

**TRILOBITE
TESTING, INC.**

JAN 1 2005

CONFIDENTIAL

RELEASED

FROM CONFIDENTIAL

DRILL STEM TEST REPORT

Prepared For: **Sam Gary Jr. & Ass.**

1870 Broadway, Suite 3300
Denver Colo. 80202

15033214080000

ATTN: Tom Fertal

sec31twp33rge20w

Girk 1-31

Start Date: 2004.10.05 @ 15:35:01

End Date: 2004.10.06 @ 03:06:31

Job Ticket #: 18347

DST #: 1

**RECEIVED
KANSAS CORPORATION COMMISSION**

JAN 14 2005

**CONSERVATION DIVISION
WICHITA, KS**

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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


**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Sam Gary Jr. & Ass.

 1870 Broadway, Suite 3300
 Denver Colo. 80202

ATTN: Tom Fertal

Girk 1-31
sec31twp33rge20w

Job Ticket: 18347

DST#: 1

Test Start: 2004.10.05 @ 15:35:01

GENERAL INFORMATION:

 Formation: **Mississippi**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 19:22:01

Time Test Ended: 03:06:31

Test Type: Conventional Bottom Hole

Tester: Steve Clark

Unit No: #19

 Interval: **5184.00 ft (KB) To 5299.00 ft (KB) (TVD)**

Total Depth: 5299.00 ft (KB) (TVD)

Hole Diameter: 7.83 inches Hole Condition: Fair

Reference Elevations: 1784.00 ft (KB)

1771.00 ft (CF)

KB to GR/CF: 13.00 ft

Serial #: 6667 Inside

Press@RunDepth: 356.38 psig @ 5186.00 ft (KB)

Start Date: 2004.10.05

End Date:

2004.10.06

Start Time: 15:35:11

End Time:

03:06:30

Capacity: 7000.00 psig

Last Calib.: 2004.10.06

Time On Btm: 2004.10.05 @ 19:15:01

Time Off Btm: 2004.10.05 @ 23:04:31

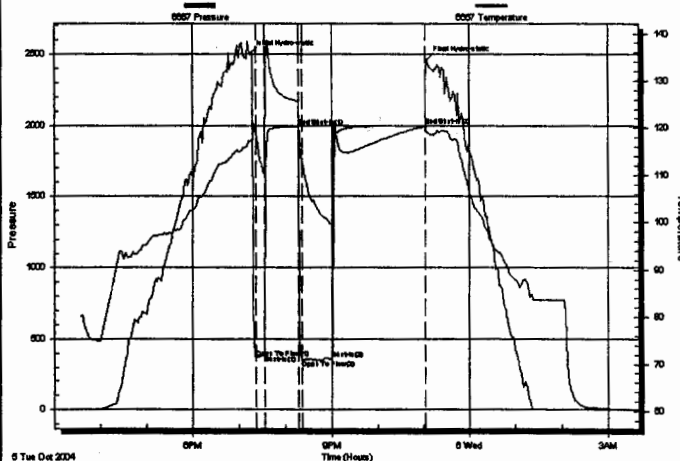
TEST COMMENT: IF-Strg blw 15sec, GTS 3min @ 14min 80#3/4"=1371.5

ISI-Blw died 15 min

FF-Strg blw 15 sec, 14min 95# 3/4"=1588.8 and stabilized

FSI-Blw died 15 min

Pressure vs. Time



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2500.64	117.25	Initial Hydro-static
7	361.87	118.58	Open To Flow (1)
18	384.14	111.25	Shut-In (1)
63	1991.12	125.76	End Shut-In (1)
67	350.37	112.66	Open To Flow (2)
106	356.38	99.23	Shut-In (2)
228	1995.59	120.40	End Shut-In (2)
230	2460.20	119.08	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
60.00	Drilling mud	0.84

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
First Gas Rate	0.75	50.00	1005.92
Last Gas Rate	0.75	95.00	1609.43
Max. Gas Rate	0.75	95.00	1609.43



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

TOOL DIAGRAM

Sam Gary Jr. & Ass.

Girk 1-31

1870 Broadway, Suite 3300
Denver Colo. 80202

sec31twp33rge20w

Job Ticket: 18347

DST#: 1

ATTN: Tom Fertal

Test Start: 2004.10.05 @ 15:35:01

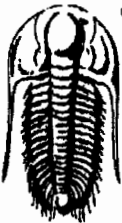
Tool Information

Drill Pipe:	Length: 5168.00 ft	Diameter: 3.80 inches	Volume: 72.49 bbl	Tool Weight:	2500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.70 inches	Volume: 0.00 bbl	Weight set on Packer:	25000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 2.25 inches	Volume: 0.00 bbl	Weight to Pull Loose:	71000.00 lb
			Total Volume: 72.49 bbl	Tool Chased	0.00 ft
Drill Pipe Above KB:	16.00 ft			String Weight: Initial	68000.00 lb
Depth to Top Packer:	5184.00 ft			Final	69000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	115.00 ft				
Tool Length:	147.00 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			5153.00	
Shut In Tool	5.00			5158.00	
Sampler	3.00			5161.00	
Hydraulic tool	5.00			5166.00	
Jars	5.00			5171.00	
Safety Joint	3.00			5174.00	
Packer	5.00			5179.00	32.00 Bottom Of Top Packer
Packer	5.00			5184.00	
Perforations	2.00			5186.00	
Recorder	0.00	6667	Inside	5186.00	
Perforations	13.00			5199.00	
Drill Pipe	96.00			5295.00	
Change Over Sub	1.00			5296.00	
Recorder	0.00	11019	Outside	5296.00	
Bullnose	3.00			5299.00	115.00 Bottom Packers & Anchor

Total Tool Length: 147.00

 TRILOBITE TESTING, INC.	DRILL STEM TEST REPORT		FLUID SUMMARY
	Sam Gary Jr. & Ass. 1870 Broadway, Suite 3300 Denver Colo. 80202 ATTN: Tom Fertal	Girk 1-31 sec31twp33rge20w Job Ticket: 18347 DST#: 1 Test Start: 2004.10.05 @ 15:35:01	

Mud and Cushion Information			
Mud Type: Gel Chem Mud Weight: 9.00 lb/gal Viscosity: 56.00 sec/qt Water Loss: 9.57 in ³ Resistivity: ohm.m Salinity: 3500.00 ppm Filter Cake: inches	Cushion Type: Cushion Length: ft Cushion Volume: bbl Gas Cushion Type: Gas Cushion Pressure: psig	Oil API: Water Salinity: ppm deg API	

Recovery Information		
Recovery Table		
Length ft	Description	Volume bbl
60.00	Drilling mud	0.842

Total Length:	60.00 ft	Total Volume:	0.842 bbl
Num Fluid Samples:	0	Num Gas Bombs:	0
Laboratory Name:		Serial #:	
Laboratory Location:			
Recovery Comments: Sampler had 60 psi no fluid			



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

GAS RATES

Sam Gary Jr. & Ass.

Girk 1-31

1870 Broadway, Suite 3300
Denver Colo. 80202

sec31twp33rge20w

Job Ticket: 18347

DST#: 1

ATTN: Tom Fertal

Test Start: 2004.10.05 @ 15:35:01

Gas Rates Information

Temperature: 125 deg C
Relative Density: 0.65
Z Factor: 0.8

Gas Rates Table

Flow Period	Elapsed Time	Choke (mm)	Pressure (kPaa)	Gas Rate (m ³ /d)
1	6	0.75	50.00	1005.92
1	6	0.75	50.00	947.42
1	8	0.75	60.00	1094.53
1	10	0.75	70.00	1241.64
1	12	0.75	80.00	1388.76
1	14	0.75	80.00	1388.76
2	3	0.75	50.00	947.42
2	5	0.75	70.00	1241.64
2	7	0.75	80.00	1388.76
2	9	0.75	85.00	1462.32
2	11	0.75	90.00	1535.87
2	14	0.75	95.00	1609.43
2	15	0.75	95.00	1609.43
2	17	0.75	95.00	1609.43
2	20	0.75	95.00	1609.43
2	25	0.75	95.00	1609.43
2	30	0.75	95.00	1609.43
2	35	0.75	95.00	1609.43
2	40	0.75	95.00	1609.43
1	45	0.75	95.00	1609.43

