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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 Read & Stevens, Inc.										Lease or Unit Name Hudson Federal												
Type Test ☒ Initial ☐ Annual ☐ Special										Test Date 4/18/95					Well No. 1							
Completion Date 4/6/95					Total Depth 13,750					Plug Back TD 13,343'					Elevation 3,641'GR							
Csg. Size 5 1/2					Wt. 20#		d 4.778"		Set At 13,750		Perforations: From: 13,177' To: 13,184'										County Lea	
Tbg. Size 2-3/8"					Wt. 4.6#		d 1.995"		Set At 13,116		Perforations: From: 13,221' To: 13,231'										Pool N/A	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single										Packer Set At 13,116					Formation Morrow							
Producing Thru Tubing					Reservoir Temp. F 193 @ 13,204'					Mean Annual Temp. F 60					Baro. Press - Pa 13.2					Connection Vented		
L 13,116		H 13,116		Cg .65		%CO2 0		%N2 0		%H2S 0		Prover		Meter Run 2.067"		Taps Flg						

FLOW DATA						TUBING DATA		CASING DATA		Duration of Flow	
NO.	Prover Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. hw	Temp. F	Press. p.s.i.g.	Temp. F	Press. p.s.i.g.		Temp. F
SI							2310		Pkr		24 hrs
1.	2		1.5	270	2.5	47	2185				1 hr
2.	2		1.5	560	.5	71	1730				1 hr
3.	2		1.5	575	1.25	71	1230				1 hr
4.	2		1.5	575	2	71	880				1 hr
5.											

RATE OF FLOW CALCULATIONS							
NO.	COEFFICIENT (24 HOURS)	V_{hwPm}	Pressure Pm	Flow Temp Factor Ft.	Gravity Factor Fg.	Super Compress. Factor, Fpv	Rate of Flow Q, Mcfd
1.	12.76	26.61	283.2	1.013	1.240	1.025	439
2.	12.76	16.93	573.2	0.990	1.240	1.044	280
3.	12.76	27.12	588.2	0.990	1.240	1.045	449
4.	12.76	34.30	588.2	0.990	1.240	1.045	568
5.							

NO.	Pr	Temp. R	Tr	Z	Gas Liquid Hydrocarbon Ratio	136	Mcf/bbl.
1.	0.42	507	1.36	0.942	A.P.I. Gravity of Liquid Hydrocarbons	60	Deg.
2.	0.85	531	1.42	0.899	Specific Gravity Separator Gas	.65	XXXXXXXXXXXXXXXXXX
3.	0.88	531	1.42	0.896	Specific Gravity Flowing Fluid	N/A	G. Mix = N/A
4.	0.88	531	1.42	0.896	Critical Pressure	670.9 P.S.I.A.	N/A P.S.I.A.
5.					Critical Temperature	374.0 R	N/A R

Pc 2323.2		Pc 5397.3	
NO.	$\frac{2}{P_t}$	$\frac{2}{P_w}$	$\frac{2}{P_w - P_c}$
1.	0.0	2197.2	4827.7
2.	0.0	1743.2	3038.7
3.	0.0	1243.2	1545.5
4.	0.0	893.2	797.8
5.			

$$1) \frac{P_c^2}{2(P_c - P_w)} = 1.087$$

$$2) \frac{P_c^2}{2(P_c - P_w)} = 1.087$$

$$n = \frac{\log \left(\frac{P_c^2}{2(P_c - P_w)} \right)}{\log \left(\frac{P_c^2}{2(P_c - P_w)} \right)} = 617$$

Absolute Open Flow 620		Mcf/d @ 15.025		Angle of Slope O 45		Slope, n 1.00	
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Remarks: *Well loading with fluid, unable to calculate bottom hole pressures.*

Approved By Division	Conducted By: <i>Ortega Engr. & Prod. Services</i>	Calculated By: <i>M.J. De Marco</i>	Checked By:
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JUL 1957
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