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JUL 12 2010

KANSAS CORPORATION COMMISSION
OIL & GAS CONSERVATION DIVISION
WELL COMPLETION FORM

ORIGINAL

Form ACO-1
October 2008
Form Must Be Typed

7/9/12

KCC WICHITA

WELL HISTORY - DESCRIPTION OF WELL & LEASE

CONFIDENTIAL

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

CONTRACTOR: License # 5822

Name: VAL ENERGY, INC.

Wellsite Geologist: ROBERT LEWELLYN

Purchaser: NCRA

Designate Type of Completion:

- New Well Re-Entry Workover
 - Oil SWD SLOW
 - Gas ENHR SIGW
 - CM (Coal Bed Methane) Temp. Abd.
 - 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.

3/16/2010 3/31/2010 4/12/2010

Spud Date or Recompletion Date Date Reached TD Completion Date or Recompletion Date

API No. 15 - 171-20753-00-00

Spot Description:

- SE - SE - SE Sec. 15 Twp. 17 S. R. 31 East West

330 feet from SOUTH Line of Section

330 feet from EAST Line of Section

Footages Calculated from Nearest Outside Section Corner:

NE NW SE SW

County: SCOTT

Lease Name: OHMART Well #: 1-15

Field Name: WILDCAT

Producing Formation: LANSING, MARMATON, CHEROKEE

Elevation: Ground: 2919' Kelly Bushing: 2924'

Total Depth: 4624' Plug Back Total Depth: 4578'

Amount of Surface Pipe Set and Cemented at: 257 Feet

Multiple State Cementing Collar Used? Yes No

If yes, show depth set: 2239 Feet

If Alternate II completion, cement circulated from: 2239

feet depth to: SURFACE w/ 250 sx cmt.

Drilling Fluid Management Plan *ATTN 7-14-10*
(Data must be collected from the Reserve Pit)

Chloride content: 8800 ppm Fluid volume: 650 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*

Title: SECRETARY/TREASURER Date: 7/9/2010

Subscribed and sworn to before me this 9TH day of JULY

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

Y Letter of Confidentiality Received 7/9/10 - 7/9/12

If Denied, Yes Date: _____

Wireline Log Received

Geologist Report Received

UIC Distribution

KCC

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Operator Name: LARSON ENGINEERING, INC. Lease Name: OHMART Well #: 1-15

Sec. 15 Twp. 17 S. R. 31 East West County: SCOTT

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 Yes No
 (Attach Additional Sheets)

Samples Sent to Geological Survey Yes No

Cores Taken Yes No

Electric Log Run Yes No
 (Submit Copy)

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

<input checked="" type="checkbox"/> Log	Formation (Top), Depth and Datum	<input type="checkbox"/> Sample
Name	Top	Datum
ANHYDRITE	2244	+680
BASE ANHYDRITE	2304	+620
HEEBNER SH	3897	-973
LANSING-KC	3944	-1020
STARK SH	4219	-1295
BASE KC	4299	-1375
ALTAMONT	4347	-1423
PAWNEE	4418	-1494
FORT SCOTT	4469	-1545
CHEROKEE	4492	-1568
MISSISSIPPIAN	4567	-1643

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CASING RECORD <input checked="" 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
SURFACE	12-1/4"	8-5/8"	23#	257'	CLASS A	175	2% GEL, 3% CC
PRODUCTION	7-7/8"	5-1/2"	15.5#	4622'	SMD	100	1/4#/SK FLOCELE
					EA-2	100	7#/SK GILSONITE, 1/4#/SK FLOCELE & 1/2% CFR-1

ADDITIONAL CEMENTING/SQUEEZE RECORD					
Purpose:	Depth		Type of Cement	# Sacks Used	Type and Percent Additives
	Top	Bottom			
<input type="checkbox"/> Perforate <input type="checkbox"/> Protect Casing <input type="checkbox"/> Plug Back TD <input type="checkbox"/> Plug Off Zone	SURF	2239'	SMD	250	1/4#/SK FLOCELE

Shots per Foot	PERFORATION RECORD - Bridge Plugs Set/Type		Acid. Fracture, Shot, Cement, Squeeze Record	
	Specify Footage of Each Interval Perforated		(Amount and Kind of Material Used)	
4	4556-60, 4543-47, 4533-35		250 GAL 15% NEFe	4556-60, 4543-47, 4533-35
4	4509-12, 4499-4501, 4369-72, 4261-65		250 GAL 15% NEFe	4499-4501, 4509-12
			250 GAL 15% MCA	4369-72
			250 GAL 15% MCA	4261-65

TUBING RECORD: Size: 2-3/8" Set At: 4569' Packer At: _____ Liner Run: Yes No

Date of First, Resumed Production, SWD or Enhr. 4/12/10 Producing Method: Flowing Pumping Gas Lift Other (Explain)

Estimated Production Per 24 Hours	Oil Bbls. <u>144</u>	Gas Mcf <u>21</u>	Water Bbls. <u>21</u>	Gas-Oil Ratio	Gravity <u>33</u>
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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 checked="" type="checkbox"/> Perf. <input type="checkbox"/> Dually Comp. <input type="checkbox"/> Commingled <input type="checkbox"/> Other (Specify)	PRODUCTION INTERVAL: <u>4261-4560 OA</u>
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ALLIED CEMENTING CO., LLC. 039212

KCC

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

SERVICE POINT:

Oakley

DATE <u>3-17-10</u>	SEC. <u>15</u>	TWP. <u>17</u>	RANGE <u>31</u>	CALLED OUT	ON LOCATION	JOB START <u>4:00 AM</u>	JOB FINISH <u>4:30 AM</u>
LEASE <u>Ohmart</u>	WELL # <u>1-15</u>	LOCATION <u>manning</u>	<u>IN WINTO</u>	COUNTY <u>SCOTT</u>	STATE <u>KS</u>		
OLD OR <u>NEW</u> (Circle one)							

CONTRACTOR Val #4

TYPE OF JOB Surface

HOLE SIZE 12 1/4 T.D. 265

CASING SIZE 8 5/8 DEPTH 269'

TUBING SIZE DEPTH

DRILL PIPE DEPTH

TOOL DEPTH

PRES. MAX MINIMUM

MEAS. LINE SHOE JOINT

CEMENT LEFT IN CSG. 15'

PERFS.

DISPLACEMENT 16.17 BBL

OWNER Same

CEMENT

AMOUNT ORDERED 175 sks com 3% a

2% gel

COMMON	<u>175 sks</u>	@	<u>15.45</u>	<u>2703.25</u>
POZMIX		@		
GEL	<u>3 sks</u>	@	<u>20.80</u>	<u>62.40</u>
CHLORIDE	<u>6 sks</u>	@	<u>58.20</u>	<u>349.20</u>
ASC		@		
		@		
		@		
		@		
		@		
		@		
		@		
		@		
HANDLING	<u>184 sks</u>	@	<u>2.40</u>	<u>441.60</u>
MILEAGE	<u>10 1/2 sk/mile</u>			<u>920.00</u>
				TOTAL <u>4476.95</u>

EQUIPMENT

PUMP TRUCK CEMENTER Andrew

423-281 HELPER Larone

BULK TRUCK

377 DRIVER Darrin

BULK TRUCK

DRIVER

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REMARKS: JUL 12 2010

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Cement did circulate

thank you

CHARGE TO: Larson Engineering

STREET _____

CITY _____ STATE _____ ZIP _____

SERVICE

DEPTH OF JOB	<u>269'</u>		
PUMP TRUCK CHARGE			<u>1018.00</u>
EXTRA FOOTAGE		@	
MILEAGE	<u>50 miles</u>	@	<u>7.00</u> <u>350.00</u>
MANIFOLD		@	
		@	
		@	
TOTAL <u>1368.00</u>			

PLUG & FLOAT EQUIPMENT

	@	
	@	
	@	
	@	
	@	
TOTAL _____		

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.

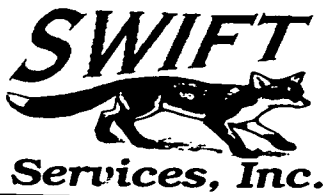
SALES TAX (If Any) _____

TOTAL CHARGES _____

DISCOUNT _____ IF PAID IN 30 DAYS

PRINTED NAME Larry Hinderliter

SIGNATURE Larry Hinderliter



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

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TICKET
 18436

PAGE 1 OF 2

1. SERVICE LOCATIONS <u>Ness City KS</u>	WELL/PROJECT NO. <u>1-15</u>	LEASE <u>Ohmart</u>	COUNTY/PARISH <u>Scott</u>	STATE <u>KS</u>	CITY <u>Ness City</u>	DATE <u>3-31-10</u>	OWNER
2. TICKET TYPE <input checked="" type="checkbox"/> SERVICE <input type="checkbox"/> SALES	CONTRACTOR <u>Val Drly. Inc</u>		RIG NAME/NO. <u>4</u>	SHIPPED VIA	DELIVERED TO <u>Manning</u>	ORDER NO.	
3. WELL TYPE <u>Oil</u>	WELL CATEGORY <u>Development</u>	JOB PURPOSE <u>Cement 5 1/2 Casing</u>		WELL PERMIT NO.	WELL LOCATION <u>Manning IN Winto</u>		
4. REFERRAL LOCATION	INVOICE INSTRUCTIONS						

PRICE REFERENCE	SECONDARY REFERENCE/ PART NUMBER	ACCOUNTING			DESCRIPTION	QTY.		UM		UNIT PRICE	AMOUNT
		LOC	ACCT	DF							
575		1			MILEAGE Trk# 114	50	mi			5.00	250.00
578		1			Pump Charge Longstring	1	cc			1400.00	1400.00
221		1			Liquid KCL	2	gal			25.00	50.00
419		1			Rotating Head Rental	1	cc			150.00	150.00

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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 T.C. Larson
 DATE SIGNED 3-31-10 TIME SIGNED 0030 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	1850.00
OUR EQUIPMENT PERFORMED WITHOUT BREAKDOWN?					
WE UNDERSTOOD AND MET YOUR NEEDS?					
OUR SERVICE WAS PERFORMED WITHOUT DELAY?					
WE OPERATED THE EQUIPMENT AND PERFORMED JOB CALCULATIONS SATISFACTORILY?					
ARE YOU SATISFIED WITH OUR SERVICE?	<input type="checkbox"/> YES	<input type="checkbox"/> NO			
<input type="checkbox"/> CUSTOMER DID NOT WISH TO RESPOND				TOTAL	6288.15

sub total 6029.00
 TAX Scott 7.3% 259.15
 Page #2 4179.00

CUSTOMER ACCEPTANCE OF MATERIALS AND SERVICES The customer hereby acknowledges receipt of the materials and services listed on this ticket.
 SWIFT OPERATOR Brett Corsic APPROVAL _____

Thank You!



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

TICKET CONTINUATION

TICKET No. 18436

CUSTOMER Larson Engineering WELL Ohmart 1-15 DATE 3-31-10 PAGE 2 OF 2

PRICE REFERENCE	SECONDARY REFERENCE / PART NUMBER	ACCOUNTING			TIME	DESCRIPTION	QTY.		U/M		UNIT PRICE	AMOUNT
		LOC	ACCT	DF								
325		1				Standard Cement EA2	100	sk			11.00	1100.00
330		1				Swift Multi-Density Standard	100	sk			14.00	1400.00
276		1				Flocele	50	lbs			1.50	75.00
277		1				Gilsonite	700	lbs			0.40	280.00
283		1				Salt	500	lbs			0.15	75.00
284		1				Cal Seal	5	sk			30.00	150.00
285		1				CFR-1	50	lbs			4.00	200.00
290		1				D-Air	2	gal			35.00	70.00
<p>KCC JUL 09 2010 CONFIDENTIAL</p>												
<p>RECEIVED JUL 12 2010 KCC WICHITA</p>												
581		1				SERVICE CHARGE	CUBIC FEET 200				1.50	300.00
583		1				MILEAGE CHARGE	TOTAL WEIGHT 21160	LOADED MILES 50	TON MILES 529.00		1.00	529.00

CONTINUATION TOTAL 4179.00

JOB LOG

SWIFT Services, Inc.

DATE 3-31-10 PAGE NO.

CUSTOMER Larsen Engineering WELL NO. 1-15 LEASE Ohmart JOB TYPE Cement 5 1/2 Casing TICKET NO. 18436

CHART NO.	TIME	RATE (BPM)	VOLUME (BBL) (GAL)	PUMPS		PRESSURE (PSI)		DESCRIPTION OF OPERATION AND MATERIALS
				T	C	TUBING	CASING	
	1230							On Location 5 1/2 IS. 5# PC @ 2239'
								TD-4624 PS-4620 SJ-42'
								KCC JUL 09 2010 CONFIDENTIAL
	130							Break Circulation
	230	6 1/2	32	✓			250	Pump Mud Sweep + KCL Flush
	235	3	7	✓				Plug Rat Hole 30 sks
	240	3	5	✓				Plug Mouse Hole 20 sks
	245			✓				Start Cement 50 sks SMD @ 12.5 pps
		4	19	✓			200	Cement 100 sks EA-2 @ 15.3 pps
	310		43				-	Shut Down - Release Plug - Wash Pump In
	315	6 3/4		✓			200	Start Displacement
		6 3/4	77	✓			300	Lift Cement
							850	Max Lift
	330		108.9				1500	Land Plug - Release - Hold
								Wash Truck
	400							Job Complete
								Thank you Brett, Dave & Jason

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

TICKET
17810

PAGE 1 OF 1

SERVICE LOCATIONS: 1. **NESS CITY**
 WELL/PROJECT NO.:
 LEASE: **OHMART 1-15**
 COUNTY/PARISH: **SCOTT**
 STATE: **KS**
 CITY: **MANNING, KS.**
 DATE: **1 APR 10**
 OWNER:
 TICKET TYPE: SERVICE SALES
 CONTRACTOR: **WILD WEST WELL SERV.**
 RIG NAME/NO.:
 SHIPPED VIA: **LOCATION**
 ORDER NO.:
 WELL TYPE: **OIL**
 WELL CATEGORY: **DEVELOPMENT**
 JOB PURPOSE: **CEMENT PORT COLLAR**
 WELL PERMIT NO.:
 WELL LOCATION: **IN, WENTO**
 REFERRAL LOCATION:
 INVOICE INSTRUCTIONS:

PRICE REFERENCE	SECONDARY REFERENCE/ PART NUMBER	ACCOUNTING			DESCRIPTION	QTY.		UNIT PRICE		AMOUNT
		LOC	ACCT	DF			UM		UM	
575		1			MILEAGE #110	60	MIL	5	⁰⁰	300 ⁰⁰
576D		1			PUMP CHARGE	1	SRB	1100	⁰⁰	1100 ⁰⁰
290		1			D-AIR	2	GR	35	⁰⁰	70 ⁰⁰
276		1			FLOCELE	65	lbs	1	⁵⁰	97 ⁵⁰
RECEIVED JUL 12 2010										
330	KCC WICHITA	1			SWIFT MULTI-DENSITY STANDARD	250	SKS	14	⁰⁰	3500 ⁰⁰
581		1			SERVICE CHARGE CEMENT	250	SKS	1	⁵⁰	375 ⁰⁰
583		1			DRAYAGE.	24915	lbs	747.45	⁴⁵	747 ⁴⁵

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

X T.C. Larson
 DATE SIGNED: **1 APR 10** TIME SIGNED: **1730** 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?				6189 ⁹⁵
WE UNDERSTOOD AND MET YOUR NEEDS?				
OUR SERVICE WAS PERFORMED WITHOUT DELAY?				Scott TAX 7.3% 267 ⁷³
WE OPERATED THE EQUIPMENT AND PERFORMED JOB CALCULATIONS SATISFACTORILY?				
ARE YOU SATISFIED WITH OUR SERVICE? <input type="checkbox"/> YES <input type="checkbox"/> NO				TOTAL 6457 ⁶⁸
<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!

JOB LOG

SWIFT Services, Inc.

