

TRILOBITE TESTING, L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Drill-Stem Test Data

Well Name WHIPPLE "H" #1 Test No. 1 Date 2/10/93
Company PICKRELL DRILLING COMPANY, INC. Zone MARMATON
Address 110 N MARKET #205 WICHITA KS 67202 Elevation 2542
Co. Rep./Geo. BILL KLAVER Cont. PICKRELL DRLG RIG #10 Est. Ft. of Pay _____
Location: Sec. 6 Twp. 18S Rge. 26W Co. NESS State KS

Interval Tested 4274-4300
Anchor Length 26
Top Packer Depth 4269
Bottom Packer Depth 4274
Total Depth 4300

Drill Pipe Size 4.5 XH
Wt. Pipe I.D. - 2.7 Ft. Run _____
Drill Collar - 2.25 Ft. Run 177
Mud Wt. 9.5 lb/Gal.
Viscosity 47 Filtrate 9.6

Tool Open @ 2:13 AM Initial Blow 1/8" BLOW BUILDING TO 1/2" / THEN DECREASING TO
SURFACE BLOW

Final Blow NO BLOW - FLUSHED TOOL - NO HELP

Recovery - Total Feet 2

Flush Tool? YES

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

BHT 109 °F Gravity _____ °API @ _____ °F Corrected Gravity _____ °API
RW _____ @ _____ °F Chlorides _____ ppm Recovery Chlorides _____ ppm System

(A) Initial Hydrostatic Mud 2213.6 PSI AK1 Recorder No. 22150 Range 3925

(B) First Initial Flow Pressure 32.4 PSI @ (depth) 4278 w / Clock No. 26199

(C) First Final Flow Pressure 40.5 PSI AK1 Recorder No. 24174 Range 3050

(D) Initial Shut-in Pressure 121.6 PSI @ (depth) 4297 w / Clock No. 27573

(E) Second Initial Flow Pressure 40.5 PSI AK1 Recorder No. _____ Range _____

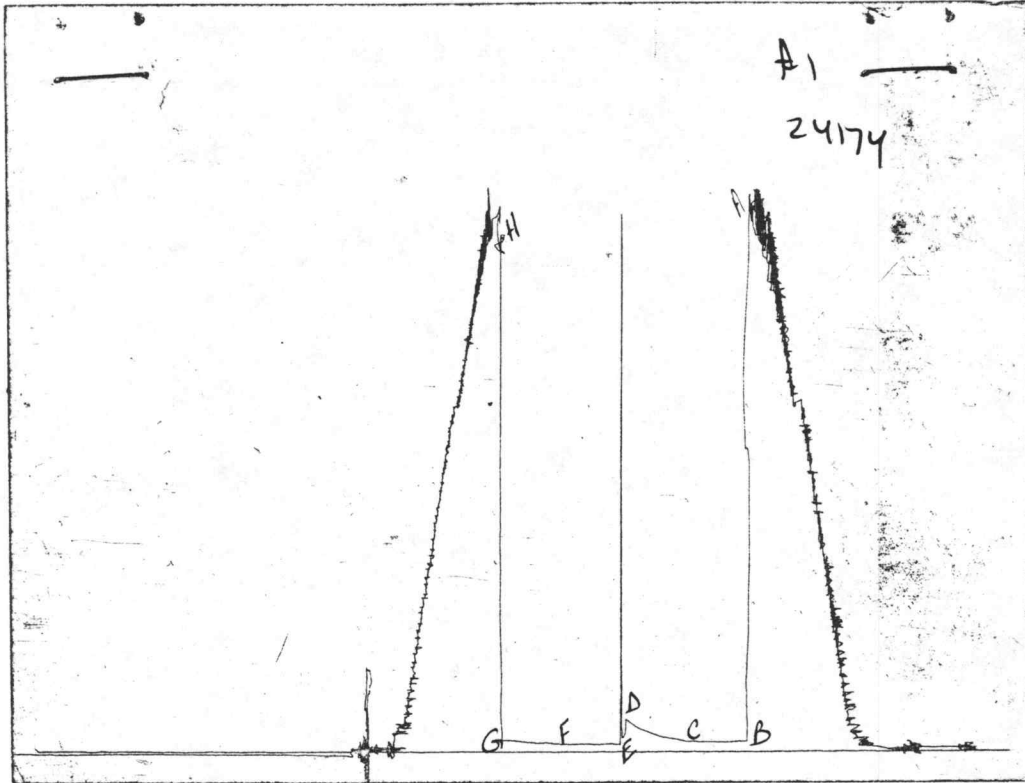
(F) Second Final Flow Pressure 40.5 PSI @ (depth) _____ w / Clock No. _____

(G) Final Shut-in Pressure 51.6 PSI Initial Opening 30 Final Flow 30

(H) Final Hydrostatic Mud 2144.7 PSI Initial Shut-in 60 Final Shut-in 60

Our Representative PAUL SIMPSON

CHART PAGE



This is an actual photograph of recorder chart

	FIELD READING	OFFICE READING
(A) INITIAL HYDROSTATIC MUD	2206	2213.6
(B) FIRST INITIAL FLOW PRESSURE	30	32.4
(C) FIRST FINAL FLOW PRESSURE	37	40.5
(D) INITIAL CLOSED-IN PRESSURE	119	121.6
(E) SECOND INITIAL FLOW PRESSURE	37	40.5
(F) SECOND FINAL FLOW PRESSURE	37	40.5
(G) FINAL CLOSED-IN PRESSURE	44	51.6
(H) FINAL HYDROSTATIC MUD	2143	2144.7

TRILOBITE TESTING L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Test Ticket

No 5845

Well Name & No. Whipple 'H' #1 Test No. 1 Date 2-10-93
 Company Pickrell Drilling Co. Inc Zone Tested Marmaton
 Address 110 N Market +205 Wichita Ks 67202 Elevation 2542 62
 Co. Rep./Geo. Bill Klaver Cont. P-D + 10 Est. Ft. of Pay _____
 Location: Sec. 6 Twp. 18s Rge. 26w Co. Ness State Ks
 No. of Copies 6 Distribution Sheet _____ Yes _____ No _____ Turnkey _____ Yes _____ No _____ Evaluation _____

Interval Tested 4274-4300 Drill Pipe Size 4 1/2 XH
 Anchor Length 26 Top Choke — 1" _____ Bottom Choke — 3/4" _____
 Top Packer Depth 4269 Hole Size — 7 7/8" _____ Rubber Size — 6 3/4" _____
 Bottom Packer Depth 4274 Wt. Pipe I.D. — 2.7 Ft. Run _____
 Total Depth 4300 Drill Collar — 2.25 Ft. Run 177
 Mud Wt. 9.5 lb/gal. Viscosity 47 Filtrate 9.6
 Tool Open @ 2:13 AM Initial Blow 1/8 blow building to 1/2 then decreasing to
Surface blow
 Final Blow NO blow - f lashed tool - no help

