



WELL COMPLETION FORM
WELL HISTORY - DESCRIPTION OF WELL & LEASE

OPERATOR: License # _____

Name: _____

Address 1: _____

Address 2: _____

City: _____ State: _____ Zip: _____ + _____

Contact Person: _____

Phone: (_____) _____

CONTRACTOR: License # _____

Name: _____

Wellsite Geologist: _____

Purchaser: _____

Designate Type of Completion:

- New Well Re-Entry Workover
- Oil WSW SWD SIOW
- Gas D&A ENHR SIGW
- OG GSW Temp. Abd.
- CM (Coal Bed Methane)
- Cathodic Other (Core, Expl., etc.): _____

If Workover/Re-entry: Old Well Info as follows:

Operator: _____

Well Name: _____

Original Comp. Date: _____ Original Total Depth: _____

- Deepening Re-perf. Conv. to ENHR Conv. to SWD
- Conv. to GSW
- Plug Back: _____ Plug Back Total Depth _____
- Commingled Permit #: _____
- Dual Completion Permit #: _____
- SWD Permit #: _____
- ENHR Permit #: _____
- GSW Permit #: _____

Spud Date or Recompletion Date Date Reached TD Completion Date or Recompletion Date

API No. 15 - _____

Spot Description: _____

_____ - _____ - _____ Sec. _____ Twp. _____ S. R. _____ East West

_____ Feet from North / South Line of Section

_____ Feet from East / West Line of Section

Footages Calculated from Nearest Outside Section Corner:

- NE NW SE SW

County: _____

Lease Name: _____ Well #: _____

Field Name: _____

Producing Formation: _____

Elevation: Ground: _____ Kelly Bushing: _____

Total Depth: _____ Plug Back Total Depth: _____

Amount of Surface Pipe Set and Cemented at: _____ Feet

Multiple Stage Cementing Collar Used? Yes No

If yes, show depth set: _____ Feet

If Alternate II completion, cement circulated from: _____

feet depth to: _____ w/ _____ sx cmt.

Drilling Fluid Management Plan

(Data must be collected from the Reserve Pit)

Chloride content: _____ ppm Fluid volume: _____ bbls

Dewatering method used: _____

Location of fluid disposal if hauled offsite: _____

Operator Name: _____

Lease Name: _____ License #: _____

Quarter _____ Sec. _____ Twp. _____ S. R. _____ East West

County: _____ Permit #: _____

AFFIDAVIT

I am the affiant and I hereby certify that all requirements of the statutes, rules and regulations promulgated to regulate the oil and gas industry have been fully complied with and the statements herein are complete and correct to the best of my knowledge.

Submitted Electronically

KCC Office Use ONLY

- Letter of Confidentiality Received
Date: _____
- Confidential Release Date: _____
- Wireline Log Received
- Geologist Report Received
- UIC Distribution
- ALT I II III Approved by: _____ Date: _____



1067346

Operator Name: _____ Lease Name: _____ Well #: _____

Sec. _____ Twp. _____ S. R. _____ East West County: _____

INSTRUCTIONS: Show important tops and base of formations penetrated. Detail all cores. Report all final copies of drill stems tests giving interval tested, time tool open and closed, flowing and shut-in pressures, whether shut-in pressure reached static level, hydrostatic pressures, bottom hole temperature, fluid recovery, and flow rates if gas to surface test, along with final chart(s). Attach extra sheet if more space is needed. Attach complete copy of all Electric Wire-line Logs surveyed. Attach final geological well site report.

Drill Stem Tests Taken <input type="checkbox"/> Yes <input type="checkbox"/> No <i>(Attach Additional Sheets)</i> Samples Sent to Geological Survey <input type="checkbox"/> Yes <input type="checkbox"/> No Cores Taken <input type="checkbox"/> Yes <input type="checkbox"/> No Electric Log Run <input type="checkbox"/> Yes <input type="checkbox"/> No Electric Log Submitted Electronically <input type="checkbox"/> Yes <input type="checkbox"/> No <i>(If no, Submit Copy)</i> List All E. Logs Run:	<input type="checkbox"/> Log Formation (Top), Depth and Datum <input type="checkbox"/> Sample Name Top Datum
---	---

CASING RECORD <input type="checkbox"/> New <input type="checkbox"/> Used							
Report all strings set-conductor, surface, intermediate, production, etc.							
Purpose of String	Size Hole Drilled	Size Casing Set (In O.D.)	Weight Lbs. / Ft.	Setting Depth	Type of Cement	# Sacks Used	Type and Percent Additives

ADDITIONAL CEMENTING / SQUEEZE RECORD				
Purpose:	Depth Top Bottom	Type of Cement	# Sacks Used	Type and Percent Additives
_____ Perforate _____ Protect Casing _____ Plug Back TD _____ Plug Off Zone				

Shots Per Foot	PERFORATION RECORD - Bridge Plugs Set/Type Specify Footage of Each Interval Perforated	Acid, Fracture, Shot, Cement Squeeze Record <i>(Amount and Kind of Material Used)</i>	Depth

TUBING RECORD: Size: _____ Set At: _____ Packer At: _____ Liner Run: Yes No

Date of First, Resumed Production, SWD or ENHR. _____ Producing Method:
 Flowing Pumping Gas Lift Other (Explain) _____

Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio	Gravity
-----------------------------------	-----------	---------	-------------	---------------	---------

DISPOSITION OF GAS: <input type="checkbox"/> Vented <input type="checkbox"/> Sold <input type="checkbox"/> Used on Lease <i>(If vented, Submit ACO-18.)</i>	METHOD OF COMPLETION: <input type="checkbox"/> Open Hole <input type="checkbox"/> Perf. <input type="checkbox"/> Dually Comp. <input type="checkbox"/> Commingled <i>(Submit ACO-5)</i> <i>(Submit ACO-4)</i> <input type="checkbox"/> Other (Specify) _____	PRODUCTION INTERVAL: _____ _____
--	--	---

Form	ACO1 - Well Completion
Operator	Grand Mesa Operating Company
Well Name	DBY 2-16
Doc ID	1067346

Tops

Name	Top	Datum
Stone Corral	2399	+649
Bs/Stone Corral	2418	+630
Heebner	3942	-894
Lansing	3986	-938
Muncie Creek	4159	-1111
Stark	4248	-1200
Hushpuckney	4290	-1242
Marmaton	4362	-1314
Little Osage	4496	-1448
Morrow	4654	-1606
Mississippian	4736	-1688
LTD	4847	

Conservation Division
Finney State Office Building
130 S. Market, Rm. 2078
Wichita, KS 67202-3802



Phone: 316-337-6200
Fax: 316-337-6211
<http://kcc.ks.gov/>

Mark Sievers, Chairman
Ward Loyd, Commissioner
Thomas E. Wright, Commissioner

Sam Brownback, Governor

November 10, 2011

Ronald N. Sinclair
Grand Mesa Operating Company
1700 N WATERFRONT PKWY BLDG 600
WICHITA, KS 67206-5514

Re: ACO1
API 15-171-20832-00-00
DBY 2-16
SW/4 Sec.16-16S-33W
Scott County, Kansas

Dear Production Department:

We are herewith requesting that the Well Completion Form ACO-1 and attached information for the subject well be held confidential for a period of two years.

Should you have any questions or need additional information regarding subject well, please contact our office.

Respectfully,
Ronald N. Sinclair



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

GRAND MESA OPERATING
1700 N WATERFRONT PKWY BLDG 600
WICHITA KS 67206
ATTN: KENT MATSON

DBY # 2-16
16-16S-33W SCOTT
Job Ticket: 43695 **DST#: 1**
Test Start: 2011.09.12 @ 08:45:37

GENERAL INFORMATION:

Formation: **KC "C"**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 10:41:22
Time Test Ended: 15:55:52
Interval: **4012.00 ft (KB) To 4040.00 ft (KB) (TVD)**
Total Depth: 4040.00 ft (KB) (TVD)
Hole Diameter: 6.88 inches Hole Condition: Fair
Test Type: Conventional Bottom Hole
Tester: RANDY WILLIAMS
Unit No: 36
Reference Elevations: 3048.00 ft (KB)
3037.00 ft (CF)
KB to GR/CF: 11.00 ft

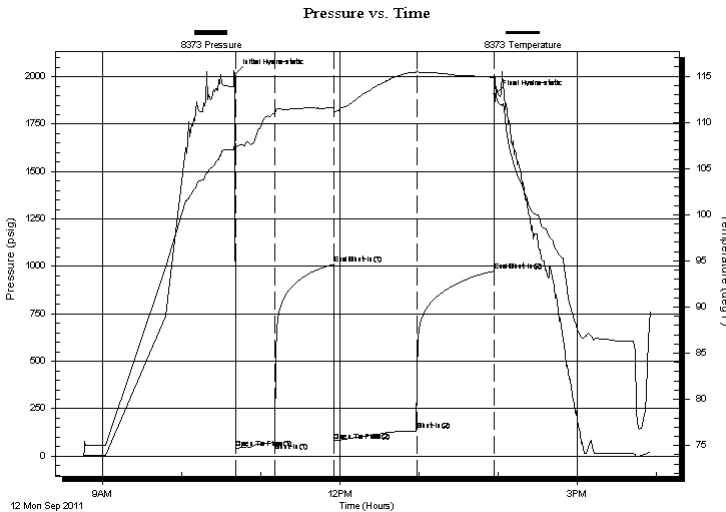
Serial #: 8373

Inside

Press @ Run Depth: 134.38 psig @ 4013.00 ft (KB) Capacity: 8000.00 psig
Start Date: 2011.09.12 End Date: 2011.09.12 Last Calib.: 2011.09.12
Start Time: 08:45:42 End Time: 15:55:51 Time On Btm: 2011.09.12 @ 10:40:52
Time Off Btm: 2011.09.12 @ 13:57:22

TEST COMMENT: IF-SBB, BUILT TO 3.5 INCH IN 30 MIN'S
ISI- NBB
FF- SBB, BUILT TO 5 INCH IN 60 MIN'S
FSI- NBB

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2015.66	107.66	Initial Hydro-static
1	42.36	107.11	Open To Flow (1)
30	72.82	111.00	Shut-In(1)
75	1011.12	111.56	End Shut-In(1)
75	80.24	111.08	Open To Flow (2)
138	134.38	115.45	Shut-In(2)
196	975.39	114.89	End Shut-In(2)
197	1906.89	114.97	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
120.00	MW 90% WATER, 10 MUD	0.59
60.00	MW 65% WATER, 35% MUD	0.30
60.00	SOCWM 5% OIL, 40% WATER, 55% MUD	0.34
10.00	V SOCWM 1% OIL, 24% WATER, 75% MUD	0.14

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

GRAND MESA OPERATING

DBY # 2-16

1700 N WATERFRONT PKWY BLDG 600
WICHITA KS 67206

16-16S-33W SCOTT

Job Ticket: 43695

DST#: 1

ATTN: KENT MATSON

Test Start: 2011.09.12 @ 08:45:37

Mud and Cushion Information

Mud Type: Gel Chem
Mud Weight: 9.00 lb/gal
Viscosity: 49.00 sec/qt
Water Loss: 9.97 in³
Resistivity: ohm.m
Salinity: 4700.00 ppm
Filter Cake: 3.00 inches

Cushion Type:
Cushion Length: ft
Cushion Volume: bbl
Gas Cushion Type:
Gas Cushion Pressure: psig

Oil API: deg API
Water Salinity: 23000 ppm

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
120.00	MW 90% WATER, 10 MUD	0.590
60.00	MW 65% WATER, 35% MUD	0.295
60.00	SOCWM 5% OIL, 40% WATER, 55% MUD	0.341
10.00	VSOCWM 1% OIL, 24% WATER, 75% MUD	0.140

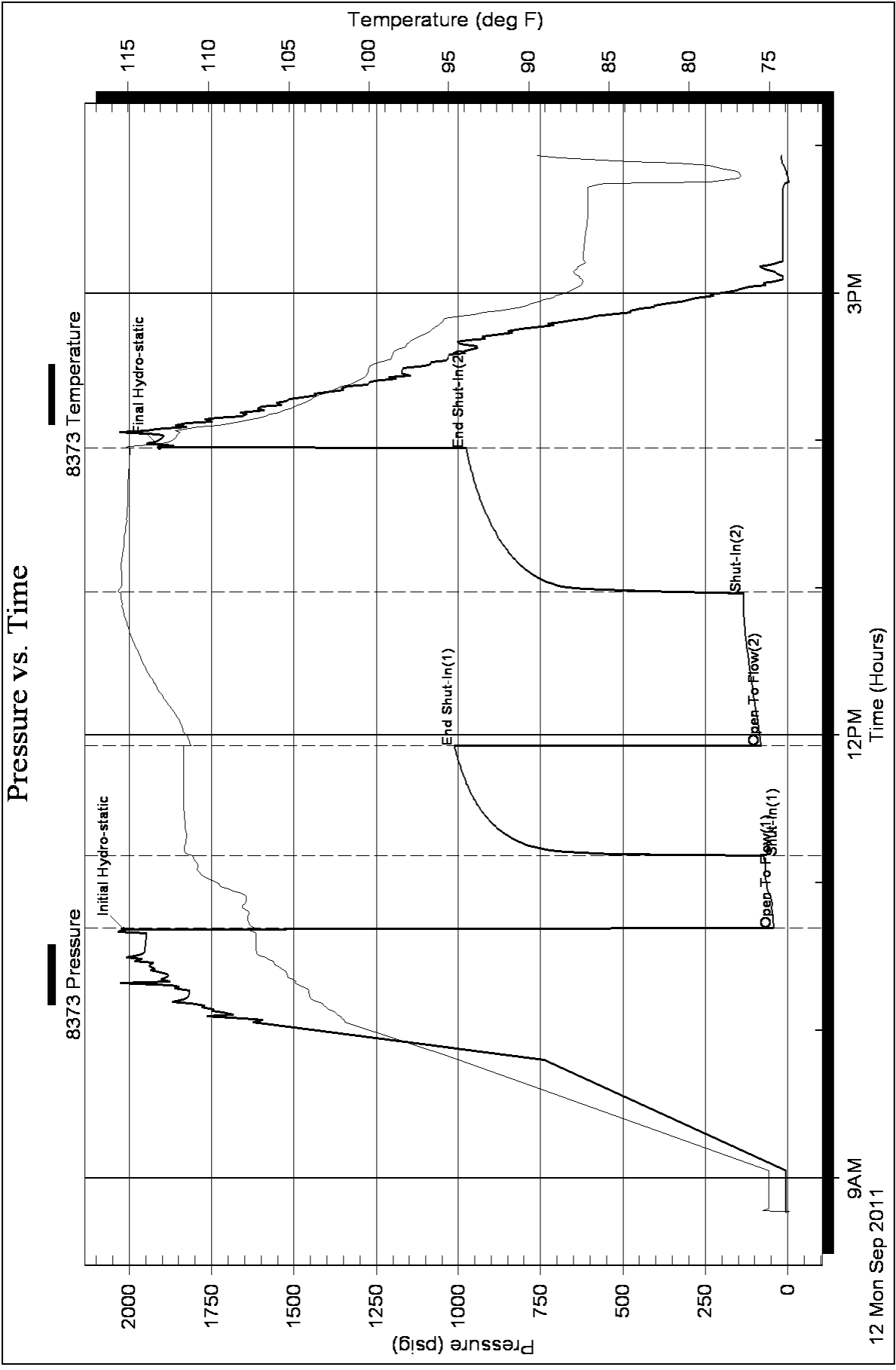
Total Length: 250.00 ft Total Volume: 1.366 bbl

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

Laboratory Name: Laboratory Location:

Recovery Comments: CHLORIDES= 23000.0 @ 102F

Pressure vs. Time





**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

GRAND MESA OPERATING
1700 N WATERFRONT PKWY BLDG 600
WICHITA KS 67206
ATTN: KENT MATSON

DBY # 2-16
16-16S-33W SCOTT
Job Ticket: 43696 **DST#: 2**
Test Start: 2011.09.13 @ 15:56:37

GENERAL INFORMATION:

Formation: **KC "H&I"**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 17:49:22
Time Test Ended: 23:54:22
Interval: **4142.00 ft (KB) To 4227.00 ft (KB) (TVD)**
Total Depth: 4227.00 ft (KB) (TVD)
Hole Diameter: 6.88 inches Hole Condition: Fair
Test Type: Conventional Bottom Hole
Tester: RANDY WILLIAMS
Unit No: 35
Reference Elevations: 3048.00 ft (KB)
3037.00 ft (CF)
KB to GR/CF: 11.00 ft

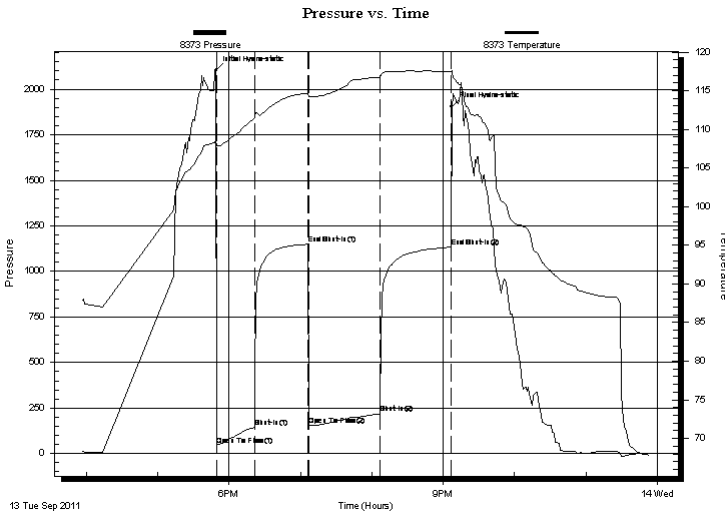
Serial #: 8373

Inside

Press @ Run Depth: 219.20 psig @ 4143.00 ft (KB) Capacity: 8000.00 psig
Start Date: 2011.09.13 End Date: 2011.09.13 Last Calib.: 2011.09.14
Start Time: 15:56:42 End Time: 23:54:21 Time On Btm: 2011.09.13 @ 17:48:52
Time Off Btm: 2011.09.13 @ 21:07:22

TEST COMMENT: IF- SBB, BUILT TO 10 INCHS IN 30 MIN'S
IS- NBB
FF- SBB, BUILT TO BOTTOM BUCKET IN 43 MIN'S
FS- NBB

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2102.03	108.54	Initial Hydro-static
1	46.34	107.91	Open To Flow (1)
33	143.92	111.55	Shut-In(1)
78	1149.22	114.69	End Shut-In(1)
78	155.05	114.30	Open To Flow (2)
138	219.20	116.74	Shut-In(2)
198	1133.02	117.49	End Shut-In(2)
199	1903.99	117.63	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
240.00	MCW-30% MUD, 70% WATER	1.23
180.00	SOWCM- 5% OIL, 25% WATER, 70% MUD	2.52
60.00	CLEAN OIL	0.84

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

GRAND MESA OPERATING

DBY # 2-16

1700 N WATERFRONT PKWY BLDG 600
WICHITA KS 67206

16-16S-33W SCOTT

Job Ticket: 43696

DST#: 2

ATTN: KENT MATSON

Test Start: 2011.09.13 @ 15:56:37

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:

19000 ppm

Viscosity: 56.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 10.37 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 8000.00 ppm

Filter Cake: 3.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
240.00	MCW-30% MUD, 70% WATER	1.226
180.00	SOWCM- 5% OIL, 25% WATER, 70% MUD	2.525
60.00	CLEAN OIL	0.842

Total Length: 480.00 ft Total Volume: 4.593 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

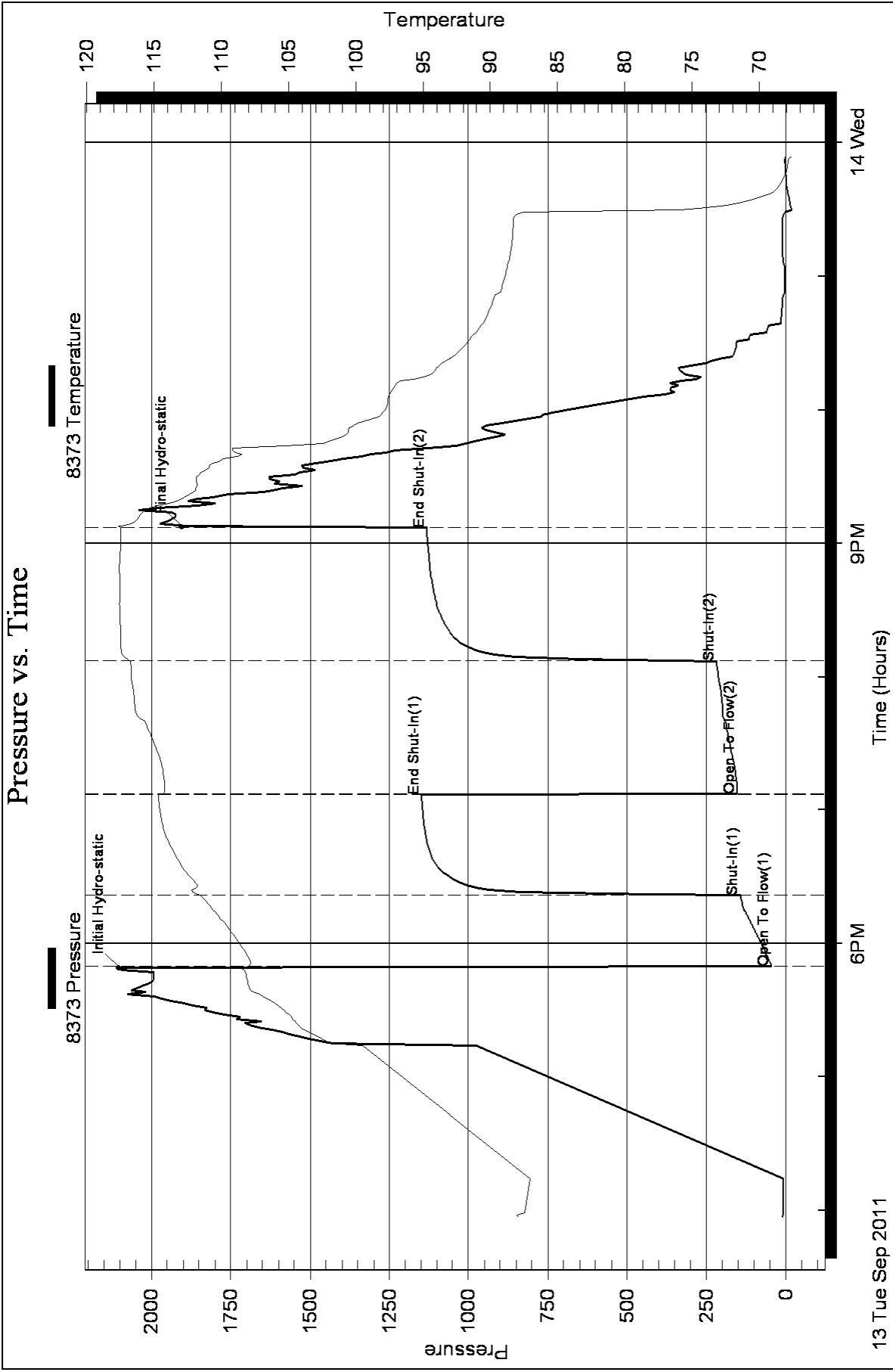
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: API- 28 @ 60 F

CHLORIDES- 19,000





TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

GRAND MESA OPERATING
 1700 N WATERFRONT PKWY BLDG 600
 WICHITA KS 67206
 ATTN: KENT MATSON

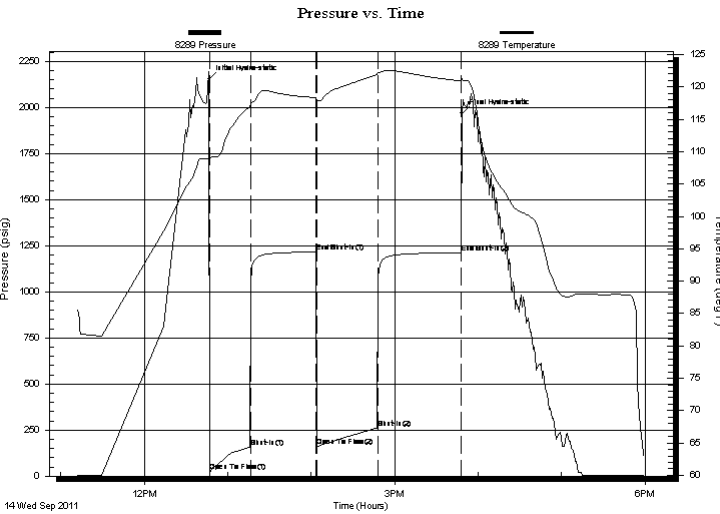
DBY # 2-16
16-16S-33W SCOTT
 Job Ticket: 43697 **DST#: 3**
 Test Start: 2011.09.14 @ 11:12:08

GENERAL INFORMATION:

Formation: **KC "K"**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 12:46:53
 Time Test Ended: 17:59:53
 Interval: **4245.00 ft (KB) To 4272.00 ft (KB) (TVD)**
 Total Depth: 4272.00 ft (KB) (TVD)
 Hole Diameter: 6.88 inches Hole Condition: Fair
 Test Type: Conventional Bottom Hole
 Tester: RANDY WILLIAMS
 Unit No: 35
 Reference Elevations: 3048.00 ft (KB)
 3037.00 ft (CF)
 KB to GR/CF: 11.00 ft

Serial #: 8289 Outside
 Press @ Run Depth: 262.64 psig @ 4246.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2011.09.14 End Date: 2011.09.14 Last Calib.: 2011.09.14
 Start Time: 11:12:13 End Time: 17:59:52 Time On Btm: 2011.09.14 @ 12:46:38
 Time Off Btm: 2011.09.14 @ 15:48:23

TEST COMMENT: IF- FBB, BUILT TO BOTTOM BUCKET IN 24 MINS
 IS- NBB
 FF- FBB, BUILT TO BOTTOM BUCKET IN 28 MINS
 FS- NBB



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2151.49	109.33	Initial Hydro-static
1	24.30	108.74	Open To Flow (1)
30	158.47	117.01	Shut-In(1)
77	1216.18	118.33	End Shut-In(1)
78	161.65	117.90	Open To Flow (2)
122	262.64	121.88	Shut-In(2)
182	1212.63	120.94	End Shut-In(2)
182	1967.29	121.21	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
540.00	MCW- 80% WATER, 20% MUD	5.43

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

GRAND MESA OPERATING

DBY # 2-16

1700 N WATERFRONT PKWY BLDG 600
WICHITA KS 67206

16-16S-33W SCOTT

Job Ticket: 43697

DST#: 3

ATTN: KENT MATSON

Test Start: 2011.09.14 @ 11:12:08

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:

21000 ppm

Viscosity: 53.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.97 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 8600.00 ppm

Filter Cake: 4.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
540.00	MCW- 80% WATER, 20% MUD	5.434

Total Length: 540.00 ft Total Volume: 5.434 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

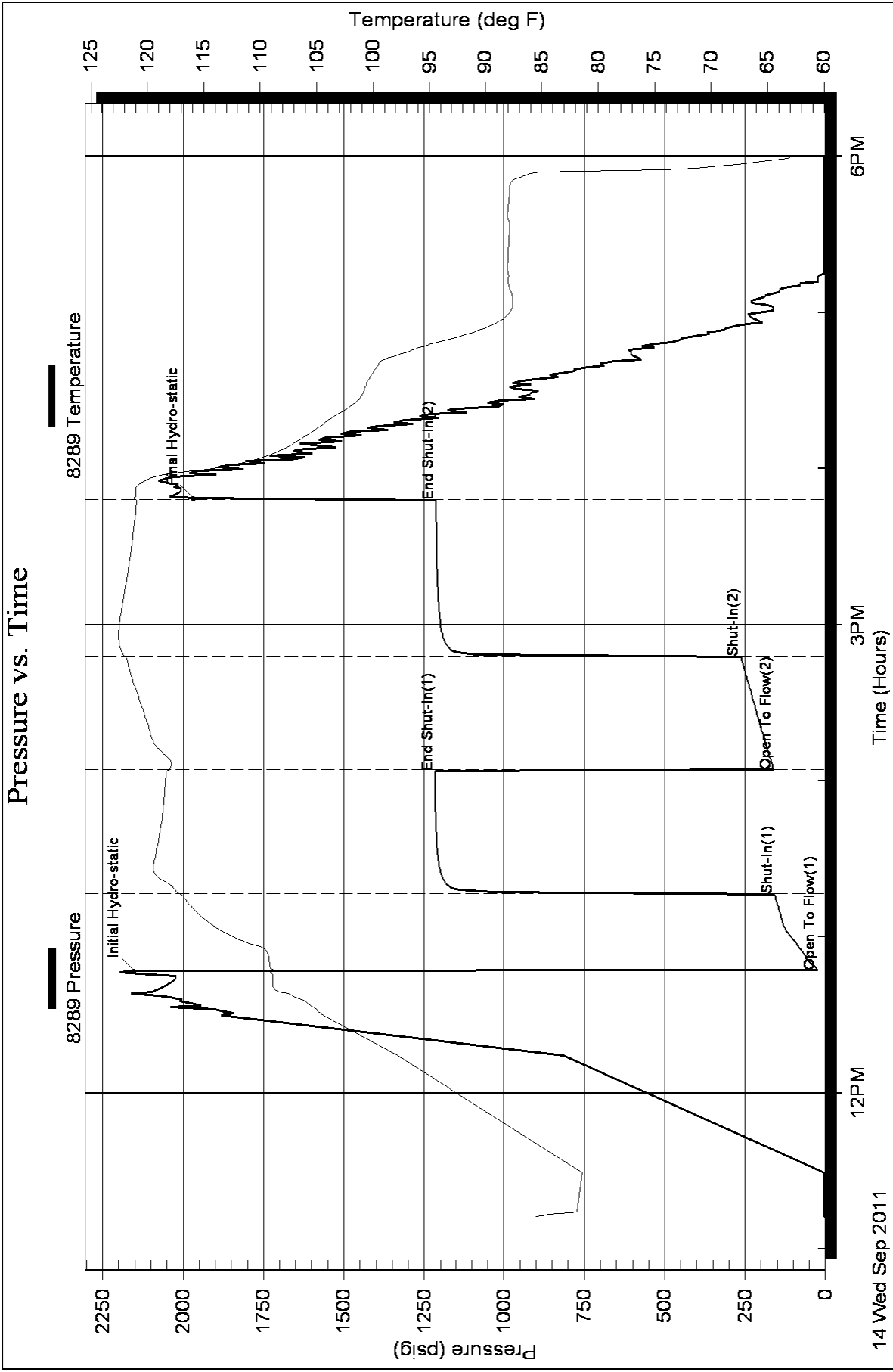
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: CHLORIDES =21,000

Pressure vs. Time





**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

GRAND MESA OPERATING
1700 N WATERFRONT PKWY BLDG 600
WICHITA KS 67206
ATTN: KENT MATSON

DBY # 2-16
16-16S-33W SCOTT
Job Ticket: 43698 **DST#: 4**
Test Start: 2011.09.15 @ 02:55:00

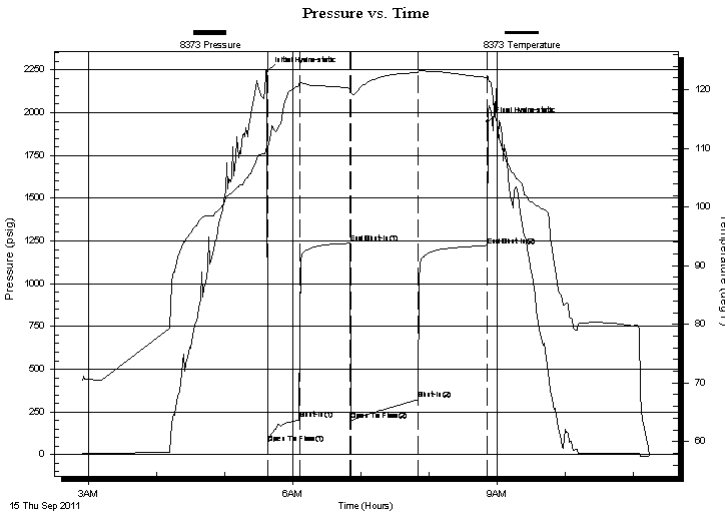
GENERAL INFORMATION:

Formation: **KC "L"**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 05:37:45
Time Test Ended: 11:14:45
Interval: **4288.00 ft (KB) To 4317.00 ft (KB) (TVD)**
Total Depth: 4317.00 ft (KB) (TVD)
Hole Diameter: 6.88 inches Hole Condition: Fair
Test Type: Conventional Bottom Hole
Tester: RANDY WILLIAMS
Unit No: 35
Reference Elevations: 3048.00 ft (KB)
3037.00 ft (CF)
KB to GR/CF: 11.00 ft

Serial #: 8373 **Inside**
Press @ Run Depth: 322.45 psig @ 4289.00 ft (KB) Capacity: 8000.00 psig
Start Date: 2011.09.15 End Date: 2011.09.15 Last Calib.: 2011.09.15
Start Time: 02:55:05 End Time: 11:14:44 Time On Btm: 2011.09.15 @ 05:37:30
Time Off Btm: 2011.09.15 @ 08:51:30

TEST COMMENT: IF- FBB, BUILT TO BOTTOM BUCKET IN 17 MINS
IS- NBB
FF- FBB, BUILT TO BOTTOM BUCKET IN 21 MINS
FS- NBB

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2239.90	110.88	Initial Hydro-static
1	66.69	109.56	Open To Flow (1)
29	205.80	120.81	Shut-In(1)
73	1236.62	120.25	End Shut-In(1)
74	201.94	119.66	Open To Flow (2)
133	322.45	122.95	Shut-In(2)
194	1223.56	122.11	End Shut-In(2)
194	1947.03	122.25	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
420.00	SGOMCW, 5% G, 15% O, 50% W, 30% M	3.75
240.00	GOWCM, 10% G, 20% O, 20% W, 50% M	3.37
15.00	CLEAN O&G, 10% G, 90% OIL	0.21
0.00	45 GIP	0.00

