

ABOVE THIS LINE FOR DIVISION USE ONLY

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



ADMINISTRATIVE APPLICATION CHECKLIST

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

Application Acronyms:

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

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

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

Check One Only for [B] or [C]

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

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

[D] Other: Specify _____

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

- [A] ☐ Working, Royalty or Overriding Royalty Interest Owners
- [B] ☒ Offset Operators, Leaseholders or Surface Owner
- [C] ☒ Application is One Which Requires Published Legal Notice
- [D] ☒ Notification and/or Concurrent Approval by BLM or SLO
 U.S. Bureau of Land Management - Commissioner of Public Lands, State Land Office
- [E] ☒ For all of the above, Proof of Notification or Publication is Attached, and/or,
- [F] ☐ Waivers are Attached

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

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

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

Ben Stone

 Print or Type Name

Signature

Agent for Ray Westall Operating, Inc. 8/08/15

 Title
 ben@sosconsulting.us

 e-mail Address

Date

- SWD 1582
 - Ray Westall Operating, Inc.
 119305
 - well
 - DHY State 'B' #1
 30-015-21971
 Pool
 - SWD, Cisco-Canyon
 96186
 2015 AUG 11 P. 2:12
 RECEIVED OGD



August 8, 2015

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 permit for salt water disposal the DHY State 'B' Well No.1 located in Section 11, Township 19 South, Range 28 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 covert for disposal, the DHY State 'B' Well No.1. Concurrent with this application, Ray Westall will be submitting a C-101 to reenter and configure the well for SWD.

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 June 26, 2015 edition of the Artesia Daily Press and all offset operators and other interested parties have been notified individually. The legal notice affidavit is included in this application package. 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 land and minerals and a copy of this application has been submitted to the State Land Office, Oil and Gas 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 black ink, appearing to read 'Ben Stone', is written over a horizontal line.

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** and the application *qualifies* for administrative approval.
- II. OPERATOR: **Ray Westall Operating, Inc. Ogrid - 119305**
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 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 - No P&As penetrate. 1 Horizontal – does NOT penetrate.)** 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. **The well may be acidized to clean perforations and formation wall w/ 15% HCl w/ up to 5000 gals.**
- *X. **There is no applicable test data on the well however, any previous well logs (1 well log available via OCD Online) have been filed with the Division and they need not be resubmitted. A log strip of 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 6 offset lessees and/or operators plus state minerals within one 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: **8/06/2015**

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

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

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



WELL SCHEMATIC - PROPOSED

DHY State 'B' Well No.1 SWD

API 30-015-21971

1980' FSL & 990' FWL, SEC. 11-T19S-R28E
EDDY COUNTY, NEW MEXICO

P&A Date: 3/22/2007

SWD Config Date: ~9/15/2015

RAY WESTALL OPERATING, INC.

Convert to SWD: D/O & C/O Existing Plugs to 10050'.

Test Existing Perfs Going Down - SQZ if Rqr'd.

Set CIBP @ 10030' w/ 30' Cement Cap.

Perforate Selected Interval Between 9600'-9950'.

Acidize w/ Max. 5000 gals. 15% HCl - Flowback/Swab.

Run Internally Coated Tubing w/ PKR set ~9555'.

Perform OCD Witnessed MIT (24 hr. notice).

Commence Disposal Operations.

Annulus Monitored
or open to atmosphere

Injection Pressure Regulated
and Volumes Reported
1920 psi

415'

Surface Casing

13.375" 48.0# Csg. (17.5" Hole) @ 415'
400 sx - Circulated to Surface

Existing Csg Patch 1660'

SA: 2500'

Intermediate Casing

8.625" 24.0/28.0# Csg. (11.0" Hole) @ 2800'
1121 sx - TOC @ 541' by Temp

2800'

Annulus Loaded
w/ Inert Packer Fluid

BRPG: 4302'

TOC 8100'

W/LPCP: 8915'

Existing Perfs: 8870'-8942' (SQZ if Rqr'd.)

PENR: 8982'

3.5" or 2.875" IC Tubing
PKR ~9555'

CSCQ: 9630'

CHYN: 9778'

Perf Interval: 9600' to 9950'

Set CIBP @ ~10030'
Cap w/ 30' Cmt.

PBTD @ 10000'

STWN: 10020'

Existing CIBP @ 10400'
w/ 20' Cmt. Cap

ATKA: 10295'

Perfs: 10458'-68'

Formation Fluids

MRRW: 10740'

11349'

DTD @ 11350'

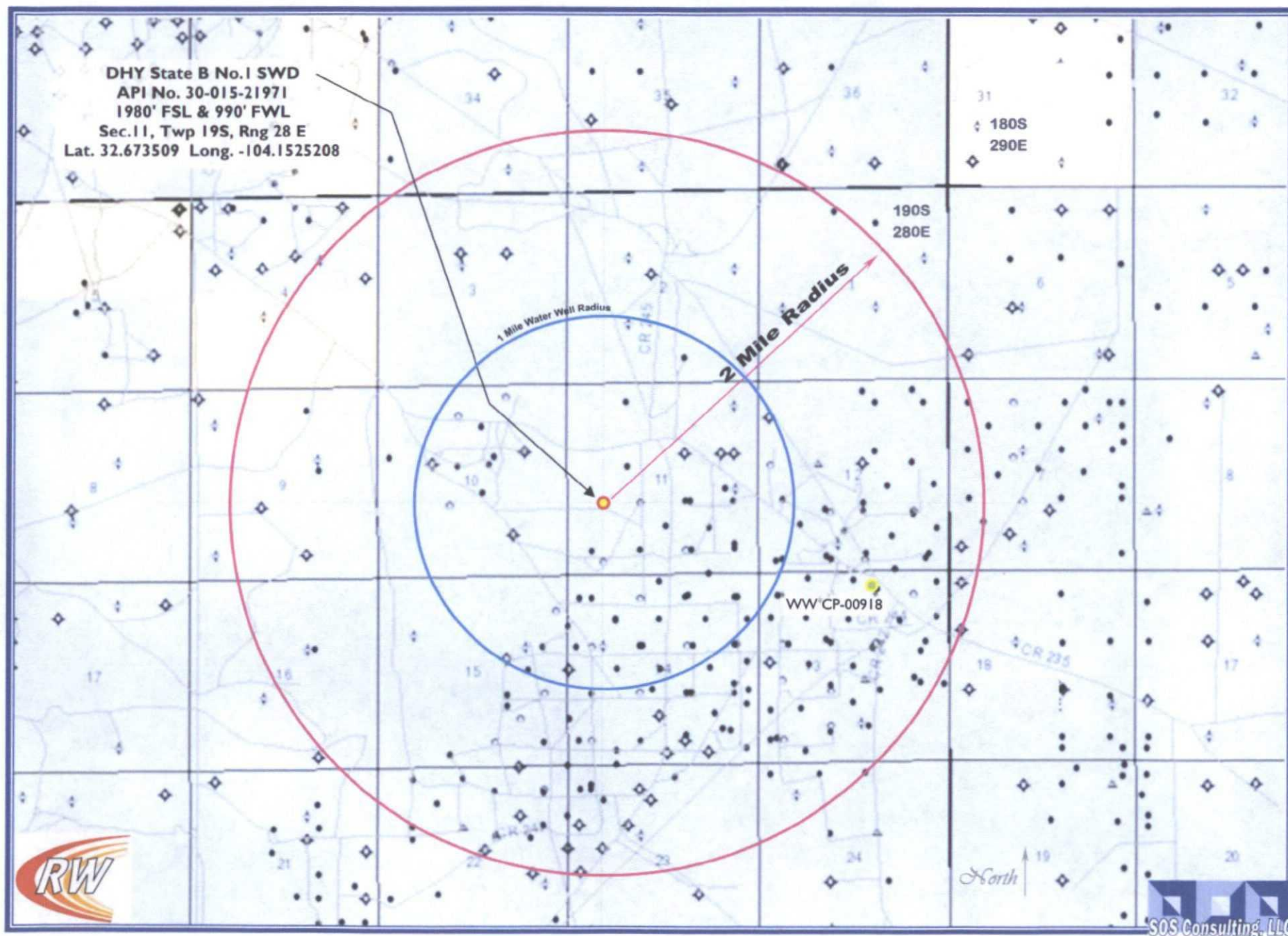
Production Casing

5.5" 17.0/20.0# Csg (7.875" Hole) @ 11349'
700 sx Cls H - TOC @ 8100' by Temp



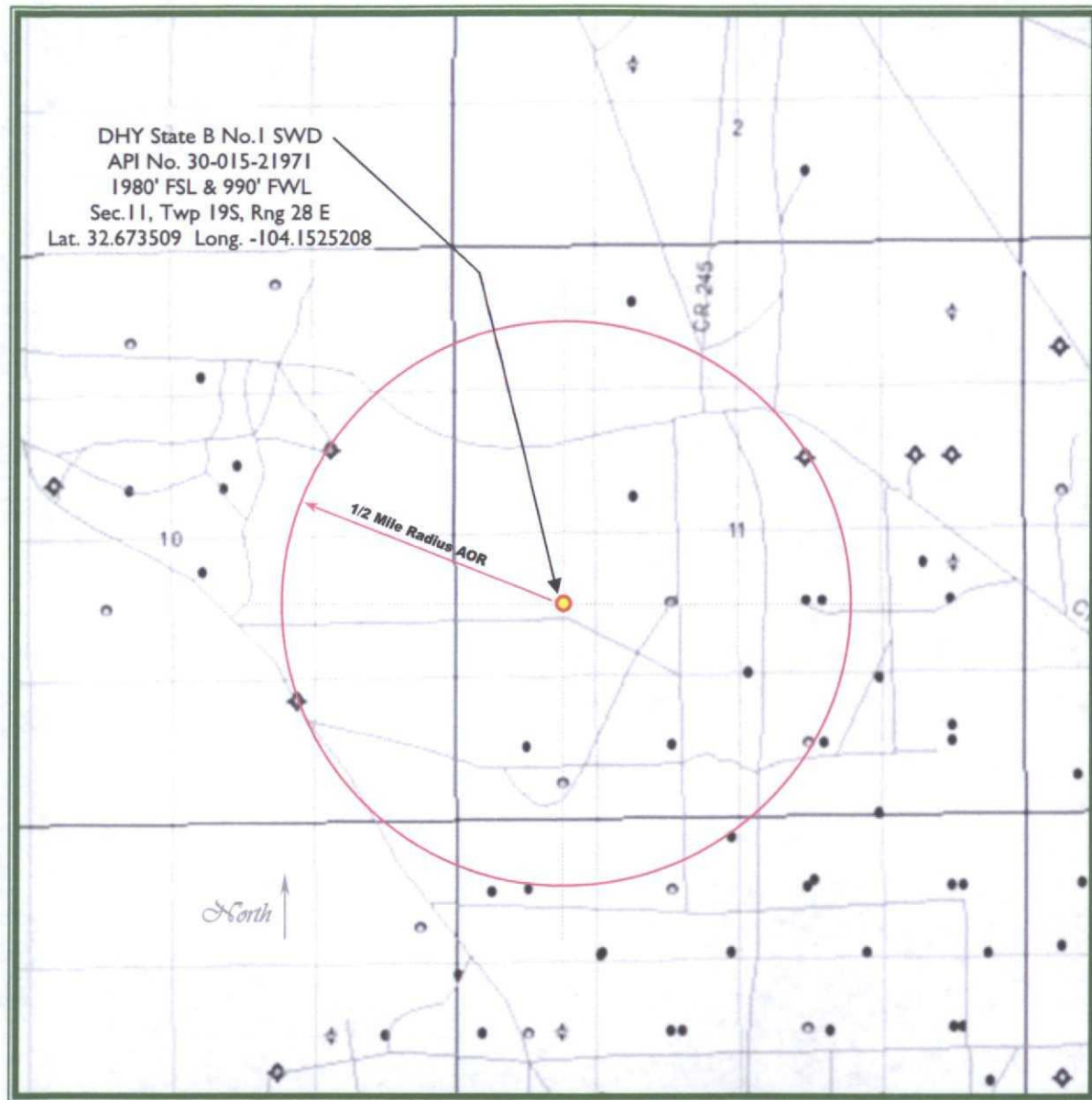
Drawn by: Ben Stone Rvs'd: 9/22/2015

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

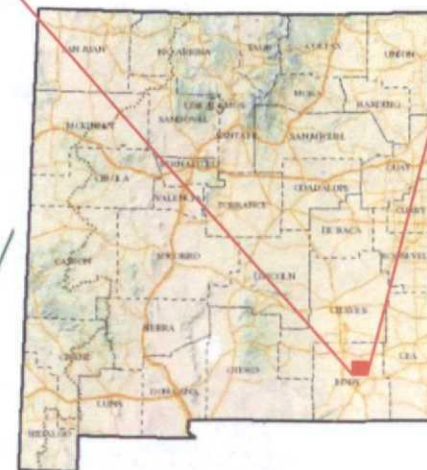
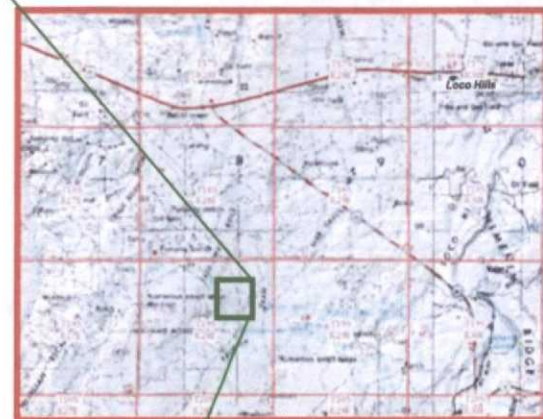


DHY State 'B' No.1 SWD - Area of Review / Overview Map

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



~17.2 miles Southwest
of Loco Hills, NM



Eddy County, New Mexico



RAY WESTALL OPERATING, INC.



Form C-108 Item VI - Tabulation of AOR Wells

Top of Proposed GISCO Interval 9600'

2 Wells Penetrate Proposed Interval.

API	Current Operator	Well Name	Well Number	Type	Lease	Status	ULSTR	Depth	Plugged On
<i>Subject Well</i>									
30-015-21971	[10882] IT PROPERTIES	DHY STATE B	#001	Gas	State	P&A	L-11-19S-28E	11350'	9/22/2008
See CURRENT (P&A) Diagram									

Section 10 Wells

30-015-02675	[214263] PRE-ONGARD WELL OPERATOR	PRE-ONGARD WELL	#075	Oil		P&A	H-10-19S-28E	2238'	9/29/1983
30-015-02206	[214263] PRE-ONGARD WELL OPERATOR	PRE-ONGARD WELL	#069	Oil	State	P&A	O-10-19S-28E	2180'	9/29/1983

Section 11 Wells

30-015-27308	[19958] STEPHENS & JOHNSON OP CO	STATE BN	#007	Oil	State	Active	O-10-19S-28E	2350'	
30-015-33964	[229137] COG OPERATING LLC	STATE 11 COM	#002	Gas	State	Active	A-10-19S-28E	11300'	
Morrow Perfs: 11,040'-11,120'; 13.375" (17.5" hole) @ 485' w/ 500 sx - circ.; 8.625" (12.25" hole) @ 2805' w/ 1100 sx - TOC @ 361'; 5.5" (7.875" hole) @ 11300' w/ 1540 sx - TOC @ 3195'									
30-015-32120	[246289] RKI EXPLORATION & PRODUCTION, LLC	TURKEY TRACK 11 STATE	#001	Oil	State	Active	C-10-19S-28E	8650'	
30-015-02214	[214263] PRE-ONGARD WELL OPERATOR	PRE-ONGARD WELL	#113	Oil	State	P&A	E-10-19S-28E	2940'	7/1/1952
30-015-31771	[246289] RKI EXPLORATION & PRODUCTION, LLC	TURKEY TRACK 11 STATE	#004	Oil	State	Active	F-11-19S-28E	8705'	
30-015-10882	[214263] PRE-ONGARD WELL OPERATOR	PRE-ONGARD WELL	#001	Oil	State	P&A	G-11-19S-28E	2302'	2/13/1969
30-015-10883	[214263] PRE-ONGARD WELL OPERATOR	PRE-ONGARD WELL	#002	Oil	State	P&A	H-11-19S-28E	2254'	2/13/1969
30-015-28712	[19958] STEPHENS & JOHNSON OP CO	MILLMAN 11 STATE	#002	Oil	State	Active	I-11-19S-28E	2927'	
30-015-27916	[229137] COG OPERATING LLC	STATE 11 COM	#001	Gas	State	Active	I-11-19S-28E	11300'	
Morrow Perfs: 10,927'-33'; 13.375" (17.5" hole) @ 435' w/ 450 sx - circ.; 8.625" (11" hole) @ 2700' w/ 1200 sx - TOC @ surf.; 5.5" (7.875" hole) @ 11300' w/ 1505 sx - TOC @ 3334'									
30-015-02212	[19958] STEPHENS & JOHNSON OP CO	STATE BN	#003	Oil	State	Active	I-11-19S-28E	2235'	
30-015-02213	[19958] STEPHENS & JOHNSON OP CO	STATE BN	#004	Oil	State	Active	J-11-19S-28E	2230'	
30-015-29043	[19958] STEPHENS & JOHNSON OP CO	MILLMAN 11 STATE	#003	Oil	State	P&A	J-11-19S-28E	2746'	8/19/2011
30-015-02216	[20451] SDX RESOURCES INC	EAST MILLMAN UNIT	#160	Injection	State	P&A	K-11-19S-28E	2245'	6/30/2000
30-015-10110	[19958] STEPHENS & JOHNSON OP CO	EAST MILLMAN UNIT	#189	Injection	State	Active	M-11-19S-28E	2265'	
30-015-28457	[19958] STEPHENS & JOHNSON OP CO	EAST MILLMAN UNIT	#301	Oil	State	Active	M-11-19S-28E	6630'	
30-015-02215	[19958] STEPHENS & JOHNSON OP CO	EAST MILLMAN UNIT	#155	Oil	State	Active	N-11-19S-28E	2260'	
30-015-02211	[19958] STEPHENS & JOHNSON OP CO	STATE BN	#002	Injection	State	Active	O-11-19S-28E	2225'	
30-015-27307	[19958] STEPHENS & JOHNSON OP CO	STATE BN	#005	Oil	State	P&A	O-11-19S-28E	2350'	8/18/2011
30-015-29044	[19958] STEPHENS & JOHNSON OP CO	MILLMAN 11 STATE	#004	Oil	State	Active	O-11-19S-28E	2700'	
30-015-27309	[20451] SDX RESOURCES INC	STATE BN	#006	Oil	State	P&A	O-11-19S-28E	2350'	3/21/2001
30-015-29045	[19958] STEPHENS & JOHNSON OP CO	MILLMAN 11 STATE	#005	Oil	State	Active	P-11-19S-28E	2700'	

(continued on next page)



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

Top of Proposed @ SCO Interval 9600'

2 Wells Penetrate Proposed Interval.

30-015-02210	[19958] STEPHENS & JOHNSON OP CO	STATE BN	#001	Oil	State	Active	P-11-19S-28E	2246'
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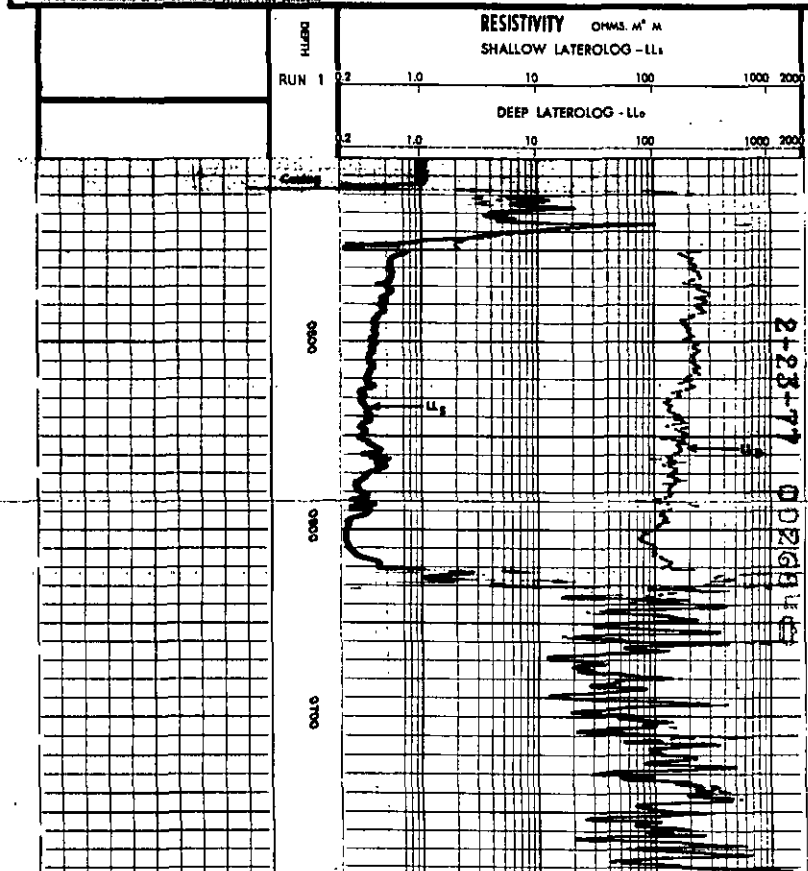
Section 14 Wells

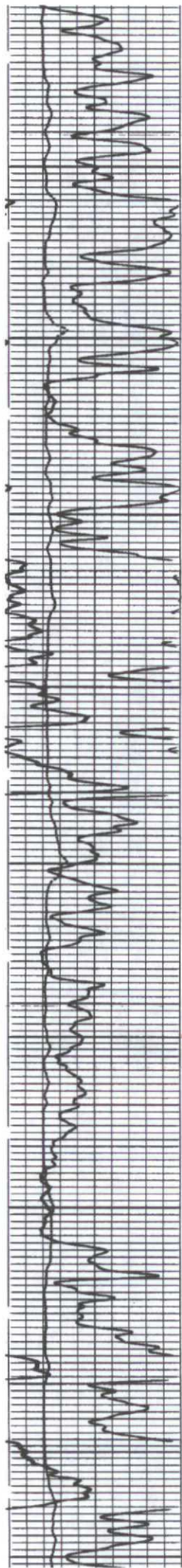
30-015-02252	[19958] STEPHENS & JOHNSON OP CO	EAST MILLMAN UNIT	#153	Injection	State	Active	C-14-19S-28E	2296'
30-015-34762	[19958] STEPHENS & JOHNSON OP CO	EAST MILLMAN UNIT	#229	Oil	State	Active	C-14-19S-28E	3000'
30-015-34763	[19958] STEPHENS & JOHNSON OP CO	EAST MILLMAN UNIT	#230	Oil	State	Active	C-14-19S-28E	3000'
30-015-34849	[19958] STEPHENS & JOHNSON OP CO	EAST MILLMAN UNIT	#729	Oil	State	Active	C-14-19S-28E	1340'
30-015-34859	[19958] STEPHENS & JOHNSON OP CO	EAST MILLMAN UNIT	#231	Oil	State	Active	C-14-19S-28E	3024'
								11759'
30-015-42543	[873] APACHE CORP	PALMILLO 14 STATE	#004H	Oil	State	Active	D-14-19S-28E	TVD
HZNTL Bone Spring Lateral ~7500'; 13.375" (17.5" hole) @ 437' w/ 486 sx - circ.; 9.625" (12.25" hole) @ 3000' w/ 1021 sx - TOC @ 11'; 5.5" (7.875" hole) @ 11759' w/ 2075 sx - TOC @ 776'								
30-015-02253	[19958] STEPHENS & JOHNSON OP CO	EAST MILLMAN UNIT	#159	Oil	State	Active	D-14-19S-28E	2265'

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

FORM 100-1				The well zone, location and borehole reference data were furnished by the customer.			
WELL NO.		ONE	TWO	SCALE CHANGES			
Service Order No.		2684	2875	Type Log	Depth	Scale Up Hole	Scale Down
Fluid Level		FULL	FULL				
Casing, P.W. CL		132000	137000				
EQUIPMENT DATA							
Panel (GUP)		939	862				
Panel (SAP)		970	1709				
Cartridge (DLC)		975					
Cartridge (SRE)							
Sonde (DLB)		909					
Sonde (SRE)			736				
Lower Electrode (DLE)		940		REMARKS			
Memorizer Panel		972	919				
Type Recorder (TTR)		1808	1809				
Depth Encoder (DRE)		953	953				
Pressure Wheel (CPW)		1253					
Controls:		Type	CME-H	CME-Z, Ryo CAL.			
Enter Keying		(No.)	2	1 EACH			
Speed, in./min. or None		1/8, 0, inches					
CALIBRATION DATA							
GR		REG. CPB	65				
		Source CPB	540				
LOGGING DATA							
GR		Sensitivity	0-100				
		Scale - 100 Div.	100 API				
		T. C. - sec	1				
Speed RPM			45				
BOTTOM HOLE TEMPERATURE							
Time Entering Hole							
Time Bottom Reached							
Time Last OH Bottom							
Time Out of Hole							
Distance TD to Therm.							
Thermometer #1		"F	"F	"F	"F		
Thermometer #2		"F	"F	"F	"F		
Thermometer #3		"F	"F	"F	"F		
RW FROM DRILL STEM TEST							
DET #1 - RW @ 100 "		DM	DM	DM	DM		
DET #2 - RW @ 100 "		DM	DM	DM	DM		

All interpretations are opinions based on information from electrical or other measurements and we cannot, and do not guarantee the accuracy or correctness of any interpretation, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, cost, damages or expenses incurred or sustained by anyone resulting from any interpretation made by any of our officers, agents or employees. These interpretations are also subject to Clause 4 of our General Terms and Conditions as set out in our current Form 100-1.



