

OIL CONSERVATION DIVISION

P O BOX 2088

Form C-122
Revised 10-1-78STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

SANTA FE, NEW MEXICO 87501

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Type Test: ☒ Initial ☐ Annual ☐ Special		Test Date: 12/22/86																																																																																													
Company: Union Texas Petroleum Corp.		Connection: El Paso Natural Gas Co.																																																																																													
Pool: Otero		Formation: Chaca																																																																																													
Completion Date: 12/10/86	Total Depth: 3150	Plug Back TD: 3102	Elevation: 5641' GL																																																																																												
Form or Lease Name: Zachry		Well No.: 59																																																																																													
Cas. Size: 2.875	wt.: 6.5	d: 2.441	Set At: 3133																																																																																												
Perforations: From 2887 To 2995		Unit: D																																																																																													
Perforations: From To		Sec. 33																																																																																													
Perforations: From To		Twp. 29N																																																																																													
Perforations: From To		Rye. 10W																																																																																													
Type Well - Single - Broadhead - G.C. or G.O. Multiple: Single - Gas		Packer Set At																																																																																													
Producing Thru: Casing		County: San Juan																																																																																													
Reservoir Temp. °F: 8		State: New Mexico																																																																																													
Mean Annual Temp. °F: 12		Baro. Press. - P _g																																																																																													
Prover: 2887		Meter Run																																																																																													
Taps																																																																																															
<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <th colspan="4">FLOW DATA</th> <th colspan="2">TUBING DATA</th> <th colspan="2">CASING DATA</th> <th rowspan="2">Duration of Flow</th> </tr> <tr> <th>NO.</th> <th>Prover Line Size</th> <th>X</th> <th>Orifice Size</th> <th>Press. p.s.i.g.</th> <th>Diff. h_w</th> <th>Temp. °F</th> <th>Press. p.s.i.g.</th> <th>Temp. °F</th> <th>Press. p.s.i.g.</th> <th>Temp. °F</th> </tr> <tr> <td>SI</td> <td>2"</td> <td></td> <td>3/4"</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>968</td> <td></td> <td>7 Days</td> </tr> <tr> <td>1.</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>76</td> <td>61°</td> <td>3 Hrs</td> </tr> <tr> <td>2.</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>3.</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>4.</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>5.</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </table>				FLOW DATA				TUBING DATA		CASING DATA		Duration of Flow	NO.	Prover Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. h _w	Temp. °F	Press. p.s.i.g.	Temp. °F	Press. p.s.i.g.	Temp. °F	SI	2"		3/4"						968		7 Days	1.									76	61°	3 Hrs	2.												3.												4.												5.											
FLOW DATA				TUBING DATA		CASING DATA		Duration of Flow																																																																																							
NO.	Prover Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. h _w	Temp. °F	Press. p.s.i.g.		Temp. °F	Press. p.s.i.g.	Temp. °F																																																																																				
SI	2"		3/4"						968		7 Days																																																																																				
1.									76	61°	3 Hrs																																																																																				
2.																																																																																															
3.																																																																																															
4.																																																																																															
5.																																																																																															
RATE OF FLOW CALCULATIONS																																																																																															
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor F _t	Gravity Factor F _g	Super Compress. Factor, F _{sv}	Rate of Flow Q, Mcfd																																																																																								
1	12,3650		88	0.990	0.9535	1.007	1044																																																																																								
2																																																																																															
3																																																																																															
4																																																																																															
5																																																																																															
NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio _____ Mcf/bbl. A.P.I. Gravity of Liquid Hydrocarbons _____ Deg. Specific Gravity Separator Gas _____ Specific Gravity Flowing Fluid _____ Critical Pressure _____ P.S.I.A. Critical Temperature _____ R																																																																																										
1																																																																																															
2																																																																																															
3																																																																																															
4																																																																																															
5																																																																																															
P _c 980 P _c ² 960,400 NO. P _r ² P _w P _w ² P _c ² - P _w ²					(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.0128$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.0095$																																																																																										
1		110	12,100	948,300	AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1054$																																																																																										
2																																																																																															
3																																																																																															
4																																																																																															
5																																																																																															
Absolute Open Flow 1054 Mcfd @ 15.025					Angle of Slope @		Slope, n 0.75																																																																																								
Remarks:																																																																																															
Approved By Division		Conducted By: Bennie Brown		Calculated By: John C. Rector		Checked By:																																																																																									