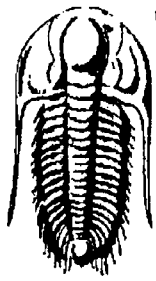


TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Prepared For: **Dreiling Oil,Inc.**

P.O.Drawer 550
Hays,Ks.67601

ATTN: Terry W.Piesker

4--14s 17w

Werth "A" # 1

Start Date: 2004.05.02 @ 07:08:54
End Date: 2004.05.02 @ 11:48:54
Job Ticket #: 19866 DST #: 1

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

DRILL STEM TEST REPORT

Dreiling Oil,Inc.

P.O.Drawer 550
Hays,Ks.67601

ATTN: Terry W.Piesker

Werth "A" # 1

4--14s 17w

Job Ticket: 19866 **DST#: 1**

Test Start: 2004.05.02 @ 07:08:54

GENERAL INFORMATION:

Formation: **L.Kc.-A-C**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 09:05:54
Time Test Ended: 11:48:54

Test Type: Conventional Bottom Hole
Tester: John Schmidt
Unit No: 18

Interval: 3292.00 ft (KB) To 3341.00 ft (KB) (TVD)
Total Depth: 3341.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

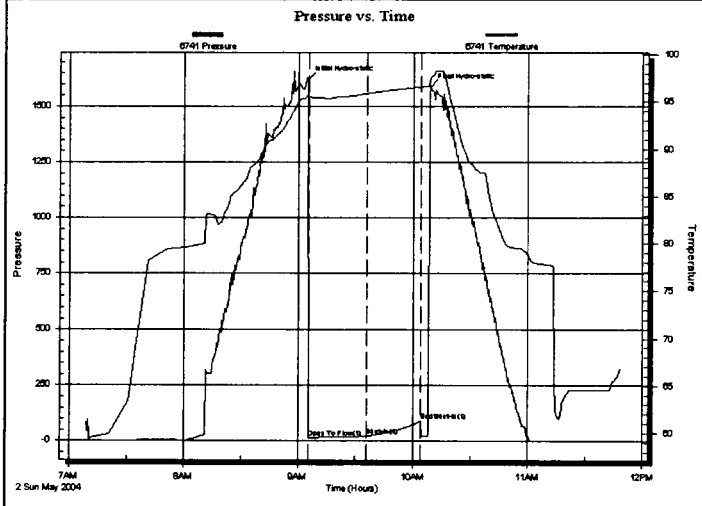
Reference Elevations: 2017.00 ft (KB)
2009.00 ft (CF)
KB to GR/CF: 8.00 ft

Serial #: 6741 **Inside**

Press@RunDepth: 21.74 psig @ 3297.00 ft (KB)
Start Date: 2004.05.02 End Date: 2004.05.02
Start Time: 07:09:04 End Time: 11:48:54

Capacity: 7000.00 psig
Last Calib.: 2004.05.02
Time On Btm: 2004.05.02 @ 09:05:24
Time Off Btm: 2004.05.02 @ 10:08:54

TEST COMMENT: IF-



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1622.17	95.70	Initial Hydro-static
1	14.09	95.54	Open To Flow (1)
31	21.74	95.87	Shut-In(1)
59	91.37	96.61	End Shut-In(1)
64	1588.23	97.49	Final Hydro-static

Recovery

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

Gas Rates

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

DRILL STEM TEST REPORT

TOOL DIAGRAM

Dreiling Oil,Inc.

P.O.Drawer 550
Hays,Ks.67601

ATTN: Terry W.Piesker

Werth "A" # 1

4--14s 17w

Job Ticket: 19866 **DST#: 1**

Test Start: 2004.05.02 @ 07:08:54

Tool Information

Drill Pipe:	Length:	3257.00 ft	Diameter:	3.80 inches	Volume:	45.69 bbl	Tool Weight:		3000.00 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:	31.00 ft	Diameter:	2.25 inches	Volume:	0.15 bbl	Weight to Pull Loose:		45000.00 lb
					Total Volume:	45.84 bbl	Tool Chased		0.00 ft
Drill Pipe Above KB:		16.00 ft					String Weight:	Initial	38000.00 lb
Depth to Top Packer:		3292.00 ft						Final	38000.00 lb
Depth to Bottom Packer:		ft							
Interval between Packers:		49.00 ft							
Tool Length:		69.00 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			3273.00		
Shut In Tool	5.00			3278.00		
Hydraulic tool	5.00			3283.00		
Packer	4.00			3287.00	20.00	Bottom Of Top Packer
Packer	5.00			3292.00		
Stubb	1.00			3293.00		
Perforations	3.00			3296.00		
Change Over Sub	1.00			3297.00		
Recorder	0.00	6741	Inside	3297.00		
Blank Spacing	30.00			3327.00		
Change Over Sub	1.00			3328.00		
Perforations	10.00			3338.00		
Recorder	0.00	13308	Outside	3338.00		
Bullnose	3.00			3341.00	49.00	Bottom Packers & Anchor
Total Tool Length:	**69.00**					

TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

FLUID SUMMARY

Dreiling Oil,Inc.

P.O.Drawer 550
Hays,Ks.67601

ATTN: Terry W.Piesker

Werth "A" # 1

4-14s 17w

Job Ticket: 19866 **DST#: 1**

Test Start: 2004.05.02 @ 07:08:54

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

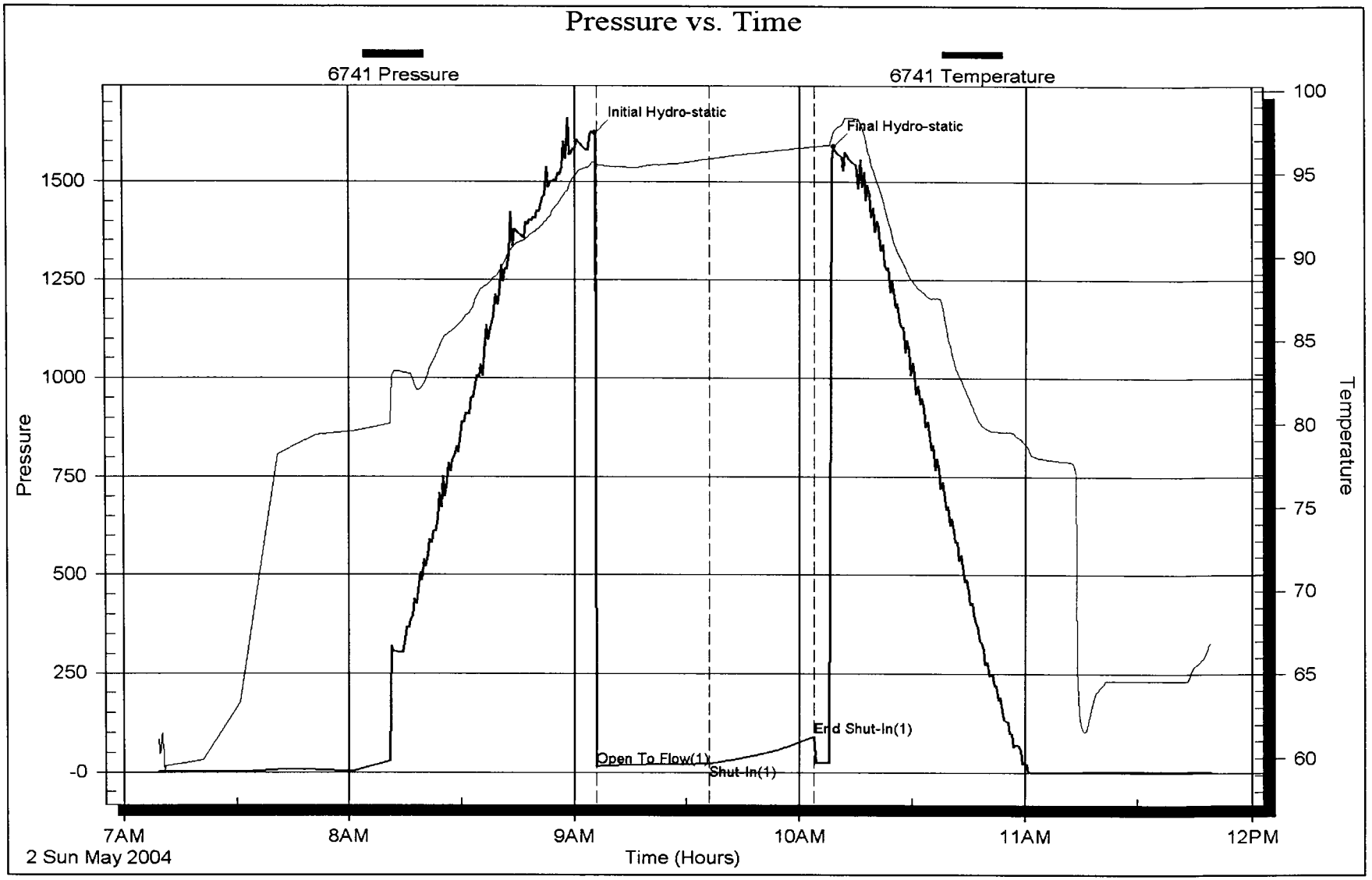
Recovery Information

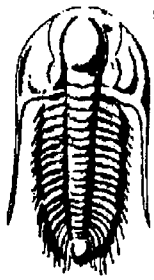
Recovery Table

Length ft	Description	Volume bbl
5.00	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
6741 Pressure
6741 Temperature
Initial Hydro-static
Final Hydro-static
End Shut-In(1)
Open To Flow(1)
Shut-In(1)
Pressure
Temperature
1500
1250
1000
750
500
250
-0
100
95
90
85
80
75
70
65
60
7AM
8AM
9AM
10AM
11AM
12PM
2 Sun May 2004
Time (Hours)



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Prepared For: **Dreiling Oil,Inc.**

P.O.Drawer 550
Hays,Ks.67601

ATTN: Terry W.Piesker

4--14s 17w

Werth "A" # 1

Start Date: 2004.05.02 @ 18:38:36
End Date: 2004.05.03 @ 00:36:36
Job Ticket #: 19867 DST #: 2

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

DRILL STEM TEST REPORT

Dreiling Oil,Inc.

