DRILL STEM TEST REPORT

Larson Engineering

562 W State Rd. 4
Olmitz, KS. 67564

ATTN: Vern Sohrag

Cowdery 3-29

29/18s/3w/Lane/KS

Job Ticket: 43101 **DST#: 1**

Test Start: 2011.04.03 @ 04:00:00

GENERAL INFORMATION:

Formation: **L.K.C. "H"**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 07:30:40
Time Test Ended: 12:00:00

Test Type: Conventional Bottom Hole
Tester: Kevin Mack
Unit No: 37

Interval: 4109.00 ft (KB) To 4134.00 ft (KB) (TVD)
Total Depth: 4134.00 ft (KB) (TVD)
Hole Diameter: 7.80 inches Hole Condition: Good

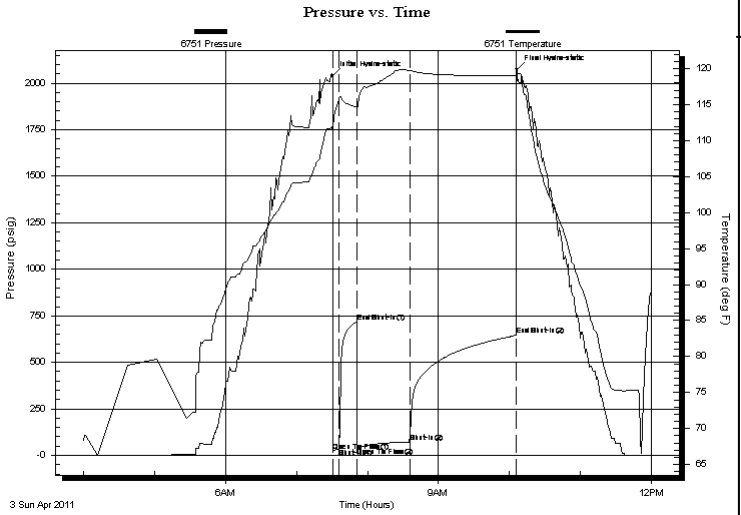
Reference Elevations: 2896.00 ft (KB)
2889.00 ft (CF)
KB to GR/CF: 7.00 ft

Serial #: 6751 **Outside**

Press@RunDepth: 70.95 psig @ 4110.00 ft (KB)
Start Date: 2011.04.03 End Date: 2011.04.03
Start Time: 04:00:05 End Time: 11:59:59

Capacity: 8000.00 psig
Last Calib.: 2011.04.03
Time On Btm: 2011.04.03 @ 07:30:30
Time Off Btm: 2011.04.03 @ 10:06:20

TEST COMMENT: IF: Blow built to 2 1/4"
IS: No Return
FF: Blow built to 9 1/2"
FS: No Return



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2041.21	111.96	Initial Hydro-static
1	20.35	111.20	Open To Flow (1)
6	37.14	115.83	Shut-In(1)
21	718.18	114.66	End Shut-In(1)
21	42.40	114.32	Open To Flow (2)
65	70.95	119.72	Shut-In(2)
156	645.68	119.00	End Shut-In(2)
156	2074.04	119.44	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
60.00	MCO 70o 30M	0.30
122.00	MCO 75o 25M	1.16

Gas Rates

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

DRILL STEM TEST REPORT

FLUID SUMMARY

Larson Engineering

562 W State Rd. 4
Olmitz, KS. 67564

ATTN: Vern Sohrag

Cowdery 3-29

29/18s/3w/Lane/KS

Job Ticket: 43101 **DST#: 1**

Test Start: 2011.04.03 @ 04:00:00

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:	68.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	7.20 in³	Gas Cushion Type:			
Resistivity:	0.00 ohm.m	Gas Cushion Pressure:	psig		
Salinity:	1500.00 ppm				
Filter Cake:	2.00 inches				

Recovery Information

Recovery Table

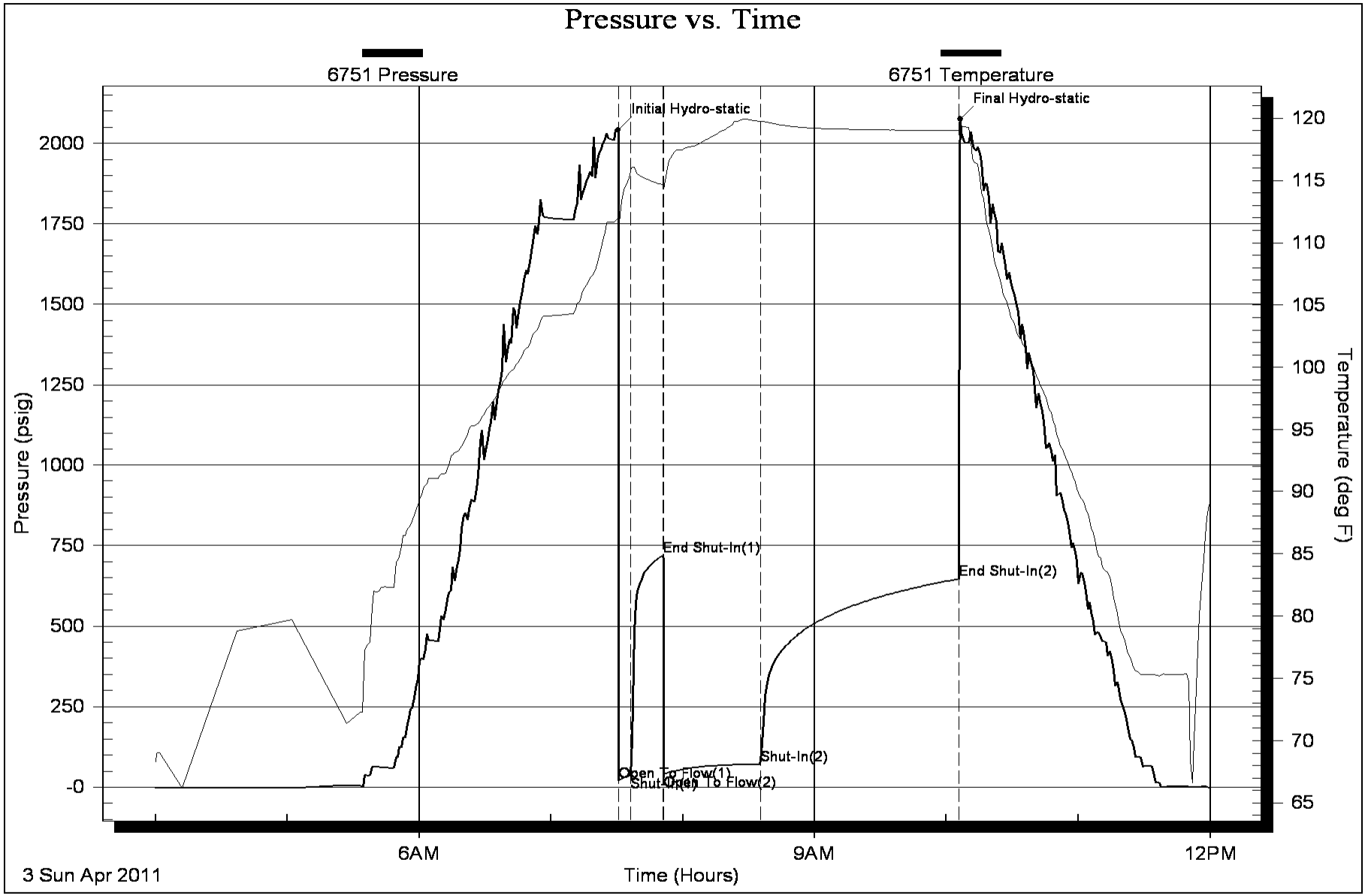
Length ft	Description	Volume bbl
60.00	MCO 70o 30M	0.295
122.00	MCO 75o 25M	1.165

Total Length: 182.00 ft Total Volume: 1.460 bbl

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

Laboratory Name: Laboratory Location:

Recovery Comments:


Pressure vs. Time
6751 Pressure
6751 Temperature
Initial Hydro-static
Final Hydro-static
End Shut-In(1)
End Shut-In(2)
Shut-In(2)
Open To Flow(1)
Shut-In(1)
Open To Flow(2)
Pressure (psig)
Temperature (deg F)
2000
1750
1500
1250
1000
750
500
250
-0
120
115
110
105
100
95
90
85
80
75
70
65
6AM
9AM
12PM
3 Sun Apr 2011
Time (Hours)

DRILL STEM TEST REPORT

Larson Engineering

562 W State Rd. 4
Olmitz, KS. 67564

ATTN: Vern Schrag

Cowdery 3-29

29/18s/3w/Lane/KS

Job Ticket: 43102 **DST#: 2**

Test Start: 2011.04.04 @ 02:26:00

GENERAL INFORMATION:

Formation: **L.K.C. "J"**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 05:11:24
Time Test Ended: 09:12:00

Test Type: Conventional Bottom Hole
Tester: Kevin Mack
Unit No: 37

Interval: 4180.00 ft (KB) To 4200.00 ft (KB) (TVD)
Total Depth: 4200.00 ft (KB) (TVD)
Hole Diameter: 7.80 inches Hole Condition: Good

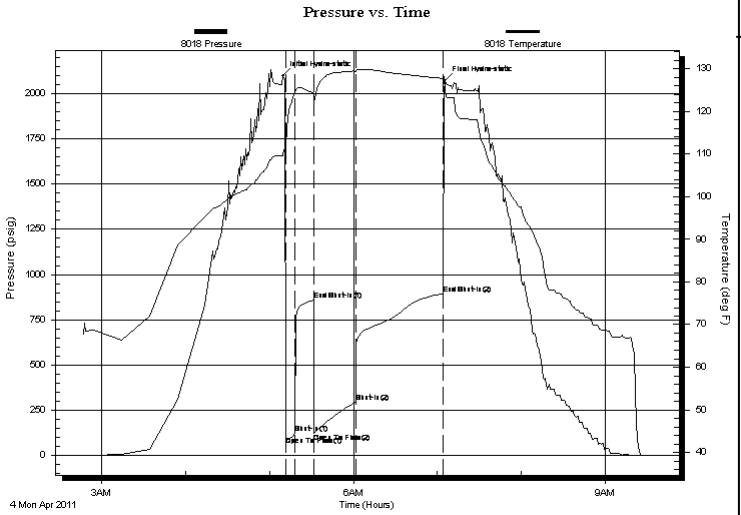
Reference Elevations: 2896.00 ft (KB)
2889.00 ft (CF)
KB to GR/CF: 7.00 ft

Serial #: 8018 **Inside**

Press@RunDepth: 296.65 psig @ 4181.00 ft (KB)
Start Date: 2011.04.04 End Date: 2011.04.04
Start Time: 02:47:05 End Time: 09:32:59

Capacity: 8000.00 psig
Last Calib.: 2011.04.04
Time On Btm: 2011.04.04 @ 05:09:36
Time Off Btm: 2011.04.04 @ 07:05:12

TEST COMMENT: IF: B.O.B. @ 2 1/2 min.
IS: Return started @ 5 min., 2 3/4".
FF: B.O.B. @ 3 min.
FS: 2" Return.



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2098.17	109.94	Initial Hydro-static
2	54.46	111.14	Open To Flow (1)
9	121.45	124.55	Shut-In(1)
22	858.99	124.28	End Shut-In(1)
23	124.80	123.65	Open To Flow (2)
52	296.65	129.47	Shut-In(2)
115	894.29	127.77	End Shut-In(2)
116	2073.57	124.75	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
370.00	GOCM 20g 20o 60m	4.10
410.00	GO 25g 75o	5.75
0.00	145 Feet GIP	0.00

Gas Rates

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

DRILL STEM TEST REPORT

FLUID SUMMARY

Larson Engineering

562 W State Rd. 4
Olmitz, KS. 67564

ATTN: Vern Schrag

Cowdery 3-29

29/18s/3w/Lane/KS

Job Ticket: 43102 **DST#: 2**

Test Start: 2011.04.04 @ 02:26:00

Mud and Cushion Information

Mud Type:	Gel Chem	Cushion Type:		Oil API:	36 deg API
Mud Weight:	9.00 lb/gal	Cushion Length:	ft	Water Salinity:	0 ppm
Viscosity:	48.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	7.60 in³	Gas Cushion Type:			
Resistivity:	0.00 ohm.m	Gas Cushion Pressure:	psig		
Salinity:	1700.00 ppm				
Filter Cake:	2.00 inches				

Recovery Information

Recovery Table

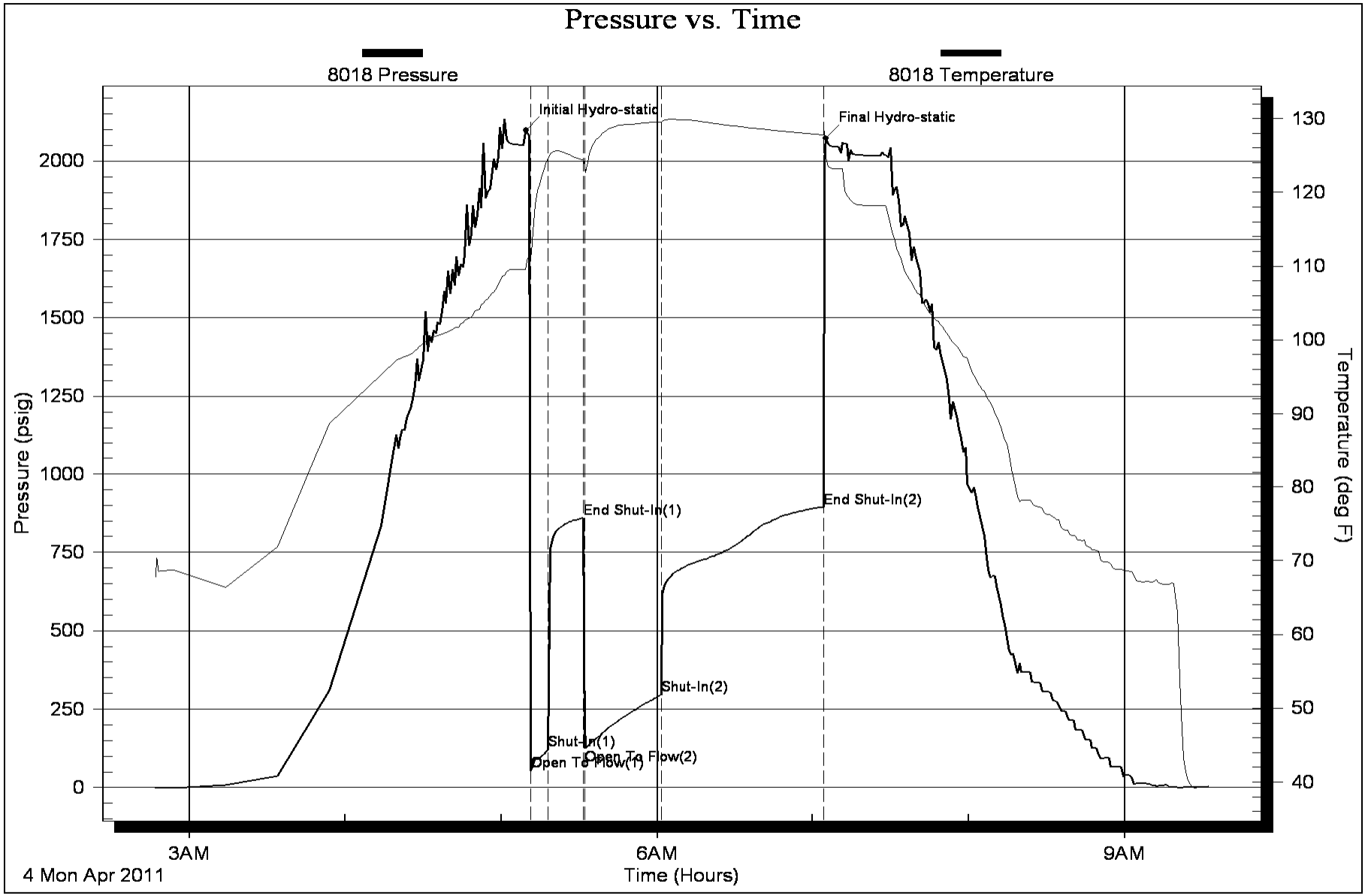
Length ft	Description	Volume bbl
370.00	GOCM 20g 20o 60m	4.097
410.00	GO 25g 75o	5.751
0.00	145 Feet GIP	0.000

Total Length: 780.00 ft Total Volume: 9.848 bbl

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

Laboratory Name: Laboratory Location:

Recovery Comments: API:34 @ 40 Degrees F = 36.


