

# MERIDIAN OIL

OIL CONSERVATION

REC:

DEC 18 1980

Oil Conservation Division  
P.O. Box 2088  
Santa Fe, New Mexico 87501

Re: Southland Royalty Company  
RJU Tr. 1A Well No. 12  
Unit A, Sec 34, T17S, R29E  
Eddy County, New Mexico  
LC-028775-B

Gentlemen:

Enclosed is Form C-108 and attachments requesting authorization to convert the above referenced well to water injection for secondary recovery. Proof that a copy of the application has been sent to operators within  $\frac{1}{2}$  mile and the required legal notice has been published in a local newspaper will be sent following receipt of that information.

By copy of this packet, we are requesting the appropriate BLM representative to review this data and to advise you of their concurrence with our request. If either of you have questions please contact me at 915 688-6836.

Sincerely,



Robert L. Bradshaw  
Sr. Staff Environmental Representative

cc: Well file  
Joe Small  
OCD - Artesia  
BLM - Carlsbad

APPLICATION FOR AUTHORIZATION TO INJECT

- I. Purpose: ☒ Secondary Recovery ☐ Pressure Maintenance ☐ Disposal ☐ Storage  
Application qualifies for administrative approval? ☒ yes ☐ no
- II. Operator: Southland Royalty Company  
Address: P.O. Box 51810 Midland, Texas 79710-1810  
Contact party: Robert L. Bradshaw Phone: 915 688-6836
- 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 2-4502  
If yes, give the Division order number authorizing the project
- 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.

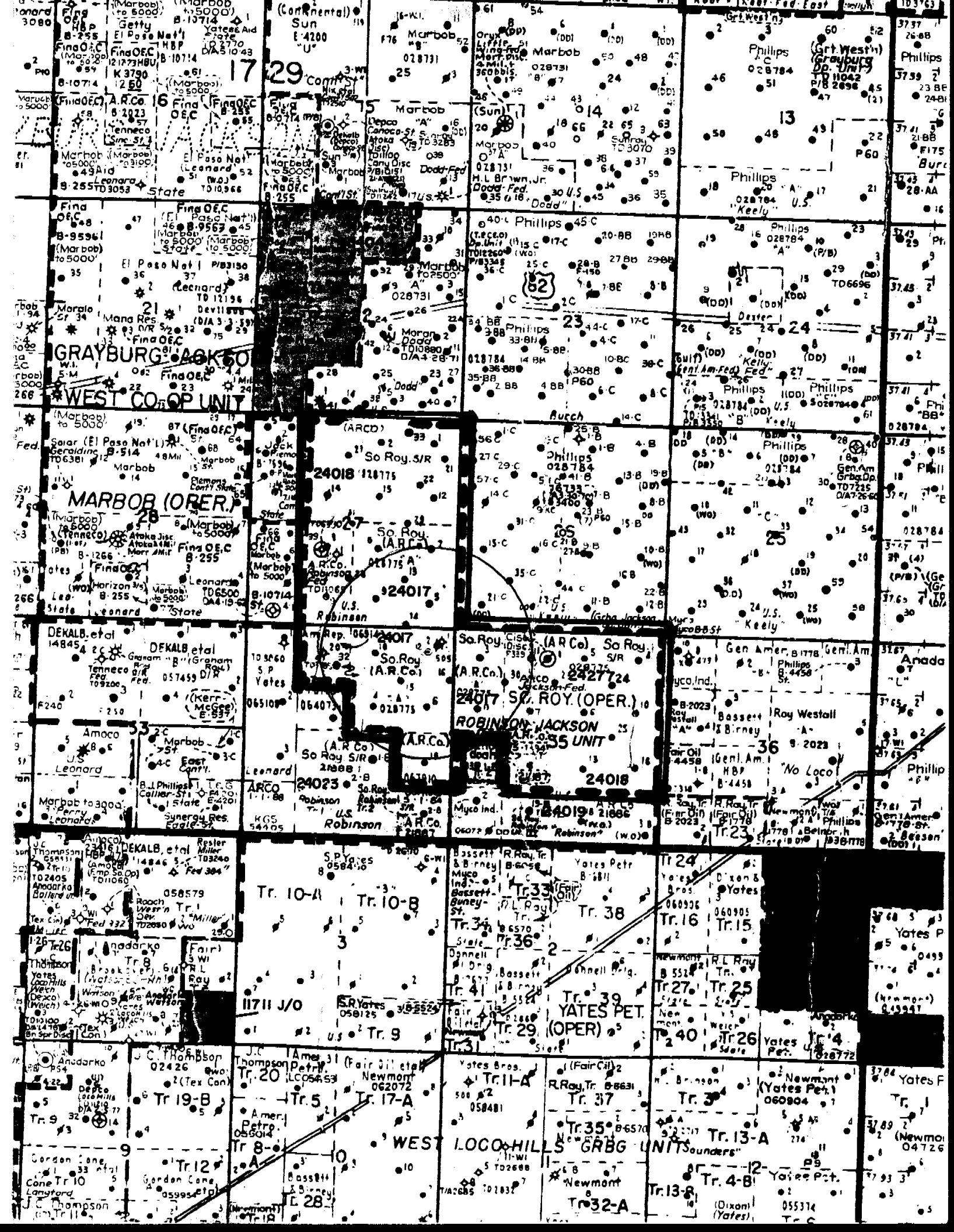
Name: Robert L. Bradshaw

Title Sr. Staff Environmental Rep.

Signature: Robert L. Bradshaw

Date: 12/20/91

- \* 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.



OIL CONSERVATION DIVISION  
1001-100

2-25-92

10215 01 00 9 56

DAVID,

Here is all the information on the "Area of review"  
wells surrounding the Robinson Jackson Unit No. 1A-12.

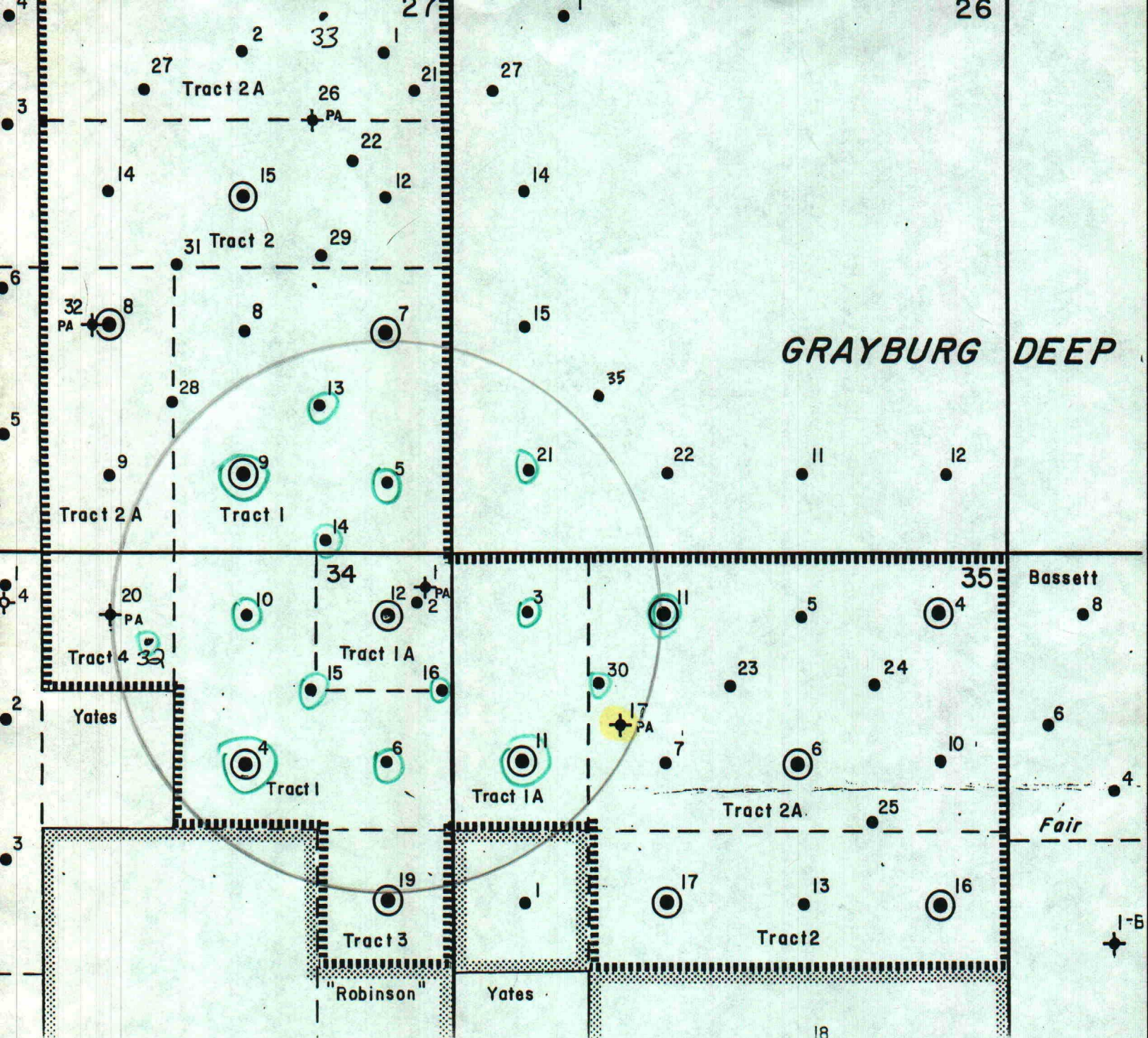
Please call if I can be of any more help.

Thanks.

*Joe Small*

JOE SMALL

915-688-6830



***Insert***

***Color Page/Photo***

***Here***

# INJECTION WELL DATA SHEET

Side 1

INJECTION WELL DATA SHEET

SIDE 1

Southland Royalty Company

Robinson Jacson Unit Tr. 1A

OPERATION

LEASE

12 660' FNL & 654' FEL

34

17S

29E

WELL NO.

PORTAGE LOCATION

SECTION

TOWNSHIP

RANGE

## Schematic

## Tabular Data

### Surface Casing

Size 8 5/8" - Cemented with 50 sz.

TDC surface feet determined by circulation

Hole size 11"

### Intermediate Casing

Size " - Cemented with sz.

TDC feet determined by

Hole size "

### Ann string

Size 7" - Cemented with 100 sz.

TDC 1050' feet determined by circulated

Hole size 7 7/8"

Total depth 3093'

### \* Injection Interval

feet to 3093' feet  
(perforated or not, indicate which)

\*2550' - 2566' perforated  
2592' - 2600' perforated  
2921' - 3093' open hole

Attachment to Form C-108  
Southland Royalty Company  
Robinson Jackson Unit Tract 1A, No. 12

III. Well Data

A. 1. Robinson Jackson Unit Tract 1A, No. 12

Location: 660' FNL & 654' FEL  
Section 34, T17S, R29E

2. Casing: Surface - 8 5/8" 24# @ 430'  
Cemented with 100 sacks  
TOC @ surface - circulated  
11" hole

Prod: 7" 20# @ 2921'  
Cemented with 100 sacks  
TOC @ 1050' - calculated  
7 7/8" hole

3. 2 3/8 J-55 4.7# tubing. Internal plastic or ceramic coated. Bottom of tubing at 2850'.
4. Baker Tandem Tension packer set at 2500', Baker Loc-Set packer set at 2850'.

B. 1. Injection Formations: Metex and Jackson  
Grayburg Jackson 7RV QN GB SA Field

2. Injection Intervals: Metex - 2550 - 2566' perforated  
2592 - 2600' perforated  
Jackson - 2921 - 3093' open hole

3. Original purpose - oil production
4. No other perforations
5. No other producing intervals

VII.

1. Average rate/volume 500 bpd  
Maximum rate/volume 1000 bpd
2. This is a closed system.
3. Average injection pressure 1600 psi.  
Maximum injection pressure 2000 psi.
4. Formation water will be reinjected.
5. Formation water will be reinjected for secondary recovery.

