

6-29-2017 DATE IN	SUSPENSE	ENGINEER PRG	6-29-2017 LOGGED IN	SWD TYPE	PKSC 1717933012 APP NO.
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ABOVE THIS LINE FOR DIVISION USE ONLY

**NEW MEXICO OIL CONSERVATION DIVISION**  
- Engineering Bureau -  
1220 South St. Francis Drive, Santa Fe, NM 87505



**ADMINISTRATIVE APPLICATION CHECKLIST**

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

**Application Acronyms:**

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

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

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

Check One Only for [B] or [C]

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

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

[D] Other: Specify \_\_\_\_\_

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

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

[B] ☒ Offset Operators, Leaseholders or Surface Owner

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

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

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

[F] ☐ Waivers are Attached

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

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

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

Stephen L. Pattee, P.G.

Print or Type Name

Signature

Engineer - Agent of OWL

Title

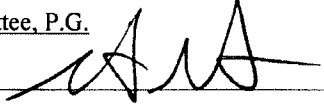
06/05/2017

Date

steve@lonquist.com

e-mail Address

**APPLICATION FOR AUTHORIZATION TO INJECT**

- I. PURPOSE: Secondary Recovery Pressure Maintenance X Disposal Storage  
Application qualifies for administrative approval? X Yes No
- II. OPERATOR: OWL SWD Operating, LLC  
ADDRESS: 8214 Westchester Drive, Suite 850, Dallas, TX 75255  
CONTACT PARTY: Preston Carr PHONE: 855-695-7937
- III. WELL DATA: Complete the data required on the reverse side of this form for each well proposed for injection.  
Additional sheets may be attached if necessary.
- IV. Is this an expansion of an existing project? Yes X No  
If yes, give the Division order number authorizing the project: \_\_\_\_\_
- V. Attach a map that identifies all wells and leases within two miles of any proposed injection well with a one-half mile radius circle drawn around each proposed injection well. This circle identifies the well's area of review.
- VI. Attach a tabulation of data on all wells of public record within the area of review which penetrate the proposed injection zone. Such data shall include a description of each well's type, construction, date drilled, location, depth, record of completion, and a schematic of any plugged well illustrating all plugging detail.
- VII. Attach data on the proposed operation, including:
1. Proposed average and maximum daily rate and volume of fluids to be injected;
  2. Whether the system is open or closed;
  3. Proposed average and maximum injection pressure;
  4. Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water; and,
  5. If injection is for disposal purposes into a zone not productive of oil or gas at or within one mile of the proposed well, attach a chemical analysis of the disposal zone formation water (may be measured or inferred from existing literature, studies, nearby wells, etc.).
- \*VIII. Attach appropriate geologic data on the injection zone including appropriate lithologic detail, geologic name, thickness, and depth. Give the geologic name, and depth to bottom of all underground sources of drinking water (aquifers containing waters with total dissolved solids concentrations of 10,000 mg/l or less) overlying the proposed injection zone as well as any such sources known to be immediately underlying the injection interval.
- IX. Describe the proposed stimulation program, if any.
- \*X. Attach appropriate logging and test data on the well. (If well logs have been filed with the Division, they need not be resubmitted).
- \*XI. Attach a chemical analysis of fresh water from two or more fresh water wells (if available and producing) within one mile of any injection or disposal well showing location of wells and dates samples were taken.
- XII. Applicants for disposal wells must make an affirmative statement that they have examined available geologic and engineering data and find no evidence of open faults or any other hydrologic connection between the disposal zone and any underground sources of drinking water.
- XIII. Applicants must complete the "Proof of Notice" section on the reverse side of this form.
- XIV. Certification: I hereby certify that the information submitted with this application is true and correct to the best of my knowledge and belief.
- NAME: Stephen L. Pattee, P.G. TITLE: Consulting Engineer – Agent for OWL  
SIGNATURE:  DATE: 06/05/2017  
E-MAIL ADDRESS: steve@lonquist.com
- \* 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

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

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.

INJECTION WELL DATA SHEET

OPERATOR: OWL SWD Operating, LLC

WELL NAME & NUMBER: Threat Level Midnight SWD No. 1

WELL LOCATION: 219' FSL & 1.420' FEL  
FOOTAGE LOCATION

Q  
UNIT LETTER

1 SECTION 26S TOWNSHIP 26E RANGE

WELLBORE SCHEMATIC

WELL CONSTRUCTION DATA  
Surface Casing

Hole Size: 24.000" Casing Size: 20.000"  
Cemented with: 800 sx. *or* \_\_\_\_\_ ft<sup>3</sup>  
Top of Cement: surface Method Determined: circulation

1<sup>st</sup> Intermediate Casing

Hole Size: 17.500" Casing Size: 13.375"  
Cemented with: 1,400 sx. *or* \_\_\_\_\_ ft<sup>3</sup>  
Top of Cement: surface Method Determined: circulation

2<sup>nd</sup> Intermediate Casing

Hole Size: 12.125" Casing Size: 9.625"  
Cemented with: 2,300 sx. *or* \_\_\_\_\_ ft<sup>3</sup>  
Top of Cement: surface Method Determined: circulation

## Production Liner

**Hole Size: 8.500"**

Casing Size: 7.000"

Cemented with: 590 sx.

or                      A3

Top of Cement: 9,750'

**Method Determined: log**

**Total Depth: 14,300'**

### Injection Interval

13,350 feet to 14,300 feet

(Open Hole Completion)

**INJECTION WELL DATA SHEET**

Tubing Size: 4-1/2", 11.6 lb/ft, P-110, BT&C Lining Material: Duoline

Type of Packer: 7" D&L Oil Tools Permapak Packer – Single Bore

Packer Setting Depth: 13,300'

Other Type of Tubing/Casing Seal (if applicable): \_\_\_\_\_

Additional Data

1. Is this a new well drilled for injection?      X Yes         No

If no, for what purpose was the well originally drilled?

2. Name of the Injection Formation: Siluro-Devonian, Top 100' of Montoya

3. Name of Field or Pool (if applicable): \_\_\_\_\_

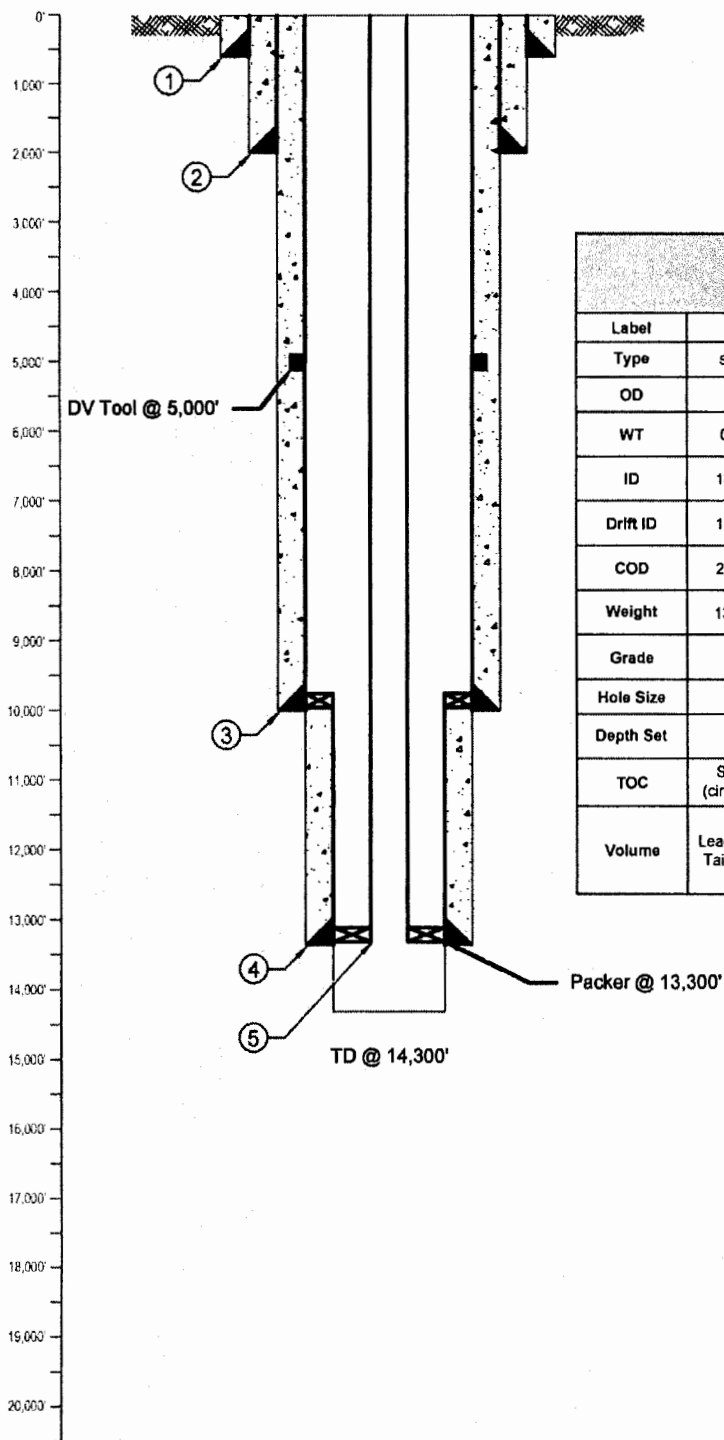
4. Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail, i.e. sacks of cement or plug(s) used.

No, new drill.

