

P. 3

Americas) Inc. ERG
4 Navajo-0, Apache Cty 663
SW SE, Sec. 23, T41N, R30E

COUNTY Apache AREA Teec Nos Pos LEASE NO. 14-20-603-716

WELL NAME Drill/Well Energy Reserves Group 4 Navajo - 0

LOCATION SW SE SEC 23 TWP 41N RANGE 30E FOOTAGE 800 FSL & 2080 FEL

ELEV 5233 GR 5246 KB per logs SPUD DATE 12-7-76 STATUS Producing TOTAL DEPTH 5440 KB COMP. DATE 2-7-70

CONTRACTOR PTA 11-23-98

| CASING SIZE | DEPTH | CEMENT | LINER SIZE & DEPTH | DRILLED BY ROTARY |
|---------------|--------------|----------------|--------------------|--|
| <u>8 7/8"</u> | <u>501'</u> | <u>325 SKS</u> | <u>Circulated</u> | <input checked="" type="checkbox"/> |
| <u>5 1/2"</u> | <u>5439'</u> | <u>150 SKS</u> | | <input type="checkbox"/> |
| | | | | DRILLED BY CABLE TOOL <input type="checkbox"/> |
| | | | | PRODUCTIVE RESERVOIR <u>Upper Ismay</u> |
| | | | | INITIAL PRODUCTION <u>148 BO 38 BW</u> <u>176 MCF</u> |

| FORMATION TOPS | DEPTHS | SOURCE | | REMARKS |
|---------------------|-------------|--------|------|-------------------------------|
| | | L.L. | E.L. | |
| <u>DeChelly ss</u> | <u>2667</u> | | | |
| <u>Hermosa</u> | <u>4168</u> | | | <u>See Sample Description</u> |
| <u>Upper Ismay</u> | <u>5213</u> | | | |
| <u>Lower Ismay</u> | <u>5278</u> | | | |
| <u>Desert Creek</u> | <u>5365</u> | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

| ELECTRIC LOGS | PERFORATED INTERVALS | PROD. INTERVALS | SAMPLE LOG |
|--------------------------|----------------------|------------------|-------------------------------------|
| <u>IES-SP & BHC-</u> | <u>5314-26 W 2</u> | <u>5314-5326</u> | <input checked="" type="checkbox"/> |
| <u>Sonic</u> | <u>holes per ft.</u> | | SAMPLE NO. _____ |
| | | | CORE ANALYSIS <u>No C.C.C.</u> |
| | | | DSTs <u>2</u> |

REMARKS Original application to drill was filed as an orthodox location. Location changed as shown above after notice and hearing
SEE CASE NO. 51

APP. TO PLUG
PLUGGING REP.
COMP. REPORT

WATER WELL ACCEPTED BY _____

BOND CO. Seaboard Surety Company CROSS CREEK filed in P/N 687 BOND NO. 731801
DATE 9-18-70
ORGANIZATION REPORT 7-17-70

BOND AMT. \$ 25,000. CANCELLED 10-9-90

FILING RECEIPT 673 LOC. PLAT X WELL BOOK X PLAT BOOK X

API NO. 02-001-20219 DATE ISSUED 6-2-1976 DEDICATION W/4 of the SE/4

PERMIT NUMBER 663

WELL COMPLETION OR RECOMPLETION REPORT AND WELL LOG

DESIGNATE TYPE OF COMPLETION:

New Well Work-Over Deepen Plug Back Same Reservoir Different Reservoir Oil Gas Dry

DESCRIPTION OF WELL AND LEASE

Operator: Energy Reserves Group, Inc. Address: P.O. Box 3280, Casper, WY 82602

Federal, State or Indian Lease Number or name of lessor if fee lease: Navajo "0" 14-20-603-716 Well Number: 4 Field & Reservoir: Teec Nos Pos - Ismay

Location: 800' FSL and 2080' FEL County: Apache

Sec. TWP-Range or Block & Survey
Sec. 23-T41N-R30E

| | | | | |
|-------------------------|--------------------------------------|--|---|---------------------------------------|
| Date spudded 12-7-76 | Date total depth reached 12-28-76 | Date completed, ready to produce 2-7-77 | Elevation (D.P., R.F.P., RT or Gr.) 5244' K.B. | Elevation of casing hd. base 5231' |
|-------------------------|--------------------------------------|--|---|---------------------------------------|

| | | | |
|----------------------|-------------------|--|--|
| Total depth 5440' | F.B.T.D. 5405' | Single, dual or triple completion? Single | If this is a dual or triple completion, furnish separate report for each completion. |
|----------------------|-------------------|--|--|

| | | |
|--|---|-----------------------------|
| Producing interval (s) for this completion 5314' - 5326' (K.B.) | Rotary tools used (interval) 0-5440' | Cable tools used (interval) |
|--|---|-----------------------------|

| | | | |
|--|------------------------------------|---------------------------------------|------------|
| Was this well directionally drilled? No | Was directional survey made? No | Was copy of directional survey filed? | Date filed |
|--|------------------------------------|---------------------------------------|------------|

Type of electrical or other logs run (check logs filed with the commission):
IES; BHC - Sonic w/GR - attached

CASING RECORD

| Casing (report all strings set in well—conductor, surface, intermediate, producing, etc.) | | | | | | |
|---|-------------------|-----------------|------------------|-------------|--------------|-------------|
| Purpose | Size hole drilled | Size casing set | Weight (lb./ft.) | Depth set | Sacks cement | Amt. pulled |
| Surface | 12-1/4" | 8-5/8" | 32# | 501' K.B. | 325 sx. | None |
| Production | 7-7/8" | 5-1/2" | 14# | 5,439' K.B. | 150 sx. | None |

TUBING RECORD

LINER RECORD

| Size | Depth set | Packer set at | Size | Top | Bottom | Sacks cement | Screen (ft.) |
|-----------|-----------|---------------|----------|-----|--------|--------------|--------------|
| 2-3/8 in. | 5344 ft. | | None in. | | | | |

PERFORATION RECORD

ACID, SHOT, FRACTURE, CEMENT SQUEEZE RECORD

| Number per ft. | Size & type | Depth Interval | Amt. & kind of material used | Depth Interval |
|----------------|-----------------|-----------------|------------------------------|-----------------|
| 2 | McCullough Jets | 5,314' - 5,326' | 500-gal. 28% HCL | 5,314' - 5,326' |

INITIAL PRODUCTION

Date of first production: 2-7-77
Producing method (indicate if flowing, gas lift or pumping—if pumping, show size & type of pump): Pumping and Flowing

| Date of test | Hrs. tested | Choke size | Oil prod. during test | Gas prod. during test | Water prod. during test | Oil gravity |
|--------------|-------------|------------|-----------------------|-----------------------|-------------------------|----------------|
| 2-21-77 | 24 | Pumping | 148 bbls. | 176 MCF | 38 bbls. | 41° API (Corr) |

| Tubing pressure | Casing pressure | Cal'cd rate of Pro-duction per 24 hrs. | Oil | Gas | Water | Gas-oil ratio |
|-----------------|-----------------|--|-----------|---------|----------|---------------|
| | 40 psi | | 148 bbls. | 176 MCF | 38 bbls. | 1,189:1 |

Disposition of gas (state whether vented, used for fuel or sold):
Produced gas is being sold.

CERTIFICATE: I, the undersigned, under the penalty of perjury, state that I am the Operations Supt. - Drilling of the Energy Reserves Group, Inc. (company), and that I am authorized by said company to make this report; and that this report was prepared under my supervision and direction and that the facts stated therein are true, correct and complete to the best of my knowledge.

Date: 2-22-77 Signature: Roscoe C. Gillogly

FEB 24 1977

| | |
|---|---|
| O & G CONS. COMM. Permit No. 663 | STATE OF ARIZONA OIL & GAS CONSERVATION COMMISSION Well Completion or Recompletion Report and Well Log Form No. 4 File One Copy |
|---|---|

DETAIL OF FORMATIONS PENETRATED

| Formation | Top | Bottom | Description |
|---|--------|------------|--|
| Morrison at Surface | | K. B Datum | |
| De Chelly SS. | 2,667' | + 2,579' | See attached Geologists Well Report for sample descriptions. |
| Hermosa | 4,468' | + 778' | |
| Upper Ismay | 5,213' | + 33' | |
| Lower Ismay | 5,278' | - 32' | |
| Desert Creek | 5,365' | - 119' | |
| T.D. Driller | 5,440' | - 194' | |
| <p>DST #1 - 5,282' - 5,360' Initial Flow 15 min.; Initial Shut In 60 min.; Final Flow 90 min.; Final Shut In 180 min. Recovered 2560' of fluid consisting of 60' of heavily oil and gas cut mud; 2370' of heavily gas cut oil and 130' of water. IFP 526 - 657 psi; ISIP 1628 psi, FFP 670 - 1181 psi; FSIP 1628'; IHSP 2681 psi; FHSP 2668 psi.</p> <p>DST #2 - 5,368' - 5,440'. Initial Flow period 15 min.; Initial Shut In 60 min.; Final Flow period 30 min.; Final Shut In 60 min. Recovered 520' of fluid consisting of 350' of mud, 120' of sl/gas cut mud and 150' of sl/gas and mud cut water. IFP 79-157 psi; ISIP 669 psi; FFP 210-249 psi; FSIP 420 psi; IHSP 2653'; FHSP 2640'.</p> | | | |

* Show all important areas of porosity, detail of all cores, and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures, and recoveries.

INSTRUCTIONS:

Attach driller's log or other acceptable log of well.
 This Well Completion or Resumption report and well log shall be filed with the State of Arizona Oil & Gas Conservation Commission not later than thirty days after project completion.

submitted in lieu of Form 3160-5

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
Sundry Notices and Reports on Wells

RECEIVED
BLM

98 DEC -9 AM 6:45

070 FARMINGTON, NM

1. Type of Well
Oil

4. Name of Operator
Cross Creek Corporation

3. Address & Phone No. of Operator

4. Location of Well, Footage, Sec., T, R, M
800' FSL and 2080' FEL, Sec. 23, T-41-N, R-30-E, NMPM

- 5. Lease Number
BIA 14-20-603-716
- 6. If Indian, All. or
Tribe Name
Navajo
- 7. Unit Agreement Name
- 8. Well Name & Number
Navajo 0 #4
- 9. API Well No.
02-001-20219-00
- 10. Field and Pool
- 11. County & State
Apache County, AZ

PA 663

12. CHECK APPROPRIATE BOX TO INDICATE NATURE OF NOTICE, REPORT, OTHER DATA

| | | |
|---|---|--|
| Type of Submission | Type of Action | |
| <input type="checkbox"/> Notice of Intent | <input checked="" type="checkbox"/> Abandonment | <input type="checkbox"/> Change of Plans |
| <input checked="" type="checkbox"/> Subsequent Report | <input type="checkbox"/> Recompletion | <input type="checkbox"/> New Construction |
| <input type="checkbox"/> Final Abandonment | <input type="checkbox"/> Plugging Back | <input type="checkbox"/> Non-Routine Fracturing |
| | <input type="checkbox"/> Casing Repair | <input type="checkbox"/> Water Shut off |
| | <input type="checkbox"/> Altering Casing | <input type="checkbox"/> Conversion to Injection |
| | <input type="checkbox"/> Other - | |

13. Describe Proposed or Completed Operations

A-Plus Well Service plugged and abandoned this well under BLM Contract Number 1422-N670-P98-0032 on November 23, 1998 per the attached report.

ENTERED
AFMSS

DEC 11 1998

BY Smm



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

Signed William F. Clark Title President Date 12/8/98
William F. Clark, A-Plus Well Service

(This space for Federal or State Office use)
APPROVED BY _____ Title _____ Date _____
CONDITION OF APPROVAL, if any:

ACCL RE ORD

DEC 11 1998

FARMINGTON DISTRICT OFFICE
Smm

FARMINGTON COPY

Form 1160-5
November 1983
(Formerly 9-3.1)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SUBMIT IN TRIPLICATE
(Other instructions
reverse side)

Budget Bureau No. 1003-01 15
Expires August 31, 1985

5. LEASE DESIGNATION AND SERIAL NO.
14-20-603-716

6. IF INDIAN ALLOTTEE OR TRIBE NAME

Navajo

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME

Navajo "0"

9. WELL NO.

#4

10. FIELD AND POOL, OR WILDCAT

Taec Nos Pos

11. SEC., T., R., M., OR BLK. AND
SURVEY OR AREA

Sec 23-T41N-R30E

12. COUNTY OR PARISH; 13. STATE

Apache

Arizona

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir.
Use "APPLICATION FOR PERMIT" for such proposals.)

1. OIL WELL GAS WELL OTHER

2. NAME OF OPERATOR
Dry Mesa Corporation

3. ADDRESS OF OPERATOR
P. O. Box 5446 Farmington, NM 87499

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*
See also space 17 below.)
At surface

800' FSL & 2080' FEL (SW SE)

14. PERMIT NO.
663

15. ELEVATIONS (Show whether DF, ST, GR, etc.)
GRD 5231' ; K. B. 5244'

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

NOTICE OF INTENTION TO:

TEST WATER SHUT-OFF

FRACTURE TREAT

SHOOT OR ACIDIZE

REPAIR WELL

(Other)

PULL OR ALTER CASING

MULTIPLE COMPLETE

ABANDON*

CHANGE PLANS

SUBSEQUENT REPORT OF:

WATER SHUT-OFF

FRACTURE TREATMENT

SHOOTING OR ACIDIZING

(Other)

REPAIRING WELL

ALTERING CASING

ABANDONMENT*

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

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

Proposed plugging program included on following pages.

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

SIGNED _____

TITLE

Engineer

DATE

9/2/90

(This space for Federal or State office use)

APPROVED BY _____

TITLE

DATE

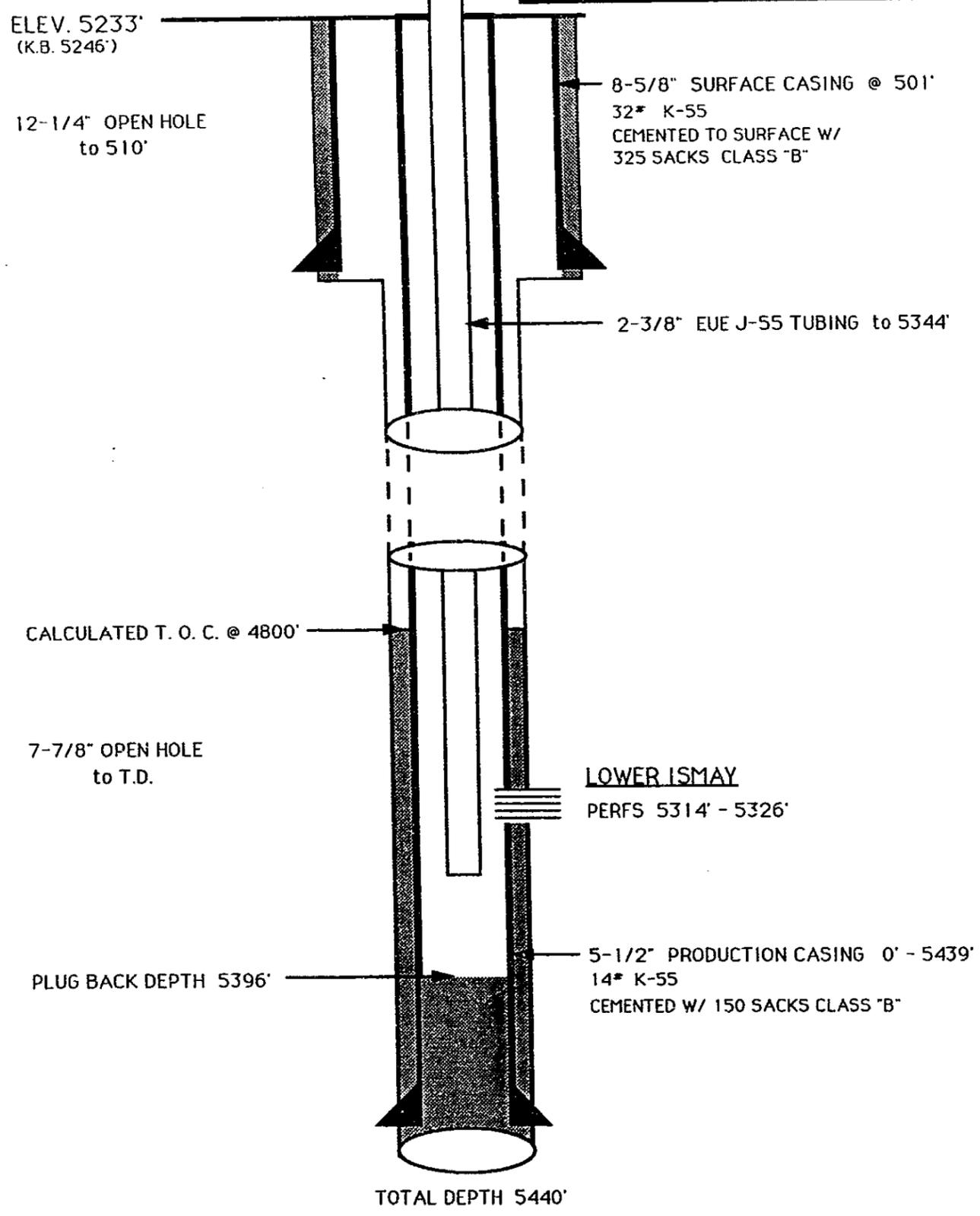
CONDITIONS OF APPROVAL, IF ANY:

*See Instructions on Reverse Side

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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.

Navajo 'O' - Well #4
T41N R30E SW SE Section 23
Teec Nos Pos Field Apache Co., Arizona



663

**OPERATOR'S CERTIFICATE OF COMPLIANCE AND AUTHORIZATION
TO TRANSPORT OIL OR GAS FROM LEASE**

| | | |
|---|-----------------------|---------------------------|
| Federal, State or Indian Lease Number, or lessor's name, if fee lease 14-20-603-716 | Field Teec Nos Pos | Reservoir Ismay |
| Survey or Sec-Twp-Rge Sec. 23, T41N, R30E | County Apache | State Arizona |
| Operator Dry Mesa Corporation | | |
| ADDRESS ALL CORRESPONDENCE CONCERNING THIS FORM TO: | | |
| Street P.O. Box 5446 | City Farmington | State New Mexico 87499 |
| Above named operator authorizes (name of transporter) The Permian Corporation | | |
| Transporter's street address P.O. Box 1183 | City Houston | State Texas 77251 |
| Field address 2502 West Main, Farmington, New Mexico 87501 | | |
| Oil, condensate, gas well gas, casinghead gas | | |
| To transport | 100 % of the Oil | from said lease. |
| OTHER GATHERERS TRANSPORTING FROM THIS LEASE ARE AS FOLLOWS: | | |
| Name of gatherer | % transported | Product transported |
| | | |
| | | |
| | | |
| Indicate whether or not this certificate is for a new lease. If not a new lease, indicate whether or not it is a change of operator, change of lease name, change of gatherer, or a consolidation or subdivision of leases and give effective date of change. | | |
| Change Of Operator February 1, 1989 | | |

The undersigned certifies that the rules and regulations of the State of Arizona Oil & Gas Conservation Commission have been complied with in drilling and producing operations on this lease, except as noted above, and that the above transporter is authorized to transport the above specified percentage of the allowable oil or gas produced from the above described property, and that this authorization will be valid until further notice or until canceled by the State of Arizona Oil & Gas Conservation Commission.

CERTIFICATE: I, the undersigned, under the penalty of perjury, state that I am the President, Sec.-Treasurer of the Dry Mesa Corporation (company), and that I am authorized by said company to make this report; and that this report was prepared under my supervision and direction and that the facts stated therein are true, correct and complete to the best of my knowledge.

Date 4-12-89 Signature Kenneth R. Land

Date approved: 1/9/90

STATE OF ARIZONA
OIL & GAS CONSERVATION COMMISSION

By: [Signature]

Permit No. 232, 582, 640, 663

RECEIVED
APR 19 1989
O & G CON. COM.

STATE OF ARIZONA
OIL & GAS CONSERVATION COMMISSION
Operator's Certificate of Compliance & Authorization to
Transport Oil or Gas from Lease
File Two Copies
Form No. 3

463

WELL NO. 4 **F-3** CURRENT STATUS - Pumping 663

LOCATION: 800' FSL & 2080' FEL Section 23-T41N-R30E

ELEVATION: 5,523' KB TD/PBTD: 5,790'/5,695'

SURFACE CASING: 8-5/8" 32#, K-55 set @ 560' KB; Cemented with 560 sacks.

PRODUCTION CASING: 5-1/2" 14#, J-55 set @ 5,775' KB; Cemented with 150 sacks.

WELL EQUIPMENT:

Rods: 143 - 3/4", 67 - 7/8"
Tubing: 2-3/8" J-55 EUE - 5,361'
Pumping Unit: American D-160
Prime Mover: 8-1/2 x 10 E-42 Ajax Gas Engine

LOGS AVAILABLE (Attached copies thru pay): IES, CAVL

PERFORATION RECORD: Desert Creek - 5,659'-66', 5,640'-46'
Lower Ismay - 5,603'-13'
Upper Ismay - 5,518'-22'

COMPLETION DATE: 2-77

INITIAL POTENTIAL: 176 MCFD/148 BOPD/38 BWPD

PRODUCTION HISTORY

MONTHLY PRODUCTION
NAVAJO "O" NO. 4

| <u>YEAR</u> | <u>MONTH</u> | <u>OIL</u> | <u>WTR</u> | <u>GAS</u> | <u>YEAR</u> | <u>MONTH</u> | <u>OIL</u> | <u>WTR</u> | <u>GAS</u> |
|-------------|--------------|------------|------------|------------|-------------|--------------|------------|------------|------------|
| 1977 | JAN | 188 | 0 | --- | 1978 | JAN | 2,020 | 732 | 964 |
| | FEB | 2,833 | 728 | 2,472 | | FEB | 1,215 | 370 | 445 |
| | MAR | 3,243 | 666 | 2,988 | | MAR | 2,001 | 770 | 439 |
| | APR | 3,604 | 801 | 2,771 | | APR | 1,476 | 330 | 532 |
| | MAY | 2,389 | 531 | 2,035 | | MAY | 1,685 | 377 | 918 |
| | JUNE | 3,442 | 586 | 2,294 | | JUNE | 1,857 | 716 | 939 |
| | JULY | 3,321 | 566 | 2,442 | | JULY | 1,812 | 699 | 1,307 |
| | AUG | 3,004 | 501 | 1,902 | | AUG | 1,756 | 720 | 1,586 |
| | SEPT | 2,420 | 712 | 2,063 | | SEPT | 1,571 | 696 | 1,373 |
| | OCT | 2,479 | 729 | 2,000 | | OCT | 1,526 | 658 | 1,147 |
| | NOV | 2,388 | 702 | 1,058 | | NOV | 1,528 | 659 | 1,322 |
| | DEC | 1,906 | 691 | 701 | | DEC | 1,596 | 688 | 915 |
| | TOTAL | 31,217 | 7,213 | 22,726 | | TOTAL | 20,043 | 7,415 | 11,887 |

MONTHLY PRODUCTION
NAVAJO "O" NO. 4

| YEAR | MONTH | OIL | WTR | GAS | YEAR | MONTH | OIL | WTR | GAS |
|------|-------|-------|--------|--------|------|--------|-------|-------|--------|
| 1979 | JAN | 1,670 | 720 | 866 | 1980 | JAN | 1,183 | 1,180 | 938 |
| | FEB | 1,267 | 546 | 907 | | FEB | 1,134 | 1,134 | 756 |
| | MAR | 1,670 | 586 | 1,130 | | MAR | 1,198 | 1,198 | 848 |
| | APR | 1,388 | 487 | 907 | | APR | 1,118 | 1,118 | 991 |
| | MAY | 1,332 | 467 | 1,174 | | MAY | 1,224 | 1,224 | 737 |
| | JUNE | 1,489 | 859 | 1,364 | | JUNE | 915 | 915 | 771 |
| | JULY | 1,422 | 821 | 1,717 | | JULY | 1,201 | 1,201 | 1,141 |
| | AUG | 1,049 | 420 | 1,416 | | AUG | 1,071 | 1,071 | 950 |
| | SEPT | 1,228 | 1,148 | 1,195 | | SEPT | 852 | 1,007 | 608 |
| | OCT | 1,341 | 1,222 | 1,307 | | OCT | 930 | 775 | 1,638 |
| | NOV | 1,336 | 1,217 | 1,067 | | NOV | 717 | 598 | 863 |
| | DEC | 1,310 | 1,194 | 1,203 | | DEC | 715 | 595 | 759 |
| | TOTAL | | 16,502 | 9,687 | | 14,253 | TOTAL | | 12,258 |
| 1981 | JAN | 777 | 647 | 628 | 1982 | JAN | 929 | 1,548 | 870 |
| | FEB | 678 | 565 | 774 | | FEB | 795 | 1,288 | 517 |
| | MAR | 756 | 630 | 946 | | MAR | 802 | 795 | 882 |
| | APR | 994 | 1,492 | 1,186 | | APR | 820 | 1,184 | 732 |
| | MAY | 890 | 1,334 | 736 | | MAY | 776 | 1,215 | 769 |
| | JUNE | 893 | 1,340 | 1,047 | | JUNE | 486 | 1,145 | 937 |
| | JULY | 902 | 1,353 | 764 | | JULY | 246 | 1,208 | 255 |
| | AUG | 864 | 1,297 | 1,004 | | AUG | 504 | 1,027 | 498 |
| | SEPT | 814 | 1,221 | 809 | | SEPT | 523 | 1,569 | 522 |
| | OCT | 449 | 1,375 | 568 | | OCT | 498 | 1,601 | 553 |
| | NOV | 0 | 303 | 0 | | NOV | 498 | 1,112 | 553 |
| | DEC | 848 | 1,696 | 878 | | DEC | | | |
| | TOTAL | | 8,865 | 13,253 | | 9,340 | TOTAL | | |

(Submit in triplicate)

RECEIVED

APR 19 1979

O & G CONS. COMM.

To: District Engineer, U. S. Geological Survey
PO Box 959 Farmington, New Mexico 87401

From: Energy Reserves Group, Inc.
PO Box 3280 Casper, Wyoming 82602

Subject: Pollution Report

Spill _____ Discharge _____ Blowout _____ Accident _____ Fire or
Explosion x

1. Specific Nature and Cause of Incident
Emergency pit with old oil sludge was ignited by Navajo children playing in the area.
2. Location of Incident
Navajo "0" Lease SE $\frac{1}{4}$ SW $\frac{1}{4}$ Section 23 T41N-R30E
14-20-601-716
3. Description of Resultant Damage and Volume of Pollutant Discharged
No damage - No pollutant discharged
4. Date and Time of Occurrence
4-9-79 1:30PM
5. Length of Time Required to Control Incident or Contain Pollutants
Burned for approximately 45 minutes
6. Action Taken to Prevent Recurrence
This is an emergency pit and does not contain any liquids.
7. Measures Taken to Clean Up Pollutants
None
8. The make or manufacturer, size, working and test pressures, date of installation, type of use, physical damage, etc., of any equipment causing or directly involved with the incident.
9. Other Federal or State Agencies Notified of Incident
Navajo Tribal Police/Shiprock, New Mexico
State of Arizona Oil and Gas Company/Bill Allan

Signature William J. [Signature] Date 4-16-79

Title Field Services Administrator

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GAS-OIL RATIO TEST REPORTS

Filed under GAS-OIL RATIO TESTS REPORTS, ~~WEC~~ NOS POS FIELD,
in cabinet in office of Enforcement Director

WELL STATUS REPORT AND GAS-OIL RATIO TESTS

APACHE

Operator: ENERGY RESERVES GROUP, INC. Field and Reservoir: TEEC NOS POS, ISMAY County: _____
 Address: P. O. BOX 3280, CASPER, WY 82602 Month: SEPTEMBER 1977

| Federal, State or Indian Lease Number, or Lessor's Name if fee lease | Permit No. | Well No. | Date of Test | Sta-tus | Choke Size | Pressures | | | Separator Temp. °F | Daily Allow-able | Length of Test (Hrs.) | Production During Test | | | Gas-Oil Ratio Cu. Ft. Per Bbl. | |
|--|------------|----------|--------------|---------|------------|-----------|------------|-----|--------------------|------------------|-----------------------|------------------------|-----------|-----------|--------------------------------|---------|
| | | | | | | Tbg. | Csg. | | | | | Wtr. Bbls. | Grav. Oil | Oil Bbls. | | Gas MCF |
| | | | | | | | Begin-ning | End | | | | | | | | |
| 14-20-603-716 | | | | | | | | | | | | | | | | |
| Navajo "0" | 232 | 1 | 9/23 | P | 48/64 | | | | | 24 | 1 | 41 | 30 | 62 | 2,067 | |
| Navajo "0" | 582 | 2 | | SWD | | | | | | | | | | | | |
| Navajo "0" | 640 | 3 | 9/22 | P | 32/64 | | | | | 24 | 3 | 41 | 63 | 56 | 889 | |
| Navajo "0" | 663 | 4 | 9/26 | P | 48/64 | | | | | 24 | 18 | 41 | 80 | 45 | 563 | |

All Tests Reported herein were made in accordance with the Applicable Rules, Regulations and Instructions of the State of Arizona Oil & Gas Conservation Commission

CERTIFICATE: I, the undersigned, under the penalty of perjury, state that I am the District Clerk of the Energy Reserves Group, Inc. (company), and that I am authorized by said company to make this report; and this report was prepared under my supervision and direction and that the facts stated therein are true, correct and complete to the best of my knowledge.

Signature: *Terrence L. Ruden*

Date: October 14, 1977

RECEIVED

OCT 17 1977

O & G CONS. COMM.

STATE OF ARIZONA
 OIL & GAS CONSERVATION COMMISSION
 Well Status Report and Gas-Oil Ratio Tests

Form No. 5

File One Copy

WELL STATUS REPORT AND GAS-OIL RATIO TESTS

Operator: ENERGY RESERVES GROUP, INC.

Field and Reservoir: TEEC NOS POS, ISMAY

County: APACHE

Address: P. O. BOX 3280, CASPER, WY 82602

Month: SEPTEMBER 1977

| Federal, State or Indian Lease Number, or Lessor's Name if fee lease | Permit No. | Well No. | Date of Test | Status | Choke Size | Pressures | | | Separator Temp. °F | Daily Allowable | Length of Test (Hrs.) | Production During Test | | | Gas-Oil Ratio Cu. Ft. Per Bbl. | |
|--|------------|----------|--------------|--------|------------|-----------|-----------|-----|--------------------|-----------------|-----------------------|------------------------|-----------|----------|--------------------------------|---------|
| | | | | | | Tbg. | Csg. | | | | | Wtr. Bbl. | Conv. Oil | Oil Bbl. | | Gas MCF |
| | | | | | | | Beginning | End | | | | | | | | |
| 14-20-603-716 | | | | | | | | | | | | | | | | |
| Navajo "O" | 232 | 1 | 9/23 | P | 48/64 | | | | | 24 | 1 | 41 | 30 | 62 | 2,067 | |
| Navajo "O" | 582 | 2 | | SWD | | | | | | | | | | | | |
| Navajo "O" | 640 | 3 | 9/22 | P | 32/64 | | | | | 24 | 3 | 41 | 63 | 56 | 889 | |
| Navajo "O" | 663 | 4 | 9/26 | P | 48/64 | | | | | 24 | 18 | 41 | 80 | 45 | 563 | |

All Tests Reported herein were made in accordance with the Applicable Rules, Regulations and Instructions of the State of Arizona Oil & Gas Conservation Commission

CERTIFICATE: I, the undersigned, under the penalty of perjury, state that I am the District Clerk of the Energy Reserves Group, Inc. (company), and that I am authorized by said company to make this report; and this report was prepared under my supervision and direction and that the facts stated therein are true, correct and complete to the best of my knowledge.

October 14, 1977

Signature

Terrence L. Ruden

RECEIVED

OCT 17 1977

O & G CONS. COMM.