VIII. Metex: Dolomite with some sandstone and shale stringers. Also referred to as the Grayburg formation of Permian Age.

Thickness: 115'  
Depth: 2512 - 2627'

Jackson: Oolitic dolomite with very little sandstone. Also referred to as the San Andres formation of Permian Age.

Thickness: 172'  
Depth: 2921 - 3093'

No underground drinking water in the area.

IX. Stimulation Program:

Stimulate Jackson formation down 2 7/8" tubing at 2900' with 440 gallons of scale inhibitor and 5000 gallons of 15% HCl acid.

XI. No fresh water wells within 1 mile.

XII. This application is not for a disposal well.

Meridian Oil Inc.  
(Southland Royalty Company)

Application for Injection Permit  
Robinson Jackson Unit Tract 1A No. 12  
Grayburg Jackson TRVS QN GB SA Field  
Eddy County, New Mexico

AREA OF REVIEW

(See attached wellbore diagrams for well construction, depth, and record of completion)

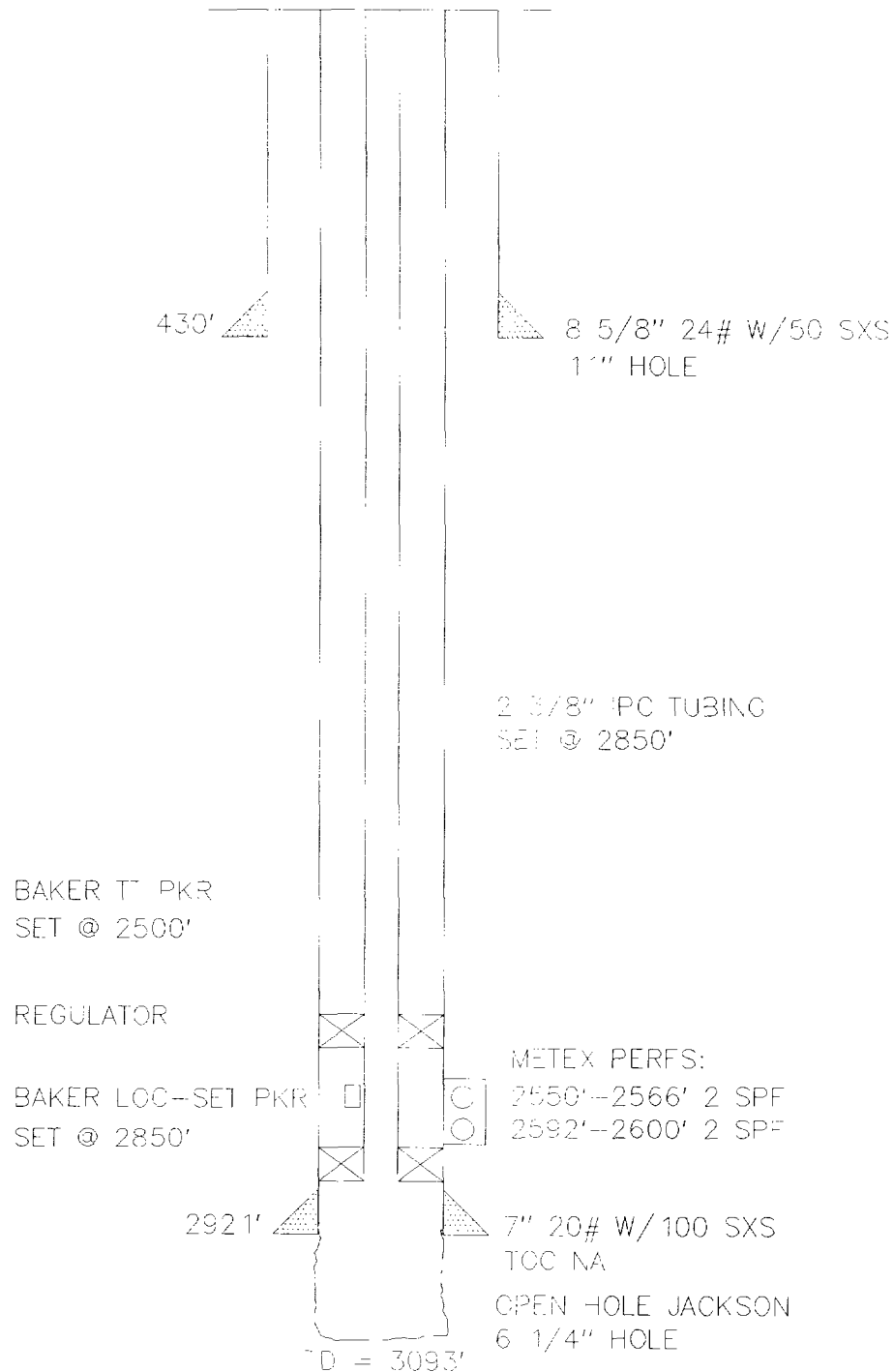
| <u>Operator</u>   | <u>Well Name</u>             | <u>Well Type</u> | <u>Status</u> | <u>Completion Date</u> | <u>Location Footage</u> | <u>Section</u> | <u>TWHP</u> | <u>RANGE</u> |
|-------------------|------------------------------|------------------|---------------|------------------------|-------------------------|----------------|-------------|--------------|
| Southland Royalty | Robinson Jackson Unit Tr. 1  | Water Injector   | T&A           | Aug-1946               | 1980 FN & FEL           | 34             | 17S         | 29E          |
| "                 | "                            | Oil              | Prod          | Oct-1946               | 660 FS & FEL            | 27             | 17S         | 29E          |
| "                 | "                            | Oil              | Prod          | Dec-1946               | 1980 FN & 660 FEL       | 34             | 17S         | 29E          |
| "                 | "                            | Water Injector   | SI            | May-1947               | 660 FS & 1980 FEL       | 27             | 17S         | 29E          |
| "                 | "                            | Oil              | T&A           | Aug-1947               | 660 FN & 1980 FEL       | 34             | 17S         | 29E          |
| "                 | "                            | Oil              | Prod          | Jul-1949               | 1345 FS & FEL           | 27             | 17S         | 29E          |
| "                 | "                            | Oil              | SI            | Jan-1947               | 1980 FN & FWL           | 27             | 17S         | 29E          |
| "                 | "                            | Oil              | Prod          | Nov-1949               | 1295 FN & 1345 FEL      | 34             | 17S         | 29E          |
| Southland Royalty | Robinson Jackson Unit Tr. 1A | Oil              | J&A           | May-1929               | 330 FN & 330 FEL        | 34             | 17S         | 29E          |
| "                 | "                            | Oil              | SI            | Aug-1929               | 440 FN & FEL            | 34             | 17S         | 29E          |
| "                 | "                            | Oil              | Prod          | Apr-1946               | 660 FN & FWL            | 35             | 17S         | 29E          |
| "                 | "                            | Water Injector   | SI            | Oct-1947               | 1980 FN & 660 FWL       | 35             | 17S         | 29E          |
| "                 | "                            | Oil              | SI            | Mar-1950               | 1295 FN & 25 FEL        | 34             | 17S         | 29E          |

| <u>Operator</u>   | <u>Well Name</u>                 | <u>Well Type</u> | <u>Status</u> | <u>Completion Date</u> | <u>Location Footage</u> | <u>Section</u> | <u>TWHP</u> | <u>RANGE</u> |
|-------------------|----------------------------------|------------------|---------------|------------------------|-------------------------|----------------|-------------|--------------|
| Southland Royalty | Robinson Jackson Unit Tr. 2A #11 | Water Injector   | SI            | Oct-1946               | 660 FN & 1980 FWL       | 35             | 17S         | 29E          |
| "                 | "                                | Oil              | P&A           | NA                     | 1600 FN & 1600 FWL      | 35             | 17S         | 29E          |
| "                 | "                                | Oil              | Prod          | Mar-1951               | 1280 FN & 1345 FWL      | 35             | 17S         | 29E          |
| Southland Royalty | Robinson Jackson Unit Tr. 4 #20  | Oil              | P&A           | NA                     | 660 FN & FWL            | 34             | 17S         | 29E          |
| "                 | "                                | Oil              | Prod          | Jan-1981               | 990 FN & 2310 FWL       | 34             | 17S         | 29E          |
| Phillips          | Keely No. 21-C                   | Oil              | SI            | May-1972               | 660 FS & FWL            | 26             | 17S         | 29E          |

# MERIDIAN OIL

RJU TR 1A No. 12  
GBG, JACKSON, 7-RVR, QN, SA FIELD  
EDDY COUNTY, NEW MEXICO

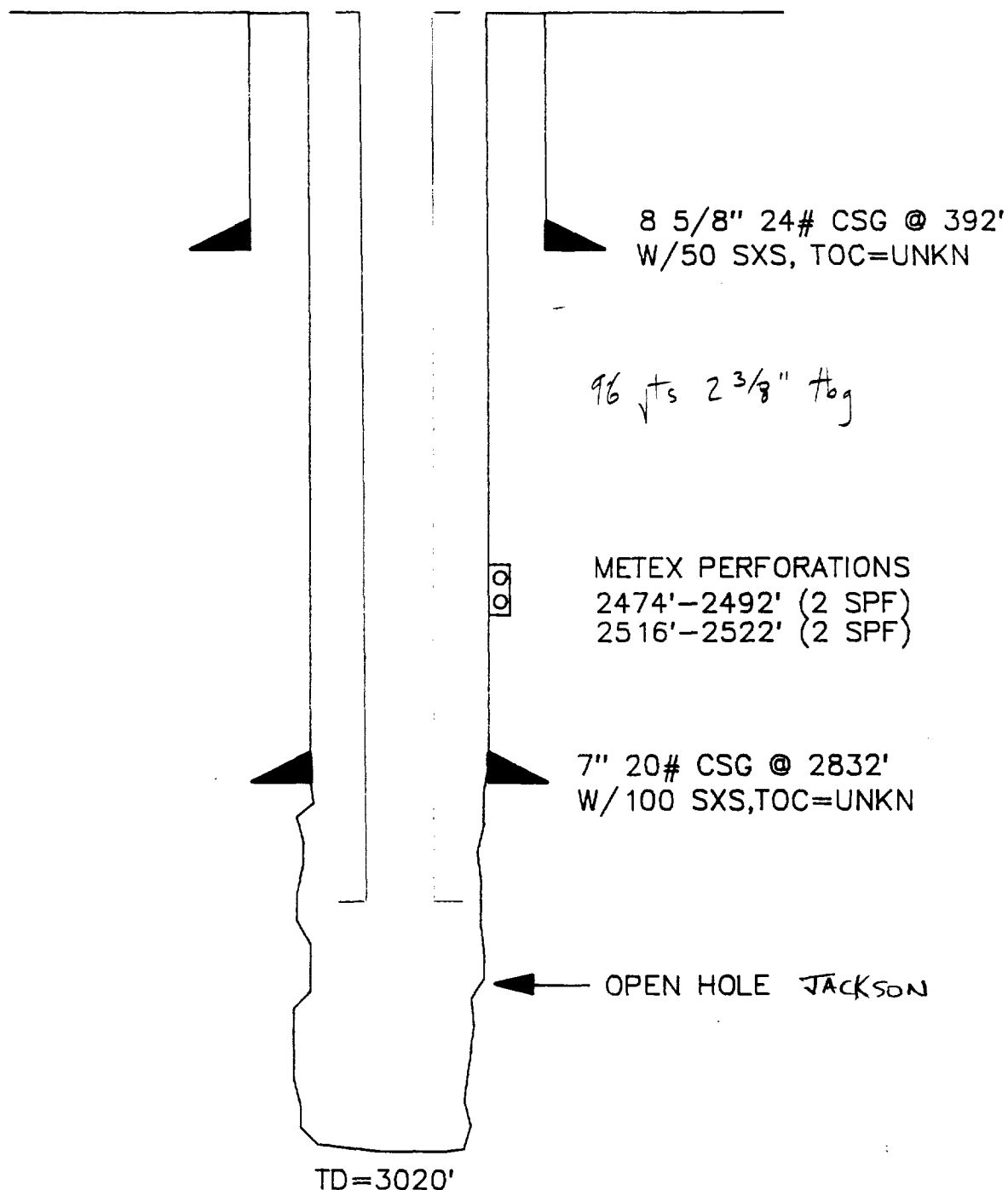
PROPOSED CONDITION



MERIDIAN OIL  
RJU 1-5  
GRAYBURG-JACKSON FIELD  
EDDY COUNTY, NEW MEXICO

KLM 4/30/90

DRILLED 7/46



Page \_\_\_\_\_  
Date \_\_\_\_\_  
By \_\_\_\_\_

Surface.  
8 5/8" e  
464' Cmt  
w/ 50 sxs

464'

