

Confidentiality Requested:

Yes No

KANSAS CORPORATION COMMISSION 1259994
OIL & GAS CONSERVATION DIVISION

Form ACO-1

November 2016

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: _____

1259994

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			
Geologist Report / Mud Logs	<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)*

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>			PRODUCTION INTERVAL: Top _____ Bottom _____	

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	Larson Engineering, Inc. dba Larson Operating Company
Well Name	Livingston-KSU 1-26
Doc ID	1259994

Tops

Name	Top	Datum
Anhydrite	1930	+645
Base Anhydrite	1967	+608
Heebner	3884	-1309
Lansing	3921	-1346
Marmaton	4264	-1689
Pawnee	4344	-1769
Cherokee Sh	4447	-1872
Miss	4529	-1954



CHARGE TO: Larson Engineering
 ADDRESS: _____
 CITY, STATE, ZIP CODE: _____

TICKET 28486

SERVICE LOCATIONS: 1. Ness City KS
 WELL/PROJECT NO.: 1-26 LEASE: Livingston - KSU COUNTY/PARISH: Ness STATE: KS CITY: Arnold DATE: 19 MAY 15 OWNER: _____
 TICKET TYPE: SERVICE SALES CONTRACTOR: _____ RIG NAME/NO.: H-0 SHIPPED VIA: CT DELIVERED TO: Location ORDER NO.: _____
 WELL TYPE: oil WELL CATEGORY: Development JOB PURPOSE: cement surface pipe WELL PERMIT NO.: _____ WELL LOCATION: _____
 REFERRAL LOCATION: _____ INVOICE INSTRUCTIONS: _____

PRICE REFERENCE	SECONDARY REFERENCE/ PART NUMBER	ACCOUNTING			DESCRIPTION	QTY.		UM		UNIT PRICE	AMOUNT
		LOC	ACCT	DF							
575		1			MILEAGE TRK 114	20		mi		5.00	100.00
576S		1			Pump Charge	1		ea		800.00	800.00
325		1			STANDARD cement	165		sk		12.25	2021.25
279		1			Bentonite gel	300		lb	3 sk	25.00	75.00
278		1			calcium chloride	250		lb	5 sk	40.00	200.00
290		1			D-AIR	2		gal		42.00	84.00
583 582		1			Drayage (min)	1		ea		250.00	250.00
581		1			service charge	165		sk		1.50	247.50

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

X
 DATE SIGNED: _____ TIME SIGNED: _____
 A.M.
 P.M.
MTS

REMIT PAYMENT TO:

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

SURVEY	AGREE	UN-DECIDED	DIS-AGREE
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?	<input type="checkbox"/> YES <input type="checkbox"/> NO		
<input type="checkbox"/> CUSTOMER DID NOT WISH TO RESPOND			

PAGE TOTAL 3777.75

Ness TAX 6.15% 146.39

TOTAL 3924.14

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

SWIFT OPERATOR: MTS APPROVAL: _____

Thank You!

JOB LOG

SWIFT Services, Inc.

DATE 19 MAY 15 PAGE NO. 1

CUSTOMER		WELL NO.		LEASE		JOB TYPE		TICKET NO.	
Larson Engineering		1-26		Livingston - KSL		cement surface pipe		28486	
CHART NO.	TIME	RATE (BPM)	VOLUME (BBL) (GAL)	PUMPS		PRESSURE (PSI)		DESCRIPTION OF OPERATION AND MATERIALS	
				T	C	TUBING	CASING		
									165 sk STANDARD cement 2% gel 3% CC 8 7/8" x 20" casing 5 jts set pipe @ 254 TD = 256
	1000 1141								on loc TRK 114 start 8 7/8" x 20" casing in well
	1303	3 1/2	40				200		Mix STD 2% 3% 165 sk @ 14.7ppg
	1323	3 1/2	15				200		Displace w/ H ₂ O 15 bbl - good circulation - jet the cellar - cement to surface { 5 sk top 1/2 } { 165 mixed }
	1430								shut in 8 7/8" wash up Back up job complete
	1415								Thanks Blaine, Flint & good



CHARGE TO: **LARSON ENGINEERING**
 ADDRESS:
 CITY, STATE, ZIP CODE:

TICKET 28521

SERVICE LOCATIONS: 1. **NESS CITY, KS.** WELL/PROJECT NO. **1-26** LEASE **LIVINGSTON-KSU** COUNTY/PARISH **NESS** STATE **KS** CITY **ARNOLD, KS** DATE **27 May 15** OWNER
 2. TICKET TYPE SERVICE SALES CONTRACTOR **HD DRILLING RIG#** RIG NAME/NO. SHIPPED VIA DELIVERED TO ORDER NO.
 3. WELL TYPE **OIL** WELL CATEGORY **DEVELOPMENT** JOB PURPOSE **5 1/2 LONGSTRING** WELL PERMIT NO. WELL LOCATION **14W S IWO**
 4. REFERRAL LOCATION INVOICE INSTRUCTIONS

PRICE REFERENCE	SECONDARY REFERENCE/PART NUMBER	ACCOUNTING			DESCRIPTION	QTY.		UM		UNIT PRICE	AMOUNT
		LOC	ACCT	DF							
575					MILEAGE #115	20		MIL		5 ⁰⁰	100 ⁰⁰
578					Pump CHARGE.					1250 ⁰⁰	1250 ⁰⁰
280					FLOCHECK 21	500		gal		3 ⁰⁰	1500 ⁰⁰
221					LIDWD RCL	2		gal		25 ⁰⁰	50 ⁰⁰
290					D-AIR	1 1/2		gal		42 ⁰⁰	63 ⁰⁰
419					ROTATING HEAD RENTAL	1				200 ⁰⁰	200 ⁰⁰

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

X
 DATE SIGNED **27 MAY 15** TIME SIGNED **1800** A.M. P.M.

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

SURVEY	AGREE	UN-DECIDED	DIS-AGREE	PAGE TOTAL	AMOUNT
OUR EQUIPMENT PERFORMED WITHOUT BREAKDOWN?				1	3163 ⁰⁰
WE UNDERSTOOD AND MET YOUR NEEDS?				2	4866 ⁰⁰
OUR SERVICE WAS PERFORMED WITHOUT DELAY?				Subtotal	8029 ²⁵
WE OPERATED THE EQUIPMENT AND PERFORMED JOB CALCULATIONS SATISFACTORILY?				TAX 6.15%	381 ¹⁰
ARE YOU SATISFIED WITH OUR SERVICE?	<input type="checkbox"/> YES <input type="checkbox"/> NO			TOTAL	8410 ³⁵

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

SWIFT OPERATOR *[Signature]*

APPROVAL *[Signature]*

Thank You!



PO Box 466
Ness City, KS 67560
Off: 785-798-2300

TICKET CONTINUATION

TICKET No. 28521

CUSTOMER: LARSON ENGINEERING
WELL: LIVINGSTON-KSU 1-26
DATE: 27 MAY 15
PAGE 2 OF 2

PRICE REFERENCE	SECONDARY REFERENCE/ PART NUMBER	ACCOUNTING			TIME	DESCRIPTION	QTY		U/M		UNIT PRICE	AMOUNT
		LOC	ACCT	DF			QTY	U/M	QTY	U/M		
276						FLOCELE	40	lbs			2 ²⁵	90 ⁰⁰
283						SALT	800	lbs			2 ⁰⁰	160 ⁰⁰
284						CALSEAL	7	15x			30 ⁰⁰	210 ⁰⁰
277						GILSONITE	1100	lbs			7 ⁵⁰	825 ⁰⁰
292						HALAD-322	150	lbs			8 ⁰⁰	1200 ⁰⁰
325						STANDARD EA-2	155	sq			12 ³⁵	1898 ⁷⁵
581						SERVICE CHARGE					1 ⁵⁰	232 ⁵⁰
582						MILEAGE CHARGE	173.60	TOTAL WEIGHT	20	LOADED MILES	250 ⁰⁰	250 ⁰⁰
								TON MILES	173.60			

CONTINUATION TOTAL 4866²⁵

JOB LOG

SWIFT Services, Inc.

DATE 27 MAY 15 PAGE NO.

CUSTOMER LARSON ENGINEERING WELL NO. J-212 LEASE HUINGTON-KSU JOB TYPE S² LONGSTRING TICKET NO. 28521

CHART NO.	TIME	RATE (BPM)	VOLUME (BBL) (GAL)	PUMPS		PRESSURE (PSI)		DESCRIPTION OF OPERATION AND MATERIALS
				T	C	TUBING	CASING	
	1430							ON LOCATION S ² -15.5 [#] RTD @ 4605 - SET @ 4604 PORT COLLAR @ 1958
	1607							DROP BALL - CIRCULATE
	1632	6	15		✓		300	Pump KCL FLUSH
		6	RD		✓		300	Pump FLOCHECK 21
		6	5		✓		300	Pump KCL SPACER
	1640		7					PLUG RH - 30 SX
	1643	4	30		✓			MIX 125 SX EA-2
	1654							WASH OUT Pump & LINES.
	1657	7			✓			START DISPLACING PLUG.
	1713	8	108 1/2		✓		1500	PLUG DOWN - LATCH PLUG IN
	1715							RELEASE PSI - DRY
	1719							WASH TRUCK
	1800							JOB COMPLETE THANKS #115 JASON COLE TYLER



DRILL STEM TEST REPORT

Prepared For: **Larson Engineering, Inc**

562 W St Rd 4
Olmitz, KS 67564

ATTN: Vern Schrag

Livingston KSU #1-26

26-16s-25w Ness,KS

Start Date: 2015.05.24 @ 17:45:00

End Date: 2015.05.25 @ 00:18:53

Job Ticket #: 57414 DST #: 1

Trilobite Testing, Inc
1515 Commerce Parkway Hays, KS 67601
ph: 785-625-4778 fax: 785-625-5620

Printed: 2015.05.27 @ 10:08:46



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Larson Engineering, Inc
562 W St Rd 4
Olmitz, KS 67564
ATTN: Vern Schrag

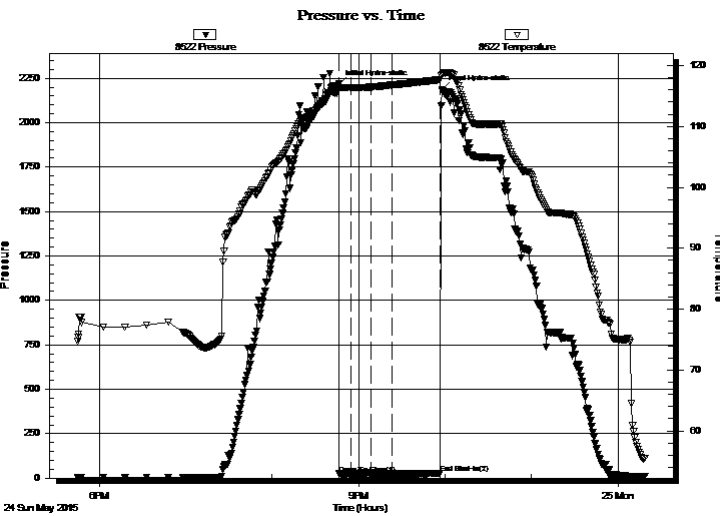
26-16s-25w Ness, KS
Livingston KSU #1-26
Job Ticket: 57414 **DST#: 1**
Test Start: 2015.05.24 @ 17:45:00

GENERAL INFORMATION:

Formation: **Ft Scott**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 20:46:38
Time Test Ended: 00:18:53
Interval: **4400.00 ft (KB) To 4430.00 ft (KB) (TVD)**
Total Depth: 4430.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Good
Test Type: Conventional Bottom Hole (Initial)
Tester: Bradley Walter
Unit No: 69
Reference Elevations: 2575.00 ft (KB)
2567.00 ft (CF)
KB to GR/CF: 8.00 ft

Serial #: 8522 Outside
Press@RunDepth: 24.88 psig @ 4401.00 ft (KB) Capacity: 8000.00 psig
Start Date: 2015.05.24 End Date: 2015.05.25 Last Calib.: 2015.05.25
Start Time: 17:45:05 End Time: 00:18:52 Time On Btm: 2015.05.24 @ 20:46:23
Time Off Btm: 2015.05.24 @ 21:57:53

TEST COMMENT: IF: Weak Surface blow
IS: No return.
FF: No blow.
FS: No return.



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2216.32	116.90	Initial Hydro-static
1	23.22	116.19	Open To Flow (1)
8	24.49	116.36	Shut-In(1)
22	31.42	116.47	End Shut-In(1)
23	25.55	116.47	Open To Flow (2)
37	24.88	116.79	Shut-In(2)
70	28.30	117.68	End Shut-In(2)
72	2185.04	118.46	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
1.00	Mud 100m	0.00

Gas Rates

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



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Larson Engineering, Inc

26-16s-25w Ness, KS

562 W St Rd 4
Olmitz, KS 67564

Livingston KSU #1-26

ATTN: Vern Schrag

Job Ticket: 57414

DST#: 1

Test Start: 2015.05.24 @ 17:45:00

GENERAL INFORMATION:

Formation: **Ft Scott**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 20:46:38

Time Test Ended: 00:18:53

Test Type: Conventional Bottom Hole (Initial)

Tester: Bradley Walter

Unit No: 69

Interval: 4400.00 ft (KB) To 4430.00 ft (KB) (TVD)

Reference Elevations: 2575.00 ft (KB)

Total Depth: 4430.00 ft (KB) (TVD)

2567.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 8.00 ft

Serial #: 8365

Inside

Press@RunDepth: psig @ 4401.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2015.05.24

End Date:

2015.05.25

Last Calib.:

2015.05.25

Start Time: 17:45:05

End Time:

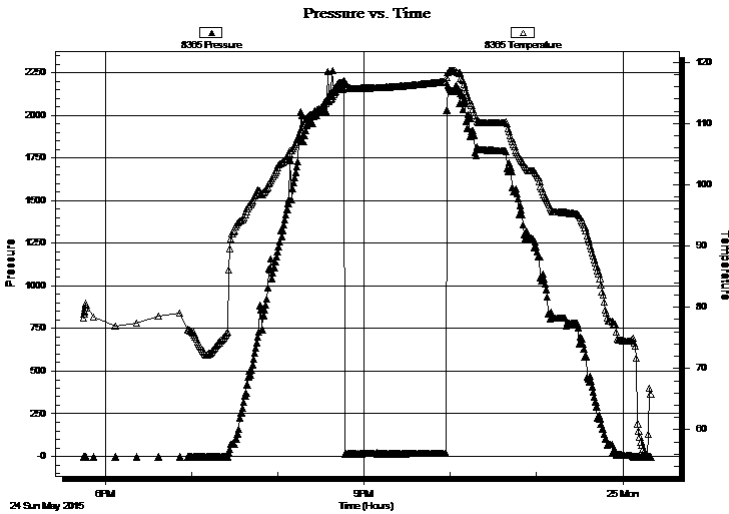
00:19:29

Time On Btm:

Time Off Btm:

TEST COMMENT: IF: Weak Surface blow
IS: No return.
FF: No blow.
FS: No return.

PRESSURE SUMMARY



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

Recovery

Length (ft)	Description	Volume (bbl)
1.00	Mud 100m	0.00

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Larson Engineering, Inc

26-16s-25w Ness,KS

562 W St Rd 4
Olmitz, KS 67564

Livingston KSU #1-26

Job Ticket: 57414

DST#: 1

ATTN: Vern Schrag

Test Start: 2015.05.24 @ 17:45:00

Tool Information

Drill Pipe:	Length: 4269.00 ft	Diameter: 3.80 inches	Volume: 59.88 bbl	Tool Weight:	2500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer:	25000.00 lb
Drill Collar:	Length: 124.00 ft	Diameter: 2.25 inches	Volume: 0.61 bbl	Weight to Pull Loose:	75000.00 lb
			<u>Total Volume: 60.49 bbl</u>	Tool Chased	0.00 ft
Drill Pipe Above KB:	20.00 ft			String Weight: Initial	62000.00 lb
Depth to Top Packer:	4400.00 ft			Final	62000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	30.00 ft				
Tool Length:	57.00 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			4374.00	
Shut In Tool	5.00			4379.00	
Hydraulic tool	5.00			4384.00	
Jars	5.00			4389.00	
Safety Joint	2.00			4391.00	
Packer	5.00			4396.00	27.00 Bottom Of Top Packer
Packer	4.00			4400.00	
Stubb	1.00			4401.00	
Recorder	0.00	8365	Inside	4401.00	
Recorder	0.00	8522	Outside	4401.00	
Perforations	26.00			4427.00	
Bullnose	3.00			4430.00	30.00 Bottom Packers & Anchor

Total Tool Length: 57.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Larson Engineering, Inc

26-16s-25w Ness,KS

562 W St Rd 4
Olmitz, KS 67564

Livingston KSU #1-26

Job Ticket: 57414

DST#: 1

ATTN: Vern Schrag

Test Start: 2015.05.24 @ 17:45:00

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: 48.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.78 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
1.00	Mud 100m	0.005

Total Length: 1.00 ft Total Volume: 0.005 bbl

Num Fluid Samples: 0

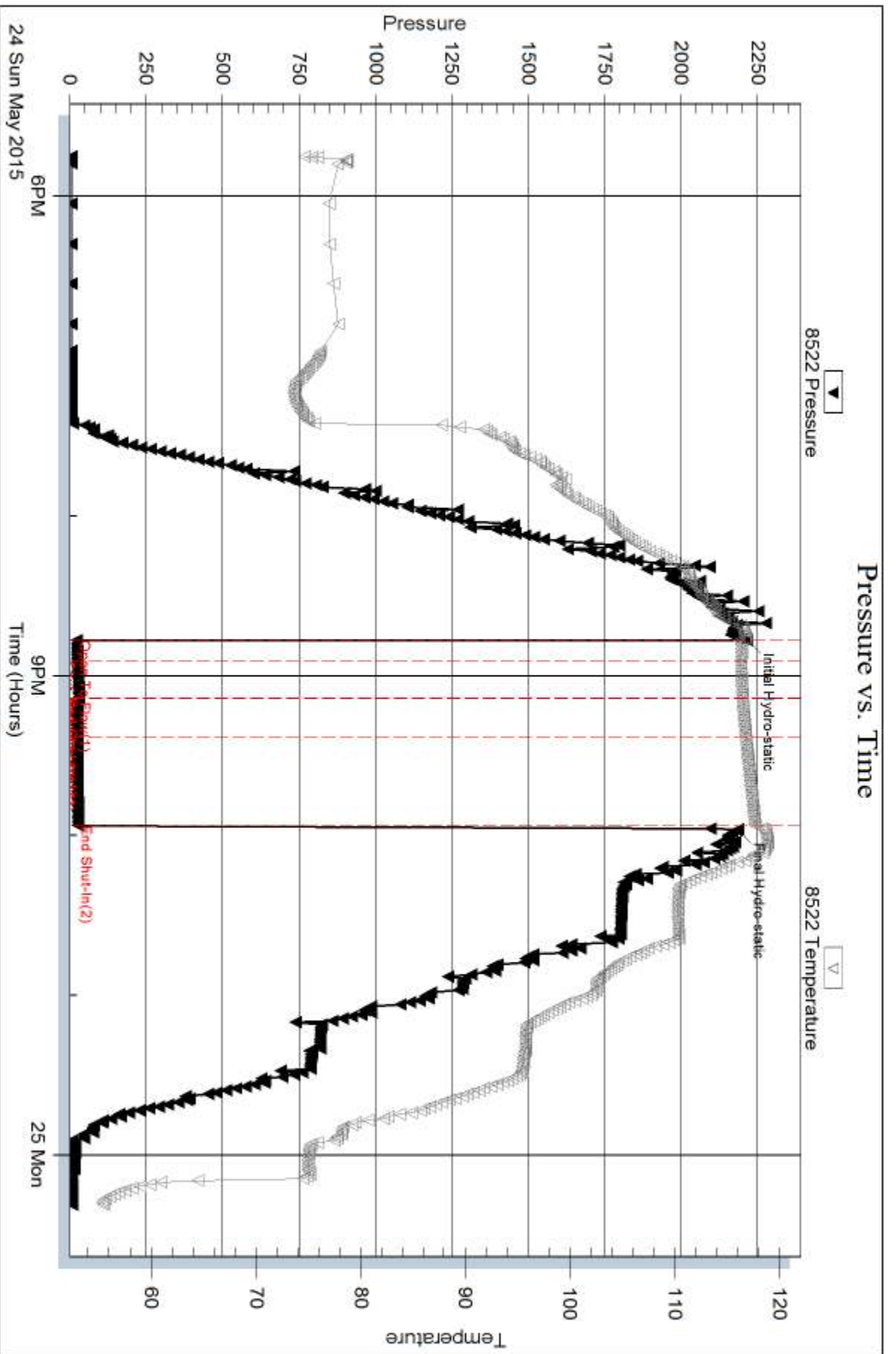
Num Gas Bombs: 0

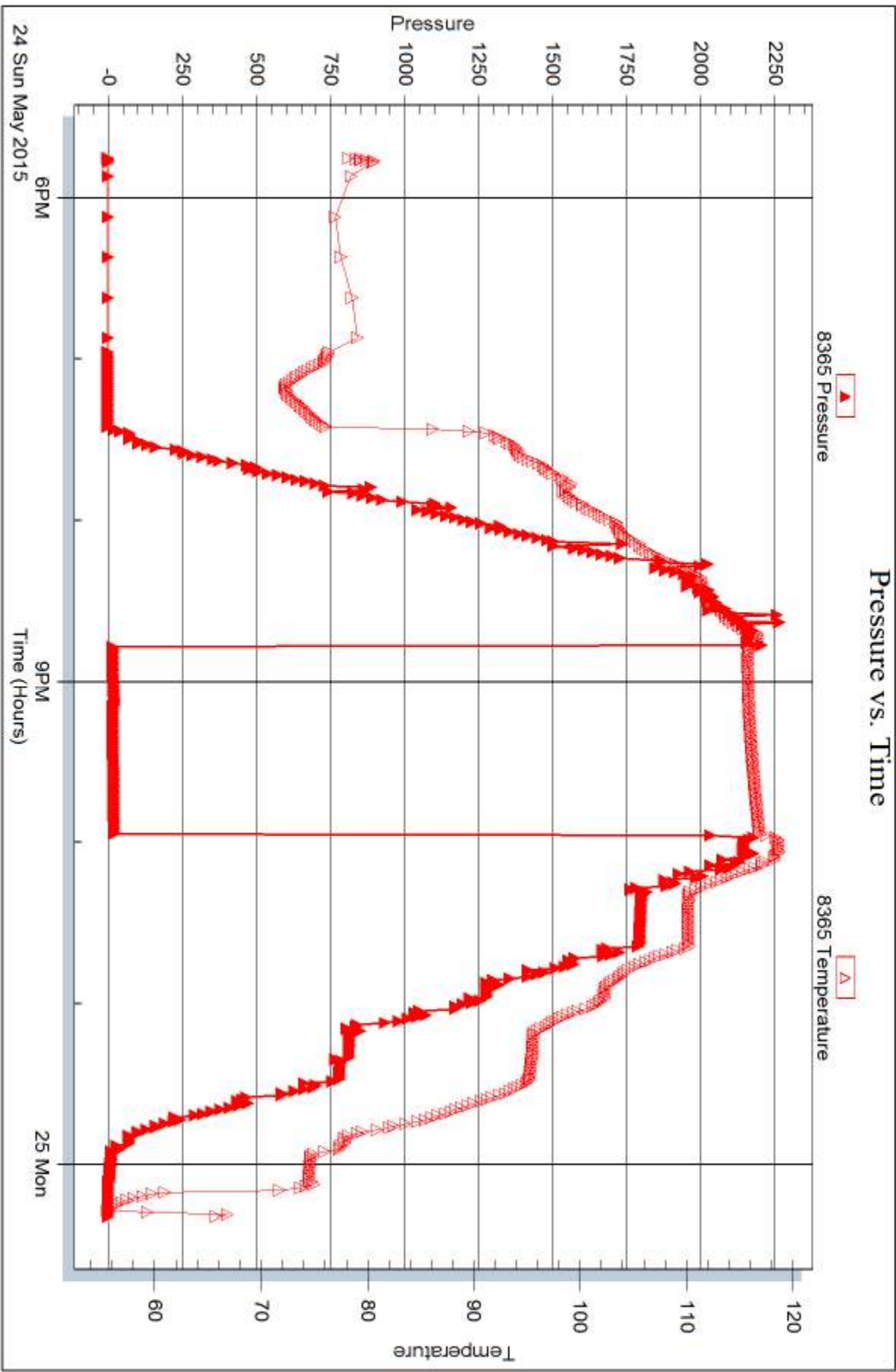
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:







DRILL STEM TEST REPORT

Prepared For: **Larson Engineering, Inc**

562 W St Rd 4
Olmitz, KS 67564

ATTN: Vern Schrag

Livingston KSU #1-26

26-16s-25w Ness,KS

Start Date: 2015.05.25 @ 07:28:00

End Date: 2015.05.25 @ 13:49:30

Job Ticket #: 57415 DST #: 2

Trilobite Testing, Inc
1515 Commerce Parkway Hays, KS 67601
ph: 785-625-4778 fax: 785-625-5620

Printed: 2015.05.27 @ 10:08:20



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Larson Engineering, Inc

26-16s-25w Ness,KS

562 W St Rd 4
Olmitz, KS 67564

Livingston KSU #1-26

ATTN: Vern Schrag

Job Ticket: 57415

DST#: 2

Test Start: 2015.05.25 @ 07:28:00

GENERAL INFORMATION:

Formation: **Ft. Scott**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 10:04:00

Time Test Ended: 13:49:30

Test Type: Conventional Bottom Hole (Reset)

Tester: Bradley Walter

Unit No: 69

Interval: 4432.00 ft (KB) To 4437.00 ft (KB) (TVD)

Total Depth: 4447.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations: 2575.00 ft (KB)

2567.00 ft (CF)

KB to GR/CF: 8.00 ft

Serial #: 8365

Inside

Press@RunDepth: 21.83 psig @ 4433.00 ft (KB)

Start Date: 2015.05.25

End Date:

2015.05.25

Start Time: 07:28:05

End Time:

13:49:29

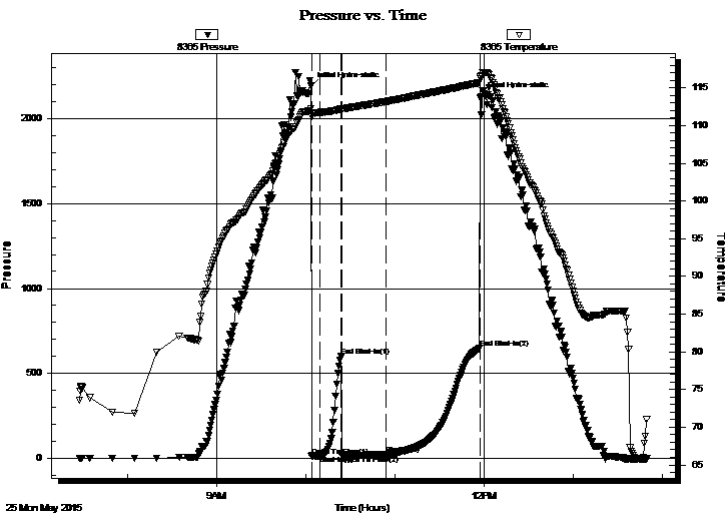
Capacity: 8000.00 psig

Last Calib.: 2015.05.25

Time On Btm: 2015.05.25 @ 10:03:45

Time Off Btm: 2015.05.25 @ 11:58:00

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



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2191.25	112.28	Initial Hydro-static
1	12.41	111.26	Open To Flow (1)
6	15.52	111.75	Shut-In(1)
21	603.48	112.20	End Shut-In(1)
21	17.27	111.96	Open To Flow (2)
51	21.83	113.19	Shut-In(2)
114	647.89	115.69	End Shut-In(2)
115	2131.54	116.27	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
20.00	Mud 100m (oil spots)	0.10

Gas Rates

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

* Recovery from multiple tests



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Larson Engineering, Inc

26-16s-25w Ness, KS

562 W St Rd 4
Olmitz, KS 67564

Livingston KSU #1-26

Job Ticket: 57415

DST#: 2

ATTN: Vern Schrag

Test Start: 2015.05.25 @ 07:28:00

GENERAL INFORMATION:

Formation: **Ft. Scott**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 10:04:00

Time Test Ended: 13:49:30

Test Type: Conventional Bottom Hole (Reset)

Tester: Bradley Walter

Unit No: 69

Interval: 4432.00 ft (KB) To 4437.00 ft (KB) (TVD)

Total Depth: 4447.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations: 2575.00 ft (KB)

2567.00 ft (CF)

KB to GR/CF: 8.00 ft

Serial #: 8522 Outside

Press@RunDepth: psig @ 4433.00 ft (KB)

Start Date: 2015.05.25

End Date: 2015.05.25

Capacity: 8000.00 psig

Last Calib.: 2015.05.25

Start Time: 07:28:05

End Time: 13:49:29

Time On Btm:

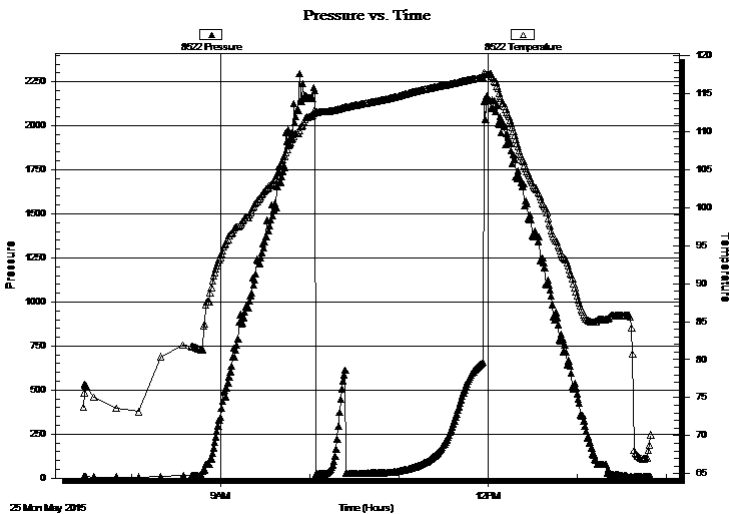
Time Off Btm:

TEST COMMENT: IF: Built to 1/2" blow.

IS: No return.

FF: Surface blow.

FS: No return.



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
20.00	Mud 100m (oil spots)	0.10

Gas Rates

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

* Recovery from multiple tests



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Larson Engineering, Inc

26-16s-25w Ness,KS

562 W St Rd 4
Olmitz, KS 67564

Livingston KSU #1-26

Job Ticket: 57415

DST#: 2

ATTN: Vern Schrag

Test Start: 2015.05.25 @ 07:28:00

Tool Information

Drill Pipe:	Length: 4301.00 ft	Diameter: 3.80 inches	Volume: 60.33 bbl	Tool Weight: 2500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 124.00 ft	Diameter: 2.25 inches	Volume: 0.61 bbl	Weight to Pull Loose: 70000.00 lb
			<u>Total Volume: 60.94 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	20.00 ft			String Weight: Initial 60000.00 lb
Depth to Top Packer:	4432.00 ft			Final 60000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	15.00 ft			
Tool Length:	42.00 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			4406.00	
Shut In Tool	5.00			4411.00	
Hydraulic tool	5.00			4416.00	
Jars	5.00			4421.00	
Safety Joint	2.00			4423.00	
Packer	5.00			4428.00	27.00 Bottom Of Top Packer
Packer	4.00			4432.00	
Stubb	1.00			4433.00	
Recorder	0.00	8365	Inside	4433.00	
Recorder	0.00	8522	Outside	4433.00	
Perforations	11.00			4444.00	
Bullnose	3.00			4447.00	15.00 Bottom Packers & Anchor

Total Tool Length: 42.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Larson Engineering, Inc

26-16s-25w Ness,KS

562 W St Rd 4
Olmitz, KS 67564

Livingston KSU #1-26

Job Ticket: 57415

DST#: 2

ATTN: Vern Schrag

Test Start: 2015.05.25 @ 07:28:00

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: 52.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.59 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 3100.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
20.00	Mud 100m (oil spots)	0.098

Total Length: 20.00 ft Total Volume: 0.098 bbl

Num Fluid Samples: 0

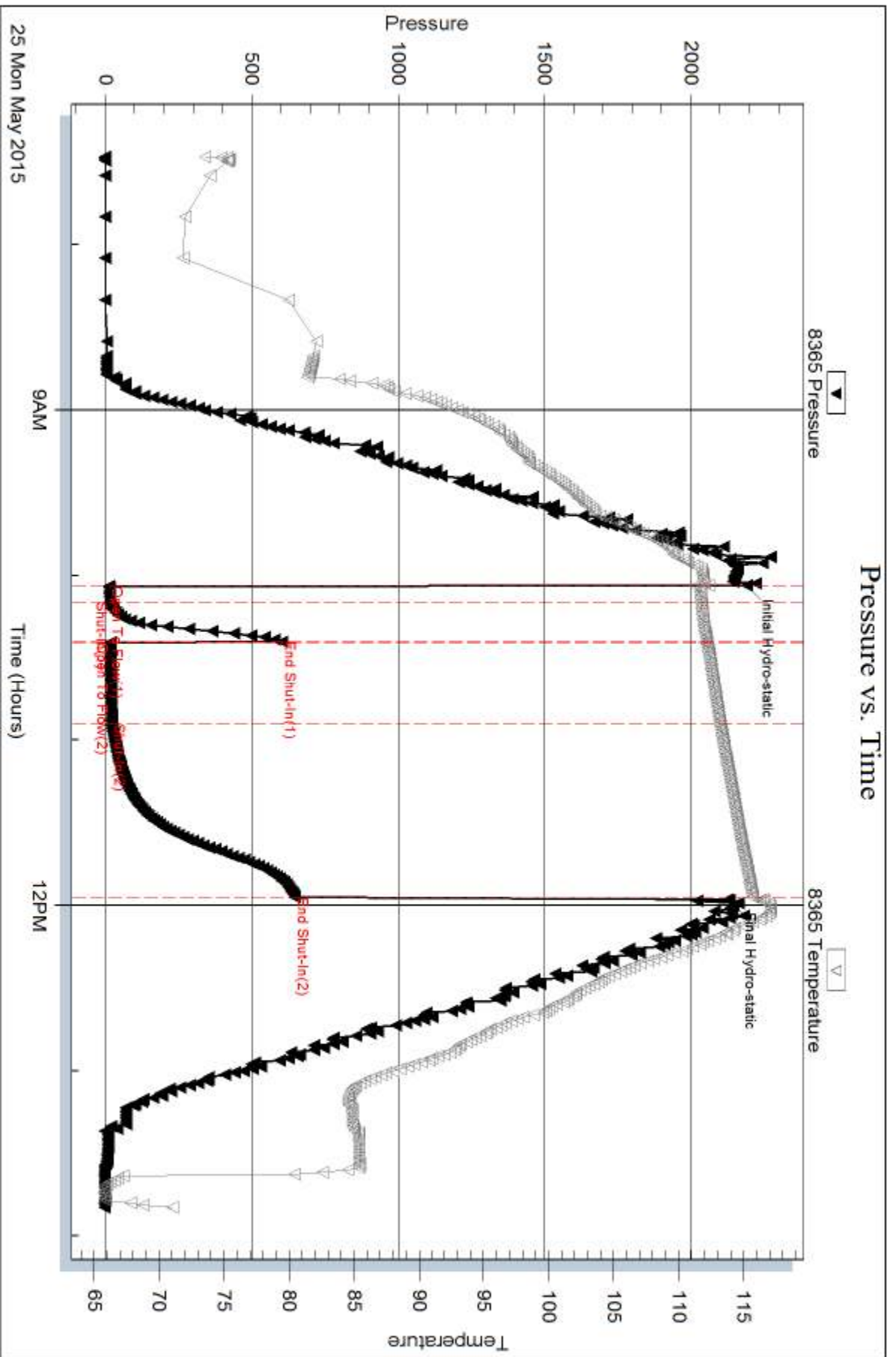
Num Gas Bombs: 0

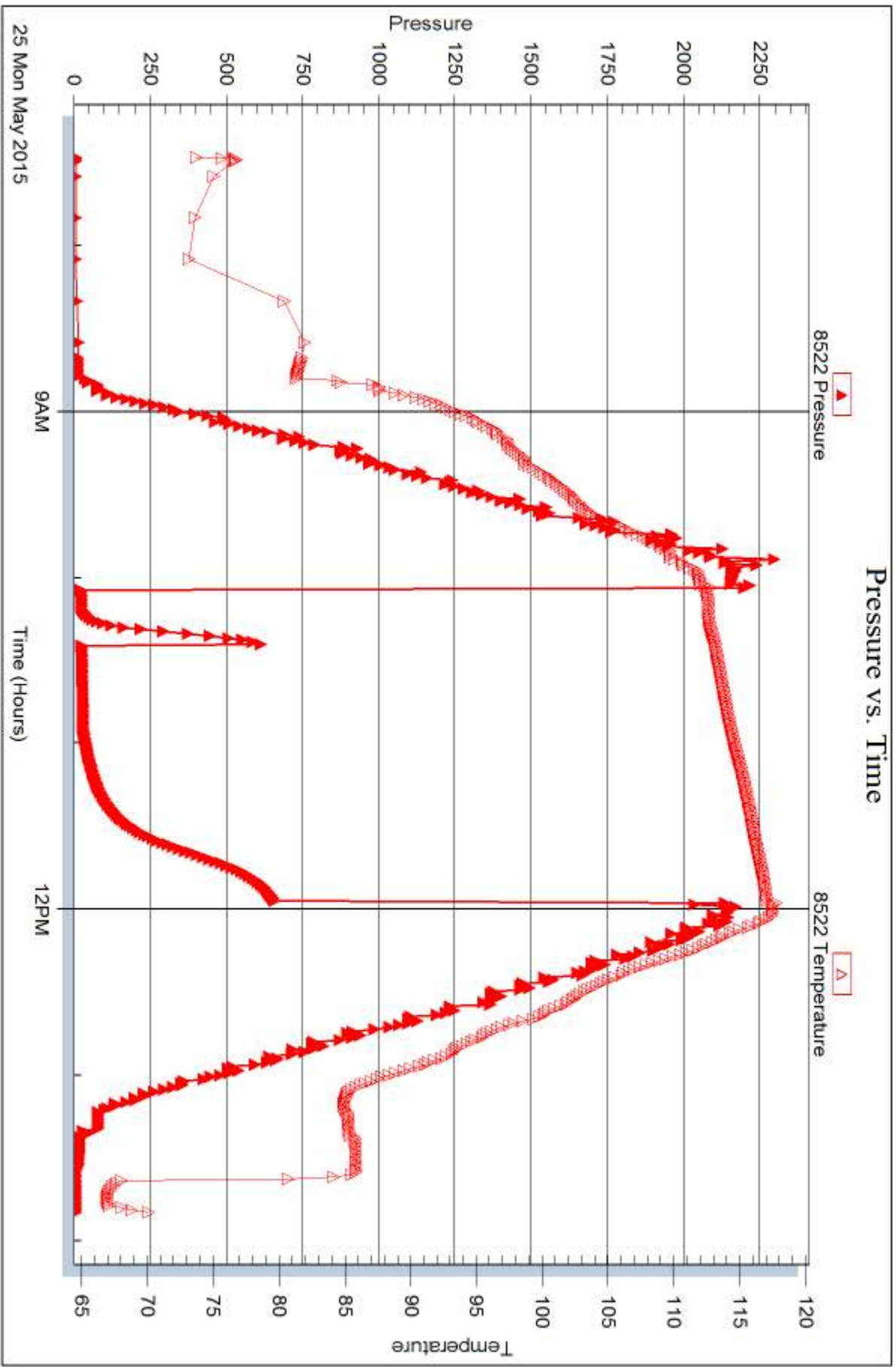
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:







DRILL STEM TEST REPORT

Prepared For: **Larson Engineering, Inc**

562 W St Rd 4
Olmitz, KS 67564

ATTN: Vern Schrag

Livingston KSU #1-26

26-16s-25w Ness,KS

Start Date: 2015.05.26 @ 05:45:00

End Date: 2015.05.26 @ 12:01:15

Job Ticket #: 57416 DST #: 3

Trilobite Testing, Inc
1515 Commerce Parkway Hays, KS 67601
ph: 785-625-4778 fax: 785-625-5620

Printed: 2015.05.27 @ 10:07:47



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Larson Engineering, Inc

26-16s-25w Ness,KS

562 W St Rd 4
Olmitz, KS 67564

Livingston KSU #1-26

ATTN: Vern Schrag

Job Ticket: 57416

DST#: 3

Test Start: 2015.05.26 @ 05:45:00

GENERAL INFORMATION:

Formation: **Mississippian**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 08:12:15

Time Test Ended: 12:01:15

Test Type: Conventional Bottom Hole (Reset)

Tester: Bradley Walter

Unit No: 69

Interval: 4484.00 ft (KB) To 4535.00 ft (KB) (TVD)

Reference Elevations: 2575.00 ft (KB)

Total Depth: 4535.00 ft (KB) (TVD)

2567.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 8.00 ft

Serial #: 8365 Inside

Press@RunDepth: 72.88 psig @ 4485.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2015.05.26

End Date: 2015.05.26

Last Calib.: 2015.05.26

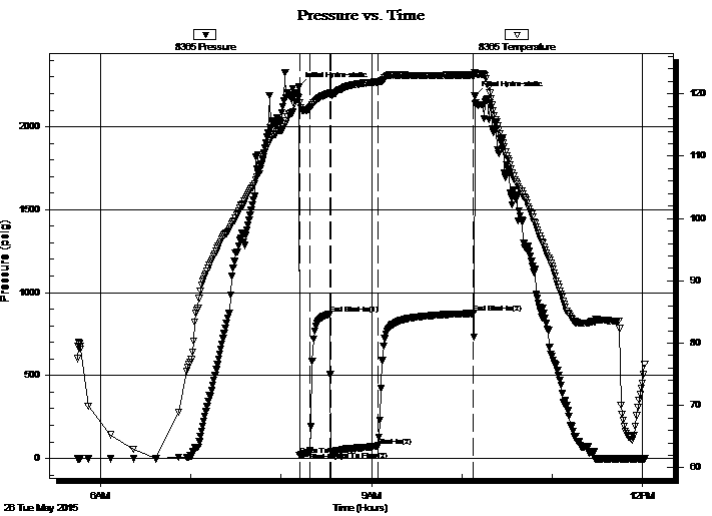
Start Time: 05:45:05

End Time: 12:01:14

Time On Btm: 2015.05.26 @ 08:12:00

Time Off Btm: 2015.05.26 @ 10:08:30

TEST COMMENT: IF: 1 1/2" blow .
IS: No return.
FF: 5" blow .
FSI No return.



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2241.81	119.41	Initial Hydro-static
1	18.21	118.56	Open To Flow (1)
7	35.73	117.65	Shut-In(1)
21	871.18	120.13	End Shut-In(1)
21	40.87	119.92	Open To Flow (2)
52	72.88	121.91	Shut-In(2)
116	874.34	123.04	End Shut-In(2)
117	2185.26	123.44	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
70.00	gocm 10g 40o 50m	0.34
70.00	go 15g 85o	0.49
0.00	100' GIP	0.00

* Recovery from multiple tests

Gas Rates

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



DRILL STEM TEST REPORT

Larson Engineering, Inc
 562 W St Rd 4
 Olmitz, KS 67564
 ATTN: Vern Schrag

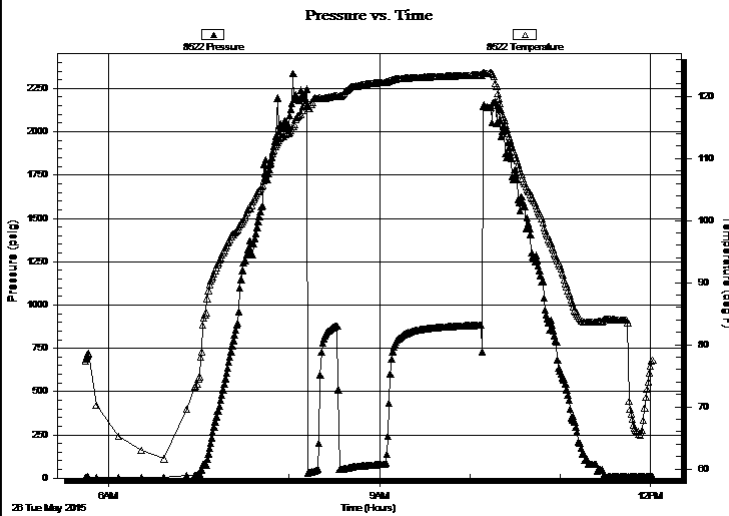
26-16s-25w Ness,KS
Livingston KSU #1-26
 Job Ticket: 57416 **DST#: 3**
 Test Start: 2015.05.26 @ 05:45:00

GENERAL INFORMATION:

Formation: **Mississippian**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 08:12:15
 Time Test Ended: 12:01:15
Interval: 4484.00 ft (KB) To 4535.00 ft (KB) (TVD)
 Total Depth: 4535.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Good
 Test Type: Conventional Bottom Hole (Reset)
 Tester: Bradley Walter
 Unit No: 69
 Reference Elevations: 2575.00 ft (KB)
 2567.00 ft (CF)
 KB to GR/CF: 8.00 ft

Serial #: 8522 Outside
 Press@RunDepth: psig @ 4485.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2015.05.26 End Date: 2015.05.26 Last Calib.: 2015.05.26
 Start Time: 05:45:05 End Time: 12:01:14 Time On Btm:
 Time Off Btm:

TEST COMMENT: IF: 1 1/2" blow .
 IS: No return.
 FF: 5" blow .
 FSI No return.



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
70.00	gocm 10g 40o 50m	0.34
70.00	go 15g 85o	0.49
0.00	100' GIP	0.00

* Recovery from multiple tests

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Larson Engineering, Inc

26-16s-25w Ness,KS

562 W St Rd 4
Olmitz, KS 67564

Livingston KSU #1-26

Job Ticket: 57416

DST#: 3

ATTN: Vern Schrag

Test Start: 2015.05.26 @ 05:45:00

Tool Information

Drill Pipe:	Length: 4363.00 ft	Diameter: 3.80 inches	Volume: 61.20 bbl	Tool Weight: 2500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 124.00 ft	Diameter: 2.25 inches	Volume: 0.61 bbl	Weight to Pull Loose: 75000.00 lb
			<u>Total Volume: 61.81 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	30.00 ft			String Weight: Initial 60000.00 lb
Depth to Top Packer:	4484.00 ft			Final 60000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	51.00 ft			
Tool Length:	78.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description

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

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			4458.00	
Shut In Tool	5.00			4463.00	
Hydraulic tool	5.00			4468.00	
Jars	5.00			4473.00	
Safety Joint	2.00			4475.00	
Packer	5.00			4480.00	27.00 Bottom Of Top Packer
Packer	4.00			4484.00	
Stubb	1.00			4485.00	
Recorder	0.00	8365	Inside	4485.00	
Recorder	0.00	8522	Outside	4485.00	
Perforations	14.00			4499.00	
Change Over Sub	1.00			4500.00	
Drill Pipe	31.00			4531.00	
Change Over Sub	1.00			4532.00	
Bullnose	3.00			4535.00	51.00 Bottom Packers & Anchor

Total Tool Length: 78.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Larson Engineering, Inc

26-16s-25w Ness,KS

562 W St Rd 4
Olmitz, KS 67564

Livingston KSU #1-26

Job Ticket: 57416

DST#: 3

ATTN: Vern Schrag

Test Start: 2015.05.26 @ 05:45:00

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

39 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

0 ppm

Viscosity: 57.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.98 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 3700.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
70.00	gocm 10g 40o 50m	0.344
70.00	go 15g 85o	0.490
0.00	100' GIP	0.000

Total Length: 140.00 ft Total Volume: 0.834 bbl

Num Fluid Samples: 0

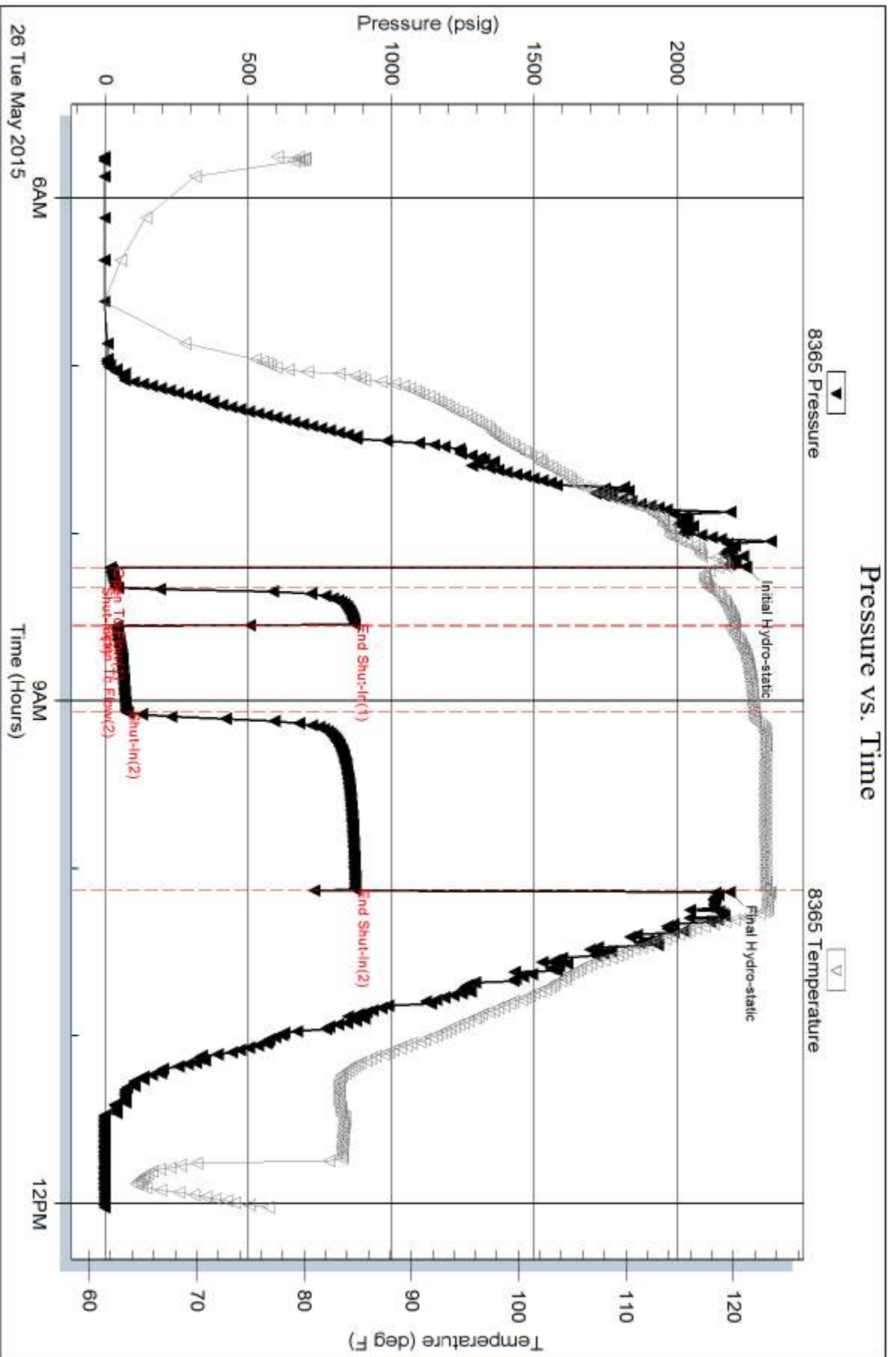
Num Gas Bombs: 0

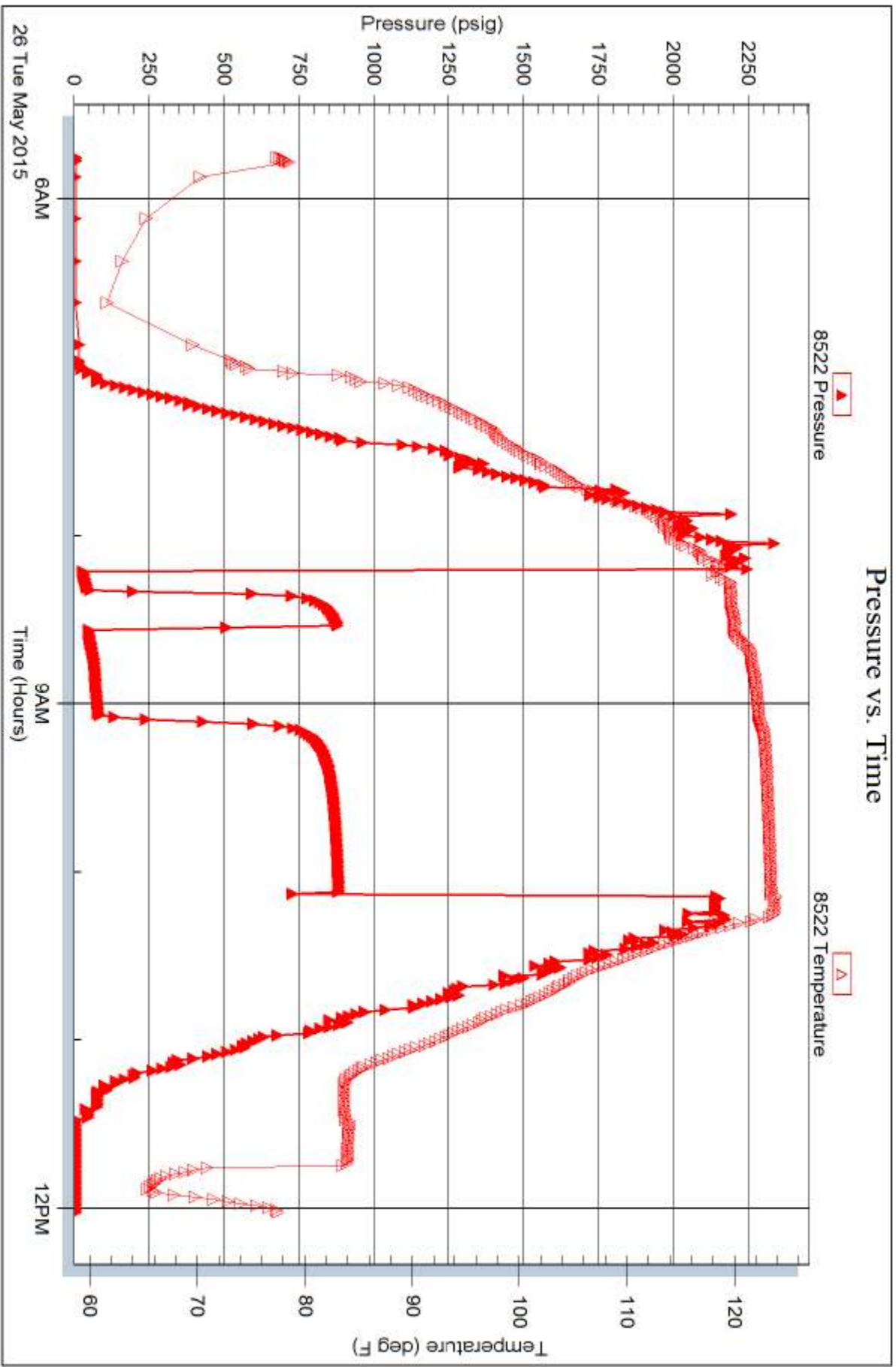
Serial #:

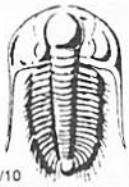
Laboratory Name:

Laboratory Location:

Recovery Comments:







TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 57414

Well Name & No. Livingston-KS U # 1-26 Test No. 1 Date 5/24/2015
 Company Larson Engineering, Inc Elevation 2575 KB 2567 GL
 Address 562 W State Rd 4 Olmitz, KS 67564
 Co. Rep / Geo. Vern Schrag Rig HD 3
 Location: Sec. 26 Twp. 16 Rge. 25 W Co. McGess State Ks

Interval Tested 4400 4430 Zone Tested FT. Scott
 Anchor Length 30' Drill Pipe Run 4269 Mud Wt. 9.3
 Top Packer Depth 4395 Drill Collars Run 124 Vis 48
 Bottom Packer Depth 4400 Wt. Pipe Run Ø WL 5# 7.8
 Total Depth 4430 Chlorides 4,000 ppm System LCM 3#

Blow Description IF: Bleak Surface blow.
ISI: No return.
FK: No blow.
FBI: No return.

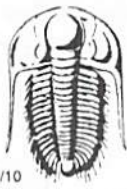
Rec	Feet of	%gas	%oil	%water	%mud
<u>1</u>	<u>MUD</u>			<u>100</u>	
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 1 BHT 117 Gravity — API RW — @ — ° F Chlorides — ppm

(A) Initial Hydrostatic <u>2216</u>	<input checked="" type="checkbox"/> Test <u>1150</u>	T-On Location <u>1730</u>
(B) First Initial Flow <u>23</u>	<input checked="" type="checkbox"/> Jars <u>250</u>	T-Started <u>1745</u>
(C) First Final Flow <u>25</u>	<input checked="" type="checkbox"/> Safety Joint <u>75</u>	T-Open <u>2040</u>
(D) Initial Shut-In <u>31</u>	<input checked="" type="checkbox"/> Circ Sub <u>N/C</u>	T-Pulled <u>2145</u>
(E) Second Initial Flow <u>26</u>	<input type="checkbox"/> Hourly Standby	T-Out <u>0119</u>
(F) Second Final Flow <u>25</u>	<input checked="" type="checkbox"/> Mileage <u>108 RT</u> <u>108</u>	Comments
(G) Final Shut-In <u>28</u>	<input type="checkbox"/> Sampler	
(H) Final Hydrostatic <u>2185</u>	<input type="checkbox"/> Straddle	<input type="checkbox"/> Ruined Shale Packer
Initial Open <u>5</u>	<input type="checkbox"/> Shale Packer	<input type="checkbox"/> Ruined Packer
Initial Shut-In <u>15</u>	<input type="checkbox"/> Extra Packer	<input type="checkbox"/> Extra Copies
Final Flow <u>15</u>	<input type="checkbox"/> Extra Recorder	Sub Total <u>0</u>
Final Shut-In <u>30</u>	<input type="checkbox"/> Day Standby	Total <u>1583</u>
	<input type="checkbox"/> Accessibility	MP/DST Disc't
	Sub Total <u>1583</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. 57415

Well Name & No. Livingston-KSU 1-26 Test No. 2 Date 5/25/2015
 Company Larson Engineering, Inc Elevation 2575 KB 2567 GL
 Address 562 W State Rd 4 Olmitz, KS 67564
 Co. Rep / Geo. Vern Schrag Rig HD#3
 Location: Sec. 26 Twp. 16 Rge. 25w Co. Necs State Ks

Interval Tested 4432 - 4447 Zone Tested Ft Scott
 Anchor Length 15' Drill Pipe Run 4301 Mud Wt. 9.3
 Top Packer Depth 4427 Drill Collars Run 124 Vis 52
 Bottom Packer Depth 4432 Wt. Pipe Run 6 WL 7.6
 Total Depth 4447 Chlorides 3100 ppm System LCM 2#

Blow Description JF: 1 1/2" blow
IGI: No return.
PF: Surface blow.
FSE: No return.

Rec	Feet of	%gas	%oil	%water	%mud
<u>20</u>	<u>MUD (OIL SPOTS)</u>			<u>100</u>	
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 20 BHT 116 Gravity — API RW — @ — ° F Chlorides — ppm

(A) Initial Hydrostatic <u>2191</u>	<input checked="" type="checkbox"/> Test <u>1150</u>	T-On Location <u>0715</u>
(B) First Initial Flow <u>12</u>	<input checked="" type="checkbox"/> Jars <u>250</u>	T-Started <u>0728</u>
(C) First Final Flow <u>16</u>	<input checked="" type="checkbox"/> Safety Joint <u>75</u>	T-Open <u>1004</u>
(D) Initial Shut-In <u>603</u>	<input checked="" type="checkbox"/> Circ Sub	T-Pulled <u>1154</u>
(E) Second Initial Flow <u>17</u>	<input type="checkbox"/> Hourly Standby	T-Out <u>1350</u>
(F) Second Final Flow <u>22</u>	<input checked="" type="checkbox"/> Mileage <u>108 Rt</u> <u>108</u>	Comments
(G) Final Shut-In <u>648</u>	<input type="checkbox"/> Sampler	
(H) Final Hydrostatic <u>2132</u>	<input type="checkbox"/> Straddle	<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>1583</u>
	<input type="checkbox"/> Accessibility	MP/DST Disc't
	Sub Total <u>1583</u>	

Approved By _____ Our Representative [Signature]

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TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 57416

4/10

Well Name & No. Livingston -KSO 1-28 Test No. 3 Date 5/26/2015
 Company Larson Engineering, Inc Elevation 2575 KB 2566 GL
 Address 567 W State Rd 4 Olmitz, KS 67564
 Co. Rep / Geo. Vern Schrag Rig H0 #3
 Location: Sec. 26 Twp. 16 Rge. 25w Co. Ness State Ks

Interval Tested 4484 4835 Zone Tested Mississippian
 Anchor Length 51' Drill Pipe Run 4363 Mud Wt. 9.4
 Top Packer Depth 4479 Drill Collars Run 124 Vis 57
 Bottom Packer Depth 4484 Wt. Pipe Run 0 WL 8.0
 Total Depth 4535 Chlorides 3700 ppm System LCM 2#

Blow Description TF : 1 1/2" blow
TSI : No return
FF : 5" blow
FSI : No return.

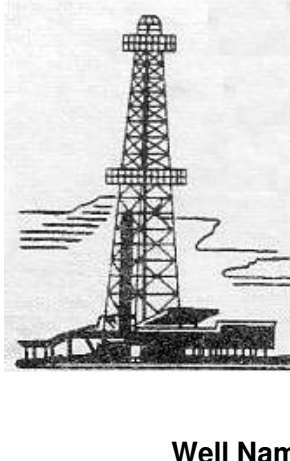
Rec	Feet of	%gas	%oil	%water	%mud
<u>70</u>	<u>60</u>	<u>15</u>	<u>85</u>		
<u>70</u>	<u>60 CM</u>	<u>10</u>	<u>40</u>		<u>50</u>
	<u>100' GIP</u>				

Rec Total 140 BHT 123 Gravity 39 API RW — @ — °F Chlorides — ppm
 (A) Initial Hydrostatic 2242 Test 1150 T-On Location 0530
 (B) First Initial Flow 18 Jars 250 T-Started 0545
 (C) First Final Flow 36 Safety Joint 75 T-Open 0913
 (D) Initial Shut-In 871 Circ Sub X/A T-Pulled 1003
 (E) Second Initial Flow 41 Hourly Standby _____ T-Out 1201
 (F) Second Final Flow 73 Mileage 108x2 108+108 Comments _____
 (G) Final Shut-In 874 Sampler _____ Prove x2 due to
 (H) Final Hydrostatic 2185 Straddle _____ Rig Maintenance
 Shale Packer _____ Ruined Shale Packer _____
 Extra Packer _____ Ruined Packer _____
 Extra Recorder _____ Extra Copies _____

Initial Open 5
 Initial Shut-In 15
 Final Flow 30
 Final Shut-In 60
 Sub Total 0
 Total 1691
 MP/DST Disc't _____
 Sub Total 1691

Approved By _____ Our Representative [Signature]

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WELLSITE GEOLOGIST'S REPORT

VERNON C. SCHRAG
CONSULTANT GEOLOGIST



Scale 1:240 (5"=100') Imperial

Well Name: LIVINGSTON-KSU #1-26
Location: N/2 NE NE SEC. 26-16S-25W
Licence Number: API:15-135-25870
Spud Date: May 17, 2015
Surface Coordinates: 157' FNL & 330' FWL

Region: Ness Co., KS
Drilling Completed: May 26, 2015

Bottom Hole Coordinates:
Ground Elevation (ft): 2566' K.B. Elevation (ft): 2575'
Logged Interval (ft): 3800' To: RTD Total Depth (ft): 4605'
Formation: Mississippi
Type of Drilling Fluid: Chemical Premix (Displaced)

Printed by MUD.LOG from WellSight Systems 1-800-447-1534 www.WellSight.com

OPERATOR:

Company: Larson Engineering Inc.
Address: 562 West State Road 4
Olmits, KS 67564-8561

DRILLING CONTRACTOR:

H. D. Drilling, LLC, Rig #3 (Co. Tools)

DP 4.5" XH (16.6#); DC 6-1/4" x 2-3/8" x 556', Kelly 40.30', Tool Joint 5.5" ; Bit: JZ-HA20Q, 7-7/8", standard jets 15-15-15; rpm 80, WOB 35k; Kelly Bushing 9' above ground level; LeWayne "Lew" Tresner (tool pusher).

CASING:

Set 8-5/8" casing at 254'

CIRCULATION SYSTEM:

Continental EMSCO D-300, duplex, 6 x 14, 60-62 spm, Chemical, premix, earth pits, Mud Co., Service Mud, Inc., Jason Whiting.

OPEN HOLE LOGS:

DN, DI (SP) (Run-1); ML (Run-2); No Sonic; 5" detail LTD-3600; 2" DI to surface casing; LogTech-Pioneer Wireline, Hays, KS, J. Hendrickson, Log total depth (4603') was two feet high to rotary total depth (4605').

DRILL STEM TEST #1:

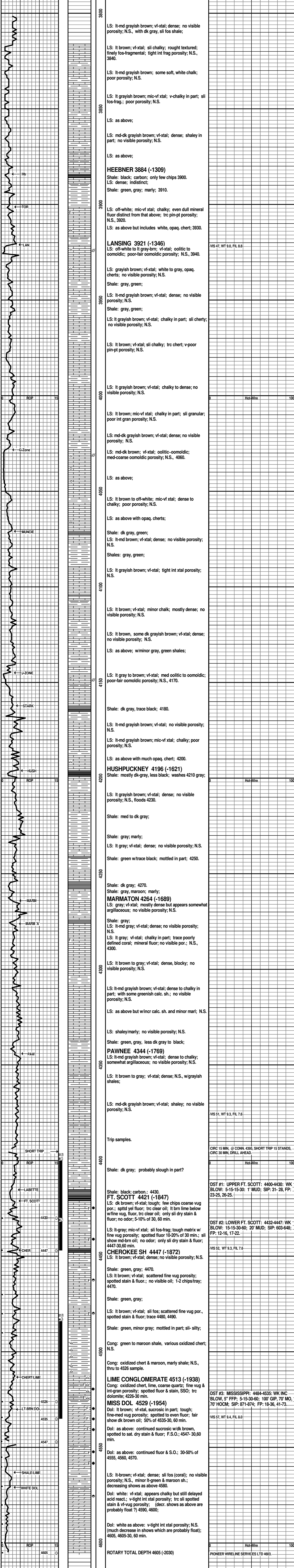
Upper Ft. Scott: Interval: 4400-4430 (30'): Blow: weak, surface IFP, no RB, no blow 2nd open; 5-15-15-30; Recovery: 1' mud; HP: 2216-2185; SIP: 31-28; FP: 23-25, 26-25; BHT: 117 F; Trilobite Testing, Inc., Scott City, KS, Bradley "Walt" Walter.

DRILL STEM TEST #2:

Lower Ft. Scott: Interval: 4432-4447 (15'): Blow: weak incr. to 1/2" IFP, no RB, surface blow FFP, no RB; Times: 5-15-30-60; Recovery: 20' mud w/oil spots; HP: 2191-2132; SIP: 603-648; FP: 12-16, 17-22; BHT: 116 F; Trilobite Testing, Inc., Scott City, KS, Bradley "Walt" Walter.

DRILL STEM TEST #3:

Mississippi Dolomite: Interval: 4484-4535 (51'): Blow: weak incr. to 1-1/2" IFP, no RB, weak incr to 1-1/2" in 10 min and 5" in 30 min FFP, no RB; Times: 5-15-30-60; Recovery: 100' GIP, 140' TF; Grindout: 70' gassy oil (15%G, 85%O, grav 39), 70' HOCM (10%G, 40%O, 50%M), no water; HP: 2242-2185; SIP: 871-874; FP: 18-36, 41-73; BHT: 123 F; Trilobite Testing, Inc., Scott City, KS, Bradley "Walt" Walter.





CHARGE TO: Laden Engineering
 ADDRESS:
 CITY, STATE, ZIP CODE:

TICKET 28492

PAGE 1 OF 1

SERVICE LOCATIONS: New City KS WELL/PROJECT NO.: 1-26 LEASE: Livingston - KSU COUNTY/PARISH: Leas STATE: KS CITY: Arnold DATE: 4 Apr 15 OWNER:
 2. TICKET TYPE: SERVICE SALES CONTRACTOR: FRITZLER RIG NAME/NO.: SHIPPED VIA: CT DELIVERED TO: location ORDER NO.:
 3. WELL TYPE: oil WELL CATEGORY: Development JOB PURPOSE: cement post collar WELL PERMIT NO.: WELL LOCATION:
 4. REFERRAL LOCATION: INVOICE INSTRUCTIONS:

PRICE REFERENCE	SECONDARY REFERENCE/ PART NUMBER	ACCOUNTING			DESCRIPTION	QTY.		U/M		UNIT PRICE	AMOUNT
		LOC	ACCT	DF							
575		1			MILEAGE	20	mi			5.00	100.00
576 D		1			Pump Charge	1	ea			1250.00	1250.00
330		1			2 MD cement	135	sk			15.75	2126.25
276		1			Flocele	50	lb			2.25	112.50
290		1			D-AIR	1	gal			42.00	42.00
581		1			Service charge	225	sk			1.50	337.50
582		1			Drayage (min)	1	ea			250.00	250.00

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

X
 DATE SIGNED: TIME SIGNED: A.M. P.M.

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

SURVEY	AGREE	UN-DECIDED	DIS-AGREE	PAGE TOTAL	AMOUNT
OUR EQUIPMENT PERFORMED WITHOUT BREAKDOWN?				4218	25
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? <input type="checkbox"/> YES <input type="checkbox"/> NO					
<input type="checkbox"/> CUSTOMER DID NOT WISH TO RESPOND				TOTAL	4358.52

7.05% TAX 16.15% 140.27

JOB LOG

SWIFT Services, Inc.

DATE 4 Jun 15 PAGE NO. 7

CUSTOMER		WELL NO.		LEASE		JOB TYPE		TICKET NO.	
Larson Engineering		1-26		Livingston - KSL		Cement port collar		28492	
CHART NO.	TIME	RATE (BPM)	VOLUME (BBL) (GAL)	PUMPS		PRESSURE (PSI)		DESCRIPTION OF OPERATION AND MATERIALS	
				T	C	TUBING	CASING		
								225 sk SMD cement w/ 1/4" floccle 2 3/8" x 5 1/2" BPT collar 1949'	
	0900							on loc TRK 114	
	0915					1000	1000	test to 1000 psi - held	
	0952							open port collar	
		3 1/2	2			300		inj rate 3 1/2 bpm @ 300 psi	
	0955	3 1/2				300		mix SMD cement @ 11.2 ppg	
		3 1/2	11			300		fluid to surface	
		3 1/2	72			450		— cement to surface —	
								{ 135 sk mixed 15 to pit }	
		3 1/2	7			450		Displace w/ H ₂ O	
								close port collar	
	1024					1000	1000	test to 1000 psi - held	
	1026							Run 5 joints	
	1033		25					Reverse hole clean - 2 cement plugs -	
	1048							wash truck pull tool	
								Rack up	
	1115							job complete	
								Thanks Phil, Blaine, & Bob	