TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Prepared For: **Tengasco Inc**

PO Box 458
Hays KS 67601

ATTN: Rod Tremblay

KU Endowment A #3

30-7s-17w Rooks,KS

Start Date: 2012.05.09 @ 01:53:17
End Date: 2012.05.09 @ 07:47:47
Job Ticket #: 44788 DST #: 1

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

Printed: 2012.05.16 @ 13:21:27

DRILL STEM TEST REPORT

TRILOBITE TESTING, INC.

Tengasco Inc

PO Box 458
Hays KS 67601

ATTN: Rod Tremblay

30-7s-17w Rooks,KS

KU Endowment A #3

Job Ticket: 44788 **DST#: 1**

Test Start: 2012.05.09 @ 01:53:17

GENERAL INFORMATION:

Formation: **Topeka**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 03:10:17
Time Test Ended: 07:47:47

Test Type: Conventional Bottom Hole (Initial)
Tester: Jeff Brown
Unit No: 44

Interval: 2730.00 ft (KB) To 2747.00 ft (KB) (TVD)
Total Depth: 2747.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Good

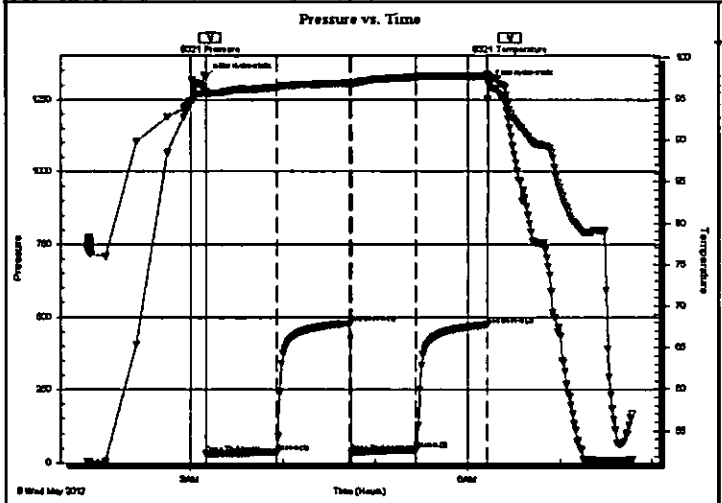
Reference Elevations: 1780.00 ft (KB)
1773.00 ft (CF)
KB to GR/CF: 7.00 ft

Serial #: 8321 **Inside**

Press@RunDepth: 44.80 psig @ 2731.00 ft (KB)
Start Date: 2012.05.09 End Date: 2012.05.09
Start Time: 01:53:18 End Time: 07:46:47

Capacity: 8000.00 psig
Last Calib.: 2012.05.09
Time On Btm: 2012.05.09 @ 03:09:47
Time Off Btm: 2012.05.09 @ 06:13:17

TEST COMMENT: IFP-Weak blow built to 3 in
ISI-Dead no blow back
FFP-Weak blow built to 1 in
FSI-Dead no blow back



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1329.13	95.85	Initial Hydro-static
1	31.58	95.61	Open To Flow (1)
46	36.16	96.40	Shut-In(1)
94	479.53	96.90	End Shut-In(1)
95	36.69	96.80	Open To Flow (2)
137	44.80	97.66	Shut-In(2)
183	473.19	97.73	End Shut-In(2)
184	1305.02	97.70	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
6.00	MW 20%M 80%W	0.08
6.00	WN 40%W 60%M	0.08

Gas Rates

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

DRILL STEM TEST REPORT

Tengasco Inc

PO Box 458
Hays KS 67601

ATTN: Rod Tremblay

30-7s-17w Rooks,KS

KU Endowment A #3

Job Ticket: 44788 **DST#: 1**

Test Start: 2012.05.09 @ 01:53:17

GENERAL INFORMATION:

Formation: **Topeka**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 03:10:17
Time Test Ended: 07:47:47

Test Type: Conventional Bottom Hole (Initial)
Tester: Jeff Brown
Unit No: 44

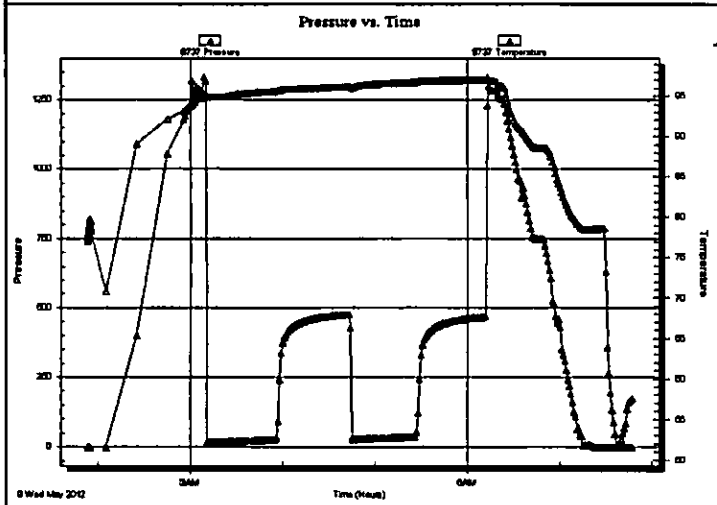
Interval: 2730.00 ft (KB) To 2747.00 ft (KB) (TVD)
Total Depth: 2747.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations: 1780.00 ft (KB)
1773.00 ft (CF)
KB to GR/CF: 7.00 ft

Serial #: 8737 **Outside**
Press@RunDepth: psig @ 2731.00 ft (KB)
Start Date: 2012.05.09 End Date: 2012.05.09
Start Time: 01:53:15 End Time: 07:46:44

Capacity: 8000.00 psig
Last Calib.: 2012.05.09
Time On Btm:
Time Off Btm:

TEST COMMENT: IFP-Weak blow built to 3 in
ISI-Dead no blow back
FFP-Weak blow built to 1 in
FSI-Dead no blow back



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation

Recovery

Length (ft)	Description	Volume (bbl)
6.00	MW 20%M 80%W	0.08
6.00	WN 40%W 60%M	0.08

Gas Rates

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

TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

TOOL DIAGRAM

Tengasco Inc

PO Box 458
Hays KS 67601

ATTN: Rod Tremblay

30-7s-17w Rooks,KS

KU Endowment A #3

Job Ticket: 44788 **DST#: 1**

Test Start: 2012.05.09 @ 01:53:17

Tool Information

Drill Pipe:	Length:	2714.00 ft	Diameter:	3.80 inches	Volume:	38.07 bbl	Tool Weight:		2200.00 lb
Heavy Wt. Pipe:	Length:	0.00 ft	Diameter:	2.70 inches	Volume:	0.00 bbl	Weight set on Packer:		2000.00 lb
Drill Collar:	Length:	0.00 ft	Diameter:	2.25 inches	Volume:	0.00 bbl	Weight to Pull Loose:		50000.00 lb
					Total Volume:	38.07 bbl	Tool Chased		0.00 ft
Drill Pipe Above KB:		12.00 ft					String Weight:	Initial	46000.00 lb
Depth to Top Packer:		2730.00 ft						Final	46000.00 lb
Depth to Bottom Packer:		ft							
Interval between Packers:		17.00 ft							
Tool Length:		45.00 ft							
Number of Packers:		2	Diameter:	6.75 inches					

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths	
Change Over Sub	1.00			2703.00		
Shut In Tool	5.00			2708.00		
Hydraulic tool	5.00			2713.00		
Jars	5.00			2718.00		
Safety Joint	3.00			2721.00		
Packer	4.00			2725.00	28.00	Bottom Of Top Packer
Packer	5.00			2730.00		
Stubb	1.00			2731.00		
Recorder	0.00	8321	Inside	2731.00		
Recorder	0.00	8737	Outside	2731.00		
Perforations	13.00			2744.00		
Bullnose	3.00			2747.00	17.00	Bottom Packers & Anchor
Total Tool Length:	**45.00**					

DRILL STEM TEST REPORT

FLUID SUMMARY

Tengasco Inc

PO Box 458
Hays KS 67601

ATTN: Rod Tremblay

30-7s-17w Rooks,KS

KU Endowment A #3

Job Ticket: 44788 **DST#: 1**

Test Start: 2012.05.09 @ 01:53:17

Mud and Cushion Information

Mud Type:	Gel Chem	Cushion Type:		Oil API:	deg API
Mud Weight:	lb/gal	Cushion Length:	ft	Water Salinity:	ppm
Viscosity:	sec/qt	Cushion Volume:	bbl		
Water Loss:	in³	Gas Cushion Type:			
Resistivity:	ohm.m	Gas Cushion Pressure:	psig		
Salinity:	ppm				
Filter Cake:	inches				

