



marbob
energy corporation

WFX 10/29/98
743

October 6, 1998

Lori Wrotenbery, Director
Oil Conservation Division
2040 South Pacheco Street
Santa Fe, New Mexico 87505

OCT 14 1998

AOR
TOTAL 54
P&A 3
REPAIR 0

Attention: Mr. Ben Stone

Dear Mr. Stone:

Marbob Energy Corporation respectfully requests an administrative approval without hearing of an expansion of the Burch Keely Waterflood pursuant to Order No. R-7900-A of the New Mexico Oil Conservation Division. The area of expansion is described below:

Township 17 South, Range 30 East, N.M.P.M.

Section 19: S/2SW/4

Section 30: NW/4NW/4; NW/4NE/4

The SW/4SW/4 of Section 19 and the NW/4 of Section 30 is included in the original Waterflood Order. The proposed expansion is necessary for the Burch Keely Unit to obtain maximum hydrocarbon production and to minimize waste over the life of the field.

Attached to this application are all of the necessary exhibits defining and supporting this request. All offset operators have been notified along with the surface owner and grazing lessee. Notice of the proposed waterflood expansion has also been published in the Artesia Daily Press.

Thank you very much for your help in this matter. Should you have any further questions or require any additional information, please contact myself or Raye Miller.

Sincerely,

Martin Joyce
Geologist

MJ/mm

**BEFORE THE NEW MEXICO OIL CONSERVATION DIVISION
APPLICATION FOR ADMINISTRATIVE APPROVAL
MARBOB ENERGY CORPORATION
FOR CONVERSION TO WATER INJECTION FOR WATER FLOODING
THE
BURCH KEELY FEDERAL UNIT EXPANSION PROJECT**

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ABOVE THIS LINE FOR DIVISION USE ONLY

NEW MEXICO OIL CONSERVATION DIVISION
- Engineering Bureau -

ADMINISTRATIVE APPLICATION COVER SHEET

THIS COVERSHEET IS MANDATORY FOR ALL ADMINISTRATIVE APPLICATIONS FOR EXCEPTIONS TO DIVISION RULES AND REGULATIONS

Application Acronyms:

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

- [1] **TYPE OF APPLICATION - Check Those Which Apply for [A]**
- [A] Location - Spacing Unit - Directional Drilling
 NSL NSP DD SD
- Check One Only for [B] and [C]
- [B] Commingling - Storage - Measurement
 DHC CTB PLC PC OLS OLM
- [C] ~~Injection~~ - Disposal - Pressure Increase - Enhanced Oil Recovery
 WFX PMX SWD IPI EOR PPR
- [2] **NOTIFICATION REQUIRED TO: - Check Those Which Apply, or Does Not Apply**
- [A] Working, Royalty or Overriding Royalty Interest Owners
- [B] Offset Operators, Leaseholders or Surface Owner
- [C] Application is One Which Requires Published Legal Notice
- [D] Notification and/or Concurrent Approval by BLM or SLO
U.S. Bureau of Land Management - Commissioner of Public Lands, State Land Office
- [E] For all of the above, Proof of Notification or Publication is Attached, and/or,
- [F] Waivers are Attached

[3] **INFORMATION / DATA SUBMITTED IS COMPLETE - Statement of Understanding**

I hereby certify that I, or personnel under my supervision, have read and complied with all applicable Rules and Regulations of the Oil Conservation Division. Further, I assert that the attached application for administrative approval is accurate and complete to the best of my knowledge and where applicable, verify that all interest (WI, RI, ORRI) is common. I understand that any omission of data (including API numbers, pool codes, etc.), pertinent information and any required notification is cause to have the application package returned with no action taken.

Note: Statement must be completed by an individual with supervisory capacity.

Martin K. Sorce
Print or Type Name

Martin K. Sorce
Signature

Geologist
Title

7/25/08
Date

APPLICATION FOR AUTHORIZATION TO INJECT

I. Purpose: Secondary Recovery Pressure Maintenance Disposal Storage
Application qualifies for administrative approval? yes no

II. Operator: Marbob Energy Corporation

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

Contact party: Martin Joyce Phone: 505/748-3303

III. Well data: Complete the data required on the reverse side of this form for each well proposed for injection. Additional sheets may be attached if necessary.

IV. Is this an expansion of an existing project? yes no
If yes, give the Division order number authorizing the project R-7900-A

V. Attach a map that identifies all wells and leases within two miles of any proposed injection well with a one-half mile radius circle drawn around each proposed injection well. This circle identifies the well's area of review.

* VI. Attach a tabulation of data on all wells of public record within the area of review which penetrate the proposed injection zone. Such data shall include a description of each well's type, construction, date drilled, location, depth, record of completion, and a schematic of any plugged well illustrating all plugging detail.

VII. Attach data on the proposed operation, including:

1. Proposed average and maximum daily rate and volume of fluids to be injected;
2. Whether the system is open or closed;
3. Proposed average and maximum injection pressure;
4. Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water; and
5. If injection is for disposal purposes into a zone not productive of oil or gas at or within one mile of the proposed well, attach a chemical analysis of the disposal zone formation water (may be measured or inferred from existing literature, studies, nearby wells, etc.).

*VIII. Attach appropriate geological data on the injection zone including appropriate lithologic detail, geological name, thickness, and depth. Give the geologic name, and depth to bottom of all underground sources of drinking water (aquifers containing waters with total dissolved solids concentrations of 10,000 mg/l or less) overlying the proposed injection zone as well as any such source known to be immediately underlying the injection interval.

IX. Describe the proposed stimulation program, if any.

* X. Attach appropriate logging and test data on the well. (If well logs have been filed with the Division they need not be resubmitted.)

* XI. Attach a chemical analysis of fresh water from two or more fresh water wells (if available and producing) within one mile of any injection or disposal well showing location of wells and dates samples were taken.

XII. Applicants for disposal wells must make an affirmative statement that they have examined available geologic and engineering data and find no evidence of open faults or any other hydrologic connection between the disposal zone and any underground source of drinking water.

XIII. Applicants must complete the "Proof of Notice" section on the reverse side of this form.

XIV. Certification

I hereby certify that the information submitted with this application is true and correct to the best of my knowledge and belief.

Name: Martin Joyce Title: Geologist

Signature: Martin Joyce Date: 10/9/88

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

III. WELL DATA

A. The following well data must be submitted for each injection well covered by this application. The data must be both in tabular and schematic form and shall include:

- (1) Lease name; Well No.; location by Section, Township, and Range; and footage location within the section.
- (2) Each casing string used with its size, setting depth, sacks of cement used, hole size, top of cement, and how such top was determined.
- (3) A description of the tubing to be used including its size, lining material, and setting depth.
- (4) The name, model, and setting depth of the packer used or a description of any other seal system or assembly used.

Division District offices have supplies of Well Data Sheets which may be used or which may be used as models for this purpose. Applicants for several identical wells may submit a "typical data sheet" rather than submitting the data for each well.

B. The following must be submitted for each injection well covered by this application. All items must be addressed for the initial well. Responses for additional wells need be shown only when different. Information shown on schematics need not be repeated.

- (1) The name of the injection formation and, if applicable, the field or pool name.
- (2) The injection interval and whether it is perforated or open-hole.
- (3) State if the well was drilled for injection or, if not, the original purpose of the well.
- (4) Give the depths of any other perforated intervals and detail on the sacks of cement or bridge plugs used to seal off such perforations.
- (5) Give the depth to and name of the next higher and next lower oil or gas zone in the area of the well, if any.

XIV. PROOF OF NOTICE

All applicants must furnish proof that a copy of the application has been furnished, by certified or registered mail, to the owner of the surface of the land on which the well is to be located and to each leasehold operator within one-half mile of the well location.

