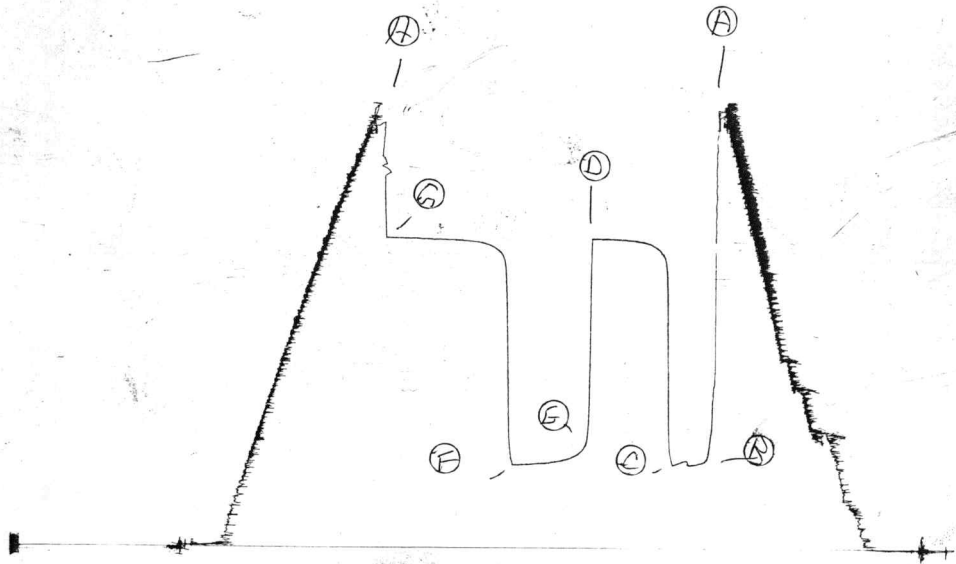


13362 D8#1

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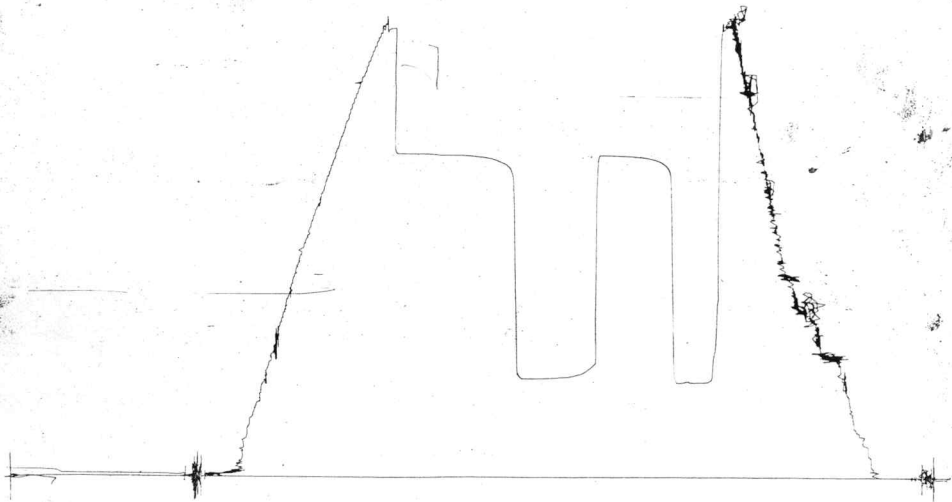
(Handwritten symbol resembling a stylized 'I' or '7')



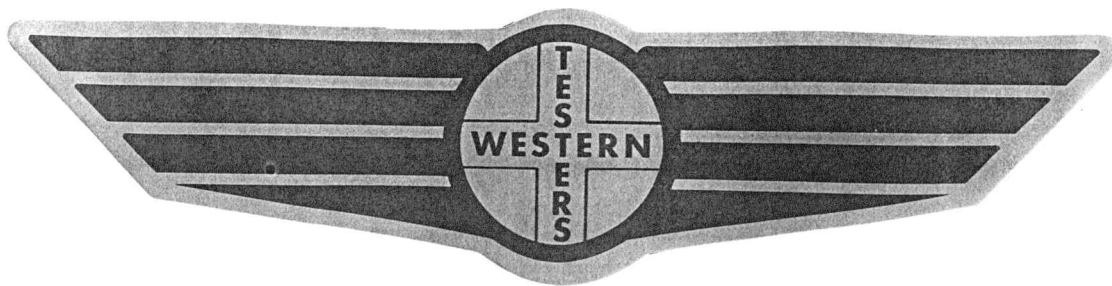
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FORMATION TEST REPORT



Home Office:

Wichita, Kansas 67201

P O. Box 1599

Phone 1-800-688-7021

DST REPORT

GENERAL INFORMATION

DATE : 6/26/94
CUSTOMER : ROBINSON OIL COMPANY
WELL : A-1 TEST: 1
ELEVATION: 2077 GL
SECTION : 22
RANGE : 21W COUNTY: CLARK
GAUGE SN#: 13362 RANGE : 4450
TICKET : 19039
LEASE : BERRYMEN
GEOLOGIST: ROBINSON
FORMATION: MISSISSIPPI
TOWNSHIP : 31S
STATE : KS
CLOCK : 12

WELL INFORMATION

PERFORATION INTERVAL FROM: 5046.00 ft TO: 5132.00 ft TVD: 5132.0 ft
DEPTH OF SELECTIVE ZONE: TEST TYPE: GAS
DEPTH OF RECORDERS: 5050.0 ft 5053.0 ft
TEMPERATURE: 121.0
DRILL COLLAR LENGTH: 495.0 ft I.D.: 2.250 in
WEIGHT PIPE LENGTH : 0.0 ft I.D.: 0.000 in
DRILL PIPE LENGTH : 4523.0 ft I.D.: 3.800 in
TEST TOOL LENGTH : 28.0 ft TOOL SIZE : 5.500 in
ANCHOR LENGTH : 86.0 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 : 4.5XH
PACKER DEPTH: 5041.0 ft SIZE: 6.630 in
PACKER DEPTH: 5046.0 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. : MURFIN RIG 21
MUD TYPE : CHEMICAL
WEIGHT : 9.200 ppg
CHLORIDES : 4000 ppm
JARS-MAKE : WTC
DID WELL FLOW?: NO
VISCOSITY : 51.00 cp
WATER LOSS: 9.600 cc
SERIAL NUMBER: 411
REVERSED OUT?: NO

COMMENTS

Comment

INITIAL FLOW PERIOD STRONG BLOW - 1/2 MINUTE
GAS TO SURFACE IN 3 MINUTES.
SEE GAS SHEET

DST REPORT (CONTINUED)

FLUID RECOVERY

Feet of Fluid	% Oil	% Gas	% Water	% Mud	Comments
250.0	0.0	10.0	0.0	90.0	GAS CUT MUD

RATE INFORMATION

OIL VOLUME:	0.0000	STB	TOTAL FLOW TIME:	85.0000	min.
GAS VOLUME:	0.6903	SCF	AVERAGE OIL RATE:	0.0000	STB/D
MUD VOLUME:	1.1064	STB	AVERAGE WATER RATE:	0.0000	STB/D
WATER VOLUME:	0.0000	STB			
TOTAL FLUID :	1.1064	STB			

FIELD TIME & PRESSURE INFORMATION

INITIAL HYDROSTATIC PRESSURE: 2506.00

Description	Duration	p1	p End
INITIAL FLOW	30.00	504.00	504.00
INITIAL SHUT-IN	60.00		1779.00
FINAL FLOW	60.00	504.00	504.00
FINAL SHUT-IN	90.00		1779.00

FINAL HYDROSTATIC PRESSURE: 2506.00

OFFICE TIME & PRESSURE INFORMATION

INITIAL HYDROSTATIC PRESSURE: 2477.00

Description	Duration	p1	p End
INITIAL FLOW	25.00	524.00	482.00
INITIAL SHUT-IN	63.00		1768.00
FINAL FLOW	60.00	573.00	475.00
FINAL SHUT-IN	90.00		1770.00

FINAL HYDROSTATIC PRESSURE: 2439.00

GAS FLOW REPORT

GENERAL INFORMATION

DATE : 6/26/94	TICKET : 19039
CUSTOMER : ROBINSON OIL COMPANY	LEASE : BERRYMEN
WELL : A-1 TEST: 1	GEOLOGIST: ROBINSON
ELEVATION: 2077 GL	FORMATION: MISSISSIPPI
SECTION : 22	TOWNSHIP : 31S
RANGE : 21W COUNTY: CLARK	STATE : KS
GAUGE SN#: 13362 RANGE : 4450	CLOCK : 12

PRE FLOW

Time Guage (min)	Tester Type	Orifice Size	Pressure	Flow Desc.
10 MIN	MERLA	1.250	26 PSIG	1462000 SCF/D
20 MIN	MERLA	1.250	32 PSIG	1690000 SCF/D
30 MIN	MERLA	1.250	32 PSIG	1690000 SCF/D

SECOND FLOW

Time Guage (min)	Tester Type	Orifice Size	Pressure	Flow Desc.
10 MIN	MERLA	1.250	32 PSIG	1690000 SCF/D
20 MIN	MERLA	1.250	32 PSIG	1690000 SCF/D
30 MIN	MERLA	1.250	32 PSIG	1690000 SCF/D
40 MIN	MERLA	1.250	32 PSIG	1690000 SCF/D
50 MIN	MERLA	1.250	32 PSIG	1690000 SCF/D
60 MIN	MERLA	1.250	32 PSIG	1690000 SCF/D

PRESSURE TRANSIENT REPORT

GENERAL INFORMATION

DATE	: 6/26/94	TICKET	: 19039
CUSTOMER	: ROBINSON OIL COMPANY	LEASE	: BERRYMEN
WELL	: A-1	TEST:	1
ELEVATION:	2077 GL	GEOLOGIST:	ROBINSON
SECTION	: 22	FORMATION:	MISSISSIPPI
RANGE	: 21W	TOWNSHIP	: 31S
GAUGE SN#:	13362	STATE	: KS
	COUNTY: CLARK	CLOCK	: 12
	RANGE : 4450		

INITIAL FLOW

<u>Time (min)</u>	<u>Pressure</u>	<u>Delta P</u>
0.00	524.00	524.00
5.00	492.00	-32.00
10.00	484.00	-8.00
15.00	455.00	-29.00
20.00	507.00	52.00
25.00	482.00	-25.00

INITIAL SHUT IN

<u>Time (min)</u>	<u>Pressure</u>	<u>Delta P</u>	<u>Horner T</u>
3.00	757.00	757.00	9.33
6.00	1570.00	813.00	5.17
9.00	1680.00	110.00	3.78
12.00	1710.00	30.00	3.08
15.00	1725.00	15.00	2.67
18.00	1737.00	12.00	2.39
21.00	1746.00	9.00	2.19
24.00	1752.00	6.00	2.04
27.00	1757.00	5.00	1.93
30.00	1759.00	2.00	1.83
33.00	1761.00	2.00	1.76
36.00	1763.00	2.00	1.69
39.00	1765.00	2.00	1.64
42.00	1766.00	1.00	1.60
45.00	1766.00	0.00	1.56
48.00	1767.00	1.00	1.52
51.00	1767.00	0.00	1.49
54.00	1767.00	0.00	1.46
57.00	1768.00	1.00	1.44
60.00	1768.00	0.00	1.42

PRESSURE TRANSIENT REPORT (CONTINUED)

INITIAL SHUT IN (CONTINUED)

<u>Time (min)</u>	<u>Pressure</u>	<u>Delta P</u>	<u>Horner T</u>
63.00	1768.00	0.00	1.40

FINAL FLOW

<u>Time (min)</u>	<u>Pressure</u>	<u>Delta P</u>
0.00	573.00	573.00
5.00	564.00	-9.00
10.00	538.00	-26.00
15.00	520.00	-18.00
20.00	504.00	-16.00
25.00	498.00	-6.00
30.00	493.00	-5.00
35.00	490.00	-3.00
40.00	484.00	-6.00
45.00	481.00	-3.00
50.00	480.00	-1.00
55.00	478.00	-2.00
60.00	475.00	-3.00