Recovery — Total Feet	Feet of Gas in Pipe	Flush Tool?
<u>2</u>		<u>Y</u>
Rec. <u>2</u> Feet Of <u>Mud</u>	% gas	% oil
Rec. _____ Feet Of _____	% gas	% oil
Rec. _____ Feet Of _____	% gas	% oil
Rec. _____ Feet Of _____	% gas	% oil
Rec. _____ Feet Of _____	% gas	% oil

BHT 109 °F Gravity _____ °API @ _____ °F Corrected Gravity _____ °API
 RW _____ @ _____ °F Chlorides _____ ppm Recovery Chlorides _____ ppm System

(A) Initial Hydrostatic Mud 2206 PSI AK1 Recorder No. 22150 Range 3925
 (B) First Initial Flow Pressure 30 PSI @ (depth) 4278 w/Clock No. 26199
 (C) First Final Flow Pressure 37 PSI AK1 Recorder No. 24174 Range 3050
 (D) Initial Shut-In Pressure 119 PSI @ (depth) 4297 w/Clock No. 27523
 (E) Second Initial Flow Pressure 37 PSI AK1 Recorder No. _____ Range _____
 (F) Second Final Flow Pressure 37 PSI @ (depth) _____ w/Clock No. _____
 (G) Final Shut-In Pressure 44 PSI Initial Opening 30 Test _____
 (H) Final Hydrostatic Mud 2143 PSI Initial Shut-In 60 Jars _____

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

TRILOBITE TESTING L.L.C. 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 SUSTAINED, 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.

Approved By Bill Klaver
 Our Representative Paul Simpson

Printcraft Printers - Hays, KS

TRILOBITE TESTING, L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Drill-Stem Test Data

Well Name WHIPPLE "H" #1 Test No. 2 Date 2/11/93
Company PICKRELL DRILLING COMPANY, INC. Zone FORT SCOTT
Address 110 N MARKET #205 WICHITA KS 67202 Elevation 2542
Co. Rep./Geo. BILL KLAVER Cont. PICKRELL DRLG RIG #10 Est. Ft. of Pay _____
Location: Sec. 6 Twp. 18S Rge. 26W Co. NESS State KS

Interval Tested 4374-4415 Drill Pipe Size 4.5 XH
Anchor Length 41 Wt. Pipe I.D. - 2.7 Ft. Run _____
Top Packer Depth 4369 Drill Collar - 2.25 Ft. Run 149
Bottom Packer Depth 4374 Mud Wt. 9.3 lb/Gal.
Total Depth 4415 Viscosity 49 Filtrate 10.4

Tool Open @ 3:59 AM Initial Blow 1/4" BLOW DECREASING TO SURFACE

Final Blow NO BLOW - FLUSHED TOOL - NO HELP

Recovery - Total Feet 10 Flush Tool? YES

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

BHT 110 °F Gravity _____ °API @ _____ °F Corrected Gravity _____ °API
RW _____ @ _____ °F Chlorides _____ ppm Recovery Chlorides _____ ppm System

(A) Initial Hydrostatic Mud 2243.7 PSI AK1 Recorder No. 22150 Range 3925

(B) First Initial Flow Pressure 32.4 PSI @ (depth) 4377 w / Clock No. 26199

(C) First Final Flow Pressure 40.5 PSI AK1 Recorder No. 24174 Range 3050

(D) Initial Shut-in Pressure 840.6 PSI @ (depth) 4412 w / Clock No. 27567

(E) Second Initial Flow Pressure 40.5 PSI AK1 Recorder No. _____ Range _____

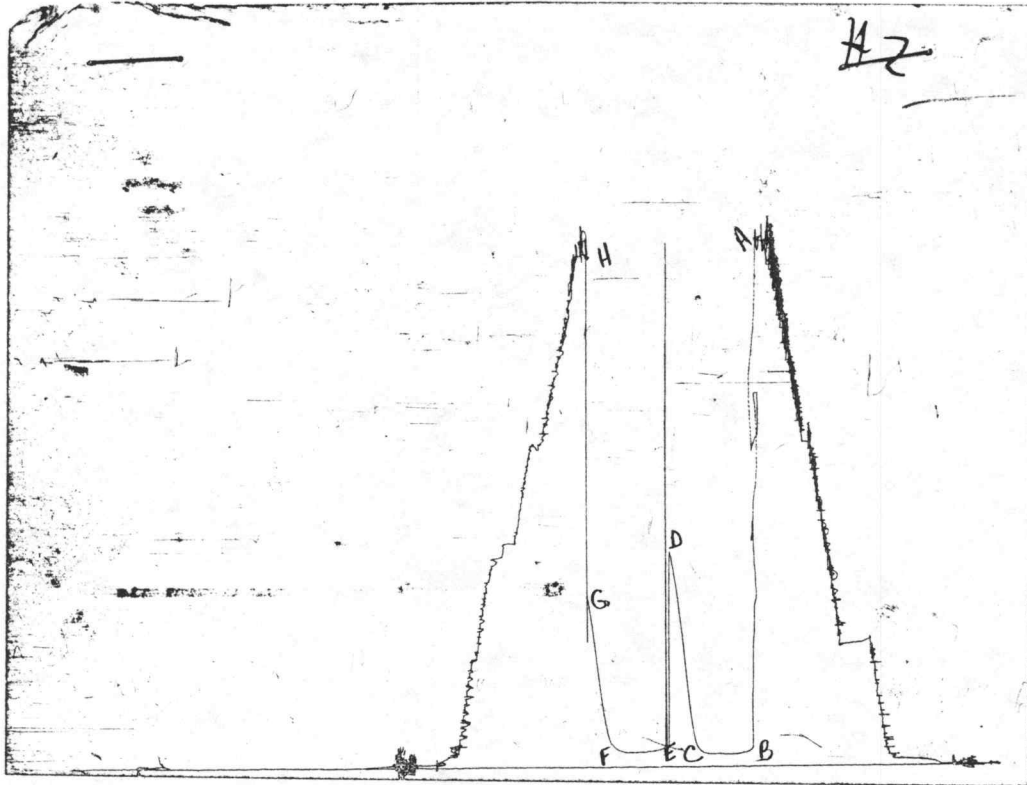
(F) Second Final Flow Pressure 40.5 PSI @ (depth) _____ w / Clock No. _____

(G) Final Shut-in Pressure 663.5 PSI Initial Opening 30 Final Flow 30

(H) Final Hydrostatic Mud 2211.5 PSI Initial Shut-in 30 Final Shut-in 30

Our Representative PAUL SIMPSON

CHART PAGE



This is an actual photograph of recorder chart

	FIELD READING	OFFICE READING
(A) INITIAL HYDROSTATIC MUD	2240	2243.7
(B) FIRST INITIAL FLOW PRESSURE	30	32.4
(C) FIRST FINAL FLOW PRESSURE	37	40.5
(D) INITIAL CLOSED-IN PRESSURE	842	840.6
(E) SECOND INITIAL FLOW PRESSURE	37	40.5
(F) SECOND FINAL FLOW PRESSURE	37	40.5
(G) FINAL CLOSED-IN PRESSURE	660	663.5
(H) FINAL HYDROSTATIC MUD	2204	2211.5

TRILOBITE TESTING L.L.C.

