



WESTERN TESTING CO., INC.
FORMATION TESTING

TICKET N^o 11906

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

Elevation 1440 Co. Form. MESS Eff. Pay - Ft.

District G.T. BEND Date 12-14-87 Customer Order No. -

COMPANY NAME JAY BOY OEL, INC.

ADDRESS 100 N. BROADWAY, SUITE 535 WICHITA, KS, 67202

LEASE AND WELL NO. T. UNRUH #1 COUNTY HARVEY STATE KS. Sec. 11 Twp. 23 S 2 W

Mail Invoice To SAME Co. Name Address No. Copies Requested 59

Mail Charts To SAME T. Unruh #1 Address No. Copies Requested 5

Formation Test No. 1 Interval Tested From 2928 ft. to 2985 ft. Total Depth 2985 ft.

Packer Depth 2923 ft. Size 6 7/8 in. Packer Depth - ft. Size - in.

Packer Depth 2928 ft. Size 6 7/8 in. Packer Depth - ft. Size - in.

Depth of Selective Zone Set -

Top Recorder Depth (Inside) 2979 ft. Recorder Number 13549 Cap. 4100

Bottom Recorder Depth (Outside) 2983 ft. Recorder Number 13553 Cap. 4025

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

Drilling Contractor ALLEN #4 Drill Collar Length 180 I. D. 2.25 in.

Mud Type CHM Viscosity 39 Weight Pipe Length - I. D. - in.

Weight 9.3 Water Loss 9.6 cc. Drill Pipe Length 278 228 I. D. 3.80 in.

Chlorides 7.000 P.P.M. Test Tool Length 20 ft. Tool Size 5 1/2 in.

Jars: Make - Serial Number - Anchor Length 57 ft. Size 5 1/2 in.

Did Well Flow? - Reversed Out - Surface Choke Size 3/4 in. Bottom Choke Size 3/4 in.

Main Hole Size 7/8 in. Tool Joint Size 4 1/2 in.

Blow: EF - STRONG BLOW - OFF BOTTOM OF BUCKET IN 1 MIN

FF - STRONG BLOW - GAS TO SURFACE - GAUGED

Recovered 280 ft. of SLIGHTLY OIL TO GAS CAT MUD 20% OEL 10% GAS

Recovered - ft. of 20% MUD

Recovered - ft. of

Recovered - ft. of

Recovered - ft. of

Chlorides P.P.M. Sample Jars used Remarks: WENT 5 MEN OVER ON INT. FLOW

SLIPS FROZEN UP - GAS TO SURFACE ON INT. SHUT IN 5 MIN

Time On Location 8:00 A.M. Time Pick Up Tool 2:00 A.M.

Time Set Packer(s) 3:30 A.M. Time Started Off Bottom 7:15 A.M.

Maximum Temperature 108°

Initial Hydrostatic Pressure (A) 1504 P.S.I.

Initial Flow Period (B) 30 Minutes (C) 175 P.S.I. to (D) 175 P.S.I.

Initial Closed In Period (E) 60 Minutes (F) 725 (633) P.S.I.

Final Flow Period (G) 45 Minutes (H) 145 P.S.I. to (I) 156 P.S.I.

Final Closed In Period (J) 90 Minutes (K) 735 (592) P.S.I.

Final Hydrostatic Pressure (L) 1422 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 Michael R. Bryan
Signature of Customer or his authorized representative

Western Representative Tom Schwager

FIELD INVOICE

Open Hole Test \$ 450
Misrun \$
Straddle Test \$
Jars \$
Selective Zone \$
Safety Joint \$
Standby \$
Evaluation \$
Extra Packer \$
Circ. Sub. \$
Mileage \$
Fluid Sampler \$
Extra Charts \$ 20
Insurance \$
Telecopier \$
TOTAL \$



GAS FLOW REPORT

No 4963

Date 12-14-87 Ticket 11906 Company JAY BOY OIL CO.
 Well Name and No. T. UNRUH #1 Dst No. 1 Interval Tested 2928-2985
 County HARVEY State KS Sec. 11 Twp. 23 Rg. 2W

Time Gauge in Min.	P.S.I. on Merla Orifice Well Tester	Size of Orifice	P.S.I. on Pitot Tester	P.S.I. on Side Static Tester	Description of Flow
PRE FLOW					

SECOND FLOW

10	3.5	1/4	—	—	17,100
20	4.0	1/4	—	—	18,500
30	4.0	1/4	—	—	18,500
40	4.0	1/4	—	—	18,500
45	4.0	1/4	—	—	18,500

GAS BOTTLE

Serial No. _____ Date Bottle Filled _____ Date to be Invoiced _____

Requisition and Provisions for high pressure stainless steel gas bottles. Western Testing Co., Inc. shall not be liable for damage of any kind to property or personnel of the one whom gas bottle is filled or for any loss suffered or sustained directly or indirectly through the use of these bottles. By signing of this ticket showing receipt of a gas testing bottle, the undersigned agrees for himself and as agent for operator, to return this bottle to Western Testing Co., Inc. within thirty (30) days free of charge, or be invoiced in the amount of \$75.00 (total charge). Should valve or seal plug be missing or damaged beyond repair, operator shall be invoiced for repairs at our invoiced price.

All charges subject to 1 1/2% per month, equal to 18% interest per annum after 30 days from date of invoice. Any expense incurred for collection will be added to the original amount.

COMPANY'S NAME JAY BOY OIL CO.Authorized by Steve Davis

Pressure Data

Date 12-14-87 Recorder No. 13549 Capacity 4100 Test Ticket No. 11906 Location _____ Ft. _____
 Clock No. _____ Elevation _____ Well Temperature _____ °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	<u>1496</u> P.S.I.	Open Tool	<u>3:30 A</u> M	
B First Initial Flow Pressure	<u>152</u> P.S.I.	First Flow Pressure	<u>30</u> Mins	<u>30</u> Mins
C First Final Flow Pressure	<u>152</u> P.S.I.	Initial Closed-in Pressure	<u>60</u> Mins	<u>69</u> Mins
D Initial Closed-in Pressure	<u>721</u> P.S.I.	Second Flow Pressure	<u>45</u> Mins	<u>45</u> Mins
E Second Initial Flow Pressure	<u>143</u> P.S.I.	Final Closed-in Pressure	<u>90</u> Mins	<u>96</u> Mins
F Second Final Flow Pressure	<u>151</u> P.S.I.			
G Final Closed-in Pressure	<u>747</u> P.S.I.			
H Final Hydrostatic Mud	<u>1455</u> 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 <u>5</u> mins. and a		of <u>3</u> mins. and a		of <u>5</u> mins. and a		of <u>3</u> mins. and a	
final inc. of <u>0</u> Min.		final inc. of <u>0</u> Min.		final inc. of <u>0</u> Min.		final inc. of <u>0</u> Min.	
Point Mins.	Press.	Point Minutes	Press.	Point Minutes	Press.	Point Minutes	Press.
P 1 0	<u>152</u>	0	<u>152</u>	0	<u>143</u>	0	<u>151</u>
P 2 5		3	<u>153</u>	5		3	<u>179</u>
P 3 10		6	<u>163</u>	10	<u>143</u>	6	<u>230</u>
P 4 15		9	<u>192</u>	15	<u>144</u>	9	<u>285</u>
P 5 20		12	<u>248</u>	20	<u>145</u>	12	<u>340</u>
P 6 25		15	<u>298</u>	25	<u>147</u>	15	<u>389</u>
P 7 30	<u>152</u>	18	<u>348</u>	30	<u>149</u>	18	<u>424</u>
P 8 35		21	<u>392</u>	35	<u>150</u>	21	<u>464</u>
P 9 40		24	<u>432</u>	40	<u>151</u>	24	<u>500</u>
P 10 45		27	<u>469</u>	45	<u>151</u>	27	<u>518</u>
P 11 50		30	<u>502</u>	50		30	<u>544</u>
P 12 55		33	<u>534</u>	55		33	<u>568</u>
P 13 60		36	<u>558</u>	60		36	<u>590</u>
P 14 65		39	<u>587</u>	65		39	<u>607</u>
P 15 70		42	<u>609</u>	70		42	<u>621</u>
P 16 75		45	<u>628</u>	75		45	<u>633</u>
P 17 80		48	<u>645</u>	80		48	<u>644</u>
P 18 85		51	<u>657</u>	85		51	<u>657</u>
P 19 90		54	<u>672</u>	90		54	<u>666</u>
P 20 95		57	<u>682</u>	95		57	<u>677</u>
100		60	<u>695</u>	100		60	<u>685</u>
		<u>63</u>	<u>705</u>				
		<u>64</u>	<u>714</u>				
		<u>65</u>					

WESTERN TESTING CO., INC.

Pressure Data

Date _____

Test Ticket No. 11904

Recorder No. _____ Capacity _____ Location _____ Ft.

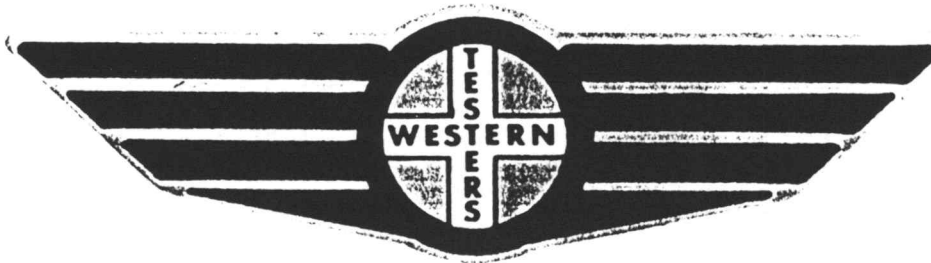
Clock No. _____ Elevation _____ Well Temperature _____ °F

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.		Breakdown: _____ Inc.		Breakdown: _____ Inc.		Breakdown: _____ Inc.	
of <u>5</u> mins. and a		of <u>3</u> mins. and a		of <u>5</u> mins. and a		of <u>3</u> mins. and a	
final inc. of <u>0</u> Min.		final inc. of <u>0</u> Min.		final inc. of <u>0</u> Min.		final inc. of <u>0</u> Min.	
Point Mins.	Press.	Point Minutes	Press.	Point Minutes	Press.	Point Minutes	Press.
P 1 <u>105</u>		<u>63</u>		<u>105</u>		<u>63</u>	<u>695</u>
P 2 <u>110</u>		<u>66</u>		<u>110</u>		<u>66</u>	<u>702</u>
P 3 <u>115</u>		<u>69</u>		<u>115</u>		<u>69</u>	<u>708</u>
P 4 <u>120</u>		<u>72</u>		<u>120</u>		<u>72</u>	<u>714</u>
P 5 <u>125</u>		<u>75</u>		<u>125</u>		<u>75</u>	<u>719</u>
P 6 <u>130</u>		<u>78</u>		<u>130</u>		<u>78</u>	<u>723</u>
P 7 <u>135</u>		<u>81</u>		<u>135</u>		<u>81</u>	<u>729</u>
P 8 <u>140</u>		<u>84</u>		<u>140</u>		<u>84</u>	<u>735</u>
P 9 <u>145</u>		<u>87</u>		<u>145</u>		<u>87</u>	<u>739</u>
P10 <u>150</u>		<u>90</u>		<u>150</u>		<u>90</u>	<u>742</u>
P11 <u>155</u>		<u>93</u>		<u>155</u>		<u>93</u>	<u>745</u>
P12 <u>160</u>		<u>96</u>		<u>160</u>		<u>96</u>	<u>747</u>
P13 <u>165</u>		<u>99</u>		<u>165</u>		<u>99</u>	
P14 <u>170</u>		<u>102</u>		<u>170</u>		<u>102</u>	
P15 <u>175</u>		<u>105</u>		<u>175</u>		<u>105</u>	
P16 <u>180</u>		<u>108</u>		<u>180</u>		<u>108</u>	
P17 <u>185</u>		<u>111</u>		<u>185</u>		<u>111</u>	
P18 <u>190</u>		<u>114</u>		<u>190</u>		<u>114</u>	
P19 <u>195</u>		<u>117</u>		<u>195</u>		<u>117</u>	
P20 <u>200</u>		<u>120</u>		<u>200</u>		<u>120</u>	

FORMATION TEST REPORT



Home Office:

Wichita, Kansas 67201

P.O. Box 1599

Phone (316) 262-5861

COMPANY JAY BOY OIL, INC.

LEASE & WELL NO.

T. UNRUH #1

SEC. 11

TWP. 23S

RGE.

2W

TEST NO.

1

DATE

12/14/87

WESTERN TESTING CO. INC.
SUBSURFACE PRESSURE SURVEY

DATE : 12-14-87 TICKET : 11906
CUSTOMER : JAY BOY OIL INC. LEASE : T. UNRUH
WELL : #1 TEST: 1 GEOLOGIST : M. BRYAN?
ELEVATION : 1440 GL FORMATION : MISSISSIPPI
SECTION : 11 TOWNSHIP : 23S
RANGE : 2W COUNTY : HARVEY STATE : KANSAS
GAUGE SN# : 13549 RANGE : 4100 CLOCK : 12

INTERVAL FROM : 2928 TO : 2985 TOTAL DEPTH : 2985
DEPTH OF SELECTIVE ZONE :
PACKER DEPTH : 2923 SIZE : 6.63
PACKER DEPTH : 2928 SIZE : 6.63
PACKER DEPTH : SIZE :
PACKER DEPTH : SIZE :

DRILLING CON. : ALLEN RIG #4
MUD TYPE : CHEMICAL VISCOSITY : 39
WEIGHT : 9.3 WATER LOSS (CC) : 9.6
CHLORIDES (PPM) : 7000
JARS-MAKE : - SERIAL NUMBER : -
DID WELL FLOW ? : - REVERSED OUT ? : -

DRILL COLLAR LENGTH : 180 FT I.D. inch : 2.25
WEIGHT PIPE LENGTH : 0 FT I.D. inch : 0.00
DRILL PIPE LENGTH : 2728 FT I.D. inch : 3.80
TEST TOOL LENGTH : 20 FT TOOL SIZE : 5.50
ANCHOR LENGTH : 57 FT ANCHOR SIZE : 5.50
SURFACE CHOKE SIZE : .75 IN BOTTOM CHOKE SIZE : .75
MAIN HOLE SIZE : 7.875 IN TOOL JOINT SIZE : 4.5 XH

BLOW COMMENT #1 : INITIAL FLOW-STRONG BLOW OFF BOTTOM OF BUCKET 1 MINUTE
BLOW COMMENT #2 : FINAL FLOW-STRONG BLOW-GAS TO SURFACE
BLOW COMMENT #3 : SEE ATTACHED FLOW CHART.
BLOW COMMENT #4 :

RECOVERED : 280 FT OF: SLIGHTLY OIL & GAS CUT MUD
20% OIL-10% GAS-70% MUD

Total Barrels Fluid = 2.29
Total Fluid Prod Rate = 43.93 BFPD
Indicated Oil Rate = 8.79 BOPD
Indicated Wtr Rate = 3.07 BWPD

REMARK 1 :
REMARK 2 :
REMARK 3 :
REMARK 4 :

SET PACKER(S) : 3:30 AM
WELL TEMPERATURE : 108

TIME STARTED OFF BOTTOM : 7:15 AM

INITIAL HYDROSTATIC PRESSURE

INITIAL FLOW PERIOD MIN: 30

INITIAL CLOSED IN PERIOD MIN: 69

FINAL FLOW PERIOD MIN: 45

FINAL CLOSED IN PERIOD MIN: 96

FINAL HYDROSTATIC PRESSURE

(A) 1496

(B) 152 PSI TO (C) : 152

(D) 721

(E) 143 PSI TO (F) : 151

(G) 747

(H) 1455

GAS FLOW REPORT

Date : 12-14-87
Customer : JAY BOY OIL INC.

Ticket # : 11906
Lease : T. UNRUH

Well : #1 Test : 1

Geologist : M. BRYAN?

Elevation (KB) : 1440 GL Formation : MISSISSIPPI

Section : 11 Township : 23S

Range : 2W County : HARVEY State : KANSAS

Gauge SN # : 13549 Range : 4100 Clock : 12

TIME GAUGE (MIN)	TESTER TYPE	ORFICE SIZE	PRESSURE (PSI)	FLOW DESCRIPTION
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PRE FLOW

SECOND FLOW

10	MERLA	1/4"	3.5	17100 CFPD
20			4	18500 CFPD
30			4	18500 CFPD
40			4	18500 CFPD
45			4	18500 CFPD

Gas Bottle SN # : 23
Date Bottle Filled : 12-14-87
Date to be Invoiced :

WESTERN TESTING CO. INC.
WICHITA - KANSAS

Pressure Transient Report

COMPANY : JAY BOY OIL INC.
RIG : HARVEY-KANSAS
FIELD : T. UNRUH
WELL : #1
DATE : 12-14-87
GAUGE NO : 13549

OPERATIONAL COMMENTS

COMPANY : JAY BOY OIL INC.
WELL : #1
GAUGE # : 13549
DATE : 14/12/87

FIELD : T. UNRUH
JOB # : 11906
DEPTH : 2985
TEST :

DATA No.	REAL TIME HR:MN:SS	ELAPSE TIME DELTA HOURS	PRESSURE PSIG	TEMP DEG F	DELTA P Pi-P(i-1)
1	3:30: 0	0.000	152.000	108.00	0.000
2	3:34:59	0.083	152.000	108.00	0.000
3	3:40: 0	0.167	152.000	108.00	0.000
4	3:45: 0	0.250	152.000	108.00	0.000
5	3:49:59	0.333	152.000	108.00	0.000
6	3:55: 0	0.417	152.000	108.00	0.000
7	4: 0: 0	0.500	152.000	108.00	0.000
8	4: 3: 0	0.550	153.000	108.00	1.000
9	4: 6: 0	0.600	163.000	108.00	10.000
10	4: 9: 0	0.650	192.000	108.00	29.000
11	4:12: 0	0.700	248.000	108.00	56.000
12	4:15: 0	0.750	298.000	108.00	50.000
13	4:18: 0	0.800	348.000	108.00	50.000
14	4:21: 0	0.850	392.000	108.00	44.000
15	4:24: 0	0.900	432.000	108.00	40.000
16	4:27: 0	0.950	469.000	108.00	37.000
17	4:30: 0	1.000	502.000	108.00	33.000
18	4:33: 0	1.050	534.000	108.00	32.000
19	4:36: 0	1.100	558.000	108.00	24.000
20	4:39: 0	1.150	587.000	108.00	29.000
21	4:42: 0	1.200	609.000	108.00	22.000
22	4:45: 0	1.250	628.000	108.00	19.000
23	4:48: 0	1.300	645.000	108.00	17.000
24	4:51: 0	1.350	657.000	108.00	12.000
25	4:54: 0	1.400	672.000	108.00	15.000
26	4:57: 0	1.450	683.000	108.00	11.000
27	5: 0: 0	1.500	695.000	108.00	12.000
28	5: 3: 0	1.550	705.000	108.00	10.000
29	5: 6: 0	1.600	714.000	108.00	9.000
30	5: 9: 0	1.650	721.000	108.00	7.000
31	5:10: 0	1.667	143.000	108.00	-578.000
32	5:13:59	1.733	143.000	108.00	0.000
33	5:19: 0	1.817	143.000	108.00	0.000
34	5:24: 0	1.900	144.000	108.00	1.000
35	5:28:59	1.983	145.000	108.00	1.000
36	5:34: 0	2.067	147.000	108.00	2.000
37	5:39: 0	2.150	149.000	108.00	2.000
38	5:43:59	2.233	150.000	108.00	1.000
39	5:49: 0	2.317	151.000	108.00	1.000
40	5:54: 0	2.400	151.000	108.00	0.000
41	5:57: 0	2.450	179.000	108.00	28.000
42	6: 0: 0	2.500	230.000	108.00	51.000
43	6: 3: 0	2.550	285.000	108.00	55.000
44	6: 6: 0	2.600	340.000	108.00	55.000
45	6: 9: 0	2.650	389.000	108.00	49.000
46	6:12: 0	2.700	426.000	108.00	37.000
47	6:15: 0	2.750	464.000	108.00	38.000
48	6:18: 0	2.800	500.000	108.00	36.000
49	6:21: 0	2.850	518.000	108.00	18.000
50	6:24: 0	2.900	544.000	108.00	26.000
51	6:27: 0	2.950	568.000	108.00	24.000
52	6:30: 0	3.000	590.000	108.00	22.000

COMPANY : JAY BOY OIL INC.

WELL : #1

GAUGE # : 13549

DATE : 14/12/87

FIELD : T. UNRUH

JOB # : 11906

DEPTH : 2985

TEST :

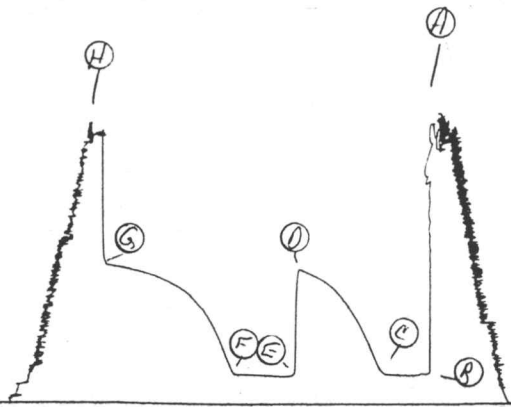
DATA No.	REAL TIME HR:MN:SS	ELAPSE TIME DELTA HOURS	PRESSURE PSIG	TEMP DEG F	DELTA P Pi-P(i-1)
53	6:33: 0	3.050	607.000	108.00	17.000
54	6:36: 0	3.100	621.000	108.00	14.000
55	6:39: 0	3.150	633.000	108.00	12.000
56	6:42: 0	3.200	644.000	108.00	11.000
57	6:45: 0	3.250	657.000	108.00	13.000
58	6:48: 0	3.300	666.000	108.00	9.000
59	6:51: 0	3.350	677.000	108.00	11.000
60	6:54: 0	3.400	685.000	108.00	8.000
61	6:57: 0	3.450	695.000	108.00	10.000
62	7: 0: 0	3.500	702.000	108.00	7.000
63	7: 3: 0	3.550	708.000	108.00	6.000
64	7: 6: 0	3.600	714.000	108.00	6.000
65	7: 9: 0	3.650	719.000	108.00	5.000
66	7:12: 0	3.700	723.000	108.00	4.000
67	7:15: 0	3.750	729.000	108.00	6.000
68	7:18: 0	3.800	735.000	108.00	6.000
69	7:21: 0	3.850	739.000	108.00	4.000
70	7:24: 0	3.900	742.000	108.00	3.000
71	7:27: 0	3.950	745.000	108.00	3.000
72	7:30: 0	4.000	747.000	108.00	2.000

WESTERN TESTING CO. INC.

TKT 11906

9

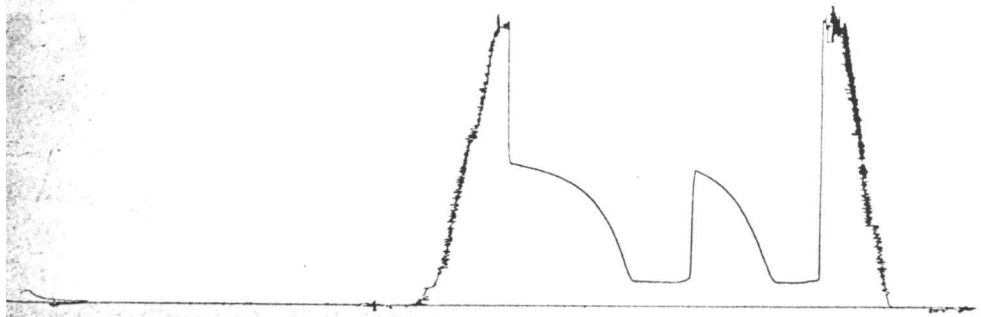
I



TKT 11906

9

O





WESTERN TESTING CO., INC. FORMATION TESTING

TICKET N^o 11907

P. O. BOX 1599 PHONE (316) 262-5861

Elevation 1440 G.L. Formation MESS Eff. Pay — Ft.

WICHITA, KANSAS 67201

District G.T. BEND Date 12-15-87 Customer Order No. —

COMPANY NAME JAY BOY OIL CO.

ADDRESS 100 N. BROADWAY, SUITE 535, WICHITA, KS. 67202

LEASE AND WELL NO. T. UNRUH #1 COUNTY HARVEY STATE KS Sec. 11 Twp. 23 Rge. 2W

Mail Invoice To Co. Name T. Unruh #1 Address — No. Copies Requested 59

Mail Charts To — Address — No. Copies Requested 5

Formation Test No. 2 Interval Tested From 2985 ft. to 3000 ft. Total Depth 3000 ft.

Packer Depth 2980 ft. Size 6 5/8 in. Packer Depth — ft. Size — in.

Packer Depth 2985 ft. Size 6 5/8 in. Packer Depth — ft. Size — in.

Depth of Selective Zone Set —

Top Recorder Depth (Inside) 2994 ft. Recorder Number 13549 Cap. 4100

Bottom Recorder Depth (Outside) 2998 ft. Recorder Number 13553 Cap. 4025

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

Drilling Contractor ALLEN #4 Drill Collar Length 180 I. D. 2.25 in.

Mud Type CHUM Viscosity 43 Weight Pipe Length — I. D. — in.

Weight 9.7 Water Loss 8.0 cc. Drill Pipe Length 2785 I. D. 3.80 in.

Chlorides 2,000 P.P.M. Test Tool Length 20 ft. Tool Size 5 1/2 in.

Jars: Make — Serial Number — Anchor Length 15 ft. Size 5 1/2 in.

Did Well Flow? YES - OIL Reversed Out YES Surface Choke Size 3/4 in. Bottom Choke Size 3/4 in.

Main Hole Size 7 7/8 in. Tool Joint Size 4 1/2 X 1 1/4 in.

Blow IF - STRONG BLOW - OFF BOTTOM OF BUCKET IMMEDIATELY

FF - STRONG BLOW

Recovered — ft. of FLOWED OIL GRAVITY 36

Recovered 120 ft. of WATERY MUD 50% WATER 50% MUD

Recovered — ft. of —

Recovered — ft. of —

Recovered — ft. of —

Chlorides 17,000 P.P.M. Sample Jars used — Remarks: GAS TO SURFACE IN 15 MIN

OIL TO SURFACE IN 25 MIN GRAVITY 36

Time On Location — A.M. Time Pick Up Tool 4:00 A.M. Time Off Location — A.M.

Time Set Packer(s) 5:10 A.M. Time Started Off Bottom 9:10 A.M. Maximum Temperature 111°

Initial Hydrostatic Pressure — (A) 1463 P.S.I.

Initial Flow Period 30 Minutes (B) 354 P.S.I. to (C) 653 P.S.I.

Initial Closed In Period 150 Minutes (D) 848 P.S.I.

Final Flow Period 30 Minutes (E) 540 P.S.I. to (F) 766 P.S.I.

Final Closed In Period 30 Minutes (G) 848 P.S.I.

Final Hydrostatic Pressure — (H) 1411 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 Steve Davis
Signature of Customer or his authorized representative

Western Representative Ron Schumacher

FIELD INVOICE

Open Hole Test \$ 450
Misrun \$ —
Straddle Test \$ —
Jars \$ —
Selective Zone \$ —
Safety Joint \$ —
Standby \$ —
Evaluation \$ —
Extra Packer \$ —
Circ. Sub. \$ 25
4 Mileage \$ —
Fluid Sampler \$ —
Extra Charts \$ 20
Insurance \$ —
Telecopier \$ —
TOTAL \$ —

Pressure Data

Date 12-15-87 Recorder No. 13549 Capacity 4100 Location 11907 Test Ticket No. 11907
 Clock No. 111 Elevation 111 Well Temperature 111 °F

Point	Pressure	Time Given	Time Computed
A Initial Hydrostatic Mud	<u>1512</u> P.S.I.	<u>5:10</u> P	<u>M</u>
B First Initial Flow Pressure	<u>352</u> P.S.I.	<u>30</u> Mins.	<u>30</u> Mins.
C First Final Flow Pressure	<u>1664</u> P.S.I.	<u>150</u> Mins.	<u>174</u> Mins.
D Initial Closed-in Pressure	<u>861</u> P.S.I.	<u>30</u> Mins.	<u>30</u> Mins.
E Second Initial Flow Pressure	<u>547</u> P.S.I.	<u>20</u> Mins.	<u>24</u> Mins.
F Second Final Flow Pressure	<u>770</u> P.S.I.		
G Final Closed-in Pressure	<u>859</u> P.S.I.		
H Final Hydrostatic Mud	<u>1459</u> 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 <u>5</u> mins. and a		of <u>3</u> mins. and a		of <u>5</u> mins. and a		of <u>3</u> mins. and a	
final inc. of <u>0</u> Min.		final inc. of <u>0</u> Min.		final inc. of <u>0</u> Min.		final inc. of <u>0</u> Min.	
Point Mins.	Press.	Point Minutes	Press.	Point Minutes	Press.	Point Minutes	Press.
P 1 0	<u>352</u>	0	<u>1664</u>	0	<u>547</u>	0	<u>770</u>
P 2 5	<u>379</u>	3	<u>820</u>	5	<u>559</u>	3	<u>833</u>
P 3 10	<u>444</u>	6	<u>842</u>	10	<u>610</u>	6	<u>846</u>
P 4 15	<u>513</u>	9	<u>850</u>	15	<u>663</u>	9	<u>851</u>
P 5 20	<u>552</u>	12	<u>855</u>	20	<u>718</u>	12	<u>856</u>
P 6 25	<u>610</u>	15	<u>856</u>	25	<u>761</u>	15	<u>858</u>
P 7 30	<u>664</u>	18	<u>857</u>	30	<u>770</u>	18	<u>859</u>
P 8 35		21	<u>858</u>	35		21	<u>859</u>
P 9 40		24	<u>859</u>	40		24	<u>859</u>
P10 45		27		45		27	
P11 50		30	<u>859</u>	50		30	
P12 55		33		55		33	
P13 60		36		60		36	
P14 65		39		65		39	
P15 70		42		70		42	
P16 75		45	<u>860</u>	75		45	
P17 80		48		80		48	
P18 85		51		85		51	
P19 90		54		90		54	
P20 95		57		95		57	
100		60	<u>860</u>	100		60	

WESTERN TESTING CO., INC.

Pressure Data

Date _____

Test Ticket No. 11907

Recorder No. _____ Capacity _____ Location _____ Ft.

Clock No. _____ Elevation _____ Well Temperature _____ °F

Point	Pressure	Open Tool	Time Given	Time Computed
A Initial Hydrostatic Mud _____	P.S.I.	_____	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.		Breakdown: _____ Inc.		Breakdown: _____ Inc.		Breakdown: _____ Inc.	
of <u>5</u> mins. and a		of <u>3</u> mins. and a		of <u>5</u> mins. and a		of <u>3</u> mins. and a	
final inc. of <u>0</u> Min.		final inc. of <u>0</u> Min.		final inc. of <u>0</u> Min.		final inc. of <u>0</u> Min.	
Point Mins.	Press.	Point Minutes	Press.	Point Minutes	Press.	Point Minutes	Press.
P 1 <u>105</u>	_____	<u>63</u>	<u>860</u>	<u>105</u>	_____	<u>63</u>	_____
P 2 <u>110</u>	_____	<u>66</u>	_____	<u>110</u>	_____	<u>66</u>	_____
P 3 <u>115</u>	_____	<u>69</u>	_____	<u>115</u>	_____	<u>69</u>	_____
P 4 <u>120</u>	_____	<u>72</u>	_____	<u>120</u>	_____	<u>72</u>	_____
P 5 <u>125</u>	_____	<u>75</u>	<u>860</u>	<u>125</u>	_____	<u>75</u>	_____
P 6 <u>130</u>	_____	<u>78</u>	<u>861</u>	<u>130</u>	_____	<u>78</u>	_____
P 7 <u>135</u>	_____	<u>81</u>	_____	<u>135</u>	_____	<u>81</u>	_____
P 8 <u>140</u>	_____	<u>84</u>	_____	<u>140</u>	_____	<u>84</u>	_____
P 9 <u>145</u>	_____	<u>87</u>	_____	<u>145</u>	_____	<u>87</u>	_____
P10 <u>150</u>	_____	<u>90</u>	<u>861</u>	<u>150</u>	_____	<u>90</u>	_____
P11 <u>155</u>	_____	<u>93</u>	_____	<u>155</u>	_____	<u>93</u>	_____
P12 <u>160</u>	_____	<u>96</u>	_____	<u>160</u>	_____	<u>96</u>	_____
P13 <u>165</u>	_____	<u>99</u>	_____	<u>165</u>	_____	<u>99</u>	_____
P14 <u>170</u>	_____	<u>102</u>	_____	<u>170</u>	_____	<u>102</u>	_____
P15 <u>175</u>	_____	<u>105</u>	<u>861</u>	<u>175</u>	_____	<u>105</u>	_____
P16 <u>180</u>	_____	<u>108</u>	_____	<u>180</u>	_____	<u>108</u>	_____
P17 <u>185</u>	_____	<u>111</u>	_____	<u>185</u>	_____	<u>111</u>	_____
P18 <u>190</u>	_____	<u>114</u>	_____	<u>190</u>	_____	<u>114</u>	_____
P19 <u>195</u>	_____	<u>117</u>	_____	<u>195</u>	_____	<u>117</u>	_____
P20 <u>200</u>	_____	<u>120</u>	<u>861</u>	<u>200</u>	_____	<u>120</u>	_____

WESTERN TESTING CO., INC.

Pressure Data

Date _____

Test Ticket No. 11907

Recorder No. _____ Capacity _____ Location _____ Ft. _____

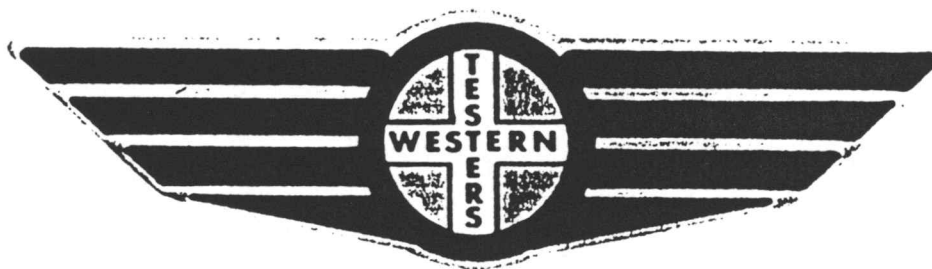
Clock No. _____ Elevation _____ Well Temperature _____ °F

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.		Breakdown: _____ Inc.		Breakdown: _____ Inc.		Breakdown: _____ Inc.	
of <u>5</u> mins. and a		of <u>3</u> mins. and a		of <u>5</u> mins. and a		of <u>3</u> mins. and a	
final inc. of <u>0</u> Min.		final inc. of <u>0</u> Min.		final inc. of <u>0</u> Min.		final inc. of <u>0</u> Min.	
Point Mins.	Press.	Point Minutes	Press.	Point Minutes	Press.	Point Minutes	Press.
P 1 <u>205</u>	_____	<u>123</u>	<u>861</u>	<u>205</u>	_____	<u>123</u>	_____
P 2 <u>210</u>	_____	<u>126</u>	_____	<u>210</u>	_____	<u>126</u>	_____
P 3 <u>215</u>	_____	<u>129</u>	_____	<u>215</u>	_____	<u>129</u>	_____
P 4 <u>220</u>	_____	<u>132</u>	_____	<u>220</u>	_____	<u>132</u>	_____
P 5 <u>225</u>	_____	<u>135</u>	_____	<u>225</u>	_____	<u>135</u>	_____
P 6 <u>230</u>	_____	<u>138</u>	_____	<u>230</u>	_____	<u>138</u>	_____
P 7 <u>235</u>	_____	<u>141</u>	_____	<u>235</u>	_____	<u>141</u>	_____
P 8 <u>240</u>	_____	<u>144</u>	_____	<u>240</u>	_____	<u>144</u>	_____
P 9 <u>245</u>	_____	<u>147</u>	_____	<u>245</u>	_____	<u>147</u>	_____
P10 <u>250</u>	_____	<u>150</u>	<u>861</u>	<u>250</u>	_____	<u>150</u>	_____
P11 <u>255</u>	_____	<u>153</u>	_____	<u>255</u>	_____	<u>153</u>	_____
P12 <u>260</u>	_____	<u>156</u>	_____	<u>260</u>	_____	<u>156</u>	_____
P13 <u>265</u>	_____	<u>159</u>	_____	<u>265</u>	_____	<u>159</u>	_____
P14 <u>270</u>	_____	<u>162</u>	_____	<u>270</u>	_____	<u>162</u>	_____
P15 <u>275</u>	_____	<u>165</u>	_____	<u>275</u>	_____	<u>165</u>	_____
P16 <u>280</u>	_____	<u>168</u>	_____	<u>280</u>	_____	<u>168</u>	_____
P17 <u>285</u>	_____	<u>171</u>	_____	<u>285</u>	_____	<u>171</u>	_____
P18 <u>290</u>	_____	<u>174</u>	<u>861</u>	<u>290</u>	_____	<u>174</u>	_____
P19 <u>295</u>	_____	<u>177</u>	_____	<u>295</u>	_____	<u>177</u>	_____
P20 <u>300</u>	_____	<u>180</u>	_____	<u>300</u>	_____	<u>180</u>	_____

FORMATION TEST REPORT



Home Office:

Wichita, Kansas 67201

P.O. Box 1599

Phone (316) 262-5861

COMPANY JAY BOY OIL, INC. LEASE & WELL NO. T. UNRUH #1 SEC. 11 TWP. 23S RGE. 2W TEST NO. 2 DATE 12/15/87

WESTERN TESTING CO. INC.
SUBSURFACE PRESSURE SURVEY

DATE	: 12-15-87	TICKET	: 11907
CUSTOMER	: JAY BOY OIL INC.	LEASE	: T. UNRUH
WELL	: #1 TEST: 2	GEOLOGIST	: S. DAVIS
ELEVATION	: 1440 GL	FORMATION	: MISSISSIPPI
SECTION	: 11	TOWNSHIP	: 23S
RANGE	: 2W	STATE	: KANSAS
GAUGE SN#	: 13549	CLOCK	: 12
	COUNTY : HARVEY		
	RANGE : 4100		

INTERVAL FROM	: 2985	TO	: 3000	TOTAL DEPTH	: 3000
DEPTH OF SELECTIVE ZONE	:				
PACKER DEPTH	: 2980	SIZE	: 6.63		
PACKER DEPTH	: 2985	SIZE	: 6.63		
PACKER DEPTH	:	SIZE	:		
PACKER DEPTH	:	SIZE	:		

DRILLING CON.	: ALLEN RIG #4		
MUD TYPE	: CHEMICAL	VISCOSITY	: 43
WEIGHT	: 9.4	WATER LOSS (CC)	: 8.0
CHLORIDES (PPM)	: 2000		
JARS-MAKE	: -	SERIAL NUMBER	: -
DID WELL FLOW ?	: YES-OIL]	REVERSED OUT ?	: YES

DRILL COLLAR LENGTH	: 180	FT	I.D. inch	: 2.25
WEIGHT PIPE LENGTH	: 0	FT	I.D. inch	: 0.00
DRILL PIPE LENGTH	: 2785	FT	I.D. inch	: 3.80
TEST TOOL LENGTH	: 20	FT	TOOL SIZE	: 5.50
ANCHOR LENGTH	: 15	FT	ANCHOR SIZE	: 5.50
SURFACE CHOKE SIZE	: .75	IN	BOTTOM CHOKE SIZE	: .75
MAIN HOLE SIZE	: 7.875	IN	TOOL JOINT SIZE	: 4.5 XH

BLOW COMMENT #1 : INITIAL FLOW-STRONG BLOW-OFF BOTTOM OF BUCKET
IMMEDIATELY.

BLOW COMMENT #2 : FINAL FLOW-STRONG BLOW.

BLOW COMMENT #3 :

BLOW COMMENT #4 :

RECOVERED : 0 FT OF: FLOWED OIL GRAVITY 36
RECOVERED : 120 FT OF: WATERY MUD
50% WATER-50% MUD
CHLORIDES: 17000 PPM

Total Barrels Fluid = 0.59
Total Fluid Prod Rate = 14.16 BFPD
Indicated Wtr Rate = 7.79 BWPD

REMARK 1 :
REMARK 2 : GAS TO SURFACE IN 15 MINUTES-NO GAUGE.
REMARK 3 : OIL TO SURFACE IN 25 MINUTES; GRAVITY 36
REMARK 4 :

SET PACKER(S) : 5:10 PM TIME STARTED OFF BOTTOM : 9:10 PM
WELL TEMPERATURE : 111
INITIAL HYDROSTATIC PRESSURE (A) 1512
INITIAL FLOW PERIOD MIN: 30 (B) 352 PSI TO (C) : 664
INITIAL CLOSED IN PERIOD MIN: 174 (D) 861
FINAL FLOW PERIOD MIN: 30 (E) 547 PSI TO (F) : 770
FINAL CLOSED IN PERIOD MIN: 24 (G) 859
FINAL HYDROSTATIC PRESSURE (H) 1459

WESTERN TESTING CO. INC.
WICHITA - KANSAS

Pressure Transient Report

COMPANY : JAY BOY OIL INC.
RIG : HARVEY-KANSAS
FIELD : T. UNRUH
WELL : #1
DATE : 12-15-87
GAUGE NO : 13549

OPERATIONAL COMMENTS

GAS TO SURFACE IN 15 MINUTES-NO GAUGE.
OIL TO SURFACE IN 25 MINUTES; GRAVITY 36

COMPANY : JAY BOY OIL INC.
WELL : #1
GAUGE # : 13549
DATE : 15/12/87

FIELD : T. UNRUH
JOB # : 11907
DEPTH : 3000
TEST :

DATA No.	REAL TIME HR:MN:SS	ELAPSE TIME DELTA HOURS	PRESSURE PSIG	TEMP DEG F	DELTA P Pi-P(i-1)
1	5:10: 0	0.000	352.000	111.00	0.000
2	5:14:59	0.083	379.000	111.00	27.000
3	5:20: 0	0.167	444.000	111.00	65.000
4	5:25: 0	0.250	513.000	111.00	69.000
5	5:29:59	0.333	552.000	111.00	39.000
6	5:35: 0	0.417	610.000	111.00	58.000
7	5:40: 0	0.500	664.000	111.00	54.000
8	5:43: 0	0.550	820.000	111.00	156.000
9	5:46: 0	0.600	842.000	111.00	22.000
10	5:49: 0	0.650	850.000	111.00	8.000
11	5:52: 0	0.700	855.000	111.00	5.000
12	5:55: 0	0.750	856.000	111.00	1.000
13	5:58: 0	0.800	857.000	111.00	1.000
14	6: 1: 0	0.850	858.000	111.00	1.000
15	6: 4: 0	0.900	859.000	111.00	1.000
16	6: 7: 0	0.950	859.000	111.00	0.000
17	6:10: 0	1.000	859.000	111.00	0.000
18	6:13: 0	1.050	859.000	111.00	0.000
19	6:16: 0	1.100	859.000	111.00	0.000
20	6:19: 0	1.150	859.000	111.00	0.000
21	6:22: 0	1.200	859.000	111.00	0.000
22	6:25: 0	1.250	860.000	111.00	1.000
23	6:28: 0	1.300	860.000	111.00	0.000
24	6:31: 0	1.350	860.000	111.00	0.000
25	6:34: 0	1.400	860.000	111.00	0.000
26	6:37: 0	1.450	860.000	111.00	0.000
27	6:40: 0	1.500	860.000	111.00	0.000
28	6:43: 0	1.550	860.000	111.00	0.000
29	6:46: 0	1.600	860.000	111.00	0.000
30	6:49: 0	1.650	860.000	111.00	0.000
31	6:52: 0	1.700	860.000	111.00	0.000
32	6:55: 0	1.750	860.000	111.00	0.000
33	6:58: 0	1.800	860.000	111.00	0.000
34	7: 1: 0	1.850	861.000	111.00	1.000
35	7: 4: 0	1.900	861.000	111.00	0.000
36	7: 7: 0	1.950	861.000	111.00	0.000
37	7:10: 0	2.000	861.000	111.00	0.000
38	7:13: 0	2.050	861.000	111.00	0.000
39	7:16: 0	2.100	861.000	111.00	0.000
40	7:19: 0	2.150	861.000	111.00	0.000
41	7:22: 0	2.200	861.000	111.00	0.000
42	7:25: 0	2.250	861.000	111.00	0.000
43	7:28: 0	2.300	861.000	111.00	0.000
44	7:31: 0	2.350	861.000	111.00	0.000
45	7:34: 0	2.400	861.000	111.00	0.000
46	7:37: 0	2.450	861.000	111.00	0.000
47	7:40: 0	2.500	861.000	111.00	0.000
48	7:43: 0	2.550	861.000	111.00	0.000
49	7:46: 0	2.600	861.000	111.00	0.000
50	7:49: 0	2.650	861.000	111.00	0.000
51	7:52: 0	2.700	861.000	111.00	0.000
52	7:55: 0	2.750	861.000	111.00	0.000

COMPANY : JAY BOY OIL INC.
WELL : #1
GAUGE # : 13549
DATE : 15/12/87

FIELD : T. UNRUH
JOB # : 11907
DEPTH : 3000
TEST :

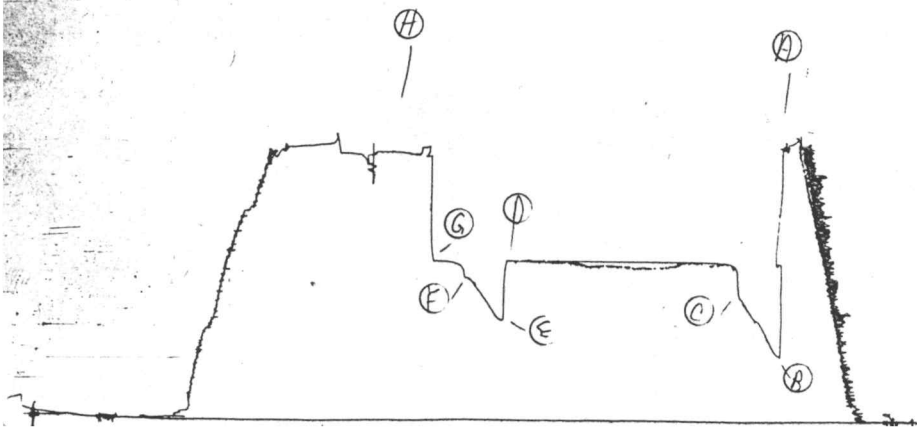
DATA No.	REAL TIME HR:MN:SS	ELAPSE TIME DELTA HOURS	PRESSURE PSIG	TEMP DEG F	DELTA P Pi-P(i-1)
53	7:58: 0	2.800	861.000	111.00	0.000
54	8: 1: 0	2.850	861.000	111.00	0.000
55	8: 4: 0	2.900	861.000	111.00	0.000
56	8: 7: 0	2.950	861.000	111.00	0.000
57	8:10: 0	3.000	861.000	111.00	0.000
58	8:13: 0	3.050	861.000	111.00	0.000
59	8:16: 0	3.100	861.000	111.00	0.000
60	8:19: 0	3.150	861.000	111.00	0.000
61	8:22: 0	3.200	861.000	111.00	0.000
62	8:25: 0	3.250	861.000	111.00	0.000
63	8:28: 0	3.300	861.000	111.00	0.000
64	8:31: 0	3.350	861.000	111.00	0.000
65	8:34: 0	3.400	861.000	111.00	0.000
66	8:35: 0	3.417	547.000	111.00	-314.000
67	8:38:59	3.483	559.000	111.00	12.000
68	8:44: 0	3.567	610.000	111.00	51.000
69	8:49: 0	3.650	663.000	111.00	53.000
70	8:53:59	3.733	718.000	111.00	55.000
71	8:59: 0	3.817	761.000	111.00	43.000
72	9: 4: 0	3.900	770.000	111.00	9.000
73	9: 7: 0	3.950	833.000	111.00	63.000
74	9:10: 0	4.000	846.000	111.00	13.000
75	9:13: 0	4.050	851.000	111.00	5.000
76	9:16: 0	4.100	856.000	111.00	5.000
77	9:19: 0	4.150	858.000	111.00	2.000
78	9:22: 0	4.200	859.000	111.00	1.000
79	9:25: 0	4.250	859.000	111.00	0.000
80	9:28: 0	4.300	859.000	111.00	0.000

WESTERN TESTING CO. INC.

KA 11901

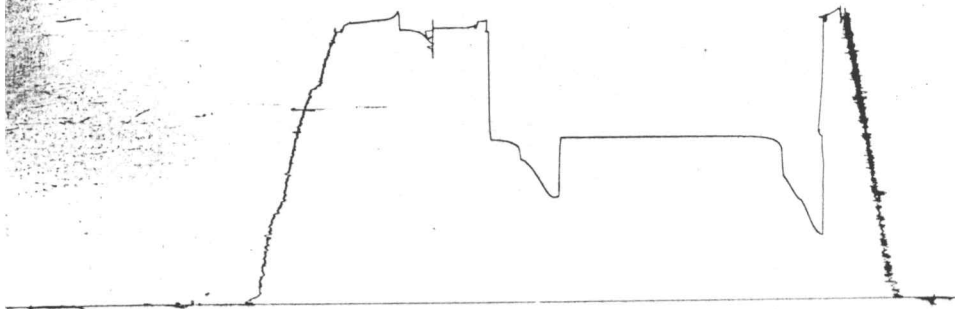
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TK 11907
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1001



WESTERN TESTING CO., INC.
FORMATION TESTING

TICKET N^o 11908

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

Elevation 1440 G.L. Formation HUNTON Eff. Pay - Ft.

District G.T. BEND Date 12-16-87 Customer Order No. -

COMPANY NAME JAY BOY OIL INC.

ADDRESS 100 N. BROADWAY, SUITE 535, WICHITA, KS. 67202

LEASE AND WELL NO. T. UNRUH #1 COUNTY HARVEY STATE MS. Sec. 11 Twp. 23 Rge. 2

Mail Invoice To T. Unruh #1 Address SAME No. Copies Requested 5

Mail Charts To T. Unruh #1 Address SAME No. Copies Requested 5

Formation Test No. 3 Interval Tested From 3206 ft. to 3270 ft. Total Depth 3270 ft.

Packer Depth 3201 ft. Size 6 5/8 in. Packer Depth - ft. Size - in.