5. Give the name and depths of any oil or gas zones underlying or overlying the proposed injection zone in this area: Delaware: 1,950' ; Cherry Canyon: 2,780' ; Brushy Canyon: 3,900' ;

Bone Spring: 5,480' ; Wolfcamp: 8,640' ; Strawn: 11,000' ; Atoka: 11,200' ; Morrow: 11,950'

\_\_\_\_\_  
\_\_\_\_\_



KB:	NA
BHF:	NA
GL:	NA
Spud:	NA

Casing/Tubing Information					
Label	1	2	3	4	5
Type	Surface	Intermediate	Production	Liner	Tubing
OD	20"	13-3/8"	9-5/8"	7"	4-1/2"
WT	0.635"	0.480"	0.545"	0.453"	0.250"
ID	18.730"	12.415"	8.535"	6.094"	4.000"
Drift ID	18.542"	12.259"	8.379"	5.969"	3.875"
COD	21.000"	14.375"	10.625"	7.875"	5.000"
Weight	133 lb/ft	68 lb/ft	53.5 lb/ft	32 lb/ft	11.6 lb/ft
Grade	J-55 BTC	J-55 BTC	HCP-110 LTC	HCL-80 LTC	P-110 BTC
Hole Size	24"	17-1/2"	12-1/4"	8-1/2"	6.094"
Depth Set	600'	2,000'	10,000'	9,750' - 13,350'	13,300'
TOC	Surface (circulation)	Surface (circulation)	Surface (circulation)	9,750'	NA
Volume	Lead: 600 sx Tail: 200 sx	Lead: 1,100 sx Tail: 300 sx	Stage 1 Lead: 1,400 sx Stage 1 Tail: 100 sx Stage 2 Lead: 700 sx Stage 2 Tail: 100 sx	590 sx	NA

**LONQUIST**

FIELD SERVICE

AUSTIN WICHITA  
HOUSTON CALGARY

Texas License F-9147

3345 Bee Cave Road, Suite 201  
Austin, Texas 78746  
Tel: 512.732.9812  
Fax: 512.732.9818

OWL SWD Operating, LLC

Country: USA

Location:

API No:

State ID No:

Drawn: WHG

Rev No: 1

Threat Level Midnight SWD No. 1

State/Province: New Mexico

Site:

Field:

Project No: 1456

Reviewed: SLP

Notes: Wellbore design supplied by OWL

County/Parish: Eddy

Survey/STR: Sect 1, T-26S, R-26E

Well Type/Status: SWD

Date: 5/11/17

Approved: SLP

**OWL SWD Operating, LLC.**

**Threat Level Midnight SWD No. 1**

**FORM C-108 Supplemental Information**

**III. Well Data**

**A. Wellbore Information**

1.

Well information	
Lease Name	Threat Level Midnight
Well No.	1
Location	S-1 T-26S R-26E
Footage Location	219' FSL & 1,420' FEL

2.

**a. Wellbore Description**

Casing Information				
Type	Surface	1 <sup>st</sup> Intermediate	2 <sup>nd</sup> Intermediate	Liner
OD	20"	13.375"	9.625"	7"
WT	0.635"	0.480"	0.545"	0.453"
ID	18.730"	12.415"	8.535"	6.094"
Drift ID	18.542"	12.259"	8.379"	5.969"
COD	21.000"	14.375"	10.625"	7.875"
Weight	133 lb/ft	68 lb/ft	53.5 lb/ft	32 lb/ft
Grade	J-55	J-55	HCP-110	HCL-80
Hole Size	24"	17.5"	12.25"	8.5"
Depth Set	600'	2,000'	10,000'	9,750' – 13,350'



b. Cementing Program

Cement Information				
Casing String	Surface	1 <sup>st</sup> Intermediate	2 <sup>nd</sup> Intermediate	Liner
Lead Cement	CI C + 4% Gel + 5% Salt + 0.25 pps Celloflake	HLC + 5% Salt	Stage 1: HLC Stage 2: HLC	Class H
Lead Cement Volume	600 sks	1,100 sks	Stage 1: 1,400 sks Stage 2: 700 sks	590 sks
Tail Cement	CI C + 2% CaCl + 0.25 pps Celloflake	Class C + 2% CaCl	Stage 1: CI H Stage 2: CI H	-
Tail Cement Volume	200 sks	300 sks	Stage 1: 100 sks Stage 2: 100 sks	-
TOC	Surface	Surface	Surface	9,750'
Method	Circulate to Surface	Circulate to Surface	Circulate to Surface	Calculated

3. Tubing Description

Tubing Information	
OD	4.5"
WT	0.250"
ID	4.000"
Drift ID	3.875"
COD	5.000"
Weight	11.6 lb/ft
Grade	P-110
Depth Set	13,300'

Tubing will be lined with Duoline.

4. Packer Description

D&L Oil Tools 7" Permapack Packer – Single Bore

## B. Completion Information

1. Injection Formation: Siluro-Devonian, Top 100' of Montoya

2. Gross Injection Interval: 13,350' – 14,300'

Completion Type: Open Hole

3. Drilled for injection.

4. See the attached wellbore schematic.

5. Oil and Gas Bearing Zones within area of well:

Formation	Depth
Delaware	1,950'
Bone Spring	5,480'
Wolfcamp	8,640'
Strawn	11,000'
Atoka	11,200'
Morrow	11,950'
Mississippian	12,560'

## VI. Area of Review

There are no wells of public record within the area of review which penetrate the proposed injection zone.

## VII. Proposed Operation Data

1. Proposed Daily Rate of Fluids to be Injection:

Average Volume: 26,000 BPD

Maximum Volume: 32,000 BPD

2. Closed System

3. Anticipated Injection Pressure:

Average Injection Pressure: 2,494 PSI (surface pressure)

Maximum Injection Pressure: 2,660 PSI (surface pressure)

4. The injection fluid is to be locally produced water. Attached are produced water sample analyses taken from the closest wells that feature samples from the Delaware formation.

5. As mentioned above, a Delaware produced water sample analysis is attached.

## VIII. Geological Data

The Devonian formation is a dolomitic ramp carbonate that occurs below the Woodford shale and above the Fusselman formation. Strata found in the Devonian formation near Jal are two major groups, the Wristen Buildups and the Thirtyone Deepwater Chert, with the Wristen being more abundant. The Wristen Groups is composed of mixed limestone and dolomites with mudstone to grainstone and boundstone textures. Porosity in the Wristen group is a result of both primary and secondary development. Present are moldic, vugular, karstic (including collapse breccia) features that allow for higher porosities and permeabilities. The Thirtyone Formation contains two end-member reservoir facies, skeletal packstones/grainstones and spiculitic chert, with most of the porosity and permeability found in the coarsely crystalline cherty dolomite. These particular characteristics allow for this formation to be a saltwater disposal horizon with great potential.

### A. Injection Zone: Delaware Mountain Group – Devonian Formation

Formation	Depth
Salado	600'
Delaware	1,950'
Cherry Canyon	2,780'
Brushy Canyon	3,900'
Bone Spring	5,480'
Wolfcamp	8,640'
Strawn	11,000'
Atoka	11,200'
Morrow	11,950'
Mississippian	12,560'
Devonian	13,300'

### B. Underground Sources of Drinking Water

Water bearing formations found in this area are the Culebra, Magenta, Dewey Lake, Santa Rosa, and the Rustler formations. The EPA standard criteria for determining freshwater bearing formations included identifying clean rock containing less than 10,000 milligrams per liter of total dissolved solids. A study done by the USDOE was conducted in northern Eddy County for the Waste Isolation Pilot Plant with the parameters mentioned above. Surface Casing set below the bottom of the Rustler formation will sufficiently protect freshwater bearing formations.

There are no sources of drinking water underlying the injection interval.

## IX. Proposed Stimulation Program

No proposed stimulation program.

## X. Logging and Test Data on the Well

There are no logs or test data on the well. During the process of drilling and completion resistivity, gamma ray, and density logs will be run.

#### **XI. Chemical Analysis of Fresh Water Wells**

There is one fresh water well within one mile of the well location (C-02438). This well is operated by Doris and Owen Carleton. After attempting to take a sample, this well was found to be abandoned. The Water Right Summary from the New Mexico Office of the State Engineer is attached.

#### **XII. Affirmative Statement of Examination of Geologic and Engineering Data**

Based on the available engineering and geologic data we find no evidence of open faults or any other hydrologic connection between the disposal zone and any underground sources of drinking water.

DISTRICT I  
1625 N. French Dr., Hobbs, NM 88240  
Phone: (575) 393-6161 Fax: (575) 393-9720  
DISTRICT II  
811 S. First St., Artesia, NM 88210  
Phone: (575) 746-1203 Fax: (575) 748-9720  
DISTRICT III  
1000 Rio Pecos Rd., Aztec, NM 87410  
Phone: (505) 334-6178 Fax: (505) 334-6178  
DISTRICT IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505  
Phone: (505) 476-3460 Fax: (505) 476-3462

State of New Mexico  
Energy, Minerals & Natural Resources Department  
OIL CONSERVATION DIVISION  
1220 South St. Francis Dr.  
Santa Fe, New Mexico 87505

Form C-102  
Revised August 1, 2011  
Submit one copy to appropriate  
District Office  
☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code	Pool Name
Property Code	Property Name THREAT LEVEL MIDNIGHT SWD	Well Number 1
OGRID No.	Operator Name OILFIELD WATER LOGISTICS	Elevation 3087'

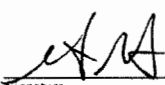
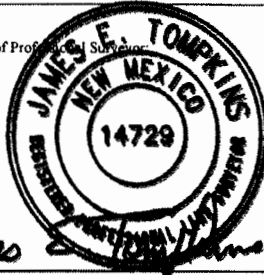
Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
	1	26S	26 E		219	SOUTH	1420	EAST	EDDY

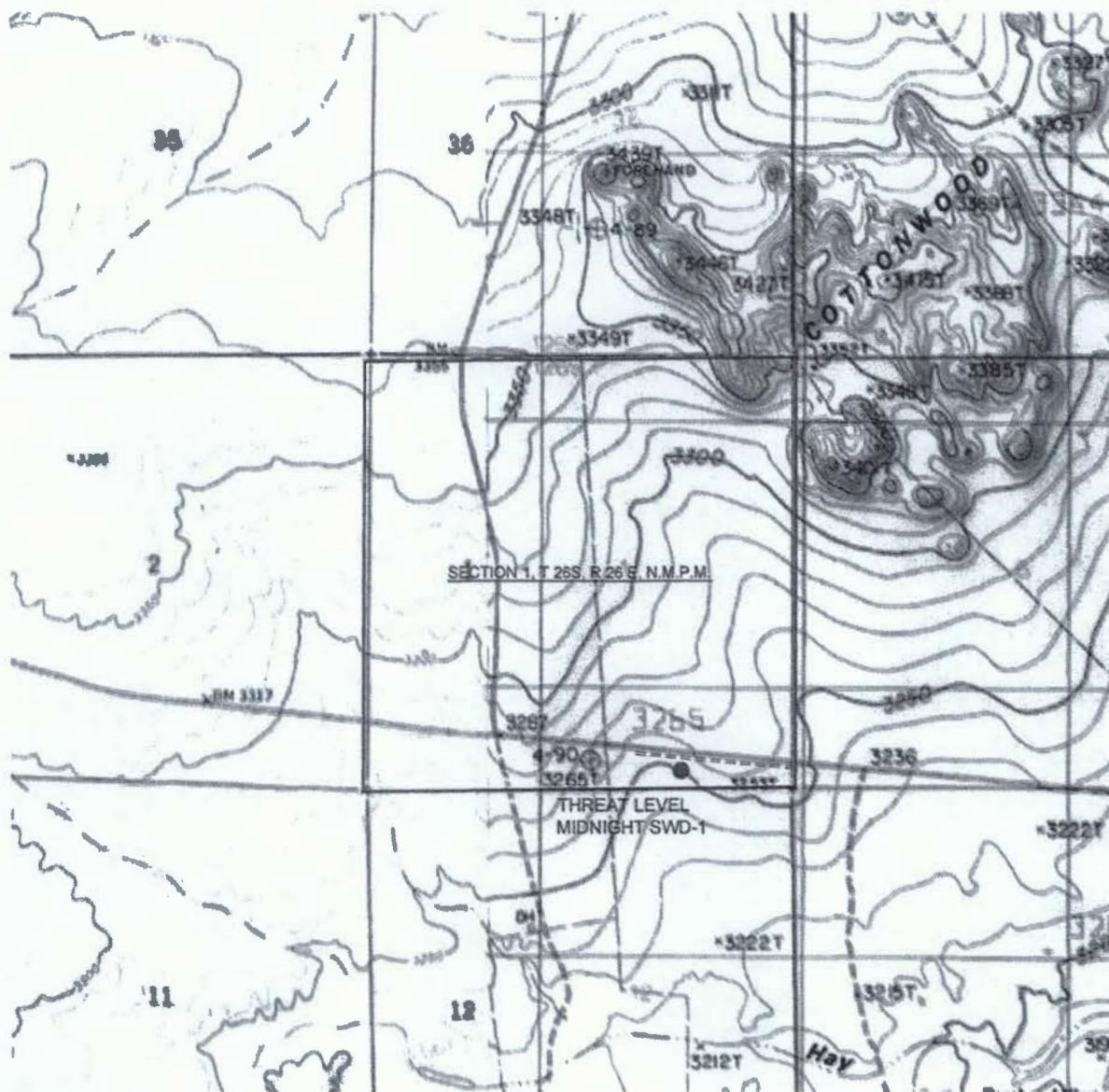
Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
Dedicated Acres	Joint or Infill	Consolidated Code	Order No.						

No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.

				<p><b>OPERATOR CERTIFICATION</b> I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.</p> <p> 06-03-17 Signature Date Stephen Patton Print Name steve@longquist.com E-mail Address</p>	
				<p><b>SURVEYORS CERTIFICATION</b> I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.</p> <p>May 25, 2017 Date of Survey</p> <p>Signature and Seal of Professional Surveyor  James E. Tompkins</p>	
				<p>Job No.: WTC51863 JAMES E. TOMPKINS 14729 Certificate Number</p>	
<p>THREAT LEVEL MIDNIGHT SWD-1 NMSP-E (NAD 83) N (Y) = 387423.6' E (X) = 569418.9' LAT. = 32°03'54.27"N LONG. = 104°14'33.65"W NMSP-E (NAD 27) N (Y) = 387368.7' E (X) = 528235.6' LAT. = 32.0649537°N LONG. = 104.2421848°W.</p>				<p>1420'</p>	
<p>219'</p>					

# LOCATION VERIFICATION MAP



0 1000 2000 4000

GRAPHIC SCALE 1" = 2000'

SECTION 1, T 26S, R 26 E, N.M.P.M.

COUNTY: EDDY STATE: NM

DESCRIPTION: 219' FSL & 1420' FEL

OPERATOR: OILFIELD WATER LOGISTICS

WELL NAME: THREAT LEVEL MIDNIGHT SWD-1



## DRIVING DIRECTIONS:

Beginning at the intersection of US 285 (Pecos Hwy.) and State Hwy. 396 (Black River Village Rd.) in Malaga, NM. go South on US 285 for approx. 11.4 miles. Turn right and head West onto Whites City Road for approx. 10.3 miles. The location flag is approx. 150 feet South of the lease road.



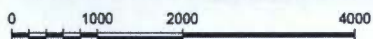
**WTC, INC.**  
405 S W. 1st Street  
Andres, TX 79714  
(432) 523-2181



JOB No.: WTC51883



# AERIAL MAP



GRAPHIC SCALE 1" = 2000'

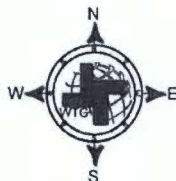
SECTION 1, T 26S, R 26 E, N.M.P.M.

COUNTY: EDDY STATE: NM

DESCRIPTION: 219' FSL & 1420' FEL

OPERATOR: OILFIELD WATER LOGISTICS

WELL NAME: THREAT LEVEL MIDNIGHT SWD-1



## DRIVING DIRECTIONS:

Beginning at the intersection of US 285 (Pecos Hwy.) and State Hwy. 396 (Black River Village Rd.) in Malaga, NM. go South on US 285 for approx. 11.4 miles. Turn right and head West onto Whites City Road for approx. 10.3 miles. The location flag is approx. 150 feet South of the lease road.



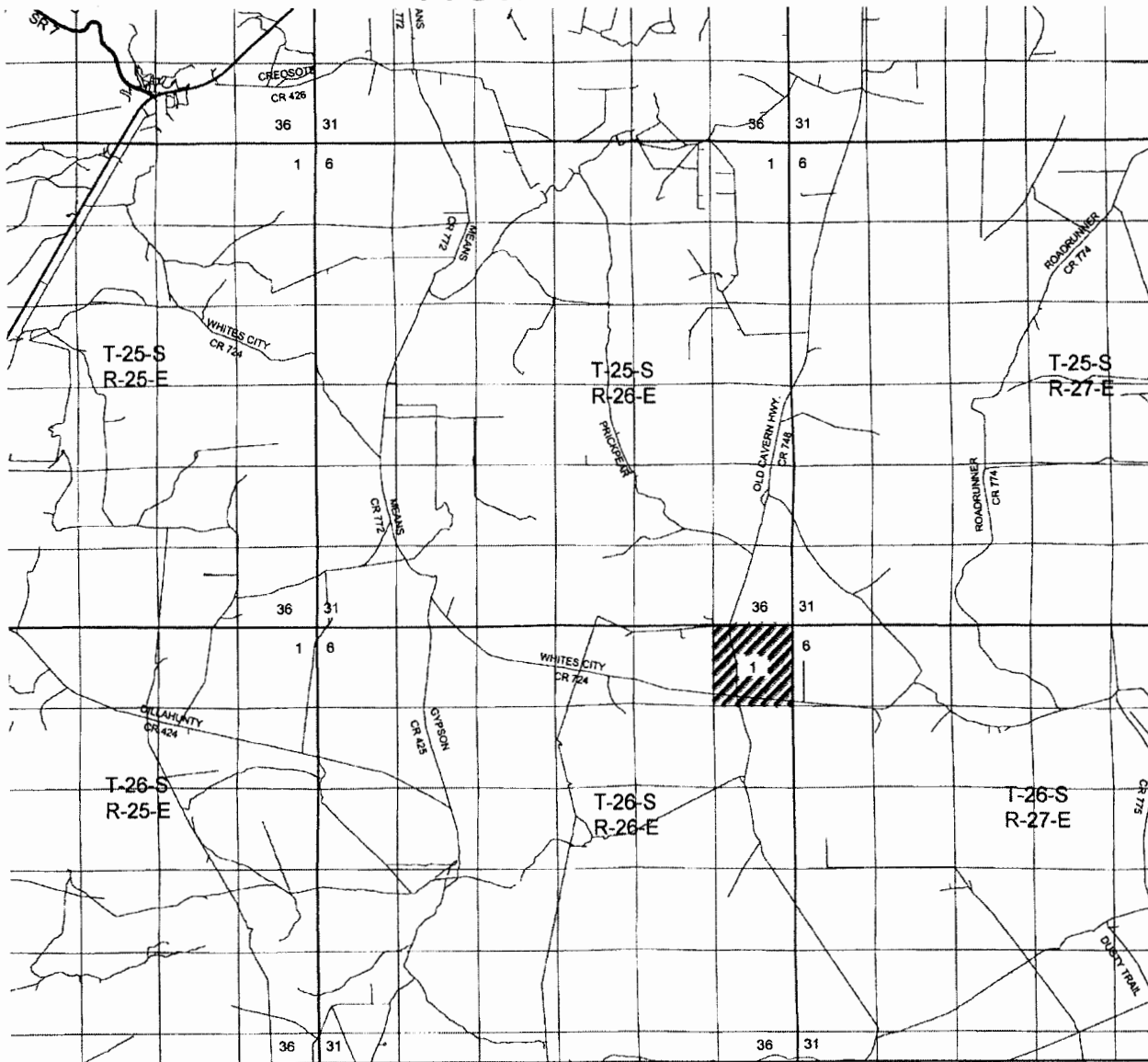
**WTC, INC.**  
405 S.W. 1st Street  
Andrews, TX 79714  
(432) 523-2181



OILFIELD WATER LOGISTICS

JOB No.: WTC51863

# VICINITY MAP



GRAPHIC SCALE 1" = 2 MILES

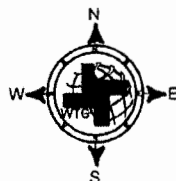
SECTION 1, T 26S, R 26 E, N.M.P.M.

