

*Start 15-day  
wait period  
4-05-2016*

ABOVE THIS LINE FOR DIVISION USE ONLY

000 SF 2

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



**ADMINISTRATIVE APPLICATION CHECKLIST**

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

**Application Acronyms:**

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

- [1] **TYPE OF APPLICATION - Check Those Which Apply for [A]**
- [A] Location - Spacing Unit - Simultaneous Dedication  
 NSL  NSP  SD
- Check One Only for [B] or [C]
- [B] Commingling - Storage - Measurement  
 DHC  CTB  PLC  PC  OLS  OLM
- [C] Injection - Disposal - Pressure Increase - Enhanced Oil Recovery  
 WFX  PMX  SWD  IPI  EOR  PPR
- [D] Other: Specify \_\_\_\_\_

*- SWD 1624*  
*- Bosque Disposal Systems LLC*  
*3070247*  
*Well*  
*- Halle SWD #1*  
*30-025-Pending*  
*Pool*  
*- SWD, Devonian -*  
*Siluria*  
*4610+*  
*96789*

- [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

2016 MAR 30 P 3:20  
 RECEIVED OGD

[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.

Michael L. Pierce      *[Signature]*      Agent      3-23-2016  
 Print or Type Name      Signature      Title      Date

MPLGeo1@aol.com  
 e-mail Address

**APPLICATION FOR AUTHORIZATION TO INJECT**

- I. PURPOSE: Secondary Recovery Pressure Maintenance  Disposal Storage  
Application qualifies for administrative approval?  Yes  No
- II. OPERATOR: BOSQUE DISPOSAL SYSTEMS, LLC  
ADDRESS: 420 THROCKMORTON, STE 620 FT. WORTH TX 76102  
CONTACT PARTY: CHRIS KAPCSOS PHONE: 254 396 019
- 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: Michael R. Pierce TITLE: Agent  
SIGNATURE: [Signature] DATE: 3-23-2016  
E-MAIL ADDRESS: mpierce@Abi.com 505 948 0545
- \* 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: NA

### 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.

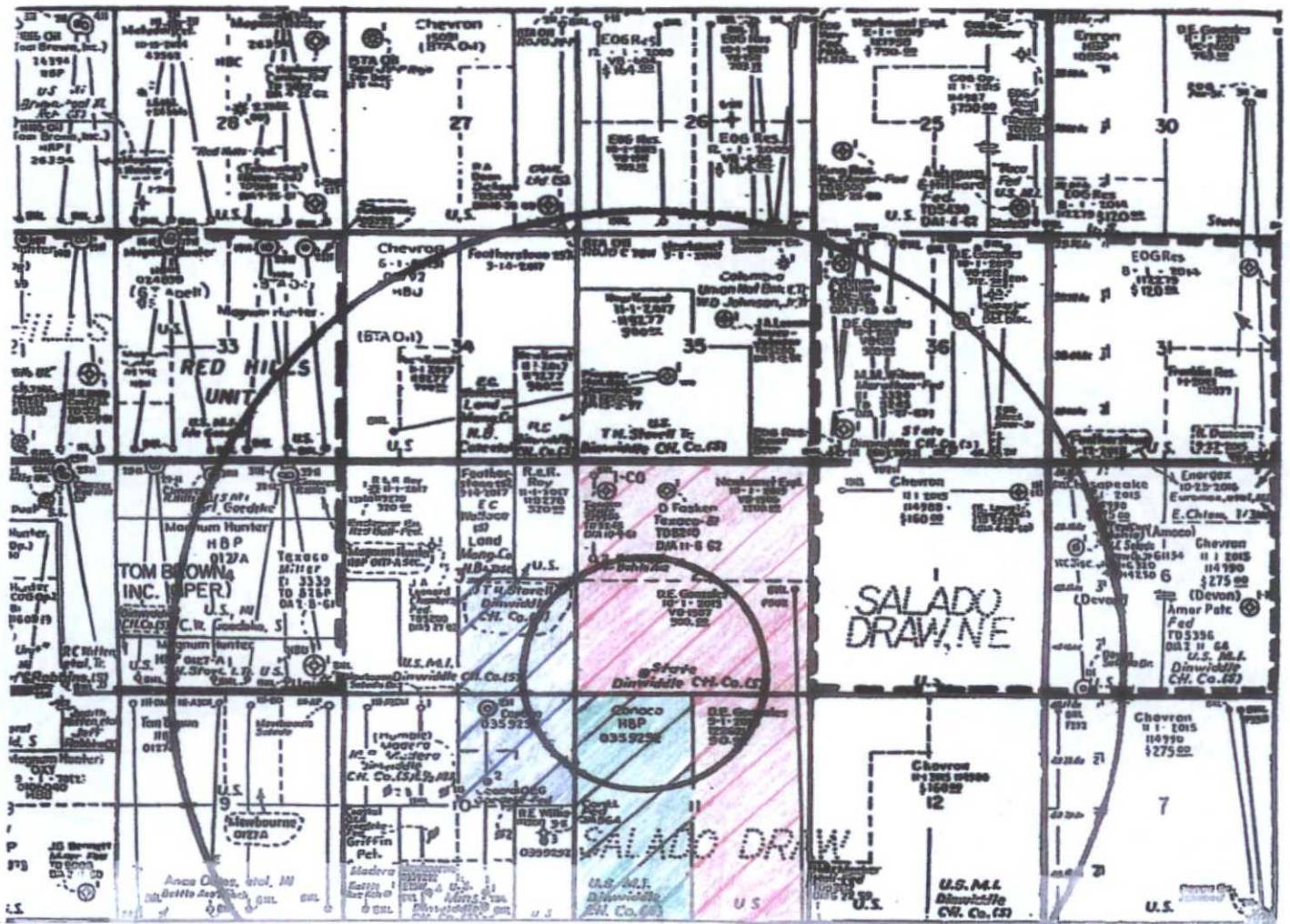
Where an application is subject to administrative approval, a proof of publication must be submitted. Such proof shall consist of a copy of the legal advertisement which was published in the county in which the well is located. The contents of such advertisement must include:

- (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.

---

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.



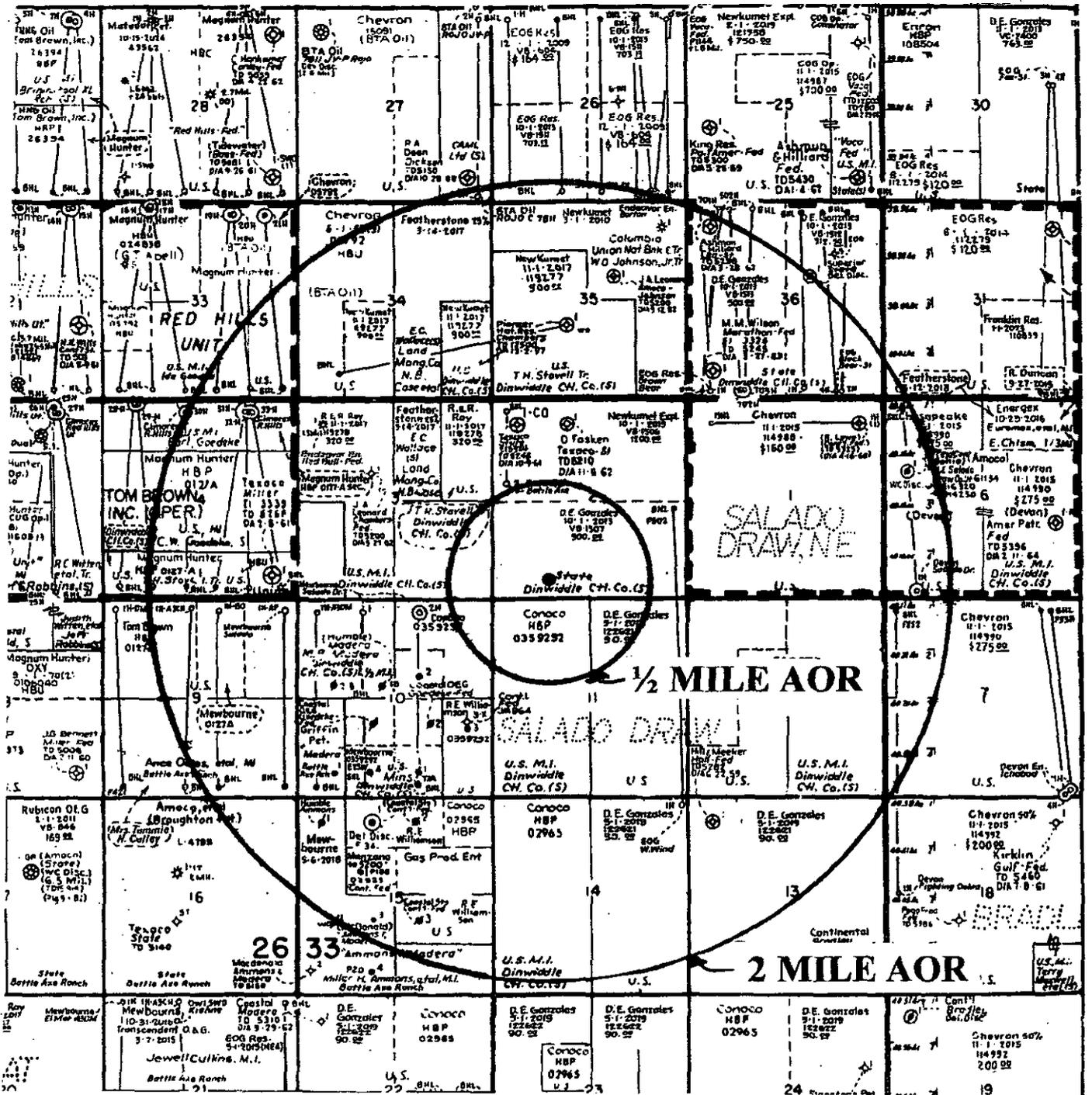
**OFFSET OPERATOR ACREAGE**

- EOG RESOURCES            RED
- CONOCO PHILLIPS        GREEN
- MEWBOURNE OIL CO    BLUE
- STATE LEASES            ALL OF SECTION 2 T26S R33E
- FEDERAL LEASES        ALL OF SECTIONS 3, 10, & 11 T26S R33E

**BOSQUE DISPOSAL SYSTEMS, LLC**

**HALLE SWD #1**

**246 FSL & 1755 FWL  
 Unit N section 2 T26S R33E  
 Lea county New Mexico**



**BOSQUE DISPOSAL SYSTEMS, LLC**

**HALLE SWD #1**

**246 FSL & 1755 FWL**

**Unit N section 2 T26S R33E**

**Lea county New Mexico**

LIST OF WELLS IN AREA OF REVIEW

2 MILE AREA OF REVIEW

WELLS THAT DO NOT PENETRATE THE INJECTION INTERVAL

API NUMBER	WELL NAME	OPERATOR	ULSTR SURFACE	ULSTR BHL	VERT or HORIZ	TVD	COMMENTS
3002639632	LOMAS ROJAS 26 ST COM No. 02H	EOG RESOURCES INC	P-26-26S-33E				CANCELLED APD
3002639701	LOMAS ROJAS 26 ST COM No. 002H	EOG RESOURCES INC	N-26-26S-33E	C-26-26S-33E	HORIZONTAL	13792	
3002639702	LOMAS ROJAS 26 ST COM No. 003H	EOG RESOURCES INC	O-26-26S-33E	B-26-26S-33E	HORIZONTAL	13742	
3002639703	LOMAS ROJAS 26 ST COM No. 004H	EOG RESOURCES INC	O-26-26S-33E	B-26-26S-33E	HORIZONTAL	13850	
3002639704	LOMAS ROJAS 26 ST COM No. 006H	EOG RESOURCES INC	P-26-26S-33E	A-26-26S-33E	HORIZONTAL	13800	
3002642166	LOMAS ROJAS 26 ST COM No. 601H	EOG RESOURCES INC	P-26-26S-33E	A-26-26S-33E	HORIZONTAL	10900	COMP IN PROGRESS
3002642167	LOMAS ROJAS 26 ST COM No. 602H	EOG RESOURCES INC	P-26-26S-33E	A-26-26S-33E	HORIZONTAL	10316	COMP IN PROGRESS
3002642466	ROJO C 7811 JV-P No. 001H	BTA OIL PRODUCERS, LLC	P-27-26S-33E	A-27-26S-33E	HORIZONTAL	LOC	
3002642672	RED HILLS UNIT No. 020H	CIMAREX ENERGY CO. OF CO	B-33-26S-33E	O-33-26S-33E	HORIZONTAL	LOC	
3002642327	RED HILLS UNIT No. 021H	CIMAREX ENERGY CO. OF CO	A-33-26S-33E	P-33-26S-33E	HORIZONTAL	LOC	
3002642326	RED HILLS UNIT No. 017H	CIMAREX ENERGY CO. OF CO	D-33-26S-33E	M-33-26S-33E	HORIZONTAL	LOC	
3002642822	COLUMBUS FEE No. 002H	COG OPERATING LLC	B-34-26S-33E	O-3-26S-33E	HORIZONTAL	LOC	
3002640610	BURTON 36 No. 001	COG OPERATING LLC	A-36-26S-33E	A-36-26S-33E	VERTICLE	13992	
3002634016	RED BULL 36 FEDERAL No. 01H	COG OPERATING LLC	K-36-26S-33E	M-34-26S-33E	HORIZONTAL	12000	P&A
3002627876	AMOCO JOHNSON 36 #1	J.A LEONARD	G-36-26S-33E	G-36-26S-33E	VERTICLE	6122	P&A
3002608386	LEA STATE 1-36	HISSOM DRILLING	D-36-26S-33E		VERTICLE	6200	P&A
3002620430	MARATHON STATE #1	MAX M WILSON	M-36-26S-33E		VERTICLE	6266	P&A
3002628802	STATE 36 #1	THE SUPERIOR COMPANY	G-36-26S-33E		VERTICLE	6344	P&A
3002640368	BLACK BEAR 36 STATE No. 001H	EOG RESOURCES INC	O-36-26S-33E	B-36-26S-33E	HORIZONTAL	9438	
3002640369	BLACK BEAR 36 STATE No. 002H	EOG RESOURCES INC	P-36-26S-33E	A-36-26S-33E	HORIZONTAL	9477	
3002640370	BLACK BEAR 36 STATE No. 003H	EOG RESOURCES INC	P-36-26S-33E	A-36-26S-33E	HORIZONTAL	8602	
3002640371	BROWN BEAR 36 STATE No. 001H	EOG RESOURCES INC	M-36-26S-33E	D-36-26S-33E	HORIZONTAL	9418	
3002640372	BROWN BEAR 36 STATE No. 002H	EOG RESOURCES INC	M-36-26S-33E	D-36-26S-33E	HORIZONTAL		CANCELLED APD
3002640373	BROWN BEAR 36 STATE No. 003H	EOG RESOURCES INC	N-36-26S-33E				CANCELLED APD
3002640680	BLACK BEAR 36 STATE No. 004H	EOG RESOURCES INC	O-36-26S-33E	B-36-26S-33E	HORIZONTAL	9481	
3002640686	BLACK BEAR 36 STATE No. 006	EOG RESOURCES INC	H-36-26S-33E		VERTICLE	10466	SWD-1369

3002540704	BROWN BEAR 36 STATE No. 004H	EOG RESOURCES INC	N-36-266-33E				CANCELLED APD
3002542153	BROWN BEAR 36 STATE No. 701H	EOG RESOURCES INC	D-36-266-33E	M-36-266-33E	HORIZONTAL	12533	
3002542154	BROWN BEAR 36 STATE No. 502H	EOG RESOURCES INC	D-36-266-33E	M-36-266-33E	HORIZONTAL	10916	
3002542538	BROWN BEAR 36 STATE No. 702H	EOG RESOURCES INC	N-36-266-33E	D-36-266-33E	HORIZONTAL	12293	COMP IN PROGRESS
3002542539	BROWN BEAR 36 STATE No. 703H	EOG RESOURCES INC	N-36-266-33E	C-36-266-33E	HORIZONTAL	12298	COMP IN PROGRESS
3002542839	BROWN BEAR 36 STATE No. 704H	EOG RESOURCES INC	N-36-266-33E	C-36-266-33E	HORIZONTAL		LOC
3002542840	BROWN BEAR 36 STATE No. 705H	EOG RESOURCES INC	N-36-266-33E	C-36-266-33E	HORIZONTAL		LOC
3002528967	N E SALADO DRAW DEEP FED No. 001	DEVON ENERGY PRODUCTION CO	E-6-266-34E	E-6-266-34E	VERTICLE	16320	P&A 4-2015
3002520385	FEDERAL K #1	AMERICAN PETROFINA COMPANY	I-6-266-33E		VERTICLE	5396	P&A 2-1964
3002541293	SALADO DRAW 6 FEDERAL No. 001H	DEVON ENERGY PRODUCTION CO	M-6-266-34E	D-6-266-34E	HORIZONTAL	12954	
3002542919	SALADO DRAW 6 FEDERAL No. 002H	DEVON ENERGY PRODUCTION CO	N-6-266-34E	C-6-266-34E	HORIZONTAL	11113	LOC
3002540874	ICHABOD 7 FEDERAL No. 004H	DEVON ENERGY PRODUCTION COMPAN Y, LP	P-7-266-34E	A-7-266-34E	HORIZONTAL	9469	
3002540043	ICHABOD 7 FEDERAL No. 001H	DEVON ENERGY PRODUCTION COMPAN Y, LP	P-7-266-33E	A-7-266-34E	HORIZONTAL	10270	
3002541239	ICHABOD 7 FEDERAL No. 002H	DEVON ENERGY PRODUCTION COMPAN Y, LP	B-7-266-34E	O-7-266-34E	HORIZONTAL	10460	
3002540382	FIGHTING OKRA 18 FED COM No. 001H	DEVON ENERGY PRODUCTION CO	E-18-266-34E	D-7-266-34E	HORIZONTAL	9810	
3002508396	CONOCO FEDERAL #1	RALPH LOWE	A-1-266-33E		VERTICLE	5316	P&A
3002539942	DUNWIDDIE 1 FEDERAL No. 001C	DEVON ENERGY PRODUCTION CO	A-1-266-33E				CANCELLED APD
3002508397	TEXACO STATE 2 #1	DAVID FASKEN	C-2-266-33E		VERTICLE	5210	P&A
3002508398	STATE OF NEW MEXICO CO #1	TEXACO INC	D-2-266-33E		VERTICLE	5243	P&A
3002541370	BATTLE AXE FEDERAL COM No. 02H	COG OPERATING LLC	E-2-266-33E	D-36-266-33E	HORIZONTAL	9305	
3002527897	CHAMBERS FED 3 #1	J A LEONARD	F-3-266-33E		VERTICLE	5179	P&A
3002539912	RED BULL 3 FEDERAL No. 001	COG OPERATING LLC	D-3-266-33E		VERTICLE	13900	
3002542810	COLUMBUS FEE No. 022H	COG OPERATING LLC	B-3-266-33E	O-3-266-33E	HORIZONTAL		LOC
3002508399	G W MILLER NCT 1 #1	TEXACO INC	P-4-266-33E		VERTICLE	5258	
3002542309	RED HILLS UNIT No. 032H	CIMAREX ENERGY CO. OF CO	B-4-266-33E	O-4-266-33E	HORIZONTAL	9876	LOC
3002542310	RED HILLS UNIT No. 033H	CIMAREX ENERGY CO. OF CO	A-4-266-33E	P-4-266-33E	HORIZONTAL	9875	LOC
3002542332	RED HILLS UNIT No. 031H	CIMAREX ENERGY CO. OF CO	B-4-266-33E	O-4-266-33E	HORIZONTAL	9875	LOC
3002542308	RED HILLS UNIT No. 029H	CIMAREX ENERGY CO. OF CO	D-04-266-33E	M-04-266-33E	HORIZONTAL	14697	LOC
3002542331	RED HILLS UNIT No. 030H	CIMAREX ENERGY CO. OF CO	C-04-266-33E	N-04-266-33E	HORIZONTAL		LOC
3002540755	SALADO DRAW 9 AP FED COM No 01H	MEWBOURNE OIL CO	A-9-266-33E	P-9-266-33E	HORIZONTAL	10267	
3002541732	SALADO DRAW 9 BO FEDCOM No 01H	MEWBOURNE OIL CO	B-9-266-33E	O-9-266-33E	HORIZONTAL	9931	
3002542437	SALADO DRAW 9 AJCN FEDERAL COM #001H	MEWBOURNE OIL CO	C-09-266-33E	N-09-266-33E	HORIZONTAL	9827	

3002608404	GOEDEKE FEDERAL No. 001	EL PASO PRODUCTION O & G CO.	K-10-26S-33E		VERTICLE	6300	P&A
3002608405	GOEDEKE FEDERAL No. 002	EL PASO PRODUCTION O & G CO.	J-10-26S-33E		VERTICLE	6300	P&A
3002608406	GOEDEKE No. 001	RKI EXPLORATION & PROD, LLC	O-10-26S-33E		VERTICLE	6170	
3002608407	GOEDEKE No. 002	RKI EXPLORATION & PROD, LLC	G-10-26S-33E		VERTICLE	6200	
3002608408	GOEDEKE No. 003	RKI EXPLORATION & PROD, LLC	I-10-26S-33E		VERTICLE	6200	
3002608410	GOEDEKE No. 003Y	CONTINENTAL OIL COMPANY	I-10-26S-33E		VERTICLE	364	J&A 1862
3002608411	MALCOLM MADERA B #1	HUMBLE OIL & REFINING CO	F-10-26S-33E		VERTICLE	6126	P&A
3002608412	MALCOLM MADERA B #2	HUMBLE OIL & REFINING CO	E-10-26S-33E		VERTICLE	6190	P&A
3002620016	GOEDEKE No. 004	RKI EXPLORATION & PROD, LLC	N-10-26S-33E		VERTICLE	6140	
3002628231	MADERA 10 No. 001	SABER OIL & GAS VENTURES, LLC	M-10-26S-33E		VERTICLE	6300	
3002636880	LA PINTA 10 FEE No. 001H	EOG RESOURCES INC	M-10-26S-33E	D-10-26S-33E	HORIZONTAL	11000	CANCELLED APD
3002639896	LA PINTA 10 FEE No. 002H	EOG RESOURCES INC	C-10-26S-33E	F-10-26S-33E	HORIZONTAL	11000	LOC
3002640066	SALADO DRAW 10 FED No. 002H	MEWBOURNE OIL CO	B-10-26S-33E	O-10-26S-33E	HORIZONTAL	6319	
3002640124	SALADO DRAW 10 FED COM No. 001H	MEWBOURNE OIL CO	C-10-26S-33E	N-10-26S-33E	HORIZONTAL	6262	
3002641843	SALADO DRAW 10 A3DM FEE No. 01H	MEWBOURNE OIL CO	D-10-26S-33E	M-10-26S-33E	HORIZONTAL	6994	
3002642706	SALADO DRAW 10 A1PA FED No. 001H	MEWBOURNE OIL CO	P-10-26S-33E	A-10-26S-33E	HORIZONTAL	6385	LOC
3002642707	SALADO DRAW 10 A3PA FED No. 002H	MEWBOURNE OIL CO	P-10-26S-33E	A-10-26S-33E	HORIZONTAL	10116	LOC
3002608414	HALL FEDERAL #1	HILL & MEEKER	D-13-26S-33E		VERTICLE	6282	P&A 1869
3002642776	SEAWOLF 12 1 FEDERAL No. 001H	DEVON ENERGY PRODUCTION CO	A-13-26S-33E	A-1-26S-33E	HORIZONTAL	10436	LOC
3002608413	BRADLEY 13 #1	CONTINENTAL OIL COMPANY	P-13-26S-33E		VERTICLE	6375	P&A 4-1961
3002641212	WHIRLING WIND 14 FED COM No 01H	EOG RESOURCES INC	A-14-26S-33E	I-2-26S-33E	HORIZONTAL	9612	
3002642886	WHIRLING WIND 14 FED COM No 701H	EOG RESOURCES INC	A-14-26S-33E	I-2-26S-33E	HORIZONTAL	12660	LOC
3002608416	CONOCO FEDERAL No. 001	RALPH E WILLIAMSON	C-16-26S-33E		VERTICLE	6300	P&A
3002608416	CONOCO FEDERAL No. 002	RALPH E WILLIAMSON	B-16-26S-33E		VERTICLE	6304	P&A
3002608417	CONOCO FEDERAL #3	COASTAL STATES GAS PROD CO	J-16-26S-33E		VERTICLE	6301	P&A
3002608418	MILLER AMMONS ET AL #1	HUMBLE OIL & REFINING CO	D-16-26S-33E		VERTICLE	6166	P&A
3002624110	CONTINENTAL FEDERAL No. 001	SOUTHWEST ROYALTIES INC	F-16-26S-33E		VERTICLE	6066	
3002642617	PEPPER RIDGE 16 A3DM FEE No 01H	MEWBOURNE OIL CO	D-16-26S-33E	M-16-26S-33E	HORIZONTAL		LOC
3002642618	PEPPER RIDGE 16 B2DM FEE No 03H	MEWBOURNE OIL CO	D-16-26S-33E	M-16-26S-33E	HORIZONTAL		LOC
3002642702	PEPPER RIDGE 16 W1DM FEE COM No 02H	MEWBOURNE OIL CO	D-16-26S-33E	M-16-26S-33E	HORIZONTAL		LOC
3002642837	PEPPER RIDGE 16 A3AP FED COM No 01H	MEWBOURNE OIL CO	A-16-26S-33E	P-16-26S-33E	HORIZONTAL	10076	LOC
3002642838	PEPPER RIDGE 16 B2AP FED COM No 03H	MEWBOURNE OIL CO	A-16-26S-33E	P-16-26S-33E	HORIZONTAL	10836	LOC

# Attachments to Form C - 108

## Bosque Disposal Systems, LLC

Halle SWD # 1  
246 FSL & 1755 FWL  
Unit N  
Section 2 T26S R33E  
Lea County New Mexico

- I. Disposal  
*This application qualifies for administrative approval.*
- II. Bosque Disposal Systems, LLC  
420 Throckmorton, Ste 620  
Ft. Worth, Texas 76102
- III. See wellbore diagram and attachment.
- IV. This is not an expansion of an existing project.
- V. See attached map.
- VI. There are no wells within the 1/2 mile AOR. No wells penetrate the injection interval within the 2 mile AOR.
- VII.
  1. The proposed average injection rate will be 10,000 BPD, with a maximum injection rate of 30,000 BPD.
  2. The system will be open.
  3. The Siluro-Devonian is expected to operate on a surface vacuum, and Bosque is asking for the normal .2 psi/ft pressure limit.
  4. The source of the injected fluids will be from produced water from surrounding leases. The water will be both trucked in and from pipeline. See attached analysis.
  5. The injection is into the Siluro-Devonian zone, and is not productive within one mile from the proposed location. See attached analysis.

- VIII. The injection interval is the Siluro-Devonian. We expect the top at ~ 18200' and is approximately 1156' thick based off of the Red Hills Unit #1 well located in section 32 T 25S R33E Lea County New Mexico. The Siluro-Devonian is composed of limestone and dolomite with abundant fractures and vugs. We will TD this well at about 19,200' approximately 150' above the Fussleman formation. Fresh water in the area if existing would be from Triassic aged reservoirs limited to a depth of ~ 600' from surface. There are no known sources of fresh water below the Siluro-Devonian formation.
- IX. We will do a 10,000 – 25,000 gallon 15% HCL acid job.
- X. We will submit logging data upon completion of the well.
- XI. There are several wells ½ mile due west in sec3 T26S R33E at a corral. We have been unable after repeated attempts to contact the surface lessee to obtain permission to sample the wells. We have included data from the New Mexico Office of the State Engineer.
- XII. We have examined the available data for this well and can find no evidence of faults or any other hydrologic connection between the disposal interval and any underground sources of drinking water.
- XIII. Notice of Offset Surface within 1/2 Mile

Bureau of Land Mgmt  
620 E. Greene St.  
Carlsbad, NM 88220

State of New Mexico  
Commissioner of Public Lands  
P.O. Box 1148  
Santa Fe, NM 87504

*Offset Operator within ½ mile*

Conoco Phillips  
3300 North A St Building 6-100  
Midland, TX 79705

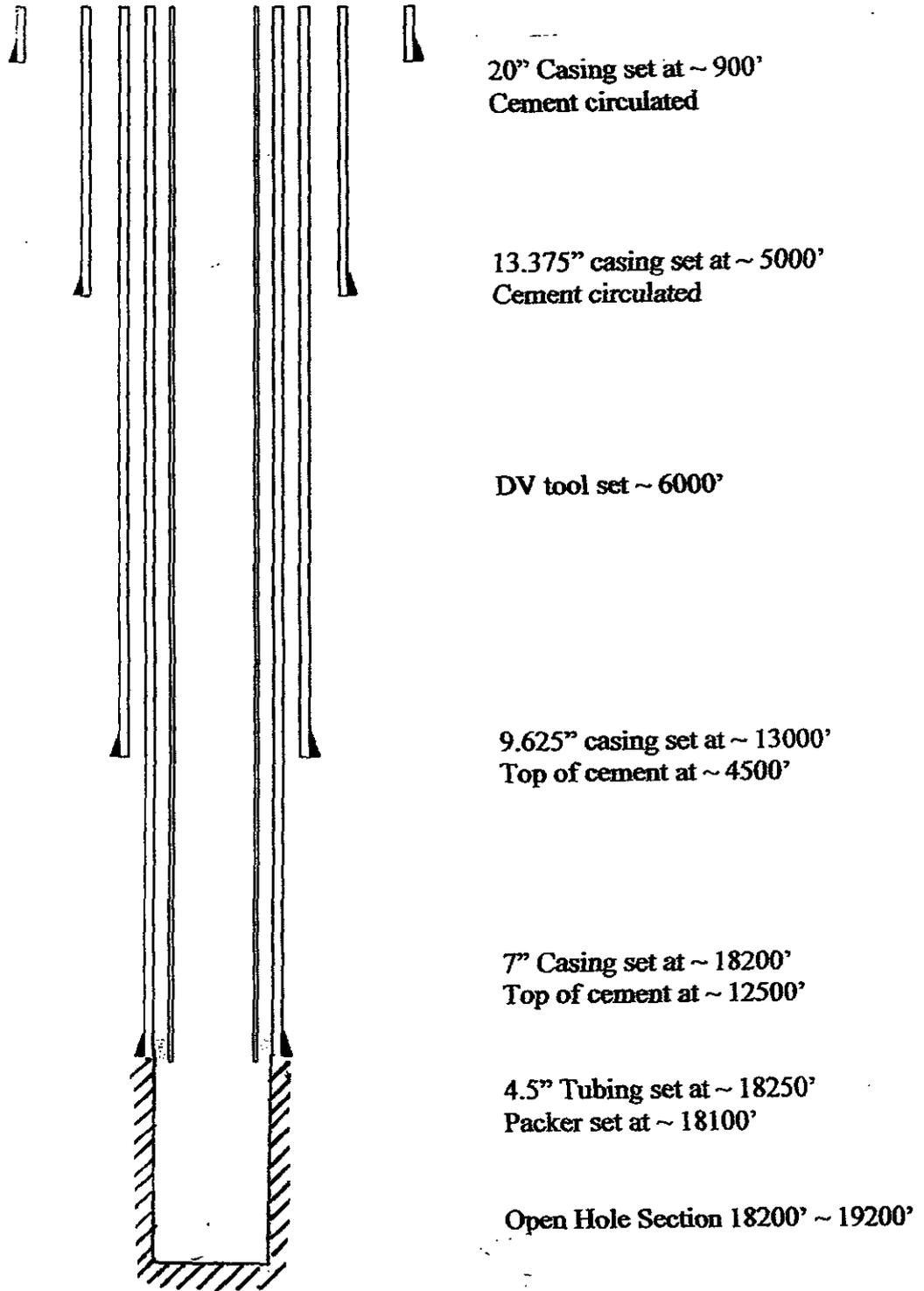
EOG Resources, Inc.  
PO Box 2267  
Midland, Texas 79702