STATE OF ARIZONA
OIL & GAS CONSERVATION COMMISSION

Well Status Report and Gas-Oil Ratio Tests

File One Copy

Form No. 3

INSTRUCTIONS

Show all data requested for each well separately, and determine the gas-oil ratio according to the following procedure:

(1) **General:**

- (a) Each well shall have produced its current daily allowable, if such well is capable of producing such allowable, during the 24 hour period immediately preceding the test, and the well shall be producing at the time the actual test begins.
- (b) The volume of gas used in computing the gas-oil ratio and reported as being produced during the test (except tests on gas lift or jetting wells) shall be the total volume of gas produced from the well in the test period. This total volume of gas shall include all gas withdrawn from the casing as well as that produced through the tubing.
- (c) The amount of oil produced during the test shall not be less than the well's then current daily allowable (if the well is capable of producing its allowable) and shall not exceed the daily allowable by more than ten (10) per cent, except that in the case of a well having an allowable already penalized due to its gas oil ratio, the operator may select any rate he desires between the penalized allowable and ten (10) per cent above the unpenalized allowable.

(2) **Flowing Wells That are Produced Continuously:**

The oil flow shall be stabilized during the 24-hour period immediately preceding the test. Adjustments in the rate of flow should be made during the first 12 hours of the stabilization period and no adjustments shall be made during the last 12 hours or during the time in which the well is being tested.

(3) **Flowing Wells That are Produced Intermittently (Stop-cocked):**

In computing the operating gas-oil ratio, the total volume of gas and the total barrels of oil produced during the 24 hour test period must be used regardless of the flowing time in the 24 hour period. On wells which are stop-cocked, both the closed-in casing pressure at the beginning of the test period and the closed-in casing pressure at the conclusion of the test must be shown and properly identified on the report. The closed-in casing pressure at the end of the 24 hour test period shall not exceed the closed-in casing pressure at the beginning of the test period by more than six-tenths (0.6) pounds per square inch per barrel of oil produced during the test.

(4) **Gas Lift or Jetting Wells:**

In submitting gas-oil ratio tests for gas lift or jetting wells, the total input and total output gas volumes shall be reported separately. These volumes shall be properly identified and determined by continuous measurement during the test. The volume of gas used in determining the operating gas-oil ratio hereunder shall be the volume remaining after the total input gas has been deducted from the total output volume.

(5) **Pumping Wells:**

In computing the operating gas-oil ratio, the total volume of gas and the total barrels of oil produced during the test period must be used regardless of the pumping time in the test period.

(6) **Definitions:**

Under Status, use the following symbols: F—Flowing, P—Pumping, GL—Gas Lift, SI—Shut In, D—Dead, TA—Temporarily Abandoned, GI—Gas Injection, WI—Water Injection.

Under Pressure, show the stabilized working pressures on the tubing, and casing, at the rate at which the well is tested. The Gas Production listed shall be the total volume of gas produced during the test in thousands of cubic feet (MCF) measured at a base pressure of 15.025 pounds per square inch, absolute, and a standard base and flowing temperature of 60° Fahrenheit; correction to be made for pressure according to Boyle's Law, and for specific gravity according to test made by the Balance Method. All well status and gas-oil ratio tests submitted to the Commission on this form shall be made by a person qualified by training or experience to make such tests. Methods of gas measurement used shall be those prescribed by the State of Arizona Oil & Gas Conservation Commission.

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O & G CONS. COMM.

WELL STATUS REPORT AND GAS-OIL RATIO TESTS

Apache County

Ismay

Teec Nos Pos

Energy Reserves Group, Inc.

Operator

Address: P.O. Box 3280, Casper, WY

Month: March, 1977

| Federal, State or Indian Lease Number, or Lessor's Name if fee lease | Permit No. | Well No. | Date of Test | Status | Choke Size | Pressures | | | Separator Temp. °F | Daily Allowable | Length of Test (Hrs.) | Production During Test | | | Gas-Oil Ratio Cur. Pl. Per Bbl. |
|--|------------|----------|--------------|--------|------------|-----------|------------|-----|--------------------|-----------------|-----------------------|------------------------|-----------|---------|---------------------------------|
| | | | | | | Tbg. | Begin-ning | End | | | | Wtr. Bbls. | Oil Bbls. | Gas MCF | |
| Navajo Tribal "O" | 232 | 1 | 2/25 P | | | | | | | 24 | 1 | 41 | 42 | 75 | 1,786 |
| Navajo Tribal "O" | 582 | 2 | | TA | | | | | | | | | | | |
| Navajo Tribal "O" | 640 | 3 | 2/20 P | | | | | | | 24 | 1 | 41 | 52 | 62 | 1,192 |
| Navajo Tribal "O" | 663 | 4 | 2/21 P | | | | | | | 24 | 38 | 41 | 148 | 176 | 1,189 |

All Tests Reported herein were made in accordance with the Applicable Rules, Regulations and Instructions of the State of Arizona Oil & Gas Conservation Commission

CERTIFICATE: I, the undersigned, under the penalty of perjury, state that I am the District Clerk of the Energy Reserves Group, Inc. and that I am authorized by said company to make this report; and this report was prepared under my supervision and direction and that the facts stated therein are true, correct and complete to the best of my knowledge.

Terrance L. Risher
SIGNATURE

March 17, 1977
Date

STATE OF ARIZONA
OIL & GAS CONSERVATION COMMISSION
Well Status Report and Gas-Oil Ratio Tests
Form No. 2
File One Copy

BEFORE THE OIL AND GAS CONSERVATION COMMISSION
OF THE STATE OF ARIZONA

IN THE MATTER OF THE HEARING CALLED
BY THE OIL AND GAS CONSERVATION
COMMISSION OF THE STATE OF ARIZONA
FOR THE PURPOSE OF CONSIDERING:

CASE NO. 52

ORDER NO. 51

THE APPLICATION OF ENERGY RESERVES
GROUP FOR AUTHORITY TO DISPOSE OF
SALT WATER PRODUCED FROM THE LOWER
ISMAY ZONE BY INJECTION INTO THE
LOWER ISMAY ZONE IN THE NAVAJO "O"
NO. 2 WELL LOCATED 1830 FEET FROM
THE SOUTH AND 1980 FEET FROM THE
EAST LINE OF SECTION 23, TOWNSHIP
41 NORTH, RANGE 30 EAST, APACHE
COUNTY, ARIZONA, THROUGH PERFORA-
TIONS IN THE LOWER ISMAY ZONE

BY THE COMMISSION

This cause was considered at 10:00 a.m. on March 25, 1977,
at Phoenix, Arizona, before the OIL AND GAS CONSERVATION COMMISS-
SION of the STATE OF ARIZONA, hereinafter referred to as the
"COMMISSION".

NOW, the COMMISSION, a quorum being present, having con-
sidered the testimony presented and the exhibits received at
said hearing, and being fully advised in the premises, finds
as follows;

FINDINGS:

- (1) THAT the COMMISSION has jurisdiction of the subject
matter thereof.
- (2) THAT due public notice has been given as required by
law.

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(3) THAT Energy Reserves Group has made proper application to the COMMISSION for approval of its plan to dispose of salt water in subject well through perforations at a depth from 5298 feet to 5328 feet in the Lower Ismay Formation.

(4) THAT to allow Energy Reserves Group to proceed as outlined in its plan of operations as amended during this hearing is to the best public interest of the STATE OF ARIZONA.

IT IS THEREFORE ORDERED:

THAT Energy Reserves Group is hereby authorized to dispose of salt water in the Energy Reserves Navajo "O" No. 2 Well located 1830 feet from the south and 1930 feet from the east line of Section 23, Township 41 North, Range 30 East, Apache County, Arizona, through perforations from a depth of 5298 feet to 5328 feet in the Lower Ismay Formation and to condition the well in the following manner in order to preclude any chance of the salt water injected into this well from entering into or contaminating any other oil or gas producing zones or water aquifers: perforate 5-1/2 inch casing at 3500 feet, set a retrievable packer above these perforations and attempt to circulate cement up the hole and into the surface casing. Should this prove to be impossible, Energy Reserves Group will squeeze cement the casing perforations at 3500 feet and perforate 5-1/2 inch casing at 3100 feet and attempt to pump cement into the casing annulus, and up the annulus into the surface casing. Should this attempt to recement prove impossible, the operators will then squeeze cement the perforations

RECORDED

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D & G CONS. COMM.

SAMPLE DESCRIPTION

| | |
|--------------|--|
| 2500-30 | 100% Sh: rd-gry, calc Tr Ls: wht, micro xln |
| 30-60 | 80% Sl: rd-gry, calc 20% Ls: gry-lt brn, crypto xln |
| 60-90 | 90% Sh: rd-gry, calc 10% Ss: clr, fn-crs-g, sb rnd, calc in part |
| 2590-2620 | 90% Sh: rd-gry, calc 10% Ss: clr, fn-g, sbrnd, calc cmt Tr Ls: wht-gry, micro xln |
| 20-50 | 90% Sh: rd-gry, calc 10% Ls: lt brn, micro xln Tr Ss: clr, f-g, sbrnd, calc cmt |
| 50-80 | 90% Sh: rd-gry, calc 10% Ls: buff, micro xln |
| Tp De Chelly | |
| 2680-2710 | 90% Clystn: rd-gry, clayey, calc 10% Loose sand grains, clr-frosted, sbrnd |
| 2710-2740 | 60% clystn: rd-gry, clayey, calc 10% Sh: blk, sl calc 30% loose sand grains, clr, m-crs-g, sbrnd |
| 40-70 | 60% Clystn: AA 20% Sh: AA 20% loose sand grains, AA |
| 2770-2800 | 40% Clystn: AA 30% Sh: AA, vy carb. 30% loose sand grains, AA |
| 2830-2860 | 40% Clystn: rd-gry, calc, some clayer 10% Sh: blk, vy carb. 10% Ls: lt brn, fn xln 40% Ss: clr, fn-crs-g, sbrnd, friable, w/calc cement |

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SAMPLE DESCRIPTION - CONTINUED

28 60-90 90% Clystn: AA
10% Ss: AA

2890-2920 40% Clystn: rd-gry, calc, clayey in part
20% Ls: why-buff, earthy
40% loose sand grains, clr-pk, crs-g, sbrnd

20-50 AA

50-80 60% loose sand grains, clr-pk, m-crs-g, sbrnd
40% Clystn: rd-gry, calc in part, earthy

 Tp Organ Rock

2980-3010 80% Clystn: rd-gry, calc in part
10% Ss: clr-pk, m-crs-g, sbrnd
10% Sltstn: yel rd, mottled, sl calc

3010-40 50% Sltstn: rd brn
50% Clystn: gry-rd

3040-20 50% Sltstn: AA
50% Clystn: AA
Tr Ss: gry, vfn-g, sbrnd, calc cement

70-3100 30% Sltstn: rd, vy sl calc
30% Ss: clr-rd, vfn-fn-g, sb ang, clay filled, vy cl ca
40% Clystn: rd-gry

3100-3130 No Samples

30-60 No Samples

 Tp Cutler Evaps

60-90 60% Clystn: rd-gry, w/anhydrite inclusion
40% Ss: gry-rd, vfn-m-g, sbrnd, calc cement
Tr Pyrite

3190-3220 90% Clystn: AA
10% Ss: AA
Tr Sh: rd, hard, wxy
Tr Pyrite

SAMPLE DESCRIPTION - CONTINUED

4400-10 40% Clystn: rd-gry, sl calc, w/any incl.
40% Ls: gry-brn, crypto xln
10% Sltstn: rd, vy shaly, vy calc
10% Ss: clr-gry, fn-m-g-, sbrnd

10-20 70% Clystn: rd-gry-brn, calc in part: gry contains crs.
qtz grains
20% Sltstn: rd, shaly, vy calc
10% Ls: gry, crypto xln

20-30 80% Clystn: AA, with why, wln any
10% Sltstn: gry-rd, shaly, vy calc
10% Ls: gry, crypto xln

30-40 100% Clystn: rd-gry, calc, vy clayey
Tr Sltstn: AA
Tr Ls: AA

40-50 AA

50-60 90% Clystn: rd-gry-brn, calc., sl silty in part
10% Ls: gry-lt brn, shaly

60-70 100% Clystn: AA
Tr Ls: AA
Tr SS: clr, m-g, sbrnd, calc cmt

70-80 90% Clystn: rd-gry, calc, silty in part, some crs
qtz grain incl.
10% Ls: lt brn, organic, and tr wht earthy

80-90 90% Clystn: AA, w/wht micro xln any incl.
10% Ls: why-lt brn, crypto xln

90-4500 AA, w/trace yel green shale

4500-10 AA

SAMPLE DESCRIPTION - CONTINUED

45 10-20 80% Clystn: AA, silty
2-% Ls: AA

20-30 70% Clystn: gry-rd, vy calc, shaly in part, silty in part
30% Ls: why, earthy, lt brn, organic, micro xln

30-40 80% Clystn: AA, w/micro xln, why, anhy incl common
20% Ls: wht-buff
Tr Ss: clr, vfn-fn-g, sbrnd, clay filled

40-50 100% Clystn: gry-rd-brn, vy calc, earthy
Tr Ls: lt brn, micro xln
Tr Ss: AA

50-60 80% Ls: wht-buff, micro xln, some earthy
20% Clystn: rd-gry, calc

60-70 80% Ls: AA, sandy in part
2-% Clystn: AA

70-80 50% Ls: wht-buff, micro xln, some earthy
50% Clystn: rd-gry, calc, with occ why anhy incl.

80-90 AA, w/trace Ss, gry, vfn-g, sbrnd, calc cmt

4590-4600 AA

4600-10 20% Ls: wht-buff, fn xln, some indistinct fossil hash,
intraclastic
70% Clystn: rd-gry, calc
10% Sltstn: rdbrn, shaly, calc

10-20 100% Clystn: rd-gry, some silty, sl calc, w/wht anhy incl.
Tr Ls: buff, intraclastic

20-30 80% Clystn: rd-brn, some silty, sl calc
20% Ls: buff-lt brn, silty

30-40 90% Clystn: AA
10% Ls: buff, fn-m-xln, some silty

SAMPLE DESCRIPTION - CONTINUED

46 40-50 AA, w/some frac. evidence (calcite filling)

50-60 50% Sh: rd brn, some silty
40% Ls: buff-lt brn, fn xln
10% Sh: blk

60-70 70% Sh: rd brn, some silty, tr why anhy incl.
30% Ls: brn, fn xln

70-80 AA, w/tr blk shale

80-90 100% Sh: rd brn, some silty
Tr Sh: blk

90-4700 90% Sh: gry-rd brn, some silty
10% Ls: lt brn, micro xln
Tr SS: clr, calc cmt, sbrnd grains

4700-4710 80% Sh: AA
20% Ls: AA

10-20 AA

20-30 90% Sh: rd brn-gry, silty in part, calc
10% Ls: lt brn, micro xln
Tr Ss: clr, fn-g, sbrnd, calc cmt, friable

30-40 10% Sh: rd brn-gry, some silty, calc
90% Ls: AA

40-50 80% Ls: buff, fn xln, silty in part
10% Sh: blk
10% Sh: rd brn-gry, silty in part, calc

50-60 80% Ls: lt brn, nodular in part
20% Sh: rd-brn, calc
Tr Sh: blk
Tr Ss: clr, fn-g, sbrnd, calc cmt

60-70 90% Sh: rd-brn, calc, w/wht fn-xln anhy
10% Ls: AA

70-80 AA, w/trace Ss, clr, fn-g, sbrnd, calc cmt

SAMPLE DESCRIPTION - CONTINUED

- 47 80-90 90% Sh: rd-brn, calc, w/wht xln anhy incl.
10% Ls: lt brn, micro xln
- 90-4800 80% Ls: wht-buff, some chalky, some fn-xln
20% Sh: rd-brn, calc w/xln anhy incl.
Chert: yel-brn common
Tr Ss: gry, vfn-g, calc cmt
- 4800-10 90% Ls: wht-gry-brn, micro xln, some shaly
10% Clystn: rd, vy calc
- 10-20 100% Ls: wht-buff, micro xln, some earthy, tr pyrite
- 20-30 90% Ls: wht-buff, micro xln, some earthy, tr chert,
clr-lt blu
10% Sh: blk
- 30-40 80% Ls: wht-gry brn, micro xln, shaly, some earthy
20% Clystn: gry brn, vy calc
Tr chert: brn
Tr Sh: blk
Tr Anhy: wht, soft
- 40-50 AA, w/the brn Ls being wxy in part, tr granular texture
- 50-60 80% Sh: rd-gry-brn, some silty, all calc
20% Ls: lt brn, micro xln, trace inter xln porosity in 1 frag,
N-S
- 60-70 80% Sh: rd org-gry brn, some silty, all calc
20% Ls: buff-lt brn, micro xln
Tr Ss: clr, m-g, calc cmt, sbang grains
- 70-80 90% Ls: lt brn, vfn xln, some pyritic, some blk sh partings
10% Clystn: org-gry, vy sl calc
Tr Chert: lt blu
- 80-90 100% Ls: AA
Tr Clystn: AA w/some rd brn, earthy
- 90-4900 70% Ls: gry-gry brn, micro xln
30% Sh: org-brn, calc
Tr Chert: brn

SAMPLE DESCRIPTION - CONTINUED

4900-10 80% Ls: wht-gry brn, micro xln, some micro pyrite inclusions
10% Sh: org-gry, calc
10% Sltstn: gry, calc

10-20 No Sample

20-30 No Sample

30-40 No Sample

40-50 90% Ls: wht-gry, earthy - crypto xln
10% Clystn: rd org, earthy, calc
Tr Ss: gry, sb ang, vfn-fn-g, calc cement, some clay filling

50-60 AA: w/trace blk sh: Tr sltstn, gry, calc

60-70 80% Ls: gry-buff, brn, crypto xln, some earthy
20% Clystn: rd-gry, earthy, w/incl of wht calc
Tr Ss: clr, m-g, sbrnd, w/clay cement
Tr Chert: gry

70-80 90% Clystn: rd org-gry-brn, vy calc
10% Ls: gry-buff, crypto xln
Tr Ss: clr, vfn-fn-g, clay cement, sbrnd

80-90 AA: w/sl increase Ss: AA

90-5000 100% Clystn: rd org, minor gry, vy calc
Tr Ls: brn, nodular

5000-10 50% Ls: gry-wht, earthy - crypto xln
50% Clystn: rd org-gry, vy calc
Tr Ss: gry, vfn, calc cmt

10-20 AA, w/tr Ss: rd-wht, vfn-fn-g, arkosic

SAMPLE DESCRIPTION - CONTINUED

50 20-30 80% Ls: wht, earthy and brn, micro xln, organic, w/dull
yel fluor and no cut, no porosity visible
20% Clystn: rd brn, earthy, vy calc
Tr Ss: clr, vfn-g, sbrnd, clay cement

30-40 90% Ls: gry, crypto xln
10% Clystn: rd org, vy calc
Tr Sh: blk

40-50 60% Clystn: gry-rd-brn, calc, w/tr anhy
20% Ls: gry-brn, crypto xln
10% Sltstn: gry, vy calc

50-60 90% Clystn: AA
10% Ls: AA

60-70 AA, w/some drk gry shale

70-80 AA

80-90 100% Clystn: rd-gry-brn, calc, w/why xln anhy
Tr Ls: buff, crypto xln

90-5100 40% Ls: wht-buff, fn xln
60% Clystn: rd-gry, sl calc

5100-10 70% Clystn: rd-org-gry-brn, calc
30% Ls: wht-buff, crypto xln
Tr Sh: drk gry, splintery

10-20 100% Clystn: rd-gry-brn, calc

20-30 No Samples

30-40 No Samples

40-50 90% Ls: lt brn, organic, mostly fine xln

50-60 50% Ls: AA
50% Sh: AA

SAMPLE DESCRIPTION - CONTINUED

5/ 60-70 50% Ls: AA
40% Sh: AA
10% Sh: blk

70-80 50% Ls: AA, with some indistinct fossils
50% Sh: rd-brn-gry, sl calc

80-90 90% Sh: AA
10% Ls: AA

90-5200 AA

60 min. 90% Sh: drk gry brn, some blk, vy calc
circ 10% Ls: brn, fn xln
sample Tr Ss: clr, vfn-g, sbrnd, calc

5200-10 90% Sh: rd brn, sl calc
Tr Sh: blk
10% Ls: wht-brn, fn xln

10-20 90% Sh: red brn-gray, sl calc
Tr Sh: blk
10% Ls: gry, micro xln, little shaly

20-30 80% Sh: rd-brn-gray, sl calc
20% Ls: wht, micro xln
Tr Sh: blk
Tr Ss: gry, vfn-g, sbrnd, sl calc

30-40 AA, w/trace Blue Chert

40-50 No Sample

50-60 10% Sh: rd-gry, sl calc
90% Ls: wht-gry-lt brn, med xln, vy fossiliferous (Oolitic),
calcite in filling
Tr Sh: blk

60-70 AA

SAMPLE DESCRIPTION - CONTINUED

- 52 70-80 90% Ls: wht-gry brown, micro xln, w/trace calcite filling,
fusilinids
10% Sh: rd-gry, sl calc
Tr Sh: blk
Tr Chert: pink
- 80-90 90% Ls: gry-gry brn, med xln, w/some calcite filling, some
clayey, indistinct foss.
10% Sh: vy drk gray, hard, splintery
Tr Chert: gry
- 90-5300 90% Ls: gry-gry brn, crs xln, some sucrosic, calcite filling
common, yel fluor and slow cut
10% Sh: blk, vy hard, brittle
Tr Chert: blue
- 5300-10 100% Ls: lt gry-gry brn, med xln, some granules, calcite
filling, sl foss.
Tr Sh: blk, hard, brittle
- 10-20 100% Ls: wht-buff, med xln, some crs calcite filling, vy foss.
fusilinids, crinoids
Tr Sh: blk, hard brittle
- 20-30 100% Ls: buff, med xln, med-crs xln calcite filling, vy foss.
some chalky wht Ls, bright yel fluor with vy weak
cut
Tr Chert: blue
Tr Sh: blk, brittle
- 30-40 70% Ls: AA, with bright wht fluor and weak cut
30% Sh: rd-gry, soft
- 40-50 50% Ls: wht-gry, sl foss, mostly fn xln, w/bright wht fluor
and weak cut, dense, some chalky
50% Sh: rd-gry, soft
- 50-60 No Sample
- 60-70 70% Ls: wht-gry, mostly fn xln, some chalky, some staining,
some pinpoint porosity, w/yel fluor and weak cut
30% Sh: rd brn-blk, firm
- 70-80 AA
- 80-90 70% Ls: wht-gry, micro sucrosic in part, some chalky,
staining common, some pinpoint porosity, few
indistinct fossils, w/scattered fluor and medium cut
30% Sh: rd brn-blk, firm (10)

SAMPLE DESCRIPTION - CONTINUED

5390-5400 90% Ls: wht-gry, sucrosic in part, chalky in part, staining common, intergranular and pinpoint porosity, some micro vugular porosity, few indistinct fossils, w/numerous frags w/bright yel to wht fluor and medium cut. Odor to sample - heating draws oil to surface of rock frag.
10% Sh: rd-gry-blk

5400-10 90% Ls: AA
10% Sh: AA

10-20 90% Ls: wht-gry, fn xln, dense
10% Ls: rd-blk, firm

20-30 100% Ls: AA

30-40 100% Ls: AA

60 min 70% Ls: AA
circ 30% Sh: AA

Sample Descript
2500 - 3220
4400 - 5440

OPERATOR'S CERTIFICATE OF COMPLIANCE AND AUTHORIZATION

| | | |
|--|------------------------------|-------------------------------|
| 14-20-603-716 | | |
| Federal, State or Indian Lease Number, or lessor's name if fee lease | | |
| Navajo "0" #4 | Field Teec Nos Pos, Ismay | Reservoir Paradox |
| Survey or Sec-Twp-Rge SW SE Sec. 23-T41N-R30E | County Apache | State Arizona |
| Operator Energy Reserves Group, Inc. | | |
| ADDRESS ALL CORRESPONDENCE CONCERNING THIS FORM TO: | | |
| Street P. O. Box 3280 | City Casper | State Wyoming 82602 |
| Above named operator authorizes (name of transporter) Plateau, Inc. | | |
| Transporter's street address P. O. Box 108 | City Farmington | State New Mexico 87401 |
| Field address | | |
| Oil, condensate, gas well gas, casinghead gas | | |
| To transport | 100 | % of the oil from said lease. |
| OTHER GATHERERS TRANSPORTING FROM THIS LEASE ARE AS FOLLOWS: | | |
| Name of gatherer El Paso Natural Gas Co | % transported 100% | Product transported Gas |
| | | |
| | | |
| Indicate whether or not this certificate is for a new lease. If not a new lease, indicate whether or not it is a change of operator, change of lease name, change of gatherer, or a consolidation or subdivision of leases and give effective date of change. Well #4 is a development well of the existing Navajo "0" lease. The oil will be produced into the lease Battery and the gas to El Paso's main meter on the lease. | | |

The undersigned certifies that the rules and regulations of the State of Arizona Oil & Gas Conservation Commission have been complied with in drilling and producing operations on this lease, except as noted above, and that the above transporter is authorized to transport the above specified percentage of the allowable oil or gas produced from the above described property, and that this authorization will be valid until further notice or until cancelled by the State of Arizona Oil & Gas Conservation Commission.

CERTIFICATE: I, the undersigned, under the penalty of perjury, state that I am the District Clerk of the Energy Reserves Group, Inc. (company), and that I am authorized by said company to make this report; and that this report was prepared under my supervision and direction and that the facts stated therein are true, correct and complete to the best of my knowledge.

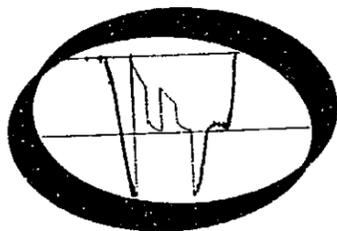
Date: February 22, 1977
Signature: *Terrence L. Fisher*

Date approved: _____
STATE OF ARIZONA
OIL & GAS CONSERVATION COMMISSION
By: _____
Permit No. 663

RECEIVED
FEB 28 1977
O & G CONS. COMM.

STATE OF ARIZONA
OIL & GAS CONSERVATION COMMISSION
Operator's Certificate of Compliance & Authorization to
Transport Oil or Gas from Lease
File Two Copies
Form No. 3

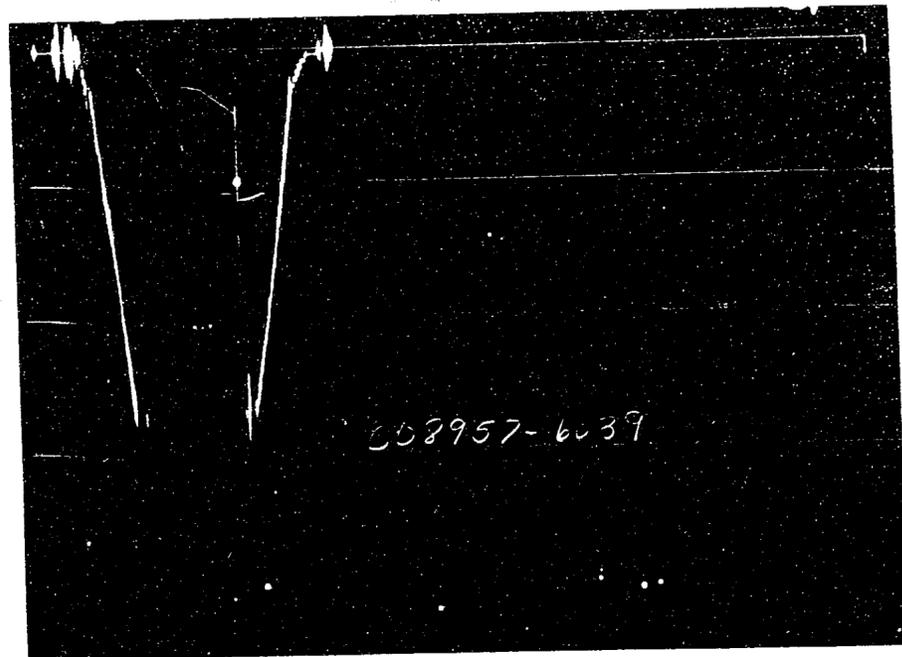
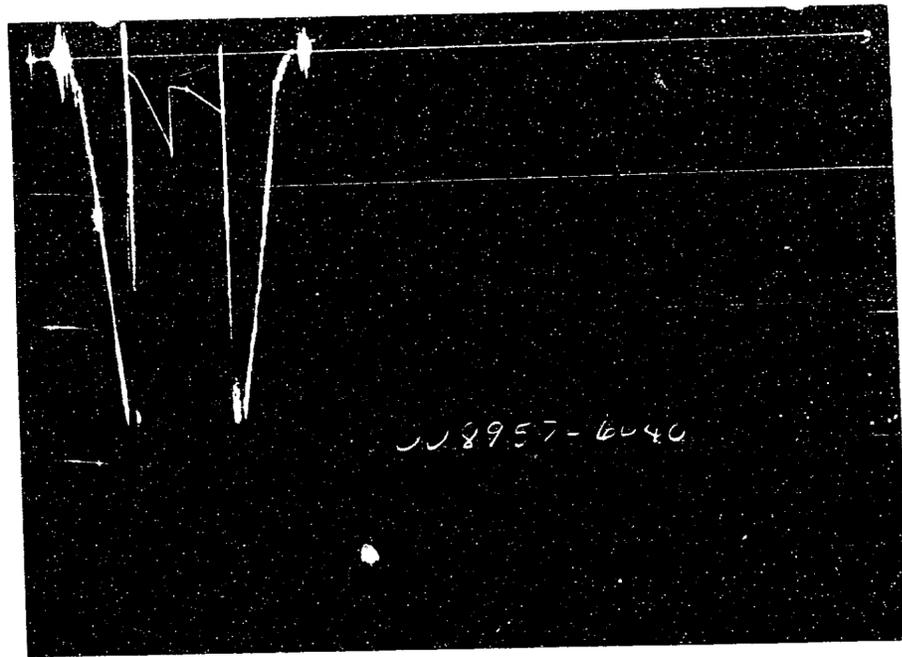
Formation Testing Service Report



HALLIBURTON SERVICES
DUNCAN, OKLAHOMA

NAVAJO 0 4 2 5368-5440' ENERGY RESERVES GROUP
Lease Name Well No. Test No. Tested Interval Lease Owner/Company Name

100



| FLUID SAMPLE DATA | | | | Date | 12-29-76 | Ticket Number | 008957 |
|---|--------------------------------------|--|--|--|------------------|------------------------|--------------------------------------|
| Sampler Pressure _____ P.S.I.G. at Surface | | | | Kind of Job | OPEN HOLE | Halliburton District | FARMINGTON |
| Recovery: Cu. Ft. Gas _____ | | | | Tester | D. HOEFER | Witness | BILL JONES |
| cc. Oil _____ | | | | Drilling Contractor | ARAPAHOE # 6 | DR | |
| cc. Water 250 CC | | | | EQUIPMENT & HOLE DATA | | | |
| cc. Mud 2000 | | | | Formation Tested | Desert Creek | | |
| Tot. Liquid cc. 2250 | | | | Elevation | 5244' | Ft. | |
| Gravity _____ ° API @ _____ °F. | Gas/Oil Ratio _____ cu. ft./bbl. | | | Net Productive Interval | 72' | Ft. | |
| RESISTIVITY _____ CHLORIDE CONTENT _____ | | | | All Depths Measured From | Kelly Bushing | | |
| Recovery Water @ _____ °F. _____ ppm | Recovery Mud @ _____ °F. _____ ppm | | | Total Depth | 5440' | Ft. | |
| Recovery Mud Filtrate @ _____ °F. _____ ppm | Mud Pit Sample @ _____ °F. _____ ppm | | | Main Hole/Casing Size | 7 7/8" | | |
| Mud Pit Sample Filtrate @ _____ °F. _____ ppm | Mud Weight 9.7 vis 52 sec | | | Drill Collar Length | 495' | I.D. | 2.50" |
| | | | | Drill Pipe Length | 4841' | I.D. | 3.826" |
| | | | | Packer Depth(s) | 5362-5368' | | |
| | | | | Depth Tester Valve | 5345' | | |
| Cushion | | | | TYPE | AMOUNT | Depth Back Pres. Valve | Surface Choke 3/4" Bottom Choke 3/4" |
| Recovered 350 Feet of mud | | | | Recovered 120 Feet of slightly gas cut mud | | | |
| Recovered 50 Feet of slightly gas and mud cut water | | | | Recovered _____ Feet of _____ | | | |
| Recovered _____ Feet of _____ | | | | Recovered _____ Feet of _____ | | | |
| Remarks | | | | SEE PRODUCTION TEST DATA SHEET | | | |
| TEMPERATURE | | | | Gauge No. 6040 | Gauge No. 6039 | Gauge No. _____ | TIME |
| Depth: 5349 Ft. | | | | Depth: 5437 Ft. | Depth: _____ Ft. | Hour Clock | Tool _____ A.M. |
| Est. _____ °F. | | | | Blanked Off No | Blanked Off YES | Blanked Off _____ | Opened 9:45 P.M. |
| Actual 122 °F. | | | | Pressures | Pressures | Pressures | By-pass 12:30 P.M. |
| Initial Hydrostatic | | | | Field 2653 | Office 2655 | Field 2694 | Office 2698 |
| Flow Initial | | | | 79 | 79 | 132 | 129 |
| Flow Final | | | | 157 | 154 | 197 | 197 |
| Closed in | | | | 669 | 697 | 762 | 745 |
| Flow Initial | | | | 210 | 235 | 263 | 278 |
| Flow Final | | | | 249 | 255 | 303 | 300 |
| Closed in | | | | 420 | 440 | 474 | 484 |
| Flow Initial | | | | | | | |
| Flow Final | | | | | | | |
| Closed in | | | | | | | |
| Final Hydrostatic | | | | 2640 | 2649 | 2681 | 2682 |

Legal Location Sec. Twp. Rng. 21-41-30
 Lease Name NAVADO 0
 Well No. 4
 Test No. 2
 5368-5440'
 Treated Interval
 County APACHE
 State ARIZONA
 Lease Owner/Company Name ENERGY RESERVES GROUP

FORMATION TEST DATA

FORM 181-R2-PRINTED IN U.S.A.

