

ABOVE THIS LINE FOR DIVISION USE ONLY

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



ADMINISTRATIVE APPLICATION CHECKLIST

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

Application Acronyms:

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

- [1] **TYPE OF APPLICATION** - Check Those Which Apply for [A]
 [A] Location - Spacing Unit - Simultaneous Dedication
 NSL NSP SD
 Check One Only for [B] or [C]
 [B] Commingling - Storage - Measurement
 DHC CTB PLC PC OLS OLM
 [C] Injection - Disposal - Pressure Increase - Enhanced Oil Recovery
 WFX PMX SWD IPI EOR PPR
 [D] Other: Specify _____
- SWD-1479-A
 -Ray Westall operating, Inc
 119305
 -well
 -Porterhouse State Comp #1
 30-015-32682
 2015 JAN 14
 RECEIVED
 Pool

- [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
- SWD Devonian
 96107

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

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

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

Ben Stone		Agent for Ray Westall	12/30/14
Print or Type Name	Signature	Title	Date
		ben@sosconsulting.us	
		e-mail Address	



December 26, 2014

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

Attn: Mr. David Catanach, Director

Re: Application of Ray Westall Operating, Inc. to AMEND its permit SWD-1479 on the Porterhouse State Com No.1 well located in Section 32, Township 18 South, Range 31 East, NMPM, Eddy County, New Mexico.

Dear Mr. Catanach,

Please find enclosed form C-108 Application for Authority to Inject, supporting the above-referenced request to amend the disposal interval in the Porterhouse State Com No.1 from the Grayburg-San Andres to the Devonian formation.

Ray Westall Operating seeks to optimize efficiency, both economically and operationally, of its operations. Approval of this application is consistent with that goal as well as the NMOCD's mission of preventing waste and protection of correlative rights.

Published legal notice ran in the December 19, 2014 edition of the Artesia Daily Press and all offset operators and other interested parties have been notified individually. The legal notice affidavit will be forwarded upon receipt. The Area of Review has not changed. This application includes updated wellbore schematics and notification documents. The well is located on state lands and a copy of this application has been submitted to the State Land Office, Division of Oil, Gas and Minerals.

I respectfully request that the approval of this salt water disposal amendment proceed swiftly and if you or your staff requires additional information or has any questions, please do not hesitate to call or email me.

Best regards,

Ben Stone, Partner
SOS Consulting, LLC
Agent for Ray Westall Operating, Inc.

Cc: Application attachment and file

APPLICATION FOR AUTHORIZATION TO INJECT

- I. PURPOSE: **Salt Water Disposal – AMENDED INTERVAL** and the application **qualifies** for administrative approval.
- II. OPERATOR: **Ray Westall Operating, Inc.**
ADDRESS: **P.O. Box 4, Loco Hills, NM 88255**
- CONTACT PARTY: **Donnie Mathews (575) 677-2372**
Agent: SOS Consulting, LLC – Ben Stone (903) 488-9850
- III. WELL DATA: **All well data and applicable wellbore diagrams are attached hereto.**
- IV. **This is not an expansion of an existing project.**
- V. **A map is attached** that identifies all wells and leases within two miles of any proposed injection well with a one-half mile radius circle drawn around each proposed injection well. This circle identifies the well's area of review.
- *VI. **A tabulation HAS BEEN PREVIOUSLY SUBMITTED** of data on all wells of public record within the area of review which penetrate the proposed injection zone. **(1 AOR active SWD well penetrates subject interval and 1 P&A'd well.)** The data includes a description of each well's type, construction, date drilled, location, depth, and a schematic of any plugged well illustrating all plugging detail.
- VII. **The following data is attached** on the proposed operation, including:
1. Proposed average and maximum daily rate and volume of fluids to be injected;
 2. Whether the system is open or closed;
 3. Proposed average and maximum injection pressure;
 4. Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water; and,
 5. If injection is for disposal purposes into a zone not productive of oil or gas at or within one mile of the proposed well, attach a chemical analysis of the disposal zone formation water (may be measured or inferred from existing literature, studies, nearby wells, etc.).
- *VIII. **Appropriate geologic data on the injection zone is attached** including appropriate lithologic detail, geologic name, thickness, and depth. Give the geologic name, and depth to bottom of all underground sources of drinking water (aquifers containing waters with total dissolved solids concentrations of 10,000 mg/l or less) overlying the proposed injection zone as well as any such sources known to be immediately underlying the injection interval.
- IX. **No stimulation program is proposed at this time.**
- *X. **There is no applicable test data on the well however, any previous well logs (2 well logs available via OCD Online) have been filed with the Division and they need not be resubmitted. A log strip w/ OH selection is included.**
- *XI. **State Engineer's records indicated no domestic water wells within one mile the proposed salt water disposal well.**
- XII. **An affirmative statement is attached that available geologic and engineering data has been examined and no evidence was found** of open faults or any other hydrologic connection between the disposal zone and any underground sources of drinking water.
- XIII. **"Proof of Notice" section on the next page of this form has been completed.**
There are 11 offset lessees and/or operators within ½ mile - all have been noticed.
- XIV. Certification: I hereby certify that the information submitted with this application is true and correct to the best of my knowledge and belief.

NAME: **Ben Stone** TITLE: **SOS Consulting, LLC agent / consultant for Ray Westall Operating, Inc.**

SIGNATURE:  DATE: **12/30/2014**

E-MAIL ADDRESS: **ben@sosconsulting.us**

* If the information required under Sections VI, VIII, X, and XI above has been previously submitted, it need not be resubmitted. Please show the date and circumstances of the earlier submittal:

III. WELL DATA – *The following information and data is included:*

A. The following well data must be submitted for each injection well covered by this application. The data must be both in tabular and schematic form and shall include:

- (1) Lease name; Well No.; Location by Section, Township and Range; and footage location within the section.
- (2) Each casing string used with its size, setting depth, sacks of cement used, hole size, top of cement, and how such top was determined.
- (3) A description of the tubing to be used including its size, lining material, and setting depth.
- (4) The name, model, and setting depth of the packer used or a description of any other seal system or assembly used.

Division District Offices have supplies of Well Data Sheets which may be used or which may be used as models for this purpose. Applicants for several identical wells may submit a "typical data sheet" rather than submitting the data for each well.

B. The following must be submitted for each injection well covered by this application. All items must be addressed for the initial well. Responses for additional wells need be shown only when different. Information shown on schematics need not be repeated.

- (1) The name of the injection formation and, if applicable, the field or pool name.
- (2) The injection interval and whether it is perforated or open-hole.
- (3) State if the well was drilled for injection or, if not, the original purpose of the well.
- (4) Give the depths of any other perforated intervals and detail on the sacks of cement or bridge plugs used to seal off such perforations.
- (5) Give the depth to and the name of the next higher and next lower oil or gas zone in the area of the well, if any.

XIV. PROOF OF NOTICE *pursuant to the following criteria is attached.*

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

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

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

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

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



WELL SCHEMATIC - CURRENT
Porterhouse State Com Well No.1 SWD

SWD-1479 Grayburg-San Andres SWD Completion

API 30-015-32682

660' FNL & 660' FEL, SEC. 32-T18S-R31E
 EDDY COUNTY, NEW MEXICO

Spud Date: 3/29/2003

P&A Date: 1/28/2011

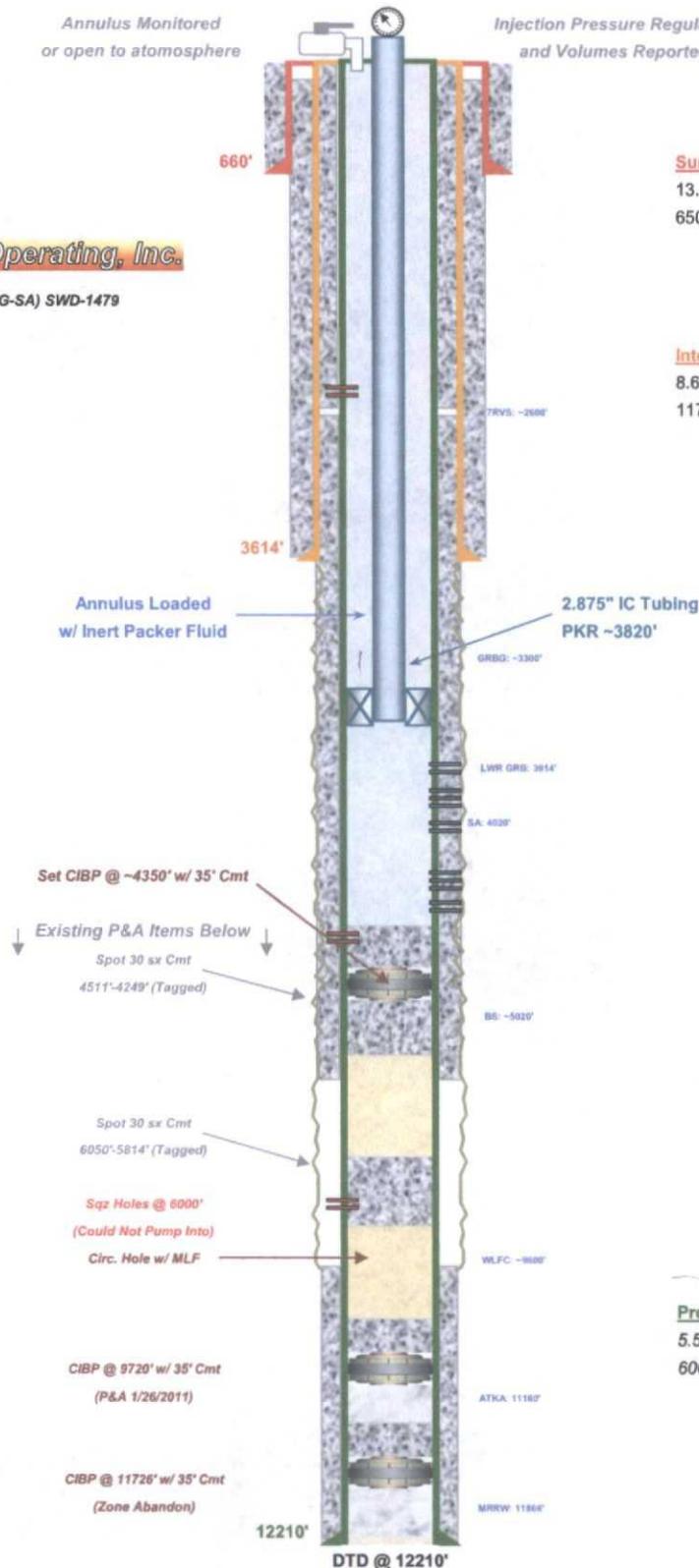
Re-Entry Date: ~3/01/2014

Ray Westall Operating, Inc.

Current Status: (G-SA) SWD-1479

Annulus Monitored
 or open to atmosphere

Injection Pressure Regulated
 and Volumes Reported



Surface Casing

13.375", 54.5# Csg. (17.5" Hole) @ 660'
 650 sx CIs 'C' - 100 sx - Circulated to Surface

Intermediate Casing

8.625", 26.0# csg. (11.0" Hole) @ 3614'
 1175 sx Calc. to Circ - Not Rpt'd

Production Casing

5.5", 20 & 17.0# Csg (7.785" hole) @ 12210'
 600 sx - TOC @ 9034' by Calc.



Drawn by: Ben Stone, Rva'd 12/24/2014



WELL SCHEMATIC - PROPOSED
Porterhouse State Com Well No.1 SWD

API 30-015-32682

660' FNL & 660' FEL, SEC. 32-T18S-R31E
 EDDY COUNTY, NEW MEXICO

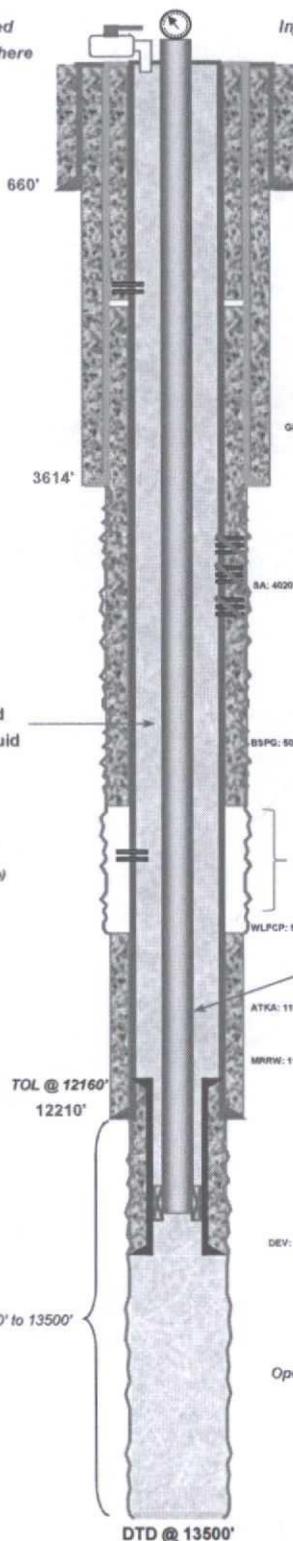
Spud Date: 3/29/2003
 SWD Date: 8/15/2014
 Re-Config Date: ~3/01/2015

Ray Westall Operating, Inc.

POOH w/ Tbg & Pkr; Sqz Existing GSA Perfs
 D/O & C/O Existing Plugs to 12210'. Deepen well to 13500'
 Run & Set New 4.5" Liner 12160' to 12400'
 Run PC Tubing and PKR - Conduct MIT.
 Commence Disposal Operations.

Annulus Monitored
 or open to atmosphere

Injection Pressure Regulated
 and Volumes Reported
 2480 psi Max



Surface Casing

13.375", 54.5# Csg. (17.5" Hole) @ 660'
 650 sx Cls 'C' - 100 sx - Circulated to Surface

5.5" Sqz'd for previous SWD config.

Intermediate Casing

8.625", 26.0# csg. (11.0" Hole) @ 3614'
 1175 sx Calc. to Circ - Not Rpt'd

GRBG: ~5300'

SA: 4020'

SQZ G-SA Perfs 3914'-4250'

BSPG: 5020'

Annulus Loaded
 w/ Inert Packer Fluid

Sqz Holes @ 6000'
 (Could Not Pump Into)

Possible void behind 5.5"
 Will run CBL for SWD configuration.

WLP:CP: 9600'

2.875" IC Tubing
 PKR ~12305'+

ATKA: 11160'

MRRW: 11860'

TOL @ 12160'
 12210'

Production Casing

5.5", 20 & 17.0# Csg (7.785" hole) @ 12210'
 600 sx - TOC @ 9034' by Calc.

NEW Liner

4.5", 10.5# LNR (4.875" hole) @ 12400'
 10 sx - TOC @ 12160' by Calc.

DEV: 12400'

New Hole 12210' to 13500'

Openhole 12,400' to 13,500'

DTD @ 13500'



Drawn by: Ben Stone, Rvs'd 3/06/2015

C-108 ITEM VII – PROPOSED OPERATION

The Porterhouse State Com Well No.1 SWD will be operated as a commercial disposal service to area operators to facilitate in disposal of produced water from typical producing formations in the area. San Andres, Delaware, Bone Spring, Wolfcamp and Morrow formation waters - chlorides and TDS are relative compatible with Devonian formation waters.)

The system will be closed utilizing a tank battery facility located on the well site.

Injection pressure will be ²⁴⁸⁰2700 psi with rates limited only by that pressure. In the future, Ray Westall Operating, Inc. may opt to conduct a step rate test if it is determined that greater rates may be required. This would be submitted to OCD as a request to increase the injection pressure.

Routine maintenance will be ongoing and any releases will be reported within 24 hours to OCD on form C-141 pursuant to various portions of 19.15.30 NMAC.

The facility will not be manned but will be available to Ray Westall's customers 24/7. The facility will be available for inspections at any time deemed necessary by OCD.

C-108 - Item VIII

Geological Data

Disposal will be into the Devonian formation.

The Devonian consists of weathered carbonate, dolomite and chert. It is overlain by the Morrow. Thickness varies with individual members generally averaging less than 150 ft. Porosity averages 10 percent and permeability around 55 millidarcies. While organic rich shales of Devonian age, such as the Woodford, have been targeted for some prolific hydrocarbon production, the reservoir offers significant potential for deep disposal in areas of major Pennsylvanian and later production.

Fresh water in the area is generally available from the Santa Rosa formation. State Engineer's records show water wells in the area to have an average depth of 240 feet.

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

C-108 ITEM XII – GEOLOGIC AFFIRMATION

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



Ben Stone, Partner
SOS Consulting, LLC

Project: Ray Westall Operating, Inc.
Porterhouse State Com No.1
Reviewed 12/29/2013

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

SURFACE OWNER

STATE OF NEW MEXICO (FedEx'ed copy)
Oil, Gas and Minerals Division
310 Old Santa Fe Trail
Santa Fe, NM 87504

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

BLM Lease NMLC-0029387A

Lessee

- 1 18-31, Inc.
P.O. Box 1120
Roswell, NM 88201

Operators

- 2 CIMEREX ENERGY COMPANY OF COLORADO
600 N. Marienfeld, Suite 600
Midland, TX 79701
- 3 DEVON ENERGY PRODUCTION COMPANY, LP
333 W. Sheridan
OKC, OK 73102

BLM Lease NMNM-0055648

Lessees

- DEVON ENERGY PRODUCTION COMPANY, LP
333 W. Sheridan
OKC, OK 73102
- 4 ENERGEN RESOURCES COMPANY
605 Richard Arrington Jr. Blvd.
Birmingham, AL 35203-2707
 - 5 FIDELITY EXPLORATION & PRODUCTION COMPANY
1615 Broadway, Suite 1800
Denver, CO 80202

Operator

CIMEREX ENERGY COMPANY OF COLORADO
600 N. Marienfeld, Suite 600
Midland, TX 79701

BLM Lease NMNM-012211

Lessee

18-31, Inc.
P.O. Box 1120
Roswell, NM 88201

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

6 **Operator**
JUDAH OIL, LLC
P.O. Box 568
Artesia, NM 88211

State Lease E0-6947-0010

7 **Lessee**
ATOFINA PETROCHEMICALS & EXXON CORP.
P.O. Box 2990
Midland, TX 79701

State Lease E0-6947-0011

8 **Lessee**
MAGNUM HUNTER PRODUCTION, INC.
600 N. Marienfeld, Suite 600
Midland, TX 79701

Operator
CIMEREX ENERGY COMPANY OF COLORADO
600 N. Marienfeld, Suite 600
Midland, TX 79701

State Lease E0-6947-0002

9 **Lessee**
CHAMBERS & KENNEDY
P.O. Box 2305
Houston, TX 77002

Operators
CIMEREX ENERGY COMPANY OF COLORADO
600 N. Marienfeld, Suite 600
Midland, TX 79701

10 **CHI OPERATING, INC.**
P.O. Box 1700
Midland, TX 79702

State Lease B0-2023-0018

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

Operators
CIMEREX ENERGY COMPANY OF COLORADO
600 N. Marienfeld, Suite 600
Midland, TX 79701

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

State Lease E0-0001-0003

Lessee

MAGNUM HUNTER PRODUCTION, INC.
600 N. Marienfeld, Suite 600
Midland, TX 79701

REGULATORY

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

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

NEW MEXICO STATE LAND OFFICE (FedEx'ed copy)
Commissioner of Public Lands
310 Old Santa Fe Trail
Santa Fe, NM



December 24, 2014

NOTIFICATION TO INTERESTED PARTIES
via U.S. Certified Mail

To Whom It May Concern:

Ray Westall Operating, Inc., Loco Hills, New Mexico, has made application to the New Mexico Oil Conservation Division to AMEND its permit for salt water disposal the Porterhouse State Com Well No.1. The proposed commercial operation is for produced water disposal from area operators. As indicated in the notice below, the well is located in Section 32, Township 18 South, Range 31 East in Eddy County, New Mexico.

