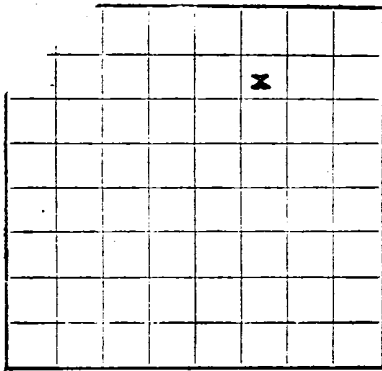
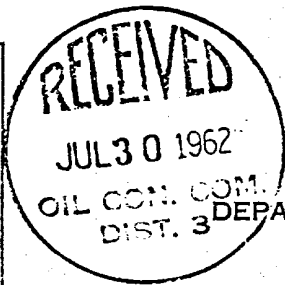


U. S. LAND OFFICE Santa Fe
SERIAL NUMBER SF-077968
LEASE OR PERMIT TO PROSPECT



LOCATE WELL CORRECTLY



UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

LOG OF OIL OR GAS WELL

Company Pan American Petroleum Corporation Address Box 480, Farmington, New Mexico
Lessor or Tract Southeast Cha Cha Unit Field Water Source Well State New Mexico
Well No. 1 Sec. 16 T. 28N R. 13W Meridian NMPM County San Juan
Location 910 ft. N of N Line and 1850 W of E Line of Section 16 Elevation 6055
(Derrick floor relative to sea level)

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 _____

Date July 24, 1962 Title Petroleum Engineer

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

Commenced drilling January 18, 1962 Finished drilling February 12, 1962

OIL OR GAS SANDS OR ZONES

(Denote gas by G)

No. 1, from 5720 to 5735 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 2630 to 3488 No. 3, from 4188 to 4333
No. 2, from 3658 to 4035 No. 4, from 6573 to 7076

CASING RECORD

| Size casing | Weight per foot | Threads per inch | Make | Amount | Kind of shoe | Cut and pulled from | Perforated | | Purpose |
|----------------|-----------------|------------------|-----------------|-------------|--------------|---------------------|------------|-----|----------------|
| | | | | | | | From— | To— | |
| <u>13-3/8"</u> | <u>36.6"</u> | <u>8RT</u> | <u>Amoco</u> | <u>203</u> | <u>Guide</u> | | | | <u>Surface</u> |
| <u>9-5/8"</u> | <u>30</u> | <u>8RT</u> | <u>X-line</u> | <u>1199</u> | <u>Guide</u> | | | | <u>Oil</u> |
| <u>8-5/8"</u> | <u>35</u> | <u>8RT</u> | <u>CF&I</u> | <u>5992</u> | | | | | <u>String</u> |

MUDDING AND CEMENTING RECORD

| Size casing | Where set | Number sacks of cement | Method used | Mud gravity | Amount of mud used |
|----------------|-------------|------------------------|---------------------|-------------|--------------------|
| <u>13-3/8"</u> | <u>214</u> | <u>225</u> | <u>BJ 1 Plug</u> | | |
| <u>8-5/8"</u> | <u>7140</u> | <u>550</u> | <u>Howco 2 Plug</u> | | |
| <u>9-5/8"</u> | | | | | |

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 7150 feet, and from _____ feet to _____ feet
Cable tools were used from _____ feet to _____ feet, and from _____ feet to _____ feet

DATES

Well shut in water source well _____ Well shut in _____

MUDDING AND CEMENTING RECORD

| Size casing | Where set | Number sacks of cement | Method used | Mud gravity | Amount of mud used |
|-------------|-----------|------------------------|--------------|-------------|--------------------|
| 13-3/8" | 214 | 225 | BJ-1 Plug | | |
| 8-5/8" | 7140 | 550 | Howco-2 Plug | | |
| 9-5/8" | | | | | |

FOLD MARK

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 _____ feet to _____ feet, and from _____ feet to _____ feet
 Cable tools were used from _____ feet to _____ feet, and from _____ feet to _____ feet

DATES

Completed as shut in water source well _____, 19____ Put to producing Well shut in _____, 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, cu. ft. per 24 hours _____ Gallons gasoline per 1,000 cu. ft. of gas _____
 Rock pressure, lbs. per sq. in. _____

EMPLOYEES

_____, Driller _____, Driller
 J. G. Binkley _____, Driller R. C. Cary _____, Driller
 J. D. Roe _____, Driller C. R. Lockhart _____, Driller

FORMATION RECORD

| FROM— | TO— | TOTAL FEET | FORMATION |
|-------|------|------------|--------------------------------|
| 0 | 216 | 216 | Surface sand and shale |
| 216 | 392 | 176 | Ojo Alamo sand |
| 392 | 1407 | 1015 | Kirtland sand and shale |
| 1407 | 1707 | 300 | Fruitland sand and shale |
| 1707 | 1890 | 183 | Pictured Cliffs sand and shale |
| 1890 | 2622 | 732 | Lewis shale |
| 2622 | 4485 | 1863 | Mesaverde sand and shale |
| 4485 | 5364 | 879 | Mancos shale |
| 5364 | 6205 | 841 | Gallup sand and shale |
| 6205 | 6296 | 91 | Greenhorn shale |
| 6296 | 6413 | 117 | Graneros sand and shale |
| 6413 | 6543 | 130 | Dakota sand and shale |
| 6543 | 7150 | 607 | Morrison sand and shale |

(OVER)