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appropriate district office
See Rule 401 & Rule 1122

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-122
Revised 4-1-91

OIL CONSERVATION DIVISION

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

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Operator MEWBOURNE OIL COMPANY						Lease or Unit Name ILLINOIS CAMP ST. 1					
Type Test ☒ Initial ☐ Annual ☐ Special						Test Date 7-25-94		Well No. 20			
Completion Date 5-28-94		Total Depth 10640		Plug Back TD 10550		Elevation RECEIVED		Unit Ltr. - Sec. - TWP - Rge. 20 18S 28E			
Csg. Size 5 1/2	Wt. 17#	d	Set At 10640	Perforations: From: 10259 To: 10510		County EDDY					
Tbg. Size 2 7/8	Wt. 6.5	d	Set At 10147	Perforations: From: To:		Pool Illinois Camp Morrow					
Type Well - Single - Bradenhead - G.G. or H.O. Multiple single						Packer Set At 10147		Formation MARROW			
Producing Thru TBG		Reservoir Temp. °F 158		Mean Annual Temp. °F 60		Baro. Press - P _a 13.2		Connection PIPELINE			
L *10386.5	H 10386.5	Gg .668	% CO ₂ .99	% N ₂ .58	% 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.	
SI						1350		PKR	
1.	3.068 X	.750	400	2	86	1340		"	
2.	3.068 X	.750	400	8	87	1325		"	1 hr.
3.	3.068 X	.750	400	47	95	1305		"	1 hr.
4.	3.068 X	1.250	420	8	102	1275		"	30 min
5.	3.068 X	1.250	520	38	102	1070		"	30 min
									1 hr.

RATE OF FLOW CALCULATIONS							
NO.	COEFFICIENT (24 HOUR)	$h_w P_m$	Pressure P _m	Flow Temp. Factor Ft.	Gravity Factor Fg.	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd
1.	2.672	28.75	413.2	.9759	1.224	1.037	95
2.	2.672	57.49	413.2	.975	1.224	1.037	190
3.	2.672	139.36	413.2	.9680	1.224	1.037	458
4.	7.577	58.87	433.2	.9619	1.224	1.034	543
5.	7.577	142.34	533.2	.9619	1.224	1.042	1323

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	DRY GAS	Mcf/bbl.
1.	.61	546	1.45	.930	A.P. I. Gravity of Liquid Hydrocarbons	DRY	Deg.
2.	.61	547	1.45	.930	Specific Gravity Separator Gas	.668	XXXXXXXXXX
3.	.61	555	1.47	.930	Specific Gravity Flowing Fluid	DRY	XXXXXX
4.	.64	562	1.49	.936	Critical Pressure	674	P.S.I.A. P.S.I.A.
5.	.79	562	1.49	.921	Critical Temperature	377	R R

NO.	P _i ²	P _w	P _w ²	P _c ² - P _w ²
1.		1278.5	1634.56	16.15
2.		1272.6	1619.51	31.20
3.		1234.8	1524.73	125.98
4.		1225.7	1502.34	148.37
5.		1051.5	1105.65	545.06

1) $\frac{P_c^2}{P_c^2 - P_w^2} = 3.029$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 2,803$

(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 2.119$

Absolute Open Flow 2,803	Mcf/d @ 15.025	Angle of Slope Θ 56	Slope, n .67778
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Remarks: * BHP INFO OBTAINED AT THIS DEPTH

NO FLUID MADE DURING TEST.

Approved By Division	Conducted By: PRO WELL TESTER GM	Calculated By: KS	Checked By: BM
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