2" Tbg. ?  
Only information

LOCO (2520-2530)  
HILLS

METEX (2606-2624)

Production  
2", 20 #  
@ 3031'  
Cmt w/ 100 sxs

Jellcoat @ 3203'  
Dowell plastic  
plug @ 3205-3234

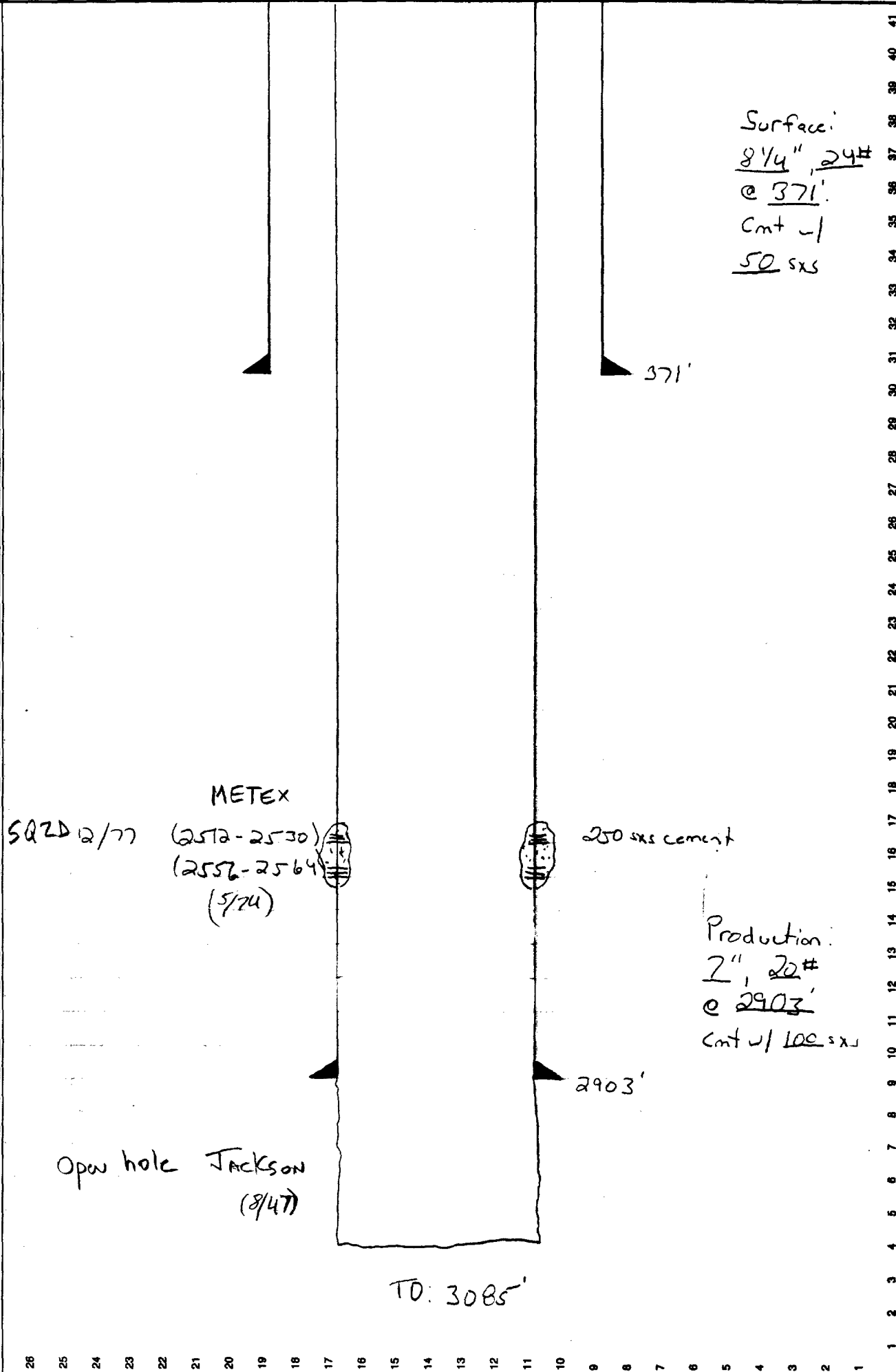
3031'  
Jackson

TDI 3234'

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By

Meridian Oil  
**ENGINEERING CALCULATION SHEET**

MO-0139 (1-89)

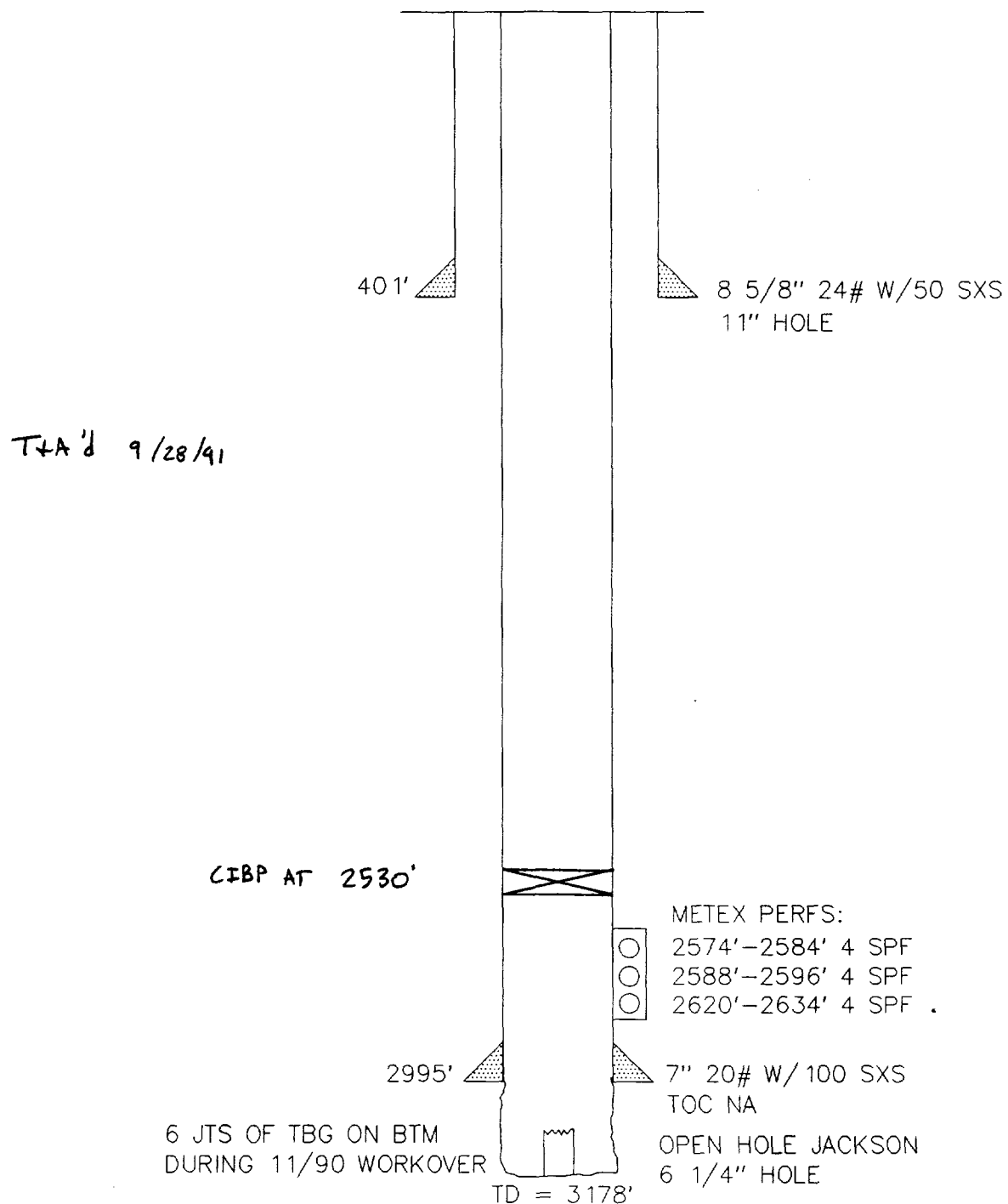


# MERIDIAN OIL

JMS 9/16/91

RJU TR 1 No. 4  
GBG, JACKSON, 7-RVR, QN, SA FIELD  
EDDY COUNTY, NEW MEXICO

CURRENT CONDITION



MERIDIAN OIL  
 RJU 1-13  
 GRAYBURG-JACKSON FIELD  
 EDDY COUNTY, NEW MEXICO

KLM 4/30/90

DRILLED 7/49

- Tubing Assembly
- 95 Jts 2" EUE  
     354 Tbg
  - 2" EUE Camco standing valve  
   w/ 1 3/4" stellite ball  
   & seat & Perforated collar  
   under it.
  - Perf. Nipple (2" EUE)
  - upset collar & bull plug.

8 5/8" 24# CSG @ 370'  
 W/50 SXS, TOC=UNKN

METEX PERFORATIONS  
 2437'-2455' (4 BSPF)

6" above pkr-12 holes  
 Gusberson KV-8  
 pkr @ 2461'

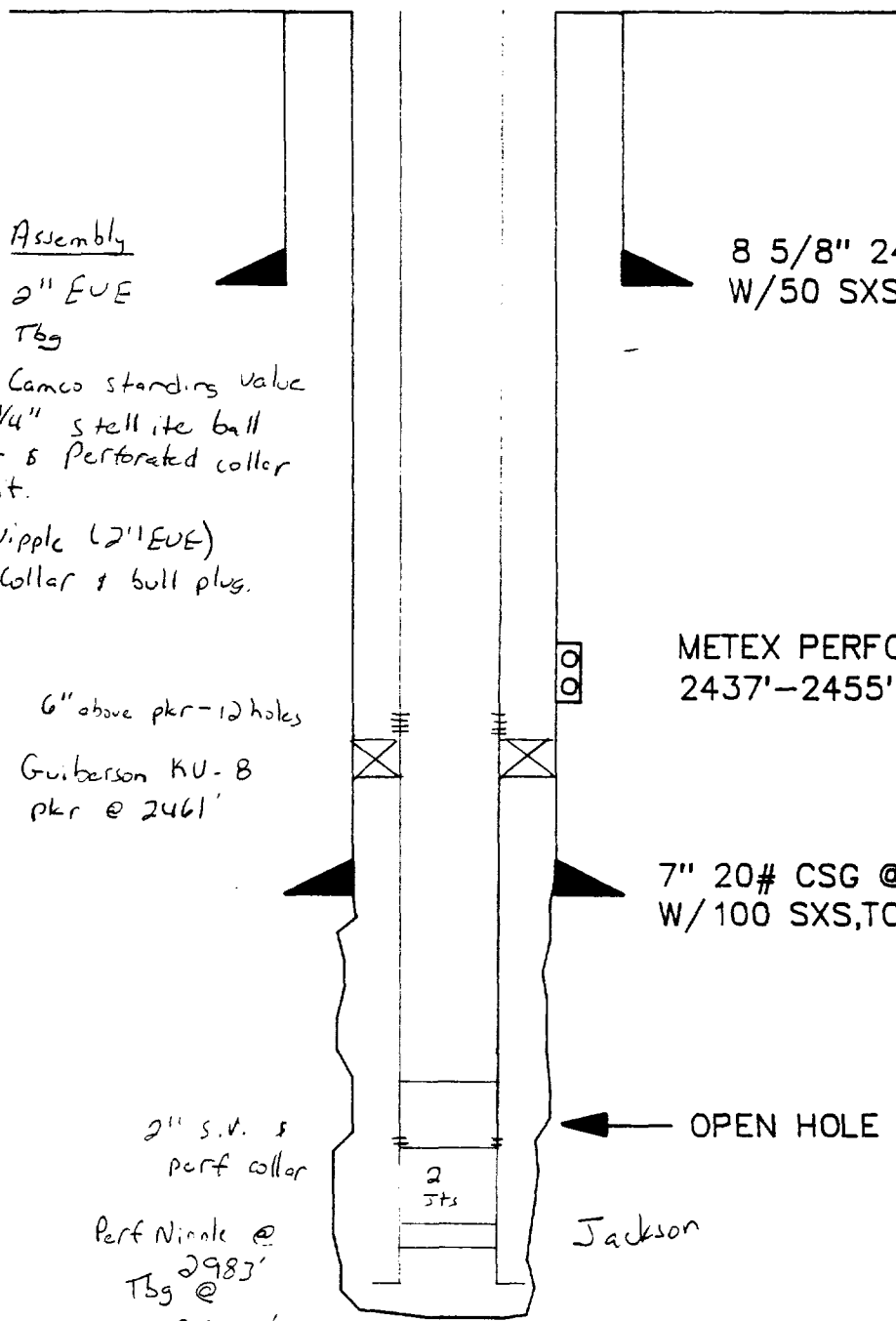
7" 20# CSG @ 2790'  
 W/100 SXS, TOC=UNKN