82746

DST Test Number: 1

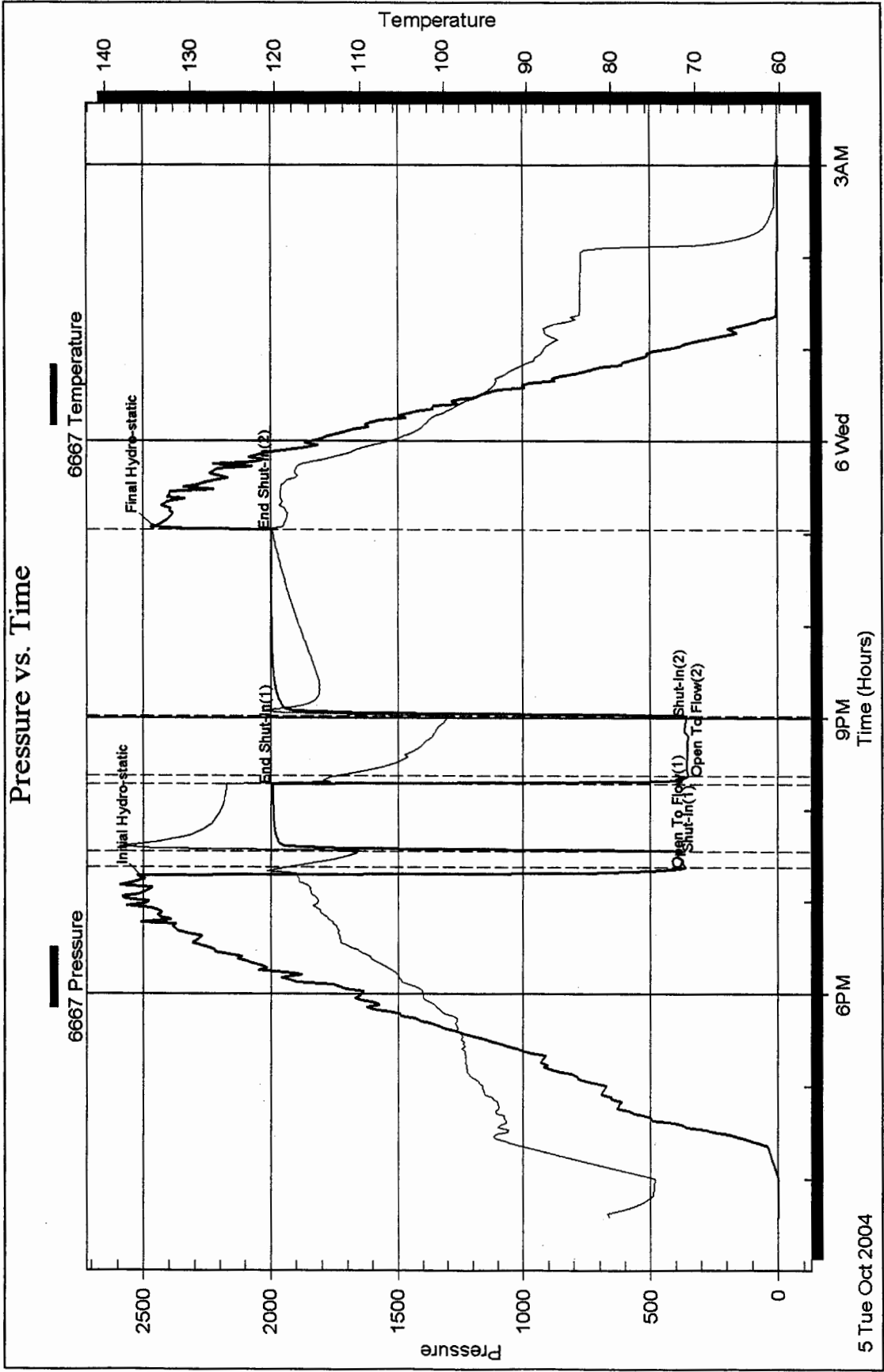
sec31lw p33rge20w

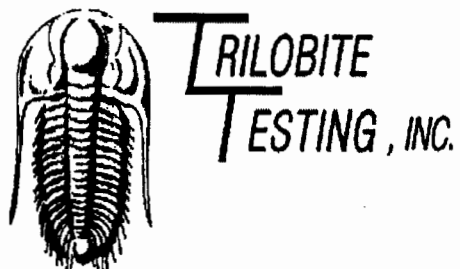
Sam Gary Jr. & Ass.

Inside

Serial #: 6667

Pressure vs. Time





DRILL STEM TEST REPORT

Prepared For: **Sam Gary Jr. & Ass.**

1870 Broadway, Suite 3300
Denver Colo. 80202

ATTN: Tom Fertal

sec31twp33rge20w

Girk 1-31

Start Date: 2004.10.12 @ 02:50:20

End Date: 2004.10.12 @ 15:10:35

Job Ticket #: 19256 DST #: 2

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

82746


**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Sam Gary Jr. & Ass.

 1870 Broadway, Suite 3300
 Denver Colo. 80202

ATTN: Tom Fertal

Girk 1-31
sec31twp33rge20w

Job Ticket: 19256

DST#: 2

Test Start: 2004.10.12 @ 02:50:20

GENERAL INFORMATION:

 Formation: **Arbuckle**

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

