

TRILOBITE TESTING, L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Drill-Stem Test Data

Well Name #1 PAT HOLLAND Test No. 1 Date 8/14/94
Company RUSSELL OIL, INC. Zone LKC
Address P.O. BOX 272 RUSSELL KS 67665 Elevation 1839
Co. Rep./Geo. RANDY KILIAN Cont. SHIELDS DRLG Est. Ft. of Pay _____
Location: Sec. 28 Twp. 13S Rge. 14W Co. RUSSELL State KS

Interval Tested <u>3150-3182</u>	Drill Pipe Size <u>4.5" FH</u>
Anchor Length <u>32</u>	Wt. Pipe I.D. - 2.7 Ft. Run <u>880</u>
Top Packer Depth <u>3145</u>	Drill Collar - 2.25 Ft. Run _____
Bottom Packer Depth <u>3150</u>	Mud Wt. <u>9.2</u> lb/Gal.
Total Depth <u>3182</u>	Viscosity <u>43</u> Filtrate <u>9.2</u>

Tool Open @ 8:19 P.M. Initial Blow WEAK 1/2" BLOW DECREASING TO SURFACE

Final Blow NO BLOW

Recovery - Total Feet 10 Flush Tool? NO

Rec. 10 Feet of MUD WITH OIL SPOTS IN TOOL
Rec. _____ Feet of _____
Rec. _____ Feet of _____
Rec. _____ Feet of _____
Rec. _____ Feet of _____

BHT _____ °F Gravity _____ °API @ _____ °F Corrected Gravity _____ °API
RW _____ @ _____ °F Chlorides _____ ppm Recovery Chlorides _____ ppm System

(A) Initial Hydrostatic Mud 1614.7 PSI AK1 Recorder No. 22150 Range 3925

(B) First Initial Flow Pressure 37.2 PSI @ (depth) 3156 w / Clock No. 14074

(C) First Final Flow Pressure 37.2 PSI AK1 Recorder No. 10994 Range 4220

(D) Initial Shut-in Pressure 115.9 PSI @ (depth) 3177 w / Clock No. 23935

(E) Second Initial Flow Pressure 40.4 PSI AK1 Recorder No. _____ Range _____

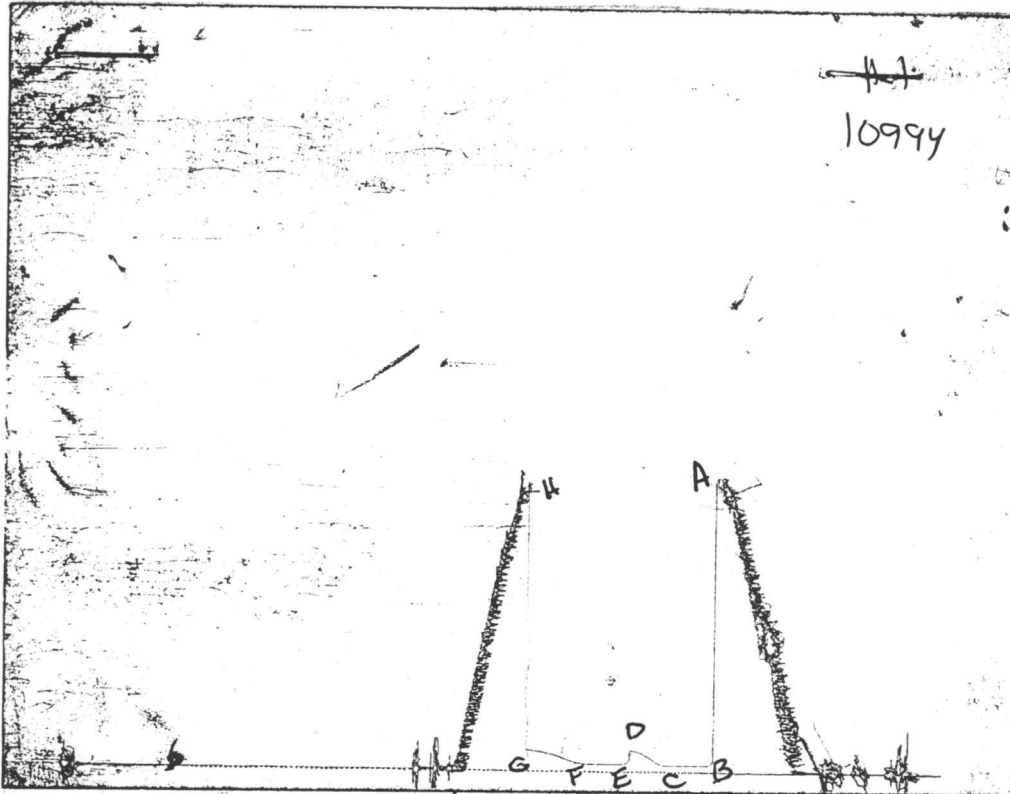
(F) Second Final Flow Pressure 40.4 PSI @ (depth) _____ w / Clock No. _____

(G) Final Shut-in Pressure 111.6 PSI Initial Opening 30 Final Flow 30

(H) Final Hydrostatic Mud 1523.4 PSI Initial Shut-in 30 Final Shut-in 45

Our Representative PAUL SIMPSON

CHART PAGE



	FIELD READING	OFFICE READING
(A) INITIAL HYDROSTATIC MUD	1610	1614.7
(B) FIRST INITIAL FLOW PRESSURE	32	37.2
(C) FIRST FINAL FLOW PRESSURE	32	37.2
(D) INITIAL CLOSED-IN PRESSURE	117	115.9
(E) SECOND INITIAL FLOW PRESSURE	32	40.4
(F) SECOND FINAL FLOW PRESSURE	32	40.4
(G) FINAL CLOSED-IN PRESSURE	106	111.6
(H) FINAL HYDROSTATIC MUD	1579	1523.4

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Drill-Stem Test Data

Well Name #1 PAT HOLLAND Test No. 2 Date 8/15/94
Company RUSSELL OIL, INC. Zone _____
Address P.O. BOX 272 RUSSELL KS 67665 Elevation _____
Co. Rep./Geo. RANDY KILIAN Cont. SHIELDS DRLG Est. Ft. of Pay _____
Location: Sec. 28 Twp. 13S Rge. 14W Co. RUSSELL State KS

Interval Tested	<u>3269-3275</u>	Drill Pipe Size	<u>4.5" FH</u>
Anchor Length	<u>6</u>	Wt. Pipe I.D. - 2.7 Ft. Run	<u>881</u>
Top Packer Depth	<u>3264</u>	Drill Collar - 2.25 Ft. Run	<u>9.3</u>
Bottom Packer Depth	<u>3269</u>	Mud Wt.	<u>43</u> lb/Gal.
Total Depth	<u>3275</u>	Viscosity	<u>10</u>

Tool Open @ 5:56 P.M. Initial Blow 1" BLOW BUILDING TO BOTTOM OF BUCKET IN 4 MIN

Final Blow 1/4" BLOW BUILDING TO BOTTOM OF BUCKET IN 9 MIN

Recovery - Total Feet 990 Flush Tool? NO

Rec. <u>30</u>	Feet of	<u>CLEAN GASSY OIL</u>
Rec. <u>90</u>	Feet of	<u>SLIGHT OIL CUT WATER 3%OIL/97%WATER</u>
Rec. <u>870</u>	Feet of	<u>SALT WATER</u>
Rec. _____	Feet of	_____
Rec. _____	Feet of	_____

BHT _____ °F Gravity _____ °API @ _____ °F Corrected Gravity _____ °API
RW 3 @ 83 °F Chlorides 19000 ppm Recovery Chlorides _____ ppm System

(A) Initial Hydrostatic Mud 1626.0 PSI AK1 Recorder No. 22150 Range 3925

(B) First Initial Flow Pressure 68.2 PSI @ (depth) 3259 w / Clock No. 23935

(C) First Final Flow Pressure 154.4 PSI AK1 Recorder No. 24174 Range 3050

(D) Initial Shut-in Pressure 1035.5 PSI @ (depth) 3270 w / Clock No. 14074

(E) Second Initial Flow Pressure 227.0 PSI AK1 Recorder No. _____ Range _____

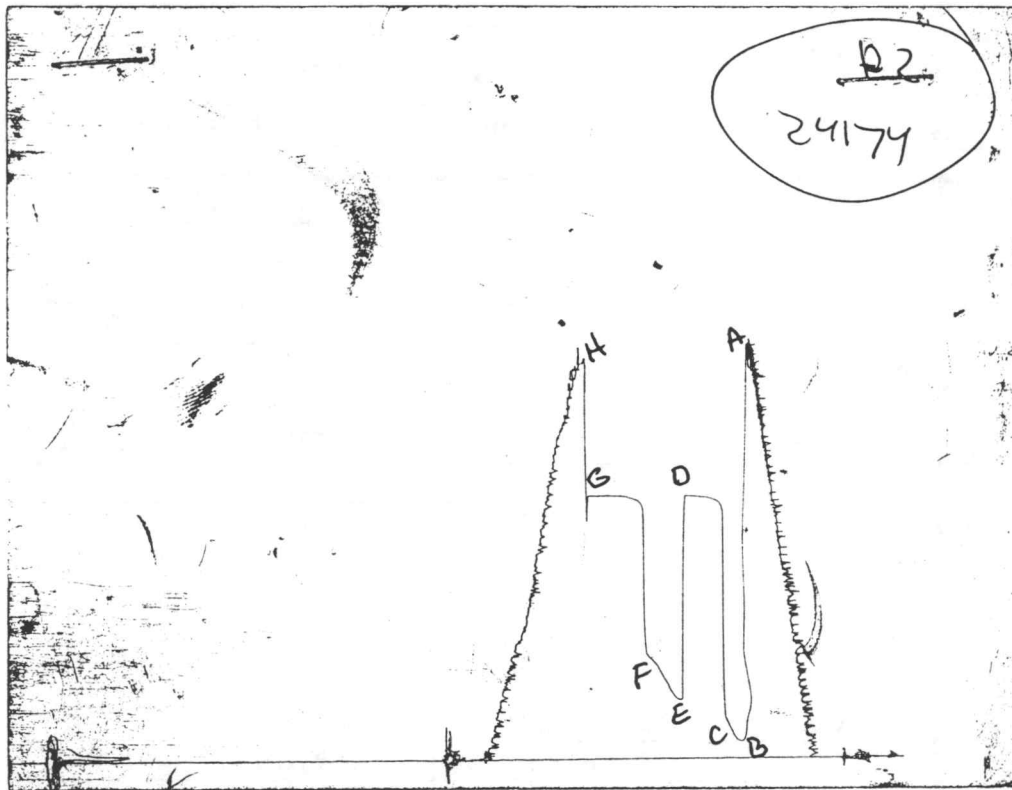
(F) Second Final Flow Pressure 408.2 PSI @ (depth) _____ w / Clock No. _____

(G) Final Shut-in Pressure 1034.7 PSI Initial Opening 15 Final Flow 30

(H) Final Hydrostatic Mud 1573.6 PSI Initial Shut-in 30 Final Shut-in 45

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CHART PAGE



	FIELD READING	OFFICE READING
(A) INITIAL HYDROSTATIC MUD	1636	1626
(B) FIRST INITIAL FLOW PRESSURE	59	68.2
(C) FIRST FINAL FLOW PRESSURE	164	154.4
(D) INITIAL CLOSED-IN PRESSURE	1039	1035.5
(E) SECOND INITIAL FLOW PRESSURE	225	227
(F) SECOND FINAL FLOW PRESSURE	400	408.2
(G) FINAL CLOSED-IN PRESSURE	1039	1034.7
(H) FINAL HYDROSTATIC MUD	1575	1573.6

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Drill-Stem Test Data

Well Name #1 PAT HOLLAND Test No. 3 Date 8/16/94
Company RUSSELL OIL, INC. Zone ARBUCKLE
Address P.O. BOX 272 RUSSELL KS 67665 Elevation _____
Co. Rep./Geo. RANDY KILIAN Cont. SHIELDS DRLG
Location: Sec. 28 Twp. 13S Rge. 14W Co. RUSSELL State KS

Interval Tested	<u>3239-3257</u>	Drill Pipe Size	<u>4.5" FH</u>
Anchor Length	<u>18</u>	Wt. Pipe I.D. - 2.7 Ft. Run	<u>881</u>
Top Packer Depth	<u>3239</u>	Drill Collar - 2.25 Ft. Run	_____
Bottom Packer Depth	<u>3257-3262</u>	Mud Wt.	<u>9.3</u> lb/Gal.
Total Depth	<u>3315</u>	Viscosity	<u>46</u>
		Filtrate	<u>13</u>

Tool Open @ 10:09 A.M. Initial Blow WEAK 1/2" BLOW THROUGHOUT

Final Blow NONE TAKEN

Recovery - Total Feet 5 Flush Tool? NO

Rec. <u>5</u>	Feet of	<u>MUD (FEW OIL SPOTS)</u>
Rec. _____	Feet of	_____
Rec. _____	Feet of	_____
Rec. _____	Feet of	_____
Rec. _____	Feet of	_____

BHT _____ °F Gravity _____ °API @ _____ °F Corrected Gravity _____ °API
RW _____ @ _____ °F Chlorides _____ ppm Recovery Chlorides _____ ppm System

(A) Initial Hydrostatic Mud 1639.7 PSI AK1 Recorder No. 22150 Range 3925

(B) First Initial Flow Pressure 28.7 PSI @ (depth) 3241 w / Clock No. 23935

(C) First Final Flow Pressure 28.7 PSI AK1 Recorder No. 10994 Range 4020

(D) Initial Shut-in Pressure 28.7 PSI @ (depth) 3254 w / Clock No. 23835

(E) Second Initial Flow Pressure 0.0 PSI AK1 Recorder No. 24174 Range 3050

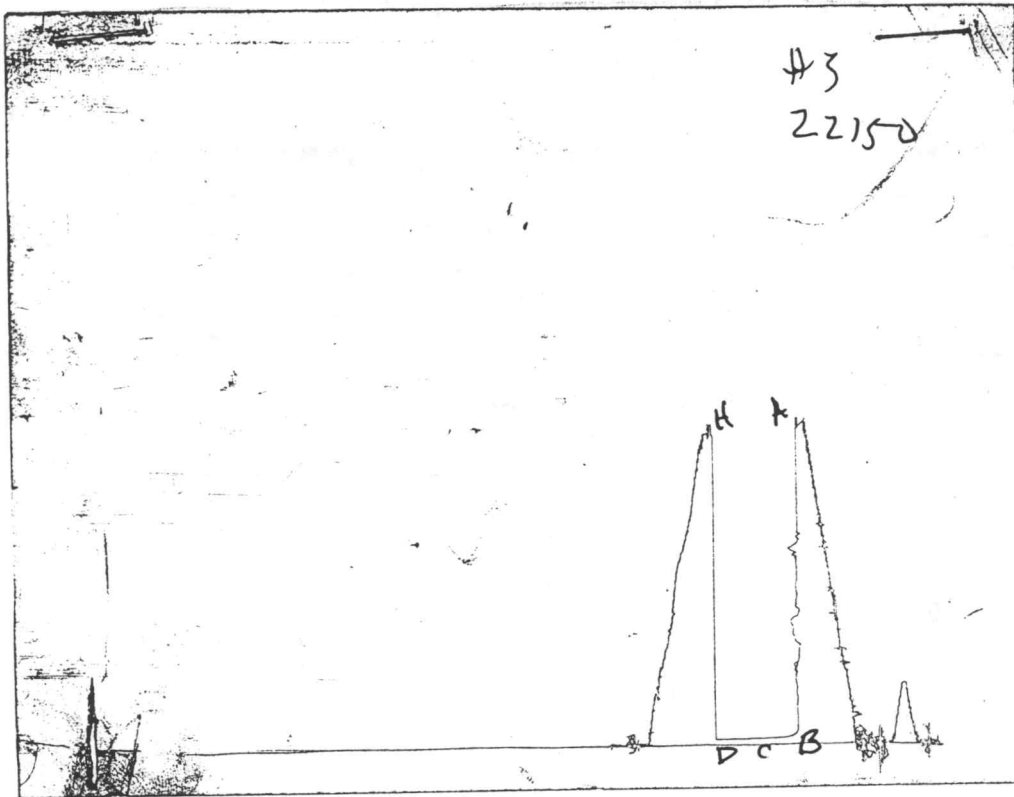
(F) Second Final Flow Pressure 0.0 PSI @ (depth) 3313 w / Clock No. 14074

(G) Final Shut-in Pressure 0.0 PSI Initial Opening 30 Final Flow 0

(H) Final Hydrostatic Mud 1604.3 PSI Initial Shut-in 30 Final Shut-in 0

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CHART PAGE



	FIELD READING	OFFICE READING
(A) INITIAL HYDROSTATIC MUD	1636	1639.7
(B) FIRST INITIAL FLOW PRESSURE	29	28.7
(C) FIRST FINAL FLOW PRESSURE	29	28.7
(D) INITIAL CLOSED-IN PRESSURE	29	28.7
(E) SECOND INITIAL FLOW PRESSURE	0	0
(F) SECOND FINAL FLOW PRESSURE	0	0
(G) FINAL CLOSED-IN PRESSURE	0	0
(H) FINAL HYDROSTATIC MUD	1606	1604.3

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Drill-Stem Test Data

Well Name #1 PAT HOLLAND Test No. 4 Date 8/16/94
Company RUSSELL OIL, INC. Zone ARBUCKLE
Address P.O. BOX 272 RUSSELL KS 67665 Elevation _____
Co. Rep./Geo. RANDY KILIAN Cont. SHIELDS DRLG Est. Ft. of Pay _____
Location: Sec. 28 Twp. 13S Rge. 14W Co. RUSSELL State KS

Interval Tested 3240-3260
Anchor Length 20
Top Packer Depth 3240
Bottom Packer Depth 3260-3265
Total Depth 3315

Drill Pipe Size 4.5" FH
Wt. Pipe I.D. - 2.7 Ft. Run 881
Drill Collar - 2.25 Ft. Run _____
Mud Wt. 9.3 lb/Gal.
Viscosity 46 Filtrate 13

Tool Open @ 1:08 P.M. Initial Blow WEAK 1/4" BLOW

Final Blow NONE TAKEN

Recovery - Total Feet 2

Flush Tool? NO

Rec. 2 Feet of MUD
Rec. _____ Feet of _____
Rec. _____ Feet of _____
Rec. _____ Feet of _____
Rec. _____ Feet of _____

BHT _____ °F Gravity _____ °API @ _____ °F Corrected Gravity _____ °API
RW _____ @ _____ °F Chlorides _____ ppm Recovery Chlorides _____ ppm System

(A) Initial Hydrostatic Mud 1674.1 PSI AK1 Recorder No. 22150 Range 3925

(B) First Initial Flow Pressure 37.5 PSI @ (depth) 3243 w / Clock No. 14074

(C) First Final Flow Pressure 37.5 PSI AK1 Recorder No. 10994 Range 4020

(D) Initial Shut-in Pressure 0.0 PSI @ (depth) 3256 w / Clock No. 23839

(E) Second Initial Flow Pressure 0.0 PSI AK1 Recorder No. 24174 Range 3050

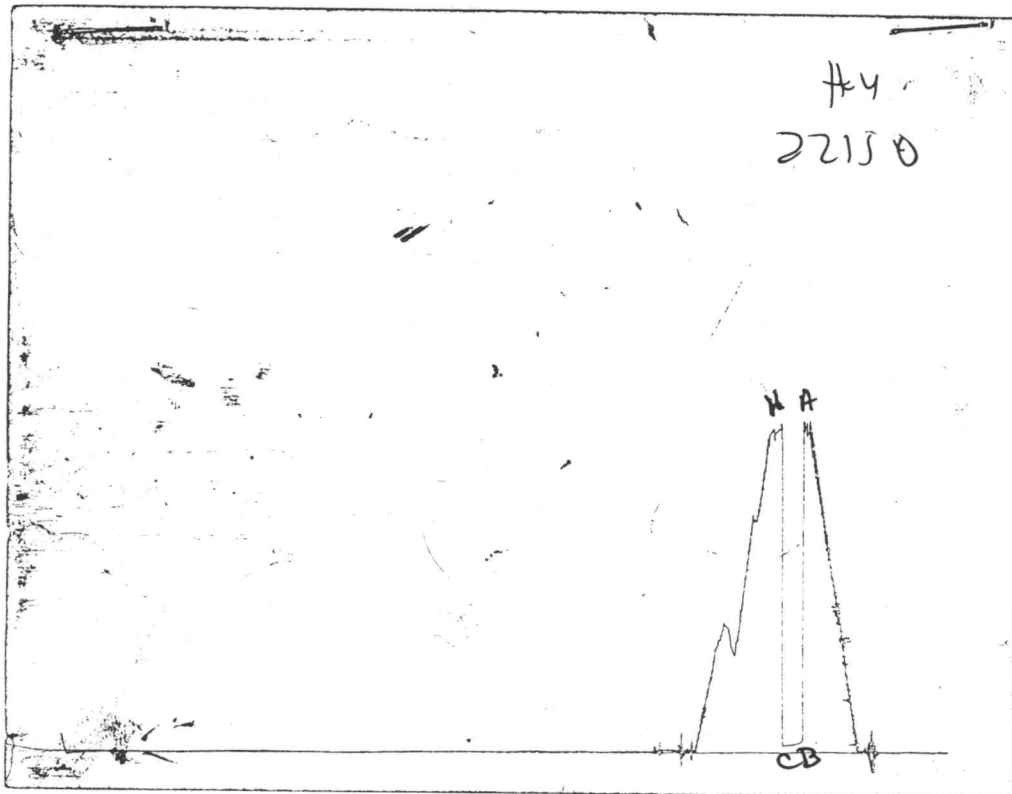
(F) Second Final Flow Pressure 0.0 PSI @ (depth) 3312 w / Clock No. 23935

(G) Final Shut-in Pressure 0.0 PSI Initial Opening 15 Final Flow 0

(H) Final Hydrostatic Mud 1644.6 PSI Initial Shut-in 0 Final Shut-in 0

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CHART PAGE



	FIELD READING	OFFICE READING
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(A) INITIAL HYDROSTATIC MUD	1675	1674.1
(B) FIRST INITIAL FLOW PRESSURE	29	37.5
(C) FIRST FINAL FLOW PRESSURE	29	37.5
(D) INITIAL CLOSED-IN PRESSURE	0	0
(E) SECOND INITIAL FLOW PRESSURE	0	0
(F) SECOND FINAL FLOW PRESSURE	0	0
(G) FINAL CLOSED-IN PRESSURE	0	0
(H) FINAL HYDROSTATIC MUD	1655	1644.6