect, they had indicated that they may be interested in utilizing the SWD facility in the future, once permitted. We have confirmed to BLM and through communications with BOPCO during the original effort, it is understood by all parties that the Mills Ranch SWD in the Devonian will not be a participatory part of the unit and will therefore have no impact on unit operations or mineral interests.

Finally, while the well design has essentially remained unchanged, we are requesting that target formations include portions of the Silurian and Ordovician formations. In continuing research efforts to support this application, it became obvious that there is limited geological data available and, other SWDs in the area to the proposed depths have included these deeper formations. (Inferred data is included to support this proposal of expanded target formations.) The well will be mudlogged and e-logged to ensure that only the desired formations are exposed and still remain within the uppermost and bottom most applied for depths. The total depth of the well shall remain well above the Ellenburger.

Published legal notice will run in the March 6, 2015 edition of the Artesia Daily Press and all offset operators and other interested parties have been notified individually. 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,

A handwritten signature in black ink, appearing to read "Ben Stone", written in a cursive style.

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. **No wells penetrate the subject interval however, the horizontal leg of 2 wells pass through the AOR - all are Delaware completions several thousand feet above the proposed Devonian disposal interval. Data ATTACHED.**
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. **There are no plugged wells in the subject AOR.**
- 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 and one SWD in the region.**
- IX. **No stimulation program is proposed at this time.**
- *X. **During drilling, mudlogging will ensure only Devonian interval is targeted. After drilling, logs will be run from TD to approximately 15,000' and will be submitted to the OCD. CBL logs will be run on all casing strings after setting.**
- *XI. **There is 1 domestic water well within one mile (SE/SE/SE Sec. 6) of the proposed salt water disposal well and one Sandia Labs (WIPP) groundwater monitoring well located just beyond 1 mile in the SW/SW/NE of Sec. 5. ATTACHED**
- XII. **An affirmative statement is ATTACHED that available geologic and engineering data has been examined and no evidence was found** of open faults or any other hydrologic connection between the disposal zone and any underground sources of drinking water.
- XIII. **"Proof of Notice" section on the next page of this form has been completed and ATTACHED. There are 9 offset lessees and/or operators within ½ mile and 1 POTASH lessee PLUS WIPP - 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: **3/03/2015**

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. ***Letters of waiver from Mosaic Potash and WIPP are ATTACHED.***

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.

C-108 - Item III

Subject Well Data

WELL SCHEMATIC

Proposed

With Construction Data Detail

C-108 - Item VI

Wells within Area of Review

No wells penetrate the proposed disposal zone.

There are two (2) wells of which a portion of the horizontal leg lies within the AOR. All are Delaware horizontal true vertical depth completions lie a minimum of 7500' above the proposed Devonian disposal interval. All wells are illustrated and labeled on the AOR map.

1. James Ranch Well No.109H - BOPCO, LP

API 30-015-38114

The bottom hole location of this well lies outside the AOR with a long path through the AOR. The horizontal leg is at a TVD of 7041' to 7649'.

2. James Ranch Well No.110H - BOPCO, LP

API 30-015-38115

The bottom hole location of this well lies outside the AOR but a substantial path within the AOR. The horizontal leg is at a TVD of 7561' to 7686'. The completion interval of the lateral is outside the AOR.

Additionally, there is one well for which a lateral is displayed on the AOR maps however; well file records indicate that lateral does not exist. (See AOR Map.)

James Ranch Well No.14 - BOPCO, LP

API 30-015-24420

The bottom hole location of this well and the subject lateral DO NOT lie within the AOR. Actual BHL is 660' FNL & 1980' FWL Sec.7-23S-31E. The JRU No.14 is a directionally drilled Morrow gas well. Measured depth is 14,640 with the lateral completion interval at a TVD of approximately 11,847'.

Expected top of the Devonian is approximately 15,600'.

THE PROPOSED DISPOSAL ZONE IS NOT PENETRATED IN THE AREA OF REVIEW.

C-108 ITEM VII – PROPOSED OPERATION

Mills Ranch 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 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 April 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 30,000 bpd and an average of 20,000 bpd at a maximum surface injection pressure of 3120 psi (.2 psi/ft gradient).

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 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

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

Water Analysis Measurements		Cations (mg/L)		Anions (mg/L)	
Oxygen (mg/L)	0.0	Barium (Ba)	0.0	Carbonate (CO ₃)	0.0
Carbon Dioxide (mg/L)	0.0	Calcium (Ca)	14.44	Bicarbonate (HCO ₃)	0.0
Hydrogen Sulfide (mg/L)	0.0	Magnesium (Mg)	0.0	Chloride (mg/L)	0.0
pH	7.0	Sodium (Na)	14.0	Sulfate (SO ₄)	0.0
Temperature (°F)	70	Iron (Fe)	0.0		
		Manganese (Mn)	0.0		

Water Analysis - Source Zone – DELAWARE

P.O. BOX 1000
 MONAHANS, TEXAS 79701
 PH. 432.3238 OR 363.1340

Martin Water Laboratories, Inc.

