

BW - 29

**PERMITS,
RENEWALS,
& MODS**

CLOSED



NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

BILL RICHARDSON

Governor

Joanna Prukop

Cabinet Secretary

August 16, 2004

Mark E. Fesmire, P.E.

Director

Oil Conservation Division

CERTIFIED MAIL

RETURN RECEIPT NO. 3929 8430

Mr. Dean Chumbley
Marbob Energy Corporation
P.O. Box 227
Artesia, NM 88211-0227

Re: Marbob Dodd A Brine Well BW-029
SE/4 SW/4 Sec 22-Ts17s-R29e
Eddy County, New Mexico

Dear Mr. Chumbley:

The groundwater discharge plan application, BW-029, for the Marbob Energy Corporation (Marbob) Marbob Dodd A Brine Well located 300 FSL and 1850 FWL in Section 22, Township 17 South, Range 29 East, NMPM, Eddy County, New Mexico, **is hereby approved** under the conditions contained in the enclosed attachment. Enclosed are two copies of the conditions of approval. **Please sign and return one copy to the New Mexico Oil Conservation Division (OCD) Santa Fe Office within 30 working days of receipt of this letter.**

The application consists of the original discharge plan application dated December 10, 1998, supplemental information supplied in letter dated March 31, 1999, site and well plugging bonds and the discharge permit renewal application dated May 21, 2004 submitted pursuant to Section 5101.B.3. of the New Mexico Water Quality Control Commission (WQCC) Regulations also includes all earlier applications and all conditions later placed on those approvals.

The discharge renewal application was submitted pursuant to Section 20.6.2.5101 of the New Mexico Water Quality Control Commission (WQCC) Regulations. The discharge is issued pursuant to Section 5101 and 3109.C. Please note Section 3109.G., which provides for possible future amendment of the permit. Please be advised that approval of this permit does not relieve Marbob Energy Corporation of liability should operations result in pollution of surface or ground waters, or the environment.

Please be advised that all exposed pits, including lined pits and open top tanks (exceeding 16 feet in diameter) shall be screened, netted, or otherwise rendered nonhazardous to wildlife including migratory birds.

Mr. Dean Chumbley
August 16, 2004
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Please note that Section 3104 of the regulations requires that "when a permit has been approved, discharges must be consistent with the terms and conditions of the permit." Pursuant to Section 3107.C., operators are required to notify the Director of any facility expansion, production increase, or process modification that would result in any change in the discharge of water quality or volume.

Pursuant to Section 3109.H.4., this approval is for a period of five years. **This approval will expire May 21, 2009** and an application for renewal should be submitted in ample time before that date. Pursuant to Section 5101.F. of the regulations, if a discharger submits a discharge renewal application at least 120 days before the discharge permit expires and is in compliance with the approved permit, then the existing discharge permit will not expire until the application for renewal has been approved or disapproved.

The \$100.00 filing fee has been received by OCD. The \$1700.00 flat fee shall be submitted upon receipt of this approval. The required flat fee may be paid in a single payment due at the time of approval, or in equal annual installments over the duration of the permit, with the first payment due upon receipt of this approval.

**Please make all checks payable to: Water Quality Management Fund
C/o: Oil Conservation Division
1220 South Saint Francis Drive
Santa Fe, New Mexico 87505.**

If you have any questions, please contact Wayne Price of my staff at (505-476-3487) or E-mail wprice@state.nm.us. On behalf of the staff of the OCD, I wish to thank you and your staff for your cooperation during this discharge plan review.

Sincerely,



Roger C. Anderson
Environmental Bureau Chief
RCA/lwp

Attachment-1

xc: OCD Artesia Office

ATTACHMENT TO THE DISCHARGE Permit BW-029 APPROVAL
Marbob Energy Corporation Marbob Dodd A Brine Well (BW-029)
DISCHARGE PERMIT APPROVAL CONDITIONS
August 16, 2004

1. Payment of Discharge Plan Fees: The \$100.00 filing fee has been received by OCD. The \$1700.00 flat fee shall be submitted upon receipt of this approval. The required flat fee may be paid in a single payment due at the time of approval, or in equal annual installments over the duration of the permit, with the first payment due upon receipt of this approval.
2. Commitments: Marbob Energy Corporation will abide by all commitments submitted in the discharge permit renewal application dated May 21, 2004 and these conditions for approval.
3. Production Method: Fresh water will be injected down the casing and brine shall be recovered up the tubing. Reverse flow will be allowed only once a month for up to 24 hours for clean out.
4. Maximum Injection Pressure: The maximum operating injection and/or test pressure at the well head will be such that the fracture pressure of the injection formation will not be exceeded and will not cause new fractures or propagate existing fractures or cause damage to the system.
5. Mechanical Integrity Testing: Conduct an annual open to formation pressure test by pressuring up the formation with fluids to one and one-half times the normal operating pressure or 300 psig whichever is greater for four hours. However, no operator may exceed surface injection or test pressures that may cause formation fracturing (see item 5 above) or system failures. Systems requiring test pressures less than 300 psig or methods that use testing media other than fluids, i.e. gas, must be approved by OCD prior to testing. Brine supply wells operating with isolation packers will have to pressure test both the cavern formation and casing/tubing annually.

At least once every five years and during well work-overs the cavern formation will be isolated from the casing/tubing annually and the casing pressure tested at 300 psig for 30 minutes. All pressure tests must be witnessed by OCD.

6. Capacity/ Cavity Configuration and Subsidence Survey: The operator shall provide information on the size and extent of the solution cavern and geologic/engineering data demonstrating that continued brine extraction will not cause surface subsidence, collapse or damage to property, or become a threat to public health and the environment. This information shall be supplied in each annual report. OCD may require the operator to perform additional well surveys, test, and install subsidence monitoring in order to demonstrate the integrity of the system. If the operator cannot demonstrate the integrity of the system to the satisfaction of the Division then the operator may be required to shut-down, close the site and properly plug and abandoned the well.
7. Production/Injection Volumes: The volumes of fluids injected (fresh water) and produced (brine) will be recorded monthly and submitted to the OCD Santa Fe Office in an annual report due on the first day of September of each year.
8. Analysis of Injection Fluid and Brine: Provide an analysis of the injection fluid and brine with each annual report. Analysis will be for General Chemistry (method 40 CFR 136.3) using EPA methods.
9. Drum Storage: All drums containing materials other than fresh water must be stored on an impermeable pad with curbing. All empty drums should be stored on their sides with the bungs in place and lined up on a horizontal plane. Chemicals in other containers such as sacks or buckets must also be stored on an impermeable pad with curbing.
10. Process Areas: All process and maintenance areas which show evidence that leaks and spills are reaching the ground surface must be either paved and curbed or have some type of spill collection device incorporated into the design.
11. Above Ground Tanks: All above ground tanks which contain fluids other than fresh water must be bermed to contain a volume of one-third more than the total volume of the largest tank or of all interconnected tanks. All new facilities or modifications to existing facilities must place the tank on an impermeable type pad within the berm.
12. Above Ground Saddle Tanks: Above ground saddle tanks must have impermeable pad and curb type containment unless they contain fresh water or fluids that are gases at atmospheric temperature and pressure.
13. Labeling: All tanks, drums, and other containers should be clearly labeled to identify their contents and other emergency information necessary if the tank were to rupture, spill, or ignite.

14. Below Grade Ponds/Pits/Tanks/Sumps: All below grade tanks, sumps, and pits must be approved by the OCD prior to installation or upon modification and must incorporate secondary containment and leak-detection into the design. All below grade tanks, sumps and pits must be tested annually, except systems that have secondary containment with leak detection. These systems with leak detection shall have a monthly inspection of the leak detection to determine if the primary containment is leaking. Results of tests and inspections shall be maintained at the facility covered by this discharge permit and available for NMOCD inspection. Any system found to be leaking shall be reported pursuant to Item # 19. Permit holders may propose various methods for testing such as pressure testing to 3 pounds per square inch above normal operating pressure and/or visual inspection of cleaned out tanks and/or sumps, or other OCD approved methods. The OCD will be notified at least 72 hours prior to all testing.
15. Underground Process/Wastewater Lines: All underground process/wastewater pipelines must be approved by the OCD prior to installation and must be tested to demonstrate their mechanical integrity every five (5) years. Results of such tests shall be maintained at the facility covered by this discharge plan and available for NMOCD inspection. Permit holders may propose various methods for testing such as pressure testing to 3 pounds per square inch above normal operating pressure or other means acceptable to the OCD. The OCD will be notified at least 72 hours prior to all testing.
16. Class V Wells: No Class V wells that inject non-hazardous industrial wastes or a mixture of industrial wastes and domestic wastes will be approved for construction and/or operation unless it can be demonstrated that groundwater will not be impacted in the reasonably foreseeable future. Leach fields and other wastewater disposal systems at OCD regulated facilities which inject non-hazardous fluid into or above an underground source of drinking water are considered Class V injection wells under the EPA UIC program. Class V wells that inject domestic waste only must be tested by the New Mexico Environment Department.
17. Well Work Over Operations: OCD approval will be obtained from the Director prior to performing remedial work, pressure test or any other Work over. Approval will be requested on OCD Form C-103 "Sundry Notices and Reports on Wells" (OCD Rule 1103.A.) with appropriate copies sent to the OCD Environmental Bureau and District Office.
18. Housekeeping: All systems designed for spill collection/prevention, and leak detection will be inspected daily to ensure proper operation and to prevent overtopping or system failure.
19. Spill Reporting: All spills/releases shall be reported pursuant to OCD Rule 116. and WQCC 1203. to the OCD Artesia District Office.

20. Waste Disposal: All wastes will be disposed of at an OCD approved facility. Only oilfield exempt wastes shall be disposed of down Class II injection wells. Non-exempt oilfield wastes that are non-hazardous may be disposed of at an OCD approved facility upon proper waste determination per 40 CFR Part 261. Any waste stream that is not listed in the discharge will be approved by OCD on a case-by-case basis.

Rule 712 Waste: Pursuant to Rule 712, disposal of certain non-domestic waste is allowed at solid waste facilities permitted by the New Mexico Environment Department as long as the waste stream is identified in the discharge, and existing process knowledge of the waste stream does not change without notification to the Oil Conservation Division.

21. Transfer of Discharge Plan: The OCD will be notified prior to any transfer of ownership, control, or possession of a facility with an approved discharge plan. A written commitment to comply with the terms and conditions of the previously approved discharge plan must be submitted by the purchaser and approved by the OCD prior to transfer.
22. Closure: The OCD will be notified when operations of the facility are discontinued for a period in excess of six months. Prior to closure of the facility a closure plan will be submitted for approval by the Director. Closure and waste disposal will be in accordance with the statutes, rules and regulations in effect at the time of closure.
23. OCD Inspections: Additional requirements may be placed on the facility based upon results from OCD inspections.
24. Storm Water: Stormwater runoff controls shall be maintained. As a result of operations, if any water contaminant that exceeds the WQCC standards listed in 20 NMAC 6.2.3101 is discharged in any stormwater run-off, then immediate actions shall be taken to mitigate the effects of the run-off, notify the OCD within 24 hours, and modify the discharge to include a formal stormwater run-off containment and submit for OCD approval within 15 days.

Mr. Dean Chumbley
August 16, 2004
Page 7

25. Certification: Marbob Energy Corporation by the officer whose signature appears below, accepts this and agrees to comply with all terms and conditions contained herein. Marbob Energy Corporation further acknowledges that these conditions and requirements of this may be changed administratively by the Division for good cause shown as necessary to protect fresh water, human health and the environment.

Marbob Energy Corporation

Print Name: _____

Signature: _____

Title: _____

Date: _____

Price, Wayne

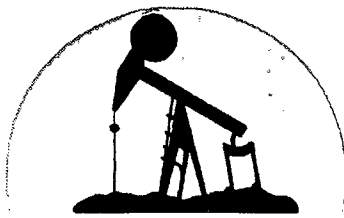
From: Price, Wayne
Sent: Thursday, May 20, 2004 1:49 PM
To: 'Land@marbob.com'
Cc: Stubblefield, Mike
Subject: Brine BW-029

Dear Dean:

The discharge permit for the Marbob "Mary Dodd A Brine Well" BW-029 expires May 21, 2004. Please submit a renewal application with \$100.00 filing fee within 10 days.

Sincerely:

Wayne Price
New Mexico Oil Conservation Division
1220 S. Saint Francis Drive
Santa Fe, NM 87505
505-476-3487
fax: 505-476-3462
E-mail: WPRICE@state.nm.us



marbob
energy corporation

June 16, 1999

LAND@MARBOB.COM

New Mexico Energy, Minerals
& Natural Resources Department
Oil Conservation Division
2040 South Pacheco Street
Santa Fe, New Mexico 87505

Attn: Wayne Price
Environmental Bureau

RE: Mary Dodd A Brine Well BW-029
SE/4SW/4, Section 22-17S-29E
Eddy County, New Mexico

Dear Mr. Price:

Please find a fully executed Conditions of Approval to Discharge Plan BW-029. As instructed, Marbob Energy has retained one copy of the before mentioned conditions for our files.

Also, enclosed please find a Marbob Energy check in the amount of \$1,380.00. This amount covers the flat fee for brine stations required by WQCC Regulation 3114.

Do not hesitate to contact me should you require any additional information. Thank you for your help in this matter.

Sincerely,

DOYLE ^{cell}
DAVIS - 748-5975


Dean Chumbley

DC/mm
Enclosures

MOBILE 748-5988

JUN 14 1999

ATTACHMENT TO THE DISCHARGE PLAN BW-029 APPROVAL
Marbob Energy Corporation
Marbob Dodd A Brine Well
DISCHARGE PLAN APPROVAL CONDITIONS

1. Payment of Discharge Plan Fees: The \$50.00 filing fee has been received by OCD. The \$1,380 flat fee shall be submitted upon receipt of this approval. The required flat fee may be paid in a single payment due at the time of approval, or in equal annual installments over the duration of the plan, with the first payment due upon receipt of this approval.
2. Marbob Commitments: Marbob will abide by all commitments submitted in the discharge plan application dated December 10, 1998.
3. Production Method: Fresh water will be injected down the casing and brine shall be recovered up the tubing. Reverse flow will be allowed only once a month for up to 24 hours for clean out.

Special condition: The fresh water make-up line shall be designed and maintained with an appropriate "Air Break" to prevent back flow of water contaminants from entering into the Double Eagle Waterline, a fresh water public supply line.

4. Maximum Injection Pressure: The maximum operating injection and/or test pressure at the well head will be such that the fracture pressure of the injection formation will not be exceeded. Marbob shall supply and obtain approval for any changes to the approval for the maximum and average injection pressures and injection volumes.
5. Mechanical Integrity Testing: Marbob will conduct an annual open hole pressure test equal to one and one-half times the normal operating pressure or 300 psi, whichever is greater for four hours with ten percent bleed-off allowed. At least once every five years Marbob will conduct a Mechanical Integrity Test where the casing will be isolated from the formation and tested to 300 psi for 30 minutes. Prior to commencement of operations and during well workovers, the OCD requires the casing to be isolated from the formation and tested to 300 psi for 30 minutes. The OCD will be notified at least 72 hours prior to all testing so that an OCD representative may witness the test.
6. Capacity and Cavity Configuration: A test will be conducted to determine the size and configuration of the mined cavity prior to discharge plan renewal (March 31, 2004). The

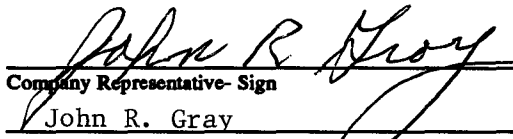
method and time of testing will be approved by the OCD prior to performing the test.

7. **Production/Injection Volumes:** The volumes of fluids injected (fresh water) and produced (brine) will be recorded monthly and submitted to the OCD Santa Fe Office quarterly.
8. **Analysis of Injection Fluid and Brine:** Provide an analysis of the injection fluid and brine with the first quarterly report. Analysis will be for concentrations of Total Dissolved Solids, Sodium, Calcium, Potassium, Magnesium, Bromide, Carbonate/Bicarbonate, Chloride and Sulfate. Include location and method of sampling.
9. **Drum Storage:** All drums containing materials other than fresh water must be stored on an impermeable pad with curbing. All empty drums should be stored on their sides with the bungs in place and lined up on a horizontal plane. Chemicals in other containers such as sacks or buckets must also be stored on an impermeable pad with curbing.
10. **Process Areas:** All process and maintenance areas which show evidence that leaks and spills are reaching the ground surface must be either paved and curbed or have some type of spill collection device incorporated into the design.
11. **Above Ground Tanks:** All above ground tanks which contain fluids other than fresh water must be bermed to contain a volume of one-third more than the total volume of the largest tank or of all interconnected tanks. All new facilities or modifications to existing facilities must place the tank on an impermeable type pad within the berm.
12. **Above Ground Saddle Tanks:** Above ground saddle tanks must have impermeable pad and curb type containment unless they contain fresh water or fluids that are gases at atmospheric temperature and pressure.
13. **Labeling:** All tanks, drums, and other containers should be clearly labeled to identify their contents and other emergency information necessary if the tank were to rupture, spill, or ignite.
14. **Below Grade Tanks/Sumps:** All below grade tanks, sumps, and pits must be approved by the OCD prior to installation or upon modification and must incorporate secondary containment and leak-detection into the design. All pre-existing sumps and below-grade tanks must demonstrate integrity on an annual basis. Integrity tests include pressure testing to 3 pounds per square inch above normal operating pressure and/or visual inspection of cleaned out tanks /or sumps.

Mr. Raye Miller
May 21, 1999
Page 5

15. Underground Process/Wastewater Lines: All underground process/wastewater, and brine transfer pipelines must be tested to demonstrate their mechanical integrity at present and then every 5 years there after. Permittees may propose various methods for testing such as pressure testing to 3 pounds per square inch above normal operating pressure or other means acceptable to the OCD.
16. Well Workover Operations: OCD approval will be obtained from the Director prior to performing remedial work or any other workover. Approval will be requested on OCD Form C-103 "Sundry Notices and Reports on Wells" (OCD Rule 1103.A.) with appropriate copies sent to the OCD Artesia District Office.
17. Housekeeping: All systems designed for spill collection/prevention, and leak detection will be inspected daily to ensure proper operation and to prevent overtopping or system failure.
18. Spill Reporting: All spills/releases shall be reported pursuant to OCD Rule 116. and WQCC 1203. to the OCD Artesia District Office.
19. Transfer of Discharge Plan: The OCD will be notified prior to any transfer of ownership, control, or possession of a facility with an approved discharge plan. A written commitment to comply with the terms and conditions of the previously approved discharge plan must be submitted by the purchaser and approved by the OCD prior to transfer.
20. Closure: The OCD will be notified when operations of the facility are discontinued for a period in excess of six months. Prior to closure of the facility a closure plan will be submitted for approval by the Director. Closure and waste disposal will be in accordance with the statutes, rules and regulations in effect at the time of closure.
21. OCD Inspections: Additional requirements may be placed on the facility based upon results from OCD inspections.

22. Conditions accepted by:

	6/15/99
Company Representative- Sign	Date
John R. Gray	
Company Representative- print name	

Title President

ACKNOWLEDGEMENT OF RECEIPT
OF CHECK/CASH

I hereby acknowledge receipt of check No. [REDACTED] dated 6/15/99,
or cash received on _____ in the amount of \$ 1380.00

from MARBOB ENERGY CORPORATION

for MARY DODD A BRINE WELL

BW-029

Submitted by: WAYNE PRICE *Wayne Price* Date: 7/13/99

Submitted to ASD by: _____ Date: _____

Received in ASD by: _____ Date: _____

Filing Fee _____ New Facility ☒ Renewal _____

Modification _____ Other _____
(specify)

Organization Code 521.07 Applicable FY 99

To be deposited in the Water Quality Management Fund.

Full Payment ☒ or Annual Increment _____



PETROLEUM BUILDING 324 W. MAIN
P.O. BOX 227
ARTESIA, NEW MEXICO 88211-0227
(505) 748-3303

95-43/1122

FIRST NATIONAL BANK
P.O. DRAWER AA
ARTESIA, NM 88210

ONE THOUSAND THREE HUNDRED EIGHTY DOLLARS AND NO CENTS***

PAY TO
THE ORDER
OF

NMED-WATER QUALITY MANAGER
OCD SANTA FE
2040 S. PACHECO ST.
SANTA FE, NM 87505

ATTN: ROGER C. ANDERSON

BW-029

DATE	CHECK AMOUNT
6/15/99	***1,380.00**

MARBOB ENERGY CORPORATION

Wayne Miller

INVOICE DATE	INVOICE NO.	DESCRIPTION	INVOICE TOTAL	ADJUSTMENTS	DISCOUNT	NET AMOUNT
6/15/99		DISCHARGE PLAN APPROVAL FEE MARY DODD A BRINE WELL	1,380.00			1,380.00



MARBOB ENERGY CORPORATION
 PETROLEUM BUILDING 324 W. MAIN
 P.O. BOX 227
 ARTESIA, NEW MEXICO 88211-0227
 (505) 748-3303

BW-029)

PLEASE DETACH BEFORE DEPOSITING. RETAIN TOP PORTION FOR YOUR RECORDS.

RE-SENT
6/16/99
WA

ATTACHMENT TO THE DISCHARGE PLAN BW-029 APPROVAL
Marbob Energy Corporation
Marbob Dodd A Brine Well
DISCHARGE PLAN APPROVAL CONDITIONS

1. **Payment of Discharge Plan Fees:** The \$50.00 filing fee has been received by OCD. The \$1,380 flat fee shall be submitted upon receipt of this approval. The required flat fee may be paid in a single payment due at the time of approval, or in equal annual installments over the duration of the plan, with the first payment due upon receipt of this approval.
2. **Marbob Commitments:** Marbob will abide by all commitments submitted in the discharge plan application dated December 10, 1998.
3. **Production Method:** Fresh water will be injected down the casing and brine shall be recovered up the tubing. Reverse flow will be allowed only once a month for up to 24 hours for clean out.

Special condition: The fresh water make-up line shall be designed and maintained with an appropriate "Air Break" to prevent back flow of water contaminants from entering into the Double Eagle Waterline, a fresh water public supply line.

4. **Maximum Injection Pressure:** The maximum operating injection and/or test pressure at the well head will be such that the fracture pressure of the injection formation will not be exceeded. Marbob shall supply and obtain approval for any changes to the approval for the maximum and average injection pressures and injection volumes.
5. **Mechanical Integrity Testing:** Marbob will conduct an annual open hole pressure test equal to one and one-half times the normal operating pressure or 300 psi, whichever is greater for four hours with ten percent bleed-off allowed. At least once every five years Marbob will conduct a Mechanical Integrity Test where the casing will be isolated from the formation and tested to 300 psi for 30 minutes. Prior to commencement of operations and during well workovers, the OCD requires the casing to be isolated from the formation and tested to 300 psi for 30 minutes. The OCD will be notified at least 72 hours prior to all testing so that an OCD representative may witness the test.
6. **Capacity and Cavity Configuration:** A test will be conducted to determine the size and configuration of the mined cavity prior to discharge plan renewal (March 31, 2004). The

method and time of testing will be approved by the OCD prior to performing the test.

7. **Production/Injection Volumes:** The volumes of fluids injected (fresh water) and produced (brine) will be recorded monthly and submitted to the OCD Santa Fe Office quarterly.
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18. Spill Reporting: All spills/releases shall be reported pursuant to OCD Rule 116. and WQCC 1203. to the OCD Artesia District Office.
19. Transfer of Discharge Plan: The OCD will be notified prior to any transfer of ownership, control, or possession of a facility with an approved discharge plan. A written commitment to comply with the terms and conditions of the previously approved discharge plan must be submitted by the purchaser and approved by the OCD prior to transfer.
20. Closure: The OCD will be notified when operations of the facility are discontinued for a period in excess of six months. Prior to closure of the facility a closure plan will be submitted for approval by the Director. Closure and waste disposal will be in accordance with the statutes, rules and regulations in effect at the time of closure.
21. OCD Inspections: Additional requirements may be placed on the facility based upon results from OCD inspections.
22. Conditions accepted by:

Company Representative- Sign

Date

Company Representative- print name

Title

Submit 4 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

State of New Mexico
Energy, Minerals and Natural Resources

Form C-103
May 27, 2004

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

WELL API NO.
30-015-31998
5. Indicate Type of Lease FEDERAL
~~STATE~~ ~~FEDERAL~~
6. ~~STATE~~ ~~FEDERAL~~
FEDERAL LEASE NO. NMLC028731A

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 ☒ BRINE WELL

2. Name of Operator
MARBOB ENERGY CORPORATION

3. Address of Operator
PO BOX 227, ARTESIA, NM 88211-0227

4. Well Location
Unit Letter N : 300 feet from the SOUTH line and 1850 feet from the WEST line
Section 22 Township 17S Range 29E NMPM County EDDY

11. Elevation (Show whether DR, RKB, RT, GR, etc.)

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:

PERFORM REMEDIAL WORK ☐ PLUG AND ABANDON ☐
TEMPORARILY ABANDON ☐ CHANGE PLANS ☐
PULL OR ALTER CASING ☐ MULTIPLE COMPL ☐

OTHER: ☐

SUBSEQUENT REPORT OF:

REMEDIAL WORK ☐ ALTERING CASING ☐
COMMENCE DRILLING OPNS. ☐ P AND A ☐
CASING/CEMENT JOB ☐

OTHER: CLOSE OUT DISCHARGE PLAN BW-029 ☒

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.

PER YOUR REQUEST, ATTACHED PLEASE FIND PHOTOS OF THE DRYHOLE MARKER LOCATED AT THE ABOVE REFERENCED WELL.

PLEASE CLOSE OUT OUR DISCHARGE PLAN BW-029 PERMIT.

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 Diana J. Briggs TITLE PRODUCTION ANALYST DATE 2/16/06

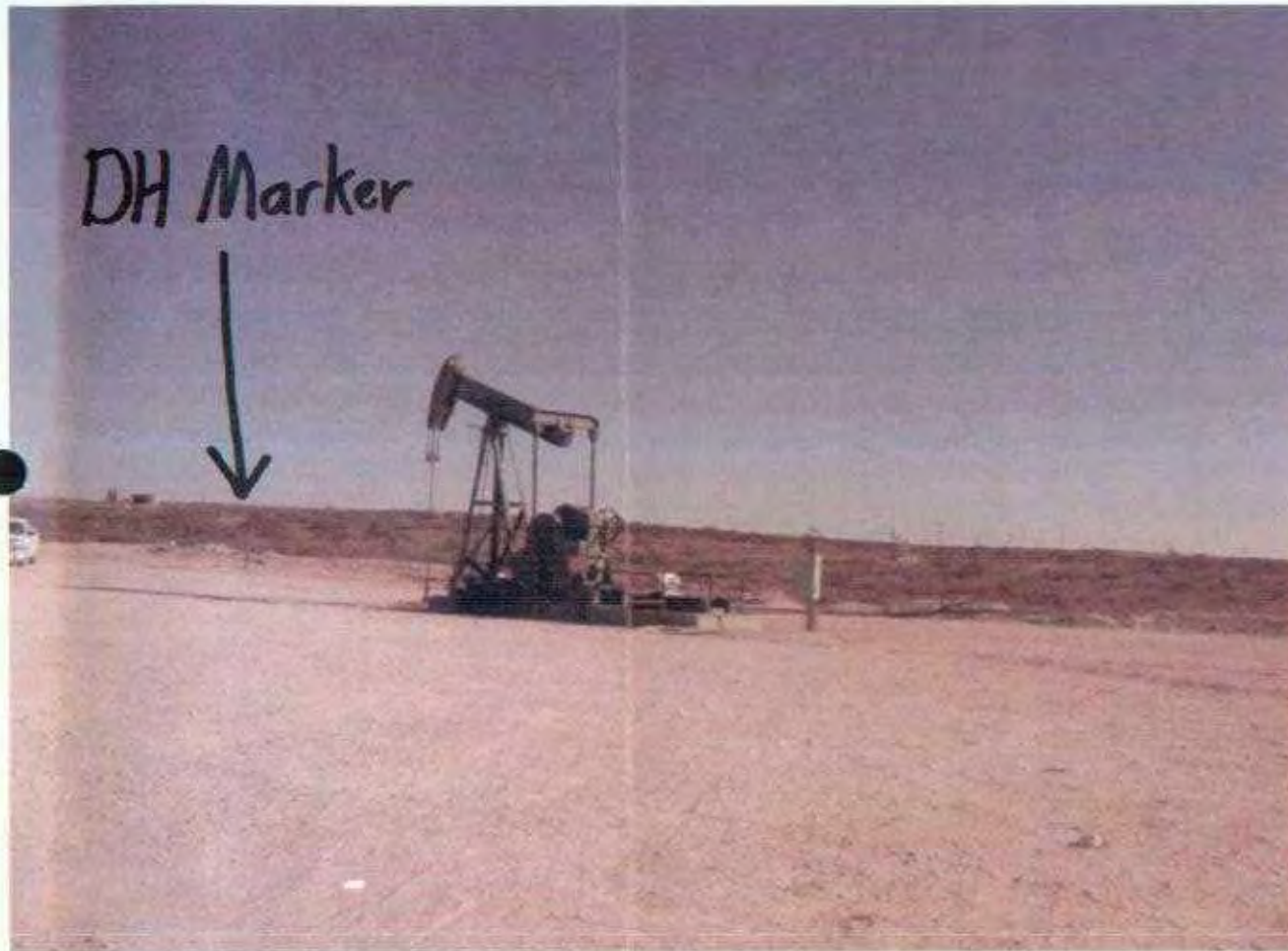
or print name DIANA J. BRIGGS

E-mail address: PRODUCTION@MARBOB.COM Telephone No. (505) 748-3303

State Use Only

APPROVED BY: [Signature] TITLE EBC DATE 7/17/06

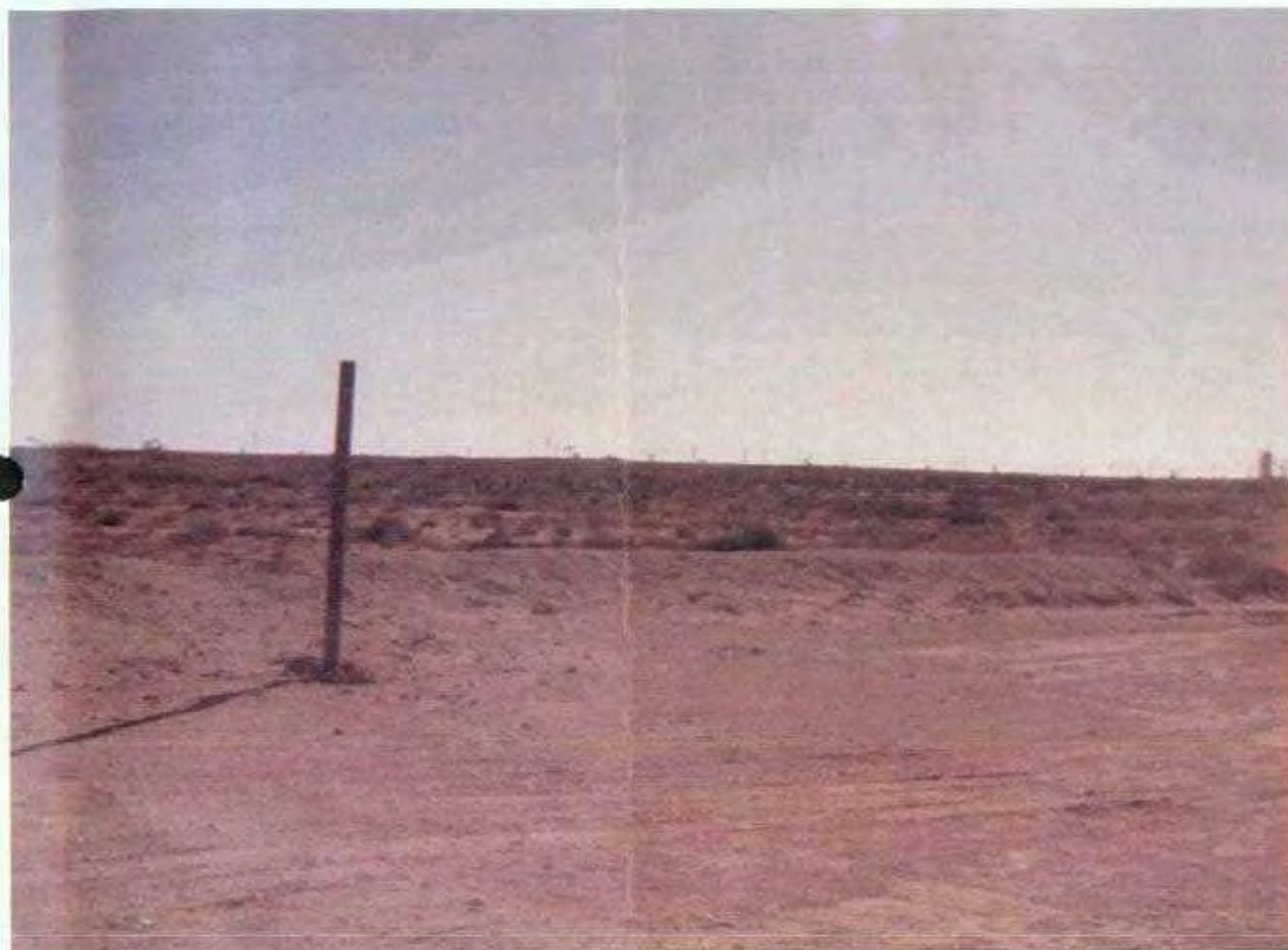
Conditions of Approval (if any):



M. Dodd A BW #1
300' FSL 1850' FWL
N-22-17s-29e
Eddy Co.

BW-029

P#A 16 Dec 05



M. Dodd A BW #1
300' FSL 1850' FWL
N-22-17s-29e
Eddy Co.

BW-029

Pt A 16 Dec 05

December 15, 2005

To: Brian Collins-Fax 505-476-3462
Marbob Energy Corp.

OCD is in receipt of the pressure chart dated Dec 14, 2005 and hereby approves of the final MIT Nitrogen Test for the Marbob Brine Well M.Dodd BW- 029. SE/4SW/4 sec 22-Ts17s-R29e Eddy County, NM.
API # 30-015-31998.

Please proceed with the approved plugging procedure and submit final C-103 when complete.

Wayne Price
Oil Conservation Div.
1220 S. Saint Francis
Santa Fe New Mexico 87505

phone: 505-476-3487
fax: 505-476-3462



marbob
energy corporation

FAX TRANSMITTAL SHEET

DATE: 15 Dec 05

TO: Wayne Price

OCD

FAX #: 505-476-3462

FROM: Brian Collins

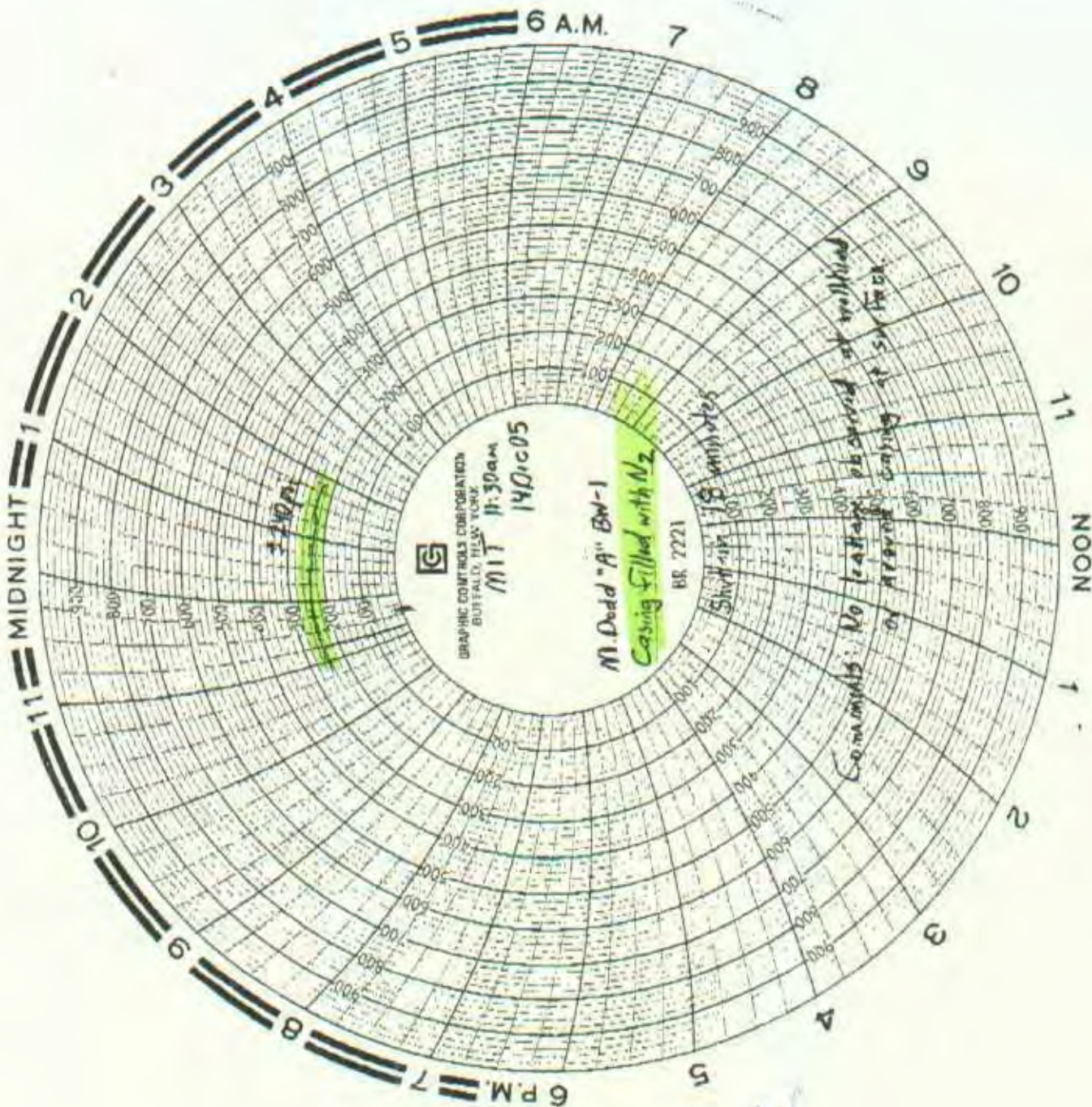
TOTAL # OF PAGES (INCLUDING COVER SHEET): 2

COMMENTS: Wayne: Here's pressure chart we
talked about. Thanks!
-Brian

IF YOU HAVE ANY TROUBLE RECEIVING THIS FAX, PLEASE CONTACT ME.

PHONE: 505/748-3303

FAX: 505/746-2523



API 30-015-31998

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

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.

30-015-31998

5. Indicate Type of Lease **FEDERAL**

~~STATE~~ ~~LEASE~~

6. ~~LEASE NO.~~

FEDERAL LEASE NO. NMLC028731A

7. Lease Name or Unit Agreement Name

M DODD A BW

8. Well Number 1

9. OGRID Number
14049

10. Pool name or Wildcat
GRBG JACKSON SR Q GRBG SA

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 **BRINE WELL**

2. Name of Operator
MARBOB ENERGY CORPORATION

3. Address of Operator
PO BOX 227, ARTESIA, NM 88211-0227

4. Well Location
Unit Letter **N** : **300** feet from the **SOUTH** line and **1850** feet from the **WEST** line
Section **22** Township **17S** Range **29E** NMPM County **EDDY**

11. Elevation (Show whether DR, RKB, RT, GR, etc.)

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:

PERFORM REMEDIAL WORK ☐ PLUG AND ABANDON ☐
TEMPORARILY ABANDON ☐ CHANGE PLANS ☐
PULL OR ALTER CASING ☐ MULTIPLE COMPL ☐

OTHER: ☐

SUBSEQUENT REPORT OF:

REMEDIAL WORK ☐ ALTERING CASING ☐
COMMENCE DRILLING OPNS. ☐ P AND A ☐
CASING/CEMENT JOB ☐

OTHER: CLOSE OUT DISCHARGE PLAN BW-029 ☒

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.

PER YOUR REQUEST, ATTACHED PLEASE FIND PHOTOS OF THE DRYHOLE MARKER LOCATED AT THE ABOVE REFERENCED WELL.

PLEASE CLOSE OUT OUR DISCHARGE PLAN BW-029 PERMIT.

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 Diana J. Briggs TITLE PRODUCTION ANALYST DATE 2/16/06

Type or print name DIANA J. BRIGGS

E-mail address: PRODUCTION@MARBOB.COM Telephone No. (505) 748-3300

For State Use Only

APPROVED BY: _____ TITLE _____ DATE _____

Conditions of Approval (if any):



M. Dodd A BW #1
300' PSL 1850' FWL
N-22-17s-29e
Eddy Co.

BW-029

P#A 16 Dec 05



M. Dodd A BW #1
300' FSL 1850' FWL
N-22-17s-29e
Eddy Co.

BW-029

Pt A 16 Dec 05

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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

State of New Mexico
Energy, Minerals and Natural Resources

Form C-103
May 27, 2004

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

WELL API NO.

30-015-31998

5. Indicate Type of Lease FEDERAL

~~STATE~~ ~~LEASE~~

6. ~~LEASE NO.~~

FEDERAL LEASE NO. NMLC028731A

7. Lease Name or Unit Agreement Name

M DODD A BW

8. Well Number 1

9. OGRID Number 14049

10. Pool name or Wildcat
GRBG JACKSON SR Q GRBG SA

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 ☒ BRINE WELL

2. Name of Operator
MARBOB ENERGY CORPORATION

3. Address of Operator
PO BOX 227, ARTESIA, NM 88211-0227

4. Well Location
Unit Letter N : 300 feet from the SOUTH line and 1850 feet from the WEST line
Section 22 Township 17S Range 29E NMPM County EDDY

11. Elevation (Show whether DR, RKB, RT, GR, etc.)

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:

PERFORM REMEDIAL WORK ☐ PLUG AND ABANDON ☐
TEMPORARILY ABANDON ☐ CHANGE PLANS ☐
PULL OR ALTER CASING ☐ MULTIPLE COMPL ☐

OTHER: ☐

SUBSEQUENT REPORT OF:

REMEDIAL WORK ☐ ALTERING CASING ☐
COMMENCE DRILLING OPNS. ☐ P AND A ☐
CASING/CEMENT JOB ☐

OTHER: CLOSE OUT DISCHARGE PLAN BW-029 ☒

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.

PER YOUR REQUEST, ATTACHED PLEASE FIND PHOTOS OF THE DRYHOLE MARKER LOCATED AT THE ABOVE REFERENCED WELL.

PLEASE CLOSE OUT OUR DISCHARGE PLAN BW-029 PERMIT.

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 Diana J. Briggs TITLE PRODUCTION ANALYST DATE 2/16/06

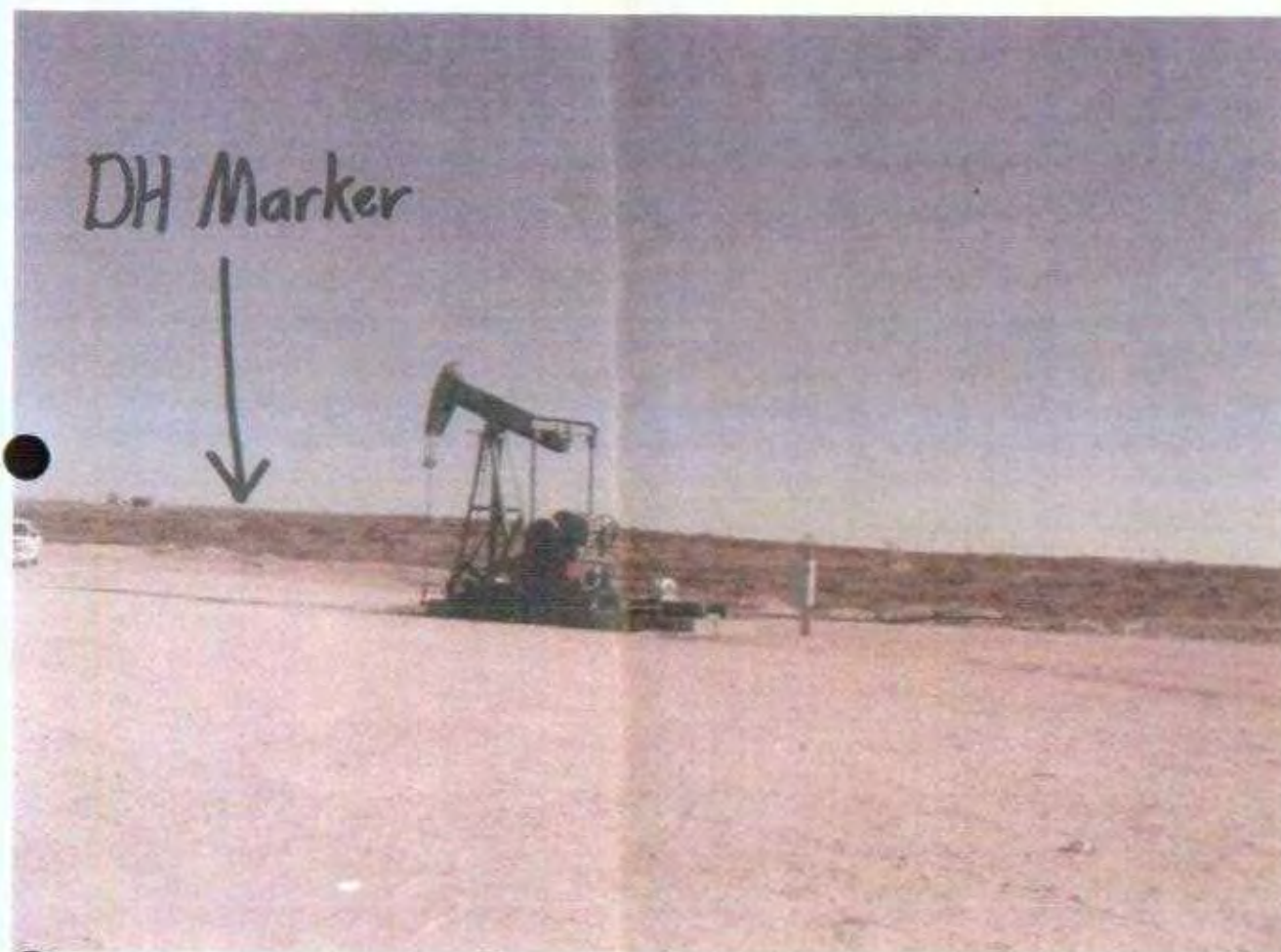
Type or print name DIANA J. BRIGGS

E-mail address: PRODUCTION@MARBOB.COM Telephone No. (505) 748-3301

For State Use Only

APPROVED BY: _____ TITLE _____ DATE _____

Conditions of Approval (if any): _____



M. Dodd A BW #1
300' FSL 1850' FWL
N-22-17s-29e
Eddy Co.

BW-029

P&A 16 Dec 05



M. Dodd A BW #1
300' FSL 1850' FWL
N-22-17s-29e
Eddy Co.

BW-029

Pt A 16 Dec 05

ATTN: WAYNE PRICE

I FAXED THIS ONE
TO YOU ON 11/3/05.

THANKS!

DIANA BIGGS

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

State of New Mexico
Energy, Minerals and Natural Resources

Form C-103
May 27, 2004

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

WELL API NO.

30-015-31998

5. Indicate Type of Lease FEDERAL

~~STATE~~ ~~XXXX~~ ~~XXXX~~ ~~XXXX~~ ~~XXXX~~

6. ~~State Oil & Gas Lease No.~~

FEDERAL LEASE NO. NMLC028731A

7. Lease Name or Unit Agreement Name

M DODD A BW

8. Well Number 1

9. OGRID Number

14049

10. Pool Name or Wildcat

GRBG JACKSON SR Q GRBG SA

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 ☒ BRINE WELL

2. Name of Operator
MARBOB ENERGY CORPORATION

3. Address of Operator
PO BOX 227, ARTESIA, NM 88211-0227

4. Well Location
Unit Letter N : 300 feet from the SOUTH line and 1850 feet from the WEST line
Section 22 Township 17S Range 29E NMPM County EDDY

11. Elevation (Show whether DR, RKB, RT, GR, etc.)

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:

PERFORM REMEDIAL WORK ☐ PLUG AND ABANDON ☒
TEMPORARILY ABANDON ☐ CHANGE PLANS ☐
PULL OR ALTER CASING ☐ MULTIPLE COMPL ☐

OTHER: ☐

SUBSEQUENT REPORT OF:

REMEDIAL WORK ☐ ALTERING CASING ☐
COMMENCE DRILLING OPNS. ☐ P AND A ☐
CASING/CEMENT JOB ☐

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.

MARBOB ENERGY CORPORATION PROPOSES TO PLUG & ABANDON AS FOLLOWS:

1. PULL TBG. RUN CSG SCRAPER TO APPX 325'.
2. SET CIBP @ APPX 325'.
3. FILL 7 5/8" CSG 325' TO SURF W/ 70 SX CLASS "C" + 2% CACL2.
4. POOH W/ TBG & FILL 7 5/8" TO SURFACE W/ CLASS "C" + 2% CACL2.
5. INSTALL BLM SPEC DRY HOLE MARKER & RECLAIM LOCATION TO BLM SPECS.

(SEE ATTACHED SCHEMATICS)

****BLM FORM 3160-5 SUNDRY NOTICE OF INTENT TO PLUG & ABANDON WAS FILED 10/31/05.****

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 Diana J. Briggs TITLE PRODUCTION ANALYST DATE 11/3/05

Type or print name DIANA J. BRIGGS

E-mail address PRODUCTION@MARBOB.COM Telephone No. (505) 748-3303

For State Use Only

APPROVED BY: _____ TITLE _____ DATE _____

Conditions of Approval (if any):

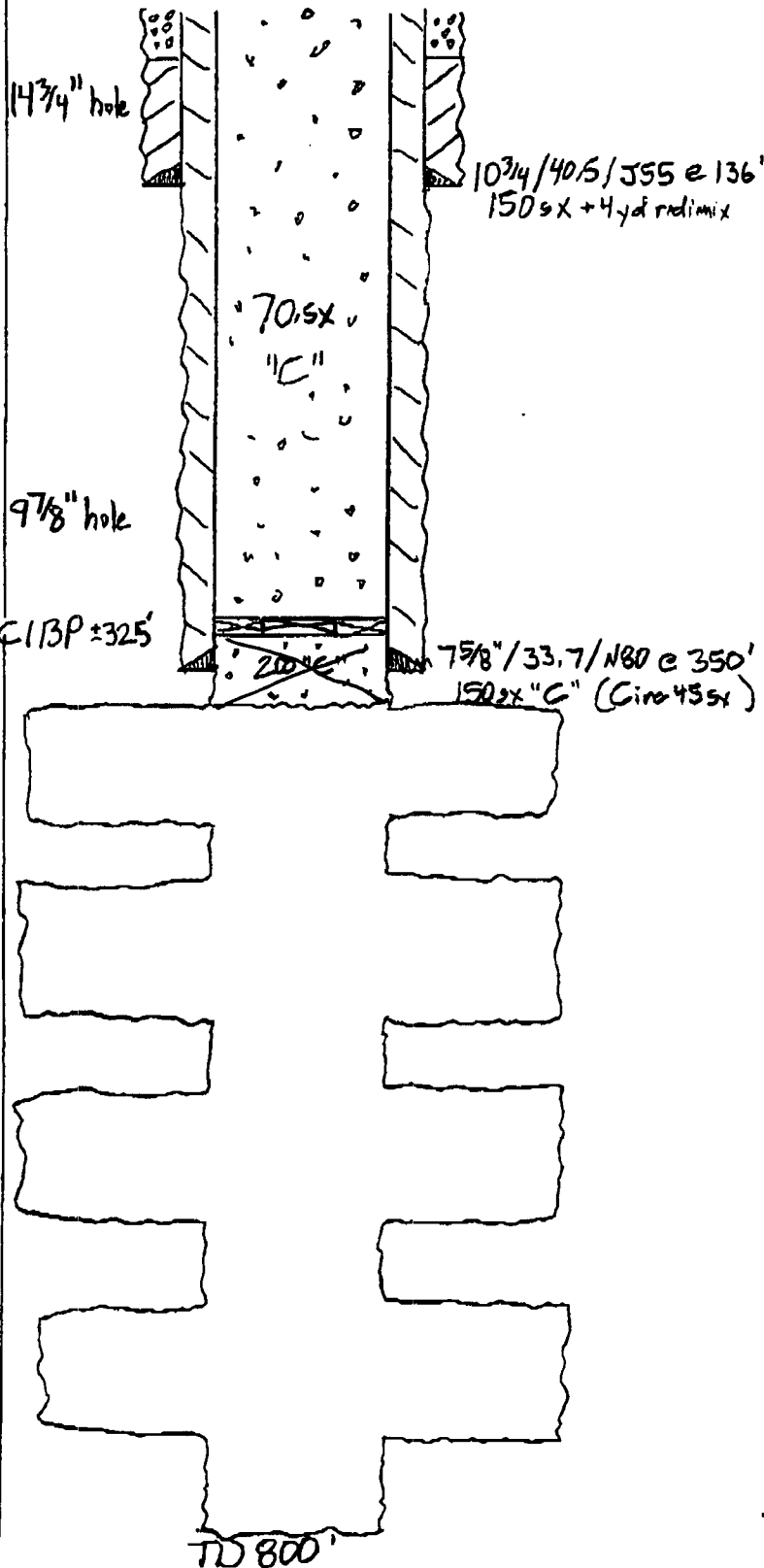
M. Dodd A BW #1

1850' FWL, 300' FSL

N-22-179-29e

Eddy, NM

(BW-029)

Proposed Procedure:

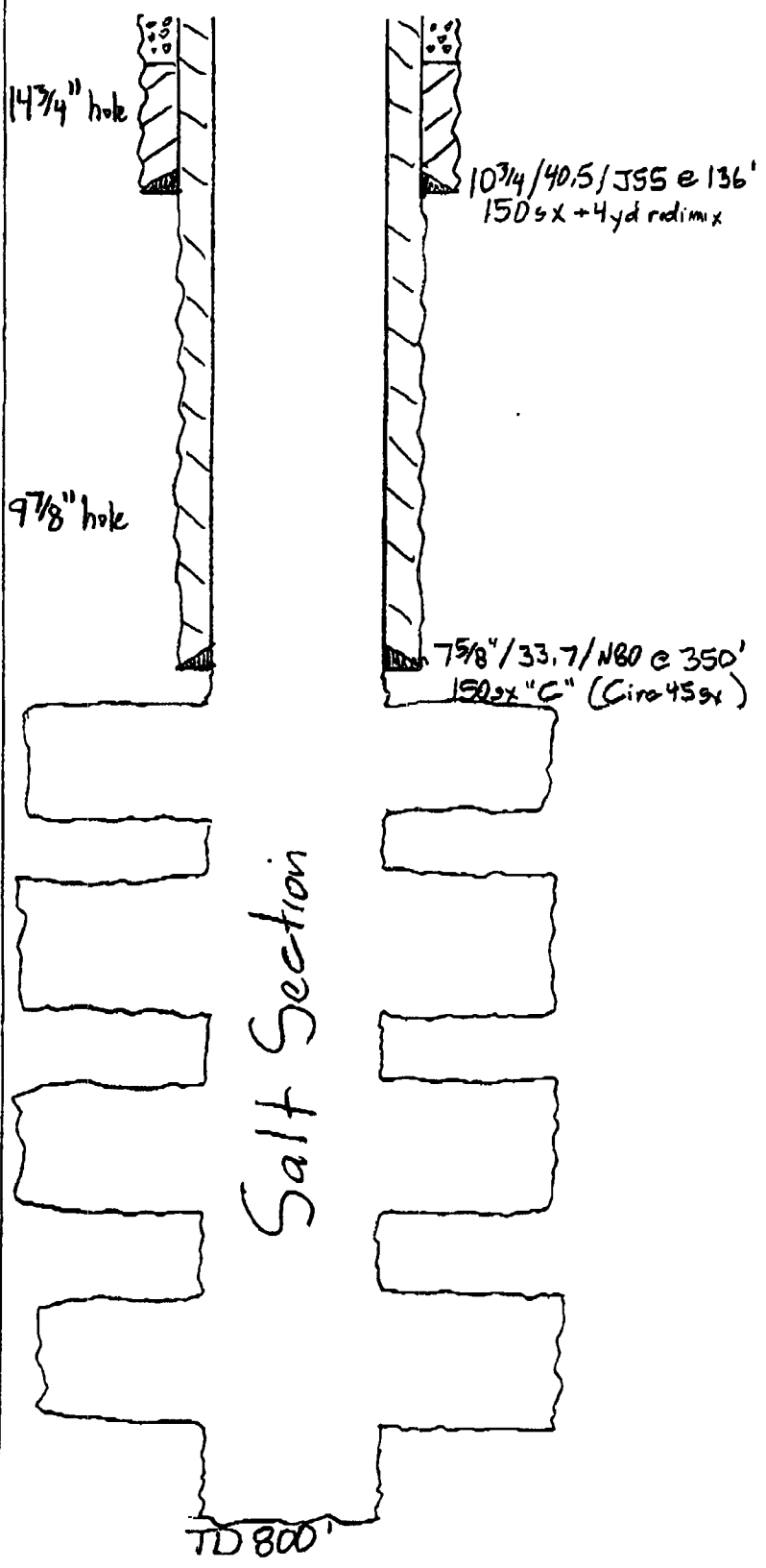
1. Pull tubing. Run casing scraper to $\pm 325'$.
2. Set CIBP $\pm 325'$
3. Pump 300 sx "C" + 2% CaCl_2 and displace to retainer.
This plug should cover 7 5/8" shoe but won't achieve squeeze pressure due to cavernous nature of salt below 7 5/8" casing.
4. String out of retainer and fill 7 5/8" casing 325' to surface with 70 sx Class "C" + 2% CaCl_2 .
5. PDDH with tubing and fill 7 5/8" to surface with Class "C" + 2% CaCl_2
6. Install BLM spec dry hole marker and reclaim location to BLM specs.

Class "C" + 2% CaCl_2 : 14.8 gpg
1.32 cpgs
6.3 gpgs

AFTER

III. Noddy IT DW T I
 1850' FWL, 300' FSL
 N-22-175-29e
 Eddy, Nm
 (CBW-029)

4395 10' 20' 30' 40' 50' 60' 70' 80' 90' 100' 110' 120' 130' 140' 150' 160' 170' 180' 190' 200' 210' 220' 230' 240' 250' 260' 270' 280' 290' 300' 310' 320' 330' 340' 350' 360' 370' 380' 390' 400' 410' 420' 430' 440' 450' 460' 470' 480' 490' 500' 510' 520' 530' 540' 550' 560' 570' 580' 590' 600' 610' 620' 630' 640' 650' 660' 670' 680' 690' 700' 710' 720' 730' 740' 750' 760' 770' 780' 790' 800' 810' 820' 830' 840' 850' 860' 870' 880' 890' 900' 910' 920' 930' 940' 950' 960' 970' 980' 990' 1000'



BEFORE

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

State of New Mexico
Energy, Minerals and Natural Resources

Form C-103
May 27, 2004

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

WELL API NO.

30-015-31998

5. Indicate Type of Lease **FEDERAL**

~~STATE~~ ~~XXXX~~ ~~FEE~~ ~~XX~~

6. ~~State Oil & Gas Lease~~

FEDERAL LEASE NO. NMLC028731A

7. Lease Name or Unit Agreement Name

M DODD A BW

8. Well Number 1

9. OGRID Number
14049

10. Pool name or Wildcat
GRBG JACKSON SR Q GRBG SA

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 **BRINE WELL**

2. Name of Operator
MARBOB ENERGY CORPORATION

3. Address of Operator
PO BOX 227, ARTESIA, NM 88211-0227

4. Well Location
Unit Letter **N** : **300** feet from the **SOUTH** line and **1850** feet from the **WEST** line
Section **22** Township **17S** Range **29E** NMPM County **EDDY**

11. Elevation (Show whether DR, RKB, RT, GR, etc.)

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:

PERFORM REMEDIAL WORK ☐ PLUG AND ABANDON ☒
TEMPORARILY ABANDON ☐ CHANGE PLANS ☐
PULL OR ALTER CASING ☐ MULTIPLE COMPL ☐

SUBSEQUENT REPORT OF:

REMEDIAL WORK ☐ ALTERING CASING ☐
COMMENCE DRILLING OPNS. ☐ P AND A ☐
CASING/CEMENT JOB ☐

OTHER: ☐

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.

MARBOB ENERGY CORPORATION PROPOSES TO PLUG & ABANDON AS FOLLOWS:

1. PULL TBG. RUN CSG SCRAPER TO APPX 325'.
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3. FILL 7 5/8" CSG 325' TO SURF W/ 70 SX CLASS "C" + 2% CACL2.
4. POOH W/ TBG & FILL 7 5/8" TO SURFACE W/ CLASS "C" + 2% CACL2.
5. INSTALL BLM SPEC DRY HOLE MARKER & RECLAIM LOCATION TO BLM SPECS.

(SEE ATTACHED SCHEMATICS)

****BLM FORM 3160-5 SUNDRY NOTICE OF INTENT TO PLUG & ABANDON WAS FILED 10/31/05.****

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 Diana J. Briggs TITLE PRODUCTION ANALYST DATE 11/3/05

Type or print name DIANA J. BRIGGS

E-mail address PRODUCTION@MARBOB.COM Telephone No. (505) 748-3303

For State Use Only

APPROVED BY: _____ TITLE _____ DATE _____

Conditions of Approval (if any): _____

III-Nood IT LW T I

1850' FWL, 300' FSL

N-22-175-29e

Eddy, NM

(CBW-029)

14 3/4" hole

9 7/8" hole

10 3/4" / 40.5 / J55 @ 136'
150sx + 4yd redmix7 5/8" / 33.7 / N80 @ 350'
150sx "C" (Circ 45sx)

Salt Section

TD 800'

BEFORE

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
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1000 Rio Brazos Rd., Aztec, NM 87410
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State of New Mexico
Energy, Minerals and Natural Resources

Form C-103
May 27, 2004

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

WELL API NO.	30-015-31998
5. Indicate Type of Lease	FEDERAL STATE
6. State Oil & Gas Lease No.	
FEDERAL LEASE NO.	NMLC028731A
7. Lease Name or Unit Agreement Name	M DODD A BW
8. Well Number	1
9. OGRID Number	14049
10. Pool name or Wildcat	GRBG JACKSON SR Q GRBG SA

SUNDRY NOTICES AND REPORTS ON WELLS
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1. Type of Well: Oil Well ☐ Gas Well ☐ Other ☒ BRINE WELL

2. Name of Operator
MARBOB ENERGY CORPORATION

3. Address of Operator
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4. Well Location
Unit Letter N : 300 feet from the SOUTH line and 1850 feet from the WEST line
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11. Elevation (Show whether DR, RKB, RT, GR, etc.)

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:

PERFORM REMEDIAL WORK ☐ PLUG AND ABANDON ☒
TEMPORARILY ABANDON ☐ CHANGE PLANS ☐
PULL OR ALTER CASING ☐ MULTIPLE COMPL ☐

OTHER: ☐

SUBSEQUENT REPORT OF:

REMEDIAL WORK ☐ ALTERING CASING ☐
COMMENCE DRILLING OPNS. ☐ P AND A ☐
CASING/CEMENT JOB ☐

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.

MARBOB ENERGY CORPORATION PROPOSES TO PLUG & ABANDON AS FOLLOWS:

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4. POOH W/ TBG & FILL 7 5/8" TO SURFACE W/ CLASS "C" + 2% CACL2.
5. INSTALL BLM SPEC DRY HOLE MARKER & RECLAIM LOCATION TO BLM SPECS.

(SEE ATTACHED SCHEMATICS)

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SIGNATURE Diana J. Briggs TITLE PRODUCTION ANALYST DATE 11/3/05

Type or print name DIANA J. BRIGGS

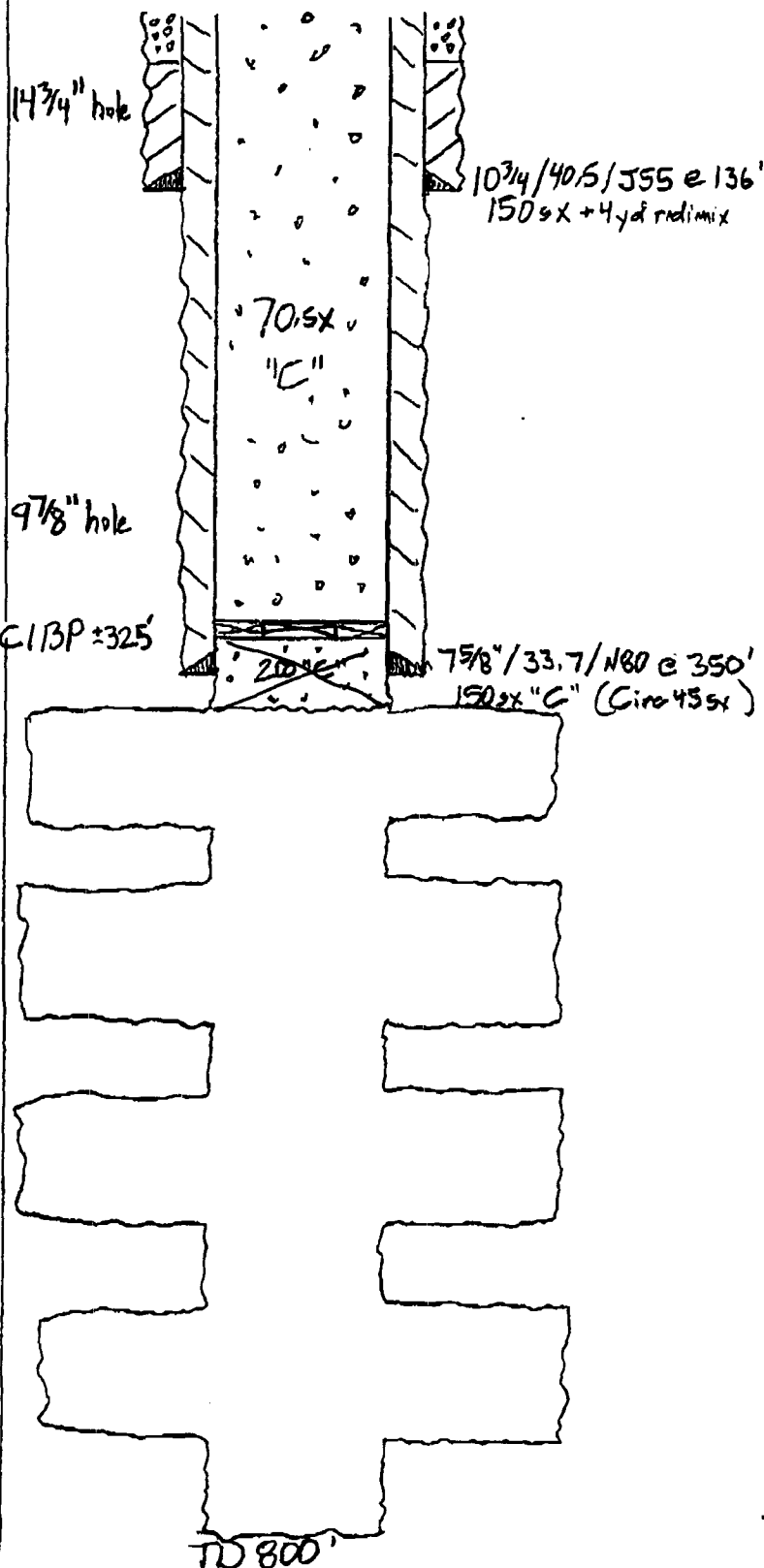
E-mail address PRODUCTION@MARBOB.COM Telephone No. (505) 748-3303

For State Use Only

APPROVED BY: _____ TITLE _____ DATE _____

Conditions of Approval (if any):

M. Dodd A BW #1
 1850' FWL, 300' FSL
 N-22-T15-29e
 Eddy, NM
 (BW-029)



Proposed Procedure:

1. Pull tubing. Run casing scraper to $\pm 325'$.
2. Set CIBP $\pm 325'$
3. Pump 200sx "C" + 2% CaCl_2 and displace to retainer.
 This plug should cover 7 5/8" shoe but won't achieve squeeze pressure due to cavernous nature of salt below 7 5/8" casing.
4. String out of retainer and fill 7 5/8" casing 325' to surface with 70 sx Class "C" + 2% CaCl_2 .
5. POOH with tubing and fill 7 5/8" to surface with Class "C" + 2% CaCl_2
6. Install BLM spec dry hole marker and reclaim location to BLM specs.

Class "C" + 2% CaCl_2 : 14.8 bbls
 1.32 cfs
 6.3 gpm

AFTER

III. Nodda IT LW T I

1850' FWL, 300' FSL

N-22-F15-29e

Eddy, NM

(BW-029)

14 3/4" hole

9 7/8" hole

10 3/4" / 40.5 / JS5 @ 136'
150sx + 4yd redimix7 5/8" / 33.7 / N80 @ 350'
150sx "C" (Circ 45sx)

Salt Section

TD 800'

BEFORE

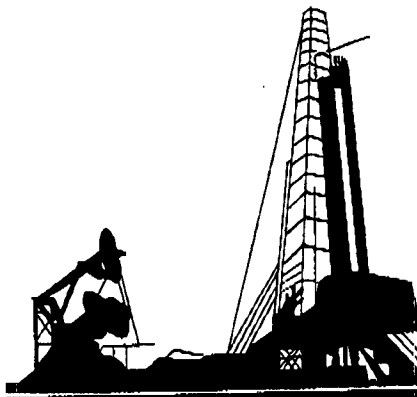
TRANSACTION REPORT

P. 01

DEC-15-2005 THU 01:09 PM

FOR:

DATE	START	RECEIVER	TX TIME	PAGES	TYPE	NOTE	M#	DP
DEC-15	01:09 PM	915057462523	22"	2	SEND	OK	741	
TOTAL :						22S	PAGES:	2



TRANSMITTAL COVER SHEET

OIL CONSERVATION DIVISION
1220 S. ST. FRANCIS DRIVE
SANTA FE, NM 87505
(505) 476-3440
(505)476-3462 (Fax)

PLEASE DELIVER THIS FAX:

TO: BRIAN COLLINS

FROM: WAYNE PRICE

12/15/05



TRANSMITTAL COVER SHEET

OIL CONSERVATION DIVISION
1220 S. ST. FRANCIS DRIVE
SANTA FE, NM 87505
(505) 476-3440
(505)476-3462 (Fax)

PLEASE DELIVER THIS FAX:

TO: BRIAN COLLINS

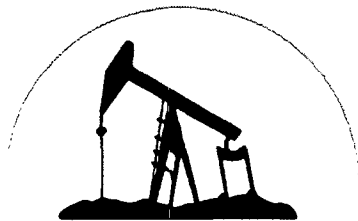
FROM: WAYNE PRICE

DATE: 12/15/05

PAGES: 2

SUBJECT: MIT BW-029

IF YOU HAVE TROUBLE RECEIVING THIS FAX, PLEASE CALL THE OFFICE
NUMBER ABOVE.



marbob
energy corporation

July 12, 2005

RECEIVED

JUL 18 2005

OIL CONSERVATION
DIVISION

*Oil Conservation Division
PO Box 6429
1220 S. St. Francis Drive
Santa Fe, NM 87504*

Attn: Wayne Price

*Re: Mary Dodd "A" BW #1
1850 FWL 300 FSL
Sec. 22-T17S-R29E
Eddy County, New Mexico
30-015-31998*

Wayne:

*Following are the production and injection volumes for the months
of April 1, 2005 through June 30, 2005 on the above referenced well:*

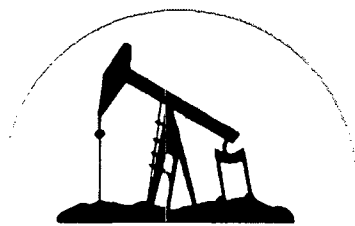
49,284 Bbls of Brine Water Produced

12,824 Bbls of Fresh Water Injected

*If you have any questions or require additional information, please
don't hesitate to contact me.*

Sincerely,

*Diana J. Briggs
Production Analyst*



marbob
energy corporation

January 13, 2005

RECEIVED

DEC 29 2005

Oil Conservation Division
PO Box 6429
1220 S. St. Francis Drive
Santa Fe, NM 87504

Oil Conservation Division
1220 S. Saint Francis Drive
Santa Fe, NM 87505

Attn: Wayne Price

Re: Mary Dodd "A" BW #1
1850 FWL 300 FSL
Sec. 22-T17S-R29E
Eddy County, New Mexico

Wayne:

Following are the production and injection volumes for the months
of October 1, 2004 through December 31, 2004 on the above referenced
well:

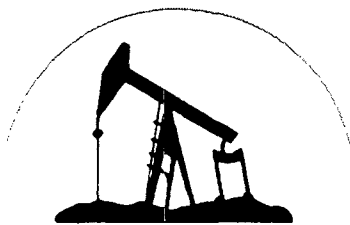
40,575 Bbls of Brine Water Produced

6,490 Bbls of Fresh Water Injected

If you have any questions or require additional information, please
don't hesitate to contact me.

Sincerely,

Diana J. Cannon
Production Analyst



marbob
energy corporation

RECEIVED

April 5, 2005

APR 07 2005

OIL CONSERVATION
DIVISION

Oil Conservation Division
PO Box 6429
1220 S. St. Francis Drive
Santa Fe, NM 87504

Attn: Wayne Price

Re: Mary Dodd "A" BW #1
1850 FWL 300 FSL
Sec. 22-T17S-R29E
Eddy County, New Mexico
30-015-31998

Wayne:

*Following are the production and injection volumes for the months
of January 1, 2005 through March 31, 2005 on the above referenced well:*

56,471 Bbls of Brine Water Produced

35,031 Bbls of Fresh Water Injected

*If you have any questions or require additional information, please
don't hesitate to contact me.*

Sincerely,

Diana J. Briggs
Production Analyst



marbob
energy corporation

RECEIVED

October 5, 2005

OCT 11 2005

Oil Conservation Division
1220 S. St. Francis Drive
Santa Fe, NM 87505

Oil Conservation Division
PO Box 6429
1220 S. St. Francis Drive
Santa Fe, NM 87504

Attn: Wayne Price

Re: Mary Dodd "A" BW #1
1850 FWL 300 FSL
Sec. 22-T17S-R29E
Eddy County, New Mexico
30-015-31998

Wayne:

Following are the production and injection volumes for the months of July 1, 2005 through September 30, 2005 on the above referenced well:

45,218 Bbls of Brine Water Produced

10,362 Bbls of Fresh Water Injected

If you have any questions or require additional information, please don't hesitate to contact me.

Sincerely,

Diana J. Briggs
Production Analyst

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

State of New Mexico
Energy, Minerals and Natural Resources

Form C-103
May 27, 2004

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

WELL API NO. 30-015-31998
5. Indicate Type of Lease <input checked="" type="checkbox"/> FEDERAL STATE XXXXXX XXXX
6. State Oil & Gas Lease No. FEDERAL LEASE NO. NMLC028731A
7. Lease Name or Unit Agreement Name M DODD A BW
8. Well Number 1
9. OGRID Number 14049
10. Pool name or Wildcat GRBG JACKSON SR Q GRBG SA
11. Elevation (Show whether DR, RKB, RT, GR, etc.)
Pit or Below-grade Tank Application <input type="checkbox"/> or Closure <input type="checkbox"/>
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 _____

SUNDRY NOTICES AND REPORTS ON WELLS
(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK FOR A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)

1. Type of Well: Oil Well ☐ Gas Well ☐ Other ☒ BRINE WELL

2. Name of Operator
MARBOB ENERGY CORPORATION

3. Address of Operator
PO BOX 227, ARTESIA, NM 88211-0227

4. Well Location
Unit Letter N : 300 feet from the SOUTH line and 1850 feet from the WEST line
Section 22 Township 17S Range 29E NMPM County EDDY

11. Elevation (Show whether DR, RKB, RT, GR, etc.)

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: PERFORM REMEDIAL WORK <input type="checkbox"/> PLUG AND ABANDON <input type="checkbox"/> TEMPORARILY ABANDON <input type="checkbox"/> CHANGE PLANS <input type="checkbox"/> PULL OR ALTER CASING <input type="checkbox"/> MULTIPLE COMPL <input type="checkbox"/> OTHER: <input type="checkbox"/>	SUBSEQUENT REPORT OF: REMEDIAL WORK <input type="checkbox"/> ALTERING CASING <input type="checkbox"/> COMMENCE DRILLING OPNS. <input type="checkbox"/> P AND A <input checked="" type="checkbox"/> CASING/CEMENT JOB <input type="checkbox"/> OTHER: <input type="checkbox"/>
--	--

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.

PLUGGED AND ABANDONED AS FOLLOWS:

12/14/05 - PRESSURE TESTED TUBING/CASING ANNULUS TO 240# FOR 18 MIN - HELD OK.
12/16/05 - PULLED TBG. RAN CSG SCRAPER TO 325'. SET CIBP @ 325'. PUMP 70 SX
CLASS "C" + 2% CACL2. POOH W/ TBG. FILL WELL TO SURFACE W/ CMT.
CUT OFF WELLHEAD & INSTALL DRY HOLE MARKER.

(SEE CHART ATTACHED).

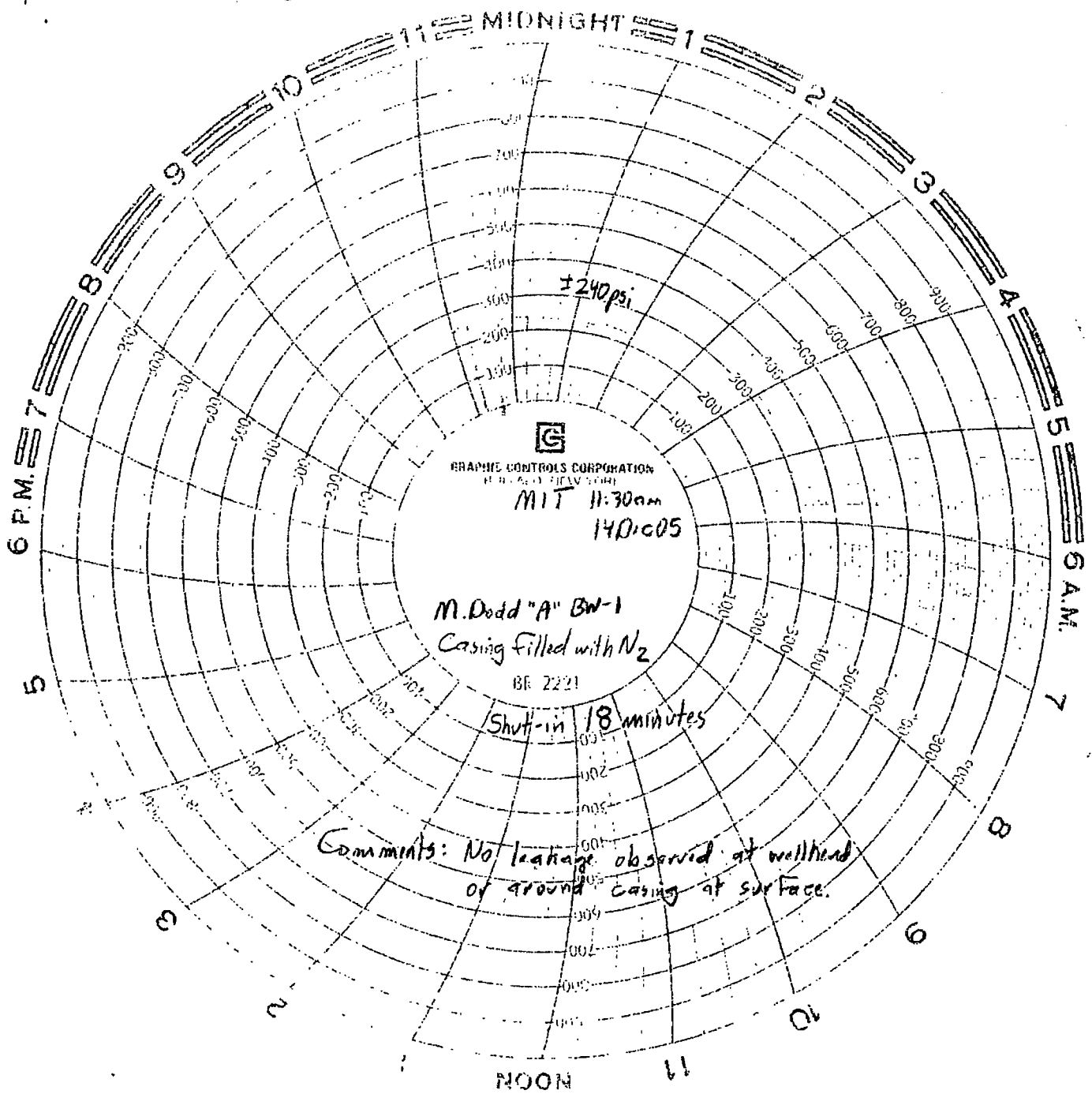
BLM FORM 3160-5 SUBSEQUENT SUNDRY NOTICE OF PLUG & ABANDON FILED 12/20/05.

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 NMOC guidelines ☐, a general permit ☐ or an (attached) alternative OCD-approved plan ☐.

SIGNATURE Diana J. Briggs TITLE PRODUCTION ANALYST DATE 12/20/05

Type or print name DIANA J. BRIGGS E-mail address: PRODUCTION@MARBOB.COM Telephone No. (505) 748-3303
For State Use Only

APPROVED BY: [Signature] TITLE ENVR. ENGR. DATE 1/10/05
Conditions of Approval (if any):



UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SODIUM LEASE NMNM82804

FORM APPROVED
OM B No. 1004-0137
Expires: March 31, 2007

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 reverse side.

1. Type of Well ☐ Oil Well ☐ Gas Well ☒ Other **BRINE WELL**
2. Name of Operator **MARBOB ENERGY CORPORATION**
3a. Address **PO BOX 227, ARTESIA, NM 88211-0227**
3b. Phone No. (include area code) **(505) 748-3303**
4. Location of Well (Footage, Sec., T., R., M., or Survey Description)
300 FSL 1850 FWL, SEC. 22-T17S-R29E, UNIT N

5. Lease Serial No.
NMLC028731A
6. If Indian, Allottee or Tribe Name
7. If Unit or CA/Agreement, Name and/or No.
8. Well Name and No.
M DODD A BW #1
9. API Well No.
30-015-31998
10. Field and Pool, or Exploratory Area
GRBG JACKSON SR Q GRBG SA
11. County or Parish, State
EDDY CO., NM

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

TYPE OF SUBMISSION	TYPE OF ACTION			
<input type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input checked="" type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input checked="" type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input type="checkbox"/> Other
	<input type="checkbox"/> Change Plans	<input checked="" type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	

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 recompleate 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 recompleation 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 site is ready for final inspection.)

PLUGGED AND ABANDONED AS FOLLOWS:

12/14/05 - PRESSURE TESTED TUBING/CASING ANNULUS TO 240# FOR 18 MIN - HELD OK.
12/16/05 - PULLED TBG. RAN CSG SCRAPER TO 325'. SET CIBP @ 325'. PUMP 70 SX CLASS "C" + 2% CACL2. POOH W/ TBG. FILL WELL TO SURFACE W/ CMT. CUT OFF WELLHEAD & INSTALL DRY HOLE MARKER.

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

DIANA J. BRIGGS

Title **PRODUCTION ANALYST**

Signature

Date **DECEMBER 20, 2005**

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by *[Signature]* BLM ONLY
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.

Title

ENGR ENGR.

Date

1/9/06
1/10/06

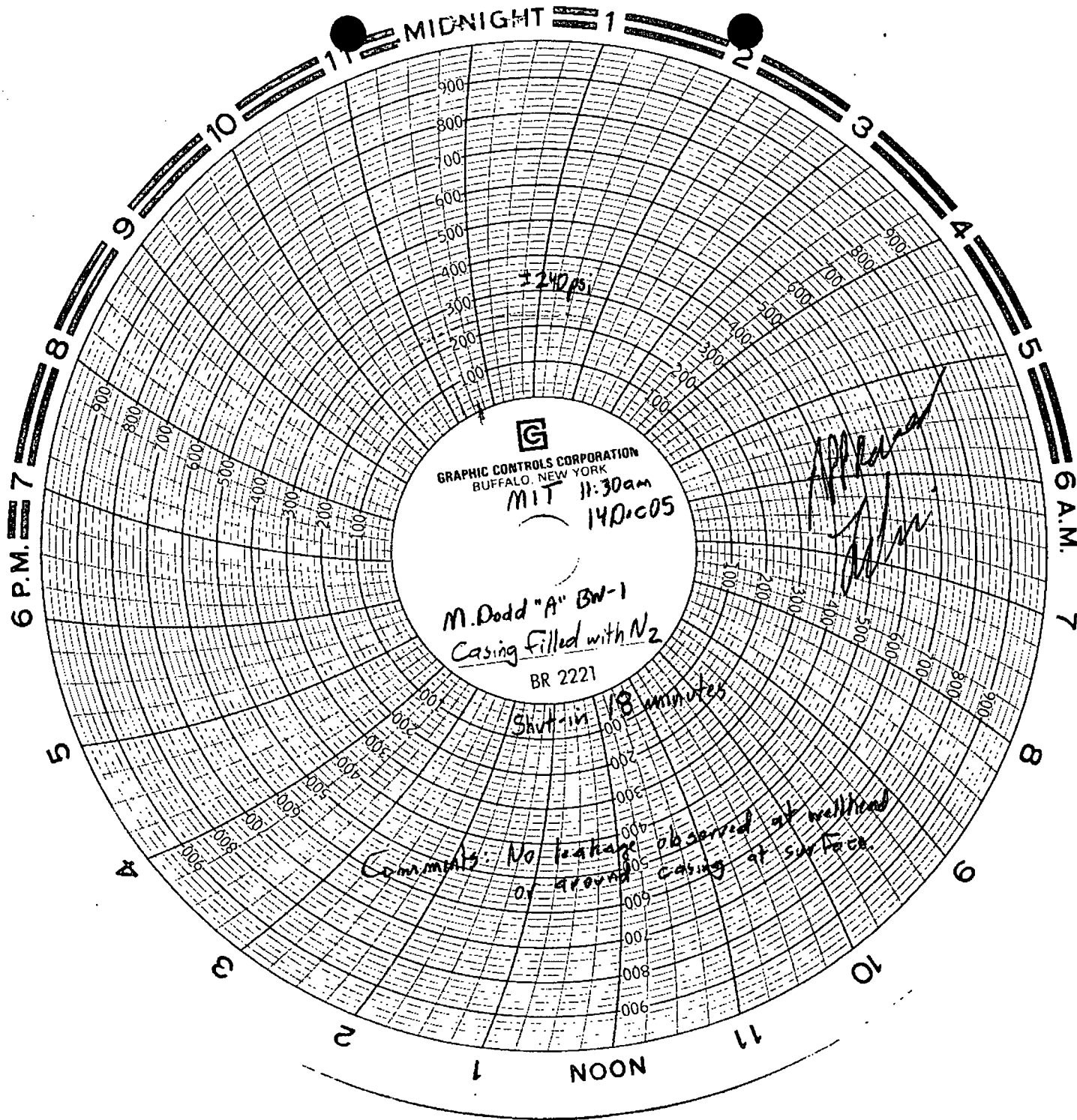
Office

SANTA FE

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Instructions on page 2)

ACCIDENTALLY SIGN BLM FORM 3160-3 - 103



Submit 3 Copies to Appropriate District Office
District I
1425 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

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.

30-015-31998

5. Indicate Type of Lease FEDERAL

~~STATE~~ ~~XXXXXX~~ ~~XXXXXX~~ ~~XXXXXX~~

6. ~~State Oil & Gas Lease No.~~

FEDERAL LEASE NO. NMLC028731A

7. Lease Name or Unit Agreement Name

M DODD A BW

8. Well Number

1

9. OGRID Number

14049

10. Pool name or Wildcat

GRBG JACKSON SR Q GRBG SA

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 BRINE WELL

2. Name of Operator

MARBOB ENERGY CORPORATION

3. Address of Operator

PO BOX 227, ARTESIA, NM 88211-0227

4. Well Location

Unit Letter N : 300 feet from the SOUTH line and 1850 feet from the WEST line

Section 22 Township 17S Range 29E NMPM County EDDY

11. Elevation (Show whether DR, RKB, RT, GR, etc.)

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:

PERFORM REMEDIAL WORK ☐ PLUG AND ABANDON ☐

TEMPORARILY ABANDON ☐ CHANGE PLANS ☐

PULL OR ALTER CASING ☐ MULTIPLE COMPL ☐

OTHER: ☐

SUBSEQUENT REPORT OF:

REMEDIAL WORK ☐ ALTERING CASING ☐

COMMENCE DRILLING OPNS. ☐ P AND A ☒

CASING/CEMENT JOB ☐

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.

PLUGGED AND ABANDONED AS FOLLOWS:

12/14/05 - PRESSURE TESTED TUBING/CASING ANNULUS TO 240# FOR 18 MIN - HELD OK.

12/16/05 - PULLED TBG. RAN CSG SCRAPER TO 325'. SET CIBP @ 325'. PUMP 70 SX CLASS "C" + 2% CACL2. POOH W/ TBG. FILL WELL TO SURFACE W/ CMT. CUT OFF WELLHEAD & INSTALL DRY HOLE MARKER.

(SEE CHART ATTACHED)

BLM FORM 3160-5 SUBSEQUENT SUNDRY NOTICE OF PLUG & ABANDON FILED 12/20/05.

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 NMOC guidelines ☐, a general permit ☐ or an (attached) alternative OCD-approved plan ☐.

SIGNATURE Diana J. Briggs TITLE PRODUCTION ANALYST DATE 12/20/05

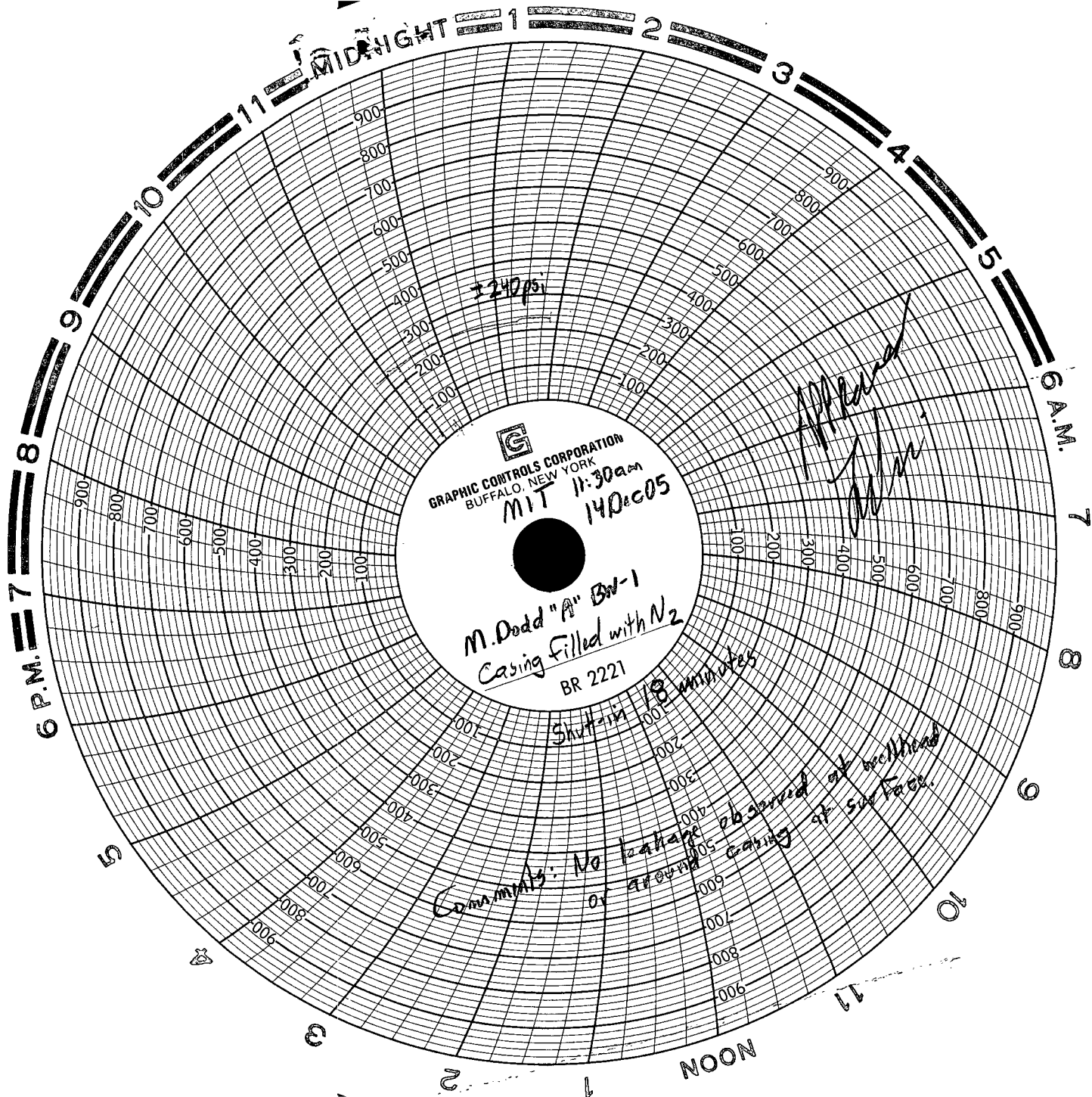
Type or print name DIANA J. BRIGGS

E-mail address: PRODUCTION@MARBOB.COM Telephone No. (505) 748-3303

For State Use Only

APPROVED BY: _____ TITLE _____ DATE _____

Conditions of Approval (if any): _____



3 Copies to Appropriate District
Summit Office
District I
1625 N. Hatch 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

State of New Mexico
Energy, Minerals and Natural Resources

Form C-103
May 27, 2004

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

WELL API NO. 30-015-31998
5. Indicate Type of Lease FEDERAL STATE
6. State Oil & Gas Lease No. FEDERAL LEASE NO. NMLC028731A
7. Lease Name or Unit Agreement Name M DODD A BW
8. Well Number 1
9. OGRID Number 14049
10. Pool name or Wildcat GRBG JACKSON SR Q GRBG SA

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 ☒ BRINE WELL

2. Name of Operator
MARBOB ENERGY CORPORATION

3. Address of Operator
PO BOX 227, ARTESIA, NM 88211-0227

4. Well Location
Unit Letter N : 300 feet from the SOUTH line and 1850 feet from the WEST line
Section 22 Township 17S Range 29E NMPM County EDDY

11. Elevation (Show whether DR, RKB, RT, GR, etc.)

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:

PERFORM REMEDIAL WORK ☐ PLUG AND ABANDON ☐
TEMPORARILY ABANDON ☐ CHANGE PLANS ☐
PULL OR ALTER CASING ☐ MULTIPLE COMPL ☐

SUBSEQUENT REPORT OF:

REMEDIAL WORK ☐ ALTERING CASING ☐
COMMENCE DRILLING OPNS. ☐ P AND A ☒
CASING/CEMENT JOB ☐

OTHER: ☐

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.

PLUGGED AND ABANDONED AS FOLLOWS:

12/14/05 - PRESSURE TESTED TUBING/CASING ANNULUS TO 240# FOR 18 MIN - HELD OK.
12/16/05 - PULLED TBG. RAN CSG SCRAPER TO 325'. SET CIBP @ 325'. PUMP 70 SX
CLASS "C" + 2% CACL2. POOH W/ TBG. FILL WELL TO SURFACE W/ CMT.
CUT OFF WELLHEAD & INSTALL DRY HOLE MARKER.

(SEE CHART ATTACHED).

BLM FORM 3160-5 SUBSEQUENT SUNDRY NOTICE OF PLUG & ABANDON FILED 12/20/05.

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 NMOC guidelines ☐, a general permit ☐ or an (attached) alternative OCD-approved plan ☐.

SIGNATURE Diana J. Briggs TITLE PRODUCTION ANALYST DATE 12/20/05

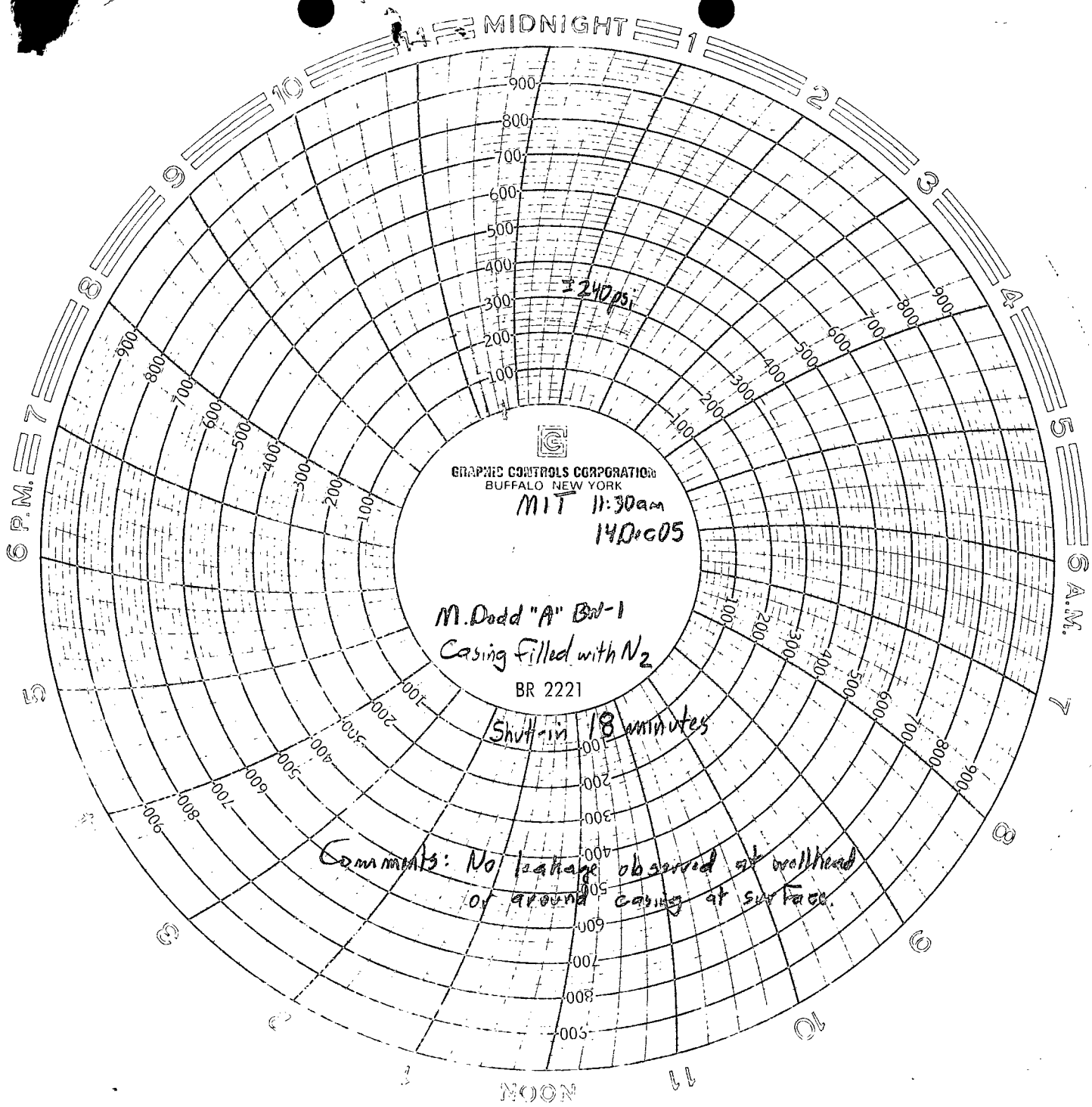
Type or print name DIANA J. BRIGGS

E-mail address: PRODUCTION@MARBOB.COM Telephone No. (505) 748-3303

For State Use Only

APPROVED BY: _____ TITLE _____ DATE _____

Conditions of Approval (if any):



GRAPHIC CONTROLS CORPORATION
BUFFALO NEW YORK

MIT 11:30am
14DEC05

M. Dodd "A" Bw-1
Casing Filled with N₂


BR 2221

Shut-in 18 minutes

Comments: No leakage observed at wellhead
or around casing at surface.

240psi

Price, Wayne, EMNRD

From: Price, Wayne, EMNRD
To: Gum, Tim, EMNRD
Cc:
Subject: Marbob Brine well BW-029 P&A
Attachments:  [C-103 P&A approval.tif\(152KB\)](#)

Sent: Fri 11/4/2005 12:26 PM

Dear Tim:

Please find enclosed for your records the C-103 with conditions:

Wayne Price-Senior Environmental Engr.
Oil Conservation Division
1220 S. Saint Francis
Santa Fe, NM 87505
E-mail wayne.price@state.nm.us
Tele: 505-476-3487
Fax: 505-4763462



TO: M

TRANSMITTAL COVER SHEET

OIL CONSERVATION DIVISION
1220 S. ST. FRANCIS DRIVE
SANTA FE, NM 87505
(505) 476-3440
(505) 476-3462 (Fax)

PLEASE DELIVER THIS FAX:

TO:

BRIAN COLLINS - MARBOB

FAX

505-746-2523

FROM:

WAYNE PRICE

DATE:

11/4/05

PAGES:

5 (INCL COVER)

SUBJECT:

C-103 BRINE WELL BW-029

POA MIT APPROVAL JP

IF YOU HAVE TROUBLE RECEIVING THIS FAX, PLEASE CALL THE OFFICE
NUMBER ABOVE.

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

Energy, Minerals and Natural Resources

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

WELL API NO. 30-015-31998
Indicate Type of Lease FEDERAL LEASE NO. XXXXXXXXXX
6. State or Federal Lease No.
FEDERAL LEASE NO. NMLC028731A
7. Lease Name or Unit Agreement Name M DODD A BW
8. Well Number 1
9. OGRID Number 14049
10. Pool name or Wildcat GRBG JACKSON SR O GRBG SA

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 _____

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 **BRINE WELL**

2. Name of Operator
MARBOB ENERGY CORPORATION

3. Address of Operator
PO BOX 227, ARTESIA, NM 88211-0227

4. Well Location
Unit Letter **N** : **300** feet from the **SOUTH** line and **1850** feet from the **WEST** line
Section **22** Township **17S** Range **29E** NMPM County **EDDY**

11. Elevation (Show whether DR, RKB, RT, GR, etc.)

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

NOTICE OF INTENTION TO:

PERFORM REMEDIAL WORK ☐ PLUG AND ABANDON ☒
TEMPORARILY ABANDON ☐ CHANGE PLANS ☐
PULL OR ALTER CASING ☐ MULTIPLE COMPL ☐

OTHER: ☐

SUBSEQUENT REPORT OF:

REMEDIAL WORK ☐ ALTERING CASING ☐
COMMENCE DRILLING OPNS. ☐ P AND A ☐
CASING/CEMENT JOB ☐

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.

MARBOB ENERGY CORPORATION PROPOSES TO PLUG & ABANDON AS FOLLOWS:

1. PULL TBG. RUN CSG SCRAPER TO APPX 325'.
2. SET CIBP @ APPX 325'.
3. FILL 7 5/8" CSG 325' TO SURF W/ 70 SX CLASS "C" + 2% CACL2.
4. POOH W/ TBG & FILL 7 5/8" TO SURFACE W/ CLASS "C" + 2% CACL2.
5. INSTALL BLM SPEC DRY HOLE MARKER & RECLAIM LOCATION TO BLM SPECS.

(SEE ATTACHED SCHEMATICS)

****BLM FORM 3160-5 SUNDRY NOTICE OF INTENT TO PLUG & ABANDON WAS FILED 10/31/05.****

APPROVED WITH ATTACHED CONDITION

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 NMOC guidelines ☐ a general permit ☐ or an (attached) alternative OCD-approved plan ☐.

SIGNATURE Diana J. Briggs TITLE PRODUCTION ANALYST DATE 11/3/05

Type or print name DIANA J. BRIGGS E-mail address PRODUCTION@MARBOB.COM Telephone No. (505) 748-331

For State Use Only

APPROVED BY: WAYNE PRICE TITLE ENVR. ENGINEER DATE 11/04/2005

Conditions of Approval (if any):

Attachment to C-103 dated 11/03/05

OCD Permit BW-029
Marbob Energy Corporation Brine Well
M Dodd A BW well #1
N-Sec 22-Ts 17s-R29e NMPM Eddy Co. NM.
API 30-015-31998.

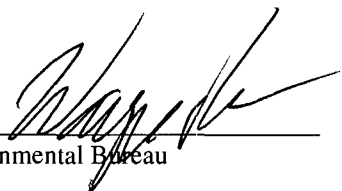
OCD Final MIT Requirement:

Marbob shall perform a final Mechanical Integrity Test (MIT) to demonstrate Internal and External integrity. OCD has reviewed the past hydrostatic MIT test "Open to formation" test that indicated that the normal surface test pressure was 220 psig. This would calculate to approximately 370 psi at the casing shoe taking into consideration the hydrostatic head of the casing water. OCD usually requires 300 psig, however due to the shallow nature of the salt section i.e. 350 feet OCD allowed this procedure to reduce the possibility of fracturing the salt.

Therefore, OCD recommends that the MIT be ran using nitrogen gas. OCD has allowed this procedure on other relative shallow brine wells in the area with good success. The test should be ran at 300 psig for a minimum of 30 minutes using a chart recorder with a 2 hours clock and minimum 1000 lb spring, with a recent calibration certification. The nitrogen should be injected slowly at approximately formation temperature 50-60 F and enough volume to displace the casing water to below the shoe of the casing.

OCD may accept other methods to verify mechanical integrity if pre-approved by OCD.