Packer Depth 3206 ft. Size 6 5/8 in. Packer Depth - ft. Size - in.

Depth of Selective Zone Set -

Top Recorder Depth (Inside) 3224 ft. Recorder Number 13549 Cap. 4100

Bottom Recorder Depth (Outside) 3228 ft. Recorder Number 13533 Cap. 4025

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

Drilling Contractor ALLEN #4 Drill Collar Length 180 I. D. 2.25 in.

Mud Type CHCN Viscosity 56 Weight Pipe Length - I. D. - in.

Weight 8.8 Water Loss 9.6 cc. Drill Pipe Length 3006 I. D. 3.80 in.

Chlorides 1900 P.P.M. Test Tool Length 20 ft. Tool Size 5 1/2 in.

Jars: Make - Serial Number - Anchor Length 24 ft. Size 5 1/2 in.

Did Well Flow? - Reversed Out - Surface Choke Size 3/4 in. Bottom Choke Size 3/4 in.

Main Hole Size 7 7/8 in. Tool Joint Size 4 1/2 X 4 in.

Blow FF-WEAK BLOW-BUILDING IN 3 INCHES

FF-WEAK BLOW-BUILDING IN 6 INCHES

Recovered 30 ft. of SLIGHTLY OIL CUT MUD 5% OIL 95% MUD

Recovered 180 ft. of MUD CUT WATER 10% MUD 90% WATER

Recovered - ft. of -

Recovered - ft. of -

Recovered - ft. of -

Chlorides 10,000 P.P.M. Sample Jars used 2 Remarks: 1.50 oil
165W

Time On Location 10:00 A.M. Time Pick Up Tool 11:15 A.M. Time Off Location - A.M.

Time Set Packer(s) 1:00 A.M. Time Started Off Bottom 4:30 A.M. Maximum Temperature 112°

Initial Hydrostatic Pressure - (A) 1576 P.S.I.

Initial Flow Period 30 Minutes (B) 62 P.S.I. to (C) 83 P.S.I.

Initial Closed In Period 60 Minutes (D) 1165-1176 P.S.I.

Final Flow Period 60 Minutes (E) 104 P.S.I. to (F) 125 P.S.I.

Final Closed In Period 60 Minutes (G) 1145-1155 P.S.I.

Final Hydrostatic Pressure - (H) 1514 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 Stan Davis
Signature of Customer or his authorized representative

Western Representative For Shungan Thank You
1926

FIELD INVOICE

Open Hole Test \$ 4.50
Misrun \$ -
Straddle Test \$ -
Jars \$ -
Selective Zone \$ -
Safety Joint \$ -
Standby \$ -
Evaluation \$ -
Extra Packer \$ -
Circ. Sub. \$ -
Mileage \$ -
Fluid Sampler \$ -
Extra Charts \$ 20
Insurance \$ -
Telecopier \$ -
TOTAL \$ -

Pressure Data

Date 12-16-87 Recorder No. 13549 Capacity 4100 Location Ft.
 Clock No. Elevation Well Temperature 112 °F

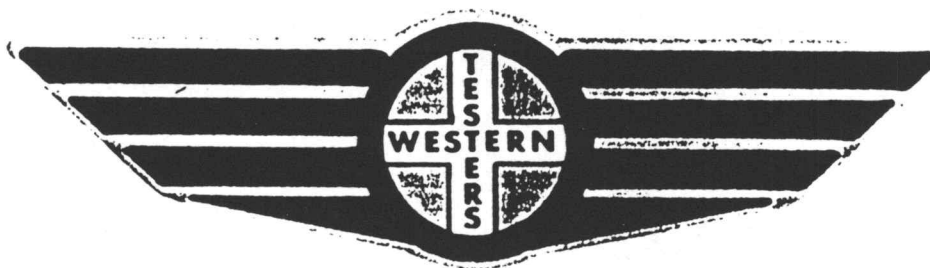
Test Ticket No. 11908

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	<u>1622</u>	P.S.I.	<u>1:00 A</u>	<u>M</u>
B First Initial Flow Pressure	<u>59</u>	P.S.I.	<u>30</u>	<u>30</u> Mins.
C First Final Flow Pressure	<u>70</u>	P.S.I.	<u>100</u>	<u>66</u> Mins.
D Initial Closed-in Pressure	<u>1175</u>	P.S.I.	<u>100</u>	<u>100</u> Mins.
E Second Initial Flow Pressure	<u>97</u>	P.S.I.	<u>60</u>	<u>66</u> Mins.
F Second Final Flow Pressure	<u>130</u>	P.S.I.		
G Final Closed-in Pressure	<u>1158</u>	P.S.I.		
H Final Hydrostatic Mud	<u>1584</u>	P.S.I.		

PRESSURE BREAKDOWN

First Flow Pressure		Initial Shut-In		Second Flow Pressure		Final Shut-In	
Breakdown: <u> </u> Inc.		Breakdown: <u> </u> Inc.		Breakdown: <u> </u> Inc.		Breakdown: <u> </u> Inc.	
of <u>5</u> mins. and a		of <u>3</u> mins. and a		of <u>5</u> mins. and a		of <u>3</u> mins. and a	
final inc. of <u>0</u> Min.		final inc. of <u>0</u> Min.		final inc. of <u>0</u> Min.		final inc. of <u>0</u> Min.	
Point Mins.	Press.	Point Minutes	Press.	Point Minutes	Press.	Point Minutes	Press.
P 1 0	<u>59</u>	0	<u>70</u>	0	<u>97</u>	0	<u>130</u>
P 2 5	<u>59</u>	3	<u>349</u>	5	<u>5</u>	3	<u>401</u>
P 3 10	<u>59</u>	6	<u>951</u>	10	<u>97</u>	6	<u>979</u>
P 4 15	<u>59</u>	9	<u>1106</u>	15	<u>99</u>	9	<u>1067</u>
P 5 20	<u>64</u>	12	<u>1127</u>	20	<u>103</u>	12	<u>1096</u>
P 6 25	<u>68</u>	15	<u>1151</u>	25	<u>109</u>	15	<u>1114</u>
P 7 30	<u>70</u>	18	<u>1158</u>	30	<u>115</u>	18	<u>1122</u>
P 8 35		21	<u>1164</u>	35	<u>119</u>	21	<u>1132</u>
P 9 40		24	<u>1168</u>	40	<u>122</u>	24	<u>1136</u>
P10 45		27	<u>1170</u>	45	<u>125</u>	27	<u>1140</u>
P11 50		30	<u>1171</u>	50	<u>128</u>	30	<u>1142</u>
P12 55		33	<u>1172</u>	55 <u>129</u>	<u>130</u>	33	<u>1145</u>
P13 60		36	<u>1173</u>	60	<u>130</u>	36	<u>1149</u>
P14 65		39	<u>1174</u>	65		39	<u>1151</u>
P15 70		42	<u>5</u>	70		42	<u>1152</u>
P16 75		45	<u>1174</u>	75		45	<u>1154</u>
P17 80		48	<u>1174</u>	80		48	<u>1155</u>
P18 85		51	<u>1175</u>	85		51	<u>1156</u>
P19 90		54	<u>5</u>	90		54	<u>1157</u>
P20 95		57	<u>5</u>	95		57	<u>5</u>
100		60	<u>1175</u>	100		60	<u>1157</u>
		<u>63</u>	<u>5</u>			<u>63</u>	<u>1158</u>
		<u>100</u>	<u>1175</u>			<u>100</u>	<u>1158</u>

FORMATION TEST REPORT



Home Office:

Wichita, Kansas 67201

P.O. Box 1599

Phone (316) 262-5861

COMPANY JAY BOY OIL, INC. LEASE & WELL NO. T. UNRUH #1 SEC. 11 TWP. 23S RGE. 2W TEST NO. 3 DATE 12/16/87

WESTERN TESTING CO. INC.
SUBSURFACE PRESSURE SURVEY

DATE	:	12-16-87	TICKET	:	11908
CUSTOMER	:	JAY BOY OIL INC.	LEASE	:	T. UNRUH
WELL	:	#1	TEST:	:	3
ELEVATION	:	1440 GL	GEOLOGIST	:	S. DAVIS
SECTION	:	11	FORMATION	:	HUNTON
RANGE	:	2W	TOWNSHIP	:	23S
GAUGE SN#	:	13549	STATE	:	KANSAS
		COUNTY :	RANGE :		CLOCK :
			4100		12

INTERVAL FROM	:	3206	TO	:	3230	TOTAL DEPTH	:	3230
DEPTH OF SELECTIVE ZONE	:							
PACKER DEPTH	:	3201	SIZE	:	6.63			
PACKER DEPTH	:	3206	SIZE	:	6.63			
PACKER DEPTH	:		SIZE	:				
PACKER DEPTH	:		SIZE	:				

DRILLING CON.	:	ALLEN RIG #4			
MUD TYPE	:	CHEMICAL	VISCOSITY	:	56
WEIGHT	:	8.8	WATER LOSS (CC)	:	9.6
CHLORIDES (PPM)	:	1900			
JARS-MAKE	:	-	SERIAL NUMBER	:	-
DID WELL FLOW ?	:	-	REVERSED OUT ?	:	-

DRILL COLLAR LENGTH	:	180	FT	I.D. inch	:	2.25
WEIGHT PIPE LENGTH	:	0	FT	I.D. inch	:	0.00
DRILL PIPE LENGTH	:	3006	FT	I.D. inch	:	3.80
TEST TOOL LENGTH	:	20	FT	TOOL SIZE	:	5.50
ANCHOR LENGTH	:	24	FT	ANCHOR SIZE	:	5.50
SURFACE CHOKE SIZE	:	.75	IN	BOTTOM CHOKE SIZE	:	.75
MAIN HOLE SIZE	:	7.875	IN	TOOL JOINT SIZE	:	4.5 XH

BLOW COMMENT #1 : INITIAL FLOW-WEAK BLOW-BUILDING TO 3 INCHES.
BLOW COMMENT #2 : FINAL FLOW-WEAK BLOW-BUILDING TO 6 INCHES.
BLOW COMMENT #3 :
BLOW COMMENT #4 :

RECOVERED : 30 FT OF: SLIGHTLY OIL CUT MUD
5% OIL-95% MUD

RECOVERED : 180 FT OF: MUD CUT WATER
10% MUD-90% WATER

CHLORIDES: 10000 PPM

Total Barrels Fluid = 1.31
Total Fluid Prod Rate = 20.89 BFPD
Indicated Oil Rate = 0.15 BOPD
Indicated Wtr Rate = 16.42 BWPD

REMARK 1 :
REMARK 2 :
REMARK 3 :
REMARK 4 :

SET PACKER(S) : 1:00 AM

TIME STARTED OFF BOTTOM : 4:30 AM

WELL TEMPERATURE : 112

INITIAL HYDROSTATIC PRESSURE

(A) 1622

INITIAL FLOW PERIOD MIN: 30

(B) 59 PSI TO (C) : 70

INITIAL CLOSED IN PERIOD MIN: 66

(D) 1175

FINAL FLOW PERIOD MIN: 60

(E) 97 PSI TO (F) : 130

FINAL CLOSED IN PERIOD MIN: 66

(G) 1158

FINAL HYDROSTATIC PRESSURE

(H) 1584

WESTERN TESTING CO. INC.
WICHITA - KANSAS

Pressure Transient Report

COMPANY : JAY BOY OIL INC.
RIG : HARVEY-KANSAS
FIELD : T. UNRUH
WELL : #1
DATE : 12-16-87
GAUGE NO : 13549

OPERATIONAL COMMENTS

COMPANY : JAY BOY OIL INC.

WELL : #1

GAUGE # : 13549

DATE : 16/12/87

FIELD : T. UNRUH

JOB # : 11908

DEPTH : 3230

TEST :

DATA No.	REAL TIME HR:MN:SS	ELAPSE TIME DELTA HOURS	PRESSURE PSIG	TEMP DEG F	DELTA P Pi-P(i-1)
1	1: 0: 0	0.000	59.000	112.00	0.000
2	1: 4:59	0.083	59.000	112.00	0.000
3	1:10: 0	0.167	59.000	112.00	0.000
4	1:15: 0	0.250	59.000	112.00	0.000
5	1:19:59	0.333	64.000	112.00	5.000
6	1:25: 0	0.417	68.000	112.00	4.000
7	1:30: 0	0.500	70.000	112.00	2.000
8	1:33: 0	0.550	349.000	112.00	279.000
9	1:36: 0	0.600	951.000	112.00	602.000
10	1:39: 0	0.650	1106.000	112.00	155.000
11	1:42: 0	0.700	1137.000	112.00	31.000
12	1:45: 0	0.750	1151.000	112.00	14.000
13	1:48: 0	0.800	1158.000	112.00	7.000
14	1:51: 0	0.850	1164.000	112.00	6.000
15	1:54: 0	0.900	1168.000	112.00	4.000
16	1:57: 0	0.950	1170.000	112.00	2.000
17	2: 0: 0	1.000	1171.000	112.00	1.000
18	2: 2:59	1.050	1172.000	112.00	1.000
19	2: 6: 0	1.100	1173.000	112.00	1.000
20	2: 9: 0	1.150	1174.000	112.00	1.000
21	2:12: 0	1.200	1174.000	112.00	0.000
22	2:15: 0	1.250	1174.000	112.00	0.000
23	2:18: 0	1.300	1174.000	112.00	0.000
24	2:21: 0	1.350	1175.000	112.00	1.000
25	2:24: 0	1.400	1175.000	112.00	0.000
26	2:27: 0	1.450	1175.000	112.00	0.000
27	2:30: 0	1.500	1175.000	112.00	0.000
28	2:33: 0	1.550	1175.000	112.00	0.000
29	2:36: 0	1.600	1175.000	112.00	0.000
30	2:37: 0	1.617	97.000	112.00	-1078.000
31	2:40:59	1.683	97.000	112.00	0.000
32	2:46: 0	1.767	97.000	112.00	0.000
33	2:51: 0	1.850	99.000	112.00	2.000
34	2:55:59	1.933	103.000	112.00	4.000
35	3: 1: 0	2.017	109.000	112.00	6.000
36	3: 5:59	2.100	115.000	112.00	6.000
37	3:10:59	2.183	119.000	112.00	4.000
38	3:16: 0	2.267	122.000	112.00	3.000
39	3:21: 0	2.350	125.000	112.00	3.000
40	3:25:59	2.433	128.000	112.00	3.000
41	3:31: 0	2.517	129.000	112.00	1.000
42	3:36: 0	2.600	130.000	112.00	1.000
43	3:38:59	2.650	401.000	112.00	271.000
44	3:41:59	2.700	979.000	112.00	578.000
45	3:45: 0	2.750	1067.000	112.00	88.000
46	3:48: 0	2.800	1096.000	112.00	29.000
47	3:51: 0	2.850	1114.000	112.00	18.000
48	3:53:59	2.900	1123.000	112.00	9.000
49	3:56:59	2.950	1132.000	112.00	9.000
50	4: 0: 0	3.000	1136.000	112.00	4.000
51	4: 3: 0	3.050	1140.000	112.00	4.000
52	4: 6: 0	3.100	1143.000	112.00	3.000

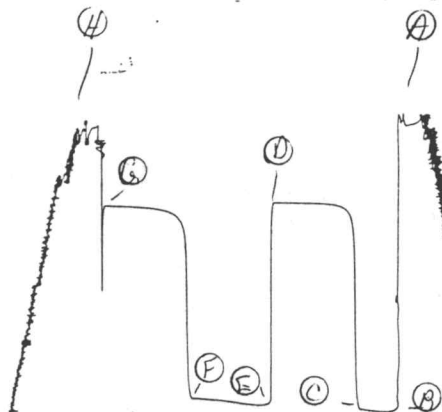
COMPANY : JAY BOY OIL INC.
WELL : #1
GAUGE # : 13549
DATE : 16/12/87

FIELD : T. UNRUH
JOB # : 11908
DEPTH : 3230
TEST :

DATA No.	REAL TIME HR:MN:SS	ELAPSE TIME DELTA HOURS	PRESSURE PSIG	TEMP DEG F	DELTA P Pi-P(i-1)
53	4: 8:59	3.150	1145.000	112.00	2.000
54	4:11:59	3.200	1149.000	112.00	4.000
55	4:15: 0	3.250	1151.000	112.00	2.000
56	4:18: 0	3.300	1153.000	112.00	2.000
57	4:21: 0	3.350	1154.000	112.00	1.000
58	4:23:59	3.400	1155.000	112.00	1.000
59	4:26:59	3.450	1156.000	112.00	1.000
60	4:30: 0	3.500	1157.000	112.00	1.000
61	4:33: 0	3.550	1157.000	112.00	0.000
62	4:36: 0	3.600	1157.000	112.00	0.000
63	4:38:59	3.650	1158.000	112.00	1.000
64	4:41:59	3.700	1158.000	112.00	0.000

WESTERN TESTING CO. INC.

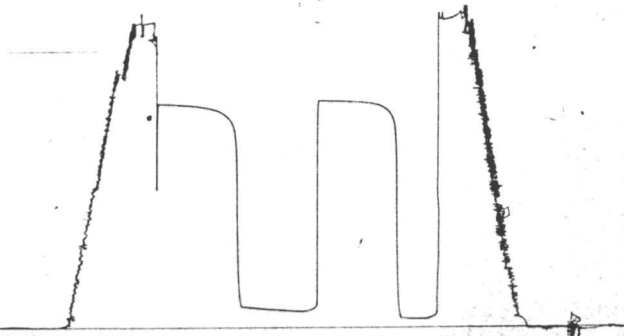
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TK4 - 11908

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WESTERN TESTING CO., INC.
FORMATION TESTING

TICKET N^o 11909

P. O. BOX 1599 PHONE (316) 262-5861

Elevation 1440

Formation HARVY

Eff. Pay — Ft.

WICHITA, KANSAS 67201

District G.T. BEND

Date 12-17-87

Customer Order No. —

COMPANY NAME JAY BOY OIL, INC.

ADDRESS 100 N. BROADWAY, SUITE 535, WICHITA KS. 67202

LEASE AND WELL NO. T. UNRUH #1

COUNTY HARVEY

STATE KS

Sec. 11

Twp. 27 S

Rge. 3 W

Mail Invoice To

Co. Name T. Unruh #1

SAME

Address

No. Copies Requested 5

Mail Charts To

T. Unruh #1

SAME

Address

No. Copies Requested 5

Formation Test No. 4

Interval Tested From 3230

ft. to 3240

ft. Total Depth 3240

ft.

Packer Depth 3235

ft. Size 6 5/8 in.

Packer Depth —

ft. Size — in.

Packer Depth 3230

ft. Size 6 5/8 in.

Packer Depth —

ft. Size — in.

Depth of Selective Zone Set —

Top Recorder Depth (Inside)

3234 ft.

Recorder Number 13549

Cap. 4100

Bottom Recorder Depth (Outside)

3238 ft.

Recorder Number 13533

Cap. 4025

Below Straddle Recorder Depth

— ft.

Recorder Number —

Cap. —

Drilling Contractor ALLEN #4

Drill Collar Length 180

I. D. 2.25 in.

Mud Type CHL M

Viscosity 44

Weight Pipe Length —

I. D. — in.

Weight 9.2

Water Loss 8.0 cc.

Drill Pipe Length 3030

I. D. 2.50 in.

Chlorides 2,000

P.P.M.

Test Tool Length 20

ft. Tool Size 5 1/2 in.

Jars: Make —

Serial Number —

Anchor Length 10

ft. Size 5 1/2 in.

Did Well Flow? —

Reversed Out —

Surface Choke Size 3/4 in.

Bottom Choke Size 3/4 in.

Main Hole Size 7 7/8 in.

Tool Joint Size 4 1/2 x 1 1/4 in.

Blow: IF - STRONG BLOW OFF BOTTOM OF BUCKET IN 7 MIN
FF - STRONG BLOW OFF BOTTOM OF BUCKET IN 8 MIN

Recovered 720 ft. of WATER

Recovered — ft. of

Recovered — ft. of

Recovered — ft. of

Recovered — ft. of

Chlorides 16,000

P.P.M. Sample Jars used 2 Remarks:

Time On Location — A.M.

Time Pick Up Tool 2:30

A.M.

Time Off Location —

A.M.

Time Set Packer(s) 3:45 A.M.

Time Started Off Bottom 6:15

A.M.

Maximum Temperature 116°

P.M.

Initial Hydrostatic Pressure (A) 1607 P.S.I.

Initial Flow Period (B) 30 Minutes 72 P.S.I. to (C) 177 P.S.I.

Initial Closed In Period (D) 45 Minutes 1206-1217 P.S.I.

Final Flow Period (E) 30 Minutes 239 P.S.I. to (F) 333 P.S.I.

Final Closed In Period (G) 45 Minutes 1155-1165 P.S.I.

Final Hydrostatic Pressure (H) 1473 P.S.I.

COMPANY TERMS

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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 Steve Davis
Signature of Customer or his authorized representative

Western Representative Ron Schwager

Thank You

FIELD INVOICE

Open Hole Test \$450
Misrun \$
Straddle Test \$
Jars \$
Selective Zone \$
Safety Joint \$
Standby \$
Evaluation \$
Extra Packer \$
Circ. Sub. \$
Mileage \$
Fluid Sampler \$
Extra Charts \$20
Insurance \$
Telecopier \$
TOTAL \$

Pressure Data

Date 12-17-87 Recorder No. 13549 Capacity 4100 Test Ticket No. 11909 Location _____ Ft. Clock No. _____ Elevation _____ Well Temperature 116 °F

Point	Pressure	Time Given	Time Computed
A Initial Hydrostatic Mud	<u>1602</u> P.S.I.	<u>3:45</u> M	
B First Initial Flow Pressure	<u>166</u> P.S.I.	<u>30</u> Mins.	<u>30</u> Mins.
C First Final Flow Pressure	<u>174</u> P.S.I.	<u>45</u> Mins.	<u>48</u> Mins.
D Initial Closed-in Pressure	<u>1166</u> P.S.I.	<u>30</u> Mins.	<u>30</u> Mins.
E Second Initial Flow Pressure	<u>243</u> P.S.I.	<u>45</u> Mins.	<u>48</u> Mins.
F Second Final Flow Pressure	<u>329</u> P.S.I.		
G Final Closed-in Pressure	<u>1166</u> P.S.I.		
H Final Hydrostatic Mud	<u>1592</u> 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 <u>5</u> mins. and a		of <u>3</u> mins. and a		of <u>5</u> mins. and a		of <u>3</u> mins. and a	
final inc. of <u>0</u> Min.		final inc. of <u>0</u> Min.		final inc. of <u>0</u> Min.		final inc. of <u>0</u> Min.	
Point Mins.	Press.	Point Minutes	Press.	Point Minutes	Press.	Point Minutes	Press.
P 1 0	<u>166</u>	0	<u>174</u>	0	<u>243</u>	0	<u>329</u>
P 2 5	<u>175</u>	3	<u>404</u>	5	<u>243</u>	3	<u>209</u>
P 3 10	<u>178</u>	6	<u>1118</u>	10	<u>252</u>	6	<u>1117</u>
P 4 15	<u>119</u>	9	<u>1142</u>	15	<u>270</u>	9	<u>1141</u>
P 5 20	<u>141</u>	12	<u>1151</u>	20	<u>290</u>	12	<u>1150</u>
P 6 25	<u>162</u>	15	<u>1157</u>	25	<u>309</u>	15	<u>1155</u>
P 7 30	<u>174</u>	18	<u>1160</u>	30	<u>329</u>	18	<u>1159</u>
P 8 35		21	<u>1162</u>	35		21	<u>1161</u>
P 9 40		24	<u>1163</u>	40		24	<u>1162</u>
P10 45		27	<u>1164</u>	45		27	<u>1163</u>
P11 50		30	<u>1165</u>	50		30	<u>1164</u>
P12 55		33	<u>1166</u>	55		33	<u>1165</u>
P13 60		36		60		36	<u>1166</u>
P14 65		39		65		39	
P15 70		42		70		42	
P16 75		45	<u>1166</u>	75		45	<u>1166</u>
P17 80		48	<u>1166</u>	80		48	<u>1166</u>
P18 85		51		85		51	
P19 90		54		90		54	
P20 95		57		95		57	
100		60		100		60	

FORMATION TEST REPORT



Home Office:

Wichita, Kansas 67201

P.O. Box 1599

Phone (316) 262-5861

COMPANY JAY BOY OIL, INC. LEASE & WELL NO. T. UNRUH #1 SEC. 11 TWP. 23S RGE. 2W TEST NO. 4 DATE 12/17/87

WESTERN TESTING CO. INC.
SUBSURFACE PRESSURE SURVEY

DATE	: 12-17-87	TICKET	: 11909
CUSTOMER	: JAY BOY OIL INC.	LEASE	: T. UNRUH
WELL	: #1 TEST: 4	GEOLOGIST	: S. DAVIS
ELEVATION	: 1440 GL	FORMATION	: HUNTON
SECTION	: 11	TOWNSHIP	: 23S
RANGE	: 2W	STATE	: KANSAS
GAUGE SN#	: 13549	CLOCK	: 12
	COUNTY : HARVEY		
	RANGE : 4100		

INTERVAL FROM	: 3230	TO	: 3240	TOTAL DEPTH	: 3240
DEPTH OF SELECTIVE ZONE	:				
PACKER DEPTH	: 3225	SIZE	: 6.63		
PACKER DEPTH	: 3230	SIZE	: 6.63		
PACKER DEPTH	:	SIZE	:		
PACKER DEPTH	:	SIZE	:		

DRILLING CON.	: ALLEN RIG #4		
MUD TYPE	: CHEMICAL	VISCOSITY	: 44
WEIGHT	: 9.2	WATER LOSS (CC)	: 8.0
CHLORIDES (PPM)	: 2000		
JARS-MAKE	: -	SERIAL NUMBER	: -
DID WELL FLOW ?	: -	REVERSED OUT ?	: -

DRILL COLLAR LENGTH	: 180	FT	I.D. inch	: 2.25
WEIGHT PIPE LENGTH	: 0	FT	I.D. inch	: 0.00
DRILL PIPE LENGTH	: 3030	FT	I.D. inch	: 3.80
TEST TOOL LENGTH	: 20	FT	TOOL SIZE	: 5.50
ANCHOR LENGTH	: 10	FT	ANCHOR SIZE	: 5.50
SURFACE CHOKE SIZE	: .75	IN	BOTTOM CHOKE SIZE	: .75
MAIN HOLE SIZE	: 7.875	IN	TOOL JOINT SIZE	: 4.5 XH

BLOW COMMENT #1 : INITIAL FLOW-STRONG BLOW-OFF BOTTOM OF BUCKET IN 7 MINUTES.

BLOW COMMENT #2 : FINAL FLOW-STRONG BLOW-OFF BOTTOM OF BUCKET IN 8 MINUTES.

BLOW COMMENT #3 :

BLOW COMMENT #4 :

RECOVERED : 720 FT OF: WATER

CHLORIDES: 16000 PPM

Total Barrels Fluid = 8.46
Total Fluid Prod Rate = 203.02 BFPD
Indicated Wtr Rate = 203.02 BWPD

REMARK 1 :
REMARK 2 :
REMARK 3 :
REMARK 4 :

SET PACKER(S) : 3:45 PM

TIME STARTED OFF BOTTOM : 6:15 PM

WELL TEMPERATURE : 116

INITIAL HYDROSTATIC PRESSURE

(A) 1602

INITIAL FLOW PERIOD MIN: 30

(B) 66 PSI TO (C) : 174

INITIAL CLOSED IN PERIOD MIN: 48

(D) 1166

FINAL FLOW PERIOD MIN: 30

(E) 243 PSI TO (F) : 329

FINAL CLOSED IN PERIOD MIN: 48

(G) 1166

FINAL HYDROSTATIC PRESSURE

(H) 1592

WESTERN TESTING CO. INC.
WICHITA - KANSAS

Pressure Transient Report

COMPANY : JAY BOY OIL INC.
RIG : HARVEY-KANSAS
FIELD : T. UNRUH
WELL : #1
DATE : 12-17-87
GAUGE NO : 13549

OPERATIONAL COMMENTS

COMPANY : JAY BOY OIL INC.
WELL : #1
GAUGE # : 13549
DATE : 17/12/87

FIELD : T. UNRUH
JOB # : 11909
DEPTH : 3240
TEST :

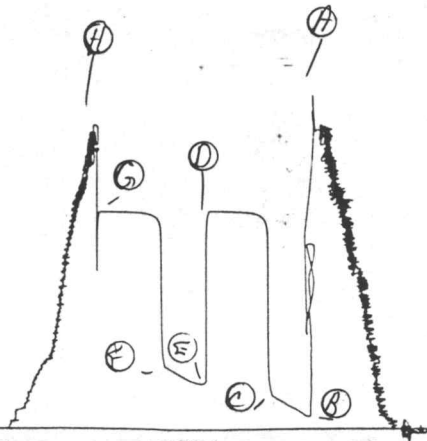
DATA No.	REAL TIME HR:MN:SS	ELAPSE TIME DELTA HOURS	PRESSURE PSIG	TEMP DEG F	DELTA P Pi-P(i-1)
1	3:45: 0	0.000	66.000	116.00	0.000
2	3:49:59	0.083	75.000	116.00	9.000
3	3:55: 0	0.167	98.000	116.00	23.000
4	4: 0: 0	0.250	119.000	116.00	21.000
5	4: 4:59	0.333	141.000	116.00	22.000
6	4:10: 0	0.417	162.000	116.00	21.000
7	4:15: 0	0.500	174.000	116.00	12.000
8	4:18: 0	0.550	404.000	116.00	230.000
9	4:21: 0	0.600	1118.000	116.00	714.000
10	4:24: 0	0.650	1142.000	116.00	24.000
11	4:27: 0	0.700	1151.000	116.00	9.000
12	4:30: 0	0.750	1157.000	116.00	6.000
13	4:33: 0	0.800	1160.000	116.00	3.000
14	4:36: 0	0.850	1162.000	116.00	2.000
15	4:39: 0	0.900	1163.000	116.00	1.000
16	4:42: 0	0.950	1164.000	116.00	1.000
17	4:45: 0	1.000	1165.000	116.00	1.000
18	4:48: 0	1.050	1166.000	116.00	1.000
19	4:51: 0	1.100	1166.000	116.00	0.000
20	4:54: 0	1.150	1166.000	116.00	0.000
21	4:57: 0	1.200	1166.000	116.00	0.000
22	5: 0: 0	1.250	1166.000	116.00	0.000
23	5: 3: 0	1.300	1166.000	116.00	0.000
24	5: 4: 0	1.317	243.000	116.00	-923.000
25	5: 7:59	1.383	243.000	116.00	0.000
26	5:13: 0	1.467	252.000	116.00	9.000
27	5:18: 0	1.550	270.000	116.00	18.000
28	5:22:59	1.633	290.000	116.00	20.000
29	5:28: 0	1.717	309.000	116.00	19.000
30	5:33: 0	1.800	329.000	116.00	20.000
31	5:36: 0	1.850	709.000	116.00	380.000
32	5:39: 0	1.900	1117.000	116.00	408.000
33	5:42: 0	1.950	1141.000	116.00	24.000
34	5:45: 0	2.000	1150.000	116.00	9.000
35	5:48: 0	2.050	1155.000	116.00	5.000
36	5:51: 0	2.100	1159.000	116.00	4.000
37	5:53:59	2.150	1161.000	116.00	2.000
38	5:57: 0	2.200	1162.000	116.00	1.000
39	6: 0: 0	2.250	1163.000	116.00	1.000
40	6: 3: 0	2.300	1164.000	116.00	1.000
41	6: 6: 0	2.350	1165.000	116.00	1.000
42	6: 9: 0	2.400	1166.000	116.00	1.000
43	6:11:59	2.450	1166.000	116.00	0.000
44	6:15: 0	2.500	1166.000	116.00	0.000
45	6:18: 0	2.550	1166.000	116.00	0.000
46	6:21: 0	2.600	1166.000	116.00	0.000

WESTERN TESTING CO. INC.

TA 11909

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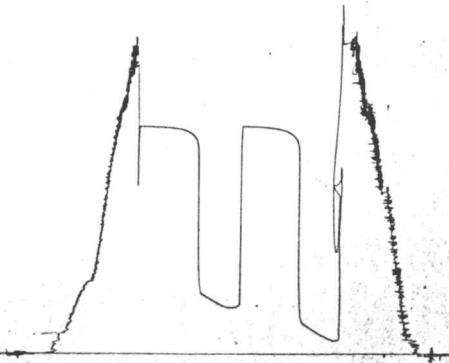
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WESTERN TESTING CO., INC. FORMATION TESTING

TICKET N^o 11910

P. O. BOX 1599 PHONE (316) 262-5861

WICHITA, KANSAS 67201

Elevation 1440 6.2 Formation SEMPSON Eff. Pay - Ft.

District G.T. BEND Date 12-18-87 Customer Order No. -

COMPANY NAME JAY ROY OIL INC.

ADDRESS 100 N. BROADWAY, SUITE 535, WICHITA KS. 67202

LEASE AND WELL NOT. UNRUH #1 COUNTY HARVEY STATE KS Sec. 11 Twp. 23 Rge. 24

Mail Invoice To SAME Co. Name F. Unruh #1 Address - No. Copies Requested 1

Mail Charts To SAME Address - No. Copies Requested 1

Formation Test No. 5 Interval Tested From 3362 ft. to 3398 ft. Total Depth 3398 ft.

Packer Depth 3357 ft. Size 6 5/8 in. Packer Depth - ft. Size - in.

Packer Depth 3362 ft. Size 6 5/8 in. Packer Depth - ft. Size - in.

Depth of Selective Zone Set -

Top Recorder Depth (Inside) 3392 ft. Recorder Number 13549 Cap. 4100

Bottom Recorder Depth (Outside) 3396 ft. Recorder Number 13553 Cap. 4025

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

Drilling Contractor ALLEN #4 Drill Collar Length 180 I. D. 2.25 in.

Mud Type CHCM Viscosity 55 Weight Pipe Length - I. D. - in.

Weight 9.3 Water Loss 80 cc. Drill Pipe Length 3162 I. D. 3.80 in.

Chlorides 2800 P.P.M. Test Tool Length 20 ft. Tool Size 5 1/2 in.

Jars: Make - Serial Number - Anchor Length 36 ft. Size 5 1/2 in.

Did Well Flow? - Reversed Out - Surface Choke Size 3/4 in. Bottom Choke Size 3/4 in.

Main Hole Size 7 7/8 in. Tool Joint Size 4 1/2 X 1 1/4 in.

Blow: IF - WEAK BLOW - BUILDING IN 1/4 INCHES
FF - WEAK BLOW - THROUGHOUT FLOW

Recovered 30 ft. of MUD W/TRACE OF OIL 2% OIL 98% MUD

Recovered - ft. of -

Recovered - ft. of -

Recovered - ft. of -

Recovered - ft. of -

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

Time On Location 12:30 A.M. Time Pick Up Tool 1:00 P.M. Time Off Location - A.M.

Time Set Packer(s) 2:05 A.M. Time Started Off Bottom 8:15 P.M. Maximum Temperature 117°

Initial Hydrostatic Pressure - (A) 1627 P.S.I.

Initial Flow Period - Minutes 30 (B) 62 P.S.I. to (C) 62 P.S.I.

Initial Closed In Period - Minutes 60 (D) 354-375 P.S.I.

Final Flow Period - Minutes 60 (E) 62 P.S.I. to (F) 62 P.S.I.

Final Closed In Period - Minutes 90 (G) 322-343-354 P.S.I.

Final Hydrostatic Pressure - (H) 1553 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 Steve Dan
Signature of Customer or his authorized representative

Western Representative For Schwager Thank you

FIELD INVOICE

Open Hole Test \$450
Misrun \$
Straddle Test \$
Jars \$
Selective Zone \$
Safety Joint \$
Standby \$
Evaluation \$
Extra Packer \$
Circ. Sub. \$
Mileage \$
Fluid Sampler \$
Extra Charts \$30
Insurance \$
Telecopier \$
TOTAL \$

Pressure Data

Date 12-18-87 Test Ticket No. 11910
 Recorder No. 13549 Capacity 4100 Location _____ Ft. _____
 Clock No. _____ Elevation _____ Well Temperature 117 °F
 Point _____ Pressure _____ Time Given _____ Time Computed _____
 A Initial Hydrostatic Mud 1181 P.S.I. Open Tool 2 15 M
 B First Initial Flow Pressure 52 P.S.I. First Flow Pressure 52 Mins. 50 Mins.
 C First Final Flow Pressure 52 P.S.I. Initial Closed-in Pressure 60 Mins. 62 Mins.
 D Initial Closed-in Pressure 3161 P.S.I. Second Flow Pressure 60 Mins. 100 Mins.
 E Second Initial Flow Pressure 54 P.S.I. Final Closed-in Pressure 90 Mins. 93 Mins.
 F Second Final Flow Pressure 54 P.S.I.
 G Final Closed-in Pressure 338 P.S.I.
 H Final Hydrostatic Mud 1655 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 <u>5</u> mins. and a		of <u>3</u> mins. and a		of <u>5</u> mins. and a		of <u>3</u> mins. and a	
final inc. of <u>0</u> Min.		final inc. of <u>0</u> Min.		final inc. of <u>0</u> Min.		final inc. of <u>0</u> Min.	
Point Mins.	Press.	Point Minutes	Press.	Point Minutes	Press.	Point Minutes	Press.
P 1 0	<u>52</u>	0	<u>52</u>	0	<u>54</u>	0	<u>54</u>
P 2 5		3	<u>67</u>	5		3	<u>74</u>
P 3 10		6	<u>142</u>	10		6	<u>154</u>
P 4 15		9	<u>216</u>	15		9	<u>208</u>
P 5 20		12	<u>274</u>	20		12	<u>242</u>
P 6 25		15	<u>296</u>	25		15	<u>257</u>
P 7 30	<u>52</u>	18	<u>313</u>	30		18	<u>274</u>
P 8 35		21	<u>321</u>	35		21	<u>283</u>
P 9 40		24	<u>328</u>	40		24	<u>291</u>
P10 45		27	<u>335</u>	45		27	<u>297</u>
P11 50		30	<u>341</u>	50		30	<u>302</u>
P12 55		33	<u>344</u>	55		33	<u>307</u>
P13 60		36	<u>348</u>	60	<u>54</u>	36	<u>309</u>
P14 65		39	<u>350</u>	65		39	<u>312</u>
P15 70		42	<u>352</u>	70		42	<u>316</u>
P16 75		45	<u>354</u>	75		45	<u>319</u>
P17 80		48	<u>356</u>	80		48	<u>321</u>
P18 85		51	<u>357</u>	85		51	<u>324</u>
P19 90		54	<u>358</u>	90		54	<u>326</u>
P20 95		57	<u>359</u>	95		57	<u>327</u>
100		60	<u>360</u>	100		60	<u>328</u>
		<u>62</u>	<u>361</u>				

WESTERN TESTING CO., INC.

