NEW MEXICO OIL CONSERVATION COMMSSION

MULTIPOINT AND [illegible] POINT BACK PRESSURE TEST F[illegible] GAS WELL

Form C-122
Revised 9-1-65

Type Test: [X] Initial [ ] Annual [ ] Special				Test Date: 3-30-79	
Company: Amoco Production Company			Connection: El Paso Natural Gas Company		
Pool: Howse			Formation: Drinkard		Unit
Completion Date: 10-23-78	Total Depth: 7150'		Plug Back TD: 7120'	Elevation: 3580'	Farm or Lease Name: Cone B
Csg. Size: 5.500 / Wt.: 14.0 / d: 5.012 / Set At: 7128			Perforations: From 7050 To 7060		Well No.: 2
Tbg. Size: 2.375 / Wt.: 4.7 / d: 1.995 / Set At: 6977			Perforations: From 7066 To 7080		Unit: G / Sec.: 12 / Twp.: 20S / Rge.: 38E
Type Well – Single – Bradenhead – G.G. or G.O. Multiple: Single			Packer Set At: 0		County: Lea
Producing Thru: Tubing	Reservoir Temp. °F: 108 @ 7065	Mean Annual Temp. °F: 60	Baro. Press. – P_a: 13.2		State: New Mexico

L	H	Gg	% CO_2	% N_2	% H_2S	Prover	Meter Run	Taps
7065	7065	0.680	0.14	1.74	0.02	0	4.0	Flange

	FLOW DATA				TUBING DATA		CASING DATA		
NO.	Prover Line Size X Orifice Size	Press. p.s.i.g.	Diff. h_w	Temp. °F	Press. p.s.i.g.	Temp. °F	Press. p.s.i.g.	Temp. °F	Duration of Flow
SI					1195	61			48.0
1.	4.03 x 2.750	100	1.7	67	1146	64	0	0	1.0
2.	4.03 x 2.750	115	5.3	69	1046	65	0	0	1.0
3.	4.03 x 2.750	131	7.9	71	945	67	0	0	1.0
4.	4.03 x 2.750	171	13.0	64	801	69	0	0	1.0
5.									

RATE OF FLOW CALCULATIONS

NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P_m	Flow Temp. Factor Ft.	Gravity Factor Fg	Super Compress. Factor, Fpv	Rate of Flow Q, Mcfd
1	41.10	14.07	113.2	0.9933	1.2127	1.0113	705
2.	41.10	26.07	128.2	0.9915	1.2127	1.0127	1304
3.	41.10	33.64	144.2	0.9896	1.2127	1.0141	1683
4.	41.10	48.93	184.2	0.9962	1.2127	1.0191	2476
5.							

NO.	P_t	Temp. °R	T_t	Z
1.	0.17	527	1.39	0.978
2.	0.17	529	1.40	0.975
3.	0.17	531	1.40	0.972
4.	0.17	524	1.38	0.963
5.				

Gas Liquid Hydrocarbon Ratio 0 Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons 0 Deg.
Specific Gravity Separator Gas 0.680 XXXXXXXXX
Specific Gravity Flowing Fluid XXXXX 0.680
Critical Pressure 666 P.S.I.A. 666 P.S.I.A.
Critical Temperature 379 R 379 R

P_c 1208.2 P_c^2 1460

NO	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1	1344	1158	1341	119
2	1122	1063	1130	330
3	918	967	936	524
4	663	843	710	750
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.9470$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1.5783$

