

NEW MEXICO OIL CONSERVATION COMMISSION
MISCELLANEOUS REPORTS ON WELLS

(Submit to appropriate District Office as per Commission Rule 1106)

COMPANY Great Western Drilling Company
(Address)

LEASE Chaco Unit WELL NO. 2 UNIT 0 S 16 T 23N R 8W
DATE WORK PERFORMED 5-24-56 - 6-6-56 POOL Wildcat

This is a Report of: (Check appropriate block) ☐ Results of Test of Casing Shut-off
☐ Beginning Drilling Operations ☒ Remedial Work
☐ Plugging ☐ Other _____

Detailed account of work done, nature and quantity of materials used and results obtained.

The Chaco Unit No. 2 was worked over as follows from May 24 to June 6, 1956:

The rods and tubing were pulled and sand was circulated out from 5049' to 5090'.

A bridging plug was set @ 4956' and the perforated interval from 4911-4941 was squeezed with 200 sacks of neat cement with the retainer set @ 4896' on 2 1/2" tubing. The retainer was drilled and the squeeze job tested. It would not hold any pressure so another retainer was set @ 4890' and the same interval squeezed with 300 sacks of neat cement. No pressure was encountered so the tool was cleared and the interval was squeezed with another 300 sacks of neat cement. 2000psi pressure was obtained on this job so the retainer and cement were drilled to 4956'. The squeezed interval held 1100 psi for 15 minutes so the bridging plug @ 4956' was drilled and the well cleaned out to 5090'.

A hookwall packer was run in the well and the following intervals tested as follows: (over)

FILL IN BELOW FOR REMEDIAL WORK REPORTS ONLY

Original Well Data:

DF Elev. 6865 TD 6094 PBD 5100 Prod. Int. 95 Compl Date June 2, 1956
Tbng. Dia 2" EUE Tbng Depth 5011 Oil String Dia 7" Oil String Depth 5100
Perf Interval (s) 4975-5007 5019-5037 5058-5068
Open Hole Interval ----- Producing Formation (s) Gallup

RESULTS OF WORKOVER:

	BEFORE	AFTER
Date of Test	<u>April, 1956</u>	<u>June 27, 1956</u>
Oil Production, bbls. per day	<u>6 BOPD</u>	<u>23 BOPD</u>
Gas Production, Mcf per day	<u>160 MCF</u>	<u>8 MCF</u>
Water Production, bbls. per day	<u>0.6 BOPD</u>	<u>2.0 BOPD</u>
Gas-Oil Ratio, cu. ft. per bbl.		
Gas Well Potential, Mcf per day		

Witnessed by Jack Page Great Western Drilling Company
(Company)

OIL CONSERVATION COMMISSION

Name Emory A. Brundin
Title Oil and Gas Inspector Dist. #3
Date JUL 2 1956

I hereby certify that the information given above is true and complete to the best of my knowledge:

Name Jack Page
Position Div. Prod. Eng.
Company Great Western Drilling Company



1911-41 Tested with 1800 psi for 15 minutes. No pressure drop.

1976-87 Tested with 1800 psi for 15 minutes. No pressure drop.

5019-29 Took fluid above 11400 psi.

5052-59 Tested with 1500 psi for 15 minutes. No pressure drop.

Gamma Ray and Neutron logs were run and the well was perforated from 5058'-5068' with four jets per foot. A packer was set @ 5040' and the perforated zone was treated through 2½" tubing with 2000 gallons 9% acid. The formation took acid @ 850 psi and before the treatment was complete we had communication between the zones above and below the packer. After swabbing 19 barrels the well did not make any fluid on a three hour test.

A retainer was set @ 4640' while running in the hole and the perforations were squeezed with 300 sacks of cement. The pressure was 2000 psi at the end of the squeeze job.

The retainer and cement were drilled, a hookwall packer was set @ 5041' and the perforations below were acidized with 250 gallons of mud acid and 2000 gallons of 9% acid. The formation broke down @ 3100 psi with an average treating pressure of 1200 psi @ two barrels per minute. The well was shut in for 12 hours and 30 barrels of flush oil and eight barrels of acid water were swabbed back. A two hour test recovered three barrels of 15% acid water.

The zone was then treated with 10,000 gallons of acid frac and 15,000 pounds of sand. The injection rate was nine barrels per minute @ 4200 psi. The well was shut in for 18 hours. Swabbed 81 barrels 15-20% acid water in 17 hours.

Treated same interval with 10,000 gallons lease crude and 10,000 pounds of sand @ 3300 psi and 10 barrels per minute. Shut in for 14 hours and when opened it flowed five barrels and swabbed 96 barrels in 10 hours. Swabbing 2-3/4 barrels per hour after 10 hours.

The packer was sanded up so we backed off the tubing, washed over, set a bridging plug @ 5040' and perforated from 5019'-5037' with four jets per foot. This interval was treated down the 7" casing with 20,000 gallons lease crude and 30,000 pounds of sand. The breakdown pressure was 2000 psi, average treating pressure 1800 psi @ 48.5 barrels per minute. The well was shut in for 12 hours and when opened flowed 110 barrels in two hours and died.

A bridging plug was set @ 5013' and the interval from 4975-5007' was treated with 20,000 gallons of lease crude and 30,000 pounds of sand. This zone broke at 1850 psi. Treated @ 1650 psi @ 47 barrels per minute. The well was shut in with 900 psi. The well was opened after 12 hours with 700 psi and flowed 135 barrels in 2½ hours and died.

The well was cleaned out to 5072' and swabbed 290 barrels in 11 hours. The 2" tubing and rods and pump were run June 6, 1956 and the well started pumping 95 barrels (pump capacity) of load oil per day. The production at present is down to 23 barrels per day with approximately 1000 barrels of load oil still in the well.

OIL CONSERVATION COMMISSION		
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