



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Cholla Production LLC

Stithem #1-4

7851 S. Elati St. STE 201
Littleton, CO 80120

4/11s/23w Trego KS

Job Ticket: 040091

DST#: 1

ATTN: Bill Goff/ Kelly Bran 201

Test Start: 2010.12.12 @ 00:12:00

GENERAL INFORMATION:

Formation: **Toronto - Lans. "A"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 02:59:15

Time Test Ended: 08:01:00

Test Type: Conventional Bottom Hole

Tester: James Winder

Unit No: 46

Interval: 3498.00 ft (KB) To 3544.00 ft (KB) (TVD)

Reference Elevations: 2291.00 ft (KB)

Total Depth: 3544.00 ft (KB) (TVD)

2286.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 5.00 ft

Serial #: 8366 Inside

Press @ Run Depth: 17.82 psig @ 3499.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2010.12.12 End Date: 2010.12.12

Last Calib.: 2010.12.12

Start Time: 00:12:05 End Time: 08:00:59

Time On Btm: 2010.12.12 @ 02:56:30

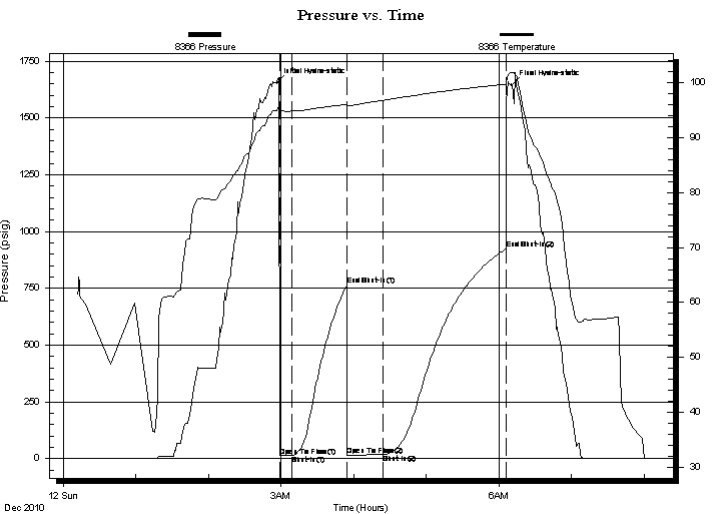
Time Off Btm: 2010.12.12 @ 06:10:30

TEST COMMENT: IF: 1/2" Blow at open, built to 1 1/4" (Diesel in bucket)

IS: Bled off, No blow back

FF: No blow

FS: No blow back



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1655.22	94.97	Initial Hydro-static
3	12.69	95.09	Open To Flow (1)
13	15.36	94.83	Shut-In(1)
58	763.39	96.10	End Shut-In(1)
59	15.68	95.81	Open To Flow (2)
88	17.82	96.80	Shut-In(2)
190	924.80	99.75	End Shut-In(2)
194	1645.82	101.86	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
2.00	Mud 100%	0.01
0.00	Oil spots in tool	0.00

Gas Rates

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



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Job Ticket: 040091

DST#: 1

ATTN: Bill Goff/ Kelly Bran 201

Test Start: 2010.12.12 @ 00:12:00

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: 60.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.20 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 1000.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
2.00	Mud 100%	0.010
0.00	Oil spots in tool	0.000

Total Length: 2.00 ft Total Volume: 0.010 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

