



Confidentiality Requested:

Yes  No

KANSAS CORPORATION COMMISSION 1222751  
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
-----------------------------------	-----------------	---

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: \_\_\_\_\_

1222751

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 <input type="checkbox"/> Yes <input type="checkbox"/> No <i>(Attach Additional Sheets)</i>  Samples Sent to Geological Survey <input type="checkbox"/> Yes <input type="checkbox"/> No  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: _____	<input type="checkbox"/> Log Formation (Top), Depth and Datum <input type="checkbox"/> Sample  Name Top Datum
--	---

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: <input type="checkbox"/> Yes <input type="checkbox"/> No
----------------	-------	---------	------------	---

Date of First, Resumed Production, SWD or ENHR.	Producing Method: <input type="checkbox"/> Flowing <input type="checkbox"/> Pumping <input type="checkbox"/> Gas Lift <input type="checkbox"/> Other <i>(Explain)</i> _____
---	--

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

<b>DISPOSITION OF GAS:</b> <input type="checkbox"/> Vented <input type="checkbox"/> Sold <input type="checkbox"/> Used on Lease <i>(If vented, Submit ACO-18.)</i>	<b>METHOD OF COMPLETION:</b> <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> _____	<b>PRODUCTION INTERVAL:</b> _____ _____
--	---	---

Form	ACO1 - Well Completion
Operator	Bach, Jason dba Bach Oil Production
Well Name	Tubbs 1
Doc ID	1222751

Tops

Name	Top	Datum
Stone Corral	1687	+338
Base Stone Corral	1708	+317
Topeka	3045	-1020
Heebner	3245	-1220
Toronto	3275	-1250
Lansing	3292	-1267
Muncie	3403	-1378
Stark	3469	-1444
LTD	3504	-1479



# GEOLOGIST'S REPORT

## DRILLING TIME AND SAMPLE LOG

**BACH OIL PRODUCTION**

**WELL: TUBBS #1**

LOC.: 2250' FSL & 1920' FEL  
 SEC. 3-1-19W  
 PHILLIPS COUNTY, KANSAS  
 API: 15-147-20738-00-00

DRILLING CONTR.: MURFIN RIG #24  
 SPUD: 05-27-14 COMP: 05-31-14  
 MUD UP: 2800' TYPE MUD: CHEM.  
 DRILL TIME: 2900 to' RTD  
 RTD: 3507' LTD: 3505"

SAMPLES SAVED: 2900'-RTD  
 GEOLOGIST: ROBERT J. PETERSEN

### ELEVATION

KB: 2025  
 GL: 2020  
 LOG MEASURED  
 FROM: KB

### SURFACE CASING

8 5/8" Set @ 220'  
 W/175 SX 3% CC 2%gel

### PRODUCTION CASING

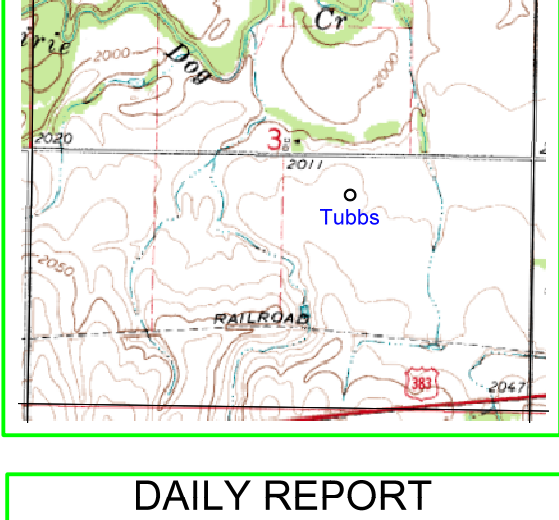
5 1/2" Set

### WELL LOG SURVEYS

RAG

### ELECTRIC LOG TOPS

FORMATION	DEPTH	DATUM	POS.
Stone Corral	1687	+338	+11
Base Stone Corral	1708	+317	-8
Topeka	3045	-1020	-19
Heebner	3245	-1220	-17
Toronto	3275	-1250	-9
Lansing	3292	-1267	-19
Muncie	3403	-1378	-20
Stark	3469	-1444	-19
LTD	3504	-1479	-



### REFERENCE WELL:

Bach Oil Production  
 Johnny #1  
 3965' FSL & 2005' FEL  
 2-1-19W

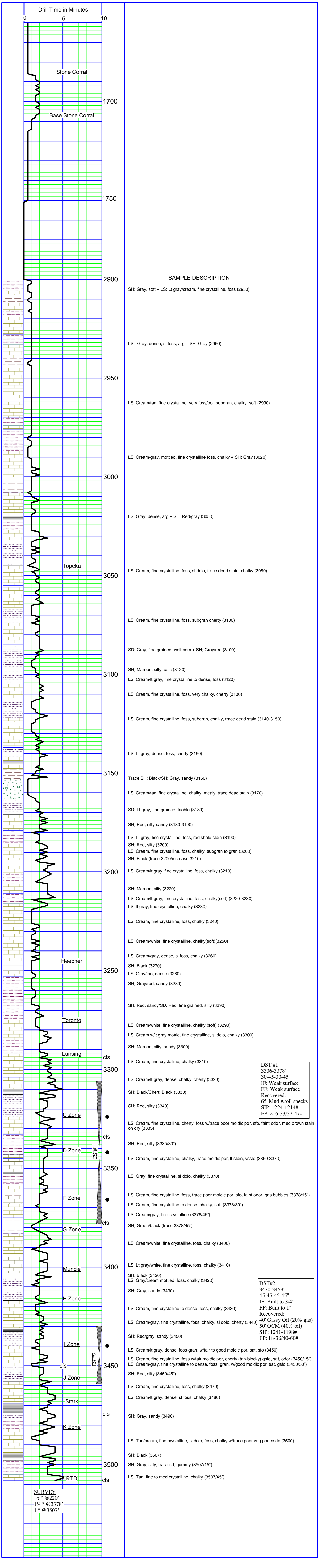
### DAILY REPORT @7:00 A.M.

05-27-14 MIRU/SPUD  
 05-28-14 445'  
 05-29-14 2626'  
 05-30-14 3355'  
 05-31-14 3507"

### REMARKS AND RECOMMENDATIONS

Production casing was run to further test this well for commercial production.

