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State of New Mexico
Energy, Minerals and Natural Resources Department

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Form C-122
Revised 4-1-91

OIL CONSERVATION DIVISION

MAR - 2 1992

P.O. Box 2088
Santa Fe, New Mexico 87504-2088

O. C. D.
OFFICE

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Operator MEWBOURNE OIL COMPANY					Lease or Unit Name KAISER LAKE FED				
Type Test ☒ Initial ☐ Annual ☐ Special					Test Date 2-21-92		Well No. 1		
Completion Date 1-9-92		Total Depth 10081		Plug Back TD 9996		Elevation		Unit Ltr. - Sec. - TWP - Rge. 32 18S 27E	
Csg. Size 5 1/2	Wt. 20#	d	Set At 10081	Perforations: From: 9745 To: 9816			County Eddy		
Tbg. Size 2 7/8	Wt. 6.5	d 2.441	Set At 9673	Perforations: From: To:			Pool		
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single				Packer Set At 9673			Formation Morrow		
Producing Thru TBG		Reservoir Temp. °F 172 @9781		Mean Annual Temp. °F 60		Baro. Press - P _a 13.2		Connection	
L *9780.5	II 9780.5	Gg .639	% CO ₂ 1.60	% N ₂ .88	% H ₂ S	Prover	Meter Run 3.068	Taps Flg.	

FLOW DATA					TUBING DATA		CASING DATA		Duration of Flow	
NO.	Prover Line Size	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						1540		PKR.		72 hr
1.	3 X .750		465	3.00	90	1440		"		1 hr.
2.	3 X .750		495	14.00	82	1370		"		1 hr.
3.	3 X .750		495	28.00	80	1225		"		1 hr.
4.	3 X .750		495	32.00	80	970		"		1 hr.
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, F _{pv}	Rate of Flow Q, Mcfd
1.	2.672	37.88	478.2	.9723	1.251	1.037	128
2.	2.672	84.35	508.2	.9795	1.251	1.045	289
3.	2.672	119.29	508.2	.9813	1.251	1.045	409
4.	2.672	127.52	508.2	.9813	1.251	1.045	437
5.							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	Dry Gas	Mcf/bbl.
1.	.70	550	1.49	.930	A.P. I. Gravity of Liquid Hydrocarbons	Dry	Deg.
2.	.75	542	1.47	.916	Specific Gravity Separator Gas	.639	XXXXXXXXXX
3.	.75	540	1.47	.916	Specific Gravity Flowing Fluid	XXXXXX	
4.	.75	540	1.47	.916	Critical Pressure ***674	P.S.I.A.	P.S.I.A.
5.					Critical Temperature **367	R	R

P_c ***1571.7 P_c² 2470.2

NO.	P _t ²	P _w	P _w ²	P _c ² - P _w ²	1) $\frac{P_c^2}{P_c^2 - P_w^2} = 2.528$	(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 2.528$
1.	***	1490.2	2220.7	249.5		
2.	***	1417.8	2010.2	460.0		
3.	***	1317.7	1736.3	733.9		
4.	***	1221.9	1493.0	977.2		
5.						

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.105$

Absolute Open Flow 1.105 Mcfd @ 15.025	Angle of Slope θ 45	Slope, n 1.000
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Remarks: *=BHP INSTRUMENT SET @ THIS DEPTH.
**= CORRECTED TO 1.60% CO₂
NO FLUID PRODUCED DURING TEST

Approved By Division	Conducted By: PRO WELL TESTERS	Calculated By: BM	Checked By: BM
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***=CALCULATED FORM KNOWN BHP'S.