

## AE Order Number Banner

---

**Application Number: pAZS2308334974**

**SWD-2527**

**RAY WESTALL OPERATING, INC. [119305]**

Revised March 23, 2017

RECEIVED:	REVIEWER:	TYPE:	APP NO:
-----------	-----------	-------	---------

ABOVE THIS TABLE FOR OCD DIVISION USE ONLY

**NEW MEXICO OIL CONSERVATION DIVISION**  
 - Geological & 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

**Applicant:** Ray Westall Operating, Inc. **OGRID Number:** 119305  
**Well Name:** Sand Tank 32 State Com No.1 SWD **API:** 30-015-28960  
**Pool:** SWD; Paddock **Pool Code:** 96190

### SUBMIT ACCURATE AND COMPLETE INFORMATION REQUIRED TO PROCESS THE TYPE OF APPLICATION INDICATED BELOW

- 1) **TYPE OF APPLICATION:** Check those which apply for [A]  
 A. Location – Spacing Unit – Simultaneous Dedication  
☐ NSL ☐ NSP (PROJECT AREA) ☐ NSP (PRORATION UNIT) ☐ SD
- B. Check one only for [ I ] or [ II ]  
 [ I ] Commingling – Storage – Measurement  
☐ DHC ☐ CTB ☐ PLC ☐ PC ☐ OLS ☐ OLM  
 [ II ] Injection – Disposal – Pressure Increase – Enhanced Oil Recovery  
☐ WFX ☐ PMX ☒ SWD ☐ IPI ☐ EOR ☐ PPR

- 2) **NOTIFICATION REQUIRED TO:** Check those which apply.  
 A. ☒ Offset operators or lease holders  
 B. ☐ Royalty, overriding royalty owners, revenue owners  
 C. ☒ Application requires published notice  
 D. ☒ Notification and/or concurrent approval by SLO  
 E. ☒ Notification and/or concurrent approval by BLM  
 F. ☒ Surface owner  
 G. ☒ For all of the above, proof of notification or publication is attached, and/or,  
 H. ☐ No notice required

#### FOR OCD ONLY

- ☐ Notice Complete  
☐ Application Content Complete

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

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

Ben Stone

Print or Type Name

Signature

3/23/2023

Date

936-377-5696

Phone Number

ben@sosconsulting.us

e-mail Address



March 23, 2023

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

Attn: Mr. Dylan Fuge, Acting Director

*Re: Application of Ray Westall Operating, Inc. to permit for salt water disposal RECOMPLETION the Sand Tank 32 State Com Well No.1, API No.30-015-28960 located in Section 32, Township 17 South, Range 30 East, NMPM, Eddy County, New Mexico.*

Dear Mr. Fuge,

Please find enclosed form C-108 Application for Authority to Inject, supporting the above-referenced request to RECOMPLETE for disposal, the Sand Tank 32 State Com Well No.1 SWD. The well is currently permitted for SWD into the Wolfcamp and Cisco formations; the proposal is to recomplete it uphole in the Paddock formation for improved injectivity.

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 March 23, 2023 edition of the Artesia Daily Press and all offset operators and other interested parties have been notified individually. The legal notice affidavit is included herein. This application also includes wellbore schematics, area of review maps, leaseholder plats and other required information for a complete Form C-108. The well is located on state lands and a copy of this application has been submitted to the State Land Office, Oil, Gas and Minerals Division.

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

Best regards,

A handwritten signature in blue ink, appearing to read "Ben Stone", is written over a light blue horizontal line.

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

Cc: Application attachment and file

STATE OF NEW MEXICO  
ENERGY, MINERALS AND NATURAL  
RESOURCES DEPARTMENT

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

FORM C-108  
Revised June 10, 2003

**APPLICATION FOR AUTHORIZATION TO INJECT**

- I. PURPOSE: **Salt Water Disposal** and the application **qualifies** for administrative approval.
- II. OPERATOR: **Ray Westall Operating, Inc. (119305)**  
ADDRESS: **P.O. Box 4, Loco Hills, NM 88255**
- CONTACT PARTY: **Donnie Mathews (575) 677-2372**  
**Agent: SOS Consulting, LLC – Ben Stone (936) 377-5696**
- 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 is ATTACHED** of data on all wells of public record within the area of review which penetrate the proposed injection zone. **2 AOR wells penetrate the subject interval; 0 P&A'd.** The data includes a description of each well's type, construction, date drilled, location, depth, and schematics of plugged wells 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,
- \*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. **The well may be acidized to clean perforations and formation wall w/ 15% HCl w/ up to 500 gals/100'.**
- \*X. **There is no applicable test data on the well however, any previous well logs have been filed with the Division and they need not be resubmitted. A cross section/ log strip/ offsetting wells; subject interval is ATTACHED.**
- \*XI. **State Engineer's records indicate there are NO 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 and ATTACHED. There are 3 offset affected parties (lessees and/or operators) BLM minerals within one-half 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: **3/23/2023**

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:

DISTRIBUTION: Original and one copy to Santa Fe with one copy to the appropriate District Office

**Page 2****III. WELL DATA – *The following information and data is included and ATTACHED:***

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.

☒ AMENDED REPORT

				<p align="center">16</p>
				<p align="right">17 <b>OPERATOR CERTIFICATION</b></p> <p>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.</p> <p align="center"> _____ Signature                                Date      <b>3/17/2023</b></p> <p><b>Ben Stone</b> _____ Printed Name</p> <p><b>ben@sosconsulting.us</b> _____ E-mail Address</p>
				<p align="right">18 <b>SURVEYOR CERTIFICATION</b></p> <p>I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.</p> <p align="center"><b>March 28, 1996</b> _____ Date of Survey</p> <p>Signature and Seal of Professional Surveyor:</p> <p align="center"><b>Earl Foote</b> <b>8278</b> _____ Certificate Number</p>
<p align="center">←————— 1980'</p>	<p align="center">○ ↓ 660'</p>			

## **C-108 - Items III, IV, V**

### **Item III - Subject Well Data**

Wellbore Diagram - CURRENT  
Wellbore Diagram – PROPOSED

### **Item IV – Tabulation of AOR Wells**

2 Wells Penetrate the Proposed Injection Interval, 0 P&A  
*(Construction Data for all Active Wells)*

### **Item V – Area of Review Maps**

1. Two Mile AOR Map with One-Mile Fresh Water Well Radius
2. One-Half Mile AOR Map

All Above Exhibits follow this page.

## WELL SCHEMATIC - PROPOSED CONFIGURATION



## Sand Tank '32' State Com Well No.1 SWD

API 30-015-28960

660' FSL & 1980' FWL, SEC. 32-T17S-R30E  
EDDY COUNTY, NEW MEXICO

Spud Date: 8/22/1996

P&amp;A Date: 6/05/2008

SWD Config Date: TBD

Annulus Monitored  
or open to atmosphereInjection Pressure Regulated  
and Volumes Reported  
1660 psi Surface Max

## RAY WESTALL OPERATING, INC.

D/O &amp; C/O Existing Cmt Plugs.

Test CSG shot depths - Squeeze/Patch as required.

Set CIBP @ 10010' w/ 30' Cmt Cap.

Perforate Specific Intervals based on logs.

Run PC Tubing and PKR - Conduct MIT.

Commence Disposal Operations.

## Surface Casing

11.75", 48.0# Csg. (14.75" Hole) @ 666'  
350 sx - Circulated to Surface

## Intermediate Casing

8.625", 32.0# Csg. (11.0" Hole) @ 4006'  
1350 sx - Circulated to SurfaceShot 5.5" @ 4056'  
Could not pull/pump into.CSG Patch / SQZ  
4056' and 4750'Shot 5.5" @ 4750'  
Could not pull/pump into.Annulus Loaded  
w/ Inert Packer Fluid2.875" IC Tubing  
PKR 8205' +Set CIBP @ ~10010'  
Cap w/ 30' Cmt.

Formation Fluids

Exst'g CIBP @ 11135'  
Capped w/ 35' Cmt.

BSPG: 4616'

BSPG-3RD: 8146'

WLFC: 8300'

Wolfcamp Perfs: Top Interval 8300'

Canyon Perfs: Btm Interval 9930'

PBTD @ 9980'

STWN: 10380'

ATKA: 10583'

MRRW: 10850'

Perfs: 11205'-222'; 11348'-325'

PBTD @ 11457'

## Production Casing

5.5", 17.0# Csg (7.875" Hole) @ 11506'  
1550 sx Premium - TOC @ 4725' by Calc.

Drawn by: Ben Stone, 3/12/2015

## WELL SCHEMATIC - PROPOSED CONFIGURATION



## Sand Tank '32' State Com Well No.1 SWD

API 30-015-28960

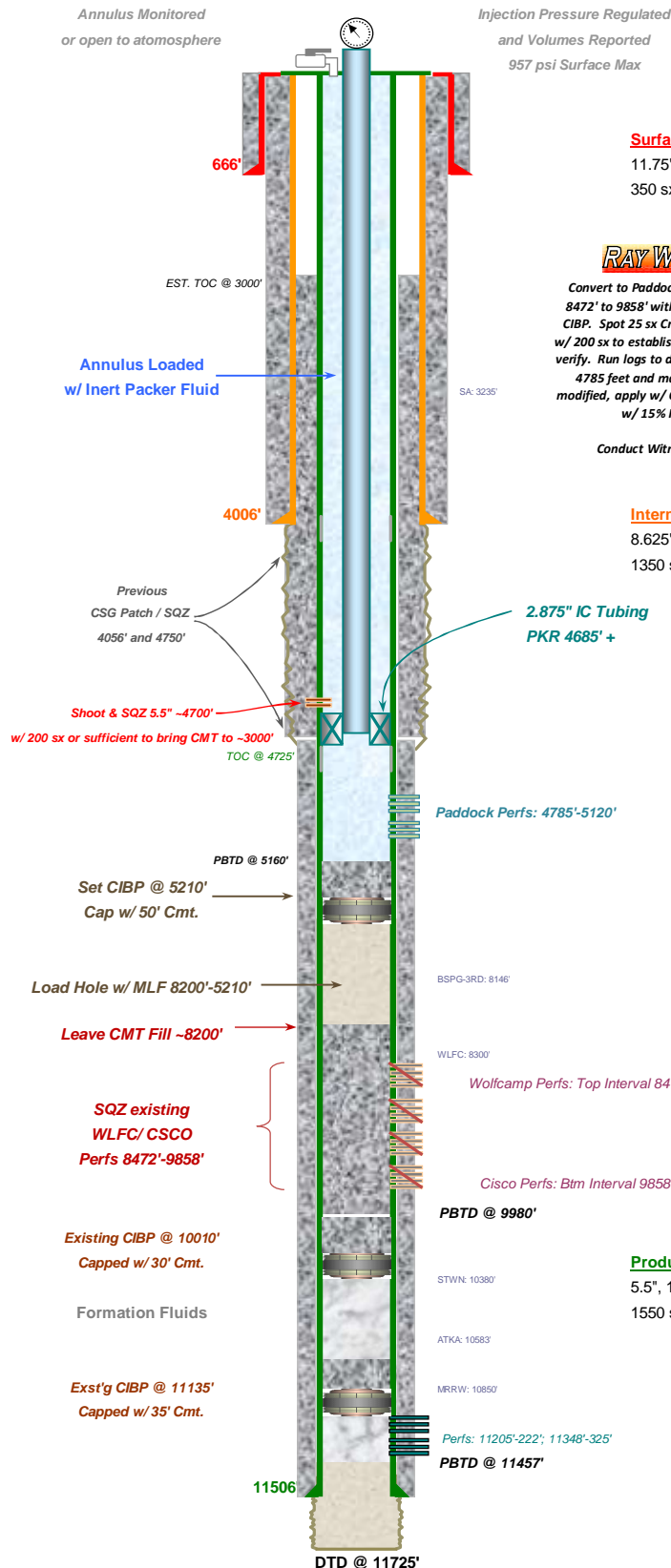
660' FSL & 1980' FWL, SEC. 32-T17S-R30E  
EDDY COUNTY, NEW MEXICO

SWD; Paddock (96190)

Spud Date: 8/22/1996

ReEntry (1st SWD) Dt: 6/29/2015

SWD Config Date: 7/01/2023

**Surface Casing**11.75", 48.0# Csg. (14.75" Hole) @ 666'  
350 sx - Circulated to Surface**RAY WESTALL OPERATING, INC.**

Convert to Paddock SWD: SQZ existing WC/CSCO SWD perf interval 8472' to 9858' with fill to ~8200'. Load hole w/ MLF to 5210' and set CIBP. Spot 25 sx Cmt to approx. 5160' PBTD. Shoot and SQZ 5.5" CSG w/ 200 sx to establish TOC ~3000'. D/O & C/O Hole to PBTD. Run CBL to verify. Run logs to determine desired perf intervals between max top of 4785 feet and max bottom of 5120'. Note: If interval needs to be modified, apply w/ OCD; otherwise, Perforate Specific Intervals. Acidize w/ 15% HCl. Run PC Tubing and PKR set @ 4685'

Conduct Witnessed MIT. Commence Disposal Operations.

**Intermediate Casing**8.625", 32.0# Csg. (11.0" Hole) @ 4006'  
1350 sx - Circulated to Surface2.875" IC Tubing  
PKR 4685' +**Production Casing**5.5", 17.0# Csg (7.875" Hole) @ 11506'  
1550 sx Premium - TOC @ 4725' by Calc.

Drawn by: Ben Stone, 3/20/2023



## Form C-108 Item VI - Tabulation of AOR Wells

Top of Proposed PADDOCK Interval 4785'

2 Wells Penetrate Proposed Interval.

API	OGRID Name	Well Name	Type	Status	Lease	ULSTR	Depth	SPUD Date	Plug Date
<u>Subject Well</u>									
30-015-28960	RAY WESTALL OPERATING, INC.	SAND TANK 32 STATE SWD #001	SWD	Active	State	N-32-17S-30E	11725'	35299	
<u>Section 31 Wells</u>									
30-015-04397	EOG Y RESOURCES, INC.	BRIGHAM #003	Oil	P&A (SR)	Federal	P-31-17S-30E	2870'	12/31/9999	11/1/2002
30-015-04460	PRE-ONGARD WELL OPERATOR	PRE-ONGARD WELL #004	Oil	P&A (SR)	No Data	I-31-17S-30E	2889'	6/6/1961	4/13/1987
<u>Section 32 Wells</u>									
30-015-04434	EOG Y RESOURCES, INC.	SCHEURICH A #005	Oil	P&A (SR)	State	E-32-17S-30E	2900'	8/27/1947	9/20/2002
30-015-04422	EOG Y RESOURCES, INC.	SCHEURICH B #006	Oil	P&A (SR)	State	F-32-17S-30E	2893'	3/29/1940	12/5/2002
30-015-04426	PRE-ONGARD WELL OPERATOR	PRE-ONGARD WELL #002	Oil	P&A (SR)	State	G-32-17S-30E	2882'	1/23/1940	11/3/1986
30-015-04420	PRE-ONGARD WELL OPERATOR	PRE-ONGARD WELL #002	Oil	P&A (SR)	No Data	J-32-17S-30E	3160'	4/14/1945	6/7/1945
30-015-29513	RAY WESTALL OPERATING, INC.	SAND TANK 32 STATE COM #002	SWD	Active	State	J-32-17S-30E	11750'	5/16/1997	
WOLFCAMP SWD perfs: 8510'-9066'; 11.75" (14.75" hole) @ 656' w/ 465 sx + 1" to circ.; 8.625" (11.0" hole) @ 4002' w/ 1300 sx + 1" to circ.; 7.0" (8.75" hole) @ 9399' w/ 210 sx - TOC @ 7950' by temp.									
30-015-04437	EOG Y RESOURCES, INC.	SCHEURICH #004	Oil	P&A (SR)	State	K-32-17S-30E	2886'	4/2/1941	7/15/2002
30-015-04421	PRE-ONGARD WELL OPERATOR	PRE-ONGARD WELL #001	Oil	P&A (SR)	No Data	K-32-17S-30E	2950'	2/13/1940	4/4/1940
30-015-04438	EOG Y RESOURCES, INC.	SCHEURICH #003	Oil	P&A (SR)	State	L-32-17S-30E	2887'	8/14/1940	7/24/2002
30-015-04461	EOG Y RESOURCES, INC.	SCHEURICH #009	Oil	P&A (SR)	State	L-32-17S-30E	2907'	10/18/1962	7/17/2002
30-015-04423	PRE-ONGARD WELL OPERATOR	PRE-ONGARD WELL #005	Oil	P&A (SR)	No Data	M-32-17S-30E	2972'	6/12/1940	4/2/1945
30-015-38957	EOG RESOURCES INC	QUALIFIER BQX STATE #001H	Oil	P&A (SR)	State	M-32-17S-30E	105'	10/28/2014	1/26/2019
30-015-04424	EOG Y RESOURCES, INC.	STATE BX #005	Oil	P&A (SR)	State	M-32-17S-30E	2858'	3/20/1945	8/3/1995
30-015-04439	EOG Y RESOURCES, INC.	TALLMADGE #001	Oil	P&A (SR)	State	N-32-17S-30E	2850'	11/22/1939	6/4/2003
30-015-04432	EOG Y RESOURCES, INC.	TALLMADGE #004	Injection	P&A (SR)	State	N-32-17S-30E	2888'	1/15/1961	8/27/1986
30-015-04431	PRE-ONGARD WELL OPERATOR	PRE-ONGARD WELL #006	Oil	P&A (SR)	No Data	P-32-17S-30E	3688'	6/16/1945	6/10/1970
<u>Section 5 Wells</u>									
30-015-04469	PRE-ONGARD WELL OPERATOR	PRE-ONGARD WELL #004	Oil	P&A (SR)	Federal	B-05-18S-30E	2885'	9/16/1941	8/23/1951
30-015-04468	PRE-ONGARD WELL OPERATOR	PRE-ONGARD WELL #003	Oil	P&A (SR)	Federal	C-05-18S-30E	2863'	6/5/1941	12/7/1971
30-015-04467	PRE-ONGARD WELL OPERATOR	PRE-ONGARD WELL #002	Oil	P&A (SR)	Federal	D-05-18S-30E	2860'	12/3/1939	11/2/1971
30-015-28691	EOG RESOURCES INC	SAND TANK 5 FEDERAL COM #001	Gas	Active	Federal	F-05-18S-30E	11747'	10/31/1995	

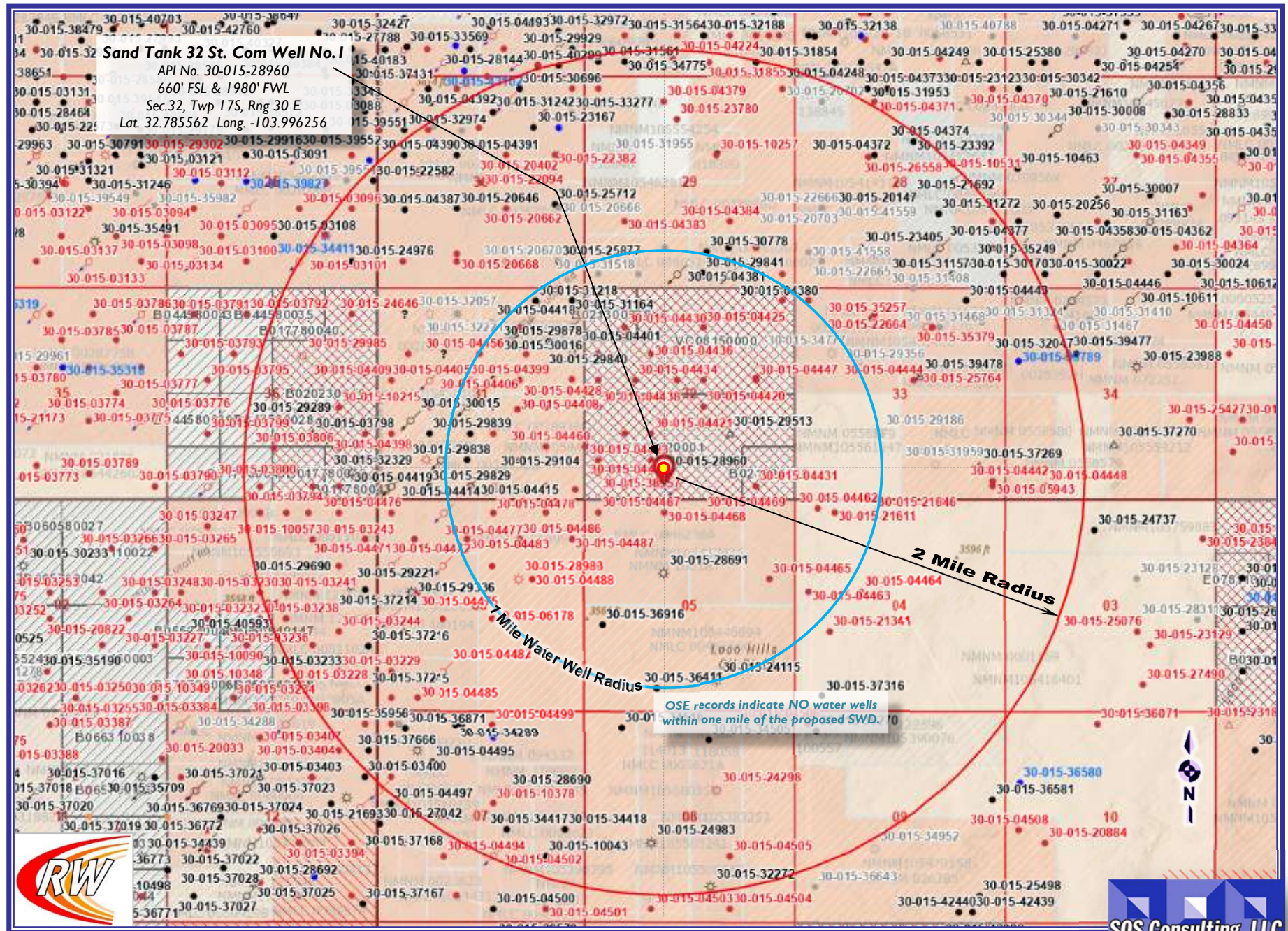
STRAWN perfs: 10583'-10610'; 11.75" (14.75" hole) @ 658' w/ 450 sx - circ.; 8.625" (11.0" hole) @ 4205' w/ 1306 sx - circ.; 5.5" (8.75" hole) @ 11513' w/ 855 sx - TOC @ 3700'

SUMMARY: 2 wells penetrate proposed disposal interval. 0 P&amp;A.



