

U. S. LAND OFFICE ----- Jicarilla Apache  
SERIAL NUMBER -----  
Dulce, New Mexico  
LEASE OR PERMIT TO PROSPECT -----

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

Cont #140

ont #112  
R  
**RECEIVED**  
FEB 10 1958  
OIL CON. COM.  
DIST. 3  
WELL

# LOG OF OIL OR GAS WELL

## LOCATE WELL CORRECTLY

Company HONOLULU OIL CORPORATION Address DRAWER 1391, MIDLAND, TEXAS  
Lessor or Tract Jicarilla Apache Tribe "A" Field Wildcat State New Mexico  
Well No. 1 Sec. 26 T. 26N R. 3W Meridian NMPN County Rio Arriba  
Location 1130 ft. [N] of N Line and 1130 ft. [E] of E Line of Sec. 26 Elevation 7400 (Derrick floor relative to RDF)

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

Signed George C. Hoy

Date February 4, 1958 Title Division Development Engineer  
The summary on this page is for the condition of the well at above date.

Commenced drilling August 4, 1957 Finished drilling November 26, 1957

## OIL OR GAS SANDS OR ZONES

(Denote gas by G)

No. 1, from 3900 to 3970 011      No. 4, from \_\_\_\_\_ to \_\_\_\_\_  
No. 2, from \_\_\_\_\_ to \_\_\_\_\_      No. 5, from \_\_\_\_\_ to \_\_\_\_\_  
No. 3, from \_\_\_\_\_ to \_\_\_\_\_      No. 6, from \_\_\_\_\_ to \_\_\_\_\_

## IMPORTANT WATER SANDS

No. 1, from 3380 to 3480 No. 3, from 3480 to 3580  
No. 2, from 3580 to 3680 No. 4, from 3680 to 3780

## CASING RECORD

| Size casing | Weight per foot | Threads per inch | Make  | Amount   | Kind of shoe    | Cut and pulled from | Perforated |      | Purpose    |
|-------------|-----------------|------------------|-------|----------|-----------------|---------------------|------------|------|------------|
|             |                 |                  |       |          |                 |                     | From—      | To—  |            |
| 13-3/8      | 48              | 8                | Met's | 2 1/2    | Outside of hole | not cut             | 1300       | 1500 | Production |
| 9-5/8       | 36              | 8                | Met's | 1 1/2    | Outside of hole | not cut             | 1300       | 1500 | Production |
| 5-1/2       | Set as          | liner from       | 5010' | to 6221' | and cemented    |                     |            |      | Production |
| 2"          | 4.70            | 8                |       | 3975     |                 |                     |            |      | Tubing     |

## MUDDING AND CEMENTING RECORD

| Size casing | Where set                                                          | Number sacks of cement | Method used | Mud gravity  | Amount of mud used |
|-------------|--------------------------------------------------------------------|------------------------|-------------|--------------|--------------------|
| 13-3/8      | 252                                                                | 250 sack               | pump & plug | water        | -                  |
| 9-5/8       | 409 1/2                                                            | 400 sack               | pump & plug | 9.0% per gal | -                  |
| 5-1/2       | Set as liner from 4010' to 4224' and cemented with 625 sack cement |                        |             |              |                    |

## PLUGS AND ADAPTERS

Heaving plug—Material none used Length \_\_\_\_\_ Depth set \_\_\_\_\_  
Adapters—Material none used Size \_\_\_\_\_

## SHOOTING RECORD

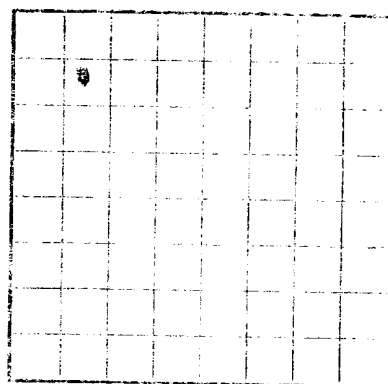
| Size     | Shell used | Explosive used | Quantity | Date | Depth shot | Depth cleaned out |
|----------|------------|----------------|----------|------|------------|-------------------|
| 254 4205 |            |                |          |      |            |                   |
|          |            |                |          |      |            |                   |
|          |            |                |          |      |            |                   |
|          |            |                |          |      |            |                   |
|          |            |                |          |      |            |                   |