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

GRAND MESA OPERATING

DBY # 2-16

1700 N WATERFRONT PKWY BLDG 600
WICHITA KS 67206

16-16S-33W SCOTT

Job Ticket: 43698

DST#: 4

ATTN: KENT MATSON

Test Start: 2011.09.15 @ 02:55:00

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:

23000 ppm

Viscosity: 53.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.97 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 8600.00 ppm

Filter Cake: 4.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
420.00	SGOMCW, 5% G, 15% O, 50% W,30% M	3.751
240.00	GOWCM, 10% G, 20% O, 20% W, 50% M	3.367
15.00	CLEAN O& G, 10% G, 90% OIL	0.210
0.00	45 GIP	0.000

Total Length: 675.00 ft Total Volume: 7.328 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

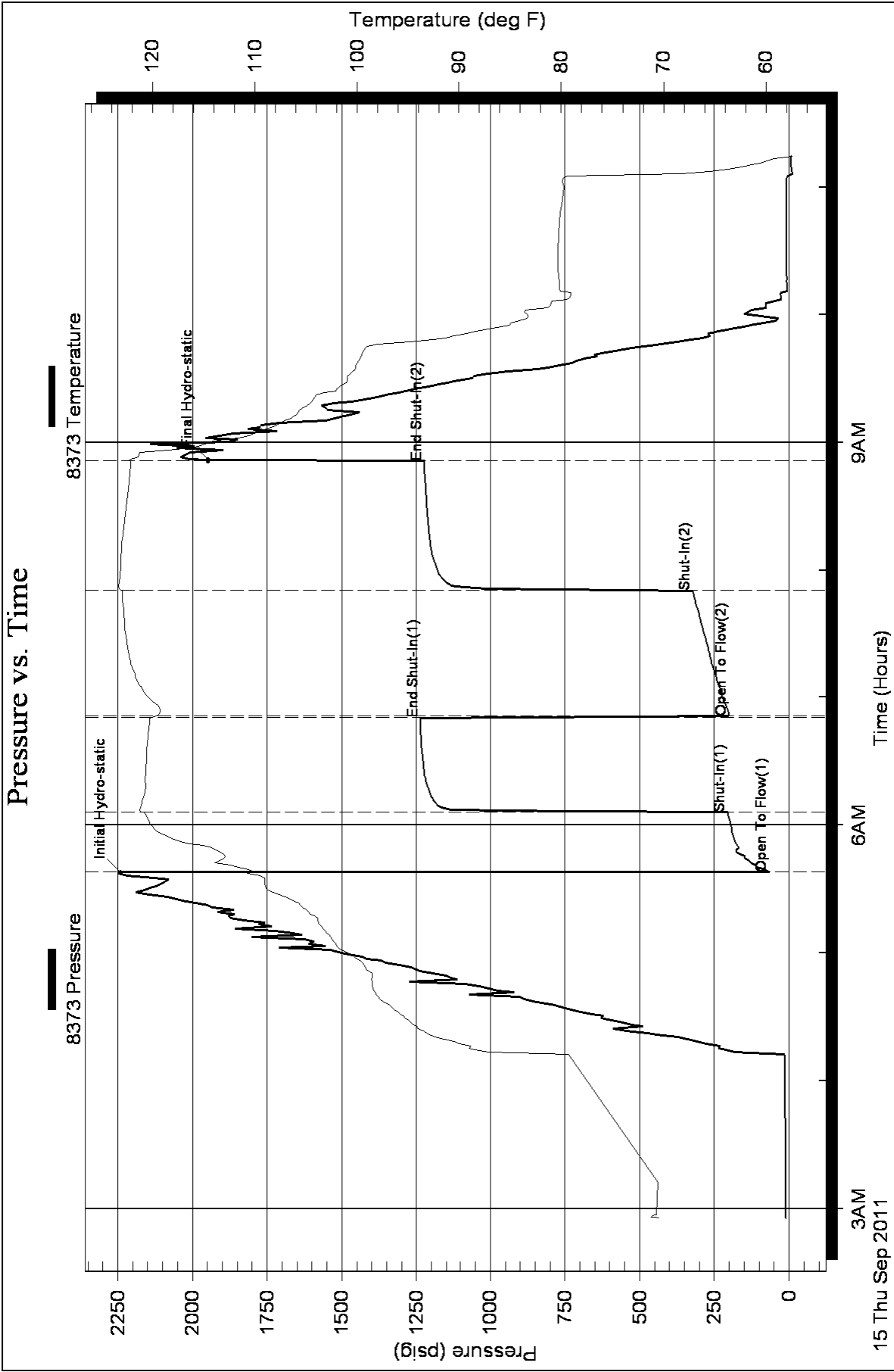
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: WATER= .426 @ 49F = 23000

API= 28 @ 60 F





TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

GRAND MESA OPERATING
 1700 N WATERFRONT PKWY BLDG 600
 WICHITA KS 67206
 ATTN: KENT MATSON

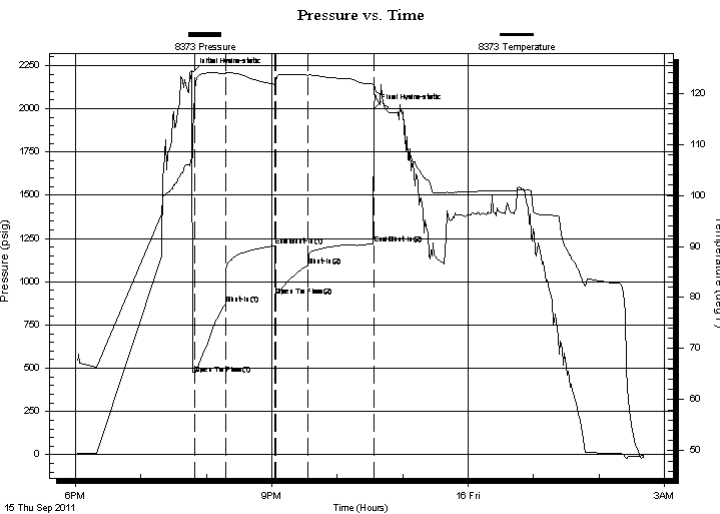
DBY # 2-16
16-16S-33W SCOTT
 Job Ticket: 43884 **DST#: 5**
 Test Start: 2011.09.15 @ 18:02:05

GENERAL INFORMATION:

Formation: **Pleasanton**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 19:49:15
 Time Test Ended: 02:42:15
 Interval: **4324.00 ft (KB) To 4352.00 ft (KB) (TVD)**
 Total Depth: 4352.00 ft (KB) (TVD)
 Hole Diameter: 6.88 inches Hole Condition: Fair
 Test Type: Conventional Bottom Hole
 Tester: Will MacLean
 Unit No: 35
 Reference Elevations: 3048.00 ft (KB)
 3037.00 ft (CF)
 KB to GR/CF: 11.00 ft

Serial #: 8373 Inside
 Press @ Run Depth: 1093.98 psig @ 4327.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2011.09.15 End Date: 2011.09.16 Last Calib.: 2011.09.16
 Start Time: 18:02:00 End Time: 02:42:10 Time On Btm: 2011.09.15 @ 19:47:10
 Time Off Btm: 2011.09.15 @ 22:33:54

TEST COMMENT: IF- BOB in 1min
 IS- BOB in 11 1/2min
 FF- BOB in 1min 15sec
 FS- Surface Blow Built to 8 1/2"



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2209.80	107.40	Initial Hydro-static
2	468.48	120.67	Open To Flow (1)
31	872.33	123.89	Shut-In(1)
76	1208.27	121.76	End Shut-In(1)
77	917.63	121.60	Open To Flow (2)
106	1093.98	123.56	Shut-In(2)
167	1219.84	121.80	End Shut-In(2)
167	1999.29	121.87	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
250.00	WGOCM 5%w 10%g 15%oil 70%m	1.37
320.00	WMGCO 5%w 10%m 10%g 75%oil	4.49
440.00	MGO 5%m 15%g 80%oil	6.17
1810.00	GO 25%g 75%oil	25.39
0.00	1394' GIP	0.00

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

GRAND MESA OPERATING

DBY # 2-16

1700 N WATERFRONT PKWY BLDG 600
WICHITA KS 67206

16-16S-33W SCOTT

Job Ticket: 43884

DST#: 5

ATTN: KENT MATSON

Test Start: 2011.09.15 @ 18:02:05

Mud and Cushion Information

Mud Type: Gel Chem
Mud Weight: 9.00 lb/gal
Viscosity: 78.00 sec/qt
Water Loss: 10.36 in³
Resistivity: ohm.m
Salinity: 9600.00 ppm
Filter Cake: 1.00 inches

Cushion Type:
Cushion Length: ft
Cushion Volume: bbl
Gas Cushion Type:
Gas Cushion Pressure: psig

Oil API: 33 deg API
Water Salinity: ppm

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
250.00	WGOCM 5%w 10%g 15%oil 70%m	1.366
320.00	WMGCO 5%w 10%m 10%g 75%oil	4.489
440.00	MGO 5%m 15%g 80%oil	6.172
1810.00	GO 25%g 75%oil	25.390
0.00	1394' GIP	0.000

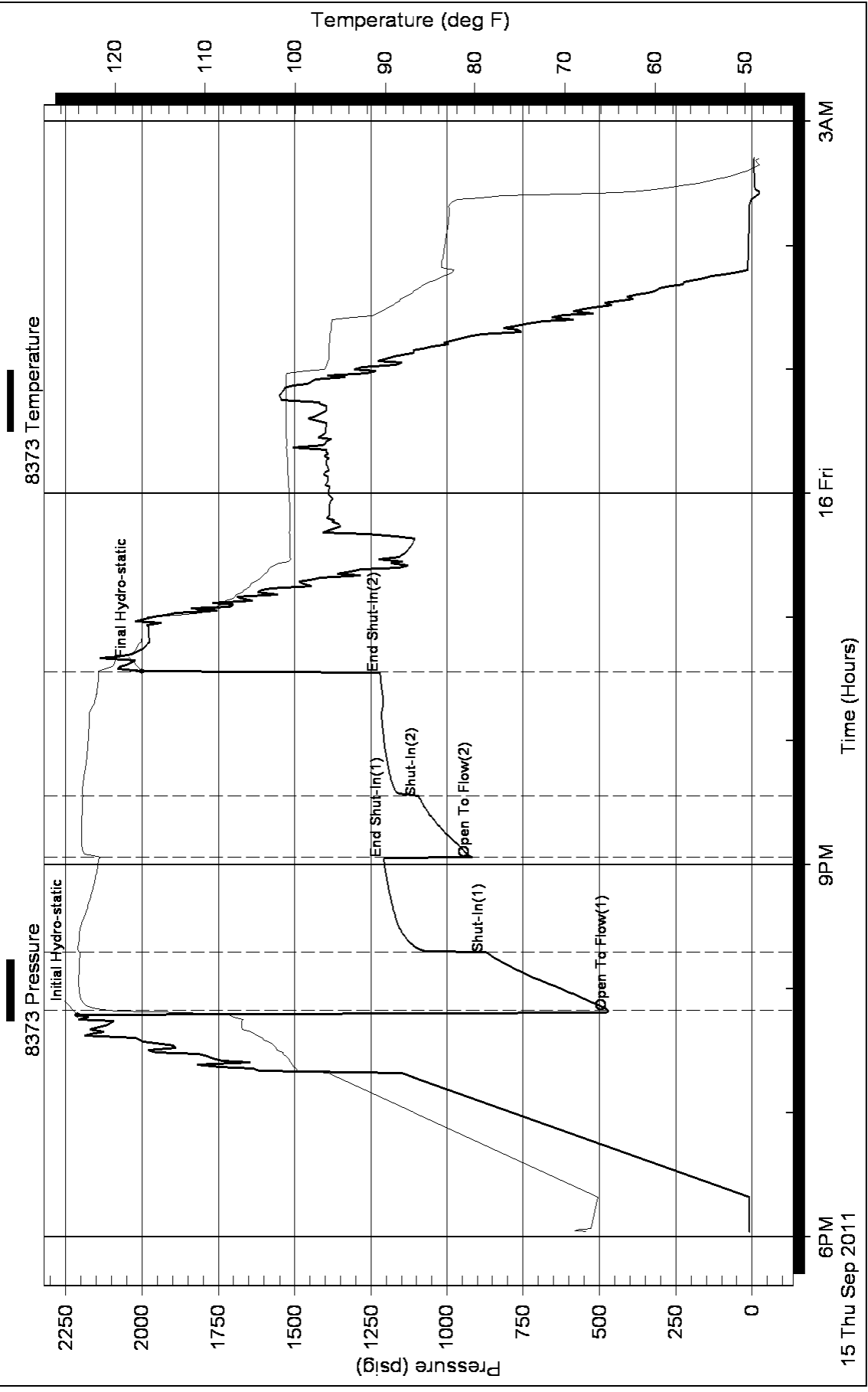
Total Length: 2820.00 ft Total Volume: 37.417 bbl

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

Laboratory Name: Laboratory Location:

Recovery Comments: API is 33 @ 50f = 34

Pressure vs. Time





**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

GRAND MESA OPERATING

DBY # 2-16

1700 N WATERFRONT PKWY BLDG 600
WICHITA KS 67206

16-16S-33W SCOTT

ATTN: John Goldsmith

Job Ticket: 43885

DST#: 6

Test Start: 2011.09.16 @ 12:22:00

GENERAL INFORMATION:

Formation: **Lenapah**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 14:06:40

Time Test Ended: 20:26:54

Test Type: Conventional Bottom Hole

Tester: Will MacLean

Unit No: 35

Interval: 4370.00 ft (KB) To 4418.00 ft (KB) (TVD)

Reference Elevations: 3048.00 ft (KB)

Total Depth: 4418.00 ft (KB) (TVD)

3037.00 ft (CF)

Hole Diameter: 6.88 inches Hole Condition: Fair

KB to GR/CF: 11.00 ft

Serial #: 8373 Inside

Press @ Run Depth: 155.07 psig @ 4371.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2011.09.16

End Date:

2011.09.16

Last Calib.:

2011.09.16

Start Time: 12:22:00

End Time:

20:26:54

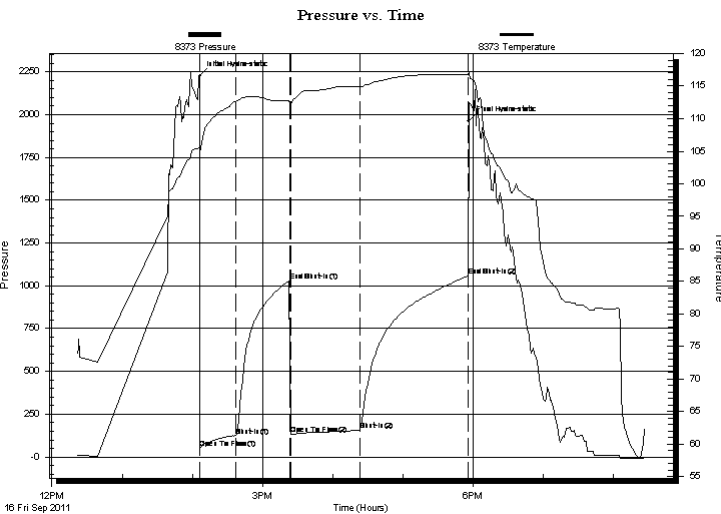
Time On Btm:

2011.09.16 @ 14:06:25

Time Off Btm:

2011.09.16 @ 17:56:24

TEST COMMENT: IF- BOB in 10min
IS- Surface Blow Built to 1 1/4"
FF- BOB in 9min
FS- Surface Blow



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2226.03	105.46	Initial Hydro-static
1	52.49	104.72	Open To Flow (1)
31	123.71	112.68	Shut-In(1)
77	1030.09	112.72	End Shut-In(1)
78	132.31	112.19	Open To Flow (2)
137	155.07	114.87	Shut-In(2)
230	1058.38	116.84	End Shut-In(2)
230	1962.24	117.10	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
62.00	MGO 35%g 35%oil 30%m	0.30
122.00	GOCM 20%g 35%oil 45%m	0.60
186.00	GOCM 30%g 30%oil 40%m	2.14
0.00	500' GIP	0.00

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

GRAND MESA OPERATING

DBY # 2-16

1700 N WATERFRONT PKWY BLDG 600
WICHITA KS 67206

16-16S-33W SCOTT

Job Ticket: 43885

DST#: 6

ATTN: John Goldsmith

Test Start: 2011.09.16 @ 12:22:00

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: 57.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.94 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 9000.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
62.00	MGO 35%g 35%oil 30%m	0.305
122.00	GOCM 20%g 35%oil 45%m	0.600
186.00	GOCM 30%g 30%oil 40%m	2.145
0.00	500' GIP	0.000

Total Length: 370.00 ft

Total Volume: 3.050 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

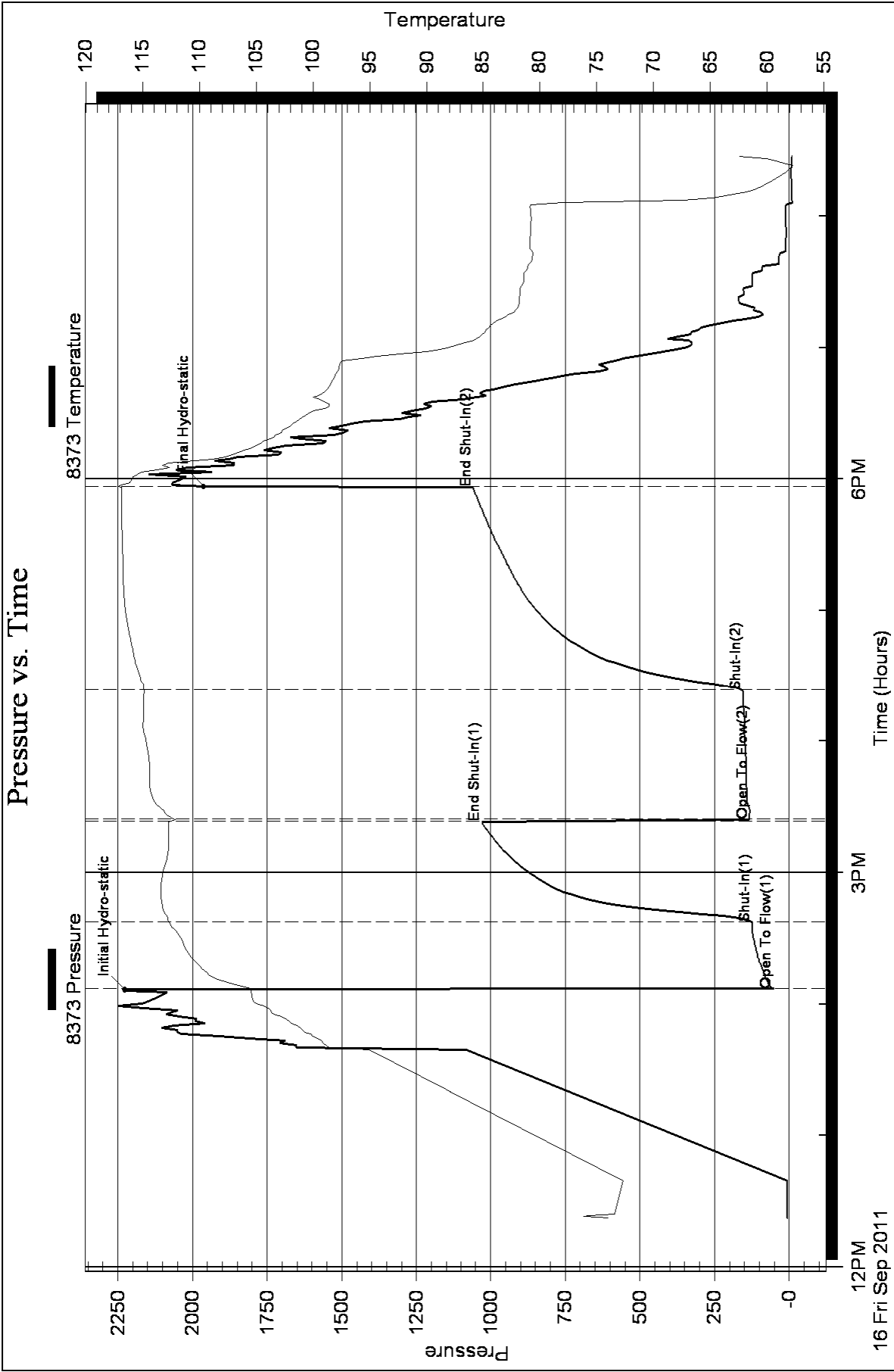
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Pressure vs. Time





**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

GRAND MESA OPERATING
1700 N WATERFRONT PKWY BLDG 600
WICHITA KS 67206
ATTN: KENT MATSON

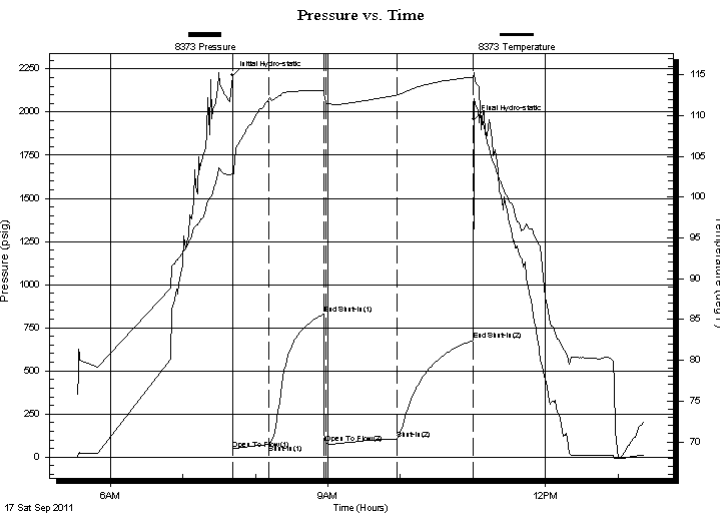
DBY # 2-16
16-16S-33W SCOTT
Job Ticket: 43888 **DST#: 7**
Test Start: 2011.09.17 @ 05:33:00

GENERAL INFORMATION:

Formation: **Altamont / Pawnee**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 07:41:25
Time Test Ended: 13:22:09
Interval: **4406.00 ft (KB) To 4456.00 ft (KB) (TVD)**
Total Depth: 4456.00 ft (KB) (TVD)
Hole Diameter: 6.88 inches Hole Condition: Fair
Test Type: Conventional Bottom Hole
Tester: Will MacLean
Unit No: 35
Reference Elevations: 3048.00 ft (KB)
3037.00 ft (CF)
KB to GR/CF: 11.00 ft

Serial #: 8373 Inside
Press @ RunDepth: 106.43 psig @ 4407.00 ft (KB) Capacity: 8000.00 psig
Start Date: 2011.09.17 End Date: 2011.09.17 Last Calib.: 2011.09.17
Start Time: 05:33:00 End Time: 13:22:09 Time On Btm: 2011.09.17 @ 07:40:55
Time Off Btm: 2011.09.17 @ 11:00:39

TEST COMMENT: IF- BOB in 13min
IS- No Blow
FF- BOB in 12min
FS- Weak Surface Blow at 40min



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2213.10	102.85	Initial Hydro-static
1	47.77	102.52	Open To Flow (1)
31	74.10	112.01	Shut-In(1)
76	830.56	113.08	End Shut-In(1)
77	77.92	111.72	Open To Flow (2)
136	106.43	112.52	Shut-In(2)
200	677.33	114.70	End Shut-In(2)
200	1956.55	115.11	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
62.00	OGCM 20%oil 30%g 50%m	0.30
64.00	GO 3%g 97%oil	0.31
124.00	WMGCO 5%w 15%m 25%g 55%oil	0.75
0.00	560 GIP	0.00

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

GRAND MESA OPERATING

DBY # 2-16

1700 N WATERFRONT PKWY BLDG 600
WICHITA KS 67206

16-16S-33W SCOTT

Job Ticket: 43888

DST#: 7

ATTN: KENT MATSON

Test Start: 2011.09.17 @ 05:33:00

Mud and Cushion Information

Mud Type: Gel Chem
Mud Weight: 9.00 lb/gal
Viscosity: 57.00 sec/qt
Water Loss: 7.97 in³
Resistivity: ohm.m
Salinity: 9000.00 ppm
Filter Cake: 1.00 inches

Cushion Type:
Cushion Length: ft
Cushion Volume: bbl
Gas Cushion Type:
Gas Cushion Pressure: psig

Oil API: 37 deg API
Water Salinity: ppm

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
62.00	OGCM 20%oil 30%g 50%m	0.305
64.00	GO 3%g 97%oil	0.315
124.00	WMGCO 5%w 15%m 25%g 55%oil	0.746
0.00	560 GIP	0.000

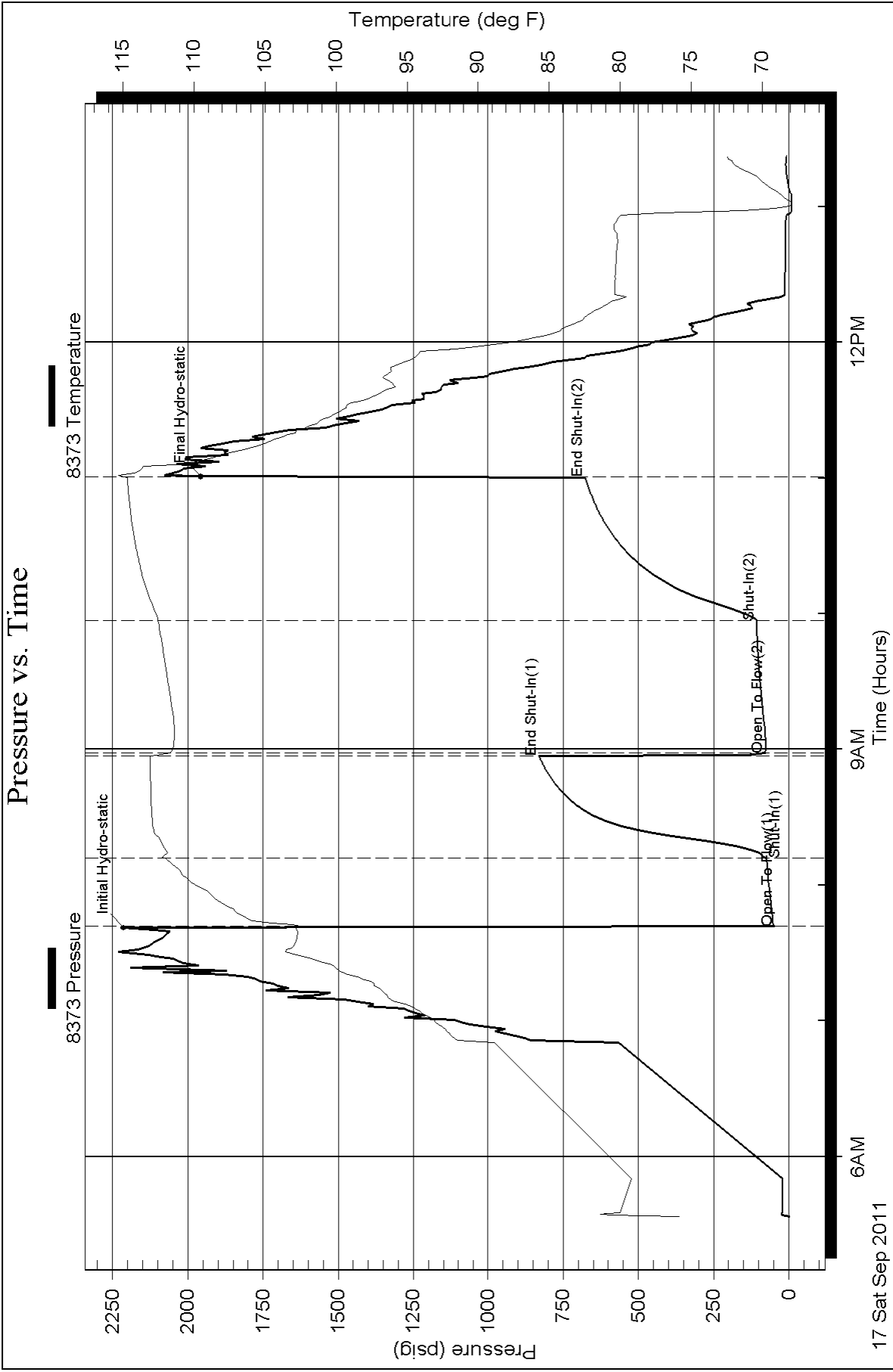
Total Length: 250.00 ft Total Volume: 1.366 bbl

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

Laboratory Name: Laboratory Location:

Recovery Comments: RW is 38 @ 70f = 37

Pressure vs. Time





TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

GRAND MESA OPERATING
 1700 N WATERFRONT PKWY BLDG 600
 WICHITA KS 67206
 ATTN: John Goldsmith

DBY # 2-16
16-16S-33W SCOTT
 Job Ticket: 43889 **DST#: 8**
 Test Start: 2011.09.18 @ 03:05:05

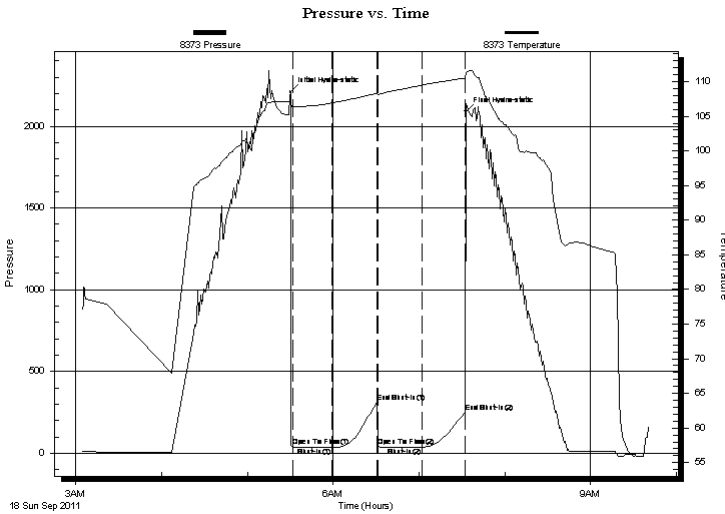
GENERAL INFORMATION:

Formation: **Ft. Scott / Vertigir**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 05:32:00
 Time Test Ended: 09:41:44
 Interval: **4454.00 ft (KB) To 4566.00 ft (KB) (TVD)**
 Total Depth: 4566.00 ft (KB) (TVD)
 Hole Diameter: 6.88 inches Hole Condition: Fair
 Test Type: Conventional Bottom Hole
 Tester: Will MacLean
 Unit No: 35
 Reference Elevations: 3048.00 ft (KB)
 3037.00 ft (CF)
 KB to GR/CF: 11.00 ft

Serial #: 8373 Inside
 Press @ Run Depth: 35.23 psig @ 4455.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2011.09.18 End Date: 2011.09.18 Last Calib.: 2011.09.18
 Start Time: 03:05:00 End Time: 09:41:39 Time On Btm: 2011.09.18 @ 05:30:25
 Time Off Btm: 2011.09.18 @ 07:32:39

TEST COMMENT: IF- Weak Surface Blow
 IS- No Blow
 FF- Weak Surface Blow Died in 6 1/2min
 FS- No Blow

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2211.16	107.12	Initial Hydro-static
2	41.13	106.47	Open To Flow (1)
29	34.17	106.93	Shut-In(1)
61	313.47	108.30	End Shut-In(1)
61	40.42	108.10	Open To Flow (2)
92	35.23	109.51	Shut-In(2)
122	253.42	110.52	End Shut-In(2)
123	2090.31	111.29	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
20.00	Mud w ith Oil Spots 100%m	0.10

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

GRAND MESA OPERATING

DBY # 2-16

1700 N WATERFRONT PKWY BLDG 600
WICHITA KS 67206

16-16S-33W SCOTT

Job Ticket: 43889

DST#: 8

ATTN: John Goldsmith

Test Start: 2011.09.18 @ 03:05:05

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: 60.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 8.75 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 9400.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
20.00	Mud w ith Oil Spots 100%m	0.098

Total Length: 20.00 ft Total Volume: 0.098 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

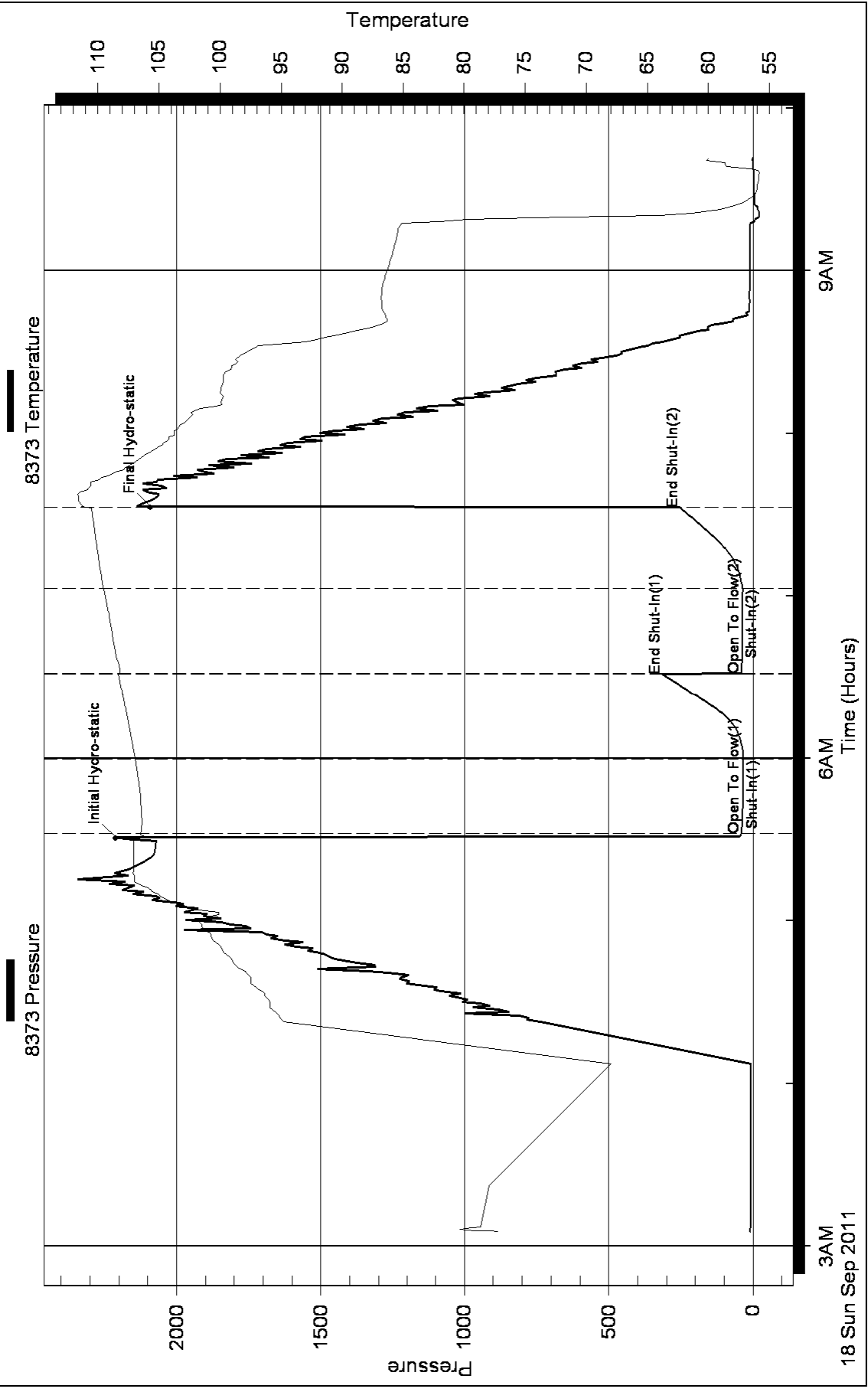
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Pressure vs. Time





**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

GRAND MESA OPERATING

DBY # 2-16

1700 N WATERFRONT PKWY BLDG 600
WICHITA KS 67206

16-16S-33W SCOTT

Job Ticket: 43890

DST#: 9

ATTN: John Goldsmith

Test Start: 2011.09.18 @ 18:56:00

GENERAL INFORMATION:

Formation: **Johnson**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 20:51:10

Time Test Ended: 03:21:09

Test Type: Conventional Bottom Hole

Tester: Will MacLean

Unit No: 35

Interval: **4566.00 ft (KB) To 4615.00 ft (KB) (TVD)**

Reference Elevations: 3048.00 ft (KB)

Total Depth: 4615.00 ft (KB) (TVD)

3037.00 ft (CF)

Hole Diameter: 6.88 inches Hole Condition: Fair

KB to GR/CF: 11.00 ft

Serial #: 8373

Inside

Press @ Run Depth: 193.87 psig @ 4567.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2011.09.18

End Date:

2011.09.19

Last Calib.:

2011.09.19

Start Time: 18:56:00

End Time:

03:21:09

Time On Btm:

2011.09.18 @ 20:50:55

Time Off Btm:

2011.09.19 @ 00:37:24

TEST COMMENT:

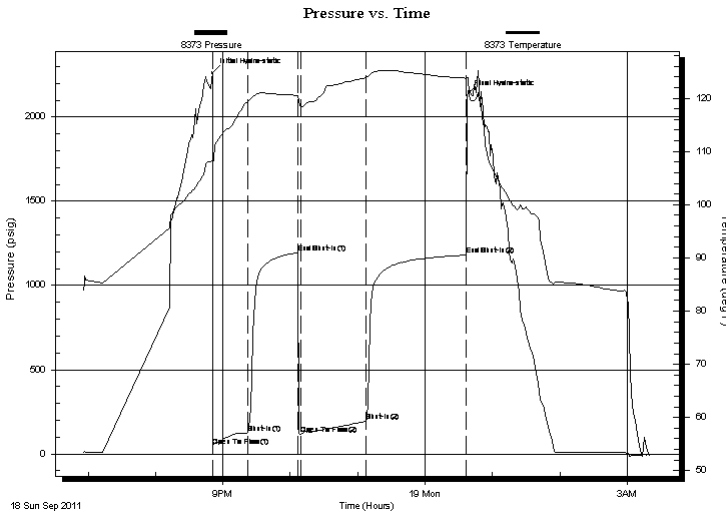
IF- BOB in 6min

IS- Surface Blow Built to 4"

FF- BOB in 4 1/2min

FS- BOB in 12 1/2min @ 18min Died Back to 7" then Built Back to BOB

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2261.62	108.34	Initial Hydro-static
1	46.13	107.57	Open To Flow (1)
31	124.05	119.26	Shut-In(1)
76	1195.41	120.53	End Shut-In(1)
79	115.17	118.37	Open To Flow (2)
137	193.87	123.84	Shut-In(2)
226	1180.41	123.77	End Shut-In(2)
227	2130.60	123.93	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
60.00	GOCM 20%oil 40%g 40%m	0.30
114.00	GO 20%g 80%oil	0.56
124.00	MCGO 20%m 30%oil 50%g	1.18
180.00	GOCM 15%g 20%oil 65%m	2.52
0.00	1178' of GIP	0.00

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

GRAND MESA OPERATING

DBY # 2-16

1700 N WATERFRONT PKWY BLDG 600
WICHITA KS 67206

16-16S-33W SCOTT

Job Ticket: 43890

DST#: 9

ATTN: John Goldsmith

Test Start: 2011.09.18 @ 18:56:00

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

32 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 60.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 9.55 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 9200.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
60.00	GOCM 20%oil 40%g 40%m	0.295
114.00	GO 20%g 80%oil	0.561
124.00	MCGO 20%m 30%oil 50%g	1.184
180.00	GOCM 15%g 20%oil 65%m	2.525
0.00	1178' of GIP	0.000

Total Length: 478.00 ft Total Volume: 4.565 bbl

Num Fluid Samples: 0

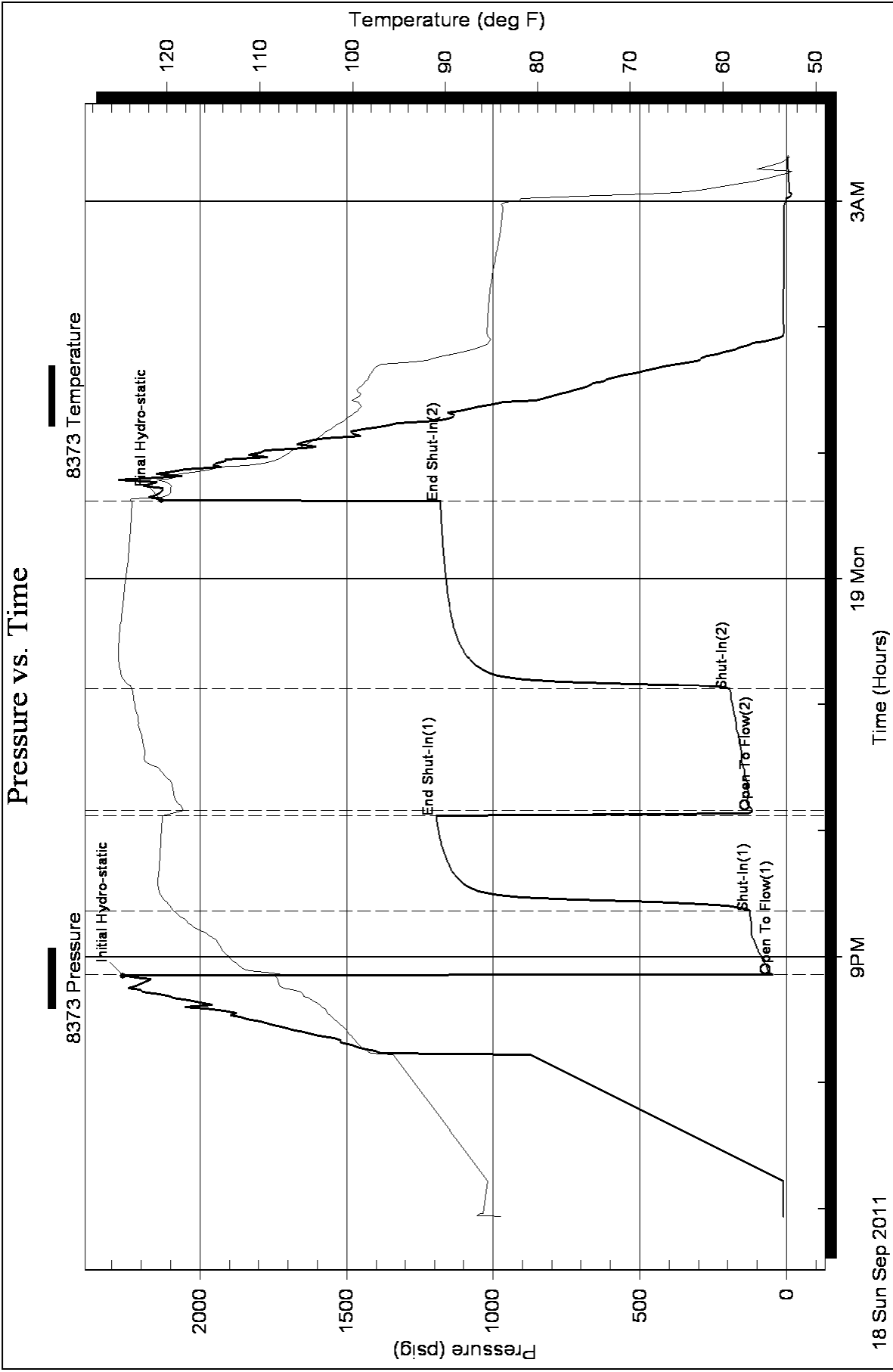
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: API is 32 @60f = 32





**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

GRAND MESA OPERATING

DBY # 2-16

1700 N WATERFRONT PKWY BLDG 600
WICHITA KS 67206

16-16S-33W SCOTT

Job Ticket: 43891

DST#: 10

ATTN: John Goldsmith

Test Start: 2011.09.19 @ 12:32:00

GENERAL INFORMATION:

Formation: **Atoka**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 14:32:25

Time Test Ended: 21:14:25

Test Type: Conventional Bottom Hole (Reset)

Tester: Will MacLean

Unit No: 35

Interval: 4618.00 ft (KB) To 4650.00 ft (KB) (TVD)

Reference Elevations: 3048.00 ft (KB)

Total Depth: 4650.00 ft (KB) (TVD)

3037.00 ft (CF)

Hole Diameter: 6.88 inches Hole Condition: Fair

KB to GR/CF: 11.00 ft

Serial #: 8373

Inside

Press @ Run Depth: 178.42 psig @ 4619.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2011.09.19

End Date:

2011.09.19

Last Calib.:

2011.09.19

Start Time:

12:32:00

End Time:

21:14:25

Time On Btm:

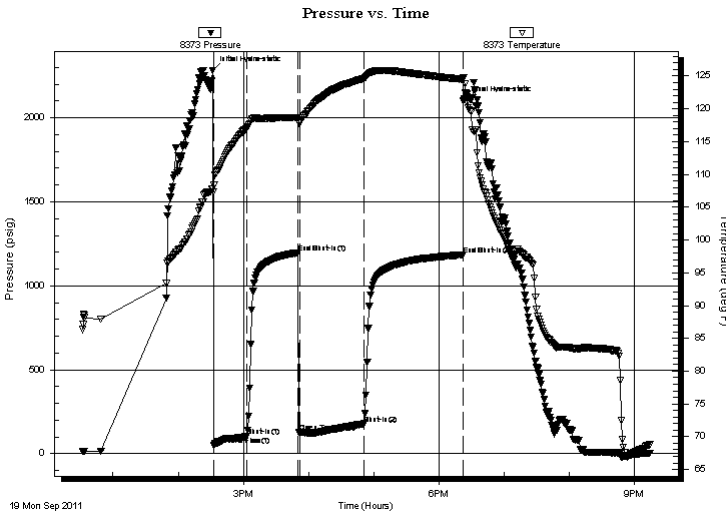
2011.09.19 @ 14:31:55

Time Off Btm:

2011.09.19 @ 18:22:39

TEST COMMENT: IF- BOB in 10min
IS- Surface Blow Built to 7"
FF- BOB in 8min
FS- BOB in 16 1/2min

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2282.70	107.79	Initial Hydro-static
1	48.35	107.30	Open To Flow (1)
31	103.11	117.03	Shut-In(1)
78	1196.54	118.68	End Shut-In(1)
80	126.27	117.80	Open To Flow (2)
139	178.42	124.61	Shut-In(2)
231	1184.28	124.50	End Shut-In(2)
231	2102.66	124.78	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
120.00	MGCO 10%m 15%g 75%oil	0.59
122.00	MGCO 10%m 35%g 55%oil	0.66
124.00	MGCO 5%m 10%g 85%oil	1.74
124.00	MGCO 5%m 35%g 60%oil	1.74
0.00	1922' of GIP	0.00

Gas Rates

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

* Recovery from multiple tests



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

GRAND MESA OPERATING

DBY # 2-16

1700 N WATERFRONT PKWY BLDG 600
WICHITA KS 67206

16-16S-33W SCOTT

Job Ticket: 43891

DST#: 10

ATTN: John Goldsmith

Test Start: 2011.09.19 @ 12:32:00

Mud and Cushion Information

Mud Type: Gel Chem
Mud Weight: 9.00 lb/gal
Viscosity: 68.00 sec/qt
Water Loss: 11.16 in³
Resistivity: ohm.m
Salinity: 10200.00 ppm
Filter Cake: 2.00 inches

Cushion Type:
Cushion Length: ft
Cushion Volume: bbl
Gas Cushion Type:
Gas Cushion Pressure: psig

Oil API: 27 deg API
Water Salinity: ppm

Recovery Information

Recovery Table

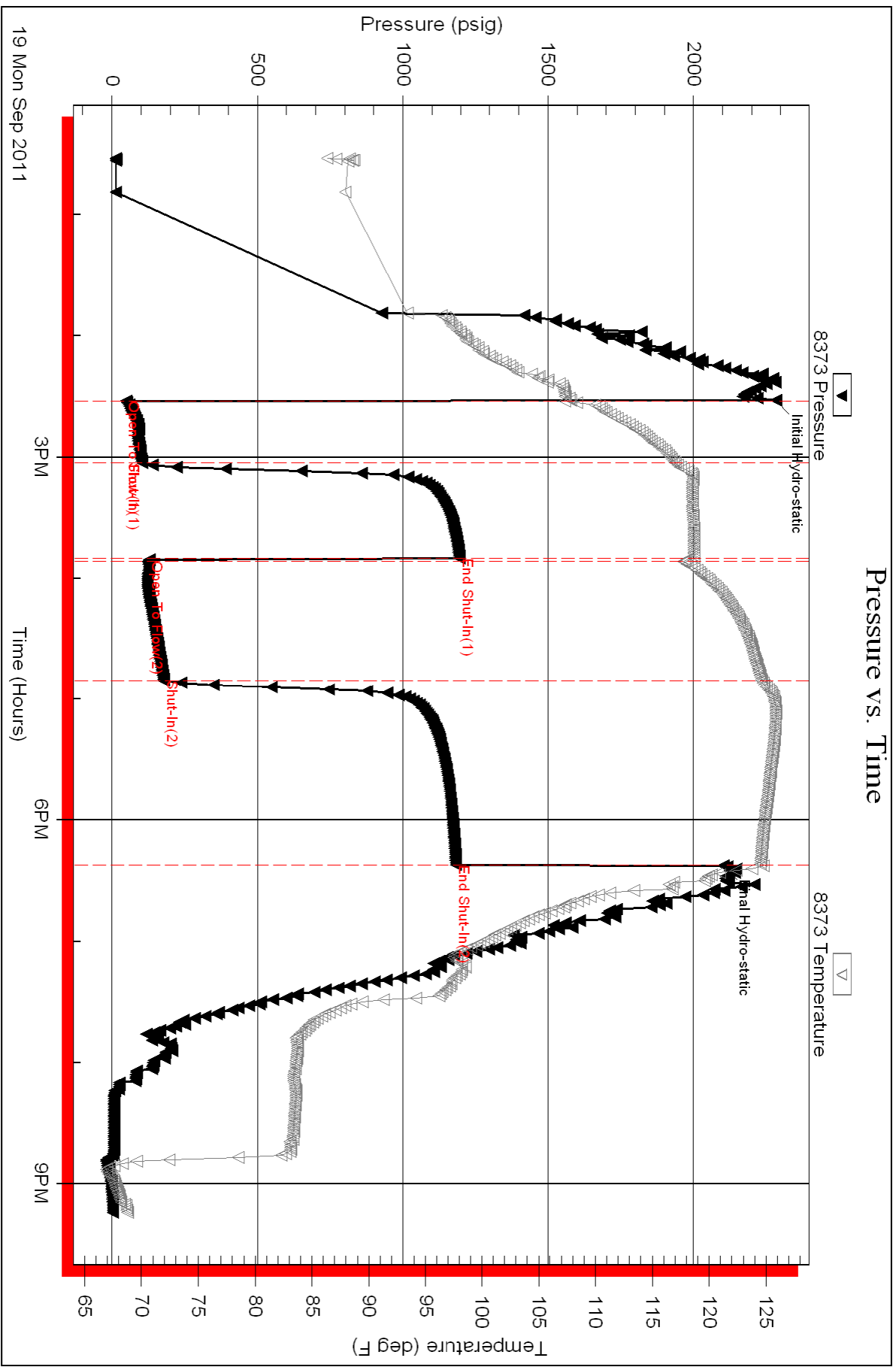
Length ft	Description	Volume bbl
120.00	MGCO 10%m 15%g 75%oil	0.590
122.00	MGCO 10%m 35%g 55%oil	0.664
124.00	MGCO 5%m 10%g 85%oil	1.739
124.00	MGCO 5%m 35%g 60%oil	1.739
0.00	1922' of GIP	0.000

Total Length: 490.00 ft Total Volume: 4.732 bbl

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

Laboratory Name: Laboratory Location:

Recovery Comments: API is 29 @ 80 = 27





TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

GRAND MESA OPERATING
 1700 N WATERFRONT PKWY BLDG 600
 WICHITA KS 67206
 ATTN: John Goldsmith

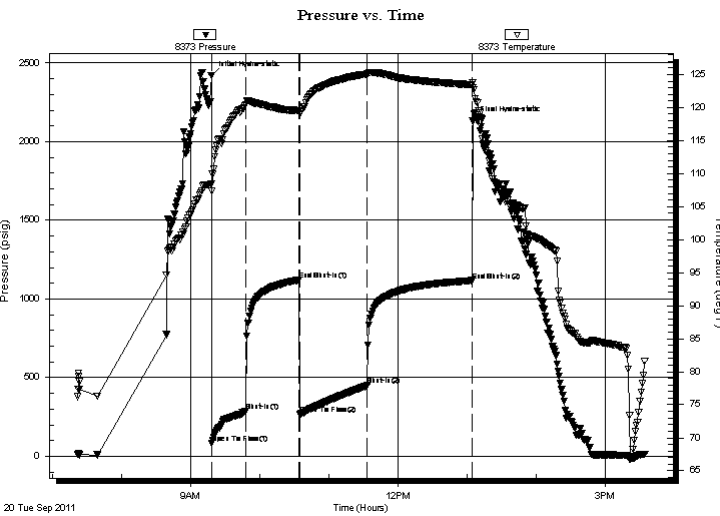
DBY # 2-16
16-16S-33W SCOTT
 Job Ticket: 43892 **DST#: 11**
 Test Start: 2011.09.20 @ 07:22:00

GENERAL INFORMATION:

Formation: **Morrow**
 Deviated: No Whipstock: ft (KB)
 Test Type: Conventional Bottom Hole (Reset)
 Time Tool Opened: 09:18:10 Tester: Will MacLean
 Time Test Ended: 15:33:54 Unit No: 35
 Interval: **4652.00 ft (KB) To 4730.00 ft (KB) (TVD)** Reference Elevations: 3048.00 ft (KB)
 Total Depth: 4730.00 ft (KB) (TVD) 3037.00 ft (CF)
 Hole Diameter: 6.88 inches Hole Condition: Fair KB to GR/CF: 11.00 ft

Serial #: 8373 Inside
 Press @ Run Depth: 449.56 psig @ 4653.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2011.09.20 End Date: 2011.09.20 Last Calib.: 2011.09.20
 Start Time: 07:22:00 End Time: 15:33:54 Time On Btm: 2011.09.20 @ 09:17:55
 Time Off Btm: 2011.09.20 @ 13:04:39

TEST COMMENT: IF- BOB in 9min
 IS- No Blow
 FF- BOB in 18 1/2min
 FS- No Blow



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2420.95	108.49	Initial Hydro-static
1	82.84	107.33	Open To Flow (1)
30	287.32	120.43	Shut-In(1)
76	1120.57	119.55	End Shut-In(1)
77	264.96	118.99	Open To Flow (2)
136	449.56	125.05	Shut-In(2)
227	1117.37	123.46	End Shut-In(2)
227	2135.17	123.73	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
372.00	MCW 35%m 65%w	3.08
244.00	MCW 15%m 85%w	3.42
191.00	WCM 20%w 80%m	2.68
120.00	MCW 5%m 95%w	1.68

* Recovery from multiple tests

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

GRAND MESA OPERATING

DBY # 2-16

1700 N WATERFRONT PKWY BLDG 600
WICHITA KS 67206

16-16S-33W SCOTT

Job Ticket: 43892

DST#: 11

ATTN: John Goldsmith

Test Start: 2011.09.20 @ 07:22:00

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:

46000 ppm

Viscosity: 68.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 11.17 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 10200.00 ppm

Filter Cake: 2.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
372.00	MCW 35% <i>m</i> 65% <i>w</i>	3.077
244.00	MCW 15% <i>m</i> 85% <i>w</i>	3.423
191.00	WCM 20% <i>w</i> 80% <i>m</i>	2.679
120.00	MCW 5% <i>m</i> 95% <i>w</i>	1.683

Total Length: 927.00 ft Total Volume: 10.862 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: RW is .137 @ 80f = 46000

Serial #: 8373

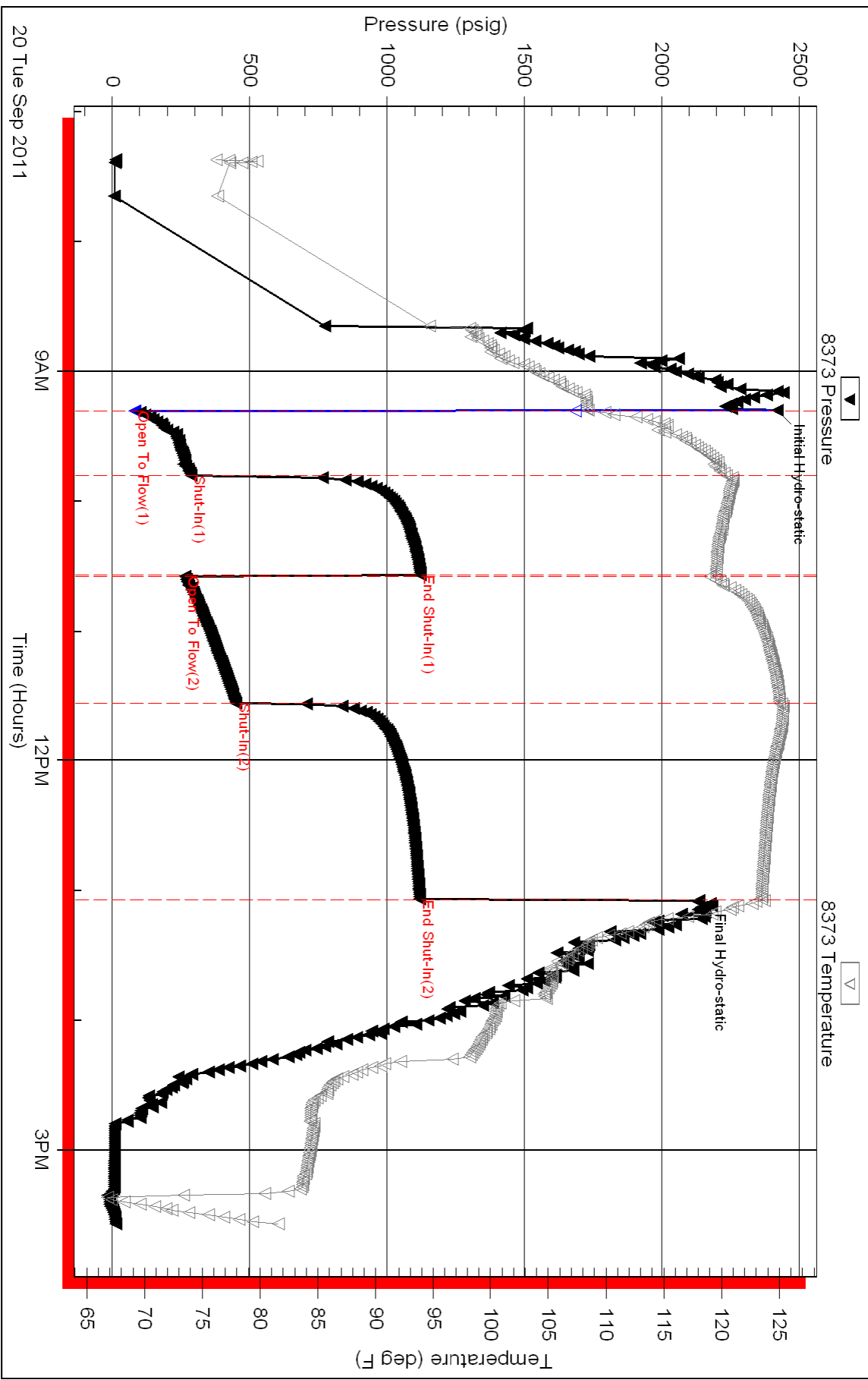
Inside

GRAND MESA OPERATING

16-16S-33W SCOTT

DST Test Number: 11

Pressure vs. Time



Triobite Testing, Inc

Ref. No: 43892

Printed: 2011.09.21 @ 08:28:26

GRAND MESA

OPERATING COMPANY

(316) 265-3000
FAX: (316) 265-3455

1700 N. WATERFRONT PARKWAY
BLDG. 600
WICHITA, KANSAS 67206-5514

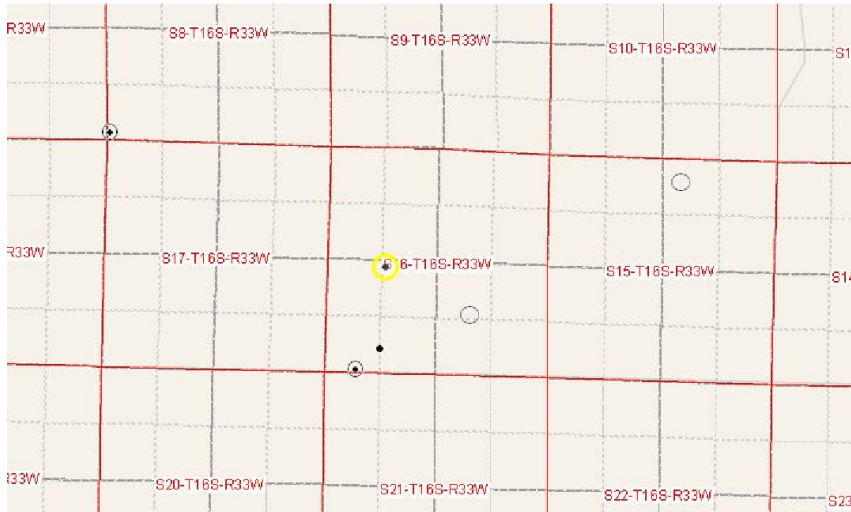
Scale 1:240 (5"=100') Imperial
Measured Depth Log

Well Name: #2-16 DBY
Location: 2466' FSL, 1390' FWL, 16-16s-33w, Scott County, Kansas
License Number: API: 15-171-20832 Region: Scott County
Spud Date: 09/08/2011 Drilling Completed: 09/21/2011
Surface Coordinates: Lat: 38.6628909
Long: -100.9759211
Bottom Hole Vertical hole
Coordinates:
Ground Elevation (ft): 3037' K.B. Elevation (ft): 3048'
Logged Interval (ft): 3500' To: RTD Total Depth (ft): 4850'
Formation: Mississippian at RTD
Type of Drilling Fluid: Chemical

Printed by MUD.LOG from WellSight Systems 1-800-447-1534 www.WellSight.com

GEOLOGIST

Name: John Goldsmith
Company: John Goldsmith Wellsite Service
Address: 322 Greenwood Ct.
Cheney, KS 67025
316-640-0236



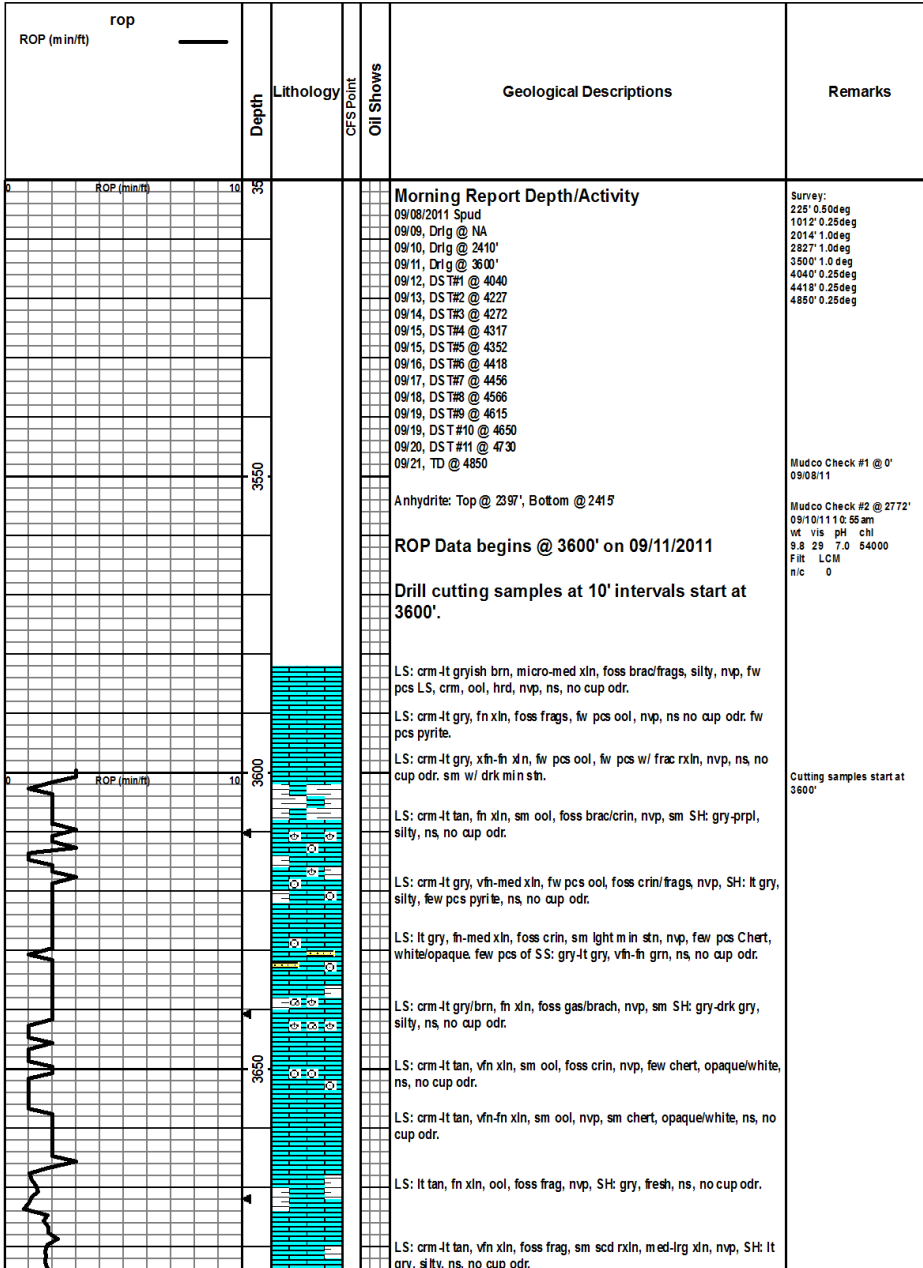
COMMENTS

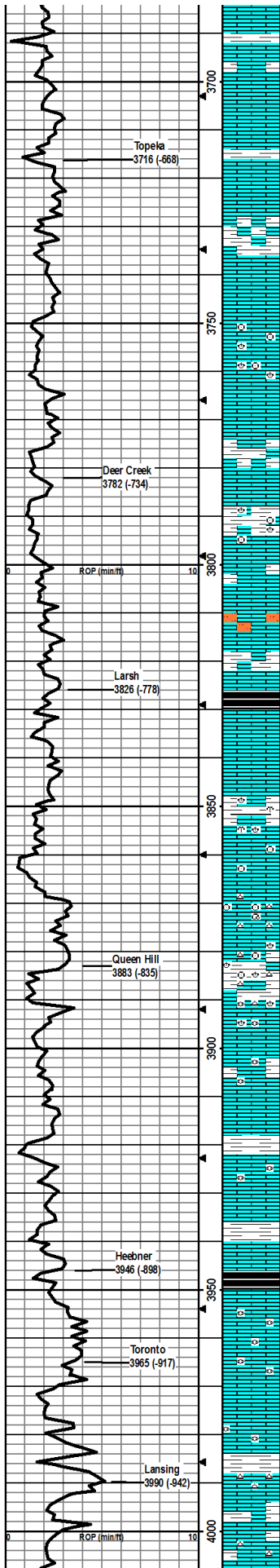
Contractor: Murfin Drilling Company Rig #22
Pusher: Kelly Wilson
Surface Casing: 8 5/8" set at 219' w/165sx
Production Casing: Production casing (5 1/2") was installed to RTD.
Mud by: MudCo
DST's by: Tribolite Testing
Logs by: Weatherford (DIL, CN-CD, ML, Imager)
RTD=4850'
LTD=4847'

FORMATION TOPS

FORMATION	SAMPLE TOPS		LOG TOPS	
	Depth	Datum	Depth	Datum
Stone Corral			2397'	651
Queen Hill	3881'	-833	3880'	-832
Heebner Shale	3946'	-898	3943'	-895

Toronto	3965'	-917	3962'	-914
Lansing	3990'	-942	3987'	-939
Muncie Creek Shale	4162'	-1113	4159'	-1111
Stark Shale	4250'	-1202	4248'	-1200
Hushpuckney Shale	4294'	-1246	4291'	-1243
Marmaton	4364'	-1317	4362'	-1314
Upper Fort Scott	4465'	-1417	4462'	-1414
Little Osage Shale	4499'	-1451	4496'	-1448
Excello Shale	4515'	-1467	4512'	-1464
Johnson Zone	4591'	-1543	4589'	-1541
Morrow	4656'	-1608	4653'	-1605
Mississippian	4738'	-1690	4736'	-1688
RTD	4850'	-1802		
LTD			4847'	-1799





SH: lt gry-brn, silty, soft, ns, no cup odr

LS: lt gry, vfn-fn xln, fw foss frag, nvp, sm SH lt gry-grn, silty, ns, no cup odr.