700 W. WILSON
 MIDLAND, TEXAS 79701
 PHONE 943.4121

RESULT OF WATER ANALYSES

LABORATORY NO. 99293
 SAMPLE RECEIVED 9-16-92
 RESULTS REPORTED 9-18-92

TO Mr. Joe Small
 P.O. Box 51810, Midland, TX 79710

COMPANY Meridian Oil Company
 FIELD OR POOL Wildcat
 SECTION BLOCK SURVEY 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 80°F	1.1462			
pH when Sampled				
pH when Received	6.26			
Barium as Ba	146			
Supersaturation as CaCO ₃				
Undersaturation as CaCO ₃				
Total Hardness as CaCO ₃	50,500			
Calcium as Ca	18,000			
Magnesium as Mg	1,336			
Sodium and/or Potassium	68,483			
Sulfate as SO ₄	947			
Chloride as Cl	140,618			
Iron as Fe	90.0			
Barium as Ba				
Turbidity, Nephelometric				
Color as Pt				
Total Solids, Calculated	229,531			
Temperature °F				
Carbon Dioxide, Calculated				
Dissolved Oxygen				
Hydrogen Sulfide	0.0			
Resistivity, calculated at 25°C	0.053			
Resistivity, actual at 25°C				
Free Amino Boron as mg/L				
Volume Filtered, ml				
Total Dissolved Solids @ 180°C	184,361			

C-108 – Item VIII

Geologic Information

The Devonian consists of a carbonates including light colored dolomite and chert intervals interspersed with some tight limestone intervals. Several thick sections of porous dolomite capable of taking water are present within the Devonian in the area. It is reasonable to assume that a Silurian section is present between the Devonian and Ordovician (Montoya) although the top depth of Silurian and Ordovician intervals is uncertain at this time. If the bases of Devonian and Silurian rocks come in as expected the well will only be drilled deep enough for adequate logging rathole.

At a proposed depth of 17,000' the well will TD 1500 to 1600 feet below the estimated top of the Devonian. Mud logging through the interval will ensure the target interval remains Devonian, Silurian and possibly upper Ordovician (Montoya).

Once Devonian is determined, the casing shoe depth will be between a maximum upper depth of 15,400' and 15,600'. TD may occur from approximately 16,800' to 17,000' which is the maximum applied for depth and injection would occur through the resulting openhole interval.

C-108 – Item VIII - Geologic Information

Stratigraphic Chart

Northwest Shelf ↔ Delaware Basin

Era	Period	Epoch	Formation		General Lithology	Approximate Thickness (ft)	
Paleozoic	Permian	Ochoan	Dewey Lake		Redbeds / Anhydrite	200-400	
			Rustler		Halite	100	
			Salado		Halite / Anhydrite	1000	
		Guadalupian	Artesia Group	Tansill	Bell Canyon	Anhydrite / Dolo.	200
				Yates		Ss Sh / Anhydrite	200
				Seven Rivers		Dolomite / Anhydrite	500
				Queen		Sandy Dolomite / Anhydrite / Shale	200-500
			San Andres	Grayburg	Cherry Canyon	Dolomite / Anhy / Shale / Sandstone	300
						Dolomite / Anhydrite	1500
			Leonardian	Glorieta	Brushy Canyon	Sandy Dolomite	100
				Yeso		Dolo. / Anh. / Ss.	1500
				Abo		Dolo. / Anh. / Sh.	1000
			Wolfcampian	Wolfcamp		Limestone / Dolo.	0-1500
		Pennsylvanian	Virgilian	Cisco		Limestone / Ss.	0-1250
			Missourian	Canyon		Limestone / Sh.	
			Des Moinesian	Strawn		Limestone / Ss.	0-750
			Atokan	Bend		Lime / Ss. / Sh.	0-1250
			Morrowan	Morrow		Lime / Ss. / Sh.	
		Mississippian			Limestone / Sh.	0-800	
	Devonian			Dolomite / Chert	0-1200		
		Fuselman		Dolomite / Chert			
		Ordovician	Upper	Montoya		Dolomite / Chert	0-400
	Middle		Simpson		Lime / Ss. / Sh.	0-200	
	Lower		Ellenburger		Dolomite	0-400	
	Cambrian			Sandstone			

Expected
Formation
Exposure to occur
15,400'-17,000'

