

RELEASE DATE 6-9-92

OIL CONSERVATION DIVISION
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GIANT

GIANT EXPLORATION AND
PRODUCTION COMPANY

P.O. Box 2810
Farmington, New Mexico
87499

505
326-3325

May 22, 1992

New Mexico Oil Conservation Division
State Land Office Building
P.O. Box 2088
Santa Fe, New Mexico 87504

Subject: Application for Authorization for Injection
Colleen Simpson Well No. 1
330' FSL, 1650' FEL
Sec. 25, T25N, R12W
San Juan County, New Mexico

10500

Dear Sir:

Enclosed for your approval is our Application for
Authorization for Injection for the above referenced well.
Upon receipt, an Affidavit of Publication will be forwarded
to you.

Very truly yours,



Jeffrey R. Vaughan
Engineering Manager

EJB/das

Enclosure

Case 10500

APPLICATION FOR AUTHORIZATION TO INJECT

I. Purpose: 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: John C. Corbett/Vice President Phone: (505) 326-3325

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

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

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

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

VII. Attach data on the proposed operation, including:

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

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

IX. Describe the proposed stimulation program, if any.

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

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

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

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

XIV. Certification

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

Name: Jeffrey R. Vaughan Title Engineering Manager

Signature:  Date: MAY 22 1992

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

III. WELL DATA

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

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

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

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

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

XIV. PROOF OF NOTICE

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

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

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

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

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

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

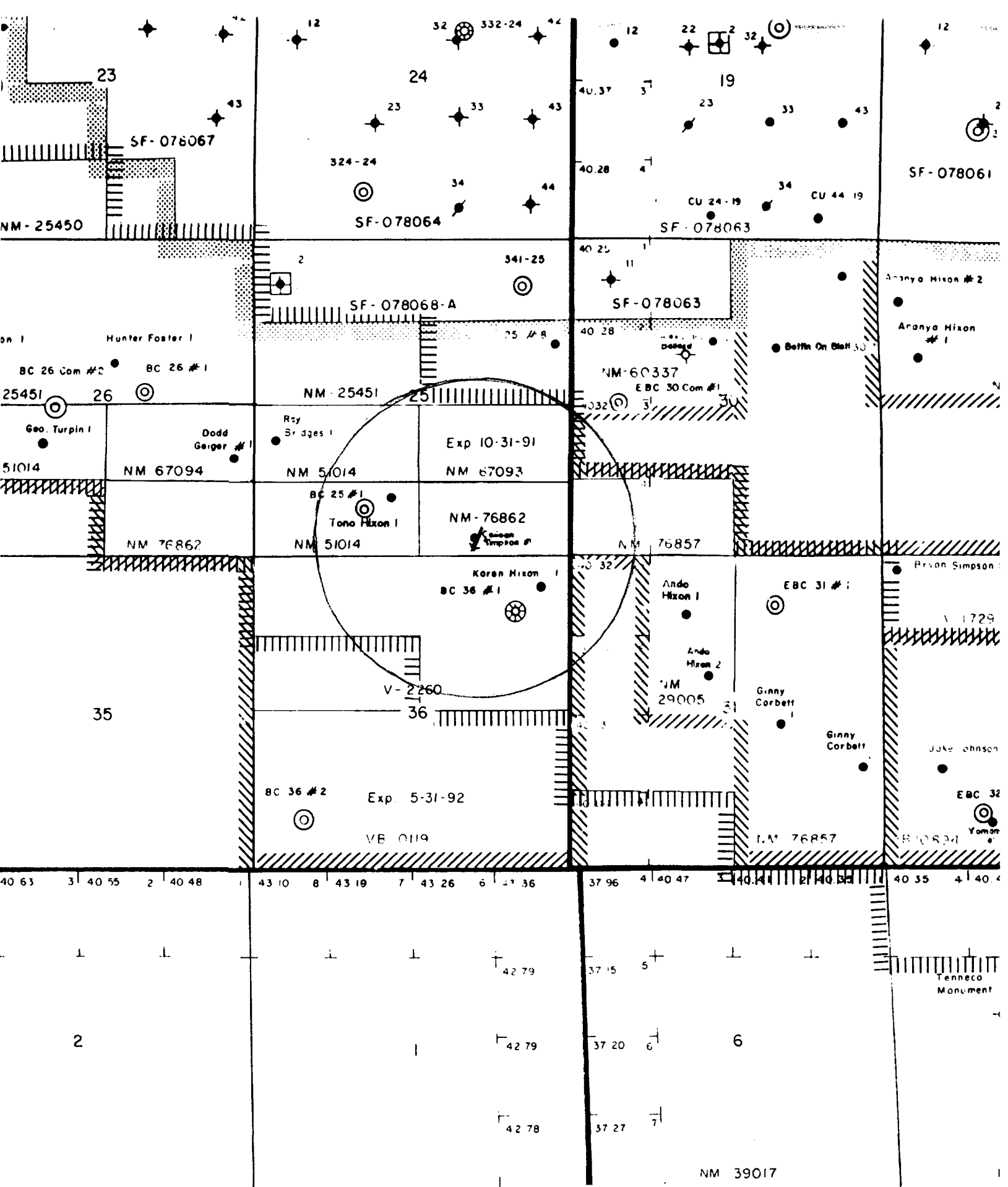
Colleen Simpson Well No. 1
SW/4, SE/4, Sec. 25, T25N, R12W
San Juan County, New Mexico

