Form 9-331
(May 1963)

# UNITED STATES
# DEPARTMENT OF THE INTERIOR
## GEOLOGICAL SURVEY

SUBMIT IN TRIPLICATE* (Other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R1424.

5. LEASE DESIGNATION AND SERIAL NO.: 14-20-603-1292

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

## 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.)

RECEIVED
NOV 15 1982
GEOLOGICAL SURVEY
FARMINGTON, N. M.

1. OIL WELL [X] GAS WELL [ ] OTHER

7. UNIT AGREEMENT NAME: Central Bisti Lower Gallup Unit

2. NAME OF OPERATOR: Hixon Development Company

8. FARM OR LEASE NAME:

3. ADDRESS OF OPERATOR: P.O. Box 2810, Farmington, New Mexico 87401

9. WELL NO.: 56 W. I.

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.) At surface: 660' FSL, 660' FWL, Section 5, T25N, R12W

10. FIELD AND POOL, OR WILDCAT: Bisti Lower Gallup

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: Section 5, T25N, R12W

14. PERMIT NO.:

15. ELEVATIONS (Show whether DF, RT, GR, etc.): 6201' GLE

12. COUNTY OR PARISH: San Juan

13. STATE: NM

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) Resume Water Injection | | | [X] | (Other) | | | |

(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.)*

It is proposed to resume water injection in the Lower Gallup sand in this well. The perforations 4808'-32', 4854'-60', 4876'-86' and 4890'-4902' will be squeezed with 150 sacks cement. The well will be cleaned out to 4843' and the interval 4808'-32' reperforated with 48 0.41" holes. A packer will be set on tubing above the injection interval, the perfs stimulated with 1000 gallons 15% HCl acid and the well placed on injection. The casing will be tested and repaired if required prior to injection. Well name will be changed to WI-56. Please find the supplemental information attached.

RECEIVED
NOV 18 1982
OIL CON. COM.
DIST. 3

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

SIGNED [signature] TITLE Petroleum Engineer DATE 11/11/82

(This space for Federal or State office use)

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:

NMOCC

APPROVED
NOV 17 1982
JAMES F. SIMS
DISTRICT ENGINEER

*See Instructions on Reverse Side

R 1414

Hixon Development Company
Central Bisti Lower Gallup Unit Well No. 56
Supplemental Information

1. Name - CBU Well No. 56. (Well name to be changed to WI-56). Federal Minerals. Unit area. Refer to attached sundry notice.

2. There will be 600 BWPD of water injected into the Lower Gallup perforations 4808'-32'. Source of water is recycled Lower Gallup injection water. Water analysis is attached.

3. Water will be injected into the Unitized Lower Gallup sand. This well has a history of water injection into the Lower Gallup from July 1959 to January 1964. From 1964 to the present it has been a producing Lower Gallup well. Because of declining bottom hole pressure in this Unit area the well will be returned to pressure maintenance. It is to be used for secondary recovery operations and not waste water disposal. The Lower Gallup sand is isolated by impermeable Mancos shale above and below. Injection water is confined to the Lower Gallup sand. Calculated cement top is 3830'.

4. The injection Lower Gallup interval has oil, gas and previously injected water. The injected fluid is not reactive with the Lower Gallup sand.

5. Usable water in this wellbore is to the base of the Ojo Alamo about 110'. Attempts to drill a fresh water utility well in this area have proved the Ojo Alamo to be dry.

6. Refer to the attached wellbore diagram.

7. Refer to the attached wellbore diagram.

8. Refer to sundry notice and wellbore diagram. Anticipated injection pressure is 600 to 1000 psi. An amine-oxygen scavanger packer fluid will be placed in the tubing casing annulus above the packer to surface. Injection pressures will be held to less than fracture pressure.

9. The system is and will be monitored with continuous recording pressure charts and rate meters, taking of tubing and casing pressures, tracer surveys if required.