C-108 – Item VIII - Geologic Information

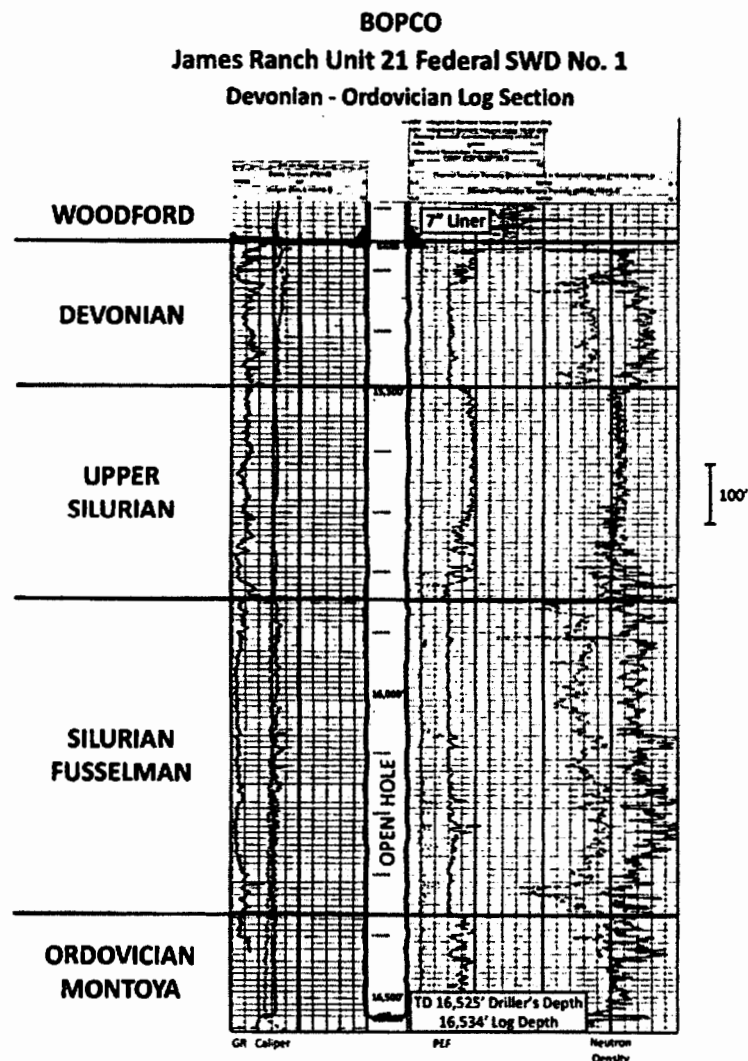
Log Strip – Inferred Data

DUE TO LIMITED STRATIGRAPHIC INFORMATION FOR THE IMMEDIATE VICINITY, THIS INFORMATION IS BEING PRESENTED TO ACCOMMODATE OWL'S PLANS TO DRILL AND COMPLETE THE WELL AS DESIGNED AND TO AVOID THE POSSIBILITY OF OTHERWISE HAVING TO LATER AMEND THE PERMIT ONCE ACTUAL DEPTHS ARE DETERMINED.

While the James Ranch Unit 21 Federal SWD No.1, represented by the log strip below, is approximately 5.8 miles away, it is reasonable to assume that similar formation horizons will be encountered albeit at slightly different depths. This particular log is being used as reference since the well was originally proposed as a Devonian completion SWD. Once the well was drilled, it was apparent that Silurian and Ordovician formations were also exposed.

The Mills Ranch SWD No.1 is proposed to have casing set from 15,400' to 15,600' with total depth being from approximately 16,800' to 17,000' which is the maximum applied for depth. If suitable porosity is exposed, drilling may be terminated before that depth is reach.

Casing depth and total depth will ultimately be determined by mudlogging and any openhole logs that may be run but will remain between a maximum of 15,400 feet to 17,000 feet.



C-108 - Item XI

Water Wells Within One Mile

There is ONE domestic water well located and ONE Monitor Well within one mile of the proposed SWD.



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

										(R=POD has been replaced and no longer serves this file, C=the file is closed)										(quarters are 1=NW 2=NE 3=SW 4=SE) (quarters are smallest to largest) (NAD83 UTM in meters)									
(acre ft per annum)																													
WR File Nbr	Sub basin	Use	Diversion	Owner	County					POD Number	Code	Grant	Source	6416	4	Sec	Tws	Rng	X	Y									
C 02664		MON		0 SANDIA NATIONAL LABORATORIES	ED	C 02664							Shallow	3	3	2	05	23S	31E	613049	3578138*								
C 02865		EXP		0 STACY MILLS	ED	C 02865							Shallow	4	4	4	06	23S	31E	612056	3577320*								

*UTM location was derived from PLSS - see Help

8/12/13 12:57 PM

Page 1 of 1

ACTIVE & INACTIVE POINTS OF DIVERSION



New Mexico Office of the State Engineer Point of Diversion Summary

POD Number	(quarters are 1=NW 2=NE 3=SW 4=SE) (quarters are smallest to largest)				(NAD83 UTM in meters)		
	Q64	Q16	Q4	Sec	Tws	Rng	X Y
C 02865	4	4	4	06	23S	31E	612056 3577320*
Driller License: TAYLOR WATER WELL SERVICE							
Driller Name: TAYLOR, CLINTON E.							
Drill Start Date:	08/27/2001	Drill Finish Date:	09/04/2001	Plug Date:			
Log File Date:	10/30/2001	PCW Rcv Date:		Source: Shallow			
Pump Type:		Pipe Discharge Size:		Estimated Yield: 0			
Casing Size:		Depth Well:	174 feet	Depth Water:			

C-108 - ITEM X1

Water Well Analysis



Frac Water Analysis

Date: 8/27/2013

2708 West County Road, Hobbs NM 88240
Phone (575) 392-5556 Fax (575) 392-7197

Source Water

1

Analyzed For

Company	Well Name	County	State
Devon	Mills Ranch WW		

Specific Gravity	1.005	SO ₄ PPM	1.008
PH	7.29	Cl PPM	Not Tested
Temperature °F	75	Reducing Agents	Not Tested

Cations

Sodium + Pot	in Mg/L	1,762	in PPM	1,748
Calcium	in Mg/L	556	in PPM	552
Magnesium	in Mg/L	7	in PPM	7
Chloride + in FeCl	in Mg/L	0.0	in PPM	0

Anions

Chlorides	in Mg/L	3,520	in PPM	3,492
Sulfates	in Mg/L	200	in PPM	198
Bicarbonates	in Mg/L	102	in PPM	102

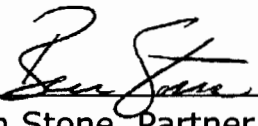
Total Hardness (as CaCO ₃)	in Mg/L	1,420	in PPM	1,409
Total Dissolved Solids (Calc)	in Mg/L	6,148	in PPM	6,099

Remarks Fresh Water
 Gelled X-linked

Report # 13038

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.

