MAIN OFFICE GCO

MULTIPLE WELLS

Pool **Drout** _____ Formation _____ County **Lea**

Initial _____ Annual _____ Special _____ Date of Test **6-20-56**

Company **Sinclair Oil & Gas Company** Lease **Hine** Well No. **5**

Unit **E** Sec. **9** Twp. **18** Rge. **36** Purchaser **El Paso Natural Gas Company**

Casing **7"** Wt. **20 #** I.D. _____ Set at **3787** Perf. **368** To **3620**

Tubing **2½** Wt. **4.70** I.D. _____ Set at **3612** Perf. **Open** To _____

Gas Pay: From **3368** To **3620** 3414 SG .683 MCL **2376** Bar.Press. **13.2**

Producing Thru: Casing _____ Tubing **x** _____ Type Well **Single**

Date of Completion: **6-12-56** Packer **None** Jingle-Bradenhead-G. G. or G.O. Dual Reservoir Temp. **113**

OBSERVED DATA

Tested Through (Prover) (Choke) (Meter)   Type Taps **Flange**

No.	(Prover) (Line) Size	(Choke) (Orifice) Size	Flow Data Press. psig	Diff. h_w	Temp. °F.	Tubing Data Press. psig	Temp. °F.	Casing Data Press. psig	Temp. °F.	Duration of Flow Hr.
SI						956	80	960	80	72
1.	4"	1.250	589	6.25	120	927	78	915	78	24
2.			597	44.2	66	791	78	802	78	24
3.			594	52.5	67	751	78	775	78	24
4.			596	67.4	59	723	78	741	78	24
5.										

No.	Coefficient (24-Hour)	$\sqrt{h_w p_f}$		Flow Temp. Factor F_t	Gravity Factor F_g	Compress. Factor F_{pv}	Rate of Flow Q-MCFPD @ 15.025 psia
1.	9.643	61.35	60.2	.949	.9393	1.048	552
2.		164.26	610.2	.9043	.9393	1.070	1583
3.		178.64	607.2	.9032	.9393	1.070	1719
4.		204.84	600.2	.9015	.9393	1.070	1968
5.							

Gas Liquid Hydrocarbon Ratio **None**   Specific Gravity Separator Gas _____
Gravity of Liquid Hydrocarbons _____   Specific Gravity Flowing Fluid _____
F_c _____ $(1-e^{-s})$ _____ P_c **973.2** P_c^2 **947.1**

No.	P_w P_t (psia)	P_t^2	F_c^2		$(1-e^{-s})$	P_w^2	$P_c^2 - P_w^2$	Cal. P_w	$\dfrac{P_w}{P_c}$
1.	928.2					861.6	85.5		95.4
2.	815.2					664.6	282.5		83.8
3.	788.2					621.3	325.8		80.9
4.	754.2					568.8	378.3		77.5
5.									

Absolute Potential: **4300** MCFPD; n **.844**
COMPANY **Sinclair Oil & Gas Company**
ADDRESS **52 East Broadway Hobbs, New Mexico**
AGENT and TITLE **R.L. Harned Gas Analyst**   *R L Harned*
WITNESSED **Earl Smith**
COMPANY **El Paso Natural Gas Co. Agt**

REMARKS

Orig. & 2CC New Mexico Oil Conservation Commission
CC: SJP, FCH, JR, HIT, , File

INSTRUCTIONS

This form is to be used for reporting multi-point back pressure tests on gas wells in the State, except those on which special orders are applicable. Three copies of this form and the back pressure curve shall be filed with the Commission at Box 871, Santa Fe.

The log log paper used for plotting the back pressure curve shall be of at least three inch cycles.

NOMENCLATURE

Q = Actual rate of flow at end of flow period at W. H. working pressure (P_w). MCF/da. @ 15.025 psia and 60° F.

P_c = 72 hour wellhead shut-in casing (or tubing) pressure whichever is greater. psia

P_w = Static wellhead working pressure as determined at the end of flow period. (Casing if flowing thru tubing, tubing if flowing thru casing.) psia

P_t = Flowing wellhead pressure (tubing if flowing through tubing, casing if flowing through casing.) psia

P_f = Meter pressure, psia.

h_w = Differential meter pressure, inches water.

F_g = Gravity correction factor.

F_t = Flowing temperature correction factor.

F_{pv} = Supercompressability factor.

n = Slope of back pressure curve.

Note: If P_w cannot be taken because of manner of completion or condition of well, then P_w must be calculated by adding the pressure drop due to friction within the flow string to P_t.