- 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 attached as follows:

Karen Hixon Well No. 1.
Tono Hixon Well No. 1
- VII.
 1. Proposed average injection rate is 500 bwpd, expected maximum injection rate is 1200 bwpd.
 2. This system will be open.
 3. Average injection pressures are expected to be in the 500-1250 psi range. Maximum injection pressure will be 1250 psi.
 4. Water injection is previously produced water from the Gallup Formation.
 5. This well will be used for secondary recovery.
- VIII. The injection zone is the Lower Gallup sandstone. This zone is to be 10' in thickness with a top of 4747' 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.

Giant Exploration & Production Company
Application for Authorization for Injection
Page 2

- 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 will be used for secondary recovery.
- XIII. A copy of this application has been sent by certified mail to the following leasehold operators:
 - Nassau Resources, Inc.
650 S. Cherry, Suite 1225
Denver, Colorado 80222-1894
 - Bureau of Land Management
1235 La Plata Highway
Farmington, New Mexico 87401
 - Bureau of Land Management
Trust for the Navajo Tribe
1235 La Plata Highway
Farmington, New Mexico 87401
- XIV. Certification shown on Application.



COLLEEN SIMPSON #1
 Application for Authorization
 to Inject
 Wells within 1/2 mile radius

R

WELL DATA SHEET

Well Name: Colleen Simpson Well No. 1

Legal Description: 330' FSL, 1650' FEL
Sec. 25, T25N, R12W
San Juan County, New Mexico

Well Type: Oil Well

Spud Date: 02-19-89

Surface Casing Hole Size: 12-1/4"
Surface Casing Size: 8-5/8"
Surface Casing Depth: 266.76'

Cementing Record: 206.5 cu. ft.

Production Casing Hole Size: 7-7/8"
Production Casing Size: 5-1/2"
Production Casing Depth: 4946.81'

Cementing Record: 1733.65 cu. ft.

Perforations: 4747' - 4757'

Plug Back Depth: 4875' KB

Total Depth: 4950'

Tubing: 2-3/8" plastic lined tubing to
4700'.

Packer: Baker Model AD-1 tension packer
or similar packer set at 4700'.