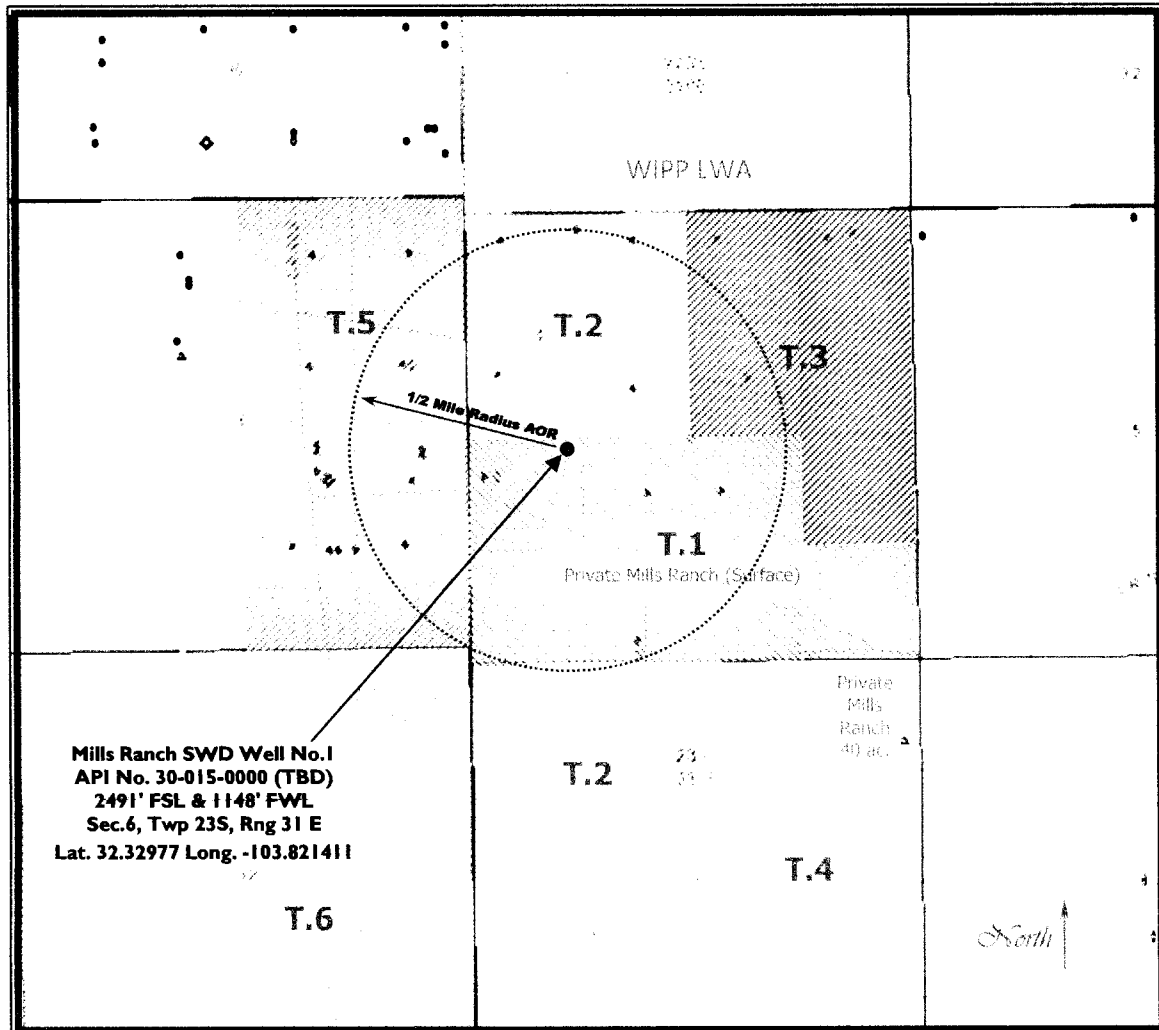


Ben Stone, Partner
SOS Consulting, LLC

Project: Owl SWD Operating, LLC
Mills Ranch SWD No.1
Reviewed 8/28/2014

Mills Ranch SWD Well No.1 - Leasehold Plat

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



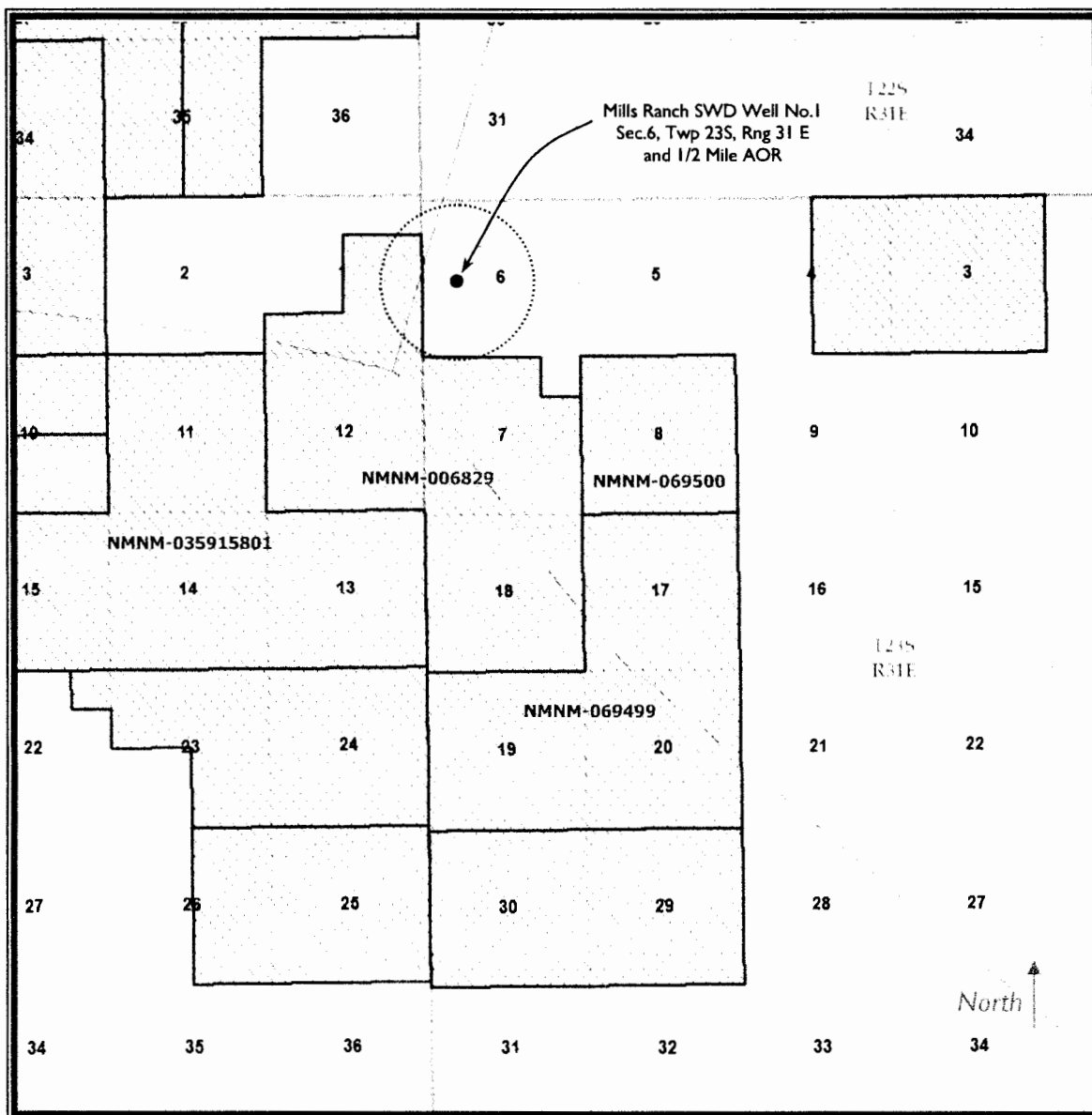
OWL SWD OPERATING, LLC

LEGEND

- T.1 - NMNM-0546732 - Occidental Permian, LP
- T.2 - NMNM-0002887B - CTV O&G NM, Keystone O&G NM, Others
- T.3 - NMNM-0002887D - CTV O&G NM, Keystone O&G NM, Others
- T.4 - NMNM-0004473 - CTV O&G NM, Keystone O&G NM, Others
- T.5 - NMNM-0002887A - CTV O&G NM, Keystone O&G NM, Others
- T.6 - NMNM-0002884B - CTV O&G NM, Keystone O&G NM, Others

Mills Ranch SWD Well No.1 - Potash Map

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



Owl SWD Operating, LLC

LEGEND



NMNM-069500; NMNM-069499;
NMNM-035915801; NMNM-006829

Western-Ag Minerals Company
(Operated by Mosaic Potash Company)

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

NOTE: RECEIPIANTS NOTIFIED VIA U.S. CERTIFIED MAIL RECEIVE THE NOTIFICATION LETTER (INCLUDED AS AN APPLICATION EXHIBIT) FOLLOWED IN A FEW DAYS BY A MINI-CD CONTAINING A PDF COPY OF THE FULL APPLICATION. FED EX RECEIPIANTS ARE SENT A HARD COPY OF THE FULL APPLICATION PACKAGE AT THE TIME OF SUBMISSION.

SURFACE OWNER (Notified via U.S. Postal Certified Mail)

1 STACEY MILLS / MILLS RANCH
c/o Francis Mills, Registered Agent
P.O. Box 1358
Loving, NM 88256

MINERALS LESSEES and OFFSET OPERATORS (All notified via U.S. Postal Certified Mail)

BLM Lease NMNM-0546732

Lessee

2 OCCIDENTAL PERMIAN, LTD
P.O. Box 4294
Houston, TX 77210

Operator

3 BOPCO, LP
Attn: Ross Sutton
201 Main Street, Suite 2900
Fort Worth, Texas 76102

BLM Leases:

**NMNM-0002887B;
NMNM-0002887D;
NMNM-0004473;
NMNM-0002887A;
NMNM-0002884B**

Lessee

4 CTV OG NM LLC
201 Main Street, Suite 2700
Fort Worth, TX 76102-3131

Lessees at same address as above:

5 KEYSTONE OG NM LLC
6 LMBI OG NM LLC
7 SRBI OG NM LLC
8 THRU LINE OG NM LLC

Operators

BOPCO, LP
Attn: Ross Sutton
201 Main Street, Suite 2900
Fort Worth, Texas 76102

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

NMNM-0002887A (cont.)