The published notice states that injection will be into the Devonian formation through an openhole interval from 12,400 feet to 13,500 feet. The current Grayburg-San Andres interval will be squeezed and abandoned.

Following is the notice published in the Artesia Daily Press, Artesia, New Mexico in the December 19, 2014 edition.

LEGAL NOTICE

Ray Westall, Inc., P.O. Box 4, Loco Hills, NM 88255 is filing Form C-108 (Application for Authority to Inject) with the New Mexico Oil Conservation Division for administrative approval to deepen and permit for salt water disposal the Porterhouse State Com Well No.1 SWD. The well, API No.30-015-32682 is located 660' FNL & 660' FWL in Section 32, Township 18 South, Range 31 East in Eddy County, New Mexico. The well is an approved SWD into the lower Grayburg and San Andres formations. This application is to deepen the well to the Devonian formation and dispose through openhole from a maximum applied for top depth of 12400 feet to maximum depth of 13500 feet. Maximum injection pressure will be 2480 psi and a maximum rate limited only by such pressure. The previous disposal interval will be squeezed and abandoned.

Interested parties wishing to object to the proposed application must file with the New Mexico Oil Conservation Division, 1220 St. Francis Dr., Santa Fe, NM 87505, (505)476-3460 within 15 days of the date of this notice. Additional information may be obtained from the applicant's agent, SOS Consulting, LLC, (903)488-9850 or, email info@sosconsulting.us.

You have been identified as a party who may be interested as an offset lessee or operator.

You are entitled to a full copy of the application. If so desired, please call or email SOS Consulting, LLC at 903-488-9850, info@sosconsulting.us, and a copy will be expedited to you. If a copy has already been sent to you or your company, we will advise you of that and the address to which it was sent.

Thank you for your attention in this matter.

Best regards,

A handwritten signature in black ink, appearing to read "Ben Stone". The signature is fluid and cursive, with the first name "Ben" and last name "Stone" clearly distinguishable.

Ben Stone, SOS Consulting, LLC
Agent for Ray Westall Operating, Inc.

Cc: Application File

C-108 - Item XIV

Proof of Notice (Certified Mail Receipts - cont.)

7011 0110 0000 9155 4872

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ATOFINA PETROCHEMICALS & EXXON CORP.
 P.O. Box 2990
 Midland, TX 79701

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Restricted Delivery Fee (Endorsement Required)		
Total Postage & Fees	\$6.49	

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CHAMBERS & KENNEDY
 P.O. Box 2305
 Houston, TX 77002

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Total Postage & Fees	\$6.49	

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Total Postage & Fees	\$6.49	

Sent To
 Street, Apt. or PO Box, City, State
MAGNUM HUNTER PRODUCTION, INC.
 600 N. Marienfeld, Suite 600
 Midland, TX 79701

For delivery information visit our website at www.usps.com
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Postage	\$	Postmark Here DEC 24 2014 COMO TX 79701
Certified Fee		
Return Receipt Fee (Endorsement Required)		
Restricted Delivery Fee (Endorsement Required)		
Total Postage & Fees	\$6.49	

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 Street, Apt. or PO Box, City, State
CHI OPERATING, INC.
 P.O. Box 1700
 Midland, TX 79702

For delivery information visit our website at www.usps.com
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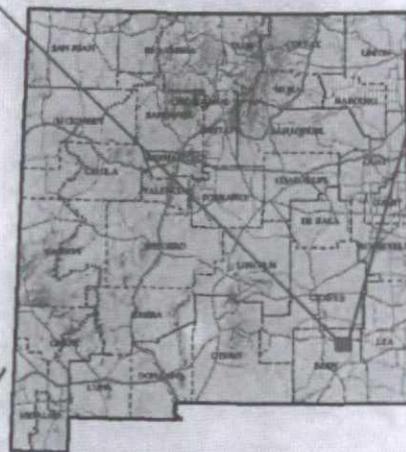
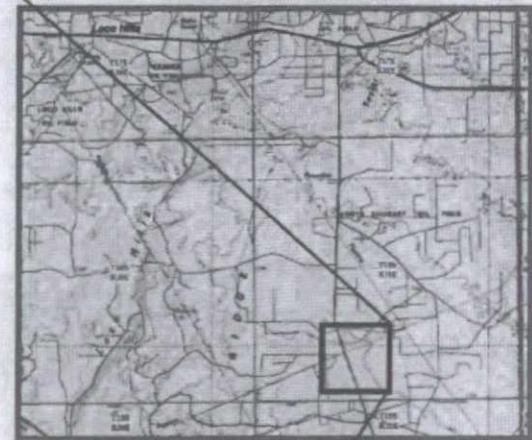
Postage	\$	Postmark Here DEC 24 2014 COMO TX 79701
Certified Fee		
Return Receipt Fee (Endorsement Required)		
Restricted Delivery Fee (Endorsement Required)		
Total Postage & Fees	\$6.49	

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 Street, Apt. or PO Box, City, State
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 P.O. Box 4294
 Houston, TX 77210