Recovery Information

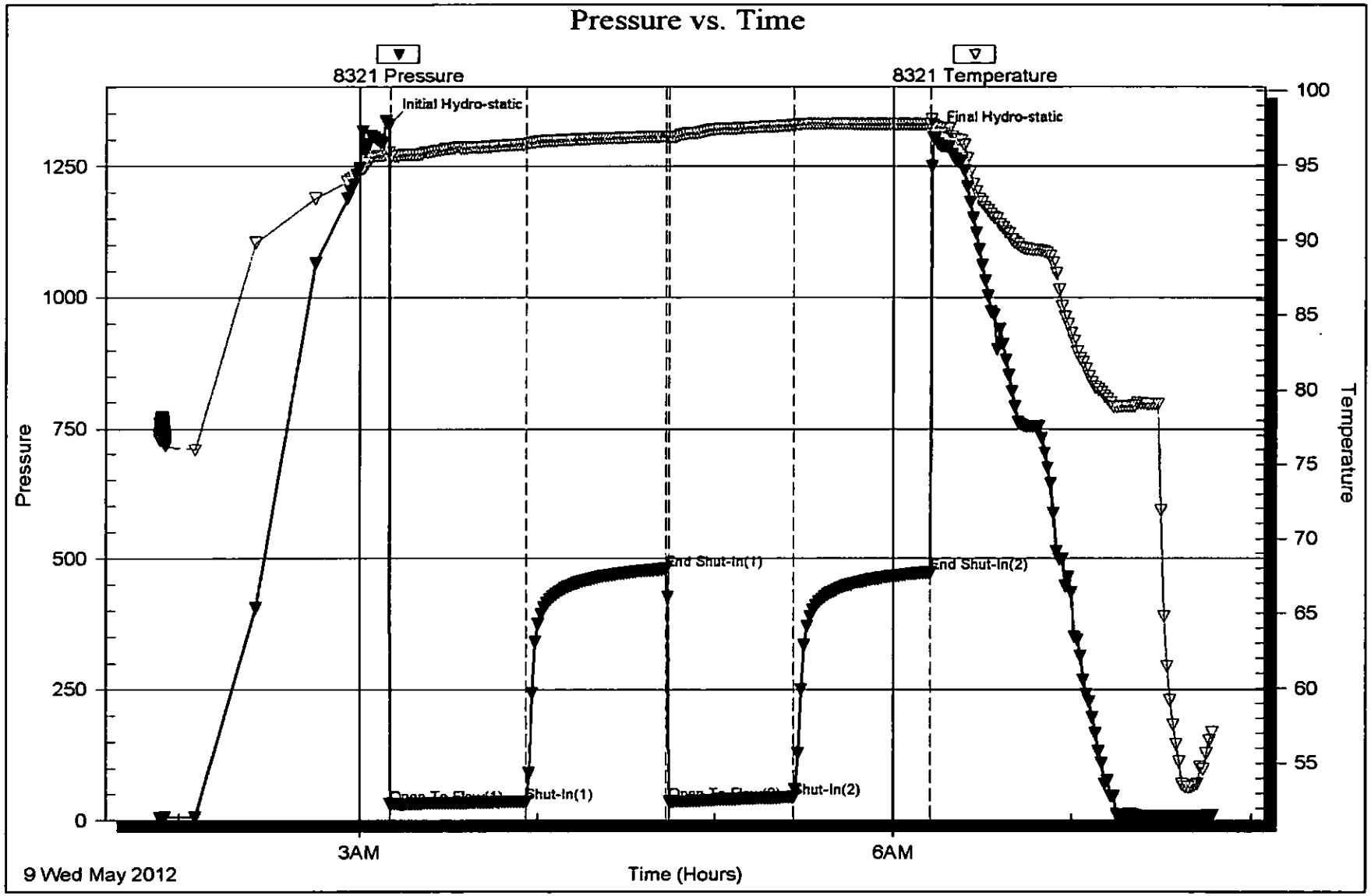
Recovery Table

Length ft	Description	Volume bbl
6.00	MW 20%M 80%W	0.084
6.00	WN 40%W 60%M	0.084

Total Length: 12.00 ft Total Volume: 0.168 bbl

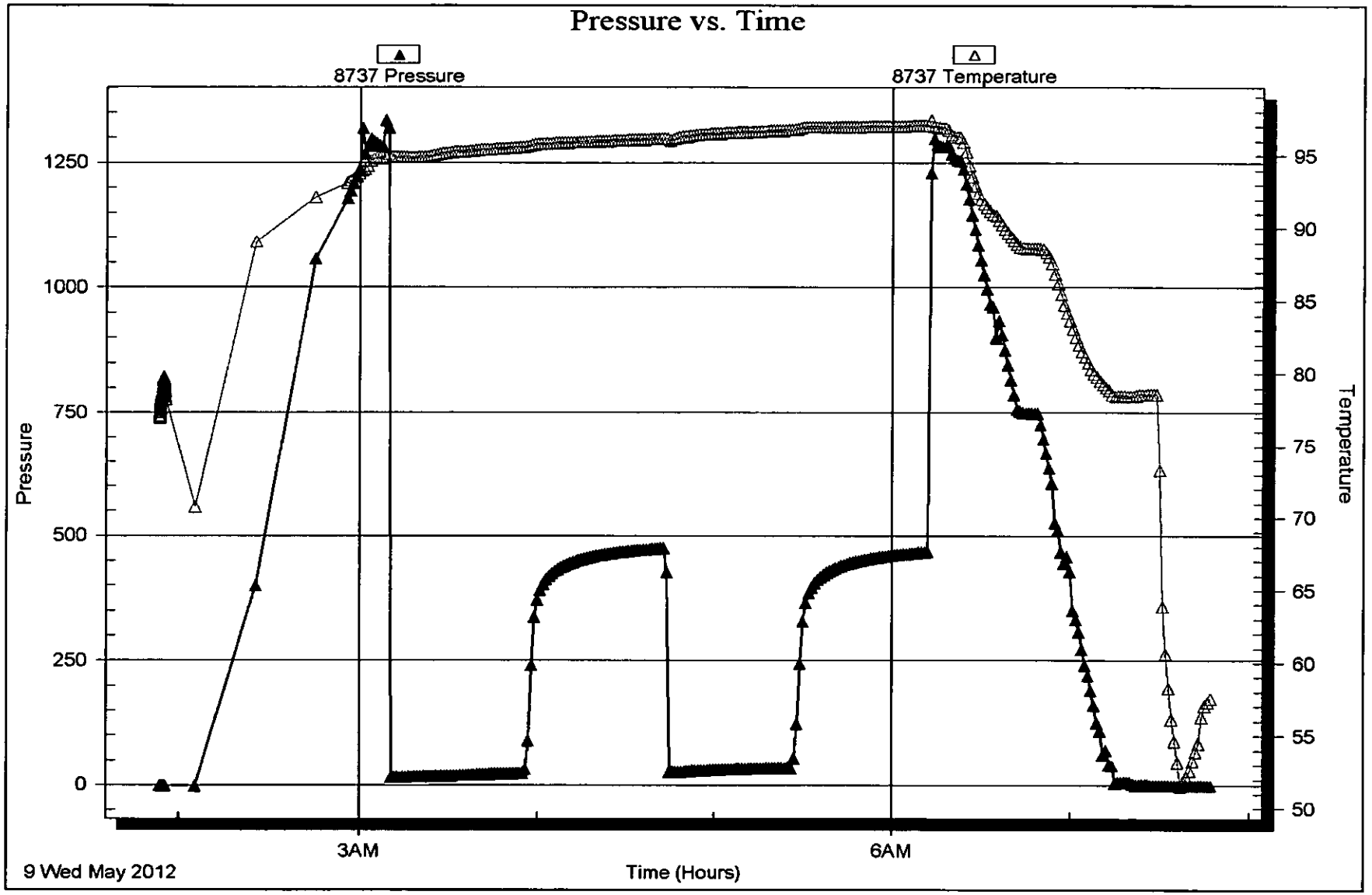
Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
Laboratory Name: Laboratory Location:
Recovery Comments:

Serial #: 8321 Inside Tengasco Inc KU Endowment A #3 DST Test Number: 1



Trilobite Testing, Inc Ref. No: 44788 Printed: 2012.05.16 @ 13:21:29

Serial #: 8737 **Outside** Tengasco Inc KU Endowment A #3 DST Test Number: 1



Trilobite Testing, Inc Ref. No: 44788 Printed: 2012.05.16 @ 13:21:29

TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Prepared For: **Tengasco Inc**

PO Box 458
Hays KS 67601

ATTN: Rod Tremblay

KU Endowment A #3

30-7s-17w Rooks,KS

Start Date: 2012.05.10 @ 08:39:21
End Date: 2012.05.10 @ 15:00:51
Job Ticket #: 44789 DST #: 2

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

Printed: 2012.05.16 @ 13:20:40

DRILL STEM TEST REPORT

TRILOBITE TESTING, INC.

Tengasco Inc

PO Box 458
Hays KS 67601

ATTN: Rod Tremblay

30-7s-17w Rooks,KS

KU Endowment A #3

Job Ticket: 44789 **DST#: 2**

Test Start: 2012.05.10 @ 08:39:21

GENERAL INFORMATION:

Formation: **Lansing-G**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 10:08:51
Time Test Ended: 15:00:51

Test Type: Conventional Bottom Hole (Reset)
Tester: Jeff Brown
Unit No: 44

Interval: 3039.00 ft (KB) To 3060.00 ft (KB) (TVD)
Total Depth: 3060.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Good

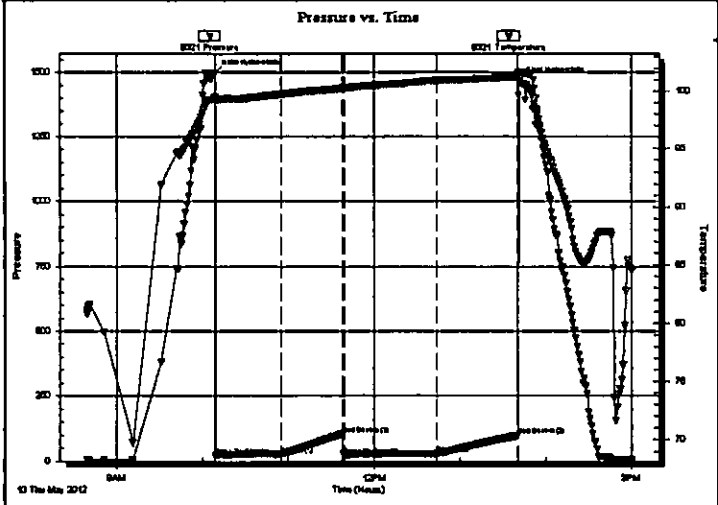
Reference Elevations: 1780.00 ft (KB)
1773.00 ft (CF)
KB to GR/CF: 7.00 ft

Serial #: 8321 **Inside**

Press@RunDepth: 30.02 psig @ 3040.00 ft (KB)
Start Date: 2012.05.10 End Date: 2012.05.10
Start Time: 08:39:22 End Time: 14:59:51

Capacity: 8000.00 psig
Last Calib.: 2012.05.10
Time On Btm: 2012.05.10 @ 10:08:21
Time Off Btm: 2012.05.10 @ 13:41:21

TEST COMMENT: IFP-Weak blow built to 2 in
ISI-Dead no blow back
FFP-Weak blow built to 2 1/2 in
FSI-Dead no blow back



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1497.44	99.48	Initial Hydro-static
1	21.07	99.21	Open To Flow (1)
47	26.26	99.75	Shut-In(1)
90	104.56	100.25	End Shut-In(1)
91	21.67	100.33	Open To Flow (2)
156	30.02	100.94	Shut-In(2)
212	98.74	101.28	End Shut-In(2)
213	1467.76	101.67	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
30.00	VSOCM 3%O 97%M	0.42

* Recovery from multiple tests

Gas Rates

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

DRILL STEM TEST REPORT

TRILOBITE TESTING, INC.

Tengasco Inc

PO Box 458
Hays KS 67601

ATTN: Rod Tremblay

30-7s-17w Rooks,KS

KU Endowment A #3

Job Ticket: 44789 **DST#: 2**

Test Start: 2012.05.10 @ 08:39:21

GENERAL INFORMATION:

Formation: **Lansing-G**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 10:08:51
Time Test Ended: 15:00:51

Test Type: Conventional Bottom Hole (Reset)
Tester: Jeff Brown
Unit No: 44

Interval: 3039.00 ft (KB) To 3060.00 ft (KB) (TVD)
Total Depth: 3060.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Good

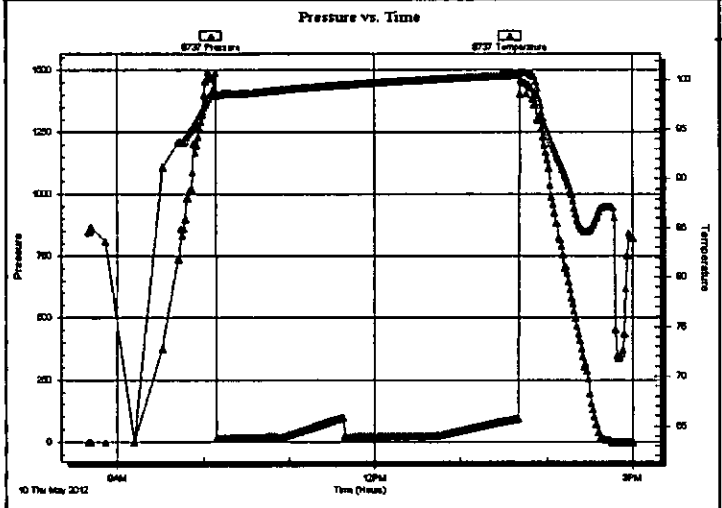
Reference Elevations: 1780.00 ft (KB)
1773.00 ft (CF)
KB to GR/CF: 7.00 ft

Serial #: 8737 **Outside**

Press@RunDepth: psig @ 3040.00 ft (KB)
Start Date: 2012.05.10 End Date: 2012.05.10
Start Time: 08:39:38 End Time: 15:00:07

Capacity: 8000.00 psig
Last Calib.: 2012.05.10
Time On Btm:
Time Off Btm:

TEST COMMENT: IFP-Weak blow built to 2 in
ISI-Dead no blow back
FFP-Weak blow built to 2 1/2 in
FSI-Dead no blow back



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation

Recovery

Length (ft)	Description	Volume (bbl)
30.00	VSOCM 3%O 97%M	0.42

* Recovery from multiple tests

Gas Rates

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

DRILL STEM TEST REPORT

TOOL DIAGRAM

Tengasco Inc

PO Box 458
Hays KS 67601

ATTN: Rod Tremblay

30-7s-17w Rooks,KS

KU Endowment A #3

Job Ticket: 44789 **DST#: 2**

Test Start: 2012.05.10 @ 08:39:21

Tool Information

Drill Pipe:	Length:	3028.00 ft	Diameter:	3.80 inches	Volume:	42.47 bbl	Tool Weight:		2200.00 lb
Heavy Wt. Pipe:	Length:	0.00 ft	Diameter:	2.70 inches	Volume:	0.00 bbl	Weight set on Packer:		20000.00 lb
Drill Collar:	Length:	0.00 ft	Diameter:	2.25 inches	Volume:	0.00 bbl	Weight to Pull Loose:		60000.00 lb
					Total Volume:	42.47 bbl	Tool Chased		0.00 ft
Drill Pipe Above KB:		17.00 ft					String Weight:	Initial	51000.00 lb
Depth to Top Packer:		3039.00 ft						Final	51000.00 lb
Depth to Bottom Packer:		ft							
Interval between Packers:		21.00 ft							
Tool Length:		49.00 ft							
Number of Packers:		2	Diameter:	6.75 inches					

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths	
Change Over Sub	1.00			3012.00		
Shut In Tool	5.00			3017.00		
Hydraulic tool	5.00			3022.00		
Jars	5.00			3027.00		
Safety Joint	3.00			3030.00		
Packer	4.00			3034.00	28.00	Bottom Of Top Packer
Packer	5.00			3039.00		
Stubb	1.00			3040.00		
Recorder	0.00	8321	Inside	3040.00		
Recorder	0.00	8737	Outside	3040.00		
Perforations	17.00			3057.00		
Bullnose	3.00			3060.00	21.00	Bottom Packers & Anchor
Total Tool Length:	**49.00**					

DRILL STEM TEST REPORT

FLUID SUMMARY

Tengasco Inc

PO Box 458
Hays KS 67601

ATTN: Rod Tremblay

30-7s-17w Rooks,KS

KU Endowment A #3

Job Ticket: 44789 **DST#: 2**

Test Start: 2012.05.10 @ 08:39:21

Mud and Cushion Information

Mud Type:	Gel Chem	Cushion Type:		Oil API:	deg API
Mud Weight:	9.00 lb/gal	Cushion Length:	ft	Water Salinity:	ppm
Viscosity:	56.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	6.39 in³	Gas Cushion Type:			
Resistivity:	ohm.m	Gas Cushion Pressure:	psig		
Salinity:	1800.00 ppm				
Filter Cake:	inches				

Recovery Information

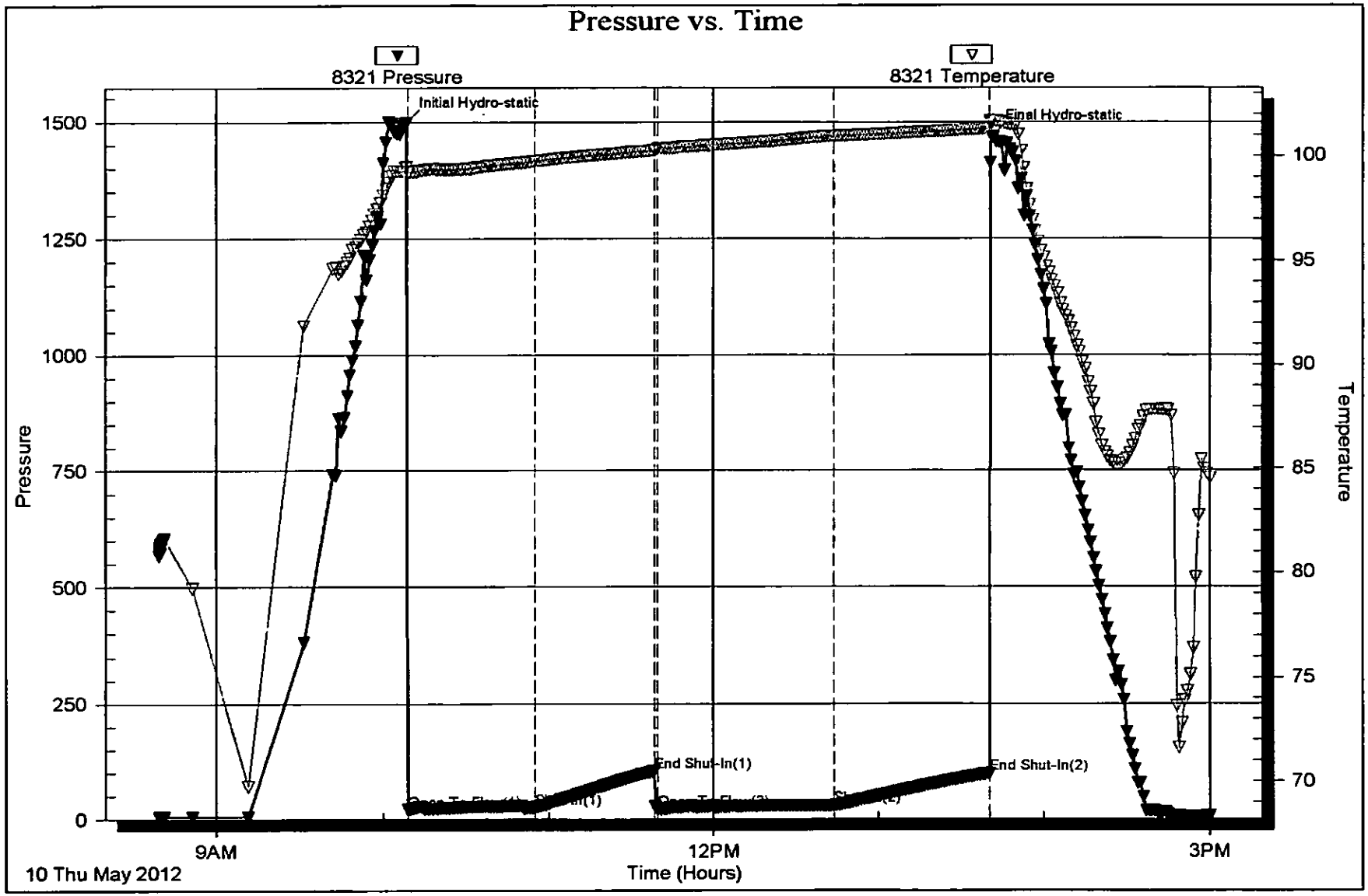
Recovery Table

Length ft	Description	Volume bbl
30.00	VSOCM 3%O 97%M	0.421

Total Length: 30.00 ft Total Volume: 0.421 bbl

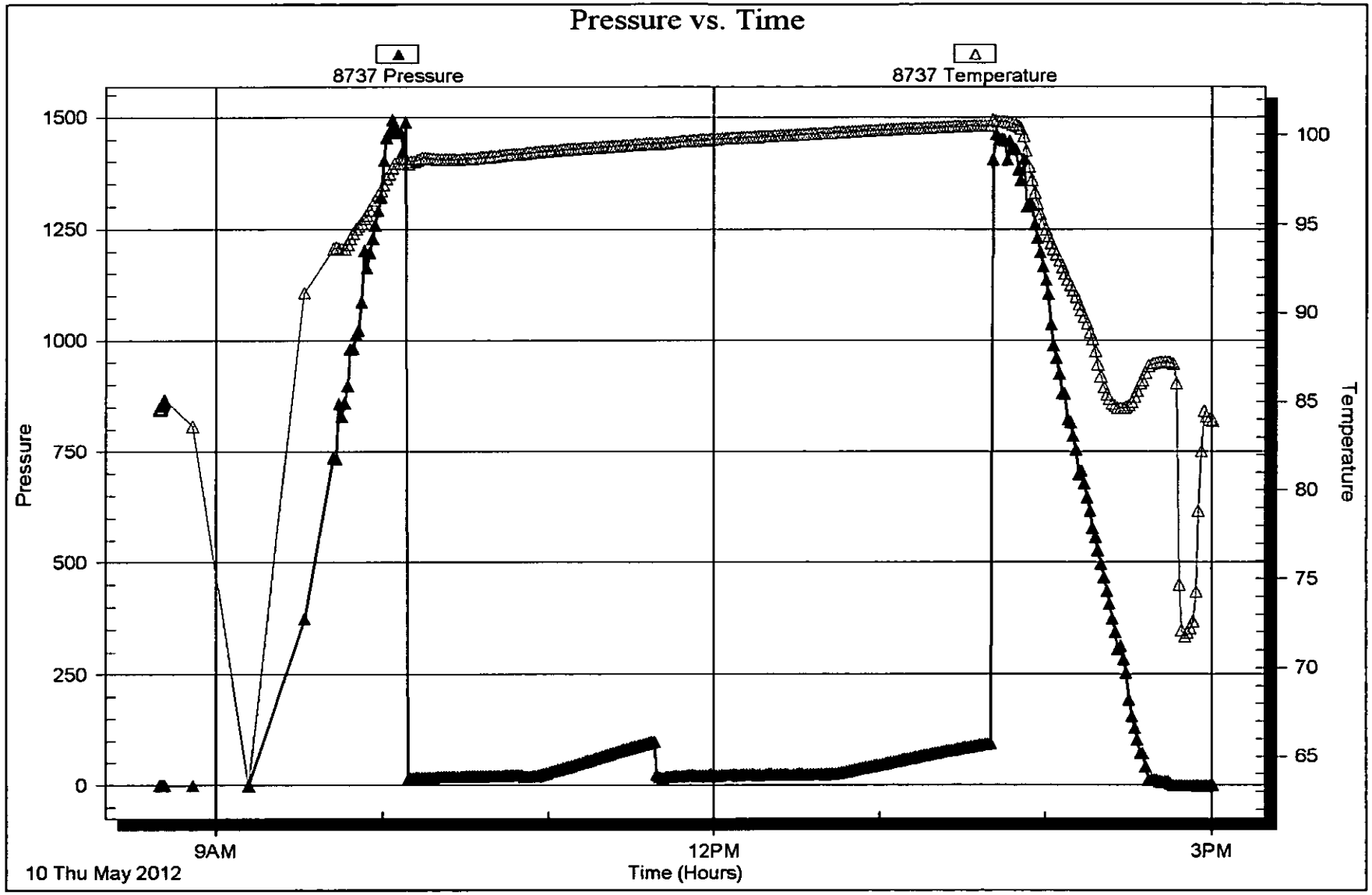
Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
Laboratory Name: Laboratory Location:
Recovery Comments:

