RAN MIT 6-1-94 OK CY

GIANT EXPLORATION &
PRODUCTION COMPANY

2200 Bloomfield Highway
Post Office Box 2810
Farmington, New Mexico
87499-2810

505 326-3325
FAX 505 327-7987

August 27, 1993



Mr. Frank Chavez
New Mexico Oil Conservation Division
1000 Rio Brazos Road
Aztec, New Mexico 87410

Subject: Carson Unit Well No. 23-13
1980/S 1980/W
K ~~1980~~' FSL, ~~1980~~' FWL
Sec. 13, T25N, R12W
San Juan County, New Mexico

Dear Mr. Chavez:

Enclosed for your information is our Application for Authorization to Inject for the above referenced well. The original Application has been sent to the New Mexico Oil Conservation Division in Santa Fe for approval.

Sincerely,

Diane G. Jaramillo
Administrative Manager

/dgj

Enclosure

STATE OF NEW MEXICO
ENERGY, MINERALS and NATURAL
RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION
PO BOX 2088
SANTA FE, NM 87504-2088

RECEIVED
AUG 31 1993
OIL CON. DIV.
DIST. 3

FORM C-108
Revised 7-1-81

# APPLICATION FOR AUTHORIZATION TO INJECT

I. PURPOSE: X Secondary Recovery _____ Pressure Maintenance _____ Disposal _____ Storage
Application qualifies for administrative approval? __Yes ___No

II. OPERATOR: Giant Exploration & Production Company

ADDRESS: P.O. Box 2810, Farmington, New Mexico 87499

CONTACT PARTY: Jeffrey R. Vaughan PHONE: (505) 326-3325

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

IV. Is this an expansion of an existing project: __X Yes ___ No
If yes, give the Division order number authorizing the project _____

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

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

VII. Attach data on the proposed operation, including:

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

*VIII. Attach appropriate geological data on the injection zone including appropriate lithologic detail, geological name, thickness and depth. Give the geologic name, and depth to bottom of all underground sources of drinking water (aquifers containing waters with total dissolved solids concentrations of 10,000 mg/1 or less) overlying the proposed injection zone as well as any such sources known to be immediately underlying the injection interval.

IX. Describe the proposed stimulation program, if any.

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

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

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

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

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

NAME: Jeffrey R. Vaughan TITLE: Vice President/Operations

SIGNATURE: JRV DATE: August 10, 1993

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

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

Giant Exploration & Production Company
Application for Authorization to Inject
Form C-108 Supplemental Information

Carson Unit No. 23-13
NE/4, SW/4, Sec. 13, T25N, R12W
San Juan County, New Mexico

I. Shown on Application

II. Shown on Application

III. Well data attached

IV. Shown on Application

V. Area of review is shown on attached map

VI. Information for wells located in area of review are as follows:

Carson Unit No. 12-13
Carson Unit No. 13-13
Carson Unit No. 14-13
Carson Unit No. 21-13
Carson Unit No. 22-13
Carson Unit No. 24-13
Carson Unit No. 32-13
Carson Unit No. 33-13
Carson Unit No. 34-13
Carson Unit No. 43-14

VII. 1. Proposed average injection rate is 600 bwpd, expected maximum injection rate is 1200 bwpd.

2. This system will be closed.

3. Average injection pressures are expected to be in the 954 - 980 psi range. Maximum injection pressure will be 980 psi.

4. Refer to the attached water analysis report. Since the formation water to be encountered is primarily previously injected water, no problems are expected in mixing the two waters.

5. This well is part of an extensive waterflood project active in the Carson Unit since 1959. All produced water is reinjected into the oil productive Lower Gallup sand to maintain pressure. Injection into the Lower Gallup sand is for waterflooding, not disposal.

VIII. The injection zone is the Lower Gallup sandstone. This zone is to be 29' in thickness with a top of 4871' as shown on the SP log previously submitted. No known sources of drinking water exist in this area. Water well drilling in this area has shown the Ojo Alamo to be dry.