Time Tool Opened: 08:00:05

Time Test Ended: 15:10:35

 Test Type: **Conventional Bottom Hole**

 Tester: **Gary Pevoteaux**

 Unit No: **23**

 Interval: **6574.00 ft (KB) To 6610.00 ft (KB) (TVD)**

 Total Depth: **6610.00 ft (KB) (TVD)**

 Hole Diameter: **7.83 inches** Hole Condition: **Poor**

 Reference Elevations: **1784.00 ft (KB)**
1771.00 ft (CF)

 KB to GR/CF: **13.00 ft**
Serial #: 6755
Inside

 Press@RunDepth: **105.00 psig @ 6575.00 ft (KB)**

 Start Date: **2004.10.12**

 End Date: **2004.10.12**

 Capacity: **7000.00 psig**

 Last Calib.: **2004.10.12**

 Start Time: **02:50:25**

 End Time: **15:10:35**

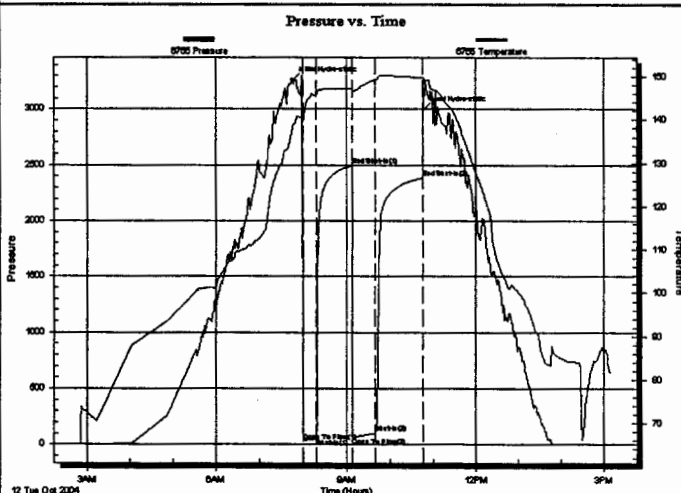
 Time On Btm: **2004.10.12 @ 07:45:05**

 Time Off Btm: **2004.10.12 @ 10:47:05**
TEST COMMENT: IF: Weak erratic blow, 1/2 - 2". NOTE: Found a surface equip. leak, and corrected it after IFP.

