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State of New Mexico
Energy, Minerals and Natural Resources Department

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MAY - 5 1992

Form C-122
Revised 4-1-91

OIL CONSERVATION DIVISION

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 COLLINS & WARE, INC.						Lease or Unit Name SHEEP DRAW					
Type Test ☒ Initial ☐ Annual ☐ Special						Test Date 4 22 92		Well No. 1			
Completion Date 3 25 92		Total Depth 11,733		Plug Back TD 10,620		Elevation 3288.46 GR		Unit Lr. - Sec. - TWP - Rge. 33 22S 26E			
Csg. Size 7"	Wt. d	Set At 10,742	Perforations: From: To:		Country EDDY						
Tbg. Size 2 3/8"	Wt. d	Set At 10,280	Perforations: From: To:		Pool <i>Sheep Draw Strawn</i>						
Type Well - Single - Bradenhead - G.G. or G.O. Multiple SINGLE						Packer Set At 10,260		Formation STRAWN			
Producing Thru TBG		Reservoir Temp. °F 178.8@10280		Mean Annual Temp. °F 60°		Baro. Press - P 13.2		Connection EL PASO			
L 10,280	H 10,280	Gg .622	% CO ₂ 0.54	% N ₂ 0.62	% H ₂ S 0	Prover 1.500	Meter Run 4.026	Taps FLG			

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	9:15 AM						2700				48 HRS.
1.	4	X	1.500	313.6	2.89	76°	2622				1 HR
2.	4	X	1.500	313.6	16.00	72°	2442				1 HR
3.	4	X	1.500	324.9	20.25	74°	2265				1 HR
4.	4	X	1.500	324.9	33.64	76°	2026				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.	10.84	30.73	326.8	.9850	1.268	1.029	428
2.	10.84	72.31	326.8	.9887	1.268	1.029	1011
3.	10.84	82.74	338.1	.9868	1.268	1.030	1156
4.	10.84	106.65	338.1	.9850	1.268	1.030	1487
5.							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	DRY GAS	Mcf/bbl.
1.	.48	536	1.46	.944	A.P. I Gravity of Liquid Hydrocarbons	GAS	Deg.
2.	.48	532	1.45	.944	Specific Gravity Separator Gas	.622	XXXXXXXXXX
3.	.50	534	1.46	.942	Specific Gravity Flowing Fluid	XXXXXX	
4.	.50	536	1.46	.942	Critical Pressure	671	P.S.I.A.
5.					Critical Temperature	365	R

P_c 2713.2 P_c² 7377.8

NO.	P _i ²	P _w	P _w ²	P _c ² - P _w ²
1.		2636.6	6951.6	426.2
2.		2461.8	6060.5	1317.3
3.		2287.2	5231.2	2146.6
4.		2055.4	4224.6	3153.2
5.				

1) $\frac{P_c^2}{P_c^2 - P_w^2} = 2.339$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.701$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 2.529$

Absolute Open Flow 2,529 Mcfd @ 15.025		Angle of Slope θ 58°	Slope, n .625
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Remarks: NO FLUID PRODUCED DURING TEST

Approved By Division	Conducted By: JOHN WEST ENGINEERING	Calculated By: GPW	Checked By: BM
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