

Confidentiality Requested:

Yes No

KANSAS CORPORATION COMMISSION
OIL & GAS CONSERVATION DIVISION

Form ACO-1

January 2018

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

Gas DH EOR

OG GSW

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 EOR Conv. to SWD

Plug Back Liner Conv. to GSW Conv. to Producer

Commingled Permit #: _____

Dual Completion Permit #: _____

SWD Permit #: _____

EOR Permit #: _____

GSW Permit #: _____

Spud Date or Date Reached TD Completion Date or Recompletion Date

API No.: _____

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 Drill Stem Tests Received

Geologist Report / Mud Logs Received

UIC Distribution

ALT I II III Approved by: _____ Date: _____

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 Geologist Report / Mud Logs <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
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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				

1. Did you perform a hydraulic fracturing treatment on this well? Yes No *(If No, skip questions 2 and 3)*
2. Does the volume of the total base fluid of the hydraulic fracturing treatment exceed 350,000 gallons? Yes No *(If No, skip question 3)*
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)*

Date of first Production/Injection or Resumed Production/Injection:	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

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> <i>(Submit ACO-4)</i>	PRODUCTION INTERVAL: Top Bottom
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Shots Per Foot	Perforation Top	Perforation Bottom	Bridge Plug Type	Bridge Plug Set At	Acid, Fracture, Shot, Cementing Squeeze Record <i>(Amount and Kind of Material Used)</i>

TUBING RECORD:	Size:	Set At:	Packer At:	
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Form	ACO1 - Well Completion
Operator	Shakespeare Oil Co., Inc.
Well Name	K OTTLEY 2-14
Doc ID	1444199

All Electric Logs Run

Array Induction
Photo Density
Comp Neutron
Microlog

Form	ACO1 - Well Completion
Operator	Shakespeare Oil Co., Inc.
Well Name	K OTTLEY 2-14
Doc ID	1444199

Tops

Name	Top	Datum
Base Anhydrite	2284	+516
Heebner	3783	-983
Lansing	3818	-1018
Muncie Creek	3972	-1172
Stark Shale	4064	-1264
Hushpuckney	4096	-1296
Marmaton	4196	-1396
Pawnee	4267	-1467
L. Cherokee Shale	4353	-1553
Johnson	4392	-1592
Mississippian	4454	-1650



P. O. Box 466
Ness City, KS 67560
Off: 785-798-2300



Invoice

DATE	INVOICE #
1/22/2019	31935

BILL TO
Shakespeare Oil Company, Inc 202 West Main Street Salem, IL 62881

- Acidizing
- Cement
- Tool Rental

INT

TERMS	Well No.	Lease	County	Contractor	Well Type	Well Category	Job Purpose	Operator
Net 30	#2-14	K Ottley	Logan	Duke Drlg Rig #4	Oil	Development	Surface Pipe	Gideon
PRICE REF.	DESCRIPTION				QTY	UM	UNIT PRICE	AMOUNT
575D	Mileage - 1 Way				90	Miles	5.00	450.00
576D-S	Pump Charge - Shallow Surface (< 500 Ft.)				1	Job	875.00	875.00
325	Standard Cement				165	Sacks	13.00	2,145.00T
278	Calcium Chloride				7	Sack(s)	40.00	280.00T
279	Bentonite Gel				3	Sack(s)	30.00	90.00T
276	Flocele				50	Lb(s)	2.50	125.00T
290	D-Air				2	Gallon(s)	42.00	84.00T
581D	Service Charge Cement				165	Sacks	1.75	288.75
583D	Drayage				729.45	Ton Miles	0.85	620.03
	Subtotal							4,957.78
	Sales Tax Logan County						8.00%	217.92

RECEIVED
JAN 28 2019

*502-5
DH*

We Appreciate Your Business!

Total

\$5,175.70

DW



TICKET 031935

CHARGE TO: Shakespeare Oil & Gas
 ADDRESS
 CITY, STATE, ZIP CODE

PAGE 1 OF 1

SERVICE LOCATIONS
 1. Ness City, KS WELL/PROJECT NO. a-14 LEASE K Otkley COUNTY/PARISH Logan STATE KS CITY Scott City DATE 1/22/19 OWNER
 2. TICKET TYPE SERVICE CONTRACTOR Duke Drilling RIG NAME/NO. 4 SHIPPED VIA ET DELIVERED TO Location ORDER NO.
 3. WELL TYPE Oil WELL CATEGORY Development JOB PURPOSE Surface Pipe WELL PERMIT NO.
 4. REFERRAL LOCATION INVOICE INSTRUCTIONS

PRICE REFERENCE	SECONDARY REFERENCE/ PART NUMBER	ACCOUNTING		DESCRIPTION	MILEAGE	QTY.	UM	QTY.	UM	UNIT PRICE	AMOUNT
		LOC	ACCT								
575				Trk #112		90	m			5.00	450.00
576				Pump Charge - Surface		1	job			875.00	875.00
325				STD Cement		165	sk			13.00	2145.00
278				Calcium Chloride		7	sk			40.00	280.00
279				Bentonite Gel		3	sk			300.00	900.00
276				Florel		50	lb			3.70	185.00
290				D-Air		2	gal			40.00	80.00
581				Service Charge CMT		1	sk			288.00	288.00
583				Drayage		16210	lb			0.35	620.03

LEGAL TERMS: Customer hereby acknowledges and agrees to the terms and conditions on the reverse side hereof which include, but are not limited to, PAYMENT, RELEASE, INDEMNITY, and LIMITED WARRANTY provisions.

MUST BE SIGNED BY CUSTOMER OR CUSTOMER'S AGENT PRIOR TO START OF WORK OR DELIVERY OF GOODS.

DATE SIGNED 1/22/19 TIME SIGNED 9:30 A.M. P.M.

REMIT PAYMENT TO:
 SWIFT SERVICES, INC.
 P.O. BOX 466
 NESS CITY, KS 67560
 785-798-2300

SURVEY
 OUR EQUIPMENT PERFORMED WITHOUT BREAKDOWN?
 WE UNDERSTOOD AND MET YOUR NEEDS?
 OUR SERVICE WAS PERFORMED WITHOUT DELAY?
 WE OPERATED THE EQUIPMENT AND PERFORMED JOB CALCULATIONS SATISFACTORILY?
 ARE YOU SATISFIED WITH OUR SERVICE?
 CUSTOMER DID NOT WISH TO RESPOND

PAGE TOTAL 1 TOTAL 5775.70

CUSTOMER ACCEPTANCE OF MATERIALS AND SERVICES The customer hereby acknowledges receipt of the materials and services listed on this ticket.

SWIFT OPERATOR Adams Truck APPROVAL Adams Truck

Thank You!

JOB LOG

SWIFT Services, Inc.

DATE 1/22/19 PAGE NO. 1

CUSTOMER Shakespeare Oil WELL NO. 2-14 LEASE K Otley JOB TYPE Surface Pipe TICKET NO. 031935

CHART NO.	TIME	RATE (BPM)	VOLUME (BBL) (GAL)	PUMPS		PRESSURE (PSI)		DESCRIPTION OF OPERATION AND MATERIALS
				T	C	TUBING	CASING	
	1900							On Location 8 5/8" 2316 RTD: 2264 TP: 264
								Casing in Well Circulation
	2025	4	5		✓		0	Pump 5 bbl Water Spacer
	2030	4	40		✓		100	Mix 165 sks of Standard CMT 2% gel 3% CC @ 14.7 ppg
	2045	4	16 1/4		✓		200	Displace Cement
								Circulate CMT to Surface * 20 sks to the Pitt *
	2050				✓			KO Pump - Shut in Release Pressure * Valve Hold *
								Wash up Trk
								Job Complete
								165 sks of Standard CMT 2% gel 3% CC used
								Thank You
								Gideon, Preston, Isaac

GLOBAL OIL FIELD SERVICES, LLC

24 S. Lincoln
RUSSELL, KS 67665

Invoice

Date	Invoice #
2/7/2019	0013378

Bill To
SHAKESPEARE OIL COMPANY INC 202 W MAIN SALEM, IL 62881

INT

P.O. No.	Terms	Project
K-OTTLEY#2-14	Due on receipt	

Quantity	Description	Rate	Amount
240	60/40 POZMIX CEMENT	13.75	3,300.00
9	BENTONITE GEL	30.00	270.00
60	FLO-SEAL	2.00	120.00
249	HANDLING	1.90	473.10
	BULK MILEAGE	950.00	950.00
1	TRI-PLEX PUMP CHARGE FOR PLUG	850.00	850.00
45	HEAVY EQUIPMENT. ONE WAY	6.50	292.50
45	LMV- ONE WAY	2.75	123.75
	DRY HOLE PLUG	62.50	62.50
	15% DISCOUNT IF PAID WITHIN 15 DAYS OF INVOICE		0.00
	new sales tax rate as of 7-1-2015	8.50%	0.00

RECEIVED
FEB 12 2019

*502-5
DH*

Thank you for your business.

Phone #	Fax #
785-445-3525	785-445-3526

Total \$6,441.85

DW

GLOBAL OIL FIELD SERVICES, LLC

0013378

REMIT TO 24 S. Lincoln
Russell, KS 67665

SERVICE POINT: Russell, KS

DATE <u>2-1-19</u>	SEC. <u>14</u>	TWP. <u>14</u>	RANGE <u>32</u>	CALLED OUT	ON LOCATION	JOB START	JOB FINISH <u>10:15 AM</u>
LEASE <u>K-OTT/ey</u>		WELL #. <u>2-14</u>	LOCATION <u>24500th Oak Hills 1 Ene</u>			COUNTY <u>Logan</u>	STATE <u>KS</u>
OLD OR <input checked="" type="radio"/> NEW (CIRCLE ONE)			<u>Nurhinto</u>				

CONTRACTOR Dulle Drilling Rig #5
 TYPE OF JOB Rotary Plus
 HOLE SIZE 7 7/8 T.D. 4550'
 CASING SIZE DEPTH
 TUBING SIZE DEPTH
 DRILL PIPE DEPTH 22-15'
 TOOL DEPTH
 PRES. MAX MINIMUM
 MEAS. LINE SHOE JOINT
 CEMENT LEFT IN CSG.
 PERFS
 DISPLACEMENT

OWNER Shakespeare Oil Co.
 CEMENT AMOUNT ORDERED 2 40s x 60/40 Poz 48/60
1/4" per Flow Seal

EQUIPMENT

PUMP TRUCK # <u>417</u>	CEMENTER <u>Cody</u>	HELPER <u>Jason</u>
BULK TRUCK # <u>410</u>	DRIVER <u>Sean</u>	
BULK TRUCK #	DRIVER	

COMMON	@	
POZMIX	@	
GEL	@	
CHLORIDE	@	
ASC	@	
	@	
	@	
	@	
	@	
	@	
	@	
HANDLING	@	
MILEAGE	@	
TOTAL		

REMARKS:

22-15' 50s
1150' 60s x
310' 50s
40' upper plug 10s
30s Rad

CHARGE TO: Shakespeare Oil Co.
 STREET _____
 CITY _____ STATE _____ ZIP _____

SERVICE

DEPTH OF JOB		
PUMP TRUCK CHARGE		
EXTRA FOOTAGE	@	
MILEAGE	@	
MANIFOLD	@	
	@	
	@	
TOTAL		

PLUG & FLOAT EQUIPMENT

	@	
	@	
	@	
	@	
	@	
TOTAL		

Global Oil Field Services, LLC
 You are hereby requested to rent cementing equipment and furnish cementer and helper(s) to assist owner or contractor to do work as is listed. The above work was done to satisfaction and supervision of owner agent or contractor. I have read and understand the "GENERAL TERMS AND CONDITIONS" listed on the reverse side.

PRINTED NAME _____
 SIGNATURE Hector Torres

SALES TAX (If Any) _____
 TOTAL CHARGES _____
 DISCOUNT _____ IF PAID IN 30 DAYS

ELEVATIONS
KB 2800'
GL 2791'

COMPANY & WELL Shakespeare # 2-14 K Otteley
LOCATION 500' FSL, 1150' FEL, SE/4
SEC 14 TWPSP 14S RGE 32W
COUNTY Logan STATE Kansas

Tim J. Lauer
Petroleum Geologist

Office 316.832.0530
Cell 316.253.1275

GEOLOGIST'S REPORT
DRILLING TIME AND SAMPLE LOG

COMPANY Shakespeare Oil Company, Inc
LEASE # 2-14 K Otteley
FIELD NW SW SE
LOCATION 500' FSL, 1150' FEL, SE/4
SEC 14 **TWPSP** 14S **RGE** 32W
COUNTY Logan **STATE** Kansas

CONTRACTOR Duke Drilling Rig #4
SPUD 1-22-2019 **COMP**
RTD 4550' **LTD** 4550'
MUD UP 3440' **TYPE MUD** Chemical

SAMPLES SAVED FROM 3500' **TORTD**
DRILLING TIME KEPT FROM 3500' **TORTD**
SAMPLES EXAMINED FROM 3600' **TORTD**
GEOLOGICAL SUPERVISION FROM 3675' **to RTD**
GEOLOGIST ON WELL Tim J. Lauer

Measurements Are All From Kelly Bushing

ELEVATIONS
KB 2800'
DF _____
GL 2791'

CASING
CONDUCTOR _____
SURFACE 8-5/8" @ 264'
PRODUCTION none

ELECTRICAL SURVEYS
Weatherford DCPL, DIL, ML
Engineer: Stacy Wight

FORMATION TOPS ELECTRIC LOG SAMPLE LOG

B/Anhydrite	2284 (+516)	2286 (+514)
Heebner	3781 (-980)	3782 (-982)
Lansing	3878 (-1078)	3820 (-1020)
Stark	4065 (-1265)	4067 (-1267)
Marmaton	4195 (-1395)	4198 (-1398)
Fort Scott	4321 (-1521)	4321 (-1521)
Cherokee Shale	4350 (-1550)	4353 (-1553)
Johnson Zone	4393 (-1593)	4394 (-1594)
Mississippian	4454 (-1654)	4453 (-1653)
Total Depth	4548 (-1748)	4550 (-1750)

14

REMARKS Due to drill stem test results, and log evaluation, operator elected to plug and abandon the location without further testing.

Log measurements are 2' shallow to Rotary measurements. Move DST intervals uphole 2' to match Electric Log measurements.

Respectfully submitted,

Tim J. Lauer
2/1/2019

38.931174807 lat
100.839793412 lon
NAD 83
API: 15-109-21,579-00-00

DEPTH	SHALES	DRILLING TIME PER FOOT	SAMPLE DESCRIPTION	REMARKS
2200				SPUD 12:15 PM 1-22-2019 RTD 11:55 PM 1-31-2019
2284				"BIT RECORD" 1) Smith F124Y (New) Under Surface to 4550' RTD'
2286				"VERTICAL SURVEYS" 3/4" @ 264' 3/4" @ 952' 3/4" @ 1513' 1/2" @ 2069' 3/4" @ 2535' 1" @ 3031' 1/2" @ 3524' 3/4" @ 4110' 3/4" @ 4325'
2300				1-22-19 - MIRT, RURT Prep to set Surf Casing 1-23-2019 - 7:00 AM Drig @ 400 set 8-5/8" @ 264' 1-24-2019 - 7:00 AM Drig @ 1875' 1-25-2019 - 7:00 AM Drig @ 2990' 1-26-2019 - 7:00 AM Drig @ 3524' 1-27-2019 - 7:00 AM CFS @ 3945' 1-28-2019 - 7:00 AM PTD @ 4052' GIH after DST(1) 1-29-2019 - 7:00 AM Drig @ 4144' 1-30-2019 - 7:00 AM PTD @ 4325' Running DST(3) 1-31-2019 - 7:00 AM PTD @ 4425' Running DST(4) 2-1-2019 - 7:00 AM RTD @ 4550' Running Weatherford OH logs 2-2-2019 - 7:00 AM RTD @ 4550' Plg & Abd Loc
2300				Drilling Time skip 2300' to 3550'
2300				Call Point 3450' 3:45 AM 1-26-2019 Geologist on location 3675' 2:00 PM 1-26-2019 Displace native fluid at 3445' Used Premix to bring mud up Mud Check at 3605: vis: 62 wt: 8.7 Chlor: 2.500 LCM: 2# Ph: 11.5 WL: 7.2
2300				DST (1) 3920'-3940' Straddle Test 30-30-30-30 Blow: weak, built to 12" on IFP no blowback on FSIP weak built to 1404 on FSIP no blowback on FSIP 15' Mud with Oil Spots (0% gas, 0% oil, 90% mud, 10% wtr) IHP: 20-55 FFP: 18-20 IFP: 16-17 FSP: 19-25 ISIP: 961 FHP: 1892 Temp: 109F Chlorides MUD: 2,200 PPM DST: NA Rw = NA Both Shut-in curves broken over.
2300				DST (1) 3960'-4052' 30-30-30-60 Blow: weak, built to 2 1/4" on IFP no blowback on FSIP no blowback on FSIP 40' Mud with Oil Spots (0% gas, 100% oil, 0% mud, 0% wtr) IHP: 2016 FFP: 26-33 IFP: 18-24 FSP: 18-25 ISIP: 797 FHP: 1945 Temp: 108F Chlorides MUD: 2,200 PPM DST: NA Rw = NA Both Shut-in curves broken over.
2300				DST (2) 4054'-4110' 30-30-30-60 Blow: frgd, built to 9 1/2" on IFP no blowback on FSIP frgd, built to 9 1/2" on FFP no blowback on FSIP 5' Free Oil (0% gas, 0% oil, 90% mud, 0% wtr) IHP: 2049 FFP: 60-86 IFP: 16-17 FSP: 18-25 ISIP: 684 FHP: 2005 Temp: 113F Chlorides MUD: 3,500 PPM DST: 56,000 PPM Rw = 0.29 Ohms @ 33F *Note: Initial Shut-in curve still bldg. Final Shut-in curve broken over.
2300				DST (3) 4256'-4325' 30-30-45-90 Blow: weak, built to 7 1/2" on IFP strong, Bldg in 21", built to 15" on FFP no blowback on FSIP 130' GOCM (10% gas, 100% oil, 0% mud, 10% wtr) 50' Total Fluid IHP: 2157 FFP: 21-32 IFP: 17-21 FSP: 19-25 ISIP: 1741 FHP: 975 Temp: 111F Chlorides MUD: 4,000 PPM DST: NA Rw = NA *Note: Initial Shut-in curve still bldg. Final Shut-in curve broken over.
2300				DST (4) 4374'-4425' 30-30-45-90 Blow: frgd, built to 9 3/4" on IFP wk blowback built to 34" on FSIP fair-good, built to 9 1/2" on FFP no blowback on FSIP 140' GOCM (10% gas, 20% oil, 70% mud, 0% wtr) IHP: 2206 FFP: 20-28 IFP: 16-20 FSP: 915' ISIP: 1477 FHP: 2171 Temp: 114F Chlorides MUD: 5,000 PPM DST: NA Rw = NA *Note: Both Shut-in curves still building
2300				Mud Check at 4325 during DST: vis: 57 wt: 9.1 Chlor: 3,000 LCM: 2# Ph: 11.0 WL: 8.0
2300				Mud Check at 4425 after test: vis: 57 wt: 9.4 Chlor: 5,000 LCM: 2# Ph: 10.0 WL: 9.6
2300				Rot TD reached 11:55 PM 1-31-2019 Straddle DST(5) 3920-3940 after OH log

COMPANY & WELL Shakespeare #2-14 K Otteley
LOCATION 500' FSL, 1150' FEL, SE/4
SEC 14 **TWPSP** 14S **RGE** 32W
COUNTY Logan **STATE** Kansas

ELEVATIONS
KB 2800'
GL 2791'





