KANSAS CORPORATION COMMISSION
OIL & GAS CONSERVATION DIVISION

CONFIDENTIAL

ORIGINAL

Form ACO-1
October 2008
Form Must Be Typed

5/28/12

WELL COMPLETION FORM
WELL HISTORY – DESCRIPTION OF WELL & LEASE

OPERATOR: License # 3842
Name: LARSON ENGINEERING, INC.
Address 1: 562 WEST STATE ROAD 4
Address 2:
City: OLMITZ State: KS Zip: 67564 + 8561
Contact Person: TOM LARSON
Phone: (620) 653-7368

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CONTRACTOR: License # 33935
Name: H.D. DRILLING
Wellsite Geologist: ROBERT LEWELLYN
Purchaser:

Designate Type of Completion:

X New Well ____ Re-Entry ____ Workover
____ Oil ____ SWD ____ SIOW
____ Gas ____ ENHR ____ SIGW
____ CM (Coal Bed Methane) ____ Temp. Abd.
X Dry ____ Other ____
(Core, WSW, Expl., Cathodic, 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./SWD
____ Plug Back: ____ Plug Back Total Depth
____ Commingled Docket No. ____
____ Dual Completion Docket No. ____
____ Other *(SWD or Enhr.?)* Docket No. ____

2/6/2010 — Spud Date or Recompletion Date
2/17/2010 — Date Reached TD
____ — Completion Date or Recompletion Date

API No. 15 - 101-22212-00-00
Spot Description:
SW - NE - SW - NW Sec. 26 Twp. 19 S. R. 28 ☐ East ☒ West
1700 feet from NORTH Line of Section
965 feet from WEST Line of Section
Footages Calculated from Nearest Outside Section Corner:
☐ NE ☒ NW ☐ SE ☐ SW
County: LANE
Lease Name: SHAPLAND Well #: 1-26
Field Name: HACKBERRY CREEK SOUTHWEST
Producing Formation:
Elevation: Ground: 2755' Kelly Bushing: 2765'
Total Depth: 4714' Plug Back Total Depth:
Amount of Surface Pipe Set and Cemented at: 262 Feet
Multiple State 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 PAM 6-8-10
(Data must be collected from the Reserve Pit)

Chloride content: 9000 ppm Fluid volume: 680 bbls
Dewatering method used: ALLOWED TO DRY
Location of fluid disposal if hauled offsite:
Operator Name: ____
Lease Name: ____ License No.: ____
Quarter ____ Sec. ____ Twp. ____ S. R. ____ ☐ East ☐ West
County: ____ Docket No.: ____

INSTRUCTIONS: An original and two copies of this information shall be filed with the Kansas Corporation Commission, 130 S. Market - Room 2078, Wichita, Kansas 67202, within 120 days of the spud date, recompletion, workover or conversion of a well. Rule 82-3-130, 82-3-106 and 82-3-107 apply. Information on side two of this form will be held confidential for a period of 12 months if requested in writing and submitted with the form (see rule 82-3-107 for confidentiality in excess of 12 months). One copy of all wireline logs and geologist well report shall be attached with this form. ALL CEMENTING TICKETS MUST BE ATTACHED. Submit CP-4 form with all plugged wells. Submit CP-111 form with all temporarily abandoned wells.

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.

Signature: Carol Lee
Title: SECRETARY/TREASURER Date: 5/28/2010

Subscribed and sworn to before me this 28TH day of MAY, 2010.

Notary Public: Debra J. Ludwig
Date Commission Expires: MAY 5, 2012

DEBRA J. LUDWIG
Notary Public - State of Kansas
My Appt. Expires 5/5/2012

KCC Office Use ONLY

✓ Letter of Confidentiality Received
✓ If Denied, Yes ☐ Date: ____
✓ Wireline Log Received
✓ Geologist Report Received
___ UIC Distribution

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Side Two

Operator Name: LARSON ENGINEERING, INC. Lease Name: SHAPLAND Well #: 1-26

Sec. 26 Twp. 19 S. R. 28 ☐ East ☒ West County: LANE

INSTRUCTIONS: Show important tops and base of formations penetrated. Detail all cores. Report all final copes of drill stem 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. Attach copy of all Electric Wireline Logs surveyed. Attach final geologist well site report.

Drill Stem Tests Taken (Attach Additional Sheets) ☒ Yes ☐ No

Samples Sent to Geological Survey ☐ Yes ☒ No

Cores Taken ☐ Yes ☒ No

Electric Log Run (Submit Copy) ☒ Yes ☐ No

List All E. Logs Run: DUAL INDUCTION
DUAL COMP POROSITY
MICRORESISTIVITY

☒ Log Formation (Top), Depth and Datum ☐ Sample

Name	Top	Datum
ANHYDRITE	2099	+665
BASE ANHYDRITE	2129	+635
HEEBNER SH	3972	-1208
LANSING- KC	4011	-1247
STARK SH	4294	-1530
BASE KANSAS CITY	4374	-1610
PAWNEE	4499	-1735
FORT SCOTT	4547	-1783
CHEROKEE	4568	-1804
MISSISSIPPIAN	4640	-1876

CASING RECORD ☐ New ☒ 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
SURFACE	12-1/4"	8-5/8"	20#	262'	CLASS A	175	2% GEL, 3% CC

ADDITIONAL CEMENTING/SQUEEZE RECORD

Purpose:	Depth Top	Bottom	Type of Cement	# Sacks Used	Type and Percent Additives
____ Perforate ____ Protect Casing ____ Plug Back TD ____ Plug Off Zone					

Shots per Foot	PERFORATION RECORD – Bridge Plugs Set/Type Specify Footage of Each Interval Perforated	Acid. Fracture, Shot, Cement, Squeeze Record (Amount and Kind of Material Used)	Depth

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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: ☐ Vented ☐ Sold ☐ Used on Lease (If vented, submit ACO-18.)

METHOD OF COMPLETION: ☐ Open Hole ☐ Perf. ☐ Dually Comp. ☐ Commingled ☒ Other (Specify) P & A

PRODUCTION INTERVAL:

Mail to: KCC – Conservation Division, 130 S. Market - Room 2078, Wichita, Kansas 67202

ALLIED CEMENTING CO., LLC. 039122

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

SERVICE POINT: Oakley KS

DATE 2/18/10	SEC 26	TWP. 19	RANGE 28	CALLED OUT	ON LOCATION 12:30am	JOB START 1:30	JOB FINISH 2:30
LEASE Shapman	WELL # 1-26	LOCATION Dighton E To Quentum Rd S To 80 Rd 2W To Oklahoma Rd 1/4 S Ento				COUNTY Lane	STATE KS
OLD OR NEW (Circle one)							

CONTRACTOR H-D Drilling
TYPE OF JOB PTA
HOLE SIZE 7 7/8 T.D.
CASING SIZE 8 5/8 DEPTH
TUBING SIZE DEPTH
DRILL PIPE 4 1/2 DEPTH
TOOL DEPTH
PRES. MAX MINIMUM
MEAS. LINE SHOE JOINT
CEMENT LEFT IN CSG.
PERFS.
DISPLACEMENT

OWNER Same

CEMENT

AMOUNT ORDERED 280 SKs 60/40 4%gel 1/4 lb Flo Seal

EQUIPMENT

PUMP TRUCK CEMENTER Alex
422 HELPER Wayne
BULK TRUCK
377 DRIVER Terry
BULK TRUCK
DRIVER

COMMON	168	@ 13.65	2293.20
POZMIX	112	@ 7.40	851.20
GEL	10	@ 20.40	204.00
CHLORIDE		@	
ASC		@	
		@	
Flo Seal	63 lb	@ 2.45	154.35
		@	
		@	
		@	
		@	
		@	
		@	
HANDLING	293 SKs	@ 2.10	615.30
MILEAGE	104 SKs/mile		879.00
		TOTAL	4997.05

REMARKS:

50 SKs @ 2130 FT
80 SKs @ 1330 FT
50 @ 660
50 @ 300
20 @ 60
30 @ Rat Hole

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SERVICE

DEPTH OF JOB			2130'
PUMP TRUCK CHARGE			1170.00
EXTRA FOOTAGE		@	
MILEAGE	30	@ 7.00	210.00
MANIFOLD		@	
		@	
		@	
		TOTAL	1380.00

CHARGE TO: Larson Engineering
STREET
CITY STATE ZIP

PLUG & FLOAT EQUIPMENT

		@	
		@	
		@	
		@	
		@	
		TOTAL	

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

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

PRINTED NAME
SIGNATURE

ALLIED CEMENTING CO., LLC. 039113

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

SERVICE POINT: Oakley KS

DATE 2/7/10	SEC 26	TWP 14	RANGE 28	CALLED OUT	ON LOCATION 11:30pm	JOB START 12:30am	JOB FINISH 1:00Am
LEASE Shapland	WELL # 1-26		LOCATION Brighton E to Quantum Rd			COUNTY Cheyenne	STATE KS
OLD OR NEW (Circle one)			S to 80 Rd 2E 1/2 S into				

CONTRACTOR H-D Drilling
TYPE OF JOB Surface 263
HOLE SIZE 12 1/4 T.D. 262
CASING SIZE 8 5/8 DEPTH
TUBING SIZE DEPTH
DRILL PIPE DEPTH
TOOL DEPTH
PRES. MAX MINIMUM
MEAS. LINE SHOE JOINT
CEMENT LEFT IN CSG. 15'
PERFS.
DISPLACEMENT 15.7 BBL H2O

OWNER Same

CEMENT
AMOUNT ORDERED 120 Com 3%CC 2%gel

EQUIPMENT

PUMP TRUCK CEMENTER Alan
472 HELPER Wayne
BULK TRUCK
377 DRIVER Jerry
BULK TRUCK
DRIVER

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COMMON	120	@ 13.65	2320.50
POZMIX		@	
GEL	3	@ 20.40	61.20
CHLORIDE	6	@ 57.15	342.90
ASC		@	
		@	
		@	
		@	
		@	
		@	
		@	
		@	
HANDLING	179	@ 2.10	375.90
MILEAGE	10¢/sk/mile		537.20
		TOTAL	3637.50

REMARKS:
Cement Did Circulate
Plug down @ 1:00 Am-2/7/10
Thank You
Alan, Wayne, Jerry

SERVICE

DEPTH OF JOB			
PUMP TRUCK CHARGE			999.00
EXTRA FOOTAGE		@	
MILEAGE	30 miles	@ 7.00	210.00
MANIFOLD		@	
		@	
		@	
		TOTAL	1209.00

