

FORMATION RECORD

| FROM | TO | THICKNESS IN FEET | FORMATION |
|------|------|----------------------|--|
| 0 | 90 | 90 | Surface sand and Caliche |
| 90 | 1220 | 1130 | Red beds |
| 1220 | 1320 | 100 | Anhydrite |
| 1320 | 2445 | 1125 | Salt |
| 2445 | 2700 | 255 | Anhydrite with streaks of Sand and Shale (Yates Sand at 2630 feet) |
| 2700 | 3500 | 800 | Anhydrite with streaks of Sand, Shale and Lime. (show of oil at 3418 feet) |
| 3500 | 5118 | 1618 | Lime with streaks of Sand and Shale |
| 5118 | 5150 | 32 | Lime (Top of Glorietta at 5118 feet) |
| 5150 | 5180 | 30 | Sand |
| 5180 | 5385 | 205 | Lime and Dolomite (Show of oil) |
| 5385 | 6090 | 705 | Lime and Dolomite |
| 6090 | 6120 | 30 | Sand (Tabbs Sand at 6090 feet) |
| 6120 | 6391 | 271 | Lime |
| 6391 | 6646 | 255 | Porous Lime and Dolomite (Show of oil and gas) Top of Drinkard gas porosity at 6391 feet. |

DRILL STEM TEST NO. 1:

Took D.S.T. No. 1 from 6561 feet to 6646 feet with Johnston double bomb - double wall packer assembly with 3/8-inch bottom hole choke and 1/4-inch top choke. Tool open 5 1/2 hours and packer held 100%. Excellent air blow immediately. Gas to surface in 5 minutes, mud and BS to surface in 45 minutes, oil and BS to surface in 1 hour 30 minutes. Flowed 114 barrels mud, BS, and oil in 4 3/4 hours. During last portion of test, in which clean oil was produced, flowed 15 barrels oil through a 1 1/2-inch open top in 1 1/4 hours. Gas oil ratio equals 4350. Then flowed 6.8 barrels oil through a 1/4-inch top choke in 1 1/4 hours. Gas oil ratio equals 5360. During last 30 minutes produced only gas. Gas volume still increasing at end of test. Unseated packer and bled off gas for 2 1/2 hours. Pulled 5250 feet dry tubing and then tubing unloaded oil and gas for 20 minutes. Recovered 92' (0.67 barrels) oil, gravity 46.9 degrees A.P.I. corrected, and 184' (1.34 barrels) oil and BS. Hydrostatic mud head 3030 p.s.i. Flowing bottom hole pressure varied from 2200 to 1350 p.s.i. Ten minute shut in bottom hole pressure 2350 p.s.i.

DRILL STEM TEST NO. 2:

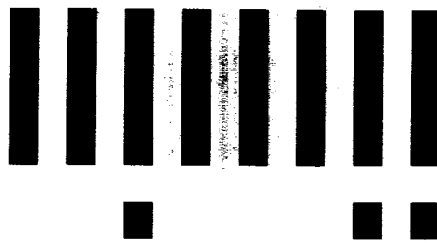
Took D.S.T. No. 2 from 6606 feet to 6646 feet with Johnston double bomb - double wall packer assembly with 3/8-inch bottom hole choke and 1 1/2-inch open top. Tool open 4 3/4 hours. Excellent air blow immediately. Gas to surface in 4 minutes. BS and mud to surface in 2 hours and 10 minutes. Oil and BS to surface in 2 hours and 45 minutes. Then flowed 17.55 barrels fluid, average cut 4 5/10% BS and 5% water through an open 1 1/2-inch Johnston flow head in 2 hours. Tubing pressure from 25 to 100 p.s.i. Gas oil ratio equals 1063. Reversed out D.S.T. to pits. Pulled D.S.T. No. 2. Hydrostatic mud head equals 3100 p.s.i. Flowing bottom hole pressure increased from 750 p.s.i. to 1650 p.s.i. in 2 hours and then declined to 600 p.s.i. in 2 3/4 hours. Thirty minute shut in bottom hole pressure equals 1200 p.s.i.

WELL STEM TEST NO. 1:

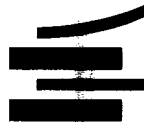
Took D.S.T. No. 1 from 6561 feet to 6646 feet with Johnston double pump - double wall packer assembly with 3/8-inch bottom hole choke and 1/4-inch top choke. Tool open 2 1/2 hours and packer held 100%. Excellent air blow immediately. Gas to surface in 2 minutes, mud and BS to surface in 4 1/2 minutes, oil and BS to surface in 1 hour 30 minutes. Flowed 1 1/4 barrels mud, BS, and oil in 3 1/4 hours. During last portion of test, in which clean oil was produced, flowed 1 1/2 barrels oil through a 1 1/2-inch open top in 1 1/4 hours. Gas oil ratio equals 4350. Then flowed 6.8 barrels oil through a 1/4-inch top choke in 1 1/4 hours. Gas oil ratio equals 3360. During last 30 minutes produced only gas. Gas volume still increased at end of test. Unseated packer and bled off gas for 2 1/2 hours. Filled 2520 feet dry tubing and then tubing unloaded oil and gas for 20 minutes. Recovered 92' (0.69 barrels) oil, gravity 46.9 degrees A.P.I. corrected, and 184' (1.34 barrels) oil and BS. Hydrostatic mud head 3020 p.s.i. Flowing bottom hole pressure varied from 2200 to 1320 p.s.i. Ten minute shut in bottom hole pressure 2320 p.s.i.

