

U. S. LAND OFFICE -----  
SERIAL NUMBER **Jicarilla** -----  
LEASE OR PERMIT TO PROSPECT -----  
**Contract #129**

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

USGS-5  
Acctg-1  
File-1

**LOG OF OIL OR GAS WELL**

### LOCATE WELL CORRECTLY

Company Northwest Production Corporation Address 520 Simms Bldg. Albuquerque, N.M.  
Lessor or Tract "C" Field Blanco Mesa-verde Extn  
Well No. 2-29 Sec. 29 T. 24N R. 4W Meridian NMSP State New Mexico  
County Rio Arriba  
Location 1830 ft.  $\left\{ \begin{array}{l} \text{N.} \\ \text{GR} \end{array} \right\}$  of S Line and 870 ft.  $\left\{ \begin{array}{l} \text{E.} \\ \text{RW} \end{array} \right\}$  of W Line of Section 29 Elevation 6775 mgr  
(Derrick floor relative to sea level) grund  
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 Ray Phillips

Date April 18, 1957 Title Asst Mgr. Prod Operations

The summary on this page is for the condition of the well at above date.

Commenced drilling ----- ~~August 24~~, 19-~~56~~ Finished drilling ----- ~~March 31~~, 19-~~57~~

## OIL OR GAS SANDS OR ZONES

(Denote gas by  $G$ )

No. 1, from ~~4996~~ to ~~5006~~ ~~C~~      No. 4, from ~~5260~~ to ~~5270~~ ~~C~~  
No. 2, from ~~5036~~ to ~~5056~~ ~~C~~      No. 5, from ~~5278~~ to ~~5282~~ ~~C~~  
No. 3, from ~~5242~~ to ~~5248~~ ~~C~~      No. 6, from ~~5286~~ to ~~5296~~ ~~C~~

## IMPORTANT WATER SANDS

No. 1, from ~~None~~ to \_\_\_\_\_

No. 2, from \_\_\_\_\_ to \_\_\_\_\_

No. 3, from \_\_\_\_\_ to \_\_\_\_\_

No. 4, from \_\_\_\_\_ to \_\_\_\_\_

### CASING RECORD

| Size casting | Weight per foot | Threads per inch | Make  | Amount  | Kind of shoe | Cut and pulled from | Perforated |      | Purpose |
|--------------|-----------------|------------------|-------|---------|--------------|---------------------|------------|------|---------|
|              |                 |                  |       |         |              |                     | From—      | To—  |         |
| 9-5/8        | 32.0            | 8-RD             | CRIE  | 24.12   | Baker Guide  |                     |            |      |         |
| 7            | 20.0            | 8-RD             | CRIE  | 14.01   | Baker Guide  |                     |            |      |         |
| 5            | 13.0            | 8-RD             | J & L | 1293.77 | Baker Flare  |                     | 4990       | 7768 | Compl.  |
| 5            | 13.0            | 8-RD             | J & L | 775.61  |              |                     |            |      |         |
| 5            | 11.3            | 8-RD             | J & L | 280X.78 |              |                     |            |      |         |
| 2-3/8        | 4.7             | 8-RD             | WAL   | 7701.19 |              |                     |            |      |         |

## MUDDING AND CEMENTING RECORD

| Size casing | Where set | Number sacks of cement | Method used | Mud gravity | Amount of mud used |
|-------------|-----------|------------------------|-------------|-------------|--------------------|
| 9-5/8       | 109.15    | 70                     | Howco       |             |                    |
| 7           | 3381.17   | 125 w/8% and 50 rag    | Howco       |             |                    |
| 5           | 7800.00   | 175 w/8% and 85 rag    | Howco       |             |                    |

## PLUGS AND ADAPTERS

Heaving plug—Material \_\_\_\_\_ Length \_\_\_\_\_ Depth set \_\_\_\_\_  
Adapters—Material \_\_\_\_\_ Size \_\_\_\_\_

## SHOOTING RECORD

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

## TOOLS USED

Rotary tools were used from 0 feet to 7852 feet, and from \_\_\_\_\_ feet to \_\_\_\_\_ feet.

Cable tools were used from \_\_\_\_\_ feet to \_\_\_\_\_ feet, and from \_\_\_\_\_ feet to \_\_\_\_\_ feet.

