WESTERN TESTING CO., INC.
FORMATION TESTING

4R

TICKET Nº 16170

P. O. BOX 1599 PHONE (316) 262-5861
WICHITA, KANSAS 67201

Elevation 1509 KB Formation MISS Eff. Pay Ft.

District Pratt Date 10-12-93 Customer Order No.

COMPANY NAME Petroleum Management Inc.

ADDRESS 14201 East Central Wichita Kansas 67230

LEASE AND WELL NO. 2 Wehrman COUNTY Butler STATE Kans Sec. 30 Twp. 25 Rge. 8E

Mail Invoice To Same Ft 2 Wehrman No. Copies Requested Reg
Co. Name Address

Mail Charts To Same No. Copies Requested Reg
Address

Formation Test No. 1 Interval Tested From 2784 ft. to 2806 ft. Total Depth 2806 ft.

Packer Depth 2779 ft. Size 6 5/8 in. Packer Depth — ft. Size — in.

Packer Depth 2784 ft. Size 6 5/8 in. Packer Depth — ft. Size — in.

Depth of Selective Zone Set —

Top Recorder Depth (Inside) 2792 ft. Recorder Number 1051 Cap. 4250

Bottom Recorder Depth (Outside) 2795 ft. Recorder Number 4332 Cap. 4200

Below Straddle Recorder Depth — ft. Recorder Number — Cap. —

Drilling Contractor Summit Drilling Drill Collar Length 362 I. D. 2 1/4 in.

Mud Type Chem Viscosity 35 Weight Pipe Length -0- I. D. in.

Weight 9.1 Water Loss 15.8 cc. Drill Pipe Length 2400 I. D. in.

Chlorides 2500 P.P.M. Test Tool Length 22 ft. Tool Size 5 7/8 OD in.

Jars: Make NO Serial Number — Anchor Length 22 ft. Size 5 1/2 OD in.

Did Well Flow? No Reversed Out NO Surface Choke Size 3/4 in. Bottom Choke Size 3/4 in.

Main Hole Size 7 7/8 in. Tool Joint Size 3 1/2 XH in.

Blow: Very weak 3/4 inch blow on both the initial & final flows

Recovered 150 ft. of Gas in pipe

Recovered 30 ft. of free oil 40 gravity @60°

Recovered 60 ft. of Gas & oil cut mud 10% gas 25% oil 65% mud

Recovered 90 ft. of Gas & oil cut mud 5% gas - 30% oil 65% mud

Recovered 60 ft. of Gas & oil cut mud 5% gas 5% oil 10% water 80% mud

Chlorides P.P.M. Sample Jars used Remarks:

Time On Location	3:00 A.M. P.M.	Time Pick Up Tool	3:30 A.M. P.M.	Time Off Location	A.M. P.M.
Time Set Packer(s)	5:15 A.M. P.M.	Time Started Off Bottom	9:00 A.M. P.M.	Maximum Temperature	118 °F

Initial Hydrostatic Pressure		(A)	1408 P.S.I.		
Initial Flow Period	Minutes 30	(B)	53 P.S.I. to	(C) 53	P.S.I.
Initial Closed In Period	Minutes 45	(D)	857 P.S.I.		
Final Flow Period	Minutes 60	(E)	107 P.S.I. to	(F) 107	P.S.I.
Final Closed In Period	Minutes 90	(G)	857 P.S.I.		
Final Hydrostatic Pressure		(H)	1334 P.S.I.		

COMPANY TERMS

Western Testing Co., Inc. shall not be liable for damages of any kind to the property or personnel of the one for whom a test is made or for any loss suffered or sustained directly or indirectly through the use of its equipment, of its statements or opinion concerning the results of any test. Tools lost or damaged in the hole shall be paid at cost by the party for whom the test is made.

All charges subject to 12% interest after 60 days from date of invoice. Any expense incurred for collection will be added to the original amount.