IX. The well will be acidized if required to maintain injection rate and pressure.

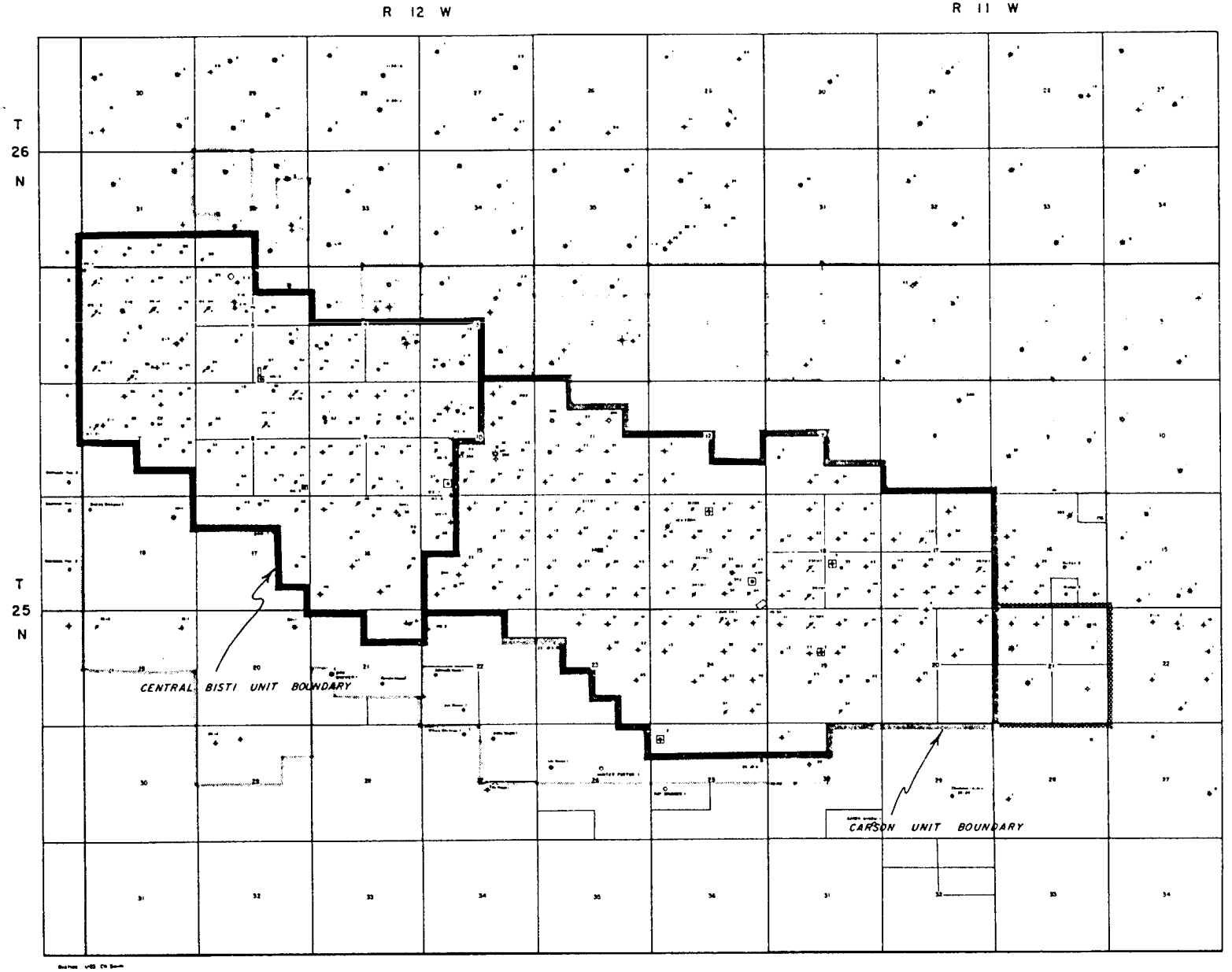
X. Logs were previously submitted.

XI. No known sources of drinking water exist in this area.

XII. This well is part of the existing approved waterflood operation for the Carson Unit. It is not a disposal well.

XIII. Proof of notification is attached.

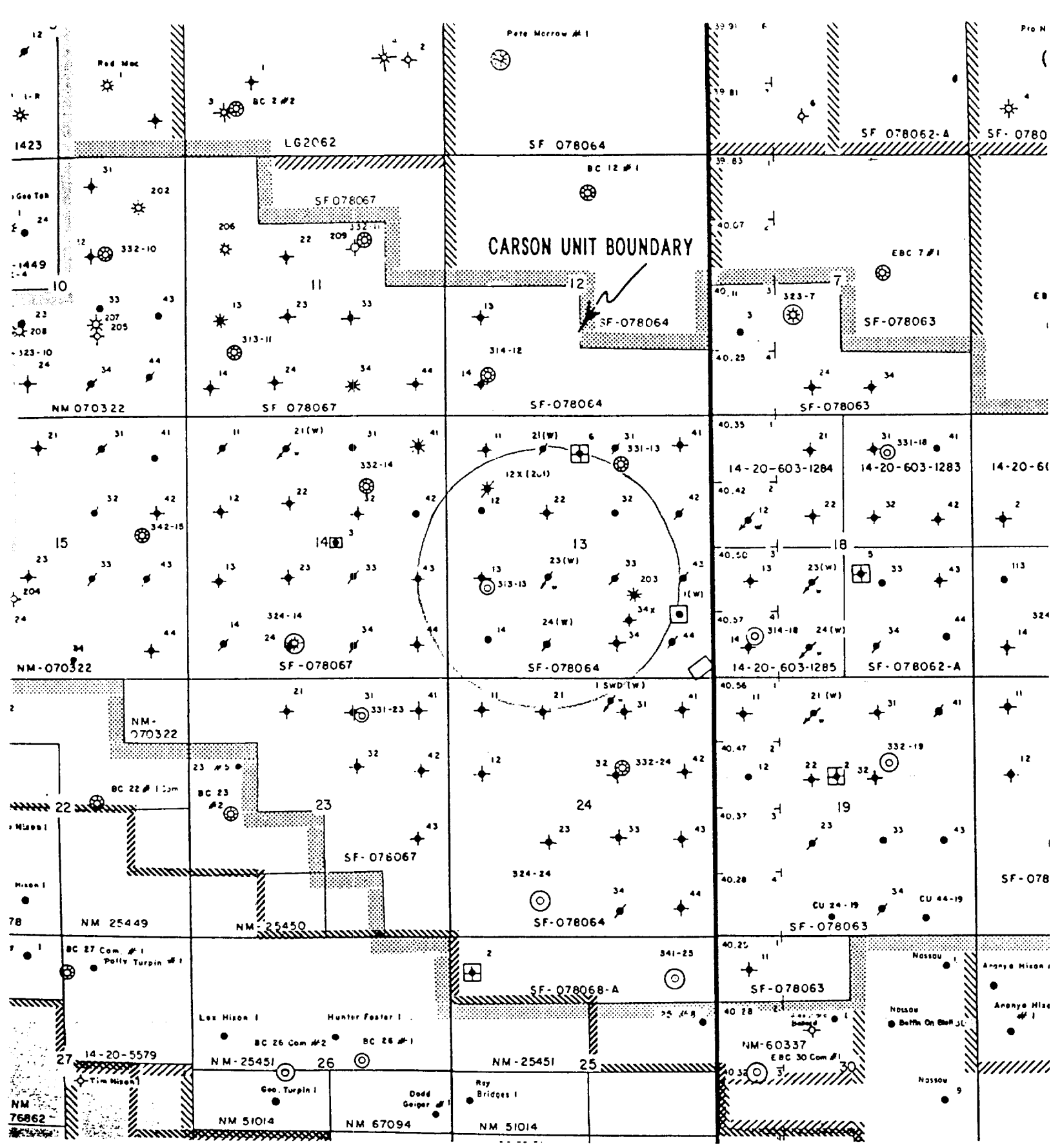
XIV. Certification shown on Application.