Mewbourne Oil Company  
PO Box 5270  
Hobbs, New Mexico 88241

# BOSQUE DISPOSAL SYSTEMS, LLC

## HALLE SWD #1

246 FSL & 1755 FWL  
Unit N section 2 T26S R33E  
Lea county New Mexico



INJECTION WELL DATA SHEET  
BOSQUE DISPOSAL SYSTEMS, LLC

OPERATOR:

WELL NAME & NUMBER:

HALLE SWD #1

WELL LOCATION:

246 FSL & 1755 FWL

Unit N

SECTION 2 T26S R33E

FOOTAGE LOCATION

UNIT LETTER

SECTION

TOWNSHIP

RANGE

WELLBORE SCHEMATIC

WELL CONSTRUCTION DATA

Surface Casing

Hole Size: 24" Casing Size: 20"

Cemented with: 1400 sx. or \_\_\_\_\_ ft<sup>3</sup>

Top of Cement: SURFACE Method Determined: \_\_\_\_\_  
± 900'

Intermediate Casing

Hole Size: 14 3/4" Casing Size: 13 3/8"

Cemented with: 1300 sx. or \_\_\_\_\_ ft<sup>3</sup>

Top of Cement: SURFACE Method Determined: \_\_\_\_\_  
± 5000'

Production Casing

Hole Size: 12 1/4" Casing Size: 9 5/8"

Cemented with: 2600 sx. or \_\_\_\_\_ ft<sup>3</sup>

Top of Cement: ± 4500' Method Determined: \_\_\_\_\_

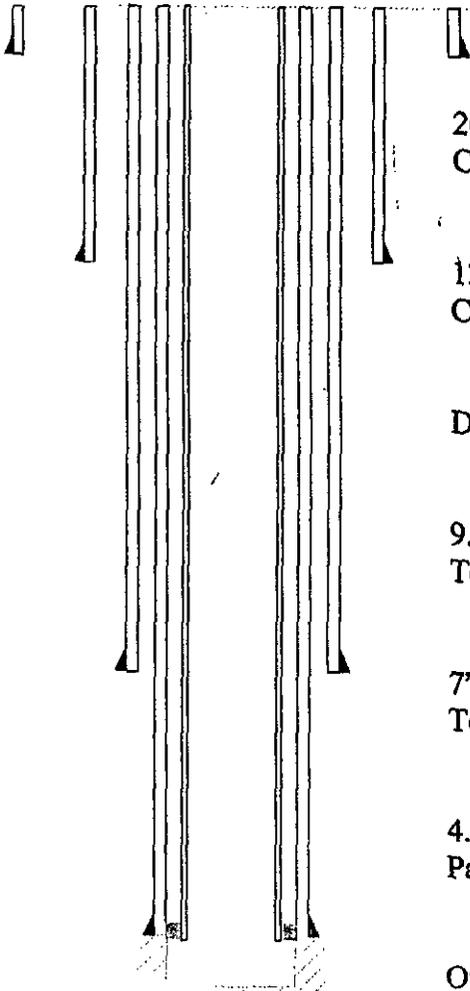
Total Depth: ± 13000'

Injection Interval

\_\_\_\_\_ feet to \_\_\_\_\_

Open Hole Section 18200' ~ 19200'

(Perforated or Open Hole; indicate which)



20" Casing set at ~ 900'  
Cement circulated

13.375" casing set at ~ 5000'  
Cement circulated

DV tool set ~ 6000'

9.625" casing set at ~ 13000'  
Top of cement at ~ 4500'

7" Casing set at ~ 18200'  
Top of cement at ~ 12500'

4.5" Tubing set at ~ 18250'  
Packer set at ~ 18100'

INJECTION WELL DATA SHEET  
BOSQUE DISPOSAL SYSTEMS, LLC

OPERATOR: \_\_\_\_\_

WELL NAME & NUMBER: HALLE SWD #1

WELL LOCATION: 246 FSL & 1755 FWL Unit N SECTION 2 T26S R33E

FOOTAGE LOCATION	UNIT LETTER	SECTION	TOWNSHIP	RANGE
<u>WELLBORE SCHEMATIC</u>		<u>WELL CONSTRUCTION DATA</u>		
		<u>Surface Casing</u>		

Hole Size: 8 1/2" Casing Size: 7"  
 Cemented with: 70<sup>3</sup> sx. or \_\_\_\_\_ ft<sup>3</sup>  
 Top of Cement: ± 12500 Method Determined: \_\_\_\_\_  
TD 7" ± 18200 Intermediate Casing Dnif ± 5.879

Hole Size: 6.5 Casing Size: Open hole  
 Cemented with: \_\_\_\_\_ sx. or \_\_\_\_\_ ft<sup>3</sup>  
 Top of Cement: NONE Method Determined: \_\_\_\_\_  
TD OH ± 19200' Production Casing

Hole Size: \_\_\_\_\_ Casing Size: 4.5" to 4 1/2"  
 Cemented with: \_\_\_\_\_ sx. or \_\_\_\_\_ ft<sup>3</sup>  
 Top of Cement: \_\_\_\_\_ Method Determined: \_\_\_\_\_  
 Total Depth: ± 18250

Injection Interval

18200 feet to 19200

(Perforated or Open Hole, indicate which)

**INJECTION WELL DATA SHEET**

Tubing Size: 4 1/2 Lining Material: Epoxy Lined  
Type of Packer: TBD  
Packer Setting Depth: ≈ 18100'  
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

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

5. Give the name and depths of any oil or gas zones underlying or overlying the proposed injection zone in this area: \_\_\_\_\_

Delaware ± 5200  
Bone Spring ± 10200 - 11900  
Wolfcamp ± 12300

**U.S. Postal Service™  
CERTIFIED MAIL® RECEIPT  
Domestic Mail Only**

For delivery information, visit our website at [www.usps.com](http://www.usps.com)®.

**HUBBS, NM 88241**  
**OFFICIAL USE**

Certified Mail Fee \$3.45

Extra Services & Fees (check box, add fee as appropriate)  
 Return Receipt (hardcopy) \$0.00  
 Return Receipt (electronic) \$0.00  
 Certified Mail Restricted Delivery \$0.00  
 Adult Signature Required \$0.00  
 Adult Signature Restricted Delivery \$0.00

Postage \$2.08  
 Total Postage and Fees \$5.53

Sent To **Mewburn Oil Company**  
 Street and Apt. No., or PO Box No. **PO BOX 5270**  
 City, State, ZIP+4® **Hobbs NM 88241**

PS Form 3800, April 2015 PSN 7531-02-000-9047 See Reverse for Instructions

**U.S. Postal Service™  
CERTIFIED MAIL® RECEIPT  
Domestic Mail Only**

For delivery information, visit our website at [www.usps.com](http://www.usps.com)®.

**MIDLAND, TX 79702**  
**OFFICIAL USE**

Certified Mail Fee \$3.45

Extra Services & Fees (check box, add fee as appropriate)  
 Return Receipt (hardcopy) \$0.00  
 Return Receipt (electronic) \$0.00  
 Certified Mail Restricted Delivery \$0.00  
 Adult Signature Required \$0.00  
 Adult Signature Restricted Delivery \$0.00

Postage \$2.08  
 Total Postage and Fees \$5.53

Sent To **EOG Resources Inc**  
 Street and Apt. No., or PO Box No. **PO BOX 2267**  
 City, State, ZIP+4® **Midland TX 79702**

PS Form 3800, April 2015 PSN 7531-02-000-9047 See Reverse for Instructions

**U.S. Postal Service™  
CERTIFIED MAIL® RECEIPT  
Domestic Mail Only**

For delivery information, visit our website at [www.usps.com](http://www.usps.com)®.

**CARLESDAD, NM 88220**  
**OFFICIAL USE**

Certified Mail Fee \$3.45

Extra Services & Fees (check box, add fee as appropriate)  
 Return Receipt (hardcopy) \$0.00  
 Return Receipt (electronic) \$0.00  
 Certified Mail Restricted Delivery \$0.00  
 Adult Signature Required \$0.00  
 Adult Signature Restricted Delivery \$0.00

Postage \$2.08  
 Total Postage and Fees \$5.53

Sent To **Bureau of Land Mgmt**  
 Street and Apt. No., or PO Box No. **620 E. Greene St**  
 City, State, ZIP+4® **Carlsbad, NM 88220**

PS Form 3800, April 2015 PSN 7531-02-000-9047 See Reverse for Instructions

**U.S. Postal Service™  
CERTIFIED MAIL® RECEIPT  
Domestic Mail Only**

For delivery information, visit our website at [www.usps.com](http://www.usps.com)®.