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Test Ticket

No 5846

Well Name & No. <u>Whipple H. #1</u>	Test No. <u>2</u>	Date <u>2-11-93</u>					
Company <u>Pickrell Drilling Co, Inc</u>	Zone Tested <u>Fort Scott</u>						
Address _____	Elevation <u>2542</u>						
Co. Rep./Geo. <u>Bill Klaver</u>	cont. <u>Pickrell #10</u>	Est. Ft. of Pay _____					
Location: Sec. <u>6</u>	Twp. <u>18s</u>	Rge. <u>26w</u>	Co. <u>Noss</u>	State <u>Ks</u>			
No. of Copies <u>5</u>	Distribution Sheet _____	Yes _____	No _____	Turnkey _____	Yes _____	No _____	Evaluation _____

Interval Tested <u>4374-4415</u>	Drill Pipe Size <u>4 1/2 X 14</u>
Anchor Length <u>41</u>	Top Choke — 1" _____ Bottom Choke — 3/4" _____
Top Packer Depth <u>4369</u>	Hole Size — 7 7/8" _____ Rubber Size — 6 3/4" _____
Bottom Packer Depth <u>4374</u>	Wt. Pipe I.D. — 2.7 Ft. Run _____
Total Depth <u>4415</u>	Drill Collar — 2.25 Ft. Run <u>149</u>
Mud Wt. <u>9.3</u> lb/gal.	Viscosity <u>49</u> Filtrate <u>10.4</u>
Tool Open @ <u>3:59 AM</u>	Initial Blow <u>4 1/2" blow decreasing to surface</u>

Final Blow no blow - flush tool - no help

Recovery — Total Feet <u>10</u>	Feet of Gas in Pipe _____	Flush Tool? <u>Y</u>		
Rec. <u>10</u> Feet Of <u>Mud oil spots in hole</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 110 °F Gravity _____ °API @ _____ °F Corrected Gravity _____ °API

RW _____ @ _____ °F Chlorides _____ ppm Recovery Chlorides _____ ppm System

- (A) Initial Hydrostatic Mud 2240 PSI AK1 Recorder No. 22150 Range 3925
- (B) First Initial Flow Pressure 30 PSI @ (depth) 4377 w/Clock No. 26199
- (C) First Final Flow Pressure 37 PSI AK1 Recorder No. 24174 Range 3050
- (D) Initial Shut-In Pressure 842 PSI @ (depth) 4412 w/Clock No. 27567
- (E) Second Initial Flow Pressure 37 PSI AK1 Recorder No. _____ Range _____
- (F) Second Final Flow Pressure 37 PSI @ (depth) _____ w/Clock No. _____
- (G) Final Shut-In Pressure 660 PSI Initial Opening 30 Test _____
- (H) Final Hydrostatic Mud 2204 PSI Initial Shut-In 30 Jars _____

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

Approved By Bill Klaver
Our Representative Paul Simpson

TRILOBITE TESTING, L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Drill-Stem Test Data

Well Name WHIPPLE "H" #1 Test No. 3 Date 2/11/93
Company PICKRELL DRILLING COMPANY, INC. Zone JOHNSON ZONE
Address 110 N MARKET #205 WICHITA KS 67202 Elevation 2542
Co. Rep./Geo. BILL KLAVER Cont. PICKRELL DRLG RIG #10 Est. Ft. of Pay _____
Location: Sec. 6 Twp. 18S Rge. 26W Co. NESS State KS

Interval Tested 4414-4465 Drill Pipe Size 4.5 XH
Anchor Length 51 Wt. Pipe I.D. - 2.7 Ft. Run _____
Top Packer Depth 4409 Drill Collar - 2.25 Ft. Run 149
Bottom Packer Depth 4414 Mud Wt. 9.3 lb/Gal.
Total Depth 4465 Viscosity 50 Filtrate 10.4

Tool Open @ 8:25 PM Initial Blow 1/2" BLOW DECREASED TO SURFACE BLOW

Final Blow NO BLOW - FLUSHED TOOL - NO HELP

Recovery - Total Feet 20 Flush Tool? YES

Rec. 20 Feet of MUD WITH OIL SPOTS IN TOOL
Rec. _____ Feet of _____
Rec. _____ Feet of _____
Rec. _____ Feet of _____
Rec. _____ Feet of _____

BHT 110 °F Gravity _____ °API @ _____ °F Corrected Gravity _____ °API
RW _____ @ _____ °F Chlorides _____ ppm Recovery Chlorides _____ ppm System

(A) Initial Hydrostatic Mud 2250.8 PSI AK1 Recorder No. 22150 Range 3925

(B) First Initial Flow Pressure 40.5 PSI @ (depth) 4417 w / Clock No. 27567

(C) First Final Flow Pressure 51.6 PSI AK1 Recorder No. 24174 Range 3050

(D) Initial Shut-in Pressure 114.3 PSI @ (depth) 4462 w / Clock No. 26199

(E) Second Initial Flow Pressure 51.6 PSI AK1 Recorder No. _____ Range _____

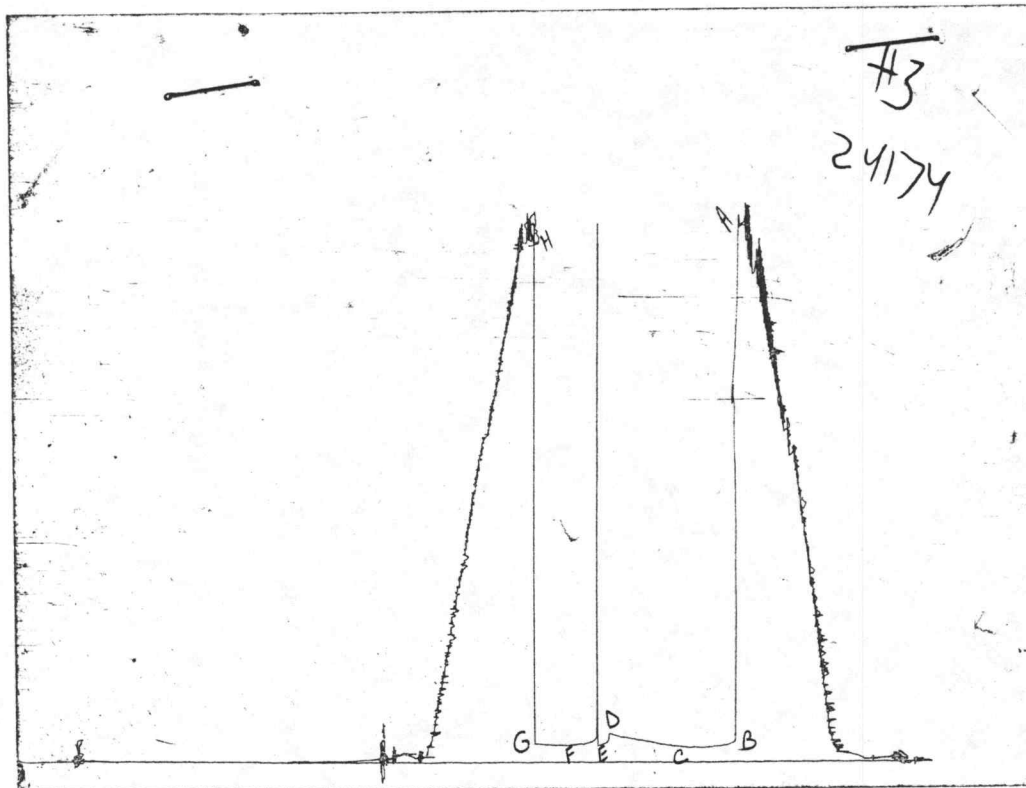
(F) Second Final Flow Pressure 51.6 PSI @ (depth) _____ w / Clock No. _____

(G) Final Shut-in Pressure 70.4 PSI Initial Opening 30 Final Flow 30

(H) Final Hydrostatic Mud 2201.3 PSI Initial Shut-in 60 Final Shut-in 30

Our Representative PAUL SIMPSON

CHART PAGE



This is an actual photograph of recorder chart

	FIELD READING	OFFICE READING
(A) INITIAL HYDROSTATIC MUD	2251	2250.8
(B) FIRST INITIAL FLOW PRESSURE	37	40.5
(C) FIRST FINAL FLOW PRESSURE	44	51.6
(D) INITIAL CLOSED-IN PRESSURE	112	114.3
(E) SECOND INITIAL FLOW PRESSURE	44	51.6
(F) SECOND FINAL FLOW PRESSURE	44	51.6
(G) FINAL CLOSED-IN PRESSURE	67	70.4
(H) FINAL HYDROSTATIC MUD	2200	2201.3

TRILOBITE TESTING L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Test Ticket

No 5847

Well Name & No. <u>Whipple 'H' #1</u>	Test No. <u>3</u>	Date <u>2-11-93</u>
Company <u>Pickrell Drilling Co, Inc</u>	Zone Tested <u>Johnson Zone</u>	
Address _____	Elevation <u>2542</u>	
Co. Rep./Geo. <u>Bill Klaver</u>	cont. <u>Pickrell #10</u>	Est. Ft. of Pay _____
Location: Sec. <u>6</u> Twp. <u>18s</u> Rge. <u>26w</u>	Co. <u>Ness</u>	State <u>Ks</u>
No. of Copies _____	Distribution Sheet _____	Yes _____ No _____ Turnkey _____ Yes _____ No _____ Evaluation _____

Interval Tested <u>4414-4465</u>	Drill Pipe Size <u>4 1/2 XH</u>
Anchor Length <u>51</u>	Top Choke — 1" _____ Bottom Choke — 3/4" _____
Top Packer Depth <u>4409</u>	Hole Size — 7 7/8" _____ Rubber Size — 6 3/4" _____
Bottom Packer Depth <u>4414</u>	Wt. Pipe I.D. — 2.7 Ft. Run _____
Total Depth <u>4465</u>	Drill Collar — 2.25 Ft. Run <u>149</u>
Mud Wt. _____ <u>9.3</u> lb/gal.	Viscosity <u>50</u> Filtrate <u>10.4</u>
Tool Open @ <u>8:25 PM</u> Initial Blow <u>1/2" blow decreased to surface blow</u>	
Final Blow <u>no blow - flush tool - no blow</u>	

Recovery — Total Feet <u>20</u>	Feet of Gas in Pipe _____	Flush Tool? <u>Y</u>
Rec. <u>20</u> Feet Of <u>mud w/oil spots</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 110 °F Gravity _____ °API @ _____ °F Corrected Gravity _____ °API

RW _____ @ _____ °F Chlorides _____ ppm Recovery Chlorides _____ ppm System

- (A) Initial Hydrostatic Mud 2251 PSI Ak1 Recorder No. 22150 Range 3925
- (B) First Initial Flow Pressure 37 PSI @ (depth) 4417 w/Clock No. 27567
- (C) First Final Flow Pressure 44 PSI Ak1 Recorder No. 24174 Range 3050
- (D) Initial Shut-In Pressure 112 PSI @ (depth) 4462 w/Clock No. 26199
- (E) Second Initial Flow Pressure 44 PSI Ak1 Recorder No. _____ Range _____
- (F) Second Final Flow Pressure 44 PSI @ (depth) _____ w/Clock No. _____
- (G) Final Shut-In Pressure 67 PSI Initial Opening 30 Test _____
- (H) Final Hydrostatic Mud 2200 PSI Initial Shut-In 60 Jars _____

Final Flow 30 Safety Joint _____

Final Shut-In 30 Straddle _____

Circ. Sub _____

Sampler _____

Extra Packer _____

Other _____

TOTAL PRICE \$ _____

TRILOBITE TESTING L.L.C. 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 SUSTAINED, 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.