COUNTY: EDDY STATE: NM

DESCRIPTION: 219' FSL & 1420' FEL

OPERATOR: OILFIELD WATER LOGISTICS

WELL NAME: THREAT LEVEL MIDNIGHT SWD-1



## DRIVING DIRECTIONS:

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**WTC, INC.**  
405 S W 1st Street  
Andrews, TX 79714  
(432) 523-2181

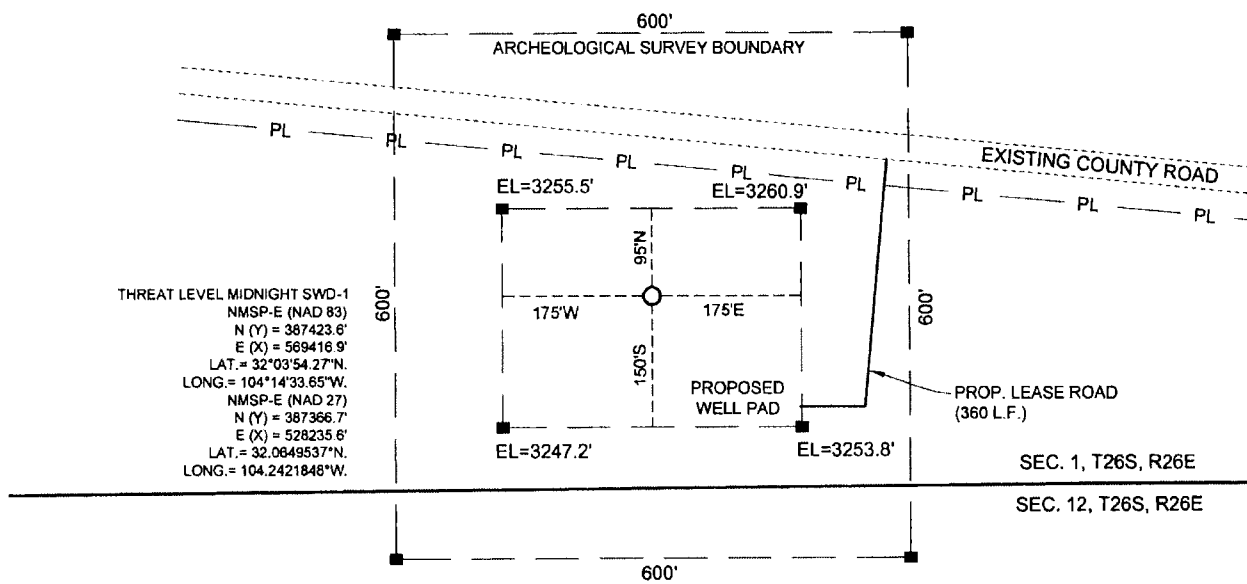


OILFIELD WATER LOGISTICS

JOB No.: WTC51883



# SITE LOCATION



GRAPHIC SCALE 1" = 200'

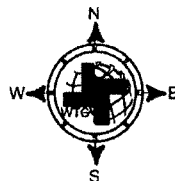
SECTION 1, T 26S, R 26 E, N.M.P.M.

COUNTY: EDDY STATE: NM

DESCRIPTION: 219' FSL & 1420' FEL

OPERATOR: OILFIELD WATER LOGISTICS

WELL NAME: THREAT LEVEL MIDNIGHT SWD-1



## DRIVING DIRECTIONS:

Beginning at the intersection of US 285 (Pecos Hwy.) and State Hwy. 396 (Black River Village Rd.) in Malaga, NM. go South on US 285 for approx. 11.4 miles. Turn right and head West onto Whites City Road for approx. 10.3 miles. The location flag is approx. 150 feet South of the lease road.



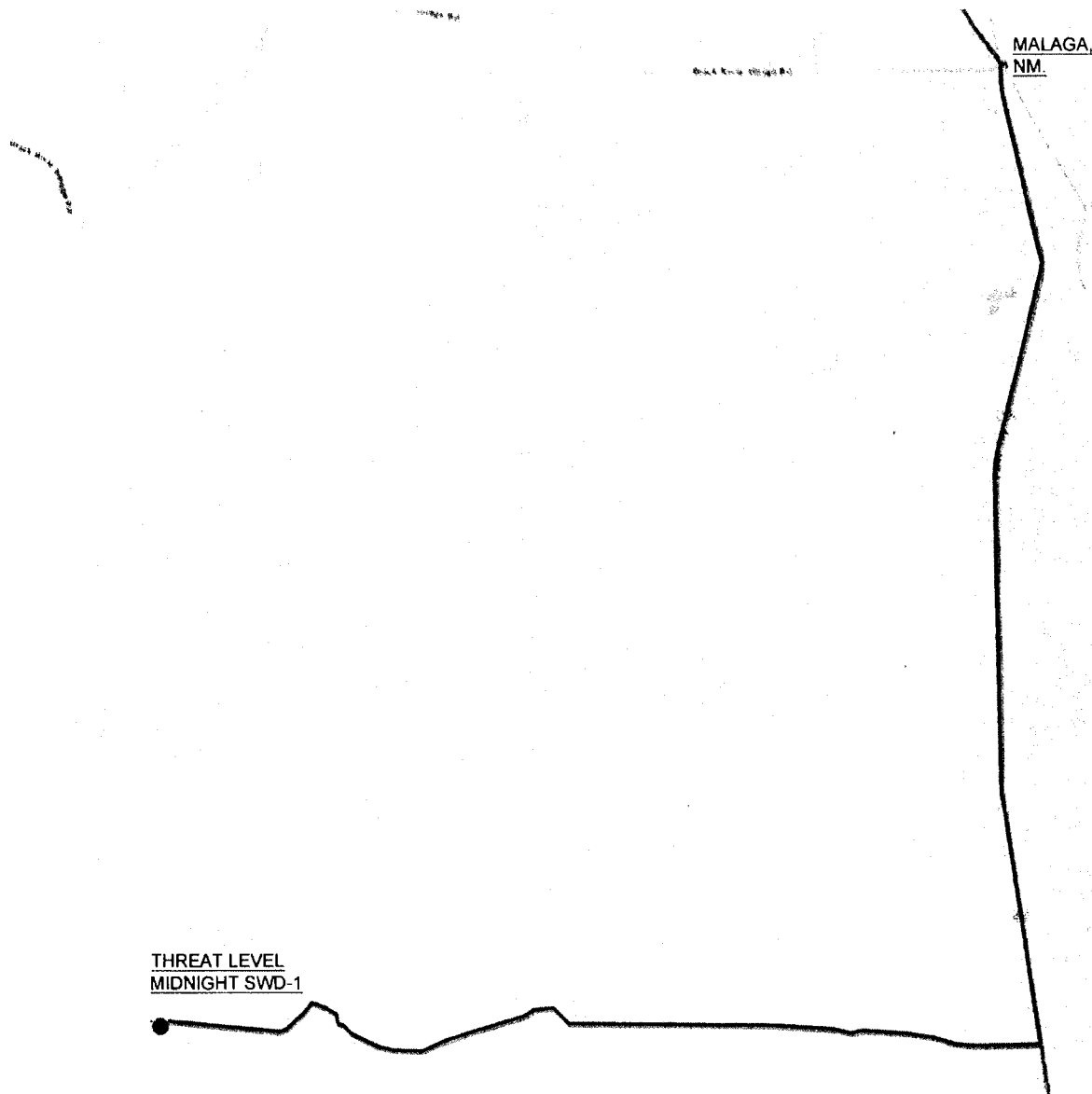
**WTC, INC.**  
 405 S.W. 1st Street  
 Andrews, TX 79714  
 (432) 523-2181



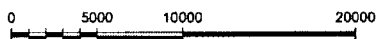
JOB No.: WTC51863

This document is the property of WTC, Inc. and is not to be distributed outside of the company without the written consent of WTC, Inc.

# ROAD ROUTE MAP



THREAT LEVEL  
MIDNIGHT SWD-1



GRAPHIC SCALE 1" = 10000'

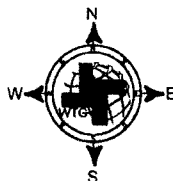
SECTION 1, T 26S, R 26 E, N.M.P.M.

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**WTC, INC.**  
405 S.W. 1st Street  
Andrews, TX 79714  
(432) 523-2181



OILFIELD WATER LOGISTICS

JOB No.: WTC51863

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35 T25S R26E  
02 T26S R26E

36 01 06

T25S R27E  
T26S R27E

31 32  
05

**Threat Level Midnight SWD #1**  
**Offset Water Wells**  
Eddy County, NM  
OWL SWD Operating, LLC

Projection: NAD 1983 State Plane NM East FIPS 3001

Drawn by: SAH      Date: 6/1/2017      Approved by: NLB

**LONQUIST & CO. LLC**

PETROLEUM  
ENGINEERS      ENERGY  
ADVISORS

AUSTIN · HOUSTON · WICHITA · DENVER · CALGARY

11 12

T26S R26E  
T26S R27E

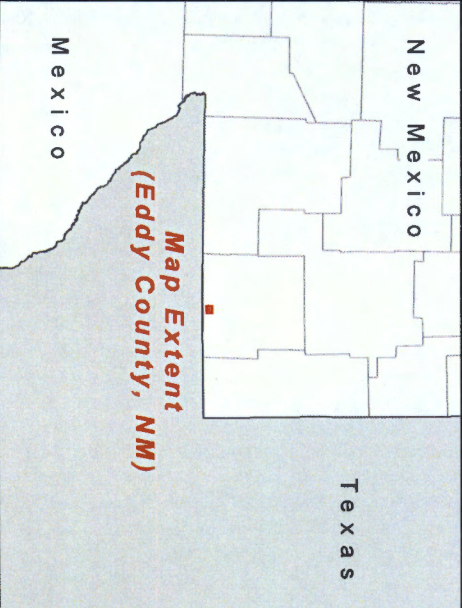
07 08

C-02438  
Lat: 32.054328  
Long: -104.247729

0 18 0.5 1 Miles

Source: New Mexico Office of the State Engineer

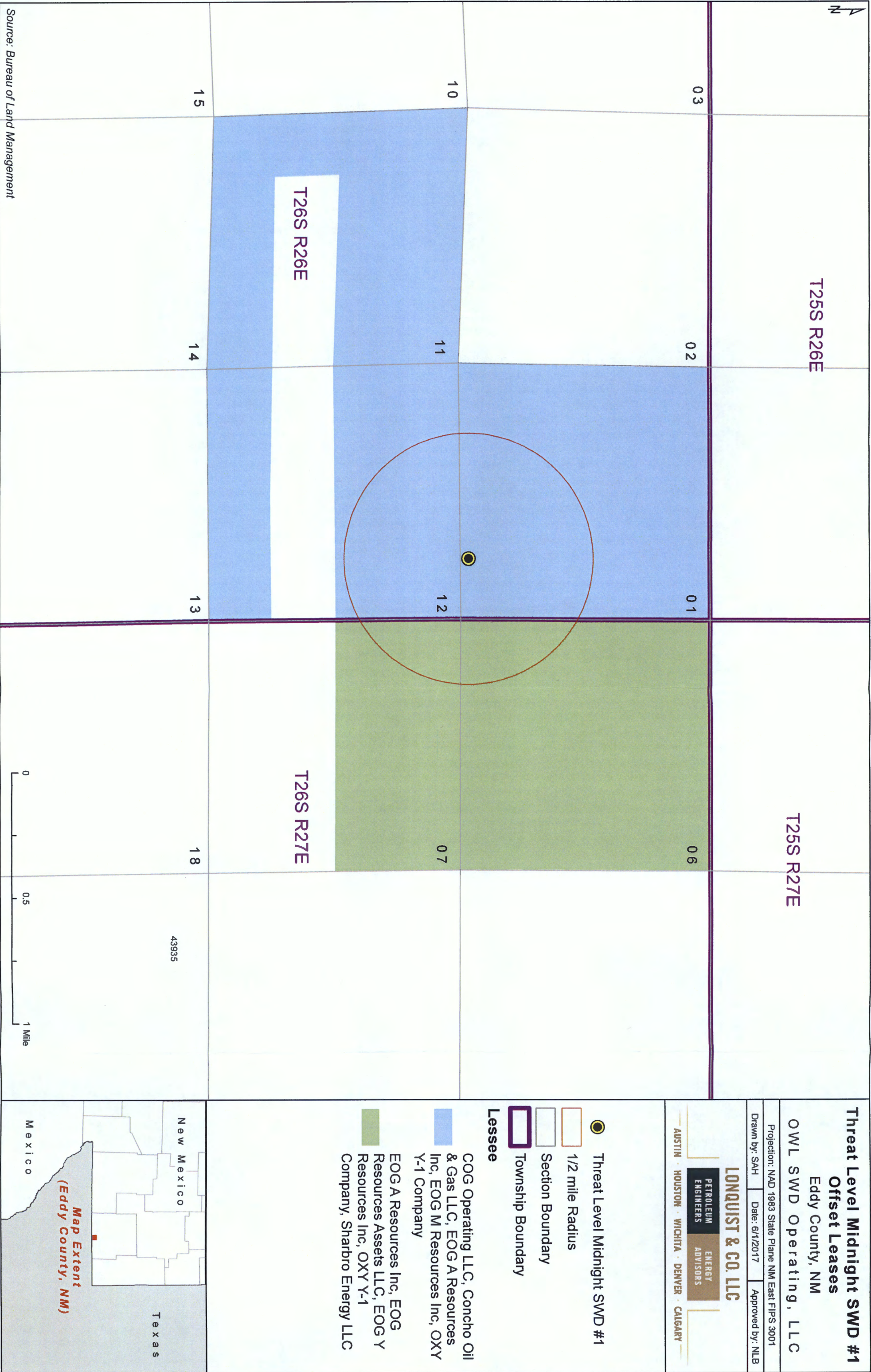
- Threat Level Midnight SWD #1
- Water Well (NAD 83)
- 1 mile Radius
- Section Boundary
- Township Boundary



Half-Mile AOR  
Threat Level Midnight SWD #1

API (30-015-)	Well Name	Well Type	Status	Operator	TD (TVD)	Location	Date Drilled
44033	BODACIOUS BSM FEDERAL #005H	Oil	Permitted	EOG Y RESOURCES, INC.	0	A-01-26S-26E	
44034	BODACIOUS BSM FEDERAL #003H	Oil	Permitted	EOG Y RESOURCES, INC.	0	C-01-26S-26E	
44035	BODACIOUS BSM FEDERAL #004H	Oil	Permitted	EOG Y RESOURCES, INC.	0	B-01-26S-26E	





T25S R26E

T25S R27E

T26S R26E

T26S R27E

43935

Map Extent  
(Eddy County, NM)

New Mexico

Texas

Mexico



Threat Level Midnight SWD No. 1 Notice List				
Notice	Address	Phone Number	Date Noticed	
Oil Conservation Division District IV	1220 South St. Francis Drive, Santa Fe, NM 87505	(505) 476-3440	6/5/2017	
Oil Conservation Division District II	811 S. First St., Artesia, NM 88210	(575) 748-1283	6/5/2017	
Bureau of Land Management	620 E. Greene St., Carlsbad, NM 88220	(575) 234-5972	6/5/2017	
EOG A Resources Inc	105 S 4th St, Artesia, NM 88210		6/5/2017	
EOG Resources Assets LLC	105 S 4th St, Artesia, NM 88210		6/5/2017	
EOG Y Resources Inc	105 S 4th St, Artesia, NM 88210		6/5/2017	
OXY Y-1 Company	PO Box 27570, Houston, TX 77227		6/5/2017	
Sharbro Energy LLC	PO Box 840, Artesia, NM 88211		6/5/2017	
COG Operating LLC	550 W Texas Ave, Suite 100, Midland, TX 79701		6/5/2017	
Concho Oil & Gas LLC	600 W Illinois Ave, One Concho Center, Midland, TX 79701		6/5/2017	
EOG M Resources Inc	105 S 4th St, Artesia, NM 88210		6/5/2017	

Eddy County, NM  
OWL SWD Operating, LLC

Projection: NAD 1983 State Plane NM East FIPS 3001

Drawn by: SAH	Date: 6/1/2017	Approved by: NLB
---------------	----------------	------------------

Drawn by: SAH	Date: 6/1/2017	Approved by: NLB
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**PETROLEUM  
ENGINEERS  
ENERGY  
ADVISORS**

—AUSTIN • HOUSTON • WICHITA • DENVER • CALGARY—

- Map Extent  
(Eddy County, NM)**

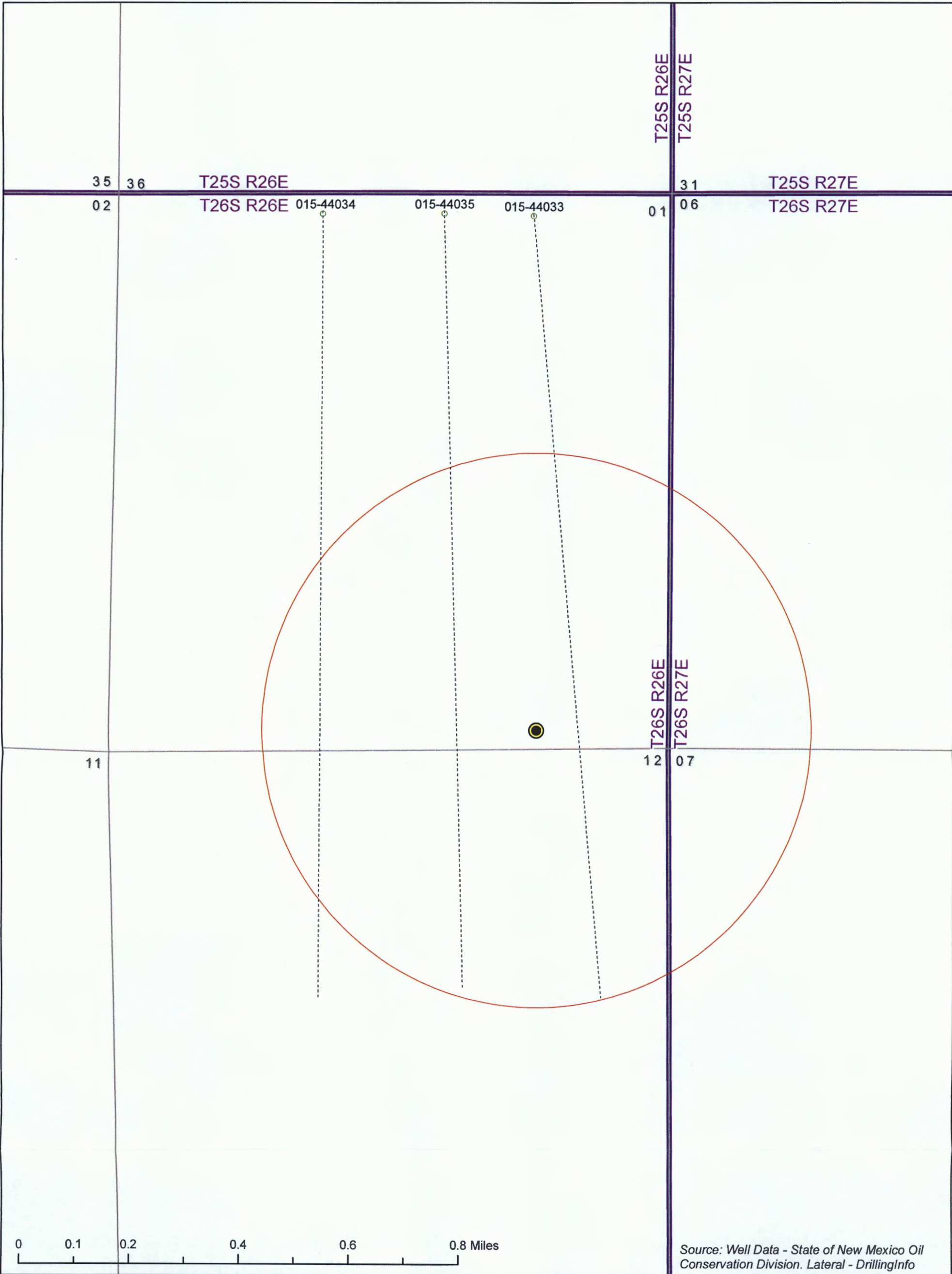
Source: State of New Mexico Oil Conservation Division

This legal notice will appear in the Carlsbad Current-Argus on Wednesday, June 7, 2017, and run in the paper for one day. The affidavit of publication will be forwarded to the New Mexico Oil Conservation Division upon receipt.

#### Legal Notice

OWL SWD Operating, LLC, 8214 Westchester Dr., Suite 850, Dallas, Texas 75255, is filing Form C-108 (Application for Authorization to Inject) with the New Mexico Oil Conservation Division for administrative approval for its salt water disposal well Threat Level Midnight SWD No. 1. The proposed well will be located 219' FSL & 1,420' FEL in Section 1, Township 26S, Range 26E in Eddy County, New Mexico. Disposal water will be sourced from area production, and will be injected into the Siluro-Devonian Formation (determined by offset log analysis) through an open hole completion between a maximum applied for top of 13,350 feet to a maximum depth of 14,300 feet. The maximum surface injection pressure will not exceed 2,660 psi with a maximum rate of 32,000 BWPD. Interested parties opposing the action must file objections or requests for hearing with the Oil Conservation Division, 1220 South St. Francis Drive, Santa Fe, New Mexico 87505, within 15 days. Additional information can be obtained from the applicant's agent, Lonquist & Co., LLC, at (512) 600-1774.





