DRILL STEM TEST REPORT

Caroden Energy LLC

7302 Spanish Bay Dr.
Windsor, Co 80550

ATTN: Chris Frevert, Herb

1-17s-10w Ellsworth

Thelma #1

Job Ticket: 65461 **DST#: 2**

Test Start: 2016.05.18 @ 08:10:17

GENERAL INFORMATION:

Formation: **Arbuckle**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 09:21:57
Time Test Ended: 13:57:11

Test Type: Conventional Straddle (Reset)
Tester: Ray Schw ager
Unit No: 77

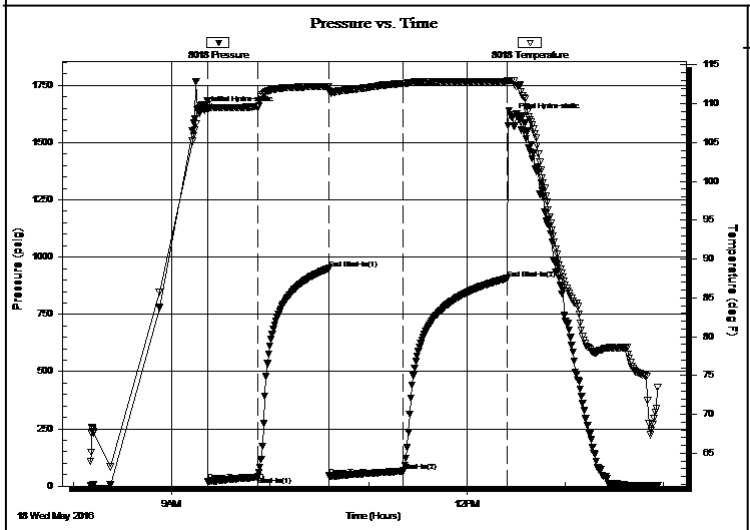
Interval: 3290.00 ft (KB) To 3300.00 ft (KB) (TVD)
Total Depth: 3362.00 ft (KB) (TVD)
Hole Diameter: 7.85 inches Hole Condition: Fair

Reference Elevations: 1810.00 ft (KB)
1802.00 ft (CF)
KB to GR/CF: 8.00 ft

Serial #: 8018 **Inside**
Press@RunDepth: 65.88 psig @ 3291.00 ft (KB)
Start Date: 2016.05.18 End Date: 2016.05.18
Start Time: 08:10:17 End Time: 13:57:11

Capacity: 8000.00 psig
Last Calib.: 2016.05.18
Time On Btm: 2016.05.18 @ 09:19:57
Time Off Btm: 2016.05.18 @ 12:27:56

TEST COMMENT: 30-IFP-w k to strg in 9min
45-ISIP-surface bl bk
45-FFP-w k to strg in 5min
60-FSIP-surface bl bk



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1640.37	109.90	Initial Hydro-static
2	19.45	109.28	Open To Flow (1)
33	41.45	109.65	Shut-In(1)
76	950.75	112.23	End Shut-In(1)
76	44.46	111.74	Open To Flow (2)
122	65.88	112.60	Shut-In(2)
185	907.00	112.83	End Shut-In(2)
188	1609.52	112.96	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
0.00	580' GIP	0.00
105.00	CO	1.47
62.00	GMO 40%G1%M4%W55%O	0.87

* Recovery from multiple tests

Gas Rates

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

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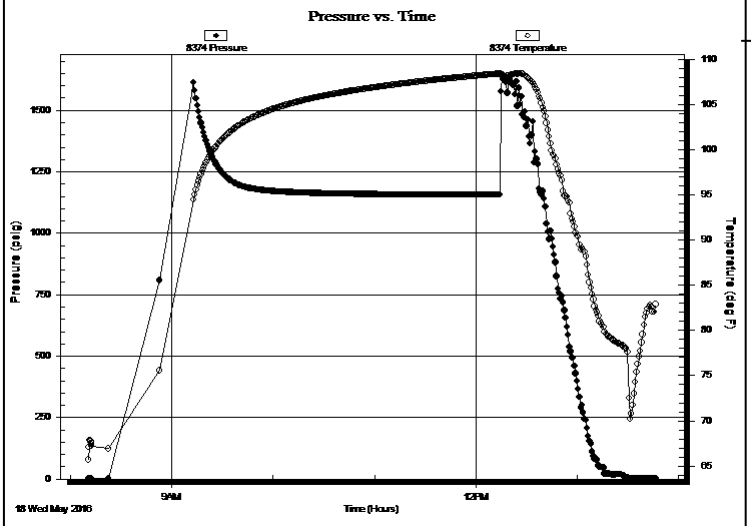
Reference Elevations: 1810.00 ft (KB)
1802.00 ft (CF)
KB to GR/CF: 8.00 ft

Serial #: 8374 **Below (Straddle)**

Press@RunDepth: psig @ 3306.00 ft (KB)
Start Date: 2016.05.18 End Date: 2016.05.18
Start Time: 08:10:37 End Time: 13:47:01

Capacity: 8000.00 psig
Last Calib.: 2016.05.18
Time On Btm:
Time Off Btm:

TEST COMMENT: 30-IFP-w k to strg in 9min
45-ISIP-surface bl bk
45-FFP-w k to strg in 5min
60-FSIP-surface bl bk



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
0.00	580' GIP	0.00
105.00	CO	1.47
62.00	GMO 40%G1%M4%W55%O	0.87

* Recovery from multiple tests

Gas Rates

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

DRILL STEM TEST REPORT

FLUID SUMMARY

Caroden Energy LLC

7302 Spanish Bay Dr.
Windsor, Co 80550

ATTN: Chris Frevert, Herb

1-17s-10w Ellsworth

Thelma #1

Job Ticket: 65461 **DST#: 2**

Test Start: 2016.05.18 @ 08:10:17

Mud and Cushion Information

Mud Type:	Gel Chem	Cushion Type:		Oil API:	43 deg API
Mud Weight:	9.00 lb/gal	Cushion Length:	ft	Water Salinity:	ppm
Viscosity:	57.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	7.95 in³	Gas Cushion Type:			
Resistivity:	ohm.m	Gas Cushion Pressure:	psig		
Salinity:	3800.00 ppm				
Filter Cake:	1.00 inches				

Recovery Information

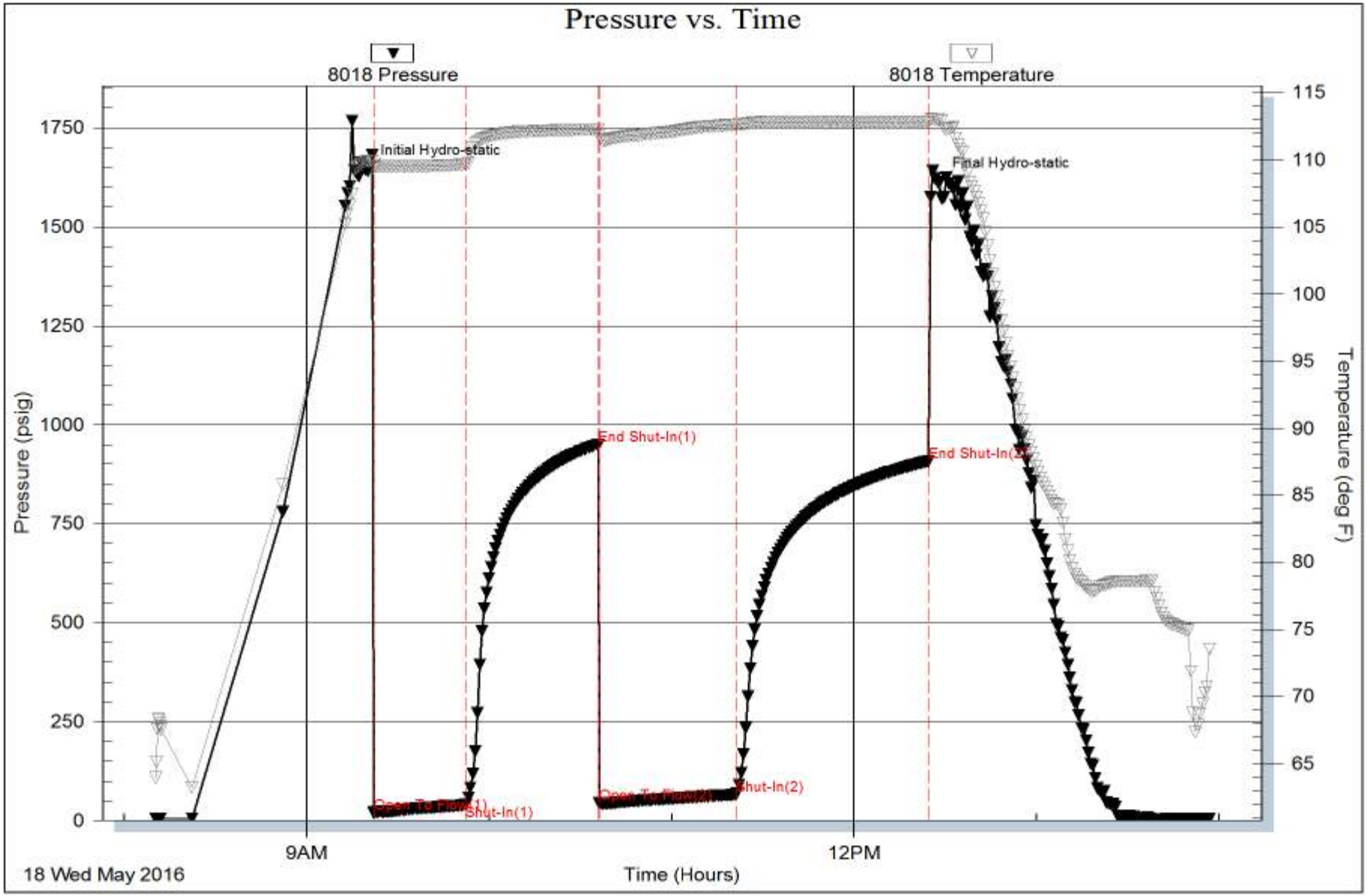
Recovery Table

Length ft	Description	Volume bbl
0.00	580' GIP	0.000
105.00	CO	1.473
62.00	GMO 40%G1%M4%W55%O	0.870

