

DRILL STEM TEST REPORT

Prepared For: **Larson Operating Co.**

1670 Broadway Suite 3300
Denver, Co.80202

ATTN: Tom Fertal

29--18s--9w

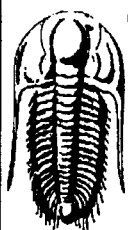
Wharton Trust # 1-29

Start Date: 2004.10.24 @ 00:43:14

End Date: 2004.10.24 @ 10:16:14

Job Ticket #: 20205 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

Larson Operating Co.

1670 Broadway Suite 3300
Denver, Co. 80202

ATTN: Tom Fertal

Wharton Trust # 1-29

29-18s-9w

Job Ticket: 20205

DST#: 1

Test Start: 2004.10.24 @ 00:43:14

GENERAL INFORMATION:

Formation: **Arbuckle**

Deviated: **No** Whipstock: **ft (KB)**

Time Tool Opened: 04:24:44

Time Test Ended: 10:16:14

Test Type: **Conventional Bottom Hole**

Tester: **John Schmidt**

Unit No: **24**

Interval: **3225.00 ft (KB) To 3276.00 ft (KB) (TVD)**

Total Depth: **3276.00 ft (KB) (TVD)**

Hole Diameter: **7.88 inches** Hole Condition: **Fair**

Reference Elevations: **1731.00 ft (KB)**

1721.00 ft (CF)

KB to GR/CF: **10.00 ft**

Serial #: 6753 **Inside**

Press@RunDepth: **44.03 psig @ 3260.00 ft (KB)**

Start Date: **2004.10.24**

End Date:

2004.10.24

Start Time: **00:43:19**

End Time:

10:16:14

Capacity: **7000.00 psig**

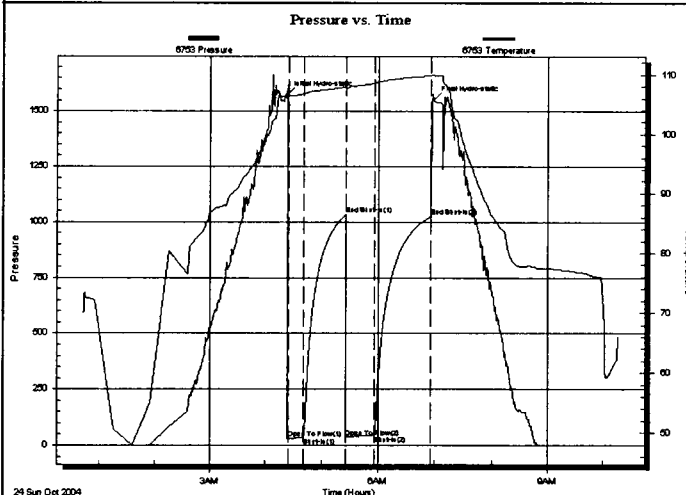
Last Calib.: **2004.10.24**

Time On Btm: **2004.10.24 @ 04:22:14**

Time Off Btm: **2004.10.24 @ 06:58:14**

TEST COMMENT: **IF-Weak Surface blow 1" in.**
FF-Weak Dead in 18 min.

ISI-Dead
FSI-Dead



PRESSURE SUMMARY

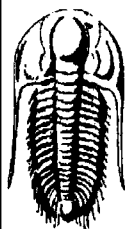
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1572.53	105.92	Initial Hydro-static
3	31.05	106.58	Open To Flow (1)
19	36.34	106.75	Shut-in(1)
63	1032.15	107.87	End Shut-in(1)
64	36.73	107.68	Open To Flow (2)
94	44.03	108.57	Shut-in(2)
154	1027.04	109.82	End Shut-in(2)
156	1552.63	109.89	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
29.00	oil stain mud	0.14

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
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TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

TOOL DIAGRAM

Larson Operating Co.