DATE **1 APR 10** PAGE NO. **1**

CUSTOMER
LARSON ENGINEERING

WELL NO.:

LEASE
OHMART 1-15

JOB TYPE
CEMENT PORT COLLAR

TICKET NO. **17810**

CHART NO.	TIME	RATE (BPM)	VOLUME (BBL/DAY)	PUMPS		PRESSURE (PSI)		DESCRIPTION OF OPERATION AND MATERIALS
				T	C	TUBING	CASING	
	1410							ON LOCATION
								P.C. @ 2239
	1530						1000	PRESSURE UP - HELD
	1535							OPEN PORT COLLAR TAKE LWS. RATE.
	1540	4	138				400 AU.	MIX 250 SKS CIRCULATE TO SURFACE. 25 SKS TO PIT
			7 1/2					DISPLACE CEMENT
	1638						1000	CLOSE PORT COLLAR PRESSURE UP - HELD.
								RUN 4 JTS.
	1645		25					REVERSE CLEAN
	1710							WASH TRUCK UP.
	1730							JOB COMPLETE.
								THANKS #110
								JASON ROBER, ROB
								RECEIVED
								JUL 12 2010
								KCC WICHITA

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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

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GEOLOGICAL REPORT

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Larson Engineering, Inc.
Ohmart No. 1-15
330' FSL & 330' FEL Sec. 15-17S-31W
Scott County, Kansas

CONTRACTOR: H D Drilling, LLC

SPUDDED: March 16, 2010

DRILLING COMPLETED: March 30, 2010

SURFACE CASING: 8 5/8" @ 257 KBM/175 sx,

ELECTRIC LOGS: Log-Tech DIL CNL/CDL MEL

ELEVATIONS: 2924 KB 2919 GL

FORMATION TOPS (Electric Log):

Anhydrite	2244 (+ 680)
Base Anhydrite	2304 (+ 620)
Heebner Shale	3897 (- 973)
Lansing-Kansas City Group	3944 (-1020)
Muncie Creek Shale	4126 (-1202)
Stark Shale	4219 (-1295)
Hushpuckney shale	4257 (-1333)
Base Kansas City	4299 (-1375)
Altamont	4347 (-1423)
Pawnee	4418 (-1494)
Myrick Station	4447 (-1523)
Fort Scott	4469 (-1545)
Cherokee	4492 (-1568)
Mississippian	4567 (-1643)
Electric Log Total Depth	4624 (-1700)

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. There were some measurement discrepancies in this well that will be discussed in the recommendations section.

Topeka Zones:

3909-3920

Limestone, cream to buff, finely crystalline, chalky in part, fair to good intercrystalline porosity, some fair vugular porosity, good spotted stain, trace of saturated stain, fair to good show of free oil, good odor, fair fluorescence, fair to good cut, grades to chalky lime in base of section.

Drill Stem Test No. 1 3884-3916

15-30-30-60; blow built to 3 ½ inches on first flow, no blowback; blow built to 4 ½ inches on second flow, no blowback; recovered a splash of clean oil (2 or 3 inches), 80 feet of water cut mud (40% water, 60% mud) and 10 feet of mud. ISIP 1111# FSIP 1114# IFP 16-26# FFP 29-51# IHP 1864# FHP 1846# BHT 119 degrees.

Lansing-Kansas City Zones:

3944-3968 (A Zone)

Limestone, cream to buff, dense to finely crystalline, some mealy and chalky, mostly tight with only a trace of very poor intercrystalline porosity, some scattered dead stain, rare trace of very poor live stain, no free oil, no odor, no fluorescence, no cut. Zone warrants no further evaluation.

3974-3982 (B Zone)

Limestone, cream to buff, some tan, finely crystalline, some medium crystalline, slightly fossiliferous, fair to good intercrystalline and small vug porosity, some interfossil porosity, fair to good spotted stain, good show of free oil, fair to good odor, fair fluorescence, good cut. Trace of scattered crystal overgrowth.

Drill Stem Test No. 2 3950-3987

15-30-30-60; blow built to ¾" blow on first flow; blow did not return on second flow; recovered 10 feet of mud. ISIP 1013# FSIP 964# IFP 14-17# FFP 18-20# IHP 1900# FHP 1887# BHT 115 degrees

3994-4028 (C/D Zone)

Limestone, cream, dense with much cream chalky, trace of finely crystalline with very poor intercrystalline porosity and very poor vugular porosity, trace of scattered dead stain, no live stain, no free oil, no odor, no fluorescence, no cut, zone is mostly tight with no shows of live oil.

4036-4041 (E Zone)

Limestone, buff, some tan, dense to finely crystalline, some oolitic, fair to good intercrystalline and interoolitic porosity, fair spotted stain, good show of free oil, good odor, fair fluorescence, good cut.

Drill Stem Test No. 3 4026-4045

15-30-30-60; blow built to ¾" on first flow, no blowback; blow did not return on second flow; recovered five feet of clean oil and 10 feet of oil cut mud (10% oil, 90% mud); ISIP 974# FSIP 935# IFP 12-16# FFP 17-19# IHP 1959# FHP 1950# BHT 118 degrees

4049-4058 (F Zone)

Limestone, buff to tan, finely crystalline and partly oolitic, trace of very poor intercrystalline and interoolitic porosity with scattered traces of poor spotted stain, very slight show of free oil, no odor, no fluorescence, no cut.

4068-4072 & 4080-4094 (G Zone)

Limestone, cream to buff to tan, dense to finely crystalline with much chalk, trace of oolitic with poor oolitic porosity, no show of oil, some fresh chert, tan to gray, opaque, lower portion of section is cream, finely crystalline and chalky limestone, mostly tight with no shows of oil.

4130-4138 (H Zone)

Limestone, cream to buff, some tan, dense to finely crystalline, slightly fossiliferous and oolitic, some fair intercrystalline porosity with fair vugular porosity, trace of fair interoolitic and interfossil porosity, fair spotted stain, trace of saturated stain, fair to good show of free oil, good odor, fair fluorescence, good cut.

Drill Stem Test No. 4 4105-4128

15-30-30-60; blow off bottom of bucket in two minutes on first flow, no blowback; blow off bottom of bucket in two minutes on second flow, no blowback; recovered 201 feet of water cut mud (20% water, 80% mud), 1768 feet of slightly mud cut water (95% water, 5% mud), and 30 feet of mud. ISIP 1070# FSIP 1072# IFP 134-501# FFP 506-921# IHP 1986# FHP 1966# BHT 129 degrees.

4164-4169 (I Zone)

Limestone, tan to brown, "resinous" in part, finely crystalline, slightly fossiliferous, slightly cherty, fair intercrystalline and vugular porosity, good spotted stain, trace of saturated stain, good show of free oil, good odor, fair fluorescence, good cut.

Drill Stem Test No. 5 4144-4172

15-30-30-60; blow built to one inch on first flow, no blowback; blow built to one inch on second flow, no blowback; recovered 40 feet of slightly water cut mud (5% water, 95% mud). ISIP 967# FSIP 961# IFP 13-19# FFP 20-31# IHP 2011# FHP 1988# BHT N/A.

4200-4219 (J Zone)

Limestone, cream to buff, dense to finely crystalline and chalky, very slightly oolitic, zone is mostly tight with no shows of oil.

4221-4230 (K Zone)

Limestone, buff to tan and brown, dense to finely crystalline, partly fossiliferous, partly oolitic, some cherty, fair scattered intercrystalline and interfossil porosity, fair spotted stain, fair to good show of free oil, good odor, fair fluorescence, fair cut, some brown fresh chert, opaque.

Drill Stem Test No. 6 4202-4230

15-30-30-60; blow built to 3 ½ inches on first flow, no blowback; blow built to 4 ½ inches on second flow, no blowback; recovered 85 feet of slightly water cut mud (10% water, 90% mud), and 20 feet mud. ISIP 915# FSIP 907# IFP 16-35# FFP 36-66# IHP 2067# FHP 2069# BHT 126 degrees.

4260-4266 (Middle Creek Zone)

Limestone, buff to tan, dense to finely crystalline, some mealy, fossiliferous in part, fair intercrystalline porosity, some small vug porosity, fair spotted stain, fair to good show of free oil, fair odor, fair fluorescence, fair cut.

Drill Stem Test No. 7 4250-4270

15-30-30-60; blow built to ½ inch on first flow, no blowback; blow built to ¾ inch on second flow, no blowback; recovered 10 feet of oil cut mud (10% oil, 90% mud). ISIP 97# FSIP 94# IFP 13-17# FFP 17-19# IHP 2111# FHP 2106# BHT 119#.

4272-4281 (L Zone)

Limestone, buff to tan, some brown, some "resinous", dense to finely crystalline, fossiliferous in part, scattered poor to fair intercrystalline and interfossil porosity, poor to fair spotted stain, fair show of free oil, fair to good odor, fair fluorescence, fair cut, zone

contains a few scattered pieces of limestone containing some rhombic calcite crystal overgrowth.

Drill Stem Test No. 8

4270-4280

15-30-30-60; blow built to 1 ½ inches on first flow, no blowback; blow built to 2 inches, no blowback; recovered 80 feet of water cut mud (20% water, 80% mud) and 10 feet of mud. ISIP 891# FSIP 881# IFP 15-27# FFP 28-52# IHP2113# FHP 2111# BHT 121 degrees.

4299-4336 (Pleasanton Zone)

This section consisted of limestone, buff, finely crystalline, some scattered oolitic, trace of scattered poor intercrystalline and interoolitic porosity, poor spotted stain, questionable odor to faint odor, slight show of free oil, no fluorescence, poor cut.

4336-4342 (Lenapah Zone)

Limestone, buff to tan, some brown, dense to finely crystalline and slightly fossiliferous, zone is mostly tight with no shows of oil.

4368-4371 (Altamont Zone)

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

Drill Stem Test No. 9

4286-4380

15-30-45-60; quarter inch blow, died in 12 minutes of first flow; blow did not return on second flow period; recovered 10 feet of oil cut mud (50% oil, 50% mud), 15 feet of slightly oil cut mud (5% oil, 95% mud). ISIP 903# FSIP 732# IFP 17-20# FFP 21-26# IHP 2108# FHP 2101# BHT 120 degrees.

4418-4445 (Pawnee Zone)

The Pawnee section consisted of limestones, cream to buff, some tan and brown, dense to finely crystalline with some scattered chalky, trace of scattered poor intercrystalline porosity, trace of dead stain, rare trace of black stringy, tarry free oil, no odor to questionable odor, no live free oil, no fluorescence, no cut, trace of buff crystal overgrowth in brown limestone.

4447-4455 (Myrick Station Zone)

Limestone, tan to brown, dense, some finely crystalline, partly oolitic, partly fossiliferous, rare trace of spotted stain in tight pieces, no free oil, no odor, no fluorescence, no cut.

4469-4492 (Fort Scott Zone)

Limestone, buff to tan, some brown, dense to finely crystalline, some oolitic, poor to fair intercrystalline porosity, scattered fair spotted stain, fair show of free oil, fair odor, poor fluorescence, poor cut. Lower portion is limestone, tan to brown, dense to finely crystalline, poor intercrystalline porosity, poor to fair spotted stain and trace of free oil, faint odor, no fluorescence, poor cut.

4494-4500 (Cherokee Limestone)

Limestone, buff to tan to brown, dense to finely crystalline, poor to fair vugular "edge" porosity and fair intercrystalline porosity, poor to fair spotted stain, fair show of free oil, fair to good odor, poor fluorescence, fair cut.

Drill Stem Test No. 10 4400-4500

15-30-30-60; one-half inch blow throughout first flow period; weak surface blow throughout second flow period; recovered 15 feet of mud. ISIP 815# FSIP 595# IFP 18-21# FFP 25-24# IHP 2181# FHP 2155# BHT 123 degrees.

4525-4552 (Johnson Zone)

Limestone, buff to tan to brown, dense to finely crystalline, slightly fossiliferous, poor to fair vugular and intercrystalline porosity, fair to good spotted stain, trace of saturated stain, fair show of free oil, fair to good odor, poor to fair fluorescence, fair to good cut.

4555-4564 (Cherokee Sand)

Sand, white to gray, very fine grained to fine grained, sub-round, well sorted, calcareous, well cemented, poor intergranular porosity with some scattered friable sand, good spotted to saturated stain, good show of free oil, good odor, fair to good fluorescence, good cut.

Drill Stem Test No. 11 4506-4565

15-30-30-60; blow off bottom of bucket in five minutes of first flow, no blowback; blow off bottom of bucket in four minutes of second flow, blowback in 20 minutes built to 1 1/2" blow; recovered 30 feet of clean oil, 124 feet of gas cut muddy oil (20% gas, 50% oil, 30% mud), 62 feet of mud cut gassy oil (30% gas, 50% oil, 20% mud), 62 feet of gas cut muddy oil (20% gas, 50% oil, 30% mud). ISIP 940# FSIP 1067# IFP 27-70# FFP 76-118# IHP 2249# FHP 2387# BHT 129 degrees.

4567-4628 (Mississippian Zone)

The Mississippian section consisted of limestone, slightly dolomitic, cream to buff, dense to finely crystalline and chalky, flaky and brittle, mostly tight with rare traces of gilsonite and no shows of live oil. The limestone is occasionally interbedded with dolomite which contains some poor intercrystalline porosity and no shows of oil.

Conclusions and Recommendations:

A number of intervals in the No. 1-15 Ohmart appear to have the possibility of being productive of commercial quantities of oil. These zones should be perforated and production tested as per Tom Larson and Kyle Carter, with treatment as necessary to facilitate production.

A number of measurement issues occurred in the drilling of the Ohmart well. Repairs on the Geolograph line at a depth of 3042 resulted in the Geolograph being set eight feet deeper than the pipe tally board. No correction of this error was made until a depth of 4545, when one of the drillers decided to "run the board", and corrected the geolograph downhole eight feet. Another two foot downhole correction was made when the short trip was made at 3906. In addition, the electric log total depth came out four feet *shallower* than the drillers' total depth. The final tops are correct, of course, because they were picked from the electric log. The drill stem test intervals, however, do not appear in some cases to match up accurately with the zones tested when compared to the electric log. With this many measurement errors it is difficult to determine what interval the tests actually covered. I believe the driller's depths above 4545 should be corrected downhole at least four feet, and possibly eight feet, to correlate with electric log depths.

Respectfully submitted,

Robert C. Lewellyn
Petroleum Geologist

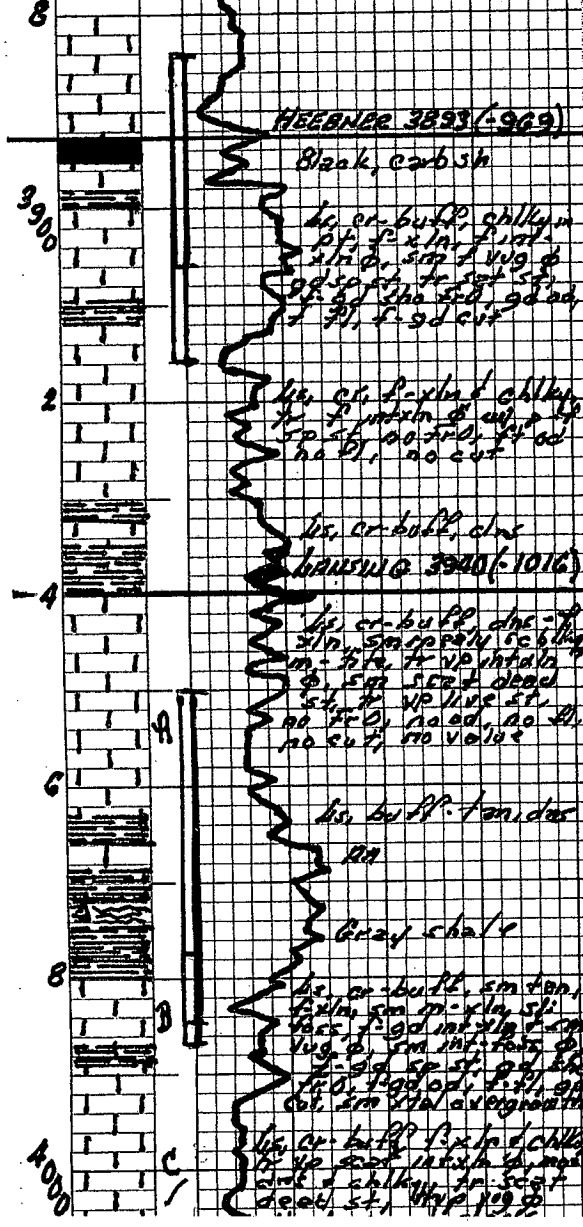
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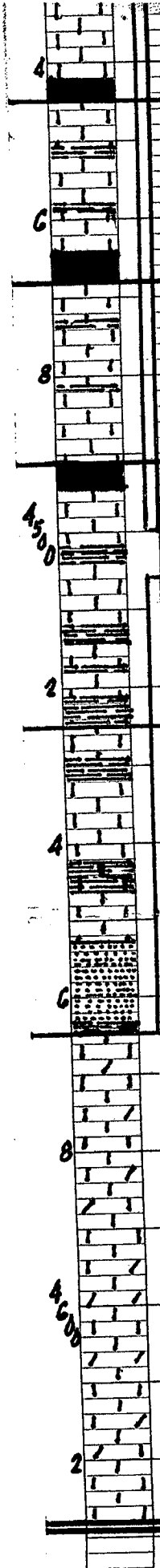
L.L.C.