Source: Well Data - State of New Mexico Oil Conservation Division. Lateral - DrillingInfo

**Threat Level Midnight SWD #1**  
**1/2 mile Area of Review**  
Eddy County, NM  
OWL SWD Operating, LLC

Projection: NAD 1983 State Plane NM East FIPS 3001

Drawn by: SAH | Date: 6/1/2017 | Approved by: NLB

**LONQUIST & CO. LLC**  
PETROLEUM ENGINEERS | ENERGY ADVISORS  
AUSTIN · HOUSTON · WICHITA · DENVER · CALGARY

Threat Level Midnight SWD #1

Permitted Oil Well

Lateral

1/2 mile Radius

Section Boundary

Township Boundary

New Mexico

Texas

Mexico

**Map Extent**  
(Eddy County, NM)

wellname	api	latitude	longitude	section	township	range	unit	figs	figew	county	state	formation	samplesource	sampledate	ph	tds_mgL	chloride_mgL	bicarbonate_mgL	sulfate_mgL	CorrectFlag
FED J #001	3001522471	32.0730133	-104.2359085	6 26S	27E	E	2180N	660W	EDDY	NM	DELAWARE	WELLHEAD	7/31/1978	0:00	5.7	255599	160000	24	330	TRUE
FED J #001	3001522471	32.0730133	-104.2359085	6 26S	27E	E	2180N	660W	EDDY	NM	DELAWARE	D5T			7.4	265727	158000	37	3600	TRUE
FED J #001	3001522471	32.0730133	-104.2359085	6 26S	27E	E	2180N	660W	EDDY	NM	DELAWARE	D5T			7.6	255336	156000	76	790	TRUE
FED J #001	3001522471	32.0730133	-104.2359085	6 26S	27E	E	2180N	660W	EDDY	NM	DELAWARE	D5T			8.5	263830	157000	78	3700	TRUE



# New Mexico Office of the State Engineer

## Water Right Summary

WR File Number: C 02438 Subbasin: - Cross Reference: -  
Primary Purpose: STK 72-12-1 LIVESTOCK WATERING  
Primary Status: DCL DECLARATION  
Total Acres: 0 Subfile: -  
Total Diversion: 3 Cause/Case: -  
Owner: DORIS & OWEN CARLETON

### Documents on File

Trn #	Doc	File/Act	Status		Transaction Desc.	From/ To	Acres	Diversion	Consumptive
			1	2					
198221	DCL	1995-02-06	DCL	PRC	C 02438	T	0	3	

### Current Points of Diversion

POD Number	Source	Q Q Q			(NAD83 UTM in meters)		Other Location Desc			
		64	16	4	X	Y				
C 02438		4	2	3	12	26S	26E	571015	3546705*	

\*An (\*) after northing value indicates UTM location was derived from PLSS - see Help

### Place of Use

Q	Q	Q	Q	SecTws	Rng	Acres	Diversion	CU	Use	Priority	Status	Other Location Desc
256	64	16	4									
						0	3		STK		DCL	NO PLACE OF USE GIVEN.

### Source

Acres	Diversion	CU	Use	Priority	Source Description
0	3		STK		GW

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT  
**APPLICATION FOR PERMIT TO DRILL OR REENTER**

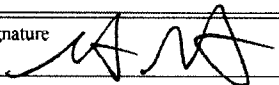
FORM APPROVED  
OMB No. 1004-0137  
Expires: January 31, 2018

1a. Type of work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. NMNM-113937
1b. Type of Well: <input type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input checked="" type="checkbox"/> Other		6. If Indian, Allottee or Tribe Name
1c. Type of Completion: <input type="checkbox"/> Hydraulic Fracturing <input type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone		7. If Unit or CA Agreement, Name and No.
2. Name of Operator OWL SWD Operating, LLC		8. Lease Name and Well No. Threat Level Midnight SWD No. 1
3a. Address 8214 Westchester Drive, Ste 850, Dallas, TX 75255	3b. Phone No. (include area code) 855-695-7937	9. API Well No. TBD
4. Location of Well (Report location clearly and in accordance with any State requirements. *) At surface 219 feet from South line and 1,420 feet from East line At proposed prod. zone Vertical well		10. Field and Pool, or Exploratory Silurian-Devonian
11. Sec., T. R. M. or Blk. and Survey or Area Sec. 1, T-26S, R-26E		12. County or Parish Eddy County
13. State NM		14. Distance in miles and direction from nearest town or post office* 15
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 219 feet	16. No of acres in lease 1,720	17. Spacing Unit dedicated to this well
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. N/A	19. Proposed Depth 14,300'	20. BLM/BIA Bond No. in file
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 3,087' MSL	22. Approximate date work will start* As soon as the application is approved	23. Estimated duration 60 days

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, and the Hydraulic Fracturing rule per 43 CFR 3162.3-3 (as applicable)

- |  |   |
|--|---|
| 1. Well plat certified by a registered surveyor.   | 4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above). |
| 2. A Drilling Plan.  | 5. Operator certification.  |
| 3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO must be filed with the appropriate Forest Service Office). | 6. Such other site specific information and/or plans as may be requested by the BLM.            |

25. Signature 	Name (Printed/Typed) Stephen Pattee, P.G.	Date 06/05/17
--	--	------------------

Title

Approved by (Signature)	Name (Printed/Typed)	Date
Title	Office	

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Conditions of approval, if any, are attached.

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

## INSTRUCTIONS

**GENERAL:** This form is designed for submitting proposals to perform certain well operations, as indicated on Federal and Indian lands and leases for action by appropriate Federal agencies, pursuant to applicable Federal laws and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local, area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from local Federal offices.

**ITEM 1:** If the proposal is to redrill to the same reservoir at a different subsurface location or to a new reservoir, use this form with appropriate notations. Consult applicable Federal regulations concerning subsequent work proposals or reports on the well.

**ITEM 4:** Locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local Federal offices for specific instructions.

**ITEM 14:** Needed only when location of well cannot readily be found by road from the land or lease description. A plat, or plats, separate or on the reverse side, showing the roads to, and the surveyed location of, the well, and any other required information, should be furnished when required by Federal agency offices.

**ITEMS 15 AND 18:** If well is to be, or has been directionally drilled, give distances for subsurface location of hole in any present or objective productive zone.

**ITEM 22:** Consult applicable Federal regulations, or appropriate officials, concerning approval of the proposal before operations are started.

**ITEM 24:** If the proposal will involve hydraulic fracturing operations, you must comply with 43 CFR 3162.3-3, including providing information about the protection of usable water. Operators should provide the best available information about all formations containing water and their depths. This information could include data and interpretation of resistivity logs run on nearby wells. Information may also be obtained from state or tribal regulatory agencies and from local BLM offices.

## NOTICES

The Privacy Act of 1974 and regulation in 43 CFR 2.48( d) provide that you be furnished the following information in connection with information required by this application.

**AUTHORITY:** 30 U.S.C. 181 et seq., 25 U.S.C. 396; 43 CFR 3160

**PRINCIPAL PURPOSES:** The information will be used to: (1) process and evaluate your application for a permit to drill a new oil, gas, or service well or to reenter a plugged and abandoned well; and (2) document, for administrative use, information for the management, disposal and use of National Resource Lands and resources including (a) analyzing your proposal to discover and extract the Federal or Indian resources encountered; (b) reviewing procedures and equipment and the projected impact on the land involved; and (c) evaluating the effects of the proposed operation on the surface and subsurface water and other environmental impacts.

**ROUTINE USE:** Information from the record and/or the record will be transferred to appropriate Federal, State, and local or foreign agencies, when relevant to civil, criminal or regulatory investigations or prosecution, in connection with congressional inquiries and for regulatory responsibilities.

**EFFECT OF NOT PROVIDING INFORMATION:** Filing of this application and disclosure of the information is mandatory only if you elect to initiate a drilling or reentry operation on an oil and gas lease.

The Paperwork Reduction Act of 1995 requires us to inform you that:

The BLM connects this information to an evaluation of the technical, safety, and environmental factors involved with drilling for oil and/or gas on Federal and Indian oil and gas leases. This information will be used to analyze and approve applications. Response to this request is mandatory only if the operator elects to initiate drilling or reentry operations on an oil and gas lease. The BLM would like you to know that you do not have to respond to this or any other Federal agency-sponsored information collection unless it displays a currently valid OMB control number.

**BURDEN HOURS STATEMENT:** Public reporting burden for this form is estimated to average 8 hours per response, including the time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding the burden estimate or any other aspect of this form to U.S. Department of the Interior, Bureau of Land Management (1004-0137), Bureau Information Connection Clearance Officer (WO-630), 1849 C Street, N.W., Mail Stop 401 LS, Washington, D.C. 20240.

**District I**  
1625 N. French Dr., Hobbs, NM 88240  
Phone: (575) 393-6161 Fax: (575) 393-0720  
**District II**  
811 S. First St., Artesia, NM 88210  
Phone: (575) 748-1283 Fax: (575) 748-9720  
**District III**  
1000 Rio Brazos Road, Aztec, NM 87410  
Phone: (505) 334-6178 Fax: (505) 334-6170  
**District IV**  
1220 S. St. Francis Dr., Santa Fe, NM 87505  
Phone: (505) 476-3460 Fax: (505) 476-3462

**State of New Mexico**  
**Energy Minerals and Natural Resources**  
**Oil Conservation Division**  
**1220 South St. Francis Dr.**  
**Santa Fe, NM 87505**

Form C-101  
Revised July 18, 2013

☐ AMENDED REPORT

**APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE**

<sup>1</sup> Operator Name and Address OWL SWD Operating, LLC 8214 Westchester Drive, Suite 850, Dallas, TX 75255		<sup>2</sup> OGRID Number 308339 <sup>3</sup> API Number 30-025-
<sup>4</sup> Property Code	<sup>5</sup> Property Name Threat Level Midnight	<sup>6</sup> Well No. 1

**<sup>7</sup> Surface Location**

UL - Lot	Section	Township	Range	Lot Idn	Feet from	N/S Line	Feet From	E/W Line	County
O	1	26S	26E		219	South	1420	East	Eddy

**<sup>8</sup> Proposed Bottom Hole Location**

UL - Lot	Section	Township	Range	Lot Idn	Feet from	N/S Line	Feet From	E/W Line	County

**<sup>9</sup> Pool Information**

Pool Name SWD; Silurian-Devonian	Pool Code 96101
-------------------------------------	--------------------

**Additional Well Information**

<sup>11</sup> Work Type N	<sup>12</sup> Well Type SWD	<sup>13</sup> Cable/Rotary R	<sup>14</sup> Lease Type Private	<sup>15</sup> Ground Level Elevation 3,087'
<sup>16</sup> Multiple N	<sup>17</sup> Proposed Depth 14,300'	<sup>18</sup> Formation Silurian-Devonian	<sup>19</sup> Contractor TBD	<sup>20</sup> Spud Date ASAP
Depth to Ground water 550'		Distance from nearest fresh water well 4,230'		Distance to nearest surface water +1 mi

☐ We will be using a closed-loop system in lieu of lined pits

**<sup>21</sup> Proposed Casing and Cement Program**

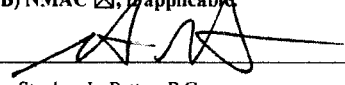
Type	Hole Size	Casing Size	Casing Weight/ft	Setting Depth	Sacks of Cement	Estimated TOC
Surface	24"	20"	133.00 lb/ft	600'	800 sks	Surface
Intermediate	17.5"	13.375"	68.00 lb/ft	2,000'	1,400 sks	Surface
Production	12.25"	9.625"	53.50 lb/ft	10,000'	2,300 sks	Surface
Prod. Liner	8.5"	7"	32.00 lb/ft	9,750'-13,350'	590 sks	9,750'
Tubing	N/A	4.5"	11.60 lb/ft	0' - 13,300'	N/A	N/A

**Casing/Cement Program: Additional Comments**

See attached schematic.

