

**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Prepared For: **John O Farmer, Inc.**

Po Box 352
Russell KS 67665

ATTN: Randy Killian

9-10s-21w Graham

Hayes #1

Start Date: 2006.01.22 @ 04:52:28

End Date: 2006.01.22 @ 11:20:13

Job Ticket #: 23611 DST #: 1

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

John O Farmer, Inc.

Hayes #1

9-10s-21w Graham

DST # 1

LKC-C

2006.01.22



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

John O Farmer, Inc.

Po Box 352
Russell KS 67665

ATTN: Randy Killian

Hayes #1

9-10s-21w Graham

Job Ticket: 23611

DST#: 1

Test Start: 2006.01.22 @ 04:52:28

GENERAL INFORMATION:

Formation: **LKC- C**

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

Time Tool Opened: 07:36:43

Time Test Ended: 11:20:13

Test Type: Conventional Bottom Hole

Tester: Michael Armbrister

Unit No: 22

Interval: **3570.00 ft (KB) To 3595.00 ft (KB) (TVD)**

Total Depth: 3595.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 2285.00 ft (KB)

2277.00 ft (CF)

KB to GR/CF: 8.00 ft

Serial #: 8166

Inside

Press@RunDepth: 13.67 psig @ 3571.00 ft (KB)

Start Date: 2006.01.22

End Date:

2006.01.22

Start Time: 04:52:29

End Time:

11:20:13

Capacity: 7000.00 psig

Last Calib.: 2006.01.22

Time On Btm: 2006.01.22 @ 07:36:28

Time Off Btm: 2006.01.22 @ 09:37:13

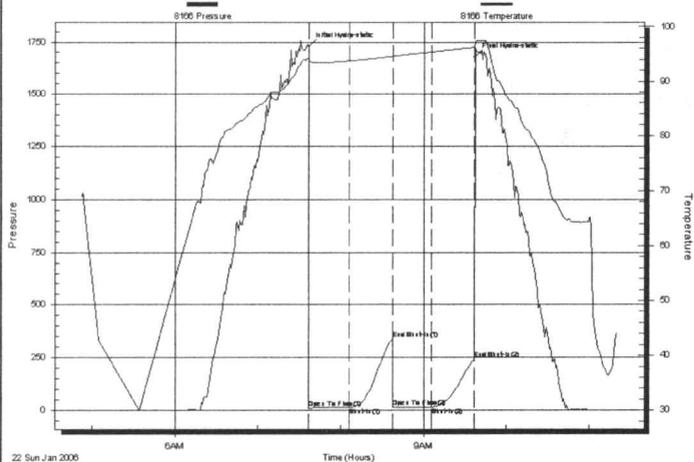
TEST COMMENT: IF- Built to 1/4" in 10m died off to a weak surface blow

IS- no blow

FF- weak surface blow died 15m

FS- no blow

Pressure vs. Time



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1731.53	94.14	Initial Hydro-static
1	9.09	93.47	Open To Flow (1)
30	11.97	93.73	Shut-In(1)
61	339.38	94.57	End Shut-In(1)
62	12.64	94.53	Open To Flow (2)
90	13.67	95.38	Shut-In(2)
120	243.66	96.21	End Shut-In(2)
121	1678.24	96.89	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)



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

John O Farmer, Inc.

Hayes #1

Po Box 352
Russell KS 67665

9-10s-21w Graham

Job Ticket: 23611

DST#: 1

ATTN: Randy Killian

Test Start: 2006.01.22 @ 04:52:28

Tool Information

Drill Pipe:	Length: 3543.00 ft	Diameter: 3.80 inches	Volume: 49.70 bbl	Tool Weight: 2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.25 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: 40000.00 lb
			<u>Total Volume: 49.85 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	23.00 ft			String Weight: Initial 40000.00 lb
Depth to Top Packer:	3570.00 ft			Final 40000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	25.00 ft			
Tool Length:	45.00 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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Shut In Tool	5.00			3555.00	
Hydraulic tool	5.00			3560.00	
Packer	5.00			3565.00	20.00 Bottom Of Top Packer
Packer	5.00			3570.00	
Stubb	1.00			3571.00	
Recorder	0.00	8166	Inside	3571.00	
Perforations	21.00			3592.00	
Recorder	0.00	11020	Inside	3592.00	
Bullnose	3.00			3595.00	25.00 Bottom Packers & Anchor
Total Tool Length:	45.00				



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

John O Farmer, Inc.

Hayes #1

Po Box 352
Russell KS 67665

9-10s-21w Graham

Job Ticket: 23611

DST#: 1

ATTN: Randy Killian

Test Start: 2006.01.22 @ 04:52:28

Mud and Cushion Information

Mud Type: Gel Chem	Cushion Type:	Oil API:	deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity:	ppm
Viscosity: 50.00 sec/qt	Cushion Volume: bbl		
Water Loss: 8.78 in ³	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: ppm			
Filter Cake: inches			

Recovery Information

Recovery Table

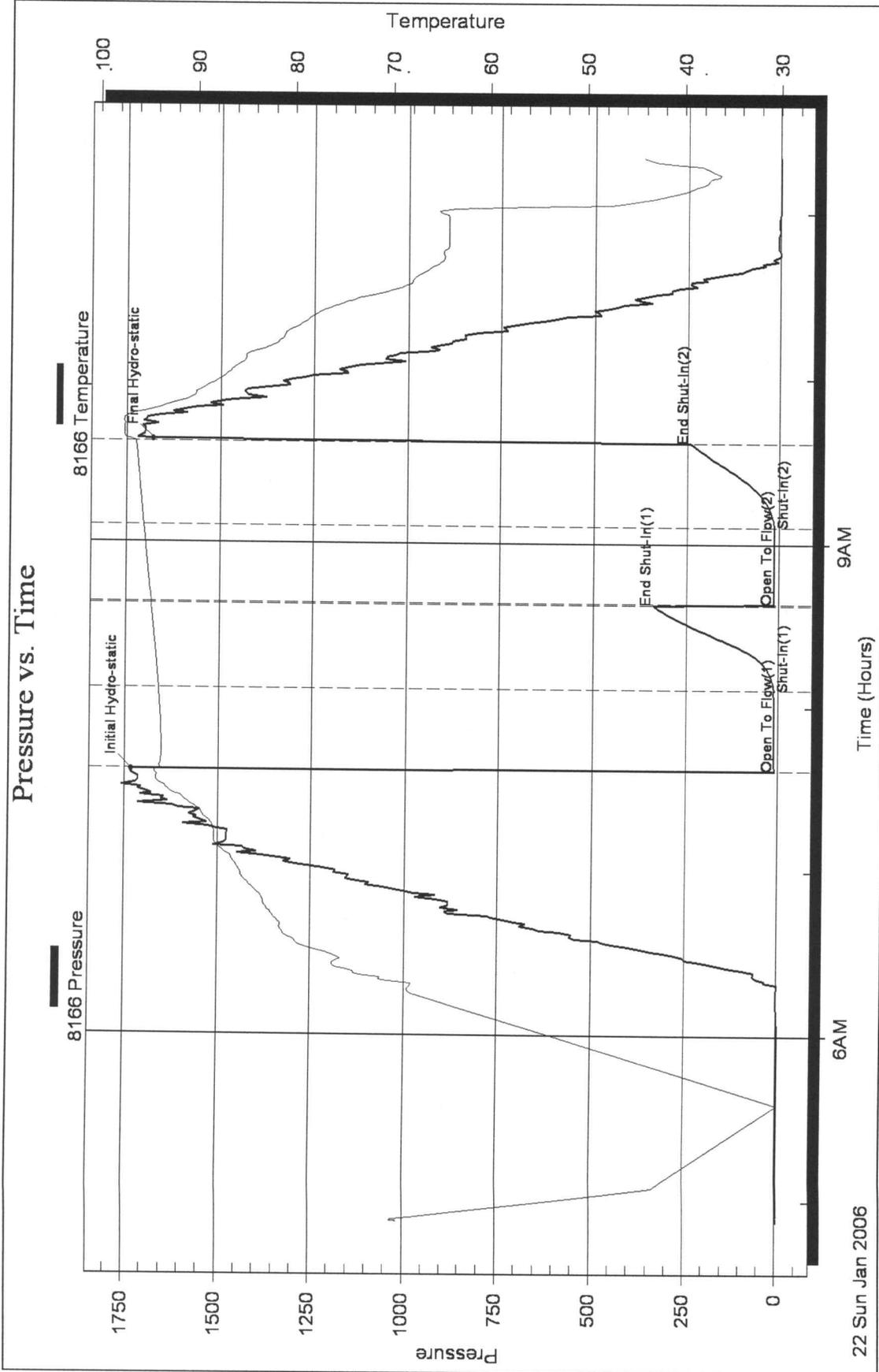
Length ft	Description	Volume bbl
5.00	Drilling mud	0.025

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:





DRILL STEM TEST REPORT

Prepared For: **John O Farmer, Inc.**

Po Box 352
Russell KS 67665

ATTN: Randy Killian

9-10s-21w Graham

Hayes #1

Start Date: 2006.01.22 @ 18:51:21

End Date: 2006.01.23 @ 01:07:06

Job Ticket #: 23612 DST #: 2

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

John O Farmer, Inc.

Hayes #1

9-10s-21w Graham

DST # 2

LKC E-F

2006.01.22



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

John O Farmer, Inc.

Hayes #1

Po Box 352
Russell KS 67665

9-10s-21w Graham

Job Ticket: 23612

DST#: 2

ATTN: Randy Killian

Test Start: 2006.01.22 @ 18:51:21

GENERAL INFORMATION:

Formation: **LKC E-F**

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

Time Tool Opened: 20:37:51

Time Test Ended: 01:07:06

Test Type: **Conventional Bottom Hole**

Tester: **Michael Armbrister**

Unit No: **22**

Interval: **3609.00 ft (KB) To 3638.00 ft (KB) (TVD)**

Reference Elevations: **2285.00 ft (KB)**

Total Depth: **3638.00 ft (KB) (TVD)**

2277.00 ft (CF)

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

KB to GR/CF: **8.00 ft**

Serial #: 8166

Inside

Press@RunDepth: **78.87 psig @ 3610.00 ft (KB)**

Capacity: **7000.00 psig**

Start Date: **2006.01.22** End Date: **2006.01.23**

Last Calib.: **2006.01.23**

Start Time: **18:51:22** End Time: **01:07:06**

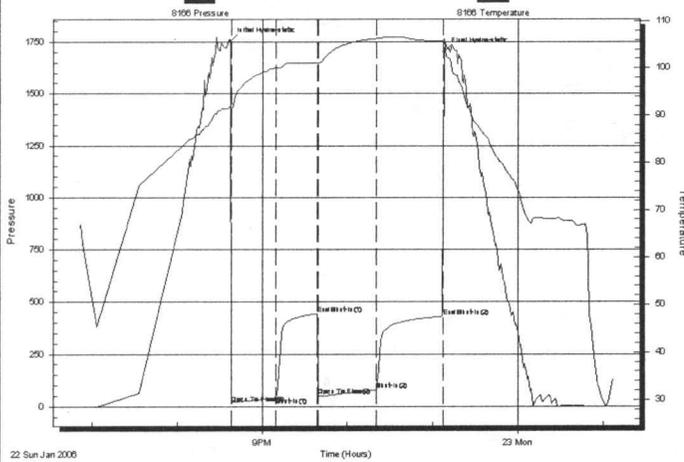
Time On Btm: **2006.01.22 @ 20:37:21**

Time Off Btm: **2006.01.22 @ 23:07:51**

TEST COMMENT:

IF- B of B 10m
IS- 2" blow back
FF- B of B 10m
FS- 2" blow back

Pressure vs. Time



PRESSURE SUMMARY

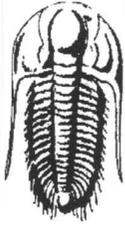
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1755.02	91.79	Initial Hydro-static
1	12.13	91.24	Open To Flow (1)
33	44.45	100.12	Shut-In(1)
62	443.73	101.06	End Shut-In(1)
62	48.14	100.99	Open To Flow (2)
103	78.87	106.27	Shut-In(2)
150	430.21	105.69	End Shut-In(2)
151	1703.50	106.16	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
30.00	Oil ct mud 5%g 40%o55%m	0.15
160.00	Clean gassy oil 10%g 90%O	2.24
0.00	549 Gip	0.00

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

John O Farmer, Inc.

Hayes #1

Po Box 352
Russell KS 67665

9-10s-21w Graham

ATTN: Randy Killian

Job Ticket: 23612

DST#: 2

Test Start: 2006.01.22 @ 18:51:21

Tool Information

Drill Pipe:	Length: 3575.00 ft	Diameter: 3.80 inches	Volume: 50.15 bbl	Tool Weight: 2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.25 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: 42000.00 lb
			<u>Total Volume: 50.30 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	16.00 ft			String Weight: Initial 42000.00 lb
Depth to Top Packer:	3609.00 ft			Final 42000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	29.00 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
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Shut In Tool	5.00			3594.00	
Hydraulic tool	5.00			3599.00	
Packer	5.00			3604.00	20.00 Bottom Of Top Packer
Packer	5.00			3609.00	
Stubb	1.00			3610.00	
Recorder	0.00	8166	Inside	3610.00	
Perforations	25.00			3635.00	
Recorder	0.00	11020	Inside	3635.00	
Bullnose	3.00			3638.00	29.00 Bottom Packers & Anchor
Total Tool Length:	49.00				



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DRILL STEM TEST REPORT

FLUID SUMMARY

John O Farmer, Inc.

Hayes #1

Po Box 352
Russell KS 67665

9-10s-21w Graham

Job Ticket: 23612

DST#: 2

ATTN: Randy Killian

Test Start: 2006.01.22 @ 18:51:21

Mud and Cushion Information

Mud Type: Gel Chem	Cushion Type:	Oil API:	deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity:	ppm
Viscosity: 50.00 sec/qt	Cushion Volume: bbl		
Water Loss: 8.77 in ³	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: ppm			
Filter Cake: inches			

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
30.00	Oil ct mud 5%g 40%o55%m	0.148
160.00	Clean gassy oil 10%g 90%O	2.244
0.00	549 Gip	0.000