Approved By Bill Klaver

Our Representative Paul Simpson

TRILOBITE TESTING, L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Drill-Stem Test Data

Well Name WHIPPLE "H" #1 Test No. 4 Date 2/12/93
Company PICKRELL DRILLING COMPANY, INC. Zone MISS
Address 110 N MARKET #205 WICHITA KS 67202 Elevation 2542
Co. Rep./Geo. BILL KLAVER Cont. PICKRELL DRLG RIG #10 Est. Ft. of Pay 5
Location: Sec. 6 Twp. 18S Rge. 26W Co. NESS State KS

Interval Tested 4457-4494 Drill Pipe Size 4.5 XH
Anchor Length 37 Wt. Pipe I.D. - 2.7 Ft. Run _____
Top Packer Depth 4452 Drill Collar - 2.25 Ft. Run 179
Bottom Packer Depth 4457 Mud Wt. 9 lb/Gal.
Total Depth 4494 Viscosity 40 Filtrate 10.4

Tool Open @ 1:49 PM Initial Blow 3/4" BLOW BUILDING TO 3"

Final Blow WEAK SURFACE BLOW BUILDING TO 4"
NO BLOW BACK ON SHUT IN

Recovery - Total Feet 195 Flush Tool? NO

Rec. 140 Feet of GAS IN PIPE
Rec. 15 Feet of CLEAN GASSY OIL-10%GAS/90%OIL
Rec. 120 Feet of HVY OIL CUT MUD-40%OIL/60%MUD
Rec. 60 Feet of OIL CUT MUD-15% OIL/85%MUD
Rec. _____ Feet of _____

BHT 119 °F Gravity _____ °API @ _____ °F Corrected Gravity _____ °API
RW _____ @ _____ °F Chlorides _____ ppm Recovery Chlorides _____ ppm System

(A) Initial Hydrostatic Mud 2213.6 PSI AK1 Recorder No. 22150 Range 3925

(B) First Initial Flow Pressure 50.3 PSI @ (depth) 4460 w / Clock No. 26194

(C) First Final Flow Pressure 70.4 PSI AK1 Recorder No. 24174 Range 3050

(D) Initial Shut-in Pressure 1105.6 PSI @ (depth) 4490 w / Clock No. 27567

(E) Second Initial Flow Pressure 78.9 PSI AK1 Recorder No. _____ Range _____

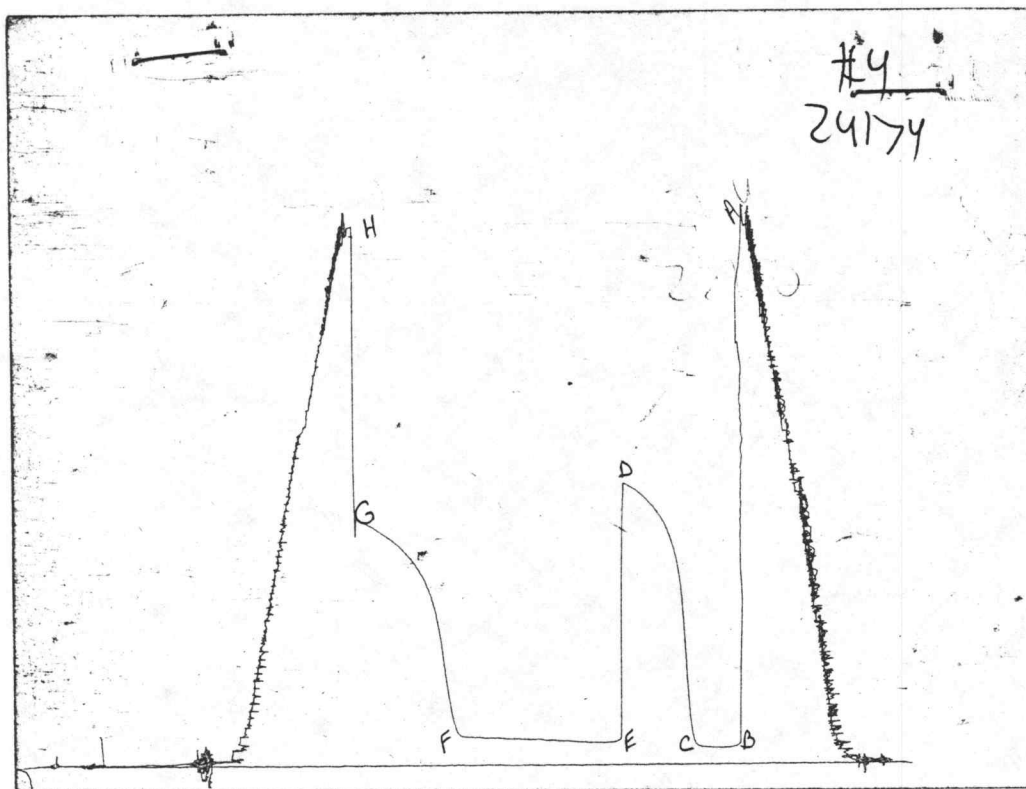
(F) Second Final Flow Pressure 110.3 PSI @ (depth) _____ w / Clock No. _____

(G) Final Shut-in Pressure 967.5 PSI Initial Opening 30 Final Flow 120

(H) Final Hydrostatic Mud 2115.4 PSI Initial Shut-in 60 Final Shut-in 90

Our Representative PAUL SIMPSON

CHART PAGE



This is an actual photograph of recorder chart

	FIELD READING	OFFICE READING
(A) INITIAL HYDROSTATIC MUD	2206	2213.6
(B) FIRST INITIAL FLOW PRESSURE	52	50.3
(C) FIRST FINAL FLOW PRESSURE	67	70.4
(D) INITIAL CLOSED-IN PRESSURE	1100	1105.6
(E) SECOND INITIAL FLOW PRESSURE	74	78.9
(F) SECOND FINAL FLOW PRESSURE	104	110.3
(G) FINAL CLOSED-IN PRESSURE	963	967.5
(H) FINAL HYDROSTATIC MUD	2112	2115.4

TRILOBITE TESTING L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Test Ticket

No 5848

Well Name & No. Whipple 'H' #1 Test No. 4 Date 2-12-93
 Company Pickrell Drilling Co, Inc Zone Tested Miss
 Address _____ Elevation 2542
 Co. Rep./Geo. Bill Klaver cont. Pickrell #10 Est. Ft. of Pay 5
 Location: Sec. 6 Twp. 18s Rge. 26w Co. Ness State KS
 No. of Copies _____ Distribution Sheet _____ Yes _____ No _____ Turnkey _____ Yes _____ No _____ Evaluation _____

Interval Tested 4457-4494 Drill Pipe Size 4 1/2 XH
 Anchor Length 37 Top Choke — 1" _____ Bottom Choke — 3/4" _____
 Top Packer Depth 4452 Hole Size — 7 7/8" _____ Rubber Size — 6 3/4" _____
 Bottom Packer Depth 4457 Wt. Pipe I.D. — 2.7 Ft. Run _____
 Total Depth 4494 Drill Collar — 2.25 Ft. Run 179
 Mud Wt. 9.0 lb/gal. Viscosity 40 Filtrate 10.4
 Tool Open @ 1:49 PM Initial Blow 3/4" blow building to 30"