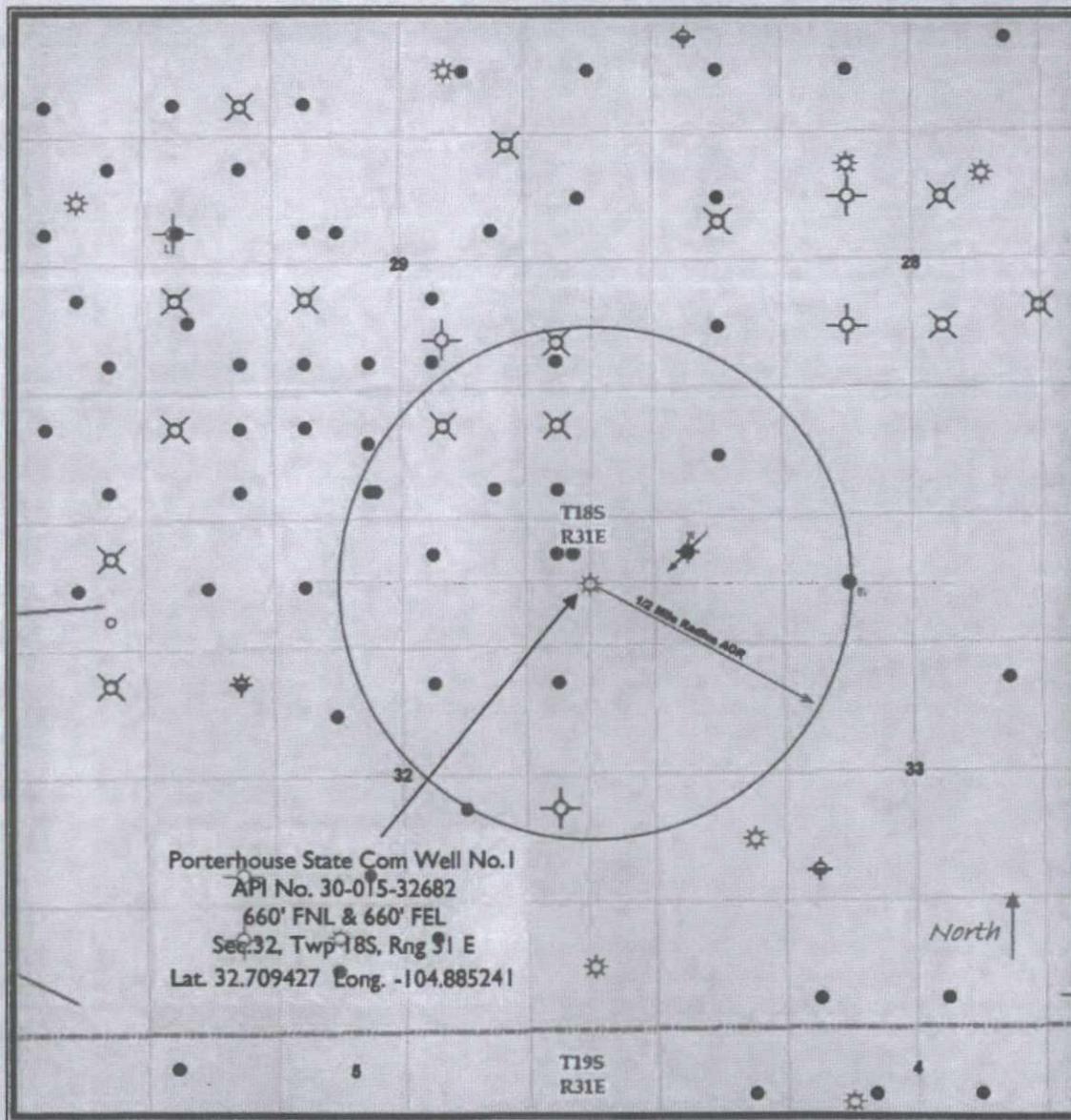
Porterhouse St. Com Well No.1 - Area of Review / Overview Map

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

~8.0 miles Southeast
of Loco Hills, NM



Eddy County, New Mexico



Porterhouse State Com Well No.1
API No. 30-015-32682
660' FNL & 660' FEL
Sec.32, Twp.18S, Rng.31 E
Lat. 32.709427 Long. -104.885241



RAY WESTALL OPERATING, INC.



Form C-108 Item VI - Tabulation of AOR Wells

Depth to Top of Proposed
GRAYBURG Injection Interval 3914'

Wells which PENETRATE
Proposed Injection Zone.

ALL WELLS WITHIN AOR, REGARDLESS OF STATUS, ARE PRESENTED IN TABULATION IF THERE IS A CORRESPONDING WELLSHOT ON THE MAP.

API Well No.	Current Operator	Well Name	Well No.	Type	Lease	Status	Dir.	STR	Total Depth
<u>SUBJECT WELL</u>									
30-015-32682	[4378] CHI OPERATING INC	PORTERHOUSE STATE COM	#001	Gas	State	Plugged, Site Released	A	32-18S-31E	12,210'
SUBJECT WELL - CURRENT AND PROPOSED WELLBORE SCHEMATICS ATTACHED.									
<u>SECTION 28 WELLS</u>									
ONLY 1 ACTIVE WELL PENETRATES PROPOSED INTERVAL - OXY T-BONE FEDERAL NO.1 SWD IN SECTION 33									
<u>Other AOR Wells</u>									
30-015-05620	[162683] CIMAREX ENERGY CO. OF CO	KEOHANE ETAL A FEDERAL	#001	Oil	Federal	Plugged, Site Released	M	28-18S-31E	3805'
<u>DOES NOT PENETRATE</u>									
<u>SECTION 29 WELLS</u>									
30-015-05635	[162683] CIMAREX ENERGY CO. OF CO	SHUGART A	#002	Oil	Federal	Plugged, Site Released	N	29-18S-31E	3724'
<u>DOES NOT PENETRATE</u>									
30-015-05636	[162683] CIMAREX ENERGY CO. OF CO	SHUGART A	#003	Oil	Federal	Plugged, Site Released	O	29-18S-31E	3763'
<u>DOES NOT PENETRATE</u>									
30-015-05632	[162683] CIMAREX ENERGY CO. OF CO	SHUGART A	#007	Oil	Federal	Plugged, Site Released	P	29-18S-31E	2705'
<u>DOES NOT PENETRATE</u>									
30-015-05640	[162683] CIMAREX ENERGY CO. OF CO	SHUGART A	#009	Injection	Federal	Plugged, Site Released	I	29-18S-31E	3820'
<u>DOES NOT PENETRATE</u>									
30-015-26667	[162683] CIMAREX ENERGY CO. OF CO	SHUGART A	#011	Oil	Federal	Plugged, Site Released	N	29-18S-31E	3921'
<u>DOES NOT PENETRATE</u>									
30-015-30870	[162683] CIMAREX ENERGY CO. OF CO	WEST SHUGART 29 FEDERAL	#004	Oil	Federal	Plugged, Site Released	N	29-18S-31E	5300'
<u>P&A SCHEMATIC ATTACHED</u>									
30-015-31239	[166111] DEVON ENERGY PROD. CO.	WEST SHUGART 29 FEDERAL	#007	Oil	Federal	Cancelled APD	P	29-18S-31E	0'
<u>CANCELLED APD</u>									
30-015-31240	[166111] DEVON ENERGY PROD. CO.	WEST SHUGART 29 FEDERAL	#008	Oil	Federal	Cancelled APD	I	29-18S-31E	0'
<u>CANCELLED APD</u>									
30-015-41795	[166111] DEVON ENERGY PROD. CO.	SARGAS 28 FEDERAL COM	#003H	Oil	Federal	New (Not Drilled/Comp)	I	29-18S-31E	0'
<u>DOES NOT PENETRATE</u>									
30-015-41560	[166111] DEVON ENERGY PROD. CO.	SARGAS 28 FEDERAL COM	#004H	Oil	Federal	New (Not Drilled/Comp)	I	29-18S-31E	0'
<u>DOES NOT PENETRATE</u>									



