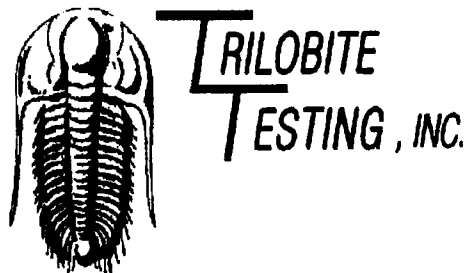


15-039-21096

21-3s-27w



DRILL STEM TEST REPORT

Prepared For: **Murfin Drilling Co., Inc.**

250 N. Water
Suite 300
Wichita, KS 67202

ATTN: Paul Gunzelman

21 3s 27w Decatur KS

Carter Brown Unit #2-21

Start Date: 2009.07.13 @ 12:13:00

End Date: 2009.07.13 @ 18:17:00

Job Ticket #: 34503 DST #: 1

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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 Co., Inc.

250 N. Water
Suite 300
Wichita, KS 67202
ATTN: Paul Gunzelman

Carter Brown Unit #2-21

21 3s 27w Decatur KS

Job Ticket: 34503

DST#: 1

Test Start: 2009.07.13 @ 12:13:00

GENERAL INFORMATION:

Formation: **Oread & Toronto**

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

Time Tool Opened: 14:13:30

Time Test Ended: 18:17:00

Test Type: **Conventional Bottom Hole**

Tester: **James Winder**

Unit No: **36**

Interval: **3458.00 ft (KB) To 3542.00 ft (KB) (TVD)**

Total Depth: **3542.00 ft (KB) (TVD)**

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

Reference Elevations: **2603.00 ft (KB)**

2598.00 ft (CF)

KB to GR/CF: **5.00 ft**

Serial #: 8366

Inside

Press@RunDepth: **35.01 psig @ 3459.00 ft (KB)**

Start Date: **2009.07.13**

End Date: **2009.07.13**

Capacity: **7000.00 psig**

Last Calib.: **2009.07.13**

Start Time: **12:13:05**

End Time: **18:16:59**

Time On Btm: **2009.07.13 @ 14:12:00**

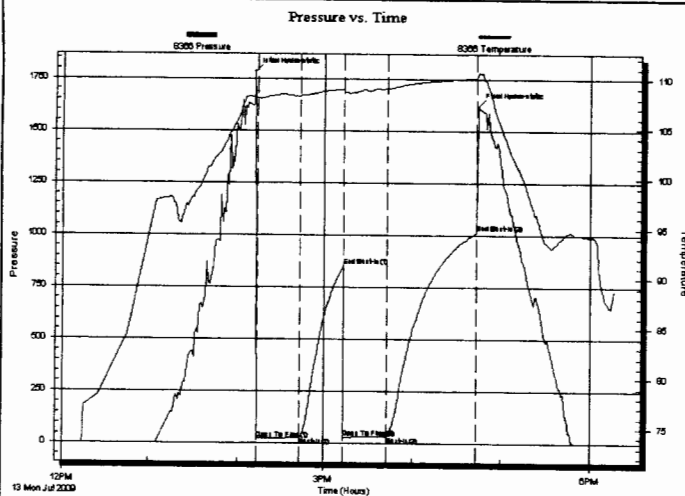
Time Off Btm: **2009.07.13 @ 16:44:29**

TEST COMMENT: IF: 3/4" blow @ open, built to 1", died back to 3/4" by close

IS: Bled off, No blow back

FF: No blow

FSI: No blow back



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1781.41	108.41	Initial Hydro-static
2	21.92	108.06	Open To Flow (1)
31	28.14	108.31	Shut-In (1)
61	852.13	109.00	End Shut-In (1)
61	30.14	108.56	Open To Flow (2)
91	35.01	109.03	Shut-In (2)
152	1011.67	110.13	End Shut-In (2)
153	1616.80	110.70	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
45.00	SOOM 96% m, 4% o	0.22

Gas Rates

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



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

TOOL DIAGRAM

Murfin Drilling Co., Inc.

250 N. Water
Suite 300
Wichita, KS 67202
ATTN: Paul Gunzelman

Carter Brown Unit #2-21

21 3s 27w Decatur KS

Job Ticket: 34503 **DST#: 1**

Test Start: 2009.07.13 @ 12:13:00

Tool Information

Drill Pipe:	Length: 2917.00 ft	Diameter: 3.80 inches	Volume: 40.92 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: 25000.00 lb
Drill Collar:	Length: 547.00 ft	Diameter: 2.25 inches	Volume: 2.69 bbl	Weight to Pull Loose: 92000.00 lb
		Total Volume:	43.61 bbl	Tool Chased 0.00 ft
Drill Pipe Above KB:	29.00 ft			String Weight: Initial 70000.00 lb
Depth to Top Packer:	3458.00 ft			Final 70000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	84.00 ft			
Tool Length:	107.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:
Tool slid 3' to bottom before open

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
S.I. Tool	5.00			3440.00	
HYD S.I. Tool	5.00			3445.00	
Safety Joint	3.00			3448.00	
Packer	5.00			3453.00	23.00 Bottom Of Top Packer
Packer	5.00			3458.00	
Stubb	1.00			3459.00	
Recorder	0.00	8366	Inside	3459.00	
Recorder	0.00	8320	Inside	3459.00	
Perforations	14.00			3473.00	
Blank Spacing	64.00			3537.00	
Perforations	2.00			3539.00	
Bullnose	3.00			3542.00	84.00 Bottom Packers & Anchor
Total Tool Length:		107.00			



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling Co., Inc.

Carter Brown Unit #2-21

250 N. Water

21 3s 27w Decatur KS

Suite 300

Job Ticket: 34503

DST#: 1

Wichita, KS 67202

Test Start: 2009.07.13 @ 12:13:00

ATTN: Paul Gunzelman

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: 49.00 sec/qt

Cushion Volume:

bbl

Water Loss: 5.96 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 1200.00 ppm

Filter Cake: 2.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
45.00	SOCM 96% m, 4% o	0.221

Total Length: 45.00 ft

Total Volume: 0.221 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Serial #: 8366

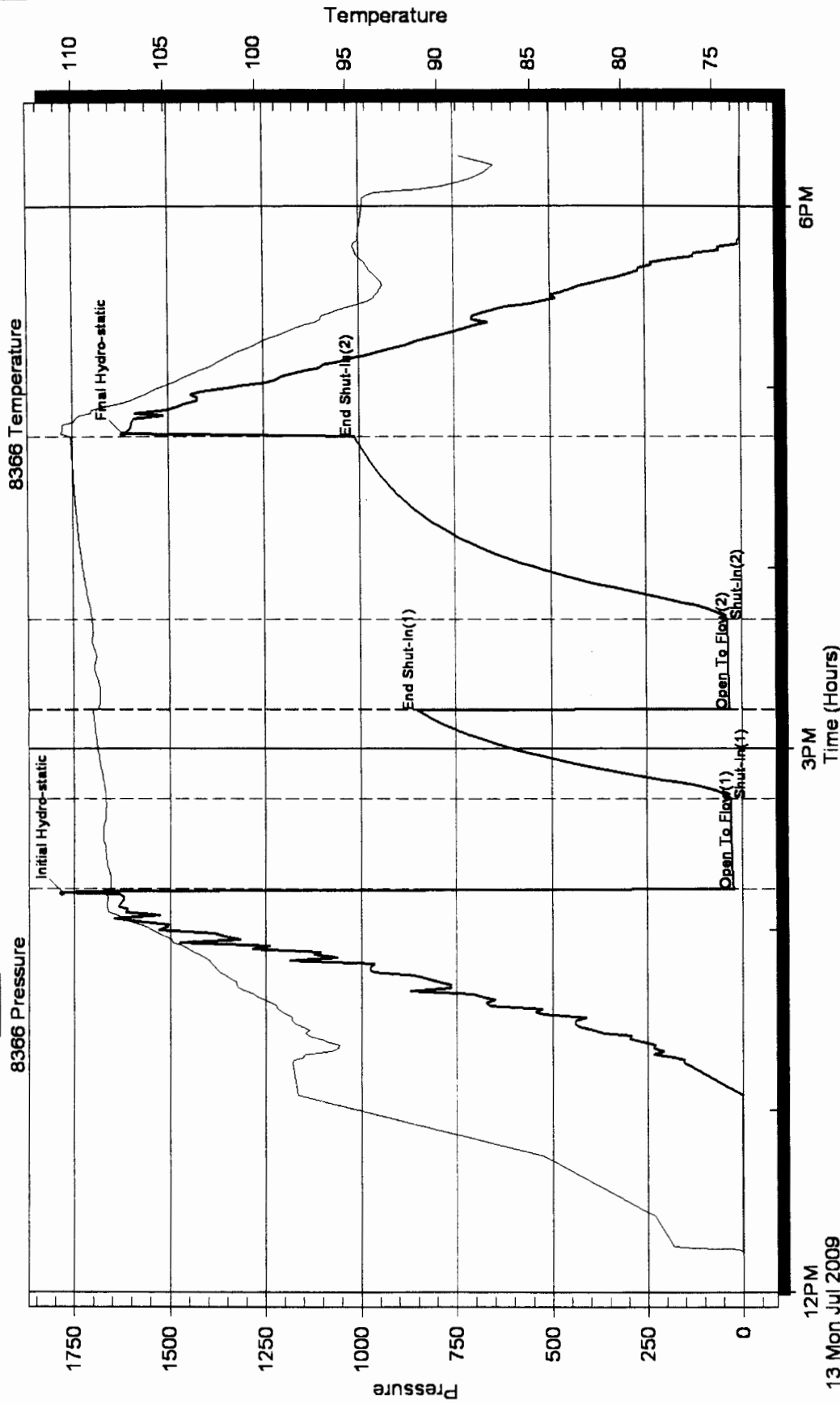
Inside

Murfin Drilling Co., Inc.

21 3s 27w Decatur KS

DST Test Number: 1

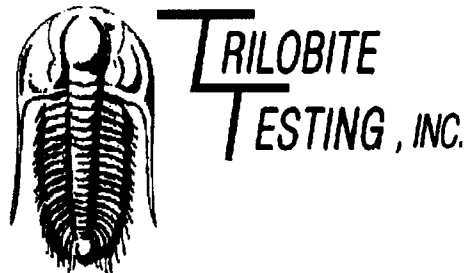
Pressure vs. Time



Trilobite Testing, Inc

Ref. No: 34503

Printed: 2009.07.24 @ 12:44:15 Page 5



DRILL STEM TEST REPORT

Prepared For: **Murfin Drilling Co., Inc.**

250 N. Water
Suite 300
Wichita, KS 67202

ATTN: Paul Gunzelman

21 3s 27w Decatur KS

Carter Brown Unit #2-21

Start Date: 2009.07.14 @ 03:57:00

End Date: 2009.07.14 @ 11:48:30

Job Ticket #: 34504 DST #: 2

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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 Co., Inc.

250 N. Water
Suite 300
Wichita, KS 67202
ATTN: Paul Gunzelman

Carter Brown Unit #2-21

21 3s 27w Decatur KS

Job Ticket: 34504

DST#: 2

Test Start: 2009.07.14 @ 03:57:00

GENERAL INFORMATION:

Formation: **Lans. "A - D"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 06:02:00

Time Test Ended: 11:48:30

Test Type: Conventional Bottom Hole

Tester: James Winder

Unit No: 36

Interval: **3540.00 ft (KB) To 3600.00 ft (KB) (TVD)**

Total Depth: 3600.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 2603.00 ft (KB)

2598.00 ft (CF)

KB to GR/CF: 5.00 ft

Serial #: 8366

Inside

Press@RunDepth: 69.25 psig @ 3541.00 ft (KB)

Start Date: 2009.07.14

End Date:

2009.07.14

Capacity: 7000.00 psig

Last Calib.: 2009.07.14

Start Time: 03:57:05

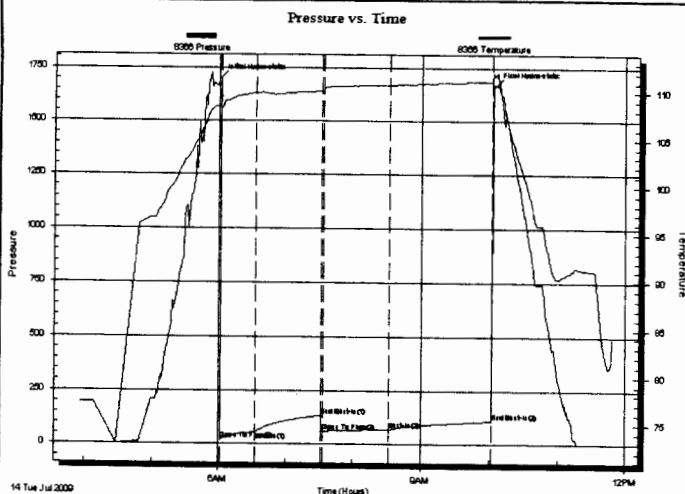
End Time:

11:48:29

Time On Btm: 2009.07.14 @ 06:01:00

Time Off Btm: 2009.07.14 @ 10:04:00

TEST COMMENT: IF: Blow built to 6"
IS: Bled off, No blow back
FF: Blow built to 8 1/2"
FS: Bled off, No blow back



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1698.67	108.59	Initial Hydro-static
1	20.84	108.11	Open To Flow (1)
32	56.16	109.97	Shut-In(1)
91	132.95	110.13	End Shut-In(1)
93	58.42	110.27	Open To Flow (2)
151	69.25	110.80	Shut-In(2)
241	108.84	111.22	End Shut-In(2)
243	1667.66	111.80	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
1.00	Oil 96%o, 2%g, 2%m	0.00
2.00	OCM 61%m, 37%o, 2%m	0.01
60.00	OCM 77%m, 19%o, 4%g	0.30
60.00	GOOM 57%m, 29%o, 14%g	0.30
0.00	GIP = 180' (weak odor)	0.00

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Murfin Drilling Co., Inc.

250 N. Water
Suite 300
Wichita, KS 67202
ATTN: Paul Gunzelman

Carter Brown Unit #2-21

21 3s 27w Decatur KS

Job Ticket: 34504 **DST#: 2**

Test Start: 2009.07.14 @ 03:57:00

Tool Information

Drill Pipe:	Length: 2978.00 ft	Diameter: 3.80 inches	Volume: 41.77 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: 25000.00 lb
Drill Collar:	Length: 547.00 ft	Diameter: 2.25 inches	Volume: 2.69 bbl	Weight to Pull Loose: 92000.00 lb
		Total Volume:	44.46 bbl	Tool Chased 0.00 ft
Drill Pipe Above KB:	8.00 ft			String Weight: Initial 70000.00 lb
Depth to Top Packer:	3540.00 ft			Final 70000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	60.00 ft			
Tool Length:	83.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
S.I. Tool	5.00			3522.00	
HYD S.I. Tool	5.00			3527.00	
Safety Joint	3.00			3530.00	
Packer	5.00			3535.00	23.00 Bottom Of Top Packer
Packer	5.00			3540.00	
Stubb	1.00			3541.00	
Recorder	0.00	8366	Inside	3541.00	
Recorder	0.00	8320	Inside	3541.00	
Perforations	19.00			3560.00	
Blank Spacing	32.00			3592.00	
Perforations	5.00			3597.00	
Bullnose	3.00			3600.00	60.00 Bottom Packers & Anchor

Total Tool Length: 83.00



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling Co., Inc.

Carter Brown Unit #2-21

250 N. Water
Suite 300
Wichita, KS 67202
ATTN: Paul Gunzelman

21 3s 27w Decatur KS
Job Ticket: 34504 DST#: 2
Test Start: 2009.07.14 @ 03:57:00

Mud and Cushion Information

Mud Type: Gel Chem

Mud Weight: 9.00 lb/gal

Viscosity: 58.00 sec/qt

Water Loss: 5.96 in³

Resistivity: ohm.m

Salinity: 1800.00 ppm

Filter Cake: 2.00 inches

Cushion Type:

Cushion Length:

Cushion Volume:

Gas Cushion Type:

Gas Cushion Pressure:

ft

bbl

psig

Oil API:

Water Salinity:

deg API

ppm

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
1.00	Oil 96%o, 2%g, 2%m	0.005
2.00	OCM 61%m, 37%o, 2%m	0.010
60.00	OCM 77%m, 19%o, 4%g	0.295
60.00	GOCM 57%m, 29%o, 14%g	0.295
0.00	GIP = 180' (weak odor)	0.000

