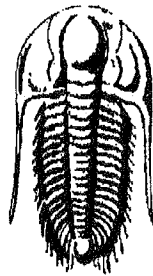


15-109-20829

25-12s-33w

IND



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

Prepared For: **Murfin Drilling**

250 N Water Ste 300
Wichita, KS 67202

CONFIDENTIAL

JUN 05 2009

ATTN: Tom Funk

KCC

25-12s-33w Logan KS

Stoecker Unit # 1-25

Start Date: 2009.02.10 @ 03:48:25

End Date: 2009.02.10 @ 13:04:40

Job Ticket #: 33615

DST #: 1

RECEIVED

JUN 05 2009

KCC WICHITA

Trilobite Testing, Inc

PO Box 1733 Hays, KS 67601

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

Murfin Drilling

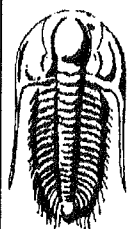
Stoecker Unit # 1-25

25-12s-33w Logan KS

DST # 1

LKC H.I.J

2009.02.10



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Murfin Drilling

250 N Water Ste 300
Wichita, KS 67202

ATTN: Tom Funk

Stoecker Unit # 1-25

25-12s-33w Logan KS

Job Ticket: 33615

DST#: 1

Test Start: 2009.02.10 @ 03:48:25

GENERAL INFORMATION:

Formation: **LKC H,I,J**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 06:18:25

Time Test Ended: 13:04:40

Interval: 4181.00 ft (KB) To 4265.00 ft (KB) (TVD)

Total Depth: 4265.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Fair

Test Type: Conventional Bottom Hole

Tester: Kyle Wiley

Unit No: 48

Reference Elevations: 3066.00 ft (KB)

3056.00 ft (CF)

KB to GR/CF: 10.00 ft

Serial #: 8353 Inside

Press@RunDepth: 985.30 psig @ 4182.00 ft (KB)

Start Date: 2009.02.10

End Date: 2009.02.10

Start Time: 03:48:30

End Time: 13:04:40

Capacity: 7000.00 psig

Last Calib.: 2009.02.10

Time On Btm: 2009.02.10 @ 06:18:10

Time Off Btm: 2009.02.10 @ 10:18:25

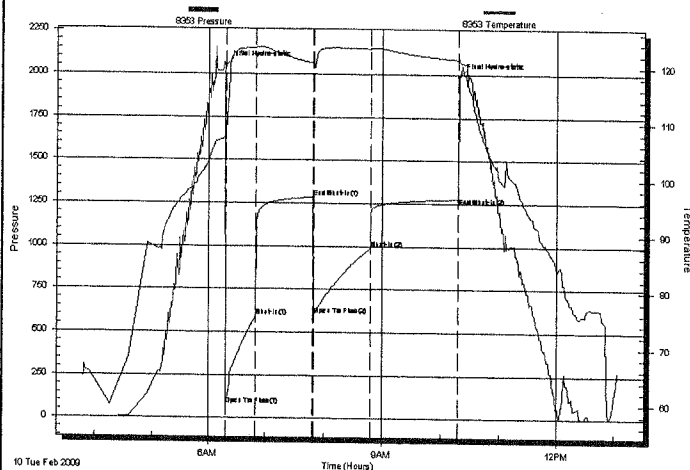
TEST COMMENT: IF: bob 2 1/2 min

IS: no return

FF: bob 4 1/2 min

FS: no return

Pressure vs. Time



PRESSURE SUMMARY

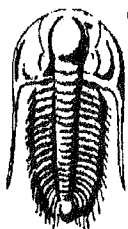
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2052.28	107.65	Initial Hydro-static
1	77.22	107.11	Open To Flow (1)
32	588.33	123.42	Shut-In (1)
91	1281.49	120.74	End Shut-In (1)
92	600.29	120.44	Open To Flow (2)
151	985.30	123.28	Shut-In (2)
240	1241.37	121.35	End Shut-In (2)
241	1985.79	121.56	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
2125.00	mcw	24.50
0.00	rw = .13 @ 65 f = 80000	0.00

Gas Rates

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



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

TOOL DIAGRAM

Murfin Drilling

250 N Water Ste 300
Wichita, KS 67202

ATTN: Tom Funk

Stoecker Unit # 1-25

25-12s-33w Logan KS

Job Ticket: 33615

DST#: 1

Test Start: 2009.02.10 @ 03:48:25

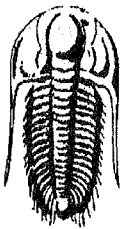
Tool Information

Drill Pipe:	Length: 3608.00 ft	Diameter: 3.80 inches	Volume: 50.61 bbl	Tool Weight:	1500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer:	30000.00 lb
Drill Collar:	Length: 583.00 ft	Diameter: 2.25 inches	Volume: 2.87 bbl	Weight to Pull Loose:	105000.0 lb
		Total Volume:	53.48 bbl	Tool Chased	0.00 ft
Drill Pipe Above KB:	30.00 ft			String Weight: Initial	94000.00 lb
Depth to Top Packer:	4181.00 ft			Final	96000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	85.00 ft				
Tool Length:	105.00 ft				
Number of Packers:	2	Diameter:	6.75 inches		
Tool Comments:					

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
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Change Over Sub	1.00			4162.00	
Shut In Tool	5.00			4167.00	
Hydraulic tool	5.00			4172.00	
Packer	5.00			4177.00	20.00 Bottom Of Top Packer
Packer	4.00			4181.00	
Stubb	1.00			4182.00	
Recorder	0.00	8353	Inside	4182.00	
Recorder	0.00	6741	Inside	4182.00	
Perforations	10.00			4192.00	
Change Over Sub	1.00			4193.00	
Blank Spacing	62.00			4255.00	
Change Over Sub	1.00			4256.00	
Perforations	5.00			4261.00	
Bullnose	5.00			4266.00	85.00 Bottom Packers & Anchor

Total Tool Length: 105.00



TRILOBITE
TESTING, INC

DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling

Stoecker Unit # 1-25

250 N Water Ste 300
Wichita, KS 67202

25-12s-33w Logan KS

Job Ticket: 33615

DST#: 1

ATTN: Tom Funk

Test Start: 2009.02.10 @ 03:48:25

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: 53.00 sec/qt

Cushion Volume:

bbl

Water Loss: 5.97 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 1600.00 ppm

Filter Cake: 2.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
2125.00	mcw	24.497
0.00	rw = 13 @ 65 f = 80000	0.000

Total Length: 2125.00 ft

Total Volume: 24.497 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

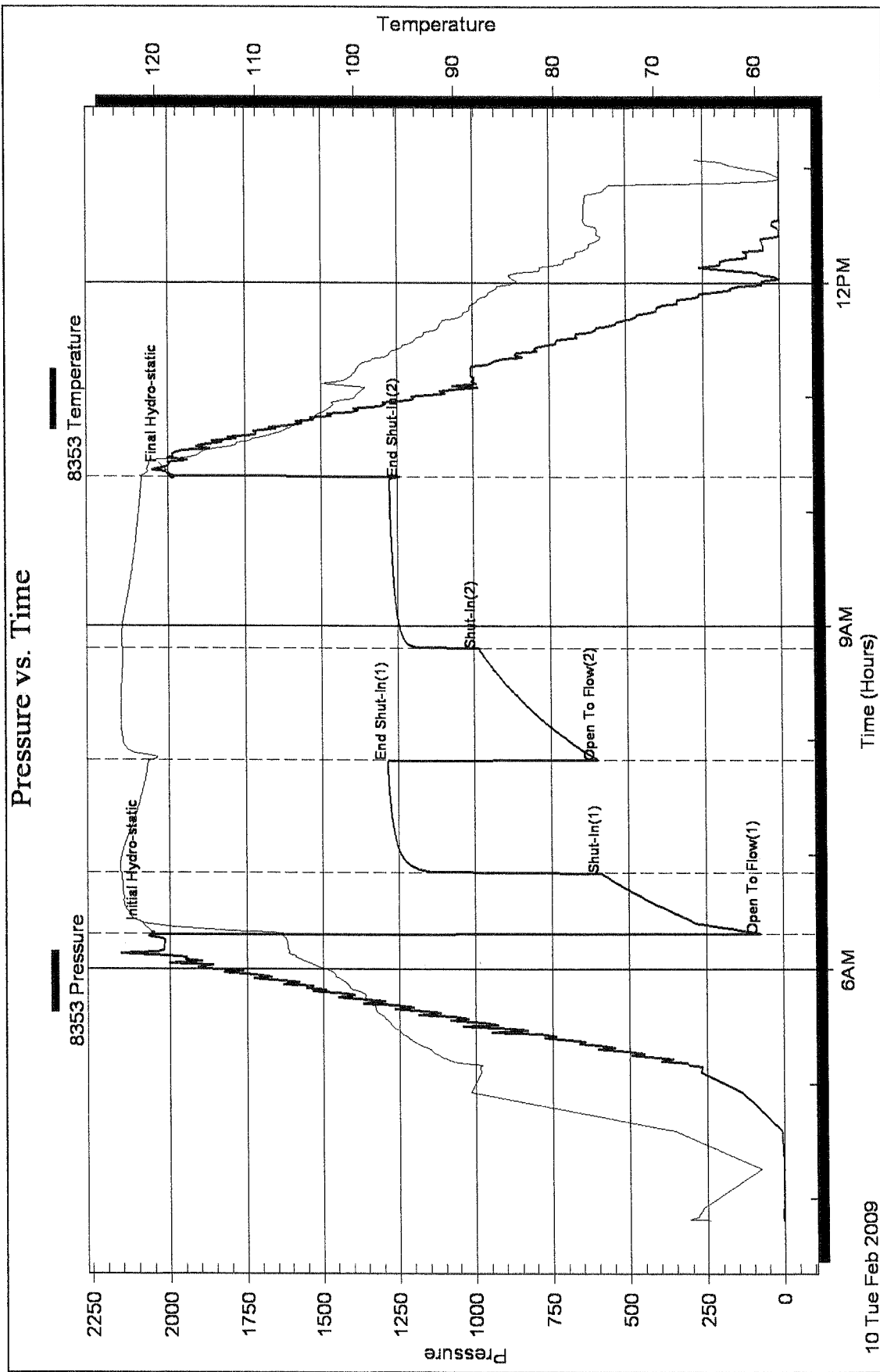
Serial #:

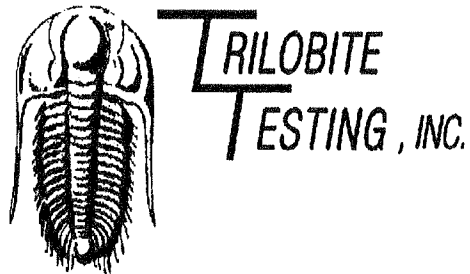
Laboratory Name:

Laboratory Location:

Recovery Comments:

Pressure vs. Time





DRILL STEM TEST REPORT

Prepared For: **Murfin Drilling**

250 N Water Ste 300
Wichita, KS 67202

CONFIDENTIAL

ATTN: Tom Funk

JUN 05 2009

25-12s-33w Logan KS

KCC

Stoecker Unit # 1-25

Start Date: 2009.02.10 @ 19:03:34

End Date: 2009.02.11 @ 03:58:49

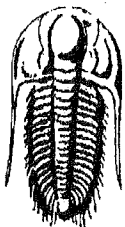
Job Ticket #: 33616 DST #: 2

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JUN 05 2009

KCC WICHITA

Trilobite Testing, Inc
PO Box 1733 Hays, KS 67601
ph: 785-625-4778 fax: 785-625-5620