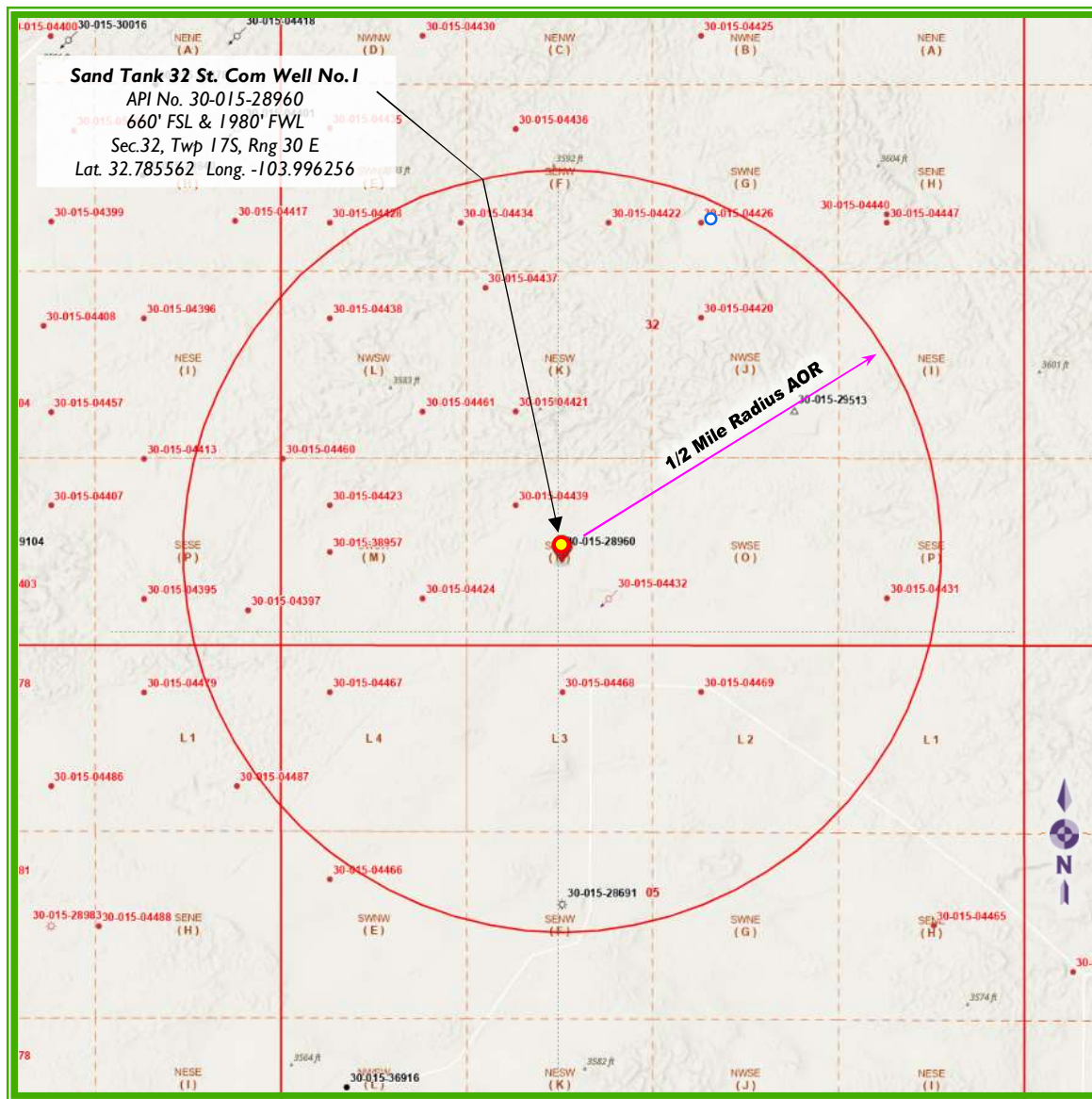
# Sand Tank 32 State Com Well No.1 - Area of Review - 2 Miles

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

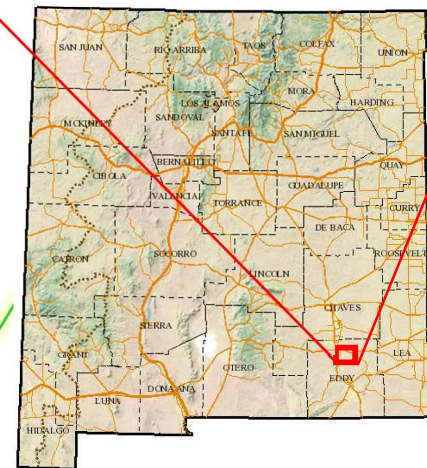
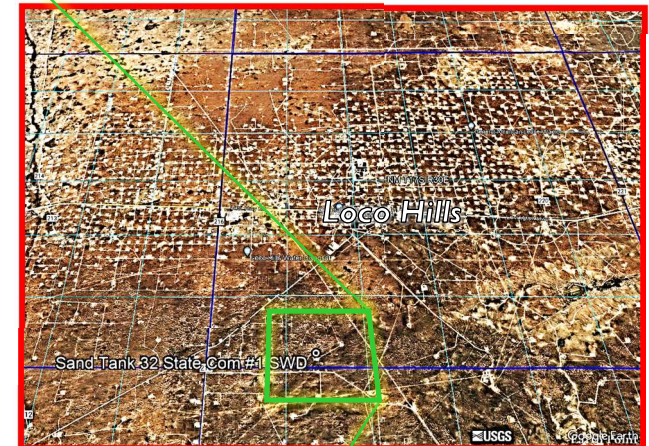


# Sand Tank State Com Well No.1 - Area of Review / Overview Map

(Attachment to NMOCD Form C-I08 - Item V)



~2.3 miles S/SW of Loco Hills, NM



Eddy County, New Mexico



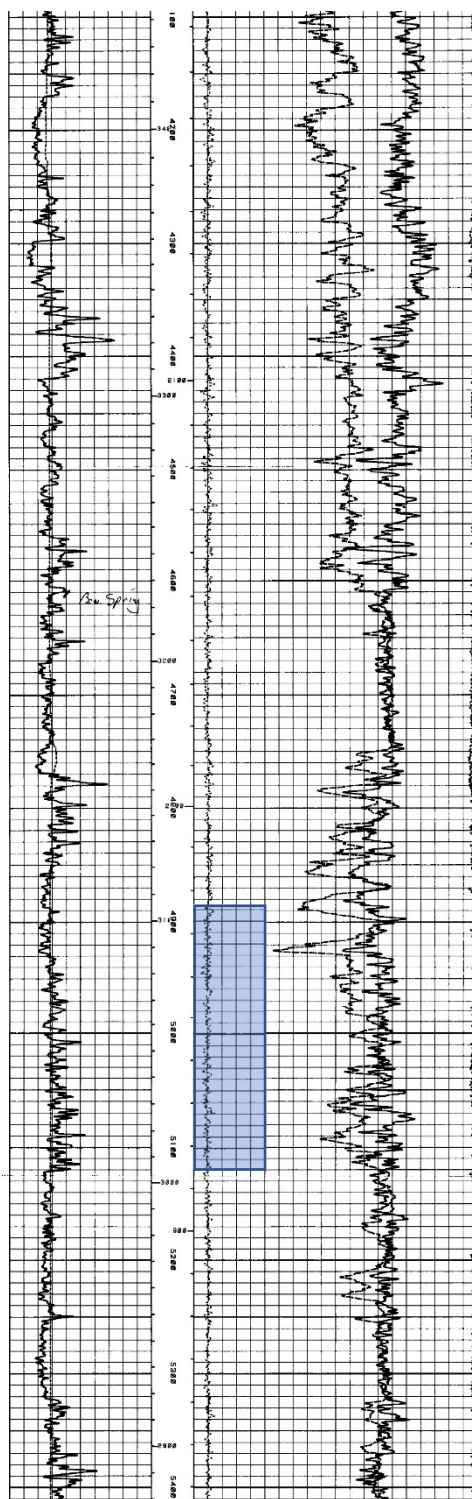
**RAY WESTALL OPERATING, INC.**



## C-108 ITEM X – LOGS and AVAILABLE TEST DATA

*Log Strip from the subject well with zone identified.*

New logs will be run to positively identify the target intervals  
within the described maximum top and bottom depths.



Proposed  
Injection  
Interval  
4785' to 5120'

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

The Sand Tank 32 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. (Samples are included in this application from Artesia Group and Bone Spring formations waters - chlorides and TDS are relative compatible with Paddock (Yeso) formation waters.)

The system will be closed utilizing flowlines from area production and augmented with a tank battery and transport offload facility located on the well site.

Injection pressure will be 957 psi and a maximum rate of 6000 bwpd and an average rate of 3500 bwpd. 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.

# e-Permitting

## C-108 Submittal

Attachment Category

### Seismicity Analysis

For High Volume Devonian Wells

**(NOT APPLICABLE TO THIS APPLICATION)**

## **C-108 ITEM VII – PRODUCED WATER ANALYSES**

### **Item VII.4 – Water Analysis of Source Zone Water**

Tansil-Yates-Seven Rivers  
Grayburg-San Andres  
Bone Spring

### **Item VII.5 – Water Analysis of Disposal Zone Water**

Paddock

**Water Analyses follow this page.**

**C-108 Item VII.5 - Produced Water Data  
Ray Westall Operating, Inc. - Sand Tank 32 State Com SWD #1**

**SOURCE ZONE**

**ARTESIA GROUP - TNSL-YTS-7RVRS**

<b>API No</b>	3001503449	<b>Lab ID</b>	
<b>Well Name</b>	SOUTH LOCO HILLS UNIT 010	<b>Sample ID</b>	5134
		<b>Sample No</b>	
<b>Location</b>	ULSTR 20 18 S 29 E 1980 N 1980 W	<b>Lat / Long</b>	32.73421 -104.09836
		<b>County</b>	Eddy
<b>Operator (when sampled)</b>			
	Field LOCO HILLS	<b>Unit</b>	F
<b>Sample Date</b>		<b>Analysis Date</b>	
	<b>Sample Source</b> DST	<b>Depth (if known)</b>	
	<b>Water Type</b>		
ph		alkalinity_as_caco3_mgL	
ph_temp_F		hardness_as_caco3_mgL	
specificgravity		hardness_mgL	
specificgravity_temp_F		resistivity_ohm_cm	
tds_mgL	174689	resistivity_ohm_cm_temp	
tds_mgL_180C		conductivity	
chloride_mgL	107000	conductivity_temp_F	
sodium_mgL		carbonate_mgL	
calcium_mgL		bicarbonate_mgL	189
iron_mgL		sulfate_mgL	1000
barium_mgL		hydroxide_mgL	
magnesium_mgL		h2s_mgL	
potassium_mgL		co2_mgL	
strontium_mgL		o2_mgL	
manganese_mgL		anionremarks	

Remarks

(Produced water data courtesy of NMT Octane NM WAIDS database.)