1670 Broadway Suite 3300
Denver, Co.80202

ATTN: Tom Fertal

Wharton Trust # 1-29

29-18s-9w

Job Ticket: 20205

DST#: 1

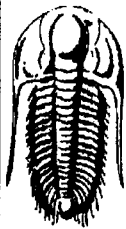
Test Start: 2004.10.24 @ 00:43:14

Tool Information

Drill Pipe:	Length: 2948.00 ft	Diameter: 3.00 inches	Volume: 25.77 bbl	Tool Weight: 2300.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.70 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 280.00 ft	Diameter: 2.25 inches	Volume: 1.38 bbl	Weight to Pull Loose: 60000.00 lb
		Total Volume:	27.15 bbl	Tool Chased 5.00 ft
Drill Pipe Above KB:	25.00 ft			String Weight: Initial 56000.00 lb
Depth to Top Packer:	3225.00 ft			Final 56000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	51.00 ft			
Tool Length:	73.00 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			3204.00	
Shut In Tool	5.00			3209.00	
Sampler	2.00			3211.00	
Hydraulic tool	5.00			3216.00	
Packer	4.00			3220.00	22.00 Bottom Of Top Packer
Packer	5.00			3225.00	
Stubb	1.00			3226.00	
Perforations	1.00			3227.00	
Change Over Sub	1.00			3228.00	
Blank Spacing	31.00			3259.00	
Change Over Sub	1.00			3260.00	
Recorder	0.00	6753	Inside	3260.00	
Perforations	13.00			3273.00	
Recorder	0.00	13252	Outside	3273.00	
Bullnose	3.00			3276.00	51.00 Bottom Packers & Anchor

Total Tool Length: 73.00



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

FLUID SUMMARY

Larson Operating Co.

Wharton Trust # 1-29

1670 Broadway Suite 3300
Denver, Co. 80202

29-18s-9w

Job Ticket: 20205

DST#: 1

ATTN: Tom Fertal

Test Start: 2004.10.24 @ 00:43:14

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: 50.00 sec/qt

Cushion Volume:

bbl

Water Loss: 9.58 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
29.00	oil stain mud	0.143

Total Length: 29.00 ft Total Volume: 0.143 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

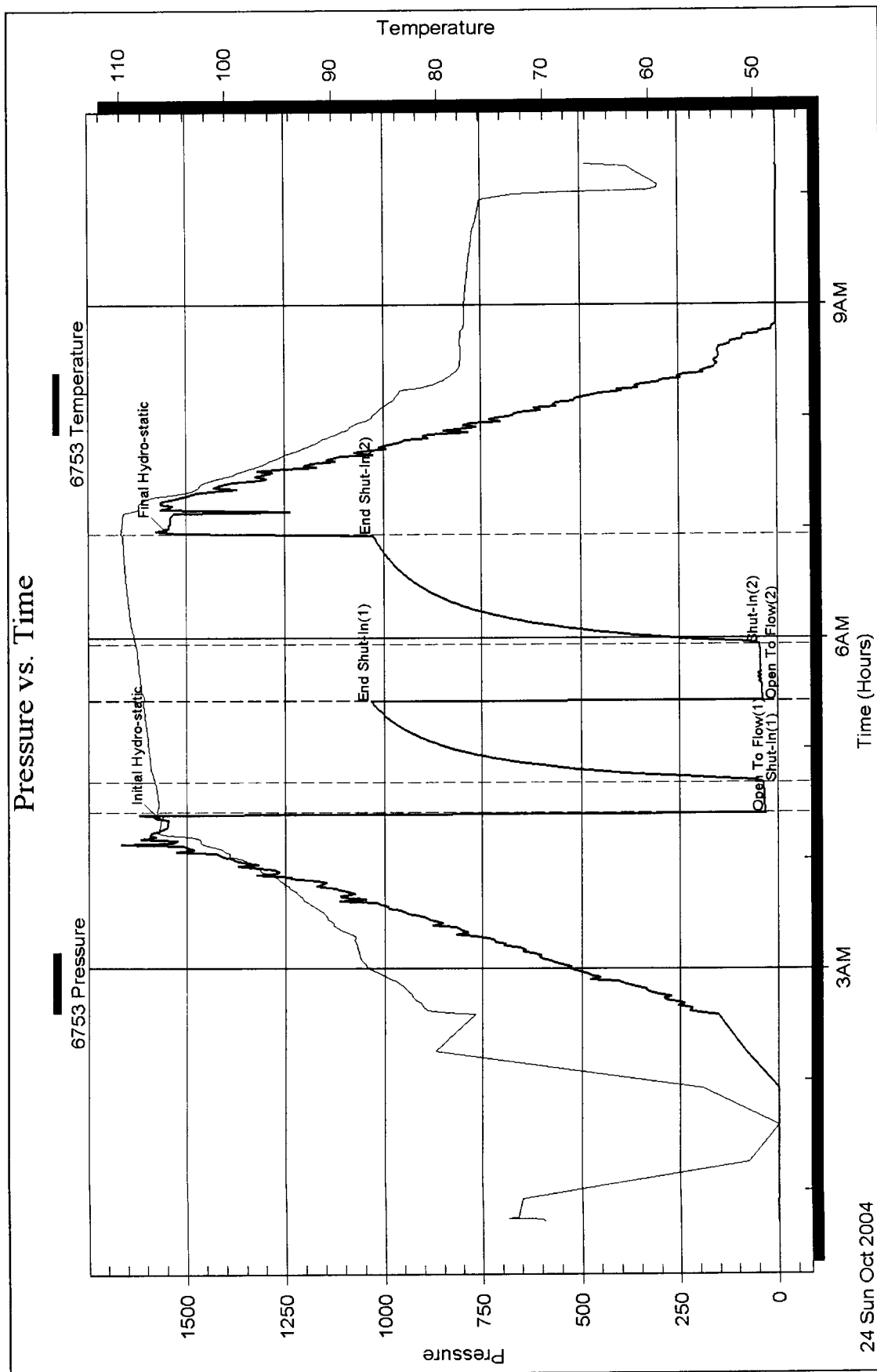
Serial #:

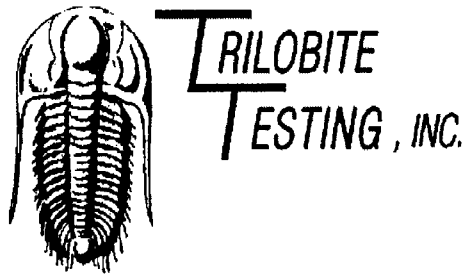
Laboratory Name:

Laboratory Location:

Recovery Comments:

Pressure vs. Time





DRILL STEM TEST REPORT

Prepared For: **Larson Operating Co.**

1670 Broadway Suite 3300
Denver, Co. 80202

ATTN: Tom Fertal

29--18s--9w

Wharton Trust # 1-29

Start Date: 2004.10.24 @ 19:25:08

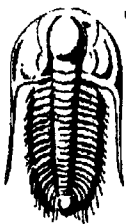
End Date: 2004.10.25 @ 05:10:08

Job Ticket #: 20206 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

Larson Operating Co.

1670 Broadway Suite 3300
Denver, Co. 80202

ATTN: Tom Fertal

Wharton Trust # 1-29

29-18s-9w

Job Ticket: 20206

DST#: 2

Test Start: 2004.10.24 @ 19:25:08

GENERAL INFORMATION:

Formation: **Arbuckle**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 22:05:08

Time Test Ended: 05:10:08

Test Type: Conventional Bottom Hole

Tester: John Schmidt

Unit No: 24

Interval: **3272.00 ft (KB) To 3286.00 ft (KB) (TVD)**

Total Depth: 3286.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 1731.00 ft (KB)

1721.00 ft (CF)

KB to GR/CF: 10.00 ft

Serial #: **6753** Inside

Press@RunDepth: 109.38 psig @ 3273.00 ft (KB)

Start Date: 2004.10.24

End Date:

2004.10.25

Start Time: 19:25:13

End Time:

