



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Cholla Production, LLC

Sec. 12-11s-23w Trego, KS

10390 Bradford Rd
Suite 201
Littleton, CO 80127
ATTN: Justin Carter/Emily

Patterson #2-12

Job Ticket: 60702

DST#: 3

Test Start: 2014.09.29 @ 11:46:00

GENERAL INFORMATION:

Formation: **LKC "K"**
 Deviated: No Whipstock: ft (KB)
 Test Type: Conventional Bottom Hole (Reset)
 Time Tool Opened: 14:22:30
 Tester: Phillip Gage
 Time Test Ended: 20:22:30
 Unit No: 62
 Interval: **3693.00 ft (KB) To 3711.00 ft (KB) (TVD)**
 Reference Elevations: 2244.00 ft (KB)
 Total Depth: 3711.00 ft (KB) (TVD)
 2239.00 ft (CF)
 Hole Diameter: 7.88 inches
 Hole Condition: Fair
 KB to GR/CF: 5.00 ft

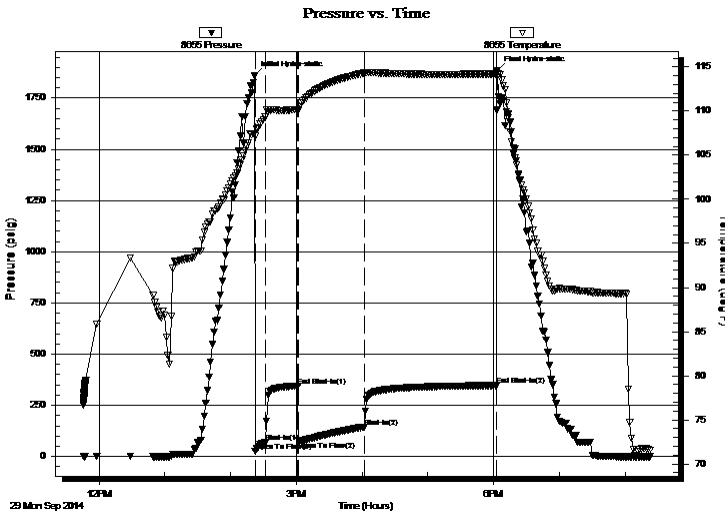
Serial #: 8655

Outside

Press @ Run Depth: 143.63 psig @ 3694.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2014.09.29 End Date: 2014.09.29 Last Calib.: 2014.09.29
 Start Time: 11:46:01 End Time: 20:22:30 Time On Btm: 2014.09.29 @ 14:22:00
 Time Off Btm: 2014.09.29 @ 18:03:30

TEST COMMENT: 10-IF-Built to 7 1/2"
 30-ISI-Weak Surface Return, died in 7 mins.
 60-FF-BOB in 7 mins.
 120-FSI-BOB Return in 10 mins, died in 1 hr 42 mins.

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1857.21	107.47	Initial Hydro-static
1	24.32	107.16	Open To Flow (1)
10	68.74	109.40	Shut-In(1)
40	344.70	110.19	End Shut-In(1)
40	76.42	110.09	Open To Flow (2)
100	143.63	114.31	Shut-In(2)
221	346.35	114.22	End Shut-In(2)
222	1884.89	114.61	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
126.00	MCW, w ith oil spots, 20%o, 80%w	0.67
73.00	SOWGCM, 10%o, 10%w , 20%g, 60%o	1.02
55.00	GO, 50%g, 50%o	0.77
68.00	O, 100%o	0.95
0.00	GIP-622'	0.00

* Recovery from multiple tests

Gas Rates

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



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Patterson #2-12

Job Ticket: 60702

DST#: 3

Test Start: 2014.09.29 @ 11:46:00

GENERAL INFORMATION:

Formation: LKC "K"					
Deviated: No Whipstock:	ft (KB)	Test Type:	Conventional Bottom Hole (Reset)		
Time Tool Opened: 14:22:30		Tester:	Phillip Gage		
Time Test Ended: 20:22:30		Unit No:	62		
Interval: 3693.00 ft (KB) To 3711.00 ft (KB) (TVD)		Reference Elevations:	2244.00 ft (KB)		
Total Depth: 3711.00 ft (KB) (TVD)			2239.00 ft (CF)		
Hole Diameter: 7.88 inches	Hole Condition: Fair	KB to GR/CF:	5.00 ft		

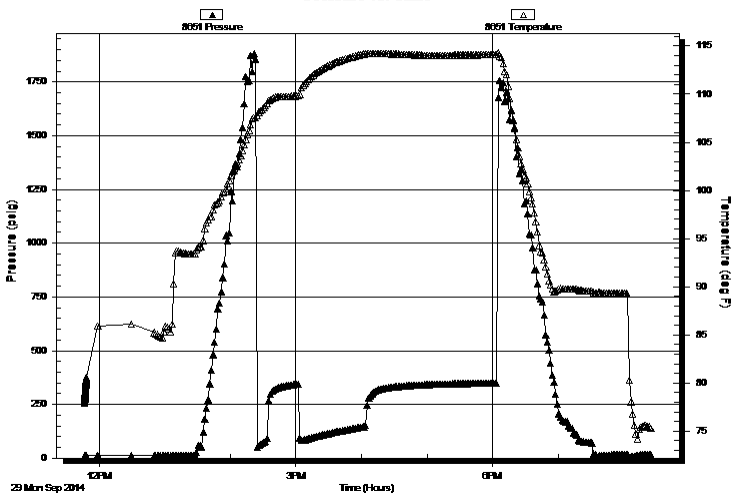
Serial #: 8651

Inside

Press @ Run Depth:	psig @ 3694.00 ft (KB)	Capacity:	8000.00 psig		
Start Date:	2014.09.29	End Date:	2014.09.29	Last Calib.:	2014.09.29
Start Time:	11:46:39	End Time:	20:24:38	Time On Btm:	
				Time Off Btm:	

TEST COMMENT: 10-IF-Built to 7 1/2"
30-ISI-Weak Surface Return, died in 7 mins.
60-FF-BOB in 7 mins.
120-FSI-BOB Return in 10 mins, died in 1 hr 42 mins.

Pressure vs. Time



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
126.00	MCW, w ith oil spots, 20%o, 80%w	0.67
73.00	SOWGCM, 10%o, 10%w , 20%g, 60%o	1.02
55.00	GO, 50%g, 50%o	0.77
68.00	O, 100%o	0.95
0.00	GIP-622'	0.00

Gas Rates

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

* Recovery from multiple tests



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FLUID SUMMARY

Cholla Production, LLC

Sec. 12-11s-23w Trego, KS

10390 Bradford Rd
Suite 201
Littleton, CO 80127
ATTN: Justin Carter/Emily

Patterson #2-12

Job Ticket: 60702

DST#: 3

Test Start: 2014.09.29 @ 11:46:00

Mud and Cushion Information

Mud Type: Gel Chem
Mud Weight: 9.00 lb/gal
Viscosity: 54.00 sec/qt
Water Loss: 7.20 in³
Resistivity: ohm.m
Salinity: 1200.00 ppm
Filter Cake: 2.00 inches

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

Oil API: 34 deg API
Water Salinity: 68000 ppm

Recovery Information

Recovery Table

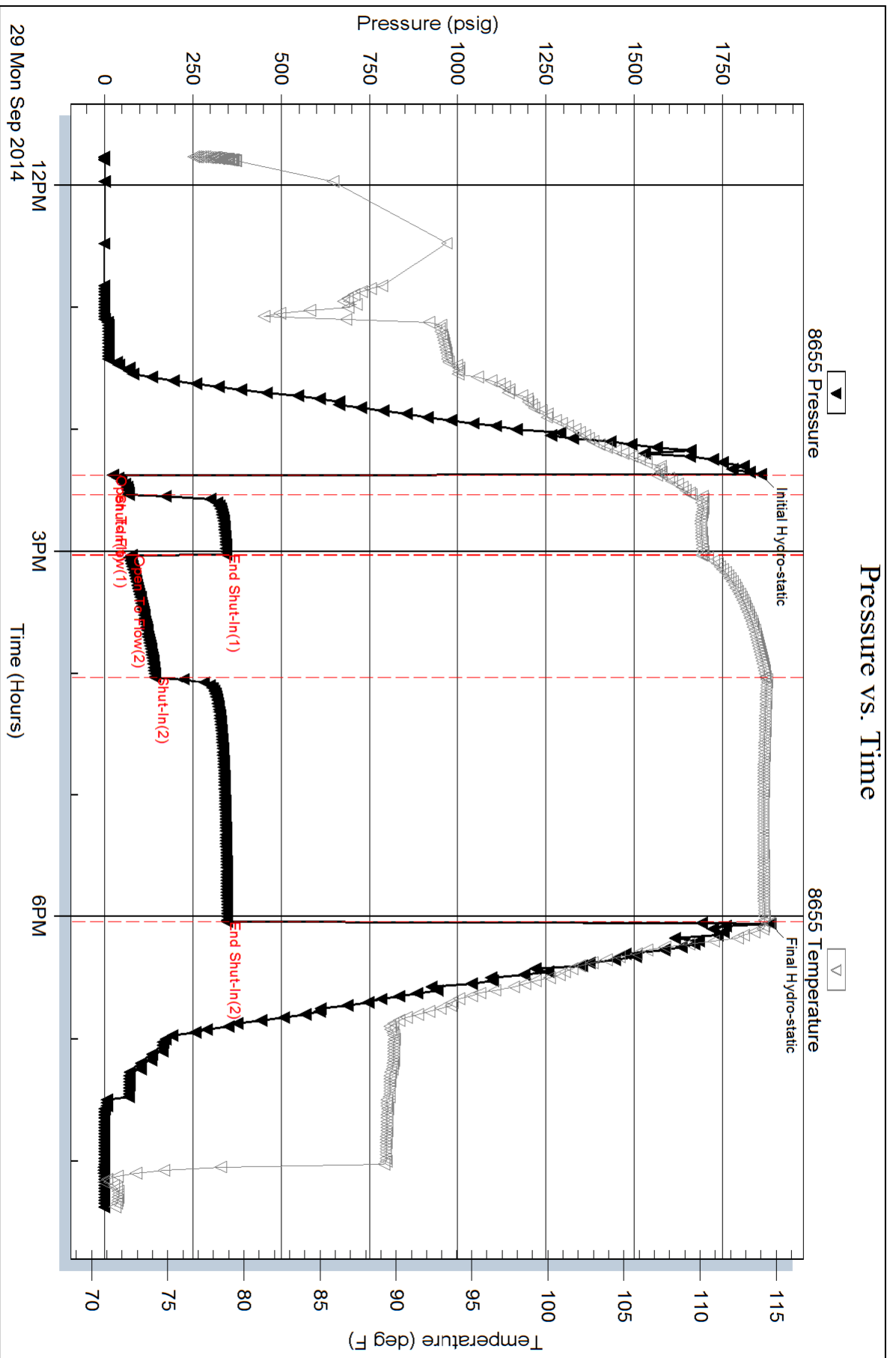
Length ft	Description	Volume bbl
126.00	MCW, w ith oil spots, 20%m, 80%w	0.674
73.00	SOWGCM, 10%o, 10%w , 20%g, 60%m	1.024
55.00	GO, 50%g, 50%o	0.772
68.00	O, 100%o	0.954
0.00	GIP-622'	0.000

Total Length: 322.00 ft Total Volume: 3.424 bbl

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

Laboratory Name: Laboratory Location:

Recovery Comments: .12 @ 75 degrees = 68000 Salinity
Sampler, 1800ml/o, 200ml/w , total 2000ml.



Serial #: 8651

Inside

Cholla Production, LLC

Patterson #2-12

DST Test Number: 3