**C-108 Item VII.5 - Produced Water Data**  
**Ray Westall Operating, Inc. - Sand Tank 32 State Com SWD #1**

**SOURCE ZONE**

**ARTESIA GROUP - TNSL-YTS-7RVRS**

<b>API No</b>	3001503042	<b>Lab ID</b>	
<b>Well Name</b>	M DODD A	<b>Sample ID</b>	5345
	008	<b>Sample No</b>	
<b>Location</b>	ULSTR 22 17 S 29 E	<b>Lat / Long</b>	32.81353 -104.05878
	330 S 1650 E	<b>County</b>	Eddy
<b>Operator (when sampled)</b>			
	Field GRAYBURG JACKSON	<b>Unit</b>	O
<b>Sample Date</b>		<b>Analysis Date</b>	
	Sample Sourc WELLHEAD	<b>Depth (if known)</b>	
	Water Typ		
ph	6.8	alkalinity_as_caco3_mgL	
ph_temp_F		hardness_as_caco3_mgL	
specificgravity		hardness_mgL	
specificgravity_temp_F		resistivity_ohm_cm	
tds_mgL	178711	resistivity_ohm_cm_temp	
tds_mgL_180C		conductivity	
chloride_mgL	104425	conductivity_temp_F	
sodium_mgL		carbonate_mgL	
calcium_mgL		bicarbonate_mgL	402
iron_mgL		sulfate_mgL	4600
barium_mgL		hydroxide_mgL	
magnesium_mgL		h2s_mgL	
potassium_mgL		co2_mgL	
strontium_mgL		o2_mgL	
manganese_mgL		anionremarks	
<b>Remarks</b>			

(Produced water data courtesy of NMT Octane NM WAIDS database.)



**C-108 Item VII.5 - Produced Water Data**  
**Ray Westall Operating, Inc. - Sand Tank 32 State Com SWD #1**

**SOURCE ZONE**

**GRAYBURG-SAN ANDRES**

<b>API No</b>	3001502873	<b>Lab ID</b>	
<b>Well Name</b>	GULF STATE 002	<b>Sample ID</b>	5366
		<b>Sample No</b>	
<b>Location</b>	ULSTR 03 17 S 29 E	<b>Lat / Long</b>	32.86987 -104.06746
	330 N 990 W	<b>County</b>	Eddy
<b>Operator (when sampled)</b>			
	Field SQUARE LAKE	<b>Unit</b>	4
<b>Sample Date</b>		<b>Analysis Date</b>	
	<b>Sample Source</b> WELLHEAD	<b>Depth (if known)</b>	
	<b>Water Type</b>		
ph		alkalinity_as_caco3_mgL	
ph_temp_F		hardness_as_caco3_mgL	
specificgravity		hardness_mgL	
specificgravity_temp_F		resistivity_ohm_cm	
tds_mgL	109000	resistivity_ohm_cm_temp	
tds_mgL_180C		conductivity	
chloride_mgL	63070	conductivity_temp_F	
sodium_mgL		carbonate_mgL	
calcium_mgL		bicarbonate_mgL	339
iron_mgL		sulfate_mgL	3538
barium_mgL		hydroxide_mgL	
magnesium_mgL		h2s_mgL	
potassium_mgL		co2_mgL	
strontium_mgL		o2_mgL	
manganese_mgL		anionremarks	

Remarks

(Produced water data courtesy of NMT Octane NM WAIDS database.)



**C-108 Item VII.5 - Produced Water Data**  
**Ray Westall Operating, Inc. - Sand Tank 32 State Com SWD #1**

**SOURCE ZONE**

**BONE SPRING**

<b>API No</b>	3001527288	<b>Lab ID</b>	
<b>Well Name</b>	COLT FEDERAL 001	<b>Sample ID</b>	5975
		<b>Sample No</b>	
<b>Location</b>	ULSTR 04 20 S 28 E	<b>Lat / Long</b>	32.59869 -104.17523
	990 S 660 E	<b>County</b>	Eddy
<b>Operator (when sampled)</b>	OXY USA INC		
	Field OLD MILLMAN RANCH	<b>Unit</b>	P
<b>Sample Date</b>	4/9/1998	<b>Analysis Date</b>	4/22/1998
	<b>Sample Source</b>	<b>Depth (if known)</b>	
	<b>Water Typ</b>		
ph	7.22	alkalinity_as_caco3_mgL	
ph_temp_F		hardness_as_caco3_mgL	
specificgravity	1.004	hardness_mgL	
specificgravity_temp_F		resistivity_ohm_cm	
tds_mgL	6037.86	resistivity_ohm_cm_temp_	
tds_mgL_180C		conductivity	
chloride_mgL	3352.36	conductivity_temp_F	
sodium_mgL	2217.84	carbonate_mgL	0
calcium_mgL	26.104	bicarbonate_mgL	220.88
iron_mgL	36.144	sulfate_mgL	141.564
barium_mgL	0.0502	hydroxide_mgL	
magnesium_mgL	6.024	h2s_mgL	
potassium_mgL	58.232	co2_mgL	
strontium_mgL	3.012	o2_mgL	
manganese_mgL		anionremarks	
<b>Remarks</b>			

(Produced water data courtesy of NMT Octane NM WAIDS database.)



**C-108 Item VII.5 - Produced Water Data**  
**Ray Westall Operating, Inc. - Sand Tank 32 State Com SWD #1**

**DISPOSAL ZONE**

**PADDOCK**

<b>API No</b>	3001529903	<b>Lab ID</b>	
<b>Well Name</b>	MCINTYRE A 011	<b>Sample ID</b>	6010
		<b>Sample No</b>	
<b>Location</b>	ULSTR 20 17 S 30 E	<b>Lat / Long</b>	32.81716 -103.98804
	1650 S 990 E	<b>County</b>	Eddy
<b>Operator (when sampled)</b>	MACK ENERGY		
	Field	<b>Unit</b>	1
<b>Sample Date</b>	5/17/2000	<b>Analysis Date</b>	5/26/2000
	<b>Sample Source</b>	<b>Depth (if known)</b>	
	<b>Water Typ</b>		
ph	7.5	alkalinity_as_caco3_mgL	
ph_temp_F		hardness_as_caco3_mgL	
specificgravity	1.138	hardness_mgL	
specificgravity_temp_F		resistivity_ohm_cm	
tds_mgL	205800	resistivity_ohm_cm_temp	
tds_mgL_180C		conductivity	
chloride_mgL	140084	conductivity_temp_F	
sodium_mgL	83237.9	carbonate_mgL	0
calcium_mgL	5012.89	bicarbonate_mgL	283.362
iron_mgL	6.828	sulfate_mgL	3206.88
barium_mgL	0.2276	hydroxide_mgL	
magnesium_mgL	1610.27	h2s_mgL	3.414
potassium_mgL	690.766	co2_mgL	
strontium_mgL	67.142	o2_mgL	
manganese_mgL		anionremarks	
<b>Remarks</b>			

(Produced water data courtesy of NMT Octane NM WAIDS database.)



**C-108 Item VII.5 - Produced Water Data**  
**Ray Westall Operating, Inc. - Sand Tank 32 State Com SWD #1**

**DISPOSAL ZONE**

**PADDOCK**

<b>API No</b>	3001530329	<b>Lab ID</b>	
<b>Well Name</b>	SINCLAIR PARKE 002	<b>Sample ID</b>	5831
		<b>Sample No</b>	
<b>Location</b>	ULSTR 22 17 S 30 E	<b>Lat / Long</b>	32.82076 -103.96219
	2310 N 1650 W	<b>County</b>	Eddy
<b>Operator (when sampled)</b>	MACK ENERGY		
	Field LOCO HILLS	<b>Unit</b>	F
<b>Sample Date</b>	7/24/2000	<b>Analysis Date</b>	8/10/2000
	<b>Sample Source</b>	<b>Depth (if known)</b>	
	<b>Water Typ</b>		
ph	6.9	alkalinity_as_caco3_mgL	
ph_temp_F		hardness_as_caco3_mgL	
specificgravity	1.129	hardness_mgL	
specificgravity_temp_F		resistivity_ohm_cm	
tds_mgL	191874	resistivity_ohm_cm_temp	
tds_mgL_180C		conductivity	
chloride_mgL	127771	conductivity_temp_F	
sodium_mgL	74575	carbonate_mgL	0
calcium_mgL	5339.04	bicarbonate_mgL	2575.25
iron_mgL	19.193	sulfate_mgL	3511.19
barium_mgL	0.3387	hydroxide_mgL	
magnesium_mgL	2398	h2s_mgL	45.16
potassium_mgL	401.924	co2_mgL	
strontium_mgL	34.999	o2_mgL	
manganese_mgL		anionremarks	
<b>Remarks</b>			

(Produced water data courtesy of NMT Octane NM WAIDS database.)



## **C-108 ITEM VIII**

### **GEOLOGIC INFORMATION**

The Paddock member (Upper Yeso) is composed of anhydritic dolomite with interbedded siltstones and fine-grained sandstones. The Paddock in the Loco Hills/ Maljamar area is a poor conventional reservoir with average porosity of 7.5% and permeability ranging from 0-350 md (Bishop, 2014). Much of the geologic analysis has focused on petrophysical and geophysical studies due to limited data for the Upper Yeso in the general area. Overall thickness averages 100 to 300 feet in the area. There appears to be some decent porosity in the proposed injection interval located from approximately 4785 feet to 5120 feet with some very good porosity interspersed throughout the overall interval.

The Paddock is overlain by some tighter Upper Yeso and then transitions to the Glorieta and the San Andres. It is underlain by the Bone Spring and then Wolfcamp formations.

New logs will be run to determine the best specific intervals within the proposed maximum interval. If the overall interval needs to be adjusted, Ray Westall Operating will apply for a permit modification to reflect the adjustment.

There are no known sources of water <10,000 mg/l TDS which underlie the injection zones.

Production in the area is generally from shallower Artesia Group formations. The AOR wells largely are completed in the the Grayburg Jackson; SR-Q-G-SA Pool, Pool ID 28509. Farther out from the proposed SWD, completions are in the 7Rrvs-Qn-GB-Glorieta-Yeso Pool, Pool ID 97558 and more recently horizontals in the Bone Spring but not yet within one mile of the proposed SWD.

There are NO domestic water wells within one mile of the proposed SWD well. There is a potential source of drinking water in the overlying sands occurring at a depth from surface of up to 250 feet but averaging 80 feet in 17S-30E. The upper part of the section on average consists of 200 ft of Holocene alluvial deposits of caliche, sand, gravel, and clay. Included in this interval are red sandstone and shale of the Chinle formation and Santa Rosa sandstone and similar deposits of the Dewey Lake formation. These formations are underlain by the Rustler and Salado formations.

