



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Larson Engineering
 562 W. State Rd 4
 Olmitz, KS 67564-8561
 ATTN: Vern Schrag

S21-18s-29w Lane, KS
Gail #1-21
 Job Ticket: 44472 **DST#: 1**
 Test Start: 2011.11.09 @ 07:09:00

GENERAL INFORMATION:

Formation: **LKC 'K'**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 09:34:50
 Time Test Ended: 13:15:00
Interval: 4231.00 ft (KB) To 4272.00 ft (KB) (TVD)
 Total Depth: 4272.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Good
 Test Type: Conventional Bottom Hole (Initial)
 Tester: Chuck Smith
 Unit No: 37
 Reference Elevations: 2815.00 ft (KB)
 2808.00 ft (CF)
 KB to GR/CF: 7.00 ft

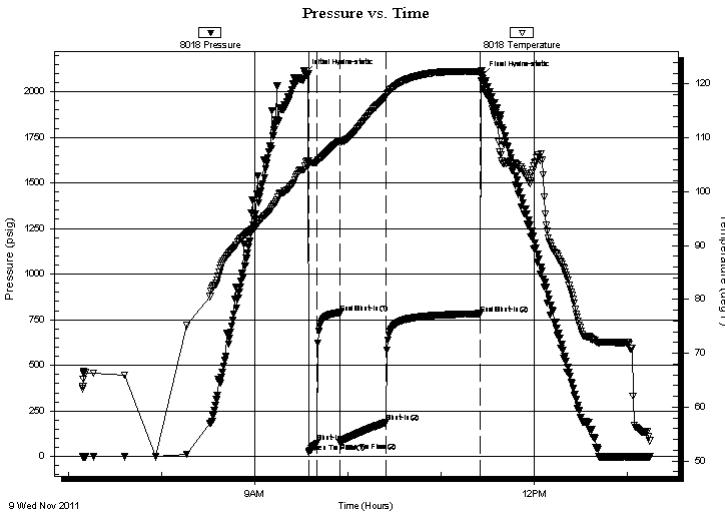
Serial #: 8018

Inside

Press @ RunDepth: 188.54 psig @ 4232.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2011.11.09 End Date: 2011.11.09 Last Calib.: 2011.11.09
 Start Time: 07:09:02 End Time: 13:15:00 Time On Btm: 2011.11.09 @ 09:32:30
 Time Off Btm: 2011.11.09 @ 11:26:09

TEST COMMENT: 6" Blow.
 No return.
 B.O.B @ 14 min.
 No return.

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2100.37	104.88	Initial Hydro-static
3	25.17	105.04	Open To Flow (1)
8	76.31	105.51	Shut-In(1)
23	789.05	109.51	End Shut-In(1)
23	80.65	109.06	Open To Flow (2)
53	188.54	117.72	Shut-In(2)
113	783.88	122.27	End Shut-In(2)
114	2090.50	122.52	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
0.00	RW: 245 @ 45 Degrees F = 50000PPM	0.00
242.00	MW 15m 85w	2.03
140.00	MW 25m 75w	1.96
0.00	Oil spots in tool.	0.00

Gas Rates

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



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562 W. State Rd 4
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ATTN: Vern Schrag

S21-18s-29w Lane, KS
Gail #1-21
Job Ticket: 44472 **DST#: 1**
Test Start: 2011.11.09 @ 07:09:00

Mud and Cushion Information

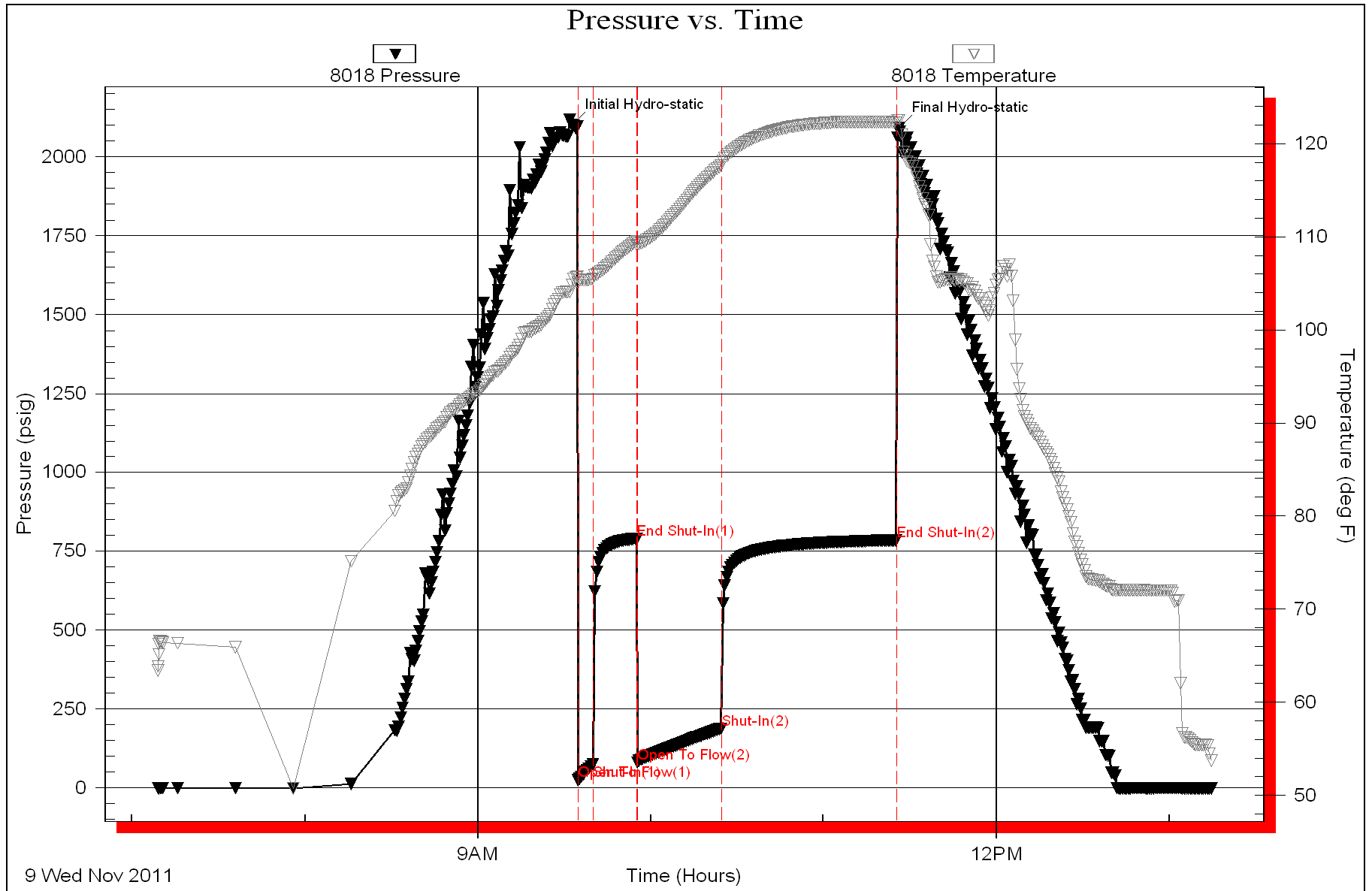
Mud Type: Gel Chem	Cushion Type:	Oil API:	deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity: 50000 ppm	
Viscosity: 58.00 sec/qt	Cushion Volume: bbl		
Water Loss: 6.80 in ³	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 3000.00 ppm			
Filter Cake: 2.00 inches			

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
0.00	RW:.245 @ 45 Degrees F = 50000PPM	0.000
242.00	MW 15m 85w	2.028
140.00	MW 25m 75w	1.964
0.00	Oil spots in tool.	0.000

Total Length: 382.00 ft Total Volume: 3.992 bbl
 Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
 Laboratory Name: Laboratory Location:
 Recovery Comments:





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Larson Engineering
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ATTN: Vern Schrag

S21-18s-29w Lane, KS
Gail #1-21
Job Ticket: 44473 **DST#: 2**
Test Start: 2011.11.09 @ 21:07:00

GENERAL INFORMATION:

Formation: **Middle Creek**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 23:38:10
Time Test Ended: 02:38:50
Interval: **4274.00 ft (KB) To 4284.00 ft (KB) (TVD)**
Total Depth: 4284.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Good
Reference Elevations: 2815.00 ft (KB)
2808.00 ft (CF)
KB to GR/CF: 7.00 ft
Test Type: Conventional Bottom Hole (Reset)
Tester: Chuck Smith
Unit No: 37

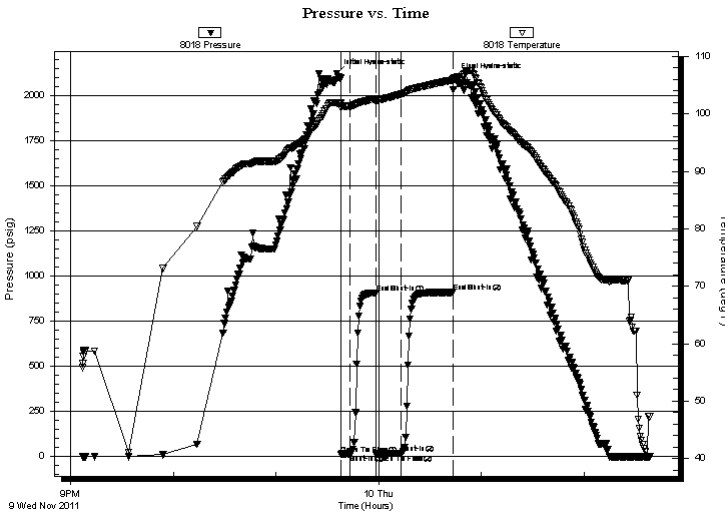
Serial #: 8018

Inside

Press @ Run Depth: 17.79 psig @ 4275.00 ft (KB) Capacity: 8000.00 psig
Start Date: 2011.11.09 End Date: 2011.11.10 Last Calib.: 2011.11.10
Start Time: 21:07:02 End Time: 02:38:50 Time On Btm: 2011.11.09 @ 23:35:50
Time Off Btm: 2011.11.10 @ 00:44:20

TEST COMMENT: Weak surface blow .
No return.
No blow .
No return.

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2120.80	101.83	Initial Hydro-static
3	14.07	101.04	Open To Flow (1)
8	15.12	101.34	Shut-In(1)
23	905.96	102.65	End Shut-In(1)
23	13.09	102.02	Open To Flow (2)
38	17.79	103.43	Shut-In(2)
68	909.20	105.91	End Shut-In(2)
69	2096.43	106.30	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
1.00	M100m	0.00

* Recovery from multiple tests

Gas Rates

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



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FLUID SUMMARY

Larson Engineering
562 W. State Rd 4
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ATTN: Vern Schrag

S21-18s-29w Lane, KS
Gail #1-21
Job Ticket: 44473 **DST#: 2**
Test Start: 2011.11.09 @ 21:07:00

Mud and Cushion Information

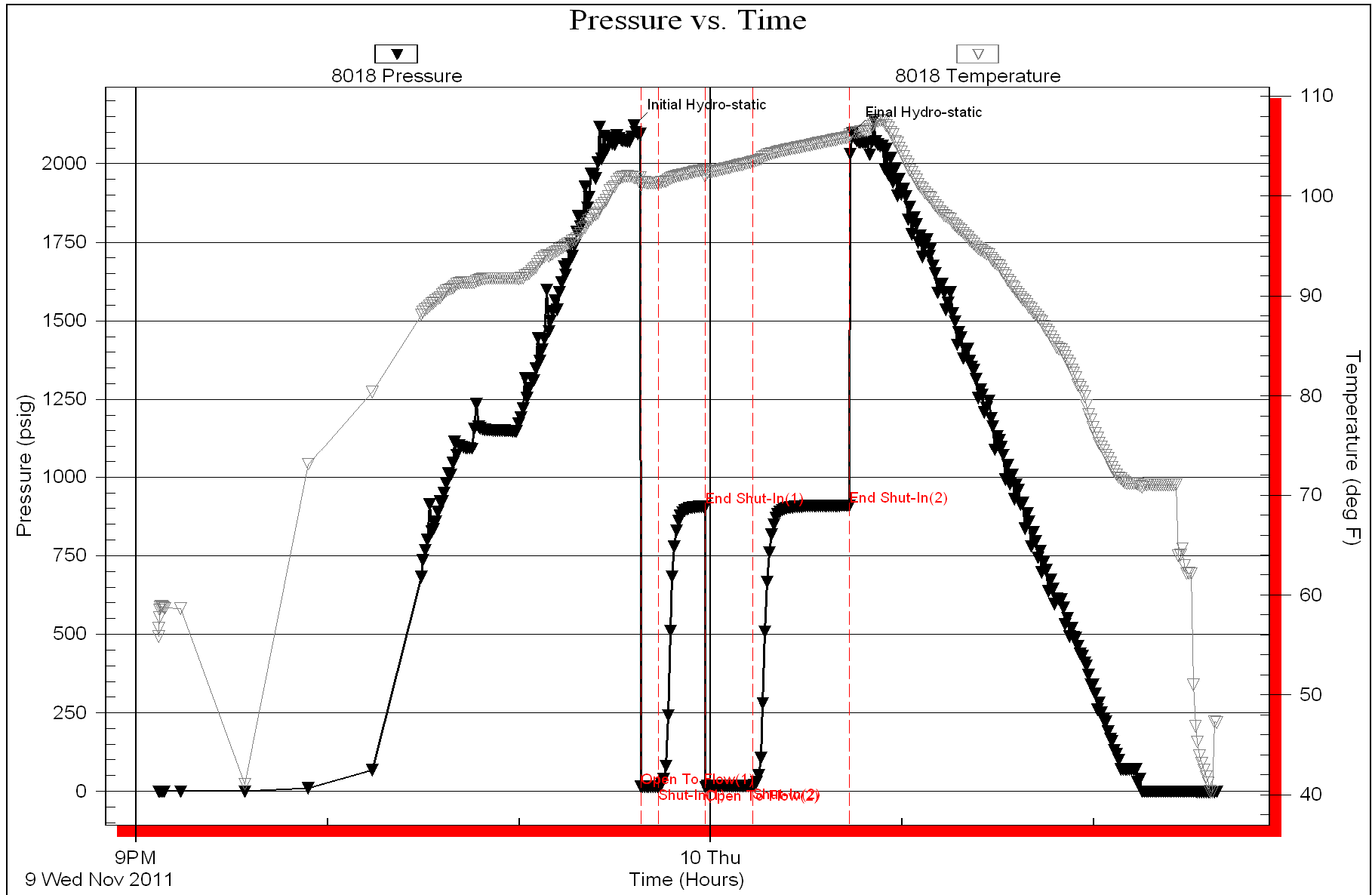
Mud Type: Gel Chem	Cushion Type:	Oil API:	deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity:	ppm
Viscosity: 53.00 sec/qt	Cushion Volume: bbl		
Water Loss: 6.79 in ³	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 3000.00 ppm			
Filter Cake: 2.00 inches			

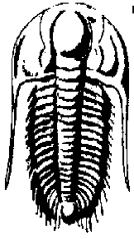
Recovery Information

Recovery Table

Length ft	Description	Volume bbl
1.00	M 100m	0.005

Total Length: 1.00 ft Total Volume: 0.005 bbl
 Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
 Laboratory Name: Laboratory Location:
 Recovery Comments:





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DRILL STEM TEST REPORT

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ATTN: Vern Schrag

S21-18s-29w Lane, KS
Gail #1-21
Job Ticket: 44474 **DST#: 3**
Test Start: 2011.11.10 @ 10:02:00

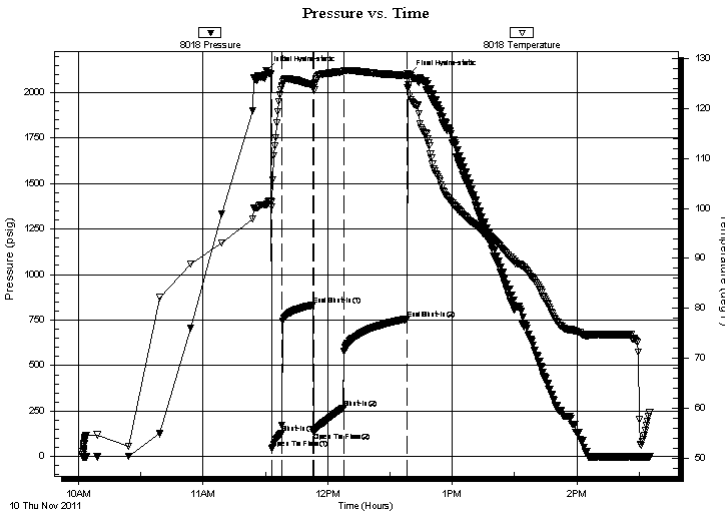
GENERAL INFORMATION:

Formation: **LKC 'L'**
Deviated: No Whipstock: ft (KB) Test Type: Conventional Bottom Hole (Reset)
Time Tool Opened: 11:33:10 Tester: Chuck Smith
Time Test Ended: 14:35:20 Unit No: 37
Interval: 4284.00 ft (KB) To 4294.00 ft (KB) (TVD) Reference Elevations: 2815.00 ft (KB)
Total Depth: 4294.00 ft (KB) (TVD) 2808.00 ft (CF)
Hole Diameter: 7.88 inches Hole Condition: Good KB to GR/CF: 7.00 ft

Serial #: 8018 Inside
Press @ RunDepth: 268.22 psig @ 4285.00 ft (KB) Capacity: 8000.00 psig
Start Date: 2011.11.10 End Date: 2011.11.10 Last Calib.: 2011.11.10
Start Time: 10:02:02 End Time: 14:35:20 Time On Btm: 2011.11.10 @ 11:30:30
Time Off Btm: 2011.11.10 @ 12:39:00

TEST COMMENT: B.O.B. @ 4 min.
No return.
B.O.B. @ 4 1/2 min.
No return.

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2121.73	100.69	Initial Hydro-static
3	43.29	101.40	Open To Flow (1)
8	128.45	124.39	Shut-In(1)
23	831.75	124.79	End Shut-In(1)
23	135.43	124.28	Open To Flow (2)
38	268.22	127.45	Shut-In(2)
68	755.82	126.61	End Shut-In(2)
69	2098.74	124.79	Final Hydro-static

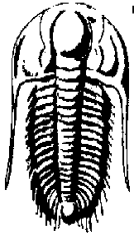
Recovery

Length (ft)	Description	Volume (bbl)
60.00	MW 20m 80w	0.30
493.00	MW 5m 95w	6.10
62.00	OSMW 30m 70w	0.87

* Recovery from multiple tests

Gas Rates

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



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ATTN: Vern Schrag

S21-18s-29w Lane, KS
Gail #1-21
Job Ticket: 44474 **DST#: 3**
Test Start: 2011.11.10 @ 10:02:00

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:	60000 ppm
Viscosity: 57.00 sec/qt	Cushion Volume: bbl		
Water Loss: 6.79 in ³	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 3000.00 ppm			
Filter Cake: 2.00 inches			

Recovery Information

Recovery Table

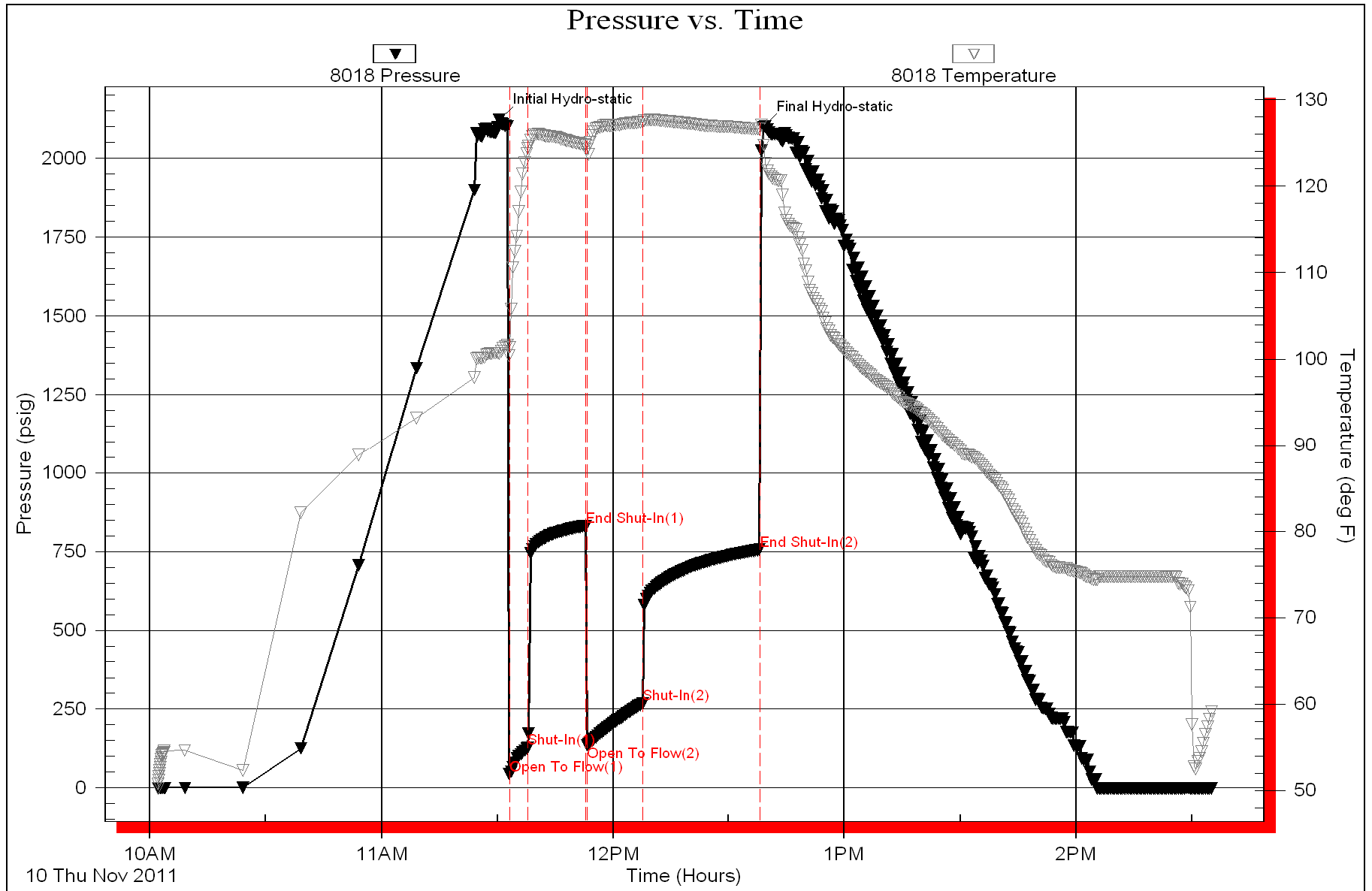
Length ft	Description	Volume bbl
60.00	MW 20m 80w	0.295
493.00	MW 5m 95w	6.096
62.00	OSMW 30m 70w	0.870

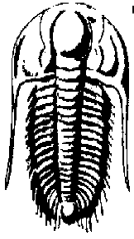
Total Length: 615.00 ft Total Volume: 7.261 bbl

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

Laboratory Name: Laboratory Location:

Recovery Comments: RW:.156 @ 57 Degrees F = 60000 PPM





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S21-18s-29w Lane, KS
Gail #1-21
Job Ticket: 44475 **DST#: 4**
Test Start: 2011.11.11 @ 02:40:00

GENERAL INFORMATION:

Formation: **Pleasanton**
Deviated: No Whipstock: ft (KB) Test Type: Conventional Bottom Hole (Reset)
Time Tool Opened: 04:29:40 Tester: Chuck Smith
Time Test Ended: 08:59:20 Unit No: 37
Interval: 4316.00 ft (KB) To 4335.00 ft (KB) (TVD) Reference Elevations: 2815.00 ft (KB)
Total Depth: 4335.00 ft (KB) (TVD) 2808.00 ft (CF)
Hole Diameter: 7.88 inches Hole Condition: Good KB to GR/CF: 7.00 ft

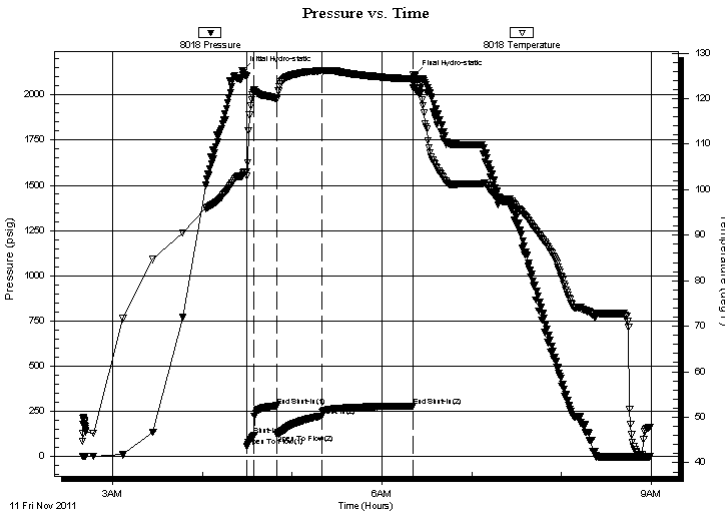
Serial #: 8018

Inside

Press @ Run Depth: 223.68 psig @ 4317.00 ft (KB) Capacity: 8000.00 psig
Start Date: 2011.11.11 End Date: 2011.11.11 Last Calib.: 2011.11.11
Start Time: 02:40:02 End Time: 08:59:20 Time On Btm: 2011.11.11 @ 04:26:40
Time Off Btm: 2011.11.11 @ 06:21:50

TEST COMMENT: B.O.B. @ 4 1/2 min.
Weak surface return.
B.O.B. @ 8 min.
No return.

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2135.38	103.08	Initial Hydro-static
3	57.68	102.93	Open To Flow (1)
8	118.01	121.68	Shut-In(1)
23	280.32	119.83	End Shut-In(1)
24	122.67	119.71	Open To Flow (2)
53	223.68	126.09	Shut-In(2)
114	280.06	124.36	End Shut-In(2)
116	2110.17	122.85	Final Hydro-static

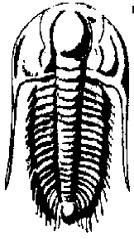
Recovery

Length (ft)	Description	Volume (bbl)
0.00	RW: .206 @ 45 Degrees F = 46000PPM	0.00
60.00	OSWM 40w 60m	0.30
397.00	OSMW 10m 90w	4.75
3.00	CGO 5g 90o	0.04

* Recovery from multiple tests

Gas Rates

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



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Larson Engineering
562 W. State Rd 4
Olmitz, KS 67564-8561
ATTN: Vern Schrag

S21-18s-29w Lane, KS
Gail #1-21
Job Ticket: 44475 **DST#: 4**
Test Start: 2011.11.11 @ 02:40:00

Mud and Cushion Information

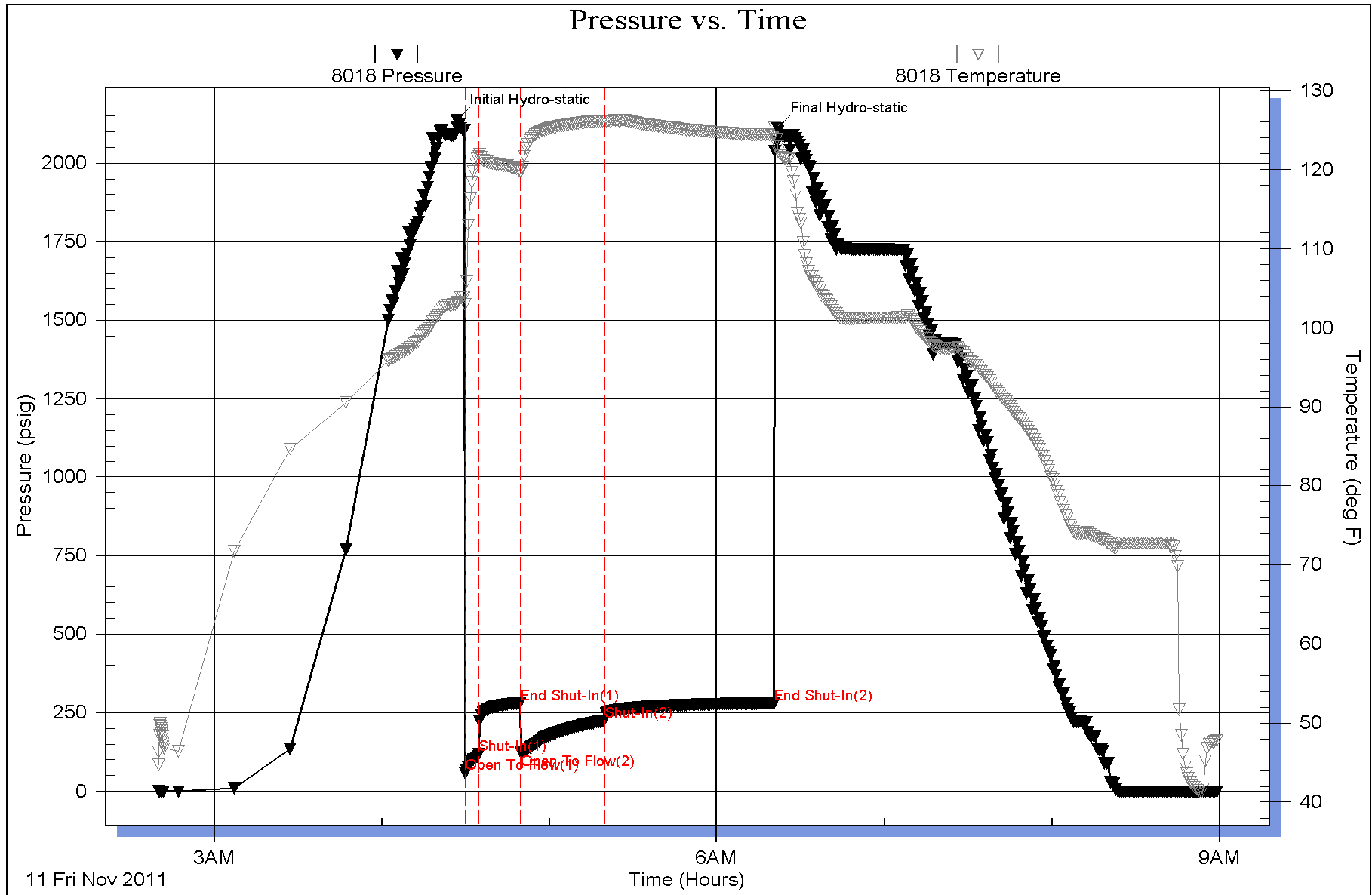
Mud Type: Gel Chem	Cushion Type:	Oil API: 31 deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity: 46000 ppm
Viscosity: 51.00 sec/qt	Cushion Volume: bbl	
Water Loss: 6.00 in ³	Gas Cushion Type:	
Resistivity: ohm.m	Gas Cushion Pressure: psig	
Salinity: 2600.00 ppm		
Filter Cake: 2.00 inches		

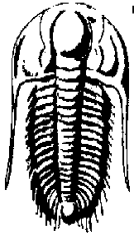
Recovery Information

Recovery Table

Length ft	Description	Volume bbl
0.00	RW:.206 @ 45 Degrees F = 46000PPM	0.000
60.00	OSWM 40w 60m	0.295
397.00	OSMW 10m 90w	4.749
3.00	CGO 5g 90o	0.042

Total Length: 460.00 ft Total Volume: 5.086 bbl
 Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
 Laboratory Name: Laboratory Location:
 Recovery Comments: API: 29 @ 40 Degrees F = 31.





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Larson Engineering
562 W. State Rd 4
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ATTN: Vern Schrag

S21-18s-29w Lane, KS
Gail #1-21
Job Ticket: 45476 **DST#: 5**
Test Start: 2011.11.11 @ 22:46:00

GENERAL INFORMATION:

Formation: **Marmaton**
Deviated: No Whipstock: ft (KB) Test Type: Conventional Bottom Hole (Reset)
Time Tool Opened: 00:48:50 Tester: Chuck Smith
Time Test Ended: 04:39:20 Unit No: 37
Interval: 4340.00 ft (KB) To 4396.00 ft (KB) (TVD) Reference Elevations: 2815.00 ft (KB)
Total Depth: 4396.00 ft (KB) (TVD) 2808.00 ft (CF)
Hole Diameter: 7.88 inches Hole Condition: Good KB to GR/CF: 7.00 ft

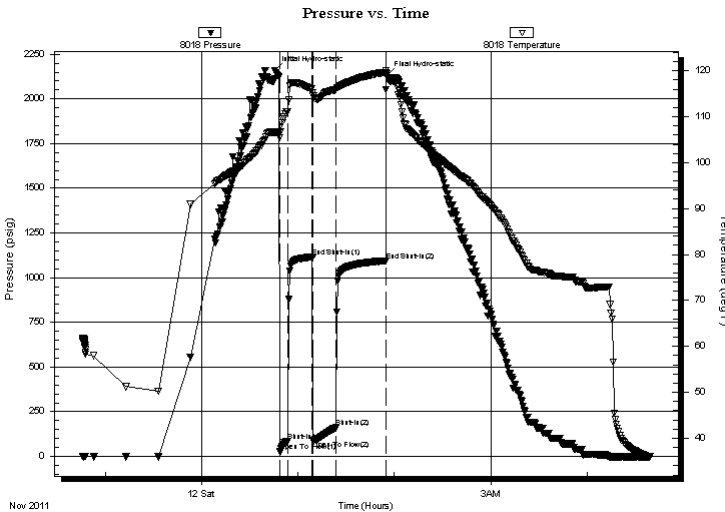
Serial #: 8018

Inside

Press @ Run Depth: 161.03 psig @ 4341.00 ft (KB) Capacity: 8000.00 psig
Start Date: 2011.11.11 End Date: 2011.11.12 Last Calib.: 2011.11.12
Start Time: 22:46:02 End Time: 04:39:20 Time On Btm: 2011.11.12 @ 00:45:40
Time Off Btm: 2011.11.12 @ 01:55:30

TEST COMMENT: 9" Blow.
3/4" Return.
B.O.B. @ 7 min.
5" Return.

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2159.25	106.60	Initial Hydro-static
4	26.71	105.50	Open To Flow (1)
8	86.51	111.12	Shut-In(1)
23	1115.81	116.04	End Shut-In(1)
24	90.03	115.18	Open To Flow (2)
38	161.03	115.89	Shut-In(2)
69	1094.30	119.67	End Shut-In(2)
70	2130.94	119.33	Final Hydro-static

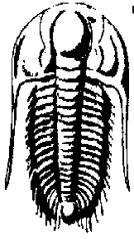
Recovery

Length (ft)	Description	Volume (bbl)
60.00	GOCM 10g 20o 70m	0.30
60.00	GMCO 20g 10m 70o	0.30
258.00	GMCO 20g 30m 50o	3.35
0.00	248 Feet GIP	0.00

* Recovery from multiple tests

Gas Rates

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



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FLUID SUMMARY

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562 W. State Rd 4
Olmitz, KS 67564-8561
ATTN: Vern Schrag

S21-18s-29w Lane, KS
Gail #1-21
Job Ticket: 45476 **DST#: 5**
Test Start: 2011.11.11 @ 22:46:00

Mud and Cushion Information

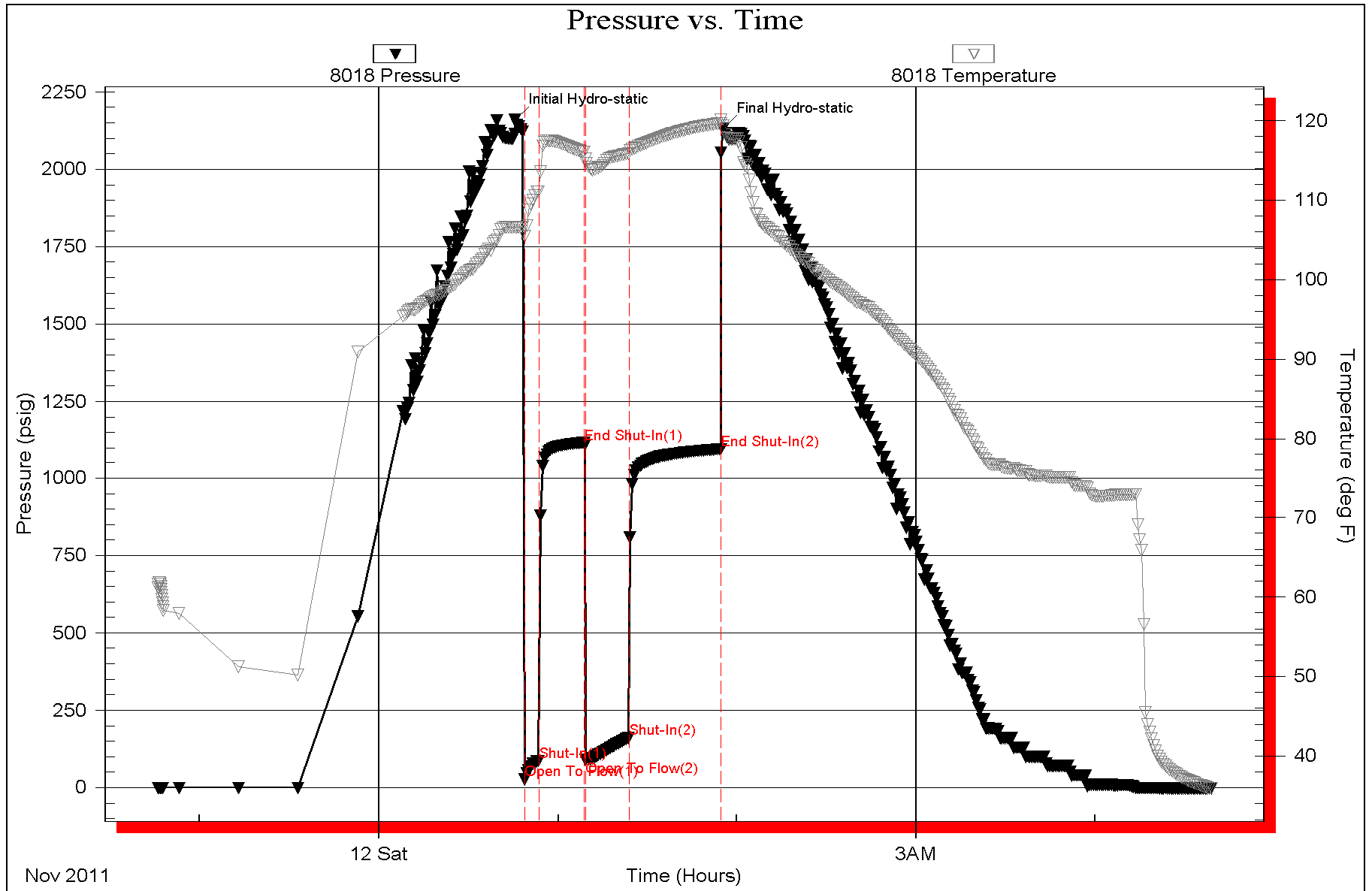
Mud Type: Gel Chem	Cushion Type:	Oil API: 33 deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity: ppm
Viscosity: 50.00 sec/qt	Cushion Volume: bbl	
Water Loss: 6.00 in ³	Gas Cushion Type:	
Resistivity: ohm.m	Gas Cushion Pressure: psig	
Salinity: 2900.00 ppm		
Filter Cake: 2.00 inches		

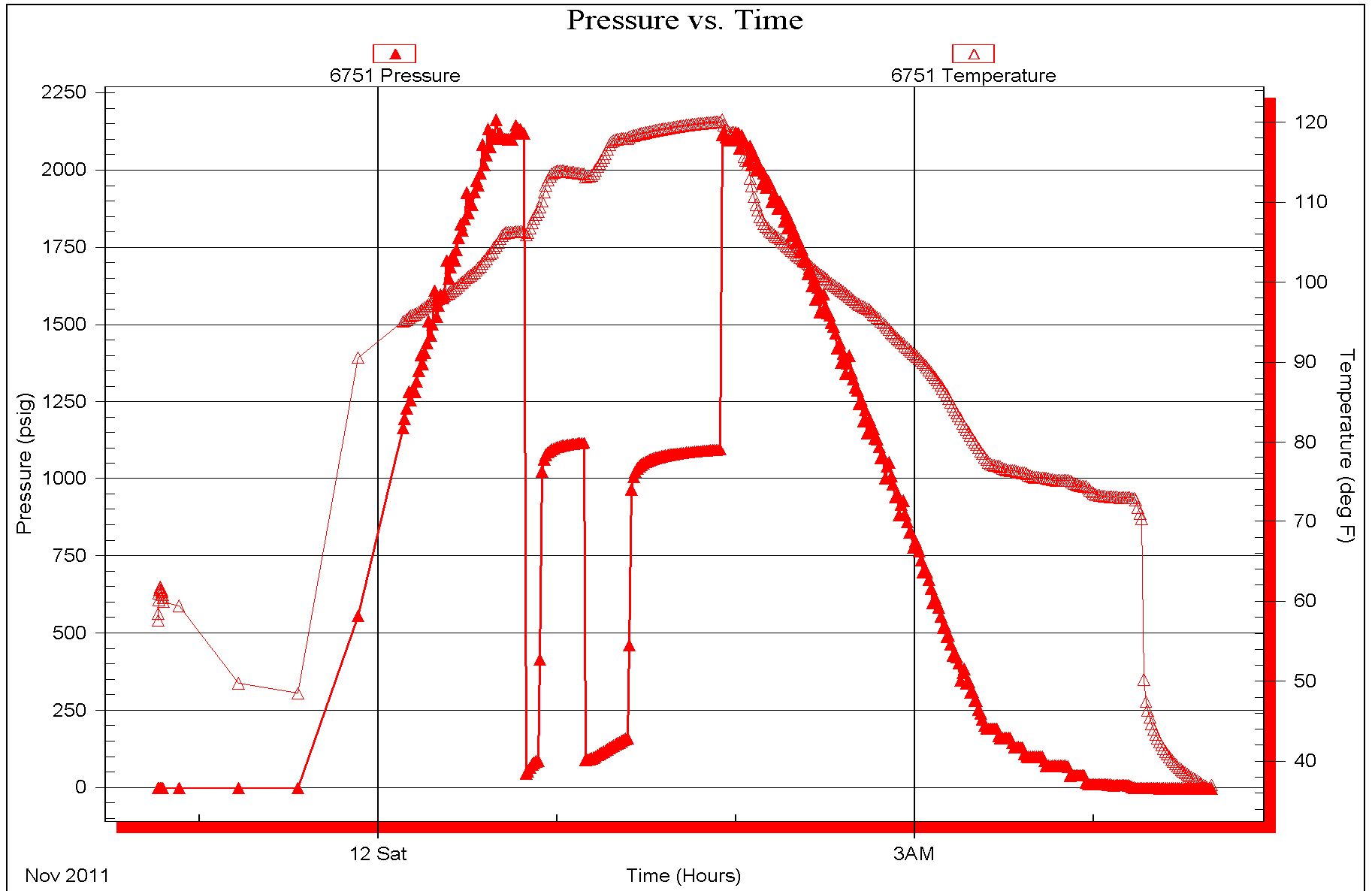
Recovery Information

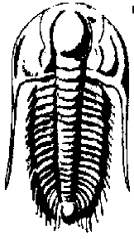
Recovery Table

Length ft	Description	Volume bbl
60.00	GOCM 10g 20o 70m	0.295
60.00	GMCO 20g 10m 70o	0.295
258.00	GMCO 20g 30m 50o	3.346
0.00	248 Feet GIP	0.000

Total Length: 378.00 ft Total Volume: 3.936 bbl
 Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
 Laboratory Name: Laboratory Location:
 Recovery Comments: API: 31 @ 40 Degrees F = 33.







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DRILL STEM TEST REPORT

Larson Engineering
562 W. State Rd 4
Olmitz, KS 67564-8561
ATTN: Vern Schrag

S21-18s-29w Lane, KS

Gail #1-21

Job Ticket: 45477

DST#: 6

Test Start: 2011.11.12 @ 15:31:00

GENERAL INFORMATION:

Formation: **Marmaton**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 17:45:38

Time Test Ended: 21:05:48

Test Type: Conventional Bottom Hole (Reset)

Tester: Chuck Smith

Unit No: 37

Interval: 4393.00 ft (KB) To 4438.00 ft (KB) (TVD)

Reference Elevations: 2815.00 ft (KB)

Total Depth: 4438.00 ft (KB) (TVD)

2808.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 7.00 ft

Serial #: 6751 Outside

Press @ Run Depth: 50.18 psig @ 4394.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2011.11.12 End Date: 2011.11.12

Last Calib.: 2011.11.12

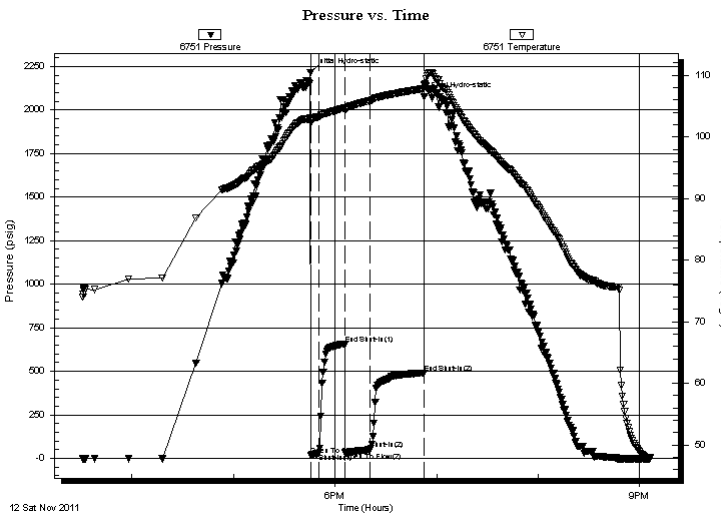
Start Time: 15:31:00 End Time: 21:05:47

Time On Btm: 2011.11.12 @ 17:45:28

Time Off Btm: 2011.11.12 @ 18:52:47

TEST COMMENT: 1" Blow.
No return.
1 1/2" Blow.
No return.

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2216.05	103.10	Initial Hydro-static
1	17.42	102.26	Open To Flow (1)
6	29.69	103.29	Shut-In(1)
21	653.78	104.71	End Shut-In(1)
21	32.38	104.37	Open To Flow (2)
36	50.18	105.90	Shut-In(2)
67	491.03	107.84	End Shut-In(2)
68	2079.24	108.41	Final Hydro-static

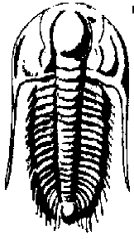
Recovery

Length (ft)	Description	Volume (bbl)
60.00	OCWM 2%o 3%w 95% m	0.30
70.00	OCM 3%o 97% m	0.34

* Recovery from multiple tests

Gas Rates

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



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FLUID SUMMARY

Larson Engineering
562 W. State Rd 4
Olmitz, KS 67564-8561
ATTN: Vern Schrag

S21-18s-29w Lane, KS
Gail #1-21
Job Ticket: 45477 **DST#: 6**
Test Start: 2011.11.12 @ 15:31:00

Mud and Cushion Information

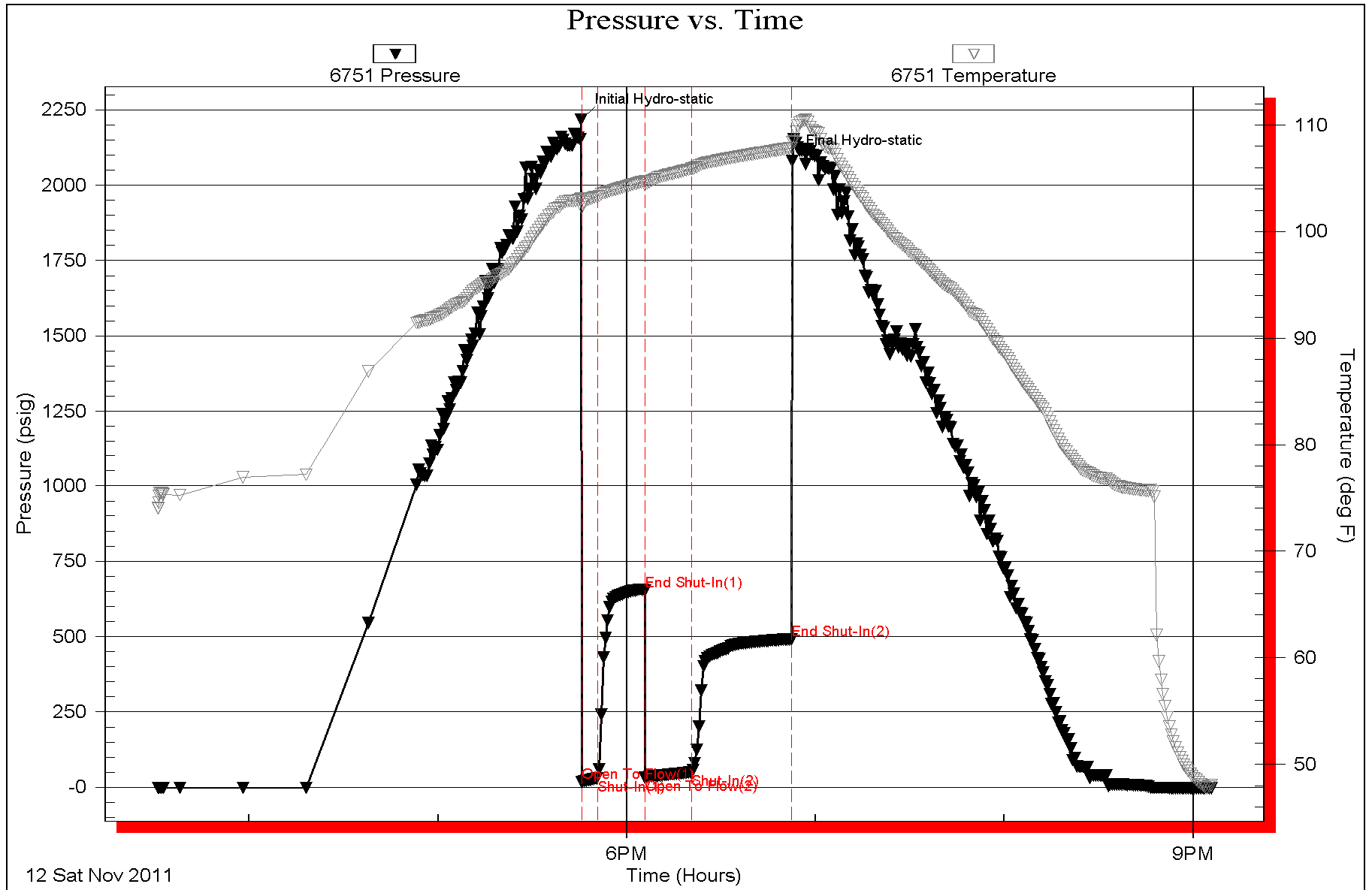
Mud Type: Gel Chem	Cushion Type:	Oil API:	deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity:	ppm
Viscosity: 54.00 sec/qt	Cushion Volume: bbl		
Water Loss: 6.40 in ³	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 2900.00 ppm			
Filter Cake: 2.00 inches			

Recovery Information

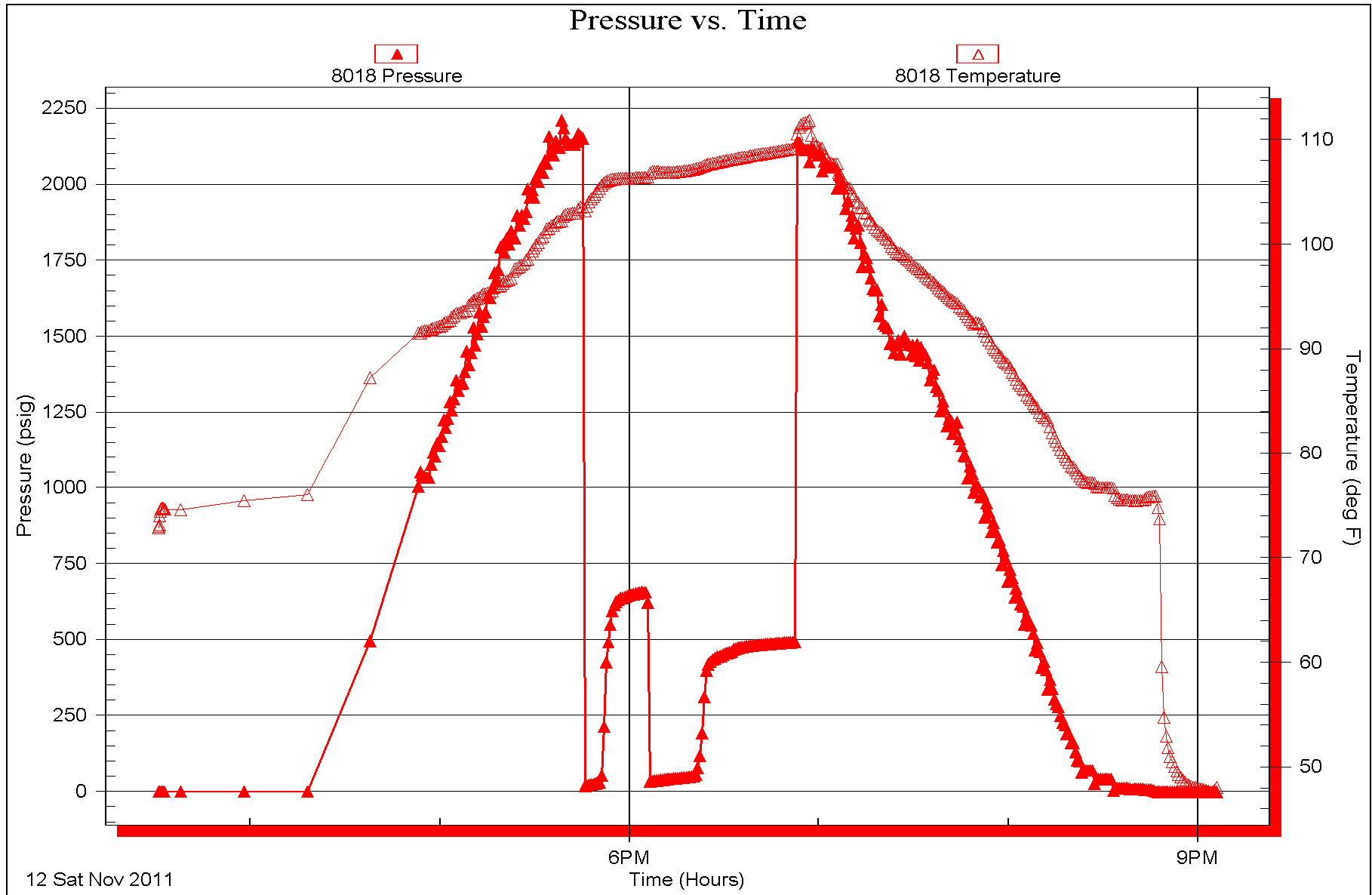
Recovery Table

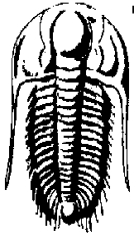
Length ft	Description	Volume bbl
60.00	OCWM 2%o 3%w 95%m	0.295
70.00	OCM 3%o 97%m	0.344

Total Length: 130.00 ft Total Volume: 0.639 bbl
 Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
 Laboratory Name: Laboratory Location:
 Recovery Comments:



12 Sat Nov 2011





**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Larson Engineering
562 W. State Rd 4
Olmitz, KS 67564-8561
ATTN: Vern Schrag

S21-18s-29w Lane, KS
Gail #1-21
Job Ticket: 45472 **DST#: 7**
Test Start: 2011.11.13 @ 18:40:00

Mud and Cushion Information

Mud Type: Gel Chem	Cushion Type:	Oil API: 27 deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity: ppm
Viscosity: 54.00 sec/qt	Cushion Volume: bbl	
Water Loss: 6.80 in ³	Gas Cushion Type:	
Resistivity: ohm.m	Gas Cushion Pressure: psig	
Salinity: 2500.00 ppm		
Filter Cake: 2.00 inches		

Recovery Information

Recovery Table

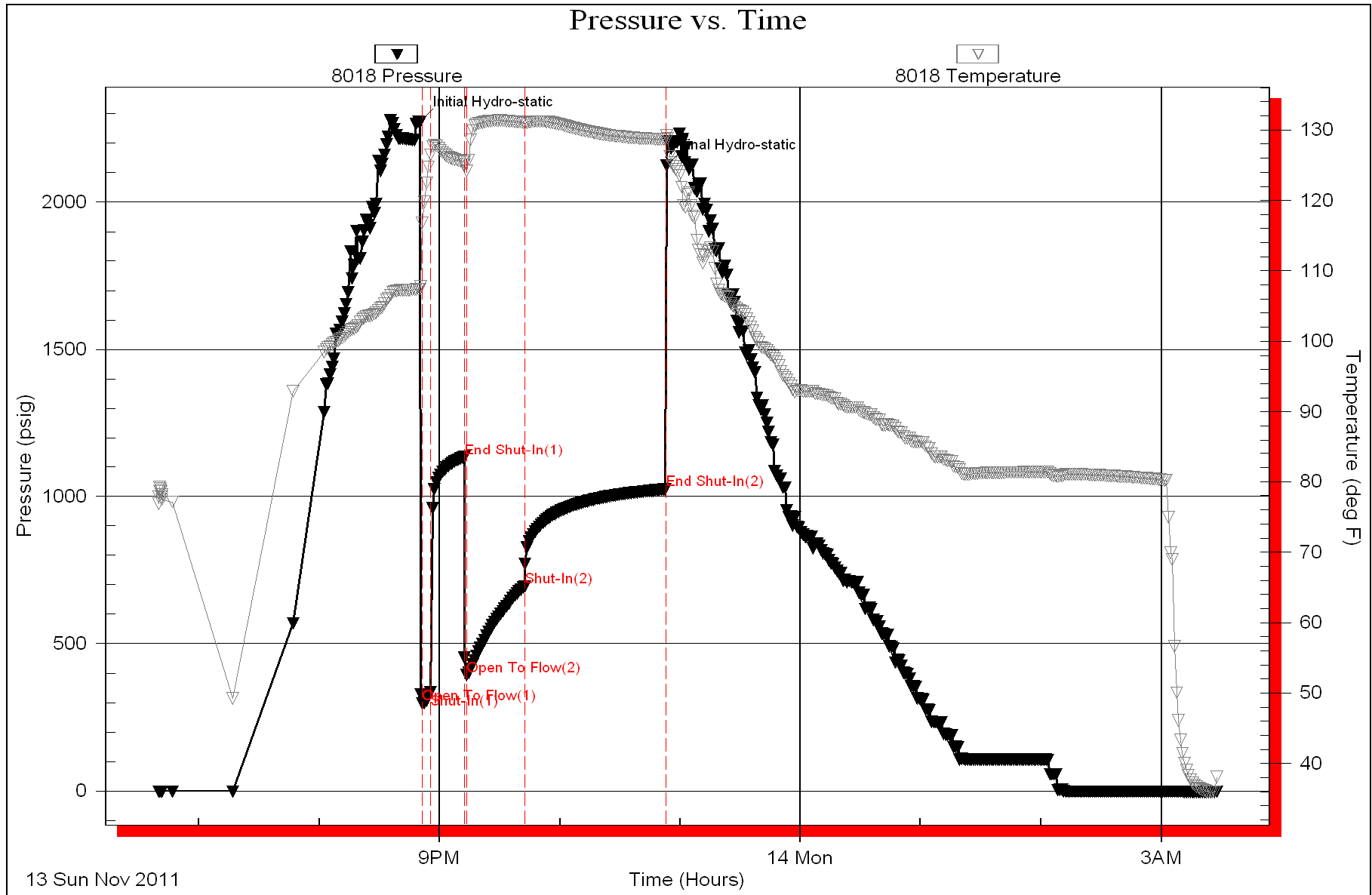
Length ft	Description	Volume bbl
62.00	GO 45%g 55%oil	0.305
181.00	MGCO 5%m 25%g 70%oil	1.737
1488.00	GO 25%G 75% oil	20.873
0.00	310' of GIP	0.000

Total Length: 1731.00 ft Total Volume: 22.915 bbl

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

Laboratory Name: Laboratory Location:

Recovery Comments: API is 25 @ 40f =27





TRILOBITE TESTING INC.

P.O. Box 1733 • Hays, Kansas 67601

NOV 18 2011

Test Ticket

NO. 44472

Well Name & No. Goil # 1-21 Test No. 1 Date 11-9-11
 Company Luzon Engineering Elevation 2815 KB _____ GL _____
 Address 562 W. 39th Rd # 4 Hays, KS 67564-8561
 Co. Rep / Geo. Vern Schrag Rig H 23
 Location: Sec. 21 Twp. 18 Rge. 29W Co. Lane State KS

Interval Tested 4231-4272 Zone Tested LKC K
 Anchor Length 41 Drill Pipe Run 4058 Mud Wt. 9.2
 Top Packer Depth 4227 Drill Collars Run 150 Vis 58
 Bottom Packer Depth 4231 Wt. Pipe Run 0 WL 4.8
 Total Depth 4272 Chlorides 3000 ppm System LCM 13

Blow Description 6 Blow
No return
3.0 B. @ 14 min
No return

Rec	Feet of	%gas	%oil	%water	%mud
Rec <u>140</u>	Feet of <u>MW</u>	%gas	%oil	<u>75</u> %water	<u>25</u> %mud
Rec <u>272</u>	Feet of <u>MW</u>	%gas	%oil	<u>85</u> %water	<u>15</u> %mud
Rec _____	Feet of _____	%gas	%oil	%water	%mud
Rec _____	Feet of _____	%gas	%oil	%water	%mud

Rec Total 382 BHT 122 Gravity _____ API RW 245 @ 45 °F Chlorides 50,000 ppm

(A) Initial Hydrostatic <u>2100</u>	<input checked="" type="checkbox"/> Test <u>1225</u>	T-On Location <u>6:00</u>
(B) First Initial Flow <u>25</u>	<input checked="" type="checkbox"/> Jars <u>250</u>	T-Started <u>7:07</u>
(C) First Final Flow <u>76</u>	<input checked="" type="checkbox"/> Safety Joint <u>75</u>	T-Open <u>9:35</u>
(D) Initial Shut-In <u>789</u>	<input checked="" type="checkbox"/> Circ Sub <u>50</u>	T-Pulled <u>11:25</u>
(E) Second Initial Flow <u>81</u>	<input type="checkbox"/> Hourly Standby _____	T-Out <u>13:15</u>
(F) Second Final Flow <u>189</u>	<input checked="" type="checkbox"/> Mileage <u>42RT 58.80</u>	Comments _____
(G) Final Shut-In <u>784</u>	<input type="checkbox"/> Sampler _____	<input type="checkbox"/> Ruined Shale Packer _____
(H) Final Hydrostatic <u>2091</u>	<input type="checkbox"/> Straddle _____	<input type="checkbox"/> Ruined Packer _____

Initial Open 5
 Initial Shut-In 15
 Final Flow 30
 Final Shut-In 60

Extra Packer _____
 Extra Recorder _____
 Day Standby _____
 Accessibility _____

Sub Total 11658.80

Sub Total 0
 Total 11658.80
 MP/DST Disc't _____

Approved By Vern Schrag Our Representative Chuck Smith

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TRILOBITE TESTING INC.

P.O. Box 1733 • Hays, Kansas 67601

RECEIVE Test Ticket

NOV 18 2011

NO. 44473

Well Name & No. En 1-121 Test No. 5 Date 11-9-11
 Company Lusco Energy Elevation 2815 KB _____ GL _____
 Address 502 W 3rd St. Hays, KS 67604
 Co. Rep / Geo. Vern Schrey Rig H53
 Location: Sec. 21 Twp. 18S Rge. 29W Co. Lano State KS

Interval Tested 4274-4284 Zone Tested Middle Creek
 Anchor Length 10 Drill Pipe Run 4121 Mud Wt. 9.2
 Top Packer Depth 4270 Drill Collars Run 150 Vis 53
 Bottom Packer Depth 4274 Wt. Pipe Run 0 WL 68
 Total Depth 4284 Chlorides 3000 ppm System LCM 1
 Blow Description Weak surface blow
No return
No blow
No return

Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of <u>M</u>	%gas	%oil	%water <u>100</u>	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 1 BHT 106 Gravity - API RW @ _____ F Chlorides _____ ppm

(A) Initial Hydrostatic <u>2121</u>	<input checked="" type="checkbox"/> Test <u>1225'</u>	T-On Location <u>21:00</u>
(B) First Initial Flow <u>14</u>	<input checked="" type="checkbox"/> Jars <u>250</u>	T-Started <u>21:07</u>
(C) First Final Flow <u>15</u>	<input checked="" type="checkbox"/> Safety Joint <u>75'</u>	T-Open <u>23:38</u>
(D) Initial Shut-In <u>906</u>	<input checked="" type="checkbox"/> Circ Sub <u>NIC</u>	T-Pulled <u>00:44</u>
(E) Second Initial Flow <u>13</u>	<input type="checkbox"/> Hourly Standby _____	T-Out <u>2:39</u>
(F) Second Final Flow <u>18</u>	<input checked="" type="checkbox"/> Mileage <u>42RT 58.80</u>	Comments _____
(G) Final Shut-In <u>909</u>	<input type="checkbox"/> Sampler _____	<input type="checkbox"/> Ruined Shale Packer _____
(H) Final Hydrostatic <u>3096</u>	<input type="checkbox"/> Straddle _____	<input type="checkbox"/> Ruined Packer _____
Initial Open <u>5</u>	<input type="checkbox"/> Shale Packer _____	<input type="checkbox"/> Extra Copies _____
Initial Shut-In <u>15</u>	<input type="checkbox"/> Extra Packer _____	Sub Total <u>0</u>
Final Flow <u>13</u>	<input type="checkbox"/> Extra Recorder _____	Total <u>1608.80</u>
Final Shut-In <u>30</u>	<input type="checkbox"/> Day Standby _____	MP/DST Disc't _____
	<input type="checkbox"/> Accessibility _____	
	Sub Total <u>1608.80</u>	

Approved By [Signature] Our Representative Chuck [Signature]

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TRILOBITE TESTING INC.

P.O. Box 1733 • Hays, Kansas 67601

Test Ticket

NO. 44474

Well Name & No. Gail #1-21 Test No. 3 Date 11-10-11
 Company Larson Engineering Elevation 2815 KB 2808 GL
 Address 562 W. St. Rd 4 Olmitz, KS 67564
 Co. Rep / Geo. Vern Schrag Rig HD#3
 Location: Sec. 21 Twp. 18s Rge. 29w Co. Lane State KS

Interval Tested 4284 - 4294 Zone Tested LKC'L'
 Anchor Length 10 Drill Pipe Run 4121 Mud Wt. 9.3
 Top Packer Depth 4280 Drill Collars Run 150 Vis 57
 Bottom Packer Depth 4284 Wt. Pipe Run 0 WL 6.8
 Total Depth 4294 Chlorides 3000 ppm System LCM 1 1/2

Blow Description B.O.B. @ 4min
No return.
B.O.B. @ 4 1/2 min.
No return.

Rec	Feet of	%gas	%oil	%water	%mud
Rec <u>62</u>	Feet of <u>OSMW</u>		%oil <u>70</u>	%water <u>30</u>	%mud
Rec <u>493</u>	Feet of <u>MW</u>	%gas	%oil <u>95</u>	%water <u>5</u>	%mud
Rec <u>60</u>	Feet of <u>MW</u>	%gas	%oil <u>80</u>	%water <u>20</u>	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 615 BHT 127 Gravity - API RW .156 @ 57 °F Chlorides 60,000 ppm

(A) Initial Hydrostatic <u>2122</u>	<input checked="" type="checkbox"/> Test <u>1225'</u>	T-On Location <u>10:00</u>
(B) First Initial Flow <u>43</u>	<input checked="" type="checkbox"/> Jars <u>250'</u>	T-Started <u>10:02</u>
(C) First Final Flow <u>128</u>	<input checked="" type="checkbox"/> Safety Joint <u>75'</u>	T-Open <u>11:33</u>
(D) Initial Shut-In <u>832</u>	<input checked="" type="checkbox"/> Circ Sub <u>N/C</u>	T-Pulled <u>12:38</u>
(E) Second Initial Flow <u>135</u>	<input type="checkbox"/> Hourly Standby	T-Out <u>14:35</u>
(F) Second Final Flow <u>268</u>	<input checked="" type="checkbox"/> Mileage <u>42RT 58.80</u>	Comments
(G) Final Shut-In <u>756</u>	<input type="checkbox"/> Sampler	
(H) Final Hydrostatic <u>2099</u>	<input type="checkbox"/> Straddle	<input type="checkbox"/> Ruined Shale Packer

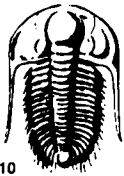
Initial Open 5
 Initial Shut-In 15
 Final Flow 15
 Final Shut-In 30

Shale Packer
 Extra Packer
 Extra Recorder
 Day Standby
 Accessibility

Sub Total 1608.80

Approved By Vern C Schrag Our Representative Chuck Amick

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TRILOBITE TESTING INC.

P.O. Box 1733 • Hays, Kansas 67601

Test Ticket

NO. 44475

Well Name & No. Gail #1-21 Test No. 4 Date 11-11-11
 Company Larson Engineering Elevation 2815 KB 2808 GL
 Address 562 W. St. Rd. 4 Olmitz, KS 67564
 Co. Rep / Geo. Vern Schrag Rig HD#3
 Location: Sec. 21 Twp. 18s Rge. 29w Co. Lane State KS

Interval Tested 4316-4335 Zone Tested Pleasanton
 Anchor Length 19 Drill Pipe Run 4153 Mud Wt. 9.3
 Top Packer Depth 4312 Drill Collars Run 150 Vis 51
 Bottom Packer Depth 4316 Wt. Pipe Run 0 WL 6.0
 Total Depth 4335 Chlorides 2600 ppm System LCM 1
 Blow Description B.O.B. @ 4 1/2 min.
Weak surface return.
B.O.B. @ 8 min.
No return.