Where an application is subject to administrative approval, a proof of publication must be submitted. Such proof shall consist of a copy of the legal advertisement which was published in the county in which the well is located. The contents of such advertisement must include:

- (1) The name, address, phone number, and contact party for the applicant;
- (2) the intended purpose of the injection well; with the exact location of single wells or the section, township, and range location of multiple wells;
- (3) the formation name and depth with expected maximum injection rates and pressures; and
- (4) a notation that interested parties must file objections or requests for hearing with the Oil Conservation Division, P. O. Box 2088, Santa Fe, New Mexico 87501 within 15 days.

NO ACTION WILL BE TAKEN ON THE APPLICATION UNTIL PROPER PROOF OF NOTICE HAS BEEN SUBMITTED.

NOTICE: Surface owners or offset operators must file any objections or requests for hearing of administrative applications within 15 days from the date this application was mailed to them.

APPLICATION FOR AUTHORIZATION TO INJECT

MARBOB ENERGY CORPORATION

Proposed Injectors: **Burch Keely Unit No. 104**
 Burch Keely Unit No. 142
 Burch Keely Unit No. 146

III. WELL DATA (existing)

A. See Injection Well Data Sheet

All proposed injectors will be equipped with 2-3/8", 4.7 lb/ft., plastic lined tubing with a Halliburton R-4 or AD-1 plastic coated packer set approximately 50' above the top perforation.

B. Reservoir Data

- 1. Injection Formation: Grayburg and San Andres (Grayburg-Jackson Field)**
- 2. Proposed Injection Intervals: See Table of Injection Wells**
- 3. Original purpose of 3 proposed injectors: Grayburg and San Andres production**
- 4. Other perforated intervals in 3 proposed injectors: Yeso/Paddock**
- 5. Productive Zones:**

Next Higher: Seven Rivers @ \pm 1500' & Queen @ \pm 1800'
Next Lower: Yeso/Paddock @ \pm 4300'

VII. PROPOSED INJECTION OPERATIONS

- 1. Injection Rate: Average = 250 bwpd/well**
Proposed maximum injection rate: 900 psi
- 2. Injection System: Closed**

3. *Injection Pressure: Average = 900 psi*

As per Unit Agreement

| <u>Well</u> | <u>Proposed Max Surf Inj Pressure</u> |
|---------------------------------|---------------------------------------|
| <i>Burch Keely Unit No. 104</i> | <i>900 psi</i> |
| <i>Burch Keely Unit No. 142</i> | <i>900 psi</i> |
| <i>Burch Keely Unit No. 146</i> | <i>900 psi</i> |

4. *Injection Fluid: Produced water from the Burch Keely Unit.*

Make-up water will be purchased from the City of Carlsbad if needed.

VIII. GEOLOGIC DATA

A. Injection Zone

- 1. Name: Grayburg and San Andres*
- 2. Lithology: Dolomite w/ anhydrite cement and fine-grained sandstone w/ anhydrite and dolomite cement*
- 3. Thickness: ± 600'*
- 4. Depth: ± 2950' - ± 3550'*

B. Water Compatibility: Previously filed with the Division

C. Fresh Water Aquifers: None known in this area

IX. PROPOSED STIMULATION PROGRAM

The Grayburg and San Andres formations will be treated with a solution of 15% NEFE HCl acid and an aromatic solvent. The volume of each treatment will be approximately 75 gallons per foot of pay.

X. LOGGING DATA

Logs for these wells have been filed with the Division

XI. FRESH WATER ANALYSIS

No fresh water wells produce within one mile of any of the 3 proposed injectors.

XIII. PROOF OF NOTICE

A copy of this application has been furnished to the land owner of the land on which the three proposed water injection wells are located and the leasehold operators within the Area of Review. Also, a notice has been published in the Artesia Daily Press, Artesia, New Mexico.

BURCH KEELY WATERFLOOD Proposed Injection Wells

(Attachment C-108 III)

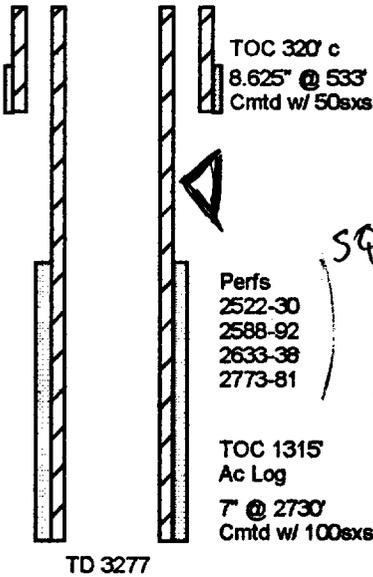
| LEASE | WELL# | LOCATION | TD PBTD | TYPE & DAT DRILLED | HOLE SIZE | CASING SZ & WT | SETTING DEPTH | SX CMT | TOC | PACKER DEPTH | PERFS |
|--|-------|-----------------------------------|----------------|-----------------------|--------------------------------------|---------------------------------------|---------------------|------------------|---------------------------------|-----------------|------------------------|
| BKU 30-015-04210 Prop. Injection | 104 | 330 FSL 1650 FWL 19-17S-30E | 3277 (3272) | OIL 06-02-41 | 11 ? 8 1/4 ? | 8 1/4 @ 24# 7 @ 20# | 533' 2730' | 50 100 | 320' c 1315' AC Log | + 2700 | 2522-2592 Open Hole |
| BKU 30-015-04388 Prop. Injection | 142 | 660 FNL 660 FWL 30-17S-30E | 4900 (4837) | OIL 02-15-44 | Cbl Tool 12 1/4 8 1/4 6 1/4 | 8 5/8 @ 24# 7 @ 20# 5 1/2 @ 17# | 502 2891 4900 | 50 100 225 | 340' c 1874' c 1650' temp | + 2950 | 4478-4744 |
| BKU 30-015-04394 Prop. Injection | 146 | 660 FNL 1980 FEL 30-17S-30E | 3320 (3295) | OIL 05-29-44 | Cbl Tool 11 ? NR 8 1/4 ? NR | 8 5/8 @ 24# 7 @ 20# | 535 2682 | 50 100 | 295' ? c 1685' ? c | + 2650 | Open Hole |

| | | | | |
|---------------------------|------------------------|------------------|--------------|-------|
| OPERATOR | | LEASE | | |
| Marbob Energy Corporation | | Burch Keely Unit | 30-015-04210 | |
| WELL NO. | FOOTAGE LOCATION | SECTION | TOWNSHIP | RANGE |
| 104 | 330' FSL and 1650' FWL | 19 | 17S | 30E |

Schematic

Tabular Data

BKU 104



Surface Casing

Size 8 5/8 " Cemented with 50 sx.
 TOC 320 feet determined by calculation
 Hole size 10"

Intermediate Casing

Size 7 " Cemented with 100 sx.
 TOC 1315 feet determined by Acoustic Log
 Hole size 6 1/4" (reported) (used 8 1/4" for calculation)

Long string

Size _____ " Cemented with _____ sx.
 TOC _____ feet determined by _____
 Hole size _____ "
 Total depth 3277 (PBD 3272)

Injection interval

+ 2700 feet to 3272 (OH) feet
 (perforated or open-hole, indicate which)

SQ2

Perfs
 2522-30
 2588-92
 2633-38
 2773-81

TOC 1315'
 Ac Log
 T @ 2730'
 Cmt'd w/ 100sxs

TD 3277

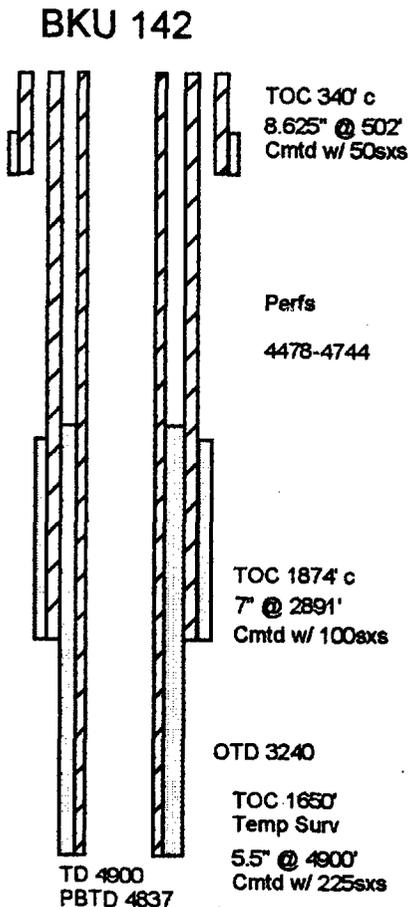
2890
3440

Tubing size 2 3/8" lined with plastic set in a
 (material)
Halliburton R-4 packer at + 2940 feet
 (brand and model)
 (or describe any other casing-tubing seal).