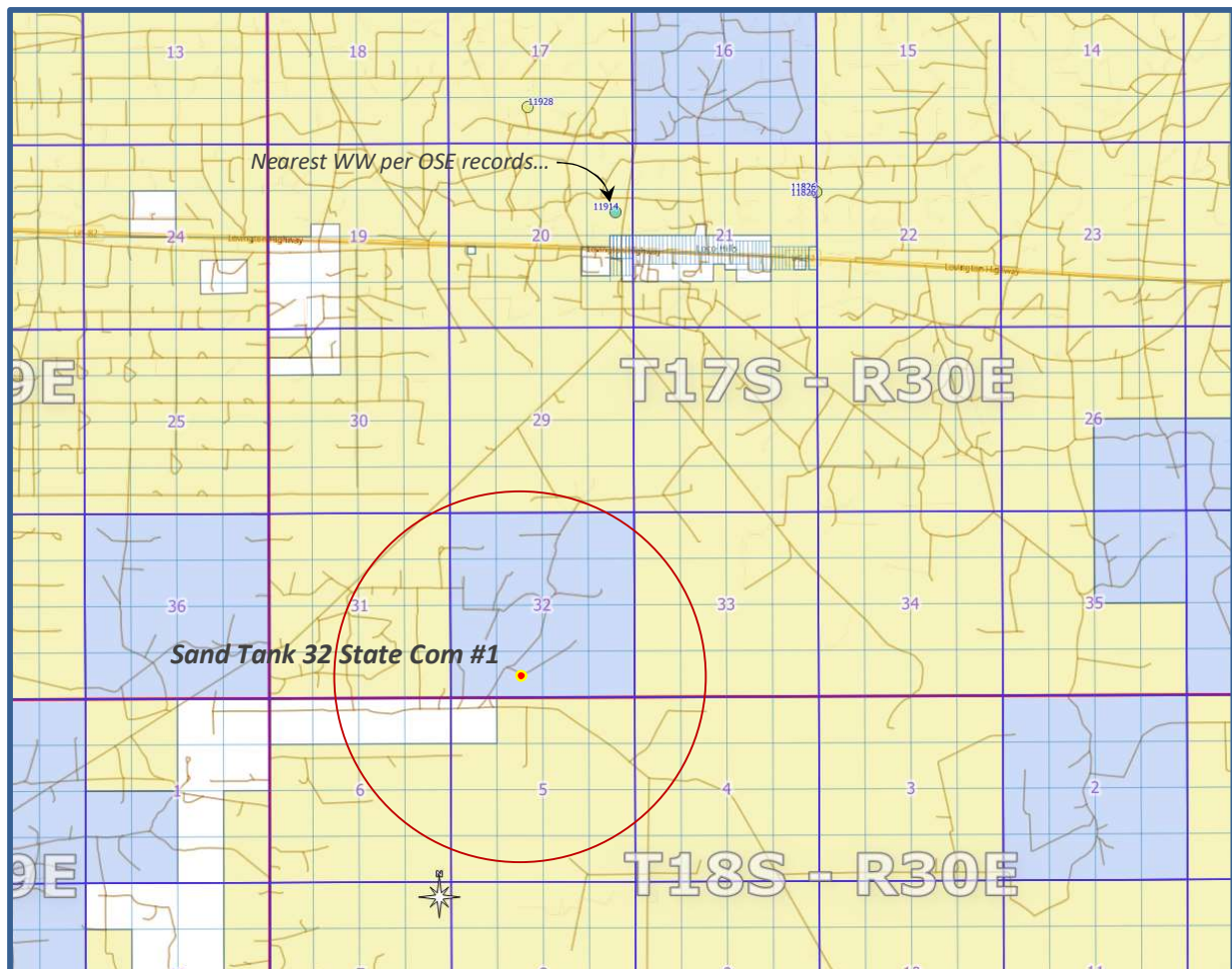
## C-108 Item XI

### Water Wells Within One Mile

### Sand Tank 32 State Com No.1 SWD - Water Well Locator Map

There are NO water wells shown within one mile radius of proposed SWD.  
(As indicated by NM Office of the State Engineer's OSE POD Locations in SOS GIS application.)

Depth to GW for 17S-30E is average 80 feet; well depths range from 85 feet to 104 feet for 6 well records in the township.





# New Mexico Office of the State Engineer

## Active & Inactive Points of Diversion

(with Ownership Information)

No PODs found.

**PLSS Search:**

**Section(s):** 28-33

**Township:** 17S

**Range:** 30E

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.

3/12/15 3:57 PM

Page 1 of 1

ACTIVE & INACTIVE POINTS OF DIVERSION



# New Mexico Office of the State Engineer

## Active & Inactive Points of Diversion

(with Ownership Information)

No PODs found.

**PLSS Search:**

**Section(s):** 4-6

**Township:** 17S

**Range:** 31E

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.

3/12/15 3:58 PM

Page 1 of 1

ACTIVE & INACTIVE POINTS OF DIVERSION



# New Mexico Office of the State Engineer

## Water Column/Average Depth to Water

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

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

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

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

(In feet)

POD Number	POD Sub-Code	basin	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Depth Well	Depth Water	Water Column
<a href="#">RA 11914 POD1</a>	RA	ED		2	4	2	20	17S	30E	594801	3632002	85	80	5
<a href="#">RA 13106 POD2</a>	RA	ED		4	2	3	01	17S	30E	600406	3636426			
<a href="#">RA 13106 POD3</a>	RA	ED		4	2	3	01	17S	30E	600381	3636421			
<a href="#">RA 13212 POD1</a>	RA	CH		1	3	4	11	17S	30E	598984	3634474			
<a href="#">RA 13213 POD1</a>	RA	CH		2	2	1	24	17S	30E	600489	3632575	101		
<a href="#">RA 13233 POD1</a>	RA	ED		3	3	1	06	17S	30E	591790	3636711	104		

Average Depth to Water: **80 feet**

Minimum Depth: **80 feet**

Maximum Depth: **80 feet**

**Record Count:** 6

**PLSS Search:**

**Township:** 17S

**Range:** 30E

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.

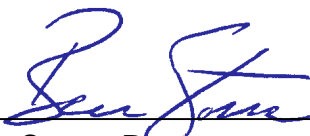
3/19/23 12:52 PM

Page 1 of 1

WATER COLUMN/ AVERAGE  
DEPTH TO WATER

## 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.  
Sand Tank 32 State Com No.1 SWD  
Reviewed 3/16/2022

## **C-108 ITEM XIII – PROOF OF NOTIFICATION**

### IDENTIFICATION AND NOTIFICATION OF AFFECTED PARTIES

#### **Exhibits for Section**

Affected Parties Map

List of Affected Parties

Notification Letter to Affected Parties

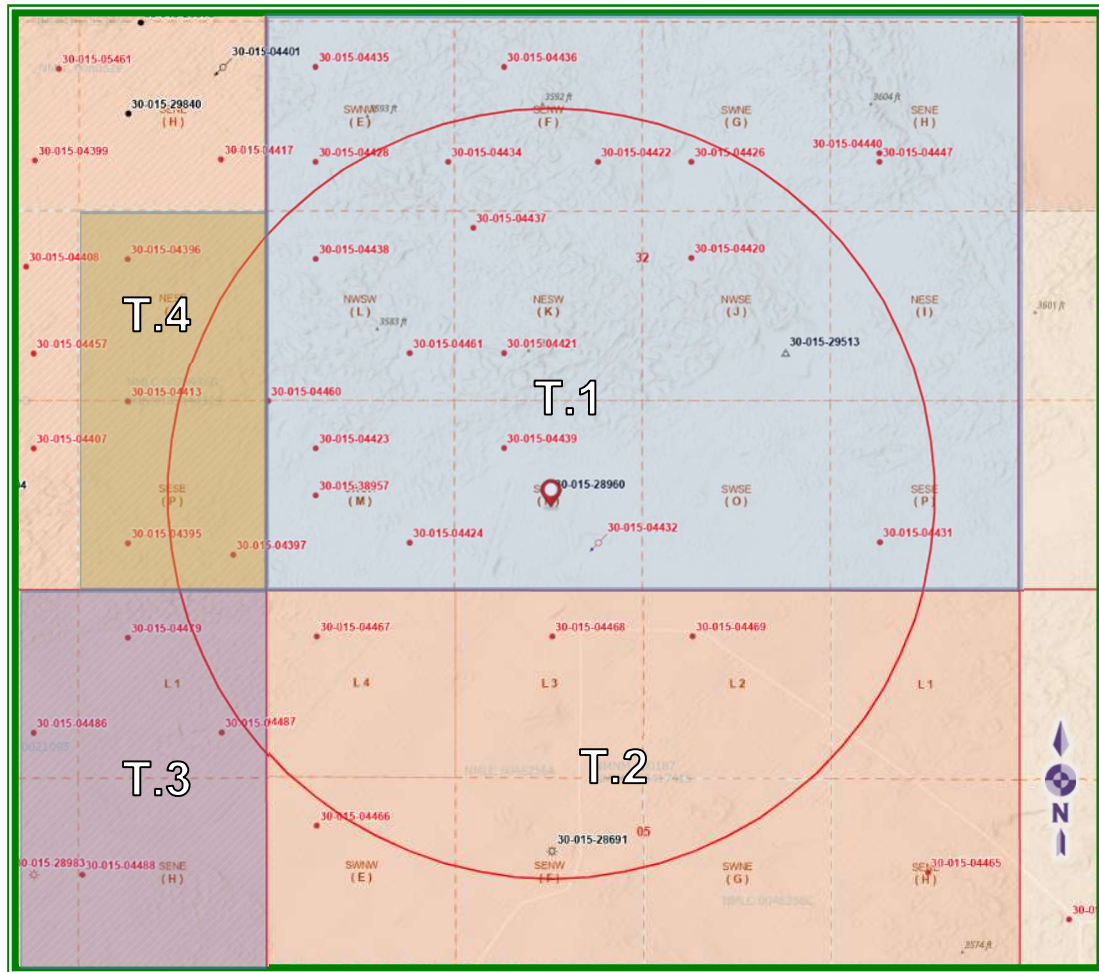
Instructions for PDF Document Access

Proof of Certified Mailing

Affidavit Published Legal Notice

# Sand Tank '32' State Com Well No.1 - Leasehold Plat

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



**RAY WESTALL OPERATING, INC.**

## LEGEND

- T.1 – State Lease, VC-0682-0001 – MRC Permian Company
- T.2 – BLM Lease, NMNM-105417415 – Held by Production; EOG operator
- T.3 – BLM Lease, NMNM-105592257 – Held by Production; EOG operator
- T.4 – NMNM-105444329 – Held by Production (*No active wells.*)

Research performed by CG&L Records & Research



## C-108 ITEM XIII – PROOF OF NOTIFICATION AFFECTED PARTIES LIST

**ALL AFFECTED PARTIES ARE PROVIDED A NOTICE LETTER VIA US CERTIFIED MAIL CONTAINING UNIQUE 6 CHARACTER DOCUMENT ACCESS CODES FOR SECURE DOWNLOAD OF A PDF COPY OF THE SUBJECT C-108 APPLICATION. AFFECTED PARTIES MAY ALSO REQUEST A PDF COPY VIA SENT EMAIL.**

"AFFECTED PERSON" MEANS THE DIVISION DESIGNATED OPERATOR; IN THE ABSENCE OF AN OPERATOR, A LESSEE WHOSE INTEREST IS EVIDENCED BY A WRITTEN CONVEYANCE DOCUMENT EITHER OF RECORD OR KNOWN TO THE APPLICANT AS OF THE DATE THE APPLICANT FILES THE APPLICATION; OR IN THE ABSENCE OF AN OPERATOR OR LESSEE, A MINERAL INTEREST OWNER WHOSE INTEREST IS EVIDENCED BY A WRITTEN CONVEYANCE DOCUMENT EITHER OF RECORD OR KNOWN TO THE APPLICANT AS OF THE DATE THE APPLICANT FILED THE APPLICATION FOR PERMIT TO INJECT.; PER OCD RULES NMAC 19.15.26.7, A. AND 19.15.26.8, B.2.