**<sup>22</sup> Proposed Blowout Prevention Program**

Type	Working Pressure	Test Pressure	Manufacturer
Double Hydraulic/ Blinds, Pipe	5,000 psi	8,000 psi	TBD (Schaffer/Cameron)

<sup>23</sup> I hereby certify that the information given above is true and complete to the best of my knowledge and belief.  
 I further certify that I have complied with 19.15.14.9 (A) NMAC ☐ and/or 19.15.14.9 (B) NMAC ☒ if applicable.  
 Signature: 

**OIL CONSERVATION DIVISION**

Approved By:

Printed name: Stephen L. Pattee, P.G.

Title:

Title: Consulting Engineer- Agent for OWL SWD Operating, LLC

Approved Date:

Expiration Date:

E-mail Address: steve@lonquist.com

Date: 06/05/2017

Phone: 512-600-1774

Conditions of Approval Attached

# LONQUIST & CO. LLC

PETROLEUM  
ENGINEERS

ENERGY  
ADVISORS

AUSTIN · HOUSTON · WICHITA · DENVER · CALGARY

June 5, 2017

New Mexico Energy, Minerals, and Natural Resources Department  
Oil Conservation Division District IV  
1220 South St. Francis Drive  
Santa Fe, New Mexico 87505  
(505) 476-3440


**RE: THREAT LEVEL MIDNIGHT SWD NO. 1 AUTHORIZATION TO INJECT**

To Whom It May Concern:

Attached for your review is Form C-108, Application for Authorization to Inject, and its supplemental documents prepared for OWL SWD Operating, LLC's Threat Level Midnight SWD No. 1. In addition, Forms C-101 and C-102 have also been included with this package. Notices have been sent to offset leaseholders and the surface owner. Proof of notice will be sent to the OCD upon receipt.

Any questions should be directed towards OWL SWD Operating, LLC's agent Lonquist & Co., LLC.

Regards,



Stephen L. Pattee, P.G.  
Regulatory Manager  
Lonquist & Co., LLC

(512) 600-1774  
[steve@lonquist.com](mailto:steve@lonquist.com)



**APPLICATION FOR AUTHORIZATION TO INJECT**

- I. PURPOSE: \_\_\_\_\_ Secondary Recovery \_\_\_\_\_ Pressure Maintenance \_\_\_\_\_ ☒ Disposal \_\_\_\_\_ Storage  
Application qualifies for administrative approval? \_\_\_\_\_ ☒ Yes \_\_\_\_\_ No
- II. OPERATOR: OWL SWD Operating, LLC  
ADDRESS: 8214 Westchester Drive, Suite 850, Dallas, TX 75255  
CONTACT PARTY: Preston Carr PHONE: 855-695-7937
- III. WELL DATA: Complete the data required on the reverse side of this form for each well proposed for injection.  
Additional sheets may be attached if necessary.
- IV. Is this an expansion of an existing project? \_\_\_\_\_ Yes \_\_\_\_\_ ☒ No  
If yes, give the Division order number authorizing the project: \_\_\_\_\_
- V. Attach a map that identifies all wells and leases within two miles of any proposed injection well with a one-half mile radius circle drawn around each proposed injection well. This circle identifies the well's area of review.
- VI. Attach a tabulation of data on all wells of public record within the area of review which penetrate the proposed injection zone. Such data shall include a description of each well's type, construction, date drilled, location, depth, record of completion, and a schematic of any plugged well illustrating all plugging detail.
- VII. Attach data on the proposed operation, including:
1. Proposed average and maximum daily rate and volume of fluids to be injected;
  2. Whether the system is open or closed;
  3. Proposed average and maximum injection pressure;
  4. Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water; and,
  5. If injection is for disposal purposes into a zone not productive of oil or gas at or within one mile of the proposed well, attach a chemical analysis of the disposal zone formation water (may be measured or inferred from existing literature, studies, nearby wells, etc.).
- \*VIII. Attach appropriate geologic data on the injection zone including appropriate lithologic detail, geologic name, thickness, and depth. Give the geologic name, and depth to bottom of all underground sources of drinking water (aquifers containing waters with total dissolved solids concentrations of 10,000 mg/l or less) overlying the proposed injection zone as well as any such sources known to be immediately underlying the injection interval.
- IX. Describe the proposed stimulation program, if any.
- \*X. Attach appropriate logging and test data on the well. (If well logs have been filed with the Division, they need not be resubmitted).
- \*XI. Attach a chemical analysis of fresh water from two or more fresh water wells (if available and producing) within one mile of any injection or disposal well showing location of wells and dates samples were taken.
- XII. Applicants for disposal wells must make an affirmative statement that they have examined available geologic and engineering data and find no evidence of open faults or any other hydrologic connection between the disposal zone and any underground sources of drinking water.
- XIII. Applicants must complete the "Proof of Notice" section on the reverse side of this form.
- XIV. Certification: I hereby certify that the information submitted with this application is true and correct to the best of my knowledge and belief.
- NAME: Stephen L. Pattee, P.G. TITLE: Consulting Engineer – Agent for OWL  
SIGNATURE: \_\_\_\_\_ DATE: 06/05/2017  
E-MAIL ADDRESS: steve@lonquist.com
- \* 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

- 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

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.

INJECTION WELL DATA SHEET

OPERATOR: OWL SWD Operating, LLC

WELL NAME & NUMBER: Threat Level Midnight SWD No. 1

WELL LOCATION:    219' FSL & 1,420' FEL  
FOOTAGE LOCATION

Q  
UNIT LETTER

1                      26S                      26E  
SECTION            TOWNSHIP            RANGE

WELLBORE SCHEMATIC

WELL CONSTRUCTION DATA

Surface Casing

Hole Size: 24.000"

Casing Size: 20.000"

Cemented with: 800 sx.

*or* \_\_\_\_\_ ft<sup>3</sup>

Top of Cement: surface

Method Determined: circulation

1<sup>st</sup> Intermediate Casing

Hole Size: 17.500"

Casing Size: 13.375"

Cemented with: 1,400 sx.

*or* \_\_\_\_\_ ft<sup>3</sup>

Top of Cement: surface

Method Determined: circulation

2<sup>nd</sup> Intermediate Casing

Hole Size: 12.125"

Casing Size: 9.625"

Cemented with: 2,300 sx.

*or* \_\_\_\_\_ ft<sup>3</sup>

Top of Cement: surface

Method Determined: circulation

Production Liner

Hole Size: 8.500"

Casing Size: 7.000"

Cemented with: 590 sx.

*or* \_\_\_\_\_ <sup>ft</sup>3

Top of Cement: 9.750'

Method Determined: log

Total Depth: 14.300'

Injection Interval

13,350 feet to 14,300 feet

(Open Hole Completion)

**INJECTION WELL DATA SHEET**

Tubing Size: 4-1/2", 11.6 lb/ft, P-110, BT&C Lining Material: Duoline

Type of Packer: 7" D&L Oil Tools Permapak Packer – Single Bore

Packer Setting Depth: 13,300'

Other Type of Tubing/Casing Seal (if applicable): \_\_\_\_\_

Additional Data

1. Is this a new well drilled for injection?      X Yes         No

If no, for what purpose was the well originally drilled?

2. Name of the Injection Formation: Siluro-Devonian, Top 100' of Montoya

3. Name of Field or Pool (if applicable): \_\_\_\_\_

4. Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail, i.e. sacks of cement or plug(s) used.

No, new drill.

5. Give the name and depths of any oil or gas zones underlying or overlying the proposed injection zone in this area: Delaware: 1,950' ; Cherry Canyon: 2,780' ; Brushy Canyon: 3,900' ;

Bone Spring: 5,480' ; Wolfcamp: 8,640' ; Strawn: 11,000' ; Atoka: 11,200' ; Morrow: 11,950'

## B. Completion Information

1. Injection Formation: Siluro-Devonian, Top 100' of Montoya
2. Gross Injection Interval: 13,350' – 14,300'

Completion Type: Open Hole

3. Drilled for injection.
4. See the attached wellbore schematic.
5. Oil and Gas Bearing Zones within area of well:

Formation	Depth
Delaware	1,950'
Bone Spring	5,480'
Wolfcamp	8,640'
Strawn	11,000'
Atoka	11,200'
Morrow	11,950'
Mississippian	12,560'

## VI. Area of Review

There are no wells of public record within the area of review which penetrate the proposed injection zone.