2" s.v. &  
 perf collar  
 Perf Nipple @  
 Tbg 2983'  
 2987'

← OPEN HOLE

Jackson

TD=3000'



Page \_\_\_\_\_  
 Date \_\_\_\_\_  
 By \_\_\_\_\_

No tubing  
 detail other  
 than 2 3/8".

METEX

(2502-2520) =  
 (2546-2554) =

386'

Surface:  
8 5/8"  
 @ 386'  
 Cmt w/ 50 sxs

Production:  
7", 20 #  
 @ 2880'  
 Cmt w/ 100 sxs

2880'

OPEN HOLE JACKSON

TD: 3063

Page \_\_\_\_\_  
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Meridian Oil  
**ENGINEERING CALCULATION SHEET**  
MO-0139 (1-89)

26 25 24 23 22 21 20 19 18 17 16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1

41 40 39 38 37 36 35 34 33 32 31 30 29 28 27 26 25 24 23 22 21 20 19 18 17 16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1

METEX

(2586-2594)

(2620-2628)

T<sub>63</sub> @  
2610'

2966'

TD: 3175

Surface:  
8 7/8" @  
426' Cmt  
w/ 50 sxs

Production  
7", 20"  
@ 2966'.  
Cmt w/ 100 sxs

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 Date \_\_\_\_\_  
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No clear  
 record of tubings  
 details. Possibly  
 2 3/8" 4.7 #  
 @ 3124'

455'

Surface:  
 8 1/4" Lapweld  
 @ 455' Cmt  
 w/ 50 sks

LOGO (2404-2414) ==  
 Hills (2432-2440) ==  
 METEX (2554-2570) ==  
 (2589-2608) ==

JACKSON  
 OPEN HOLE

2941'

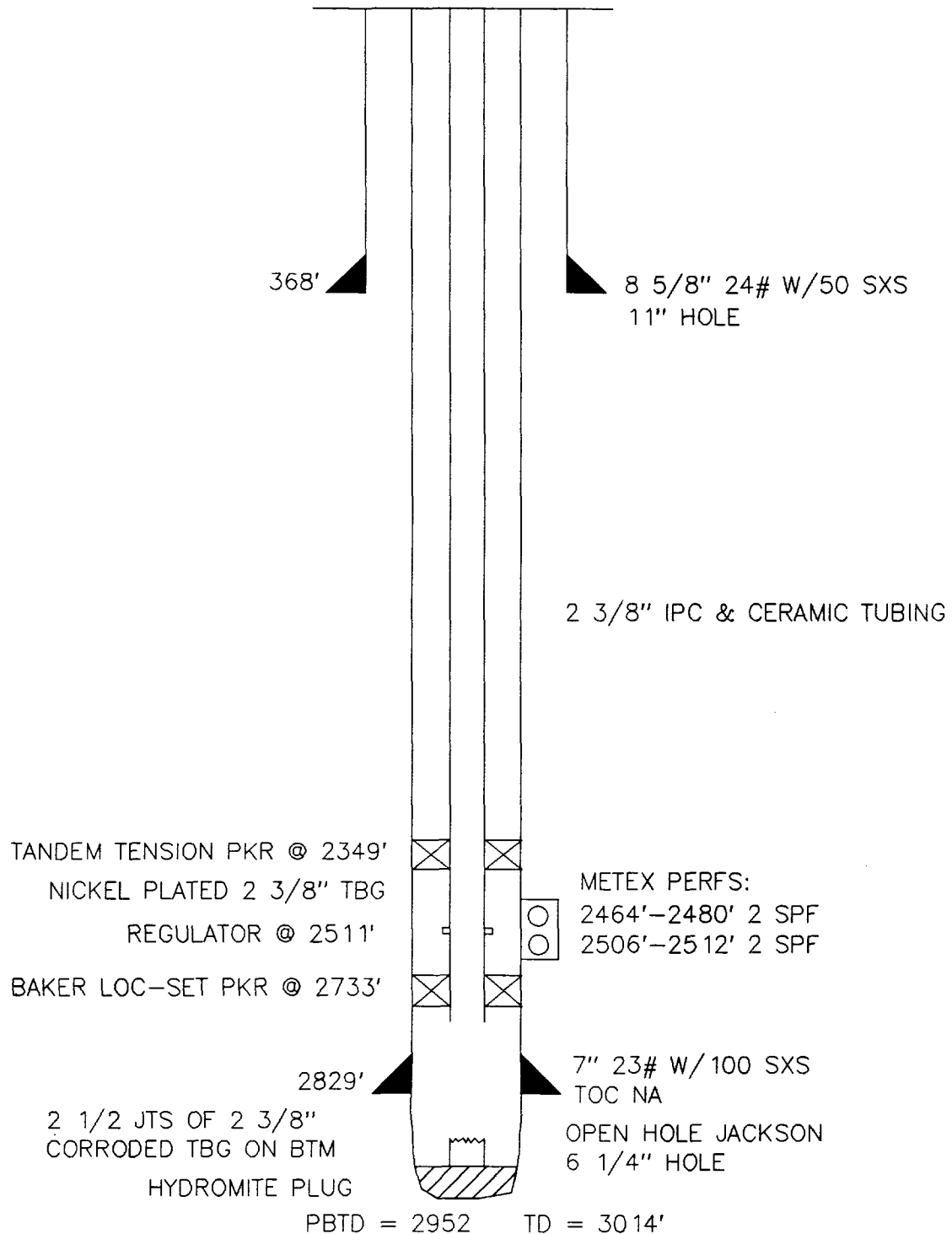
TD: 3140'

Production:  
 7", 20 #  
 @ 2941'.  
 Cmt w/  
 100 sks &  
 5 sks aquagel

# MERIDIAN OIL

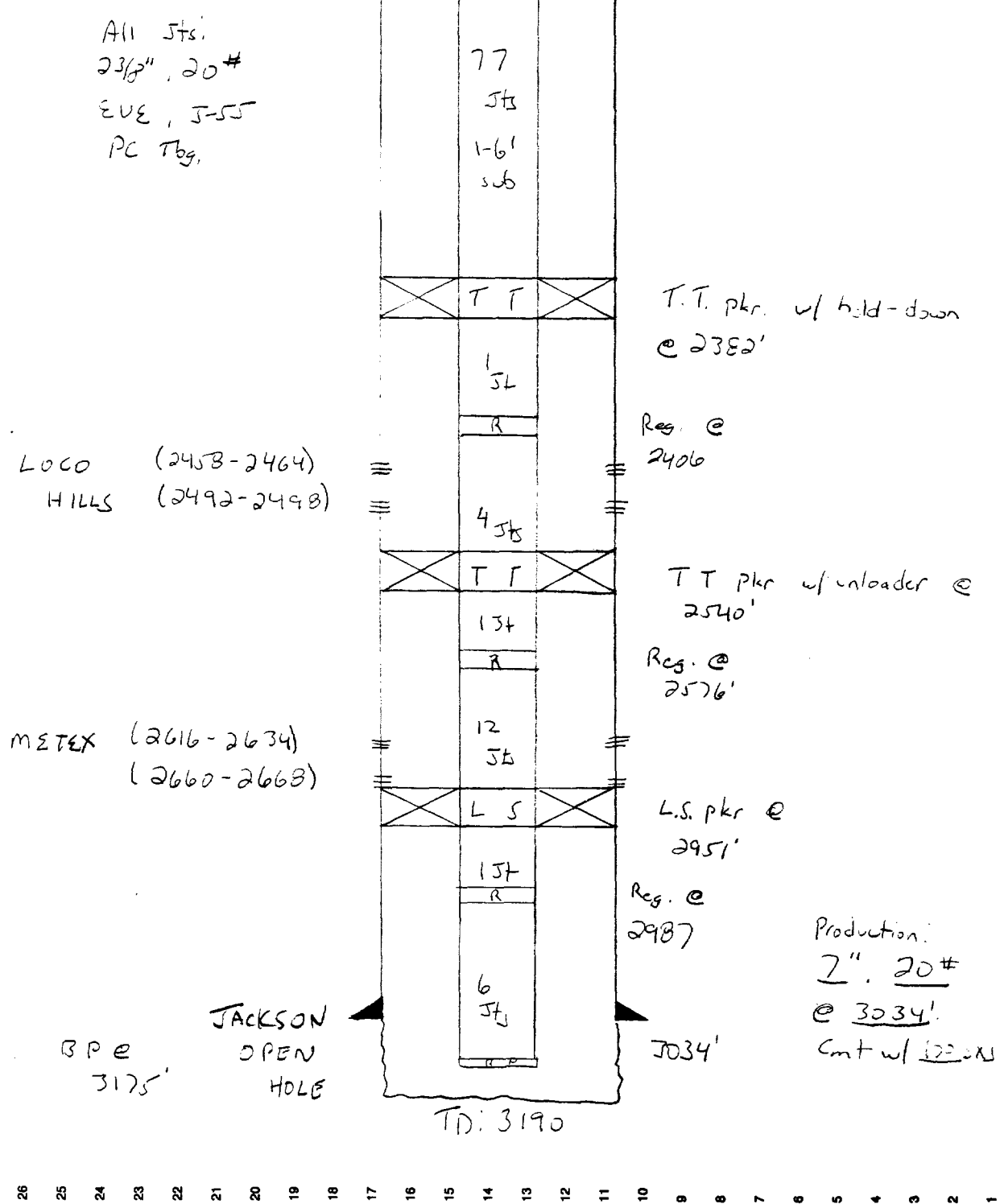
RJU TR 1 No. 9  
GBG, JACKSON, 7-RVR, QN, SA FIELD  
EDDY COUNTY, NEW MEXICO