HIXON DEVELOPMENT COMPANY

CENTRAL BISTI - CARSON UNIT AREA

San Juan County, New Mexico


CARSON UNIT BOUNDARY
Pete Morrow #1
Red Mac
BC 2 #2
LG2062
SF 078064
SF 078062-A
BC 12 #1
SF078067
SF-078064
SF-078063
EBC 7 #1
NM 070322
SF 078067
SF-078064
SF-078063
12 X (2-1)
14-20-603-1284
14-20-603-1283
14-20-603-1285
SF-078062-A
NM-070322
SF-078067
SF-078064
NM-070322
BC 22 #1 Com
BC 23 #2
SF-078067
SF-078064
SF-078063
NM 25449
NM-25450
BC 27 Com #1
Polly Turpin #1
Los Hison 1
Hunter Foster 1
BC 26 Com #2
BC 26 #1
14-20-5579
NM-25451
NM-25451
SF-078068-A
SF-078063
NM-60337
EBC 30 Com #1
Tim Hison 1
Geo. Turpin 1
Dodd Geiger #1
Ray Bridges 1
NM 51014
NM 67094
NM 51014
Nassau 1
Nassau
Nassau

# Giant Exploration & Production Company

Well Bore Diagram

**WELL NAME** Carson Unit Well No. 23-13

**LOCATION** 1980' FSL, 1980' FWL **SECTION** 13 **T** 25 N **R** 12 W

**COUNTY** San Juan **STATE** New Mexico

**GLE** 6391.2'

**KBE** 6399.9'

**DF** 6398.7'

## SURFACE CASING

Hole Size: 12-1/4"
Casing: 8-5/8", 24#, J-55
Casing Set @ 101' with 100 sks cement containing 2% CaCl.

## FORMATION TOPS

| | |
|---|---|
| Pictured Cliffs | 1207' |
| Lewis | 1411' |
| Cliffhouse | 1585' |
| Menefee | 2073' |
| Point Lookout | 3684' |
| Mancos | 3862' |
| Gallup | 4775' |

**CEMENT TOP** 4235' (Calc.)

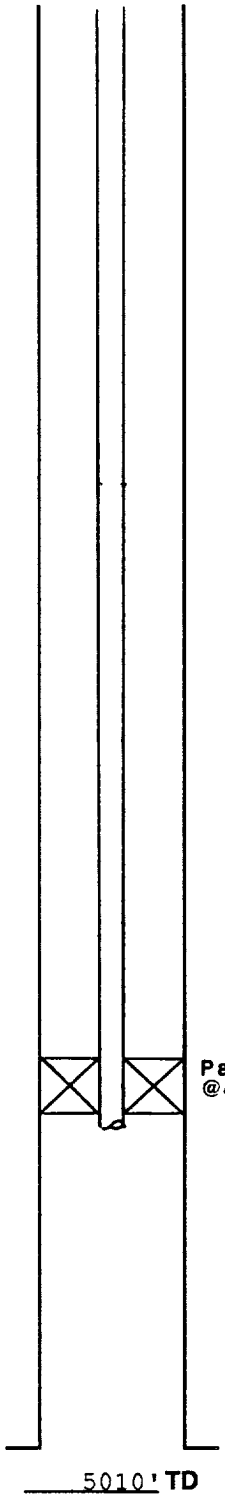
## PERFORATIONS

4871'-4900'

**PBD** 4904' (CIBP)

## PRODUCTION CASING

Hole Size: 7-7/8"
Casing: 4-1/2", 9.5#
Casing Set @ 5010' with 150 sks cement containing 4% gel.




