



DRILL STEM TEST REPORT

Prepared For: **Murfin Drilling Co Inc**

250 N Water Ste 300
Wichita KS 67202-1216

ATTN: Paul Gunzelman

Haneke Inv # 1-18

18 11s 20w Ellis,KS

Start Date: 2012.11.05 @ 20:10:00

End Date: 2012.11.06 @ 02:47:00

Job Ticket #: 48642 DST #: 1

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Printed: 2012.11.19 @ 14:01:47



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Murfin Drilling Co Inc
 250 N Water Ste 300
 Wichita KS 67202-1216
 ATTN: Paul Gunzelman

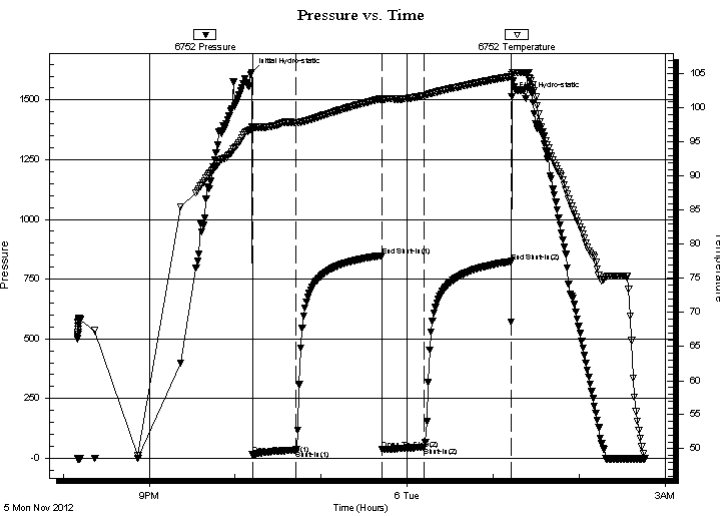
18 11s 20w Ellis,KS
Haneke Inv # 1-18
 Job Ticket: 48642 **DST#: 1**
 Test Start: 2012.11.05 @ 20:10:00

GENERAL INFORMATION:

Formation: **Oread**
 Deviated: No Whipstock: 2140.00 ft (KB)
 Time Tool Opened: 22:12:00
 Time Test Ended: 02:47:00
 Interval: **3336.00 ft (KB) To 3370.00 ft (KB) (TVD)**
 Total Depth: 3370.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Fair
 Test Type: Conventional Bottom Hole (Initial)
 Tester: Jim Svaty
 Unit No: 41
 Reference Elevations: 2140.00 ft (KB)
 2135.00 ft (CF)
 KB to GR/CF: 5.00 ft

Serial #: 6752 Inside
 Press @ Run Depth: 47.23 psig @ 3337.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2012.11.05 End Date: 2012.11.06 Last Calib.: 2012.11.06
 Start Time: 20:10:01 End Time: 02:46:20 Time On Btm: 2012.11.05 @ 22:11:40
 Time Off Btm: 2012.11.06 @ 01:13:00

TEST COMMENT: 30-IFP- Weak Surface Blow in 15 min. Building to 1" Surging Blow
 60-ISIP- No Blow
 30-FFP- Weak Surface Blow in 11 min.
 60-FSIP- No Blow



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1615.70	97.25	Initial Hydro-static
1	15.09	97.08	Open To Flow (1)
31	34.23	97.80	Shut-In(1)
91	848.49	101.38	End Shut-In(1)
91	37.10	101.10	Open To Flow (2)
121	47.23	101.83	Shut-In(2)
181	823.81	104.63	End Shut-In(2)
182	1514.62	104.88	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
67.00	MCW 25% m 75% w	0.68

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 Ste 300
Wichita KS 67202-1216
ATTN: Paul Gunzelman

18 11s 20w Ellis,KS
Haneke Inv # 1-18
Job Ticket: 48642 **DST#: 1**
Test Start: 2012.11.05 @ 20:10:00

Tool Information

Drill Pipe:	Length: 3296.00 ft	Diameter: 3.80 inches	Volume: 46.23 bbl	Tool Weight:	2500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.75 inches	Volume: 0.00 bbl	Weight set on Packer:	25000.00 lb
Drill Collar:	Length: 29.00 ft	Diameter: 2.25 inches	Volume: 0.14 bbl	Weight to Pull Loose:	48000.00 lb
			<u>Total Volume: 46.37 bbl</u>	Tool Chased	0.00 ft
Drill Pipe Above KB:	12.00 ft			String Weight: Initial	46000.00 lb
Depth to Top Packer:	3336.00 ft			Final	46000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	34.00 ft				
Tool Length:	57.00 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			3318.00	
Hydraulic tool	5.00			3323.00	
Safety Joint	3.00			3326.00	
Packer	5.00			3331.00	23.00 Bottom Of Top Packer
Packer	5.00			3336.00	
Stubb	1.00			3337.00	
Recorder	0.00	6752	Inside	3337.00	
Recorder	0.00	6741	Outside	3337.00	
Perforations	30.00			3367.00	
Bullnose	3.00			3370.00	34.00 Bottom Packers & Anchor
Total Tool Length:	57.00				



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling Co Inc
250 N Water Ste 300
Wichita KS 67202-1216
ATTN: Paul Gunzelman

18 11s 20w Ellis,KS
Haneke Inv # 1-18
Job Ticket: 48642 **DST#: 1**
Test Start: 2012.11.05 @ 20:10:00

Mud and Cushion Information

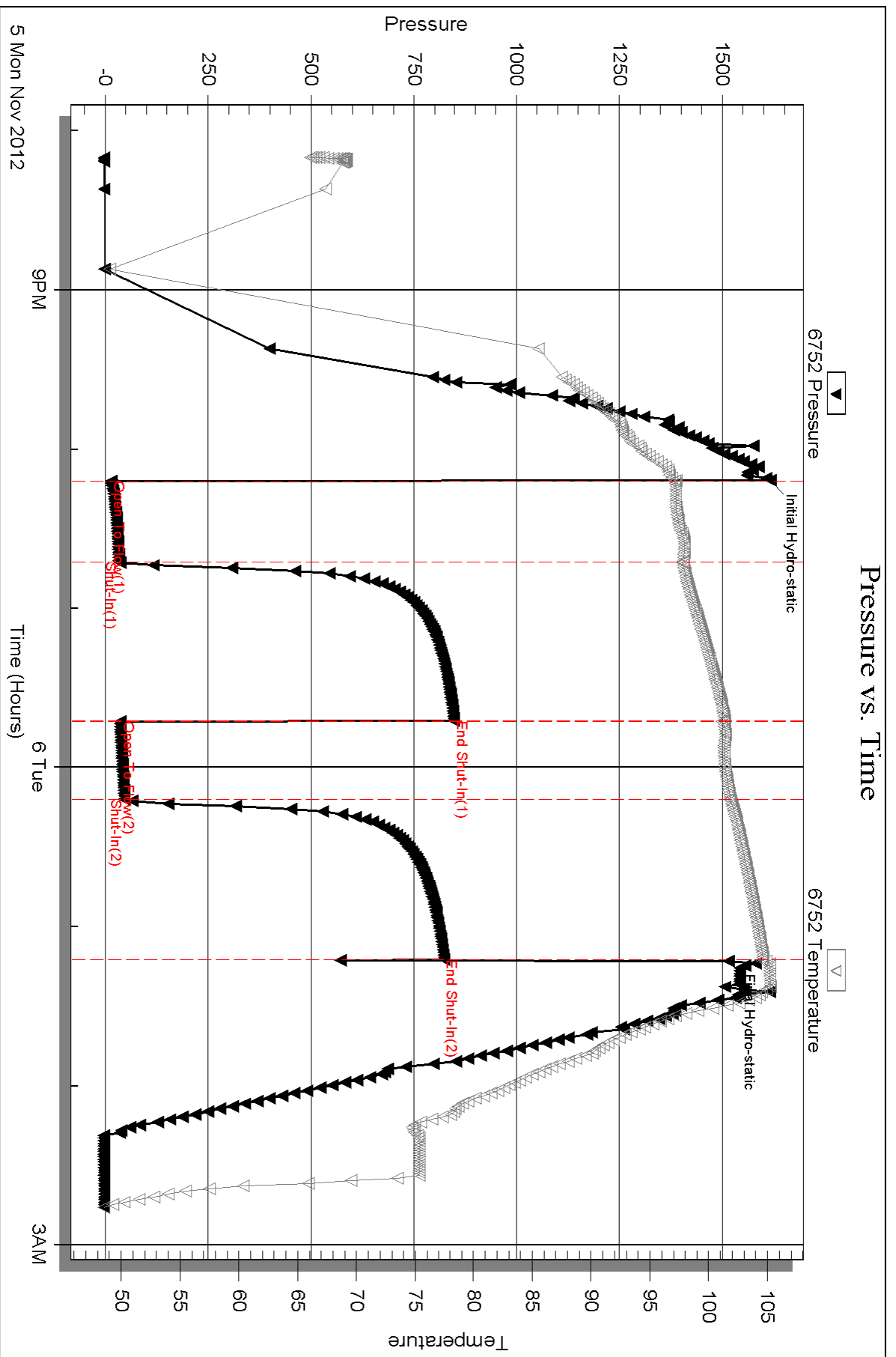
Mud Type: Gel Chem	Cushion Type:	Oil API:	deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity:	31000 ppm
Viscosity: 60.00 sec/qt	Cushion Volume: bbl		
Water Loss: 6.34 in ³	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 2500.00 ppm			
Filter Cake: inches			

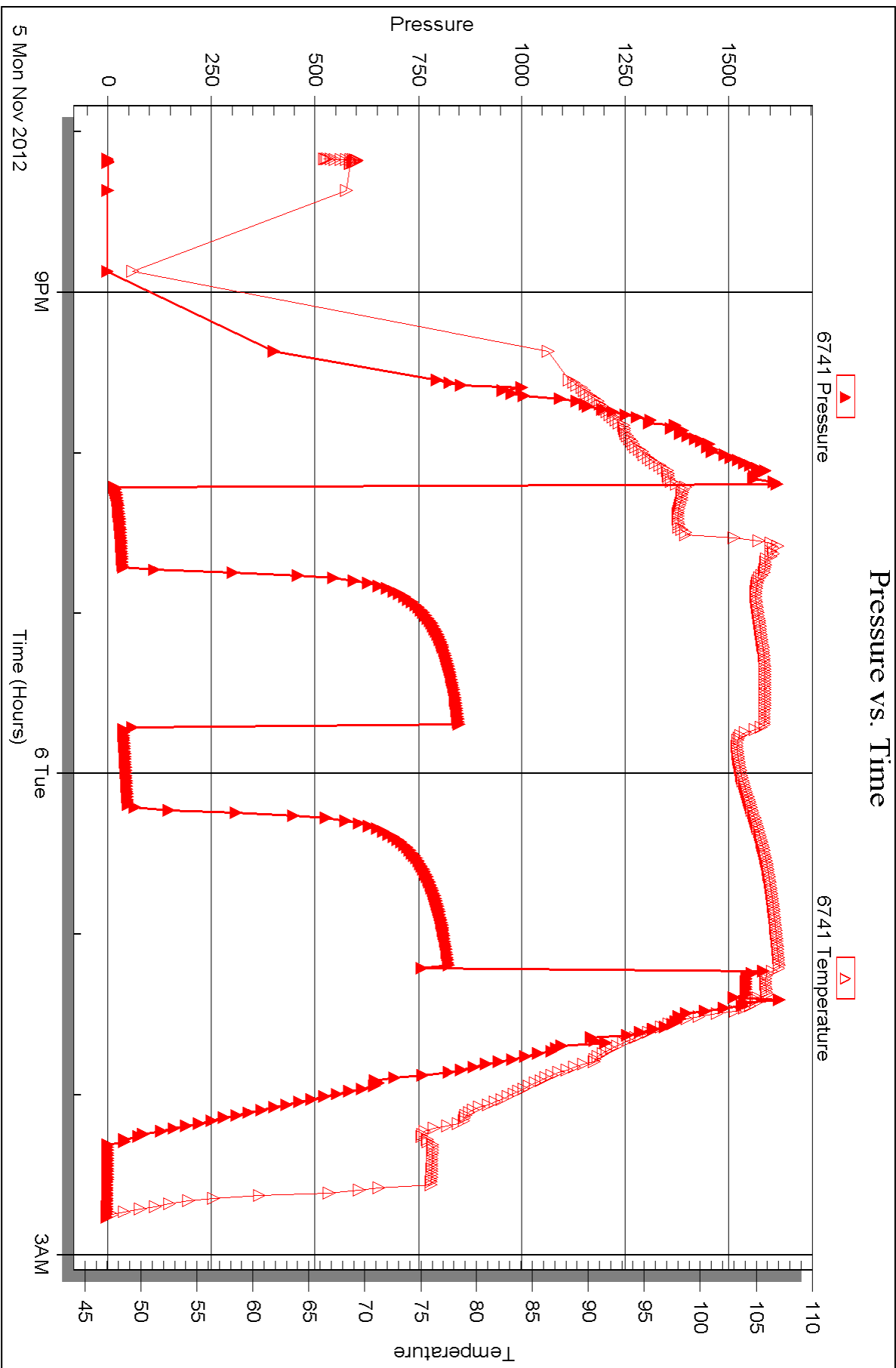
Recovery Information

Recovery Table

Length ft	Description	Volume bbl
67.00	MCW 25% m 75% w	0.676

Total Length: 67.00 ft Total Volume: 0.676 bbl
 Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
 Laboratory Name: Laboratory Location:
 Recovery Comments: .440 @ 44







DRILL STEM TEST REPORT

Prepared For: **Murfin Drilling Co Inc**

250 N Water Ste 300
Wichita KS 67202-1216

ATTN: Paul Gunzelman

Haneke Inv # 1-18

18 11s 20w Ellis,KS

Start Date: 2012.11.06 @ 15:45:00

End Date: 2012.11.06 @ 22:03:00

Job Ticket #: 48642 DST #: 2

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

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TESTING, INC.**

DRILL STEM TEST REPORT

Murfin Drilling Co Inc
250 N Water Ste 300
Wichita KS 67202-1216
ATTN: Paul Gunzelman

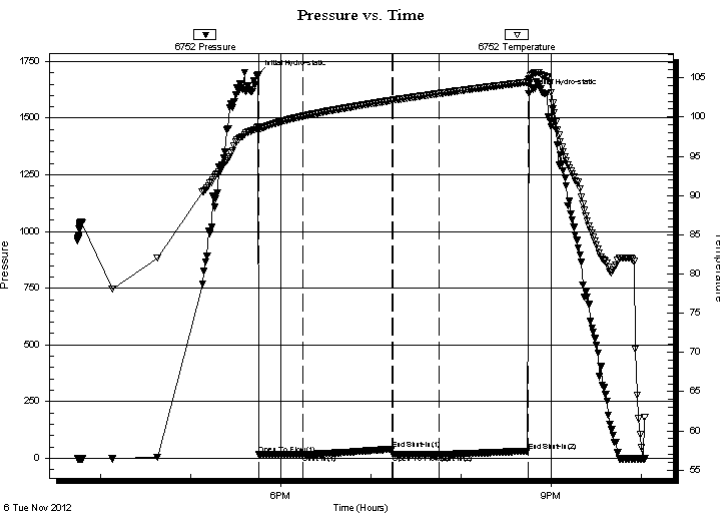
18 11s 20w Ellis,KS
Haneke Inv # 1-18
Job Ticket: 48642 **DST#: 2**
Test Start: 2012.11.06 @ 15:45:00

GENERAL INFORMATION:

Formation: **LKC " B-D "**
Deviated: No Whipstock: 2140.00 ft (KB)
Time Tool Opened: 17:45:20
Time Test Ended: 22:03:00
Interval: **3456.00 ft (KB) To 3501.00 ft (KB) (TVD)**
Total Depth: 3501.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair
Test Type: Conventional Bottom Hole (Reset)
Tester: Jim Svaty
Unit No: 41
Reference Elevations: 2140.00 ft (KB)
2135.00 ft (CF)
KB to GR/CF: 5.00 ft

Serial #: 6752 Inside
Press @ Run Depth: 16.68 psig @ 3457.00 ft (KB) Capacity: 8000.00 psig
Start Date: 2012.11.06 End Date: 2012.11.06 Last Calib.: 2012.11.06
Start Time: 15:45:01 End Time: 22:02:20 Time On Btm: 2012.11.06 @ 17:45:00
Time Off Btm: 2012.11.06 @ 20:45:20

TEST COMMENT: 30-IFP- Weak Surface Blow Died in 10 min.
60-ISIP- No Blow
30-FFP- No Blow
60-FSIP- No Blow



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1690.68	98.69	Initial Hydro-static
1	15.83	98.48	Open To Flow (1)
30	16.22	100.12	Shut-In(1)
89	41.13	102.12	End Shut-In(1)
90	16.19	102.14	Open To Flow (2)
120	16.68	102.98	Shut-In(2)
180	32.24	104.45	End Shut-In(2)
181	1608.22	104.82	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
1.00	MUD 100%	0.00

* Recovery from multiple tests

Gas Rates

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



**TRILOBITE
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DRILL STEM TEST REPORT

TOOL DIAGRAM

Murfin Drilling Co Inc
250 N Water Ste 300
Wichita KS 67202-1216
ATTN: Paul Gunzelman

18 11s 20w Ellis,KS
Haneke Inv # 1-18
Job Ticket: 48642 **DST#: 2**
Test Start: 2012.11.06 @ 15:45:00

Tool Information

Drill Pipe:	Length: 3424.00 ft	Diameter: 3.80 inches	Volume: 48.03 bbl	Tool Weight: 2500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.75 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 29.00 ft	Diameter: 2.25 inches	Volume: 0.14 bbl	Weight to Pull Loose: 50000.00 lb
			<u>Total Volume: 48.17 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	20.00 ft			String Weight: Initial 48000.00 lb
Depth to Top Packer:	3456.00 ft			Final 48000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	45.00 ft			
Tool Length:	68.00 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			3438.00	
Hydraulic tool	5.00			3443.00	
Safety Joint	3.00			3446.00	
Packer	5.00			3451.00	23.00 Bottom Of Top Packer
Packer	5.00			3456.00	
Stubb	1.00			3457.00	
Recorder	0.00	6752	Inside	3457.00	
Recorder	0.00	6741	Outside	3457.00	
Perforations	7.00			3464.00	
Change Over Sub	1.00			3465.00	
Blank Spacing	32.00			3497.00	
Change Over Sub	1.00			3498.00	
Bullnose	3.00			3501.00	45.00 Bottom Packers & Anchor

Total Tool Length: 68.00



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DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling Co Inc
250 N Water Ste 300
Wichita KS 67202-1216
ATTN: Paul Gunzelman

18 11s 20w Ellis,KS
Haneke Inv # 1-18
Job Ticket: 48642 **DST#: 2**
Test Start: 2012.11.06 @ 15:45:00

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: 52.00 sec/qt	Cushion Volume: bbl		
Water Loss: 7.14 in ³	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 4700.00 ppm			
Filter Cake: inches			

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
1.00	MUD 100%	0.005

Total Length: 1.00 ft Total Volume: 0.005 bbl
 Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
 Laboratory Name: Laboratory Location:
 Recovery Comments:

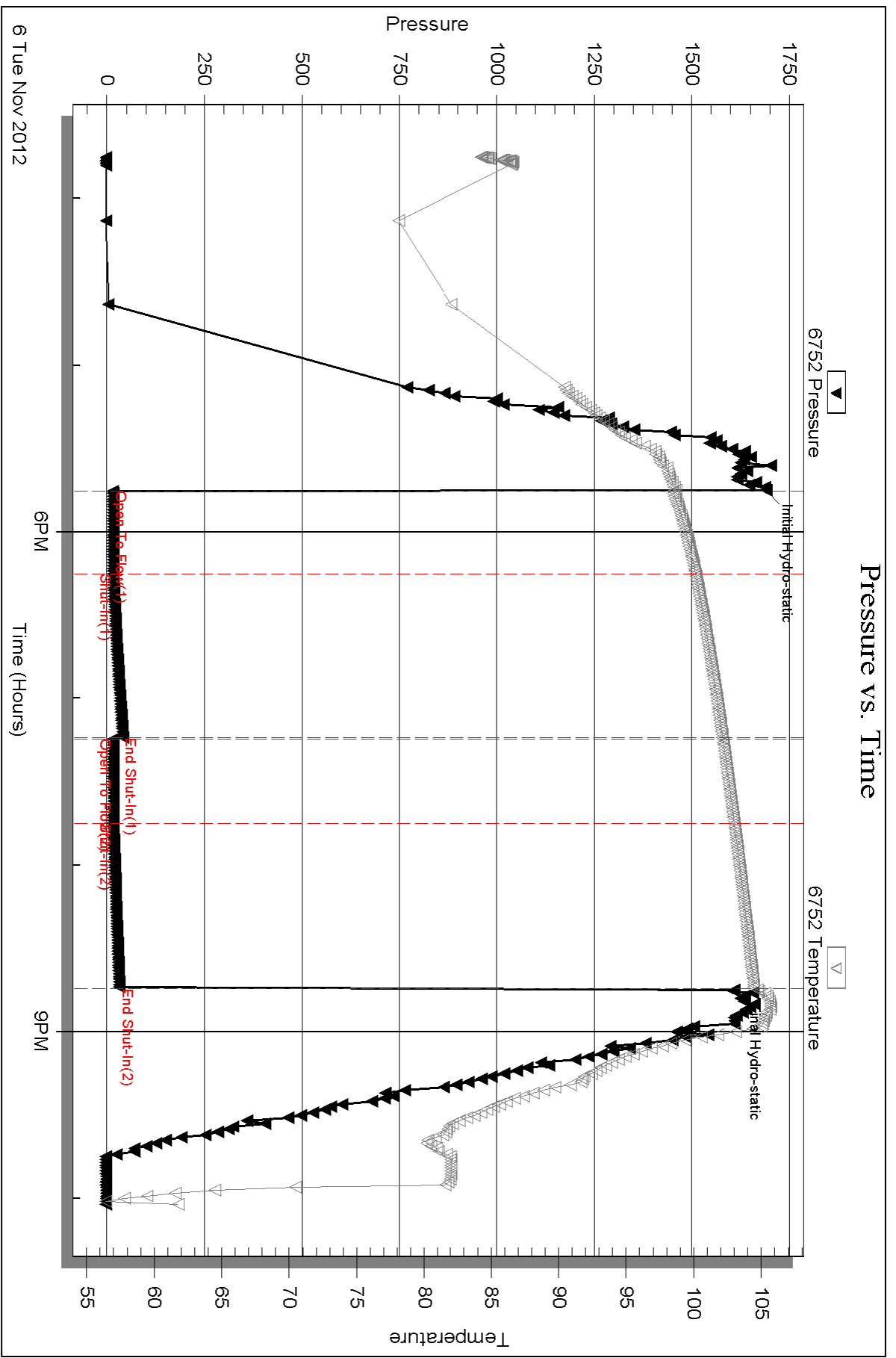
Serial #: 6752

Inside

Murfin Drilling Co Inc

Haneke Inv #1-18

DST Test Number: 2



Triobite Testing, Inc

Ref. No: 48642

Printed: 2012.11.19 @ 14:01:14



DRILL STEM TEST REPORT

Prepared For: **Murfin Drilling Co Inc**

250 N Water Ste 300
Wichita KS 67202-1216

ATTN: Paul Gunzelman

Haneke Inv # 1-18

18 11s 20w Ellis,KS

Start Date: 2012.11.07 @ 03:51:00

End Date: 2012.11.07 @ 10:22:00

Job Ticket #: 48644 DST #: 3

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Printed: 2012.11.19 @ 14:00:31