## TOOLS USED

Rotary tools were used from 0 feet to 84.6 feet, and from - feet to - feet  
Cable tools were used from - feet to - feet, and from - feet to - feet  
not used DATES

## DATES

|                                                                                                                                                                                                   |                                                                                                                                                               |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>Put to producing _____, 19____</p> <p>The production for the first 24 hours was _____</p> <p>emulsion; _____ % water; and _____ % sediment.</p> <p>If gas well, cu. ft. per 24 hours _____</p> | <p>February 1</p> <p>barrels of fluid of which _____ % was oil; _____ %</p> <p>Gravity, °Bé. _____</p> <p>Gallons gasoline per 1,000 cu. ft. of gas _____</p> |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|



LOCATE WELL CORRECTLY

LOG OF OIL OR GAS WELL

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY



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

Given \_\_\_\_\_  
Signed \_\_\_\_\_

Location \_\_\_\_\_ ft. [N] of \_\_\_\_\_ line and \_\_\_\_\_ ft. [E] of \_\_\_\_\_ line of \_\_\_\_\_  
Well No. \_\_\_\_\_ Sec. \_\_\_\_\_ T. \_\_\_\_\_ R. \_\_\_\_\_ N. \_\_\_\_\_  
District or Tract \_\_\_\_\_  
County \_\_\_\_\_ State \_\_\_\_\_

Address \_\_\_\_\_  
City \_\_\_\_\_ State \_\_\_\_\_

Commenced drilling \_\_\_\_\_, 19\_\_\_\_  
Finished drilling \_\_\_\_\_, 19\_\_\_\_  
The summary on this page is for the condition of the well at above date.

Oil or Gas Sands or Zones

1. 3472-3520 Open 1 hr. Tool stuck. R covered 100' drilling mud.

2. 8224-8309 Open 3 hrs. Gas to surface in 30 minutes. R covered 100' drilling mud.

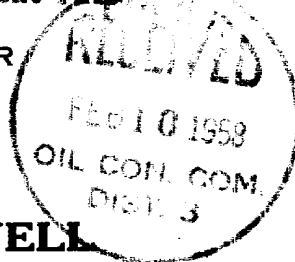
It is of the greatest importance to have a complete history of the well. Please state in detail the dates of redrilling, together with the reasons for the work and its results. If there were any changes made in the casing, state fully, and if any casing was "spliced" or left in the well, give its size and location. If the well has been dynamited, give date, size, position, and number of shots. If plugs or bridges were put in to test for water, state kind of material used, position, and results of pumping or bailing.

## HISTORY OF OIL OR GAS WELL

| DATE      | DESCRIPTION    | QUANTITY | UNIT    | REMARKS                        |
|-----------|----------------|----------|---------|--------------------------------|
| 8283-8287 | Recovered 11.1 | 11.1     | gallons | Heavy sandstone                |
| 8287-8309 | Recovered 25.1 | 25.1     | gallons | Lightly porous sandy sandstone |
| 8309-8326 | Recovered 17.1 | 17.1     | gallons | Lightly porous sandy sandstone |
| 8327-8345 | Recovered 17.1 | 17.1     | gallons | Lightly porous sandy sandstone |
| 8346-8386 | Recovered 20.1 | 20.1     | gallons | Lightly porous sandy sandstone |
| 8388-8413 | Recovered 25.1 | 25.1     | gallons | Lightly porous sandy sandstone |
| 8414-8471 | Recovered 9.1  | 9.1      | gallons | Lightly porous sandy sandstone |
| 8501-8595 | Recovered 17.1 | 17.1     | gallons | Lightly porous sandy sandstone |

U. S. LAND OFFICE Jicarilla Apache  
SERIAL NUMBER Dulce, New Mexico  
LEASE OR PERMIT TO PROSPECT \_\_\_\_\_UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

