

NEW MEXICO OIL CONSERVATION COMMISSION
MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form C-122
Revised 9-1-65

RECEIVED

API # 30-015-21126

Type Test ☒ Initial ☐ Annual ☐ Special						Test Date 1-27-75		FEB 3 1975																																																																																																			
Company Phillips Petroleum Company						Connection El Paso Natural Gas Company																																																																																																					
Pool Undesignated						Formation Morrow																																																																																																					
Completion Date 7-21-74						Total Depth 14,857' TD 14,816' PBTD		Flow Back TD 14,816		Elevation 3288' DF, 3289' EKB																																																																																																	
Farm or Lease Name Sandy Unit						Unit Sandy Unit																																																																																																					
Csg. Size 5 1/2		Wt. 23		Set At 14,856		Perforations: From 14,494 To 14,650		Well No. 1																																																																																																			
Tbg. Size 2 7/8		Wt. 6.7		Set At 14,304		Perforations: From open To end		Unit E		Sec. 24 Twp. 23 Rge. 30																																																																																																	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single						Packer Set At 14,250		County Eddy		State New Mexico																																																																																																	
Producing Thru Tbg.		Reservoir Temp. *F 145 @ 14,494		Mean Annual Temp. *F 13.2		Baro. Press. - P _a		Meter Run 4		Taps																																																																																																	
L *14,760		H 14,760		Gg .577		% CO ₂		% N ₂		% H ₂ S																																																																																																	
<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <th colspan="6">FLOW DATA</th> <th colspan="2">TUBING DATA</th> <th colspan="2">CASING DATA</th> <th colspan="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> <th>Duration of Flow</th> </tr> <tr> <td>SI</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>4920</td> <td></td> <td></td> <td></td> <td>48 Hr. S.T.P.</td> </tr> <tr> <td>1.</td> <td>4</td> <td>x</td> <td>1.500</td> <td>726</td> <td>2.3</td> <td>79</td> <td>3592</td> <td>66</td> <td></td> <td></td> <td>1 hr.</td> </tr> <tr> <td>2.</td> <td>4</td> <td>x</td> <td>1.500</td> <td>726</td> <td>4.8</td> <td>76</td> <td>2987</td> <td>68</td> <td></td> <td></td> <td>1 hr.</td> </tr> <tr> <td>3.</td> <td>4</td> <td>x</td> <td>1.500</td> <td>709</td> <td>7.8</td> <td>68</td> <td>2440</td> <td>69</td> <td></td> <td></td> <td>1 hr.</td> </tr> <tr> <td>4.</td> <td>4</td> <td>x</td> <td>1.500</td> <td>709</td> <td>10.2</td> <td>60</td> <td>1772</td> <td>69</td> <td></td> <td></td> <td>1 hr.</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	Duration of Flow	SI							4920				48 Hr. S.T.P.	1.	4	x	1.500	726	2.3	79	3592	66			1 hr.	2.	4	x	1.500	726	4.8	76	2987	68			1 hr.	3.	4	x	1.500	709	7.8	68	2440	69			1 hr.	4.	4	x	1.500	709	10.2	60	1772	69			1 hr.	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	Duration of Flow																																																																																																
SI							4920				48 Hr. S.T.P.																																																																																																
1.	4	x	1.500	726	2.3	79	3592	66			1 hr.																																																																																																
2.	4	x	1.500	726	4.8	76	2987	68			1 hr.																																																																																																
3.	4	x	1.500	709	7.8	68	2440	69			1 hr.																																																																																																
4.	4	x	1.500	709	10.2	60	1772	69			1 hr.																																																																																																
5.																																																																																																											
RATE OF FLOW CALCULATIONS																																																																																																											
NO.	Coefficient (24 Hour)	$\sqrt{h_w F_m}$	Pressure P _m	Flow Temp. Factor F _t	Gravity Factor F _g	Super Compress. Factor, F _{sp}	Rate of Flow Q, Mhd																																																																																																				
1	10.84	41.23	739.2	.9822	1.316	1.050	607																																																																																																				
2	10.84	59.57	739.2	.9850	1.316	1.051	880																																																																																																				
3	10.84	75.05	722.2	.9924	1.316	1.053	1119																																																																																																				
4	10.84	85.83	722.2	1.000	1.316	1.057	1294																																																																																																				
5																																																																																																											
NO.	R _i	Temp. *R	T _r	Z	Gas Liquid Hydrocarbon Ratio 813 Mcf/bbl. A.P.I. Gravity of Liquid Hydrocarbons 43.7 @ 60 Deg. Specific Gravity Separator Gas XXXXXXX Specific Gravity Flowing Fluid XXXXXX G Mix = .581 Critical Pressure 672 P.S.I.A. 672 P.S.I.A. Critical Temperature 346 R 350 R																																																																																																						
1	1.10	539	1.56	.907																																																																																																							
2	1.10	536	1.55	.905																																																																																																							
3	1.07	528	1.53	.902																																																																																																							
4	1.07	520	1.50	.895																																																																																																							
5																																																																																																											
$P_c = 4933.2$ $P_c^2 = 24,336.5$																																																																																																											
NO.	P _i	P _w	P _w ²	P _i ² - P _w ²	(1) $\frac{P_c^2}{P_i^2 - P_w^2} = 1.152$	(2) $\left[\frac{P_c^2}{P_i^2 - P_w^2} \right]^n = 1.152$																																																																																																					
1		3605.7	13001.1	11335.4																																																																																																							
2		3002.1	9012.6	15323.9																																																																																																							
3		2455.3	6033.4	18303.1																																																																																																							
4		1790.4	3205.5	21131.0																																																																																																							
5																																																																																																											
Absolute Open Flow 1,490 Mhd @ 15.025 Angle of Slope 45 Slope, n 1.000																																																																																																											
Remarks: * Equiv. Length																																																																																																											
Approved By Commission: _____ Conducted By: Reggie Reston Calculated By: Reggie Reston Checked By: D. E. Simpson																																																																																																											

