CIST File

Submit in duplicate to appropriate district office
See Rule 401 & Rule 1122

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-122
Revised 4-1-91

OIL CONSERVATION DIVISION

P.O. Box 2088
Santa Fe, New Mexico 87504-2088

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Operator: COLLINS AND WARE				Lease or Unit Name: BOEING ~~FED. COM.~~ Fed 2 Com	
Type Test: [X] Initial [ ] Annual [ ] Special				Test Date: 8/10/92	Well No.: 1
Completion Date	Total Depth: 11940'		Plug Back TD: 11902'	Elevation	Unit Ltr. - Sec. - TWP - Rge.: E 2 23 26
Csg. Size: 5½" / Wt.: 17 / d: / Set At: 11940'				Perforations: From: 11733' To: 11846'	County: EDDY
Tbg. Size: 2 7/8" / Wt.: 6.5 / d: 2.441 / Set At: 11700'				Perforations: From: To:	Pool:
Type Well - Single - Bradenhead - G.G. or G.O. Multiple: SINGLE			Packer Set At: 11696'		Formation: ~~S.~~ Carlsbad MORROW
Producing Thru: TBG	Reservoir Temp. °F: 191@11700'	Mean Annual Temp. °F: 60°	Baro. Press - P_a: 13.2		Connection: EPNG

L	H	Gg	% CO_2	% N_2	% H_2S	Prover	Meter Run	Taps
11700'	11700'	.584	1.33	.31			4.026	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						2980		PKR		24 HRS.
1.	4	X 1.000	359	14.44	92	542		"		1 HR.
2.	4	X 1.000	347	20.25	90	417		"		1 HR.
3.	4	X 1.500	347	4.00	89	380		"		1 HR.
4.	4	X 1.500	347	6.25	88	358		"		24 HRS.
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, F pv.	Rate of Flow Q, Mcfd
1.	4.753	73.31	372.2	.9706	1.309	1.023	453
2.	4.753	85.41	360.2	.9723	1.309	1.022	528
3.	10.84	37.96	360.2	.9732	1.309	1.022	536
4.	10.84	47.45	360.2	.9741	1.309	1.022	670
5.							

NO.	P_r	Temp. °R	T_r	Z
1.	.55	552	1.58	.956
2.	.53	550	1.57	.958
3.	.53	549	1.57	.958
4.	.53	548	1,57	.958
5.				

Gas Liquid Hydrocarbon Ratio: DRY GAS Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons: DRY Deg.
Specific Gravity Separator Gas: .584 XXXXXXXXX
Specific Gravity Flowing Fluid: XXXXX
Critical Pressure: * 676 P.S.I.A. P.S.I.A.
Critical Temperature: * 349 R R

P_c 2993.2 P_c^2 8959.2

NO.	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1.		557.6	310.9	8648.4
2.		434.4	188.7	8770.5
3.		398.0	158.4	8800.9
4.		379.1	143.7	8815.5
5.				

1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.016$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1.016$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = .681$

Absolute Open Flow: 681 Mcfd @ 15.025 | Angle of Slope θ: 45° | Slope, n: 1.000

Remarks: WELL MADE TRACE OF FLUID DURING TEST.
* CORRECTED TO 1.33% CO2 AND .31 N2.

Approved By Division	Conducted By:	Calculated By:	Checked By:
	JOHN WEST ENGINEERING	BM	BM