Cont #110



## LOG OF OIL OR GAS WELL

LOCATE WELL CORRECTLY

Company HONOLULU OIL CORPORATION Address DENVER 1391, MIDLAND, TEXAS  
Lessor or Tract Jicarilla Apache Tribe "A" Field Wildcat State New Mexico  
Well No. 1 Sec. 26 T. 26N R. 3W Meridian NMPM County Rio Arriba  
Location 1130 ft. N of N Line and 1130 ft. E of E Line of Sec. 26 Elevation 7400 RDP  
(Derrick floor relative to base of well)

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

Signed George R. Hay

Date February 4, 1958 Title Division Development Engineer  
The summary on this page is for the condition of the well at above date.

Commenced drilling August 4, 1957 Finished drilling November 26, 1957

## OIL OR GAS SANDS OR ZONES

(Denote gas by G)

No. 1, from 3900 to 3970 Oil  
No. 2, from \_\_\_\_\_ to \_\_\_\_\_  
No. 3, from \_\_\_\_\_ to \_\_\_\_\_  
No. 4, from \_\_\_\_\_ to \_\_\_\_\_  
No. 5, from \_\_\_\_\_ to \_\_\_\_\_  
No. 6, from \_\_\_\_\_ to \_\_\_\_\_

## IMPORTANT WATER SANDS

No. 1, from 3380 to 3480  
No. 2, from \_\_\_\_\_ to \_\_\_\_\_  
No. 3, from \_\_\_\_\_ to \_\_\_\_\_  
No. 4, from \_\_\_\_\_ to \_\_\_\_\_

## CASING RECORD

| Size casing | Weight per foot                                | Threads per inch | Make  | Amount | Kind of shoe | Cut and pulled from | Perforated |      | Purpose           |
|-------------|------------------------------------------------|------------------|-------|--------|--------------|---------------------|------------|------|-------------------|
|             |                                                |                  |       |        |              |                     | From—      | To—  |                   |
| 13-3/8      | 48                                             | 8rnd             | Nat'l | 236    | Guide        | not cut             | not perf.  |      | surface           |
| 9-5/8       | 36                                             | 8rnd             | Nat'l | 4083   | Guide        | not cut             | 3888       | 3960 | Production casing |
| 5-1/2       | Set as liner from 4010' to 6224' and cemented. |                  |       |        |              |                     |            |      |                   |
| 2"          | 4.70                                           | 8rnd             | -     | 3975   | -            | -                   | -          | -    | Production tubing |

## MUDDING AND CEMENTING RECORD

| Size casing | Where set                                                           | Number sacks of cement | Method used | Mud gravity | Amount of mud used |
|-------------|---------------------------------------------------------------------|------------------------|-------------|-------------|--------------------|
| 13-3/8      | 252                                                                 | 250 sack               | pump & plug | water       |                    |
| 9-5/8       | 4094                                                                | 400 sack               | pump & plug | 9.0 per gal | -                  |
| 5-1/2       | Set as liner from 4010' to 6224' and cemented with 625 sack cement. |                        |             |             |                    |

## PLUGS AND ADAPTERS

Heaving plug—Material none used Length \_\_\_\_\_ Depth set \_\_\_\_\_  
Adapters—Material none used Size \_\_\_\_\_

## SHOOTING RECORD

| Size     | Shell used | Explosive used | Quantity | Date | Depth shot | Depth cleaned out |
|----------|------------|----------------|----------|------|------------|-------------------|
| not shot |            |                |          |      |            |                   |

## TOOLS USED

Rotary tools were used from \_\_\_\_\_ feet to \_\_\_\_\_ feet, and from \_\_\_\_\_ feet to \_\_\_\_\_ feet  
Cable tools were used from \_\_\_\_\_ feet to \_\_\_\_\_ feet, and from \_\_\_\_\_ feet to \_\_\_\_\_ feet  
not used