Test Approved By Bill Stout
Signature of Customer or his authorized representative

Western Representative Lod Trilt - Thank You

FIELD INVOICE

Open Hole Test	$ ✓
Misrun	$
Straddle Test	$
Jars	$
Selective Zone	$
Safety Joint	$ ✓
Standby	$
Evaluation	$
Extra Packer	$
Circ. Sub.	$
Mileage	$
Fluid Sampler	$
Extra Charts	$
Insurance	$
Telecopier	$
TOTAL	$

WESTERN TESTING CO., INC.
Pressure Data

Date 10-12-92 Test Ticket No. 16120

Recorder No. 1051 Capacity Location Ft.

Clock No. Elevation Well Temperature °F

Point		Pressure		Time Given	Time Computed
A	Initial Hydrostatic Mud	1409 P.S.I.	Open Tool	M	
B	First Initial Flow Pressure	P.S.I.	First Flow Pressure	Mins.	Mins.
C	First Final Flow Pressure	P.S.I.	Initial Closed-in Pressure	Mins.	Mins.
D	Initial Closed-in Pressure	P.S.I.	Second Flow Pressure	Mins.	Mins.
E	Second Initial Flow Pressure	P.S.I.	Final Closed-in Pressure	Mins.	Mins.
F	Second Final Flow Pressure	P.S.I.			
G	Final Closed-in Pressure	P.S.I.			
H	Final Hydrostatic Mud	1342 P.S.I.			

PRESSURE BREAKDOWN

First Flow Pressure		Initial Shut-In		Second Flow Pressure		Final Shut-In	
Breakdown: Inc.		Breakdown: Inc.		Breakdown: Inc.		Breakdown: Inc.	
of 5 mins. and a		of 3 mins. and a		of 5 mins. and a		of 3 mins. and a	
final inc. of 0 Min.		final inc. of 0 Min.		final inc. of 0 Min.		final inc. of 0 Min.	
Point Mins.	Press.	Point Minutes	Press.	Point Minutes	Press.	Point Minutes	Press.
P 1 0	67	0	67	0	123	0	122
P 2 5		3	69	5		3	216
P 3 10		6	72	10		6	438
P 4 15		9	224	15		9	647
P 5 20		12	527	20	122	12	734
P 6 25		15	755	25	122	15	769
P 7 30	67	18	791	30	122	18	800
P 8 35		21	815	35		21	818
P 9 40		24	828	40		24	830
P10 45		27	844	45		27	840
P11 50		30	855	50		30	850
P12 55		33	860	55		33	854
P13 60		36	865	60	122	36	857
P14 65		39	870	65		39	860
P15 70		42	874	70		42	864
P16 75		45	876	75		45	868
P17 80		48		80		48	874
P18 85		51		85		51	872
P19 90		54		90		54	873
P20 95		57		95		57	874
100		60		100		60	875

WESTERN TESTING CO., INC.
Pressure Data

Date _____ Test Ticket No. 16170

Recorder No. _____ Capacity _____ Location _____ Ft.

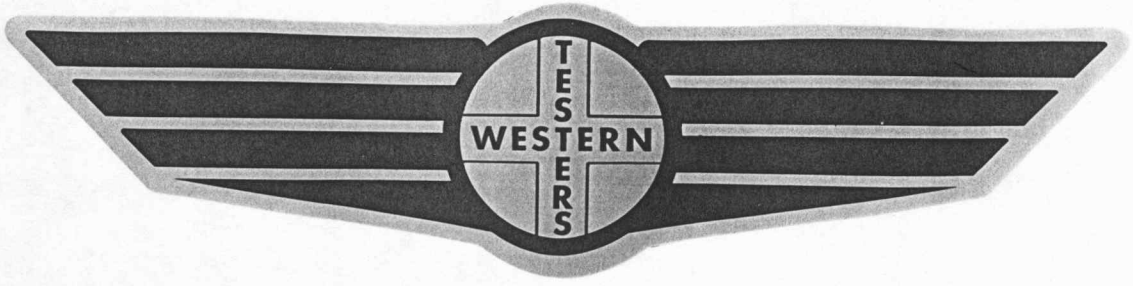
Clock No. _____ Elevation _____ Well Temperature _____ °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	_____ P.S.I.	Open Tool	_____ M	_____
B First Initial Flow Pressure	_____ P.S.I.	First Flow Pressure	_____ Mins.	_____ Mins.
C First Final Flow Pressure	_____ P.S.I.	Initial Closed-in Pressure	_____ Mins.	_____ Mins.
D Initial Closed-in Pressure	_____ P.S.I.	Second Flow Pressure	_____ Mins.	_____ Mins.
E Second Initial Flow Pressure	_____ P.S.I.	Final Closed-in Pressure	_____ Mins.	_____ Mins.
F Second Final Flow Pressure	_____ P.S.I.			
G Final Closed-in Pressure	_____ P.S.I.			
H Final Hydrostatic Mud	_____ P.S.I.			

PRESSURE BREAKDOWN

First Flow Pressure		Initial Shut-In		Second Flow Pressure		Final Shut-In	
Breakdown: _____ Inc. of _____ mins. and a final inc. of _____ Min.		Breakdown: _____ Inc. of _____ mins. and a final inc. of _____ Min.		Breakdown: _____ Inc. of _____ mins. and a final inc. of _____ Min.		Breakdown: _____ Inc. of _____ mins. and a final inc. of _____ Min.	
Point Mins.	**Press.**	**Point Minutes**	**Press.**	**Point Minutes**	**Press.**	**Point Minutes**	**Press.**
P 1 105		63		105		63	876
P 2 110		66		110		66	877
P 3 115		69		115		69	878
P 4 120		72		120		72	879
P 5 125		75		125		75	879
P 6 130		78		130		78	880
P 7 135		81		135		81	880
P 8 140		84		140		84	881
P 9 145		87		145		87	
P10 150		90		150		90	881
P11 155		93		155		93	
P12 160		96		160		96	
P13 165		99		165		99	
P14 170		102		170		102	
P15 175		105		175		105	
P16 180		108		180		108	
P17 185		111		185		111	
P18 190		114		190		114	
P19 195		117		195		117	
P20 200		120		200		120	

FORMATION TEST REPORT



Home Office: Wichita, Kansas 67201

P.O. Box 1599 Phone 1-80-688-7021

COMPANY PETROLEUM MANAGEMENT, INC. LEASE & WELL NO. #2 WEHRMAN SEC. 30 TWP. 29S RGE. 8E TEST NO. 1 DATE 10/12/93

DST REPORT

GENERAL INFORMATION

DATE	: 10/12/93	TICKET	: 16170
CUSTOMER	: PETROLEUM MANAGEMENT INC	LEASE	: WEHRMAN
WELL	: #2 TEST: 1	GEOLOGIST	: STOUT
ELEVATION	: 1509 KB	FORMATION	: MISSISSIPPI
SECTION	: 30	TOWNSHIP	: 29S
RANGE	: 8E COUNTY: BUTLER	STATE	: KS
GAUGE SN#	: 1051 RANGE : 4250	CLOCK	: 12

WELL INFORMATION

PERFORATION INTERVAL FROM: 2784.00 ft TO: 2806.00 ft TVD: 2806.0 ft
DEPTH OF SELECTIVE ZONE: TEST TYPE: OIL
DEPTH OF RECORDERS: 2792.0 ft 2795.0 ft
TEMPERATURE: 118.0

DRILL COLLAR LENGTH:	362.0 ft	I.D.:	2.250 in
WEIGHT PIPE LENGTH :	0.0 ft	I.D.:	0.000 in
DRILL PIPE LENGTH :	2400.0 ft	I.D.:	3.800 in
TEST TOOL LENGTH :	22.0 ft	TOOL SIZE :	5.500 in
ANCHOR LENGTH :	22.0 ft	ANCHOR SIZE:	5.500 in
SURFACE CHOKE SIZE :	0.750 in	BOTTOM CHOKE SIZE:	0.750 in
MAIN HOLE SIZE :	7.875 in	TOOL JOINT SIZE :	3.5XH
PACKER DEPTH:	2779.0 ft	SIZE:	6.630 in
PACKER DEPTH:	2784.0 ft	SIZE:	6.630 in
PACKER DEPTH:	0.0 ft	SIZE:	0.000 in
PACKER DEPTH:	0.0 ft	SIZE:	0.000 in

MUD INFORMATION

DRILLING CON.	: SUMMIT DRILLING		
MUD TYPE	: CHEMICAL	VISCOSITY :	35.00 cp
WEIGHT	: 9.700 ppg	WATER LOSS:	15.800 cc
CHLORIDES	: 2500 ppm		
JARS-MAKE	:	SERIAL NUMBER:	
DID WELL FLOW?	: NO	REVERSED OUT?:	NO

COMMENTS

Comment

VERY WEAK 3/4 INCH BLOW ON BOTH FLOW PERIODS.

DST REPORT (CONTINUED)

FLUID RECOVERY

Feet of Fluid	% Oil	% Gas	% Water	% Mud	Comments
0.0	0.0	0.0	0.0	0.0	150 FT GAS ABOVE FLUID
30.0	100.0	0.0	0.0	0.0	FREE OIL
0.0	0.0	0.0	0.0	0.0	40 GRAVITY @ 60 DEGREES F
60.0	25.0	10.0	0.0	65.0	GAS & OIL CUT MUD
90.0	30.0	5.0	0.0	65.0	GAS & OIL CUT MUD
60.0	5.0	5.0	10.0	80.0	GAS & OIL CUT MUD

RATE INFORMATION

OIL VOLUME:	0.3688 STB		
GAS VOLUME:	0.3728 SCF	TOTAL FLOW TIME:	90.0000 min.
MUD VOLUME:	0.7155 STB	AVERAGE OIL RATE:	14.8311 STB/D
WATER VOLUME:	0.0295 STB	AVERAGE WATER RATE:	2.9898 STB/D
TOTAL FLUID :	1.1138 STB		

FIELD TIME & PRESSURE INFORMATION

INITIAL HYDROSTATIC PRESSURE: 1408.00

Description	Duration	p1	p End
INITIAL FLOW	30.00	53.00	53.00
INITIAL SHUT-IN	45.00		857.00
FINAL FLOW	60.00	107.00	107.00
FINAL SHUT-IN	90.00		857.00

FINAL HYDROSTATIC PRESSURE: 1334.00

OFFICE TIME & PRESSURE INFORMATION

INITIAL HYDROSTATIC PRESSURE: 1409.00

Description	Duration	p1	p End
INITIAL FLOW	30.00	67.00	67.00
INITIAL SHUT-IN	45.00		876.00
FINAL FLOW	60.00	123.00	123.00
FINAL SHUT-IN	90.00		881.00

FINAL HYDROSTATIC PRESSURE: 1343.00

PRESSURE TRANSIENT REPORT

GENERAL INFORMATION

DATE	: 10/12/93			TICKET	: 16170
CUSTOMER	: PETROLEUM MANAGEMENT INC			LEASE	: WEHRMAN
WELL	: #2	TEST: 1		GEOLOGIST	: STOUT
ELEVATION	: 1509 KB			FORMATION	: MISSISSIPPI
SECTION	: 30			TOWNSHIP	: 29S
RANGE	: 8E	COUNTY:	BUTLER	STATE	: KS
GAUGE SN#	: 1051	RANGE :	4250	CLOCK	: 12

INITIAL FLOW

Time (min)	Pressure	Delta P
0.00	67.00	67.00
5.00	67.00	0.00
10.00	67.00	0.00
15.00	67.00	0.00
20.00	67.00	0.00
25.00	67.00	0.00
30.00	67.00	0.00

INITIAL SHUT IN

Time (min)	Pressure	Delta P	Horner T
3.00	69.00	69.00	0.00
6.00	73.00	4.00	0.00
9.00	224.00	151.00	0.00
12.00	527.00	303.00	0.00
15.00	755.00	228.00	0.00
18.00	791.00	36.00	0.00
21.00	815.00	24.00	0.00
24.00	828.00	13.00	0.00
27.00	844.00	16.00	0.00
30.00	855.00	11.00	0.00
33.00	860.00	5.00	0.00
36.00	865.00	5.00	0.00
39.00	870.00	5.00	0.00
42.00	874.00	4.00	0.00
45.00	876.00	2.00	0.00

