

TRILOBITE TESTING, L.L.C.

P.O. Box 362 • Hays, Kansas 67601

KCC

JUL 5 1994

Drill-Stem Test Data

Well Name SCHNOOR #9 Test No. 1 Date 5/16/92
Company HALLWOOD PETROLEUM INC. Zone TOPEKA
Address 4582 S ULSTER ST PKWY #1700 DENVER CO Elevation 1723
Co. Rep./Geo. JIM MUSGROVE Cont. DUKE DRLG #1 Est. Ft. of Pay
Location: Sec. 31 Twp. 14S Rge. 13W Co. RUSSELL State KS

Interval Tested <u>2712-2760</u>	Drill Pipe Size <u>4.5 FH</u>
Anchor Length <u>48</u>	Wt. Pipe I.D. - 2.7 Ft. Run <u>631</u>
Top Packer Depth <u>2707</u>	Drill Collar - 2.25 Ft. Run <u> </u>
Bottom Packer Depth <u>2712</u>	Mud Wt. <u>8.8</u> lb/Gal.
Total Depth <u>2760</u>	Viscosity <u>40</u> Filtrate <u>10.4</u>

Tool Open @ 1:30 AM Initial Blow VERY WEAK BLOW FOR 30 MINUTES/1/2"

Final Blow VERY WEAK FOR 5 MINUTES

Recovery - Total Feet 30 Flush Tool? NO

Rec. <u>30</u>	Feet of <u>SLTLY GAS CUT MUD</u>
Rec. <u> </u>	Feet of <u> </u>
Rec. <u> </u>	Feet of <u> </u>
Rec. <u> </u>	Feet of <u> </u>
Rec. <u> </u>	Feet of <u> </u>

BHT 92 °F Gravity °API @ °F Corrected Gravity °API
RW @ °F Chlorides ppm Recovery Chlorides ppm System

(A) Initial Hydrostatic Mud 1396.5 PSI AK1 Recorder No. 7437 Range 4200

(B) First Initial Flow Pressure 11.4 PSI @ (depth) 2725 w / Clock No.

(C) First Final Flow Pressure 25.8 PSI AK1 Recorder No. 13754 Range 4000

(D) Initial Shut-in Pressure 970.4 PSI @ (depth) 2760 w / Clock No.

(E) Second Initial Flow Pressure 25.8 PSI AK1 Recorder No. Range

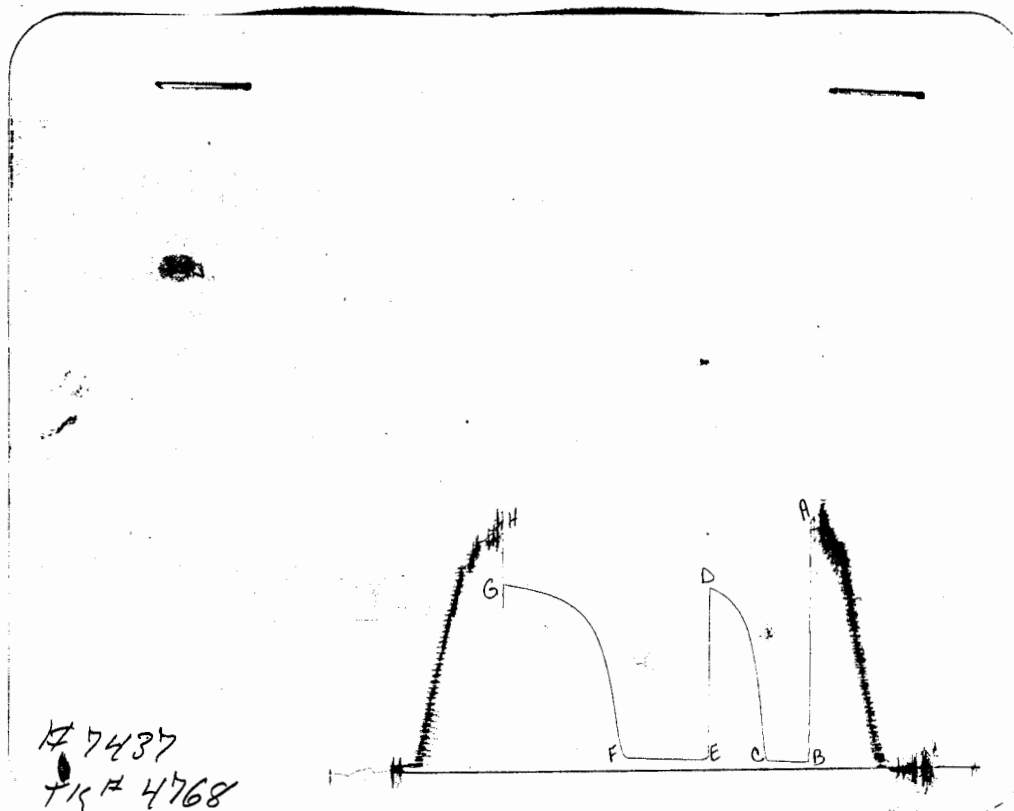
(F) Second Final Flow Pressure 33.4 PSI @ (depth) w / Clock No.

(G) Final Shut-in Pressure 984.7 PSI Initial Opening 30 Final Flow 60

(H) Final Hydrostatic Mud 1388.7 PSI Initial Shut-in 45 Final Shut-in 90

Our Representative HARRY SCHMIDT

CHART PAGE



This is an actual photograph of recorder chart

FIELD
READING

OFFICE
READING

(A) INITIAL HYDROSTATIC MUD	1386	1396.5
(B) FIRST INITIAL FLOW PRESSURE	10	11.4
(C) FIRST FINAL FLOW PRESSURE	20	25.8
(D) INITIAL CLOSED-IN PRESSURE	966	970.4
(E) SECOND INITIAL FLOW PRESSURE	20	25.8
(F) SECOND FINAL FLOW PRESSURE	30	33.4
(G) FINAL CLOSED-IN PRESSURE	986	984.7
(H) FINAL HYDROSTATIC MUD	1380	1388.7

TRILOBITE TESTING COMPANY L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Test Ticket

No 4768

Well Name & No. <u>SCHNOOR #9</u>	Test No. <u>ONE</u>	Date <u>5-16-92</u>
Company <u>HALLWOOD PET. INC.</u>	Zone Tested <u>FAIRBANK TOPICA</u>	
Address <u>4582 S. ULSTER ST. PILOT #700 DENVER CO. 80237</u>	Elevation <u>1723 G.H.</u>	
Co. Rep./Geo. <u>JIM MUSGROVE</u>	Cont. <u>DUKE</u>	Est. Ft. of Pay _____
Location: Sec. <u>31</u>	Twp. <u>14 S</u>	Rge. <u>13 W</u>
	Co. <u>RUSSELL</u>	State <u>KS</u>
No. of Copies <u>540</u>	Distribution Sheet _____	Yes ☐ No ☒ Turnkey _____
		Yes ☐ No ☒ Evaluation _____

Interval Tested <u>2712 TO 2760</u>	Drill Pipe Size <u>4 1/2" F.H.</u>
Anchor Length <u>48'</u>	Top Choke — 1" _____ Bottom Choke — 3/4" _____
Top Packer Depth <u>2707</u>	Hole Size — 7 7/8" _____ Rubber Size — 6 3/4" _____
Bottom Packer Depth <u>2712</u>	Wt. Pipe I.D. — 2.7 Ft. Run <u>631</u>
Total Depth <u>2760</u>	Drill Collar — 2.25 Ft. Run _____
Mud Wt. <u>8.8</u> lb/gal.	Viscosity <u>40</u> Filtrate <u>104</u>
Tool Open @ <u>1:30 A</u>	Initial Blow <u>VERY WEAK FOR 30 MIN.</u>
Final Blow <u>VERY WEAK FOR 5 MIN.</u>	

KGC
JUL 5 1994

Recovery — Total Feet <u>30'</u>	Feet of Gas in Pipe _____	Flush Tool? <u>NO</u>
Rec. <u>30'</u> Feet Of <u>SLIGHT GAS CUT MUD</u>	%gas _____ %oil _____ %water _____ %mud _____	
Rec. _____ Feet Of _____	%gas _____ %oil _____ %water _____ %mud _____	
Rec. _____ Feet Of _____	%gas _____ %oil _____ %water _____ %mud _____	
Rec. _____ Feet Of _____	%gas _____ %oil _____ %water _____ %mud _____	
Rec. _____ Feet Of _____	%gas _____ %oil _____ %water _____ %mud _____	
BHT <u>92</u> °F Gravity _____	°API @ _____ °F Corrected Gravity _____	°API _____
RW _____ @ _____ °F Chlorides _____	ppm Recovery _____ Chlorides _____	ppm System _____
(A) Initial Hydrostatic Mud <u>1386</u>	PSI AK1 Recorder No. <u>7437</u>	Range <u>4200</u>
(B) First Initial Flow Pressure <u>10</u>	PSI @ (depth) <u>2725</u>	w/Clock No. _____
(C) First Final Flow Pressure <u>20</u>	PSI AK1 Recorder No. <u>13754</u>	Range <u>4000</u>
(D) Initial Shut-in Pressure <u>966</u>	PSI @ (depth) <u>2760</u>	w/Clock No. _____
(E) Second Initial Flow Pressure <u>20</u>	PSI AK1 Recorder No. _____	Range _____
(F) Second Final Flow Pressure <u>30</u>	PSI @ (depth) _____	w/Clock No. _____
(G) Final Shut-in Pressure <u>986</u>	PSI Initial Opening <u>30</u>	Test <u>550.00</u>
(H) Final Hydrostatic Mud <u>1380</u>	PSI Initial Shut-in <u>45</u>	Jars _____

TRILOBITE TESTING COMPANY SHALL NOT BE LIABLE FOR DAMAGE OF ANY KIND OF THE PROPERTY OR PERSONNEL OF THE ONE FOR WHOM A TEST IS MADE, OR FOR ANY LOSS SUFFERED OR SUBSTAINED, DIRECTLY OR INDIRECTLY, THROUGH THE USE OF ITS EQUIPMENT, OR ITS STATEMENTS OR OPINION CONCERNING THE RESULTS OF ANY TEST. TOOLS LOST OR DAMAGED IN THE HOLE SHALL BE PAID FOR AT COST BY THE PARTY FOR WHOM THE TEST IS MADE.

Final Flow <u>60</u>	Safety Joint _____
Final Shut-in <u>90</u>	Straddle _____
	Circ. Sub _____
	Sampler _____
	Extra Packer _____
	Other _____
	TOTAL PRICE \$ <u>550.00</u>

Approved By _____

Our Representative [Signature]

TRILOBITE TESTING, L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Drill-Stem Test Data

Well Name SCHNOOR #9 Test No. 2 Date 5/16/92
Company HALLWOOD PETROLEUM INC. Zone DOUGLAS SAND
Address 4582 S ULSTER ST PKWY #1700 DENVER CO Elevation 1723
Co. Rep./Geo. JIM MUSGROVE Cont. DUKE DRLG #1 Est. Ft. of Pay _____
Location: Sec. 31 Twp. 14S Rge. 13W Co. RUSSELL State KS

Interval Tested 2822-2870 Drill Pipe Size 4.5 FH
Anchor Length 48 Wt. Pipe I.D. - 2.7 Ft. Run 631
Top Packer Depth 2817 Drill Collar - 2.25 Ft. Run _____
Bottom Packer Depth 2822 Mud Wt. 9.2 lb/Gal.
Total Depth 2870 Viscosity 52 Filtrate 10.4

Tool Open @ 4:14 PM Initial Blow WEAK-DIED IN 20 MINUTES

Final Blow NO BLOW

Recovery - Total Feet 15 Flush Tool? NO

Rec. 15 Feet of DRILLING MUD
Rec. _____ Feet of _____
Rec. _____ Feet of _____
Rec. _____ Feet of _____
Rec. _____ Feet of _____

BHT 101 °F Gravity _____ °API @ _____ °F Corrected Gravity _____ °API
RW _____ @ _____ °F Chlorides _____ ppm Recovery Chlorides 8000 ppm System

(A) Initial Hydrostatic Mud 1396.5 PSI AK1 Recorder No. 7437 Range 4200

(B) First Initial Flow Pressure 52.6 PSI @ (depth) 2826 w / Clock No. _____

(C) First Final Flow Pressure 52.6 PSI AK1 Recorder No. 13754 Range 4000

(D) Initial Shut-in Pressure 81.4 PSI @ (depth) 2866 w / Clock No. _____

(E) Second Initial Flow Pressure 52.6 PSI AK1 Recorder No. _____ Range _____

(F) Second Final Flow Pressure 52.6 PSI @ (depth) _____ w / Clock No. _____

(G) Final Shut-in Pressure 90.7 PSI Initial Opening 30 Final Flow 30

(H) Final Hydrostatic Mud 1340.2 PSI Initial Shut-in 45 Final Shut-in 60

Our Representative DAN BANGLE

A hand-drawn sketch of a geological profile. A horizontal line represents the ground surface. Below it, a profile is drawn with points labeled A, B, C, D, E, F, G, and H. Point A is on the left, connected to B by a vertical line. From B, the profile goes down to C, then up to D, then down to E, then up to F, then down to G, and finally up to H. A vertical line is drawn from point D to the ground surface. The area between the ground surface and the profile is shaded with diagonal lines. The area between the profile and the vertical line is also shaded with diagonal lines. The area between the vertical line and the ground surface is shaded with diagonal lines. The area between the ground surface and the profile is shaded with diagonal lines.

This is an actual photograph of recorder chart

	FIELD READING	OFFICE READING
(A) INITIAL HYDROSTATIC MUD	1386	1396.5
(B) FIRST INITIAL FLOW PRESSURE	49	52.6
(C) FIRST FINAL FLOW PRESSURE	49	52.6
(D) INITIAL CLOSED-IN PRESSURE	78	81.4
(E) SECOND INITIAL FLOW PRESSURE	49	52.6
(F) SECOND FINAL FLOW PRESSURE	49	52.6
(G) FINAL CLOSED-IN PRESSURE	88	90.7
(H) FINAL HYDROSTATIC MUD	1336	1340.2

TRILOBITE TESTING COMPANY L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Test Ticket

No 4769

Well Name & No. <u>Schnoor #9</u>	Test No. <u>2</u>	Date <u>5-16-92</u>
Company <u>Hallwood Petro.</u>	Zone Tested <u>Douglas Sand</u>	
Address _____	Elevation <u>1728 K.B.</u>	
Co. Rep./Geo. <u>Jim Musgrove</u>	Cont. <u>Duke #1</u>	Est. Ft. of Pay _____
Location: Sec. <u>31</u>	Twp. <u>14</u>	Rge. <u>13</u> Co. <u>Russell</u> State <u>Ks.</u>
No. of Copies _____	Distribution Sheet _____	Yes _____ No _____ Turnkey _____ Yes _____ No _____ Evaluation _____

Interval Tested 2822-2870 Drill Pipe Size 4.5 FH
 Anchor Length 48 Top Choke — 1" Bottom Choke — 3/4"
 Top Packer Depth 2817 Hole Size — 77/8" Rubber Size — 63/4"
 Bottom Packer Depth 2822 Wt. Pipe I.D. — 2.7 Ft. Run 631
 Total Depth 2870 Drill Collar — 2.25 Ft. Run _____
 Mud Wt. 9.2 lb/gal. Viscosity 52 Filtrate 10.4
 Tool Open @ 4:14 P.M. Initial Blow Weak - Died in 20 min.

Final Blow No blow

Recovery — Total Feet	Feet of Gas in Pipe	Flush Tool?
<u>15</u>		☒
Rec. <u>15</u> Feet Of <u>D.M.</u>	%gas	%oil
Rec. _____ Feet Of _____	%gas	%oil
Rec. _____ Feet Of _____	%gas	%oil
Rec. _____ Feet Of _____	%gas	%oil
Rec. _____ Feet Of _____	%gas	%oil

BHT 101 °F Gravity _____ °API @ _____ °F Corrected Gravity _____ °API

RW _____ @ _____ °F Chlorides _____ ppm Recovery Chlorides 8,000 ppm System

(A) Initial Hydrostatic Mud <u>1386</u>	PSI	AK1 Recorder No. <u>7437</u>	Range <u>4200</u>
(B) First Initial Flow Pressure <u>49</u>	PSI	@ (depth) <u>2826</u>	w/Clock No. _____
(C) First Final Flow Pressure <u>49</u>	PSI	AK1 Recorder No. <u>13754</u>	Range <u>4000</u>
(D) Initial Shut-In Pressure <u>78</u>	PSI	@ (depth) <u>2866</u>	w/Clock No. _____
(E) Second Initial Flow Pressure <u>49</u>	PSI	AK1 Recorder No. _____	Range _____
(F) Second Final Flow Pressure <u>49</u>	PSI	@ (depth) _____	w/Clock No. _____
(G) Final Shut-In Pressure <u>88</u>	PSI	Initial Opening <u>30</u>	Test _____
(H) Final Hydrostatic Mud <u>1336</u>	PSI	Initial Shut-In <u>45</u>	Jars _____

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Final Flow 30 Safety Joint _____
 Final Shut-In 60 Straddle _____
 Circ. Sub _____
 Sampler _____
 Extra Packer _____
 Other _____

Approved By _____

Our Representative [Signature]

TRILOBITE TESTING, L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Drill-Stem Test Data

Well Name SCHNOOR #9 Test No. 3 Date 5/17/92
Company HALLWOOD PETROLEUM INC. Zone LKC - "C"
Address 4582 S ULSTER ST PKWY #1700 DENVER CO Elevation 1728
Co. Rep./Geo. JIM MUSGROVE Cont. DUKE DRLG #1 Est. Ft. of Pay _____
Location: Sec. 31 Twp. 14S Rge. 13W Co. RUSSELL State KS

Interval Tested <u>2879-2914</u>	Drill Pipe Size <u>4.5 FH</u>
Anchor Length <u>35</u>	Wt. Pipe I.D. - 2.7 Ft. Run <u>631</u>
Top Packer Depth <u>2874</u>	Drill Collar - 2.25 Ft. Run _____
Bottom Packer Depth <u>2879</u>	Mud Wt. <u>9.3</u> lb/Gal.
Total Depth <u>2914</u>	Viscosity <u>46</u> Filtrate <u>10.4</u>

Tool Open @ 2:15 AM Initial Blow WEAK-BUILDING TO 1"

Final Blow WEAK-STEADY SURFACE BLOW

Recovery - Total Feet 80 Flush Tool? NO

Rec. <u>80</u>	Feet of <u>WATER W/ SHOW OF OIL ON TOP</u>
Rec. _____	Feet of _____
Rec. _____	Feet of _____
Rec. _____	Feet of _____
Rec. _____	Feet of _____

BHT 103 °F Gravity _____ °API @ _____ °F Corrected Gravity _____ °API
RW 0.06 @ 82 °F Chlorides 34000 ppm Recovery Chlorides 8000 ppm System

(A) Initial Hydrostatic Mud 1544.6 PSI AK1 Recorder No. 7437 Range 4200

(B) First Initial Flow Pressure 8.7 PSI @ (depth) 2883 w / Clock No. 8179

(C) First Final Flow Pressure 22.3 PSI AK1 Recorder No. 13754 Range 4000

(D) Initial Shut-in Pressure 31.5 PSI @ (depth) 2910 w / Clock No. 31152

(E) Second Initial Flow Pressure 40.6 PSI AK1 Recorder No. _____ Range _____

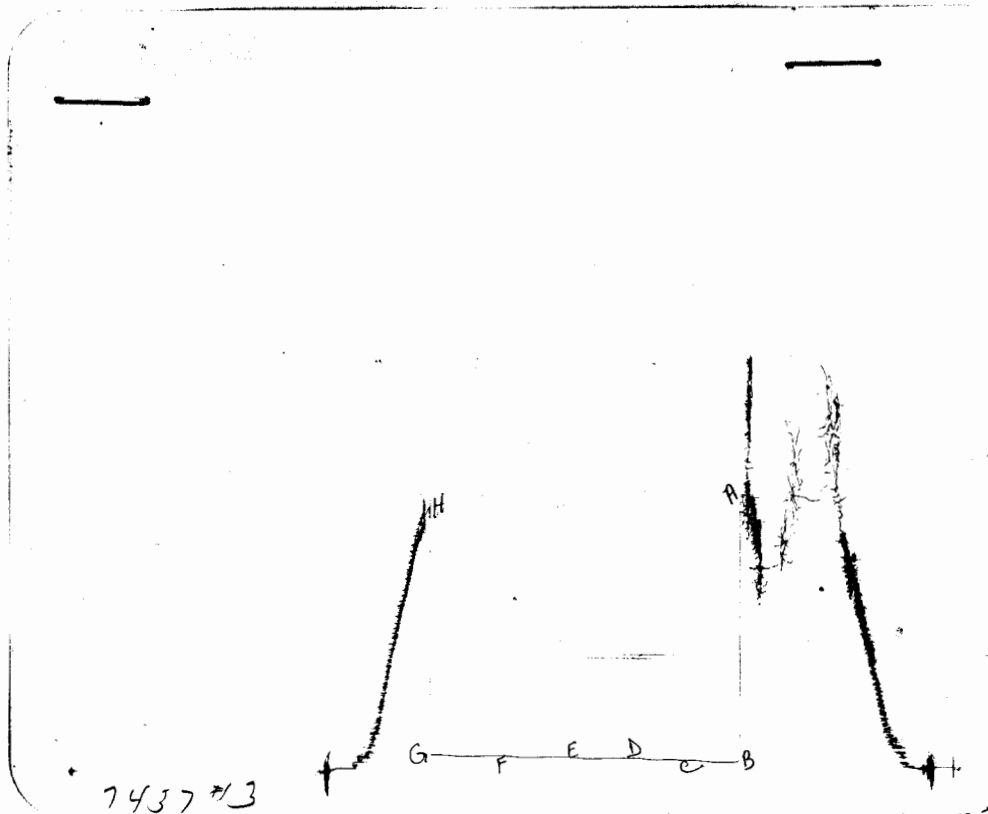
(F) Second Final Flow Pressure 40.6 PSI @ (depth) _____ w / Clock No. _____

(G) Final Shut-in Pressure 52.6 PSI Initial Opening 30 Final Flow 60

(H) Final Hydrostatic Mud 1490.7 PSI Initial Shut-in 45 Final Shut-in 90

Our Representative DAN BANGLE

CHART PAGE



This is an actual photograph of recorder chart

FIELD
READING

OFFICE
READING

(A) INITIAL HYDROSTATIC MUD	1536	1544.6
(B) FIRST INITIAL FLOW PRESSURE	9	8.7
(C) FIRST FINAL FLOW PRESSURE	19	22.3
(D) INITIAL CLOSED-IN PRESSURE	29	31.5
(E) SECOND INITIAL FLOW PRESSURE	39	40.6
(F) SECOND FINAL FLOW PRESSURE	39	40.6
(G) FINAL CLOSED-IN PRESSURE	49	52.6
(H) FINAL HYDROSTATIC MUD	1486	1490.7

TRILOBITE TESTING COMPANY L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Test Ticket

No 4770

Well Name & No. <u>Schnoor #9</u>	Test No. <u>3</u>	Date <u>5-17-92</u>
Company <u>Hallwood Petro.</u>	Zone Tested <u>C</u>	<u>L.K.C.</u>
Address _____	Elevation <u>1728 K.B.</u>	
Co. Rep./Geo. <u>Jim Musgrove</u>	Cont. <u>Duke #1</u>	Est. Ft. of Pay _____
Location: Sec. <u>31</u>	Twp. <u>14</u>	Rge. <u>13</u>
Co. <u>Russell</u>	State <u>Ks.</u>	
No. of Copies _____	Distribution Sheet _____	Yes _____ No _____ Turnkey _____ Yes _____ No _____ Evaluation _____

Interval Tested <u>2879 - 2914</u>	Drill Pipe Size <u>4.5 FH</u>
Anchor Length <u>35'</u>	Top Choke — 1" _____ Bottom Choke — 3/4" _____
Top Packer Depth <u>2874</u>	Hole Size — 7 7/8" _____ Rubber Size — 6 3/4" _____
Bottom Packer Depth <u>2879</u>	Wt. Pipe I.D. — 2.7 Ft. Run <u>631</u>
Total Depth <u>2914</u>	Drill Collar — 2.25 Ft. Run _____
Mud Wt. <u>9.3</u> lb / gal.	Viscosity <u>46</u> Filtrate <u>10.4</u>
Tool Open @ <u>2:15 A.M.</u> Initial Blow <u>Weak - building to 1"</u>	
Final Blow <u>Weak - steady surface blow.</u>	

Recovery — Total Feet <u>80</u>	Feet of Gas in Pipe _____	Flush Tool? _____
Rec. <u>80</u> Feet Of <u>WTR w/show oil on top</u>	%gas _____ %oil _____ %water _____ %mud _____	
Rec. _____ Feet Of _____	%gas _____ %oil _____ %water _____ %mud _____	
Rec. _____ Feet Of _____	%gas _____ %oil _____ %water _____ %mud _____	
Rec. _____ Feet Of _____	%gas _____ %oil _____ %water _____ %mud _____	
Rec. _____ Feet Of _____	%gas _____ %oil _____ %water _____ %mud _____	

BHT <u>10.3</u> °F Gravity _____ °API @ _____ °F Corrected Gravity _____ °API
RW <u>.06 @ 82</u> °F Chlorides <u>34,000</u> ppm Recovery Chlorides <u>8,000</u> ppm System
(A) Initial Hydrostatic Mud <u>1536</u> PSI AK1 Recorder No. <u>7437</u> Range <u>4200</u>
(B) First Initial Flow Pressure <u>9</u> PSI @ (depth) <u>2883</u> w/Clock No. <u>8179</u>
(C) First Final Flow Pressure <u>19</u> PSI AK1 Recorder No. <u>13754</u> Range <u>4000</u>
(D) Initial Shut-In Pressure <u>29</u> PSI @ (depth) <u>2910</u> w/Clock No. <u>31152</u>
(E) Second Initial Flow Pressure <u>39</u> PSI AK1 Recorder No. _____ Range _____
(F) Second Final Flow Pressure <u>39</u> PSI @ (depth) _____ w/Clock No. _____
(G) Final Shut-In Pressure <u>49</u> PSI Initial Opening <u>30</u> Test _____
(H) Final Hydrostatic Mud <u>1486</u> PSI Initial Shut-In <u>45</u> Jars _____

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Final Flow <u>60</u>	Safety Joint _____
Final Shut-In <u>90</u>	Straddle _____
	Circ. Sub _____
	Sampler _____
	Extra Packer _____
	Other _____
	TOTAL PRICE \$ _____

Approved By [Signature]
Our Representative [Signature]

TRILOBITE TESTING, L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Drill-Stem Test Data

Well Name SCHNOOR #9 Test No. 4 Date 5/17/92
Company HALLWOOD PETROLEUM INC. Zone LKC-"I-J"
Address 4582 S ULSTER ST PKWY #1700 DENVER CO Elevation 1728
Co. Rep./Geo. JIM MUSGROVE Cont. DUKE DRLG #1 Est. Ft. of Pay _____
Location: Sec. 31 Twp. 14S Rge. 13W Co. RUSSELL State KS

Interval Tested 3021-3074 Drill Pipe Size 4.5 FH
Anchor Length 53 Wt. Pipe I.D. - 2.7 Ft. Run 631
Top Packer Depth 3016 Drill Collar - 2.25 Ft. Run _____
Bottom Packer Depth 3021 Mud Wt. 9.4 lb/Gal.
Total Depth 3074 Viscosity 47 Filtrate 9.6

Tool Open @ 11:37 PM Initial Blow WEAK-DIED IN 12 MINUTES

Final Blow NO BLOW

Recovery - Total Feet 5 Flush Tool? NO

Rec. 5 Feet of DRILLING MUD
Rec. _____ Feet of _____
Rec. _____ Feet of _____
Rec. _____ Feet of _____
Rec. _____ Feet of _____

BHT 104 °F Gravity _____ °API @ _____ °F Corrected Gravity _____ °API
RW _____ @ _____ °F Chlorides _____ ppm Recovery Chlorides 8000 ppm System

(A) Initial Hydrostatic Mud 1630.9 PSI AK1 Recorder No. 7437 Range 4200

(B) First Initial Flow Pressure 31.5 PSI @ (depth) 3025 w / Clock No. 31152

(C) First Final Flow Pressure 31.5 PSI AK1 Recorder No. 13754 Range 4000

(D) Initial Shut-in Pressure 52.6 PSI @ (depth) 3070 w / Clock No. 26199

(E) Second Initial Flow Pressure 31.5 PSI AK1 Recorder No. _____ Range _____

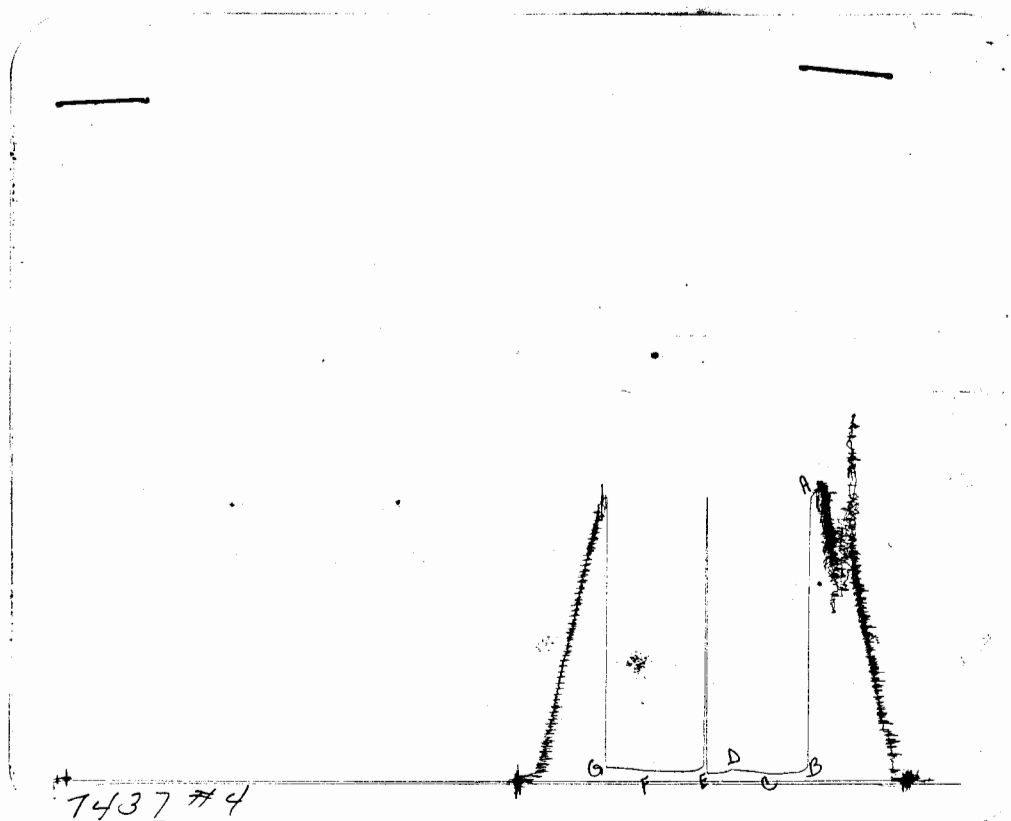
(F) Second Final Flow Pressure 31.5 PSI @ (depth) _____ w / Clock No. _____

(G) Final Shut-in Pressure 52.6 PSI Initial Opening 30 Final Flow 30

(H) Final Hydrostatic Mud 1580.4 PSI Initial Shut-in 30 Final Shut-in 60

Our Representative DAN BANGLE

CHART PAGE



This is an actual photograph of recorder chart

	FIELD READING	OFFICE READING
(A) INITIAL HYDROSTATIC MUD	1626	1630.9
(B) FIRST INITIAL FLOW PRESSURE	29	31.5
(C) FIRST FINAL FLOW PRESSURE	29	31.5
(D) INITIAL CLOSED-IN PRESSURE	49	52.6
(E) SECOND INITIAL FLOW PRESSURE	29	31.5
(F) SECOND FINAL FLOW PRESSURE	29	31.5
(G) FINAL CLOSED-IN PRESSURE	49	52.6
(H) FINAL HYDROSTATIC MUD	1576	1580.4

TRILOBITE TESTING COMPANY L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Test Ticket

No 4771

Well Name & No. <u>Schnoor #9</u>	Test No. <u>4</u>	Date <u>5-17-92</u>
Company <u>Hallwood Petro.</u>	Zone Tested <u>F-T</u>	<u>L.K.C.</u>
Address _____	Elevation <u>1728 K.B</u>	
Co. Rep./Geo. <u>Jim Musgrove</u>	Cont. <u>Duke #1</u>	Est. Ft. of Pay _____
Location: Sec. <u>31</u>	Twp. <u>14</u>	Rge. <u>13</u> Co. <u>Russell</u> State <u>Ks.</u>
No. of Copies _____	Distribution Sheet _____	Yes _____ No _____ Turnkey _____ Yes _____ No _____ Evaluation _____

Interval Tested 3021-3074 Drill Pipe Size 4.5 FH
 Anchor Length 53 Top Choke — 1" Bottom Choke — 3/4"
 Top Packer Depth 3016 Hole Size — 7 7/8" Rubber Size — 6 3/4"
 Bottom Packer Depth 3021 Wt. Pipe I.D. — 2.7 Ft. Run 6.31
 Total Depth 3074 Drill Collar — 2.25 Ft. Run _____
 Mud Wt. 9.4 lb/gal. Viscosity 47 Filtrate 9.6
 Tool Open @ 11:37 P.M. Initial Blow Weak - Died in 12 min.

Final Blow No blow

Recovery — Total Feet 5 Feet of Gas In Pipe _____ Flush Tool? ☒

Rec.	Feet Of	%gas	%oil	%water	%mud
<u>5</u>	<u>D.M.</u>				

BHT 104 °F Gravity _____ °API @ _____ °F Corrected Gravity _____ °API

RW _____ @ _____ °F Chlorides _____ ppm Recovery Chlorides 8,000 ppm System

(A) Initial Hydrostatic Mud 1626 PSI AK1 Recorder No. 7437 Range 4200

(B) First Initial Flow Pressure 29 PSI @ (depth) 3025 w/Clock No. 31152

(C) First Final Flow Pressure 29 PSI AK1 Recorder No. 13754 Range 4000

(D) Initial Shut-In Pressure 49 PSI @ (depth) 3070 w/Clock No. 26199

(E) Second Initial Flow Pressure 29 PSI AK1 Recorder No. _____ Range _____

(F) Second Final Flow Pressure 29 PSI @ (depth) _____ w/Clock No. _____

(G) Final Shut-In Pressure 49 PSI Initial Opening 30 Test _____

(H) Final Hydrostatic Mud 1576 PSI Initial Shut-In 30 Jars _____

TRILOBITE TESTING COMPANY SHALL NOT BE LIABLE FOR DAMAGE OF ANY KIND OF THE PROPERTY OR PERSONNEL OF THE ONE FOR WHOM A TEST IS MADE, OR FOR ANY LOSS SUFFERED OR SUBSTAINED, DIRECTLY OR INDIRECTLY, THROUGH THE USE OF ITS EQUIPMENT, OR ITS STATEMENTS OR OPINION CONCERNING THE RESULTS OF ANY TEST. TOOLS LOST OR DAMAGED IN THE HOLE SHALL BE PAID FOR AT COST BY THE PARTY FOR WHOM THE TEST IS MADE.

Final Flow 30 Safety Joint _____

Final Shut-In 60 Straddle _____

Circ. Sub _____

Sampler _____

Extra Packer _____

Other _____

TOTAL PRICE \$ _____

Approved By _____

Our Representative _____

TRILOBITE TESTING, L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Drill-Stem Test Data

Well Name SCHNOOR #9 Test No. 5 Date 5/18/92
Company HALLWOOD PETROLEUM INC. Zone GORHAM SAND
Address 4582 S ULSTER ST PKWY #1700 DENVER CO Elevation 1728
Co. Rep./Geo. JIM MUSGROVE Cont. DUKE DRLG #1 Est. Ft. of Pay _____
Location: Sec. 31 Twp. 14S Rge. 13W Co. RUSSELL State KS

Interval Tested 3094-3144 Drill Pipe Size 4.5 FH
Anchor Length 50 Wt. Pipe I.D. - 2.7 Ft. Run 631
Top Packer Depth 3089 Drill Collar - 2.25 Ft. Run _____
Bottom Packer Depth 3094 Mud Wt. 9.5 lb/Gal.
Total Depth 3144 Viscosity 49 Filtrate 10.8

Tool Open @ 2:10 PM Initial Blow STRONG-BOTTOM OF BUCKET IN 30 SECONDS

Final Blow STRONG-BOTTOM OF BUCKET IN 30 SECONDS

Recovery - Total Feet 2418 Flush Tool? NO

Rec. 2418 Feet of GASSY SALT WATER-10%GAS/90%WTR
Rec. _____ Feet of _____
Rec. _____ Feet of _____
Rec. _____ Feet of _____
Rec. _____ Feet of _____

BHT 111 °F Gravity _____ °API @ _____ °F Corrected Gravity _____ °API
RW 0.33 @ 74.5 °F Chlorides 28000 ppm Recovery Chlorides 12000 ppm System

(A) Initial Hydrostatic Mud 1699.3 PSI AK1 Recorder No. 7437 Range 4200

(B) First Initial Flow Pressure 241.5 PSI @ (depth) 3098 w / Clock No. 31152

(C) First Final Flow Pressure 839.6 PSI AK1 Recorder No. 13754 Range 4000

(D) Initial Shut-in Pressure 1033.5 PSI @ (depth) 3140 w / Clock No. 26199

(E) Second Initial Flow Pressure 884.5 PSI AK1 Recorder No. _____ Range _____

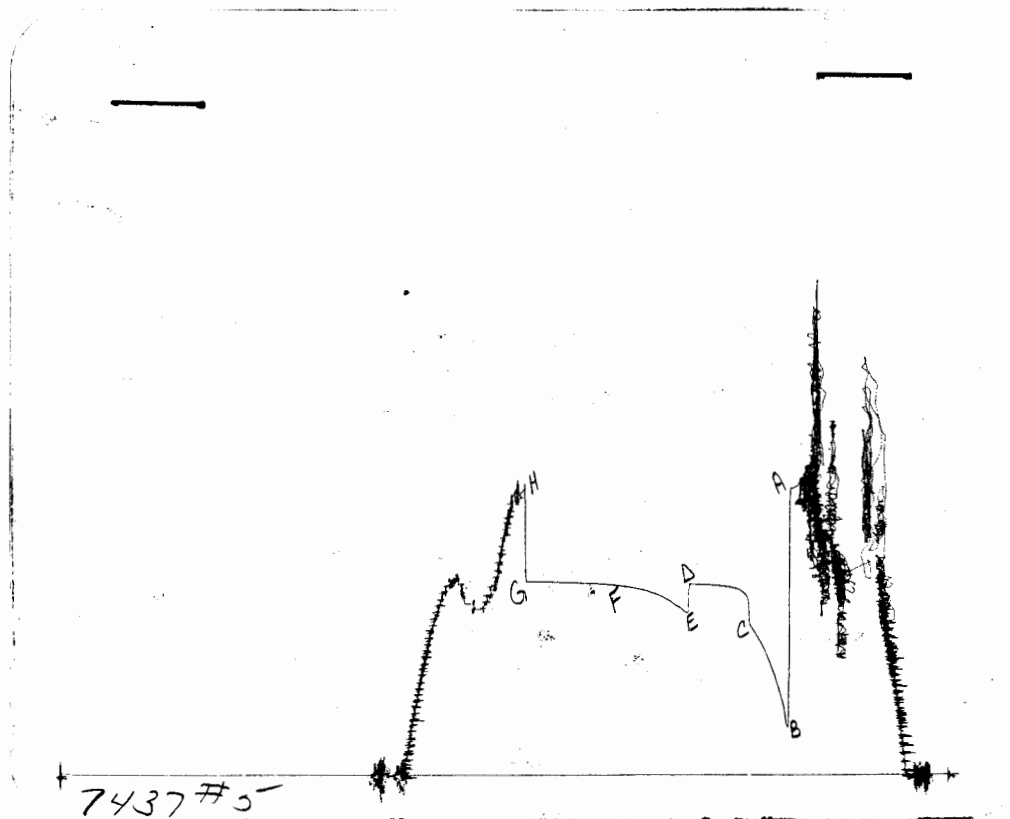
(F) Second Final Flow Pressure 1030.9 PSI @ (depth) _____ w / Clock No. _____

(G) Final Shut-in Pressure 1030.9 PSI Initial Opening 30 Final Flow 30

(H) Final Hydrostatic Mud 1640.8 PSI Initial Shut-in 45 Final Shut-in 90

Our Representative DAN BANGLE

CHART PAGE



This is an actual photograph of recorder chart

FIELD
READING

OFFICE
READING

(A) INITIAL HYDROSTATIC MUD	1686	1699.3
(B) FIRST INITIAL FLOW PRESSURE	236	241.5
(C) FIRST FINAL FLOW PRESSURE	837	839.6
(D) INITIAL CLOSED-IN PRESSURE	1036	1033.5
(E) SECOND INITIAL FLOW PRESSURE	887	884.5
(F) SECOND FINAL FLOW PRESSURE	1036	1030.9
(G) FINAL CLOSED-IN PRESSURE	1036	1030.9
(H) FINAL HYDROSTATIC MUD	1636	1640.8

TRILOBITE TESTING COMPANY L.C.

P.O. Box 362 • Hays, Kansas 67601

Test Ticket

No 4772

Well Name & No. <u>Schnoor #9</u>	Test No. <u>5</u>	Date <u>5-18-92</u>
Company <u>Hallwood Petro.</u>	Zone Tested <u>Gorham Sd</u>	
Address _____	Elevation <u>1728 K.B.</u>	
Co. Rep./Geo. <u>Tim Musgrove</u>	Cont. <u>Duke #1</u>	Est. Ft. of Pay _____
Location: Sec. <u>31</u> Twp. <u>14</u> Rge. <u>13</u>	Co. <u>Russell</u>	State <u>Ks.</u>
No. of Copies _____	Distribution Sheet _____	Yes _____ No _____ Evaluation _____

Interval Tested: <u>3094-3144</u>	Drill Pipe Size <u>4.5 FH</u>
Anchor Length <u>50</u>	Top Choke — 1" _____ Bottom Choke — ¾" _____
Top Packer Depth <u>3089</u>	Hole Size — 77/8" _____ Rubber Size — 63/4" _____
Bottom Packer Depth <u>3094</u>	Wt. Pipe I.D. — 2.7 Ft. Run <u>631</u>
Total Depth <u>3144</u>	Drill Collar — 2.25 Ft. Run _____
Mud Wt. <u>9.5</u> lb/gal.	Viscosity <u>49</u> Filtrate <u>10.8</u>
Tool Open @ <u>2:10 P.M.</u> Initial Blow <u>Strong - B.O.B in 30 sec.</u>	

Final Blow Strong - B.O.B in 30 sec.

Recovery — Total Feet <u>2418</u>	Feet of Gas In Pipe _____	Flush Tool? _____
Rec. <u>2418</u> Feet Of <u>Gsy S.W.</u>	<u>10</u> %gas	%oil <u>90</u> %water _____ %mud _____
Rec. _____ Feet Of _____	%gas _____	%oil _____ %water _____ %mud _____
Rec. _____ Feet Of _____	%gas _____	%oil _____ %water _____ %mud _____
Rec. _____ Feet Of _____	%gas _____	%oil _____ %water _____ %mud _____
Rec. _____ Feet Of _____	%gas _____	%oil _____ %water _____ %mud _____

BHT 111 °F Gravity _____ °API @ _____ °F Corrected Gravity _____ °API

RW 133 @ 74.5 °F Chlorides 28,000 ppm Recovery Chlorides 12,000 ppm System

(A) Initial Hydrostatic Mud <u>1686</u>	PSI	AK1 Recorder No. <u>7437</u>	Range <u>4200</u>
(B) First Initial Flow Pressure <u>236</u>	PSI	@ (depth) <u>3098</u>	w/Clock No. <u>31152</u>
(C) First Final Flow Pressure <u>837</u>	PSI	AK1 Recorder No. <u>13754</u>	Range <u>4000</u>
(D) Initial Shut-In Pressure <u>1036</u>	PSI	@ (depth) <u>3140</u>	w/Clock No. <u>26199</u>
(E) Second Initial Flow Pressure <u>887</u>	PSI	AK1 Recorder No. _____	Range _____
(F) Second Final Flow Pressure <u>1036</u>	PSI	@ (depth) _____	w/Clock No. _____
(G) Final Shut-In Pressure <u>1036</u>	PSI	Initial Opening <u>30</u>	Test _____
(H) Final Hydrostatic Mud <u>1636</u>	PSI	Initial Shut-In <u>45</u>	Jars _____

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Final Flow 30 Safety Joint _____

Final Shut-In 90 Straddle _____

Circ. Sub X

Sampler _____

Extra Packer _____

Other _____

TOTAL PRICE \$ 585.00

Approved By _____

Our Representative [Signature]