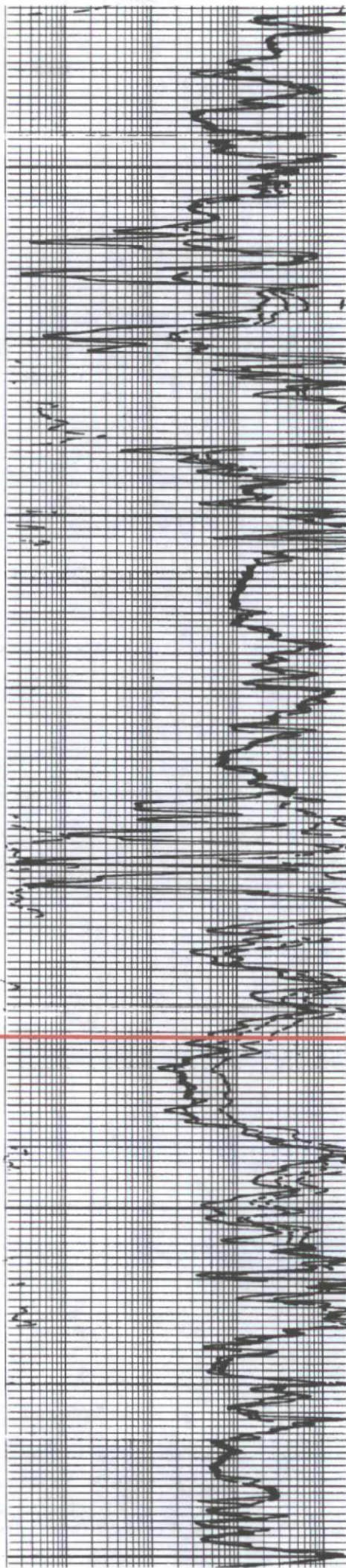


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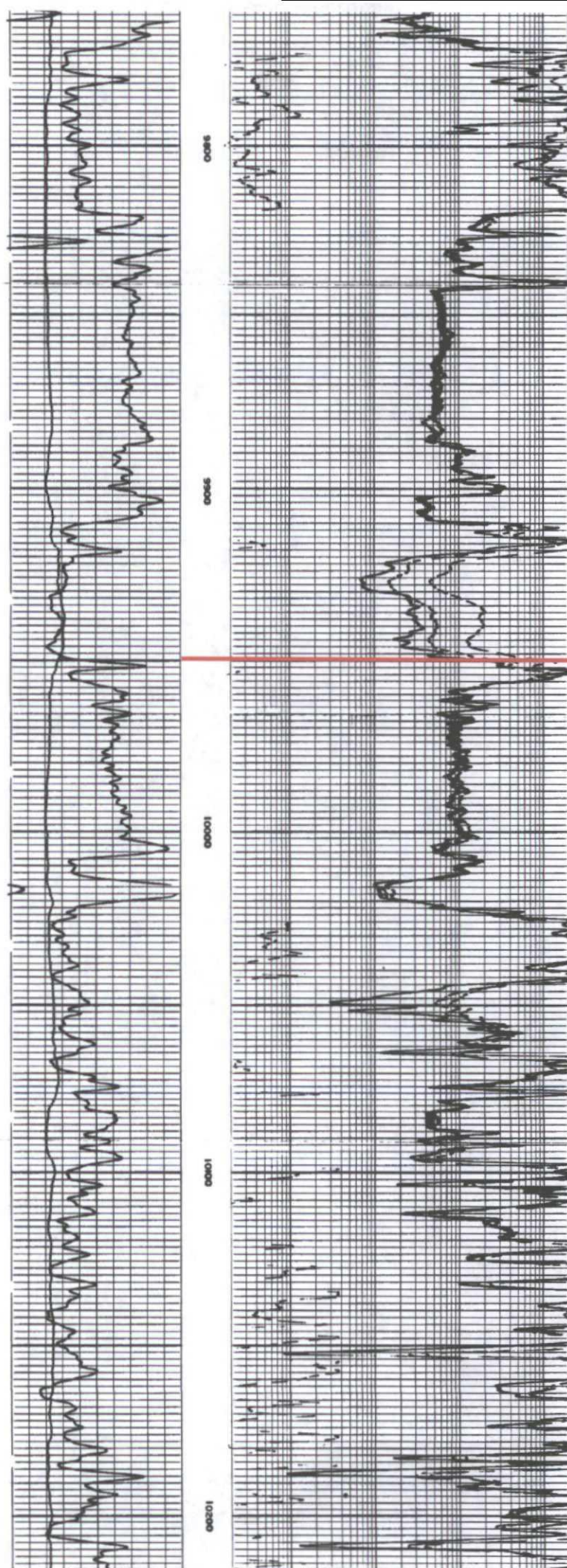
8050

8060

8070



TOP OF PROPOSED
INTERVAL @ 9600'



BOTTOM OF PROPOSED
INTERVAL @ 9950'

C-108 - Item VII.5

Water Analysis - Disposal Zone



Water Analysis

Date: 2/24/2005

2401 Sireley, Artesia NM 88210

Phone (505) 746-3160 Fax (505) 746-2293

Analyzed For

Company	Well Name	County	State
Westall	State G#1	Eddy	New Mexico

Sample Source

Sample

1

Formation

Canyon

Depth

Specific Gravity

1.050

SG @ 60 °F

1.051

pH

6.30

Sulfides

Not Tested

Temperature (°F)

65

Reducing Agents

Not Tested

Cations

Sodium (Calc)

in Mg/L

9,318

in PPM

9,056

Calcium

in Mg/L

5,600

in PPM

5,328

Magnesium

in Mg/L

240

in PPM

228

Soluble Iron (FE2)

in Mg/L

300.0

in PPM

285

Anions

Chlorides

in Mg/L

24,000

in PPM

22,835

Sulfates

in Mg/L

2,000

in PPM

1,903

Bicarbonates

in Mg/L

185

in PPM

176

Total Hardness (as CaCO3)

in Mg/L

15,000

in PPM

14,272

Total Dissolved Solids (Calc)

in Mg/L

41,844

in PPM

39,813

Equivalent NaCl Concentration

in Mg/L

38,410

in PPM

36,546

Scaling Tendencies

*Calcium Carbonate Index

1,038,464

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

*Calcium Sulfate (Gyp) Index

11,200,000

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 877-2281

C-108 ITEM VII – PROPOSED OPERATION

The DHY State 'B' 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 San Andres, Delaware and Morrow formation waters - chlorides and TDS are relative compatible with Cisco and Canyon formation waters.)

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

Injection pressure will be 1920 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 VII.4

Water Analysis - Source Water - SAN ANDRES

B J Services Water Analysis

Artesia District Laboratory
(505)-746-3140

Date: 6-Nov-00 Test #:
Company: SDX Resources Well #:
Lease: Chalk Federal #2 County: Eddy
State: N.M. Formation San Andres
Depth: 2900 Source:

pH: 8.51 Temp (F): 88.3
Specific Gravity 1.12

CATIONS	mg/l	meq/l	ppm
Sodium (calc.)	64502	2370.7	48662
Calcium	3208	160.1	2884
Magnesium	1458	120.0	1302
Barium	< 25	—	—
Potassium	< 10	—	—
Iron	3	0.1	2

ANIONS	mg/l	meq/l	ppm
Chloride	93000	2823.4	83038
Sulfate	1071	22.3	957
Carbonate	< 1	—	—
Bicarbonate	678	14.4	784

Total Dissolved Solids(calc.) 154120 137607

Total Hardness as CaCO3 14014 280.0 12513

COMMENTS:

Res = 0.0847 @ 51.1 deg.

SCALE ANALYSIS:

CaCO3 Factor 2817907 Calcium Carbonate Scale Probability → Probabl
CaSO4 Factor 3849500 Calcium Sulfate Scale Probability → Remote

SEW Plot



C-108 - Item VII.4

Water Analysis - Source Water - DELAWARE



Water Analysis

Date: 11-Jan-05

2788 West County Road, Hobbs NM 88240

Phone (505) 392-3336 Fax (505) 392-7307

Analyzed For

Location	Well Name	County	State
Devon	Spud 16 State #1	Lea	New Mexico

Sample Source Sample Sample # 1

Formation Depth

Specific Gravity	1.185	SG @ 60 °F	1.185
pH	9.98	Sulfides	Absent
Temperature (°F)	65	Reducing Agents	

Cations

Sodium (Calc)	In Mg/L	73,985	In PPM	61,860
Calcium	In Mg/L	34,800	In PPM	28,428
Magnesium	In Mg/L	5,040	In PPM	4,214
Soluble Iron (FE2)	In Mg/L	50.0	In PPM	42

Anions

Chlorides	In Mg/L	183,000	In PPM	157,191
Sulfates	In Mg/L	550	In PPM	460
Bicarbonates	In Mg/L	78	In PPM	65
Total Hardness (as CaCO3)	In Mg/L	186,000	In PPM	158,620
Total Dissolved Solids (Calc)	In Mg/L	301,783	In PPM	252,260
Equivalent NaCl Concentration	In Mg/L	294,733	In PPM	212,988

Scaling Tendencies

*Calcium Carbonate Index 2,854,720

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

*Calcium Sulfate (Gyp) Index 18,700,000

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 nwc.040@631

C-108 - Item VII.4

Water Analysis - Source Water - MORROW



HALLIBURTON

CENTRAL OPERATIONS LABORATORY
WATER ANALYSIS REPORT
HOBBS, NEW MEXICO

COMPANY Marbach

REPORT WD2-128
DATE June 18, 2002
DISTRICT Hobbs

SUBMITTED BY Jim Treia

WELL Ruger St. #1 DEPTH _____ FORMATION _____
COUNTY _____ FIELD _____ SOURCE _____

SAMPLE Morrow Prod. Water

Sample Temp.	<u>84</u>	°F	_____	°F	_____	°F	_____	°F
RESISTIVITY	<u>0.13</u>		_____		_____		_____	
SPECIFIC GR.	<u>1.040</u>		_____		_____		_____	
pH	<u>8.93</u>		_____		_____		_____	
CALCIUM	<u>4.500</u>	mg/l	_____	mg/l	_____	mg/l	_____	mg/l
MAGNESIUM	<u>0.300</u>	mg/l	_____	mg/l	_____	mg/l	_____	mg/l
CHLORIDE	<u>34.863</u>	mg/l	_____	mg/l	_____	mg/l	_____	mg/l
SULFATES	<u>8.071</u>	mg/l	_____	mg/l	_____	mg/l	_____	mg/l
BICARBONATES	<u>18</u>	mg/l	_____	mg/l	_____	mg/l	_____	mg/l
SOLUBLE IRON	<u>0</u>	mg/l	_____	mg/l	_____	mg/l	_____	mg/l
Sodium	_____	mg/l	<u>0</u>	mg/l	<u>0</u>	mg/l	<u>0</u>	mg/l
TDS	_____	mg/l	<u>0</u>	mg/l	<u>0</u>	mg/l	<u>0</u>	mg/l
OIL GRAVITY	<u>0</u>	°	<u>0</u>	°	<u>0</u>	°	<u>0</u>	°

REMARKS _____

MP/L = Milligrams per liter
Resistivity measured in: Ohm-cm/25°C

This report is the property of Halliburton Company and neither it nor any part thereof nor a copy thereof is to be published or disclosed without first securing the express written approval of laboratory management. It may, however, be used in the course of regular business operations by any person or persons and employees thereof receiving such report from Halliburton Co.

ANALYST: Mike Armstrong

C-108 - Item VIII

Geological Data

The Cisco Formation (Upper Penn) is a gray micritic (fine grained) fossiliferous limestone with vugular porosity. The reservoirs in this area are usually limited in size with up dip porosity loss due to shelf margin carbonate build up.

The [Pennsylvanian] Canyon formation consists of similarly medium-grained carbonates, primarily dolomite and porous and permeable sandstone interbedded with shale and is generally 150 to 200 feet in thickness.

The combined zones offer good porosity in the proposed injection interval located from 9600 feet to 9950 feet with some very good porosity interspersed throughout the overall interval.

The Cisco is overlain by the Wolfcamp and the Canyon is underlain by the Strawn and Atoka. (See Pool Map and Data exhibit included.)

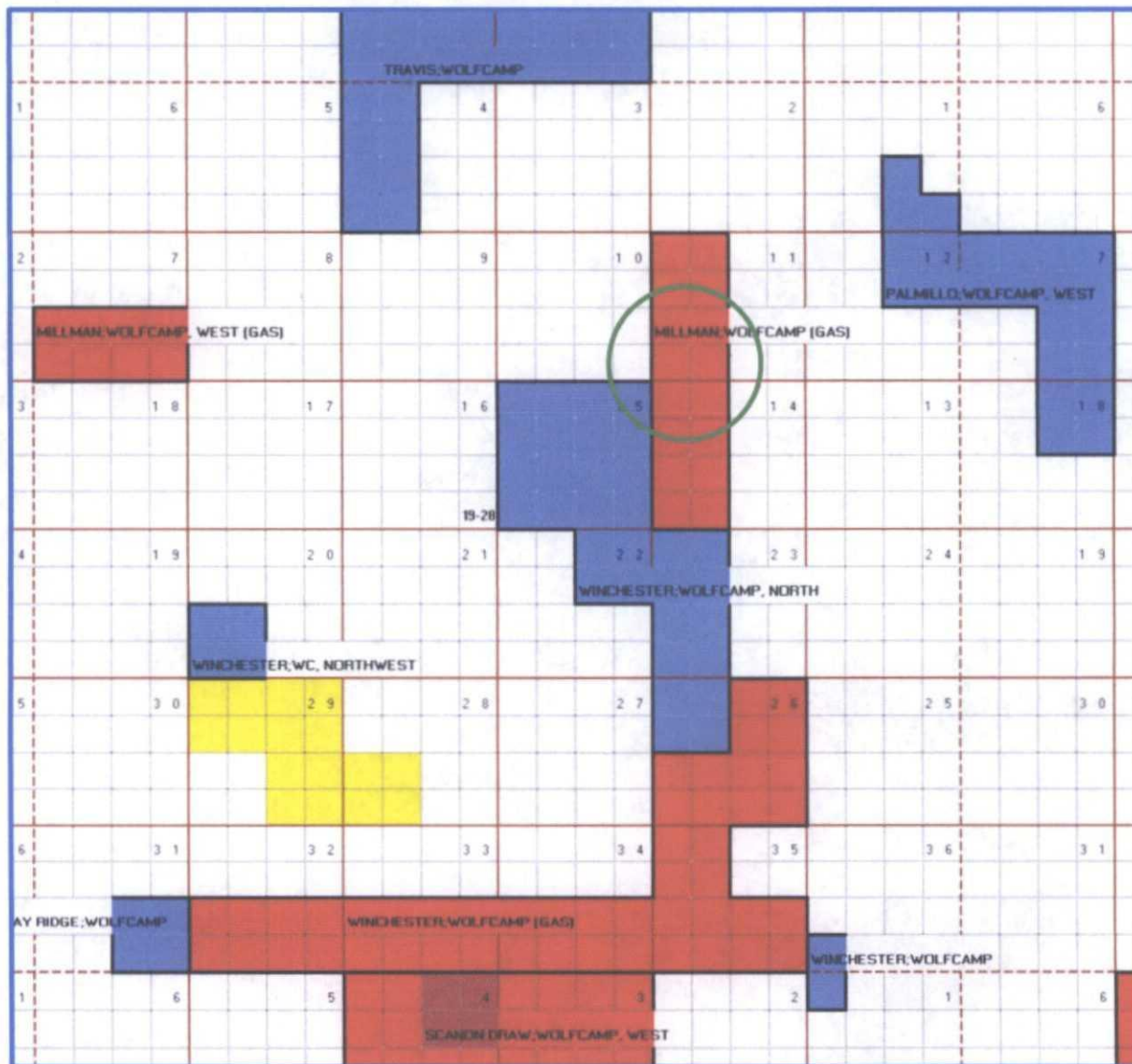
Fresh water in the area is generally available from the Santa Rosa formation (Capitan Basin). Based on State Engineer's records for water wells in Section Twp 19S, Rng 28E, groundwater is found from 75 feet to 265 feet, average depth 143 feet.