**Giant Exploration & Production
Company**
Well Bore Diagram

WELL NAME Colleen Simpson Well No. 1
LOCATION 330' FSL, 1650' FEL **SECTION** 25 **T** 25 N **R** 12 W
COUNTY San Juan **STATE** New Mexico

SURFACE CASING

Hole Size: 12-1/4"
 Casing: 8-5/8", 24#, J-55, ST&C
 Casing Set @ 266.76' with
175 sx Class "B" containing
2% CaCl
Cement to surface

FORMATION TOPS

<u>Fruitland Basal Coal</u>	<u>1650</u>
<u>Pictured Cliffs</u>	<u>1671'</u>
<u>Lewis</u>	<u>1763'</u>
<u>Cliff House</u>	<u>2687'</u>
<u>Menefee</u>	<u>2851'</u>
<u>Point Lookout</u>	<u>3871'</u>
<u>Mancos</u>	<u>4505'</u>
<u>Upper Gallup</u>	<u>5109'</u>
<u>Lower Gallup</u>	<u>5270'</u>
<u>First S. Bisti Sand</u>	<u>5297'</u>

CEMENT TOP surface

PERFORATIONS

4747' - 4757' with 4 JSPF

PBD 4875'

PRODUCTION CASING

Hole Size: 7-7/8"
 Casing: 5-1/2", 15.5#, K-55, LT&C & ST&C
 Casing Set @ 4928.63' with
Lead 400 sx Class B with
3% Extender and 1/4#/sk
Cellophane. Tail 200 sx
Class B with 2% CaCl2 and
1/4#/sk Cellophane

GLE 6385'
KBE 6397'
DF 6396'

WELL HISTORY

Spud date: 2/19/89
 Original owner: Hixon Development
 IP 4/25/89 BOPD 41 BWPD 2.8
 MCFD 18 GOR 439
 Completion Treatment: 3/2/89
 Frac'd w/ 60,000# 12/20 Brady
sand and 1446 bbl lease crude

CURRENT DATA

Pumping Unit American 114
 Tubing 149 jts 2-3/8"
 Pump Size 2" x 1-1/2" x 16'
 Rod string (191) 3/4"
 Remarks _____

4950' TD

Date Last Revised: 3/2/92

4947' TD **Logger**

WELL DATA SHEET

Well Name: Karen Hixon Well No. 1

Legal Description: 500' FNL, 400' FEL
Sec. 36, T25N, R12W
San Juan County, New Mexico

Well Type: Oil Well

Spud Date: 12-02-87

Surface Casing Hole Size: 12-1/4"
Surface Casing Size: 8-5/8"
Surface Casing Depth: 263' KB

Cementing Record: 206.5 cu. ft.

Production Casing Hole Size: 7-7/8"
Production Casing Size: 5-1/2"
Production Casing Depth: 4946.66' KB

Cementing Record: 1168 cu. ft.

Perforations: 4756' - 4766'

Plug Back Depth: 4899' KB

Total Depth: 4950' KB

**Giant Exploration & Production
Company
Well Bore Diagram**

WELL NAME Karen Hixon Well No. 1
LOCATION 500' FNL, 400' FEL **SECTION** 36 **T** 25N **R** 12W
COUNTY San Juan **STATE** New Mexico

SURFACE CASING

Hole Size: 12-1/4"
 Casing: 8-5/8", 24#, J-55, 8rd, ST&C
 Casing Set @ 264.11' KB with
175 sks Class B containing
2% CaCl

FORMATION TOPS

<u>Pictured Cliffs</u>	<u>1128'</u>
<u>Lewis</u>	<u>1289'</u>
<u>Cliffhouse</u>	<u>1894'</u>
<u>Menefee</u>	<u>2392'</u>
<u>Point Lookout</u>	<u>3592'</u>
<u>Upper Mancos</u>	<u>3735'</u>
<u>Upper Gallup</u>	<u>4642'</u>
<u>Lower Gallup</u>	<u>4736'</u>

CEMENT TOP 700' by temp. log

PERFORATIONS

4756'- 4766' w/ 4JSPF

PBD 4899'

PRODUCTION CASING

Hole Size: 7-7/8"
 Casing: 5-1/2", 15.5#, K-55, 8rd, LT&C
 Casing Set @ 4946.66 KB with
400 sks Class B with 3%
Thriftylite and 1/4#/sk
Cellophane. Tailed in with
200 sks Class H with 1% CF-9
and 1/4#/sk Cellophane