CURRENT CONDITION



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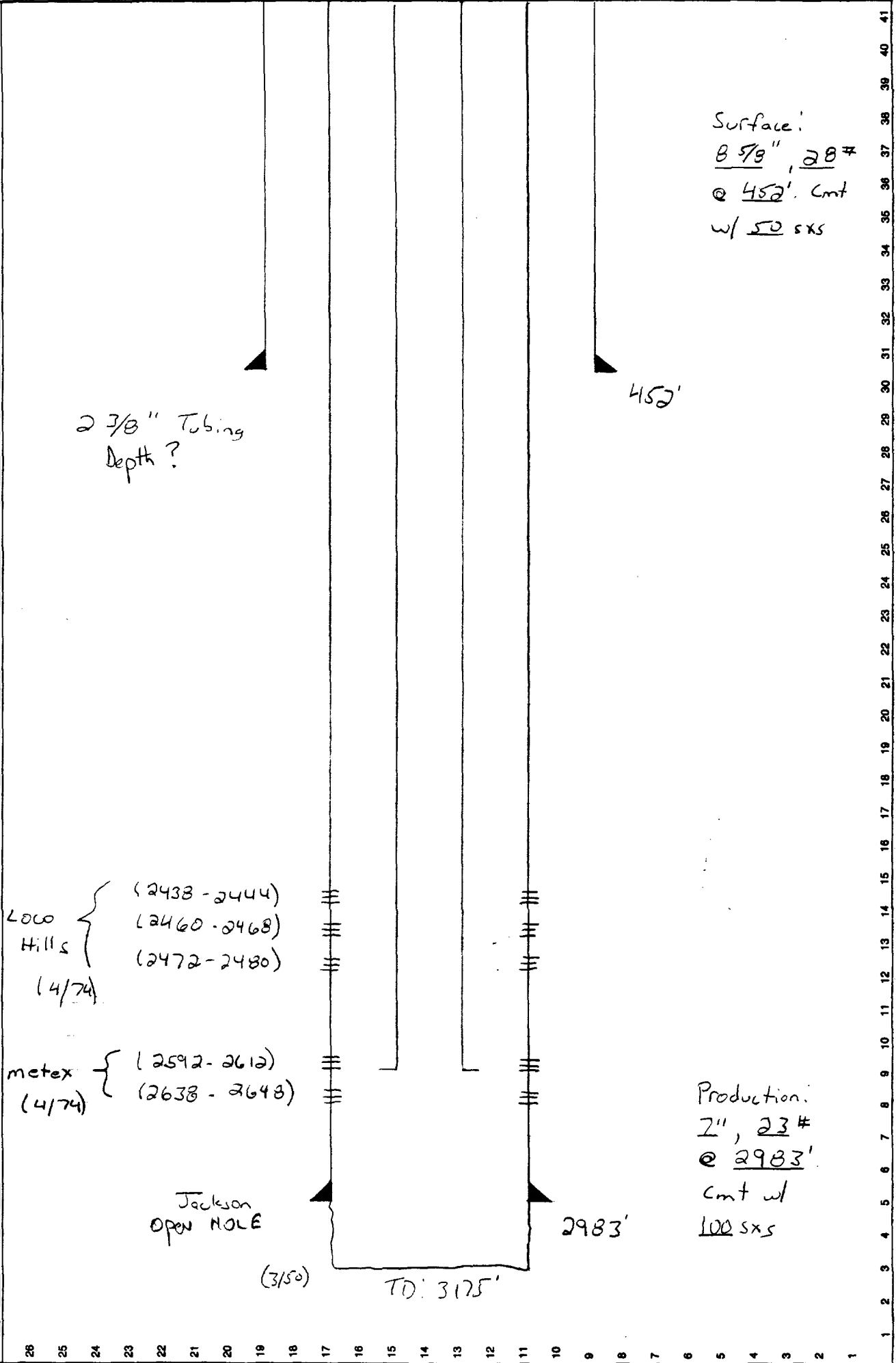
Meridian Oil  
ENGINEERING CALCULATION SHEET  
MO-0139 (1-89)



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Meridian Oil  
**ENGINEERING CALCULATION SHEET**

MO-0138 (1-88)

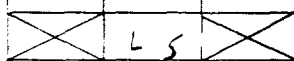


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Surface:  
8 1/4"  
@ 526'  
Cmt w/  
50 sy

526'

75  
5 ft



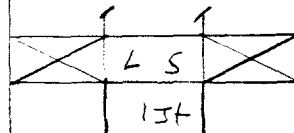
L.S. pkr @ 2360'

LOCO (2426-2432)  
HILLS (2454-2466)

13  
5 ft

METEX (2580-2600)

Parted Htg  
@ 2620'

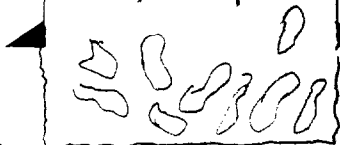


L.S. pkr  
@ 2899'  
2900

Production:  
7" @ 20#  
2980' Cmt  
w/ 100 sy

(OH)  
Jackson

Tbg @  
2930'  
(open  
ended)



2980'

Debris @ bottom of  
hole

TD: 3135'

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Date \_\_\_\_\_  
By \_\_\_\_\_

Meridian Oil  
**ENGINEERING CALCULATION SHEET**  
MO-0139 (1-88)

- 102 Jts 2 3/8" Tbg  
including 1 Jt Bull  
plus MA w/ 3' Perf +  
SN.

Lolo (2438-2450)  
Hill (2476-2486)  
  
METEX (2600-2618)  
(2646-2656)

Tbg depth  
unknown

TD: 3188

3025'

JACKSON OPEN HOLE

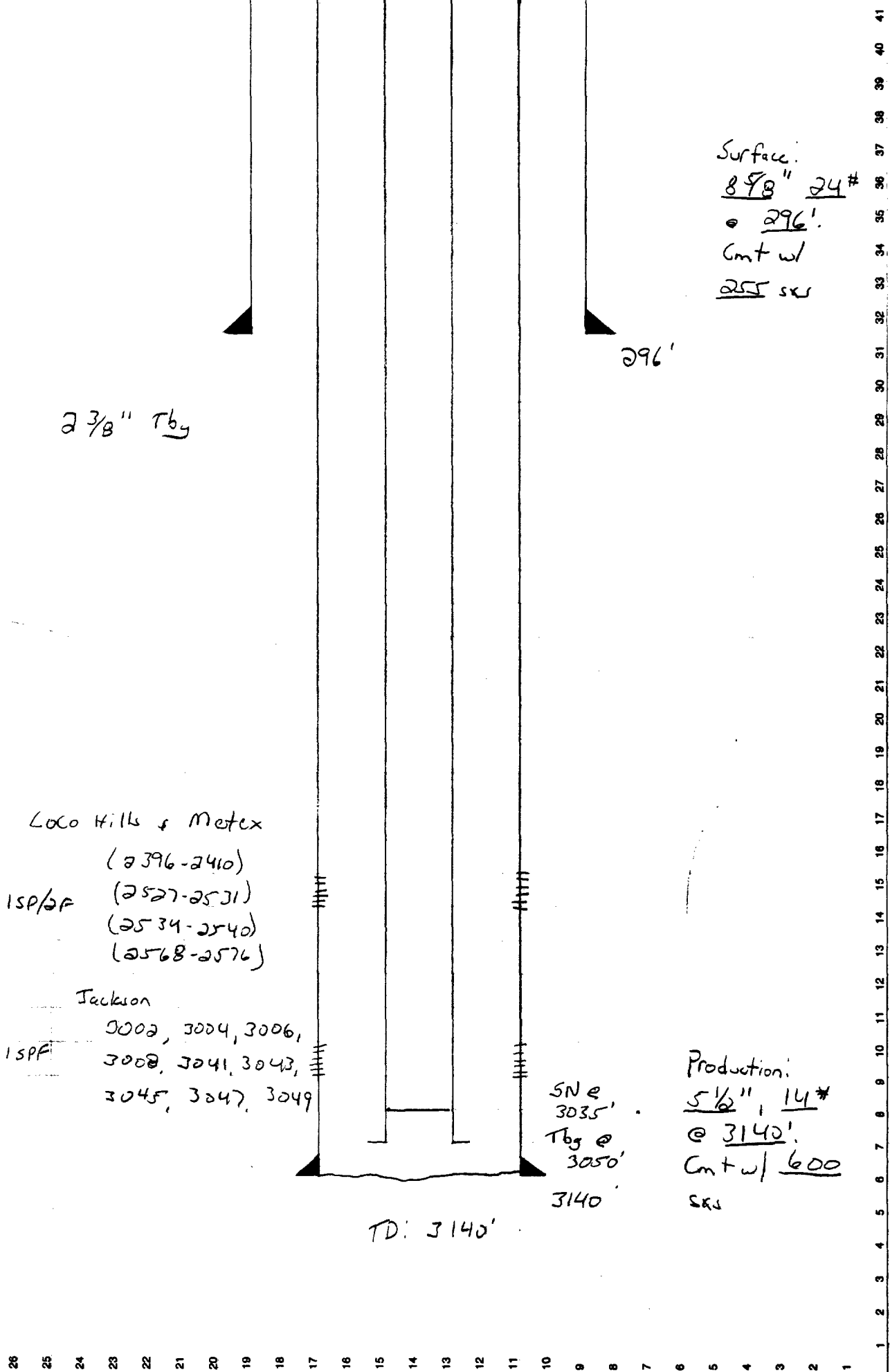
Surface:  
8 7/8", 284  
@ 498' Cmt  
w/ 100 SKS

Production:  
2", 20#  
@ 3025'  
Cmt w/ 100 SKS

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Meridian Oil  
**ENGINEERING CALCULATION SHEET**  
MO-0139 (1-88)



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Meridian Oil  
**ENGINEERING CALCULATION SHEET**  
MO-0138 (1-88)

PHILLIPS  
KEELY No. 21-C

12-13-91

LOCO HILLS 2378-88'

METEX 2792-2800'

JACKSON

2932-34  
2948-52  
2964-67  
3014-17  
3056-60  
3143-45  
3254-56

8-5/8"  
CMT w/ 100 SX

7"  
CMT w/ 100 SX

2858'

4 1/2" LINER  
2840-3367'  
CMT w/ 115 SX

3367'

41  
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**SRC RJU Tr. 1 #10**

1947 - Open hole Jackson 2903-3085' acid w/ 12,000g  
1974 - Perf Metex 2512-30' and 2556-64'  
Frac w/ 20,000g gel wtr and 50,000 lbs sd  
1977 - Squeeze Metex w/ 250 sx  
1982 - T&A

**SRC RJU Tr. 1 #13**

1949 - Open hole Jackson 2790-3000' acid w/ 12,500g  
1954 - Perf Metex 2437-55' frac w/ 6000g & 12,000 lbs sd

**SRC RJU Tr. 1 #14**

1947 - Open hole Jackson 2880-3063' acid w/ 7500g  
1974 - Perf Metex 2502-20' & 2546-54' 2 spf  
Frac w/ 20,000g gel & 50,000 lbs sd  
1982 - POH with rods/tbg SI

**SRC RJU Tr. 1 #15**

1949 - Open hole Jackson 2966-3175' acid w/ 4000g  
1954 - Frac open hole w/ 12,500g & 12,500 lbs sd  
1956 - Perf Metex 2586-94' and 2620-28' 4 spf  
Frac w/ 6000g oil and 12,000 lbs sd

**SRC RJU Tr. 1A #1**

1929 - J&A

**SRC RJU Tr. 1A #2**

1929 - Open hole Metex & Jackson 2430-3150'  
115 qts of nitro  
1967 - T&A  
No records - 8 5/8" casing set at 2430'

**SRC RJU Tr. 1A #3**

1946 - Open hole Jackson 2944-3140' acid w/ 6000g  
1953 - Frac w/ 3000g gel acid and 3000 lbs sd  
1974 - Perf Metex 2554-70' and 2589-2608'  
Frac w/ 50,000 lbs sd  
Perf Loco Hills 2404-14' and 2430-40'  
Frac 50,000 lbs sd

**SRC RJU Tr. 1A #11**

1947 - Open hole Jackson 3034-3190' Acid w/ 6500g  
1953 - Set BP over Jackson  
    Perf Metex 2616-34' Frac 3000g oil & 4500 lbs sd  
1973 - Covert to WIW  
    Drill out BP over Jackson  
    Perf Loco Hills 2458-64', 2492-98'  
    Perf Metex 2660-68'  
    Acidize w/ 750g

**SRC RJU Tr. 1A #16**

1950 - Open hole Jackson 2983-3175' Acid w/ 4500g  
1974 - Perf Metex 2592-2612' and 2638-48'  
    Perf Loco Hills 2438-44', 2460-69', 2472-80'  
    Frac together w/ 50,000 lbs sd