## DATES

\_\_\_\_\_, 19\_\_\_\_ Put to producing \_\_\_\_\_, 19\_\_\_\_  
The production for the first 24 hours was \_\_\_\_\_ barrels of fluid of which \_\_\_\_\_ % was oil; \_\_\_\_\_ %  
emulsion; \_\_\_\_\_ % water; and \_\_\_\_\_ % sediment. Gravity, °Bé. 100 0  
If gas well, cu. ft. per 24 hours \_\_\_\_\_ Gallons gasoline per 1,000 cu. ft. of gas \_\_\_\_\_  
Rock pressure, lbs. per sq. in. \_\_\_\_\_

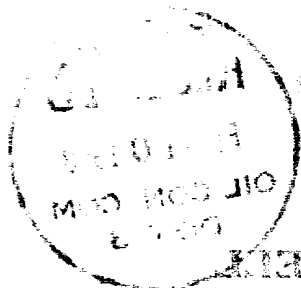
## EMPLOYEES

P. E. Wright Toolpusher J. A. Catt Driller  
B. L. Catt Driller W. A. Pickett Driller

## FORMATION RECORD

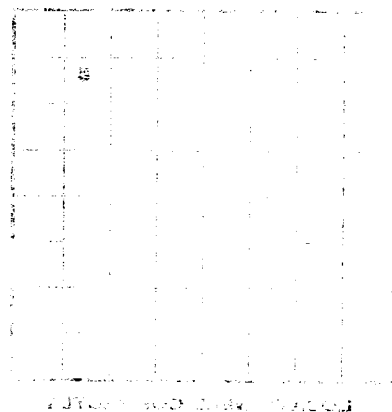
| FROM— | TO—  | TOTAL FEET | FORMATION                      |
|-------|------|------------|--------------------------------|
| 0     | 190  | 190        | Sandstone                      |
| 190   | 3360 | 3190       | Shale with sandstone stringers |
| 3360  | 3460 | 100        | Sandstone                      |
| 3460  | 3710 | 230        | Shale with sandstone stringers |
| 3710  | 3880 | 170        | Shale with coal stringers      |
| 3880  | 3960 | 100        | Sandstone (Pictured Cliff)     |
| 3960  | 4080 | 100        | Sandstone with shale stringers |
| 4080  | 5590 | 1510       | Shale                          |
| 5590  | 5700 | 110        | Sandstone                      |
| 5700  | 6010 | 310        | Shale with sandstone stringers |
| 6010  | 6190 | 180        | Sandstone                      |
| 6190  | 8030 | 1840       | Shale with sandstone stringers |
| 8030  | 8150 | 120        | Shale                          |

[OVER]



LOG OF OIL OR GAS WELL

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY



The following is a log of the well described in the accompanying map and diagram. The log is based on the information furnished by the owner of the well, and is not a statement of fact. It is the policy of the Geological Survey to publish the results of its work as soon as they are available, and to make no attempt to verify the accuracy of the information furnished by the owner of the well. The log is published as a service to the public, and is not a statement of fact. It is the policy of the Geological Survey to publish the results of its work as soon as they are available, and to make no attempt to verify the accuracy of the information furnished by the owner of the well.

Oil and gas bearing zone  
cut mud, 180' gas out mud.  
and gas cut mud, 180' gas out mud, 180' slightly oil and gas

- 3472-3520 open 1 hr. Tool stuck. Recovered 400' drilling mud.
- 8224-8309 open 3 hrs. Gas to surface in 30 minutes. Recovered 180' heavily oil

Drill Stem Test Record

It is of the greatest importance to have a complete history of the well. Please state in detail the dates of redrilling, together with the reasons for the work and its results. If there were any changes made in the casing, state fully, and if any casing was "sidetracked" or left in the well, give its size and location. If the well has been dynamited, give date, size, position, and number of shots. If plugs or bridges were put in to test for water, state kind of material used, position, and results of pumping or bailing.

