

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

Form C-122
Revised 9-1-65

Type Test ☒ Initial ☐ Annual ☐ Special						Test Date 9-29-81			
Company ENERGY RESERVES GROUP, INC.				Connection TO AIR					
Pool Undesignated				Formation CISCO				Unit	
Completion Date 8-20-81		Total Depth 7851		Plug Back TD 7807		Elevation 4372.5G.L.		Farm or Lease Name CRUME	
Csg. Size 4 1/2	Wt. 10.5#	d 4.052"	Set At 7850	Perforations: From 7542 To 7567		Well No. 1			
Tbg. Size 2 3/8	Wt. 4.7	d 1.995	Set At 7498	Perforations: From OPENENDED		Unit C 13 6S 33E			
Type Well - Single - Brdhead - G.G. or G.O. Multiple SINGLE						Packer Set At 7498'		County ROOSEVELT	
Producing Thru TUBING		Reservoir Temp. °F 142 @ 7570		Mean Annual Temp. °F 60°		Baro. Press. - P _a 13.2		State NEW MEXICO	
L 7570	H 7570	Gg .7438	% CO ₂ .591	% N ₂ 3.750	% H ₂ S	Prover	Meter Run 4"	Taps 1 flange	

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							1882.2		PKR	CHOKE	72 Hrs
1.	4"	x	1.5	180	31"	78°	1812.2	70		13/64	105 Min
2.	4"	x	1.5	180	59"	64	1792.2	71		13.5/64	30 Min
3.	4"	x	1.5	190	45"	61	1767.2	72		14.5/64	30 Min
4.	4"	x	2	240	58	66	1715.2	74		16/64	60 Min
5.											

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor Ft.	Gravity Factor Fg	Super Compress. Factor, Fpv	Rate of Flow Q, Mcfd
1	11.82	77.39	193.2	.9831	1.159	1.021	1064
2	11.82	106.77	193.2	.9962	1.159	1.023	1491
3	23.18	95.62	203.2	.9990	1.159	1.025	2630
4	23.18	121.18	253.2	.9943	1.159	1.029	3331
5.							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	Mcf/bbl.
1	291	538	1.37	.960	88.71	
2	291	524	1.33	.956	69.9 @ 60	
3	306	521	1.32	.951		
4	382	526	1.34	.944		
5.						

* P_c 1918.6 P_c² 3681

<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <th>NO.</th> <th>P_t²</th> <th>P_w</th> <th>P_w²</th> <th>P_c² - P_w²</th> </tr> <tr> <td>1</td> <td></td> <td>1885.4</td> <td>3555</td> <td>126</td> </tr> <tr> <td>2</td> <td></td> <td>1850.4</td> <td>3424</td> <td>257</td> </tr> <tr> <td>3</td> <td></td> <td>1829.8</td> <td>3348</td> <td>333</td> </tr> <tr> <td>4</td> <td></td> <td>1806.1</td> <td>3262</td> <td>419</td> </tr> <tr> <td>5</td> <td></td> <td></td> <td></td> <td></td> </tr> </table>	NO.	P _t ²	P _w	P _w ²	P _c ² - P _w ²	1		1885.4	3555	126	2		1850.4	3424	257	3		1829.8	3348	333	4		1806.1	3262	419	5					(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 8.785$ And $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 26,956$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 8.0926$
NO.	P _t ²	P _w	P _w ²	P _c ² - P _w ²																											
1		1885.4	3555	126																											
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5																															

Absolute Open Flow	26,956	Mcf/d @ 15.025	Angle of Slope	46° 06'	Slope, n	.96221
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Remarks: Calculated from known Bottom Hole Pressures
Made 2 1/2 Bbl. of Condensate during test.

Approved By: JOHN SEXTON	Conducted By: W.S.	Calculated By: M.K.	Checked By: M.K.
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