LITTLE'S 102548 24 2/76

AMERICAS) INC.
 -N) Apache City
 UCC-231 TAIN- R30F

TICKET NO. 008957

| | O. D. | I. D. | LENGTH | DEPTH |
|-------------------------------|--------|--------|--------|-------|
| Drill Pipe or Tubing | | | | |
| Reversing Sub | 6" | 2.50" | 1' | |
| Water Cushion Valve | | | | |
| Drill Pipe | 4 1/2" | 3.826" | 4841' | |
| Drill Collars | 6 1/4" | 2 1/2" | 495' | |
| Handling Sub & Choke Assembly | | | | |
| Dual CIP Valve | 5" | .89" | 8' | 5332' |
| Dual CIP Sampler | 5" | .75" | 5' | 5345' |
| Hydro-Spring Tester | | | | |
| Multiple CIP Sampler | | | | |
| Extension Joint | | | | |
| AP Running Case | 5" | 3.50" | 4' | 5349' |
| Hydraulic Jar | 5" | 1.75" | 5' | |
| VR Safety Joint | 5" | 1.00" | 3' | |
| Pressure Equalizing Crossover | | | | |
| Packer Assembly | 6 3/4" | 1.53" | 6' | 5362' |
| Distributor | | | | |
| Packer Assembly | 6 3/4" | 1.53" | 6' | 5368' |
| Flush Joint Anchor | | | | |
| Pressure Equalizing Tube | | | | |
| Blanked-Off B.T. Running Case | | | | |
| Drill Collars | | | | |
| Anchor Pipe Safety Joint | | | | |
| Packer Assembly | | | | |
| Distributor | | | | |
| Packer Assembly | | | | |
| Anchor Pipe Safety Joint | | | | |
| Side Wall Anchor | | | | |
| Drill Collars | 6 1/4" | 2 1/2" | 55' | |
| Flush Joint Anchor | 5 3/4" | 2.50 | 10' | |
| Blanked-Off B.T. Running Case | 5 3/4" | 3.50" | 4' | 5437' |
| Total Depth | | | | 5440' |

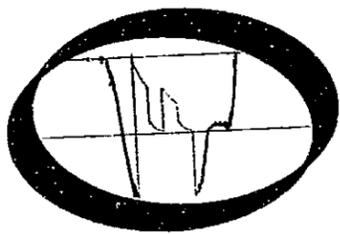
FORM 187-R1-PRINTED IN U.S.A.

EQUIPMENT DATA

LITTLE'S 36475 7/54

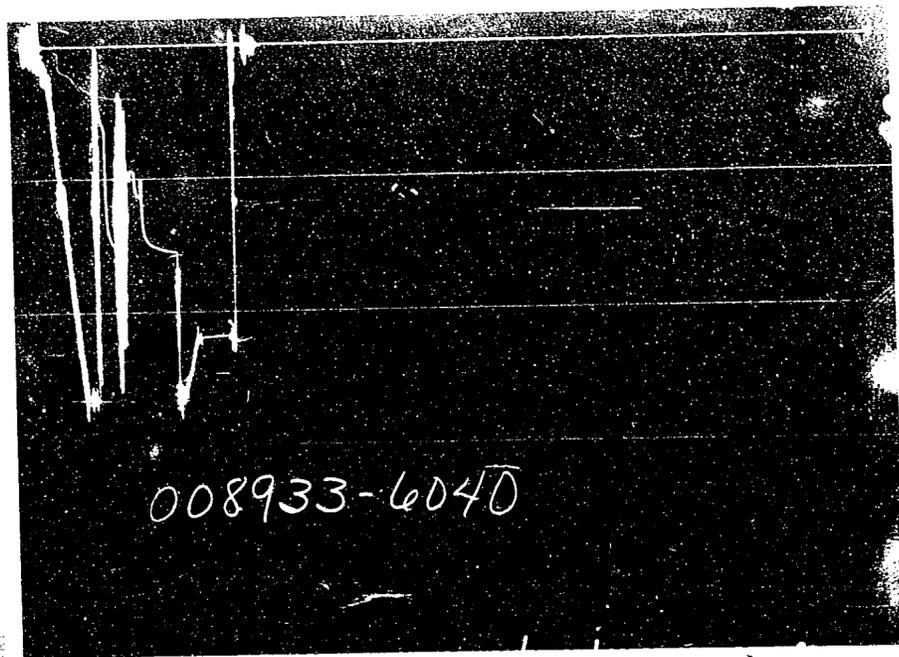
AMERICAN INS...
Apache City
TAINT...
RIDE

Formation Testing Service Report



HALLIBURTON SERVICES
DUNCAN, OKLAHOMA

6/2/74
6



Each Horizontal Line Equal to 1000 p.s.i.

EQUIPMENT DATA

TICKET NO. 008933

| | O. D. | I. D. | LENGTH | DEPTH |
|-------------------------------|--------|--------|--------|-------|
| Drill Pipe or Tubing | 6" | 3" | 1' | |
| Reversing Sub | | | | |
| Water Cushion Valve | 4 1/2" | 3.826" | 4730' | |
| Drill Pipe | 6" | 2 1/2" | 515' | |
| Drill Collars | | | | |
| Handling Sub & Choke Assembly | | | | |
| Dual CIP Valve | 5" | 3/4" | 6' | 5255' |
| Dual CIP Sampler | 5" | 3/4" | 5' | 5260' |
| Hydro-Spring Tester | | | | |
| Multiple CIP Sampler | | | | |
| Extension Joint | | | | |
| AP Running Case | 5" | - | 4' | 5264' |
| Hydraulic Jar | 5" | 1" | 6' | |
| VR Safety Joint | 5" | 1" | 3' | |
| Pressure Equalizing Crossover | | | | |
| Packer Assembly | 6 3/4" | 1 1/2" | 6' | 5276' |
| Distributor | | | | |
| Packer Assembly | 6 3/4" | 1 1/2" | 6' | 5282' |
| Flush Joint Anchor | | | | |
| Pressure Equalizing Tube | | | | |
| Blanked-Off B.T. Running Case | | | | |
| Drill Collars | | | | |
| Anchor Pipe Safety Joint | | | | |
| Packer Assembly | | | | |
| Distributor | | | | |
| Packer Assembly | | | | |
| Anchor Pipe Safety Joint | | | | |
| Side Wall Anchor | | | | |
| Drill Collars | 6" | 2 1/2" | 59' | |
| Flush Joint Anchor | 5 3/4" | 2 1/2" | 15' | |
| Blanked-Off B.T. Running Case | 5 3/4" | - | 4' | 5356' |
| Total Depth | | | | 5360' |

FORM 187-R1-PRINTED IN U.S.A.

EQUIPMENT DATA

LITTLE'S 20676 75C 4/74

Each horizontal line equals 1000 p.s.f.

AMERICAN IN...
Apache City
23 MAIN ROAD

Each Horizontal Line Equ...

| Gauge No. 6040 | | | Depth 5264' | | | Clock No. 13741 | | | 24 hour Ticket No. 008933 | | |
|---|------------------|--------------------------|------------------|--------------------|------------------|---------------------------|------------------|-------------------|---------------------------|--------------------------|------------------|
| First Flow Period | | First Closed In Pressure | | Second Flow Period | | Second Closed In Pressure | | Third Flow Period | | Third Closed In Pressure | |
| Time Defl. .000" | PSIG Temp. Corr. | Time Defl. .000" | Log t + θ | Time Defl. .000" | PSIG Temp. Corr. | Time Defl. .000" | Log t + θ | Time Defl. .000" | PSIG Temp. Corr. | Time Defl. .000" | Log t + θ |
| 0 .0000 | 685-Q | .0000 | 642 | .0000 | 604 | .0000 | 1004 | | | | |
| 1 .0100 | 479 | .0133 | 1341* | .0130 | 475-BB | .0433 | 1486** | | | | |
| 2 .0200 | 499 | .0300 | 1457 | .1310 | 1143-AB | .0833 | 1517 | | | | |
| 3 .0300 | 552 | .0467 | 1493 | .1340 | 1004-CS | .1233 | 1534 | | | | |
| 4 .0400 | 591 | .0633 | 1516 | | | .1633 | 1546 | | | | |
| 5 .0500 | 642 | .0740 | 1525 CS | | | .2033 | 1554-CS | | | | |
| 6 | | .0800 | CLOCK | | | .2433 | CLOCK | | | | |
| 7 | | .0967 | STOPPED | | | .2833 | STOPPED | | | | |
| 8 | | .1133 | AFTER | | | .3233 | AFTER | | | | |
| 9 | | .1300 | 22 | | | .3633 | 61 | | | | |
| 10 | | .1467 | MINUTES | | | .4033 | MINUTES | | | | |
| 11 | | .1633 | - | | | .4433 | - | | | | |
| 12 | | .1800 | - | | | .4833 | - | | | | |
| 13 | | .1970 | - | | | .5233 | - | | | | |
| 14 | | | | | | .5633 | - | | | | |
| 15 | | | | | | .6030 | - | | | | |
| Gauge No. 6039 | | | Depth 5356' | | | Clock No. 14121 | | | 12 hour | | |
| 0 .0000 | 872-Q | .0000 | 682 | .0000 | 788 | .0000 | 1073 | | | | |
| 1 .0204 | 563 | .0268 | 1378* | .0300 | 691-BB | .0871 | 1521** | | | | |
| 2 .0408 | 567 | .0604 | 1492 | .3680 | 2622-AB | .1675 | 1554 | | | | |
| 3 .0612 | 619 | .0940 | 1532 | .6100 | 1073 | .2480 | 1575 | | | | |
| 4 .0816 | 627 | .1275 | 1555 | | | .3284 | 1587 | | | | |
| 5 .1020 | 682 | .1611 | 1571 | | | .4088 | 1599 | | | | |
| 6 | | .1946 | 1583 | | | .4892 | 1605 | | | | |
| 7 | | .2282 | 1591 | | | .5696 | 1613 | | | | |
| 8 | | .2618 | 1599 | | | .6501 | 1621 | | | | |
| 9 | | .2953 | 1605 | | | .7305 | 1625 | | | | |
| 10 | | .3289 | 1611 | | | .8109 | 1628 | | | | |
| 11 | | .3624 | 1617 | | | .8913 | 1632 | | | | |
| 12 | | .3960 | 1621 | | | .9717 | 1634 | | | | |
| 13 | | | | | | 1.0522 | 1637 | | | | |
| 14 | | | | | | 1.1326 | 1639 | | | | |
| 15 | | | | | | 1.2130 | 1641 | | | | |
| Reading Interval 3 | | | 5 | | | 12 | | | Minutes | | |
| REMARKS: *Interval = 4 minutes **Interval = 13 minutes BB = Before by-passing AB = After by-passing | | | | | | | | | | | |
| Q = Questionable CS = Clock stopped | | | | | | | | | | | |

SPECIAL PRESSURE DATA

FORM 15-51-PRINTED IN U.S.A.

LITTLE # 8453 76C 2/74

| FLUID SAMPLE DATA | | | | Date | Ticket Number | |
|---|---------------------------------|------------------|---------------------|--------------------------|--------------------------------|--------|
| Sampler Pressure | 0 P.S.I.G. at Surface | | | 12-29-76 | 008933 | |
| Recovery: Cu. Ft. Gas | 5 | | | Kind of Job | OPEN HOLE | |
| cc. Oil | 1350 | | | Halliburton District | FARMINGTON | |
| cc. Water | 450 | | | Tester | MR. SMITH | |
| cc. Mud | | | | Witness | MR. JONES | |
| Tot. Liquid cc. | 1800 | | | Drilling Contractor | ARAPAHOE DRILLING COMPANY BC S | |
| Gravity | 32 * API @ 60 *F. | | | EQUIPMENT & HOLE DATA | | |
| Gas/Oil Ratio | | | | Formation Tested | Ismay | |
| | RESISTIVITY | cu. ft./bbl. | | Elevation | 5246' Ft. | |
| | | CHLORIDE CONTENT | | Net Productive Interval | 78' Ft. | |
| Recovery Water | @ | *F. | ppm | All Depths Measured From | Rotary Kelly Bushing | |
| Recovery Mud | 0.5 | @ 70 | *F. ppm | Total Depth | 5360' Ft. | |
| Recovery Mud Filtrate | @ | *F. | ppm | Main Hole/Casing Size | 7 7/8" | |
| Mud Pit Sample | 0.6 | @ 70 | *F. ppm | Drill Collar Length | 515' I.D. 2 1/2" | |
| Mud Pit Sample Filtrate | @ | *F. | ppm | Drill Pipe Length | 4730' I.D. 3.826" | |
| Mud Weight | 9.6 | vis | 52 Sec. | Packer Depth(s) | 5276' - 5282' Ft. | |
| | | | | Depth Tester Valve | 5260' Ft. | |
| Cushion | TYPE | AMOUNT | Ft. | Depth Back Pres. Valve | Surface Choke | |
| | | | | | 3/4" ADJ. Bottom Choke 3/4" | |
| Recovered | 60 | Feet of | Gas and oil cut mud | | | |
| Recovered | 2370 | Feet of | Gas cut oil | | | |
| Recovered | 130 | Feet of | Water | | | |
| Recovered | | Feet of | | | | |
| Recovered | | Feet of | | | | |
| Remarks | SEE PRODUCTION TEST DATA SHEET. | | | | | |
| Charts indicate partial plugging of anchor perforations during flow periods.... | | | | | | |
| CS = Clock stopped Q = Questionable | | | | | | |
| TEMPERATURE | Gauge No. | 6040 | Gauge No. | 6039 | Gauge No. | |
| | Depth: | 5264' Ft. | Depth: | 5356' Ft. | Depth: | |
| Est. | 24 Hour Clock | | 12 Hour Clock | | Hour Clock | |
| | *F. | Blanked Off NO | Blanked Off YES | Blanked Off | Tool Opened 1530 P.M. | |
| Actual 120 *F. | Pressures | | Pressures | | Pressures | |
| | Field | Office | Field | Office | Field | Office |
| Initial Hydrostatic | 2634 | 2681 | 2673 | | | |
| Flow | Initial | 685-Q | 526 | 872-Q | | |
| | Final | 642 | 657 | 682 | | |
| Closed in | Initial | 1525-CS | 1628 | 1621 | | |
| | Final | 604 | 670 | 788 | | |
| Flow | Initial | 1004-CS | 1181 | 1073 | | |
| | Final | 1554-CS | 1628 | 1641 | | |
| Closed in | Initial | | | | | |
| | Final | | | | | |
| Final Hydrostatic | 2634 | 2668 | 2673 | | | |

Legal Location: 23 - 41N - 30E
 Lease Name: NAVAJO "0"
 Well No.: 4
 Test No.: 1
 Tested Interval: 5282' - 5360'
 County: APACHE
 State: ARIZONA
 Lease Owner/Company Name: ENERGY RESERVES GROUP

Each Horizontal Line Equar...

AMERICAS) INC
 Apache City
 86301

ENERGY RESERVES GROUP, INC.
P. O. BOX 3280, CASPER, WY 82602

12-30-76 (CONTINUED)

FF - 30 min. Very weak blow.
FSI - 60 min. Rec. 620' of fluid. 350' of mud, 120'
sli gas cut mud, 150' sli gas and mud cut water.
IFP - 79-157 psi
ISIP- 669 psi
FFP - 210-249 psi
FSIP- 420 psi
Ran IES w/SP from 5442' to base of surface csg. BHC
Sonic from T.D. to 4300'; 3000' to 2550'; and 950'
to surface pipe.

12-31-76 T.D. 5440'. Ran 169 jts. 5442.66' (net) 5-1/2" O.D.,
14#, K-55, 8rd, R-2 and R-3 Used casing set at
5439' K.B. Cemented w/150 sx. of Class "B" neat
cement. Bumped plug w/1500 psi at 6:05 P.M., 12-30-76.
Good returns throughout job. Released rig. W.O.C.T.

1-12-77 Move in and rig up completion unit.

1-13-77 Perf. L. Ismay 5314'-5326' w/2 JPF.

1-14-77 Acidized perms w/500 gals. 28% HCL w/3 gals/1000 gals
inhibitor and 5 gals/1000 gals non-emulsifier. Flow
testing well.

9-331
1973

Form Approved
Budget Bureau No. 42-R1424

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use Form 9-331-C for such proposals.)

1. oil well gas well other

2. NAME OF OPERATOR
Energy Reserves Group, Inc.

3. ADDRESS OF OPERATOR
P.O. Box 3280 - Casper, Wyoming 82602

4. LOCATION OF WELL (REPORT LOCATION CLEARLY. See space 17 below.)
AT SURFACE:
AT TOP PROD. INTERVAL:
AT TOTAL DEPTH:

16. CHECK APPROPRIATE BOX TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

| | |
|---|--|
| REQUEST FOR APPROVAL TO: | SUBSEQUENT REPORT OF: |
| TEST WATER SHUT-OFF <input type="checkbox"/> | <input type="checkbox"/> |
| FRACTURE TREAT <input type="checkbox"/> | <input type="checkbox"/> |
| SHOOT OR ACIDIZE <input type="checkbox"/> | <input type="checkbox"/> |
| REPAIR WELL <input type="checkbox"/> | <input type="checkbox"/> |
| PULL OR ALTER CASING <input type="checkbox"/> | <input type="checkbox"/> |
| MULTIPLE COMPLETE <input type="checkbox"/> | <input type="checkbox"/> |
| CHANGE ZONES <input type="checkbox"/> | <input type="checkbox"/> |
| ABANDON* <input type="checkbox"/> | <input type="checkbox"/> |
| (other) <u>Beta Ratio</u> <input checked="" type="checkbox"/> | <u>X</u> <input checked="" type="checkbox"/> |

| |
|---|
| 5. LEASE 14-20-603-716 |
| 6. IF INDIAN, ALLOTTEE OR TRIBE NAME Navajo Tribal |
| 7. UNIT AGREEMENT NAME |
| 8. FARM OR LEASE NAME Navajo Tribal |
| 9. WELL NO. |
| 10. FIELD OR WILDCAT NAME Teec Nos Pos |
| 11. SEC., T., R., M. OR BLK. AND SURVEY OR AREA Section 23-131N-R30E |
| 12. COUNTY OR PARISH Apache |
| 13. STATE Arizona |
| 14. API NO. |
| 15. ELEVATIONS (SHOW DF, KDB, AND WD) |

(NOTE: Report results of multiple completion or zone change on Form 9-330.)

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

The orifice plate on the lease master sales meter was changed from 0.375 in. to 0.500 in. on March 30, 1983. This changed the beta ratio from 0.09 to 0.12 which is within the tolerances as set forth by the A.G.A. Committee in Report No. 3.

Subsurface Safety Valve: Manu. and Type _____ Ft.

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

SIGNED Paul Bertoglio TITLE Prod. Engr-RMD DATE April 5 1983

(This space for Federal or State office use)

APPROVED BY _____ TITLE _____ DATE _____
CONDITIONS OF APPROVAL, IF ANY:

663

Form 9-331
(May 1963)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN TRIPPLICATE*
(Other instructions on re-
verse side)

Form approved.
Budget Bureau No. 42-R1424.

5. LEASE DESIGNATION AND SERIAL NO.
14-20-603-716

6. IF INDIAN, ALLOTTEE OR TRIBE NAME
Navajo

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME
Navajo "0"

9. WELL NO.
4

10. FIELD AND POOL, OR WILDCAT
Teec-Nos-Pos

11. SEC., T., R., M., OR B.L.K. AND
SURVEY OR AREA
Sec. 23-T41N-R30E

12. COUNTY OR PARISH 13. STATE
Apache Arizona

SUNDRY NOTICES AND REPORTS ON WELLS
(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir.
Use "APPLICATION FOR PERMIT" for such proposals.)

1. OIL WELL GAS WELL OTHER

2. NAME OF OPERATOR
Energy Reserves Group, Inc.

3. ADDRESS OF OPERATOR
P.O. Box 3280, Casper, WY 82602

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*
See also space 17 below.)
At surface
800' FSL & 2,080' FEL (SW SE 1/4)

14. PERMIT NO. 15. ELEVATIONS (Show whether DF, RT, CR, etc.)
G.L. - 5,231'; K.B. - 5,244'

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

| NOTICE OF INTENTION TO: | | SUBSEQUENT REPORT OF: | |
|--|---|--|--|
| TEST WATER SHUT-OFF <input type="checkbox"/> | PULL OR ALTER CASING <input type="checkbox"/> | WATER SHUT-OFF <input type="checkbox"/> | REPAIRING WELL <input type="checkbox"/> |
| FRACTURE TREAT <input type="checkbox"/> | MULTIPLE COMPLETE <input type="checkbox"/> | FRACTURE TREATMENT <input type="checkbox"/> | ALTERING CASING <input type="checkbox"/> |
| SHOOT OR ACIDIZE <input type="checkbox"/> | ABANDON* <input type="checkbox"/> | SHOOTING OR ACIDIZING <input type="checkbox"/> | ABANDONMENT* <input type="checkbox"/> |
| REPAIR WELL <input type="checkbox"/> | CHANGE PLANS <input type="checkbox"/> | (Other) <input type="checkbox"/> | Progress <input checked="" type="checkbox"/> |
| (Other) <input type="checkbox"/> | | | |

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

12-30-76 - T.D. 5,440'. Prepare to run 5-1/2" casing.

RECEIVED
JAN 3 1977
O & G CONS. COMM.

18. I hereby certify that the foregoing is true and correct
SIGNED Karen C. Pilling TITLE Operations Supt. - Drlg. DATE 12-30-76

(This space for Federal or State office use)
APPROVED BY _____ TITLE _____ DATE _____
CONDITIONS OF APPROVAL, IF ANY:

663

*See Instructions on Reverse Side

Form 9-331
(May 1963)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN TRIPlicate*
(Other instructions on re-
verse side)

Form approved.
Budget Bureau No. 42-R1424.

5. LEASE DESIGNATION AND SERIAL NO.

14-20-603-716

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

Navajo

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME

Navajo "0"

9. WELL NO.

4

10. FIELD AND POOL, OR WILDCAT

Teec-Nos-Pos

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA

Sec. 23-T41N-R30E

12. COUNTY OR PARISH | 13. STATE

Apache | Arizona

SUNDRY NOTICES AND REPORTS ON WELLS
(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir.
Use "APPLICATION FOR PERMIT" for such proposals.)

1. OIL WELL GAS WELL OTHER

2. NAME OF OPERATOR

Energy Reserves Group, Inc.

3. ADDRESS OF OPERATOR

P. O. Box 3280, Casper, WY 82602

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*
See also space 17 below.)
At surface

800' FSL & 2,080' FEL (SW SE)

14. PERMIT NO.

15. ELEVATIONS (Show whether DF, RT, GR, etc.)

Ground - 5,231'; K.B. - 5,244'

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

| NOTICE OF INTENTION TO: | | SUBSEQUENT REPORT OF: | |
|--|---|--|--|
| TEST WATER SHUT-OFF <input type="checkbox"/> | PULL OR ALTER CASING <input type="checkbox"/> | WATER SHUT-OFF <input type="checkbox"/> | REPAIRING WELL <input type="checkbox"/> |
| FRACTURE TREAT <input type="checkbox"/> | MULTIPLE COMPLETE <input type="checkbox"/> | FRACTURE TREATMENT <input type="checkbox"/> | ALTERING CASING <input type="checkbox"/> |
| SHOOT OR ACIDIZE <input type="checkbox"/> | ABANDON* <input type="checkbox"/> | SHOOTING OR ACIDIZING <input type="checkbox"/> | ABANDONMENT* <input type="checkbox"/> |
| REPAIR WELL <input type="checkbox"/> | CHANGE PLANS <input type="checkbox"/> | (Other) <input type="checkbox"/> | Progress <input checked="" type="checkbox"/> |

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

12-28-76 DST #1 (5282'-5360') L. Ismay
 IF - 15 min. Good blow throughout period. Gas to surface after 16-1/2 min.
 ISI - 60 min.
 FF - 90 min. Gas throughout flow period est. 30-40 MCFPD after 55 min. Lost all weight of string and slid packer 6', did not lose annulus fluid.
 FSI - 180 min. Rec. 2560' of fluid. 60' heavily oil and gas cut mud. 2370' of heavily gas cut oil. 130' free water.
 IFP - 526-657 psi
 ISIP- 1628 psi
 FFP - 670-1181 psi
 FSIP- 1628 psi
 IHP - 2681 psi
 FHP - 2668 psi

12-30-76 DST #2 (5368'- 5440') Desert Creek
 IF - 15 min. Weak blow
 ISI - 60 min.

(CONTINUED ON ATTACHED SHEET)

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

SIGNED Dean B. Burner TITLE Dist. Prod. Engr. - RMD DATE 1-14-77

(This space for Federal or State office use)

APPROVED BY _____ TITLE _____ DATE _____
CONDITIONS OF APPROVAL, IF ANY:

663

*See Instructions on Reverse Side

JAN 19 1977
O & G CONS. COMM.

Form 9-331
(May 1963)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN TRIPLICATE*
(Other instructions on re-
verse side)

Form approved.
Budget Bureau No. 42-R1424.

5. LEASE DESIGNATION AND SERIAL NO.

14-20-603-716

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

Navajo

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME

Navajo "0"

9. WELL NO.

4

10. FIELD AND POOL, OR WILDCAT

Teec-Nos-Pos

11. SEC., T., R., M., OR BLM. AND
SURVEY OR AREA

Sec. 23-T41N-R30E

12. COUNTY OR PARISH 13. STATE

Apache Arizona

14. PERMIT NO.

15. ELEVATIONS (Show whether DF, ST, OR, etc.)

G.L. - 5,231'; K.B. - 5,244'

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

NOTICE OF INTENTION TO:

SUBSEQUENT REPORT OF:

TEST WATER SHUT-OFF

PULL OR ALTER CASING

WATER SHUT-OFF

REPAIRING WELL

FRACTURE TREAT

MULTIPLE COMPLETE

FRACTURE TREATMENT

ALTERING CASING

SHOOT OR ACIDIZE

ABANDON*

SHOOTING OR ACIDIZING

ABANDONMENT*

REPAIR WELL

CHANGE PLANS

(Other)

Progress

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

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

12-23-76 - Drilling 7-7/8" hole at 4,987'.

RECEIVED

DEC 31 1976

O & G CONS. COMM.

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

SIGNED Russell C. Billinger TITLE Operations Supt. -Drilg DATE 12-23-76

(This space for Federal or State office use)

APPROVED BY _____ TITLE _____ DATE _____
CONDITIONS OF APPROVAL, IF ANY:

663

*See Instructions on Reverse Side

Form 9-331
(May 1963)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN TRIPLICATE*
(Other instructions on re-
verse side)

Form approved.
Budget Bureau No. 42-R1424.

SUNDRY NOTICES AND REPORTS ON WELLS
(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir.
Use "APPLICATION FOR PERMIT—" for such proposals.)

5. LEASE DESIGNATION AND SERIAL NO.
14-20-603-716

6. IF INDIAN, ALLOTTEE OR TRIBE NAME
Navajo

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME
Navajo "0"

9. WELL NO.
4

10. FIELD AND POOL, OR WILDCAT
Teec-Nos-Pos

11. SEC., T., E., M., OR BLK. AND
SURVEY OR AREA
Sec. 23-T41N-R30E

1. OIL WELL GAS WELL OTHER

2. NAME OF OPERATOR
Energy Resrves Group, Inc.

3. ADDRESS OF OPERATOR
P. O. Box 3280, Casper, WY 82602

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*
See also space 17 below.)
At surface
800' FSL & 2080' FEL (SWSE)

14. PERMIT NO.
15. ELEVATIONS (Show whether DF, ST, CR, etc.)
G.L. Elev. -5,231', K.B. - 5,244'

12. COUNTY OR PARISH
Apache

13. STATE
Arizona

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

| NOTICE OF INTENTION TO: | | SUBSEQUENT REPORT OF: | |
|--|---|--|--|
| TEST WATER SHUT-OFF <input type="checkbox"/> | PULL OR ALTER CASING <input type="checkbox"/> | WATER SHUT-OFF <input type="checkbox"/> | REPAIRING WELL <input type="checkbox"/> |
| FRACURE TREAT <input type="checkbox"/> | MULTIPLE COMPLETE <input type="checkbox"/> | FRACURE TREATMENT <input type="checkbox"/> | ALTERING CASING <input type="checkbox"/> |
| SHOOT OR ACIDIZE <input type="checkbox"/> | ABANDON* <input type="checkbox"/> | SHOOTING OR ACIDIZING <input type="checkbox"/> | ABANDONMENT* <input type="checkbox"/> |
| REPAIR WELL <input type="checkbox"/> | CHANGE PLANS <input type="checkbox"/> | (Other) <input type="checkbox"/> | Progress <input checked="" type="checkbox"/> |

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

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

12-17-76 Drilling 7-7/8" hole at 3,693'.

RECEIVED
DEC 20 1976
D & G CONS. COMM.

18. I hereby certify that the foregoing is true and correct
SIGNED Kenneth C. Hillman TITLE Operations Supt. - Drlg DATE 12-17-76

(This space for Federal or State office use)
APPROVED BY _____ TITLE _____ DATE _____
CONDITIONS OF APPROVAL, IF ANY:

663

*See Instructions on Reverse Side

Form 9-311
(May 1963)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN TRIPlicate
(Other instructions
verse side)

Form approved.
Budget Bureau No. 42-R1424.

5. LEASE DESIGNATION AND SERIAL NO.

14-20-603-716

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

Navajo

7. UNIT AGREEMENT NAME

Navajo "0"

8. FARM OR LEASE NAME

9. WELL NO.

4

10. FIELD AND POOL, OR WILDCAT

Teec Nos Pos - Ismay

11. SEC., T., R., M., OR BLK. AND
SURVEY OF AREA

Sec. 23-T41N-R30E

12. COUNTY OR PARISH

Apache

13. STATE

Arizona

SUNDRY NOTICES AND REPORTS ON WELLS
(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir.
Use "APPLICATION FOR PERMIT—" for such proposals.)

1. OIL WELL GAS WELL OTHER

2. NAME OF OPERATOR

Energy Reserves Group, Inc.

3. ADDRESS OF OPERATOR

P. O. Box 3280, Casper, WY 82602

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*
See also space 17 below.)
At surface

800' FSL & 2,080' FEL (NWSWSE½)

14. PERMIT NO.

15. ELEVATIONS (Show whether DF, ST, GR, etc.)

Graded G.L. Elev-5,231'KB-5,244'

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

NOTICE OF INTENTION TO:

TEST WATER SHUT-OFF

FRACTURE TREAT

SHOOT OR ACIDIZE

REPAIR WELL

(Other)

PULL OR ALTER CASING

MULTIPLE COMPLETE

ABANDON*

CHANGE PLANS

SUBSEQUENT REPORT OF:

WATER SHUT-OFF

FRACTURE TREATMENT

SHOOTING OR ACIDIZING

(Other)

REPAIRING WELL

ALTERING CASING

ABANDONMENT*

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

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

The above described well was spudded at 11:15 P.M., 12-7-76.

Drilled 12-1/4" hole to 510' (K.B.)

Ran 12 jts. - 486.34' (net) - 8-5/8" O.K., 32#, 8RTH, K-55, R-3, ST&C,
New casing set at 501' (K.B.) Cemented w/325 sx Class "B" cement w/2%
CaCl2 and 1/4# flocele per sx. Plug down at 10:20 P.M., 12-8-76. Good
returns. Nippled up and pressure tested BOPE to 600 psi - held O.K.

12-10-76: Drilling 7-7/8" at 966'.

RECORDED

DEC 13 1976

D & G CONS. COMM.

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

SIGNED Karen C. Billings

TITLE Operations Supt-Drlg

DATE 12-10-76

(This space for Federal or State office use)

APPROVED BY _____

TITLE _____

DATE _____

CONDITIONS OF APPROVAL, IF ANY:

663

*See Instructions on Reverse Side

October 26, 1976

Memo: To File 663

From: William E. Allen *well*

Called Dean Barnes, Energy Reserves Group, regarding change of location on the proposed Navajo "0" 4. Told him that there was no way the Commission could approve location change, as requested, without a hearing.

Suggested that they come in for a hearing on November 12, 1976 and also suggested that they request permission for 40 acre spacing in the Teec Nos Pos Field.

Dean was advised that we would need his formal request immediately in order to give us time for publication.

SUNDRY NOTICES AND REPORTS ON WELLS

RECEIVED
OCT 26 1976
O & G CONS. COMM.

1. Name of Operator ENERGY RESERVES GROUP, INC.
 2. OIL WELL GAS WELL OTHER (Specify) _____
 3. Well Name NAVAJO "O" #4
 Location 800' FSL, 2080' FEL (NW SW SE)
 Sec. 23 Twp. 41N Rge. 30E County Apache, Arizona.
 4. Federal, State or Indian Lease Number, or lessor's name if fee lease 14-20-603-716
 5. Field or Pool Name TEEC NOS POS - ISMAY

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

| NOTICE OF INTENTION TO: | | SUBSEQUENT REPORT OF: | |
|--|---|--|---|
| TEST WATER SHUT-OFF <input type="checkbox"/> | PULL OR ALTER CASING <input type="checkbox"/> | WATER SHUT-OFF <input type="checkbox"/> | MONTHLY PROGRESS <input type="checkbox"/> |
| FRACTURE TREATMENT <input type="checkbox"/> | DIRECTIONAL DRILL <input type="checkbox"/> | FRACTURE TREATMENT <input type="checkbox"/> | REPAIRING WELL <input type="checkbox"/> |
| SHOOT OR ACIDIZE <input type="checkbox"/> | PERFORATE CASING <input type="checkbox"/> | SHOOTING OR ACIDIZING <input type="checkbox"/> | ALTERING CASING <input type="checkbox"/> |
| REPAIR WELL <input type="checkbox"/> | CHANGE PLANS <input type="checkbox"/> | (OTHER) <input type="checkbox"/> | ABANDONMENT <input type="checkbox"/> |
| (OTHER) <input checked="" type="checkbox"/> change well location | | | |

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

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

It is proposed to change the well location from 660' FSL, 660' FEL (SESE) Section 23-T41N-R30E which was submitted in May, 1976, to the above location. This will be beneficial in at least two ways:

1. The geologic position of the well will be improved, thus enhancing its possibility of being oil productive.
2. Since the location has been moved off of the mountain, the extensive and costly construction of the access road will be eliminated.

Because of this proposed change we have had to completely revise and re-submit the application to drill and the plan of development, etc. to the U.S.G.S. Because of this it is unlikely that approval will be received in time to start drilling by the November 1, 1976 expiration of the extension of the original permit to drill. We therefore would like to ask for another extension of the original permit for drilling this well.

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

Signed Nolan B. Bames Title RMD Prod. Engineer Date 10-22-76

Permit No. 663

STATE OF ARIZONA
OIL & GAS CONSERVATION COMMISSION
Sundry Notices and Reports On Wells
File Two Copies
Form No. 25

Energy Reserves Group, Inc.
P.O. Box 3280
Casper, Wyoming 82601
Phone 307 265 7331

 Energy Reserves Group

May 25, 1976

Mr. Anthony P. Lincoln
Area Director
Navajo Area Office
Bureau of Indian Affairs
Window Rock, Arizona 86515

Dear Mr. Lincoln:

Energy Reserves Group, Inc. plans to drill an oil well in
the Teec Nos Pos - Ismay Field at the following location:
(see attached map)

Navajo "O" #4 - 660' FSL, 660' FEL
SE SE Section 23-T41N-R30E
Apache County, Arizona

We understand that you are now handling archaeological
approvals. We are therefore soliciting your assistance
in obtaining the necessary archaeological approval for
drilling the above well.

Very truly yours,

Dean B. Barnes

Dean B. Barnes
Drilling Engineer
Rocky Mountain District

DBB:kp

Attachment

LOCATION CHANGED
TO 800 FSL & 2080 FEL

Energy Reserves Group, Inc.
Navajo "O" #4
SE SE Sec. 23-T41N-R30E
Apache Co., Arizona

Page two

of Appl.

Energy Reserves Group, Inc. proposes to drill the above well with rotary tools from surface to TD. The anticipated zone of completion is the Lower Ismay. No coring is planned. One DST of the Lower Ismay is planned. Copies of all logs run will be furnished upon completion of the well. Copies of the location plat and the Development Plan for Surface Use are attached. Archaeology approval is being requested and will be forwarded upon receipt.

Estimated tops:

| | |
|-------------|-------|
| DeChelly SS | 2950' |
| Cutler | 3226' |
| Hermosa | 4740' |
| Upper Ismay | 5470' |
| Lower Ismay | 5560' |
| TD | 5630' |

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1A. TYPE OF WORK
DRILL DEEPEN PLUG BACK

B. TYPE OF WELL
OIL WELL GAS WELL OTHER
SINGLE ZONE MULTIPLE ZONE

2. NAME OF OPERATOR
ENERGY RESERVES GROUP, INC.

3. ADDRESS OF OPERATOR
Box 3280 CASPER, Wyoming, 82602

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)
At surface 800' FSL, 2080' FEL (NW SW SE)
At proposed prod. zone

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*
Approximately 2 miles North of Teec Nos Pos Trading Post

10. DISTANCE FROM PROPOSED LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any) 3200'

18. DISTANCE FROM PROPOSED LOCATION TO NEAREST WELL, DRILLING COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT. 1050'

21. ELEVATIONS (Show whether DF, RT, GR, etc.)
5233' GRD

5. LEASE DESIGNATION AND SERIAL NO.
14-20-603-716

6. IF INDIAN, ALLOTTEE OR TRIBE NAME
NAVAJO

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME
NAVAJO "O"

9. WELL NO.
4

10. FIELD AND POOL, OR WILDCAT
TEEC NOS POS-ISMAY

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
Sec 23-T41N-R30E

12. COUNTY OR PARISH
Apache

13. STATE
Arizona

16. NO. OF ACRES IN LEASE 560

17. NO. OF ACRES ASSIGNED TO THIS WELL 40

20. ROTARY OR CABLE TOOLS
Rotary

22. APPROX. DATE WORK WILL START*
November 25th, 1976

23. PROPOSED CASING AND CEMENTING PROGRAM

| SIZE OF HOLE | SIZE OF CASING | WEIGHT PER FOOT | SETTING DEPTH | QUANTITY OF CEMENT |
|--------------|----------------|-----------------|---------------|--------------------|
| 12 1/2" | 8 5/8" | 24# | 500' ± | 360 SKS |
| 7 7/8" | 5 1/2" | 14# | 5400' ± | 80 SKS |

Energy Reserves Group, Inc. proposes to drill the above well with rotary tools from surface to TD. The anticipated zone of completion is the Lower Ismay. No coring is planned. One DST of the Lower Ismay is planned. Copies of all logs run will be furnished upon completion of the well. Copies of the location plat and the Development Plan for Surface Use are attached. Archaeological approval is being requested and will be forwarded upon receipt.

Estimated tops :
DeChelly SS 2713'
Cutler 2989'
Hermosa 4503'
Upper Ismay 5233'
Lower Ismay 5323' TD 5400'

Application for permit to drill will be filed with the State of Arizona on their forms.

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24. SIGNED Alan B. Barnes TITLE RMD Production Engineer DATE 10-27-76

(This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE _____

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:

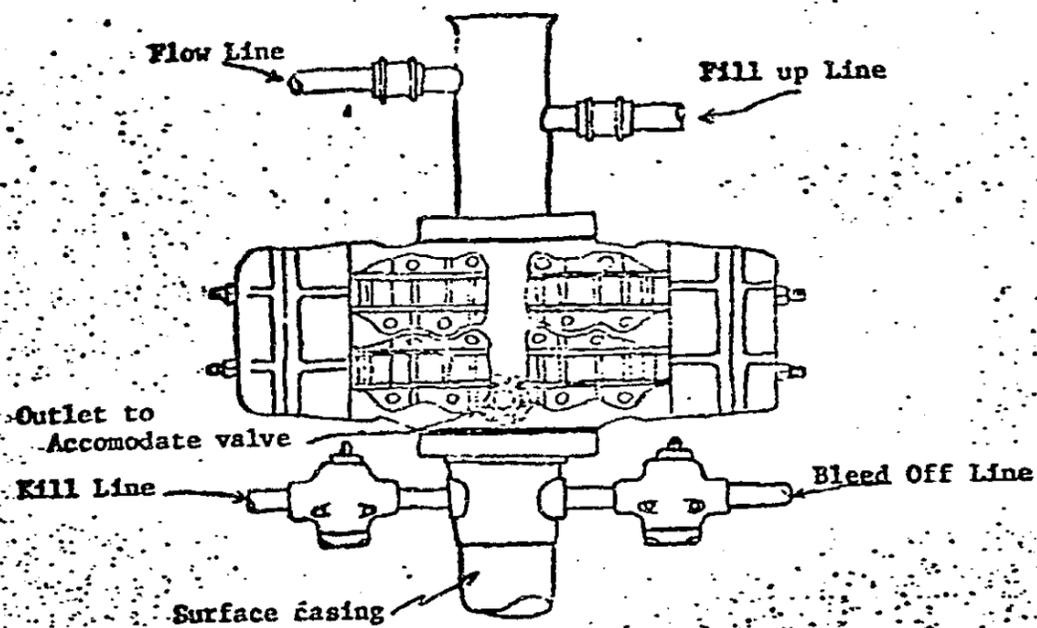
ENERGY RESERVES GROUP, INC.
NAVAJO "O" # 4

ATTACHMENT WITH FORM 9-331C.

1. The surface formation is the Morrison formation.
2. The estimated tops of the important geologic markers in this well are as follows :

| | |
|-----------------|-------|
| De Chelly SS | 2713' |
| Cutler | 2989' |
| Hermosa | 4503' |
| Upper Ismay | 5233' |
| Lower Ismay | 5323' |
| Lower Ismay Pay | 5353' |
| TD | 5400' |
3. The Lower Ismay pay at 5353' is expected to be oil productive.
4. The proposed casing program is as follows:
Set 8 5/8", 24# new casing at 500' ± and cement back to surface with 360 sks cement.
Set 5 1/2", 14 #, used casing at 5400' ± (in a 7 7/8" hole) and cement with 80 sks cement.
Estimated cement top is 5000' ±.
5. Pressurecontrol equipment to consist of a Shaffer type - hydraulically operated - double ram BOP.- 10" 900 series. The BOP will be pressure tested to 600 PSI after installation and prior to drilling out from under surface casing. See attachment #1.
6. Well is to be drilled with gel mud plus required additives for hole conditions and formations to be drilled. Normally about 50-60 sacks of gel will be on location at any one time. There is no need for weighting material.
7. Auxiliary equipment - Kelly cock stop for 4 1/2" drill pipe - a float at the bit and a full opening floor valve to stab into the drill pipe.
8. No coring is planned. One DST of the Lower Ismay pay zone may be run.
Logs will probably be as follows:
Induction Electric from TD to base of surface casing - BHC Sonic log over potential zones of interest including the expected pay zone.
9. No abnormal pressure or temperatures are anticipated. H₂S is not a potential problem in this area.
10. It is planned to commence drilling operations soon after regulatory approval has been received and a rig can be obtained - hopefully by the latter part of November, 1976. It is estimated it will take 30 days to drill, test and log this well.

ENERGY RESERVES GROUP, INC.
Navajo "0" #4
Attachment #1



Blowout preventer is Shaffer double hydraulic equipped with drill pipe rams in the top and blind rams in the bottom.

Blowout preventer closing unit is Koomey 30 gallon accumulator unit.

When choke manifold is used, it will be installed downstream from bleed off valve.

Kill line or bleed off line may be installed at flanged opening in blowout preventer.

ENERGY RESERVES GROUP, INC.
NAVAJO "O" #4

NTL-6

1. Existing Roads - see attachment #2 :

There are two possible routes into this well, depending on archeological clearance.

Route 1 : Go north from Teec Nos Pos Trading Post on Route # 160 about 2½ miles. Turn of on west side of road, through a gate and on to a dirt road. Follow this dirt road around the mountain to our shut-in well #2. From here on south there is an old partial road along a pipe line right-of-way. It will require some cat work and possibly some gravel to make a usable road. There are two substantial gulleys that will require some cat work and fill to be able to cross. This route would go south for about ½ mile. At this point you turn back east to the location. No construction will be required from the turnoff point to the location. The dirt road into well #2 should only require a minimum amount of work to be a suitable access road.

Route 2 : From existing well #3 go northeast on the top of the mesa to the location. This route should be relatively flat and is preferred if there are no archeological problems. This would be a better permanent road because of the shorter distance involved. The Indian surface lessee has asked us to establish this road.

2. Planned Access Roads :

Covered extensively in #1 above.

- (1) the proposed width of either route would be limited to 16' ±
- (2) Getting up to well #3 there is a grade of 8% ±. Grades would be less on Route 2.
- (3) Not required on either route.
- (4) (5) Drainage should not be a problem on route #2 by well #3. On route #1 - by well #2 - would possibly require a culvert on road into well #2 and maybe two on road to be constructed beyond well #2.
- (6) None should be required on route 2 by well #3. Dirt and possibly some gravel would be required on route 1 by well #2.
- (7) None required on either route.

3. Location of Existing Wells - see attachment #3 :

#1 - 660' FSL, 1880' FWL Sec 23 - Producing
#2 - 1830' FSL, 1980' FEL Sec 23 - Shut-in
#3 - 1000' FSL, 900' FWL Sec 23 - Producing

4. Location of Existing and/or Proposed Facilities :

- a. (1) The tank battery for the Navajo "O" lease is located just to the southwest of well #1.
- (2) Covered in (1) above
- (3) There are buried flow lines from well #1 and well #3 to this tank battery.

ENERGY RESOURCES GROUP, INC.
NAVAJO "O" #4

NTL-6

- (4) None
- (5) None
- (6) None

If this well is productive, a flow line will be installed from this well to the aforementioned tank battery.

b. None required

c. The surface along the new flow line will be returned to its pre-disturbed state as soon as possible after the flow line is installed.

5. Location and Type of Water Supply :

There is no water available in the immediate area. It will have to be hauled from outside the area, possibly from the San Juan River on the reservation or a water well about 5 miles west of well #3, depending on the access route approved.

6. Source of Construction Materials :

- a. Any dirt or gravel required - if route #1 is used by well #2 - will be obtained in the area.
- b. Material mentioned in a. above will be from Indian lands.
- c. No additional roads should be required.

7. Methods for Handling Waste Disposal :

- (1) (2) (3) These materials will be contained in the reserve pit during drilling and completion operations. Any oil on the pit will be removed. After the pit is dried up it will be covered over.
- (4) A portable restroom facility will be installed on the location during drilling and completion operations.
- (5) A deep trash pit will be dug to contain garbage and other waste material which accumulates during drilling operations. It will be covered at the completion of drilling operations.
- (6) After drilling operations are completed the area will be policed up and debris placed in the trash pit prior to covering it. The reserve pit will be fenced - sheep tight - so that it can dry up and be covered as soon as possible.

8. Ancillary Facilities :

None are required.

ENERGY RESERVES GROUP, INC.
NAVAJO "O" #4

NTL-6

9. Well Site Layout :

- (1) See attachment #4
- (2) See attachment #5 - A rig contractor has not been selected at this time. However, this is a typical layout for the size rig required to drill this well.
- (3) See attachment #5 - also covered in #2 (Planned Access Roads).
- (4) It is not planned to line the reserve pit.

10. Plans For Restoration of Surface :

At the conclusion of drilling operations the reserve pit will be fenced - sheep tight - to allow the pit to dry. The location surface shall be restored to as near natural conditions as possible. Top soil, such as it is, will be stockpiled and spread over the location after the pit has been covered and the location leveled and contoured to the surrounding topography. If the well is plugged, the road will be restored to as near its pre-disturbed condition as possible. All the disturbed area will be re-seeded (if required) as per the proper regulatory agency's recommendations. Since there is no grass growing at present in the proposed disturbed area, it is highly doubtful if re-seeding would be successful. Rehabilitation operations will be commenced and completed as soon as possible after drilling operations are completed.

11. Other Information :

- (1) The area is marginal, overgrazed rangeland with considerable erosion and gully-cutting. Vegetation is limited to sparse range grass, sagebrush and Russian thistle. The location is on the north west side and at the base of the large shale out crop.
- (2) There are no surface use activities in the general area except sheep grazing. The Navajo tribe owns all the surface in this area.
- (3) There are no occupied dwellings in the area of proposed activity. An archeological inspection was made and clearance obtained for the previous location.

12. Lessee's or Operator's representative :

Mr. T.C. Durham is the Foreman who will represent Energy Reserves Group, Inc. during our drilling and clean up operations in connection with this well. He lives in Farmington, New Mexico. His address and phone no's are as follows :

| | | |
|---------|---------------------|------------------|
| Home | - 1205 Camino Largo | ph. 505-325-7978 |
| Office | - Box 977 | ph. 505-327-1639 |
| Contact | - Unit 539 | ph. 505-325-1873 |

CERTIFICATION

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drillsite and access route; that I am familiar with the conditions which presently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and, that the work associated with the operations proposed herein will be performed by _____

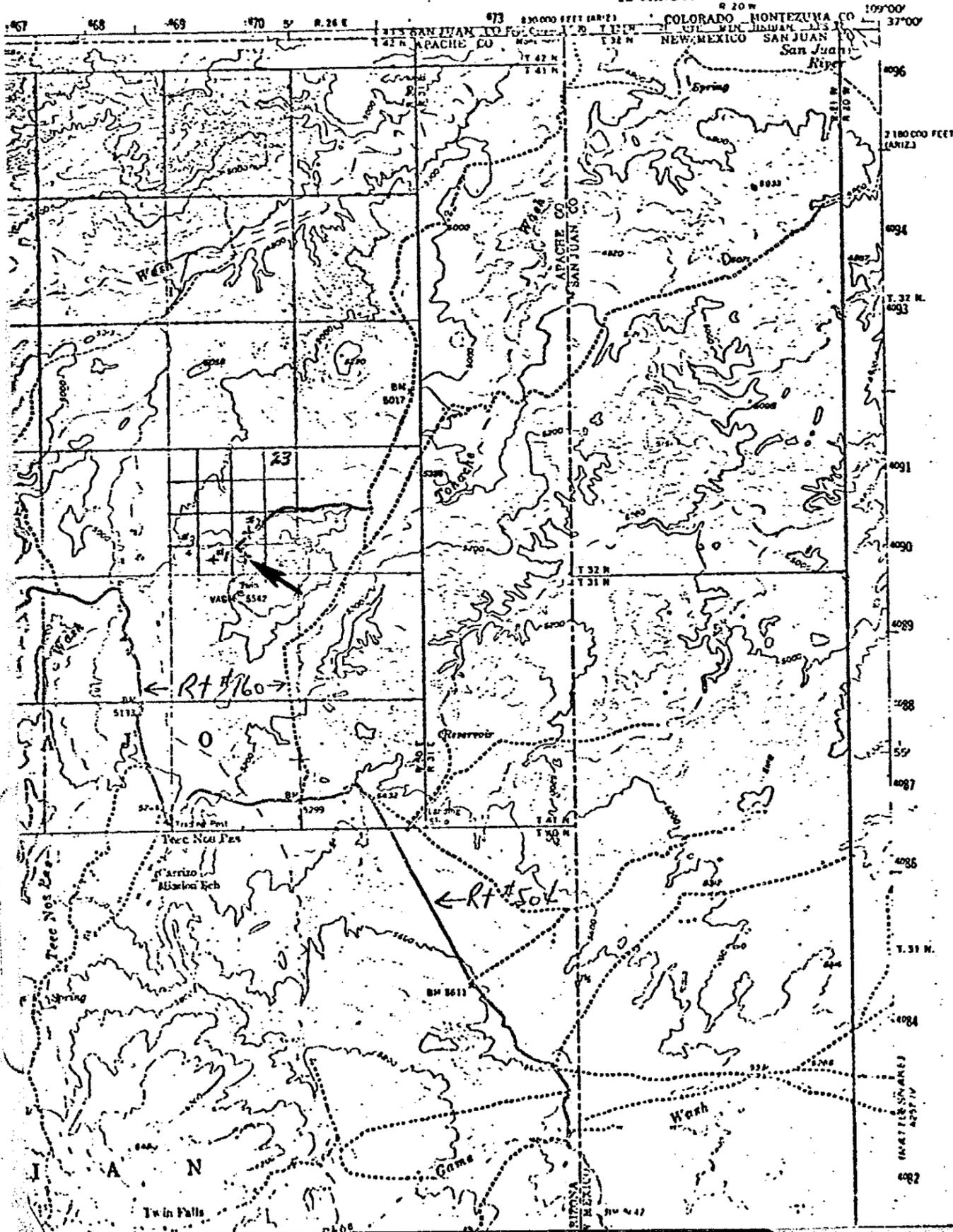
Frank Louis Green
and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved.

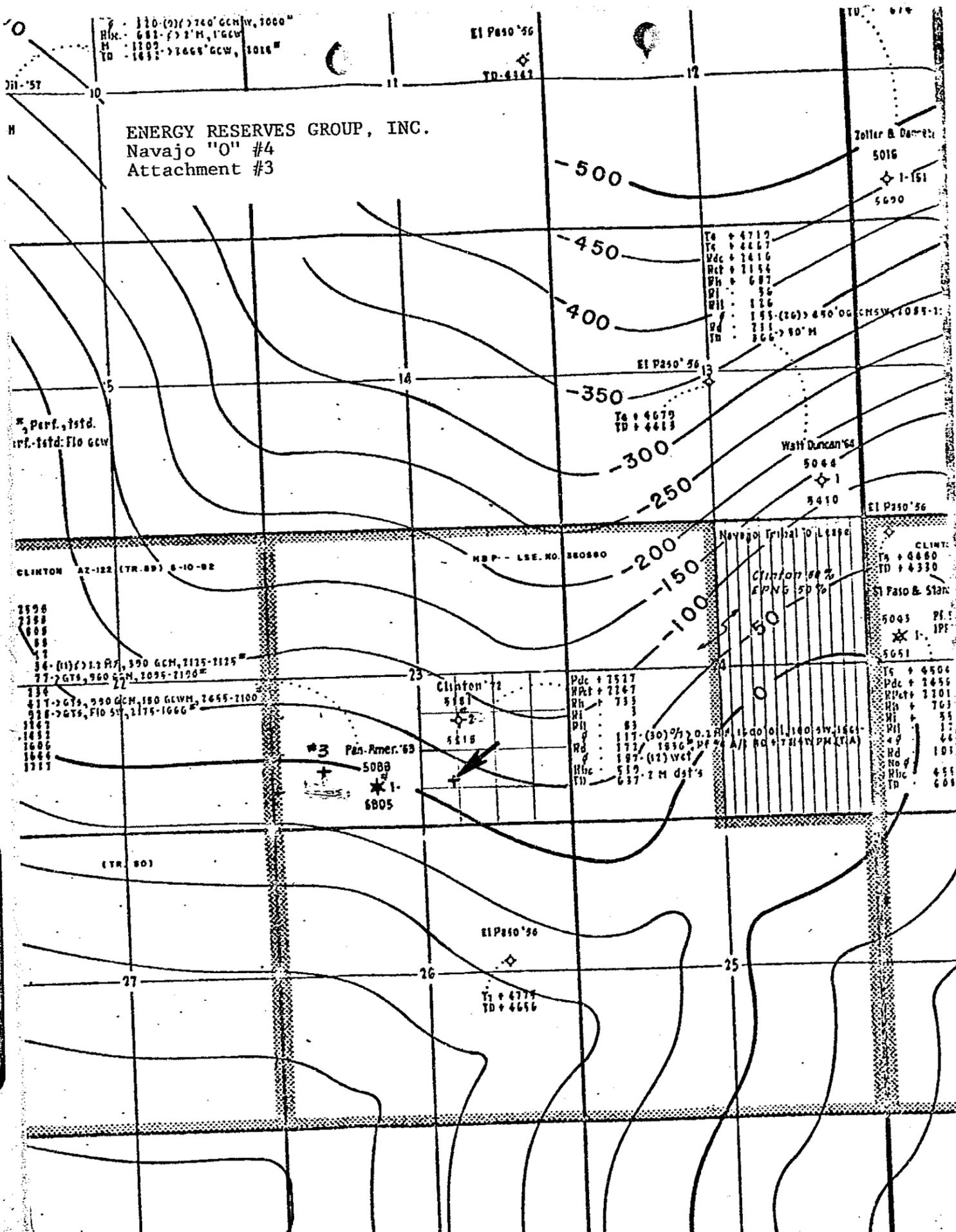
10-5-76
Date

W. Sullivan Love Foreman
Name and Title

ENERGY RESERVES GROUP, INC
Navajo "O" #4
Attachment #2

PASTORA PEAK QUADRANGLE
ARIZ.-N. MEX.-UTAH-COLO.
15 MINUTE SERIES (TOPOGRAPHIC)





110 (2) 740' GCM, 1000"
 Hdc: 682 - 731' M, 1' GCM
 M: 1102 - 766' GCM, 1018"
 TD: 1632 - 766' GCM, 1018"

El Paso '56
 TD: 4142

ENERGY RESERVES GROUP, INC.
 Navajo "O" #4
 Attachment #3

Zeller & Co.
 5016
 1-151
 5690

Ts + 4712
 Pdc + 2417
 HPet + 2416
 RH + 2116
 RH + 607
 RH + 56
 RH + 126
 RH + 185 (20) 490' GCM, 1085-1
 TD + 711
 TD + 366 - 90' M

El Paso '56
 Ts + 4679
 TD + 4413

Watt Duncan
 5044
 1
 5410
 El Paso '56

Perf. test
 ref. test: Flo GCM

CLINTON AZ-122 (TR. 89) 8-10-82

HBP - LSE. NO. 280880

Navajo Tribal Lease

CLINTON
 Ts + 4680
 TD + 4330
 El Paso & Star
 5045
 1-151
 5651

34 (1) 312' P, 390 GCM, 2125-2125"
 71-72 GTS, 960 GCM, 2025-2120"
 239
 417-425, 990 GCM, 180 GCM, 2455-2100
 218-225, Flo 57, 2175-1666"

Clinton '72
 5181
 518

Pdc + 2517
 HPet + 2247
 RH + 733
 RH + 3
 RH + 83
 RH + 117 (30) 20.1 P, 1500' GCM, 1140 SW, 1666-
 RH + 172 1836' P, 24' A, 11' RD + 7' 11' 11' PM (TA)
 RH + 187 (11) wet
 Hdc + 519
 TD + 637 - 2 M dist's

Pan-Amer. '63
 5089
 1-151
 5805

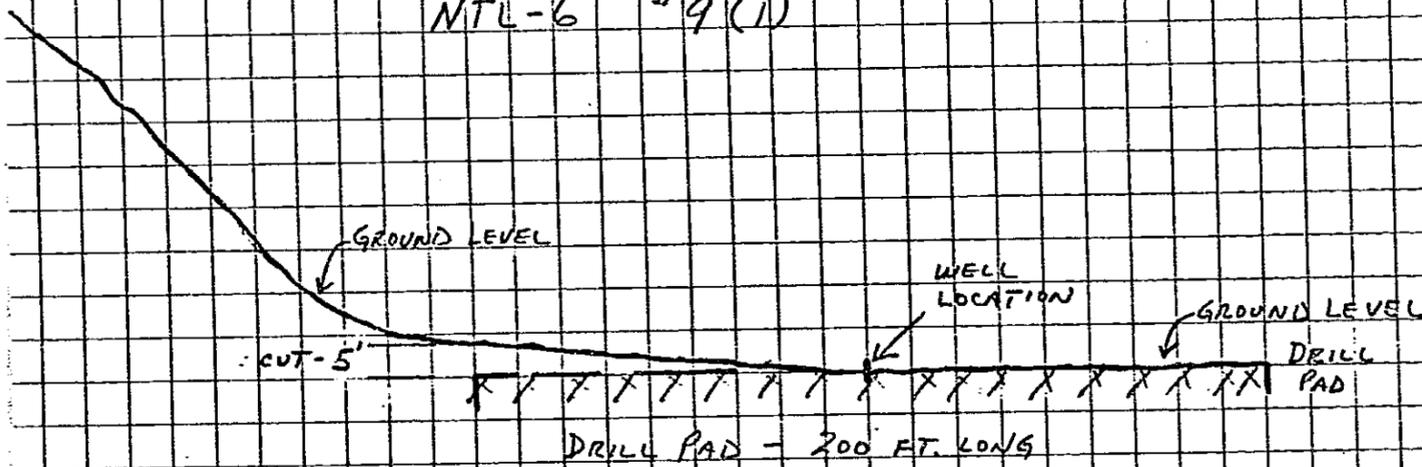
Ts + 4504
 Pdc + 2456
 HPet + 2201
 RH + 763
 RH + 55
 RH + 17
 RH + 46
 Hdc + 181
 Hdc + 455
 TD + 608

El Paso '56
 Ts + 4777
 TD + 4656

(TR. 80)

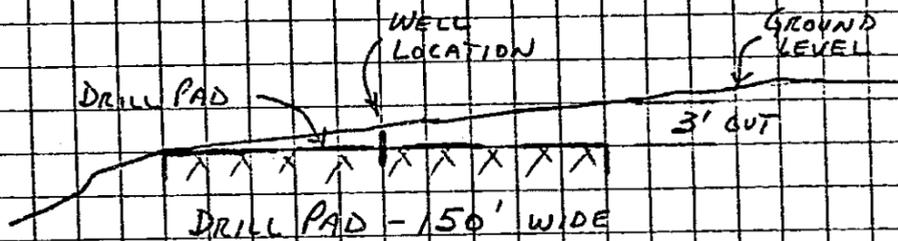
WELL SITE LAYOUT

NTL-6 #9 (1)



