



Confidentiality Requested:

Yes No

KANSAS CORPORATION COMMISSION 1093468
OIL & GAS CONSERVATION DIVISION

Form ACO-1

August 2013

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

WELL COMPLETION FORM
WELL HISTORY - DESCRIPTION OF WELL & LEASE

OPERATOR: License # _____

Name: _____

Address 1: _____

Address 2: _____

City: _____ State: _____ Zip: _____ + _____

Contact Person: _____

Phone: (_____) _____

CONTRACTOR: License # _____

Name: _____

Wellsite Geologist: _____

Purchaser: _____

Designate Type of Completion:

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

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

Operator: _____

Well Name: _____

Original Comp. Date: _____ Original Total Depth: _____

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

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

Spot Description: _____

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

_____ Feet from North / South Line of Section

_____ Feet from East / West Line of Section

Footages Calculated from Nearest Outside Section Corner:

- NE NW SE SW

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

Datum: NAD27 NAD83 WGS84

County: _____

Lease Name: _____ Well #: _____

Field Name: _____

Producing Formation: _____

Elevation: Ground: _____ Kelly Bushing: _____

Total Vertical Depth: _____ Plug Back Total Depth: _____

Amount of Surface Pipe Set and Cemented at: _____ Feet

Multiple Stage Cementing Collar Used? Yes No

If yes, show depth set: _____ Feet

If Alternate II completion, cement circulated from: _____

feet depth to: _____ w/ _____ sx cmt.

Drilling Fluid Management Plan

(Data must be collected from the Reserve Pit)

Chloride content: _____ ppm Fluid volume: _____ bbls

Dewatering method used: _____

Location of fluid disposal if hauled offsite:

Operator Name: _____

Lease Name: _____ License #: _____

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

County: _____ Permit #: _____

AFFIDAVIT

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

Submitted Electronically

KCC Office Use ONLY

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

1093468

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

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

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

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

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

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

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

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

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

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

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

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

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

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

DISPOSITION OF GAS: <input type="checkbox"/> Vented <input type="checkbox"/> Sold <input type="checkbox"/> Used on Lease <i>(If vented, Submit ACO-18.)</i>	METHOD OF COMPLETION: <input type="checkbox"/> Open Hole <input type="checkbox"/> Perf. <input type="checkbox"/> Dually Comp. <input type="checkbox"/> Commingled <i>(Submit ACO-5)</i> <input type="checkbox"/> Other <i>(Specify)</i> _____ <input type="checkbox"/> Other <i>(Specify)</i> _____	PRODUCTION INTERVAL: _____ _____
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Form	ACO1 - Well Completion
Operator	Larson Engineering, Inc. dba Larson Operating Company
Well Name	Danis 1-21
Doc ID	1093468

Tops

Name	Top	Datum
Anhydrite	2164	+653
Base Anhydrite	2189	+628
Heebner Sh	3935	-1118
Lansing-KC	3981	-1164
Stark Sh	4253	-1436
Base KC	4335	-1518
Marmaton	4363	-1546
Pawnee	4452	-1635
Fort Scott	4504	-1687
Cherokee	4528	-1711
Cherokee Sand	4581	-1764
Mississippian	4591	-1774

ALLIED OIL & GAS SERVICES, LLC 053654

Federal Tax I.D.# 20-5975804

REMIT TO P.O. BOX 31
RUSSELL, KANSAS 67665

SERVICE POINT: Great Bend, KS

DATE <u>6-11-12</u>	SEC <u>21</u>	TWP <u>19</u>	RANGE <u>29</u>	CALLED OUT	ON LOCATION	JOB START <u>8:30pm</u>	JOB FINISH <u>8:00pm</u>
LEASE <u>DANIS</u>	WELL # <u>1-21</u>	LOCATION <u>Dighton, KS</u>	<u>3 West</u>	COUNTY <u>same</u>	STATE <u>KS</u>		
OLD OR NEW (Circle one)		<u>3450 West int.</u>					

CONTRACTOR <u>H-D Rig #3</u>	OWNER <u>Larson Engineering</u>
TYPE OF JOB <u>plug float</u>	
HOLE SIZE <u>12 1/4</u>	T.D. <u>264</u>
CASING SIZE <u>8 3/8</u>	DEPTH <u>264</u>
TUBING SIZE	DEPTH
DRILL PIPE	DEPTH
TOOL	DEPTH
PRES. MAX	MINIMUM
MEAS. LINE	SHOE JOINT
CEMENT LEFT IN CSG. <u>15 ft</u>	
PERFS.	
DISPLACEMENT <u>15.86 bbl</u>	

CEMENT AMOUNT ORDERED <u>170 sfcs Class A</u>		
<u>290 cc 20/0 gel</u>		
COMMON <u>170</u>	@ <u>16.25</u>	<u>2762.50</u>
POZMIX	@	
GEL <u>3</u>	@ <u>21.25</u>	<u>63.75</u>
CHLORIDE <u>86</u>	@ <u>58.20</u>	<u>349.20</u>
ASC	@	
	@	
	@	
	@	
	@	
	@	
	@	
	@	
HANDLING <u>183.51</u>	@ <u>2.10</u>	<u>385.37</u>
MILEAGE <u>8.34 x 30 x</u>	<u>2.35</u>	<u>587.97</u>
		TOTAL <u>4148.2</u>

EQUIPMENT

PUMP TRUCK # <u>346</u>	CEMENTER <u>Greg</u>
	HELPER <u>Kevin G</u>
BULK TRUCK # <u>377</u>	DRIVER <u>Joel W</u>
BULK TRUCK #	DRIVER

REMARKS:

Pipe on bottom break circ.
w/ Rig and hook up and
mix 190 sfcs class A 290cc
20/0 gel 290 cc 20/0 gel
plug float about 15.86 bbl
circ. Dighton
Plug down @ 8:30pm

SERVICE

DEPTH OF JOB <u>264</u>		
PUMP TRUCK CHARGE <u>1125.00</u>		
EXTRA FOOTAGE	@	
MILEAGE <u>4um 30</u>	@ <u>7.00</u>	<u>210.00</u>
MANIFOLD	@	
<u>4um 80</u>	@ <u>4.00</u>	<u>120.00</u>
	@	
		TOTAL <u>1455.00</u>

PLUG & FLOAT EQUIPMENT

	@	
	@	
	@	
	@	
	@	
		TOTAL

CHARGE TO: Larson Engineering
STREET _____
CITY _____ STATE _____ ZIP _____

To: Allied Oil & Gas 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 X LEWAYNE TRESNER

SIGNATURE Lewayne Tresner
Thank You!

SALES TAX (If Any) _____
TOTAL CHARGES 5603.22
DISCOUNT 28% 1681.13 IF PAID IN 30 DAYS
3922.65



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

TICKET No 22736

PAGE 1 OF 2

SERVICE LOCATIONS: 1. **NESS CITY, KS**
 WELL/PROJECT NO.: **DANIS 1-21** LEASE: **LANE** COUNTY/PARISH: **KS.** CITY: **DIGHTON, KS.** DATE: **23 Jun 12** OWNER:
 2. TICKET TYPE: SERVICE SALES CONTRACTOR: **HD DRILLING RIG #3** 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: **3W, 2S, W FWD**
 4. REFERRAL LOCATION: INVOICE INSTRUCTIONS:

PRICE REFERENCE	SECONDARY REFERENCE/ PART NUMBER	ACCOUNTING			DESCRIPTION	QTY.		U/M		UNIT PRICE	AMOUNT
		LOC	ACCT	DF							
575					MILEAGE #110	45	mil			6.00	270.00
578					Pump charge	1	4655 FT			1500.00	1500.00
280					FLOCHECK 21	500	gal			2.50	1250.00
221					LIQUID RCL	2	gal			25.00	50.00
419					ROTATING HEAD RENTAL	200				10.00	2000.00

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 *[Signature]*
 DATE SIGNED: **23 Jun 12** TIME SIGNED: **2000** 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		
OUR EQUIPMENT PERFORMED WITHOUT BREAKDOWN?							1	3270.00	
WE UNDERSTOOD AND MET YOUR NEEDS?							2	5316.00	
OUR SERVICE WAS PERFORMED WITHOUT DELAY?							Subtotal		
WE OPERATED THE EQUIPMENT AND PERFORMED JOB CALCULATIONS SATISFACTORILY?							Lane TAX	385.28	
ARE YOU SATISFIED WITH OUR SERVICE?	<input type="checkbox"/> YES <input type="checkbox"/> NO						TOTAL	8971.35	
<input type="checkbox"/> CUSTOMER DID NOT WISH TO RESPOND									

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

SWIFT OPERATOR: *[Signature]* APPROVAL:

Thank You!



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

TICKET CONTINUATION

TICKET No. 22736

CUSTOMER LARSON ENGINEERING WELL DAVIS 1-21 DATE 23 JUN 12 PAGE 2 OF 2

PRICE REFERENCE	SECONDARY REFERENCE / PART NUMBER	ACCOUNTING			TIME	DESCRIPTION	QTY. U/M		QTY. U/M	UNIT PRICE	AMOUNT
		LOC	ACCT	DF							
276						FLOCELE	39	lbs		2 ⁰⁰	78 ⁰⁰
283						SALT	800	lbs		2 ⁰⁰	160 ⁰⁰
284						CALSEAL	7	bx		35 ⁰⁰	245 ⁰⁰
292						HALAD-322	150	lbs		7 ²⁵	1162 ⁵⁰
277						COAL SEAL	1100	lbs		7 ²⁵	825 ⁰⁰
290						DAIR	1 1/2	gal		35 ⁰⁰	52 ⁵⁰
325						STANDARD CEMENT EA-2	155	sq		13 ⁵⁰	2092 ⁵⁰
581						SERVICE CHARGE				2 ⁰⁰	310 ⁰⁰
583						MILEAGE CHARGE	11559	TOTAL WEIGHT	75	LOADED MILES	390.57
										1 ⁰⁰	390 ⁵⁷

CONTINUATION TOTAL 5316⁰⁷

JOB LOG

SWIFT Services, Inc.

DATE 23 Jun 12 PAGE NO.

CUSTOMER
LARSON ENGINEERING

WELL NO.