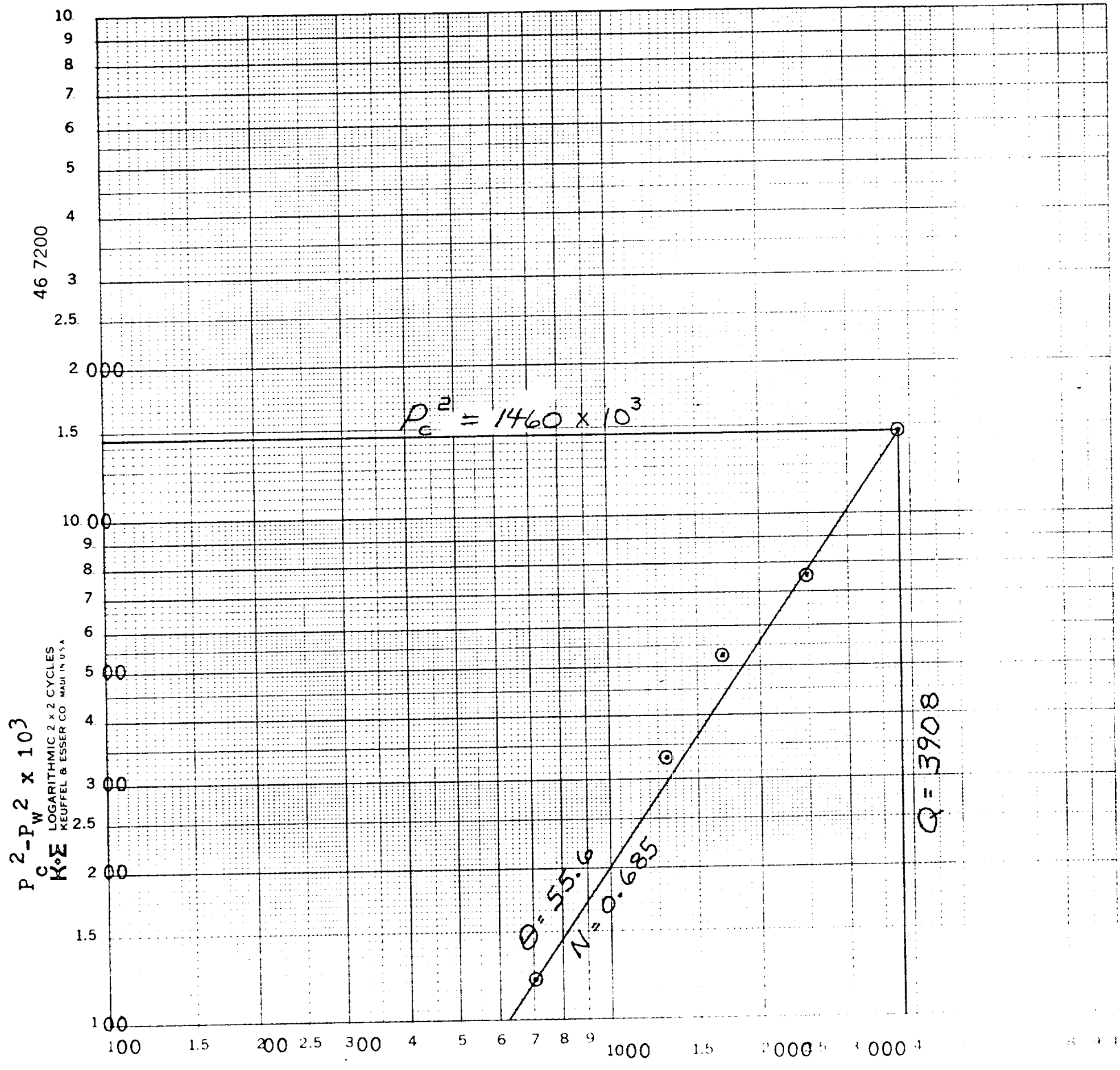
AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 3908$

Absolute Open Flow 3908 Mcfd @ 15.025 Angle of Slope θ 55.6 Slope, n 0.685

Remarks:

Approved By Commission:	Conducted By: John West Engineering	Calculated By: CCW	Checked By: RMB

Amoco Production Company
Cone " #2



SUGGESTED F[illegible]LD DATA SHEET (Not Required To File)

Type Test: ☒ Initial ☐ Annual ☒ Special		Test Date: 3-30-79	Lease No. or Serial No.
Company: Amoco Production Co.	Connection: EPNG Co		Allottee
Field: Howse	Reservoir: Drinkard	Location	Unit
Completion Date: —	Total Depth: 7,150	Plug Back TD: 7,120 / Elevation: 3580 RDB	Form or Lease Name: Cone "B"
Csg. Size: 5½ / Wt. / d	Set At: 7128	Perforations: From 7050 To 7080	Well No. 2
Tbg. Size: 2⅜ / Wt. 4.7# / d	Set At: 6977	Perforations: From open Ended To	Sec. 12 / Twp.-Blk. 20S 38E
Type Completion (Describe): Single		Packer Set At	County or Parish: Lea
Producing Thru: Tubing	Reservoir Temp. F: [illegible] / Mean Annual Temp. F: 60	Baro. Press. – P_a: 13.2	State: New Mexico
L / H / G_g	% CO_2	% N_2 / % H_2S	Prover / Meter Run

DATE Time of Reading	ELAP. TIME Hrs.	Wellhead Working Pressure Tbg. Psig.	Csg. Psig.	Temp. F	METER OR PROVER Pressure Psig.	Diff.	Temp. F	Orifice	REMARKS (Include liquid production data; Type—A.P.I. Gravity—Amount)
[illegible]			[illegible]	[illegible]	[illegible]			[illegible]	
[illegible]		11[illegible]	[illegible]	[illegible]	[illegible]				
[illegible]		[illegible]	[illegible]	[illegible]	100	[illegible]	[illegible]		
[illegible]		1155	1144	64	[illegible]		"		[illegible]
10:15		114[illegible]	[illegible]	64	100	[illegible]	[illegible]		[illegible]
10:30		1106	110[illegible]	64	100	5.3	[illegible]		
10:45		1087	1079	64	120	[illegible]	[illegible]		[illegible]
11:00		10[illegible]	1053	65	115	4.[illegible]	[illegible]		
11:15		1046	1040	[illegible]	115	5.[illegible]	[illegible]		[illegible]
11:30		[illegible]	985	65	143	1[illegible]	[illegible]		
11:45		[illegible]	[illegible]	66	[illegible]	[illegible]	72		[illegible]
12:00		955	950	66	[illegible]1	[illegible]	[illegible]		
12:15		945	942	[illegible]	131	[illegible]	[illegible]		[illegible]
12:30		92[illegible]	927	67	151	14.5	72		
12:45		847	845	67	167	13.7	65		[illegible]
1:00		[illegible]	817	[illegible]	[illegible]	13.[illegible]	[illegible]		
1:15		3[illegible]1	[illegible]	69	171	[illegible]	[illegible]		[illegible]
	11[illegible] – 1[illegible]			[illegible]					
	11[illegible]	[illegible]	[illegible]			[illegible]	[illegible]		

Page 1 of 1 Data By [illegible]

El Paso Natural Gas Company

HYDROCARBON ANALYSIS

Form 15-18 (Rev. 12-65)

PERMIAN DIVISION LABORATORY

TYPE ANALYSIS	Pod	Mass Spec.	Chromatograph	Other	Analysis No.
					43164

Sample From: Cone B Well #2

Owner	State	County
Amoco Production Company	New Mexico	Lea

Location or Field	Formation	Depth	From	To
Howse	Drinkard			

Date Secured	Secured by	Department
3-30-79	Swartz	
Date Run	**Run by**	**Checked by**
3-30-79	Martin	

Source Press.	Bomb Press.	Source Temp.	Atmos. Temp.

BTU @ 14.696	Actual	Calculated, Dry	SP. GR. @ 14.696 & 60° F	Actual	Calculated
		1175.96			.680

Hydrogen Sulphide as grs. H_2S/100 SCF	Mercaptan as grs. Sulfur/100 SCF	Total	Sweet
.02	.05	.07	

VAPOR PRESS. @ 100° F	Actual, Reid	Calculated

COMPONENT		MOLE %	GPM	LIQ. VOL. %
Helium	HE_2			
Hydrogen Sulphide	H_2S			
Carbon Dioxide	CO_2	.14		
Nitrogen	N_2	1.74		
Methane	C_1	84.10		
Ethane	C_2	7.64		
Propane	C_3	3.80	1.045	
Isc Butane	IC_4	.41	.134	
Normal Butane	C_4	1.26	.397	
Isc Pentane	IC_5	.27	.099	
Normal Pentane	C_5	.39	.141	
Hexane	C_6	.20	.082	
Heptane	C_7	.05	.024	
		100.00	1.922	

ENGLER	
IBP	% @ 96
5	% @ 140
10	% @ 275
20	End Point
30	Recovery
40	Residue
50	Loss
60	
70	
80	
90	

REMARKS

Sec 12, Twp 20S, Rge 38E

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