

DRILL STEM TEST REPORT

Prepared For: **RP Nixon Operating Inc**

207 W 12th Street
Hays KS 67601-3898

ATTN: Dan Nixon

9 11 23W Trego KS

Delaney #1

Start Date: 2007.09.06 @ 03:20:42

End Date: 2007.09.06 @ 10:41:36

Job Ticket #: 29199 DST #: 1

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

RP Nixon Operating Inc

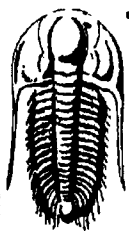
Delaney #1

9 11 23W Trego KS

DST # 1

LKC

2007.09.06



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

RP Nixon Operating Inc

Delaney #1

207 W 12th Street
Hays KS 67601-3898

9 11 23W Trego KS

ATTN: Dan Nixon

Job Ticket: 29199

DST#: 1

Test Start: 2007.09.06 @ 03:20:42

GENERAL INFORMATION:

Formation: **LKC**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 05:19:37

Time Test Ended: 10:41:36

Test Type: Conventional Bottom Hole

Tester: Ray Schwager

Unit No: 42

Interval: **3510.00 ft (KB) To 3580.00 ft (KB) (TVD)**

Total Depth: 3580.00 ft (KB) (TVD)

Hole Diameter: 7.85 inches Hole Condition: Fair

Reference Elevations: 2266.00 ft (KB)

2261.00 ft (CF)

KB to GR/CF: 5.00 ft

Serial #: 6753

inside

Press@RunDepth: 1108.82 psig @ 3518.01 ft (KB)

Start Date: 2007.09.06

End Date:

2007.09.06

Start Time: 03:20:42

End Time:

10:41:36

Capacity: 7000.00 psig

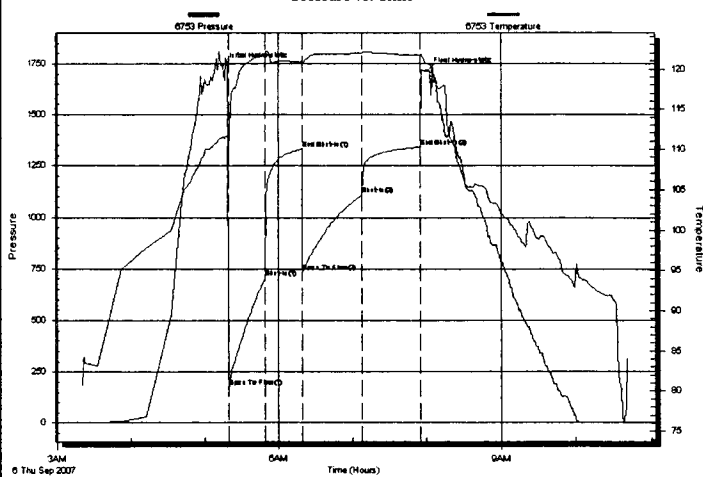
Last Calib.: 2007.09.06

Time On Btm: 2007.09.06 @ 05:15:07

Time Off Btm: 2007.09.06 @ 08:00:36

TEST COMMENT: IFP Strg bl in 1min
FFP Strg bl in 1 min
Times 30 30 45 45
No bl on shut-in

Pressure vs. Time



PRESSURE SUMMARY

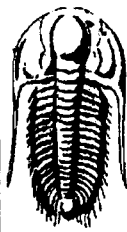
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1736.85	111.40	Initial Hydro-static
5	177.24	109.47	Open To Flow (1)
34	706.12	121.74	Shut-In(1)
64	1330.15	120.87	End Shut-In(1)
65	736.47	120.42	Open To Flow (2)
113	1108.82	121.98	Shut-In(2)
160	1340.71	121.72	End Shut-In(2)
166	1712.27	120.64	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
2325.00	Water RW .12 @ 84F	30.43

Gas Rates

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



TRILOBITE
TESTING, INC

DRILL STEM TEST REPORT

TOOL DIAGRAM

RP Nixon Operating Inc

Delaney #1

207 W 12th Street
Hays KS 67601-3898

9 11 23W Trego KS

Job Ticket: 29199

DST#: 1

ATTN: Dan Nixon

Test Start: 2007.09.06 @ 03:20:42

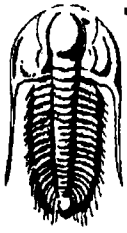
Tool Information

Drill Pipe:	Length: 3197.00 ft	Diameter: 3.80 inches	Volume: 44.85 bbl	Tool Weight: 2200.00 lb
Heavy Wt. Pipe:	Length: 315.00 ft	Diameter: 2.70 inches	Volume: 2.23 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose: 60000.00 lb
			<u>Total Volume: 47.08 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	23.00 ft			String Weight: Initial 40000.00 lb
Depth to Top Packer:	3510.00 ft			Final 51000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	70.02 ft			
Tool Length:	91.02 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			3490.00	
Shut In Tool	5.00			3495.00	
Hydraulic tool	5.00			3500.00	
Packer	5.00			3505.00	21.00 Bottom Of Top Packer
Packer	5.00			3510.00	
Stubb	1.00			3511.00	
Perforations	7.00			3518.00	
Recorder	0.01	6753	Inside	3518.01	
Blank Spacing	32.00			3550.01	
Recorder	0.01	13534	Outside	3550.02	
Perforations	27.00			3577.02	
Bullnose	3.00			3580.02	70.02 Bottom Packers & Anchor

Total Tool Length: 91.02



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

RP Nixon Operating Inc

Delaney #1

207 W 12th Street
Hays KS 67601-3898

9 11 23W Trego KS

Job Ticket: 29199

DST#: 1

ATTN: Dan Nixon

Test Start: 2007.09.06 @ 03:20:42

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: 53000 ppm

Viscosity: 60.00 sec/qt

Cushion Volume: bbl

Water Loss: 7.94 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure: psig

Salinity: 1200.00 ppm

Filter Cake: 2.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
2325.00	Water RW .12 @ 84F	30.426

Total Length: 2325.00 ft Total Volume: 30.426 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

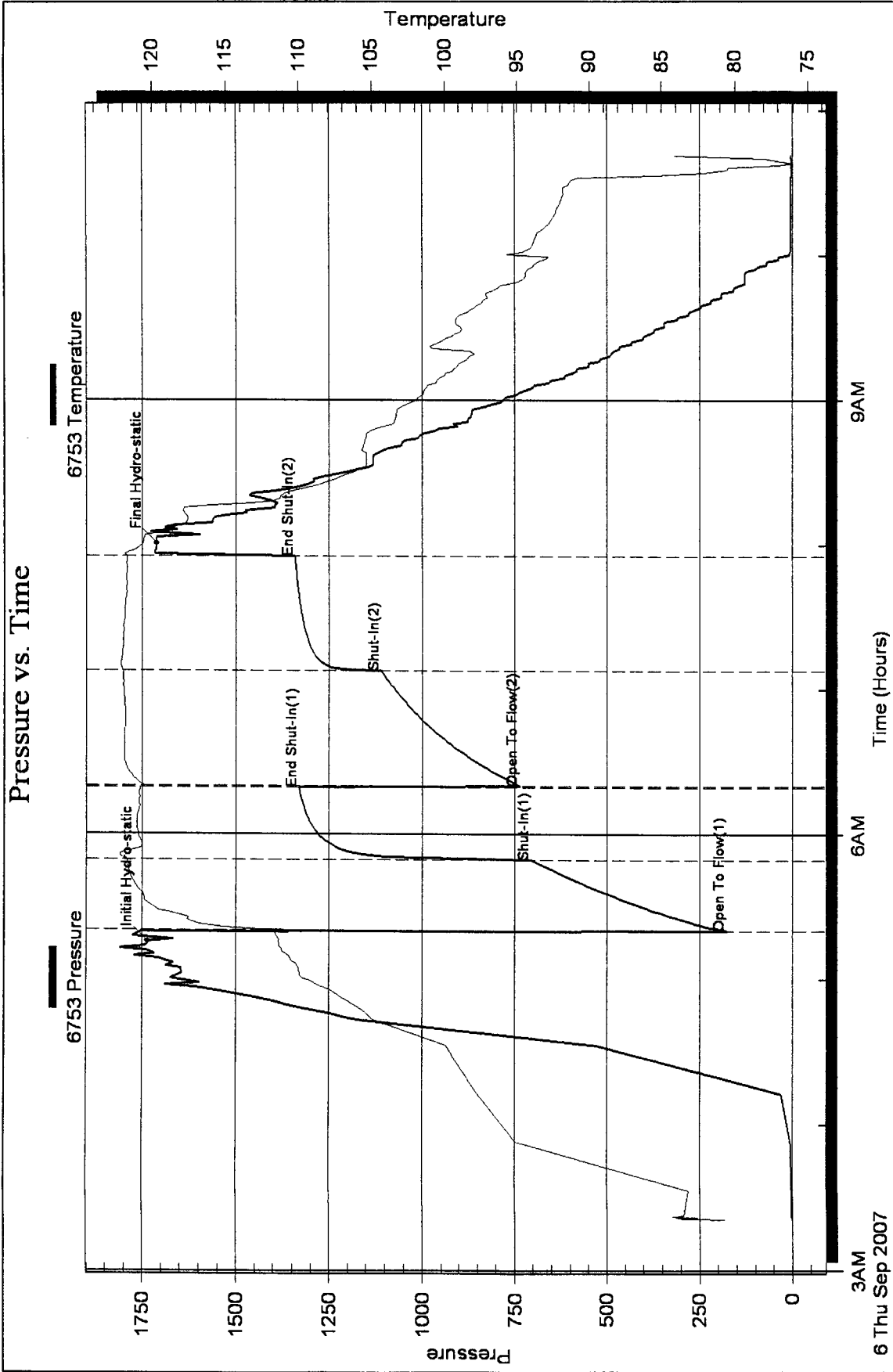
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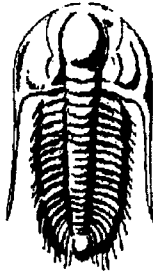
Laboratory Name:

Laboratory Location:

Recovery Comments:

Pressure vs. Time





**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Prepared For: **RP Nixon Operating Inc**

207 W 12th Street
Hays KS 67601-3898

ATTN: Dan Nixon

9 11 23W Trego KS

Delaney #1

Start Date: 2007.09.06 @ 19:49:00

End Date: 2007.09.07 @ 02:36:54

Job Ticket #: 29200 DST #: 2

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

RP Nixon Operating Inc

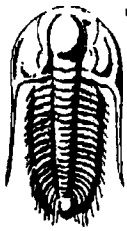
Delaney #1

9 11 23W Trego KS

DST # 2

LKC

2007.09.06



TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

RP Nixon Operating Inc

Delaney #1

207 W 12th Street
Hays KS 67601-3898

9 11 23W Trego KS

ATTN: Dan Nixon

Job Ticket: 29200

DST#: 2

Test Start: 2007.09.06 @ 19:49:00

GENERAL INFORMATION:

Formation: **LKC**

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

Time Tool Opened: 22:07:25

Time Test Ended: 02:36:54

Test Type: **Conventional Bottom Hole**

Tester: **Ray Schwager**

Unit No: **42**

Interval: **3580.00 ft (KB) To 3630.00 ft (KB) (TVD)**

Total Depth: **3630.00 ft (KB) (TVD)**

Hole Diameter: **7.85 inches** Hole Condition: **Fair**

Reference Elevations: **2266.00 ft (KB)**

2261.00 ft (CF)

KB to GRVCF: **5.00 ft**

Serial #: 6753

Inside

Press@RunDepth: **545.86 psig @ 3583.01 ft (KB)**

Start Date: **2007.09.06**

End Date:

2007.09.07

Start Time: **19:49:00**

End Time:

02:36:54

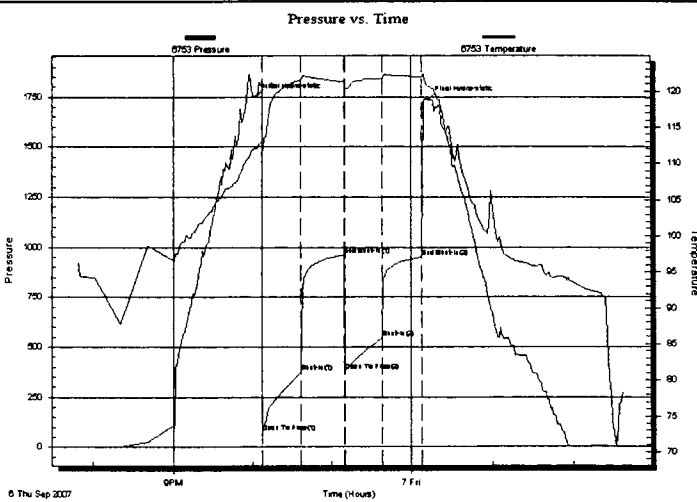
Capacity: **7000.00 psig**

Last Calib.: **2007.09.07**

Time On Btm: **2007.09.06 @ 22:02:55**

Time Off Btm: **2007.09.07 @ 00:12:54**

TEST COMMENT: IFF Strg bl in 3 min
FFP Strg bl in 6 min
ISIP Surface bl bk
FSIP Surface to 2" bl bk Time 30 30 30 30



PRESSURE SUMMARY

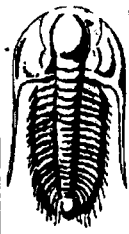
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1749.95	112.04	Initial Hydro-static
5	72.58	111.25	Open To Flow (1)
34	373.26	121.45	Shut-In (1)
67	961.42	121.27	End Shut-In (1)
67	378.30	120.26	Open To Flow (2)
95	545.86	121.71	Shut-In (2)
125	950.19	121.92	End Shut-In (2)
130	1734.04	120.59	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
660.00	Water RW.17 @ 79F	7.07
360.00	SO&GCMW 10%G1%O24%M64%W	5.05
90.00	O&GCWM 10%G5%O10%W75%M	1.26
10.00	CO	0.14
0.00	200' GIP	0.00

Gas Rates

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



TRILOBITE
TESTING, INC

DRILL STEM TEST REPORT

TOOL DIAGRAM

RP Nixon Operating Inc

Delaney #1

207 W 12th Street
Hays KS 67601-3898

9 11 23W Trego KS

Job Ticket: 29200

DST#: 2

ATTN: Dan Nixon

Test Start: 2007.09.06 @ 19:49:00

Tool Information

Drill Pipe:	Length: 3260.00 ft	Diameter: 3.80 inches	Volume: 45.73 bbl	Tool Weight: 2200.00 lb
Heavy Wt. Pipe:	Length: 315.00 ft	Diameter: 2.70 inches	Volume: 2.23 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose: 55000.00 lb
		Total Volume:	47.96 bbl	Tool Chased 0.00 ft
Drill Pipe Above KB:	16.00 ft			String Weight: Initial 41000.00 lb
Depth to Top Packer:	3580.00 ft			Final 45000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	50.02 ft			
Tool Length:	71.02 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			3560.00	
Shut In Tool	5.00			3565.00	
Hydraulic tool	5.00			3570.00	
Packer	5.00			3575.00	21.00 Bottom Of Top Packer
Packer	5.00			3580.00	
Stubb	1.00			3581.00	
Perforations	2.00			3583.00	
Recorder	0.01	6753	Inside	3583.01	
Blank Spacing	32.00			3615.01	
Recorder	0.01	13534	Outside	3615.02	
Perforations	12.00			3627.02	
Bullnose	3.00			3630.02	50.02 Bottom Packers & Anchor

Total Tool Length: 71.02



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FLUID SUMMARY

RP Nixon Operating Inc
207 W 12th Street
Hays KS 67601-3898
ATTN: Dan Nixon

Delaney #1
9 11 23W Trego KS
Job Ticket: 29200 **DST#: 2**
Test Start: 2007.09.06 @ 19:49:00

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:	37000 ppm
Viscosity: 50.00 sec/qt	Cushion Volume: bbl		
Water Loss: 7.93 in ³	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 1500.00 ppm			
Filter Cake: 2.00 inches			

Recovery Information

Recovery Table

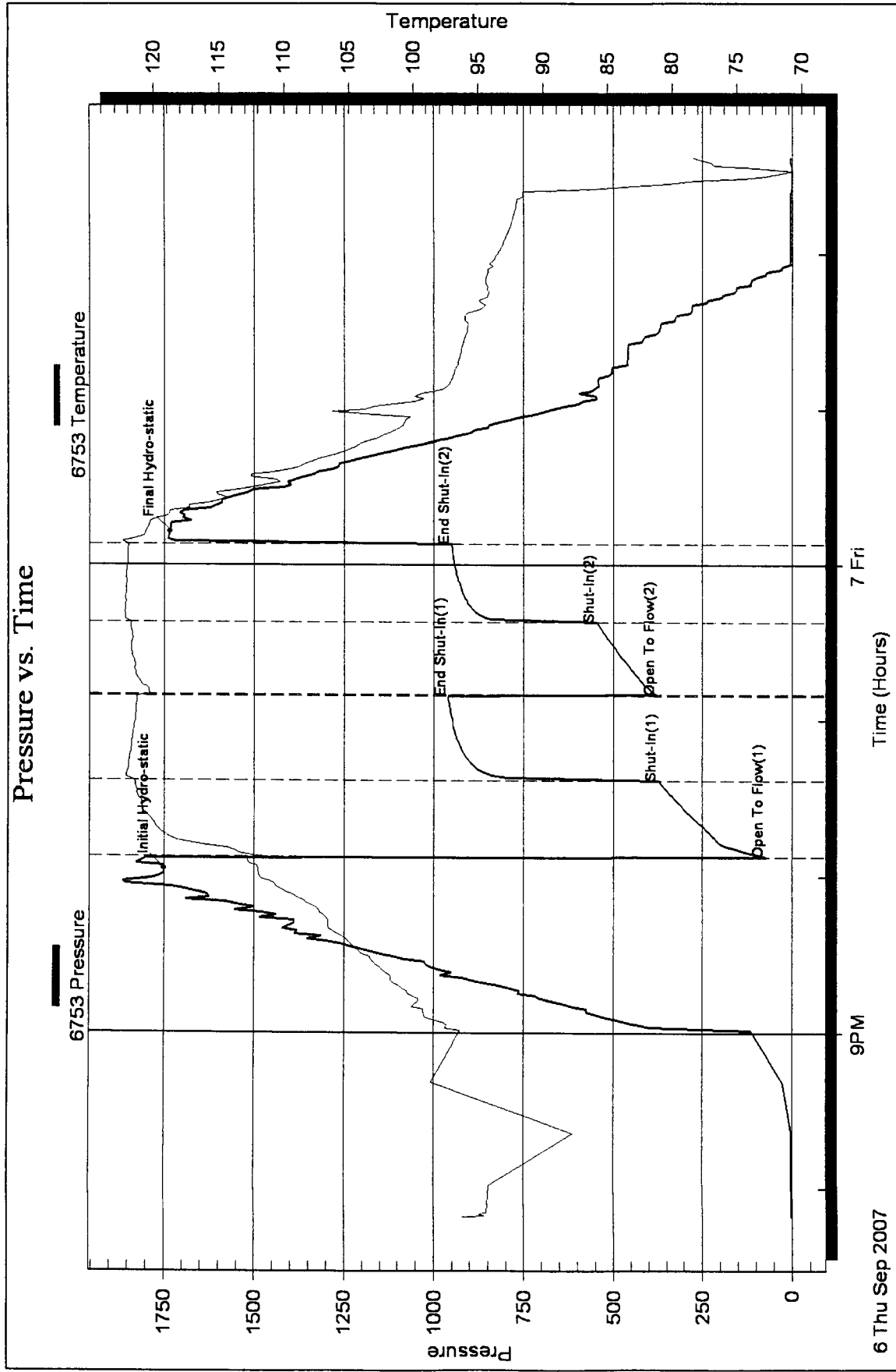
Length ft	Description	Volume bbl
660.00	Water RW.17 @ 79F	7.070
360.00	SO&GCMW 10%G1%O24%M64%W	5.050
90.00	O&GCWM 10%G5%O10%W75%M	1.262
10.00	CO	0.140
0.00	200' GIP	0.000

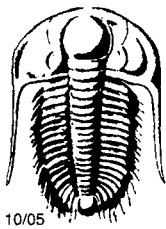
Total Length: 1120.00 ft Total Volume: 13.522 bbl

Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:

Laboratory Name: Laboratory Location:

Recovery Comments:





TRILOBITE TESTING INC.

P.O. Box 362 • Hays, Kansas 67601

29199

RECEIVED
SEP 10 2007

10599

Test Ticket

BY: _____

Well Name & No. DeLaney #1 Test No. 1 Date 9-6-07
 Company R.P. Nixon Oper, Inc Zone Tested LRC
 Address 207 West 12th Street Hays, Ks 67601-3898 Elevation 2266 KB 2261 GL
 Co. Rep / Geo. Brad Hutchison Rig Shields rig
 Location: Sec. 9 Twp. 11^s Rge. 23^w Co. Trego State Ks
 Comment: _____ Release date / time: _____

Interval Tested 3510-3580 Initial Str Wt./Lbs. 40000 Unseated Str Wt/Lbs. 51000
 Anchor Length 70 Wt. Set Lbs. 25000 Wt. Pulled Loose/Lbs. 60000
 Top Packer Depth 3505 Tool Weight 2200
 Bottom Packer Depth 3510 Hole Size 7 7/8" - Rubber Size 6 3/4" -
 Total Depth 3580 Wt. Pipe Run 315 Drill Collar Run -
 Mud Wt. 9.1 LCM 2* Vis. 60 WL 8 Drill Pipe Size 4 1/2 x H Ft. Run 3197
 Blow Description IFP - STRONG BLOW IN 1 MIN
FFP - STRONG BLOW IN 1 MIN
NO BLOW ON SHUT-IN

Recovery - Total Feet 2325 GIP - Ft. in DP 315 Ft. in DP 2010
 Rec. 2325 Feet of WATER %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 121 °F Gravity - °API D @ - °F Corrected Gravity _____ °API
 RW .12 @ 84 °F Chlorides 53000 ppm Recovery _____ Chlorides 1200 ppm System

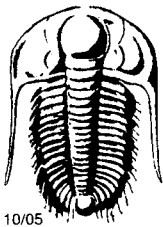
AK-1	Alpine	Recorder No.	Test
(A) Initial Hydrostatic Mud	<u>1736</u> PSI	<u>6753</u>	<input checked="" type="checkbox"/> <u>1100</u>
(B) First Initial Flow Pressure	<u>177</u> PSI	(depth) <u>3518</u>	Jars _____
(C) First Final Flow Pressure	<u>706</u> PSI	Recorder No. <u>13534</u>	Safety Jt. _____
(D) Initial Shut-In Pressure	<u>1330</u> PSI	(depth) <u>3550</u>	Circ Sub _____
(E) Second Initial Flow Pressure	<u>736</u> PSI	Recorder No. <u>-</u>	Sampler _____
(F) Second Final Flow Pressure	<u>1108</u> PSI	(depth) <u>-</u>	Straddle _____
(G) Final Shut-In Pressure	<u>1340</u> PSI	Initial Opening <u>30</u>	Ext. Packer _____
(Q) Final Hydrostatic Mud	<u>1712</u> PSI	Initial Shut-In <u>30</u>	Shale 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 _____
 Our Representative Ray Schwager Thank you

Final Flow 45
 Final Shut-In 45
 T-On Location 0130
 T-Started 0320
 T-Open 0520
 T-Pulled 0750
 T-Out 1041

Ruined Packer _____
 Mileage 88 RT 110
 Sub Total: _____
 Std. By _____
 Acc. Chg: _____
 Other: \$1210
 Total: _____



TRILOBITE TESTING INC.

P.O. Box 362 • Hays, Kansas 67601

29200

RECEIVED
SEP 10 2007

BY: _____

Test Ticket

Well Name & No. DeLaney #1 Test No. 2 Date 9-6-07
 Company R. P. Nixon Oper Inc Zone Tested LKC
 Address 207 West 12th Street Hays, Ks 67601-3898 Elevation 2266 KB 2261 GL
 Co. Rep / Geo. BRAD HUTCHISON Rig Shields rig 1
 Location: Sec. 9 Twp. 11^s Rge. 23^w Co. Trego State Ks
 Comment: _____ Release date / time: _____

Interval Tested 3580 - 3630 Initial Str Wt./Lbs. 41000 Unseated Str Wt./Lbs. 45000
 Anchor Length 50 Wt. Set Lbs. 25000 Wt. Pulled Loose/Lbs. 55000
 Top Packer Depth 3575 Tool Weight 2200
 Bottom Packer Depth 3580 Hole Size 7 7/8" - Rubber Size 6 3/4" -
 Total Depth 3630 Wt. Pipe Run 315 Drill Collar Run -
 Mud Wt. 9.3 LCM 2# Vis. 50 WL 8 Drill Pipe Size 4 1/2 XH Ft. Run 3260

Blow Description IFP - STRONG BLOW IN 3 min
FFP - STRONG BLOW IN 6 min
ISIP - SURFACE BLOW BACK
FSIP - SURFACE BLOW BACK BUILT TO 2"

Recovery - Total Feet	GIP	Ft. in DP	Ft. in DP
<u>1120</u>	<u>200</u>	<u>315</u>	<u>805</u>
Rec. <u>10</u> Feet of <u>CO</u> %gas _____ %oil _____ %water _____ %mud _____			
Rec. <u>90</u> Feet of <u>0+6CWM</u> 10%gas <u>5</u> %oil <u>10</u> %water <u>75</u> %mud			
Rec. <u>360</u> Feet of <u>50+6CWM</u> 10%gas <u>1</u> %oil <u>64</u> %water <u>24</u> %mud			
Rec. <u>660</u> Feet of <u>WATER</u> %gas _____ %oil _____ %water _____ %mud _____			

BHT 122 °F Gravity - °API D @ - °F Corrected Gravity _____ °API
 RW .17 @ 79 °F Chlorides 32000 ppm Recovery _____ Chlorides 1500 ppm System

AK-1	Alpine	Recorder No.	Test
(A) Initial Hydrostatic Mud	<u>1749</u> PSI	<u>6753</u>	<u>1100</u>
(B) First Initial Flow Pressure	<u>72</u> PSI	(depth) <u>3583</u>	Jars _____
(C) First Final Flow Pressure	<u>373</u> PSI	Recorder No. <u>13534</u>	Safety Jt. _____
(D) Initial Shut-In Pressure	<u>961</u> PSI	(depth) <u>3615</u>	Circ Sub _____
(E) Second Initial Flow Pressure	<u>378</u> PSI	Recorder No. <u>-</u>	Sampler _____
(F) Second Final Flow Pressure	<u>545</u> PSI	(depth) <u>-</u>	Straddle _____
(G) Final Shut-In Pressure	<u>950</u> PSI	Initial Opening <u>30</u>	Ext. Packer _____
(Q) Final Hydrostatic Mud	<u>1734</u> PSI	Initial Shut-In <u>30</u>	Shale Packer _____

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Approved By _____
 Our Representative RAY SCHWAGER Thank you

Final Flow	<u>30</u>	Ruined Packer	_____
Final Shut-In	<u>30</u>	Mileage	<u>88 RT 110.00</u>
T-On Location	<u>1900</u>	Sub Total:	_____
T-Started	<u>1948</u>	Std. By	_____
T-Open	<u>2210</u>	Acc. Chg:	_____
T-Pulled	<u>0010</u>	Other:	_____
T-Out	<u>0236</u>	Total:	<u>\$1210.00</u>

CHART PAGE

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

13534
DST#2
RPN, year