Total Length: 190.00 ft Total Volume: 2.392 bbl

Num Fluid Samples: 0

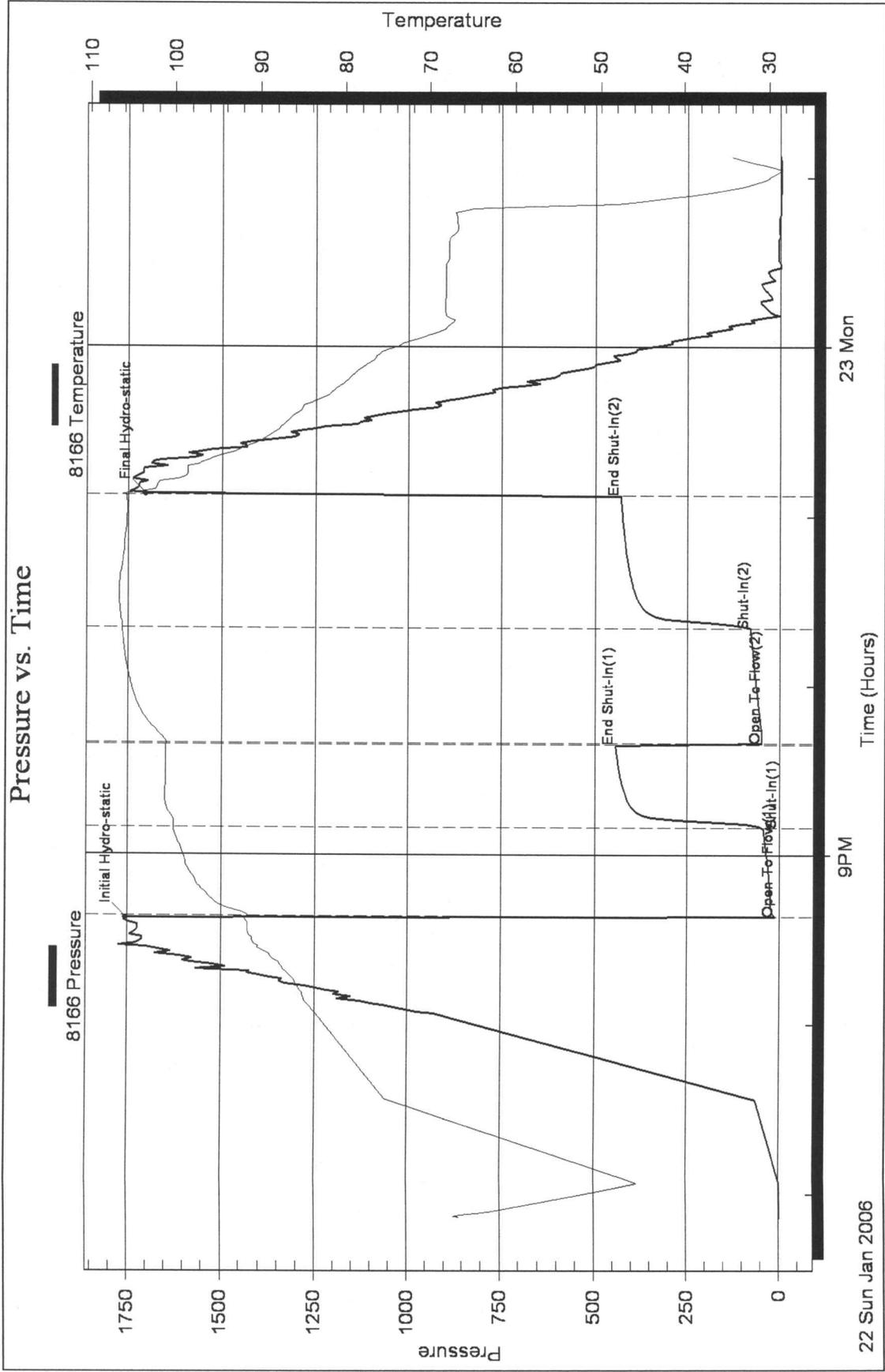
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:





DRILL STEM TEST REPORT

Prepared For: **John O Farmer, Inc.**

Po Box 352
Russell KS 67665

ATTN: Randy Killian

9-10s-21w Graham

Hayes #1

Start Date: 2006.01.23 @ 13:00:23

End Date: 2006.01.23 @ 19:50:08

Job Ticket #: 23613 DST #: 3

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

John O Farmer, Inc.

Hayes #1

Po Box 352
Russell KS 67665

9-10s-21w Graham

Job Ticket: 23613

DST#: 3

ATTN: Randy Killian

Test Start: 2006.01.23 @ 13:00:23

GENERAL INFORMATION:

Formation: **LKC -I J**

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

Time Tool Opened: 14:53:53

Time Test Ended: 19:50:08

Test Type: **Conventional Bottom Hole**

Tester: **Michael Armbrister**

Unit No: **22**

Interval: **3692.00 ft (KB) To 3735.00 ft (KB) (TVD)**

Total Depth: **3735.00 ft (KB) (TVD)**

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

Reference Elevations: **2285.00 ft (KB)**

2277.00 ft (CF)

KB to GR/CF: **8.00 ft**

Serial #: 8166

Inside

Press@RunDepth: **39.99 psig @ 3727.00 ft (KB)**

Start Date: **2006.01.23**

End Date:

2006.01.23

Start Time: **13:00:24**

End Time:

19:50:08

Capacity: **7000.00 psig**

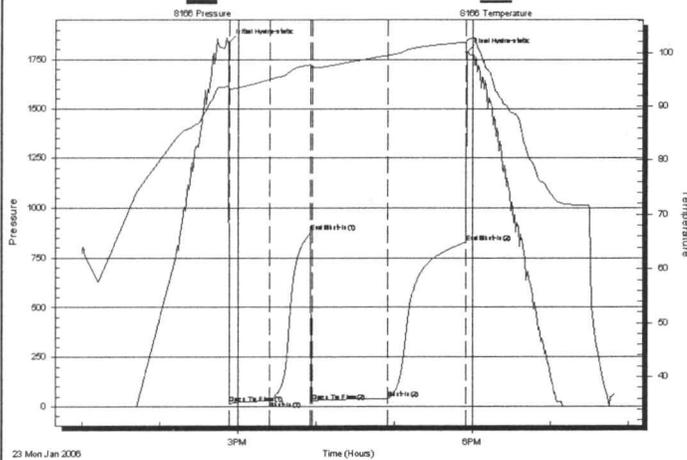
Last Calib.: **2006.01.23**

Time On Btm: **2006.01.23 @ 14:53:23**

Time Off Btm: **2006.01.23 @ 17:55:08**

TEST COMMENT: IF- slow building 3" blow
IS- no blow
FF- Slow building 6" blow
FSI- no blow

Pressure vs. Time



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1835.47	93.70	Initial Hydro-static
1	13.16	93.27	Open To Flow (1)
31	28.49	94.98	Shut-In(1)
63	879.61	97.77	End Shut-In(1)
63	22.37	97.20	Open To Flow (2)
122	39.99	99.50	Shut-In(2)
181	827.20	101.92	End Shut-In(2)
182	1787.20	102.34	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
45.00	Oil cut mud 40%o 60%m	0.36
20.00	Clean oil	0.28
0.00	180 Gip	0.00

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

John O Farmer, Inc.

Hayes #1

Po Box 352 -
Russell KS 67665

9-10s-21w Graham

Job Ticket: 23613

DST#: 3

ATTN: Randy Killian

Test Start: 2006.01.23 @ 13:00:23

Tool Information

Drill Pipe:	Length: 3667.00 ft	Diameter: 3.80 inches	Volume: 51.44 bbl	Tool Weight: 2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.25 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: 41000.00 lb
			<u>Total Volume: 51.59 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	25.00 ft			String Weight: Initial 41000.00 lb
Depth to Top Packer:	3692.00 ft			Final 41000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	43.00 ft			
Tool Length:	63.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Shut In Tool	5.00			3677.00	
Hydraulic tool	5.00			3682.00	
Packer	5.00			3687.00	20.00 Bottom Of Top Packer
Packer	5.00			3692.00	
Stubb	1.00			3693.00	
Perforations	1.00			3694.00	
Change Over Sub	1.00			3695.00	
Drill Pipe	31.00			3726.00	
Change Over Sub	1.00			3727.00	
Recorder	0.00	8166	Inside	3727.00	
Perforations	5.00			3732.00	
Recorder	0.00	11020	Inside	3732.00	
Bullnose	3.00			3735.00	43.00 Bottom Packers & Anchor

Total Tool Length: 63.00



**TRILOBITE
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DRILL STEM TEST REPORT

FLUID SUMMARY

John O Farmer, Inc.