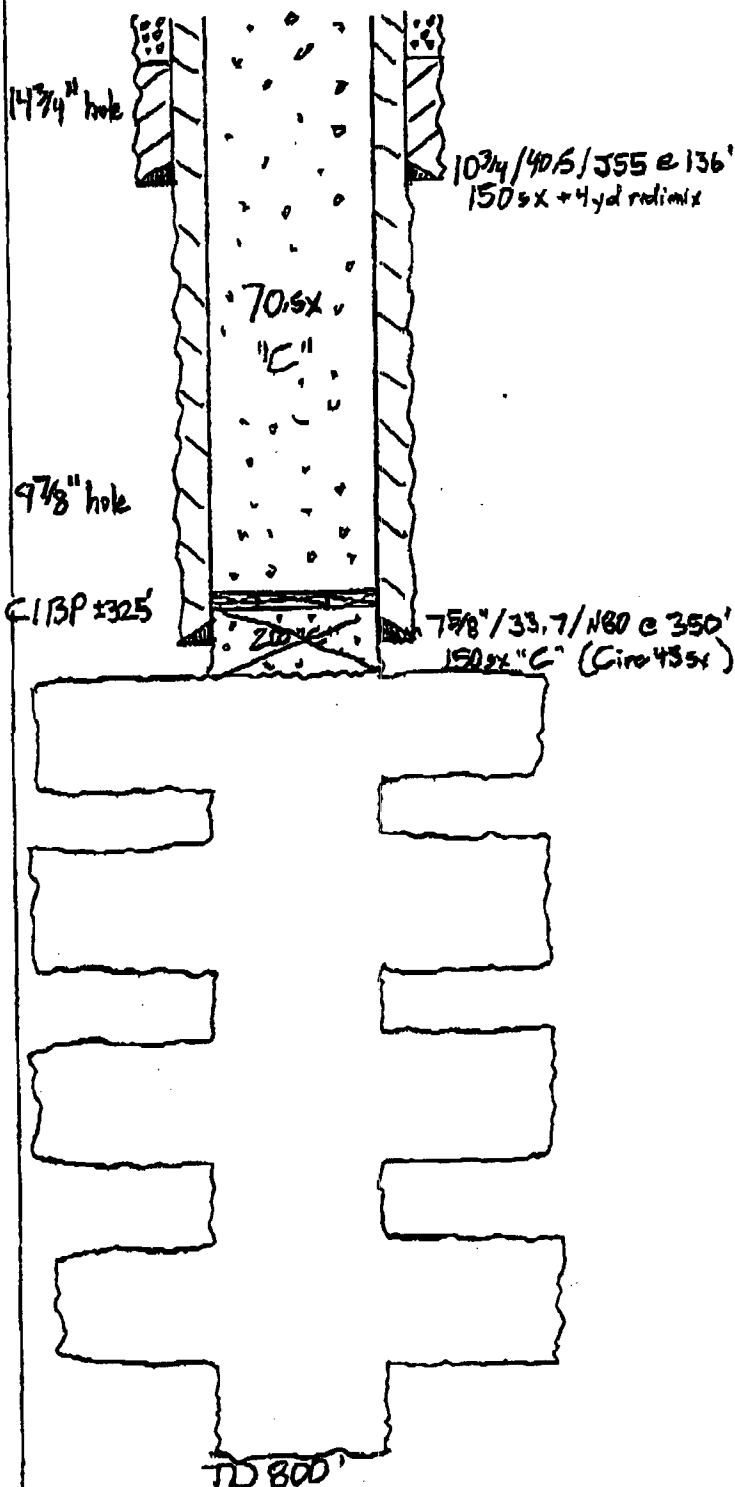
Please notify the OCD District Office and the Santa Fe Office within 72 hours of the Testing and Plugging event.

Wayne Price 
OCD Environmental Bureau

Date: 11/09/2005

M. Dodd A BW 31
 1850' FWL, 300' FSL
 N-22-719-29e
 Eddy, NM

(BW-029)



Proposed Procedure:

1. Pull tubing. Run casing scraper to $\pm 325'$.
2. Set CIBP $\pm 325'$
3. Pump 200 gx "C" + 2% CaCl_2 and displace to retainer. This plug should cover 7 5/8" shoe but won't achieve squeeze pressure due to cavernous nature of salt below 7 5/8" casing.
4. String out of retainer and fill 7 5/8" casing 325' to surface with 70 gx Class "C" + 2% CaCl_2 .
5. Poot with tubing and fill 7 5/8" to surface with Class "C" + 2% CaCl_2 .
6. Install OLM spec dry hole marker and reclaim location to OLM specs.

Class "C" + 2% CaCl_2 : 14.8 bbls
 1.32 cfs
 6.3 gpm

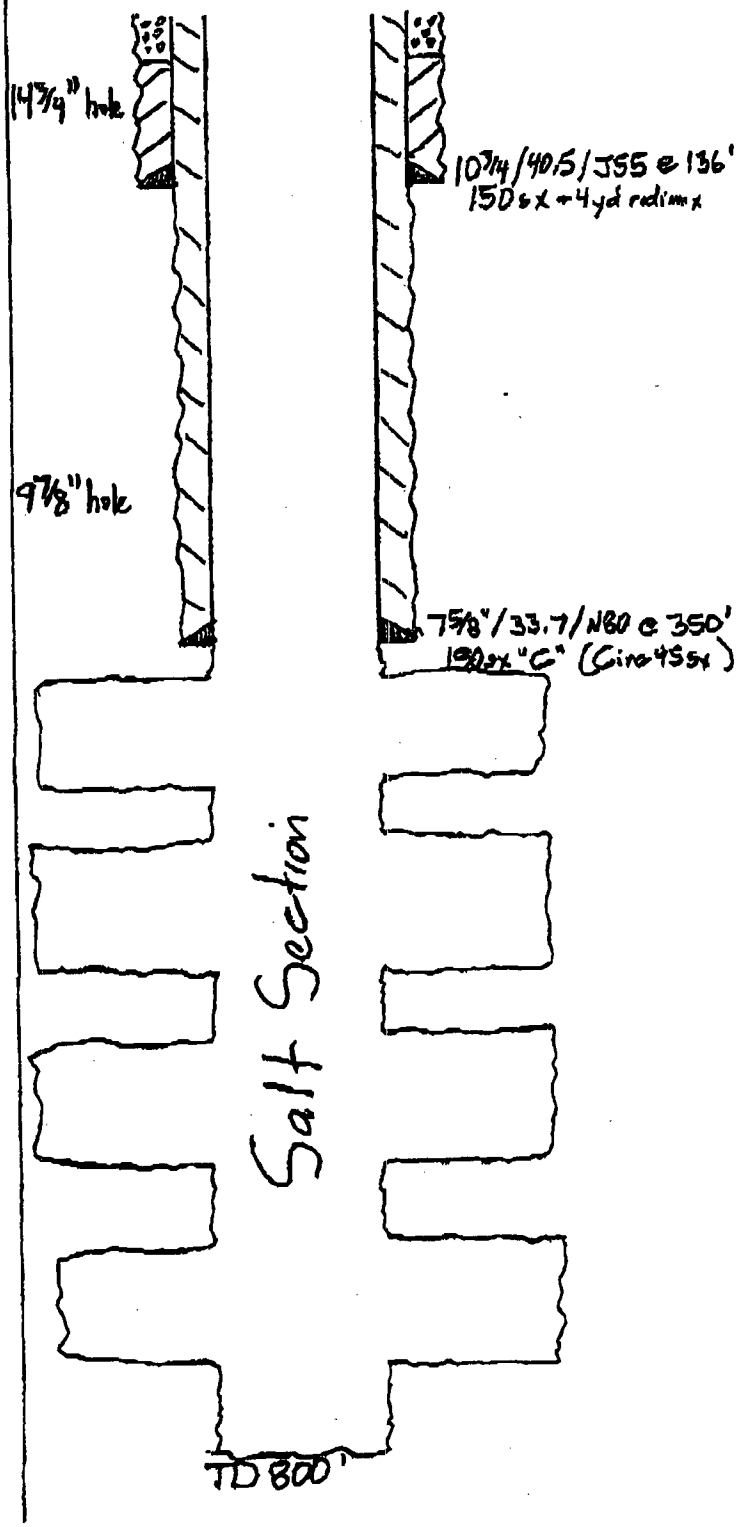
AFTER

111-61000 AT 12W T 1

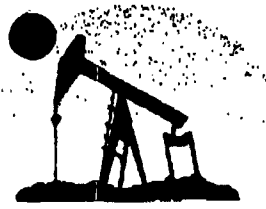
1050' FNL, 300' FSL
N-22-175-29e
Eddy, NM

(CBW-029)

111-61000 AT 12W T 1



BEFORE



marbob
energy corporation

FAX TRANSMITTAL

DATE: 11/3/05
TO: WAYNE PRICE
OCD - SANTA FE
FAX #: (505) 476-3462
FROM: DIANA BRIGGS

TOTAL # OF PAGES (INCLUDING COVER SHEET):

4

COMMENTS: WAYNE- FOLLOWING IS AN AMENDED C-103
FOR OUR M DODD & BUN #1. PLEASE DISREGARD
THE ONE I FAXED YOU EARLIER TODAY.
IF YOU HAVE ANY QUESTIONS, PLEASE CONTACT
BRIAN COLLINS @ (505) 748-3303.
THANK YOU!

PS - I WILL PUT THE
ORIGINAL IN THE MAIL
TO YOU TODAY -

IF YOU HAVE ANY TROUBLE RECEIVING THIS FAX, PLEASE CONTACT ME.

THANKS!

PHONE: 505/748-3303

FAX: 505/746-2523

E-MAIL: PRODUCTION@MARBOB.COM

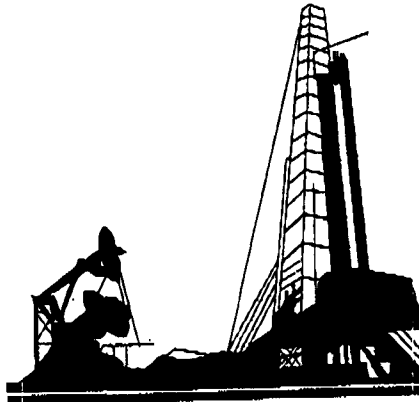
TRANSACTION REPORT

P.01

NOV-04-2005 FRI 12:01 PM

FOR:

DATE	START	RECEIVER	TX TIME	PAGES	TYPE	NOTE	M#	DP
NOV-04	12:00 PM	915057462523	57"	5	SEND	OK	677	
TOTAL :						57S PAGES:	5	



TO: M

TRANSMITTAL COVER SHEET

OIL CONSERVATION DIVISION
1220 S. ST. FRANCIS DRIVE
SANTA FE, NM 87505
(505) 476-3440
(505)476-3462 (Fax)

PLEASE DELIVER THIS FAX:

TO:

BRIAN COLLINS - MARBOB

FAX

505-746-2523

FROM:

WAYNE PRICE

11/4/05

**ATTACHMENT TO THE DISCHARGE Permit BW-029 APPROVAL
Marbob Energy Corporation Marbob Dodd A Brine Well (BW-029)
DISCHARGE PERMIT APPROVAL CONDITIONS
August 16, 2004**

1. Payment of Discharge Plan Fees: The \$100.00 filing fee has been received by OCD. The \$1700.00 flat fee shall be submitted upon receipt of this approval. The required flat fee may be paid in a single payment due at the time of approval, or in equal annual installments over the duration of the permit, with the first payment due upon receipt of this approval.
2. Commitments: Marbob Energy Corporation will abide by all commitments submitted in the discharge permit renewal application dated May 21, 2004 and these conditions for approval.
3. Production Method: Fresh water will be injected down the casing and brine shall be recovered up the tubing. Reverse flow will be allowed only once a month for up to 24 hours for clean out.
4. Maximum Injection Pressure: The maximum operating injection and/or test pressure at the well head will be such that the fracture pressure of the injection formation will not be exceeded and will not cause new fractures or propagate existing fractures or cause damage to the system.
5. Mechanical Integrity Testing: Conduct an annual open to formation pressure test by pressuring up the formation with fluids to one and one-half times the normal operating pressure or 300 psig whichever is greater for four hours. However, no operator may exceed surface injection or test pressures that may cause formation fracturing (see item 5 above) or system failures. Systems requiring test pressures less than 300 psig or methods that use testing media other than fluids, i.e. gas, must be approved by OCD prior to testing. Brine supply wells operating with isolation packers will have to pressure test both the cavern formation and casing/tubing annually.

At least once every five years and during well work-overs the cavern formation will be isolated from the casing/tubing annually and the casing pressure tested at 300 psig for 30 minutes. All pressure tests must be witnessed by OCD.

6. Capacity/ Cavity Configuration and Subsidence Survey: The operator shall provide information on the size and extent of the solution cavern and geologic/engineering data demonstrating that continued brine extraction will not cause surface subsidence, collapse or damage to property, or become a threat to public health and the environment. This information shall be supplied in each annual report. OCD may require the operator to perform additional well surveys, test, and install subsidence monitoring in order to demonstrate the integrity of the system. If the operator cannot demonstrate the integrity of the system to the satisfaction of the Division then the operator may be required to shut-down, close the site and properly plug and abandoned the well.
7. Production/Injection Volumes: The volumes of fluids injected (fresh water) and produced (brine) will be recorded monthly and submitted to the OCD Santa Fe Office in an annual report due on the first day of September of each year.
8. Analysis of Injection Fluid and Brine: Provide an analysis of the injection fluid and brine with each annual report. Analysis will be for General Chemistry (method 40 CFR 136.3) using EPA methods.
9. Drum Storage: All drums containing materials other than fresh water must be stored on an impermeable pad with curbing. All empty drums should be stored on their sides with the bungs in place and lined up on a horizontal plane. Chemicals in other containers such as sacks or buckets must also be stored on an impermeable pad with curbing.
10. Process Areas: All process and maintenance areas which show evidence that leaks and spills are reaching the ground surface must be either paved and curbed or have some type of spill collection device incorporated into the design.
11. Above Ground Tanks: All above ground tanks which contain fluids other than fresh water must be bermed to contain a volume of one-third more than the total volume of the largest tank or of all interconnected tanks. All new facilities or modifications to existing facilities must place the tank on an impermeable type pad within the berm.
12. Above Ground Saddle Tanks: Above ground saddle tanks must have impermeable pad and curb type containment unless they contain fresh water or fluids that are gases at atmospheric temperature and pressure.
13. Labeling: All tanks, drums, and other containers should be clearly labeled to identify their contents and other emergency information necessary if the tank were to rupture, spill, or ignite.

14. Below Grade Ponds/Pits/Tanks/Sumps: All below grade tanks, sumps, and pits must be approved by the OCD prior to installation or upon modification and must incorporate secondary containment and leak-detection into the design. All below grade tanks, sumps and pits must be tested annually, except systems that have secondary containment with leak detection. These systems with leak detection shall have a monthly inspection of the leak detection to determine if the primary containment is leaking. Results of tests and inspections shall be maintained at the facility covered by this discharge permit and available for NMOCD inspection. Any system found to be leaking shall be reported pursuant to Item # 19. Permit holders may propose various methods for testing such as pressure testing to 3 pounds per square inch above normal operating pressure and/or visual inspection of cleaned out tanks and/or sumps, or other OCD approved methods. The OCD will be notified at least 72 hours prior to all testing.
15. Underground Process/Wastewater Lines: All underground process/wastewater pipelines must be approved by the OCD prior to installation and must be tested to demonstrate their mechanical integrity every five (5) years. Results of such tests shall be maintained at the facility covered by this discharge plan and available for NMOCD inspection. Permit holders may propose various methods for testing such as pressure testing to 3 pounds per square inch above normal operating pressure or other means acceptable to the OCD. The OCD will be notified at least 72 hours prior to all testing.
16. Class V Wells: No Class V wells that inject non-hazardous industrial wastes or a mixture of industrial wastes and domestic wastes will be approved for construction and/or operation unless it can be demonstrated that groundwater will not be impacted in the reasonably foreseeable future. Leach fields and other wastewater disposal systems at OCD regulated facilities which inject non-hazardous fluid into or above an underground source of drinking water are considered Class V injection wells under the EPA UIC program. Class V wells that inject domestic waste only must be regulated by the New Mexico Environment Department.
17. Well Work Over Operations: OCD approval will be obtained from the Director prior to performing remedial work, pressure test or any other Work over. Approval will be requested on OCD Form C-103 "Sundry Notices and Reports on Wells" (OCD Rule 1103.A.) with appropriate copies sent to the OCD Environmental Bureau and District Office.
18. Housekeeping: All systems designed for spill collection/prevention, and leak detection will be inspected daily to ensure proper operation and to prevent overtopping or system failure.
19. Spill Reporting: All spills/releases shall be reported pursuant to OCD Rule 116. and WQCC 1203. to the OCD Artesia District Office.

20. Waste Disposal: All wastes will be disposed of at an OCD approved facility. Only oilfield exempt wastes shall be disposed of down Class II injection wells. Non-exempt oilfield wastes that are non-hazardous may be disposed of at an OCD approved facility upon proper waste determination per 40 CFR Part 261. Any waste stream that is not listed in the discharge will be approved by OCD on a case-by-case basis.

Rule 712 Waste: Pursuant to Rule 712, disposal of certain non-domestic waste is allowed at solid waste facilities permitted by the New Mexico Environment Department as long as the waste stream is identified in the discharge, and existing process knowledge of the waste stream does not change without notification to the Oil Conservation Division.

21. Transfer of Discharge Plan: The OCD will be notified prior to any transfer of ownership, control, or possession of a facility with an approved discharge plan. A written commitment to comply with the terms and conditions of the previously approved discharge plan must be submitted by the purchaser and approved by the OCD prior to transfer.
22. Closure: The OCD will be notified when operations of the facility are discontinued for a period in excess of six months. Prior to closure of the facility a closure plan will be submitted for approval by the Director. Closure and waste disposal will be in accordance with the statutes, rules and regulations in effect at the time of closure.
23. OCD Inspections: Additional requirements may be placed on the facility based upon results from OCD inspections.
24. Storm Water: Stormwater runoff controls shall be maintained. As a result of operations, if any water contaminant that exceeds the WQCC standards listed in 20 NMAC 6.2.3101 is discharged in any stormwater run-off, then immediate actions shall be taken to mitigate the effects of the run-off, notify the OCD within 24 hours, and modify the discharge to include a formal stormwater run-off containment and submit for OCD approval within 15 days.

Mr. Dean Chumbley
August 16, 2004
Page 7

25. Certification: Marbob Energy Corporation by the officer whose signature appears below, accepts this and agrees to comply with all terms and conditions contained herein. Marbob Energy Corporation further acknowledges that these conditions and requirements of this may be changed administratively by the Division for good cause shown as necessary to protect fresh water, human health and the environment.

Marbob Energy Corporation

Print Name: Ray Miller

Signature: Ray Miller

Title: Attorney-in-Fact

Date: 08/23/04



NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

BILL RICHARDSON

Governor

Joanna Prukop

Cabinet Secretary

August 16, 2004

Mark E. Fesmire, P.E.

Director

Oil Conservation Division

CERTIFIED MAIL

RETURN RECEIPT NO. 3929 8430

AUG 16 2004

Mr. Dean Chumbley
Marbob Energy Corporation
P.O. Box 227
Artesia, NM 88211-0227

Re: Marbob Dodd A Brine Well BW-029
SE/4 SW/4 Sec 22-Ts17s-R29e
Eddy County, New Mexico

Dear Mr. Chumbley:

The groundwater discharge plan application, BW-029, for the Marbob Energy Corporation (Marbob) Marbob Dodd A Brine Well located 300 FSL and 1850 FWL in Section 22, Township 17 South, Range 29 East, NMPM, Eddy County, New Mexico, **is hereby approved** under the conditions contained in the enclosed attachment. Enclosed are two copies of the conditions of approval. **Please sign and return one copy to the New Mexico Oil Conservation Division (OCD) Santa Fe Office within 30 working days of receipt of this letter.**

The application consists of the original discharge plan application dated December 10, 1998, supplemental information supplied in letter dated March 31, 1999, site and well plugging bonds and the discharge permit renewal application dated May 21, 2004 submitted pursuant to Section 5101.B.3. of the New Mexico Water Quality Control Commission (WQCC) Regulations also includes all earlier applications and all conditions later placed on those approvals.

The discharge renewal application was submitted pursuant to Section 20.6.2.5101 of the New Mexico Water Quality Control Commission (WQCC) Regulations. The discharge is issued pursuant to Section 5101 and 3109.C. Please note Section 3109.G., which provides for possible future amendment of the permit. Please be advised that approval of this permit does not relieve Marbob Energy Corporation of liability should operations result in pollution of surface or ground waters, or the environment.

Please be advised that all exposed pits, including lined pits and open top tanks (exceeding 16 feet in diameter) shall be screened, netted, or otherwise rendered nonhazardous to wildlife including migratory birds.

Mr. Dean Chumbley
August 16, 2004
Page 2

Please note that Section 3104 of the regulations requires that "when a permit has been approved, discharges must be consistent with the terms and conditions of the permit." Pursuant to Section 3107.C., operators are required to notify the Director of any facility expansion, production increase, or process modification that would result in any change in the discharge of water quality or volume.

Pursuant to Section 3109.H.4., this approval is for a period of five years. **This approval will expire May 21, 2009** and an application for renewal should be submitted in ample time before that date. Pursuant to Section 5101.F. of the regulations, if a discharger submits a discharge renewal application at least 120 days before the discharge permit expires and is in compliance with the approved permit, then the existing discharge permit will not expire until the application for renewal has been approved or disapproved.

The \$100.00 filing fee has been received by OCD. The \$1700.00 flat fee shall be submitted upon receipt of this approval. The required flat fee may be paid in a single payment due at the time of approval, or in equal annual installments over the duration of the permit, with the first payment due upon receipt of this approval.

**Please make all checks payable to: Water Quality Management Fund
C/o: Oil Conservation Division
1220 South Saint Francis Drive
Santa Fe, New Mexico 87505.**

If you have any questions, please contact Wayne Price of my staff at (505-476-3487) or E-mail wprice@state.nm.us. On behalf of the staff of the OCD, I wish to thank you and your staff for your cooperation during this discharge plan review.

Sincerely,



Roger C. Anderson
Environmental Bureau Chief
RCA/lwp

Attachment-1
xc: OCD Artesia Office

STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

EEE 0000556

OFFICIAL RECEIPT

Date: 8-30-04

Received From: Machob Energy Corp



* E E E 0 0 0 0 5 5 6 *

_____ Dollars

Center Code	Revenue Code	Amount	Work Order No.
<u>2700</u>		<u>1.700</u>	

Center Code	Revenue Code	Amount	Work Order No.

State Treasurer Deposit Number _____

Total \$ 1,700.00

Description: _____

Signed: [Signature]

ACKNOWLEDGEMENT OF RECEIPT
OF CHECK/CASH

I hereby acknowledge receipt of check No. [REDACTED] dated 8/23/04,
or cash received on _____ in the amount of \$ 1,700.00
from Marbob Energy Corp.
for Brine Marbob Dadda Brine Well BLW-079
(Facility Name)
Submitted by: [Signature] Date: 8/30/04 (DP No.)
Submitted to ASD by: _____ Date: _____
Received in ASD by: _____ Date: _____
Filing Fee _____ New Facility _____ Renewal ☒
Modification _____ Other _____
(Specify)
Organization Code 521.07 Applicable FY 2001
To be deposited in the Water Quality Management Fund.
Full Payment ☒ or Annual Increment _____



marbob
energy corporation

2208 W. MAIN
P.O. BOX 227
ARTESIA, NEW MEXICO 88211-0227
(505) 748-3303

95-43/1122

FIRST NATIONAL BANK
P.O. DRAWER AA
ARTESIA, NM 88210

*****ONE THOUSAND SEVEN HUNDRED DOLLARS AND NO/100*****

PAY TO
THE ORDER
OF

WATER QUALITY MANAGEMENT FUND
C/O OIL CONSERVATION DIVISION
1220 SOUTH SAINT FRANCIS DRIVE
SANTA FE, NM 87505

DATE	CHECK AMOUNT
08/23/04	*\$1700.00*

MARBOb ENERGY CORPORATION

[Signature]

INVOICE DATE	INVOICE NO.	DESCRIPTION	INVOICE TOTAL	ADJUSTMENTS	DISCOUNT	NET AMOUNT
08/23/04		MARBOB DODDA BRINE WELL BW-029 SW/4 SW/4 SEC 22-17S-293 EDDY COUNTY, NM	\$1700.00			\$1700.00



MARBOB ENERGY CORPORATION

2208 W. MAIN

P.O. BOX 227

ARTESIA, NEW MEXICO 88211-0227

(505) 748-3303

PLEASE DETACH BEFORE DEPOSITING. RETAIN TOP PORTION FOR YOUR RECORDS.

8-18-04
Randy Lewis

GRAPHIC CONTROLS CORPORATION
API 30-015-31998
CHART NO. MC MP-500

METER

CHART PUT ON

31M

LOCATION

DEPART

TAKEN OFF
3:30 P
MARMS 30-015-31998
CASING TEST
PACKARD SET 2300'

WITNESS W.D. - OCP
8/18/04
PASSED - OK

W.D. 3:30 P
JFO

3:30 P
←

5

NOTICE OF PUBLICATION

STATE OF NEW MEXICO ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT OIL CONSERVATION DIVISION

Notice is hereby given that pursuant to New Mexico Water Quality Control Commission Regulations, the following discharge permit application(s) has been submitted to the Director of the Oil Conservation Division, 1220 S. Saint Francis Drive, Santa Fe, New Mexico 87505, Telephone (505) 476-3440:

(BW-029) - Marbob Energy Corporation, Dean Chumbley, (505) 748-3303, P. O. Box 227, Artesia, New Mexico 88211-0227, has submitted a discharge plan application for the Marbob Dodd A Brine Well Station located 300 FSL and 1850 FWL in Section 22, Township 17 South, Range 29 East, NMPM, Eddy County, New Mexico. Approximately 20 barrels per day on average, of brine water will be extracted with an average dissolved solids concentration of approximately 300,000 mg/l. The brine water will be stored in one 500 barrel aboveground fiberglass tank. Ground water most likely to be affected in the area by any accidental discharge is estimated to be at a depth of approximately 60-80 feet below ground surface with a total dissolved solids concentration ranging from approximately 300 to 2300 mg/l respectively. The discharge plan addresses how spills, leaks, and other accidental discharges to the surface will be managed.

Any interested person may obtain further information from the Oil Conservation Division and may submit written comments to the Director of the Oil Conservation Division at the address given above. The discharge permit application and draft discharge permit may be viewed at the above address between 8:00 a.m. and 4:00 p.m., Monday through Friday. The draft discharge permit may also be viewed at OCD's web site <http://www.emnrd.state.nm.us/ocd/>. Prior to ruling on any proposed discharge permit or its modification, the Director of the Oil Conservation Division shall allow at least thirty (30) days after the date of publication of this notice during which comments may be submitted and a public hearing may be requested by any interested person. Requests for a public hearing shall set forth the reasons why a hearing should be held. A hearing will be held if the Director determines there is significant public interest.

If no public hearing is held, the Director will approve or disapprove the proposed permit based on information available. If a public hearing is held, the director will approve or disapprove the proposed permit based on information in the permit and information submitted at the hearing.

GIVEN under the Seal of New Mexico Oil Conservation Commission at Santa Fe, New Mexico, on this 14th day of June 2004.

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION

S E A L

Mark Fesmire, Director

ACKNOWLEDGEMENT OF RECEIPT
OF CHECK/CASH

I hereby acknowledge receipt of check No. [REDACTED] dated 5/21/04
or cash received on _____ in the amount of \$ 100⁰⁰
from MARBOB ENERGY CORP
for DOOP A BRIVE WELL G-29
Submitted by: WAYNE PRICE (Facility Name) Date: 6/8/04 (CP No.)
Submitted to ASD by: [Signature] Date: _____
Received in ASD by: _____ Date: _____
Filing Fee ☒ New Facility _____ Renewal _____
Modification _____ Other _____ (Specify)
Organization Code 521.07 Applicable FY 2004

To be deposited in the Water Quality Management Fund.
Full Payment _____ or Annual Increment _____



2208 W. MAIN
P.O. BOX 227
ARTESIA, NEW MEXICO 88211-0227
(505) 748-3303

95-43/1122

FIRST NATIONAL BANK
P.O. DRAWER AA
ARTESIA, NM 88210

*****ONE HUNDRED DOLLARS AND NO/100*****

PAY TO THE ORDER OF
OIL CONSERVATION DIVISION
1220 SOUTH ST. FRANCIS DR.
SANTA FE, NM 87505

DATE	CHECK AMOUNT
05/21/04	\$100.00*

MARBOB ENERGY CORPORATION

Wayne Miller

INVOICE DATE*	INVOICE NO.	DESCRIPTION	INVOICE TOTAL	ADJUSTMENTS	DISCOUNT	NET AMOUNT
05/21/04		FILING FEES DODD A BRINE WELL	\$100.00			\$100.00



MARBOB ENERGY CORPORATION

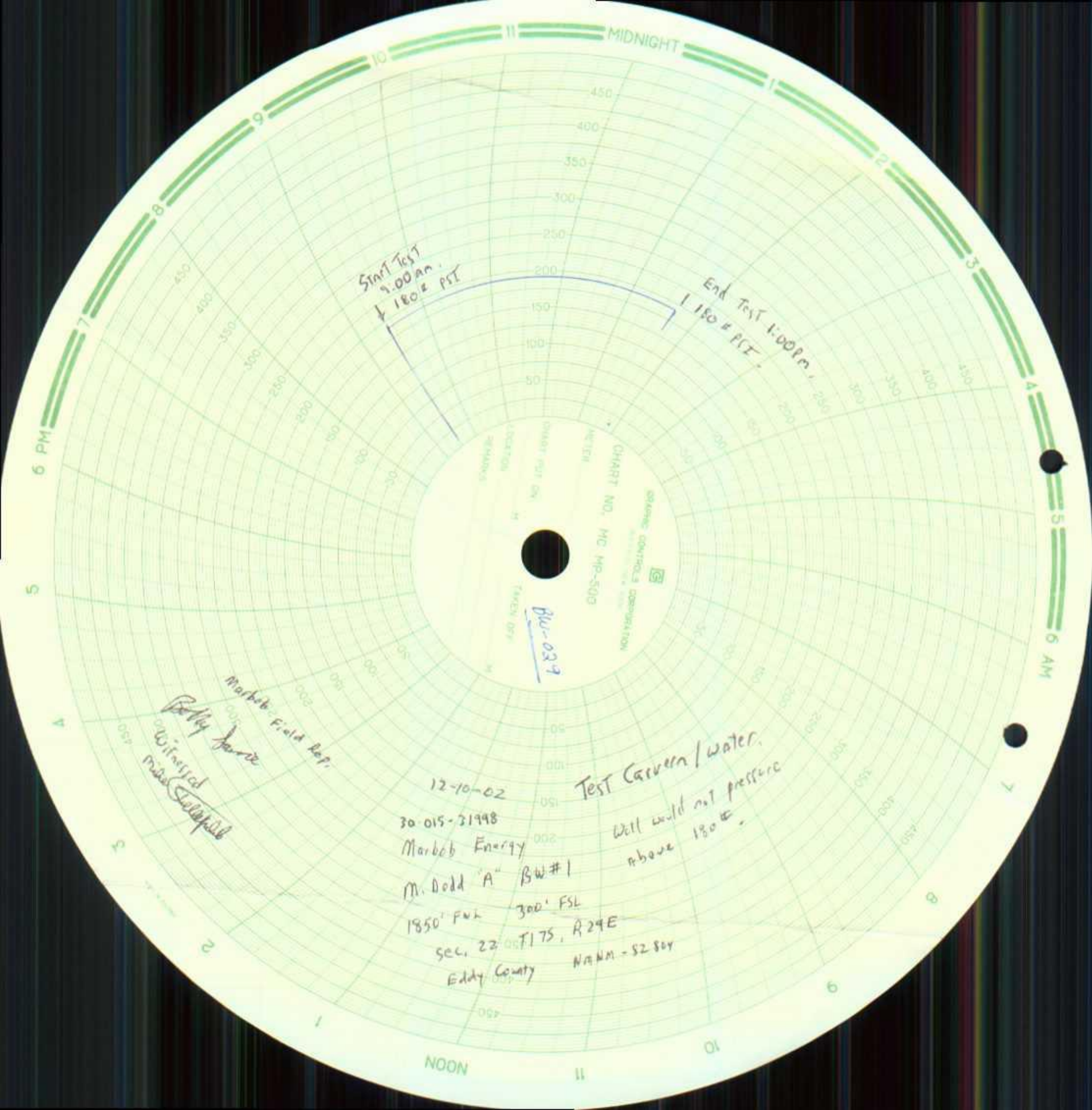
2208 W. MAIN

P.O. BOX 227

ARTESIA, NEW MEXICO 88211-0227

(505) 748-3303

PLEASE DETACH BEFORE DEPOSITING. RETAIN TOP PORTION FOR YOUR RECORDS.





OCD ENVIRONMENTAL BUREAU

SITE INSPECTION SHEET

NEED API #

DATE: 12/8/00 Time: 2:1 PM

Type of Facility: Refinery ☐ Gas Plant ☐ Compressor St. ☐ Brine St. ☒ Oilfield Service Co. ☐
Surface Waste Mgt. Facility ☐ E&P Site ☐ Crude Oil Pump Station ☐
Other ☐ _____

Discharge Plan: No ☐ Yes ☒ DP# BW-029

FACILITY NAME: MARBON ENERGY CORP. M. DONA "A" BW #1

PHYSICAL LOCATION: _____

Legal: QTR QTR Sec 22 TS 175 R 29E County EDDY
1850 FWL / 300' FSL

OWNER/OPERATOR (NAME) SAB

Contact Person: _____ Tele: # _____

MAILING

ADDRESS: _____ State _____ ZIP _____

Owner/Operator Rep's: DOYLE DAVIS

OCD INSPECTORS: W PRICE, M STUBBLEFIELD, GARY WILLIAMS

1. **Drum Storage:** All drums containing materials other than fresh water must be stored on an impermeable pad with curbing. All empty drums will be stored on their sides with the bungs in and lined up on a horizontal plane. Chemicals in other containers such as sacks or buckets will also be stored on an impermeable pad and curb type containment.

NA

2. **Process Areas:** All process and maintenance areas which show evidence that leaks and spills are reaching the ground surface must be either paved and curbed or have some type of spill collection device incorporated into the design.

OK

3. **Above Ground Tanks:** All above ground tanks which contain fluids other than fresh water must be bermed to contain a volume of one-third more than the total volume of the largest tank or of all interconnected tanks. All new tanks or existing tanks that undergo a major modification, as determined by the Division, must be placed within an impermeable bermed enclosure.

OK

4. Above Ground Saddle Tanks: Above ground saddle tanks must have impermeable pad and curb type containment unless they contain fresh water or fluids that are gases at atmospheric temperature and pressure.

NA

5. Labeling: All tanks, drums and containers will be clearly labeled to identify their contents and other emergency notification information.

NA

6. Below Grade Tanks/Sumps: All below grade tanks, sumps, and pits must be approved by the OCD prior to installation or upon modification and must incorporate secondary containment and leak-detection into the design. All pre-existing sumps and below-grade tanks must demonstrate integrity on an annual basis. Integrity tests include pressure testing to 3 pounds per square inch above normal operating pressure and/or visual inspection of cleaned out tanks and/or sumps, or other OCD approved methods. The OCD will be notified at least 72 hours prior to all testing.

NA

7. Underground Process/Wastewater Lines: All underground process/wastewater pipelines must be tested to demonstrate their mechanical integrity at present and then every 5 years thereafter, or prior to discharge plan renewal. The permittee may propose various methods for testing such as pressure testing to 3 pounds per square inch above normal operating pressure or other means acceptable to the OCD. The OCD will be notified at least 72 hours prior to all testing.

LINE FROM BRINE WELL TO TANKS

8. Onsite/Offsite Waste Disposal and Storage Practices: Are all wastes properly characterized and disposed of correctly? Does the facility have an EPA hazardous waste number? Yes No

ARE ALL WASTE CHARACTERIZED AND DISPOSED OF PROPERLY? YES ☒ NO ☐ IF NO DETAIL BELOW.

9. Class V Wells: Leach fields and other wastewater disposal systems at OCD regulated facilities which inject non-hazardous fluid into or above an underground source of drinking water are considered Class V injection wells under the EPA UIC program. All Class V wells that inject non-hazardous industrial wastes or a mixture of industrial wastes and domestic wastes will be closed unless it can be demonstrated that groundwater will not be impacted in the reasonably foreseeable future. Closure of Class V wells must be in accordance with a plan approved by the Division's Santa Fe Office. The OCD allows industry to submit closure plans which are protective of human health, the environment and groundwater as defined by the WQCC, and are cost effective. Class V wells that inject domestic waste only must be permitted by the New Mexico Environment Department.

ANY CLASS V WELLS NO ☒ YES ☐ IF YES DESCRIBE BELOW! Undetermined ☐

10. Housekeeping: All systems designed for spill collection/prevention will be inspected weekly and after each storm event to ensure proper operation and to prevent overtopping or system failure. A record of inspections will be retained on site for a period of five years.

GOOD

11. Spill Reporting: All spills/releases will be reported pursuant to OCD Rule 116 and WQCC 1203 to the proper OCD District Office.

OK

12. Does the facility have any other potential environmental concerns/issues?

NONE

13. Does the facility have any other environmental permits - i.e. SPCC, Stormwater Plan, etc.?

FACILITY IS COMPLETELY NIKE

14. ANY WATER WELLS ON SITE? NO ☒ YES ☐ IF YES, HOW IS IT BEING USED?

MIT - Miscellaneous Comments: ANNULUS GAGE 188 psig - CHART ON UPM 0-1000 psig
CHART \approx 180 psig -

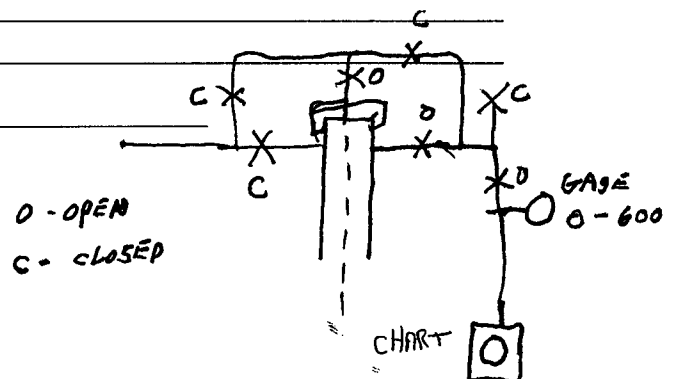
ON 2 CLOCK - 30 MIN - PUT ON 8 HOUR CLOCK
NORMAL OPERATING PRESS 50 psig

Number of Photos taken at this site: _____
attachments-

OCD Inspection Sheet
Page ____ of ____

5 PM GAGE \approx 183 psig

SECOND TEST - SEE BACK



MARB

Wildcat Measurement

Calibration Certificate

Pressure Recorder

Serial Number: MFG-4399 (Clif Mock Recorder)

Pressure Range 0-1000# p.s.i. accuracy +/- 0.2% % Full Scale 0-1000# p.s.i.

Company: Marbob Energy Corporation

Increasing Pressure			Decreasing Pressure		
Applied Pressure	Indicated Pressure	Difference	Applied Pressure	Indicated Pressure	Difference
0.0#	0.0#	0.0#	800#	783#	-17#
100#	99#	-1#	600#	587#	-13#
300#	296#	-4#	400#	392#	-8#
500#	485#	-15#	200#	198#	-2#
700#	682#	-18#	0.0#	0.0#	0.0#
1000#	980#	-20#			
0.0#	0.0#	0.0#	800#	800#	0.0#
100#	100#	0.0#	600#	600#	0.0#
300#	300#	0.0#	400#	400#	0.0#
500#	500#	0.0#	200#	200#	0.0#
700#	700#	0.0#	0.0#	0.0#	0.0#
1000#	1000#	0.0#			

Calibrated By: DCT Gauge Deadweight

This Is To Certify That This Recorder Has Been Inspected And Tested.

Remarks _____

Date Of Calibration 12-13-2000 Inspector [Signature]

FIRST TEST

BW-029



GRAPHIC CONTROLS CORPORATION
BUFFALO, NEW YORK

MARB-B ENERGY CORP.

M 000P A
1850 FWL
300 FSL

BW #1

22-175-29E

OPEN HOLE TEST

12/8

19 00

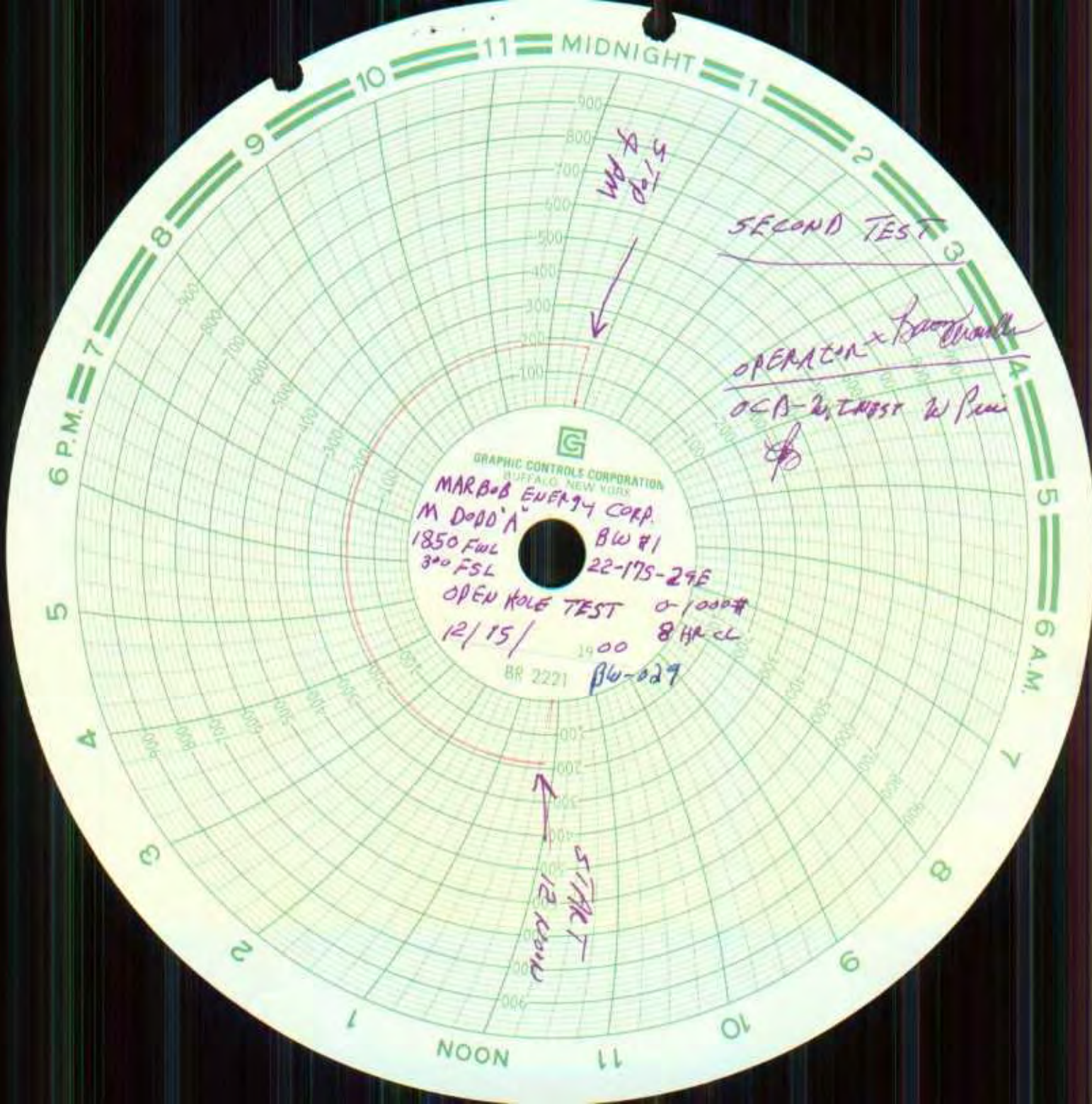
RR 2221

0-1000 PSIG
8 HR CLOCK

COMPANY W. A. Davis
OCD Wayne Price

← 5 PM

1 PM



GRAPHIC CONTROLS CORPORATION
BUFFALO, NEW YORK

MARBOB ENERGY CORP.
M DODD A
1850 FWSL
300 FSL
OPEN HOLE TEST
12/15/1900
BR 2221
BW-029

SECOND TEST

OPERATION x 1000

OCA-2, TEST 2, Pen

51100
12.1000

51100
12.1000



NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

GARY E. JOHNSON

Governor

Jennifer A. Salisbury

Cabinet Secretary

Lori Wrotenbery

Director

Oil Conservation Division

October 20, 2000

CERTIFIED MAIL

RETURN RECEIPT NO.

5051 4515

MARBB
BW-029

Attention: Brine Well Operators

Re: Mechanical Integrity Testing of Brine Supply Wells

The Underground Injection Control Program of the Federal Safe Drinking Water Act requires that operators demonstrate mechanical integrity of all injection wells by ensuring there are no leaks in the tubing, casing, or packer, and injected/produced fluids are confined within the piping and injection zones.

The Oil Conservation Division (OCD) requires operators of brine supply wells to perform the following mechanical integrity tests:

1. At least once every five years isolate the cavern formation from the casing/tubing annulars and hydrostatic fluid pressure test the casing at 300 psig for 30 minutes. New brine wells and wells being worked over will have to be tested in this manner before operations begin.
2. Annually perform an open hole cavern formation pressure test by pressuring up the formation with fluid to one and one-half times the normal operating pressure or 300 psig whichever is greater for four hours. Operators shall not exceed surface pressures that may cause formation fracturing or system failures. OCD prior to test shall approve test pressures below 300 psig and methods that use media other than fluids. Brine supply wells operating with packers will have to pressure both the cavern formation and casing/tubing annulars.

Please find enclosed an "OCD Brine Well Test Schedule December 2000" and "Brine Well Test Procedure Guidance Document" for this December 8th through 18th 2000. Please have your well ready for testing on the date and time you are scheduled. Please refer to the Well Test Schedule attached for the **type of test** you are scheduled to perform. You must receive prior OCD approval to alter the scheduled time or type of test.

Brine Well Operators

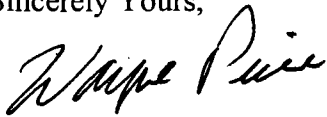
10/20/00

Page 2

Operators will be responsible for providing equipment and shall bear all costs incurred. All tests must be witnessed by the New Mexico Oil Conservation Division. Operators failing to abide by the procedures, type of test, and time schedules listed herein may be required to shut-in their systems until OCD has an opportunity to approve and witness testing.

If you require any further information or assistance please do not hesitate to write or call me at (505-827-7155).

Sincerely Yours,

A handwritten signature in cursive script, appearing to read "Wayne Price".

Wayne Price-Pet. Engr. Spec.
Environmental Bureau

cc: OCD District Offices

- Attachments-
1. OCD Brine Well Test Schedule December 2000.
 2. Brine Well Testing Procedure Guidance Document.

OCD BRINE WELL TEST SCHEDULE December of 2000

Company	DP#	Facility Name	Date of Test	Start	Stop	Type of Test(s) Required	Contact Person	Telephone	FAX #
Marbob Brine Well	BW-029	M. Dodd "A" BW#1	December 08, 2000	1:00 PM	5:00 PM	2 Pressure test cavern	Doyle Davis Raye Miller	748-5975 cell 748-3303	1-505-746-2523
P&S Brine Simms-McCasland Salty Dog, Inc.	BW-002	Eunice Eunice Water ST.	December 11, 2000	8 am	12 noon	2 Pressure test cavern	Paul Prather	1-505-394-2545	1-505-394-2426
	BW-009A	Eunice Brine Station	December 11, 2000	9:30 am	1:30 pm	2 Pressure test cavern	Bob Patterson	1-505-394-2581	1-505-394-2584
	BW-008	Arkansas-Jct	December 11, 2000	11 am	3 pm	2 Pressure test cavern	Mr. Piter Bergstein Walter Brisco	1-806-741-1080	
Stearns Inc. Gandy Corp. Key Energy	BW-013	Crossroads	December 12, 2000	8:00 AM	12 noon	2 Pressure test cavern	L.A. Stearns	1-505-675-2356	1-505-675-2339
	BW-022	Tatum Water St.	December 12, 2000	9:00 AM	1:00 PM	2 Pressure test cavern	Larry Gandy	1-505-398-4960	cell 369-5721
	BW-018	Truckers #2 (Hobbs)	December 12, 2000	10:30 AM	2:30 PM	2 Pressure test cavern	Pete Turner	1-505-397-4994	1-505-393-9023
I&W Trucking Loco Hills Brine	BW-006 & 6A	Carlsbad Yard	December 13, 2000	8:00 AM	12 noon	2 Pressure test cavern	George Parchman	1-505-885-6663	1-505-885-8477
	BW-021	Loco Hills	December 13, 2000	1:30 PM	5:30 PM	2 Pressure test cavern	D. Maloney or R. Harris	1-505-677-2370	1-505-677-2361
Goldstar Quality Oil (Salado Brine Sales)	BW-028	Eunice Brine Station	December 14, 2000	9:30 am	1:30 pm	2 Pressure test cavern	Royce Crowell	1-505-394-2504	1-505-394-2560
	BW-025	Salado Brine St. #2	December 14, 2000	11am	3 pm	2 Pressure test cavern	see P&S		
Key Energy-Carlsbad Scurlock/Permian Jims Water Ser.	BW-019	Rowland Truckers	December 15, 2000	8:00 AM	12 noon	2 Pressure test cavern	John Hutcheson		1-505-887-3011
	BW-027 & 27A	Carlsbad Brine St.	December 15, 2000	9:00 AM	1:00 PM	2 Pressure test cavern	Jim Ephraim	1-713-672-8092	1-713-672-7609
	BW-005	SE of Artesia	December 15, 2000	10:30 AM	2:30 PM	2 Pressure test cavern	Sammy Stoneman	1-505-748-1352	1-505-746-3227
Scurlock-Permian Gandy- WasserHaun	BW-012	Hobbs Station	December 18, 2000	8:00 AM	12 noon	2 Pressure test cavern	Richard Lentz	1-505-392-8212	1-505-392-6988
	BW-004	Buckeye St.	December 18, 2000	9:00 AM	1:00 PM	2 Pressure test cavern	Larry Gandy	1-505-398-4960	cell 369-5721

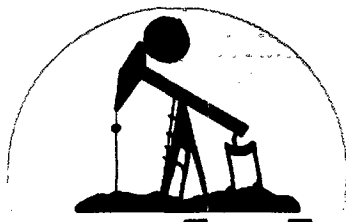
Notes:

Type of Pressure Test:	1 Casing Test	Isolate cavern formation from the casing/tubing annulars and hydrostatic fluid pressure test the casing at 300 psig for 30 minutes.
	2 Open Hole Cavern Pressure Test	Open hole cavern formation pressure test by pressuring up the formation with fluid to one and one-half times the normal operating pressure or 300 psig whichever is greater for four hours. Operators shall not exceed surface pressures that may cause formation fracturing or system failures. OCD prior to test shall approve test pressures below 300 psig and methods that use media other than fluids. Brine supply wells operating with packers will have to pressure both the cavern formation and casing/tubing annulars.
	3 Others	Nitrogen-Brine Interface Test, Nitrogen Test, Etc.

Brine Well Testing Procedure Guidance Document

- 1) The cavern and all piping must be filled, pressured up and stabilized for a period of at least 24 hours prior to testing. If this test requires or utilizes a packer then the casing/tubing annulus must be loaded with inert fluid 24 hours prior to testing.
- 2) Have manpower and equipment available for pressure test. Well head shall be prepared for test and all valves and gauges should be in good working order.
- 3) Pressure devices i.e pumps, truck pumps, etc. must be isolated from the well head during test.
- 4) A continuous recording pressure chart with an 8 hour clock shall be installed on the casing/tubing annulus, as directed by the OCD, with a pressure range of not greater than 500 psig. The operator must provide proof that pressure recording device has a range of 0-500 psig and has been calibrated within the past 6 months. Wells, with isolation packers installed, which requires both the casing/tubing annulus and cavern to be tested will require two recording devices or one recording device with two pins. Operators may utilize other types of pressure recording devices, such as electronic data loggers, etc., if approved by OCD.
- 5) A minimum of one pressure gage shall be installed in the system as directed by OCD.
- 6) OCD must witness the beginning of test (putting chart on) and ending of test (removing chart). At the end of test operator may be required to bleed-off pressure to demonstrate recorder response.
- 7) The Operator will supply the following information on the pressure chart before starting test:
 1. Company name, discharge plan #, well name and number, legal location UL, section, township, range and county.
 2. Type of Test: Open Hole, Casing Test, or Both.
 3. Date, time test started, time stop.
 4. Chart and Recorder information. (can be attached)
 5. Normal operating surface and formation fracture pressure. (can be attached)
 6. **After Test Completed:**
Name (printed) and signature of company representative and OCD inspector.