Pressure Data

Date _____

Test Ticket No. 11910

Recorder No. _____ Capacity _____ Location _____ Ft.

Clock No. _____ Elevation _____ Well Temperature _____ °F

Point	Pressure	Open Tool	Time Given	Time Computed
A Initial Hydrostatic Mud _____	P.S.I.	_____	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.		Breakdown: _____ Inc.		Breakdown: _____ Inc.		Breakdown: _____ Inc.	
of <u>5</u> mins. and a		of <u>3</u> mins. and a		of <u>5</u> mins. and a		of <u>3</u> mins. and a	
final inc. of <u>0</u> Min.		final inc. of <u>0</u> Min.		final inc. of <u>0</u> Min.		final inc. of <u>0</u> Min.	
Point Mins.	Press.	Point Minutes	Press.	Point Minutes	Press.	Point Minutes	Press.
P 1 105		63		105		63	329
P 2 110		66		110		66	330
P 3 115		69		115		69	331
P 4 120		72		120		72	332
P 5 125		75		125		75	333
P 6 130		78		130		78	334
P 7 135		81		135		81	335
P 8 140		84		140		84	336
P 9 145		87		145		87	337
P10 150		90		150		90	338
P11 155		93		155		93	338
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 (316) 262-5861

COMPANY JAY BOY OIL, INC.

LEASE & WELL NO.

T. UNRUH #1

SEC. 11

TWP. 23S

RGE. 2W

TEST NO.

5 DATE

12/18/87

WESTERN TESTING CO. INC.
SUBSURFACE PRESSURE SURVEY

DATE	:	12-18-87	TICKET	:	11910
CUSTOMER	:	JAY BOY OIL INC.	LEASE	:	T. UNRUH
WELL	:	#1	TEST:	:	5
ELEVATION	:	1440 GL	GEOLOGIST	:	S. DAVIS
SECTION	:	11	FORMATION	:	SIMPSON
RANGE	:	2W	TOWNSHIP	:	23S
GAUGE SN#	:	13549	STATE	:	KANSAS
		COUNTY :	RANGE :		CLOCK :
			4100		12

INTERVAL FROM	:	3362	TO	:	3398	TOTAL DEPTH	:	3398
DEPTH OF SELECTIVE ZONE	:							
PACKER DEPTH	:	3357	SIZE	:	6.63			
PACKER DEPTH	:	3362	SIZE	:	6.63			
PACKER DEPTH	:		SIZE	:				
PACKER DEPTH	:		SIZE	:				

DRILLING CON.	:	ALLEN RIG #4			
MUD TYPE	:	CHEMICAL	VISCOSITY	:	55
WEIGHT	:	9.3	WATER LOSS (CC)	:	8.0
CHLORIDES (PPM)	:	2000			
JARS-MAKE	:	-	SERIAL NUMBER	:	-
DID WELL FLOW ?	:	-	REVERSED OUT ?	:	-

DRILL COLLAR LENGTH	:	180	FT	I.D. inch	:	2.25
WEIGHT PIPE LENGTH	:	0	FT	I.D. inch	:	0.00
DRILL PIPE LENGTH	:	3162	FT	I.D. inch	:	3.80
TEST TOOL LENGTH	:	20	FT	TOOL SIZE	:	5.50
ANCHOR LENGTH	:	36	FT	ANCHOR SIZE	:	5.50
SURFACE CHOKE SIZE	:	.75	IN	BOTTOM CHOKE SIZE	:	.75
MAIN HOLE SIZE	:	7.875	IN	TOOL JOINT SIZE	:	4.5 XH

BLOW COMMENT #1	:	INITIAL FLOW-WEAK BLOW-BUILDING TO 1 1/2 INCHES.
BLOW COMMENT #2	:	FINAL FLOW-WEAK BLOW THROUGHOUT.
BLOW COMMENT #3	:	
BLOW COMMENT #4	:	

RECOVERED : 30 FT OF: MUD / WITH TRACE OF OIL
2% OIL-98% MUD

Total Barrels Fluid = 0.15
Total Fluid Prod Rate = 2.36 BFPD
Indicated Oil Rate = 0.05 BOPD
Indicated Wtr Rate = 0.23 BWPD

REMARK 1 :
REMARK 2 :
REMARK 3 :
REMARK 4 :

SET PACKER(S) : 2:15 PM

TIME STARTED OFF BOTTOM : 6:15 PM

WELL TEMPERATURE : 117

INITIAL HYDROSTATIC PRESSURE

(A) 1681

INITIAL FLOW PERIOD MIN: 30

(B) 52 PSI TO (C) : 52

INITIAL CLOSED IN PERIOD MIN: 63

(D) 361

FINAL FLOW PERIOD MIN: 60

(E) 54 PSI TO (F) : 54

FINAL CLOSED IN PERIOD MIN: 93

(G) 338

FINAL HYDROSTATIC PRESSURE

(H) 1655

WESTERN TESTING CO. INC.
WICHITA - KANSAS

Pressure Transient Report

COMPANY : JAY BOY OIL INC.
RIG : HARVEY-KANSAS
FIELD : T. UNRUH
WELL : #1
DATE : 12-18-87
GAUGE NO : 13549

OPERATIONAL COMMENTS

COMPANY : JAY BOY OIL INC.

FIELD : T. UNRUH

WELL : #1

JOB # : 11910

GAUGE # : 13549

DEPTH : 3398

DATE : 18/12/87

TEST :

DATA No.	REAL TIME HR:MN:SS	ELAPSE TIME DELTA HOURS	PRESSURE PSIG	TEMP DEG F	DELTA P Pi-P(i-1)
1	2:15: 0	0.000	52.000	117.00	0.000
2	2:19:59	0.083	52.000	117.00	0.000
3	2:25: 0	0.167	52.000	117.00	0.000
4	2:30: 0	0.250	52.000	117.00	0.000
5	2:34:59	0.333	52.000	117.00	0.000
6	2:40: 0	0.417	52.000	117.00	0.000
7	2:45: 0	0.500	52.000	117.00	0.000
8	2:48: 0	0.550	67.000	117.00	15.000
9	2:51: 0	0.600	142.000	117.00	75.000
10	2:54: 0	0.650	226.000	117.00	84.000
11	2:57: 0	0.700	274.000	117.00	48.000
12	3: 0: 0	0.750	296.000	117.00	22.000
13	3: 3: 0	0.800	313.000	117.00	17.000
14	3: 6: 0	0.850	321.000	117.00	8.000
15	3: 9: 0	0.900	328.000	117.00	7.000
16	3:12: 0	0.950	335.000	117.00	7.000
17	3:15: 0	1.000	341.000	117.00	6.000
18	3:18: 0	1.050	344.000	117.00	3.000
19	3:21: 0	1.100	348.000	117.00	4.000
20	3:24: 0	1.150	350.000	117.00	2.000
21	3:27: 0	1.200	352.000	117.00	2.000
22	3:30: 0	1.250	354.000	117.00	2.000
23	3:33: 0	1.300	356.000	117.00	2.000
24	3:36: 0	1.350	357.000	117.00	1.000
25	3:39: 0	1.400	358.000	117.00	1.000
26	3:42: 0	1.450	359.000	117.00	1.000
27	3:45: 0	1.500	360.000	117.00	1.000
28	3:48: 0	1.550	361.000	117.00	1.000
29	3:49: 0	1.567	54.000	117.00	-307.000
30	3:52:59	1.633	54.000	117.00	0.000
31	3:58: 0	1.717	54.000	117.00	0.000
32	4: 3: 0	1.800	54.000	117.00	0.000
33	4: 7:59	1.883	54.000	117.00	0.000
34	4:13: 0	1.967	54.000	117.00	0.000
35	4:18: 0	2.050	54.000	117.00	0.000
36	4:22:59	2.133	54.000	117.00	0.000
37	4:28: 0	2.217	54.000	117.00	0.000
38	4:33: 0	2.300	54.000	117.00	0.000
39	4:37:59	2.383	54.000	117.00	0.000
40	4:43: 0	2.467	54.000	117.00	0.000
41	4:48: 0	2.550	54.000	117.00	0.000
42	4:51: 0	2.600	74.000	117.00	20.000
43	4:53:59	2.650	154.000	117.00	80.000
44	4:57: 0	2.700	208.000	117.00	54.000
45	5: 0: 0	2.750	242.000	117.00	34.000
46	5: 3: 0	2.800	257.000	117.00	15.000
47	5: 6: 0	2.850	274.000	117.00	17.000
48	5: 8:59	2.900	283.000	117.00	9.000
49	5:12: 0	2.950	291.000	117.00	8.000
50	5:15: 0	3.000	297.000	117.00	6.000
51	5:18: 0	3.050	302.000	117.00	5.000
52	5:21: 0	3.100	307.000	117.00	5.000

COMPANY : JAY BOY OIL INC.
WELL : #1
GAUGE # : 13549
DATE : 18/12/87

FIELD : T. UNRUH
JOB # : 11910
DEPTH : 3398
TEST :

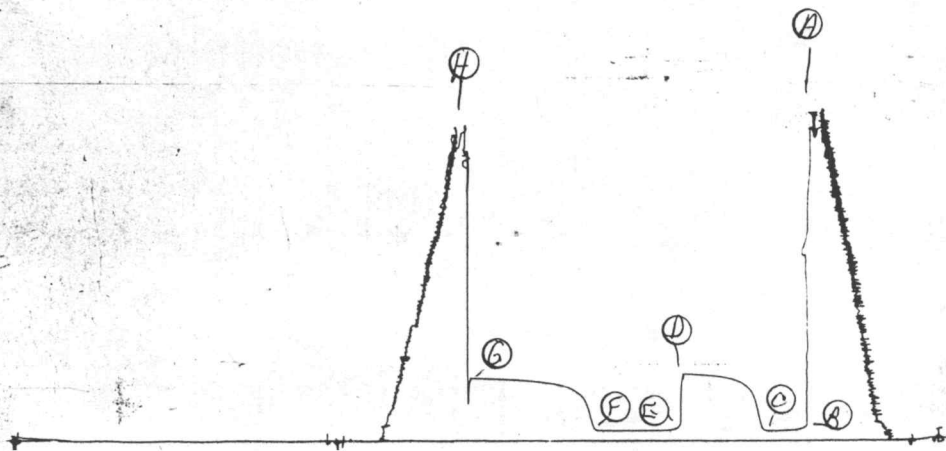
DATA No.	REAL TIME HR:MN:SS	ELAPSE TIME DELTA HOURS	PRESSURE PSIG	TEMP DEG F	DELTA P Pi-P(i-1)
53	5:24: 0	3.150	309.000	117.00	2.000
54	5:26:59	3.200	313.000	117.00	4.000
55	5:30: 0	3.250	316.000	117.00	3.000
56	5:33: 0	3.300	319.000	117.00	3.000
57	5:36: 0	3.350	321.000	117.00	2.000
58	5:39: 0	3.400	324.000	117.00	3.000
59	5:41:59	3.450	326.000	117.00	2.000
60	5:45: 0	3.500	327.000	117.00	1.000
61	5:48: 0	3.550	328.000	117.00	1.000
62	5:51: 0	3.600	329.000	117.00	1.000
63	5:54: 0	3.650	330.000	117.00	1.000
64	5:56:59	3.700	331.000	117.00	1.000
65	6: 0: 0	3.750	332.000	117.00	1.000
66	6: 3: 0	3.800	333.000	117.00	1.000
67	6: 6: 0	3.850	334.000	117.00	1.000
68	6: 9: 0	3.900	335.000	117.00	1.000
69	6:11:59	3.950	336.000	117.00	1.000
70	6:15: 0	4.000	337.000	117.00	1.000
71	6:18: 0	4.050	338.000	117.00	1.000
72	6:21: 0	4.100	338.000	117.00	0.000

WESTERN TESTING CO. INC.

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