LOOKING PERPENDICULAR TO LENGTH
OF DRILL PAD

DIRECTION - NORTH EAST TO LEFT

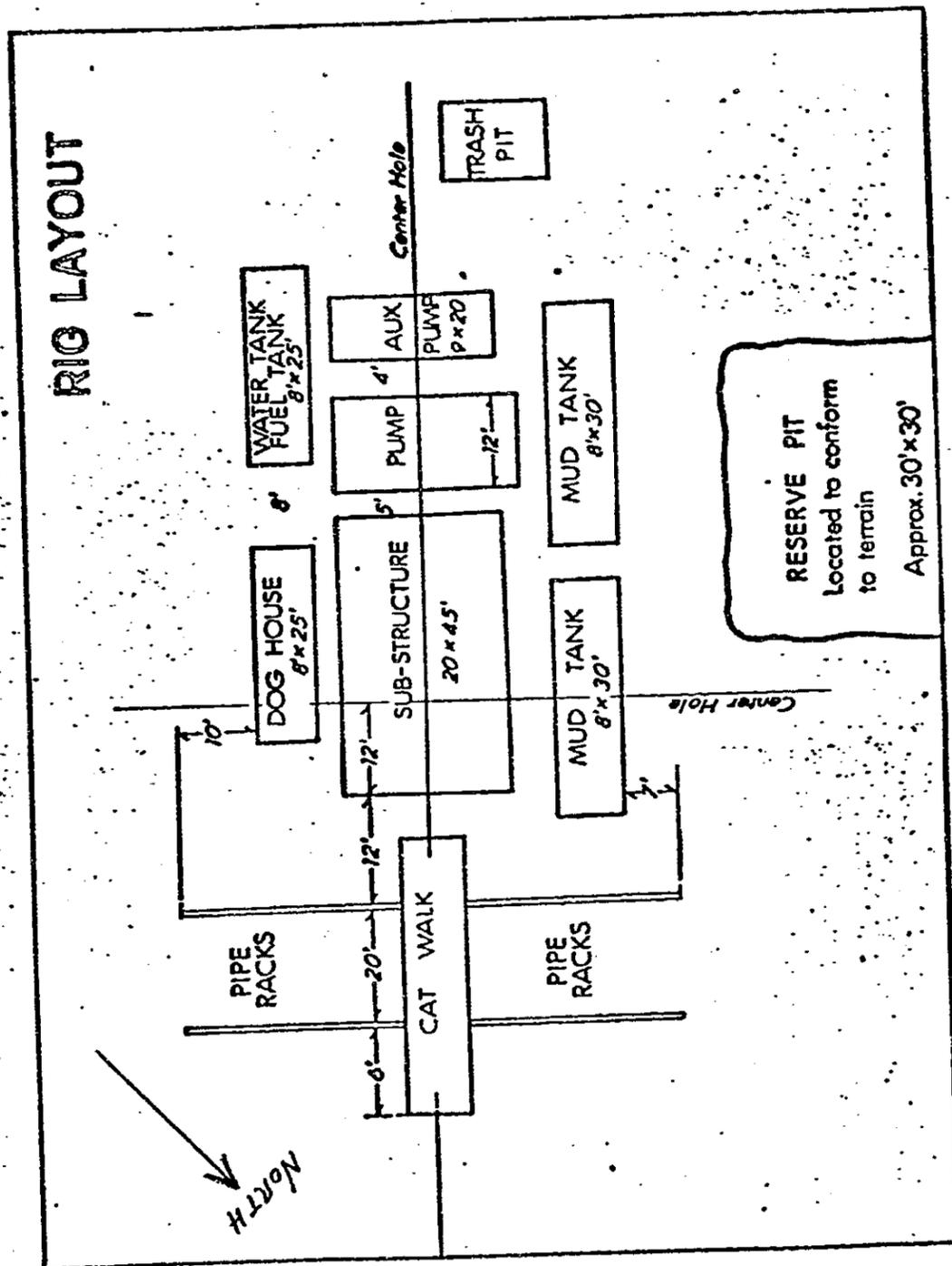


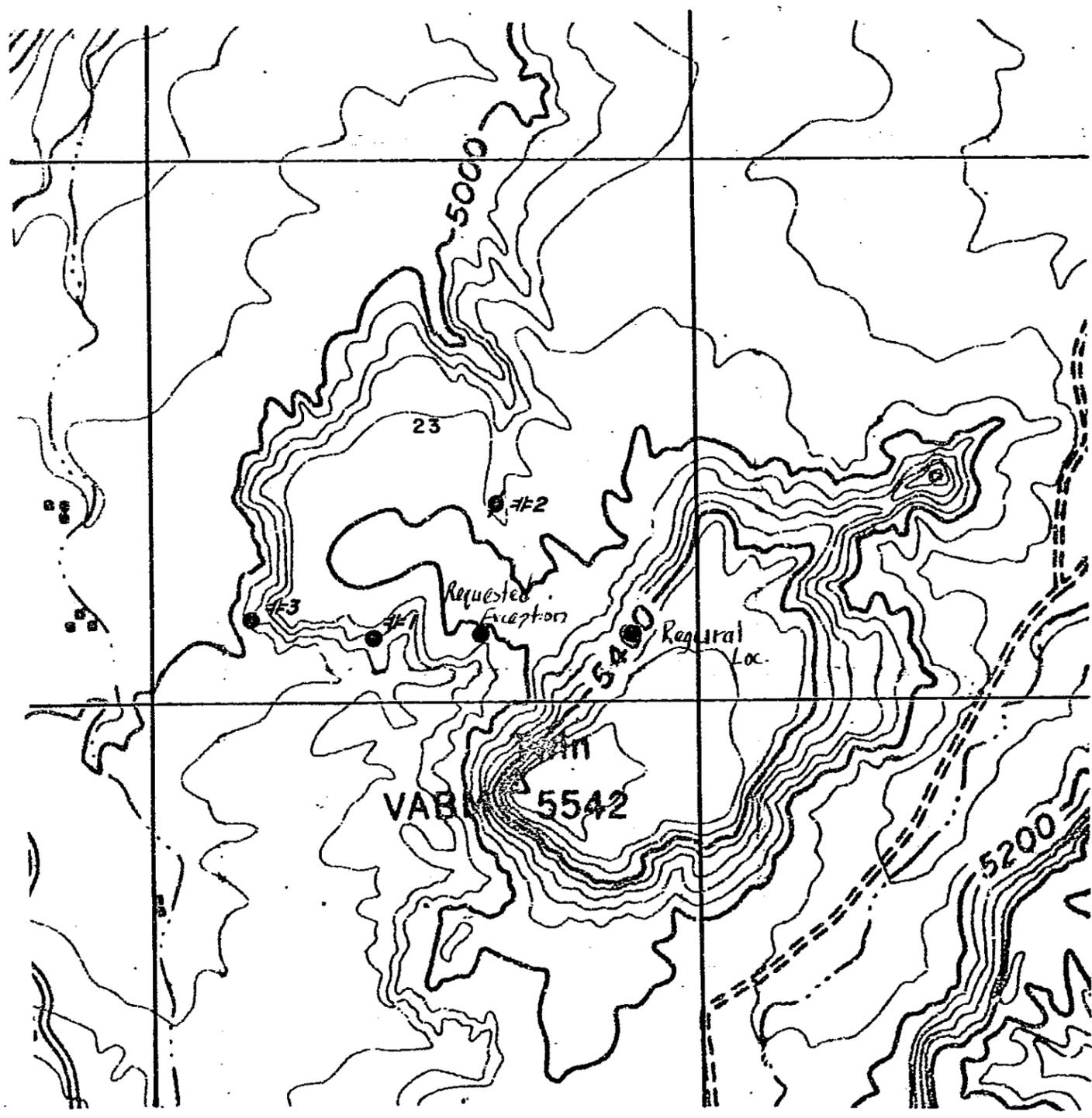
LOOKING PERPENDICULAR TO WIDTH
OF DRILL PAD

DIRECTION - NORTH WEST TO LEFT

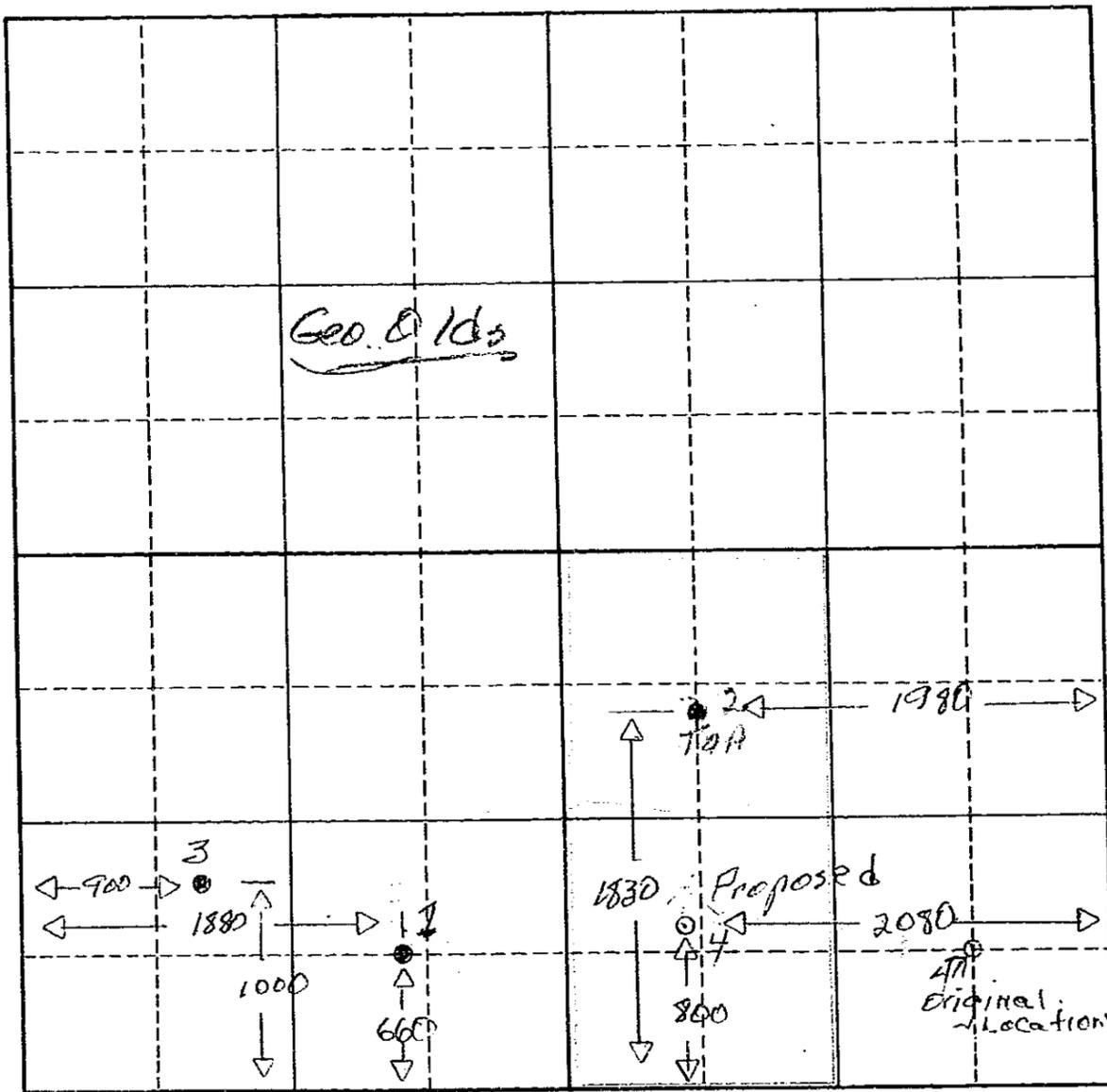
NOT TO SCALE

ENERGY SERVICES GROUP, INC.
Navajo, "O" # 4
Attachment #5





Section 23 Township 41 N Range 50 E



800 400 0 800 1600 2400 Feet

5280 Feet }
 320 Rods } 1 Mile
 1760 Yards }
 80 Chains }
 66 Feet } 1 Chain
 43560 Sq. Ft. } 1 Acre

Scale: _____

APPLICATION FOR PERMIT TO DRILL OR RE-ENTER

APPLICATION TO DRILL

RE-ENTER OLD WELL

Energy Reserves Group, Inc.

NAME OF COMPANY OR OPERATOR

P. O. Box 3280 Casper Wyoming 82601

Address

To be determined

Drilling Contractor

Address

DESCRIPTION OF WELL AND LEASE

| | | |
|---|--|--|
| Federal, State or Indian Lease Number, or if fee lease, name of lessor 14-20-603-716 | Well number Navajo "O" #4 | Elevation (ground) 5475' 5233 |
| Nearest distance from proposed location to property or lease line: 4620 feet | Distance from proposed location to nearest drilling completed or applied--for well on the same lease: 1867 feet | |
| Number of acres in lease: 560 | Number of wells on lease, including this well, completed in or drilling to this reservoir: 4 | |
| If lease, purchased with one or more wells drilled, from whom purchased: | | |
| Name Amoco Production Company | Address Box 591, Tulsa, Oklahoma | |
| Well location (give footage from section lines) 100' FSL, 200' FEL | Section--township--range or block and survey Sec. 23-T41N-R30E | Dedication (Comply with Rule 105) 80 Acres* |
| Field and reservoir (if wildcat, so state) Teec Nos Pos - Ismay | County Apache | |
| Distance, in miles, and direction from nearest town or post office Approximately 2 miles north of Teec Nos Pos Trading Post. | | |
| Proposed depth: 5630 | Rotary or cable tools Rotary | Approx. date work will start July 15, 1976 |
| Bond Status active | Organization Report On file 7-70 Or attached | Filing Fee of \$25.00 Attached - X |
| Amount \$25,000 | | |

REMARKS:

See page two attached.

CERTIFICATE: I, the undersigned, under the penalty of perjury, state that I am the Rocky Mtn. Dist. Drlg. Engr the Energy Reserves Group, Inc. (company), and that I am authorized by said company to make this report; and that this report was prepared under my supervision and direction and that the facts stated therein are true, correct and complete to the best of my knowledge.

* Dedicated acreage E $\frac{1}{2}$ SE $\frac{1}{2}$

Signature

Date

Permit Number: 6063
Approval Date: 6-2-76
Approved By: W.S. Allen

Notice: Before sending in this form be sure that you have given all information requested. Much unnecessary correspondence will thus be avoided.

Form No. 3

STATE OF ARIZONA
OIL & GAS CONSERVATION COMMISSION
Application to Drill or Re-enter
File Two Copies

- Operator shall outline the dedicated acreage for both oil and gas wells on the plat.
- A registered professional engineer or land surveyor registered in the State of Arizona or approved by the Commission shall show on the plat the location of the well and certify this information in the space provided.
- All distances shown on the plat must be from the outer boundaries of the Section.
- Is the Operator the only owner in the dedicated acreage outlined on the plat below? YES NO
- If the answer to question four is "no," have the interests of all the owners been consolidated by communitization agreement or otherwise? YES NO If answer is "yes," Type of Consolidation _____
- If the answer to question four is "no," list all the owners and their respective interests below:

| Owner | Land Description |
|---|------------------|
| | |
| <div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 0 auto;"> CERTIFICATION I hereby certify that the information above is true and complete to the best of my knowledge and belief. Name <u>Wesley B. Barnes</u> Position <u>Drilling Engineer</u> Company <u>Energy Reserves Group, Inc.</u> Date _____ </div> | |
| <div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 0 auto;"> I hereby certify that the well location shown on the plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief. Date Surveyed _____ Registered Professional Engineer and/or Land Surveyor _____ Certificate No. _____ </div> | |
| <div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 0 auto;"> Date Surveyed _____ Registered Professional Engineer and/or Land Surveyor _____ Certificate No. _____ </div> | |

| PROPOSED CASING PROGRAM | | | | | | |
|-------------------------|--------|--------------|-----|--------|------------------|--------------|
| Size of Casing | Weight | Grade & Type | Top | Bottom | Cementing Depths | Sacks Cement |
| 8-5/8" | 24# | J-55 ST&C | 0 | 500'+ | 0 - 500'+ | 360 |
| 5 1/2" | 14# | J-55 ST&C | 0 | 5630'+ | 5230' - 5630'+ | 80 |

COMPANY Energy Reserves Group

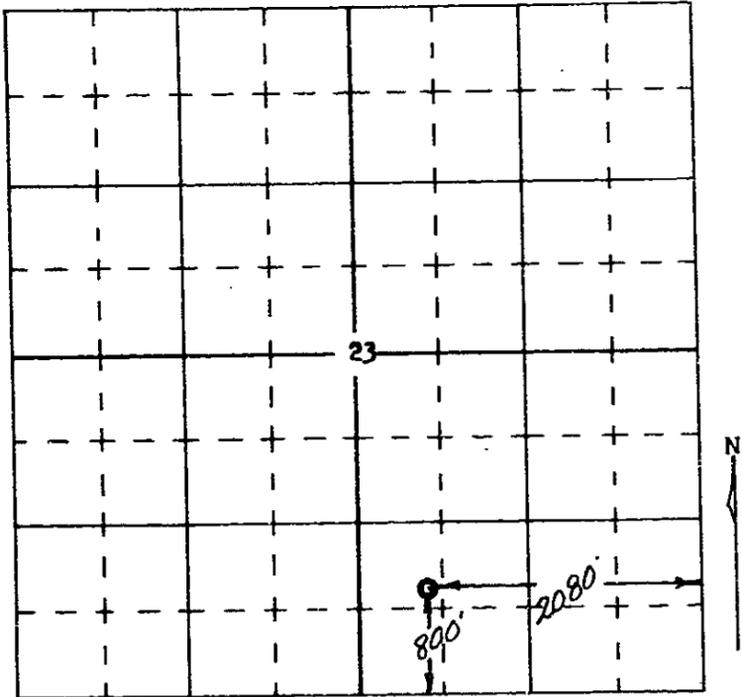
Well Name & No. Navajo "0" No. 4 Lease No. _____

Location 800 feet from South line and 2080 feet from East line

Being in Apache County, Arizona

Sec. 23, T.41N., R.30E., G. & S.R.M. •

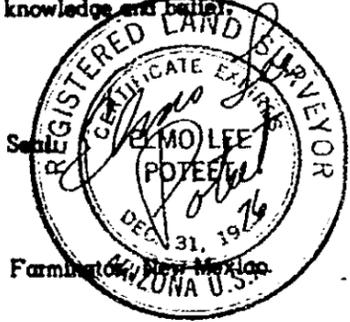
Ground Elevation 5233



Scale - 4 inches equals 1 mile

Surveyed October 20th, 19 76

This is to certify that the above plot was prepared from field notes of actual surveys made by me or under my supervision and that the same are true and correct to the best of my knowledge and belief.





PERMIT TO DRILL

This constitutes the permission and authority from the
OIL AND GAS CONSERVATION COMMISSION,
STATE OF ARIZONA,

To: Energy Reserves Group, Inc.
(OPERATOR)

to drill a well to be known as

Energy Reserves Group, Inc. Navajo "O" No. 4
(WELL NAME)

located ~~400' FSL & 200' FEL~~ 800' FSL & 2080' FEL

Section 23 Township 41N Range 30E Apache County, Arizona.

The SW 1/4 of the SE/4 Sec. 23, T41N, R30E (40A) of said
Section, Township and Range is dedicated to this well.

Said well is to be drilled substantially as outlined in the attached Application and must be drilled
in full compliance with all applicable laws, statutes, rules and regulations of the State of Arizona.

Issued this 2 day of June, 19 76.

OIL AND GAS CONSERVATION COMMISSION

By W.B. Allen
EXECUTIVE SECRETARY

PERMIT N^o 663

RECEIPT NO. 673

SAMPLES ARE REQUIRED

API #02-001-20219

State of Arizona
Oil & Gas Conservation Commission
Permit to Drill

FORM NO. 27

R 29 E

R 30 E

UTAH
ARIZONA

R 31 E

T
4
N

Miami Oil '67
 5353
 1-M-1-Fed 3154
 6537

Pdc 4 2973
 Pci 1 2633
 Ph 4 1148
 Pl 1 467
 Pli 1 389
 No# 1
 Pa 4 315
 Lmr Znd 10M/280,58MPL/1812-2524#
 Pdc 4 29
 M - 505
 De - 847
 Dem - 1041 35' GCM
 Do - 1191
 C - 1284 2880 OGCSW,2307

Superior Oil '57
 5126
 2-M
 6787

Pdc 4 2764
 Pci 1 958
 Ph 4 748
 Pl 1 180
 Pli 1 26(30) 90M
 No# 1
 Pa 4 81
 Lmr Znd 248 2 1/2 50
 M - 774 3000' SW, 2710-2090#
 De - 1101
 Dem - 1290
 Do - 1480 502 4700' SW, 3000-2250#
 C - 1514
 TD - 6088

Superior Oil '60
 5195
 2-M
 5986

Pdc 4 2755
 Pci 1 195
 Ph 1 930
 Pl 1 217
 Pli 1 135
 No# 1
 Pa 4 696
 Lmr Znd 14, SO, NT (O)
 M - 597
 De - 255
 Dem - 805
 Do - 831

Superior Oil '61
 4891
 1-M

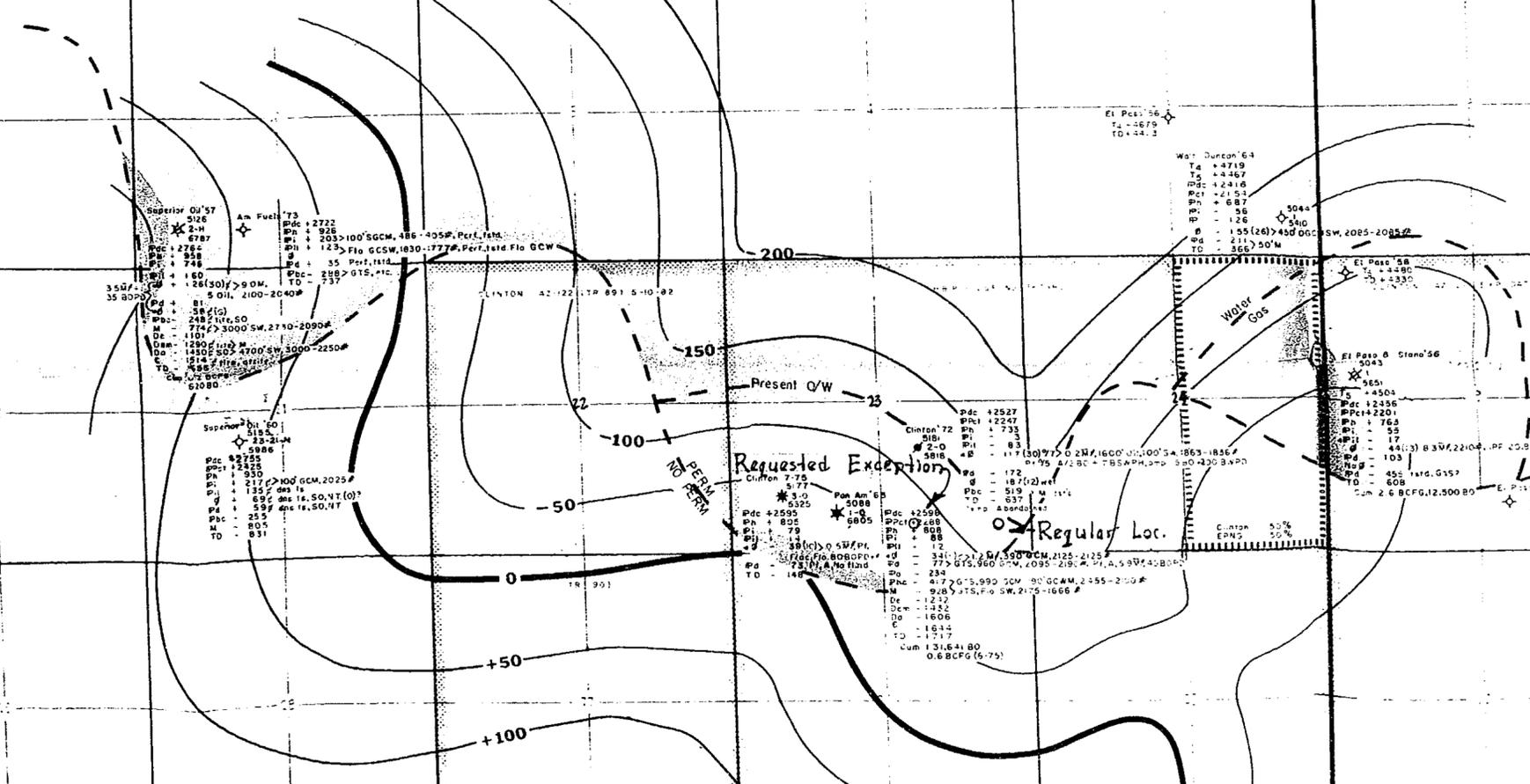
Pdc 4 2722
 Pci 1 928
 Ph 1 150
 Pl 1 123
 Pli 1 238 (30) GTS, 492' SW, 2206' F
 No# 1
 Pa 4 320 (91) 750' GCM, 1000#
 Lmr Znd 682 2 1/2 M, 1' GCM
 M - 1209
 De - 2463
 Dem - 2463 GCM, 2025#
 Do - 1432

Zeller B. Schreberg '63
 5206
 1926
 4-1
 368
 452
 476
 5243 100' GCM, 2328-2328#
 5016 161
 5689

Water
 Gas

Requested Exemption

Regular Loc.



T
41
N

T
40
N

168
170
172
174
176
178
180
182
184
186
188
190
192
194
196
198
200

Superior Oil 57
 5126
 2-W
 6787
 Pdc + 2764
 Ph + 958
 Pl + 748
 No 1
 160
 128130' > 90M
 501. 2:00-20:00

Am Fuel 73
 Pdc + 2722
 Ph + 926
 Pl + 712
 No 1
 160
 128130' > 90M
 501. 2:00-20:00

203 > 100' GCM, 486 - 495# Per. 1st d
 1235' Flg GCSW, 1850 - 1777# Per. 1st d Flg GCM
 15 Per. 1st d
 Pdc - 288 > 015, etc.
 TD - 737

350' 35' 20" 501. 2:00-20:00

Superior Oil 58
 5188
 2-W
 5986
 Pdc + 2625
 Ph + 930
 Pl + 717
 No 1
 160
 128130' > 90M
 501. 2:00-20:00

217 > 100' GCM, 2025
 135' d
 68' d
 59' d
 Pdc - 255
 Ph + 804
 Pl + 831
 TD - 831

Miami Oil 67
 5353
 1-W
 6637
 Pdc + 2973
 Ph + 1148
 Pl + 467
 No 1
 315
 1.0M / 280, 5BWP, 1, 1, 1, 2-2524
 29
 M - 505
 De - 847
 Dem - 1041 > 35' GCM
 Da - 1191
 C -
 TD - 1284 > 2880 GCM SW, 2307

Brilliant - Am Oil 60
 5545
 1-C
 6419
 Pdc + 2853
 Ph + 1283
 Pl + 1355
 No 1
 601
 218' GCM, 150' GCM, 1450#
 535
 Pdc + 225 > 370' GCM, 1632#
 M - 330 > 1440' GCM SW, 1905#
 De - 609
 Dem -
 TD - 875

Decca 70
 5295
 7235
 1-C
 4884
 Pdc + 2631
 Ph + 719
 Pl + 653
 No 1
 31
 37
 Pdc - 375
 M - 927
 De - 1278
 Dem - 1463
 Da - 1653
 C - 1762
 TD - 1852
 - N -

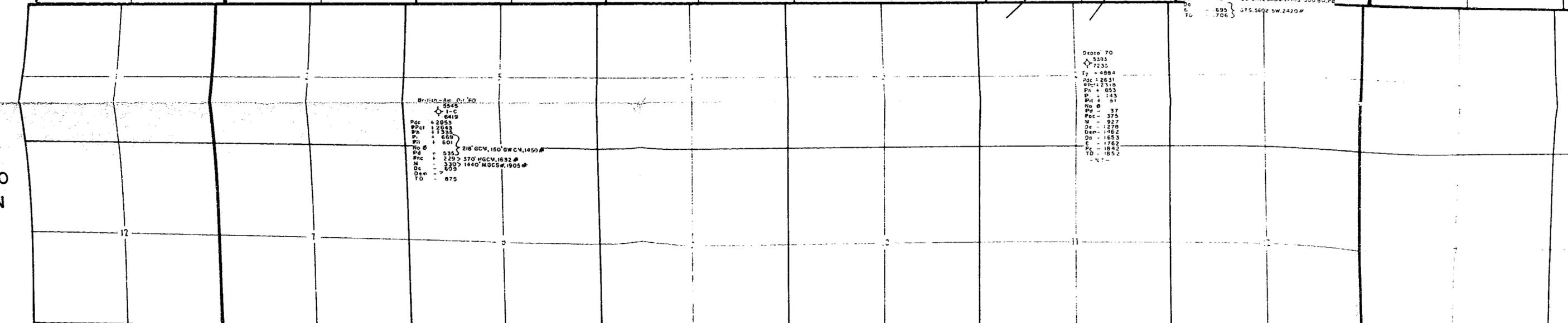
Ow #0
 Texaco Inc 67
 529
 1-Z
 6997
 4763
 Pdc + 2561
 Ph + 223
 Pl + 636
 No 1
 39 > 175, 85' GCM, 695#
 31 > 90' GCM, 440#
 Pdc - 339
 M - 689 > 52' d, 1% HA, 200BTJ
 De - 169 > 70' HOSM, 101, 1820#
 Dem - 1467 > 20' d, 2380# Per. 500' BO, PB
 Da - 695 > 375, 5692 SW, 2420#
 TD - 706

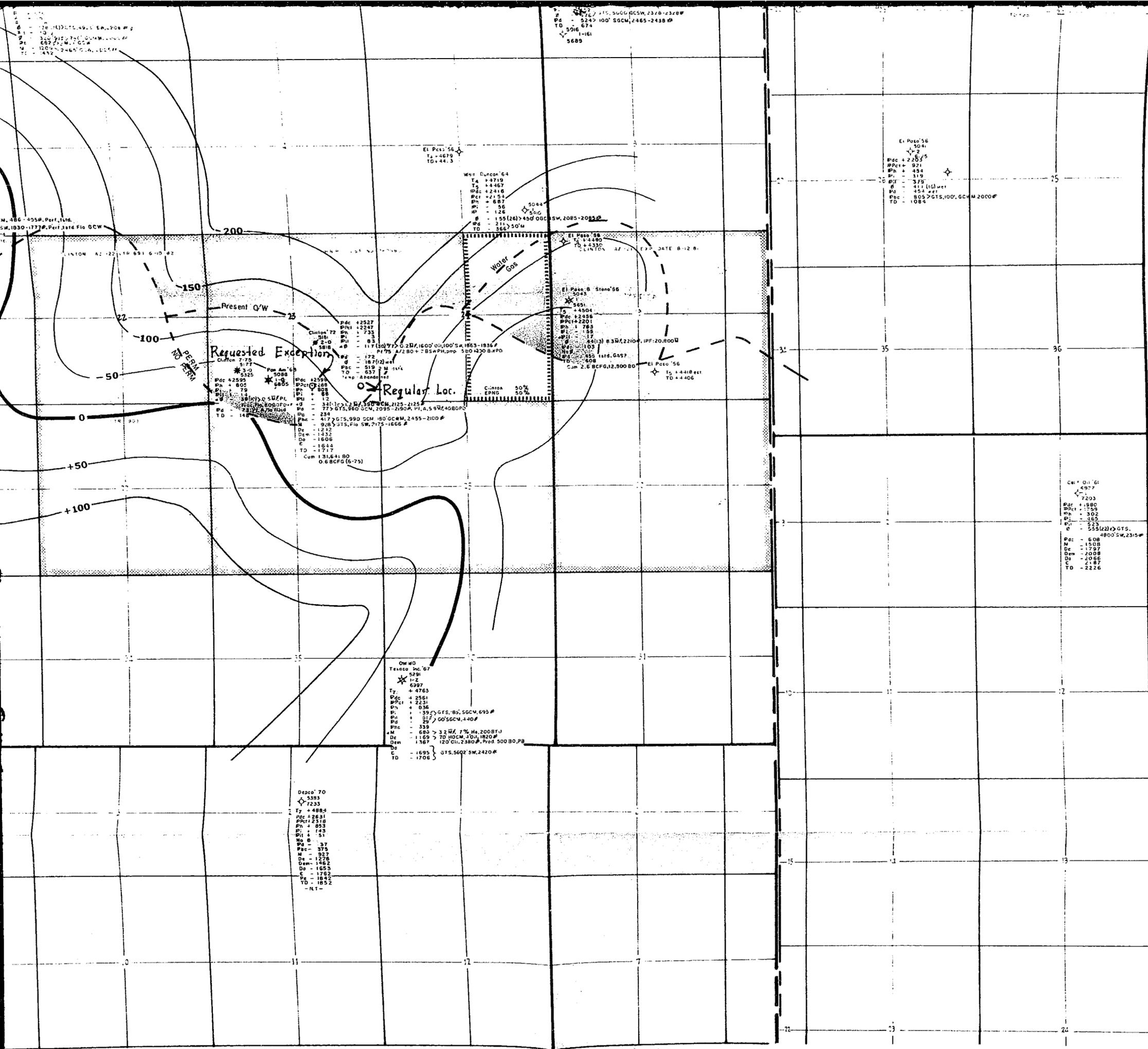
Requested Exception

Regular Loc.

Present O/W

Water Gas





T
32
N

T
31
N

El Paso 56
T₁ - 1679
TD - 44.3

El Paso 56
T₁ - 1679
TD - 44.3

Requested Exception

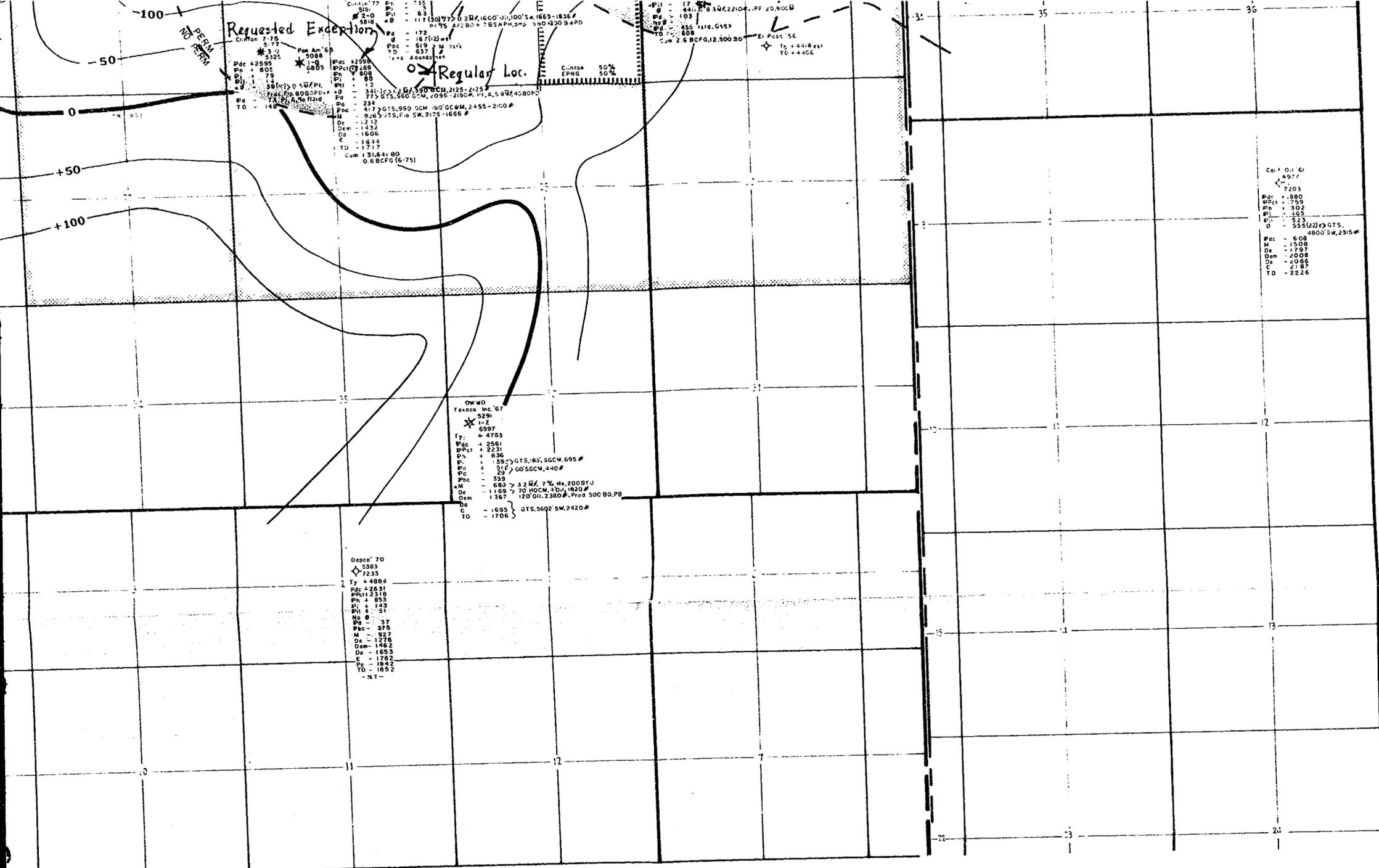
Regular Loc.

OWW
Texaco Inc. 67
T₁ - 4765
G₁ - 2561
PPC₁ - 2121
P₁ - 036
P₂ - 385 GTS, 85, SGCW, 695 #
P₃ - 517 GOSGCW, 440 #
P₄ - 29
P₅ - 339
M - 680 > 3.2 W, 7% H₂O, 200 BFU
De - 1169 > 70 H₂O, 101, 1820 #
Den - 1167 120' Cl., 2380 #, Prod. 500 BO, PB
D₁ - 1695 GTS, 5602 SW, 2420 #
TD - 1706

Depco 70
T₁ - 4884
PPC₁ - 2631
P₁ - 2318
P₂ - 893
P₃ - 143
P₄ - 51
M₁ - 37
M₂ - 375
M₃ - 92
M₄ - 1278
D₁ - 1462
D₂ - 1653
C - 1782
P₁ - 1842
TD - 1852
- NT -

Cell Oil 61
T₁ - 4977
G₁ - 7203
PPC₁ - 1580
P₁ - 1759
P₂ - 302
P₃ - 365
P₄ - 523
P₅ - 555 (22) GTS,
800 SW, 2315 #
M - 608
M₂ - 1508
D₁ - 1797
D₂ - 2008
D₃ - 2086
C - 2187
TD - 2226

ERG
663
INC. 23
FALL RIVER



Requested Exception

Regular Loc.

T
31
N

Pdc +2595
 Ppct +805
 Ph +99
 Pi +112
 Pii +108
 Pd +149
 Po +149
 Pcc +149
 M +149
 De +149
 Dem +149
 Da +149
 E +149
 Pe +149
 TD +149
 Cum 131644.80
 0.6BCFG(6-75)

OWWD
 Texaco Inc. 67
 5291
 1-2
 6997
 Ty: +4753
 Pdc +2561
 Ppct +2231
 Ph +836
 Pi +159
 Pii +317
 Pd +29
 Po +339
 Pcc +680
 M +149
 De +1367
 Dem +1695
 Da +1706
 E +1706
 Pe +1706
 TD +1706

Decco 70
 5383
 7233
 Ty +4083
 Pdc +2631
 Ppct +2319
 Ph +853
 Pi +143
 Pii +51
 Pd +37
 Po +37
 Pcc +37
 M +37
 De +37
 Dem +37
 Da +37
 E +37
 Pe +37
 TD +37

Col + 0.1 Gi
 497
 7203
 Pdc +1880
 Ppct +1759
 Ph +302
 Pi +352
 Pii +523
 Pd +555
 Po +555
 Pcc +555
 M +555
 De +555
 Dem +555
 Da +555
 E +555
 Pe +555
 TD +555

- Pdc - De Chelly Ss
- Ppct - Cutler Fm
- Ph - Hermosa Group
- Pi - Ismay
- Pii - L. Ismay
- Pd - Desert Creek
- Po - Akah
- Pcc - Barker Creek
- M - Mississippi
- De - Elbert
- Dem - M² Cracken Ss
- Da - Aneth
- E - Cambrian
- Pe - Pre-Cambrian



Energy Reserves Group

**BITA PEAK AREA
APACHE CO., ARIZONA**

CONTOURED ON: L. Ismay \emptyset

CONT. INT: 50'

SCALE
1000 0 1000 2000 3000
FEET

GEOLOGICAL: GTO DATE 8-8-75

CAS) Inc. ERG
 The City 663
 237 TAIN B30P

TEEC NOS POS FIELD

Operator: Cross Creek Corporation*

Bond Company** : Indian lands, bond posted with BIA

Amount: Unknown

Bond No.: Not applicable

Date approved: n/a

* In accordance with IBLA 92-541 affirmation of SDR 92-16 that Cross Creek Corporation is lessee of record and responsible to plug and abandon the five unplugged wells

** Pursuant to commission motion of October 31, 1997, no bond required with State of Arizona when bond is posted with the BIA.

Permits covered by this bond posted with the BIA:

232

582

640

663 ✓

678

P4A 11-23-98



IN REPLY REFER TO

United States Department of the Interior

OFFICE OF HEARINGS AND APPEALS
Interior Board of Land Appeals
4015 Wilson Boulevard
Arlington, Virginia 22203

Permit # 663

CROSS CREEK CORP.

IBLA 92-541

Decided September 29, 1994

Appeal from a decision of the New Mexico State Office, Bureau of Land Management, affirming order to plug and abandon wells on Indian oil and gas lease. SDR-92-16.

Affirmed.

1. Board of Land Appeals—Bureau of Indian Affairs:
Generally—Bureau of Land Management—Indians: Mineral
Resources: Oil and Gas: Generally—Res Judicata—Rules
of Practice: Appeals: Jurisdiction

Where a decision by BIA declaring that an Indian oil and gas lease held in its extended term by production terminated for lack of production is not appealed, review of that termination is barred by the doctrine of administrative finality. Further, neither BLM nor the Board of Land Appeals has jurisdiction to review BIA's decision, which is committed entirely to its authority.

2. Bureau of Indian Affairs: Generally—Bureau of Land Management—Indians: Mineral Resources: Oil and Gas: Generally—Oil and Gas Leases: Assignments and Transfers—Oil and Gas Leases: Termination

Where an Indian oil and gas lease held by production has been deemed by BIA to have terminated due to lack of production, BLM properly requires the lessee of record to plug and abandon wells on the leased land.

APPEARANCES: Earl P. Enos, Esq., Duncan, Oklahoma, for appellant.

OPINION BY ADMINISTRATIVE JUDGE HUGHES

The Cross Creek Corporation (Cross Creek) has appealed from the April 22, 1992, decision of the New Mexico State Office, Bureau of Land Management (BLM), affirming a February 12, 1992, order by the Farmington (New Mexico) Resource Area (FRA), BLM, requiring it to plug and abandon five wells located on Indian oil and gas lease 14-20-603-716. 1/

1/ The five wells are within the Teac Nos Pos Field, situated in Apache County, Arizona, within the Navajo Indian Reservation.

IBLA 92-541

At all relevant times, Cross Creek was the lessee of record under the lease, by virtue of a 1987 assignment of record title from BHP Petroleum (Americas), Inc., which was approved effective January 25, 1990, by the Bureau of Indian Affairs (BIA). 2/ Sometime in late 1989 or early 1990, Cross Creek sought BIA's approval of a February 15, 1989, assignment of record title to Dry Mesa Corporation (Dry Mesa), its designated operator. However, BIA never approved the assignment, despite the August 29, 1989, favorable recommendation of the lessor, Navajo Tribe of Indians (Tribe).

The facts, which are not disputed by Cross Creek, are as follows. Throughout the relevant time period, the subject lease, which had originally been issued effective December 22, 1954, was in its extended term, and thus held by production. That is, the lease continued so long as oil and/or gas was being produced in paying quantities. See 25 U.S.C. § 396a (1988); 25 CFR 211.10. Where a lease is held by production, the lease terminates by operation of law if production ceases during the extended term. See Mobil Oil Corp. v. Albuquerque Area Director, BIA, 18 IBIA 315, 331, 97 I.D. 215, 223 (1990).

For some time prior to the FRA's February 1992 order, none of the five wells on the leased lands was producing oil or gas (Decision at 1; see also Memorandum from the Chief, Branch of Mineral Resources, FRA, to BIA, dated Apr. 17, 1990). 3/ This was despite the fact that, by letter dated June 19, 1991, BIA had required Cross Creek to "commence production activities" within 30 days, test each well within 5 months, and either produce or plug and abandon each well, and thereafter to "diligently operate all active wells." In addition, BIA had warned that "[d]isruption of lease production for any reason without prior approval of the appropriate regulatory agencies will result in automatic termination of the lease without any further notification to the lessee." *Id.*

BIA notified Cross Creek by letter dated November 27, 1991, that the lease had "expired by its own terms effective November 19, 1991, for failure to produce the wells" (Decision at 1; see also Letter to BIA from the Director, Minerals Department, The Navajo Nation, dated Oct. 30, 1991). So far as we are aware, no appeal was taken by Cross Creek from BIA's November 1991 notification of termination of the lease.

2/ Jurisdiction regarding lease matters, including the approval of any assignment of record title to the lease, resided with BIA. See 25 U.S.C. §§ 1a, 2, 396a (1988); 25 CFR Part 211.

3/ The Board has obtained the five well files, which indicate that one of the wells is a salt water disposal well (No. 2) and the other four wells are, according to Dry Mesa, "played out" (Letter to BLM from Dry Mesa, dated Sept. 4, 1990). In particular, Dry Mesa reports that well Nos. 4 and 5 have been shut in since 1985, well No. 3 was producing less than three barrels of oil when it was shut in in 1987, and well No. 1 produced between three and five barrels of oil when it was last produced in 1987-88. See "Teec Nos Pos Proposed Plugging Program," attached to Letter to BLM from Dry Mesa, dated Sept. 4, 1990.

IBLA 92-541

The FRA subsequently issued its February 1992 order, requiring Cross Creek to plug and abandon the wells on the subject lease. 4/ On March 13, 1992, Cross Creek requested the BLM State Director to review that order, pursuant to 43 CFR 3165.3(b). Cross Creek contended that Dry Mesa, not Cross Creek, was liable for plugging and abandoning the wells since, although BIA had not approved the pending assignment of the lease to Dry Mesa, both BIA and BLM had recognized Dry Mesa as the de facto lessee. Alternatively, Cross Creek asserted that, if it were properly required to plug and abandon the wells, it should first have a reasonable opportunity to return the lease to production.

In its April 1992 decision, the State Office concluded that, in the absence of BIA's approval of the pending assignment of record title to Dry Mesa, Cross Creek remained ultimately liable for compliance with the terms of the lease, including the requirement to plug and abandon wells on the lease following its termination on November 19, 1991. Thus, it affirmed the FRA's February 1992 order requiring Cross Creek to plug and abandon the wells. Cross Creek has appealed from that decision.

In its statement of reasons for appeal (SOR), appellant repeats its contentions that BLM improperly required it to plug and abandon the wells and that (in any case), before doing so, appellant should have a reasonable opportunity to return the lease to production.

[1] We start with appellant's second contention, which can be viewed as an attack on the validity of BIA's decision declaring that the lease terminated, since appellant plainly cannot have an opportunity to produce from the lease if the lease was properly declared terminated. That is, the only way that appellant's argument could prevail is if BIA had improperly determined that the lease had terminated, thus preserving lessee's rights to further produce from the lease.

So far as we are aware, appellant did not seek administrative review of BIA's decision that the lease had terminated. In the absence of a timely appeal, the propriety of that termination is not properly subject to further review in the Department, but is barred by the doctrine of administrative finality. See Daymon D. Gililand, 108 IBLA 144, 147 (1989).

4/ The February 1992 order was preceded by other letters, dated Oct. 21, and 23, 1991, in which the FRA noted that the wells had long been approved for plugging and abandonment as a result of sundry notices approved by BLM on Oct. 3, 1990. The FRA required Dry Mesa to notify it, within 30 days, whether that had occurred and either submit the appropriate report or indicate when such activity was scheduled to be performed. Noting that Dry Mesa had failed to comply, BLM issued its February 1992 order, which specifically required Cross Creek, as the lessee of record, to notify BLM when the wells were scheduled to be plugged. The allowed time for compliance with that notice was 30 days from receipt of the letter.

In any event, BLM lacked authority to review questions regarding the termination noted by BIA, since the leased lands are tribal lands situated within an Indian reservation. See 43 CFR 3100.0-3(a). Rather, that matter was committed entirely to BIA. See 25 U.S.C. §§ 1a, 2, 396a (1988); 25 CFR Part 211. Thus, any questions regarding termination were not properly presented to BLM in appellant's March 1992 SDR request. By the same token, this Board may not adjudicate any question regarding lease termination, as we have no jurisdiction to review the BIA decision regarding lease termination. See 25 CFR 2.3 and 2.4; e.g., Mobil Oil Corp. v. Albuquerque Area Director, BIA, 18 IBIA at 332 n.14, 97 I.D. at 224 n.14. We, therefore, do not reach questions regarding whether BIA properly declared the lease terminated. 5/

[2] The authority to require that the wells be plugged and abandoned resides with BLM. 43 CFR 3160.0-1, 3160.0-2, 3161.1(a), 3161.2, and 3162.3-4; Everett Hall, 101 IBIA 362 (1988). BLM was authorized, in these circumstances, to require that any wells that had already been drilled be plugged and abandoned. Daymon D. Gililland, *supra* at 147. Appellant does not dispute that authority, but argues that BLM improperly required it, rather than Dry Mesa, to plug and abandon the wells.

Absent BIA's approval of the assignment of record title from appellant to Dry Mesa, appellant, as holder of record title, remained ultimately liable for compliance with the terms of the lease. 43 CFR 3106.7-2. 6/ BIA correctly notified appellant that, in the event of termination of the lease, it would be appellant's responsibility "to plug and abandon all wells on the lease" (Letter to Appellant from Acting Area Director, Navajo Area Office, BIA, dated June 19, 1991). Further, it is established that the lessee of record's liability extends after expiration of the lease. See Glen Morgan, 122 IBIA 36, 44 (1992).

Appellant contends that, as a result of certain actions by BLM and BIA, Dry Mesa became the "de facto lessee" and was therefore liable under the

5/ We do note that, as stated above, BIA's authority to declare a lease held by production terminated by operation of law when production ceases is well established. See Mobil Oil Corp. v. Albuquerque Area Director, BIA, 18 IBIA at 331, 97 I.D. at 223.

It is also established that BIA was not required to give appellant notice or an opportunity to re-establish production prior to termination: "Unlike 30 U.S.C. § [226(f)], the [Indian Mineral Leasing Act] does not require that notice be given before leases may expire by their own terms." 18 IBIA at 332, 97 I.D. at 224.

6/ BIA is the designated representative for management of Indian leases. An applicable regulation requires approval of assignments by the Secretary, and his designated representative for Indian leases is BIA. See 25 CFR 211.26(a). We express no opinion on whether BIA should have approved the pending assignment of record title to the lease from appellant to Dry Mesa prior to the November 19, 1991, expiration of the lease.

IBLA 92-541

lease. 7/ Appellant also notes that both BIA and BLM acknowledged Dry Mesa to be the operator under the lease and knowingly permitted it to conduct operations, including producing and selling oil and gas from the lease (see Letter to State Director, dated Mar. 9, 1992, at 2). 8/ Nothing that BIA and BLM permitted Dry Mesa to do was inconsistent with its role as operator under the lease. At the same time, BLM and BIA did nothing to indicate that Dry Mesa held record title. 9/

The assignment of operating rights under a lease has long been distinguished from the assignment of record title to the lease. 10/ Harry L. Bigbee, 2 IBLA 23, 25, 27 (1971). Thus, although BIA and BLM may recognize that operating rights have been assigned to a particular party and allow those rights to be exercised (even going so far as to "approve" the

7/ Appellant also raises certain arguments regarding another Indian oil and gas lease, 14-20-603-4190, principally that it has been denied the benefits of that lease (see Letter to State Director, dated Mar. 9, 1992, at 2, 3). That lease was not the subject of BLM's April 1992 decision, and thus is not properly before the Board.

8/ Appellant also states that, when deciding to terminate the lease, BIA notified Dry Mesa, rather than appellant (see Letter to State Director, dated Mar. 9, 1992, at 2). It appears that BIA's Nov. 27, 1991, notification of termination was sent to appellant (see Decision at 1). We also attribute no significance to any notice that might have also been sent to Dry Mesa, who was the operator under the lease.

9/ Appellant states that, by assertedly permitting Dry Mesa to act as the lessee, BIA and BLM acted in violation of their regulations (Letter to State Director, dated Mar. 9, 1992, at 4). No regulations are cited. We find no substance to this charge.

Appellant indicates that no bond was required of Dry Mesa in connection with its operations on the lease (see *id.* at 2). The record indicates that appellant had, prior to acquiring record title to the lease, properly submitted a surety bond that covered operations on the lease (see Letter to Appellant from Acting Assistant Area Director, Navajo Area Office, BIA, dated Oct. 25, 1988). Since Dry Mesa was not the lessee of record, it was not required to submit a bond to conduct operations. See 25 U.S.C. § 396c (1988); 25 CFR 211.6(a).

The fact that Dry Mesa paid no bond actually supports the conclusion that Dry Mesa was never the lessee of record. The fact that appellant did pay the bond shows that it was the lessee of record.

10/ In particular, it appears that the assignment of operating rights does not require BIA approval. Appellant has provided a copy of a Sept. 30, 1988, letter from BIA, which states that, as of August 1987, it will no longer process assignments of operating rights. The assignment of record title does require BIA approval. See 25 U.S.C. §§ 1a, 2, 396a (1988); 25 CFR 211.26(a).

assignment of operating rights), that action neither constitutes recognition that the party is the record title holder nor effects an approval of the assignment of record title to that party. See id. at 27.

The assignment of record title requires BIA approval. See 25 U.S.C. §§ 1a, 2, 396a (1988); 25 CFR 211.26(a). Since the assignment of record title, unlike the assignment of operating rights, gives rise to a contractual relationship between the lessor and the lessee's assignee, in order to effect a change in the holder of record title, the agency must affirmatively approve an assignment of record title, in order to bring the assignee under the prevailing terms of the contract with the lessor. See Alaska Statebank, 111 IBLA 300, 308 (1989). ^{11/} As appellant acknowledges, BIA never did so (see Letter to State Director, dated Mar. 9, 1992, at 2). Thus, appellant remained liable under the contractual terms of the lease and regulation.

Appellant also argues that the liability for plugging and abandoning a well stems only from operations conducted on a leasehold and that, since it has not undertaken any operations since January 1989, it cannot be made to plug and abandon (see Letter to State Director, dated Mar. 9, 1992, at 4). We disagree. It is established that, regardless of whether the lessee of record drilled or reworked the wells or produced from them, it is still ultimately responsible for plugging and abandoning them as the lessee of record, even if it did not profit from the earlier production. 43 CFR 3106.7-2; see Ralph G. Abbott, 115 IBLA 343, 346 (1990).

BLM and BIA were not required to wait until appellant and Dry Mesa sorted out their differences before taking action under the lease. Rather, they were entitled to look to appellant, as the lessee of record, for compliance with the production requirements of its lease, and, in the absence of any production, for compliance with the requirement to plug and abandon wells upon the termination of the lease. We, therefore, conclude that the State Office properly affirmed the FRA's 1992 order requiring appellant to plug and abandon the wells on Indian oil and gas lease 14-20-603-716. ^{12/}

^{11/} As we held in Alaska Statebank, supra, this procedure protects the government, by allowing it to determine whether the assignee is acceptable as a lessee.

^{12/} We also note that appellant is under the erroneous impression that BLM was prevented from requiring Dry Mesa to plug and abandon the wells, having failed to obtain a bond from it, and as a result proceeded against appellant (see Letter to State Director, dated Mar. 9, 1992, at 2). It would appear not only that BLM could have required Dry Mesa, as the designated operator, to plug and abandon the wells (see Glen Morgan, supra at 48; Ralph G. Abbott, supra at 346), but that it actually sought to do so. In any event, appellant is not absolved from its obligations as lessee of record because BLM might also have required Dry Mesa to comply.

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Accordingly, pursuant to the authority delegated to the Board of Land Appeals by the Secretary of the Interior, 43 CFR 4.1, the decision appealed from is affirmed.

David L. Hughes
David L. Hughes
Administrative Judge

I concur:

C. Randall Grant, Jr.
C. Randall Grant, Jr.
Administrative Judge



Jane Dee Hull
Governor

State of Arizona
Arizona Geological Survey

416 W. Congress, Suite 100
Tucson, Arizona 85701
(520) 770-3500



Larry D. Fellows
Director and State Geologist

December 1, 1997

CERTIFIED MAIL

Mr. Ken Hand
15 Willowbrook
Wichita KS 67207

663

Re: Release of Performance Bond, C.D. #2538054

Dear Ken:

Our records show that Dry Mesa Corporation has no outstanding drilling or plugging obligations in Arizona. As a result, the referenced certificate of deposit and executed release form are enclosed.

It has been our pleasure working with you the past several years.

Sincerely,

Steven L. Rauzi
Oil & Gas Program Administrator

Enclosures

SECURITIES SAFEKEEPING
 1700 WEST WASHINGTON ST. - PHOENIX, ARIZONA 85007

DATE: 11/7/97

STATE AGENCY NO. _____

STATE AGENCY OIL & GAS CONSERVATION COMM.

State Treasurer's Use Only

COMPANY DRY MESA CORPORATION ✓

P.O. BOX 5446

FARMINGTON NM 87499

DOMESTIC FOREIGN

DEPOSIT

C.D. NO.:

BANK:

MATURITY DATE:

INTEREST RATE: %

AMOUNT \$

C.D. ASSIGNMENT MUST BE ATTACHED UNLESS C.D. IS PAYABLE TO STATE TREASURER

RELEASE

C.D. NO.: 2538054 ✓

BANK: VALLEY NATIONAL BANK OF AZ ✓

MATURITY DATE: 11/24/92 ✓

INTEREST RATE: 8.0 % ✓

AMOUNT \$ 25,000.00 ✓

STATE TREASURER VALIDATION NO. _____

RECEIVED
 STATE TREASURER
 NOV 17 10 05 AM '97

| | | | |
|---|-------------------|-------------------------------|----------------------|
| RECEIVED THE ABOVE RELEASE | | STATE AGENCY AUTHORIZATION | |
| BY <u>Stann L. Rainz</u> <u>11/7/97</u> | Date | BY <u>Stann L. Rainz</u> | Authorized Signature |
| OIL & GAS CONSERVATION COMMISSION | | STATE TREASURER AUTHORIZATION | |
| Bank or Firm | | BY <u>Katharine Valentin</u> | Authorized Signature |
| FOR BANK USE ONLY | | BANK AUTHORIZATION | |
| Checked by _____ | Verified by _____ | BY _____ | Authorized Signature |
| | | STATE'S DEPOSITORY BANK | |

SECURITIES SAFEKEEPING
 1700 WEST WASHINGTON ST. - PHOENIX, ARIZONA 85007

PERMIT 663

DATE: 11/29/89
 STATE AGENCY: OIL & GAS CONSERVATION COMM. ✓
 COMPANY: DRY MESA CORPORATION ✓
P O BOX 5446
FARMINGTON, NEW MEXICO 87499

STATE AGENCY NO. _____

State Treasurer's Use Only

DOMESTIC FOREIGN

DEPOSIT

C.D. NO.: 2538054 ✓
 BANK: VALLEY NATIONAL BANK OF AZ ✓

MATURITY DATE: 11/24/92 ✓ INTEREST RATE: 8.0 % ✓

AMOUNT \$ 25,000.00 ✓

C.D. ASSIGNMENT MUST BE ATTACHED UNLESS C.D. IS PAYABLE TO STATE TREASURER

RELEASE

C.D. NO.: _____
 BANK: _____
 MATURITY DATE: _____ INTEREST RATE: _____ %
 AMOUNT \$ _____

RECEIVED
 SUPER
 NOV 29 3 19 PM '89
 STATE TREASURER

STATE TREASURER VALIDATION NO. _____

| | | | |
|----------------------------|--|-------------------------------|--|
| RECEIVED THE ABOVE RELEASE | | STATE AGENCY AUTHORIZATION | |
| BY _____ | | BY <u>Koti Barnes</u> | |
| Authorized Signature | | Authorized Signature | |
| Date | | DATE | |
| Bank or Firm | | BY <u>Katherine Jaramillo</u> | |
| Bank or Firm | | Authorized Signature | |
| FOR BANK USE ONLY | | BANK AUTHORIZATION | |
| Checked by _____ | | BY _____ | |
| Verified by _____ | | Authorized Signature | |
| | | STATE'S DEPOSITORY BANK | |



Fife Symington
Governor

State of Arizona
Arizona Geological Survey
845 North Park Avenue, #100
Tucson, Arizona 85719
(602) 882-4795



Larry D. Fellows
Director and State Geologist

March 8, 1994

Mr. Kenneth R. Hand
Dry Mesa Corporation
15 Willowbrook
Wichita, KS 67207

Dear Mr. Hand:

According to our records, Dry Mesa Corporation posted a \$25,000 state-wide performance bond on November 24, 1989, to cover its operations in the State of Arizona. Dry Mesa Corporation, therefore, meets the current bonding requirements of the Arizona Oil and Gas Conservation Commission to operate its existing, permitted oil and gas wells in Arizona.

Our records further indicate that Dry Mesa Corporation's bond currently covers six active permits at the Navajo-O (BIA 14-20-603-716) lease and five active permits at the Navajo-138 (BIA 14-20-603-4190) lease.

Please let me know if I can be of further assistance.

Sincerely,

Steven L. Rauzi
Oil & Gas Program Administrator

c Dennis Peterson, First National Bank, Farmington, NM



Fife Symington
Governor

State of Arizona
Arizona Geological Survey

845 North Park Avenue, #100
Tucson, Arizona 85719
(602) 882-4795



Larry D. Fellows
Director and State Geologist

May 12, 1993

663

Mr. Ken Hand
Dry Mesa Corporation
15 Willowbrook
Wichita, KS 67207

Dear Mr. Hand:

I received your letter of May 6, 1993, requesting release from further liability on the Navajo "O" lease because "Dry Mesa Corporation has never owned any title interest in the subject Navajo "O" and resigned as interim operator of that lease some time ago."

Our records indicate that Dry Mesa Corporation assumed ownership and operatorship of the Navajo "O" (BIA 14-20-603-716) lease on or about February 1, 1989, and posted a \$25,000 performance bond (certificate of deposit) on November 24, 1989.

A.A.C. R12-7-103, copy enclosed, requires a performance bond to remain in effect until (1) the wells under the bond have been plugged and abandoned as approved by the Commission, or (2) the property is transferred and the transferee posts a new bond or bonds for the wells. As a result, I cannot release Dry Mesa Corporation's liability on the Navajo "O" lease because (1) the wells on the Navajo "O" lease have not been plugged or abandoned, and (2) a new owner has not put up a bond or bonds for the wells.

Please let me know if I can be of further assistance in this matter.

Sincerely,

Steven L. Rauzi
Oil & Gas Program Administrator

Enclosure

c Larry D. Fellows

DRY MESA CORPORATION

POST OFFICE BOX 5446
FARMINGTON, NEW MEXICO 87499
505 325-2058

6 May 1993



CERTIFIED MAIL NO. P 321 755 847
RETURN RECEIPT REQUESTED

663

Mr. Steve Rauzi
Arizona Geological Survey
845 Park Avenue
Suite 100
Tucson, Arizona 85719

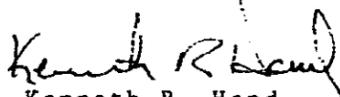
Re: Navajo Tribal "0"
BIA 14-20-603-716
Apache County, Arizona

Dear Mr. Rauzi:

Dry Mesa Corporation has in effect and force a \$25,000.00 Certificate of Deposit that is pledged to the State of Arizona as a bond for operations on the subject lease as well as Navajo Tract 138, BIA 14-20-603-4190.

Dry Mesa Corporation has never owned any title interest in the subject Navajo "0" and resigned as interim operator of that lease some time ago. This letter is to request the State of Arizona to release Dry Mesa Corporation from any further liability concerning the Navajo "0" and make the current owner, Cross Creek Corporation, liable for any and all operations on that lease. This action will leave the \$25,000.00 bond in place but it will only pertain to Navajo Tract 138. Thank you for your help.

Sincerely,


Kenneth R. Hand
PRESIDENT

MEMORANDUM TO FILE

DATE: JUNE 1, 1992

FROM: STEVEN L. RAUZI

SUBJECT: STATUS OF OPERATORSHIP AT THE TEEC NOS POS LEASE

I CONTACTED JOHN KELLER, BUREAU OF LAND MANAGEMENT, FARMINGTON, NEW MEXICO (BLM) WHO REFERRED ME TO KEN TOWNSEND OF THIS OFFICE.

KEN TOWNSEND WAS OUT, ACCORDING TO STEVE MASON:

1. FARMINGTON OFFICE BLM ORDERED CROSS CREEK TO P&A WELLS
2. CROSS CREEK APPEALED TO NEW MEXICO STATE OFFICE
3. NEW MEXICO STATE OFFICE UPHELD THE FARMINGTON ORDER TO P&A
4. CROSS CREEK APPEALED TO INTERIOR BOARD OF LAND APPEALS (IBLA)
5. IBLA COULD TAKE A COUPLE OF YEARS TO ISSUE DECISION

P/N 663

CERTIFIED MAIL P 718 638 830

CROSS CREEK CORPORATION

P. O. Box 1957
Duncan, OK 73534

March 9, 1992



State Director
Bureau Of Land Management
P. O. Box 27115
Santa Fe, New Mexico 87502-7115

Re: Navajo Tribal Lease No. 14-20-603-716

Sir:

This is to advise that we do hereby request an administrative review of the Orders of the Bureau of Land Management respecting the termination of the above referred to lease set out in your letter of February 12, 1992, addressed to Cross Creek Corporation. This request for administrative review is pursuant to applicable statutes and regulations particularly 43 C.F.R. Section 3165.3. We also request the opportunity to make oral presentation in support.

We believe, first, that Cross Creek Corporation should not be required to bear the expense of plugging the wells on the Navajo "O" lease, BIA Lease No. 14-20-603-716; hereinafter referred to simply as # 716.

We believe that the wells on this lease should not be plugged without giving Cross Creek Corporation an opportunity to make reasonable efforts to place them on production.

In support of our view we offer the following:

1. Cross Creek Corporation transferred all of its right, title and interest in and to Leases No. 716 and 4190 to Dry Mesa Corporation, together with operating rights, leaving it without any claim to or interest in those leases or the proceeds of production.
2. The Navajo Nation approved the assignment to Dry Mesa Corporation of both leases.
3. Dry Mesa Corporation posted a bond with the Oil and Gas Commission for the State of Arizona believing that to be appropriate.

4. Both Bureau of Indian Affairs, hereinafter referred to simply as BIA, and Bureau of Land Management, hereinafter referred to simply as BLM, accepted Dry Mesa Corporation as the owner and operator of both Leases No. 716 and 4190. They acknowledged Dry Mesa Corporation was operating on both leases and although they had not formally approved the assignment from Cross Creek Corporation to Dry Mesa Corporation and had not required bond to be posted by Dry Mesa Corporation they knowingly permitted Dry Mesa Corporation to conduct operations on both leases.

5. Both BIA and BLM knowingly permitted Dry Mesa Corporation to operate both leases, produce and receive income from them without requiring the requisite bond or security to be posted.

6. When BIA and BLM determined to cancel the Navajo "O" Lease, No. 716, it notified Dry Mesa Corporation thus acknowledging Dry Mesa Corporation to be the operator and lessee.

7. When BIA and BLM decided to terminate the lease on the Navajo "O", No. 716, it did not notify Cross Creek Corporation thus acknowledging that Cross Creek Corporation was neither the lessee nor the operator.

8. BLM's present inability to compel Dry Mesa Corporation to plug the wells on the Navajo "O" Lease, No. 716, is due directly to the failure of BLM and BIA to obtain the necessary bond or security from Dry Mesa Corporation at the time it assumed operations with the knowledge of the BIA and BLM and their implied consent.

9. BIA and BLM do implicitly acknowledge Dry Mesa Corporation to be the lessee and operator of Tract No. 138 lease, No. 4190, and yet they have never approved the assignment of the lease or operating rights and have never required Dry Mesa Corporation to post the requisite security.

10. The assignment of Tract No. 138 lease, No. 4190, and the Navajo "O" lease, No. 716, were part and parcel of the same transaction. It is obviously unfair to Cross Creek Corporation to permit Dry Mesa Corporation to continue as de facto operator and lessee of No. 4190 and receive the benefits therefrom without requiring Dry Mesa Corporation to assume the responsibilities of its companion lease.

11. It is obviously unfair to Cross Creek Corporation to compel the return of operations and status as lessee of the Navajo "O" lease, No. 716, (Lease No. 716) and its burden without at the same time acknowledging Cross Creek Corporation to be the lessee and operator of Tract No. 138 lease, No. 4190, and lending all assistance in permitting Cross Creek Corporation to enjoy the production from Tract No. 138 lease, No. 4190.

12. It is patently unfair to put the burden of plugging wells on the Navajo "O" lease, No. 716, without first giving Cross Creek Corporation the option of making reasonable efforts to put the wells back on production and at least attempt to re-coup the costs which might be required for plugging. Such an option must be without impossible conditions such as were placed on it by the Order dated June 19, 1991, to pay any outstanding obligations owed to the Navajo tribe with respect to this lease without determining at that time what those obligations were and so advising Cross Creek Corporation.

13. If Cross Creek Corporation is the lessee and operator of the Navajo "O" Lease, No. 716, because the assignment of the lease and operating rights to Dry Mesa Corporation were never approved by the BIA then by the same token Cross Creek Corporation is both the lessee and operator of the Tract No. 138 lease, No. 4190, and should be so confirmed by the BIA and the BIA and BLM should assist Cross Creek Corporation in securing possession of that lease and its production.

14. Since the BIA has not accepted the assignment of the lease or operating rights to Dry Mesa Corporation on Tract No. 138 lease, No. 4190, Cross Creek Corporation now formally makes demand on BIA and BLM not to permit Dry Mesa Corporation to operate and receive proceeds of production from that lease.

15. Since the BIA has not approved the assignment of the lease or the assignment of operating rights on Tract No. 138 lease, No. 4190, Cross Creek Corporation now makes formal demand on the BIA not to grant any tardy approval of the assignment of the lease or operating rights on that lease to Dry Mesa Corporation to the detriment of Cross Creek Corporation.

16. Since the BIA and the BLM have impliedly accepted Dry Mesa Corporation to be the operator of the Navajo "O" Lease, No. 716, then Cross Creek Corporation should have been released of any obligations or responsibilities with respect to that lease and its bond released as to that lease. To do otherwise is to impose an unfair obligation on Cross Creek Corporation.

17. BIA and BLM both permitted Dry Mesa Corporation to remove equipment from the Navajo "O" Lease, No. 716, in violation of their own rules and regulations. Having done so it is unfair to require Cross Creek Corporation to assume any responsibilities for placing said lease back on production having permitted it to be robbed of the necessary equipment.

18. It is unfair to Cross Creek Corporation to put the burden of plugging the wells on the Navajo "O" Lease, No. 716, when both BIA and BLM acquiesced in the assumption of operations by Dry Mesa Corporation and impliedly acknowledged Dry Mesa Corporation to be the operator when they failed to require the posting of adequate security in violation of its own rules and regulations.

19. The BIA and BLM having impliedly, if not formally, acknowledged Dry Mesa Corporation to be the operator and lessee of the Navajo "O" Lease, No. 716, then Dry Mesa Corporation is the only entity liable for any breach of the rules of the BIA or the BLM and Cross Creek Corporation should not be saddled with any responsibility which rightfully should go to Dry Mesa Corporation.

20. The BIA and BLM both knowingly allowed Dry Mesa Corporation to perform as though it was both lessee and operator of the Navajo "O" Lease, No. 716, in violation of its own rules and regulations.

21. According to BIA and BLM rules and regulations liability for plugging results from "operations" and since Cross Creek Corporation has not performed any operations on the Navajo "O" Lease, No. 716, since January, 1989, it would follow it cannot be made to plug the wells.

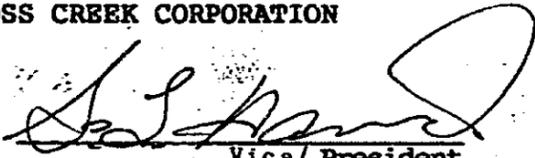
We therefore respectfully request:

That responsibility for plugging the wells on the Navajo "O" Lease, No. 716, should be enforced against Dry Mesa Corporation.

If BIA and BLM insist Cross Creek Corporation has to plug the wells we ask that Cross Creek Corporation be granted a reasonable opportunity to put the wells back on production.

Respectfully submitted

CROSS CREEK CORPORATION

By: 

Vice/ President

cc/BLM, Farmington, NM
BIA, Window Rock, Az.
Navajo Tribe, Window Rock, Az.

~~NAVJO SURVEY, 1985~~

SCHEDULE "A"

Documentation in support of the request by Cross Creek Corporation for administrative review by State Director, Bureau of Land Management, of orders respecting Navajo Tribal "O" BIA Lease No. 14-20-603-716.

- 1) Assignment and conveyance dated April 1, 1987, from BHP Petroleum to Cross Creek Corporation.
- 2) Collective bond on behalf of Cross Creek Corporation (\$50,000.00) required by Bureau of Indian Affairs.
- 3) Letter of October 25, 1988, from BIA approving bond.
- 4) Letter of August 16, 1988, showing approval by the Navajo Nation of assignment of Lease No. 716 to Cross Creek Corporation.
- 5) Letter of March 13, 1990, from BIA showing approval by BIA of assignment of Lease No. 716 to Cross Creek Corporation.
- 6) Agreement dated February 15, 1989, of Leases No. 716 and 4190 between Cross Creek Corporation and Dry Mesa Corporation.
- 7) Assignment and conveyance of Leases No. 716 and 4190 from Cross Creek Corporation to Dry Mesa Corporation.
- 8) Assignment of Lease No. 716 from Cross Creek Corporation to Dry Mesa Corporation.
- 9) Letter of September 6, 1989, from the Navajo Nation showing approval of assignment of Lease No. 716 to Dry Mesa Corporation.
- 10) Letter dated September 15, 1989, from Cross Creek Corporation to BIA.
- 11) Letter dated November 13, 1989, from area director of BIA to Dry Mesa Corporation.
- 12) Letter dated April 20, 1990, from area director of BIA to Dry Mesa Corporation requiring bond.
- 13) Letter dated June 19, 1991, from area director of BIA to Cross Creek Corporation stipulating conditions for operating Lease No. 716.
- 14) Letter dated October 21, 1991, from BLM to Dry Mesa Corporation regarding plugging.

- 15) Letter dated December 16, 1991, from BLM to Dry Mesa Corporation regarding plugging requirements and assessment of fine.
- 16) Letter dated January 24, 1992, from Arizona Geological Survey to Cross Creek Corporation.
- 17) Letter dated May 8, 19__, from Cross Creek Corporation to area director of BIA regarding reduction in bond.
- 18) Letter dated September 30, 1988, from BIA to Cross Creek Corporation advising that BIA "will no longer process assignment of operating rights, but these documents will still have to be submitted to the Navajo tribe for tribal approval and to the BIA for record purposes only."

A:\Cross-A



Fife Symington
Governor

State of Arizona
Arizona Geological Survey

845 North Park Avenue, #100
Tucson, Arizona 85719
(602) 882-4795

Larry D. Fellows
Director and State Geologist

January 24, 1992

Mr. Scott Hand
Cross Creek Corporation
P. O. Box 1957
Duncan, Oklahoma 73534

663

Re: BIA Lease 14-20-603-716, Navajo "O", Apache County, Arizona

Dear Mr. Hand:

I received word today that Dry Mesa Corporation has resigned as interim operator of the BIA Lease 14-20-603-716 (Navajo Tribal "O") in Apache County, Arizona as requested by the Bureau of Indian Affairs.

Mr. Stephen Mason of the Bureau of Land Management in Farmington informed me that the BIA considers Cross Creek Corporation to be the legitimate operator of the lease. He indicated that you would probably plug and abandon the wells according to the plugging and abandonment plans submitted by Dry Mesa Corporation and as modified by the BLM in Farmington.

Dry Mesa Corporation has submitted these plans to the Commission and I am enclosing copies of our Form 10, Plugging Record, for your use in reporting the work actually done after the wells have been plugged and abandoned. The Commission will accept copies of all reports submitted to the BLM throughout this process, but will require Form 10, properly filled out, upon completion of the work.

I would appreciate learning of your intent in this matter and please don't hesitate to call me if you have any questions.

Sincerely,

Steven L. Rauzi
Oil & Gas Program Administrator



Fife Symington
Governor

State of Arizona
Arizona Geological Survey
845 North Park Avenue, #100
Tucson, Arizona 85719
(602) 882-4795

Larry D. Fellows
Director and State Geologist

January 24, 1992

663

Mr. Ken Hand
Dry Mesa Corporation
15 Willowbrook
Wichita, KS 67207

Dear Ken:

Enclosed is the copy of the December 1991 injection report for the Dry Mesa Field. I received your letter wherein you resigned as interim operator of the Navajo "O" lease in Apache County. Since your letter is dated January 16, 1992, I believe it would be appropriate that you submit the December 1991 injection and production reports for the Navajo "O" lease.

Sincerely,

Steve

Steven L. Rauzi
Oil & Gas Program Administrator

Enclosure

DRY MESA CORPORATION

POST OFFICE BOX 5446
FARMINGTON, NEW MEXICO 87409
505 325-2058

16 January 1992

CERTIFIED MAIL P 321 755 830
RETURN RECEIPT REQUESTED

663

Mr. Stephen Mason
Department Of The Interior
Bureau Of Land Management
Farmington Resource Area
1235 La Plata Highway
Farmington, New Mexico 87401

Re: BIA Lease 14-20-603-716
Navajo Tribal "O"
Apache County, Arizona

Dear Mr. Mason:

This letter is to inform the Bureau Of Land Management that Dry Mesa Corporation has resigned as interim operator of the subject lease.

Sincerely,

Kenneth R. Hand
Kenneth R. Hand



1-24-92

Steve Mason indicated that the Navajo's (BIA) informed Kent that he had no rights to the Navajo O and that ownership will revert to Cross Creek.

FLOYD SCHMIDT
RR #3
Baldwin City, KS 66006
913-594-3417



INSTRUMENT

RICK COOPER
1632 Valleyview Court
Wichita, KS 67212
316-722-7537



117 E. Patterson
Bellevue, OH 43311
513-592-5025

Steve:

I am enclosing a copy of a letter where Dry Mesa resigned as operator of the Navajo "O".

There was no production in December but if you need some paperwork, call me here in Farmington.

Thanks,

Ken



— We Go To The Edge For You, Our Customer —

DRY MESA CORPORATION

POST OFFICE BOX 5446
FARMINGTON, NEW MEXICO 87499
505 325-2058

November 1, 1990

Dan Brennan
Arizona Oil and Gas Commission
5150 North 16th Street Suite B-141
Phoenix, Arizona 85016

RE: Teec Nos Pos Plugging Program
Apache County, Arizona

Dear Mr. Brennan:

Regarding your letter dated October 9, 1990, Dry Mesa Corporation is revising its proposed plugging program. For your information, the BLM approved the original proposed plugging plans for wells #1, #3, #4, and #5 with these changes:

1. Instead of plugging off the Winnegate Formation, the upper aquifer to protect is the Chinle. Tops for the Chinle as reported by the BLM are #1 - 1535', #3 - 1620', #4 - 1710', and #5 - 1955'.

2. A 50' cement plug must be placed down the surface casing/production casing annulus.

Since the Arizona O&G Commission requires a plug 50' above, 50' below, and across the aquifers and since the aquifers are >300' thick, the original proposed perforate and squeeze plugging method will not be adequate. Our recent squeeze experience showed that the only places where a decent bond was obtained was in that part of the hole with no or very little washout. The original hole is probably not in gauge through these aquifers. Therefore, I think we will have to shoot and pull the production casing to get a plug like the Commission requires.

Before I submit a revised plugging program, I would like to make sure we agree on formation tops and bases for the two plugging horizons. Here are my picks for the plugging horizons:

#232
582
640
663
678

| Well | #1 | #2 | #3 | #4 | #5 |
|------------------------|----------------|----------------|----------------|----------------|----------------|
| Base Surface Casing | 1522' | 1539' | 514' | 507' | 802' |
| Top Chinle | 1532' | 1687' | 1624' | 1710' | 1955' |
| Base Chinle | 1810' | 2630' | 1910' | 2020' | 2270' |
| Top De Chelly | 2488' | 2640' | 2533' | 2667' | 2940' |
| Base De Chelly | 2800' | 2955' | 2888' | 2980' | 3260' |
| Top Cement | 4680' (EST) | 2614' (CBL) | 4594' (CBL) | 4800' (EST) | 4700' (CBL) |

For wells #1, #3, #4 and #5, I will propose that we:

1. squeeze perfs
2. set a CIBP
3. shoot and pull casing 500' above top of cement
4. place plug #1 50' above to 50' below top and base of De Chelly
5. place plug #2 50' above to 50' below top and base of Chinle
6. place plug #3 50' above to 50' below base of surface casing
7. place plug #4 50' below to surface inside surface casing

For Well #2, the two squeeze jobs at 3500' and 3100' have left cement outside casing up to a depth of 2614' (CBL). It is my guess that the squeeze hole at 3100' is where the casing leak is at. Would a squeeze of this interval satisfy the Commission for a plug in the De Chellys (assuming this squeeze hole is leaking)? Obviously, we could not pull the casing below 2614' and two squeeze jobs have already been performed to try and get cement over the De Chellys with very little success. We may shoot and pull casing from a depth of 2400' to get a plug in the Chinle and a plug at the surface. I am working with the EPA to see what changes they will require in the original plan before I send a revised plan to you. They indicated that there would be a few minor changes and were going to send out a letter to every one within the next two weeks. Look this over and see what you think.

Sincerely,

Bob Hand
Bob Hand



Oil and Gas Conservation Commission

STATE OF ARIZONA

5150 N. 16th STREET, SUITE B-141
PHOENIX, ARIZONA 85016
PHONE: (602) 255-5161

October 9, 1990

PH 232, 582, 640, (667) 678

Mr. Bob Hand
Dry Mesa Corporation
P. O. Box 5446
Farmington, NM 87499

Dear Bob:

Following up on our recent conversation, I am sending you copies of the electric logs on the five wells you are talking about plugging. I have marked them in a couple of ways: First in red are the "scout" tops for the De Chelly; Second in blue ink are whatever "sample" tops we have.

Our rule for plugging requires cement across and 50 feet above and below "fresh water strata." Frankly for this purpose I don't care what name anybody gives to the formation--if it is an aquifer we have to protect it. So it seems to me that we ought to pick the porous zones, perhaps as identified by the SP curves, our criteria for what ought to be protected.

As you can see on the logs, the given tops don't correlate. So what I suggest is going from the sample log and E-log on each well and correlating the porosity zones and cementing across them. For instance, the No. 1 well clearly the porosity zone extends from 2489 to 2800, although it doesn't look very porous from, say, 2670 to 2800. But as we know, SP is supposed to be suppressed by fresh water zones.

The E-log on the No. 2 well is terrible, but the sample log shows porosity 2640 to 2955.

Mr. Bob Hand
Dry Mesa Corporation

October 9, 1990
Page 2

Following is a table I have worked out from our information.

| | 1 | 2 | 3 | 4 | 5 | | |
|--------------------------------|---------------|------|-------|---------------|--------|--------|--------|
| | E-log | Spl | E-log | Spl | E-log* | E-log* | E-log* |
| Top Wingate porosity zone | ** | 800 | ** | ** | ? | ? | ? |
| Base Wingate porosity zone | ** | 1090 | ** | ** | ? | ? | ? |
| Top "De Chelly" porosity zone | 2488 | 2490 | 2640 | 2650? 2700 | 2533 | 2667 | 2940 |
| Base "De Chelly" porosity zone | 2670? 2800 | 2800 | 2955? | 2955 | 2710? | 2880? | 3100 |
| Top ORGAN Rock | 2798 | 2800 | 2955 | 2955? | 2888 | 2980 | 3260 |

* No sample log or log started too deep
** Interval not logged

The only well in the field on which we have a decent driller's log is the No. 12. (Copy enclosed.) It reports a shallow water flow, which I assume is the Wingate, and a deeper one (from the De Chelly?) which they had to kill with 9.3 lb. mud. So those do seem to be the zones to plug.

They sure didn't do anybody any favor when they drilled, logged, cased, and cemented these holes.

The porosity logs are all questionable in my mind because the hole is so big. The sample logs we have show the section which is enlarged to be loose or friable sand which lead me to think it has lots of porosity, and if porosity, presumably also water.

You have proposed a single perforation to cement off the Wingate and De Chelly zones outside the pipe. I doubt if one hole is enough to cement these big intervals shown in the tables.

Mr. Bob Hand
Dry Mesa Corporation

October 9, 1990
Page 3

Have you thought about shooting off the pipe above the cement and pulling it for whatever salvage value it may have? If you pull the pipe, you could do a lot better job of plugging without the nonsense of the perforating and squeezing, and we could be sure the cement plug blocks off the aquifers.

Let me know what you think.

Very truly yours,


Daniel J. Brennan
Executive Director

Enclosure

DRY MESA CORPORATION

POST OFFICE BOX 5448
FARMINGTON, NEW MEXICO 87499
505 325-2058

September 5, 1990

Mr. Dan Brennan
Arizona Oil and Gas Commission
5150 North 16th Street Suite B-141
Phoenix, Arizona 85016 September 5, 1990

PHN 582
663

Dear Mr. Brennan:

Dry Mesa Corporation received a letter from the BLM dated August 15, 1990 (copy of letter enclosed) which basically stated that since the SWD Well #2 in Teec Nos Pos Field had failed a mechanical integrity test, Dry Mesa Corporation needs to submit plugging and abandonment plans for this well. Therefore, please find enclosed preliminary plugging and abandonment plans for the 5 wells that Dry Mesa Corporation operates in Teec Nos Pos Field. Besides BLM and State of Arizona standards, Well #2 falls under the UIC Program (underground injection control) which is sponsored by the U.S. EPA. This gives the EPA final authority and say so as to how this well is plugged. The other four wells on the lease are oil wells that have played out. They will be plugged according to BLM and State of Arizona requirements.

Dry Mesa Corporation is not in any hurry to plug these wells but we do want to be in compliance with BLM standards and to get our paper work in and approved. Please review the enclosed material to see if it will meet the States requirements. Also, if there are any areas where the proposed plugging program may be redundant or unnecessary, please bring these to our attention. If there are any questions or comments, please contact us. Thank you for your time.

Sincerely,

Bob Hand

Bob Hand

DRY MESA CORPORATION

POST OFFICE BOX 5446
FARMINGTON, NEW MEXICO 87499
505 325-2058

Teec Nos Pos Proposed Plugging Program

In response to a letter Dry Mesa Corporation received from the BLM regarding plugging of the Navajo "O" #2 SWD well, Dry Mesa Corporation is submitting plugging and abandonment plans for all 5 wells that it operates in Teec Nos Pos Field, Apache County, Arizona.

Teec Nos Pos Field has played out. Wells #4 and #5 have been shut-in since 1985. The field has a limited water drive and both of these wells have watered out. Well #3 was making less than 3 bls/day of oil when it was shut-in in 1987. Well #1 was making 3 - 5 bls/day of oil when it was operated steadily in 1987-88. Well #1 has since lost annular gas pressure to run the pumpjack engine. Repeated attempts to restore gas pressure by pumping the well off with butane brought out to the lease in tanks has been unsuccessful. To restore Wells #1 and #3 to production would require:

1. Getting a pipeline hookup and purchasing lease gas from Northwest Pipeline to run the pumpjacks.
2. Replacing the existing downhole pumps and several joints of tubing per well.
3. Acidize both wells and give them a paraffin treatment; pressure test and repair flowlines due to the highly corrosive fluids at Teec Nos Pos
4. Do road work to get the workover equipment on to the lease.
5. Repair vandalized surface equipment including gauges and pumpjack engine parts.
6. The major expense to repair and reequip Well #2 for brine disposal or, pay to have produced water hauled off.

Dry Mesa Corporation can not justify doing this work when the anticipated combined production from these 2 wells will most likely be less than 10 bls/day.

Therefore, for Wells #1, #3, #4, and #5, find enclosed a BLM proposed plugging form, a generalized plugging diagram, a current wellbore sketch, and a proposed plugging program with specific well plugging information included. Note that Well #2 is a SWD well and is included in the UIC Program (underground injection control) sponsored by the U. S. EPA. The EPA has final jurisdiction for plugging this well. A copy of the proposed plugging program that was submitted to the EPA for Well #2 is included, however, it has not been approved at this time.

Dry Mesa has not established a timetable to commence plugging operations at Teec Nos Pos Field. If there are any questions, comments, or changes in the proposed plugging program that you may have or if there are any areas of the proposed program that you feel are unnecessary or redundant, please contact us.

PROPOSED PLUGGING PROGRAM for TEEC NOS POS FIELD

The following is a generic plugging program to be followed in the plugging of Dry Mesa Corporation Wells #1, #3, #4/#5 in Teec Nos Pos Field, Apache County, Arizona. Well #2 is a SWD well and falls under the jurisdiction of the UIC Program (underground injection control) sponsored by the EPA. Therefore, Well #2 will be plugged according to EPA regulations.

All wells use 5-1/2", 14#, J-55 production casing. Casing capacity is 0.137 cubic ft/foot. Cement for plugging will be Class 'B', 15.6 ppg slurry weight, 1.18 cubic feet/sack slurry volume.

1. Remove surface equipment, NU BOP stack, TOH w/ existing tubing.
2. TIH w/ squeeze tool. Squeeze existing perforations w/ 35 sacks Class 'B' cmt. TOH w/ squeeze tool.
3. TIH w/ CIBP. Set plug 25' above top perf. Place 25 sack cmt plug on top of CIBP. Mix and circ 9.2 ppg mud to fill hole. TOH. *215' on plug*
4. TIH w/ perf gun. Perf #1 at 50' below top of the De Chellys; Perf #2 at 50' below top of Winnegate; and Perf #3 at 50' below surface casing shoe. TOH w/ perf gun.
5. PU packer. RIH and set packer at 100' above Perf #1. Pump 45 sacks Class 'B' cmt below packer. (5-1/2" casing capacity is 12 sacks/100' - this leaves a 12 sack plug inside 5-1/2" casing and a 33 sack plug outside 5-1/2" casing). Release packer and pull up to 100' above Perf #2. Pump 45 sacks Class 'B' cmt below packer. Release packer and pull up to 100' above Perf #3. Pump 45 sacks Class 'B' cmt below packer. Release packer and TOH. Lay down packer.
6. TIH to 50'. Mix and pump 6 sacks Class 'B' cmt. TOH. ND BOP stack.
7. Cut off casing head. Install permanent marker.
8. Cut off tie downs, remove accessible flow lines, fill all pits, restore surface as required by BLM Surface Management Agency Standards.

WELL SPECIFICS

| | PERFORATIONS | TOP OF DE CHELLYS | TOP OF WINNEGATE | SURFACE CASING SHOE |
|----|--------------|-------------------|------------------|---------------------|
| #1 | 5122'-5140' | 2488' | 1234' | 1522' |
| #3 | 5214'-5228' | 2582' | 1324' | 514' |
| #4 | 5314'-5326' | 2667' | 1385' | 501' |
| #5 | 5506'-5510' | 3007' | 1643' | 802' |
| | 5591'-5601' | | | |
| | 5628'-5634' | | | |
| | 5647'-5654' | | | |

A change from the proposed plan will be needed for Well #1 because the surface casing shoe is below the Winnegate Formation. On Well #1, it is proposed that the 5-1/2" casing be perforated at 2538' (50' below the top of the De Chellys), 1572' (50' below the surface casing shoe) and at 150'.

Well #1: CIBP @ 5097'; perf #1 @ 2538'; perf #2 @ 1572'; perf #3 @ 150'; plug #1 @ 5097' - 4897'; plug #2 @ 2538' - 2438'; plug #3 @ 1572' - 1472'; plug #4 @ 150' - 50'; plug #5 @ 50' - surface.

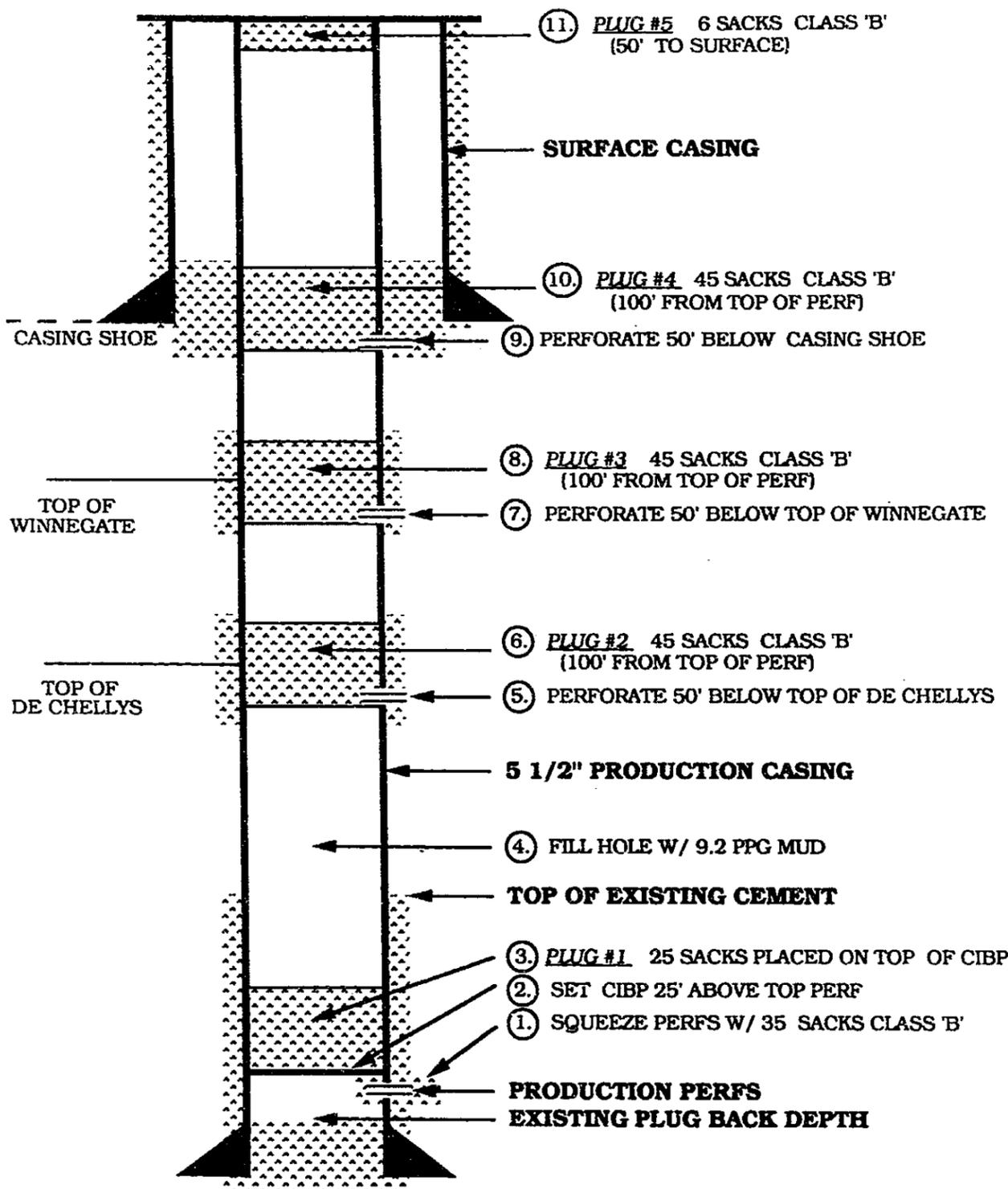
Well #3: CIBP @ 5189'; perf #1 @ 2632'; perf #2 @ 1374'; perf #3 @ 564'; plug #1 @ 5189' - 4989'; plug #2 @ 2632' - 2532'; plug #3 @ 1374' - 1274'; plug #4 @ 564' - 464'; plug #5 @ 50' - surface.