LS: lt gry, fn xln, dense/hard, nvp, ns, no cup odr.

SH: lt gy-grn, silty, soft, ns, no cup odr

LS: lt gry-sm cream, vfn xln, dense/hard, nvp, sm drk mineral stn, ns no cup odr.

LS: Crm-lt gry, vfn-fn xln, dense/hard, nvp, sm Intermixed SH lt gry, silty, ns, no cup odr.

LS: Crm-lt gry, vfn xln, dense/hard, nvp, ns, no cup odr.

LS: Lt gry-tan, fn xln, sm ool, foss crin, none-tr of inxln por, ns, no cup odr.

LS: Lt gry-tan, fn-med xln, sm ool, vry foss brach/crin, nvp, sm SH: lt brown-red, hard, ns, no cup odr.

LS: lt gry-tan, fn xln, fw pcs med-crs, various foss frags, nvp, ns, no cup odr

LS: lt gry, fn xln, dense/hard/equal, nvp, ns, no cup odr.

LS: lt tan-gry, fn xln, foss crin/brach, brittle-can crush, nvp, sm SH: gry, ns, no cup odr.

LS: gry, vfn-fn xln, dense/hard, nvp, few pcs of chalk, white-cr, vry soft, ns, no cup odr. sm SH gry, soft.

LS: gry-lt tan, fn xln, dense, fw ool pcs, nvp, sm Siltstone: brn, firm yet crushes, ns no cup odr.

LS: lt gry, fn xln, fw foss frags, nvp, ns, no cup odr. sm SH: lt gray, silty.

SH: drk gry, carb

LS: lt gry, fn xln, few foss frags, nvp, sm SH: red-brn, sm lt gry, silty, still somewhat hard.

LS: tan-lt gry, fn-med xln, foss brach/bryz, nvp, fw SH: red-brn, firm yet brittle, ns, no cup odr.

LS: crm-lt tan, fn-med xln, foss crin/var frags, hard, brittle, nvp, ns, no cup odr.

LS: crm-lt tan, fn-med xln, foss crin/gast, silted, hard, nvp, sm soft chalk, wht, sm Chert, gry, foss fus, ns, no cup odr.

LS: lt gry-tan, fn-med xln, foss brach/crin/var frags, hard, nvp, sm Chert, gry-opaque, foss, few SH: lt brn-red/lt gry, silty, ns, no cup odr.

LS: lt gry-tan, fn-med xln, foss brach/fus/frags, hard, nvp, fw Chert, gry, foss, ns no cup odr.

LS: crm-med brn, fn-med xln, foss fus/frags, mostly hard w/ some silty friable, some med-dk gry SH, nvp, no odor, ns.

LS: crm-med gryish brn, micro-fn xln, min foss frags, dense hard, nvp, no odor, ns.

SH: med greenish gry and gry, fissile

LS: lt gryish brn, fn-med xln, min foss fus/frags, silty, hard, nvp, no odor, ns.

LS: crm, micro-med xln, foss frags, hard, nvp, no odor, ns.

SH: med-dk gry/greenish gry/rd-brn, silty, fissile.

LS: crm-lt brn, fn xln, min foss frags, nvp, no odor, ns

SH: med-dk gry/blk, brittle, fissile.

LS: crm, fn-med xln, silty, foss fus/frags, ppt-fn intfoss por, no odor, ns.

Same as above.

LS: lt gryish brn, vry silty, friable, ppt-fn por, dk brn dead oil thk globs, w/ one pctray in stop and 30", and two pcs in 60" sm pl, no fluor, vry ssfo, vs cup odr in the 30" and slight odr in the 60" sm pl.

LS: lt gry-tan, fn-med xln, foss fus/frags, ppt-tr por. few pcs SH gry, silty, ns, no cup odr.

LS: crm-lt tan, fn xln, foss frags, hard, brittle, none-tr intfoss por. sm Chert, wh-opaque, ns, no cup odr.

LS: crm-lt tan, vfn xln, fw foss frags, hard brittle, nvp, few pcs Chert, wh-opaque, ns no cup odr. sm SH: gry-drk gry.

LS: crm-lt tan, fn xln, nvp, fw Chert wh-opaque, ns, no cup odr. fw SH: gry.

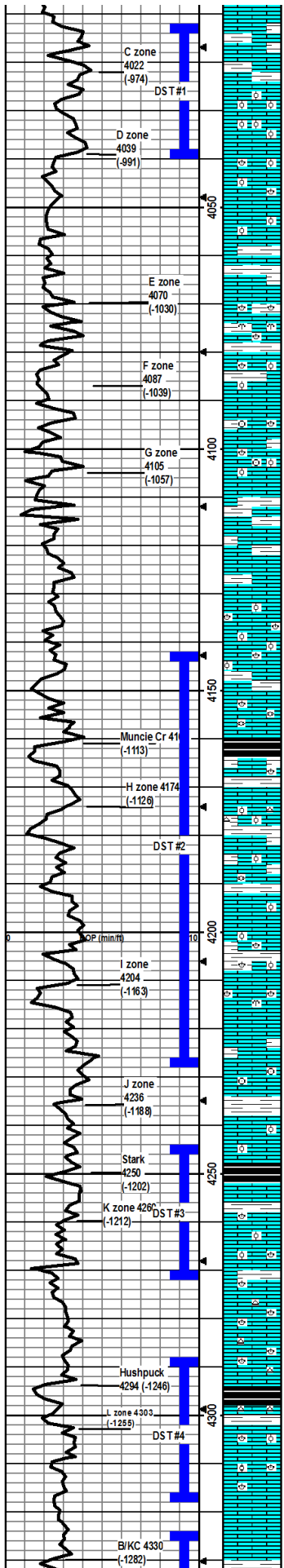
Mudco Check #3 @ 3707'
 09/11/11 10:45am
 wt vis pH chl
 9.15 62 9.0 6300
 Filt LCM
 11.6 2

CF 5 @ 3980'
 30" x 60"

DST1) 4012-4040

30/45/60/60
 1st) Weak blow built to 3.5" in 30 min
 2nd) Surface bubbles built to 5" in 60 min
 IFP 42-73#
 ISIP 1.011#

FF P



LS: crm-lt tan, vfn-fn xln, few mineral stns, does not cut, nvp, sm SH: gry, silty, ns, no cup odr.

Same as above. Driller stopped early to circulate at 4030 and 30" sample caught.

LS: lt tan, fn xln, v ool, gd int ool/foss por, hard yet brittle, gd sfo, 1-2 pcs in 4040" sample, sevrl pcs/tray in 30" and 60" sample, bright org fluor, cut strm pale blu, easy-med crush, gd cup odr.

LS: lt tan, med-crs xln, fw ool, foss brach/var, fn vug/nxn por, hard, brittle, sso 3-4 pcs/tray in 30" sample, dull yel fluor, slw cut pale blu, med crush, slight cup odr. 3-4 pcs/tray in 60" sample, dull yel-no fluor, no cut, med crush, no cup odr.

LS: lt tan-gry, fn xln, foss frags, fw ool, hard, tr of vug por, fw Chert: gry, SH: gry, silty, no cup odr, 1-2 pcs/tray of LS: dul yel fluor, cut slw strm pale blu, vsfo, had to crush to get it out.

SH: gry -grysh grn, silty, hard, fissile.

LS: tan-lt gry, med-crs xln, foss brach/bryz/frag, fn med intxn/ntfoss por, slight cup odr, fluor dul yel, cut stream pale blu, vsfo. SH: gry-grn, silty, fissile.

LS: crm-lt tan, xfn-fn xln, fw ool, foss frags, dense, vfn intxn-ntfoss por, vs cup odr, min dul yel fluor, slw cut pale blu, surf/intxn stn, nsfo. SH: gry-lt grn, fissile, med crush.

LS: crm-lt tan, fn xln, foss frags, dense, fn intxn/fw small vug por, vs cup odr, ss of do in frac, vsfo, dul yel fluor, slw cut pale blu.

LS: lt tan, fn-med xln, abun foss frags, fw ool, none-tr frac por, hard, no cup odr, ns.

LS: lt tan-gry, fn-med xln, fw foss frags, nvp, no cup odr, ns. SH: gry-lt grn, fissile.

LS: crm-lt tan, fn xln, foss frags, dense, brittle, nvp, no cup odr, ns. SH: gry, silty, fissile.

LS: lt tan, fn/med-crs xln, foss brach/frags, ool, dense, hard, nvp, no cup odr, ns.

LS: mostly as above, SH: gry/red-brn, firm to crush, silty, fissile.

SH: red-brn, gry, only fw pcs drk carb, fissile.

LS: crm-lt tan, fn-med xln, foss brach/fuss, sm ool, dense, brittle, ppt-tr intxn/intool por, no cup odr, ns. SH: gray, silty, fissile.

LS: gry-lt brn, fn xln, foss frags, v ool, dense hard, none-tr in foss por, dul yel fluor, little no cut pale blu, vsfo. Chert lt brn-gry. SH: red-brn/gry, fissile.

LS: gry-tan, fn xln, foss fust/frags, few ool, hard, none-tr intxn por, dul yel fluor, no cut, nsfo, do-mineral stns. SH: red-brn/gry-grn, silty, soft.

LS: tan-gry, fn-med xln, foss brach/frags, ool, hard, nvp, ns, no cup odr, SH: gry/red-brn, silty.

LS: crm-lt tan, fn-med xln, abun foss frags, gd intfoss/intxn por, brittle, gd sfo, vs cup odr, easy crush, dul yel fluor, stream cut pale blu. 30" min sample more show pcs, better odr, 60" sample less show pcs, SH: red-brn, med crush, fissile.

LS: tan-lt gray, micro-fn xln, foss arin/frags, tr-nvp, dense, hard, ns, no cup odr.

LS: lt gry, micro-fn xln, foss frags, few ool, tr-nvp, dense, ns, no cup odr.

SH: drk gry/blk, carb, fissile.

LS: crm-lt gry, fn xln, dense, brittle tr-nvp, ns, no cup odr. SH: red-brn/gry, silty.

LS: crm-lt tan, fn xln, tr fn-med intxn, foss brach/frags, few ool, slight cup odr, sfo, vry dul-no fluor, cut slw pale blu. few pcs in the stop smpl, more in 30", fw pcs in 60". 60" had SH: red-brn/gry, silty.

LS: wht/crm, fn xln, dense, hard, foss-brach/various, nvp, few pcs CHERT-gry, opaque, nvp, no cup odr, no fluor, nsfo.

SH: blk, carb.

LS: crm-lt tan, micro-fn xln, dense, foss/various, tr-nvp intxn, few pcs Chert-wh-gry, opaque, foss/various, nvp, no cup odr, no fluor, ns. SH: gry/red-brn, silty, fissile.

LS: tan-lt gry, fn xln, foss brach/various, fw ool, dense, tr-fr intxn por, dul yel/gold fluor, gd cup odr, stream cut pale blu. Sm pcs in the 1st circ 30" & 60", Similer in 2nd circ 30", 2nd circ 60" only few pcs.

LS: lt gry, fn xln, fw foss/various, dense hard, tr-nvp, no cup odr, ns, SH: gry, silty, fissile.

HP 2016-1907#
 Recvd: 250' TF = 70' OVM,
 180' MW

CFS @ 4030'
 30"

CFS @ 4040'
 30"/60"

Mudco Check #4 @ 4040'
 09/12/11 11:30am
 wt vis pH chl
 9.15 49 9.5 4700
 Fil LCM
 10.0 3

CFS @ 4050'
 30"/60"

CFS @ 4079'
 30"/60"

CFS @ 4090'
 30"/60"

CFS @ 4105'
 30"/60"

CFS @ 4170'
 30"/60"

DST2) 4142-4227
 30456060
 1st) Weak blow built to 10" in 30"
 2nd) Surface bubbles built to bottom of bucket in 45"
 I/P 45-144#
 ISIP 1149# FFP
 155-219# F S/P
 1133#
 HP 2102-1904#
 Recvd: 60' of CO, 180' of SOI/M, 240' of MCW

CFS @ 4200'
 30"/60"

Mudco Check #5 @ 4208'
 09/13/11 9:30am
 wt vis pH chl
 9.36 56 10.4 8000
 Fil LCM
 10.4 3

CFS @ 4227'
 30"/60"

Mudco Check #6 @ 4254'
 09/14/11 06:45am
 wt vis pH chl
 9.3 53 10.5 8600
 Fil LCM
 8.0 4

CFS @ 4250'
 30"/60"

DST3) 4245-4272
 30454560
 1st) Weak blow built to bottom of bucket in 24min
 2nd) Surface bubbles built to bottom of bucket in 28min
 I/P 24-158#
 ISIP 1216# FFP
 162-263# F S/P
 1215#
 HP 2151-21967#
 Recvd: 540' MCW

CFS @ 4272'
 30"/60"

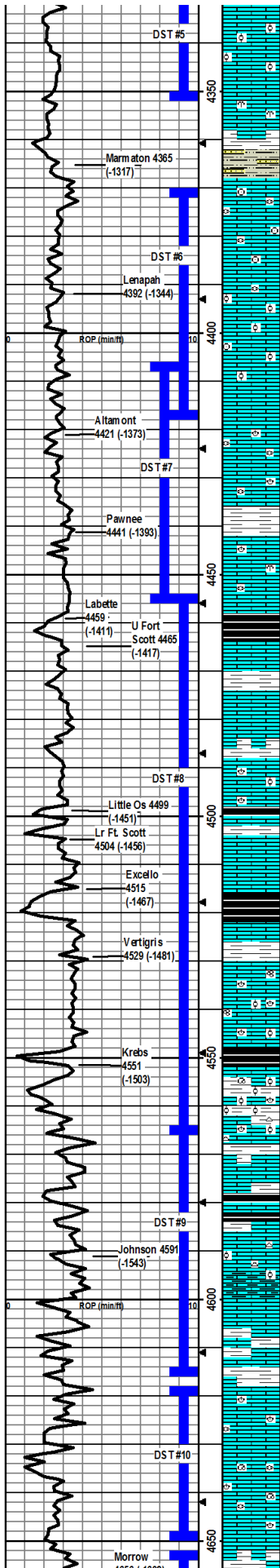
CFS @ 4314' 30"/60"

CFS @ 4317' 30"/60"

Mudco Check #7 @ 4317'
 09/15/11 06:45am
 wt vis pH chl
 9.4 78 10.0 9600
 Fil LCM
 10.4 4

CFS @ 4318'
 30"/60"

DST4) 4288-4317
 30456060
 1st) Fair blow built to bottom of bucket in 17"



LS: crm-It tan, fn-xln, fw foss, fw ool pcs, tr ppt-fn intbln/few intool por, slight cup odr, sso in ool pcs, vsslo/stn in ppt-fn intbln pcs, dul yel/gold flur, ool pcs stream cut pale blu, intxn pcs, slow cut pale blu, few pcs/tray of both in 30" sample. Very fw pcs in the 60" sample

LS: crm-It tan, fn xln, fw foss bryz/frags, tr-nvp, no cup odr, ns. SH gry/grm, silty, soft

SH: red-brn/sm gry, silty, soft. SS: gry, fn grm, arg, tr-intbln, ns, no cup odr.

LS: It tan, fn-med xln, foss crin/variou/frags, dense, hard, tr-nvp, no cup odr, ns.

LS: crm-It tan, fn xln, foss fuss/crin/frags, dense, brittle, tr-nvp, no cup odr, ns.

LS: crm-It tan, fn-med xln, foss various, sm ool, intfoss/ool por, sm intbln por, dul yel/gold flur, stream cut pale blu, sfo, slight cup odr. 4.6 pcs in the 4415' sample.

LS: crm-It tan, fn xln, foss various, sm ool, intfoss por, sm intbln por, dul yel flur, ool pcs stream cut pale blu/intxn pcs slow cut pale blu, sfo, slight cup odr, gas bub on brk, drk stn on frac/facies. svrl pcs in 30" sample.

LS: It tan, fn xln, foss various, fw ool, tr intbln por, sm intfoss por, dense, brittle, sso 2-3 pcs/tray, dul yel flur, slow cut pale blu. slight cup odr. botbm, SH: gry, firm, fissile.

