



DRILL STEM TEST REPORT

Prepared For: **Bach Oil Production**

PO Box 723
Alma, NE 68920

ATTN: Bob Peterson

Lloyd #1

29-4s-20w Phillips,KS

Start Date: 2012.01.10 @ 22:00:00

End Date: 2012.01.11 @ 04:59:30

Job Ticket #: 45553 DST #: 1

Trilobite Testing, Inc
PO Box 362 Hays, KS 67601
ph: 785-625-4778 fax: 785-625-5620

Printed: 2012.01.18 @ 11:26:50



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Bach Oil Production

29-4s-20w Phillips,KS

PO Box 723
Alma, NE 68920

Lloyd #1

Job Ticket: 45553

DST#: 1

ATTN: Bob Peterson

Test Start: 2012.01.10 @ 22:00:00

GENERAL INFORMATION:

Formation: **LKC "C"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 23:53:00

Time Test Ended: 04:59:30

Test Type: Conventional Bottom Hole (Initial)

Tester: James Winder

Unit No: 57

Interval: 3235.00 ft (KB) To 3260.00 ft (KB) (TVD)

Reference Elevations: 2002.00 ft (KB)

Total Depth: 3260.00 ft (KB) (TVD)

1997.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 5.00 ft

Serial #: 6719

Inside

Press @ Run Depth: 35.25 psig @ 3236.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2012.01.10

End Date:

2012.01.11

Last Calib.:

2012.01.11

Start Time: 22:00:05

End Time:

04:59:29

Time On Btm:

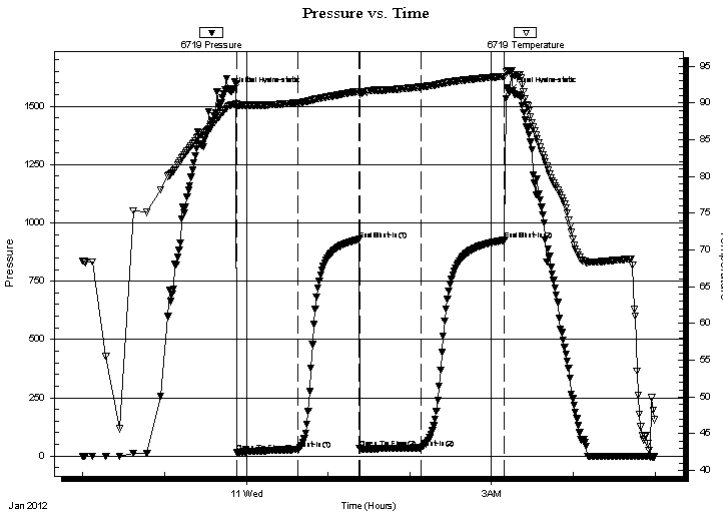
2012.01.10 @ 23:49:30

Time Off Btm:

2012.01.11 @ 03:13:00

TEST COMMENT: 45 - IF: Blow built to 2 1/2"
45 - IS: Bled off, No blow back
45 - FF: Blow built to 1 1/4"
60 - FS: Bled off, No blow back

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1563.83	89.77	Initial Hydro-static
4	16.21	89.72	Open To Flow (1)
49	28.70	90.04	Shut-In(1)
93	928.72	91.59	End Shut-In(1)
94	34.30	91.30	Open To Flow (2)
139	35.25	92.19	Shut-In(2)
200	925.70	93.63	End Shut-In(2)
204	1561.35	94.42	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
35.00	SOCM 98% m, 2% o	0.22
5.00	WMCO 66% o, 21% m, 11% w, 2% g	0.07
0.00	GIP = 20'	0.00

Gas Rates

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



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TESTING, INC.**

DRILL STEM TEST REPORT

Bach Oil Production

29-4s-20w Phillips,KS

PO Box 723
Alma, NE 68920

Lloyd #1

Job Ticket: 45553

DST#: 1

ATTN: Bob Peterson

Test Start: 2012.01.10 @ 22:00:00

GENERAL INFORMATION:

Formation: **LKC "C"**

Deviated: No Whipstock: ft (KB)

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Time Test Ended: 04:59:30

Test Type: Conventional Bottom Hole (Initial)

Tester: James Winder

Unit No: 57

Interval: 3235.00 ft (KB) To 3260.00 ft (KB) (TVD)

Total Depth: 3260.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 2002.00 ft (KB)

1997.00 ft (CF)

KB to GR/CF: 5.00 ft

Serial #: 8320 Outside

Press @ RunDepth: psig @ 3236.00 ft (KB)

Start Date: 2012.01.10

End Date: 2012.01.11

Start Time: 22:00:05

End Time: 04:59:29

Capacity: 8000.00 psig

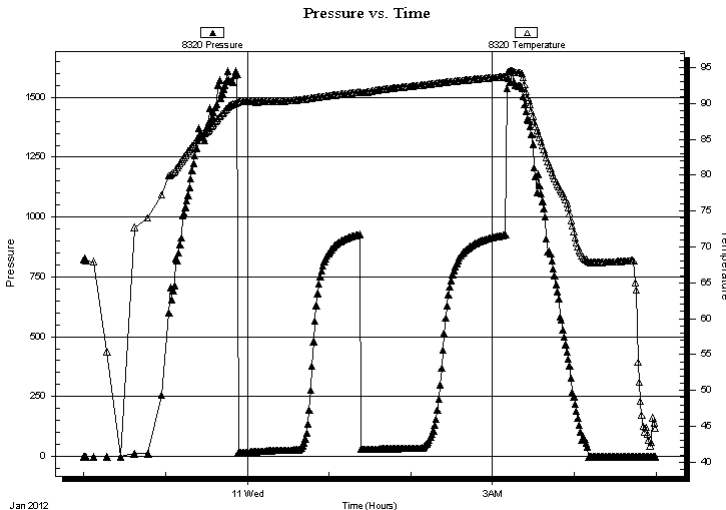
Last Calib.: 2012.01.11

Time On Btm:

Time Off Btm:

TEST COMMENT: 45 - IF: Blow built to 2 1/2"
45 - IS: Bled off, No blow back
45 - FF: Blow built to 1 1/4"
60 - FS: Bled off, No blow back

PRESSURE SUMMARY



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

Recovery

Length (ft)	Description	Volume (bbl)
35.00	SOCM 98% m, 2% o	0.22
5.00	WMCO 66% o, 21% m, 11% w, 2% g	0.07
0.00	GIP = 20'	0.00

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Bach Oil Production

29-4s-20w Phillips,KS

PO Box 723
Alma, NE 68920

Lloyd #1

Job Ticket: 45553

DST#: 1

ATTN: Bob Peterson

Test Start: 2012.01.10 @ 22:00:00

Tool Information

Drill Pipe:	Length: 3202.00 ft	Diameter: 3.80 inches	Volume: 44.92 bbl	Tool Weight: 2500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 30.00 ft	Diameter: 2.25 inches	Volume: 0.15 bbl	Weight to Pull Loose: 55000.00 lb
			<u>Total Volume: 45.07 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	25.00 ft			String Weight: Initial 46000.00 lb
Depth to Top Packer:	3235.00 ft			Final 46000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	25.00 ft			
Tool Length:	53.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Shut In Tool	5.00			3212.00	
Hydraulic tool	5.00			3217.00	
Jars	5.00			3222.00	
Safety Joint	3.00			3225.00	
Packer	5.00			3230.00	28.00 Bottom Of Top Packer
Packer	5.00			3235.00	
Stubb	1.00			3236.00	
Recorder	0.00	6719	Inside	3236.00	
Recorder	0.00	8320	Outside	3236.00	
Perforations	21.00			3257.00	
Bullnose	3.00			3260.00	25.00 Bottom Packers & Anchor

Total Tool Length: 53.00



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Bach Oil Production

29-4s-20w Phillips,KS

PO Box 723
Alma, NE 68920

Lloyd #1

Job Ticket: 45553

DST#: 1

ATTN: Bob Peterson

Test Start: 2012.01.10 @ 22:00:00

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: 53.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.59 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 800.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
35.00	SOCM 98% _m , 2% _o	0.218
5.00	WMCO 66% _o , 21% _m , 11% _w , 2% _g	0.070
0.00	GIP = 20'	0.000

Total Length: 40.00 ft Total Volume: 0.288 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

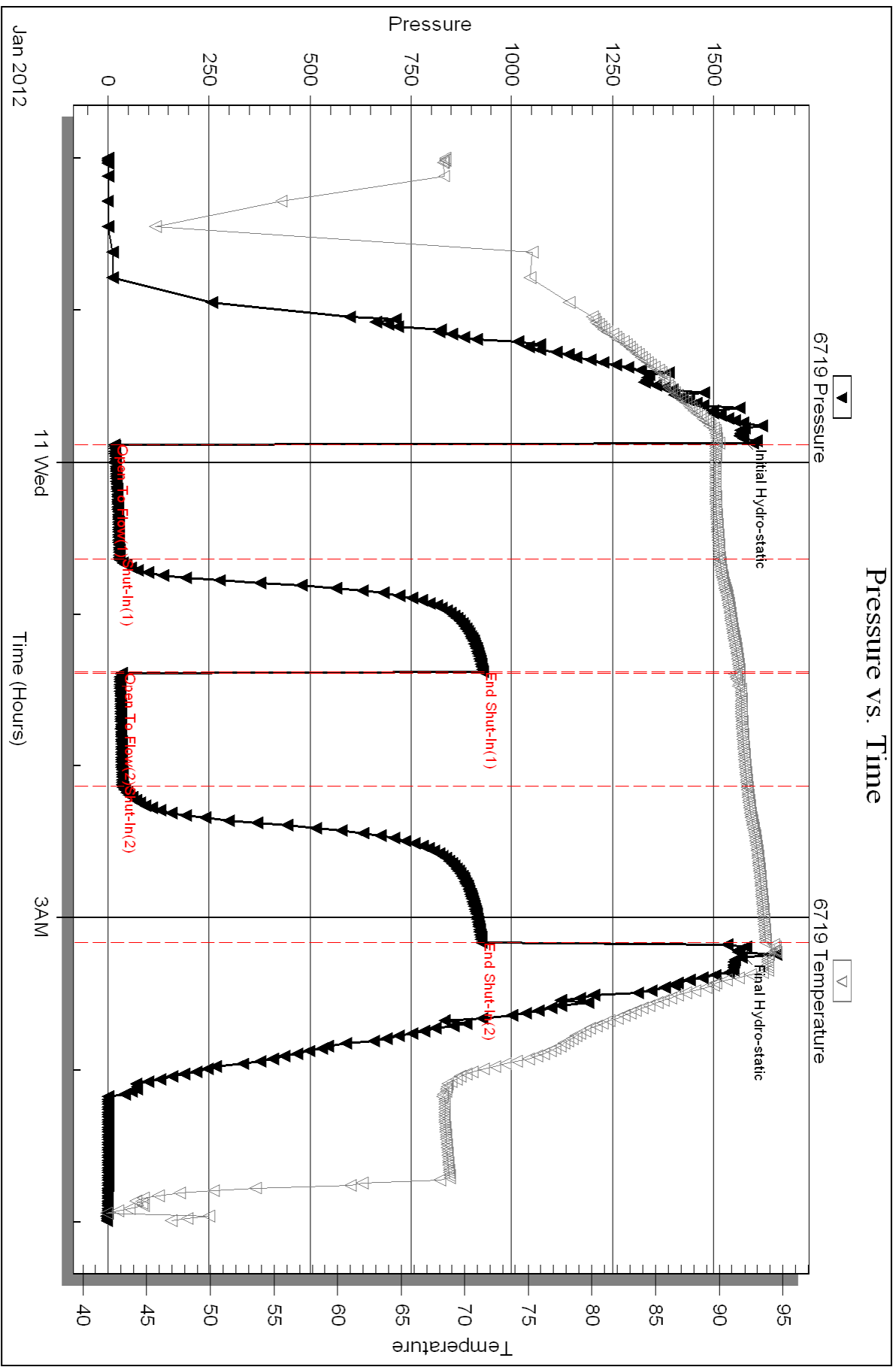
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Inside

Bach Oil Production

Lloyd #1

DST Test Number: 1



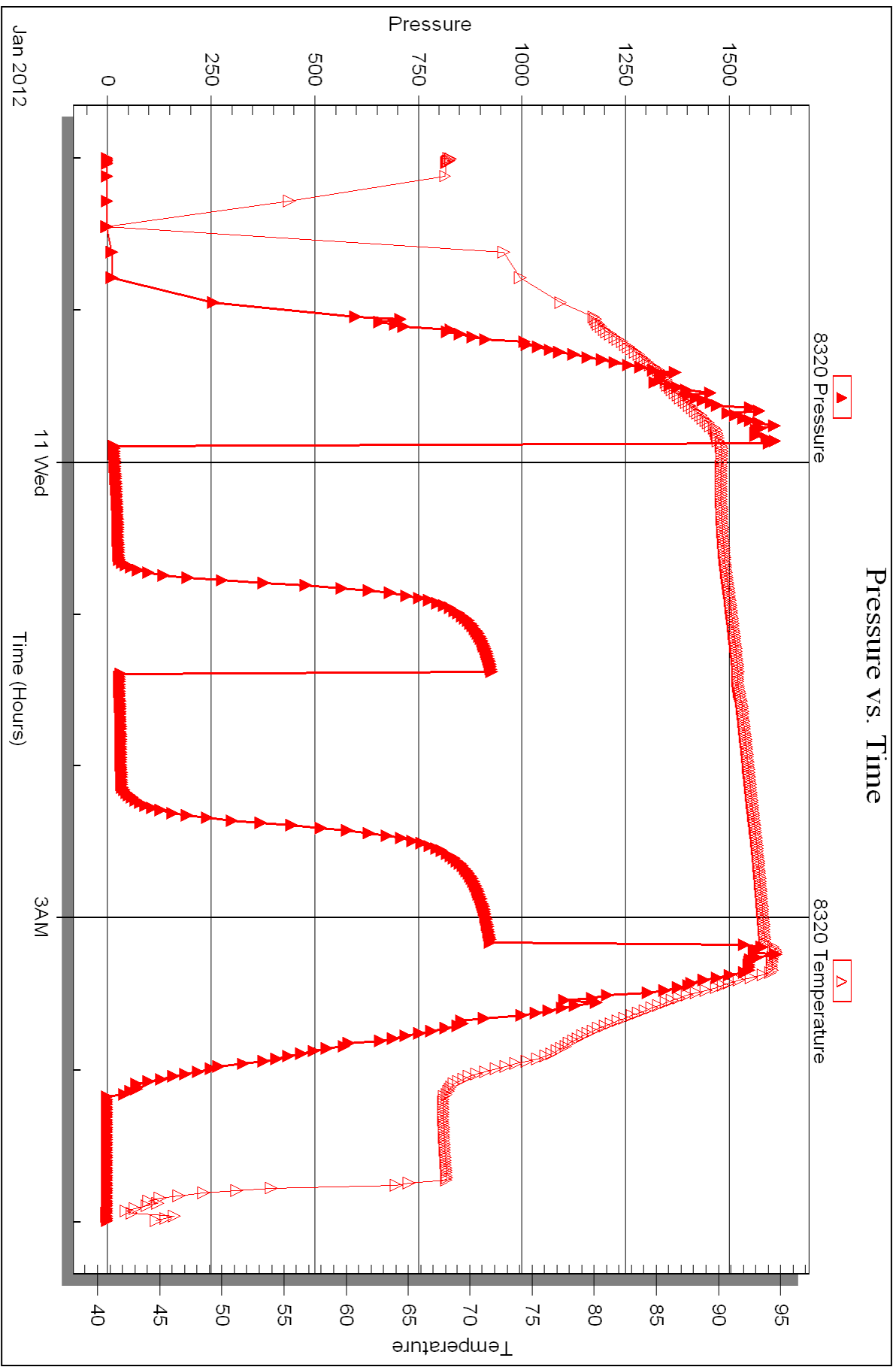
Serial #: 8320

Outside

Bach Oil Production

Lloyd #1

DST Test Number: 1





DRILL STEM TEST REPORT

Prepared For: **Bach Oil Production**

PO Box 723
Alma, NE 68920

ATTN: Bob Peterson

Lloyd #1

29-4s-20w Phillips,KS

Start Date: 2012.01.11 @ 12:10:00

End Date: 2012.01.11 @ 18:43:00

Job Ticket #: 45554 DST #: 2

Trilobite Testing, Inc
PO Box 362 Hays, KS 67601
ph: 785-625-4778 fax: 785-625-5620

Printed: 2012.01.18 @ 11:25:17

Bach Oil Production
29-4s-20w Phillips,KS
Lloyd #1
DST # 2
LKC "F"
2012.01.11



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Bach Oil Production

29-4s-20w Phillips,KS

PO Box 723
Alma, NE 68920

Lloyd #1

Job Ticket: 45554

DST#: 2

ATTN: Bob Peterson

Test Start: 2012.01.11 @ 12:10:00

GENERAL INFORMATION:

Formation: **LKC "F"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 14:08:30

Time Test Ended: 18:43:00

Test Type: Conventional Bottom Hole (Reset)

Tester: James Winder

Unit No: 57

Interval: 3273.00 ft (KB) To 3300.00 ft (KB) (TVD)

Reference Elevations: 2002.00 ft (KB)

Total Depth: 3300.00 ft (KB) (TVD)

1997.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 5.00 ft

Serial #: 6719

Inside

Press @ Run Depth: 45.37 psig @ 3274.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2012.01.11

End Date: 2012.01.11

Last Calib.: 2012.01.11

Start Time: 12:10:05

End Time: 18:42:59

Time On Btm: 2012.01.11 @ 14:06:00

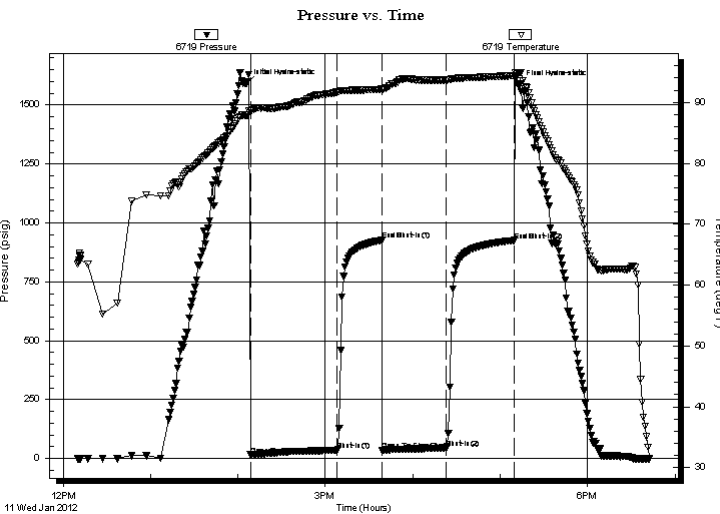
Time Off Btm: 2012.01.11 @ 17:13:00

TEST COMMENT: 60 - IF: Blow built to 1 1/4" in 18 min., then on/off surging blow built to 2 1/4" by 60 min.

30 - IS: Bled off, No blow back

45 - FF: Blow started at 7 min., on/off surging blow built to 1 1/4"

45 - FS: Bled off, No blow back



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1591.05	87.92	Initial Hydro-static
3	16.26	88.65	Open To Flow (1)
62	35.39	91.71	Shut-In(1)
93	926.34	92.17	End Shut-In(1)
93	36.41	92.05	Open To Flow (2)
137	45.37	93.66	Shut-In(2)
184	926.03	94.41	End Shut-In(2)
187	1588.68	94.93	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
60.00	WCM w/trace oil 80%w, 20%w	0.57
1.00	WM w/trace oil 50%w, 50%w	0.01

* Recovery from multiple tests

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Bach Oil Production

29-4s-20w Phillips, KS

PO Box 723
Alma, NE 68920

Lloyd #1

Job Ticket: 45554

DST#: 2

ATTN: Bob Peterson

Test Start: 2012.01.11 @ 12:10:00

GENERAL INFORMATION:

Formation: **LKC "F"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 14:08:30

Time Test Ended: 18:43:00

Test Type: Conventional Bottom Hole (Reset)

Tester: James Winder

Unit No: 57

Interval: 3273.00 ft (KB) To 3300.00 ft (KB) (TVD)

Reference Elevations: 2002.00 ft (KB)

Total Depth: 3300.00 ft (KB) (TVD)

1997.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 5.00 ft

Serial #: 8320 Outside

Press @ Run Depth: psig @ 3274.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2012.01.11

End Date: 2012.01.11

Last Calib.: 2012.01.11

Start Time: 12:10:05

End Time: 18:42:29

Time On Btm:

Time Off Btm:

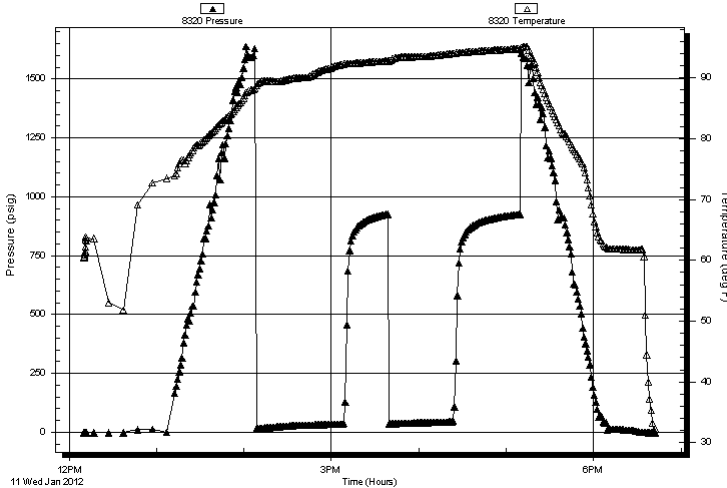
TEST COMMENT: 60 - IF: Blow built to 1 1/4" in 18 min., then on/off surging blow built to 2 1/4" by 60 min.

30 - IS: Bled off, No blow back

45 - FF: Blow started at 7 min., on/off surging blow built to 1 1/4"

45 - FS: Bled off, No blow back

Pressure vs. Time



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
60.00	WCM w/trace oil 80%m, 20%w	0.57
1.00	WM w/trace oil 50%w, 50%m	0.01

* Recovery from multiple tests

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Bach Oil Production

29-4s-20w Phillips,KS

PO Box 723
Alma, NE 68920

Lloyd #1

Job Ticket: 45554

DST#: 2

ATTN: Bob Peterson

Test Start: 2012.01.11 @ 12:10:00

Tool Information

Drill Pipe:	Length: 3233.00 ft	Diameter: 3.80 inches	Volume: 45.35 bbl	Tool Weight: 2500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 30.00 ft	Diameter: 2.25 inches	Volume: 0.15 bbl	Weight to Pull Loose: 54000.00 lb
			<u>Total Volume: 45.50 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	18.00 ft			String Weight: Initial 46000.00 lb
Depth to Top Packer:	3273.00 ft			Final 46000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	27.00 ft			
Tool Length:	55.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
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Shut In Tool	5.00			3250.00	
Hydraulic tool	5.00			3255.00	
Jars	5.00			3260.00	
Safety Joint	3.00			3263.00	
Packer	5.00			3268.00	28.00 Bottom Of Top Packer
Packer	5.00			3273.00	
Stubb	1.00			3274.00	
Recorder	0.00	6719	Inside	3274.00	
Recorder	0.00	8320	Outside	3274.00	
Perforations	23.00			3297.00	
Bullnose	3.00			3300.00	27.00 Bottom Packers & Anchor

Total Tool Length: 55.00



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Bach Oil Production

29-4s-20w Phillips,KS

PO Box 723
Alma, NE 68920

Lloyd #1

Job Ticket: 45554

DST#: 2

ATTN: Bob Peterson

Test Start: 2012.01.11 @ 12:10:00

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:

17000 ppm

Viscosity: 62.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.98 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 bbbl
60.00	WCM w/trace oil 80% _m , 20% _w	0.568
1.00	WM w/trace oil 50% _w , 50% _m	0.014

Total Length: 61.00 ft Total Volume: 0.582 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: RW= .491 @ 54.4 deg F

Serial #: 6719

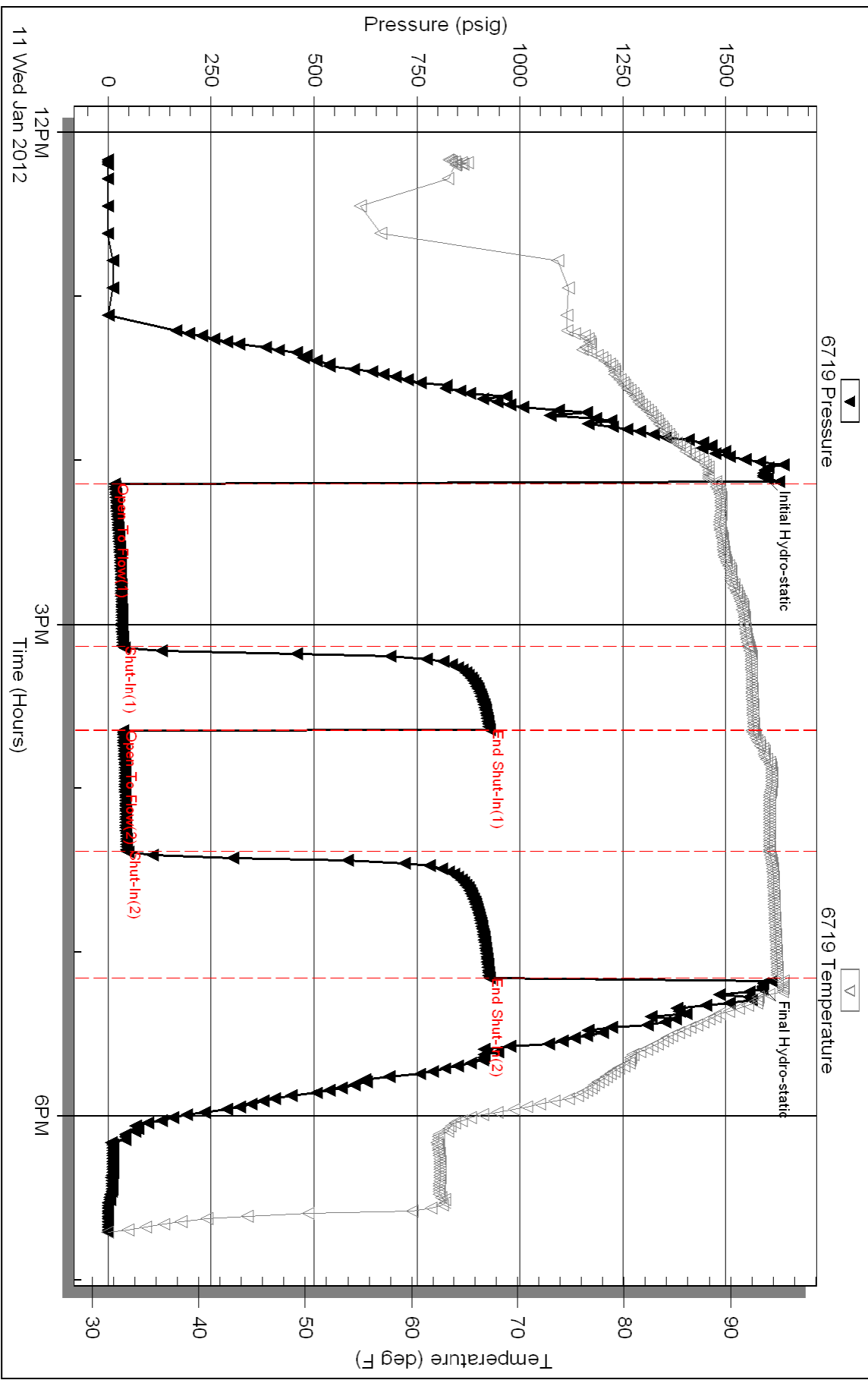
Inside

Bach Oil Production

Lloyd #1

DST Test Number: 2

Pressure vs. Time



Triobite Testing, Inc

Ref. No: 45554

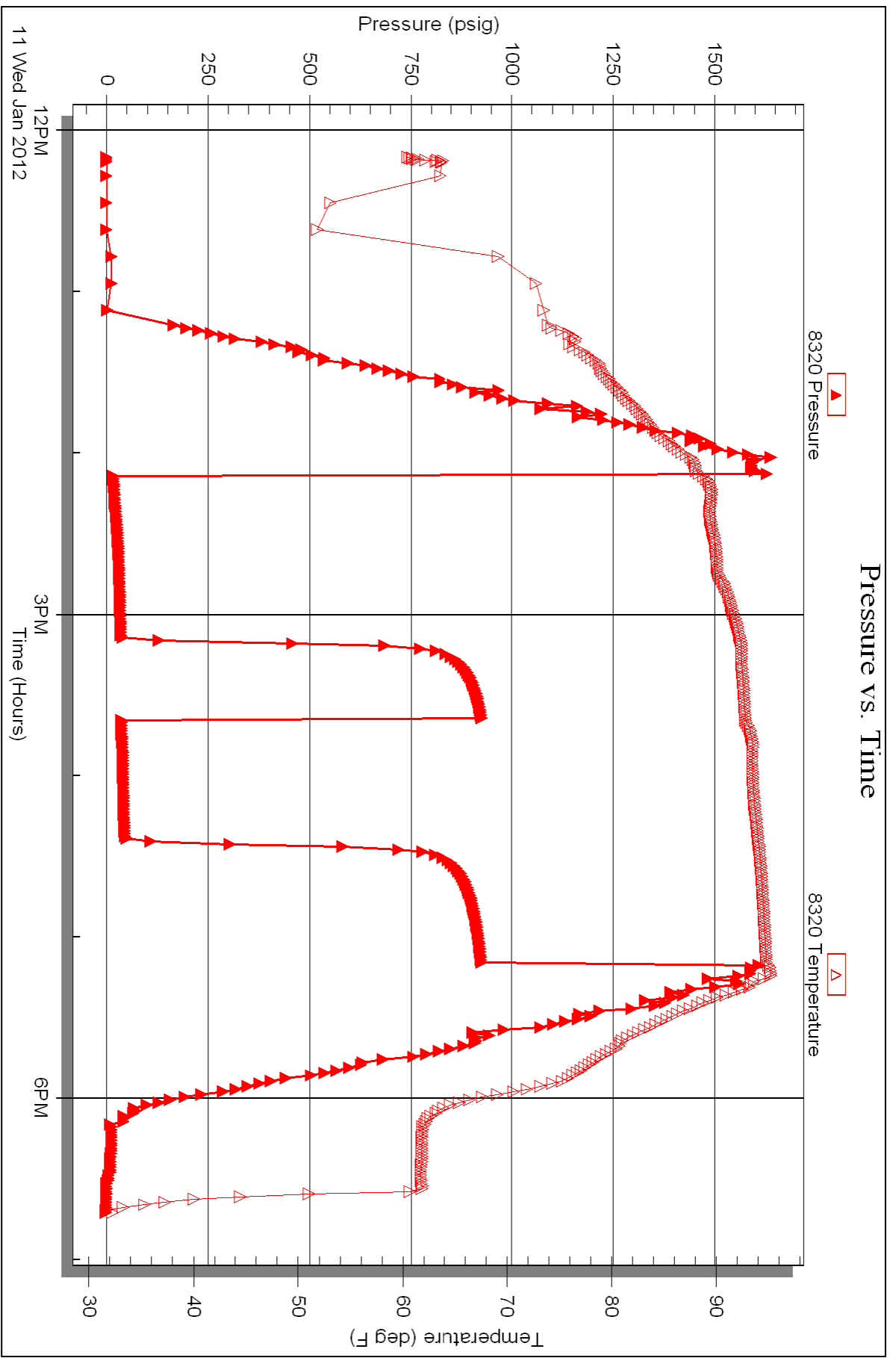
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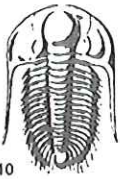
Serial #: 8320

Outside Bach Oil Production

Lloyd #1

DST Test Number: 2





TRILOBITE TESTING INC.

P.O. Box 1733 • Hays, Kansas 67601

RECEIVED
JAN 12 2012

Test Ticket

NO. 45553

BY: _____

Well Name & No. Bach Oil Production Lloyd #1 Test No. 1 Date 1-10-12
 Company Bach Oil Production Elevation 2002 KB 1997 GL
 Address PO Box 723 Alma NE 68920
 Co. Rep / Geo. Bob Peterson Rig Murfin #16
 Location: Sec. 29 Twp. 4s Rge. 20w Co. Phillips State KS

Interval Tested 3235-3260 Zone Tested LKC "C"
 Anchor Length 25 Drill Pipe Run 3202 Mud Wt. 8.7
 Top Packer Depth 3220 Drill Collars Run 30 Vis 53
 Bottom Packer Depth 3225 Wt. Pipe Run - WL 7.6
 Total Depth 3260 Chlorides 800 ppm System LCM 3

Blow Description IF: Blow built to 2 1/2"
ISI: Bled off, No blowback
FF: Blow built to 1 1/4"
FSI: Bled off, No blowback