## DATES

**Graneros - Dakota**  
April 8, 1957 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. \_\_\_\_\_

If gas well, ~~NOF~~ ft. per 24 hours ~~NOF~~ **CAOF 671** Gallons gasoline per 1,000 cu. ft. of gas -----

Rock pressure, lbs. per sq. in. SI TP 21354. SI CP 12684. SI 7 days. (Continued)

## EMPLOYEES

-----, Driller  
**M. B. Jones** -----, Driller  
 -----, Driller

## FORMATION RECORD

| FROM— | TO—  | TOTAL FEET | FORMATION                                     |
|-------|------|------------|-----------------------------------------------|
| 0     | 2899 | 2899       | Surface                                       |
| 2899  | 2988 | 89         | Ojo Alamo - Sand w/some shale                 |
| 2988  | 3149 | 161        | Kirtland - Shale w/some sand interbedded.     |
| 3149  | 3314 | 165        | Fruitland - Shale and coal                    |
| 3314  | 3380 | 66         | Pictured Cliffs - Sand                        |
| 3380  | 4985 | 1605       | Lewis - Shale                                 |
| 4985  | 5090 | 105        | Cliff House - Sand w/some shale               |
| 5090  | 5503 | 413        | Manatee - Sand, shale and coal interbedded    |
| 5503  | 5592 | 89         | Point Lookout - Sand                          |
| 5592  | 7430 | 1838       | Mancos - Shale                                |
|       |      |            | Gallup 7025 - 7045 - Sand                     |
|       |      |            | Gallup 7120 - 7220 - Interbedded shale & sand |
| 7430  | 7490 | 60         | Greenhorn - Limestone                         |
| 7490  | 7645 | 155        | Graneros - Interbedded sand, shale and coal   |
| 7645  | 7852 | 207        | Dakota - Sand                                 |

**FORMATION RECORD—Continued**[illegible]

### **HISTORY OF OIL OR GAS WELL.**

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.

16-43094-2 U. S. GOVERNMENT PRINTING OFFICE

OVERFLOW BLOCKED

### WILKINSON WATER SANDS

ONE OF THE STARS OF THE

FOUO OF OR OR ENV ALI

GEOLOGICAL SURVEY

DEPARTMENT OF THE INTERIOR

UNITED STATES

REF ID: A66110

THE UNIVERSITY OF CHICAGO

1. THE FIRST QUESTION

1990年12月21日  
 1990年12月21日

OIL OR GAS SANDS OR ZONES (CONTD)

|                   |   |
|-------------------|---|
| From 5326 to 5330 | G |
| 5388 5394         | G |
| 5438 5444         | G |
| 5490 5496         | G |
| 5506 5510         | G |
| 5518 5524         | G |
| 5534 5538         | G |
| 5550 5554         | G |
| 5558 5562         | G |
| 5574 5580         | G |
| 5586 5590         | G |
| 7534 7550         | G |
| 7570 7576         | G |
| 7584 7590         | G |
| 7610 7616         | G |
| 7654 7672         | G |
| 7686 7716         | G |
| 7736 7752         | G |
| 7762 7772         | G |
| 7780 7788         | G |
| 7800 7852         | G |

TESTS (Contd)

Tested Masaverde 4-15-57 for 3 hours after 7 day shut in. SI TP 2050#. SI CP 1288#. CAOP 1,377 MCF.

CORING RECORD

|                            |                                                                                              |
|----------------------------|----------------------------------------------------------------------------------------------|
| Cut Core #1 fr 3355-3405.  | Cut 50' and rec 37' - 7' shaley sand & 30' sand.                                             |
| Cut Core #2 fr 4940-4976.  | Cut 36' and rec 32' of sdy, carbonaceous shale.                                              |
| Cut Core #3 fr 4976-5015.  | Cut 39' and rec 37' - 2' shaley sand, 3' shale, 29' sand and 1' carbonaceous shale and coal. |
| Cut Core #4 fr 5030-5060.  | Cut 30' and rec 20' - 17' sand and 3' shale.                                                 |
| Cut Core #5 fr 5060-5093.  | Cut 33' and rec 25' - 6½' sand and 18½' mud.                                                 |
| Cut Core #6 fr 5093-5123.  | Cut 30' and rec 11.3' - 3-3/4' sand and 7½' shale.                                           |
| Cut Core #7 fr 5440-5482'. | Cut 42' and rec 26' - 17' sand and 9' shale.                                                 |
| Cut Core #8 fr 5482-5510.  | Cut 28' and rec 22.7' - 1' shale, 20.7' sand & 1' coal & shale.                              |
| Cut Core #9 fr 5510-5520.  | Cut 10' and rec 8' sand.                                                                     |
| Cut Core #10 fr 5520-5529. | Cut 9' and rec 6' - 2' sand and 4' muc.                                                      |