Final Blow weak surface blow building to 4"
no blow back on shut in

Recovery — Total Feet	Feet of Gas in Pipe	Flush Tool?
Rec. <u>15</u> Feet Of <u>cl gassy oil</u>	<u>140</u>	
Rec. <u>120</u> Feet Of <u>HOCM</u>	<u>10% gas 90% oil</u>	<u>% water 60% mud</u>
Rec. <u>60</u> Feet Of <u>OCM</u>	<u>% gas 15% oil</u>	<u>% water 85% mud</u>
Rec. _____ Feet Of _____	<u>% gas % oil</u>	<u>% water % mud</u>
Rec. _____ Feet Of _____	<u>% gas % oil</u>	<u>% water % mud</u>

BHT 119 °F Gravity _____ °API @ _____ °F Corrected Gravity _____ °API
 RW _____ @ _____ °F Chlorides _____ ppm Recovery Chlorides _____ ppm System

(A) Initial Hydrostatic Mud 2206 PSI Ak1 Recorder No. 22150 Range 3925
 (B) First Initial Flow Pressure 52 PSI @ (depth) 4460 w/Clock No. 26199
 (C) First Final Flow Pressure 67 PSI AK1 Recorder No. 24174 Range 3050
 (D) Initial Shut-In Pressure 1100 PSI @ (depth) 4490 w/Clock No. 27567
 (E) Second Initial Flow Pressure 74 PSI AK1 Recorder No. _____ Range _____
 (F) Second Final Flow Pressure 104 PSI @ (depth) _____ w/Clock No. _____
 (G) Final Shut-In Pressure 963 PSI Initial Opening 30 Test _____
 (H) Final Hydrostatic Mud 2112 PSI Initial Shut-In 60 Jars _____

TRILOBITE TESTING L.L.C. 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 SUSTAINED, 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.

Approved By Bill Klaver
 Our Representative Paul Simpson
 Safety Joint _____
 Straddle _____
 Circ. Sub _____
 Sampler _____
 Extra Packer _____
 Other _____

TRILOBITE TESTING, L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Drill-Stem Test Data

Well Name WHIPPLE "H" #1 Test No. 5 Date 2/13/93
Company PICKRELL DRILLING COMPANY, INC. Zone MISS
Address 110 N MARKET #205 WICHITA KS 67202 Elevation 2542
Co. Rep./Geo. BILL KLAVER Cont. PICKRELL DRLG RIG #10 Est. Ft. of Pay _____
Location: Sec. 6 Twp. 18S Rge. 26W Co. NESS State KS

Interval Tested 4494-4502 Drill Pipe Size 4.5 XH
Anchor Length 8 Wt. Pipe I.D. - 2.7 Ft. Run _____
Top Packer Depth 4489 Drill Collar - 2.25 Ft. Run 179
Bottom Packer Depth 4494 Mud Wt. 9 lb/Gal.
Total Depth 4502 Viscosity 46 Filtrate 11.2

Tool Open @ 7:51 AM Initial Blow 3/4" BLOW BUILDING TO 1.5"

Final Blow NO BLOW - FLUSHED TOOL - NO BLOW

Recovery - Total Feet 65 Flush Tool? YES

Rec. 2 Feet of CLEAN OIL
Rec. 63 Feet of SLTLY OIL CUT THIN MUD - 5%OIL/95%MUD
Rec. _____ Feet of _____
Rec. _____ Feet of _____
Rec. _____ Feet of _____

BHT 111 °F Gravity _____ °API @ _____ °F Corrected Gravity _____ °API
RW 0.88 @ 40 °F Chlorides 13000 ppm Recovery Chlorides 3000 ppm System

(A) Initial Hydrostatic Mud 2306.9 PSI AK1 Recorder No. 22150 Range 3925

(B) First Initial Flow Pressure 32.4 PSI @ (depth) 4496 w / Clock No. 26199

(C) First Final Flow Pressure 40.5 PSI AK1 Recorder No. 24174 Range 3050

(D) Initial Shut-in Pressure 1240.6 PSI @ (depth) 4500 w / Clock No. 27573

(E) Second Initial Flow Pressure 51.6 PSI AK1 Recorder No. _____ Range _____

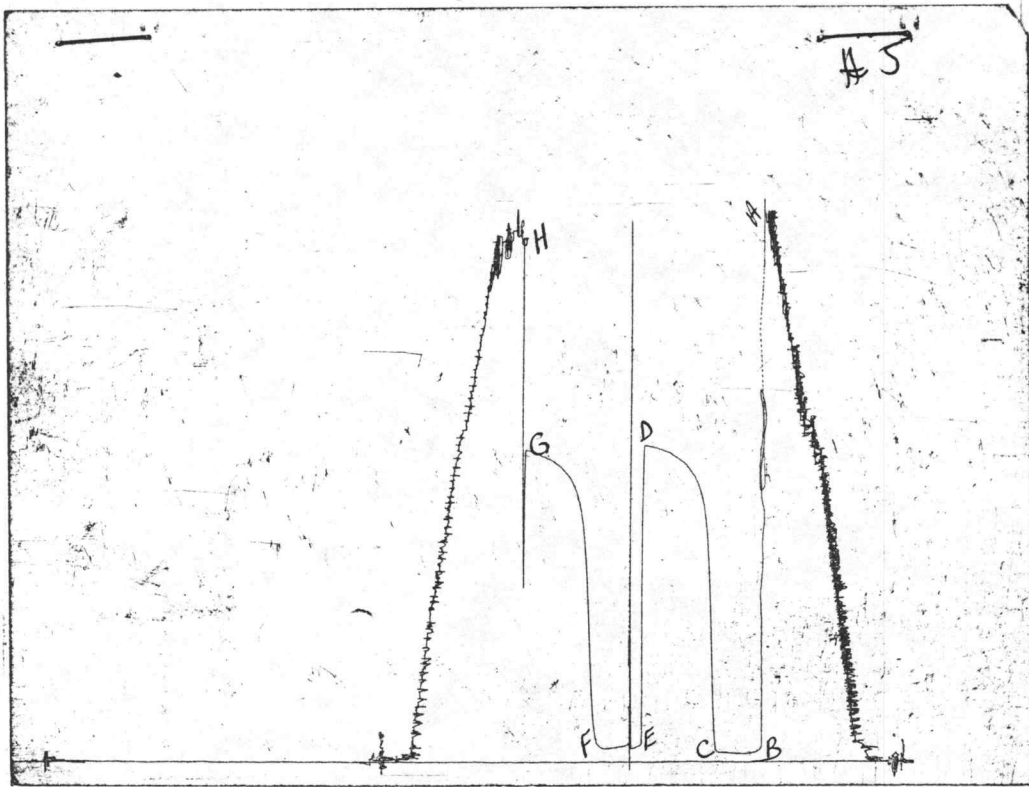
(F) Second Final Flow Pressure 51.6 PSI @ (depth) _____ w / Clock No. _____