FINAL SHUT IN

<u>Time (min)</u>	<u>Pressure</u>	<u>Delta P</u>	<u>Horner T</u>
3.00	757.00	757.00	21.00
6.00	1500.00	743.00	11.00
9.00	1665.00	165.00	7.67
12.00	1694.00	29.00	6.00
15.00	1701.00	7.00	5.00
18.00	1725.00	24.00	4.33
21.00	1732.00	7.00	3.86
24.00	1741.00	9.00	3.50
27.00	1746.00	5.00	3.22
30.00	1748.00	2.00	3.00
33.00	1750.00	2.00	2.82
36.00	1754.00	4.00	2.67
39.00	1757.00	3.00	2.54
42.00	1758.00	1.00	2.43
45.00	1759.00	1.00	2.33
48.00	1760.00	1.00	2.25

PRESSURE TRANSIENT REPORT (CONTINUED)

FINAL SHUT IN (CONTINUED)

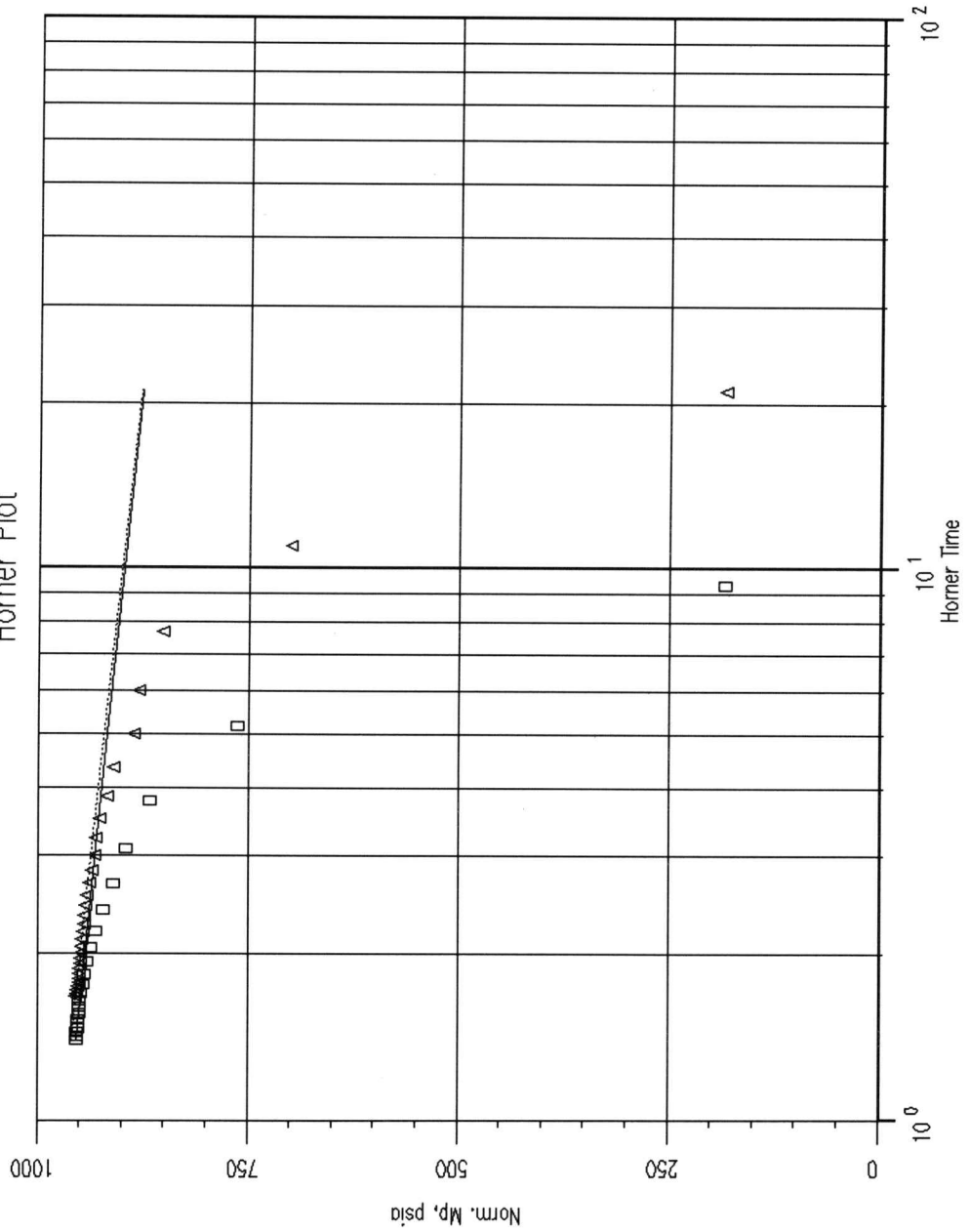
<u>Time (min)</u>	<u>Pressure</u>	<u>Delta P</u>	<u>Horner T</u>
51.00	1761.00	1.00	2.18
54.00	1762.00	1.00	2.11
57.00	1763.00	1.00	2.05
60.00	1763.00	0.00	2.00
63.00	1764.00	1.00	1.95
66.00	1764.00	0.00	1.91
69.00	1765.00	1.00	1.87
72.00	1765.00	0.00	1.83
75.00	1766.00	1.00	1.80
78.00	1766.00	0.00	1.77
81.00	1767.00	1.00	1.74
84.00	1768.00	1.00	1.71
87.00	1769.00	1.00	1.69
90.00	1770.00	1.00	1.67