## WELL HISTORY

Spud date: 1/31/58
Original owner: Shell Oil Co.
IP 2/24/58 BOPD 493 BWPD -
MCFD 135 GOR 272
Completion Treatment:
Frac'd with 50,000 gal crude and 1 #/gal 20/40 mesh sand.

## CURRENT DATA

Pumping Unit
Tubing
Pump Size
Rod string
Remarks

Proposed water injection schematic.

Date Last Revised: 8/18/93

# WELL DATA SHEET

| | |
|---|---|
| Well Name: | Carson Unit #23-13 |
| Legal Description: | 1980' FSL, 1980' FWL<br>Sec. 13, T25N, R12W<br>San Juan County, N.M. |
| Well Type: | Water Injection<br>(Waiting on Approval) |
| Spud Date: | 01-31-58 |
| Surface Casing Hole Size: | 12-1/4" |
| Surface Casing Size: | 8-5/8" |
| Surface Casing Depth: | 101' |
| Cementing Record: | 100 sks. |
| Production Casing Hole Size: | 7-7/8" |
| Production Casing Size: | 4-1/2" |
| Production Casing Depth: | 5010' |
| Cementing Record: | 150 sks. |
| Perforation: | 4871' - 4900' |
| Plug Back Depth: | 4904' |
| Total Depth: | 5010' |

# WELL DATA SHEET

| | |
|---|---|
| Well Name: | Carson Unit #12-13 |
| Legal Description: | 1980' FSL, 660' FWL<br>Sec. 13, T25N, R12W<br>San Juan County, N.M. |
| Well Type: | Oil Well |
| Spud Date: | 01-15-58 |
| Surface Casing Hole Size: | 12-1/4" |
| Surface Casing Size: | 8-5/8" |
| Surface Casing Depth: | 100' |
| Cementing Record: | 100 sks. |
| Production Casing Hole Size: | 7-7/8" |
| Production Casing Size: | 4-1/2" |
| Production Casing Depth: | 5015' |
| Cementing Record: | 150 sks. |
| Perforation: | 4875' - 4900'<br>4909' - 4921'<br>4947' - 4952'<br>4957' - 4971'<br>4975' - 4992' |
| Plug Back Depth: | 4975' |
| Total Depth: | 5015' |

# Hixon Development Compa.
Well Bore Diagram

WELL NAME Carson Unit Well No. 13-13

LOCATION 1930' FSL, 660' FWL SECTION 13 T 25 N R 12 W

COUNTY San Juan STATE New Mexico

GLE 6400'

KBE 6409.5'

DF 6408'

**SURFACE CASING**

Hole Size:

Casing:

Casing Set @

**FORMATION TOPS**

| | |
|---|---|
| Pictured Cliffs | 1216' |
| Lewis | 1434' |
| Cliff House | 1580' |
| Allison-Menefee | 2067' |
| Point Lookout | 3692' |
| Mancos | 3843' |
| Gallup | 4771' |

**CEMENT TOP**

**PERFORATIONS**

4866'-92'
4898'-4906'
4936'-40'
4949'-57'
4967'-75'

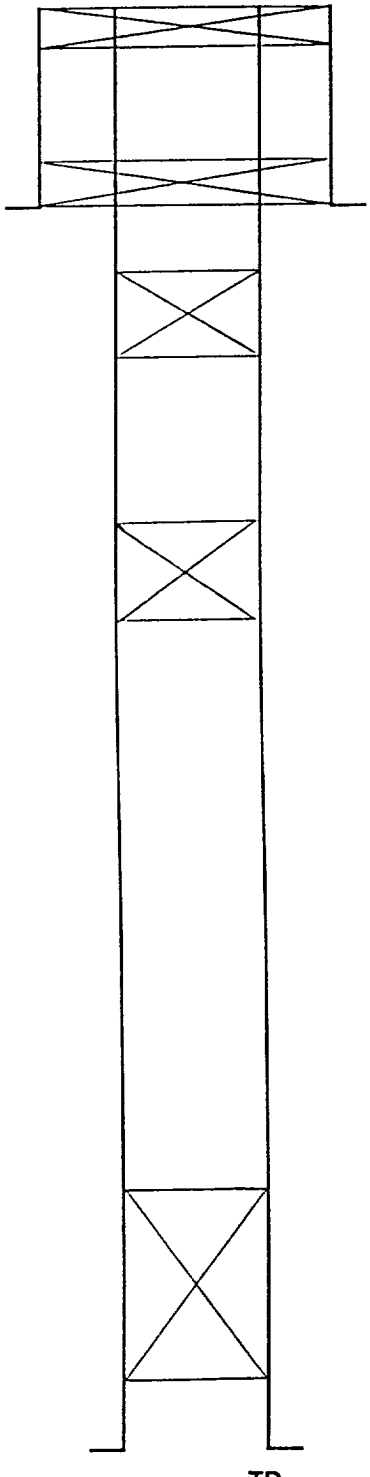
**PBD**

**PRODUCTION CASING**

Hole Size:

Casing:

Casing Set @



TD

**WELL HISTORY**

Spud date: 8/25/59

Original owner: Shell Oil Co.