Operators

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

POTASH LEASES

**BLM Lease NMNM-006829;
NMNM-069499;
NMNM-069500;
NMNM-035915801**

MOSAIC POTASH COMPANY / WESTERN AG-MINERALS COMPANY
Attn: Mr. Dan Morehouse
P.O. Box 71
Carlsbad, NM 88221

ADDITIONAL NOTIFICATION – WASTE ISOLATION PILOT PLANT (WIPP)

U.S. Department of Energy (U.S. Certified Mail)
Attn: Mr. Jose Franco, Director
Carlsbad Field Office
P.O. Box 3090
Carlsbad, New Mexico 88221

U.S. Department of Energy Carlsbad Field Office (U.S. Certified Mail)
Attn: Ms. Susan McCauslin
4021 National Parks Highway
Carlsbad, NM 88220

REGULATORY

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

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

BUREAU OF LAND MANAGEMENT (FedEx'ed copy)
Oil & Gas Division
620 E. Greene St.
Carlsbad, NM 88220



March 3, 2015

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 drill and configure for salt water disposal the Mills Ranch SWD Well No.1. The proposed commercial operation will be for

produced water disposal from area operators into the Devonian formation. As indicated in the notice below, the well is located in Section 6, Township 23 South, Range 31 East in Eddy County, New Mexico.

Please note that this is a new location to satisfy all concerned parties who expressed a desire to have the subject well spot relocated. Owl negotiated with those parties through various efforts and was able to develop the new site with the cooperation of those parties and the landowner.

The published notice states that the interval will be from a maximum top of 15,600 feet and maximum depth of 17,000 feet. Depths may alter only slightly depending on log analysis to establish an appropriate interval of desirable porosity.

Following is the notice published in the Artesia Daily Press, Artesia, New Mexico on or about March 5, 2015.

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 [drill and] permit for salt water disposal its Mills Ranch SWD Well No.1. The well will be located 2491' FSL & 1148' FWL in Section 6, Township 23 South, Range 31 East in Eddy County, New Mexico. Produced water from area production will be commercially disposed into the Devonian formation through an openhole completion between a maximum applied for top of 15,600 feet to maximum depth of 17,000 feet. (Actual interval will vary only by depth setting of casing and DTD when desired porosity interval is exposed meaning, total depth of the well could be slightly shallower.) The maximum injection pressure will be 3120 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.

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)

U.S. Postal Service™ CERTIFIED MAIL™ RECEIPT (Domestic Mail Only; No Insurance Coverage Provided)

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Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees	\$ 649

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MAR 03 2015

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or PO Box No.
City, State, ZIP

STACEY MILLS / MILLS RANCH
c/o Francis Mills, Registered Agent
P.O. Box 1358

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Street, Apt. No.
or PO Box
City, State, ZIP

BOPCO, LP
Attn: Ross Sutton
201 Main Street, Suite 2900
Fort Worth, Texas 76102

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KEYSTONE OG NM LLC
201 Main St., Ste. 2700
Fort Worth, TX 76102-3131

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P.O. Box 4294
Houston, TX 77210

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CTV OG NM LLC
201 Main St., Ste. 2700
Fort Worth, TX 76102-3131

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or PO Box
City, State, ZIP

LMBI OG NM LLC
201 Main St., Ste. 2700
Fort Worth, TX 76102-3131

PS Form 3800

C-108 - Item XIV

Proof of Notice (Certified Mail Receipts – cont.)

7014 0510 0001 2766 3045
7014 0510 0001 2766 30
7014 0510 0001 2766 30
7014 0510 0001 2766 30

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MAR 03 2015

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City, State

SRBI OG NM LLC
201 Main St., Ste. 2700
Fort Worth, TX 76102-3131

PS Form 3800, April 2010
For delivery information visit our website at www.usps.com

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Return Receipt Fee (Endorsement Required)	270
Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees	\$ 649

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MAR 03 2015

Sent To
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City, State

DEVON ENERGY PROD. CO., LP
333 W. Sheridan Avenue
Oklahoma City, OK 73102-5010

PS Form 3800, April 2010
For delivery information visit our website at www.usps.com

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Return Receipt Fee (Endorsement Required)	270
Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees	\$ 649

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MAR 03 2015

Sent To
Street, Apt or PO Box
City, State

U.S. Department of Energy
Attn: Mr. Jose Franco, Director
Carlsbad Field Office
P.O. Box 3090
Carlsbad, New Mexico 88221

U.S. Postal Service™ CERTIFIED MAIL™ RECEIPT (Domestic Mail Only; No Insurance Coverage Provided)

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Return Receipt Fee (Endorsement Required)	270
Restricted Delivery Fee (Endorsement Required)	
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City, State

THRU LINE OG NM LLC
201 Main St., Ste. 2700
Fort Worth, TX 76102-3131

PS Form 3800, April 2010
For delivery information visit our website at www.usps.com

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Return Receipt Fee (Endorsement Required)	270
Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees	\$ 649

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MAR 03 2015

Sent To
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City, State

MOSAIC POTASH COMPANY
Attn: Mr. Dan Morehouse
P.O. Box 71
Carlsbad, NM 88221

PS Form 3800, April 2010
For delivery information visit our website at www.usps.com

Postage	\$ 49
Certified Fee	330
Return Receipt Fee (Endorsement Required)	270
Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees	\$ 649

Postmark Here
MAR 03 2015

Sent To
Street, Apt or PO Box
City, State

U.S. Department of Energy CFO
Attn: Ms. Susan McCauslin
4021 National Parks Highway
Carlsbad, NM 88220

C-108 – Item XIV

Notice and Publication

Letters of Consent

1. Waste Isolation Pilot Plant
2. Mosaic Potash Company

(Letters follow this page.)