P.O.Drawer 550
Hays,Ks.67601

ATTN: Terry W.Piesker

Werth "A" # 1

4--14s 17w

Job Ticket: 19867 **DST#: 2**

Test Start: 2004.05.02 @ 18:38:36

GENERAL INFORMATION:

Formation: **L.Kc.-D-F**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 20:12:06
Time Test Ended: 00:36:36

Test Type: Conventional Bottom Hole
Tester: John Schmidt
Unit No: 18

Interval: 3341.00 ft (KB) To 3394.00 ft (KB) (TVD)
Total Depth: 3394.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

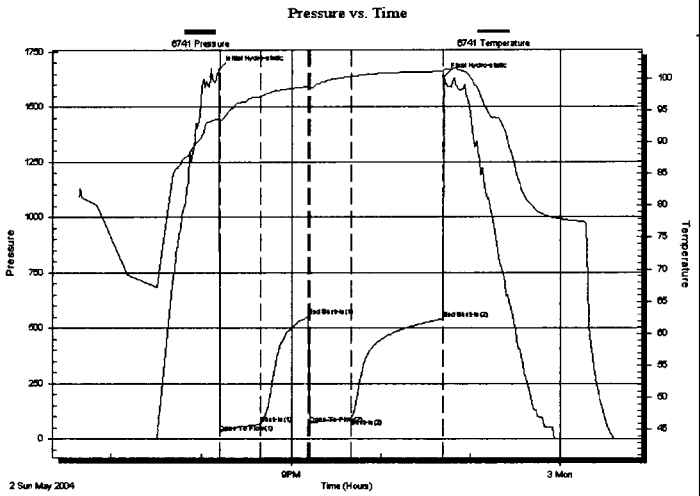
Reference Elevations: 2017.00 ft (KB)
2009.00 ft (CF)
KB to GR/CF: 8.00 ft

Serial #: 6741 **Inside**

Press@RunDepth: 92.26 psig @ 3346.00 ft (KB)
Start Date: 2004.05.02 End Date: 2004.05.03
Start Time: 18:38:46 End Time: 00:36:36

Capacity: 7000.00 psig
Last Calib.: 2004.05.03
Time On Btm: 2004.05.02 @ 20:11:36
Time Off Btm: 2004.05.02 @ 22:42:06

TEST COMMENT: IF-Strong B.O.B.10 min. ISI-Weak surface blow back.
FF-Strong B.O.B.9 min. FSI-Good blow back built to 2 1/4" in.



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1670.95	93.67	Initial Hydro-static
1	26.20	93.49	Open To Flow (1)
28	64.98	97.18	Shut-In(1)
60	552.26	98.72	End Shut-In(1)
61	66.99	98.63	Open To Flow (2)
89	92.26	100.30	Shut-In(2)
150	542.06	101.13	End Shut-In(2)
151	1637.20	101.30	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
190.00	HGMCO 20%G-25%M-55%oil	2.38
0.00	500 gas in pipe	0.00

Gas Rates

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

DRILL STEM TEST REPORT

TOOL DIAGRAM

Dreiling Oil,Inc.

P.O.Drawer 550
Hays,Ks.67601

ATTN: Terry W.Piesker

Werth "A" # 1

4--14s 17w

Job Ticket: 19867 **DST#: 2**

Test Start: 2004.05.02 @ 18:38:36

Tool Information

Drill Pipe:	Length:	3320.00 ft	Diameter:	3.80 inches	Volume:	46.57 bbl	Tool Weight:		3100.00 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:	31.00 ft	Diameter:	2.25 inches	Volume:	0.15 bbl	Weight to Pull Loose:		43000.00 lb
					Total Volume:	46.72 bbl	Tool Chased		0.00 ft
Drill Pipe Above KB:		30.00 ft					String Weight:	Initial	39000.00 lb
Depth to Top Packer:		3341.00 ft						Final	40000.00 lb
Depth to Bottom Packer:		ft							
Interval between Packers:		53.00 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			3322.00		
Shut In Tool	5.00			3327.00		
Hydraulic tool	5.00			3332.00		
Packer	4.00			3336.00	20.00	Bottom Of Top Packer
Packer	5.00			3341.00		
Stubb	1.00			3342.00		
Perforations	3.00			3345.00		
Change Over Sub	1.00			3346.00		
Recorder	0.00	6741	Inside	3346.00		
Blank Spacing	30.00			3376.00		
Change Over Sub	1.00			3377.00		
Perforations	14.00			3391.00		
Recorder	0.00	13308	Outside	3391.00		
Bullnose	3.00			3394.00	53.00	Bottom Packers & Anchor
Total Tool Length:	**73.00**					

DRILL STEM TEST REPORT

FLUID SUMMARY

Dreiling Oil,Inc.

P.O.Drawer 550
Hays,Ks.67601

ATTN: Terry W.Piesker

Werth "A" # 1

4--14s 17w

Job Ticket: 19867 **DST#: 2**

Test Start: 2004.05.02 @ 18:38:36

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:	ppm
Viscosity:	55.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	8.78 in³	Gas Cushion Type:			
Resistivity:	ohm.m	Gas Cushion Pressure:	psig		
Salinity:	ppm				
Filter Cake:	inches				

Recovery Information

Recovery Table

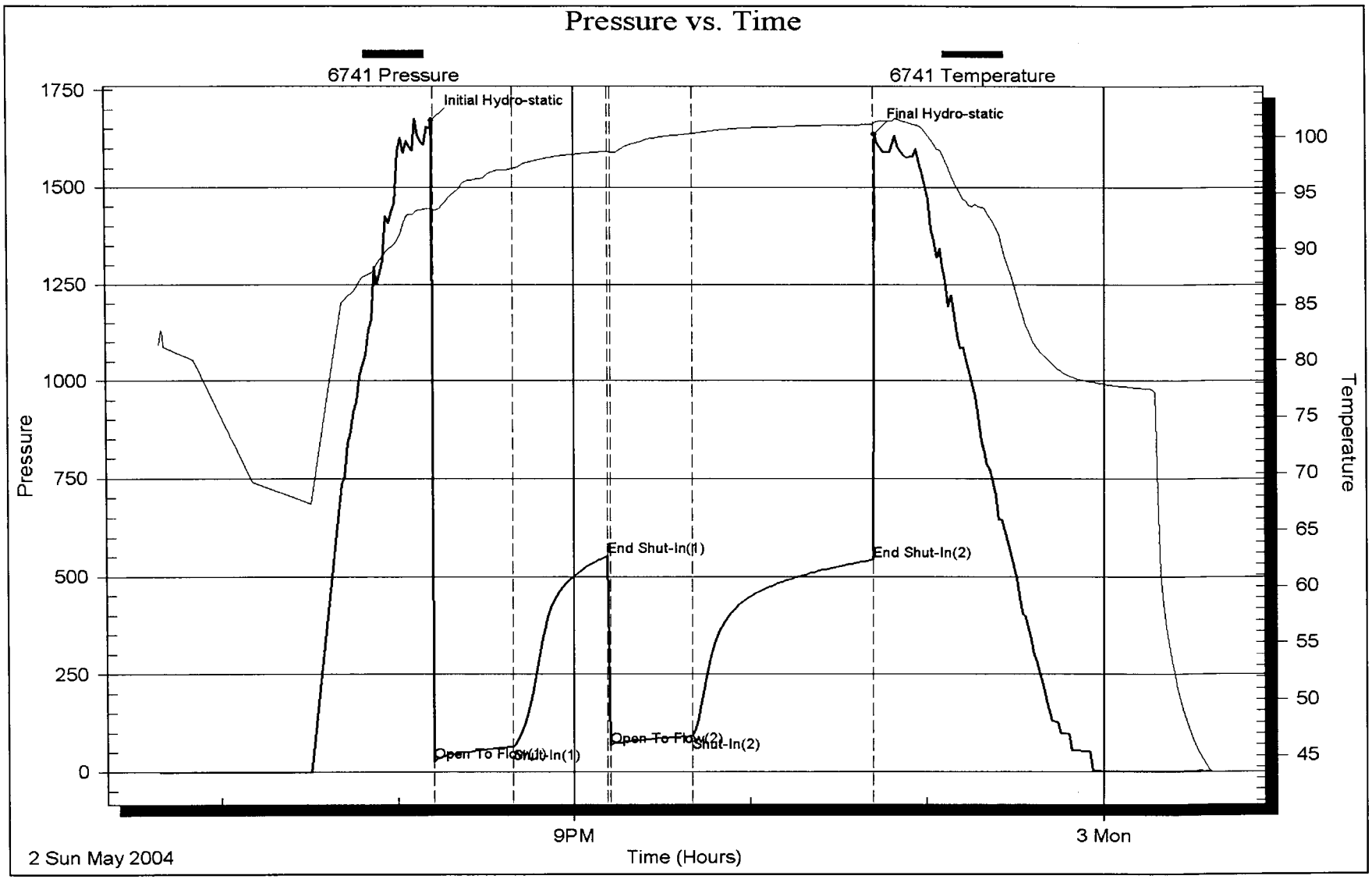
Length ft	Description	Volume bbl
190.00	HGMCO 20%G-25%M-55%oil	2.383
0.00	500 gas in pipe	0.000

