:W MEXICO OIL CONSERVATION CO. SION

MULTIPOIN. AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form C-122
Revised 9-1-65

RECEIVED
JUN 20 1978
O. C. C.
ARTESIA, OFFICE

Type Test: [X] Initial [ ] Annual [ ] Special				Test Date: 6-15-78		
Company: Atlantic Richfield Company		Connection: None				
Pool: ~~Undesignated~~ South		Formation: Empire Morrow Gas			Unit	
Completion Date: 6-9-78	Total Depth: 10,860	Plug Back TD: 10,850	Elevation: 3688.5 GR	Farm or Lease Name		
Csg. Size: ~~7-5/8~~ 4½" Liner	Wt. 26.4 / 11.6	d 6.969 / 4.00	Set At 6805 / 6562-10,860	Perforations: From 10,685 To 10,765	Well No.: ~~State BV~~ #1	
Tbg. Size: 2-3/8"	Wt. 4.7	d 1.995	Set At 10,647	Perforations: From 10,647 To 10,650	Unit J, Sec. 25, Twp. 17S, Rge. 28E	
Type Well – Single – Bradenhead – G.G. or G.O. Multiple: Single				Packer Set At: 10,645	County: Eddy	
Producing Thru: Tbg	Reservoir Temp. °F: 166° @ 10,779	Mean Annual Temp. °F: 60°	Baro. Press. – P_a: 13.2		State: New Mexico	

L	H	Gg	% CO_2	% N_2	% H_2S	Prover	Meter Run	Taps
10647	10647	.667	.62	.55	-0-		4"	Flg

	FLOW DATA				TUBING DATA		CASING DATA		
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	Duration of Flow
SI	4 x 2.25				2923	80	Pkr		144 hrs
1.	4 x 2.25	500	4	120	2910	78			1/2 hrs
2.	4 x 2.25	500	18	98	2857	79			3/4 hrs
3.	4 x 2.25	550	38	78	2764	78			3/4 hrs
4.	4 x 2.25	560	56	59	2680	79			3/4 hrs
5.	4 x 2.25	830	76	60	2377	80			3/4 hrs

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, Fpv	Rate of Flow Q, Mcfd
1	25.64	45.31	513.2	.9469	1.224	1.035	1394
2.	25.64	96.11	513.2	.9653	1.224	1.041	3031
3.	25.64	146.29	563.2	.9831	1.224	1.052	4748
4.	25.64	179.16	573.2	1.001	1.224	1.058	5955
5.	25.64	253.15	843.2	1.000	1.224	1.090	8660

NO.	P_r	Temp. °R	T_r	Z
1.	.76	580	1.55	.933
2.	.76	558	1.49	.922
3.	.84	538	1.44	.904
4.	.82	519	1.39	.894
5.	1.25	520	1.39	.841

Gas Liquid Hydrocarbon Ratio 69.4 Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons 58.0 Deg.
Specific Gravity Separator Gas 0.667 XXXXXXXXXX
Specific Gravity Flowing Fluid XXXXX 0.708
Critical Pressure 673 P.S.I.A. 668 P.S.I.A.
Critical Temperature 374 R 392 R

*P_c 4053.2 P_c^2 16428.4

NO	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1	*	4050.2	16404.1	24.3
2	*	4044.2	16355.6	72.8
3	*	4020.2	16226.4	202.0
4	*	4003.2	16025.6	402.8
5	*	3992.2	15937.7	490.7

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 81.3287$

(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 12.878$

$AOF = Q \left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 61,145$

Posted ND-2 + back 6-30-78

Absolute Open Flow 61,145 Mcfd @ 15.025 | Angle of Slope θ 59° 50' | Slope, n 0.581

NC 6/

Remarks: * BHP recorded is at 10,725 feet (mid point of perforations)
10.5 bbl of distillate (58° API) produced during test.

Approved By Commission:	Conducted By:	Calculated By:	Checked By:
	James D. Coffman (signature)	James D. Coffman (signature)	William [illegible] (signature)