Other Data

- Name of the injection formation Grayburg & San Andres
- Name of Field or Pool (if applicable) Grayburg Jackson
- Is this a new well drilled for injection? Yes No
 If no, for what purpose was the well originally drilled? Oil & Gas Production
- Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail (sacks of cement or bridge plug(s) used) Propose to attempt to clean out and deepen hole to 3500! Will set 5 1/2" casing to TD and cement w/ 225 sx. Perfed intervals 2522-30, 2588-92, 2633-38, 2773-81.
- Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area. Grayburg - + 2410
Yeso/Paddock - 4400'

| OPERATOR | | LEASE | | |
|---------------------------|-----------------------|------------------|--------------|-------|
| Marbob Energy Corporation | | Burch Keely Unit | 30-015-04388 | |
| WELL NO. | FOOTAGE LOCATION | SECTION | TOWNSHIP | RANGE |
| 142 | 660' FNL and 660' FWL | 30 | 17S | 30E |

SchematicTabular DataSurface CasingSize 8 5/8 " Cemented with 50 sx.TOC 340 feet determined by calculationHole size 12 1/4"Intermediate CasingSize 7 " Cemented with 100 sx.TOC 1874 feet determined by calculationHole size 8 1/4"Long stringSize 5 1/2 " Cemented with 225 sx.TOC 1650 feet determined by Temperature SurveyHole size 7 7/8"Total depth 4900 (PBD 4837)Injection interval± 2950 feet to 3550 feet
(perforated or open-hole, indicate which)

Tubing size 2 3/8 lined with plastic set in a
(material)
Halliburton packer at + 2975 feet
(brand and model)

(or describe any other casing-tubing seal).

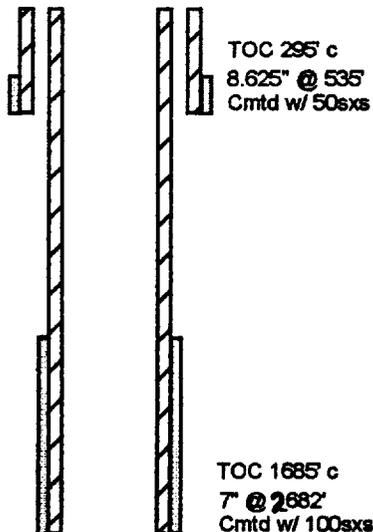
Other Data

- Name of the injection formation Grayburg and San Andres
- Name of Field or Pool (if applicable) Grayburg Jackson
- Is this a new well drilled for injection? Yes No
If no, for what purpose was the well originally drilled? Oil & Gas
- Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail (sacks of cement or bridge plug(s) used) Perfed 2392-2812
through 7", ran 5.5" casing to 4900' and cemented w/ 225 sx. TOC @ 1650'
by temperature survey.
- Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area. Lovington - 2930
Yeso/Paddock - 4400

| OPERATOR | | LEASE | | |
|---------------------------|------------------------|------------------|----------|--------------|
| Marbob Energy Corporation | | Burch Keely Unit | | 30-015-04394 |
| WELL NO. | FOOTAGE LOCATION | SECTION | TOWNSHIP | RANGE |
| 146 | 660' FNL and 1980' FEL | 30 | 17S | 30E |

SchematicTabular Data

BKU 146



TD 3320
PBTD 3295
Junk on BTM

Surface Casing

Size 8 5/8 " Cemented with 50 sx.

TOC 295 feet determined by calculation

Hole size 11" (Not reported)

Intermediate Casing

Size 7 " Cemented with 100 sx.

TOC 1685 feet determined by calculation

Hole size 8 1/4" ? (Not reported)

Long string

Size _____ " Cemented with _____ sx.

TOC _____ feet determined by _____

Hole size _____

Total depth 3320 (PBTD 3295)

Injection interval

+ 2650 feet to 3295 feet
(perforated or open-hole, indicate which)

Tubing size 2 3/8" lined with plastic set in a
(material)
Halliburton R-4 packer at +3045 feet
(brand and model)

(or describe any other casing-tubing seal).

Other Data

- Name of the injection formation Grayburg & San Andres
- Name of field or Pool (if applicable) Grayburg Jackson
- Is this a new well drilled for injection? Yes No
If no, for what purpose was the well originally drilled? _____

4. Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail (sacks of cement or bridge plug(s) used) No. Propose to attempt
to clean out and deepen hole to 3600'. Will set 5 1/2" casing to TD
and cement w/ 225 sx.

5. Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area. Grayburg - 2515' (est.)
Yeso/Paddock - 4500'

Form 3160-5
(November 1994)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

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.

FORM APPROVED
OMB No. 1004-0135
Expires July 31, 1996

SUBMIT IN TRIPLICATE - Other instructions on reverse side

1. Type of Well
 Oil Well Gas Well Other

2. Name of Operator
 MARBOB ENERGY CORPORATION

3a. Address
 P. O. BOX 227, ARTESIA, NM 88210

3b. Phone No. (include area code)
 505-748-3303

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)
 660 FNL 660 FWL SEC. 30-T17S-R30E UNIT D

5. Lease Serial No.
 LC-028784B

6. If Indian, Allottee or Tribe Name

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

8. Well Name and No.
 BURCH KEELY UNIT #142

9. API Well No.
 30-015-04388

10. Field and Pool, or Exploratory Area
 GRBG JACKSON SR Q GRBG SA

11. County or Parish, State
 EDDY COUNTY, NM

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

| TYPE OF SUBMISSION | TYPE OF ACTION | | | |
|--|--|---|--|---|
| <input checked="" 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 type="checkbox"/> Subsequent Report | <input type="checkbox"/> Alter Casing | <input type="checkbox"/> Fracture Treat | <input type="checkbox"/> Reclamation | <input 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 type="checkbox"/> Plug and Abandon | <input type="checkbox"/> Temporarily Abandon | |
| | <input checked="" 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 recomplete 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 recompletion 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.)

MARBOB ENERGY PROPOSES TO SET CIBP @ 4324', PMP 5 SX CMT ON TOP OF CIBP, SELECTIVELY PERFORATE SAN ANDRES FORMATION 3110-3500', RUN 2 3/8" PC TBG TO 3140' +/-, SET HALLIBURTON RTTS PKR @ 3100', COMMENCE WATERFLOOD INJECTION.

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

| | |
|---------------------------------------|-----------------------------|
| Name (Printed/Typed) RHONDA NELSON | Title PRODUCTION ANALYST |
| Signature | Date 10/26/98 |

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

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

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.