Department of Energy
Carlsbad Field Office
P. O. Box 3090
Carlsbad, New Mexico 88221
FEB 25 2015

Mr. Stacey Mills
P.O. Box 1358
Loving, NM 88256

Subject: Proposed Mills Ranch Salt Water Disposal Well No. 1, Section 6, Township 23 South, Range 31 East, Eddy County, New Mexico

Dear Mr. Mills:

Thank you for contacting me on the subject of the planned salt water disposal well to be located on your property south of the Waste Isolation Pilot Plant (WIPP) Land Withdrawal Area (LWA). The Department of Energy (DOE) has reviewed the information you provided, and has determined that there are no required actions of approval or oversight requirements by the DOE, as this well will be located on your private land.

Maintaining an open-door working relationship with WIPP's neighbors is important. If you have any further questions on this subject, please contact Susan McCauslin at (575) 234-7349 or via email at susan.mccauslin@cbfo.doe.gov. Also, please feel free in the future to contact the DOE on subjects that are of importance to you.

Sincerely,


Jose R. Franco, Manager
Carlsbad Field Office

cc:
B. Stone, SOS Consulting, LLC *ED
CBFO M&RC
*ED denotes electronic distribution



Mosaic Potash Carlsbad Inc.
P.O. Box 71
1361 Potash Mines Road
Carlsbad, NM 88221-0071

Tel 575-628-6200
Fax 575-887-0589

February 25, 2015

Mr. Ben Stone
SOS Consulting, LLC
P.O. Box 300
Como, TX 75431

Dear Mr. Stone

Locating the Mills Ranch No. 1 SWD at 2520' FSL and 1148' FWL of Section 6, T23S, R31E meets with Mosaic's desired policy of limiting additional impact of oil and gas operations on potash reserves. We appreciate everyone's work on this issue and are glad to see it arrive at an agreeable location.

Mosaic does not object to this well at this location at this time. Due to the possibility of conditions changing in the area or our knowledge the potash ore body improves, our lack of objection is valid only for one year and we reserve the right to revisit the issue if drilling does not occur by that time.

Thanks again for your understanding and assistance.

A handwritten signature in black ink, appearing to read "Dan Morehouse", with a long horizontal stroke extending to the right.

Dan Morehouse
Mine Engineering Manager



Dan Morehouse | Mine Engineering Manager, Carlsbad Mine
The Mosaic Company | P.O. Box 71 | Carlsbad, NM 88220
P: 575.628.6312 | C: 575.302.9028

C-108 - Item XIV

Proof of Notice – Legal Notice
Newspaper of General Circulation

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 [drill and] permit for salt water disposal its Mills Ranch SWD Well No.1. The well will be located 2491' FSL & 1148' FWL in Section 6, Township 23 South, Range 31 East in Eddy County, New Mexico. Produced water from area production will be commercially disposed into the Devonian, Silurian and Ordovician formations (as encountered and identified by log analysis) through an openhole completion between a maximum applied for top of 15,400 feet to maximum depth of 17,000 feet. (Actual interval will vary only by depth setting of casing and DTD when desired porosity interval is exposed meaning, total depth of the well could be slightly shallower.) The maximum injection pressure will be 3080 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.

Published in the Artesia Daily Press, Artesia, N.M., March 6, 2015 Legal No. 23372.

The above is the "Proof Copy" sent from the Artesia Daily Press.
The affidavit of publication will be forwarded as soon as it is received.

C-108 ITEM XIII – PROOF OF NOTIFICATION

Regulatory Filings

Owl SWD Operating, LLC

Mills Ranch SWD No.1

C-108 sent 3/05/2015

FedEx Tracking Nos.

OCD SF – 7730 5625 7848

OCD Art – 7730 5620 3610

BLM – 7730 5628 7873

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

6

~~Silver Spike Energy Operating NM, LLC~~
~~Mills Ranch SWD Well No.1~~
Section 7, Twp 23-S, Rng 31-E
Eddy County, New Mexico

Well Program - New Drill

Objective: *Drill new well for commercial salt water disposal into the Devonian formation.*

1. Geologic Information - Devonian Formation

This area of the Devonian consists of dolomites with some cherty domites characterized by intercrystalline and vugular porosity. Additional porosity can be found when the well bore encounters detrital carbonates interspersed throughout.

Estimated Formation Tops:

T/Fresh Water	346
T/Rustler	191
T/Salado	556
T/Lamar	3536
Delaware Sand	3581
Bone Spring	7384
Wolfcamp	10693
Middle Wolfcamp	11351
Strawn	12283
Atoka	12395
Morrow	12254
Middle Morrow	13520
Lower Morrow	13915
Mississippian	14662
Woodford	15122
Devonian	15291
TD	17000

2. Drilling Procedure

- a. MIRU drilling rig and associated equipment. Set up H2S wind direction indicators; brief all personnel on Emergency Evacuation Routes.
- b. All contractors conduct safety meeting prior to current task. All equipment inspected daily. Repair / replace as required.
- c. Well spud operations commence.
- d. Mud logger monitoring returns; cuttings & waste hauled to specified facility. CRI - LEA COUNTY
- e. After surface casing set/drilled; if H2S levels >20ppm detected, implement H2S Plan accordingly. (e.g., cease operations, shut in well, employ H2S safety trailer & personnel safety devices, install flare line, etc. - refer to plan.)
- f. Spills contained & cleaned up immediately. Repair or otherwise correct the situation within 48 hours before resuming operations. Notify OCD within 24 hours. Remediation started ASAP if required. Operator shall comply with 19.15.29 NMAC and 19.15.30 NMAC, as appropriate.
- g. Sundry forms filed as needed - casing, cement, etc. - operations continue to completion.