Total Length: 123.00 ft

Total Volume: 0.605 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

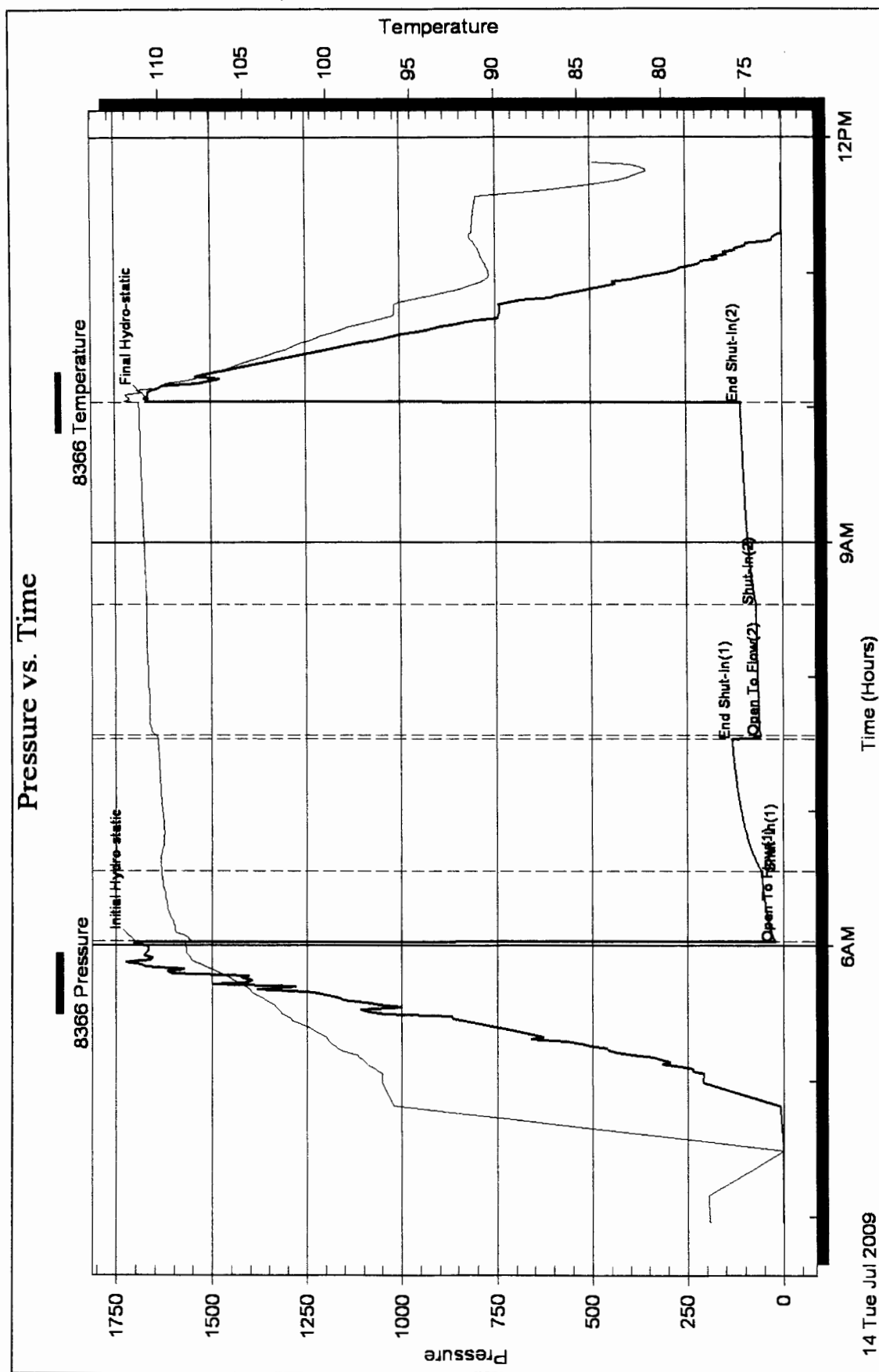
Serial #:

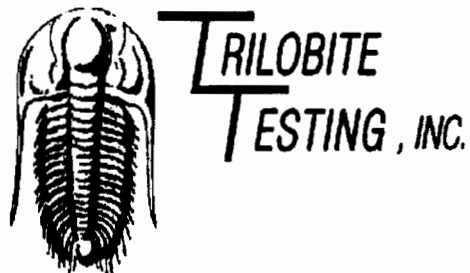
Laboratory Name:

Laboratory Location:

Recovery Comments:

Pressure vs. Time





DRILL STEM TEST REPORT

Prepared For: **Murfin Drilling Co., Inc.**

250 N. Water
Suite 300
Wichita, KS 67202

ATTN: Paul Gunzelman

21 3s 27w Decatur KS

Carter Brown Unit #2-21

Start Date: 2009.07.14 @ 19:12:00

End Date: 2009.07.15 @ 03:02:00

Job Ticket #: 34505 DST #: 3

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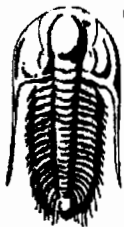
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KCC WICHITA

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 Co., Inc.