HISTORY OF OIL OR GAS WELL

TD 7800'. PBD 7798'. MI & RU Compl Rig. Perf 5" liner fr 7654-72, 7686-7716, 7736-52, 7762-72, 7780-88 w/3 SPF. Set retrv BP at 7793 and full bore cmtr at 7726'. BD form at 3000# and pumped 2 BPM at 4200#. Set BP at 7726' and full bore cmtr at 7680'. BD form w/2800# and pumped 2 BPM at 3200#. Set BP at 7680' and full bore cmtr at 7638'. BD form w/2600# and pumped 2 BPM at 3200#. Retrv BP and frac Dakota 7654-7788 w/10,320 gals crude and 10,000# 20-40 sd. BD 2700#. IP 3000#. Avg 2800#. Max and Final 3000#. Stdg 2100#. Flushed w/250 bbls crude. IR 22.5 BPM. Flush IR 21 BPM. Flowed back 210 bbls in 12 hrs. Gaged 1500 MCF after flowing 12 hrs. Set 7648.26' of 2-3/8" OD J-55 4.7# 8-ED tubing at 7657.26'.

TD 7800'. PBD 7798'. MI rotary rig 1-2-57. Pulled 2-3/8" tubing. Went in w/4½" bit and drld cnt fr 7798-7800', and frac from 7800-7852'.

TD 7852'. Set Baker full bore packer at 7795' and frac lower Dakota in open hole from 7800-7852 w/9,492 gals crude and 2465# 40-60 sd. BD 3300#. Avg 4000#. Max 4500#. Final 4500#. IR 3.3 BPM. Well sandbed off with approx 15 bbls flush oil in. Released press and well flowed back frac oil and sand. Rec packer and cleaned out to TD. Gage 297.6 MCF. Prep to isolate lower Dakota and frac Graneros.

TD 7852'. Set Baker drill BP at 7648' and dumped 2 sx reg cnt on op. Top of cnt at 7628'. Perf 7534-50, 7570-76, 7584-90, 7610-16. Set Baker full bore pkr at 7508' and and frac Graneros-Dakota w/12,600 gals crude and 3,000# 40-60 sd. BD 4850#. Max 5250#. Avg 4900#. Final 4850#. Stdg 2250# in 5 mins. IR 5 BPM. Released press and well flowed back. Released pkr, drld cnt and BP at 7648' and cleaned out to TD. Set 2-3/8" OD tubing at 7758' and released rig 1-17-57.

HISTORY OF OIL OR GAS WELL (CONTD)

TD 7852'. NI & RU compl unit. Pulled tbg, set BP at 7440' and perf 4 SPF from 4996-5006, 5036-56, 5242-48, 5260-70, 5278-82, 5286-94, 5326-30, 5388-94, 5438-44, 5490-96, 5506-10, 5518-24, 5534-38, 5550-54, 5558-62, 5574-80, 5586-90. Frac Mesaverde w/126,000 gals water. BD 1400#. IP 1500#. Avg 1500#. Max and final 2500#. Stdg 1200# in 21 mins. IR 71.7 BPM. Used 495 ball sealers w/overall IR 60 BPM. Drld BP and cleaned out to TD. Set 7701.19' of 2-3/8" OD J-55 4.7# 8-ED tubing at 7722.76' w/Baker "KJ" packer at 7484.13' and Otis side-door choke w/straight thru mandril at 7493.13'. Completed well to produce the Graneros-Dakota thru the tubing and the Mesaverde thru the tubing casing annulus. Well SIFIP.