

EW MEXICO OIL CONSERVATION COMM ON
MULTI-POINT BACK PRESSURE TEST FOR GAS WELL

Form C-122
Revised 12-1-55

Pool Indian Basin		Formation XXXX Upper Penn		County Eddy	
Initial X		Annual		Date of Test 10-7-65	
Company Monsanto Company		Lease Conoco-State		Well No. 142751A, OFFICE	
Unit F	Sec. 2	Twp. 22-S	Range 23-E	Purchaser None	
Casing 4 1/2"	Wt. 11.6	I.D. 4.000	Set at 7807	Perf. 7413	To 7488
Tubing 2 3/8"	Wt. 4.7	I.D. 1.995	Set at 7276	Perf. Open Ended	To
Gas Pay:	From 7413	To 7488	L 7276	G .6629	GL 4823
					Bar. Press. 13.2
Producing Through:		Casing	Tubing X	Type Well - Single - Braden head - G.G. or G.O. Dual Single	
Date of Completion 10-4-65		Packer 7276		Reservoir Temp.	

OBSERVED DATA

Tested Through: Prover ☐ Choke ☐ Meter ☒								Type of Taps Flange		
FLOW DATA						TUBING DATA		CASING DATA		DURATION OF FLOW HR.
No.	(Crown) (Line) Size	(Block) (Orifice) Size	Press. psig.	Diff. h _w	Temp. °F.	Press. psig.	Temp. °F.	Press. psig.	Temp. °F.	
SI						2380	86	Packer		
1.	4"	2.250	400	23.0	84	2293	82	Packer		1.00
2.	4"	2.250	485	33.5	64	2263	78	Packer		1.00
3.	4"	2.250	640	44.5	59	2196	79	Packer		1.00
4.	4"	2.250	835	57.5	65	2129	86	Packer		1.00
5.										

FLOW CALCULATIONS

No.	Coefficient (24 Hour)	$\sqrt{h_w P_f}$	Pressure psia	Flow Temp. Factor F _t	Gravity Factor F _g	Compress. Factor F _{pv}	Rate of Flow Q-MCF PD @ 15.025 psia *
1.	33.10	97.49	413.2	.9777	.9679	1.023	3,124
2.	33.10	129.19	498.2	.9962	.9679	1.033	4,259
3.	33.10	170.49	653.2	1.0010	.9679	1.067	5,834
4.	33.10	220.84	848.2	.9952	.9679	1.084	7,633
5.							

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio 113,727 cf/bbl. Specific Gravity Separator Gas .6405
 Gravity of Liquid Hydrocarbons 60.1 deg. Specific Gravity Flowing Fluid .6629
 F_c 9.936 (1-e^{-S}) .282 P_c 2393.2 P_c² 5,727.4

No.	P _w P _t psia	P _t ²	F _c Q	(F _c Q) ²	(F _c Q) ² (1-e ^{-S})	P _w ²	P _c ² - P _w ² **	Cal P _w	P _w P _c
1.	2306.2	5,318.6	31.040	963.5	271.7	5,590.3	408.8		96.4
2.	2276.2	5,181.1	42.317	1,790.7	505.0	5,686.1	546.3		95.1
3.	2209.2	4,880.6	57.967	3,360.2	947.6	5,828.2	846.8		92.3
4.	2142.2	4,589.0	75.841	5,751.9	1,622.0	6,211.0	1,138.4		89.5
5.									

*Flow Rates were limited by the capacity of the Surface Equipment

ABSOLUTE POTENTIAL: 31,400 MCFPD; n .875

COMPANY West Texas Engineering Service, Inc. WITNESSED [Signature]

ADDRESS P. O. Box 4456 - Midland, Texas

AGENT AND TITLE R. W. Harrington
Field Petroleum Engineer

COMPANY MONSANTO COMPANY

**Calculated P_w² is obviously overcorrected.
P_t² was used instead.

RECEIVED
OCT 18 1965

COMPANY	Monsanto Company
WELL	Conoco-State No. 1
LOCATION	2-22S-23E
COUNTY	Eddy
DATE	10-7-65