05:10:08

Capacity: 7000.00 psig

Last Calib.: 2004.10.25

Time On Btm: 2004.10.24 @ 22:03:38

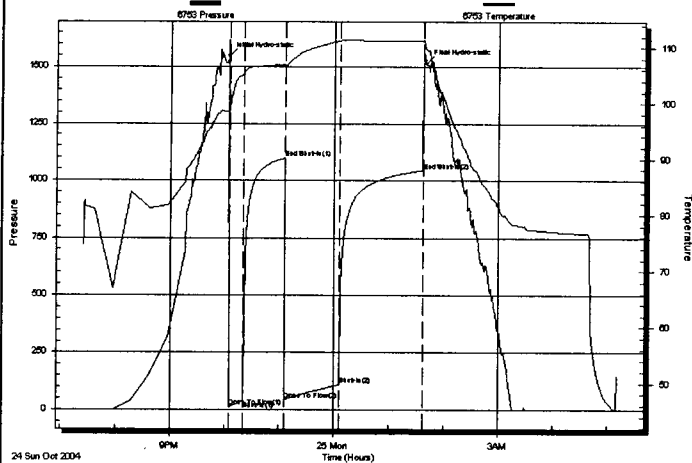
Time Off Btm: 2004.10.25 @ 01:39:38

TEST COMMENT: IF-Weak built to 4" in.
FF-Weak built to 5" in.

ISI-Dead

FSI-Dead

Pressure vs. Time



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1547.57	98.63	Initial Hydro-static
2	13.05	98.67	Open To Flow (1)
18	38.48	105.33	Shut-In (1)
62	1095.57	106.97	End Shut-In (1)
63	41.63	106.75	Open To Flow (2)
123	109.38	111.21	Shut-In (2)
213	1044.56	111.18	End Shut-In (2)
216	1515.76	109.73	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
108.00	SOCW-2%O-98%W	0.53
100.00	OCM-15%O-85%M	0.49
5.00	oil	0.02

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
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TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

TOOL DIAGRAM

Larson Operating Co.

Wharton Trust # 1-29

1670 Broadway Suite 3300
Denver, Co. 80202

29-18s-9w

Job Ticket: 20206

DST#: 2

ATTN: Tom Fertal

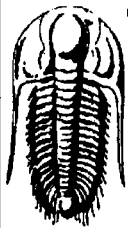
Test Start: 2004.10.24 @ 19:25:08

Tool Information

Drill Pipe:	Length: 2945.00 ft	Diameter: 3.00 inches	Volume: 25.75 bbl	Tool Weight:	lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.70 inches	Volume: 0.00 bbl	Weight set on Packer:	25000.00 lb
Drill Collar:	Length: 311.00 ft	Diameter: 2.25 inches	Volume: 1.53 bbl	Weight to Pull Loose:	60000.00 lb
			Total Volume: 27.28 bbl	Tool Chased	0.00 ft
Drill Pipe Above KB:	6.00 ft			String Weight: Initial	52000.00 lb
Depth to Top Packer:	3272.00 ft			Final	53000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	14.00 ft				
Tool Length:	36.00 ft				
Number of Packers:	2	Diameter: 6.75 inches			
Tool Comments:					
Sampler-					

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			3251.00	
Shut In Tool	5.00			3256.00	
Sampler	2.00			3258.00	
Hydraulic tool	5.00			3263.00	
Packer	4.00			3267.00	22.00 Bottom Of Top Packer
Packer	5.00			3272.00	
Stubb	1.00			3273.00	
Recorder	0.00	6753	Inside	3273.00	
Perforations	10.00			3283.00	
Recorder	0.00	13252	Outside	3283.00	
Bullnose	3.00			3286.00	14.00 Bottom Packers & Anchor

Total Tool Length: 36.00



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Larson Operating Co.