Affidavit of Publication

No. 23372

State of New Mexico

County of Eddy:

Danny Scott

being duly sworn, says that he is the

Publisher

of the Artesia Daily Press, a daily newspaper of General circulation, published in English at Artesia, said county and state, and that the hereto attached

Legal Notice

was published in a regular and entire issue of the said Artesia Daily Press, a daily newspaper duly qualified for that purpose within the meaning of Chapter 167 of the 1937 Session Laws of the state of New Mexico for

1 Consecutive weeks/day on the same

day as follows:

First Publication March 6, 2015

Second Publication _____

Third Publication _____

Fourth Publication _____

Fifth Publication _____

Sixth Publication _____

Subscribed and sworn before me this

6th day of March 2015



OFFICIAL SEAL
Latisha Romine
NOTARY PUBLIC-STATE OF NEW MEXICO

My commission expires: 5/12/2015

Latisha Romine

Latisha Romine

Notary Public, Eddy County, New Mexico

Copy of Publication:





C-108 Review Checklist: Received 3/9/15 Add. Request: _____ Reply Date: _____ Suspended: _____ [Ver 14]

PERMIT TYPE: WFX / PMX / SWD Number: 1536 Permit Dates: 3/25/15 to 5/21/15 Legacy Permits/Orders: _____

Well No. 1 Well Name(s): MILLS Ranch SWD

API: 30-0 15-44590 Spud Date: Not Yet New or Old: _____ (UIC Class II Primacy 03/07/1982)

Footages 2491 FSL/1148 FWL Lot _____ or Unit L Sec 6 Tsp 23S Rge 31E County EDDY

General Location: 1/2 mi South of WIPP Pool: _____ Pool No.: _____

BLM 100K Map: _____ Operator: OWL SWD Oper, LLC UGRID: 308330 Contact: Ben Stone

COMPLIANCE RULE 5.9: Total Wells: 7 Inactive: 0 Fincl Assur: OK Compl. Order? — IS 5.9 OK? ✓ Date: 3/11/15

WELL FILE REVIEWED ☒ Current Status: None

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

Planned Rehab Work to Well: Drill Equip / DISPOSE Stage Tool to Prod. Zone? Probed?

Well Construction Details		Sizes (in)	Setting Depths (ft)	Cement Sx or Cf	Cement Top and Determination Method
Planned <input checked="" type="checkbox"/> or Existing <input type="checkbox"/> Surface	18 1/2 - 16	1000	Stage Tool	625 SX	TOP
Planned <input type="checkbox"/> or Existing <input checked="" type="checkbox"/> Interm/Prod	14 3/4 - 13 1/4	4000	?	685 SX	TOP
Planned <input checked="" type="checkbox"/> or Existing <input type="checkbox"/> Interm/Prod	12 - 10 3/4	11,800	?	1150 SX	TOP
Planned <input type="checkbox"/> or Existing <input type="checkbox"/> Prod/Liner					
Planned <input checked="" type="checkbox"/> or Existing <input type="checkbox"/> Liner	9 3/8 - 7 5/8	11500 - 15400		720 SX	11500 (TOL)
Planned <input type="checkbox"/> or Existing <input checked="" type="checkbox"/> OH/PERF	6 1/8"	15400 - 17000	Inj Length		
			1600		

Injection Lithostratigraphic Units	Depths (ft)	Injection or Confining Units	Tops
Adjacent Unit: Litho. Struc. Por.			
Confining Unit: Litho. Struc. Por.			
Proposed Inj Interval TOP:	15,400	DEVIL FUEL	
Proposed Inj Interval BOTTOM:	17,000	OPERO RIMMAYO	
Confining Unit: Litho. Struc. Por.			
Adjacent Unit: Litho. Struc. Por.			

Completion/Operation Details:	
Drilled TD	PBTD
NEW TD 17000	NEW PBTD
NEW Open Hole <input type="checkbox"/> or NEW Perfs <input type="checkbox"/>	
Tubing Size 5 1/2 in. Inter Coated? <input checked="" type="checkbox"/>	
Proposed Packer Depth _____ ft	
Min. Packer Depth (100-ft limit)	
Proposed Max. Surface Press. 3080 psi	
Admin. Inj. Press. 3080 (0.2 psi per ft)	

AOR: Hydrologic and Geologic Information

POTASH: R-111-P ☐ Noticed? _____ BLM Sec Ord ☐ WIPP ☐ Noticed? _____ SALT/SALADO T: 556 B: OLIVE HOUSE

FRESH WATER: Aquifer _____ Max Depth 560 HYDRO AFFIRM STATEMENT By Qualified Person ☒

NMOSE Basin: _____ CAPITAN REEF: thru ☐ adj ☐ NA ☒ No. Wells within 1-Mile Radius? 2 FW Analysis ☒

Disposal Fluid: Formation Source(s) all sources Analysis? ☒ On Lease ☐ Operator Only ☐ or Commercial ☒

Disposal Int: Inject Rate (Avg/Max BWPD): 30,000 Protectable Waters? No Source: analysis System: Closed ☒ or Open ☐

HC Potential: Producing Interval? _____ Formerly Producing? _____ Method: Logs/DST/P&A/Other WILLOG 2-Mile Radius Pool Map ☒

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

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 3/6/15 Mineral Owner _____ Surface Owner MILLS Ranch N. Date 3/5/15

RULE 26.7(A): Identified Tracts? _____ Affected Persons: WIPP/MOSAIC/DEVON/THRU/SRBN N. Date 3/25/15

Permit Conditions: Issues: one Year FROM 2/25/15, PER MOSAIC