IS: Weak blow, 1/4".

FF: Weak blow, 1/2 - 1 1/2".

FSI: Weak blow, (surface)



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	3263.25	138.43	Initial Hydro-static
15	30.84	139.37	Open To Flow (1)
33	56.42	145.90	Shut-In (1)
83	2493.74	147.23	End Shut-In (1)
84	66.80	146.36	Open To Flow (2)
115	105.00	149.27	Shut-In (2)
181	2389.17	149.82	End Shut-In (2)
182	2996.81	149.63	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
120.00	SW Rw .086 ohms @ 80 deg.	0.59
30.00	WM 28%w 72%w	0.15

Gas Rates

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

DRILL STEM TEST REPORT

TOOL DIAGRAM

Sam Gary Jr. & Ass.

Girk 1-31

1870 Broadway, Suite 3300
Denver Colo. 80202

sec31twp33rge20w

Job Ticket: 19256

DST#: 2

ATTN: Tom Fertal

Test Start: 2004.10.12 @ 02:50:20

Tool Information

Drill Pipe:	Length: 6361.00 ft	Diameter: 3.80 inches	Volume: 89.23 bbl	Tool Weight:	2100.00 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: 186.00 ft	Diameter: 2.25 inches	Volume: 0.91 bbl	Weight to Pull Loose:	130000.0 lb
		Total Volume:	90.14 bbl	Tool Chased	0.00 ft
Drill Pipe Above KB:	3.00 ft			String Weight: Initial	88000.00 lb
Depth to Top Packer:	6574.00 ft			Final	95000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	36.00 ft				
Tool Length:	66.00 ft				
Number of Packers:	2	Diameter:	6.75 inches		

Tool Comments:

SAMPLER DATA: 4400 ml. SW / Trace of oil (heavy/tar like) @
90 PSI R_w .08 ohms @ 80 deg. 84000 ppm NaCl

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			6545.00	
Shut In Tool	5.00			6550.00	
Sampler	3.00			6553.00	
Hydraulic tool	5.00			6558.00	
Jars	5.00			6563.00	
Safety Joint	2.00			6565.00	
Packer	4.00			6569.00	30.00 Bottom Of Top Packer
Packer	5.00			6574.00	
Stubb	1.00			6575.00	
Recorder	0.00	6755	Inside	6575.00	
Perforations	30.00			6605.00	
Recorder	0.00	13222	Outside	6605.00	
Bullnose	5.00			6610.00	36.00 Bottom Packers & Anchor

Total Tool Length: 66.00


**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Sam Gary Jr. & Ass.

Girk 1-31

 1870 Broadway, Suite 3300
 Denver Colo. 80202

sec31twp33rge20w

Job Ticket: 19256

DST#: 2

ATTN: Tom Fertal

Test Start: 2004.10.12 @ 02:50:20

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:

80000 ppm

Viscosity: 65.00 sec/qt

Cushion Volume:

bbl

 Water Loss: 8.77 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 4000.00 ppm

Filter Cake: 0.20 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
120.00	SW Rw .086 ohms @ 80 deg.	0.590
30.00	WM 28%w 72%m	0.148

Total Length: 150.00 ft

Total Volume: 0.738 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #: none

Laboratory Name:

Laboratory Location:

