

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

RECEIVED

JUN 09 2010

FORM APPROVED  
OMB NO. 1004-0137  
Expires July 31, 2010

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.

SUBMIT IN TRIPLICATE - Other instructions on page 2

1. Type of Well  
☐ Oil Well ☒ Gas Well ☐ Other

2. Name of Operator  
EOG Resources Inc.

3a. Address  
P.O. Box 2267 Midland, Texas 79702

3b. Phone No. (include area code)  
432 686 3689

4. Location of Well (Footage, Sec., T, R, M., or Survey Description)  
330' FSL & 330' FEL, U/L P SHL  
579' FSL & 531' FEL, U/L P BHL

5. Lease Serial No.

NM12412

6. If Indian, Allottee or Tribe Name

7. If Unit or CA/Agreement, Name and/or No

8. Well Name and No.

Lusk 23 Federal 2

9. API Well No

30-025-36720

10. Field and Pool, or Exploratory Area

Lusk; Morrow (Gas)

11. County or Parish, State

Lea

NM

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION

☒ Notice of Intent

☐ Subsequent Report

☐ Final Abandonment Notice

TYPE OF ACTION

☐ Acidize

☐ Alter Casing

☐ Casing Repair

☐ Change Plans

☐ Convert to Injection

☐ Deepen

☐ Fracture Treat

☐ New Construction

☐ Plug and Abandon

☐ Plug Back

☐ Production (Start/Resume)

☐ Reclamation

☐ Recomplete

☐ Temporarily Abandon

☒ Water Disposal

☐ Water Shut-Off

☐ Well Integrity

☐ Other

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleat horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleat in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the final site is ready for final inspection.)

Request for approval of method for produced water disposal.

Water disposal information sheet is attached.

SEE ATTACHED FOR  
CONDITIONS OF APPROVAL

14. I hereby certify that the foregoing is true and correct  
Name (Printed/Typed)

Stan Wagner

Title Regulatory Analyst

Signature

Date 5/18/10

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by

Title

Date

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Office

Water Production & Disposal Information

**Lusk 23 Fed #2**

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

1. Name of formations producing water on the lease. Morrow
2. Amount of water produced from all formations in barrel per day. 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 the water is commingled ) Attached
4. How water is stored on the lease. 500 BBL Fiberglass Tank
5. How water is moved to the disposal facility. Truck
6. Identify the Disposal Facility by:
  - A. Facility Operators Name. Marbob Energy Corporation
  - B. Name of facility or well name & number. Sand Tank 32 State Com 2
  - C. Type of facility or well (WDW) (WIW) etc. WDW
  - D. Location: 1650 FSL & 1650 FEL  
1/4 1/4 SWNE Section 32 Township 17S Range 30E

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

Submit 1 original and 5 copies on Sundry Notice 3160-5



## Martin Water Laboratories, Inc.

*Analysts & Consultants since 1953*  
Bacterial & Chemical Analysis

**TO:** Mr. Mike Lamothe  
PO Box 1656  
Monahans, TX 79756

**LABORATORY #:** 110-88  
**SAMPLE RECEIVED:** 1-7-10  
**RESULTS REPORTED:** 1-12-10

**COMPANY:** Monachem, Inc.  
**COUNTY:**  
**FIELD:**  
**LEASE:** EOG - Lusk 23 #2

**SUBJECT:** To determine composition of solids filtered from top phase of sample.

<u>COMPOSITION OF SOLIDS</u>	<u>PERCENT</u>
Iron Oxide, as $Fe_2O_3$	30.31
Calcium Carbonate, as $CaCO_3$	1.36
Calcium Sulfate, as $CaSO_4 \cdot 2H_2O$	4.27
Barium Sulfate, as $BaSO_4$	0.00
Organic (Chloroethene Soluble) — Oil	53.23
Other Organic	9.08
*Other Acid Insoluble	1.75

*\*Microscopic examination indicated this to be small size sand ranging from 25-30 $\mu$ .*

**Remarks:** The undersigned certifies the above to be true and correct to the best of his knowledge and belief.

Greg Ogden, B.S.

(432) 683-4521 \* 709 W. Indiana, Midland, Texas 79701 \* (fax) 682-8819

Remit to Address: P.O. Box 98, Midland, Texas 79702

Visit our Website @: [www.martinwaterlabs.com](http://www.martinwaterlabs.com)

P.O. BOX 98  
MIDLAND, TX. 79702  
PHONE (432) 683-4521

Martin Water Laboratories, Inc.

709 W. INDIANA  
MIDLAND, TEXAS 79701  
FAX (432) 682-8819

RESULT OF WATER ANALYSES

TO: Mr. Mike Lamothe  
PO Box 1656, Monahans, TX 79756

LABORATORY NO. 110-81  
SAMPLE RECEIVED 1-7-10  
RESULTS REPORTED 1-11-10

COMPANY Monachem

LEASE EOG

FIELD OR POOL

SECTION BLOCK SURVEY COUNTY STATE

SOURCE OF SAMPLE AND DATE TAKEN:

NO. 1 Lusk 23 #2.

