



DRILL STEM TEST REPORT

Prepared For: **Central Operating, Inc.**

1600 Broadway Suite # 1050
Denver, Co. 80202

ATTN: P.A. Brew

8--15S--14w

Deines # 1

Start Date: 2004.06.14 @ 01:51:02

End Date: 2004.06.14 @ 06:25:02

Job Ticket #: 19443 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

Central Operating, Inc.

1600 Broadway Suite # 1050
Denver, Co. 80202

ATTN: P.A. Brew

Deines # 1

8--15S--14w

Job Ticket: 19443

DST#: 1

Test Start: 2004.06.14 @ 01:51:02

GENERAL INFORMATION:

Formation: **Tor-L.Kc.-A&B**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 03:32:02

Time Test Ended: 06:25:02

Test Type: Conventional Bottom Hole

Tester: John Schmidt

Unit No: 18

Interval: **2988.00 ft (KB) To 3075.00 ft (KB) (TVD)**

Total Depth: 3075.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 1861.00 ft (KB)

1856.00 ft (CF)

KB to GR/CF: 5.00 ft

Serial #: 6741

Inside

Press@RunDepth: 21.92 psig @ 2991.00 ft (KB)

Start Date: 2004.06.14 End Date: 2004.06.14

Start Time: 01:51:03 End Time: 06:25:02

Capacity: 7000.00 psig

Last Calib.: 2004.06.14

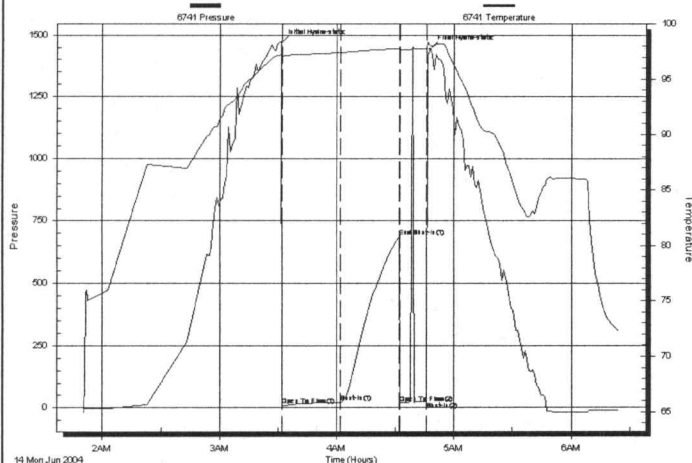
Time On Btm: 2004.06.14 @ 03:31:32

Time Off Btm: 2004.06.14 @ 04:47:32

TEST COMMENT: IF-Weak Surface Dead in 20 min.
FF-Dead Flush tool no help.

ISI-Dead

Pressure vs. Time



PRESSURE SUMMARY

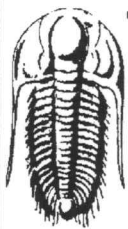
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1468.37	97.26	Initial Hydro-static
1	7.40	96.88	Open To Flow (1)
31	21.92	97.43	Shut-In(1)
61	686.36	97.80	End Shut-In(1)
61	17.79	97.64	Open To Flow (2)
75	26.59	97.78	Shut-In(2)
76	1443.72	98.00	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
10.00	Drilling Mud Few spots of oil	0.05

Gas Rates

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

DRILL STEM TEST REPORT

TOOL DIAGRAM

Central Operating, Inc.

1600 Broadway Suite # 1050
Denver, Co. 80202

ATTN: P.A. Brew

Deines # 1

8--15S--14w

Job Ticket: 19443

DST#: 1

Test Start: 2004.06.14 @ 01:51:02

Tool Information

Drill Pipe:	Length:	2850.00 ft	Diameter:	3.80 inches	Volume:	39.98 bbl	Tool Weight:	2600.00 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:	125.00 ft	Diameter:	2.25 inches	Volume:	0.61 bbl	Weight to Pull Loose:	65000.00 lb
					Total Volume:	40.59 bbl	Tool Chased	0.00 ft
Drill Pipe Above KB:		16.00 ft					String Weight: Initial	62000.00 lb
Depth to Top Packer:		2988.00 ft					Final	62000.00 lb
Depth to Bottom Packer:		ft						
Interval between Packers:		87.00 ft						
Tool Length:		116.00 ft						
Number of Packers:		2	Diameter:	6.75 inches				
Tool Comments:								

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
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Change Over Sub	1.00			2960.00	
Shut In Tool	5.00			2965.00	
Sampler	2.00			2967.00	
Hydraulic tool	5.00			2972.00	
Jars	5.00			2977.00	
Safety Joint	2.00			2979.00	
Packer	4.00			2983.00	29.00 Bottom Of Top Packer
Packer	5.00			2988.00	
Stubb	1.00			2989.00	
Perforations	1.00			2990.00	
Change Over Sub	1.00			2991.00	
Recorder	0.00	6741	Inside	2991.00	
Blank Spacing	62.00			3053.00	
Change Over Sub	1.00			3054.00	
Recorder	0.00	11084	Outside	3054.00	
Perforations	18.00			3072.00	
Bullnose	3.00			3075.00	87.00 Bottom Packers & Anchor
Total Tool Length:	116.00				



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

FLUID SUMMARY

Central Operating, Inc.

Deines # 1

1600 Broadway Suite # 1050
Denver, Co. 80202

8--15S--14w

Job Ticket: 19443

DST#: 1

ATTN: P.A. Brew

Test Start: 2004.06.14 @ 01:51:02

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: 52.00 sec/qt

Cushion Volume:

bbl

Water Loss: 9.59 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
10.00	Drilling Mud Few spots of oil	0.049

Total Length: 10.00 ft

Total Volume: 0.049 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

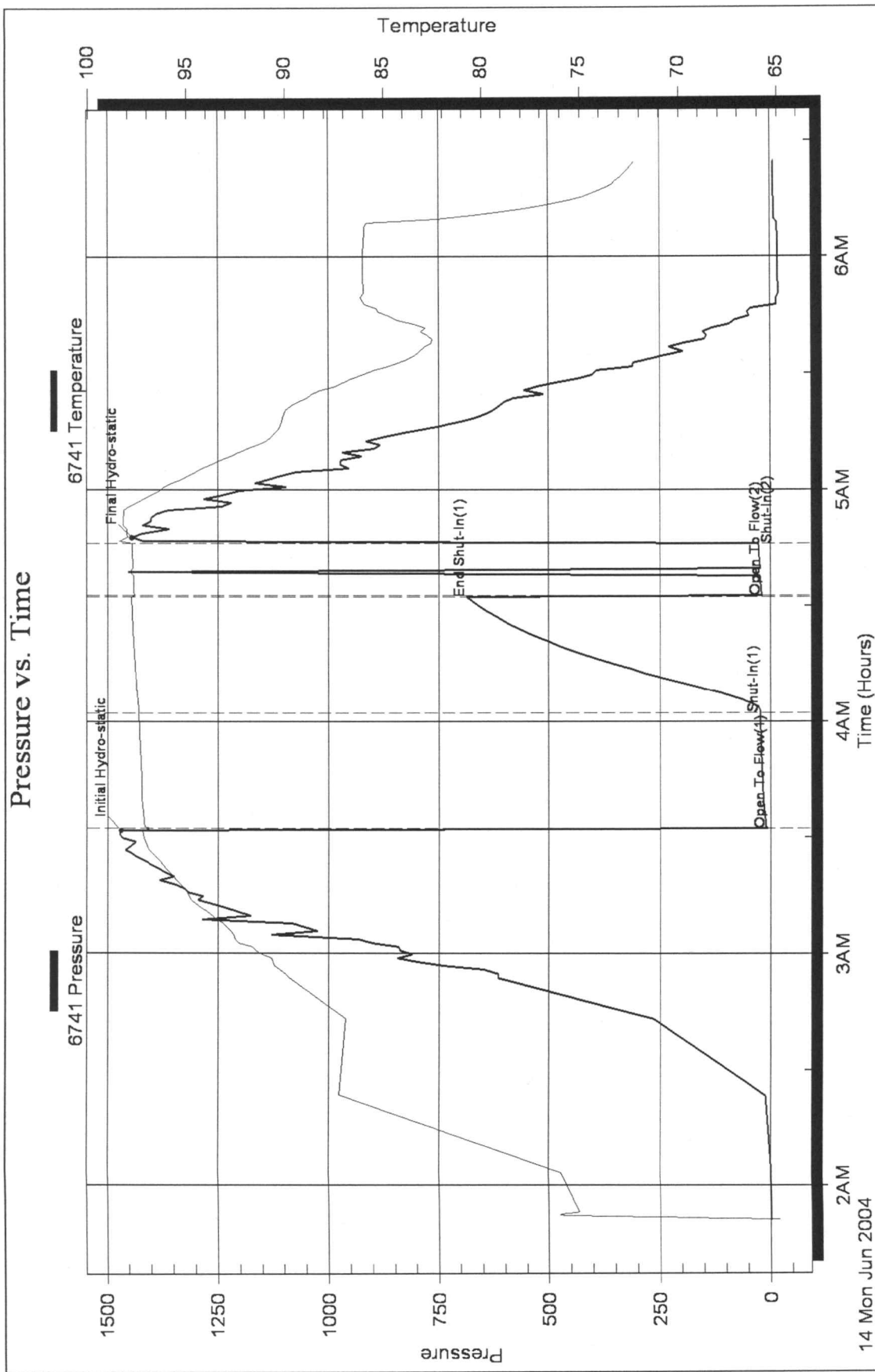
Serial #: 6741

Inside

Central Operating, Inc.

8--15S--14w

DST Test Number: 1





DRILL STEM TEST REPORT

Prepared For: **Central Operating, Inc.**

1600 Broadway Suite # 1050
Denver, Co. 80202

ATTN: P.A. Brew

8--15S--14w

Deines # 1

Start Date: 2004.06.14 @ 23:42:20

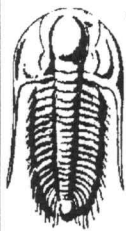
End Date: 2004.06.15 @ 04:45:50

Job Ticket #: 19444 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

Central Operating, Inc.

1600 Broadway Suite # 1050
Denver, Co. 80202

ATTN: P.A. Brew

Deines # 1

8--15S--14w

Job Ticket: 19444

DST#: 2

Test Start: 2004.06.14 @ 23:42:20

GENERAL INFORMATION:

Formation: **L.Kc.-**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 01:22:50

Time Test Ended: 04:45:50

Interval: **3222.00 ft (KB) To 3253.00 ft (KB) (TVD)**

Total Depth: 3075.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Fair

Test Type: Conventional Bottom Hole

Tester: John Schmidt

Unit No: 18

Reference Elevations: 1861.00 ft (KB)

1856.00 ft (CF)

KB to GR/CF: 5.00 ft

Serial #: 6741 Inside

Press@RunDepth: 9.84 psig @ 3227.00 ft (KB)

Start Date: 2004.06.14

End Date: 2004.06.15

Start Time: 23:42:21

End Time: 04:45:50

Capacity: 7000.00 psig

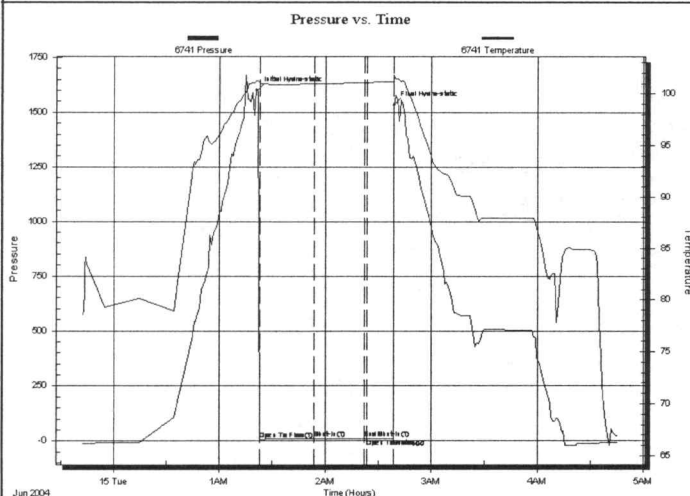
Last Calib.: 2004.06.15

Time On Btm: 2004.06.15 @ 01:21:20

Time Off Btm: 2004.06.15 @ 02:38:50

TEST COMMENT: IF-Weak Dead in 8 min.
FF-Dead Flush tool no help.

ISI-Dead



PRESSURE SUMMARY

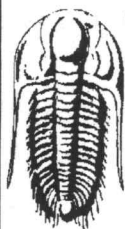
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1601.52	101.22	Initial Hydro-static
2	6.76	101.07	Open To Flow (1)
33	9.84	100.94	Shut-In(1)
61	11.38	101.05	End Shut-In(1)
63	10.52	101.05	Open To Flow (2)
77	11.71	101.12	Shut-In(2)
78	1532.86	101.81	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
5.00	Drilling Mud	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

Central Operating, Inc.

1600 Broadway Suite # 1050
Denver, Co.80202

ATTN: P.A.Brew

Deines # 1

8--15S--14w

Job Ticket: 19444

DST#: 2

Test Start: 2004.06.14 @ 23:42:20

Tool Information

Drill Pipe:	Length: 3087.00 ft	Diameter: 3.80 inches	Volume: 43.30 bbl	Tool Weight: 2600.00 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: 125.00 ft	Diameter: 2.25 inches	Volume: 0.61 bbl	Weight to Pull Loose: 68000.00 lb
			<u>Total Volume: 43.91 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	12.00 ft			String Weight: Initial 64000.00 lb
Depth to Top Packer:	3222.00 ft			Final 64000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	31.00 ft			
Tool Length:	53.00 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			3201.00	
Shut In Tool	5.00			3206.00	
Sampler	2.00			3208.00	
Hydraulic tool	5.00			3213.00	
Packer	4.00			3217.00	22.00 Bottom Of Top Packer
Packer	5.00			3222.00	
Stubb	1.00			3223.00	
Perforations	4.00			3227.00	
Recorder	0.00	6741	Inside	3227.00	
Perforations	23.00			3250.00	
Recorder	0.00	11084	Outside	3250.00	
Bullnose	3.00			3253.00	31.00 Bottom Packers & Anchor

Total Tool Length: 53.00



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DRILL STEM TEST REPORT

FLUID SUMMARY

Central Operating, Inc.

Deines # 1

1600 Broadway Suite # 1050
Denver, Co. 80202

8--15S--14w

Job Ticket: 19444

DST#: 2

ATTN: P.A. Brew

Test Start: 2004.06.14 @ 23:42:20

Mud and Cushion Information

Mud Type: Gel Chem

Mud Weight: 9.00 lb/gal

Viscosity: 52.00 sec/qt

Water Loss: 9.58 in³

Resistivity: ohm.m

Salinity: ppm

Filter Cake: inches

Cushion Type:

Cushion Length:

Cushion Volume:

Gas Cushion Type:

Gas Cushion Pressure:

ft

bbl

psig

Oil API:

Water Salinity:

deg API

ppm

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
5.00	Drilling Mud	0.025

Total Length: 5.00 ft

Total Volume: 0.025 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

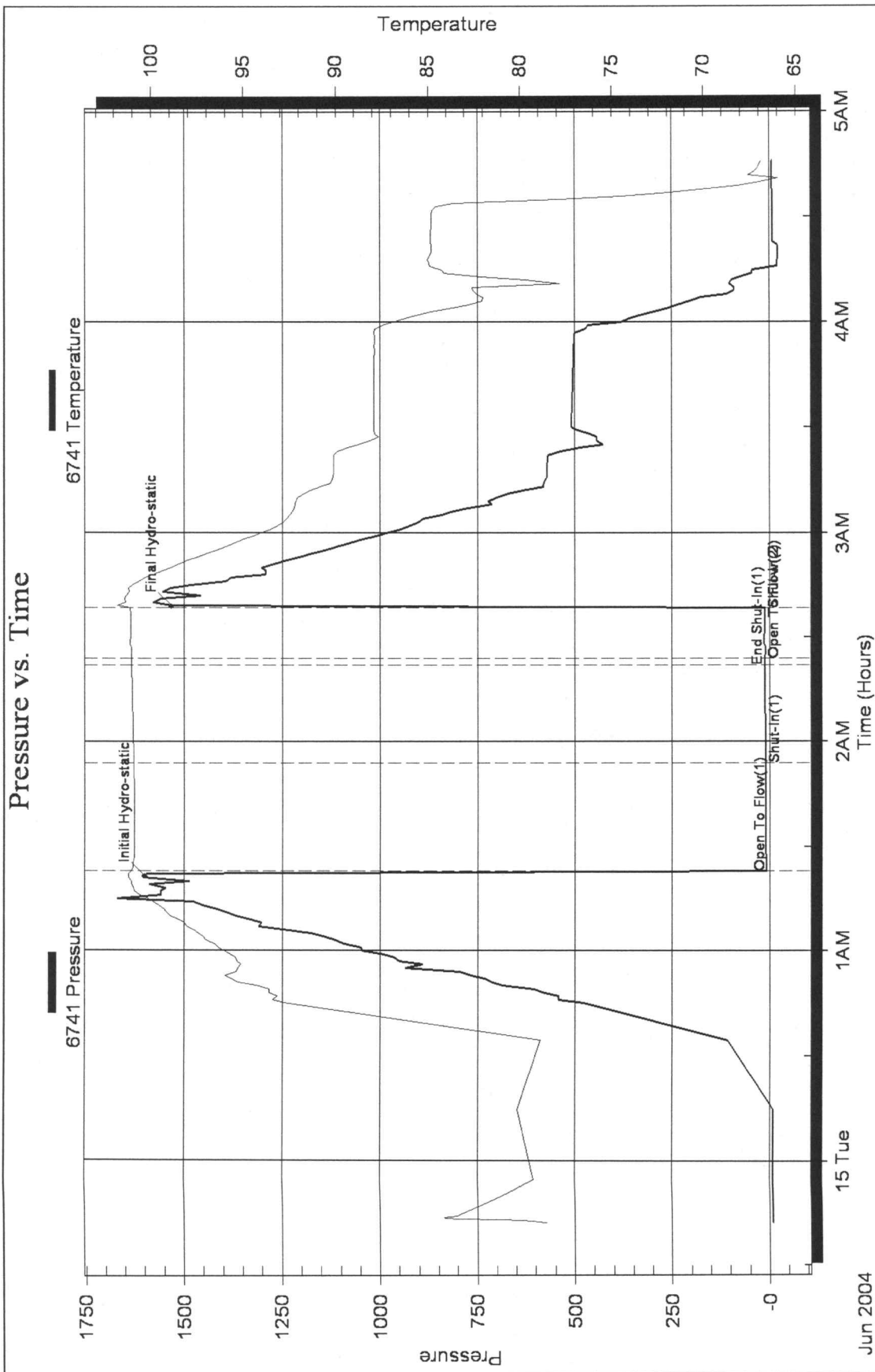
Serial #:

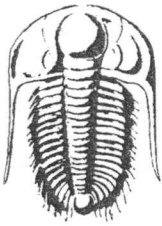
Laboratory Name:

Laboratory Location:

Recovery Comments:

Pressure vs. Time





TRILOBITE TESTING INC.

P.O. Box 362 • Hays, Kansas 67601

INV
0514

No. 19443

05/03

Test Ticket

Well Name & No. <u>DEINES #1</u>	Test No. <u>#1</u>	Date <u>6-14-04</u>
Company <u>CENTRAL OPERATING, INC.</u>	Zone Tested <u>TOP - L.R. A+B</u>	
Address <u>1600 BROADWAY SUITE #1050 DENVER, CO, 80202</u>	Elevation <u>1861</u>	KB <u>1856</u> GL
Co. Rep / Geo. <u>JERRY GREEN</u>	Cont. <u>MURFIN #10</u>	Est. Ft. of Pay _____ Por. _____ %
Location: Sec. <u>8</u>	Twp. <u>15S</u>	Rge. <u>14E</u> Co. <u>RUSSELL</u> State <u>KS</u>
No. of Copies _____	Disbtribution Sheet (Y, N) _____	Turnkey (Y, N) _____ Evaluation (Y, N) _____