**SANTA FE, NM 87504**  
**OFFICIAL USE**

Certified Mail Fee \$3.45

Extra Services & Fees (check box, add fee as appropriate)  
 Return Receipt (hardcopy) \$0.00  
 Return Receipt (electronic) \$0.00  
 Certified Mail Restricted Delivery \$0.00  
 Adult Signature Required \$0.00  
 Adult Signature Restricted Delivery \$0.00

Postage \$2.08  
 Total Postage and Fees \$5.53

Sent To **State of NM Commission of Public Land**  
 Street and Apt. No., or PO Box No. **PO BOX 114B**  
 City, State, ZIP+4® **SANTA FE NM 87504**

PS Form 3800, April 2015 PSN 7531-02-000-9047 See Reverse for Instructions

**U.S. Postal Service™  
CERTIFIED MAIL® RECEIPT  
Domestic Mail Only**

For delivery information, visit our website at [www.usps.com](http://www.usps.com)®.

**MIDLAND, TX 79705**  
**OFFICIAL USE**

Certified Mail Fee \$3.45

Extra Services & Fees (check box, add fee as appropriate)  
 Return Receipt (hardcopy) \$0.00  
 Return Receipt (electronic) \$0.00  
 Certified Mail Restricted Delivery \$0.00  
 Adult Signature Required \$0.00  
 Adult Signature Restricted Delivery \$0.00

Postage \$2.08  
 Total Postage and Fees \$5.53

Sent To **Conoco Phillips**  
 Street and Apt. No., or PO Box No. **3300 North A St Bldg 6-100**  
 City, State, ZIP+4® **Midland TX 79705**

PS Form 3800, April 2015 PSN 7531-02-000-9047 See Reverse for Instructions

## Legal Notice

BOSQUE DISPOSAL SYSTEMS, LLC, 420 Throckmorton, Ste 620, Ft. Worth, Texas 76102, will file form C-108 Application for Authorization to Inject with the New Mexico Oil Conservation Division seeking administrative approval for a salt water disposal well. The proposed well, the Halle SWD #1 well will be located 246' FSL & 1755' FWL Section 2, T26S R33E, Lea County NM. The disposal interval will be the Devonian formation at a depth of 18200' – 19200', with a maximum surface pressure of 3640 psi, and an average rate of 10,000 BWPD, and maximum rate of 30,000 BWPD. All interested parties must file objections or requests for hearing with the Oil Conservation Division, 1220 South St. Francis Dr., Santa Fe, NM 87505, within 15 days of this publication. Questions or additional information can be obtained by contacting Michael Pierce at 505-948-0545.

**LEGAL NOTICE**  
**April 1, 2016**

BOSQUE DISPOSAL SYSTEMS, LLC, 420 Throckmorton, Ste 620, Ft. Worth, Texas 76102, will file form C-108 Application for Authorization to Inject with the New Mexico Oil Conservation Division seeking administrative approval for a salt water disposal well. The proposed well, the Halle SWD #1 well will be located 246' FSL & 1755' FWL Section 2, T26S R33E, Lea County NM. The disposal interval will be the Devonian formation at a depth of 18200' – 19200', with a maximum surface pressure of 3640 psi, and an average rate of 10,000 BWPD, and maximum rate of 30,000 BWPD.

All interested parties must file objections or requests for hearing with the Oil Conservation Division, 1220 South St. Francis Dr., Santa Fe, NM 87505, within 15 days of this publication. Questions or additional information can be obtained by contacting Michael Pierce at 505-948-0545.  
**#30798**

VIL 5

PO BOX 1468  
MONAHAN, TEXAS 79756

Martin Water Laboratories, Inc.

709 W. INDIANA  
MIDLAND, TEXAS 79701  
PHONE 683-4521

RESULT OF WATER ANALYSES

LABORATORY NO. 49057  
TO: Mr. Tom Williams  
104 South Pecos, Midland, Texas  
SAMPLE RECEIVED 4-6-90  
RESULTS REPORTED 4-11-90

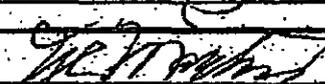
COMPANY BTA Oil Producers LEASE Rojo  
FIELD OR POOL Red Hills  
SECTION BLOCK SURVEY COUNTY Lea STATE NM  
SOURCE OF SAMPLE AND DATE TAKEN:  
NO. 1 Produced water - taken from Rojo #1. 4-5-90  
NO. 2  
NO. 3 Sec 27 25S 33E Unit D  
NO. 4

REMARKS: Devonian

CHEMICAL AND PHYSICAL PROPERTIES				
	NO. 1	NO. 2	NO. 3	NO. 4
Specific Gravity at 60° F.	1.0849			
pH When Sampled				
pH When Received	6.88			
Bicarbonate as HCO <sub>3</sub>	264			
Supersaturation as CaCO <sub>3</sub>				
Undersaturation as CaCO <sub>3</sub>				
Total Hardness as CaCO <sub>3</sub>	48,800			
Calcium as Ca	6,640			
Magnesium as Mg	535			
Sodium and/or Potassium	39,583			
Sulfate as SO <sub>4</sub>	472			
Chloride as Cl	73,860			
Iron as Fe	0.14			
Barium as Ba				
Turbidity, Electric				
Color as Pt				
Total Solids, Calculated	121,353			
Temperature °F.				
Carbon Dioxide, Calculated				
Dissolved Oxygen				
Hydrogen Sulfide	27.0			
Resistivity, ohms/m at 77° F.	0.082			
Suspended Oil				
Filtrable Solids as mg/l				
Volume Filtrate, ml				

Results Reported As Milligrams Per Liter.  
Additional Determinations And Remarks: Our area records of Devonian are some 10 and 15 miles to the north of this field. In comparing with those records, we note that this water has decidedly similar ratios of salts but a higher level of the salts than these records to the north. This gives strong implication of the probability that this is a natural water from the Devonian interval and appears to have little, or no, influence from condensed water vapor.

Form No. 3

By:   
Waylan C. Martin, M.A.

**Endura Products Corp.**  
P.O. Box 3394, Midland, Texas 79702  
Phone (432) 684-4233 Fax (432) 684-4277

**WATER ANALYSIS**

Date	<b>9/11/2015</b>	Endura Rep	<b>Arthur Cox</b>	Code	<b>105013362</b>
Sampling Point/Date	<b>well head 9/10/2015</b>			State	<b>New Mexico</b>
Company	<b>Cimarex Energy</b>			County	<b>Lea</b>
Formation		Lease	<b>Red Hills</b>	Well	<b>#SWD</b>

**DISSOLVED SOLIDS**

<u>CATIONS</u>	mg/l	me/l
Sodium, Na+ (Calc.)	<b>50,531</b>	<b>2,197</b>
Total Hardness as Ca++	<b>3,136</b>	<b>0</b>
Calcium Ca++	<b>2,512</b>	<b>126</b>
Magnesium, Mg+	<b>380</b>	<b>32</b>
Barium, Ba++	<b>0</b>	<b>0</b>
Iron (Total) Fe+++*	<b>3</b>	<b>0</b>

**ANIONS**

Chlorides, Cl-	<b>80,750</b>	<b>2,275</b>
Sulfate, SO4-	<b>1,375</b>	<b>29</b>
Carbonate, CO3-	<b>0</b>	<b>0</b>
Bicarbonates, HCO3-	<b>3,123</b>	<b>51</b>
Sulfide, S-*	<b>0</b>	<b>0</b>
Total Dissolved Solid	<b>138,674</b>	

**OTHER PROPERTIES**

pH*	<b>6.710</b>
Specific Gravity, 60/60 F.	<b>1.092</b>
Turbidity	<b>36</b>

**SCALING INDICIES**

<u>TEMP. F</u>	<u>CA CO3</u>	<u>CASO4*2H2O</u>	<u>CA SO4</u>	<u>BA SO4</u>
80	<b>0.9878</b>	<b>-0.4915</b>	<b>-0.7149</b>	<b>-29.2360</b>
120	<b>1.3313</b>	<b>-0.4994</b>	<b>-0.5423</b>	<b>-29.4468</b>
160	<b>1.8630</b>	<b>-0.5108</b>	<b>-0.3811</b>	<b>-29.6770</b>

**PERFORATIONS**

*Sample Analysis of Disposal Water*



# New Mexico Office of the State Engineer Water Column/Average Depth to Water

No records found.

**PLSS Search:**

Section: 2

Township: 26S

Range: 33E



# New Mexico Office of the State Engineer Water Column/Average Depth to Water

(A CLW##### in the POD suffix indicates the POD has been replaced & no longer serves a water right file.)

(R=POD has been replaced,  
O=orphaned,

C=the file is (quarters are 1=NW 2=NE 3=SW 4=SE)  
closed) (quarters are smallest to largest)

(NAD83 UTM in meters)

(In feet)

POD Number	POD Sub-	Code	basin	County	Q	Q	Q	Sec	Tws	Rng	X	Y	Depth Well	Depth Water	Water Column
<u>C 02285</u> POD1	C	LE	1	4	4	03	26S	33E	636613	3548855	220	220	0		
<u>C 02286</u>	CUB	LE	3	4	4	03	26S	33E	636470	3548714	220	175	45		
<u>C 02287</u>	CUB	LE	3	4	4	03	26S	33E	636427	3548708	220				
<u>C 02288</u>	CUB	LE	4	4	4	03	26S	33E	636646	3548758	220	180	40		
<u>C 02289</u>	CUB	LE	4	4	4	03	26S	33E	636612	3548675*	200	160	40		
<u>C 02290</u>	CUB	LE	4	4	4	03	26S	33E	636538	3548770	200	160	40		

*Section 3*

Average Depth to Water: **179 feet**

Minimum Depth: **160 feet**

Maximum Depth: **220 feet**

**Record Count: 6**

**PLSS Search:**

Section: 3

Township: 26S

Range: 33E



# New Mexico Office of the State Engineer Water Column/Average Depth to Water

No records found.

