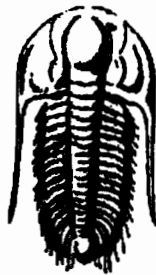


15-195-22717

18-11s-23w



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Prepared For: **Phillips Exploration Co LLC**

1601 Sagebrush
Wichita KS 67230-7010

ATTN: Jim Phillips

18-11s-23w Trego,KS

Herman/Moden #1-18

Start Date: 2011.09.05 @ 13:35:45

End Date: 2011.09.05 @ 20:21:09

Job Ticket #: 44556 DST #: 1

RECEIVED
FEB 27 2012
KCC WICHITA

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

ORIGINAL

Printed: 2011.09.15 @ 10:18:58

Phillips Exploration Co LLC Herman/Moden #1-18 18-11s-23w Trego,KS DST # 1 LKC A-C 2011.09.05



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Phillips Exploration Co LLC

1601 Sagebrush
Wichita KS 67230-7010

ATTN: Jim Phillips

Herman/Moden #1-18

18-11s-23w Trego,KS

Job Ticket: 44556

DST#: 1

Test Start: 2011.09.05 @ 13:35:45

GENERAL INFORMATION:

Formation: LKC A-C

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 15:23:10

Time Test Ended: 20:21:09

Test Type: Conventional Bottom Hole (Initial)

Tester: Ray Schwager

Unit No: 42

Interval: 3735.00 ft (KB) To 3800.00 ft (KB) (TVD)

Total Depth: 3800.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 2372.00 ft (KB)

2367.00 ft (CF)

KB to GR/CF: 5.00 ft

Serial #: 6625

Inside

Press@RunDepth: 303.57 psig @ 3739.00 ft (KB)

Start Date: 2011.09.05

End Date:

2011.09.05

Start Time: 13:35:00

End Time:

20:20:24

Capacity: 8000.00 psig

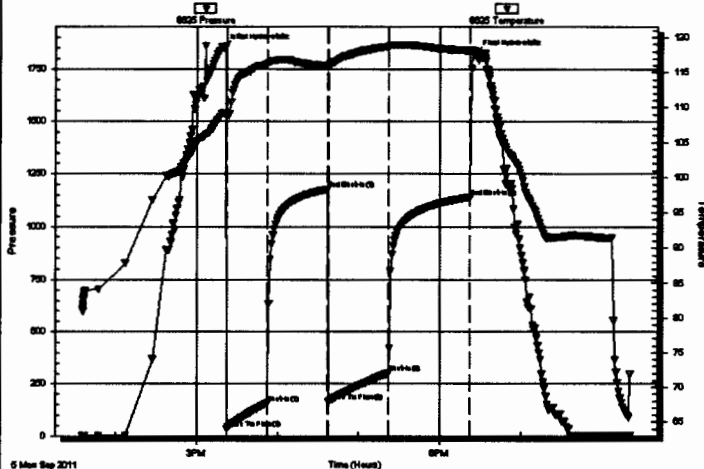
Last Calib.: 2011.09.05

Time On Btm: 2011.09.05 @ 15:19:25

Time Off Btm: 2011.09.05 @ 18:25:54

TEST COMMENT: 30-IFP-w k to strg in 11min
45-ISIP-surface bl bk
45-FFP-w k to strg in 15 min
60-FSIP-no bl bk

Pressure vs. Time



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1850.62	109.16	Initial Hydro-static
3	35.76	108.89	Open To Flow (1)
33	157.75	116.21	Shut-In(1)
78	1177.74	115.93	End Shut-In(1)
78	166.28	115.91	Open To Flow (2)
123	303.57	118.68	Shut-In(2)
183	1140.51	118.11	End Shut-In(2)
187	1822.51	118.00	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
80.00	MW 45%W55%Mw/show of oil	0.85
480.00	Water	6.73

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Phillips Exploration Co LLC

Herman/Moden #1-18

1601 Sagebrush
Wichita KS 67230-7010

18-11s-23w Trego, KS

Job Ticket: 44556

DST#: 1

ATTN: Jim Phillips

Test Start: 2011.09.05 @ 13:35:45

Tool Information

Drill Pipe:	Length: 3707.00 ft	Diameter: 3.80 inches	Volume: 52.00 bbl	Tool Weight:	2200.00 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:	60000.00 lb
		Total Volume:	52.15 bbl	Tool Chased	0.00 ft
Drill Pipe Above KB:	25.00 ft			String Weight: Initial	43000.00 lb
Depth to Top Packer:	3735.00 ft			Final	45000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	65.00 ft				
Tool Length:	88.00 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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Change Over Sub	1.00			3713.00	
Shut In Tool	5.00			3718.00	
Hydraulic tool	5.00			3723.00	
Safety Joint	2.00			3725.00	
Packer	5.00			3730.00	23.00 Bottom Of Top Packer
Packer	5.00			3735.00	
Stubb	1.00			3736.00	
Perforations	3.00			3739.00	
Recorder	0.00	6625	Inside	3739.00	
Recorder	0.00	8700	Outside	3739.00	
Blank Spacing	33.00			3772.00	
Perforations	25.00			3797.00	
Bullnose	3.00			3800.00	65.00 Bottom Packers & Anchor

Total Tool Length: 88.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Phillips Exploration Co LLC

Herman/Moden #1-18

1601 Sagebrush
Wichita KS 67230-7010

18-11s-23w Trego,KS

Job Ticket: 44556

DST#: 1

ATTN: Jim Phillips

Test Start: 2011.09.05 @ 13:35:45

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: 54.00 sec/qt

Cushion Volume:

bbl

Water Loss: 6.35 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 500.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
80.00	MW 45%W55%Mw/show of oil	0.849
480.00	Water	6.733

Total Length: 560.00 ft

Total Volume: 7.582 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: RW.11@80F

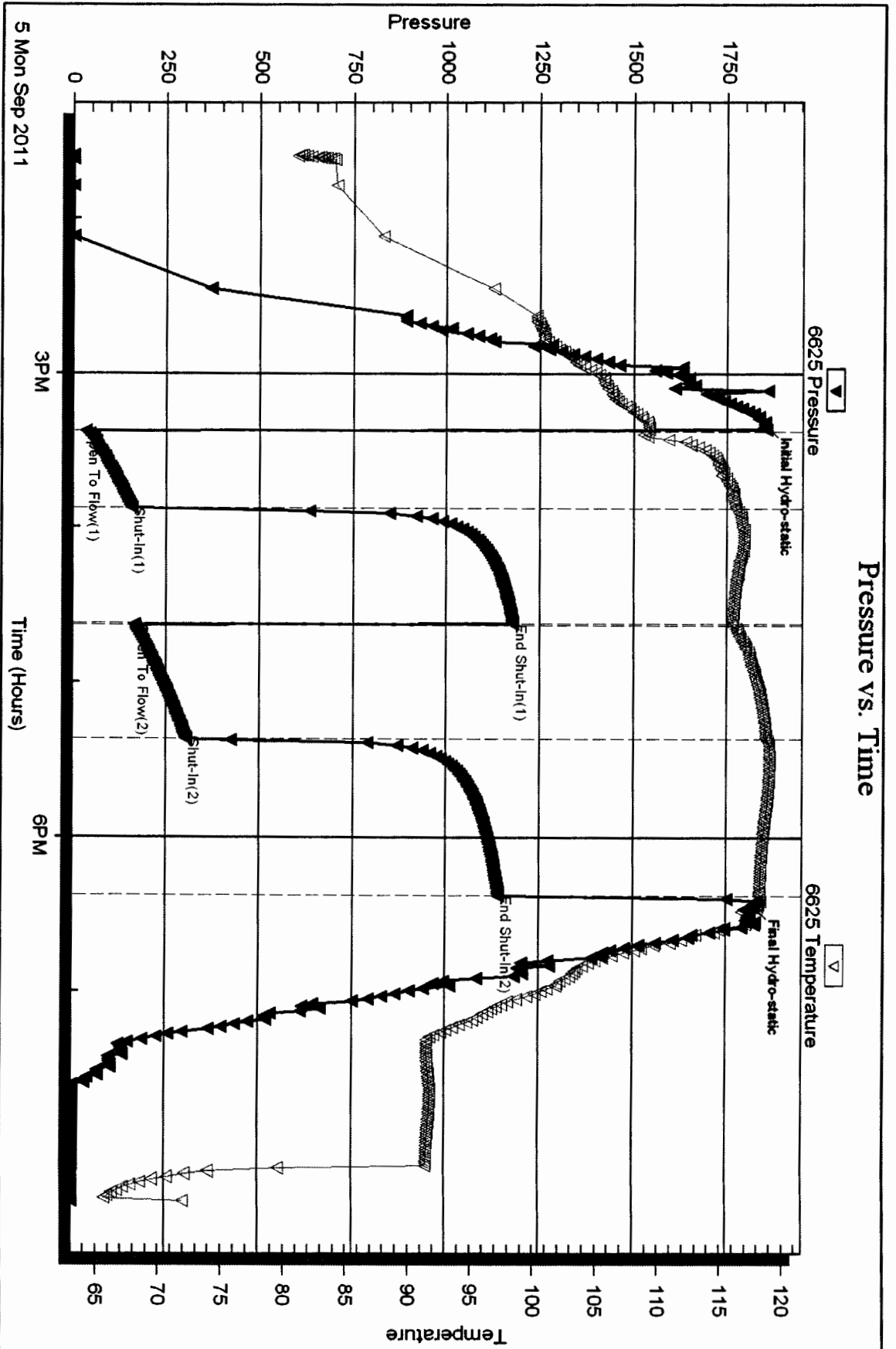
Serial #: 6625

Inside

Phillips Exploration Co LLC

18-11s-23w Trego, KS

DST Test Number: 1



Trickle Testing, Inc

Ref. No: 44556

Printed: 2011.09.15 @ 10:18:59



DRILL STEM TEST REPORT

Prepared For: **Phillips Exploration Co LLC**

1601 Sagebrush
Wichita KS 67230-7010

ATTN: Jim Phillips

18-11s-23w Trego,KS

Herman/Moden #1-18

Start Date: 2011.09.06 @ 07:45:22

End Date: 2011.09.06 @ 13:16:46

Job Ticket #: 44557 DST #: 2

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

ph: 785-625-4778 fax: 785-625-5620

Printed: 2011.09.15 @ 10:19:26

Phillips Exploration Co LLC Herman/Moden #1-18 18-11s-23w Trego,KS DST # 2 LKC H-I 2011.09.06



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Phillips Exploration Co LLC

1601 Sagebrush
Wichita KS 67230-7010

ATTN: Jim Phillips

Herman/Moden #1-18

18-11s-23w Trego, KS

Job Ticket: 44557

DST#: 2

Test Start: 2011.09.06 @ 07:45:22

GENERAL INFORMATION:

Formation: LKC H-I

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 09:39:17

Time Test Ended: 13:16:46

Test Type: Conventional Bottom Hole (Reset)

Tester: Ray Schwager

Unit No: 42

Interval: 3870.00 ft (KB) To 3904.00 ft (KB) (TVD)

Total Depth: 3904.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 2372.00 ft (KB)

2367.00 ft (CF)

KB to GR/CF: 5.00 ft

Serial #: 6625 Inside

Press@RunDepth: 33.34 psig @ 3876.00 ft (KB)

Start Date: 2011.09.06

End Date: 2011.09.06

Capacity: 8000.00 psig

Last Calib.: 2011.09.06

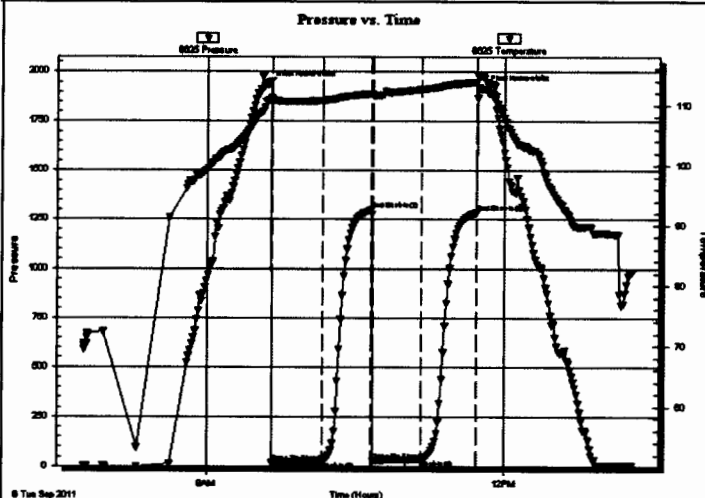
Start Time: 07:45:22

End Time: 13:16:46

Time On Btm: 2011.09.06 @ 09:36:47

Time Off Btm: 2011.09.06 @ 11:46:47

TEST COMMENT: 30-IFP-surface bl thru-out
30-ISIP-no bl bk
30-FFP-no bl flushed tool
30-FSIP-no bl



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1933.97	110.78	Initial Hydro-static
3	19.49	111.05	Open To Flow (1)
33	25.22	110.80	Shut-In(1)
63	1299.09	111.91	End Shut-In(1)
64	28.71	111.63	Open To Flow (2)
93	33.34	112.63	Shut-In(2)
126	1284.89	113.83	End Shut-In(2)
130	1911.77	114.81	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
10.00	Mud w/show of oil	0.05

* Recovery from multiple tests

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
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**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Phillips Exploration Co LLC

Herman/Moden #1-18

1601 Sagebrush
Wichita KS 67230-7010

18-11s-23w Trego, KS

Job Ticket: 44557

DST#: 2

ATTN: Jim Phillips

Test Start: 2011.09.06 @ 07:45:22

Tool Information

Drill Pipe:	Length: 3835.00 ft	Diameter: 3.80 inches	Volume: 53.79 bbl	Tool Weight:	2200.00 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
		Total Volume:	53.94 bbl	Tool Chased	0.00 ft
Drill Pipe Above KB:	18.00 ft			String Weight: Initial	41000.00 lb
Depth to Top Packer:	3870.00 ft			Final	41000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	34.00 ft				
Tool Length:	57.00 ft				
Number of Packers:	2	Diameter:	6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			3848.00	
Shut In Tool	5.00			3853.00	
Hydraulic tool	5.00			3858.00	
Safety Joint	2.00			3860.00	
Packer	5.00			3865.00	23.00 Bottom Of Top Packer
Packer	5.00			3870.00	
Stubb	1.00			3871.00	
Perforations	5.00			3876.00	
Recorder	0.00	6625	Inside	3876.00	
Recorder	0.00	8700	Outside	3876.00	
Perforations	25.00			3901.00	
Bullnose	3.00			3904.00	34.00 Bottom Packers & Anchor

Total Tool Length: 57.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Phillips Exploration Co LLC

Herman/Moden #1-18

1601 Sagebrush
Wichita KS 67230-7010

18-11s-23w Trego, KS

Job Ticket: 44557

DST#: 2

ATTN: Jim Phillips

Test Start: 2011.09.06 @ 07:45:22

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: 55.00 sec/qt

Cushion Volume:

bbl

Water Loss: 6.34 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 500.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
10.00	Mud w/show of oil	0.049

Total Length: 10.00 ft

Total Volume: 0.049 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

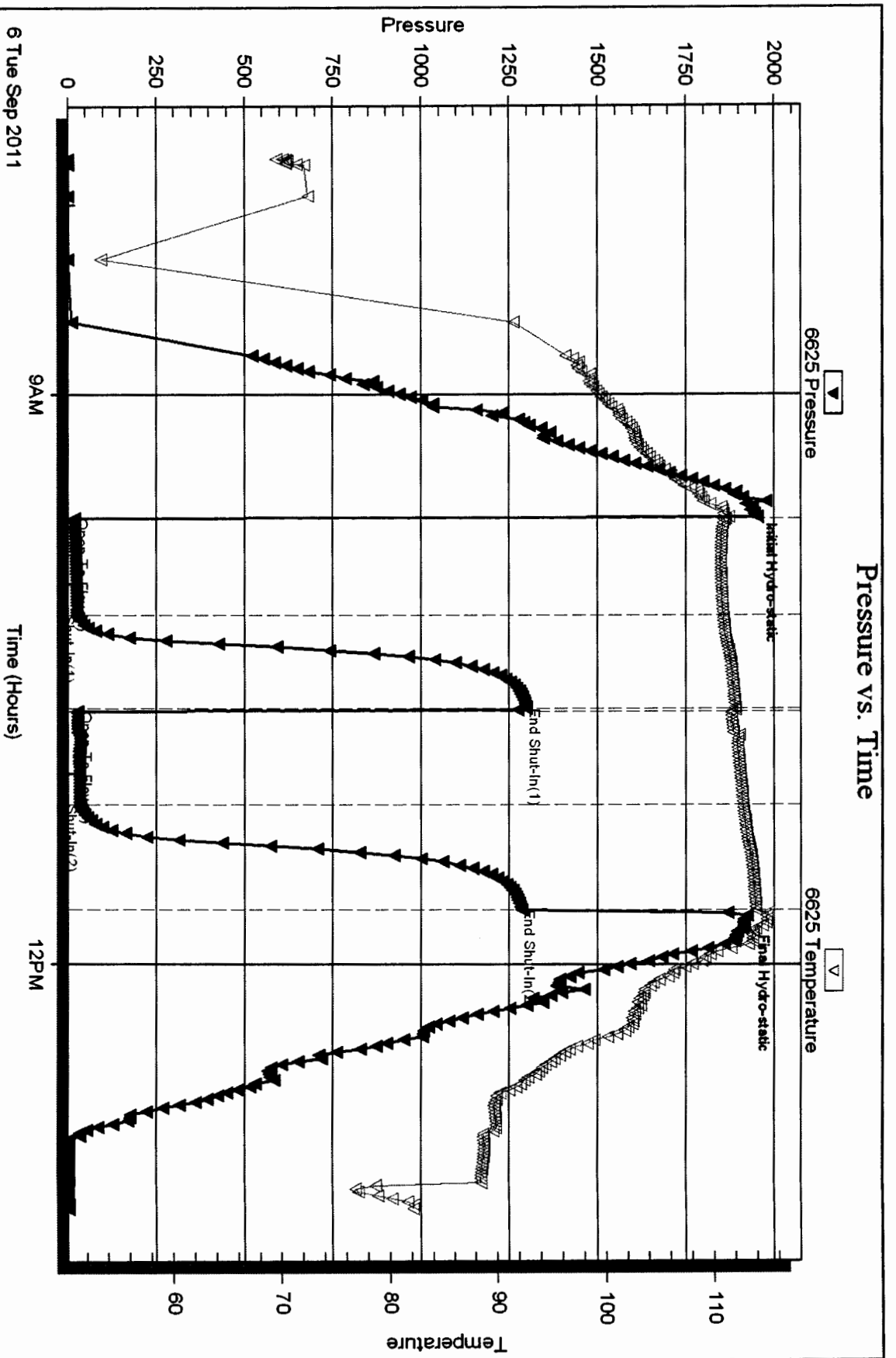
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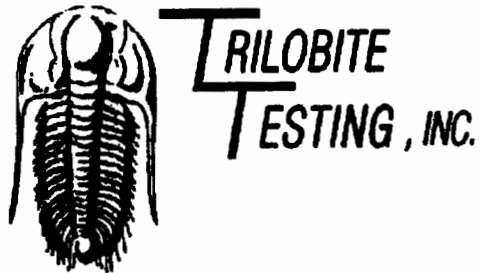
Inside

Phelps Exploration Co LLC

18-11s-23w Trego KS

DST Test Number: 2





DRILL STEM TEST REPORT

Prepared For: **Phillips Exploration Co LLC**

1601 Sagebrush
Wichita KS 67230-7010

ATTN: Jim Phillips

18-11s-23w Trego,KS

Herman/Moden #1-18

Start Date: 2011.09.06 @ 21:15:05

End Date: 2011.09.07 @ 04:47:59

Job Ticket #: 44558 DST #: 3

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

ph: 785-625-4778 fax: 785-625-5620

Printed: 2011.09.15 @ 10:20:00

Phillips Exploration Co LLC Herman/Moden #1-18 18-11s-23w Trego,KS DST # 3 LKC J-K 2011.09.06



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Phillips Exploration Co LLC

1601 Sagebrush
Wichita KS 67230-7010

ATTN: Jim Phillips

Herman/Moden #1-18

18-11s-23w Trego, KS

Job Ticket: 44558

DST#: 3

Test Start: 2011.09.06 @ 21:15:05

GENERAL INFORMATION:

Formation: LKC J-K

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 23:32:30

Time Test Ended: 04:47:59

Test Type: Conventional Bottom Hole (Reset)

Tester: Ray Schwager

Unit No: 42

Interval: 3902.00 ft (KB) To 3948.00 ft (KB) (TVD)

Total Depth: 3948.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 2372.00 ft (KB)

2367.00 ft (CF)

KB to GR/CF: 5.00 ft

Serial #: 6625

Inside

Press@RunDepth: 151.02 psig @ 3912.00 ft (KB)

Start Date: 2011.09.06

End Date:

2011.09.07

Capacity: 8000.00 psig

Last Calib.: 2011.09.07

Start Time: 21:15:05

End Time:

04:47:59

Time On Btm: 2011.09.06 @ 23:29:00

Time Off Btm: 2011.09.07 @ 02:37:29

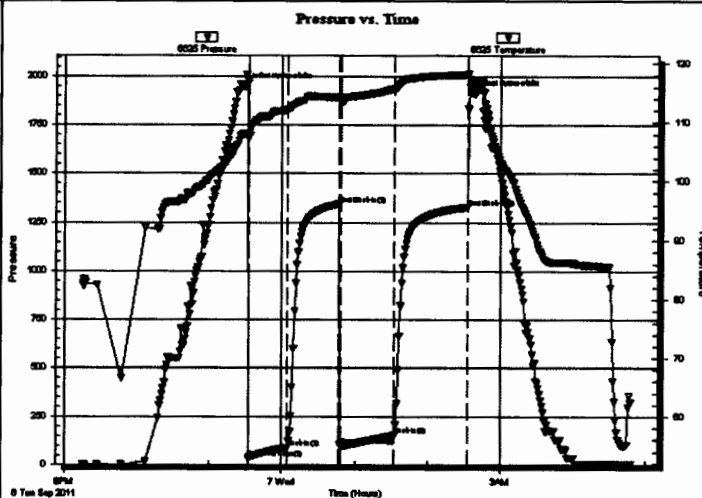
TEST COMMENT: 30-IFP-wk to strg in 10min

45-ISIP-1 1/2"bl bk

45-FFP-strg bl in 6min

60-FSIP-2 1/4"bl bk

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1945.71	107.96	Initial Hydro-static
4	34.81	107.23	Open To Flow (1)
36	88.37	112.09	Shut-In(1)
78	1344.64	114.23	End Shut-In(1)
79	97.13	113.83	Open To Flow (2)
124	151.02	115.66	Shut-In(2)
184	1327.61	118.04	End Shut-In(2)
189	1910.32	116.83	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
62.00	MGO 25%G25%M50%O	0.60
95.00	MGO 25%G10%M65%O	1.33
170.00	CO	2.38
0.00	1040'GIP	0.00

* Recovery from multiple tests

Gas Rates

Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
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**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Phillips Exploration Co LLC

Herman/Moden #1-18

1601 Sagebrush
Wichita KS 67230-7010

18-11s-23w Trego, KS

Job Ticket: 44558

DST#: 3

ATTN: Jim Phillips

Test Start: 2011.09.06 @ 21:15:05

Tool Information

Drill Pipe:	Length: 3868.00 ft	Diameter: 3.80 inches	Volume: 54.26 bbl	Tool Weight:	2200.00 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
		Total Volume:	54.41 bbl	Tool Chased	0.00 ft
Drill Pipe Above KB:	19.00 ft			String Weight: Initial	40000.00 lb
Depth to Top Packer:	3902.00 ft			Final	42000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	46.00 ft				
Tool Length:	69.00 ft				
Number of Packers:	2	Diameter:	6.75 inches		

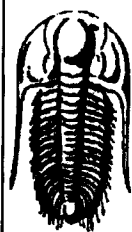
Tool Comments:

Tool Description

Length (ft) Serial No. Position Depth (ft) Accum. Lengths

Change Over Sub	1.00			3880.00	
Shut In Tool	5.00			3885.00	
Hydraulic tool	5.00			3890.00	
Safety Joint	2.00			3892.00	
Packer	5.00			3897.00	23.00 Bottom Of Top Packer
Packer	5.00			3902.00	
Stubb	1.00			3903.00	
Perforations	9.00			3912.00	
Recorder	0.00	6625	Inside	3912.00	
Recorder	0.00	8700	Outside	3912.00	
Blank Spacing	33.00			3945.00	
Bullnose	3.00			3948.00	46.00 Bottom Packers & Anchor

Total Tool Length: 69.00



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Phillips Exploration Co LLC

Herman/Moden #1-18

1601 Sagebrush
Wichita KS 67230-7010

18-11s-23w Trego, KS

Job Ticket: 44558

DST#: 3

ATTN: Jim Phillips

Test Start: 2011.09.06 @ 21:15:05

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

25 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 54.00 sec/qt

Cushion Volume:

bbl

Water Loss: 6.78 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 1100.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
62.00	MGO 25%G25%M50%O	0.596
95.00	MGO 25%G10%M65%O	1.333
170.00	CO	2.385
0.00	1040'GIP	0.000

Total Length: 327.00 ft

Total Volume: 4.314 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

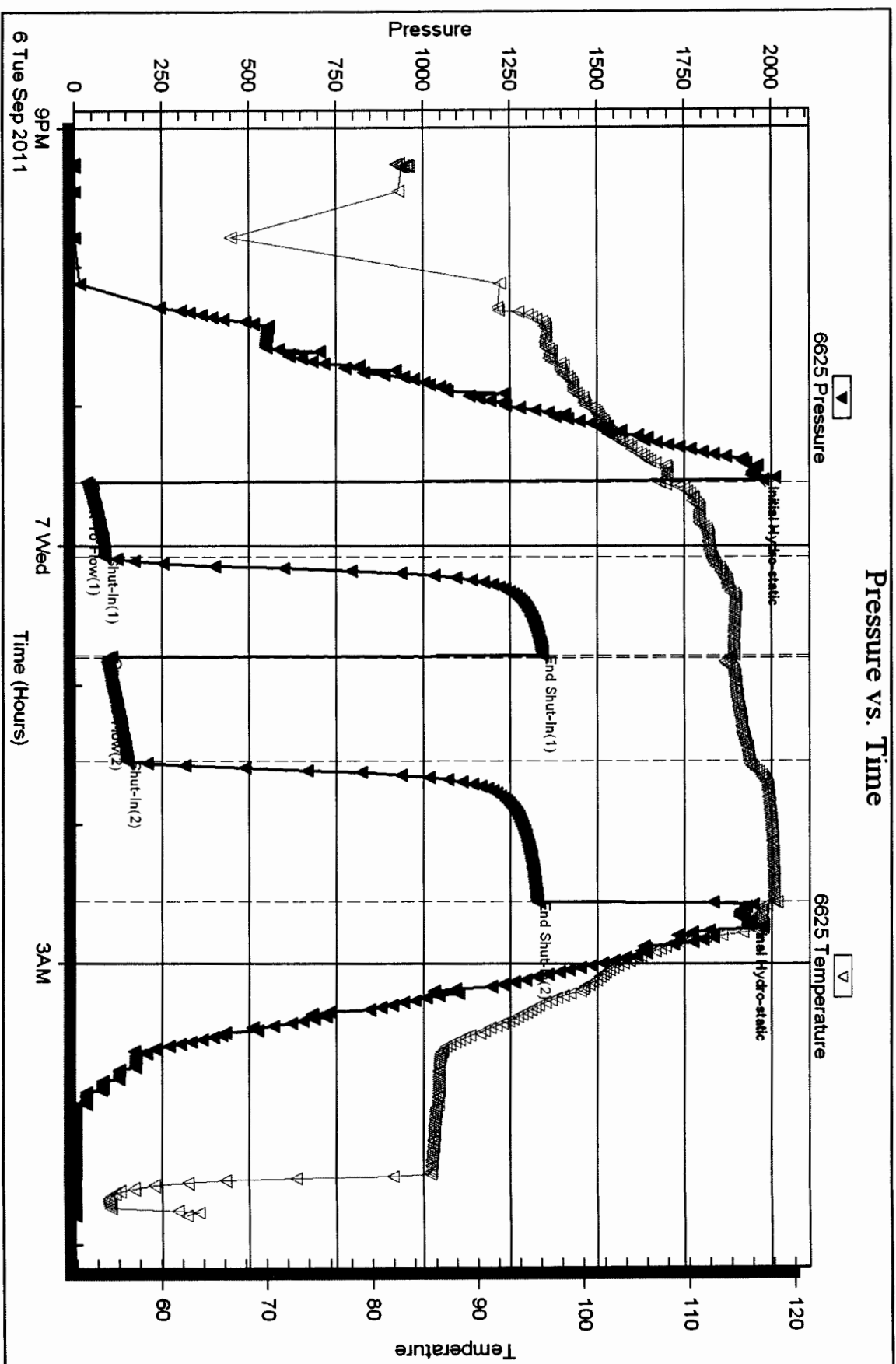
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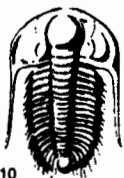
Inside

Phelps Exploration Co LLC

18-11s-23w Trego, KS

DST Test Number: 3





TRILOBITE TESTING INC.

P.O. Box 1733 • Hays, Kansas 67601

RECEIVED

SEP 07 2011

Test Ticket

NO. 44556

BY: _____
Well Name & No. HERMAN / Moden #1-18 Test No. 1 Date 9-5-11
Company Phillips Explorations Co LLC Elevation 2372 KB 2367 GL
Address 1601 Sagebrush Wichita, KS 67230-7010
Co. Rep / Geo. Jim Phillips Rig MURFIN rig 16
Location: Sec. 18 Twp. 11^s Rge. 23^w Co. Trego State KS

Interval Tested 3735-3800 Zone Tested LKC A-C
Anchor Length 65 Drill Pipe Run 3707 Mud Wt. 9.1
Top Packer Depth 3730 Drill Collars Run 30 Vis 54
Bottom Packer Depth 3735 Wt. Pipe Run - WL 6.4
Total Depth 3800 Chlorides 500 ppm System LCM 2#

Blow Description IFP - WEAK TO STRONG IN 11 MIN
TSIP - SURFACE BLOW BACK
FFP - WEAK TO STRONG IN 15 MIN
FSIP - NO BLOW

Rec	Feet of	%gas	%oil	%water	%mud
<u>80</u>	<u>WM w/show of oil</u>		<u>45</u>	<u>55</u>	
<u>480</u>	<u>WATER</u>				

Rec Total 560 BHT 118 Gravity - API RW .11 @ 80 °F Chlorides 60000 ppm

(A) Initial Hydrostatic 1850
(B) First Initial Flow 35
(C) First Final Flow 157
(D) Initial Shut-In 1177
(E) Second Initial Flow 166
(F) Second Final Flow 303
(G) Final Shut-In 1140
(H) Final Hydrostatic 1822

☒ Test 1125
☐ Jars
☒ Safety Joint 75
☐ Circ Sub
☐ Hourly Standby
☒ Mileage 98 RT 137.20
☐ Sampler
☐ Straddle
☐ Shale Packer
☐ Extra Packer
☐ Extra Recorder
☐ Day Standby
☐ Accessibility
Sub Total 1337.20

T-On Location 1300
T-Started 1335
T-Open 1520
T-Pulled 1820
T-Out 2021

Comments _____

Initial Open 30
Initial Shut-In 45
Final Flow 45
Final Shut-In 60

☐ Ruined Shale Packer
☐ Ruined Packer
☐ Extra Copies
Sub Total 0
Total 1337.20
MP/DST Disc't _____

Approved By _____

Our Representative

RAY SCHWAGER THANK YOU

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.



TRILOBITE TESTING INC.