(Instructions on reverse)

003 MARBOB 505 748 2523 15:43 10/29/98

Insert

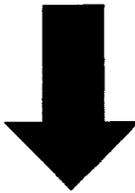
Color Page/Photo

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Simplex mode



LTR



AREA OF REVIEW WELL DATA

Attachment C-108 VI

| LEASE | WELL# | LOCATION | TD (PBTD) | TYPE & DATE DRILLED | HOLE SIZE | CASING SZ & WT | SETTING DEPTH | SX CMT | TOC | PERFS |
|--------------------------|-------|------------------------------------|------------------|----------------------------|--|---|--------------------------|------------------|------------------------------|------------------------|
| BEESON 30-015-22453 | 1 | 330 FNL 330 FWL 29-17S-30E | 3446' (3432') | OIL 04-15-78 | 12 1/4 7 7/8 | 8 5/8 @ 24# 5 1/2 @ 14# | 480 3446 | 300 750 | CIRC | 1698-1735 3058-3398 |
| GRAYBURG 30-015-03083 | 5 | 330 FNL 660 FEL 25-17S-29E | 7225' (6828') | OIL AND GAS 07-15-60 | 12 1/4 7 7/8 | 8 5/8 @ 24# 5 1/2 @ 14# | 1404 6838 | 525 650 | CIRC CIRC | 6655-6679 |
| BURCH A 30-015-04207 | 23 | 2565 FNL 995 FWL 19-17S-30E | 3150' | OIL 06-08-49 Plugged | Cbl Tool 11 ? NR 8 1/4 ? NR | 8 5/8 @ 24# 7" @ 20# | 455 3183 | 75 100 | 316' c 1876' c | Plugged |
| BKU 30-015-04194 | 92 | 1980 FNL 660 FWL 19-17S-30E | 3142' (3137') | OIL 06-27-29 Plugged | Cbl Tool ?? NR 11 ? NR 8 1/4 ? NR | 12 1/2 @ 50# 10 3/4 @ 40# 6 5/8 @ 24# | 368 900 2865 | 15 20 ? | | Plugged |
| BKU 30-015-04205 | 93 | 2310 FSL 1650 FWL 19-17S-30E | 3160' | OIL 12-20-39 Plugged | Cbl Tool 11 ? NR 8 1/4 ? NR | 8 1/4 @ 24# 7 @ 20# | 478 2712 | 50 100 | 60' c 1230' c | Plugged |
| BKU 30-015-22092 | 94 | 1650 FSL 2970 FEL 19-17S-30E | 3600' | OIL 02-28-78 | 12 1/4 7 7/8 | 8 5/8 @ 20# 5 1/2 @ 15.5# | 478 3600 | 300 575 | CIRC 1550' c | 2969-3208 |
| BKU 30-015-04204 | 95 | 2310 FSL 2310 FEL 19-17S-30E | 3612' (3260') | OIL 06-16-39 | Cbl Tool 11 8 1/4 | 8 1/4 @ 32# 7 @ 20# 4 1/2 @ 9.5# | 478 2706 2682-3610 | 50 100 220 | 257' c 1690' c 2682' c | 2956-3304 |
| BKU 30-015-04193 | 96 | 1650 FSL 1650 FEL 19-17S-30E | 3300' (3247') | OIL 01/25/47 | 11 8 1/4 | 8 5/8 @ 24# 7 @ 20# | 509 2560 | 50 100 | 1530' Ac L | 1611-1704 2560-3300 |

AREA OF REVIEW WELL DATA

Attachment C-108 VI

| LEASE | WELL# | LOCATION | TD (PBD) | TYPE & DATE DRILLED | HOLE SIZE | CASING SZ & WT | SETTING DEPTH | SX CMT | TOC | PERFS |
|--|--------|-----------------------------------|------------------|---------------------|--------------------------------------|---|--------------------------|-------------------|------------------------------|-------------------------------------|
| BKU 30-015-04213 | 100 WI | 660 FSL 660 FEL 19-17S-30E | 3287' | OIL 01-14-43 | 11 7 7/8 | 8 5/8 @ 24# 7 @ 20# | 510 2630 | 50 100 | 358' c 1345' c | 3250-3275 |
| BKU 30-015-20794 | 101 WI | 330 FSL 1650 FEL 19-17S-30E | 3450' (3445') | OIL 05-05-73 | 12 1/4 7 7/8 | 8 5/8 @ 20# 4 1/2 @ 9.5# | 511 3450 | 100 300 | 350' c 2465' c | 3148-3326 |
| BKU 30-015-04212 | 102 WI | 990 FSL 2310 FEL 19-17S-30E | 3246' | OIL 09-02-41 | 12 1/4 7 7/8 | 8 5/8 @ 24# 7 @ 20# 4 1/2 @ 11.6# | 560 2710 2700 | 50 100 725 | 398' 1414' circ | 2701-3246 |
| BKU 30-015-04206 | 103 | 990 FSL 1650 FWL 19-17S-30E | 3605' (3600') | OIL 01-01-47 | 11 8 1/4 6 1/2 | 8 5/8 @ 24# 7 @ 20# 4 1/2 @ 9.5# | 464 2942 2906-3605 | 75 110 140 | 105' c 1825' c 2906' c | 2504-3247 |
| BKU 30-015-04210 Prop. Injection | 104 | 330 FSL 1650 FWL 19-17S-30E | 3277' (3272') | OIL 06-02-41 | 11 ? 8 1/4 ? | 8 1/4 @ 24# 7 @ 20# | 533 2730 | 50 100 | 320' c 1315' Ac Log | 2522-2592 2633-2781 Open Hole |
| BKU 30-015-04211 | 105 WI | 660 FSL 660 FWL 19-17S-30E | 3599' (3505') | WIW 04-29-42 | 10 8 1/4 6 1/4 | 8 5/8 @ 24# 7 @ 20# 4 1/2 @ 9.5# | 508 2773 2750-3599 | 100 100 185 | circ 1163' c 2737' c | 2511-2517 2591-2605 2798-3558 |
| BKU 30-015-26890 | 106 | 1210 FSL 330 FEL 24-17S-20E | 3650' (3645') | OIL 03-01-97 | 12 1/4 7 7/8 | 8 5/8 @ 24# 5 1/2 @ 15.5# | 375 3649 | 350 1100 | sfc sfc | 2908 3640 |
| BKU 30-015-03076 | 107 | 660 FSL 660 FEL 24-17S-29E | 3628' (3165') | OIL 11-16-42 | Cbl Tool 10 3/4 8 1/4 6 1/4 | 8 1/4 @ 24# 7 @ 20# 4 1/2 @ 9.5# | 435 2755 2660-3628 | 50 100 150 | 215' c 1740' c 2660' c | 2437-3535 |

AREA OF REVIEW WELL DATA

Attachment C-108 VI

| LEASE | WELL# | LOCATION | TD (PBD) | TYPE & DATE DRILLED | HOLE SIZE | CASING SZ & WT | SETTING DEPTH | SX CMT | TOC | PERFS |
|--|--------|------------------------------------|------------------|---------------------|-----------------------------------|--|--------------------------|-------------------|-------------------------------|-------------------------------------|
| BKU 30-015-25668 | 108 | 330 FSL 660 FEL 24-17S-29E | 6900' (6273') | OIL 11-26-86 | 17 1/2 12 1/4 7 7/8 | 13 3/8 @ 54# 8 5/8 @ 24# 5 1/2 @ 15.5# | 372 3500 6900 | 500 800 550 | CIRC CIRC 3320' | 2436-3554 |
| BKU 30-015-03102 | 139 | 25 FNL 1295 FEL 25-17S-29E | 3602' | OIL 09-23-49 | 11 8 1/4 6 1/4 | 8 5/8 @ 28# 7 @ 20# 4 1/2 @ 9.5# | 445 2951 2837-3602 | 60 100 120 | 158' c 1935' c 2837' | 2508-3567 |
| BKU 30-015-03089 | 140 WI | 660 FNL 660 FEL 25-17S-29E | 3605' (3578') | WI 08-12-43 | 11 7 5/8 6 1/4 | 8 1/4 @ 24# 7 @ 20# 4 1/2 @ Int 9.5# | 459 2848 2815-3605 | 50 100 125 | 238' c 1300' c 2815' | 2457-3565 |
| BKU 30-015-03110 | 141 | 25 FNL 25 FEL 25-17S-29E | 3238' | OIL 02-07-52 | Cbl Tool 11 ? NR 8 1/4 ? NR | 8 5/8 @ 24# 7 @ 20# | 484 2908 | 75 100 | 125' c 1890' c | 2447-2656 2908-3238 |
| BKU 30-015-04388 Prop. Injection | 142 | 660 FNL 660 FWL 30-17S-30E | 4900' (4837') | OIL 02-15-44 | 12 1/4 8 1/4 6 1/4 | 8 5/8 @ 24# 7 @ 20# 5 1/2 @ 17# | 502 2891 4900 | 50 100 225 | 340' c 1874' c 1650' T° | 4478-4744 |
| BKU 30-015-04392 | 143 | 330 FNL 1260 FWL 30-17S-30E | 3263' | OIL 08-19-49 | Cbl Tool 11 ? NR 8 1/4 ? NR | 8 5/8 @ 24# 7 @ 20# | 506 3013 | 75 100 | 150' c 1995' c | 2548-2989 3013-3263 |
| BKU 30-015-04389 | 144 WI | 660 FNL 1980 FWL 30-17S-30E | 3246' | WIW 04-20-44 | 11 7 7/8 | 8 5/8 @ 24# 7 @ 20# | 508 2911 | 50 100 | 311' c 1502' c | 2572-2690 2911-3246 |
| BKU 30-015-21659 | 145 | 1295 FNL 2665 FEL 30-17S-30E | 3295' | OIL 02-13-76 | 12 1/4 7 7/8 | 8 5/8 @ 24# 5 1/2 @ 14# | 504 3295 | 100 550 | 260' c 1365' c | 1702-1709 2641-2762 3020-3247 |

AREA OF REVIEW WELL DATA

Attachment C-108 VI

| LEASE | WELL# | LOCATION | TD (PBD) | TYPE & DATE DRILLED | HOLE SIZE | CASING SZ & WT | SETTING DEPTH | SX CMT | TOC | PERFS |
|--|-------|------------------------------------|------------------|---------------------|--------------------------------------|------------------------------|---------------|------------|-------------------|--|
| BKU 30-015-04394 Prop. Injection | 146 | 660 FNL 1980 FEL 30-17S-30E | 3320' (3295') | OIL 05-29-44 | Cbl Tool 1 1/2 ? NR 8 1/4 ? NR | 8 5/8 @ 24# 7 @ 20# | 535 2682 | 50 100 | 296' c 1685' c | Open Hole |
| BKU 30-015-23167 | 147 | 1295 FNL 1295 FEL 30-17S-30E | 3390' | OIL 12-17-80 | 12 1/4 7 7/8 | 8 5/8 @ 20# 5 1/2 @ 15.5# | 506 3390 | 357 850 | sfce sfce | 2662-2790 2928-3072 3211-3293 |
| BKU 30-015-20342 | 148 | 660 FNL 660 FEL 30-17S-30E | 3355' | OIL 02-06-71 | 12 1/4 7 7/8 | 8 5/8 @ 20# 5 1/2 @ 15.5# | 485 3357 | 100 225 | 325' c 2503' c | 2758-2771 3039-3340 |
| BKU 30-015-20645 | 149 | 1980 FNL 660 FEL 30-17S-30E | 3355' (3344') | OIL 06-20-72 | 12 1/4 7 7/8 | 8 5/8 @ 20# 4 1/2 @ 9.5# | 499 3350 | 100 500 | 340' c 1450' c | 2670-2705 3102-3110 3324-3330 |
| BKU 30-015-20402 | 150 | 1980 FNL 1980 FEL 30-17S-30E | 3475' (3649') | OIL 04-17-71 | 12 1/4 7 7/8 | 8 5/8 @ 20# 4 1/2 @ 9.5# | 515 3475 | 100 400 | 355' c 2165' c | 2680-2811 3076-3088 3304-3446 |
| BKU 30-015-04391 | 151 | 1980 FNL 1980 FWL 30-17S-30E | 3310' | OIL 07-09-45 | Cbl Tool 1 1/2 ? NR 8 1/4 ? NR | 8 5/8 24# 7 20# | 522 3195 | 50 100 | 283' c 2180' c | 2610-2648 3195-3310 |
| BKU 30-015-04393 | 152 | 1345 FNL 1260 FWL 30-17S-30E | 3316' | OIL-T/A 12-14-49 | 1 1/2 8 1/4 | 8 5/8 @ 24# 7 @ 23# | 507 3061 | 50 100 | 206' c 2045' c | 2588-2596 2708-2716 2915-2984 3061-3316 |
| BKU 30-015-04390 | 153 | 1980 FNL 660 FWL 30-17S-30E | 3254' | OIL 05-24-44 | Cbl Tool 1 1/2 ? NR 8 1/4 ? NR | 8 5/8 @ 24# 7 @ 20# | 523 2925 | 50 100 | 285' c 1910' c | 2558-2850 2925-3254 |

AREA OF REVIEW WELL DATA

Attachment C-108 VI

| LEASE | WELL# | LOCATION | TD (PBD) | TYPE & DATE DRILLED | HOLE SIZE | CASING SZ & WT | SETTING DEPTH | SX CMT | TOC | PERFS |
|---------------------|-------|------------------------------------|------------------|---------------------|-----------------------------------|------------------------------|---------------|-------------|-------------------|--|
| BKU 30-015-04386 | 154 | 1345 FNL 25 FWL 30-17S-30S | 3255' | OIL 05-10-50 | Cbl Tool 10 8 1/4 ? NR | 8 5/8 28# 7 20# | 509 2994 | 50 100 | 145' c 1975' c | 2526-2668 3077-3218 |
| BKU 30-015-22582 | 155 | 2615 FNL 125 FEL 25-17S-29E | 3410' | OIL 06-05-78 | 12 1/4 7 7/8 | 8 5/8 @ 20# 5 1/2 @ 15.5# | 497 3407 | 335 550 | sfc 1320' c | 1650-3336 |
| BKU 30-015-03093 | 156 | 1980 FNL 660 FEL 27-17S-29E | 3242' | OIL 05-28-44 | Cbl Tool 11 ? NR 8 1/4 ? NR | 8 5/8 @ 24# 7 @ 20# | 482 2912 | 50 100 | 245' c 1895' c | 2546-2564 2684-2718 2912-3242 |
| BKU 30-015-03103 | 157 | 1345 FNL 1295 FEL 25-17S-29E | 3239' | OIL 12/19/49 | Cbl Tool 12 1/2 8 1/4 ? NR | 8 5/8 @ 24# 7 @ 23# | 465 2951 | 50 100 | 225' c 1935' c | 2553-2559 2625-2631 2947-3239 |
| BKU 30-015-22094 | 189 | 2615 FSL 2615 FEL 30-17S-30E | 3390' (2677') | OIL 07-31-77 | 12 1/4 7 7/8 | 8 5/8 @ 20# 5 1/2 @ 15.5# | 497 3385 | 125 550 | 850' c 1295' c | 1721-3304 |
| BKU 30-015-20662 | 190 | 1980 FSL 1980 FEL 30-17S-30E | 3425' (3419') | OIL 06-03-72 | 12 1/4 7 7/8 | 8 5/8 @ 20# 4 1/2 @ 9.5# | 505 3425 | 100 450 | 345' c 1950' c | 2734-3405 |
| BKU 30-015-27769 | 220 | 1430 FSL 660 FWL 19-17S-30E | 4600' (4573') | OIL 04/05/94 | 12 1/4 7 7/8 | 8 5/8 24# 5 1/2 17# | 403 4582 | 250 1250 | CIRC CIRC | 4219-4530' 2954-3663' 2451-2693' |
| BKU 30-015-28155 | 229 | 650 FSL 2310 FEL 19-17S-30E | 4800' (4778') | OIL 06-07-96 | 12 1/4 7 7/8 | 8 5/8 24# 5 1/2 17# | 399 4784 | 100 1875 | CIRC CIRC | 4264-4553' 3423-3698' 3044-3220' 2492-2724' |