**SRC RJU Tr. 2A #11**

1946 - Open hole Jackson 2980-3135' Acid w/ 5000g  
1954 - Perf Metex 2580-2600' 4 spf  
    Frac 8,000g gel oil and 16,000 lbs sd  
1973 - Convert to WIW  
    Perf Loco Hills 2426-32' and 2454-66' Acid w/ 750g

**SRC RJU Tr. 2A #17**

Completion date unknown  
This well was P&A'd sometime after completion  
No records exist

**SRC RJU Tr. 2A #30**

1951 - Open hole Jackson 3025-3188' Acid w/ 12,000g  
1974 - Perf Metex 2600-18' & 2646-56'  
    Frac w/ 23,000 lbs sd  
    Perf Loco Hills 2438-50' & 2476-86'  
    Frac w/ 23,000 lbs sd

**SRC RJU Tr. 4 #20**

Completion date unknown  
This well was P&A'd sometime after completion  
No records exist

**SRC RJU Tr. 4 #32**

1980 - Perf Jackson 3041-49' & 3002-08'  
Frac w/ 20,000g & 20,000 lbs sd  
Perf Metex 2527-31', 2534-40', 2568-76'  
Perf Loco Hills 2396-2410'  
Frac Metex & LH w/ 45,000g and 63,000 lbs sd

**Phillips Keely No. 21-C**

1946 - Jackson open hole 2858-2917'  
1972 - Recompletion - deepened to 3367', ran 4-1/2" liner  
from 2840-3367'  
Perf Loco Hills 2378-88'  
Metex 2792-2800'  
Jackson 2932-34', 2948-52', 2964-67',  
3014-17', 3056-60', 3143-45', 3254-56'  
Frac w/ 60,000g & 60,000 lbs sand

**MERIDIAN OIL INC.**  
(Southland Royalty Co.)

**Application for Injection Permit**  
**Robinson Jackson Unit Tract 1A No. 12**  
**Grayburg Jackson 7RVS QN GB SA Field**  
**Eddy County, New Mexico**

**Wells in Area of Review**

**Completion Records**

**SRC RJU Tr. 1 #4**

1946 - Open hole Jackson 2995-3178' treated w/ 2000g acid  
1953 - Plugged back to 3160' using cmt, gravel, hydromite  
1954 - Perf 2574-84', 2588-96', 2620-34' 4 spf  
Frac w/ gelled crude 3000g & 4500 lbs sd  
1973 - Convert to WIW  
Acidize 2574-2634' w/ 750 gal 15% HCL  
1991 - T&A

**SRC RJU Tr. 1 #5**

1946 - Open hole Jackson 2832-3020' treated w/ 5000g acid  
1951 - Acidize w/ 3500g 15%  
1974 - Perf 2474-92', 2516-22' 2spf  
Frac w/ 20,000g & 23,000 lbs sand

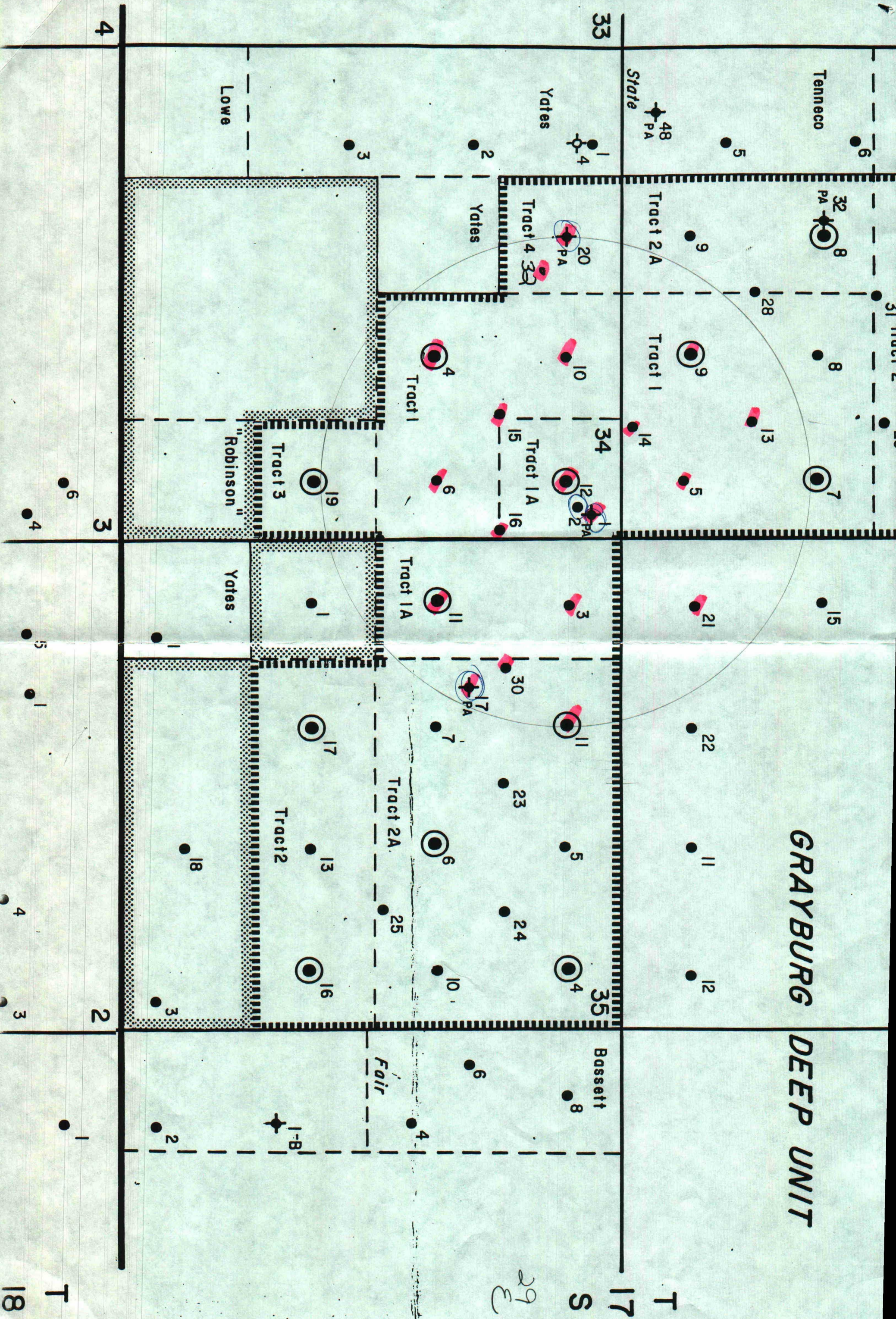
**SRC RJU Tr. 1 #6**

1946 - Open hole Jackson 3031-3234' treated w/ 5000g acid  
1954 - Perf 2520-30' 4 spf acid w/ 1000g frac w/ 3000g 8000#  
1954 - Perf 2606-24' 4 spf frac w/ 6000g & 8000 lbs sd

**SRC RJU Tr. 1 #9**

1947 - Open hole Jackson 2829-3014' treated w/ 8500g acid  
1954 - Open hole frac w/ 12,000g & 12,000 lbs  
1954 - Open hole frac w/ 10,000g & 20,000 lbs  
1973 - Convert to WIW  
Perf Metex 2464-80' and 2505-12' 750g acid  
Hydromite plug from TD to 2952'

GRAYBURG DEEP UNIT



29 E

T 17 S

T 18

# Memo

From  
DAVID CATANACH  
Petroleum Engineer

To WATER well - Call St. Engineer

1A #1 - J&A TB 2695  
Rebo (Republic)  
=> Lee No. 1 1929-J&A  
330 FW & FEL

1A #2 C.B. Lee No. 1  
440 FWL & 440 FEL  
2415' - 8 7/8" open hole  
898' 10 3/4" currently TA'd  
13 3/8 - 240'

---

#17 - NO INFO

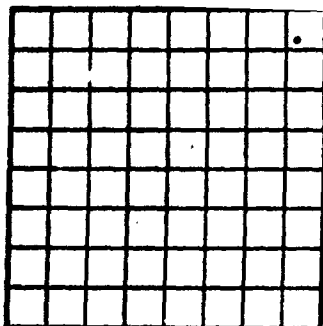
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#20 660 FWL - 1980 FWL

|                   |                  |            |               |          |         |
|-------------------|------------------|------------|---------------|----------|---------|
| NO.               | COUNTY           | STATE      | TYPED         | LOG      | PLOTTED |
|                   | EDDY             | New Mexico |               |          |         |
| COMPANY           | LEASE            | WELL NO.   |               |          |         |
| Pueblo (Republic) | Lee #1 - Roberts | 2-A        |               |          |         |
| LOCATION          | SEC              | BLOCK      | TWP           | SURVEY   |         |
| 330 f. N. - E     | 34               |            | 17-S          | R. 29-E  |         |
| COMMENCED         | COMPLETED        | I. P.      | ROTARY        | ELEV. BY |         |
|                   |                  |            | CABLE         | 3566     |         |
| SHOOTING RECORD   |                  |            | CASING RECORD | T. A.    |         |
| QUARTS            | DEPTHS           | DATE       | RESULTS       | SIZE     | DEPTH   |
|                   |                  |            |               |          |         |
|                   |                  |            |               |          |         |
| ACID TREATMENT    |                  |            | T. L.         |          |         |
| GALS.             | %                | TEMP.      | LOAD          | PRESSURE | TIME    |
|                   |                  |            |               |          |         |
|                   |                  |            |               |          |         |
|                   |                  |            |               |          |         |
| DATE              |                  |            | RESULTS       |          |         |
| REMARKS           |                  |            | T. P.         |          |         |
| (OVER)            |                  |            | T. D.         |          |         |
|                   |                  |            | P. B.         |          |         |

2-21-92

RJU Tract 1A No. 1



LOCATE WELL CORRECTLY

SERIAL NUMBER .....  
LEASE OR PERMIT TO PROSPECT .....UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

## LOG OF OIL OR GAS WELL

Company American Republics Corpn Address Pox 547, Artesia, New Mexico  
Lessor or Tract E. M. Robinson Field Gray-Jackson State New Mexico  
Well No. 2-A Sec. 34 T. 17 R. 22 Meridian N.M.P.M. County Eddy  
Location 440 ft. (N. of S. Line and 440 ft. (E. of W. Line of NE/4 Sec. 34 Elevation 3566  
(Mark the well on an inset map)

The information given herewith is a complete and correct record of the well and all work done thereon so far as can be determined from all available records.

Signed W. B. Macey  
Title District SuperintendentDate 8/21/51

The summary on this page is for the condition of the well at above date.

Commenced drilling MAY 23, 1929 Finished drilling August 14, 1929

## OIL OR GAS SANDS OR ZONES

(Denote gas by G)

No. 1, from 2531 to 2532 No. 4, from ..... to .....  
No. 2, from 2545 to 2550 No. 5, from ..... to .....  
No. 3, from 2570 to 2575 No. 6, from ..... to .....

## IMPORTANT WATER SANDS

No. 1, from 160 to 175 No. 3, from ..... to .....  
No. 2, from ..... to ..... No. 4, from ..... to .....

## CASING RECORD

| Size casing | Weight per foot | Threads per inch | Make   | Amount | Kind of shoe | Cut and pulled from | Perforated |     | Purpose |
|-------------|-----------------|------------------|--------|--------|--------------|---------------------|------------|-----|---------|
|             |                 |                  |        |        |              |                     | From—      | To— |         |
| 15 1/2      | 70              | 3                | 22 1/2 |        |              |                     |            |     |         |
| 12 1/2      | 50              | 3                | 24 1/2 |        |              |                     |            |     |         |
| 10          | 40              | 3                | 26 1/2 |        |              |                     |            |     |         |
| 8 1/2       | 32              | 3                | 24 3/4 |        |              |                     |            |     |         |

## MUDDING AND CEMENTING RECORD

| Size casing | Where set | Number sacks of cement | Method used | Mud gravity | Amount of mud used |
|-------------|-----------|------------------------|-------------|-------------|--------------------|
| 15 1/2      | 22        | Landed                 |             |             |                    |
| 12 1/2      | 24 1/2    | Landed                 |             |             |                    |
| 10          | 26 1/2    | Landed                 |             |             |                    |
| 8 1/2       | 24 3/4    | Landed                 |             |             |                    |

## PLUGS AND ADAPTERS

Heaving plug—Material ..... Length ..... Depth set .....  
Adapters—Material ..... Size .....

