



Confidentiality Requested:

Yes No

KANSAS CORPORATION COMMISSION 1237412
OIL & GAS CONSERVATION DIVISION

Form ACO-1

August 2013

Form must be Typed
Form must be Signed
All blanks must be Filled

WELL COMPLETION FORM
WELL HISTORY - DESCRIPTION OF WELL & LEASE

OPERATOR: License # _____

Name: _____

Address 1: _____

Address 2: _____

City: _____ State: _____ Zip: _____ + _____

Contact Person: _____

Phone: (_____) _____

CONTRACTOR: License # _____

Name: _____

Wellsite Geologist: _____

Purchaser: _____

Designate Type of Completion:

- New Well Re-Entry Workover
- Oil WSW SWD SIOW
- Gas D&A ENHR SIGW
- OG GSW Temp. Abd.
- CM (Coal Bed Methane)
- Cathodic Other (Core, Expl., etc.): _____

If Workover/Re-entry: Old Well Info as follows:

Operator: _____

Well Name: _____

Original Comp. Date: _____ Original Total Depth: _____

- Deepening Re-perf. Conv. to ENHR Conv. to SWD
- Plug Back Conv. to GSW Conv. to Producer
- Commingled Permit #: _____
- Dual Completion Permit #: _____
- SWD Permit #: _____
- ENHR Permit #: _____
- GSW Permit #: _____

Spud Date or Recompletion Date	Date Reached TD	Completion Date or Recompletion Date
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API No. 15 - _____

Spot Description: _____

_____ - _____ - _____ Sec. _____ Twp. _____ S. R. _____ East West

_____ Feet from North / South Line of Section

_____ Feet from East / West Line of Section

Footages Calculated from Nearest Outside Section Corner:

- NE NW SE SW

GPS Location: Lat: _____, Long: _____
(e.g. xx.xxxxx) (e.g. -xxx.xxxxx)

Datum: NAD27 NAD83 WGS84

County: _____

Lease Name: _____ Well #: _____

Field Name: _____

Producing Formation: _____

Elevation: Ground: _____ Kelly Bushing: _____

Total Vertical Depth: _____ Plug Back Total Depth: _____

Amount of Surface Pipe Set and Cemented at: _____ Feet

Multiple Stage Cementing Collar Used? Yes No

If yes, show depth set: _____ Feet

If Alternate II completion, cement circulated from: _____

feet depth to: _____ w/ _____ sx cmt.

Drilling Fluid Management Plan

(Data must be collected from the Reserve Pit)

Chloride content: _____ ppm Fluid volume: _____ bbls

Dewatering method used: _____

Location of fluid disposal if hauled offsite:

Operator Name: _____

Lease Name: _____ License #: _____

Quarter _____ Sec. _____ Twp. _____ S. R. _____ East West

County: _____ Permit #: _____

AFFIDAVIT

I am the affiant and I hereby certify that all requirements of the statutes, rules and regulations promulgated to regulate the oil and gas industry have been fully complied with and the statements herein are complete and correct to the best of my knowledge.

Submitted Electronically

KCC Office Use ONLY

- Confidentiality Requested
Date: _____
- Confidential Release Date: _____
- Wireline Log Received
- Geologist Report Received
- UIC Distribution
- ALT I II III Approved by: _____ Date: _____



1237412

Operator Name: _____ Lease Name: _____ Well #: _____

Sec. _____ Twp. _____ S. R. _____ East West County: _____

INSTRUCTIONS: Show important tops of formations penetrated. Detail all cores. Report all final copies of drill stems tests giving interval tested, time tool open and closed, flowing and shut-in pressures, whether shut-in pressure reached static level, hydrostatic pressures, bottom hole temperature, fluid recovery, and flow rates if gas to surface test, along with final chart(s). Attach extra sheet if more space is needed.

Final Radioactivity Log, Final Logs run to obtain Geophysical Data and Final Electric Logs must be emailed to kcc-well-logs@kcc.ks.gov. Digital electronic log files must be submitted in LAS version 2.0 or newer AND an image file (TIFF or PDF).

Drill Stem Tests Taken <i>(Attach Additional Sheets)</i>	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Log	Formation (Top), Depth and Datum	<input type="checkbox"/> Sample
Samples Sent to Geological Survey	<input type="checkbox"/> Yes <input type="checkbox"/> No	Name	Top	Datum
Cores Taken	<input type="checkbox"/> Yes <input type="checkbox"/> No			
Electric Log Run	<input type="checkbox"/> Yes <input type="checkbox"/> No			
List All E. Logs Run:				

CASING RECORD <input type="checkbox"/> New <input type="checkbox"/> Used							
Report all strings set-conductor, surface, intermediate, production, etc.							
Purpose of String	Size Hole Drilled	Size Casing Set (In O.D.)	Weight Lbs. / Ft.	Setting Depth	Type of Cement	# Sacks Used	Type and Percent Additives

ADDITIONAL CEMENTING / SQUEEZE RECORD				
Purpose:	Depth Top Bottom	Type of Cement	# Sacks Used	Type and Percent Additives
<input type="checkbox"/> Perforate				
<input type="checkbox"/> Protect Casing				
<input type="checkbox"/> Plug Back TD				
<input type="checkbox"/> Plug Off Zone				

Did you perform a hydraulic fracturing treatment on this well? Yes No *(If No, skip questions 2 and 3)*

Does the volume of the total base fluid of the hydraulic fracturing treatment exceed 350,000 gallons? Yes No *(If No, skip question 3)*

Was the hydraulic fracturing treatment information submitted to the chemical disclosure registry? Yes No *(If No, fill out Page Three of the ACO-1)*

Shots Per Foot	PERFORATION RECORD - Bridge Plugs Set/Type Specify Footage of Each Interval Perforated	Acid, Fracture, Shot, Cement Squeeze Record <i>(Amount and Kind of Material Used)</i>	Depth

TUBING RECORD: Size: _____ Set At: _____ Packer At: _____ Liner Run: Yes No

Date of First, Resumed Production, SWD or ENHR: _____ Producing Method: Flowing Pumping Gas Lift Other *(Explain)* _____

Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio	Gravity

DISPOSITION OF GAS: <input type="checkbox"/> Vented <input type="checkbox"/> Sold <input type="checkbox"/> Used on Lease <i>(If vented, Submit ACO-18.)</i>	METHOD OF COMPLETION: <input type="checkbox"/> Open Hole <input type="checkbox"/> Perf. <input type="checkbox"/> Dually Comp. <input type="checkbox"/> Commingled <i>(Submit ACO-5)</i> <input type="checkbox"/> Other <i>(Specify)</i> _____ <i>(Submit ACO-4)</i>	PRODUCTION INTERVAL: _____ _____
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Form	ACO1 - Well Completion
Operator	American Oil LLC
Well Name	Kohl 3-19
Doc ID	1237412

Tops

Name	Top	Datum
Anhydrtie	1446	643
Topeka	3116	-1027
Heebner	3336	-1247
Toronto	3360	-1271
LKC	3376	-1287
BKC	3604	-1513
Marmaton	3639	-1549
Arbuckle	3694	-1605
TD	3770	-1681

QUALITY OILWELL CEMENTING, INC.

Federal Tax I.D.# 20-2886107

Phone 785-483-2025
Cell 785-324-1041

Home Office P.O. Box 32 Russell, KS 67665

No. 306

Date	7-1-14	Sec.	19	Twp.	11	Range	19	County	Ellis	State	KS	On Location	10:00AM	Finish	2:00PM
------	--------	------	----	------	----	-------	----	--------	-------	-------	----	-------------	---------	--------	--------

Lease Kohl Well No. 3-19 Location Yocemento N to Buckeye RD
Owner W to 170 1/2 N Winto

Contractor Discovey 4
To Quality Oilwell Cementing, Inc.
You are hereby requested to rent cementing equipment and furnish
cementer and helper to assist owner or contractor to do work as listed.

Type Job plug Charge To American Oil

Hole Size 7 7/8 T.D. 3770 Street American Oil

Csg. Pill pipe Depth City State

Tbg. Size Depth The above was done to satisfaction and supervision of owner agent or contractor.

Tool Depth Cement Amount Ordered 305 60/40

Cement Left in Csg. Shoe Joint Ugozel Yu Flow

Meas Line Displace Common 183

Pumptrk 20 No. Cementer Matt Poz. Mix 122

Bulktrk 4 No. Driver Mike Gel. 11

Bulktrk 04 No. Driver Chad Calcium

EQUIPMENT

JOB SERVICES & REMARKS Hulls

Remarks: Salt

Rat Hole 30 SKS Flowseal 76#

Mouse Hole 15 SKS Kol-Seal

Centralizers Mud CLR 48

Baskets CFL-117 or CD110 CAF 38

D/V or Port Collar Sand

1st 3720 50 SKS Handling 316

2nd 1475 50 SKS Mileage 8 5/8 **FLOAT EQUIPMENT**

3rd 740 100 SKS Guide Shoe

4th 340 50 SKS Centralizer

5th 40 10 SKS Baskets

AFU Inserts

Float Shoe

Latch Down Wood Plug

Pumptrk Charge Mileage 17 Tax Discount Total Charge

X Signature [Signature]

QUALITY OILWELL CEMENTING, INC.

Federal Tax I.D.# 20-2886107

Phone 785-483-2025
Cell 785-324-1041

Home Office P.O. Box 32 Russell, KS 67665

No. 146

Date	6-24-14	Sec.	19	Twp.	11	Range	19	County	ELLIS	State	KANSAS	On Location		Finish	10:00 PM
Lease	Kohl			Well No.	2-19			Owner	Hays Yocemento T-20 Exit 5N 2W 4 1/2 N Y 2 W 1/2 N INTO						
Contractor	Discovery DRWG. Rig #1 "CLIFF"							To Quality Oilwell Cementing, Inc. You are hereby requested to rent cementing equipment and furnish cementer and helper to assist owner or contractor to do work as listed.							
Type Job	Cement Surface														
Hole Size	12 1/4		T.D.	221											
Csg.	8 5/8 New		Depth	221											
Tbg. Size	2 3/8		Depth												
Tool			Depth												
Cement Left in Csg.	15'		Shoe Joint	15 FT											
Meas Line			Displace	13 ¹⁰ BBL											
EQUIPMENT				Common 150											
Pumptrk	18	No.	Cementer	Glenn G.											
			Helper	Cody B.											
Bulktrk	14	No.	Driver	Clayton B.											
			Driver	Lonnie M.											
Bulktrk		No.	Driver												
			Driver												
JOB SERVICES & REMARKS				Hulls											
Remarks:															
Rat Hole	Salt														
Mouse Hole	Flowseal														
Centralizers	Kol-Seal														
Baskets	Mud CLR 48														
D/V or Port Collar	CFL-117 or CD110 CAF 38														
	Sand														
	Handling 158														
	Mileage														
FLOAT EQUIPMENT				Guide Shoe											
	Centralizer														
	Baskets														
	AFU Inserts														
	Float Shoe														
	Latch Down														
	Pumptrk Charge Surface														
	Mileage 17														
X Signature				THANKS. <i>[Signature]</i>											
				Tax											
				Discount											
				Total Charge											

RAN 5 NEW JOINTS OF 23# 8 5/8 CSG.
SET @ 221, RECEIVED CIRCULATION
CEMENT W/ 150 SX COM, 2+3
DISPLACED 13 /BBL H₂O
SHUT IN @ 250#.

Cement DID CIRCULATE TO SURFACE!



DRILL STEM TEST REPORT

Prepared For: **American Oil LLC**

1023 Reservation Rd.
Hays, KS 67601

ATTN: Marc Downing, Zach Pa

Kohl #3-19

19-11s-19w Ellis,KS

Start Date: 2014.06.29 @ 02:16:04

End Date: 2014.06.29 @ 07:49:28

Job Ticket #: 59317 DST #: 1

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

Printed: 2014.07.02 @ 09:04:33



TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

American Oil LLC

19-11s-19w Ellis,KS

1023 Reservation Rd.
Hays, KS 67601

Kohl #3-19

Job Ticket: 59317

DST#: 1

ATTN: Marc Downing, Zach Pa

Test Start: 2014.06.29 @ 02:16:04

GENERAL INFORMATION:

Formation: **LKC C-D**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 04:16:29

Time Test Ended: 07:49:28

Test Type: Conventional Bottom Hole (Initial)

Tester: Ray Schwager

Unit No: 70

Interval: 3397.00 ft (KB) To 3442.00 ft (KB) (TVD)

Reference Elevations: 2089.00 ft (KB)

Total Depth: 3442.00 ft (KB) (TVD)

2081.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 8.00 ft

Serial #: 8018

Inside

Press@RunDepth: 18.54 psig @ 3406.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2014.06.29

End Date:

2014.06.29

Last Calib.:

2014.06.29

Start Time: 02:16:04

End Time:

07:49:28

Time On Btm:

2014.06.29 @ 04:13:59

Time Off Btm:

2014.06.29 @ 06:24:59

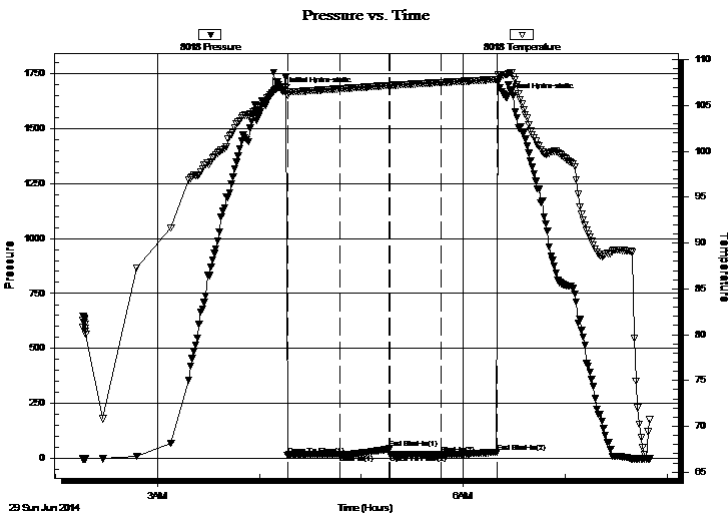
TEST COMMENT: 30-IFP-surface bl, died in 11 min

30-ISIP-no bl

30-FFP-no bl

30-FSIP-no bl

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1666.76	106.97	Initial Hydro-static
3	16.77	106.13	Open To Flow (1)
34	17.93	106.84	Shut-In(1)
63	44.94	107.21	End Shut-In(1)
63	18.36	107.20	Open To Flow (2)
93	18.54	107.53	Shut-In(2)
126	29.65	107.85	End Shut-In(2)
131	1641.40	108.36	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
1.00	Mud w/show of oil	0.00

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

American Oil LLC

19-11s-19w Ellis,KS

1023 Reservation Rd.
Hays, KS 67601

Kohl #3-19

Job Ticket: 59317

DST#: 1

ATTN: Marc Downing, Zach Pa

Test Start: 2014.06.29 @ 02:16:04

Tool Information

Drill Pipe:	Length: 3376.00 ft	Diameter: 3.80 inches	Volume: 47.36 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
			<u>Total Volume: 47.51 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	30.00 ft			String Weight: Initial 45000.00 lb
Depth to Top Packer:	3397.00 ft			Final 45000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	45.00 ft			
Tool Length:	66.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			3377.00	
Shut In Tool	5.00			3382.00	
Hydraulic tool	5.00			3387.00	
Packer	5.00			3392.00	21.00 Bottom Of Top Packer
Packer	5.00			3397.00	
Stubb	1.00			3398.00	
Perforations	8.00			3406.00	
Recorder	0.00	8018	Inside	3406.00	
Recorder	0.00	8678	Outside	3406.00	
Blank Spacing	33.00			3439.00	
Bullnose	3.00			3442.00	45.00 Bottom Packers & Anchor

Total Tool Length: 66.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

American Oil LLC

19-11s-19w Ellis,KS

1023 Reservation Rd.
Hays, KS 67601

Kohl #3-19

Job Ticket: 59317

DST#: 1

ATTN: Marc Downing, Zach Pa

Test Start: 2014.06.29 @ 02:16:04

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

deg API

Mud Weight: 10.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 51.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.91 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 5000.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
1.00	Mud w/show of oil	0.005

Total Length: 1.00 ft Total Volume: 0.005 bbl

Num Fluid Samples: 0

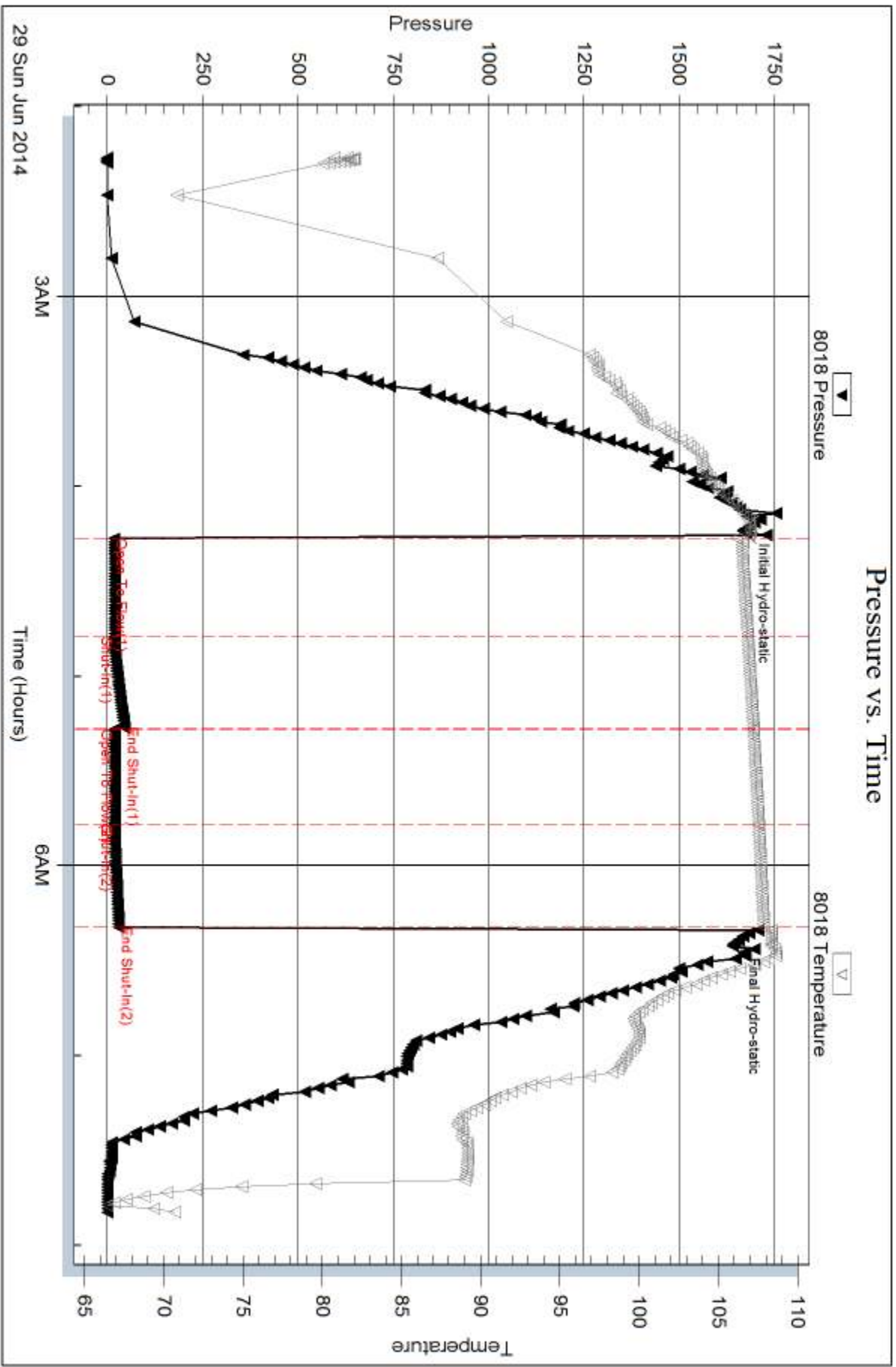
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

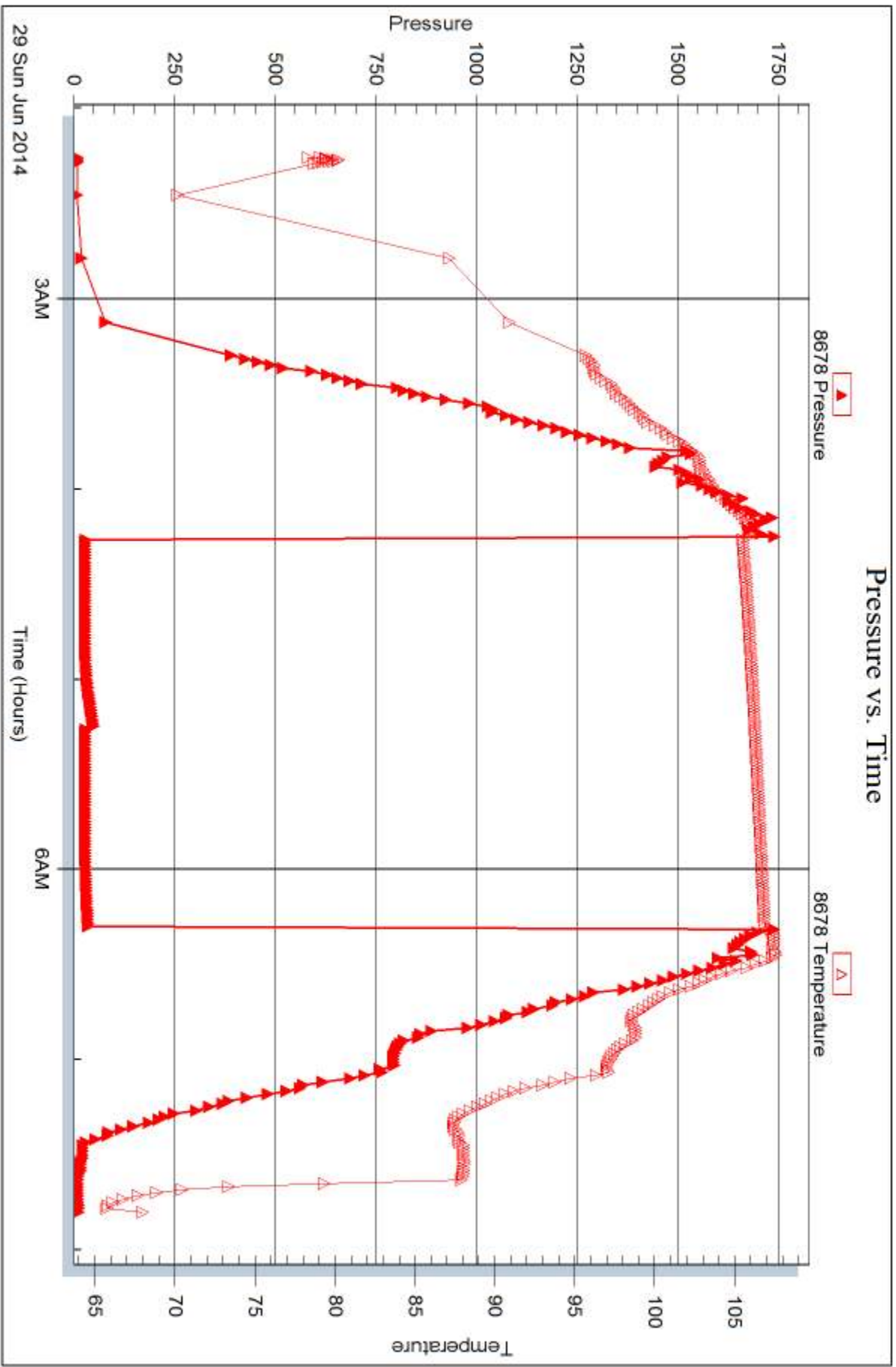


Serial #: 8678

Outside American Oil LLC

Kohl #3-19

DST Test Number: 1



Trilobite Testing, Inc

Ref. No: 59317

Printed: 2014.07.02 @ 09:04:34



DRILL STEM TEST REPORT

Prepared For: **American Oil LLC**

1023 Reservation Rd.
Hays, KS 67601

ATTN: Marc Downing, Zach Pa

Kohl #3-19

19-11s-19w Ellis,KS

Start Date: 2014.06.30 @ 02:10:06

End Date: 2014.06.30 @ 07:24:00

Job Ticket #: 59318 DST #: 2

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

Printed: 2014.07.02 @ 09:03:49



TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

American Oil LLC

19-11s-19w Ellis,KS

1023 Reservation Rd.
Hays, KS 67601

Kohl #3-19

Job Ticket: 59318

DST#: 2

ATTN: Marc Downing, Zach Pa

Test Start: 2014.06.30 @ 02:10:06

GENERAL INFORMATION:

Formation: **LKC I-L**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 03:40:01

Time Test Ended: 07:24:00

Test Type: Conventional Bottom Hole (Reset)

Tester: Ray Schwager

Unit No: 70

Interval: 3519.00 ft (KB) To 3605.00 ft (KB) (TVD)

Reference Elevations: 2089.00 ft (KB)

Total Depth: 3605.00 ft (KB) (TVD)

2081.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 8.00 ft

Serial #: 8018

Inside

Press@RunDepth: 19.72 psig @ 3521.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2014.06.30

End Date:

2014.06.30

Last Calib.:

2014.06.30

Start Time:

02:10:06

End Time:

07:24:00

Time On Btm:

2014.06.30 @ 03:37:01

Time Off Btm:

2014.06.30 @ 05:44:31

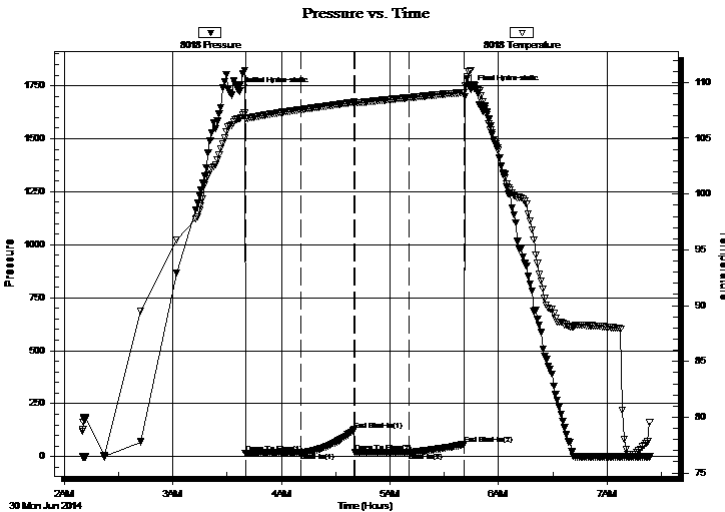
TEST COMMENT: 30-IFP-w k surface bl , died in 8 min

30-ISIP-no bl

30-FFP-no bl

30-FSIP-no bl

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1721.00	106.78	Initial Hydro-static
3	16.28	106.74	Open To Flow (1)
34	17.94	107.56	Shut-In(1)
63	126.11	108.23	End Shut-In(1)
64	18.63	108.18	Open To Flow (2)
94	19.72	108.63	Shut-In(2)
124	58.04	109.11	End Shut-In(2)
128	1731.99	111.08	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
5.00	Mud	0.02

* Recovery from multiple tests

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

American Oil LLC

19-11s-19w Ellis,KS

1023 Reservation Rd.
Hays, KS 67601

Kohl #3-19

Job Ticket: 59318

DST#: 2

ATTN: Marc Downing, Zach Pa

Test Start: 2014.06.30 @ 02:10:06

Tool Information

Drill Pipe:	Length: 3472.00 ft	Diameter: 3.80 inches	Volume: 48.70 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
			<u>Total Volume: 48.85 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	4.00 ft			String Weight: Initial 48000.00 lb
Depth to Top Packer:	3519.00 ft			Final 48000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	86.00 ft			
Tool Length:	107.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			3499.00	
Shut In Tool	5.00			3504.00	
Hydraulic tool	5.00			3509.00	
Packer	5.00			3514.00	21.00 Bottom Of Top Packer
Packer	5.00			3519.00	
Stubb	1.00			3520.00	
Perforations	1.00			3521.00	
Recorder	0.00	8018	Inside	3521.00	
Recorder	0.00	8678	Outside	3521.00	
Blank Spacing	64.00			3585.00	
Perforations	17.00			3602.00	
Bullnose	3.00			3605.00	86.00 Bottom Packers & Anchor

Total Tool Length: 107.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

American Oil LLC

19-11s-19w Ellis,KS

1023 Reservation Rd.
Hays, KS 67601

Kohl #3-19

Job Ticket: 59318

DST#: 2

ATTN: Marc Downing, Zach Pa

Test Start: 2014.06.30 @ 02:10:06

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: 63.00 sec/qt

Cushion Volume:

bbf

Water Loss: 11.93 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 8000.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbf
5.00	Mud	0.025

Total Length: 5.00 ft Total Volume: 0.025 bbf

Num Fluid Samples: 0

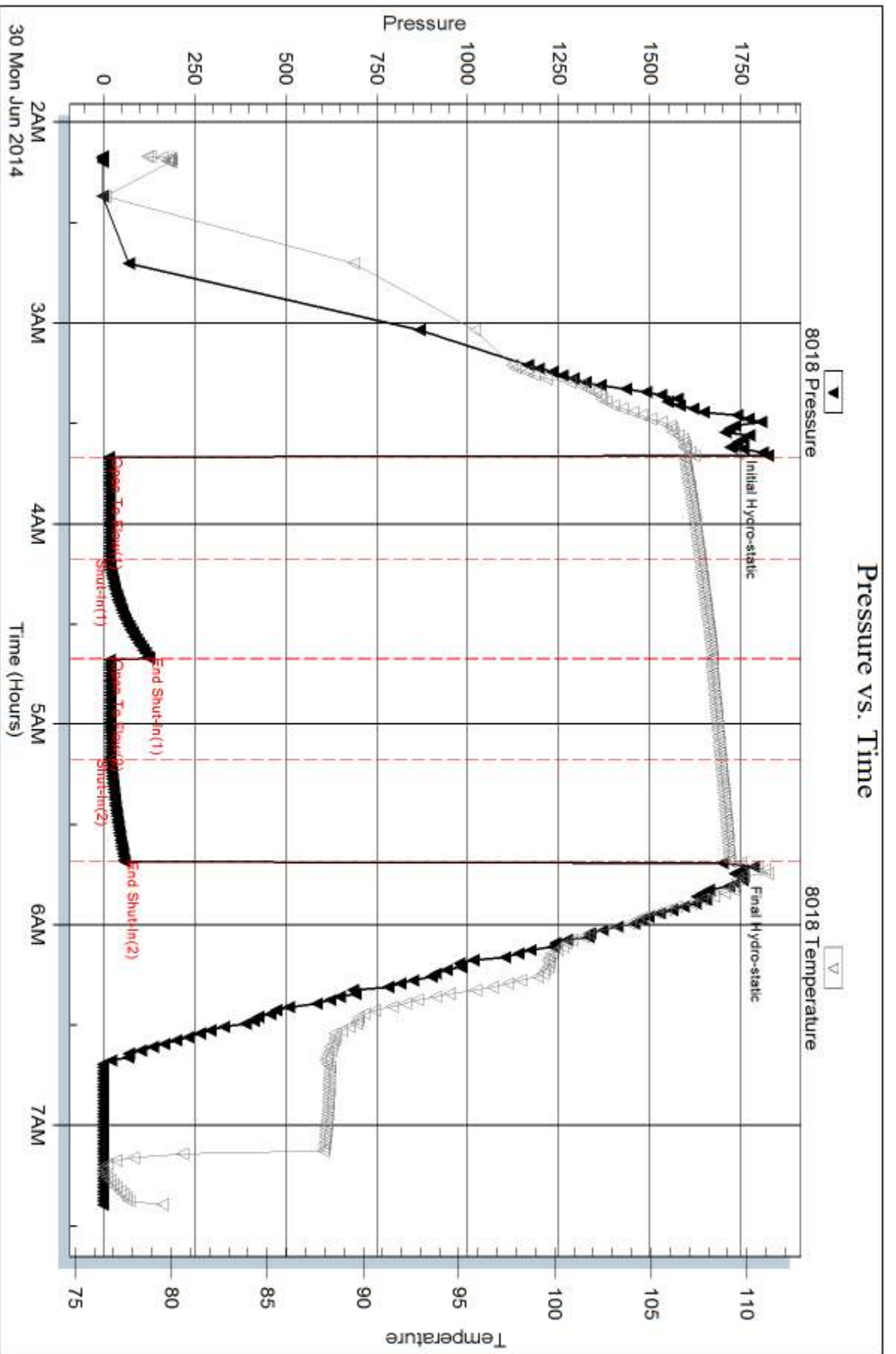
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

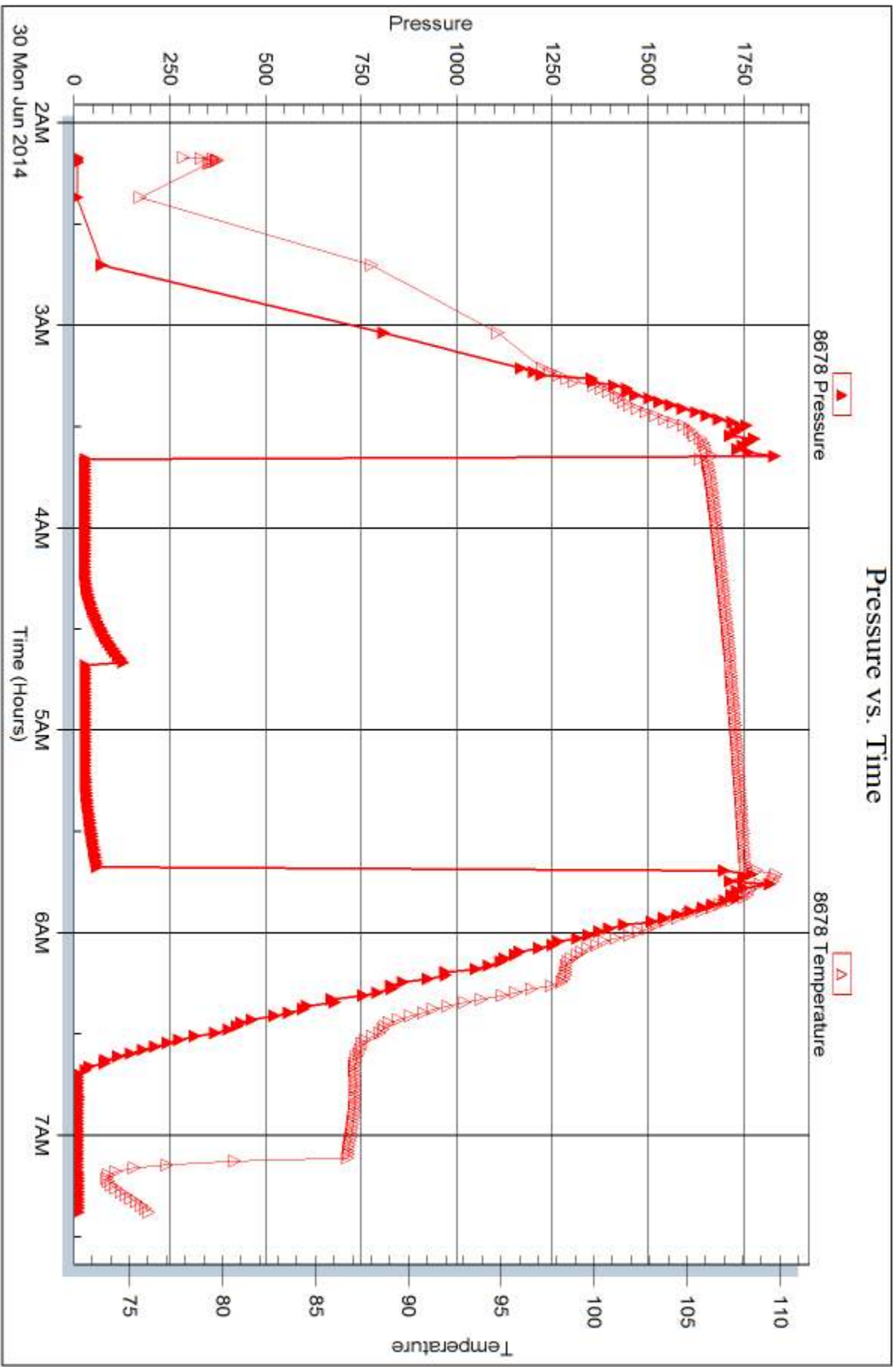


Serial #: 8678

Outside American Oil LLC

Kohl #3-19

DST Test Number: 2





DRILL STEM TEST REPORT

Prepared For: **American Oil LLC**

1023 Reservation Rd.
Hays, KS 67601

ATTN: Marc Downing, Zach Pa

Kohl #3-19

19-11s-19w Ellis,KS

Start Date: 2014.07.01 @ 00:15:36

End Date: 2014.07.01 @ 07:12:00

Job Ticket #: 59319 DST #: 3

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

Printed: 2014.07.02 @ 09:01:30



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

American Oil LLC

19-11s-19w Ellis,KS

1023 Reservation Rd.
Hays, KS 67601

Kohl #3-19

Job Ticket: 59319

DST#: 3

ATTN: Marc Downing, Zach Pa

Test Start: 2014.07.01 @ 00:15:36

GENERAL INFORMATION:

Formation: **Arbuckle**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 02:04:31

Time Test Ended: 07:12:00

Test Type: Conventional Straddle (Reset)

Tester: Ray Schwager

Unit No: 70

Interval: 3653.00 ft (KB) To 3702.00 ft (KB) (TVD)

Reference Elevations: 2089.00 ft (KB)

Total Depth: 3770.00 ft (KB) (TVD)

2081.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 8.00 ft

Serial #: 8018

Inside

Press@RunDepth: 157.13 psig @ 3655.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2014.07.01

End Date:

2014.07.01

Last Calib.:

2014.07.01

Start Time: 00:15:36

End Time:

07:12:00

Time On Btm:

2014.07.01 @ 02:00:31

Time Off Btm:

2014.07.01 @ 05:12:00

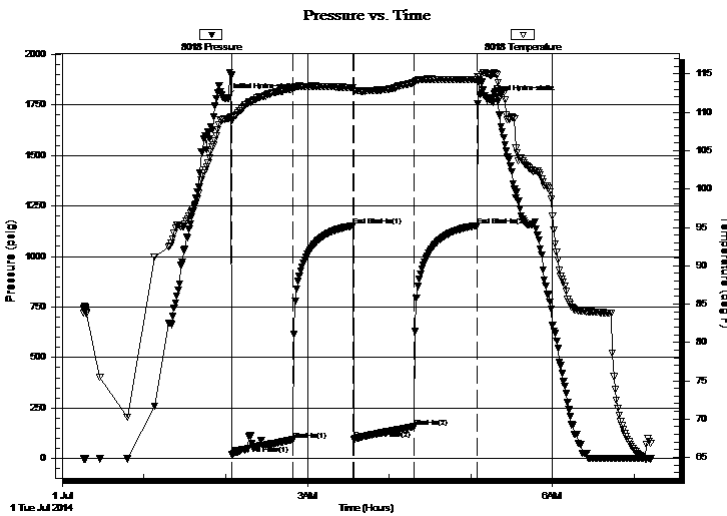
TEST COMMENT: 45-IFP-w k to a fr bl 1/2"to 6"bl

45-ISIP-no bl

45-FFP-no bl

45-FSIP-no bl

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1787.82	109.15	Initial Hydro-static
4	20.26	108.97	Open To Flow (1)
49	93.16	112.99	Shut-In(1)
93	1152.46	113.21	End Shut-In(1)
94	96.20	112.83	Open To Flow (2)
138	157.13	113.81	Shut-In(2)
184	1152.73	114.28	End Shut-In(2)
192	1775.21	115.06	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
110.00	MW 40%M60%W w/show of oil	1.27
185.00	Water	2.60

* Recovery from multiple tests

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

American Oil LLC

19-11s-19w Ellis,KS

1023 Reservation Rd.
Hays, KS 67601

Kohl #3-19

Job Ticket: 59319

DST#: 3

ATTN: Marc Downing, Zach Pa

Test Start: 2014.07.01 @ 00:15:36

Tool Information

Drill Pipe:	Length: 3630.00 ft	Diameter: 3.80 inches	Volume: 50.92 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: 80000.00 lb
			<u>Total Volume: 51.07 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	28.00 ft			String Weight: Initial 50000.00 lb
Depth to Top Packer:	3653.00 ft			Final 53000.00 lb
Depth to Bottom Packer:	3702.00 ft			
Interval between Packers:	49.00 ft			
Tool Length:	143.00 ft			
Number of Packers:	3	Diameter: 6.75 inches		

Tool Comments:

Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			3633.00	
Shut In Tool	5.00			3638.00	
Hydraulic tool	5.00			3643.00	
Packer	5.00			3648.00	21.00 Bottom Of Top Packer
Packer	5.00			3653.00	
Stubb	1.00			3654.00	
Perforations	1.00			3655.00	
Recorder	0.00	8018	Inside	3655.00	
Recorder	0.00	8678	Outside	3655.00	
Blank Spacing	33.00			3688.00	
Perforations	10.00			3698.00	
Blank Off Sub	1.00			3699.00	
Blank Spacing	3.00			3702.00	49.00 Tool Interval
Packer	5.00			3707.00	
Stubb	1.00			3708.00	
Recorder	0.00	8374	Below	3708.00	
Blank Spacing	64.00			3772.00	
Bullnose	3.00			3775.00	73.00 Bottom Packers & Anchor

Total Tool Length: 143.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

American Oil LLC

19-11s-19w Ellis,KS

1023 Reservation Rd.
Hays, KS 67601

Kohl #3-19

Job Ticket: 59319

DST#: 3

ATTN: Marc Downing, Zach Pa

Test Start: 2014.07.01 @ 00:15:36

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

deg API

Mud Weight: 10.00 lb/gal

Cushion Length:

ft

Water Salinity:

24000 ppm

Viscosity: 45.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 9.55 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 6000.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
110.00	MW 40%M60%W w/show of oil	1.270
185.00	Water	2.595