Form C-108 Item VI - Tabulation of AOR Wells (cont.)

<i>API Well No.</i>	<i>Current Operator</i>	<i>Well Name</i>	<i>Well No.</i>	<i>Type</i>	<i>Lease</i>	<i>Status</i>	<i>U/I</i>	<i>STR</i>	<i>Total Depth</i>
SECTION 29 WELLS (Cont.)									
30-015-31301	[166111] DEVON ENERGY PROD. CO.	WEST SHUGART 29 FEDERAL	#006	Oil	Federal	Cancelled APD	O	29-18S-31E	0' CANCELLED APD
30-015-05633	[214263] PRE-ONGARD OPERATOR	PRE-ONGARD WELL	#008	Oil	Federal	Plugged, Site Released	N	29-18S-31E	2692' DOES NOT PENETRATE
SECTION 32 WELLS									
30-015-32682	[4378] CHI OPERATING INC	PORTERHOUSE STATE COM	#001	Gas	State	Plugged, Site Released	A	32-18S-31E	12,210' SUBJECT WELL - CURRENT AND PROPOSED WELLBORE SCHEMATICS ATTACHED
30-015-05659	[162683] CIMAREX ENERGY CO. OF CO	MONTEREY STATE	#001	Oil	State	Plugged, Not Released	J	32-18S-31E	3344' DOES NOT PENETRATE
30-015-05668	[162683] CIMAREX ENERGY CO. OF CO	NEW MEXICO Y STATE	#003	Oil	State	Plugged, Not Released	H	32-18S-31E	3350' DOES NOT PENETRATE
30-015-20657	[162683] CIMAREX ENERGY CO. OF CO	NEW MEXICO Y STATE	#005	Oil	State	Active	A	32-18S-31E	2779' DOES NOT PENETRATE
30-015-05669	[7318] ENERGY RESOURCES CORP	STATE 32	#001	Oil	State	Plugged, Site Released	B	32-18S-31E	3670' DOES NOT PENETRATE
30-015-05660	[214263] PRE-ONGARD OPERATOR	PRE-ONGARD WELL	#002	Oil	State	Plugged, Site Released	I	32-18S-31E	2708' DOES NOT PENETRATE
30-015-05663	[214263] PRE-ONGARD OPERATOR	PRE-ONGARD WELL	#002	Oil	State	Plugged, Site Released	A	32-18S-31E	3743' DOES NOT PENETRATE
30-015-05661	[214263] PRE-ONGARD OPERATOR	PRE-ONGARD WELL	#003	Oil	State	Plugged, Site Released	3	32-18S-31E	3677' DOES NOT PENETRATE
30-015-05667	[26478] SOUTHLAND ROYALTY CO	NEW MEXICO Y STATE	#001	Injection	State	Plugged, Site Released	G	32-18S-31E	3750' DOES NOT PENETRATE
SECTION 33 WELLS									
30-015-32122	[245872] JUDAH OIL LLC	OXY T-BONE FEDERAL	#001	SWD	Federal	Active	C	33-18S-31E	12,172' SWD IN SAN ANDRES - P8TD 4450'
30-015-05674	[214263] PRE-ONGARD OPERATOR	PRE-ONGARD WELL	#005	Oil	Federal	Plugged, Site Released	D	33-18S-31E	3855' DOES NOT PENETRATE



C-108 Item VII-4

Disposal Zone – San Andres Formation Water



MAR 23 2005
OIL OIL CORPORATION
MIDLAND, TEXAS

Water Analysis

Date: 3/15/2005

2401 Steep, Artesia NM 88310
Phone (505) 746-3140 Fax (505) 746-2293

30-05-32122

Analyzed For

Judah	T Bone Fed 1	Eddy	New Mexico
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Sample Source	Sample #		
Formation	Depth		
Specific Gravity	1.030	SG @ 60 °F	1.030
pH	11.31	Sulfides	Not Tested
Temperature (°F)	60	Reducing Agents	Not Tested

Cations

Sodium (Calc)	in Mg/L	12,097	in PPM	11,749
Calcium	in Mg/L	3,200	in PPM	3,107
Magnesium	in Mg/L	480	in PPM	465
Soluble Iron (FE2)	in Mg/L	0.0	in PPM	0

Anions

Chlorides	in Mg/L	24,000	in PPM	23,301
Sulfates	in Mg/L	2,000	in PPM	1,942
Bicarbonates	in Mg/L	288	in PPM	281
Total Hardness (as CaCO3)	in Mg/L	10,000	in PPM	9,709
Total Dissolved Solids (Calc)	in Mg/L	42,048	in PPM	40,821
Equivalent NaCl Concentration	in Mg/L	39,970	in PPM	38,806

Scaling Tendencies

*Calcium Carbonate Index	658,890
Below 500,000 Remote / 500,000 - 1,000,000 Possible / Above 1,000,000 Probable	
*Calcium Sulfate (Gyp) Index	6,400,000
Below 500,000 Remote / 500,000 - 10,000,000 Possible / Above 10,000,000 Probable	

*This Calculation is only an approximation and is only valid before treatment of a well or several weeks after treatment.

Remarks FAX 746-1790

C-108 Item VII-4

Source – Yates Formation Water



Water Analysis

Date: 9/28/2004

2401 Sivley, Artesia NM 88210
 Phone (505) 746-3140 Fax (505) 746-2293

Analyzed For

Company	Well Name	County	State
Gruy Pet Mng	Keohane Et al 1	Eddy	New Mexico

Sample Source **Sample #** 1
Formation **Depth**

Specific Gravity	1.080	SG @ 60 °F	1.082
pH	6.77	Sulfides	
Temperature (°F)	72	Reducing Agents	

Cations

Sodium (Calc)	in Mg/L	-23,799	in PPM	-21,987
Calcium	in Mg/L	46,000	in PPM	42,498
Magnesium	in Mg/L	5,040	in PPM	4,656
Soluable Iron (FE2)	in Mg/L	0.0	in PPM	0

Anions

Chlorides	in Mg/L	58,000	in PPM	53,585
Sulfates	in Mg/L	1,800	in PPM	1,663
Bicarbonates	in Mg/L	288	in PPM	286
Total Hardness (as CaCO3)	in Mg/L	136,000	in PPM	125,647
Total Dissolved Solids (Calc)	in Mg/L	87,329	in PPM	80,681
Equivalent NaCl Concentration	in Mg/L	82,187	in PPM	75,930

Scaling Tendencies

*Calcium Carbonate Index 13,244,320
 Below 500,000 Remote / 500,000 - 1,000,000 Possible / Above 1,000,000 Probable

*Calcium Sulfate (Gyp) Index 82,800,000
 Below 500,000 Remote / 500,000 - 10,000,000 Possible / Above 10,000,000 Probable

*This Calculation is only an approximation and is only valid before treatment of a well or several weeks after treatment.

Remarks

C-108 Item VII-4

Source – Queen Formation Water



Water Analysis

Date: 9/28/2004

2401 Sivley, Artesia NM 88210
 Phone (505) 746-3140 Fax (505) 746-2293

Analyzed For

Company	Well Name	County	State
Grwy. Pct. Mng	Shugart A 3	Eddy	New Mexico

Sample Source **Sample #** **1**

Formation	Depth
Specific Gravity	1.125
pH	6.53
Temperature (°F)	72
SG @ 60 °F	1.127
Sulfides	
Reducing Agents	

Cations

Sodium (Calc)	in Mg/L	-19,970	in PPM	-17,713
Calcium	in Mg/L	40,000	in PPM	35,480
Magnesium	in Mg/L	6,000	in PPM	5,322
Soluble Iron (FE2)	in Mg/L	0.0	in PPM	0

Anions

Chlorides	in Mg/L	56,000	in PPM	49,872
Sulfates	in Mg/L	1,600	in PPM	1,419
Bicarbonates	in Mg/L	732	in PPM	649
Total Hardness (as CaCO3)	in Mg/L	125,000	in PPM	110,875
Total Dissolved Solids (Calc)	in Mg/L	84,362	in PPM	74,829
Equivalent NaCl Concentration	in Mg/L	77,193	in PPM	68,470

Scaling Tendencies

*Calcium Carbonate Index 29,280,000

Below 500,000 Remote / 500,000 - 1,000,000 Possible / Above 1,000,000 Probable

*Calcium Sulfate (Gyp) Index 64,000,000

Below 500,000 Remote / 500,000 - 10,000,00 Possible / Above 10,000,000 Probable

**This Calculation is only an approximation and is only valid before treatment of a well or several weeks after treatment.*

Remarks

State of New Mexico
Energy, Minerals and Natural Resources Department

Susana Martinez
Governor

David Martin
Cabinet Secretary

Brett F. Woods, Ph.D.
Deputy Cabinet Secretary

Jami Bailey, Division Director
Oil Conservation Division



Administrative Order SWD-1479
August 11, 2014

**ADMINISTRATIVE ORDER
OF THE OIL CONSERVATION DIVISION**

Pursuant to the provisions of Division Rule 19.15.26.8B. NMAC, Ray Westall Operating, Incorporated (the "operator") seeks an administrative order to re-enter and recomplete its Porterhouse State Com. Well No. 1 with a location of 660 feet from the North line and 660 feet from the East line, Unit letter A of Section 32, Township 18 South, Range 31 East, NMPM, Eddy County, New Mexico, for commercial, produced-water disposal purposes.

THE DIVISION DIRECTOR FINDS THAT:

The application has been duly filed under the provisions of 19.15.26.8B. NMAC and satisfactory information has been provided that affected parties as defined in said rule have been notified and no objections have been received within the prescribed waiting period. The applicant has presented satisfactory evidence that all requirements prescribed in 19.15.26.8 NMAC have been met and the operator is in compliance with 19.15.5.9 NMAC.

IT IS THEREFORE ORDERED THAT:

The applicant, Ray Westall Operating, Inc. (OGRID 119305), is hereby authorized to utilize its Porterhouse State Com. Well No. 1 (API 30-015-32682) with a location of 660 feet from the North line and 660 feet from the East line, Unit letter A of Section 32, Township 18 South, Range 31 East, NMPM, Eddy County, for commercial disposal of oil field produced water (UIC Class II only) through perforations into the lower Grayburg and San Andres formations from 3914 feet to 4250 feet. Injection will occur through internally-coated, 2 7/8-inch or smaller tubing and a packer set within 100 feet of the permitted interval.

IT IS FURTHER ORDERED THAT:

The operator shall take all steps necessary to ensure that the disposed water enters only the approved disposal interval and is not permitted to escape to other formations or onto the surface. This includes the well construction proposed and described in the application.

If the operator is unable to successfully squeeze cement the annulus of the 5 1/2-inch casing to surface, the operator shall provide, prior to commencing injection, a radial cement bond log (or equivalent) presenting that the final top of cement is at or above the minimum depth of 3400 feet. The operator shall supply both the Division's district II office and Santa Fe Bureau office with a copy of the log.

The operator shall run an initial injection survey (tracer/temperature or equivalent) of the injection interval within two (2) years after commencing disposal into this well. The operator will supply both the Division's district II office and Santa Fe Bureau office with a copy of each survey log.

After installing tubing, the casing-tubing annulus shall be loaded with an inert fluid and equipped with a pressure gauge or an approved leak detection device in order to determine leakage in the casing, tubing, or packer. The casing shall be pressure tested from the surface to the packer setting depth to assure casing integrity.

The well shall pass an initial mechanical integrity test ("MIT") prior to initially commencing disposal and prior to resuming disposal each time the disposal packer is unseated. All MIT procedures and schedules shall follow the requirements in Division Rule 19.15.26.11A. NMAC. The Division Director retains the right to require at any time wireline verification of completion and packer setting depths in this well.

The maximum surface injection pressure on the well shall be limited to **no more than 783 psi**. In addition, the disposal well or system shall be equipped with a pressure limiting device in workable condition which shall, at all times, limit surface tubing pressure to the maximum allowable pressure for this well.