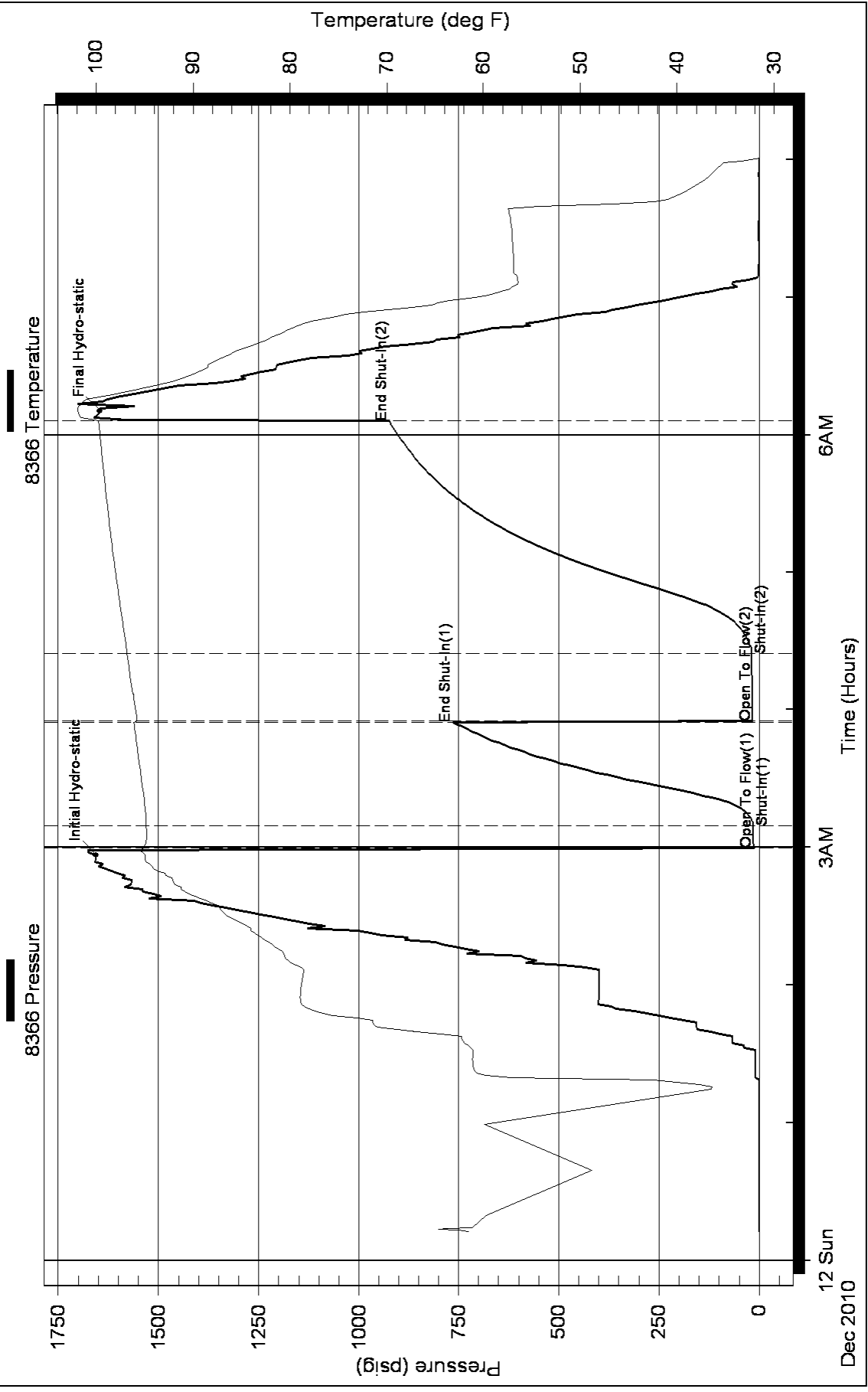
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: Sampler: 100 PSI No fluid recovery

Pressure vs. Time





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Stithem #1-4

7851 S. Elati St. STE 201
Littleton, CO 80120

4/11s/23w Trego KS

ATTN: Bill Goff/ Kelly Bran 201

Job Ticket: 040092

DST#: 2

Test Start: 2010.12.12 @ 14:45:00

GENERAL INFORMATION:

Formation: **Lans. "C"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 16:23:00

Time Test Ended: 21:36:30

Test Type: Conventional Bottom Hole

Tester: James Winder

Unit No: 46

Interval: 3560.00 ft (KB) To 3580.00 ft (KB) (TVD)

Reference Elevations: 2291.00 ft (KB)

Total Depth: 3580.00 ft (KB) (TVD)

2286.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 5.00 ft

Serial #: 8366 Inside

Press @ Run Depth: 256.34 psig @ 3561.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2010.12.12 End Date: 2010.12.12