Respectfully submitted,  
*Robert J. Petersen*  
 Robert J. Petersen



**DST #1**  
 3306-3378'  
 30-45-30-45"  
 IF: Weak surface  
 FF: Weak surface  
 Recovered:  
 65' Mud w/oil specks  
 SIP: 1224-1214#  
 FP: 18-36/37-47#

**DST #2**  
 3430-3459'  
 45-45-45-45"  
 IF: Built to 3/4"  
 FF: Built to 1"  
 Recovered:  
 40' Gassy Oil (20% gas)  
 50' OCM (40% oil)  
 SIP: 1241-1198#  
 FP: 18-36/40-60#

**SURVEY**  
 1/2° @ 220'  
 1 1/4° @ 3378'  
 1° @ 3507'



# INVOICE

PO Box 93999  
Southlake, TX 76092

Invoice Number: 143501  
Invoice Date: May 27, 2014  
Page: 1

Voice: (817) 546-7282  
Fax: (817) 246-3361

<b>Bill To:</b>
Bach Oil Production 82 W. 500 Ln. Phillipsburg, KS 67661

Customer ID	Field Ticket #	Payment Terms	
Bach	55276	Net 30 Days	
Job Location	Camp Location	Service Date	Due Date
KS2-01	Russell	May 27, 2014	6/26/14

Quantity	Item	Description	Unit Price	Amount
1.00	WELL NAME	Tubbs #1		
175.00	CEMENT MATERIALS	Class A Common	17.90	3,132.50
330.00	CEMENT MATERIALS	Gel	0.24	79.20
495.00	CEMENT MATERIALS	Chloride	0.80	396.00
175.00	CEMENT SERVICE	Cubic Feet Charge	2.48	434.00
412.50	CEMENT SERVICE	Ton Mileage Charge	2.60	1,072.50
1.00	CEMENT SERVICE	Surface	1,512.25	1,512.25
50.00	CEMENT SERVICE	Heavy Vehicle Mileage	7.70	385.00
50.00	CEMENT SERVICE	Light Vehicle Mileage	4.40	220.00
1.00	CEMENT SUPERVISOR	Tony Pfannenstiel		
1.00	OPERATOR ASSISTANT	Danny Sinner		
1.00	EQUIPMENT OPERATOR	Kevin Rupp		

ALL PRICES ARE NET, PAYABLE  
30 DAYS FOLLOWING DATE OF  
INVOICE. 1 1/2% CHARGED  
THEREAFTER. IF ACCOUNT IS  
CURRENT, TAKE DISCOUNT OF

\$ 1,735.54

ONLY IF PAID ON OR BEFORE  
Jun 26, 2014

Subtotal	7,231.45
Sales Tax	239.91
Total Invoice Amount	7,471.36
Payment/Credit Applied	
<b>TOTAL</b>	<b>7,471.36</b>







# INVOICE

PO Box 93999  
Southlake, TX 76092

Invoice Number: 143644

Invoice Date: Jun 1, 2014

Voice: (817) 546-7282

Page: 1

Fax: (817) 246-3361

Bill To:
Bach Oil Production 82 W. 500 Ln. Phillipsburg, KS 67661

Customer ID	Field Ticket #	Payment Terms	
Bach	55355	Net 30 Days	
Job Location	Camp Location	Service Date	Due Date
KS2-02	Russell	Jun 1, 2014	7/1/14

Quantity	Item	Description	Unit Price	Amount
1.00	WELL NAME	Tubbs #1		
258.00	CEMENT MATERIALS	Chloride	0.80	206.40
450.00	CEMENT MATERIALS	AMD	25.90	11,655.00
150.00	CEMENT MATERIALS	60/40 Blend	14.93	2,239.50
2,250.00	CEMENT MATERIALS	Gilsonite	0.98	2,205.00
1,787.00	CEMENT MATERIALS	Salt	0.53	947.11
600.00	CEMENT SERVICE	Cubic Feet Charge	2.48	1,488.00
1,380.00	CEMENT SERVICE	Ton Mileage Charge	2.60	3,588.00
1.00	CEMENT SERVICE	Long String	2,558.75	2,558.75
50.00	CEMENT SERVICE	Light Vehicle Mileage	4.40	220.00
1.00	CEMENT SERVICE	Manifold Rental	275.00	275.00
150.00	CEMENT SERVICE	Heavy Vehicle Mileage	7.70	1,155.00
1.00	EQUIPMENT SALES	5-1/2 Float Shoe	545.00	545.00
1.00	EQUIPMENT SALES	5-1/2 Latch Down	660.00	660.00
10.00	EQUIPMENT SALES	5-1/2 Centralizer	57.00	570.00
5.00	EQUIPMENT SALES	5-1/2 Basket	395.00	1,975.00
1.00	CEMENT SUPERVISOR	Robert Yakubovich		
1.00	EQUIPMENT OPERATOR	Nathan Donner		
1.00	OPERATOR ASSISTANT	Tracy Jordan		
1.00	EQUIPMENT OPERATOR	Kevin Rupp		

Subtotal	30,287.76
Sales Tax	1,396.70
Total Invoice Amount	31,684.46
Payment/Credit Applied	
<b>TOTAL</b>	<b>31,684.46</b>

ALL PRICES ARE NET, PAYABLE  
30 DAYS FOLLOWING DATE OF  
INVOICE. 1 1/2% CHARGED  
THEREAFTER. IF ACCOUNT IS  
CURRENT, TAKE DISCOUNT OF

\$ 6,057.55

ONLY IF PAID ON OR BEFORE

Jul 1, 2014







## DRILL STEM TEST REPORT

Prepared For: **Bach Oil**

PO Box 723  
Alma NE 68920

ATTN: Bob Peterson

### **Tubbs #1**

### **3-1s-19w Phillips,KS**

Start Date: 2014.05.30 @ 11:12:00

End Date: 2014.05.30 @ 17:06:30

Job Ticket #: 58187                      DST #: 1

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

Printed: 2014.06.09 @ 10:53:25

Bach Oil  
3-1s-19w Phillips,KS  
Tubbs #1  
DST # 1  
LKC-C-F  
2014.05.30



**TRILOBITE TESTING, INC**

# DRILL STEM TEST REPORT

Bach Oil  
 PO Box 723  
 Alma NE 68920  
 ATTN: Bob Peterson

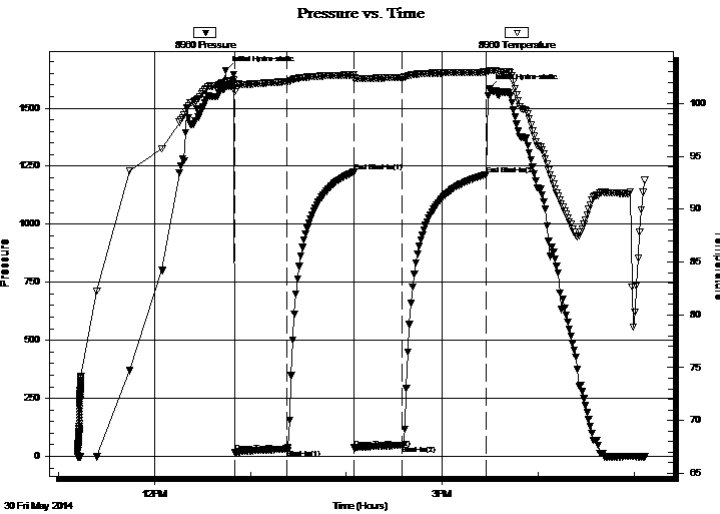
**3-1s-19w Phillips,KS**  
**Tubbs #1**  
 Job Ticket: 58187 **DST#: 1**  
 Test Start: 2014.05.30 @ 11:12:00

## GENERAL INFORMATION:

Formation: **LKC-C-F**  
 Deviated: No Whipstock: ft (KB)  
 Time Tool Opened: 12:50:30  
 Time Test Ended: 17:06:30  
 Interval: **3306.00 ft (KB) To 3378.00 ft (KB) (TVD)**  
 Total Depth: 3378.00 ft (KB) (TVD)  
 Hole Diameter: 7.88 inches Hole Condition: Good  
 Test Type: Conventional Bottom Hole (Initial)  
 Tester: Chuck Kreuzer Jr.  
 Unit No: 61  
 Reference Elevations: 2030.00 ft (KB)  
 2025.00 ft (CF)  
 KB to GR/CF: 5.00 ft

**Serial #: 8960 Inside**  
 Press@RunDepth: 47.49 psig @ 3307.00 ft (KB) Capacity: 8000.00 psig  
 Start Date: 2014.05.30 End Date: 2014.05.30 Last Calib.: 2014.05.30  
 Start Time: 11:12:01 End Time: 17:06:30 Time On Btm: 2014.05.30 @ 12:44:30  
 Time Off Btm:

TEST COMMENT: IF: Weak surface blow  
 IS: No blow back  
 FF: Weak surface blow  
 FS: No blow back



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1662.86	102.06	Initial Hydro-static
6	16.20	101.13	Open To Flow (1)
39	32.60	102.06	Shut-In(1)
80	1224.42	102.71	End Shut-In(1)
81	37.16	102.31	Open To Flow (2)
111	47.49	102.46	Shut-In(2)
163	1214.02	102.96	End Shut-In(2)
165	1584.20	103.08	Initial Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
65.00	mud w ith oil spots	0.50

## Gas Rates

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





**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Bach Oil

**3-1s-19w Phillips,KS**

PO Box 723  
Alma NE 68920

**Tubbs #1**

Job Ticket: 58187

**DST#: 1**

ATTN: Bob Peterson

Test Start: 2014.05.30 @ 11:12:00

## Tool Information

Drill Pipe:	Length: 3208.00 ft	Diameter: 3.80 inches	Volume: 45.00 bbl	Tool Weight:	2400.00 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: 88.00 ft	Diameter: 2.80 inches	Volume: 0.67 bbl	Weight to Pull Loose:	45000.00 lb
			<u>Total Volume: 45.67 bbl</u>	Tool Chased	2.00 ft
Drill Pipe Above KB:	18.00 ft			String Weight: Initial	42000.00 lb
Depth to Top Packer:	3306.00 ft			Final	42000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	72.00 ft				
Tool Length:	100.00 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			3283.00	
Hydraulic tool	5.00			3288.00	
Jars	5.00			3293.00	
Safety Joint	3.00			3296.00	
Packer	5.00			3301.00	28.00 Bottom Of Top Packer
Packer	5.00			3306.00	
Stubb	1.00			3307.00	
Recorder	0.00	8960	Inside	3307.00	
Recorder	0.00	8673	Outside	3307.00	
Perforations	4.00			3311.00	
change Over Sub	1.00			3312.00	
Drill Pipe	62.00			3374.00	
Change Over Sub	1.00			3375.00	
Bullnose	3.00			3378.00	72.00 Bottom Packers & Anchor

**Total Tool Length: 100.00**



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

## FLUID SUMMARY

Bach Oil **3-1s-19w Phillips,KS**  
 PO Box 723 **Tubbs #1**  
 Alma NE 68920 Job Ticket: 58187 **DST#: 1**  
 ATTN: Bob Peterson Test Start: 2014.05.30 @ 11:12:00

### 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: 58.00 sec/qt	Cushion Volume: bbl		
Water Loss: 4.79 in <sup>3</sup>	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 400.00 ppm			
Filter Cake: 2.00 inches			

### Recovery Information

Recovery Table

Length ft	Description	Volume bbl
65.00	mud w ith oil spots	0.495

Total Length: 65.00 ft Total Volume: 0.495 bbl  
 Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:  
 Laboratory Name: Laboratory Location:  
 Recovery Comments:

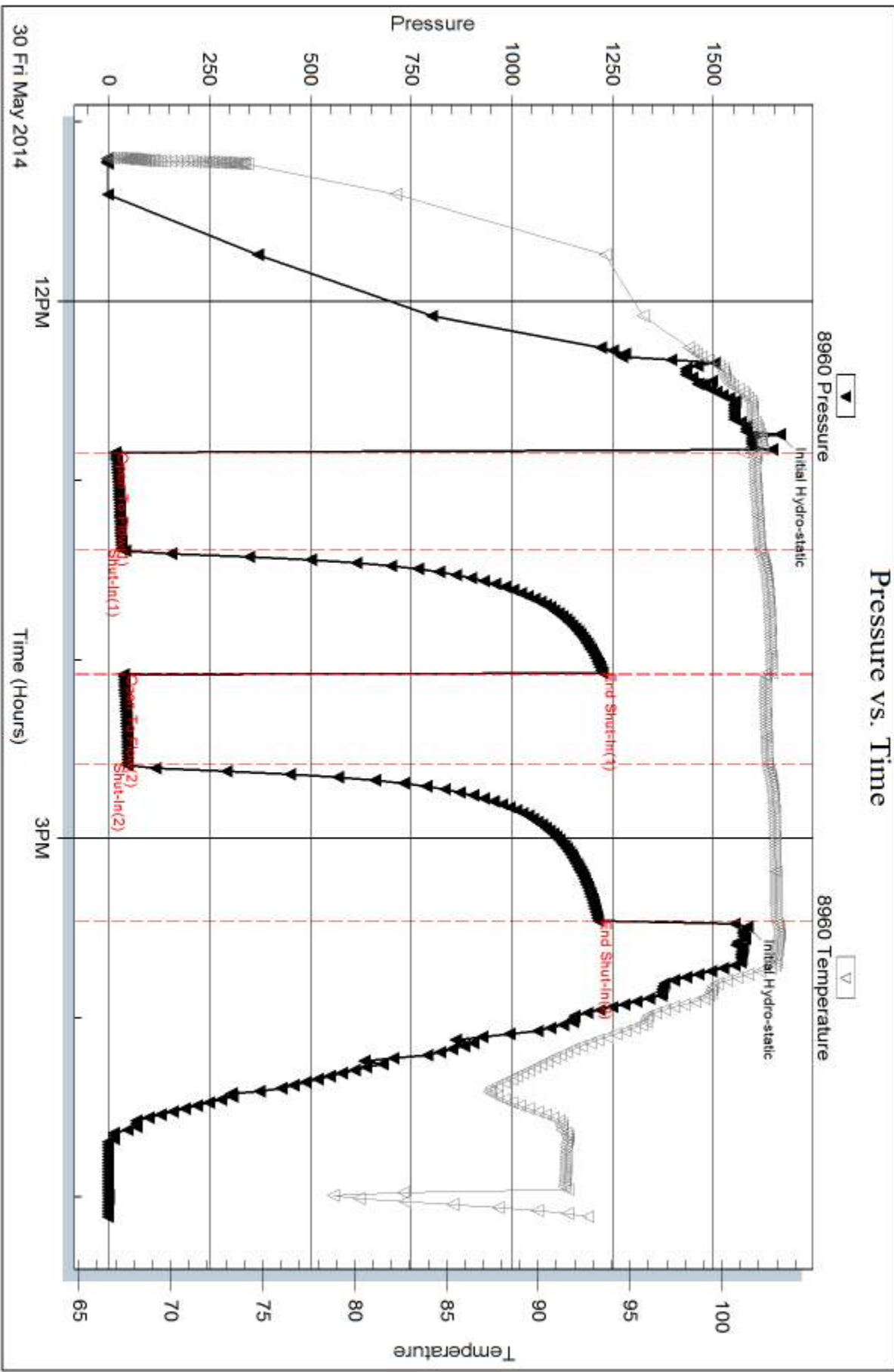
Serial #: 8960

Inside

Batch Oil

Tubbs #1

DST Test Number: 1



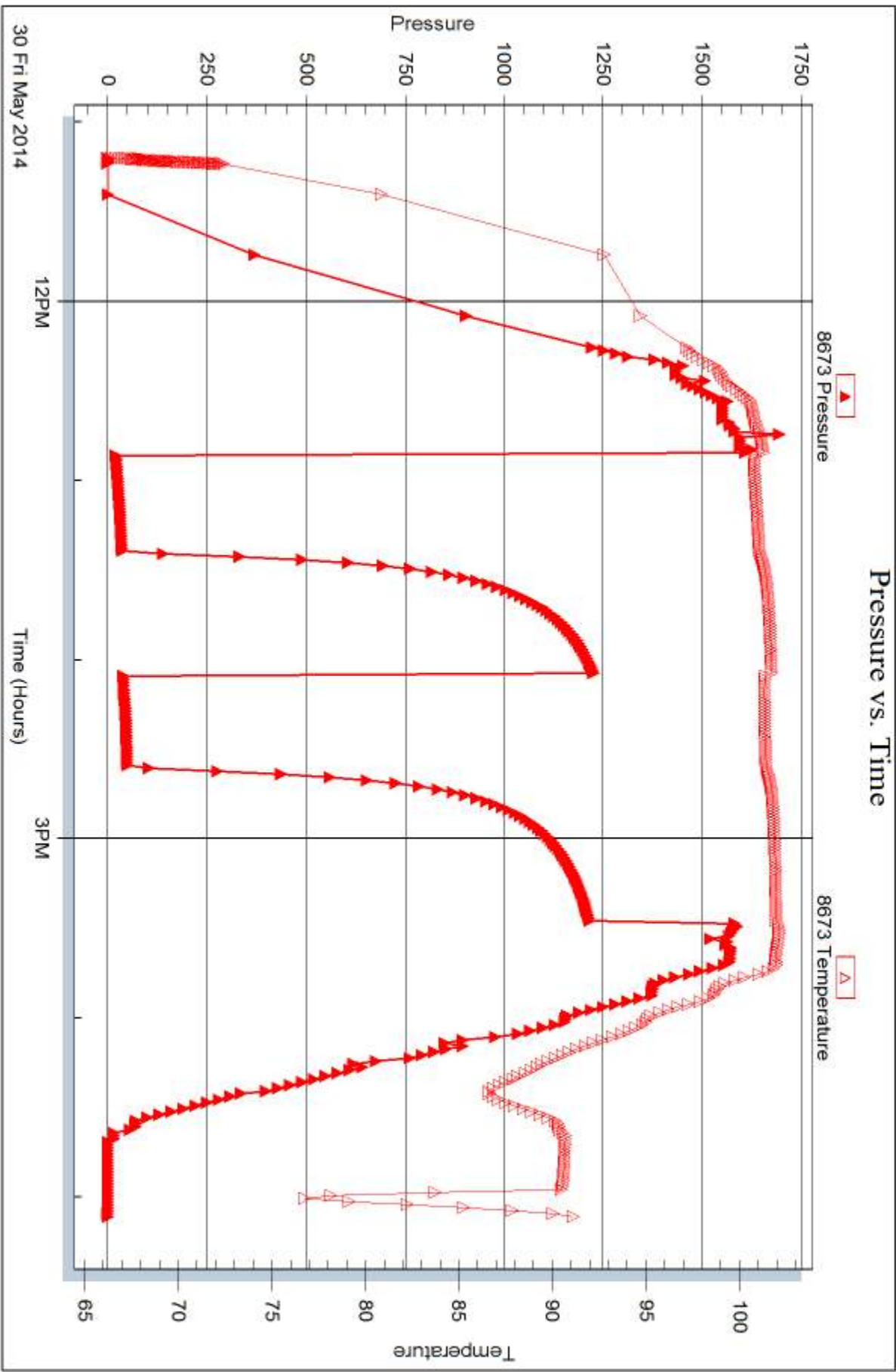


Serial #: 8673

Outside Bach Oil

Tubbs #1

DST Test Number: 1



Trilobite Testing, Inc

Ref. No: 58187

Printed: 2014.06.09 @ 10:53:26



## DRILL STEM TEST REPORT

Prepared For: **Bach Oil**

PO Box 723  
Alma NE 68920

ATTN: Bob Peterson

### **Tubbs #1**

### **3-1s-19w Phillips,KS**

Start Date: 2014.05.31 @ 08:36:00

End Date: 2014.05.31 @ 15:33:30

Job Ticket #: 58188                      DST #: 2

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

Printed: 2014.06.10 @ 08:53:25

Bach Oil  
3-1s-19w Phillips,KS  
Tubbs #1  
DST # 2  
LKC 1  
2014.05.31



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

Bach Oil  
PO Box 723  
Alma NE 68920  
ATTN: Bob Peterson

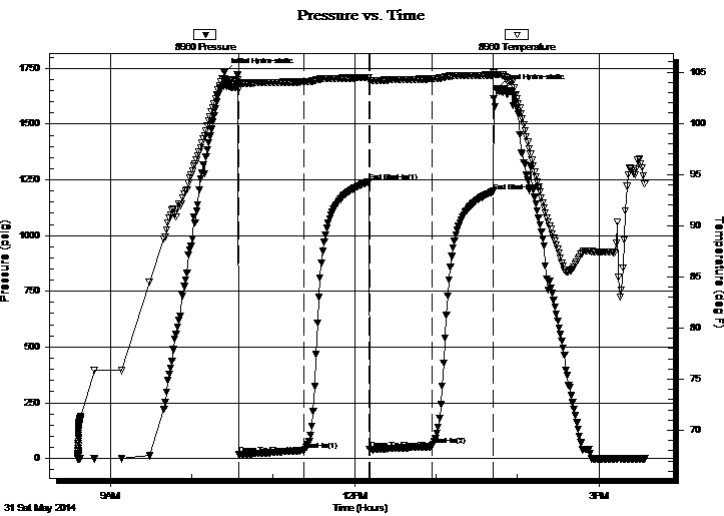
**3-1s-19w Phillips,KS**  
**Tubbs #1**  
Job Ticket: 58188      **DST#: 2**  
Test Start: 2014.05.31 @ 08:36:00

## GENERAL INFORMATION:

Formation: **LKC I**  
Deviated: No Whipstock: ft (KB)      Test Type: Conventional Straddle (Reset)  
Time Tool Opened: 10:34:30      Tester: Chuck Kreuzer Jr.  
Time Test Ended: 15:33:30      Unit No: 61  
**Interval: 3430.00 ft (KB) To 3459.00 ft (KB) (TVD)**      Reference Elevations: 2030.00 ft (KB)  
Total Depth: 3459.00 ft (KB) (TVD)      2025.00 ft (CF)  
Hole Diameter: 7.88 inches Hole Condition: Good      KB to GR/CF: 5.00 ft

**Serial #: 8960      Inside**  
Press@RunDepth: 59.62 psig @ 3431.00 ft (KB)      Capacity: 8000.00 psig  
Start Date: 2014.05.31      End Date: 2014.05.31      Last Calib.: 2014.05.31  
Start Time: 08:36:01      End Time: 15:33:30      Time On Btm: 2014.05.31 @ 10:24:00  
Time Off Btm: 2014.05.31 @ 13:45:00

**TEST COMMENT:** IF: Weak blow , Built to 3/4" . over 45 mins.  
IS: No blow back over 45 mins.  
FF: Weak blow , Built to 1" over 45 mins.  