CHARGE TO: Larson Engineering
STREET
CITY STATE ZIP

PLUG & FLOAT EQUIPMENT

		@	
		@	
		@	
		@	
		@	
		TOTAL	

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

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

PRINTED NAME
SIGNATURE Stephen W. Pearce

Robert C. Lewellyn

Consulting Petroleum Geologist

P. O. Box 375
Kechi, KS 67067-0375
Office 316-744-2567
Cell 316-518-0495
boblewellyn@yahoo.com

GEOLOGICAL REPORT

Larson Engineering, Inc.
Shapland No. 1-26
1700' FNL & 965' FWL Sec. 26-19S-28W
Lane County, Kansas

CONTRACTOR:	H D Drilling, LLC
SPUDDED:	February 07, 2010
DRILLING COMPLETED:	February 17, 2010
SURFACE CASING:	8 5/8" @ 262 KBM/175 sx,
ELECTRIC LOGS:	Log-Tech DIL CNL/CDL MEL
ELEVATIONS:	2764 KB 2754 GL

FORMATION TOPS (Electric Log):

Anhydrite	2099 (+ 665)
Base Anhydrite	2129 (+ 635)
Heebner Shale	3972 (-1208)
Lansing-Kansas City Group	4011 (-1247)
Muncie Creek Shale	4188 (-1424)
Stark Shale	4294 (-1530)
Hushpuckney shale	4332 (-1569)
Base Kansas City	4374 (-1610)
Altamont	4419 (-1655)
Pawnee	4499 (-1735)
Myrick Station	4521 (-1757)
Fort Scott	4547 (-1783)
Cherokee	4568 (-1804)
Mississippian	4640 (-1876)
Electric Log Total Depth	4714 (-1950)

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. Depths on drill stem tests have been moved downhole four feet to correlate with electric log measurements.

Lansing-Kansas City Zones:

4011-4019 (A Zone)

Limestone, buff, some cream, dense to finely crystalline, some microcrystalline, some chalky, trace of poor intercrystalline porosity with tan dead stain, no show of live oil. Lower section is tan, dense limestone.

4054-4060 (B Zone)

Limestone, cream to buff, some tan, dense to finely crystalline, some chalky, trace of brittle dense-oolitic, trace of poor scattered intercrystalline and interoolitic porosity, no show of oil.

4071-4099 (C/D Zone)

Limestone, buff, some tan, dense with cream chalky, some finely crystalline, zone is mostly tight with no shows of oil. Lower portion is tan to brown dense limestone.

4102-4113 (E Zone)

Limestone, buff to tan, dense to finely crystalline, some tan opaque chert, some cream chalky limestone, zone is mostly tight with no shows of oil.

4116-4129 (F Zone)

Limestone, buff to tan, some brown, dense and dense-oolitic, "resinous", some finely crystalline, one or two pieces with very poor intercrystalline porosity and trace of very poor spotted stain, faint questionable odor, no free oil, no fluorescence, no cut. Zone is tight on log and warrants no further consideration.

4135-4140 (G Zone)

Limestone, cream to buff, finely crystalline and partly oolitic, partly chalky, poor scattered ooliticastic porosity, no show of oil, some scattered light gray chert.

4201-4210 (H Zone)

Limestone, buff to tan and brown, cherty in part with some scattered brown fossiliferous chert, finely crystalline with some poor intercrystalline porosity, poor spotted stain, slight to fair show of free oil, faint odor, poor to fair fluorescence, poor cut.

Drill Stem Test No. 1 4186-4213
15-30-30-60; surface blow for 15 minutes on first flow; blow did not return on second flow. Recovered 10 feet of mud. ISIP 963# FSIP 946# IFP 18-21# FFP 22-27# IHP 2051# FHP 1997# BHT 116 degrees.

4236-4260 (I Zone)

Limestone, buff to light gray, some tan, finely crystalline and fossiliferous, scattered poor intercrystalline and fossil-cast porosity, some poorly developed small vug porosity, scattered dead stain, no shows of live oil. Zone grades to tan to brown oolitic and dense-oolitic limestone toward base. Zone is tight on electric log.

4218-4239 (J Zone)

Limestone, cream to buff, finely crystalline and oolitic, fair to good ooliticastic porosity, poor spotted stain, fair to good show of free oil, fair to good odor, fair fluorescence, fair cut, considerable barren porosity.

Drill Stem Test No. 2 4266-4274
15-30-45-90; built to 4 ½" blow on first flow, no blowback, built to bottom of bucket in 43 minutes on second flow, no blowback. Recovered 300 feet of water. ISIP 707# FSIP 708# IFP 21-54# FFP 56-150# IHP 2104# FHP 2006# BHT 131 degrees.

4312-4317 (K Zone)

Limestone, buff to tan, dense to finely crystalline, slightly fossiiferous, trace of poor intercrystalline and interfossil porosity, no show of oil. This interval has an indicated 14% porosity on the CDN log and has indicated microlog permeability. Using an Rw of .08 and a resistivity of 10 ohms, the zone calculates 63% water saturation. Zone warrants no further consideration.

4335-4346 (L Zone)

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

Drill Stem Test No. 3 4334-4346
15-30-30-60; surface blow, died in 13 minutes, blow did not return on second flow. Recovered one foot of drilling mud. ISIP 21# FSIP 22# IFP 18-18# FFP 20-20# IHP 2132# FHP 2017# BHT 116 degrees.

4346-4350 (L Zone)

Limestone, tan, dense to finely crystalline, some medium crystalline, brittle, some large calcite crystal overgrowth in a few fragments, fair intercrystalline and small vug porosity, trace of scattered interfossil and interoolitic porosity, poor spotted stain, fair show of free oil, fair odor, poor fluorescence, fair cut.

Drill Stem Test No. 4 4340-4350
15-30-45-90; blow off bottom of bucket in eight minutes on first flow, no blowback, blow off bottom of bucket in 12 minutes of second flow. Recovered two inches of free oil on top and 120 feet of slightly mud cut water (85 % water, 15% mud) and 600 feet of water (100% water). ISIP 717# FSIP 694# IFP 30-120# FFP 124-344# IHP 2141# FHP 2042# BHT 129 degrees.

4374-4402 (Pleasanton Zone)

The Pleasanton zone consisted of limestone, buff to tan, some brown, mostly dense, trace of finely crystalline with very poor intercrystalline porosity, one or two pieces with very poor spotted stain, no free oil, no odor, no fluorescence, no cut. Zone warrants no further consideration.

4402-4409 (Lenapah Zone)

Limestone, tan to brown, dense, tight, trace of tan chert, zone contains no shows of oil.

4419-4452 (Altamont "A" Zone)

Limestone, tan to brown, dense to finely crystalline, slightly fossiliferous, rare scattered poor intercrystalline porosity, trace of dead stain in "edge" and small vugular porosity in dense pieces, no show of live oil.

4455-4492 (Altamont "B" Zone)

Limestone, buff to tan to mottled, dense to finely crystalline, some slightly oolitic, rare fragment with poor intercrystalline porosity, some poor interoolitic porosity, no show of oil.

4499-4518 (Pawnee Zone)

Limestone, buff to tan, dense to finely crystalline, few pieces of finely crystalline with poor intercrystalline porosity, poor spotted stain, slight show of free oil, fair to good odor, poof fluorescence, fair cut.

4521-4542 (Myrick Station Zone)

Limestone, tan to brown, dense, some finely crystalline, tight with no shows of oil.

4547-4568 (Fort Scott Zone)

Limestone, tan to brown, dense to finely crystalline, slightly fossiliferous, few pieces with poor intercrystalline porosity, poor spotted stain, very slight show of free oil, faint odor, poor fluorescence, poor cut. Lower Fort Scott is limestone, buff to tan to light gray, some dark brown dense to finely crystalline with tan oolitic containing black oolites, tight, no show of oil.

4595-4630 (Johnson Zone)

Limestone, buff to tan, dense to finely crystalline, slightly fossiliferous, slightly chalky, few pieces with poor to fair intercrystalline porosity, trace of poorly developed vugular porosity, poor light spotted stain, very slight show of free oil, faint to fair odor, poor fluorescence, poor to fair cut.

4630-4640 (Detrital Zone)

Chert, cream to buff, fresh, opaque, and sand, very fine grained, calcareous, well cemented, well sorted, tight with scattered black tarry stain, no free oil, questionable odor, no fluorescence, poor tarry cut.

Drill Stem Test No. 5 4490-4640
15-39-30-60; quarter-inch blow diminished to surface blow on first flow; no blow on second flow period. Recovered ten feet of mud. ISIP 370# FSIP 444# IFP 30-34# FFP 35-37# IHP 2261# FHP 2187# BHT 115 degrees.

4640-4710 (Mississippian Zone)

The Mississippian section consisted of tan dolomitic, finely crystalline lime grading with depth into tan, medium crystalline dolomite. The entire section contained only sparse sections of porosity and no shows of oil.

4710 Rotary Total Depth

Conclusions and Recommendations:

Sample examination, drill stem testing and electric logging revealed no zones of possible commercial production of oil or gas. It was therefore recommended that the No. 1-26 Shapland be plugged and abandoned.

Respectfully submitted,

Robert C. Lewellyn
Petroleum Geologist

STATE: KANSAS
COUNTY: LANE
BLOCK:
SEC.: 26
T.: 19S
R.: 28W
ALTITUDE: 2764 KB
PRODUCTION: D&A

COMPANY: LARSON ENGINEERING, INC.
FARM: SHAPLAND
WELL NO.: 1-26
SURVEY: 1700' FNL & 965' FWL
TOTAL DEPTH: 4910
CONTRACTOR: H.D. DRILLING, LLC
COMMENCED: FEBRUARY 07, 2010
COMPLETED: FEBRUARY 17, 2010
REMARKS:
Robert C. Lewellyn - Geologist

CASING RECORD

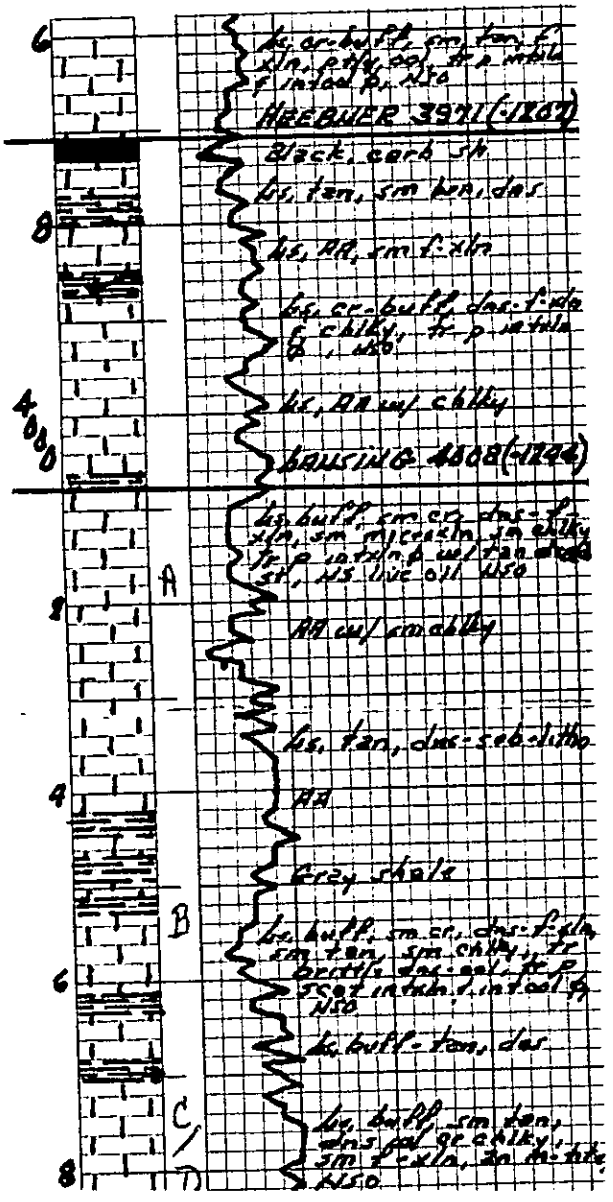
8 5/8" @ 262 KBM/175 sx

SHOT | QUARTS | BETWEEN

TIME RATE SCALE: 1/10" = MINUTES

Kraftbilt 450-A 1-800-331-7290 www.kraftbilt.com

TIME RATE: 1/10" SQUARES



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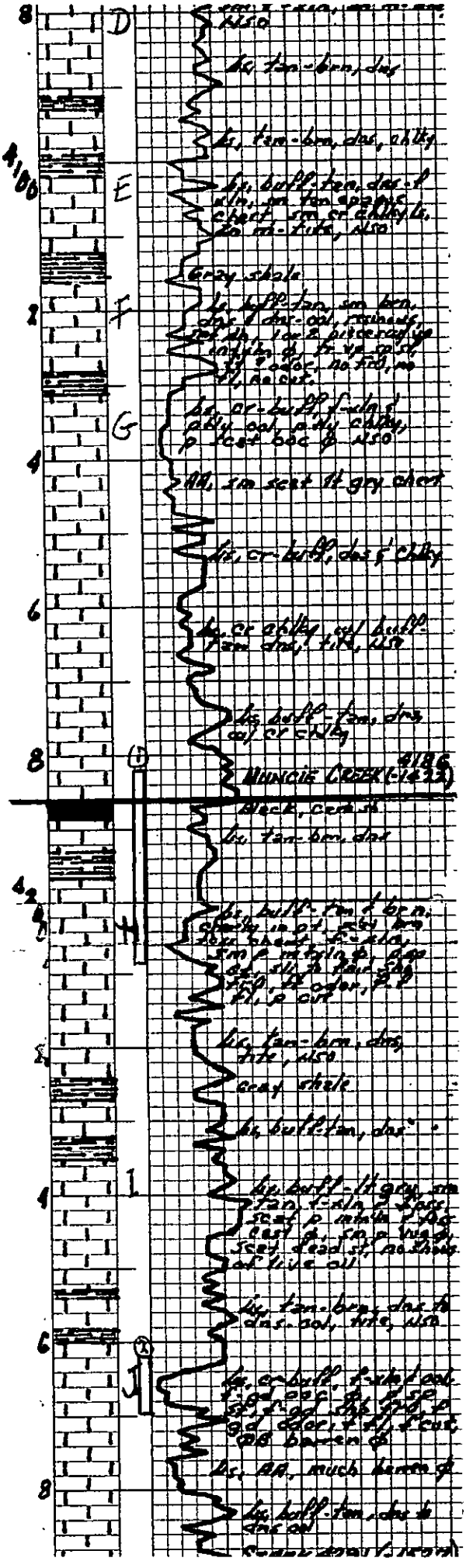

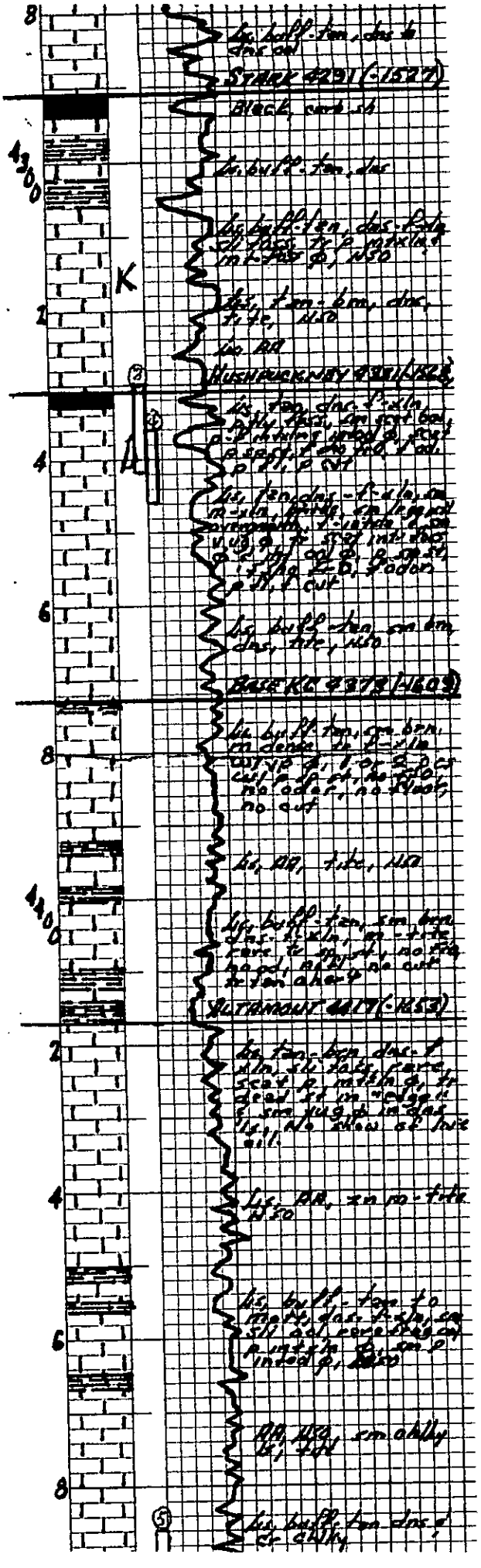

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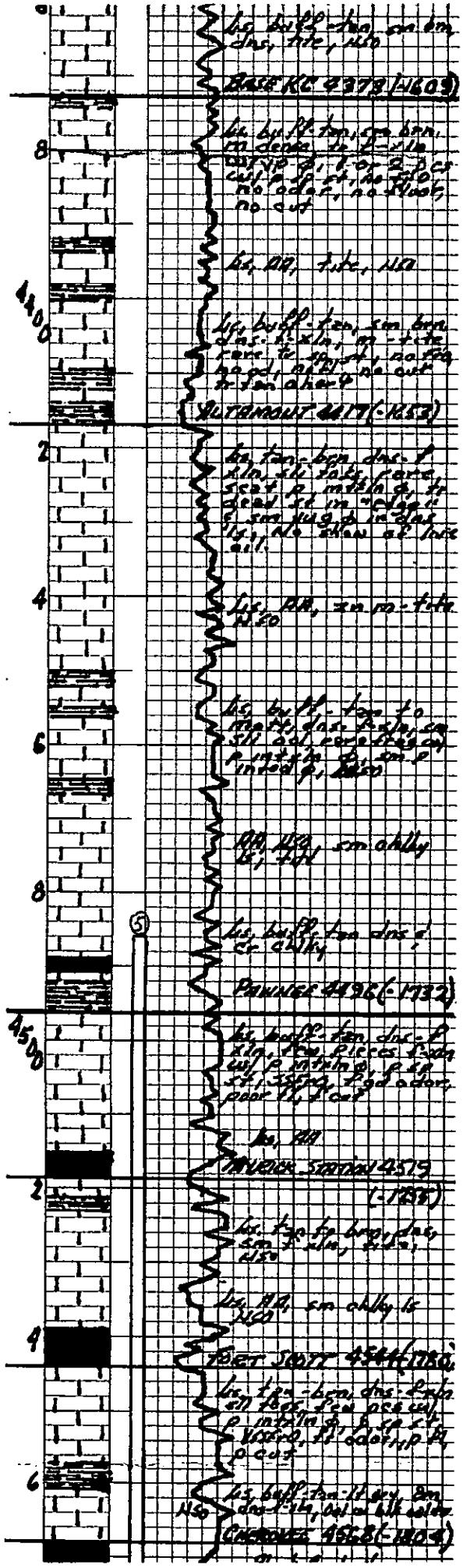

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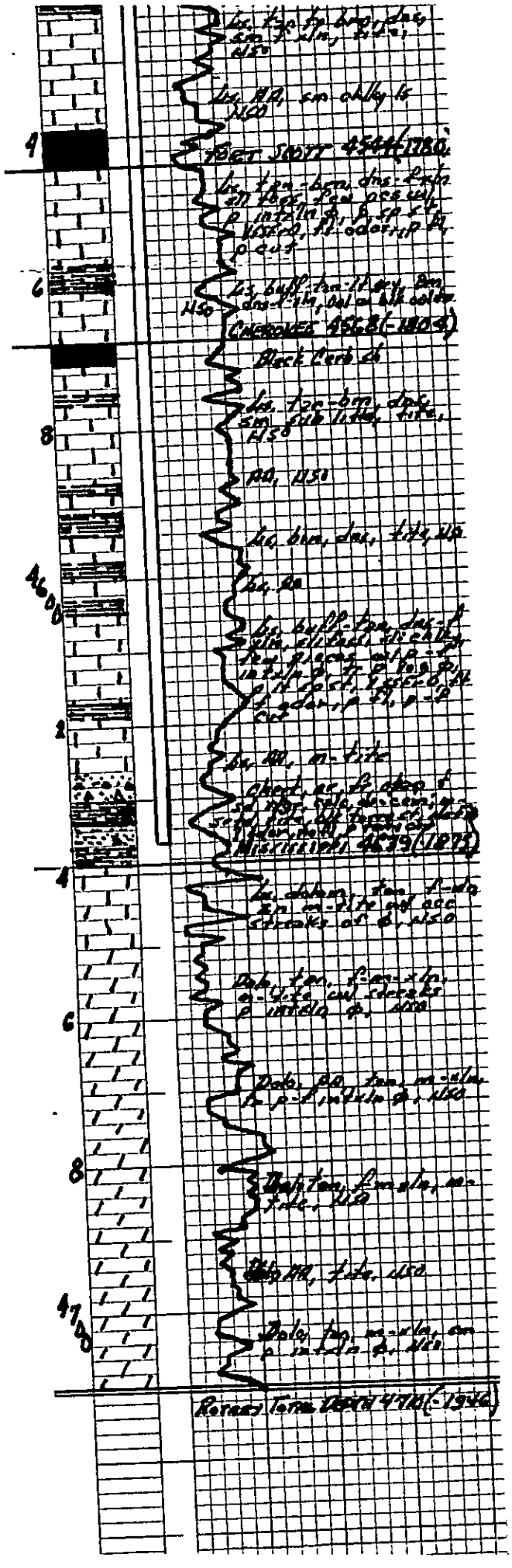

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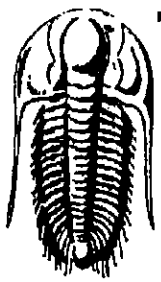

TRILOBITE TESTING, INC.

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DRILL STEM TEST REPORT

Prepared For: **Larson Engineering, Inc.**

562 St. Rd 4
Olmitz, KS 67564

ATTN: Bob Lewellyn

26-19-28 Lane, KS

Shapland #1-26

Start Date: 2010.02.12 @ 19:15:51
End Date: 2010.02.13 @ 01:40:00
Job Ticket #: 37008 DST #: 1

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Trilobite Testing, Inc
PO Box 1733 Hays, KS 67601
ph: 785-625-4778 fax: 785-625-5620

DRILL STEM TEST REPORT

TRILOBITE TESTING, INC

Larson Engineering, Inc.

562 St. Rd 4
Olmitz, KS 67564

ATTN: Bob Lewellyn

Shapland #1-26

26-19-28 Lane, KS

Job Ticket: 37008 **DST#: 1**

Test Start: 2010.02.12 @ 19:15:51

GENERAL INFORMATION:

Formation: KC
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 21:28:31
Time Test Ended: 01:40:00

Test Type: Conventional Bottom Hole
Tester: Shane McBride
Unit No: 40

Interval: 4182.00 ft (KB) To 4209.00 ft (KB) (TVD)
Total Depth: 4209.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

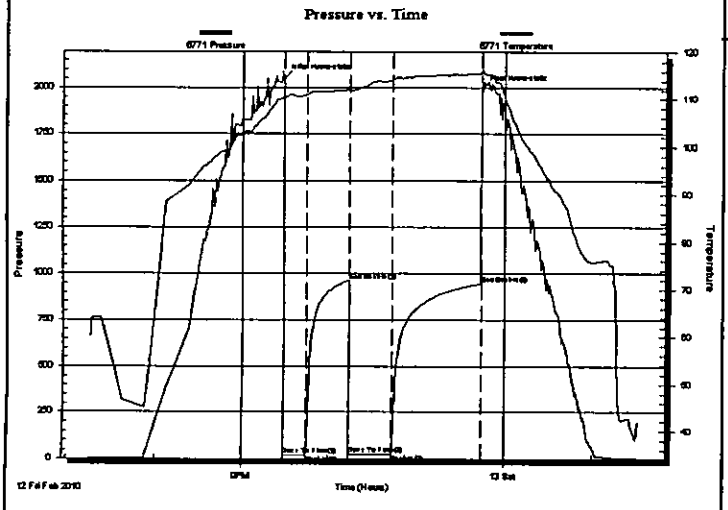
Reference Elevations: 2763.00 ft (KB)
2755.00 ft (CF)
KB to GR/CF: 8.00 ft

Serial #: 6771 **Outside**

Press@RunDepth: 27.25 psig @ 4183.00 ft (KB)
Start Date: 2010.02.12 End Date: 2010.02.13
Start Time: 19:15:51 End Time: 01:32:00

Capacity: 8000.00 psig
Last Calib.: 2010.02.12
Time On Btm: 2010.02.12 @ 21:28:16
Time Off Btm: 2010.02.12 @ 23:44:01

TEST COMMENT: Surface blow
No return
Surface blow
No return



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2051.92	110.89	Initial Hydro-static
1	18.15	109.88	Open To Flow (1)
17	21.93	111.12	Shut-In(1)
45	963.72	112.04	End Shut-In(1)
46	22.70	111.46	Open To Flow (2)
75	27.25	114.40	Shut-In(2)
136	946.72	115.63	End Shut-In(2)
136	1997.65	116.08	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
10.00	mud 100%m	0.14

Gas Rates

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

TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

TOOL DIAGRAM

Larson Engineering, Inc.

562 St. Rd 4
Olmitz, KS 67564

ATTN: Bob Lewellyn

Shapland #1-26

26-19-28 Lane, KS

Job Ticket: 37008 **DST#: 1**

Test Start: 2010.02.12 @ 19:15:51

Tool Information

Drill Pipe:	Length:	4164.00 ft	Diameter:	3.80 inches	Volume:	58.41 bbl	Tool Weight:		1500.00 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:	0.00 ft	Diameter:	0.00 inches	Volume:	0.00 bbl	Weight to Pull Loose:		70000.00 lb
					Total Volume:	58.41 bbl	Tool Chased		0.00 ft
Drill Pipe Above KB:		9.00 ft					String Weight:	Initial	58000.00 lb
Depth to Top Packer:		4182.00 ft						Final	59000.00 lb
Depth to Bottom Packer:		ft							
Interval between Packers:		27.00 ft							
Tool Length:		54.00 ft							
Number of Packers:		2	Diameter:	6.75 inches					

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths	
Change Over Sub	1.00			4156.00		
Shut In Tool	5.00			4161.00		
Hydraulic tool	5.00			4166.00		
Jars	5.00			4171.00		
Safety Joint	2.00			4173.00		
Packer	5.00			4178.00	27.00	Bottom Of Top Packer
Packer	4.00			4182.00		
Stubb	1.00			4183.00		
Recorder	0.00	8368	Inside	4183.00		
Recorder	0.00	6771	Outside	4183.00		
Perforations	21.00			4204.00		
Bullnose	5.00			4209.00	27.00	Bottom Packers & Anchor
Total Tool Length:	**54.00**					

TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

FLUID SUMMARY

Larson Engineering, Inc.

562 St. Rd 4
Olmitz, KS 67564

ATTN: Bob Lewellyn

Shapland #1-26

26-19-28 Lane, KS

Job Ticket: 37008 **DST#: 1**

Test Start: 2010.02.12 @ 19:15:51

Mud and Cushion Information

Mud Type:	Gel Chem	Cushion Type:		Oil API:	0 deg API
Mud Weight:	9.00 lb/gal	Cushion Length:	ft	Water Salinity:	0 ppm
Viscosity:	46.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	7.92 in³	Gas Cushion Type:			
Resistivity:	0.00 ohm.m	Gas Cushion Pressure:	psig		
Salinity:	4000.00 ppm				
Filter Cake:	1.00 inches				

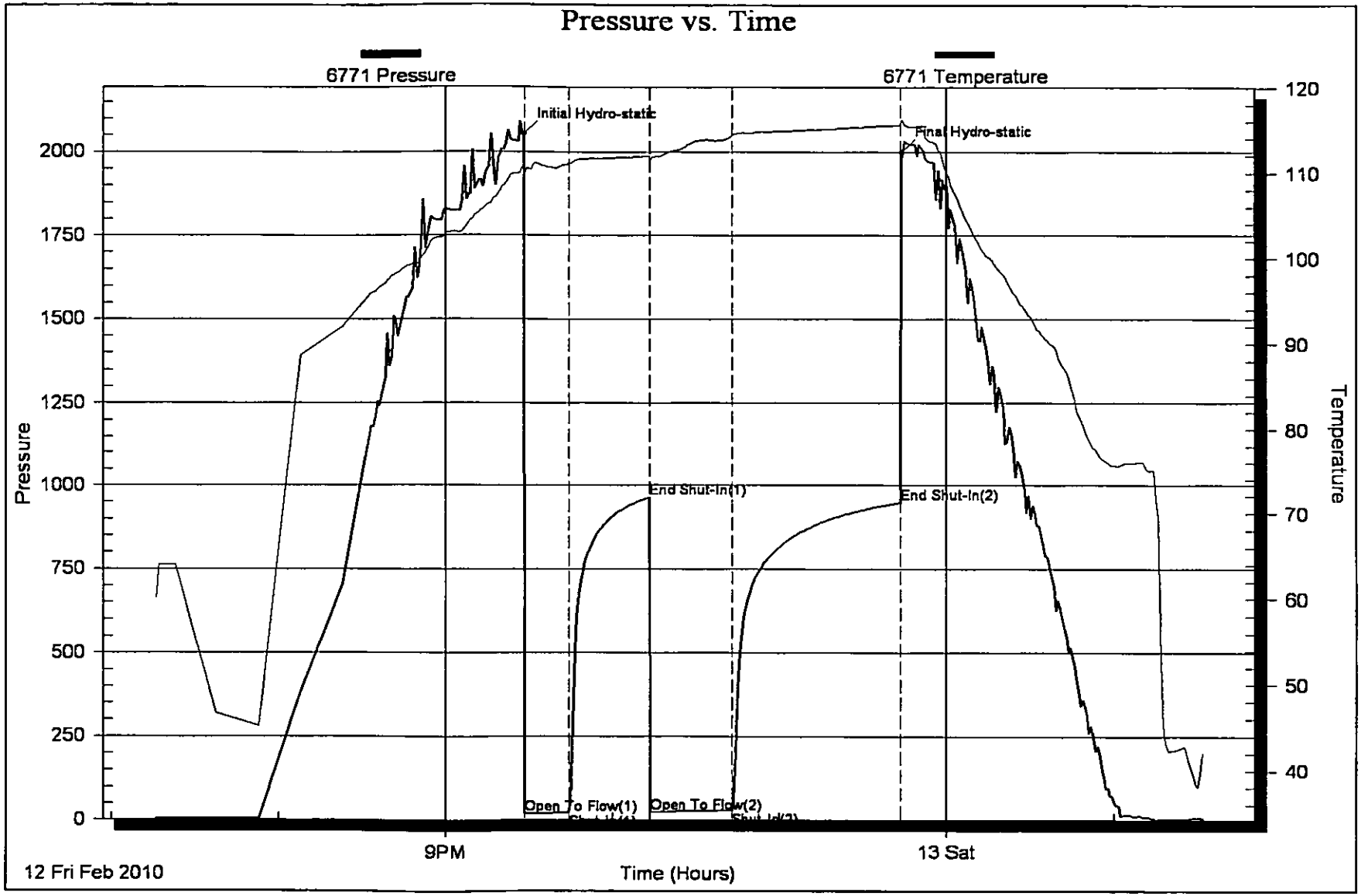
Recovery Information

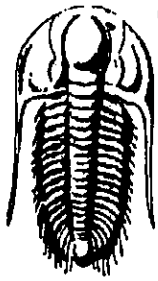
Recovery Table

Length ft	Description	Volume bbl
10.00	mud 100%m	0.140

Total Length: 10.00 ft Total Volume: 0.140 bbl

Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
Laboratory Name: Laboratory Location:
Recovery Comments:


Pressure vs. Time
6771 Pressure
6771 Temperature
Initial Hydro-static
Final Hydro-static
End Shut-In(1)
End Shut-In(2)
Open To Flow(1)
Open To Flow(2)
Pressure
Temperature
2000
1750
1500
1250
1000
750
500
250
0
120
110
100
90
80
70
60
50
40
9PM
13 Sat
12 Fri Feb 2010
Time (Hours)



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Prepared For: **Larson Engineering, Inc.**

562 St. Rd 4
Olmitz, KS 67564

ATTN: Bob Lewellyn

26-19-28 Lane, KS

Shapland #1-26

Start Date: 2010.02.13 @ 14:12:18
End Date: 2010.02.13 @ 21:00:12
Job Ticket #: 37009 DST #: 2

Trilobite Testing, Inc
PO Box 1733 Hays, KS 67601
ph: 785-625-4778 fax: 785-625-5620

DRILL STEM TEST REPORT

TRILOBITE TESTING, INC

Larson Engineering, Inc.

562 St. Rd 4
Olmitz, KS 67564

ATTN: Bob Lewellyn

Shapland #1-26

26-19-28 Lane, KS

Job Ticket: 37009 **DST#: 2**

Test Start: 2010.02.13 @ 14:12:18

GENERAL INFORMATION:

Formation: J
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 16:01:13
Time Test Ended: 21:00:12

Test Type: Conventional Bottom Hole
Tester: Shane McBride
Unit No: 40

Interval: 4262.00 ft (KB) To 4270.00 ft (KB) (TVD)
Total Depth: 4270.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

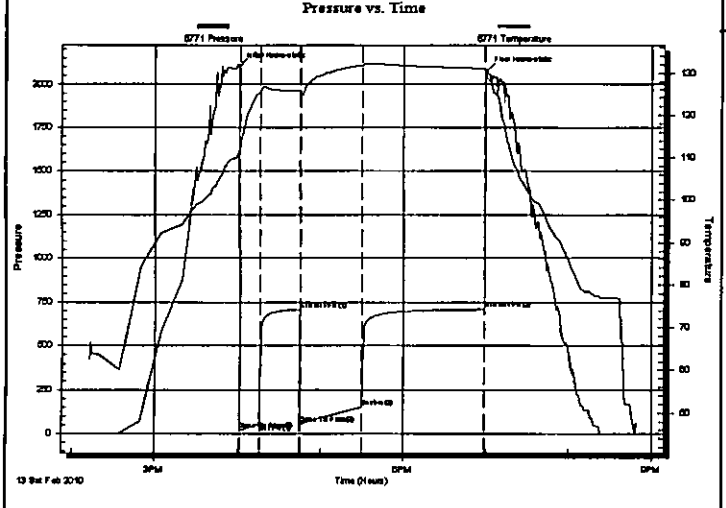
Reference Elevations: 2763.00 ft (KB)
2755.00 ft (CF)
KB to GR/CF: 8.00 ft

Serial #: 6771 **Outside**

Press@RunDepth: 150.91 psig @ 4272.00 ft (KB)
Start Date: 2010.02.13 End Date: 2010.02.13
Start Time: 14:12:18 End Time: 20:49:12

Capacity: 8000.00 psig
Last Calib.: 2010.02.13
Time On Btm: 2010.02.13 @ 16:00:58
Time Off Btm: 2010.02.13 @ 18:59:58

TEST COMMENT: 4 1/2"in blow
No return
B.O.B. in 43 min.
No return



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2104.15	111.32	Initial Hydro-static
1	21.45	110.64	Open To Flow (1)
15	54.36	125.31	Shut-In(1)
45	707.48	125.87	End Shut-In(1)
45	56.08	125.58	Open To Flow (2)
89	150.91	131.82	Shut-In(2)
178	708.85	131.10	End Shut-In(2)
179	2078.93	129.17	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
300.00	w ater 100%w	4.21

Gas Rates

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

TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

TOOL DIAGRAM

Larson Engineering, Inc.

562 St. Rd 4
Olmitz, KS 67564

ATTN: Bob Lewellyn

Shapland #1-26

26-19-28 Lane, KS

Job Ticket: 37009 **DST#: 2**

Test Start: 2010.02.13 @ 14:12:18

Tool Information

Drill Pipe:	Length:	4261.00 ft	Diameter:	3.80 inches	Volume:	59.77 bbl	Tool Weight:	1500.00 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:	0.00 ft	Diameter:	0.00 inches	Volume:	0.00 bbl	Weight to Pull Loose:	80000.00 lb
					Total Volume:	59.77 bbl	Tool Chased	0.00 ft
Drill Pipe Above KB:		22.00 ft					String Weight: Initial	58000.00 lb
Depth to Top Packer:		4262.00 ft					Final	60000.00 lb
Depth to Bottom Packer:		ft						
Interval between Packers:		17.00 ft						
Tool Length:		40.00 ft						
Number of Packers:		2	Diameter:	6.75 inches				

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths	
Change Over Sub	1.00			4240.00		
Shut In Tool	5.00			4245.00		
Hydraulic tool	5.00			4250.00		
Jars	5.00			4255.00		
Safety Joint	2.00			4257.00		
Packer	5.00			4262.00	23.00	Bottom Of Top Packer
Blank Spacing	5.00			4267.00	17.00	Tool Interval
Packer	4.00			4271.00		
Stubb	1.00			4272.00		
Recorder	0.00	8368	Inside	4272.00		
Recorder	0.00	6771	Outside	4272.00		
Perforations	2.00			4274.00		
Bullnose	5.00			4279.00	1000039.00	Bottom Packers & Anchor
Total Tool Length:	**40.00**					

TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

FLUID SUMMARY

Larson Engineering, Inc.

562 St. Rd 4
Olmitz, KS 67564

ATTN: Bob Lewellyn

Shapland #1-26

26-19-28 Lane, KS

Job Ticket: 37009 **DST#: 2**

Test Start: 2010.02.13 @ 14:12:18

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:	43000 ppm
Viscosity:	46.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	7.94 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

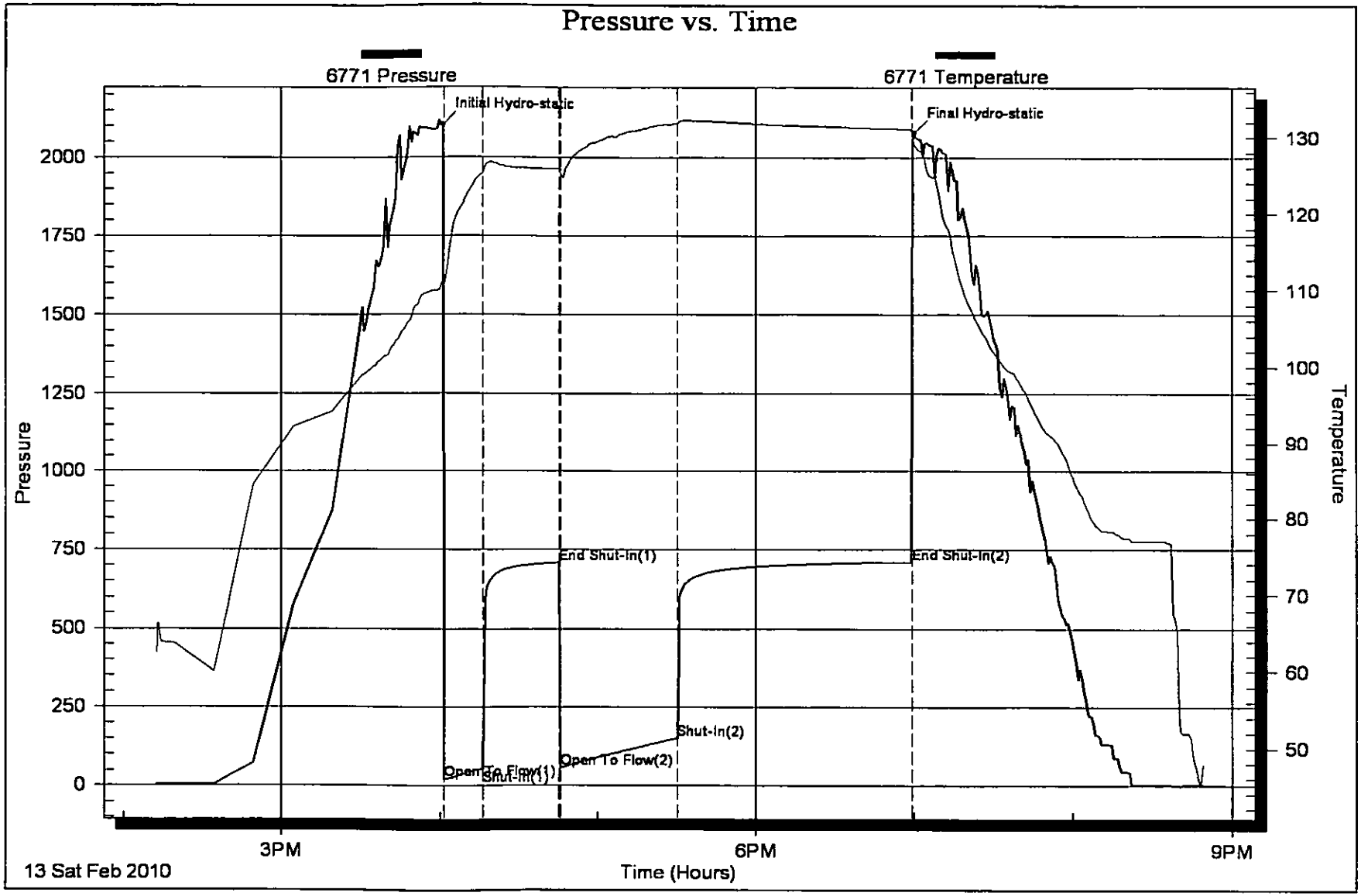
Length ft	Description	Volume bbl
300.00	w ater 100%w	4.208

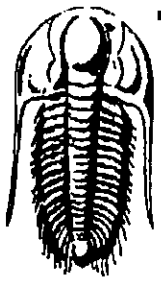
Total Length: 300.00 ft Total Volume: 4.208 bbl

Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:

Laboratory Name: Laboratory Location:

Recovery Comments: RW .230 @ 50°f =43,000 chlor


Pressure vs. Time
6771 Pressure
6771 Temperature
Initial Hydro-static
Final Hydro-static
End Shut-In(1)
End Shut-In(2)
Shut-In(2)
Open To Flow(1)
Shut-In(1)
Open To Flow(2)
Pressure
Temperature
2000
1750
1500
1250
1000
750
500
250
0
130
120
110
100
90
80
70
60
50
3PM
6PM
9PM
13 Sat Feb 2010
Time (Hours)



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Prepared For: **Larson Engineering, Inc.**

562 St. Rd 4
Olmitz, KS 67564

ATTN: Bob Lewellyn

26-19-28 Lane, KS

Shapland #1-26

Start Date: 2010.02.14 @ 10:10:37

End Date: 2010.02.14 @ 16:55:31

Job Ticket #: 37010 DST #: 3

Trilobite Testing, Inc
PO Box 1733 Hays, KS 67601
ph: 785-625-4778 fax: 785-625-5620

DRILL STEM TEST REPORT

Larson Engineering, Inc.

562 St. Rd 4
Olmitz, KS 67564

ATTN: Bob Lewellyn

Shapland #1-26

26-19-28 Lane, KS

Job Ticket: 37010 **DST#: 3**

Test Start: 2010.02.14 @ 10:10:37

GENERAL INFORMATION:

Formation: L
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 12:29:17
Time Test Ended: 16:55:31

Test Type: Conventional Bottom Hole
Tester: Shane McBride
Unit No: 40

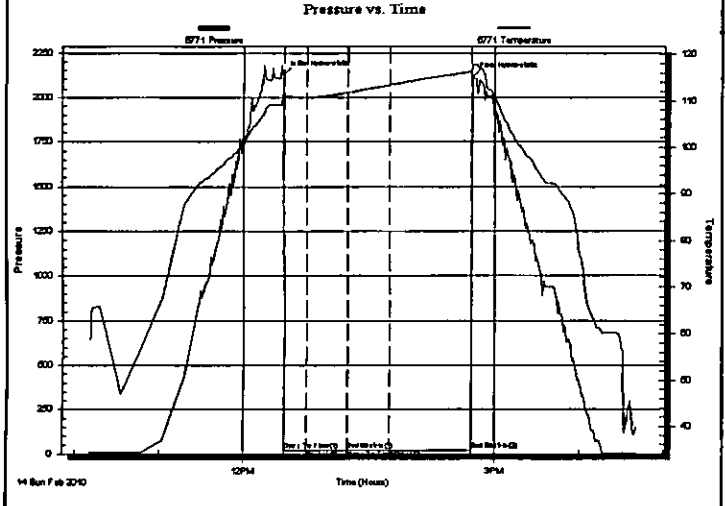
Interval: 4330.00 ft (KB) To 4342.00 ft (KB) (TVD)
Total Depth: 4342.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 2763.00 ft (KB)
2755.00 ft (CF)
KB to GR/CF: 8.00 ft

Serial #: 6771 **Outside**
Press@RunDepth: 20.81 psig @ 4331.00 ft (KB)
Start Date: 2010.02.14 End Date: 2010.02.14
Start Time: 10:10:37 End Time: 16:41:31

Capacity: 8000.00 psig
Last Calib.: 2010.02.14
Time On Btm: 2010.02.14 @ 12:28:32
Time Off Btm: 2010.02.14 @ 14:44:02

TEST COMMENT: Surface blow died in 13 min.
No return
No blow
No return



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2132.03	111.67	Initial Hydro-static
1	18.97	111.18	Open To Flow (1)
17	18.25	110.79	Shut-In(1)
46	21.19	111.88	End Shut-In(1)
46	20.62	111.90	Open To Flow (2)
77	20.81	113.57	Shut-In(2)
135	22.17	116.37	End Shut-In(2)
136	2116.88	117.76	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
0.50	1/2'ft of mud 100%m	0.01

Gas Rates

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

DRILL STEM TEST REPORT

TOOL DIAGRAM

Larson Engineering, Inc.

562 St. Rd 4
Olmitz, KS 67564

ATTN: Bob Lewellyn

Shapland #1-26

26-19-28 Lane, KS

Job Ticket: 37010 **DST#: 3**

Test Start: 2010.02.14 @ 10:10:37

Tool Information

Drill Pipe:	Length:	4316.00 ft	Diameter:	3.80 inches	Volume:	60.54 bbl	Tool Weight:	1500.00 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:	0.00 ft	Diameter:	0.00 inches	Volume:	0.00 bbl	Weight to Pull Loose:	80000.00 lb
					Total Volume:	60.54 bbl	Tool Chased	0.00 ft
Drill Pipe Above KB:		13.00 ft					String Weight: Initial	59000.00 lb
Depth to Top Packer:		4330.00 ft					Final	59000.00 lb
Depth to Bottom Packer:		ft						
Interval between Packers:		12.00 ft						
Tool Length:		39.00 ft						
Number of Packers:		2	Diameter:	6.75 inches				

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths	
Change Over Sub	1.00			4304.00		
Shut In Tool	5.00			4309.00		
Hydraulic tool	5.00			4314.00		
Jars	5.00			4319.00		
Safety Joint	2.00			4321.00		
Packer	5.00			4326.00	27.00	Bottom Of Top Packer
Packer	4.00			4330.00		
Stubb	1.00			4331.00		
Recorder	0.00	8368	Inside	4331.00		
Recorder	0.00	6771	Outside	4331.00		
Perforations	6.00			4337.00		
Bullnose	5.00			4342.00	12.00	Bottom Packers & Anchor
Total Tool Length:	**39.00**					

DRILL STEM TEST REPORT

FLUID SUMMARY

Larson Engineering, Inc.

562 St. Rd 4
Olmitz, KS 67564

ATTN: Bob Lewellyn

Shapland #1-26

26-19-28 Lane, KS

Job Ticket: 37010 **DST#: 3**

Test Start: 2010.02.14 @ 10:10:37

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:	49.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	7.56 in³	Gas Cushion Type:			
Resistivity:	0.00 ohm.m	Gas Cushion Pressure:	psig		
Salinity:	3100.00 ppm				
Filter Cake:	1.00 inches				

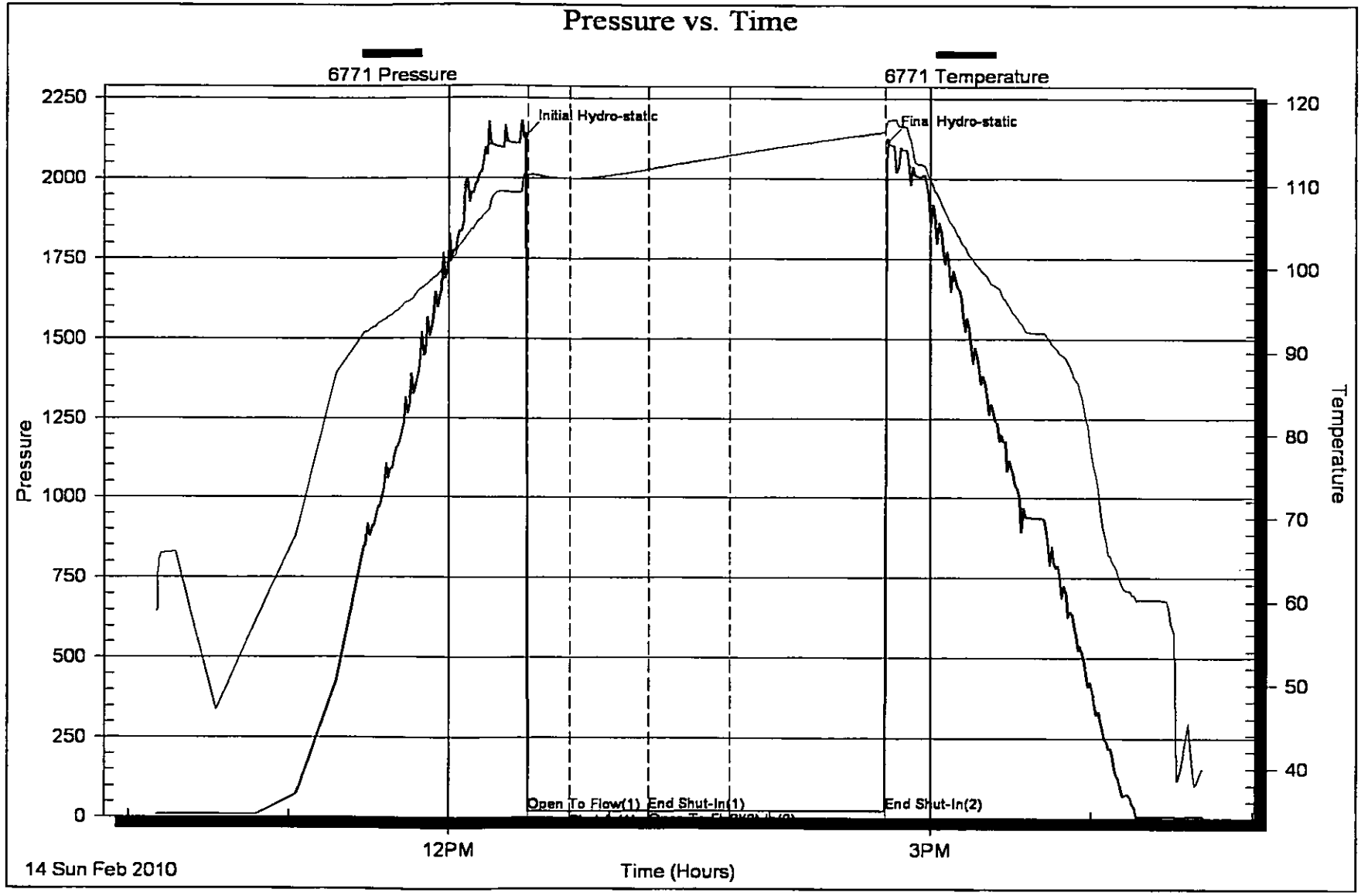
Recovery Information

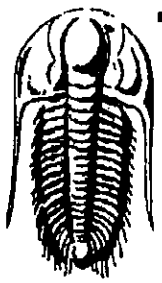
Recovery Table

Length ft	Description	Volume bbl
0.50	1/2'ft of mud 100%m	0.007

Total Length: 0.50 ft Total Volume: 0.007 bbl

Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
Laboratory Name: Laboratory Location:
Recovery Comments:


Pressure vs. Time
6771 Pressure
6771 Temperature
Initial Hydro-static
Final Hydro-static
Open To Flow(1)
End Shut-In(1)
End Shut-In(2)
Pressure
Temperature
Time (Hours)
12PM
3PM
14 Sun Feb 2010
2250
2000
1750
1500
1250
1000
750
500
250
0
120
110
100
90
80
70
60
50
40



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Prepared For: **Larson Engineering, Inc.**

562 St. Rd 4
Olmitz, KS 67564

ATTN: Bob Lewellyn

26-19-28 Lane, KS

Shapland #1-26

Start Date: 2010.02.15 @ 01:00:12
End Date: 2010.02.15 @ 10:35:52
Job Ticket #: 37011 DST #: 4

Trilobite Testing, Inc
PO Box 1733 Hays, KS 67601
ph: 785-625-4778 fax: 785-625-5620

DRILL STEM TEST REPORT

Larson Engineering, Inc.

562 St. Rd 4
Olmitz, KS 67564

ATTN: Bob Lewellyn

Shapland #1-26

26-19-28 Lane, KS

Job Ticket: 37011 DST#: 4

Test Start: 2010.02.15 @ 01:00:12

GENERAL INFORMATION:

Formation: L
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 03:55:52
Time Test Ended: 10:35:52

Test Type: Conventional Bottom Hole
Tester: Shane McBride
Unit No: 40

Interval: 4336.00 ft (KB) To 4346.00 ft (KB) (TVD)
Total Depth: 4346.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

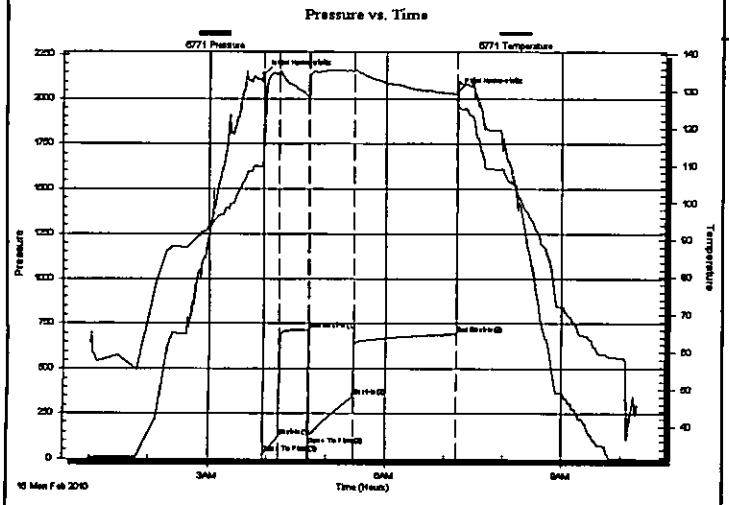
Reference Elevations: 2763.00 ft (KB)
2755.00 ft (CF)
KB to GR/CF: 8.00 ft

Serial #: 6771 Outside

Press@RunDepth: 344.52 psig @ 4337.00 ft (KB)
Start Date: 2010.02.15 End Date: 2010.02.15
Start Time: 01:00:12 End Time: 10:16:52

Capacity: 8000.00 psig
Last Calib.: 2010.02.15
Time On Btm: 2010.02.15 @ 03:55:37
Time Off Btm: 2010.02.15 @ 07:12:07

TEST COMMENT: B.O.B. in 8 min
No return
B.O.B. in 12 min.
No return



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2141.66	111.61	Initial Hydro-static
1	30.56	110.88	Open To Flow (1)
16	120.27	134.86	Shut-In(1)
46	717.22	128.54	End Shut-In(1)
47	124.14	128.99	Open To Flow (2)
92	344.52	135.46	Shut-In(2)
197	694.12	129.26	End Shut-In(2)
197	2042.98	129.38	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
120.00	s m c w 15%m 85%w	1.68
600.00	w ater 100%w	8.42
0.00	2"in of free oil on top	0.00

Gas Rates

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

TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

TOOL DIAGRAM

Larson Engineering, Inc.

562 St. Rd 4
Olmitz, KS 67564

ATTN: Bob Lewellyn

Shapland #1-26

26-19-28 Lane, KS

Job Ticket: 37011 **DST#: 4**

Test Start: 2010.02.15 @ 01:00:12

Tool Information

Drill Pipe:	Length:	4317.00 ft	Diameter:	3.80 inches	Volume:	60.56 bbl	Tool Weight:		1500.00 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:	0.00 ft	Diameter:	0.00 inches	Volume:	0.00 bbl	Weight to Pull Loose:		85000.00 lb
					Total Volume:	60.56 bbl	Tool Chased		0.00 ft
Drill Pipe Above KB:		8.00 ft					String Weight:	Initial	59000.00 lb
Depth to Top Packer:		4336.00 ft						Final	62000.00 lb
Depth to Bottom Packer:		ft							
Interval between Packers:		10.00 ft							
Tool Length:		37.00 ft							
Number of Packers:		2	Diameter:	6.75 inches					

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths	
Change Over Sub	1.00			4310.00		
Shut In Tool	5.00			4315.00		
Hydraulic tool	5.00			4320.00		
Jars	5.00			4325.00		
Safety Joint	2.00			4327.00		
Packer	5.00			4332.00	27.00	Bottom Of Top Packer
Packer	4.00			4336.00		
Stubb	1.00			4337.00		
Recorder	0.00	8368	Inside	4337.00		
Recorder	0.00	6771	Outside	4337.00		
Perforations	4.00			4341.00		
Bullnose	5.00			4346.00	10.00	Bottom Packers & Anchor
Total Tool Length:	**37.00**					

TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

FLUID SUMMARY

Larson Engineering, Inc.

562 St. Rd 4
Olmitz, KS 67564

ATTN: Bob Lewellyn

Shapland #1-26

26-19-28 Lane, KS

Job Ticket: 37011 **DST#: 4**

Test Start: 2010.02.15 @ 01:00:12

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:	34000 ppm
Viscosity:	49.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	7.18 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

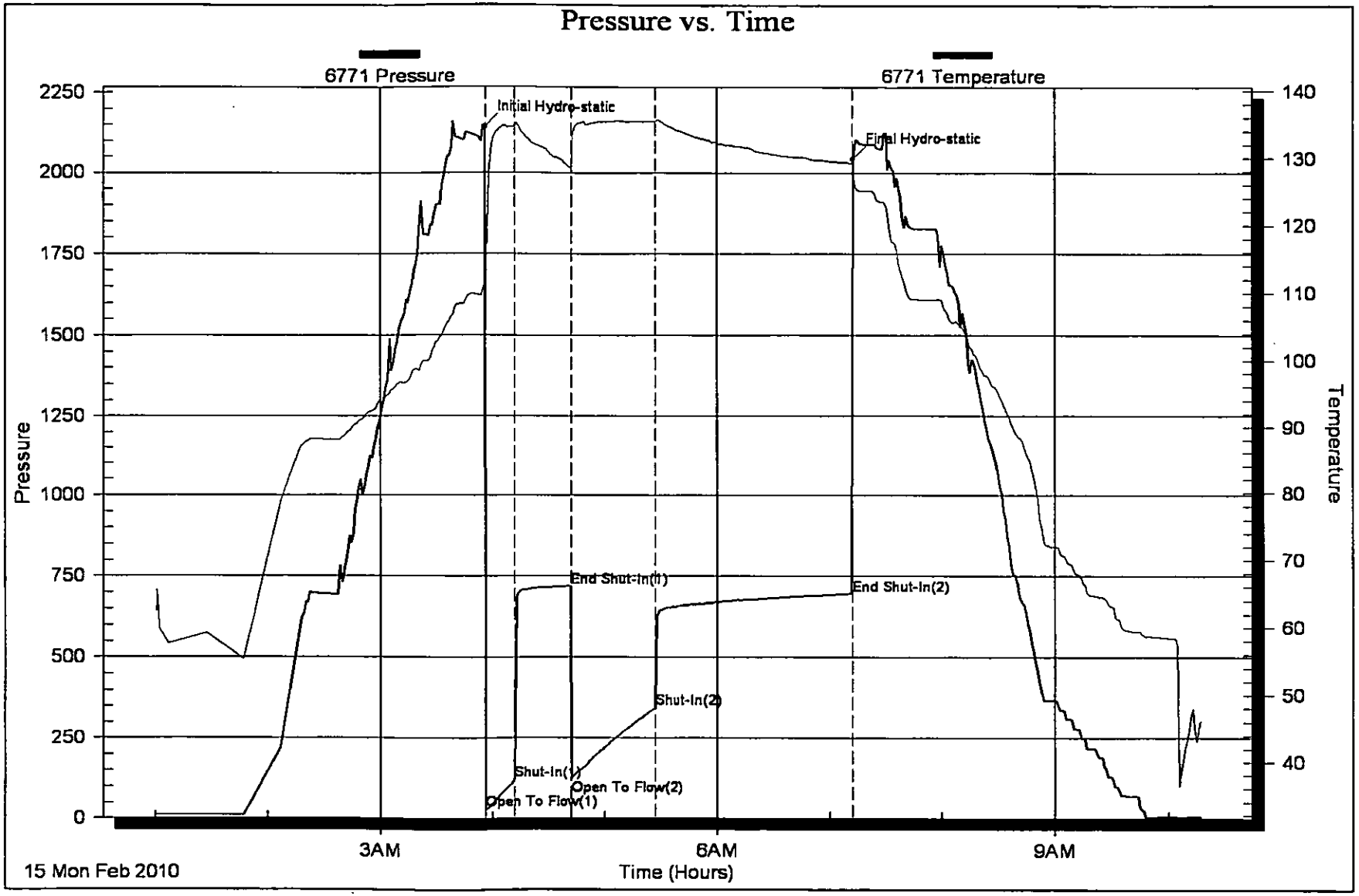
Length ft	Description	Volume bbl
120.00	s m c w 15%m 85%w	1.683
600.00	w ater 100%w	8.416
0.00	2"in of free oil on top	0.000

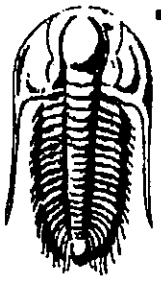
Total Length: 720.00 ft Total Volume: 10.099 bbl

Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:

Laboratory Name: Laboratory Location:

Recovery Comments: rw .277 @ 52*f=34,000 chlor


Pressure vs. Time
6771 Pressure
6771 Temperature
Initial Hydro-static
Final Hydro-static
End Shut-In(1)
End Shut-In(2)
Shut-In(2)
Shut-In(1)
Open To Flow(2)
Open To Flow(1)
Pressure
Temperature
2250
2000
1750
1500
1250
1000
750
500
250
0
140
130
120
110
100
90
80
70
60
50
40
3AM
6AM
9AM
15 Mon Feb 2010
Time (Hours)



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Prepared For: **Larson Engineering, Inc.**

562 St. Rd 4
Olmitz, KS 67564

ATTN: Bob Lewellyn

26-19-28 Lane, KS

Shapland #1-26

Start Date: 2010.02.16 @ 19:21:22
End Date: 2010.02.17 @ 02:50:22
Job Ticket #: 37012 DST #: 5

Trilobite Testing, Inc
PO Box 1733 Hays, KS 67601
ph: 785-625-4778 fax: 785-625-5620

DRILL STEM TEST REPORT

Larson Engineering, Inc.

562 St. Rd 4
Olmitz, KS 67564

ATTN: Bob Lewellyn

Shapland #1-26

26-19-28 Lane, KS

Job Ticket: 37012 **DST#: 5**

Test Start: 2010.02.16 @ 19:21:22

GENERAL INFORMATION:

Formation: **Pawnee-Ft Scott-John**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 21:28:07
Time Test Ended: 02:50:22

Test Type: Conventional Bottom Hole
Tester: Shane McBride
Unit No: 40

Interval: 4486.00 ft (KB) To 4636.00 ft (KB) (TVD)
Total Depth: 4636.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

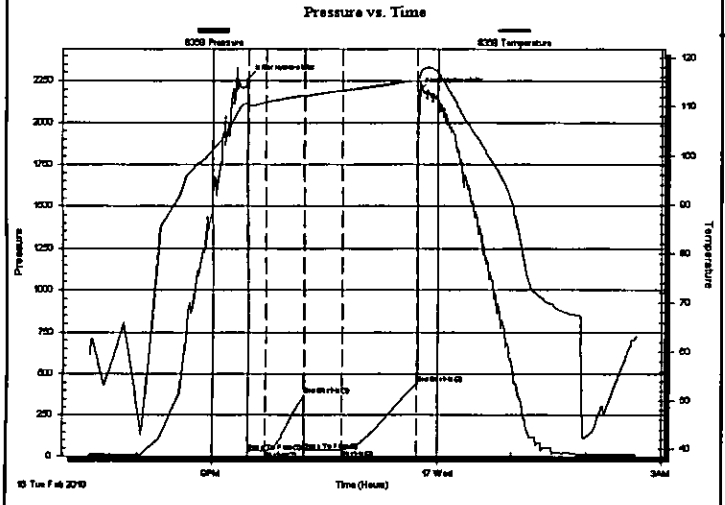
Reference Elevations: 2763.00 ft (KB)
2755.00 ft (CF)
KB to GR/CF: 8.00 ft

Serial #: 8368 **Inside**

Press@RunDepth: 37.67 psig @ 4491.00 ft (KB)
Start Date: 2010.02.16 End Date: 2010.02.17
Start Time: 19:21:22 End Time: 02:40:22

Capacity: 8000.00 psig
Last Calib.: 2010.02.17
Time On Btm: 2010.02.16 @ 21:27:52
Time Off Btm: 2010.02.16 @ 23:44:07

TEST COMMENT: 1/4"in blow died back to w eak surface blow
No return
No blow
No return



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2261.33	110.98	Initial Hydro-static
1	30.47	109.64	Open To Flow (1)
15	34.31	110.87	Shut-In(1)
45	370.84	112.31	End Shut-In(1)
46	35.73	112.07	Open To Flow (2)
76	37.67	113.25	Shut-In(2)
136	444.75	115.35	End Shut-In(2)
137	2187.79	115.97	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
10.00	mud 100%m	0.05

Gas Rates

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

DRILL STEM TEST REPORT

TOOL DIAGRAM

Larson Engineering, Inc.

562 St. Rd 4
Olmitz, KS 67564

ATTN: Bob Lewellyn

Shapland #1-26

26-19-28 Lane, KS

Job Ticket: 37012 **DST#: 5**

Test Start: 2010.02.16 @ 19:21:22

Tool Information

Drill Pipe:	Length:	4292.00 ft	Diameter:	3.80 inches	Volume:	60.21 bbl	Tool Weight:		1500.00 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:	180.00 ft	Diameter:	2.25 inches	Volume:	0.89 bbl	Weight to Pull Loose:		85000.00 lb
					Total Volume:	61.10 bbl	Tool Chased		0.00 ft
Drill Pipe Above KB:		9.00 ft					String Weight:	Initial	71000.00 lb
Depth to Top Packer:		4486.00 ft						Final	71000.00 lb
Depth to Bottom Packer:		ft							
Interval between Packers:		154.00 ft							
Tool Length:		177.00 ft							
Number of Packers:		2	Diameter:	6.75 inches					

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths	
Change Over Sub	1.00			4464.00		
Shut In Tool	5.00			4469.00		
Hydraulic tool	5.00			4474.00		
Jars	5.00			4479.00		
Safety Joint	2.00			4481.00		
Packer	5.00			4486.00	23.00	Bottom Of Top Packer
Packer - Shale	4.00			4490.00		
Stubb	1.00			4491.00		
Recorder	0.00	8368	Inside	4491.00		
Recorder	0.00	6771	Outside	4491.00		
Perforations	21.00			4512.00		
Change Over Sub	1.00			4513.00		
Drill Pipe	121.00			4634.00		
Change Over Sub	1.00			4635.00		
Bullnose	5.00			4640.00	154.00	Anchor Tool
Total Tool Length:	**177.00**					

TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

FLUID SUMMARY

Larson Engineering, Inc.

562 St. Rd 4
Olmitz, KS 67564

ATTN: Bob Lewellyn

Shapland #1-26

26-19-28 Lane, KS

Job Ticket: 37012 **DST#: 5**

Test Start: 2010.02.16 @ 19:21:22

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:	53.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	7.19 in³	Gas Cushion Type:			
Resistivity:	0.00 ohm.m	Gas Cushion Pressure:	psig		
Salinity:	2700.00 ppm				
Filter Cake:	1.00 inches				

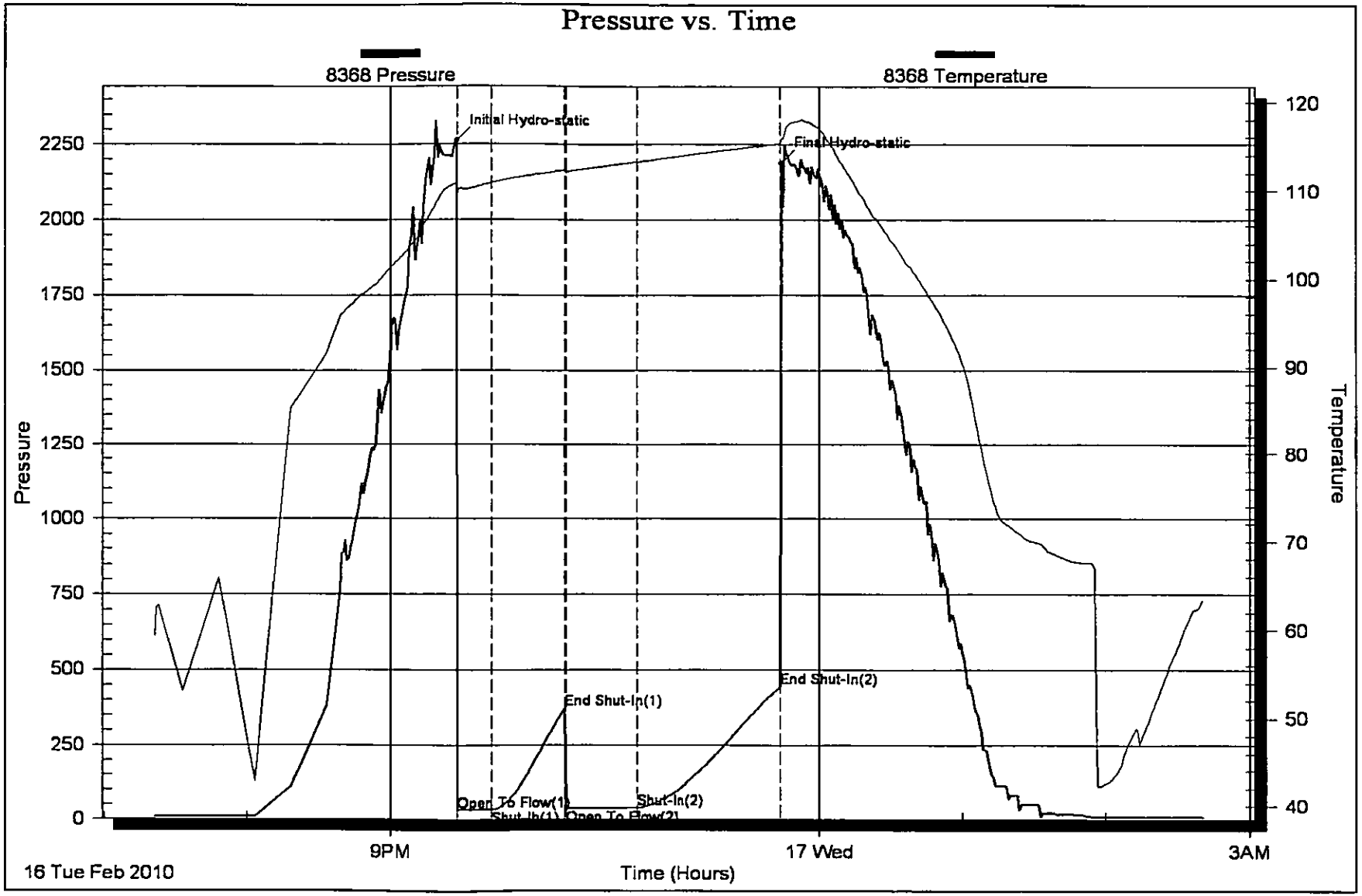
Recovery Information

Recovery Table

Length ft	Description	Volume bbl
10.00	mud 100%m	0.049

Total Length: 10.00 ft Total Volume: 0.049 bbl

Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
Laboratory Name: Laboratory Location:
Recovery Comments:


Pressure vs. Time
8368 Pressure
8368 Temperature
Initial Hydro-static
Final Hydro-static
End Shut-In(1)
End Shut-In(2)
Open To Flow(1)
Shut-In(1)
Shut-In(2)
Open To Flow(2)
Pressure
Temperature
2250
2000
1750
1500
1250
1000
750
500
250
0
120
110
100
90
80
70
60
50
40
9PM
17 Wed
3AM
16 Tue Feb 2010
Time (Hours)