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

C-108 – Item VIII – Geologic Data
SUPPLEMENTAL INFORMATION – POOL DATA

WOLFCAMP POOLS IN REGION

(Overlying Disposal Formation)

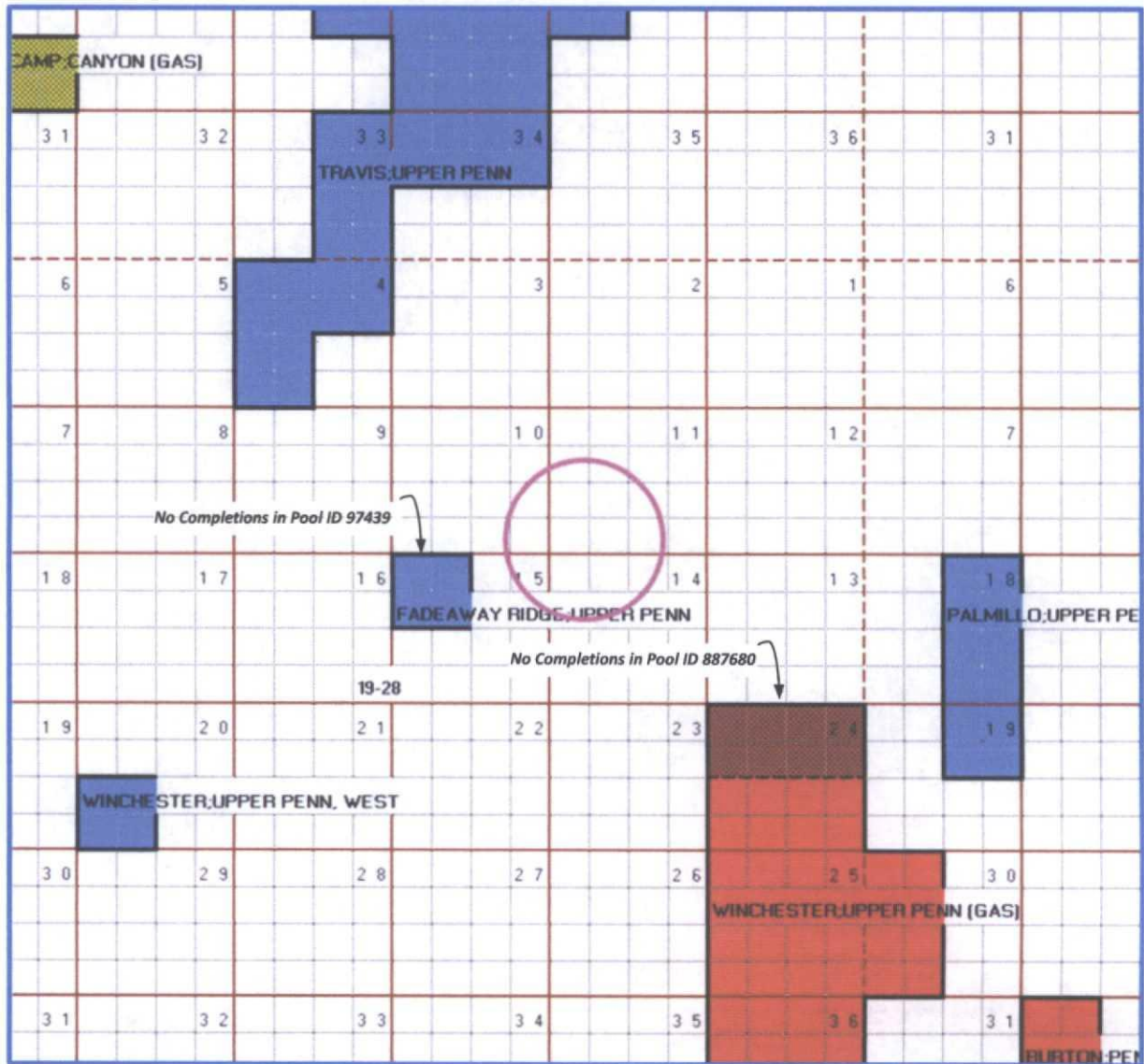


Pool Maps Courtesy of Paul Kautz

C-108 – Item VIII – Geologic Data **SUPPLEMENTAL INFORMATION – POOL DATA**

UPPER PENN / CISCO / CANYON POOLS IN REGION

(Cisco & Canyon Disposal Formations)



Pool Maps Courtesy of Paul Kautz

C-108 ITEM XI – WATER WELLS IN AOR

A search of the State Engineer's database indicates one water well located in any section surrounding the subject section. This well is NOT within one mile of the proposed salt water disposal well. The location is spotted on the 2-Mile AOR map.



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

(acre ft per annum)		(R=POD has been replaced and no longer serves this file, C=the file is closed)		(quarters are 1=NW 2=NE 3=SW 4=SE)		(quarters are smallest to largest) (NAD83 UTM in meters)			
WR File Nbr	Sub basin Use Diversion Owner	County	POD Number	Code	Grant	Source	Q Q Q	Sec	Tws Rng
CP 00918	PRO 9 ST MARY LAND AND EXPL.	ED	CP 00918			Shallow	2 1 2 13	19S	28E
									X Y
									581837 3614736

Record Count: 1

PLSS Search:

Section(s): 13, 14, 15, 22, 23, 24, 25, 26, 27

Sorted by: File Number

The nearest water wells in Twp 19-S, Rng 28-E were used for the average depth to groundwater; shown to be 143 feet.



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	Sub-Code	basin	County	Q Q Q	Sec	Tws	Rng	Depth Well	Depth Water Column
CP 00361	ED	3 1 3 09	19S	28E	576094	3615246		365	265
CP 00502	ED	1 1 18	19S	28E	573001	3614478		100	91
CP 00836	ED	1 1 18	19S	28E	573001	3614478		110	
CP 00837	ED	1 1 18	19S	28E	573001	3614478		110	
CP 00838	ED	1 1 18	19S	28E	573001	3614478		110	
CP 01231 POD1	ED	4 4 2 36	19S	28E	582311	3609372		300	75

Average Depth to Water: 143 feet

Minimum Depth: 75 feet

Maximum Depth: 265 feet

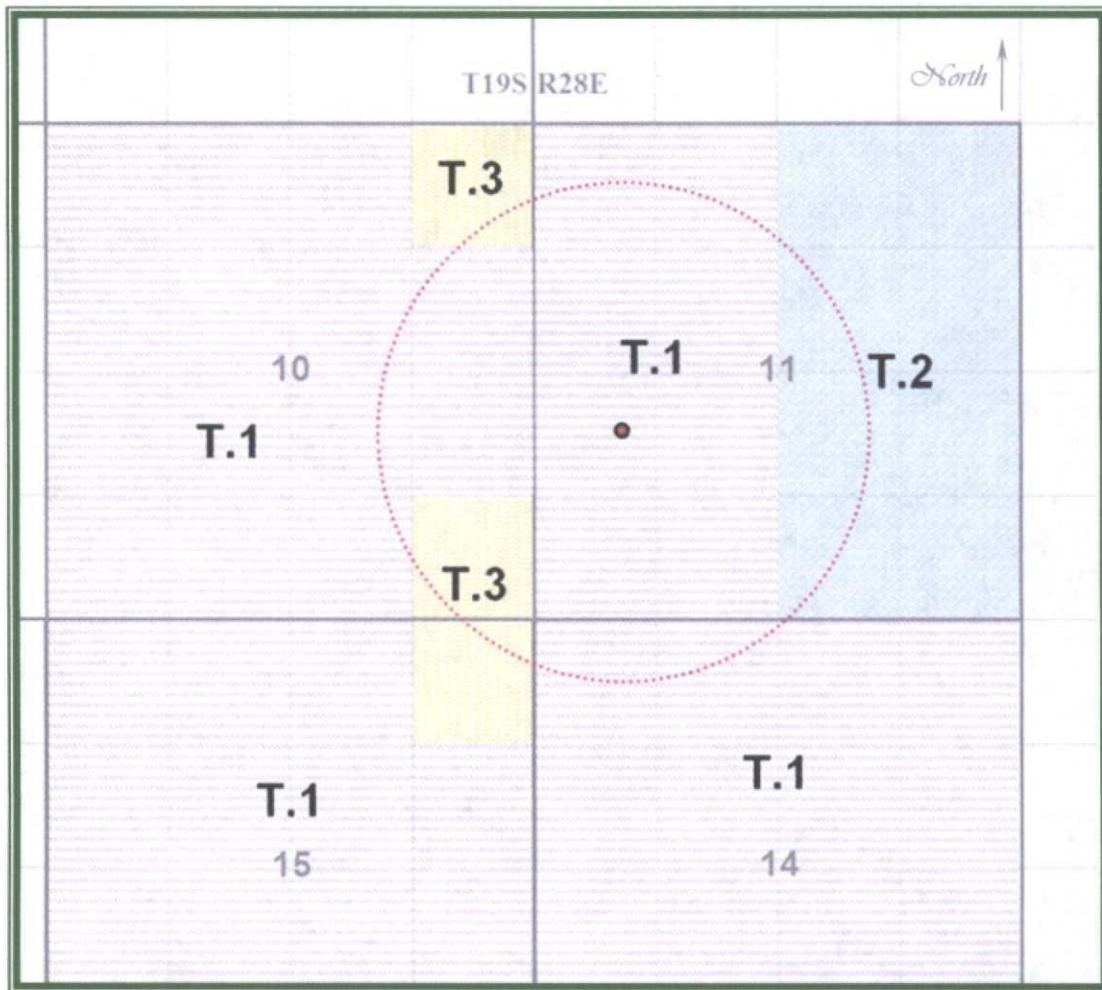
Record Count: 6

PLSS Search:

Township: 19S Range: 28E

DHY State 'B' SWD No.1 - Leasehold Plat

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



RAY WESTALL OPERATING, INC.

LEGEND

T.1 – X0-0648-0131 – Marathon Oil Company

X0-0648-0151 - Khody Land and Minerals Company

T.2 – OG-0272-0004 – COG Operating, LLC

T.3 – E0-5003-0004 – Khody Land and Minerals Company

**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)

State Lease X0-0648-0131

Lessee/Operator

- 1 MARATHON OIL COMPANY
P.O. Box 22164
Tulsa, OK 74121-2164

Operators

- 2 STEPHENS & JOHNSON OPERATING CO.
P.O. Box 2249
Wichita Falls, TX 76307
- 3 RKI EXPLORATION & PRODUCTION, LLC
210 Park Avenue, Ste.900
OKC, OK 73102

State Leases X0-0648-0151; E0-5003-0004

Lessee

- 4 KHODY LAND AND MINERALS COMPANY
210 Park Avenue, Ste., 900
Oklahoma City, OK 73102

Operators

- STEPHENS & JOHNSON OPERATING CO.
P.O. Box 2249
Wichita Falls, TX 76307
- 5 APACHE CORPORATION
303 Veterans Airpark Lane, Ste.3000
Midland, TX 79705

State Lease OG-0272-0004

Lessee/Operator

- 6 COG OPERATING, LLC
Attn: Jim Bob Burnett
2208 W. Main St.
Artesia, NM 88210

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

State Lease OG-0272-0004 (cont.)

Operators

STEPHENS & JOHNSON OPERATING CO.
P.O. Box 2249
Wichita Falls, TX 76307

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



August 5, 2015

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 convert for salt water disposal the DHY State 'B' No.1. The proposed commercial operation will be for produced water disposal from area operators. As indicated in the notice below, the well is located in Section 11, Township 19 South, Range 28 East in Eddy County, New Mexico.

The published notice states that the interval will be from 9600 feet to 9950 feet.

Following is the notice published in the Artesia Daily Press, Artesia, New Mexico on or about June 26, 2015

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 permit for salt water disposal in its DHY State 'B' No.1. The well, API No.30-015-21971 is located 1980 FSL & 990 FWL in Section 11, Township 19 South, Range 28 East in Eddy County, New Mexico. Produced water from area production will be commercially disposed into the Cisco and Canyon formations through selected perforated intervals between a maximum applied for top of 9600 feet to maximum depth of 9950 feet and based on further log analysis. Maximum injection pressure will be 1920 psi with a maximum rate limited only by such pressure.

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

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

You are entitled to a full copy of the application. A full copy in PDF format on a mini-CD will be arriving within a few days of this notice. If you do not receive it, please call or email SOS Consulting, LLC at 903-488-9850, info@sosconsulting.us, and a copy will be expedited to you and may also be sent via email if preferred.

Thank you for your attention in this matter.

Best regards,

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

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

Cc: Application File

C-108 - Item XIV

Proof of Notice (Certified Mail Receipts)

7015 0640 0007 9482 5431
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Total Postage and Fees	\$ 6.74
Sent To	
Street and Apt.	MARATHON OIL COMPANY
City, State, Zip	P.O. Box 2069 Houston, TX 77252-2069
PS Form 3800	
For delivery information, visit our website at www.usps.com	
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Extra Services & Fees (check box, add fee as appropriate)	
<input type="checkbox"/> Return Receipt (hardcopy)	\$
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<input type="checkbox"/> Adult Signature Required	\$
<input type="checkbox"/> Adult Signature Restricted Delivery	\$
Postage	
Total Postage and Fees	\$ 6.74
Sent To	
Street and	RKI E & P, LLC
City, State,	210 Park Avenue, Ste.900 OKC, OK 73102
PS Form 3800	
For delivery information, visit our website at www.usps.com	
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<input type="checkbox"/> Adult Signature Restricted Delivery	\$
Postage	
Total Postage and Fees	\$ 6.74
Sent To	
Street and	APACHE CORPORATION
City, State,	303 Veterans Airpark Lane, Ste.3000 Midland, TX 79705
PS Form 3800	

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<input type="checkbox"/> Adult Signature Restricted Delivery	\$
Postage	
Total Postage and Fees	\$ 6.74
Sent To	
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City, State,	P.O. Box 2249 Wichita Falls, TX 76307
PS Form 3800	
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<input type="checkbox"/> Return Receipt (electronic)	\$
<input type="checkbox"/> Certified Mail Restricted Delivery	\$
<input type="checkbox"/> Adult Signature Required	\$
<input type="checkbox"/> Adult Signature Restricted Delivery	\$
Postage	
Total Postage and Fees	\$ 6.74
Sent To	
Street and	KHODY LAND & MINERALS CO.
City, State,	210 Park Avenue, Ste.900 OKC, OK 73102
PS Form 3800	
For delivery information, visit our website at www.usps.com	
OFFICIAL USE	
Certified Mail Fee	
Extra Services & Fees (check box, add fee as appropriate)	
<input type="checkbox"/> Return Receipt (hardcopy)	\$
<input type="checkbox"/> Return Receipt (electronic)	\$
<input type="checkbox"/> Certified Mail Restricted Delivery	\$
<input type="checkbox"/> Adult Signature Required	\$
<input type="checkbox"/> Adult Signature Restricted Delivery	\$
Postage	
Total Postage and Fees	\$ 6.74
Sent To	
Street and	COG OPERATING, LLC
City, State,	Attn: Jim Bob Burnett 2208 W. Main St. Artesia, NM 88210
PS Form 3800	

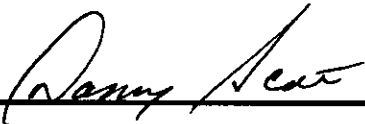
Affidavit of Publication

No. 23549

State of New Mexico

County of Eddy:

Danny Scott



being duly sworn says that she is the

Publisher

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

Legal Notice

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

1 Consecutive weeks/day on the same

day as follows:

First Publication June 26, 2015

Second Publication _____

Third Publication _____

Fourth Publication _____

Fifth Publication _____

Sixth Publication _____

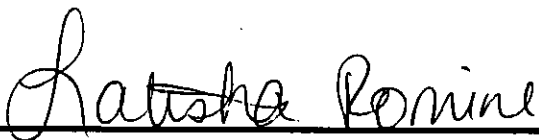
Subscribed and sworn before me this

29th day of June 2015



OFFICIAL SEAL
Latisha Romine
NOTARY PUBLIC-STATE OF NEW MEXICO

My commission expires: 5/12/2019



Latisha Romine

Notary Public, Eddy County, New Mexico

Copy of Publication:

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 permit for salt water disposal in its DHY State 'B' No. 1. The well, API No. 30-015-21971 is located 1980 FSL & 990 FWL in Section 11, Township 19 South, Range 28 East in Eddy County, New Mexico. Produced water from area production will be commercially disposed into the Cisco and Canyon formations through selected perforated intervals between a maximum applied for top of 9600 feet to maximum depth of 9950 feet and based on further log analysis. Maximum injection pressure will be 1920 psi with a maximum rate limited only by such pressure.

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Published in the Artesia Daily Press, Artesia, N.M., June 26, 2015 Legal No. 23549.

ORIGIN ID: TYRA (903) 488-9850
BENJAMIN STONE
SOS CONSULTING, LLC
1950 CR 2331

COMO, TX 75431
UNITED STATES US

SHIP DATE: 10AUG15
ACTWGT: 0.50 LB
CAD: 100120607/INET3670

BILL SENDER

TO: TERRY WARNELL
NM STATE LAND OFFICE - OIL & GAS
310 OLD SANTA FE TRL

SANTA FE NM 87501

(505) 827-5791
INV
PO#

REF: RWO DHY B&F Q SWDS

DEPT:

539 J1FECA31DQ



FedEx
Express



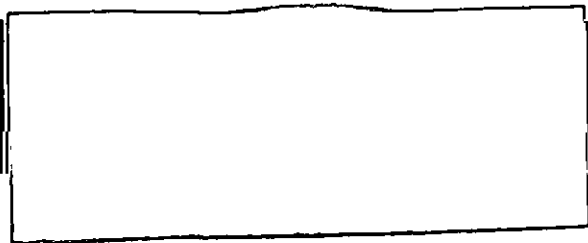
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C-108 Review Checklist: Received _____ Add. Request: _____ Reply Date: _____ Suspended: _____ [Ver 15]

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

Well No. 1 Well Name(s): DHystate B SWD

API: 30-0 15-21971 Spud Date: 2-7-77 New or Old: 0 (UIC Class II Primacy 03/07/1982)

Footages 1980 FSL
940 FSL Lot _____ or Unit L Sec 11 Tsp 19S Rge 28E County Eddy

General Location: 2.15 miles SE of Hwy 1 Pool: 640' Canyon Pool No.: 96186

BLM 100K Map: Antesic Operator: Roy Westell Operating, Inc OGRID: 118305 Contact: Stone

COMPLIANCE RULE 5.9: Total Wells: _____ Inactive: _____ Fincl Assur: _____ Compl. Order? _____ IS 5.9 OK? _____ Date: _____

WELL FILE REVIEWED ☐ Current Status: P&A

WELL DIAGRAMS: NEW: Proposed ☐ or RE-ENTER: Before Conv. ☒ After Conv. ☒ Logs in Imaging: Y (Inductron NO LOG)

Planned Rehab Work to Well: SG 4002 = PERFS 8870-8942' DO PLUGS

Well Construction Details		Sizes (in) Borehole / Pipe	Setting Depths (ft)	Cement Sx or Cf	Cement Top and Determination Method
Planned <input checked="" type="checkbox"/> Existing <input checked="" type="checkbox"/> Surface		17 1/2 / 13 3/8	415	425	Surface / Visal
Planned <input checked="" type="checkbox"/> Existing <input checked="" type="checkbox"/> Interm/Prod		11" / 8 5/8"	2800	35	Surface
Planned _____ or Existing _____ Interm/Prod		7 7/8 / 5"	11349	700	8100 / T.S.
Planned _____ or Existing <input checked="" type="checkbox"/> Prod/Liner		7 7/8	7 7/8 / 175	600	Surface / Visal
Planned _____ or Existing _____ Liner					
Planned _____ or Existing _____ OH / PERF		4600 / 4950			

Injection Lithostratigraphic Units:		Depths (ft)	Injection or Confining Units	Tops	Completion/Operation Details:
Adjacent Unit: Litho. Struc. Por.			PERF	9540	Drilled TD <u>11350</u> PBTD <u>10000</u>
Confining Unit: Litho. Struc. Por.			CN 24125	8150	NEW TD _____ NEW PBTD _____
Proposed Inj Interval TOP:		9660			NEW Open Hole <input type="radio"/> or NEW Perfs <input type="radio"/>
Proposed Inj Interval BOTTOM:		9950			Tubing Size <u>3 1/2</u> in. Inter Coated? <u>Y</u>
Confining Unit: Litho. Struc. Por.					Proposed Packer Depth <u>9585</u> ft
Adjacent Unit: Litho. Struc. Por.					Min. Packer Depth <u>9500</u> (100-ft limit)
					Proposed Max. Surface Press. <u>1920</u> psi
					Admin. Inj. Press. <u>1920</u> (0.2 psi per ft)

AOR: Hydrologic and Geologic Information

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

FRESH WATER: Aquifer 24125 / 19400 Max Depth 265 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) morro, Del Norte Analysis? _____ On Lease ☐ Operator Only ☐ or Commercial ☐

Disposal Int: Inject Rate (Avg/Max BWPD): _____ Protectable Waters? _____ Source: _____ System: Closed ☐ or Open ☐

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

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

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 4-20-05 Mineral Owner NMSL Surface Owner NMSL N. Date Aug 10

RULE 26.7(A): Identified Tracts? Y Affected Persons: RK 7 MARATHON, Stephens 9/9/11 N. Date 8-05

Order Conditions: Issues: _____

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OIL CONSERVATION DIVISION

P. O. BOX 2088

SANTA FE, NEW MEXICO 87501

NOV 22 '88

Form C-103
Revised 10-1-79

O. C. D.
ARTESIA, OFFICE

5a. Indicate Type of Lease

State ☒

For ☐

5. State Oil & Gas Lease No.
648

SUNDRY NOTICES AND REPORTS ON WELLS

(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR.
USE "APPLICATION FOR PERMIT - 1" (FORM C-101) FOR SUCH PROPOSALS.)

1. <input type="checkbox"/> OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER	7. Unit Agreement Name
2. Name of Operator DEKALB Energy Company	8. Farm or Lease Name DHY State "B"
3. Address of Operator 800 Central, Odessa, Texas 79761	9. Well No. 1
4. Location of Well UNIT LETTER <u>L</u> <u>1980</u> FEET FROM THE <u>South</u> LINE AND <u>990</u> FEET FROM <u>West</u> LINE, SECTION <u>11</u> TOWNSHIP <u>19S</u> RANGE <u>28E</u> N.M.P.M.	10. Field and Pool, or Wildcat Millman-Wolfcamp Gas
11. Elevation (Show whether DF, RT, GR, etc.) 3477 GR	12. County Eddy

Check Appropriate Box To Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:

SUBSEQUENT REPORT OF:

PERFORM REMEDIAL WORK <input type="checkbox"/>	PLUG AND ABANDON <input type="checkbox"/>	REMEDIAL WORK <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
TEMPORARILY ABANDON <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>	COMMENCE DRILLING OPS. <input type="checkbox"/>	PLUG AND ABANDONMENT <input type="checkbox"/>
PULL OR ALTER CASING <input type="checkbox"/>	OTHER <input type="checkbox"/>	CASING TEST AND CEMENT JOBS <input checked="" type="checkbox"/>	

17. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work) SEE RULE 1503.

10-23-87: 5 1/2" csg was parted @ 1660'. Pulled 1660' csg out of hole. Backed off csg @ 1975' & pulled. Reran csg w/10 new jts 5 1/2" 17# N-80 on bottom (403.52') @ 1975'. Tested csg @ 800#, Held OK.

10-27-87: Perf @ 3105'.

10-28-87 Sqz perf w/500 sx Hal-lite w/2% CaCl & 1/4# flocel & 3# gel, followed w/100 sx Claas "C" w/2% CaCl. TOC 620'

10-29-87: Ran 1" pipe to tag cmt outside 5 1/2" csg & circulated 100 sx lite w/2% CaCl to sfs.

10-30-87: Drld out cmt in 5 1/2" csg & tested to 1500#. Held OK.

10-31-87: Ran tbg & Baker Lokset pkr set @ 8789'.

18. I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNED R. L. Denney TITLE Chief Production Clerk DATE 11-21-88

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY: