

NEW MEXICO OIL CONSERVATION CO. SSION
MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL **RECEIVED**

Form C-1221
Revised 9-1-65

OCT 14 1982

Type Test ☒ Initial ☐ Annual ☐ Special		Test Date 10-7-82	
Company Amoco Production Company ✓		Connection El Paso Natural Gas	
Pool Wildcat Atoka		Formation Atoka	
Completion Date 2-15-82		Total Depth 10933.	Plug Back TD 10365
Elevation 4225		Farm or Lease Name Federal BL	
Csq. Size 5,500	Wt. 17.0	d 4.778	Set At 10900.
Perforations: From 9996. To 10002.		Well No. 1	
Tbg. Size 2,375	Wt. 4.7	d 1.995	Set At 10002.
Perforations: From 0. To 0.		Unit B 17 23S 24E	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single		Packer Set At 9844.	County Eddy
Producing Thru Tubing	Reservoir Temp. °F 173.9 9999.	Mean Annual Temp. °F 60.0	Baro. Press. - P _a 13.2
State New Mexico			
L 9999.	H 9999.	G _g 0.600	% CO ₂ 0.56
% N ₂ 1.11	% H ₂ S 0.	Prover 0.	Meter Run 4.0
Taps Flange			

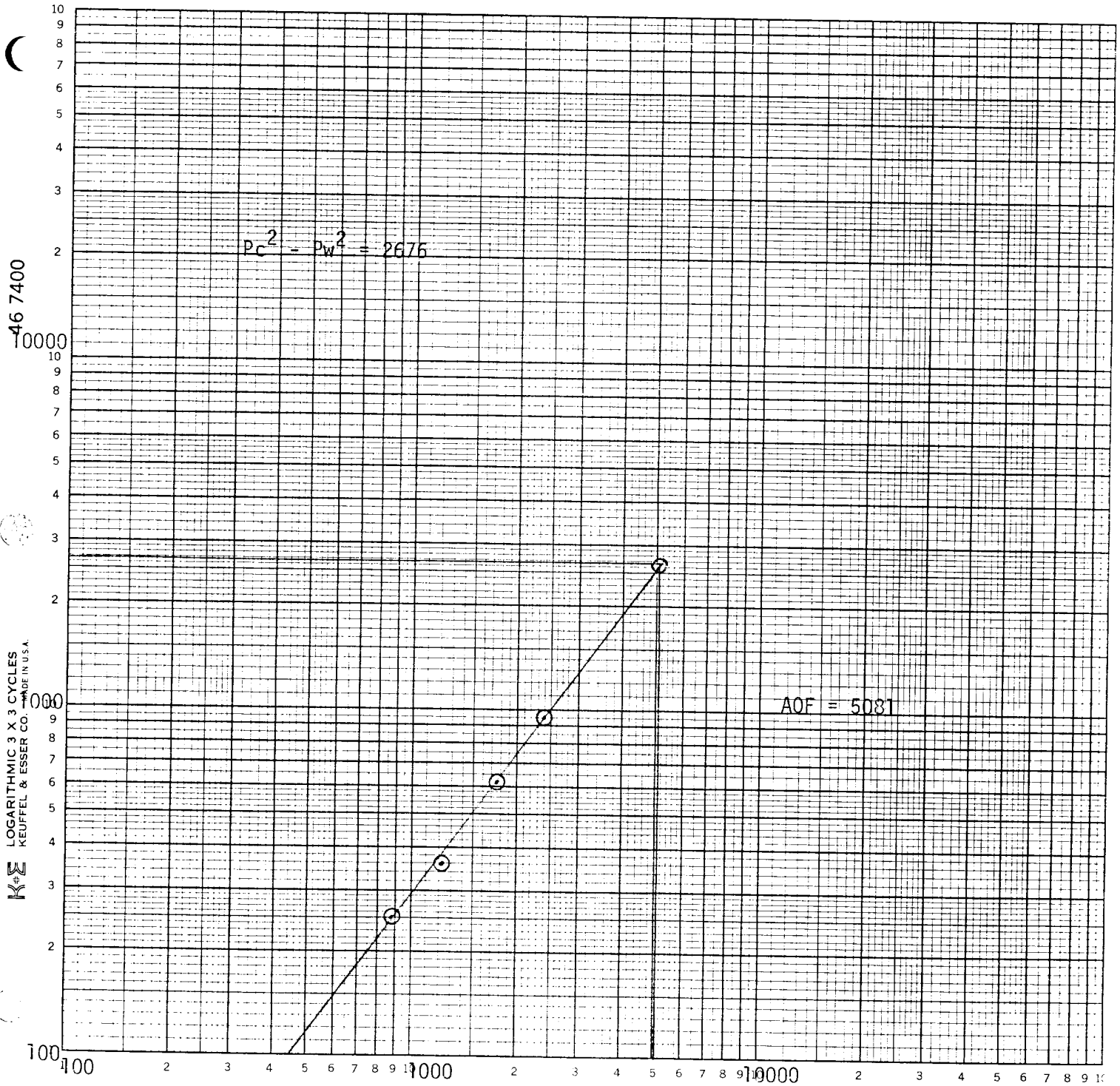
FLOW DATA						TUBING DATA		CASING DATA		Duration of Flow	
NO.	Prover Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. h _w	Temp. °F	Press. p.s.i.g.	Temp. °F	Press. p.s.i.g.		Temp. °F
1.	4.03 x 1.250			850.	9.0	80.	1618.	55.			12.0
2.	4.03 x 1.250			865.	17.0	95.	1532.	53.	0.	0.	0.7
3.	4.03 x 1.250			874.	36.0	88.	1489.	55.	0.	0.	0.7
4.	4.03 x 1.250			874.	64.0	81.	1387.	56.	0.	0.	0.7
5.							1237.	57.	0.	0.	0.7

