

DRILL STEM TEST REPORT

Prepared For: **Sam Gary & Associates Inc**

1670 Broadway Ste 3300
Denver CO 80202

ATTN: Tom Feral

3 19 10 Rice KS

Habiger # 1-3

Start Date: 2007.09.21 @ 17:44:46

End Date: 2007.09.22 @ 03:15:46

Job Ticket #: 28916 DST #: 1

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

ph: 785-625-4778 fax: 785-625-5620



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Sam Gary & Associates Inc

1670 Broadway Ste 3300
Denver CO 80202

ATTN: Tom Fertal

Habiger # 1-3

3 19 10 Rice KS

Job Ticket: 28916

DST#: 1

Test Start: 2007.09.21 @ 17:44:46

GENERAL INFORMATION:

Formation: **Simpson Sd**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 20:15:06
 Time Test Ended: 03:15:46

Test Type: Conventional Bottom Hole
 Tester: Dan Bangle
 Unit No: 38

Interval: **3261.00 ft (KB) To 3295.00 ft (KB) (TVD)**
 Total Depth: 3295.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Good

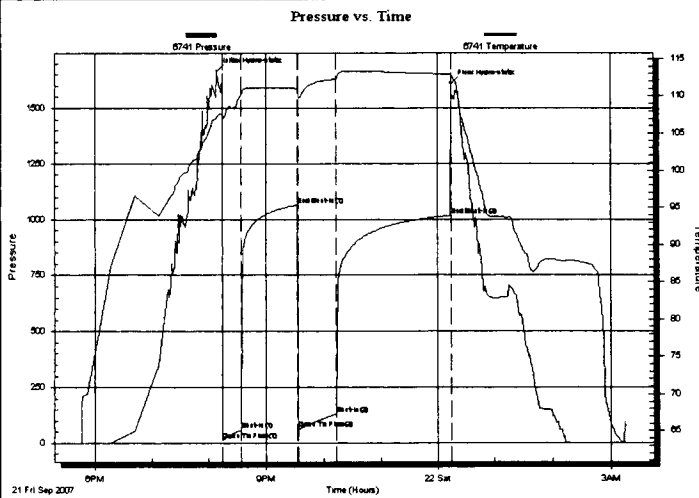
Reference Elevations: 1735.00 ft (KB)
 1725.00 ft (CF)
 KB to GR/CF: 10.00 ft

Serial #: 6741 Inside

Press@RunDepth: 129.52 psig @ 3262.00 ft (KB)
 Start Date: 2007.09.21 End Date: 2007.09.22
 Start Time: 17:44:48 End Time: 03:15:46

Capacity: 7000.00 psig
 Last Calib.: 2007.09.22
 Time On Btm: 2007.09.21 @ 20:08:56
 Time Off Btm: 2007.09.22 @ 00:14:16

TEST COMMENT: IF Weak building to 1 "
 FF Weak building to 1/2 "



PRESSURE SUMMARY

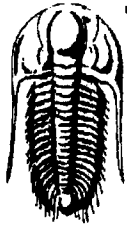
Time (Mn.)	Pressure (psig)	Temp (deg F)	Annotation
0	1665.07	107.05	Initial Hydro-static
7	14.07	106.86	Open To Flow (1)
25	59.10	110.15	Shut-In(1)
84	1064.09	111.02	End Shut-In(1)
85	62.98	110.64	Open To Flow (2)
125	129.52	112.23	Shut-In(2)
246	1017.34	112.89	End Shut-In(2)
246	1608.27	113.01	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
93.00	MCO 80%O 20%M	0.46
207.00	CGO 5%G 95%O	1.02
0.00	310 GIP	0.00