Wharton Trust # 1-29

1670 Broadway Suite 3300
Denver, Co. 80202

29-18s-9w

Job Ticket: 20206

DST#: 2

ATTN: Tom Fertal

Test Start: 2004.10.24 @ 19:25:08

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:

34000 ppm

Viscosity: 49.00 sec/qt

Cushion Volume:

bbl

Water Loss: 10.79 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
108.00	SOCW-2%O-98%W	0.531
100.00	OCM-15%O-85%M	0.492
5.00	oil	0.025

Total Length: 213.00 ft

Total Volume: 1.048 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

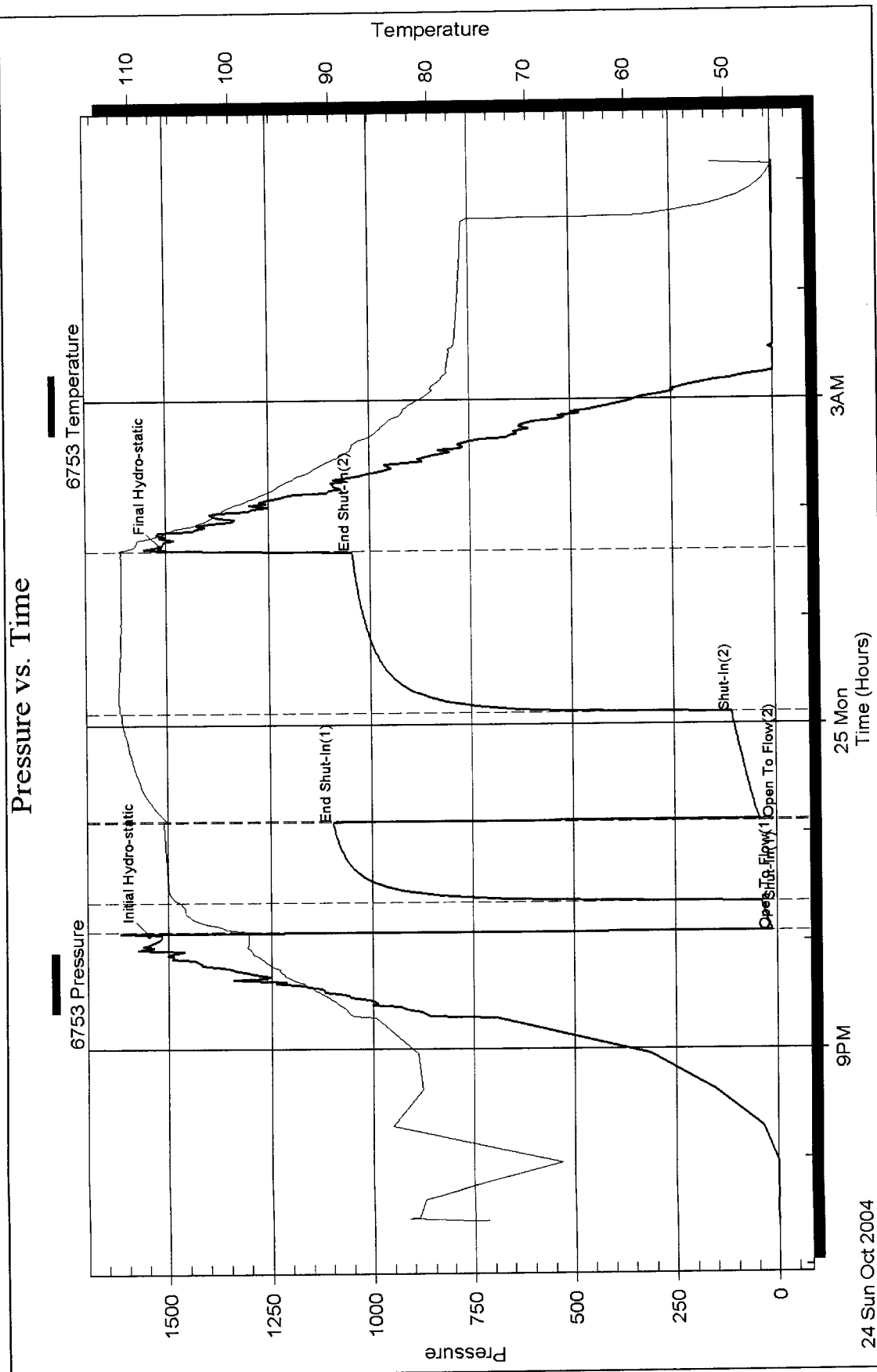
Serial #:

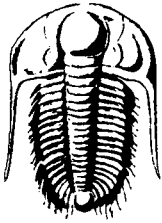
Laboratory Name:

Laboratory Location:

Recovery Comments:

Pressure vs. Time





TRILOBITE TESTING INC.