Note: NMOCD recognizes that different operations, well constructions, well designs and field conditions may cause variations in the above procedures. Operator is responsible to notify OCD of any procedure that may cause harm to the well or formation. If operator wishes to make or anticipate changes you must notify the OCD for approval.



marbob
energy corporation

JUL - 1 1999

June 28, 1999

New Mexico Energy, Minerals
& Natural Resources Department
Oil Conservation Division
2040 South Pacheco Street
Santa Fe, New Mexico 87505

Attn: Wayne Price
Environmental Bureau

RE: Mary Dodd A Brine Well BW-029
SE/4SW/4 - Section 22-17S-29E
Eddy County, New Mexico

Dear Mr. Price:

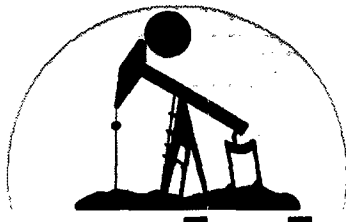
As you requested, please find enclosed five photographs of the above referenced brine station. A short description and orientation is printed on the back of each photograph.

Again, I apologize for the delay in getting these photographs to you. Please do not hesitate to contact me should you require any additional information. Thank you for your help in this matter.

Sincerely,

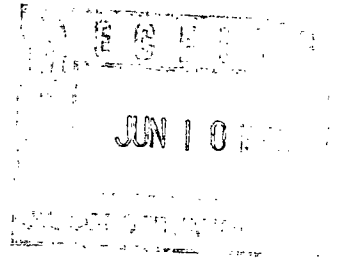
Dean Chumbley
Land Department

DC/mm
Enclosures



marbob
energy corporation

June 8, 1999



Energy, Minerals and Natural
Resources Department
Oil Conservation Division
2040 South Pacheco
Santa Fe, New Mexico 87505

Attn: Wayne Price
Environmental Bureau

RE: Mary Dodd A
Brine Well BW-029
SE/4SW/4 Section 22-17S-29E
Eddy County, New Mexico

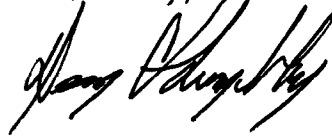
Dear Mr. Price:

Please find enclosed, in triplicate, a revised version of Marbob Energy's Mary Dodd A Brine Station layout. The changes shown are the removal of the transfer pump and the addition of two more 500 barrel fiberglass storage tanks. The storage tanks will be filled through the existing pipeline into the original brine water tank. All three tanks will be tied together via the one foot connection at the front of the tanks allowing the existing level controller to operate all three storage tanks. This revision does not affect the operation of the Brine Station. It only increases the amount of storage available.

I apologize for the lack of the pictures you requested. I am waiting for construction of the additional tanks, as well as a new berm capable

of continuing these additional tanks. I hope to forward the pictures to your office shortly. Please do not hesitate to contact me should you require any additional information. Thank you for your help in this matter.

Sincerely,

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

Dean Chumbley
Land Department

DC/mm
Enclosures



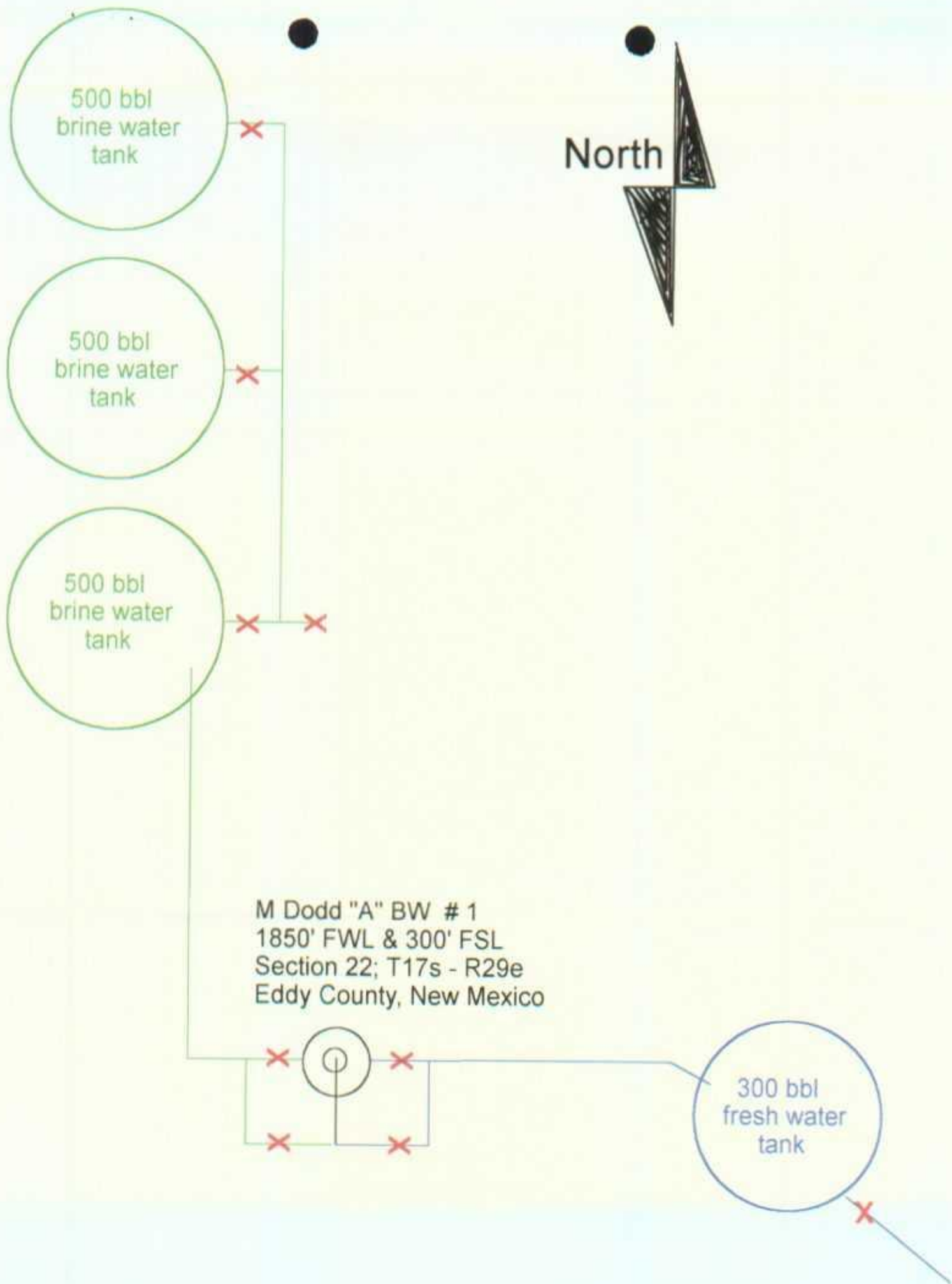
North



M Dodd "A" BW # 1
1850' FWL & 300' FSL
Section 22; T17s - R29e
Eddy County, New Mexico



North



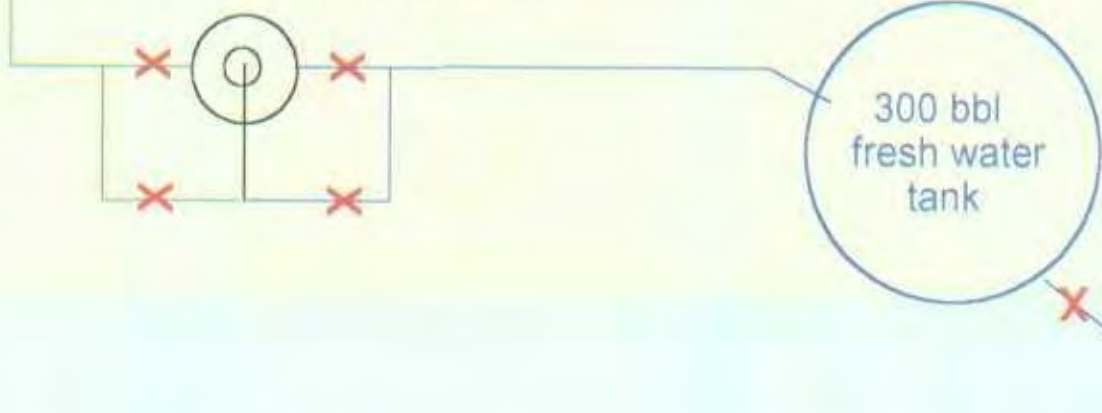
M Dodd "A" BW # 1
1850' FWL & 300' FSL
Section 22; T17s - R29e
Eddy County, New Mexico

300 bbl
fresh water
tank

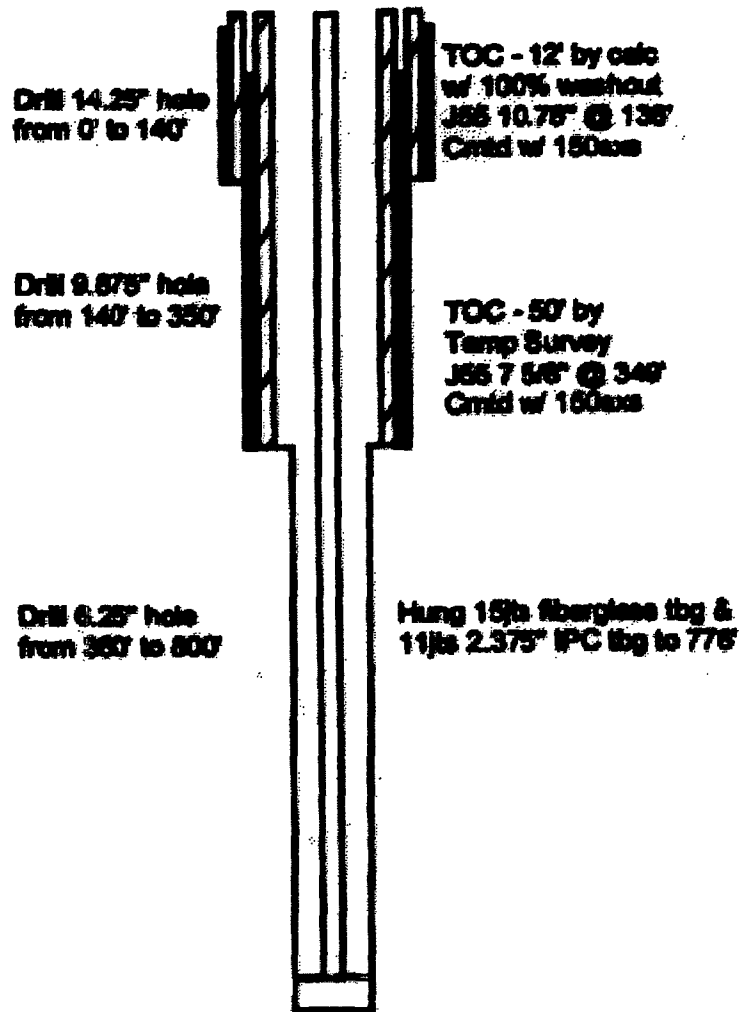
North



M Dodd "A" BW # 1
1850' FWL & 300' FSL
Section 22; T17s - R29e
Eddy County, New Mexico



M. Dodd "A" BW #1
1850'FWL 300' FSL
Sec 22 - 17S - 29E
Eddy Co., NM



TD 800'

Current Status
12/10/98

Revised
3/31/99



NEW MEXICO ENERGY, MINERALS
& NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION
2040 South Pacheco Street
Santa Fe, New Mexico 87505
(505) 827-7131

June 1, 1999

CERTIFIED MAIL
RETURN RECEIPT NO. Z 357 870 132

Mr. Raye Miller
Marbob Energy Corporation
P.O. Box 227
Artesia, NM 88211-0227

Re: Marbob Dodd A Brine Well BW-029
SE/4 SW/4 Sec 22-Ts17s-R29e
Eddy County, New Mexico

Dear Mr. Miller:

On May 21, 1999 The New Mexico Oil Conservation Division (NMOCD) approved the Discharge Plan BW-029 with conditions. Please note condition #18. Spill Reporting was incorrect, please find enclosed the correct version. Please sign the corrected version and resubmit to our office.

If you require any further information or assistance please do not hesitate to write or call me at (505-827-7155).

Sincerely Yours,

Wayne Price-Pet. Engr. Spec.
Environmental Bureau

cc: OCD Artesia Office

ATTACHMENT TO THE DISCHARGE PLAN BW-029 APPROVAL
Marbob Energy Corporation
Marbob Dodd A Brine Well
DISCHARGE PLAN APPROVAL CONDITIONS

1. Payment of Discharge Plan Fees: The \$50.00 filing fee has been received by OCD. The \$1,380 flat fee shall be submitted upon receipt of this approval. The required flat fee may be paid in a single payment due at the time of approval, or in equal annual installments over the duration of the plan, with the first payment due upon receipt of this approval.
2. Marbob Commitments: Marbob will abide by all commitments submitted in the discharge plan application dated December 10, 1998.
3. Production Method: Fresh water will be injected down the casing and brine shall be recovered up the tubing. Reverse flow will be allowed only once a month for up to 24 hours for clean out.

Special condition: The fresh water make-up line shall be designed and maintained with an appropriate "Air Break" to prevent back flow of water contaminants from entering into the Double Eagle Waterline, a fresh water public supply line.

4. Maximum Injection Pressure: The maximum operating injection and/or test pressure at the well head will be such that the fracture pressure of the injection formation will not be exceeded. Marbob shall supply and obtain approval for any changes to the approval for the maximum and average injection pressures and injection volumes.
5. Mechanical Integrity Testing: Marbob will conduct an annual open hole pressure test equal to one and one-half times the normal operating pressure or 300 psi, whichever is greater for four hours with ten percent bleed-off allowed. At least once every five years Marbob will conduct a Mechanical Integrity Test where the casing will be isolated from the formation and tested to 300 psi for 30 minutes. Prior to commencement of operations and during well workovers, the OCD requires the casing to be isolated from the formation and tested to 300 psi for 30 minutes. The OCD will be notified at least 72 hours prior to all testing so that an OCD representative may witness the test.
6. Capacity and Cavity Configuration: A test will be conducted to determine the size and configuration of the mined cavity prior to discharge plan renewal (March 31, 2004). The

method and time of testing will be approved by the OCD prior to performing the test.

7. **Production/Injection Volumes:** The volumes of fluids injected (fresh water) and produced (brine) will be recorded monthly and submitted to the OCD Santa Fe Office quarterly.
8. **Analysis of Injection Fluid and Brine:** Provide an analysis of the injection fluid and brine with the first quarterly report. Analysis will be for concentrations of Total Dissolved Solids, Sodium, Calcium, Potassium, Magnesium, Bromide, Carbonate/Bicarbonate, Chloride and Sulfate. Include location and method of sampling.
9. **Drum Storage:** All drums containing materials other than fresh water must be stored on an impermeable pad with curbing. All empty drums should be stored on their sides with the bungs in place and lined up on a horizontal plane. Chemicals in other containers such as sacks or buckets must also be stored on an impermeable pad with curbing.
10. **Process Areas:** All process and maintenance areas which show evidence that leaks and spills are reaching the ground surface must be either paved and curbed or have some type of spill collection device incorporated into the design.
11. **Above Ground Tanks:** All above ground tanks which contain fluids other than fresh water must be bermed to contain a volume of one-third more than the total volume of the largest tank or of all interconnected tanks. All new facilities or modifications to existing facilities must place the tank on an impermeable type pad within the berm.
12. **Above Ground Saddle Tanks:** Above ground saddle tanks must have impermeable pad and curb type containment unless they contain fresh water or fluids that are gases at atmospheric temperature and pressure.
13. **Labeling:** All tanks, drums, and other containers should be clearly labeled to identify their contents and other emergency information necessary if the tank were to rupture, spill, or ignite.
14. **Below Grade Tanks/Sumps:** All below grade tanks, sumps, and pits must be approved by the OCD prior to installation or upon modification and must incorporate secondary containment and leak-detection into the design. All pre-existing sumps and below-grade tanks must demonstrate integrity on an annual basis. Integrity tests include pressure testing to 3 pounds per square inch above normal operating pressure and/or visual inspection of cleaned out tanks /or sumps.

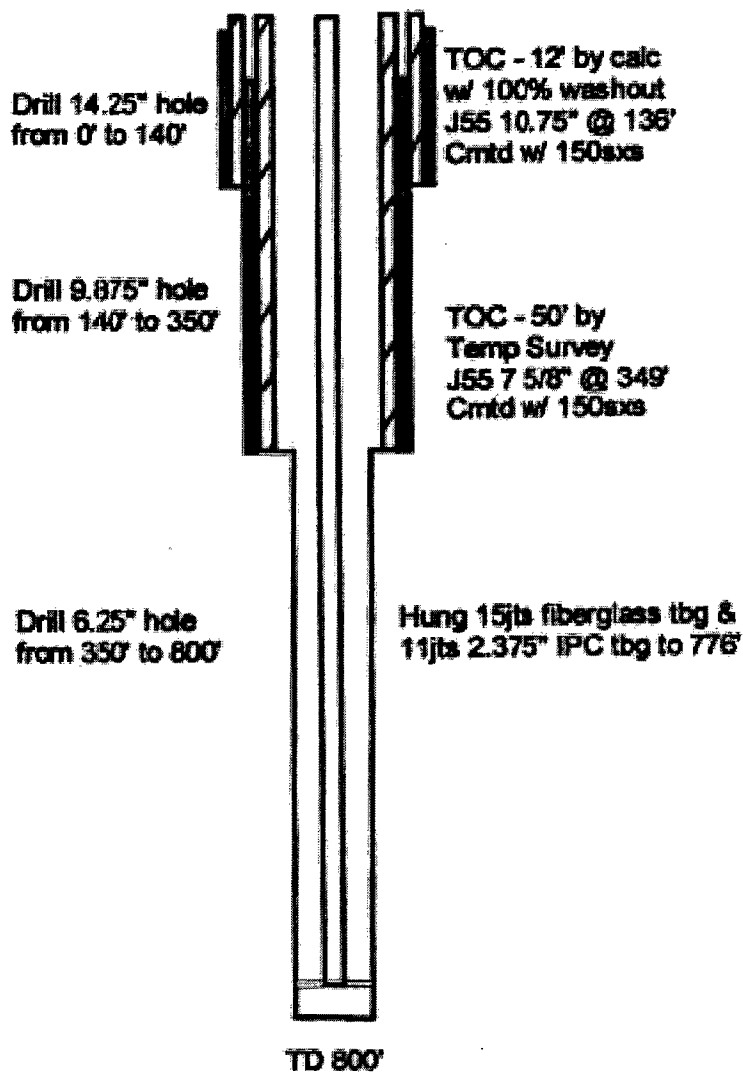
15. Underground Process/Wastewater Lines: All underground process/wastewater, and brine transfer pipelines must be tested to demonstrate their mechanical integrity at present and then every 5 years there after. Permittees may propose various methods for testing such as pressure testing to 3 pounds per square inch above normal operating pressure or other means acceptable to the OCD.
16. Well Workover Operations: OCD approval will be obtained from the Director prior to performing remedial work or any other workover. Approval will be requested on OCD Form C-103 "Sundry Notices and Reports on Wells" (OCD Rule 1103.A.) with appropriate copies sent to the OCD Hobbs District Office.
17. Housekeeping: All systems designed for spill collection/prevention, and leak detection will be inspected daily to ensure proper operation and to prevent overtopping or system failure.
18. Spill Reporting: All spills/releases shall be reported pursuant to OCD Rule 116. and WQCC 1203. to the OCD Artesia District Office.
19. Transfer of Discharge Plan: The OCD will be notified prior to any transfer of ownership, control, or possession of a facility with an approved discharge plan. A written commitment to comply with the terms and conditions of the previously approved discharge plan must be submitted by the purchaser and approved by the OCD prior to transfer.
20. Closure: The OCD will be notified when operations of the facility are discontinued for a period in excess of six months. Prior to closure of the facility a closure plan will be submitted for approval by the Director. Closure and waste disposal will be in accordance with the statutes, rules and regulations in effect at the time of closure.
21. OCD Inspections: Additional requirements may be placed on the facility based upon results from OCD inspections.
22. Conditions accepted by:

Company Representative- Sign

Date

Company Representative- print name

M. Dodd "A" BW
1850'FWL 300' FSL
Sec 22 - 17S - 29E
Eddy Co., NM



Current Status
12/10/98

Revised
3/31/99

LELE CON: 5/24/99
PRICE - ARRANT OCN

TOP of SALT IN THIS AREA
IS ~ 235'-295' SALAD
DOWN TO 600-800'



NEW MEXICO ENERGY, MINERALS
& NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION
2040 South Pacheco Street
Santa Fe, New Mexico 87505
(505) 827-7131

May 21, 1999

CERTIFIED MAIL

RETURN RECEIPT NO. P 288 259 115

Mr. Raye Miller
Marbob Energy Corporation
P.O. Box 227
Artesia, NM 88211-0227

Re: Marbob Dodd A Brine Well BW-029
SE/4 SW/4 Sec 22-Ts17s-R29e
Eddy County, New Mexico

Dear Mr. Miller:

The groundwater discharge plan application, BW-029, for the Marbob Energy Corporation (Marbob) Marbob Dodd A Brine Well located in, 300 FSL and 1850 FWL in Section 22, Township 17 South, Range 29 East, NMPM, Eddy County, New Mexico, **is hereby approved** under the conditions contained in the enclosed attachment. The application consists of the original discharge plan application dated December 10, 1998, supplemental information supplied in letter dated March 31, 1999, site and well plugging bonds. Enclosed are two copies of the conditions of approval. **Please sign and return one copy to the New Mexico Oil Conservation Division (OCD) Santa Fe Office within five working days of receipt of this letter.**

The discharge plan application was submitted pursuant to Section 5101.B.3. of the New Mexico Water Quality Control Commission (WQCC) Regulations. It is approved pursuant to Section 5101.A. and 3109.C. Please note Section 3109.G., which provides for possible future amendment of the plan. Please be advised that approval of this plan does not relieve Marbob of liability should operations result in pollution of surface or ground waters, or the environment.

Please be advised that all exposed pits, including lined pits and open top tanks (exceeding 16 feet in diameter) shall be screened, netted, or otherwise rendered nonhazardous to wildlife including migratory birds.

Please note that Section 3104. of the regulations requires that "when a plan has been approved, discharges must be consistent with the terms and conditions of the plan." Pursuant to Section 3107.C., Marbob is required to notify the Director of any facility expansion, production increase, or process modification that would result in any change in the discharge of water quality or

Mr. Raye Miller
May 21, 1999
Page 2

volume.

Pursuant to Section 3109.H.4., this approval is for a period of five years. This approval will expire May 21, 2004, and an application for renewal should be submitted in ample time before that date. Note that under Section 5101.F. of the regulations, if a discharger submits a discharge plan renewal application at least 120 days before the discharge plan expires and is in compliance with the approved plan, then the existing discharge plan will not expire until the application for renewal has been approved or disapproved. It should be noted that all discharge plan facilities will be required to submit plans for, or the results of, an underground drainage testing program as a requirement for discharge plan renewal.

The discharge plan application for the Marbob Eunice Brine Station is subject to the WQCC Regulation 3114. Every billable facility submitting a discharge plan will be assessed a fee equal to the filing fee of \$50 plus a flat fee of \$1,380 for brine stations. The OCD has not received the \$1,380 flat fee. The flat fee of \$1,380 may be paid in a single payment due on the date of the discharge plan approval or in five equal installments over the expected duration of the discharge plan. Installment payments shall be remitted yearly, with the first installment due on the date of the discharge plan approval and subsequent installments due on this date of each calendar year.

Please make all checks payable to: **NMED-Water Quality Management** and addressed to the OCD Santa Fe Office.

On behalf of the staff of the Oil Conservation Division, I wish to thank you and your staff for your cooperation during this discharge plan review.

Sincerely,



Roger C. Anderson
Environmental Bureau Chief

RCA/lwp
Attachments

xc: OCD Artesia Office

Mr. Raye Miller
May 21, 1999
Page 3

ATTACHMENT TO THE DISCHARGE PLAN BW-029 APPROVAL
Marbob Energy Corporation
Marbob Dodd A Brine Well
DISCHARGE PLAN APPROVAL CONDITIONS

1. Payment of Discharge Plan Fees: The \$50.00 filing fee has been received by OCD. The \$1,380 flat fee shall be submitted upon receipt of this approval. The required flat fee may be paid in a single payment due at the time of approval, or in equal annual installments over the duration of the plan, with the first payment due upon receipt of this approval.
2. Marbob Commitments: Marbob will abide by all commitments submitted in the discharge plan application dated December 10, 1998.
3. Production Method: Fresh water will be injected down the casing and brine shall be recovered up the tubing. Reverse flow will be allowed only once a month for up to 24 hours for clean out.

Special condition: The fresh water make-up line shall be designed and maintained with an appropriate "Air Break" to prevent back flow of water contaminants from entering into the Double Eagle Waterline, a fresh water public supply line.

4. Maximum Injection Pressure: The maximum operating injection and/or test pressure at the well head will be such that the fracture pressure of the injection formation will not be exceeded. Marbob shall supply and obtain approval for any changes to the approval for the maximum and average injection pressures and injection volumes.
5. Mechanical Integrity Testing: Marbob will conduct an annual open hole pressure test equal to one and one-half times the normal operating pressure or 300 psi, whichever is greater for four hours with ten percent bleed-off allowed. At least once every five years Marbob will conduct a Mechanical Integrity Test where the casing will be isolated from the formation and tested to 300 psi for 30 minutes. Prior to commencement of operations and during well workovers, the OCD requires the casing to be isolated from the formation and tested to 300 psi for 30 minutes. The OCD will be notified at least 72 hours prior to all testing so that an OCD representative may witness the test.
6. Capacity and Cavity Configuration: A test will be conducted to determine the size and configuration of the mined cavity prior to discharge plan renewal (March 31, 2004). The method and time of testing will be approved by the OCD prior to performing the test.

Mr. Raye Miller

May 21, 1999

Page 4

7. Production/Injection Volumes: The volumes of fluids injected (fresh water) and produced (brine) will be recorded monthly and submitted to the OCD Santa Fe Office quarterly.
8. Analysis of Injection Fluid and Brine: Provide an analysis of the injection fluid and brine with the first quarterly report. Analysis will be for concentrations of Total Dissolved Solids, Sodium, Calcium, Potassium, Magnesium, Bromide, Carbonate/Bicarbonate, Chloride and Sulfate. Include location and method of sampling.
9. Drum Storage: All drums containing materials other than fresh water must be stored on an impermeable pad with curbing. All empty drums should be stored on their sides with the bungs in place and lined up on a horizontal plane. Chemicals in other containers such as sacks or buckets must also be stored on an impermeable pad with curbing.
10. Process Areas: All process and maintenance areas which show evidence that leaks and spills are reaching the ground surface must be either paved and curbed or have some type of spill collection device incorporated into the design.
11. Above Ground Tanks: All above ground tanks which contain fluids other than fresh water must be bermed to contain a volume of one-third more than the total volume of the largest tank or of all interconnected tanks. All new facilities or modifications to existing facilities must place the tank on an impermeable type pad within the berm.
12. Above Ground Saddle Tanks: Above ground saddle tanks must have impermeable pad and curb type containment unless they contain fresh water or fluids that are gases at atmospheric temperature and pressure.
13. Labeling: All tanks, drums, and other containers should be clearly labeled to identify their contents and other emergency information necessary if the tank were to rupture, spill, or ignite.
14. Below Grade Tanks/Sumps: All below grade tanks, sumps, and pits must be approved by the OCD prior to installation or upon modification and must incorporate secondary containment and leak-detection into the design. All pre-existing sumps and below-grade tanks must demonstrate integrity on an annual basis. Integrity tests include pressure testing to 3 pounds per square inch above normal operating pressure and/or visual inspection of cleaned out tanks /or sumps.

Mr. Raye Miller
May 21, 1999
Page 5

15. Underground Process/Wastewater Lines: All underground process/wastewater, and brine transfer pipelines must be tested to demonstrate their mechanical integrity at present and then every 5 years there after. Permittees may propose various methods for testing such as pressure testing to 3 pounds per square inch above normal operating pressure or other means acceptable to the OCD.
16. Well Workover Operations: OCD approval will be obtained from the Director prior to performing remedial work or any other workover. Approval will be requested on OCD Form C-103 "Sundry Notices and Reports on Wells" (OCD Rule 1103.A.) with appropriate copies sent to the OCD Hobbs District Office.
17. Housekeeping: All systems designed for spill collection/prevention, and leak detection will be inspected daily to ensure proper operation and to prevent overtopping or system failure.
18. Spill Reporting: All spills/releases shall be reported pursuant to OCD Rule 116. and WQCC 1203. to the OCD Hobbs District Office. → RE-SENT 6/1/99
19. Transfer of Discharge Plan: The OCD will be notified prior to any transfer of ownership, control, or possession of a facility with an approved discharge plan. A written commitment to comply with the terms and conditions of the previously approved discharge plan must be submitted by the purchaser and approved by the OCD prior to transfer.
20. Closure: The OCD will be notified when operations of the facility are discontinued for a period in excess of six months. Prior to closure of the facility a closure plan will be submitted for approval by the Director. Closure and waste disposal will be in accordance with the statutes, rules and regulations in effect at the time of closure.
21. OCD Inspections: Additional requirements may be placed on the facility based upon results from OCD inspections.
22. Conditions accepted by:

Company Representative- Sign

Date

Company Representative- print name

Title



NEW MEXICO ENERGY, MINERALS
& NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION
2040 South Pacheco Street
Santa Fe, New Mexico 87505
(505) 827-7131

May 19, 1999

CERTIFIED MAIL

RETURN RECEIPT NO. Z 559 573 599

J.S. Ward & Son, Inc.
104 South Fourth Street
Artesia, New Mexico 88210-2195

Attention: Mr. Gary Sims

Re: Marbob Energy Corporation
Bond No. 58 96 15
\$ 5,000.00 One-Well Plugging Bond
to the State of New Mexico for Class III Brine Well - M Dodd "A" BW1
OCD Discharge Plan BW-029
1850 FWL, 300 FSL Sec 22-Ts 17s-R29e N.M.P.M.
Eddy, County, New Mexico
J.S. Ward & Son, Inc., Principal

Gulf Insurance Company, Surety
Bond 58 96 15

The New Mexico Oil Conservation Division hereby approves the above-captioned One-Well Plugging Bond.

Sincerely,

RAND CARROLL,
Legal Counsel

RC/wp

cc: OCD Artesia Office
Gulf Insurance Company

P.O. Box 1771

DALLAS, TX 75221-1771



J. S. Ward & Son, Inc.

101 South Fourth Street
(505) 746-2796
FAX (505) 746-4244
Artesia, New Mexico
88210-2195

Insurance
Bonds

May 7, 1999

State of New Mexico
Energy, Minerals & Natural Resources Department
Oil Conservation Division
2040 South Pacheco Street
Santa Fe, New Mexico 87505-5472

Attention: Mr. Roger Anderson
Environmental Bureau Chief

Re: Marbob Energy Corporation
Bond No. 58 96 15
\$5,000 One-Well Plugging Bond
to the State of New Mexico
for Brine Well - M Dodd "A" BW #1

Dear Mr. Anderson:

Enclosed please find the captioned bond through Gulf Insurance Company which we trust you find in order and acceptable for filing.

Very truly yours,

J. S. WARD & SON, INC.

By 

SGS:emb

Enclosure

cc: Marbob Energy Corporation
Post Office Box 227
Artesia, New Mexico 88211-0227
Attention: Mr. Raye Miller - Invoice

OVER 30 YEARS

STATE OF NEW MEXICO
ONE-WELL PLUGGING BOND

FOR CHAVES, EDDY, LEA, MCKINLEY, RIO ARRIBA, ROOSEVELT,
SANDOVAL, AND SAN JUAN COUNTIES ONLY

COPY
BOND HELD IN
OCD ENVIR BUREAU
SAFE!

BOND NO. 58 96 15
AMOUNT OF BOND \$5,000.00
COUNTY Eddy

NOTE: For wells less than 5,000 feet deep, the minimum bond is \$5,000.00*
For wells 5,000 to 10,000 feet deep, the minimum bond is \$7,500.00*
For wells more than 10,000 feet deep, the minimum bond is \$10,000.00

*Under certain conditions, a well being drilled under a \$5,000.00 or \$7,500 bond may be permitted to be drilled as much as 500 feet deeper than the normal maximum depth, i.e., a well being drilled under a \$5,000.00 bond may be permitted to go to 5,500 feet, and a well being drilled under a \$7,500.00 bond may be permitted to go to 10,500 feet. (See Rule 101)

File with Oil Conservation Division, P. O. Box 2088, Santa Fe 87501

KNOW ALL MEN BY THESE PRESENTS:

That Marbob Energy Corporation, ~~XXXXXXXXXXXXXXXXXXXX~~
(a corporation organized in the State of New Mexico, with its principal office in the city
of Artesia, State of New Mexico, and authorized to do business
in the State of New Mexico), as PRINCIPAL, and Gulf Insurance Company,
a corporation organized and existing under the laws of the State of
Missouri, and authorized to do business in the State of New
Mexico, as SURETY, are held firmly bound unto the State of New Mexico, for the use and benefit of the Oil
Conservation Division of New Mexico pursuant to Section 70-2-12, New Mexico Statutes Annotated, 1978
Compilation, as amended, in the sum of Five Thousand and no/100ths Dollars lawful money of the United
States, for the payment of which, well and truly to be made, said PRINCIPAL and SURETY hereby bind
themselves, their successors and assigns, jointly and severally, firmly by these presents.

The conditions of this obligation are such that:

WHEREAS, The above principal has heretofore or may hereafter enter into oil and gas lease, or carbon
dioxide (CO₂) gas leases, or helium gas leases, or brine mineral leases with the State of New Mexico; and

WHEREAS, The above principal has heretofore or may hereafter enter into oil and gas leases, or carbon
dioxide (CO₂) gas leases, or helium gas leases, or brine mineral leases on lands patented by the United
States of America to private individuals, and on lands otherwise owned by private individuals; and

WHEREAS, The above principal, individually, or in association with one or more other parties, has
commenced or may commence the drilling of one well not to exceed a depth of 5,000
feet, to prospect for and produce oil or gas, or carbon dioxide (CO₂) gas or helium gas, or does own or
may acquire, own or operate such well, or such well started by others on land embraced in said State oil
and gas leases, or carbon dioxide (CO₂) leases, or helium gas leases, or brine minerals, and on land
patented by the United States of America to private individuals, and on land otherwise owned by private
individuals, the identification and location of said well being being
1850' FWL and 300' FSL, Section 22, Township 17 ~~XXXXXX~~ (South)

(Here state exact legal footage description)

Range 29 (East ~~XXXXX~~, N.M.P.M., Eddy County, New Mexico.

NOW, THEREFORE, If the above bounden principal and surety or either of them or their successors or
assigns, or any of them, shall plug said well when dry or when abandoned in accordance with the rules,
regulations, and orders of the Oil Conservation Division of New Mexico in such way as to confine the oil,
gas, brine, and water in the strata in which they are found, and to prevent them from escaping into other
strata;

THEN, THEREFORE, This obligation shall be null and void; otherwise and in default of complete
compliance with any and all of said obligations, the same shall remain in full force and effect.

Signed and sealed this 5th day of May, 1999.

Marbob Energy Corporation

PRINCIPAL

Post Office Box 227

Artesia, New Mexico 88211-0227

Address

By: [Signature]
Signature
President
Title

Gulf Insurance Company

SURETY

101 South Fourth Street

Artesia, New Mexico 88210-2195

Address

S. Gary Sims [Signature]
Attorney-In-Fact

(Note: Principal, if corporation, affix corporate seal here.)

(Note: Corporate surety affix corporate seal here.)

ACKNOWLEDGEMENT FORM FOR NATURAL PERSONS

STATE OF _____)
COUNTY OF _____) ss.

On this _____ day of _____, 19____, before me personally appeared _____, to me known to be the person (persons) described in and who executed the foregoing instrument and acknowledged that he (they) executed the same as his (their) free act and deed.

IN WITNESS WHEREOF, I have hereunto set my hand and seal on the day and year in this certificate first above written.

Notary Public

My Commission Expires _____

ACKNOWLEDGEMENT FORM FOR CORPORATION

STATE OF New Mexico)
COUNTY OF Eddy) ss.

On this 5th day of May, 1999, before me personally appeared John R. Gray, to me personally known who, being by me duly sworn, did say that he is President of Marbob Energy Corporation and that the foregoing instrument was signed and sealed on behalf of said corporation by authority of its board of directors, and acknowledged said instrument to be the free act and deed of said corporation.

IN WITNESS WHEREOF, I have hereunto set my hand and seal on the day and year in this certificate first above written.

[Signature]
Notary Public

March 19, 2003

My Commission Expires _____

ACKNOWLEDGEMENT FORM FOR CORPORATE SURETY

STATE OF New Mexico)
COUNTY OF Eddy) ss.

On this 5th day of May, 1999, before me appeared S. Gary Sims, to me personally known, who, being by me duly sworn, did say that he is Attorney-in-Fact of Gulf Insurance Company and that the foregoing instrument was signed and sealed on behalf of said corporation by authority of its board of directors, and acknowledged said instrument to be the free act and deed of said corporation.

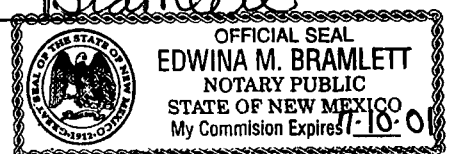
IN WITNESS WHEREOF, I have hereunto set my hand and seal on the day and year in this certificate first above written.

[Signature]
Notary Public

07-10-01

My Commission Expires _____

(Note: Corporate surety attach power of attorney.)



APPROVED BY:

OIL CONSERVATION DIVISION OF NEW MEXICO

By: [Signature]

Date: 5/20/99



POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS:

That GULF INSURANCE COMPANY, a corporation of the State of Missouri, hereinafter called "Company," does hereby appoint

CHARLENE M. WARD or S. GARY SIMS or JOHN C. KNIGHT

ARTESIA, NEW MEXICO

its true and lawful Attorney-in-fact to make, execute, seal and deliver on its behalf, as surety, any and all bonds and undertakings of suretyship, not to exceed \$250,000.00 or any bond where the penalty is not stated in the bond form. No authority is granted where the attorney in fact is a party at interest in the bond.

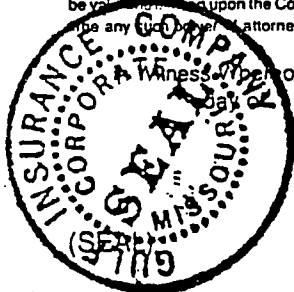
The execution of such bonds or undertakings in pursuance of these presents shall be as binding upon the Company as if they had been executed and acknowledged by the regularly elected officers of the Company.

This Power of Attorney is issued pursuant to and by authority of the following resolution of the Board of Directors of the Company, adopted effective July 1, 1983, and now in full force and effect:

"Resolved that the President, or any Senior Vice President, or any Vice President, or the Secretary, or any Assistant Secretary may appoint Attorneys-in-fact in any state, territory or federal district to represent this Company and to act on its behalf within the scope of the authority granted to them, in writing, which authority may include the power to make, execute, seal and deliver on behalf of this Company, as surety, and as its act and deed, any and all bonds and undertakings of suretyship and other documents that the ordinary course of surety business may require, including authority to appoint agents for the service of process in any jurisdiction, state or federal, and authority to attest to the signature of the President, or any Senior Vice President, or any Vice President, or the Secretary, or any Assistant Secretary and to verify any affidavit or other statement relating to the foregoing, and to certify to a copy of any of the bylaws of the Company and to any resolutions adopted by its Board of Directors; and any such Attorney-in-fact may be removed and the authority granted him revoked by the President, or any Senior Vice President, or any Vice President, or the Secretary, or any Assistant Secretary, or by the Board of Directors."

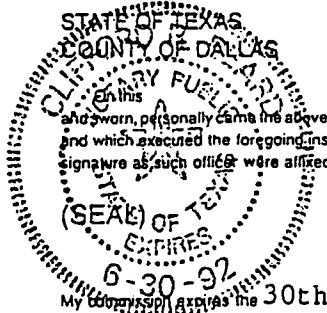
This Power of Attorney and Certificate are signed and sealed by facsimile under and by authority of the following resolution of the Board of Directors of the Company, adopted effective July 1, 1983, and now in full force and effect:

"Resolved that the signature of the President, or of any Senior Vice President, or of any Vice President, or of the Secretary, or of any Assistant Secretary, and the seal of the Company may be affixed by facsimile to any power of attorney or to any certificate relating thereto appointing Attorneys-in-fact for purposes only of executing and attesting bonds and undertakings and other writings obligatory in the nature thereof, including any such power of attorney and certificate revoking the authority of the foregoing Attorneys-in-fact, as well as for the appointment of agents for the service of process in any jurisdiction, state or federal, including any such power of attorney and certificate revoking the authority of such agents; and any such power of attorney or certificate bearing such facsimile signature or facsimile seal shall be valid and binding upon the Company and any such power of attorney or certificate so executed and certified by such facsimile signature and facsimile seal shall be valid and binding upon the Company at the time any such power of attorney and certificate are executed and in the future with respect to any bond or undertaking to which they are attached."



As Witness, Whereof, the Company has caused this Power of Attorney to be signed and its corporate seal to be affixed by its authorized officer this April 12, 1991

By *OK Carter*
Sr. Vice President



SS:

On this 12 day of April, 1991, before me, a Notary Public of the State and County aforesaid, residing therein, duly commissioned and sworn, personally came the above named officer of GULF INSURANCE COMPANY, who being by me first duly sworn according to law, did depose and say that he is that officer of the company described in and which executed the foregoing instrument; that he knows the seal of said company; that the seal affixed to such instrument is the corporate seal of said company; and that the corporate seal and his signature as such officer were affixed and subscribed to the said instrument by the authority and direction of said company.

Clifford R. Beard
Clifford R. Beard Notary Public
1992

CERTIFICATE

I, the undersigned, do hereby certify that the original Power of Attorney of which the foregoing is a true and correct copy is in full force and effect, and the foregoing resolutions are true and correct transcripts from the records of GULF INSURANCE COMPANY and that the above named officer was on the date of execution of the foregoing Power of Attorney authorized to execute this Power of Attorney.



I, the undersigned, have hereunto subscribed my name and affixed the corporate seal of Gulf Insurance Company this 5th day of May, 1999

Lo Rodney Reckel
Vice President



NEW MEXICO ENERGY, MINERALS
& NATURAL RESOURCES DEPARTMENT

Jennifer A. Salisbury
CABINET SECRETARY

Oil Conservation Div.
Environmental Bureau
2040 S. Pacheco
Santa Fe, NM 87505

Memorandum of Meeting or Conversation

Telephone X
Personal

Time: 9:42AM
Date: May 3, 1999

Originating Party: Wayne Price-OCD

Other Parties: Dean Chumbley - Marbob

Subject: Brine Well Application BW-29

Discussion: OCD requested:

1. \$5,000.00 One-Well Plugging Bond bound to NM.
2. Site Pictures

Conclusions or Agreements:

OCD will send approval after receipt of above bond & pictures.

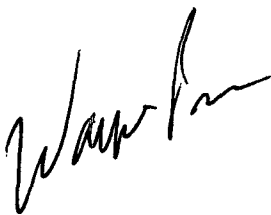
Signed: Wayne Price

CC:

April 27, 1999

To: Rand Carroll

From: Wayne Price



Re: Marbob Energy Corp. Brine Well Discharge Permit BW-029

Dear Rand:

Lori & Roger ask me to run this by you.

This is a Brine well system being permitted by OCD. It is on Federal BLM Lands. They have obtained a \$10,000.00 bond (copy enclosed for your review) bound to BLM not OCD. Do we need to have this or another bond bound to OCD. Please advise.

Wayne!

WILL NEED ADDITIONAL
BONDING! per meeting!
LAD, RCD, & RC

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

COPY

Serial Number

NMNM 82804

Bond Number

58 93 97

BOND* UNDER LEASE FOR
MINING SODIUM DEPOSITS

KNOW ALL MEN BY THESE PRESENTS, That Marbob Energy Corporation
of Post Office Box 227, Artesia, New Mexico 88211-0227, as principal,
and Gulf Insurance Company
of Post Office Box 1771, Dallas, Texas 75221-1771, as surety,

are held and firmly bound unto the United States in the sum of Ten Thousand and no/100ths---dollars

(\$ 10,000.00--), lawful money of the United States, for the payment of which, well and truly to be made, we bind ourselves, and each of us, and each of our heirs, executors, administrators, and successors, jointly and severally, firmly by these presents.

The conditions of this obligation are such, that whereas the said principal entered into a lease of the lands described therein and upon conditions therein expressed, which lease bears the above serial number.

NOW, THEREFORE, if the said principal, his heirs, executors, administrators, or successors, shall faithfully carry out the obligations and observe the requirements of said lease, and shall duly keep, perform, and abide by each and every term and provision of said lease as therein stipulated and agreed, then this obligation shall be null and void; otherwise to remain in full force and effect.

Signed on this 26th day of October, 1998, in the presence of:

Attest By: Ray Miller
(Signature of Witness) Secretary

P. O. Box 227
Artesia, NM 88211-0227

(Address of Witness)

Witness: [Signature]
(Signature of Witness)

P. O. Box 227
Artesia, NM 88211-0227

(Address of Witness)

Witness: Misti McLurg
(Signature of Witness)

P. O. Box 227
Artesia, NM 88211-0227

(Address of Witness)

Marbob Energy Corporation

By: John R. Gray
(Signature of Principal) President

Post Office Box 227
Artesia, New Mexico 88211-0227

(Address of Principal)

Gulf Insurance Company

By: [Signature]
(Signature of Surety) Attorney-in-Fact

101 South Fourth Street
Artesia, New Mexico 88210-2195

(Address of Surety)

Edwina M. Bramlett
(Signature of Witness)

Post Office Box 834
Artesia, New Mexico 88211-0834

(Address of Witness)

*This form of bond may be used in connection with coal, phosphate, and sodium leases, Act of February 25, 1920, as amended (30 U.S.C. 181 et seq.); potassium leases, Act of February 7, 1927, as amended (30 U.S.C. 281 et seq.); sulphur leases, Act of April 17, 1926, as amended (30 U.S.C. 271 et seq.); all such leases involving acquired lands, Act of August 7, 1947 (30 U.S.C. 351), and asphalt leases, Act of June 28, 1944 (58 Stat. 463, 483-485), by inserting the particular mineral applicable in the space provided therefor. If this bond is executed by a corporation, it must bear the corporate seal.



POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS:

That GULF INSURANCE COMPANY, a corporation of the State of Missouri, hereinafter called "Company," does hereby appoint

CHARLENE M. WARD or S. GARY SIMS or JOHN C. KNIGHT

ARTESIA, NEW MEXICO

its true and lawful Attorney-in-fact to make, execute, seal and deliver on its behalf, as surety, any and all bonds and undertakings of suretyship, not to exceed \$250,000.00 or any bond where the penalty is not stated in the bond form. No authority is granted where the attorney in fact is a party at interest in the bond.

The execution of such bonds or undertakings in pursuance of these presents shall be as binding upon the Company as if they had been executed and acknowledged by the regularly elected officers of the Company.

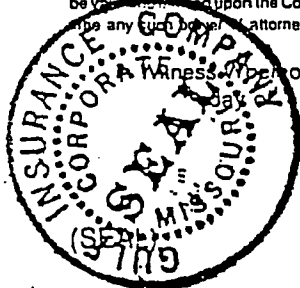
This Power of Attorney is issued pursuant to and by authority of the following resolution of the Board of Directors of the Company, adopted effective July 1, 1983, and now in full force and effect:

"Resolved that the President, or any Senior Vice President, or any Vice President, or the Secretary, or any Assistant Secretary may appoint Attorneys-in-fact in any state, territory or federal district to represent this Company and to act on its behalf within the scope of the authority granted to them, in writing, which authority may include the power to make, execute, seal and deliver on behalf of this Company, as surety, and as its act and deed, any and all bonds and undertakings of suretyship and other documents that the ordinary course of surety business may require, including authority to appoint agents for the service of process in any jurisdiction, state or federal, and authority to attest to the signature of the President, or any Senior Vice President, or any Vice President, or the Secretary, or any Assistant Secretary and to verify any affidavit or other statement relating to the foregoing, and to certify to a copy of any of the bylaws of the Company and to any resolutions adopted by its Board of Directors; and any such Attorney-in-fact may be removed and the authority granted him revoked by the President, or any Senior Vice President, or any Vice President, or the Secretary, or any Assistant Secretary, or by the Board of Directors."

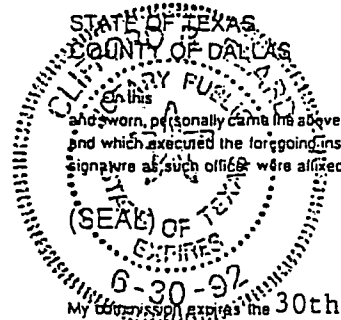
This Power of Attorney and Certificate are signed and sealed by facsimile under and by authority of the following resolution of the Board of Directors of the Company, adopted effective July 1, 1983, and now in full force and effect:

"Resolved that the signature of the President, or of any Senior Vice President, or of any Vice President, or of the Secretary, or of any Assistant Secretary, and the seal of the Company may be affixed by facsimile to any power of attorney or to any certificate relating thereto appointing Attorneys-in-fact for purposes only of executing and attesting bonds and undertakings and other writings obligatory in the nature thereof, including any such power of attorney and certificate revoking the authority of the foregoing Attorneys-in-fact, as well as for the appointment of agents for the service of process in any jurisdiction, state or federal, including any such power of attorney and certificate revoking the authority of such agents; and any such power of attorney or certificate bearing such facsimile signature or facsimile seal shall be valid and binding upon the Company and any such power of attorney or certificate so executed and certified by such facsimile signature and facsimile seal shall be valid and binding upon the Company at the time any such power of attorney and certificate are executed and in the future with respect to any bond or undertaking to which they are attached."

Witness my hand, the Company has caused this Power of Attorney to be signed and its corporate seal to be affixed by its authorized officer this April 12, 1991



By [Signature]
Sr. Vice President



12 day of April, 1991, before me, a Notary Public of the State and County aforesaid, residing therein, duly commissioned and sworn, personally came the above named officer of GULF INSURANCE COMPANY, who being by me first duly sworn according to law, did depose and say that he is that officer of the company described in and which executed the foregoing instrument; that he knows the seal of said company; that the seal affixed to such instrument is the corporate seal of said company; and that the corporate seal and his signature as such officer were affixed and subscribed to the said instrument by the authority and direction of said company.

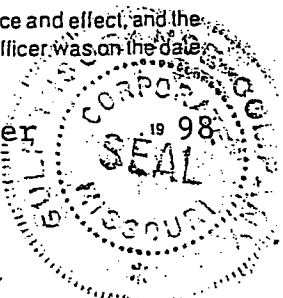
Clifford R. Beard
Notary Public
1992

CERTIFICATE

I, the undersigned, do hereby certify that the original Power of Attorney of which the foregoing is a true and correct copy is in full force and effect, and the foregoing resolutions are true and correct transcripts from the records of GULF INSURANCE COMPANY and that the above named officer was, on the date of execution of the foregoing Power of Attorney authorized to execute this Power of Attorney.



Witness my hand, I have hereunto subscribed my name and affixed the corporate seal of Gulf Insurance Company this 26th day of October, 1998



[Signature]
Vice President

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

Serial Number

SODIUM

LEASE

NMMN 82804

PART I. LEASE RIGHTS GRANTED.

This ☒ Lease ☐ Lease Renewal entered into by and between the UNITED STATES OF AMERICA, through the Bureau of Land Management, hereinafter called lessor, and (Name and Address)

MARBOB ENERGY CORPORATION

P O DRAWER 217, ARTESIA, NEW MEXICO 88211-0217

hereinafter called lessee, is effective (date) NOVEMBER 1, 1998, for a period of 20 years,

Sodium, Sulphur, Hardrock -

☒ with preferential right in the lessee to renew for successive periods of 10 years under such terms and conditions as may be prescribed by the Secretary of the Interior, unless otherwise provided by law at the expiration of any period.

Potassium, Phosphate, Gilsonite -

☐ and for so long thereafter as lessee complies with the terms and conditions of this lease which are subject to readjustment at the end of each year period, unless otherwise provided by law.

Sec. 1. This lease is issued pursuant and subject to the terms and provisions of the:

☒ Mineral Leasing Act of 1920, as amended, and supplemented, 41 Stat. 437, 30 U.S.C. 181-287, hereinafter referred to as the Act;

☐ Mineral Leasing Act for Acquired Lands, Act of August 7, 1947, 61 Stat. 913, 30 U.S.C. 351-359;

☐ Reorganization Plan No. 3 of 1946, 60 Stat. 1099 and 43 U.S.C. 1201;

☐ (Other)

to the regulations and general mining orders of the Secretary of the Interior in force on the date this lease issued.

Sec. 2. Lessor, in consideration of any bonuses, rents, and royalties to be paid, and the conditions and covenants to be observed as herein set forth, hereby grants and leases to lessee the exclusive right and privilege to explore for, drill for, mine, extract, remove, beneficiate, concentrate, or otherwise process and dispose of the sodium deposits hereinafter referred to as "leased deposits," in, upon, or under the following described lands:

T. 17 S., R 29 E., NMPM, Eddy County, New Mexico

section 22: SE $\frac{1}{4}$ SW $\frac{1}{4}$, SE $\frac{1}{4}$;

section 27: NE $\frac{1}{4}$, E $\frac{1}{2}$ NW $\frac{1}{4}$.