**WELL NAME** CBU WELL NO. 56 (GI-6)

**LOCATION** 660' FSL, 660' FWL **SECTION** 5 **T** 25N **R** 12W

**CURRENT STATUS:** PUMPING

**GLE** 6201'

**RBM** 6213'

**DF** 6211'

## SURFACE CASING

Hole size: 15"

Casing: 10-3/4" 32.75# H-40

Casing set @ 208'

## FORMATION TOPS

Fruitland

Pictured Cliffs 1152'

Lewis

Cliffhouse

Menefee

Point Lookout 3600'

Mancos

Upper Gallup 4627'

Lower Gallup

## CEMENT TOP

3830' CaCl

## PERFORATIONS

(7/5/59)

4808'-32', 4854'-60'
4876'-86', 4890'-4902'

PBD 4953'

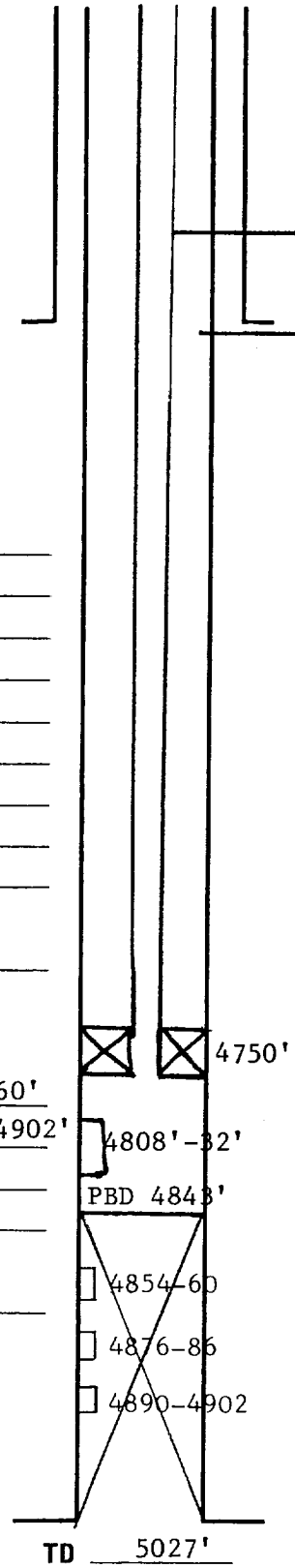
## PRODUCTION CASING

Hole size: 8-3/4"

Casing: 5/½" 15.5# & 14# J-55

Casing set @ 4997' w/250 sx

23 jts 5½" 15.5 LT&C
98 jts 5½" 14# ST&C




## WELL HISTORY

Spud date: 8/23/56

Original owner: Phillips

IP 450 BOPD ____ BWPD ____

GOR

Completion treatment: 10/14/56

## CURRENT DATA

Pumping Unit American 160

Tubing 2-3/8"

Pump size 2 x 1-½ x 16

Rod string 138 of 3/4 & 49 of 7/8

Remarks Well converted to LPG 6/13/59
Set Baker Model 415D packer @ 4773', latching sub & seal nipple
Perforated 7/5/59, Reran Model D at 4760'. Type "E" latch-in seal assembly. Model D driven to 4907' 12/13/63.

Sun Gulf Testing Laboratories Inc.

907 WEST APACHE • P.O. BOX 2075 • FARMINGTON, NEW MEXICO

PHONE
327-4966

Date June 10, 1977

Report to Hixon Development Company

Requested by A. Kuchera, Mgr. Sampled by Hixon Personnel

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

Source of Material Lower Gallup Produced Water

Lab No. 24509 Water Analysis for Petroleum Engineering

**TEST RESULTS**

## WATER ANALYSIS FOR PETROLEUM ENGINEERING

| Constituent | |
|---|---|
| Total Solids | 2263 ppm |
| pH | 7.25 |
| Resistivity | 2.94 ohms/meter @70°F |
| Conductivity | 3,400 micromhos/cm @ 70°F |

Comments

Essentially this is a 0.2% sodium sulfate solution.

| Constituents | | |
|---|---|---|
| **Cations** | **Meg/L** | **ppm** |
| 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 |

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

Certified by:

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

TEST NO. 22096

Form 360-7