

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

Form C-122
Revised 9-1-65

RECEIVED

Type Test ☒ Initial ☐ Annual ☐ Special		Test Date 3-6-74		MAR 20 1974	
Company PERRY R. BASS		Connection None		O. C. C.	
Pool Wildcat		Formation Morrow Sand		UNIT ARTESIA, OFFICE Big Eddy	
Completion Date 2-2-74		Total Depth 13,335'	Plug Back To 13,279'	Elevation 3426.5' GL	Farm or Lease Name Big Eddy Unit
Case Size 5 1/2"	Wt. 17#	d 4.892	Sat At 13,335	Perforations: (Gross) From 13068' To 13212	Well No. 38
Reg. Size 7/8"	Wt. 6.5#	d 2.441	bot At 13,000	Perforations: From Open To ended	Unit Sec. Twp. Rge. C 34 T-21S R29E
Type Well - Single - Bradenhead - G.G. or C.O. Multiple Single				Proctor Bot At 12993-13000	County Eddy
Producing Thru Tubing		Reservoir Temp. °F 200° ± 13086'	Mean Annual Temp. °F 60°	Baro. Press. - P _a 13.2	State New Mexico
L 13000	H 13000	Gg 0.600	% CO ₂ 1.01	% N ₂ 0.71	% H ₂ S Nil
		Prover 4"	Meter Run 4"		Taps Pipe

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	
1	3/8"	826	1 1/2	605	8.5	89	4071	67	Pkr.	----	601 hrs.
2	3/8"	826	1 1/2	615	20	90	3537	69			1 hr.
3	3/8"	826	1 1/2	625	6	88	3117	72			1 hr.
4	3/8"	826	2 1/2	630	19	87	2515	73			1 hr.
5	3/8"	826	2 1/2	630			1269	74			1 hr.

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor Ft.	Gravity Factor F _g	Super. Compres. Factor, F _{spv}	Rate of Flow Q, Mcfd
1	11.97	72.489	618.2	0.9732	1.291	1.043	1137
2	11.97	112.089	628.2	0.9723	1.291	1.044	1758
3	44.41	61.881	638.2	0.9741	1.291	1.045	3611
4	44.41	110.548	643.2	0.9750	1.291	1.045	6458
5							

NO.	P _r	Temp. °R	T _r	Z	Gas/Liquid Hydrocarbon Ratio	161	Mcfd/bbl.
1	0.92	549	1.50	0.909	A.P.L. Gravity of Liquid Hydrocarbons	50.8	Deq.
2	0.94	550	1.51	0.909	Specific Gravity Separator Gas	0.600	XXXXXXX
3	0.95	548	1.50	0.906	Specific Gravity Flowing Fluid	XXXXX	0.619
4	0.95	547	1.50	0.905	Critical Pressure	671	P.S.I.A. 674
5					Critical Temperature	365	R 361

P _r 4084.2 P _c 16680.7				(1) $\frac{P_c^2}{P_r^2 - P_c^2} = 1.1503$		$\left[\frac{P_c^2}{P_r^2 - P_c^2} \right]^n = 1.291$	
NO.	P _r	P _w	P _c	$\sqrt{P_r^2 - P_c^2}$			
1	12604	3544.2	12561.3	4119.3			
2	9798	3138.2	9848.3	6832.4			
3	6392	2561.2	6559.7	10121.0			
4	1644	1476.2	2179.2	14501.5			
5							

Absolute Open Flow		8337	Mcfd @ 15.025	Angle of Slope	28.7	Slope, n	1.823
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Remarks: The numerical value of the exponent, N, on the back pressure curve, does not fall within the acceptable limits; but the well will be re-tested when a pipeline connection is obtained.