RECEIVED
1998 OCT 26 A 10:18
BUREAU OF LAND MGMT.
LAND RESOURCE AREA

containing 440.00 acres, more or less, together with the right to construct such works, buildings, plants, structures, equipment and appliances and the right to use such on-lease rights-of-way which may be necessary and convenient in the exercise of the rights and privileges granted, subject to the conditions herein provided.

Phosphate -

☐ In accordance with Section 11 of the Act (30 U.S.C. 213), lessee may use deposits of silica, limestone, or other rock in the processing or refining of the phosphates, phosphate rock, and associated or related minerals mined from the leased lands or other lands upon payments of royalty as set forth on the attachment to this lease. (Phosphate leases only.)

situated are more restrictive than the provisions in this paragraph, then the State laws apply.

Lessee will comply with all provisions of Executive Order No. 11246 of September 24, 1965, as amended, and the rules, regulations, and relevant orders of the Secretary of Labor. Neither lessee nor lessee's subcontractors shall maintain segregated facilities.

Sec. 8. (a) TRANSFERS - This lease may be transferred in whole or in part to any person, association or corporation qualified to hold such lease interest.

(b) RELINQUISHMENT - The lessee may relinquish in writing at any time all rights under this lease or any portion thereof as provided in the regulations. Upon lessor's acceptance of the relinquishment, lessee shall be relieved of all future obligations under the lease or the relinquished portion thereof, whichever is applicable.

Sec. 9. DELIVERY OF PREMISES, REMOVAL OF MACHINERY, EQUIPMENT, ETC. - At such time as all or portions of this lease are returned to lessor, lessee shall deliver up to lessor the land leased, underground timbering, and such other supports and structures necessary for the preservation of the mine workings on the leased premises or deposits and place all wells in condition for suspension or abandonment. Within 180 days thereof, lessee shall remove from the premises all other structures, machinery, equipment, tools, and materials that it elects to or as required by the authorized officer. Any such structures, machinery, equipment, tools, and materials remaining on the leased lands beyond 180 days, or approved extension thereof, shall become the property of the lessor, but lessee shall either remove any or all such property or shall continue to be liable for the cost of removal and disposal in the amount actually incurred by the lessor. If the surface is owned by third parties, lessor shall waive the requirement for removal, provided the third parties do not object to such

Sec. 14. SPECIAL STIPULATIONS -

See Attachment II for Special Stipulations.

waiver. Lessee shall, prior to the termination of bond liability or at any other time when required and in accordance with all applicable laws and regulations, reclaim all lands the surface of which has been disturbed, dispose of all debris or solid waste, repair the offsite and onsite damage caused by lessee's activity or activities on the leased lands, and reclaim access roads or trails.

Sec. 10. PROCEEDINGS IN CASE OF DEFAULT - If lessee fails to comply with applicable laws, now existing regulations, or the terms, conditions and stipulations of this lease, and the noncompliance continues for 30 days after written notice thereof, this lease shall be subject to cancellation by the lessor only by judicial proceedings. This provision shall not be construed to prevent the exercise by lessor of any other legal and equitable remedy, including waiver of the default. Any such remedy or waiver shall not prevent later cancellation for the same default occurring at any other time.

Sec. 11. HEIRS AND SUCCESSORS-IN-INTEREST - Each obligation of this lease shall extend to and be binding upon, and every benefit hereof shall inure to, the heirs, executors, administrators, successors, or assigns of the respective parties hereto.

Sec. 12. INDEMNIFICATION - Lessee shall indemnify and hold harmless the United States from any and all claims arising out of the lessee's activities and operations under this lease.

Sec. 13. SPECIAL STATUTES - This lease is subject to the Federal Water Pollution Control Act (33 U.S.C. 1151-1175), the Clean Air Act (42 U.S.C. 1857 et. seq.), and to all other applicable laws pertaining to exploration activities, mining operations and reclamation.

SCHEDULE OF PRODUCTION ROYALTY RATES

To pay the lessor a royalty of 6.0 percent of the gross value of the output of the leased deposits at the point of shipment to market.

Royalties shall be paid monthly in cash or delivered in kind at the option of the lessor. It is expressly agreed that the Secretary of the Interior may establish reasonable minimum values for purposes of computing royalty on any of the leased deposits, due consideration being given to the highest price paid for a part or a majority of the production of like quality products from the same general area, the price received by the lessee, the posted price, and other relevant matters.

When paid in value such royalty on production shall be due and payable monthly on the last day of the calendar month following the calendar month in which produced.

When royalty is to be taken in kind, the lessee will be notified prior to March 1 that delivery of royalty products will be required beginning June 1 of that year for a stated period not exceeding 12 months. When paid in kind royalty products shall be delivered in merchantable condition at the point of shipment without cost to the lessor, unless otherwise agreed to by the parties hereto, at such time and in such storage compartments provided by the lessee as may reasonably be required by the lessor, provided that the lessee shall not be required to hold the royalty products in storage for more than 60 days beyond the end of the month in which produced, and, provided further, that the lessee shall in no manner be responsible or held liable for the loss or destruction of the royalty product in storage from causes over which the lessee has no control.

SPECIAL STIPULATIONS
for
Brine Production Wells

1. The lessee shall agree and stipulate that the Federal Government, the Department of the Interior, and the Bureau of Land Management and its representatives shall not be responsible for damage or injury to persons and property which may occur during the permitted use period or as a result of such use.
2. The lessee shall comply with all applicable Federal, State and local laws and regulations existing or hereafter enacted or promulgated during the term of this lease.
3. Operations shall not be conducted which in the opinion of the authorized officer would constitute a hazard to oil and gas production or that would unreasonably interfere with the orderly development and production under any oil and gas lease issued for the same lands.
4. If, during any phase of the construction, operation, maintenance, or termination of the brine well, if any pollutant should be discharged, impacting Federal lands, the control and total removal, disposal, and cleanup up of such pollutant, wherever found, shall be the responsibility of lessee, regardless of fault. Upon failure of lessee to control, dispose of, or cleanup such discharge on or affecting Federal lands, or to repair all damages resulting therefrom, on the Federal lands, the Authorized Officer may take such measures as he deems necessary to control the clean up of the discharge and restore the area, including where appropriate, the aquatic environment and fish and wildlife habitats, at the full expense of the lessee. Such action by the Authorized Officer shall not relieve the lessee of any responsibility as provided herein.
5. Vegetation, soil and rocks left as a result of construction or maintenance activity will be randomly scattered in the vicinity of the power line and will not be left in rows, piles, or berms, unless otherwise approved by the Authorized Officer.
6. Clearing and blading of roads and pads will be held to a minimum unless approved by the Authorized Officer.
7. To prevent slacking of fence wire, the lessee will brace and tie-off each existing fence to be crossed, before cutting. During construction, the opening will be protected to prevent the escape of livestock. Fences which have been cut during construction will be restored by the lessee to a condition which is equal to, or better, than the original. Cattleguards and adjacent gates which are of a suitable width will also be installed in any fence where a road created during construction is to be regularly traveled.
8. Gates or cattleguards on public lands will not be locked or closed to public use by the lessee.


Signature

10/22/98
Date
1

9. The lessee, prior to any construction, shall notify the grazing allottee or the surface owner in the case of private ownership.
10. Removal of fuel wood, live plants, or mineral materials such as sand, gravel, caliche or building stone from public lands is not permitted unless approved by the Authorized Officer.
11. No new caliche pits or other material pits on federal lands will be allowed without the approval of the Authorized Officer.
12. All trash shall be hauled to an approved sanitary landfill or dump site. Any other methods of disposal shall first be approved by the Authorized Officer.
13. No excess or waste concrete shall be dumped on Federal lands. If concrete is accidentally spilled, it will be removed and disposed of properly.
14. The collection of antiquities including Indian artifacts and arrowheads is prohibited, and the lessee shall be responsible for ensuring that this prohibition is enforced.
15. Any cultural and/or paleontological resource (historic or prehistoric site of object) discovered by the lessee, or any person working on the lessee's behalf, on public or Federal land shall be immediately reported to the authorized officer. The holder shall suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the Authorized Officer to determine appropriate actions to prevent the loss of significant cultural or scientific values. The holder will be responsible for the cost of evaluation and any decision as to the proper mitigation measures will be made by the Authorized Officer after consulting with the lessee.
16. The proposed action may not result in the establishment of the following noxious weeds: Malta Starthistle, African Rue, Scotch Thistle, Saltcedar, or Rayless Goldenrod. If this action is responsible for the establishment of any noxious weeds, as defined by the Carlsbad Field Office, on the leased or surrounding lands, the lessee will be responsible for their removal at the lessees expense.
17. Excavations shall be filled with soil and a berm left over the excavation to allow for settling back to grade.

Road Construction Stipulations

1. Road Width and Grade - The road will have a driving surface of 14 feet (all roads shall have a minimum driving surface of 12 feet, unless local conditions dictate a different width). The maximum grade of the road at any point will be no more than 10 percent.
2. Road Width and Grade - The maximum width of surface disturbance resulting from construction will be 30 feet.

3. **Crowning and Ditching** - Crowning with materials on site and ditching on one side of the road on the uphill side will be required. The road cross-section will conform to the cross section diagrams in Figure 1. If conditions dictate, ditching may be required for both sides of the road. If local conditions permit, a flat-bladed road may be considered. The crown shall have a grade of approximately 2% (i. e., 1" crown on a 12' wide road).
4. **Drainage** - Drainage control shall be ensured over the entire length of road through the use of borrow ditches, outslowing, insloping, natural rolling topography, lead-off (turnout) ditches, culverts, and/or drainage dips.
 - a. All lead-off ditches shall be constructed to drain water with a 1% minimum to 3% maximum ditch slope. The spacing interval for lead-off ditches shall be determined according to the following table, but may be amended depending upon existing soil types and centerline road slope (in %)

Spacing Interval for Turnout Ditches

Percent slope	Spacing interval
0% - 4%	400' - 150'
4% - 6%	250' - 125'
6% - 8%	200' - 100'
8% - 10%	150' - 75'

5. **Culverts** - Culvert pipes shall be used for cross drains where drainage dips or low water crossings are not feasible. The minimum culvert diameter must be 18 inches. Any culvert pipe installed shall be of sufficient diameter to pass the anticipated flow of water. (Further details can be obtained from the Roswell District Office or the appropriate Resource Area Office.)
6. **Surfacing** - Surfacing of the road, at the direction of the Authorized Officer, may be required, if necessary, to maintain traffic within the right-of-way with caliche, gravel, or other surfacing material which shall be approved by the Authorized Officer. When surfacing is required, surfacing materials will be compacted to a minimum thickness of six inches with caliche material. The width of surfacing shall be not less than the driving surface. Prior to using any mineral materials from an existing or proposed Federal source, authorization must be obtained from the Authorized Officer.
7. **Cattleguards** - Where used, all cattleguard grids and foundation designs and construction shall meet the American Association of State Highway and Transportation Officials (AASHTO) Load Rating H-20, although AASHTO U-80 rated grids shall be required where heavy loads (exceeding H-20 loading), are anticipated (see BLM standard drawings for cattleguards). Cattleguard grid length shall not be less than 8 feet and width of not less than 14 feet. A wire gate (16-foot minimum width) will be provided on one side of the cattleguard unless requested otherwise by the surface user.
8. **Maintenance** - The holder shall maintain the road in a safe, usable condition. A maintenance program shall include, but not be limited to blading, ditching, culvert installation, culvert cleaning, drainage installation, cattleguard maintenance, and surfacing.

9. Traffic Safety Control Signs - The lessee shall erect traffic safety control signs where appropriate.
10. Paving - If the road is paved with asphalt, roadbed construction and paving specifications shall be submitted to the Authorized Officer for approval, prior to the start of construction.

Hazardous Materials Requirements

If Hydrogen Sulfide gas is present, the lessee will be required to install:

1. Signs - at appropriate locations with the following language:

**CAUTION - POTENTIAL POISON GAS
HYDROGEN SULFIDE (H₂S)
NO ADMITTANCE WITHOUT AUTHORIZATION**

- 2 Windsock or Windstreamers - at appropriate locations and will be at least 36" in length.

RECLAMATION PLAN

The reclamation plan described herein applies to the surface area disturbed during construction and related activities for the area describe as:

The area located (land description and physical description/ meets and bounds)

1. Brine Production Well:

- a The brine production well shall be plugged from bottom to top with cement to protect water bearing aquifers.
- b. A 4-inch pipe marker, will be set extending 5 feet above ground level and will have the location and lessee's name stamped on a disc and set in the top of the pipe.

1. Road and Site Reclamation:

- a. Any new roads constructed to gain access to the site will be ripped and seeded to the specifications below.
- b. Roads that are ripped or areas where vehicles have been driven across open country will have three tee posts with wire stretched between them, erected across the access to the road in order to restrict further vehicular use.
- c. Any land disturbed during construction will be seeded to the specifications below.
- d. A berm will be constructed across the entrance to any road reclaimed with a minimum height of 3 feet and a length sufficient to prohibit or discourage vehicular travel.

2. Facility Reclamation:

Any surface structure erected during this project will be removed and disposed of in a proper manner according to Federal, State and County laws and regulations. Any concrete spilled on the Public Lands shall be removed and disposed of properly.

3. Hazardous Waste Removal:

Any hazardous wastes spilled or otherwise used on the site will be removed and disposed of by a method approved by the Authorized Officer at the expense of the lessee.

4. Seeding Techniques:

Seeds shall be drilled to a proper depth to insure good coverage and germination. The seed mixture shall be evenly and uniformly planted over the disturbed area. If drilling is not possible, seeds shall be broadcast and the area raked or dragged to cover the seed.

5. Seed Mixture:

The standard seed mixture to be used is listed below. The seed mixture may be changed with the approval of the Authorized Officer.

Species are to be planted in pounds of pure live seed per acre.

Common Name	Scientific Name	Lbs. Live Seed/ Acre
Blue Grama	Bouteloua Gracilis, Hachita Variety	5.0
Plains Bristle Grass	Setaria Macrostachya	2.0
Little Bluestem	Schizachyrium Scoparium	2.0
Green Sprangletop	Leptochloa Dubia	2.0
Alkali Sacaton	Sporobolus Airoides, Salado Variety	1.0
Fourwing Saltbush	Atriplex Canescens	2.0
Total		14.0 lbs./acre

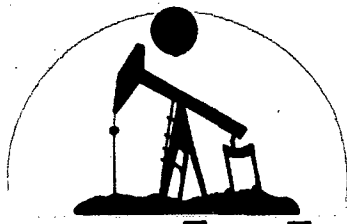
6. Soil Preparation:

A granular 16-12-12 fertilizer, or better, will be required at the rate of 200 lbs per acre. Fertilizer requirements may be modified prior to the performance of reclamation upon approval of the Authorized Officer.

Water shall be applied directly after planting, irrigated a minimum of three inches into the soil in order to provide adequate amounts of moisture, and to help imbed the seeds.

Seeding prior to the fall rainy season is preferable.

If after one growing season the vegetation has not taken hold, re-seeding will be required as in steps 4 through 6 above.



marbob
energy corporation

APR - 2 1999

March 31, 1999

*CALLER 4/20/99
NEED BOND FORM
+ OIL LEASE AGREEMENT!
LW*

Energy, Minerals and Natural Resources Department
Oil Conservation Division
2040 South Pacheco
Santa Fe, New Mexico 87505

Attn: Wayne Price

RE: Dodd A Brine Well Station

Dear Mr. Price:

In regards to our March 31, 1999 telephone conversation, please find enclosed documents in an effort to clarify the questions that have arisen.

Enclosed, for your review, is a copy of Marbob Energy's Bond No. 58 93 97 dated October 26, 1998. Also, enclosed is a new M. Dodd "A" BW No. 1 wellbore schematic. The revised schematic shows the top of the cement at 12'. Not the 124' previously submitted. The calculated amount of cement was 124', pipe was set at 136', therefore the estimated top of cement is 12'. We apologize for this error and hope this explanation will resolve this issue.

After our conversation I contacted Marbob Energy's field foreman as to how the incoming fresh water line was connected. He informed me that the incoming fresh water line was connected at the top of the fresh water tank. The level is controlled with a head switch which activates an electric valve. I believe this set up will provide the "air break" need for this type of application.

Please advise as to any further actions needed. Again, I apologize any inconveniences these errors may have caused. Do not hesitate to contact us should you require additional information or have any questions.

Thank you for your help in this matter.

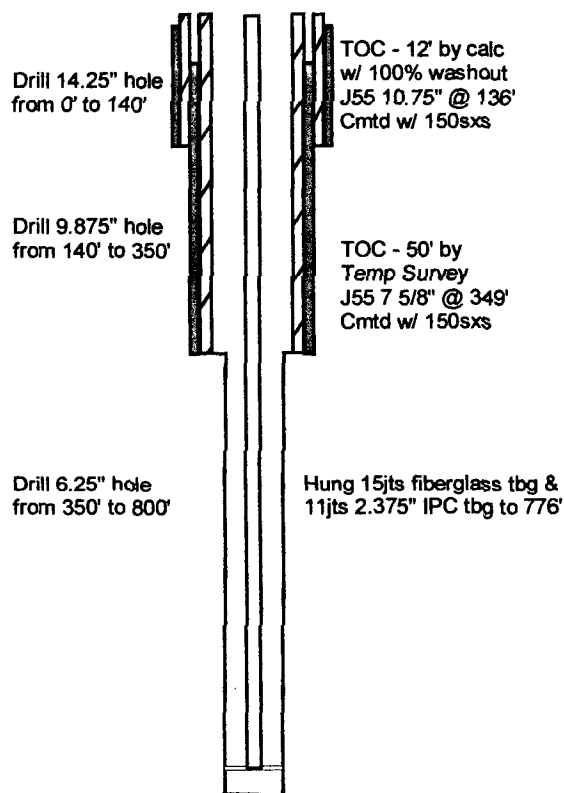
Sincerely,

A handwritten signature in black ink, appearing to read "Dean Chumbley", written over a horizontal line.

Dean Chumbley
Land Department

DC/mm
Enclosures

Marbob Energy
M. Dodd "A" BW #1
1850'FWL 300' FSL
Sec 22 - 17S - 29E
Eddy Co., NM



TD 800'

Current Status
12/10/98

Revised
3/31/99



J. S. Ward & Son, Inc.

101 South Fourth Street
(505) 746-2796
FAX (505) 746-4244
Artesia, New Mexico
88210-2195

Insurance
Bonds

OCT 27 1998

October 26, 1998

Bureau of Land Management
620 East Greene Street
Post Office Box 1778
Carlsbad, New Mexico 88221-1778

Attention: Mrs. Nellie Hernandez
Land Law Examiner

Re: Marbob Energy Corporation
Bond No. 58 93 97
\$10,000 Bond Under Lease For
Mining Sodium Deposits
Lease Serial No. NMNM 82804

(Replacing Gulf Insurance Company
Bond No. 58 57 08)

Dear Mrs. Hernandez:

Enclosed please find the captioned bond through Gulf Insurance Company which we trust you find in order and acceptable for filing.

When this bond has been accepted, please issue termination of liability for Gulf Insurance Company Bond No. 58 57 04 as this bond replaces it.

Very truly yours,

J. S. WARD & SON, INC.

By *K. J. Ward*

SGS:emb

Enclosure

cc: Marbob Energy Corporation
Post Office Box 227
Artesia, New Mexico 88211-0227
Attention: Mr. Dean Chumbley - Invoice

OVER 60 YEARS

C

O

P

Y

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

COPY

Serial Number

NMNM 82804

Bond Number

58 93 97

BOND* UNDER LEASE FOR
MINING SODIUM DEPOSITS

KNOW ALL MEN BY THESE PRESENTS, That Marbob Energy Corporation
of Post Office Box 227, Artesia, New Mexico 88211-0227, as principal,
and Gulf Insurance Company
of Post Office Box 1771, Dallas, Texas 75221-1771, as surety,
are held and firmly bound unto the United States in the sum of Ten Thousand and no/100ths---dollars
(\$ 10,000.00--), lawful money of the United States, for the payment of which, well and truly to be made, we bind
ourselves, and each of us, and each of our heirs, executors, administrators, and successors, jointly and severally,
firmly by these presents.

The conditions of this obligation are such, that whereas the said principal entered into a lease of the lands described
therein and upon conditions therein expressed, which lease bears the above serial number.

NOW, THEREFORE, if the said principal, his heirs, executors, administrators, or successors, shall faithfully carry
out the obligations and observe the requirements of said lease, and shall duly keep, perform, and abide by each and
every term and provision of said lease as therein stipulated and agreed, then this obligation shall be null and void;
otherwise to remain in full force and effect.

Signed on this 26th day of October, 1998, in the presence of:

Attest By: Ray Miller
(Signature of Witness) Secretary
P. O. Box 227
Artesia, NM 88211-0227
(Address of Witness)

Witness: [Signature]
(Signature of Witness)
P. O. Box 227
Artesia, NM 88211-0227
(Address of Witness)

Witness: Misti McLurg
(Signature of Witness)
P. O. Box 227
Artesia, NM 88211-0227
(Address of Witness)

Marbob Energy Corporation
By: John R. Gray
(Signature of Principal) President
Post Office Box 227
Artesia, New Mexico 88211-0227
(Address of Principal)
Gulf Insurance Company
By: [Signature]
S. Gary Sims (Signature of Surety) Attorney-in-Fact
101 South Fourth Street
Artesia, New Mexico 88210-2195
(Address of Surety)
Edwin M. Bramlett
(Signature of Witness) Witness
Post Office Box 834
Artesia, New Mexico 88211-0834
(Address of Witness)

* This form of bond may be used in connection with coal, phosphate, and sodium leases, Act of February 25, 1920, as amended (30 U.S.C. 181 et seq.); potassium leases, Act of February 7, 1927, as amended (30 U.S.C. 281 et seq.); sulphur leases, Act of April 17, 1926, as amended (30 U.S.C. 271 et seq.); all such leases involving acquired lands, Act of August 7, 1947 (30 U.S.C. 351), and asphalt leases, Act of June 28, 1944 (58 Stat. 463, 483-485), by inserting the particular mineral applicable in the space provided therefor. If this bond is executed by a corporation, it must bear the corporate seal.



POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS:

That GULF INSURANCE COMPANY, a corporation of the State of Missouri, hereinafter called "Company," does hereby appoint

CHARLENE M. WARD or S. GARY SIMS or JOHN C. KNIGHT

ARTESIA, NEW MEXICO

its true and lawful Attorney-in-fact to make, execute, seal and deliver on its behalf, as surety, any and all bonds and undertakings of suretyship, not to exceed \$250,000.00 or any bond where the penalty is not stated in the bond form. No authority is granted where the attorney in fact is a party at interest in the bond.

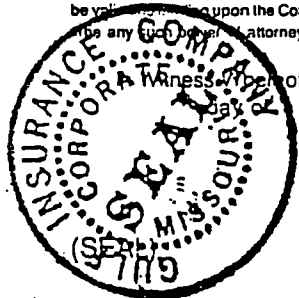
The execution of such bonds or undertakings in pursuance of these presents shall be as binding upon the Company as if they had been executed and acknowledged by the regularly elected officers of the Company.

This Power of Attorney is issued pursuant to and by authority of the following resolution of the Board of Directors of the Company, adopted effective July 1, 1983, and now in full force and effect:

"Resolved that the President, or any Senior Vice President, or any Vice President, or the Secretary, or any Assistant Secretary may appoint Attorneys-in-fact in any state, territory or federal district to represent this Company and to act on its behalf within the scope of the authority granted to them, in writing, which authority may include the power to make, execute, seal and deliver on behalf of this Company, as surety, and as its act and deed, any and all bonds and undertakings of suretyship and other documents that the ordinary course of surety business may require, including authority to appoint agents for the service of process in any jurisdiction, state or federal, and authority to attest to the signature of the President, or any Senior Vice President, or any Vice President, or the Secretary, or any Assistant Secretary and to verify any affidavit or other statement relating to the foregoing, and to certify to a copy of any of the bylaws of the Company and to any resolutions adopted by its Board of Directors; and any such Attorney-in-fact may be removed and the authority granted him revoked by the President, or any Senior Vice President, or any Vice President, or the Secretary, or any Assistant Secretary, or by the Board of Directors."

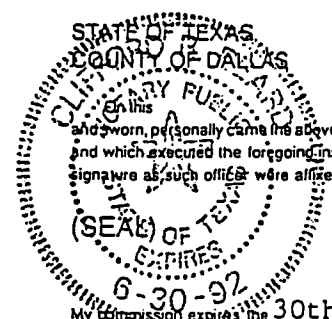
This Power of Attorney and Certificate are signed and sealed by facsimile under and by authority of the following resolution of the Board of Directors of the Company, adopted effective July 1, 1983, and now in full force and effect:

"Resolved that the signature of the President, or of any Senior Vice President, or of any Vice President, or of the Secretary, or of any Assistant Secretary, and the seal of the Company may be affixed by facsimile to any power of attorney or to any certificate relating thereto appointing Attorneys-in-fact for purposes only of executing and attesting bonds and undertakings and other writings obligatory in the nature thereof, including any such power of attorney and certificate revoking the authority of the foregoing Attorneys-in-fact, as well as for the appointment of agents for the service of process in any jurisdiction, state or federal, including any such power of attorney and certificate revoking the authority of such agents; and any such power of attorney or certificate bearing such facsimile signature or facsimile seal shall be valid and binding upon the Company and any such power of attorney or certificate so executed and certified by such facsimile signature and facsimile seal shall be valid and binding upon the Company at the time any such power of attorney and certificate are executed and in the future with respect to any bond or undertaking to which they are attached."



Witness Whereof, the Company has caused this Power of Attorney to be signed and its corporate seal to be affixed by its authorized officer this April 12, 1991

By OR A. A. A.
Sr. Vice President

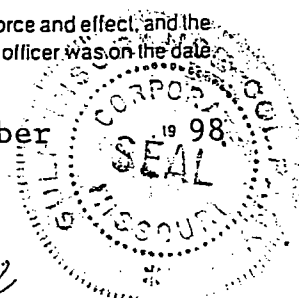
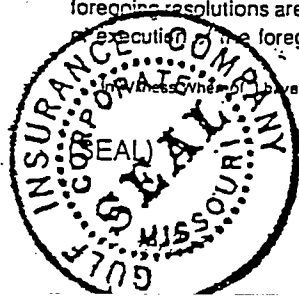


SS: 12 day of April, 1991 before me, a Notary Public of the State and County aforesaid, residing therein, duly commissioned and sworn, personally came the above named officer of GULF INSURANCE COMPANY, who being by me first duly sworn according to law, did depose and say that he is that officer of the company described in and which executed the foregoing instrument; that he knows the seal of said company; that the seal affixed to such instrument is the corporate seal of said company; and that the corporate seal and his signature as such officer were affixed and subscribed to the said instrument by the authority and direction of said company.

Cliffure R. Beard
Cliffure R. Beard Notary Public
1992

CERTIFICATE

I, the undersigned, do hereby certify that the original Power of Attorney of which the foregoing is a true and correct copy is in full force and effect, and the foregoing resolutions are true and correct transcripts from the records of GULF INSURANCE COMPANY and that the above named officer was on the date of execution of the foregoing Power of Attorney authorized to execute this Power of Attorney.



Witness Whereof, I have hereunto subscribed my name and affixed the corporate seal of Gulf Insurance Company this 26th day of October, 1998

Lo Rodney Reckel
Vice President



**NEW MEXICO ENERGY, MINERALS
& NATURAL RESOURCES DEPARTMENT**

Jennifer A. Salisbury
CABINET SECRETARY

Oil Conservation Div.
Environmental Bureau
2040 S. Pacheco
Santa Fe, NM 87505

Memorandum of Meeting or Conversation

Telephone X
Personal

Time: 2:20 pm
Date: 3/31/99

Originating Party: Wayne Price-OCD

Other Parties: Raye Miller, Dean Chumbley - Marbob

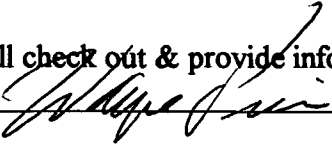
Subject: Brine Well Application BW-29

Discussion: OCD requested info on:

1. Bonding
2. Fresh water connection
3. Well cementing completion

Conclusions or Agreements:

Marbob will check out & provide info within 2 weeks

Signed: 

CC:

Artesia Daily Press

P.O. Box 190, Artesia, NM 88211-0190

Phone: (505) 746-3524

Fax: (505) 746-8795

INVOICE

Invoice Date:

02/03/99

Invoice Number:

1035894

Customer Number:

10005610

Oil Conservation Division

2040 South Pacheco St.

Santa Fe NM 87505

DATE	TYPE	DOC NO	REF NUMBER	DESCRIPTION	# OF INS	DEPTH	RATE	AMOUNT
02/03/99	INV	1035894	A/R:1035894 Ord:10457010	LEGAL NOTICE NOTICE OF PUBLICA Artesia Daily Press Legal Section, LEGAL NOTICE 2/3/99 State Sales Tax This is your first notice. Thank you.	1 1	13.87 13.87	44.40 2.75	44.40 2.75
TOTAL								47.15

I hereby certify that this is a true and correct statement to the best of my knowledge.

Barbara Boans
Bookkeeper

*OK
Nak
file cc*

Please detach and return this portion with payment. To ensure proper credit to your account, please write your customer number on your check. If you have any questions about your account, please contact Accounts Receivable at (505) 746-3524.

Invoice Date

02/03/99

Invoice Number

1035894

Customer Number

10005610

Retail Advertising

Legal 16480

PLEASE PAY:

47.15

ARTESIA DAILY PRESS
Attn: Accounts Receivable
P.O. Box 190
Artesia, NM 88211-0190

Oil Conservation Division
2040 South Pacheco St.
Santa Fe NM 87505

Affidavit of Publication

NO. 16480

STATE OF NEW MEXICO

County of Eddy:

Gary Scott being duly

sworn, says: That he is the Publisher of The

Artesia Daily Press, a daily newspaper of general

circulation, published in English at Artesia, said county

and county and state, and that the here to 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/days on the same

day as follows:

First Publication February 3 1999

Second Publication _____

Third Publication _____

Fourth Publication _____

Subscribed and sworn to before me this

3rd day of February 1999

Barbara Ann Beans
Notary Public, Eddy County, New Mexico

My Commission expires September 23, 1999

Copy of Publication:

LEGAL NOTICE

NOTICE OF PUBLICATION
STATE OF NEW MEXICO
ENERGY, MINERALS AND
NATURAL RESOURCES
DEPARTMENT
OIL CONSERVATION
DIVISION

Notice is hereby given that pursuant to New Mexico Water Quality Control Commission Regulations, the following discharge plan application(s) have been submitted to the Director of the Oil Conservation Division, 2040 South Pacheco, Santa Fe,

New Mexico 87505. Telephone (505) 827-7131:

(BW-029) - Marbob Energy Corporation, Dean Chumbley, (505) 748-3303, P.O. Box 227, Artesia, New Mexico 88211-0227, has submitted a discharge plan application for the Marbob ~~Dodd A Brine Well Station~~ located 300 FSL and 1850 FWL in Section 22, Township 17 South, Range 29 East, NMPM, Eddy County, New Mexico. Approximately 20 barrels per day on average, of brine water will be extracted with an average dissolved solids concentration of approximately 300,000 mg/l. The brine water will be stored in one 500 barrel aboveground fiberglass tank. Ground water most likely to be affected in the area by any accidental discharge is estimated to be at a depth of approximately 60-80 feet below ground surface with a total dissolved solids concentration ranging from approximately 300 to 2300 mg/l respectively. The discharge plan addresses how spills, leaks, and other accidental discharges to the surface will be managed.

Any interested person may obtain further information from the Oil Conservation Division and may submit written comments to the Director of the Oil Conservation Division at the address given above. The discharge plan application(s) may be viewed at the above address between 8:00 a.m. and 4:00 p.m., Monday through

GIVEN under the Seal of New Mexico Oil Conservation Commission at Santa Fe, New Mexico, on this 25th day of January 1999.

STATE OF NEW MEXICO
OIL CONSERVATION
DIVISION
s-Lori Wrotenbery
LORI WROTENBERY, Director
S E A L

Published in the Artesia Daily Press, Artesia, N.M. February 3, 1999.

Legal 16480

Friday. Prior to ruling on any proposed discharge plan application(s), the Director of the Oil Conservation Division shall allow at least thirty (30) days after the date of publication of this notice during which comments may be submitted and a public hearing may be requested by any interested person. Requests for a public hearing shall set forth the reasons why a hearing should be held. A hearing will be held if the Director determines there is significant public interest.

If no public hearing is held, the Director will approve or disapprove the proposed plan(s) based on information available. If a public hearing is held, the Director will approve or disapprove the proposed plan(s) based on the information in the discharge plan application(s) and information submitted at the hearing.

NOTICE OF PUBLICATION

STATE OF NEW MEXICO ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT OIL CONSERVATION DIVISION

Notice is hereby given that pursuant to New Mexico Water Quality Control Commission Regulations, the following discharge plan application(s) have been submitted to the Director of the Oil Conservation Division, 2040 South Pacheco, Santa Fe, New Mexico 87505, Telephone (505) 827-7131:

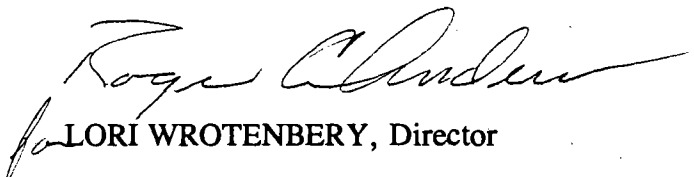
(BW-029) - Marbob Energy Corporation, Dean Chumbley, (505) 748-3303, P. O. Box 227, Artesia, New Mexico 88211-0227, has submitted a discharge plan application for the Marbob Dodd A Brine Well Station located 300 FSL and 1850 FWL in Section 22, Township 17 South, Range 29 East, NMPM, Eddy County, New Mexico. Approximately 20 barrels per day on average, of brine water will be extracted with an average dissolved solids concentration of approximately 300,000 mg/l. The brine water will be stored in one 500 barrel aboveground fiberglass tank. Ground water most likely to be affected in the area by any accidental discharge is estimated to be at a depth of approximately 60-80 feet below ground surface with a total dissolved solids concentration ranging from approximately 300 to 2300 mg/l respectively. The discharge plan addresses how spills, leaks, and other accidental discharges to the surface will be managed.

Any interested person may obtain further information from the Oil Conservation Division and may submit written comments to the Director of the Oil Conservation Division at the address given above. The discharge plan application(s) may be viewed at the above address between 8:00 a.m. and 4:00 p.m., Monday through Friday. Prior to ruling on any proposed discharge plan application(s), the Director of the Oil Conservation Division shall allow at least thirty (30) days after the date of publication of this notice during which comments may be submitted and a public hearing may be requested by any interested person. Requests for a public hearing shall set forth the reasons why a hearing should be held. A hearing will be held if the Director determines there is significant public interest.

If no public hearing is held, the Director will approve or disapprove the proposed plan(s) based on information available. If a public hearing is held, the Director will approve or disapprove the proposed plan(s) based on the information in the discharge plan application(s) and information submitted at the hearing.

GIVEN under the Seal of New Mexico Oil Conservation Commission at Santa Fe, New Mexico, on this 25th day of January 1999.

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION


for LORI WROTENBERY, Director

S E A L

INVOICE DATE	INVOICE NO.	DESCRIPTION	INVOICE TOTAL	ADJUSTMENTS	DISCOUNT	NET AMOUNT
12/10/98 12		APPLICATION FEE MDA BRINE WELL	50.00			50.00

BW-29

DOLL A BRINE



MARBOB ENERGY CORPORATION
 PETROLEUM BUILDING 324 W. MAIN
 P.O. BOX 227
 ARTESIA, NEW MEXICO 88211-0227
 (505) 748-3303

PLEASE DETACH BEFORE DEPOSITING. RETAIN TOP PORTION FOR YOUR RECORDS.

ACKNOWLEDGEMENT OF RECEIPT
OF CHECK/CASH

I hereby acknowledge receipt of check No. [REDACTED] dated 12/10/98,
or cash received on _____ in the amount of \$ 50.00

from Marbob Energy
for Dodd A Brine BW-029
(Facility Name) (DP No.)

Submitted by: _____ Date: _____

Submitted to ASD by: R Chandra Date: 1-11-99

Received in ASD by: _____ Date: _____

Filing Fee ☒ New Facility _____ Renewal _____

Modification _____ Other _____
(specify)

Organization Code 521.07 Applicable FY 99

To be deposited in the Water Quality Management Fund.

Full Payment _____ or Annual Increment _____



PETROLEUM BUILDING 324 W. MAIN
P.O. BOX 227
ARTESIA, NEW MEXICO 88211-0227
(505) 748-3303

BW-029

32-2/1110

NATIONSBANK
MIDLAND, TEXAS 79701-0303

FIFTY DOLLARS AND NO CENTS***

AY TO
HE ORDER
F
OCD - SANTA FE

DATE	CHECK AMOUNT
12/10/98	*****50.00****

MARBOB ENERGY CORPORATION

Ray Miller

INVOICE DATE	INVOICE NO.	DESCRIPTION	INVOICE TOTAL	ADJUSTMENTS	DISCOUNT	NET AMOUNT
12/10/98		APPLICATION FEE MDA BRINE WELL	50.00			50.00



MARBOB ENERGY CORPORATION
 PETROLEUM BUILDING 324 W. MAIN
 P.O. BOX 227
 ARTESIA, NEW MEXICO 88211-0227
 (505) 748-3303

PLEASE DETACH BEFORE DEPOSITING. RETAIN TOP PORTION FOR YOUR RECORDS.



marbob
 energy corporation

PETROLEUM BUILDING 324 W. MAIN
 P.O. BOX 227
 ARTESIA, NEW MEXICO 88211-0227
 (505) 748-3303

BW-029

32-2/1110

NATIONS BANK
 MIDLAND, TEXAS 79701-0303

FIFTY DOLLARS AND NO CENTS***

PAY TO
 THE ORDER OF OCD - SANTA FE

DATE	CHECK AMOUNT
12/10/98	*****50.00****

MARBOB ENERGY CORPORATION

Ray Miller



marbob
energy corporation

December 10, 1998

BW-029

New Mexico Energy, Minerals
& Natural Resources Department
Oil Conservation Division
2040 South Pacheco Street
Santa Fe, New Mexico 87505

Attn: Mr. Roger C. Anderson
Chief, Environmental Bureau

RE: Marbob Dodd A Brine Well
Section 22-17S-29E
Eddy County, New Mexico

Dear Mr. Anderson:

Marbob Energy Corporation respectfully submits the enclosed Discharge Plan for your review and approval. The proposed plan is for Marbob Energy's Dodd A Brine well located at 300' FSL and 1850' FWL in Section 22 of Township 17 South, Range 29 East in Eddy County, New Mexico. Also, enclosed is a Marbob Energy check in the amount of \$50.00 to cover the cost of this Application fee.

Please do not hesitate to contact me should you require any additional information. Thank you for your help in this matter.

Sincerely,

Dean Chumbley
Land Department

DC/mm
Enclosures

State of New Mexico
Energy, Minerals and Natural Resources Department
OIL CONSERVATION DIVISION
P.O. Box 2088
Santa Fe, NM 87501

DISCHARGE PLAN APPLICATION FOR BRINE EXTRACTION FACILITIES

(Refer to OCD Guidelines for assistance in completing the application.)

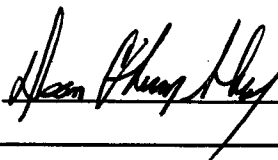
☒ NEW ☐ RENEWAL

- I. FACILITY NAME: Dodd A Brine Well
- II. OPERATOR: Marbob Energy Corporation
ADDRESS: P. O. Box 227, Artesia, New Mexico 88211-0227
CONTACT PERSON: Dean Chumbley PHONE: (505)748-3303
- III. LOCATION: SE /4 SW /4 Section 22 Township 17S Range 29E
Submit large scale topographic map showing exact location.
- IV. Attach the name and address of the landowner of the facility site.
- V. Attach a description of the types and quantities of fluids at the facility.
- VI. Attach a description of all fluid transfer and storage and fluid and solid disposal facilities.
- VII. Attach a description of underground facilities (i.e. brine extraction well).
- VIII. Attach a contingency plan for reporting and clean-up of spills or releases.
- IX. Attach geological/hydrological evidence demonstrating that brine extraction operations will not adversely impact fresh water.
- X. Attach such other information as is necessary to demonstrate compliance with any other OCD rules, regulations and/or orders.
- XI. CERTIFICATION

I hereby certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment.

Name: Dean Chumbley

Title: Landman

Signature: 

Date: 12-10-1998

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

IV **Landowners**

United States Department of the Interior
Bureau of Land Management

Attached is a copy of BLM Sodium Lease NMNM 82804

V. **Type and Quantities of Fluids Stored or Used at the Facility**

Attached are copies of analysis for both fresh water and brine water.

Fresh Water: Fresh water source is the Double Eagle Waterline.

Fresh water is transported to facility via 3" polyethylene pipeline, and stored in a 300 bbl. steel tank located at this facility. Average daily volume used is approximately 20 bbls. Estimated volume stored is 281 bbls.

Brine Water: Brine water source is Marbob Energy's Dodd A Brine Well. Brine water is produced by pumping fresh water into the Dodd A Brine well. The Brine water is then stored in a 500 bbl. tank located at this facility. Average daily volume used is approximately 20 bbls. Estimated volume stored is 462 bbls.

VI. **Transfer, Storage and Disposal of Fluids and Solids**

Transfer of Brine water is accomplished by one of two ways:

Transfer Pump: This system uses a 3" polyethylene pipeline to transfer brine water to a BLM approved drilling location. The Transfer pump is only used to transfer brine water short distances.

Transport Truck: Brine water is transported by an independent trucking company when it is not economical to use the transfer pump. The transport truck loads via a valve on the front of the fiberglass brine water storage tank.

Storage of fresh water is in a 300 bbl. steel tank above ground with no pressure.

Storage of brine water is in a 500 bbl. fiberglass tank above ground with no pressure.

Daily inspection is performed by Marbob field personal. After inspecting tanks, pumps, and pipelines, any maintenance that may be required is then performed. Field personnel are responsible for maintaining an accurate account of brine water transferred by reading transfer pump meter and/or transport truck run tickets.

In the event of a leak or spill, NMOCD Rule 116 will be utilized as to the proper corrective action and notification.

Facility is equipped with an earthen berm to prevent run off from passing through system. Yearly rainfall in this area is minimal, therefore, any precipitation remaining within the berms will be allowed to evaporate.

Upon closure of facility, all fluids and contaminates will be removed and disposed of properly. Well will be properly plugged and abandoned. All tanks and any other equipment remaining will be removed from facility. The facility area will then be graded as close to the original contour as is practical.

VII. Brine Extraction Well(s)

Attached is a schematic drawing of Marbob Energy's M. Dodd A Brine Water #1 well.

VIII. Spill/Leak Prevention and Reporting Procedures (Contingency Plans)

Marbob Energy spill or leak prevention measures consists of employing competent and responsible personnel. Field personnel are trained in proper maintenance and inspection of its facility. Field supervisors are knowledgeable of release notification and corrective actions in accordance with NMOCD Rule 116. Beyond personnel, spills and leaks are prevented with Marbob Energy's practice of utilizing non-corrosive material where ever possible.

In the event of a spill in which 25 bbls. or more of brine water was lost, field supervisor or other responsible personnel will contact the OCD District office for recommendations on proper corrective actions.

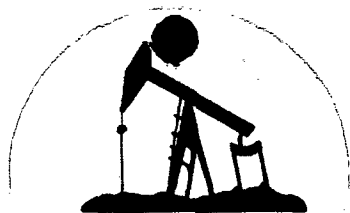
IX **Site Characteristics**

Attached is a map showing Bear Grass Draw. Marbob Energy will construct an earthen berm around this facility to prevent any spills or leaks from reaching this draw.

Also, attached is complete records on a fresh water well located in the NW/4NW/4 of Section 22 of Township 17 South, Range 29 East obtained from the State Engineer's office in Roswell.

X. **Other Compliance Information**

Attachments: Geological Summary;
 Site Diagram;
 Topographical Map showing location of Facility;
 Unichem International Analysis of Fresh Water;
 Unichem International Analysis of Brine Water;
 Unichem International Analysis of Windmill Water;
 Bureau of Land Management;
 Sodium Lease NMNM 82804;
 Topographical map showing location of Bear Grass
 Draw;
 Current schematic drawing of M. Dodd A BW #1;
 State Engineer's records; and
 Marbob Records from 1991: BLM Reports
 Water Analysis
 Fresh Water Right-of-Way
 Archeological Report



marbob energy corporation

12/10/98

ATTN: R. C. Anderson, Chief of Environmental Bureau

RE: Discharge Plan for the:

Marbob Energy Corporation
M. Dodd "A" BW #1
1850'FWL 300' FSL
Sec 22 - 17S - 29E
Eddy Co., NM
GL: 3534

Roger: In satisfying the the BLM requirements for a discharge plans, Dean contacted the State Engineers office in Roswell. They provided us with the following information concerning the "Big Red" active windmill located approximately 0.95 mile to the north-northwest of the M Dodd brine well:

Location: NW/NW/NW Section 22 T17S R29E

Elevation: 3543 (estimated from topo sheet).

Aquifer: Qal (no driller's log is available detailing the actual rock type of the aquifer.)

Depth to Water: 71' (\pm , again there is very little available data on this well.)

Water Analysis:

Date	Collector	POC	CL	SC	Remarks
9/18/90	MFN/KO	E DP	34	2570	No Temp POA
3/1/94	RLT/PF	DP	80	2280	POA - 63° Stock
11/3/98	Unichem		300	2231	Ca-674 Mg-54 S-1275

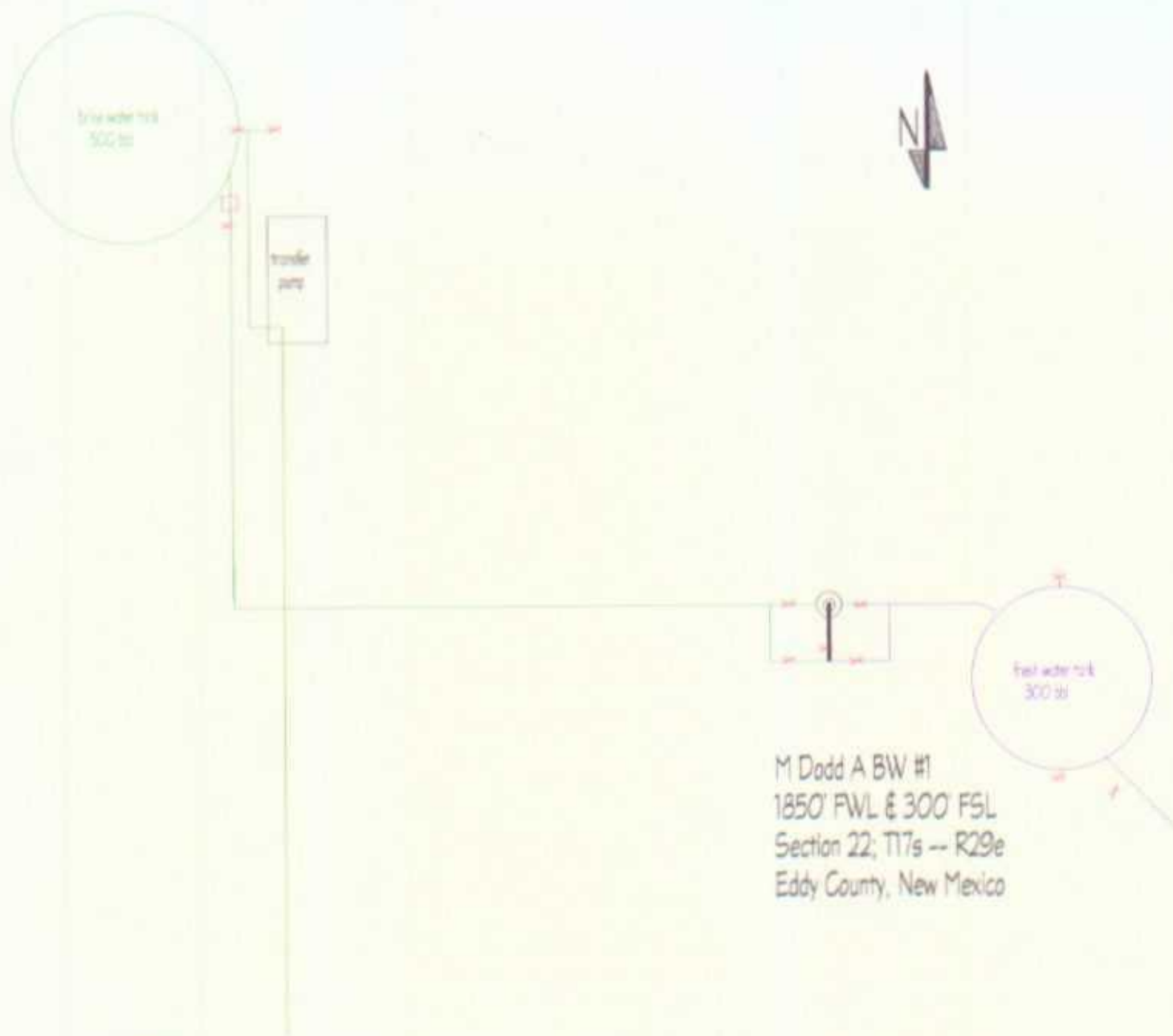
Within the ¼ mile radius area of review, there are no active windmills. On the topo sheet, Bear Grass Draw is mapped as a north-south trending intermittent stream/drainage approximately 1200' to the east of the Dodd brine well. From local knowledge, the Draw itself drains internally though topography suggests southerly regional drainage. The soil type can best be described as loamy sand within the primary drainage area of the Bear Grass Draw grading to predominantly sand upslope and out of the draw.

I do not believe there is much of a chance of a flood at the discharge site. Local annual rainfall probably does not exceed 8-10". The M Dodd site will be bermed.

If I can be of any help to you, please do not hesitate to contact me.