IP 9/12/59 BOPD 144 BWPD 0

MCFD 320 GOR 2220

Completion Treatment:

Fraced with 50,000 gal crude, 1#/gal sand, 200 rubber balls

**CURRENT DATA**

Pumping Unit

Tubing

Pump Size

Rod string

Remarks

Plug and abandoned 9/3/77

10 sk cmt plug at surface
20 sk cmt plug set at 180'
35 sk cmt plug set at 350'
50 sk cmt plug set at 1220'
15 sk cmt plug set across perforations (4866'-4975')

Date Last Revised: 1/31/90

# WELL DATA SHEET

| | |
|---|---|
| Well Name: | Carson Unit #14-13 |
| Legal Description: | 660' FSL, 660' FWL<br>Sec. 13, T25N, R12W<br>San Juan County, N.M. |
| Well Type: | Oil Well |
| Spud Date: | 04-12-57 |
| Surface Casing Hole Size: | 12-1/4" |
| Surface Casing Size: | 8-5/8" |
| Surface Casing Depth: | 222' |
| Cementing Record: | 130 sks. |
| Production Casing Hole Size: | 7-7/8" |
| Production Casing Size: | 5-1/2" |
| Production Casing Depth: | 5040' |
| Cementing Record: | 200 sks. |
| Perforation: | 4876' - 4891'<br>4943' - 4948'<br>4954' - 4966'<br>4972' - 4986' |
| Plug Back Depth: | 5003' |
| Total Depth: | 5040' |

# WELL DATA SHEET

| | |
|---|---|
| Well Name: | Carson Unit #21-13 |
| Legal Description: | 660' FNL, 1880' FWL<br>Sec. 13, T25N, R12W<br>San Juan County, N.M. |
| Well Type: | Water Injection |
| Spud Date: | 04-15-58 |
| Surface Casing Hole Size: | 12-1/4" |
| Surface Casing Size: | 8-5/8" |
| Surface Casing Depth: | 103' |
| Cementing Record: | 100 sks. |
| Production Casing Hole Size: | 7-7/8" |
| Production Casing Size: | 4-1/2" |
| Production Casing Depth: | 5007' |
| Cementing Record: | 150 sks. |
| Perforation: | 4860' - 4886'<br>4890' - 4900'<br>4940' - 4954'<br>4958' - 4974' |
| Plug Back Depth: | 5002' |
| Total Depth: | 5010' |

# Hixon Development Compa.
Well Bore Diagram

WELL NAME Carson Unit Well No. 22-13

LOCATION 1980' FNL, 1980 FWL SECTION 13 T 25 N R 12 W

COUNTY San Juan STATE New Mexico

GLE 6375.6'

KBE 6384.8'

DF 6383.3'

**SURFACE CASING**

Hole Size:

Casing:

Casing Set @

**FORMATION TOPS**

| | |
|---|---|
| Pictured Cliffs | 1196' |
| Lewis | 1394' |
| Cliff House | 1553' |
| Allison-Menefee | 2044' |
| Point Lookout | 3680' |
| Mancos | 3855' |
| Gallup | 4767' |

**CEMENT TOP**

**PERFORATIONS**

4864'-87'

4893'-4906'

4943'-53'

4962'-70'

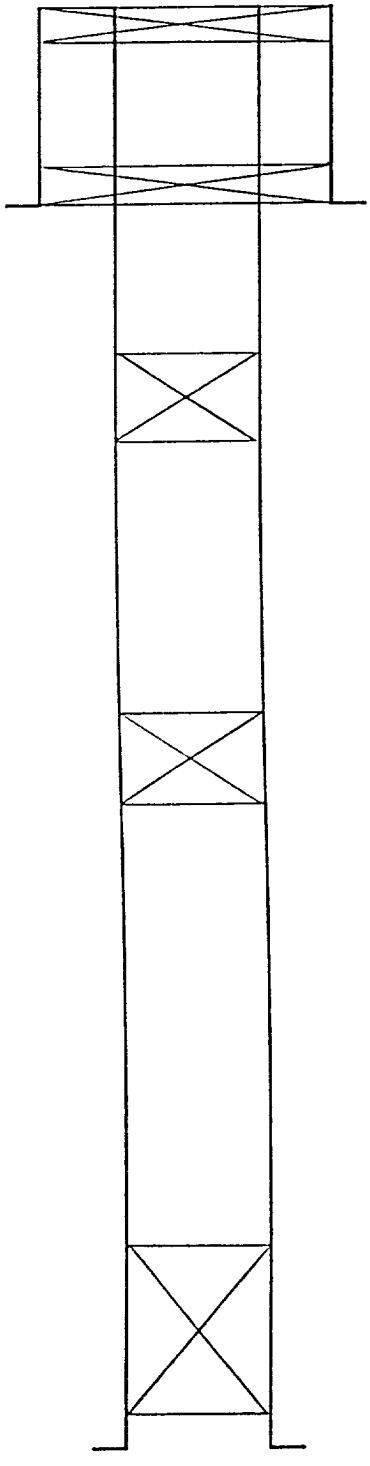
**PBD**

**PRODUCTION CASING**

Hole Size:

Casing:

Casing Set @



TD

**WELL HISTORY**

Spud date: 11/24/59

Original owner: Shell Oil Co.

IP 1/4/60 BOPD 30 BWPD 0

MCFD 48 GOR 1600

Completion Treatment:

Fraced with 50,000 gal crude
1 lb/gal sand and 140 balls.