AREA OF REVIEW WELL DATA

Attachment C-108 VI

| LEASE | WELL# | LOCATION | TD (PBD) | TYPE & DATE DRILLED | HOLE SIZE | CASING SZ & WT | SETTING DEPTH | SX CMT | TOC | PERFS |
|---------------------------------|-------|------------------------------------|------------------|---------------------|-----------------|------------------------|---------------|-------------|----------------------|--|
| BKU | 231 | 660 FSL 1240 FWL 19-17S-30E | 4805' (4754') | 05-05-96 | 12 1/4 7 7/8 | 8 5/8 24# 5 1/2 17# | 391 4797 | 350 2300 | CIRC CIRC | 4306-4656' 3436-3685' 2980-3237' |
| BKU | 235 | 1760 FSL 330 FEL 24-17S-29E | 4650' (4597') | OIL 07-24-96 | 12 1/4 7 7/8 | 8 5/8 24# 5 1/2 17# | 417 4615 | 350 1950 | CIRC CIRC | 4170-4459' 3384-3849' 2814-3123' 2412-2696' |
| BKU RE-ENTRY 30-015-20281 | 241 | 330 FNL 1980 FWL 30-17S-30E | 6900' (4993') | OIL 08-24-94 | 12 1/4 7 7/8 | 8 5/8 24# 5 1/2 17# | 1436 5001 | 400 805 | CIRC CIRC | 4526-4795' |
| BKU | 245 | 650 FSL 1650 FWL 19-17S-30E | 4775' (4709') | OIL 04-11-95 | 12 1/4 7 7/8 | 8 5/8 24# 5 1/2 17# | 414 4762 | 350 1580 | CIRC CIRC | 4243-4631' 3030-3203' 2416-2750' |
| BKU | 246 | 2310 FSL 2280 FWL 19-17S-30E | 4715' (4708') | OIL 09-21-95 | 12 1/4 7 7/8 | 8 5/8 24# 5 1/2 17# | 412 4712 | 350 1500 | CIRC CIRC | 4210-4581' 3440-3879' 3004-3172' 2462-2782' |
| BKU | 247 | 2310 FSL 1130 FWL 19-17S-30E | 4715' (4703') | OIL 09-09-95 | 12 1/4 7 7/8 | 8 5/8 24# 5 1/2 17# | 375 4715 | 350 1625 | CIRC CIRC CIRC | 4293-4633' 2946-3188' 2466-2782' |
| BKU | 250 | 660 FSL 2310 FWL 19-17S-30E | 4831' (4796') | OIL 10-04-95 | 12 1/4 7 7/8 | 8 5/8 24# 5 1/2 17# | 410 4815 | 350 1800 | CIRC CIRC | 4324-4685' 3572-3776' 3098-3277' 2532-2865' |
| BKU | 256 | 25 FSL 760 FWL 19-17S-30E | 4845' (4831') | OIL 09-03-96 | 12 1/4 7 7/8 | 8 5/8 24# 5 1/2 17# | 416 4845 | 350 1975 | CIRC CIRC | 4316-4661' 3466-3732' 3079-3235' 2509-2745' |

AREA OF REVIEW WELL DATA

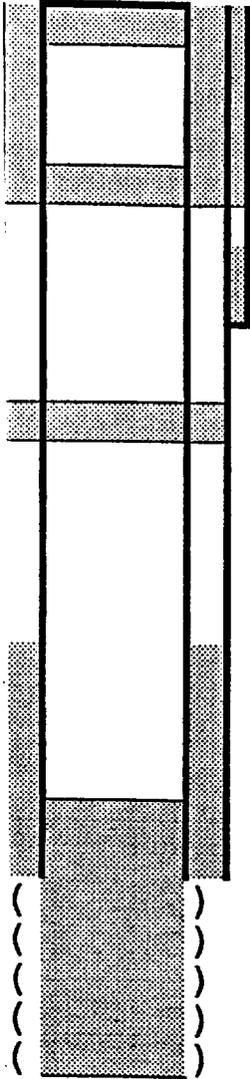
Attachment C-108 VI

| LEASE | WELL# | LOCATION | TD (PBD) | TYPE & DATE DRILLED | HOLE SIZE | CASING SZ & WT | SETTING DEPTH | SX CMT | TOC | PERFS |
|---------------------|-------|------------------------------------|------------------|---------------------|-----------------|------------------------|---------------|-------------|--------------|------------|
| BKU 30-015-29811 | 274 | 1295 FSL 1345 FEL 19-17S-30E | 4751' (4722') | OIL 10-30-97 | 12 1/4 7 7/8 | 8 5/8 24# 5 1/2 17# | 412 4751 | 350 2000 | CIRC CIRC | 4316-4692' |
| BKU 30-015-29512 | 276 | 660 FSL 168 FWL 19-17S-30E | 4775' (4738') | OIL 10-21-97 | 12 1/4 7 7/8 | 8 5/8 24# 5 1/2 17# | 402 4750 | 350 1275 | CIRC CIRC | 4334-4593' |
| BKU 30-015-29821 | 279 | 660 FSL 2040 FEL 19-17S-30E | 4816' (4773') | OIL 10-30-97 | 12 1/4 7 7/8 | 8 5/8 24# 5 1/2 17# | 419 4798 | 350 1400 | CIRC CIRC | 4352-4713' |
| BKU 30-015-29921 | 280 | 660 FNL 1345 FEL 25-17S-29E | 4800' (4780') | OIL 02-14-98 | 12 1/4 7 7/8 | 8 5/8 24# 5 1/2 17# | 393 4785 | 350 1375 | CIRC CIRC | 4336-4654' |
| BKU 30-015-29722 | 282 | 2378 FSL 290 FWL 19-17S-30E | 4796' (4751') | OIL 01-15-98 | 12 1/4 7 7/8 | 8 5/8 24# 5 1/2 17# | 367 4747 | 350 1540 | CIRC CIRC | 4219-4290' |
| BKU 30-015-29929 | 285 | 660 FSL 330 FEL 19-17S-30E | 4900' (4780') | OIL 02-04-98 | 12 1/4 7 7/8 | 8 5/8 24# 5 1/2 17# | 390 4893 | 450 1450 | CIRC CIRC | 4423-4800' |

| | | | | |
|---------------------------|------------------|--------------|----------|-------|
| OPERATOR | LEASE | | | |
| MARBOB ENERGY CORPORATION | BURCH A | 30-015-04207 | | |
| WELL NO. | FOOTAGE LOCATION | SECTION | TOWNSHIP | RANGE |
| 23 | 2565 FNL 995 FWL | 19 | 17S | 30E |

Schematic

Tabular Data



cmt plug 10sx

Surface Casing

Size 8 5/8 @ 24# Cemented with 75 gr.

TOC 316 feet determined by CALC @ 50%

Hole size _____

cmt plug 175sx
293-243

Intermediate Casing

Size _____ Cemented with _____ gr.

TOC _____ feet determined by _____

Hole size _____

8 5/8 24# @ 455'
TOC 316'

Long string

Size 7 @ 20# Cemented with 100 gr.