Last Calib.: 2010.12.12

Start Time: 14:45:05 End Time: 21:36:29

Time On Btm: 2010.12.12 @ 16:20:00

Time Off Btm: 2010.12.12 @ 19:22:15

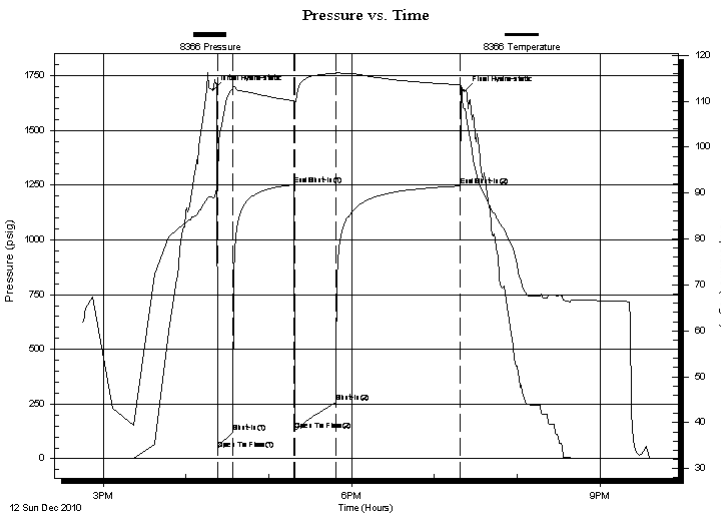
TEST COMMENT: IF: Blow built to BOB (11 1/4") in 3 3/4 min. (Diesel in Bucket)

IS: Blow back built to 6 1/2"

FF: Blow built to BOB in 5 min.

FS: Blow back built to 8 1/4"

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1686.84	89.06	Initial Hydro-static
3	41.66	90.89	Open To Flow (1)
14	118.78	112.80	Shut-In(1)
59	1252.11	110.15	End Shut-In(1)
59	130.99	109.40	Open To Flow (2)
89	256.34	116.05	Shut-In(2)
179	1246.46	113.60	End Shut-In(2)
183	1681.65	108.28	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
315.00	Water w/trace oil 96%w , 4%m	3.30
155.00	SO/MCW 69%w , 27%m, 2%o, 2%g	2.17
50.00	CO 94%o, 4%g, 2%m	0.70
0.00	GIP = 360'	0.00
0.00	Sampler: Over 600 PSI 1800 mL w ater	0.00
0.00	500 mL oil	0.00

Gas Rates

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



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7851 S. Elati St. STE 201
Littleton, CO 80120

4/11s/23w Trego KS

Job Ticket: 040092

DST#: 2

ATTN: Bill Goff/ Kelly Bran 201

Test Start: 2010.12.12 @ 14:45:00

Mud and Cushion Information

Mud Type: Gel Chem
Mud Weight: 9.00 lb/gal
Viscosity: 60.00 sec/qt
Water Loss: 7.19 in³
Resistivity: ohm.m
Salinity: 1000.00 ppm
Filter Cake: 1.00 inches

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

Oil API: 41.8 deg API
Water Salinity: ppm

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
315.00	Water w/trace oil 96%w , 4%m	3.298
155.00	SO/MCW 69%w , 27%m, 2%o, 2%g	2.174
50.00	CO 94%o, 4%g, 2%m	0.701
0.00	GIP = 360'	0.000
0.00	Sampler: Over 600 PSI 1800 mL w ater	0.000
0.00	500 mL oil	0.000

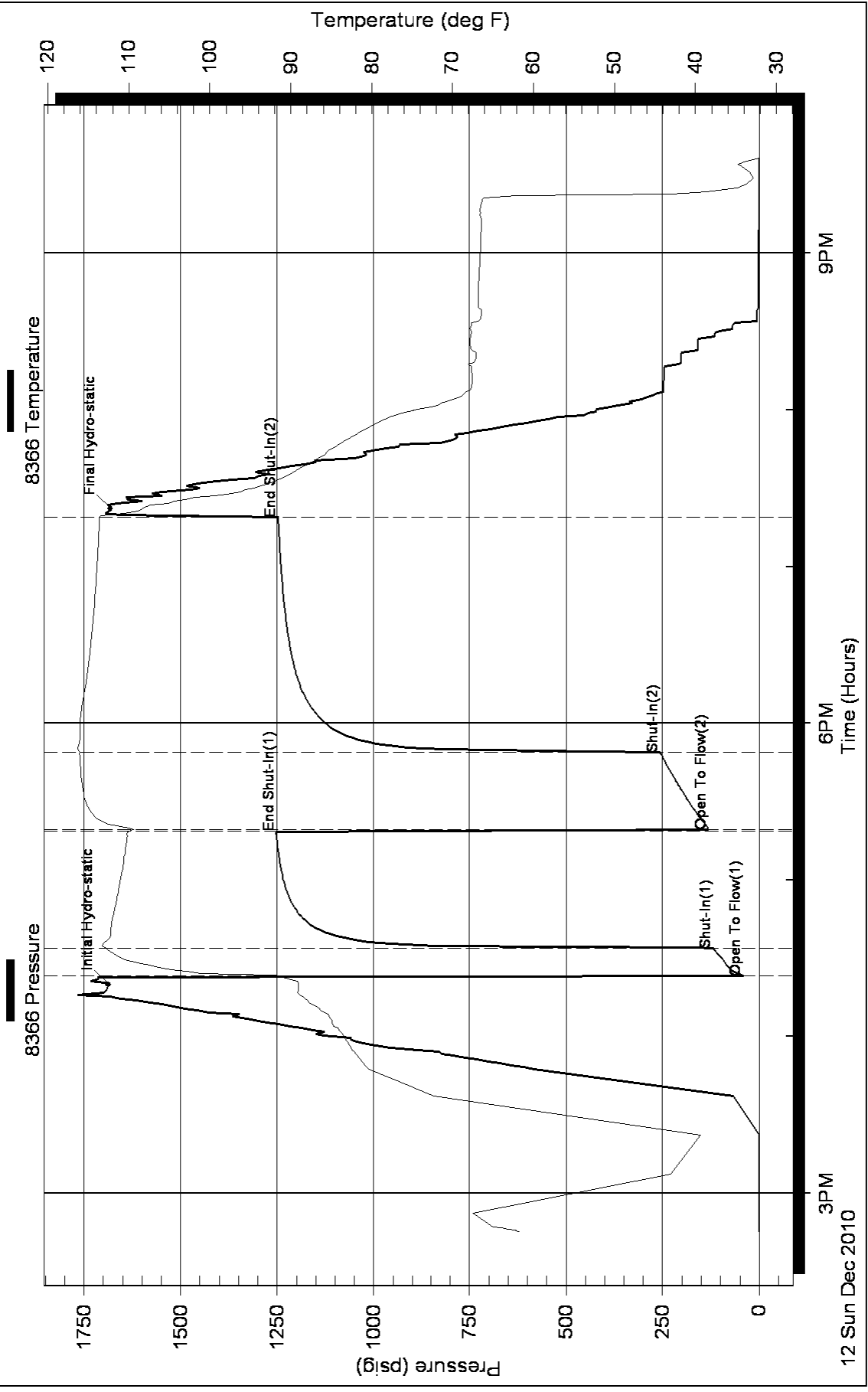
Total Length: 520.00 ft Total Volume: 6.173 bbl

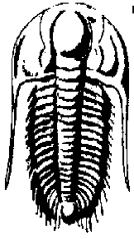
Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:

Laboratory Name: Laboratory Location:

Recovery Comments: Gravity = 38.6 api @ 28 deg F
Corrected Gravity = 41.8 api

Pressure vs. Time





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Stithem #1-4

7851 S. Elati St. STE 201
Littleton, CO 80120

4/11s/23w Trego KS

Job Ticket: 41339

DST#: 3

ATTN: Bill Goff/ Kelly Bran 201

Test Start: 2010.12.13 @ 04:18:21

GENERAL INFORMATION:

Formation: **LKC "E"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 05:51:51

Time Test Ended: 11:30:51

Test Type: Conventional Bottom Hole

Tester: Dustin Rash

Unit No: 47

Interval: 3594.00 ft (KB) To 3620.00 ft (KB) (TVD)

Reference Elevations: 2291.00 ft (KB)

Total Depth: 3620.00 ft (KB) (TVD)

2286.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Poor

KB to GR/CF: 5.00 ft

Serial #: 8319

Inside

Press @ Run Depth: 73.46 psig @ 3598.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2010.12.13

End Date:

2010.12.13

Last Calib.:

2010.12.13

Start Time:

04:18:26

End Time:

11:30:50

Time On Btm:

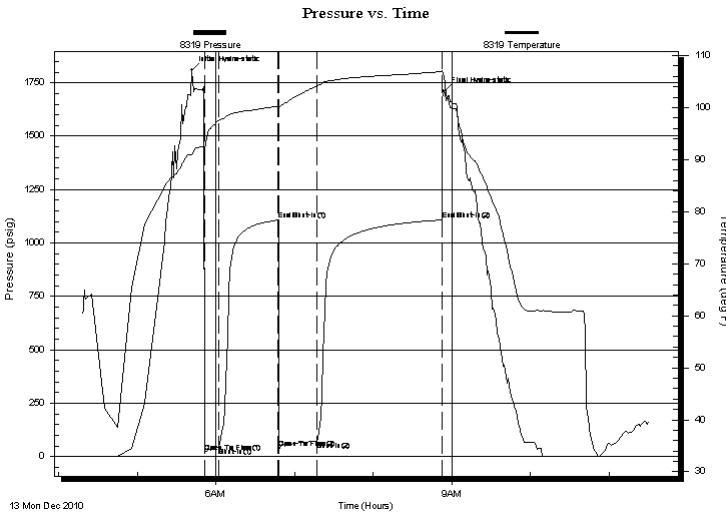
2010.12.13 @ 05:41:51

Time Off Btm:

2010.12.13 @ 08:53:51

TEST COMMENT: IF-Strong building blow . BOB in 9.5 minutes.
ISI-No Return.
FF-Strong building blow . BOB in 2 minutes.
FSI-Blow back @ 11 minutes. Built to 1/2 inch.

PRESSURE SUMMARY



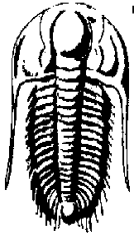
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1808.18	90.96	Initial Hydro-static
10	19.12	92.08	Open To Flow (1)
20	45.40	97.43	Shut-In(1)
66	1107.82	100.25	End Shut-In(1)
67	39.40	99.90	Open To Flow (2)
96	73.46	104.18	Shut-In(2)
191	1108.05	106.96	End Shut-In(2)
192	1709.26	105.91	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
120.00	50%Mud/40%Oil/10%Gas	0.59
100.00	30%Mud/30%Oil/40%Gas	1.38
0.00	640' GIP	0.00

Gas Rates

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



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4/11s/23w Trego KS

Job Ticket: 41339

DST#: 3

ATTN: Bill Goff/ Kelly Bran 201

Test Start: 2010.12.13 @ 04:18:21

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

37 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 60.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.20 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 1000.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
120.00	50%Mud/40%Oil/10%Gas	0.590
100.00	30%Mud/30%Oil/40%Gas	1.375
0.00	640' GIP	0.000

Total Length: 220.00 ft

Total Volume: 1.965 bbl

Num Fluid Samples: 0

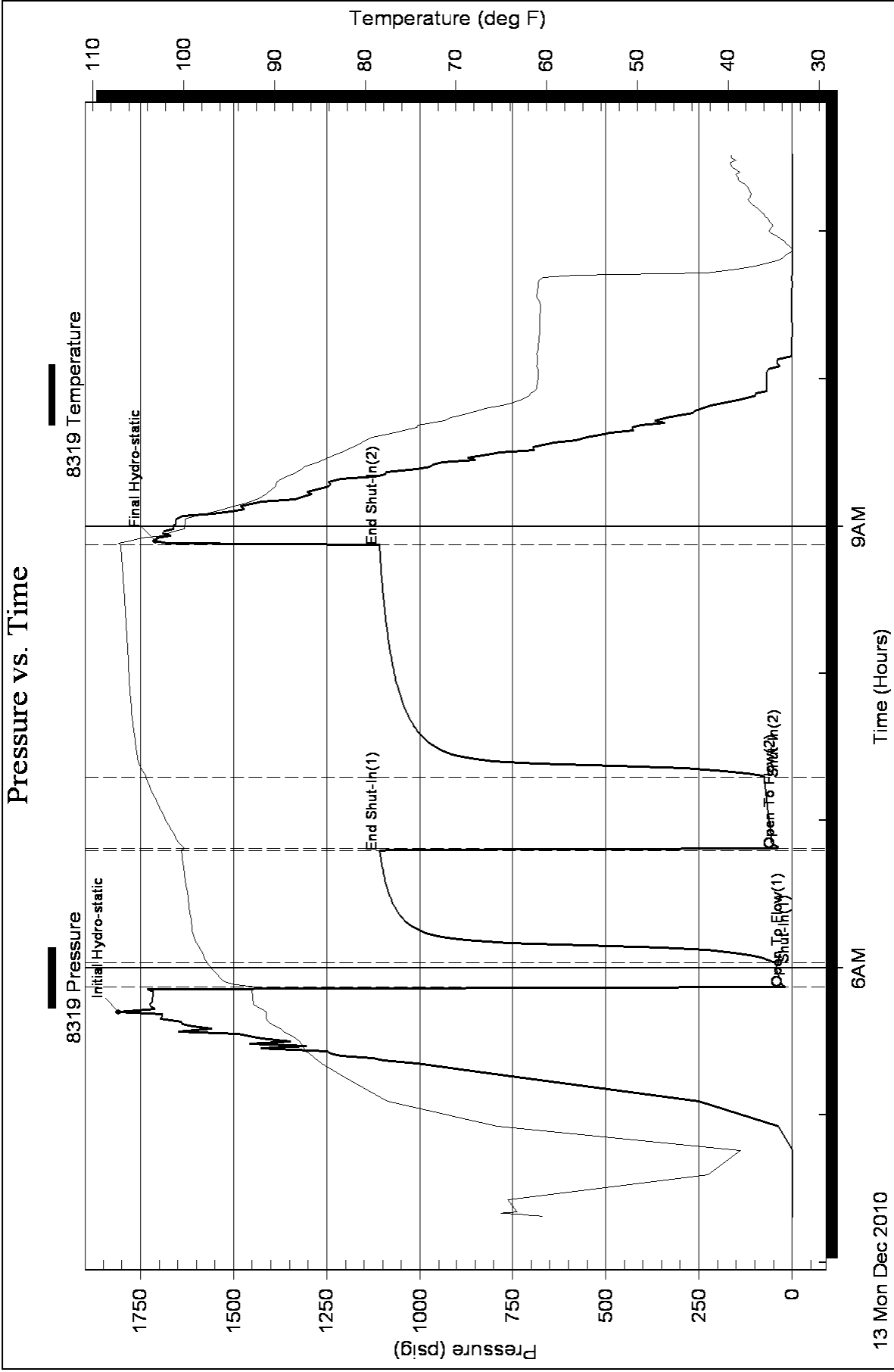
Num Gas Bombs: 0

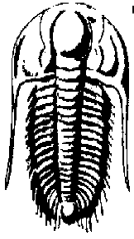
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:





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Stithem #1-4

7851 S. Elati St. STE 201
Littleton, CO 80120

4/11s/23w Trego KS

ATTN: Bill Goff/ Kelly Bran 201

Job Ticket: 41340

DST#: 4

Test Start: 2010.12.13 @ 17:15:41

GENERAL INFORMATION:

Formation: **LKC "F"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 19:04:41

Time Test Ended: 21:17:41

Test Type: Conventional Bottom Hole

Tester: Dustin Rash

Unit No: 47

Interval: 3618.00 ft (KB) To 3660.00 ft (KB) (TVD)

Reference Elevations: 2291.00 ft (KB)

Total Depth: 3660.00 ft (KB) (TVD)

2286.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Poor

KB to GR/CF: 5.00 ft

Serial #: 6719 Inside

Press @ Run Depth: psig @ 3621.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2010.12.13

End Date: 2010.12.13

Last Calib.: 2010.12.13

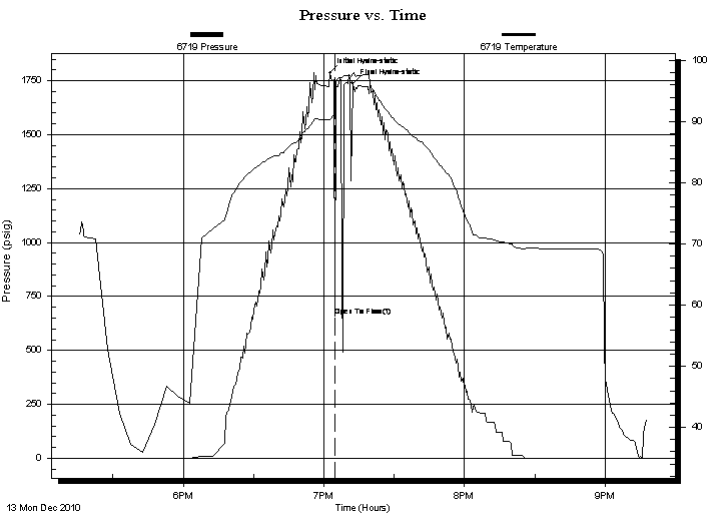
Start Time: 17:15:46

End Time: 21:17:41

Time On Btm: 2010.12.13 @ 19:02:41

Time Off Btm: 2010.12.13 @ 19:12:11

TEST COMMENT: IF- Misrun.



PRESSURE SUMMARY

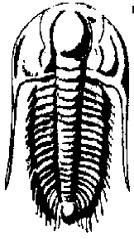
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1786.79	90.34	Initial Hydro-static
2	661.27	92.80	Open To Flow (1)
10	1737.36	97.93	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)

Gas Rates

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



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Stithem #1-4

7851 S. Elati St. STE 201
Littleton, CO 80120

4/11s/23w Trego KS

Job Ticket: 41340

DST#: 4

ATTN: Bill Goff/ Kelly Bran 201

Test Start: 2010.12.13 @ 17:15:41

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: 7.20 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 1000.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbbl

Total Length: ft

Total Volume: bbl

Num Fluid Samples: 0

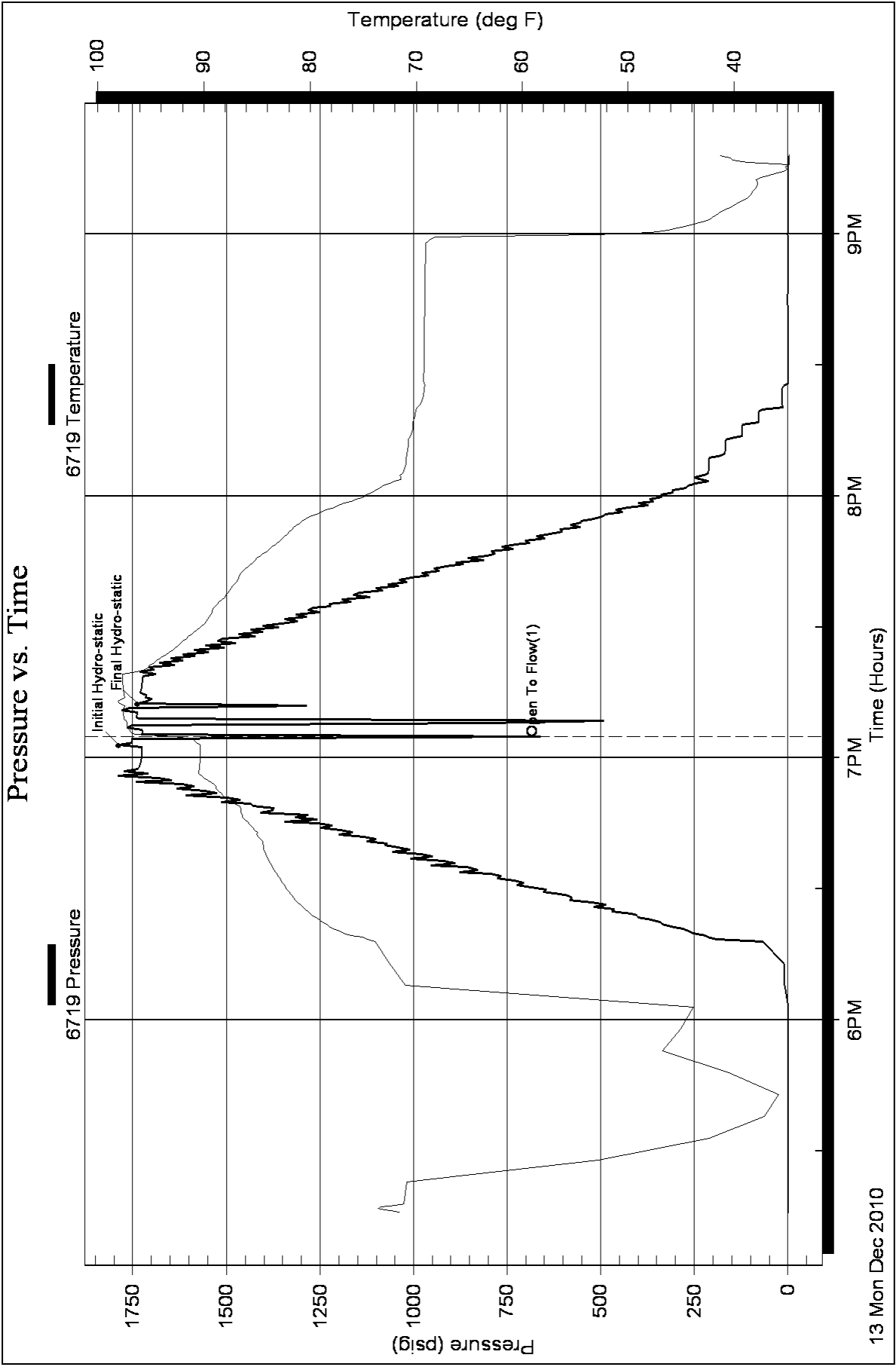
Num Gas Bombs: 0

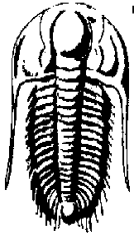
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:





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Cholla Production LLC

Stithem #1-4

7851 S. Elati St. STE 201
Littleton, CO 80120

4/11s/23w Trego KS

ATTN: Bill Goff/ Kelly Bran 201

Job Ticket: 41341

DST#: 5

Test Start: 2010.12.14 @ 05:03:48

GENERAL INFORMATION:

Formation: **LKC "J"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 06:45:48

Time Test Ended: 11:25:48

Test Type: Conventional Bottom Hole

Tester: Dustin Rash

Unit No: 47

Interval: 3684.00 ft (KB) To 3725.00 ft (KB) (TVD)

Reference Elevations: 2291.00 ft (KB)

Total Depth: 3725.00 ft (KB) (TVD)

2286.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Poor

