

CITIES SERVICE OIL COMPANY  
ZOTEA MESA UNIT A WELL #1  
Sec. 8-T23S-R24E  
Eddy County, New Mexico

DST No. 1

10,475-10,524' (49') Morrow, 5/8" BH choke, 1/2" top choke, no wtr. blanket. Tool opened with good blow decreasing to fair blow during 15 min. preflow. Flowing pressures: 10 psig in 5 mins., 4 psig in 10 mins. and 5 psig in 15 mins. Closed tool. No gas to surface during preflow. Took 90 min. ISIP. Reopened tool for 60 mins. test period with fair blow on 1/8" choke:

<u>Time</u>	<u>Choke</u>	<u>Flowing Press.</u>
5 mins.	1/8"	8 psig
10 mins.	1/8"	8 psig
15 mins.	1/8"	8 psig
20 mins.	1/8"	8 psig
25 mins.	1/8"	8 psig
30 mins.	1/8"	9 psig
35 mins.	1/8"	9 psig
40 mins.	1/8"	9 psig
45 mins.	1/8"	10 psig
50 mins.	1/8"	10 psig
55 mins.	1/8"	10 psig
60 mins.	1/8"	10 psig

No gas to surface during 60 min. flow period. Closed tool for 90 min. FSIP. Released pkrs. Did not reverse out. Rec. 0.5 bbl. of drlg. fluid in DP that titrated 67,000 ppm chlorides. Pit sample 67,000 ppm chlorides. Sample chamber at 10,447' contained 1.28 cu. ft. gas and 10 cc drlg. fluid 67,000 ppm chlorides at 425 psig. BHP's as follows:

Top Chart at 10,513'

IMCP	5045 psig
IF (15 min.)	75-75 psig
90 min. ISIP	1570 (Building) psig
FF (60 mins.)	62-75 psig
90 min. FSIP	1368 (building) psig
FMCP	5045 psig
BHT	177° F

DST No. 2

10,600-10,700' (100') Morrow, 5/8" BH choke, 1/8" top choke, no wtr. blanket (1395' of drlg. fluid leaked into DP from hole in DP near surface. Replaced jt. of DP and continued GIH w/test tools). Tool opened w/fair blow on 1/8" choke, increasing to 2 psig for entire 15 min. preflow. Closed tool. No gas to surface during preflow. Took 90 min. ISIP. Reopened tool for 90 min. test period w/a poor blow. Surface flowing pressure increased from 2 psig to 4 psig on 1/8" choke during 90 min. test. No gas to surface. Closed tool for 90 min. FSIP. Released pkrs. Did not reverse out. Recovered 1395' (17 bbls.) slightly gas cut drlg. fluid that titrated 77,000 ppm chlorides. and 1360' (24 bbls.) of clear formation wtr. that titrated 48,000 ppm chlorides. Pit sample titrated 77,000 ppm chlorides. Sample chamber at 10,575' contained 0.95 cu. ft. gas and 2000 cc formation wtr. that titrated 48,000 ppm chlorides and  $R_w$  0.12 at 60°. BHP's as follows: