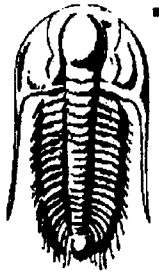


TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Prepared For: **DNOC**

P O Box 372
Hays Ks 67601

ATTN: Ron Nelson

30-13-20-Ellis-Ks

Luea # 1-30

Start Date: 2004.10.25 @ 03:50:57
End Date: 2004.10.25 @ 10:17:27
Job Ticket #: 20197 DST #: 1

Trilobite Testing, Inc
PO Box 362 Hays, KS 67601
ph: 785-625-4778 fax: 785-625-5620

DRILL STEM TEST REPORT

DNOC

P O Box 372
Hays Ks 67601

ATTN: Ron Nelson

Luea # 1-30

30-13-20-Ellis-Ks

Job Ticket: 20197 **DST#: 1**

Test Start: 2004.10.25 @ 03:50:57

GENERAL INFORMATION:

Formation: **A** **LKC**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 05:48:27
Time Test Ended: 10:17:27

Test Type: Conventional Bottom Hole
Tester: Dan Bangle
Unit No: 21

Interval: 3583.00 ft (KB) To 3610.00 ft (KB) (TVD)
Total Depth: 3610.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Good

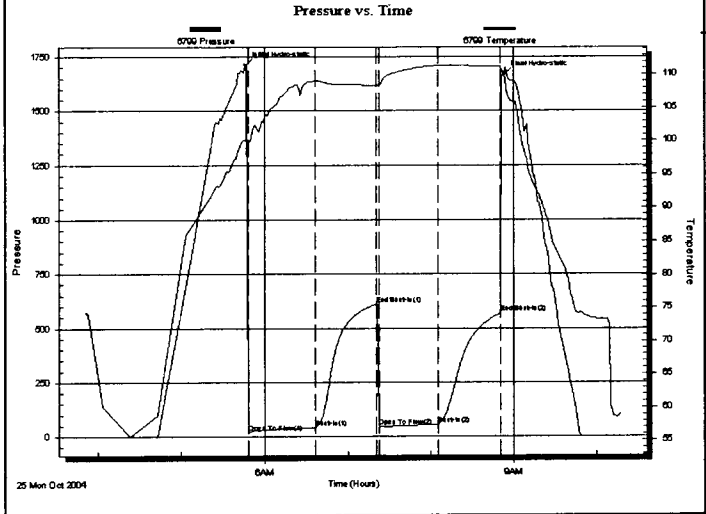
Reference Elevations: 2305.00 ft (KB)
2297.00 ft (CF)
KB to GR/CF: 8.00 ft

Serial #: 6799 **Inside**

Press@RunDepth: 54.58 psig @ 3584.00 ft (KB)
Start Date: 2004.10.25 End Date: 2004.10.25
Start Time: 03:50:58 End Time: 10:17:27

Capacity: 7000.00 psig
Last Calib.: 2004.10.25
Time On Btm: 2004.10.25 @ 05:45:57
Time Off Btm: 2004.10.25 @ 08:52:57

TEST COMMENT: IF-Weak building to 1 1/4"
FF-Weak building to 1 1/4"
Times-45-45-45-45



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1711.28	100.07	Initial Hydro-static
3	17.46	99.84	Open To Flow (1)
50	41.95	109.06	Shut-In(1)
95	610.82	108.35	End Shut-In(1)
96	43.47	108.17	Open To Flow (2)
140	54.58	111.37	Shut-In(2)
184	567.49	111.16	End Shut-In(2)
187	1666.55	110.10	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
85.00	Mdy Wtr	0.92
5.00	CO	0.07

Gas Rates

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

TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

TOOL DIAGRAM

DNOC

P O Box 372
Hays Ks 67601

ATTN: Ron Nelson

Luea # 1-30

30-13-20-Ellis-Ks

Job Ticket: 20197 **DST#: 1**

Test Start: 2004.10.25 @ 03:50:57

Tool Information

Drill Pipe:	Length:	3545.00 ft	Diameter:	3.80 inches	Volume:	49.73 bbl	Tool Weight:		1800.00 lb
Heavy Wt. Pipe:	Length:	0.00 ft	Diameter:	0.00 inches	Volume:	0.00 bbl	Weight set on Packer:		25000.00 lb
Drill Collar:	Length:	30.00 ft	Diameter:	2.25 inches	Volume:	0.15 bbl	Weight to Pull Loose:		50000.00 lb
					Total Volume:	49.88 bbl	Tool Chased		0.00 ft
Drill Pipe Above KB:		13.00 ft					String Weight:	Initial	39000.00 lb
Depth to Top Packer:		3583.00 ft						Final	39000.00 lb
Depth to Bottom Packer:		ft							
Interval between Packers:		28.00 ft							
Tool Length:		49.00 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			3563.00		
Shut In Tool	5.00			3568.00		
Hydraulic tool	5.00			3573.00		
Packer	5.00			3578.00	21.00	Bottom Of Top Packer
Packer	5.00			3583.00		
Stubb	1.00			3584.00		
Recorder	0.00	6799	Inside	3584.00		
Perforations	24.00			3608.00		
Recorder	0.00	13254	Outside	3608.00		
Bullnose	3.00			3611.00	28.00	Bottom Packers & Anchor
Total Tool Length:	**49.00**					

TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

FLUID SUMMARY

DNOC

P O Box 372
Hays Ks 67601

ATTN: Ron Nelson

Luea # 1-30

30-13-20-Ellis-Ks

Job Ticket: 20197 **DST#: 1**

Test Start: 2004.10.25 @ 03:50:57

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:	45.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	8.78 in³	Gas Cushion Type:			
Resistivity:	ohm.m	Gas Cushion Pressure:	psig		
Salinity:	4000.00 ppm				
Filter Cake:	inches				

Recovery Information

Recovery Table

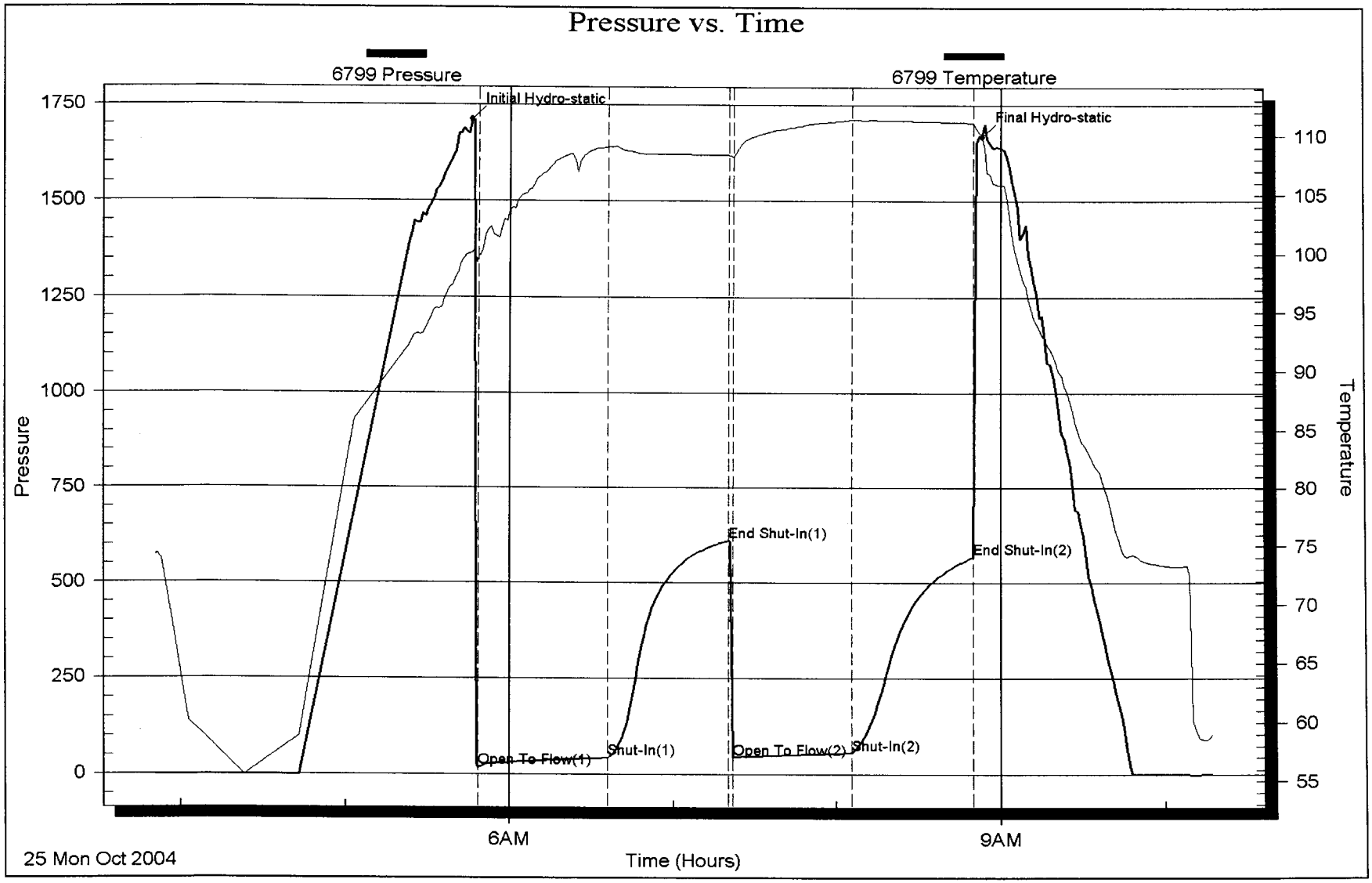
Length ft	Description	Volume bbl
85.00	Mdy Wtr	0.919
5.00	CO	0.070

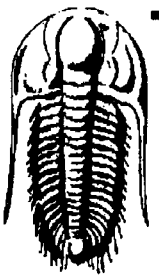
Total Length: 90.00 ft Total Volume: 0.989 bbl

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

Laboratory Name: Laboratory Location:

Recovery Comments:


Pressure vs. Time
6799 Pressure
6799 Temperature
Initial Hydro-static
Final Hydro-static
End Shut-In(1)
End Shut-In(2)
Open To Flow(1)
Shut-In(1)
Open To Flow(2)
Shut-In(2)
Pressure
Temperature
1750
1500
1250
1000
750
500
250
0
110
105
100
95
90
85
80
75
70
65
60
55
6AM
9AM
25 Mon Oct 2004
Time (Hours)



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Prepared For: **DNOC**

P O Box 372
Hays Ks 67601

ATTN: Ron Nelson

30-13-20-Ellis-Ks

Luea # 1-30

Start Date: 2004.10.25 @ 22:50:33
End Date: 2004.10.26 @ 03:48:33
Job Ticket #: 20198 DST #: 2

Trilobite Testing, Inc
PO Box 362 Hays, KS 67601
ph: 785-625-4778 fax: 785-625-5620

DRILL STEM TEST REPORT

DNOC

P O Box 372
Hays Ks 67601

ATTN: Ron Nelson

Luea # 1-30

30-13-20-Ellis-Ks

Job Ticket: 20198 **DST#: 2**

Test Start: 2004.10.25 @ 22:50:33

GENERAL INFORMATION:

Formation: **I-J** **LKC**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 00:32:03
Time Test Ended: 03:48:33

Test Type: Conventional Bottom Hole
Tester: Dan Bangle
Unit No: 21

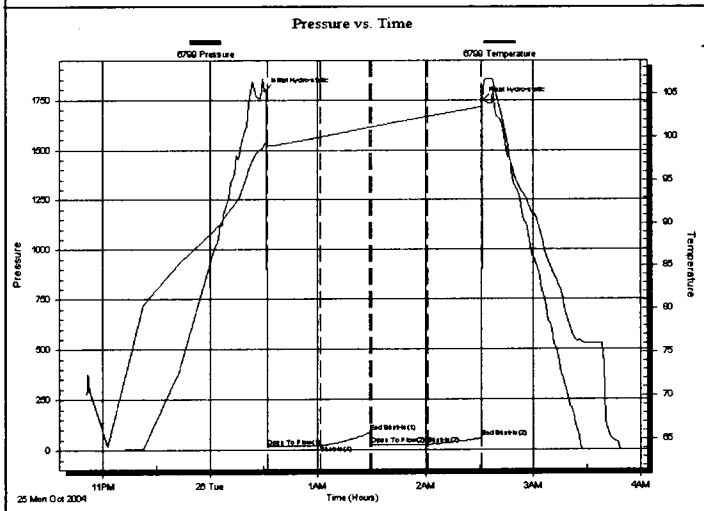
Interval: 3713.00 ft (KB) To 3770.00 ft (KB) (TVD)
Total Depth: 3770.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations: 2305.00 ft (KB)
2297.00 ft (CF)
KB to GR/CF: 8.00 ft

Serial #: 6799 **Inside**
Press@RunDepth: 25.83 psig @ 3717.00 ft (KB)
Start Date: 2004.10.25 End Date: 2004.10.26
Start Time: 22:50:34 End Time: 03:48:33

Capacity: 7000.00 psig
Last Calib.: 2004.10.26
Time On Btm: 2004.10.26 @ 00:30:33
Time Off Btm: 2004.10.26 @ 02:31:33

TEST COMMENT: IF-Weak died in 10 min
FF-No blow
Times-30-30-30-30



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1792.30	99.21	Initial Hydro-static
2	17.00	98.98	Open To Flow (1)
31	22.78	99.93	Shut-In(1)
59	86.77	101.10	End Shut-In(1)
60	24.89	101.12	Open To Flow (2)
91	25.83	102.32	Shut-In(2)
121	56.90	103.41	End Shut-In(2)
121	1741.30	104.27	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
5.00	DM w / oil spots	0.02

Gas Rates

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

TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

TOOL DIAGRAM

DNOC

P O Box 372
Hays Ks 67601

ATTN: Ron Nelson

Luea # 1-30

30-13-20-Ellis-Ks

Job Ticket: 20198 **DST#: 2**

Test Start: 2004.10.25 @ 22:50:33

Tool Information

Drill Pipe:	Length:	3670.00 ft	Diameter:	3.80 inches	Volume:	51.48 bbl	Tool Weight:		2400.00 lb
Heavy Wt. Pipe:	Length:	0.00 ft	Diameter:	0.00 inches	Volume:	0.00 bbl	Weight set on Packer:		25000.00 lb
Drill Collar:	Length:	30.00 ft	Diameter:	2.25 inches	Volume:	0.15 bbl	Weight to Pull Loose:		70000.00 lb
					Total Volume:	51.63 bbl	Tool Chased		0.00 ft
Drill Pipe Above KB:		8.00 ft					String Weight:	Initial	40000.00 lb
Depth to Top Packer:		3713.00 ft						Final	40000.00 lb
Depth to Bottom Packer:		ft							
Interval betw een Packers:		57.00 ft							
Tool Length:		78.00 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			3693.00		
Shut In Tool	5.00			3698.00		
Hydraulic tool	5.00			3703.00		
Packer	5.00			3708.00	21.00	Bottom Of Top Packer
Packer	5.00			3713.00		
Stubb	1.00			3714.00		
Perforations	2.00			3716.00		
Change Over Sub	1.00			3717.00		
Recorder	0.00	6799	Inside	3717.00		
Drill Pipe	31.00			3748.00		
Change Over Sub	1.00			3749.00		
Recorder	0.00	13254	Outside	3749.00		
Perforations	18.00			3767.00		
Bullnose	3.00			3770.00	57.00	Bottom Packers & Anchor
Total Tool Length:	**78.00**					

TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

FLUID SUMMARY

DNOC

P O Box 372
Hays Ks 67601

ATTN: Ron Nelson

Luea # 1-30

30-13-20-Ellis-Ks

Job Ticket: 20198 **DST#: 2**

Test Start: 2004.10.25 @ 22:50:33

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:	8.79 in³	Gas Cushion Type:			
Resistivity:	ohm.m	Gas Cushion Pressure:	psig		
Salinity:	4000.00 ppm				
Filter Cake:	inches				

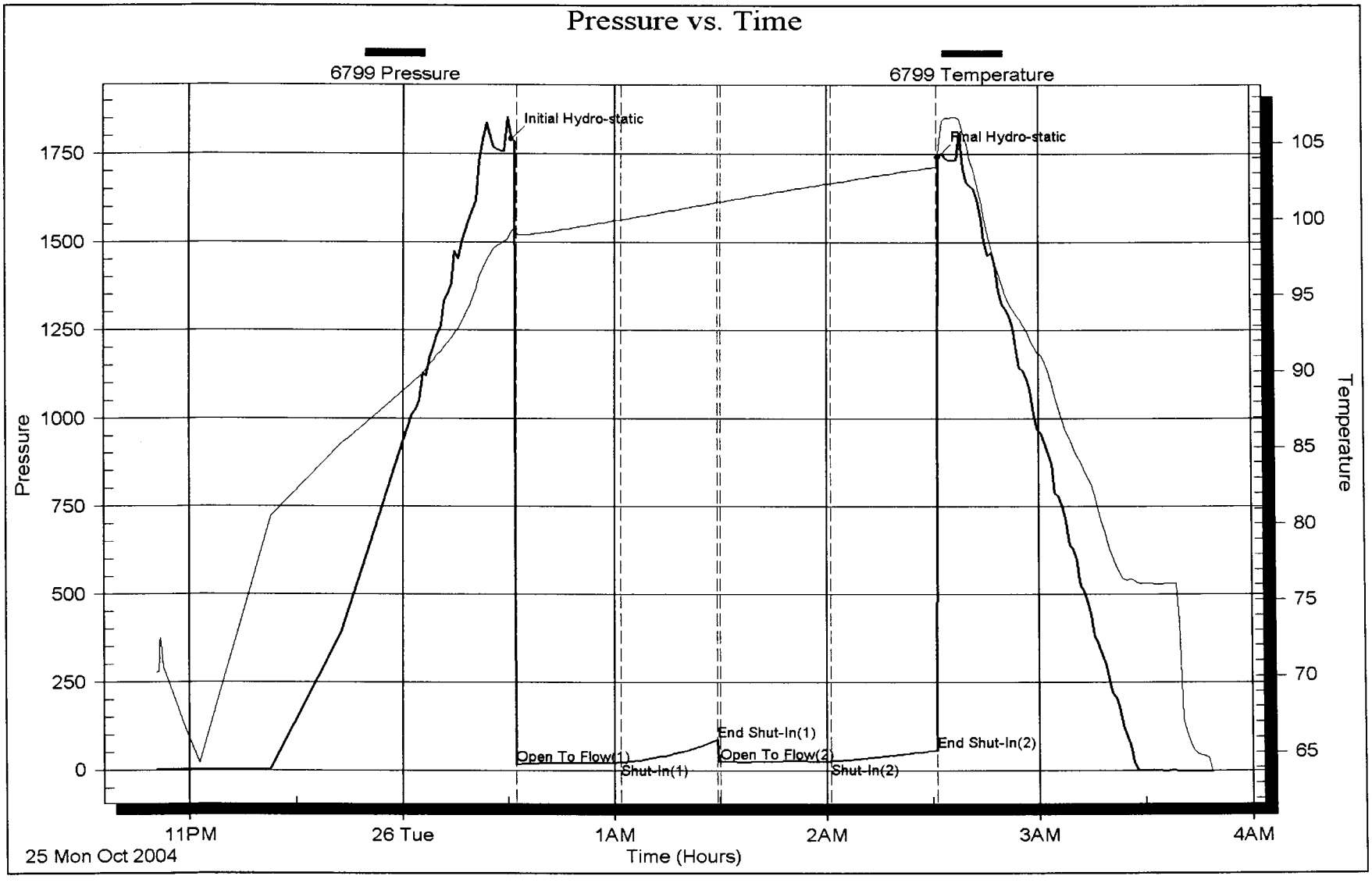
Recovery Information

Recovery Table

Length ft	Description	Volume bbl
5.00	DM w / oil spots	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
6799 Pressure
6799 Temperature
Initial Hydro-static
Final Hydro-static
Open To Flow(1)
Shut-In(1)
End Shut-In(1)
Open To Flow(2)
Shut-In(2)
End Shut-In(2)
Pressure
Temperature
1750
1500
1250
1000
750
500
250
0
105
100
95
90
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65
11PM
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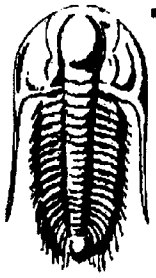
4AM
25 Mon Oct 2004
Time (Hours)



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Prepared For: **DNOC**

P O Box 372
Hays Ks 67601

ATTN: Ron Nelson

30-13-20-Ellis-Ks

Luea # 1-30

Start Date: 2004.10.26 @ 15:25:49

End Date: 2004.10.26 @ 21:29:19

Job Ticket #: 20199 DST #: 3

Trilobite Testing, Inc
PO Box 362 Hays, KS 67601
ph: 785-625-4778 fax: 785-625-5620

DRILL STEM TEST REPORT

DNOC

P O Box 372
Hays Ks 67601

ATTN: Ron Nelson

Luea # 1-30

30-13-20-Ellis-Ks

Job Ticket: 20199 **DST#: 3**

Test Start: 2004.10.26 @ 15:25:49

GENERAL INFORMATION:

Formation: **Marmaton**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 17:15:19
Time Test Ended: 21:29:19

Test Type: Conventional Bottom Hole
Tester: Dan Bangle
Unit No: 21

Interval: 3906.00 ft (KB) To 3934.00 ft (KB) (TVD)
Total Depth: 3934.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Good

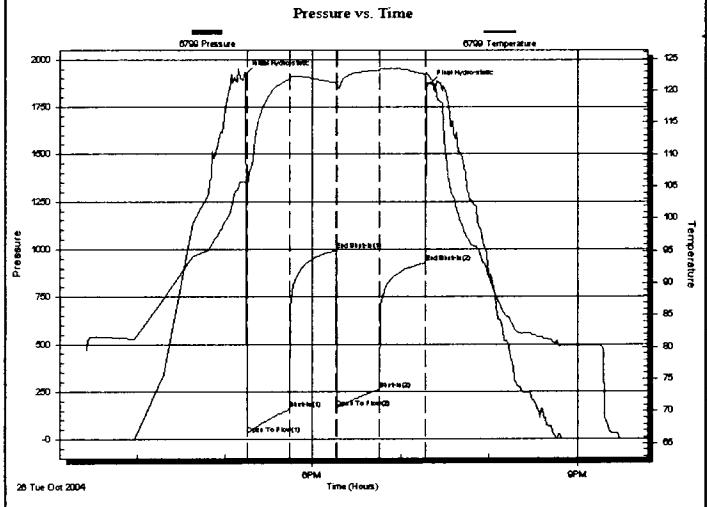
Reference Elevations: 2305.00 ft (KB)
2297.00 ft (CF)
KB to GR/CF: 8.00 ft

Serial #: 6799 **Inside**

Press@RunDepth: 261.43 psig @ 3907.00 ft (KB)
Start Date: 2004.10.26 End Date: 2004.10.26
Start Time: 15:25:50 End Time: 21:29:19

Capacity: 7000.00 psig
Last Calib.: 2004.10.26
Time On Btm: 2004.10.26 @ 17:14:19
Time Off Btm: 2004.10.26 @ 19:20:19

TEST COMMENT: IF-Strong B-B in 5 min
FF-Strong B-B in 15 min
Times-30-30-30-30



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1923.34	105.78	Initial Hydro-static
1	25.31	104.82	Open To Flow (1)
30	156.70	121.76	Shut-In(1)
62	993.51	121.15	End Shut-In(1)
63	164.02	120.55	Open To Flow (2)
91	261.43	123.20	Shut-In(2)
123	928.18	122.54	End Shut-In(2)
126	1873.63	121.87	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
550.00	Wtr	7.44
5.00	CO	0.07

Gas Rates

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

TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

TOOL DIAGRAM

DNOC

P O Box 372
Hays Ks 67601

ATTN: Ron Nelson

Luea # 1-30

30-13-20-Ellis-Ks

Job Ticket: 20199 **DST#: 3**

Test Start: 2004.10.26 @ 15:25:49

Tool Information

Drill Pipe:	Length:	3885.00 ft	Diameter:	3.80 inches	Volume:	54.50 bbl	Tool Weight:		1800.00 lb
Heavy Wt. Pipe:	Length:	0.00 ft	Diameter:	0.00 inches	Volume:	0.00 bbl	Weight set on Packer:		25000.00 lb
Drill Collar:	Length:	30.00 ft	Diameter:	2.25 inches	Volume:	0.15 bbl	Weight to Pull Loose:		70000.00 lb
					Total Volume:	54.65 bbl	Tool Chased		0.00 ft
Drill Pipe Above KB:		30.00 ft					String Weight:	Initial	42000.00 lb
Depth to Top Packer:		3906.00 ft						Final	43000.00 lb
Depth to Bottom Packer:		ft							
Interval betw een Packers:		32.00 ft							
Tool Length:		53.00 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			3886.00		
Shut In Tool	5.00			3891.00		
Hydraulic tool	5.00			3896.00		
Packer	5.00			3901.00	21.00	Bottom Of Top Packer
Packer	5.00			3906.00		
Stubb	1.00			3907.00		
Recorder	0.00	6799	Inside	3907.00		
Perforations	28.00			3935.00		
Recorder	0.00	13254	Outside	3935.00		
Bullnose	3.00			3938.00	32.00	Bottom Packers & Anchor
Total Tool Length:	**53.00**					

TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

FLUID SUMMARY

DNOC

P O Box 372
Hays Ks 67601

ATTN: Ron Nelson

Luea # 1-30

30-13-20-Ellis-Ks

Job Ticket: 20199 **DST#: 3**

Test Start: 2004.10.26 @ 15:25:49

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:	46.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	8.79 in³	Gas Cushion Type:			
Resistivity:	ohm.m	Gas Cushion Pressure:	psig		
Salinity:	4000.00 ppm				
Filter Cake:	inches				

Recovery Information

Recovery Table

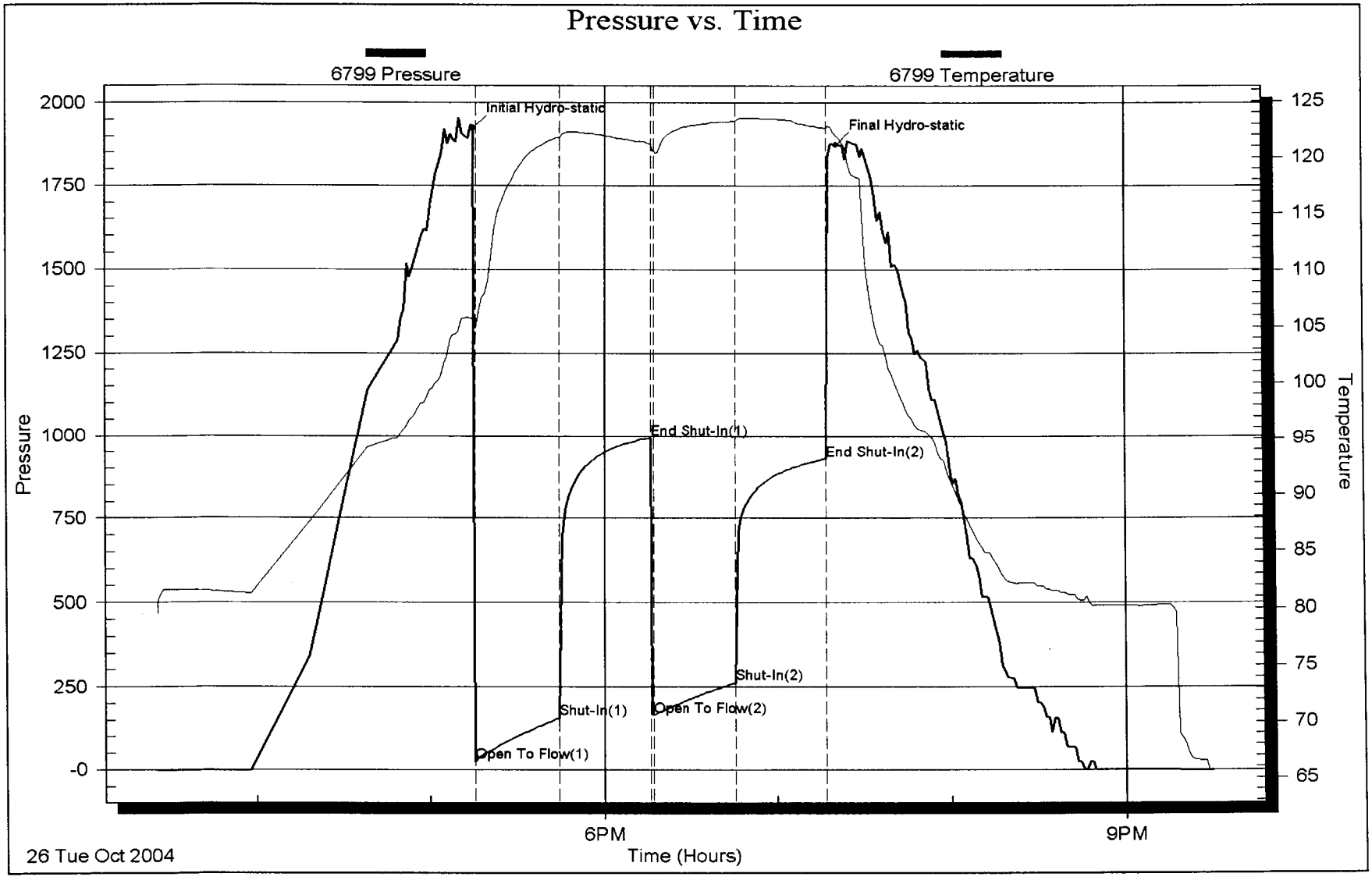
Length ft	Description	Volume bbl
550.00	Wtr	7.442
5.00	CO	0.070

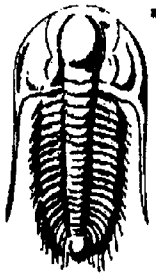
Total Length: 555.00 ft Total Volume: 7.512 bbl

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

Laboratory Name: Laboratory Location:

Recovery Comments:


Pressure vs. Time
6799 Pressure
6799 Temperature
Initial Hydro-static
Final Hydro-static
End Shut-In(1)
End Shut-In(2)
Shut-In(1)
Shut-In(2)
Open To Flow(1)
Open To Flow(2)
Pressure
Temperature
2000
1750
1500
1250
1000
750
500
250
-0
125
120
115
110
105
100
95
90
85
80
75
70
65
6PM
9PM
Time (Hours)
26 Tue Oct 2004



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Prepared For: **DNOC**

P O Box 372
Hays Ks 67601

ATTN: Ron Nelson

30-13-20-Ellis-Ks

Luea # 1-30

Start Date: 2004.10.27 @ 05:50:30
End Date: 2004.10.27 @ 11:53:00
Job Ticket #: 20200 DST #: 4

Trilobite Testing, Inc
PO Box 362 Hays, KS 67601
ph: 785-625-4778 fax: 785-625-5620

DRILL STEM TEST REPORT

DNOC

P O Box 372
Hays Ks 67601

ATTN: Ron Nelson

Luea # 1-30

30-13-20-Ellis-Ks

Job Ticket: 20200 **DST#: 4**

Test Start: 2004.10.27 @ 05:50:30

GENERAL INFORMATION:

Formation: **Arbuckle**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 07:33:30
Time Test Ended: 11:53:00

Test Type: Conventional Bottom Hole
Tester: Dan Bangle
Unit No: 21

Interval: 3932.00 ft (KB) To 3970.00 ft (KB) (TVD)
Total Depth: 3970.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Good

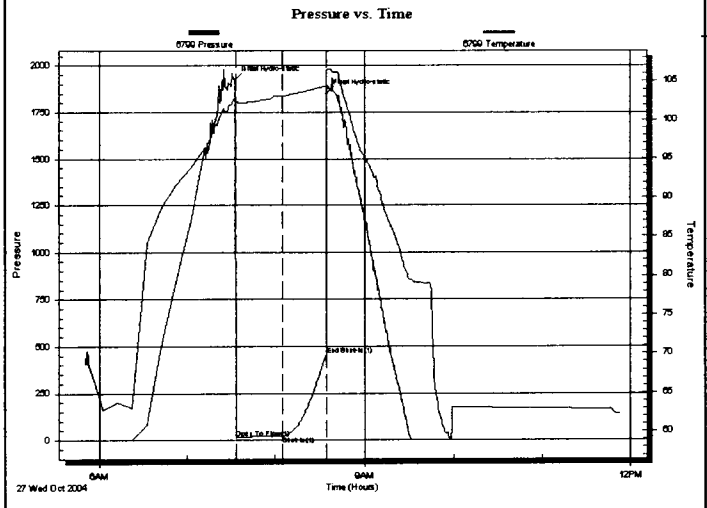
Reference Elevations: 2305.00 ft (KB)
2297.00 ft (CF)
KB to GR/CF: 8.00 ft

Serial #: 6799 **Inside**

Press@RunDepth: 20.75 psig @ 3933.00 ft (KB)
Start Date: 2004.10.27 End Date: 2004.10.27
Start Time: 05:50:31 End Time: 11:53:00

Capacity: 7000.00 psig
Last Calib.: 2004.10.27
Time On Btm: 2004.10.27 @ 07:33:00
Time Off Btm: 2004.10.27 @ 08:34:30

TEST COMMENT: IF-Weak died in 20 min
Times-30-30



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1923.58	102.68	Initial Hydro-static
1	13.31	102.09	Open To Flow (1)
32	20.75	103.06	Shut-In(1)
61	453.13	104.37	End Shut-In(1)
62	1852.09	106.40	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
5.00	Mud Few oil spots	0.02

Gas Rates

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

TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

TOOL DIAGRAM

DNOC

P O Box 372
Hays Ks 67601

ATTN: Ron Nelson

Luea # 1-30

30-13-20-Ellis-Ks

Job Ticket: 20200 **DST#: 4**

Test Start: 2004.10.27 @ 05:50:30

Tool Information

Drill Pipe:	Length:	3887.00 ft	Diameter:	3.80 inches	Volume:	54.52 bbl	Tool Weight:		2600.00 lb
Heavy Wt. Pipe:	Length:	0.00 ft	Diameter:	0.00 inches	Volume:	0.00 bbl	Weight set on Packer:		25000.00 lb
Drill Collar:	Length:	30.00 ft	Diameter:	2.25 inches	Volume:	0.15 bbl	Weight to Pull Loose:		70000.00 lb
					Total Volume:	54.67 bbl	Tool Chased		0.00 ft
Drill Pipe Above KB:		6.00 ft					String Weight:	Initial	42000.00 lb
Depth to Top Packer:		3932.00 ft						Final	42000.00 lb
Depth to Bottom Packer:		ft							
Interval betw een Packers:		38.00 ft							
Tool Length:		59.00 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			3912.00		
Shut In Tool	5.00			3917.00		
Hydraulic tool	5.00			3922.00		
Packer	5.00			3927.00	21.00	Bottom Of Top Packer
Packer	5.00			3932.00		
Stubb	1.00			3933.00		
Recorder	0.00	6799	Inside	3933.00		
Perforations	34.00			3967.00		
Recorder	0.00	13254	Outside	3967.00		
Bullnose	3.00			3970.00	38.00	Bottom Packers & Anchor
Total Tool Length:	**59.00**					

TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

FLUID SUMMARY

DNOC

P O Box 372
Hays Ks 67601

ATTN: Ron Nelson

Luea # 1-30

30-13-20-Ellis-Ks

Job Ticket: 20200 **DST#: 4**

Test Start: 2004.10.27 @ 05:50:30

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:	46.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	8.79 in³	Gas Cushion Type:			
Resistivity:	ohm.m	Gas Cushion Pressure:	psig		
Salinity:	4000.00 ppm				
Filter Cake:	inches				

Recovery Information

Recovery Table

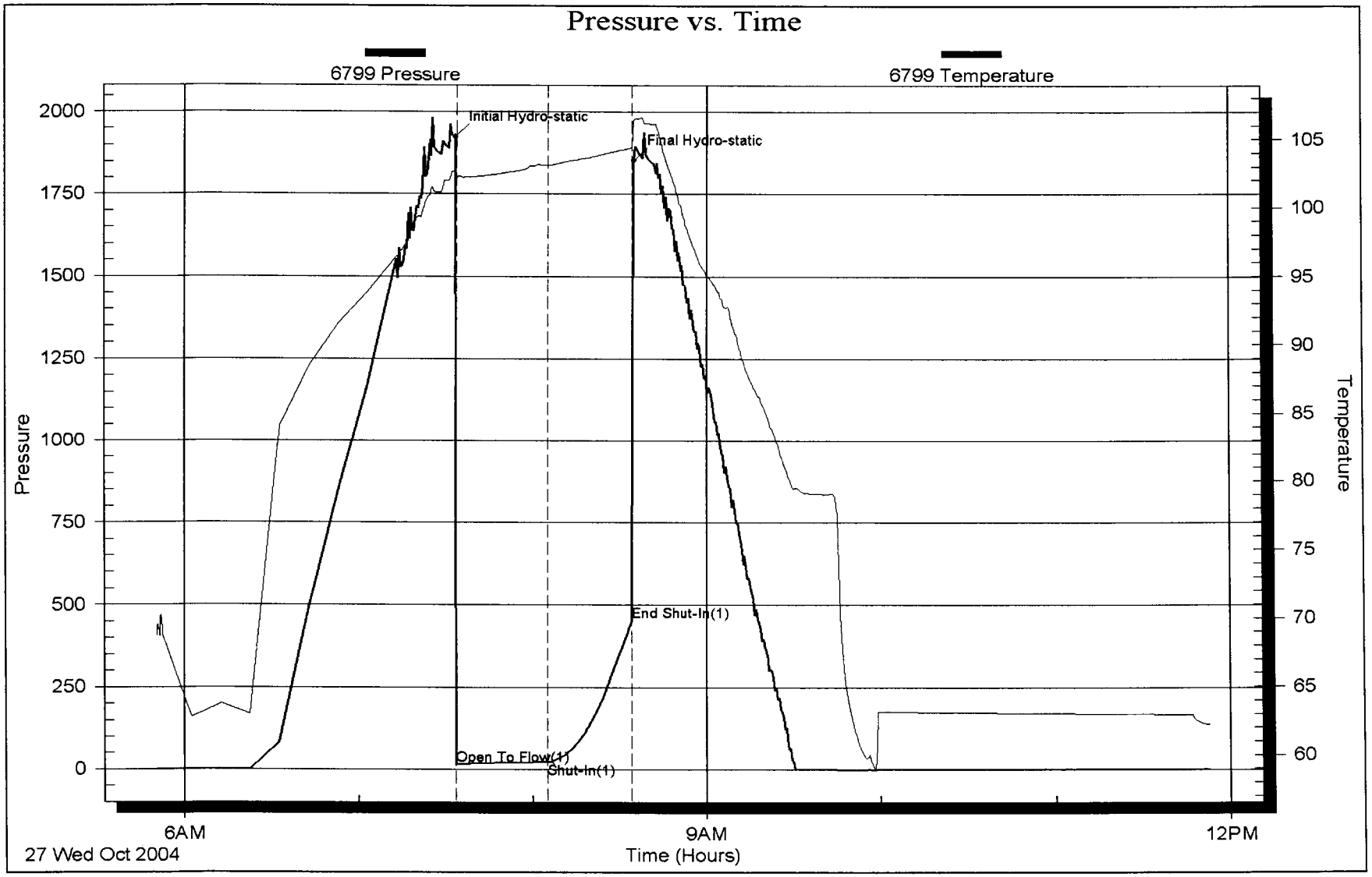
Length ft	Description	Volume bbl
5.00	Mud Few oil spots	0.025

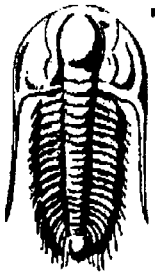
Total Length: 5.00 ft Total Volume: 0.025 bbl

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

Laboratory Name: Laboratory Location:

Recovery Comments:


Pressure vs. Time
6799 Pressure
6799 Temperature
Initial Hydro-static
Final Hydro-static
End Shut-In(1)
Open To Flow(1)
Shut-In(1)
Pressure
Temperature
2000
1750
1500
1250
1000
750
500
250
0
105
100
95
90
85
80
75
70
65
60
6AM
9AM
12PM
27 Wed Oct 2004
Time (Hours)



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Prepared For: **DNOC**

P O Box 372
Hays Ks 67601

ATTN: Ron Nelson

30-13-20-Ellis-Ks

Luea # 1-30

Start Date: 2004.10.27 @ 10:43:36
End Date: 2004.10.27 @ 16:46:06
Job Ticket #: 20851 DST #: 5

Trilobite Testing, Inc
PO Box 362 Hays, KS 67601
ph: 785-625-4778 fax: 785-625-5620

DRILL STEM TEST REPORT

DNOC

P O Box 372
Hays Ks 67601

ATTN: Ron Nelson

Luea # 1-30

30-13-20-Ellis-Ks

Job Ticket: 20851 **DST#: 5**

Test Start: 2004.10.27 @ 10:43:36

GENERAL INFORMATION:

Formation: **L.Kc.-J**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 12:15:06
Time Test Ended: 16:46:06

Test Type: Conventional Straddle
Tester: John Schmidt
Unit No: 21

Interval: 3760.00 ft (KB) To 3804.00 ft (KB) (TVD)
Total Depth: 3970.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Good

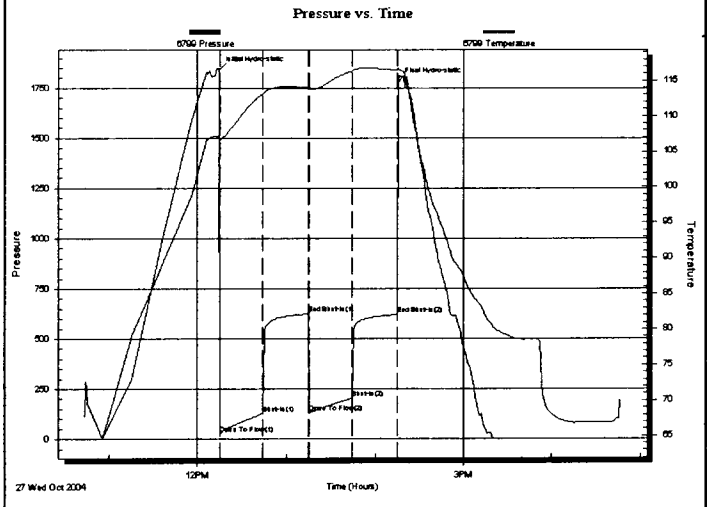
Reference Elevations: 2305.00 ft (KB)
2297.00 ft (CF)
KB to GR/CF: 8.00 ft

Serial #: 6799 **Inside**

Press@RunDepth: 203.19 psig @ 3763.00 ft (KB)
Start Date: 2004.10.27 End Date: 2004.10.27
Start Time: 10:43:37 End Time: 16:46:06

Capacity: 7000.00 psig
Last Calib.: 2004.10.27
Time On Btm: 2004.10.27 @ 12:14:36
Time Off Btm: 2004.10.27 @ 14:15:36

TEST COMMENT: IF-Strong B.O.B.13 min. ISI-Dead
FF-strong B.O.B.16 min. FSI-Dead



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1842.08	107.16	Initial Hydro-static
1	26.24	106.48	Open To Flow (1)
30	125.93	113.07	Shut-In(1)
60	624.62	113.99	End Shut-In(1)
61	129.42	113.70	Open To Flow (2)
90	203.19	116.29	Shut-In(2)
121	620.11	116.41	End Shut-In(2)
121	1780.33	116.70	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
410.00	Muddy Salt Water	5.48

Gas Rates

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

TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

TOOL DIAGRAM

DNOC

P O Box 372
Hays Ks 67601

ATTN: Ron Nelson

Luea # 1-30

30-13-20-Ellis-Ks

Job Ticket: 20851 **DST#: 5**

Test Start: 2004.10.27 @ 10:43:36

Tool Information

Drill Pipe:	Length:	3733.00 ft	Diameter:	3.80 inches	Volume:	52.36 bbl	Tool Weight:		2500.00 lb
Heavy Wt. Pipe:	Length:	0.00 ft	Diameter:	0.00 inches	Volume:	0.00 bbl	Weight set on Packer:		25000.00 lb
Drill Collar:	Length:	30.00 ft	Diameter:	2.25 inches	Volume:	0.15 bbl	Weight to Pull Loose:		60000.00 lb
					Total Volume:	52.51 bbl	Tool Chased		0.00 ft
Drill Pipe Above KB:		23.00 ft					String Weight:	Initial	42000.00 lb
Depth to Top Packer:		3760.00 ft						Final	48000.00 lb
Depth to Bottom Packer:		3804.00 ft							
Interval between Packers:		44.00 ft							
Tool Length:		233.00 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			3741.00		
Shut In Tool	5.00			3746.00		
Hydraulic tool	5.00			3751.00		
Packer	4.00			3755.00	20.00	Bottom Of Top Packer
Packer	5.00			3760.00		
Stubb	1.00			3761.00		
Perforations	1.00			3762.00		
Change Over Sub	1.00			3763.00		
Recorder	0.00	6799	Inside	3763.00		
Blank Spacing	31.00			3794.00		
Perforations	9.00			3803.00		
Recorder	0.00	13254	Outside	3803.00		
Blank Off Sub	1.00			3804.00	44.00	Tool Interval
Packer	4.00			3808.00		
Change Over Sub	1.00			3809.00		
Blank Spacing	155.00			3964.00		
Change Over Sub	1.00			3965.00		
Recorder	0.00	13248	Outside	3965.00		
Perforations	5.00			3970.00		
Bullnose	3.00			3973.00	169.00	Bottom Packers & Anchor
Total Tool Length:	**233.00**					

TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

FLUID SUMMARY

DNOC

P O Box 372
Hays Ks 67601

ATTN: Ron Nelson

Luea # 1-30

30-13-20-Ellis-Ks

Job Ticket: 20851 **DST#: 5**

Test Start: 2004.10.27 @ 10:43:36

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:	100000 ppm
Viscosity:	45.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	8.78 in³	Gas Cushion Type:			
Resistivity:	ohm.m	Gas Cushion Pressure:	psig		
Salinity:	4000.00 ppm				
Filter Cake:	inches				

Recovery Information

Recovery Table

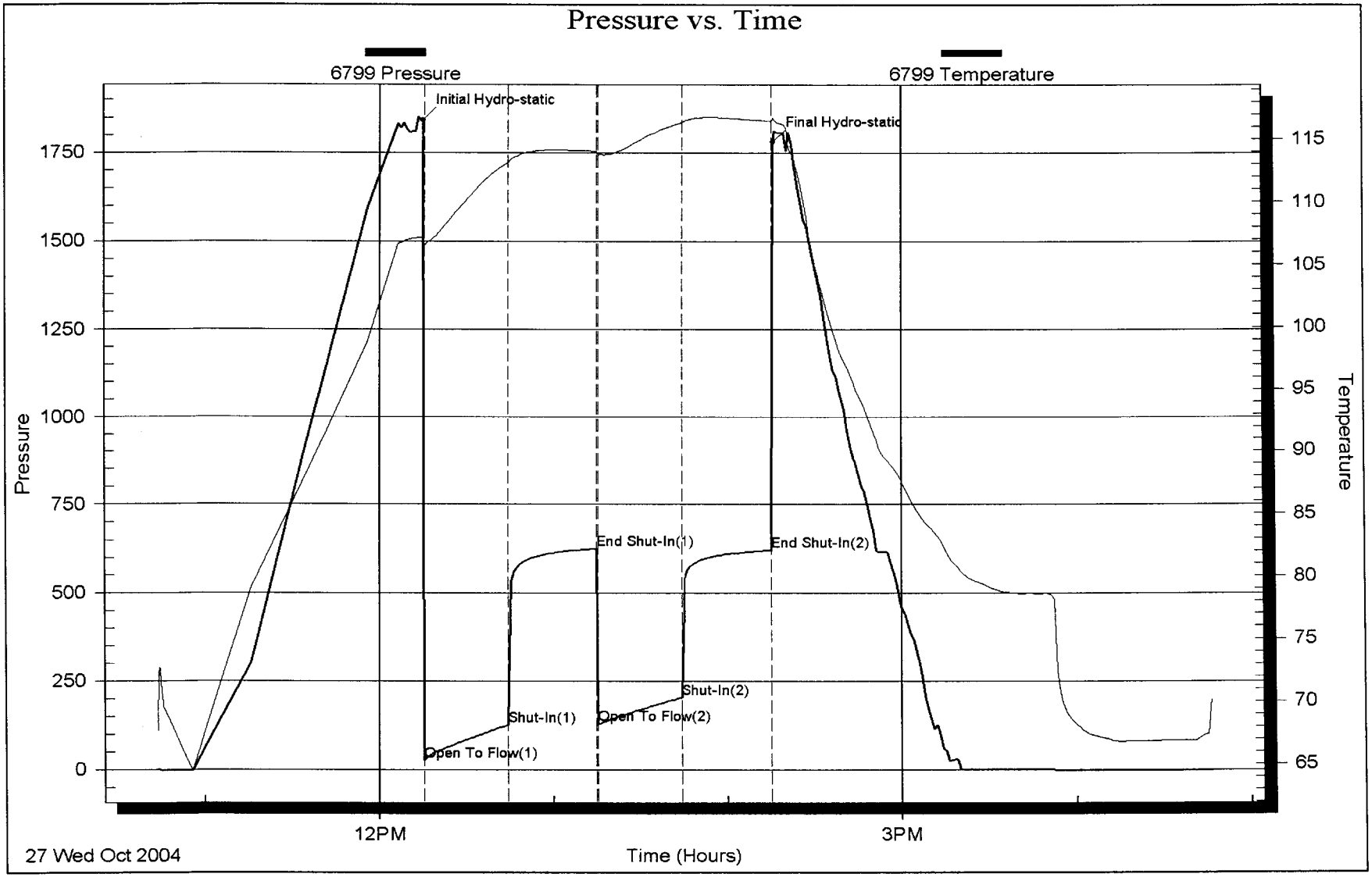
Length ft	Description	Volume bbl
410.00	Muddy Salt Water	5.478

Total Length: 410.00 ft Total Volume: 5.478 bbl

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

Laboratory Name: Laboratory Location:

Recovery Comments:


Pressure vs. Time
6799 Pressure
6799 Temperature
Initial Hydro-static
Final Hydro-static
End Shut-In(1)
End Shut-In(2)
Shut-In(1)
Shut-In(2)
Open To Flow(1)
Open To Flow(2)
Pressure
Temperature
1750
1500
1250
1000
750
500
250
0
115
110
105
100
95
90
85
80
75
70
65
12PM
3PM
27 Wed Oct 2004
Time (Hours)

TRILOBITE TESTING INC.

P.O. Box 362 • Hays, Kansas 67601

INV 6897

№ 20197

05/03

Test Ticket

Well Name & No. Luea #1-30 Test No. 1 Date 10-25-04

Company Downing-Nelson Oil Co. Inc Zone Tested A LKC

Address P.O. Box 372 Hays Ks. 67601 Elevation 2305 KB 2297 GL

Co. Rep / Geo. Ron Nelson Cont. Discovery #2 Est. Ft. of Pay _____ Por. _____ %

Location: Sec. 30 Twp. 13 Rge. 20 Co. Ellis State Ks

No. of Copies _____ Disbtribution Sheet (Y, N) _____ Turnkey (Y, N) _____ Evaluation (Y, N) _____

Interval Tested 3583 — 3610 Initial Str Wt./Lbs. 39,000 Unseated Str Wt/Lbs. 39,000

Anchor Length 27 Wt. Set Lbs. 25,000 Wt. Pulled Loose/Lbs. 50,000

Top Packer Depth 3578 Tool Weight 1800

Bottom Packer Depth 3583 Hole Size 7 7/8" Rubber Size 6 3/4"

Total Depth 3610 Wt. Pipe Run _____ Drill Collar Run 30

Mud Wt. 8.8 LCM _____ Vis. 45 WL 8.8 Drill Pipe Size 4.5 XH Ft. Run 3545

Blow Description I.F. Weak - building to 1¼"

F.F. Weak - building to 1¼"

Recovery - Total Feet 90 GIP 60 Ft. in DC 30 Ft. in DP 60

Rec. 5	Feet of CO	%gas	%oil	%water	%mud
Rec. 85	Feet of mdy WTR	%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 111 °F Gravity _____ °API D @ _____ °F Corrected Gravity _____ °API

RW _____ @ _____ °F Chlorides _____ ppm Recovery _____ Chlorides 4,000 ppm System

	AK-1	Alpine					
(A) Initial Hydrostatic Mud		1711	PSI	Recorder No.	6799	Test	900
(B) First Initial Flow Pressure		17	PSI	(depth)	3584	Elec. Rec.	X
(C) First Final Flow Pressure		41	PSI	Recorder No.	13254	Jars	
(D) Initial Shut-In Pressure		610	PSI	(depth)	3608	Safety Jt.	
(E) Second Initial Flow Pressure		43	PSI	Recorder No.		Circ Sub	
(F) Second Final Flow Pressure		574	PSI	(depth)		Sampler	
(G) Final Shut-In Pressure		567	PSI	**Initial Opening**	45	Straddle	
(Q) Final Hydrostatic Mud		1665	PSI	Initial Shut-In	45	Ext. Packer	
				Final Flow	45	Shale Packer	
				Final Shut-In	45	Mileage 46	46
				T-On Location	03:30	Sub Total:	
				T-Started	03:50	Std. By	946
				T-Open	05:45	Other	
				T-Pulled	08:45	Total:	
				T-Out	10:17		

Approved By _____

Our Representative Dan Rample

TRILOBITE TESTING INC.
P.O. Box 362 • Hays, Kansas 67601

05/03

№ 20198

Test Ticket

Well Name & No. Lvea #1-30 Test No. 2 Date 10-25-04
Company Downing-Nelson Oil Co. Inc Zone Tested I-J LKC
Address Elevation 2305 KB 2297 GL
Co. Rep / Geo. Ron Nelson Cont. Discovery #2 Est. Ft. of Pay Por. %
Location: Sec. 30 Twp. 13 Rge. 20 Co. Ellis State KS
No. of Copies Disbtribution Sheet (Y, N) Turnkey (Y, N) Evaluation (Y, N)

Interval Tested 3713 — 3770 Initial Str Wt./Lbs. 40,000 Unseated Str Wt/Lbs. 40000
Anchor Length 57 Wt. Set Lbs. 25,000 Wt. Pulled Loose/Lbs. 70,000
Top Packer Depth 3708 Tool Weight 2400
Bottom Packer Depth 3713 Hole Size 7 7/8" Rubber Size 6 3/4"
Total Depth 3770 Wt. Pipe Run Drill Collar Run 30
Mud Wt. 9 LCM Vis. 48 WL 8.8 Drill Pipe Size 4.5XH Ft. Run 3670
Blow Description I.F. Weak-Died in 10 min.

F.F. No blow

Recovery - Total Feet 5 GIP Ft. in DC 5 Ft. in DP
Rec. 5 Feet of D.M w/oil spots %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 103 °F Gravity °API D @ °F Corrected Gravity °API
RW @ °F Chlorides ppm Recovery Chlorides 4,000 ppm System

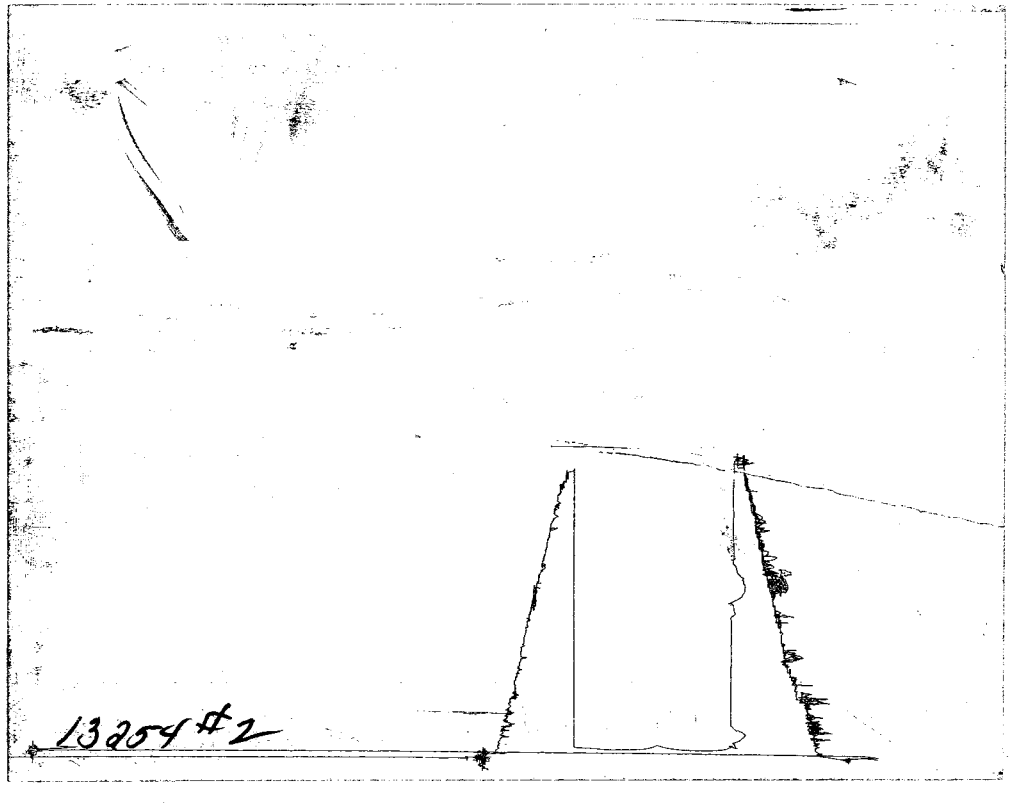
	AK-1	Alpine				
(A)Initial Hydrostatic Mud		1792 PSI	Recorder No.	6799	Test	900
(B) First Initial Flow Pressure		17 PSI	(depth)	3717	Elec. Rec.	X
(C) First Final Flow Pressure		22 PSI	Recorder No.	13254	Jars	
(D) Initial Shut-In Pressure		86 PSI	(depth)	3749	Safety Jt.	
(E) Second Initial Flow Pressure		24 PSI	Recorder No.		Circ Sub	
(F) Second Final Flow Pressure		25 PSI	(depth)		Sampler	
(G) Final Shut-In Pressure		56 PSI	**Initial Opening**	30	Straddle	
(Q) Final Hydrostatic Mud		1741 PSI	Initial Shut-In	30	Ext. Packer	
			Final Flow	30	Shale Packer	
			Final Shut-In	30	Mileage	46
			T-On Location	22:30	Sub Total:	946
			T-Started	22:50	Std. By	
			T-Open	00:30	Other	
			T-Pulled	02:30	Total:	
			T-Out	03:48		

Approved By

Our Representative Dan Bangle

CHART PAGE

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



TRILOBITE TESTING INC.

P.O. Box 362 • Hays, Kansas 67601

05/03

№ 20199

Test Ticket

Well Name & No. Luea #1-30 Test No. 3 Date 10-26-04

Company Downing—Nelson Oil Co. Inc Zone Tested Marmaton

Address _____ Elevation 2305 KB 2297 GL

Co. Rep / Geo. Ron Nelson Cont. Discovery #2 Est. Ft. of Pay _____ Por. _____ %

Location: Sec. 30 Twp. 13 Rge. 20 Co. Ellis State Ks

No. of Copies _____ Disbtribution Sheet (Y, N) _____ Turnkey (Y, N) _____ Evaluation (Y, N) _____

Interval Tested 3906 — 3934 Initial Str Wt./Lbs. 42,000 Unseated Str Wt/Lbs. 43,000

Anchor Length 28 Wt. Set Lbs. 25,000 Wt. Pulled Loose/Lbs. 29,000

Top Packer Depth 3901 Tool Weight 1800

Bottom Packer Depth 3906 Hole Size 7 7/8" _____ Rubber Size 6 3/4" _____

Total Depth 3934 Wt. Pipe Run _____ Drill Collar Run 30

Mud Wt. 9 LCM _____ Vis. 46 WL 8.8 Drill Pipe Size 4.5 XH Ft. Run 3885

Blow Description I.F. Strong B-B in 8 min.

F.F. Strong B-B in 15 min.

Recovery - Total Feet 555 GIP _____ Ft. in DC 30 Ft. in DP 525

Rec. 5	Feet of CO	%gas	%oil	%water	%mud
Rec. 550	Feet of WTR	%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 122 °F Gravity _____ °API D @ _____ °F Corrected Gravity _____ °API

RW _____ @ _____ °F Chlorides _____ ppm Recovery _____ Chlorides 4,000 ppm System

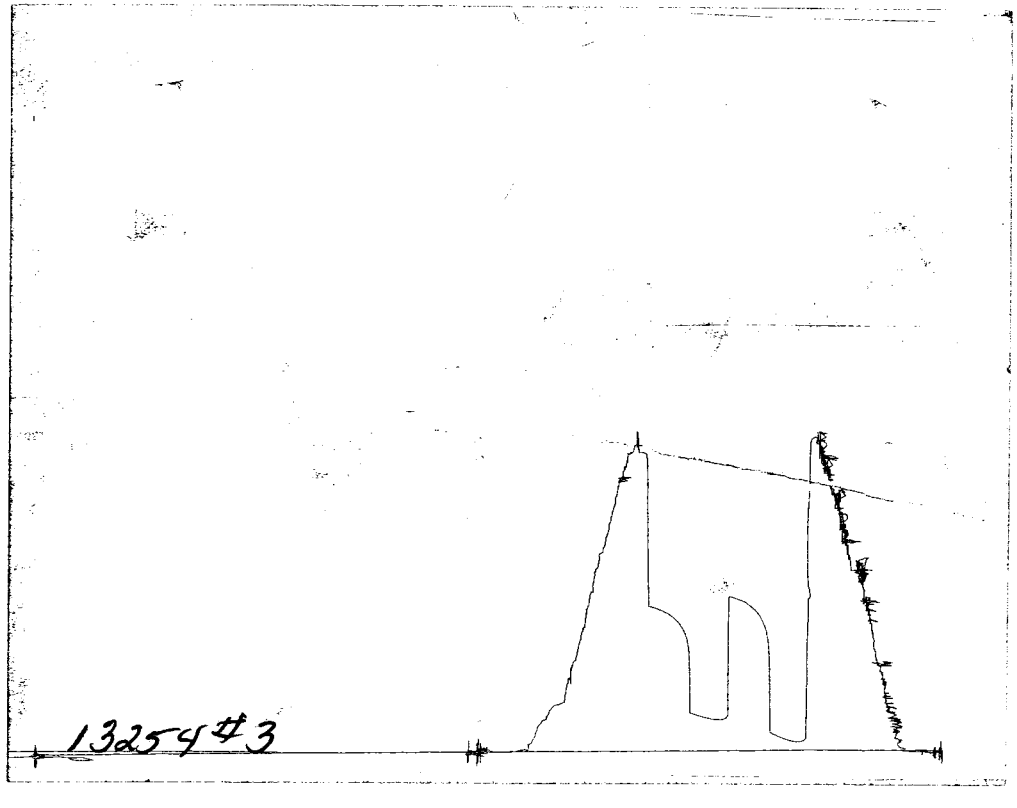
	AK-1	Alpine				
(A) Initital Hydrostatic Mud		1923 PSI	Recorder No.	6799	Test	
(B) First Initial Flow Pressure		25 PSI	(depth)	3907	Elec. Rec.	X
(C) First Final Flow Pressure		156 PSI	Recorder No.	13254	Jars	
(D) Initial Shut-In Pressure		993 PSI	(depth)	3935	Safety Jt.	
(E) Second Initial Flow Pressure		164 PSI	Recorder No.		Circ Sub	
(F) Second Final Flow Pressure		261 PSI	(depth)		Sampler	
(G) Final Shut-In Pressure		928 PSI	**Initial Opening**	30	Straddle	
(Q) Final Hydrostatic Mud		1873 PSI	Initial Shut-In	30	Ext. Packer	
			Final Flow	30	Shale Packer	
			Final Shut-In	30	Mileage	46
			T-On Location	15:05	Sub Total:	946
			T-Started	15:25	Std. By	
			T-Open	17:15	Other	
			T-Pulled	19:15	Total:	
			T-Out	21:29		

Approved By _____

Our Representative Dan Bangle

CHART PAGE

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



TRILOBITE TESTING INC.

P.O. Box 362 • Hays, Kansas 67601

№ 20200

05/03

Test Ticket

Well Name & No. Luea #1-30 Test No. 4 Date 10-27-04

Company Downing-Nelson Oil Co. Inc Zone Tested Arbuckle

Address ______ Elevation 2305 KB 2297 GL

Co. Rep / Geo. Ron Nelson Cont. Discovery #2 Est. Ft. of Pay ______ Por. ______ %

Location: Sec. 30 Twp. 13 Rge. 20 Co. Ellis State Ks

No. of Copies ______ Disbtribution Sheet (Y, N) ______ Turnkey (Y, N) ______ Evaluation (Y, N) ______

Interval Tested 3932 — 3970 Initial Str Wt./Lbs. 42,000 Unseated Str Wt/Lbs. 42,000

Anchor Length 38 Wt. Set Lbs. 25,000 Wt. Pulled Loose/Lbs. 70,000

Top Packer Depth 3927 Tool Weight 2600

Bottom Packer Depth 3932 Hole Size 7 7/8" ✓ Rubber Size 6 3/4" ✓

Total Depth 3970 Wt. Pipe Run 0 Drill Collar Run 30

Mud Wt. 9 LCM ______ Vis. 46 WL 8.8 Drill Pipe Size 4.5 XH Ft. Run 3889

Blow Description I.F. Weak - Died in 20 min.

Recovery - Total Feet 5' GIP 0 Ft. in DC 5 Ft. in DP 0

Rec. 5' Feet of MUD FEW OIL SPOTS %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 104 °F Gravity — °API D @ — °F Corrected Gravity — °API

RW — @ — °F Chlorides — ppm Recovery — Chlorides 4,000 ppm System

	AK-1	Alpine	
(A) Initital Hydrostatic Mud		1923	PSI
(B) First Initial Flow Pressure		13	PSI
(C) First Final Flow Pressure		20	PSI
(D) Initial Shut-In Pressure		453	PSI
(E) Second Initial Flow Pressure		—	PSI
(F) Second Final Flow Pressure		—	PSI
(G) Final Shut-In Pressure		—	PSI
(Q) Final Hydrostatic Mud		1852	PSI

Recorder No.	6799	Test	
(depth)	3933	Elec. Rec.	X
Recorder No.	13254	Jars	
(depth)	3967	Safety Jt.	
Recorder No.		Circ Sub	
(depth)		Sampler	
Initial Opening	30	Straddle	
Initial Shut-In	30	Ext. Packer	
Final Flow	—	Shale Packer	
Final Shut-In	—	Mileage	46
T-On Location	05:30	Sub Total:	946
T-Started	05:50	Std. By	
T-Open	07:35	Other	
T-Pulled	08:35	Total:	
T-Out	11:53		

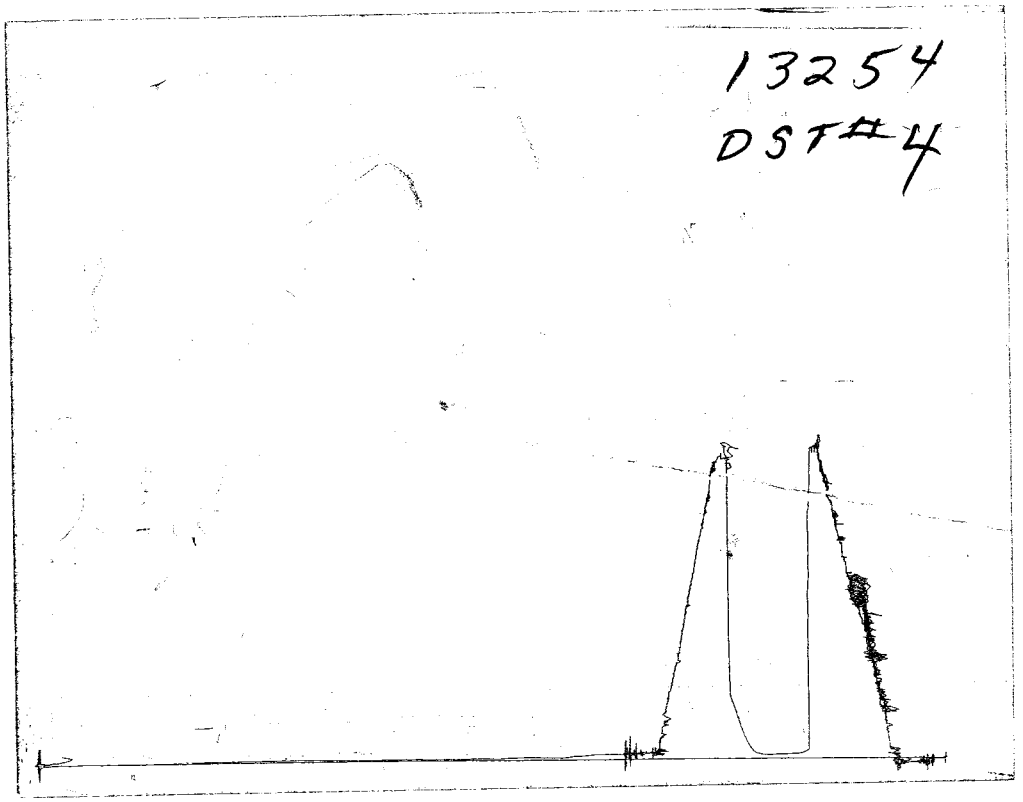
TRILOBITE TESTING INC. SHALL NOT BE LIABLE FOR DAMAGED OF ANY KIND OF THE PROPERTY OR PERSONNEL OF THE ONE FOR WHOM A TEST IS MADE, OR FOR ANY LOSS SUFFERED OR SUSTAINED, DIRECTLY OR INDIRECTLY, THROUGH THE USE OF ITS EQUIPMENT, OR ITS STATEMENTS OR OPINION CONCERNING THE RESULTS OF ANY TEST. TOOLS LOST OR DAMAGED IN THE HOLE SHALL BE PAID FOR AT COST BY THE PARTY FOR WHOM THE TEST IS MADE.

Approved By ______

Our Representative Dan Bangle

CHART PAGE

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



TRILOBITE TESTING INC.

P.O. Box 362 • Hays, Kansas 67601

05/03

№ 20851

Test Ticket

Well Name & No. LUEA #1-30 Test No. #5 Date 10-27-04

Company DOWNING-NELSON OIL Co., INC. Zone Tested L, Kc, J

Address _____ Elevation 2305 KB 2297 GL

Co. Rep / Geo. RON NELSON Cont. DISCOVERY #2 Est. Ft. of Pay _____ Por. _____ %

Location: Sec. 30 Twp. 13 Rge. 20 Co. ELLIS State KS.

No. of Copies _____ Disbtribution Sheet (Y, N) _____ Turnkey (Y, N) _____ Evaluation (Y, N) _____

Interval Tested 3760 To 3804 Initial Str Wt./Lbs. 42,000 Unseated Str Wt/Lbs. 48,000

Anchor Length 44' Wt. Set Lbs. 25,000 Wt. Pulled Loose/Lbs. 60,000

Top Packer Depth 3755' Tool Weight 2,500

Bottom Packer Depth 3760' & 3804 Hole Size 7 7/8" — Rubber Size 6 3/4" —

Total Depth 3970 Wt. Pipe Run 0 Drill Collar Run 30'

Mud Wt. 9 LCM — Vis. 46 WL 8.8 Drill Pipe Size 4½ XH Ft. Run 3733

Blow Description IF. - STRONG B.O.B. 13-min. ISI. - DEAD

FF. - STRONG B.O.B 16-min. FSI. -

Recovery - Total Feet 410' GIP 0 Ft. in DC 30 Ft. in DP 380

Rec. 410'	Feet of MUDDY S. WATER	%gas	%oil	90	%water 10	%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 116 °F Gravity — °API D @ — °F Corrected Gravity — °API

RW .08 @ 70 °F Chlorides 100,000 ppm Recovery — Chlorides 4,000 ppm System

	AK-1	Alpine					
(A)Initital Hydrostatic Mud		1842	PSI	Recorder No.	6799	Test	STRADDLE 900
(B) First Initial Flow Pressure		26	PSI	(depth)	3763	Elec. Rec.	✓
(C) First Final Flow Pressure		125	PSI	Recorder No.	13254	Jars	
(D) Initial Shut-In Pressure		624	PSI	(depth)	3803	Safety Jt.	
(E) Second Initial Flow Pressure		129	PSI	Recorder No.	13248	Circ Sub	✓ 35
(F) Second Final Flow Pressure		203	PSI	(depth)	3961	Sampler	
(G) Final Shut-In Pressure		620	PSI	**Initial Opening**	30	Straddle	— 250
(Q) Final Hydrostatic Mud		1780	PSI	Initial Shut-In	30	Ext. Packer	— 150
				Final Flow	30	Shale Packer	
				Final Shut-In	30	Mileage	0
				T-On Location	10:00	Sub Total:	335
				T-Started	10:43	Std. By	
				T-Open		Other	
				T-Pulled		Total:	
				T-Out			

Approved By _____

Our Representative John J. Schmidt

CHART PAGE

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

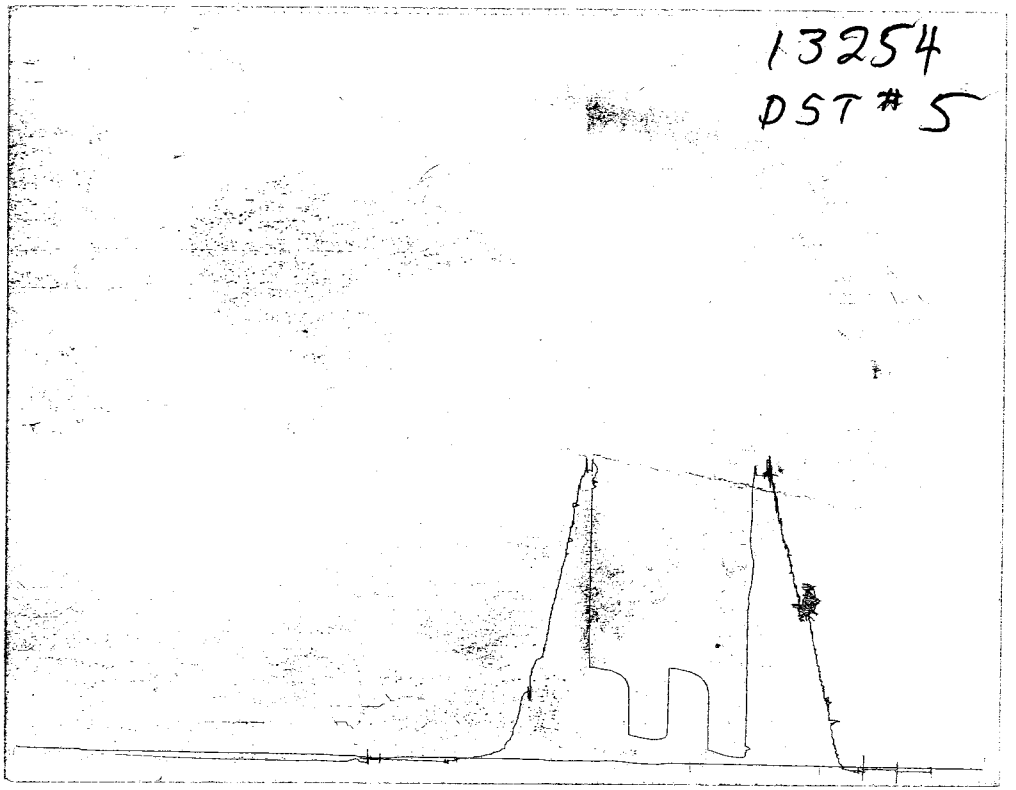


CHART PAGE

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