10-43084-2 U. S. GOVERNMENT PRINTING OFFICE

HISTORY OF OIL OR GAS WELL

| FROM-         | TO-           | TOTAL FEET                                               | FORMATION          |
|---------------|---------------|----------------------------------------------------------|--------------------|
| 8150          | 8470          | 320                                                      | Sandstone (Dakota) |
| 8470          | 8646          | 176                                                      | Shale (Wrightson)  |
| CORRECTION    |               |                                                          |                    |
| 1. 3470-3520  | Recovered 50' | Top 11' sandstone, next 20' shale, bottom 19' sandstone. |                    |
| 2. 3840-3867  | Recovered 27' | Top 24' shale, bottom 3' sandstone.                      |                    |
| 3. 3870-3909  | Recovered 38' | Top 21' shale, bottom 17' scattered porous sandstone.    |                    |
| 4. 3909-3960  | Recovered 51' | Scattered porous sandstone.                              |                    |
| 5. 5640-5690  | Recovered 50' | Top 10' shale, bottom 40' slightly porous sandstone.     |                    |
| 6. 6010-6060  | Recovered 38' | Shaly sandstone.                                         |                    |
| 7. 6060-6090  | Recovered 30' | Shaly sandstone.                                         |                    |
| 8. 8120-8144  | Recovered 24' | Shale.                                                   |                    |
| 9. 8144-8164  | Recovered 19' | Top 15' shale, bottom 5' sandstone.                      |                    |
| 10. 8164-8189 | Recovered 25' | Top 7' sandstone, bottom 18' shale.                      |                    |
| 11. 8189-8239 | Recovered 50' | Top 43' sandy shale, bottom 7' sandstone.                |                    |
| 12. 8239-8256 | Recovered 17' | Top 6' shale, bottom 11' sandstone.                      |                    |
| 13. 8256-8263 | Recovered 7'  | Sandstone.                                               |                    |
| 14. 8263-8264 | Recovered 21' | Shaly sandstone.                                         |                    |
| 15. 8264-8309 | Recovered 25' | Slightly porous sandstone.                               |                    |
| 16. 8309-8326 | Recovered 17' | Shale.                                                   |                    |
| 17. 8327-8345 | Recovered 17' | Shale.                                                   |                    |
| 18. 8346-8388 | Recovered 20' | Slightly porous shaly sandstone.                         |                    |
| 19. 8388-8413 | Recovered 25' | Slightly porous shaly sandstone.                         |                    |
| 20. 8412-8451 | Recovered 9'  | Light sandstone.                                         |                    |
| 21. 8501-8595 | Recovered 14' | Shale.                                                   |                    |

Jicarilla "A"-1

Drilling and Completion Record

Well spudded on August 4, 1957. Set 13-3/8" casing at 252' and cemented with 250 sacks. Drilled to 4100' and ran logs. Set 9-5/8" casing at 4094' and cemented with 400 sacks. Top of cement behind casing is at 3100' by temperature survey. Drilled to 8413. Had fishing job from October 15 to November 12, 1957. Drilled to 8646'. Ran logs. Set 325 sack cement plug from 7885' to 8646'. Set 100 sack cement plug from 6190' to 6455'. Drilled out cement plug to 6335'. Ran 5-1/2" liner from 4010' to 6224' and cemented with 625 sacks. After cement had set cleaned out inside liner to 6186'. Perforated Mesa Verde formation with two jet shots per foot as follows: 5672'-5680', 5688'-5694', 5854'-5858', 5866'-5874', 5886'-5897', 5934'-5946', 6050'-6068', 6082'-6086', 6110'-6118', 6144'-6150'. Set packer on 3" tubing at 4025'. Sandfrac Mesa Verde formation with 50,000 gallons of water and 25,000 pounds of sand. Well swabbed down. No gas or oil. Set Baker cast iron retainer in 9-5/8" casing at 3983'. Squeezed all perforations with 300 sacks cement.

Perforated Pictured Cliff formation with four jet shots per foot as follows: 3888'-3894', 3905'-3907', 3938'-3942', 3946'-3951', 3958'-3960'. Sandfrac with 27,000 gallons of crude oil and 27,000 pounds of sand. Swabbed and flowed back load oil. Well potential for 32 barrels oil per day flowing through 1/4" choke with a GOR of 2889 to 1.