Hayes #1

Po Box 352
Russell KS 67665

9-10s-21w Graham

Job Ticket: 23613

DST#: 3

ATTN: Randy Killian

Test Start: 2006.01.23 @ 13:00:23

Mud and Cushion Information

Mud Type: Gel Chem	Cushion Type:	Oil API:	deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity:	ppm
Viscosity: 50.00 sec/qt	Cushion Volume: bbl		
Water Loss: 8.77 in ³	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: ppm			
Filter Cake: inches			

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
45.00	Oil cut mud 40%o 60%m	0.358
20.00	Clean oil	0.281
0.00	180 Gip	0.000

Total Length: 65.00 ft Total Volume: 0.639 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

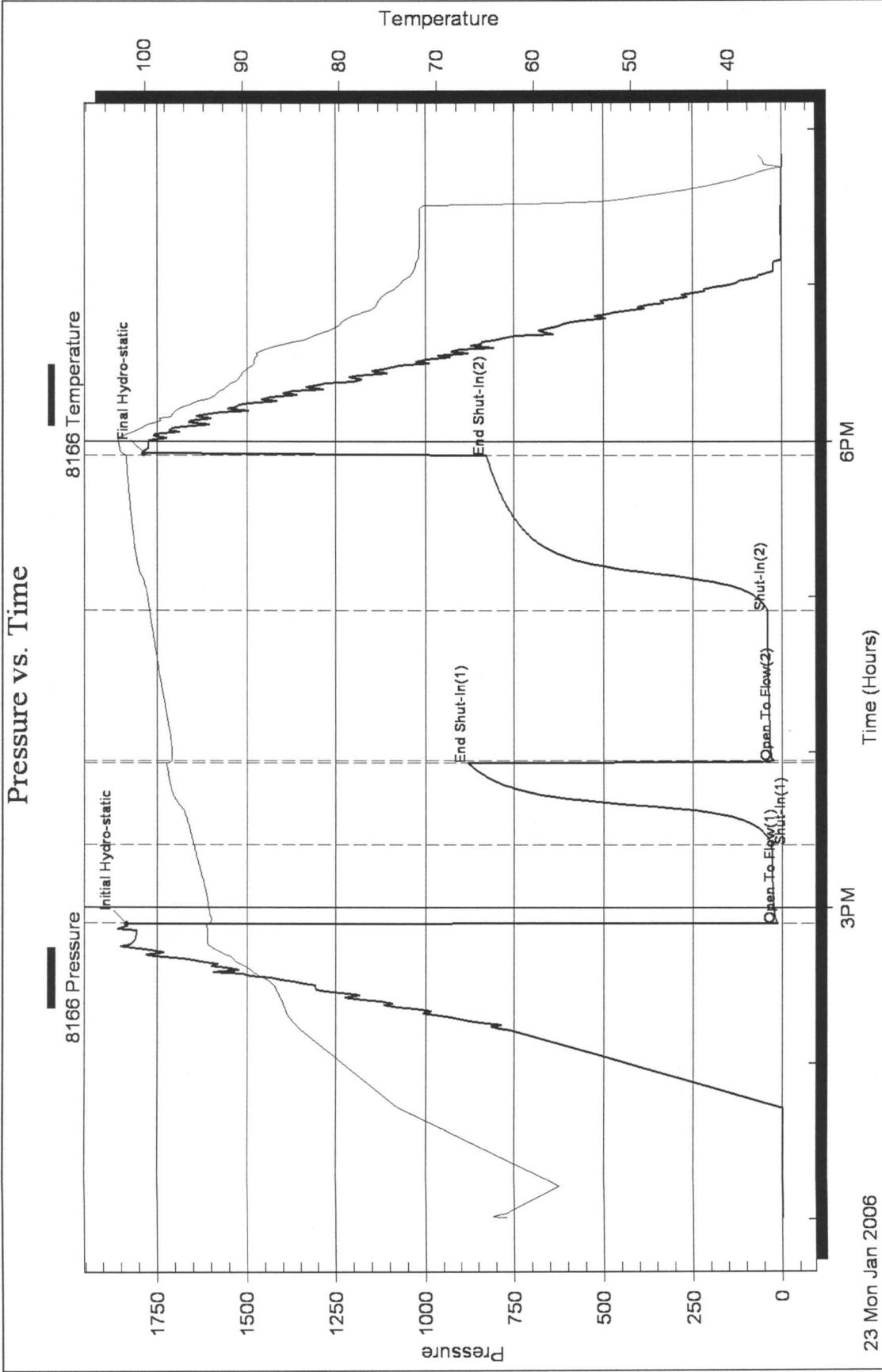
Serial #:

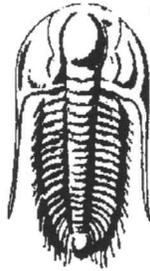
Laboratory Name:

Laboratory Location:

Recovery Comments:

Pressure vs. Time





**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Prepared For: **John O Farmer, Inc.**

Po Box 352
Russell KS 67665

ATTN: Randy Killian

9-10s-21w Graham

Hayes #1

Start Date: 2006.01.24 @ 19:25:55

End Date: 2006.01.25 @ 02:57:25

Job Ticket #: 24606 DST #: 4

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

John O Farmer, Inc.

Hayes #1

9-10s-21w Graham

DST # 4

ARB

2006.01.24



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

John O Farmer, Inc.

Hayes #1

Po Box 352
Russell KS 67665

9-10s-21w Graham

ATTN: Randy Killian

Job Ticket: 24606

DST#: 4

Test Start: 2006.01.24 @ 19:25:55

GENERAL INFORMATION:

Formation: **ARB**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 21:05:40

Time Test Ended: 02:57:25

Test Type: Conventional Straddle

Tester: Joe

Unit No: 22

Interval: **3842.00 ft (KB) To 3880.00 ft (KB) (TVD)**

Reference Elevations: 2285.00 ft (KB)

Total Depth: 3950.00 ft (KB) (TVD)

2277.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 8.00 ft

Serial #: 8166

Inside

Press@RunDepth: 95.52 psig @ 3843.00 ft (KB)

Capacity: 7000.00 psig

Start Date: 2006.01.24

End Date:

2006.01.25

Last Calib.: 2006.01.25

Start Time: 19:25:56

End Time:

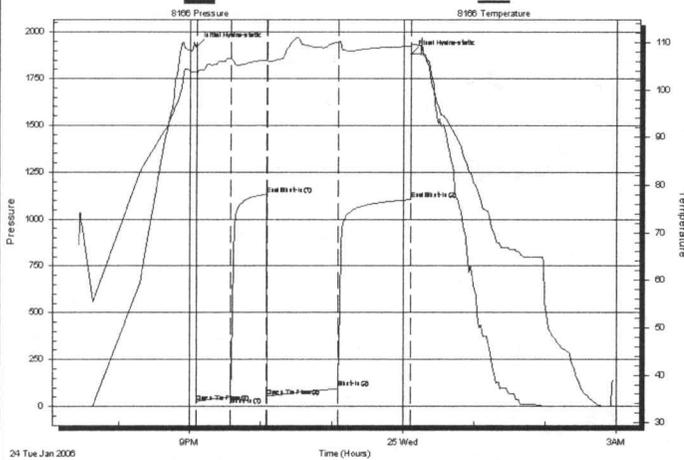
02:57:25

Time On Btm: 2006.01.24 @ 21:05:25

Time Off Btm: 2006.01.25 @ 00:06:55

TEST COMMENT: IF-Good blow built to 6.5" in
IS-No Blow back
FF-Weak Blow built to 2" in
FSI-No Blow back

Pressure vs. Time



PRESSURE SUMMARY

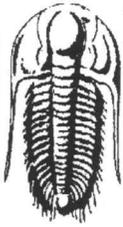
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1922.79	103.75	Initial Hydro-static
1	21.11	103.19	Open To Flow (1)
29	50.13	106.49	Shut-In(1)
60	1132.82	106.27	End Shut-In(1)
60	53.61	105.95	Open To Flow (2)
120	95.52	110.11	Shut-In(2)
181	1104.54	109.12	End Shut-In(2)
182	1882.58	109.43	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
62.00	MCO30%M70%O	0.60
31.00	GyO20%G80%O	0.43
103.00	VeryGassyOil40%O60%G	1.44

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

John O Farmer, Inc.

Hayes #1

Po Box 352
Russell KS 67665

9-10s-21w Graham

Job Ticket: 24606

DST#: 4

ATTN: Randy Killian

Test Start: 2006.01.24 @ 19:25:55

Tool Information

Drill Pipe:	Length: 3824.00 ft	Diameter: 3.80 inches	Volume: 53.64 bbl	Tool Weight: 2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.25 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: 42000.00 lb
			<u>Total Volume: 53.79 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	32.00 ft			String Weight: Initial 42000.00 lb
Depth to Top Packer:	3842.00 ft			Final 42000.00 lb
Depth to Bottom Packer:	3880.00 ft			
Interval between Packers:	38.00 ft			
Tool Length:	129.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Shut In Tool	5.00			3827.00	
Hydraulic tool	5.00			3832.00	
Packer	5.00			3837.00	20.00 Bottom Of Top Packer
Packer	5.00			3842.00	
Stubb	1.00			3843.00	
Recorder	0.00	8166	Inside	3843.00	
Perforations	33.00			3876.00	
Recorder	0.00	11020	Inside	3876.00	
Blank Off Sub	1.00			3877.00	
Stubb	3.00			3880.00	38.00 Tool Interval
Packer	2.00			3882.00	
Change Over Sub	1.00			3883.00	
Blank Spacing	62.00			3945.00	
Change Over Sub	1.00			3946.00	
Perforations	2.00			3948.00	
Recorder	0.00	16601		3948.00	
Bullnose	3.00			3951.00	71.00 Bottom Packers & Anchor
Total Tool Length:	129.00				



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

John O Farmer, Inc.

Hayes #1

Po Box 352
Russell KS 67665

9-10s-21w Graham

Job Ticket: 24606

DST#: 4

ATTN: Randy Killian

Test Start: 2006.01.24 @ 19:25:55

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: 7.99 in ³	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: ppm			
Filter Cake: inches			

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
62.00	MCO30%M70%O	0.596
31.00	GyO20%G80%O	0.435
103.00	VeryGassyOil40%O60%G	1.445

Total Length: 196.00 ft Total Volume: 2.476 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

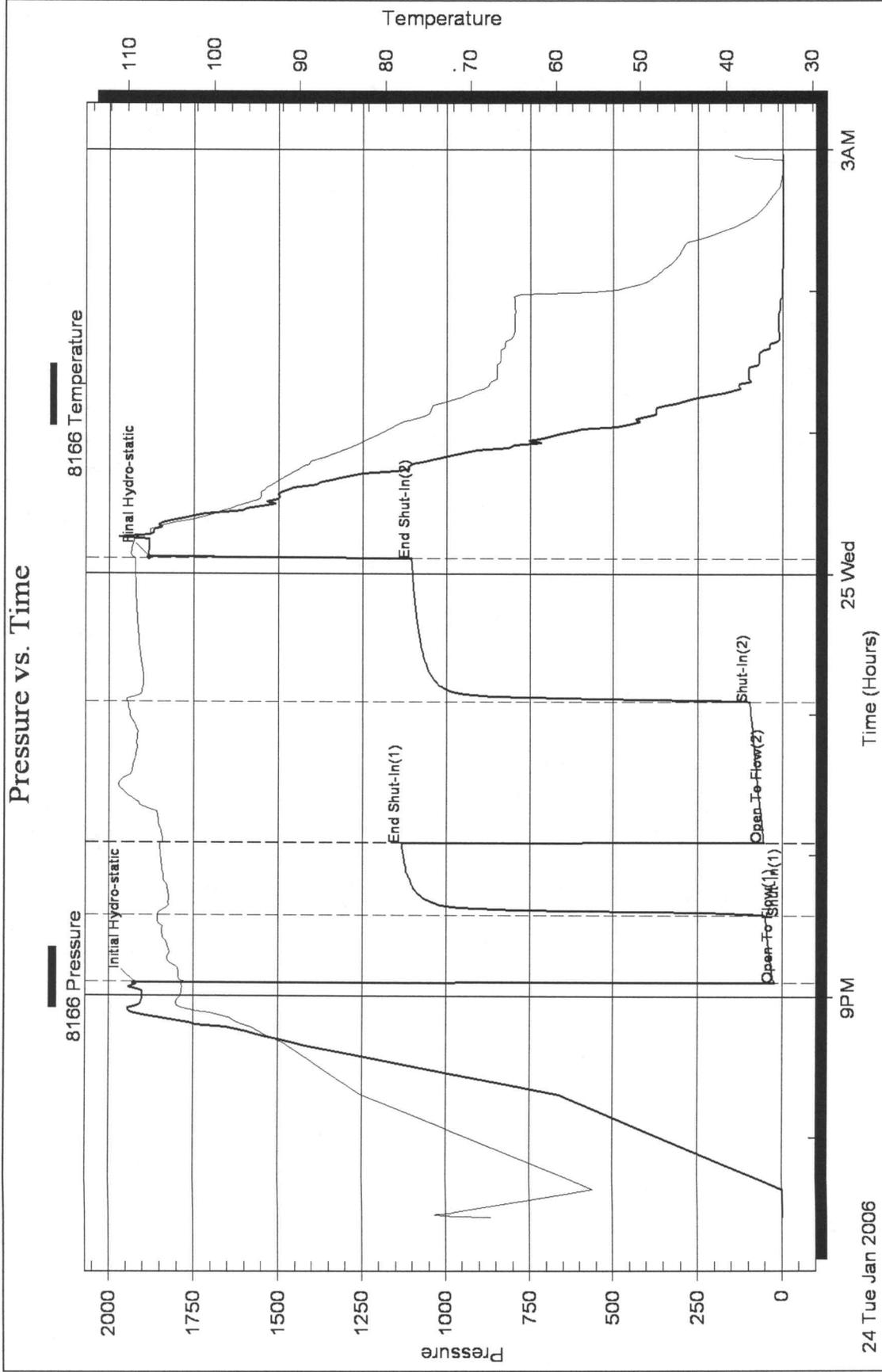
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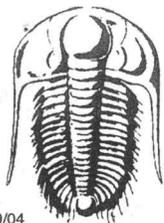
Laboratory Name:

Laboratory Location:

Recovery Comments:

Pressure vs. Time





TRILOBITE TESTING INC.

P.O. Box 362 • Hays, Kansas 67601

JWV
8344

No 23611

9/04

Test Ticket

Well Name & No. Hayes #1 Test No. 1 Date 1-22-06
 Company JO Farmer Inc. Zone Tested LKC-C
 Address Russell, KS Elevation 2285 KB 2277 GL
 Co. Rep / Geo. Randy Killian Cont. Discovery 3 Est. Ft. of Pay _____ Por. _____ %
 Location: Sec. 9 Twp. 10s Rge. 21W Co. Graham State KS
 No. of Copies _____ Distribution Sheet (Y, N) _____ Turnkey (Y, N) _____ Evaluation (Y, N) _____

Interval Tested 3570 - 3595 Initial Str Wt./Lbs. 40,000 Unseated Str Wt./Lbs. 40,000
 Anchor Length 25 Wt. Set Lbs. 25,000 Wt. Pulled Loose/Lbs. 40,000
 Top Packer Depth 3565 Tool Weight 2,000
 Bottom Packer Depth 3570 Hole Size 7 7/8" Rubber Size 6 3/4"
 Total Depth 3595 Wt. Pipe Run _____ Drill Collar Run 30
 Mud Wt. 8.8 LCM 1/2 Vis. 50 WL 8.0 Drill Pipe Size 4.5 Ft. Run 3543
 Blow Description IF - Weak blow bit to 1/4" in 10m Died back to surface blow
ISI - No Blow
FF - Weak surface blow died after 15m
ESI - No Blow

Recovery - Total Feet 5 GIP _____ Ft. in DC _____ Ft. in DP _____
 Rec. _____ Feet of Drilling 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 97 °F Gravity _____ °API D @ _____ °F Corrected Gravity _____ °API
 RW _____ @ _____ °F Chlorides _____ ppm Recovery _____ Chlorides _____ ppm System

	AK-1	Alpine	Recorder No.	Test
(A) Initial Hydrostatic Mud		<u>1732</u> PSI	<u>8166</u>	<u>1000</u>
(B) First Initial Flow Pressure		<u>9</u> PSI	(depth) <u>3572</u>	Jars _____
(C) First Final Flow Pressure		<u>12</u> PSI	Recorder No. <u>11020</u>	Safety Jt. _____
(D) Initial Shut-In Pressure		<u>339</u> PSI	(depth) <u>3592</u>	Circ Sub _____
(E) Second Initial Flow Pressure		<u>13</u> PSI	Recorder No. _____	Sampler _____
(F) Second Final Flow Pressure		<u>14</u> PSI	(depth) _____	Straddle _____
(G) Final Shut-In Pressure		<u>244</u> PSI	Initial Opening <u>30</u>	Ext. Packer _____
(Q) Final Hydrostatic Mud		<u>1678</u> PSI	Initial Shut-In <u>30</u>	Shale Packer _____
			Final Flow <u>30</u>	Ruined Packer _____
			Final Shut-In <u>30</u>	Mileage <u>102</u> <u>102</u>

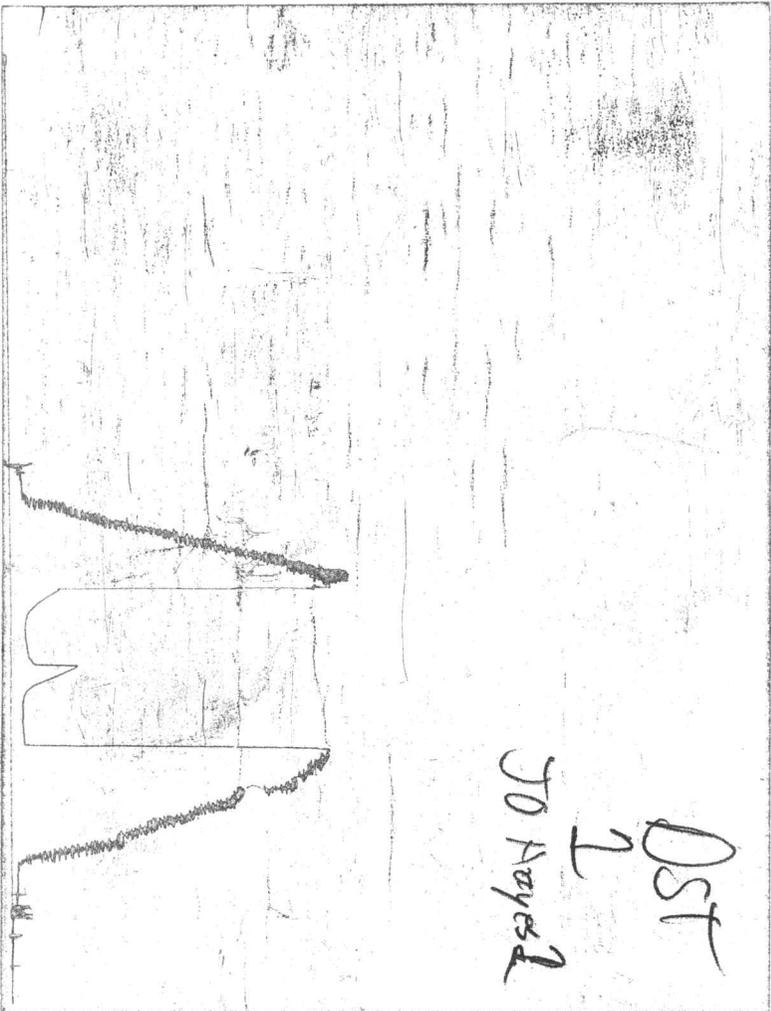
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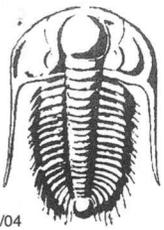
Approved By _____
 Our Representative Michael Ambroster

T-On Location 4:30
 T-Started 4:52
 T-Open 7:35
 T-Pulled 9:35
 T-Out 11:10
 Sub Total: 1102
 Std. By _____
 Other _____
 Total: _____

CHART PAGE

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





TRILOBITE TESTING INC.

P.O. Box 362 • Hays, Kansas 67601

No 23612

9/04

Test Ticket

Well Name & No. Hayes #1 Test No. 2 Date 1-22-04
 Company JJ Farmer Zone Tested LKC-E-7
 Address Russell KS Elevation 2285 KB 2277 GL
 Co. Rep / Geo. Randy Killian Cont. Discovery 3 Est. Ft. of Pay _____ Por. _____ %
 Location: Sec. 9 Twp. 10S Rge. 21W Co. Graham State KS
 No. of Copies _____ Distribution Sheet (Y, N) _____ Turnkey (Y, N) _____ Evaluation (Y, N) _____

Interval Tested 3609-3638 Initial Str Wt./Lbs. 42000 Unseated Str Wt./Lbs. 42000
 Anchor Length 29 Wt. Set Lbs. 25000 Wt. Pulled Loose/Lbs. 42000
 Top Packer Depth 3604 Tool Weight 2000
 Bottom Packer Depth 3609 Hole Size 7 7/8" Rubber Size 6 3/4"
 Total Depth 3638 Wt. Pipe Run 0 Drill Collar Run 30
 Mud Wt. _____ LCM _____ Vis. _____ WL _____ Drill Pipe Size 4 1/2 Ft. Run 3575
 Blow Description IF-BoFB 10m
ISI-2" Blow Back
FE-BoFB 10m
KSI-2" Blow Back

Recovery - Total Feet 190 GIP 549 Ft. in DC _____ Ft. in DP _____
 Rec. 30 Feet of Oilcut Mud 5 %gas 40 %oil %water 55 %mud
 Rec. 160 Feet of Clean Gassy 0.1 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 106 °F Gravity _____ °API D @ _____ °F Corrected Gravity _____ °API
 RW _____ @ _____ °F Chlorides _____ ppm Recovery _____ Chlorides _____ ppm System

	AK-1	Alpine	Recorder No.	Test
(A) Initial Hydrostatic Mud		<u>1755</u> PSI	<u>8166</u>	<u>1000</u>
(B) First Initial Flow Pressure		<u>12</u> PSI	(depth) <u>3612</u>	Jars _____
(C) First Final Flow Pressure		<u>44</u> PSI	Recorder No. <u>11820</u>	Safety Jt. _____
(D) Initial Shut-In Pressure		<u>444</u> PSI	(depth) <u>3637</u>	Circ Sub _____
(E) Second Initial Flow Pressure		<u>48</u> PSI	Recorder No. _____	Sampler _____
(F) Second Final Flow Pressure		<u>29</u> PSI	(depth) _____	Straddle _____
(G) Final Shut-In Pressure		<u>430</u> PSI	Initial Opening <u>30</u>	Ext. Packer _____
(Q) Final Hydrostatic Mud		<u>1704</u> PSI	Initial Shut-In <u>30</u>	Shale Packer _____
			Final Flow <u>45</u>	Ruined Packer _____
			Final Shut-In <u>45</u>	Mileage <u>102</u> <u>102</u>
			T-On Location <u>18:45</u>	Sub Total: <u>1102</u>
			T-Started <u>18:51</u>	Std. By _____
			T-Open <u>20:40</u>	Other _____
			T-Pulled <u>23:10</u>	Total: _____
			T-Out <u>00:50</u>	

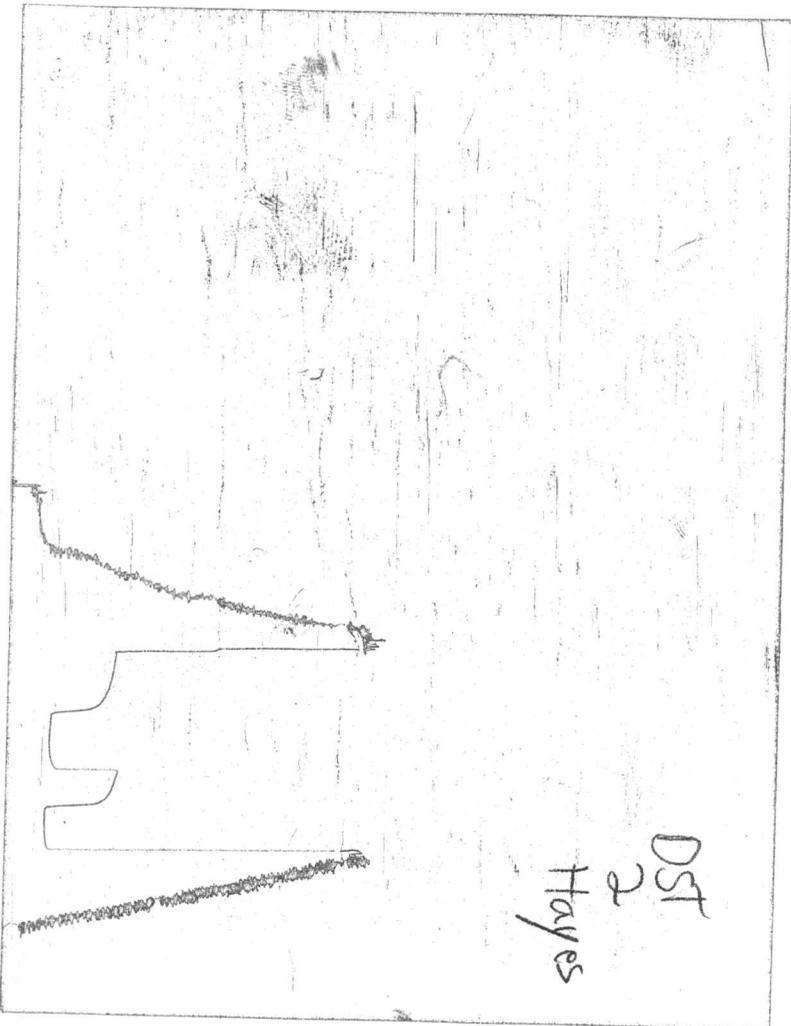
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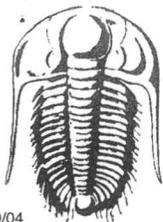
Approved By _____

Our Representative Michael Armbuster

CHART PAGE

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TRILOBITE TESTING INC.

P.O. Box 362 • Hays, Kansas 67601

No. 23613

Test Ticket

Well Name & No. Hayes # 1 Test No. 3 Date 1-23-05
 Company JO Farmer Zone Tested LKC-IJ
 Address Russell KS Elevation 2285 KB 2277 GL
 Co. Rep / Geo. Randy Killian Cont. Discovery Est. Ft. of Pay _____ Por. _____ %
 Location: Sec. 9 Twp. 10s Rge. 2/W Co. Graham State KS
 No. of Copies _____ Distribution Sheet (Y, N) _____ Turnkey (Y, N) _____ Evaluation (Y, N) _____

Interval Tested 3692 - 3735 Initial Str Wt./Lbs. 41,000 Unseated Str Wt./Lbs. 41,000
 Anchor Length 43 Wt. Set Lbs. 25,000 Wt. Pulled Loose/Lbs. 41,000
 Top Packer Depth 3687 Tool Weight 2,000
 Bottom Packer Depth 3692 Hole Size 7 7/8" Rubber Size 6 3/4"
 Total Depth 3735 Wt. Pipe Run _____ Drill Collar Run 30
 Mud Wt. _____ LCM _____ Vis. _____ WL _____ Drill Pipe Size 4 1/2 Ft. Run 3667
 Blow Description IF - Slow building 3" Blow
FSI - No Blow
FF - Slow building 6" Blow
FST - No Blow

Recovery - Total Feet 65 GIP _____ Ft. in DC _____ Ft. in DP _____
 Rec. 20 Feet of Clean Oil 5 %gas 95 %oil _____ %water _____ %mud _____
 Rec. 45 Feet of Oil cut mud %gas 40 %oil _____ %water 60 %mud _____
 Rec. _____ Feet of _____ %gas _____ %oil _____ %water _____ %mud _____
 Rec. _____ Feet of _____ %gas _____ %oil _____ %water _____ %mud _____
 Rec. _____ Feet of _____ %gas _____ %oil _____ %water _____ %mud _____
 BHT 102 °F Gravity _____ °API D @ _____ °F Corrected Gravity _____ °API
 RW _____ @ _____ °F Chlorides _____ ppm Recovery _____ Chlorides _____ ppm System

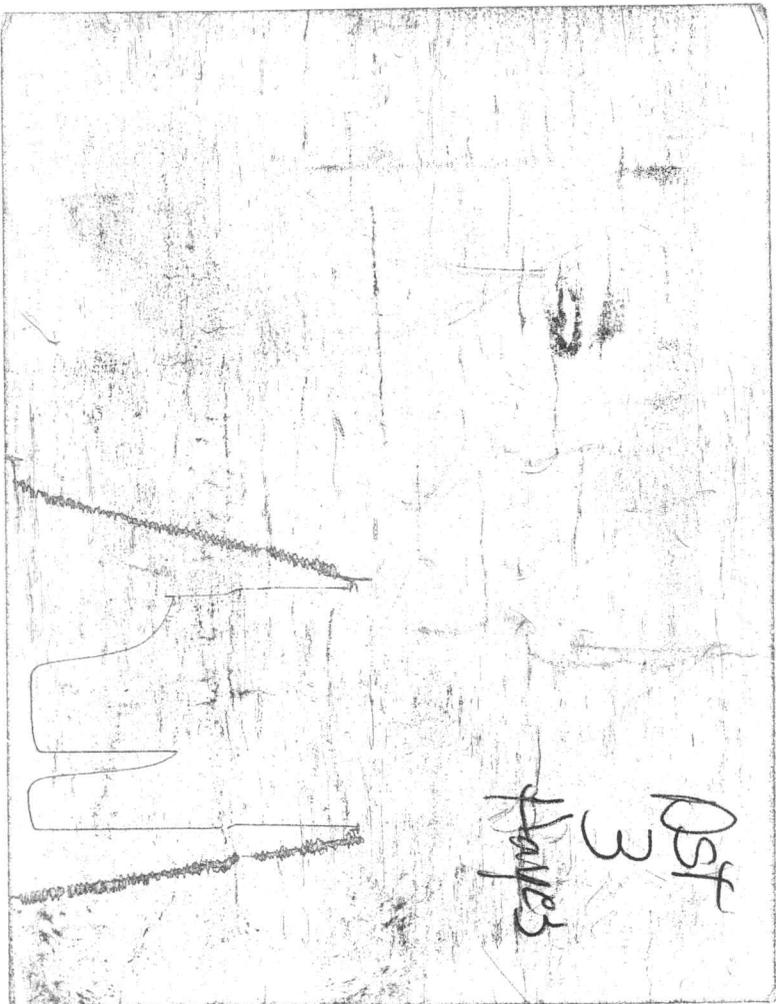
	AK-1	Alpine	Recorder No.	Test
(A) Initial Hydrostatic Mud	1835	PSI	<u>8166</u>	<u>1000</u>
(B) First Initial Flow Pressure	13	PSI	<u>3074</u>	Jars _____
(C) First Final Flow Pressure	28	PSI	<u>11020</u>	Safety Jt. _____
(D) Initial Shut-In Pressure	880	PSI	<u>3734</u>	Circ Sub _____
(E) Second Initial Flow Pressure	22	PSI	Recorder No. _____	Sampler _____
(F) Second Final Flow Pressure	40	PSI	(depth) _____	Straddle _____
(G) Final Shut-In Pressure	827	PSI	<u>30</u>	Ext. Packer _____
(Q) Final Hydrostatic Mud	1787	PSI	Initial Shut-In <u>30</u>	Shale Packer _____
			Final Flow <u>60</u>	Ruined Packer _____
			Final Shut-In <u>40</u>	Mileage <u>102</u> <u>102</u>
			T-On Location <u>12:30</u>	Sub Total: <u>1102</u>
			T-Started <u>13:00</u>	Std. By _____
			T-Open <u>15:00</u>	Other _____
			T-Pulled <u>18:00</u>	Total: _____
			T-Out <u>20:00</u>	

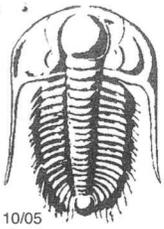
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Approved By _____
 Our Representative Michael Ambister

CHART PAGE

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TRILOBITE TESTING INC.

No 24606

P.O. Box 362 • Hays, Kansas 67601

Test Ticket

Well Name & No. Hayas #1 Test No. 4 Date 1-24-06
 Company JO Farmer Zone Tested ARB
 Address _____ Elevation 2295 KB 2277 GL _____
 Co. Rep / Geo. Randy Killian Rig Disc Drilling Rig 3
 Location: Sec. 9 Twp. 10s Rge. 21w Co. Graham State _____
 Comment: _____ Release date / time: _____

Interval Tested 3842 - 3880 Initial Str Wt./Lbs. 42000 Unseated Str Wt./Lbs. _____
 Anchor Length 38 Wt. Set Lbs. 25000 Wt. Pulled Loose/Lbs. _____
 Top Packer Depth 3837 Tool Weight 2000
 Bottom Packer Depth 3842 Hole Size 7 7/8" Rubber Size 6 3/4"
 Total Depth 3950 Wt. Pipe Run _____ Drill Collar Run 30
 Mud Wt. 9.1 LCM 4 1/2 Vis. 55 WL 8.0 Drill Pipe Size 4 1/2 XH Ft. Run 3824
 Blow Description IF - Good Blow built to 6 1/2" in IST - No Blowback
FF - Weak Blow built to 2" in FSI - No Blowback

Recovery - Total Feet	GIP	Ft. in DC	Ft. in DP
Rec. <u>103</u>	Feet of <u>Very Gassy Oil</u>	<u>60</u> %gas <u>40</u> %oil	%water %mud
Rec. <u>31</u>	Feet of <u>Gassy Oil</u>	<u>20</u> %gas <u>80</u> %oil	%water %mud
Rec. <u>62</u>	Feet of <u>MCO</u>	%gas <u>70</u> %oil	%water <u>30</u> %mud
Rec. _____	Feet of _____	%gas %oil	%water %mud
Rec. _____	Feet of _____	%gas %oil	%water %mud

BHT 109 °F Gravity _____ °API D @ _____ °F Corrected Gravity _____ °API
 RW _____ @ _____ °F Chlorides _____ ppm Recovery _____ Chlorides _____ ppm System

	AK-1	Alpine	Recorder No.	Test
(A) Initial Hydrostatic Mud	<u>1923</u>	PSI	<u>8160</u>	<u>1000</u>
(B) First Initial Flow Pressure	<u>21</u>	PSI	(depth) <u>3843</u>	Jars _____
(C) First Final Flow Pressure	<u>50</u>	PSI	Recorder No. <u>11020</u>	Safety Jt. _____
(D) Initial Shut-In Pressure	<u>1133</u>	PSI	(depth) <u>3876</u>	Circ Sub <u>✓</u>
(E) Second Initial Flow Pressure	<u>54</u>	PSI	Recorder No. <u>16601</u>	Sampler _____
(F) Second Final Flow Pressure	<u>96</u>	PSI	(depth) <u>3946</u>	Straddle <u>✓</u> <u>250</u>
(G) Final Shut-In Pressure	<u>1105</u>	PSI	Initial Opening <u>30</u>	Ext. Packer <u>✓</u> <u>150</u>
(Q) Final Hydrostatic Mud	<u>1883</u>	PSI	Initial Shut-In <u>30</u>	Shale Packer _____

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Approved By _____
 Our Representative Joe Ramsey

Final Flow	<u>60</u>	Ruined Packer	_____
Final Shut-In	<u>60</u>	Mileage	<u>1502</u>
T-On Location	<u>18:20</u>	Sub Total:	<u>1502</u>
T-Started	<u>19:25</u>	Std. By	<u>✓</u>
T-Open	<u>21:05</u>	Acc. Chg:	_____
T-Pulled	<u>00:05</u>	Other:	_____
T-Out	<u>2:20</u>	Total:	_____

CHART PAGE

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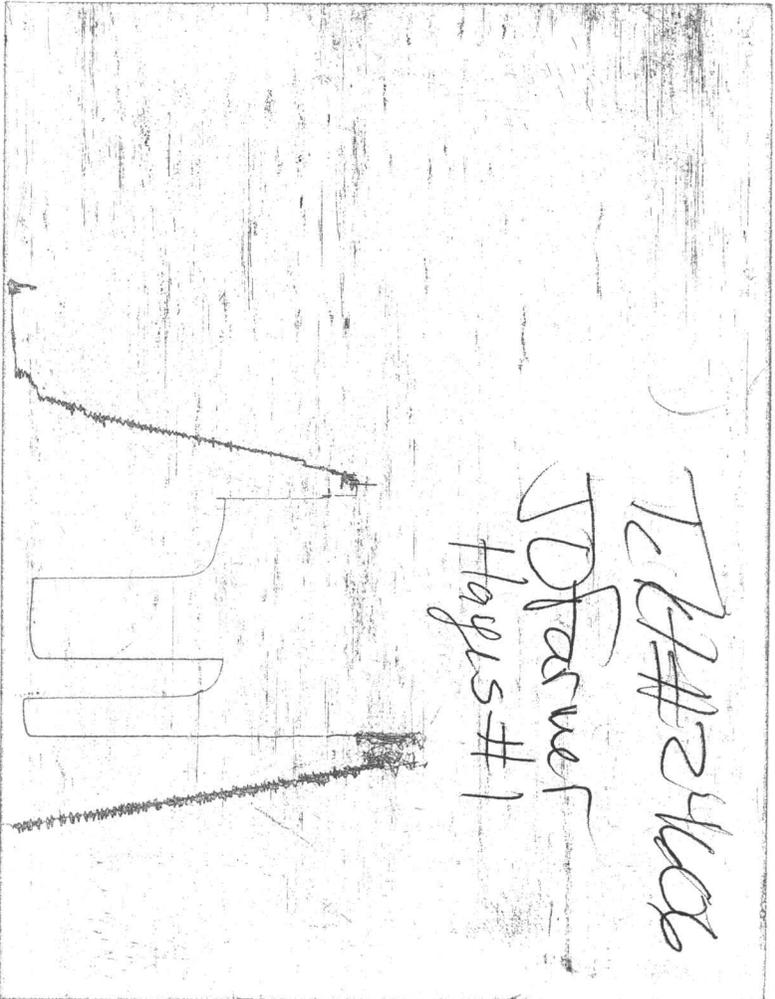


CHART PAGE

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