

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

Form C-122
Revised 10-1-66

Type Test ☒ Initial ☐ Annual ☐ Special		Test Date 5-4-71	
Tester Perry R. Bass		Company POTASH CO. of AMR. (High Pr.) PHILLIPS PET. CO. (Low Pressure)	
Well Name Undesignated		Formation Morrow Sand	
Date 5-3-71		Depth 14,208'	
Well No. WJ-55/17		Pressure 12,465'	
Well Size 5 1/2" N-80/20#		Flow Rate 3,549' KB	
Well Depth 2 3/8" 4.7		Well Unit Big Eddy	
Well Type Single		Well Unit Big Eddy Unit	
Well Depth 12,820		Well Unit 7	
Well Depth 12,820		Well Unit 19 20-S 31-E	
Well Depth 12,820		Well Unit Eddy	
Well Depth 12,820		Well Unit New Mexico	
Well Depth 12,820		Well Unit 4"	
Well Depth 12,820		Well Unit 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.	
SI	4.026						3905	Not	Packer	Not
1.	4		1 1/2	540	52	53	2431	Meas.	"	Meas.
2.	4		1 1/2	540	59	54	2087	"	"	"
3.	4		1 1/2	540	68	53	1808	"	"	"
4.	4		1 1/2	550	73	49	1588	"	"	"
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. Compens. Factor, Fpv	Rate of Flow Q, Mhd
1	10.84	169.60	553.2	1.007	1.258	1.195	2,783
2	"	180.66	553.2	1.006	"	1.191	2,952
3	"	193.95	553.2	1.007	"	1.187	3,161
4	"	202.75	563.2	1.011	"	1.179	3,296
5							

NO	R _f	Temp. °R	T _f	Z	Gas Liquid Hydrocarbon Ratio	A.P.I. Gravity of Liquid Hydrocarbons	Specific Gravity Separator Gas	Specific Gravity Flowing Fluid	Critical Pressure	Critical Temperature
1	3.63	513	1.39	0.700		54.3	0.632	XXXXXX		
2	3.11	514	1.40	0.705						
3	2.70	513	1.39	0.710						
4	2.37	509	1.38	0.720						
5										

NO	P _f	P _w	P _f ²	P _w ²	P _f ² - P _w ²
1		3,565.2	12,711	15,668	
2		3,134.2	9,823	18,556	
3		2,768.2	7,663	20,716	
4		2,472.2	6,112	22,267	
5					

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.274$		(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.153$	
(3) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 3,800$			

Flow Rate	3,549	Mcf @ 15.025	Angle of Slope	59.8°	Slope	0.581
Sept. hole pressure measured by aneroid pressure bomb at 12,820 (-9271) for P _c and P _w						

Approved By Commission	Conducted By: Perry R. Bass Repr's.	Calculated By: Grover L. Worley	Checked By:
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