TOC 1876 feet determined by CALC @ 50%

Hole size _____

cmt plug 55sx
875-825

Total depth 3150

7" 20# @ 2492'
TOC 1876'

cmt plug 145sx
3150-2447'

TD 3150'

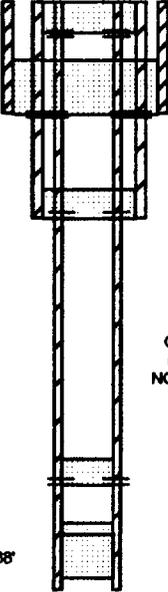
| | | | | |
|---------------------------|----------------------|------------------|--------------|-------|
| OPERATOR | | LEASE | | |
| Marbob Energy Corporation | | Burch Keely Unit | 30-015-04194 | |
| WELL NO. | FOOTAGE LOCATION | SECTION | TOWNSHIP | RANGE |
| 92 | 1980' FNL & 660' FEL | 19 | 17S | 30E |

Schematic

Marbob Energy
 BKU 92
 1980FSL 660FWL
 Sec19-17S-30E
 Eddy Co., NM
 30-015-04194

Plugs

Spot 40lbs inside
 7" to Sfc
 Perf 7" @ 50'
 Circ cmt w/ 75lbs
 TOC 170'
 Perf 368'
 Sqz 30lbs betw
 10.5" & 12.5" csg
 Sqz 50lbs betw
 7" & 10.5" csg
 TOC 768'
 Perf & Sqz 7"
 75lbs @ 900'



TOC ??
 12.5" 50# @ 368'
 Cmt'd w/ 15lbs

TOC ??
 10.75" 40# @ 900'
 Cmt'd w/ 20lbs

DRILLED w/
 CABLE TOOL
 HOLE SIZES
 NOT REPORTED

TOC 2527'
 Perf & Sqz
 75lbs @ 2675'

15lbs @ 2829'
 TOC 2829'
 75lbs @ 2829-3068'

TOC ??
 7" 24# @ 2865'
 Cmt'd w/ NRlbs

TD 3142
 PBTD 3137

Tabular Data

Surface Casing

Size 12 1/2 " Cemented with 15 ex.

TOC _____ feet determined by _____

Hole size Not Reported

Intermediate Casing

Size 10 3/4 " Cemented with 20 ex.

TOC _____ feet determined by _____

Hole size Not Reported

Long string

Size 6 5/8 " Cemented with Not Reported.

TOC _____ feet determined by _____

Hole size Not Reported

Total depth 3142

Injection interval

N/A feet to N/A feet
 (perforated or open-hole, indicate which)

Tubing size _____ lined with _____ (material) set in a
 _____ packer at _____ feet
 (brand and model)

(or describe any other casing-tubing seal).

Other Data

1. Name of the injection formation _____

2. Name of field or Pool (if applicable) _____

3. Is this a new well drilled for injection? Yes No

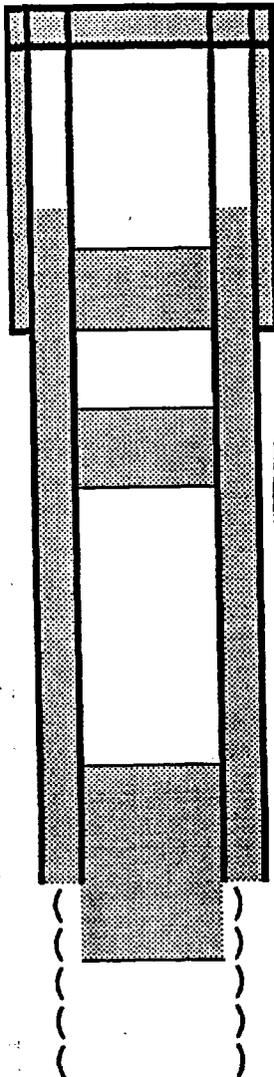
If no, for what purpose was the well originally drilled? _____

4. Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail (sacks of cement or bridge plug(s) used) _____

5. Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area. _____

| | | | | |
|---------------------------|-------------------|---------|--------------|-------|
| OPERATOR | | LEASE | | |
| MARBOB ENERGY CORPORATION | | BKU | 30-015-04205 | |
| WELL NO. | FOOTAGE LOCATION | SECTION | TOWNSHIP | RANGE |
| 93 | 2310 FSL 1650 FWL | 19 | 17S | 30E |

Schematic



Tabular Data

cmt plug 70sx
60' - surface

Surface Casing

Size 8 5/8 @ 24# " Cemented with 50 sv.

TOC 60' feet determined by 6

Hole size _____

cmt plug 50sx
478' - 346

Intermediate Casing

Size _____ " Cemented with _____ sv.

TOC _____ feet determined by _____

Hole size _____

8 5/8 @ 560'

cmt plug 50sx
910' -

Long string

Size 7 @ 20# " Cemented with 100 sv.

TOC 1230 feet determined by _____

Hole size _____

Total depth _____

Injection Interval

_____ feet to _____ feet
(perforated or open-hole, indicate which)

cmt plug 85 sx
2785 - 2441

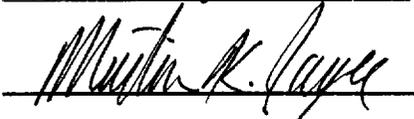
7" @ 20# @ 2660'
TOC 1230'

TD 3148'

AFFIRMATIVE STATEMENT
C-108 XII

I have examined all geologic and engineering data available for the Burch Keely Unit and find no evidence of open faults or other hydrologic connection between the disposal zone and any under ground drinking water sources.

Name: Martin K. Joyce **Title:** Geologist

Signature:  **Date:** October 6, 1998

**OFFSET OPERATOR NOTIFICATION
C-108 XIII**

The below listed operators have received notification of Marbob Energy Corporation's intent to expand their Burch Keely Waterflood:

*Anadarko Petroleum Corporation
Tom P. Stephens Trust
Mack Energy Corporation
Rogers Aston
Phillips Petroleum Corporation
Enron Oil & Gas Company
Read & Stevens, Inc.
Bureau of Land Management*

ARTESIA DAILY PRESS

Pursuant to State of New Mexico Oil Conservation Division Rule 701-C-1 Marbob Energy Corporation gives public notice that it has applied to the New Mexico Oil Conservation Division for an expansion of the Burch-Keely Waterflood Unit. The area of expansion includes the S/2 of Section 19, and the N/2 of Section 30 in Township 17 South, Range 30 East, Eddy County, New Mexico, N.M.P.M. ; the Burch Keely Unit #104 proposed injection well located 330' FSL and 1650' FWL in Section 19 of Township 17 South, Range 30 East; the Burch Keely Unit #142 proposed injection well located 660' FNL and 660' FWL of Section 30 of Township 17 South, Range 30 East; and the Burch Keely Unit #146 located 660' FNL and 1980' FEL of Section 30 of Township 17 South, Range 30 East, Eddy County, New Mexico. The purpose of the waterflood expansion is to gain optimum control over the flow of formation hydrocarbons and to increase oil production. The Grayburg and San Andres formations are to be injected at a depth of 2,650 - 3,550 feet at a maximum surface pressure of 900 lbs at a rate of 250 barrels of formation water per day per well. Any interested party who has an objection to this waterflood expansion must give notice in writing to the Oil Conservation Division, 2040 South Pacheco Street, Santa Fe, New Mexico 87505 within fifteen (15) days of this notice. Any interested party with questions or comments may contact Johnny C. Gray at Marbob Energy Corporation, Post Office Box 227, Artesia, New Mexico 88211-0227 or call 505/748-3303.

Published in the Artesia Daily Press, Artesia, New Mexico
_____, 1998.