**CURRENT DATA**

Pumping Unit

Tubing

Pump Size

Rod string

Remarks

Plug and abandoned 3/25/75

10 sk cmt plug at surface
25 sk cmt plug set at 121'
35 sk cmt plug set at 295'
45 sk cmt plug set at 1375'
30 sk cmt plug set at 1824'
20 sk cmt plug set across
perforations (4864'-4970')

Date Last Revised: 1/31/90

# WELL DATA SHEET

| | |
|---|---|
| Well Name: | Carson Unit #24-13 |
| Legal Description: | 660' FSL, 1980' FWL<br>Sec. 13, T25N, R12W<br>San Juan County, N.M. |
| Well Type: | Water Injection |
| Spud Date: | 12-01-59 |
| Surface Casing Hole Size: | 12-1/4" |
| Surface Casing Size: | 8-5/8" |
| Surface Casing Depth: | 111' |
| Cementing Record: | 100 sks. |
| Production Casing Hole Size: | 7-7/8" |
| Production Casing Size: | 4-1/2" |
| Production Casing Depth: | 5031' |
| Cementing Record: | 150 sks. |
| Perforation: | 4864' - 4888'<br>4897' - 4905'<br>4932' - 4938'<br>4946' - 4958'<br>4964' - 4978' |
| Plug Back Depth: | 5031' |
| Total Depth: | 5035' |

# WELL DATA SHEET

| | |
|---|---|
| Well Name: | Carson Unit #32-13 |
| Legal Description: | 1980' FNL, 1980' FEL<br>Sec. 13, T25N, R12W<br>San Juan County, N.M. |
| Well Type: | Oil Well |
| Spud Date: | 04-30-58 |
| Surface Casing Hole Size: | 12-1/4" |
| Surface Casing Size: | 8-5/8" |
| Surface Casing Depth: | 110' |
| Cementing Record: | 100 sks. |
| Production Casing Hole Size: | 7-7/8" |
| Production Casing Size: | 4-1/2" |
| Production Casing Depth: | 5006' |
| Cementing Record: | 150 sks. |
| Perforation: | 4877' - 4901'<br>4905' - 4916'<br>4956' - 4971'<br>4974' - 4992' |
| Plug Back Depth: | 5001' |
| Total Depth: | 5010' |

# WELL DATA SHEET

| | |
|---|---|
| Well Name: | Carson Unit #33-13 |
| Legal Description: | 1980' FSL, 1980' FEL<br>Sec. 13, T25N, R12W<br>San Juan County, N.M. |
| Well Type: | Water Injection Well<br>(Waiting on Approval) |
| Spud Date: | 07-03-59 |
| Surface Casing Hole Size: | 12-1/4" |
| Surface Casing Size: | 8-5/8" |
| Surface Casing Depth: | 104' |
| Cementing Record: | 100 sks. |
| Production Casing Hole Size: | 7-7/8" |
| Production Casing Size: | 4-1/2" |
| Production Casing Depth: | 5038' |
| Cementing Record: | 150 sks. |
| Perforation: | 4876' - 4898' |
| Plug Back Depth: | 4904' |
| Total Depth: | 5040' |

# Giant Exploration & Production Company

Well Bore Diagram

**WELL NAME** Carson Unit Well No. 34-13

**LOCATION** 660' FSL, 1976' FEL **SECTION** 13 **T** 25 N **R** 12 W

**COUNTY** San Juan **STATE** New Mexico

**GLE** 6412.1'

**KBE** 6421.1'

**DF** 6420'

## SURFACE CASING

Hole Size: 12-1/4"
Casing: 8-5/8", 24#, J-55
Casing Set @ 218' with 130 sks cement containing 2% CaCl.

## FORMATION TOPS

| | |
|---|---|
| Pictured Cliffs | 1213' |
| Lewis | 1417' |
| Cliffhouse | 1590' |
| Menefee | 2068' |
| Point Lookout | 3693' |
| Mancos | 3874' |
| Gallup | 4778' |

**CEMENT TOP** 4100' (Calc.)

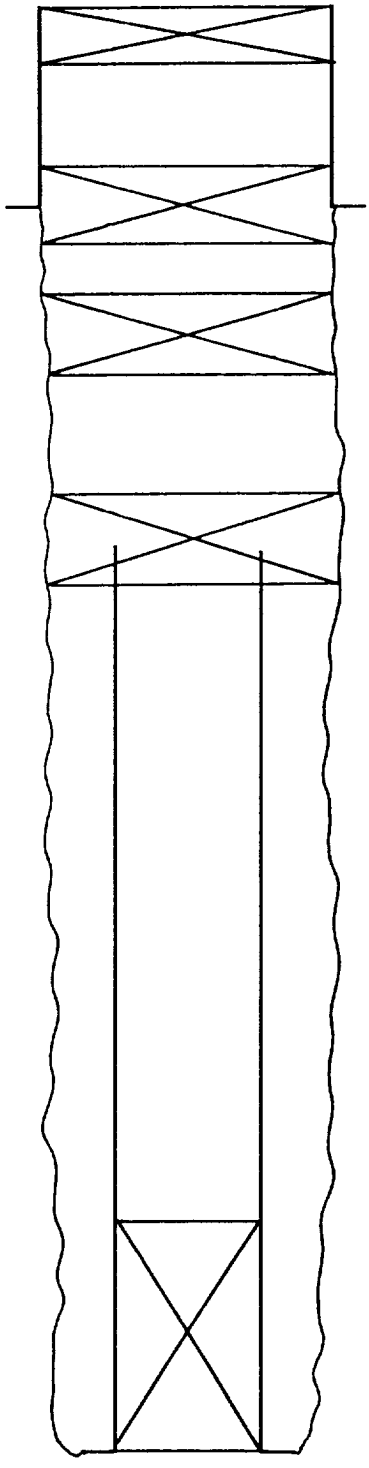
## PERFORATIONS

4876'-4900'
4908'-16'
4944'-52'
4958'-72'
4976'-94'