Pressure vs. Time
8018 Pressure
8018 Temperature
Initial Hydro-static
Final Hydro-static
End Shut-In(1)
End Shut-In(2)
Shut-In(1)
Shut-In(2)
Open To Flow(1)
Open To Flow(2)
Pressure (psig)
Temperature (deg F)
2000
1750
1500
1250
1000
750
500
250
0
130
120
110
100
90
80
70
60
50
40
3AM
6AM
9AM
4 Mon Apr 2011
Time (Hours)

DRILL STEM TEST REPORT

Larson Engineering

562 W State Rd. 4
Olmitz, KS. 67564

ATTN: Vern Schrag

Cowdery 3-29

29/18s/30w/Lane/KS

Job Ticket: 43103 **DST#: 3**

Test Start: 2011.04.05 @ 00:55:00

GENERAL INFORMATION:

Formation: **Middle Creek**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 02:35:48
Time Test Ended: 06:19:47

Test Type: Conventional Bottom Hole
Tester: Chuck Smith
Unit No: 37

Interval: 4256.00 ft (KB) To 4264.00 ft (KB) (TVD)
Total Depth: 4264.00 ft (KB) (TVD)
Hole Diameter: 7.80 inches Hole Condition: Good

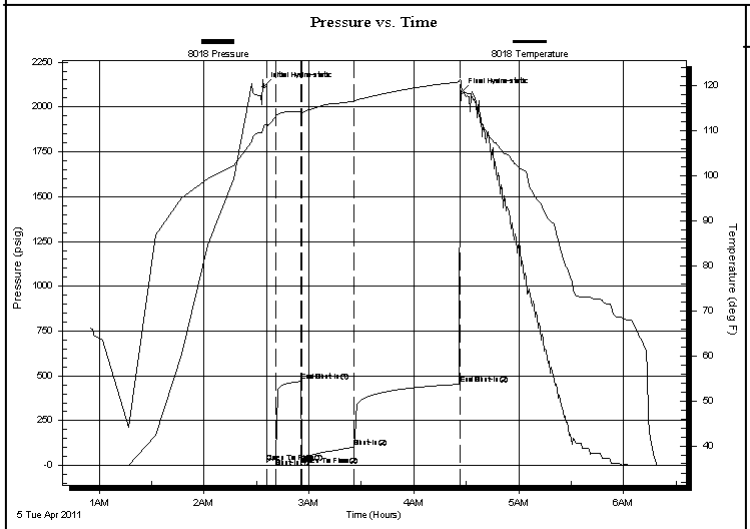
Reference Elevations: 2896.00 ft (KB)
2889.00 ft (CF)
KB to GR/CF: 7.00 ft

Serial #: 8018 **Inside**

Press@RunDepth: 102.00 psig @ 4257.00 ft (KB)
Start Date: 2011.04.05 End Date: 2011.04.05
Start Time: 00:55:05 End Time: 06:19:47

Capacity: 8000.00 psig
Last Calib.: 2011.04.05
Time On Btm: 2011.04.05 @ 02:34:00
Time Off Btm: 2011.04.05 @ 04:27:00

TEST COMMENT: IF: 5" Blow .
ISI: No return.
FF: B.O.B. @ 11 min.
FSI: 2" Return.



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2113.12	110.64	Initial Hydro-static
2	20.59	110.58	Open To Flow (1)
7	43.14	113.13	Shut-In(1)
22	469.37	114.27	End Shut-In(1)
22	49.50	114.04	Open To Flow (2)
52	102.00	116.56	Shut-In(2)
113	453.32	120.82	End Shut-In(2)
113	2081.45	121.02	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
60.00	GOCM 10g 20o 70m	0.30
184.00	GMCO 25g 15m 60o	2.03
31.00	GO 30g 70o	0.43
0.00	160 Weak GIP	0.00

Gas Rates

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

DRILL STEM TEST REPORT

FLUID SUMMARY

Larson Engineering

562 W State Rd. 4
Olmitz, KS. 67564

ATTN: Vern Schrag

Cowdery 3-29

29/18s/30w/Lane/KS

Job Ticket: 43103 **DST#: 3**

Test Start: 2011.04.05 @ 00:55:00

Mud and Cushion Information

Mud Type:	Gel Chem	Cushion Type:		Oil API:	38 deg API
Mud Weight:	9.00 lb/gal	Cushion Length:	ft	Water Salinity:	0 ppm
Viscosity:	50.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	6.80 in³	Gas Cushion Type:			
Resistivity:	0.00 ohm.m	Gas Cushion Pressure:	psig		
Salinity:	2800.00 ppm				
Filter Cake:	2.00 inches				

Recovery Information

Recovery Table

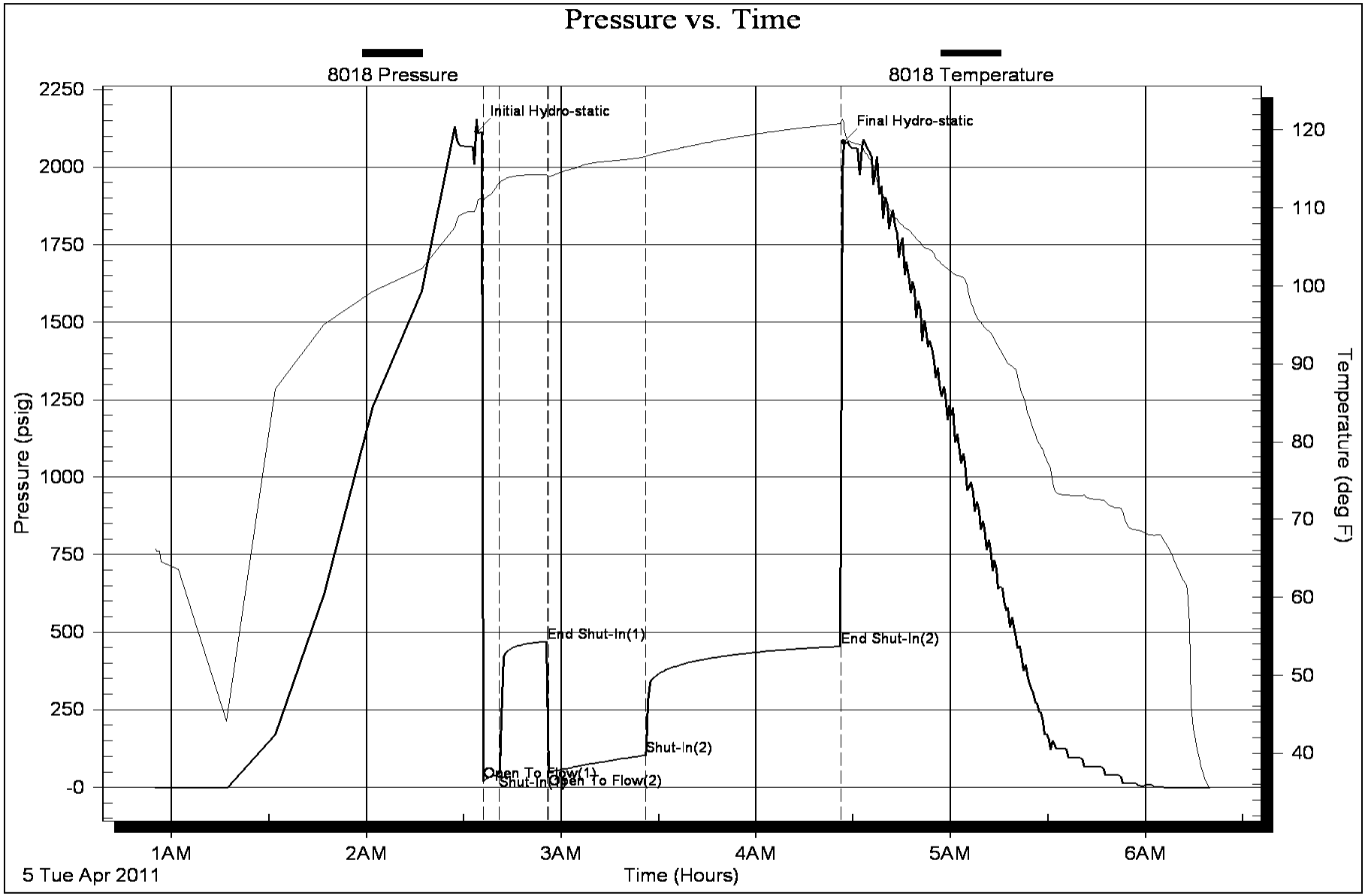
Length ft	Description	Volume bbl
60.00	GOCM 10g 20o 70m	0.295
184.00	GMCO 25g 15m 60o	2.034
31.00	GO 30g 70o	0.435
0.00	160 Weak GIP	0.000