STATE KANSAS	COMPANY LARSON ENGINEERING,
COUNTY SCOTT	FARM OHMART
BLOCK 330' FSL # 330' FEL	WELL NO. 1-15
SEC. 15	TOTAL DEPTH 4628
T. 175 R. 31W	CONTRACTOR VAL ENERGY Rig 4
COMPLETED 09-30-10	COMPLETED 09-30-10
ALTIMETER 2924 KB	REMARKS
PRODUCTION Oil	Robert C. Lavellyn - Geologist

CASING RECORD
8 5/8" @ 257 KBM / 175 SX

TIME RATE SCALE: 1/10" = MINUTES
Kraftbilt 450-A 1-800-331-7290 WWW.KRAFTBILT.COM

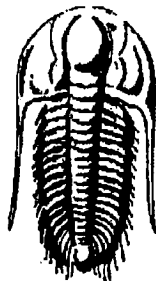




Live bed, no pl, no cut
 Full of ornaments
 MURICK STR. 4445 (-152)
 ls, tan-brn, das, sm
 int. xla, p. 11, col, p. 11
 fine, face, 1st, 2nd, 3rd, 4th
 fine, pieces, no bed
 good, no pl, no cut
 ls, tan-brn, das, fine
 Ft. Scott 4468 (-154)
 ls, buff-tan, sm brn
 int. xla, sm, col, p. 11
 int. xla, 1st, 2nd, 3rd, 4th
 shp bed, 1st, 2nd, 3rd, 4th
 cut
 ls, tan-brn, das, fine
 int. xla, p. 11, col, p. 11
 (MERCEZ 4491 (-156))
 (1st, 2nd, 3rd, 4th)
 (1st, 2nd, 3rd, 4th)
 ls, buff-tan to brn, das
 int. xla, p. 11, col, p. 11
 int. xla, 1st, 2nd, 3rd, 4th
 shp bed, 1st, 2nd, 3rd, 4th
 cut
 ls, tan-brn, das, fine
 ls, AA
 JOHNSON 4525 (-160)
 ls, buff-tan to brn, das
 int. xla, p. 11, col, p. 11
 int. xla, 1st, 2nd, 3rd, 4th
 shp bed, 1st, 2nd, 3rd, 4th
 cut
 ls, tan-brn, das, fine
 Downhole Correction
 ls, tan-brn, das, fine
 int. xla, p. 11, col, p. 11
 int. xla, 1st, 2nd, 3rd, 4th
 shp bed, 1st, 2nd, 3rd, 4th
 cut
 Mississippi 4565 (-164)
 ls, ch
 detour, 1st, 2nd, 3rd, 4th
 buff, das, shp bed
 1st, 2nd, 3rd, 4th
 cut
 ls, tan-brn, das, fine
 fine, int. xla, p. 11
 gibbsite, no shp bed
 AA, sm data cut, p
 int. xla, p. 11, col, p. 11
 ls, Dalton AA
 ls, Dalton + ic, xla
 shp bed, 1st, 2nd, 3rd, 4th
 cut
 ls, AA
 RAREY FORM. W. 4600 (-170)

KCC
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TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

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

562 W State Rd 4
Olmitz KS 67564-8561

ATTN: Bob Lewellyn

15-17s-31w Scott KS

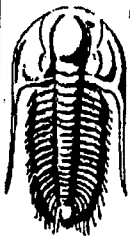
Ohmart #1-15

Start Date: 2010.03.21 @ 13:45:05

End Date: 2010.03.21 @ 20:48:44

Job Ticket #: 37807 DST #: 1

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Larson Engineering, Inc.

562 W State Rd 4
Olmitz KS 67564-8561

ATTN: Bob Lewellyn

Ohmart #1-15

15-17s-31w Scott KS

Job Ticket: 37807

DST#: 1

Test Start: 2010.03.21 @ 13:45:05

GENERAL INFORMATION:

Formation: **Toronto**
 Deviated: **No** Whipstock: **ft (KB)**
 Time Tool Opened: 16:19:45
 Time Test Ended: 20:48:44

Test Type: **Conventional Bottom Hole**
 Tester: **Brandon Domsch**
 Unit No: **48**

Interval: **3884.00 ft (KB) To 3916.00 ft (KB) (TVD)**
 Total Depth: **3916.00 ft (KB) (TVD)**
 Hole Diameter: **7.88 inches** Hole Condition: **Fair**

Reference Elevations: **2924.00 ft (KB)**
2919.00 ft (CF)
 KB to GR/CF: **5.00 ft**

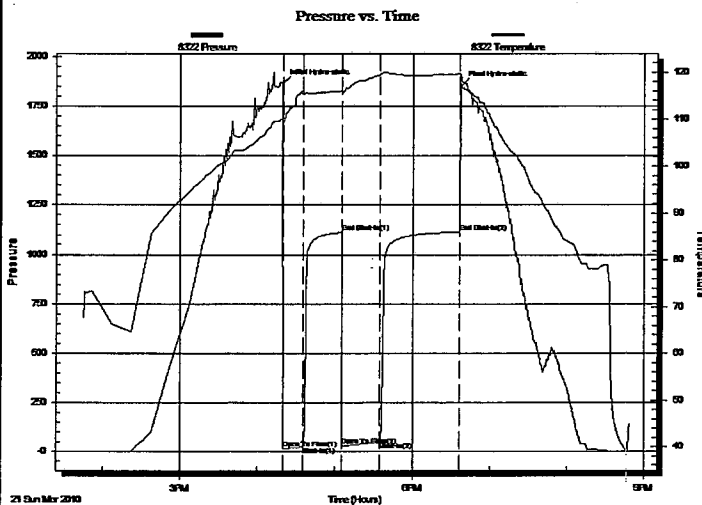
Serial #: 8322

Inside

Press@RunDepth: **51.88 psig @ 3885.00 ft (KB)**
 Start Date: **2010.03.21** End Date: **2010.03.21**
 Start Time: **13:45:05** End Time: **20:48:44**

Capacity: **8000.00 psig**
 Last Calib.: **2010.03.21**
 Time On Btm: **2010.03.21 @ 16:19:30**
 Time Off Btm: **2010.03.21 @ 18:37:14**

TEST COMMENT: IF: Built to 3 1/4 inches.
 IS: No return.
 FF: Built to 4 1/4 inches.
 FS: No return.



PRESSURE SUMMARY

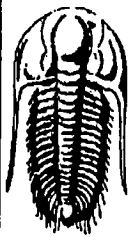
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1864.82	110.16	Initial Hydro-static
1	16.27	109.46	Open To Flow (1)
17	26.33	115.51	Shut-In(1)
46	1111.67	116.10	End Shut-In(1)
47	29.64	115.77	Open To Flow (2)
76	51.88	119.55	Shut-In(2)
137	1114.09	119.68	End Shut-In(2)
138	1855.55	118.63	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
10.00	M 100%m	0.14
80.00	WCM 40%w 60%m	1.12
0.00	Splash of CO	0.00
0.00	GIP = 0	0.00
0.00	RW = .278 @ 63F = 27000 ppm	0.00

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Larson Engineering, Inc.

Ohmart #1-15

562 W State Rd 4
Olmitz KS 67564-8561

15-17s-31w Scott KS

Job Ticket: 37807

DST#: 1

ATTN: Bob Lewellyn

Test Start: 2010.03.21 @ 13:45:05

Tool Information

Drill Pipe:	Length: 3868.00 ft	Diameter: 3.80 inches	Volume: 54.26 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: 60000.00 lb
		Total Volume: 54.26 bbl		Tool Chased 0.00 ft
Drill Pipe Above KB:	12.00 ft			String Weight: Initial 51000.00 lb
Depth to Top Packer:	3884.00 ft			Final 51000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	32.00 ft			
Tool Length:	60.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

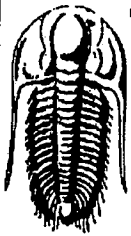
Tool Comments:

Tool Description

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

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			3857.00	
Shut In Tool	5.00			3862.00	
Hydraulic tool	5.00			3867.00	
Jars	5.00			3872.00	
Safety Joint	3.00			3875.00	
Packer	5.00			3880.00	28.00 Bottom Of Top Packer
Packer	4.00			3884.00	
Stubb	1.00			3885.00	
Recorder	0.00	8322	Inside	3885.00	
Recorder	0.00	8166	Inside	3885.00	
Perforations	26.00			3911.00	
Bullnose	5.00			3916.00	32.00 Bottom Packers & Anchor

Total Tool Length: 60.00



TRILOBITE
TESTING, INC

DRILL STEM TEST REPORT

FLUID SUMMARY

Larson Engineering, Inc.

Ohmart #1-15

562 W State Rd 4
Olmitz KS 67564-8561

15-17s-31w Scott KS

Job Ticket: 37807

DST#: 1

ATTN: Bob Lewellyn

Test Start: 2010.03.21 @ 13:45:05

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:

27000 ppm

Viscosity: 54.00 sec/qt

Cushion Volume:

bbl

Water Loss: 5.53 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 1400.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
10.00	M 100%m	0.140
80.00	WCM 40%w 60%m	1.122
0.00	Splash of CO	0.000
0.00	GIP = 0	0.000
0.00	RW = .278@ 63F = 27000 ppm	0.000

Total Length: 90.00 ft

Total Volume: 1.262 bbl

Num Fluid Samples: 0

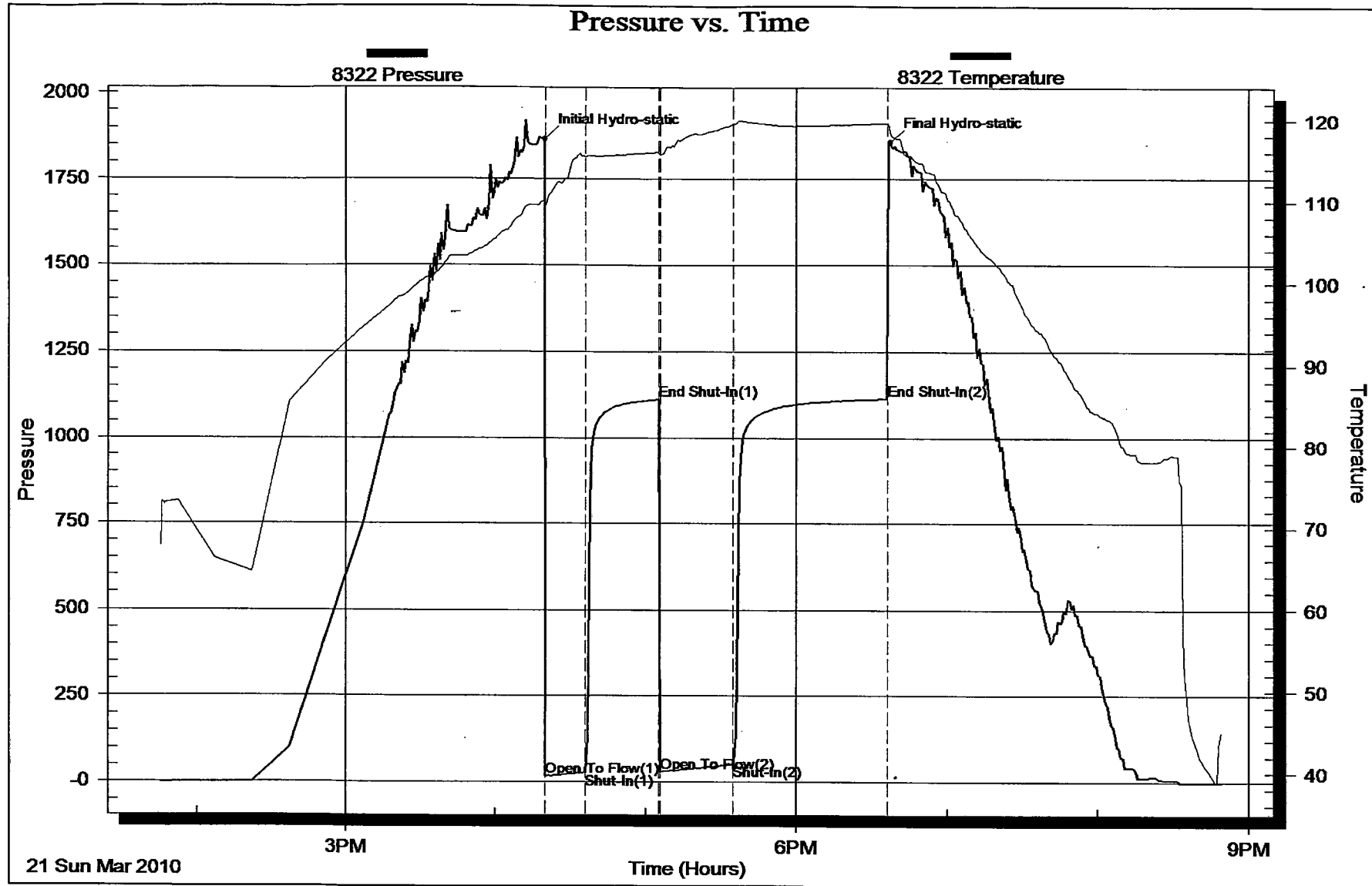
Num Gas Bombs: 0

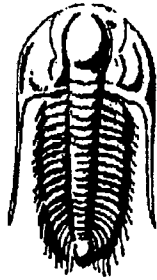
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:





**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

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

562 W State Rd 4
Olmitz KS 67564-8561

ATTN: Bob Lewellyn

15-17s-31w Scott KS

Ohmart #1-15

Start Date: 2010.03.22 @ 10:38:05

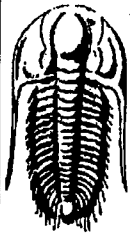
End Date: 2010.03.22 @ 17:00:29

Job Ticket #: 37808 DST #: 2

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

ph: 785-625-4778 fax: 785-625-5620



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Larson Engineering, Inc.