**PBD** 5036'

## PRODUCTION CASING

Hole Size: 7-7/8"
Casing: 4-1/2", 9.5#
Casing Set @ 5096' with 150 sks cement containing 4% gel.



5104' TD

## WELL HISTORY

Spud date: 5/13/57

Original owner: Shell Oil Co.

IP 2/13/58 BOPD 100 BWPD -

MCFD 360 GOR 356

Completion Treatment:
2 Stage frac w/72,000 gal oil and 1 #/gal 20/40 mesh sand.

## CURRENT DATA

Pumping Unit
Tubing
Pump Size
Rod string
Remarks
Well was P&A'd in 1977.

Gallup perforations were plugged in 1975. Cement top in casing calculated at 4585'.
Casing shot off at 1180'
50 sk plug set across casing stub, Pictured Cliffs, and Fruitland Coal.
35 sk plug placed over Ojo Alamo.
25 sk plug placed over surface casing shoe.
10 sk plug set at surface.

Date Last Revised: 8/9/93

# Giant Exploration & Production Company

Well Bore Diagram

**WELL NAME** Carson Unit Well No. 43-14

**LOCATION** 1980' FSL, 660' FEL **SECTION** 14 **T** 25 N **R** 12 W

**COUNTY** San Juan **STATE** New Mexico

**GLE** 6406.55'

**KBE** 6416.10'

**DF** 6414.90'

## SURFACE CASING

Hole Size: 12-1/4"

Casing: 8-5/8", 24#, J-55

Casing Set @ 103' with 100 sks cement containing 2% CaCl.

## FORMATION TOPS

| | |
|---|---|
| Pictured Cliffs | 1248' |
| Lewis | 1419' |
| Cliffhouse | 1593' |
| Menefee | 2084' |
| Point Lookout | 3700' |
| Mancos | 3871' |
| Gallup | 4777' |

**CEMENT TOP** 4025' (Calc.)

## PERFORATIONS

4874'-99'

4911'-16'

4945'-68'

4973'-89'

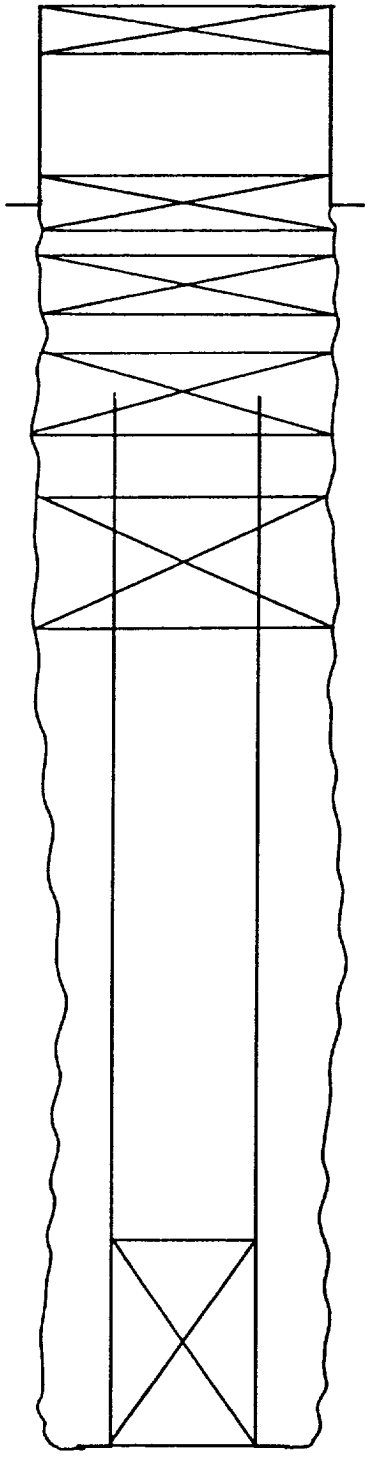
**PBD**

## PRODUCTION CASING

Hole Size: 7-7/8"

Casing: 4-1/2", 9.5#

Casing Set @ 5023' with 150 sks cement containing 4% gel.



5025' **TD**

## WELL HISTORY

Spud date: 1/10/58

Original owner: Shell Oil Co.

IP 2/28/58 BOPD 120 BWPD -

MCFD 72 GOR 600

Completion Treatment:

Frac w/50,000 gal crude and 1 #/gal 20/40 mesh sand.

## CURRENT DATA

Pumping Unit

Tubing

Pump Size

Rod string

Remarks

Well was P&A'd in 1977.