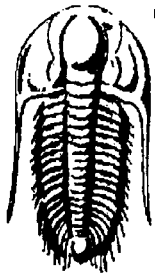
Total Length: 190.00 ft Total Volume: 2.383 bbl

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

Laboratory Name: Laboratory Location:

Recovery Comments:


Pressure vs. Time
6741 Pressure
6741 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)
1750
1500
1250
1000
750
500
250
0
Pressure
100
95
90
85
80
75
70
65
60
55
50
45
Temperature
9PM
3 Mon
2 Sun May 2004
Time (Hours)



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Prepared For: **Dreiling Oil,Inc.**

P.O.Drawer 550
Hays,Ks.67601

ATTN: Terry W.Piesker

4–14s 17w

Werth "A" # 1

Start Date: 2004.05.03 @ 10:50:11

End Date: 2004.05.03 @ 16:31:11

Job Ticket #: 19868 DST #: 3

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

DRILL STEM TEST REPORT

Dreiling Oil,Inc.

P.O.Drawer 550
Hays,Ks.67601

ATTN: Terry W.Piesker

Werth "A" # 1

4–14s 17w

Job Ticket: 19868 **DST#: 3**

Test Start: 2004.05.03 @ 10:50:11

GENERAL INFORMATION:

Formation: **L.Kc.-G-J**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 12:22:41
Time Test Ended: 16:31:11

Test Type: Conventional Bottom Hole
Tester: John Schmidt
Unit No: 18

Interval: 3394.00 ft (KB) To 3490.00 ft (KB) (TVD)
Total Depth: 3490.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

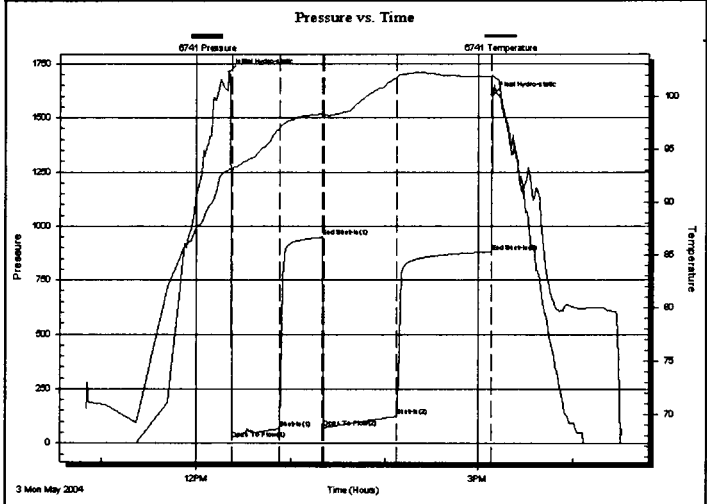
Reference Elevations: 2017.00 ft (KB)
2009.00 ft (CF)
KB to GR/CF: 8.00 ft

Serial #: 6741 **Inside**

Press@RunDepth: 125.56 psig @ 3399.00 ft (KB)
Start Date: 2004.05.03 End Date: 2004.05.03
Start Time: 10:50:21 End Time: 16:31:11

Capacity: 7000.00 psig
Last Calib.: 2004.05.03
Time On Btm: 2004.05.03 @ 12:20:41
Time Off Btm: 2004.05.03 @ 15:08:41

TEST COMMENT: IF-Strong B.O.B. 28 min. ISI-Weak surface blow back
FF-Strong B.O.B.34 min. FSI-Good blow back 1/2" in.



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1710.00	93.15	Initial Hydro-static
2	19.78	92.78	Open To Flow (1)
32	69.06	97.00	Shut-In(1)
60	949.07	98.39	End Shut-In(1)
61	71.04	98.28	Open To Flow (2)
107	125.56	101.85	Shut-In(2)
168	880.13	101.93	End Shut-In(2)
168	1603.59	102.00	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
124.00	Muddy Water	1.46
107.00	Oil stain mud	1.50
3.00	oil	0.04
0.00	60 gas in pipe	0.00

Gas Rates

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

TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

TOOL DIAGRAM

Dreiling Oil,Inc.

P.O.Drawer 550
Hays,Ks.67601

ATTN: Terry W.Piesker

Werth "A" # 1

4--14s 17w

Job Ticket: 19868 **DST#: 3**

Test Start: 2004.05.03 @ 10:50:11

Tool Information

Drill Pipe:	Length:	3349.00 ft	Diameter:	3.80 inches	Volume:	46.98 bbl	Tool Weight:		3400.00 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:	31.00 ft	Diameter:	2.25 inches	Volume:	0.15 bbl	Weight to Pull Loose:		45000.00 lb
					Total Volume:	47.13 bbl	Tool Chased		0.00 ft
Drill Pipe Above KB:		6.00 ft					String Weight:	Initial	40000.00 lb
Depth to Top Packer:		3394.00 ft						Final	40500.00 lb
Depth to Bottom Packer:		ft							
Interval between Packers:		96.00 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	
Change Over Sub	1.00			3375.00		
Shut In Tool	5.00			3380.00		
Hydraulic tool	5.00			3385.00		
Packer	4.00			3389.00	20.00	Bottom Of Top Packer
Packer	5.00			3394.00		
Stubb	1.00			3395.00		
Perforations	3.00			3398.00		
Change Over Sub	1.00			3399.00		
Recorder	0.00	6741	Inside	3399.00		
Blank Spacing	63.00			3462.00		
Change Over Sub	1.00			3463.00		
Perforations	24.00			3487.00		
Recorder	0.00	13308	Outside	3487.00		
Bullnose	3.00			3490.00	96.00	Bottom Packers & Anchor
Total Tool Length:	**116.00**					

TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

FLUID SUMMARY

Dreiling Oil,Inc.

P.O.Drawer 550
Hays,Ks.67601

ATTN: Terry W.Piesker

Werth "A" # 1

4--14s 17w

Job Ticket: 19868 **DST#: 3**

Test Start: 2004.05.03 @ 10:50:11

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:	48000 ppm
Viscosity:	55.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	8.77 in³	Gas Cushion Type:			
Resistivity:	ohm.m	Gas Cushion Pressure:	psig		
Salinity:	ppm				
Filter Cake:	inches				

