COLORADO CONSERVATION COMMISSION
~~RAILROAD COMMISSION OF TEXAS~~
OIL AND GAS DIVISION
MULTI-POINT BACK PRESSURE TEST
FOR GAS WELL

Company Horizon Oil & Gas Company Lease Nicodemus Well No. 1-6-UC
New Well X Retest Date of Test July 16, 19 62
Field Unnamed-Waubansee Formation County Bacca Acres 640
Sec. 6 Blk. 34 S Surv. 42 W Loc. Conn. None
Casing 2-7/8 Wt. 6.5 I.D. Set at 3048 Perf. 2920 To 2928
Liner Wt. I.D. Set at Perf. To
Tubing Wt. I.D. Set at Perf. To
Gas Pay From 2920 To 2928 L 2924 G .770 GL 2251 Barometric 14.4
e^s 1.169 F_d 6.376 Well Shut In 72 ± Hours Before Test
Size of Prover 2" CFP Size of Meter Run Type of Connection
REMARKS:

OBSERVED DATA

RUN NO.	SIZE METER RUN OR PROVER ORIFICE	METER PRESSURES STATIC Psig	Pm Psia	DIFFERENTIAL Inches-Roots	FLOW TEMP	WELLHEAD WP Psig	Pw Psia	DURATION OF FLOW IN HOURS
1	3/32				60	449.0	463.4	
2	1/8				60	440.6	455.0	
3	3/16				60	404.3	418.7	
4	7/32				60	377.3	391.7	
5								

FLOW CALCULATIONS

RUN NO.	COEFF. "C" (24 HR.)	h_wP_m	$\sqrt{h_wP_m}$	WORKING PRESSURE ON PROVER Psig	Psia	FLOW TEMP. FACTOR F_{tf}	GRAVITY FACTOR F_g	FLOW RATE $Q=M^2$cfd @ 14.65
1	.1863			449.0	463.4	1.000	.8827	76
2	.3499			440.6	455.0	1.000	.8827	140
3	.8035			404.3	418.7	1.000	.8827	297
4	1.1090			377.3	391.7	1.000	.8827	383
5								

S.I.P. 460.4 Psig
Bar. 14.4

PRESSURE CALCULATIONS
(All Squared Pressures In Thousands)

P_c 474.8 Psia P_c^2 225.44 x e^s 1.169 = P_f^2 263.54

RUN NO.	P_w^2	$e^sP_w^2$	F_dQ	F^2	R^2	P_s^2	$P_f^2 - P_s^2$
1	214.74	251.03	.48	.24	.04	251.07	12.47
2	207.03	242.02	.89	.80	.14	242.16	21.38
3	175.31	204.94	1.89	3.43	.58	205.52	58.02
4	153.43	179.36	2.44	5.62	.95	180.31	83.23
5							

Slope of Curve: n = .740
Angle of Curve: θ = 53.5
Absolute Open Flow: 910 MCF/Day

R. R. COMMISSION:
Company: J. A. Shumard
Pipe Line:
Others:

AFFIDAVIT

STATE OF Texas

COUNTY OF Gray

BEFORE me, the undersigned authority, on this day personally appeared J. A. Thurmond, known to me to be the person whose name is subscribed to this instrument, who, after being by me duly sworn on oath, states that he is employed by or associated with THURMOND-McGLOTHLIN in the capacity of Consultant; that this test was made by affiant or under the supervision of affiant; that this test was made according to the Rules and Regulations of the indicated Field as of this date; that the test data and factual data shown hereon are true and correct; and that no pertinent matter inquired about in said report has been omitted.

J. A. Thurmond

Subscribed and Sworn to before me on this the 17 day of July 19 62

C. Helen Sams

Notary Public in and for

C. HELEN SAMS

Gray County, Texas