P.O. Box 362 • Hays, Kansas 67601

6892
No 20205

05/03

Test Ticket

Well Name & No. WHARTON TRUST #1-29 Test No. #1 Date 10-24-04
 Company LARSON OPERATING CO. Zone Tested ARBUCKLE
 Address 1670 BROADWAY SUITE 3300 DENVER, CO. 80202 Elevation 1231 KB 1721 GL
 Co. Rep / Geo. STEVE DAVIS Cont. SUMMIT #1 Est. Ft. of Pay _____ Por. _____ %
 Location: Sec. 29 Twp. 18S Rge. 9W Co. RICE State KS
 No. of Copies _____ Distribution Sheet (Y, N) _____ Turnkey (Y, N) _____ Evaluation (Y, N) _____

Interval Tested 3225 TO 3274 Initial Str Wt./Lbs. 56,000 Unseated Str Wt./Lbs. 56,000
 Anchor Length 51 Wt. Set Lbs. 25,000 Wt. Pulled Loose/Lbs. 60,000
 Top Packer Depth 3220 Tool Weight 3300
 Bottom Packer Depth 3225 Hole Size 7 7/8" Rubber Size 6 3/4"
 Total Depth 3274 Wt. Pipe Run 0 Drill Collar Run 280'
 Mud Wt. 9.3 LCM 0 Vis. 50 WL 9.6 Drill Pipe Size 4" XH Ft. Run 2948
 Blow Description IF - WEAK SURFACE BLOW 1" IN. FSI-DEAD
FF-WEAK DEAD IN 18-MIN. FSI-DEAD

Recovery - Total Feet 29 GIP 0 Ft. in DC 29 Ft. in DP 0
 Rec. 29 Feet of CIL STAIN MUD %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 6,500 ppm System

	AK-1	Alpine	Recorder No.	Test
(A) Initial Hydrostatic Mud		<u>1572</u> PSI	<u>67.53</u>	<u>B. HOLE 900</u>
(B) First Initial Flow Pressure		<u>31</u> PSI	<u>3260</u>	Elec. Rec. <u>✓</u>
(C) First Final Flow Pressure		<u>36</u> PSI	<u>13252</u>	Jars _____
(D) Initial Shut-In Pressure		<u>1032</u> PSI	<u>3273</u>	Safety Jt. _____
(E) Second Initial Flow Pressure		<u>36</u> PSI		Circ Sub _____
(F) Second Final Flow Pressure		<u>44</u> PSI		Sampler <u>✓ 200</u>
(G) Final Shut-In Pressure		<u>1027</u> PSI	<u>Initial Opening</u>	Straddle _____
(Q) Final Hydrostatic Mud		<u>1552</u> PSI	<u>Initial Shut-In</u>	Ext. Packer _____
			<u>Final Flow</u>	Shale Packer _____
			<u>Final Shut-In</u>	Mileage <u>160 R. TRIP</u>
			<u>T-On Location</u>	Sub Total: <u>1260</u>
			<u>T-Started</u>	Std. By <u>234</u> <u>82.50</u>
			<u>T-Open</u>	Other _____
			<u>T-Pulled</u>	Total: <u>1342.50</u>
			<u>T-Out</u>	

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.

Approved By [Signature]
 Our Representative [Signature]



TRILOBITE TESTING, INC.

P.O. Box 362 • Hays, Kansas 67601

FLUID SAMPLER DATA

Ticket No. #20205 Date 10-24-04
Company Name LARSON OPERATING CO.
Lease WHARTON TRUST #29 Test No. #1
County RICE Sec. 29 Twp. 18s Rng. 9w

SAMPLER RECOVERY

Gas 0 ML
Oil STAIN ML
Mud 4,000 ML
Water 0 ML
Other 0 ML
Pressure 0 ML
Total 4,000 ML

PIT MUD ANALYSIS

Chlorides 6,500 ppm.
Resistivity — ohms @ — F
Viscosity 50
Mud Weight 9.3
Filtrate 9.6
Other LCM 0

