

**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Great Plains Energy Inc

8 7s 18w Rooks

6121 S 58th St Ste B
Lincoln NE 68516

Odle # 2-8

Job Ticket: 54316

DST#: 1

ATTN: Mike Madchan

Test Start: 2013.07.14 @ 14:42:00

GENERAL INFORMATION:

Formation: **Oread**

Deviated: No Whipstock: 1936.00 ft (KB)

Time Tool Opened: 16:13:50

Time Test Ended: 20:22:00

Test Type: Conventional Bottom Hole (Initial)

Tester: Jim Svaty

Unit No: 41

Interval: 3060.00 ft (KB) To 3080.00 ft (KB) (TVD)

Total Depth: 3080.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 1936.00 ft (KB)

1931.00 ft (CF)

KB to GR/CF: 5.00 ft

Serial #: 8322 Outside

Press@RunDepth: 342.10 psig @ 3062.00 ft (KB)

Start Date: 2013.07.14

End Date:

2013.07.14

Start Time: 14:42:01

End Time:

20:22:00

Capacity: 8000.00 psig

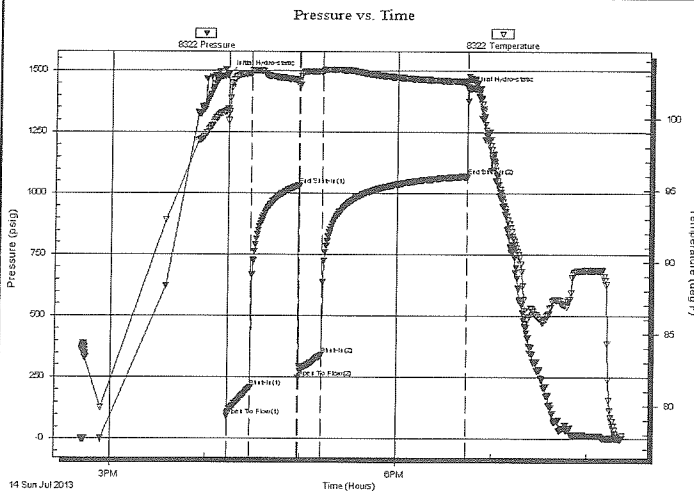
Last Calib.: 2013.07.14

Time On Btm: 2013.07.14 @ 16:13:30

Time Off Btm: 2013.07.14 @ 18:44:00

TEST COMMENT: 15-IFP- BOB in 2min. 50sec.
30-ISIP- No Blow
15-FFP- BOB in 3min. 10sec.
90-FSIP- No Blow

PRESSURE SUMMARY



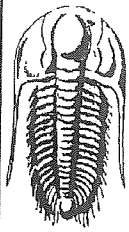
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1484.51	100.66	Initial Hydro-static
1	91.90	100.30	Open To Flow (1)
15	209.55	103.16	Shut-In(1)
45	1031.91	102.68	End Shut-In(1)
45	248.06	102.27	Open To Flow (2)
60	342.10	103.26	Shut-In(2)
150	1069.46	102.57	End Shut-In(2)
151	1423.56	102.59	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
434.00	MCW 5% m 95% w	4.99
134.00	MCW 20% m 80% w	1.88

Gas Rates

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



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FLUID SUMMARY

Great Plains Energy Inc

8 7s 18w Rooks

6121 S 58th St Ste B
Lincoln NE 68516

Odle # 2-8

Job Ticket: 54316

DST#: 1

ATTN: Mike Madchan

Test Start: 2013.07.14 @ 14:42:00

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:

100000 ppm

Viscosity: 41.00 sec/qt

Cushion Volume:

bbl

Water Loss: 7.98 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 1500.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
434.00	MCW 5%m 95%w	4.995
134.00	MCW 20%m 80%w	1.880

Total Length: 568.00 ft

Total Volume: 6.875 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

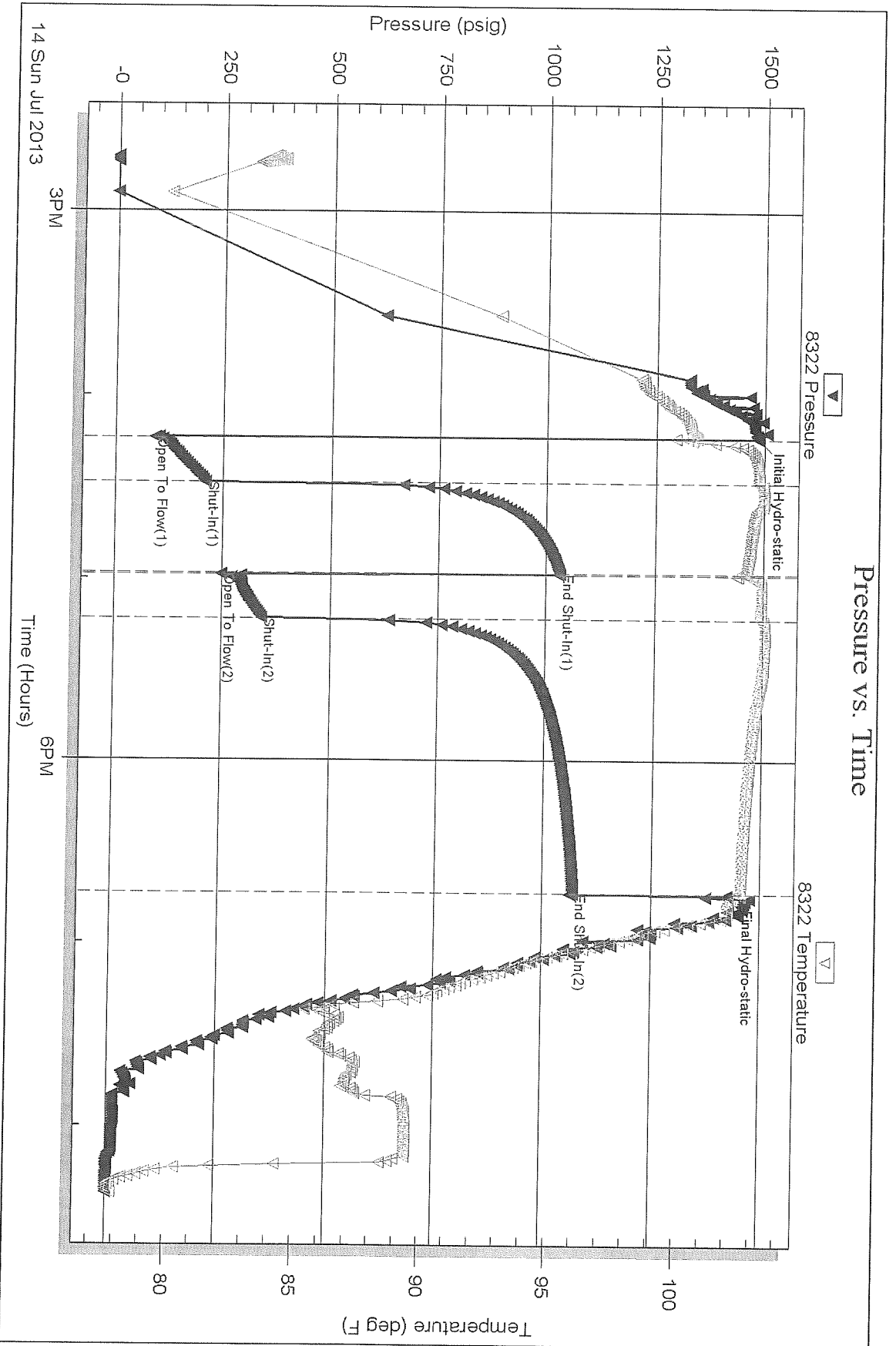
Recovery Comments: .070 @ 80

Serial #: 8322

Outside Great Plains Energy Inc

Odle # 2-8

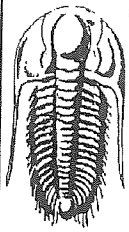
DST Test Number: 1



Trilobite Testing, Inc

Ref. No: 54316

Printed: 2013.07.14 @ 22:57:59



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Great Plains Energy Inc

8 7s 18w Rooks

6121 S 58th St Ste B
Lincoln NE 68516

Odle # 2-8

Job Ticket: 54317

DST#: 2

ATTN: Mike Madchan

Test Start: 2013.07.15 @ 09:29:00

GENERAL INFORMATION:

Formation: LKC " A - C "

Deviated: No Whipstock: 1936.00 ft (KB)

Time Tool Opened: 10:59:00

Time Test Ended: 17:23:00

Test Type: Conventional Bottom Hole (Reset)

Tester: Jim Svaty

Unit No: 41

Interval: 3138.00 ft (KB) To 3195.00 ft (KB) (TVD)

Total Depth: 3195.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 1936.00 ft (KB)

1931.00 ft (CF)

KB to GR/CF: 5.00 ft

Serial #: 8322 Outside

Press@RunDepth: 117.89 psig @ 3139.00 ft (KB)

Start Date: 2013.07.15

End Date: 2013.07.15

Capacity: 8000.00 psig

Last Calib.: 2013.07.15

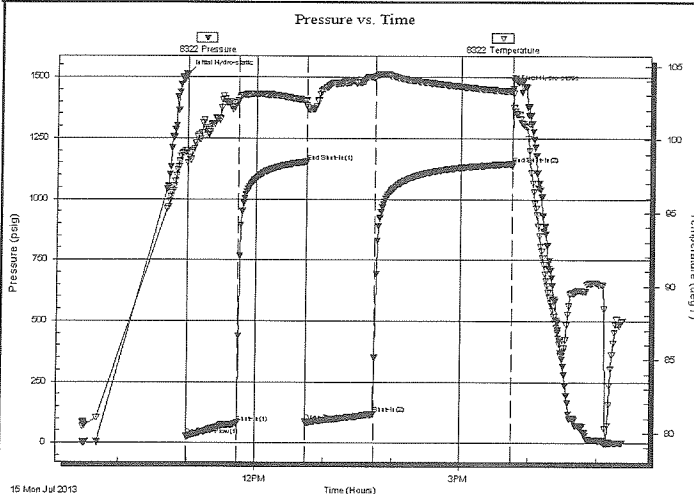
Start Time: 09:29:01

End Time: 17:22:40

Time On Btm: 2013.07.15 @ 10:58:50

Time Off Btm: 2013.07.15 @ 15:45:20

TEST COMMENT: 45-IFP- Very Weak Surface Blow For 25 min. Surging to 5 1/2 in.
60-ISIP- No Blow
60-FFP- Surface Blow in 4 min. Building to 6 1/2 min.
120-FSIP- No Blow



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1513.04	99.25	Initial Hydro-static
1	28.44	98.41	Open To Flow (1)
46	81.20	102.63	Shut-In(1)
106	1153.44	102.65	End Shut-In(1)
106	86.25	102.32	Open To Flow (2)
166	117.89	104.24	Shut-In(2)
286	1145.34	103.28	End Shut-In(2)
287	1452.51	103.12	Final Hydro-static

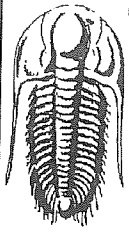
Recovery

Length (ft)	Description	Volume (bbl)
200.00	MCW 15% m 85% w	1.71

* Recovery from multiple tests

Gas Rates

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



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DRILL STEM TEST REPORT

FLUID SUMMARY

Great Plains Energy Inc

8 7s 18w Rooks

6121 S 58th St Ste B
Lincoln NE 68516

Odle # 2-8

Job Ticket: 54317

DST#: 2

ATTN: Mike Madchan

Test Start: 2013.07.15 @ 09:29:00

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:

90000 ppm

Viscosity: 50.00 sec/qt

Cushion Volume:

bbf

Water Loss: 6.80 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 2500.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbf
200.00	MCW 15% m 85% w	1.712