DATE 6/26/94
 CUSTOMER ROBINSON OIL COMPANY
 WELL A-1
 ELEVATION 2077 GL
 SECTION 22
 RANGE 21W
 GAUGE SN# 13362

TEST 1
 COUNTY CLARK
 RANGE 4450

TICKET 19039
 LEASE BERRYMEN
 GEOLOGIST ROBINSON
 FORMATION MISSISSIPPI
 TOWNSHIP 31S
 STATE KS
 CLOCK 12

Horner Plot



Result

	#1	#2
tp, hrs	0.42	1.00
Slope	-64.77	-68.03
Pstar, psig	1778.11	1783.70
P1hr, psig	953.38	948.32
Skin	10.83	9.79
k, md	13.25	12.61
kh/u, md-ft/cp	5816.78	5538.14
ri, ft	62.34	94.24
DR, %	2.90	2.76
Drawdown Factor, %		-0.001
Drawdown P*		-0.003

— BUILD 1
 BUILD 2

HORNER ANALYSIS REPORT

GENERAL INFORMATION

DATE : 6/26/94	TICKET : 19039
CUSTOMER : ROBINSON OIL COMPANY	LEASE : BERRYMEN
WELL : A-1 TEST: 1	GEOLOGIST: ROBINSON
ELEVATION: 2077 GL	FORMATION: MISSISSIPPI
SECTION : 22	TOWNSHIP : 31S
RANGE : 21W COUNTY: CLARK	STATE : KS
GAUGE SN#: 13362 RANGE : 4450	CLOCK : 12

Input Data

Porosity 0.150 Rw: 0.328 ft h: 7.000 ft

qg 1690000.0 STB

Pvt Data

Evaluation Pressure : 1768.0
 Evaluation Temperature: 121.0

Gas Grav 0.65 API
 Bg 0.001 RBL/STB Vis 0.016 cp Ct 6.2650E-004 1/PSI

Horner Results

	Initial Shut-In	Final Shut-In
pseudo pressure time	0.42 hrs	1.00 hrs
slope	-64.77	-68.03
pstar	1778.11 psig	1783.70 psig
plhr	953.38 psig	948.32 psig
skin	10.83	9.79
permeability	13.25 md	12.61 md
transmissability	5816.78 md-ft/cp	5538.14 md-ft/cp
radius of investigation	62.34 ft	94.24 ft
Damage-Ratio	2.9 percent	2.8 percent
Drawdown Factor		-0.001 percent
Drawdown P*		-0.003 percent