**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Shakespeare Oil Co

14-14s-32w Logan Ks

202 W Main St
Salem IL 62881

K Ottley 2-14

Job Ticket: 64320

DST#: 1

ATTN: Tim Lauer

Test Start: 2019.01.27 @ 23:28:51

GENERAL INFORMATION:

Formation: **Lansing H-I**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 02:35:51

Time Test Ended: 07:04:51

Test Type: Conventional Bottom Hole (Initial)

Tester: Brandon Turley

Unit No: 79

Interval: 3960.00 ft (KB) To 4052.00 ft (KB) (TVD)

Reference Elevations: 2800.00 ft (KB)

Total Depth: 4052.00 ft (KB) (TVD)

2791.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 9.00 ft

Serial #: 8166 Outside

Press@RunDepth: 33.08 psig @ 3961.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2019.01.27 End Date: 2019.01.28

Last Calib.: 2019.01.28

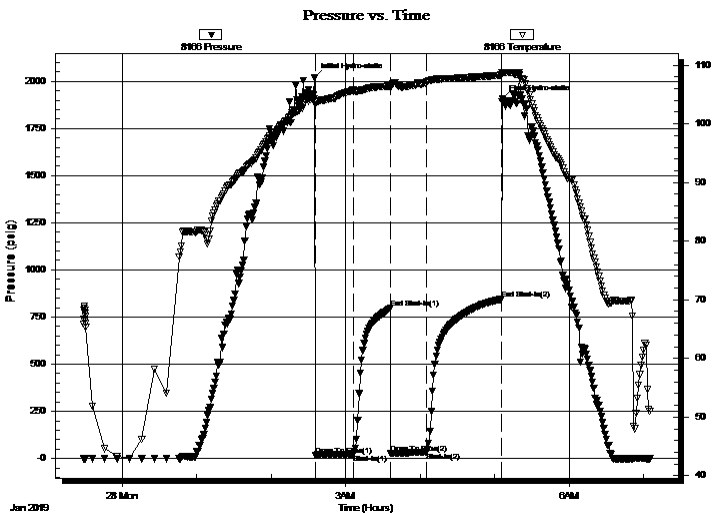
Start Time: 23:28:56 End Time: 07:04:50

Time On Btm: 2019.01.28 @ 02:34:51

Time Off Btm: 2019.01.28 @ 05:06:21

TEST COMMENT: IF: 1/4 blow built to 2 1/4.
IS: No return.
FF: Surface blow built to 1/2.
FS: No return.

PRESSURE SUMMARY



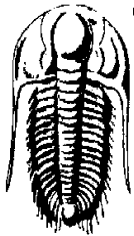
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2016.91	104.30	Initial Hydro-static
1	18.19	103.26	Open To Flow (1)
32	24.52	105.69	Shut-In(1)
61	797.18	106.46	End Shut-In(1)
62	26.65	106.22	Open To Flow (2)
90	33.08	107.13	Shut-In(2)
151	844.36	108.28	End Shut-In(2)
152	1905.35	108.69	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
40.00	mud oil spots in tool of the tool 100% m	0.56

Gas Rates

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



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Shakespeare Oil Co

14-14s-32w Logan Ks

202 W Main St
Salem IL 62881

K Ottley 2-14

Job Ticket: 64320

DST#: 1

ATTN: Tim Lauer

Test Start: 2019.01.27 @ 23:28:51

GENERAL INFORMATION:

Formation: **Lansing H-I**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 02:35:51

Time Test Ended: 07:04:51

Test Type: Conventional Bottom Hole (Initial)

Tester: Brandon Turley

Unit No: 79

Interval: 3960.00 ft (KB) To 4052.00 ft (KB) (TVD)

Reference Elevations: 2800.00 ft (KB)

Total Depth: 4052.00 ft (KB) (TVD)

2791.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 9.00 ft

Serial #: 6651

Inside

Press@RunDepth: psig @ 3961.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2019.01.27

End Date: 2019.01.28

Last Calib.: 2019.01.28

Start Time: 23:28:20

End Time: 07:04:14

Time On Btm:

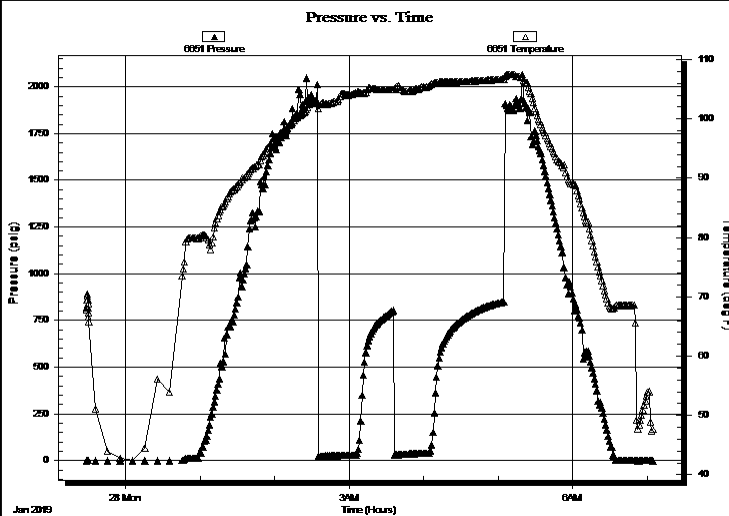
Time Off Btm:

TEST COMMENT: IF: 1/4 blow built to 2 1/4.

IS: No return.

FF: Surface blow built to 1/2.

FS: No return.



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
40.00	mud oil spots in tool of the tool 100% m	0.56

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Shakespeare Oil Co

14-14s-32w Logan Ks

202 W Main St
Salem IL 62881

K Ottley 2-14

Job Ticket: 64320

DST#: 1

ATTN: Tim Lauer

Test Start: 2019.01.27 @ 23:28:51

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

0 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

0 ppm

Viscosity: 55.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.20 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 2200.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
40.00	mud oil spots in tool of the tool 100%m	0.561

Total Length: 40.00 ft Total Volume: 0.561 bbl

Num Fluid Samples: 0

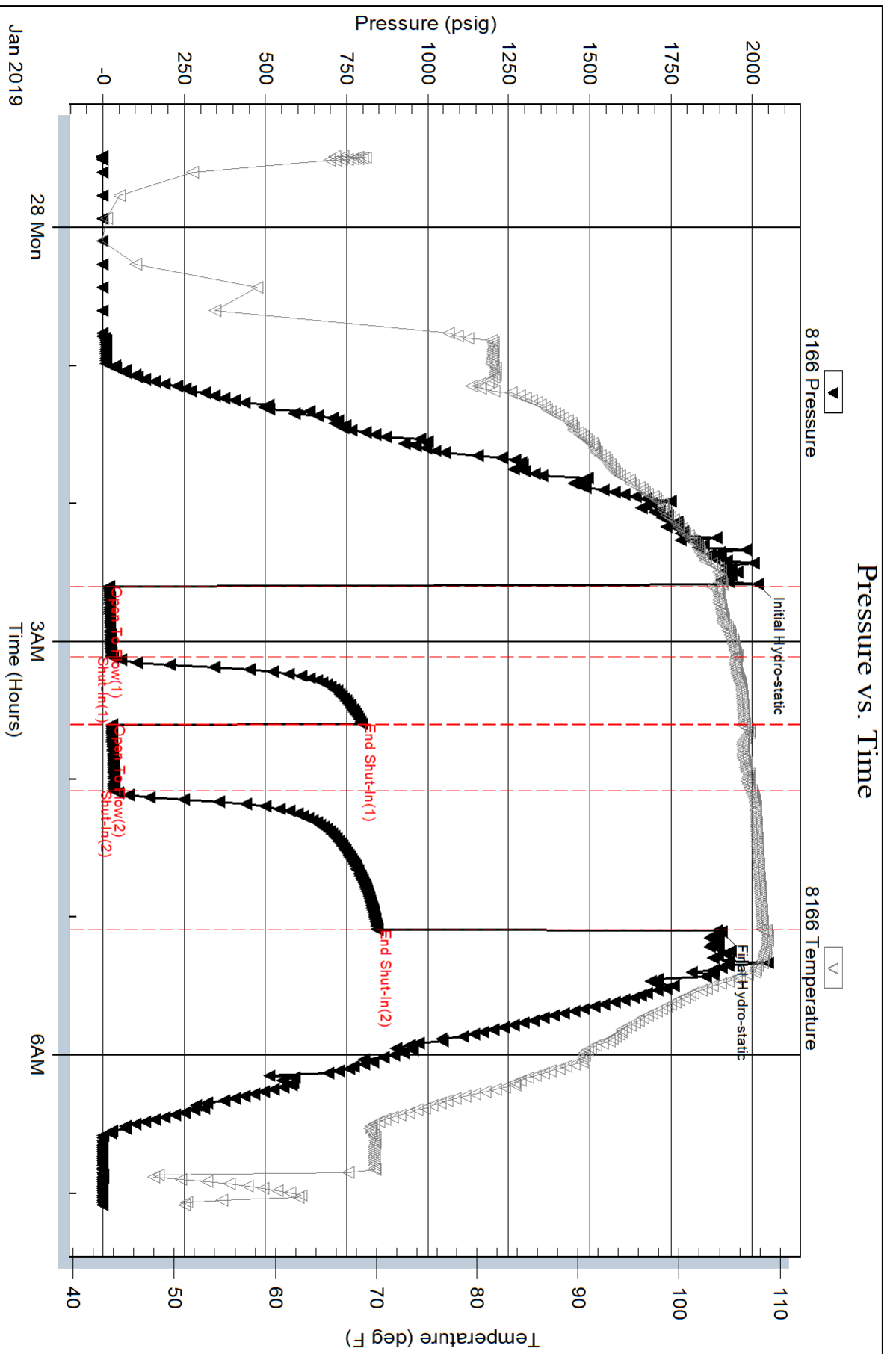
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:



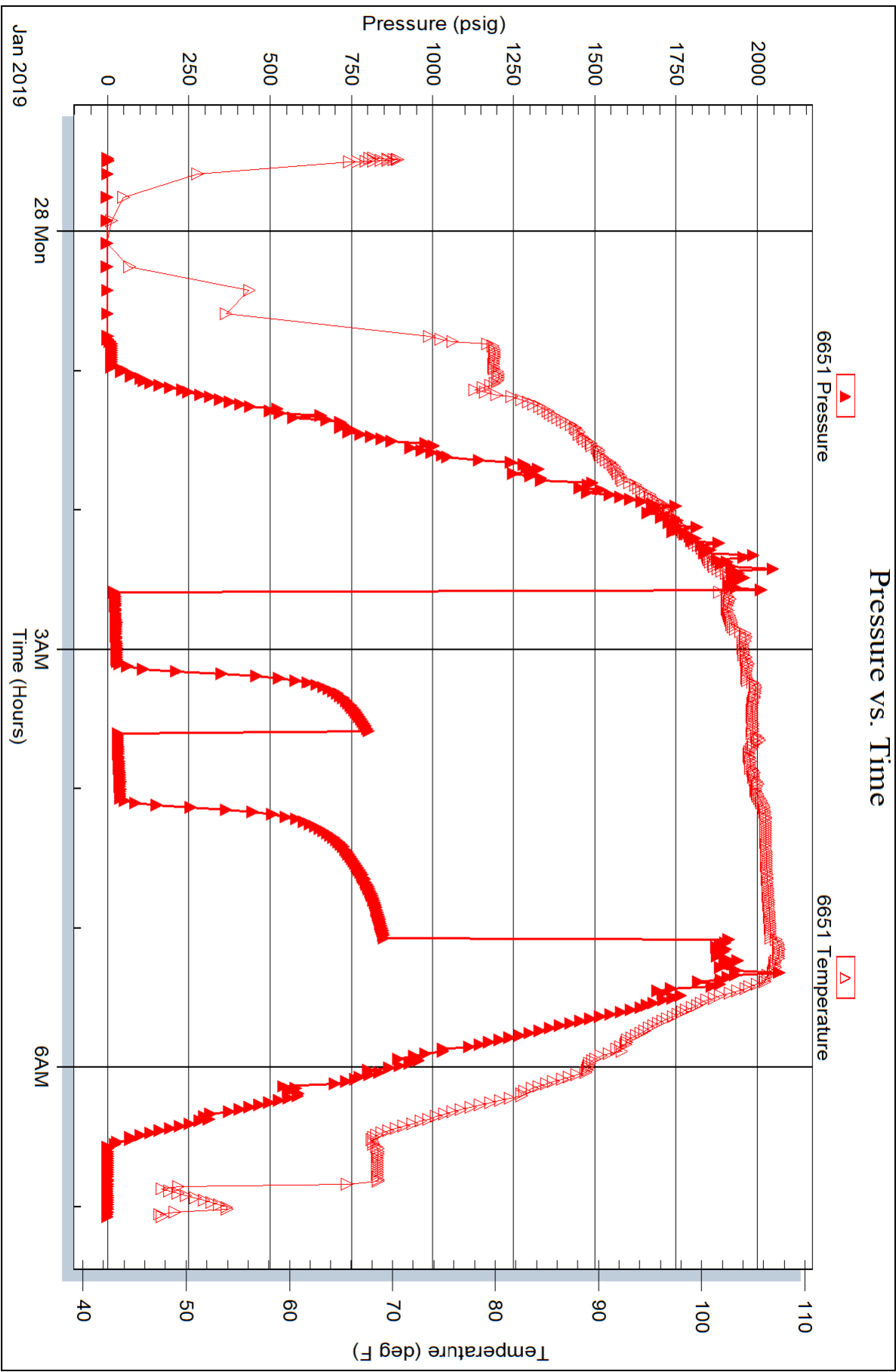
Serial #: 6651

Inside

Shakespeare Oil Co

K Otley 2-14

DST Test Number: 1





TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Shakespeare Oil Co

14-14s-32w Logan Ks

202 W Main St
Salem IL 62881

K Ottley 2-14

Job Ticket: 64321

DST#: 2

ATTN: Tim Lauer

Test Start: 2019.01.28 @ 17:48:17

GENERAL INFORMATION:

Formation: **Lansing J-K**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 20:32:17

Time Test Ended: 01:17:47

Test Type: Conventional Bottom Hole (Reset)

Tester: Brandon Turley

Unit No: 79

Interval: 4054.00 ft (KB) To 4110.00 ft (KB) (TVD)

Reference Elevations: 2800.00 ft (KB)

Total Depth: 4110.00 ft (KB) (TVD)

2791.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 9.00 ft

Serial #: 8166 Outside

Press@RunDepth: 86.10 psig @ 4055.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2019.01.28

End Date:

2019.01.29

Last Calib.:

2019.01.29

Start Time: 17:48:22

End Time:

01:17:46

Time On Btm:

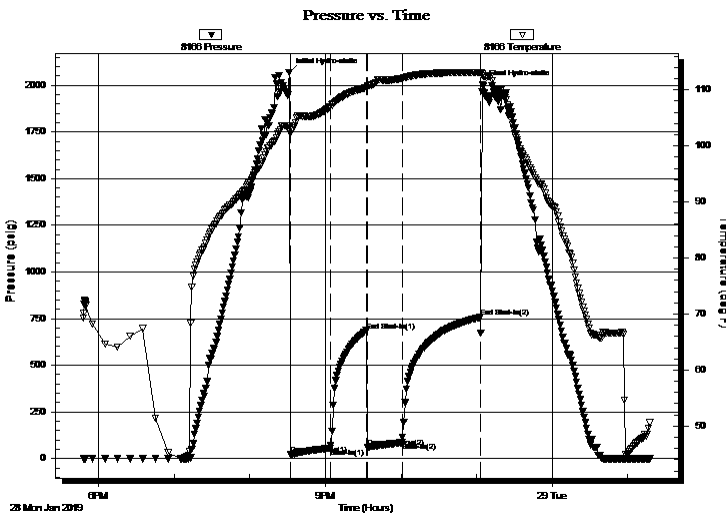
2019.01.28 @ 20:31:17

Time Off Btm:

2019.01.28 @ 23:04:47

TEST COMMENT: IF: 1/2 blow built to 9 1/2.
IS: No return.
FF: 1/2 blow built to 6 1/2.
FS: No return.

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2069.31	103.49	Initial Hydro-static
1	20.40	102.22	Open To Flow (1)
33	55.81	106.97	Shut-In(1)
61	684.81	110.36	End Shut-In(1)
62	60.61	110.67	Open To Flow (2)
90	86.10	112.04	Shut-In(2)
152	756.46	113.11	End Shut-In(2)
154	2005.35	112.58	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
62.00	mcw 70%w 30%m	0.87
62.00	w cm 40%w 60%m	0.87
15.00	w cm oil spots 30%w 70%m	0.21
5.00	free oil 100%o	0.07

Gas Rates

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

* Recovery from multiple tests



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Shakespeare Oil Co

14-14s-32w Logan Ks

202 W Main St
Salem IL 62881

K Ottley 2-14

ATTN: Tim Lauer

Job Ticket: 64321

DST#: 2

Test Start: 2019.01.28 @ 17:48:17

GENERAL INFORMATION:

Formation: **Lansing J-K**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 20:32:17

Time Test Ended: 01:17:47

Test Type: Conventional Bottom Hole (Reset)

Tester: Brandon Turley

Unit No: 79

Interval: 4054.00 ft (KB) To 4110.00 ft (KB) (TVD)

Reference Elevations: 2800.00 ft (KB)

Total Depth: 4110.00 ft (KB) (TVD)

2791.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 9.00 ft

Serial #: 6651 Inside

Press@RunDepth: psig @ 4055.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2019.01.28

End Date:

2019.01.29

Last Calib.:

2019.01.29

Start Time: 17:48:26

End Time:

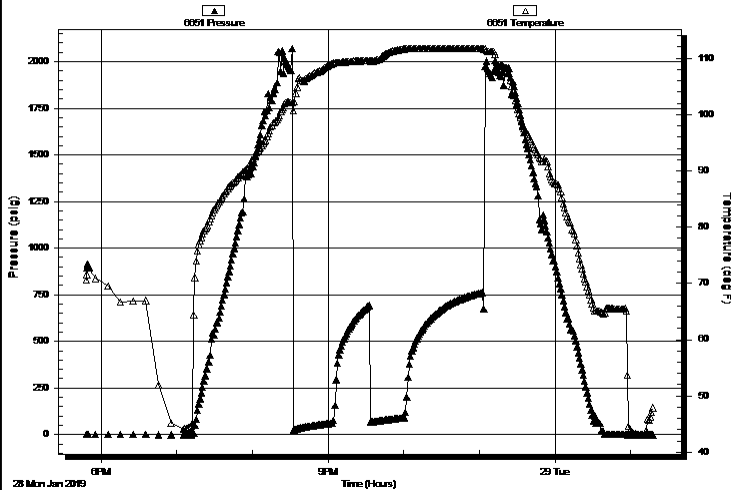
01:17:50

Time On Btm:

Time Off Btm:

TEST COMMENT: IF: 1/2 blow built to 9 1/2.
IS: No return.
FF: 1/2 blow built to 6 1/2.
FS: No return.

