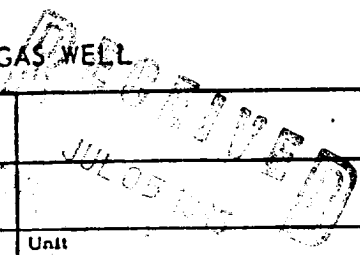


MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL



Type Test <input checked="" type="checkbox"/> Initial <input type="checkbox"/> Annual <input type="checkbox"/> Special		Test Date 6/28/85	
Company SOUTHERN UNION EXPLORATION CO.		Connection EL PASO NATURAL GAS	
Pool BASIN DAKOTA		Formation DAKOTA	
Completion Date 6/28/85		Total Depth 6885'	Plug Back TD 6860'
Elevation 6514 G.L.		Farm or Lease Name Nickson	
Csq. Size 4 1/2"	Wt. 10.5# 11.6#	Set At 4.000 6885	Perforations: From 6742 To 6816
Tbg. Size 2 1/16	Wt. 3.25	Set At 1.750 6816	Perforations: From To
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single		Packer Set At N/A	County San Juan
Producing Thru Tbg	Reservoir Temp. °F #	Mean Annual Temp. °F	Baro. Press. - P <sub>a</sub> State New Mexico
L	H	G <sub>g</sub>	% CO <sub>2</sub> % N <sub>2</sub> % H <sub>2</sub> S    Prover

FLOW DATA					TUBING DATA		CASING DATA		Duration of Flow
NO.	Prover Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. h <sub>w</sub>	Temp. °F	Press. p.s.i.g.	Temp. °F	
SI						64	1800	1845	7 days
1.		.750					86	635	3 hrs
2.									
3.									
4.									
5.									

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P <sub>m</sub>	Flow Temp. Factor Ft.	Gravity Factor F <sub>g</sub>	Super Compress. Factor, F <sub>pv</sub>	Rate of Flow Q, Mcfd
1	12.3650		98	.9962	.9463	1.009	1153
2.							
3.							
4.							
5.							

NO.	P <sub>r</sub>	Temp. °R	T <sub>r</sub>	Z	Gas Liquid Hydrocarbon Ratio _____ Mcf/bbl.
1.					A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.
2.					Specific Gravity Separator Gas <u>670 Est</u> X X X X X X X X X
3.					Specific Gravity Flowing Fluid    X X X X X
4.					Critical Pressure _____ P.S.I.A.    _____ P.S.I.A.
5.					Critical Temperature _____ R    _____ R

P <sub>c</sub> 1845	P <sub>c</sub> <sup>2</sup> 3404025	(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1140$	(2) $\left[ \frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1103$	
NO	P <sub>i</sub> <sup>2</sup>	P <sub>w</sub>	P <sub>w</sub> <sup>2</sup>	P <sub>c</sub> <sup>2</sup> - P <sub>w</sub> <sup>2</sup>
1		647	418609	2985416
2				
3				
4				
5				

AOF = Q  $\left[ \frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1272$

Absolute Open Flow \_\_\_\_\_ Mcfd @ 15.025    Angle of Slope θ \_\_\_\_\_    Slope, n \_\_\_\_\_

Remarks: Well unloaded one big slug of oil. Then blew light to medium mist of condensate. Half way thru test well flowed intermittent mist of water and oil. At end of test well was flowing light mist of water and oil.

Approved by Division \_\_\_\_\_    Conducted By: Steve R. Hudgins    Calculated By: Law H. Hudgins    Checked By: \_\_\_\_\_