Total Length: 295.00 ft Total Volume: 3.865 bbl

Num Fluid Samples: 0

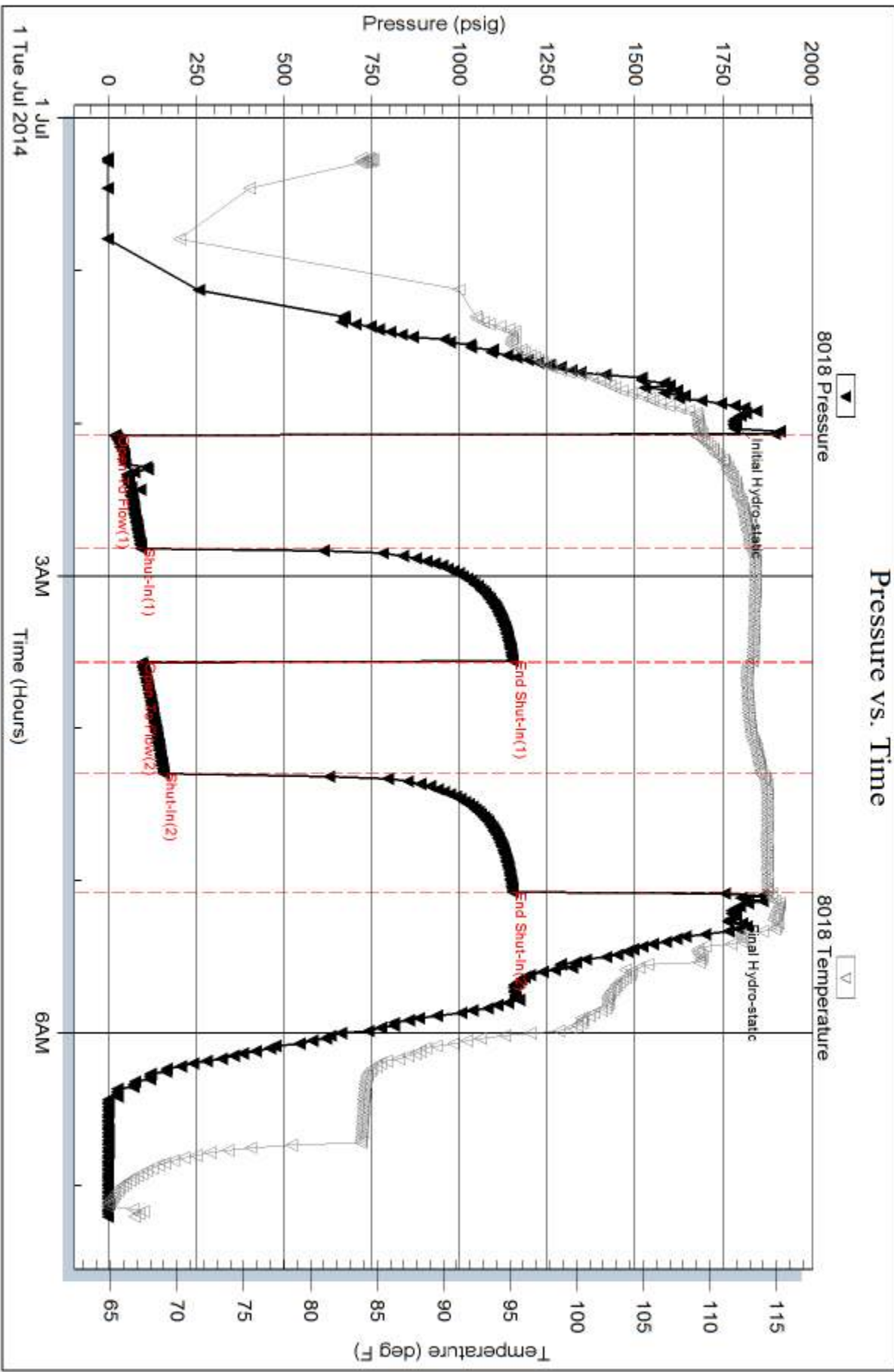
Num Gas Bombs: 0

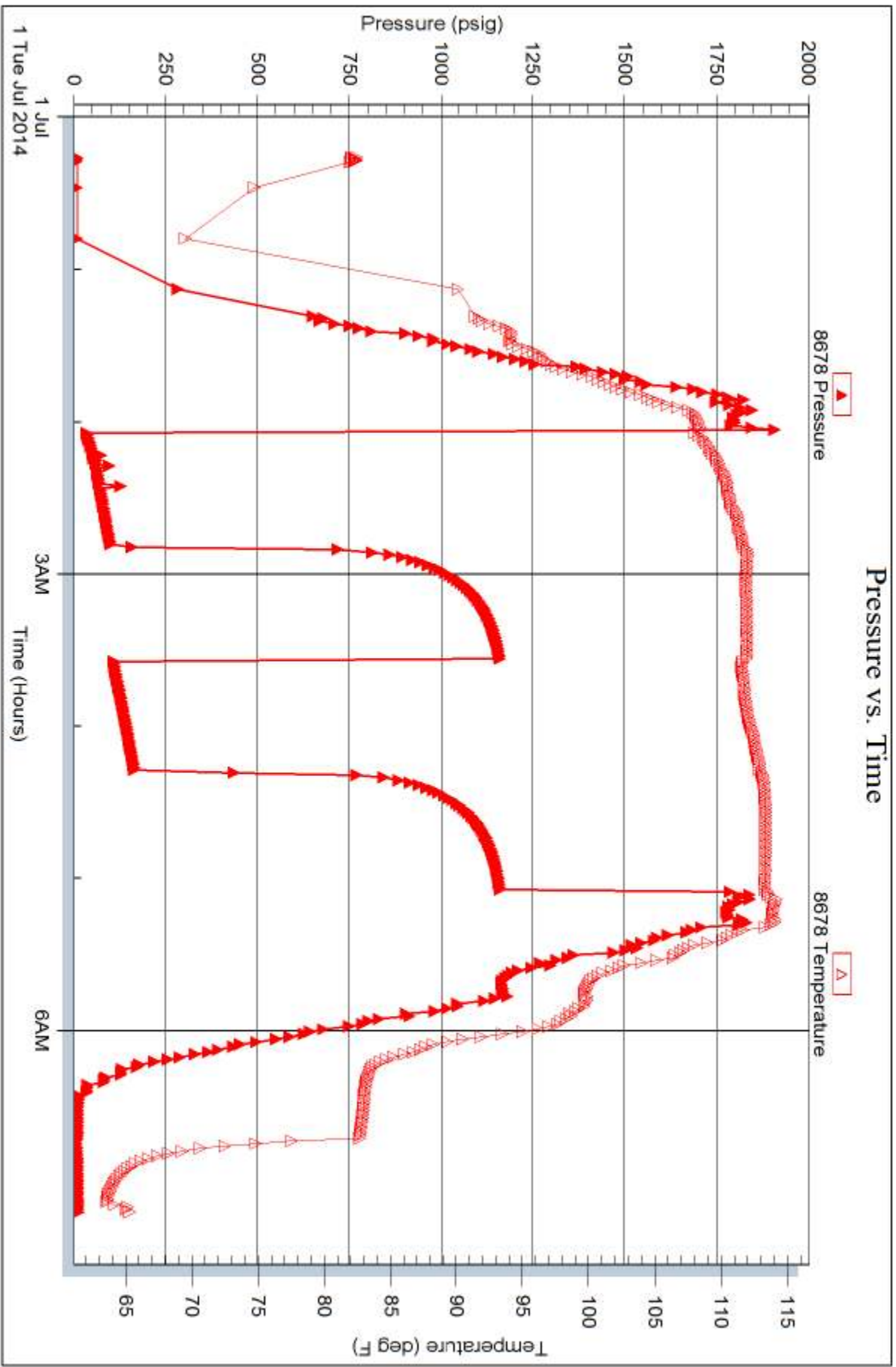
Serial #:

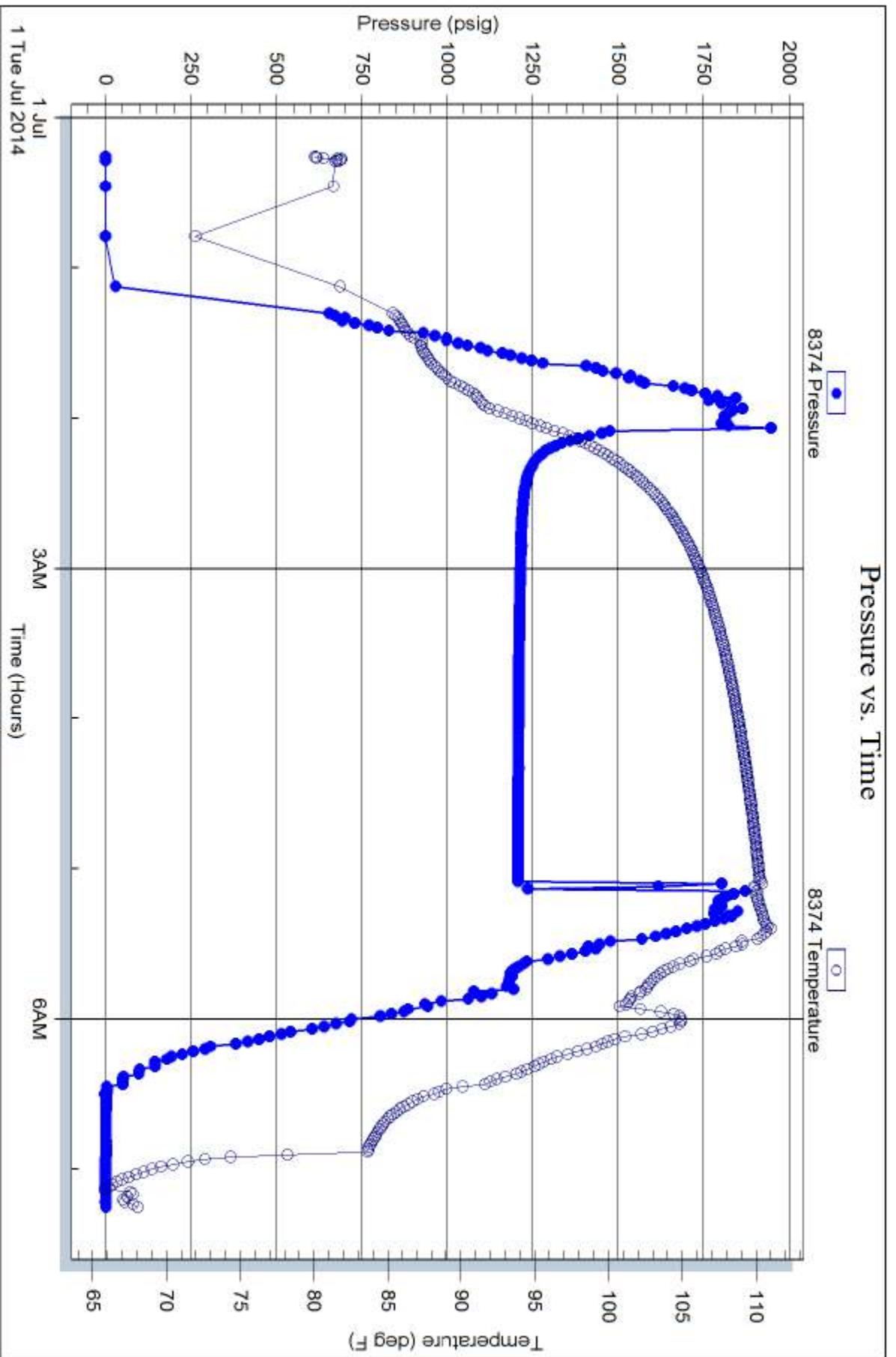
Laboratory Name:

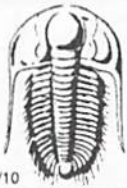
Laboratory Location:

Recovery Comments: RW .29 @ 70F









TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 59317

Well Name & No. Kohl #3-19 Test No. 1 Date 6-29-14
 Company American Oil LLC Elevation 2089 KB 2080 GL
 Address 1023 Reservation Rd. Hays, Ko 67601
 Co. Rep / Geo. MARC DOWNING Rig Discovery rig 1
 Location: Sec. 19 Twp. 11^s Rge. 19^w Co. ELLIS State Ko

Interval Tested 3397-3442 Zone Tested LKC C-0
 Anchor Length 45 Drill Pipe Run 3376 Mud Wt. 9.5
 Top Packer Depth 3392 Drill Collars Run 30 Vis 51
 Bottom Packer Depth 3397 Wt. Pipe Run - WL 8
 Total Depth 3442 Chlorides 5000 ppm System LCM 2 1/2 #

Blow Description IFP - Very Weak surface Blow, died in 11 min
ISTP - NO Blow
FFP - NO Blow
FSIP - NO Blow

Rec	Feet of	%gas	%oil	%water	%mud
<u>1</u>	<u>mud</u>				
	<u>w/show of oil</u>				

Rec Total 1 BHT 107 Gravity - API RW - @ - ° F Chlorides - ppm

(A) Initial Hydrostatic 1666 Test 1150 T-On Location 0030
 (B) First Initial Flow 16 Jars - T-Started 0215
 (C) First Final Flow 17 Safety Joint - T-Open 0415
 (D) Initial Shut-In 44 Circ Sub - T-Pulled 0615
 (E) Second Initial Flow 18 Hourly Standby - T-Out 0749
 (F) Second Final Flow 18 Mileage 50RT 77.50 Comments -
 (G) Final Shut-In 29 Sampler -
 (H) Final Hydrostatic 1641 Straddle - Ruined Shale Packer -
 Shale Packer - Ruined Packer -
 Extra Packer - Extra Copies -
 Initial Open 30 Extra Recorder - Sub Total 0
 Initial Shut-In 30 Day Standby - Total 1227.50
 Final Flow 30 Accessibility - MP/DST Disc't -
 Final Shut-In 30 Sub Total 1227.50

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.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 59318

Well Name & No. Kohl #3-19 Test No. 2 Date 6-29-14
 Company American O, L LLC Elevation 2089 KB 2081 GL
 Address 1023 RESERVATION Rd. Hays, Ks 67601
 Co. Rep / Geo. MARC DOWNING Rig DISCOVERY rig
 Location: Sec. 19 Twp. 11^s Rge. 19^w Co. ELLIS State Ks

Interval Tested 3519-3605 Zone Tested LKC I-L
 Anchor Length 86 Drill Pipe Run 3472 Mud Wt. 9.3
 Top Packer Depth 3514 Drill Collars Run 30 Vis 63
 Bottom Packer Depth 3519 Wt. Pipe Run - WL 12
 Total Depth 3605 Chlorides 8000 ppm System LCM 2#

Blow Description I/FP - WEAK SURFACE BLOW, died in 8 min
ISIP - NO BLOW
FFP - NO BLOW
FSIP - NO BLOW

Rec	Feet of	%gas	%oil	%water	%mud
<u>5</u>	<u>Mud</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 5 BHT 109 Gravity - API RW - @ - ° F Chlorides - ppm
 (A) Initial Hydrostatic 1721 Test 1150 T-On Location 230.5
 (B) First Initial Flow 16 Jars - T-Started ~~2355~~ 0210
 (C) First Final Flow 17 Safety Joint - T-Open 0.340
 (D) Initial Shut-In 126 Circ Sub - T-Pulled 0.540
 (E) Second Initial Flow 18 Hourly Standby - T-Out 0.724
 (F) Second Final Flow 19 Mileage 50 RT 77.50 Comments -
 (G) Final Shut-In 58 Sampler -
 (H) Final Hydrostatic 1731 Straddle - Ruined Shale Packer -
 Shale Packer - Ruined Packer -
 Extra Packer - Extra Copies -
 Extra Recorder - Sub Total 0
 Day Standby - Total 1227.50
 Accessibility - MP/DST Disc't -

Initial Open 30
 Initial Shut-In 30
 Final Flow 30
 Final Shut-In 30
 Sub Total 1227.50

Approved By _____ Our Representative RAY SCHWAGER Thank you

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TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 59319

Well Name & No. Kohl # 3-19 Test No. 3 Date 6-30-14
 Company AMERICAN OIL LLC Elevation 2089 KB 2081 GL
 Address 1023 Reservation Rd. Hays, Ks 67601
 Co. Rep / Geo. MARC Downing Rig Discovery rig 1
 Location: Sec. 19 Twp. 11^s Rge. 19^w Co. ELLIS State Ks

Interval Tested 3653-3702 Zone Tested ARBuckle
 Anchor Length 49 Drill Pipe Run 3630 Mud Wt. 9.5
 Top Packer Depth 3653-3648 Drill Collars Run 30 Vis 45
 Bottom Packer Depth 3702 Wt. Pipe Run - WL 9.6
 Total Depth 3770 Chlorides 6000 ppm System LCM 2 #

Blow Description TFP - WEAK TO A FAIR BLOW 1/2" TO 6" BLOW
ISTP - NO BLOW
FFP - NO BLOW
FSIP - NO BLOW

Rec	Feet of	%gas	%oil	%water	%mud
<u>110</u>	<u>Feet of MW w/show foal</u>			<u>60</u>	<u>40</u>
<u>185</u>	<u>Feet of WATER</u>				
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 295 BHT 114 Gravity - API RW .29 @ 70 °F Chlorides 24000 ppm
 (A) Initial Hydrostatic 1787 Test 1150 T-On Location 2250
 (B) First Initial Flow 20 Jars _____ T-Started 0015
 (C) First Final Flow 93 Safety Joint _____ T-Open 0200
 (D) Initial Shut-In 1152 Circ Sub _____ T-Pulled 0500
 (E) Second Initial Flow 96 Hourly Standby _____ T-Out 0712
 (F) Second Final Flow 157 Mileage 50RT 77.50 Comments _____
 (G) Final Shut-In 1152 Sampler _____
 (H) Final Hydrostatic 1775 Straddle 600 Ruined Shale Packer _____

Initial Open 45 Shale Packer _____ Ruined Packer _____
 Initial Shut-In 45 Extra Packer _____ Extra Copies _____
 Final Flow 45 Extra Recorder _____ Sub Total 0
 Final Shut-In 45 Day Standby _____ Total 1827.50
 Accessibility _____ MP/DST Disc't _____
 Sub Total 1827.50

Approved By _____ Our Representative RAY SCHWAGER Thank you

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