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Sam Gary & Associates Inc

Habiger # 1-3

1670 Broadway Ste 3300
Denver CO 80202

3 19 10 Rice KS

Job Ticket: 28916

DST#: 1

ATTN: Tom Fertal

Test Start: 2007.09.21 @ 17:44:46

Tool Information

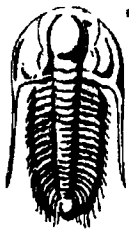
Drill Pipe:	Length: 2928.00 ft	Diameter: 2.76 inches	Volume: 21.67 bbl	Tool Weight: 2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 20000.00 lb
Drill Collar:	Length: 311.00 ft	Diameter: 2.25 inches	Volume: 1.53 bbl	Weight to Pull Loose: 45000.00 lb
		Total Volume: 23.20 bbl		Tool Chased 0.00 ft
Drill Pipe Above KB:	7.00 ft			String Weight: Initial 40000.00 lb
Depth to Top Packer:	3261.00 ft			Final 40000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	34.00 ft			
Tool Length:	63.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			3233.00	
Shut In Tool	5.00			3238.00	
Hydraulic tool	5.00			3243.00	
Jars	5.00			3248.00	
Safety Joint	3.00			3251.00	
Packer	5.00			3256.00	29.00 Bottom Of Top Packer
Packer	5.00			3261.00	
Stubb	1.00			3262.00	
Recorder	0.00	6741	Inside	3262.00	
Perforations	30.00			3292.00	
Recorder	0.00	13254	Outside	3292.00	
Bullnose	3.00			3295.00	34.00 Bottom Packers & Anchor

Total Tool Length: 63.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Sam Gary & Associates Inc

Habiger # 1-3

1670 Broadway Ste 3300
Denver CO 80202

3 19 10 Rice KS

Job Ticket: 28916

DST#: 1

ATTN: Tom Fertal

Test Start: 2007.09.21 @ 17:44:46

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

36 deg API

Mud Weight: 10.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 51.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 10.36 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 4500.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
93.00	MCO 80%O 20%M	0.457
207.00	CGO 5%G 95%O	1.018
0.00	310 GIP	0.000

Total Length: 300.00 ft

Total Volume: 1.475 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

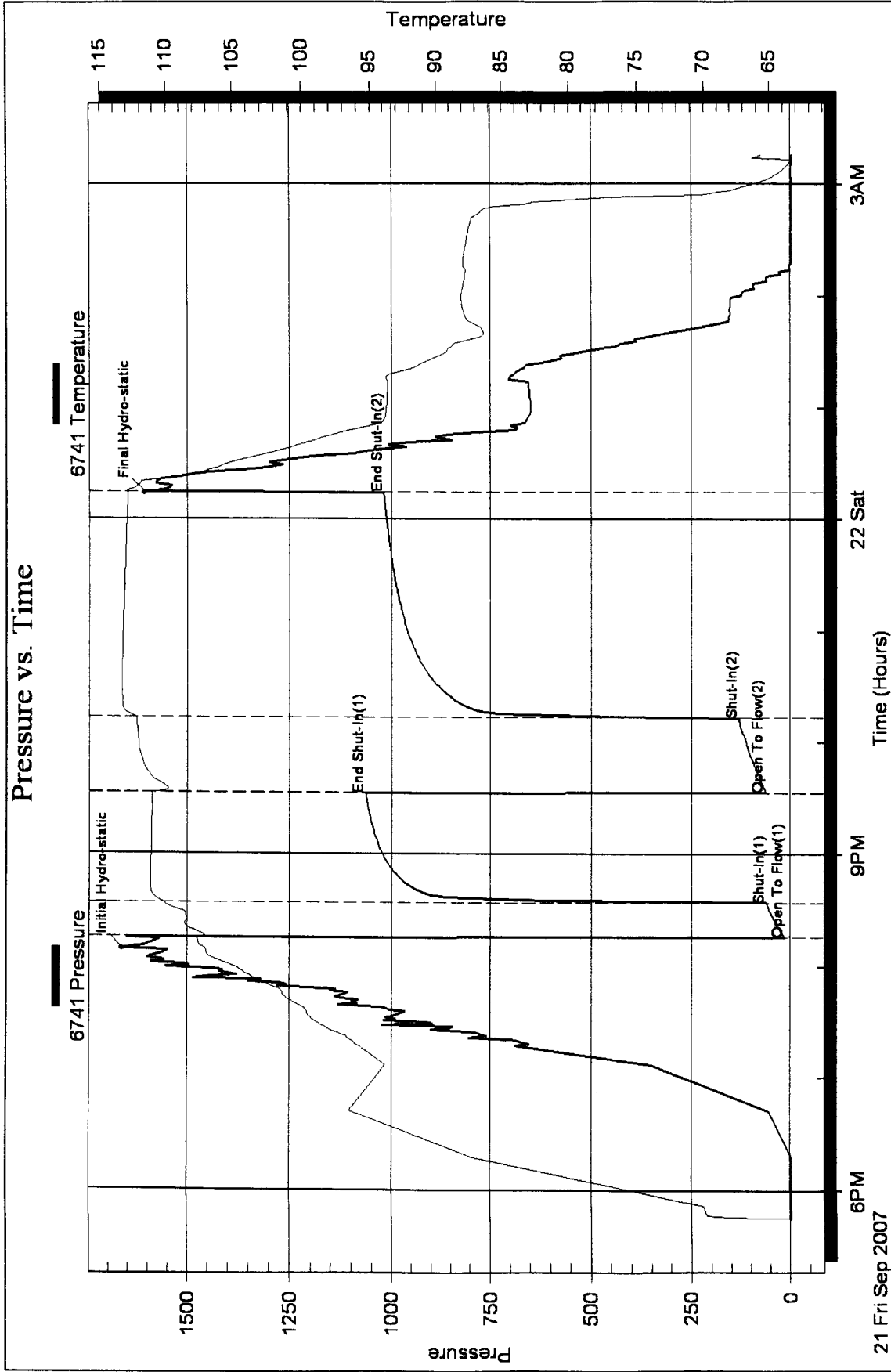
Serial #:

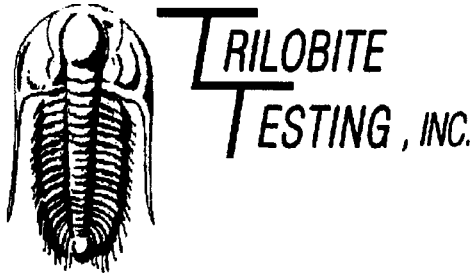
Laboratory Name:

Laboratory Location:

Recovery Comments:

Pressure vs. Time





DRILL STEM TEST REPORT

Prepared For: **Sam Gary & Associates Inc**

1670 Broadway Ste 3300
Denver CO 80202

ATTN: Tom Fertal

3 19 10 Rice KS

Habiger # 1-3

Start Date: 2007.09.22 @ 16:15:13

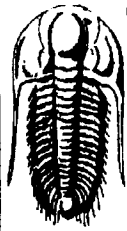
End Date: 2007.09.22 @ 22:55:13

Job Ticket #: 28917 DST #: 2

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

ph: 785-625-4778 fax: 785-625-5620



TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

Sam Gary & Associates Inc

1670 Broadway Ste 3300
Denver CO 80202

ATTN: Tom Fertal

Habiger # 1-3

3 19 10 Rice KS

Job Ticket: 28917

DST#: 2

Test Start: 2007.09.22 @ 16:15:13

GENERAL INFORMATION:

Formation: **Arbuckle**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 18:26:03

Time Test Ended: 22:55:13

Test Type: Conventional Bottom Hole

Tester: Dan Bangle

Unit No: 38

Interval: **3315.00 ft (KB) To 3323.00 ft (KB) (TVD)**

Total Depth: 3295.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations: 1735.00 ft (KB)

1725.00 ft (CF)

KB to GR/CF: 10.00 ft

Serial #: 6741 Inside

Press@RunDepth: 17.56 psig @ 3316.00 ft (KB)

Start Date: 2007.09.22

End Date: 2007.09.22

Start Time: 16:15:15

End Time: 22:55:13

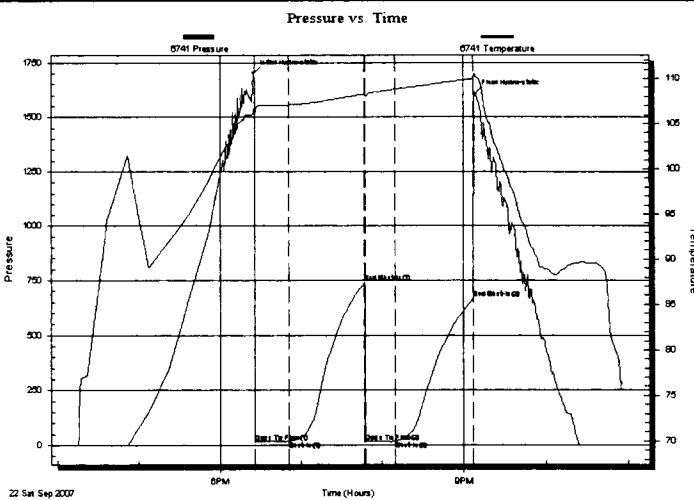
Capacity: 7000.00 psig

Last Calib.: 2007.09.22

Time On Btm: 2007.09.22 @ 18:24:53

Time Off Btm: 2007.09.22 @ 21:07:58

TEST COMMENT: IF Weak steady surface blow
FF No blow



PRESSURE SUMMARY

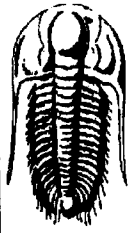
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1700.99	106.41	Initial Hydro-static
2	14.88	105.69	Open To Flow (1)
27	17.87	107.07	Shut-In(1)
83	740.00	108.26	End Shut-In(1)
83	15.09	108.11	Open To Flow (2)
105	17.56	108.80	Shut-In(2)
163	666.48	109.96	End Shut-In(2)
164	1609.09	110.38	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
5.00	DM	0.02

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Sam Gary & Associates Inc
1670 Broadway Ste 3300
Denver CO 80202
ATTN: Tom Fertal

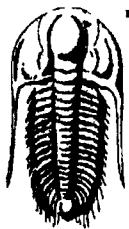
Habiger # 1-3
3 19 10 Rice KS
Job Ticket: 28917 **DST#:2**
Test Start: 2007.09.22 @ 16:15:13

Tool Information

Drill Pipe:	Length: 3004.00 ft	Diameter: 2.76 inches	Volume: 22.23 bbl	Tool Weight: 2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 20000.00 lb
Drill Collar:	Length: 311.00 ft	Diameter: 2.25 inches	Volume: 1.53 bbl	Weight to Pull Loose: lb
			<u>Total Volume: 23.76 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	29.00 ft			String Weight: Initial 40000.00 lb
Depth to Top Packer:	3315.00 ft			Final 40000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	8.00 ft			
Tool Length:	37.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		
Tool Comments:				

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			3287.00	
Shut In Tool	5.00			3292.00	
Hydraulic tool	5.00			3297.00	
Jars	5.00			3302.00	
Safety Joint	3.00			3305.00	
Packer	5.00			3310.00	29.00 Bottom Of Top Packer
Packer	5.00			3315.00	
Stubb	1.00			3316.00	
Recorder	0.00	6741	Inside	3316.00	
Perforations	4.00			3320.00	
Recorder	0.00	13254	Outside	3320.00	
Bullnose	3.00			3323.00	8.00 Bottom Packers & Anchor

Total Tool Length: 37.00



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DRILL STEM TEST REPORT

FLUID SUMMARY

Sam Gary & Associates Inc

Habiger # 1-3

1670 Broadway Ste 3300
Denver CO 80202

3 19 10 Rice KS

Job Ticket: 28917

DST#: 2

ATTN: Tom Fertal

Test Start: 2007.09.22 @ 16:15:13

Mud and Cushion Information

Mud Type: Gel Chem	Cushion Type:	Oil API:	deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity:	ppm
Viscosity: 48.00 sec/qt	Cushion Volume: bbl		
Water Loss: 10.38 in ³	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 8800.00 ppm			
Filter Cake: inches			