NO. 2

NO. 3

NO. 4

REMARKS:

CHEMICAL AND PHYSICAL PROPERTIES				
	NO. 1	NO. 2	NO. 3	NO. 4
Specific Gravity at 60° F.	1.0250			
pH When Sampled				
pH When Received	6.70			
Bicarbonate as HCO <sub>3</sub>	598			
Supersaturation as CaCO <sub>3</sub>				
Undersaturation as CaCO <sub>3</sub>				
Total Hardness as CaCO <sub>3</sub>	3,450			
Calcium as Ca	740			
Magnesium as Mg	389			
Sodium and/or Potassium	12,585			
Sulfate as SO <sub>4</sub>	267			
Chloride as Cl	21,306			
Iron as Fe	1222.70			
Barium as Ba	0			
Turbidity, Electric				
Color as Pt				
Total Solids, Calculated	35,885			
Temperature °F.				
Carbon Dioxide, Calculated	197			
Dissolved Oxygen				
Hydrogen Sulfide	0.0			
Resistivity, ohm-cm at 77° F.	0.224			
Stripped Oil				
Fluoride Solids as F <sup>-</sup> XXXXXXXX Corrosiveness	Moderate			
Barium Sulfate Scaling Tendency	None			
CaCO <sub>3</sub> S.I. @ 77° F. (Stiff-Davis)	-0.32			
CaCO <sub>3</sub> S.I. @ 122° F. (Stiff-Davis)	0.30			
Calcium Sulfate Scaling Tendency	None			
Results Reported As Milligrams Per Liter				
Additional Determinations And Remarks				
CaCO <sub>3</sub> S.I. - A positive fig. signifies a scaling potential proportionate to the magnitude of the number, and a negative fig. signifies no scaling potential.				
Please feel free to contact us for any details or discussions concerning these results.				

Form No. 3

By

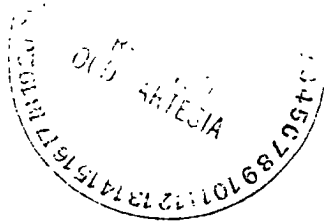
Greg Ogden, B.S.



# NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

**GARY E. JOHNSON**  
Governor  
**Jennifer A. Salisbury**  
Cabinet Secretary

**Lori Wrotenberg**  
Director  
Oil Conservation Division



*AMENDED ADMINISTRATIVE ORDER SWD-684*

***APPLICATION OF MARBOB ENERGY CORPORATION FOR AN AMENDMENT TO  
DIVISION ORDER SWD-684 FOR SALT WATER DISPOSAL, EDDY COUNTY, NEW  
MEXICO.***

## **ADMINISTRATIVE ORDER OF THE OIL CONSERVATION DIVISION**

Under the provisions of Rule 701(B), Marbob Energy Corporation made application to the New Mexico Oil Conservation Division on July 16, 2001, for permission to expand the injection interval in its Sand Tank "32" State Com Well No. 2 located 1650 feet from the South line and 1650 feet from the East line (Unit J) of Section 32, Township 17 South, Range 30 East, NMPM, Eddy County, New Mexico.

### **THE DIVISION DIRECTOR FINDS THAT:**

- (1) The application has been duly filed under the provisions of Rule 701(B) of the Division Rules and Regulations: and
- (2) The applicant has presented satisfactory evidence that all requirements prescribed in Rule 701 will be met.

### **IT IS THEREFORE ORDERED THAT:**

The applicant herein, Marbob Energy Corporation is hereby authorized to complete its Sand Tank "32" State Com Well No. 2 located 1650 feet from the South line and 1650 feet from the East line (Unit J) of Section 32, Township 17 South, Range 30 East, NMPM, Eddy County, New Mexico, in such manner as to permit the injection of salt water for disposal purposes into the Wolfcamp formation at approximately 8,510 feet to 9,100 feet through 2 7/8-inch or 3 1/2-inch plastic-lined tubing set in a packer located at approximately 8,410 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.

Prior to commencing injection operations into the well, the casing shall be pressure tested from the surface to the packer setting depth to assure the integrity of said casing.

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.

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 1702 psi.

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 Wolfcamp formation. Such proper showing shall consist of a valid step-rate test run in accordance with and acceptable to this office.

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 and of the mechanical integrity test so that the same may be inspected and witnessed.

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

The operator shall submit monthly reports of the disposal operations in accordance with Division Rules and Regulations on Form C-115, Operator's Monthly Report.

PROVIDED FURTHER THAT, 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 water or (2) consistent with the requirements in this order, whereupon the Division may, after notice and hearing, terminate the injection authority granted herein.

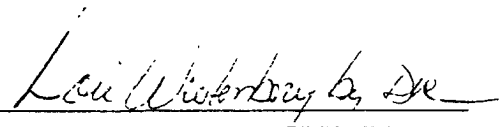
The injection authority granted herein shall terminate on December 1, 2001, if the operator has not commenced injection operations into the subject well, provided however, the

*Amended Administrative Order SWD-684*  
*Marbob Energy Corporation*  
*August 24, 2001*  
*Page 3*

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Division, upon written request by the operator, may grant an extension thereof for good cause shown.

Approved at Santa Fe, New Mexico, on this 24th day of August, 2001.

  
\_\_\_\_\_  
LORI WROTENBERY, Director

LW/DRC

xc: Oil Conservation Division - Artesia /  
State Land Office - Oil & Gas Division

**BUREAU OF LAND MANAGEMENT  
Carlsbad Field Office  
620 East Greene Street  
Carlsbad, New Mexico 88220  
575-234-5972**

**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. All above ground structures on the lease shall be painted Shale Green (5Y 4/2), or as per approved APD stipulations. This is to be done within 90 days, if you have not already done so.
6. Any on-lease open top storage tanks shall be covered with a protective cover to prevent entry by birds and other wildlife.
7. This approval should not constitute the granting of any right-of-way or construction rights not granted by the lease instrument.
8. 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 if you have not already done so.
9. Subject to like approval by NMOCD.

3/25/2010