Total Length: 275.00 ft Total Volume: 2.764 bbl

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

Laboratory Name: Laboratory Location:

Recovery Comments: API: 36 @ 40 Degrees F = 38


Pressure vs. Time
8018 Pressure
8018 Temperature
Initial Hydro-static
Final Hydro-static
End Shut-In(1)
End Shut-In(2)
Shut-In(2)
Open To Flow(1)
Shut-In(1)
Open To Flow(2)
Pressure (psig)
Temperature (deg F)
2250
2000
1750
1500
1250
1000
750
500
250
-0
120
110
100
90
80
70
60
50
40
1AM
2AM
3AM
4AM
5AM
6AM
5 Tue Apr 2011
Time (Hours)

DRILL STEM TEST REPORT

Larson Engineering

562 W State Rd. 4
Olmitz, KS. 67564

ATTN: Vern Schrag

Cowdery 3-29

29/18s/30w/Lane/KS

Job Ticket: 43104 **DST#: 4**

Test Start: 2011.04.05 @ 17:20:00

GENERAL INFORMATION:

Formation: **LKC 'L'**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 19:33:48
Time Test Ended: 22:53:47

Test Type: Conventional Bottom Hole
Tester: Chuck Smith
Unit No: 37

Interval: 4269.00 ft (KB) To 4286.00 ft (KB) (TVD)
Total Depth: 4286.00 ft (KB) (TVD)
Hole Diameter: 7.80 inches Hole Condition: Good

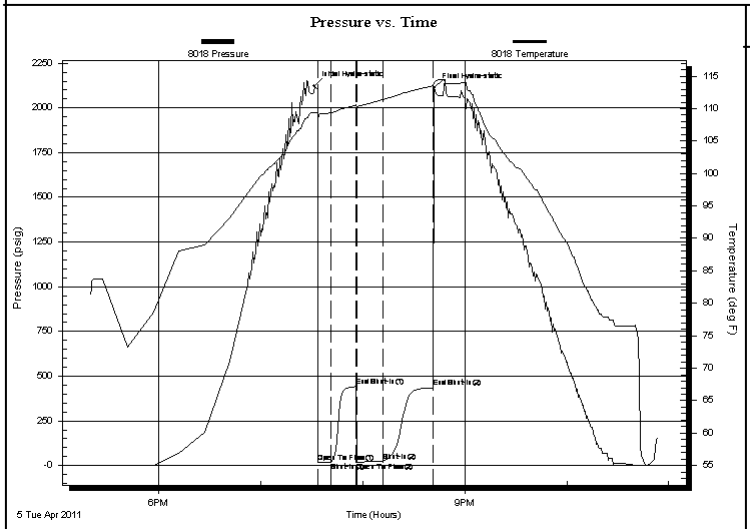
Reference Elevations: 2896.00 ft (KB)
2889.00 ft (CF)
KB to GR/CF: 7.00 ft

Serial #: 8018 **Inside**

Press@RunDepth: 22.20 psig @ 4270.00 ft (KB)
Start Date: 2011.04.05 End Date: 2011.04.05
Start Time: 17:20:05 End Time: 22:53:47

Capacity: 8000.00 psig
Last Calib.: 2011.04.05
Time On Btm: 2011.04.05 @ 19:31:48
Time Off Btm: 2011.04.05 @ 20:42:12

TEST COMMENT: IF: Weak surface blow .
ISI: No return.
FF: No blow .
FSI: No return.



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2123.58	109.37	Initial Hydro-static
2	16.28	108.18	Open To Flow (1)
10	18.40	109.37	Shut-In(1)
25	441.69	110.53	End Shut-In(1)
25	18.30	110.16	Open To Flow (2)
40	22.20	111.37	Shut-In(2)
70	435.78	113.52	End Shut-In(2)
71	2112.89	114.00	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
5.00	SOCM 1o 99m	0.02

Gas Rates

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

DRILL STEM TEST REPORT

FLUID SUMMARY

Larson Engineering

562 W State Rd. 4
Olmitz, KS. 67564

ATTN: Vern Schrag

Cowdery 3-29

29/18s/30w/Lane/KS

Job Ticket: 43104 **DST#: 4**

Test Start: 2011.04.05 @ 17:20:00

Mud and Cushion Information

Mud Type:	Gel Chem	Cushion Type:		Oil API:	0 deg API
Mud Weight:	9.00 lb/gal	Cushion Length:	ft	Water Salinity:	0 ppm
Viscosity:	50.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	6.40 in³	Gas Cushion Type:			
Resistivity:	0.00 ohm.m	Gas Cushion Pressure:	psig		
Salinity:	3000.00 ppm				
Filter Cake:	2.00 inches				

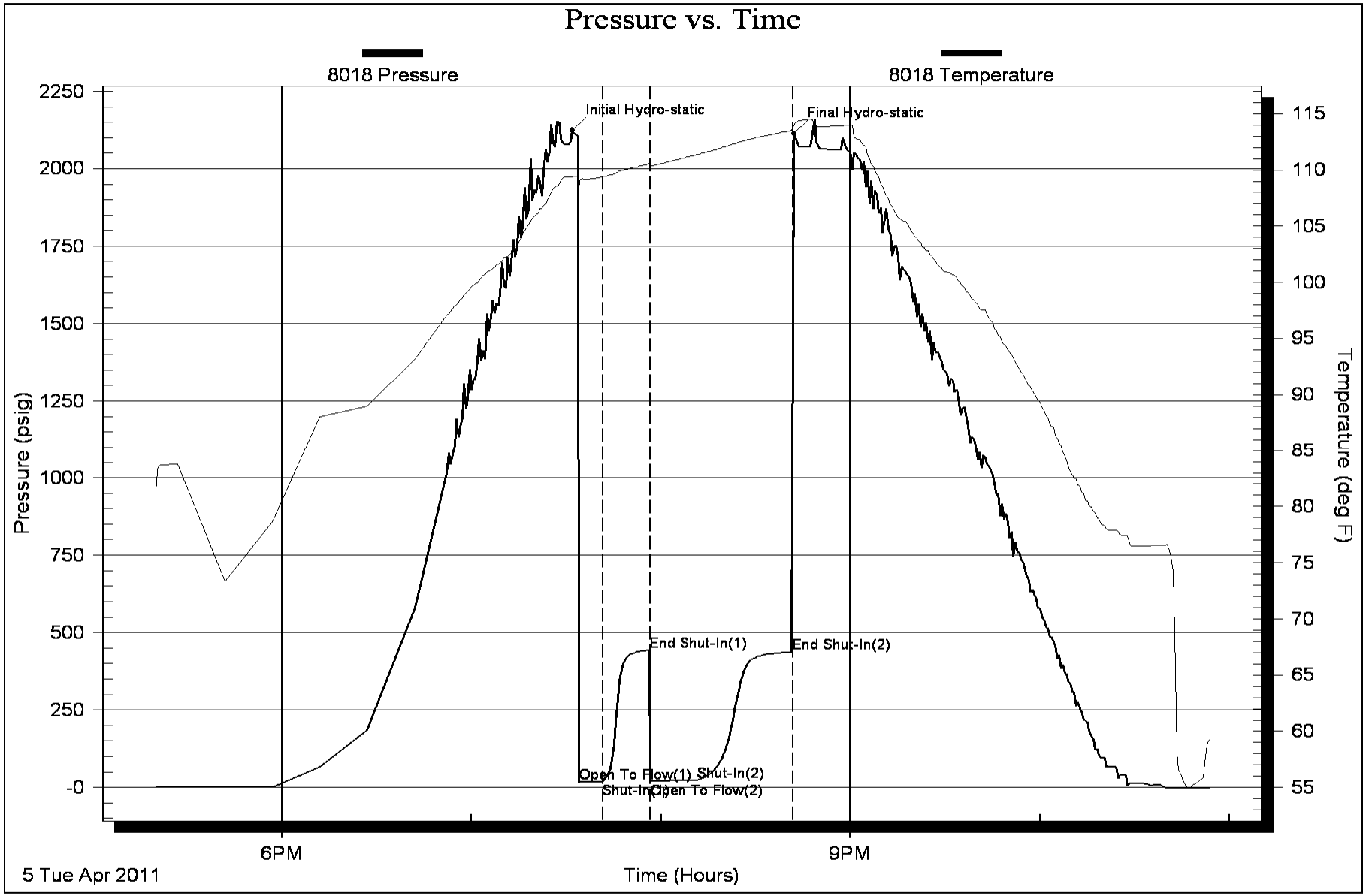
Recovery Information

Recovery Table

Length ft	Description	Volume bbl
5.00	SOCM 1o 99m	0.025

Total Length: 5.00 ft Total Volume: 0.025 bbl

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


Pressure vs. Time
8018 Pressure
8018 Temperature
Initial Hydro-static
Final Hydro-static
End Shut-In(1)
End Shut-In(2)
Open To Flow(1)
Shut-In(2)
Shut-In(1)
Open To Flow(2)
2250
2000
1750
1500
1250
1000
750
500
250
-0
Pressure (psig)
115
110
105
100
95
90
85
80
75
70
65
60
55
Temperature (deg F)
6PM
9PM
5 Tue Apr 2011
Time (Hours)

DRILL STEM TEST REPORT

Larson Engineering

562 W State Rd. 4
Olmitz, KS. 67564

ATTN: Vern Schrag

Cowdery 3-29

29/18s/30w/Lane/KS

Job Ticket: 43105 **DST#: 5**

Test Start: 2011.04.06 @ 12:21:00

GENERAL INFORMATION:

Formation: **Marmaton**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 14:01:36
Time Test Ended: 17:46:00

Test Type: Conventional Bottom Hole
Tester: Kevin Mack
Unit No: 37

Interval: 4295.00 ft (KB) To 4356.00 ft (KB) (TVD)
Total Depth: 4356.00 ft (KB) (TVD)
Hole Diameter: 7.80 inches Hole Condition: Good

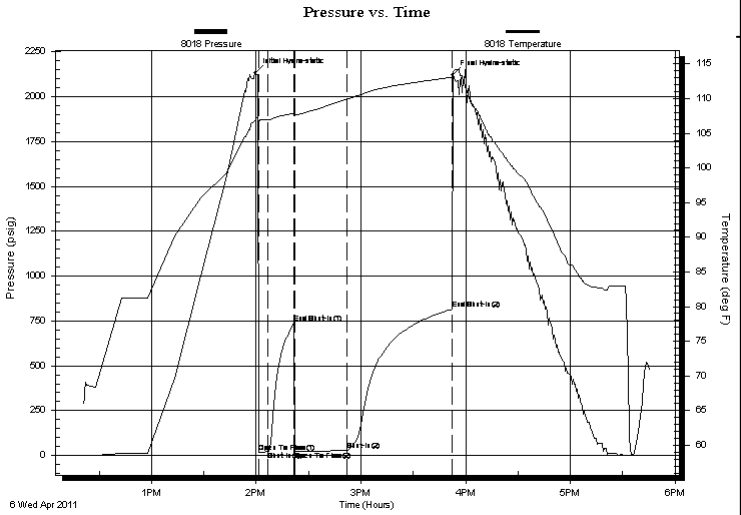
Reference Elevations: 2896.00 ft (KB)
2889.00 ft (CF)
KB to GR/CF: 7.00 ft

Serial #: 8018 **Inside**

Press@RunDepth: 27.40 psig @ 4299.00 ft (KB)
Start Date: 2011.04.06 End Date: 2011.04.06
Start Time: 12:21:05 End Time: 17:45:59

Capacity: 8000.00 psig
Last Calib.: 2011.04.06
Time On Btm: 2011.04.06 @ 13:59:36
Time Off Btm: 2011.04.06 @ 15:52:36

TEST COMMENT: IF: Surface blow .
ISI: No return.
FF: Weak surface blow died @ 20 min.
FSI: No return.



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2133.55	106.97	Initial Hydro-static
2	19.46	106.52	Open To Flow (1)
8	20.74	106.96	Shut-In(1)
22	739.42	107.90	End Shut-In(1)
23	22.55	107.56	Open To Flow (2)
53	27.40	109.91	Shut-In(2)
113	814.75	113.07	End Shut-In(2)
113	2120.32	113.79	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
30.00	SOCM 2o 98m	0.15

Gas Rates

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

DRILL STEM TEST REPORT

FLUID SUMMARY

Larson Engineering

562 W State Rd. 4
Olmitz, KS. 67564

ATTN: Vern Schrag

Cowdery 3-29

29/18s/30w/Lane/KS

Job Ticket: 43105 **DST#: 5**

Test Start: 2011.04.06 @ 12:21:00

Mud and Cushion Information

Mud Type:	Gel Chem	Cushion Type:		Oil API:	0 deg API
Mud Weight:	9.00 lb/gal	Cushion Length:	ft	Water Salinity:	0 ppm
Viscosity:	55.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	6.80 in³	Gas Cushion Type:			
Resistivity:	0.00 ohm.m	Gas Cushion Pressure:	psig		
Salinity:	3000.00 ppm				
Filter Cake:	2.00 inches				

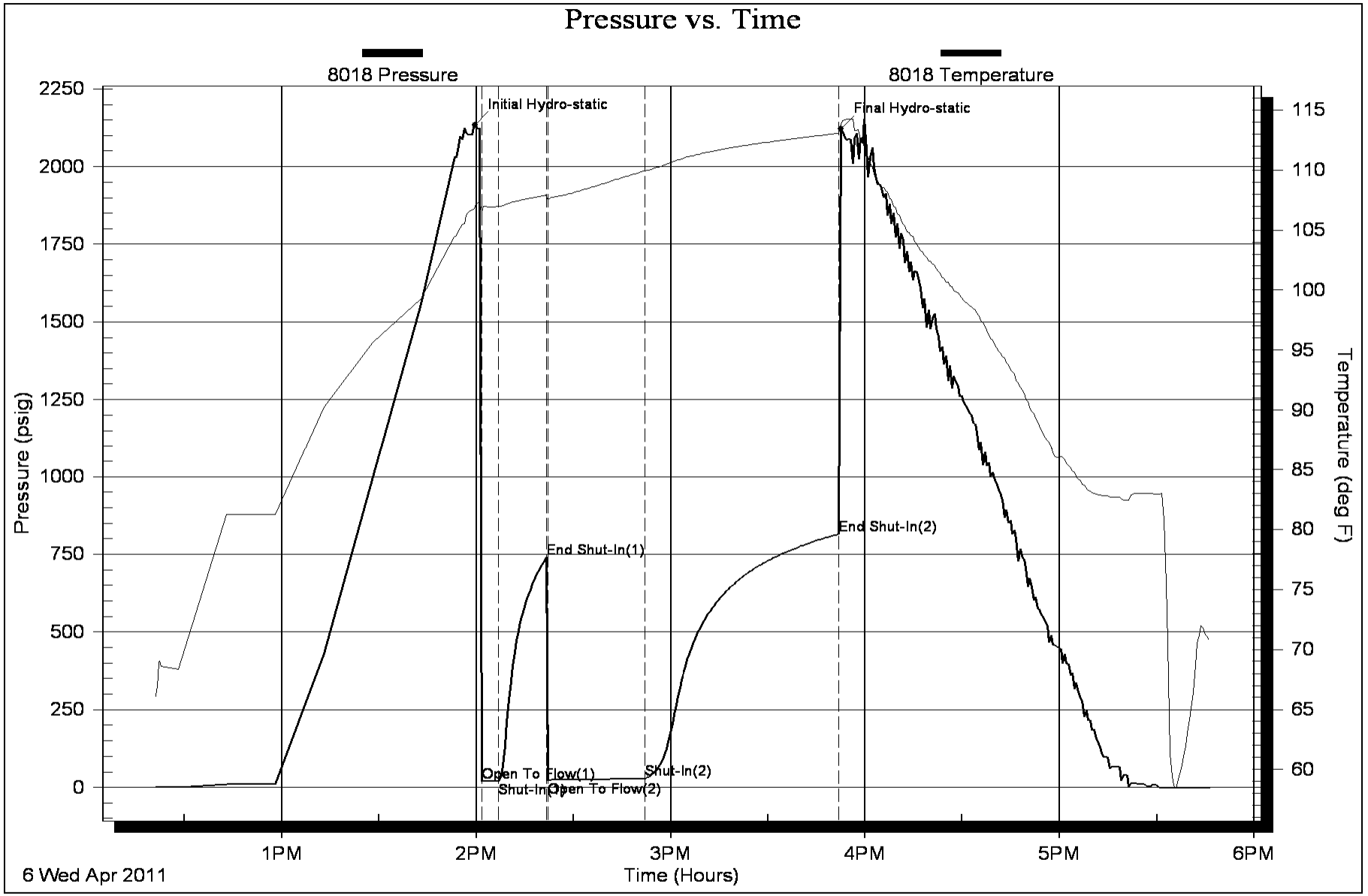
Recovery Information

Recovery Table

Length ft	Description	Volume bbl
30.00	SOCM 2o 98m	0.148

Total Length: 30.00 ft Total Volume: 0.148 bbl

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


Pressure vs. Time
8018 Pressure
8018 Temperature
Initial Hydro-static
Final Hydro-static
End Shut-In(1)
End Shut-In(2)
Open To Flow(1)
Shut-In(1)
Open To Flow(2)
Shut-In(2)
Pressure (psig)
Temperature (deg F)
Time (Hours)
6 Wed Apr 2011
2250
2000
1750
1500
1250
1000
750
500
250
0
115
110
105
100
95
90
85
80
75
70
65
60
1PM
2PM
3PM
4PM
5PM
6PM

DRILL STEM TEST REPORT

Larson Engineering

562 W State Rd. 4
Olmitz, KS. 67564

ATTN: Vern Schrag

Cowdery 3-29

29/18s/30w/Lane/KS

Job Ticket: 43106 **DST#: 6**

Test Start: 2011.04.07 @ 04:26:00

GENERAL INFORMATION:

Formation: **Altamont**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 06:36:12
Time Test Ended: 11:15:00

Test Type: Conventional Bottom Hole
Tester: Chuck Smith
Unit No: 37

Interval: 4359.00 ft (KB) To 4392.00 ft (KB) (TVD)
Total Depth: 4392.00 ft (KB) (TVD)
Hole Diameter: 7.80 inches Hole Condition: Good

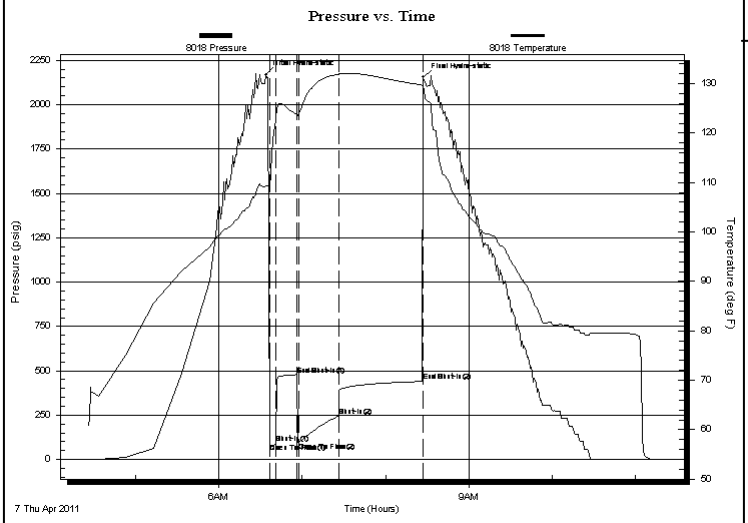
Reference Elevations: 2896.00 ft (KB)
2889.00 ft (CF)
KB to GR/CF: 7.00 ft

Serial #: 8018 **Inside**

Press@RunDepth: 246.45 psig @ 4360.00 ft (KB)
Start Date: 2011.04.07 End Date: 2011.04.07
Start Time: 04:26:05 End Time: 11:14:59

Capacity: 8000.00 psig
Last Calib.: 2011.04.07
Time On Btm: 2011.04.07 @ 06:33:48
Time Off Btm: 2011.04.07 @ 08:27:24

TEST COMMENT: IF: B.O.B. @ 5 min.
ISI: 3" Return.
FF: B.O.B. @ 5 min.
FSI: B.O.B. @ 25 min.



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2168.93	109.25	Initial Hydro-static
3	39.44	108.84	Open To Flow (1)
8	90.63	123.19	Shut-In(1)
23	478.58	123.81	End Shut-In(1)
24	94.71	123.53	Open To Flow (2)
53	246.45	131.89	Shut-In(2)
113	440.48	129.71	End Shut-In(2)
114	2155.41	129.75	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
460.00	GO 45g 55o	5.36
190.00	GOCM 20g 30o 50m	2.67
0.00	775 Feet GIP	0.00

Gas Rates

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

DRILL STEM TEST REPORT

FLUID SUMMARY

Larson Engineering

562 W State Rd. 4
Olmitz, KS. 67564

ATTN: Vern Schrag

Cowdery 3-29

29/18s/30w/Lane/KS

Job Ticket: 43106 **DST#: 6**

Test Start: 2011.04.07 @ 04:26:00

Mud and Cushion Information

Mud Type:	Gel Chem	Cushion Type:		Oil API:	36 deg API
Mud Weight:	9.00 lb/gal	Cushion Length:	ft	Water Salinity:	0 ppm
Viscosity:	49.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	6.80 in³	Gas Cushion Type:			
Resistivity:	0.00 ohm.m	Gas Cushion Pressure:	psig		
Salinity:	3000.00 ppm				
Filter Cake:	2.00 inches				

Recovery Information

Recovery Table

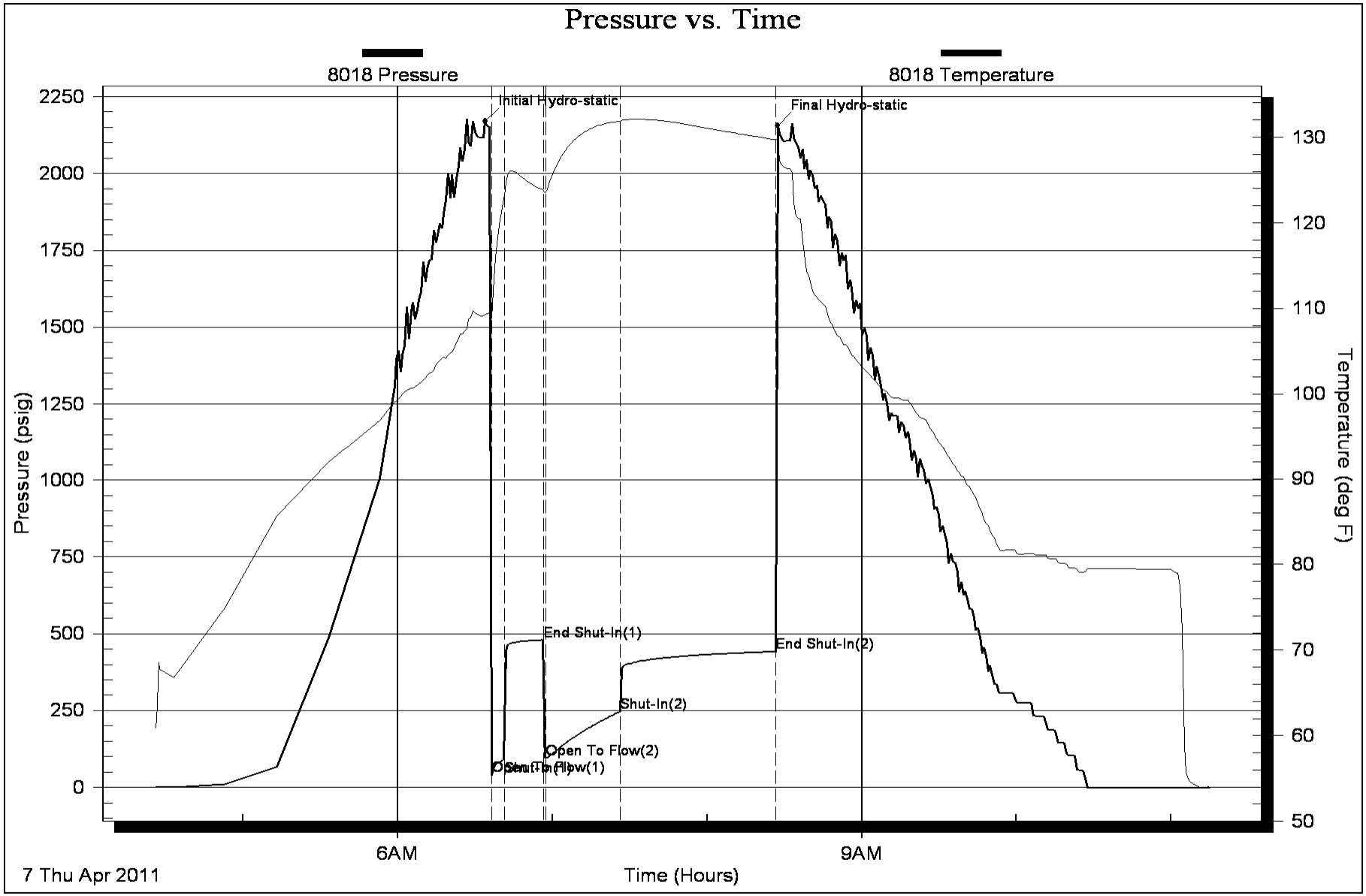
Length ft	Description	Volume bbl
460.00	GO 45g 55o	5.359
190.00	GOCM 20g 30o 50m	2.665
0.00	775 Feet GIP	0.000

Total Length: 650.00 ft Total Volume: 8.024 bbl

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

Laboratory Name: Laboratory Location:

Recovery Comments: API: 36 @ 60 Degrees F = 36.


Pressure vs. Time
8018 Pressure
8018 Temperature
Initial Hydro-static
Final Hydro-static
End Shut-In(1)
End Shut-In(2)
Shut-In(2)
Open To Flow(2)
Shut-In(1)
Pressure (psig)
Temperature (deg F)
2250
2000
1750
1500
1250
1000
750
500
250
0
130
120
110
100
90
80
70
60
50
6AM
9AM
7 Thu Apr 2011
Time (Hours)

TRILOBITE TESTING INC.

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4/10

Test Ticket

NO. 43101 15628

Well Name & No. Landery #3-29 Test No. 1 Date 4/3/11

Company Larson Engineering Elevation 2896 KB 2889 GL

Address 562 W State Rd. 4 Olmitz, KS 67564

Co. Rep / Geo. Vern Schrag Rig H.D. #3

Location: Sec. 29 Twp. 18s Rge. 30w Co. Lane State KS

Interval Tested 4109-4134 Zone Tested L.KC "H"

Anchor Length 25' Drill Pipe Run 3992 Mud Wt. 8.6

Top Packer Depth 4105 Drill Collars Run 120' Vis 68

Bottom Packer Depth 4109 Wt. Pipe Run 0 WL 7.2

Total Depth 4134 Chlorides 4500 ppm System LCM 2

Blow Description IF: Blow built to 2¼"

IS No Return

FF: Blow built to 9½"

FS: No Return

Rec 122	Feet of MCO	%gas 75	%oil	%water 25	%mud		
Rec 60	Feet of MCO	%gas 70	%oil	%water 30	%mud		
Rec	Feet of	%gas	%oil	%water	%mud		
Rec	Feet of	%gas	%oil	%water	%mud		
Rec	Feet of	%gas	%oil	%water	%mud		

Rec Total 182 BHT 119 Gravity — API RW — @ — °F Chlorides — ppm

(A) Initial Hydrostatic 2041	☒ Test 1225.00	T-On Location 2:15 AM	
(B) First Initial Flow 20	☒ Jars 250.00	T-Started 4:00 AM	
(C) First Final Flow 37	☒ Safety Joint 75.00	T-Open 7:31 AM	
(D) Initial Shut-In 718	☒ Circ Sub N/C	T-Pulled 10:06 AM	
(E) Second Initial Flow 42	☐ Hourly Standby	T-Out 12:00 PM	
(F) Second Final Flow 70	☒ Mileage 31 RT 38.75	Comments	
(G) Final Shut-In 645	☐ Sampler		
(H) Final Hydrostatic 2074	☐ Straddle	☐ Ruined Shale Packer	
	☐ Shale Packer	☐ Ruined Packer	
Initial Open 5	☐ Extra Packer	☐ Extra Copies	
Initial Shut-In 15	☐ Extra Recorder	Sub Total 8	
Final Flow 45	☐ Day Standby	Total 1588.75	
Final Shut-In 90	☐ Accessibility	MP/DST Disc't	
	Sub Total 1588.75		

Approved By Vernon C Schrag Our Representative Kevin

TRILOBITE TESTING INC.

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4/10

Test Ticket

NO. 43102

Well Name & No. Cowdery # 3-24 Test No. 2 Date 4/4/14

Company Larson Engineering Elevation 2896 KB 2889 GL

Address 562 W State Rd. 4 Olmitz, KS 67564

Co. Rep / Geo. Vern Schrag Rig H.D. #3

Location: Sec. 24 Twp. 18s Rge. 30w Co. Lane State KS

Interval Tested 4180-4200 Zone Tested L.K.C. "J"

Anchor Length 20' Drill Pipe Run 4055 Mud Wt. 9.2

Top Packer Depth 4176 Drill Collars Run 120' Vis 48

Bottom Packer Depth 4180 Wt. Pipe Run 0 WL 7.6

Total Depth 4200 Chlorides 1,700 ppm System LCM 2

Blow Description IF: BoB in 2½ min

IS: Return started @ 5 min built to 2¾"

FF: BoB in 3 min

FS: 2½" Return.

Rec	Feet of	%gas	%oil	%water	%mud	
Rec 410	Feet of GO	25 %gas	25 %oil	%water	%mud	
Rec 370	Feet of GOCM	20 %gas	20 %oil	%water	60 %mud	
Rec	Feet of 145 Ft. GIP	%gas	%oil	%water	%mud	
Rec	Feet of	%gas	%oil	%water	%mud	

Rec Total 780 BHT 128 Gravity 36 API RW – @ – °F Chlorides – ppm

(A) Initial Hydrostatic	2098	☒ Test	1225.00
(B) First Initial Flow	54	☒ Jars	250.00
(C) First Final Flow	121	☒ Safety Joint	75.00
(D) Initial Shut-In	859	☒ Circ Sub	
(E) Second Initial Flow	125	☐ Hourly Standby	
(F) Second Final Flow	297	☑ Mileage	3 RT = 38.75
(G) Final Shut-In	894	☐ Sampler	
(H) Final Hydrostatic	2074	☐ Straddle	
		☒ Shale Packer	250.00
Initial Open	5	☐ Extra Packer	
Initial Shut-In	15	☐ Extra Recorder	
Final Flow	30	☐ Day Standby	
Final Shut-In	60	☐ Accessibility	
		Sub Total	1888.75

T-On Location 12:45 AM

T-Started 2:26 AM

T-Open 5:11 AM

T-Pulled 7:04 AM

T-Out 9:12 AM

Comments

☐ Ruined Shale Packer

☐ Ruined Packer

☐ Extra Copies

Sub Total 8

Total 1888.75

MP/DST Disc't

Approved By Vernon C Schrag Our Representative

TRILOBITE TESTING INC.

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4/10

Test Ticket

NO. 43103

Well Name & No. Cowdery 3-29 Test No. 3 Date 4-5-11

Company Larson Engineering Elevation 2896 KB 2889 GL

Address

Co. Rep / Geo. Vern Schrag Rig HD #3

Location: Sec. 29 Twp. 18s Rge. 30w Co. Lane State KS

Interval Tested 4256-4264 Zone Tested Middle Creek

Anchor Length 8 Drill Pipe Run 4113 Mud Wt. 9.2

Top Packer Depth 4252 Drill Collars Run 120 Vis 50

Bottom Packer Depth 4256 Wt. Pipe Run 0 WL 6.8

Total Depth 4264 Chlorides 2800 ppm System LCM 1½

Blow Description IF: 5" Blow

ISI: No return.