Regards

Martin K. Joyce, geologist



M Dodd A BW #1
1850' FWL & 300' FSL
Section 22; T17s -- R29e
Eddy County, New Mexico

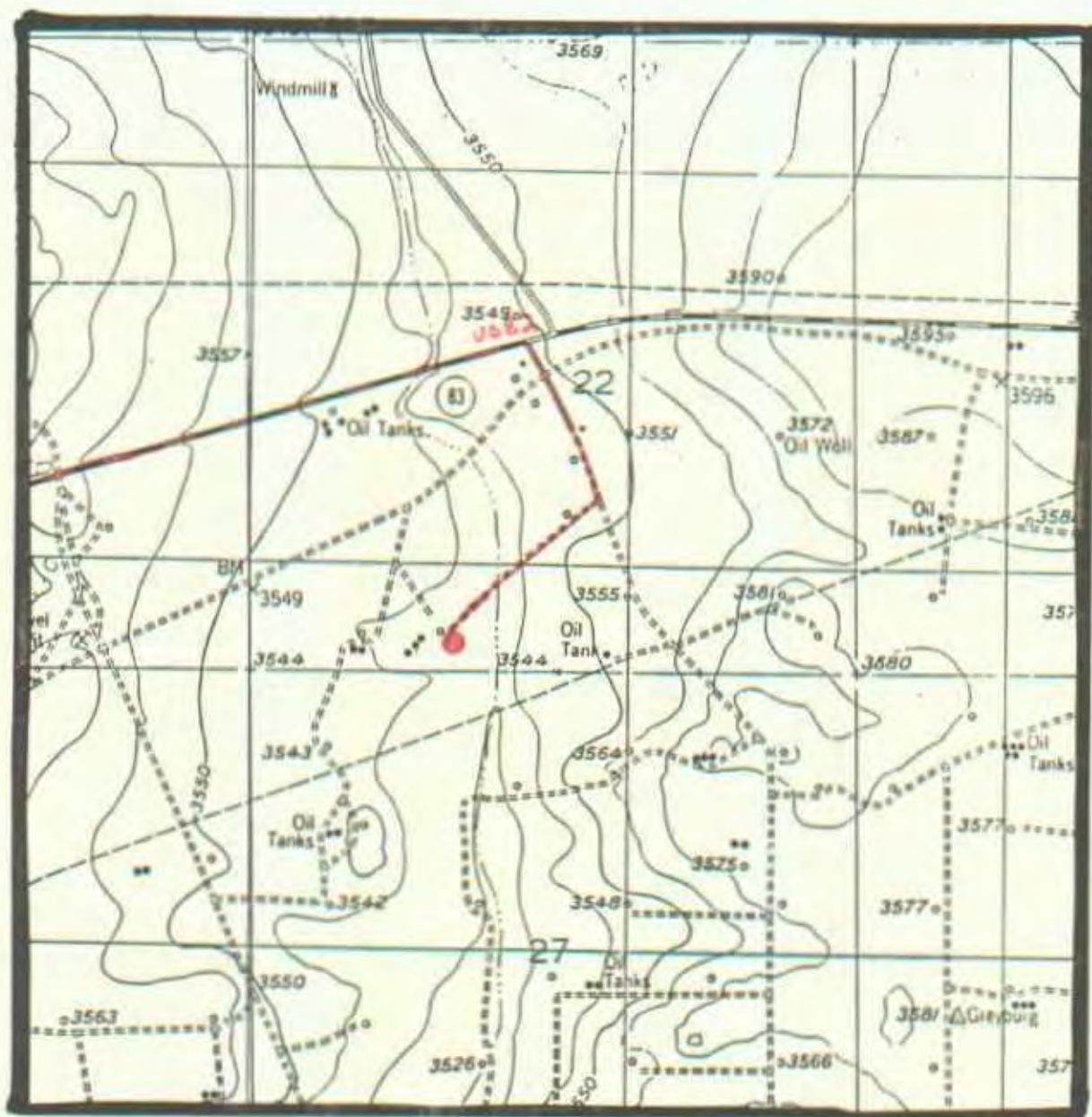
LEGEND

— brine water

— fresh water

x valve

□ meter



MARBOB ENERGY CORPORATION
 DODD A BRINE WELL
 1850 FWL 300 ESL
 SECTION 22-T17S-R29E
 EDDY COUNTY, NEW MEXICO

Unichem International

707 North Leech

P.O.Box 1499

Hobbs, New Mexico 88240

Company : Marbob

Date : 10-27-1998

Location: Dodd A Fed BW #1 - Fresh Water Tank (on 10-23-1998)

Sample 1

Specific Gravity:

1.004

Total Dissolved Solids:

5764

pH:

0.00

Resistivity:

20.000 ohms @ 72[F

IONIC STRENGTH:

0.159

CATIONS:		me/liter	mg/liter
Calcium	(Ca+2)	16.0	320
Magnesium	(Mg+2)	75.7	920
Sodium	(Na+1)	19.6	451
Iron (total)	(Fe+2)	0.322	9.00
Barium	(Ba+2)	0.015	1.00
ANIONS:			
Bicarbonate	(HCO ₃ -1)	3.00	183
Carbonate	(CO ₃ -2)	0	0
Hydroxide	(OH-1)	0	0
Sulfate	(SO ₄ -2)	3.96	190
Chloride	(Cl-1)	104	3700

SCALING INDEX (positive value indicates scale)

Temperature		Calcium Carbonate	Calcium Sulfate
86 [F	30 [C	-7.3	-28
104 [F	40 [C	-6.6	-28
122 [F	50 [C	-6.3	-28
140 [F	60 [C	-6.0	-28
168 [F	76 [C	-5.4	-11
176 [F	80 [C	-5.3	-11

Comments:

cc: Bill Polk

Jay Brown

LI

Unichem International

707 North Leech

P.O.Box 1499

Hobbs, New Mexico 88240

Company : Marbob

Date : 10-27-1998

Location: Dodd A Fed - BW #1 Brine Tank (on 10-23-1998)

Sample 1

1.219

Specific Gravity:

306901

Total Dissolved Solids:

0.00

pH:

0.330 ohms @ 72[F

Resistivity:

5.358

IONIC STRENGTH:

CATIONS:		me/liter	mg/liter
Calcium	(Ca+2)	56.0	1120
Magnesium	(Mg+2)	52.0	632
Sodium	(Na+1)	5130	118000
Iron (total)	(Fe+2)	0.026	0.730
Barium	(Ba+2)	0.015	1.00
ANIONS:			
Bicarbonate	(HCO ₃ -1)	2.60	159
Carbonate	(CO ₃ -2)	0	0
Hydroxide	(OH-1)	0	0
Sulfate	(SO ₄ -2)	104	5000
Chloride	(Cl-1)	5130	182000

SCALING INDEX (positive value indicates scale)

Temperature		Calcium Carbonate	Calcium Sulfate
86[F	30[C	-5.5	-17
104[F	40[C	-4.9	-21
122[F	50[C	-4.6	-21
140[F	60[C	-4.3	-21
168[F	76[C	-3.7	-17
176[F	80[C	-3.5	-17

Comments:

cc: Bill Polk

Jay Brown

LI

UNICHEM

A Division of BJ Services Company

Lab Test No : 22298

Marbob Energy

Sample Date : 11/3/98

Water Analysis

Listed below please find water analysis report from : Barnsdall

Windmill

Specific Gravity : 1.002
 Total Dissolved Solids : 2231
 pH :
 Conductivity (umhos):
 Ionic Strength : 0.068

Cations:		mg/l
Calcium	(Ca++):	674
Magnesium	(Mg++):	54
Sodium	(Na+):	
Iron	(Fe++):	0.00
Dissolved Iron	(Fe++):	
Barium	(Ba++):	0.00
Strontium	(Sr):	11
Manganese	(Mn++):	0.00
Resistivity :		

Anions:		
Bicarbonate	(HCO3-):	
Carbonate	(CO3--):	
Hydroxide	(OH-):	0
Sulfate	(SO4--):	1275
Chloride	(Cl-):	300

Gases:		ppm	
Carbon Dioxide	(CO2):		Oxygen (O2):
Hydrogen Sulfide	(H2S):		

Scale Index (positive value indicates scale tendency) a blank indicates some tests were not run

Temperature	CaCO3 SI	CaSO4 SI
86F	30.0C	
104F	40.0C	
122F	50.0C	
140F	60.0C	
168F	70.0C	
176F	80.0C	

Comments :

cc: Bill Polk
 Jay Brown

OCT 30 1998

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

Serial Number

SODIUM LEASE

NMNM 82804

PART I. LEASE RIGHTS GRANTED.

This ☒ Lease ☐ Lease Renewal entered into by and between the UNITED STATES OF AMERICA, through the Bureau of Land Management, hereinafter called lessor, and (Name and Address)

MARBOB ENERGY CORPORATION
P O DRAWER 217, ARTESIA, NEW MEXICO 88211-0217

hereinafter called lessee, is effective (date) NOVEMBER 1, 1998, for a period of 20 years,

Sodium, Sulphur, Hardrock -

☒ with preferential right in the lessee to renew for successive periods of 10 years under such terms and conditions as may be prescribed by the Secretary of the Interior, unless otherwise provided by law at the expiration of any period.

Potassium, Phosphate, Gilsomite -

☐ and for so long thereafter as lessee complies with the terms and conditions of this lease which are subject to readjustment at the end of each year period, unless otherwise provided by law.

Sec. 1. This lease is issued pursuant and subject to the terms and provisions of the:

☒ Mineral Leasing Act of 1920, as amended, and supplemented, 41 Stat. 437, 30 U.S.C. 181-287, hereinafter referred to as the Act;

☐ Mineral Leasing Act for Acquired Lands, Act of August 7, 1947, 61 Stat. 913, 30 U.S.C. 351-359;

☐ Reorganization Plan No. 3 of 1946, 60 Stat. 1099 and 43 U.S.C. 1201;

☐ (Other)

; and
to the regulations and general mining orders of the Secretary of the Interior in force on the date this lease issued.

Sec. 2. Lessor, in consideration of any bonuses, rents, and royalties to be paid, and the conditions and covenants to be observed as herein set forth, hereby grants and leases to lessee the exclusive right and privilege to explore for, drill for, mine, extract, remove, beneficiate, concentrate, or otherwise process and dispose of the sodium deposits hereinafter referred to as "leased deposits," in, upon, or under the following described lands:

T. 17 S., R 29 E., NMPM, Eddy County, New Mexico

section 22: SE $\frac{1}{4}$ SW $\frac{1}{4}$, SE $\frac{1}{4}$;

section 27: NE $\frac{1}{4}$, E $\frac{1}{2}$ NW $\frac{1}{4}$.

RECEIVED
1998 OCT 26 A 10:18
BUREAU OF LAND MANAGEMENT
LAND RESOURCE AREA

containing 440.00 acres, more or less, together with the right to construct such works, buildings, plants, structures, equipment and appliances and the right to use such on-lease rights-of-way which may be necessary and convenient in the exercise of the rights and privileges granted, subject to the conditions herein provided.

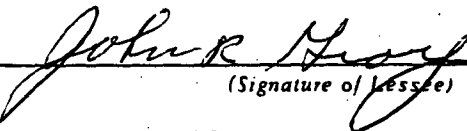
Phosphate -

☐ In accordance with Section 11 of the Act (30 U.S.C. 213), lessee may use deposits of silica, limestone, or other rock in the processing or refining of the phosphates, phosphate rock, and associated or related minerals mined from the leased lands or other lands upon payments of royalty as set forth on the attachment to this lease. (Phosphate leases only.)

THE UNITED STATES OF AMERICA

Bureau of Land Management
By Carlsbad Field Office

Marbob Energy Corporation
Company or Lessee Name


(Signature of Lessee)

President

(Title)

October 22, 1998

(Date)


(Signing Officer)

Field Office Manager

(Title)

10/29/98

(Date)

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

NOTICE

The Privacy Act of 1974 and the regulations in 43 CFR 2.48(d) provides that you be furnished the following information in connection with information required under the terms of this lease.

AUTHORITY: 30 U.S.C. 181 et seq.; 43 CFR 3500.

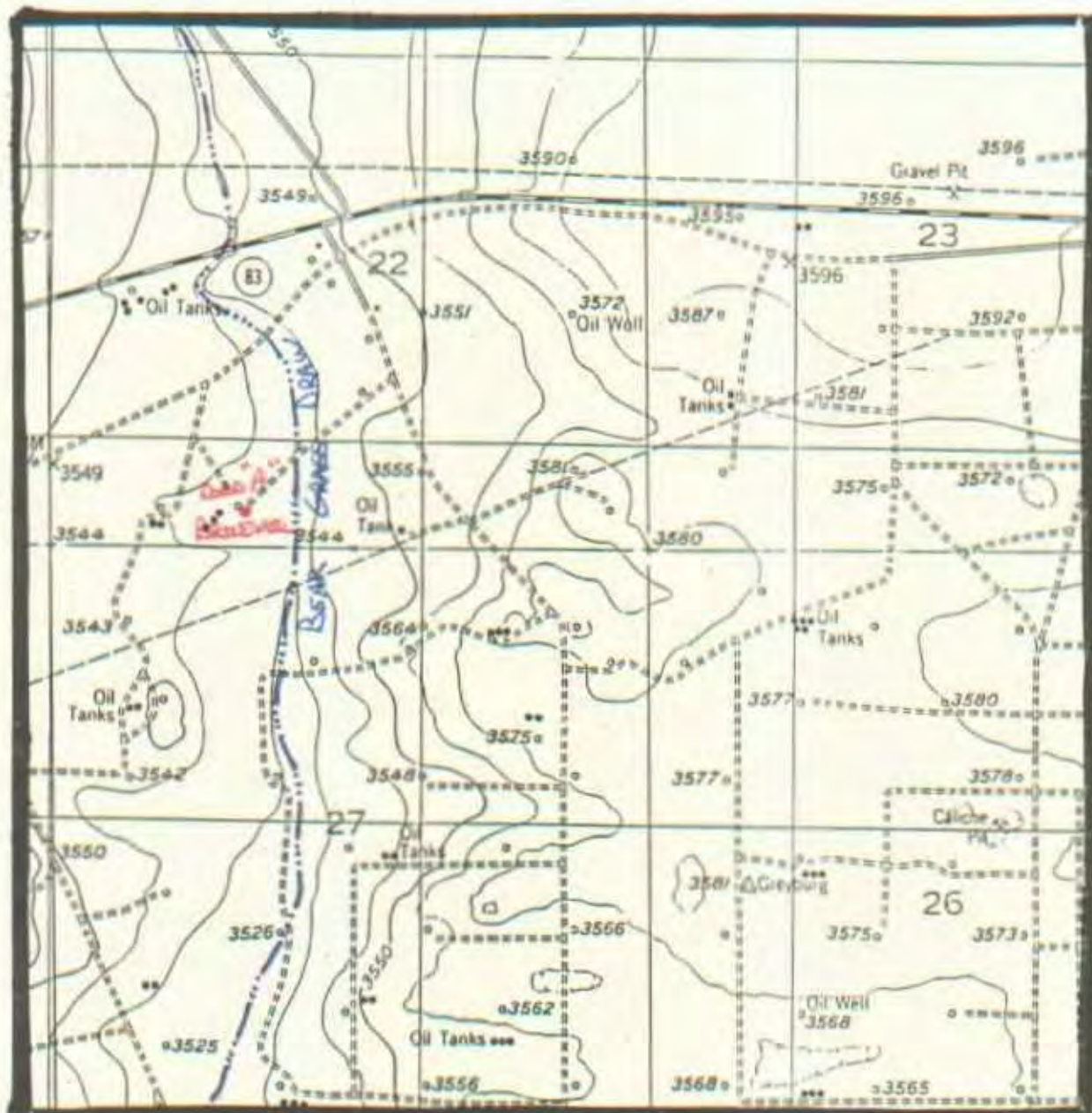
PRINCIPAL PURPOSE The information will be used to verify your compliance with the lease terms and in calculating royalty payments.

ROUTINE USES: (1) Evaluation of the effects of the operations on the environment. (2) Statistical reports to Congress. (3)(4) and (5) Information from the record and/or the record may be released or transferred to appropriate Federal, State or local agencies in allocating mineral revenue, for investigations of energy programs; and when relevant to civil, criminal or regulatory investigations or prosecutions, as well as routine regulatory responsibility.

EFFECT OF NOT PROVIDING INFORMATION: Disclosure of this information is mandatory only if the lessee elects to mine, extract, remove and/or dispose of the leased deposits.

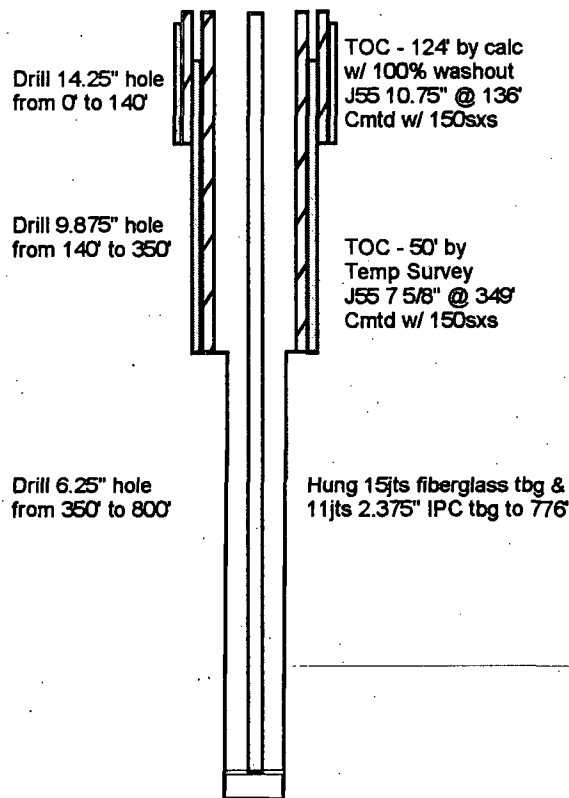
The Paperwork Reduction Act of 1980 (44 U.S.C. 3501 et seq.) requires us to inform you that:

This information is being collected for use in calculating royalty payments and in verification of compliance with lease terms. Response to this request is mandatory only if the lessee elects to mine, extract, remove and/or dispose of the leased deposits.



MARBOB ENERGY CORPORATION
 DODD A BRINE WELL
 1850 FWL 300 FSL
 SECTION 22-T17S-R29E
 EDDY COUNTY, NEW MEXICO

Marbob Energy
M. Dodd "A" BW #1
1850'FWL 300' FSL
Sec 22 - 17S - 29E
Eddy Co., NM



TD 800'

Current Status
12/10/98



**THE REPRODUCTION OF
THE
FOLLOWING
DOCUMENT (S)
CANNOT BE IMPROVED
DUE TO
THE CONDITION OF
THE ORIGINAL**

STATE ENGINEER
Technical Division

Owner <u>BOGLE RANCH</u>	DEPTH TO WATER			WATER LEVEL ELEV
Use <u>ABND, OWD</u>	Below MP		Below	
	1st	2nd	LSO	
Date <u>APRIL 14</u> , 19 <u>83</u>	<u>73.00</u>	<u>72.00</u>	<u>71.80</u>	<u>3545</u>
Hour <u>9:58</u> ^{AM} _{PM} Obs <u>JTC</u>	<u>1.30</u>	<u>0.30</u>	<u>0.80</u>	<u>71</u>
Not POA (X) POA ()	<u>71.70</u>	<u>71.70</u>	<u>70.90</u>	<u>3474</u>

W L meas after pump shut off _____ min. Pumping W L ()
Remarks _____

Date _____, 19____				
Hour _____ AM PM Obs _____				
Not POA () POA ()				

W L meas after pump shut off _____ min. Pumping W L ()
Remarks _____

Date _____, 19____				
Hour _____ AM PM Obs _____				
Not POA () POA ()				

W L meas after pump shut off _____ min. Pumping W L ()
Remarks _____

Date _____, 19____				
Hour _____ AM PM Obs _____				
Not POA () POA ()				

W L meas after pump shut off _____ min. Pumping W L ()
Remarks _____

Latitude _____ Longitude 15-56010
File No _____ Location No 17.29.22.11124

FE-1

State of New Mexico
State Engineer

WELL SCHEDULE

Source of data: Obser ☒ Owner ☐ Other _____
Date APRIL 14, 1983 Record by CRASER, LOSE & COCHRAN

LOCATION: County EDDY Map 106.2.4

OWNER BOGLE RANCH

DRILLER _____ Completed _____ 19____

TOPO SITUATION _____ 4545T Elev 3545

DEPTH _____ ft ☐ Rept ☐ Meas Use ABND, OWD

CASING 7 in to _____ ft Log _____

PUMP: Type _____ Make _____

Ser.no./model _____ Size of dischg _____ in.

PRIME MOVER: Make _____ HP _____

Ser.no. _____ Power/Fuel _____

PUMP DRIVE: ☐ Gear Head ☐ Belt Head ☐ Pump Jack

Make _____ Ser.no _____ ☐ VHS

WATER LEVEL: 71.70 ft ^{rept} APRIL 14, 1983 ^{above} meas ^{below}

T.C.

_____ which is 0.80 ft ^{above} below LS

PERMANENT RP is NO RP

which is _____ ft above _____ ft below described MP and _____ ft above _____ ft below LS

REMARKS Well is just about dry

AQUIFER(S): Gal

Well No. _____ on Photo _____ DPN 15-06010

File No _____ Loc. No. 17.29.22.11124

Remarks cont. _____

SKETCH:

N
↑

INITIAL WATER- LEVEL MEASUREMENT	DEPTH TO WATER			
	Below MP			Below LS
	1st	2nd	3rd	
Date <u>APRIL 14</u> 19 <u>83</u>	<u>73.00</u>	<u>72.00</u>		<u>71.70</u>
Hour <u>9:58</u> ^{AM} PM Obs <u>JK</u>	<u>1.50</u>	<u>0.30</u>		<u>0.80</u>
Not POA (X) POA ()	<u>71.70</u>	<u>71.70</u>		<u>70.90</u>

W L meas after pump shut off _____ min. Pumping W L ()

Remarks _____

STATE ENGINEER
Technical Division

Owner Use	DEPTH TO WATER		WATER LEVEL ELEV
	Below MP 1st	Below 2nd LSD	
Date _____, 19____			
Hour _____ AM _____ PM _____ Obs _____			
Not POA () POA ()			

W L meas after pump shut off _____ min. Pumping W L ()
Remarks _____

Date _____, 19____			
Hour _____ AM _____ PM _____ Obs _____			
Not POA () POA ()			

W L meas after pump shut off _____ min. Pumping W L ()
Remarks _____

Date _____, 19____			
Hour _____ AM _____ PM _____ Obs _____			
Not POA () POA ()			

W L meas after pump shut off _____ min. Pumping W L ()
Remarks _____

Date _____, 19____			
Hour _____ AM _____ PM _____ Obs _____			
Not POA () POA ()			

W L meas after pump shut off _____ min. Pumping W L ()
Remarks _____

Latitude _____ Longitude 15-06018
File No _____ Location No 17-29-22-112311

FE-1

State of New Mexico
State Engineer

WELL SCHEDULE

Source of data: Obser ☒ Owner ☐ Other F.O. Pochett
Date Nov 29 1948 Record by Hendrickson & Council

LOCATION: County Eddy Map 106.2.4

OWNER Boyle Farms - Turkey Track Ranch (?)

DRILLER _____ Completed _____ 19____

TOPO SITUATION _____ Topo. Elev 3542

DEPTH _____ ft ☐ Rept ☐ Meas Use Stock

CASING 1 1/2 ^{od steel} in to _____ ft Log _____

PUMP: Type Piston Make _____

Ser.no./model _____ Size of dischg _____ in.

PRIME MOVER: Make 10 Dempster W.M. HP _____

Ser.no. factory steel tower Power/Fuel _____

PUMP DRIVE: ☐ Gear Head ☐ Belt Head ☐ Pump Jack

Make _____ Ser.no. _____ ☐ VHS

WATER LEVEL: 80.00 ft ^{rept} 11-29 1948 ^{above} below

top of casing

which is 8.30 ft ^{above} below LS

PERMANENT RP is _____

See updated FE-1

which is _____ ft above described MP and _____ ft above below LS

REMARKS 10-10-71 HWP - P.O.A. well (underground)

AQUIFER(S): Gal

Well No. _____ on Photo _____ DPN 15-06018

File No _____ Loc. No. 17-29-22-112311

This 2 11 1 for ...

Remarks cont. underground line to 4' dia x 38' diam
steel tank, located 120' S-SW. Well shown
on map. Access to measure now
would be difficult.

Note: there are 3 7" abandoned wells
- probably OLD wells near here. The first
is 140' NW of the W.M. The second

SKETCH: about 360' NW of the W.M. and
the third is about 200 yards S.E.
of the W.M. - Could probably
measure one or more of these.

3-28-85, JCG WATER SAMPLE COLLECTED

Temp = 67°

11-19-86 RLT, TN Water sample collected

Temp = 68°

9-18-90 MFN-KO Well discharges ± 40 SW
 into a 16' tall x 20' dia steel storage
 tank.

INITIAL WATER- LEVEL MEASUREMENT	DEPTH TO WATER			
	Below MP			Below LS
	1st	2nd	3rd	
Date <u>APRIL 14, 1983</u>				
Hour <u>9:41 AM</u> Obs <u>JCG/SC</u>	<u>47m</u>			
Not POA (X) POA ()				

W L meas after pump shut off _____ min. Pumping W L ()

Remarks COLUMN PIPE IS 2 1/2" and no room for
tape to measure

STATE ENGINEER
Technical Division

Owner	DEPTH TO WATER			WATER LEVEL ELEV
	Below MP 1st	Below 2nd	Below LSD	
Date <u>Nov 29, 1948</u>			80.00	
Hour <u>AM</u> Obs <u>JEH</u>			0.30	
Not POA () POA (X)			79.70	

W L meas after pump shut off _____ min. Pumping W L (X)
Remarks Well pumping - Temperature of water in
45°F.

Date <u>April 14, 1983</u>				
Hour <u>1:41 AM</u> Obs <u>JCH JC</u>				
Not POA (X) POA ()				

W L meas after pump shut off _____ min. Pumping W L ()
Remarks Can't get tape down between column and
casing. UTM.

Date <u>June 19, 1986</u>	50.00	49.50	48.63	
Hour <u>12:30 PM</u> Obs <u>JEH</u>	1.37	0.37	.30	
Not POA () POA (X)	48.63	48.63	48.63	

W L meas after pump shut off 4 min. Pumping W L ()
Remarks 50'

Date <u>Sept. 19, 1990</u>				
Hour <u>10:15 AM</u> Obs <u>MFR</u>				
Not POA () POA (X)				

W L meas after pump shut off _____ min. Pumping W L ()
Remarks Brake wouldn't hold. Well pump to
112311

Latitude _____ Longitude 15 - 22.11
File No _____ Location No 1129, 22, 112311

FE-1

State of New Mexico
State Engineer

WELL SCHEDULE

Source of data: Obser ☒ Owner ☐ Other _____

Date September 16, 1981 Record by Robert E. Hippel

LOCATION: County Eddy Map 106, 2, 4

OWNER Bogte Ranch (?)

DRILLER _____ Completed _____ 19 _____

TOPO SITUATION _____ Elev 3542

DEPTH _____ ft ☐ Rept ☐ Meas Use Loc

CASING 4 1/2 in to _____ ft Log _____

PUMP: Type Piston Make _____

Ser. no. / model _____ Size of dischg 2 in.

PRIME MOVER: Make Dumpster WM HP _____

Ser. no. Safety - 1000 Power/Fuel 1000

PUMP DRIVE: ☐ Gear Head ☐ Belt Head ☐ Pump Jack

Make _____ Ser. no. _____ ☐ VHS

WATER LEVEL: _____ ft rept _____ 19 _____ above
meas _____ below _____

_____ which is _____ ft above
below LS

PERMANENT RP is _____

which is _____ ft above
below described MP and _____ ft above
below LS

REMARKS Sample taken at end of D.P. well

Water Spl. #1

Well No. _____ on Photo _____ DPN 15-06018

File No _____ Loc. No. 17, 29, 22, 112311

P06

12-10-98 08:58AM FROM NM STATE ENGINEERS

Remarks cont. 115' S. SW into 4' tall x 44'
flume for steel storage
Distribution in flume
100' 90'E - 4' Temp a
68.5°F
Well is shown on topo map
6-19-86 RL/TN Sample collected Temp 68°
 SKETCH: This well known as "Big Red"



INITIAL WATER- LEVEL MEASUREMENT	DEPTH TO WATER			
	Below MP			Below LS
	1st	2nd	3rd	
Date _____, 19____				
Hour _____ AM Obs _____				
Not POA () POA ()				

W L meas after pump shut off _____ min. Pumping W L ()

Remarks _____

2-10-98 08:58AM FROM NM STATE ENGINEERS

X- More Complete Analysis Available on Sample

File No. _____ Location No. 17.29.22.112311

Owner		DEPTH TO WATER			WATER	
Use		Below MP		Below	LEVEL	
		1st	2nd	LSD	ELEV	
Date	3 30, 1974					
Hour	12:46 AM PM Obs PF					
Not POA ()	POA (✓)					
W L meas after pump shut off _____ min. Pumping W L ()						
Remarks Penke Still no good. Could not get any farther than 14' 2:30						
Date	_____, 19____					
Hour	____ AM ____ PM Obs _____					
Not POA ()	POA ()					
W L meas after pump shut off _____ min. Pumping W L ()						
Remarks _____						
Date	_____, 19____					
Hour	____ AM ____ PM Obs _____					
Not POA ()	POA ()					
W L meas after pump shut off _____ min. Pumping W L ()						
Remarks _____						
Date	_____, 19____					
Hour	____ AM ____ PM Obs _____					
Not POA ()	POA ()					
W L meas after pump shut off _____ min. Pumping W L ()						
Remarks _____						

Latitude _____ Longitude 15-06018

File No _____ Location No 17-29-22-112311

HALLIBURTON DIVISION LABORATORY

HALLIBURTON SERVICES

ARTESIA DISTRICT

LABORATORY REPORT

No. W219-91

TO Marbob Energy Corporation
P. O. Box 304
Artesia, NM 88210

Date May 7, 1991

This report is the property of Halliburton Services 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 concern and employees thereof receiving such report from Halliburton Services.

Submitted by _____ Date Rec. May 7, 1991Well No. Water Well Dodd ABW #1 Depth _____ Formation _____

Field _____ County _____ Source _____

Resistivity 0.050 @ 70°Specific Gravity .. 1.2120 @ 70°pH 6.0Calcium 2,174Magnesium 11,203Chlorides 195,000Sulfates 200Bicarbonates 366Soluble Iron 10

Remarks: Do not mix with cement.

Scott Taylor
Respectfully submitted

Analyst: Scott Taylor - EIT

HALLIBURTON SERVICES

NOTICE:

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UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

CONTACT RECEIVING
OFFICE FOR NUMBER
OF COPIES REQUIRED
(Other instructions on re-
verse side)

BLM Roswell District
Modified Form No.
NM060-3160-4 *okc* *well* *bill*

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—" for such proposals.)

1. OIL WELL <input type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input checked="" type="checkbox"/> <i>Brine Water Well</i>		5. LEASE DESIGNATION AND SERIAL NO. NMNM-82804
2. NAME OF OPERATOR <i>Marbob Energy Corporation</i>		6. IF INDIAN, ALLOTTEE OR TRIBE NAME
3. ADDRESS OF OPERATOR <i>P. O. Drawer 217, Artesia, NM 88210</i>		7. UNIT AGREEMENT NAME
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.) <i>At surface</i> <i>1850 FWL 300 FSL</i>		8. FARM OR LEASE NAME <i>M. Dodd A BW</i>
14. PERMIT NO.		9. WELL NO. <i>1</i>
15. ELEVATIONS (Show whether DF, RT, OR, etc.)		10. FIELD AND POOL, OR WILDCAT <i>Grbg Jackson SR Q Grbg SA</i>
		11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA <i>Sec. 22-T17S-R29E</i>
		12. COUNTY OR PARISH 13. STATE

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

NOTICE OF INTENTION TO:

TEST WATER SHUT-OFF ☐
FRACTURE TREAT ☐
SHOOT OR ACIDIZE ☐
REPAIR WELL ☐
(Other) ☐

PULL OR ALTER CASING ☐
MULTIPLE COMPLETE ☐
ABANDON* ☐
CHANGE PLANE ☐

SUBSEQUENT REPORT OF:

WATER SHUT-OFF ☐
FRACTURE TREATMENT ☐
SHOOTING OR ACIDIZING ☐
(Other) *TD, cmt csg*

REPAIRING WELL ☐
ALTERING CASING ☐
ABANDONMENT* ☒

(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.) *

Drld to 350', ran 9 jts. of 7 5/8" 33.7# csg to 349', cmtd w/150 sx Class C w/2% CC, circ 45 sx to surf, plug down @ 9:30 p.m. 4/29/91. WOC 18 hrs., tstd csg to 1500# f/30, minutes--held okay.

18. I hereby certify that the foregoing is true and correct

SIGNED

Chonda Nelson

TITLE *Production Clerk*

DATE *5/6/91*

(This space for Federal or State office use)

APPROVED BY

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:

*See Instructions on Reverse Side

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

CONTACT RECEIVING
OFFICE FOR NO.
OF COPIES REQUIRED
(Other instructions on re-
verse side)

BLM Roswell District
Modified Form No.
NMD60-3160-4

*well
bill*
okrc.

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—" for such proposals.)

1. OIL WELL <input type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <u>Brine Water Well</u>		5. LEASE DESIGNATION AND SERIAL NO. <u>NMNM-82804</u>
2. NAME OF OPERATOR <u>Marbob Energy Corporation</u>	3a. Area Code & Phone No. <u>(505) 748-3303</u>	6. IF INDIAN, ALLOTTEE OR TRIBE NAME
3. ADDRESS OF OPERATOR <u>P. O. Drawer 217, Artesia, NM 88210</u>		7. UNIT AGREEMENT NAME
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements. See also space 17 below.) <u>At surface</u> <u>1850 FWL 300 FSL</u>		8. FARM OR LEASE NAME <u>M. Dodd A BW</u>
14. PERMIT NO.		9. WELL NO. <u>1</u>
15. ELEVATIONS (Show whether DP, RT, GR, etc.)		10. FIELD AND POOL, OR WILDCAT <u>Grbg Jackson SR Q Grbg SA</u>
		11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA <u>Sec. 22-T17S-R29E</u>
		12. COUNTY OR PARISH <u>Eddy</u>
		13. STATE <u>NM</u>

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

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
TEST WATER SHUT-OFF <input type="checkbox"/>	PULL OR ALTER CASING <input type="checkbox"/>	WATER SHUT-OFF <input type="checkbox"/>	REPAIRING WELL <input type="checkbox"/>
FRACTURE TREAT <input type="checkbox"/>	MULTIPLE COMPLETE <input type="checkbox"/>	FRACTURE TREATMENT <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
SHOOT OR ACIDIZE <input type="checkbox"/>	ABANDON* <input type="checkbox"/>	SHOOTING OR ACIDIZING <input type="checkbox"/>	ABANDONMENT* <input type="checkbox"/>
REPAIR WELL <input type="checkbox"/>	CHANGE PLANE <input type="checkbox"/>	(Other) <u>Spud, cmt csg</u>	<input checked="" type="checkbox"/>
(Other) <input type="checkbox"/>		(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)	

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)

*Spudded 4/28/91. Drld 14 1/4" hole to 96', ran 3 jts.
10 3/4" 40.5# csg to 93', cmt'd w/150 sx Class C w/2%
CC, circ 15 sx to surf, plug down @ 6:30 p.m. 4/28/91.
WOC 18 hrs., tstd csg to 600# f/20 minutes--held okay.*

*John R. Gray received verbal approval to change casing
program from Tony Herrell.*

18. I hereby certify that the foregoing is true and correct

SIGNED Thonda Nelson TITLE Production Clerk DATE 5/6/91

(This space for Federal or State office use)

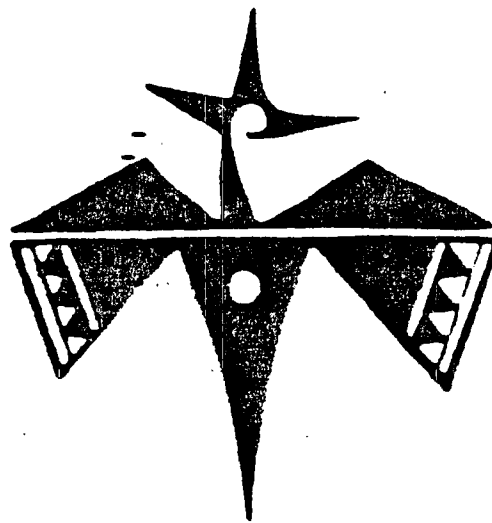
APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:

*See Instructions on Reverse Side

NOV 1 1993

PECOS
ARCHEOLOGICAL
CONSULTANTS
P.O. BOX 1771
CARLSBAD, NM 88221



Archeological Clearance Report for
MARBOE Energy Corporation's
Proposed Salt Water Disposal Pipeline
for the M Dodd A Well No. 1
Situated on Public Lands in Eddy County, N.M.
Report No. 93216

Archeological Clearance Report for
MARBOB Energy Corporation's
Proposed Salt Water Disposal Pipeline
for the M Dodd A Well No. 1
Situated on Public Lands in Eddy County, N.M.
Report No. 93216

prepared by
Robert J. Martin

submitted by
Pecos Archeological Consultants
P.O. Box 1771, Carlsbad, N.M., 88221
16 November, 1990
BLM Cultural Use Permit No. 0-1920-11-L
State Blanket Survey Permit No. 91-024

ABSTRACT

On 11 Nov., 1993, Pecos Archeological Consultants (BLM Cultural Use Permit No. 6-2920-90-L, State Blanket Survey Permit No. 91-024) undertook an archeological inventory of a salt water disposal line, scheduled to be impacted by MARBOB Energy Corporation. This project will be situated on public lands in Eddy County, New Mexico. These lands occur in section 22 and 27, T17S, R29E, NMPM, Eddy County, N.M. A total of 5.7 acres of BLM land status were archeologically investigated during the course of fieldwork for this project. The project was completed in 3 man-hours by Robert J. Martin. As LA 21045 is presently impacted by a 50 ft wide pipeline in the area of subject project, clearance is recommended only if all equipment, machinery, and personnel are limited to the impact area of the existing pipeline. No additional archeological remains were recorded.

INTRODUCTION

On 13 Oct., 1993, Pecos Archeological Consultants was requested by Mr. David Martin, representing MARBOB Energy Corporation, to perform the archeological survey for an easement scheduled to cross public land in Eddy County, New Mexico. This land is administered by the Bureau of Land Management and it will be impacted by construction of a salt water disposal pipeline. Consequently, federal law requires that an intensive archeological inventory be performed to identify what cultural resources might be impacted by such construction prior to granting clearance to the project. Therefore, Pecos Archeological Consultants undertook this survey on 11. Nov. 1993. Fieldwork for this project was performed by Robert J. Martin. The following is a report of the field activities and findings resulting from the survey.

SURVEY METHODOLOGY

Pecos Archeological Consultants conducted this survey by physically examining the entire impact zone. Pedestrian inspection along two parallel transects was accomplished the length of the easement. These transects were spaced 15 meters apart; however, established transects were departed from to examine nearby areas of high site probability. All prominent deflations and denuded areas

were given special attention. This project was conducted on one partly cloudy day. Surface visibility in the region, which, due to floral cover, ranged between 10-65% of the ground under damp soil conditions, made this the most practical methodology for effectively sampling the impact zone which will result from this project as planned.

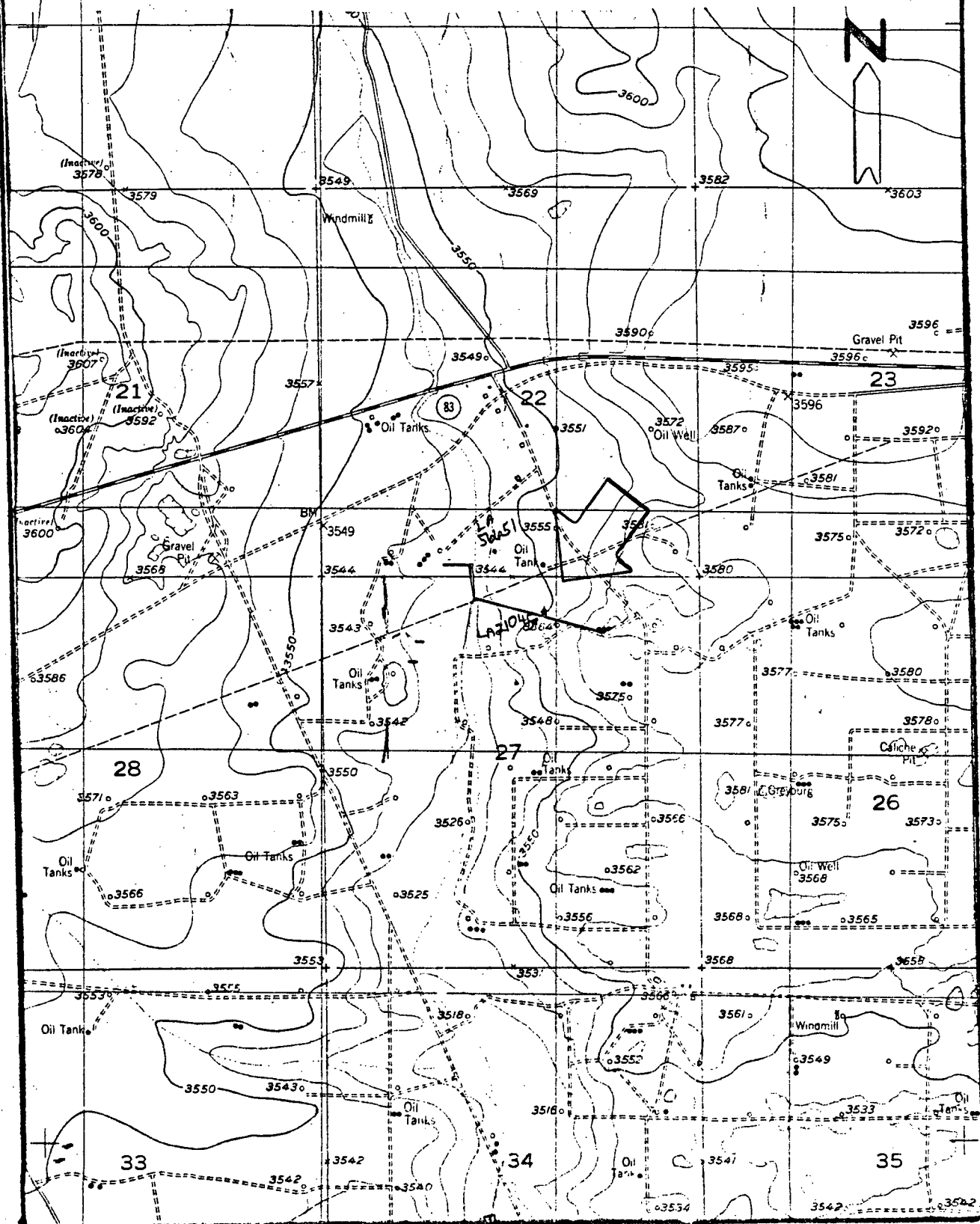
LOCATIONAL DATA

MARBOB Energy Corporation's salt water disposal easement, to be constructed for the M Dodd Brine Well, will measure 100 ft X 2500 ft, or an area of 5.7 acres. The easement will be situated in the:

NE1/4 NE1/4, section 27, T17S, R29E, NMPM, Eddy Co., NM
NW1/4 NE1/4, section 27, T17S, R29E, NMPM, Eddy Co., NM
NE1/4 NW1/4, section 27, T17S, R29E, NMPM, Eddy Co., NM
SE1/4 SW1/4, section 22, T17S, R29E, NMPM, Eddy Co., NM

Map Reference. USGS Red Lake SE Quadrangle, 7.5 Minute Series, 1955.

MARBOB Energy, Inc.'s
 Proposed Salt Water Disposal Pipeline
 Sects. 22 and 27, T17S, R29E, Eddy Co., N.M.
 USGS Red Lake SE Quadrangle, 7.5 Minute Series, 1955.
 1:24,000 ft



ENVIRONMENT

The project area will be situated on the rolling plain just west and southwest of Loco Hills, N.M. in an area characterized by mesquite and/or shin oak anchored hummocks and coppice dunes averaging 0.25 in height interspersed with deflated and denuded areas. The project area is near a portion of an old (dating from the early 20th Century) established and densely employed oil field, consequently, from 85 to 95 % of the project area is impacted. Drainage is accomplished mainly by sheetwash into low-lying areas that periodically hold standing water; the nearest main drainage Bear Grass Draw, is located within the project area and is severely impacted by established oilfield production. Cedar Lake, located east of Loco Hills, is the most prominent drainage and physical features of the area. Local soils are composed of those of the Kermit-Berino soil association, or sandy clays and loamy sands which are occasionally included with quartzite and gravels that are derived from the Ogallala formation, which has weathered from the Mescalero Pediment. Some of this material is suitable for chipped stone tool manufacture. Elevation in the project area is between 3540 and 3600 ft above sea level.

The environmental zone in which this project occurs, typical of the region as a whole, is part of the Lower

Sonoran Life Zone. The most common plant varieties in the region are mesquite (Prosopis juliflora), javalina bush (Condalia ericoides), broom snakeweed (Gutierrezia sarothrae), prickly-pear cactus (Opuntia sp.) and various grasses. Some of the common faunal types in area are mule deer (Odocoileus hemionus), pronghorn antelope (Antilocapra americana), jackrabbit (Lepus sp.), cottontail rabbit (Silvilagus sp.), coyote (Canis latrans), as well as other small mammals, birds and reptiles.

ARCHEOLOGICAL RESOURCES

On 11 November, 1993, Pecos Archeological Consultants performed a literature search to determine if any archeological sites had already been recorded in the vicinity of the project area. Current BLM files and the National Register of Historic Places were consulted in this endeavor. It was determined that two such previously-recorded sites were found to occur near the project area:

1. LA 21046 is located within the impact zone of this project and several others.
2. LA 56651 is located 100m from the project area.

Observed Archeological Manifestations:

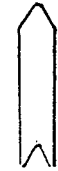
Although no additional archeological remains were recorded during the course of the project the subject easement will traverse LA-21046. This area of the site is destroyed by previously-constructed easements.

LA 21045



HEARTH

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12+00

PROPOSED

PIPELINE

?

?

14+00

RECOMMENDATIONS

Due to the significant nature of the archeological remains in the impact zone, LA-21045, Pecos Archeological Consultants are recommending clearance for this project ONLY if additional impact to the site is avoided. This can be accomplished by restricting all construction equipment, vehicles, and personnel to the existing impacted area between Stations 12+00 and 14+00.

Of course, final approval for this project and these recommendations must be granted by the appropriate government agency.

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

MAR 31 1990

FORM APPROVED
OMB NO. 1004-0030
Expires: April 30, 1987

PROSPECTING APPLICATION AND PERMIT

1. What mineral are you applying for?

Sodium

2. Give legal description of land requested (See General Instruction for assistance on land description if needed)

SE/4 SW/4, SE/4
Section 22, T-17S, R-29E
containing 200 acres
E/2 NW/4, NE/4
Section 27, T-17S, R-29E
containing 240 acres
Eddy County, New Mexico

3. Legal description of land included in permit
APPLICANT DOES NOT FILL IN THIS SPACE

Land included in this permit is the same
as the land applied for.

RECEIVED
BUR. OF LAND MGMT.
N.M.S.O. SANTA FE
AUG 07 1989
AM 7:18 PM 10:11 12:12 2:23 4:56

Total acres 440

Rental submitted \$220.00

Total acres 440

Rental retained \$ \$220.00

4. Are the lands administered by a government agency? ☒ Yes ☐ No (If "yes," give name of agency)

Bureau of Land Management, Carlsbad District

5. Are you the sole party in interest? ☒ Yes ☐ No (See Specific Instruction No. 5)

6a. Are you a citizen of the United States? ☒ Yes ☐ No

b. Are you over the age of majority? ☒ Yes ☐ No

7a. Is application made for a corporation or other legal entity? ☒ Yes ☐ No (See Specific Instructions No. 7a and 7b)

b. Has a statement of qualification been filed? ☒ Yes ☐ No (If "yes," give file number)

8. Have you enclosed a filing fee
of \$ 25 ☒ Yes

9. Have you enclosed the first year's advance rental computed at the rate of
50 ¢ per acre? ☒ Yes (See Specific Instruction No. 9)

I CERTIFY That my interests, direct or indirect, in leases, permits, and applications therefor, do not exceed the maximum permitted by law or regulation; and that the statements made herein are true, complete, and correct to the best of my knowledge and belief and are made in good faith.

ATTEST:

Secretary/Treasurer (Signature of Applicant)

MARBOB ENERGY CORPORATION

President

(Signature of Applicant)

(Date)

(Attorney-in-fact)

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

DO NOT WRITE BELOW THIS LINE

PROSPECTING PERMIT

A permit for the lands in Item 3, above is hereby issued under the
☐ Mineral Leasing Act, 30 U.S.C. 181 et seq. ☐ Acquired Lands
Leasing Act, 30 U.S.C. 351 et seq. ☐ 43 CFR 3511 et seq. and is subject
to all regulations in force and to the terms and conditions set forth on

the reverse side hereof.

This permit, to the extent applicable, is subject to standard or special
stipulations. Stipulations if any, are attached.

THE UNITED STATES OF AMERICA

Effective date of permit

APR 1 1990

By

Clarence F. Houghland
(Signing Officer)

This permit is issued for a period of 2 years

Chief, Lands & Mining Unit

(Title)



United States Department of the Interior

BUREAU OF LAND MANAGEMENT
NEW MEXICO STATE OFFICE
Post Office and Federal Building
P.O. Box 1449
Santa Fe, New Mexico 87504-1449

IN REPLY REFER TO:

NM NM 82804
3520 (943C-2amr)

MAR 19 1990

CERTIFIED—RETURN RECEIPT REQUESTED

NOTICE

Marbob Energy Corporation
P.O. Drawer 217
Artesia, NM 88211-0217

:
:
: Sodium
:
:

Sodium Prospecting Permit Approved
Bond Accepted

Enclosed is sodium prospecting permit NM NM 82804 which is approved and is effective April 1, 1990.

The \$5000.00 bond executed on July 10, 1987, with Allied Mutual Bonding Company, as surety, and the agreement signed on March 6, 1990, whereby the surety agrees to be bond according to the terms and conditions of the existing bond are hereby approved on April 1, 1990.

Clarence F. Hougland
Clarence F. Hougland
Chief, Lands and Mining Unit

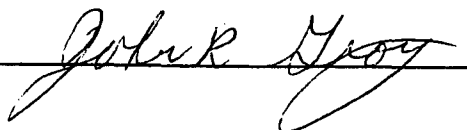
Enclosure:

cc:
NM (060)
NM (067)
NM (921)

RECEIVED
JAN - JANUARY 24, 1990

SPECIAL SODIUM LEASE STIPULATIONS 12 AM 9:52

1. Prior to any surface disturbing activities, such as road construction or major maintenance efforts that would reasonably be expected to damage cultural resources on land previously undisturbed, a Class III cultural survey must be performed by a qualified archaeologist.
2. Clearing and blading of roads and pads will be held to a minimum as approved by the authorized office.
3. To prevent slacking of fence wire, the grantee will brace and tie-off each existing fence to be crossed, before cutting. During construction, the opening will be protected to prevent the escape of livestock. Fences which have been cut during construction will be restored by the grantee to a condition which is equal to, or better, than the original. Cattleguards and adjacent gates which are of a suitable width will also be installed in any fence where a road created during construction is to be regularly traveled.
4. Gates or cattleguards on public land will not be locked or closed to public use by the grantee.
5. Mud pits will be filled, the roads and pads will be ripped and reseeded. The surface allottee can request that a road be allowed to remain, if approved by the authorized officer.
6. Core test holes will be plugged to surface with cement.
7. A 4-inch pipe marker will be set in hole with 5 feet above ground. The location and permittee's name will be stamped on a disc and set on the marker pipe.
8. The permittee, prior to any construction, shall notify the grazing allottee or the surface owner in the case of private ownership. Permission to drill will be necessary in the case of private surface ownership. Abandonment stipulations will coincide with surface owner agreement.
9. Additional reasonable stipulations may be formulated at the time of application for specified locations.
10. Brine pits will be lined as per requirements of the State Oil Commission.



SPECIAL DRILLING STIPULATIONS

THE FOLLOWING DATA IS REQUIRED ON THE WELL SIGN

OPERATORS NAME Marbob Energy Corporation WELL NO. & NAME _____
 LOCATION 1850 F W L & 300 F S L SEC. 22 T. 17S., R. 29E.
 LEASE NO. NM NM 82804 COUNTY Eddy

The special stipulations check marked below are applicable to the above described well and approval of this application to drill is conditioned upon compliance with such stipulations in addition to the General Requirements. The permittee should be familiar with the General Requirements, a copy of which is available from a Bureau of Land Management office. EACH PERMITTEE HAS THE RIGHT OF ADMINISTRATIVE APPEAL TO THESE STIPULATIONS PURSUANT TO TITLE 43 CFR 3165.3 and 3165.4.

I. SPECIAL ENVIRONMENT REQUIREMENTS

- ☐ Lesser Prairie Chicken (Stips attached) ☐ Floodplain (Stips attached)
☐ San Simon Swale (Stips attached) ☐ Other _____

II. ON LEASE - SURFACE REQUIREMENTS PRIOR TO DRILLING

- ☐ The BLM will monitor construction of this drill site. Notify the _____ Resource Area Office, BLM at least _____ working days prior to commencing construction at (505) _____.
- ☐ Roads and the drill pad for this well must be surfaced with _____ inches of compacted _____.
- ☐ All topsoil and vegetation encountered during the construction of the drill site area will be stockpiled and made available for resurfacing of the disturbed area after completion of the drilling operation. Topsoil on the subject location is approximately _____ inches in depth. Approximately _____ cubic yards of topsoil material will be stockpiled for reclamation.
- ☐ Other _____

III. DRILLING OPERATIONS REQUIREMENTS [No Water Basin]

The Bureau of Land Management office is to be notified at (505) 887-6544, in sufficient time for a representative to witness:

- ☒ 1. Spudding ☒ 2. Cement casing 8 5/8 inch _____ inch _____ inch
☐ 3. BOP tests ☐ Other _____

IV. CASING

☒ 8 5/8" surface casing should be set @ ~350' or below potable surface water and cement circulated to the surface. If cement does not circulate to the surface, this BLM office will be notified and a temperature survey or cement bond log will be run to verify the top of the cement. Remedial cementing will be done prior to drilling out of that string.

☐ ~~Minimum required fill of cement behind the _____ intermediate casing is to be _____.~~

☐ ~~Minimum required fill of cement behind the _____ production casing is to be _____.~~

IF A BLM TECHNICIAN IS NOT AVAILABLE WHEN CEMENTING, AN ACOUSTIC CEMENT BOND LOG AND/OR A TEMPERATURE SURVEY LOG WILL BE RUN AS APPROPRIATE.

RESERVE PIT CONSTRUCTION STANDARDS

The reserve pit will be constructed almost entirely in cut material and lined with 6 mill plastic.

The excavated material may be used for construction of the pad and access road as needed.

Reclamation: Reclamation of this type of deep pit will consist of pushing the pit walls into the pit when sufficiently dry to support track equipment. The pit liner is NOT TO BE RUPTURED to facilitate drying; a ten month period after completion of the well is allowed for drying of pit contents.

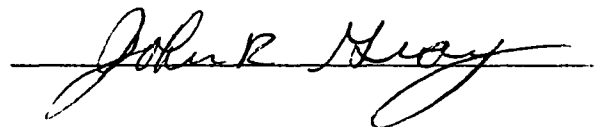
The pit area must be contoured to the natural terrain with all contaminated drilling mud buried with at least 3 feet of clean soil. The reclaimed area will then be seeded as specified in this permit.