Serial #: 8321 Inside Tengasco Inc KU Endowment A #3 DST Test Number: 2



Tritobite Testing, Inc Ref. No: 44789 Printed: 2012.05.16 @ 13:20:42

Serial #: 8737 **Outside** Tengasco Inc KU Endowment A #3 DST Test Number: 2



Trilobite Testing, Inc Ref. No: 44789 Printed: 2012.05.16 @ 13:20:42

TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Prepared For: **Tengasco Inc**

PO Box 458
Hays KS 67601

ATTN: Rod Tremblay

KU Endowment A #3

30-7s-17w Rooks,KS

Start Date: 2012.05.11 @ 13:33:03
End Date: 2012.05.11 @ 19:54:03
Job Ticket #: 44790 DST #: 3

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

Printed: 2012.05.16 @ 13:19:43

DRILL STEM TEST REPORT

TRILOBITE TESTING, INC.

Tengasco Inc

PO Box 458
Hays KS 67601

ATTN: Rod Tremblay

30-7s-17w Rooks,KS

KU Endowment A #3

Job Ticket: 44790 **DST#: 3**

Test Start: 2012.05.11 @ 13:33:03

GENERAL INFORMATION:

Formation: **Arbuckle**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 15:18:03
Time Test Ended: 19:54:03

Test Type: Conventional Bottom Hole (Reset)
Tester: Jeff Brown
Unit No: 44

Interval: 3242.00 ft (KB) To 3280.00 ft (KB) (TVD)
Total Depth: 3280.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Good

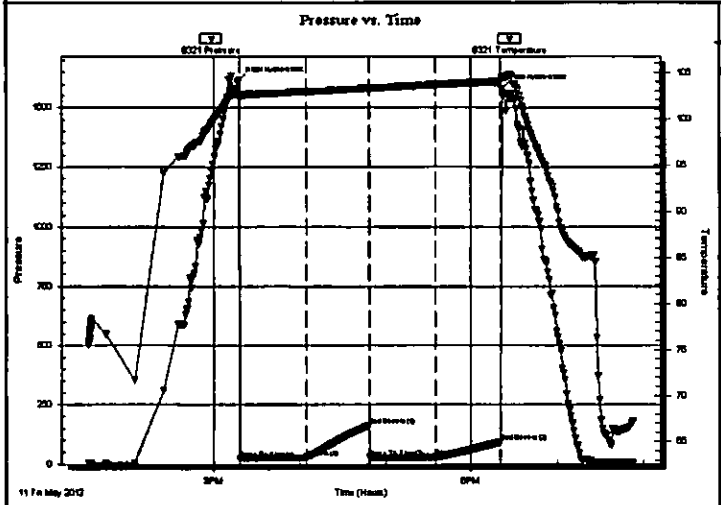
Reference Elevations: 1780.00 ft (KB)
1773.00 ft (CF)
KB to GR/CF: 7.00 ft

Serial #: 8321 **Inside**

Press@RunDepth: 30.05 psig @ 3245.00 ft (KB)
Start Date: 2012.05.11 End Date: 2012.05.11
Start Time: 13:33:04 End Time: 19:53:03

Capacity: 8000.00 psig
Last Calib.: 2012.05.11
Time On Btm: 2012.05.11 @ 15:17:33
Time Off Btm: 2012.05.11 @ 18:21:33

TEST COMMENT: IFP-Weak blow built to 1 3/4 in
ISI-Dead no blow back
FFP-Weak blow built to 1/4 in
FSI-Dead no blow back



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1613.21	102.68	Initial Hydro-static
1	24.08	102.40	Open To Flow (1)
47	29.46	102.93	Shut-In(1)
91	162.09	103.30	End Shut-In(1)
91	29.28	103.28	Open To Flow (2)
138	30.05	103.69	Shut-In(2)
183	91.14	104.01	End Shut-In(2)
184	1582.05	104.40	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
10.00	OCM 10%O 90%M	0.14
5.00	Oil 100%	0.07

* Recovery from multiple tests

Gas Rates

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

DRILL STEM TEST REPORT

TRILOBITE TESTING, INC.

Tengasco Inc

PO Box 458
Hays KS 67601

ATTN: Rod Tremblay

30-7s-17w Rooks,KS

KU Endowment A #3

Job Ticket: 44790 **DST#: 3**

Test Start: 2012.05.11 @ 13:33:03

GENERAL INFORMATION:

Formation: **Arbuckle**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 15:18:03
Time Test Ended: 19:54:03

Test Type: Conventional Bottom Hole (Reset)
Tester: Jeff Brown
Unit No: 44

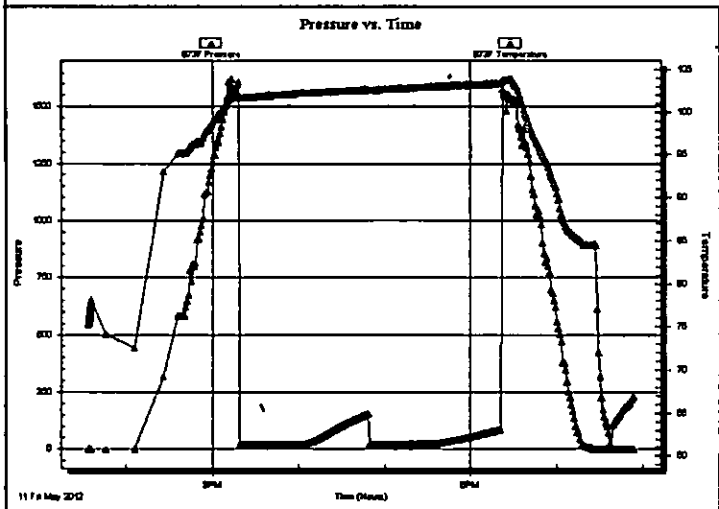
Interval: 3242.00 ft (KB) To 3280.00 ft (KB) (TVD)
Total Depth: 3280.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations: 1780.00 ft (KB)
1773.00 ft (CF)
KB to GR/CF: 7.00 ft

Serial #: 8737 **Outside**
Press@RunDepth: psig @ 3245.00 ft (KB)
Start Date: 2012.05.11 End Date: 2012.05.11
Start Time: 13:33:53 End Time: 19:53:52

Capacity: 8000.00 psig
Last Calib.: 2012.05.11
Time On Btm:
Time Off Btm:

TEST COMMENT: IFP-Weak blow built to 1 3/4 in
ISI-Dead no blow back
FFP-Weak blow built to 1/4 in
FSI-Dead no blow back



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation

Recovery

Length (ft)	Description	Volume (bbl)
10.00	OCM 10%O 90%M	0.14
5.00	Oil 100%	0.07

* Recovery from multiple tests

Gas Rates

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

DRILL STEM TEST REPORT

TOOL DIAGRAM

Tengasco Inc

PO Box 458
Hays KS 67601

ATTN: Rod Tremblay

30-7s-17w Rooks,KS

KU Endowment A #3

Job Ticket: 44790 **DST#: 3**

Test Start: 2012.05.11 @ 13:33:03

Tool Information

Drill Pipe:	Length:	3246.00 ft	Diameter:	3.80 inches	Volume:	45.53 bbl	Tool Weight:		2200.00 lb
Heavy Wt. Pipe:	Length:	0.00 ft	Diameter:	2.70 inches	Volume:	0.00 bbl	Weight set on Packer:		22000.00 lb
Drill Collar:	Length:	0.00 ft	Diameter:	2.25 inches	Volume:	0.00 bbl	Weight to Pull Loose:		60000.00 lb
					Total Volume:	45.53 bbl	Tool Chased		0.00 ft
Drill Pipe Above KB:		32.00 ft					String Weight:	Initial	54000.00 lb
Depth to Top Packer:		3242.00 ft						Final	54000.00 lb
Depth to Bottom Packer:		ft							
Interval betw een Packers:		38.00 ft							
Tool Length:		66.00 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			3215.00		
Shut In Tool	5.00			3220.00		
Hydraulic tool	5.00			3225.00		
Jars	5.00			3230.00		
Safety Joint	3.00			3233.00		
Packer	4.00			3237.00	28.00	Bottom Of Top Packer
Packer	5.00			3242.00		
Stubb	1.00			3243.00		
Perforations	2.00			3245.00		
Recorder	0.00	8321	Inside	3245.00		
Recorder	0.00	8737	Outside	3245.00		
Perforations	32.00			3277.00		
Bullnose	3.00			3280.00	38.00	Bottom Packers & Anchor
Total Tool Length:	**66.00**					

DRILL STEM TEST REPORT

FLUID SUMMARY

Tengasco Inc

PO Box 458
Hays KS 67601

ATTN: Rod Tremblay

30-7s-17w Rooks,KS

KU Endowment A #3

Job Ticket: 44790 **DST#: 3**

Test Start: 2012.05.11 @ 13:33:03

Mud and Cushion Information

Mud Type:	Gel Chem	Cushion Type:		Oil API:	26 deg API
Mud Weight:	9.00 lb/gal	Cushion Length:	ft	Water Salinity:	ppm
Viscosity:	54.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	7.19 in³	Gas Cushion Type:			
Resistivity:	ohm.m	Gas Cushion Pressure:	psig		
Salinity:	2400.00 ppm				
Filter Cake:	inches				

Recovery Information

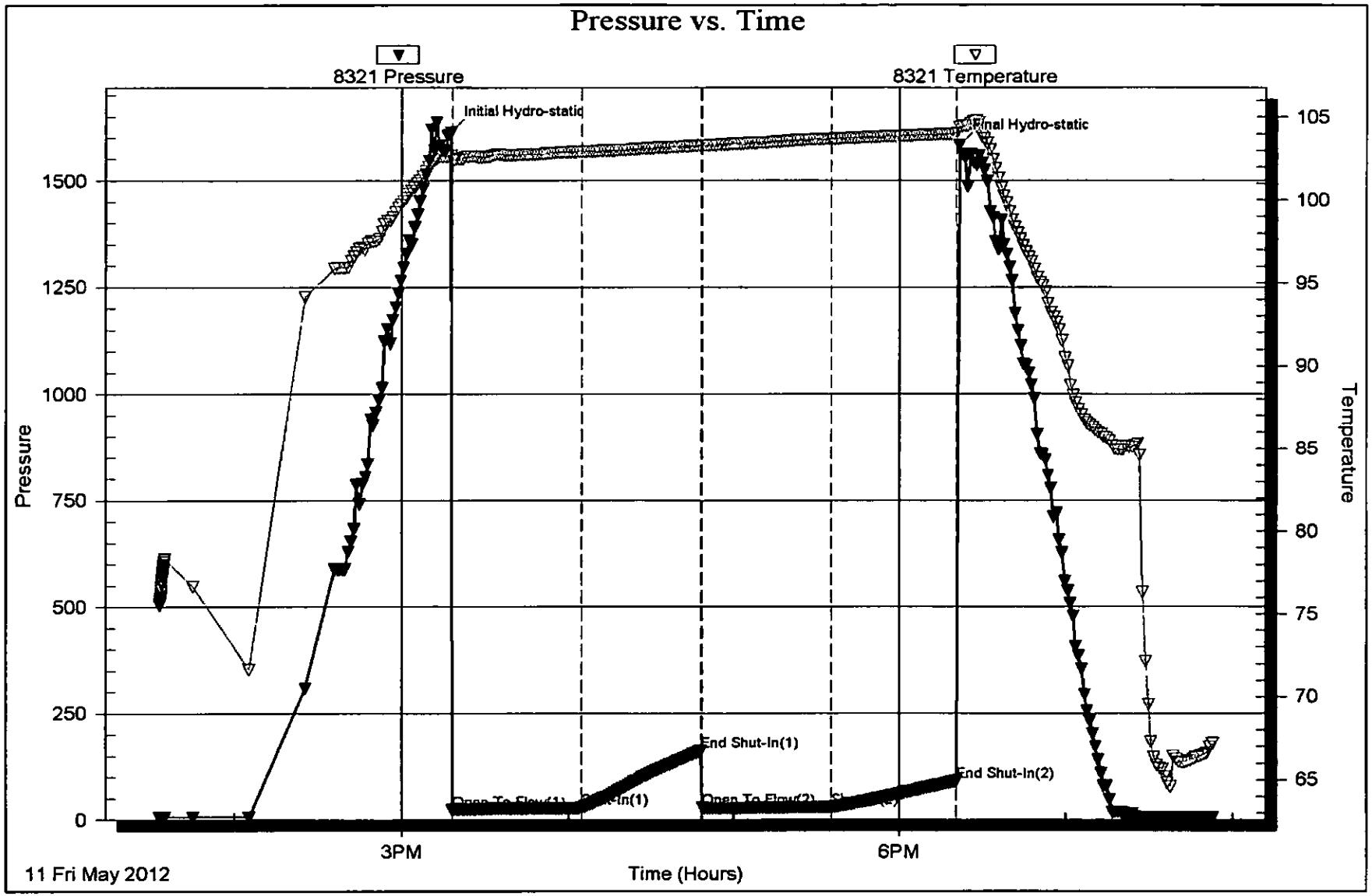
Recovery Table

Length ft	Description	Volume bbl
10.00	OCM 10%O 90%M	0.140
5.00	Oil 100%	0.070

Total Length: 15.00 ft Total Volume: 0.210 bbl

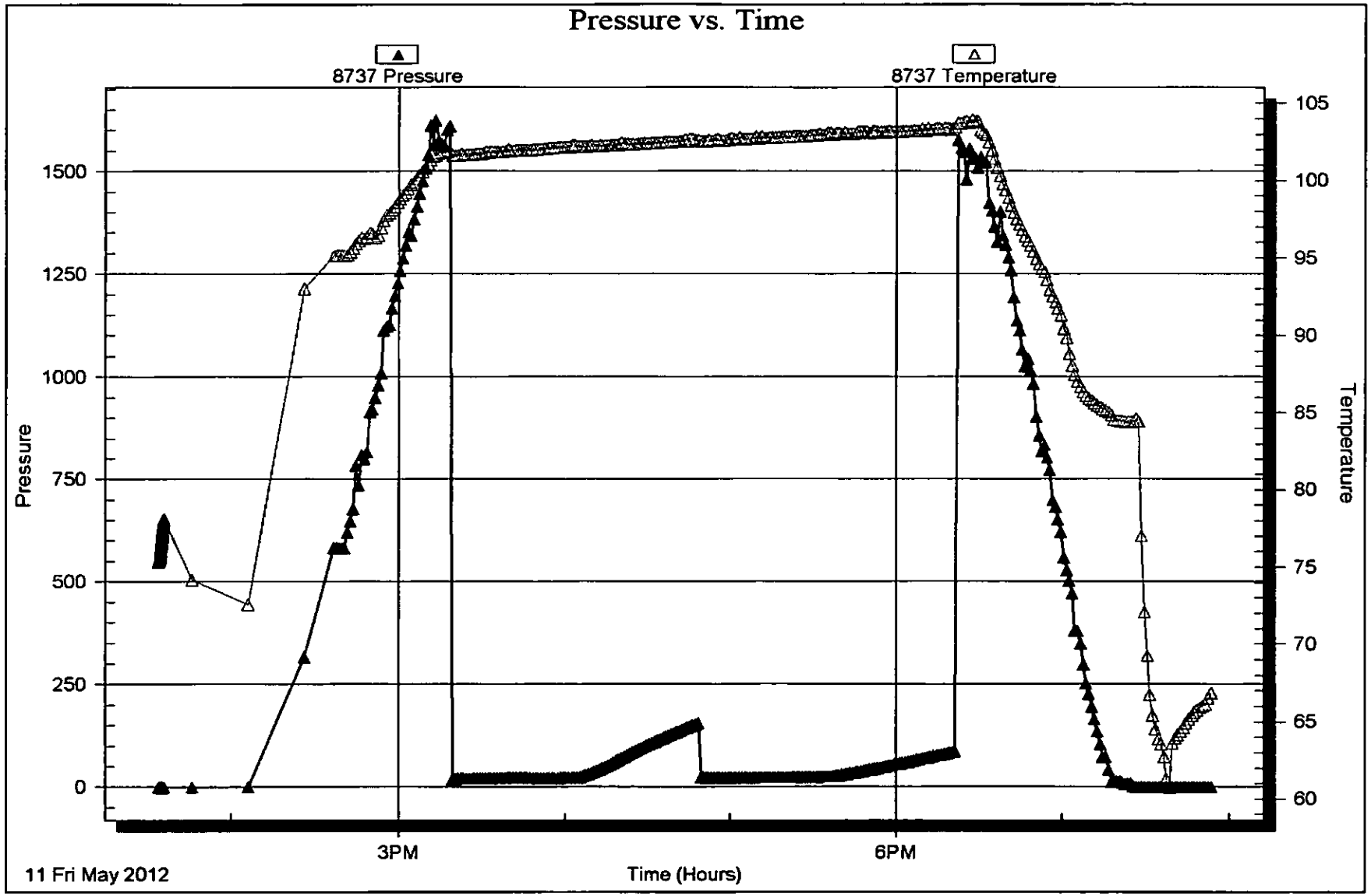
Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
Laboratory Name: Laboratory Location:
Recovery Comments:

Serial #: 8321 Inside Tengasco Inc KU Endowment A #3 DST Test Number: 3



Trilobite Testing, Inc Ref. No: 44790 Printed: 2012.05.16 @ 13:19:45

Serial #: 8737 Outside Tengasco Inc KU Endowment A #3 DST Test Number: 3



Trilobite Testing, Inc Ref. No: 44790 Printed: 2012.05.16 @ 13:19:46

TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Prepared For: **Tengasco Inc**

PO Box 458
Hays KS 67601

ATTN: Rod Tremblay

KU Endowment A #3

30-7s-17w Rooks,KS

Start Date: 2012.05.12 @ 14:10:14

End Date: 2012.05.12 @ 20:20:44

Job Ticket #: 44791 DST #: 4

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

Printed: 2012.05.16 @ 13:13:18

DRILL STEM TEST REPORT

Tengasco Inc

PO Box 458
Hays KS 67601

ATTN: Rod Tremblay

30-7s-17w Rooks,KS

KU Endowment A #3

Job Ticket: 44791 **DST#: 4**

Test Start: 2012.05.12 @ 14:10:14

GENERAL INFORMATION:

Formation: **Abuckle**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 15:33:14
Time Test Ended: 20:20:44

Test Type: Conventional Straddle (Reset)
Tester: Jeff Brown
Unit No: 44

Interval: 3275.00 ft (KB) To 3316.00 ft (KB) (TVD)
Total Depth: 3369.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Good

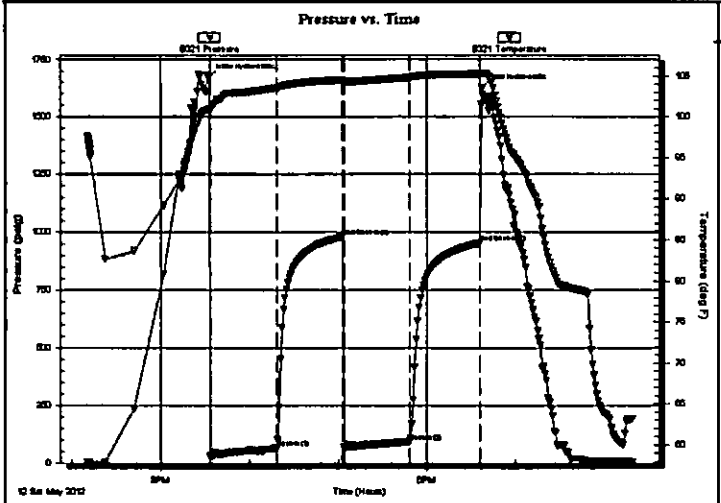
Reference Elevations: 1780.00 ft (KB)
1773.00 ft (CF)
KB to GR/CF: 7.00 ft