Interval Tested <u>2988 TO 3075</u>	Initial Str Wt./Lbs. <u>62,000</u>	Unseated Str Wt./Lbs. <u>62,000</u>
Anchor Length <u>87'</u>	Wt. Set Lbs. <u>25,000</u>	Wt. Pulled Loose/Lbs. <u>65,000</u>
Top Packer Depth <u>2983</u>	Tool Weight <u>2600</u>	
Bottom Packer Depth <u>2988</u>	Hole Size <u>7 7/8"</u> ✓	Rubber Size <u>6 3/4"</u> ✓
Total Depth <u>3075</u>	Wt. Pipe Run <u>0</u>	Drill Collar Run <u>+86' 125'</u>
Mud Wt. <u>9.0</u> LCM <u>0</u> Vis. <u>52</u> WL <u>9.6</u>	Drill Pipe Size <u>4 1/2 XH</u>	Ft. Run <u>2850</u>
Blow Description <u>IF - WEAK SURF. DEAD IN 20-MIN FSI - DEAD,</u> <u>FF - DEAD FLUSH TOOL NO HELP</u>		

Recovery - Total Feet <u>10'</u>	GIP <u>0</u>	Ft. in DC <u>10'</u>	Ft. in DP <u>0</u>
Rec. <u>10'</u>	Feet of <u>DRILLING MUD</u>	%gas	%oil
Rec. _____	Feet of <u>FEW OIL SPOTS</u>	%gas	%oil
Rec. _____	Feet of _____	%gas	%oil
Rec. _____	Feet of _____	%gas	%oil
Rec. _____	Feet of _____	%gas	%oil
BHT <u>98</u>	°F Gravity _____	°API D @ _____	°F Corrected Gravity _____
RW _____	@ _____	°F Chlorides _____	ppm Recovery _____
		Chlorides <u>2,500</u>	ppm System

(A) Initial Hydrostatic Mud	AK-1	Alpine	1468 PSI	Recorder No. <u>6741</u>	Test <u>B, HOLE</u>
(B) First Initial Flow Pressure			7 PSI	(depth) <u>2991</u>	Elec. Rec. <u>✓</u>
(C) First Final Flow Pressure			21 PSI	Recorder No. <u>11084</u>	Jars <u>✓</u>
(D) Initial Shut-In Pressure			686 PSI	(depth) <u>3054</u>	Safety Jt. <u>✓</u>
(E) Second Initial Flow Pressure			17 PSI	Recorder No. _____	Circ Sub _____
(F) Second Final Flow Pressure			26 PSI	(depth) _____	Sampler <u>✓</u>
(G) Final Shut-In Pressure			— PSI	Initial Opening <u>30</u>	Straddle _____
(Q) Final Hydrostatic Mud			1443 PSI	Initial Shut-In <u>30</u>	Ext. Packer _____

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 _____

Representative

John J. Schmidt

Final Flow	<u>15</u>
Final Shut-In	<u>—</u>
T-On Location	<u>23:30</u>
T-Started	<u>01:51</u>
T-Open	<u>03:32</u>
T-Pulled	<u>04:47</u>
T-Out	<u>06:25</u>

Mileage	<u>35</u>
Sub Total:	<u>1409.50</u>
Std. By	_____
Other	_____
Total:	_____

TRILOBITE TESTING L.L.C.

P.O. Box 362 - Hays, Kansas 67601

FLUID SAMPLER DATA

Ticket No. # 19443 Date 6-14-04
Company Name CENTRAL OPERATING, INC.
Lease DEINES #1 Test No. #1
County RUSSELL Sec. 8 Twp. 15 S Rng. 14 W

SAMPLER RECOVERY

Gas — ML
Oil 0 ML
Mud 4,000 ML
Water 0 ML
Other 0 ML
Pressure 400 PSI
Total 4,000 ML

PIT MUD ANALYSIS

Chlorides 2,500 ppm.
Resistivity _____ ohms @ _____ F
Viscosity 52
Mud Weight 9.0
Filtrate 9.6
Other LCM-0

SAMPLER ANALYSIS

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

PIPE RECOVERY

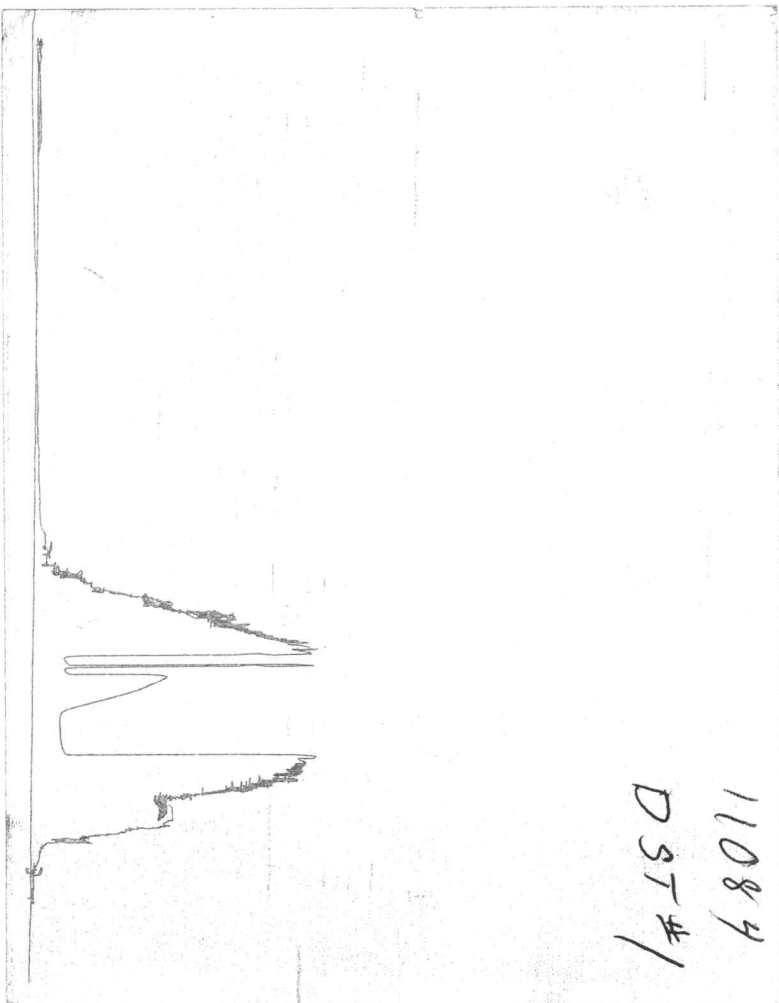
TOP
Resistivity _____ ohms @ _____ F
Chlorides _____ ppm.

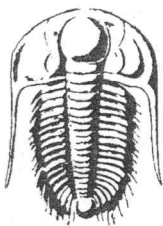
MIDDLE
Resistivity _____ ohms @ _____ F
Chlorides _____ ppm.

BOTTOM
Resistivity _____ ohms @ _____ F
Chlorides _____ ppm.

CHART PAGE

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





TRILOBITE TESTING INC.

P.O. Box 362 • Hays, Kansas 67601

No. 19444

05/03

Test Ticket

Well Name & No. <u>DEINES #1</u>	Test No. <u>#2</u>	Date <u>6-14-04</u>
Company <u>CENTRAL OPERATING, INC.</u>	Zone Tested <u>L. KC. - K</u>	
Address _____	Elevation <u>1861</u> KB <u>1856</u> GL	
Co. Rep / Geo. <u>JERRY GREEN</u>	Cont. <u>MURFIN #16</u>	Est. Ft. of Pay _____ Por. _____ %
Location: Sec. <u>8</u> Twp. <u>15S</u> Rge. <u>14W</u>	Co. <u>RUSSELL</u>	State <u>KS</u>
No. of Copies _____	Disbtribution Sheet (Y, N) _____	Turnkey (Y, N) _____ Evaluation (Y, N) _____

Interval Tested <u>3222 TO 3253</u>	Initial Str Wt./Lbs. <u>64,000</u>	Unseated Str Wt./Lbs. <u>64,000</u>
Anchor Length <u>31'</u>	Wt. Set Lbs. <u>25,000</u>	Wt. Pulled Loose/Lbs. <u>68,000</u>
Top Packer Depth <u>3217</u>	Tool Weight <u>2300</u>	
Bottom Packer Depth <u>3222</u>	Hole Size 7 7/8" <u>✓</u>	Rubber Size 6 3/4" <u>✓</u>
Total Depth <u>3253'</u>	Wt. Pipe Run <u>0</u>	Drill Collar Run <u>125'</u>
Mud Wt. <u>9.4</u> LCM <u>0</u> Vis. <u>52</u> WL <u>9.6</u>	Drill Pipe Size <u>4 1/2 X 14</u>	Ft. Run <u>3087'</u>
Blow Description <u>IF - WEAK DEAD IN 8-MIN. IF - DEAD</u>		
<u>FF - DEAD FLUSH TOOL NO HELP</u>		

Recovery - Total Feet <u>5</u>	GIP <u>0</u>	Ft. in DC <u>5</u>	Ft. in DP <u>0</u>
Rec. <u>5</u>	Feet of <u>DRILLING 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 <u>101</u>	°F Gravity _____	°API D @ _____	°F Corrected Gravity _____
RW _____	@ _____	°F Chlorides _____ ppm	Recovery _____ Chlorides <u>5,500</u> ppm System

(A) Initial Hydrostatic Mud _____	AK-1 <u>1001</u> PSI	Alpine <u>1001</u> PSI	Recorder No. <u>6741</u>	Test <u>B. HOLE 700</u>
(B) First Initial Flow Pressure _____	<u>6</u> PSI	<u>6</u> PSI	(depth) <u>3227</u>	Elec. Rec. <u>✓</u> <u>150</u>
(C) First Final Flow Pressure _____	<u>9</u> PSI	<u>9</u> PSI	Recorder No. <u>13308</u>	Jars _____
(D) Initial Shut-In Pressure _____	<u>11</u> PSI	<u>11</u> PSI	(depth) <u>3250</u>	Safety Jt. _____
(E) Second Initial Flow Pressure _____	<u>10</u> PSI	<u>10</u> PSI	Recorder No. _____	Circ Sub _____
(F) Second Final Flow Pressure _____	<u>11</u> PSI	<u>11</u> PSI	(depth) _____	Sampler <u>✓</u> <u>200</u>
(G) Final Shut-In Pressure _____	_____ PSI	_____ PSI	Initial Opening <u>30</u>	Straddle _____
(Q) Final Hydrostatic Mud _____	<u>1532</u> PSI	<u>1532</u> PSI	Initial Shut-In <u>30</u>	Ext. Packer _____
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.			Final Flow <u>15</u>	Shale Packer _____
			Final Shut-In _____	Mileage <u>35</u> <u>59.50</u>
			T-On Location <u>22:45</u>	Sub Total: <u>1109.50</u>
			T-Started <u>23:42</u>	Std. By _____
			T-Open <u>01:22</u>	Other _____
			T-Pulled <u>02:38</u>	Total: _____
			T-Out <u>04:45</u>	
Approved By _____				
Our Representative <u>John J. Schmidt</u>				

TRILOBITE TESTING L.L.C.

P.O. Box 362 - Hays, Kansas 67601

FLUID SAMPLER DATA

Ticket No. #19444 Date 6-14-04
Company Name CENTRAL OPERATING, INC.
Lease DEINES #1 Test No. #2
County RUSSELL Sec. 8 Twp. 15S Rng. 14W

SAMPLER RECOVERY

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

PIT MUD ANALYSIS

Chlorides 5,500 ppm.
Resistivity - ohms @ - F
Viscosity 52
Mud Weight 9.4
Filtrate 9.6
Other _____

SAMPLER ANALYSIS

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

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

13308
DST#2