Well #4: CIBP @ 5289'; perf #1 @ 2717'; perf #2 @ 1435'; perf #3 @ 551'; plug #1 @ 5289' - 5089'; plug #2 @ 2717' - 2617'; plug #3 @ 1435' - 1335'; plug #4 @ 551' - 451'; plug #5 @ 50' - surface.

Well #5: CIBP @ 5489'; perf #1 @ 3057'; perf #2 @ 1693'; perf #3 @ 852'; plug #1 @ 5489' - 5289'; plug #2 @ 3057' - 2957'; plug #3 @ 1693' - 1593'; plug #4 @ 852' - 752'; plug #5 @ 50' - surface.

PROPOSED PLUGGING DIAGRAM

FOR TEEC NOS POS WELLS #1, #3, #4, & #5
APACHE COUNTY, ARIZONA



AZ OIL & GAS
CONSERVATION COMMISSION

JAN 26 1990

GROSS CREEK CORPORATION
P.O. BOX 1957
DUNCAN, OK. 73534-1957

January 23, 1989

Arizona Oil & Gas Commission
5150 N 16th Street B141
Phoenix, Az. 85016

RE: Dry Mesa Field, Tract 138 Lease
Teec Nos Pos Field, Navajo "0"

Attention: Dan Brennan

Dear Sir:

Enclosed herewith please find copies of the following
information:

Tax Sale Notice
Letter to Apache County Treasurer
Agreement of Sale & Purchase

If you have any questions please feel free to call.

Thank you,



Scott L. Hand
Cross Creek Corporation

CROSS CREEK CORPORATION
P.O. BOX 1957
UNCAN, OK. 73534-1957

AZ OIL & GAS
CONSERVATION COMMISSION

JAN 26 1990

January 23, 1990

Lavere O. Connolly
Apache County Treasurer
P.O. Box 699
St. Johns, Az. 85936

RE: Parcel ID 989-12-700-00-8

Dear Mr. Connolly:

Enclosed herewith please find a copy of the Agreement of Sale and Purchase from Cross Creek Corporation to Ken R. Hand d/b/a Dry Mesa Corporation effective February 15, 1989 for Operating Rights of the leases this tax statement covers. For your convenience I have highlighted the following items:

- #2) Buyer's Representations (c)
- #5) Taxes
- #7) Effective Date
- #15) Miscellaneous

Cross Creek Corporation has mailed or delivered to Kenneth R. Hand d/b/a Dry Mesa Corporation, P.O. Box 5446, Farmington, NM 87499 and/or #15 Willowbrook, Wichita, Ks. 67207, any and all tax statements, requests and demands as follows:

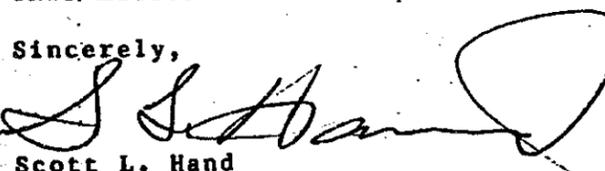
- a) Copy 1988 Tax Statement, delivered 2/13/89
- b) Original 1988 Tax Stment, delivered 2/14/89
- c) Delinquent Tax Notice, mailed 10/5/89
- d) 1989 Original Tax Statement, mailed 10/5/89
- e) Tax Sale Notice, mailed 1/23/89

We have also notified by mail, the sale of these properties, to the Arizona Department of Revenue, Division of Evaluation and Equalization, Sales, Use & Severance Tax Division and Apache County Tax Assessor.

We are asking that any further request regarding these properties be sent to the current operator, Kenneth R. Hand d/b/a Dry Mesa Corporation at the address or addresses above.

Thank you for your prompt attention and cooperation in this matter.

Sincerely,


Scott L. Hand
Vice-President/Secretary

cc: Kenneth R. Hand d/b/a Dry Mesa Corporation
cc: Arizona Oil & Gas Commission

**AZ OIL & GAS
CONSERVATION COMMISSION**

LAVERE O. CONNOLLY
APACHE COUNTY TREASURER
P. O. BOX 699
ST. JOHNS, ARIZONA 85936
TELEPHONE: (602) 337-4364 EXT. 252

JAN 26 1990

JAN 22 REC'D

JANUARY 8, 1990

CROSS CREEK CORP.
SCOTT HAND
P. O. BOX 447
FARMINGTON, N. M. 77057

PARCEL ID 989-12-700-00-8
DESCRIPTION VALUE OF PRODUCING OIL AND GAS INTEREST

**** TAX SALE NOTICE ****

| YEAR | RECEIPT | TAX CERT | TAX | INTEREST | TOTAL |
|-----------------------------------|---------|----------|----------|----------|-----------|
| 88 F | 43741 | | 8,993.06 | 1,438.89 | 10,431.95 |
| 89 F | 43644 | | 4,403.62 | 88.07 | 4,491.69 |
| TOTAL IF PAID BY FEBRUARY 1, 1990 | | | | | 14,923.64 |

PAYMENT MUST BE MADE BY CERTIFIED CHECK, CASHIERS CHECK, OR POSTAL MONEY ORDER.
THIS PARCEL HAS DELINQUENT TAXES. ADDITIONAL TAXES, INTEREST, AND PENALTIES MAY BE DUE.
UNDER THE PROVISIONS OF THE STATUTES COVERING DELINQUENT TAXES, IT IS MANDATORY FOR ME TO ADVERTISE & SELL ALL TAXES OLDER THAN 1989, WHICH ARE OUTSTANDING AGAINST THIS PROPERTY AFTER FEBRUARY 1, 1990 (ARS #42-385).

SINCERELY YOURS,
LAVERE O. CONNOLLY
APACHE COUNTY TREASURER

JAN 26 1990

AGREEMENT OF SALE AND PURCHASE

This agreement made and entered into this 15th day of February, 1989 by and between CROSS CREEK CORPORATION, an Oklahoma corporation, with an office and place of business at #30 Road 1990, Farmington, New Mexico 87499; hereinafter sometimes called "Seller," and DRY MESA CORPORATION, a Delaware corporation, with an office and place of business at #15 Willowbrook, Wichita, Kansas 67207, hereinafter sometimes called "Buyer."

Seller agrees to sell and Buyer agrees to buy for the sum described hereinafter the following described and referred to properties and interests which are together hereinafter sometimes referred to as the "Subject Interests."

All of Seller's right, title and interest in and to:

1. All of those properties, rights and interests described on Exhibit "A", attached hereto and made a part hereof for all purposes, together with all operating rights as to the oil, gas and mineral leases described on Exhibit "A".
2. Together with all units associated with the oil, gas and mineral leases noted on said Exhibit and all personal property, improvements, moveables, easements, permits, licenses, servitudes and rights-of-way situated upon or used or useful or held for future use in connection with the exploration, development, maintenance or operation of the properties, rights and interests described in No. 1 hereinabove or the production, treating, storing or transportation of the oil, gas or other minerals produced from such leases, including, but not by way of limitation, wells, tanks, boilers, buildings, fixtures, machinery and other equipment, pipelines, power lines, telephone and telegraph lines, roads and other appurtenances situated upon or used or useful or held for future use in connection with the exploration, development, maintenance or operation of the properties, rights and interests described in No. 1 hereinabove or the production, treating, storing or transportation of oil, gas or other minerals produced from the properties, rights and interests described in No. 1 hereinabove.

This agreement does not cover the sale and conveyance of any gas purchase pipelines, gas purchase facilities or gas purchase contracts.

This agreement and conveyance is made and accepted subject to the following terms and conditions:

1. Seller's Representations: Seller represents to Buyer:
 - (a) That the Subject Interests include all the property rights acquired by CROSS CREEK CORPORATION on those leases. (See Exhibit "A".)
 - (b) That, to the best of Seller's knowledge, there are no administrative proceedings, litigations or claims pending (other than those listed below), affecting or relating to the ownership, use, operation or maintenance of the Subject Interests.
 - (c) That, to the best of Seller's knowledge, all oil and gas leases, contracts, licenses, easements, permits and other rights and interests comprising

any portion of the Subject Interests are now and shall be as of the date of closing in full force and effect according to their respective terms and provisions and that all rights granted thereby are valid and subsisting, and Seller has received no notices or demands affecting or relating to such rights.

- (d) That, to the best of Seller's knowledge, all payments of rentals, royalties, and other charges, if any, required by the terms and provisions of the oil, gas and mineral leases, contracts, licenses, permits and easements comprising any portion of the Subject Interests to be made prior to closing date to prevent forfeiture or termination thereof shall have been fully and timely paid.
- (e) That all consents, waivers or permissions required for the valid and effective conveyance and assignment to Buyer of any rights or interests included within the Subject Interests have been obtained or will be obtained prior to the date of closing, and, if requested by Buyer, satisfactory evidence thereof will be furnished to Buyer at or before the date of closing.
- (f) That Seller has caused no lien to attach to any of the Subject Interests.
- (g) Seller has full power and authority to enter into and perform its obligations under this agreement and has taken all proper corporate action to authorize entering into this agreement and the performance of its obligations hereunder.
- (h) That Seller shall not have received, prior to the closing date, any prepayment for production of oil, gas or other minerals from the Subject Interests produced subsequent to the effective date hereof except payments for which Seller will make proper accounting to Buyer on the date of closing.
- (i) The conveyance and assignment from Seller to Buyer of the Subject Interests will contain no warranty of title to the Subject Interests, either expressed or implied, except that as to those items listed on Exhibit "A". Seller warrants that the Subject Interests have not been disposed of, mortgaged or encumbered by Cross Creek Corporation.

2. Buyer's Representations: Buyer represents to Seller:

- (a) That Buyer is negotiating this transaction and entering into this contract for its own account.
- (b) That Buyer will promptly cooperate in the closing of the transaction evidenced hereby after being informed by Seller that the papers necessary for such conveyance have been prepared.
- (c) That Buyer will promptly post a bond necessary to meet the requirements of operation of the Subject Interests. The buyer will accept any and all liabilities that should occur by the absence of such bonds.

3. Buyer's Conditions to Closing: The obligations of Buyer under this agreement to purchase the Subject Interests

shall, at Buyer's option, be conditioned upon the following:

- (a) Seller shall have performed all of the terms and provisions contained in this agreement to be performed.
 - (b) At the date of closing, no suit, action or other proceeding shall be pending or threatened in which it is sought to restrict or prohibit the consummation of the sale of the Subject Interests as contemplated by this agreement or in which title of Seller to any part of the Subject Interests is brought into question.
4. Records, Contracts and Files: If requested by Buyer, all original lease and land records, and all existing contracts, well files, including all well logs, core analyses, drilling records, filed forms, and all other materials pertaining to the Subject Interests in possession of Seller and copies or duplicates of which Buyer does not have shall be delivered to Buyer and, as of closing, shall become the property of Buyer as a part of the Subject Interests.
 5. ~~Property and/or other taxes, as well as necessary interest taxes that remain unpaid against the subject interests shall be the responsibility of Buyer.~~
 6. Conditions and Covenants: Buyer agrees that from and after the effective date, hereinafter noted, it will assume and carry out all conditions and covenants and obligations contained in the leases, contracts, licenses, easements and permits comprising the Subject Interests which Buyer is legally obligated to perform. Seller declares that, to the best of its knowledge, such conditions, covenants and obligations have been fully complied with and performed down to the effective date hereinafter noted and agrees to hold Buyer harmless from any claim or judgment arising out of Seller's failure to so comply with and perform any such conditions, covenants and obligations with which Seller was legally obligated to comply or as to which Seller was legally obligated to perform.
 7. ~~Conveyance: The conveyance and assignment of Subject Interests to Buyer shall be made effective as to the date hereinafter noted above.~~
 8. The Buyer will assume ownership of any and all oil remaining in the tanks on the Subject Interests. The Seller will receive all monies for oil sold before the effective date and will pay all royalties and severance taxes due upon said production. After such royalties and taxes are paid, fifty (50) percent of the remaining monies will be paid to Hay Hot Oil under the terms of Exhibit "C", and the remaining fifty (50) percent will be credited to Sun's Interest.
 9. Closing Date: This sale and purchase shall be consummated and closed on the day first written above.
 10. Operation of Subject Interests: All costs and expenses of the operation of the Subject Interests after the effective date shall be charged to the account of Buyer and shall be paid solely by Buyer.
 11. Delivery of Records, Contracts and Files: At the time of

closing, or as soon thereafter as possible, Seller shall deliver to Buyer all records, contracts, files and other materials herein required to be furnished and delivered by Seller and which have not already been so delivered to Buyer. At closing, Seller shall then deliver to Buyer instruments of assignment and conveyance covering all of the Subject Interests duly executed and acknowledged on behalf of Seller.

12. Payment of Purchase Price: Buyer agrees to assume the liabilities as shown on Exhibit "B". The liability to Hay Hot Oil, Incorporated will be met under the conditions as set out in an agreement between Hay Hot Oil, Incorporated and Cross Creek Corporation and attached as Exhibit "C". The liability to Cross Creek Corporation will be met by and in a promissory note and agreement between the Buyer and Seller and a copy herein attached as Exhibit "D".
13. Negotiations of This Sale and Purchase: Each party represents that it has negotiated this transaction only through its own personnel and has incurred no obligation to any agent or broker for any commission in connection with this transaction.
14. Entire Agreement: This agreement contains the entire agreement between the parties hereto with respect to the transaction covered hereby and supersedes all prior agreements between the parties, oral or written, relating to the subject matter of this agreement. This agreement shall extend to and be binding upon the heirs, successors and assigns of the parties hereto. An assignment shall be executed in consummation of this agreement. Any conflict between said assignment and this agreement shall be resolved in favor of this agreement.
15. Miscellaneous:
 - (a) The personal property, improvements and moveables included in the Subject Interests are to be conveyed without any warranties, expressed or implied, as to quality, merchantability or fitness for use of or for a particular purpose. Additionally, such items will be conveyed "as is" and "where is."
 - (b) ~~Buyer agrees to indemnify and hold Seller harmless from any and all claims, attorneys' fees, demands, costs, causes of action, fines, damages, rulings and judgments accruing on or after the effective date and based on or arising out of the use of the personal property, improvements and moveables included in the Subject Interests.~~
 - (c) ~~Buyer agrees that, upon closing of this transaction, it solely assumes the full obligation to properly and promptly plug and abandon all wells needing such operations and located on the Subject Interests.~~
 - (d) ~~Buyer shall fully comply with all rules, regulations, orders, laws and rulings with respect to the Subject Interests and agrees to indemnify and hold Seller harmless from any attorneys' fees, judgments and damages accruing on and after the effective date and resulting from Buyer's failure to so comply.~~

- (e) Buyer shall fully comply with all terms, covenants and conditions of the oil, gas and mineral leases included in the Subject Interests and all related documentation and agrees to indemnify and hold Seller harmless from all claims, demands, fines, attorneys' fees, judgments and damages accruing on and after the effective date and resulting from Buyer's failure to comply.
- (f) Buyer hereby agrees to indemnify and hold harmless Seller from all attorneys' fees, costs, fines, damages, claims, judgments, and losses, accruing after said effective date, and resulting from, arising out of our association with any business or operations as to the Subject Interests, or any part thereof.
- (g) Buyer and Seller, for themselves and any related business concerns, hereby waive and release any and all claims and causes of action in favor of Buyer or Seller, and any related business concern, against Buyer or Seller, and any related business concern, and arising out of the contractual or business relationship of Buyer and Seller, or any related business, as to the Subject Interests, excluding this Agreement of Sale and Purchase and said Assignment executed pursuant to this Agreement of Sale and Purchase. If this waiver and release is legally ineffectual then Buyer and Seller hereby agrees to indemnify and hold harmless each other from any and all claims, damages and causes of action in behalf of each (or in behalf of any affiliate or related business concern of each) except for those claims, damages and causes of action arising by virtue of or pursuant to this Agreement of Sale and Purchase or said Assignment, and arising out of, related to or associated with the contractual or business relationship of Seller (or any affiliate or related business concern of Seller) with Buyer (or any affiliate or related business concern of Buyer) as to the Subject Interests.
- (h) The conveyance of the Subject Interests shall be made specifically subject to any and all conveyances, reservations and matters of record in Apache County, Arizona, or the Bureau of Land Management, even though such conveyances, reservations and matters are not specifically recited herein or in said conveyance, to any gas purchase contracts currently in force as to the Subject Interests, if any, and to all non-consent elections by seller or its predecessors in interest.

This agreement may be executed in one or more counterparts, each of which shall have the same validity as the original. This instrument is signed effective as to the date first written above.

SELLER: CROSS CREEK CORPORATION


S. L. Hand
Vice President/Secretary

BUYER: DRY MESA CORPORATION

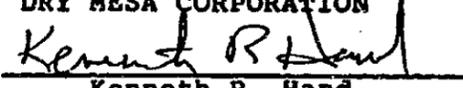

Kenneth R. Hand
President

EXHIBIT "A"
LEASE SCHEDULE

| LEASE NO. | NAME | LEASE DATE & TERM | BASIC RI | ORRI BURDEN | DESCRIPTION | GROSS ACRES | NET ACRES |
|--------------------|------------------|-------------------|----------|-------------|---|-------------|-----------|
| BIA 14-20-603-4190 | Navajo Tract 138 | 05/28/58 HBP | 16.67% | -0- | Township 40 North, Range 28 East Section 1 : All Section 2 : All Section 11 : All Section 12 : All | 2,357.00 | 1,178.50 |
| | | | | | Apache County, Arizona | | |
| BIA 14-20-603-716 | Teec Nos Pos | 10/07/54 | 12.5% | -0- | Township 41 North, Range 30 East Section 23: S $\frac{1}{2}$ Section 25: W $\frac{1}{2}$ NW $\frac{1}{4}$, N $\frac{1}{2}$ SW $\frac{1}{4}$ Section 26: NE $\frac{1}{4}$ | 640.00 | 640.00 |



Oil and Gas Conservation Commission

STATE OF ARIZONA

3110 N. 19th AVENUE, SUITE 190

PHOENIX, ARIZONA 85015

PHONE: (602) 255-5161

December 24, 1987

BHP Petroleum
5613 DTC Parkway, Ste 600
Englewood, CO 80111

Attn: J. W. Bair

Gentlemen:

Thank you for your letter of Dec. 21, 1987, confirming the sale of property in the Dry Mesa and Teec Nos Pos fields to Cross Creek Corp.

Please be aware that your bonds (Nos. 731451 and 8111-66-21) on these properties cannot be released until Cross Creek files their own bond(s), which to date they have not done.

If we can be of any assistance, please advise.

Sincerely,

R. A. Ybarra
R. A. Ybarra
Enforcement Director

RAY:lr

RECEIVED
DEC 23 1987
O & G CONS. COMM.

Suite 600
5613 DTC Parkway
Englewood, Colorado 80111
Telephone (303) 850-9090
DEX: (303) 850-9110

December 21, 1987



Oil and Gas Conservation Commission
State of Arizona
Suite 190
3220 N. 19th Avenue
Phoenix, Arizona 85015
Attn: R. A. Ybarra

Re: Transfer of Property
Dry Mesa and Teec Nos Pos Fields
Apache County, Arizona

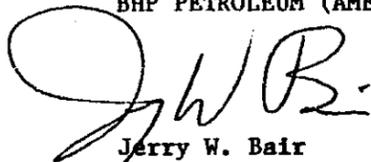
Gentlemen:

Pursuant to your letter dated October 14, 1987 (copy attached), this is to notify you that Tract 138 property in Dry Mesa Field and property in Teec Nos Pos Field, Apache County, Arizona, has been sold by BHP Petroleum (Americas) to Cross Creek Corporation, P. O. Box 1957, Duncan, Oklahoma 73534. Operations were assumed from BHP by Cross Creek at 7:00 a.m. on April 1, 1987. A list of wells involved is attached.

If you have any further questions, please do not hesitate to contact us.

Very truly yours,

BHP PETROLEUM (AMERICAS) INC.


Jerry W. Bair

/js
Attachment



Oil and Gas Conservation Commission

STATE OF ARIZONA
3110 N. 19th AVENUE, SUITE 190
PHOENIX, ARIZONA 85015
PHONE: (602) 255-5161

October 14, 1987

BHP Petroleum Company, Inc.
1300 Post Oak Tower
5051 Westheimer
Houston, TX 77056

RE: Transfer of Property
Dry Mesa and Teec Nos Pos Fields
Apache County, Arizona

Gentlemen:

We understand that certain wells located in the above-captioned fields have been transferred to Cross Creek Corp., effective July 20, 1987.

Please be informed that BHP is also required to notify the Commission in writing to confirm the transfer. Identify and give a location for each well transferred and confirm the effective date of transfer.

Your bonds, Nos. 731451 and 8111-66-21, will be released as soon as we receive proper bonding from the new operator.

If you have any questions on this matter, please call.

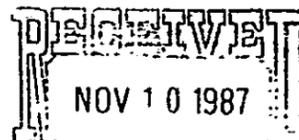
Sincerely,

R. A. Ybarra
R. A. Ybarra
Enforcement Director

/kb

cc: Cross Creek Corp.
P. O. Box 447
Farmington, NM 87499-0447

NOV 4 1987



BHP PETROLEUM
DNV LAND DEPT.

WELL LOCATIONS

BHP Petroleum (Americas) Inc.

| <u>Well Name</u> | <u>Description</u> |
|---------------------|---|
| Old Trading Post #1 | 790' FSL and 1850' FWL Sec. 10, T26N, R14W |
| Navajo "O" #1 | 1880' FWL and 660' FSL Sec. 23, T41N, R30E |
| Navajo "O" #2 | 1830' FSL and 1930' FEL Sec. 23, T41N, R30E |
| Navajo "O" #3 | 1000' FSL and 900' FWL Sec. 23, T41N, R30E |
| Navajo "O" #4 | 660' FSL and 660' FEL Sec. 23, T41N, R30W |
| Navajo "O" #5 | 560' FNL and 660' FEL Sec. 26, T41N, R30E |
| Navajo Tract 138 #1 | 660' FNL and 660' FEL Sec. 11, T40N, R28E |
| Navajo Tract 138 #2 | 1980' FNL and 660' FWL Sec. 12, T40N, R28E |
| Navajo Tract 138 #3 | 760' FSL and 2035' FEL Sec. 2, T40N, R28E |
| Navajo Tract 138 #6 | 1689.5' FSL and 2289.7' FWL Sec. 2, T40N, R28E |

1300 Post Oak Tower
5051 Westheimer
Houston, Texas 77056
Telephone (713) 877-5999
Fax (713) 877-5950
Telex 262496



August 19, 1986

Mr. R. A. Ybarra
Enforcement Director
Oil & Gas Conservation Commission
State of Arizona
1645 West Jefferson, Suite 420
Phoenix, Arizona 85007

Re: BHP Petroleum (Americas)-
Bond #731451
BHP Petroleum Company -
Bond #8111-66-21

Dear Mr. Ybarra:

Pursuant to your request July 16, 1986 of Ms. Diana Jones, we submit the following well information by company:

BHP Petroleum Company Apache County, Arizona
Formerly: Monsanto Oil Company
Dry Mesa Field
Navajo Tract 138
Well #'s

| | <u>State Permit No.</u> |
|---|-------------------------|
| 1 | 77 |
| 2 | 106 |
| 3 | 115 |
| 6 | 852 |

Legal Description on the above is: Sec 1, 2, 11 & 12 TWP 40N-29.

BHP Petroleum (Americas) Apache County, Arizona
Teec Nos Pos, Ismay Field
Navajo Tribal 'O'

| <u>Well #'s</u> | <u>State Permit No.</u> | <u>Section No.</u> | TWP 41N-30E. |
|-----------------|-------------------------|--------------------|--------------|
| 1 | 232 ✓ P | 23 | |
| 2 | 582 ✓ © | 23 | |
| 3 | 640 ✓ P | 23 | |
| 4 | 663 st | 23 | |
| 5 | 678 st | 26 | |
| 6 | 683 ✓ | 25 | |
| 9 | 687 ✓ | 26 | |

June 13, 1977

Mr. Dean Barnes
Energy Reserves Group, Inc.
P.O. Box 3280
Casper, Wyoming 82601

Re: Navajo "0" #3, SW/4 SW/4 Sec. 23, T41N, R30E,
Apache County, Arizona; State Permit No. 640

Navajo "0" #4, SW/4 SE/4 Sec. 23, T41N, R30E,
Apache County, Arizona; State Permit No. 663

Dear Dean:

We have never received the samples from the above-referred wells. Will you please send a set of samples on each of these wells to this Commission and also a set from each well to the Bureau of Mines, University of Arizona, 845 N. Park, Tucson, Arizona 85719.

We would appreciate receiving these samples as quickly as possible.

Very truly yours,

W. E. Allen
Director
Enforcement Section

WEA/vh

| | | | | | | | | |
|------------------|-----------|---------|----|------|---------|----------------------|--------------------|-----|
| 99-31 1023 | 50.00 | | | | 11-1-76 | Energy Reserve Group | Hearing - Case #50 | QOB |
| BANK TRANSIT NO. | \$ CHECKS | \$ CASH | NE | DATE | NAME | DESCRIPTION | RECEIVED BY: | |

IF (ENCIRCLED) INDICATES CASH RETURNED FOR ADJUSTMENT TO NET AMOUNT OF ACTUAL PAYMENT

INVALID WITHOUT SIGNATURE

Oil and Gas Conservation Commission
 STATE OF ARIZONA
 4515 NORTH 7TH AVE.
 PHOENIX, ARIZONA 85013

№ 0719

RETAIN THIS RECEIPT FOR YOUR RECORDS

CR-OTC

SIGNATURE

RECEIVED

NOV 1 1976

O & G CONS. COMM.

Energy Reserves Group, Inc.
P.O. Box 3280
Casper, Wyoming 82601
Phone 307 265 7331

 Energy Reserves Group

Mr. W.E. Allen
Director, Enforcement Section
Arizona Oil and Gas Conservation Commission
8686 N. Central - Suite 106
Phoenix, Arizona 85020.

October 27, 1976

Re : Application to Drill Navajo "O" #4
800' FSL, 2080' FEL (NW SW SE)
Section 23-T41N-R30E
Apache County, Arizona.

Dear Mr. Allen :

Energy Reserves Group, Inc. requests an exception to spacing Rule 105A for the drilling of the subject well. This request is made for the following reasons :

1. Geologic interpretation indicates that a well at the normal location will have marginal chances of being oil productive and would possibly produce large quantities of water.
2. A well at the normal location is up on top of a large shale out crop and would require extensive road construction, in the order of \$ 25,000 or more.

All facts stated herein are known by me to be true and the data on attachment #1 correctly locates the respective positions of the wells in the immediate area.

Would you please place us on the docket of the next hearing, November 12, 1976.

Sincerely Yours,

Dean B. Barnes

Dean B. Barnes
ENERGY RESERVES GROUP, INC.
Rocky Mountain District
Production Engineer.

DBB/MVE

RECEIVED

NOV 1 1976

O & G CONS. COMM.

Energy Reserves Group, Inc.
P.O. Box 3280
Casper, Wyoming 82601
Phone 307 265 7331



Arizona Oil And Gas Conservation Commission
8686 N. Central # 106
Phoenix, Arizona 85020
Attn: Mr. Jack N. Conley

October 27, 1976

Gentleman :

For your information and records we are enclosing two copies of our submitted application and incidental datum to the USGS, Farmington, N.M. for a permit to drill a 5400' lower Ismay test in the NW SW SE of Section 23 T41N R30E Apache County, Arizona.

If you need any additional information please communicate with us.

Yours very truly,


M.S. Pettersen
ENERGY RESERVES GROUP, INC.
Field Services Adm.

MSP/MVE

Encl. (4) including :

1. Original application for Permit
2. Survey plat
3. Attachment with Form 9-331 C
4. NTL-6
5. Blow out preventer Attachment #1
6. Map indicating road and well location, attachment #2
7. Map indicating location of existing wells, attachment #3
8. Well site layout, attachment #4
9. Rig Layout, attachment #5.

RECEIVED

AUG 26 1976

O & G CONS. COMM.

Energy Reserves Group, Inc.
P.O. Box 3280
Casper, Wyoming 82601
Phone 307 265 7331

 Energy Reserves Group

August 24, 1976

Oil & Gas Conservation Commission
State of Arizona
8686 North Central, Suite 106
Phoenix, Arizona 85020
Attn: W. E. Allen

Re: Energy Reserves Group Navajo "O" #4
SE SE Sec. 23-T41N-R30E, Apache County
Permit No. 663

Dear Mr. Allen:

We appreciate your calling to our attention that the subject permit will soon expire. For various reasons we have been delayed on this project. We are still interested in drilling the well and hope to commence drilling in the near future.

However, to give us ample time, we hereby solicit an extension of this permit for 60 days.

Very truly yours,

ENERGY RESERVES GROUP, INC.

Dean B. Barnes

Dean B. Barnes
District Production Engineer
Rocky Mountain District

DBB:kp

December 31, 1976
~~November 23, 1976~~

Permit expires

W&Q

Dean called today 10-22-76 Requesting additional time for permit - Expiration date above - *W&Q*

August 18, 1976

Mr. Dean B. Barnes
Energy Reserves Group, Inc.
P.O. Box 3280
Casper, Wyoming 82601

Re: Energy Reserve Group Navajo 0 #4
SE/4 SE/4 Sec. 23, T41N, R30E, Apache County
Permit No. 663

Dear Mr. Barnes:

This letter is to advise you that the above-referred permit will expire September 2, 1976.

If you wish an extension on this permit, please advise this office prior to the expiration date the duration of the extension, if you so desire.

Very truly yours,

William E. Allen
Director
Enforcement Section

WEA/vb

June 8, 1976

Mr. Dean B. Barnes
Energy Reserves Group, Inc.
P. O. Box 3280
Casper, Wyoming 82601

Dear Mr. Barnes:

Attached is your Approved application to drill, your drilling permit and a copy of your receipt for the \$25.00 filing fee. Also enclosed are the necessary forms to keep us advised of your progress.

Please note that 10' samples from surface to T. D. are required.

If we can be of any assistance; please advise.

Very truly yours,

W. E. Allen
Director, Enforcement Section

June 2, 1976

Mrs Jo Ratcliff
Four Corners Sample Cut Association
P. O. Box 899
Farmington, New Mexico 87401

Dear Mrs. Ratcliff:

The following permit was issued today:

Energy Reserves Group, Inc. (Formerly Clinton Oil Co.)
Navajo "O" No. 4
660' FSL & 660' FEL Sec. 23, T41N, R30E Apache Co.

Very truly yours,

W. E. Allen