October 6, 1998

Bureau of Land Management
Post Office Box 27115
Santa Fe, New Mexico 87502-7115

Re: *Burch Keely Unit Waterflood Expansion Project*
SW/4 Section 19-17S-30E; N/2 Section 30-17S-30E
Eddy County, New Mexico

Gentlemen:

Marbob Energy Corporation, as operator of the Burch Keely Unit, notifies you that we have applied to the New Mexico Oil Conservation Division for Administrative Approval for an expansion of the currently approved Burch Keely Waterflood Project to include the above referenced lands. The purpose of this expansion is to gain optimal control over the flow of formation hydrocarbons and to increase oil production.

If you have no objections to this expansion of the existing Burch Keely Unit Waterflood project, please sign below and forward one copy to the New Mexico Oil Conservation Division in Santa Fe, one copy to the New Mexico Oil Conservation Division in Artesia, one copy to Marbob Energy Corporation, and retain one copy for your records. Addressed, envelopes have been provided for your convenience. If you do have an objection to this project, you must notify the New Mexico Oil Conservation Division in Santa Fe in writing within fifteen days of this notice. Thank you for your quick response in this matter.

Sincerely,

Martin Joyce
Geologist

MJ/mm
Enclosures

BUREAU OF LAND MANAGEMENT:

By: _____
Date: _____



marbob
energy corporation

October 6, 1998

*Read & Stevens, Inc.
Post Office Box 1518
Roswell, New Mexico 88202*

*Re: Burch Keely Unit Waterflood Expansion Project
SW/4 Section 19-17S-30E; N/2 Section 30-17S-30E
Eddy County, New Mexico*

Gentlemen:

Marbob Energy Corporation, as operator of the Burch Keely Unit, notifies you that we have applied to the New Mexico Oil Conservation Division for Administrative Approval for an expansion of the currently approved Burch Keely Waterflood Project to include the above referenced lands. The purpose of this expansion is to gain optimal control over the flow of formation hydrocarbons and to increase oil production.

If you have no objections to this expansion of the existing Burch Keely Unit Waterflood project, please sign below and forward one copy to the New Mexico Oil Conservation Division in Santa Fe, one copy to the New Mexico Oil Conservation Division in Artesia, one copy to Marbob Energy Corporation, and retain one copy for your records. Addressed, envelopes have been provided for your convenience. If you do have an objection to this project, you must notify the New Mexico Oil Conservation Division in Santa Fe in writing within fifteen days of this notice. Thank you for your quick response in this matter.

Sincerely,

*Martin Joyce
Geologist*

*MJ/mm
Enclosures*

READ & STEVENS, INC.:

*By: _____
Date: _____*



marbob
energy corporation

October 6, 1998

*Enron Oil & Gas Company
1445 Ross at Field
Dallas, Texas 75202*

*Re: Burch Keely Unit Waterflood Expansion Project
SW/4 Section 19-17S-30E; N/2 Section 30-17S-30E
Eddy County, New Mexico*

Gentlemen:

Marbob Energy Corporation, as operator of the Burch Keely Unit, notifies you that we have applied to the New Mexico Oil Conservation Division for Administrative Approval for an expansion of the currently approved Burch Keely Waterflood Project to include the above referenced lands. The purpose of this expansion is to gain optimal control over the flow of formation hydrocarbons and to increase oil production.

If you have no objections to this expansion of the existing Burch Keely Unit Waterflood project, please sign below and forward one copy to the New Mexico Oil Conservation Division in Santa Fe, one copy to the New Mexico Oil Conservation Division in Artesia, one copy to Marbob Energy Corporation, and retain one copy for your records. Addressed, envelopes have been provided for your convenience. If you do have an objection to this project, you must notify the New Mexico Oil Conservation Division in Santa Fe in writing within fifteen days of this notice. Thank you for your quick response in this matter.

Sincerely,

*Martin Joyce
Geologist*

*MJ/mm
Enclosures*

ENRON OIL & GAS COMPANY:

By: _____
Date: _____



marbob
energy corporation

October 6, 1998

Phillips Petroleum Corporation
4001 Penbrook
Odessa, Texas 79762

Re: *Burch Keely Unit Waterflood Expansion Project*
SW/4 Section 19-17S-30E; N/2 Section 30-17S-30E
Eddy County, New Mexico

Gentlemen:

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Sincerely,

Martin Joyce
Geologist

MJ/mm
Enclosures

PHILLIPS PETROLEUM CORPORATION:

By: _____
Date: _____



marbob
energy corporation

October 6, 1998

Rogers Aston
Post Office Box 1090
Roswell, New Mexico 88202

Re: *Burch Keely Unit Waterflood Expansion Project*
SW/4 Section 19-17S-30E; N/2 Section 30-17S-30E
Eddy County, New Mexico

Gentlemen:

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Sincerely,

Martin Joyce
Geologist

MJ/mm
Enclosures

ROGERS ASTON:

By: _____
Date: _____



marbob
energy corporation

October 6, 1998

*Mack Energy Corporation
Post Office Box 960
Artesia, New Mexico 88211-0960*

*Re: Burch Keely Unit Waterflood Expansion Project
SW/4 Section 19-17S-30E; N/2 Section 30-17S-30E
Eddy County, New Mexico*

Gentlemen:

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Sincerely,

*Martin Joyce
Geologist*

*MJ/mm
Enclosures*

MACK ENERGY CORPORATION:

By: _____
Date: _____



marbob
energy corporation

October 6, 1998

*Tom P. Stephens Trust
Post Office Box 698
Roswell, New Mexico 88202*

*Re: Burch Keely Unit Waterflood Expansion Project
SW/4 Section 19-17S-30E; N/2 Section 30-17S-30E
Eddy County, New Mexico*

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Sincerely,

*Martin Joyce
Geologist*

*MJ/mm
Enclosures*

TOM P. STEPHENS TRUST:

*By: _____
Date: _____*



marbob
energy corporation

October 6, 1998

*Anadarko Petroleum Corporation
Post Office Box 351
Liberal, KS 67905*

*Re: Burch Keely Unit Waterflood Expansion Project
SW/4 Section 19-17S-30E; N/2 Section 30-17S-30E
Eddy County, New Mexico*

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Sincerely,

*Martin Joyce
Geologist*

*MJ/mm
Enclosures*

ANADARKO PETROLEUM CORPORATION:

*By: _____
Date: _____*



marbob
energy corporation

October 6, 1998

*Mack Energy Corporation
Post Office Box 960
Artesia, New Mexico 88211-0960*

*Re: Burch Keely Unit Waterflood Expansion Project
SW/4 Section 19-17S-30E; N/2 Section 30-17S-30E
Eddy County, New Mexico*

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Sincerely,

**Martin Joyce
Geologist**

**MJ/mm
Enclosures**

MACK ENERGY CORPORATION:

By:
Date: 10/15/98

RECEIVED OCT 14 1998



marbob
energy corporation

October 6, 1998

*Read & Stevens, Inc.
Post Office Box 1518
Roswell, New Mexico 88202*

*Re: Burch Keely Unit Waterflood Expansion Project
SW/4 Section 19-17S-30E; N/2 Section 30-17S-30E
Eddy County, New Mexico*

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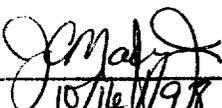
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Sincerely,

*Martin Joyce
Geologist*

*MJ/mm
Enclosures*

READ & STEVENS, INC.:

*By: 
Date: 10/16/98*



marbob
energy corporation

NOV - 6 1998

October 6, 1998

*Rogers Aston
Post Office Box 1090
Roswell, New Mexico 88202*

*Re: Burch Keely Unit Waterflood Expansion Project
SW/4 Section 19-17S-30E; N/2 Section 30-17S-30E
Eddy County, New Mexico*

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Sincerely,

*Martin Joyce
Geologist*

*MJ/mm
Enclosures*

ROGERS ASTON:

*By: Rogers Aston
Date: Nov. 4, 1998*