OIL CONSERVATION COMMISSION

BOX 2045

HOBBS, NEW MEXICO

NOTICE OF GAS CONNECTION

DATE September 29, 1964

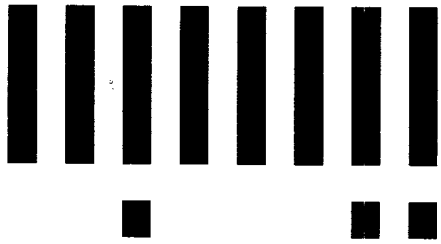
This is to notify the Oil Conservation Commission that connection for the purchase of gas from the Phillips Petroleum Company (Operator), Hale Well No. 10 (Lease), O (Well Unit), 35-17-34 (S.T.R.), Undesignated Yates (Pool), Phillips Petroleum Company (Name of Purchaser) was made on September 28, 1964.

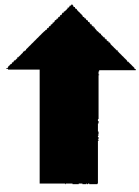
PHILLIPS PETROLEUM COMPANY
Purchaser

Representative
R. C. Mason

Superintendent of gasoline Oper.
Title

cc: To operator
Oil Conservation Commission - Santa Fe





LTR

Job separation sheet

NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122
Revised 12-1-55

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Undesignated Formation Yates County Lea

Initial x Annual Special Date of Test August 13, 1964

Company Phillips Petroleum Company Lease M. E. Hale Well No. 10

Unit O Sec. 35 Twp. 17S Rge. 34E Purchaser Phillips Petroleum Company

Casing 4.5# Wt. 9.5# I.D. 4.090 Set at 6200' Perf. 3004' To 3090'

Tubing 2.375 Wt. 4.7# I.D. 1.995 Set at 2935' Perf. None To

Gas Pay: From 3004 To 3090' L 3047 xG .776 GL 4013' Bar.Press. 13.2

Producing Thru: Casing Tubing x Type Well Single Single-Bradenhead-G. G. or G.O. Dual

Date of Completion: 8-12-64 Packer None Reservoir Temp. 95°F

OBSERVED DATA

Tested Through (Prover) (~~Choke~~) (~~Meter~~) Type Taps

No.	Flow Data (Prover) (~~Choke~~) Size	(Orifice) Size	Press. psig	Diff. h_g h_w	Temp. °F.	Tubing Data Press. psig	Tubing Data Temp. °F.	Casing Data Press. psig	Casing Data Temp. °F.	Duration of Flow Hr.
SI	2"	1.25				1613	66	1655	66	
1.	2"	1.25		3	55	1177	66	1279	66	1.0
2.	2"	1.25		5	90	693	77	1027	77	1.0
3.	2"	1.25		7	94	380	84	656	84	1.0
4.	2"	1.25		6	94	175	84	485	84	1.0
5.										

FLOW CALCULATIONS

No.	Coefficient (24-Hour)	$\sqrt{h_w P_f}$	Pressure base Corr 15.025	Flow Temp. Factor F_t	Gravity Factor F_g	Compress. Factor F_{pv}	Rate of Flow Q-MCFPD @ 15.025 psia
1.	284		.975	1.0048	.8793		244.6
2.	370		.975	.9723	.8793		308.4
3.	442		.975	.9688	.8793		367.1
4.	407		.975	.9688	.8793		338.0
5.							

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio _____ cf/bbl.
Gravity of Liquid Hydrocarbons _____ deg.
F_c _____ $(1-e^{-s})$ _____

Specific Gravity Separator Gas _____
Specific Gravity Flowing Fluid _____
P_c 1668.2 P_c^2 2783

No.	P_w (psia)	P_t^2	F_cQ	$(F_cQ)^2$	$\frac{(F_cQ)^2}{(1-e^{-s})}$	P_w^2	$P_c^2-P_w^2$	Cal. P_w	$\frac{P_w}{P_c}$
						1670	1113		.7746
1.	1292.2					1082	1701		.6235
2.	1040.2					448	2335		.4012
3.	669.2					248	2535		.2986
4.	498.2								
5.									

Absolute Potential: 408 MCFPD MCFPD; n .553391

COMPANY Phillips Petroleum Company
ADDRESS Box 2130 - Hobbs, New Mexico
AGENT and TITLE W. S. Griffin - Production Engineer
WITNESSED _____
COMPANY _____

REMARKS

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.