Optional Pit Construction Standards

The reserve pit may be constructed in predominantly fill material if:

- 1) Lined as specified above and,
- 2) A borrow/caliche/gravel pit for road and pad surfacing is constructed immediately adjacent to the reserve pit and it is capable of containing all reserve pit contents.

Reclamation of the reserve pit will consist of bulldozing all reserve pit contents and contaminants into the borrow pit and covering with a minimum of 3 feet of clean soil material. The entire area must be recontoured, all trash removed, and reseeded as specified in this permit.



EXPLORATION PLAN
SODIUM PROSPECTING APPLICATION

MARBOB ENERGY CORPORATION
SODIUM EXPLORATION WELL
1850 FWL & 300 FSL SEC. 22-17S-29E
EDDY COUNTY, NEW MEXICO

This plan is submitted with the prospecting application and permit covering the following requested acreage:

SE1/4SW1/4, SE1/4
Sec. 22, T-17S, R-29E
E1/2NW1/4, NE1/4
Sec. 27, T-17S, R-29E
Eddy County, New Mexico

The purpose of the plan is to describe the location of the proposed exploration well, the proposed construction activities and operations plan, the magnitude of surface disturbance involved, and the procedures to be followed in rehabilitating the surface after completion of the operation so that a complete appraisal can be made of the environmental affects associated with the operation.

I. OPERATOR'S REPRESENTATIVE: Representatives responsible for assuring compliance with the approved Exploration Plan:

Mack C. Chase or John R. Gray
P. O. Drawer 217
Artesia, New Mexico 88211-0217
Phone (505) 748-3303

II. ENVIRONMENT

- A. Topography: The undisturbed wellsite is at an elevation of 3568.6 feet. The terrain of the area surrounding the location is relatively flat. Regional slope is to the southwest toward the Pecos River.
- B. Soil: Top soil at the wellsite is silty loam.
- C. Land Use & Type: The vicinity surrounding the drillsite is semiarid rangeland and its primary use is for production of oil and gas.
- D. Flora: Flora in the vicinity surrounding the drillsite is sparse. It consists primarily of javalina, saltbush, broomweed and mesquite.
- E. Fauna: No wildlife was observed, however fauna for this type of habitat normally consists of lizards, snakes, rabbits, rodents, coyotes, skunks, quail, dove, and other small birds.

- F. Ponds & Streams: None.
- G. Water Wells: The nearest known water well is over one mile to the south.
- H. Residences & Other Structures: There are no occupied dwellings within one (1) mile of the proposed drillsite.
- I. Archaeological, Historical & Cultural Sites: An archaeological survey has been conducted by Pecos Archeology Consultants and a formal report has been furnished directly to BLM for the adjacent oil well M. Dodd "A" No. 41.
- J. Well Site & Surrounding Area: An Exhibit "A" consisting of a map of the well site & surrounding area is attached.

III. EXPLORATION PLAN AND RESTORATION

- A. Existing Roads: A detailed map showing drillsite location in relation to existing roads and all existing roads within 3 miles of the wellsite are shown on Exhibits "A" & "B". From Artesia go approximately 20 miles east on Federal Highway US-82 9/10 of a mile beyond Mile Post 127. (This point is approximately 4.5 miles west of Loco Hills, New Mexico.) From this starting point, turn right (south) on paved road (County Road E-213) and proceed in a southerly direction for a distance of .3 miles. Next turn right and proceed south for a distance of .4 miles. Next turn right and proceed west for a distance of .3 miles. At this point turn left and proceed south to the existing oil & gas well M. Dodd "A" No. 41. The drillsite is to be located on the east side of the existing well pad. No new roads will be needed.
- B. CONSTRUCTION MATERIALS: No new construction materials will be needed. The existing well pad and pit for the M. Dodd "A" No. 41 well will be utilized.
- C. EXPLORATION EQUIPMENT & PLAN:
1. A rotary drilling rig will be moved to the drillsite and drill to above the top of the salt section at approximately 350' subsurface. Surface casing of 8 5/8" will be run to 350' and cemented to the surface. The rig will then drill through the cement into the salt section at approximately 360'. If commercial production of sodium is found, 2" tubing will be utilized for production.
- D. WASTE DISPOSAL:
1. Drill cuttings will be disposed of in the drilling pits.

2. Drilling fluids will be allowed to evaporate in the drilling pits until the pits are dry.
3. Water produced during tests will be disposed of in the pits.
4. Trash, waste paper, garbage, and junk will be buried in a trash pit and covered with a minimum of 24 inches of dirt. All waste material will be contained to prevent scattering by the wind.
5. All trash and debris will be buried or removed from the wellsite within 45 days after finishing each drilling and/or completion operation.

E. RESTORATION OF SURFACE:

1. After completion of drilling and/or completing operations, all equipment and other material not needed for operations will be removed. Pits will be filled and the location cleaned of all trash and junk to leave the wellsite in as aesthetically pleasing a condition as possible.
2. Any unguarded pits containing fluids will be fenced until they are filled.
3. After abandonment, all equipment, electric poles, trash and junk will be removed and the location cleaned. Any special rehabilitation and/or special revegetation requirements of the BLM will be complied with and accomplished as expeditiously as possible.

IV. PRODUCTION FACILITY: If sodium is found in commercial quantities, the existing pit will be expanded to a commercial storage size and properly lined. An electrical pump station will be constructed and two 500 barrel storage tanks will be installed. A salt water flow is expected but, if fresh water is needed for injection into the salt section, a line will be run from the existing commercial water line approximately 1/2 mile to the northwest.

MARBOB ENERGY CORPORATION

DATE

5/27/87

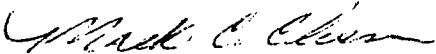

Mack C. Chase, President

EXHIBIT "A"
EXPLORATION PLAN
MARBOB ENERGY CORP.'S

Sec. 22, T17S, R29E, Eddy Co., NM

USGS RED LAKE SE QUADRANGLE
7.5 Minute Series, 1955

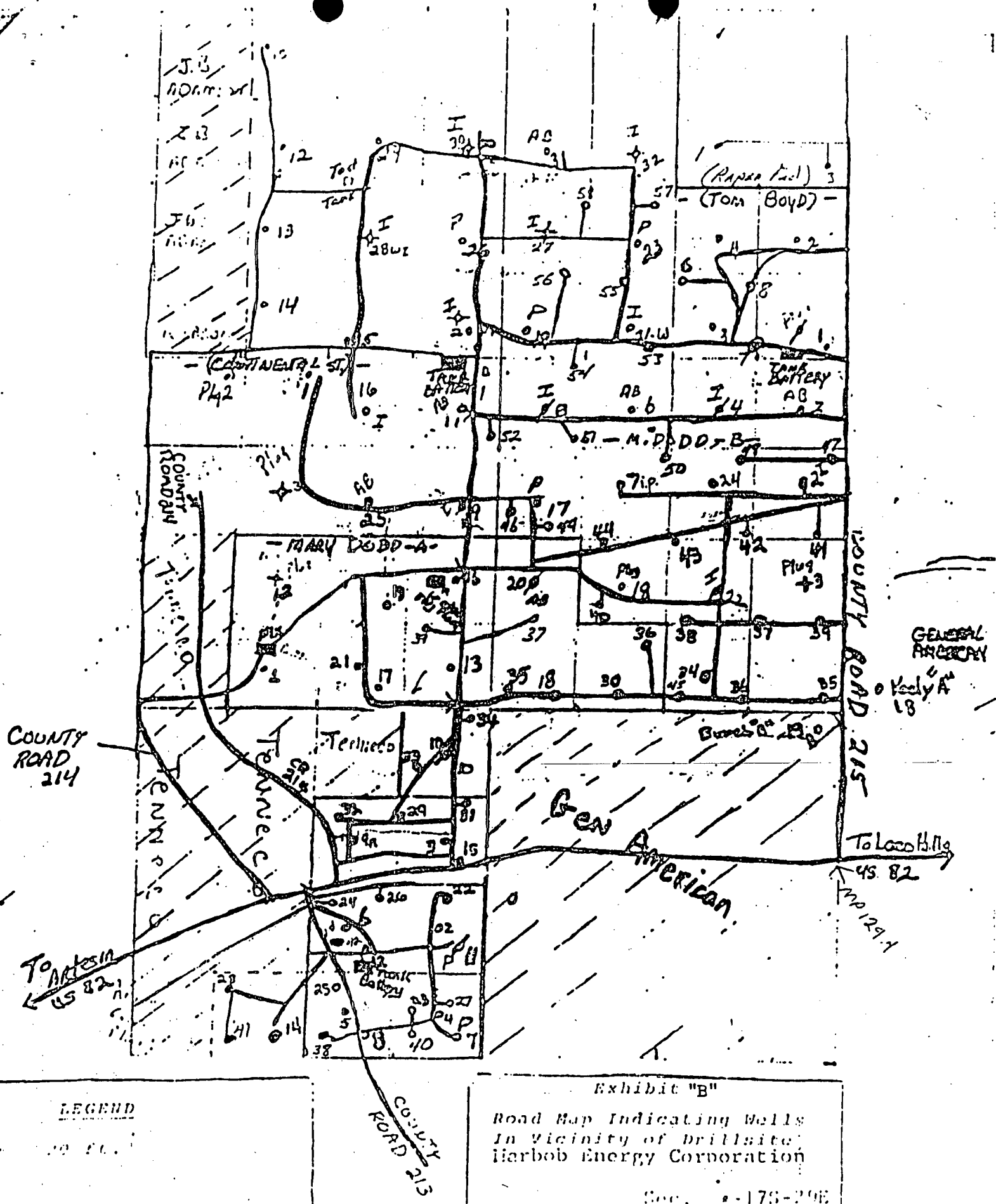


Exhibit "B"

Road Map Indicating Wells
In Vicinity of Drillsite
Harbob Energy Corporation

Doc. # 175-298



NEW MEXICO ENERGY, MINERALS
& NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION
2040 South Pacheco Street
Santa Fe, New Mexico 87505
(505) 827-7131

Certified Mail
Returned Receipt No. Z-357-870-025

September 24, 1998

Mr. Raye Miller
Marbob Energy Corporation (MEC)
P.O. Box 227
Artesia, NM 88211-0227

Re: Marbob Dodd A Brine Well
Sec 22-Ts17s-R29e
Eddy County, New Mexico

The New Mexico Oil Conservation Division has received a request, dated September 3, 1998 from Marbob Energy Corporation (MEC) for 120 day authorization to continue operations at the above referenced Brine facility without an approved discharged plan. The time allotted and requested is for MEC to be able to determine if their operations are warranted and to receive application information, submit a Discharge Plan application and allow OCD time for the review process.

Pursuant to Water Quality Control Commission (WQCC) Regulations 3106.B and for good cause shown, Marbob Energy Corporation is authorized to continue operations without an approved discharge plan until January 3, 1999 for the following Brine extraction well system:

* Marbob Dodd A Brine Well
Sec 22-Ts17s-R29e
Eddy County, New Mexico

Please be advised this authorization does not relieve MEC of liability should the operations of this facility result in pollution of surface waters, ground waters or the environment. Further, OCD authorization does not relieve MEC from responsibility for compliance with other federal, state, and local permitting requirements, rules, and regulations.

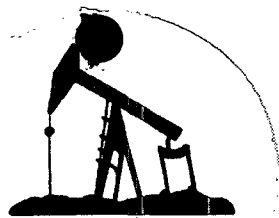
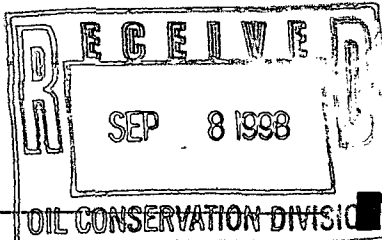
Sincerely,

Roger C. Anderson
Chief, Environmental Bureau

RA/wp: file marbob

Xc: Artesia OCD District Office

attachments- application form and guidelines.



marbob
energy corporation

September 3, 1998

Oil Conservation Division
2040 South Pacheco
Santa Fe, New Mexico 87505

Attention: Mr. Roger Anderson

RE: Marbob Dodd A Brine Well
Section 22-175-29E
Eddy County, New Mexico

Dear Mr. Anderson:

Marbob Energy Corporation would request a 120 day temporary permit to continue operating the above well. This is not a commercial well, and the only use is for the drilling of Marbob operated wells on this federal lease and adjoining federal leases. We were not aware of any requirements for a state permit. Please send us the requirements for obtaining a permanent permit where we can determine if the economics are such to continue using this well on a periodic basis or whether we should plug the well.

Thank you for your help in this matter.

Sincerely,

Raye Miller
Land Department

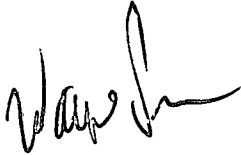
RM/mm

Inter-Office Memo:

September 3, 1998

To: Roger Anderson

From: Wayne Price-



Telephone Conversation : Raye Miller – Marbob Energy Corp.
P.O. Box 227
Artesia, NM 88211-0227
505-748-3303

Re: Operating Brine well without permit

Location: 1850 FWL/ 300 FSL Sec 22-Ts17s-R29E

Mr. Miller indicated they have a Sodium lease from the BLM but does not have an OCD Discharge Plan for the above referenced facility. Mr. Miller is going to submit to you a letter requesting permission to operate the well for an interim period of 120 days. He is requesting a permit application and guidelines when we respond back to him.

CC: TIM GUMM

BRINB ZUBIL FILE - SF

District I

1625 N. French Dr., Hobbs, NM 88240

District II

1301 W. Grand Avenue, Artesia, NM 88210

District III

1000 Rio Brazos Road, Aztec, NM 87410

District IV

1220 S. St. Francis Dr., Santa Fe, NM 87505

RECEIVED

MAY 25 2004

OIL CONSERVATION
DIVISION

State of New Mexico

Energy, Minerals and Natural Resources Department

Oil Conservation Division

1220 South St. Francis Dr.

Santa Fe, NM 87505

Revised June 10, 2003

Submit Original
Plus 1 Copy

to Santa Fe

1 Copy to Appropriate
District Office

DISCHARGE PLAN APPLICATION FOR BRINE EXTRACTION FACILITIES

(Refer to the OCD Guidelines for assistance in completing the application)

☐ New ☒ Renewal

I. Facility Name: **Dodd A Brine Well**

II. Operator: **Marbob Energy Corporation**

Address: **PO Box 227, Artesia, NM 88211-0227**

Contact Person: **Dean Chumbley**

Phone: **505-748-3303**

III. Location: **SE/4 SW/4 Section 22 Township 17S Range 29E**

Submit large scale topographic map showing exact location.

IV. Attach the name and address of the landowner of the facility site.

V. Attach a description of the types and quantities of fluids at the facility.

VI. Attach a description of all fluid transfer and storage and fluid and solid disposal facilities.

VII. Attach a description of underground facilities (i.e. brine extraction well).

VIII. Attach a contingency plan for reporting and clean-up of spills or releases.

IX. Attach geological/hydrological evidence demonstrating that brine extraction operations will not adversely impact fresh water.

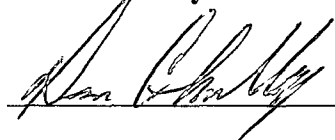
X. Attach such other information as is necessary to demonstrate compliance with any other OCD rules, regulations and/or orders.

XI. CERTIFICATION:

I hereby certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment.

Name: **Dean Chumbley**

Title: **Landman**

Signature: 

Date: **May 21, 2004**

E-mail Address: **land@marbob.com**

IV **Landowners**

United States Department of the Interior
Bureau of Land Management

Attached is a copy of BLM Sodium Lease NMNM 82804

V. **Type and Quantities of Fluids Stored or Used at the Facility**

Attached are copies of analysis for both fresh water and brine water.

Fresh Water: Fresh water source is the Double Eagle Waterline.

Fresh water is transported to facility via 3" polyethylene pipeline, and stored in a 300 bbl. steel tank located at this facility. Average daily volume used is approximately 20 bbls. Estimated volume stored is 281 bbls.

Brine Water: Brine water source is Marbob Energy's Dodd A Brine Well. Brine water is produced by pumping fresh water into the Dodd A Brine well. The Brine water is then stored in a 500 bbl. tank located at this facility. Average daily volume used is approximately 20 bbls. Estimated volume stored is 462 bbls.

VI. **Transfer, Storage and Disposal of Fluids and Solids**

Transfer of Brine water is accomplished by one of two ways:

Transfer Pump: This system uses a 3" polyethylene pipeline to transfer brine water to a BLM approved drilling location. The Transfer pump is only used to transfer brine water short distances.

Transport Truck: Brine water is transported by an independent trucking company when it is not economical to use the transfer pump. The transport truck loads via a valve on the front of the fiberglass brine water storage tank.

Storage of fresh water is in a 300 bbl. steel tank above ground with no pressure.

Storage of brine water is in a 500 bbl. fiberglass tank above ground with no pressure.

Daily inspection is performed by Marbob field personal. After inspecting tanks, pumps, and pipelines, any maintenance that may be required is then performed. Field personnel are responsible for maintaining an accurate account of brine water transferred by reading transfer pump meter and/or transport truck run tickets.

In the event of a leak or spill, NMOCD Rule 116 will be utilized as to the proper corrective action and notification.

Facility is equipped with an earthen berm to prevent run off from passing through system. Yearly rainfall in this area is minimal, therefore, any precipitation remaining within the berms will be allowed to evaporate.

Upon closure of facility, all fluids and contaminates will be removed and disposed of properly. Well will be properly plugged and abandoned. All tanks and any other equipment remaining will be removed from facility. The facility area will then be graded as close to the original contour as is practical.

VII. Brine Extraction Well(s)

Attached is a schematic drawing of Marbob Energy's M. Dodd A Brine Water #1 well.

VIII. Spill/Leak Prevention and Reporting Procedures (Contingency Plans)

Marbob Energy spill or leak prevention measures consists of employing competent and responsible personnel. Field personnel are trained in proper maintenance and inspection of its facility. Field supervisors are knowledgeable of release notification and corrective actions in accordance with NMOCD Rule 116. Beyond personnel, spills and leaks are prevented with Marbob Energy's practice of utilizing non-corrosive material where ever possible.

In the event of a spill in which 25 bbls. or more of brine water was lost, field supervisor or other responsible personnel will contact the OCD District office for recommendations on proper corrective actions.

IX Site Characteristics

Attached is a map showing Bear Grass Draw. Marbob Energy will construct an earthen berm around this facility to prevent any spills or leaks from reaching this draw.

Also, attached is complete records on a fresh water well located in the NW/4NW/4 of Section 22 of Township 17 South, Range 29 East obtained from the State Engineer's office in Roswell.

X. Other Compliance Information

Attachments:

- Geological Summary;
- Site Diagram;
- Topographical Map showing location of Facility;
- Unichem International Analysis of Fresh Water;
- Unichem International Analysis of Brine Water;
- Unichem International Analysis of Windmill Water;
- Bureau of Land Management;
- Sodium Lease NMNM 82804;
- Topographical map showing location of Bear Grass Draw;
- Current schematic drawing of M. Dodd A BW #1;
- State Engineer's records; and
- Marbob Records from 1991: BLM Reports
 - Water Analysis
 - Fresh Water Right-of-Way
 - Archeological Report



marbob energy corporation

12/10/98

ATTN: R. C. Anderson, Chief of Environmental Bureau
RE: Discharge Plan for the:

Marbob Energy Corporation
M. Dodd "A" BW #1
1850'FWL 300' FSL
Sec 22 - 17S - 29E
Eddy Co., NM
GL: 3534

Roger: In satisfying the the BLM requirements for a discharge plans, Dean contacted the State Engineers office in Roswell. They provided us with the following information concerning the "Big Red" active windmill located approximately 0.95 mile to the north-northwest of the M Dodd brine well:

Location: NW/NW/NW Section 22 T17S R29E

Elevation: 3543 (estimated from topo sheet).

Aquifer: Qal (no driller's log is available detailing the actual rock type of the aquifer.)

Depth to Water: 71' (\pm , again there is very little available data on this well.)

Water Analysis:

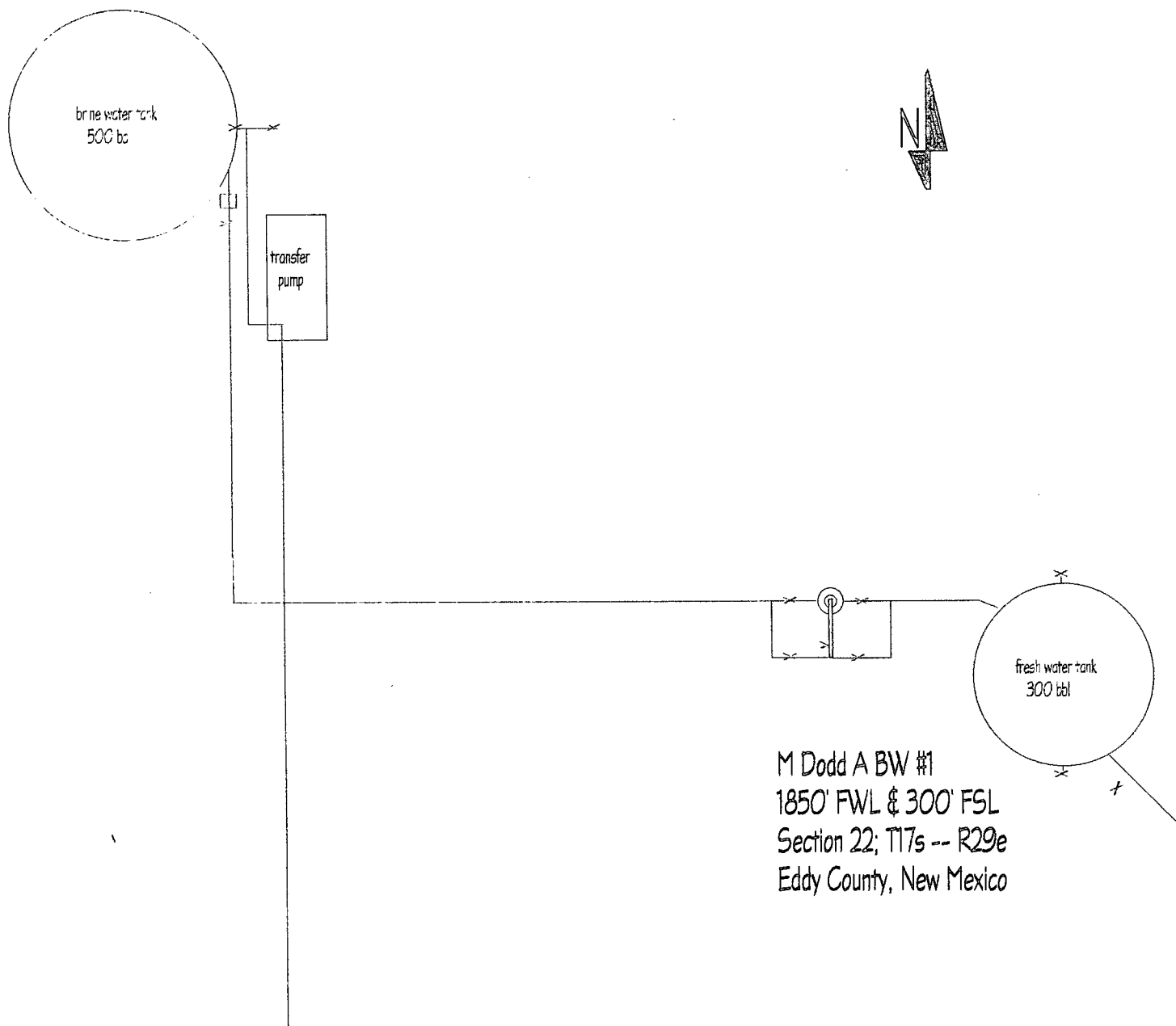
Date	Collector	POC	CL	SC	Remarks
9/18/90	MFN/KO	E DP	34	2570	No Temp POA
3/1/94	RLT/PF	DP	80	2280	POA - 63° Stock
11/3/98	Unichem		300	2231	Ca-674 Mg-54 S-1275

Within the ¼ mile radius area of review, there are no active windmills. On the topo sheet, Bear Grass Draw is mapped as a north-south trending intermittent stream/drainage approximately 1200' to the east of the Dodd brine well. From local knowledge, the Draw itself drains internally though topography suggests southerly regional drainage. The soil type can best be described as loamy sand within the primary drainage area of the Bear Grass Draw grading to predominantly sand upslope and out of the draw.

I do not believe there is much of a chance of a flood at the discharge site. Local annual rainfall probably does not exceed 8-10". The M Dodd site will be bermed.

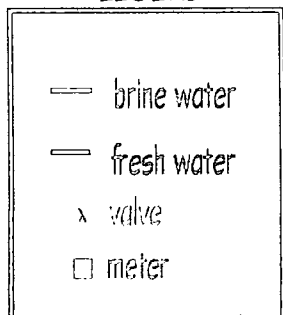
If I can be of any help to you, please do not hesitate to contact me.

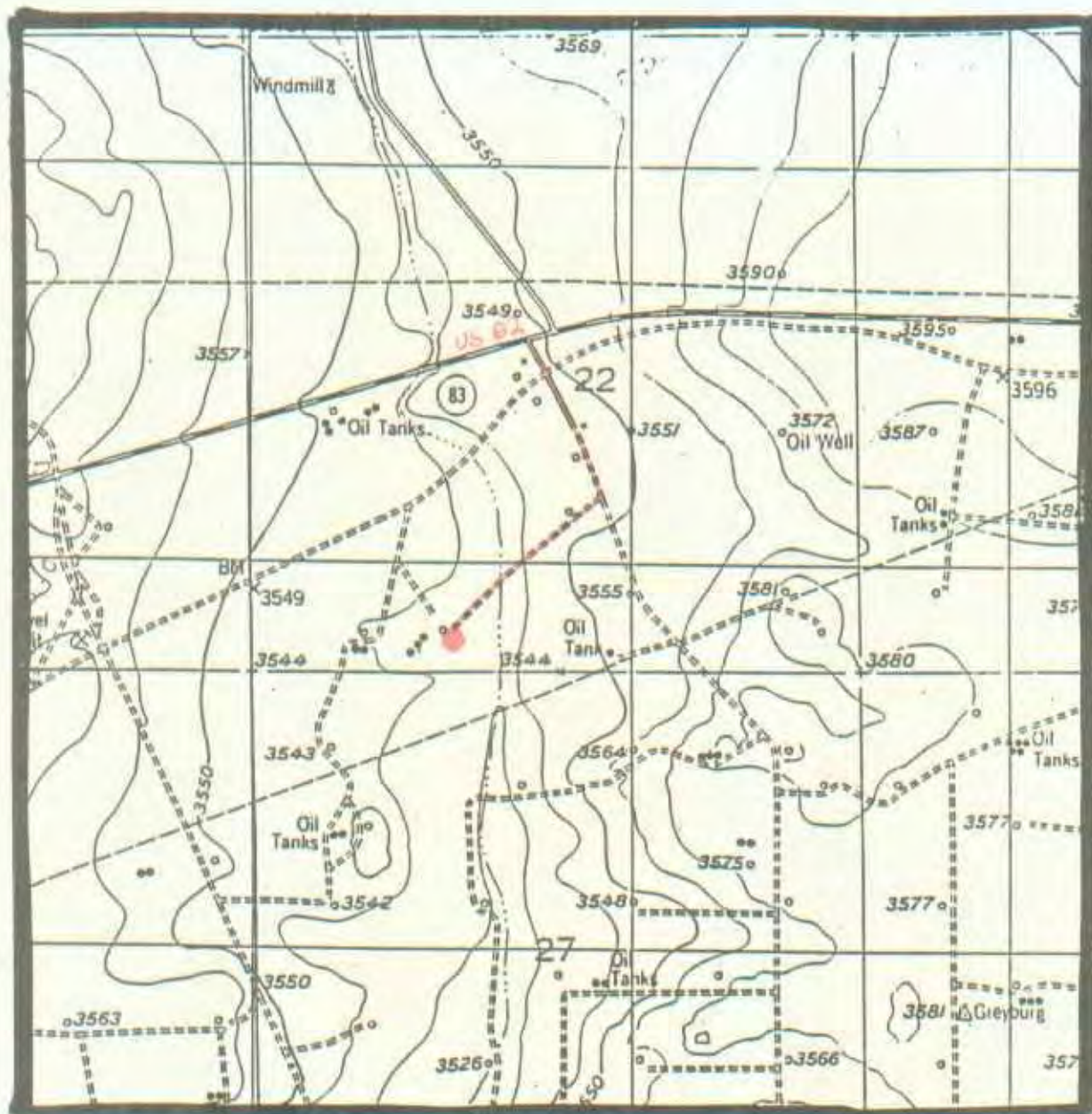
Regards
Martin K. Joyce, geologist



M Dodd A BW #1
 1850' FWL & 300' FSL
 Section 22; T17s -- R29e
 Eddy County, New Mexico

LEGEND





MARBOB ENERGY CORPORATION
 DODD A BRINE WELL
 1850 FWL 300 FSL
 SECTION 22-T17S-R29E
 EDDY COUNTY, NEW MEXICO

Unichem International

707 North Leech

P.O.Box 1499

Hobbs, New Mexico 88240

Company : Marbob

Date : 10-27-1998

Location: Dodd A Fed BW #1 - Fresh Water Tank (on 10-23-1998)

Sample 1

Specific Gravity:

1.004

Total Dissolved Solids:

5764

pH:

0.00

Resistivity:

20.000 ohms @ 72[F

IONIC STRENGTH:

0.159

CATIONS:		me/liter	mg/liter
Calcium	(Ca+2)	16.0	320
Magnesium	(Mg+2)	75.7	920
Sodium	(Na+1)	19.6	451
Iron (total)	(Fe+2)	0.322	9.00
Barium	(Ba+2)	0.015	1.00
ANIONS:			
Bicarbonate	(HCO ₃ -1)	3.00	183
Carbonate	(CO ₃ -2)	0	0
Hydroxide	(OH-1)	0	0
Sulfate	(SO ₄ -2)	3.96	190
Chloride	(Cl-1)	104	3700

SCALING INDEX (positive value indicates scale)

Temperature		Calcium Carbonate	Calcium Sulfate
86[F	30[C	-7.3	-28
104[F	40[C	-6.6	-28
122[F	50[C	-6.3	-28
140[F	60[C	-6.0	-28
168[F	76[C	-5.4	-11
176[F	80[C	-5.3	-11

Comments:

cc: Bill Polk

Jay Brown

LI

Unichem International

707 North Leech

P.O.Box 1499

Hobbs, New Mexico 88240

Company : Marbob

Date : 10-27-1998

Location: Dodd A Fed - BW #1 Brine Tank (on 10-23-1998)

Specific Gravity:	Sample 1
Total Dissolved Solids:	1.219
pH:	306901
Resistivity:	0.00
IONIC STRENGTH:	0.330 ohms @ 72[F]
	5.358

CATIONS:		me/liter	mg/liter
Calcium	(Ca+2)	56.0	1120
Magnesium	(Mg+2)	52.0	632
Sodium	(Na+1)	5130	118000
Iron (total)	(Fe+2)	0.026	0.730
Barium	(Ba+2)	0.015	1.00
ANIONS:			
Bicarbonate	(HCO ₃ -1)	2.60	159
Carbonate	(CO ₃ -2)	0	0
Hydroxide	(OH-1)	0	0
Sulfate	(SO ₄ -2)	104	5000
Chloride	(Cl-1)	5130	182000

SCALING INDEX (positive value indicates scale)

Temperature		Calcium Carbonate	Calcium Sulfate
86[F]	30[C]	-5.5	-17
104[F]	40[C]	-4.9	-21
122[F]	50[C]	-4.6	-21
140[F]	60[C]	-4.3	-21
168[F]	76[C]	-3.7	-17
176[F]	80[C]	-3.5	-17

Comments:

cc: Bill Polk

Jay Brown

LI

UNICHEM

A Division of BJ Services Company

Lab Test No : 22298

Marbob Energy

Sample Date : 11/3/98

Water Analysis

Listed below please find water analysis report from : Bamsdall

Windmill

Specific Gravity : 1.002
Total Dissolved Solids : 2231
pH :
Conductivity (umhos):
Ionic Strength : 0.068

Cations: mg/l
Calcium (Ca++): 674
Magnesium (Mg++): 54
Sodium (Na+):
Iron (Fe++): 0.00
Dissolved Iron (Fe++):
Barium (Ba++): 0.00
Strontium (Sr): 11
Manganese (Mn++): 0.00
Resistivity :

Anions:
Bicarbonate (HCO3-):
Carbonate (CO3--):
Hydroxide (OH-): 0
Sulfate (SO4--): 1275
Chloride (Cl-): 300

Gases: ppm
Carbon Dioxide (CO2):
Hydrogen Sulfide (H2S):
Oxygen (O2):

Scale Index (positive value indicates scale tendency) a blank indicates some tests were not run

Temperature	CaCO3 SI	CaSO4 SI
86F 30.0C		
104F 40.0C		
122F 50.0C		
140F 60.0C		
168F 70.0C		
176F 80.0C		

Comments :

cc: Bill Polk
Jay Brown

OCT 30 1998

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

Serial Number

SODIUM LEASE

NMMN 82804

PART I. LEASE RIGHTS GRANTED.

This ☒ Lease ☐ Lease Renewal entered into by and between the UNITED STATES OF AMERICA, through the Bureau of Land Management, hereinafter called lessor, and (Name and Address)

MARBOB ENERGY CORPORATION

P O DRAWER 217, ARTESIA, NEW MEXICO 88211-0217

hereinafter called lessee, is effective (date) NOVEMBER 1, 1998, for a period of 20 years,

Sodium, Sulphur, Hardrock -

☒ with preferential right in the lessee to renew for successive periods of 10 years under such terms and conditions as may be prescribed by the Secretary of the Interior, unless otherwise provided by law at the expiration of any period.

Potassium, Phosphate, Gilsonite -

☐ and for so long thereafter as lessee complies with the terms and conditions of this lease which are subject to readjustment at the end of each year period, unless otherwise provided by law.

Sec. 1. This lease is issued pursuant and subject to the terms and provisions of the:

☒ Mineral Leasing Act of 1920, as amended, and supplemented, 41 Stat. 437, 30 U.S.C. 181-287, hereinafter referred to as the Act;

☐ Mineral Leasing Act for Acquired Lands, Act of August 7, 1947, 61 Stat. 913, 30 U.S.C. 351-359;

☐ Reorganization Plan No. 3 of 1946, 60 Stat. 1099 and 43 U.S.C. 1201;

☐ (Other)

; and to the regulations and general mining orders of the Secretary of the Interior in force on the date this lease issued.

Sec. 2. Lessor, in consideration of any bonuses, rents, and royalties to be paid, and the conditions and covenants to be observed as herein set forth, hereby grants and leases to lessee the exclusive right and privilege to explore for, drill for, mine, extract, remove, beneficiate, concentrate, or otherwise process and dispose of the sodium deposits hereinafter referred to as "leased deposits," in, upon, or under the following described lands:

T. 17 S., R 29 E., NMPM, Eddy County, New Mexico

section 22: SE $\frac{1}{4}$ SW $\frac{1}{4}$, SE $\frac{1}{4}$;

section 27: NE $\frac{1}{4}$, E $\frac{1}{4}$ NW $\frac{1}{4}$.

containing 440.00 acres, more or less, together with the right to construct such works, buildings, plants, structures, equipment and appliances and the right to use such on-lease rights-of-way which may be necessary and convenient in the exercise of the rights and privileges granted, subject to the conditions herein provided.

Phosphate -

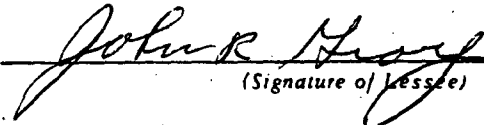
☐ In accordance with Section 11 of the Act (30 U.S.C. 213), lessee may use deposits of silica, limestone, or other rock in the processing or refining of the phosphates, phosphate rock, and associated or related minerals mined from the leased lands or other lands upon payments of royalty as set forth on the attachment to this lease. (Phosphate leases only.)

RECEIVED
1998 OCT 26 A 10:18
BUREAU OF LAND MANAGEMENT
LAND RESOURCES AREA

THE UNITED STATES OF AMERICA

Marbob Energy Corporation

Company or Lessee Name


(Signature of Lessee)

President

(Title)

October 22, 1998

(Date)

By Bureau of Land Management
Carlsbad Field Office


(Signing Officer)

Field Office Manager

(Title)

10/29/98

(Date)

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

NOTICE

The Privacy Act of 1974 and the regulations in 43 CFR 2.48(d) provides that you be furnished the following information in connection with information required under the terms of this lease.

AUTHORITY: 30 U.S.C. 181 et seq.; 43 CFR 3500.

PRINCIPAL PURPOSE The information will be used to verify your compliance with the lease terms and in calculating royalty payments.

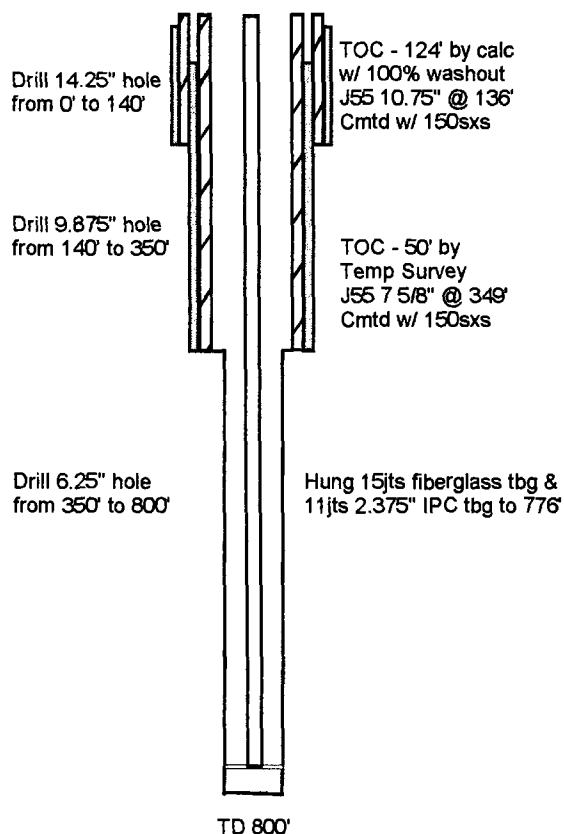
ROUTINE USES: (1) Evaluation of the effects of the operations on the environment. (2) Statistical reports to Congress. (3)(4) and (5) Information from the record and/or the record may be released or transferred to appropriate Federal, State or local agencies in allocating mineral revenue, for investigations of energy programs; and when relevant to civil, criminal or regulatory investigations or prosecutions, as well as routine regulatory responsibility.

EFFECT OF NOT PROVIDING INFORMATION: Disclosure of this information is mandatory only if the lessee elects to mine, extract, remove and/or dispose of the leased deposits.

The Paperwork Reduction Act of 1980 (44 U.S.C. 3501 et seq.) requires us to inform you that:

This information is being collected for use in calculating royalty payments and in verification of compliance with lease terms. Response to this request is mandatory only if the lessee elects to mine, extract, remove and/or dispose of the leased deposits.

Marbob Energy
M. Dodd "A" BW #1
1850'FWL 300' FSL
Sec 22 - 17S - 29E
Eddy Co., NM



Current Status
12/10/98



**THE REPRODUCTION OF
THE
FOLLOWING
DOCUMENT (S)
CANNOT BE IMPROVED
DUE TO
THE CONDITION OF
THE ORIGINAL**

STATE ENGINEER
Technical Division

Owner <u>BOGLE RANCH</u>	DEPTH TO WATER			WATER LEVEL ELEV
	Below MP 1st	Below 2nd	Below LSD	
Use <u>ABND. OWD</u>				
Date <u>APRIL 14</u> , 19 <u>83</u>	<u>73.00</u>	<u>72.00</u>	<u>71.80</u>	<u>3545</u>
Hour <u>9:58</u> <u>AM</u> Obs <u>JCC</u>	<u>1.30</u>	<u>0.30</u>	<u>0.80</u>	<u>71</u>
Not POA (X) POA ()	<u>71.70</u>	<u>71.70</u>	<u>70.90</u>	<u>3474</u>

W L meas after pump shut off _____ min. Pumping W L ()
Remarks _____

Date _____, 19____				
Hour _____ AM Obs _____				
Not POA () POA ()				

W L meas after pump shut off _____ min. Pumping W L ()
Remarks _____

Date _____, 19____				
Hour _____ AM Obs _____				
Not POA () POA ()				

W L meas after pump shut off _____ min. Pumping W L ()
Remarks _____

Date _____, 19____				
Hour _____ AM Obs _____				
Not POA () POA ()				

W L meas after pump shut off _____ min. Pumping W L ()
Remarks _____

Latitude _____ Longitude 15-06010
File No _____ Location No 17.29.22.11124

FE-1

State of New Mexico
State Engineer

WELL SCHEDULE

Source of data: Obser ☒ Owner ☐ Other _____
Date APRIL 14 1983 Record by GRASECLOSE & COCHRAN

LOCATION: County EDDY Map 106.2.4

OWNER BOGLE RANCH

DRILLER _____ Completed _____ 1B _____

TOPO SITUATION _____ 4545T Elev 3545

DEPTH _____ ft ☐ Rept ☐ Meas Use ABND. OWD

CASING 7 in to _____ ft Log _____

PUMP: Type _____ Make _____

Ser.no./model _____ Size of dischg _____ in.

PRIME MOVER: Make _____ HP _____

Ser.no. _____ Power/Fuel _____

PUMP DRIVE: ☐ Gear Head ☐ Belt Head ☐ Pump Jack

Make _____ Ser.no. _____ ☐ VHS

WATER LEVEL: 71.70 ft rept APRIL 14 1983 above below
T.C.

_____ which is 0.80 ft above below LS
PERMANENT RP is NO RP

which is _____ ft above
below described MP and _____ ft above
below LS

REMARKS Well is JUST ABOUT DRY

AQUIFER(S): Gal

Well No. _____ on Photo _____ DPN 15-06010

File No _____ Loc. No. 17.29.22.11124

12-10-98 08:58AM FROM NM STATE ENGINEERS

P02

Remarks cont. _____

SKETCH:

N
↑

INITIAL WATER- LEVEL MEASUREMENT	DEPTH TO WATER			
	Below MP			Below LS
	1st	2nd	3rd	
Date <u>APRIL 14</u> 19 <u>83</u>	73.00	72.00		71.70
Hour <u>9:58</u> ^{AM} PM Obs <u>JC</u>	1.30	0.30		0.80
Not POA (X) POA ()	71.70	71.70		70.90

W L meas after pump shut off _____ min. Pumping W L ()

Remarks _____

STATE ENGINEER
Technical Division

Owner Use	DEPTH TO WATER			WATER LEVEL ELEV
	Below MP 1st	Below 2nd	Below LSD	
Date _____, 19____				
Hour _____ AM _____ PM Obs _____				
Not POA () POA ()				

W L meas after pump shut off _____ min. Pumping W L ()
Remarks _____

Date _____, 19____				
Hour _____ AM _____ PM Obs _____				
Not POA () POA ()				

W L meas after pump shut off _____ min. Pumping W L ()
Remarks _____

Date _____, 19____				
Hour _____ AM _____ PM Obs _____				
Not POA () POA ()				

W L meas after pump shut off _____ min. Pumping W L ()
Remarks _____

Date _____, 19____				
Hour _____ AM _____ PM Obs _____				
Not POA () POA ()				

W L meas after pump shut off _____ min. Pumping W L ()
Remarks _____

Latitude _____ Longitude 15-06018
File No _____ Location No 17-29-22-112311

FE-1

State of New Mexico
State Engineer

WELL SCHEDULE

Source of data: Obser ☒ Owner ☐ Other F.O. Puchett
Date Nov 29 1948 Record by Hendrickson & Council

LOCATION: County Eddy Map 106.2.4.

OWNER Boyle Farms - Turkey Creek Ranch (?)

DRILLER _____ Completed _____ 19____

TOPO SITUATION _____ Topo. Elev 3542

DEPTH _____ ft ☐ Rept ☐ Meas Use Stick

CASING 1 1/2 ^{od steel} in to _____ ft Log _____

PUMP: Type Piston Make _____

Ser.no./model _____ Size of dischg _____ in.

PRIME MOVER: Make 10 Dempster W.M. HP _____

Ser.no. factory steel tower Power/Fuel _____

PUMP DRIVE: ☐ Gear Head ☐ Belt Head ☐ Pump Jack

Make _____ Ser.no. _____ ☐ VHS

WATER LEVEL: 80.00 ft rept 11-29 1948 above
top of casing below

which is 2.30 ft above below LS

PERMANENT RP is _____

See updated FE-1

which is _____ ft above described MP and _____ ft above below LS

REMARKS 10-10-79 HWP - P.D. well (changes via

AQUIFER(S): gal

Well No. _____ on Photo _____ DPN 15-06019

File No _____ Loc. No. 17.29.22.112311

This 2 11 1 for

Remarks cont. underground line to 4' tall x 38' diam
steel tank, located 120' S-SW. Well shown
on map. Access to measurement point
would be difficult.

Note: there are 3 7" abandoned wells
 - probably OLD wells near here. The first
 is 140' NW of the W.M. The second
 SKETCH: about 360' NW of the W.M. and
 the third is about 200 yards S.E.
 of the W.M. - Could probably
 measure one or more of these.



3-28-85, JCG WATER SAMPLE Collected

Temp = 67°

4-19-86 RLT, TN Water sample collected

Temp = 68°

9-18-90 MFN-KO Well discharges ± 40 SW
 into a 16' tall x 20' dia steel storage
 tank.

INITIAL WATER- LEVEL MEASUREMENT	DEPTH TO WATER			
	Below MP			Below LS
	1st	2nd	3rd	
Date <u>APR 14</u> , 19 <u>83</u>				
Hour <u>9:41</u> AM Obs <u>JCG/JC</u>	<u>UTM</u>			
Not POA (X) POA ()				

W L meas after pump shut off _____ min. Pumping W L ()

Remarks COLUMN PIPE IS 2 1/2" and no room for
type to measure

STATE ENGINEER
Technical Division

Owner Use	DEPTH TO WATER			WATER LEVEL ELEV
	Below MP		Below LSD	
	1st	2nd		
Date <u>Nov 29, 1948</u>			80.00	
Hour <u>AM</u> Obs <u>DEH</u>			0.30	
Not POA () POA (X)			79.70	

W L meas after pump shut off _____ min. Pumping W L (X)
Remarks Well purring - Temperature of water in
45°F.

Date <u>April 14, 1983</u>				
Hour <u>7:41 AM</u> Obs <u>JCH JC</u>				
Not POA (X) POA ()				

W L meas after pump shut off _____ min. Pumping W L ()
Remarks Can't get tape down between column and
casing. UTM.

Date <u>June 19, 1986</u>	50.00	49.50	48.63	
Hour <u>12:36 PM</u> Obs <u>KTS</u>	1.37	0.37	.30	
Not POA () POA (X)	48.63	48.63	48.63	

W L meas after pump shut off 4 min. Pumping W L ()
Remarks 50"

Date <u>Sept. 19, 1990</u>				
Hour <u>10:15 AM</u> Obs <u>MFR</u>				
Not POA () POA (X)				

W L meas after pump shut off _____ min. Pumping W L ()
Remarks Brake wouldn't hold. Will have to
pull out the cable and replace it.

Latitude _____ Longitude 15 - 11
File No _____ Location No 1129.22. 112311

FE-1

State of New Mexico
State Engineer

WELL SCHEDULE

Source of data: Obser ☒ Owner ☐ Other _____
Date September 16, 1981 Record by Robert E. Hinkle

LOCATION: County Eddy Map 106.2.4

OWNER Bogte Ranch (?)

DRILLER _____ Completed _____ 19__

TOPO SITUATION _____ Elev 3542

DEPTH _____ ft ☐ Rept ☐ Meas Use Foot

CASING 4 1/2 in to _____ ft Log _____

PUMP: Type Piston Make _____

Ser.no./model _____ Size of dischg 2 in.

PRIME MOVER: Make Dumpster WM HP _____

Ser.no. Safety Power/Fuel WHL

PUMP DRIVE: ☐ Gear Head ☐ Belt Head ☐ Pump Jack

Make _____ Ser.no. _____ ☐ VHS

WATER LEVEL: _____ ft rept _____ 19__ above
meas _____ below _____

_____ which is _____ ft above
below LS

PERMANENT RP is _____

which is _____ ft above
below described MP and _____ ft above
below LS

REMARKS Sampled at end of D.P. Well

Water Spl. #1

Well No. _____ on Photo _____ DPN 15-06018

File No _____ Loc. No. 17.29.22. 112311

Remarks cont. 115' S. SW into 4' tall x 44'
 Distribution in floor outside building
 1 mi. 90' E - + ? Temp a rise
 68.5° F

Well's shown on topo graph
 6-19-86 RL7/TN Sample collected Temp 68°
 SKETCH: This well known as "Big Red"

N

INITIAL WATER- LEVEL MEASUREMENT	DEPTH TO WATER			
	Below MP			Below
	1st	2nd	3rd	LS
Date _____, 19 ____				
Hour _____ AM PM Obs _____				
Not POA () POA ()				
W L meas after pump shut off _____ min. Pumping W L ()				
Remarks _____				

‘ , ’

Owner	DEPTH TO WATER			WATER LEVEL ELEV
	Below MP		Below LSD	
Use	1st	2nd		
Date <u>3</u> <u>30</u> , 19 <u>74</u>				
Hour <u>12:46</u> <u>PM</u> Obs <u>PF</u>				
Not POA () POA (✓)				
W L meas after pump shut off _____ min. Pumping W L () Remarks <u>Penke Still no good. Could not get</u> <u>any farther than 14' 2:30</u>				
Date _____, 19____				
Hour _____ <u>AM</u> Obs _____				
Not POA () POA ()				
W L meas after pump shut off _____ min. Pumping W L () Remarks _____				
Date _____, 19____				
Hour _____ <u>AM</u> Obs _____				
Not POA () POA ()				
W L meas after pump shut off _____ min. Pumping W L () Remarks _____				
Date _____, 19____				
Hour _____ <u>AM</u> Obs _____				
Not POA () POA ()				
W L meas after pump shut off _____ min. Pumping W L () Remarks _____				

Latitude _____ Longitude 15-06018
File No _____ Location No 17-29-22-112311

HALLIBURTON DIVISION LABORATORY

HALLIBURTON SERVICES

ARTESIA DISTRICT

LABORATORY REPORT

No. W219-91TO Marbob Energy CorporationDate May 7, 1991P. O. Box 304Artesia, NM 88210

This report is the property of Halliburton Services 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 concern and employees thereof receiving such report from Halliburton Services

Submitted by _____ Date Rec. May 7, 1991Well No. Water Well Dodd #1 Depth _____ Formation _____

Field _____ County _____ Source _____

Resistivity 0.050 @ 70°Specific Gravity .. 1.2120 @ 70°pH 6.0Calcium 2,174Magnesium 11,203Chlorides 195,000Sulfates 200Bicarbonates 366Soluble Iron 10Remarks: Do not mix with cement.
Respectfully submittedAnalyst: Scott Taylor - EIT

HALLIBURTON SERVICES

NOTICE:

This report is for information only and the content is limited to the sample described. Halliburton makes no warranties, express or implied, as to the accuracy of the contents or results. Any user of this report agrees Halliburton shall not be liable for any loss or damage, regardless of cause, including any act or omission of Halliburton resulting from the use hereof.

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

CONTACT RECEIVING
OFFICE FOR NO
OF COPIES REQUIRED
(Other instructions on re-
verse side)

BLM Roswell District
Modified Form No.
NM060-3160-4

5. LEASE DESIGNATION AND SERIAL NO.

NMNM-82804

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME

M. Dodd A BW

9. WELL NO.

1

10. FIELD AND POOL, OR WILDCAT

Grbg Jackson SR Q Grbg SR

11. SEC., T., R., M., OR BLK. AND
SURVEY OR AREA

Sec. 22-T17S-R29E

12. COUNTY OR PARISH 13. STATE

1. 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—" for such proposals.)

OIL WELL ☐ GAS WELL ☐ OTHER ☒ Brine Water Well

2. NAME OF OPERATOR
Marbob Energy Corporation

3a. Area Code & Phone No.
(505) 748-3303

3. ADDRESS OF OPERATOR
P. O. Drawer 217, Artesia, NM 88210

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*
See also space 17 below.)
At surface

1850 FWL 300 FSL

14. PERMIT NO.

15. ELEVATIONS (Show whether OF, RT, OR, etc.)

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

NOTICE OF INTENTION TO:

TEST WATER SHUT-OFF ☐

FRACTURE TREAT ☐

SHOOT OR ACIDIZE ☐

REPAIR WELL ☐

(Other) ☐

PULL OR ALTER CASING ☐

MULTIPLE COMPLETE ☐

ABANDON* ☐

CHANGE PLANE ☐

SUBSEQUENT REPORT OF:

WATER SHUT-OFF ☐

FRACTURE TREATMENT ☐

SHOOTING OR ACIDIZING ☐

(Other) ☒ TD, cmt csg

REPAIRING WELL ☐

ALTERING CASING ☐

ABANDONMENT* ☒

(NOTE: Report results of multiple completion on Well
Completion or Recompletion Report and Log form.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.) *

Drld to 350', ran 9 jts. of 7 5/8" 33.7# csg to 349', cmtd
w/150 sx Class C w/2% CC, circ 45 sx to surf, plug down
@ 9:30 p.m. 4/29/91. WOC 18 hrs., tstd csg to 1500#
f/30, minutes--held okay.