Serial #: 8321 **Inside**

Press@RunDepth: 92.45 psig @ 3279.00 ft (KB)
Start Date: 2012.05.12 End Date: 2012.05.12
Start Time: 14:10:15 End Time: 20:18:44

Capacity: 8000.00 psig
Last Calib.: 2012.05.12
Time On Btm: 2012.05.12 @ 15:32:44
Time Off Btm: 2012.05.12 @ 18:37:14

TEST COMMENT: IFP-Good blow built to 10 3/4 in
ISI-Dead no blow back
FFP-Fair blow built to 7 1/4 in
FSI-Dead no blow back



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1672.93	100.96	Initial Hydro-static
1	29.88	100.74	Open To Flow (1)
46	64.10	103.52	Shut-In(1)
90	981.30	104.46	End Shut-In(1)
91	67.53	104.30	Open To Flow (2)
136	92.45	104.81	Shut-In(2)
183	954.17	105.24	End Shut-In(2)
185	1626.96	105.32	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
93.00	VSOCM 5%O 95%M	1.30
52.00	OCWM 10%O 10%W 80%M	0.73
10.00	Oil 100%	0.14

* Recovery from multiple tests

Gas Rates

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

DRILL STEM TEST REPORT

Tengasco Inc

PO Box 458
Hays KS 67601

ATTN: Rod Tremblay

30-7s-17w Rooks,KS

KU Endowment A #3

Job Ticket: 44791 **DST#: 4**

Test Start: 2012.05.12 @ 14:10:14

GENERAL INFORMATION:

Formation: **Abuckle**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 15:33:14
Time Test Ended: 20:20:44

Test Type: Conventional Straddle (Reset)
Tester: Jeff Brown
Unit No: 44

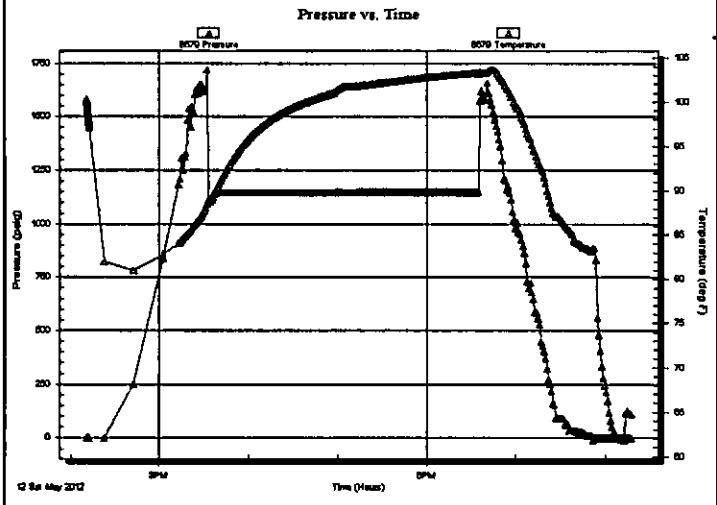
Interval: 3275.00 ft (KB) To 3316.00 ft (KB) (TVD)
Total Depth: 3369.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations: 1780.00 ft (KB)
1773.00 ft (CF)
KB to GR/CF: 7.00 ft

Serial #: 8679 **Below (Straddle)**
Press@RunDepth: psig @ 3319.00 ft (KB)
Start Date: 2012.05.12 End Date: 2012.05.12
Start Time: 14:10:31 End Time: 20:18:00

Capacity: 8000.00 psig
Last Calib.: 2012.05.12
Time On Btm:
Time Off Btm:

TEST COMMENT: IFP-Good blow built to 10 3/4 in
ISI-Dead no blow back
FFP-Fair blow built to 7 1/4 in
FSI-Dead no blow back



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation

Recovery

Length (ft)	Description	Volume (bbl)
93.00	VSOCM 5%O 95%M	1.30
52.00	OCWM 10%O 10%W 80%M	0.73
10.00	Oil 100%	0.14

* Recovery from multiple tests

Gas Rates

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

DRILL STEM TEST REPORT

Tengasco Inc

PO Box 458
Hays KS 67601

ATTN: Rod Tremblay

30-7s-17w Rooks,KS

KU Endowment A #3

Job Ticket: 44791 **DST#: 4**

Test Start: 2012.05.12 @ 14:10:14

GENERAL INFORMATION:

Formation: **Abuckle**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 15:33:14
Time Test Ended: 20:20:44

Test Type: Conventional Straddle (Reset)
Tester: Jeff Brown
Unit No: 44

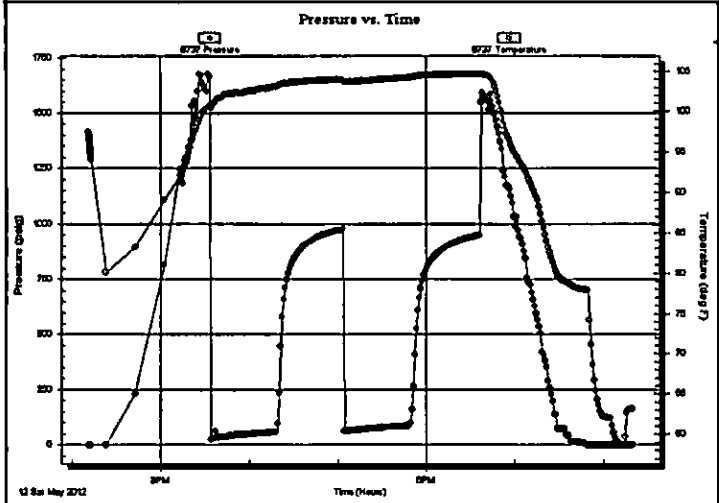
Interval: 3275.00 ft (KB) To 3316.00 ft (KB) (TVD)
Total Depth: 3369.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations: 1780.00 ft (KB)
1773.00 ft (CF)
KB to GR/CF: 7.00 ft

Serial #: 8737 **Outside**
Press@RunDepth: psig @ 3279.00 ft (KB)
Start Date: 2012.05.12 End Date: 2012.05.12
Start Time: 14:10:54 End Time: 20:19:23

Capacity: 8000.00 psig
Last Calib.: 2012.05.12
Time On Btm:
Time Off Btm:

TEST COMMENT: IFP-Good blow built to 10 3/4 in
ISI-Dead no blow back
FFP-Fair blow built to 7 1/4 in
FSI-Dead no blow back



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation

Recovery

Length (ft)	Description	Volume (bbl)
93.00	VSOCM 5%O 95%M	1.30
52.00	OCWM 10%O 10%W 80%M	0.73
10.00	Oil 100%	0.14

* Recovery from multiple tests

Gas Rates

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

DRILL STEM TEST REPORT

TOOL DIAGRAM

Tengasco Inc

PO Box 458
Hays KS 67601

ATTN: Rod Tremblay

30-7s-17w Rooks,KS

KU Endowment A #3

Job Ticket: 44791 **DST#: 4**

Test Start: 2012.05.12 @ 14:10:14

Tool Information

Drill Pipe:	Length:	3277.00 ft	Diameter:	3.80 inches	Volume:	45.97 bbl	Tool Weight:		2400.00 lb
Heavy Wt. Pipe:	Length:	0.00 ft	Diameter:	2.70 inches	Volume:	0.00 bbl	Weight set on Packer:		24000.00 lb
Drill Collar:	Length:	0.00 ft	Diameter:	2.25 inches	Volume:	0.00 bbl	Weight to Pull Loose:		60000.00 lb
					Total Volume:	45.97 bbl	Tool Chased		0.00 ft
Drill Pipe Above KB:		30.00 ft					String Weight:	Initial	54000.00 lb
Depth to Top Packer:		3275.00 ft						Final	55000.00 lb
Depth to Bottom Packer:		3316.00 ft							
Interval between Packers:		41.00 ft							
Tool Length:		122.00 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			3248.00		
Shut In Tool	5.00			3253.00		
Hydraulic tool	5.00			3258.00		
Jars	5.00			3263.00		
Safety Joint	3.00			3266.00		
Packer	4.00			3270.00	28.00	Bottom Of Top Packer
Packer	5.00			3275.00		
Stubb	1.00			3276.00		
Perforations	2.00			3278.00		
Change Over Sub	1.00			3279.00		
Recorder	0.00	8321	Inside	3279.00		
Recorder	0.00	8737	Outside	3279.00		
Drill Pipe	30.00			3309.00		
Change Over Sub	1.00			3310.00		
Perforations	2.00			3312.00		
Blank Off Sub	1.00			3313.00		
Stubb	3.00			3316.00	41.00	Tool Interval
Packer	1.00			3317.00		
Stubb	1.00			3318.00		
Change Over Sub	1.00			3319.00		
Recorder	0.00	8679	Below	3319.00		
Drill Pipe	31.00			3350.00		
Change Over Sub	1.00			3351.00		
Perforations	15.00			3366.00		
Bullnose	3.00			3369.00	53.00	Bottom Packers & Anchor
Total Tool Length:	**122.00**					

DRILL STEM TEST REPORT

FLUID SUMMARY

Tengasco Inc

PO Box 458
Hays KS 67601

ATTN: Rod Tremblay

30-7s-17w Rooks,KS

KU Endowment A #3

Job Ticket: 44791 **DST#: 4**

Test Start: 2012.05.12 @ 14:10:14

Mud and Cushion Information

Mud Type:	Gel Chem	Cushion Type:		Oil API:	21 deg API
Mud Weight:	9.00 lb/gal	Cushion Length:	ft	Water Salinity:	ppm
Viscosity:	55.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	7.19 in³	Gas Cushion Type:			
Resistivity:	ohm.m	Gas Cushion Pressure:	psig		
Salinity:	2400.00 ppm				
Filter Cake:	inches				

