

ARTESIA SERVICE OIL COMPANY
 Government Well No. 1
 Sec. 14-T20N-R28E
 Eddy County, New Mexico

RECEIVED
MAR 11 1974
U.S. GEOLOGICAL SURVEY
ARTESIA, NEW MEXICO

SIP 1600#. Flowed 4.5 B. Dist. + 92 BLW/23 hrs. + Gas @ rate of 250 MCFD thru 3/4" Choke FTP 75#. 13 hr. SIPP 1200#. 3 hrs. + Swabbed and flowed 4 B. Dist. + 18 BW/24 hrs. + Gas @ rate of 125 BCFD thru 1" choke FTP 0-40# Reset Retrievalable Packer @ 10,273' and swabbed 116 BW/7 hrs. Pressure tested casing and found hole @ 10,214' - 216'. Squeezed Strawn perfs. 10,241' - 10,202' and hole in casing 10,214' - 10,216' w/75 sacks Class H w/3/4% CFR-2 + 7# SALT/Sack cement. Left 15 sacks in csg. and 60 sacks in formation. WOC 24 hrs. Do to 10,315' and found hole in casing was squeezed off but perfs were still open.

Swabbed and flowed 20 B. Dist + 95 BLW/24 hrs. + Gas @ rate of 128 MCFD. Reacidified Strawn perfs. 10,241' - 10,303' w/3000 gals. 15% NE HCl acid w/1000 SCF Nitrogen/Bbl. Pressured annulus to 1000# - held OK. Preflushed w/5000 SCF Nitrogen. Max. press. 2350#, Min. press. 1100#, Avg. Trtg. press. 1700#, A.I.R. 4.8 B/M. ISIP 1200#, 5 min. SIP 600#. Swabbed and flowed 8 B. Dist. + 19 BW/7 hrs. + gas rate of 100 MCFD. 24 hrs. SIPP 750#. Squeezed Strawn perfs. 10,241' - 10,303' w/150 sacks Class H w/0.8% Halad 9 + 50 sacks Class H w/0.3% Hr - 4 + 3# sand/sack cement. Max. squeeze press. 5500#. Left 100 sacks in formation, 40 sacks in csg. and reversed 60 sacks to pit. WOC 38 hrs. do to 10,413'. Pulled REP set @ 10,413'. Reset RBP @ 9,344'. Spotted 250 gals. 10% Acetic Acid @ 9,344' - 9,106'. Perforated Wolfcamp Zone w/2-0.41" holes each @ 9,206' - 9,209' - 9,211' - 9,214' - 9,216' - 9,219' - 9,222' - 9,224' - 9,226' - and 9,231'. Ran tubing with packer set @ 9,071'. Swabbed 3 B. Dist. + 60 BLW/7 hrs. Acidized Wolfcamp perfs. 9,206' - 9,231' w/3000 gals. 15% HCl NE Acid w/1000 SCF Nitrogen/Bbl. Preceded w/5000 SCF Nitrogen. Flushed w/33 Bbls. 4% KCL-FW w/4 gals. LF-30 (Foaming Agent) + 15 Gals. J2 (Friction Reducer) and 1000 SCF/Bbl. Nitrogen. Max. press. 6000#, Min. press. 5400#, AIR 7.42 B/M @ 5800#. ISIP 3200#, 5 min. SIP 3000#. Flowed part of load and flowed gas @ rate 4.1 MCFD + 7 B. Dist. + 2 BW/2 hrs. thru 48/64" choke FTP 1075#. Killed well and pulled REP @ 9344' and Packer Set @ 9071'. Ran 2-7/8" CD Tubing and locked into Packer @ 11,005' with a Baker Model AR-1 Packer Set @ 9,126'.

The Morrow Zone flowed on 4 point tests as follows:

24 hr. SIPP 3255#

<u>Duration of Test</u>	<u>Choke</u>	<u>FCP</u>	<u>Sep. Press.</u>	<u>Gas Volume</u>
1 Hr.	10/64"	2675#	730#	2.1 MMCFD
1 Hr.	13/64"	2235#	735#	2.8 MMCFD
1 Hr.	17/64"	2295#	740#	3.9 MMCFD
1 Hr.	21/64"	1865#	740#	5.0 MMCFPD

Produced 15 B. Dist, Grav. 55.4°, + 0 BW During 4 hr. test.

CAO potential from the Morrow Zone is 7,314 MCFPD. The Wolfcamp Zone flowed on 4 point tests as follows: