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: [illegible]	
Company: AMOCO PRODUCTION COMPANY			Connection:		
Pool: NORTH ANTELOPE RIDGE			Formation:		Unit:
Completion Date	Total Depth: 13600.		Plug Back TD: 13360.	Elevation: 3864.	Farm or Lease Name: STATE NE Com
Csg. Size: 7.000 / Wt.: 34.6 / d: 6.094 / Set At: 13360.			Perforations: From 13214. To 13250.		Well No.: 1Y
Tbg. Size: 2.875 / Wt.: 6.5 / d: 2.441 / Set At: 13199.			Perforations: From 0. To 0.		Unit / Sec.: 11 / Twp.: 33S / Rge.: 34E
Type Well – Single – Bradenhead – G.G. or G.O. Multiple: SINGLE			Packer Set At: 13100.		County: LEA
Producing Thru: TUBING	Reservoir Temp. °F: 90. @ 13222.	Mean Annual Temp. °F: 60.0	Bar. Press. – P_a: 13.2		State: NEW MEXICO

L	H	Gg	% CO_2	% N_2	% H_2S	Prover	Meter Run	Taps
13222.	13222.	0.605	0.66	1.30	0	0	4.0	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
SI					3390.	89.			72.0
1.	4.03 X 1.000	491.	6.8	76.	2450.	80.	0.	0.	1.0
2.	4.03 X 1.000	491.	19.4	96.	1935.	80.	0.	0.	0.7
3.	4.03 X 1.000	491.	19.4	96.	1447.	81.	0.	0.	0.7
4.	4.03 X 1.000	491.	29.2	96.	1150.	81.	0.	0.	0.7
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	4.75	58.38	504.2	0.9850	1.2853	1.0388	365.
2.	4.75	98.80	504.2	0.9671	1.2853	1.0337	603.
3.	4.75	98.80	504.2	0.9671	1.2853	1.0337	603.
4.	4.75	121.25	504.2	0.9671	1.2853	1.0337	740.
5.							

NO.	P_t	Temp. °R	T_r	Z
1.	0.75	536.	1.51	0.927
2.	0.75	556.	1.56	0.936
3.	0.75	556.	1.56	0.936
4.	0.75	556.	1.56	0.936
5.	[illegible]			

Gas Liquid Hydrocarbon Ratio 0. Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons 0. Deg.
Specific Gravity Separator Gas 0.605 XXXXXXXXX
Specific Gravity Flowing Fluid XXXXX 0.605
Critical Pressure 673. P.S.I.A. 673. P.S.I.A.
Critical Temperature 356. R 356. R

P_c 3385.75 P_c^2 11925. 11586.8

NO	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1	6067.	2438.	5895.	6429. 5817
2	3416.	1322.	3318.	8006. 8404
3	2132.	1441.	2076.	9248. 9526
4	1353.	1151.	1325.1	10000. 10267
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.1325$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1.1325$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 839.$

Absolute Open Flow 839. Mcfd @ 15.025 Angle of Slope θ 45.0 Slope, n 1.000

Remarks:

Approved By Commission:	Conducted By:	Calculated By:	Checked By:
Eng			

SUGGESTED FIELD DATA SHEET (Not Required To File)

Type Test: ☒ Initial ☐ Annual ☐ Special — Test Date

Company: Amoco Production Co. — Connection

Field — Reservoir — Location

Completion Date — Total Depth — Plug Back TD — Elevation

Csg. Size — Wt. — d — Set At — Perforations: From — To

Tbg. Size — Wt. — d — Set At — Perforations: From — To

Type Completion (Describe) — Packer Set At

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

L — H — G_g — % CO_2 — % N_2 — % H_2S — Prover — Meter Run: 4.026 — Taps

Lease No. or Serial No.

Allottee

Unit

Farm or Lease Name: State "ME" Com

Well No.: 1-Y

Sec. — Twp.-Blk. — Rge.-Sur.