Rec	Feet of	%gas	%oil	%water	%mud
<u>5</u>	<u>WMCO</u>	<u>2</u>	<u>66</u>	<u>11</u>	<u>21</u>
<u>35</u>	<u>SOCM</u>	<u>-</u>	<u>2</u>	<u>-</u>	<u>98</u>
	<u>GIP = 20'</u>				

Rec Total 40 BHT 94 Gravity - API RW - @ - °F Chlorides - ppm

(A) Initial Hydrostatic <u>1564</u>	<input type="checkbox"/> Test <u>1125'</u>	T-On Location <u>19:30</u>
(B) First Initial Flow <u>16</u>	<input checked="" type="checkbox"/> Jars <u>250'</u>	T-Started <u>22:00</u>
(C) First Final Flow <u>29</u>	<input checked="" type="checkbox"/> Safety Joint <u>75'</u>	T-Open <u>23:53</u>
(D) Initial Shut-In <u>929</u>	<input checked="" type="checkbox"/> Circ Sub <u>NA</u>	T-Pulled <u>3:09</u>
(E) Second Initial Flow <u>34</u>	<input type="checkbox"/> Hourly Standby <u>1/2 hr 50'</u>	T-Out <u>4:55</u>
(F) Second Final Flow <u>35</u>	<input type="checkbox"/> Mileage <u>130 RT 182'</u>	Comments _____
(G) Final Shut-In <u>926</u>	<input checked="" type="checkbox"/> Sampler _____	
(H) Final Hydrostatic <u>1561</u>	<input checked="" type="checkbox"/> Straddle _____	<input checked="" type="checkbox"/> Ruined Shale Packer _____

Initial Open <u>45</u>	<input checked="" type="checkbox"/> Extra Packer _____	<input checked="" type="checkbox"/> Extra Copies _____
Initial Shut-In <u>45</u>	<input checked="" type="checkbox"/> Extra Recorder _____	Sub Total <u>Ø</u>
Final Flow <u>45</u>	<input checked="" type="checkbox"/> Day Standby _____	Total <u>11682'</u>
Final Shut-In <u>60</u>	<input checked="" type="checkbox"/> Accessibility _____	MP/DST Disc't _____
	Sub Total <u>11682'</u>	

Approved By _____ Our Representative James Winder

Trilobite Testing Inc. shall not be liable for damaged or 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.



TRILOBITE TESTING INC.

P.O. Box 1733 • Hays, Kansas 67601

RECEIVED
JAN 12 2012

Test Ticket

NO. 45554

4/10

BY: _____

Well Name & No. Lloyd #1 Test No. 2 Date 1-11-12
 Company Bagh Oil Production Elevation 2002 KB 1997 GL
 Address PO Box 723 Alma NE 68920
 Co. Rep / Geo. Bob Peterson Rig Murfin #16
 Location: Sec. 29 Twp. 4s Rge. 20w Co. Phillips State KS

Interval Tested 3273 - 3300 Zone Tested LKC "F"
 Anchor Length 27 Drill Pipe Run 3223 Mud Wt. 9.0
 Top Packer Depth 3268 Drill Collars Run 30 Vis 62
 Bottom Packer Depth 3273 Wt. Pipe Run - WL 8.0
 Total Depth 3300 Chlorides 1000 ppm System LCM 3
 Blow Description IF: Blow built to 1 1/4" in 18 min., then on/off ^{surging} blow built to 2 1/4" by 60 min.
ISI: Bled off, No blowback
FF: Blow started at 7 min., on/off ^{surging} blow built to 1 1/4"
FSI: Bled off, No blowback

Rec	Feet of	%gas	%oil	%water	%mud
<u>1</u>	<u>WCM w/trace oil</u>	<u>-</u>	<u>trace</u>	<u>50</u>	<u>50</u>
<u>60</u>	<u>WCM w/trace oil</u>	<u>-</u>	<u>trace</u>	<u>20</u>	<u>80</u>
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 61 BHT 94 Gravity - API RW .491 @ 59.4 °F Chlorides _____ ppm

(A) Initial Hydrostatic 1591 Test * 1125' T-On Location 11:35
 (B) First Initial Flow 16 Jars * 250' T-Started 12:10
 (C) First Final Flow 35 Safety Joint * 75' T-Open 14:08
 (D) Initial Shut-In 926 Circ Sub * N/A T-Pulled 17:09
 (E) Second Initial Flow 36 Hourly Standby _____ T-Out 18:35
 (F) Second Final Flow 45 Mileage 130 RT 182' Comments _____
 (G) Final Shut-In 926 Sampler _____
 (H) Final Hydrostatic 1589 Straddle _____ Ruined Shale Packer _____
 Shale Packer _____ Ruined Packer _____
 Extra Packer _____ Extra Copies _____
 Extra Recorder _____ Sub Total 0
 Day Standby _____ Total 11632'
 Accessibility _____ MP/DST Disc't _____
 Sub Total 11632'

Approved By _____ Our Representative Jensen Winters

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.