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appropriate district office
See Rule 401 & Rule 1122

OIL CONSERVATION DIVISION

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

NOV 16 1992

O. C. D.
ARTIFICIAL LIFT

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Operator ENRON OIL AND GAS COMPANY						Lease or Unit Name CEDAR LAKE 35 FEDERAL COM					
Type Test ☒ Initial ☐ Annual ☐ Special						Test Date 10/30/92		Well No. 1			
Completion Date 6/9/92		Total Depth 12500		Plug Back TD 12335		Elevation 3548 GL		Unit Ltr. - Sec. - TWP - Rge. B 35 17S 30E			
Csg. Size 5 1/2	Wt. 17#	d 4.892	Set At 12500	Perforations: From: 11,188 To: 11,234				County EDDY			
Tbg. Size 2 7/8	Wt. 6.5#	d 2.441	Set At 10834	Perforations: From: OPEN To: ENDED				Packer Set At 10832			
Type Well - Single - Bradenhead - G.G. or G.O. Multiple SINGLE						Formation MORROW LOWER		Connection CONOCO			
Producing Thru TBC		Reservoir Temp. °F 166 @ 10853		Mean Annual Temp. °F 60		Baro. Press - P _a 13.2		Meter Run 4,026			
L 10853	H 10853	Gg .671	% CO ₂ .49	% N ₂ .52	% H ₂ S	Prover		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						3439	60	PKR		1.5 HRS
1.	4.026 X 2.750		345	8.7	96	3377	"			1 HR
2.	4.026 X 2.750		360	45.6	82	3224	"			1 HR
3.	4.026 X 2.750		375	90.7	67	3016	"			1 HR
4.	4.026 X 2.750		390	147	61	2724	60			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.	41.10	55.82	358.2	.9671	1.221	1.032	2796
2.	41.10	130.45	373.2	.9795	1.221	1.036	6643
3.	41.10	187.64	388.2	.9933	1.221	1.041	9737
4.	41.10	243.46	403.2	.9990	1.221	1.046	12767
5.							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	A.P. L Gravity of Liquid Hydrocarbons	Specific Gravity Separator Gas	Specific Gravity Flowing Fluid	Critical Pressure	Critical Temperature
1.	.54	556	1.46	.939	18.23	53.5 @ 60°	.671 *GOR .922	XXXXXXX	669	382
2.	.56	542	1.42	.932				XXXXXX		
3.	.58	527	1.38	.922						
4.	.60	521	1.36	.914						
5.										

NO.	P _t ²	P _w	P _w ²	P _c ² - P _w ²
1.	3409.2	11622.6	204.1	
2.	3343.1	11176.3	650.4	
3.	3259.0	10621.0	1205.7	
4.	3139.3	9853.3	1973.4	
5.				

1) $\frac{P_c^2}{P_c^2 - P_w^2} = 5.992$

2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 3.348$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 42,743$

3) $\frac{P_c^2}{P_c^2 - P_w^2} = 5.992$

4) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 3.348$

Absolute Open Flow	42,743	Mcfd @ 15.025	Angle of Slope θ	56°	Slope, n	.675
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Remarks: WELL PRODUCED 73 BBLS OIL DURING TEST

Approved By Division	Conducted By: JARREL SERVICES, INC.	Calculated By:	Checked By: GW
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