Submit 3 Copies To Appropriate District Office
District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Ave., Artesia, NM 88210
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

HOBBS OCD
MAY 07 2014
RECEIVED

State of New Mexico
Energy, Minerals and Natural Resources

OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-103
May 27, 2004

WELL API NO. 30-025-40162	
5. Indicate Type of Lease STATE ☒ FEE ☐	
6. State Oil & Gas Lease No.	
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" (FORM C-101) FOR SUCH PROPOSALS.) 1. Type of Well: Oil Well ☐ Gas Well ☐ Other ☒ SWD	7. Lease Name or Unit Agreement Name Red Hills West SWD 8. Well Number 1
2. Name of Operator Mewbourne Oil Company	9. OGRID Number 14744
3. Address of Operator PO Box 5270 Hobbs, NM 88240	10. Pool name or Wildcat SWD; Bell Canyon – Cherry Canyon
4. Well Location Unit Letter P : 700 feet from the S line and 690 feet from the E line Section 16 Township 26S Range 32E NMPM Lea County	
	11. Elevation *(Show whether DR, RKB, RT, GR, etc.)* 3166' GL
Pit or Below-grade Tank Application ☐ or Closure ☐ **Pit type** ____ **Depth to Groundwater** ____ **Distance from nearest fresh water well** ____ **Distance from nearest surface water** ____ **Pit Liner Thickness:** ____ **mil** **Below-Grade Tank: Volume** ____ **bbls; Construction Material** ____	

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
PERFORM REMEDIAL WORK ☐	PLUG AND ABANDON ☐	REMEDIAL WORK ☐	ALTERING CASING ☐
TEMPORARILY ABANDON ☐	CHANGE PLANS ☐	COMMENCE DRILLING OPNS. ☐	P AND A ☐
PULL OR ALTER CASING ☐	MULTIPLE COMPL ☐	CASING/CEMENT JOB	
OTHER: SWD plan		OTHER:	

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 1103. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

Please see attached SWD plan.

I hereby certify that the information above is true and complete to the best of my knowledge and belief. **I further certify that any pit or below-grade tank has been/will be constructed or closed according to NMOCD guidelines ☐, a general permit ☐ or an (attached) alternative OCD-approved plan ☐.**

SIGNATURE Kyle Mitchell TITLE Engineer DATE 05/05/14

Type or print name Kyle Mitchell E-mail address: kmitchell@mewbourne.com Telephone No. 575-393-5905

For State Use Only

Accepted for Record Only

APPROVED BY: ____ TITLE ____ DATE ____

Conditions of Approval (if any):

Accepted for Record Only

Accepted for Record Only

MAY 08 2014

New Mexico Energy, Minerals and Natural Resources Department

Susana Martinez
Governor

John H. Bemis
Cabinet Secretary-Designate

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

HOBBS OCD

MAY 07 2014

RECEIVED

Jami Bailey
Division Director
Oil Conservation Division

Administrative Order SWD-1282
June 22, 2011

ADMINISTRATIVE ORDER
OF THE OIL CONSERVATION DIVISION

Under the provisions of 19.15.26.8B NMAC, Mewbourne Oil Company seeks an administrative order to utilize its proposed Red Hills West SWD Well No. 1 (API 30-025-NA) to be located 700 feet from the South line and 690 feet from the East line, Unit Letter P of Section 16, Township 26 South, Range 32 East, NMPM, Lea County, New Mexico, for produced water disposal purposes.

THE DIVISION DIRECTOR FINDS THAT:

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

IT IS THEREFORE ORDERED THAT:

The applicant, Mewbourne Oil Company, is hereby authorized to utilize its proposed Red Hills West SWD Well No. 1 (API 30-025-NA) to be located 700 feet from the South line and 690 feet from the East line, Unit Letter P of Section 16, Township 26 South, Range 32 East, NMPM, Lea County, New Mexico, for disposal of oil field produced water (UIC Class II only) into the Bell Canyon and Cherry Canyon members of the Delaware Mountain Group through perforations from approximately 5100 feet to 6300 feet through lined tubing and a packer set within 100 feet of the permitted disposal interval.

IT IS FURTHER ORDERED THAT:

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

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

The well shall pass an initial mechanical integrity test ("MIT") prior to initially commencing disposal and prior to resuming disposal each time the disposal packer is unseated. All MIT testing procedures and schedules shall follow the requirements in Division Rule 19.15.26.11A. NMAC.