SAMPLER ANALYSIS

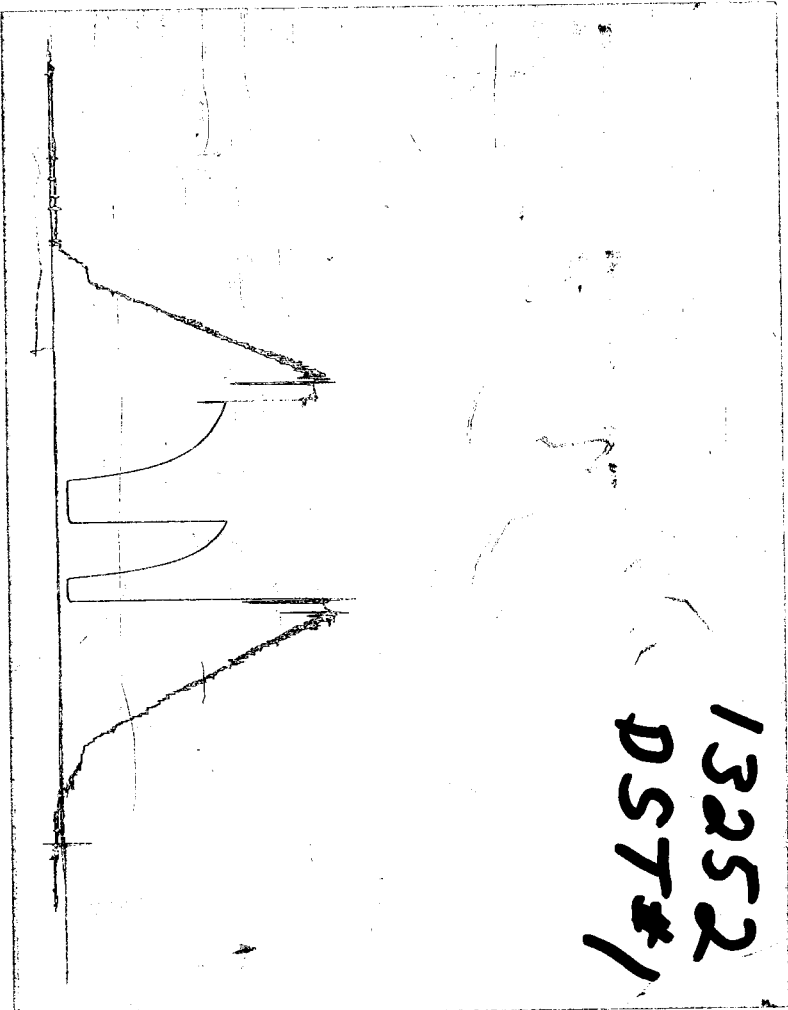
Resistivity — ohms @ — F
Chlorides — ppm.
Gravity — corrected @60F

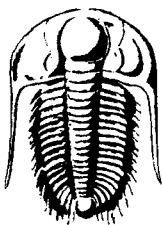
PIPE RECOVERY

TOP
Resistivity — ohms @ — F
Chlorides — ppm.
MIDDLE
Resistivity — ohms @ — F
Chlorides — ppm.
BOTTOM
Resistivity — ohms @ — F
Chlorides — ppm.

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

13252
DST#1





TRILOBITE TESTING INC.

P.O. Box 362 • Hays, Kansas 67601

No 20206

05/03

Test Ticket

Well Name & No. WHARTON TRUST #1-29 Test No. #2 Date 10-24-04
 Company LARSON OPERATING CO. Zone Tested ARBUCKLE
 Address _____ Elevation 1731 KB 1721 GL
 Co. Rep / Geo. STEVE DAVIS Cont. SUMMIT Est. Ft. of Pay _____ Por. _____ %
 Location: Sec. 29 Twp. 18S Rge. 9W Co. RICE State KS
 No. of Copies _____ Distribution Sheet (Y, N) _____ Turnkey (Y, N) _____ Evaluation (Y, N) _____