## SHOOTING RECORD

| Size | Shell used | Explosive used | Quantity | Date | Depth shot | Depth cleared out |
|------|------------|----------------|----------|------|------------|-------------------|
|      |            |                |          |      |            |                   |
|      |            |                |          |      |            |                   |
|      |            |                |          |      |            |                   |

## TOOLS USED

Rotary tools were used from ..... feet to ..... feet, and from ..... feet to ..... feet  
Cable tools were used from ..... feet to ..... feet, and from ..... feet to ..... feet

## DATES

Put to producing August 14, 1929

The production for the first 24 hours was ..... barrels of fluid of which 100 % was oil; ..... % emulsion; ..... % water; and ..... % sediment. Gravity, °Bé. ....

If gas well, cu. ft. per 24 hours ..... Gallons gasoline per 1,000 cu. ft. of gas .....

Rock pressure, lbs. per sq. in. ....

EMPLOYEES

Driller

COUNTY EDDY STATE NEW MEXICO ELEV. 3566 LAND  
LOCATION 440 FNL & 440 FEL of Section 34, Twp. 17-S, Rge. 29-E GEO.

# 03771

|              |                              |                |
|--------------|------------------------------|----------------|
| PAY          | OIL STRING<br>OR PROD. PERF. | FIRST<br>REPT. |
| T.D. 3150'   | PLUG BACK                    | SPUD. 5/22/29  |
| I.P. 20 BOPD |                              | COMP. 8/22/29  |

[illegible]

RTU 1A-2

2-21-92

|                                          |        |                 |                |               |       |           |  |
|------------------------------------------|--------|-----------------|----------------|---------------|-------|-----------|--|
| No.                                      |        | COUNTY          |                | STATE         |       | LOG       |  |
|                                          |        | EDDY            |                | New Mexico    |       | TYPED     |  |
| COMPANY                                  |        | Pueblo          |                | LEASE         |       | C. B. Lee |  |
| LOCATION                                 |        | 440' f m. N. E. |                | SEC.          |       | T. W. P.  |  |
|                                          |        | 34              |                | BLOCK         |       | 17-S      |  |
|                                          |        |                 |                |               |       | R. 29-E   |  |
| COMMENCED                                |        | COMPLETED       |                | I. P. Pump    |       | ELEV. BY  |  |
| 4/23/29                                  |        | 9/6/29          |                | 20/29         |       | SW. 3566' |  |
| SHOOTING RECORD                          |        |                 |                | CASING RECORD |       | T. S.     |  |
| QUARTS                                   | DEPTHS | DATE            | RESULT         | SIZE          | DEPTH | B. S.     |  |
| 15                                       | 2528   | 2538            | 9/30/29        | 12 1/2"       | 240'  | 360       |  |
| 50                                       | 2835   | 2855            | Oil - 24 hrs - |               |       | 760'      |  |
| 50                                       | 2965   | 2985            | R-tubing       |               |       | BASE A    |  |
| REMARKS                                  |        |                 |                |               |       | T. B. L.  |  |
| 7/17/29 Gas pocket 518-532               |        |                 |                |               |       | 2270'     |  |
| 7/11/29 S.D. 75 G.H. @ 2542 TD           |        |                 |                | 8" 2415       |       | T. W. L.  |  |
| R-8 @ 2415                               |        |                 |                | 1000 2430     |       | T. BENT.  |  |
| 7/18 @ 2595 G.H. - 8 1/2" - 2430         |        |                 |                | Red 2885      |       | T. P.     |  |
| (OVER) Show oil 2531-33 SLM 2542 to 2531 |        |                 |                |               |       | T. D.     |  |
|                                          |        |                 |                |               |       | 3150'     |  |
|                                          |        |                 |                |               |       | P. B.     |  |

RJU 1A No. 2

Inf  
2-21-92

8/16 Oil incr. 2970-75, sev. o.i.H.

S.P. 3110' L.S.,  
1000' o.i.H.

8/23 T.P. 3150 - will shoot.

8/20 Sub. 30 bbls - 1st 12hrs after shot (See record-keeper)

9/6 Av. 20 bbls day - pump - not shot in  
for storage.

|                                                                                                        |           |            |                 |
|--------------------------------------------------------------------------------------------------------|-----------|------------|-----------------|
| No.                                                                                                    | COUNTY    | STATE      | LOG             |
|                                                                                                        | EDDY      | New Mexico | TYPED           |
| COMPANY                                                                                                | LEASE     | PLOTTED    |                 |
| Pueblo                                                                                                 | Lee       | WELL NO. 1 |                 |
| LOCATION                                                                                               | SEC.      | BLOCK      | T. W. P. SURVEY |
|                                                                                                        |           |            | R.              |
| COMMENCED                                                                                              | COMPLETED | I. P.      | ROTARY CABLE    |
| SHOOTING RECORD                                                                                        |           |            | ELEV. BY        |
| QUARTS                                                                                                 | DEPTHS    | DATE       | CASING RECORD   |
|                                                                                                        |           |            | T. S.           |
|                                                                                                        |           |            | SIZE DEPTH      |
| REMARKS<br>Samples #2<br>2220-25 @ A-R Sh.<br>2220-25 @ A-R Sh.<br>2225-35 ✓<br>(OVER) 2235-45 A-R Sh. |           |            | B. S.           |
|                                                                                                        |           |            | BASE A          |
|                                                                                                        |           |            | T. B. L.        |
|                                                                                                        |           |            | T. W. L.        |
|                                                                                                        |           |            | T. BENT.        |
|                                                                                                        |           |            | T. P.           |
|                                                                                                        |           |            | T. D.           |
|                                                                                                        |           |            | P. B.           |

|           |                            |           |                           |
|-----------|----------------------------|-----------|---------------------------|
| 2245-50   | A-dolo, some R. bluish     | 2385-95   | Very anhydritic gr. dolo. |
| 2250-55   | Rsh. some dolo. some A     | 2395-2400 | ✓                         |
| 2260-65   | A, some R. Sh.             | 2400-10   | ✓                         |
| 2260-70   | ✓                          | 2410-15   | ✓                         |
| 2270-75   | A-gr dolo.                 | 2415-20   | ✓                         |
| 2275-80   | Dolo. - some Rsh. little A | 2420-25   | ✓                         |
| 2280-85   | ✓ mult. Rsh. dysh. ✓       | 2425-30   | ✓                         |
| 2285-90   | ✓ calc. Rsh. little A      | 2430-35   | ✓                         |
| 2295-2300 | gr. dolo, some calc. Rsh.  | 2435-40   | ✓                         |
| 2305-10   | A, ✓ tr. Rsh.              | 2440-45   | ✓                         |
| 2310-20   | ✓ A-gr dolo.               | 2445-50   | ✓                         |
| 2320-25   | ✓                          | 2450-55   | ✓                         |
| 2325-30   | ✓                          | 2455-60   | ✓                         |
| 2330-35   | ✓                          | 2460-65   | ✓                         |
| 2335-40   | ✓                          | 2465-70   | ✓                         |
| 2345-50   | ✓                          | 2470-75   | ✓                         |
| 2350-55   | ✓                          | 2480-85   | ✓                         |
| 2355-60   | ✓                          | 2485-90   | ✓                         |
| 2360-70   | ✓                          | 2490-95   | ✓                         |
| 2370-75   | ✓                          | 2505-10   | ✓                         |
| 2375-80   | ✓                          | 2510-25   | ✓                         |
| 2380-85   | ✓                          | 2525-30   | ✓                         |

|                                    |           |        |        |               |          |          |  |
|------------------------------------|-----------|--------|--------|---------------|----------|----------|--|
| No.                                |           | COUNTY |        | STATE         |          | LOG      |  |
|                                    |           | EDDY   |        | New Mexico    |          | TYPED    |  |
| COMPANY                            |           | LEASE  |        | PUEBLO        |          | PLOTTED  |  |
|                                    |           |        |        | Lee           |          | WELL NO. |  |
| LOCATION                           |           | SEC.   | BLOCK  | T. W. P.      | SURVEY   |          |  |
|                                    |           |        |        |               | R.       |          |  |
| COMMENCED                          | COMPLETED | I. P.  |        | ROTARY        | ELEV. BY |          |  |
|                                    |           |        |        | CABLE         |          |          |  |
| SHOOTING RECORD                    |           |        |        | CASING RECORD |          | T. S.    |  |
| QUARTS                             | DEPTHS    | DATE   | RESULT | SIZE          | DEPTH    |          |  |
|                                    |           |        |        |               |          | B. S.    |  |
|                                    |           |        |        |               |          | BASE A   |  |
| REMARKS                            |           |        |        |               |          | T. B. L. |  |
| Samples #3                         |           |        |        |               |          | T. W. L. |  |
| 2530-35 A-gr dolo.                 |           |        |        |               |          | T. BENT. |  |
| 2530-35 ✓ ✓ ✓                      |           |        |        |               |          | T. P.    |  |
| 2535-40 ✓ ✓ ✓                      |           |        |        |               |          | T. D.    |  |
| (OVER) 2540-42 Brnsh sand tr. dolo |           |        |        |               |          | P. B.    |  |

Cont - Roswell 7/19/29 CP9.

2532-36-44 Gr. dolo.  
 2544-46 Sl. clay A-  
 2546-50 gr. tan dolo.  
 2554-55 A-  
 2555-60 A-gr. dolo. tr. OS  
 2560-70 A-gr. dolo.  
 2570-75 Red dolo.  
 2575-80 R-some gr A-dolo.  
 tr. dk. sh  
 2580-85 R-tr. gr. A-dolo.  
 2585-90 Lgr  
 tr. d. to say sh.  
 2590-95 Only A-life bnd dolo.  
 2595-2600 some dolo. - blk bent.  
 say sh  
 2600-05 Tan dolo. little d. to sh.  
 2605-10 Life A- tr. sh.

2610-15 Sl. clay A-life dolo  
 2615-20 sample gone  
 2620-25-30 Life dolo. (test)  
 2630-35-40 tan  
 2640-45 Sl. clay A-life dolo  
 2645-50 A-life dolo. odor  
 2650-55 gr. some pink dolo.  
 2660-65 Sl. clay A-life dolo (odor)  
 2665-75 sd, little Red dolo.  
 2675-80 tr. sh  
 2680-85 Red dolo. to  
 2685-90 RSh sh R-gr dolo.  
 Any d. to  
 2690-95 RSh sh R-gr dolo.  
 2695-2700 Al gr dolo. some Red sh  
 2700-05 Brnc R dolo  
 2705-10 white dolo  
 2710-15 white dolo  
 2715-20 white dolo - odor out  
 earthy

|                                          |           |        |        |               |          |          |  |
|------------------------------------------|-----------|--------|--------|---------------|----------|----------|--|
| No.                                      |           | COUNTY |        | STATE         |          | LOG      |  |
|                                          |           | EDDY   |        | New Mexico    |          |          |  |
| COMPANY                                  |           | LEASE  |        | TYPED         |          | PLOTTED  |  |
| Pueblo                                   |           | Lee    |        |               |          | 1        |  |
| LOCATION                                 |           | SEC.   | BLOCK  | T. W. P.      | SURVEY   |          |  |
|                                          |           |        |        | R.            |          |          |  |
| COMMENCED                                | COMPLETED | I. P.  |        | ROTARY        | ELEV. BY |          |  |
|                                          |           |        |        | CABLE         |          |          |  |
| SHOOTING RECORD                          |           |        |        | CASING RECORD |          | T. S.    |  |
| QUARTS                                   | DEPTHS    | DATE   | RESULT | SIZE          | DEPTH    |          |  |
|                                          |           |        |        |               |          | B. S.    |  |
|                                          |           |        |        |               |          | BASE A   |  |
| REMARKS                                  |           |        |        |               |          | T. B. L. |  |
| 2720-25 OS 1.5 to 2.0 ft. hole           |           |        |        |               |          | T. W. L. |  |
| 2725-30 - 3.5 Whit. dol.                 |           |        |        |               |          | T. BENT. |  |
| 2735-40 Whit. top. 2.0 ft. hole          |           |        |        |               |          | T. P.    |  |
| 2740-45                                  |           |        |        |               |          | T. D.    |  |
| (OVER) 2745-50 Whit. 1.5 to 2.0 ft. hole |           |        |        |               |          | P. B.    |  |

2750-55-75 Lile dolo <sup>some</sup> <sub>WHT</sub>  
 2775-80-85 oil sot. ✓  
 2785-90 Lile & gr. ✓ some OS  
 2790-95 ✓ tr. pink dolo  
 2795-2800 ✓ Lile & gr. brown dolo  
 2800-05-10 ✓ Lile & gr. brown dolo  
 2810-15 Lile & tr. bl. dolo  
 2815-20 Same, only unhydatite  
 2820-25 Gr. dolomite sd. some dolo  
 2825-30 Lile, some bl. gr. dolo  
 2830-35 Lile tan dolo, some  
 white ss, tr. bl.  
 gr. dolo.