The wellhead injection pressure on the well shall be limited to **no more than 1020 psi.** In addition, the disposal well or system shall be equipped with a pressure limiting device in workable condition which shall, at all times, limit surface tubing pressure to the maximum allowable pressure for this well.

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

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

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

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

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

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

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

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

JAMI BAILEY
Director

JB/wvjj

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

WATER PRODUCTION & DISPOSAL INFORMATION

Red Hills West 22 CN Fed Com #1H

In order to process your disposal request, the following information must be completed:

1. Name of formations producing water on the lease. Avalon Shale

2. Amount of water produced from all formations in barrels per day. 200

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.)

4. How water is stored on lease. 2- 500 bbl fiberglass tanks

5. How water is moved to the disposal facility. pipelined

6. Identify the Disposal Facility by:
   A. Facility Operators name. Mewbourne Oil Company
   B. Name of facility or well name and number. Red Hills West SWD #1
   C. Type of facility or well (WDW) (WIW) etc. WDW
   D. Location by ¼ ¼ SESE Section 16 Township 26S Range 32E

7. Attach a copy of the State issued permit for the Disposal Facility.

Submit to this office, **620 EAST GREENE ST, CARLSBAD NM, 88220,** the above required information on a Sundry Notice 3160-5. Submit 1 original and 3 copies, within abatement period. (This form may be used as an attachment to the Sundry Notice.)

BAKER HUGHES

Water Analysis

Date: 15-Oct-13

2708 West County Road, Hobbs NM 88240
Phone (575) 392-5556 Fax (575) 392-7307

Analyzed For

Company	Well Name	County	State
Mewbourne Oil & Gas	Red Hills 22 CN	Lea	New Mexico

Sample Source Swab Sample **Sample #** 1

Formation **Depth**

Specific Gravity	1.100	SG @ 60 °F	1.112
pH	7.32	Sulfides	Absent
Temperature (°F)	70	Reducing Agents	

Cations

Sodium (Calc)	in Mg/L	48,579	in PPM	44,083
Calcium	in Mg/L	3,600	in PPM	3,267
Magnesium	in Mg/L	720	in PPM	653
Soluable Iron (FE2)	in Mg/L	0.2	in PPM	0

Anions

Chlorides	in Mg/L	82,000	in PPM	74,410
Sulfates	in Mg/L	350	in PPM	318
Bicarbonates	in Mg/L	1,337	in PPM	1,213
Total Hardness (as CaCO3)	in Mg/L	12,000	in PPM	10,889
Total Dissolved Solids (Calc)	in Mg/L	136,587	in PPM	123,944
Equivalent NaCl Concentration	in Mg/L	123,390	in PPM	111,969

Scaling Tendencies

*Calcium Carbonate Index 4,813,612

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

*Calcium Sulfate (Gyp) Index 1,260,000

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

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

Remarks rw=.066@70f

Report # 3252

WATER PRODUCTION & DISPOSAL INFORMATION

Red Hills West 22 AP Fed Com #1H

In order to process your disposal request, the following information must be completed:

1. Name of formations producing water on the lease. Avalon Shale

2. Amount of water produced from all formations in barrels per day. 150

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.)

4. How water is stored on lease. 2-500 bbl fiberglass tanks

5. How water is moved to the disposal facility. pipelined

6. Identify the Disposal Facility by:
   A. Facility Operators name. Mewbourne Oil Company
   B. Name of facility or well name and number. Red Hills West SWD #1
   C. Type of facility or well (WDW) (WIW) etc. WDW
   D. Location by ¼ ¼ SESE Section 16 Township 26S Range 32E

7. Attach a copy of the State issued permit for the Disposal Facility.

Submit to this office, **620 EAST GREENE ST, CARLSBAD NM, 88220,** the above required information on a Sundry Notice 3160-5. Submit 1 original and 3 copies, within abatement period. (This form may be used as an attachment to the Sundry Notice.)

BAKER HUGHES

Water Analysis

Date: 15-Oct-13

2708 West County Road, Hobbs NM 88240
Phone (575) 392-5556 Fax (575) 392-7307

Analyzed For

Company	Well Name	County	State
Mewbourne Oil & Gas	Red Hills 22 AP	Lea	New Mexico

Sample Source Swab Sample **Sample #** 1

Formation **Depth**

Specific Gravity	1.125	SG @ 60 °F	1.127
pH	7.49	Sulfides	Absent
Temperature (°F)	70	Reducing Agents	

Cations

Sodium (Calc)	in Mg/L	56,685	in PPM	50,297
Calcium	in Mg/L	3,600	in PPM	3,194
Magnesium	in Mg/L	480	in PPM	426
Soluable Iron (FE2)	in Mg/L	0.2	in PPM	0