County or Parish

State

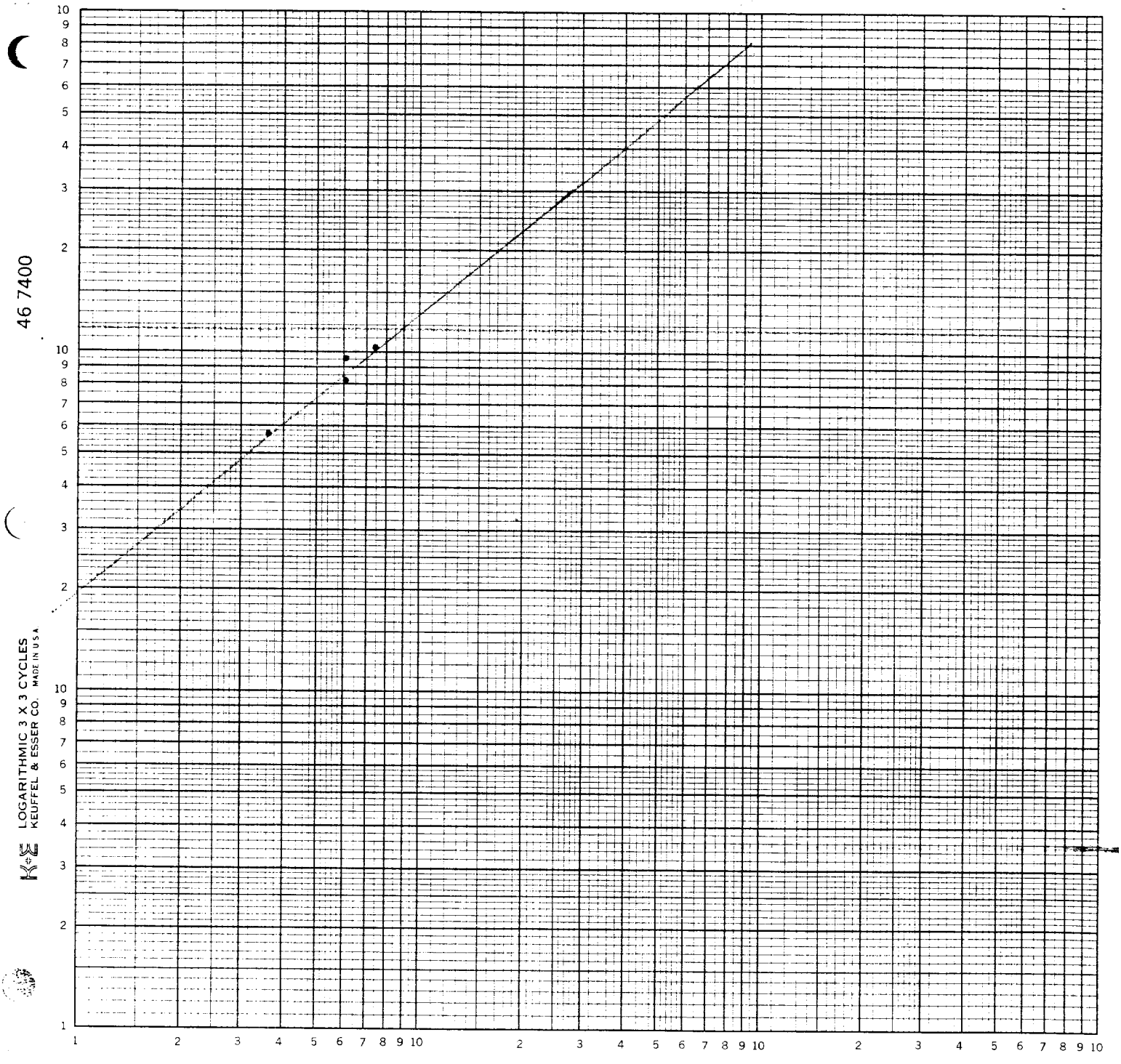
DATE Time of Reading	ELAP. TIME Hrs.	Wellhead Working Pressure: Tbg. Psig.	Csg. Psig.	Temp. F	METER OR PROVER: Pressure Psig.	Diff.	Temp. F	Orifice	REMARKS (Include liquid production data: Type—A.P.I. Gravity—Amount)
8:45	AM	3390	960		00	00		1.00	0/64
9:15	AM	3142	960	79°	6.9	2.1	68°	1.00	6/64 294.4 MCF/day
9:30		2992	960	79°	7.1	2.0	68°		280.4 MCF/day
9:45		2749	955	79°	7.1	3.0	69°		420.6 MCF/day
10:00		2585	955	79°	7.1	2.6	76°		361.8 MCF/day
10:15		2450	950	80°	7.1	2.6	76°		361.8 MCF/day
10:30	AM	2235	950	80°	7.1	5.1	76°	1.00	7/64 709.7 MCF/day
10:45		2025	950	80°	7.1	5.1	76°		709.7 MCF/day
11:00		1960	950	80°	7.1	4.4	96°		601.1
11:15		1835	950	80°	7.1	4.4	96°		601.1
11:30	AM	1705	950	80°	7.1	5.6	76°	1.00	8/64 765.1 MCF/day
11:45		1602	950	80°	7.1	5.4	96°		737.7 MCF/day
12:00	NOON	1518	925	81°	7.1	4.4	96°		601.1 MCF/day
12:15		1447	925	81°	7.1	4.4	96°		601.1 MCF/day
12:30	PM	1303	925	81°	7.1	6.2	96°	1.00	10/64 847.0 MCF/day
12:45		1230	925	81°	7.1	5.7	96°		778.7 MCF/day
1:00		1180	925	81°	7.1	5.4	96°		737.7 MCF/day
1:15		1150	920	81°	7.1	5.4	96°		737.7 MCF/day
									0.0" Liquid

