

COPY FILE  
Form C-122  
Revised 9-1-65

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

RECEIVED

Type Test 4POINT <input checked="" type="checkbox"/> Initial <input type="checkbox"/> Annual <input type="checkbox"/> Special				Test Date 3/17/87		1980 FSL	
Company MCKAY OIL CORP.				Connection TO AIR		JUN 10 '88	
Pool WEST PECOS SLOPE				Formation ABO		660 FEL	
Completion Date 3/14/87		Total Length 3392		Flag Back To 3296		Invention 4356	
Csg. Size 4.5		ID 9.5		Set At 4.090		Perforations: From 2821 To 2943.5	
Tq. Size 2.375		ID 4.7		Set At 1.995		Perforations: From OPEN To ENDED	
Type Well - Single - Provenhead - C.G. or G.O. Multiple SINGLE				Packer Set At NONE		County CHAVES	
Producing Thru TUBING		Reservoir Temp. °F 98 @ 2882		Mean Annual Temp. °F 60		Baro. Press. - P <sub>a</sub> 13.2	
L 2882		H 2882		G <sub>g</sub> .638		% CO <sub>2</sub> .090	
				% N <sub>2</sub> 5.055		% H <sub>2</sub> S 0	
				Prover 2.000		Meter Run 0	
						State NEW MEXICO	

  

FLOW DATA						TUBING DATA		CASING DATA		Duration of Flow	
NO.	Prover Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. h <sub>w</sub>	Temp. °F	Press. p.s.i.g.	Temp. °F	Press. p.s.i.g.		Temp. °F
S1							705	46	702	46	72HRS
1.	2.000		.0625	590	0.00	44	690	44	690	44	60MIN
2.	2.000		.09375	570	0.00	49	670	49	670	49	60MIN
3.	2.000		.125	647	0.00	56	647	56	650	56	60MIN
4.	2.000		.1875	584	0.00	57	584	57	585	57	60MIN
5.	2.000		.21875	515	0.00	58	515	58	518	58	60MIN

  

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P <sub>m</sub>	Flow Temp. Factor Ft.	Gravity Factor F <sub>g</sub>	Super Compress. Factor, F <sub>sp</sub>	Rate of Flow Q, Mcfd
1	.06405	0.00	703.2	1.016	1.252	1.071	61
2	.1410	0.00	683.2	1.011	1.252	1.068	130
3	.2648	0.00	660.2	1.004	1.252	1.062	233
4	.6082	0.00	597.2	1.003	1.252	1.056	480
5	.8393	0.00	528.2	1.002	1.252	1.048	583

  

NO.	P <sub>1</sub>	Temp. °R	T <sub>r</sub>	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	1.06	504	1.41	.871			.638	XXXXXX	661	358
2	1.03	509	1.42	.877			XXXXX	638	661	358
3	1.00	516	1.44	.887						
4	.90	517	1.44	.897						
5	.80	518	1.45	.910						

  

NO.	P <sub>1</sub>	P <sub>w</sub>	P <sub>w</sub> <sup>2</sup>	P <sub>1</sub> <sup>2</sup> - P <sub>w</sub> <sup>2</sup>
1	494	703.2	494	17
2	467	583.2	467	44
3	436	563.2	440	71
4	357	598.2	358	153
5	279	531.2	282	229

  

$$(1) \frac{P_1^2}{P_1^2 - P_w^2} = 3.3399$$

$$(2) \left[ \frac{P_1^2}{P_1^2 - P_w^2} \right]^n = 3.3399$$

  

$$\text{ANS} = 0 \left[ \frac{P_1^2}{P_1^2 - P_w^2} \right]^n = 1603.1$$

  

Absolute Open Flow	1603	Mcf @ 15.025	Angle of Slope @	45	Slope, n	1.000
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Remarks:

  

Approved by Consultant:	Conducted By:	Calculated By:	Checked By:
	BENNETT & CATHEY	RICHARD TOWNLEY	