25 sk plug set across Gallup perfs. Backed tubing off at 1603' (anchor was stuck). Perf'd at 1220'. Spotted 50 sk plug across Pictured Cliffs and Fruitland Coal. Shot casing off at 720'. Set 35 sk plug across csg stub. 35 sk plug placed over Ojo Alamo. 25 sk plug placed over surface casing shoe. 10 sk plug set at surface.

Date Last Revised: 8/9/93

sa. in testing labo..y, inc.

907 WEST APACHE • P O BOX 2079 • FARMINGTON, NEW MEXICO

PHONE
327-4966

Date June 10, 1977

eport to Hixon Development Company

equested by A. Kuchera, Mgr. Sompled by Hixon Personnel

oject CBU #5 Location NW NW Sec. 6, T25N, R12W

ource of Material Lower Gallup Produced Water

Lab No. 24509 Water Analysis for Petroleum Engineering

**TEST RESULTS**

## WATER ANALYSIS FOR PETROLEUM ENGINEERING

| nstituent | |
|---|---|
| tal Solids | 2263 ppm |
| | 7.25 |
| sistivity | 2.94 ohms/meter @70°F |
| nductivity | 3,400 micromhos/cm @ 70°F |

| Constituents | Meq/L | ppm |
|---|---|---|
| **Cations** | | |
| Sodium | 29.3 | 674 |
| Calcium | 2.3 | 45 |
| Magnesium | 0.5 | 6 |
| Iron | neg. | 3 |
| Barium | 0 | 0 |
| **Anions** | | |
| Chloride | 4.1 | 145 |
| Bicarbonate | 4.0 | 244 |
| Carbonate | 0 | 0 |
| Hydroxide | 0 | 0 |
| Sulfate | 24.0 | 1150 |

mments

ssentially this is a 0.2% sodium
lfate solution.

LAWRENCE A. BREWER
REGISTERED
PROFESSIONAL ENGINEER AND LAND SURVEYOR
3122
STATE OF NEW MEXICO

Copies to Hixon Development Co. (3)
P.O. Box 2810
Farmington, New Mexico 87401

Certified by:

Form 3160-5
(June 1990)

FORM APPROVED
Budget Bureau No. 1004-0135
Expires: March 31, 1993

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

## SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir, Use "APPLICATION FOR PERMIT - -" for such proposals

SUBMIT IN TRIPLICATE

5. Lease Designation and Serial No.
SF ~~070864~~ 078064

6. If Indian, Allottee or Tribe Name

7. If Unit or CA. Agreement Designation
Carson Unit

1. Type of Well
[ ] Oil Well [ ] Gas Well [X] Other Water Injection Well

8. Well Name and No.
Carson Unit #23-13

2. Name of Operator
Giant Exploration & Production Company

9. API Well No.
30-045-05371

3. Address and Telephone No.
P.O. Box 2810, Farmington, New Mexico 87499 (505)326-3325

10. Field and Pool, or Exploratory Area
Bisti Lower Gallup

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)
1980' FSL, 1980' FWL, Sec. 13, T25N, R12W

11. County or Parish, State
San Juan, New Mexico

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

| TYPE OF SUBMISSION | TYPE OF ACTION | |
|---|---|---|
| [ ] Notice of Intent | [ ] Abandonment | [ ] Change of Plans |
| [X] Subsequent Report | [ ] Recompletion | [ ] New Construction |
| [ ] Final Abandonment Notice | [ ] Plugging Back | [ ] Non-Routine Fracturing |
| | [ ] Casing Repair | [ ] Water Shut-Off |
| | [ ] Altering Casing | [X] Conversion to Injection |
| | [ ] Other _____ | (Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.) |

13. Describe Proposed or Completed Operations (Clearly state all pertinent dates, including estimated date of starting any proposed work. If well is directionaly drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

The subject well was converted to injection as follows:

1) Tripped in the hole with overshot and 2-3/8" tubing.
2) Latched onto fish. Pulled free. Tripped out of the hole with tubing and old packer.
3) Cleaned out fill to 4901'. Isolated leaking casing interval from 1952'-3713'.
4) Acidized existing perforations (4871'-4900') with 1000 gal 15% HCl.
5) Installed injection packer with pump out plug at 4787'.
6) Installed 3-1/2", 8.81# liner with isolating packers. Top packer at 1831'. Bottom packer at 3796'. Tested injection packer and isolating packers. Held.
7) Tripped in the hole with 1-1/2" internal plastic coated tubing. Filled casing with packer fluid. Pumped out plug.
8) Released packer. Spaced out tubing. Reset packer at 4813'.
9) Performed mechanical integrity test. Tested to 300 psi for 30 min. Held. Denny Fouse of NMOCD witnessed test.

14. I hereb
Signed _____ Title Vice President Operations Date JAN 0 6 1994
Jeffrey R. Vaughan

(This space for Federal or State office use)

Approved by _____ Title _____ Date _____

Conditions of aproval, if any:

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, fictious or fraudulent statements or representations as to any maner within its jurisdiction.

*See Instruction on Reverse Side

RECEIVED
JAN 1 0 1994
OIL CON. DIV.
DIST. 3

ACCEPTED FOR RECORD
JAN 1 0 1994
FARMINGTON DISTRICT OFFICE
BY

NMOCD