Recovery Comments: LCM 9 - 10 lbs/bl

DST Test Number: 2

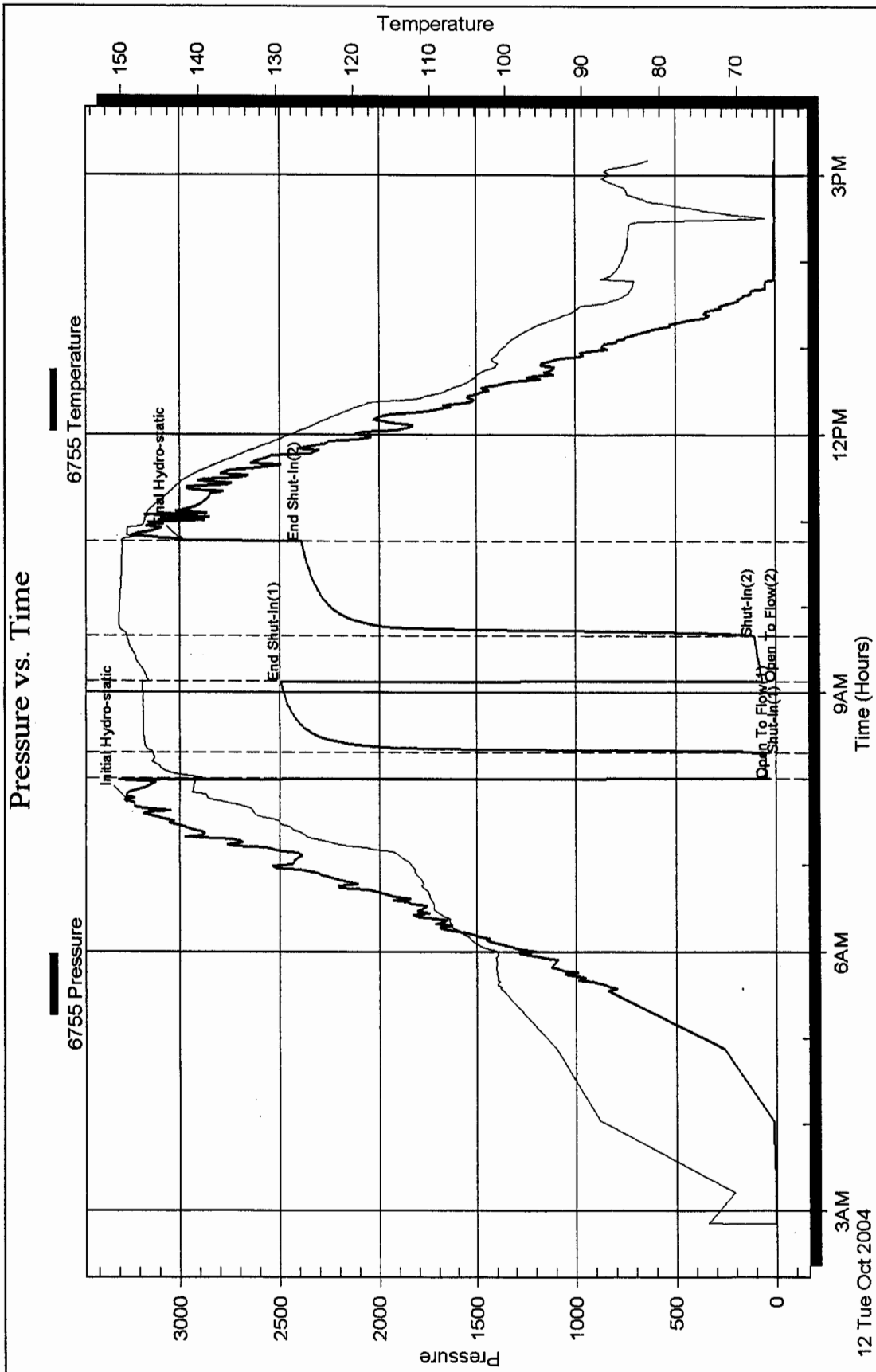
sec31lw p33rge20w

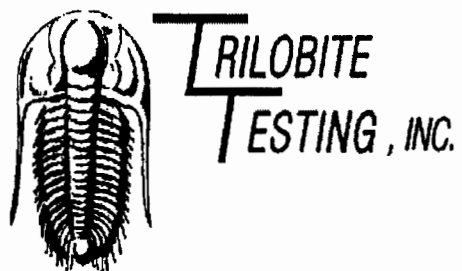
Sam Gary Jr. & Ass.