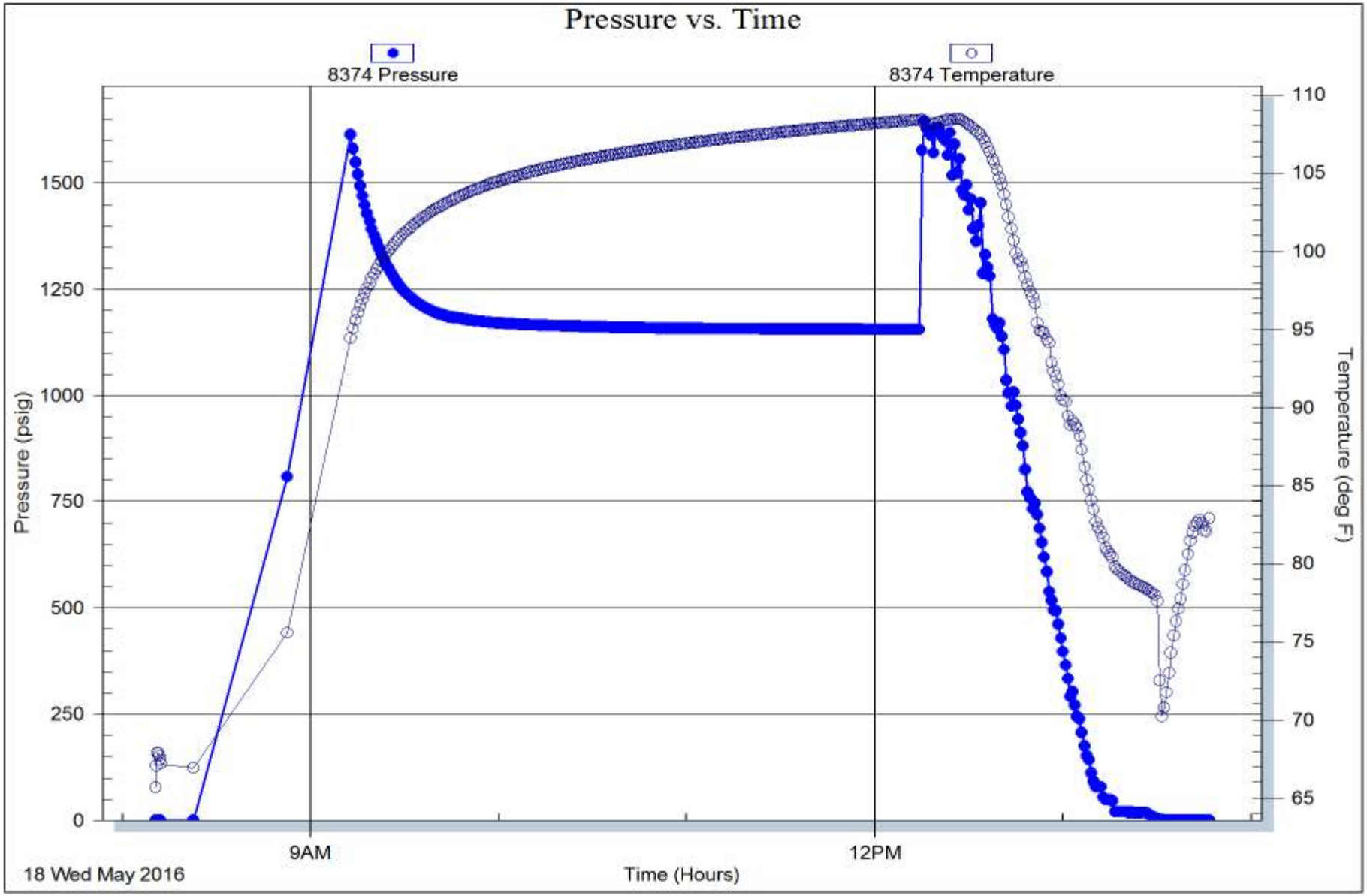
Total Length: 167.00 ft Total Volume: 2.343 bbl

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

Serial #: 8018 **Inside** Caroden Energy LLC Thelma #1 DST Test Number: 2



Trilobite Testing, Inc Ref. No: 65461 Printed: 2016.05.18 @ 15:10:23


Pressure vs. Time
8374 Pressure
8374 Temperature
Pressure (psig)
Temperature (deg F)
1500
1250
1000
750
500
250
0
110
105
100
95
90
85
80
75
70
65
9AM
12PM
18 Wed May 2016
Time (Hours)