LS: tan, med-crs xln, foss fuss/variou, intfoss/gd intbln por, dul yel/gold flur, stream cut pale blu, fr cup odr, few gas bub on brk, fo does not brk well out of por, frsfo svrl pcs/tray.

SH: gry, fw red-brn, firm, fissile.

LS: It tan, med-crs xln, foss variou/frags, gd intbln por, dul yel/gold flur, stream cut pale blu, fr cup odr, fo does not brk well out of por, frsfo, svrl pcs in 30" sample, 4.5 pcs in 60" sample. Chert: wh-opaque, ool.

SH: blk/drk gry, carb, firm, fissile.

LS: crm-It tan, med xln, foss variou, tr intbln por, dense brittle, sm chalky, no cup odr, ns. SH: gry, silty, fissile.

LS: It tan, med xln, foss fuss/variou/frags, fr intbln por, dense, sm chalky, slight cup odr, dul yel flur, no cut, hard to brk out of por, sso. Chert: wh-opaque, ool. sm stn in drys.

SH: gry-grm, silty, firm, fissile.

LS: crm-It tan, micro-fn xln, foss brach/frags, sm ool, tr-nvp, dense, sm secdry xln, no cup odr. ns. Chert: wh-opaque

SH: blk-drk gry, carb, firm, fissile.

LS: It tan, med xln, tr-fr intbln por, dense slight cup odr, dul yel flur, stream cut pale blu, hrd to brk out of por, sso.

SH: blk-drk gray, carb, firm fissile.

LS: It tan, micro-fn xln, foss brach/fuss/frags, sm ool, tr intbln/foss por, dense, no cup odr, ns SH: gry/red-brn, silty, firm to brk, fissile.

LS: crm-It tan, micro-fn xln, vry foss variou/brach/foram, dense, hard, tr-ppt intbln por & face stns, sm intfoss por, vry slight cup odr, dul yel flur, stream cut pale blu, sso.

SH: blk-drk gry, fissile, firm to brk

LS: crm-It tan, fn-med xln, foss brach/gas/variou, vry ool, fr intbln/intool, slight cup odr, dul yel flur, stream cut pale blu, sso.

SH: gry-grm, sm red-brn, silty, fissile. few Chert: wh-opaque foss, ool.

LS: gry-It tan, fn-med xln, sm ool, tr intbln por, no cup odr, no fluor, ns.

SH: gry-grm, sm blk carb, silty, fissile

SH: gry-grm, sm blk carb, soft, silty. LS: crm-It tan, fn xln, dense, hard, tr-nvp, no cup odr, ns. Chert: wh-opaque w/ sm drk min stns.

LS: It tan, med-crs xln, few pcs chalky, gd intbln por/sm ppt por on facies, slight cup odr, dul yel/gold flur, stream cut pale blu, sfo, SH: gry/ sm red-brn, silty, soft, few pcs Chert: gry/brn.

LS: It tan, fn-crs xln, secdry xln=crs, gd intbln por, slight cup odr, dul yel/gold flur, stream cut pale blu, sfo. sevrl pcs in the 30" smpl, crs pcs in 30" smpl, sm in 60" smple, all fn-med intbln por.

SH: gry-grm, silty, soft

LS: It tan, fn xln, fw foss brach/frags, tr intbln por, dense hrd, no cup odr, ns

LS: It tan-gry, fn xln, fw foss, tr intbln por, sm gd vgr por, vsight cup odr, scat dul yel flur, stream cut pale blu, sso.

LS: It tan, fn xln, foss fuss/gas/variou, fr intbln por, vsight cup odr, dul yel flur, stream cut pale blu, 3-4 pcs in the 30" smple

LS: gry, micro-fn xln, fw foss brach/frags, dense, brittle tr-nvp, no cup odr, ns.

SH: gry/red-brn, silty, gry pcs soft, red-brn firm to brk.

2nd) Fair blow built to bottom of bucket in 21"
IP 67-206#
ISIP 1237#
FFP 202-222# F SIP
1224#
HP 2240-1947#
Recvd: 45' GIR, 15' GGO,
240' GOWCM, 420' SGOMCW

CFS @ 4352'
30"/60"

DST5) 4324-4352
30456090
1st) BOB in 1"
2nd) BOB in 1.25"
IP 468-872#
ISIP 1208# FFP
917-1092# F SIP
1215#
HP 2209-1999#
Recvd: 1810' GO, 440' MGO,
320' VMCGO, 250' WGOCM

Mudco Check #8 @ 4398'
09/16/11 08:15 am
wt vis pH chl
8.9 57 10.5 9000
Fit LCM
8.0 4

DST6) 4370-4418
30456090
1st) BOB in 10"
2nd) BOB in 9"
IP 52-123#
ISIP 1030# FFP
132-165# F SIP
1058#
HP 2226-1962#
Recvd: 500' GIR, 308' of
GOCM, 62' of MGO

CFS @ 4456'
30"/60"

DST7) 4406-4456
30456090
1st) BOB in 13"
2nd) BOB in 12"
IP 47-74#
ISIP 830# FFP
77-108# F SIP 677#
HP 2215-1956#
Recvd: 560' GIR, 124' VMCGO,
64' GO, 62' OGCM

Mudco Check #9 @ 4456'
09/17/11 07:45 am
wt vis pH chl
9.0 66 10.0 9400
Fit LCM
8.8 3

DST8) 4456-4566
300303030
1st) Wk surface blow
2nd) Wk surface blow died in
6.5"
IP 41-34#
ISIP 313# FFP
40-35# F SIP 253#
HP 2211-2090#
Recvd: 20' Mud w oil spots

CFS @ 4532'
30"

Mudco Check #10 @ 4566'
09/18/11 07:45 am
wt vis pH chl
9.3 60 9.5 9200
Fit LCM
9.6 3

CFS @ 4568'
30"/60"

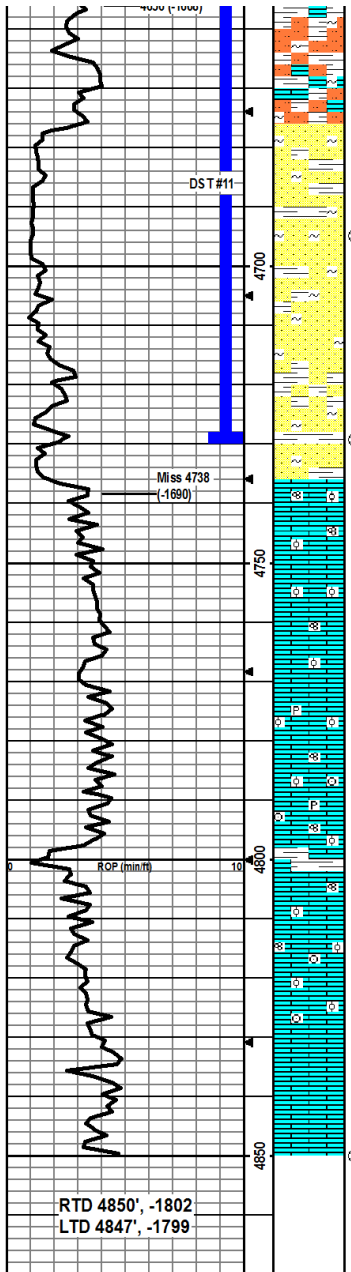
DST9) 4566-4615
30456090
1st) BOB in 6"
2nd) Surface bubbles built to
4"
IP 46-124#
ISIP 1195# FFP
115-180# F SIP
1184#
HP 2261-2130#
Recvd: 1178' GIR, 114, GO,
124' MCGO, 240' GOCM

CFS @ 4615' 30"/60"

DST10) 4618-4650
30456090
1st) BOB in 10"
2nd) BOB in 8"
IP 48-103#
ISIP 1186# FFP
126-178# F SIP
1184#
HP 2261-2130#
Recvd: 490' MCGO

CFS @ 4650'
30"/60"

Mudco Check #11 @ 4650'
09/19/11 08:30 am
wt vis pH chl
8.9 68 9.0 10200



SS: gry, fn grn, well sorted, sub-rnd, consol, silica cem, glauc, tr intgrn por, rare loose grns in tray, ns.

SS: lt brn, vfn grn, well sorted, rnded, vry friable, tr-nvp, arg, mny loose grns n tray, no cup odr, few tiny sps med brn fo in dimple dish on crush, rare drk dead oil stn in drys, wk pale blu cut, SH: gry/red-brn, silty, vry soft, sticky. abun LS: lt tan, micro-fn xin, abun glauc, hard, brittle, tr-nvp por.

SS: wh, vfn grn, well srt, semi-fri, glauc, tr intgrn por, ns, no odr, sm SS: gry, vfn grn, arg, soft, tr-nvp, ns, SH: oliv/gry, silty, soft.

SS: wh/gry, vfn grn, well srt, v glauc, hard-sam i-fri, tr-nvp, silica cem, no cup odr, fw tiny sps med brn fo in dimple dish on crush, wk pale blu cut, fw more loose grns than prev.

SS: as above, no cup odr, fw tiny drops of fo on brk. SH: much as above.

SS: as above, no cup odr, fw tiny drops, of fo on brk, SH: oliv/gry/red-brn, silty, sm soft, sm fissile.

LS: crm-lt tan, micro-fn xin, few pcs w/ crs secy xin, foss foram, gritty-sandy, vfn grns, dense, brittle tr-nvp, no cup odr, nsfo.

LS: crm-lt tan, fn xin, sm ool, gritty-sandy, fn grns, dense, tr-nvp, no cup odr, ns.

LS: crm-wht, fn xin, dense, sm uniform, sm v sandy, sm foss/ool, few pcs w/m in stn frac faces, does not cut, sm chert-gry, opaque-transl, foss, tr-nvp, no cup odr, ns.

LS: crm-wht, fn xin, dense, hard, mstly uniform, sm sandy, foss frags, sm ool, sm chert-gry, opaque transl, foss, tr-nvp, no cup odr, ns.

LS: crm-wht, fn xin, dense, brittle, sm uniform, sm sandy, foss crin/foram/frags, sm ool, tr-nvp, no cup odr, ns.

LS: crm-wht, fn xin, dense, sm sandy, foss various, ool, tr-nvp, no cup odr, ns. SH: gry-grn, silty, fissile.

LS: crm-lt tan, micro-fn xin, dense, silty, foss var/frags, sm ool, sm uniform, tr-nvp, no cup odr, ns.

LS: crm-lt tan, micro-fn ln, dense, sandy, foss crin/foram/frags, sm ool, tr-nvp, no cup odr, ns.

LS: crm-lt tan, fn xin, dense, sm sandy, foss various, sm ool, tr-nvp, no cup odr, ns.

LS: crm-lt tan, fn xin, dense, sm sandy, foss various, sm ool, tr-nvp, no cup odr, ns.

FIN LCM
11.2 3
DST11)
4652-4730
30455090
1st) BOB in 9"
2nd) BOB in 18.5"
IFP 82-287#
ISIP 1120# FFP
284-449# F SIP 117#
HP 2420-2135#
Recvd: 927 MCWw spts of oil.
CFS @ 4694'
30"60"
Mudco Check #12 @ 4730'
09/20/11 08:45 am
wt vis pH chl
8.9 57 10.5 9400
FIN LCM
10.4 4
CFS @ 4730' 30"60"

RTD 4850', -1802'
LTD 4847', -1799'

JOB LOG

SWIFT Services, Inc.

DATE 21 SEP 11 PAGE NO.

CUSTOMER GRAND MESA WELL NO. LEASE DBY 2-16 JOB TYPE 5 1/2 LONG STRING TICKET NO. 22356

CHART NO.	TIME	RATE (BPM)	VOLUME (BBL) (GAL)	PUMPS		PRESSURE (PSI)		DESCRIPTION OF OPERATION AND MATERIALS
				T	C	TUBING	CASING	
	2200							ON LOCATION
	0040							START PIPE 5 1/2 - 15.5 #
								RTD @ 4849 LTD @ 4847
								SHOE JT 21:00
								CENTRALIZERS 1,3,5,7,9,11,14,55
								BASKETS 2,5,6, SCRATCHERS 6,8,11,12
								DV TOOL TOP OF # 56 @ 2409
	0400							DROP BALL CIRCULATE
	0434	6	12		✓		500	Pump 500 gal mud FLUSH
	0436	6	20		✓		500	Pump 20 BBL KCL FLUSH
	0440	4	42		✓			MIX 175 SX EA2
	0455							WASH OUT PUMPING LINES
	0456	6			✓			RELEASE PLUG START DISPLACEMENT
	0515	Ø	115		✓		1500	PLUG DOWN PRESSURE UP LATCH PLUG IN
	0518							RELEASE PRESSURE DRY
								WASH TRUCK
	0523							DROP DV OPENING TOOL
	0533							OPEN DV, - CIRCULATE
	0653	6	20		✓		300	Pump 20 BBL KCL FLUSH
	0657		7.5					PLUG RH/MH (30SX-20SX)
	0701	5 1/2	138 1/2		✓			MIX 250 SX SMD
	0734							WASH OUT PUMPING LINES
	0736	6			✓			RELEASE PLUG START DISPLACEMENT
	0746	Ø	57		✓		1500	PLUG DOWN PRESSURE UP CLOSE DV TOOL
	0748							RELEASE PRESSURE DRY
								CIRCULATED CEMENT TO PIT
	0749							WASH TRUCK
	0830							JOB COMPLETE.
								THANKS # 110
								JASON JEFF JOE LANE.

Acidizing Report

PRO-STIM CHEMICALS

Date 10-12-11

Customer <u>Grand Mesa</u>	Pro-Stim Chemical Yard <u>Dighton</u>	Pro-Stim Number <u>196 57989</u>
Well Name & Number <u>DBY 2-16</u>	Field	Formallon Spot <u>26-1</u>
County <u>Scott</u> State <u>K.S</u>	BHT	YD
Interval		

Well Type: Completion Recompletion Workover Oil Gas Water Disposal Perf OH

Job Pumped Via: Tubing Casing Annulus CTU Combination Plug Depth Packer Depth 7 feet
4600

Casing Size:	GRD	WT	Depth	Tubing Size:	GRD	WT	Spot
Casing Vol.	Tbg Vol		Ann Vol	OH Vol	Total Displacement		
Maximum Pressure	Tubing		Casing	Proposed Pump Time	AOL	Leave Loc	

Special Instructions: 600 gal. 15% HC-1 Acid w/additives

Treatment Record

Time	Type Fluid	Rate BMP	Increment Vol Bbls	Cum Vol Bbls	Pressure		Observations
					Tubing	Casing	
							Safety Meeting
							Prs Test to _____ psi
<u>1</u>	<u>Acid</u>		<u>Spot 2</u>				
<u>14</u>	<u>Acid</u>	<u>2.9</u>		<u>3.3</u>	<u>30</u>		
<u>18</u>	<u>Acid</u>	<u>2.9</u>		<u>14.2</u>	<u>30</u>		<u>Acid Curve</u>
<u>26</u>	<u>Flush</u>	<u>0</u>		<u>28.6</u>	<u>60</u>		<u>Loaded</u>
<u>27</u>	<u>Flush</u>	<u>0</u>		<u>28.7</u>	<u>300</u>		
<u>30</u>	<u>Flush</u>	<u>0</u>		<u>29.2</u>	<u>600</u>		
<u>37</u>	<u>Flush</u>	<u>.2</u>		<u>29.9</u>	<u>650</u>		
<u>41</u>	<u>Flush</u>	<u>.5</u>		<u>31.1</u>	<u>650</u>		
<u>52</u>	<u>Flush</u>	<u>1.0</u>		<u>41</u>	<u>550</u>		<u>Done</u>

Treatment Synopsis

Avg Inj Rate	Fluid BPM	Total Injected		H2O <u>27 bbl</u>	Acid <u>14 bbl</u>	Oil
Treating Pts.	Max <u>700</u>	Final <u>550</u>	Avg <u>600</u>	ISIP <u>580</u>	5'SI <u>260</u>	10'SI <u>50</u>
Customer Representative				Pro-Stim Supervisor	<u>Shannon M.</u>	

12 VAC

Pro-Stim Chemicals, LLC

OCT 28 2011

Invoice

P.O. Box 25

Cheyenne Wells, CO 80810

Date	Invoice #
10/15/2011	57989

Bill To
Grand Mesa Operating Co. 1700 N. Waterfront Pkwy - Bldg 600 Wichita, KS 67206-6614

Ship To

Requested By	Terms	Sales Rep.	Ship	Lease
	Net 30	S M	10/12/2011	DBY 2-16

Quantity	Item Code	Description	Price Each	Amount
600	15% HCl ACID	GALLONS	1.78	1,068.00
6	RENAB	GALLONS	17.89	107.34
21	AS-290	GALLONS	32.46	681.66
2	AR-630	GALLONS	25.79	51.58
27	KCL BIOCID - 2%	BRLS	3.16	85.32
1	DUMP JOB	HOURS	158.00	158.00T
4	TRUCK TIME	HOURS	95.00	380.00T
		Sales Tax - SCOTT CO.	8.30%	44.65

Total			\$2,576.55
--------------	--	--	------------

Phone #	Fax #	E-mail
719-767-8071	719-767-5925	prostim@hotmail.com