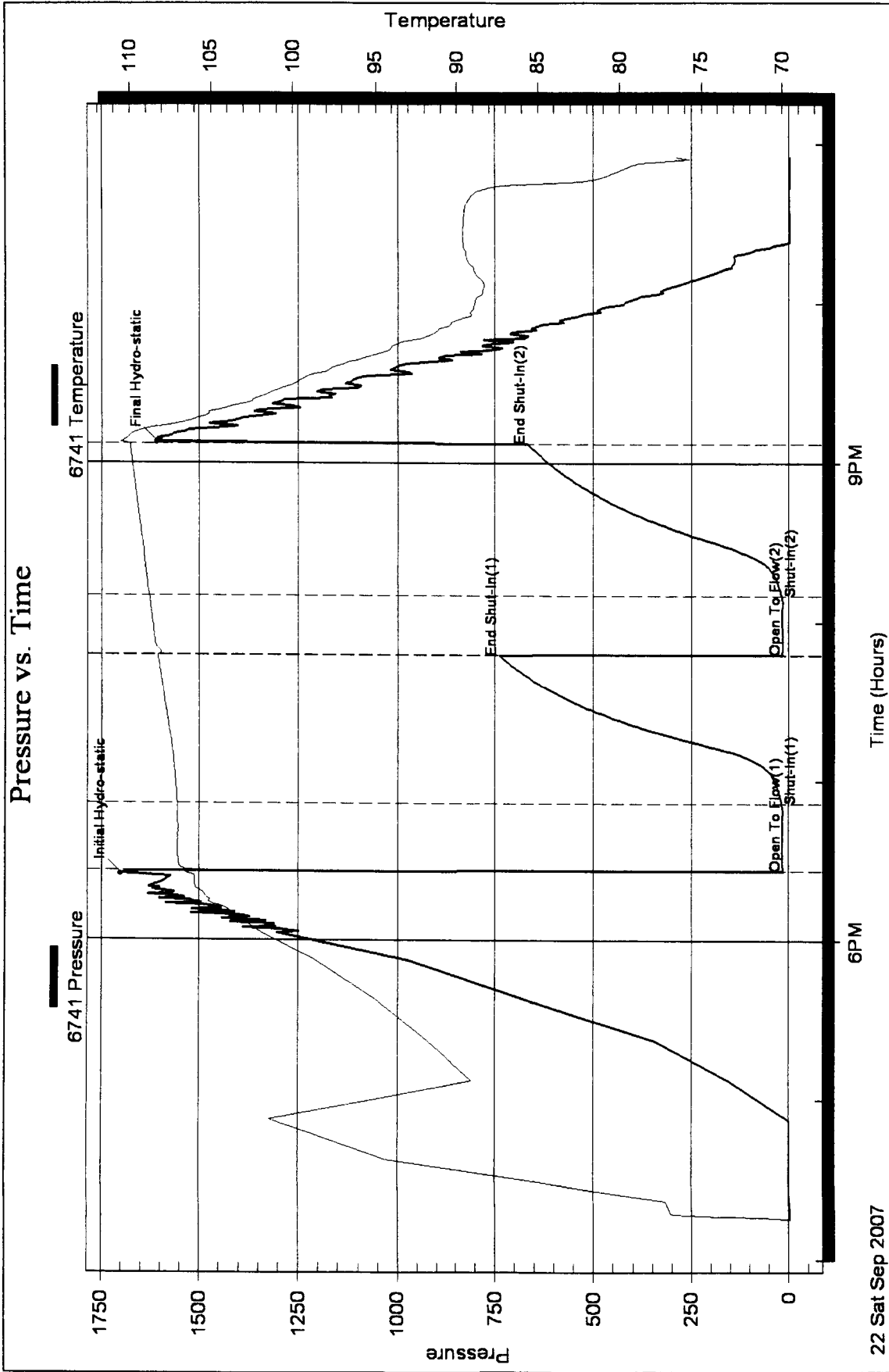
Recovery Information

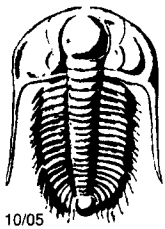
Recovery Table

Length ft	Description	Volume bbl
5.00	DM	0.025

Total Length: 5.00 ft Total Volume: 0.025 bbl
 Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
 Laboratory Name: Laboratory Location:
 Recovery Comments:

Pressure vs. Time





TRILOBITE TESTING INC.

P.O. Box 362 • Hays, Kansas 67601

28916
RECEIVED
SEP 24 2007

10676

BY: _____

Test Ticket

Well Name & No. Habiger et al #1-3 Test No. 1 Date 9-21-07
 Company Sam Gary & Associates, Inc Zone Tested Simpson Sd
 Address 1670 Broadway Ste 3300 Denver Co. 80202 Elevation 1735 KB 1725 GL
 Co. Rep / Geo. Justin Carter Rig Summit
 Location: Sec. 3 Twp. 19 Rge. 10 Co. Rice State Ks
 Comment: _____ Release date / time: _____

Interval Tested 3261 — 3295 Initial Str Wt./Lbs. 40,000 Unseated Str Wt/Lbs. 40,000
 Anchor Length 34 Wt. Set Lbs. 20,000 Wt. Pulled Loose/Lbs. 45,000
 Top Packer Depth 3256 Tool Weight 2000
 Bottom Packer Depth 3261 Hole Size 7 7/8" Rubber Size 6 3/4"
 Total Depth 3295 Wt. Pipe Run _____ Drill Collar Run 311
 Mud Wt. 9.5 LCM _____ Vis. 51 WL 10.4 Drill Pipe Size 3.5 X H Ft. Run 2928
 Blow Description I.F. weak-building to 1"
F.F. weak-building to 1/2"