Anions

Chlorides	in Mg/L	94,000	in PPM	83,407
Sulfates	in Mg/L	350	in PPM	311
Bicarbonates	in Mg/L	878	in PPM	779
Total Hardness (as CaCO3)	in Mg/L	11,000	in PPM	9,760
Total Dissolved Solids (Calc)	in Mg/L	155,994	in PPM	138,415
Equivalent NaCl Concentration	in Mg/L	137,957	in PPM	122,411

Scaling Tendencies

*Calcium Carbonate Index 3,162,240

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

*Calcium Sulfate (Gyp) Index 1,260,000

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

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

Remarks rw=.058@70f

Report # 3253

WATER PRODUCTION & DISPOSAL INFORMATION

Red Hills West 21 DM Fed Com #1H

In order to process your disposal request, the following information must be completed:

1. Name of formations producing water on the lease. Avalon Shale

2. Amount of water produced from all formations in barrels per day. 200

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.)

4. How water is stored on lease. 2-500 bbl fiberglass tanks

5. How water is moved to the disposal facility. pipelined

6. Identify the Disposal Facility by:
   A. Facility Operators name. Newbourne Oil Company
   B. Name of facility or well name and number. Red Hills West SWD #1
   C. Type of facility or well (WDW) (WIW) etc. WDW
   D. Location by ¼ ¼ SESE Section 16 Township 26S Range 32E

7. Attach a copy of the State issued permit for the Disposal Facility.

Submit to this office, **620 EAST GREENE ST, CARLSBAD NM, 88220**, the above required information on a Sundry Notice 3160-5. Submit 1 original and 3 copies, within abatement period. (This form may be used as an attachment to the Sundry Notice.)

BJ SERVICES

Water Analysis

Date: 12-Aug-13

2708 West County Road, Hobbs NM 88240
Phone (505) 392-5556 Fax (505) 392-7307

Analyzed For

Company	Well Name	County	State
Mewbourne	Red Hills 21-DM	Lea	New Mexico

Sample Source Swab Sample **Sample #** 1

Formation **Depth**

Specific Gravity	1.125	SG @ 60 °F	1.127
pH	7.34	Sulfides	Absent
Temperature (°F)	70	Reducing Agents	

Cations

Sodium (Calc)	in Mg/L	58,438	in PPM	51,853
Calcium	in Mg/L	2,000	in PPM	1,775
Magnesium	in Mg/L	480	in PPM	426
Soluable Iron (FE2)	in Mg/L	10.0	in PPM	9

Anions

Chlorides	in Mg/L	94,000	in PPM	83,407
Sulfates	in Mg/L	300	in PPM	266
Bicarbonates	in Mg/L	732	in PPM	650
Total Hardness (as CaCO3)	in Mg/L	7,000	in PPM	6,211
Total Dissolved Solids (Calc)	in Mg/L	155,960	in PPM	138,385
Equivalent NaCl Concentration	in Mg/L	138,105	in PPM	122,543

Scaling Tendencies

*Calcium Carbonate Index 1,464,000

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

*Calcium Sulfate (Gyp) Index 600,000

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

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

Remarks rw=.058@70f

Report # 3223

WATER PRODUCTION & DISPOSAL INFORMATION

Red Hills West 21 BO Fed Com #1H

In order to process your disposal request, the following information must be completed:

1. Name of formations producing water on the lease. Avalon Shale

2. Amount of water produced from all formations in barrels per day. 500

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.)

4. How water is stored on lease. 2 - 500 bbl fiberglass tanks

5. How water is moved to the disposal facility. pipelined

6. Identify the Disposal Facility by:
   A. Facility Operators name. Mewbourne Oil Company
   B. Name of facility or well name and number. Red Hills West SWD #1
   C. Type of facility or well (WDW) (WIW) etc. WDW
   D. Location by ¼ ¼ SESE Section 16 Township 26S Range 32E

7. Attach a copy of the State issued permit for the Disposal Facility.

Submit to this office, 620 EAST GREENE ST, CARLSBAD NM, 88220, the above required information on a Sundry Notice 3160-5. Submit 1 original and 3 copies, within abatement period. (This form may be used as an attachment to the Sundry Notice.)