250 N. Water
Suite 300
Wichita, KS 67202
ATTN: Paul Gunzelman

Carter Brown Unit #2-21

21 3s 27w Decatur KS

Job Ticket: 34505 DST#: 3

Test Start: 2009.07.14 @ 19:12:00

GENERAL INFORMATION:

Formation: **Lans. "E - G"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 20:42:00

Time Test Ended: 03:02:00

Test Type: Conventional Bottom Hole

Tester: James Winder

Unit No: 36

Interval: **3594.00 ft (KB) To 3642.00 ft (KB) (TVD)**

Total Depth: 3642.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 2603.00 ft (KB)

2598.00 ft (CF)

KB to GR/CF: 5.00 ft

Serial #: 8366

Inside

Press@RunDepth: 258.09 psig @ 3595.00 ft (KB)

Start Date: 2009.07.14

End Date:

2009.07.15

Capacity: 7000.00 psig

Last Calib.: 2009.07.15

Start Time: 19:12:05

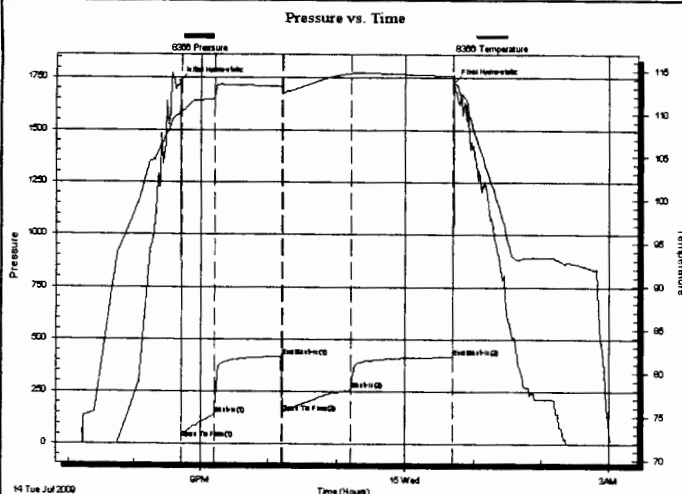
End Time:

03:01:59

Time On Btm: 2009.07.14 @ 20:41:00

Time Off Btm: 2009.07.15 @ 00:42:59

TEST COMMENT: IF: Blow built to BOB in 17 min.
IS: Bled off, Blow back built to 1"
FF: Blow built to BOB in 24 min.
FS: Bled off, Blow back built to 2"



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1735.75	110.01	Initial Hydro-static
1	23.37	109.92	Open To Flow (1)
31	142.29	111.72	Shut-In (1)
91	417.26	113.17	End Shut-In (1)
92	151.65	112.67	Open To Flow (2)
152	258.09	114.68	Shut-In (2)
241	415.57	114.41	End Shut-In (2)
242	1729.89	113.64	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
121.00	GOMCW 58%W, 28%M, 7%O, 7%G	0.60
122.00	GOWCM 71%M, 13%G, 8%O, 8%W	0.60
122.00	GOCM 67%M, 17%G, 16%O	0.60
182.00	MCO 80%O, 17%M, 3%G	0.90
30.00	Clean Oil 100%	0.42
0.00	GIP = 220'	0.00

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Murfin Drilling Co., Inc.

250 N. Water
Suite 300
Wichita, KS 67202
ATTN: Paul Gunzelman

Carter Brown Unit #2-21

21 3s 27w Decatur KS

Job Ticket: 34505 **DST#: 3**

Test Start: 2009.07.14 @ 19:12:00

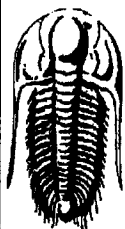
Tool Information

Drill Pipe:	Length: 3039.00 ft	Diameter: 3.80 inches	Volume: 42.63 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:	25000.00 lb
Drill Collar:	Length: 547.00 ft	Diameter: 2.25 inches	Volume: 2.69 bbl	Weight to Pull Loose:	88000.00 lb
		Total Volume:	45.32 bbl	Tool Chased	0.00 ft
Drill Pipe Above KB:	15.00 ft			String Weight: Initial	70000.00 lb
Depth to Top Packer:	3594.00 ft			Final	75000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	48.00 ft				
Tool Length:	71.00 ft				
Number of Packers:	2	Diameter:	6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
S.I. Tool	5.00			3576.00	
HYD S.I. Tool	5.00			3581.00	
Safety Joint	3.00			3584.00	
Packer	5.00			3589.00	23.00 Bottom Of Top Packer
Packer	5.00			3594.00	
Stubb	1.00			3595.00	
Recorder	0.00	8366	Inside	3595.00	
Recorder	0.00	8320	Inside	3595.00	
Perforations	9.00			3604.00	
Blank Spacing	33.00			3637.00	
Perforations	2.00			3639.00	
Bullnose	3.00			3642.00	48.00 Bottom Packers & Anchor

Total Tool Length: 71.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling Co., Inc.

Carter Brown Unit #2-21

250 N. Water
Suite 300
Wichita, KS 67202

21 3s 27w Decatur KS

Job Ticket: 34505

DST#: 3

ATTN: Paul Gunzelman

Test Start: 2009.07.14 @ 19:12:00

Mud and Cushion Information

Mud Type: Gel Chem

Mud Weight: 9.00 lb/gal

Viscosity: 58.00 sec/qt

Water Loss: 5.97 in³

Resistivity: ohm.m

Salinity: 1800.00 ppm

Filter Cake: 2.00 inches

Cushion Type:

Cushion Length:

Cushion Volume:

Gas Cushion Type:

Gas Cushion Pressure:

ft

bbl

psig

Oil API:

29 deg API

Water Salinity:

58000 ppm

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
121.00	GOMCW 58%W, 28%M, 7%O, 7%G	0.595
122.00	GOWCM 71%M, 13%G, 8%O, 8%W	0.600
122.00	GOCM 67%M, 17%G, 16%O	0.600
182.00	MCO 80%O, 17%M, 3%G	0.895
30.00	Clean Oil 100%	0.421
0.00	GIP = 220'	0.000

Total Length: 577.00 ft

Total Volume: 3.111 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

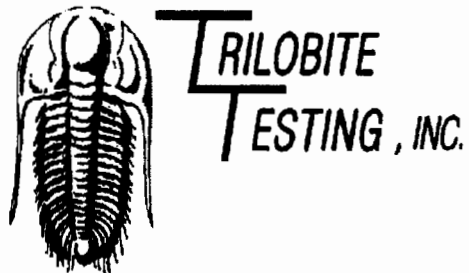
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: Gravity = 29.6 api @ 66 deg F

Corrected Gravity = 29 api



DRILL STEM TEST REPORT

Prepared For: **Murfin Drilling Co., Inc.**

250 N. Water
Suite 300
Wichita, KS 67202

ATTN: Paul Gunzelman

21 3s 27w Decatur KS

Carter Brown Unit #2-21

Start Date: 2009.07.15 @ 14:36:00

End Date: 2009.07.15 @ 22:23:00

Job Ticket #: 34506 DST #: 4

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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 Co., Inc.

250 N. Water
Suite 300
Wichita, KS 67202
ATTN: Paul Gunzelman

Carter Brown Unit #2-21

21 3s 27w Decatur KS

Job Ticket: 34506 **DST#: 4**

Test Start: 2009.07.15 @ 14:36:00

GENERAL INFORMATION:

Formation: **Lans. "H - K"**

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

Time Tool Opened: 16:12:30

Time Test Ended: 22:23:00

Test Type: **Conventional Bottom Hole**

Tester: **James Winder**

Unit No: **36**

Interval: **3640.00 ft (KB) To 3730.00 ft (KB) (TVD)**

Total Depth: **3730.00 ft (KB) (TVD)**

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

Reference Elevations: **2603.00 ft (KB)**

2598.00 ft (CF)

KB to GR/CF: **5.00 ft**

Serial #: 8366 **Inside**

Press@RunDepth: **196.28 psig @ 3641.00 ft (KB)**

Start Date: **2009.07.15**

End Date: **2009.07.15**

Capacity: **7000.00 psig**

Last Calib.: **2009.07.15**

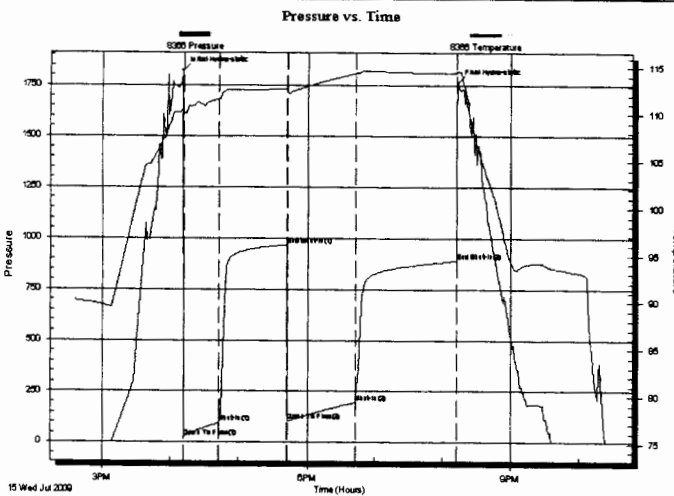
Start Time: **14:36:05**

End Time: **22:22:59**

Time On Btm: **2009.07.15 @ 16:11:30**

Time Off Btm: **2009.07.15 @ 20:13:00**

TEST COMMENT: IF: 1" blow @ open, built to 10"
IS: Bled off, Weak surface blow back, dead in 11 min.
FF: Blow built to BOB in 42 min.
FSI: Bled off, Blow back built to 1 1/8"



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1822.09	110.41	Initial Hydro-static
1	26.87	110.06	Open To Flow (1)
32	95.60	111.62	Shut-In (1)
91	967.41	112.69	End Shut-In (1)
92	106.61	112.30	Open To Flow (2)
151	196.28	114.37	Shut-In (2)
241	890.78	114.40	End Shut-In (2)
242	1764.04	114.55	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
120.00	SO/MCW 78%W, 20%M, 2%O	0.59
120.00	GOWCM 61%M, 16%W, 13%G, 10%O	0.59
80.00	GOCM 53%M, 37%O, 10%G	0.39
45.00	MCO 79%O, 19%M, 2%G	0.22
45.00	OIL 98%O, 2%M	0.22
0.00	GIP = 200'	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 Co., Inc.

250 N. Water
Suite 300
Wichita, KS 67202
ATTN: Paul Gunzelman

Carter Brown Unit #2-21

21 3s 27w Decatur KS

Job Ticket: 34506 **DST#: 4**

Test Start: 2009.07.15 @ 14:36:00

Tool Information

Drill Pipe:	Length: 3102.00 ft	Diameter: 3.80 inches	Volume: 43.51 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: 547.00 ft	Diameter: 2.25 inches	Volume: 2.69 bbl	Weight to Pull Loose:	90000.00 lb
		Total Volume:	46.20 bbl	Tool Chased	1.00 ft
Drill Pipe Above KB:	32.00 ft			String Weight: Initial	70000.00 lb
Depth to Top Packer:	3640.00 ft			Final	74000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	90.00 ft				
Tool Length:	113.00 ft				
Number of Packers:	2	Diameter:	6.75 inches		

Tool Comments:

Tool slid about 14' to before open & chased 1' @ open

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
S.I. Tool	5.00			3622.00	
HYD S.I. Tool	5.00			3627.00	
Safety Joint	3.00			3630.00	
Packer	5.00			3635.00	23.00 Bottom Of Top Packer
Packer	5.00			3640.00	
Stubb	1.00			3641.00	
Recorder	0.00	8366	Inside	3641.00	
Recorder	0.00	8320	Inside	3641.00	
Perforations	20.00			3661.00	
Blank Spacing	64.00			3725.00	
Perforations	2.00			3727.00	
Bullnose	3.00			3730.00	90.00 Bottom Packers & Anchor

Total Tool Length: 113.00



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling Co., Inc.

Carter Brown Unit #2-21

250 N. Water
Suite 300
Wichita, KS 67202
ATTN: Paul Gunzelman

21 3s 27w Decatur KS

Job Ticket: 34506

DST#: 4

Test Start: 2009.07.15 @ 14:36:00

Mud and Cushion Information

Mud Type: Gel Chem

Mud Weight: 9.00 lb/gal

Viscosity: 54.00 sec/qt

Water Loss: 5.97 in³

Resistivity: ohm.m

Salinity: 1800.00 ppm

Filter Cake: 2.00 inches

Cushion Type:

Cushion Length:

Cushion Volume:

Gas Cushion Type:

Gas Cushion Pressure:

ft

bbl

psig

Oil API:

34.6 deg API

Water Salinity:

41000 ppm

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
120.00	SO/MCW 78%W, 20%M, 2%O	0.590
120.00	GOWCM 61%M, 16%W, 13%G, 10%O	0.590
80.00	GOCM 53%M, 37%O, 10%G	0.393
45.00	MCO 79%O, 19%M, 2%G	0.221
45.00	OIL 98%O, 2%M	0.221
0.00	GIP = 200'	0.000

Total Length: 410.00 ft Total Volume: 2.015 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: Gravity = 35.8 api @ 72 deg F

Corrected Gravity = 34.6 api

Pressure vs. Time