562 W State Rd 4
Olmitz KS 67564-8561

ATTN: Bob Lewellyn

Ohmart #1-15

15-17s-31w Scott KS

Job Ticket: 37808

DST#: 2

Test Start: 2010.03.22 @ 10:38:05

GENERAL INFORMATION:

Formation: **Lans B**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 12:34:00

Time Test Ended: 17:00:29

Test Type: Conventional Bottom Hole

Tester: Brandon Domsch

Unit No: 48

Interval: **3950.00 ft (KB) To 3987.00 ft (KB) (TVD)**

Total Depth: 3987.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 2924.00 ft (KB)

2919.00 ft (CF)

KB to GR/CF: 5.00 ft

Serial #: 8322 Inside

Press@RunDepth: 20.68 psig @ 3951.00 ft (KB)

Start Date: 2010.03.22

End Date:

2010.03.22

Capacity: 8000.00 psig

Last Calib.:

2010.03.22

Start Time: 10:38:05

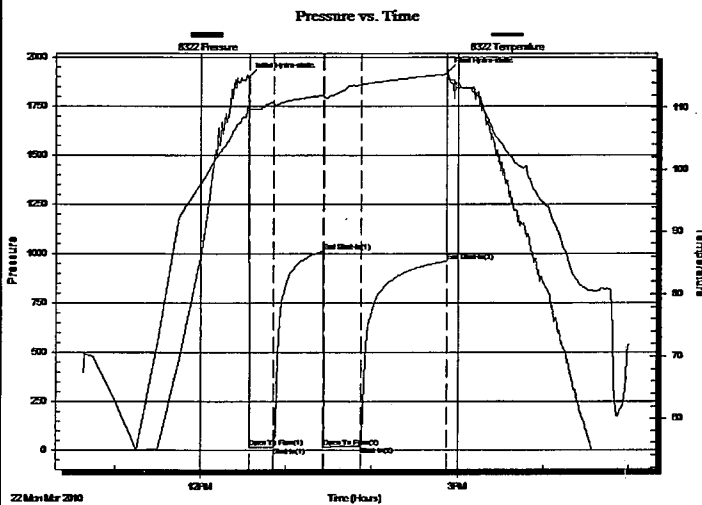
End Time:

17:00:29

Time On Btm: 2010.03.22 @ 12:33:30

Time Off Btm: 2010.03.22 @ 14:52:45

TEST COMMENT: IF: Built to 3/4 inch.
IS: No return.
FF: No blow.
FS: No return.



PRESSURE SUMMARY

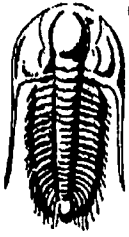
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1900.34	110.30	Initial Hydro-static
1	14.63	110.01	Open To Flow (1)
18	17.56	110.56	Shut-In(1)
53	1013.78	112.02	End Shut-In(1)
53	18.03	111.78	Open To Flow (2)
79	20.68	113.79	Shut-In(2)
139	964.35	115.44	End Shut-In(2)
140	1927.59	115.50	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
10.00	M 100% m	0.14
0.00	GIP = 0	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 W State Rd 4
Olmitz KS 67564-8561
ATTN: Bob Lewellyn

Ohmart #1-15
15-17s-31w Scott KS
Job Ticket: 37808 **DST#: 2**
Test Start: 2010.03.22 @ 10:38:05

Tool Information

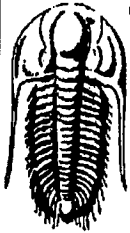
Drill Pipe:	Length: 3937.00 ft	Diameter: 3.80 inches	Volume: 55.23 bbl	Tool Weight: 1500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose: 60000.00 lb
			<u>Total Volume: 55.23 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	15.00 ft			String Weight: Initial 50000.00 lb
Depth to Top Packer:	3950.00 ft			Final 50000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	37.00 ft			
Tool Length:	65.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
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Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			3923.00	
Shut In Tool	5.00			3928.00	
Hydraulic tool	5.00			3933.00	
Jars	5.00			3938.00	
Safety Joint	3.00			3941.00	
Packer	5.00			3946.00	28.00 Bottom Of Top Packer
Packer	4.00			3950.00	
Stubb	1.00			3951.00	
Recorder	0.00	8322	Inside	3951.00	
Recorder	0.00	8166	Inside	3951.00	
Perforations	31.00			3982.00	
Bullnose	5.00			3987.00	37.00 Bottom Packers & Anchor

Total Tool Length: 65.00



TRILOBITE
TESTING, INC

DRILL STEM TEST REPORT

FLUID SUMMARY

Larson Engineering, Inc.

Ohmart #1-15

562 W State Rd 4
Olmitz KS 67564-8561

15-17s-31w Scott KS

Job Ticket: 37808

DST#: 2

ATTN: Bob Lewellyn

Test Start: 2010.03.22 @ 10:38:05

Mud and Cushion Information

Mud Type: Gel Chem

Mud Weight: 9.00 lb/gal

Viscosity: 48.00 sec/qt

Water Loss: 6.33 in³

Resistivity: 0.00 ohm.m

Salinity: 1600.00 ppm

Filter Cake: 1.00 inches

Cushion Type:

Cushion Length: ft

Cushion Volume: bbl

Gas Cushion Type:

Gas Cushion Pressure: psig

Oil API:

Water Salinity: deg API

ppm

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
10.00	M 100%m	0.140
0.00	GIP = 0	0.000

Total Length: 10.00 ft Total Volume: 0.140 bbl

Num Fluid Samples: 0

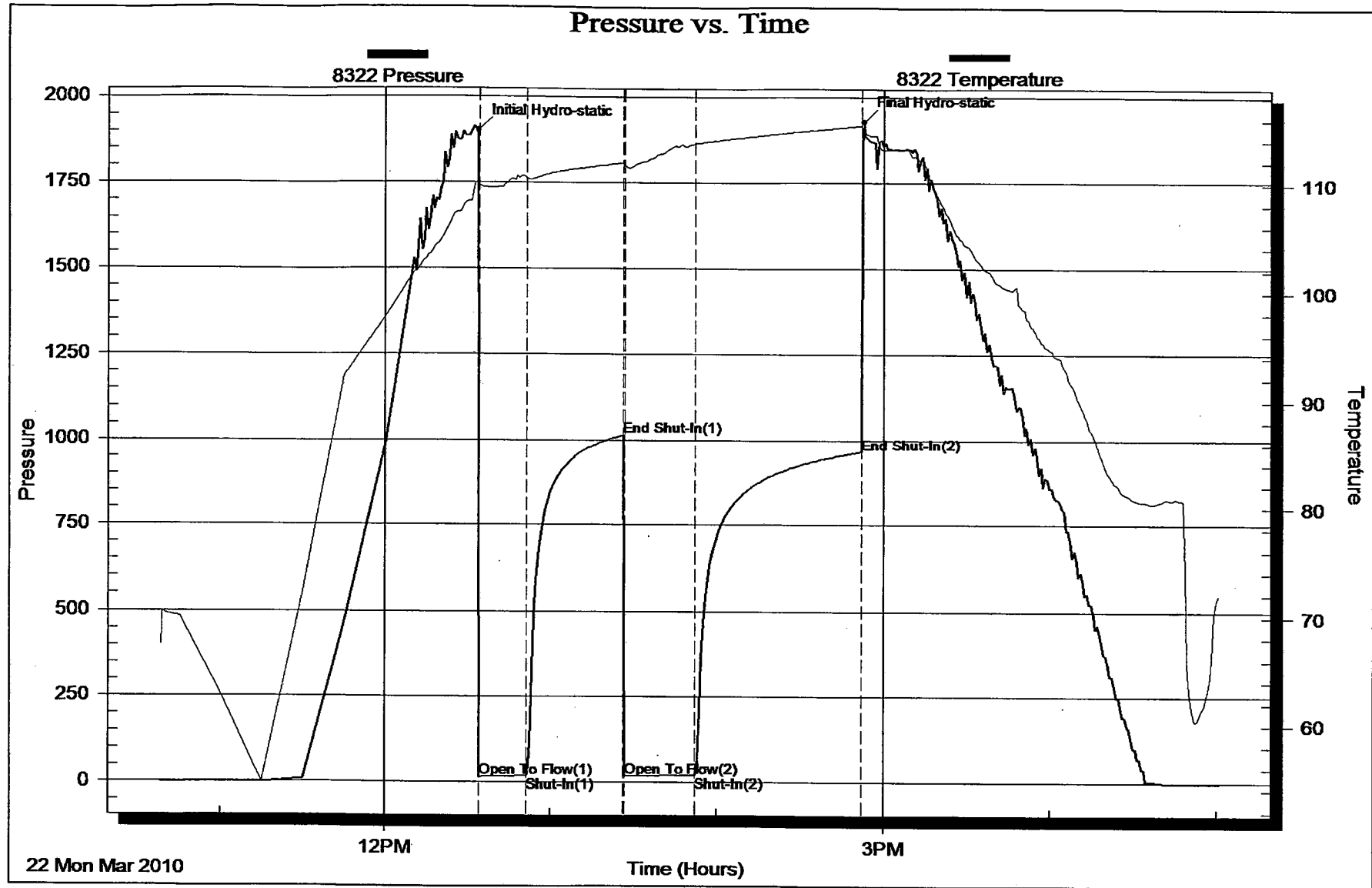
Num Gas Bombs: 0

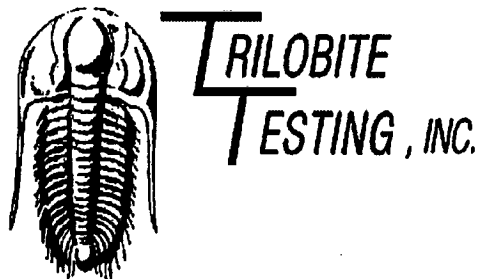
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:





DRILL STEM TEST REPORT

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

562 W State Rd 4
Olmitz KS 67564-8561

ATTN: Bob Lewellyn

15-17s-31w Scott KS

Ohmart #1-15

Start Date: 2010.03.23 @ 05:45:05

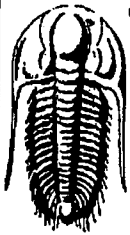
End Date: 2010.03.23 @ 12:00:29

Job Ticket #: 37809 DST #: 3

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

ph: 785-625-4778 fax: 785-625-5620



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Larson Engineering, Inc.

562 W State Rd 4
Olmitz KS 67564-8561

ATTN: Bob Lewellyn

Ohmart #1-15

15-17s-31w Scott KS

Job Ticket: 37809

DST#: 3

Test Start: 2010.03.23 @ 05:45:05

GENERAL INFORMATION:

Formation: **Lans F**

Deviated: **No** Whipstock: **ft (KB)**

Time Tool Opened: 07:36:15

Time Test Ended: 12:00:29

Test Type: **Conventional Bottom Hole**

Tester: **Brandon Domsch**

Unit No: **48**

Interval: **4026.00 ft (KB) To 4045.00 ft (KB) (TVD)**

Total Depth: **4045.00 ft (KB) (TVD)**

Hole Diameter: **7.88 inches** Hole Condition: **Fair**

Reference Elevations: **2924.00 ft (KB)**

2919.00 ft (CF)

KB to GR/CF: **5.00 ft**

Serial #: 8322 Inside

Press@RunDepth: **19.54 psig @ 4027.00 ft (KB)**

Start Date: **2010.03.23**

End Date:

2010.03.23

Capacity: **8000.00 psig**

Last Calib.: **2010.03.23**

Start Time: **05:45:05**

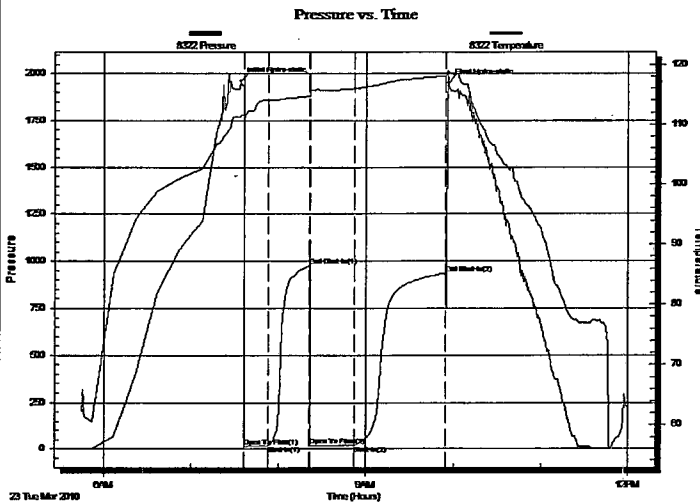
End Time:

12:00:29

Time On Btm: **2010.03.23 @ 07:33:45**

Time Off Btm: **2010.03.23 @ 09:55:45**

TEST COMMENT: IF: Built to 3/4 inch.
IS: No return.
FF: No blow.
FS: No return.



PRESSURE SUMMARY

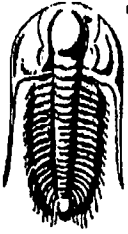
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1959.35	111.32	Initial Hydro-static
3	12.50	111.01	Open To Flow (1)
20	16.87	113.99	Shut-In(1)
48	974.20	114.67	End Shut-In(1)
49	17.77	115.62	Open To Flow (2)
78	19.54	115.96	Shut-In(2)
140	935.16	118.03	End Shut-In(2)
142	1950.81	118.83	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
10.00	OCM 10% o 90% m	0.14
5.00	CO 100% o	0.07
0.00	GIP = 0	0.00
0.00	API = 32 @ 50F = 33	0.00

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Larson Engineering, Inc.

Ohmart #1-15

562 W State Rd 4
Olmitz KS 67564-8561

15-17s-31w Scott KS

Job Ticket: 37809

DST#: 3

ATTN: Bob Lewellyn

Test Start: 2010.03.23 @ 05:45:05

Tool Information

Drill Pipe:	Length: 4030.00 ft	Diameter: 3.80 inches	Volume: 56.53 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: 60000.00 lb
			<u>Total Volume: 56.53 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	32.00 ft			String Weight: Initial 50000.00 lb
Depth to Top Packer:	4026.00 ft			Final 50000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	19.00 ft			
Tool Length:	47.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

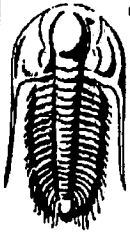
Tool Comments:

Tool Description

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

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			3999.00	
Shut In Tool	5.00			4004.00	
Hydraulic tool	5.00			4009.00	
Jars	5.00			4014.00	
Safety Joint	3.00			4017.00	
Packer	5.00			4022.00	28.00 Bottom Of Top Packer
Packer	4.00			4026.00	
Stubb	1.00			4027.00	
Recorder	0.00	8322	Inside	4027.00	
Recorder	0.00	8166	Inside	4027.00	
Perforations	13.00			4040.00	
Bullnose	5.00			4045.00	19.00 Bottom Packers & Anchor

Total Tool Length: 47.00



TRILOBITE
TESTING, INC

DRILL STEM TEST REPORT

FLUID SUMMARY

Larson Engineering, Inc.

Ohmart #1-15

562 W State Rd 4
Olmitz KS 67564-8561

15-17s-31w Scott KS

Job Ticket: 37809

DST#: 3

ATTN: Bob Lewellyn

Test Start: 2010.03.23 @ 05:45:05

Mud and Cushion Information

Mud Type: Gel Chem

Mud Weight: 9.00 lb/gal

Viscosity: 46.00 sec/qt

Water Loss: 6.73 in³

Resistivity: 0.00 ohm.m

Salinity: 2100.00 ppm

Filter Cake: 1.00 inches

Cushion Type:

Cushion Length:

Cushion Volume:

Gas Cushion Type:

Gas Cushion Pressure:

ft

bbl

psig

Oil API:

Water Salinity:

33 deg API

ppm

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
10.00	OCM 10% o 90%m	0.140
5.00	CO 100%o	0.070
0.00	GIP = 0	0.000
0.00	API = 32@ 50F = 33	0.000

Total Length: 15.00 ft Total Volume: 0.210 bbl

Num Fluid Samples: 0

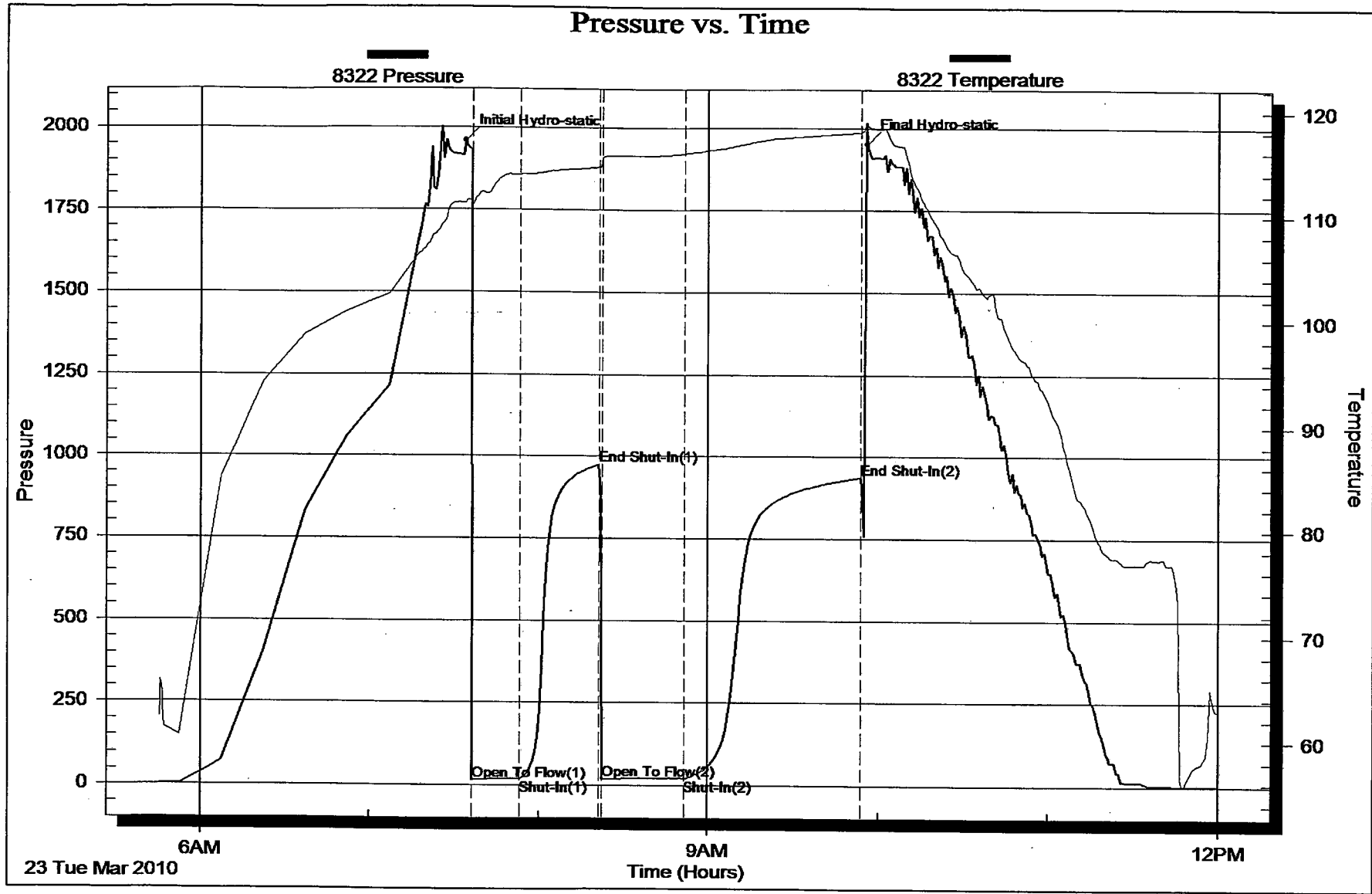
Num Gas Bombs: 0

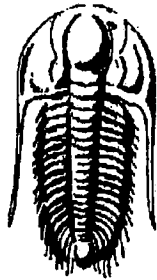
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:





**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

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

562 W State Rd 4
Olmitz KS 67564-8561

ATTN: Bob Lewellyn

15-17s-31w Scott KS

Ohmart #1-15

Start Date: 2010.03.23 @ 22:30:05

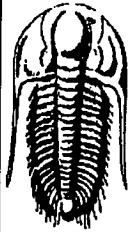
End Date: 2010.03.24 @ 05:40:14

Job Ticket #: 37810 DST #: 4

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

ph: 785-625-4778 fax: 785-625-5620



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Larson Engineering, Inc.

562 W State Rd 4
Olmitz KS 67564-8561

ATTN: Bob Lewellyn

Ohmart #1-15

15-17s-31w Scott KS

Job Ticket: 37810

DST#: 4

Test Start: 2010.03.23 @ 22:30:05

GENERAL INFORMATION:

Formation: **Lans H**

Deviated: **No Whipstock:** ft (KB)

Time Tool Opened: 00:07:45

Time Test Ended: 05:40:14

Test Type: **Conventional Bottom Hole**

Tester: **Brandon Domsch**

Unit No: **48**

Interval: **4105.00 ft (KB) To 4128.00 ft (KB) (TVD)**

Total Depth: **4128.00 ft (KB) (TVD)**

Hole Diameter: **7.88 inches** Hole Condition: **Fair**

Reference Elevations: **2924.00 ft (KB)**

2919.00 ft (CF)

KB to GR/CF: **5.00 ft**

Serial #: **8322** Inside

Press@RunDepth: **921.79 psig @ 4106.00 ft (KB)**

Start Date: **2010.03.23**

End Date:

2010.03.24

Capacity: **8000.00 psig**

Last Calib.: **2010.03.24**

Start Time: **22:30:05**

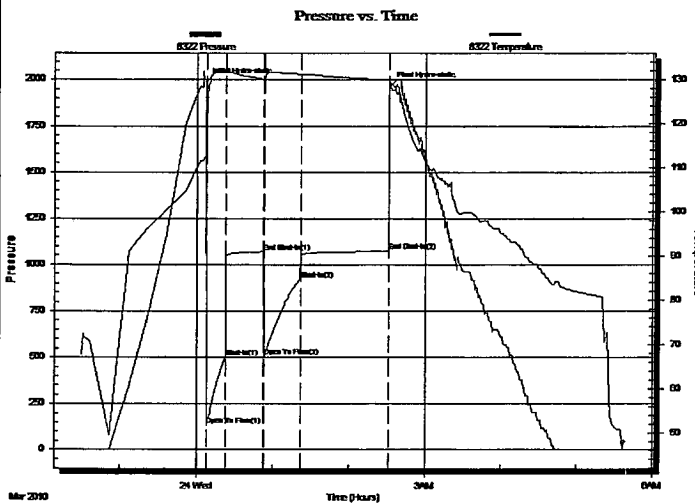
End Time:

05:40:14

Time On Btm: **2010.03.24 @ 00:07:15**

Time Off Btm: **2010.03.24 @ 02:32:15**

TEST COMMENT: IF: BOB in 2 mins.
IS: No return.
FF: BOB in 2 mins.
FS: No return.



PRESSURE SUMMARY

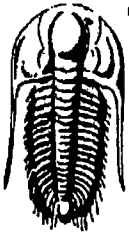
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1986.68	112.61	Initial Hydro-static
1	134.60	112.19	Open To Flow (1)
16	501.33	131.69	Shut-In(1)
46	1070.79	130.07	End Shut-In(1)
46	506.57	129.88	Open To Flow (2)
75	921.79	131.19	Shut-In(2)
144	1072.67	129.92	End Shut-In(2)
145	1966.17	128.90	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
30.00	M 100% m	0.42
1768.00	SMCW 95% w 5% m	24.80
201.00	WCM 20% w 80% m	2.82
0.00	GIP = 0	0.00
0.00	RW = .217 @ 64F = 36000 ppm	0.00

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Larson Engineering, Inc.

Ohmart #1-15

562 W State Rd 4
Olmitz KS 67564-8561

15-17s-31w Scott KS

Job Ticket: 37810

DST#: 4

ATTN: Bob Lewellyn

Test Start: 2010.03.23 @ 22:30:05

Tool Information

Drill Pipe:	Length: 4097.00 ft	Diameter: 3.80 inches	Volume: 57.47 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: 57.47 bbl		Tool Chased 0.00 ft
Drill Pipe Above KB:	20.00 ft			String Weight: Initial 50000.00 lb
Depth to Top Packer:	4105.00 ft			Final 60000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	23.00 ft			
Tool Length:	51.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

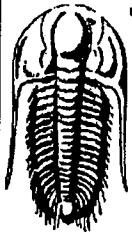
Tool Comments:

Tool Description

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

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			4078.00	
Shut In Tool	5.00			4083.00	
Hydraulic tool	5.00			4088.00	
Jars	5.00			4093.00	
Safety Joint	3.00			4096.00	
Packer	5.00			4101.00	28.00 Bottom Of Top Packer
Packer	4.00			4105.00	
Stubb	1.00			4106.00	
Recorder	0.00	8322	Inside	4106.00	
Recorder	0.00	8166	Inside	4106.00	
Perforations	17.00			4123.00	
Bullnose	5.00			4128.00	23.00 Bottom Packers & Anchor

Total Tool Length: 51.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Larson Engineering, Inc.

Ohmart #1-15

562 W State Rd 4
Olmitz KS 67564-8561

15-17s-31w Scott KS

Job Ticket: 37810

DST#: 4

ATTN: Bob Lewellyn

Test Start: 2010.03.23 @ 22:30:05

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:

36000 ppm

Viscosity: 52.00 sec/qt

Cushion Volume:

bbl

Water Loss: 6.74 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
30.00	M 100%m	0.421
1768.00	SMCW 95%w 5%m	24.800
201.00	WCM 20%w 80%m	2.820
0.00	GIP = 0	0.000
0.00	RW = .217@64F = 36000ppm	0.000

Total Length: 1999.00 ft

Total Volume: 28.041 bbl

Num Fluid Samples: 0

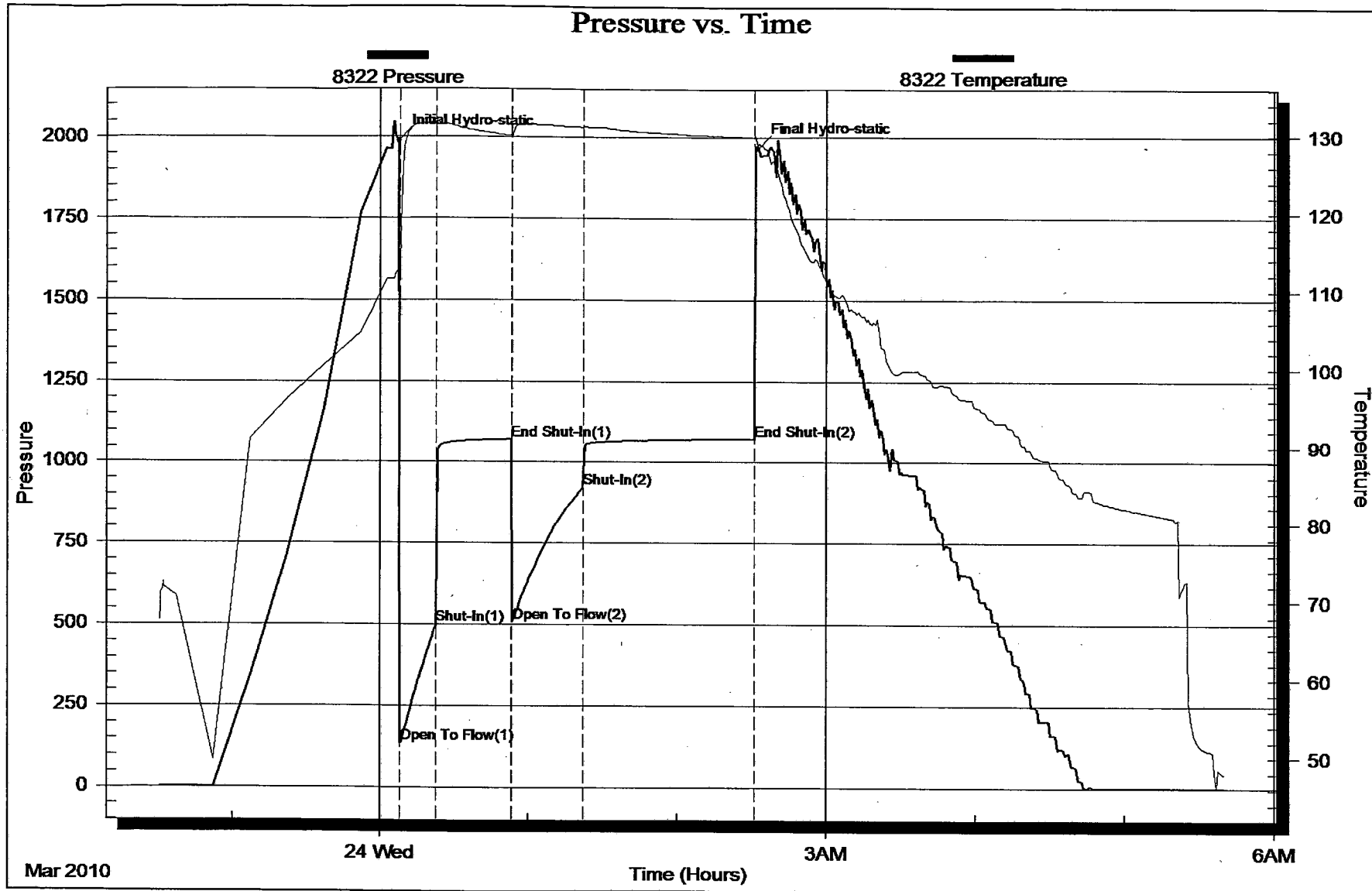
Num Gas Bombs: 0

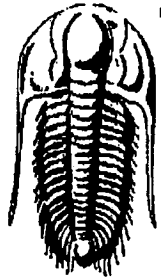
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:





**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

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

562 W State Rd 4
Olmitz KS 67564-8561

ATTN: Bob Lewellyn

15-17s-31w Scott KS

Ohmart #1-15

Start Date: 2010.03.24 @ 17:11:26

End Date: 2010.03.24 @ 23:52:26

Job Ticket #: 37811 DST #: 5

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

ph: 785-625-4778 fax: 785-625-5620

Larson Engineering, Inc.

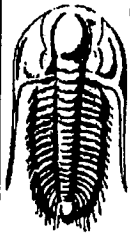
Ohmart #1-15

15-17s-31w Scott KS

DST # 5

Lans, I

2010.03.24



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Larson Engineering, Inc.

562 W State Rd 4
Olmitz KS 67564-8561

ATTN: Bob Lewellyn

Ohmart #1-15

15-17s-31w Scott KS

Job Ticket: 37811

DST#: 5

Test Start: 2010.03.24 @ 17:11:26

GENERAL INFORMATION:

Formation: **Lans, I**

Deviated: **No** Whipstock: **ft (KB)**

Time Tool Opened: 19:33:56

Time Test Ended: 23:52:26

Test Type: **Conventional Bottom Hole**

Tester: **Brandon Domsch**

Unit No: **48**

Interval: **4144.00 ft (KB) To 4172.00 ft (KB) (TVD)**

Total Depth: **4172.00 ft (KB) (TVD)**

Hole Diameter: **7.88 inches** Hole Condition: **Fair**

Reference Elevations: **2924.00 ft (KB)**

2919.00 ft (CF)

KB to GR/CF: **5.00 ft**

Serial #: 8166

Inside

Press@RunDepth: **31.01 psig @ 4145.00 ft (KB)**

Start Date: **2010.03.24**

End Date:

2010.03.24

Capacity: **8000.00 psig**

Last Calib.: **2010.03.25**

Start Time: **17:11:26**

End Time:

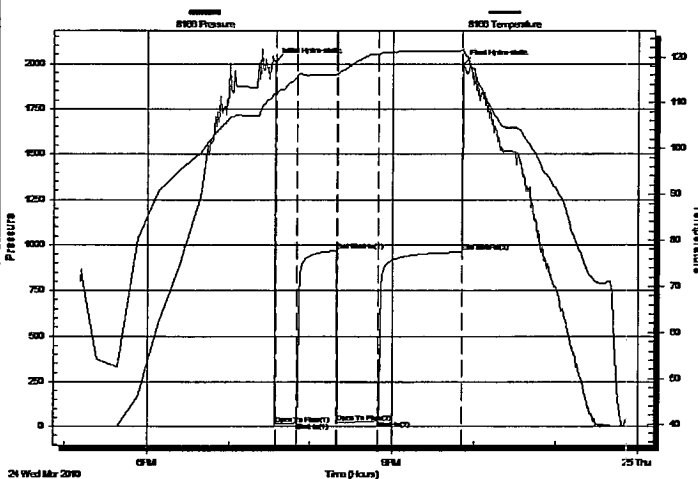
23:52:26

Time On Btm: **2010.03.24 @ 19:33:41**

Time Off Btm: **2010.03.24 @ 21:51:41**

TEST COMMENT: IF: Built to 1 inch.
IS: No return.
FF: Built to 1 inch.
FS: No return.