John West

Page 1 of 1 — Data By: John A. Carrasco Tony

$n = 1.054$

$\theta = 43.5°$

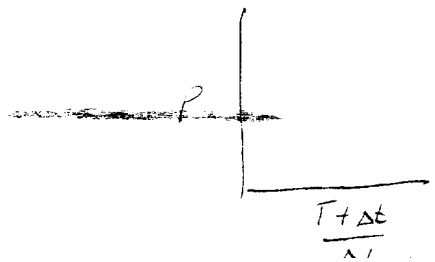


AMOCO PRODUCTION COMPANY
STATE "ME" NO. 1-Y
BOTTOM HOLE PRESSURE BUILD-UP TEST
TABULATION OF TIMES AND PRESSURES

TEST CONDUCTED BY:
JOHN WEST ENGINEERING COMPANY

TEST DATE: JUNE 25 to 28, 1982
TEST DEPTH: 13,137 FEET
ELEMENT NO: 34912 (0-6000 psi)
OPERATOR: B.T.

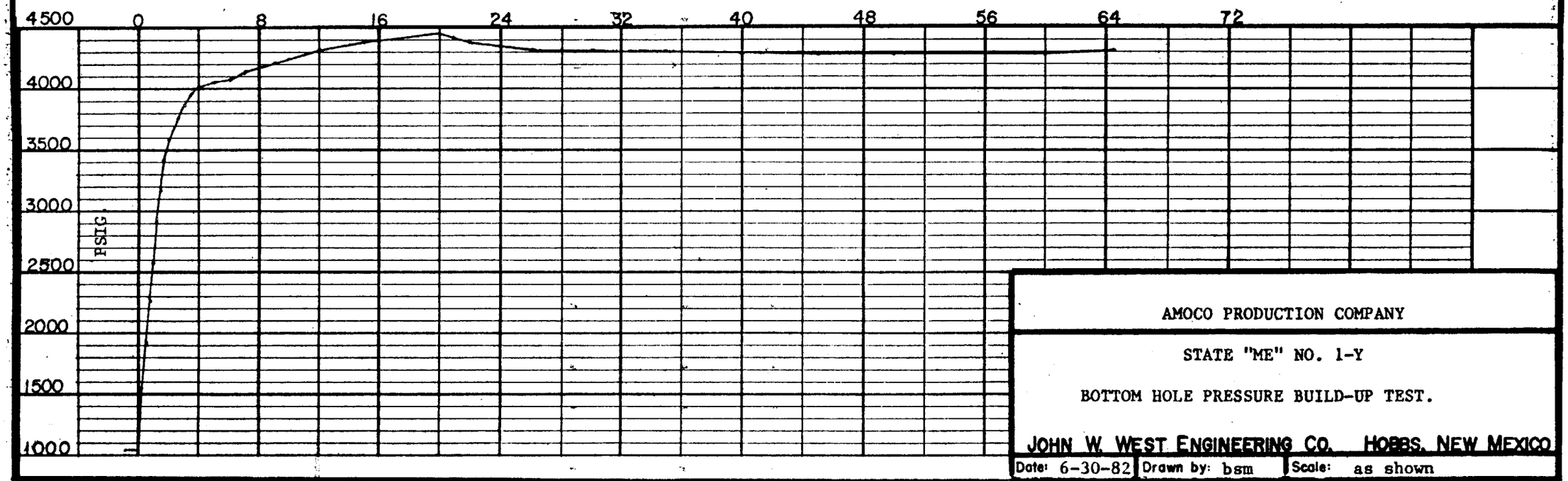
DATE	TIME	CUM HRS./MIN.	Δt	T+Δt / Δt	PSIG @ 13,137 FEET	ΔP	SIPSQ x 10⁴
				15 hrs →			
6-25-82	4:15 P.M.				1030 Gauge reached 13,137 Feet		
	4:45 P.M.				1030		
	5:15 P.M.	00 Hrs.	00 Min.		1030 Start Build-Up		
	5:30 P.M.	00 .25	15	301.0	1560	530	243.36
	5:45 P.M.	00 .5	30	151.0	1925	895	370.56
	6:00 P.M.	00 .75	45	101.0	2275	1245	517.56
	6:15 P.M.	01 1.0	00	76.0	2592	1562	671.85
	6:30 P.M.	01 1.25	15	61.0	2931	1901	859.08
	6:45 P.M.	01 1.5	30	51.0	3190	2160	1017.6
	7:00 P.M.	01 1.75	45	43.86	3413	2383	1164.9
	7:15 P.M.	02 2.0	00	38.5	3593	2563	1291.0
	7:45 P.M.	02 2.5	30	31.0	3786	2756	1433.4
	8:15 P.M.	03 3.0	00	26.0	3886	2856	1510.1
	8:45 P.M.	03 3.5	30	22.43	3961	2931	1569.0
	9:15 P.M.	04 4.0	00	19.75	4009	2979	1607.2
	10:15 P.M.	05 5.0	00	16.0	4060	3030	1648.4
6-25-82	11:15 P.M.	06 6.0	00	13.5	4094	3064	1676.1