Recovery Information

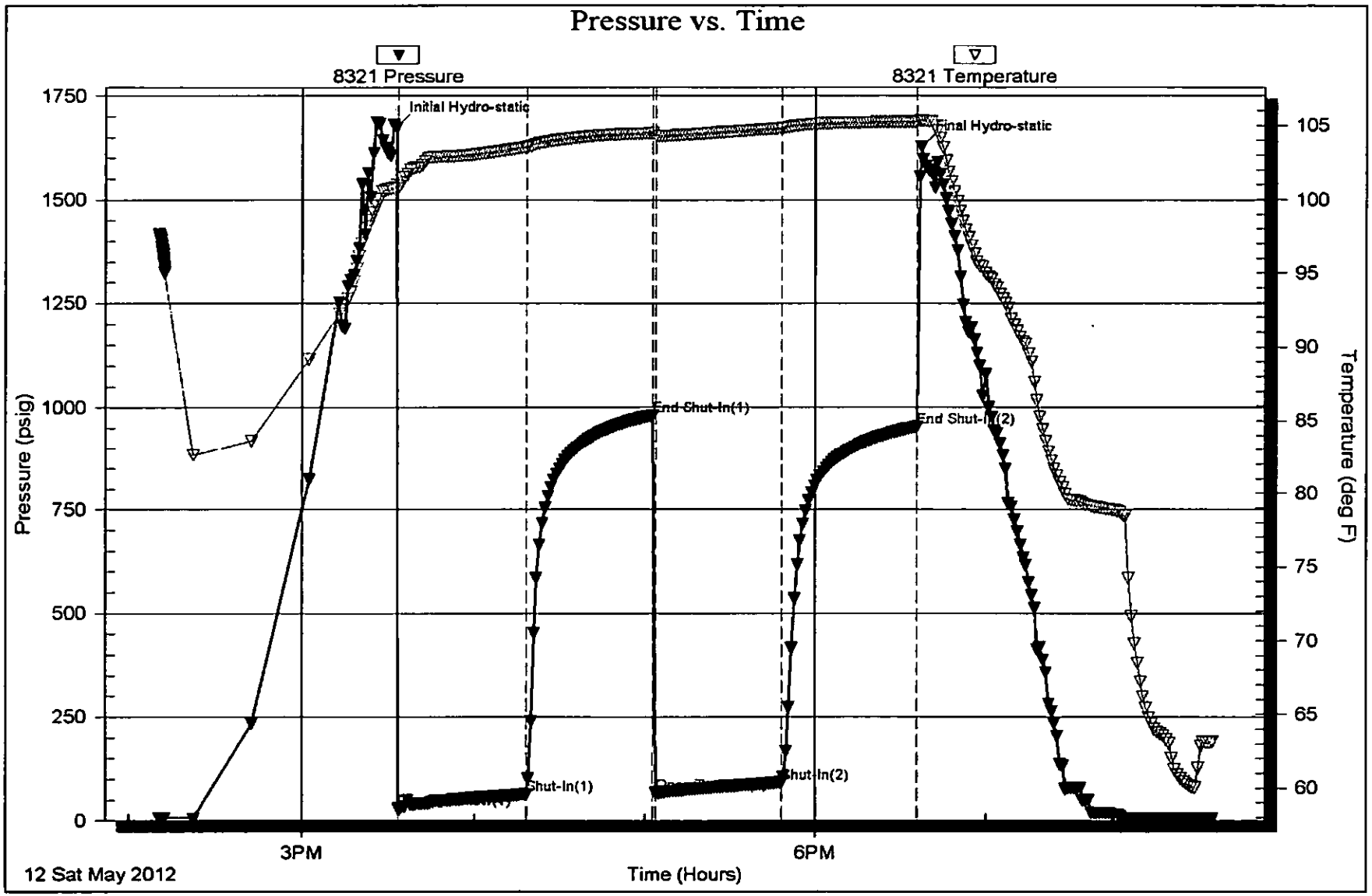
Recovery Table

Length ft	Description	Volume bbl
93.00	VSOCM 5%O 95%M	1.305
52.00	OCWM 10%O 10%W 80%M	0.729
10.00	Oil 100%	0.140

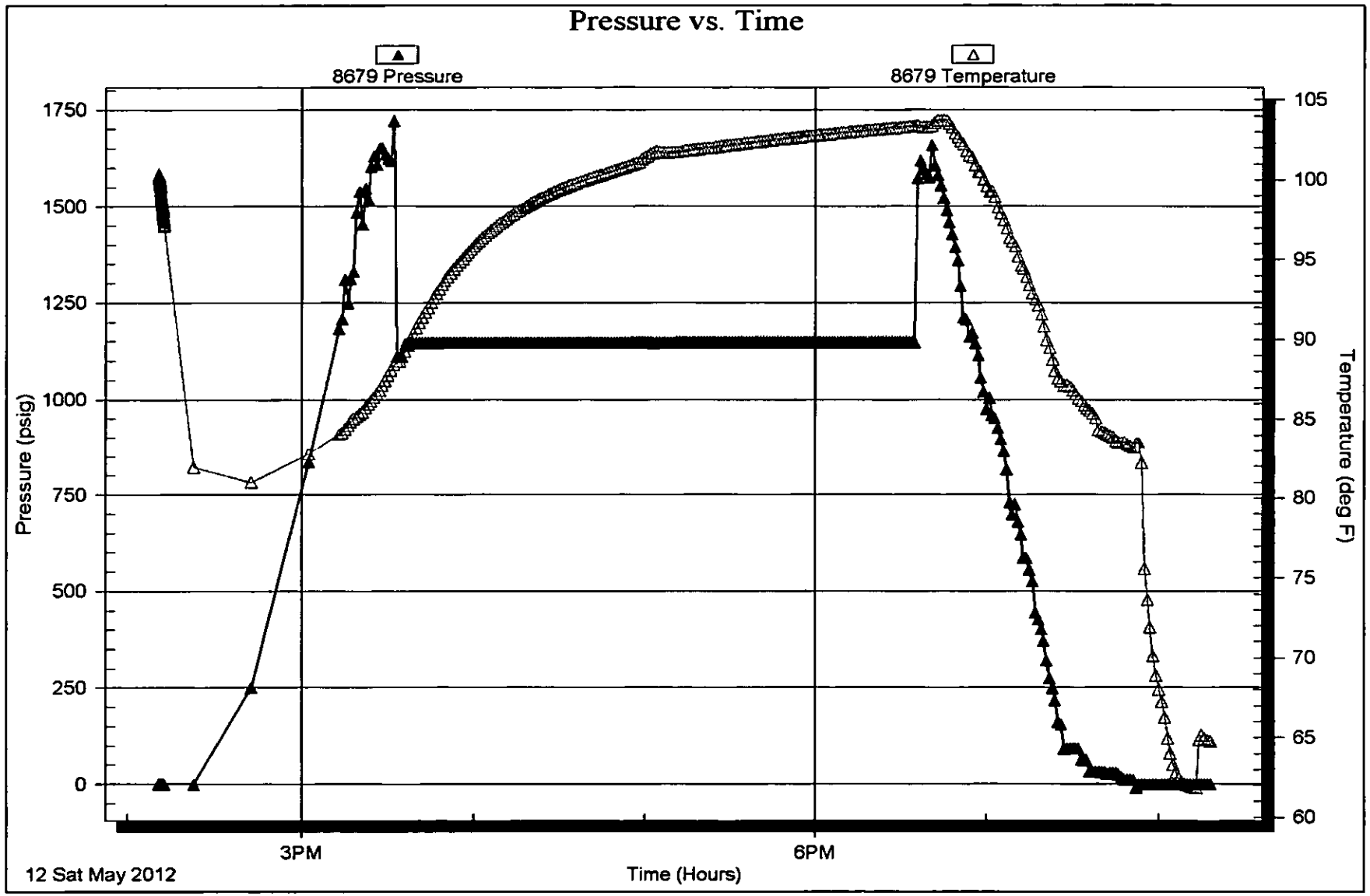
Total Length: 155.00 ft Total Volume: 2.174 bbl

Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
Laboratory Name: Laboratory Location:
Recovery Comments:

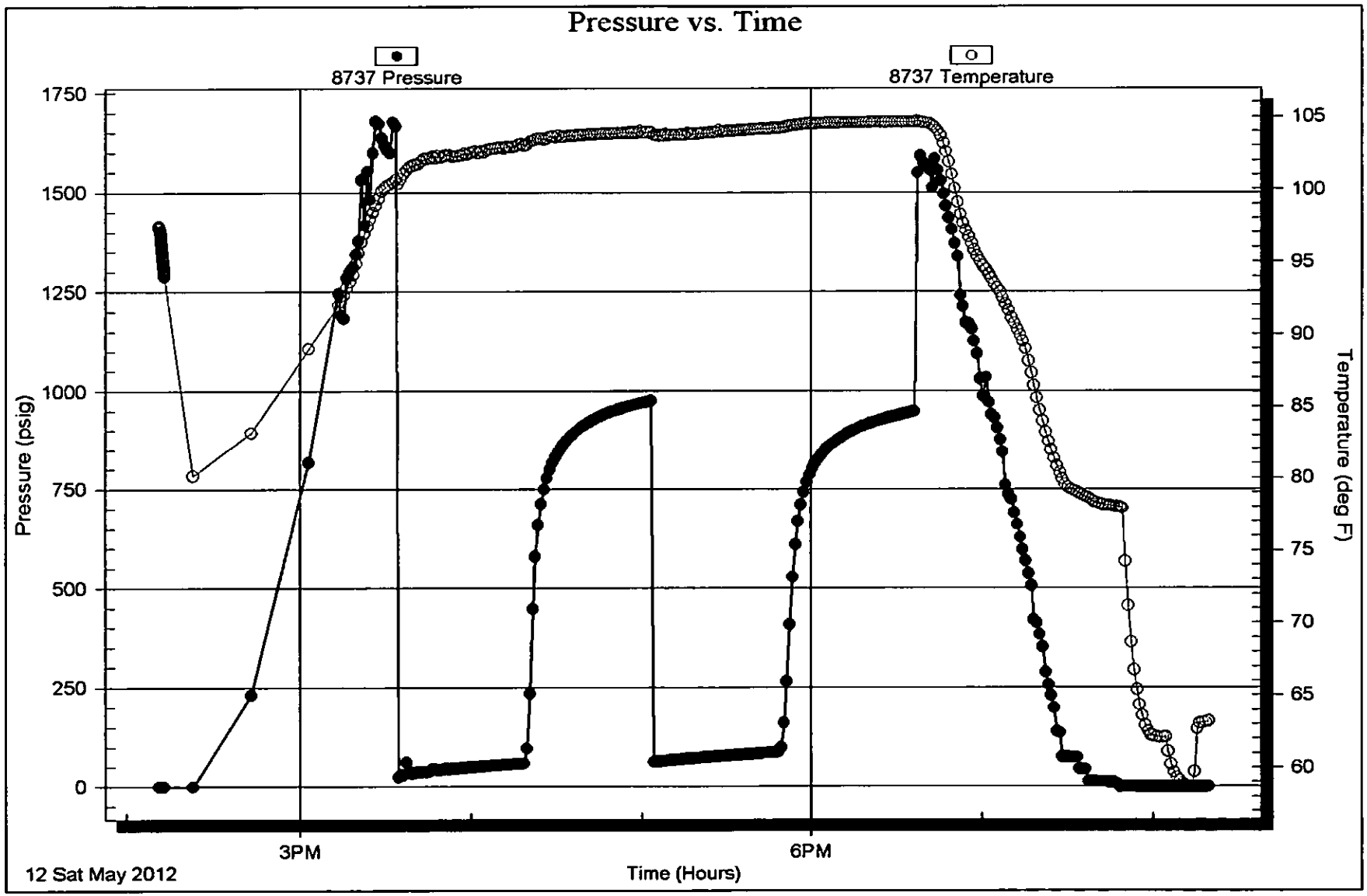
Serial #: 8321 Inside Tengasco Inc KU Endowment A #3 DST Test Number: 4



Trilobite Testing, Inc Ref. No: 44791 Printed: 2012.05.16 @ 13:13:20


Pressure vs. Time
8679 Pressure
8679 Temperature
1750
1500
1250
1000
750
500
250
0
Pressure (psig)
105
100
95
90
85
80
75
70
65
60
Temperature (deg F)
3PM
6PM
Time (Hours)
12 Sat May 2012

Serial #: 8737 **Outside** Tengasco Inc KU Endowment A #3 DST Test Number: 4



Trilobite Testing, Inc Ref. No: 44791 Printed: 2012.05.16 @ 13:13:21

TRILOBITE TESTING INC.