Inside

Serial #: 6755

Pressure vs. Time





DRILL STEM TEST REPORT

Prepared For: **Sam Gary Jr. & Ass.**

1870 Broadway, Suite 3300
Denver Colo. 80202

ATTN: Tom Fertal

sec31twp33rge20w

Girk 1-31

Start Date: 2004.10.13 @ 22:00:38

End Date: 2004.10.14 @ 10:14:38

Job Ticket #: 19257 DST #: 3

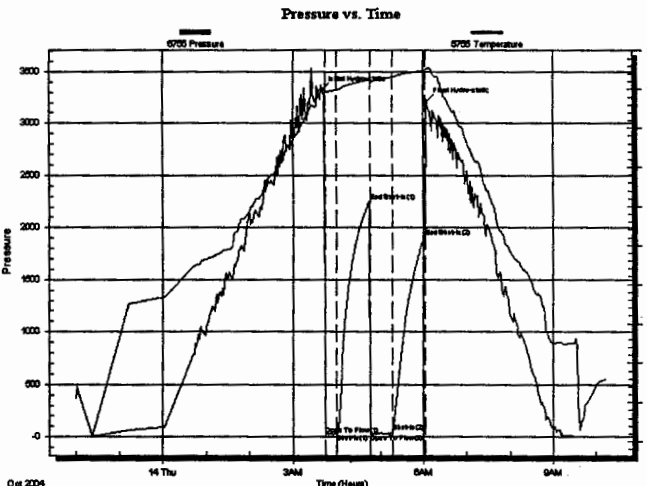
Trilobite Testing, Inc
PO Box 362 Hays, KS 67601
ph: 785-625-4778 fax: 785-625-5620

 TRILOBITE TESTING, INC.	DRILL STEM TEST REPORT		
Sam Gary Jr. & Ass. 1870 Broadway, Suite 3300 Denver Colo. 80202 ATTN: Tom Fertal	Girk 1-31 sec31twp33rge20w Job Ticket: 19257 DST#: 3 Test Start: 2004.10.13 @ 22:00:38		

GENERAL INFORMATION:			
Formation: Arbuckle Deviated: No Whipstock: ft (KB) Time Tool Opened: 03:43:23 Time Test Ended: 10:14:38 Interval: 6612.00 ft (KB) To 6650.00 ft (KB) (TVD) Total Depth: 6650.00 ft (KB) (TVD) Hole Diameter: 7.83 inches Hole Condition: Poor	Test Type: Conventional Bottom Hole Tester: Gary Pevoteaux Unit No: 23		Reference Elevations: 1784.00 ft (KB) 1771.00 ft (CF) KB to GR/CF: 13.00 ft

Serial #: 6755 Inside			
Press@RunDepth:	46.87 psig @	6613.00 ft (KB)	Capacity: 7000.00 psig
Start Date:	2004.10.13	End Date:	2004.10.14
Start Time:	22:00:43	End Time:	10:14:38
		Time On Btrn:	2004.10.14 @ 03:40:23
		Time Off Btrn:	2004.10.14 @ 06:04:53

TEST COMMENT: IF:Weak blow . 1/2 - 1".
 IS:No blow .
 FF:Very weak blow . (surface)
 FS:No blow .

	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th colspan="4" style="text-align: center;">PRESSURE SUMMARY</th> </tr> <tr> <th>Time (Min.)</th> <th>Pressure (psig)</th> <th>Temp (deg F)</th> <th>Annotation</th> </tr> <tr> <td>0</td> <td>3327.92</td> <td>140.28</td> <td>Initial Hydro-static</td> </tr> <tr> <td>3</td> <td>23.27</td> <td>139.46</td> <td>Open To Flow (1)</td> </tr> <tr> <td>19</td> <td>26.95</td> <td>139.88</td> <td>Shut-in(1)</td> </tr> <tr> <td>66</td> <td>2252.20</td> <td>142.46</td> <td>End Shut-In(1)</td> </tr> <tr> <td>66</td> <td>28.72</td> <td>141.86</td> <td>Open To Flow (2)</td> </tr> <tr> <td>97</td> <td>46.87</td> <td>143.20</td> <td>Shut-in(2)</td> </tr> <tr> <td>143</td> <td>1910.83</td> <td>144.88</td> <td>End Shut-In(2)</td> </tr> <tr> <td>145</td> <td>3214.89</td> <td>145.49</td> <td>Final Hydro-static</td> </tr> </table>	PRESSURE SUMMARY				Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation	0	3327.92	140.28	Initial Hydro-static	3	23.27	139.46	Open To Flow (1)	19	26.95	139.88	Shut-in(1)	66	2252.20	142.46	End Shut-In(1)	66	28.72	141.86	Open To Flow (2)	97	46.87	143.20	Shut-in(2)	143	1910.83	144.88	End Shut-In(2)	145	3214.89	145.49	Final Hydro-static
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TRILOBITE
TESTING, INC

DRILL STEM TEST REPORT

TOOL DIAGRAM

Sam Gary Jr. & Ass.

Girk 1-31

1870 Broadway, Suite 3300
Denver Colo. 80202

sec31twp33rge20w

Job Ticket: 19257

DST#: 3

ATTN: Tom Fertal

Test Start: 2004.10.13 @ 22:00:38

Tool Information

Drill Pipe:	Length: 6423.00 ft	Diameter: 3.80 inches	Volume: 90.10 bbl	Tool Weight:	2100.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer:	20000.00 lb
Drill Collar:	Length: 186.00 ft	Diameter: 2.25 inches	Volume: 0.91 bbl	Weight to Pull Loose:	108000.0 lb
		Total Volume:	91.01 bbl	Tool Chased	0.00 ft
Drill Pipe Above KB:	27.00 ft			String Weight: Initial	90000.00 lb
Depth to Top Packer:	6612.00 ft			Final	90000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	38.00 ft				
Tool Length:	68.00 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			6583.00	
Shut In Tool	5.00			6588.00	
Sampler	3.00			6591.00	
Hydraulic tool	5.00			6596.00	
Jars	5.00			6601.00	
Safety Joint	2.00			6603.00	
Packer	4.00			6607.00	30.00 Bottom Of Top Packer
Packer	5.00			6612.00	
Stubb	1.00			6613.00	
Recorder	0.00	6755	Inside	6613.00	
Perforations	32.00			6645.00	
Recorder	0.00	13222	Outside	6645.00	
Bullnose	5.00			6650.00	38.00 Bottom Packers & Anchor

Total Tool Length: 68.00

 TRILOBITE TESTING, INC.	DRILL STEM TEST REPORT		FLUID SUMMARY
	Sam Gary Jr. & Ass. 1870 Broadway, Suite 3300 Denver Colo. 80202 ATTN: Tom Fertal	Girk 1-31 sec31twp33rge20w Job Ticket: 19257 DST#: 3 Test Start: 2004.10.13 @ 22:00:38	

Mud and Cushion Information			
Mud Type: Gel Chem Mud Weight: 9.00 lb/gal Viscosity: 75.00 sec/qt Water Loss: 11.19 in ³ Resistivity: 0.00 ohm.m Salinity: 5000.00 ppm Filter Cake: 0.20 inches	Cushion Type: Cushion Length: ft Cushion Volume: bbl Gas Cushion Type: Gas Cushion Pressure: psig	Oil API: Water Salinity: 5000 ppm deg API	

Recovery Information		
Recovery Table		
Length ft	Description	Volume bbl
20.00	Drig.mud/ 110 vis. +	0.098

Total Length:	20.00 ft	Total Volume:	0.098 bbl
Num Fluid Samples:	0	Num Gas Bombs:	0
Laboratory Name:		Serial #:	none
Laboratory Location:			
Recovery Comments: SAMPLER DATA:3900 ml. very heavy mud / LCM @ 20#/bl.+ @ 60 PSI			

DST Test Number: 3

sec31lw p33rge20w

Sam Gary Jr. & Ass.

Inside

Serial #: 6755

Pressure vs. Time

