OIL CONSERVATION DIVISION

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

P. O. BOX 2088
SANTA FE, NEW MEXICO 87501

Form C-122
Revised 10-1-78

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Type Test: [X] Initial [ ] Annual [ ] Special				Test Date: 4/5/83	
Company: The Desana Corporation		Connection: None			
Pool: Undesignated		Formation: San Andres		Unit	
Completion Date: 3/25/83	Total Depth: 7250'	Plug Back TD: 2310'	Elevation: 4602'GL	Farm or Lease Name: Wichita State	
Csg. Size: 4½" / Wt.: 10.5 / d: 4.090 / Set At: 2464'		Perforations: From 2070' To 2091'		Well No.: 1	
Tbg. Size: 2 3/8" / Wt.: 4.7 / d: 1.995 / Set At: 2020'		Perforations: From Open To Ended		Unit: M / Sec.: 36 / Twp.: 5N / Rge.: 30E	
Type Well – Single – Bradenhead – G.G. or G.O. Multiple: Single		Packer Set At: 2020'		County: Quay	
Producing Thru: Tubing	Reservoir Temp. °F: 166 @ 2080'	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
2080	–	0.8807	0.211	71.503	–	–	1.939	F

NO.	FLOW DATA: Prover Line Size	X Orifice Size	Press. p.s.i.g.	Diff. h_w	Temp. °F	TUBING DATA: Press. p.s.i.g.	Temp. °F	CASING DATA: Press. p.s.i.g.	Temp. °F	Duration of Flow
SI						680	60	PACKER		8 DAYS
1.	1.939	7/64 1.00	80	10	62	633	60			0.75 hr
2.	1.939	8 5/64 1.00	80	18	62	575	60			1.0 hr
3.	1.939	10/64 1.00	80	27	62	510	61			1.0 hr
4.	1.939	11.5/64 1.00	80	32	62	430	61			1.0 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	4.999	30.53	93.2	0.9981	1.065	–	162.23
2	4.999	40.96	93.2	0.9981	1.065	–	217.65
3	4.999	50.16	93.2	0.9981	1.065	–	266.54
4	4.999	54.61	93.2	0.9981	1.065	–	290.19
5							

NO.	P_t	Temp. °R	T_t	Z
1	0.17	522	2.06	–
2	0.17	522	2.06	–
3	0.17	522	2.06	–
4	0.17	522	2.06	–
5				

Gas Liquid Hydrocarbon Ratio: Dry Gas Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons: – Deg.
Specific Gravity Separator Gas: 0.8807 XXXXXXXXX
Specific Gravity Flowing Fluid: XXXXX
Critical Pressure: 545 P.S.I.A. – P.S.I.A.
Critical Temperature: 254 R – R

P_c 725.2 P_c^2 525.9

NO	P_t^2	P_w *	P_w^2	$P_c^2 - P_w^2$
1		663.2	439.8	86.1
2		625.2	390.9	135.0
3		583.2	340.1	185.8
4		510.2	260.3	265.6
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 2.830$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1.948$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 519.22$

Absolute Open Flow: 519 Mcfd @ 15.025 Angle of Slope θ: 57° 20' Slope, n: 0.641

Remarks: * BOTTOM HOLE PRESSURE @ (+2522) 2080' USED FOR PRESSURE CALCULATIONS

Joe A. Coleman

Approved By Division	Conducted By:	Calculated By:	Checked By:
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