### SURFACE OWNER

- 1 STATE OF NEW MEXICO  
Oil, Gas and Minerals Division  
310 Old Santa Fe Trail  
Santa Fe, NM 87504  
Certified Mail: 7018 1130 0000 8738 2612

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

#### **State Lease VC-0682-0001**

##### **Lessee**

MATADOR PRODUCTION COMPANY  
(MRC Permian NM Leases)  
5400 LBJ Freeway, Ste.1500  
Dallas, TX 75240

##### **Operator**

RAY WESTALL OPERATING, INC. (Applicant)  
P.O. Box 4  
Loco Hills, NM 88255

#### **BLM Leases NMNM-105417415; 105592257 (T.2 and T.3 on plat.)**

##### **Lessee & Operator**

- 2 EOG RESOURCES, INC.  
P.O. Box 2267  
Midland, TX 79702  
Certified: 7018 1130 0000 8738 2629

#### **BLM Lease NMNM-105444329 (T.4 on plat.)**

##### **Lessee – Held by Production, No Active Wells**

##### **Nearest Operator**

- 3 J&J INVESTMENTS  
P.O. Box 39  
Loco Hills, NM 88255  
Certified: 7018 1130 0000 8738 2636

- 4 U.S. DEPARTMENT OF INTERIOR  
Bureau of Land Management  
Oil & Gas Division  
620 E. Greene St.  
Carlsbad, NM 88220  
Certified: 7018 1130 0000 8738 2643

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

### **REGULATORY**

NEW MEXICO OIL CONSERVATION DIVISION (Filed via OCD Online e-Permitting)  
1220 S. St. Francis Dr.  
Santa Fe, NM 87505

NEW MEXICO STATE LAND OFFICE  
Commissioner of Public Lands  
Oil, Gas and Minerals Division  
310 Old Santa Fe Trail  
Santa Fe, NM

RWO, INC. SAND TANK 32 #1 SWD

USPS Certified Tracking:  
7018 1130 0000 8738 2612,  
7018 1130 0000 8738 2629,  
7018 1130 0000 8738 2636,  
7018 1130 0000 8738 2643

Doc Access Codes:

**HIDDEN**



March 20, 2023

**NOTIFICATION TO INTERESTED PARTIES**

**via U.S. Certified Mail**

To Whom It May Concern:

Ray Westall Operating, Inc., Loco Hills, New Mexico, is making application to the New Mexico Oil Conservation Division to RECOMPLETE for salt water disposal its Sand Tank 32 State Com Well No.1. The proposed commercial operation will be for produced water disposal from area operators. As indicated in the notice below, the well is in Section 32, Township 17 South, Range 30 East in Eddy County, New Mexico.

The well is currently completed as a Wolfcamp/ Cisco SWD. The published notice states that the interval will be from 4785 feet to 5120 feet in the Paddock formation.

Following is the notice to be published in the Artesia Daily Press, Artesia, New Mexico on or about March 23, 2023.

**LEGAL NOTICE**

Ray Westall Operating, 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 permit for salt water disposal in its Sand Tank 32 State Com Well No.1. The well, API No.30-015-28960 is located 660 FSL & 1980 FWL in Section 32, Township 17 South, Range 30 East in Eddy County, New Mexico. It is currently permitted for SWD in the Wolfcamp and Canyon formations. The proposal is to RECOMPLETE uphole and produced water from area production will be commercially disposed into the into the Paddock formation through perforations between a maximum top of 4785 feet to maximum depth of 5120 feet (specific perforated intervals to be determined based on logs) at a maximum injection pressure of 957 psi and a maximum rate of 6000 bwpd and an average rate of 3500 bwpd.

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, (936) 377-5696 or, email [info@sosconsulting.us](mailto: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. SOS Consulting has deployed a new app for the explicit secure delivery of a full PDF copy of the application. Any user employed with **Affected Party** may log into the system and when prompted for a *Document Access Code*, enter **1234XX** to View or Download the document as desired. Using the *SOS Client and Affected Party Document Access* app takes about one minute, start to finish – instructions are included, and only name, email and company name are needed to access the system.

Thank you for your attention in this matter.

Best regards,

A handwritten signature in black ink, appearing to read "Ben Stone", is written over a light blue horizontal line.

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

Cc: Application File

## User Information for the SOS Client & Affected Party Portal

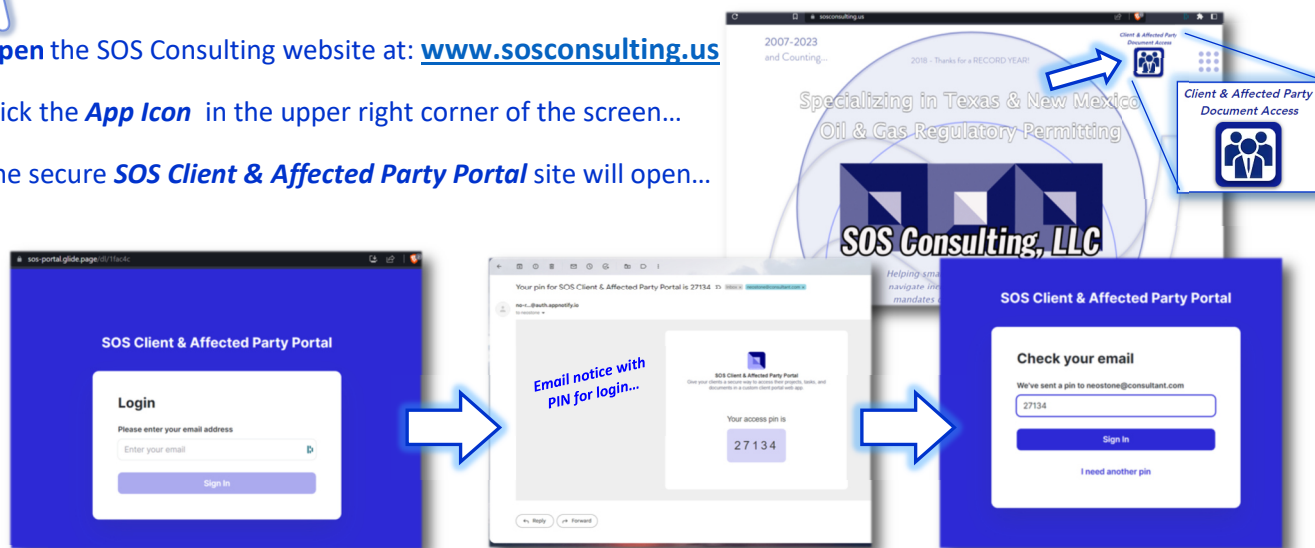
Thank you for using the new SOS Document Portal. This system allows for the **secure delivery of all types of applications and any resulting permits**. The system is built in and stored in the cloud using the best available platforms and code for a secure and robust app. We hope you appreciate our efforts to reduce printed paper copies and deliver pertinent documents in a much more efficient way. If you're a client, you may use the portal to view all the applications that SOS Consulting, LLC has generated on behalf of you or your organization.

1

Open the SOS Consulting website at: [www.sosconsulting.us](http://www.sosconsulting.us)

Click the **App Icon** in the upper right corner of the screen...

The secure **SOS Client & Affected Party Portal** site will open...



2

Become a user of the site by entering your email address and basic info for your profile – minimal information is required although we ask that you provide your company name so we may view who and which companies have reviewed a particular document.

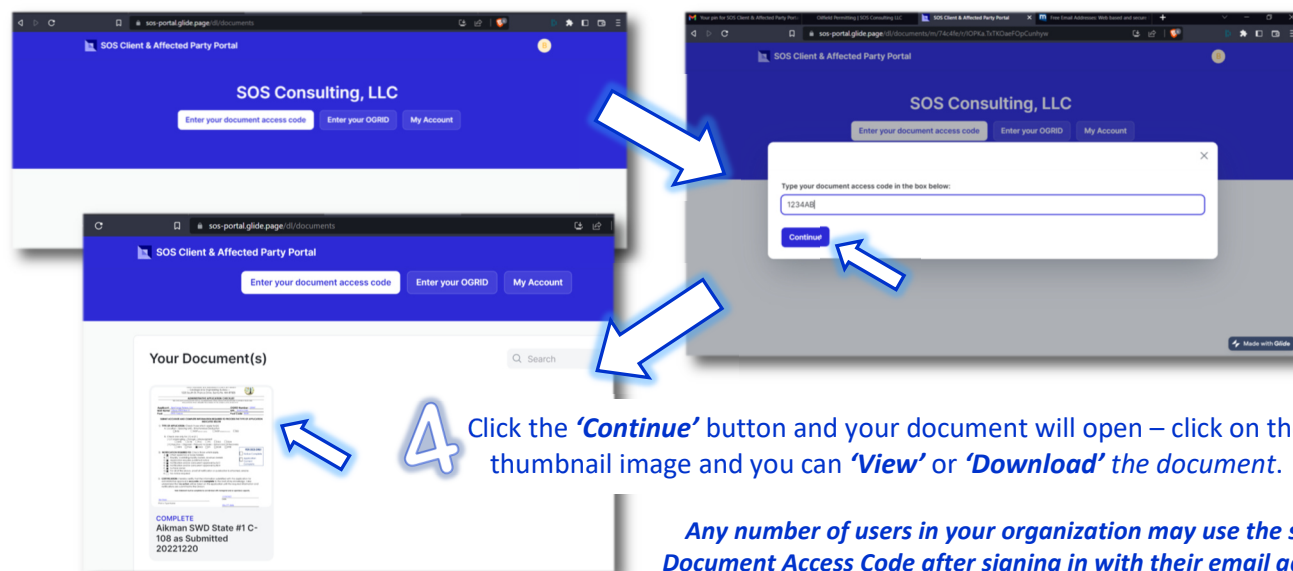
*(Please note that nothing is done with your information – it is only for access to this portal.)*

Each time you log into the SOS Portal, you will be sent a pin code for **2-Step Verification** to your email within 15 seconds. Enter the code for access to the portal.

3

The SOS portal will open to your user page or the portal home. If you don't see this screen, simply click on the SOS Client & Affected Party title and the home page will open. This page allows you to enter a '**Document Access Code**' or if a client, '**Enter your OGRID**'. *(When entering an OGRID, you will also be prompted for a Client ID for security – SOS Consulting will have already provided this to its clients.)*

Note: The unique **Document Access Code** is provided in your '**Notice Letter to Affected Parties**'.



4

Click the '**Continue**' button and your document will open – click on the thumbnail image and you can '**View**' or '**Download**' the document.