RECEIVED

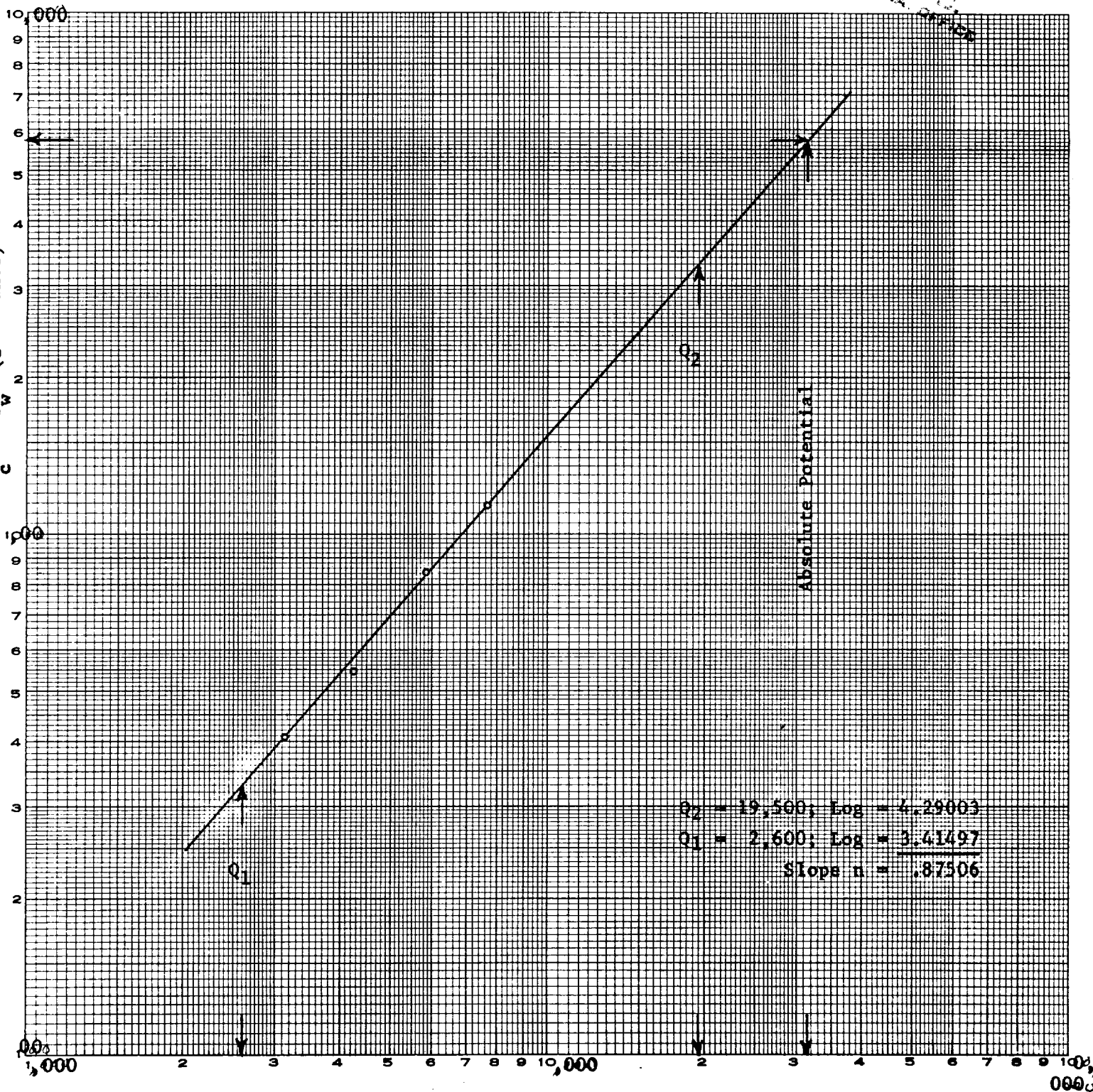
OCT 12 1965

CLERK
MONTANA OFFICE

EUGENE DIETZGEN CO.
MADE IN U. S. A.

NO. 340R-L22 DIETZGEN GRAPH PAPER
() LOGARITHMIC-2 CYCLES X 2 CYCLES

$P_c^2 - P_w^2$ (Thousands)



Q in MCFD