The Director of the Division may authorize an increase in tubing pressure upon a proper showing by the operator of said well that such higher pressure will not result in migration of the disposed fluid from the target formation. Such proper showing shall be demonstrated by sufficient evidence including but not limited to an acceptable Step-Rate Test.

The operator shall notify the supervisor of the Division's district II office of the date and time of the installation of disposal equipment and of any MIT so that the same may be inspected and witnessed. The operator shall provide written notice of the date of commencement of disposal to the Division's district office. The operator shall submit monthly reports of the disposal operations on Division Form C-115, in accordance with Division Rules 19.15.26.13 and 19.15.7.24 NMAC.

Without limitation on the duties of the operator as provided in Division Rules 19.15.29 and 19.15.30 NMAC, or otherwise, the operator shall immediately notify the Division's district II office of any failure of the tubing, casing or packer in the well, or of any leakage or release of water, oil or gas from around any produced or plugged and abandoned well in the area, and shall take such measures as may be timely and necessary to correct such failure or leakage.

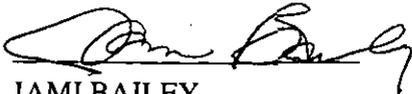
The injection authority granted under this order is not transferable except upon division approval. The Division may require the operator to demonstrate mechanical integrity of any injection well that will be transferred prior to approving transfer of authority to inject.

The Division may revoke this injection permit after notice and hearing if the operator is in violation of 19.15.5.9 NMAC.

The disposal authority granted herein shall terminate two (2) years after the effective date of this order if the operator has not commenced injection operations into the subject well. One year after the last date of reported disposal into this well, the Division shall consider the well abandoned, and the authority to dispose will terminate *ipso facto*. The Division, upon written request mailed by the operator prior to the termination date, may grant an extension thereof for good cause.

Compliance with this order does not relieve the operator of the obligation to comply with other applicable federal, state or local laws or rules, or to exercise due care for the protection of fresh water, public health and safety and the environment.

Jurisdiction is retained by the Division for the entry of such further orders as may be necessary for the prevention of waste and/or protection of correlative rights or upon failure of the operator to conduct operations (1) to protect fresh or protectable waters or (2) consistent with the requirements in this order, whereupon the Division may, after notice and hearing, terminate the disposal authority granted herein.



JAMI BAILEY
Director

JB/prg

cc: Oil Conservation Division – Artesia District Office
State Land Office – Oil, Gas and Minerals Division



ORDER TYPE: PMX/SWD Number: 1479-A Order Date: _____ Legacy Permits/Orders: NSWD 1479
8/11/2014

Well No. 1 Well Name(s): Porterhouse state com#1

API: 30-0 15-32682 Spud Date: _____ New or Old new (UIC Class II Primacy 03/07/1982)

Footages 660FNL
660FEL Lot _____ or Unit A Sec 32 Tsp 18S Rge 31E County Eddy

General Location: Southeast Locotti 115 Pool: _____ Pool No.: _____

BLM 100K Map: Hobbs Operator: Ray Westall operating OGRID: 119305 Contact: Ben Stone

COMPLIANCE RULE 5.9: Total Wells: 93 Inactive: 0 Fincl Assur: Y Compl. Order? N IS 5.9 OK? Y Date: 3-09-2015

WELL FILE REVIEWED: Current Status: SWD - Grayburg - SA & P&A - Murren & WC

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

Planned Rehab Work to Well: Squeeze GRAYBURG - SAN ANTONIO PERFS., drill out plugs
at 660 SWD 119305/1479-A

Well Construction Details	Sizes (in) Borehole / Pipe	Setting Depths (ft)	85/8	Cement Sk or Cf	Cement Top and Determination Method
Planned ___ or Existing ___ Surface	17 7/8 / 13 3/8	660	Stage Tool	650	Surface
Planned ___ or Existing ___ Interm/Prod	11 / 8 5/8	3614		475	Surface
Planned ___ or Existing ___ Interm/Prod					
Planned ___ or Existing ___ Prod/Liner	7 1/8 / 5 1/2	12210		600	9034 / <u>CAL</u>
Planned ___ or Existing ___ Liner	4 3/8 / 4 1/2	32160 *			12160
Planned ___ or Existing ___ OH / PERF	12400	13500	Inj Length 1100		

Injection Lithostratigraphic Units:	Depths (ft)	Injection or Confining Units	Tops 115 4798
Adjacent Unit: Litho. Struc. Por.		Murren	12200
Confining Unit: Litho. Struc. Por.		MS	12200
Proposed Inj Interval TOP:	12400	DEU	12400
Proposed Inj Interval BOTTOM:	13500		
Confining Unit: Litho. Struc. Por.			
Adjacent Unit: Litho. Struc. Por.			

Completion/Operation Details:	
Drilled TD	12210 PBDT
NEW TD	13500 NEW PBDT
NEW Open Hole	<input checked="" type="radio"/> or NEW Perfs <input type="radio"/>
Tubing Size	2 7/8 in. Inter Coated? <u>Y</u>
Proposed Packer Depth	12305 ft
Min. Packer Depth	12300 (100-ft limit)
Proposed Max. Surface Press.	2480 psi
Admin. Inj. Press.	2480 (0.2 psi per ft)

AOR: Hydrologic and Geologic Information

POTASH: R-111-P N/A Noticed? _____ BLM Sec Ord WIPP Noticed? N/A Salt/Salado T: _____ B: _____ NW: Cliff House fm _____

FRESH WATER: Aquifer Alluvia/Kustien Max Depth 2300 HYDRO AFFIRM STATEMENT By Qualified Person

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

Disposal Fluid: Formation Source(s) Bon Springs, Wolfcamp Analysis? _____ On Lease Operator Only or Commercial

Disposal Int: Inject Rate (Avg/Max BWPD): not stipulated protectable Waters? _____ Source: _____ System: Closed or Open

HC Potential: Producing Interval? NO Formerly Producing? NO Method: Logs/DST/P&A/Other hydrology 2-Mile Radius Pool Map

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

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

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

NOTICE: Newspaper Date 12-19-2014 Mineral Owner NMSLU Surface Owner NMSLU N. Date 12/19/14

RULE 26.7(A): Identified Tracts? Y Affected Persons: 18-31 Inc Cimarron, Devon, Judd N. Date 12/19/14

Order Conditions: Issues: hydrology, salinity, CB, liner, #5 2" cement, to surface, casing, if not circulated to surface

Add Order Cond: _____