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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 Stevin's and Tull				Lease or Unit Name Sweet thing st. 36			
Type Test ☒ Initial ☐ Annual ☐ Special				Test Date 2-24-98		Well No. 1	
Completion Date 2-18-98		Total Depth		Plug Back TD 8250		Elevation 4458 GL	
Crg. Size 5 1/2		Wt. 17	d 4.892	Set At 8250'	Perforations: From: 7978 To: 8008		Unit Ltr. - Sec. - TWP - Rgn. 36 20-S 21-E
Tbg. Size 2 3/8		Wt. 4.7	d 1.995	Set At	Perforations: From: To:		County Eddy
Type Well - Single - Bradenhead - G.G. or G.Q. Multiple Single				Packer Set At 7860		Formation Morrow	
Producing Thru Tbg		Reservoir Temp. °F 152		Mean Annual Temp. °F 60°		Barg. Press. - P. 13.2	
Connection Air							
L 7860	II 7860	Gg .642	% CO ₂ .610	% N ₂ .313	% H ₂ S 0	Prover 0	Meter Run 4.026
						Taps F/G	

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							2348	64 ⁰	PKR	-----	-----
1.	4.026	x	2.750	430	3"	89 ⁰	2280	64 ⁰	pkR	-----	60 min
2.	4.026	x	2.750	450	11"	78 ⁰	2150	64 ⁰	pkR	-----	60 min
3.	4.026	x	2.750	470	24"	70 ⁰	1950	64 ⁰	pkR	-----	60 min
4.	4.026	x	2.750	480	39"	64 ⁰	1715	64 ⁰	pkR	-----	60 min
5.											

RATE OF FLOW CALCULATIONS							
NO.	COEFFICIENT (24 HOUR)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor F _L	Gravity Factor F _g	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd
1.	41.10	36.46	443.2	.9732	1.248	1.045	1.902
2.	41.10	71.38	463.2	.9831	1.248	1.047	3769
3.	41.10	107.68	483.2	.9905	1.248	1.049	5739
4.	41.10	138.68	493.2	.9962	1.248	1.052	7455
5.							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	Mc/bbl
1.	.82	549	1.49	.916	98.255	
2.	.80	538	1.46	.912	A.P. L. Gravity of Liquid Hydrocarbons 54.6	Deg
3.	.79	530	1.44	.908	Specific Gravity Separator Gas .642	XXXXXXXXXX
4.	.78	524	1.42	.903	Specific Gravity Flowing Fluid N/A	XXXXXX
5.					Critical Pressure 667	P.S.I.A.
					Critical Temperature 368	R

P _c 2384.8	P _c ² 5687.2			
NO.	P _i ²	P _w	P _w ²	P _c ² - P _w ²
1.		2351.5	5529.5	157.7
2.		2307.7	5325.4	361.8
3.		2255.9	5089.0	598.8
4.		2202.3	4850.1	837.1
5.				

1) $\frac{P_c^2}{P_c^2 - P_w^2} = 6.79$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 4.80$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 35784.0$

Absolute Open Flow	35784.0	Mcfd @ 15.025	Angle of Slope θ	50.6	Slope, n	.819
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Remarks: *Well made 8 bals of 54.6° API GRAVITY CONDENSATE
*CALCAULATED FROM KNOWN BOTTOM HOLE PRESSURES

Approved By Division	Conducted By: PRO WELL TESTING	Calculated By: M. B.	Checked By: B.M.
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