Pressure vs. Time



PRESSURE SUMMARY

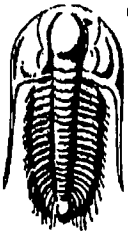
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2011.56	112.07	Initial Hydro-static
1	13.17	111.38	Open To Flow (1)
16	19.88	115.73	Shut-In(1)
46	967.77	116.16	End Shut-In(1)
46	20.64	115.96	Open To Flow (2)
76	31.01	120.57	Shut-In(2)
137	961.08	121.30	End Shut-In(2)
138	1996.27	121.30	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
40.00	SWCM 5%w 95% m	0.56
0.00	GIP = 0	0.00
0.00	RW= N/A	0.00

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Larson Engineering, Inc.

Ohmart #1-15

562 W State Rd 4
Olmitz KS 67564-8561

15-17s-31w Scott KS

Job Ticket: 37811

DST#: 5

ATTN: Bob Lewellyn

Test Start: 2010.03.24 @ 17:11:26

Tool Information

Drill Pipe:	Length: 4128.00 ft	Diameter: 3.80 inches	Volume: 57.90 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: 65000.00 lb
			<u>Total Volume: 57.90 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	12.00 ft			String Weight: Initial 51000.00 lb
Depth to Top Packer:	4144.00 ft			Final 51000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	28.00 ft			
Tool Length:	56.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

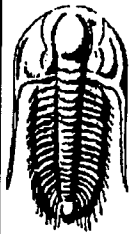
Tool Comments:

Tool Description

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

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			4117.00	
Shut In Tool	5.00			4122.00	
Hydraulic tool	5.00			4127.00	
Jars	5.00			4132.00	
Safety Joint	3.00			4135.00	
Packer	5.00			4140.00	28.00 Bottom Of Top Packer
Packer	4.00			4144.00	
Stubb	1.00			4145.00	
Recorder	0.00	8322	Inside	4145.00	
Recorder	0.00	8166	Inside	4145.00	
Perforations	22.00			4167.00	
Bullnose	5.00			4172.00	28.00 Bottom Packers & Anchor

Total Tool Length: 56.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Larson Engineering, Inc.

Ohmart #1-15

562 W State Rd 4
Olmitz KS 67564-8561

15-17s-31w Scott KS

Job Ticket: 37811

DST#: 5

ATTN: Bob Lewellyn

Test Start: 2010.03.24 @ 17:11:26

Mud and Cushion Information

Mud Type: Gel Chem

Mud Weight: 9.00 lb/gal

Viscosity: 48.00 sec/qt

Water Loss: 6.75 in³

Resistivity: 0.00 ohm.m

Salinity: 3300.00 ppm

Filter Cake: 2.00 inches

Cushion Type:

Cushion Length: ft

Cushion Volume: bbl

Gas Cushion Type:

Gas Cushion Pressure: psig

Oil API: deg API

Water Salinity: ppm

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
40.00	SWCM 5%w 95%m	0.561
0.00	GIP = 0	0.000
0.00	RW= N/A	0.000

Total Length: 40.00 ft Total Volume: 0.561 bbl

Num Fluid Samples: 0

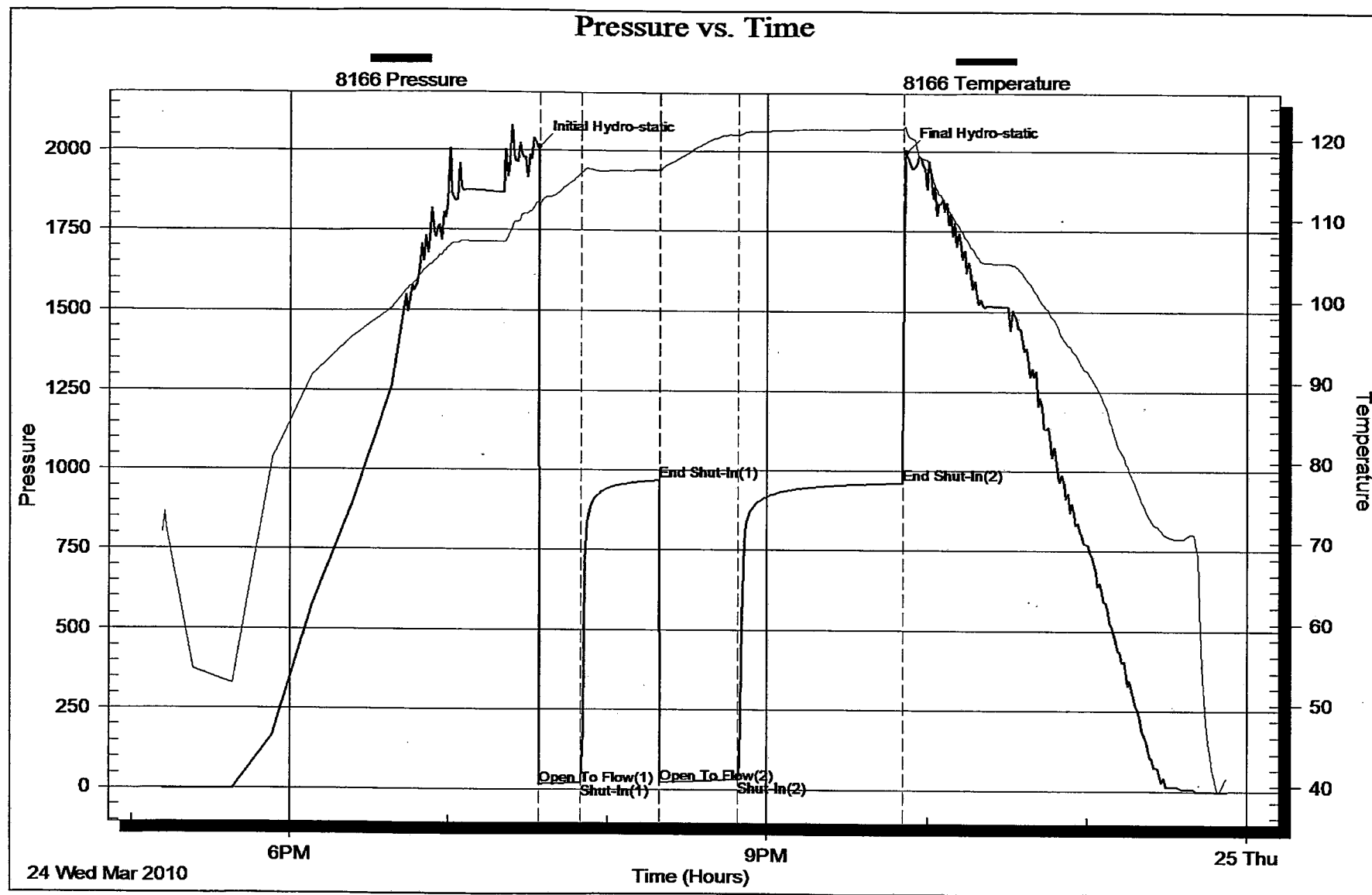
Num Gas Bombs: 0

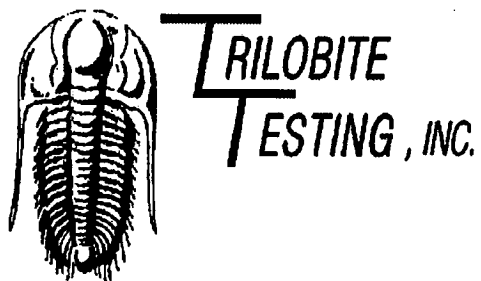
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:





DRILL STEM TEST REPORT

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

562 W State Rd 4
Olmits KS 67564-8561

ATTN: Bob Lewellyn

15-17s-31w Scott KS

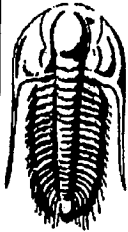
Ohmart #1-15

Start Date: 2010.03.25 @ 11:23:05

End Date: 2010.03.25 @ 17:35:44

Job Ticket #: 37812 DST #: 6

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Larson Engineering, Inc.
562 W State Rd 4
Olmitz KS 67564-8561
ATTN: Bob Lewellyn

Ohmart #1-15
15-17s-31w Scott KS
Job Ticket: 37812 **DST#: 6**
Test Start: 2010.03.25 @ 11:23:05

GENERAL INFORMATION:

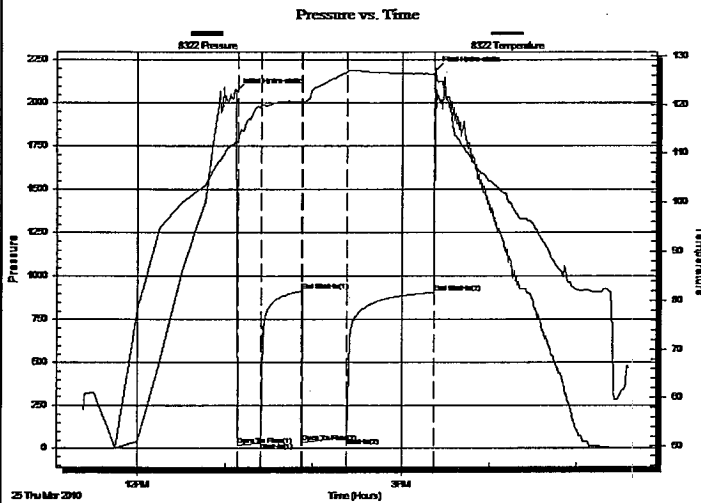
Formation: **Lans K**
Deviated: **No** Whipstock: **ft (KB)**
Time Tool Opened: 13:08:00
Time Test Ended: 17:35:44
Interval: **4202.00 ft (KB) To 4230.00 ft (KB) (TVD)**
Total Depth: **4230.00 ft (KB) (TVD)**
Hole Diameter: **7.88 inches** Hole Condition: **Fair**
Test Type: **Conventional Bottom Hole**
Tester: **Brandon Domsch**
Unit No: **48**
Reference Elevations: **2924.00 ft (KB)**
2919.00 ft (CF)
KB to GR/CF: **5.00 ft**

Serial #: 8322

Inside

Press@RunDepth: 66.91 psig @ 4203.00 ft (KB) Capacity: 8000.00 psig
Start Date: 2010.03.25 End Date: 2010.03.25 Last Calib.: 2010.03.25
Start Time: 11:23:05 End Time: 17:35:44 Time On Btm: 2010.03.25 @ 13:07:15
Time Off Btm: 2010.03.25 @ 15:22:45

TEST COMMENT: IF: Built to 3 1/2 inches.
IS: No return.
FF: Built to 4 1/2 inches.
FS: No return.



PRESSURE SUMMARY

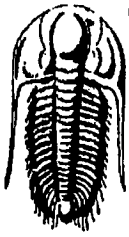
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2067.32	112.36	Initial Hydro-static
1	16.68	112.16	Open To Flow (1)
17	35.52	119.63	Shut-In(1)
45	915.04	120.59	End Shut-In(1)
46	36.12	120.30	Open To Flow (2)
76	66.91	126.66	Shut-In(2)
135	907.17	126.18	End Shut-In(2)
136	2190.39	126.50	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
20.00	M 100% m	0.28
85.00	SWCM 10% w 90% m	1.19
0.00	GIP = 0	0.00
0.00	RW = NA	0.00

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Larson Engineering, Inc.

Ohmart #1-15

562 W State Rd 4
Olmitz KS 67564-8561

15-17s-31w Scott KS

Job Ticket: 37812

DST#: 6

ATTN: Bob Lewellyn

Test Start: 2010.03.25 @ 11:23:05

Tool Information

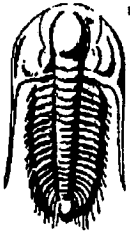
Drill Pipe:	Length: 4184.00 ft	Diameter: 3.80 inches	Volume: 58.69 bbl	Tool Weight: 1500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose: 60000.00 lb
			<u>Total Volume: 58.69 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	10.00 ft			String Weight: Initial 52000.00 lb
Depth to Top Packer:	4202.00 ft			Final 53000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	28.00 ft			
Tool Length:	56.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			4175.00	
Shut In Tool	5.00			4180.00	
Hydraulic tool	5.00			4185.00	
Jars	5.00			4190.00	
Safety Joint	3.00			4193.00	
Packer	5.00			4198.00	28.00 Bottom Of Top Packer
Packer	4.00			4202.00	
Stubb	1.00			4203.00	
Recorder	0.00	8322	Inside	4203.00	
Recorder	0.00	8166	Inside	4203.00	
Perforations	22.00			4225.00	
Bullnose	5.00			4230.00	28.00 Bottom Packers & Anchor

Total Tool Length: 56.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Larson Engineering, Inc.

Ohmart #1-15

562 W State Rd 4
Olmitz KS 67564-8561

15-17s-31w Scott KS

Job Ticket: 37812

DST#: 6

ATTN: Bob Lewellyn

Test Start: 2010.03.25 @ 11:23:05

Mud and Cushion Information

Mud Type: Gel Chem	Cushion Type:	Oil API:	deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity:	ppm
Viscosity: 48.00 sec/qt	Cushion Volume: bbl		
Water Loss: 6.75 in ³	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 bbl
20.00	M 100%m	0.281
85.00	SWCM 10%w 90%m	1.192
0.00	GIP = 0	0.000
0.00	RW = N/A	0.000

Total Length: 105.00 ft Total Volume: 1.473 bbl

Num Fluid Samples: 0

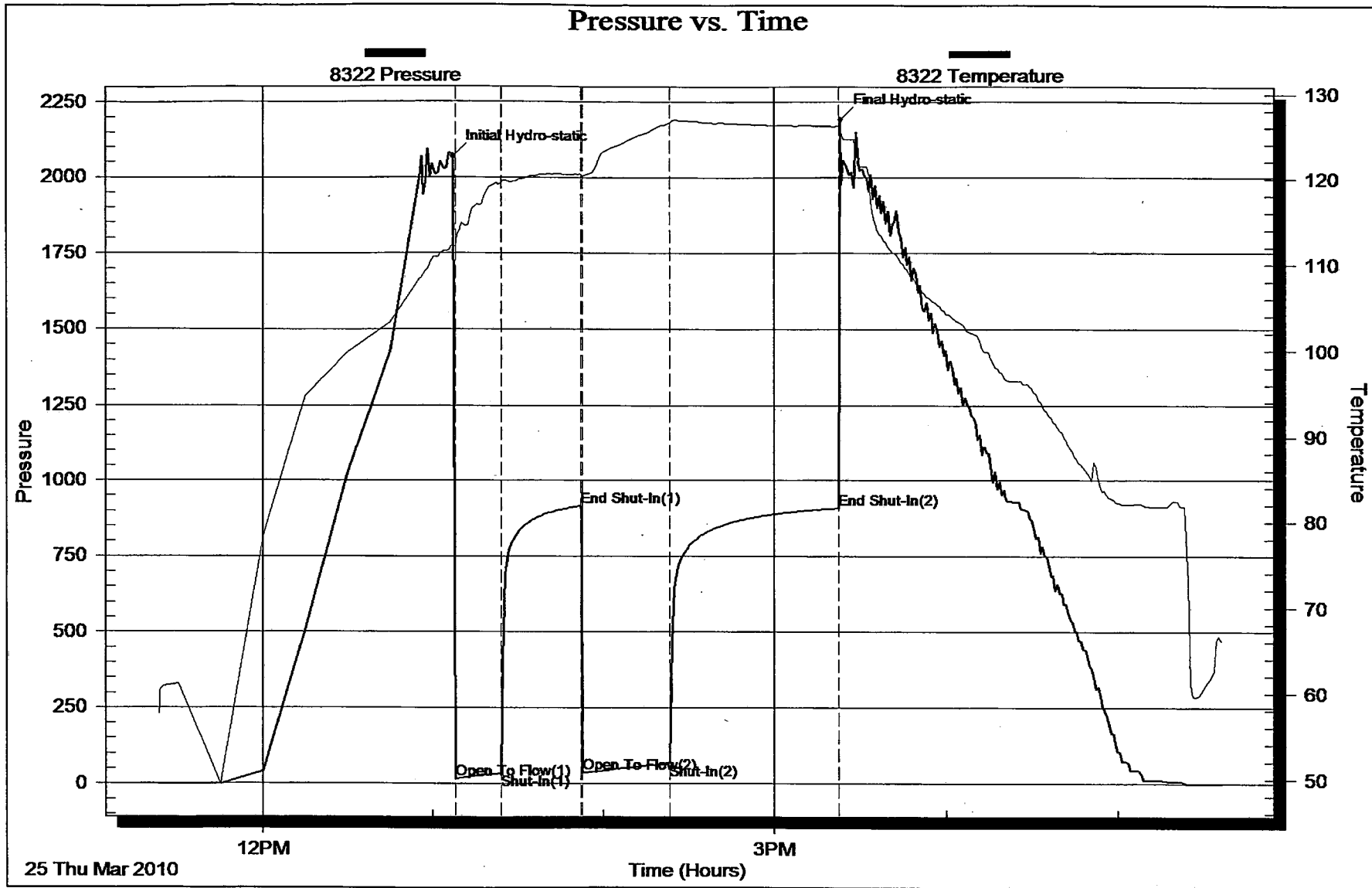
Num Gas Bombs: 0

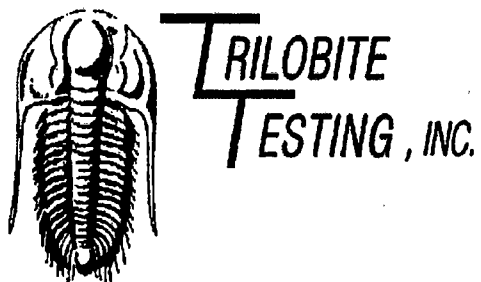
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:





DRILL STEM TEST REPORT

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

562 W State Rd 4
Olmitz KS 67564-8561

ATTN: Bob Lewellyn

15-17s-31w Scott KS

Ohmart #1-15

Start Date: 2010.03.26 @ 05:44:05

End Date: 2010.03.26 @ 12:14:29

Job Ticket #: 37813 DST #: 7

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

ph: 785-625-4778 fax: 785-625-5620



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Larson Engineering, Inc.

562 W State Rd 4
Olmitz KS 67564-8561

ATTN: Bob Lewellyn

Ohmart #1-15

15-17s-31w Scott KS

Job Ticket: 37813

DST#: 7

Test Start: 2010.03.26 @ 05:44:05

GENERAL INFORMATION:

Formation: **Lans L**

Deviated: **No** Whipstock: **ft (KB)**

Time Tool Opened: 07:37:45

Time Test Ended: 12:14:29

Test Type: **Conventional Bottom Hole**

Tester: **Brandon Domsch**

Unit No: **48**

Interval: **4250.00 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: **2924.00 ft (KB)**

2919.00 ft (CF)

KB to GR/CF: **5.00 ft**

Serial #: 8322

Inside

Press@RunDepth: **19.68 psig @ 4251.00 ft (KB)**

Start Date: **2010.03.26**

End Date:

2010.03.26

Capacity: **8000.00 psig**

Last Calib.: **2010.03.26**

Start Time: **05:44:05**

End Time:

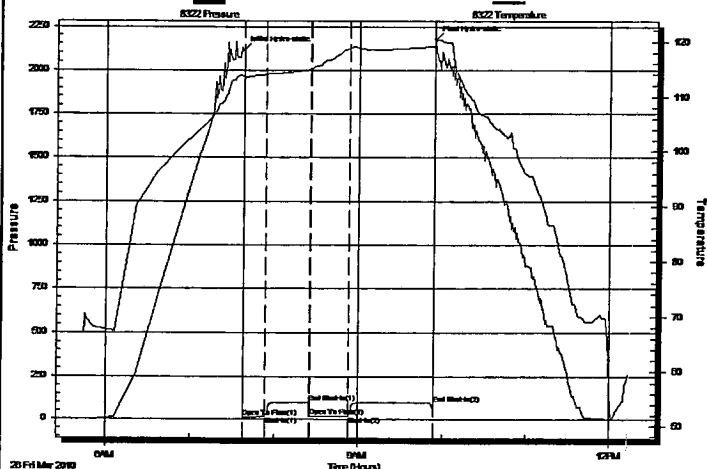
12:14:29

Time On Btm: **2010.03.26 @ 07:36:45**

Time Off Btm: **2010.03.26 @ 09:54:15**

TEST COMMENT: IF: Built to 1/2 inch.
IS: No return.
FF: Built to 3/4 inch.
FS: No return.

Pressure vs. Time



PRESSURE SUMMARY

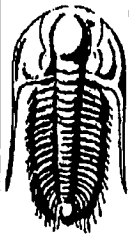
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2111.87	113.62	Initial Hydro-static
1	13.35	113.18	Open To Flow (1)
17	17.06	114.00	Shut-In(1)
49	97.31	114.90	End Shut-In(1)
50	17.12	114.90	Open To Flow (2)
77	19.68	118.74	Shut-In(2)
137	94.03	119.15	End Shut-In(2)
138	2174.95	120.03	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
10.00	OCM 10%o 90%m	0.14
0.00	GIP = 0	0.00

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Larson Engineering, Inc.

Ohmart #1-15

562 W State Rd 4
Olmitz KS 67564-8561

15-17s-31w Scott KS

Job Ticket: 37813

DST#: 7

ATTN: Bob Lewellyn

Test Start: 2010.03.26 @ 05:44:05

Tool Information

Drill Pipe:	Length: 4254.00 ft	Diameter: 3.80 inches	Volume: 59.67 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: 55000.00 lb
		Total Volume: 59.67 bbl		Tool Chased 0.00 ft
Drill Pipe Above KB:	32.00 ft			String Weight: Initial 50000.00 lb
Depth to Top Packer:	4250.00 ft			Final 50000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	19.00 ft			
Tool Length:	47.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

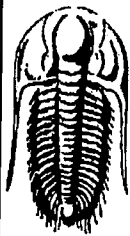
Tool Comments:

Tool Description

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

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			4223.00	
Shut In Tool	5.00			4228.00	
Hydraulic tool	5.00			4233.00	
Jars	5.00			4238.00	
Safety Joint	3.00			4241.00	
Packer	5.00			4246.00	28.00 Bottom Of Top Packer
Packer	4.00			4250.00	
Stubb	1.00			4251.00	
Recorder	0.00	8322	Inside	4251.00	
Recorder	0.00	8166	Inside	4251.00	
Perforations	13.00			4264.00	
Bullnose	5.00			4269.00	19.00 Bottom Packers & Anchor

Total Tool Length: 47.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Larson Engineering, Inc.

Ohmart #1-15

562 W State Rd 4
Olmitz KS 67564-8561

15-17s-31w Scott KS

Job Ticket: 37813

DST#: 7

ATTN: Bob Lewellyn

Test Start: 2010.03.26 @ 05:44:05

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 51.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.56 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 2900.00 ppm

Filter Cake: 2.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
10.00	OCM 10%o 90%m	0.140
0.00	GIP = 0	0.000

Total Length: 10.00 ft Total Volume: 0.140 bbl

Num Fluid Samples: 0

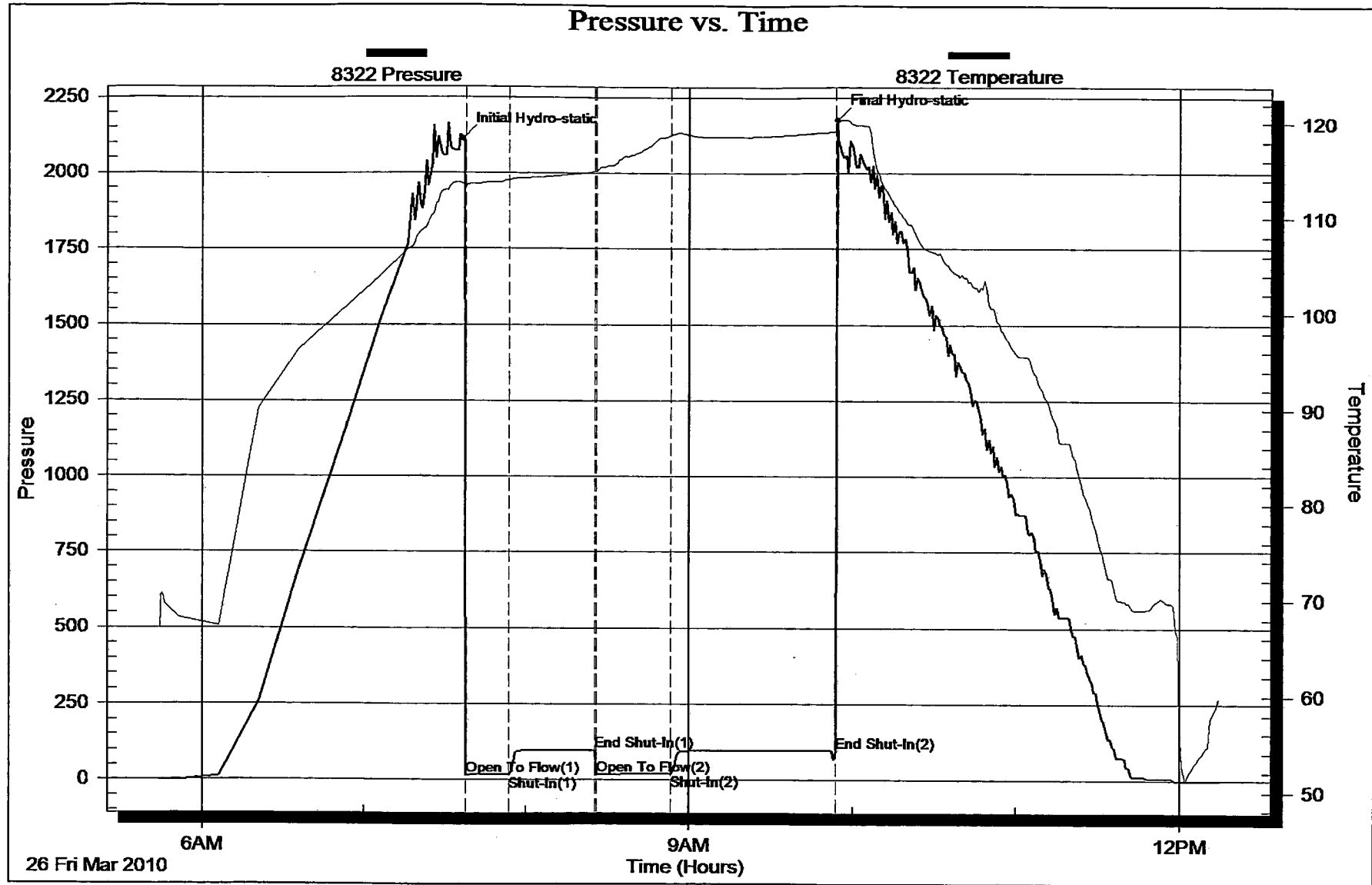
Num Gas Bombs: 0

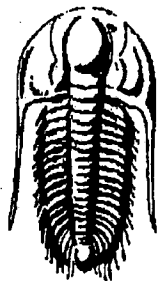
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:





TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

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

562 W State Rd 4
Olmitz KS 67564-8561

ATTN: Bob Lewellyn

15-17s-31w Scott KS

Ohmart #1-15

Start Date: 2010.03.26 @ 20:56:05

End Date: 2010.03.27 @ 03:34:44

Job Ticket #: 37814 DST #: 8

Trilobite Testing, Inc.

PO Box 362 Hays, KS 67601

ph: 785-625-4778 fax: 785-625-5620

Larson Engineering, Inc.

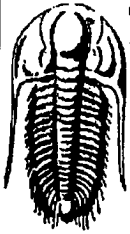
Ohmart #1-15

15-17s-31w Scott KS

DST # 8

Lans, L

2010.03.26



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Larson Engineering, Inc.

562 W State Rd 4
Olmitz KS 67564-8561

ATTN: Bob Lewellyn

Ohmart #1-15

15-17s-31w Scott KS

Job Ticket: 37814

DST#: 8

Test Start: 2010.03.26 @ 20:56:05

GENERAL INFORMATION:

Formation: **Lans, L**

Deviated: **No** Whipstock: **ft (KB)**

Time Tool Opened: **23:07:45**

Time Test Ended: **03:34:44**

Test Type: **Conventional Bottom Hole**

Tester: **Brandon Domsch**

Unit No: **48**

Interval: **4270.00 ft (KB) To 4280.00 ft (KB) (TVD)**

Total Depth: **4280.00 ft (KB) (TVD)**

Hole Diameter: **7.88 inches** Hole Condition: **Fair**

Reference Elevations: **2924.00 ft (KB)**

2919.00 ft (CF)

KB to GR/CF: **5.00 ft**

Serial #: 8322 Inside

Press@RunDepth: **52.68 psig @ 4271.00 ft (KB)**

Start Date: **2010.03.26**

End Date:

2010.03.27

Capacity: **8000.00 psig**

Last Calib.: **2010.03.27**

Start Time: **20:56:05**

End Time:

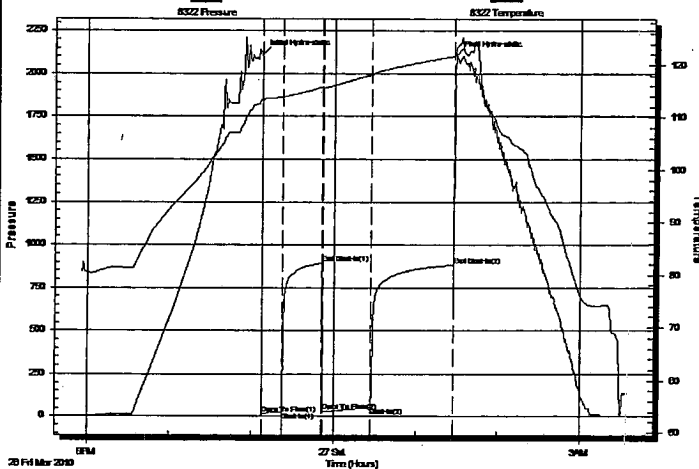
03:34:44

Time On Btm: **2010.03.26 @ 23:07:30**

Time Off Btm: **2010.03.27 @ 01:29:00**

TEST COMMENT: IF: Built to 1 1/2 inches.
IS: No return.
FF: Built to 2 inches.
FS: No return.

Pressure vs. Time



PRESSURE SUMMARY

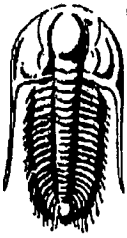
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2113.75	113.66	Initial Hydro-static
1	15.59	112.77	Open To Flow (1)
15	27.12	113.76	Shut-In(1)
44	891.09	115.80	End Shut-In(1)
44	28.54	115.43	Open To Flow (2)
80	52.68	118.08	Shut-In(2)
140	881.52	121.64	End Shut-In(2)
142	2111.56	123.15	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
10.00	M 100% m	0.14
80.00	WCM 20% w 80% m	1.12
0.00	GIP = 0	0.00
0.00	RW = .303 @ 69F = 23000 ppm	0.00

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Larson Engineering, Inc.

Ohmart #1-15

562 W State Rd 4
Olmitz KS 67564-8561

15-17s-31w Scott KS

Job Ticket: 37814

DST#: 8

ATTN: Bob Lewellyn

Test Start: 2010.03.26 @ 20:56:05

Tool Information

Drill Pipe:	Length: 4254.00 ft	Diameter: 3.80 inches	Volume: 59.67 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: 65000.00 lb
		Total Volume: 59.67 bbl		Tool Chased 0.00 ft
Drill Pipe Above KB:	12.00 ft			String Weight: Initial 50000.00 lb
Depth to Top Packer:	4270.00 ft			Final 50000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	10.00 ft			
Tool Length:	38.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description

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

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			4243.00	
Shut In Tool	5.00			4248.00	
Hydraulic tool	5.00			4253.00	
Jars	5.00			4258.00	
Safety Joint	3.00			4261.00	
Packer	5.00			4266.00	28.00 Bottom Of Top Packer
Packer	4.00			4270.00	
Stubb	1.00			4271.00	
Recorder	0.00	8322	Inside	4271.00	
Recorder	0.00	8166	Inside	4271.00	
Perforations	4.00			4275.00	
Bullnose	5.00			4280.00	10.00 Bottom Packers & Anchor

Total Tool Length: 38.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Larson Engineering, Inc.