## VII. Proposed Operation Data

1. Proposed Daily Rate of Fluids to be Injection:

Average Volume: 26,000 BPD  
Maximum Volume: 32,000 BPD

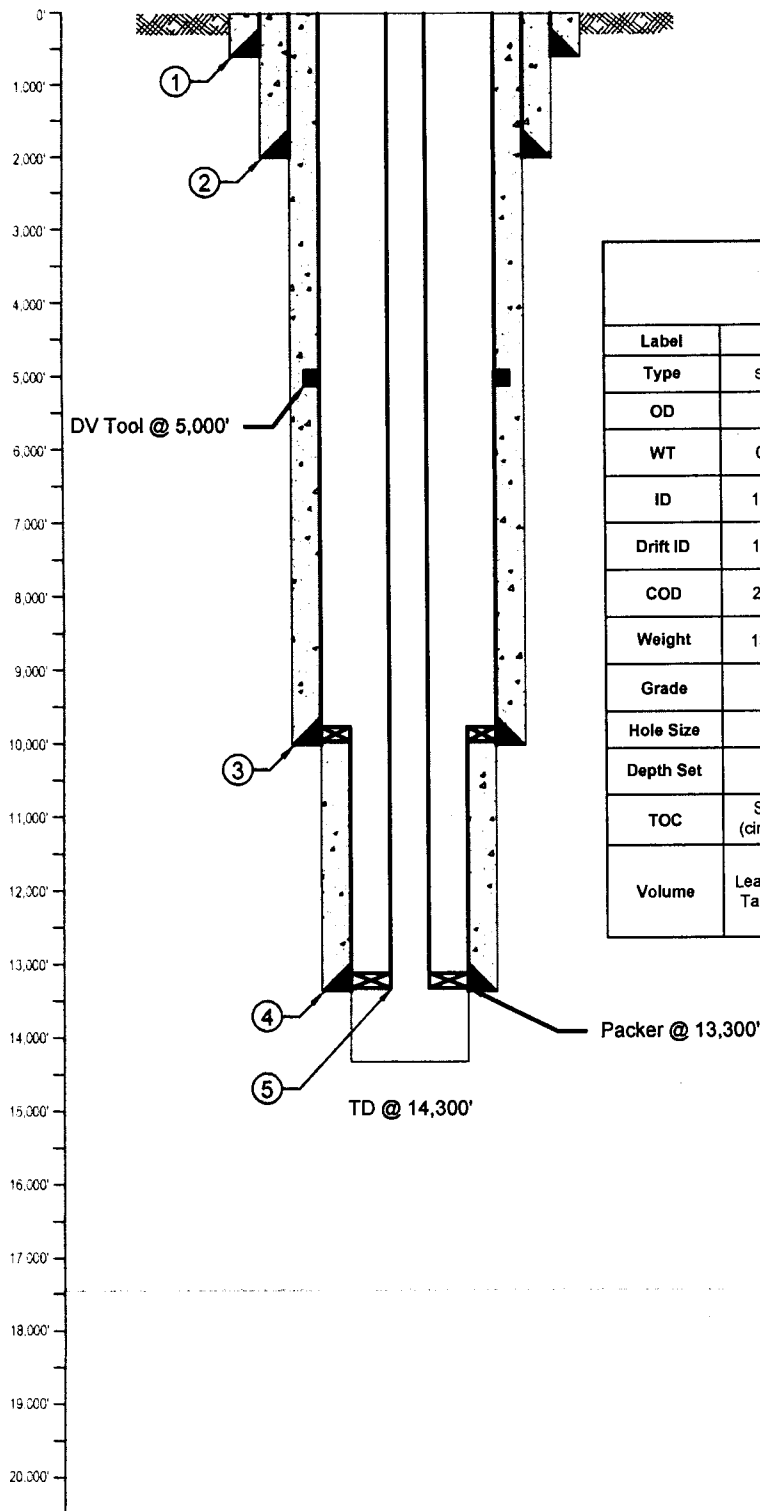
2. Closed System
3. Anticipated Injection Pressure:

Average Injection Pressure: 2,494 PSI (surface pressure)  
Maximum Injection Pressure: 2,660 PSI (surface pressure)

4. The injection fluid is to be locally produced water. Attached are produced water sample analyses taken from the closest wells that feature samples from the Delaware formation.
5. As mentioned above, a Delaware produced water sample analysis is attached.

KB:	NA
BHF:	NA
GL:	NA
Spud:	NA

Casing/Tubing Information					
Label	1	2	3	4	5
Type	Surface	Intermediate	Production	Liner	Tubing
OD	20"	13-3/8"	9-5/8"	7"	4-1/2"
WT	0.635"	0.480"	0.545"	0.453"	0.250"
ID	18.730"	12.415"	8.535"	6.094"	4.000"
Drift ID	18.542"	12.259"	8.379"	5.969"	3.875"
COD	21.000"	14.375"	10.625"	7.875"	5.000"
Weight	133 lb/ft	68 lb/ft	53.5 lb/ft	32 lb/ft	11.6 lb/ft
Grade	J-55 BTC	J-55 BTC	HCP-110 LTC	HCL-80 LTC	P-110 BTC
Hole Size	24"	17-1/2"	12-1/4"	8-1/2"	6.094"
Depth Set	600'	2,000'	10,000'	9,750' - 13,350'	13,300'
TOC	Surface (circulation)	Surface (circulation)	Surface (circulation)	9,750'	NA
Volume	Lead: 600 sx Tail: 200 sx	Lead: 1,100 sx Tail: 300 sx	Stage 1 Lead: 1,400 sx Stage 1 Tail: 100 sx Stage 2 Lead: 700 sx Stage 2 Tail: 100 sx	590 sx	NA



<div>LONQUIST</div> <div>FIELD SERVICE</div> <div>3345 Bee Cave Road, Suite 201 Austin, Texas 78746 Tel: 512.732.9812 Fax: 512.732.9816</div>	OWL SWD Operating, LLC	Threat Level Midnight SWD No. 1	
	Country: USA	State/Province: New Mexico	County/Parish: Eddy
	Location:	Site:	Survey/STR: Sect 1, T-26S, R-26E
	API No:	Field:	Well Type/Status: SWD
	Texas License F-9147	State ID No:	Project No: 1456
3345 Bee Cave Road, Suite 201 Austin, Texas 78746 Tel: 512.732.9812 Fax: 512.732.9816	Drawn: WHG	Reviewed: SLP	Approved: SLP
	Rev No: 1	Notes: Wellbore design supplied by OWL	

**OWL SWD Operating, LLC.**

**Threat Level Midnight SWD No. 1**

**FORM C-108 Supplemental Information**

**III. Well Data**

**A. Wellbore Information**

1.

Well information	
Lease Name	Threat Level Midnight
Well No.	1
Location	S-1 T-26S R-26E
Footage Location	219' FSL & 1,420' FEL

2.

**a. Wellbore Description**

Casing Information				
Type	Surface	1 <sup>st</sup> Intermediate	2 <sup>nd</sup> Intermediate	Liner
OD	20"	13.375"	9.625"	7"
WT	0.635"	0.480"	0.545"	0.453"
ID	18.730"	12.415"	8.535"	6.094"
Drift ID	18.542"	12.259"	8.379"	5.969"
COD	21.000"	14.375"	10.625"	7.875"
Weight	133 lb/ft	68 lb/ft	53.5 lb/ft	32 lb/ft
Grade	J-55	J-55	HCP-110	HCL-80
Hole Size	24"	17.5"	12.25"	8.5"
Depth Set	600'	2,000'	10,000'	9,750' – 13,350'

b. Cementing Program

Cement Information				
Casing String	Surface	1 <sup>st</sup> Intermediate	2 <sup>nd</sup> Intermediate	Liner
Lead Cement	CI C + 4% Gel + 5% Salt + 0.25 pps Celloflake	HLC + 5% Salt	Stage 1: HLC Stage 2: HLC	Class H
Lead Cement Volume	600 sks	1,100 sks	Stage 1: 1,400 sks Stage 2: 700 sks	590 sks
Tail Cement	CI C + 2% CaCl + 0.25 pps Celloflake	Class C + 2% CaCl	Stage 1: CI H Stage 2: CI H	-
Tail Cement Volume	200 sks	300 sks	Stage 1: 100 sks Stage 2: 100 sks	-
TOC	Surface	Surface	Surface	9,750'
Method	Circulate to Surface	Circulate to Surface	Circulate to Surface	Calculated

3. Tubing Description

Tubing Information	
OD	4.5"
WT	0.250"
ID	4.000"
Drift ID	3.875"
COD	5.000"
Weight	11.6 lb/ft
Grade	P-110
Depth Set	13,300'

Tubing will be lined with Duoline.

4. Packer Description

D&L Oil Tools 7" Permapack Packer – Single Bore



## VIII. Geological Data

The Devonian formation is a dolomitic ramp carbonate that occurs below the Woodford shale and above the Fusselman formation. Strata found in the Devonian formation near Jal are two major groups, the Wristen Buildups and the Thirtyone Deepwater Chert, with the Wristen being more abundant. The Wristen Groups is composed of mixed limestone and dolomites with mudstone to grainstone and boundstone textures. Porosity in the Wristen group is a result of both primary and secondary development. Present are moldic, vugular, karstic (including collapse breccia) features that allow for higher porosities and permeabilities. The Thirtyone Formation contains two end-member reservoir facies, skeletal packstones/grainstones and spiculitic chert, with most of the porosity and permeability found in the coarsely crystalline cherty dolomite. These particular characteristics allow for this formation to be a saltwater disposal horizon with great potential.

### A. Injection Zone: Delaware Mountain Group – Devonian Formation

Formation	Depth
Salado	600'
Delaware	1,950'
Cherry Canyon	2,780'
Brushy Canyon	3,900'
Bone Spring	5,480'
Wolfcamp	8,640'
Strawn	11,000'
Atoka	11,200'
Morrow	11,950'
Mississippian	12,560'
Devonian	13,300'

### B. Underground Sources of Drinking Water

Water bearing formations found in this area are the Culebra, Magenta, Dewey Lake, Santa Rosa, and the Rustler formations. The EPA standard criteria for determining freshwater bearing formations included identifying clean rock containing less than 10,000 milligrams per liter of total dissolved solids. A study done by the USDOE was conducted in northern Eddy County for the Waste Isolation Pilot Plant with the parameters mentioned above. Surface Casing set below the bottom of the Rustler formation will sufficiently protect freshwater bearing formations.

There are no sources of drinking water underlying the injection interval.

## IX. Proposed Stimulation Program

No proposed stimulation program.

## X. Logging and Test Data on the Well

There are no logs or test data on the well. During the process of drilling and completion resistivity, gamma ray, and density logs will be run.

#### XI. Chemical Analysis of Fresh Water Wells

There is one fresh water well within one mile of the well location (C-02438). This well is operated by Doris and Owen Carleton. After attempting to take a sample, this well was found to be abandoned. The Water Right Summary from the New Mexico Office of the State Engineer is attached.

#### XII. Affirmative Statement of Examination of Geologic and Engineering Data

Based on the available engineering and geologic data we find no evidence of open faults or any other hydrologic connection between the disposal zone and any underground sources of drinking water.

## **McMillan, Michael, EMNRD**

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**From:** McMillan, Michael, EMNRD  
**Sent:** Monday, June 12, 2017 4:09 PM  
**To:** 'Steve Pattee'  
**Cc:** Jones, William V, EMNRD; Goetze, Phillip, EMNRD  
**Subject:** Threat Level Midnight SWD Well No. 1

Steve:

Your application that was received on June 12, 2017 will not be placed into the administrative application review process.

The following information is required

- Administrative Application checklist (Use new form on website)
- Complete C-108 form with the relevant
- ½ mile AOR map
- 2 mile pool map
- Return receipt for surface owner
- Return receipt for operator of record, if no operator then lessor, if no lessor, then lessee
- Affidavit of publication.

Once the required information is received it will be placed into the administrative application review process.

Michael McMillan  
1220 South St. Francis  
Santa Fe, New Mexico  
505-476-3448  
Michael.mcmillan@state.nm.us