P.O. Box 1733 • Hays, Kansas 67601

4/10

Test Ticket

NO. 44788

Well Name & No. KY ENDOWMENT A #3 Test No. 1 Date 5-9-12

Company Tengasco INC Elevation 1790 KB 1783 GL

Address 1327 NOOSE RD PO Box 458 Hays KS 67601

Co. Rep / Geo. Mike Bair Rig American Eagle #2

Location: Sec. 30 Twp. 7 S Rge. 17 W Co. Rooks State KS

Interval Tested 2730-2747 Zone Tested TOPEKA

Anchor Length 17 Drill Pipe Run 2714 Mud Wt. 9.3

Top Packer Depth 2725 Drill Collars Run 0 Vis 29

Bottom Packer Depth 2730 Wt. Pipe Run 0 WL

Total Depth 2747 Chlorides 63,000 ppm System LCM

Blow Description IF- Weak Blow Built TO 3 IN
ISI- Dead No Blow Back
FF- Weak Blow Built TO 1 IN
FSI- Dead No Blow Back

Rec 60	Feet of MW	%gas	%oil	80 %water	20 %mud	
Rec 60	Feet of WM	%gas	%oil	40 %water	60 %mud	
Rec	Feet of	%gas	%oil	%water	%mud	
Rec	Feet of	%gas	%oil	%water	%mud	
Rec	Feet of	%gas	%oil	%water	%mud	

Rec Total 120 BHT 98 Gravity ____ API RW .304 @ 45.1 °F Chlorides 37,000 ppm

(A) Initial Hydrostatic 1329	☒ Test	T-On Location 1:23
(B) First Initial Flow 32	☒ Jars 250	T-Started 1:53
(C) First Final Flow 32	☒ Safety Joint 75	T-Open 3:11
(D) Initial Shut-In 480	☐ Circ Sub	T-Pulled 6:11
(E) Second Initial Flow 37	☐ Hourly Standby	T-Out 7:47
(F) Second Final Flow 45	☒ Mileage 84 130.20 RT	Comments
(G) Final Shut-In 473	☐ Sampler	
(H) Final Hydrostatic 1305	☐ Straddle	☐ Ruined Shale Packer
	☐ Shale Packer	☐ Ruined Packer
Initial Open 45	☐ Extra Packer	☐ Extra Copies
Initial Shut-In 45	☐ Extra Recorder	Sub Total 0
Final Flow 45	☐ Day Standby	Total 1605.20
Final Shut-In 45	☐ Accessibility	MP/DST Disc't
	Sub Total 1605.20	

Approved By ____ Our Representative Jeff Brown

Trilobite Testing Inc. shall not be liable for damages 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.

TRILOBITE TESTING INC.

P.O. Box 1733 • Hays, Kansas 67601

4/10

Test Ticket

NO. 44789

Well Name & No. KL Endowment A #3 Test No. 2 Date 5-10-12

Company Tengas Co INC Elevation 1790 KB 1783 GL

Address Po Box 458 Hays KS 67601

Co. Rep / Geo. Mike Bair Rig American Eagle #2

Location: Sec. 30 Twp. 7S Rge. 17W Co. Rooks State KS

Interval Tested 3039 - 3060 Zone Tested Lansing - G

Anchor Length 21 Drill Pipe Run 3028 Mud Wt. 8.9

Top Packer Depth 3034 Drill Collars Run 0 Vis 56

Bottom Packer Depth 3039 Wt. Pipe Run 0 WL 6.4

Total Depth 3060 Chlorides 1800 ppm System LCM 1

Blow Description IF- Weak Blow Built To 2 IN
ISI- Dead No Blow Back
FF- Weak Blow Built To 2½ IN
FSI- Dead No Blow Back

Rec 30	Feet of USOCM	%gas	3 %oil	%water 97	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 30 BHT 101 Gravity ____ API RW ____ @ ____ °F Chlorides ____ ppm

(A) Initial Hydrostatic 1497	☒ Test		T-On Location 7:43
(B) First Initial Flow 21	☒ Jars 250		T-Started 8:39
(C) First Final Flow 26	☒ Safety Joint 75		T-Open 10:10
(D) Initial Shut-In 105	☐ Circ Sub		T-Pulled 13:40
(E) Second Initial Flow 22	☐ Hourly Standby		T-Out 15:00
(F) Second Final Flow 30	☒ Mileage 130.20		Comments
(G) Final Shut-In 99	☐ Sampler		
(H) Final Hydrostatic 1468	☐ Straddle		☐ Ruined Shale Packer
	☐ Shale Packer		☐ Ruined Packer
Initial Open 45	☐ Extra Packer		☐ Extra Copies
Initial Shut-In 45	☐ Extra Recorder		Sub Total 0
Final Flow 60	☐ Day Standby		Total 1605.20
Final Shut-In 60	☐ Accessibility		MP/DST Disc't
	Sub Total 1605.20		

Approved By ____ Our Representative Jeff Brown

Trilobite Testing Inc. shall not be liable for damages 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.

TRILOBITE TESTING INC.

P.O. Box 1733 • Hays, Kansas 67601

Test Ticket

NO. 44790

Well Name & No. KH ENDOWMENT A #3 Test No. 3 Date 5-11-12

Company Tengas CO INC Elevation 1790 KB 1783 GL

Address Po Box 458 Hays 67601

Co. Rep / Geo. Mike Bair Rig American Eagle #2

Location: Sec. 30 Twp. 7s Rge. 17W Co. Rooks State KS

Interval Tested 3242 - 3280 Zone Tested ARBuckle

Anchor Length 38 Drill Pipe Run 3246 Mud Wt. 9.4

Top Packer Depth 3237 Drill Collars Run 0 Vis 54

Bottom Packer Depth 3242 Wt. Pipe Run 0 WL 7.2

Total Depth 3280 Chlorides 2400 ppm System LCM 3

Blow Description IF: Weak Blow Built To 1 3/4 IN

ISI. Dead No Blow Back

FF- Weak Blow Built To 1/4

FSI - Dead No Blow

Rec	10	Feet of	OCM	%gas		10 %oil	%water	90	%mud
Rec	5	Feet of	Oil	%gas		100 %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 15 BHT 104 Gravity 26 API RW ____ @ ____ °F Chlorides ____ ppm

(A) Initial Hydrostatic	1603	☒ Test		T-On Location	13:15
(B) First Initial Flow	24	☒ Jars	250	T-Started	13:33
(C) First Final Flow	29	☒ Safety Joint	75	T-Open	15:20
(D) Initial Shut-In	1602	☐ Circ Sub		T-Pulled	18:20
(E) Second Initial Flow	29	☐ Hourly Standby		T-Out	19:54
(F) Second Final Flow	30	☒ Mileage	130.20	Comments	
(G) Final Shut-In	91	☐ Sampler			
(H) Final Hydrostatic	1582	☐ Straddle		☐ Ruined Shale Packer	
		☐ Shale Packer		☐ Ruined Packer	
Initial Open	45	☐ Extra Packer		☐ Extra Copies	
Initial Shut-In	45	☐ Extra Recorder		Sub Total	0
Final Flow	45	☐ Day Standby		Total	1605.20
Final Shut-In	45	☐ Accessibility		MP/DST Disc't	
		Sub Total	1605.20		

Approved By ____ Our Representative Jeff Brown

Trilobite Testing Inc. shall not be liable for damages 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.

TRILOBITE TESTING INC.

P.O. Box 1733 • Hays, Kansas 67601

4/10

Test Ticket

NO. 44791

Well Name & No. KU ENDOWMENT A #3 Test No. 4 Date 5-12-12

Company Tengas CO INC Elevation 1790 KB 1783 GL

Address PO Box 458 Hays KS 67601

Co. Rep / Geo. Mike Bair Rig American Eagle #2

Location: Sec. 30 Twp. 7S Rge. 17W Co. Rooks State KS

Interval Tested 3275-3316 Zone Tested ARBuckle

Anchor Length 41-Anchor 53-Tail Drill Pipe Run 3277 Mud Wt. 9.3

Top Packer Depth 3270 Drill Collars Run 0 Vis 55

Bottom Packer Depth 3275 Wt. Pipe Run 0 WL 7.2

Total Depth 3316 Chlorides 2400 ppm System LCM 3

Blow Description IF: Good Blow Built To 10 3/4 IN

ISI: Dead No Blow Back

FF: Fair Blow Built To 7 1/4

FSI: Dead No Blow Back

Rec 93	Feet of SOCM	%gas	5 %oil	%water	95 %mud
Rec 52	Feet of OCWM	%gas	10 %oil	10 %water	80 %mud
Rec 10	Feet of Oil	%gas	100 %oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 155 BHT 105 Gravity 21 API RW .261 @ 64.3 °F Chlorides 28,000 ppm

(A) Initial Hydrostatic	1673	☒ Test	1150	T-On Location	11:53
(B) First Initial Flow	30	☒ Jars	250	T-Started	14:10
(C) First Final Flow	64	☒ Safety Joint	75	T-Open	15:35
(D) Initial Shut-In	981	☐ Circ Sub		T-Pulled	18:35
(E) Second Initial Flow	68	☐ Hourly Standby		T-Out	20:20
(F) Second Final Flow	92	☒ Mileage	130.20	Comments	
(G) Final Shut-In	954	☐ Sampler			
(H) Final Hydrostatic	1627	☒ Straddle	600	☐ Ruined Shale Packer	
		☐ Shale Packer		☐ Ruined Packer	
Initial Open	45	☐ Extra Packer		☐ Extra Copies	
Initial Shut-In	45	☐ Extra Recorder		Sub Total	0
Final Flow	45	☐ Day Standby		Total	2205.20
Final Shut-In	45	☐ Accessibility		MP/DST Disc't	
		Sub Total			

Approved By _____ Our Representative Jeff Brown

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.