PRESSURE TRANSIENT REPORT (CONTINUED)

FINAL FLOW

Time (min)	Pressure	Delta P
0.00	123.00	123.00
5.00	123.00	0.00
10.00	123.00	0.00
15.00	123.00	0.00
20.00	123.00	0.00
25.00	123.00	0.00
30.00	123.00	0.00
35.00	123.00	0.00
40.00	123.00	0.00
45.00	123.00	0.00
50.00	123.00	0.00
55.00	123.00	0.00
60.00	123.00	0.00

FINAL SHUT IN

Time (min)	Pressure	Delta P	Horner T
3.00	216.00	216.00	0.00
6.00	438.00	222.00	0.00
9.00	647.00	209.00	0.00
12.00	734.00	87.00	0.00
15.00	769.00	35.00	0.00
18.00	800.00	31.00	0.00
21.00	818.00	18.00	0.00
24.00	830.00	12.00	0.00
27.00	840.00	10.00	0.00
30.00	850.00	10.00	0.00
33.00	854.00	4.00	0.00
36.00	857.00	3.00	0.00
39.00	860.00	3.00	0.00
42.00	864.00	4.00	0.00
45.00	868.00	4.00	0.00
48.00	871.00	3.00	0.00
51.00	872.00	1.00	0.00
54.00	873.00	1.00	0.00
57.00	874.00	1.00	0.00
60.00	875.00	1.00	0.00
63.00	876.00	1.00	0.00
66.00	877.00	1.00	0.00
69.00	878.00	1.00	0.00
72.00	879.00	1.00	0.00
75.00	879.00	0.00	0.00

PRESSURE TRANSIENT REPORT (CONTINUED)

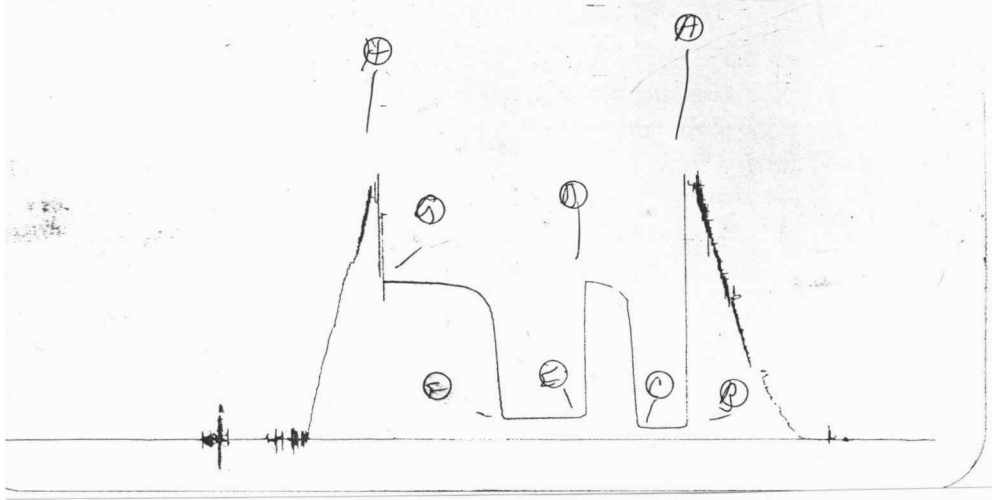
FINAL SHUT IN (CONTINUED)

Time (min)	Pressure	Delta P	Horner T
78.00	880.00	1.00	0.00
81.00	880.00	0.00	0.00
84.00	881.00	1.00	0.00
87.00	881.00	0.00	0.00
90.00	881.00	0.00	0.00

4057 DST #1

7K+16170

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4332 DST #1

7K+16170

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