18. I hereby certify that the foregoing is true and correct

SIGNED

Rhonda Nelson

TITLE Production Clerk

DATE 5/6/91

(This space for Federal or State office use)

APPROVED BY

CONDITIONS OF APPROVAL, IF ANY:

TITLE

DATE

Form 3160-5
(July 1989)
(Formerly 9-331)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

CONTACT RECEIVED
OFFICE FOR NU
OF COPIES REQUIRED
(Other instructions on re-
verse side)

Blm Roswell District
Modified Form No.
NM060-3160-4

6. LEASE DESIGNATION AND SERIAL NO.

NMNM-82804

8. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME

M. Dodd A BW

9. WELL NO.

1

10. FIELD AND POOL, OR WILDCAT

Grbg Jackson SR Q Grbg SR

11. SEC., T., R., M., OR BLK. AND
SURVEY OR AREA

Sec. 22-T17S-R29E

12. COUNTY OR PARISH

Eddy

13. STATE

NM

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—" for such proposals.)

1. OIL WELL ☐ GAS WELL ☐ OTHER Brine Water Well

2. NAME OF OPERATOR
Marbob Energy Corporation

3a. Area Code & Phone No.
(505) 748-3303

3. ADDRESS OF OPERATOR
P. O. Drawer 217, Artesia, NM 88210

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*
See also space 17 below.)
At surface

1850 FWL 300 FSL

14. PERMIT NO.

15. ELEVATIONS (Show whether DF, RT, OR, etc.)

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

NOTICE OF INTENTION TO:

TEST WATER SHUT-OFF

☐
☐
☐
☐
☐

PULL OR ALTER CASING

☐
☐
☐
☐
☐

FRACTURE TREAT

MULTIPLE COMPLETE

SHOOT OR ACIDIZE

ABANDON*

REPAIR WELL

CHANGE PLANE

(Other)

SUBSEQUENT REPORT OF:

WATER SHUT-OFF

☐
☐
☐
☐
☐

FRACTURE TREATMENT

SHOOTING OR ACIDIZING

(Other) Spud, cmt csg

REPAIRING WELL

ALTERING CASING

ABANDONMENT*

☐
☐
☐
☒
☐

(NOTE: Report results of multiple completion on Well
Completion or Recompletion Report and Log form.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

Spudded 4/28/91. Drld 14 1/4" hole to 96', ran 3 jts.
10 3/4" 40.5# csg to 93', cmtd w/150 sx Class C w/2%
CC, circ 15 sx to surf, plug down @ 6:30 p.m. 4/28/91.
WOC 18 hrs., tstd csg to 600# f/20 minutes--held okay.

John R. Gray received verbal approval to change casing
program from Tony Herrell.

18. I hereby certify that the foregoing is true and correct

SIGNED

Thonda Nelson

TITLE Production Clerk

DATE 5/6/91

(This space for Federal or State office use)

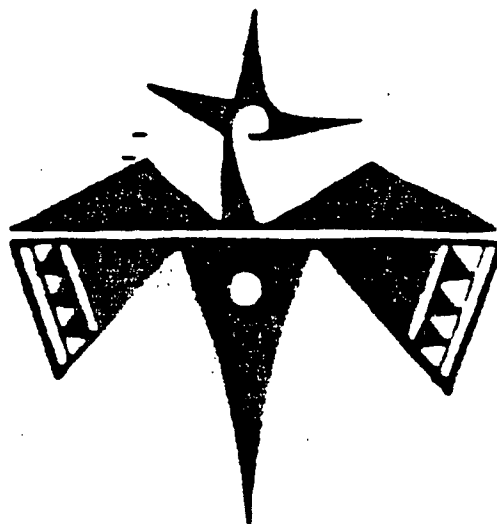
APPROVED BY

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:

PECOS
ARCHEOLOGICAL
CONSULTANTS
P.O. BOX 1771
CARLSBAD, NM 88221



Archaeological Clearance Report for
MARBOE Energy Corporation's
Proposed Salt Water Disposal Pipeline
for the M Dodd A Well No. 1
Situated on Public Lands in Eddy County, N.M.
Report No. 93218

Archeological Clearance Report for
MARBOB Energy Corporation's
Proposed Salt Water Disposal Pipeline
for the M Dodd A Well No. 1
Situated on Public Lands in Eddy County, N.M.
Report No. 93216

prepared by
Robert J. Martin

submitted by
Pecos Archeological Consultants
P.O. Box 1771, Carlsbad, N.M. 88221
16 November, 1990
BLM Cultural Use Permit No. 1920-111
State Blanket Survey Permit No. 1920-111

ABSTRACT

On 11 Nov., 1993, Pecos Archeological Consultants (BLM Cultural Use Permit No. 6-2920-90-L, State Blanket Survey Permit No. 91-024) undertook an archeological inventory of a salt water disposal line, scheduled to be impacted by MARBOB Energy Corporation. This project will be situated on public lands in Eddy County, New Mexico. These lands occur in section 22 and 27, T17S, R29E, NMPM, Eddy County, N.M. A total of 5.7 acres of BLM land status were archeologically investigated during the course of fieldwork for this project. The project was completed in 3 man-hours by Robert J. Martin. As LA 21045 is presently impacted by a 50 ft wide pipeline in the area of subject project, clearance is recommended only if all equipment, machinery, and personnel are limited to the impact area of the existing pipeline. No additional archeological remains were recorded.

INTRODUCTION

On 13 Oct., 1993, Pecos Archeological Consultants was requested by Mr. David Martin, representing MARBOB Energy Corporation, to perform the archeological survey for an easement scheduled to cross public land in Eddy County, New Mexico. This land is administered by the Bureau of Land Management and it will be impacted by construction of a salt water disposal pipeline. Consequently, federal law requires that an intensive archeological inventory be performed to identify what cultural resources might be impacted by such construction prior to granting clearance to the project. Therefore, Pecos Archeological Consultants undertook this survey on 11. Nov. 1993. Fieldwork for this project was performed by Robert J. Martin. The following is a report of the field activities and findings resulting from the survey.

SURVEY METHODOLOGY

Pecos Archeological Consultants conducted this survey by physically examining the entire impact zone. Pedestrian inspection along two parallel transects was accomplished the length of the easement. These transects were spaced 15 meters apart; however, established transects were departed from to examine nearby areas of high site probability. All prominent deflations and denuded areas

were given special attention. This project was conducted on one partly cloudy day. Surface visibility in the region, which, due to floral cover, ranged between 10-65% of the ground under damp soil conditions, made this the most practical methodology for effectively sampling the impact zone which will result from this project as planned.

LOCATIONAL DATA

MAREOB Energy Corporation's salt water disposal easement, to be constructed for the M Dodd Brine Well, will measure 100 ft X 2500 ft, or an area of 5.7 acres. The easement will be situated in the:

NE1/4 NE1/4, section 27, T17S, R29E, NMPM, Eddy Co., NM

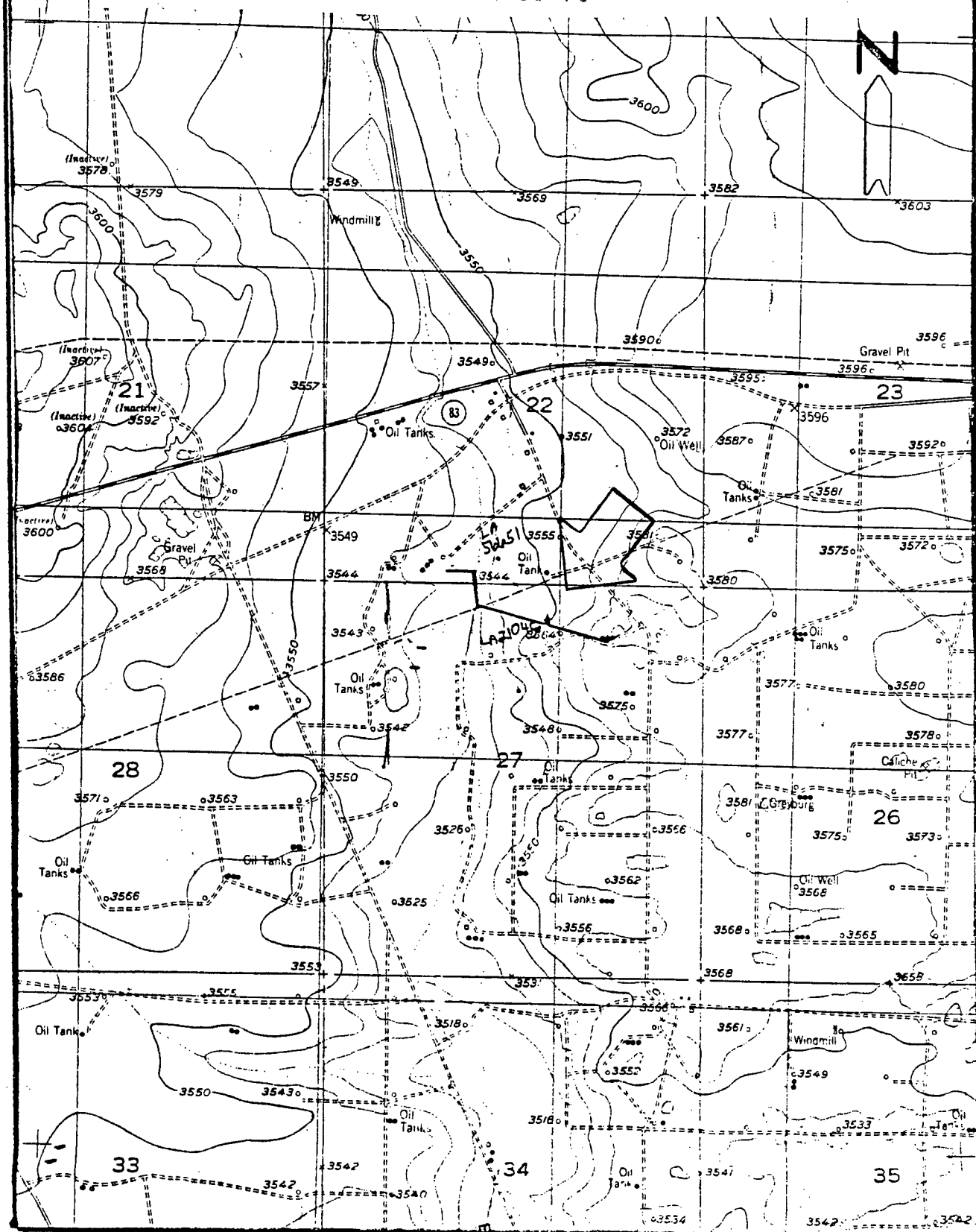
NW1/4 NE1/4, section 27, T17S, R29E, NMPM, Eddy Co., NM

NE1/4 NW1/4, section 27, T17S, R29E, NMPM, Eddy Co., NM

SE1/4 SW1/4, section 22, T17S, R29E, NMPM, Eddy Co., NM

Map Reference. USGS Red Lake SE Quadrangle, 7.5 Minute Series, 1955.

MARBOB Energy, Inc.'s
 Proposed Salt Water Disposal Pipeline
 Sects. 22 and 27, T17S, R29E, Eddy Co., N.M.
 USGS Red Lake SE Quadrangle, 7.5 Minute Series, 1955.
 1:24,000 ft



ENVIRONMENT

The project area will be situated on the rolling plain just west and southwest of Loco Hills, N.M. in an area characterized by mesquite and/or shin oak anchored hummocks and coppice dunes averaging 0.25 in height interspersed with deflated and denuded areas. The project area is near a portion of an old (dating from the early 20th Century) established and densely employed oil field, consequently, from 85 to 95 % of the project area is impacted. Drainage is accomplished mainly by sheetwash into low-lying areas that periodically hold standing water; the nearest main drainage Bear Grass Draw, is located within the project area and is severely impacted by established oilfield production. Cedar Lake, located east of Loco Hills, is the most prominent drainage and physical features of the area. Local soils are composed of those of the Kermit-Serino soil association, or sandy clays and loamy sands which are occasionally included with quartzite and gravels that are derived from the Ogallala formation, which has weathered from the Mescalero Pediment. Some of this material is suitable for chipped stone tool manufacture. Elevation in the project area is between 3540 and 3680 ft above sea level.

The environmental zone in which this project occurs, typical of the region as a whole, is one of the Lower

Sonoran Life Zone. The most common plant varieties in the region are mesquite (Prosopis juliflora), javalina bush (Condalia ericoides), broom snakeweed (Gutierrezia sarothrae), prickly-pear cactus (Opuntia sp.) and various grasses. Some of the common faunal types in area are mule deer (Odocoileus hemionus), pronghorn antelope (Antilocapra americana), jackrabbit (Lepus sp.), cottontail rabbit (Silvilagus sp.), coyote (Canis latrans), as well as other small mammals, birds and reptiles.

ARCHEOLOGICAL RESOURCES

On 11 November, 1993, Pecos Archeological Consultants performed a literature search to determine if any archeological sites had already been recorded in the vicinity of the project area. Current BLM files and the National Register of Historic Places were consulted in this endeavor. It was determined that two such previously-recorded sites were found to occur near the project area:

1. LA 21046 is located within the impact zone of this project and several others.
2. LA 56651 is located 100m from the project area.

Observed Archeological Manifestations:

Although no additional archeological remains were recorded during the course of the project the subject easement will traverse LA-21046. This area of the site is destroyed by previously-constructed easements.

LA 21045



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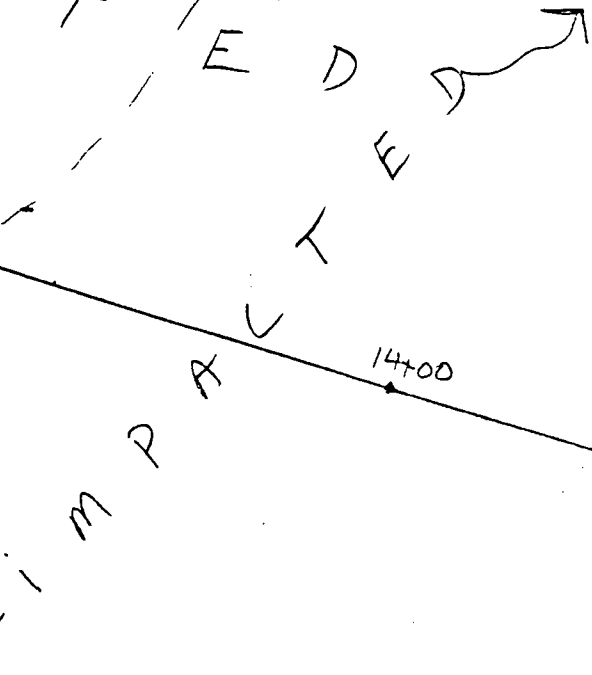
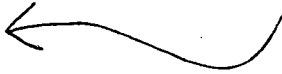
14+00

12+00

PROPOSED PIPELINE

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RECOMMENDATIONS

Due to the significant nature of the archeological remains in the impact zone, LA-21045, Pecos Archeological Consultants are recommending clearance for this project ONLY if additional impact to the site is avoided. This can be accomplished by restricting all construction equipment, vehicles, and personnel to the existing impacted area between Stations 12+00 and 14+00. Of course, final approval for this project and these recommendations must be granted by the appropriate government agency.

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB NO. 1004-0030
Expires: April 30, 1987

PROSPECTING APPLICATION AND PERMIT

1. What mineral are you applying for?
Sodium

2. Give legal description of land requested (See General Instruction for assistance on land description if needed)

SE/4 SW/4, SE/4
Section 22, T-17S, R-29E
containing 200 acres
E/2 NW/4, NE/4
Section 27, T-17S, R-29E
containing 240 acres
Eddy County, New Mexico

3. Legal description of land included in permit
APPLICANT DOES NOT FILL IN THIS SPACE

Land included in this permit is the same
as the land applied for.

RECEIVED
BUR. OF LAND MGMT.
N.M.S.O. SANTA FE
AUG 07 1989
AM 7:18 PM 10:11 12:12 2:13 4:15 6

Total acres 440	Rental submitted \$220.00	Total acres 440	Rental retained \$220.00
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4. Are the lands administered by a government agency? ☒ Yes ☐ No (If "yes," give name of agency)
Bureau of Land Management, Carlsbad District

5. Are you the sole party in interest? ☒ Yes ☐ No (See Specific Instruction No. 5)

6a. Are you a citizen of the United States? ☒ Yes ☐ No

b. Are you over the age of majority? ☒ Yes ☐ No

7a. Is application made for a corporation or other legal entity? ☒ Yes ☐ No (See Specific Instructions No. 7a and 7b)

b. Has a statement of qualification been filed? ☒ Yes ☐ No (If "yes," give file number)

8. Have you enclosed a filing fee
of \$ 25 ☒ Yes

9. Have you enclosed the first year's advance rental computed at the rate of
50 ¢ per acre? ☒ Yes (See Specific Instruction No. 9)

I CERTIFY That my interests, direct or indirect, in leases, permits, and applications therefor, do not exceed the maximum permitted by law or regulation; and that the statements made herein are true, complete, and correct to the best of my knowledge and belief and are made in good faith.

ATTEST:

Debra J. Rich
Secretary/Treasurer of Applicant

MARBOB ENERGY CORPORATION

Mark E. Chan
President (Signature of Applicant)

August 4, 1989
(Date)

(Attorney-in-fact)

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

DO NOT WRITE BELOW THIS LINE

PROSPECTING PERMIT

A permit for the lands in Item 3, above is hereby issued under the
☐ Mineral Leasing Act, 30 U.S.C. 181 *et seq.* ☐ Acquired Lands
Leasing Act, 30 U.S.C. 351 *et seq.* ☐ 43 CFR 3511 *et seq.* and is subject
to all regulations in force and to the terms and conditions set forth on

the reverse side hereof.

This permit, to the extent applicable, is subject to standard or special
stipulations. Stipulations if any, are attached.

THE UNITED STATES OF AMERICA

Effective date of permit APR 1 1990

By Clarence F. Houghton
(Signing Officer)

This permit is issued for a period of 2 years

Chief, Lands & Mining Unit

(Title)



United States Department of the Interior

BUREAU OF LAND MANAGEMENT NEW MEXICO STATE OFFICE

Post Office and Federal Building

P.O. Box 1449

Santa Fe, New Mexico 87504-1449

IN REPLY REFER TO:

NM NM 82804
3520 (943C-2amr)

MAR 19 1990

CERTIFIED—RETURN RECEIPT REQUESTED

NOTICE

Marbob Energy Corporation
P.O. Drawer 217
Artesia, NM 88211-0217

:
:
:
:
:

Sodium

Sodium Prospecting Permit Approved

Bond Accepted

Enclosed is sodium prospecting permit NM NM 82804 which is approved and is effective April 1, 1990.

The \$5000.00 bond executed on July 10, 1987, with Allied Mutual Bonding Company, as surety, and the agreement signed on March 6, 1990, whereby the surety agrees to be bond according to the terms and conditions of the existing bond are hereby approved on April 1, 1990.

Clarence F. Hougland
Chief, Lands and Mining Unit

Enclosure:

cc:

NM (060)

NM (067)

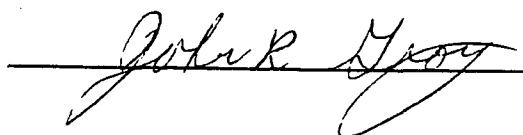
NM (921)

RECEIVED

JAN - 11 1990 January 24, 1990

SPECIAL SODIUM LEASE STIPULATIONS 12 AM 9 52

1. Prior to any surface disturbing activities, such as road construction or major maintenance efforts that would reasonably be expected to damage cultural resources on land previously undisturbed, a Class III cultural survey must be performed by a qualified archaeologist.
2. Clearing and blading of roads and pads will be held to a minimum as approved by the authorized office.
3. To prevent slacking of fence wire, the grantee will brace and tie-off each existing fence to be crossed, before cutting. During construction, the opening will be protected to prevent the escape of livestock. Fences which have been cut during construction will be restored by the grantee to a condition which is equal to, or better, than the original. Cattleguards and adjacent gates which are of a suitable width will also be installed in any fence where a road created during construction is to be regularly traveled.
4. Gates or cattleguards on public land will not be locked or closed to public use by the grantee.
5. Mud pits will be filled, the roads and pads will be ripped and reseeded. The surface allottee can request that a road be allowed to remain, if approved by the authorized officer.
6. Core test holes will be plugged to surface with cement.
7. A 4-inch pipe marker will be set in hole with 5 feet above ground. The location and permittee's name will be stamped on a disc and set on the marker pipe.
8. The permittee, prior to any construction, shall notify the grazing allottee or the surface owner in the case of private ownership. Permission to drill will be necessary in the case of private surface ownership. Abandonment stipulations will coincide with surface owner agreement.
9. Additional reasonable stipulations may be formulated at the time of application for specified locations.
10. Brine pits will be lined as per requirements of the State Oil Commission.



SPECIAL DRILLING STIPULATIONS

THE FOLLOWING DATA IS REQUIRED ON THE WELL SIGN

OPERATORS NAME Marbob Energy Corporation WELL NO. & NAME _____
 LOCATION 1850 F W L & 300 F S L SEC. 22 T. 17S., R. 29E.
 LEASE NO. NM NM 82804 COUNTY Eddy

The special stipulations check marked below are applicable to the above described well and approval of this application to drill is conditioned upon compliance with such stipulations in addition to the General Requirements. The permittee should be familiar with the General Requirements, a copy of which is available from a Bureau of Land Management office. EACH PERMITTEE HAS THE RIGHT OF ADMINISTRATIVE APPEAL TO THESE STIPULATIONS PURSUANT TO TITLE 43 CFR 3165.3 and 3165.4.

I. SPECIAL ENVIRONMENT REQUIREMENTS

- () Lesser Prairie Chicken (Stips attached) () Floodplain (Stips attached)
 () San Simon Swale (Stips attached) () Other _____

II. ON LEASE - SURFACE REQUIREMENTS PRIOR TO DRILLING

- () The BLM will monitor construction of this drill site. Notify the _____ Resource Area Office, BLM at least _____ working days prior to commencing construction at (505) _____.
 () Roads and the drill pad for this well must be surfaced with _____ inches of compacted _____.
 () All topsoil and vegetation encountered during the construction of the drill site area will be stockpiled and made available for resurfacing of the disturbed area after completion of the drilling operation. Topsoil on the subject location is approximately _____ inches in depth. Approximately _____ cubic yards of topsoil material will be stockpiled for reclamation.
 () Other _____

III. DRILLING OPERATIONS REQUIREMENTS [No Water Basin]

The Bureau of Land Management office is to be notified at (505) 887-6544, in sufficient time for a representative to witness:

- (✓) 1. Spudding (✓) 2. Cement casing 8 5/8 inch _____ inch _____ inch
 () 3. BOP tests () Other _____

IV. CASING

(✓) 8 5/8" surface casing should be set @ 350' or below potable surface water and cement circulated to the surface. If cement does not circulate to the surface, this BLM office will be notified and a temperature survey or cement bond log will be run to verify the top of the cement. Remedial cementing will be done prior to drilling out of that string.

- () ~~Minimum required fill of cement behind the _____ intermediate casing is to _____~~
 () ~~Minimum required fill of cement behind the _____ production casing is to _____~~

IF A BLM TECHNICIAN IS NOT AVAILABLE WHEN CEMENTING, AN ACOUSTIC CEMENT BOND LOG AND/OR A TEMPERATURE SURVEY LOG WILL BE RUN AS APPROPRIATE

RESERVE PIT CONSTRUCTION STANDARDS

The reserve pit will be constructed almost entirely in cut material and lined with 6 mill plastic.

The excavated material may be used for construction of the pad and access road as needed.

Reclamation: Reclamation of this type of deep pit will consist of pushing the pit walls into the pit when sufficiently dry to support track equipment. The pit liner is NOT TO BE RUPTURED to facilitate drying; a ten month period after completion of the well is allowed for drying of pit contents.

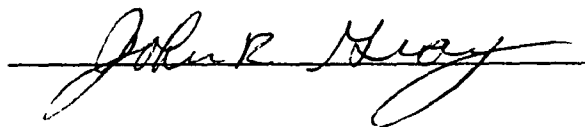
The pit area must be contoured to the natural terrain with all contaminated drilling mud buried with at least 3 feet of clean soil. The reclaimed area will then be seeded as specified in this permit.

Optional Pit Construction Standards

The reserve pit may be constructed in predominantly fill material if:

- 1) Lined as specified above and,
- 2) A borrow/caliche/gravel pit for road and pad surfacing is constructed immediately adjacent to the reserve pit and it is capable of containing all reserve pit contents.

Reclamation of the reserve pit will consist of bulldozing all reserve pit contents and contaminants into the borrow pit and covering with a minimum of 3 feet of clean soil material. The entire area must be recontoured, all trash removed, and reseeded as specified in this permit.



EXPLORATION PLAN
SODIUM PROSPECTING APPLICATION

MARBOB ENERGY CORPORATION
SODIUM EXPLORATION WELL
1850 FWL & 300 FSL SEC. 22-17S-29E
EDDY COUNTY, NEW MEXICO

This plan is submitted with the prospecting application and permit covering the following requested acreage:

SE1/4SW1/4, SE1/4
Sec. 22, T-17S, R-29E
E1/2NW1/4, NE1/4
Sec. 27, T-17S, R-29E
Eddy County, New Mexico

The purpose of the plan is to describe the location of the proposed exploration well, the proposed construction activities and operations plan, the magnitude of surface disturbance involved, and the procedures to be followed in rehabilitating the surface after completion of the operation so that a complete appraisal can be made of the environmental affects associated with the operation.

I. OPERATOR'S REPRESENTATIVE: Representatives responsible for assuring compliance with the approved Exploration Plan:

Mack C. Chase or John R. Gray
P. O. Drawer 217
Artesia, New Mexico 88211-0217
Phone (505) 748-3303

II. ENVIRONMENT

- A. Topography: The undisturbed wellsite is at an elevation of 3568.6 feet. The terrain of the area surrounding the location is relatively flat. Regional slope is to the southwest toward the Pecos River.
- B. Soil: Top soil at the wellsite is silty loam.
- C. Land Use & Type: The vicinity surrounding the drillsite is semiarid rangeland and its primary use is for production of oil and gas.
- D. Flora: Flora in the vicinity surrounding the drillsite is sparse. It consists primarily of javalina, saltbush, broomweed and mesquite.
- E. Fauna: No wildlife was observed, however fauna for this type of habitat normally consists of lizards, snakes, rabbits, rodents, coyotes, skunks, quail, dove, and other small birds.

- F. Ponds & Streams: None.
- G. Water Wells: The nearest known water well is over one mile to the south.
- H. Residences & Other Structures: There are no occupied dwellings within one (1) mile of the proposed drillsite.
- I. Archaeological, Historical & Cultural Sites: An archaeological survey has been conducted by Pecos Archeology Consultants and a formal report has been furnished directly to BLM for the adjacent oil well M. Dodd "A" No. 41.
- J. Well Site & Surrounding Area: An Exhibit "A" consisting of a map of the well site & surrounding area is attached.

III. EXPLORATION PLAN AND RESTORATION

- A. Existing Roads: A detailed map showing drillsite location in relation to existing roads and all existing roads within 3 miles of the wellsite are shown on Exhibits "A" & "B". From Artesia go approximately 20 miles east on Federal Highway US-82 9/10 of a mile beyond Mile Post 127. (This point is approximately 4.5 miles west of Loco Hills, New Mexico.) From this starting point, turn right (south) on paved road (County Road E-213) and proceed in a southerly direction for a distance of .3 miles. Next turn right and proceed south for a distance of .4 miles. Next turn right and proceed west for a distance of .3 miles. At this point turn left and proceed south to the existing oil & gas well M. Dodd "A" No. 41. The drillsite is to be located on the east side of the existing well pad. No new roads will be needed.
- B. CONSTRUCTION MATERIALS: No new construction materials will be needed. The existing well pad and pit for the M. Dodd "A" No. 41 well will be utilized.
- C. EXPLORATION EQUIPMENT & PLAN:
 - 1. A rotary drilling rig will be moved to the drillsite and drill to above the top of the salt section at approximately 350' subsurface. Surface casing of 8 5/8" will be run to 350' and cemented to the surface. The rig will then drill through the cement into the salt section at approximately 360'. If commercial production of sodium is found, 2" tubing will be utilized for production.
- D. WASTE DISPOSAL:
 - 1. Drill cuttings will be disposed of in the drilling pits.

2. Drilling fluids will be allowed to evaporate in the drilling pits until the pits are dry.
3. Water produced during tests will be disposed of in the pits.
4. Trash, waste paper, garbage, and junk will be buried in a trash pit and covered with a minimum of 24 inches of dirt. All waste material will be contained to prevent scattering by the wind.
5. All trash and debris will be buried or removed from the wellsite within 45 days after finishing each drilling and/or completion operation.

E. RESTORATION OF SURFACE:

1. After completion of drilling and/or completing operations, all equipment and other material not needed for operations will be removed. Pits will be filled and the location cleaned of all trash and junk to leave the wellsite in as aesthetically pleasing a condition as possible.
2. Any unguarded pits containing fluids will be fenced until they are filled.
3. After abandonment, all equipment, electric poles, trash and junk will be removed and the location cleaned. Any special rehabilitation and/or special revegetation requirements of the BLM will be complied with and accomplished as expeditiously as possible.

IV. PRODUCTION FACILITY: If sodium is found in commercial quantities, the existing pit will be expanded to a commercial storage size and properly lined. An electrical pump station will be constructed and two 500 barrel storage tanks will be installed. A salt water flow is expected but, if fresh water is needed for injection into the salt section, a line will be run from the existing commercial water line approximately 1/2 mile to the northwest.

MARBOB ENERGY CORPORATION

DATE

5/27/87

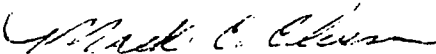
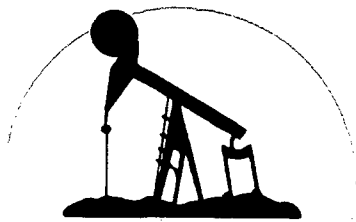

Mack C. Chase, President

EXHIBIT "A"
EXPLORATION PLAN
MARBOB ENERGY CORP.'S

Sec. 22, T17S, R29E, Eddy Co., NM

USGS RED LAKE SE QUADRANGLE
7.5 Minute Series, 1955



marbob
energy corporation

April 9, 2003

RECEIVED

APR 17 2003

OIL CONSERVATION
DIVISION

Oil Conservation Division
PO Box 6429
1220 S. St. Francis Drive
Santa Fe, NM 87504

Attn: Wayne Price

Re: Mary Dodd "A" BW #1
1850 FWL 300 FSL
Sec. 22-T17S-R29E
Eddy County, New Mexico

Wayne:

The following information is the production and injection volumes for the months of January 1, 2003 through March 31, 2003 on the above referenced well:

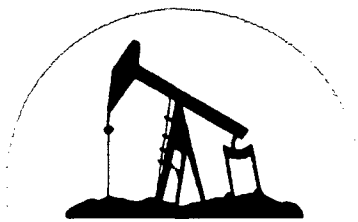
36,892 Bbls of brine water produced
20,038 Bbls of fresh water injected

If you have any questions or need additional information, please don't hesitate to contact me.

Sincerely,

Diana J. Cannon
Production Analyst

DJC/



marbob
energy corporation

October 6, 2004

RECEIVED

OCT 12 2004

CALIFORNIA

Oil Conservation Division
PO Box 6429
1220 S. St. Francis Drive
Santa Fe, NM 87504

Attn: Wayne Price

Re: Mary Dodd "A" BW #1
1850 FWL 300 FSL
Sec. 22-T17S-R29E
Eddy County, New Mexico

Wayne:

Following are the production and injection volumes for the months of July 1, 2004 through September 30, 2004 on the above referenced well:

38,127 Bbls of Brine Water Produced

24,111 Bbls of Fresh Water Injected

If you have any questions or require additional information, please don't hesitate to contact me.

Sincerely,

Diana J. Cannon
Production Analyst



marbob
energy corporation

July 8, 2004

RECEIVED

JUL 12 2004

OIL CONSERVATION
DIVISION

Oil Conservation Division
PO Box 6429
1220 S. St. Francis Drive
Santa Fe, NM 87504

Attn: Wayne Price

Re: Mary Dodd "A" BW #1
1850 FWL 300 FSL
Sec. 22-T17S-R29E
Eddy County, New Mexico

Wayne:

Following are the production and injection volumes for the months
of April 1, 2004 through June 30, 2004 on the above referenced well:

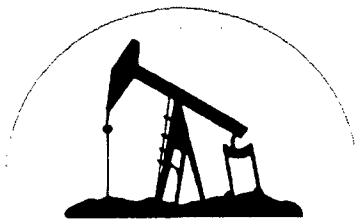
28,748 Bbls of Brine Water Produced

29,295 Bbls of Fresh Water Injected

If you have any questions or require additional information, please
don't hesitate to contact me.

Sincerely,

Diana J. Cannon
Production Analyst



marbob
energy corporation

August 23, 2004

RECEIVED

AUG 26 2004

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

OIL CONSERVATION
DIVISION

Attention: Mr. Wayne Price

Re: Marbob Dodd A Brine Well BW-029
SW/4 SW/4 Section 22-T17S-R29E
Eddy County, New Mexico

Dear Mr. Price:

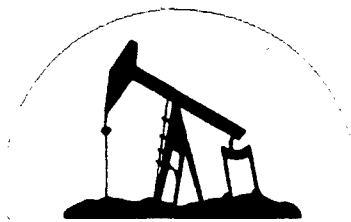
Enclosed is the Attachment to the Discharge Permit BW-029 Approval executed by Raye Miller on behalf of Marbob Energy Corporation. Also enclosed is Marbob Energy's check in the amount of \$1700.00 for the required flat fee.

Thank you for assistance with this matter. Please call should you need anything further.

Sincerely,

Melanie J. Parker
Land Department

/mp
Enclosures



marbob
energy corporation

RECEIVED

APR 19 2004

OIL CONSERVATION
DIVISION

April 15, 2004

Oil Conservation Division
PO Box 6429
1220 S. St. Francis Drive
Santa Fe, NM 87504

Attn: Wayne Price

Re: Mary Dodd "A" BW #1
1850 FWL 300 FSL
Sec. 22-T17S-R29E
Eddy County, New Mexico

Wayne:

Following are the production and injection volumes for the months
of January 1, 2004 through March 31, 2004 on the above referenced well:

34,896 Bbls of Brine Water produced

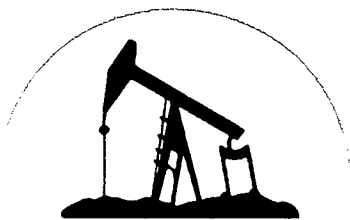
39,539 Bbls of Fresh Water injected

If you have any questions or need additional information, please
don't hesitate to contact me.

Sincerely,

Diana J. Cannon
Production Analyst

DJC/



marbob
energy corporation

January 7, 2004

Oil Conservation Division
PO Box 6429
1220 S. St. Francis Drive
Santa Fe, NM 87504

Attn: Wayne Price

Re: Mary Dodd "A" BW #1
1850 FWL 300 FSL
Sec. 22-T17S-R29E
Eddy County, New Mexico

RECEIVED

JAN 9 2004

Oil Conservation Division
1220 S. St. Francis Drive
Santa Fe, NM 87505

Wayne:

The following information is the production and injection volumes for the months of October 1, 2003 through December 31, 2003 on the above referenced well:

*62,505 Bbls of brine water produced
9,755 Bbls of fresh water injected*

If you have any questions or need additional information, please don't hesitate to contact me.

Sincerely,

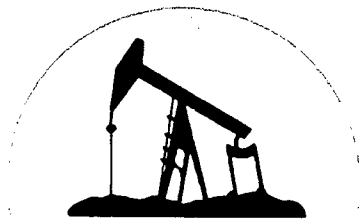
Diana J. Cannon
Production Analyst

DJC/

RECEIVED

OCT 14 2003

OIL CONSERVATION
DIVISION



marbob
energy corporation

October 8, 2003

Oil Conservation Division
PO Box 6429
1220 S. St. Francis Drive
Santa Fe, NM 87504

Attn: Wayne Price

Re: Mary Dodd "A" BW #1
1850 FWL 300 FSL
Sec. 22-T17S-R29E
Eddy County, New Mexico

Wayne:

The following information is the production and injection volumes for the months of April 1, 2003 through June 30, 2003 on the above referenced well:

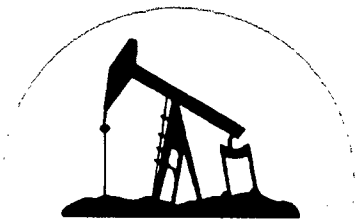
*79,413 Bbls of brine water produced
22,650 Bbls of fresh water injected*

If you have any questions or need additional information, please don't hesitate to contact me.

Sincerely,

Diana J. Cannon
Production Analyst

DJC/



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JUL 18 2003

OIL CONSERVATION
DIVISION

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energy corporation

July 3, 2003

Oil Conservation Division
PO Box 6429
1220 S. St. Francis Drive
Santa Fe, NM 87504

Attn: Wayne Price

Re: Mary Dodd "A" BW #1
1850 FWL 300 FSL
Sec. 22-T17S-R29E
Eddy County, New Mexico

Wayne:

The following information is the production and injection volumes for the months of April 1, 2003 through June 30, 2003 on the above referenced well:

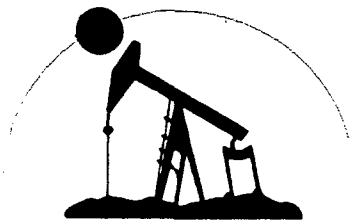
86,873 Bbls of brine water produced
72,049 Bbls of fresh water injected

If you have any questions or need additional information, please don't hesitate to contact me.

Sincerely,

Diana J. Cannon
Production Analyst

DJC/



marbob
energy corporation

October 10, 2002

*Oil Conservation Division
PO Box 6429
1220 S. St. Francis Drive
Santa Fe, NM 87504*

Attn: Wayne Price

*Re: Mary Dodd "A" BW #1
1850 FWL 300 FSL
Sec. 22-T17S-R29E
Eddy County, New Mexico*

Dear Mr. Price:

*The following information is the production and injection volumes
for the months of July 1, 2002 through September 30, 2002 on the above
referenced well:*

*29,616 Bbls of brine water produced
13,443 Bbls of fresh water injected*

*If you have any questions or need additional information, please
don't hesitate to contact me.*

Sincerely,

*Diana J. Cannon
Production Analyst*

DJC/



marbob
energy corporation

April 5, 2002

*Oil Conservation Division
PO Box 6429
1220 S. St. Francis Drive
Santa Fe, NM 87504*

Attn: Wayne Price

*Re: Mary Dodd "A" BW #1
1850 FWL 300 FSL
Sec. 22-T17S-R29E
Eddy County, New Mexico*

Dear Mr. Price:

*The following information is the production and injection volumes
for the months of January 1, 2002 through March 31, 2001 on the above
referenced well:*

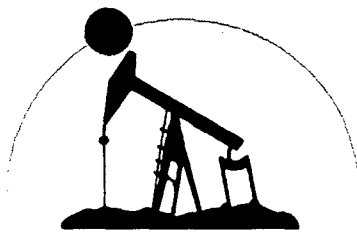
*6,489 Bbls of brine water produced
6,543 Bbls of fresh water injected*

*If you have any questions or need additional information, please
don't hesitate to contact me.*

Sincerely,

*Diana J. Cannon
Production Analyst*

DJC/



marbob
energy corporation

January 21, 2002

*Oil Conservation Division
PO Box 6429
1220 S. St. Francis Drive
Santa Fe, NM 87504*

Attn: Wayne Price

*Re: Mary Dodd "A" BW #1
1850 FWL 300 FSL
Sec. 22-T17S-R29E
Eddy County, New Mexico*

Dear Mr. Price:

*The following information is the production and injection volumes
for the months of October 1, 2001 through December 31, 2001 on the above
referenced well:*

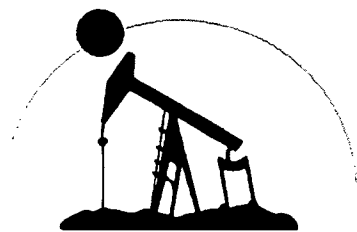
*22,304 Bbls of brine water produced
27,154 Bbls of fresh water injected*

*If you have any questions or need additional information, please
don't hesitate to contact me.*

Sincerely,

*Diana J. Cannon
Production Analyst*

DJC/



marbob
energy corporation

October 25, 2001

Oil Conservation Division
PO Box 6429
1220 S. St. Francis Dr.
Santa Fe, New Mexico 87504

Attention: Wayne Price

RE: M. Dodd "A" BW #1
1850' FWL 300' FSL
Sec 22-T17S-R29E
Eddy County, New Mexico

Dear Mr. Price:

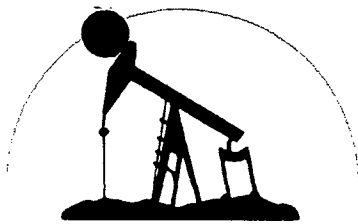
The following information is the Production/Injection Volumes for
July 1, 2001 through September 30, 2001 for the above stated well.

22,592 – bbls of brine produced
23,004 – bbls of fresh water injected

If you have any questions or need any further information, please
feel free to contact me.

Sincerely,

Diana J. Cannon
Production Analyst



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energy corporation

July 10, 2002

RECEIVED
JUL 12 2002
Environmental Bureau
Oil Conservation Division

Oil Conservation Division
PO Box 6429
1220 S. St. Francis Drive
Santa Fe, NM 87504

Attn: Wayne Price

Re: Mary Dodd "A" BW #1
1850 FWL 300 FSL
Sec. 22-T17S-R29E
Eddy County, New Mexico

Dear Mr. Price:

The following information is the production and injection volumes for the months of April 1, 2002 through June 30, 2002 on the above referenced well:

28,777 Bbls of brine water produced
17,319 Bbls of fresh water injected

If you have any questions or need additional information, please don't hesitate to contact me.

Sincerely,

Diana J. Cannon
Production Analyst

DJC/



marbob
energy corporation

January 3, 2003

Oil Conservation Division
PO Box 6429
1220 S. St. Francis Drive
Santa Fe, NM 87504

Attn: Wayne Price

Re: Mary Dodd "A" BW #1
1850 FWL 300 FSL
Sec. 22-T17S-R29E
Eddy County, New Mexico

Dear Mr. Price:

The following information is the production and injection volumes for the months of October 1, 2002 through December 31, 2002 on the above referenced well:

28,908 Bbls of brine water produced
24,264 Bbls of fresh water injected

If you have any questions or need additional information, please don't hesitate to contact me.

Sincerely,

Diana J. Cannon
Production Analyst

DJC/



marbob
energy corporation

July 23, 2001

Oil Conservation Division
2040 S. Pacheco
Santa Fe, New Mexico 87504

Attention: Wayne Price

RE: M. Dodd "A" BW #1
1850' FWL 300' FSL
Sec 22-T17S-R29E
Eddy County, New Mexico

Dear Mr. Price:

The following information is the Production/Injection Volumes for April 1, 2001 through June 30, 2001 for the above stated well.

33694– bbls of brine produced
33047 – bbls of fresh water injected

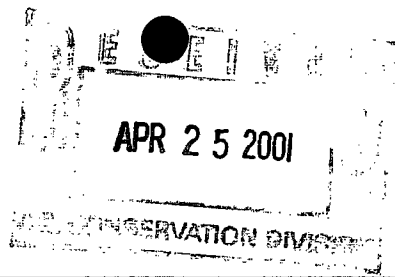
If you have any questions or need any further information, please feel free to contact me.

Sincerely,

Diana J. Cannon
Production Analyst



marbob
energy corporation



April 23, 2001

Oil Conservation Division
2040 S. Pacheco
Santa Fe, New Mexico 87504

Attention: Wayne Price

RE: M. Dodd "A" BW #1
1850' FWL 300' FSL
Sec 22-T17S-R29E
Eddy County, New Mexico

Dear Mr. Price:

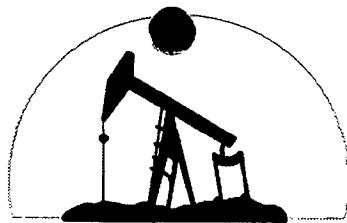
The following information is the Production/Injection Volumes for January 1, 2001 through March 31, 2001 for the above stated well.

40136– bbls of brine produced
39233 – bbls of fresh water injected

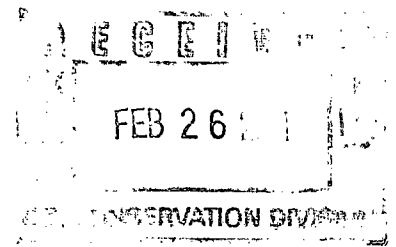
If you have any questions or need any further information, please feel free to contact me.

Sincerely,

Robin Cockrum
Production Analyst



marbob
energy corporation



February 22 ,2000

Oil Conservation Division
2040 S. Pacheco
Santa Fe, New Mexico 87504

Attention: Wayne Price

RE: M. Dodd "A" BW #1
1850' FWL 300' FSL
Sec 22-T17S-R29E
Eddy County, New Mexico

Dear Mr. Price:

The following information is the Production/Injection Volumes for October 1, 2000 through December 31, 2000 for the above stated well.

34289- bbls of brine produced
32277 - bbls of fresh water injected

If you have any questions or need any further information, please feel free to contact me.

Sincerely,

Robin Cockrum

Robin Cockrum
Production Analyst



marbob
energy corporation

NOV - 3 2000

October 30, 2000

Oil Conservation Division
2040 S. Pacheco
Santa Fe, New Mexico 87504

Attention: Wayne Price

RE: M. Dodd "A" BW #1
1850' FWL 300' FSL
Sec 22-T17S-R29E
Eddy County, New Mexico

Dear Mr. Price:

The following information is the Production/Injection Volumes for July 1, 2000 through September 30, 2000 for the above stated well.

50833- bbls of brine produced
52714 - bbls of fresh water injected

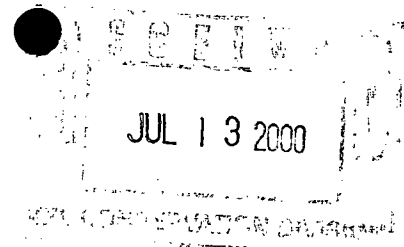
If you have any questions or need any further information, please feel free to contact me.

Sincerely,

Robin Cockrum
Production Analyst



marbob
energy corporation



July 11, 2000

Oil Conservation Division
2040 S. Pacheco
Santa Fe, New Mexico 87504

Attention: Wayne Price

RE: M. Dodd "A" BW #1
1850' FWL 300' FSL
Sec 22-T17S-R29E
Eddy County, New Mexico

Dear Mr. Price:

The following information is the Production/Injection Volumes for April 1, 2000 through June 30, 2000 for the above stated well.

35934– bbls of brine produced
36129 – bbls of fresh water injected

If you have any questions or need any further information, please feel free to contact me.

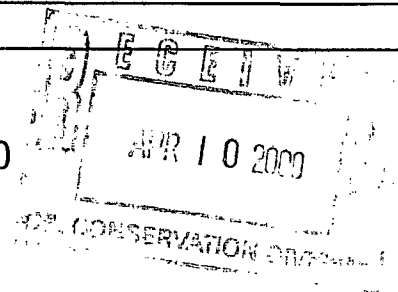
Sincerely,

Robin Cockrum
Production Analyst



marbob
energy corporation

April 6, 2000



Oil Conservation Division
2040 S. Pacheco
Santa Fe, New Mexico 87504

Attention: Wayne Price

RE: M. Dodd "A" BW #1
1850' FWL 300' FSL
Sec 22-T17S-R29E
Eddy County, New Mexico

Dear Mr. Price:

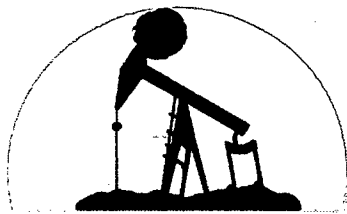
The following information is the Production/Injection Volumes for January 1, 2000 through March 31, 2000 for the above stated well.

10415 – bbls of brine produced
10364 – bbls of fresh water injected

If you have any questions or need any further information, please feel free to contact me.

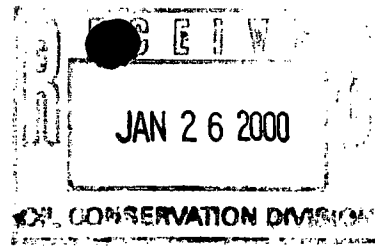
Sincerely,

Robin Cockrum
Production Analyst



marbob

energy corporation



January 24, 2000

Oil Conservation Division
2040 S. Pacheco
Santa Fe, New Mexico 87504

Attention: Wayne Price

RE: M. Dodd "A" BW #1
1850' FWL 300' FSL
Sec 22-T17S-R29E
Eddy County, New Mexico

Dear Mr. Price:

The following information is the Production/Injection Volumes for October 1, 1999 through December 31, 1999 for the above stated well.

34478 – bbls of brine produced
35619 – bbls of fresh water injected

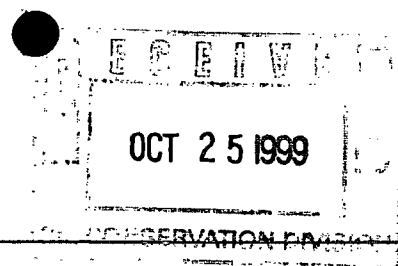
If you have any questions or need any further information, please feel free to contact me.

Sincerely,

Robin Cockrum
Production Analyst



marbob
energy corporation



October 22, 1999

Oil Conservation Division
2040 S. Pacheco
Santa Fe, New Mexico 87504

Attention: Wayne Price

RE: M. Dodd "A" BW #1
1850' FWL 300' FSL
Sec 22-T17S-R29E
Eddy County, New Mexico

Dear Mr. Price:

The following information is the Production/Injection Volumes for May 21, 1999 through September 30, 1999 for the above stated well.

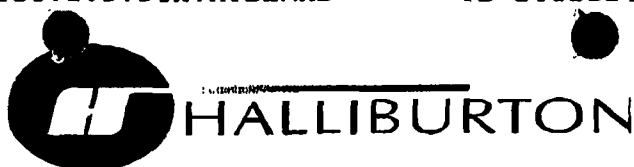
36421 – bbls of brine produced
35128 – bbls of fresh water injected

I have enclosed a copy of the Analysis ran by Halliburton. If you have any questions or need any further information, please feel free to contact me.

Sincerely,

Robin Cockrum
Production Analyst

Encl



CENTRAL OPERATIONS LABORATORY
WATER ANALYSIS REPORT
HOBBS, NEW MEXICO

COMPANY Marbob

Fax: 1-505-746-2523

REPORT W99-138
DATE October 21, 1999
DISTRICT Artesia

SUBMITTED BY

WELL Dodd "A" Brine Station DEPTH FORMATION
COUNTY Eddy, NM FIELD SOURCE

SAMPLE	# 1		# 2			
Sample Temp.	71	°F	71	°F		°F
RESISTIVITY	0.052		10.81			
SPECIFIC GR.	1.175		1.010			
pH	7.12		8.35			
CALCIUM	1,350	mpl	35	mpl	mpl	mpl
MAGNESIUM	1,020	mpl	15	mpl	mpl	mpl
CHLORIDE	187,345	mpl	311	mpl	mpl	mpl
SULFATES	1,800	mpl	50	mpl	mpl	mpl
BICARBONATES	67	mpl	55	mpl	mpl	mpl
SOLUBLE IRON	0	mpl	0	mpl	mpl	mpl
Sodium	118921	mpl	178	mpl	0	mpl
TDS	310,503	mpl	644	mpl	0	mpl
OIL GRAVITY	@	°F	@	°F	@	°F

REMARKS

Resitivity measured in: Ohm/m2/m

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 concern and employees thereof receiving such report from Halliburton Co.

ANALYST:



STEEL FRESH WATER TANK AND BRINE WELL BW-029 LOCATED ON THE
SOUTHEAST CORNER OF LOCATION.

RECEIVED

JUL 01 1999

Environmental Bureau
Oil Conservation Division



ST HALF OF LOCATION WITH BRINE STORAGE TANKS ALONG WEST
TAKEN FROM BERM ON THE EASTSIDE

RECEIVED

APR 1 1999

Environmental Bureau
Oil Conservation Division



ENTIRE LOCATION; TAKEN FROM THE NORTH SIDE

RECEIVED

Environmental Bureau
Oil Conservation Division



FIBERGLASS BRINE WATER STORAGE TANKS LOCATED ON WESTSIDE OFF
LOCATION

RECEIVED

JUL 01 1999

Environmental Bureau
Oil Conservation Division



EAST HALF OF LOCATION WITH FRESH WATER TANK IN SOUTHEAST CORNER;
TAKEN FROM ATOP OF BRINE STORAGE TANKS ON WESTSIDE

RECEIVED

JUL 01 1999

Environmental Bureau
Oil Conservation Division