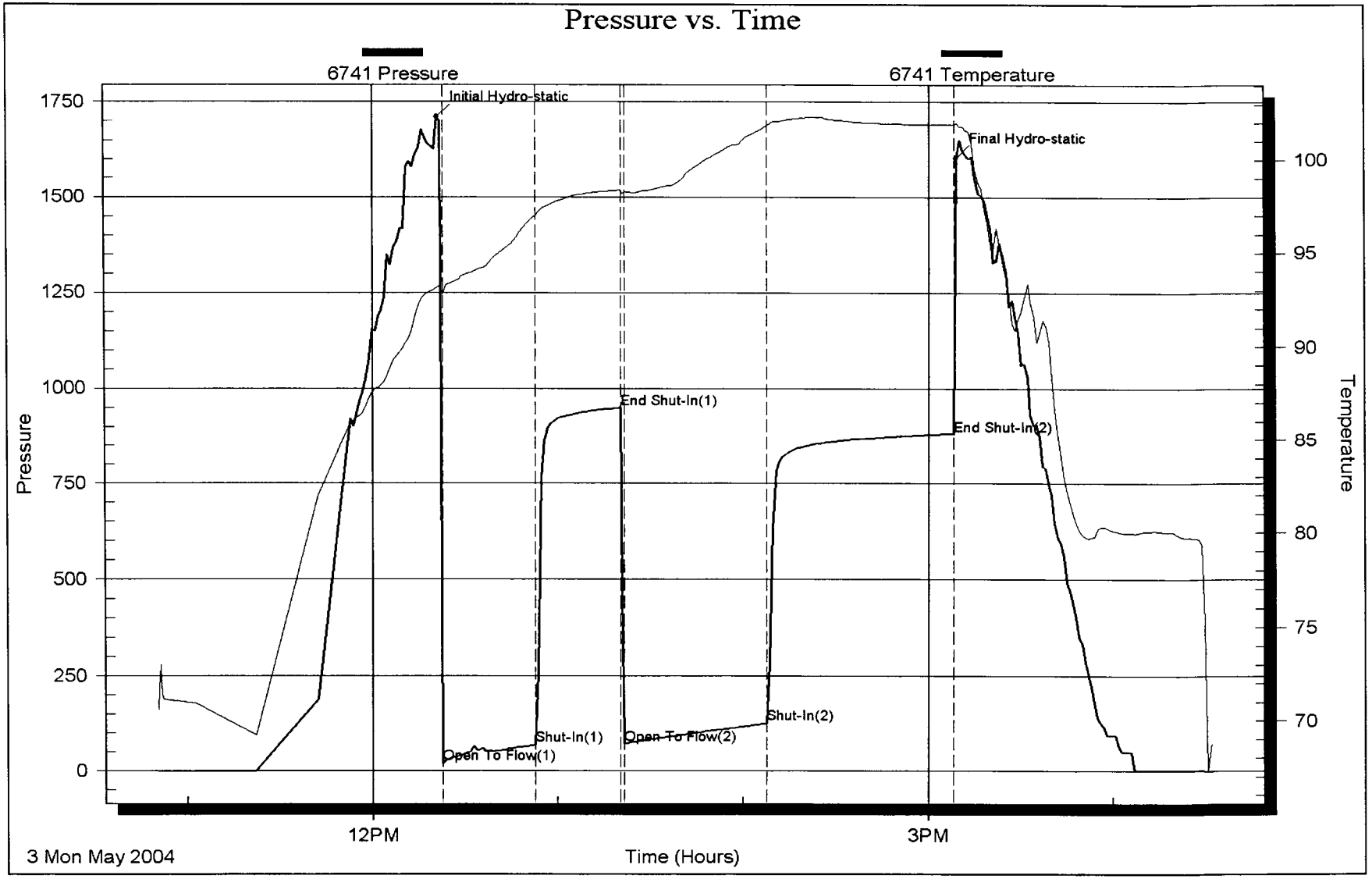
Recovery Information

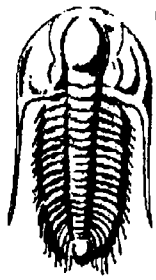
Recovery Table

Length ft	Description	Volume bbl
124.00	Muddy Water	1.457
107.00	Oil stain mud	1.501
3.00	oil	0.042
0.00	60 gas in pipe	0.000

Total Length: 234.00 ft Total Volume: 3.000 bbl

Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
Laboratory Name: Laboratory Location:
Recovery Comments:


Pressure vs. Time
6741 Pressure
6741 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)
1750
1500
1250
1000
750
500
250
0
Pressure
100
95
90
85
80
75
70
Temperature
12PM
3PM
3 Mon May 2004
Time (Hours)



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Prepared For: **Dreiling Oil,Inc.**

P.O.Drawer 550
Hays,Ks.67601

ATTN: Terry W.Piesker

4–14s 17w

Werth "A" # 1

Start Date: 2004.05.04 @ 02:44:34
End Date: 2004.05.04 @ 08:50:34
Job Ticket #: 19869 DST #: 4

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

DRILL STEM TEST REPORT

Dreiling Oil,Inc.

P.O.Drawer 550
Hays,Ks.67601

ATTN: Terry W.Piesker

Werth "A" # 1

4–14s 17w

Job Ticket: 19869 **DST#: 4**

Test Start: 2004.05.04 @ 02:44:34

GENERAL INFORMATION:

Formation: **Arbuckle**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 04:12:34
Time Test Ended: 08:50:34

Test Type: Conventional Bottom Hole
Tester: John Schmidt
Unit No: 18

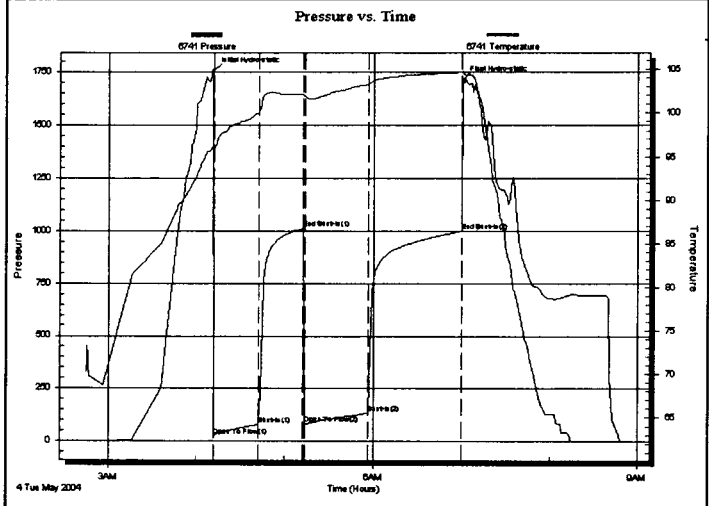
Interval: 3519.00 ft (KB) To 3569.00 ft (KB) (TVD)
Total Depth: 3569.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 2017.00 ft (KB)
2009.00 ft (CF)
KB to GR/CF: 8.00 ft

Serial #: 6741 **Inside**
Press@RunDepth: 133.59 psig @ 3524.00 ft (KB)
Start Date: 2004.05.04 End Date: 2004.05.04
Start Time: 02:44:44 End Time: 08:50:34

Capacity: 7000.00 psig
Last Calib.: 2004.05.04
Time On Btm: 2004.05.04 @ 04:12:04
Time Off Btm: 2004.05.04 @ 07:01:04

TEST COMMENT: IF-Strong B.O.B.in 15 min. ISI-Blow back 1/2" in.
FF-Strong B.O.B.in 15 min. FSI-Blow back 2" in.



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1755.70	96.19	Initial Hydro-static
1	25.71	96.05	Open To Flow (1)
31	79.83	100.05	Shut-In(1)
61	1012.43	102.17	End Shut-In(1)
62	82.03	101.92	Open To Flow (2)
104	133.59	103.20	Shut-In(2)
168	997.98	104.65	End Shut-In(2)
169	1712.54	104.80	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
125.00	MCO 45%M-55%oil	1.47
163.00	Gassy oil 10%G-90%oil	2.29
0.00	270 gas in pipe	0.00

Gas Rates

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

DRILL STEM TEST REPORT

TOOL DIAGRAM

Dreiling Oil,Inc.

P.O.Drawer 550
Hays,Ks.67601

ATTN: Terry W.Piesker

Werth "A" # 1

4–14s 17w

Job Ticket: 19869 **DST#: 4**

Test Start: 2004.05.04 @ 02:44:34

Tool Information

Drill Pipe:	Length:	3474.00 ft	Diameter:	3.80 inches	Volume:	48.73 bbl	Tool Weight:		3000.00 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:	31.00 ft	Diameter:	2.25 inches	Volume:	0.15 bbl	Weight to Pull Loose:		45000.00 lb
					Total Volume:	48.88 bbl	Tool Chased		0.00 ft
Drill Pipe Above KB:		6.00 ft					String Weight:	Initial	40000.00 lb
Depth to Top Packer:		3519.00 ft						Final	41000.00 lb
Depth to Bottom Packer:		ft							
Interval between Packers:		50.00 ft							
Tool Length:		70.00 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			3500.00		
Shut In Tool	5.00			3505.00		
Hydraulic tool	5.00			3510.00		
Packer	4.00			3514.00	20.00	Bottom Of Top Packer
Packer	5.00			3519.00		
Stubb	1.00			3520.00		
Perforations	3.00			3523.00		
Change Over Sub	1.00			3524.00		
Recorder	0.00	6741	Inside	3524.00		
Blank Spacing	30.00			3554.00		
Change Over Sub	1.00			3555.00		
Perforations	11.00			3566.00		
Recorder	0.00	13308	Outside	3566.00		
Bullnose	3.00			3569.00	50.00	Bottom Packers & Anchor
Total Tool Length:	**70.00**					

TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

FLUID SUMMARY

Dreiling Oil,Inc.

P.O.Drawer 550
Hays,Ks.67601

ATTN: Terry W.Piesker

Werth "A" # 1

4--14s 17w

Job Ticket: 19869 **DST#: 4**

Test Start: 2004.05.04 @ 02:44:34

Mud and Cushion Information

Mud Type:	Gel Chem	Cushion Type:		Oil API:	32 deg API
Mud Weight:	9.00 lb/gal	Cushion Length:	ft	Water Salinity:	ppm
Viscosity:	55.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	8.78 in³	Gas Cushion Type:			
Resistivity:	ohm.m	Gas Cushion Pressure:	psig		
Salinity:	ppm				
Filter Cake:	inches				

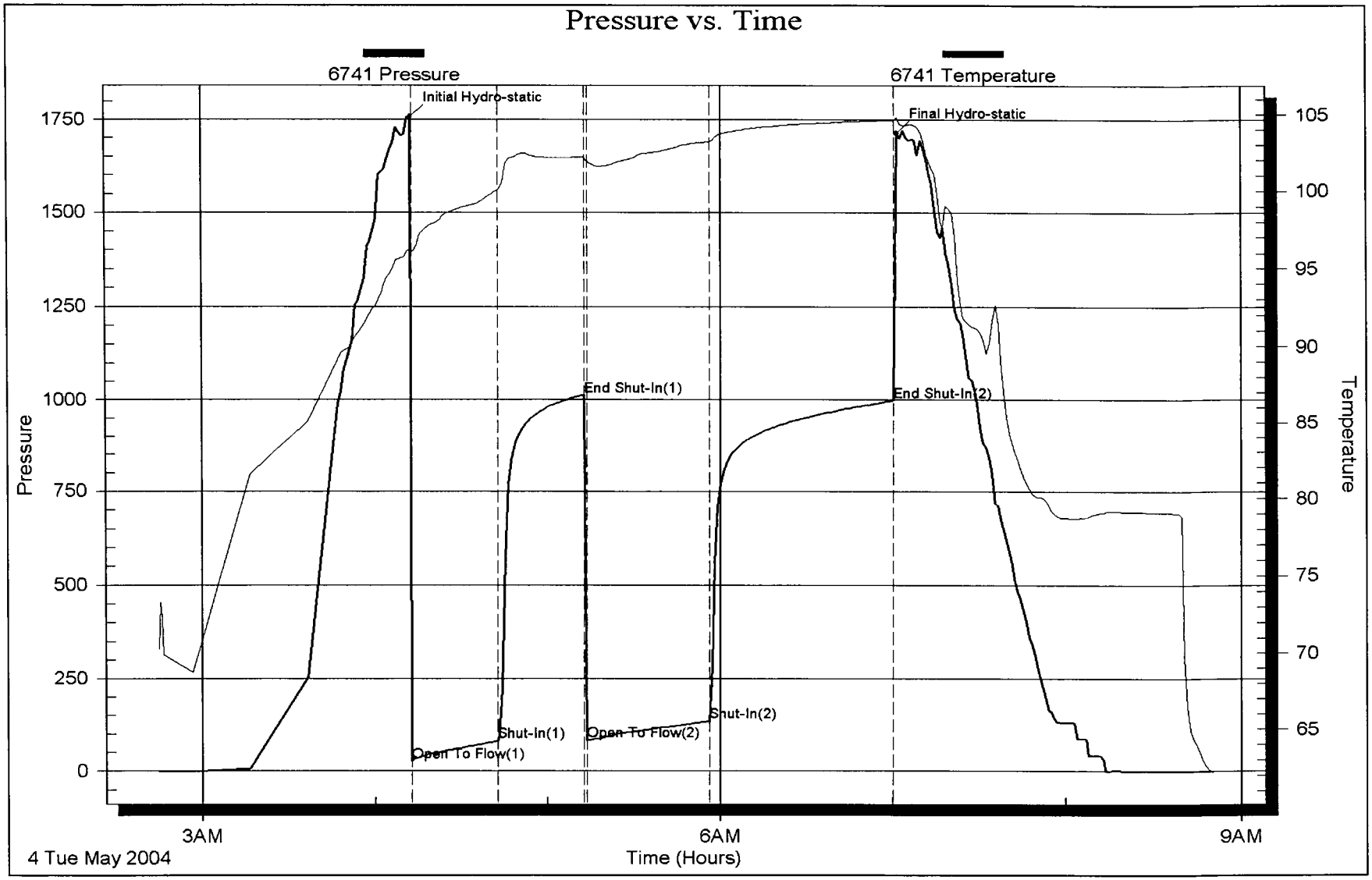
Recovery Information

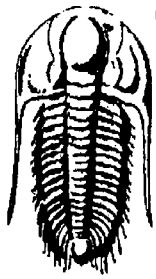
Recovery Table

Length ft	Description	Volume bbl
125.00	MCO 45%M-55%oil	1.471
163.00	Gassy oil 10%G-90%oil	2.286
0.00	270 gas in pipe	0.000

Total Length: 288.00 ft Total Volume: 3.757 bbl

Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
Laboratory Name: Laboratory Location:
Recovery Comments:


Pressure vs. Time
6741 Pressure
6741 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
105
100
95
90
85
80
75
70
65
3AM
6AM
9AM
4 Tue May 2004
Time (Hours)



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Prepared For: **Dreiling Oil,Inc.**

P.O.Drawer 550
Hays,Ks.67601

ATTN: Terry W.Piesker

4--14s 17w

Werth "A" # 1

Start Date: 2004.05.04 @ 15:43:24
End Date: 2004.05.04 @ 22:20:24
Job Ticket #: 19870 DST #: 5

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

DRILL STEM TEST REPORT

Dreiling Oil,Inc.

P.O.Drawer 550
Hays,Ks.67601

ATTN: Terry W.Piesker

Werth "A" # 1

4–14s 17w

Job Ticket: 19870 **DST#: 5**

Test Start: 2004.05.04 @ 15:43:24

GENERAL INFORMATION:

Formation: **Arbuckle**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 17:41:54
Time Test Ended: 22:20:24

Test Type: Conventional Bottom Hole
Tester: John Schmidt
Unit No: 18

Interval: 3568.00 ft (KB) To 3589.00 ft (KB) (TVD)
Total Depth: 3589.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

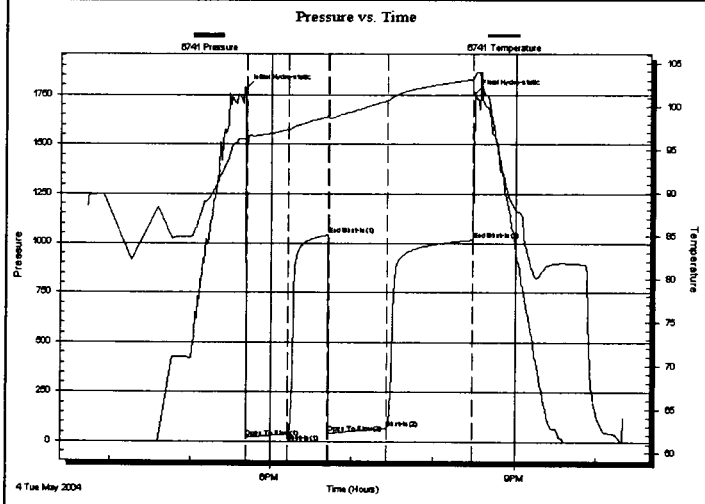
Reference Elevations: 2017.00 ft (KB)
2009.00 ft (CF)
KB to GR/CF: 8.00 ft

Serial #: 6741 **Inside**

Press@RunDepth: 69.36 psig @ 3571.00 ft (KB)
Start Date: 2004.05.04 End Date: 2004.05.04
Start Time: 15:43:34 End Time: 22:20:24

Capacity: 7000.00 psig
Last Calib.: 2004.05.04
Time On Btm: 2004.05.04 @ 17:40:54
Time Off Btm: 2004.05.04 @ 20:29:54

TEST COMMENT: IF-Strong B.O.B.27 min. ISI-Weakblow back 1/4" in.
FF-Strong B.O.B.27 min FSI-Weak blow back 1/2" in.



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1781.49	96.14	Initial Hydro-static
1	18.78	95.22	Open To Flow (1)
32	39.88	97.29	Shut-In(1)
61	1040.47	98.81	End Shut-In(1)
62	42.27	98.60	Open To Flow (2)
105	69.36	100.66	Shut-In(2)
168	1016.10	103.11	End Shut-In(2)
169	1756.64	103.58	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
155.00	Gassy Oil 10%gas 90%oil	1.89
0.00	100 gas in pipe	0.00

Gas Rates

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

TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

TOOL DIAGRAM

Dreiling Oil,Inc.

P.O.Drawer 550
Hays,Ks.67601

ATTN: Terry W.Piesker

Werth "A" # 1

4--14s 17w

Job Ticket: 19870 **DST#: 5**

Test Start: 2004.05.04 @ 15:43:24

Tool Information

Drill Pipe:	Length:	3537.00 ft	Diameter:	3.80	inches	Volume:	49.61	bbl	
Heavy Wt. Pipe:	Length:	0.00 ft	Diameter:	2.70	inches	Volume:	0.00	bbl	
Drill Collar:	Length:	31.00 ft	Diameter:	2.25	inches	Volume:	0.15	bbl	
						Total Volume:	49.76	bbl	

Drill Pipe Above KB:	20.00 ft
Depth to Top Packer:	3568.00 ft
Depth to Bottom Packer:	ft
Interval between Packers:	21.00 ft
Tool Length:	41.00 ft
Number of Packers:	2 Diameter: 6.75 inches

Tool Weight:		2000.00 lb
Weight set on Packer:		25000.00 lb
Weight to Pull Loose:		50000.00 lb
Tool Chased		0.00 ft
String Weight:	Initial	40000.00 lb
	Final	41000.00 lb

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths	
Change Over Sub	1.00			3549.00		
Shut In Tool	5.00			3554.00		
Hydraulic tool	5.00			3559.00		
Packer	4.00			3563.00	20.00	Bottom Of Top Packer
Packer	5.00			3568.00		
Stubb	1.00			3569.00		
Perforations	2.00			3571.00		
Recorder	0.00	6741	Inside	3571.00		
Perforations	15.00			3586.00		
Recorder	0.00	13308	Outside	3586.00		
Bullnose	3.00			3589.00	21.00	Bottom Packers & Anchor
Total Tool Length:	**41.00**					

TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

FLUID SUMMARY

Dreiling Oil,Inc.

P.O.Drawer 550
Hays,Ks.67601

ATTN: Terry W.Piesker

Werth "A" # 1

4--14s 17w

Job Ticket: 19870 **DST#: 5**

Test Start: 2004.05.04 @ 15:43:24

Mud and Cushion Information

Mud Type:	Gel Chem	Cushion Type:		Oil API:	32 deg API
Mud Weight:	9.00 lb/gal	Cushion Length:	ft	Water Salinity:	ppm
Viscosity:	55.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	8.78 in³	Gas Cushion Type:			
Resistivity:	ohm.m	Gas Cushion Pressure:	psig		
Salinity:	ppm				
Filter Cake:	inches				

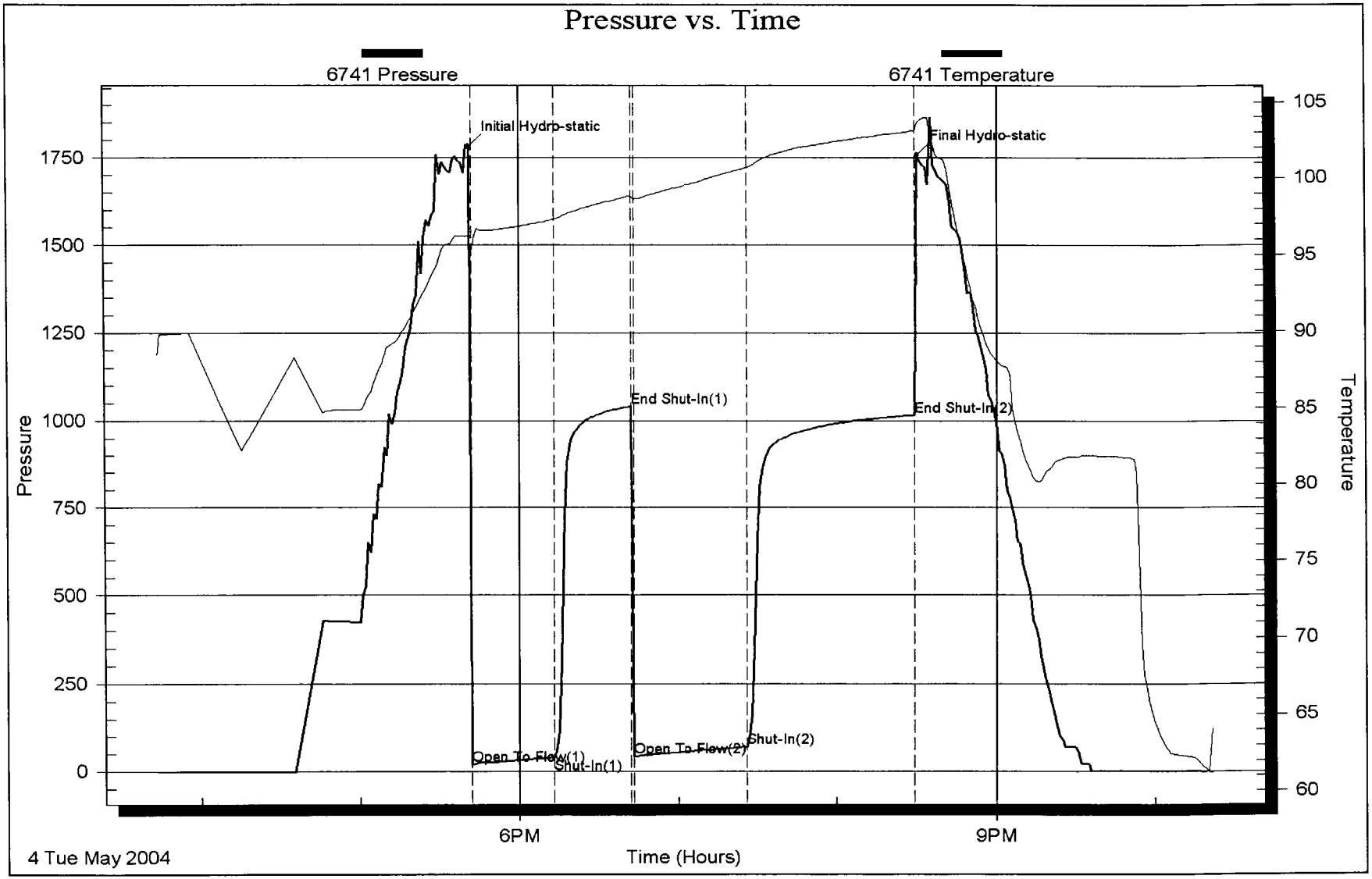
Recovery Information

Recovery Table

Length ft	Description	Volume bbl
155.00	Gassy Oil 10%gas 90%oil	1.892
0.00	100 gas in pipe	0.000

Total Length: 155.00 ft Total Volume: 1.892 bbl

Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
Laboratory Name: Laboratory Location:
Recovery Comments:


Pressure vs. Time
6741 Pressure
6741 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
105
100
95
90
85
80
75
70
65
60
6PM
9PM
Time (Hours)
4 Tue May 2004

TRILOBITE TESTING INC.

P.O. Box 362 • Hays, Kansas 67601

INV 6401

№ 19866

05/03

Test Ticket

Well Name & No. WERTH "A" #1 Test No. #1 Date 5-2-04

Company DREILING OIL, INC. Zone Tested L. KC. A-C

Address P.O. DRAWER 550 HAYS, KS. 67601 Elevation 2017 KB 2009 GL

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

Location: Sec. 4 Twp. 14S Rge. 17W Co. ELLIS State KS.

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

Interval Tested 3292 To 3341 Initial Str Wt./Lbs. 38,000 Unseated Str Wt/Lbs. 38,000

Anchor Length 49' Wt. Set Lbs. 25,000 Wt. Pulled Loose/Lbs. 45,000

Top Packer Depth 3287 Tool Weight 3,000

Bottom Packer Depth 3292 Hole Size 7 7/8" ✓ Rubber Size 6 3/4" ✓

Total Depth 3341 Wt. Pipe Run 0 Drill Collar Run 31

Mud Wt. 8.8 LCM 1/8# Vis. 55 WL 8.8 Drill Pipe Size 4½ XH Ft. Run 3257

Blow Description IF.-WEAK DEAD IN 12-MIN. ISI.-DEAD FF.-DEAD

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

Rec. 5	Feet of 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 _____ °F Gravity _____ °API D @ _____ °F Corrected Gravity _____ °API

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

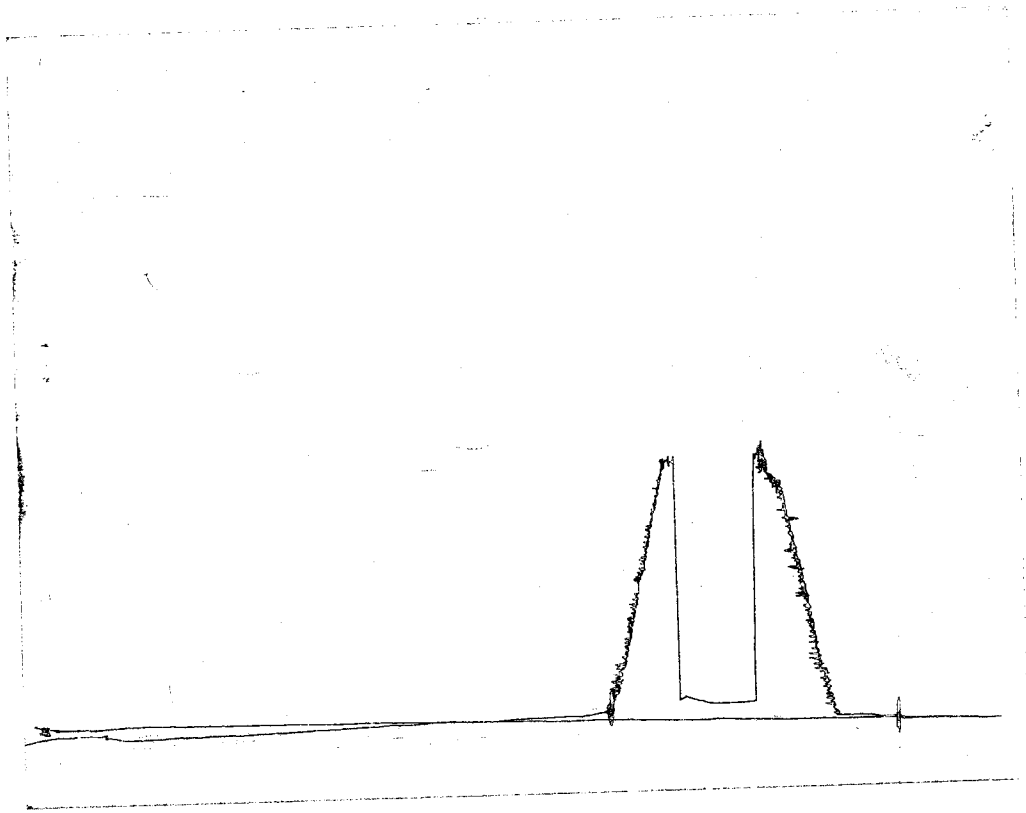
	AK-1	Alpine				
(A)Initial Hydrostatic Mud		1622 PSI	Recorder No.	6741	Test	B. HOLE
(B) First Initial Flow Pressure		14 PSI	(depth)	3297	Elec. Rec.	✓
(C) First Final Flow Pressure		21 PSI	Recorder No.	13308	Jars	
(D) Initial Shut-In Pressure		91 PSI	(depth)	3338	Safety Jt.	
(E) Second Initial Flow Pressure		— PSI	Recorder No.		Circ Sub	
(F) Second Final Flow Pressure		— PSI	(depth)		Sampler	
(G) Final Shut-In Pressure		— PSI	**Initial Opening**	30	Straddle	
(Q) Final Hydrostatic Mud		1588 PSI	Initial Shut-In	30	Ext. Packer	
			Final Flow	—	Shale Packer	
			Final Shut-In	—	Mileage	5
			T-On Location	05:00	Sub Total:	358.50
			T-Started	07:08	Std. By	
			T-Open	09:05	Other	
			T-Pulled	10:08	Total:	
			T-Out	11:48		

Approved By _____

Our Representative John F. Schmidt

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

№ 19867

Test Ticket

Well Name & No. WERTH "A" # 1 Test No. #2 Date 5-2-04

Company DREILING OIL, INC. Zone Tested L. Kc. - D - F

Address _____ Elevation 2017 KB 2009 GL

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

Location: Sec. 4 Twp. 14S Rge. 17W Co. ELLIS State KS.

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

Interval Tested 3341 To 3394 Initial Str Wt./Lbs. 39,000 Unseated Str Wt/Lbs. 40,000

Anchor Length 53' Wt. Set Lbs. 25,000 Wt. Pulled Loose/Lbs. 43,000

Top Packer Depth 3336 Tool Weight 3,100

Bottom Packer Depth 3341 Hole Size 7 7/8" ✓ Rubber Size 6 3/4" ✓

Total Depth 3394 Wt. Pipe Run 0 Drill Collar Run 31

Mud Wt. 9.1 LCM TR. Vis. 57 WL 7.2 Drill Pipe Size 4½ XH Ft. Run 3320

Blow Description IF - STRONG B.O.B 10-min, FSI-WEAK SURFACE BLOW BACK
FF-STRONG B.O.B. 9-min. FSI. - GOOD BLOW BACK BUILT TO 2¼" IN.

Recovery - Total Feet 190' GIP 500 Ft. in DC 31 Ft. in DP 159

Rec. 190	Feet of HGMCO	20 %gas	55 %oil	%water	25 %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 101 °F Gravity - °API D @ - °F Corrected Gravity - °API

RW - @ - °F Chlorides - ppm Recovery - Chlorides 5,000 ppm System

	AK-1	Alpine
(A) Initital Hydrostatic Mud		1670 PSI
(B) First Initial Flow Pressure		26 PSI
(C) First Final Flow Pressure		64 PSI
(D) Initial Shut-In Pressure		552 PSI
(E) Second Initial Flow Pressure		66 PSI
(F) Second Final Flow Pressure		92 PSI
(G) Final Shut-In Pressure		542 PSI
(Q) Final Hydrostatic Mud		1637 PSI

Recorder No.	C741
(depth)	3346
Recorder No.	13308
(depth)	3391
Recorder No.	
(depth)	
Initial Opening	30
Initial Shut-In	30
Final Flow	30
Final Shut-In	60
T-On Location	18:00
T-Started	18:38
T-Open	20:12
T-Pulled	22:42
T-Out	00:36

Test	B. HOLE
Elec. Rec.	✓
Jars	
Safety Jt.	
Circ Sub	
Sampler	
Straddle	
Ext. Packer	
Shale Packer	
Mileage	5
Sub Total:	858.50
Std. By	
Other	
Total:	

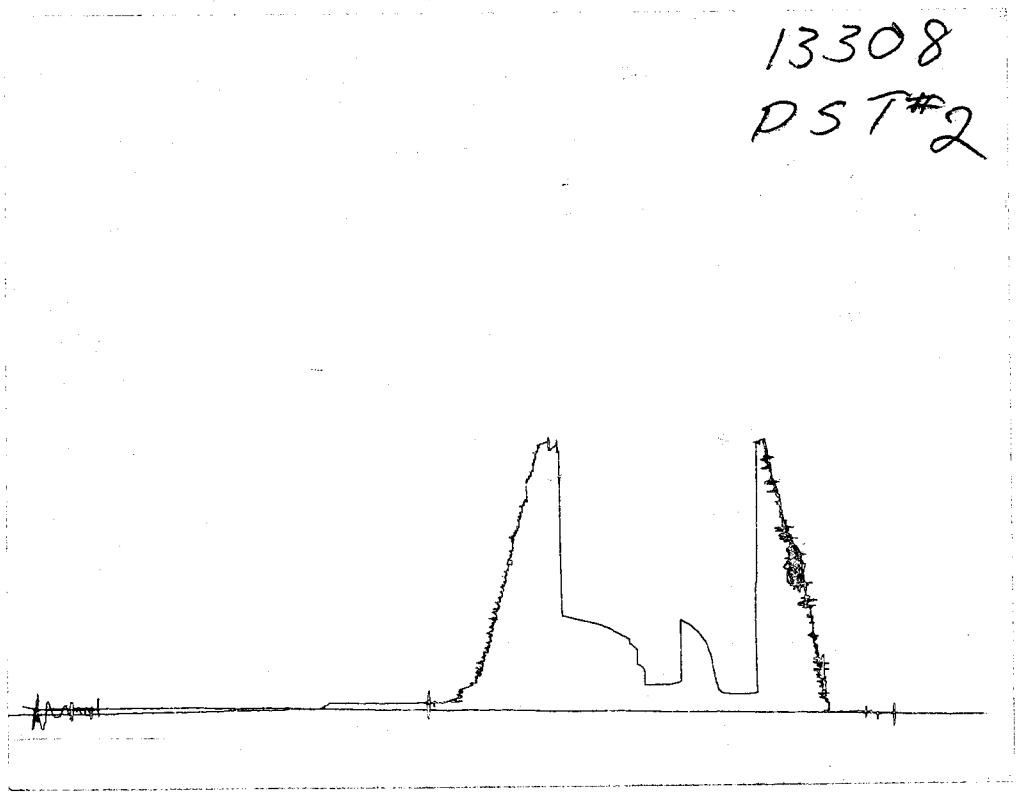
Approved By _____

Our Representative John J. Schmidt

CHART PAGE

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

13308
DST #2



TRILOBITE TESTING INC.

P.O. Box 362 • Hays, Kansas 67601

05/03

№ 19868

Test Ticket

Well Name & No. WERTH "A" #1 Test No. #3 Date 5-3-04

Company DREILING OIL, INC. Zone Tested L. KC.-G-J

Address _____ Elevation 2017 KB 2009 GL

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

Location: Sec. 4 Twp. 14S Rge. 17W Co. ELLIS State KS

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

Interval Tested 3394 To 3490 Initial Str Wt./Lbs. 40,000 Unseated Str Wt/Lbs. 40,500

Anchor Length 96' Wt. Set Lbs. 25,000 Wt. Pulled Loose/Lbs. 45,000

Top Packer Depth 3389 Tool Weight 3,400

Bottom Packer Depth 3394 Hole Size 7 7/8" ✓ Rubber Size 6 3/4" ✓

Total Depth 3490 Wt. Pipe Run 0 Drill Collar Run 31

Mud Wt. 9.1 LCM TR. Vis. 55 WL 8.8 Drill Pipe Size 4½ XH Ft. Run 3349

Blow Description IF.-STRONG B.O.B. 28-min. FSI. WEAK SURFACE BLOWBACK
FF.-STRONG B.O.B. 34-min FSI.- GOOD BLOW BACK ½" in.

Recovery - Total Feet 234 GIP 60' Ft. in DC 31 Ft. in DP 203

Rec. 124	Feet of MUDDY WATER	%gas	%oil	%water	%mud
Rec. 107	Feet of OIL STAIN MUD	%gas	%oil	%water	%mud
Rec. 3	Feet of OIL	%gas	%oil	%water	%mud
Rec.	Feet of	%gas	%oil	%water	%mud
Rec.	Feet of	%gas	%oil	%water	%mud

BHT 101 °F Gravity _____ °API D @ _____ °F Corrected Gravity _____ °API

RW .21 @ 54 °F Chlorides 48,000 ppm Recovery _____ Chlorides 11,500 ppm System

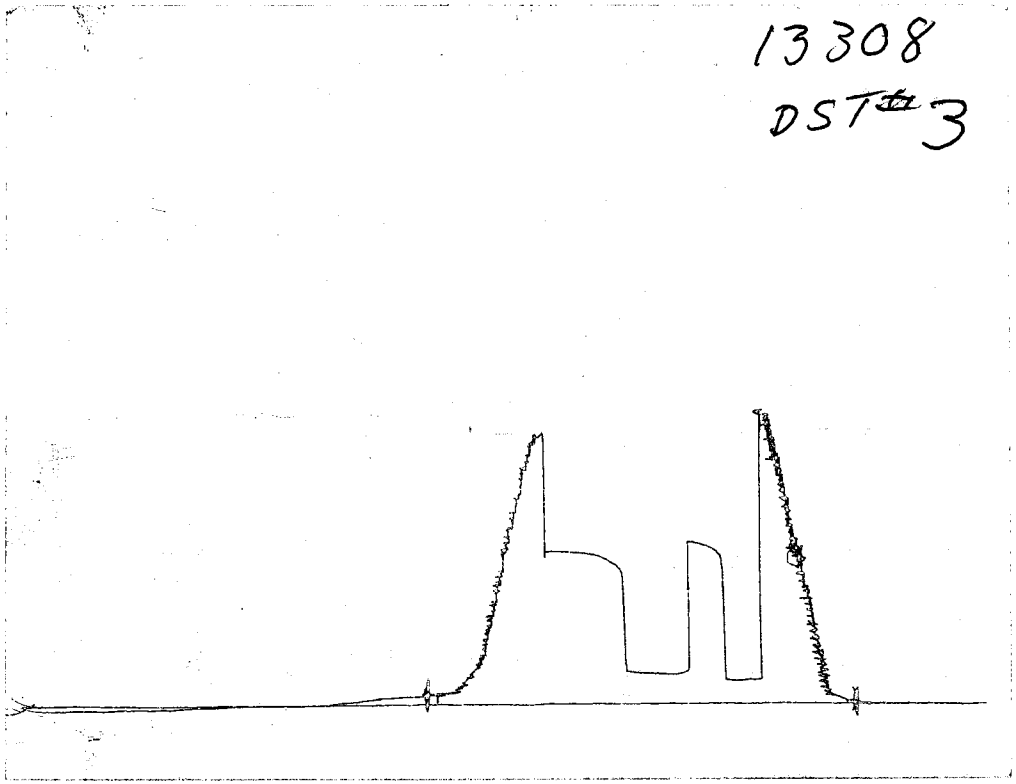
	AK-1	Alpine				
(A) Initital Hydrostatic Mud		1710 PSI	Recorder No.	6741	Test	B. HOLE
(B) First Initial Flow Pressure		19 PSI	(depth)	3399	Elec. Rec.	✓
(C) First Final Flow Pressure		69 PSI	Recorder No.	13308	Jars	
(D) Initial Shut-In Pressure		949 PSI	(depth)	3487	Safety Jt.	
(E) Second Initial Flow Pressure		71 PSI	Recorder No.		Circ Sub	
(F) Second Final Flow Pressure		125 PSI	(depth)		Sampler	
(G) Final Shut-In Pressure		880 PSI	**Initial Opening**	30	Straddle	
(Q) Final Hydrostatic Mud		1603 PSI	Initial Shut-In	30	Ext. Packer	
			Final Flow	45	Shale Packer	
			Final Shut-In	60	Mileage	5
			T-On Location	10:00	Sub Total:	858.50
			T-Started	10:50	Std. By	
			T-Open	12:22	Other	
			T-Pulled	15:08	Total:	
			T-Out	16:31		

Approved By _____

Our Representative John J. Schmidt

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

№ 19869

Test Ticket

Well Name & No. WERTH "A" #1 Test No. #4 Date 5-4-04

Company DREILING OIL, INC. Zone Tested ARBUCKLE

Address _____ Elevation 2017 KB 2009 GL

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

Location: Sec. 4 Twp. 14S Rge. 17W Co. ELLIS State KS

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

Interval Tested 3519 To 3569 Initial Str Wt./Lbs. 40,000 Unseated Str Wt/Lbs. 41,000

Anchor Length 50' Wt. Set Lbs. 25,000 Wt. Pulled Loose/Lbs. 45,000

Top Packer Depth 3514 Tool Weight 3,000

Bottom Packer Depth 3519 Hole Size 7 7/8" — Rubber Size 6 3/4" —

Total Depth 3569 Wt. Pipe Run 0 Drill Collar Run 31

Mud Wt. 9.1 LCM TR. Vis. 51 WL 8.8 Drill Pipe Size 4½ XH Ft. Run 3474

Blow Description IF. - STRONG B.O.B. 15-MIN. ISI. - BLOW BACK ½" IN FF. - STRONG B.O.B. 15-min. FSI. - BLOW BACK 2" IN.

Recovery - Total Feet 288 GIP 270 Ft. in DC 31 Ft. in DP 257

Rec. 125'	Feet of MCO	%gas	55 %oil	%water	45 %mud
Rec. 163	Feet of GASSY OIL	10 %gas	90 %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 33 °API D @ 70 °F Corrected Gravity 32 °API

RW — @ — °F Chlorides — ppm Recovery — Chlorides 11,500 ppm System

	AK-1	Alpine
(A) Initital Hydrostatic Mud		1755 PSI
(B) First Initial Flow Pressure		25 PSI
(C) First Final Flow Pressure		79 PSI
(D) Initial Shut-In Pressure		1012 PSI
(E) Second Initial Flow Pressure		82 PSI
(F) Second Final Flow Pressure		133 PSI
(G) Final Shut-In Pressure		997 PSI
(Q) Final Hydrostatic Mud		1712 PSI

Recorder No.	6741
(depth)	3524
Recorder No.	13308
(depth)	3566
Recorder No.	
(depth)	
Initial Opening	30
Initial Shut-In	30
Final Flow	45
Final Shut-In	60
T-On Location	02:00
T-Started	02:44
T-Open	04:12
T-Pulled	07:01
T-Out	08:50

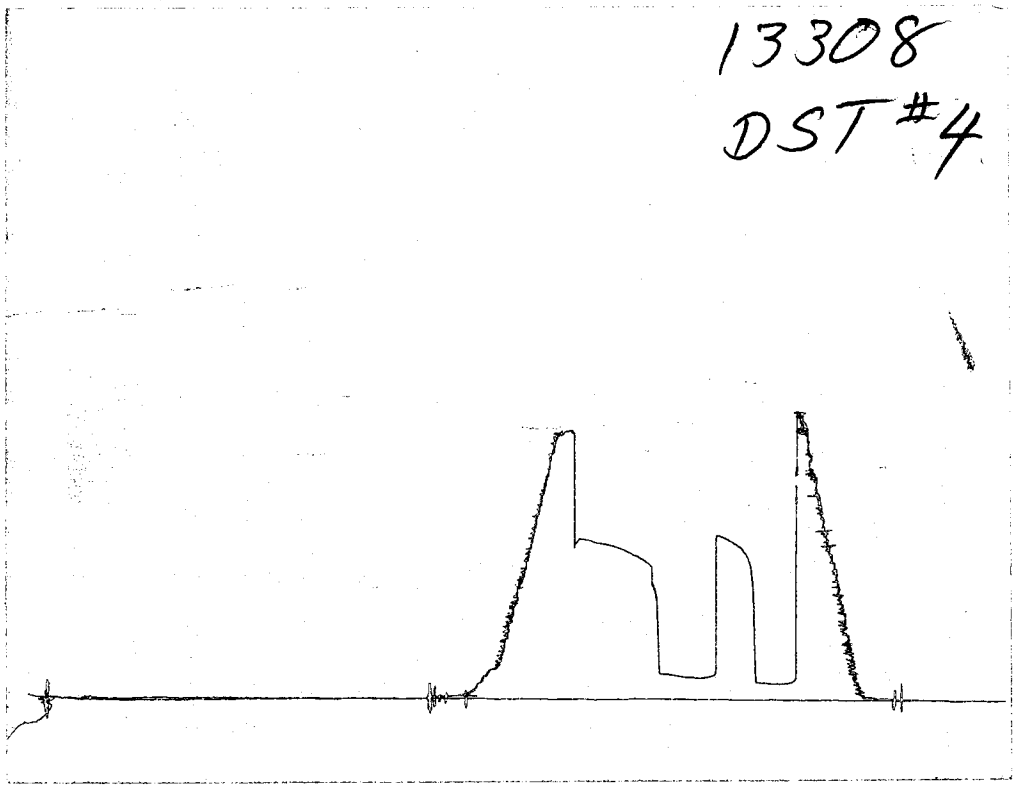
Test	B. HOLE
Elec. Rec.	—
Jars	
Safety Jt.	
Circ Sub	
Sampler	
Straddle	
Ext. Packer	
Shale Packer	
Mileage	5
Sub Total:	855.50
Std. By	
Other	
Total:	

Approved By _____

Our Representative John J. Schmidt

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

№ 19870

Test Ticket

Well Name & No. WERTH "A" #1 Test No. #5 Date 5-4-04

Company DREILING OIL, INC. Zone Tested ARBUCKLE

Address _____ Elevation 2017 KB 2009 GL

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

Location: Sec. 4 Twp. 14 S Rge. 17 W Co. ELLIS State KS.

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

Interval Tested 3568 To 3589 Initial Str Wt./Lbs. 40,000 Unseated Str Wt/Lbs. 41,000

Anchor Length 21' Wt. Set Lbs. 25,000 Wt. Pulled Loose/Lbs. 50,000

Top Packer Depth 3563 Tool Weight 2,000

Bottom Packer Depth 3568 Hole Size 7 7/8" ✓ Rubber Size 6 3/4" ✓

Total Depth 3589 Wt. Pipe Run 0 Drill Collar Run 31

Mud Wt. 9.3 LCM ½# Vis. 45 WL 8.8 Drill Pipe Size 4 ½ XH Ft. Run 3537

Blow Description IF. STRONG B.O.B. 27-MIN ISI. BLOW BACK ¼" IN.
FF. STRONG B.O.B. 27-MIN. FSI.-BLOW BACK ½" IN

Recovery - Total Feet 155 GIP 100 Ft. in DC 31 Ft. in DP ~~124~~ 124

Rec. 155	Feet of GASSY OIL	10 %gas	90 %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 34 °API D @ 80 °F Corrected Gravity 32 °API

RW ~ @ ~ °F Chlorides ~ ppm Recovery ~ Chlorides 11,500 ppm System

	AK-1	Alpine
(A) Initial Hydrostatic Mud		1781 PSI
(B) First Initial Flow Pressure		18 PSI
(C) First Final Flow Pressure		39 PSI
(D) Initial Shut-In Pressure		1040 PSI
(E) Second Initial Flow Pressure		42 PSI
(F) Second Final Flow Pressure		69 PSI
(G) Final Shut-In Pressure		1016 PSI
(Q) Final Hydrostatic Mud		1756 PSI

Recorder No.	6741
(depth)	3571
Recorder No.	13308
(depth)	3586
Recorder No.	
(depth)	
Initial Opening	30
Initial Shut-In	30
Final Flow	45
Final Shut-In	60
T-On Location	15:00
T-Started	15:45
T-Open	17:42
T-Pulled	20:29
T-Out	22:20

Test	B. HOLE
Elec. Rec.	✓
Jars	
Safety Jt.	
Circ Sub	
Sampler	
Straddle	
Ext. Packer	
Shale Packer	
Mileage	5
Sub Total:	~~258.50~~
Std. By	
Other	
Total:	

Approved By _____

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