**PLSS Search:**

Section: A. 10      Township: 26S      Range: 33E



# New Mexico Office of the State Engineer Water Column/Average Depth to Water

(A CLW##### in the  
POD suffix indicates the  
POD has been replaced  
& no longer serves a  
water right file.)

(R=POD has  
been replaced,

O=orphaned,

C=the file is (quarters are 1=NW 2=NE 3=SW 4=SE)

closed) (quarters are smallest to largest) (NAD83 UTM in meters) (In feet)

POD Number	POD Sub-	Code basin	County	Q	Q	Q	Sec	Tws	Rng	X	Y	Depth Well	Depth Water	Water Column
0102284		CUB	LE	4	4	3	11	26S	33E	637465	3547003	200	145	55

Average Depth to Water: 145 feet

Minimum Depth: 145 feet

Maximum Depth: 145 feet

**Record Count: 1**

**PLSS Search:**

Section(s): 11      Township: 26S      Range: 33E

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



---

*New Mexico Office of the State Engineer*  
**Point of Diversion with Meter Attached**

---

No PODs found.

**Basin/County Search:**

Lea

**PLSS Search:**

10

26S

33E



---

*New Mexico Office of the State Engineer*  
**Point of Diversion with Meter Attached**

---

No PODs found.

**Basin/County Search:**

County: Lea

**PLSS Search:**

11

26S

33E

---

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

---



*New Mexico Office of the State Engineer*  
**Point of Diversion with Meter Attached**

No PODs found.

**Basin/County Search:**

County: Lea

**PLSS Search:**

Section(s): 2

Range(s): 26S

Range: 33E



*New Mexico Office of the State Engineer*  
**Point of Diversion with Meter Attached**

No PODs found.

**Basin/County Search:**

Lea

**PLSS Search:**

Section(s): 3

Range: 26S

Range: 33E

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

**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 & 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 <b>BATTLE AXE SWD</b>	
OGRID No.	Operator Name <b>BOSQUE SYSTEMS, LLC</b>	
		Well Number  Elevation <b>3325'</b>

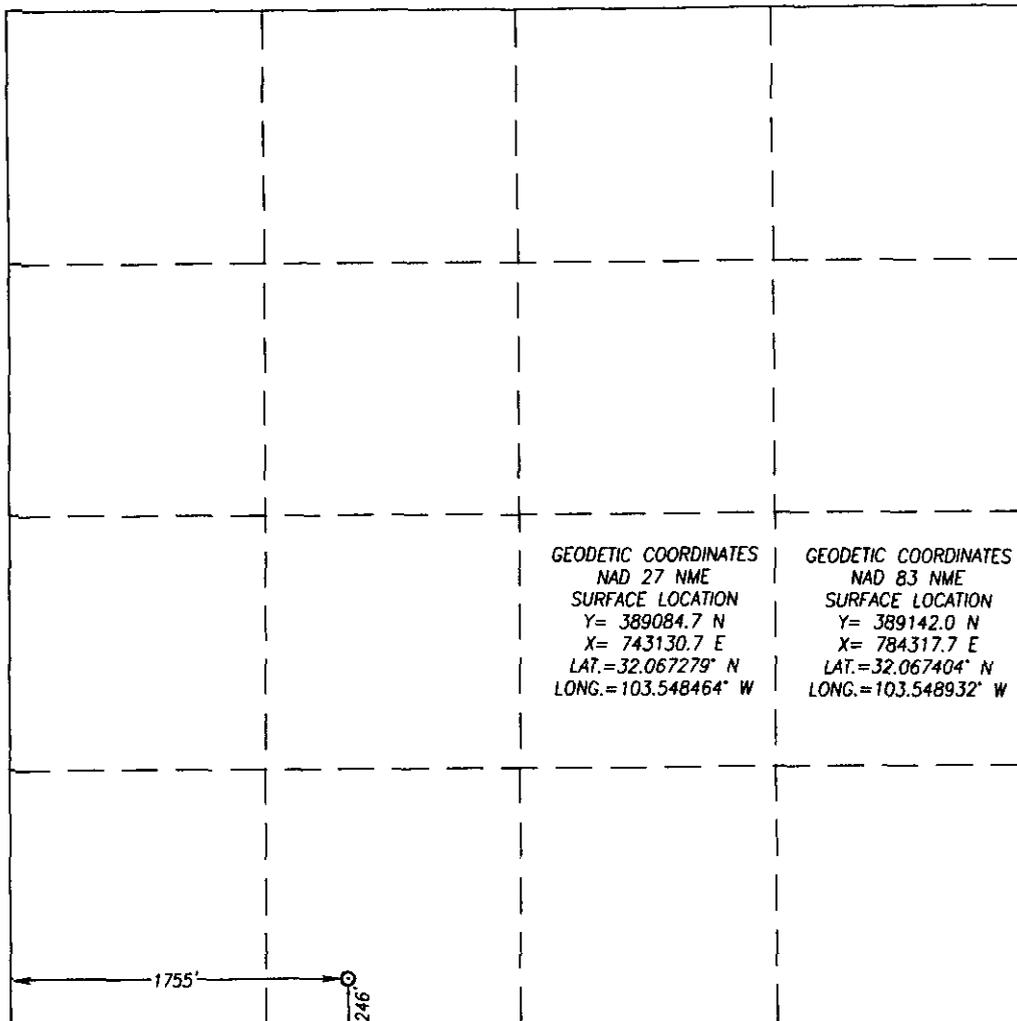
Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
N	2	26-S	33-E		246	SOUTH	1755	WEST	LEA

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		Consolidation 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**



**OPERATOR CERTIFICATION**

*I hereby certify that the information 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 mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.*

Signature \_\_\_\_\_ Date \_\_\_\_\_

Printed Name \_\_\_\_\_

E-mail Address \_\_\_\_\_

---

**SURVEYOR CERTIFICATION**

*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.*

Date of Survey \_\_\_\_\_

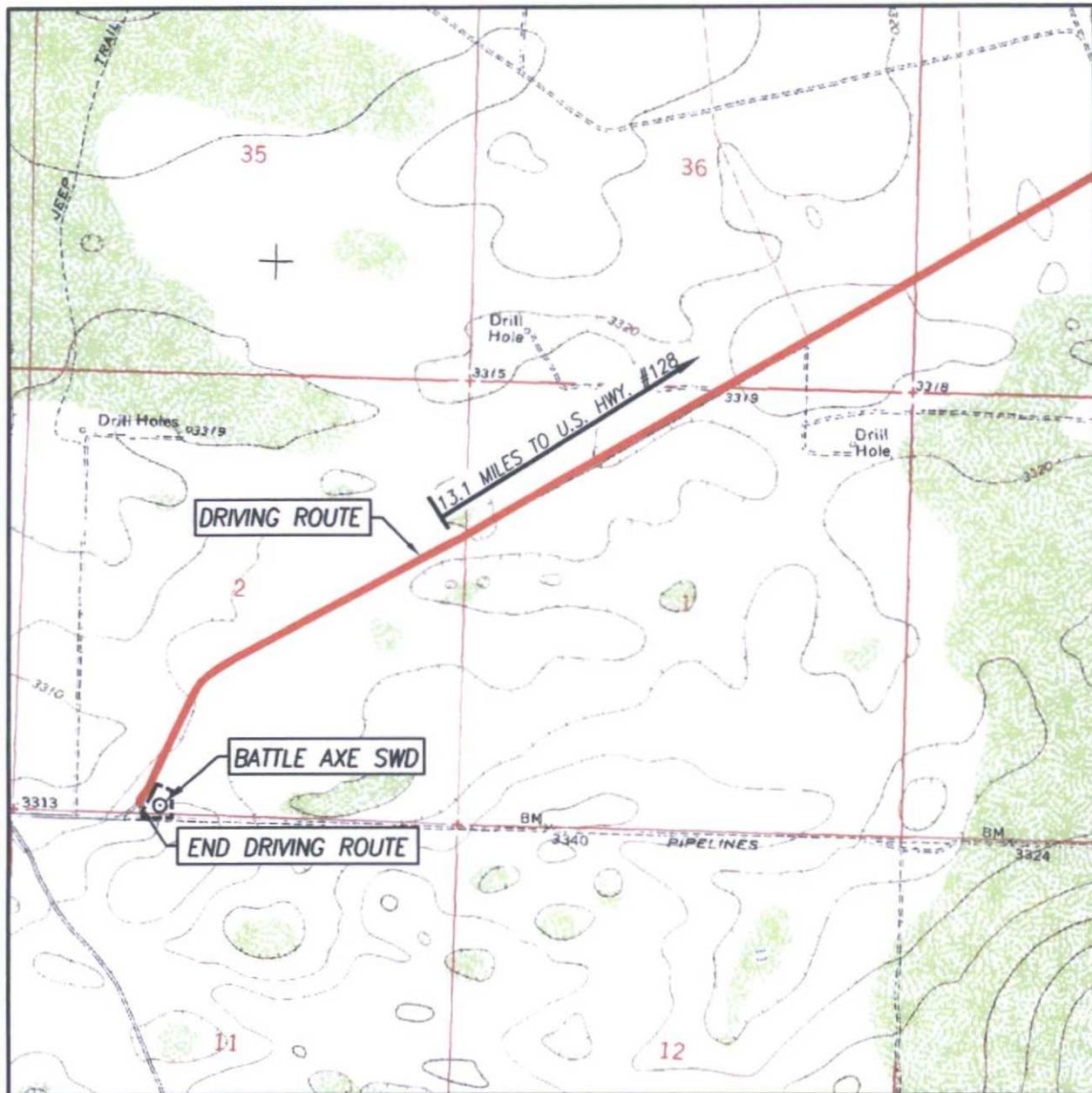
Signature & Seal of **3089** Professional Surveyor

*Ronald J. Eidson* 3/11/2016

Certificate Number Gary G. Eidson 12641  
 Ronald J. Eidson 3239

ACK JWSC W.O.: 16.11.0145

# TOPOGRAPHIC AND ACCESS ROAD MAP



SCALE: 1" = 2000'

CONTOUR INTERVAL:  
PADUCA BREAKS EAST, N.M. - 10'

SEC. 2 TWP. 26-S RGE. 33-E

SURVEY \_\_\_\_\_ N.M.P.M.