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Murfin Drilling

250 N Water Ste 300
Wichita, KS 67202

ATTN: Tom Funk

Stoecker Unit # 1-25

25-12s-33w Logan KS

Job Ticket: 33616

DST#: 2

Test Start: 2009.02.10 @ 19:03:34

GENERAL INFORMATION:

Formation: **LKC K**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 21:03:34

Time Test Ended: 03:58:49

Test Type: Conventional Bottom Hole

Tester: Kyle Wiley

Unit No: 48

Interval: **4265.00 ft (KB) To 4294.00 ft (KB) (TVD)**

Total Depth: 4294.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 3066.00 ft (KB)

3056.00 ft (CF)

KB to GR/CF: 10.00 ft

Serial #: 8353

Inside

Press@RunDepth: 608.41 psig @ 4266.00 ft (KB)

Start Date: 2009.02.10

End Date:

2009.02.11

Start Time: 19:03:39

End Time:

03:58:49

Capacity: 7000.00 psig

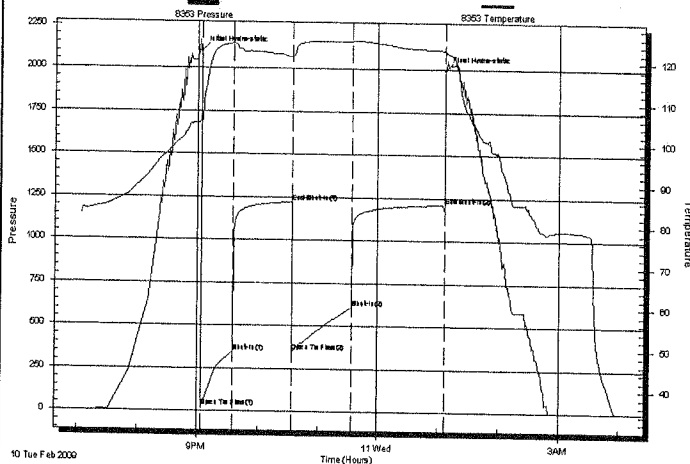
Last Calib.: 2009.02.11

Time On Btm: 2009.02.10 @ 21:03:19

Time Off Btm: 2009.02.11 @ 01:07:04

TEST COMMENT: IF: bob 7 min
IS: weak surface blow
FF: bob 12 min
FS: no return

Pressure vs. Time



PRESSURE SUMMARY

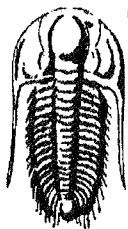
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2101.36	105.71	Initial Hydro-static
1	23.12	104.70	Open To Flow (1)
32	345.96	124.42	Shut-In(1)
91	1221.48	121.20	End Shut-In(1)
91	349.97	121.03	Open To Flow(2)
151	608.41	125.06	Shut-In(2)
244	1208.87	122.98	End Shut-In(2)
244	1996.20	123.30	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
1235.00	mcw 10% m 90% w	12.01
0.00	rw = 1.3 @ 50 = 60000	0.00

Gas Rates

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

DRILL STEM TEST REPORT

TOOL DIAGRAM

Murfin Drilling

250 N Water Ste 300
Wichita, KS 67202

ATTN: Tom Funk

Stoecker Unit # 1-25

25-12s-33w Logan KS

Job Ticket: 33616

DST#: 2

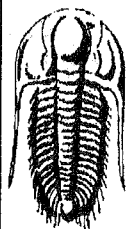
Test Start: 2009.02.10 @ 19:03:34

Tool Information

Drill Pipe:	Length: 3672.00 ft	Diameter: 3.80 inches	Volume: 51.51 bbl	Tool Weight: 1500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 30000.00 lb
Drill Collar:	Length: 583.00 ft	Diameter: 2.25 inches	Volume: 2.87 bbl	Weight to Pull Loose: 105000.0 lb
		Total Volume: 54.38 bbl		Tool Chased 0.00 ft
Drill Pipe Above KB:	10.00 ft			String Weight: Initial 88000.00 lb
Depth to Top Packer:	4265.00 ft			Final 90000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	30.00 ft			
Tool Length:	50.00 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			4246.00	
Shut In Tool	5.00			4251.00	
Hydraulic tool	5.00			4256.00	
Packer	5.00			4261.00	20.00 Bottom Of Top Packer
Packer	4.00			4265.00	
Stubb	1.00			4266.00	
Recorder	0.00	8353	Inside	4266.00	
Recorder	0.00	6741	Inside	4266.00	
Perforations	24.00			4290.00	
Bullnose	5.00			4295.00	30.00 Bottom Packers & Anchor
Total Tool Length:		50.00			



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling

Stoecker Unit # 1-25

250 N Water Ste 300
Wichita, KS 67202

25-12s-33w Logan KS

Job Ticket: 33616

DST#: 2

ATTN: Tom Funk

Test Start: 2009.02.10 @ 19:03:34

Mud and Cushion Information

Mud Type: Gel Chem

Mud Weight: 9.00 lb/gal

Viscosity: 52.00 sec/qt

Water Loss: 5.98 in³

Resistivity: 0.00 ohm.m

Salinity: 5000.00 ppm

Filter Cake: 2.00 inches

Cushion Type:

Cushion Length:

Cushion Volume:

Gas Cushion Type:

Gas Cushion Pressure:

Oil API:

Water Salinity:

deg API

ppm

ft

bbl

psig

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
1235.00	mcw 10%m 90%w	12.013
0.00	rw = 1.3 @ 50 = 60000	0.000

Total Length: 1235.00 ft

Total Volume: 12.013 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

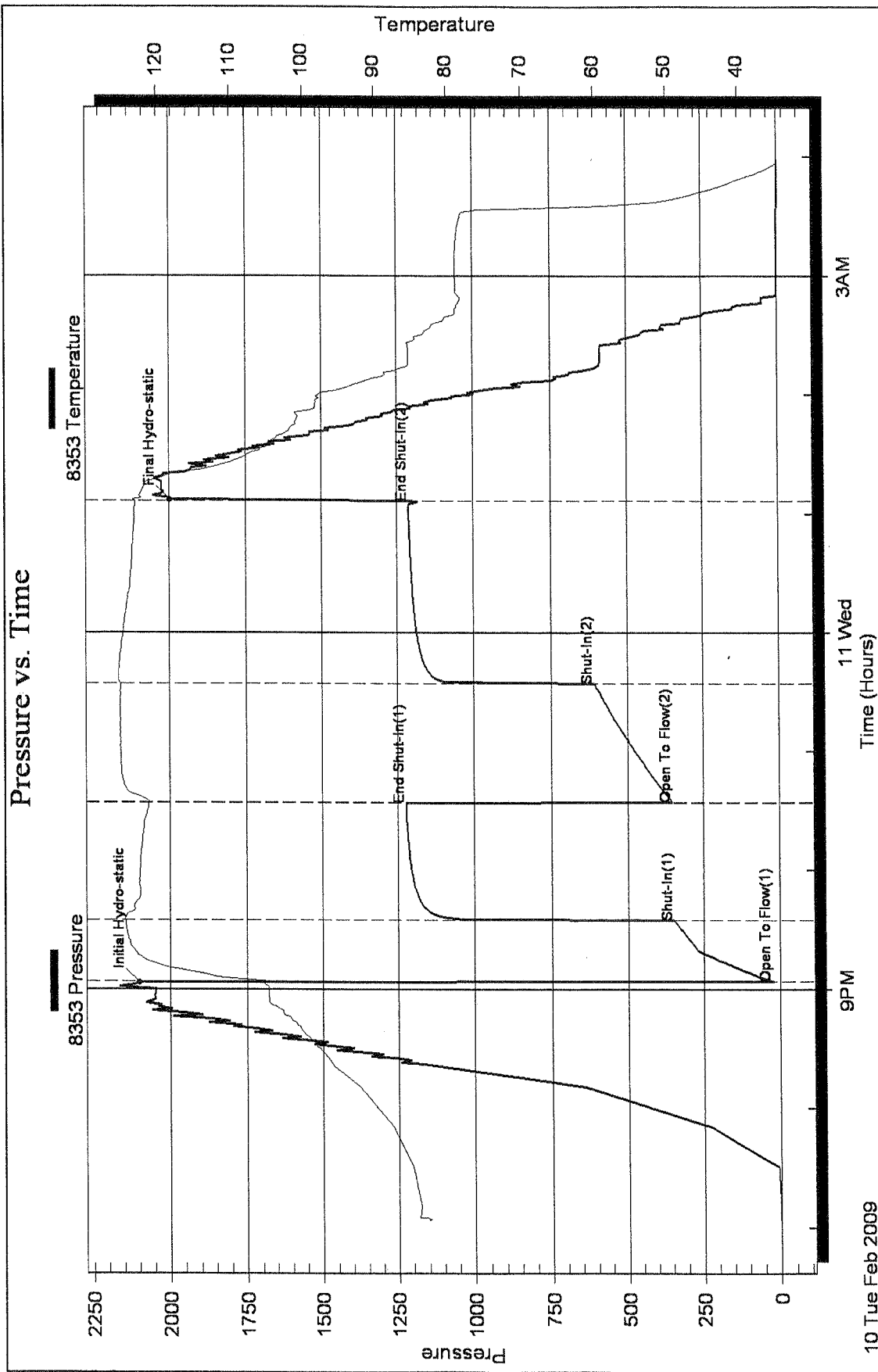
Serial #:

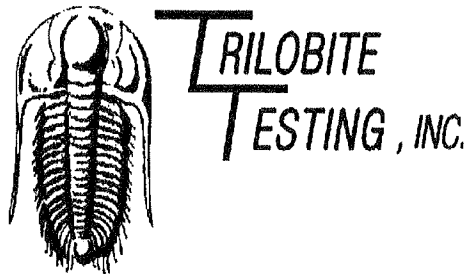
Laboratory Name:

Laboratory Location:

Recovery Comments:

Pressure vs. Time





DRILL STEM TEST REPORT

Prepared For: **Murfin Drilling**

250 N Water Ste 300
Wichita, KS 67202

ATTN: Tom Funk

25-12s-33w Logan KS

Stoecker Unit # 1-25

Start Date: 2009.02.12 @ 06:37:16

End Date: 2009.02.12 @ 15:21:01

Job Ticket #: 33617 DST #: 3

CONFIDENTIAL

JUN 05 2009

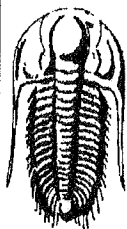
KCC

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JUN 05 2009

KCC WICHITA

Trilobite Testing, Inc
PO Box 1733 Hays, KS 67601
ph: 785-625-4778 fax: 785-625-5620



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

Murfin Drilling

250 N Water Ste 300
Wichita, KS 67202

ATTN: Tom Funk

Stoecker Unit # 1-25

25-12s-33w Logan KS

Job Ticket: 33617

DST#: 3

Test Start: 2009.02.12 @ 06:37:16

GENERAL INFORMATION:

Formation: **Johnson**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 09:23:16

Time Test Ended: 15:21:01

Interval: **4566.00 ft (KB) To 4625.00 ft (KB) (TVD)**

Total Depth: 4625.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Fair

Test Type: Conventional Bottom Hole

Tester: Kyle Wiley

Unit No: 48

Reference Elevations: 3066.00 ft (KB)

3056.00 ft (CF)

KB to GR/CF: 10.00 ft

Serial #: 8353

Inside

Press@RunDepth: 365.30 psig @ 4567.00 ft (KB)

Start Date: 2009.02.12

End Date: 2009.02.12

Start Time: 06:37:21

End Time: 15:21:01

Capacity: 7000.00 psig

Last Calib.: 2009.02.12

Time On Btm: 2009.02.12 @ 09:23:01

Time Off Btm: 2009.02.12 @ 13:06:01

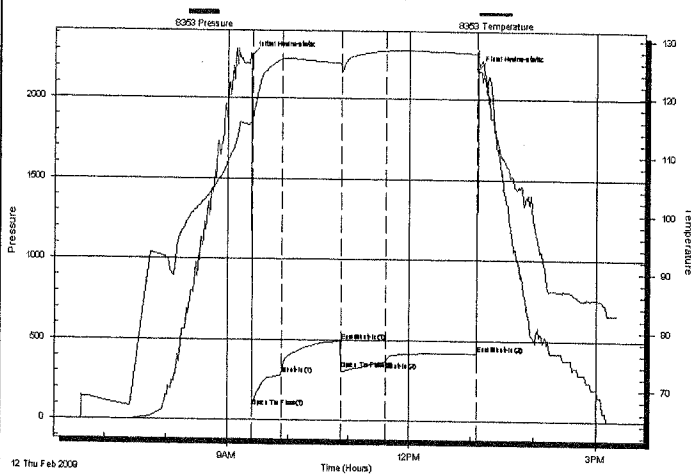
TEST COMMENT: IF: bob 5 1/2 min

IS: bob 25 min

FF: bob 10 min

FS: bob 26 min

Pressure vs. Time



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2264.74	115.70	Initial Hydro-static
1	83.45	114.67	Open To Flow (1)
30	281.49	126.53	Shut-In (1)
89	495.05	125.88	End Shut-In (1)
90	322.30	125.25	Open To Flow (2)
134	365.30	128.02	Shut-In (2)
223	423.93	127.64	End Shut-In (2)
223	2189.94	128.32	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
950.00	mgco 26%m 20%g 54% o	8.02

Gas Rates

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

DRILL STEM TEST REPORT

TOOL DIAGRAM

Murfin Drilling

250 N Water Ste 300
Wichita, KS 67202

ATTN: Tom Funk

Stoecker Unit # 1-25

25-12s-33w Logan KS

Job Ticket: 33617

DST#: 3

Test Start: 2009.02.12 @ 06:37:16

Tool Information

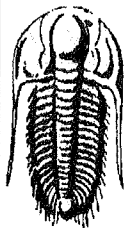
Drill Pipe:	Length: 3987.00 ft	Diameter: 3.80 inches	Volume: 55.93 bbl	Tool Weight:	1500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer:	30000.00 lb
Drill Collar:	Length: 583.00 ft	Diameter: 2.25 inches	Volume: 2.87 bbl	Weight to Pull Loose:	105000.0 lb
		Total Volume:	58.80 bbl	Tool Chased	0.00 ft
Drill Pipe Above KB:	24.00 ft			String Weight: Initial	90000.00 lb
Depth to Top Packer:	4566.00 ft			Final	92000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	59.00 ft				
Tool Length:	79.00 ft				
Number of Packers:	2	Diameter:	6.75 inches		

Tool Comments:

Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			4547.00	
Shut In Tool	5.00			4552.00	
Hydraulic tool	5.00			4557.00	
Packer	5.00			4562.00	20.00 Bottom Of Top Packer
Packer	4.00			4566.00	
Stubb	1.00			4567.00	
Recorder	0.00	8353	Inside	4567.00	
Recorder	0.00	6741	Inside	4567.00	
Change Over Sub	1.00			4568.00	
Blank Spacing	31.00			4599.00	
Change Over Sub	1.00			4600.00	
Perforations	20.00			4620.00	
Bullnose	5.00			4625.00	59.00 Bottom Packers & Anchor

Total Tool Length: 79.00



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling

Stoecker Unit # 1-25

250 N Water Ste 300
Wichita, KS 67202

25-12s-33w Logan KS

Job Ticket: 33617

DST#: 3

ATTN: Tom Funk

Test Start: 2009.02.12 @ 06:37:16

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

20 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 51.00 sec/qt

Cushion Volume:

bbl

Water Loss: 6.78 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 6300.00 ppm

Filter Cake: 2.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
950.00	mgco 26%m 20%g 54% o	8.015

Total Length: 950.00 ft

Total Volume: 8.015 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Pressure vs. Time