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor Ft.	Gravity Factor F _g	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd
1.	7.47	88.14	863.2	0.9813	1.2913	1.0636	887.
2.	7.47	122.19	878.2	0.9680	1.2913	1.0579	1207.
3.	7.47	178.72	887.2	0.9741	1.2913	1.0617	1783.
4.	7.47	238.29	887.2	0.9804	1.2913	1.0649	2400.
5.							

NO.	R _t	Temp. °R	T _f	Z	Gas Liquid Hydrocarbon Ratio	A.P.I. Gravity of Liquid Hydrocarbons	Specific Gravity Separator Gas	Specific Gravity Flowing Fluid	Critical Pressure	Critical Temperature
1.	1.28	540.	1.52	0.884	0.	0.	0.600	XXXXXX	673.	354.
2.	1.30	555.	1.57	0.893						
3.	1.32	548.	1.55	0.887						
4.	1.32	541.	1.53	0.882						
5.										

P _c 1635.9	P _c ² 2676.	(1) $\frac{P_c^2}{P_c^2 - P_w^2} = \frac{2.8164}{-}$	(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = \frac{2.1177}{-}$
NO	P _t ²	P _w	P _w ²
1	2388.	1558.	2426.
2	2257.	1519.	2308.
3	1961.	1434.	2055.
4	1563.	1314.	1726.
5			

Absolute Open Flow 5081. Mcfd @ 15.025		Angle of Slope θ 54.1	Slope, n 0.725
Remarks:			
Approved By Commission:			
Conducted By: John West		Calculated By: Barbara Wagner	Checked By: Steve Lesikar



Q = MCF

SUGGESTED FIELD DATA SHEET (Not Required To File)