LEASE
DANIS 1-21

JOB TYPE
5 1/2 LONGSTRING

TICKET NO.
22736

CHART NO.	TIME	RATE (BPM)	VOLUME (BBL) (GAL)	PUMPS		PRESSURE (PSI)		DESCRIPTION OF OPERATION AND MATERIALS
				T	C	TUBING	CASING	
	1530							ON LOCATION 5 1/2 - 15.5 APPS RTD @ 4655 LTD @ 4656 PORT COLLAR @ 2220
	1810							DROP BALL CIRCULATE.
	1850	6	15		✓		300	Pump 15 Bbl KCL FLUSH
		6	12		✓		300	Pump 500 gal FLOCHECK
		6	5		✓		300	Pump 5 Bbl KCL FLUSH
	1858		7					PLUG RA-30sx
	1900	4	30		✓			MIX 125sx EA2
	1913							WASH OUT Pump & LINES
	1915	6						START DISPLACING PLUG
	1932		109.8		✓		1500	PLUG DOWN PSI up LATCH PLUG IN
	1934							RELEASE PSI DRY
	1935							WASH TRUCK
	2000							JOB COMPLETE
								THANKS #110
								JASON JEFF DONG



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

TICKET
 No 23143

PAGE 1 OF 1

SERVICE LOCATIONS 1. 1600 6th KS WELL/PROJECT NO. 1-21 LEASE Davis COUNTY/PARISH Lane STATE KS CITY Dighton DATE 12/01/12 OWNER _____
 2. TICKET TYPE SERVICE SALES CONTRACTOR FRITZLER RIG NAME/NO. _____ SHIPPED VIA _____ DELIVERED TO _____ ORDER NO. _____
 3. WELL TYPE oil WELL CATEGORY Drilldown JOB PURPOSE connect port 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 TRK 114	40	mi			6.00	240.00
576D		1			Pump Charge	1	20			1250.00	1250.00
330		1			SMD cont	185	sk			16.50	3052.50
276		1			fluid	50	lb			2.00	100.00
290		1			D-AIR	2	90			35.00	70.00
581		1			service charge	235	sk			2.00	470.00
583		1			Drayage			467.7	TW	1.00	467.70

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 [Signature]
 DATE SIGNED _____ TIME SIGNED 1:30 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
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?				TAX
ARE YOU SATISFIED WITH OUR SERVICE? <input type="checkbox"/> YES <input type="checkbox"/> NO				TOTAL
<input type="checkbox"/> CUSTOMER DID NOT WISH TO RESPOND				

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

SWIFT OPERATOR ABG APPROVAL _____

Thank You!

JOB LOG

SWIFT Services, Inc.

DATE: 2/11/12 PAGE NO. 1

CUSTOMER: *LDJ Engineering Inc* WELL NO. *1-21* LEASE *Danis* JOB TYPE *Cement Port Colker* TICKET NO. *2343*

CHART NO.	TIME	RATE (BPM)	VOLUME (BBL) (GAL)	PUMPS		PRESSURE (PSI)		DESCRIPTION OF OPERATION AND MATERIALS
				T	C	TUBING	CASING	
								<i>77 2355k SMD w/ 1/4" floater</i> <i>2 3/8 x 5 1/2 Port Colker 2230'</i>
	<i>1130</i>							<i>on loc TRK 114</i>
	<i>1155</i>					<i>1000</i>	<i>1000</i>	<i>lost to 1000psi - held</i> <i>open port colker</i>
	<i>1208</i>	<i>2 3/4</i>				<i>500</i>		<i>inj rate</i>
	<i>1205</i>	<i>3 3/4</i>	<i>10</i>				<i>300</i>	<i>MIX SMD @ 11.2 ppg</i> <i>10 bbl top end</i>
	<i>1235</i>	<i>3 3/4</i>	<i>102</i>				<i>450</i>	<i>— cement to surface —</i> <i>{ 1855 k mix</i> <i>20 top pit }</i>
	<i>1245</i>							<i>Run 4 joints</i>
			<i>25</i>					<i>Reverse hole clean</i> <i>— 2 cement of 1000 —</i>
								<i>wash truck</i>
								<i>job complete</i>
								<i>Thank</i> <i>Alan Danis & Brian</i>

P. O. Box 375
Kechi, Kansas 67067-0375
316-518-0495
boblewellyn@yahoo.com

GEOLOGICAL REPORT

Larson Engineering, Inc.

No. 1-21 Danis
1500' FSL & 997' FEL Sec. 21-18S-29W
Lane County, Kansas

CONTRACTOR: H D Drilling, LLC Rig 3
SPUDED: June 11, 2012
DRILLING COMPLETED: June 23, 2012
SURFACE CASING: 8 5/8" @ 261 KBM/175 sx.
ELECTRIC LOGS: DIL CNL/CDL MEL
ELEVATIONS: 2817 KB 2810 GL
FORMATION TOPS: (Electric Log)

Anhydrite	2164 (+ 653)
Base Anhydrite	2189 (+ 628)
Heebner Shale	3935 (-1118)
Lansing-Kansas City Group	3981 (-1164)
Muncie Creek Shale	4154 (-1337)
Stark Shale	4253 (-1436)
Hushpuckney Shale	4292 (-1475)
Base Kansas City	4335 (-1518)
Marmaton	4363 (-1546)
Altamont	4392 (-1575)
Pawnee	4452 (-1635)
Myrick Station	4477 (-1660)
Fort Scott	4504 (-1687)
Cherokee	4528 (-1711)
Cherokee Sand	4581 (-1764)
Mississippian	4591 (-1774)
Electric Log Total Depth	4656 (-1839)

Samples were examined microscopically from 3800 to Rotary Total Depth. Samples were examined wet and dry and samples from potentially productive zones were viewed under a fluoroscope and checked for oil cut. Following is a description of zones of interest, Drill Stem Tests, etc. For a

complete lithologic description of all formations refer to the sample log in the back pages of this report.

Lansing-Kansas City Zones:

3981-3987 (A Zone)

Limestone, buff, dense to finely crystalline, slightly fossiliferous, slightly chalky, trace of very poor intercrystalline porosity, trace of dead stain, no show of live oil, some chert, light gray, fresh, opaque, lower portion grades to buff to tan to brown, dense to finely crystalline tight limestone.

4015-4018 (B Zone)

Limestone, cream to buff, dense to finely crystalline and chalky, trace of very poor vugular and "edge" porosity, trace of dead stain, no show of live oil.

4034-4053 (C/D Zone)

Limestone, cream to buff, dense to finely crystalline and chalky, zone is mostly tight with no shows of oil, scattered light gray chert, fresh, opaque.

4066-4080 (E Zone)

Limestone, cream to buff, some light gray, dense to finely crystalline and chalky, zone is mostly tight with no shows of oil, trace of chert as above.

4082-4087 (F Zone)

Limestone, cream to buff, some tan, dense to finely crystalline, slightly fossiliferous, scattered poor intercrystalline and interfossil porosity, scattered dead stain, no show of live oil, some tan sub-lithographic limestone in lower portion.

4089-4099 (G Zone)

Limestone, buff to tan, finely crystalline and oolitic, fair to good ooliticastic porosity, zone contains no shows of oil. Lower portion becomes limestone, cream to buff, dense and chalky with scattered finely crystalline, mostly tight with no shows of oil.

4164-4170 (H Zone)

Limestone, cream to buff, some gray, some brown, dense to finely crystalline and partly fossiliferous, scattered poor intercrystalline and interfossil porosity, no show of oil.

4203-4217 (I Zone)

Limestone, buff to tan, finely crystalline and partly fossiliferous, some dense, scattered poor vugular and intercrystalline porosity, poor spotted stain, very slight show of free oil, faint fleeting odor, poor fluorescence, poor cut.

DST No. 1

4192-4216

5-15-15-30; surface blow on first flow period, no blowback; blow did not return on second flow period. Recovered one foot of mud. ISIP 15# FSIP 16# IFP 14-14# FFP 14-16# IHP 2111# FHP 2019# BHT 115 degrees F.

4230-4233 (J Zone)

Limestone, buff to tan, some brown, finely crystalline and oolitic, poor to fair intercrystalline and interoolitic porosity, some vugular and "edge" porosity, trace of scattered ooliticastic porosity, fair spotted stain, fair to good show of free oil, good odor, poor fluorescence, fair cut.

4237-4242 (Lower J Zone)

Limestone, buff to tan, some brown, oolitic with some finely crystalline, fair ooliticastic porosity, mostly barren, some with poor spotted stain, very slight show of free oil, fair to good odor (probably from upper J zone), poor fluorescence, poor cut.

Drill Stem Test No. 2

4218-4239

5-15-30-60; 1 1/2" blow on first flow, no blowback; 7 1/2" blow on second flow period, no blowback. Recovered 72 feet of water cut mud (20% water, 80% mud), 124 feet of mud cut water (80% water, 20% mud), chlorides 21,000 ppm, system chlorides 2500 ppm. ISIP 688# FSIP 692# IFP 18-43# FFP 42-117# IHP 2291# FHP 2099# BHT 123 degrees F.

4260-4268 (K Zone)

Limestone, cream to buff to tan, dense to finely crystalline, slightly fossiliferous, scattered poor to fair intercrystalline porosity, poor to fair spotted stain, slight show of free oil, good odor, poor fluorescence, poor to fair cut.

Drill Stem Test No. 3

4250-4280

5-15-15-30; blow off bottom of bucket in 4 minutes on first flow period; blow off bottom of bucket in 5 minutes of second flow period. Recovered 174 feet of mud cut water (70% water, 30% mud), 372 feet of mud cut water (90% water, 10% mud), chlorides 20,000 ppm, system chlorides 2500 ppm. ISIP 709# FSIP 708# IFP 47-129# FFP 137-263# IHP 2103# FHP 2039# BHT 125 degrees F.

4294-4298 (Middle Creek Zone)

Limestone, tan to brown and medium gray, finely crystalline, some dense, slightly fossiliferous, scattered poor intercrystalline porosity, trace of poor spotted stain, trace of free oil, faint fleeting odor, poor fluorescence, poor to fair cut.

Drill Stem Test No. 4

4290-4298

5-15-15-30; weak surface blow, died in three minutes; blow did not return on second flow period. Recovered one foot of mud. ISIP 16# FSIP 17# IFP 16-15# FFP 15-17# IHP 2171# FHP 2173# BHT 112 degrees F.

4299-4304 (L Zone)

Limestone, buff, dense, tight, with scattered finely crystalline, slightly chalky, trace of very poor

intercrystalline porosity with trace of dead stain, no show of live oil. Lower portion of L Zone was mostly tight with no shows of oil.

4346-4352 (Pleasanton Zone)

The Pleasanton section consisted of limestone, buff to tan, some gray, finely crystalline and fossiliferous, some dense, fair intercrystalline and interfossil porosity, poor to fair spotted stain, fair to good show of free oil, good odor, fair fluorescence, good cut.

Drill Stem Test No. 5 4327-4352

5-15-30-60; surface blow, built to 1/2" on first flow period; surface blow built to three inches on second flow, no blowback. Recovered 10 feet of mud with a show of oil, 60 feet of water cut mud (5% water, 95% mud). ISIP 310# FSIP 304# IFP 16-22# FFP 23-58# IHP 2203# FHP 2095# BHT 121 degrees F.

4363-4378 (Marmaton Zone)

Limestone, buff to tan, dense to finely crystalline, trace of poor vugular and intercrystalline porosity with questionable live stain, some scattered dead stain, no free oil, faint questionable odor, no fluorescence, no cut.

4409-4413 (Altamont "A" Zone)

Limestone, tan, finely crystalline and partly fossiliferous, some dense, poor to fair intercrystalline and interfossil porosity, fair spotted stain, fair show of free oil, fair odor, fair fluorescence, fair to good cut.

Drill Stem Test No 6 4345-4420

5-16-30-60; surface blow built to 1/4 inch, no blowback; surface blow built to two inches on second flow period, no blowback. Recovered 65 feet of mud cut water (60% water, 40% mud), chlorides 23,000 ppm, system chlorides 3,000 ppm. ISIP 320# FSIP 318# IFP 19-23# FFP 25-50# BHT 117 degrees F.

4430-4433 (Lower Altamont Zone)

Limestone, tan, dense to finely crystalline, few pieces with poor intercrystalline porosity and slight show of free oil, faint to fair odor, poor fluorescence, fair cut

4452-4456 (Pawnee Zone)

Limestone, tan to brown, dense to finely crystalline, mostly tight with trace of very poor spotted stain on dense limestone fracture faces, no odor, no free oil, no fluorescence, no cut.

4485-4497 (Myrick Station Zone)

Limestone, buff to tan, some brown, dense to finely crystalline with some mealy, rare trace of very poor spotted stain in a few pieces, no odor, no free oil, no fluorescence, no cut.

4504-4528 (Fort Scott Zone)

Limestone, buff to tan, dense to finely crystalline, some tan to brown finely crystalline and oolitic, trace of poor spotted stain in dense pieces, trace of dead stain, no free oil, no odor, no fluorescence, no cut, lower portion is limestone, buff, dense to finely crystalline, buff fossiliferous and oolitic limestone with dark brown oolites and fossils, tight, no show of oil, scattered light gray chert.

4531-4562 (Cherokee Lime Zones)

Limestone, brown, dense to finely crystalline, trace of fossiliferous, zone is mostly tight with no shows of oil.

4565-4581 (Johnson Zone)

Limestone, tan to brown, dense to finely crystalline, trace of poor intercrystalline porosity with poor spotted stain, faint fleeting odor, very slight show of free oil, poor fluorescence, poor to fair cut.

4581-4588 (Cherokee Sand)

Sand, white, calcareous, fine grained, well-sorted, well-cemented, subround to subangular, hard, tight, no show of oil.

Drill Stem Test No. 7 4420-4590
5-15-15-30; quarter-inch blow died back to surface blow on first flow period; blow did not return on second flow period. Recovered five feet of oil cut mud (5% oil, 95% mud). ISIP 641# FSIP 830# IFP 23-24# FFP 27-28# IHP 2197# FHP 2162# BHT 118 degrees F.

4591-4656 (Mississippian Zones)

Limestone, buff to tan and brown, dense to finely crystalline and partly mealy, mostly tight with no shows of oil, grading downward to limestone and dolomite, buff to gray to mottled, finely crystalline and partly fossiliferous, partly oolitic, trace of very poor intercrystalline porosity, no shows of oil were present in the Mississippian section.

4655 Rotary Total Depth

Conclusions and Recommendations:

Casing was cemented at 4655 in the No. 1-21 Danis to evaluate the zones present in the well that contained shows of oil. These zones should be perforated and treated with acid as per Tom Larson, as necessary to facilitate production.

Respectfully submitted,

Robert C. Lewellyn
Consulting Petroleum Geologist

RCL:me



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Larson Engineering

21-18-29 Lane, Ks

562 W State Rd 4
Olmitz, Ks 67564

Danis 1-21

ATTN: Bob Lew ellyn

Job Ticket: 47981

DST#: 1

Test Start: 2012.06.17 @ 02:06:28

GENERAL INFORMATION:

Formation: **Lansing I**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 04:36:58

Time Test Ended: 08:20:28

Test Type: Conventional Bottom Hole (Initial)

Tester: Brandon Turley

Unit No: 60

Interval: 4192.00 ft (KB) To 4216.00 ft (KB) (TVD)

Reference Elevations: 2817.00 ft (KB)

Total Depth: 4216.00 ft (KB) (TVD)

2810.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 7.00 ft

Serial #: 8373

Press @ Run Depth: 16.09 psig @ 4193.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2012.06.17

End Date:

2012.06.17

Last Calib.: 2012.06.17

Start Time: 02:06:33

End Time:

08:20:27

Time On Btm: 2012.06.17 @ 04:35:43

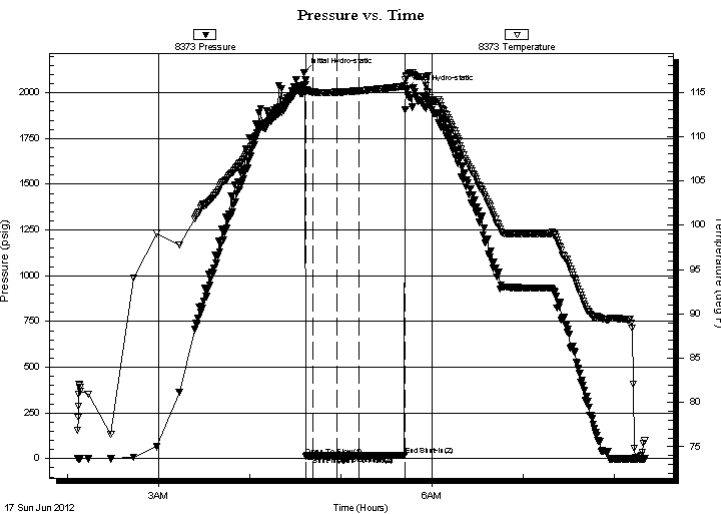
Time Off Btm: 2012.06.17 @ 05:42:58

TEST COMMENT: IF: Surface blow .

IS: No return.

FF: No blow .

FS: No return.



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2111.67	115.85	Initial Hydro-static
2	14.39	115.15	Open To Flow (1)
6	14.84	115.01	Shut-In(1)
22	15.81	114.99	End Shut-In(1)
22	14.92	115.00	Open To Flow (2)
36	16.09	115.15	Shut-In(2)
67	16.71	115.68	End Shut-In(2)
68	2019.57	116.71	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
1.00	mud 100%m	0.00

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Larson Engineering

21-18-29 Lane, Ks

562 W State Rd 4
Olmitz, Ks 67564

Danis 1-21

Job Ticket: 47981

DST#: 1

ATTN: Bob Lew ellyn

Test Start: 2012.06.17 @ 02:06:28

GENERAL INFORMATION:

Formation: **Lansing I**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 04:36:58

Time Test Ended: 08:20:28

Interval: 4192.00 ft (KB) To 4216.00 ft (KB) (TVD)

Total Depth: 4216.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

Test Type: Conventional Bottom Hole (Initial)

Tester: Brandon Turley

Unit No: 60

Reference Elevations: 2817.00 ft (KB)

2810.00 ft (CF)

KB to GR/CF: 7.00 ft

Serial #: 8356

Press @ Run Depth: psig @ 4193.00 ft (KB)

Start Date: 2012.06.17

End Date:

2012.06.17

Start Time: 02:06:23

End Time:

08:20:17

Capacity: 8000.00 psig

Last Calib.:

2012.06.17

Time On Btm:

Time Off Btm:

TEST COMMENT: IF: Surface blow .

IS: No return.

FF: No blow .

FS: No return.

PRESSURE SUMMARY

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

Length (ft)	Description	Volume (bbl)
1.00	mud 100%m	0.00

Gas Rates

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

DRILL STEM TEST REPORT

FLUID SUMMARY

Larson Engineering

21-18-29 Lane, Ks

562 W State Rd 4
Olmitz, Ks 67564

Danis 1-21

Job Ticket: 47981

DST#: 1

ATTN: Bob Lew ellyn

Test Start: 2012.06.17 @ 02:06:28

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: 53.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 6.80 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 1800.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
1.00	mud 100%m	0.005

Total Length: 1.00 ft Total Volume: 0.005 bbl

Num Fluid Samples: 0

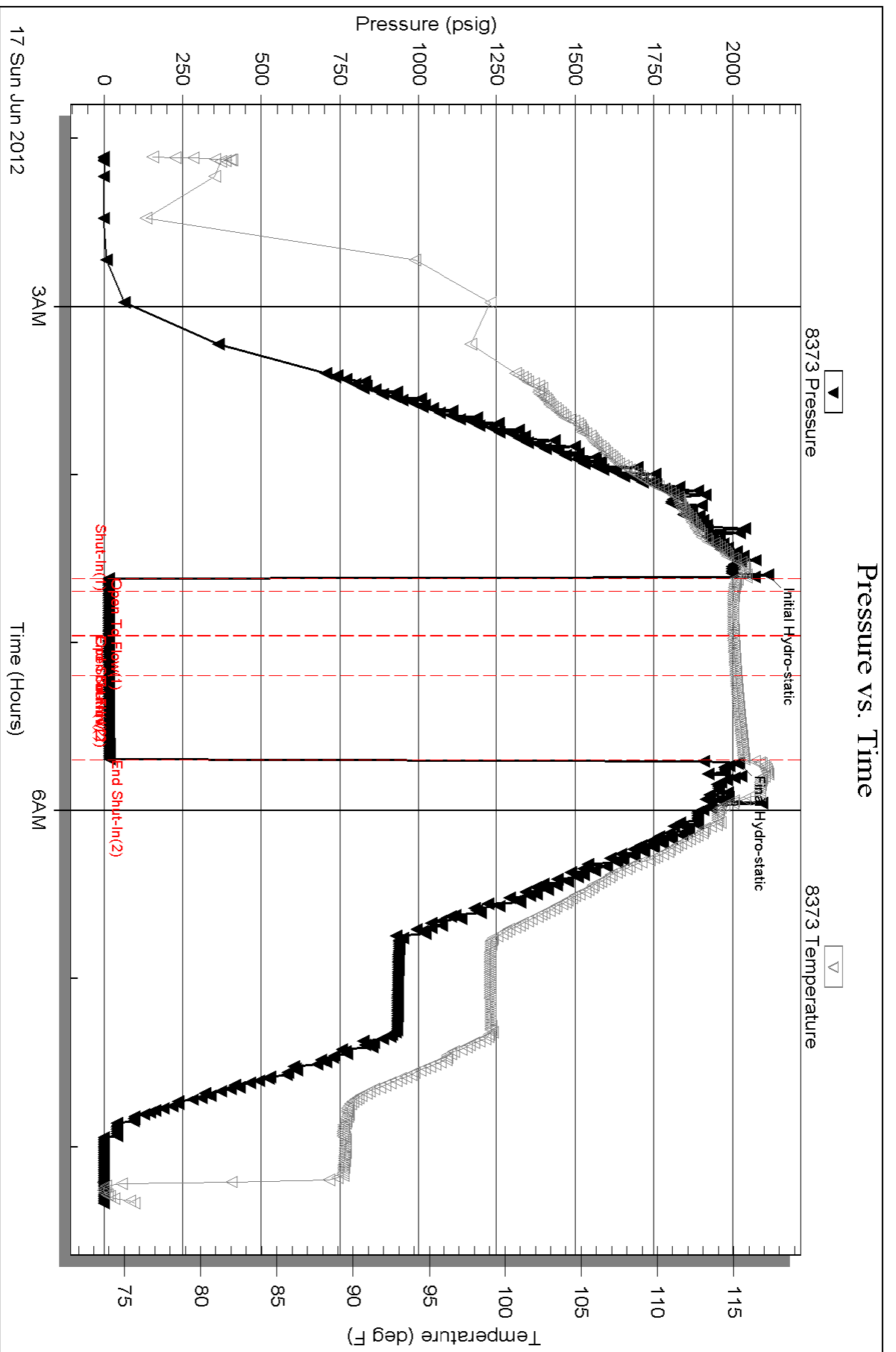
Num Gas Bombs: 0

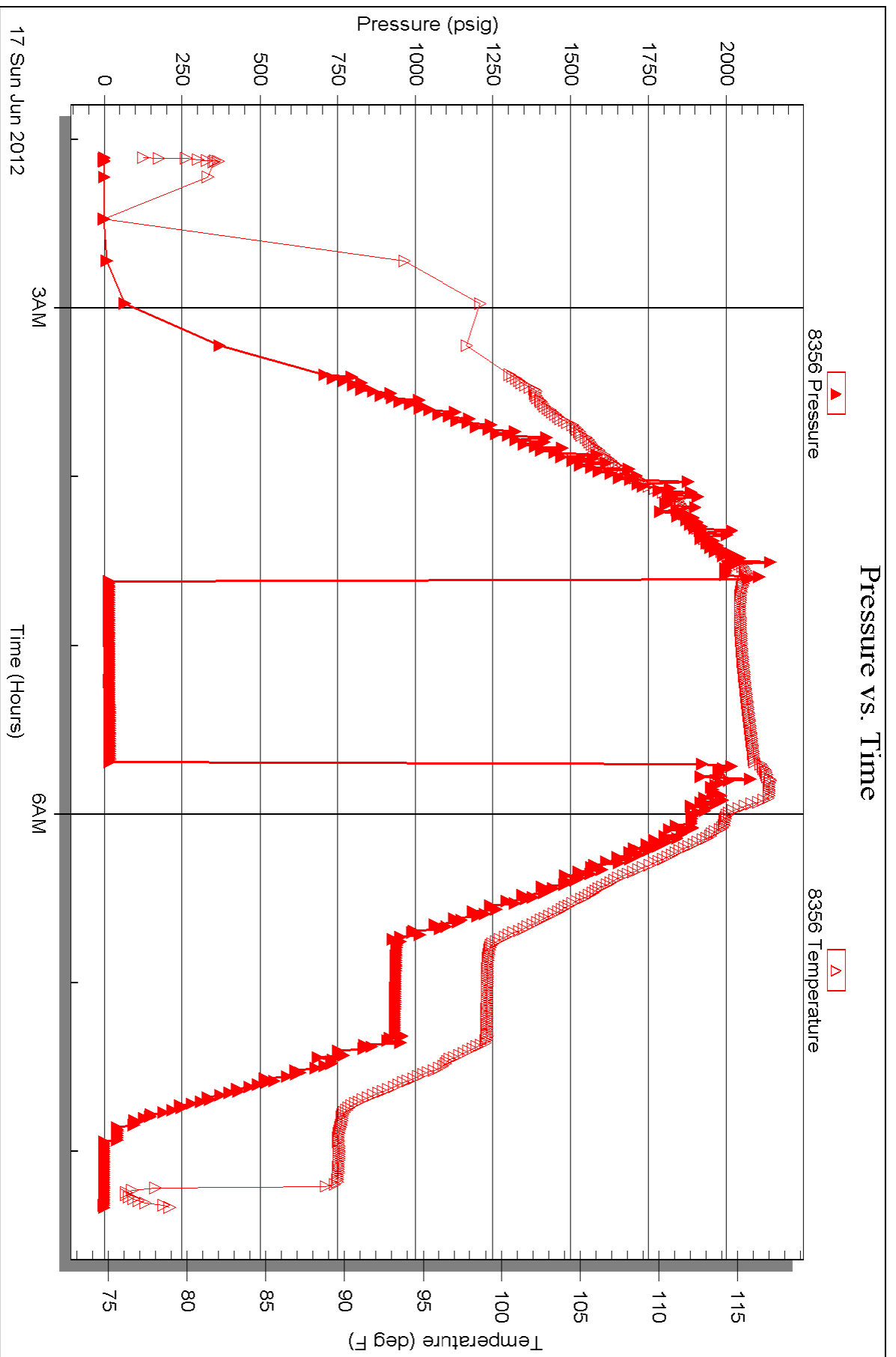
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:







**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Larson Engineering

21-18-29 Lane, Ks

562 W State Rd 4
Olmitz, Ks 67564

Danis 1-21

ATTN: Bob Lew ellyn

Job Ticket: 47982

DST#: 2

Test Start: 2012.06.17 @ 17:18:00

GENERAL INFORMATION:

Formation: **Lansing "J"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 19:21:30

Time Test Ended: 23:28:15

Test Type: Conventional Bottom Hole (Reset)

Tester: Brandon Turley

Unit No: 60

Interval: 4218.00 ft (KB) To 4239.00 ft (KB) (TVD)

Reference Elevations: 2817.00 ft (KB)

Total Depth: 4239.00 ft (KB) (TVD)

2810.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 7.00 ft

Serial #: 8356

Press @ RunDepth: 116.72 psig @ 4219.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2012.06.17

End Date:

2012.06.17

Last Calib.: 2012.06.17

Start Time: 17:18:05

End Time:

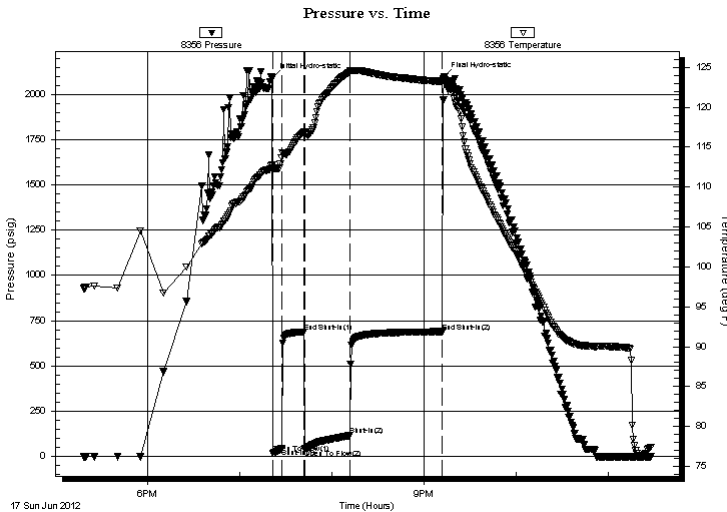
23:28:14

Time On Btm: 2012.06.17 @ 19:21:15

Time Off Btm: 2012.06.17 @ 21:13:15

TEST COMMENT: IF: 1 1/2" Blow
IS: No Return
FF: 7 1/2" Blow
FS: No Return

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2091.06	112.80	Initial Hydro-static
1	17.88	112.10	Open To Flow (1)
6	43.41	113.66	Shut-In(1)
21	688.01	116.93	End Shut-In(1)
21	42.20	116.82	Open To Flow (2)
51	116.72	124.41	Shut-In(2)
111	689.88	123.23	End Shut-In(2)
112	2099.13	123.41	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
124.00	MCW 80w 20m	0.61
72.00	WCM 20w 80m	0.79

Gas Rates

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

* Recovery from multiple tests



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Larson Engineering

21-18-29 Lane, Ks

562 W State Rd 4
Olmitz, Ks 67564

Danis 1-21

Job Ticket: 47982

DST#: 2

ATTN: Bob Lew ellyn

Test Start: 2012.06.17 @ 17:18:00

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:

21000 ppm

Viscosity: 69.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.20 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 2500.00 ppm

Filter Cake: 2.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
124.00	MCW 80w 20m	0.610
72.00	WCM 20w 80m	0.791

Total Length: 196.00 ft Total Volume: 1.401 bbl

Num Fluid Samples: 0

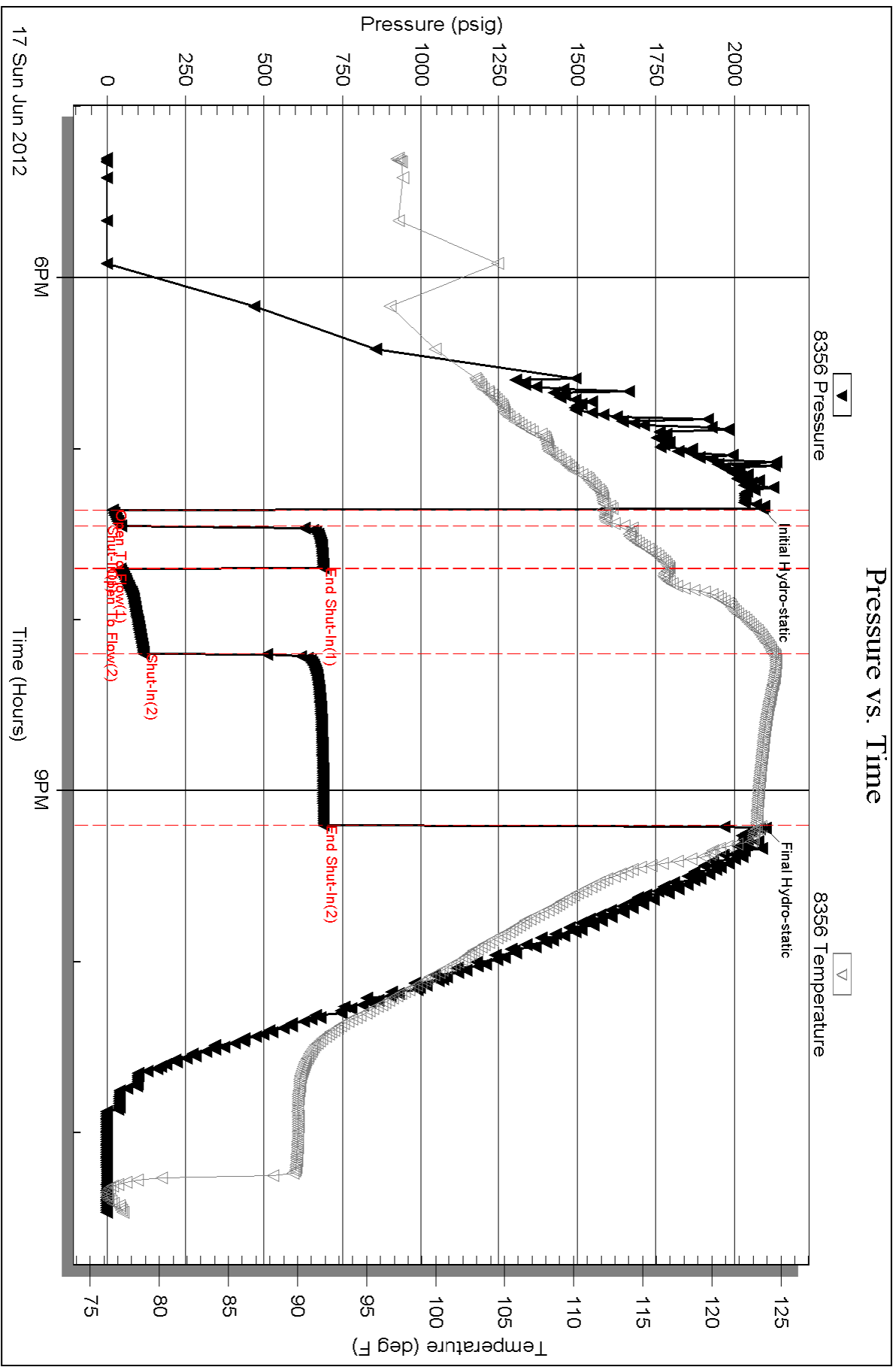
Num Gas Bombs: 0

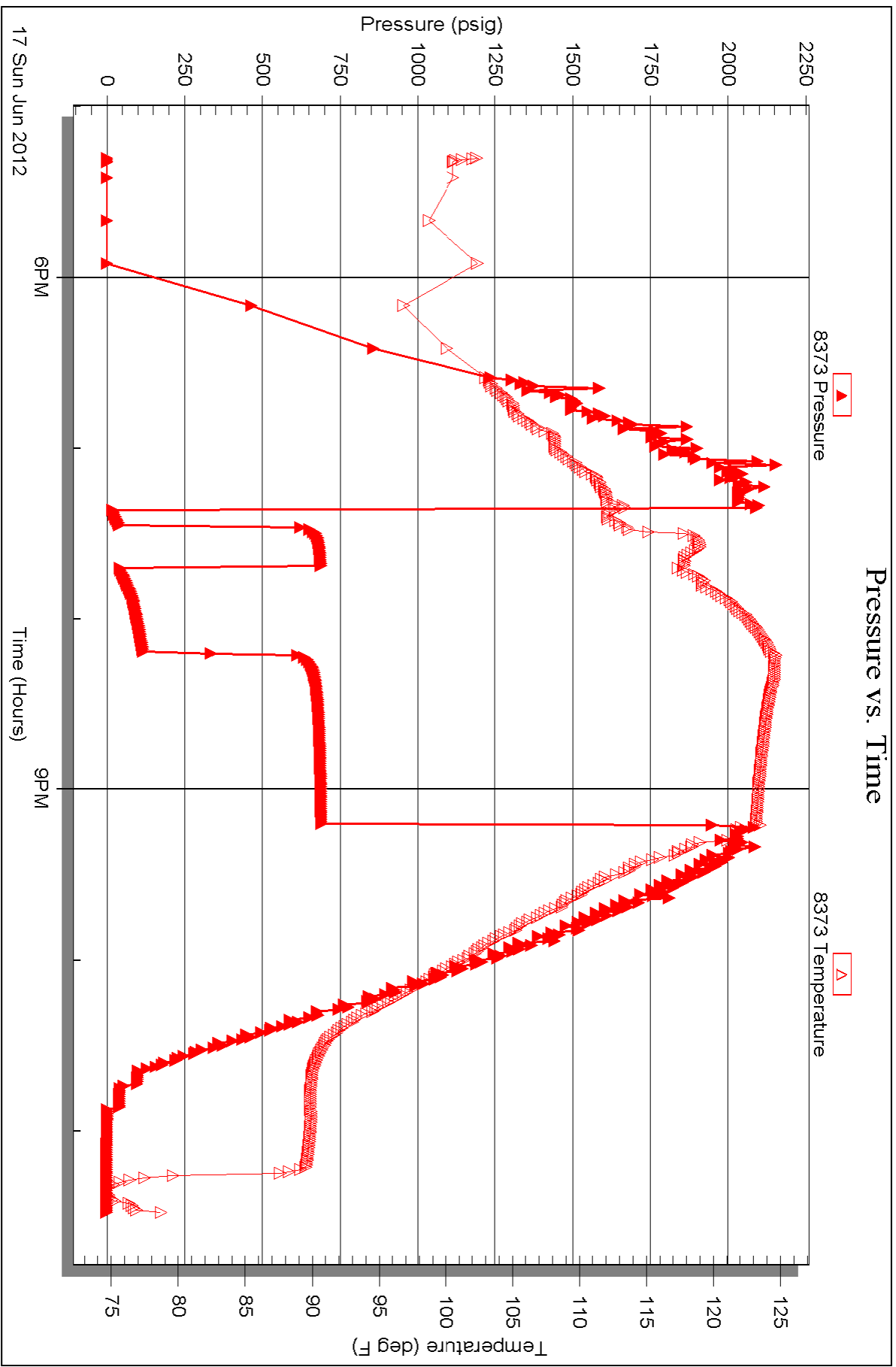
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: .28@ 80= 21000 ppm







**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Larson Engineering

21-18-29 Lane, Ks

562 W State Rd 4
Olmitz, Ks 67564

Danis 1-21

Job Ticket: 47983

DST#: 3

ATTN: Bob Lew ellyn

Test Start: 2012.06.18 @ 11:16:00

GENERAL INFORMATION:

Formation: **Lansing "K"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 13:14:30

Time Test Ended: 16:37:45

Test Type: Conventional Bottom Hole (Reset)

Tester: Brandon Turley

Unit No: 60

Interval: 4250.00 ft (KB) To 4280.00 ft (KB) (TVD)

Reference Elevations: 2817.00 ft (KB)

Total Depth: 4280.00 ft (KB) (TVD)

2810.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 7.00 ft

Serial #: 8356

Press @ RunDepth: 262.90 psig @ 4251.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2012.06.18

End Date: 2012.06.18

Last Calib.: 2012.06.18

Start Time: 11:16:05

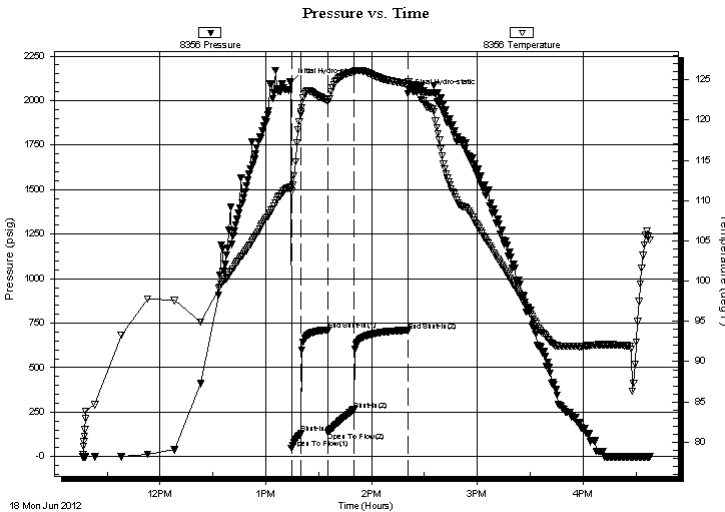
End Time: 16:37:44

Time On Btm: 2012.06.18 @ 13:14:15

Time Off Btm: 2012.06.18 @ 14:20:45

TEST COMMENT: IF: BOB @ 4 min.
IS: No Return.
FF: BOB @ 5 min.
FS: No Return.

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2102.99	111.73	Initial Hydro-static
1	47.38	111.15	Open To Flow (1)
6	128.69	120.98	Shut-In(1)
21	708.67	122.42	End Shut-In(1)
21	136.95	122.28	Open To Flow (2)
36	262.90	125.97	Shut-In(2)
67	707.50	124.44	End Shut-In(2)
67	2039.42	124.80	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
372.00	MCW 90w 10m	3.87
174.00	MCW 70w 30m	2.44

* Recovery from multiple tests

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Larson Engineering

21-18-29 Lane, Ks

562 W State Rd 4
Olmitz, Ks 67564

Danis 1-21

Job Ticket: 47983

DST#: 3

ATTN: Bob Lew ellyn

Test Start: 2012.06.18 @ 11:16:00

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:

20000 ppm

Viscosity: 57.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.20 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 2500.00 ppm

Filter Cake: 2.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
372.00	MCW 90w 10m	3.870
174.00	MCW 70w 30m	2.441

Total Length: 546.00 ft Total Volume: 6.311 bbl

Num Fluid Samples: 0

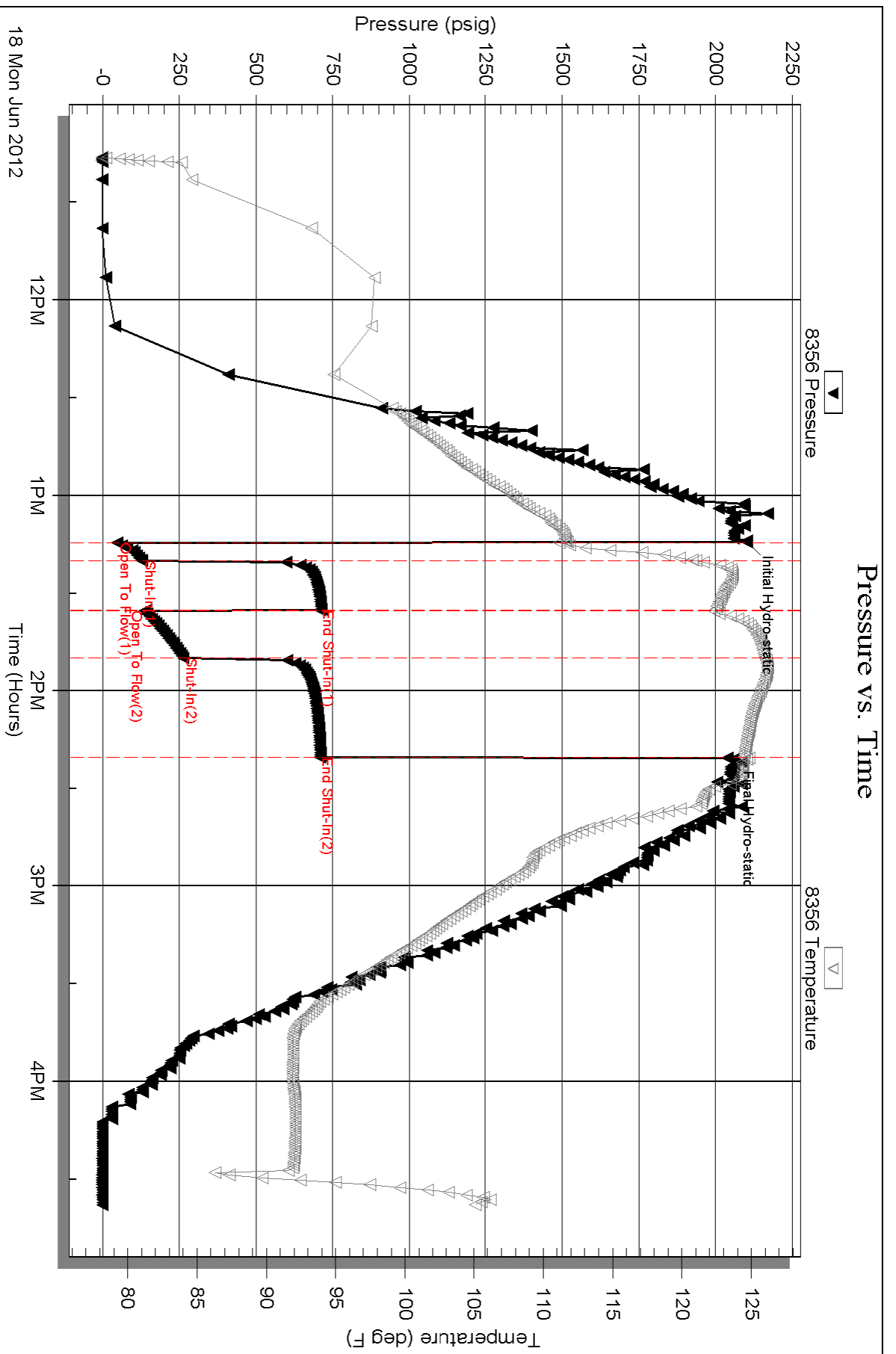
Num Gas Bombs: 0

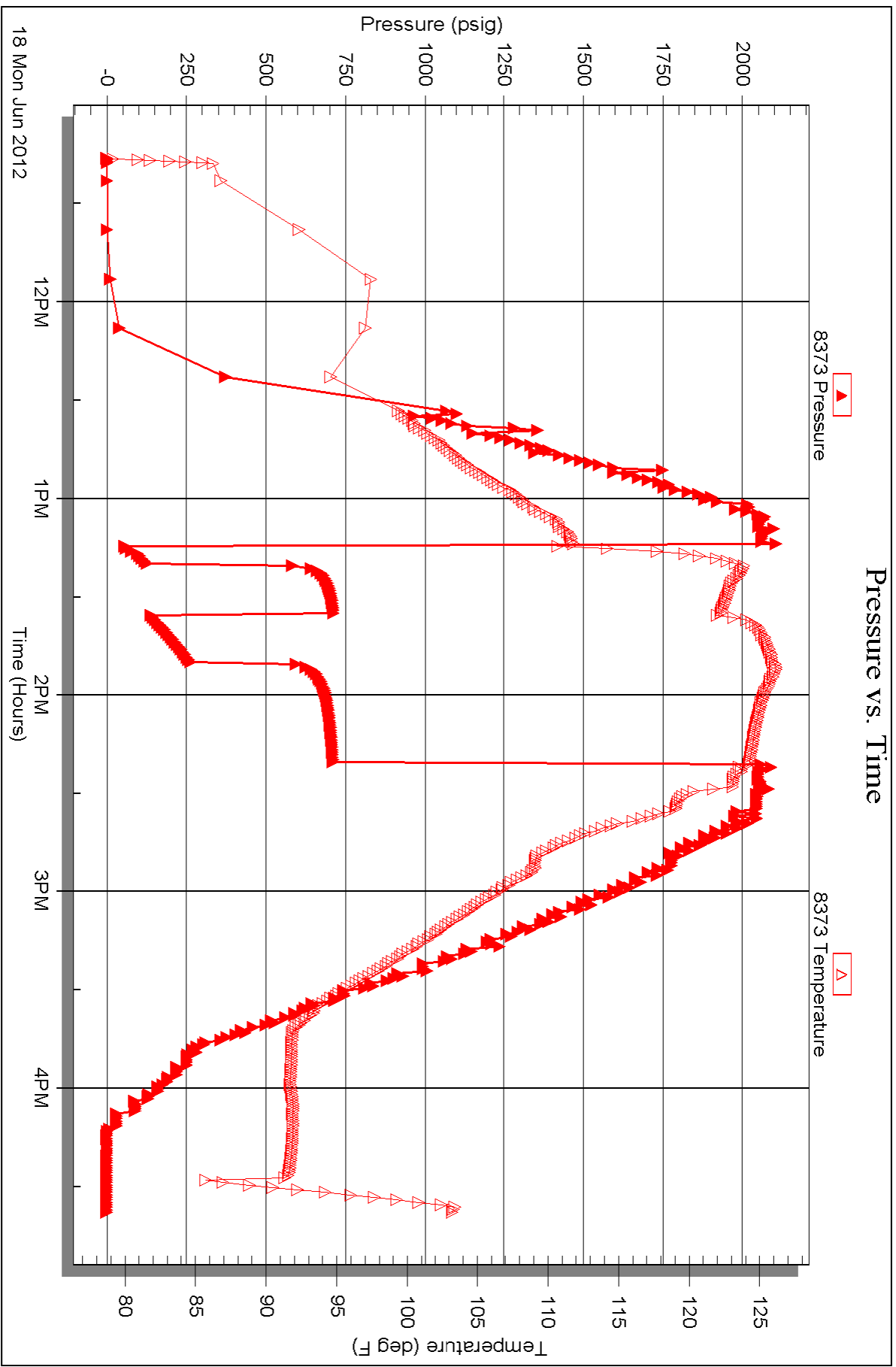
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: RW .22 @ 101 Degrees = 20000







**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Larson Engineering

21-18-29 Lane, Ks

562 W State Rd 4
Olmitz, Ks 67564

Danis 1-21

Job Ticket: 47984

DST#: 4

ATTN: Bob Lew ellyn

Test Start: 2012.06.19 @ 05:11:57

GENERAL INFORMATION:

Formation: **Middle Creek**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 07:14:57

Time Test Ended: 10:11:57

Test Type: Conventional Bottom Hole (Reset)

Tester: Brandon Turley

Unit No: 60

Interval: 4290.00 ft (KB) To 4298.00 ft (KB) (TVD)

Reference Elevations: 2817.00 ft (KB)

Total Depth: 4298.00 ft (KB) (TVD)

2810.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 7.00 ft

Serial #: 8373 Inside

Press @ Run Depth: 17.00 psig @ 4291.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2012.06.19

End Date:

2012.06.19

Last Calib.:

2012.06.19

Start Time: 05:12:02

End Time:

10:11:56

Time On Btm:

2012.06.19 @ 07:13:42

Time Off Btm:

2012.06.19 @ 08:21:57

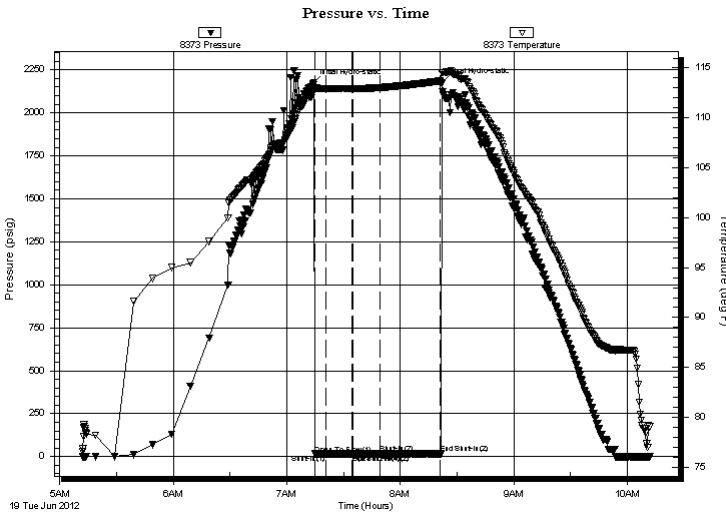
TEST COMMENT: IF: Surface blow died in 3 min.

IS: No return.

FF: No blow.

FS: No return.

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2171.50	113.18	Initial Hydro-static
2	16.38	112.95	Open To Flow (1)
7	15.80	112.92	Shut-In(1)
21	16.26	112.92	End Shut-In(1)
22	15.44	112.92	Open To Flow (2)
36	17.00	113.04	Shut-In(2)
68	17.29	113.71	End Shut-In(2)
69	2173.61	114.53	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
1.00	mud 100%m	0.00

* Recovery from multiple tests

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Larson Engineering

21-18-29 Lane, Ks

562 W State Rd 4
Olmitz, Ks 67564

Danis 1-21

Job Ticket: 47984

DST#: 4

ATTN: Bob Lew ellyn

Test Start: 2012.06.19 @ 05:11:57

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: 57.00 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
1.00	mud 100%m	0.005

Total Length: 1.00 ft Total Volume: 0.005 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

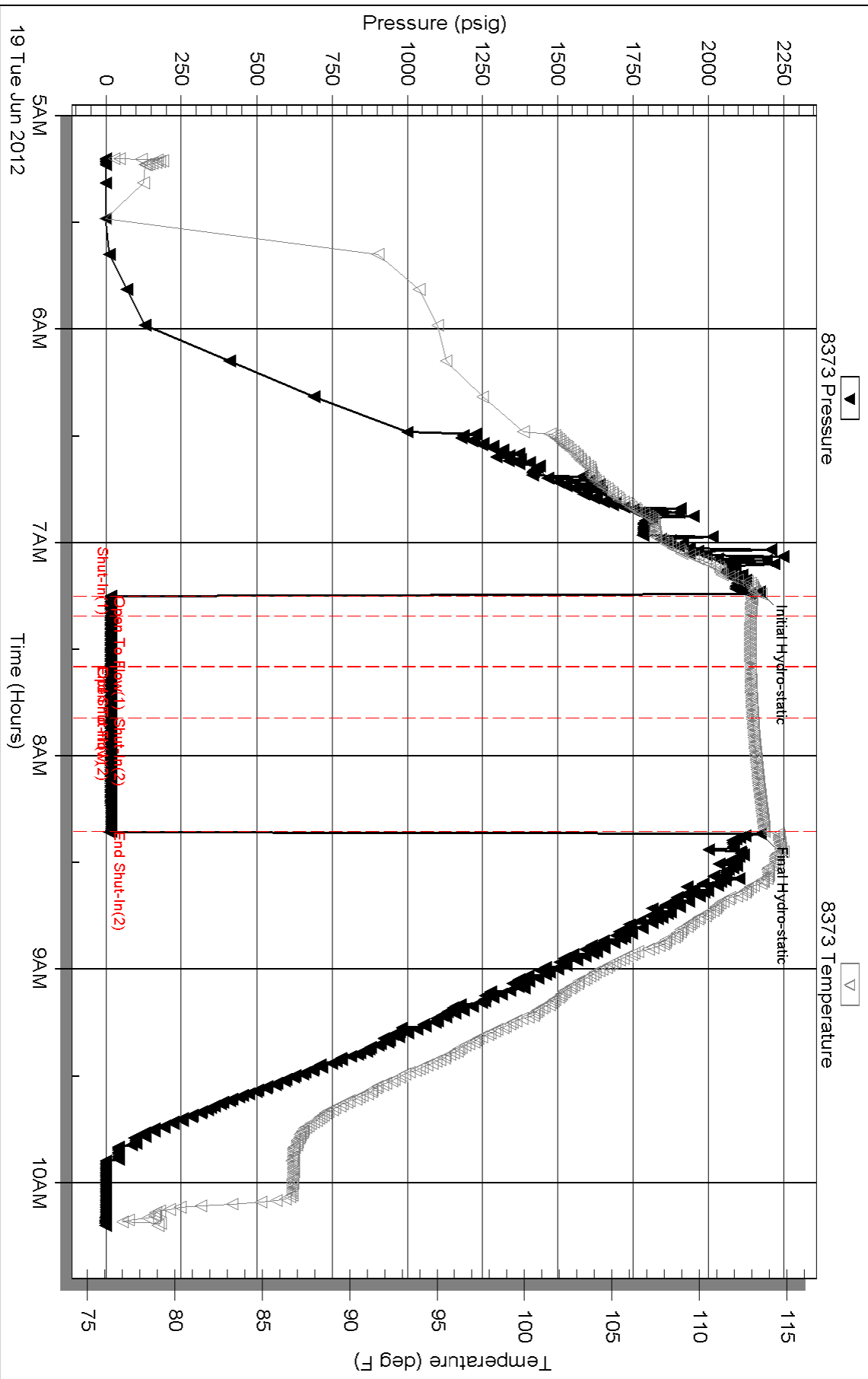
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Pressure vs. Time





**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Larson Engineering

21-18-29 Lane, Ks

562 W State Rd 4
Olmitz, Ks 67564

Danis 1-21

Job Ticket: 47985

DST#: 5

ATTN: Bob Lew ellyn

Test Start: 2012.06.20 @ 01:54:22

GENERAL INFORMATION:

Formation: **Pleasanton**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 04:18:52

Time Test Ended: 08:46:07

Test Type: Conventional Bottom Hole (Reset)

Tester: Brandon Turley

Unit No: 60

Interval: 4327.00 ft (KB) To 4352.00 ft (KB) (TVD)

Reference Elevations: 2817.00 ft (KB)

Total Depth: 4352.00 ft (KB) (TVD)

2810.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 7.00 ft

Serial #: 8373 Inside

Press @ RunDepth: 58.19 psig @ 4328.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2012.06.20

End Date:

2012.06.20

Last Calib.:

2012.06.20

Start Time: 01:54:27

End Time:

08:46:06

Time On Btm:

2012.06.20 @ 04:17:37

Time Off Btm:

2012.06.20 @ 06:07:37

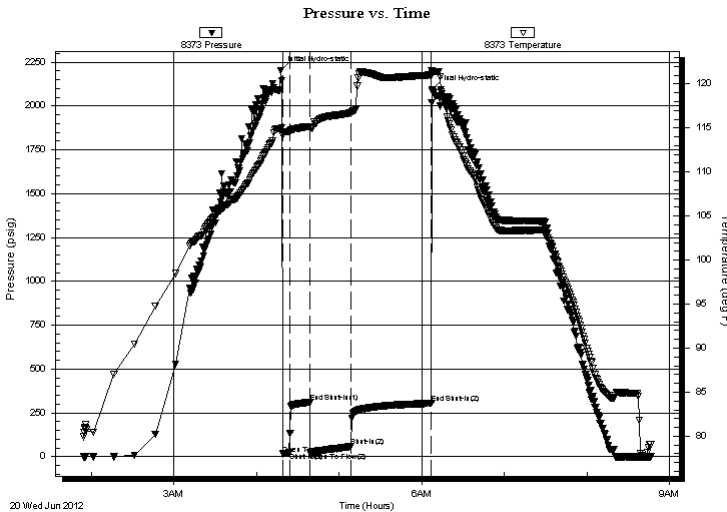
TEST COMMENT: IF: Surface blow built to a 1/2.

IS: No return.

FF: Surface blow built to 3.

FS: No return.

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2203.29	114.93	Initial Hydro-static
2	16.24	114.19	Open To Flow (1)
7	22.30	114.56	Shut-In(1)
21	310.36	115.17	End Shut-In(1)
22	23.68	115.00	Open To Flow (2)
51	58.19	116.74	Shut-In(2)
110	304.20	121.02	End Shut-In(2)
110	2095.94	121.26	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
60.00	w cm 5%w 95%m	0.30
10.00	mud show of oil 100%m	0.05

Gas Rates

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

* Recovery from multiple tests



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Larson Engineering

21-18-29 Lane, Ks

562 W State Rd 4
Olmitz, Ks 67564

Danis 1-21

Job Ticket: 47985

DST#: 5

ATTN: Bob Lew ellyn

Test Start: 2012.06.20 @ 01:54:22

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: 57.00 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
60.00	w cm 5%w 95%m	0.295
10.00	mud show of oil 100%m	0.049

Total Length: 70.00 ft Total Volume: 0.344 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

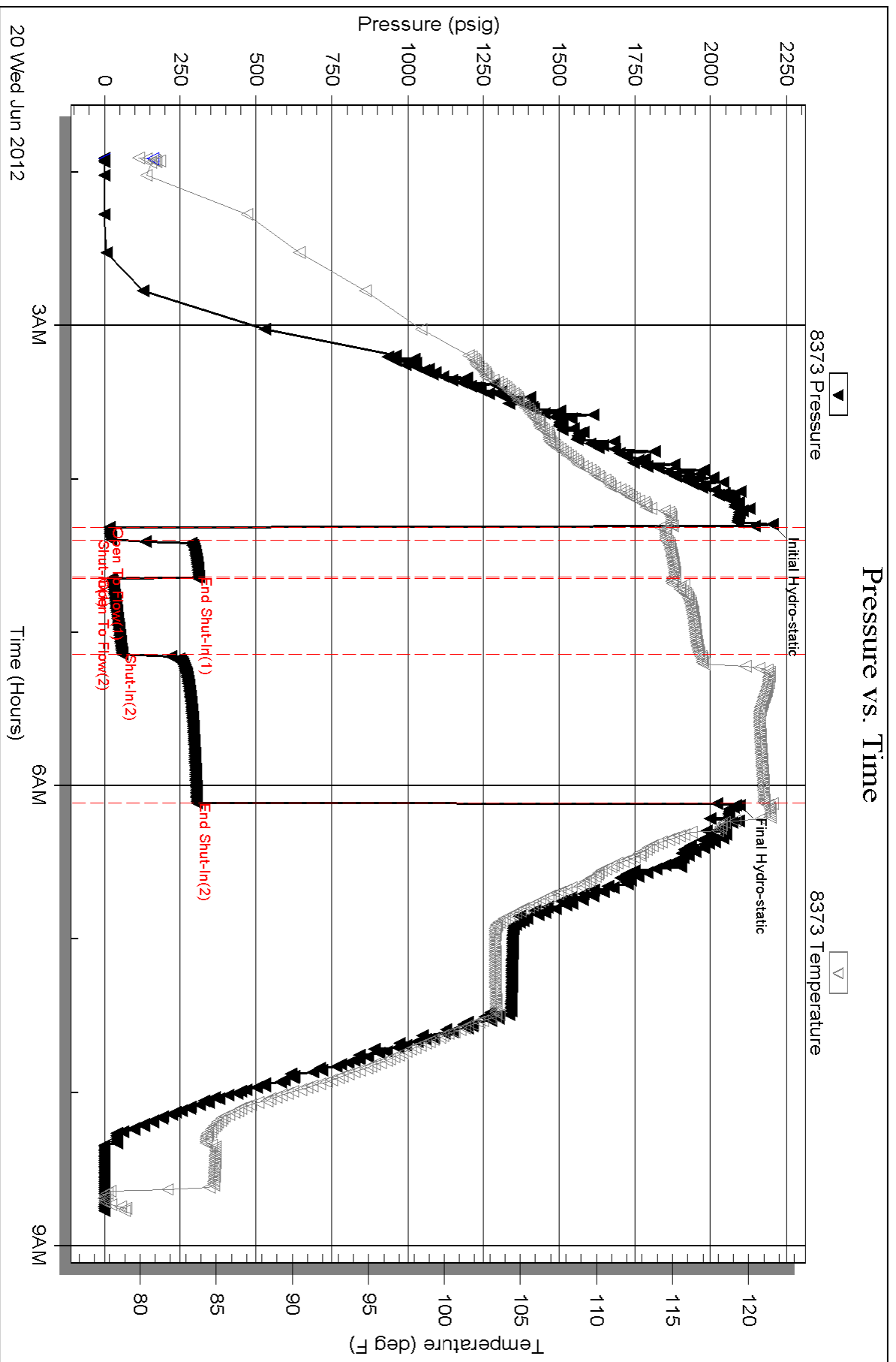
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Pressure vs. Time





TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Larson Engineering

21-18-29 Lane, Ks

562 W State Rd 4
Olmitz, Ks 67564

Danis 1-21

ATTN: Bob Lew ellyn

Job Ticket: 47986

DST#: 6

Test Start: 2012.06.20 @ 22:55:07

GENERAL INFORMATION:

Formation: **Altamont**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 00:59:37

Time Test Ended: 05:11:37

Test Type: Conventional Bottom Hole (Reset)

Tester: Brandon Turley

Unit No: 60

Interval: 4345.00 ft (KB) To 4420.00 ft (KB) (TVD)

Reference Elevations: 2817.00 ft (KB)

Total Depth: 4420.00 ft (KB) (TVD)

2810.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 7.00 ft

Serial #: 8373

Inside

Press @ Run Depth: 50.73 psig @ 4346.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2012.06.20

End Date:

2012.06.21

Last Calib.:

2012.06.21

Start Time: 22:55:12

End Time:

05:11:36

Time On Btm:

2012.06.21 @ 00:58:52

Time Off Btm:

2012.06.21 @ 02:55:22

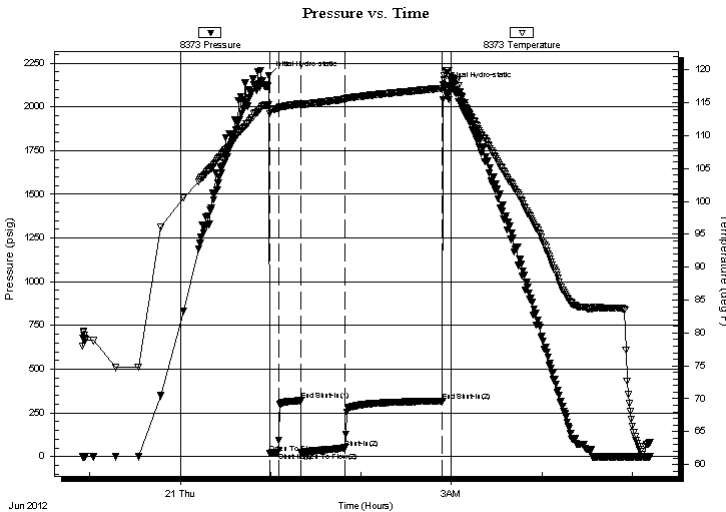
TEST COMMENT: IF: Surface blow built to 1/4.

IS: No return.

FF: Surface blow built to 2.

FS: No return.

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2180.35	114.72	Initial Hydro-static
1	19.45	113.37	Open To Flow (1)
7	23.77	114.16	Shut-In(1)
21	320.17	114.86	End Shut-In(1)
22	25.36	114.61	Open To Flow (2)
51	50.73	115.56	Shut-In(2)
116	318.39	117.22	End Shut-In(2)
117	2118.13	119.12	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
65.00	mcw 60%w 40%m	0.32

* Recovery from multiple tests

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Larson Engineering

21-18-29 Lane, Ks

562 W State Rd 4
Olmitz, Ks 67564

Danis 1-21

Job Ticket: 47986

DST#: 6

ATTN: Bob Lew ellyn

Test Start: 2012.06.20 @ 22:55:07

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:

23000 ppm

Viscosity: 53.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 6.78 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 1800.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
65.00	mcw 60%w 40%m	0.320

Total Length: 65.00 ft Total Volume: 0.320 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

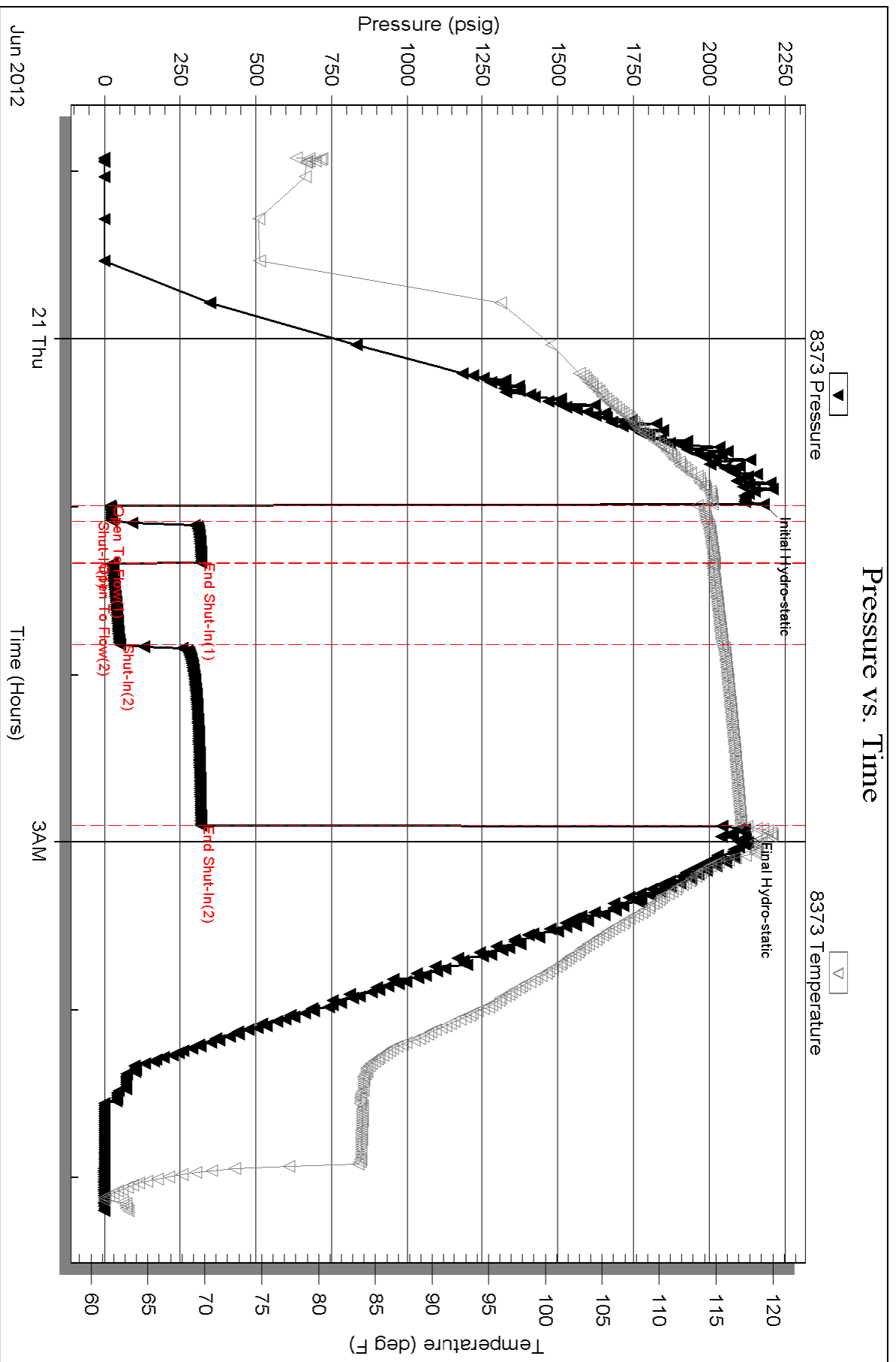
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: .34@61=23000

Pressure vs. Time





TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Larson Engineering

21-18-29 Lane, Ks

562 W State Rd 4
Olmitz, Ks 67564

Danis 1-21

ATTN: Bob Lew ellyn

Job Ticket: 47987

DST#: 7

Test Start: 2012.06.22 @ 06:07:57

GENERAL INFORMATION:

Formation: **Pawnee- Ft. Scott**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 09:29:57
 Time Test Ended: 12:36:27
 Interval: **4420.00 ft (KB) To 4590.00 ft (KB) (TVD)**
 Total Depth: 4590.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Good
 Test Type: Conventional Bottom Hole (Reset)
 Tester: Brandon Turley
 Unit No: 60
 Reference Elevations: 2817.00 ft (KB)
 2810.00 ft (CF)
 KB to GR/CF: 7.00 ft

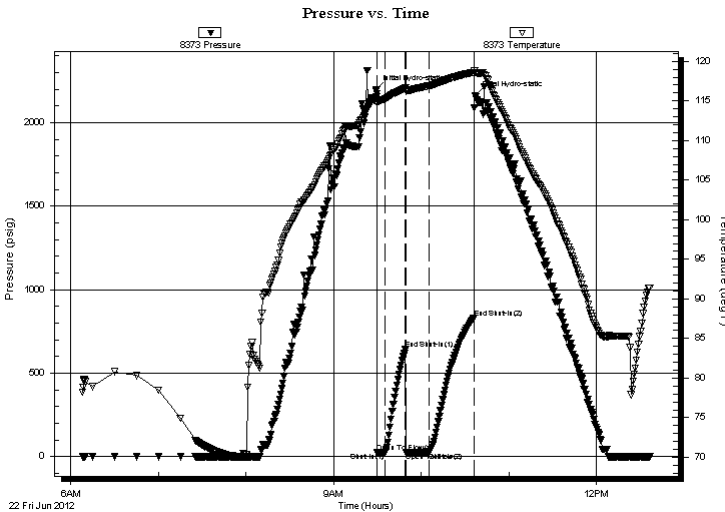
Serial #: 8373

Inside

Press @ RunDepth: 28.65 psig @ 4421.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2012.06.22 End Date: 2012.06.22 Last Calib.: 2012.06.22
 Start Time: 06:08:02 End Time: 12:36:26 Time On Btm: 2012.06.22 @ 09:29:12
 Time Off Btm: 2012.06.22 @ 10:36:57

TEST COMMENT: IF: 1/4 blow died to surface blow .
 IS: No return.
 FF: No blow .
 FS: No return.

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2197.32	115.48	Initial Hydro-static
1	23.70	114.77	Open To Flow (1)
6	24.19	115.25	Shut-In(1)
20	641.98	116.60	End Shut-In(1)
21	27.29	116.25	Open To Flow (2)
36	28.65	116.89	Shut-In(2)
67	830.97	118.61	End Shut-In(2)
68	2162.29	118.56	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
5.00	ocm 5%o 95%m	0.02

* Recovery from multiple tests

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Larson Engineering

21-18-29 Lane, Ks

562 W State Rd 4
Olmitz, Ks 67564

Danis 1-21

Job Ticket: 47987

DST#: 7

ATTN: Bob Lew ellyn

Test Start: 2012.06.22 @ 06:07:57

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: 50.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 8.38 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 3300.00 ppm

Filter Cake: 2.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
5.00	ocm 5%o 95%m	0.025

Total Length: 5.00 ft Total Volume: 0.025 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

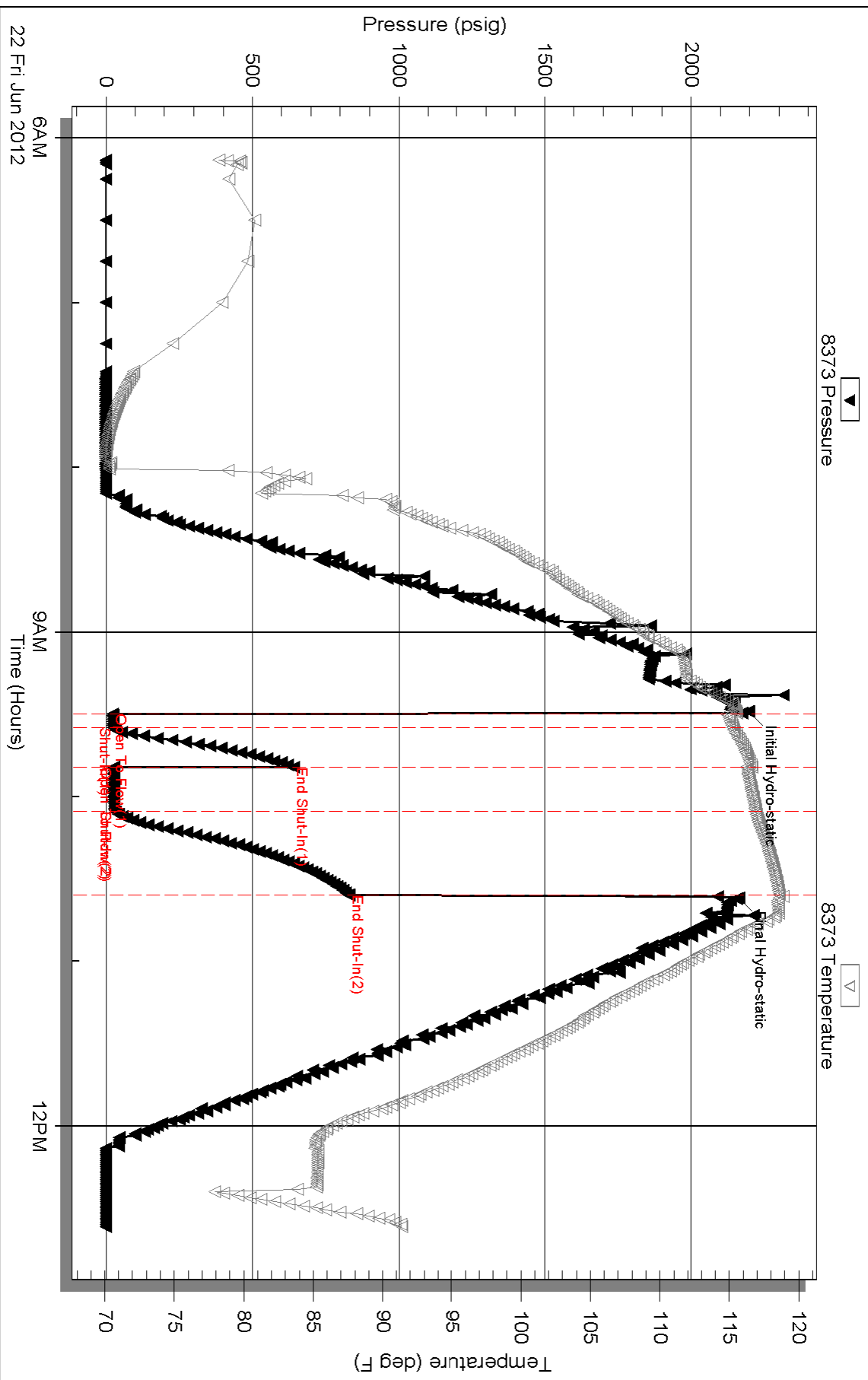
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Pressure vs. Time



Conservation Division
Finney State Office Building
130 S. Market, Rm. 2078
Wichita, KS 67202-3802



Phone: 316-337-6200
Fax: 316-337-6211
<http://kcc.ks.gov/>

Mark Sievers, Chairman
Thomas E. Wright, Commissioner
Shari Feist Albrecht, Commissioner

Sam Brownback, Governor

September 13, 2012

Thomas Larson
Larson Engineering, Inc. dba Larson Operating
Company
562 W STATE RD 4
OLMITZ, KS 67564-8561

Re: ACO1
API 15-101-22372-00-00
Danis 1-21
SE/4 Sec.21-18S-29W
Lane County, Kansas

Dear Production Department:

We are herewith requesting that the Well Completion Form ACO-1 and attached information for the subject well be held confidential for a period of two years.

Should you have any questions or need additional information regarding subject well, please contact our office.

Respectfully,
Thomas Larson