(G) Final Shut-in Pressure 1226.9 PSI Initial Opening 30 Final Flow 30

(H) Final Hydrostatic Mud 2144.7 PSI Initial Shut-in 60 Final Shut-in 60

Our Representative PAUL SIMPSON

CHART PAGE



This is an actual photograph of recorder chart

	FIELD READING	OFFICE READING
(A) INITIAL HYDROSTATIC MUD	2294	2306.9
(B) FIRST INITIAL FLOW PRESSURE	30	32.4
(C) FIRST FINAL FLOW PRESSURE	37	40.5
(D) INITIAL CLOSED-IN PRESSURE	1243	1240.6
(E) SECOND INITIAL FLOW PRESSURE	44	51.6
(F) SECOND FINAL FLOW PRESSURE	44	51.6
(G) FINAL CLOSED-IN PRESSURE	1220	1226.9
(H) FINAL HYDROSTATIC MUD	2151	2144.7

TRILOBITE TESTING L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Test Ticket

No 5849

Well Name & No. <u>Whipple 'H' #1</u>	Test No. <u>5</u>	Date <u>2-13-93</u>
Company <u>Pickrell Drilling Co, Inc</u>	Zone Tested <u>Miss</u>	
Address _____	Elevation _____	
Co. Rep./Geo. <u>Bill Klaver</u>	cont. <u>Pickrell #10</u>	Est. Ft. of Pay _____
Location: Sec. <u>6</u>	Twp. <u>18s</u>	Rge. <u>26w</u> Co. <u>Nees</u> State <u>Ks</u>
No. of Copies _____	Distribution Sheet _____	Yes _____ No _____ Turnkey _____ Yes _____ No _____ Evaluation _____

Interval Tested <u>4494-4502</u>	Drill Pipe Size <u>4 1/2 IH</u>
Anchor Length <u>8</u>	Top Choke — 1" _____ Bottom Choke — 3/4" _____
Top Packer Depth <u>4489</u>	Hole Size — 7 7/8" _____ Rubber Size — 6 3/4" _____
Bottom Packer Depth <u>4494</u>	Wt. Pipe I.D. — 2.7 Ft. Run _____
Total Depth <u>4502</u>	Drill Collar — 2.25 Ft. Run <u>179</u>
Mud Wt. <u>9.0</u> lb/gal.	Viscosity <u>46</u> Filtrate <u>11.2</u>
Tool Open @ <u>7:51 AM</u>	Initial Blow <u>3/4" blow build ing to 1 1/2</u>
Final Blow <u>no blow - flush tool - no blow</u>	

Recovery — Total Feet <u>65</u>	Feet of Gas in Pipe _____	Flush Tool? _____
Rec. <u>2</u> Feet Of <u>cl oil</u>	%gas _____ %oil _____ %water _____ %mud _____	
Rec. <u>63</u> Feet Of <u>50c thin mud</u>	%gas <u>5</u> %oil _____ %water <u>95</u> %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 .88 @ 40 °F Chlorides 13,000 ppm Recovery Chlorides 3,000 ppm System

(A) Initial Hydrostatic Mud <u>2294</u>	PSI Ak1 Recorder No. <u>22150</u>	Range <u>3925</u>
(B) First Initial Flow Pressure <u>30</u>	PSI @ (depth) <u>4496</u>	w/Clock No. <u>26199</u>
(C) First Final Flow Pressure <u>37</u>	PSI AK1 Recorder No. <u>24174</u>	Range <u>3050</u>
(D) Initial Shut-in Pressure <u>1243</u>	PSI @ (depth) <u>4500</u>	w/Clock No. <u>27523</u>
(E) Second Initial Flow Pressure <u>44</u>	PSI AK1 Recorder No. _____	Range _____
(F) Second Final Flow Pressure <u>44</u>	PSI @ (depth) _____	w/Clock No. _____
(G) Final Shut-in Pressure <u>1220</u>	PSI Initial Opening <u>30</u>	Test _____
(H) Final Hydrostatic Mud <u>2151</u>	PSI Initial Shut-in <u>60</u>	Jars _____

TRILOBITE TESTING L.L.C. 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 SUSTAINED, 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>30</u>	Safety Joint _____
Final Shut-in <u>60</u>	Straddle _____
	Circ. Sub _____
	Sampler _____
	Extra Packer _____
	Other _____

Approved By Klaver, Bill
Our Representative Paul Simpson

TRILOBITE TESTING, L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Drill-Stem Test Data

Well Name WHIPPLE "H" #1 Test No. 6 Date 2/13/93
Company PICKRELL DRILLING COMPANY, INC. Zone MISS
Address 110 N MARKET #205 WICHITA KS 67202 Elevation 2542
Co. Rep./Geo. BILL KLAVER Cont. PICKRELL DRLG RIG #10 Est. Ft. of Pay _____
Location: Sec. 6 Twp. 18S Rge. 26W Co. NESS State KS

Interval Tested 4498-4506 Drill Pipe Size 4.5 XH
Anchor Length 8 Wt. Pipe I.D. - 2.7 Ft. Run _____
Top Packer Depth 4493 Drill Collar - 2.25 Ft. Run 179
Bottom Packer Depth 4498 Mud Wt. 9 lb/Gal.
Total Depth 4506 Viscosity 46 Filtrate 11.2

Tool Open @ 10:12 PM Initial Blow (SLID TOOL 1 FT WHEN OPENED) - 1/2" BLOW
BUILDING TO 1.25"

Final Blow NO BLOW - NO BLOW AFTER SURGE

Recovery - Total Feet 70 Flush Tool? YES

Rec. 70 Feet of MUDDY WATER
Rec. _____ Feet of _____
Rec. _____ Feet of _____
Rec. _____ Feet of _____
Rec. _____ Feet of _____

BHT 113 °F Gravity _____ °API @ _____ °F Corrected Gravity _____ °API
RW 0.98 @ 50 °F Chlorides 9000 ppm Recovery Chlorides 3000 ppm System

(A) Initial Hydrostatic Mud 2306.9 PSI AK1 Recorder No. 22150 Range 3925

(B) First Initial Flow Pressure 32.4 PSI @ (depth) 4500 w / Clock No. 26199

(C) First Final Flow Pressure 40.5 PSI AK1 Recorder No. 24174 Range 3050

(D) Initial Shut-in Pressure 1250.6 PSI @ (depth) 4504 w / Clock No. 19960

(E) Second Initial Flow Pressure 51.6 PSI AK1 Recorder No. _____ Range _____

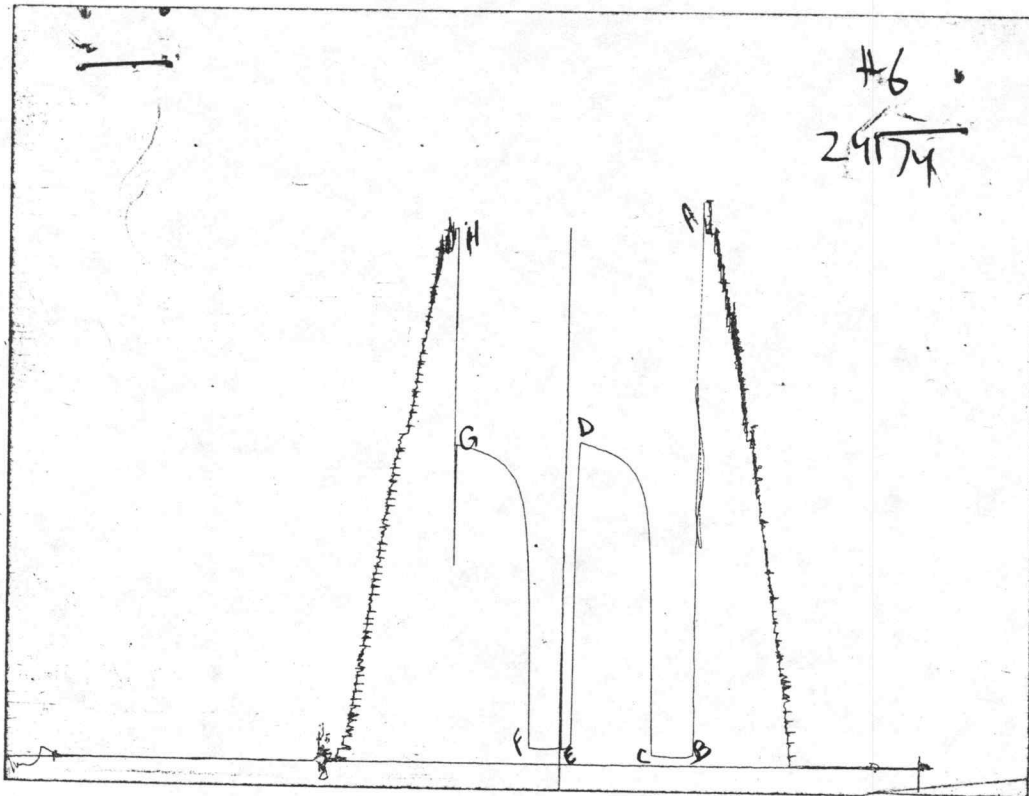
(F) Second Final Flow Pressure 51.6 PSI @ (depth) _____ w / Clock No. _____

(G) Final Shut-in Pressure 1255.6 PSI Initial Opening 30 Final Flow 30

(H) Final Hydrostatic Mud 2170.6 PSI Initial Shut-in 60 Final Shut-in 60

Our Representative PAUL SIMPSON

CHART PAGE



This is an actual photograph of recorder chart

	FIELD READING	OFFICE READING
(A) INITIAL HYDROSTATIC MUD	2299	2306.9
(B) FIRST INITIAL FLOW PRESSURE	30	32.4
(C) FIRST FINAL FLOW PRESSURE	37	40.5
(D) INITIAL CLOSED-IN PRESSURE	1258	1250.6
(E) SECOND INITIAL FLOW PRESSURE	44	51.6
(F) SECOND FINAL FLOW PRESSURE	44	51.6
(G) FINAL CLOSED-IN PRESSURE	1251	1255.6
(H) FINAL HYDROSTATIC MUD	2174	2170.6

TRILOBITE TESTING L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Test Ticket

No 5850

Well Name & No. <u>Whipple H. A1</u>	Test No. <u>6</u>	Date <u>2-13-93</u>
Company <u>Pickren Drilling Co. Inc</u>	Zone Tested <u>Miss</u>	
Address _____	Elevation _____	
Co. Rep./Geo. <u>Bill Klaver</u>	Cont. _____	Est. Ft. of Pay _____
Location: Sec. <u>6</u> Twp. <u>18s</u> Rge. <u>26w</u> Co. <u>Ness</u> State <u>Ks</u>		
No. of Copies _____	Distribution Sheet _____	Yes _____ No _____ Turnkey _____ Yes _____ No _____ Evaluation _____

Interval Tested <u>4498-4506</u>	Drill Pipe Size <u>4 1/2 XT</u>
Anchor Length <u>8</u>	Top Choke — 1" _____ Bottom Choke — 3/4" _____
Top Packer Depth <u>4493</u>	Hole Size — 7 7/8" _____ Rubber Size — 6 3/4" _____
Bottom Packer Depth <u>4498</u>	Wt. Pipe I.D. — 2.7 Ft. Run _____
Total Depth <u>4506</u>	Drill Collar — 2.25 Ft. Run <u>179</u>
Mud Wt. <u>9.0</u> lb/gal.	Viscosity <u>46</u> Filtrate <u>11.2</u>
Tool Open @ <u>10:12 PM</u> Initial Blow <u>(slid tool 1' when opened) - 1/2" blow</u>	
Final Blow <u>no blow - no blow after surge</u>	

Recovery — Total Feet <u>70</u>	Feet of Gas in Pipe _____	Flush Tool? <u>Y</u>
Rec. <u>70</u> Feet Of <u>Muddy water</u>	% gas _____ % oil <u>10</u> % water <u>90</u> % 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 113 °F Gravity _____ °API @ _____ °F Corrected Gravity _____ °API
RW .98 @ 50 °F Chlorides 9,000 ppm Recovery Chlorides 3000 ppm System

(A) Initial Hydrostatic Mud <u>2.299</u>	PSI AK1 Recorder No. <u>22150</u>	Range <u>3925</u>
(B) First Initial Flow Pressure <u>30</u>	PSI @ (depth) <u>4500</u>	w/Clock No. <u>26179</u>
(C) First Final Flow Pressure <u>37</u>	PSI AK1 Recorder No. <u>24174</u>	Range <u>3050</u>
(D) Initial Shut-In Pressure <u>1258</u>	PSI @ (depth) <u>4504</u>	w/Clock No. <u>1996</u>
(E) Second Initial Flow Pressure <u>44</u>	PSI AK1 Recorder No. _____	Range _____
(F) Second Final Flow Pressure <u>44</u>	PSI @ (depth) _____	w/Clock No. _____
(G) Final Shut-In Pressure <u>1257</u>	PSI Initial Opening <u>30</u>	Test _____
(H) Final Hydrostatic Mud <u>2174</u>	PSI Initial Shut-In <u>60</u>	Jars _____

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Approved By Bill Klaver
Our Representative Paul Simpson

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

TOTAL PRICE \$ _____