Pressure vs. Time



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
62.00	mcw 70%w 30%m	0.87
62.00	w cm 40%w 60%m	0.87
15.00	w cm oil spots 30%w 70%m	0.21
5.00	free oil 100%o	0.07

Gas Rates

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

* Recovery from multiple tests



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Shakespeare Oil Co

14-14s-32w Logan Ks

202 W Main St
Salem IL 62881

K Ottley 2-14

Job Ticket: 64321

DST#: 2

ATTN: Tim Lauer

Test Start: 2019.01.28 @ 17:48:17

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

0 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

56000 ppm

Viscosity: 67.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.99 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 3500.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
62.00	mcw 70%w 30%m	0.870
62.00	w cm 40%w 60%m	0.870
15.00	w cm oil spots 30%w 70%m	0.210
5.00	free oil 100%o	0.070

Total Length: 144.00 ft

Total Volume: 2.020 bbl

Num Fluid Samples: 0

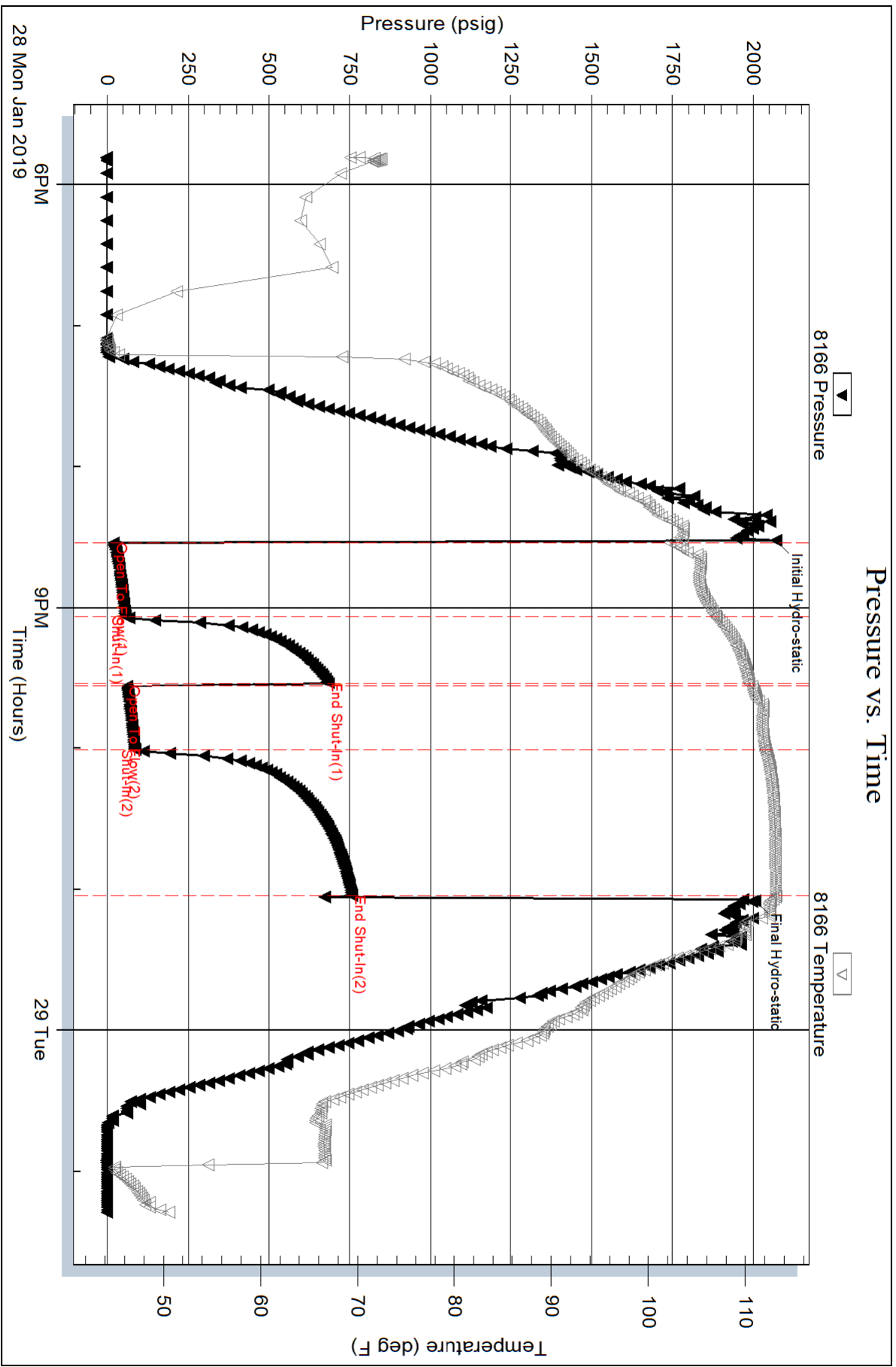
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: .29@33=56000



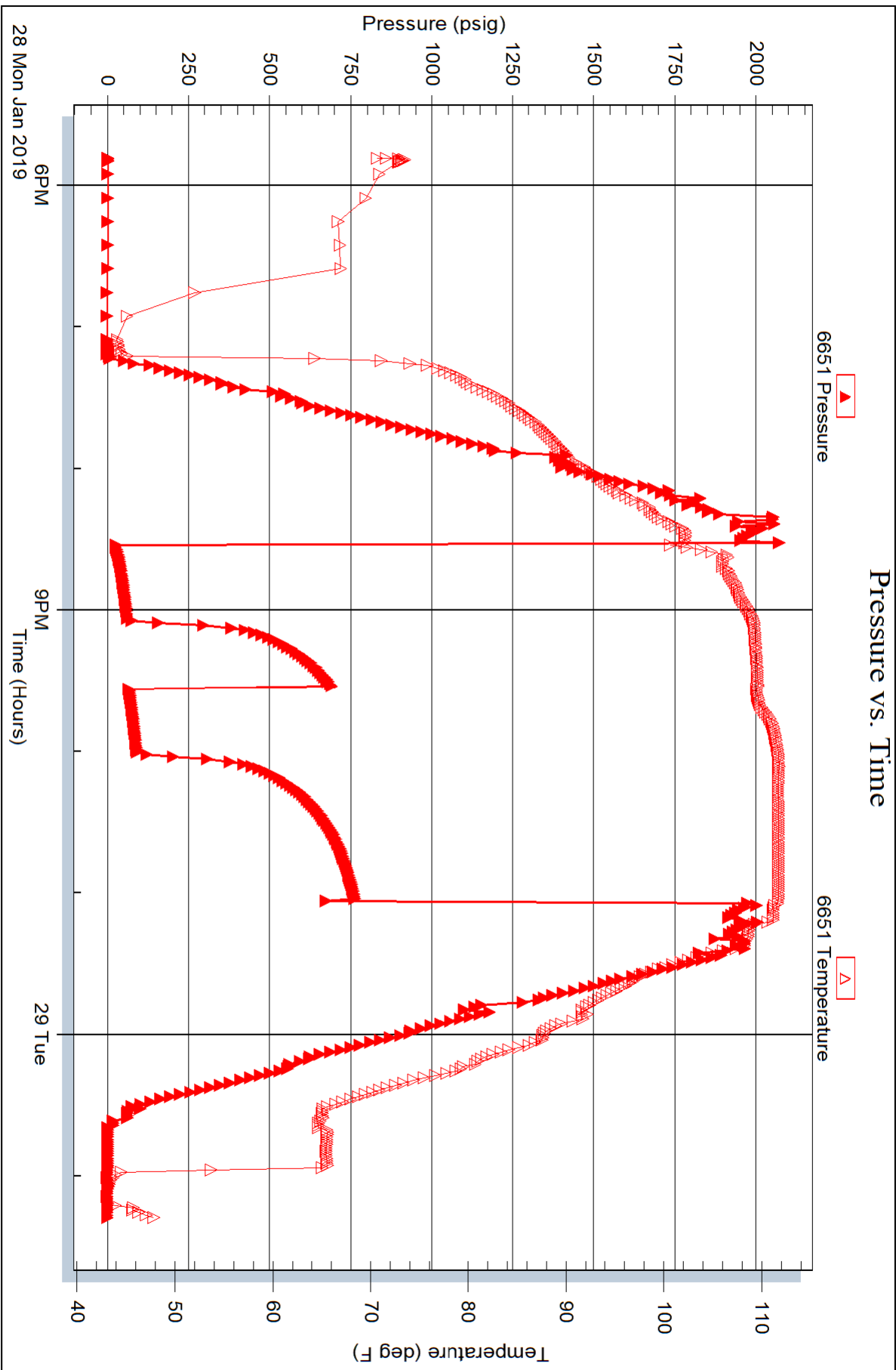
Serial #: 6651

Inside

Shakespeare Oil Co

K Otley 2-14

DST Test Number: 2





TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Shakespeare Oil Co

14-14s-32w Logan Ks

202 W Main St
Salem IL 62881

K Ottley 2-14

Job Ticket: 64322

DST#: 3

ATTN: Tim Lauer

Test Start: 2019.01.30 @ 04:04:56

GENERAL INFORMATION:

Formation: **Pawnee Ft Scott**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 06:07:56

Time Test Ended: 11:25:26

Test Type: Conventional Bottom Hole (Reset)

Tester: Brandon Turley

Unit No: 79

Interval: **4256.00 ft (KB) To 4325.00 ft (KB) (TVD)**

Reference Elevations: 2800.00 ft (KB)

Total Depth: 4325.00 ft (KB) (TVD)

2791.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 9.00 ft

Serial #: 8166 Outside

Press@RunDepth: 32.34 psig @ 4257.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2019.01.30

End Date:

2019.01.30

Last Calib.:

2019.01.30

Start Time: 04:05:01

End Time:

11:25:25

Time On Btm:

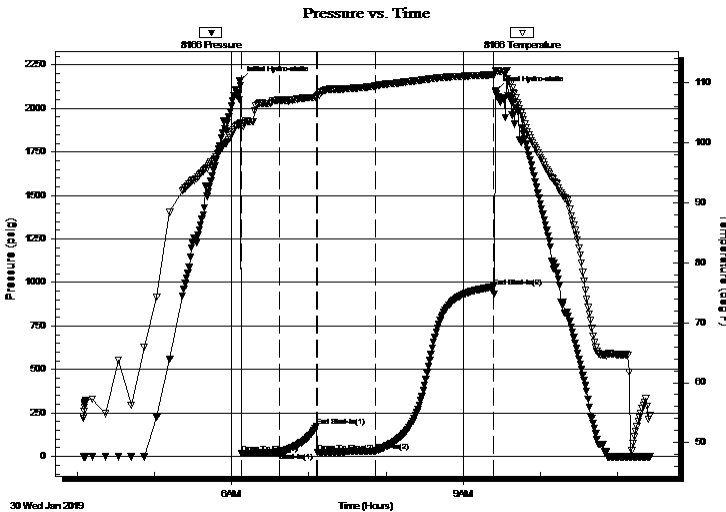
2019.01.30 @ 06:06:26

Time Off Btm:

2019.01.30 @ 09:25:26

TEST COMMENT: IF: 3/4 blow built to 7 1/2.
IS: Weak blow built to 3/4.
FF: 3 inch blow BOB in 21 min. 15"
FS: No return.

