30-015-30908

NEW MEXICO OIL CONSERVATION COMMISSION

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form C-122
Revised 9-1-65

RECEIVED
2000
OCD
ARTESIA

Type Test: [X] Initial [ ] Annual [ ] Special				Test Date: 5/17/00	
Company: OXY USA, INC.		Connection: 4-14-00			
Pool: Logan Draw Morrow		Formation: MORROW			Unit:
Completion Date: 4-14-00	Total Depth: 9800	Plug Back TD:	Elevation:		Farm or Lease Name: ROSENKAVLIER
Csg. Size: 4.5 / Wt.: 11.6 / d: 4.0 / Set At:		Perforations: From 9539 To 9549			Well No.: 1
Tbg. Size: 2.375 / Wt.: 4.7 / d: 1.995 / Set At: 9484		Perforations: From To			Unit: D Sec.: 23 Twp.: 17 Rge.: 27
Type Well - Single - Bradenhead - G.G. or G.O. Multiple: SINGLE			Packer Set At: 9472		County: EDDY
Producing Thru: TUBING	Reservoir Temp. °F: 162 @ 9489	Mean Annual Temp. °F: 60	Baro. Press. - P_a: 13.2		State: NM

L	H	G_g	% CO_2	% N_2	% H_2S	Prover	Meter Run	Taps
9484	9484	0.6398					2.068	FLANGE

	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						701	82			115
1.	2.068	1.000	584	1.2	82	651	82			1
2.	2.068	1.000	584	4.3	83	628	82			1
3.	2.068	1.000	588	6.6	81	600	83			1
4.	2.068	1.000	581	7.1	79	585	86			1
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.	4.946	26.76	596.7	0.9795	1.2502	1.0522	171
2.	4.946	50.66	596.7	0.9789	1.2502	1.0520	323
3.	4.946	63.14	601.3	0.9809	1.2502	1.0532	403
4.	4.946	65.17	594.2	0.9825	1.2502	1.0533	416
5.							

NO.	P_r	Temp. °R	T_r	Z
1.	0.89	542	1.46	0.903
2.	0.89	543	1.46	0.904
3.	0.90	541	1.46	0.901
4.	0.89	539	1.45	0.901
5.				

Gas Liquid Hydrocarbon Ratio: NONE Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons: NONE Deg.
Specific Gravity Separator Gas: 0.6398 XXXXXXXXX
Specific Gravity Flowing Fluid: XXXX 0.6398
Critical Pressure: 671 P.S.I.A. 671 P.S.I.A.
Critical Temperature: 371 R 371 R

P_c 823.3 P_c^2 678

NO.	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1.		821	674	3
2.		799	639	39
3.		785	616	62
4.		781	610	68
5.				

(1) $\frac{P_c^2}{P_c^2 - P_w^2}$ = 10.0119 (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n$ = 3.1642

$AOF = Q\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n$ = 1318

Absolute Open Flow: 1318 Mcfd @ 15.025 | Angle of Slope θ: 63.4 | Slope, n: 0.500

Remarks: Bottomhole pressures recorded using electronic pressure gauge #P-87.

Approved By Commission:	Conducted By:	Calculated By:	Checked By:
	ARC Pressure Data, Inc.	Rod Dodson	

GAS WELL BACK-PRESSURE CURVE

OXY USA, INC.
ROSENKAVLIER FEDERAL #1
EDDY COUNTY,NM
5/17/00

n = 0.5 θ = 63.4 ° AOF = 1318 Mcf/day