

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

Form C-122
Revised 9-1-65

RECEIVED

JAN 29 1974

Type Test ☒ Initial ☐ Annual ☐ Special					Test Date 1-15-74		JAN 29 1974	
Company PERRY R. BASS				Connection Vented		O. C. C. ARTESIA, OFFICE		
Pool Wildcat				Formation Morrow Sand		Unit Big Eddy		
Completion Date 1-15-74		Total Depth 12240		Plug Back To 12020		Elevation 3182 GL 3199 KDB		Farm or Lease Name
Casing Size 5 1/2"	Wt. 17#	d 4.892	Set At 12241	Perforations: (Gross interval) From 11762 To 11853		Well No. 39		
Tubg. Size 2 7/8"	Wt. 6.5#	d 2.441	Set At 11,670	Perforations: From Open-ended		Unit 29	Sec. 21-S	Twp. 28-E
Type Well - Single - Bradenhead - G.C. or C.O. Multiple Single					Packer Set At 11657-11664		County EDDY	
Producing Thru Tubing		Reservoir Temp. °F 195° 11740		Mean Annual Temp. °F 60°		Baro. Press. - P _a 13.2		State NEW MEXICO
L 11670	H 11670	Gg 0.597	% CO ₂ 1.03	% N ₂ 0.32	% H ₂ S Nil	Provor	Water Run 4.026	Taps 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							4024	67	Pkr.	---	452 hrs.
1.	4.026	1 1/4	970	15	126	3892	71				1 hr.
2.	4.026	1 1/4	980	37	98	3733	73				1 hr.
3.	4.026	2"	980	15	68	3351	74				1 hr.
4.	4.026	2"	980	57	65	2193	75				1.5 hrs.
5.											

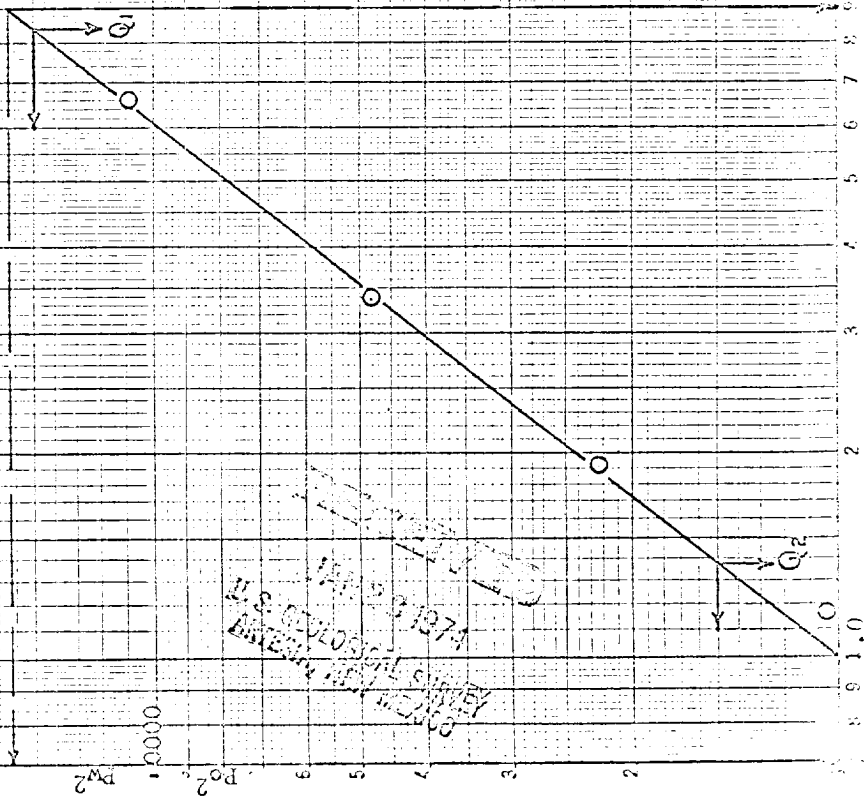
RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor F _t	Gravity Factor F _g	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd
1	7.469	121.42	983.2	.9420	1.294	1.052	1163
2	7.469	191.68	993.2	.9653	1.294	1.064	1903
3	19.81	122.04	993.2	.9924	1.294	1.083	3362
4	19.81	237.90	993.2	.9952	1.294	1.084	6579
5							

NO.	R _f	Temp. °R	T _f	Z	Gas Liquid Hydrocarbon Ratio Mcf/bbl.	A.P.I. Gravity of Liquid Hydrocarbons Deg.	Specific Gravity Separator Gas XXXXXXX	Specific Gravity Flowing Fluid XXXXXX	Critical Pressure P.S.I.A.	Critical Temperature °R
1	1.46	586	1.65	0.904	492	50.8	0.597	XXXXXXX	675	356
2	1.47	558	1.57	0.883						
3	1.47	528	1.49	0.852						
4	1.47	525	1.48	0.851						
5										

NO.	P ₁ ²	P _w	P ₂ ²	P ₂ ² - P _w ²	(1) $\frac{P_c^2}{P_2^2 - P_w^2} = 1.4906$	(2) $\left[\frac{P_c^2}{P_2^2 - P_w^2} \right]^n = 1.368$
1	15250	3908.2	15274.0	1025.0		
2	14034	3752.2	14079.0	2220.0		
3	11318	3385.2	11459.6	4839.4		
4	4867	2316.2	5364.8	10934.2		
5						

Absolute Open Flow <u>9,000</u> Mcfd @ 15.025		Angle of Slope <u>51.8°</u>		Slope, n <u>0.786</u>	
Remarks: The fourth flow period was extended 1 1/2 hour due to difficulty in starting the flow rate. This was caused by a sudden drop in temperature through the heater when the flow rate was increased.					
Approved By Commission:		Conducted By:		Calculated By: TOM COOK	
				Checked By:	

FACE PRESSURE CURVE
Perry R. Bass
Big Eddy Unit #39 - Wildcat
Eddy County, New Mexico
Location: Big Eddy, 29-21-S-28-E
Slope "n": 0.786
Potential: 9000 MCF/D
Date: January 15, 1974



$$Q_1 = 8400 \text{ MCF/D}$$

$$Q_2 = 1380 \text{ MCF/D}$$

$$\log Q_1 = 3.92634$$

$$\log Q_2 = 3.13988$$

$$N = 0.78646 = 0.786$$

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JAN 23 1974
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