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2157.29	103.11	Initial Hydro-static
2	17.61	102.79	Open To Flow (1)
31	21.84	107.11	Shut-In(1)
60	174.36	107.60	End Shut-In(1)
61	21.83	107.87	Open To Flow (2)
106	32.34	109.47	Shut-In(2)
197	975.83	111.35	End Shut-In(2)
199	2099.50	112.08	Final Hydro-static

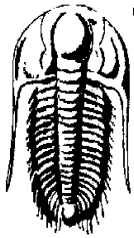
Recovery

Length (ft)	Description	Volume (bbl)
50.00	gocm 10%g 10%o 80%m	0.70
0.00	134 GIP	0.00

Gas Rates

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

* Recovery from multiple tests



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

Shakespeare Oil Co

14-14s-32w Logan Ks

202 W Main St
Salem IL 62881

K Ottley 2-14

Job Ticket: 64322

DST#: 3

ATTN: Tim Lauer

Test Start: 2019.01.30 @ 04:04:56

GENERAL INFORMATION:

Formation: **Pawnee Ft Scott**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 06:07:56

Time Test Ended: 11:25:26

Interval: 4256.00 ft (KB) To 4325.00 ft (KB) (TVD)

Total Depth: 4325.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

Test Type: Conventional Bottom Hole (Reset)

Tester: Brandon Turley

Unit No: 79

Reference Elevations: 2800.00 ft (KB)

2791.00 ft (CF)

KB to GR/CF: 9.00 ft

Serial #: 6651 Inside

Press@RunDepth: psig @ 4257.00 ft (KB)

Start Date: 2019.01.30

End Date:

2019.01.30

Start Time: 04:04:13

End Time:

11:24:37

Capacity: 8000.00 psig

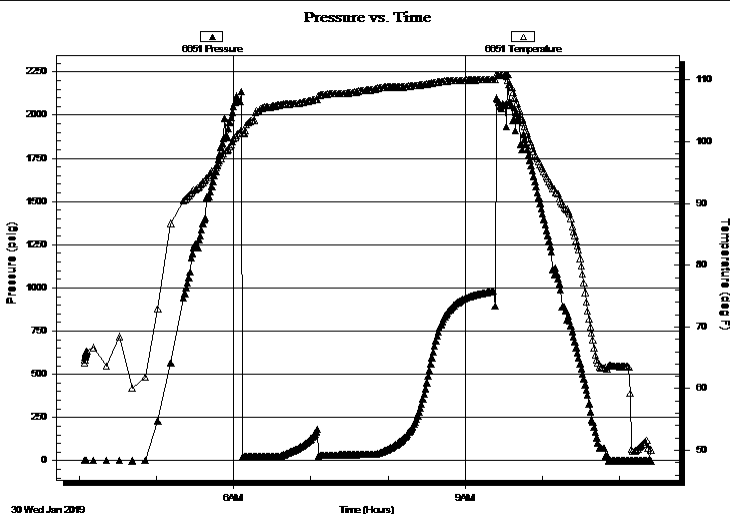
Last Calib.:

2019.01.30

Time On Btm:

Time Off Btm:

TEST COMMENT: IF: 3/4 blow built to 7 1/2.
IS: Weak blow built to 3/4.
FF: 3 inch blow BOB in 21 min. 15"
FS: No return.



PRESSURE SUMMARY

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

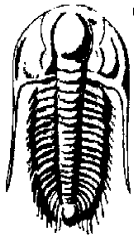
Recovery

Length (ft)	Description	Volume (bbl)
50.00	gocm 10%g 10%o 80%m	0.70
0.00	134 GIP	0.00

Gas Rates

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

* Recovery from multiple tests



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Shakespeare Oil Co

14-14s-32w Logan Ks

202 W Main St
Salem IL 62881

K Ottley 2-14

Job Ticket: 64322

DST#: 3

ATTN: Tim Lauer

Test Start: 2019.01.30 @ 04:04:56

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

0 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

0 ppm

Viscosity: 62.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.20 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 3000.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
50.00	gocm 10%g 10%o 80%m	0.701
0.00	134 GIP	0.000

Total Length: 50.00 ft Total Volume: 0.701 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Shakespeare Oil Co

14-14s-32w Logan,KS

202 W Main St
Salem IL 62881

K Ottley #2-14

Job Ticket: 64323

DST#: 4

ATTN: Tim Lauer

Test Start: 2019.01.31 @ 02:50:41

GENERAL INFORMATION:

Formation: **Johnson**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 05:01:11

Time Test Ended: 10:03:11

Test Type: Conventional Bottom Hole (Reset)

Tester: Brandon Turley

Unit No: 79

Interval: 4374.00 ft (KB) To 4425.00 ft (KB) (TVD)

Reference Elevations: 2800.00 ft (KB)

Total Depth: 4425.00 ft (KB) (TVD)

2791.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 9.00 ft

Serial #: 8166 Outside

Press@RunDepth: 28.53 psig @ 4375.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2019.01.31

End Date:

2019.01.31

Last Calib.:

2019.01.31

Start Time:

02:50:46

End Time:

10:03:10

Time On Btm:

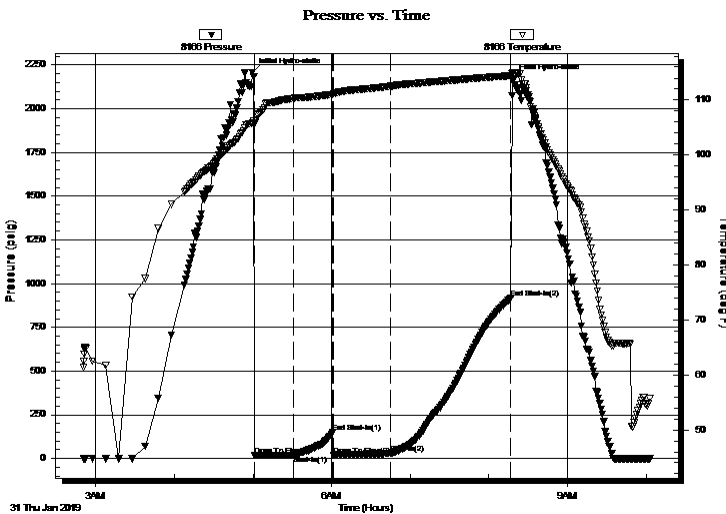
2019.01.31 @ 04:59:41

Time Off Btm:

2019.01.31 @ 08:18:11

TEST COMMENT: IF: 1/2" blow built to 6 3/4"
IS: Surface blow built to 3/4.
FF: 2" blow built to 9 1/2.
FS: No return.

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2206.96	105.90	Initial Hydro-static
2	16.68	105.65	Open To Flow (1)
32	20.20	110.30	Shut-In(1)
61	147.20	111.03	End Shut-In(1)
62	20.22	111.19	Open To Flow (2)
106	28.53	112.53	Shut-In(2)
197	915.96	114.44	End Shut-In(2)
199	2171.21	115.03	Final Hydro-static

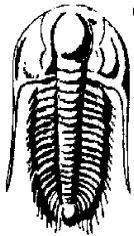
Recovery

Length (ft)	Description	Volume (bbl)
40.00	gocm 10%g 20%o 70%m	0.56
0.00	186 GIP	0.00

Gas Rates

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

* Recovery from multiple tests



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Shakespeare Oil Co

14-14s-32w Logan,KS

202 W Main St
Salem IL 62881

K Ottley #2-14

ATTN: Tim Lauer

Job Ticket: 64323

DST#: 4

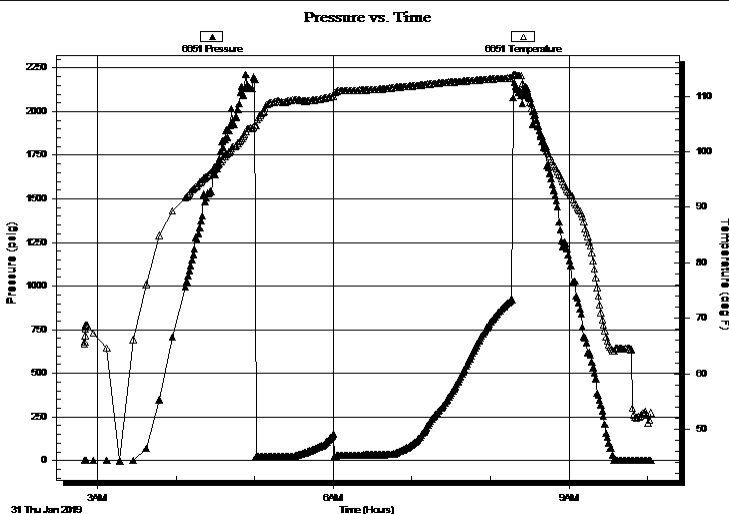
Test Start: 2019.01.31 @ 02:50:41

GENERAL INFORMATION:

Formation: **Johnson**
 Deviated: No Whipstock: ft (KB)
 Test Type: Conventional Bottom Hole (Reset)
 Time Tool Opened: 05:01:11
 Tester: Brandon Turley
 Time Test Ended: 10:03:11
 Unit No: 79
 Interval: **4374.00 ft (KB) To 4425.00 ft (KB) (TVD)**
 Reference Elevations: 2800.00 ft (KB)
 Total Depth: 4425.00 ft (KB) (TVD)
 2791.00 ft (CF)
 Hole Diameter: 7.88 inches
 Hole Condition: Good
 KB to GR/CF: 9.00 ft

Serial #: 6651 Inside
 Press@RunDepth: psig @ 4375.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2019.01.31 End Date: 2019.01.31 Last Calib.: 2019.01.31
 Start Time: 02:50:14 End Time: 10:02:38 Time On Btm:
 Time Off Btm:

TEST COMMENT: IF: 1/2" blow built to 6 3/4"
 IS: Surface blow built to 3/4.
 FF: 2" blow built to 9 1/2.
 FS: No return.



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
40.00	gocm 10%g 20%o 70%m	0.56
0.00	186 GIP	0.00

Gas Rates

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

* Recovery from multiple tests



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Shakespeare Oil Co

14-14s-32w Logan,KS

202 W Main St
Salem IL 62881

K Ottley #2-14

Job Ticket: 64323

DST#: 4

ATTN: Tim Lauer

Test Start: 2019.01.31 @ 02:50:41

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

0 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

0 ppm

Viscosity: 58.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.99 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 4000.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
40.00	gocm 10%g 20%o 70%m	0.561
0.00	186 GIP	0.000

Total Length: 40.00 ft Total Volume: 0.561 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

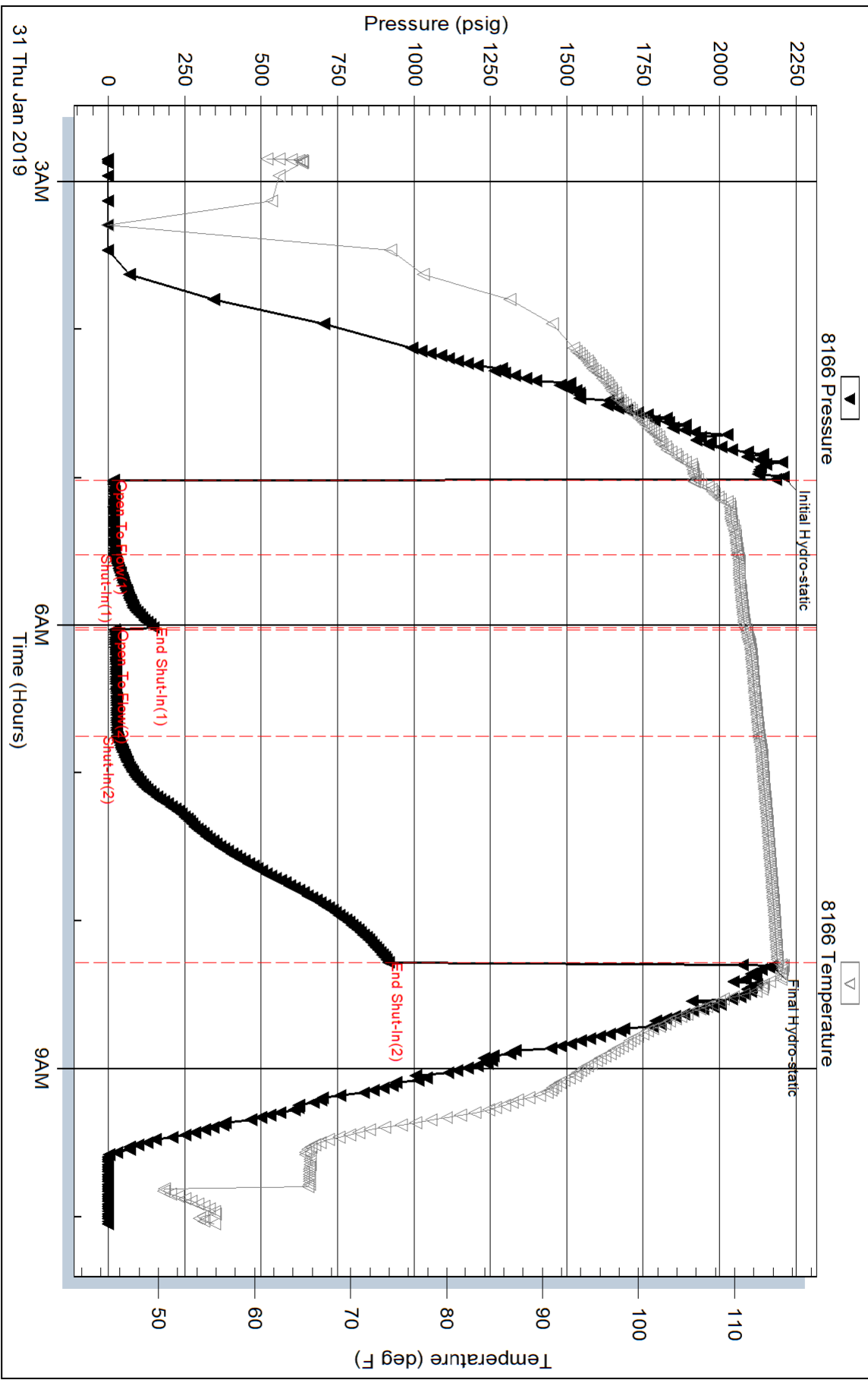
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Pressure vs. Time



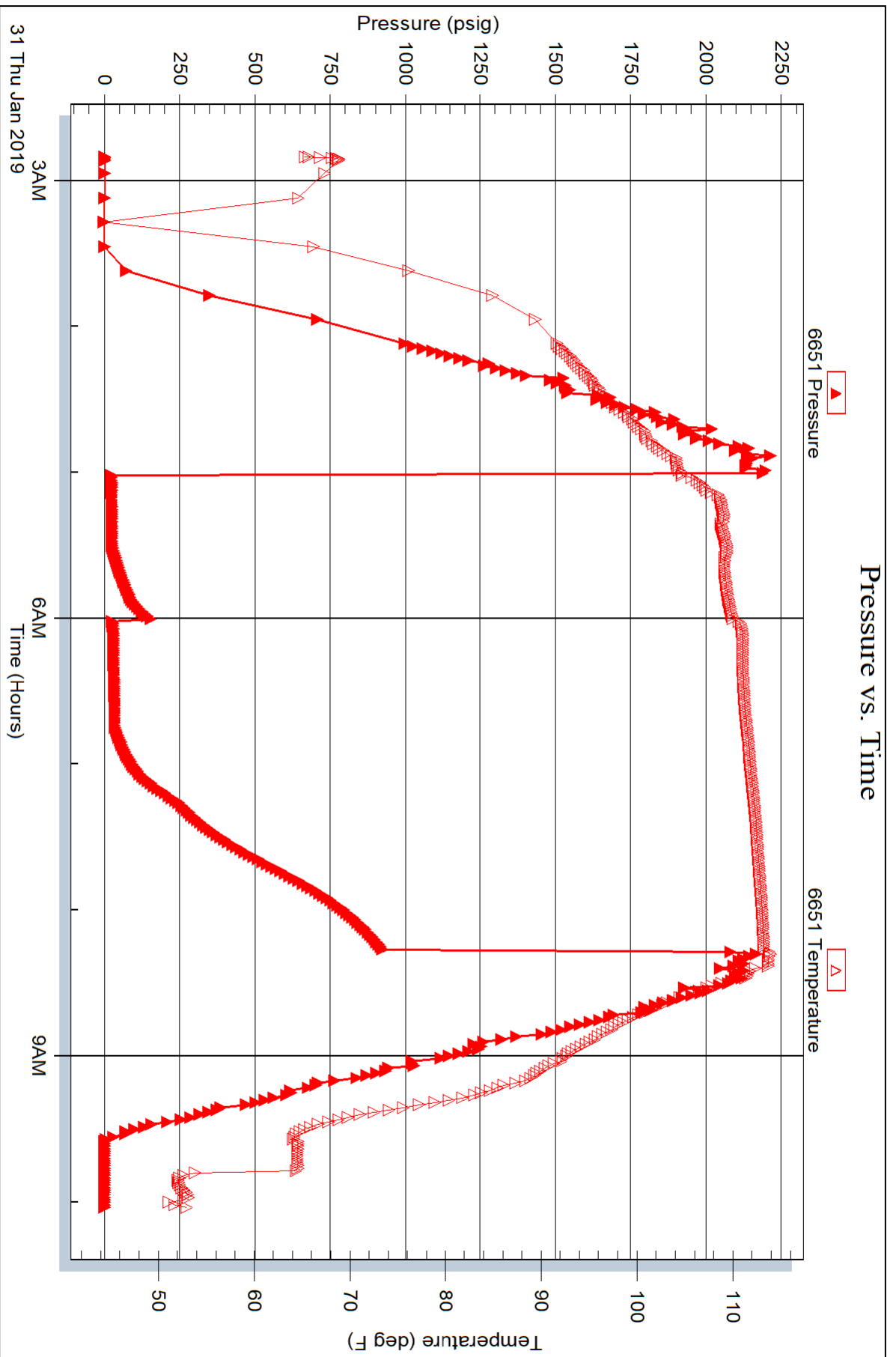
Serial #: 6651

Inside

Shakespeare Oil Co

K Otley #2-14

DST Test Number: 4





TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Shakespeare Oil Co

14-14s-32w Logan Ks

202 W Main St
Salem IL 62881

K Ottley 2-14

Job Ticket: 64324

DST#: 5

ATTN: Tim Lauer

Test Start: 2019.02.01 @ 10:31:13

GENERAL INFORMATION:

Formation: **Lansing F**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 12:10:43

Time Test Ended: 16:16:13

Test Type: Conventional Bottom Hole (Reset)

Tester: Brandon Turley

Unit No: 79

Interval: 3920.00 ft (KB) To 3940.00 ft (KB) (TVD)

Reference Elevations: 2800.00 ft (KB)

Total Depth: 4550.00 ft (KB) (TVD)

2791.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 9.00 ft

Serial #: 8166 Outside

Press@RunDepth: 20.27 psig @ 3921.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2019.02.01

End Date:

2019.02.01

Last Calib.:

2019.02.01

Start Time:

10:31:18

End Time:

16:16:12

Time On Btm:

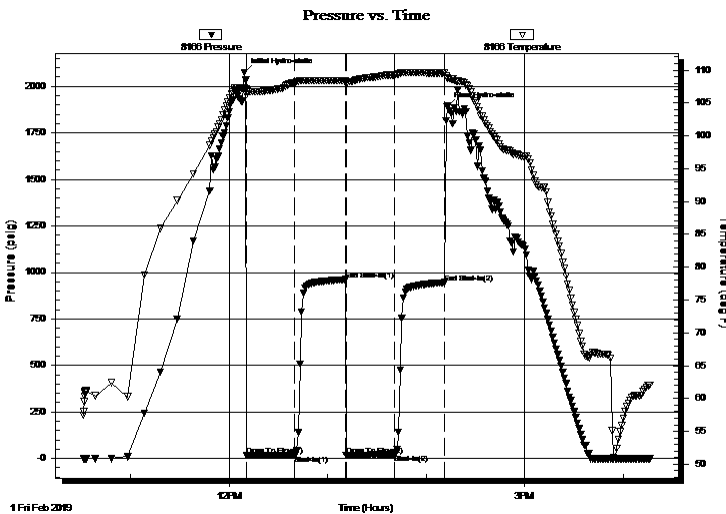
2019.02.01 @ 12:09:13

Time Off Btm:

2019.02.01 @ 14:12:43

TEST COMMENT: IF: 1/4 blow built to 1/2.
IS: No return.
FF: Surface blow built to 1/4.
FS: No return.