Type Test ☒ INITIAL ☐ ANNUAL ☐ SPECIAL	Test Date 10-7-82	Lease No. or Serial No.
Company HISCOX Exploration Co.	Connection PIPELINE	Allottee
Field Reservoir	Location	Unit
Completion Date	Total Depth	Plug Back TD
Elevation	Farm or Lease Name FEDECH, "P.L."	
Csg. Size	Wt. d	Set At
Perforation: From	To	Well No.
Tbg. Size	Wt. d	Set At
Perforation: From	To	Sec. Twp-Blk. Rge.
Type Completion (Describe) S.S.B.	Packer Set At	County or Parish EDDY
Producing Thru Tbg.	Reservoir Temp. F	Mean Annual Temp. F
Baro. Press. - P _a	State N.M.	
H	G _g	% CO ₂
% N ₂	% H ₂ S	Prover
Meter Run	4,026	
FLG.		

DATE	ELAP. TIME	Wellhead Working Pressure			METER OR PROVER				REMARKS
Time of Reading	Hrs.	Tbg. Psig.	Csg. Psig.	Temp. F	Pressure Psig	Diff.	Temp. F	Orifice	(Include Liquid Production data Type-A.P.I. Gravity-Amount)
10:55		1419 [#]							LEADWEIGHT SHUT-IN PRESSURE
11:05		1419 [#]							START TEST
									TANK STABLE START 8'30"
11:20	15	1532 [#]	PVP	55°	846 [#]	5"	87°	1.250"	RATE I MAKE 1/4"
11:35	30	1543 [#]	PVP	53°	850 [#]	6"	81°	1.250"	
11:50	45	1532 [#]	PVP	55°	846 [#]	7"	79°	1.250"	
12:05	1:00	1532 [#]	PVP	53°	850 [#]	9"	80°	1.250"	END RATE 835 msc/d
12:20	1:15	1492 [#]	PVP	54°	845 [#]	17"	87°	1.250"	RATE II MAKE 1/4"
12:35	1:30	1492 [#]	PVP	53°	845 [#]	17"	81°	1.250"	
12:50	1:45	1491 [#]	PVP	55°	845 [#]	17"	79°	1.250"	
1:05	2:00	1480 [#]	PVP	55°	845 [#]	17"	95°	1.250"	END RATE 1157 msc/d
1:20	2:15	1401 [#]	PVP	55°	874 [#]	37"	93°	1.250"	RATE III MAKE 1/4"
1:35	2:30	1398 [#]	PVP	55°	874 [#]	37"	91°	1.250"	
1:50	2:45	1391 [#]	PVP	53°	874 [#]	36"	90°	1.250"	
2:05	3:00	1397 [#]	PVP	56°	874 [#]	36"	89°	1.250"	END RATE 1680 msc/d
2:20	3:15	1247 [#]	PVP	56°	884 [#]	46"	84°	1.250"	RATE IV MAKE 1/4"
2:35	3:30	1239 [#]	PVP	57°	874 [#]	65"	83°	1.250"	
2:50	3:45	1237 [#]	PVP	57°	874 [#]	64"	82°	1.250"	
3:05	4:00	1237 [#]	PVP	57°	874 [#]	64"	81°	1.250"	END RATE 2254 msc/d
									MADE 1/2" IN TANK

NEW-TEX LAB

PHONE 505/393-3561

P. O. BOX 1161

611 W. SNYDER

HOBBS, NEW MEXICO 88240

ANALYSIS CERTIFICATE

CLIENT: JOHN KEET ENGINEERING
ADDRESS: 412 N. DAL PASO
CITY: STATE: HOBBS NM 88240

ANALYSIS NUMBER: 4046
DATE OF RUN: 11 8 82
DATE RECEIVED: 11 7 82

SAMPLE IDENT: AMOCO- FEDERAL "BL" #1
SAMPLING PRESS:

SAMPLING TEMP:

*** LAB ANALYSIS ***

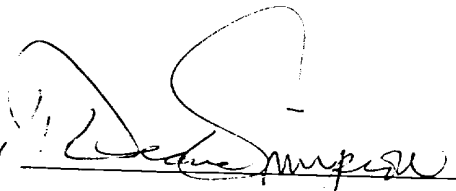
	Wt %	Vol %
NITROGEN	0.00	0.00
CARBON DIOXIDE	0.00	0.00
METHANE	70.11	11.81
ETHANE	2.01	1.81
PROPANE	2.77	2.51
ISOBUTANE	0.11	1.05
NORMAL BUTANE	2.14	4.04
ISOPENTANE	1.21	2.73
NORMAL PENTANE	0.23	2.21
HEXANES	0.03	2.01
HEPTANES PLUS	4.00	0.24
TOTAL	100.00	1.43

PROPANE GRM: 0.21 BUTANES GRM: 0.10
ETHANE GRM: 1.03 PENTANES PLUS GRM: 0.29

SPECIFIC GRAV (CALC): 0.6957
MOLE WEIGHT: 17.55

WATER SATURATED AT	PRESSURE (PSIA)	WET	DRY
14.095	1231	1230	1230
14.450	1225	1240	1240
14.732	1221	1232	1232
14.735	1234	1232	1232

