Monument, New Mexico
December 2, 1957

N.M. Oil Conservation Commission
Box 2045
Hobbs, New Mexico

Attn: Mr. R. F. Montgomery

Dear Sir:

We wish to advise that as of December 1, 1957, Amerada has discontinued taking gas from State "T" No. 3, Eumont Gas Pool, for gas lift purposes on State "V" No. 3, gas-oil dual in the Monument and Eumont Pools. This gas was being used to lift the Monument Oil Zone.

Preparations are being made to install a meter whereas we will start taking high-pressure gas from the State "V" No. 3 Eumont gas zone (casing) and use for gas lifting purposes on the State "V" No. 3 Monument oil zone (tubing).

We have attached Form C-110 for revised distribution of gas on State "V" No. 3.

Yours very truly,

D. C. Capps

CC: Commission - 2
File

NEW MEXICO OIL CONSERVATION COMMISSION

HOBBS OFFICE OCC

Form C-122

Revised 12-1-55

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

1957 FEB 11 AM 9:57

Pool Eumont Formation Seven Rivers - Queen County Lea

Initial ____ Annual ____ Special ____ Date of Test 6-26-56

Company Amerada Petroleum Corporation Lease State "V" Well No. 3

Unit H Sec. 36 Twp. 19S Rge. 36E Purchaser Permian Basin Pipe Line Company

Casing 6-5/8" Wt. 20.0# I.D. 6.049" Set at 3796' Perf. 3165' To 3450'

Tubing 3-1/2" Wt. 9.3# I.D. 2.992" Set at 3790' Perf. 3768' To 3790'

Gas Pay: From 3165' To 3450' L 3165' xG 0.675 -GL 2136' Bar.Press. 13.2

Producing Thru: Casing X Tubing ____ Type Well Gas-Oil Dual
Single-Bradenhead-G. G. or G.O. Dual

Date of Completion: 12-20-53 Packer 3639' Reservoir Temp. 91°

OBSERVED DATA

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

No.	Flow Data (Prover) (Line) Size	Flow Data (Choke) (Orifice) Size	Flow Data Press. psig	Flow Data Diff. h_w	Flow Data Temp. °F.	Tubing Data Press. psig	Tubing Data Temp. °F.	Casing Data Press. psig	Casing Data Temp. °F.	Duration of Flow Hr.
SI								956.2		71-3/4
1.	4"	1.500"	457.4	13.0	82			847.2		24
2.	4"	1.500"	454.8	21.8	80			804.0		23-1/2
3.	4"	1.500"	457.3	28.4	80			760.0		24-1/4
4.	4"	1.500"	460.2	40.0	82			696.6		24
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-MCFPD @ 15.025 psia
1.	15.26	78.21	470.6	0.9795	0.9427	1.060	1168.44
2.	15.26	100.15	468.0	0.9813	0.9427	1.060	1496.14
3.	15.26	115.20	470.5	0.9813	0.9427	1.060	1720.97
4.	15.26	137.57	473.4	0.9795	0.9427	1.060	2055.16
5.							

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio ____ cf/bbl.
Gravity of Liquid Hydrocarbons ____ deg.
F_c 1.399 $(1-e^{-s})$ 0.137

Specific Gravity Separator Gas 0.675
Specific Gravity Flowing Fluid ____
P_c 969.4 P_c^2 939.7

No.	P_w P_t (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	$\frac{P_w}{P_c}$
1.	860.4	740.3	1.634	2.67	1.37	740.7	119.0	862.4	89.0
2.	817.2	667.8	2.093	4.38	2.60	668.4	271.3	810.3	83.6
3.	773.2	597.8	2.407	5.79	3.79	598.6	341.1	772.8	79.7
4.	711.8	506.6	2.875	8.26	1.13	507.7	432.0	710.9	73.3
5.									

Absolute Potential: 3200 MCFD MCFPD; n 0.68

COMPANY ____

ADDRESS Amerada Petroleum Corporation
Drawer D - Monument, New Mexico

AGENT and TITLE W. G. Abbott

WITNESSED ____

COMPANY Permian Basin Pipe Line 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.