Recovery - Total Feet	GIP	Ft. in DC	Ft. in DP
<u>300</u>	<u>310</u>	<u>300</u>	<u>-</u>
Rec. <u>93</u> Feet of <u>MCC</u> %gas <u>80</u> %oil _____ %water <u>2</u> %mud _____	Rec. <u>207</u> Feet of <u>C6510</u> %gas <u>95</u> %oil _____ %water _____ %mud _____	Rec. _____ Feet of _____ %gas _____ %oil _____ %water _____ %mud _____	Rec. _____ Feet of _____ %gas _____ %oil _____ %water _____ %mud _____
BHT <u>112</u> °F Gravity _____ °API D @ _____ °F Corrected Gravity <u>36</u> °API	RW _____ @ _____ °F Chlorides _____ ppm Recovery _____ Chlorides <u>4500</u> ppm System		

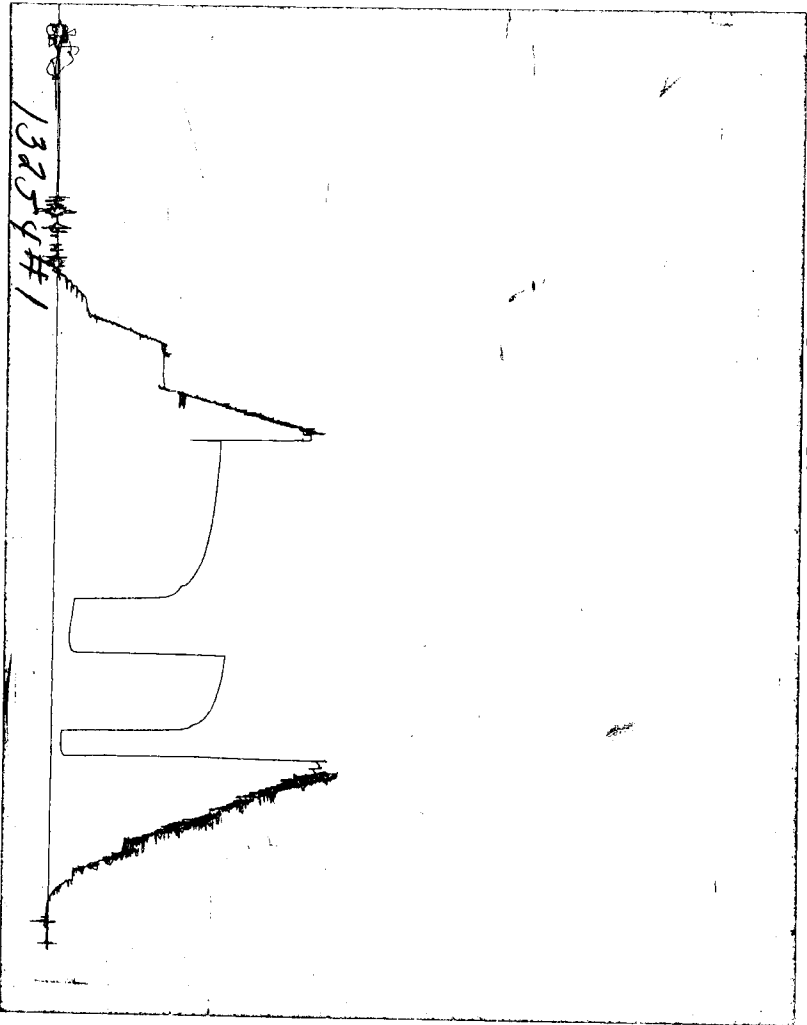
AK-1	Alpine	Recorder No.	Test
(A) Initial Hydrostatic Mud	<u>1665</u> PSI	<u>6741</u>	<u>1100</u>
(B) First Initial Flow Pressure	<u>14</u> PSI	(depth) <u>3262</u>	Jars <u>X</u> <u>250</u>
(C) First Final Flow Pressure	<u>59</u> PSI	Recorder No. <u>1325-1</u>	Safety Jt. <u>X</u> <u>75</u>
(D) Initial Shut-In Pressure	<u>1064</u> PSI	(depth) <u>3292</u>	Circ Sub _____
(E) Second Initial Flow Pressure	<u>62</u> PSI	Recorder No. _____	Sampler _____
(F) Second Final Flow Pressure	<u>129</u> PSI	(depth) _____	Straddle _____
(G) Final Shut-In Pressure	<u>1017</u> PSI	Initial Opening <u>20</u>	Ext. Packer _____
(Q) Final Hydrostatic Mud	<u>1608</u> PSI	Initial Shut-In <u>60</u>	Shale Packer _____
		Final Flow <u>40</u>	Ruined Packer _____
		Final Shut-In <u>120</u>	Mileage <u>172 RT 215</u>
		T-On Location <u>16:00</u>	Sub Total: _____
		T-Started <u>17:44</u>	Std. By <u>X</u> <u>2.25</u> <u>225</u>
		T-Open <u>20:10</u>	Acc. Chg: <u>X</u> <u>186.5</u>
		T-Pulled <u>00:10</u>	Other: _____
		T-Out <u>03:15</u>	Total: _____