FS: No blow back



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1731.72	104.38	Initial Hydro-static
11	17.59	103.27	Open To Flow (1)
59	36.07	104.06	Shut-In(1)
107	1241.14	104.47	End Shut-In(1)
107	40.27	104.12	Open To Flow (2)
153	59.62	104.35	Shut-In(2)
198	1198.44	104.71	End Shut-In(2)
201	1659.34	104.75	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
50.00	ocm-40%o60%m	0.38
40.00	go	0.32

\* 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

**3-1s-19w Phillips,KS**

PO Box 723  
Alma NE 68920

**Tubbs #1**

Job Ticket: 58188

**DST#: 2**

ATTN: Bob Peterson

Test Start: 2014.05.31 @ 08:36:00

## Tool Information

Drill Pipe:	Length: 3332.00 ft	Diameter: 3.80 inches	Volume: 46.74 bbl	Tool Weight: 2400.00 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: 88.00 ft	Diameter: 2.80 inches	Volume: 0.67 bbl	Weight to Pull Loose: 45000.00 lb
			<u>Total Volume: 47.41 bbl</u>	Tool Chased 2.00 ft
Drill Pipe Above KB:	20.00 ft			String Weight: Initial 42000.00 lb
Depth to Top Packer:	3430.00 ft			Final 43000.00 lb
Depth to Bottom Packer:	3459.00 ft			
Interval between Packers:	29.00 ft			
Tool Length:	106.00 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			3405.00	
Sampler	2.00			3407.00	
Hydraulic tool	5.00			3412.00	
Jars	5.00			3417.00	
Safety Joint	3.00			3420.00	
Packer	5.00			3425.00	30.00 Bottom Of Top Packer
Packer	5.00			3430.00	
Stubb	1.00			3431.00	
Recorder	0.00	8960	Inside	3431.00	
Recorder	0.00	8673	Outside	3431.00	
Perforations	23.00			3454.00	
Blank Off Sub	1.00			3455.00	
Blank Spacing	4.00			3459.00	29.00 Tool Interval
Packer	1.00			3460.00	
Packer - Shale	0.00			3460.00	
Recorder	0.00	8651	Below	3460.00	
Change Over Sub	1.00			3461.00	
Perforations	9.00			3470.00	
Change Over Sub	1.00			3471.00	
Blank Spacing	31.00			3502.00	
Change Over Sub	1.00			3503.00	
Bullnose	3.00			3506.00	47.00 Bottom Packers & Anchor

**Total Tool Length: 106.00**



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

## FLUID SUMMARY

Bach Oil

**3-1s-19w Phillips,KS**

PO Box 723  
Alma NE 68920

**Tubbs #1**

Job Ticket: 58188

**DST#: 2**

ATTN: Bob Peterson

Test Start: 2014.05.31 @ 08:36:00

### 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: 58.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 4.79 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 400.00 ppm

Filter Cake: 2.00 inches

### Recovery Information

Recovery Table

Length ft	Description	Volume bbl
50.00	ocm-40%o60%m	0.381
40.00	go	0.317

Total Length: 90.00 ft      Total Volume: 0.698 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:



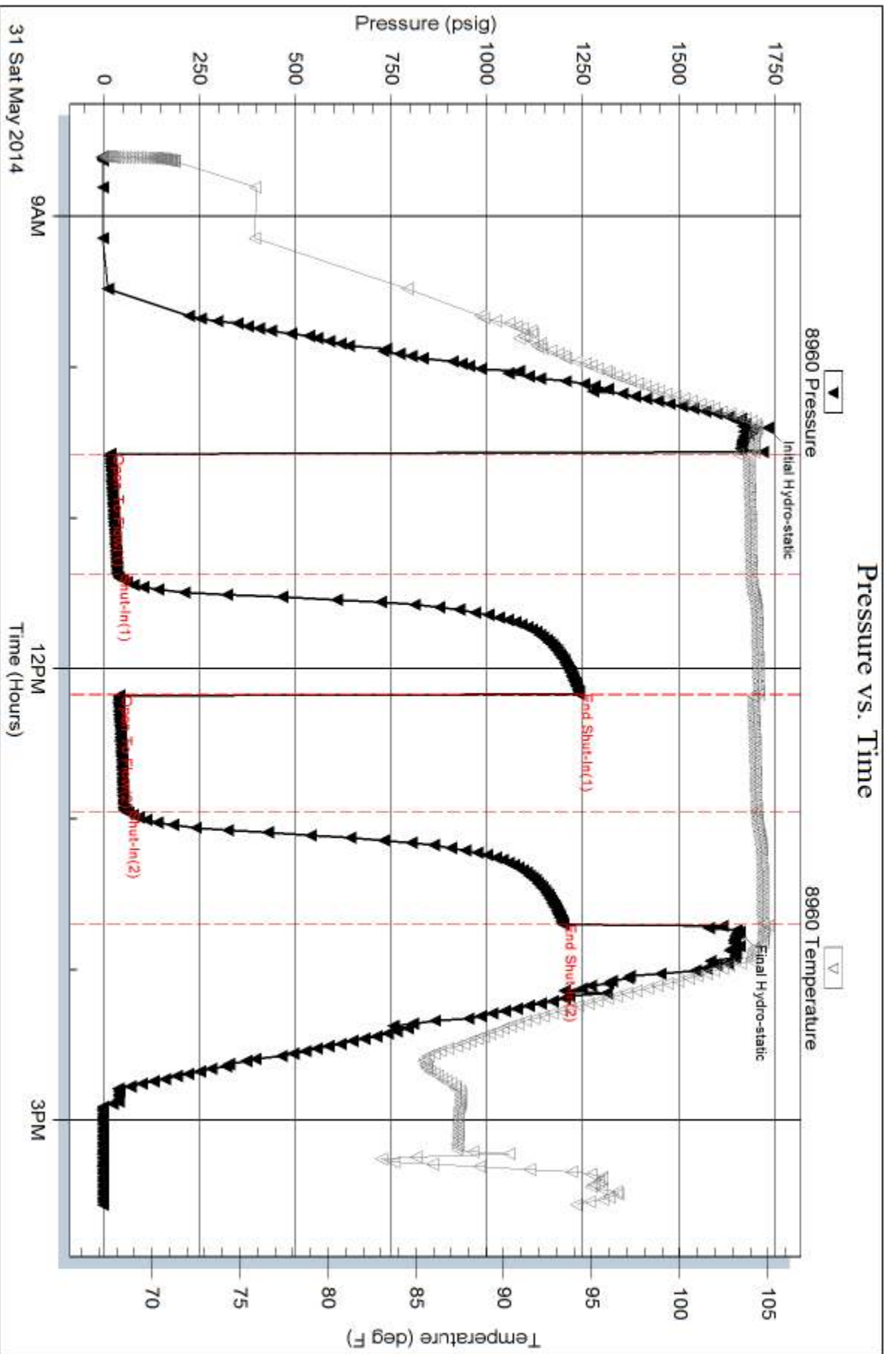
Serial #: 8960

Inside

Bach Oil

Tubbs #1

DST Test Number: 2

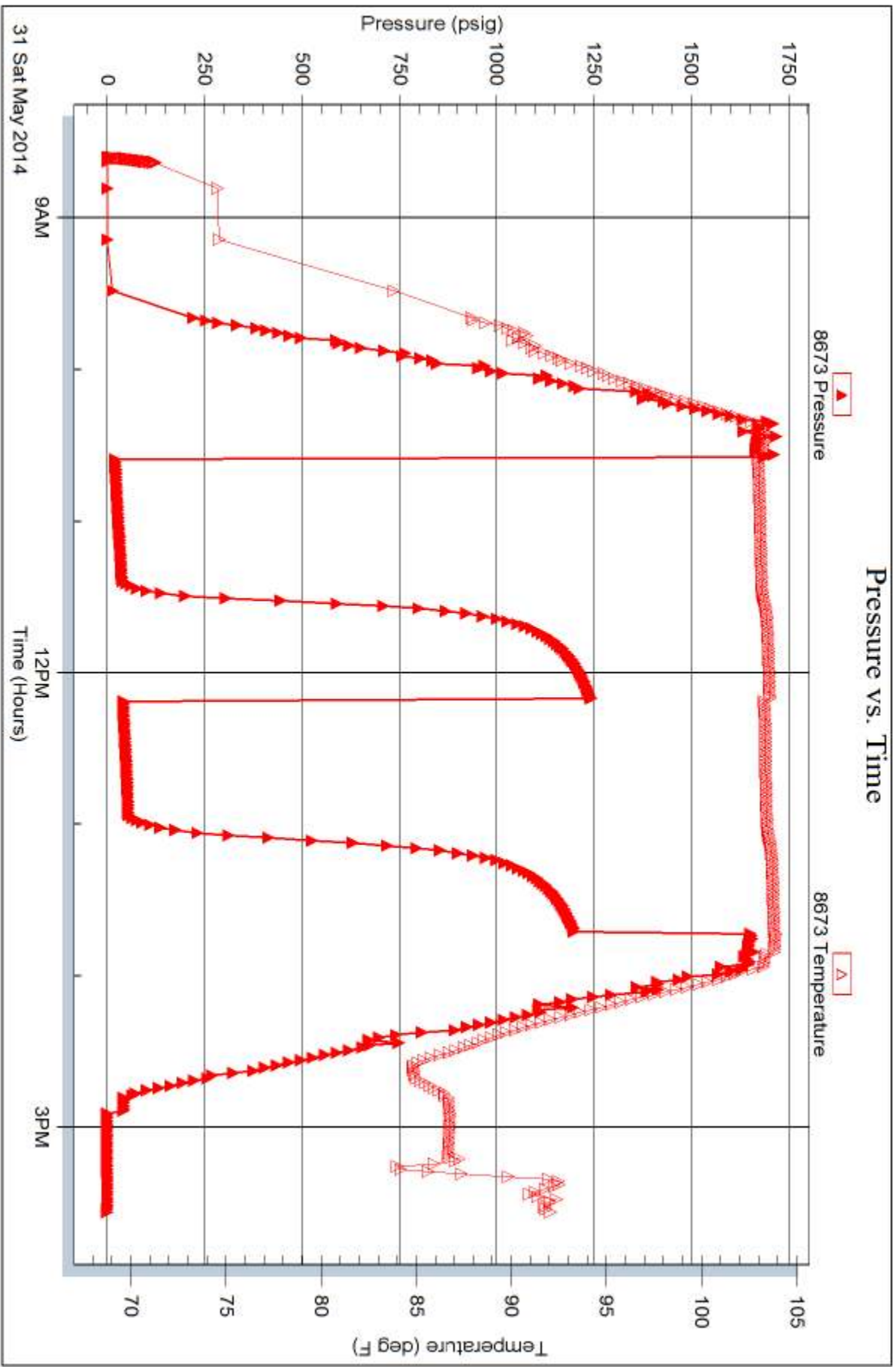


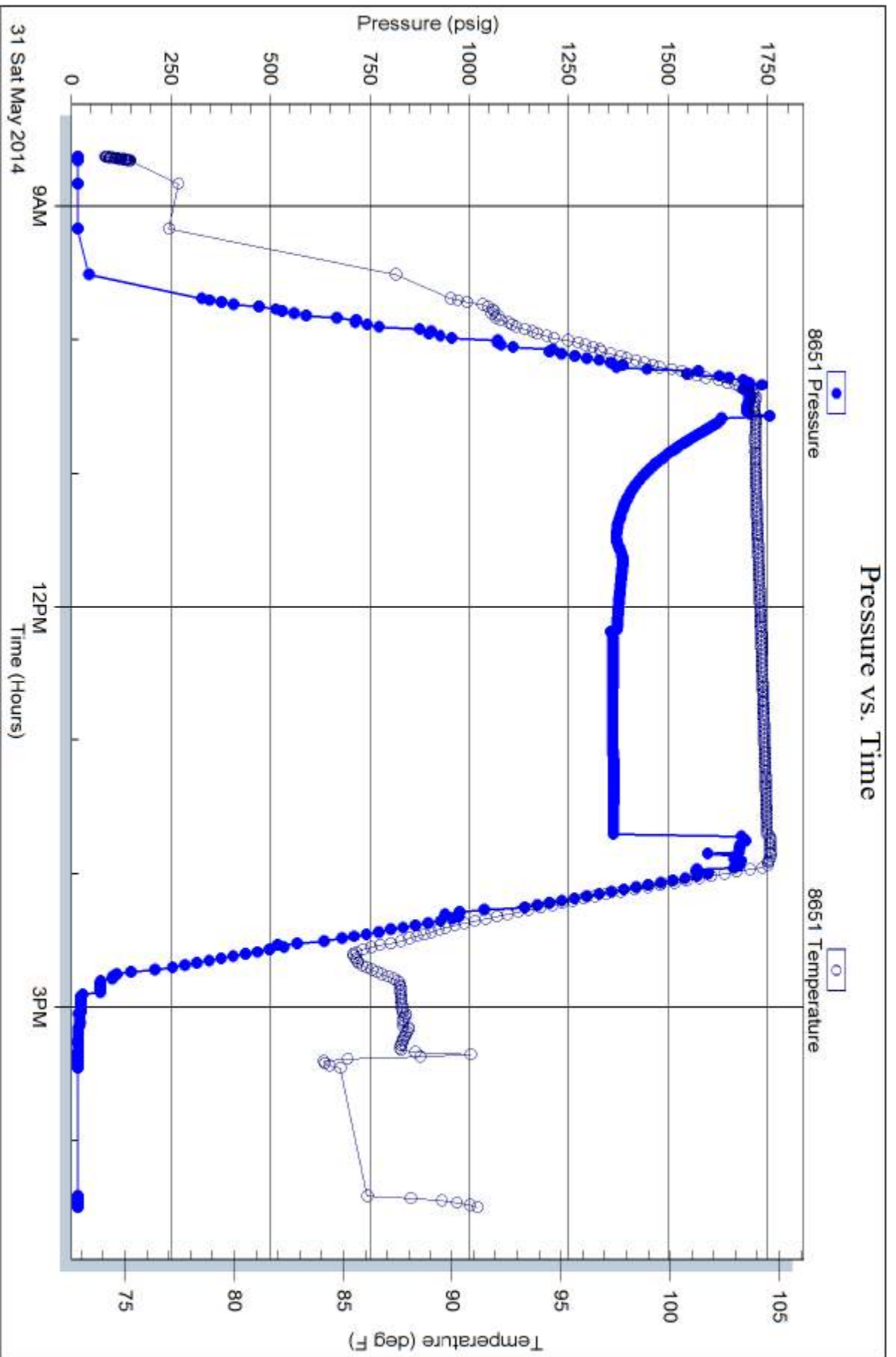
Serial #: 8673

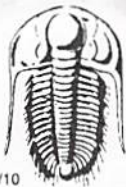
Outside Bach Oil

Tubbs #1

DST Test Number: 2







# TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

## Test Ticket

NO. 58187

Well Name & No. Tubbs # 1 Test No. 1 Date 5-30-2014  
 Company Bach Elevation 2030 KB 2025 GL  
 Address P.O. Box 723 Alma Ne. 68900  
 Co. Rep / Geo. Bob Peterson Rig Murfin #24  
 Location: Sec. 3 Twp. 1s Rge. 19w Co. Phillips State Ks

Interval Tested 3306 3378 Zone Tested LKL-C-F  
 Anchor Length 72 Drill Pipe Run \_\_\_\_\_ Mud Wt. 9.2  
 Top Packer Depth 3301 Drill Collars Run 98 Vis 58  
 Bottom Packer Depth 3306 Wt. Pipe Run -00 WL 4.8  
 Total Depth 3378 Chlorides 406 ppm System LCM 1#

Blow Description IF: Weak surface  
FST: No blow back  
FF: Weak surface  
FIS: No blow back

Rec	Feet of	%gas	%oil	%water	%mud
<u>65</u>	<u>mud with oil specs</u>				
_____	_____				
_____	_____				
_____	_____				
_____	_____				

Rec Total 65 BHT 100 Gravity \_\_\_\_\_ API RW \_\_\_\_\_ @ \_\_\_\_\_ °F Chlorides \_\_\_\_\_ ppm

(A) Initial Hydrostatic <u>1663</u>	<input checked="" type="checkbox"/> Test <u>1150</u>	T-On Location <u>10:30</u>
(B) First Initial Flow <u>16</u>	<input checked="" type="checkbox"/> Jars <u>250</u>	T-Started <u>11:12</u>
(C) First Final Flow <u>33</u>	<input checked="" type="checkbox"/> Safety Joint <u>75</u>	T-Open <u>12:50</u>
(D) Initial Shut-In <u>1224</u>	<input type="checkbox"/> Circ Sub _____	T-Pulled <u>15:20</u>
(E) Second Initial Flow <u>37</u>	<input type="checkbox"/> Hourly Standby _____	T-Out <u>17:06</u>
(F) Second Final Flow <u>47</u>	<input checked="" type="checkbox"/> Mileage <u>59x2 = 116 x 1.55 = 179.80</u>	Comments _____
(G) Final Shut-In <u>1214</u>	<input type="checkbox"/> Sampler _____	
(H) Final Hydrostatic <u>1584</u>	<input type="checkbox"/> Straddle _____	<input type="checkbox"/> Ruined Shale Packer _____
Initial Open <u>30</u>	<input type="checkbox"/> Shale Packer _____	<input type="checkbox"/> Ruined Packer _____
Initial Shut-In <u>45</u>	<input type="checkbox"/> Extra Packer _____	<input type="checkbox"/> Extra Copies _____
Final Flow <u>30</u>	<input type="checkbox"/> Extra Recorder _____	Sub Total <u>0</u>
Final Shut-In <u>45</u>	<input type="checkbox"/> Day Standby _____	Total <u>1654.80</u>
	<input type="checkbox"/> Accessibility _____	MP/DST Disc't _____
	Sub Total <u>1654.80</u>	

Approved By \_\_\_\_\_ Our Representative [Signature]

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. **58188**

4/10

Well Name & No. Tubbs #1 Test No. 2 Date 5-31-2014  
 Company Bash Elevation 2030 KB 2025 GL  
 Address PO Box 723 Alma Ne. 68020  
 Co. Rep / Geo. Bob Peterson Rig Murfit #24  
 Location: Sec. 3 Twp. 1S Rge. 19W Co. Ph: 16ps State Ks.

Interval Tested 3430 3459 Zone Tested LKC - I  
 Anchor Length 29 Drill Pipe Run 3332 Mud Wt. 9.2  
 Top Packer Depth 3425 Drill Collars Run 88 Vis 58  
 Bottom Packer Depth 3459 ~~3430~~ ~~3425~~ Wt. Pipe Run - 0 - WL 4.8  
 Total Depth 3505 ~~3430~~ Chlorides 400 ppm System LCM 1#

Blow Description IF: Weak blow, Built to 3/4 in. over 45 mins.  
ISI: No blow back  
FF: Weak blow, Built to 1 in. over 45 mins.  
FSI: No blow back

Rec	Feet of	%gas	%oil	%water	%mud
<u>40</u>	<u>90</u>	<u>20</u>	<u>80</u>		
<u>50</u>	<u>OCM</u>		<u>40</u>		<u>60</u>

Rec Total 90 BHT 104 Gravity 19 API RW \_\_\_\_\_ @ \_\_\_\_\_ ° F Chlorides \_\_\_\_\_ ppm

(A) Initial Hydrostatic <u>1732</u>	<input checked="" type="checkbox"/> Test <u>1150</u>	T-On Location <u>8:00</u>
(B) First Initial Flow <u>18</u>	<input checked="" type="checkbox"/> Jars <u>250</u>	T-Started <u>8:36</u>
(C) First Final Flow <u>36</u>	<input checked="" type="checkbox"/> Safety Joint <u>75</u>	T-Open <u>10:34</u>
(D) Initial Shut-In <u>1241</u>	<input type="checkbox"/> Circ Sub _____	T-Pulled <u>13:30</u>
(E) Second Initial Flow <u>40</u>	<input type="checkbox"/> Hourly Standby _____	T-Out <u>15:33</u>
(F) Second Final Flow <u>60</u>	<input checked="" type="checkbox"/> Mileage <u>58x2 = 116x1.55 = 179.80</u>	Comments _____
(G) Final Shut-In <u>1198</u>	<input type="checkbox"/> Sampler _____	
(H) Final Hydrostatic <u>1659</u>	<input checked="" type="checkbox"/> Straddle <u>600</u>	<input type="checkbox"/> Ruined Shale Packer _____
	<input type="checkbox"/> Shale Packer _____	<input type="checkbox"/> Ruined Packer _____
	<input type="checkbox"/> Extra Packer _____	<input type="checkbox"/> Extra Copies _____
	<input type="checkbox"/> Extra Recorder _____	Sub Total <u>0</u>
	<input type="checkbox"/> Day Standby _____	Total <u>2254.80</u>
	<input type="checkbox"/> Accessibility _____	MP/DST Disc't _____
	Sub Total <u>2254.80</u>	

Approved By \_\_\_\_\_ Our Representative [Signature]

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.