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Murfin Drilling Co Inc
250 N Water Ste 300
Wichita KS 67202-1216
ATTN: Paul Gunzelman

18 11s 20w Ellis,KS
Haneke Inv # 1-18
Job Ticket: 48644 **DST#: 3**
Test Start: 2012.11.07 @ 03:51:00

GENERAL INFORMATION:

Formation: **LKC " E & F "**
Deviated: No Whipstock: 2140.00 ft (KB)
Time Tool Opened: 06:05:00
Time Test Ended: 10:22:00
Interval: **3500.00 ft (KB) To 3523.00 ft (KB) (TVD)**
Total Depth: 3523.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair
Test Type: Conventional Bottom Hole (Reset)
Tester: Jim Svaty
Unit No: 41
Reference Elevations: 2140.00 ft (KB)
2135.00 ft (CF)
KB to GR/CF: 5.00 ft

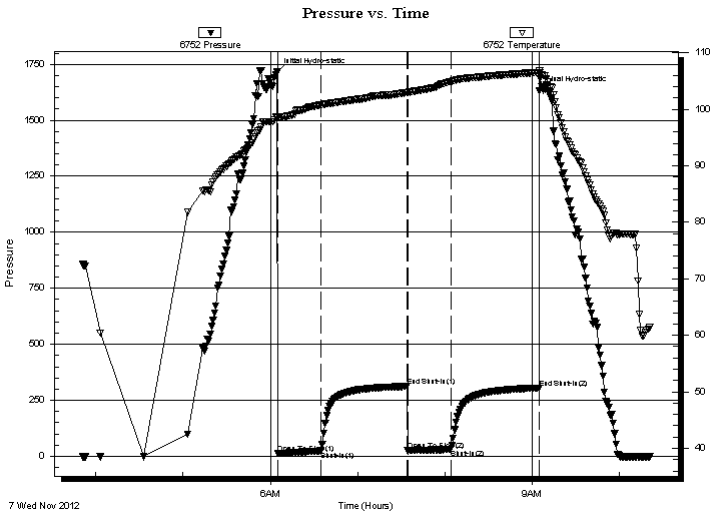
Serial #: 6752

Inside

Press @ RunDepth: 30.76 psig @ 3501.00 ft (KB)
Start Date: 2012.11.07 End Date: 2012.11.07
Start Time: 03:51:01 End Time: 10:21:20
Capacity: 8000.00 psig
Last Calib.: 2012.11.07
Time On Btm: 2012.11.07 @ 06:04:40
Time Off Btm: 2012.11.07 @ 09:05:00

TEST COMMENT: 30-IFP-Surface Blow Building to 1 3/4"
60-ISIP- No Blow
30-FFP- Surface Blow in 4 min.
60-FSIP- No Blow

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1714.49	98.66	Initial Hydro-static
1	12.06	98.49	Open To Flow (1)
30	23.82	100.80	Shut-In(1)
89	312.36	102.98	End Shut-In(1)
90	25.11	102.95	Open To Flow (2)
120	30.76	104.93	Shut-In(2)
180	305.45	106.57	End Shut-In(2)
181	1634.04	106.90	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
44.00	MUD 100%	0.35

* Recovery from multiple tests

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 Ste 300
Wichita KS 67202-1216
ATTN: Paul Gunzelman

18 11s 20w Ellis,KS
Haneke Inv # 1-18
Job Ticket: 48644 **DST#: 3**
Test Start: 2012.11.07 @ 03:51:00

Tool Information

Drill Pipe:	Length: 3455.00 ft	Diameter: 3.80 inches	Volume: 48.46 bbl	Tool Weight:	2500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.75 inches	Volume: 0.00 bbl	Weight set on Packer:	25000.00 lb
Drill Collar:	Length: 29.00 ft	Diameter: 2.25 inches	Volume: 0.14 bbl	Weight to Pull Loose:	50000.00 lb
			<u>Total Volume: 48.60 bbl</u>	Tool Chased	0.00 ft
Drill Pipe Above KB:	7.00 ft			String Weight: Initial	46000.00 lb
Depth to Top Packer:	3500.00 ft			Final	46000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	23.00 ft				
Tool Length:	46.00 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			3482.00	
Hydraulic tool	5.00			3487.00	
Safety Joint	3.00			3490.00	
Packer	5.00			3495.00	23.00 Bottom Of Top Packer
Packer	5.00			3500.00	
Stubb	1.00			3501.00	
Recorder	0.00	6752	Inside	3501.00	
Recorder	0.00	8322	Outside	3501.00	
Perforations	19.00			3520.00	
Bullnose	3.00			3523.00	23.00 Bottom Packers & Anchor
Total Tool Length:	46.00				



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling Co Inc
250 N Water Ste 300
Wichita KS 67202-1216
ATTN: Paul Gunzelman

18 11s 20w Ellis,KS
Haneke Inv # 1-18
Job Ticket: 48644 **DST#: 3**
Test Start: 2012.11.07 @ 03:51:00

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: 52.00 sec/qt	Cushion Volume: bbl		
Water Loss: 7.15 in ³	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 4700.00 ppm			
Filter Cake: inches			

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
44.00	MUD 100%	0.353

Total Length: 44.00 ft Total Volume: 0.353 bbl
Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
Laboratory Name: Laboratory Location:
Recovery Comments:

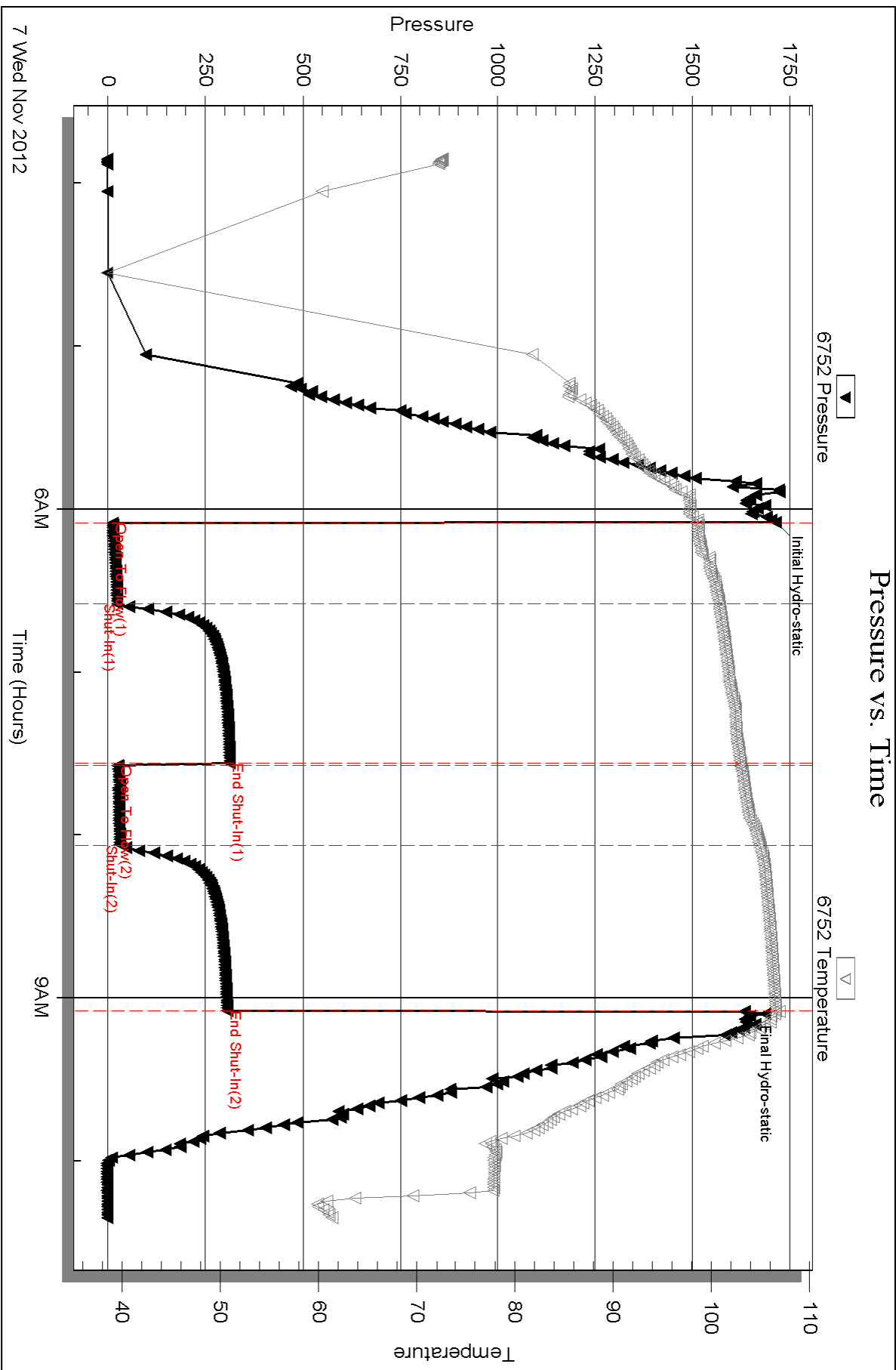
Serial #: 6752

Inside

Murfin Drilling Co Inc

Haneke Inv # 1-18

DST Test Number: 3

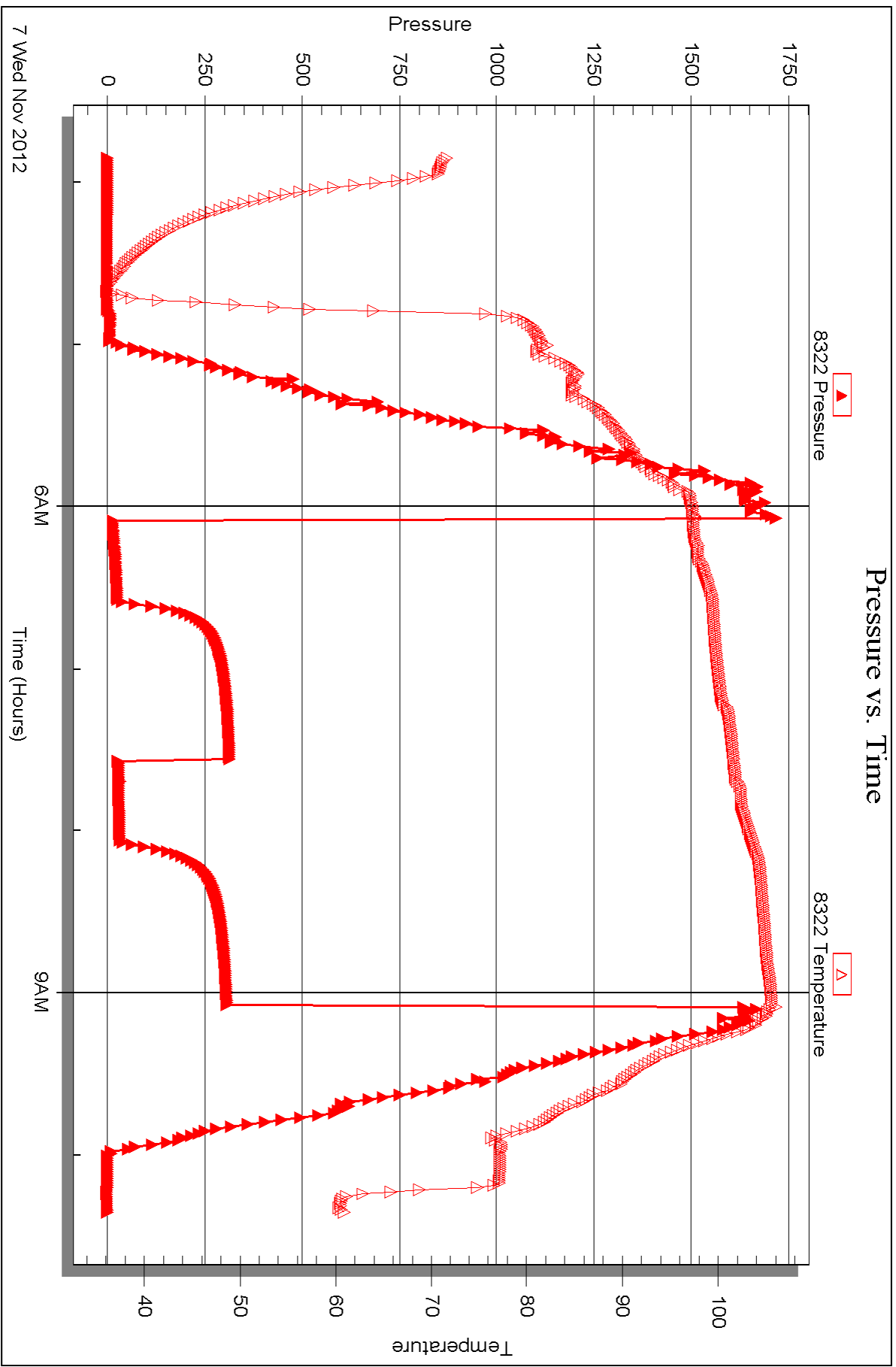


Serial #: 8322

Outside Murfin Drilling Co Inc

Haneke Inv # 1-18

DST Test Number: 3



Triobite Testing, Inc

Ref. No: 48644

Printed: 2012.11.19 @ 14:00:36



DRILL STEM TEST REPORT

Prepared For: **Murfin Drilling Co Inc**

250 N Water Ste 300
Wichita KS 67202-1216

ATTN: Paul Gunzelman

Haneke Inv # 1-18

18 11s 20w Ellis,KS

Start Date: 2012.11.07 @ 22:50:00

End Date: 2012.11.08 @ 06:51:00

Job Ticket #: 48645 DST #: 4

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

Printed: 2012.11.19 @ 13:59:45



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Murfin Drilling Co Inc
 250 N Water Ste 300
 Wichita KS 67202-1216
 ATTN: Paul Gunzelman

18 11s 20w Ellis, KS
Haneke Inv # 1-18
 Job Ticket: 48645 **DST#: 4**
 Test Start: 2012.11.07 @ 22:50:00

GENERAL INFORMATION:

Formation: **LKC " J & K "**
 Deviated: No Whipstock: 2140.00 ft (KB)
 Time Tool Opened: 01:07:20
 Time Test Ended: 06:51:00
 Interval: **3600.00 ft (KB) To 3640.00 ft (KB) (TVD)**
 Total Depth: 3640.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Fair
 Test Type: Conventional Bottom Hole (Reset)
 Tester: Jim Svaty
 Unit No: 41
 Reference Elevations: 2140.00 ft (KB)
 2135.00 ft (CF)
 KB to GR/CF: 5.00 ft

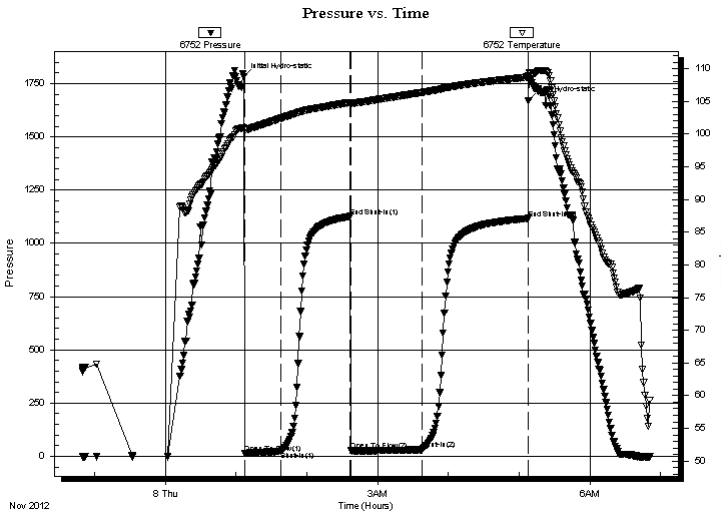
Serial #: 6752

Inside

Press @ Run Depth: 31.73 psig @ 3601.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2012.11.07 End Date: 2012.11.08 Last Calib.: 2012.11.08
 Start Time: 22:50:01 End Time: 06:51:00 Time On Btm: 2012.11.08 @ 01:07:00
 Time Off Btm: 2012.11.08 @ 05:08:00

TEST COMMENT: 30-IFP- Surface Blow Building to 1 1/4"
 60-ISIP- No Blow
 60-FFP- Surface Blow Building to 3 1/4"
 90-FSIP- No Blow

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1780.71	100.97	Initial Hydro-static
1	13.59	100.67	Open To Flow (1)
31	24.24	102.36	Shut-In(1)
90	1126.46	104.82	End Shut-In(1)
91	27.22	104.67	Open To Flow (2)
151	31.73	106.33	Shut-In(2)
241	1116.86	108.70	End Shut-In(2)
241	1668.88	108.85	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
10.00	OCM 20%o 80%m	0.05
40.00	CO 100%	0.39
0.00	70 GIP	0.00

* Recovery from multiple tests

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 Ste 300
Wichita KS 67202-1216
ATTN: Paul Gunzelman

18 11s 20w Ellis,KS
Haneke Inv # 1-18
Job Ticket: 48645 **DST#: 4**
Test Start: 2012.11.07 @ 22:50:00

Tool Information

Drill Pipe:	Length: 3582.00 ft	Diameter: 3.80 inches	Volume: 50.25 bbl	Tool Weight: 2500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.75 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 29.00 ft	Diameter: 2.25 inches	Volume: 0.14 bbl	Weight to Pull Loose: 52000.00 lb
			<u>Total Volume: 50.39 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	34.00 ft			String Weight: Initial 48000.00 lb
Depth to Top Packer:	3600.00 ft			Final 48000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	40.00 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
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Shut In Tool	5.00			3582.00	
Hydraulic tool	5.00			3587.00	
Safety Joint	3.00			3590.00	
Packer	5.00			3595.00	23.00 Bottom Of Top Packer
Packer	5.00			3600.00	
Stubb	1.00			3601.00	
Recorder	0.00	6752	Inside	3601.00	
Recorder	0.00	8322	Outside	3601.00	
Perforations	2.00			3603.00	
Change Over Sub	1.00			3604.00	
Blank Spacing	32.00			3636.00	
Change Over Sub	1.00			3637.00	
Bullnose	3.00			3640.00	40.00 Bottom Packers & Anchor

Total Tool Length: 63.00



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling Co Inc
250 N Water Ste 300
Wichita KS 67202-1216
ATTN: Paul Gunzelman

18 11s 20w Ellis,KS
Haneke Inv # 1-18
Job Ticket: 48645 **DST#: 4**
Test Start: 2012.11.07 @ 22:50:00

Mud and Cushion Information

Mud Type: Gel Chem	Cushion Type:	Oil API: 30 deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity: ppm
Viscosity: 56.00 sec/qt	Cushion Volume: bbl	
Water Loss: 6.77 in ³	Gas Cushion Type:	
Resistivity: ohm.m	Gas Cushion Pressure: psig	
Salinity: 4500.00 ppm		
Filter Cake: inches		

Recovery Information

Recovery Table

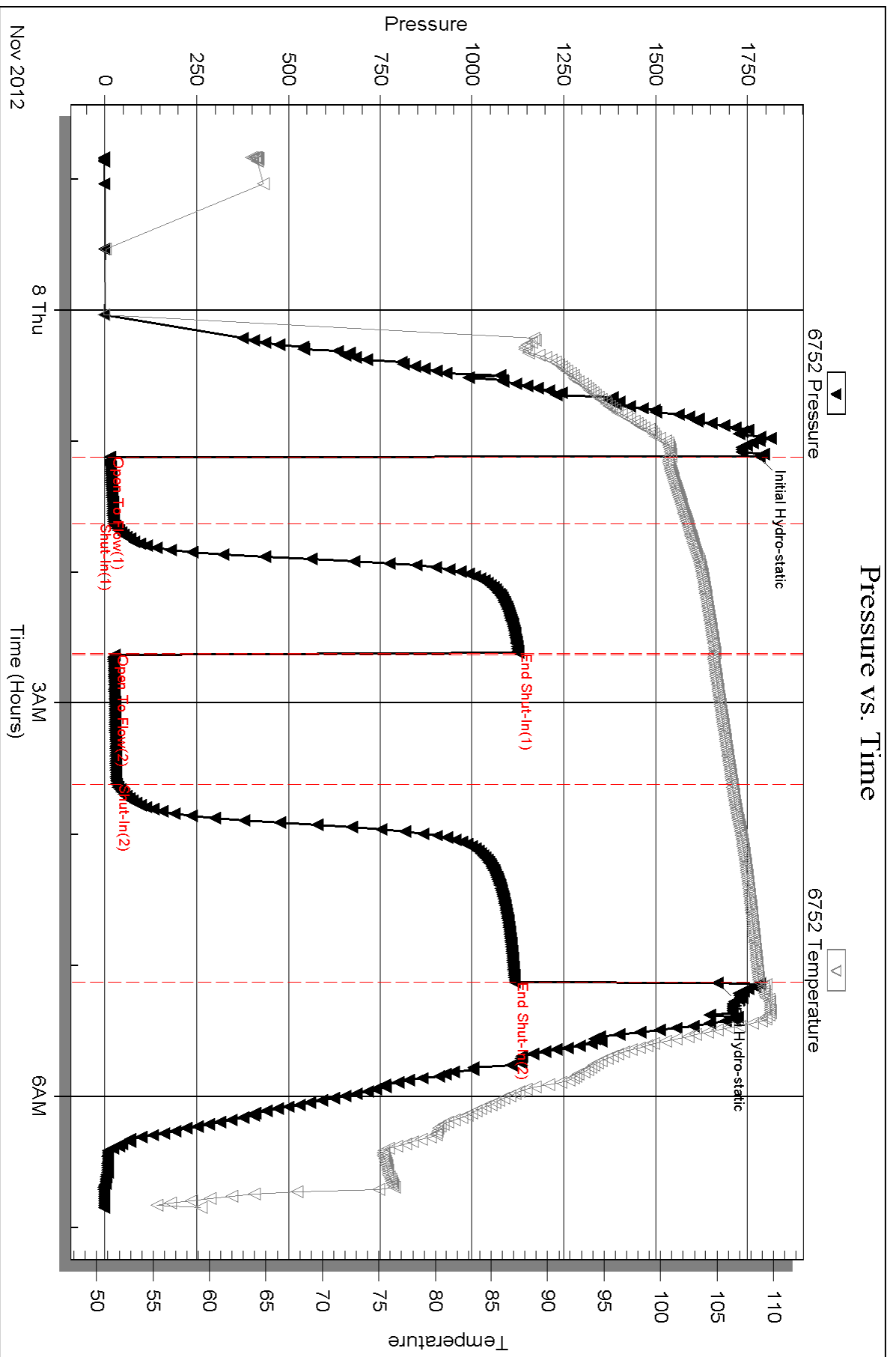
Length ft	Description	Volume bbl
10.00	OCM 20%o 80%m	0.049
40.00	CO 100%	0.388
0.00	70 GIP	0.000

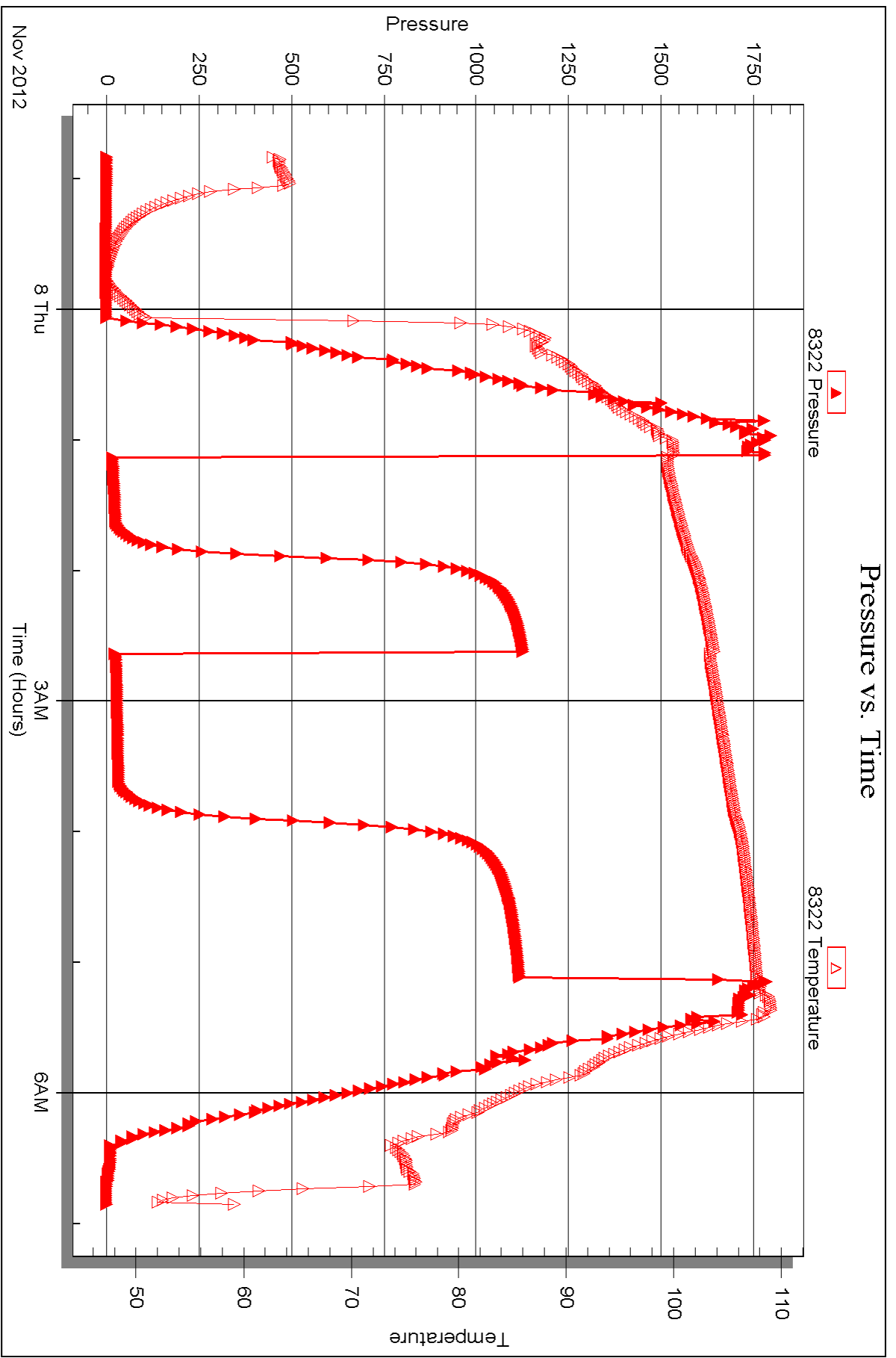
Total Length: 50.00 ft Total Volume: 0.437 bbl

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

Laboratory Name: Laboratory Location:

Recovery Comments:







DRILL STEM TEST REPORT

Prepared For: **Murfin Drilling Co Inc**

250 N Water Ste 300
Wichita KS 67202-1216

ATTN: Paul Gunzelman

Haneke Inv # 1-18

18 11s 20w Ellis,KS

Start Date: 2012.11.08 @ 17:36:00

End Date: 2012.11.08 @ 23:42:00

Job Ticket #: 48646 DST #: 5

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Printed: 2012.11.19 @ 13:58:58



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Murfin Drilling Co Inc
 250 N Water Ste 300
 Wichita KS 67202-1216
 ATTN: Paul Gunzelman

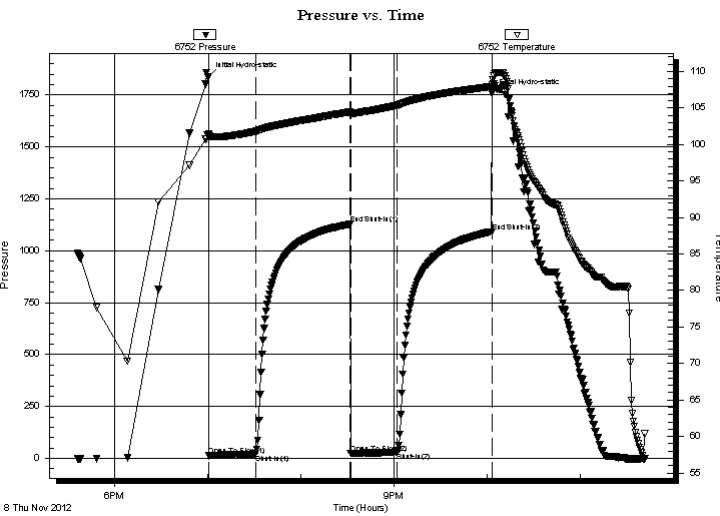
18 11s 20w Ellis, KS
Haneke Inv # 1-18
 Job Ticket: 48646 **DST#: 5**
 Test Start: 2012.11.08 @ 17:36:00

GENERAL INFORMATION:

Formation: **Arbuckle**
 Deviated: No Whipstock: 2140.00 ft (KB)
 Time Tool Opened: 19:00:40
 Time Test Ended: 23:42:00
 Interval: **3716.00 ft (KB) To 3754.00 ft (KB) (TVD)**
 Total Depth: 3754.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Fair
 Test Type: Conventional Bottom Hole (Reset)
 Tester: Jim Svaty
 Unit No: 41
 Reference Elevations: 2140.00 ft (KB)
 2135.00 ft (CF)
 KB to GR/CF: 5.00 ft

Serial #: 6752 Inside
 Press @ Run Depth: 28.36 psig @ 3718.50 ft (KB) Capacity: 8000.00 psig
 Start Date: 2012.11.08 End Date: 2012.11.08 Last Calib.: 2012.11.08
 Start Time: 17:36:01 End Time: 23:41:40 Time On Btm: 2012.11.08 @ 19:00:20
 Time Off Btm: 2012.11.08 @ 22:03:20

TEST COMMENT: 30-IFP- Surface Blow Building to 3/4"
 60-ISIP- No Blow
 30-FFP-Weak Surface Blow in 12 min.
 60-FSIP- No Blow



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1839.83	101.40	Initial Hydro-static
1	12.64	101.13	Open To Flow (1)
31	21.32	101.79	Shut-In(1)
92	1127.46	104.47	End Shut-In(1)
92	23.24	104.29	Open To Flow (2)
122	28.36	105.35	Shut-In(2)
183	1092.03	107.95	End Shut-In(2)
183	1757.58	108.14	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
32.00	MUD 100%	0.18

* Recovery from multiple tests

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 Ste 300
Wichita KS 67202-1216
ATTN: Paul Gunzelman

18 11s 20w Ellis,KS
Haneke Inv # 1-18
Job Ticket: 48646 **DST#: 5**
Test Start: 2012.11.08 @ 17:36:00

Tool Information

Drill Pipe:	Length: 3678.00 ft	Diameter: 3.80 inches	Volume: 51.59 bbl	Tool Weight: 2500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.75 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 29.00 ft	Diameter: 2.25 inches	Volume: 0.14 bbl	Weight to Pull Loose: 50000.00 lb
			<u>Total Volume: 51.73 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	14.00 ft			String Weight: Initial 50000.00 lb
Depth to Top Packer:	3716.00 ft			Final 50000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	38.00 ft			
Tool Length:	61.00 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			3698.00	
Hydraulic tool	5.00			3703.00	
Safety Joint	3.00			3706.00	
Packer	5.00			3711.00	23.00 Bottom Of Top Packer
Packer	5.00			3716.00	
Stubb	1.00			3717.00	
Perforations	1.00			3718.00	
Change Over Sub	0.50			3718.50	
Recorder	0.00	6752	Inside	3718.50	
Recorder	0.00	8322	Outside	3718.50	
Blank Spacing	32.00			3750.50	
Change Over Sub	0.50			3751.00	
Bullnose	3.00			3754.00	38.00 Bottom Packers & Anchor

Total Tool Length: 61.00



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling Co Inc
250 N Water Ste 300
Wichita KS 67202-1216
ATTN: Paul Gunzelman

18 11s 20w Ellis,KS
Haneke Inv # 1-18
Job Ticket: 48646 **DST#: 5**
Test Start: 2012.11.08 @ 17:36:00

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: 54.00 sec/qt	Cushion Volume: bbl		
Water Loss: 6.78 in ³	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 6900.00 ppm			
Filter Cake: 1.00 inches			

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
32.00	MUD 100%	0.185

Total Length: 32.00 ft Total Volume: 0.185 bbl
Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
Laboratory Name: Laboratory Location:
Recovery Comments:

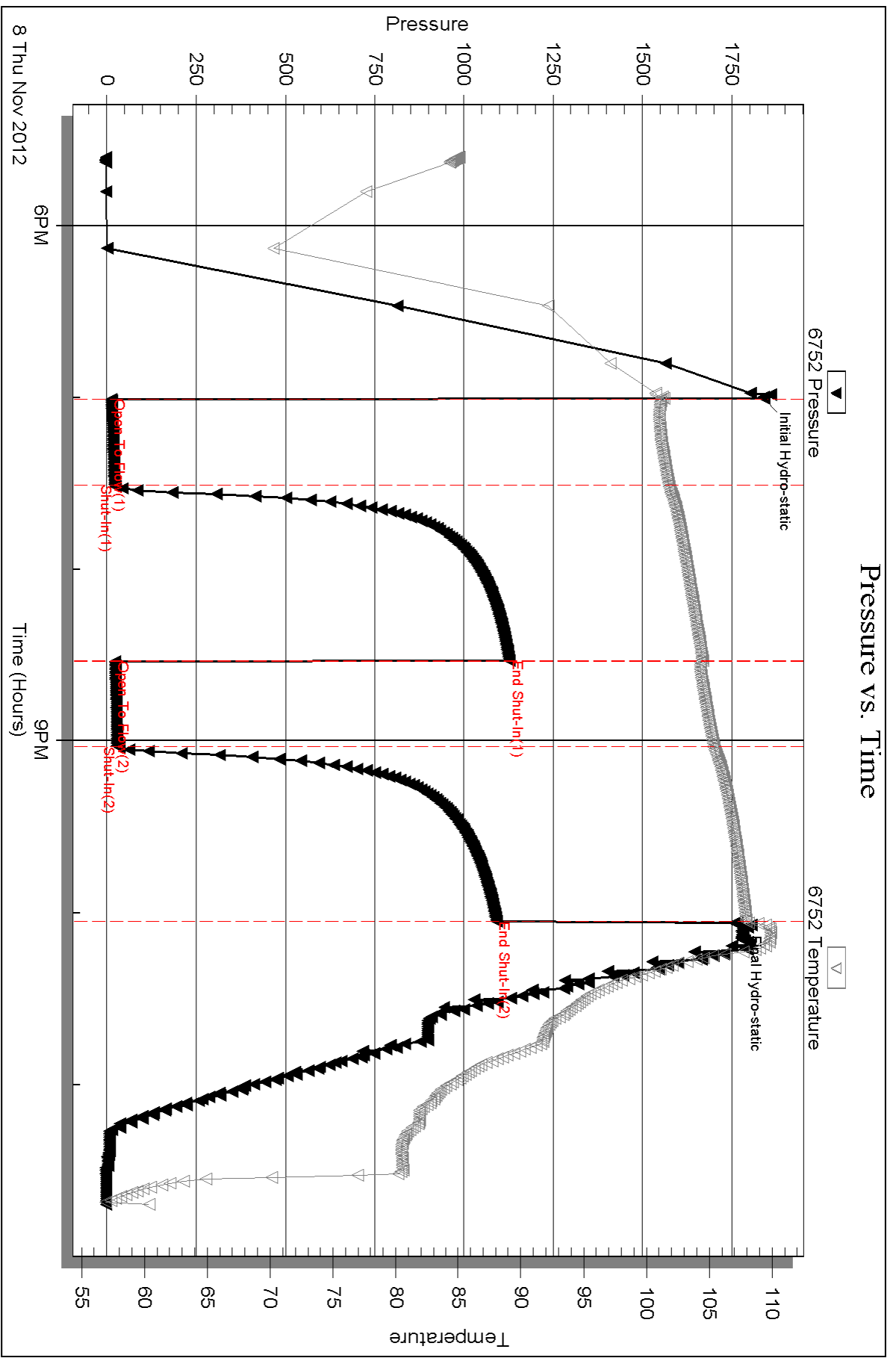
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Inside

Murfin Drilling Co Inc

Haneke Inv # 1-18

DST Test Number: 5



Triobite Testing, Inc

Ref. No: 48646

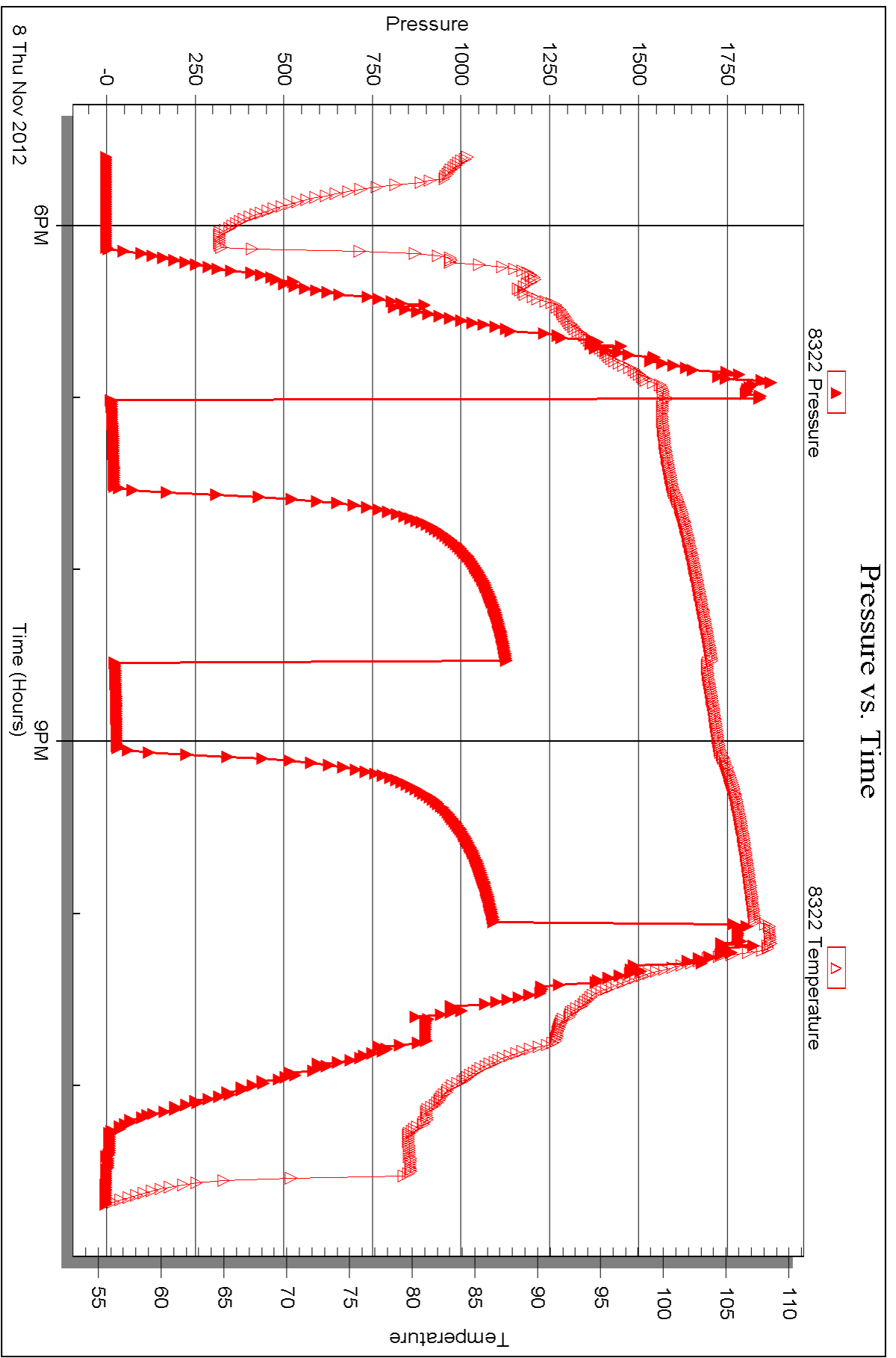
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Serial #: 8322

Outside Murfin Drilling Co Inc

Haneke Inv # 1-18

DST Test Number: 5



Triobite Testing, Inc

Ref. No: 48646

Printed: 2012.11.19 @ 13:59:04



DRILL STEM TEST REPORT

Prepared For: **Murfin Drilling Co Inc**

250 N Water Ste 300
Wichita KS 67202-1216

ATTN: Paul Gunzelman

Haneke Inv # 1-18

18 11s 20w Ellis,KS

Start Date: 2012.11.09 @ 04:54:00

End Date: 2012.11.09 @ 11:44:00

Job Ticket #: 48647 DST #: 6

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Printed: 2012.11.19 @ 13:57:06



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Murfin Drilling Co Inc
 250 N Water Ste 300
 Wichita KS 67202-1216
 ATTN: Paul Gunzelman

18 11s 20w Ellis,KS
Haneke Inv # 1-18
 Job Ticket: 48647 **DST#: 6**
 Test Start: 2012.11.09 @ 04:54:00

GENERAL INFORMATION:

Formation: **Arbuckle**
 Deviated: No Whipstock: 2140.00 ft (KB)
 Time Tool Opened: 07:06:40
 Time Test Ended: 11:44:00
 Interval: **3754.00 ft (KB) To 3764.00 ft (KB) (TVD)**
 Total Depth: 3764.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Fair
 Test Type: Conventional Bottom Hole (Reset)
 Tester: Jim Svaty
 Unit No: 41
 Reference Elevations: 2140.00 ft (KB)
 2135.00 ft (CF)
 KB to GR/CF: 5.00 ft

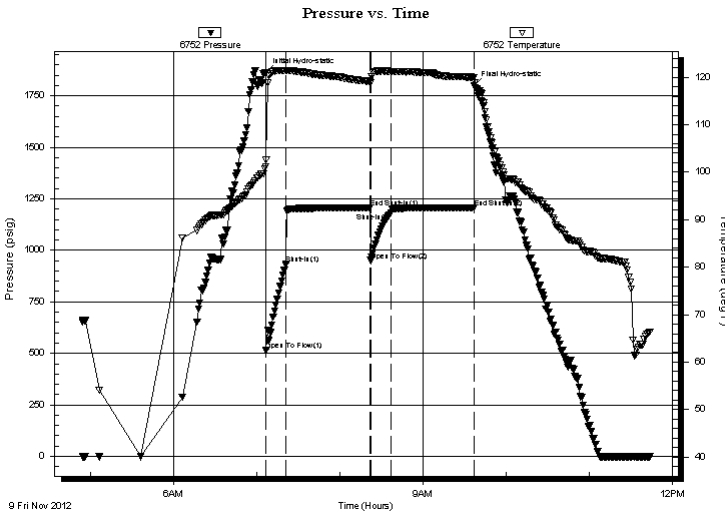
Serial #: 6752

Inside

Press @ Run Depth: 1182.94 psig @ 3755.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2012.11.09 End Date: 2012.11.09 Last Calib.: 2012.11.09
 Start Time: 04:54:01 End Time: 11:44:00 Time On Btm: 2012.11.09 @ 07:06:20
 Time Off Btm: 2012.11.09 @ 09:37:00

TEST COMMENT: 15-IFP- BOB in 30 sec.
 60-ISIP- No Blow
 15-FFP- BOB in 30 sec.
 60-FSIP- No Blow

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1860.75	101.09	Initial Hydro-static
1	516.07	102.61	Open To Flow (1)
15	934.95	121.42	Shut-In(1)
76	1205.97	119.15	End Shut-In(1)
76	950.90	118.93	Open To Flow (2)
91	1182.94	121.22	Shut-In(2)
151	1205.99	120.00	End Shut-In(2)
151	1798.53	119.90	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
310.00	WATER 100%	4.08
1996.00	MCW 7% _m 93% _w	28.00
315.00	WCM 35% _w 65% _m	4.42

* Recovery from multiple tests

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 Ste 300
Wichita KS 67202-1216
ATTN: Paul Gunzelman

18 11s 20w Ellis,KS
Haneke Inv # 1-18
Job Ticket: 48647 **DST#: 6**
Test Start: 2012.11.09 @ 04:54:00

Tool Information

Drill Pipe:	Length: 3708.00 ft	Diameter: 3.80 inches	Volume: 52.01 bbl	Tool Weight: 2500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.75 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 29.00 ft	Diameter: 2.25 inches	Volume: 0.14 bbl	Weight to Pull Loose: 60000.00 lb
			<u>Total Volume: 52.15 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	6.00 ft			String Weight: Initial 49000.00 lb
Depth to Top Packer:	3754.00 ft			Final 60000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	10.00 ft			
Tool Length:	33.00 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			3736.00	
Hydraulic tool	5.00			3741.00	
Safety Joint	3.00			3744.00	
Packer	5.00			3749.00	23.00 Bottom Of Top Packer
Packer	5.00			3754.00	
Stubb	1.00			3755.00	
Recorder	0.00	6752	Inside	3755.00	
Recorder	0.00	8322	Outside	3755.00	
Perforations	6.00			3761.00	
Bullnose	3.00			3764.00	10.00 Bottom Packers & Anchor
Total Tool Length:	33.00				



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling Co Inc
250 N Water Ste 300
Wichita KS 67202-1216
ATTN: Paul Gunzelman

18 11s 20w Ellis,KS
Haneke Inv # 1-18
Job Ticket: 48647 **DST#: 6**
Test Start: 2012.11.09 @ 04:54:00

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:	25000 ppm
Viscosity: 54.00 sec/qt	Cushion Volume: bbl		
Water Loss: 6.79 in ³	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 6900.00 ppm			
Filter Cake: 1.00 inches			

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
310.00	WATER 100%	4.084
1996.00	MCW 7%m 93%w	27.999
315.00	WCM 35%w 65%m	4.419

Total Length: 2621.00 ft Total Volume: 36.502 bbl
Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
Laboratory Name: Laboratory Location:
Recovery Comments: .342 @ 55

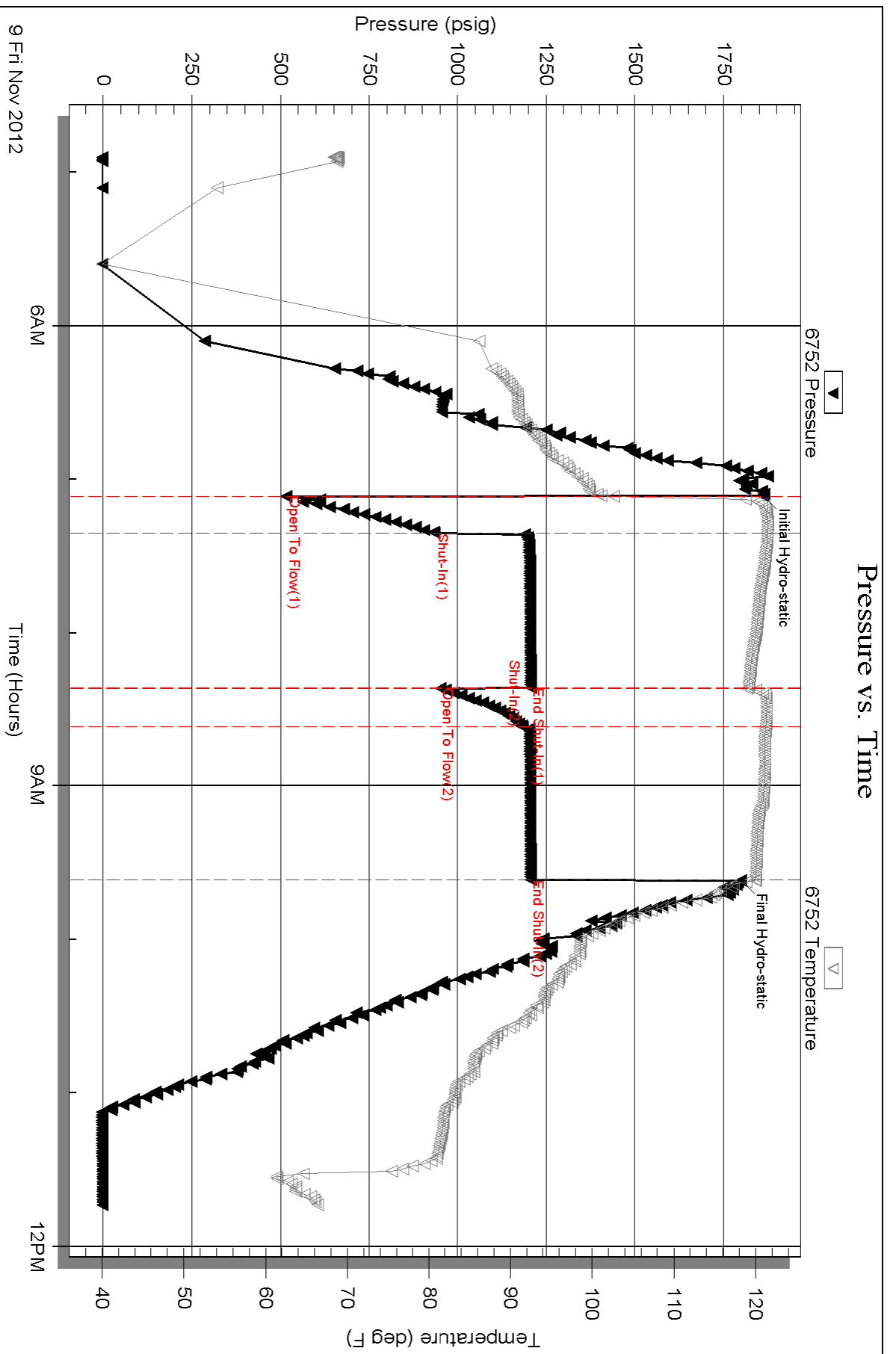
Serial #: 6752

Inside

Murfin Drilling Co Inc

Haneke Inv #1-18

DST Test Number: 6

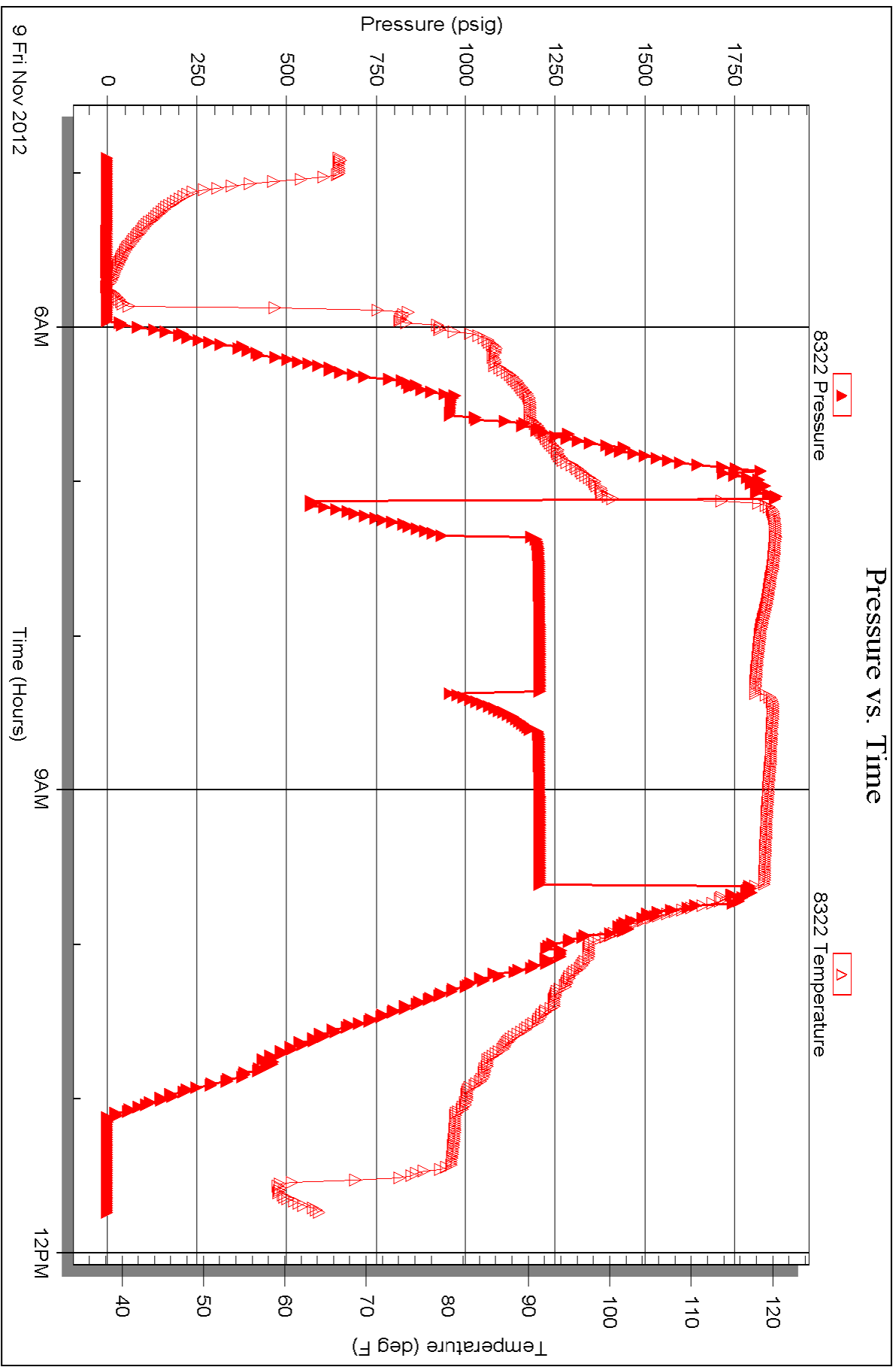


Serial #: 8322

Outside Murfin Drilling Co Inc

Haneke Inv # 1-18

DST Test Number: 6





TRILOBITE TESTING INC.

P.O. Box 1733 • Hays, Kansas 67601

Test Ticket

NO. 48642

4/10

Well Name & No. HANEKE INV. # 1-18 Test No. 1 Date 11-5-12
 Company Murfin Drilling Co. Inc. Elevation 2140 KB 2135 GL
 Address 250 N. Water Ste 300 Wichita KS 67202-1216
 Co. Rep / Geo. Paul Munzelman Rig Murfin #16
 Location: Sec. 18 Twp. 11^s Rge. 20^w Co. Ellis State Ks.

Interval Tested 3336-3370 Zone Tested Oread
 Anchor Length 34 Drill Pipe Run 3296 Mud Wt. 8.8
 Top Packer Depth 3331 Drill Collars Run 29 Vis 60
 Bottom Packer Depth 3336 Wt. Pipe Run 20 WL 6.4
 Total Depth 3370 Chlorides 2500 ppm System LCM 0.0

Blow Description IFP - Weak Surface Blow in 15 min. Build to lin. Surging Blow.
ISIP - No Blow
FFP - Weak Surface Blow in 11 min.
FSIP - No Blow

Rec	Feet of	%gas	%oil	%water	%mud
<u>67</u>	<u>MCW</u>		<u>75</u>	<u>25</u>	
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 67 BHT 104 Gravity API RW 1440 @ 44 ° F Chlorides 31000 ppm
 (A) Initial Hydrostatic 1615 Test 1150 T-On Location 18:29
 (B) First Initial Flow 15 Jars T-Started 20:10
 (C) First Final Flow 34 Safety Joint 75 T-Open 22:13
 (D) Initial Shut-In 848 Circ Sub T-Pulled 01:13
 (E) Second Initial Flow 37 Hourly Standby T-Out 02:47
 (F) Second Final Flow 47 Mileage 64 RT 99.20 Comments _____
 (G) Final Shut-In 823 Sampler _____
 (H) Final Hydrostatic 1514 Straddle _____
 Ruined Shale Packer _____
 Shale Packer _____
 Ruined Packer _____
 Extra Packer _____
 Extra Copies _____
 Extra Recorder _____
 Day Standby _____
 Accessibility _____
 Sub Total 1324.20 Sub Total 0
 Total 1324.20 MP/DST Disc't _____

Approved By _____ Our Representative [Signature]
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TRILOBITE TESTING INC.

P.O. Box 1733 • Hays, Kansas 67601

Test Ticket

NO. 48643

Well Name & No. HANEKE INV. # 1-18 Test No. 2 Date 11-6-12
 Company MURFIN DRILLING CO. INC. Elevation 2140 KB 2135 GL
 Address 250 N. WATER ST. STE 300 WICHITA KS. 67202-1216
 Co. Rep / Geo. PAUL GUNZELMAN Rig MURFIN #16
 Location: Sec. 18 Twp. 11^S Rge. 20^W Co. ELLIS State KS

Interval Tested 3456-3501 Zone Tested LKC "B-D"
 Anchor Length 45 Drill Pipe Run 3424 Mud Wt. 9.2
 Top Packer Depth 3451 Drill Collars Run 29 Vis 52
 Bottom Packer Depth 3456 Wt. Pipe Run 0 WL 7.2
 Total Depth 3501 Chlorides 4700 ppm System LCM 0.0

Blow Description IFP - WEAK SURFACE BLOW DIED IN 10 MIN
ISIP - No Blow
FFP - No Blow
F5IP - No Blow

Rec	Feet of	%gas	%oil	%water	%mud
<u>1</u>	<u>MUD</u>			<u>100</u>	
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

Rec Total 1 BHT 104 Gravity _____ API RW _____ @ _____ °F Chlorides _____ ppm

(A) Initial Hydrostatic 1690 Test 1150 T-On Location 15:43
 (B) First Initial Flow 15 Jars T-Started 15:45
 (C) First Final Flow 16 Safety Joint 75 T-Open 17:45
 (D) Initial Shut-In 41 Circ Sub T-Pulled 20:45
 (E) Second Initial Flow 16 Hourly Standby T-Out 22:03
 (F) Second Final Flow 16 Mileage 99.20 Comments _____
 (G) Final Shut-In 32 Sampler _____
 (H) Final Hydrostatic 1608 Straddle _____ Ruined Shale Packer _____
 Shale Packer _____ Ruined Packer _____
 Extra Packer _____ Extra Copies _____
 Extra Recorder _____ Sub Total 0
 Day Standby _____ Total 1324.20
 Accessibility _____ MP/DST Disc't _____
 Sub Total 1324.20

Approved By _____ Our Representative

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TRILOBITE TESTING INC.

P.O. Box 1733 • Hays, Kansas 67601

Test Ticket

NO. 48644

4/10

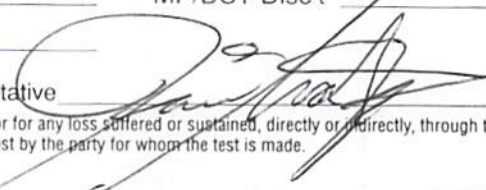
Well Name & No. HANEKE INV. #1-18 Test No. 3 Date 11-7-12
 Company MURFIN DRILLING CO. INC. Elevation 2140 KB 2135 GL
 Address 250 N. WATER ST. 300 WICHITA KS. 67202-1216
 Co. Rep / Geo. PAUL GUNZELMAN Rig MURFIN #16
 Location: Sec. 18 Twp. 11 S Rge. 20 W Co. ELLIS State KS

Interval Tested 3500-3523 Zone Tested LKC "E & F"
 Anchor Length 23 Drill Pipe Run 3455 Mud Wt. 9.2
 Top Packer Depth 3495 Drill Collars Run 29 Vis 52
 Bottom Packer Depth 3500 Wt. Pipe Run 0 WL 7.2
 Total Depth 3523 Chlorides 4700 ppm System LCM 0.0
 Blow Description IFP-SURFACE BLOW BUILDING TO 1 3/4 IN.
ISIP-NO BLOW
FFP-SURFACE BLOW IN 4 MIN
FSIP-NO BLOW

Rec	Feet of	%gas	%oil	%water	%mud
<u>44</u>	<u>MUD</u>			<u>100</u>	
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 44 BHT 72 Gravity _____ API RW _____ @ _____ °F Chlorides _____ ppm

(A) Initial Hydrostatic 1714 Test 1150 T-On Location 03:40
 (B) First Initial Flow 12 Jars T-Started 03:51
 (C) First Final Flow 23 Safety Joint 75 T-Open 06:05
 (D) Initial Shut-In 312 Circ Sub T-Pulled 09:05
 (E) Second Initial Flow 25 Hourly Standby T-Out 10:22
 (F) Second Final Flow 30 Mileage 99.20 Comments _____
 (G) Final Shut-In 305 Sampler _____
 (H) Final Hydrostatic 1634 Straddle _____
 Ruined Shale Packer
 Ruined Packer
 Extra Copies
 Initial Open 30 Shale Packer
 Initial Shut-In 60 Extra Packer
 Final Flow 30 Extra Recorder Sub Total 0
 Final Shut-In 60 Day Standby Total 1324.20
 Accessibility MP/DST Disc't _____
 Sub Total 1324.20

Approved By _____ Our Representative 

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TRILOBITE TESTING INC.

P.O. Box 1733 • Hays, Kansas 67601

Test Ticket

NO. 48645

4/10

Well Name & No. HANEKE INV. #1-18 Test No. 4 Date 11-7-12
 Company MURFIN DRILLING CO. INC. Elevation 2140 KB 2135 GL
 Address 250 N. WATER ST. 300 WICHITA KS. 67202-1216
 Co. Rep / Geo. PAUL MUNSZELMAN Rig MURFIN #16
 Location: Sec. 18 Twp. 11^S Rge. 20^W Co. ELLIS State KS

Interval Tested 3600 - 3640 Zone Tested LKC "J+K"
 Anchor Length 40 Drill Pipe Run 3582 Mud Wt. 9.1
 Top Packer Depth 3595 Drill Collars Run 29 Vis 56
 Bottom Packer Depth 3600 Wt. Pipe Run 0 WL 6.8
 Total Depth 3640 Chlorides 4500 ppm System LCM 0.0

Blow Description IFP - SURFACE BLOW BUILDING TO 1/4 IN.
ISIP - NO BLOW
FFP - SURFACE BLOW BUILDING TO 3/4 IN.
FSIP - NO BLOW

Rec	Feet of	%gas	%oil	%water	%mud
<u>10</u>	<u>OCM</u>	<u>20</u>		<u>80</u>	
<u>40</u>	<u>CO</u>	<u>100</u>			
	<u>70 - DIP</u>				

Rec Total 50 BHT 108 Gravity 30 API RW @ °F Chlorides ppm

(A) Initial Hydrostatic 1780 Test 1150 T-On Location 22:31
 (B) First Initial Flow 13 Jars T-Started 22:50
 (C) First Final Flow 24 Safety Joint 75 T-Open 1:08
 (D) Initial Shut-In 1126 Circ Sub T-Pulled 5:08
 (E) Second Initial Flow 27 Hourly Standby T-Out 6:51
 (F) Second Final Flow 31 Mileage 99.20 Comments
 (G) Final Shut-In 1116 Sampler
 (H) Final Hydrostatic 1668 Straddle Ruined Shale Packer

Initial Open 30 Shale Packer Ruined Packer
 Initial Shut-In 60 Extra Packer Extra Copies
 Final Flow 60 Extra Recorder Sub Total 0
 Final Shut-In 90 Day Standby Total 1324.20
 Accessibility MP/DST Disc't
 Sub Total 1324.20

Approved By _____ Our Representative [Signature]

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TRILOBITE TESTING INC.

P.O. Box 1733 • Hays, Kansas 67601

Test Ticket

NO. 48646

4/10

Well Name & No. HANEKE INV. #1-18 Test No. 5 Date 11-8-12
 Company MURFIN DRILLING CO. INC. Elevation 2140 KB 2135 GL
 Address 250 N. WATER ST. 300 WICHITA KS. 67202-1216
 Co. Rep / Geo. PAUL DUNZELMAN Rig MURFIN #16
 Location: Sec. 18 Twp. 11 S Rge. 20 W Co. ELLIS State KS

Interval Tested 3716 - 3754 Zone Tested Arbuckle
 Anchor Length 38 Drill Pipe Run 3678 Mud Wt. 9.1
 Top Packer Depth 3711 Drill Collars Run 29 Vis 54
 Bottom Packer Depth 3716 Wt. Pipe Run Ø WL 6.8
 Total Depth 3754 Chlorides 6900 ppm System LCM 1
 Blow Description IFP - SURFACE BLOW BUILDING TO 3/4 IN.
ISIP - NO BLOW
FFP - WEAK SURFACE BLOW IN 12 MIN.
FSIP - NO BLOW

Rec	Feet of	%gas	%oil	%water	%mud
<u>32</u>	<u>MUD</u>			<u>100</u>	
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

Rec Total 32 BHT 107 Gravity _____ API RW _____ @ _____ °F Chlorides _____ ppm

(A) Initial Hydrostatic 1839 Test 1150 T-On Location 17:05
 (B) First Initial Flow 12 Jars T-Started 17:36
 (C) First Final Flow 21 Safety Joint 75 T-Open 19:01
 (D) Initial Shut-In 1127 Circ Sub T-Pulled 22:01
 (E) Second Initial Flow 23 Hourly Standby T-Out 23:42
 (F) Second Final Flow 28 Mileage 99.20 Comments _____
 (G) Final Shut-In 1092 Sampler _____
 (H) Final Hydrostatic 1757 Straddle _____ Ruined Shale Packer _____
 Shale Packer _____ Ruined Packer _____
 Extra Packer _____ Extra Copies _____
 Initial Open 30 Extra Recorder _____ Sub Total 0
 Initial Shut-In 60 Day Standby _____ Total 1324.20
 Final Flow 30 Accessibility _____ MP/DST Disc't _____
 Final Shut-In 60 Sub Total 1324.20

Approved By _____ Our Representative [Signature]

Trilobite Testing Inc. shall not be liable for damaged of any kind of the property or personnel of the one for whom a test is made, or for any loss suffered or sustained, directly or indirectly, through the use of its equipment, or its statements or opinion concerning the results of any test, tools lost or damaged in the hole shall be paid for at cost by the party for whom the test is made.