BAKER HUGHES

Water Analysis

Date: 23-Apr-14

2708 West County Road, Hobbs NM 88240
Phone (575) 392-5556 Fax (575) 392-7307

Analyzed For

Company	Well Name	County	State
Mewbourne	RH 21 BO	Lea	New Mexico

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

Formation ***Depth***

Specific Gravity	**1.115**	*SG @ 60 °F*	**1.117**
pH	**6.80**	*Sulfides*	**Absent**
Temperature (°F)	**70**	*Reducing Agents*	

Cations

Sodium (Calc)	*in Mg/L*	**55,241**	*in PPM*	**49,455**
Calcium	*in Mg/L*	**1,000**	*in PPM*	**895**
Magnesium	*in Mg/L*	**144**	*in PPM*	**129**
Soluable Iron (FE2)	*in Mg/L*	**0.4**	*in PPM*	**0**

Anions

Chlorides	*in Mg/L*	**86,000**	*in PPM*	**76,992**
Sulfates	*in Mg/L*	**650**	*in PPM*	**582**
Bicarbonates	*in Mg/L*	**854**	*in PPM*	**765**
Total Hardness (as CaCO3)	*in Mg/L*	**3,100**	*in PPM*	**2,775**
Total Dissolved Solids (Calc)	*in Mg/L*	**143,890**	*in PPM*	**128,818**
Equivalent NaCl Concentration	*in Mg/L*	**128,053**	*in PPM*	**114,640**

Scaling Tendencies

Calcium Carbonate Index* **854,000

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

Calcium Sulfate (Gyp) Index* **650,000

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

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

Remarks **RW=.062@70F**

Report # **3239**

WATER PRODUCTION & DISPOSAL INFORMATION

Red Hills West Unit #004H

In order to process your disposal request, the following information must be completed:

1. Name of formations producing water on the lease. Avalon Shale

2. Amount of water produced from all formations in barrels per day. 150

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.)

4. How water is stored on lease. 4-500 bbl fiberglass tanks

5. How water is moved to the disposal facility. pipe lined

6. Identify the Disposal Facility by:
   A. Facility Operators name. Mewbourne Oil Company
   B. Name of facility or well name and number. Red Hills West SWD #1
   C. Type of facility or well (WDW) (WIW) etc. WDW
   D. Location by ¼ ¼ SESE Section 16 Township 26S Range 32E

7. Attach a copy of the State issued permit for the Disposal Facility.

Submit to this office, 620 EAST GREENE ST, CARLSBAD NM, 88220, the above required information on a Sundry Notice 3160-5. Submit 1 original and 3 copies, within abatement period. (This form may be used as an attachment to the Sundry Notice.)

BJ SERVICES

Water Analysis

Date: 12-Aug-13

2708 West County Road, Hobbs NM 88240
Phone (505) 392-5556 Fax (505) 392-7307

Analyzed For

Company	Well Name	County	State
Mewbourne	Red Hills 004	Lea	New Mexico

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

Specific Gravity	1.125	SG @ 60 °F	1.127
pH	7.45	Sulfides	Absent
Temperature (°F)	70	Reducing Agents	

Cations

Sodium (Calc)	in Mg/L	58,442	in PPM	51,856
Calcium	in Mg/L	2,000	in PPM	1,775
Magnesium	in Mg/L	480	in PPM	426
Soluable Iron (FE2)	in Mg/L	10.0	in PPM	9

Anions

Chlorides	in Mg/L	94,000	in PPM	83,407
Sulfates	in Mg/L	300	in PPM	266
Bicarbonates	in Mg/L	742	in PPM	658
Total Hardness (as CaCO3)	in Mg/L	7,000	in PPM	6,211
Total Dissolved Solids (Calc)	in Mg/L	155,973	in PPM	138,397
Equivalent NaCl Concentration	in Mg/L	138,112	in PPM	122,548

Scaling Tendencies

*Calcium Carbonate Index 1,483,520

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

*Calcium Sulfate (Gyp) Index 600,000

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

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

Remarks rw=.058@70f

Report # 3222

WATER PRODUCTION & DISPOSAL INFORMATION

Red Hills West Unit #005H

In order to process your disposal request, the following information must be completed:

1. Name of formations producing water on the lease. Avalon Shale

2. Amount of water produced from all formations in barrels per day. 150

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.)

4. How water is stored on lease. 4- 500 bbl fiberglass tanks

5. How water is moved to the disposal facility. pipe line

6. Identify the Disposal Facility by:
   A. Facility Operators name. Mewbourne Oil Company
   B. Name of facility or well name and number. Red Hills West SWD #1
   C. Type of facility or well (WDW) (WIW) etc. WDW
   D. Location by ¼ ¼ SESE Section 16 Township 26S Range 32E

7. Attach a copy of the State issued permit for the Disposal Facility.

Submit to this office, **620 EAST GREENE ST, CARLSBAD NM, 88220**, the above required information on a Sundry Notice 3160-5. Submit 1 original and 3 copies, within abatement period. (This form may be used as an attachment to the Sundry Notice.)