Rec	Feet of	%gas	%oil	%water	%mud
<u>3</u>	<u>CGO</u>	<u>5</u>	<u>95</u>		
<u>397</u>	<u>CSMW</u>			<u>90</u>	<u>10</u>
<u>60</u>	<u>OSWM</u>			<u>40</u>	<u>60</u>

Rec Total 460 BHT 124 Gravity 31 API RW .206 @ 45 °F Chlorides 46,000 ppm

(A) Initial Hydrostatic 2135 Test 1225' T-On Location 2:15
 (B) First Initial Flow 58 Jars 250' T-Started 2:40
 (C) First Final Flow 118 Safety Joint 75' T-Open 4:30
 (D) Initial Shut-In 280 Circ Sub N/C T-Pulled 6:61
 (E) Second Initial Flow 123 Hourly Standby _____ T-Out 8:59
 (F) Second Final Flow 224 Mileage 42RT 58.80 Comments _____
 (G) Final Shut-In 280 Sampler _____
 (H) Final Hydrostatic 2110 Straddle _____ Ruined Shale Packer _____
 Shale Packer _____ Ruined Packer _____
 Extra Packer _____ Extra Copies _____
 Extra Recorder _____ Sub Total 8
 Day Standby _____ Total 1608.80
 Accessibility _____ MP/DST Disc't _____

Sub Total 1608.80

Approved By Jerron C Schrag Our Representative Chuck Smith

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TRILOBITE TESTING INC.

P.O. Box 1733 • Hays, Kansas 67601

Test Ticket

NO. 45476

Well Name & No. Gail #1-21 Test No. 5 Date 11-11-11
 Company Larson Engineering Elevation 2815 KB 2808 GL
 Address 562 W. 57. Rd 4, Olmitz, KS
 Co. Rep / Geo. Vern Schrag Rig HD#3
 Location: Sec. 21 Twp. 18s Rge. 29w Co. Lane State KS

Interval Tested 4340 - 4396 Zone Tested Marmaton
 Anchor Length 56 Drill Pipe Run 4186 Mud Wt. 9.2
 Top Packer Depth 4336 Drill Collars Run 150 Vis 50
 Bottom Packer Depth 4340 Wt. Pipe Run 0 WL 6.0
 Total Depth 4396 Chlorides 2900 ppm System LCM 1
 Blow Description 9" Blow
3/4" Return.
B.O.B. @ 7 min.
5" Blow.

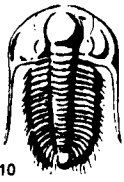
Rec	Feet of	%gas	%oil	%water	%mud
<u>258</u>	<u>Feet of GMCO</u>	<u>20</u>	<u>50</u>	<u>30</u>	
<u>60</u>	<u>Feet of GMCO</u>	<u>20</u>	<u>70</u>	<u>10</u>	
<u>60</u>	<u>Feet of GOCM</u>	<u>10</u>	<u>20</u>	<u>70</u>	
<u>0</u>	<u>Feet of 248 Feet GIP</u>				
<u>0</u>	<u>Feet of</u>				

Rec Total 378 BHT 120 Gravity 33 API RW — @ — °F Chlorides — ppm

(A) Initial Hydrostatic <u>2159</u>	<input checked="" type="checkbox"/> Test <u>1225'</u>	T-On Location <u>22:15</u>
(B) First Initial Flow <u>27</u>	<input checked="" type="checkbox"/> Jars <u>250'</u>	T-Started <u>22:46</u>
(C) First Final Flow <u>87</u>	<input checked="" type="checkbox"/> Safety Joint <u>75'</u>	T-Open <u>00:49</u>
(D) Initial Shut-In <u>1116</u>	<input checked="" type="checkbox"/> Circ Sub <u>NIC</u>	T-Pulled <u>01:55</u>
(E) Second Initial Flow <u>90</u>	<input type="checkbox"/> Hourly Standby	T-Out <u>4:39</u>
(F) Second Final Flow <u>161</u>	<input checked="" type="checkbox"/> Mileage <u>42RT 58.80</u>	Comments
(G) Final Shut-In <u>1094</u>	<input type="checkbox"/> Sampler	
(H) Final Hydrostatic <u>2131</u>	<input type="checkbox"/> Straddle	
	<input checked="" type="checkbox"/> Shale Packer <u>250'</u>	<input type="checkbox"/> Ruined Shale Packer
Initial Open <u>5</u>	<input type="checkbox"/> Extra Packer	<input type="checkbox"/> Ruined Packer
Initial Shut-In <u>15</u>	<input type="checkbox"/> Extra Recorder	<input type="checkbox"/> Extra Copies
Final Flow <u>15</u>	<input type="checkbox"/> Day Standby	Sub Total <u>0</u>
Final Shut-In <u>30</u>	<input type="checkbox"/> Accessibility	Total <u>1858.80</u>
	Sub Total <u>1858.80</u>	MP/DST Disc't

Approved By Vern C Schrag Our Representative Chuck Smith

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TRILOBITE TESTING INC.

P.O. Box 1733 • Hays, Kansas 67601

Test Ticket

NO. 45477

Well Name & No. Gail #1-21 Test No. 6 Date 11-12-11
 Company Larson Engineering Elevation 2815 KB 2808 GL
 Address 562 W. ST. Rd. 4 Olmitz, KS 67564
 Co. Rep / Geo. Vern Schrag Rig HD#3
 Location: Sec. 21 Twp. 18s Rge. 29w Co. Lane State KS

Interval Tested 4393-4438 Zone Tested Marmaton
 Anchor Length 45 Drill Pipe Run 4247 Mud Wt. 9.3
 Top Packer Depth 4389 Drill Collars Run 150 Vis 54
 Bottom Packer Depth 4393 Wt. Pipe Run 0 WL 6.4
 Total Depth 4438 Chlorides 2900 ppm System LCM 1
 Blow Description 1" Blow
No return
1 1/2" Blow
No return

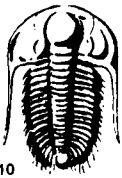
Rec	Feet of	%gas	%oil	%water	%mud
70	Feet of <u>OCM</u>	%gas <u>3</u>	%oil	%water <u>97</u>	%mud
60	Feet of <u>OWCM</u>	%gas <u>2</u>	%oil <u>3</u>	%water <u>95</u>	%mud
	Feet of	%gas	%oil	%water	%mud
	Feet of	%gas	%oil	%water	%mud

Rec Total 130 BHT 111 Gravity — API RW — @ — °F Chlorides — ppm

(A) Initial Hydrostatic <u>2216</u>	<input checked="" type="checkbox"/> Test <u>1225</u>	T-On Location <u>15:15</u>
(B) First Initial Flow <u>17</u>	<input checked="" type="checkbox"/> Jars <u>250</u>	T-Started <u>15:31</u>
(C) First Final Flow <u>29</u>	<input checked="" type="checkbox"/> Safety Joint <u>75</u>	T-Open <u>17:45</u>
(D) Initial Shut-In <u>653</u>	<input checked="" type="checkbox"/> Circ Sub <u>NIC</u>	T-Pulled <u>18:5</u>
(E) Second Initial Flow <u>32</u>	<input type="checkbox"/> Hourly Standby	T-Out <u>21:05</u>
(F) Second Final Flow <u>50</u>	<input checked="" type="checkbox"/> Mileage <u>42 RT 58.80</u>	Comments
(G) Final Shut-In <u>491</u>	<input type="checkbox"/> Sampler	
(H) Final Hydrostatic <u>2079</u>	<input type="checkbox"/> Straddle	
	<input checked="" type="checkbox"/> Shale Packer <u>250</u>	<input type="checkbox"/> Ruined Shale Packer
Initial Open <u>5</u>	<input type="checkbox"/> Extra Packer	<input type="checkbox"/> Ruined Packer
Initial Shut-In <u>15</u>	<input type="checkbox"/> Extra Recorder	<input type="checkbox"/> Extra Copies
Final Flow <u>15</u>	<input type="checkbox"/> Day Standby	Sub Total <u>0</u>
Final Shut-In <u>30</u>	<input type="checkbox"/> Accessibility	Total <u>1858.80</u>
	Sub Total <u>1858.80</u>	MP/DST Disc't

Approved By [Signature] Our Representative Chuck Aniel

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TRILOBITE TESTING INC.

P.O. Box 1733 • Hays, Kansas 67601

Test Ticket

NO. 45472

Well Name & No. Gail #1-21 Test No. DST #17 Date 11-13-11
 Company Larson Engineering Elevation 2815 KB 2808 GL
 Address 562 W St Rd 4 Olmitz KS 67564
 Co. Rep / Geo. Vern Schrag Rig H-D #3
 Location: Sec. 21 Twp. 18 Rge. 29 Co. Lane State KS

Interval Tested 4494-4561 Zone Tested Cherokee ~~Sand~~
 Anchor Length 67 Drill Pipe Run 4339 Mud Wt. 9.2
 Top Packer Depth 4490 Drill Collars Run 150 Vis 54
 Bottom Packer Depth 4494 Wt. Pipe Run 0 WL 6.8
 Total Depth 4561 Chlorides 2500 ppm System LCM 116

Blow Description IF - BOB in 1 min
ISI - Surface Blow Built to 3"
FF - BOB in 1 min 10 sec
FSI - Surface Blow Built to 5 1/4"

Rec	Feet of	%gas	%oil	%water	%mud
<u>1488</u>	<u>GO</u>	<u>25</u>	<u>75</u>		
<u>181</u>	<u>M & CO</u>	<u>25</u>	<u>70</u>		<u>5</u>
<u>62</u>	<u>GO</u>	<u>45</u>	<u>55</u>		
<u>310</u>	<u>GIP</u>				

Rec Total 1731 BHT 124 Gravity 27 API RW 25 @ 40 °F Chlorides _____ ppm

(A) Initial Hydrostatic 2270 Test 1225' T-On Location 17:14
 (B) First Initial Flow 298 Jars 250' T-Started 18:40
 (C) First Final Flow 335 Safety Joint 75' T-Open 20:51
 (D) Initial Shut-In 1133 Circ Sub NC T-Pulled 22:53
 (E) Second Initial Flow 393 Hourly Standby _____ T-Out 3:27
 (F) Second Final Flow 694 Mileage 42 R/T 58.80 Comments _____
 (G) Final Shut-In 1023 Sampler _____
 (H) Final Hydrostatic 2123 Straddle _____
 Shale Packer _____
 Extra Packer _____
 Extra Recorder _____
 Day Standby _____
 Accessibility _____

Initial Open 5 Ruined Shale Packer _____
 Initial Shut-In 15 Ruined Packer _____
 Final Flow 30 Extra Copies _____
 Final Shut-In 60 Sub Total 0
 Sub Total 1608.80 Total 1608.80
 MP/DST Disc't _____

Approved By Vern Schrag Our Representative Will Mae

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