PHILLIPS PETRO. CORP.

SANDY UNIT #1

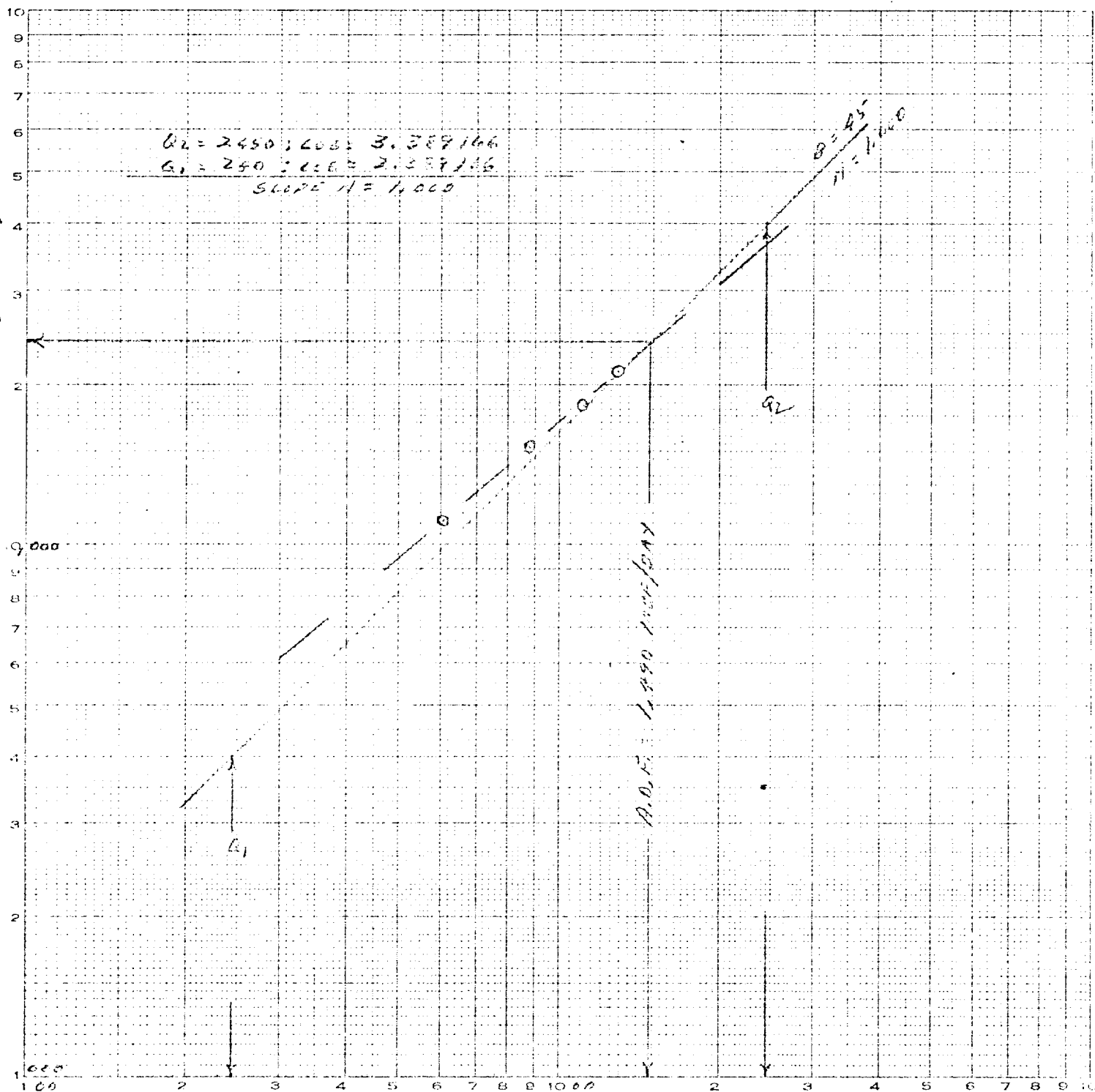
E-24-23-30

EDDY CO. N.M.

1-27-75

EUGENE DIETZGEN CO.
PAGE 1
P2 - P2 (TAS-100)

NU. 341-1222 DIETZGEN GRAPH PAPER
LOGARITHMIC
2 CYCLES X 2 CYCLES



Q-metric