

WATER PRODUCTION & DISPOSAL INFORMATION

FOLLOWING FOR: Letters 1H, API 30-005-63934

1. Name of formations producing water on the lease:
WOLFCAMP
2. Amount of water produced from all formations in barrels per day:
3.2 BWPD
3. Attach a current water analysis of produced water from all zones showing at least the total dissolved solids, ph and the concentrations of chlorides and sulfates.
(One sample will suffice if water is commingled.)
**PRODUCED WATER ANALYSIS DATED 06-22-2010 BY BJ
CHEMICAL ATTACHED**
4. How water is stored on lease.
ABOVE GROUND CLOSED TOP FIBERGLASS TANKS
5. How water is moved to the disposal facility.
TRANSPORTED BY COMMERCIAL TANK-TRUCK VENDOR
6. Identify the Disposal Facility by:
 - A. Facility Operators Name.
Mesquite SWD Inc.
 - B. Name of facility or well name and number
Ann SWD #001, API 30-015-23580
 - C. Type of facility or well (WDW) (WIW) etc.
DISPOSAL WELL (WDW)
 - D. Location by $\frac{1}{4}$ $\frac{1}{4}$
1980 FNL & 1980 FEL, Unit G, Sec 18, T19S, R26E, Eddy Co.
7. Attach a copy of the State issued permit for the Disposal Facility.
COPY OF PERMIT APPROVAL ATTACHED

Submit to this office: **ATTN: Linda Jimenez, Bureau of Land Management, 2909 West 2nd Street, Roswell, NM 88201**, the above required information on a Sundry Notice 3160-5. Submit 1 original and 5 copies within abatement period. (This form may be used as an attachment to the Sundry Notice.) If you need further direction on this matter, feel free to call Linda Jimenez @ (575)-627-0263 (office)

Analytical Laboratory Report for:

**PARALLEL PETROLEUM NM LEASES
ONLY**



BJ Chemical Services
Account Representative:
Richard D Nailon

Production Water Analysis

Listed below please find water analysis report from: Letter Federal, #1

Lab Test No: 2010130394

Sample Date:

06/22/2010

Specific Gravity: 1.038

TDS: 56895

pH: 6.50

Cations:	mg/L	as:
Calcium	2413	(Ca ⁺⁺)
Magnesium	618	(Mg ⁺⁺)
Sodium	18700	(Na ⁺)
Iron	17.00	(Fe ⁺⁺)
Potassium	78.0	(K ⁺)
Barium	0.82	(Ba ⁺⁺)
Strontium	45.00	(Sr ⁺⁺)
Manganese	1.07	(Mn ⁺⁺)
Anions:	mg/L	as:
Bicarbonate	122	(HCO ₃ ⁻)
Sulfate	3400	(SO ₄ ⁼)
Chloride	31500	(Cl ⁻)
Gases:		
Carbon Dioxide	50	(CO ₂)
Hydrogen Sulfide	0	(H ₂ S)

PARALLEL PETROLEUM NM Lab Test No: 2010130394
LEASES ONLY

DownHole SAT™ Scale Prediction
@ 100 deg. F



Chemical Services

Mineral Scale	Saturation Index	Momentary Excess (lbs/1000 bbls)
Calcite (CaCO ₃)	0.50	-0.08
Strontianite (SrCO ₃)	0.02	-6.05
Anhydrite (CaSO ₄)	0.93	-142.18
Gypsum (CaSO ₄ *2H ₂ O)	1.25	437.37
Barite (BaSO ₄)	10.12	1.26
Celestite (SrSO ₄)	0.54	-76.49
Siderite (FeCO ₃)	6.13	0.08
Halite (NaCl)	0.01	-519910.69
Iron sulfide (FeS)	0.00	-0.48

Interpretation of DHSat Results:

The Saturation Index is calculated for each mineral species independently and is a measure of the degree of supersaturation (driving force for precipitation) under the conditions modeled. This value ranges from 0 to infinity with 1.0 representing a condition of equilibrium where scale will neither dissolve nor precipitate. Values less than 1.0 are undersaturated and values greater than 1.0 are supersaturated. The Momentary excess is a measure of how much scale would have to precipitate to bring the system back to a non-scaling condition. This value ranges from negative (dissolving) to positive (precipitating) values. The Momentary Excess represents the amount of scale possible while the Saturation Level represents the probability that scale will form.

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ADMINISTRATIVE ORDER
OF THE OIL CONSERVATION DIVISION

Under the provisions of Rule 701(B), Ralph Nix made application to the New Mexico Oil Conservation Division on June 18, 1982, for permission to complete for salt water disposal its Ann Well No. 1 located in Unit G of Section 18, Township 19 South, Range 26 East, NMPM, Eddy County, New Mexico.

The Division Director finds:

(1) That application has been duly filed under the provisions of Rule 701(B) of the Division Rules and Regulations;

(2) That satisfactory information has been provided that all offset operators and surface owners have been duly notified; and

(3) That the applicant has presented satisfactory evidence that all requirements prescribed in Rule 701 will be met.

(4) That no objections have been received within the waiting period prescribed by said rule.

IT IS THEREFORE ORDERED:

That the applicant herein, Ralph Nix is hereby authorized to complete its Ann Well No. 1, located in Unit G of Section 18, Township 19 South, Range 26 East, NMPM, Eddy County, New Mexico, in such a manner as to permit the injection of salt water for disposal purposes into the Cisco Canyon formation at approximately 7770 feet to approximately 8110 feet through 2 7/8 inch plastic lined tubing set in a packer located at approximately 7750 feet.

IT IS FURTHER ORDERED:

That the operator shall take all steps necessary to ensure that the injected water enters only the proposed injection interval and is not permitted to escape to other formations or onto the surface.

That the casing-tubing annulus shall be loaded with an inert fluid and equipped with a pressure gauge at the surface or left open to the atmosphere to facilitate detection of leakage in the casing, tubing, or packer.

That the injection well or system shall be equipped with a pressure limiting device which will limit the wellhead pressure on the injection well to no more than 1560 psi.

That the Director of the Division may authorize an increase in injection pressure upon a proper showing by the operator of said well that such higher pressure will not result in migration of the injected fluid from the Cisco Canyon formation.

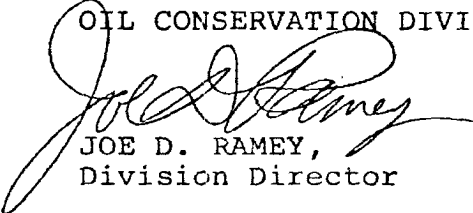
That the operator shall notify the supervisor of the Artesia district office of the Division of the date and time of the installation of disposal equipment so that the same may be inspected.

That the operator shall immediately notify the supervisor of the Division's Artesia district office of the failure of the tubing, casing, or packer, in said well or the leakage of water from or around said well and shall take such steps as may be timely and necessary to correct such failure or leakage.

PROVIDED FURTHER, That jurisdiction of this cause is hereby retained by the Division for such further order or orders as may seem necessary or convenient for the prevention of waste and/or protection of correlative rights; upon failure of applicant to comply with any requirement of this order after notice and hearing, the Division may terminate the authority hereby granted in the interest of conservation. That applicant shall submit monthly reports of the disposal operations in accordance with Rule 706 and 1120 of the Division Rules and Regulations.

Approved at Santa Fe, New Mexico, on this 13th of July, 1982.

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION


JOE D. RAMEY,
Division Director

S E A L

BUREAU OF LAND MANAGEMENT

Roswell Field Office

2909 West Second Street

Roswell, New Mexico 88201

575-627-0272

**Disposal of Produced Water From Federal Wells
Conditions of Approval**

Approval of the produced water disposal methodology is subject to the following conditions of approval:

1. This agency shall be notified of any change in your method or location of disposal.
2. Compliance with all provisions of Onshore Order No. 7.
3. This agency shall be notified of any spill or discharge as required by NTL-3A.
4. This agency reserves the right to modify or rescind approval whenever it determines continued use of the approved method may adversely affect the surface or subsurface environments.
5. Any on-lease open top storage tanks shall be covered with a wire screen to prevent entry by birds and other wildlife.
6. This approval should not constitute the granting of any right-of-way or construction rights not granted by the lease instrument.
7. If water is transported via a pipeline that extends beyond the lease boundary, then you need to submit within 30 days an application for right-of-way approval to the Realty Section in this office for wells in Chaves or Roosevelt County if you have not already done so.