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2075.22	107.25	Initial Hydro-static
2	16.30	106.28	Open To Flow (1)
31	17.84	108.09	Shut-In(1)
62	961.34	108.45	End Shut-In(1)
62	18.20	107.87	Open To Flow (2)
92	20.27	109.28	Shut-In(2)
122	945.53	109.54	End Shut-In(2)
124	1892.31	108.85	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
15.00	w cm oil Spots 10%w 90%m	0.21

Gas Rates

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

* Recovery from multiple tests



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Shakespeare Oil Co

14-14s-32w Logan Ks

202 W Main St
Salem IL 62881

K Ottley 2-14

Job Ticket: 64324

DST#: 5

ATTN: Tim Lauer

Test Start: 2019.02.01 @ 10:31:13

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

0 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

8500 ppm

Viscosity: 57.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 9.59 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 5000.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
15.00	w cm oil Spots 10%w 90%m	0.210

Total Length: 15.00 ft Total Volume: 0.210 bbl

Num Fluid Samples: 0

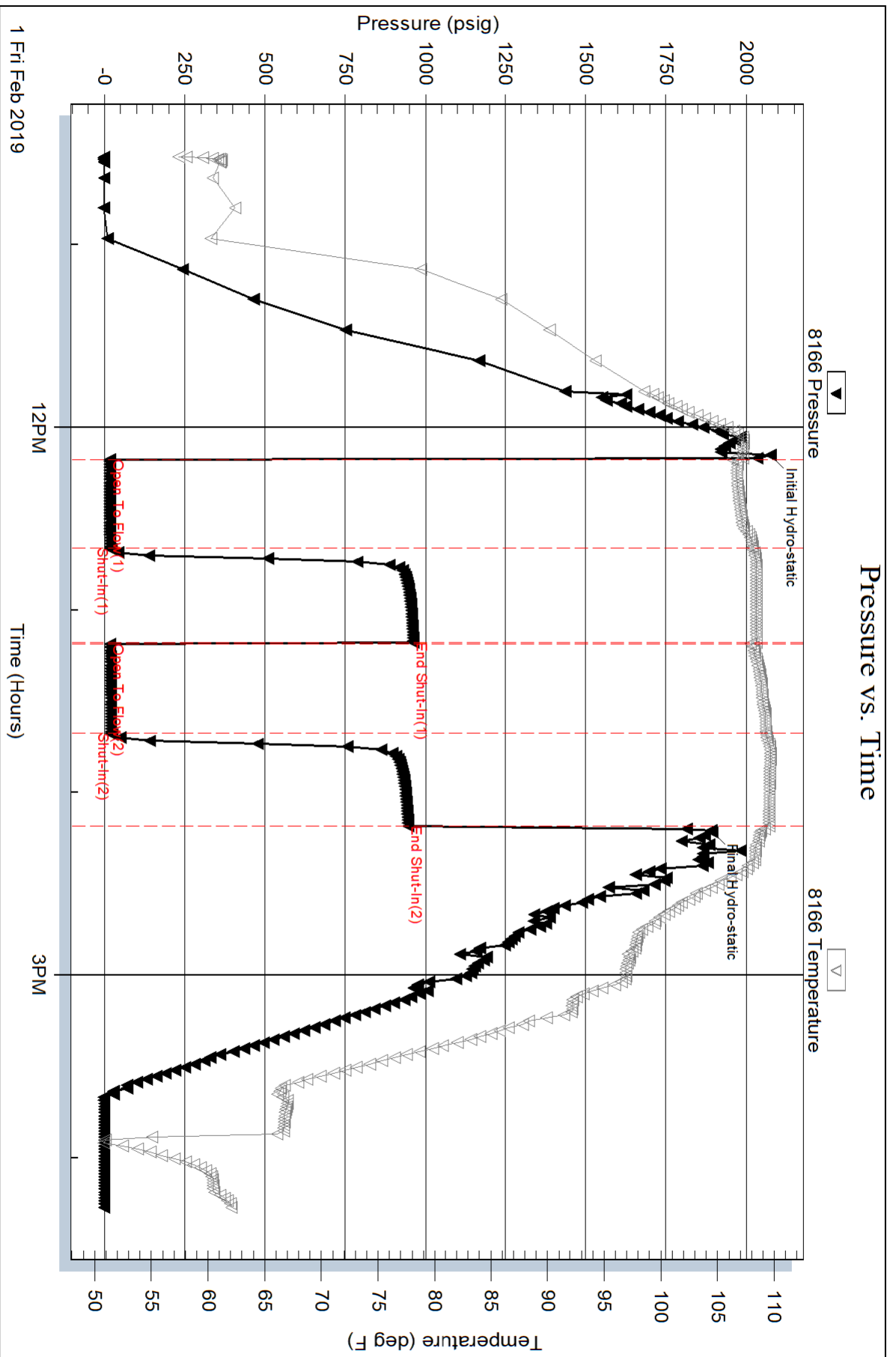
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: .83@62=8500



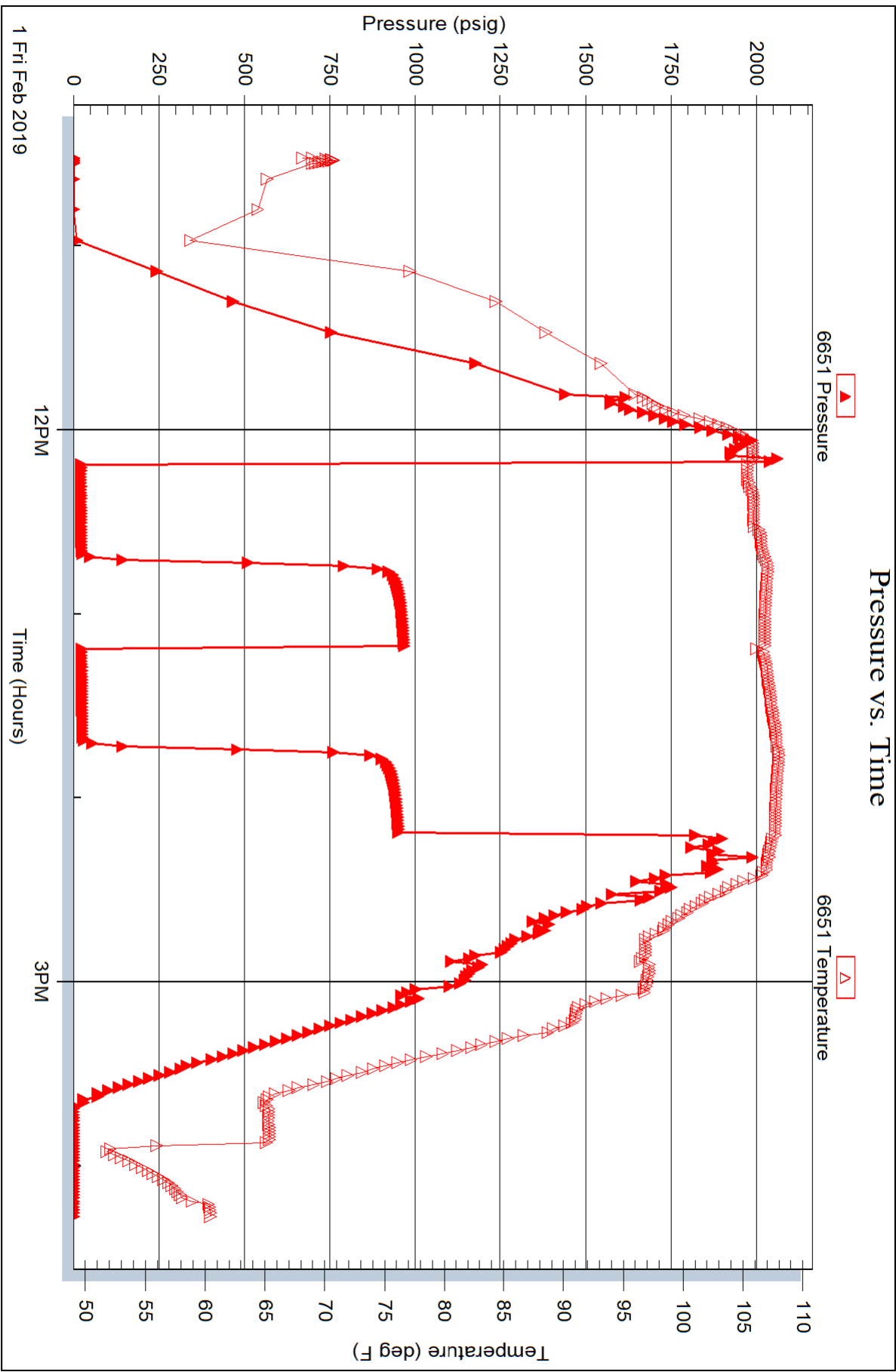
Serial #: 6651

Inside

Shakespeare Oil Co

K Otley 2-14

DST Test Number: 5



Serial #: 8650

Below (Strat) Hayspear Oil Co

K Otley 2-14

DST Test Number: 5