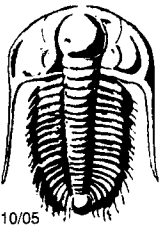
Approved By [Signature]
 Our Representative Don Bungle

11.25

TRILOBITE TESTING INC. SHALL NOT BE LIABLE FOR DAMAGED 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.

CHART PAGE
This is a photocopy of the actual AK-1 recorder chart





TRILOBITE TESTING INC.

P.O. Box 362 • Hays, Kansas 67601

RECEIVED
SEP 24 2007
BY: _____

Test Ticket

Well Name & No. Habiger et al #1-3 Test No. 2 Date 9-21-07
 Company Sam Gaby & Associates Inc Zone Tested Arbuckle
 Address _____ Elevation 1735 KB 1725 GL
 Co. Rep / Geo. Justin Carter Rig Summit
 Location: Sec. 3 Twp. 19 Rge. 10 Co. Rice State Ks
 Comment: _____ Release date / time: _____

Interval Tested 3315 ————— 3323 Initial Str Wt./Lbs. 40,000 Unseated Str Wt./Lbs. 40,000
 Anchor Length _____ 8 Wt. Set Lbs. 20,000 Wt. Pulled Loose/Lbs. 45,000
 Top Packer Depth _____ 3310 Tool Weight 2000
 Bottom Packer Depth _____ 3315 Hole Size 7 7/8" _____ Rubber Size 6 3/4" _____
 Total Depth _____ 3323 Wt. Pipe Run _____ Drill Collar Run 311
 Mud Wt. 9.4 LCM _____ Vis. 48 WL 10.4 Drill Pipe Size 3.5 XH Ft. Run 3004
 Blow Description I.F. weak steady surface blow

F.F. No blow

Recovery - Total Feet 5 GIP _____ Ft. in DC 5 Ft. in DP _____
 Rec. 5 Feet of DM %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 109 °F Gravity _____ °API D @ _____ °F Corrected Gravity _____ °API
 RW _____ @ _____ °F Chlorides _____ ppm Recovery _____ Chlorides 8800 ppm System

	AK-1	Alpine	Recorder No.	Test
(A) Initial Hydrostatic Mud	<u>1700</u>	PSI	<u>6741</u>	<u>1100</u>
(B) First Initial Flow Pressure	<u>14</u>	PSI	(depth) <u>3316</u>	Jars <u>X</u> <u>250</u>
(C) First Final Flow Pressure	<u>17</u>	PSI	Recorder No. <u>13254</u>	Safety Jt. <u>X</u> <u>75</u>
(D) Initial Shut-In Pressure	<u>740</u>	PSI	(depth) <u>3320</u>	Circ Sub _____
(E) Second Initial Flow Pressure	<u>15</u>	PSI	Recorder No. _____	Sampler _____
(F) Second Final Flow Pressure	<u>17</u>	PSI	(depth) _____	Straddle _____
(G) Final Shut-In Pressure	<u>666</u>	PSI	Initial Opening <u>20</u>	Ext. Packer _____
(Q) Final Hydrostatic Mud	<u>1609</u>	PSI	Initial Shut-In <u>60</u>	Shale Packer _____
			Final Flow <u>25</u>	Ruined Packer _____
			Final Shut-In <u>60</u>	Mileage <u>172 RT 215</u>
			T-On Location <u>11:30</u>	Sub Total: _____
			T-Started <u>16:15</u>	Std. By <u>2.5</u> <u>250</u>
			T-Open <u>18:25</u>	Acc. Chg: <u>X</u> <u>1890</u>
			T-Pulled <u>21:05</u>	Other: _____
			T-Out <u>22:55</u>	Total: <u>150</u>

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Approved By Justin Carter
 Our Representative Wan Bangle

CHART PAGE

This is a photocopy of the actual AK-1 recorder chart