**Any number of users in your organization may use the same Document Access Code after signing in with their email address!**

## C-108 - Item XIV

## Proof of Notice (Certified Mail Receipts)

7018 1130 0000 8738 2612

**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	\$4.15	0360 02
Extra Services & Fees (check box, add fee as appropriate)	\$3.35	
<input type="checkbox"/> Return Receipt (hardcopy)	\$0.00	
<input type="checkbox"/> Return Receipt (electronic)	\$0.00	
<input type="checkbox"/> Certified Mail Restricted Delivery	\$0.00	
<input type="checkbox"/> Adult Signature Required	\$0.00	Postmark Here
<input type="checkbox"/> Adult Signature Restricted Delivery	\$0.00	
Postage	\$0.63	03/20/2023
Total Postage and Fees	\$8.13	
Sent To	STATE OF NEW MEXICO	
Street and A	Oil, Gas and Minerals Division	
City, State, ZIP	310 Old Santa Fe Trail	
PS Form 3849	Santa Fe, NM 87504	

7018 1130 0000 8738 2629

**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	\$4.15	0360 02
Extra Services & Fees (check box, add fee as appropriate)	\$3.35	
<input type="checkbox"/> Return Receipt (hardcopy)	\$0.00	
<input type="checkbox"/> Return Receipt (electronic)	\$0.00	
<input type="checkbox"/> Certified Mail Restricted Delivery	\$0.00	
<input type="checkbox"/> Adult Signature Required	\$0.00	Postmark Here
<input type="checkbox"/> Adult Signature Restricted Delivery	\$0.00	
Postage	\$0.63	03/20/2023
Total Postage and Fees	\$8.13	
Sent To	EOG RESOURCES, INC.	
Street and A	P.O. Box 2267	
City, State, ZIP	Midland, TX 79702	
PS Form 3849		

7018 1130 0000 8738 2636

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

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

Loco Hills, NM 88255

**OFFICIAL USE**

Certified Mail Fee	\$4.15	0360 02
Extra Services & Fees (check box, add fee as appropriate)	\$3.35	
<input type="checkbox"/> Return Receipt (hardcopy)	\$0.00	
<input type="checkbox"/> Return Receipt (electronic)	\$0.00	
<input type="checkbox"/> Certified Mail Restricted Delivery	\$0.00	
<input type="checkbox"/> Adult Signature Required	\$0.00	Postmark Here
<input type="checkbox"/> Adult Signature Restricted Delivery	\$0.00	
Postage	\$0.63	03/20/2023
Total Postage and Fees	\$8.13	
Sent To	J&J INVESTMENTS	
Street and A	P.O. Box 39	
City, State, ZIP	Loco Hills, NM 88255	
PS Form 3849		

7018 1130 0000 8738 2643

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

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

Carlsbad, NM 88220

**OFFICIAL USE**

Certified Mail Fee	\$4.15	0360 02
Extra Services & Fees (check box, add fee as appropriate)	\$3.35	
<input type="checkbox"/> Return Receipt (hardcopy)	\$0.00	
<input type="checkbox"/> Return Receipt (electronic)	\$0.00	
<input type="checkbox"/> Certified Mail Restricted Delivery	\$0.00	
<input type="checkbox"/> Adult Signature Required	\$0.00	Postmark Here
<input type="checkbox"/> Adult Signature Restricted Delivery	\$0.00	
Postage	\$0.63	03/20/2023
Total Postage and Fees	\$8.13	
Sent To	BUREAU OF LAND MANAGEMENT	
Street and A	Oil & Gas Division	
City, State, ZIP	620 E. Greene St.	
PS Form 3849	Carlsbad, NM 88220	

## C-108 - Item XIV

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

#### Legal Notice

Ray Westall Operating, 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 permit for salt water disposal in its Sand Tank 32 State Com Well No.1. The well, API No.30-015-28960 is located 660 FSL & 1980 FWL in Section 32, Township 17 South, Range 30 East in Eddy County, New Mexico. It is currently permitted for SWD in the Wolfcamp and Canyon formations. The proposal is to RE-COMplete uphole and produced water from area production will be commercially disposed into the into the Paddock formation through perforations between a maximum top of 4785 feet to maximum depth of 5120 feet (specific perforated intervals to be determined based on logs) at a maximum injection pressure of 957 psi and a maximum rate of 6000 bwpd and an average rate of 3500 bwpd.

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, (936) 377-5696, info@sosconsulting.us.

Published in the Artesia Daily Press, Artesia, N.M., March 23, 2023 Legal No. 26479.

The above is the "Proof Copy" sent from the Artesia Daily Press.

***This is provided in the Affected Party Copy for timely publication.***

OCD requires the actual affidavit of publication be included in the final version for filing through OCD's e-Permitting Online System.

**Affidavit of Publication**

No. 26479

State of New Mexico

County of Eddy:

**Danny Scott**

being duly sworn says that he is the **Publisher**  
 of the Artesia Daily Press, a daily newspaper of General  
 circulation, published in English at Artesia, said county  
 and state, and that the hereto attached

**Legal Ad**

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

day as follows:

First Publication March 23, 2023

Second Publication

Third Publication

Fourth Publication

Fifth Publication

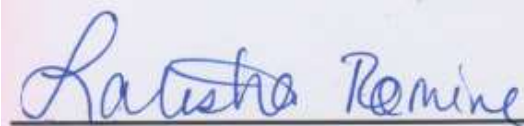
Sixth Publication

Seventh Publication

Subscribed and sworn before me this

23rd day of March 2023

STATE OF NEW MEXICO  
 NOTARY PUBLIC  
 Latisha Romine  
 Commission Number 1076338  
 My Commission Expires May 12, 2023



Latisha Romine

Notary Public, Eddy County, New Mexico

**Copy of Publication:****Legal Notice**

Ray Westall Operating, 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 permit for salt water disposal in its Sand Tank 32 State Com Well No.1. The well, API No.30-015-28960 is located 660 FSL & 1980 FWL in Section 32, Township 17 South, Range 30 East in Eddy County, New Mexico. It is currently permitted for SWD in the Wolfcamp and Canyon formations. The proposal is to RE-COMplete uphole and produced water from area production will be commercially disposed into the into the Paddock formation through perforations between a maximum top of 4785 feet to maximum depth of 5120 feet (specific perforated intervals to be determined based on logs) at a maximum injection pressure of 957 psi and a maximum rate of 6000 bwpd and an average rate of 3500 bwpd.

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, (936) 377-5696, info@sosconsulting.us.

Published in the Artesia Daily Press, Artesia, N.M., March 23, 2023 Legal No. 26479.

**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, NM 87505

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

## WELL LOCATION AND ACREAGE DEDICATION PLAT

<sup>1</sup> API Number 30-015-28960	<sup>2</sup> Pool Code 96190	<sup>3</sup> Pool Name SWD; Paddock
<sup>4</sup> Property Code TBD	<sup>5</sup> Property Name Sand Tank 32 State Com	
<sup>7</sup> OGRID No. 119305	<sup>8</sup> Operator Name Ray Westall Operating, Inc.	<sup>6</sup> Well Number 1
		<sup>9</sup> Elevation 3624'

## <sup>10</sup> Surface Location

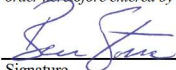
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
N	32	17S	30E		660'	FSL	1980'	FWL	Eddy

<sup>11</sup> 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
same									

<sup>12</sup> Dedicated Acres n/a	<sup>13</sup> Joint or Infill	<sup>14</sup> Consolidation Code	<sup>15</sup> 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.

16				<p><b>17 OPERATOR CERTIFICATION</b></p> <p><i>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.</i></p> <p> 3/17/2023</p> <p>Signature Date</p> <p><b>Ben Stone</b></p> <p>Printed Name</p> <p><b>ben@sosconsulting.us</b></p> <p>E-mail Address</p>
				<p><b>18 SURVEYOR CERTIFICATION</b></p> <p><i>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.</i></p> <p><b>March 28, 1996</b></p> <p>Date of Survey</p> <p>Signature and Seal of Professional Surveyor:</p> <p><b>Earl Foote</b></p> <p><b>8278</b></p> <p>Certificate Number</p>

## WELL SCHEMATIC - PROPOSED CONFIGURATION



## Sand Tank '32' State Com Well No.1 SWD

SWD; Paddock (96190)

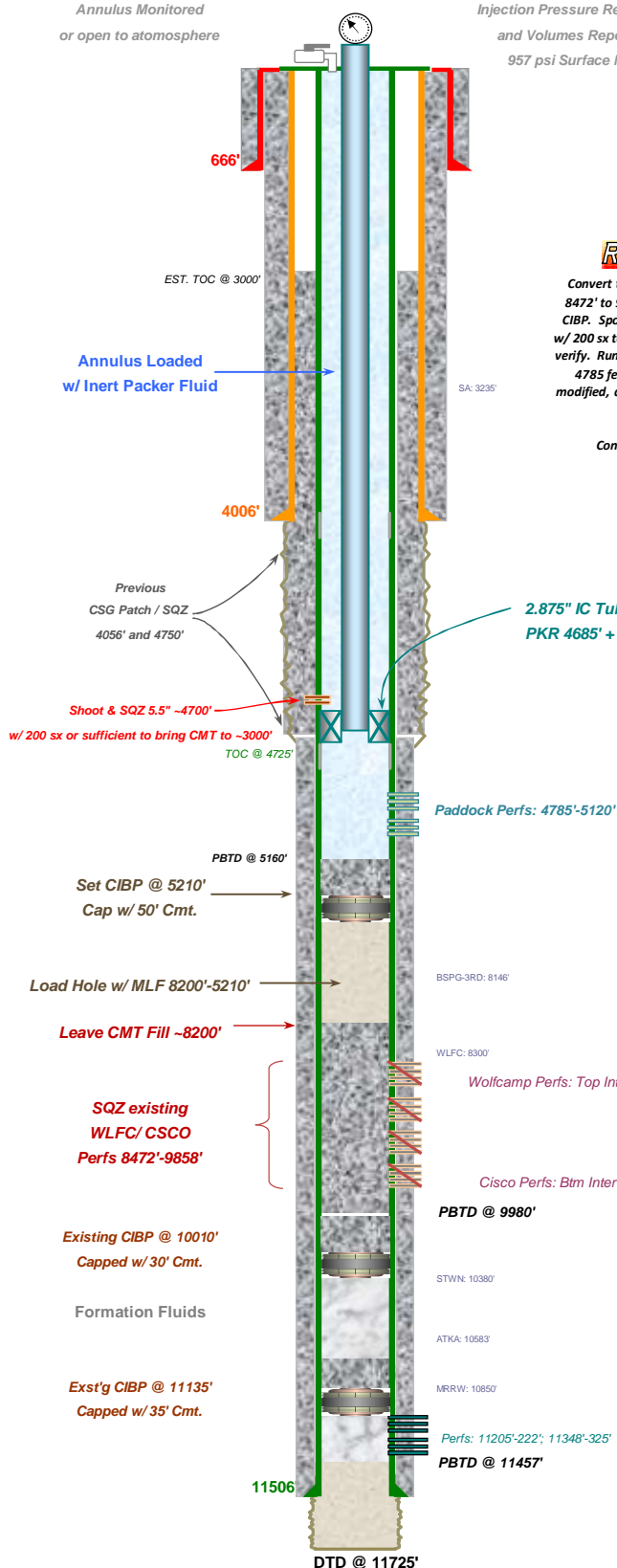
API 30-015-28960

660' FSL & 1980' FWL, SEC. 32-T17S-R30E  
EDDY COUNTY, NEW MEXICO

Spud Date: 8/22/1996

ReEntry (1st SWD) Dt: 6/29/2015

SWD Config Date: 7/01/2023

Annulus Monitored  
or open to atmosphereInjection Pressure Regulated  
and Volumes Reported  
957 psi Surface Max**Surface Casing**11.75", 48.0# Csg. (14.75" Hole) @ 666'  
350 sx - Circulated to Surface**RAY WESTALL OPERATING, INC.**

Convert to Paddock SWD: SQZ existing WC/CSCO SWD perf interval 8472' to 9858' with fill to ~8200'. Load hole w/ MLF to 5210' and set CIBP. Spot 25 sx Cmt to approx. 5160' PBTD. Shoot and SQZ 5.5" CSG w/ 200 sx to establish TOC ~3000'. D/O & C/O Hole to PBTD. Run CBL to verify. Run logs to determine desired perf intervals between max top of 4785 feet and max bottom of 5120'. Note: If interval needs to be modified, apply w/ OCD; otherwise, Perforate Specific Intervals. Acidize w/ 15% HCl. Run PC Tubing and PKR set @ 4685'

Conduct Witnessed MIT. Commence Disposal Operations.