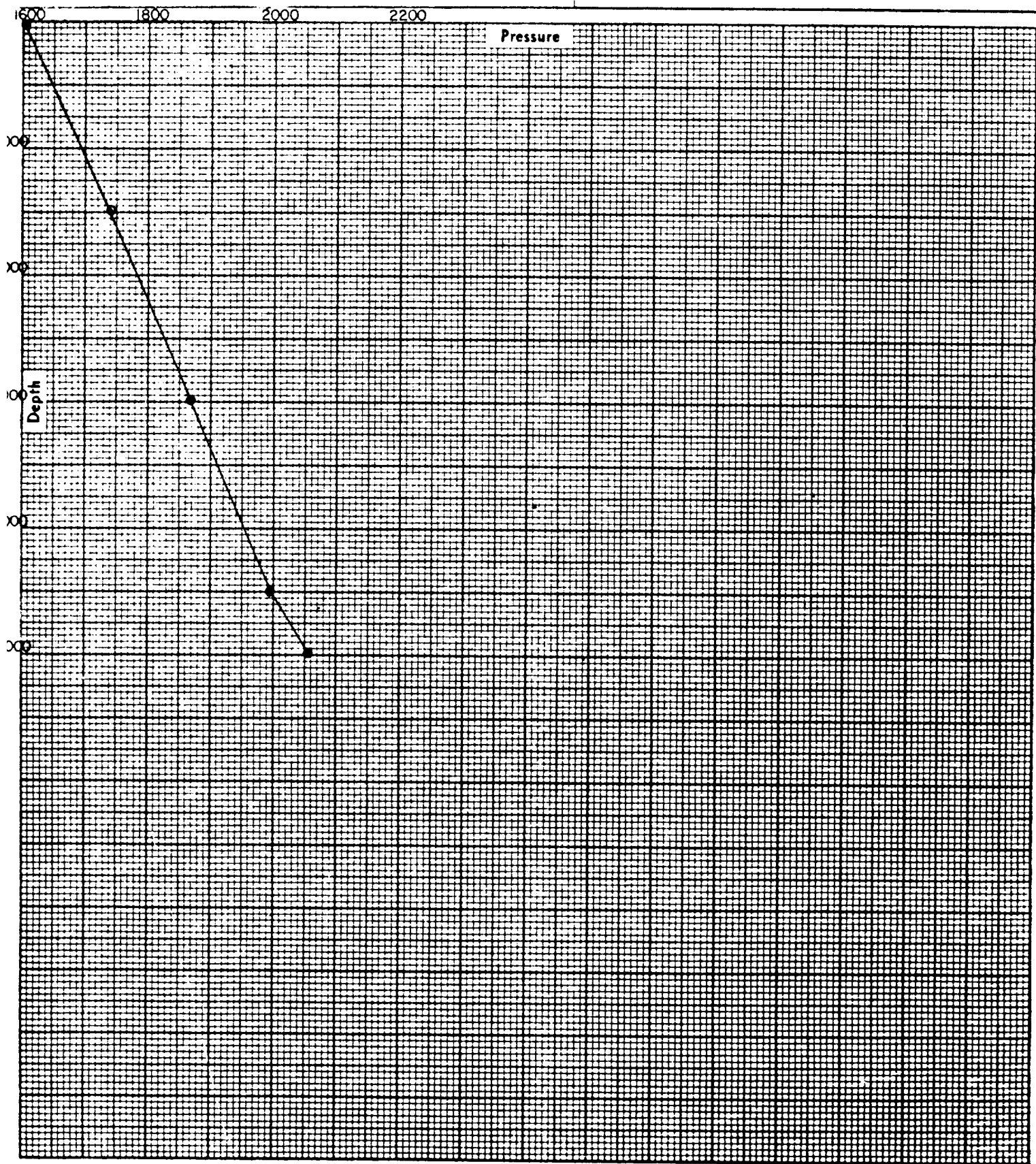
ANALYZED BY: J. HAMILTON

APPROVED BY: 

BOTTOM HOLE PRESSURE SURVEY REPORT

OPERATOR AMOCO PRODUCTION CO.
LEASE FEDERAL "BL"
WELL NO. 1
FIELD _____
DATE 10-7-82 TIME 10:55 A.M.
STATUS Shut-In TEST DEPTH 9950'
TIME S.I. _____ LAST TEST DATE _____
CAS. PRES. _____ BHP LAST TEST _____
TUB. PRES. 1605 BHP CHANGE _____
ELEV _____ FLUID TOP _____
DATUM _____ WATER TOP _____
TEMP _____ RUN BY J.W.
CLOCK NO. B-13032 GAUGE NO. 19389
ELEMENT NO. 34911 (0-6000 PSI)

DEPTH	PRESSURE	GRADIENT
000	1605	
3000	1741	.045
6000	1867	.042
9000	1997	.043
9950	2057	.063



TEST DATE: OCTOBER 7, 1982
TEST DEPTH: 9950 FEET

ELEMENT NO: 34911
RANGE: 0-6000 PSI
CLOCK NO: B-13032
RANGE: 0-12 HOUR

TEST CONDUCTED BY:
JOHN WEST ENGINEERING COMPANY

DATE

10-7-82

TIME

10:55 A.M.
11:00 A.M.
11:15 A.M.
11:30 A.M.
11:45 A.M.
12:00 Noon
12:15 P.M.
12:30 P.M.
12:45 P.M.
1:00 P.M.
1:15 P.M.
1:30 P.M.
1:45 P.M.
2:00 P.M.
2:15 P.M.
2:30 P.M.
2:45 P.M.
3:00 P.M.

CUM HRS./MIN.

00 Hrs. 00 Min.
00 15
00 30
00 45
01 00
01 15
01 30
01 45
02 00
02 15
02 30
02 45
03 00
03 15
03 30
03 45
04 00

PSIG @ 9950 FEET

2057 Gauge reached 9950 Feet
2057 Begin 4-POINT
1994 9/64 Choke
1967
1955
1955 END RATE I
1916 11/64 Choke
1913
1913
1904 END RATE II
1819 14/64 Choke
1816
1810
1807 END RATE III

TIME IN HOURS

0 1 2 3 4

2100

2025

1950

1875

1800

1725

1650

1663 END RATE IV, END OF TEST.

AMOCO PRODUCTION COMPANY

FEDERAL "BL" NO. 1

4-POINT BACK PRESSURE TEST.

JOHN W. WEST ENGINEERING CO. HOBBS, NEW MEXICO

Date: 10-7-82 Drawn by: bsm Scale: as shown