FF: B.O.B. @ 11 min.

FSI: 2" Return.

Rec		Feet of		%gas		%oil		%water	%mud
Rec	31	Feet of	GO	30	%gas	70	%oil	%water	%mud
Rec	184	Feet of	GMCO	25	%gas	60	%oil	%water 15	%mud
Rec	60	Feet of	GOCM	10	%gas	20	%oil	%water 70	%mud
Rec		Feet of	160' Weak GIP		%gas		%oil	%water	%mud

Rec Total 275 BHT 121 Gravity 38 API RW — @ — °F Chlorides — ppm

(A) Initial Hydrostatic	2113	☒ Test	1225	T-On Location	00:45
(B) First Initial Flow	21	☒ Jars	250	T-Started	00:55
(C) First Final Flow	43	☒ Safety Joint	75	T-Open	02:36
(D) Initial Shut-In	469	☒ Circ Sub	50	T-Pulled	04:26
(E) Second Initial Flow	50	☐ Hourly Standby		T-Out	06:20
(F) Second Final Flow	102	☒ Mileage	3 1RT 38.75	Comments	
(G) Final Shut-In	453	☐ Sampler			
(H) Final Hydrostatic	2081	☐ Straddle		☐ Ruined Shale Packer	
		☒ Shale Packer	250	☐ Ruined Packer	
Initial Open	5	☐ Extra Packer		☐ Extra Copies	
Initial Shut-In	15	☐ Extra Recorder		Sub Total	0
Final Flow	30	☐ Day Standby		Total	1888.75
Final Shut-In	60	☐ Accessibility		MP/DST Disc't	
		Sub Total	1888.75		

Approved By Vern C Schrag Our Representative Chuck Smith

TRILOBITE TESTING INC.

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4/10

Test Ticket

NO. 43104

Well Name & No. Cowdery 3-29 Test No. 4 Date 4-5-11

Company Larson Engineering Elevation 2896 KB 2889 GL

Address

Co. Rep / Geo. Vern Schrag Rig HD #3

Location: Sec. 29 Twp. 18s Rge. 30w Co. Lane State KS

Interval Tested 4269-4286 Zone Tested LKC 'L'

Anchor Length 17 Drill Pipe Run 4143 Mud Wt. 9.2

Top Packer Depth 4265 Drill Collars Run 120 Vis 50

Bottom Packer Depth 4269 Wt. Pipe Run 0 WL 6.4

Total Depth 4286 Chlorides 3000 ppm System LCM 1

Blow Description IF: Weak surface blow.
ISI: No return.
FF: No blow
FSI: No return.

Rec	Feet of	%gas	%oil	%water	%mud
Rec 5	Feet of SOCM	%gas	1 %oil	%water 99	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 5 BHT 114 Gravity — API RW — @ — °F Chlorides — ppm

(A) Initial Hydrostatic 2124	☒ Test 1225	T-On Location 16:45	
(B) First Initial Flow 14	☒ Jars 250	T-Started 17:20	
(C) First Final Flow 18	☒ Safety Joint 75	T-Open 19:34	
(D) Initial Shut-In 442	☒ Circ Sub NC	T-Pulled 20:42	
(E) Second Initial Flow 18	☐ Hourly Standby	T-Out 22:54	
(F) Second Final Flow 22	☒ Mileage 3 RT 38.75	Comments	
(G) Final Shut-In 436	☐ Sampler		
(H) Final Hydrostatic 2113	☐ Straddle	☐ Ruined Shale Packer	
	☒ Shale Packer	☐ Ruined Packer	
Initial Open 5	☐ Extra Packer	☐ Extra Copies	
Initial Shut-In 15	☐ Extra Recorder	Sub Total 0	
Final Flow 15	☐ Day Standby	Total 1588.75	
Final Shut-In 30	☐ Accessibility	MP/DST Disc't	
	Sub Total 1588.75		

Approved By Vernon C Schrag Our Representative Chuck Smith

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.

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4/10

APR 1 1 2011

Test Ticket

NO. 43105

Well Name & No.	Cowdery 3-29	Test No.	5	Date	4-6-11
Company	Larson Engineering	Elevation	2896 KB	2889	GL
Address					
Co. Rep / Geo.	Vern Schrag	Rig	HD #3		
Location: Sec. 29	Twp. 18s	Rge. 30w	Co. Lane	State	Ks

Interval Tested	4295-4356	Zone Tested	Marmaton		
Anchor Length	61	Drill Pipe Run	4178	Mud Wt.	9.2
Top Packer Depth	4291	Drill Collars Run	120	Vis	55
Bottom Packer Depth	4295	Wt. Pipe Run	0	WL	6.8
Total Depth	4356	Chlorides	3000 ppm System	LCM	1

Blow Description IF: ½ Surface blow.

ISI: No return.

FF: Weak surface blow died @ 20 min.

FSI: No return.

Rec	Feet of	%gas	%oil	%water	%mud
30	SOCM		2		98

Rec Total 30 BHT 113 Gravity — API RW — @ — °F Chlorides — pp

(A) Initial Hydrostatic	2134	☒ Test	1225	T-On Location	12:00
(B) First Initial Flow	19	☒ Jars	250	T-Started	12:21
(C) First Final Flow	21	☒ Safety Joint	75	T-Open	14:02
(D) Initial Shut-In	739	☒ Circ Sub	50	T-Pulled	15:52
(E) Second Initial Flow	23	☐ Hourly Standby		T-Out	17:46
(F) Second Final Flow	27	☒ Mileage	31RT 38.75	Comments	
(G) Final Shut-In	815	☐ Sampler			
(H) Final Hydrostatic	2120	☐ Straddle		☐ Ruined Shale Packer	
		☐ Shale Packer		☐ Ruined Packer	
Initial Open	75	☐ Extra Packer		☐ Extra Copies	
Initial Shut-In	15	☐ Extra Recorder		Sub Total	0
Final Flow	30	☐ Day Standby		Total	1638.75
Final Shut-In	60	☐ Accessibility		MP/DST Disc't	
		Sub Total	1638.75		

Approved By [signature] Our Representative Chuck Smith

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4/10

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Test Ticket

NO. 43106

Well Name & No. Cowdery 3-29 Test No. 6 Date 4-7-11

Company Larson Engineering Elevation 2896 KB 2889 GL

Address

Co. Rep / Geo. Vern Schrag Rig HD #3

Location: Sec. 29 Twp. 18s Rge. 30w Co. Lane State KS

Interval Tested 4359-4392 Zone Tested Altamont

Anchor Length 33 Drill Pipe Run 4242 Mud Wt. 9.3

Top Packer Depth 4355 Drill Collars Run 120 Vis 49

Bottom Packer Depth 4359 Wt. Pipe Run 0 WL 6.8

Total Depth 4392 Chlorides 3000 ppm System LCM 1

Blow Description IF: B.O.B. @ 5 min.

ISI 3½" Return.

FF: B.O.B. @ 5 min.

FSI: B.O.B. @ 25 min.

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	Feet of	%gas	%oil	%water	%mud

Rec Total 650 BHT 130 Gravity 36 API RW — @ — °F Chlorides — ppm

(A) Initial Hydrostatic	2169	☒ Test	1225
(B) First Initial Flow	39	☒ Jars	250
(C) First Final Flow	91	☒ Safety Joint	75
(D) Initial Shut-In	479	☒ Circ Sub	N/C
(E) Second Initial Flow	95	☒ Hourly Standby	
(F) Second Final Flow	247	☒ Mileage 3 1/RT	38.75
(G) Final Shut-In	440	☒ ~~Sampler~~ Pick-up tool	7750
(H) Final Hydrostatic	2155	☐ Straddle	
		☒ Shale Packer	250
Initial Open	5	☐ Extra Packer	
Initial Shut-In	15	☐ Extra Recorder	
Final Flow	30	☐ Day Standby	
Final Shut-In	60	☐ Accessibility	
		Sub Total	1877 50

T-On Location	4:00
T-Started	4:26
T-Open	6:36
T-Pulled	8:27
T-Out	11:15
Comments	
☒ Ruined Shale Packer	260
☐ Ruined Packer	
☐ Extra Copies	
Sub Total	260
Total	2137.50
MP/DST Disc't	

Approved By Vernon Schrag Our Representative Chuck Smith

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