

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR **GREOELVED**

Type Test ☒ Initial ☐ Annual ☐ Special		Test Date 4-19-90	
Company Union Oil Co. of Calif.		Connection Flared	
Pool Gem Morrow Gas		Formation Morrow	
Completion Date 4-17-90		Total Depth 13,750	Plug Back TD 13,230
		Elevation 3600.6	Unit Maduro Federal Unit
Csq. Size 5-1/2"	Wt. 17	Set At 13,750	Perforations: From 13052 To 13062
Thq. Size 2	Wt. 6.5	Set At 12,966	Perforations: From To
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single		Packer Set At 12,966	County Lea
Producing Thru Tbg at 12,966	Reservoir Temp. °F 6	Mean Annual Temp. °F 60	Baro. Press. - P _a 13.2
L 12966	H	G _g .663	% CO ₂ 0.37
		% N ₂ 0.82	% H ₂ S 0
		Prover	Meter Run 3.068
			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
1.	3.068 x 1.25			500	5.5	87	4720				34 hr
2.	3.068 x 1.25			500	11	75	3822				1 hr
3.	3.068 x 1.25			500	10	69	3260				1 hr
4.	3.068 x 1.25			500	55	66	3020				1 hr
5.							2240				1 hr

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor Ft.	Gravity Factor F _g	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd
1.	7.577	53.128	513.2	.9750	1.228	1.045	504
2.	7.577	75.134	513.2	.9859	1.228	1.048	722
3.	7.577	71.638	513.2	.9915	1.228	1.051	695
4.	7.577	135.923	513.2	.9943	1.228	1.054	1325.4
5.							

NO.	P _t	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	A.P.I. Gravity of Liquid Hydrocarbons	Specific Gravity Separator Gas	Specific Gravity Flowing Fluid	Critical Pressure	Critical Temperature
1.	.766	547	1.447	.915		55.4	.663	X X X X X X X X	670	378
2.	.766	535	1.415	.911						
3.	.766	529	1.400	.905						
4.	.766	526	1.392	.90						
5.										

P _c 6706	P _c ² 44,970,436	(1) $\frac{P_c^2}{P_t^2 - P_w^2} = 1.4431$	(2) $\left[\frac{P_c^2}{P_t^2 - P_w^2} \right]^n = 1.4431$
NO. 1	P _t ² 5743	P _w ² 32,982	P _c ² - P _w ² 11,988
2	5099	25,999	18,970
3	4872	22,676	22,293
4	3716	13,808	31,161
5			

Absolute Open Flow 1912.7 Mcfd @ 15.025		Angle of Slope 45°	Slope, n 1
Remarks: P _w is BHP. Well made 8 BC + 0 BW during test			
MAY 25 1990			
Approved By Division SIGNED BY JERRY SEXTON DISTRICT SUPERVISOR	Conducted By: Jim Bilbrey	Calculated By: Charles Pietsch	Checked By: Charles Pietsch

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MAY 21 1990

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HOLDS OFFICE