c121 File

Form C-122
Revised 10-1-78

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

OIL CONSERVATION DIVISION
P. O. BOX 2088
SANTA FE, NEW MEXICO 87501

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

RECEIVED
MAR 2 9 1991
O. C. D.
ARTESIA, OFFICE

Type Test: [X] Initial [ ] Annual [ ] Special				Test Date: 1/8/91	
Company: Oxy USA, Inc.		Connection: Vented			Unit
Pool: Burton Flat		Formation: Morrow			
Completion Date: 1/8/91	Total Depth: 12165		Plug Back TD: 11910	Elevation: 3148.0 G.L.	Farm or Lease Name: Simpson A
Csg. Size: 5 1/2 / Wt.: / d: / Set At: 12165			Perforations: From 11624 To 11809		Well No.: 2-Z
Tbg. Size: 2 3/8 / Wt.: 4.7 / d: 1.995 / Set At: 11556			Perforations: From open To end		Unit: H / Sec.: 29 / Twp.: 21S / Rge.: 27E
Type Well – Single – Bradenhead – G.G. or G.O. Multiple: Single			Packer Set At: 11556		County: Eddy
Producing Thru: Tbg.	Reservoir Temp. °F: 191 @ 11716	Mean Annual Temp. °F: 60	Baro. Press. – P_a: 13.2		State: NM

L	H	Gg	% CO_2	% N_2	% H_2S	Prover	Meter Run	Taps
*11716	*11716	.598	1.07	0.48			3.826	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						2242		Pkr.		24 Hrs.
1.	4	x 1.250	470	3.00	75	1917		Pkr.		1 Hr.
2.	4	x 1.250	480	8.00	94	1858		Pkr.		1 Hr.
3.	4	x 1.250	490	28.00	72	1558		Pkr.		1 Hr.
4.	4	x 1.250	490	41.00	58	1410		Pkr.		1 Hr.
5.										

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	7.483	38.07	483.2	.9859	1.293	1.038	377
2.	7.483	62.81	493.2	.9688	1.293	1.031	607
3.	7.483	118.70	503.2	.9887	1.293	1.039	1,180
4.	7.483	143.64	503.2	1.002	1.293	1.044	1,454
5.							

NO.	P_r	Temp. °R	T_r	Z
1.	.71	535	1.51	.929
2.	.72	554	1.56	.940
3.	.74	532	1.50	.926
4.	.74	518	1.46	.917
5.				

Gas Liquid Hydrocarbon Ratio: Dry Gas Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons: Dry Deg.
Specific Gravity Separator Gas: .598 xxxxxxxxx
Specific Gravity Flowing Fluid: xxxxx
Critical Pressure: **676 P.S.I.A. ____ P.S.I.A.
Critical Temperature: **353 R ____ R

P_c ***2243.7 P_c^2 5034.2

NO	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1		1935.4	3745.8	1288.4
2		1883.0	3545.7	1488.5
3		1604.1	2573.1	2461.1
4		1499.1	2247.3	2786.9
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.806$

(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1.806$

Post FD-2
4-12-91
comp + BK

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 2.626$

Absolute Open Flow: 2,626 Mcfd @ 15.025 Angle of Slope θ: 45 Slope, n: 1.000

Remarks: * = BHP instrument set @ this depth
** = Corrected to 1.07% CO2 (No fluid produced)
*** = BHP from shut-in corrected to surface pressure (psia)

Approved By Division	Conducted By:	Calculated By:	Checked By:
	John West Engineering	BM	BM