2835-40

2840-50 Gr. sd. + r. dolo.  
 2854-55 A-bm OS dolo  
 2855-60 A-gr. dolo, (tr. blue sh)  
 2860-65 Bm dolo  
 2865-70 Lile & gr.  
 2870-75 A-

2875-80 A-bm dolo (sl. ite)  
 2880-85 Lile ✓  
 2885-90 Wht. dolo (tr. blue sh)  
 2890-95 ✓  
 2895-2900 Same  
 2900-05 Lile dolo on wh. -  
 gr. bl. bent.

# Memo

*From*  
DAVID CATANACH  
*Petroleum Engineer*

*To*

*1948 Spad  
Abandoned  
856 362'  
7" - 2899'  
TD 3788'*

|                    |  |                  |  |            |  |               |  |          |  |
|--------------------|--|------------------|--|------------|--|---------------|--|----------|--|
| NO.                |  | COUNTY           |  | STATE      |  | LOG           |  | PLOTTED  |  |
|                    |  | EDDY             |  | New Mexico |  | TYPED         |  |          |  |
| COMPANY            |  |                  |  | LEASE      |  |               |  | WELL NO. |  |
| American Republics |  |                  |  | Robinson   |  |               |  | 20-B     |  |
| LOCATION           |  |                  |  | SEC.       |  | BLOCK         |  | SURVEY   |  |
| 660' FN & 1980' FW |  |                  |  | 34         |  | TWP 17-S      |  | R. 29-E  |  |
| COMMENCED          |  | COMPLETED        |  | I. P.      |  | ROTARY        |  | ELEV. BY |  |
| 1-15-48            |  | 4-19-48          |  | D&A        |  | CABLE         |  | 3518'    |  |
| SHOOTING RECORD    |  |                  |  |            |  | CASING RECORD |  | T. A.    |  |
| QUARTS             |  | DEPTHS           |  | DATE       |  | RESULTS       |  | T. S.    |  |
|                    |  |                  |  |            |  |               |  | B. S.    |  |
|                    |  |                  |  |            |  |               |  | BASE A.  |  |
|                    |  |                  |  |            |  |               |  | T. YATES |  |
| ACID TREATMENT     |  |                  |  |            |  |               |  | T. L.    |  |
| GALS.              |  | %                |  | TEMP.      |  | LOAD          |  | PRESSURE |  |
|                    |  |                  |  |            |  |               |  | T. L.    |  |
|                    |  |                  |  |            |  |               |  | L.       |  |
|                    |  |                  |  |            |  |               |  | T. P.    |  |
| DATE               |  | RESULTS          |  |            |  |               |  | T. D.    |  |
| R 4-28-48          |  | Grayburg-Jackson |  |            |  |               |  | 3788'    |  |
| REMARKS            |  |                  |  |            |  |               |  | P. B.    |  |
|                    |  |                  |  |            |  |               |  | 2470'    |  |
| (OVER)             |  |                  |  |            |  |               |  |          |  |

# 20  
Not in use  
review

D+A

2.22.92

RJU TRACT 4 No. 20

# 20  
660 NL & 1980 FW

# 12 - Dry well  
660 NL & 654 FW

2646' from dry well.

EDDY COUNTY: AMERICAN REPUBLICS #20-B ROBINSON, 660'  
FNL 1980' FWL Sec 34-17S-29E (GRAYBURG-  
JACKSON POOL) TD 3788' DOLOMITE, PB 2470', DRY & ABAND-  
ONED. SPUD 1-15-48, COMPL 4-19-48, 8 1/2" 362' (50 SX) 7"-  
2899' (100 SX); SSC & WTR 3475' SAND, SWAB DRY, TR/500  
GA, SWAB DRY, BAIL 1/2 BLR OIL/2 HRS, RETR/1000 GA, SWAB  
5 GALS OPH, TRIED RETR/1000 GA, RAN 2" 3093', PKR 2945',  
TR/1000 GA, SSC, PERF 2450-67'/90 SHOTS, TR/500 GA, SWAB  
3 BC/8 HRS, RETR/1000 GA, NO INCREASE, ELEV 3518', T/-  
RED SAND 1870', T/SAN ANDRES 2685', NO JACKSON, NO GRAY-  
BURG.

**MERIDIAN OIL**

OIL CONSERVATION DIVISION  
RECEIVED

1992 JAN 14 AM 10 17

January 10, 1992

Oil Conservation Division  
P.O. Box 2088  
Santa Fe, New Mexico 87501

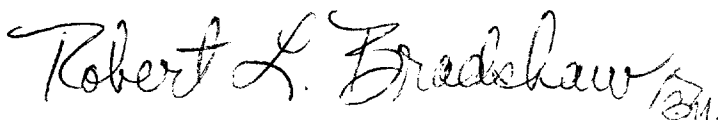
Re: Southland Royalty Company  
RJU Tr. 1A Well No. 12  
Unit A, Sec 34, T17S, R29E  
Eddy County, New Mexico  
LC-028775-B

Gentlemen:

Form C-108 and attachments requesting authorization to convert the above referenced well to water injection for secondary recovery were sent to you on December 20, 1991. Attached is proof that a copy of the application has been sent to operators within ½ mile and the required legal notice has been published in a local newspaper.

If other information is needed prior to your approval of our request, please contact me at (915) 688-6836.

Sincerely,



Robert L. Bradshaw  
Sr. Staff Environmental Representative

RLB/cm

cc: Well file  
Joe Small  
OCD - Artesia  
BLM - Carlsbad

## Copy of Publication

STATE OF NEW MEXICO,

Gary D. 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 state, and that the hereto attached Legal Notice

the state of New Mexico for 1 consecutive weeks on                      days  
the same day as follows:

Fourth Publication

Barbara Ann Beams  
Notary Public, Eddy County, New Mexico

**LEGAL NOTICE**

Southland Royalty proposes to convert the Bitter Lake No. 1A, No. 12 to water disposal for secondary recovery by steam flood oil. The well is located in T17S, R6E, N20W, Sec. 18, T17S, R6E, N20W, New Mexico. Estimated flow of 1000 BBL per day. To the nearest section corner to the NE corner of Section 26.

2921  
presented at 202  
In

jections or requests for hearing with the Oil Conservation Division, Room 2088, Santa Fe, New Mexico 87501 within 15 days.

Published in the Santa Fe Daily Press Artesian, El Cerrito, Mexico December 26, 1964

Legal 13785

**SENDER:** Complete items 1 and 2 when additional services are desired, and complete items 3 and 4.  
Put your address in the "RETURN TO" Space on the reverse side. Failure to do this will prevent this card from being returned to you. The return receipt fee will provide you the name of the person delivered to and the date of delivery. For additional fees the following services are available. Consult postmaster for fees and check box(es) for additional service(s) requested.

1. ☐ Show to whom delivered, date, and addressee's address. 2. ☐ Restricted Delivery (Extra charge)

3. Article Addressed to:  
S.P. Yates  
104 South 4th St.  
Ortisia, N.M. 88210  
BSU TRIA #12

4. Article Number  
P154 362 237

Type of Service:  
☐ Registered ☐ Insured  
☒ Certified ☒ COD  
☐ Express Mail ☒ Return Receipt for Merchandise

Always obtain signature of addressee or agent and DATE DELIVERED.

5. Signature — Addressee  
X

6. Signature — Agent  
X *[Signature]*

7. Date of Delivery  
12-26-91

8. Addressee's Address (ONLY if requested and fee paid)

PS Form 3811, Apr. 1989

★ U.S.G.P.O. 1989-238-815

DOMESTIC RETURN RECEIPT

**SENDER:** Complete items 1 and 2 when additional services are desired, and complete items 3 and 4.  
Put your address in the "RETURN TO" Space on the reverse side. Failure to do this will prevent this card from being returned to you. The return receipt fee will provide you the name of the person delivered to and the date of delivery. For additional fees the following services are available. Consult postmaster for fees and check box(es) for additional service(s) requested.

1. ☐ Show to whom delivered, date, and addressee's address. 2. ☐ Restricted Delivery (Extra charge)

3. Article Addressed to:  
Phillips Petroleum  
4001 Penbrook  
Odessa Texas 79762  
BSU TRIA #12

4. Article Number  
P154 362 236

Type of Service:  
☐ Registered ☐ Insured  
☒ Certified ☒ COD  
☐ Express Mail ☒ Return Receipt for Merchandise

Always obtain signature of addressee or agent and DATE DELIVERED.

5. Signature — Addressee  
X

6. Signature — Agent  
X *[Signature]*

7. Date of Delivery  
12-30-91

8. Addressee's Address (ONLY if requested and fee paid)

PS Form 3811, Apr. 1989

★ U.S.G.P.O. 1989-238-815

DOMESTIC RETURN RECEIPT

TR 14, No. 12

Schlumberger

COMPENS  
NEUTRON

|                                                   |      |                     |         |                        |
|---------------------------------------------------|------|---------------------|---------|------------------------|
| COUNTY<br>FIELD or<br>LOCATION<br>WELL<br>COMPANY | EDDY | GRAYBURG JACKSON    | COMPANY | SHENANDOAH OIL CORPORA |
|                                                   |      | F.M. ROBINSON "A"   | WELL    | F.M. ROBINSON "A" #12  |
|                                                   |      | #12                 | FIELD   | GRAYBURG JACKSON       |
|                                                   |      | SHENANDOAH OIL      | COUNTY  | EDDY STATE NEV         |
| Location:                                         |      | 660' FNL & 654' FEL |         |                        |
| Sec. 34                                           |      | Twp. 17-S Rge. 29-E |         |                        |

Permanent Datum: G.L. ; Elev.: 3558  
 Log Measured From G.L. , 0 Ft. Above Perm. Datum  
 Drilling Measured From -

|                        |             |
|------------------------|-------------|
| Date                   | 6-15-73     |
| Run No.                | ONE         |
| Type Log               | CNL         |
| Depth—Driller          | 3086        |
| Depth—Logger           | 3085        |
| Bottom logged interval | 3082        |
| Top logged interval    | 1550        |
| Type fluid in hole     | WATER & OIL |
| Salinity, PPM Cl.      | -           |
| Density                | -           |
| Level                  | -           |
| Max rec. temp., deg F. | 82          |
| Operating rig time     | 3 HOURS     |
| Recorded by            | GANN        |
| Witnessed by           | BELLAH      |

| BORE-HOLE RECORD |       |      |      | CASING |      |    |
|------------------|-------|------|------|--------|------|----|
| RUN No.          | Bit   | From | To   | Size   | Wgt. | Fr |
| 1                | 8     | SURF |      | 7      | 20   | SL |
|                  | 6 1/4 | 2922 | 3082 |        |      |    |
|                  |       |      |      |        |      |    |
|                  |       |      |      |        |      |    |