BAKER HUGHES

Water Analysis

Date: 23-Apr-14

2708 West County Road, Hobbs NM 88240
Phone (575) 392-5556 Fax (575) 392-7307

Analyzed For

Company	Well Name	County	State
Mewbourne	RH 005	Lea	New Mexico

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

Formation ***Depth***

Specific Gravity	**1.115**	*SG @ 60 °F*	**1.117**
pH	**6.60**	*Sulfides*	**Absent**
Temperature (°F)	**70**	*Reducing Agents*	

Cations

Sodium (Calc)	*in Mg/L*	**55,814**	*in PPM*	**49,968**
Calcium	*in Mg/L*	**1,320**	*in PPM*	**1,182**
Magnesium	*in Mg/L*	**192**	*in PPM*	**172**
Soluable Iron (FE2)	*in Mg/L*	**0.3**	*in PPM*	**0**

Anions

Chlorides	*in Mg/L*	**88,000**	*in PPM*	**78,782**
Sulfates	*in Mg/L*	**650**	*in PPM*	**582**
Bicarbonates	*in Mg/L*	**137**	*in PPM*	**122**
Total Hardness (as CaCO3)	*in Mg/L*	**4,100**	*in PPM*	**3,671**
Total Dissolved Solids (Calc)	*in Mg/L*	**146,113**	*in PPM*	**130,808**
Equivalent NaCl Concentration	*in Mg/L*	**130,540**	*in PPM*	**116,867**

Scaling Tendencies

Calcium Carbonate Index* **180,365

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

Calcium Sulfate (Gyp) Index* **858,000

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

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

Remarks **RW=.061@70F**

Report # **3236**

WATER PRODUCTION & DISPOSAL INFORMATION

Red Hills West Unit #006H

In order to process your disposal request, the following information must be completed:

1. Name of formations producing water on the lease. Avalon Shale

2. Amount of water produced from all formations in barrels per day. 600

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.)

4. How water is stored on lease. 2- 500 bbl fiberglass tanks

5. How water is moved to the disposal facility. pipe lined

6. Identify the Disposal Facility by:
   A. Facility Operators name. Mewbourne Oil Company
   B. Name of facility or well name and number. Red Hills West SWD #1
   C. Type of facility or well (WDW) (WIW) etc. WDW
   D. Location by ¼ ¼ SESE Section 16 Township 26S Range 32E

7. Attach a copy of the State issued permit for the Disposal Facility.

Submit to this office, **620 EAST GREENE ST, CARLSBAD NM, 88220**, the above required information on a Sundry Notice 3160-5. Submit 1 original and 3 copies, within abatement period. (This form may be used as an attachment to the Sundry Notice.)

BAKER HUGHES

Water Analysis

Date: 23-Apr-14

2708 West County Road, Hobbs NM 88240
Phone (575) 392-5556 Fax (575) 392-7307

Analyzed For

Company	Well Name	County	State
Mewbourne	RH 006	Lea	New Mexico

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

Formation ***Depth***

Specific Gravity	**1.115**	*SG @ 60 °F*	**1.117**
pH	**6.78**	*Sulfides*	**Absent**
Temperature (°F)	**70**	*Reducing Agents*	

Cations

Sodium (Calc)	*in Mg/L*	**55,250**	*in PPM*	**49,463**
Calcium	*in Mg/L*	**1,000**	*in PPM*	**895**
Magnesium	*in Mg/L*	**144**	*in PPM*	**129**
Soluable Iron (FE2)	*in Mg/L*	**0.4**	*in PPM*	**0**

Anions

Chlorides	*in Mg/L*	**86,000**	*in PPM*	**76,992**
Sulfates	*in Mg/L*	**650**	*in PPM*	**582**
Bicarbonates	*in Mg/L*	**878**	*in PPM*	**786**
Total Hardness (as CaCO3)	*in Mg/L*	**3,100**	*in PPM*	**2,775**
Total Dissolved Solids (Calc)	*in Mg/L*	**143,923**	*in PPM*	**128,848**
Equivalent NaCl Concentration	*in Mg/L*	**128,067**	*in PPM*	**114,652**

Scaling Tendencies

Calcium Carbonate Index* **878,400

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

Calcium Sulfate (Gyp) Index* **650,000

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

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

Remarks **RW=.062@70F**

Report # **3238**