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SEP 16 '87
O. C. D.
ARTESIA, OFFICE

NEW MEXICO OIL CONSERVATION COMMISSION
MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form C-122
Revised 9-1-65

Type Test: ☒ Initial ☐ Annual ☐ Special				Test Date: 8-14-87	
Company: AMOCO PRODUCTION CO		Connection: PHILLIPS PETROLEUM			
Pool: CROW FLATS MORROW WILDCAT		Formation: MORROW		Unit	
Completion Date: 12-29-81	Total Depth: 9602.	Plug Back TD: 9550.	Elevation: (RDB) 3542	Farm or Lease Name: FED. CE GAS COM	
Csg. Size: 5.500 / Wt.: 17.0 / d: 4.892 / Set At: 9595.		Perforations: From 9296. To 9418.		Well No.: 1	
Tbg. Size: 2.375 / Wt.: 4.7 / d: 1.995 / Set At: 9182.		Perforations: From OPEN-ENDED To		Unit: K / Sec.: 1 / Twp.: 17S / Rge.: 27E	
Type Well – Single – Bradenhead – G.G. or G.O. Multiple: SINGLE		Packer Set At: 9082.		County: EDDY	
Producing Thru: TUBING	Reservoir Temp. °F: 152.0 9296.	Mean Annual Temp. °F: 60.0	Baro. Press. – P_a: 13.2	State: NEW MEXICO	
L: 9296. / H: 9296.	Gg: 0.671	% CO_2: 0.45	% N_2: 0.54	% H_2S:	Prover: / Meter Run: 4.026 / Taps: FLANGE

NO.	FLOW DATA: Prover Line Size X Orifice Size	Press. p.s.i.g.	Diff. h_w	Temp. °F	TUBING DATA: Press. p.s.i.g.	Temp. °F	CASING DATA: Press. p.s.i.g.	Temp. °F	Duration of Flow HRS
SI					2056.	60.	PKR	CHOKE	96.0
1.	4.03 X 2.625	11.	2.0	39.	1961.	39.		10/64	1.0
2.	4.03 X 2.625	13.	6.5	40.	1825.	40.		12/64	1.0
3.	4.03 X 2.625	16.	12.0	40.	1698.	40.		15/64	1.0
4.	4.03 X 2.625	19.	22.4	41.	1418.	41.		18/64	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	36.66	6.96	24.2	1.0208	1.2207	1.0029	319.
2.	36.66	13.05	26.3	1.0198	1.2207	1.0031	598.
3.	36.66	18.85	29.6	1.0198	1.2207	1.0035	864.
4.	36.66	26.80	32.0	1.0188	1.2207	1.0038	1227.
5.							

NO.	P_r	Temp. °R	T_r	Z
1.	0.04	499.	1.32	0.994
2.	0.04	500.	1.32	0.994
3.	0.04	500.	1.32	0.993
4.	0.05	501.	1.32	0.993
5.				

Gas Liquid Hydrocarbon Ratio 0.0 Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons 0.0 Deg.
Specific Gravity Separator Gas 0.671 XXXXXXXXX
Specific Gravity Flowing Fluid XXXXX 0.671
Critical Pressure 670. P.S.I.A. 670. P.S.I.A.
Critical Temperature 379. R 379. R

P_c 2069.2 P_c^2 4282.

NO	P_t	P_w	P_w^2	$P_c^2 - P_w^2$
1	3897.	2004.	4015.	266.
2	3379.	1866.	3482.	799.
3	2928.	1740.	3027.	1255.
4	2048.	1461.	2133.	2148.
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.9931$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1.5604$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1914.$

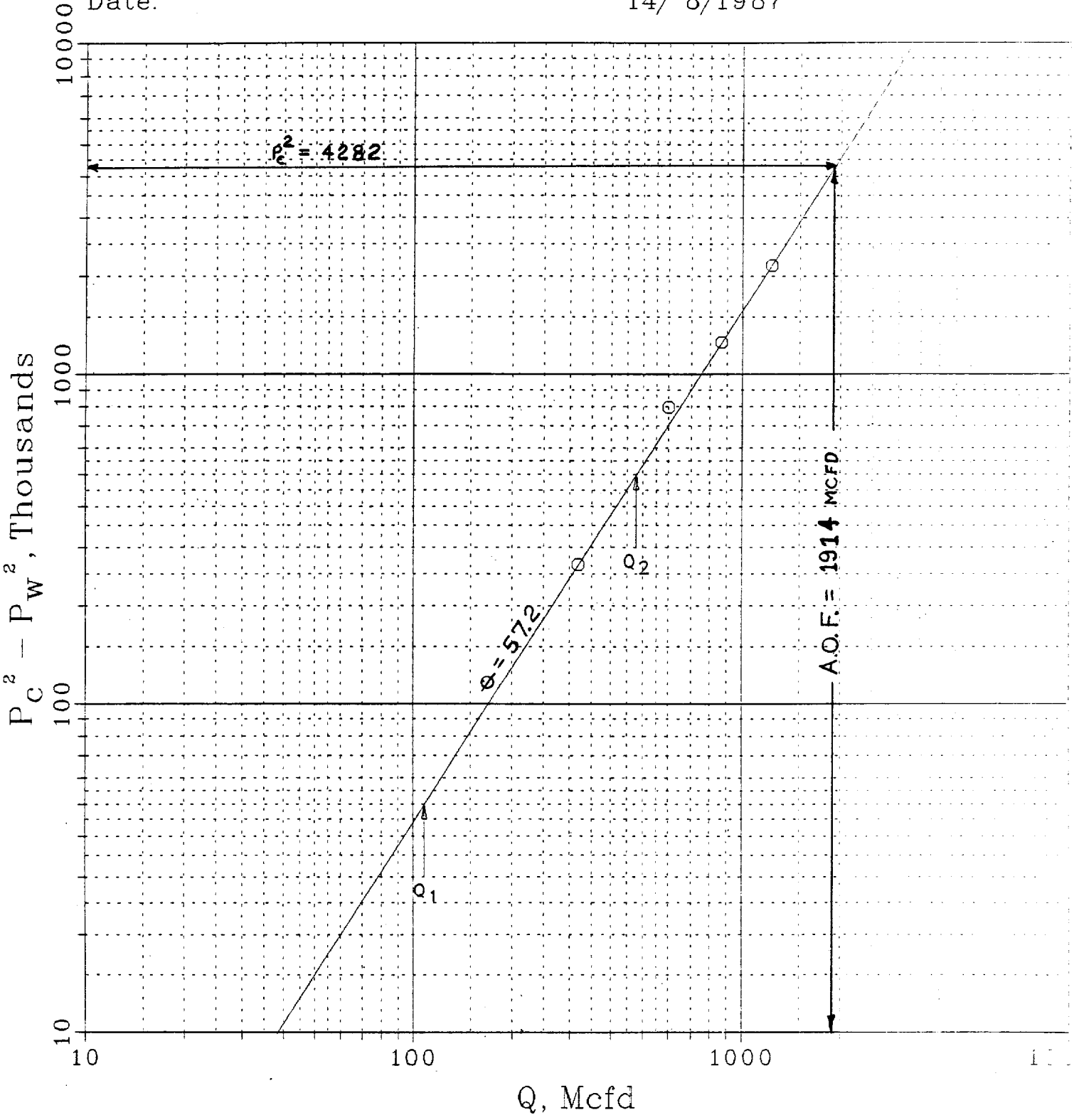
Absolute Open Flow 1914. Mcfd @ 15.025 Angle of Slope θ 57.2 Slope, n 0.645

Remarks: NO FLUID PRODUCED DURING THIS TEST.
B.H. TEMP. CALCULATED

Approved by Commission:	Conducted By:	Calculated By:	Checked By:
	W. S.	PAUL Y'BARBO	MAURICE MITCHELL

GAS WELL
BACK PRESSURE TES.

Company: AMOCO PRODUC
Well: FEDERAL CE GAS COM* 1 Po
Field/Pool: WILDCAT
County: K - 1 - 17S - 27E EDDY
Date: 14/ 8/1987



Q_1 = 108. Mcfd; LOG Q_1 = 2.03507
Q_2 = 479. Mcfd; LOG Q_2 = 2.68025
n = 0.64518 =

NEW-TEX LAB
P.O. Box 1161
Hobbs, New Mexico 88240

ANALYSIS CERTIFICATE

CLIENT: JOHN WEST ENGINEERING
ADDRESS: 412 N DAL PASO
CITY, STATE: HOBBS, NM 88240

ANALYSIS NUMBER: 1666
DATE OF RUN: 08 14 87
DATE SECURED: 08 14 87

SAMPLE IDENT: AMOCO PROD - FEDERAL "CE" GAS COMM #1
SAMPLING PRESS: SAMPLING TEMP:

SEC 1 T17S R27E; EDDY COUNTY, NM

********* GAS ANALYSIS *********

	MOLE PERCENT	GAL/ MCF
NITROGEN	0.536	
CARBON DIOXIDE	0.447	
METHANE	86.084	
ETHANE	7.131	1.902
PROPANE	3.319	0.911
ISO-BUTANE	0.474	0.155
NORMAL BUTANE	0.989	0.311
ISO-PENTANE	0.284	0.105
NORMAL PENTANE	0.243	0.088
HEXANES	0.493	0.202
TOTAL	100.000	3.674

PROPANE GPM: 0.91 BUTANES GPM: 0.47
ETHANE GPM: 1.90 PENTANES PLUS GPM: 0.40

SPECIFIC GRAV (CALC): 0.6711
MOLE WEIGHT: 19.43

HHV-BTU/CU FT	PRESSURE (PSIA)	WET	DRY
	14.696	1152	1172
	14.650	1148	1168
	14.730	1154	1.75
	14.73E	1155	1.75

ANALYZED BY:
DEANE SIMPSON

APPROVED BY:

SUGGESTED FIELD DATA SHEET (Not Required To File)

Type Test ☐ INITIAL ☐ ANNUAL ☐ SPECIAL — Test Date

Lease No. or Serial No. FEDERAL CE #1

Company AMOCO — Connection PHILLIPS — Allottee

Field — Reservoir — Location — Unit ~~E~~ K 1980FSL & FWL

Completion Date 12-29-81 — Total Depth 9602' — Plug Back TD 9550 — Elevation — Farm or Lease Name

Csg. Size — Wt. — d — Set At — Perforation: From 9296 To 9418 — Well No.

Tbg. Size — Wt. — d — Set At — Perforation: From — To — Sec 7 Twp. Blk. T17S Rge. R24E

Type Completion (Describe) — Packer Set At — County or Parish

Producing Thru — Reservoir Temp. F — Mean Annual Temp. F — Baro. Press. — P_a — State N.M.

L — H — G_g — % CO_2 — % N_2 — % H_2S — Prover — Meter Run 4.02C

8-14-87

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)
9:00		2056						2.625	Shut-in 0-50psi 0-30s/m
9:15			open choke beg test						
9:30		2000			6.9	2.0	60°	2.625	10/64
9:45		1982			6.95	2.0	60°	2.625	10/64
10:00		1967			6.95	2.0	60°	2.625	10/64
10:15		1961			6.95	2.0	~~40~~ 60°	2.625	10/64 325 mcfd
10:30		1887			7.20	4.3	60°	2.625	12/64
10:45		1848			7.30	4.2	60°	2.625	12/64
11:00		1830			7.30	4.1	60°	2.625	12/64
11:15		1825			7.25	3.~~6~~	~~40~~ 60°	2.625	12/64 ~~3250~~ ~610 mcfd
11:30		1751			7.50	5.3	60°	2.625	15/64
11:45		1717			7.70	5.6	60°	2.625	15/64
12:00		1706			7.70	5.3	~~40~~ 60°	2.625	15/64
12:15		1678			7.70	4.9	40°	2.625	15/64 ~880 mcfd
12:30		1554			81	8.2		2.625	18/64
12:45		1494			8.10	~~7.~~9		2.625	18/64
1:00		1453			8.0	7.9		2.625	18/64
1:15		1418			8.0	6.7	40°	2.625	18/64 ~1250 mcfd

Page ____ of ____ Data By W.N. Sutton

Witnessed By Paul Y'Barbo 8-14-87