**Intermediate Casing**8.625", 32.0# Csg. (11.0" Hole) @ 4006'  
1350 sx - Circulated to Surface2.875" IC Tubing  
PKR 4685' +**Production Casing**5.5", 17.0# Csg. (7.875" Hole) @ 11506'  
1550 sx Premium - TOC @ 4725' by Calc.

Drawn by: Ben Stone, 3/20/2023



## **C-108 ITEM XIII – PROOF OF NOTIFICATION**

### IDENTIFICATION AND NOTIFICATION OF AFFECTED PARTIES

#### **Exhibits for Section**

Affected Parties Map

List of Affected Parties

Notification Letter to Affected Parties

Instructions for PDF Document Access

Proof of Certified Mailing

Affidavit Published Legal Notice

## **C-108 - Items III, IV, V**

### **Item III - Subject Well Data**

Wellbore Diagram - CURRENT  
Wellbore Diagram – PROPOSED

### **Item IV – Tabulation of AOR Wells**

2 Wells Penetrate the Proposed Injection Interval, 0 P&A  
*(Construction Data for all Active Wells)*

### **Item V – Area of Review Maps**

1. Two Mile AOR Map with One-Mile Fresh Water Well Radius
2. One-Half Mile AOR Map

All Above Exhibits follow this page.

## Form C-108 Item VI - Tabulation of AOR Wells

Top of Proposed PADDOCK Interval 4785'

2 Wells Penetrate Proposed Interval.

API	OGRID Name	Well Name	Type	Status	Lease	ULSTR	Depth	SPUD Date	Plug Date
<u>Subject Well</u>									
30-015-28960	RAY WESTALL OPERATING, INC.	SAND TANK 32 STATE SWD #001	SWD	Active	State	N-32-17S-30E	11725'	35299	
<u>Section 31 Wells</u>									
30-015-04397	EOG Y RESOURCES, INC.	BRIGHAM #003	Oil	P&A (SR)	Federal	P-31-17S-30E	2870'	12/31/9999	11/1/2002
30-015-04460	PRE-ONGARD WELL OPERATOR	PRE-ONGARD WELL #004	Oil	P&A (SR)	No Data	I-31-17S-30E	2889'	6/6/1961	4/13/1987
<u>Section 32 Wells</u>									
30-015-04434	EOG Y RESOURCES, INC.	SCHEURICH A #005	Oil	P&A (SR)	State	E-32-17S-30E	2900'	8/27/1947	9/20/2002
30-015-04422	EOG Y RESOURCES, INC.	SCHEURICH B #006	Oil	P&A (SR)	State	F-32-17S-30E	2893'	3/29/1940	12/5/2002
30-015-04426	PRE-ONGARD WELL OPERATOR	PRE-ONGARD WELL #002	Oil	P&A (SR)	State	G-32-17S-30E	2882'	1/23/1940	11/3/1986
30-015-04420	PRE-ONGARD WELL OPERATOR	PRE-ONGARD WELL #002	Oil	P&A (SR)	No Data	J-32-17S-30E	3160'	4/14/1945	6/7/1945
30-015-29513	RAY WESTALL OPERATING, INC.	SAND TANK 32 STATE COM #002	SWD	Active	State	J-32-17S-30E	11750'	5/16/1997	
WOLFCAMP SWD perfs: 8510'-9066'; 11.75" (14.75" hole) @ 656' w/ 465 sx + 1" to circ.; 8.625" (11.0" hole) @ 4002' w/ 1300 sx + 1" to circ.; 7.0" (8.75" hole) @ 9399' w/ 210 sx - TOC @ 7950' by temp.									
30-015-04437	EOG Y RESOURCES, INC.	SCHEURICH #004	Oil	P&A (SR)	State	K-32-17S-30E	2886'	4/2/1941	7/15/2002
30-015-04421	PRE-ONGARD WELL OPERATOR	PRE-ONGARD WELL #001	Oil	P&A (SR)	No Data	K-32-17S-30E	2950'	2/13/1940	4/4/1940
30-015-04438	EOG Y RESOURCES, INC.	SCHEURICH #003	Oil	P&A (SR)	State	L-32-17S-30E	2887'	8/14/1940	7/24/2002
30-015-04461	EOG Y RESOURCES, INC.	SCHEURICH #009	Oil	P&A (SR)	State	L-32-17S-30E	2907'	10/18/1962	7/17/2002
30-015-04423	PRE-ONGARD WELL OPERATOR	PRE-ONGARD WELL #005	Oil	P&A (SR)	No Data	M-32-17S-30E	2972'	6/12/1940	4/2/1945
30-015-38957	EOG RESOURCES INC	QUALIFIER BQX STATE #001H	Oil	P&A (SR)	State	M-32-17S-30E	105'	10/28/2014	1/26/2019
30-015-04424	EOG Y RESOURCES, INC.	STATE BX #005	Oil	P&A (SR)	State	M-32-17S-30E	2858'	3/20/1945	8/3/1995
30-015-04439	EOG Y RESOURCES, INC.	TALLMADGE #001	Oil	P&A (SR)	State	N-32-17S-30E	2850'	11/22/1939	6/4/2003
30-015-04432	EOG Y RESOURCES, INC.	TALLMADGE #004	Injection	P&A (SR)	State	N-32-17S-30E	2888'	1/15/1961	8/27/1986
30-015-04431	PRE-ONGARD WELL OPERATOR	PRE-ONGARD WELL #006	Oil	P&A (SR)	No Data	P-32-17S-30E	3688'	6/16/1945	6/10/1970
<u>Section 5 Wells</u>									
30-015-04469	PRE-ONGARD WELL OPERATOR	PRE-ONGARD WELL #004	Oil	P&A (SR)	Federal	B-05-18S-30E	2885'	9/16/1941	8/23/1951
30-015-04468	PRE-ONGARD WELL OPERATOR	PRE-ONGARD WELL #003	Oil	P&A (SR)	Federal	C-05-18S-30E	2863'	6/5/1941	12/7/1971
30-015-04467	PRE-ONGARD WELL OPERATOR	PRE-ONGARD WELL #002	Oil	P&A (SR)	Federal	D-05-18S-30E	2860'	12/3/1939	11/2/1971
30-015-28691	EOG RESOURCES INC	SAND TANK 5 FEDERAL COM #001	Gas	Active	Federal	F-05-18S-30E	11747'	10/31/1995	

STRAWN perfs: 10583'-10610'; 11.75" (14.75" hole) @ 658' w/ 450 sx - circ.; 8.625" (11.0" hole) @ 4205' w/ 1306 sx - circ.; 5.5" (8.75" hole) @ 11513' w/ 855 sx - TOC @ 3700'

SUMMARY: 2 wells penetrate proposed disposal interval. 0 P&amp;A.



## **C-108 ITEM VII – PRODUCED WATER ANALYSES**

### **Item VII.4 – Water Analysis of Source Zone Water**

Tansil-Yates-Seven Rivers  
Grayburg-San Andres

### **Item VII.5 – Water Analysis of Disposal Zone Water**

Paddock

**Water Analyses follow this page.**

# e-Permitting

## C-108 Submittal

Attachment Category

### Seismicity Analysis

For High Volume Devonian Wells

**(NOT APPLICABLE TO THIS APPLICATION)**

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

The Sand Tank 32 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. (Samples are included in this application from Artesia Group and Bone Spring formations waters - chlorides and TDS are relative compatible with Paddock (Yeso) formation waters.)

The system will be closed utilizing flowlines from area production and augmented with a tank battery and transport offload facility located on the well site.

Injection pressure will be 957 psi and a maximum rate of 6000 bwpd and an average rate of 3500 bwpd. 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**

### **GEOLOGIC INFORMATION**

The Paddock member (Upper Yeso) is composed of anhydritic dolomite with interbedded siltstones and fine-grained sandstones. The Paddock in the Loco Hills/ Maljamar area is a poor conventional reservoir with average porosity of 7.5% and permeability ranging from 0-350 md (Bishop, 2014). Much of the geologic analysis has focused on petrophysical and geophysical studies due to limited data for the Upper Yeso in the general area. Overall thickness averages 100 to 300 feet in the area. There appears to be some decent porosity in the proposed injection interval located from approximately 4785 feet to 5120 feet with some very good porosity interspersed throughout the overall interval.

The Paddock is overlain by some tighter Upper Yeso and then transitions to the Glorieta and the San Andres. It is underlain by the Bone Spring and then Wolfcamp formations.

New logs will be run to determine the best specific intervals within the proposed maximum interval. If the overall interval needs to be adjusted, Ray Westall Operating will apply for a permit modification to reflect the adjustment.

There are no known sources of water <10,000 mg/l TDS which underlie the injection zones.

Production in the area is generally from shallower Artesia Group formations. The AOR wells largely are completed in the the Grayburg Jackson; SR-Q-G-SA Pool, Pool ID 28509. Farther out from the proposed SWD, completions are in the 7Rrvs-Qn-GB-Glorieta-Yeso Pool, Pool ID 97558 and more recently horizontals in the Bone Spring but not yet within one mile of the proposed SWD.

There are NO domestic water wells within one mile of the proposed SWD well. There is a potential source of drinking water in the overlying sands occurring at a depth from surface of up to 250 feet but averaging 80 feet in 17S-30E. The upper part of the section on average consists of 200 ft of Holocene alluvial deposits of caliche, sand, gravel, and clay. Included in this interval are red sandstone and shale of the Chinle formation and Santa Rosa sandstone and similar deposits of the Dewey Lake formation. These formations are underlain by the Rustler and Salado formations.

**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 Rd., Aztec, NM 87410  
Phone:(505) 334-6178 Fax:(505) 334-6170

**District IV**  
1220 S. St Francis Dr., Santa Fe, NM 87505  
Phone:(505) 476-3470 Fax:(505) 476-3462

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

CONDITIONS

Action 200067

CONDITIONS

Operator: RAY WESTALL OPERATING, INC. P.O. Box 4 Loco Hills, NM 88255	OGRID: 119305
	Action Number: 200067
	Action Type: [C-108] Fluid Injection Well (C-108)

CONDITIONS

Created By	Condition	Condition Date
mgebremichael	None	3/24/2023