KB to GR/CF: 5.00 ft

Serial #: 6719

Inside

Press @ Run Depth: 14.29 psig @ 3686.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2010.12.14

End Date:

2010.12.14

Last Calib.:

2010.12.14

Start Time: 05:03:53

End Time:

11:25:47

Time On Btm:

2010.12.14 @ 06:45:18

Time Off Btm:

2010.12.14 @ 09:47:48

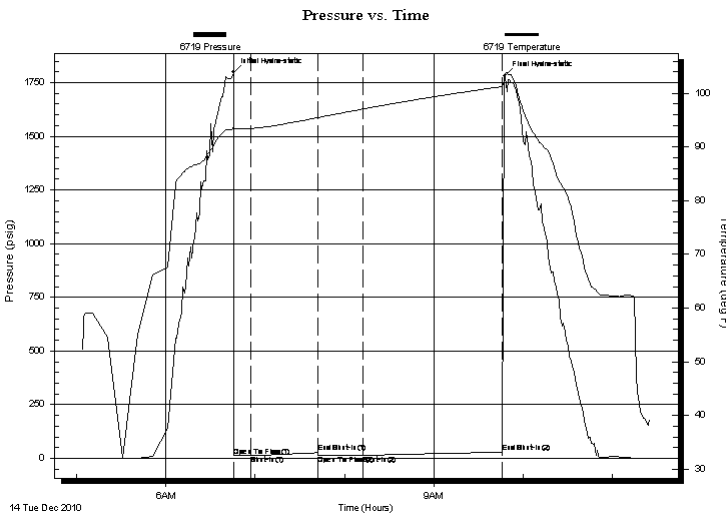
TEST COMMENT: IF-Weak blow . Built to 1/2 inch.

ISI-No Return.

FF-No blow .

FSI-No Return.

PRESSURE SUMMARY



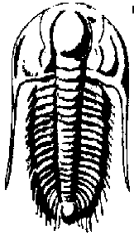
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1797.61	93.76	Initial Hydro-static
1	11.86	93.50	Open To Flow (1)
12	12.60	93.47	Shut-In(1)
57	26.34	95.47	End Shut-In(1)
57	13.22	95.49	Open To Flow (2)
87	14.29	97.08	Shut-In(2)
181	28.30	101.24	End Shut-In(2)
183	1782.53	103.51	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
0.50	100%Mud	0.00

Gas Rates

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



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Cholla Production LLC

Stithem #1-4

7851 S. Elati St. STE 201
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4/11s/23w Trego KS

Job Ticket: 41341

DST#: 5

ATTN: Bill Goff/ Kelly Bran 201

Test Start: 2010.12.14 @ 05:03:48

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: 58.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 8.39 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 2300.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
0.50	100%Mud	0.002

Total Length: 0.50 ft Total Volume: 0.002 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Pressure vs. Time