Approved By Commission:	Conducted By:	Calculated By: Tom Cook.	Checked By:
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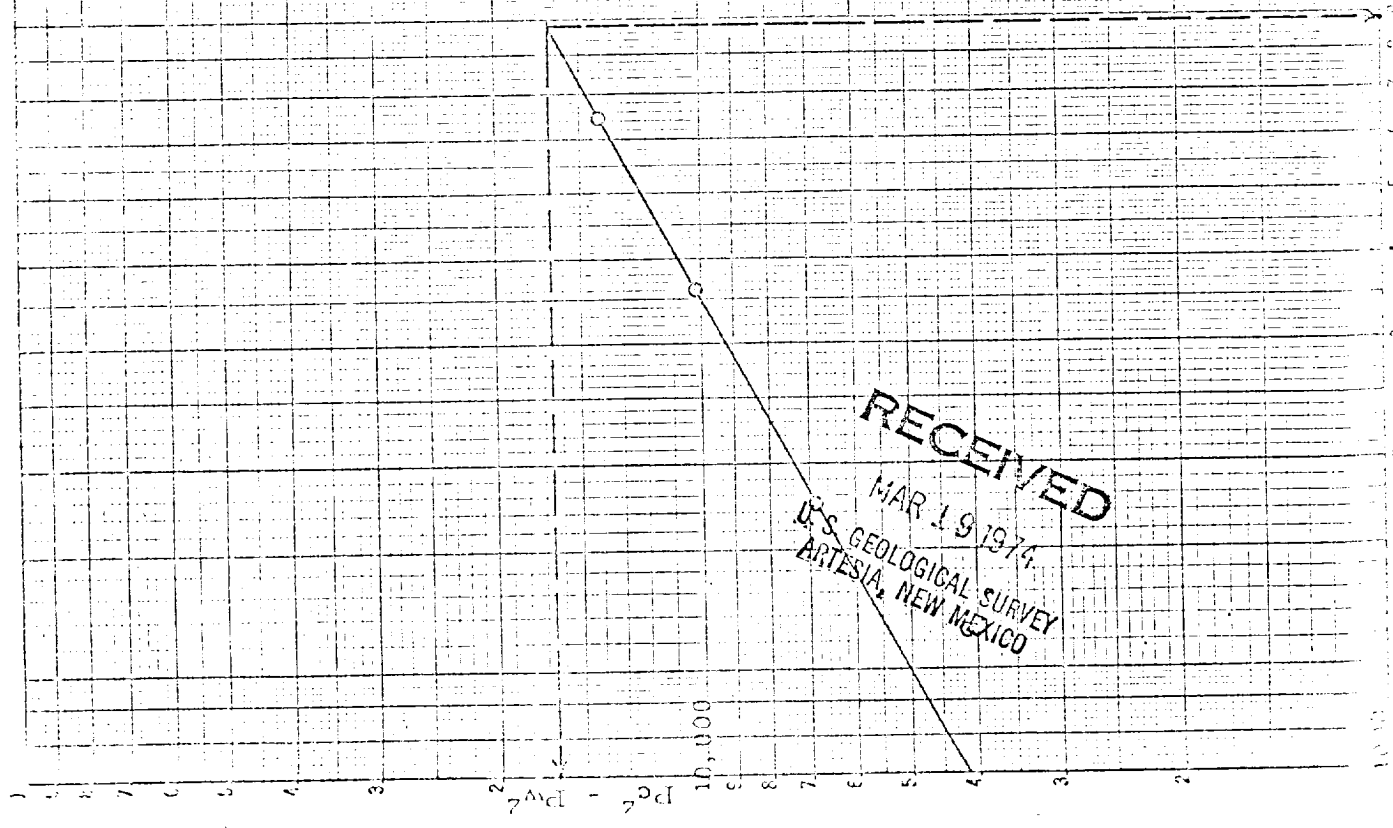
LOGGING
KUTLER & SONS CO.
SALT LAKE CITY, UTAH

BACK PRESSURE CURVE

PERRY R. BASS

Big Eddy Unit #38 -- Wildcat

Location: Sec. 29, T-21-S, R-29-E,
Eddy County, New Mexico
March 6, 1974
CAOF: 8337 MCFFD



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MAR 19 1974
U.S. GEOLOGICAL SURVEY
ARTESIA, NEW MEXICO