COUNTY LEA STATE NEW MEXICO

DESCRIPTION 246' FSL & 1755' FWL

ELEVATION 3325'

OPERATOR BOSQUE SYSTEMS, LLC

LEASE BATTLE AXE SWD

U.S.G.S. TOPOGRAPHIC MAP  
PADUCA BREAKS EAST, N.M.

DIRECTIONS TO THE BATTLE AXE SWD WELL:

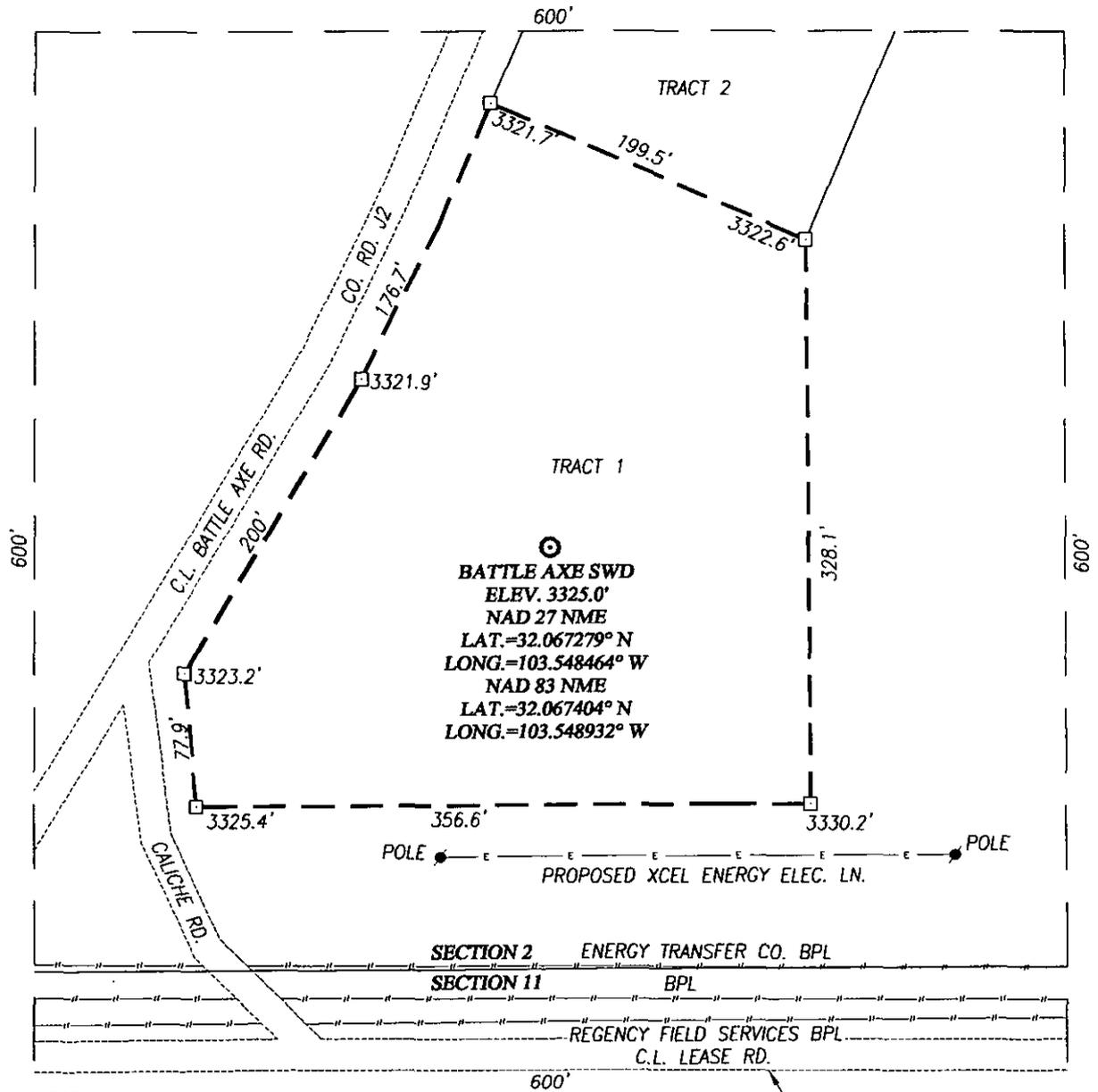
FROM THE INTERSECTION OF HWY. 128 AND CO. RD. J2 (BATTLE AXE)  
GO SOUTHWEST ON CO. RD. J2 (BATTLE AXE) 13.1 MILES. THE  
LOCATION STAKE IS 150 FEET EAST.



PROVIDING SURVEYING SERVICES  
SINCE 1946  
**JOHN WEST SURVEYING COMPANY**  
412 N. DAL PASO HOBBS, N.M. 88240  
(575) 393-3117 [www.jwsc.biz](http://www.jwsc.biz)  
TBPLS# 10021000

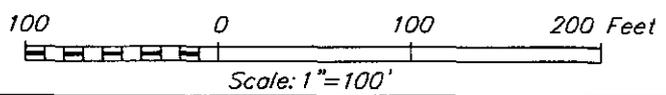


# WELL SITE PLAN



NOTE:  
1) SEE "TOPOGRAPHICAL AND ACCESS ROAD MAP" FOR PROPOSED ROAD LOCATION.

DIRECTIONS TO THE BATTLE AXE SWD WELL:  
FROM THE INTERSECTION OF HWY. 128 AND CO. RD. J2 (BATTLE AXE) GO SOUTHWEST ON CO. RD. J2 (BATTLE AXE) 13.1 MILES. THE LOCATION STAKE IS 150 FEET EAST.



## BOSQUE SYSTEMS, LLC

BATTLE AXE SWD LOCATED 246 FEET FROM THE SOUTH LINE AND 1755 FEET FROM THE WEST LINE OF SECTION 2, TOWNSHIP 26 SOUTH, RANGE 33 EAST, N.M.P.M., LEA COUNTY, NEW MEXICO

PROVIDING SURVEYING SERVICES SINCE 1946  
  
**JOHN WEST SURVEYING COMPANY**  
 412 N. DAL PASO HOBBS, N.M. 88240  
 (575) 393-3117 www.jwsc.biz

Survey Date: 3/1/16	CAD Date: 3/10/16	Drawn By: ACK
---------------------	-------------------	---------------

**PEAK CONSULTING SERVICES**

P.O. Box 16555  
Albuquerque, New Mexico 87191

March 23, 2016

Re: Application for Authorization to Inject  
Halle SWD #1  
246 FSL & 1755 FWL Unit N  
Section 2 T26S R33E  
Lea County, New Mexico

NEW MEXICO OIL CONSERVATION COMMISSION  
OIL CONSERVATION DIVISION  
1220 South St. Francis Drive  
Santa Fe, New Mexico 87505

Attn: Mr. Michael McMillan

Dear Mr. McMillan,

Bosque Disposal Systems, LLC hereby seeks approval for Authorization to Inject at the above referenced location. We are proposing to drill a new well at this location to inject into the Siluro-Devonian. We plan to utilize this well as a commercial disposal.

Enclosed is a copy of our Application Packet.

Bosque Disposal Systems, LLC has notified all offset Operators and the Surface Owners of our intensions. A Legal Notice has been published in the Hobbs News Sun. The Affidavit of Publication will be forwarded to you as soon as it is received.

Should you have any questions regarding this application, please contact Michael Pierce, Peak Consulting Services at 505-948-0545 or [mpgeol@aol.com](mailto:mpgeol@aol.com), agent for Bosque Disposal Systems, LLC.

Regards,



Michael Pierce  
Peak Consulting Services

505-948-0545  
[mpgeol@aol.com](mailto:mpgeol@aol.com)

# Affidavit of Publication

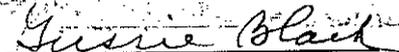
STATE OF NEW MEXICO  
COUNTY OF LEA

I, Daniel Russell, Publisher of the Hobbs News-Sun, a newspaper published at Hobbs, New Mexico, solemnly swear that the clipping attached hereto was published in the regular and entire issue of said newspaper, and not a supplement thereof for a period of 1 issue(s).

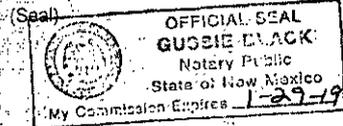
Beginning with the issue dated  
April 01, 2016  
and ending with the issue dated  
April 01, 2016.

  
\_\_\_\_\_  
Publisher

Sworn and subscribed to before me this  
1st day of April 2016.

  
\_\_\_\_\_  
Business Manager

My commission expires  
January 29, 2019



This newspaper is duly qualified to publish legal notices or advertisements within the meaning of Section 3, Chapter 167, Laws of 1937 and payment of fees for said

**LEGAL NOTICE**  
April 1, 2016

BOSQUE DISPOSAL SYSTEMS, LLC, 420 Throckmorton, Ste 620 Ft. Worth, Texas 76102, will file Form C-108 Application for Authorization to Inject with the New Mexico Oil Conservation Division seeking administrative approval for a salt water disposal well. The proposed well, the Hattie SWD #1 well, will be located 246' FSL & 1755' FWL Section 2, T26S R33E, Lea County NM. The disposal interval will be the Devonian formation at a depth of 18200' - 19200' with a maximum surface pressure of 3640 psi and an average rate of 10,000 BWPD and maximum rate of 30,000 BWPD.

All interested parties must file objections or requests for hearing with the Oil Conservation Division, 1220 South St. Francis Dr., Santa Fe, NM 87505, within 15 days of this publication. Questions or additional information can be obtained by contacting Michael Pierce at 505-948-0545 #30798

02101653

00172576

MICHAEL PIERCE  
P.O. BOX 16555  
ALBUQUERQUE, NM 87191

## McMillan, Michael, EMNRD

---

**From:** MPGEOL@aol.com  
**Sent:** Tuesday, April 05, 2016 8:22 AM  
**To:** McMillan, Michael, EMNRD  
**Subject:** Re: Bosque Halle SWD  
**Attachments:** Halle SWD Affidavit 4-1-2016.doc

Michael,

Attached is the affidavit for the Halle SWD #1.