P.O. Box 1733 • Hays, Kansas 67601

RECEIVED

SEP 07 2011

Test Ticket

NO. 44557

Well Name & No. Herrman / Moden #1-18 Test No. 2 Date 9-6-11
 Company Phillips Explorations Co LC Elevation 2372 KB 2367 GL
 Address 1601 Sagebrush Wichita, Ko 67230-7010
 Co. Rep / Geo. Jim Phillips Rig Murfin rig 16
 Location: Sec. 18 Twp. 11^s Rge. 23^w Co. Trego State Ko

Interval Tested 3870-3904 Zone Tested LKC H-I
 Anchor Length 34 Drill Pipe Run 3835 Mud Wt. 9.4
 Top Packer Depth 3865 Drill Collars Run 30 Vis SS
 Bottom Packer Depth 3870 Wt. Pipe Run - WL 6.4
 Total Depth 3904 Chlorides 500 ppm System LCM 2 #

Blow Description IFP - SURFACE Blow Thru-out
ISIP - NO Blow
FFP - NO Blow, flushed Tool
FSIP - NO Blow

Rec	Feet of	%gas	%oil	%water	%mud
<u>10</u>	<u>Mud w/show of oil</u>				
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 10 BHT 113 Gravity - API RW - @ - °F Chlorides - ppm

(A) Initial Hydrostatic 1933
 (B) First Initial Flow 19
 (C) First Final Flow 25
 (D) Initial Shut-In 1299
 (E) Second Initial Flow 28
 (F) Second Final Flow 33
 (G) Final Shut-In 1284
 (H) Final Hydrostatic 1911

☒ Test 1125-
☐ Jars
☒ Safety Joint 75-
☐ Circ Sub
☐ Hourly Standby
☒ Mileage 98RT 137.20
☐ Sampler
☐ Straddle
☐ Shale Packer
☐ Extra Packer
☐ Extra Recorder
☐ Day Standby
☐ Accessibility

T-On Location 0640
 T-Started 0745
 T-Open 0930
 T-Pulled 1130
 T-Out 1316

Comments

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

☐ Ruined Shale Packer
☐ Ruined Packer
☐ Extra Copies
 Sub Total 0
 Total 1337.20
 MP/DST Disc't

Sub Total 1337.20

Approved By

Our Representative

RAY SCHWAGER *thank you*

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.



TRILOBITE TESTING INC.

P.O. Box 1733 • Hays, Kansas 67601

RECEIVED
SEP 07 2011

Test Ticket

NO. 44558

Well Name & No. Herman/Moden #1-18 Test No. 3 Date 9-6-11
Company Phillips Exploration Co LLC Elevation 2372 KB 2367 GL
Address 1601 Sagebrush Wichita, Ks 67230-7010
Co. Rep / Geo. Jim Phillips Rig Murfin rig 16
Location: Sec. 18 Twp. 11^s Rge. 23^w Co. 1 Rego State Ks

Interval Tested 3902-3948 Zone Tested LKC J-K
Anchor Length 46 Drill Pipe Run 3868 Mud Wt. 9.2
Top Packer Depth 3897 Drill Collars Run 30 Vis 54
Bottom Packer Depth 3902 Wt. Pipe Run — WL 6.8
Total Depth 3948 Chlorides 1100 ppm System LCM 1#

Blow Description IFP - WEAK TO STRONG IN 10 MIN
ISIP - 1 1/2" Blow BACK
FFP - STRONG BLOW IN 6 MIN
FSIP - 2 1/4" Blow BACK

Rec	Feet of	%gas	%oil	%water	%mud
<u>1040</u>	<u>GIP</u>				
<u>170</u>	<u>Co</u>				
<u>95</u>	<u>M60</u>	<u>25</u>	<u>65</u>		<u>10</u>
<u>62</u>	<u>M60</u>	<u>25</u>	<u>50</u>		<u>25</u>

Rec Total 327 BHT 118 Gravity 25 API RW — @ — °F Chlorides — ppm

(A) Initial Hydrostatic 1945
(B) First Initial Flow 34
(C) First Final Flow 88
(D) Initial Shut-In 1344
(E) Second Initial Flow 97
(F) Second Final Flow 151
(G) Final Shut-In 1327
(H) Final Hydrostatic 1910

☒ Test 1125
☐ Jars
☒ Safety Joint 75
☐ Circ Sub
☐ Hourly Standby
☒ Mileage 98Rt 137.20

T-On Location 2015
T-Started 2115
T-Open 2330
T-Pulled 0230
T-Out 0447
Comments

☐ Ruined Shale Packer
☐ Ruined Packer
☐ Extra Copies
Sub Total 0
Total 1337.20
MP/DST Disc't

Initial Open 30
Initial Shut-In 45
Final Flow 45
Final Shut-In 60
Sub Total 1337.20
Approved By [Signature] Our Representative RAY SCHWAGER Thank you

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.