WELL STEM TEST NO. 2:

Took D.S.T. No. 2 from 6606 feet to 6646 feet with Johnston double pump - double wall packer assembly with 3/8-inch bottom hole choke and 1 1/2-inch open top. Tool open 4 3/4 hours. Excellent air blow immediately. Gas to surface in 4 minutes, BS and mud to surface in 2 hours and 10 minutes. Oil and BS to surface in 2 hours and 45 minutes. Then flowed 17.25 barrels fluid, average out 4 2/10% BS and 2 1/2% water through an open 1 1/2-inch Johnston flow head in 2 hours. Tubing pressure from 25 to 100 p.s.i. Gas oil ratio equals 1063. Reversed out D.S.T. to pits. Filled D.S.T. No. 2. Hydrostatic mud head equals 3100 p.s.i. Flowing bottom hole pressure increased from 720 p.s.i. to 1620 p.s.i. in 2 hours and then declined to 600 p.s.i. in 2 3/4 hours. Thirty minute shut in bottom hole pressure equals 1200 p.s.i.



LTR



Job separation sheet

OIL CONSERVATION COMMISSION

Santa Fe, New Mexico

MISCELLANEOUS REPORTS ON WELLS

RECEIVED
OCT 7 1947
RECEIVED

Submit this report in triplicate to the Oil Conservation Commission or its proper agent within ten days after the work specified is completed. It should be signed and sworn to before a notary public for reports on beginning drilling operations, results of shooting well, results of test of casing shut off, result of plugging of well, and other important operations, even though the work was witnessed by an agent of the Commission. Reports on minor operations need not be signed and sworn to before a notary public. See additional instructions in the Rules and Regulations of the Commission.

Indicate nature of report by checking below.

| | | | |
|--|----------|--|--|
| REPORT ON BEGINNING DRILLING OPERATIONS | | REPORT ON REPAIRING WELL | |
| REPORT ON RESULT OF SHOOTING OR CHEMICAL TREATMENT OF WELL | X | REPORT ON PULLING OR OTHERWISE ALTERING CASING | |
| REPORT ON RESULT OF TEST OF CASING SHUT-OFF | | REPORT ON DEEPENING WELL | |
| REPORT ON RESULT OF PLUGGING OF WELL | | | |

October 3, 1947

Hobbs, New Mexico

Date

Place

OIL CONSERVATION COMMISSION,
SANTA FE, NEW MEXICO.

Gentlemen:

Following is a report on the work done and the results obtained under the heading noted above at the _____

Shell Oil Company, Incorporated Argo Oil Corporation Well No. 1 in the _____
Company or Operator Lease

SW/4 of Sec. 15, T. 21-S, R. 37-E, N. M. P. M.,
Drinkard Field, Lea County.

The dates of this work were as follows: 9-21-47, 9-22-47, 9-23-47

Notice of intention to do the work was ~~(submitted)~~ submitted on Form C-102 on 9-24 19 47
and approval of the proposed plan was (was not) obtained. (Cross out incorrect words.)

DETAILED ACCOUNT OF WORK DONE AND RESULTS OBTAINED

Treated with 2000 gallons 15% acid in 3 stages. Set formation packer at 6606 feet to exclude excess gas. After acid produced on official potential test 89.1 barrels oil through a 16/64-inch choke in 2 1/2 hours. Gas oil ratio equals 977.

Witnessed by John Pevhouse Shell Oil Company, Incorporated Production Foreman
Name Company Title

Subscribed and sworn before me this 3rd

I hereby swear or affirm that the information given above is true and correct.

day of October, 19 47

Name M. G. Brunner

Position District Superintendent

Representing Shell Oil Company, Incorporated
Company or Operator

My commission expires My Commission Expires Sept. 13, 1952

Address Box 1457 Hobbs, New Mexico.

Remarks:

APPROVED

Date OCT 7 1947

Ray Yandrough
Name
OIL & GAS INSPECTOR
Title

1. The first part of the report

2. The second part of the report

3. The third part of the report

4. The fourth part of the report

5. The fifth part of the report

6. The sixth part of the report

7. The seventh part of the report

8. The eighth part of the report

9. The ninth part of the report

10. The tenth part of the report

11. The eleventh part of the report