We have not finalized the final casing and tubing design. The depths of casing are approximate, but will be set at the top of the Delaware, top of Wolfcamp, and base of the Woodford, The cement for all strings will be circulated.

I will pass along the 7" requirement to the engineers.

When the casing and tubing designs have been completed, I will forward them to you.

Regards,

Mike

Michael L. Pierce  
Peak Consulting Services

505-948-0545 cell  
505-856-1213 home  
mpgeol@aol.com

In a message dated 4/1/2016 10:40:07 A.M. Mountain Daylight Time, Michael.McMillan@state.nm.us writes:

Mike:

When you e-mail the affidavit of publication, can you provide the weight of the 7" casing. The OCD wants to make sure that the drift of the casing is greater than 1", in case the tubing gets stuck

Also, provide the estimated number of sacks of cement used in each casing.

thanks

---

**From:** MPGEOL@aol.com [mailto:MPGEOL@aol.com]  
**Sent:** Tuesday, March 29, 2016 10:00 AM  
**To:** McMillan, Michael, EMNRD  
**Subject:** Re: Bosque Halle SWD

## McMillan, Michael, EMNRD

---

**From:** McMillan, Michael, EMNRD  
**Sent:** Wednesday, April 20, 2016 1:53 PM  
**To:** 'MPGEOL@aol.com'  
**Subject:** RE: Bosque Halle SWD

Mike:

The OCD will require information about the casing program prior to approval.  
If the information is not received by May 5, 2015 your application will be cancelled.

Thank You

## Michael A. McMillan

Engineering and Geological Services Bureau, Oil Conservation Division  
1220 South St. Francis Dr., Santa Fe NM 87505  
O: 505.476.3448 F. 505.476.3462  
Michael.mcmillan@state.nm.us

---

**From:** MPGEOL@aol.com [mailto:MPGEOL@aol.com]  
**Sent:** Wednesday, April 20, 2016 11:26 AM  
**To:** McMillan, Michael, EMNRD  
**Subject:** Re: Bosque Halle SWD

Michael,

I passed the your questions along to the engineer. He told me they are having trouble getting commitments from suppliers for the amount and grades of casing we need, so the tubular design has not been finalized. They are aware of the OCD's concern.

Would it be possible to put language in the order to require prior approval from the OCD of the casing design, just to continue with the application?

Also, did we get any comments on the application. The only party I heard from was from the BLM in Roswell confirming that we moved the location.

Regards,

Mike

Michael L. Pierce  
Peak Consulting Services

505-948-0545 cell  
505-856-1213 home  
[mpgeol@aol.com](mailto:mpgeol@aol.com)

Proposed Casing Design Halle SWD # 1

Drill 26" surface hole to ~ 900'

Run 20" J-55 94#/ft casing.

Cemented with 1400 sxs to circulate.

Drill 14.75" hole to ~ 5000'

Run 133/8" J-55 68#/ft casing.

Cement with 1300 sxs to circulate.

Drill 12.25" hole to ~ 13000'

Run 95/8" P-110 35#/ft casing.

DV at ~ 6000

Cement 1<sup>st</sup> stage with 1800 sxs to circulate

Cement 2<sup>nd</sup> stage with 800 sxs TOC ~3500'

Drill 8.5" hole to ~18200'

Run 7" P-110 35#/ft casing ID 6.004 Drift 5.879

Cement with 700 sxs TOC 12000'

Run 4.5 N-80 internally coated tubing.

## McMillan, Michael, EMNRD

---

**From:** MPGEOL@aol.com  
**Sent:** Wednesday, April 20, 2016 4:42 PM  
**To:** McMillan, Michael, EMNRD  
**Subject:** Re: Bosque Halle SWD

Michael,

Here they are.

Lower Miss Top 17700'  
Woodford Top 18050'  
Devonian Top 18200'

Michael L. Pierce  
Peak Consulting Services

505-948-0545 cell  
505-856-1213 home  
mpgeol@aol.com

In a message dated 4/20/2016 4:16:49 P.M. Mountain Daylight Time, Michael.McMillan@state.nm.us writes:

Can you give me the approximate top of Woodford, Devonian and Lower Ms.-I know this will be approximate values. We require this for our application

Mike

---

**From:** MPGEOL@aol.com [mailto:MPGEOL@aol.com]  
**Sent:** Wednesday, April 20, 2016 3:45 PM  
**To:** McMillan, Michael, EMNRD  
**Subject:** Re: Bosque Halle SWD

Michael,

Here is the proposed casing design.

Mike



# New Mexico Office of the State Engineer

## Water Column/Average Depth to Water

(A CLW##### in the POD suffix indicates the POD has been replaced & no longer serves a water right file.)

(R=POD has been replaced, O=orphaned, C=the file is closed)

(quarters are 1=NW 2=NE 3=SW 4=SE)

(quarters are smallest to largest) (NAD83 UTM in meters)

(In feet)

POD Number	POD Sub-Code	basin	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Depth Well	Depth Water	Water Column
C 02285	POD1	C	LE	1	4	4	03	26S	33E	636613	3548855	220	220	0
C 02286		CUB	LE	3	4	4	03	26S	33E	636470	3548714	220	175	45
C 02287		CUB	LE	3	4	4	03	26S	33E	636427	3548708	220		
C 02288		CUB	LE	4	4	4	03	26S	33E	636646	3548758	220	180	40
C 02289		CUB	LE	4	4	4	03	26S	33E	636612	3548675*	200	160	40
C 02290		CUB	LE	4	4	4	03	26S	33E	636538	3548770	200	160	40
C 02294		CUB	LE	4	4	3	11	26S	33E	637465	3547003	200	145	55
C 02295		CUB	LE	2	2	4	12	26S	33E	639850	3547710*	250	200	50

Average Depth to Water: **177 feet**

Minimum Depth: **145 feet**

Maximum Depth: **220 feet**

**Record Count: 8**

**PLSS Search:**

Section(s): 1-3, 10-12

Township: 26S

Range: 33E

\*UTM location was derived from PLSS - see Help

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

I have examined the available data for this well and can find no evidence of faults or any other hydrologic connection between the disposal interval and any underground sources of drinking water.

BY:

A handwritten signature in black ink, appearing to read 'MLP', written over a dotted grid background.

Michael L. Pierce



C-108 Review Checklist: Received 4/05/2016 Add. Request: 4/05/2016 Reply Date: 4/20/2016 Suspended: \_\_\_\_\_ [Ver 15]

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

Well No. 1 Well Name(s): Halle SWP

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

Footages 246 FSL 1755 FUL Lot \_\_\_\_\_ or Unit B Sec 2 Tsp 26S Rge 33E County Lea

General Location: 225 SW JAI Pool: SW DEVONIAN SILURIAN Pool No.: 967-89

BLM 100K Map: JAI Operator: BOSTON Disposal Systems OGRID: 370247 Contact: Michael Pierce

COMPLIANCE RULE 5.9: Total Wells: \_\_\_\_\_ Inactive: 0 Fincl Assur: 0 Compl. Order? MA IS 5.9 OK? Y Date: 4-2-2016

WELL FILE REVIEWED  Current Status: Proposed

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

Planned Rehab Work to Well: 7" CASING CBL-SURFACE

Well Construction Details	Sizes (in)		Setting		Cement S <sub>2</sub> or C <sub>1</sub>	Cement Top and Determination Method
	Borehole / Pipe		Depths (ft)	Stage Tool		
Planned ___ or Existing ___ Surface	<u>24/20</u>		<u>900</u>			<u>SURFACE</u>
Planned ___ or Existing ___ Interm/Prod	<u>14 3/4 / 13 3/8</u>		<u>5000</u>		<u>1300</u>	<u>SURFACE</u>
Planned ___ or Existing ___ Interm/Prod	<u>12 1/4 / 9 5/8</u>		<u>4500</u>	<u>6000</u>	<u>2600</u>	<u>4500</u>
Planned ___ or Existing ___ Prod/Liner	<u>8 1/2 / 7</u>		<u>18200</u>		<u>700</u>	<u>12000*</u>
Planned ___ or Existing ___ Liner						
Planned ___ or Existing ___ OH / PERF	<u>18200 / 19200</u>			<u>inj Length</u>		

Injection Lithostratigraphic Units:	Depths (ft)	Injection or Confining Units	Tops	Completion/Operation Details:	
Adjacent Unit: Litho. Struc. (Por)	<u>18200</u>	<u>DEV</u>	<u>18200</u>	Drilled TD <u>19200</u>	PBTD <u>19200</u>
Confining Unit (Litho) Struc. Por.		<u>WD</u>	<u>18050</u>	NEW TD _____	NEW PBTD _____
Proposed Inj Interval TOP:				NEW Open Hole <input type="radio"/> or NEW Perfs <input type="radio"/>	
Proposed Inj Interval BOTTOM:				Tubing Size <u>4.5</u> in. Inter Coated? <u>Y</u>	
Confining Unit: Litho. Struc. Por.				Proposed Packer Depth <u>18100</u> ft	
Adjacent Unit: Litho. Struc. Por.				Min. Packer Depth <u>18050</u> (100-ft limit)	
				Proposed Max. Surface Press. <u>18100</u> psi	
				Admin. Inj. Press. <u>3640</u> (0.2 psi per ft)	

**AOR: Hydrologic and Geologic Information**

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

FRESH WATER: Aquifer Carlsbad Max Depth 220 HYDRO AFFIRM STATEMENT By Qualified Person

NMOSE Basin: CARLSBAD CAPITAN REEF: thru adj  No. Wells within 1-Mile Radius? \_\_\_\_\_ FW Analysis \_\_\_\_\_

Disposal Fluid: Formation Source(s) Bone Springs Analysis? Y On Lease  Operator Only  or Commercial

Disposal Int: Inject Rate (Avg/Max BWPD): 32/100 Protectable Waters? MA Source: \_\_\_\_\_ System: Closed or Open

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

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

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

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

NOTICE: Newspaper Date 4-01-2016 Mineral Owner NMSLO Surface Owner NMSLO N. Date 3-29-2016

RULE 26.7(A): Identified Tracts? Y Affected Persons: ROB CONOLO MURBOURNA N. Date 3-29-2016

Order Conditions: Issues: CBL 7" SURFACE

Add Order Cond: \_\_\_\_\_