6-26-82	12:15 A.M.	07 7.0	00	11.71	4130	3100	1705.7
	1:15 A.M.	08 8.0	00	10.38	4169	3139	1738.1
	2:15 A.M.	09 9.0	00	9.33	4205	3175	1768.2
	3:15 A.M.	10 10.0	00	8.5	4242	3212	1799.5
	5:15 A.M.	12 12.0	00	7.25	4308	3278	1855.9
	8:15 A.M.	15 15.0	00	6.0	4399	3369	1935.1
	1:15 P.M.	20 20.0	00	4.75	4471 Decrease	3441	1999.0
	2:15 P.M.	21 21.0	00	4.57	4438	3408	1969.6
	3:15 P.M.	22 22.0	00	4.41	4399	3369	1935.1
	5:15 P.M.	24 24.0	00	4.13	4357	3327	1898.3
	7:15 P.M.	26 26.0	00	3.88	4335	3305	1879.2
	9:15 P.M.	28 28.0	00	3.68	4323	3293	1868.8
6-26-82	11:15 P.M.	30 30.0	00	3.50	4314	3284	1861.1
6-27-82	4:15 A.M.	35 35.0	00	3.14	4302	3272	1850.7
	9:15 A.M.	40 40.0	00	2.88	4299	3269	1848.1
	2:15 P.M.	45 45.0	00	2.67	4296	3266	1845.6
6-27-82	7:15 P.M.	50 50.0	00	2.50	4293	3263	1843.0
6-28-82	5:15 A.M.	60 60.0	00	2.25	4293	3263	1843.0
6-28-82	9:45 A.M.	64 64.0	30	2.17	4305 Gauge out, End of test.	3275	1853.3



TEST DATE: JUNE 25 to 28, 1982
TEST DEPTH: 13,137 FEET

ELEMENT NO: 3491
RANGE: 0-6000 PSI
CLOCK NO: 2249
RANGE: 0-72 Hours

NOTE: SEE TABULATION OF TIMES AND PRESSURES ON ATTACHED SHEET.



AMOCO PRODUCTION COMPANY

STATE "ME" NO. 1-Y

BOTTOM HOLE PRESSURE BUILD-UP TEST.

JOHN W. WEST ENGINEERING CO. HOBBS, NEW MEXICO

Date: 6-30-82 | Drawn by: bsm | Scale: as shown