GLE 6401'

KBE 6413'

DF 6412'

WELL HISTORY

Spud date: 12/02/87
 Original owner: Hixon Development
 IP 12/24/87 BOPD 224 BWPD 12.8
 MCFD 80 GOR 357
 Completion Treatment: _____
 Acidized with 500 gal. 15% HCl
 Frac'd with 100,000# 20/40
 Brady sand and 78,400 SlickH2O

CURRENT DATA

Pumping Unit Lufkin M160D
 Tubing 147 jts of 2-3/8", 4.7#
 Pump Size 2" x 1-1/2" x 16'
 Rod string (126) 3/4", (63) 7/8"
 Remarks _____

4950' TD

Date Last Revised: 2/21/92

4923' TD Logger

WELL DATA SHEET

Well Name: Tono Hixon Well No. 1

Legal Description: 990' FSL, 2310' FWL
Sec. 25, T25N, R12W
San Juan County, New Mexico

Well Type: Oil Well

Spud Date: 03-18-87

Surface Casing Hole Size: 12-1/2"
Surface Casing Size: 8-5/8"
Surface Casing Depth: 266.39'

Cementing Record: 189 cu. ft.

Production Casing Hole Size: 7-7/8"
Production Casing Size: 5-1/2"
Production Casing Depth: 4952'

Cementing Record: 1784 cu. ft.

Perforations: 4644' - 4654'
4750' - 4760'
4774' - 4780'

Plug Back Depth: 4906' KB

Total Depth: 4954' KB

**Giant Exploration & Production
Company**
Well Bore Diagram

WELL NAME Tono Hixon Well No. 1
LOCATION 990' FSL, 2310' FWL **SECTION** 25 T 25 N R 12 W
COUNTY San Juan **STATE** New Mexico

SURFACE CASING

Hole Size: 12-1/4"
 Casing: 8-5/8", 24#, J-55
 Casing Set @ 266.39' with
160 sx Class "B" containing
2% CaCl.

FORMATION TOPS

<u>Fruitland Basal Coal</u>	<u>1097'</u>
<u>Pictured Cliffs</u>	<u>1114'</u>
<u>Lewis</u>	<u>1296'</u>
<u>Cliff House</u>	<u>1898'</u>
<u>Menefee</u>	<u>2534'</u>
<u>Point Lookout</u>	<u>3578'</u>
<u>Mancos</u>	<u>3728'</u>
<u>Upper Gallup</u>	<u>4630'</u>
<u>Lower Gallup</u>	<u>4714'</u>
<u>First S. Bisti Sand</u>	<u>4750'</u>

CEMENT TOP Surface

PERFORATIONS

4774'-4780' with 13 holes
4750'-4760' with 21 holes
4644'-4654' with 21 holes

PBD 4896'

PRODUCTION CASING

Hole Size: 7-7/8"
 Casing: 5-1/2", 15.5#, K-55, LT&C
 Casing Set @ 4952.28' with
Lead 400 sx Class B with
3% Thriftylite and 1/4#/sk
Cello-Seal. Tail 200 sx
Class B with 2% CaCl and
1/4#/sk Cello-Seal

GLE 6398'

KBE 6410'

DF 6409'

WELL HISTORY

Spud date: 3/18/87
 Original owner: Hixon Development
 IP 4/15/87 BOPD 114 BWPD 0
 MCFD 26 GOR 231
 Completion Treatment: 2000 gallons of 15% HCl

CURRENT DATA

Pumping Unit American 228-213-86
 Tubing 145 jts 2-3/8"
 Pump Size 2"x1-1/2"x16'
 Rod string 186 jts 3/4"
 Remarks Frac'd in 1220 bbls lease
crude and 50,000# 12/20
Brady sand
Fish in hole - swab mandrel
and sinker bar 2/7/90
fill at 4866' on 2/5/90

4954' TD

Date Last Revised: 2/22/92

4932' TD Logger