Total Length: 200.00 ft

Total Volume: 1.712 bbf

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

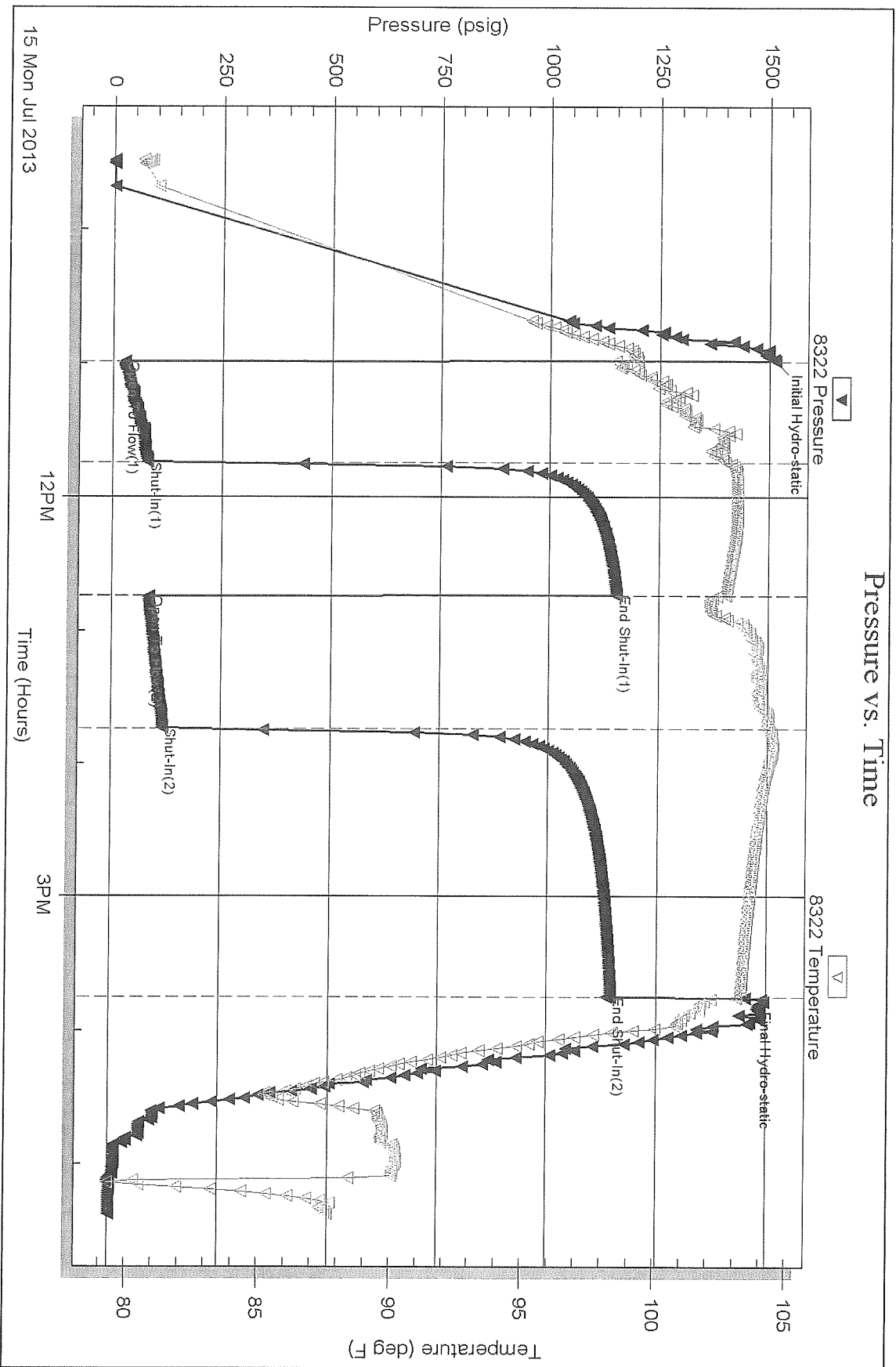
Recovery Comments: .072 @ 87

Serial #: 8322

Outside Great Plains Energy Inc

Odle # 2-8

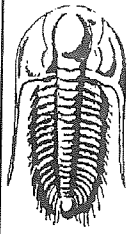
DST Test Number: 2



Trilobite Testing, Inc

Ref. No: 54317

Printed: 2013.07.16 @ 00:43:30



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Great Plains Energy Inc

8 7s 18w Rooks

6121 S 58th St Ste B
Lincoln NE 68516

Odle # 2-8

ATTN: Mike Madchan

Job Ticket: 54318

DST#: 3

Test Start: 2013.07.15 @ 23:03:00

GENERAL INFORMATION:

Formation: LKC " E "

Deviated: No Whipstock: 1936.00 ft (KB)

Time Tool Opened: 00:45:20

Time Test Ended: 05:37:00

Test Type: Conventional Bottom Hole (Reset)

Tester: Jim Svaty

Unit No: 41

Interval: 3216.00 ft (KB) To 3227.00 ft (KB) (TVD)

Reference Elevations: 1936.00 ft (KB)

Total Depth: 3227.00 ft (KB) (TVD)

1931.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 5.00 ft

Serial #: 8322

Outside

Press@RunDepth: 17.55 psig @ 3217.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2013.07.15

End Date:

2013.07.16

Last Calib.: 2013.07.16

Start Time: 23:03:01

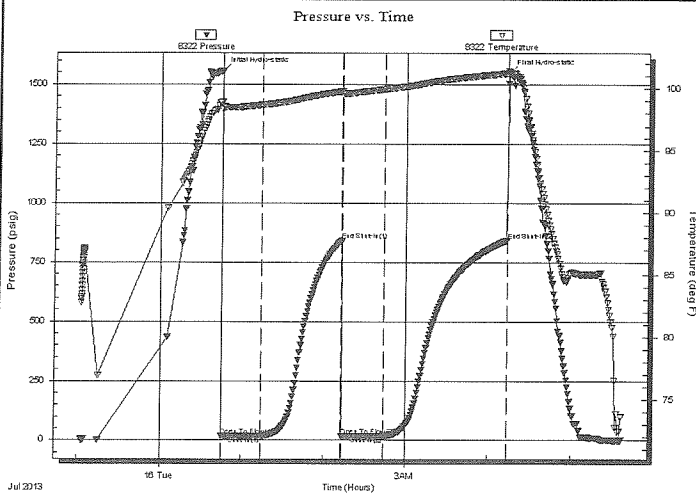
End Time:

05:36:40

Time On Btm: 2013.07.16 @ 00:45:10

Time Off Btm: 2013.07.16 @ 04:14:10

TEST COMMENT: 30-IFP- Very Weak Surface Blow
60-ISIP- No Blow
30-FFP- No Blow
90-FSIP- No Blow



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1556.53	98.93	Initial Hydro-static
1	17.48	98.35	Open To Flow (1)
29	17.36	98.69	Shut-In(1)
88	841.78	99.79	End Shut-In(1)
89	18.58	99.41	Open To Flow (2)
119	17.55	99.97	Shut-In(2)
209	842.59	101.25	End Shut-In(2)
209	1545.95	101.41	Final Hydro-static

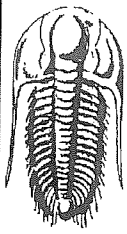
Recovery

Length (ft)	Description	Volume (bbl)
2.00	Mud 100%	0.01

* Recovery from multiple tests

Gas Rates

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



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DRILL STEM TEST REPORT

FLUID SUMMARY

Great Plains Energy Inc

8 7s 18w Rooks

6121 S 58th St Ste B
Lincoln NE 68516

Odle # 2-8

Job Ticket: 54318

DST#: 3

ATTN: Mike Madchan

Test Start: 2013.07.15 @ 23:03:00

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: 50.00 sec/qt

Cushion Volume:

bbl

Water Loss: 6.80 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 2500.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
2.00	Mud 100%	0.010

Total Length: 2.00 ft Total Volume: 0.010 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

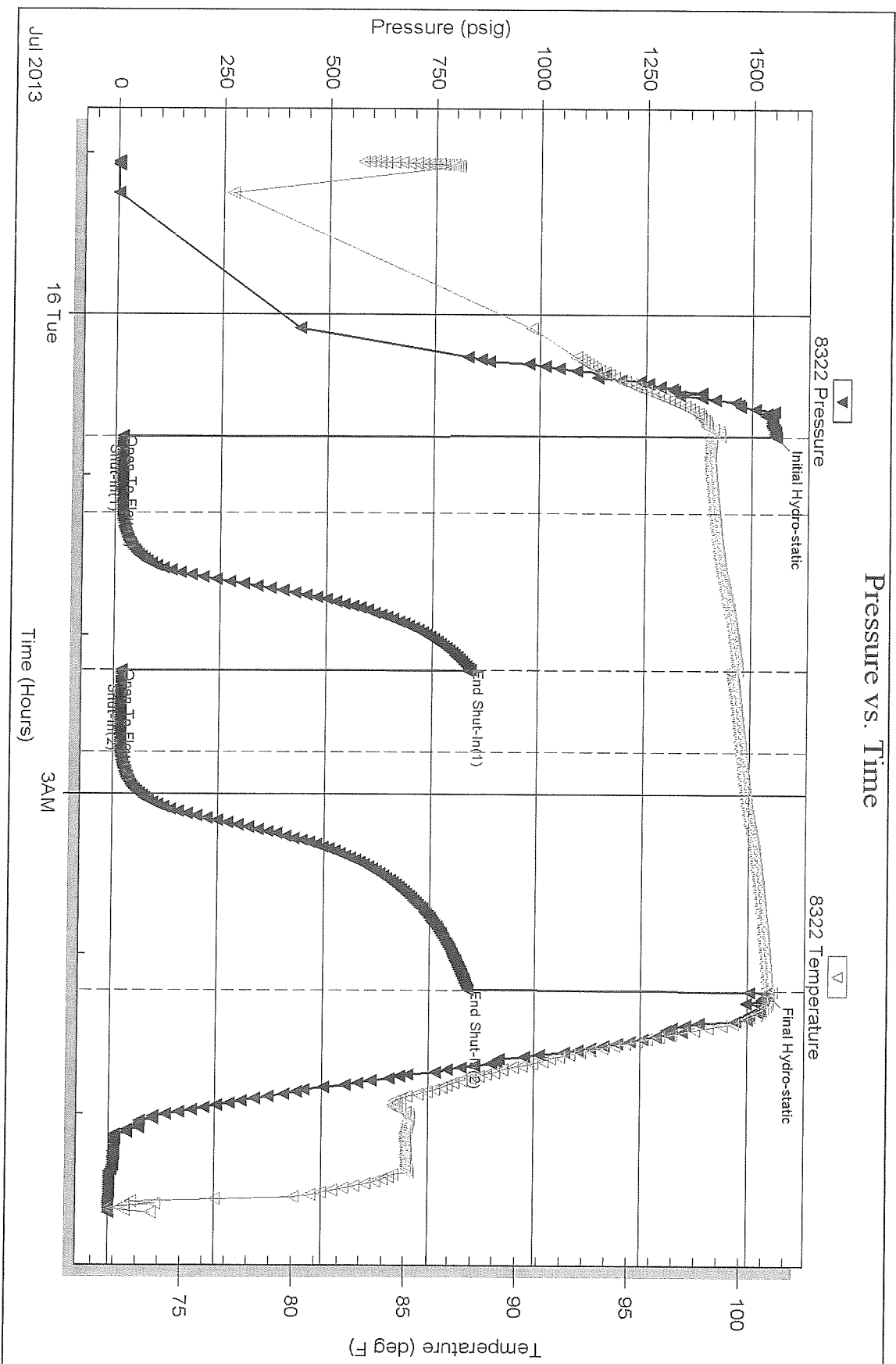
Recovery Comments:

Serial #: 8322

Outside Great Plains Energy Inc

Odle # 2-8

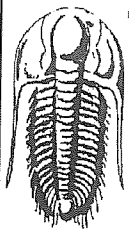
DST Test Number: 3



Tribotite Testing, Inc

Ref. No: 54318

Printed: 2013.07.16 @ 05:53:53



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Great Plains Energy Inc
6121 S 58th St Ste B
Lincoln NE 68516
ATTN: Mike Madcharo

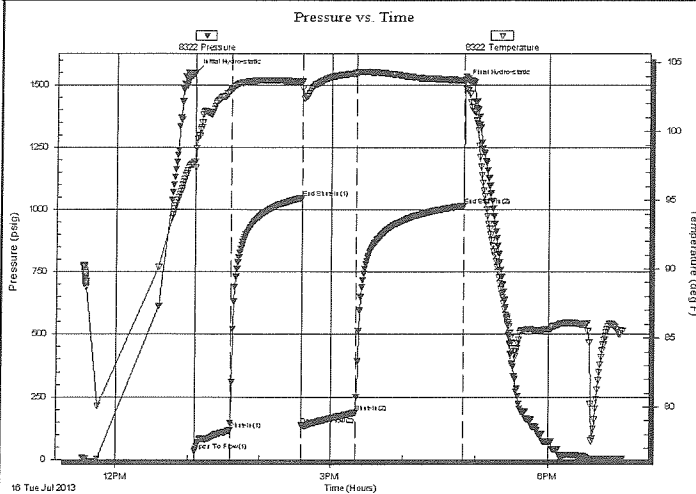
8 7s 18w Rooks
Odle # 2-8
Job Ticket: 54319 DST#: 4
Test Start: 2013.07.16 @ 11:33:00

GENERAL INFORMATION:

Formation: LKC " E - G "
Deviated: No Whipstock: 1936.00 ft (KB)
Time Tool Opened: 13:05:40
Time Test Ended: 19:02:00
Interval: 3214.00 ft (KB) To 3240.00 ft (KB) (TVD)
Total Depth: 3240.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair
Test Type: Conventional Bottom Hole (Reset)
Tester: Jim Svaty
Unit No: 41
Reference Elevations: 1936.00 ft (KB)
1931.00 ft (CF)
KB to GR/CF: 5.00 ft

Serial #: 8322 **Outside**
Press@RunDepth: 186.44 psig @ 3215.00 ft (KB) Capacity: 8000.00 psig
Start Date: 2013.07.16 End Date: 2013.07.16 Last Calib.: 2013.07.16
Start Time: 11:33:01 End Time: 19:01:50 Time On Btm: 2013.07.16 @ 13:05:20
Time Off Btm: 2013.07.16 @ 16:50:40

TEST COMMENT: 30-IFP- BOB in 8 min. 45 sec.
60-ISIP- Surface Blow in 2 1/2 min. Building to 2 in. in 32 min.
45-FFP- BOB in 17 min.
90-FSIP- Surface Blow in 2 min. Building to 2 1/2 in. in 39 min.



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1548.22	97.80	Initial Hydro-static
1	32.21	97.35	Open To Flow (1)
30	117.00	103.01	Shut-In(1)
90	1047.04	103.59	End Shut-In(1)
91	136.07	103.12	Open To Flow (2)
135	186.44	104.23	Shut-In(2)
225	1016.48	103.67	End Shut-In(2)
226	1508.43	103.76	Final Hydro-static

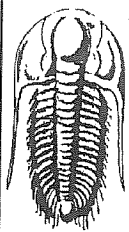
Recovery

Length (ft)	Description	Volume (bbl)
176.00	OMCW 3%o 7%m 90%w	1.38
62.00	OMCW 5%o 30%m 65%w	0.87
62.00	OWCM 15%o 35%w 50%m	0.87
93.00	CO 100%	1.30
0.00	222 GIP	0.00

* Recovery from multiple tests

Gas Rates

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



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DRILL STEM TEST REPORT

FLUID SUMMARY

Great Plains Energy Inc

8 7s 18w Rooks

6121 S 58th St Ste B
Lincoln NE 68516

Odle # 2-8

Job Ticket: 54319

DST#: 4

ATTN: Mike Madcharo

Test Start: 2013.07.16 @ 11:33:00

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: 95000 ppm
Viscosity: 51.00 sec/qt	Cushion Volume: bbl	
Water Loss: 6.80 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
176.00	OMCW 3%o 7%m 90%w	1.376
62.00	OMCW 5%o 30%m 65%w	0.870
62.00	OWCM 15%o 35%w 50%m	0.870
93.00	CO 100%	1.305
0.00	222 GIP	0.000

Total Length: 393.00 ft Total Volume: 4.421 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

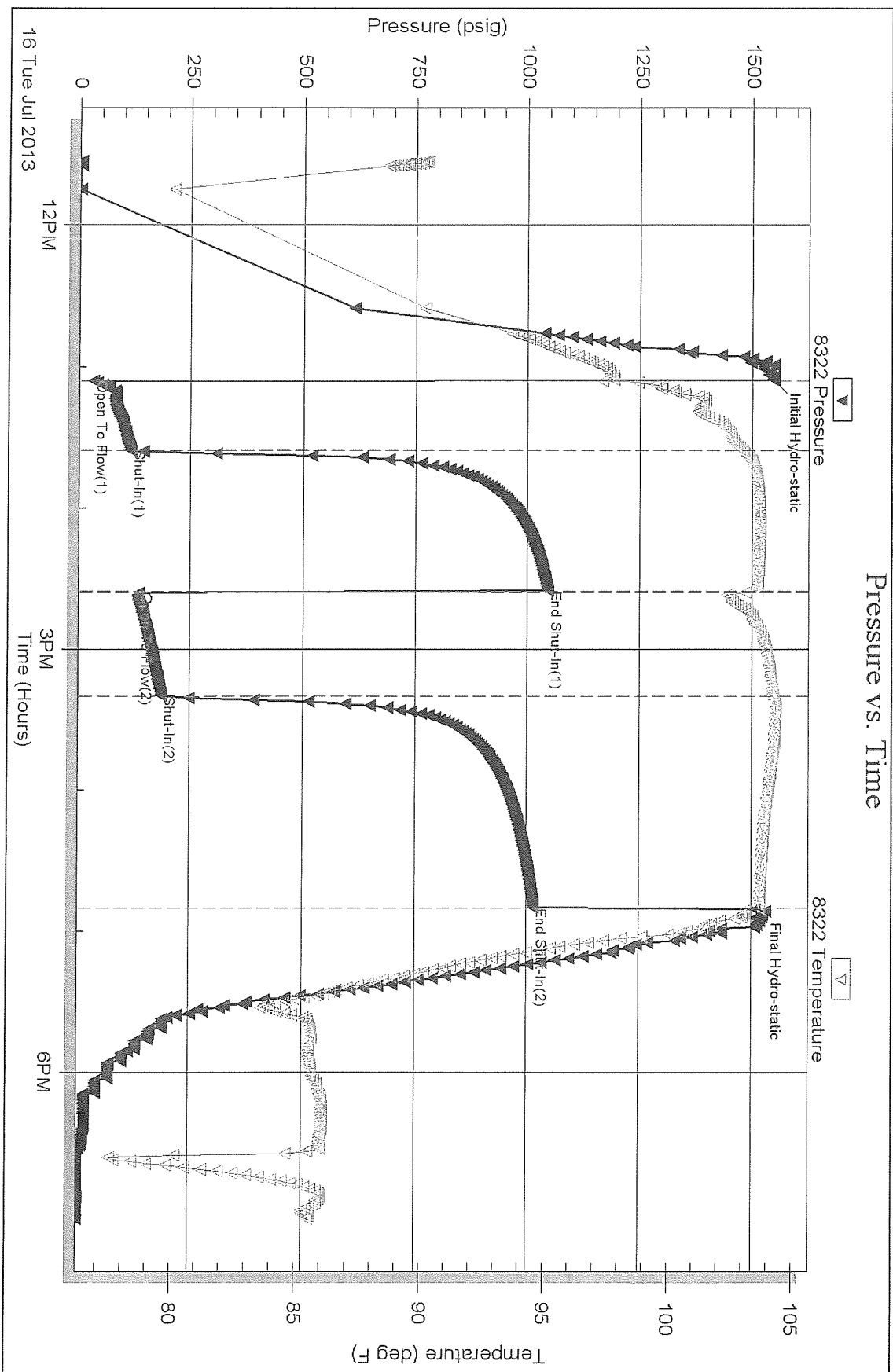
Recovery Comments: .070 @ 83

Serial #: 8322

Outside Great Plains Energy Inc

Odle #2-8

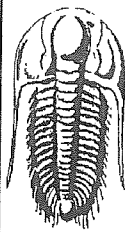
DST Test Number: 4



Trilobite Testing, Inc

Ref. No: 54319

Printed: 2013.07.17 @ 07:41:54



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Great Plains Energy Inc

8 7s 18w Rooks

6121 S 58th St Ste B
Lincoln NE 68516

Odle # 2-8

Job Ticket: 54320

DST#: 5

ATTN: Mike Madcharo

Test Start: 2013.07.17 @ 04:46:00

GENERAL INFORMATION:

Formation: LKC " I & J "

Deviated: No Whipstock: 1936.00 ft (KB)

Time Tool Opened: 06:32:30

Time Test Ended: 11:35:00

Test Type: Conventional Bottom Hole (Reset)

Tester: Jim Svaty

Unit No: 41

Interval: 3297.00 ft (KB) To 3330.00 ft (KB) (TVD)

Total Depth: 3330.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 1936.00 ft (KB)

1931.00 ft (CF)

KB to GR/CF: 5.00 ft

Serial #: 8322 Outside

Press@RunDepth: 37.03 psig @ 3298.00 ft (KB)

Start Date: 2013.07.17

End Date: 2013.07.17

Start Time: 04:46:01

End Time: 11:34:50

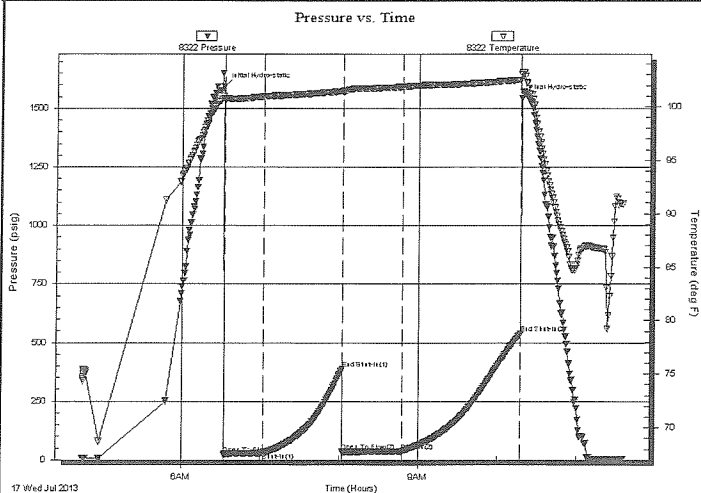
Capacity: 8000.00 psig

Last Calib.: 2013.07.17

Time On Btm: 2013.07.17 @ 06:32:10

Time Off Btm: 2013.07.17 @ 10:17:40

TEST COMMENT: 30-IFP- Surface Blow
60-ISIP- No Blow
45-FFP- No Blow
90-FSIP- No Blow



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1594.85	101.00	Initial Hydro-static
1	23.47	100.56	Open To Flow (1)
31	30.48	100.95	Shut-In(1)
90	386.72	101.45	End Shut-In(1)
91	34.73	101.34	Open To Flow (2)
136	37.03	101.85	Shut-In(2)
226	539.31	102.51	End Shut-In(2)
226	1542.85	103.04	Final Hydro-static

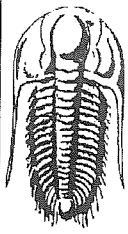
Recovery

Length (ft)	Description	Volume (bbl)
15.00	OCM 30%o 70%m	0.07

* Recovery from multiple tests

Gas Rates

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



TRILOBITE
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DRILL STEM TEST REPORT

FLUID SUMMARY

Great Plains Energy Inc

8 7s 18w Rooks

6121 S 58th St Ste B
Lincoln NE 68516

Odle # 2-8

Job Ticket: 54320

DST#: 5

ATTN: Mike Madcharo

Test Start: 2013.07.17 @ 04:46:00

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: 51.00 sec/qt

Cushion Volume:

bbl

Water Loss: 6.80 in³

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
15.00	OCM 30%o 70%m	0.074

Total Length: 15.00 ft Total Volume: 0.074 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Serial #: 8322

Outside Great Plains Energy Inc

Odle #2-8

DST Test Number: 5