Interval Tested 3272 To 3286 Initial Str Wt./Lbs. 52,000 Unseated Str Wt./Lbs. 53,000
 Anchor Length 14' Wt. Set Lbs. 25,000 Wt. Pulled Loose/Lbs. 60,000
 Top Packer Depth 3267 Tool Weight 2,300
 Bottom Packer Depth 3272 Hole Size 7 7/8" ✓ Rubber Size 6 3/4" ✓
 Total Depth 3286' Wt. Pipe Run 0 Drill Collar Run 311'
 Mud Wt. 9.3 LCM 0 Vis. 49 WL 10.8 Drill Pipe Size 4" XH Ft. Run 2945'
 Blow Description IF-WEAK BUILT TO 4" IN. ISI-DEAD
FF-WEAR BUILT TO 5" IN. FST-DEAD

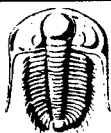
Recovery - Total Feet 218 GIP 0 Ft. in DC 218' Ft. in DP 0
 Rec. 108 Feet of SOLW %gas 2 %oil 98 %water _____ %mud _____
 Rec. 100 Feet of OCM %gas 15 %oil _____ %water 85 %mud _____
 Rec. 10' Feet of OL %gas 100 %oil _____ %water _____ %mud _____
 Rec. _____ Feet of _____ %gas _____ %oil _____ %water _____ %mud _____
 Rec. _____ Feet of _____ %gas _____ %oil _____ %water _____ %mud _____
 BHT 111 °F Gravity _____ °API D @ _____ °F Corrected Gravity _____ °API
 RW 27 @ 44 °F Chlorides 34,000 ppm Recovery _____ Chlorides 6,500 ppm System
156 46 AK-1 Alpine 19,000

(A) Initial Hydrostatic Mud 1547 PSI Recorder No. 6753 Test B. HOLE 900
 (B) First Initial Flow Pressure 13 PSI (depth) 3273 Elec. Rec. ✓
 (C) First Final Flow Pressure 38 PSI Recorder No. 13252 Jars _____
 (D) Initial Shut-In Pressure 1095 PSI (depth) 3283 Safety Jt. _____
 (E) Second Initial Flow Pressure 41 PSI Recorder No. _____ Circ Sub _____
 (F) Second Final Flow Pressure 109 PSI (depth) _____ Sampler ✓ 200
 (G) Final Shut-In Pressure 1044 PSI Initial Opening 15 Straddle _____
 (Q) Final Hydrostatic Mud 1515 PSI Initial Shut-In 45 Ext. Packer _____
 Final Flow 60 Shale Packer _____
 Final Shut-In 90 Mileage 35-R. TRIP
 T-On Location 18:15 Sub Total: 1135
 T-Started 19:25 Std. By 3hrs 90
 T-Open 22:05 Other _____
 T-Pulled 01:39 Total: 1225
 T-Out 05:10

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Approved By [Signature]

Our Representative John J. Schmidt



TRILOBITE TESTING, INC.

P.O. Box 362 • Hays, Kansas 67601

FLUID SAMPLER DATA

Ticket No. 20206 Date 10-24-04
Company Name LARSON OPERATING CO.
Lease WHARTON TRUST #29 Test No. #2
County RICE Sec. 29 Twp. 18S Rng. 9W

SAMPLER RECOVERY

Gas 0
Oil 80
Mud 0
Water 3,920
Other 0
Pressure 600
Total 4,000

ML Chlorides 4,500 ppm.
ML Resistivity - ohms @ - F
ML Viscosity 49
ML Mud Weight 9.3
ML Filtrate 10.8
ML Other LCM #0
ML

SAMPLER ANALYSIS

Resistivity 127 ohms @ 44 F
Chlorides 34,000 ppm.
Gravity - corrected @60F

PIPE RECOVERY

TOP
Resistivity 127 ohms @ 44 F
Chlorides 34,000 ppm.
MIDDLE
Resistivity - ohms @ - F
Chlorides - ppm.
BOTTOM
Resistivity - ohms @ - F
Chlorides - ppm.

CHART PAGE

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