Ohmart #1-15

562 W State Rd 4
Olmitz KS 67564-8561

15-17s-31w Scott KS

Job Ticket: 37814

DST#: 8

ATTN: Bob Lew ellyn

Test Start: 2010.03.26 @ 20:56:05

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:

23000 ppm

Viscosity: 53.00 sec/qt

Cushion Volume:

bbl

Water Loss: 7.17 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 2900.00 ppm

Filter Cake: 2.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
10.00	M 100%m	0.140
80.00	WCM 20%w 80%m	1.122
0.00	GIP = 0	0.000
0.00	RW = .303@69F = 23000 ppm	0.000

Total Length: 90.00 ft Total Volume: 1.262 bbl

Num Fluid Samples: 0

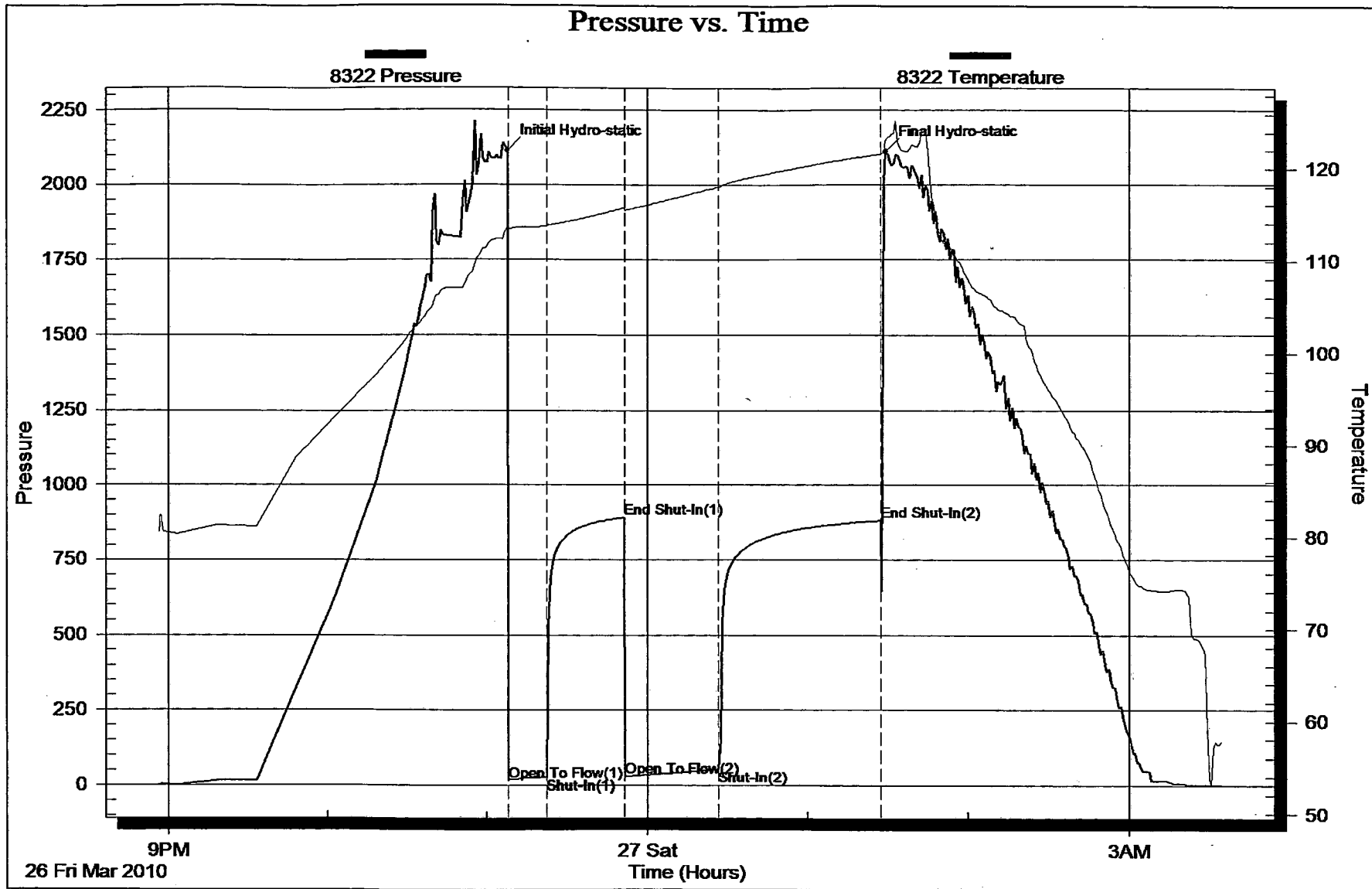
Num Gas Bombs: 0

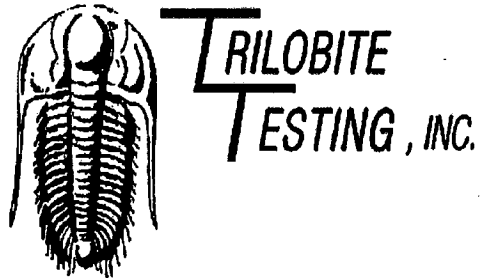
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:





DRILL STEM TEST REPORT

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

562 W State Rd 4
Olmitz KS 67564-8561

ATTN: Bob Lewellyn

15-17s-31w Scott KS

Ohmart #1-15

Start Date: 2010.03.27 @ 18:23:05

End Date: 2010.03.28 @ 01:33:44

Job Ticket #: 37815 DST #: 9

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

ph: 785-625-4778 fax: 785-625-5620



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Larson Engineering, Inc.

562 W State Rd 4
Olmitz KS 67564-8561

ATTN: Bob Lewellyn

Ohmart #1-15

15-17s-31w Scott KS

Job Ticket: 37815

DST#: 9

Test Start: 2010.03.27 @ 18:23:05

GENERAL INFORMATION:

Formation: **Altamont**

Deviated: **No** Whipstock: **ft (KB)**

Time Tool Opened: 20:39:30

Time Test Ended: 01:33:44

Test Type: **Conventional Bottom Hole**

Tester: **Brandon Domsch**

Unit No: **48**

Interval: **4286.00 ft (KB) To 4380.00 ft (KB) (TVD)**

Total Depth: **4380.00 ft (KB) (TVD)**

Hole Diameter: **7.88 inches** Hole Condition: **Fair**

Reference Elevations: **2924.00 ft (KB)**

2919.00 ft (CF)

KB to GR/CF: **5.00 ft**

Serial #: 8322 Inside

Press@RunDepth: **26.06 psig @ 4287.00 ft (KB)**

Start Date: **2010.03.27**

End Date: **2010.03.28**

Capacity: **8000.00 psig**

Last Calib.: **2010.03.28**

Start Time: **18:23:05**

End Time: **01:33:44**

Time On Btm: **2010.03.27 @ 20:39:00**

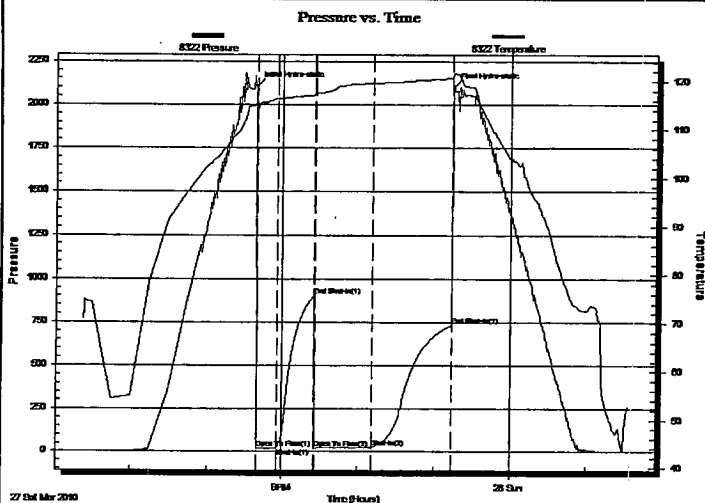
Time Off Btm: **2010.03.27 @ 23:14:30**

TEST COMMENT: IF: 1/4 inch died in 12 mins.

IS: No return.

FF: No blow.

FS: No return.



PRESSURE SUMMARY

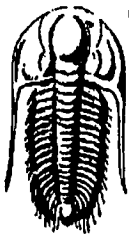
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2108.54	115.38	Initial Hydro-static
1	17.75	114.64	Open To Flow (1)
17	20.27	116.37	Shut-In(1)
46	903.17	117.15	End Shut-In(1)
47	21.93	117.07	Open To Flow (2)
92	26.06	119.64	Shut-In(2)
155	732.73	120.63	End Shut-In(2)
156	2101.73	121.71	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
15.00	SOCM 5%o 95%m	0.21
10.00	O&M 50%o 50%m	0.14
0.00	GIP = 0	0.00
0.00	API = N/A	0.00

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Larson Engineering, Inc.

Ohmart #1-15

562 W State Rd 4
Olmitz KS 67564-8561

15-17s-31w Scott KS

Job Ticket: 37815

DST#: 9

ATTN: Bob Lewellyn

Test Start: 2010.03.27 @ 18:23:05

Tool Information

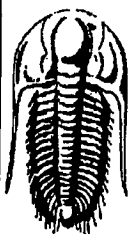
Drill Pipe:	Length: 4282.00 ft	Diameter: 3.80 inches	Volume: 60.07 bbl	Tool Weight: 1500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose: 60000.00 lb
		Total Volume: 60.07 bbl		Tool Chased 0.00 ft
Drill Pipe Above KB:	24.00 ft			String Weight: Initial 53000.00 lb
Depth to Top Packer:	4286.00 ft			Final 53000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	94.00 ft			
Tool Length:	122.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			4259.00	
Shut In Tool	5.00			4264.00	
Hydraulic tool	5.00			4269.00	
Jars	5.00			4274.00	
Safety Joint	3.00			4277.00	
Packer	5.00			4282.00	28.00 Bottom Of Top Packer
Packer	4.00			4286.00	
Stubb	1.00			4287.00	
Recorder	0.00	8322	Inside	4287.00	
Recorder	0.00	8166	Inside	4287.00	
Perforations	23.00			4310.00	
Change Over Sub	1.00			4311.00	
Drill Pipe	63.00			4374.00	
Change Over Sub	1.00			4375.00	
Bullnose	5.00			4380.00	94.00 Bottom Packers & Anchor

Total Tool Length: 122.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Larson Engineering, Inc.

Ohmart #1-15

562 W State Rd 4
Olmitz KS 67564-8561

15-17s-31w Scott KS

Job Ticket: 37815

DST#: 9

ATTN: Bob Lewellyn

Test Start: 2010.03.27 @ 18:23:05

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 45.00 sec/qt

Cushion Volume:

bbl

Water Loss: 7.58 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 3000.00 ppm

Filter Cake: 2.00 inches

Recovery Information

Recovery Table

Length ft.	Description	Volume bbl
15.00	SOCM 5%o 95%m	0.210
10.00	O&M 50%o 50%m	0.140
0.00	GIP = 0	0.000
0.00	API = N/A	0.000

Total Length: 25.00 ft

Total Volume: 0.350 bbl

Num Fluid Samples: 0

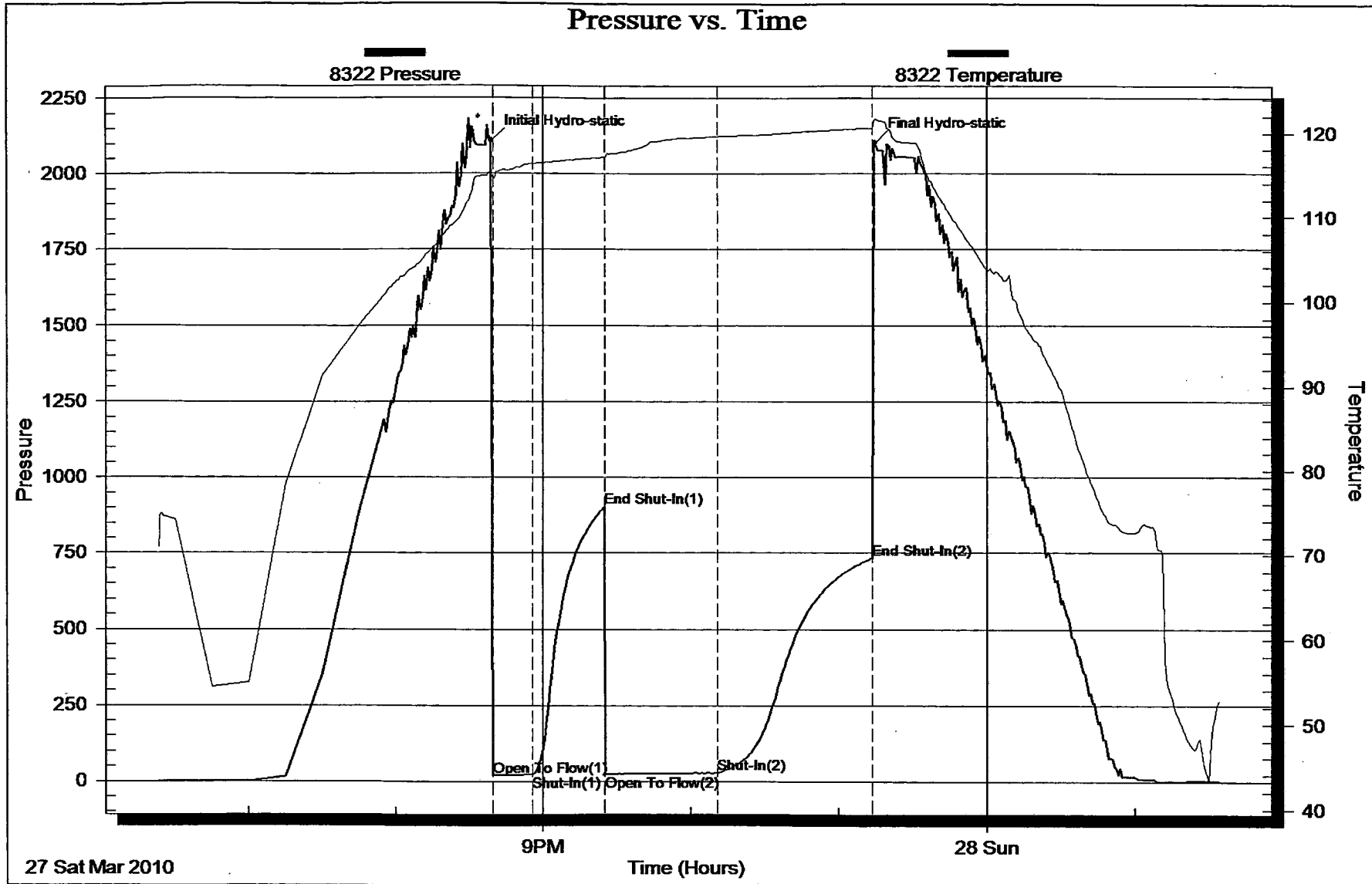
Num Gas Bombs: 0

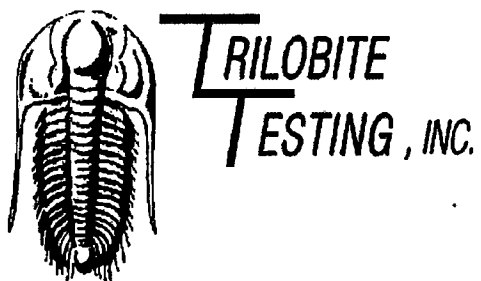
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:





DRILL STEM TEST REPORT

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

562 W State Rd 4
Olimitz KS 67564-8561

ATTN: Bob Lewellyn

15-17s-31w Scott KS

Ohmart #1-15

Start Date: 2010.03.28 @ 17:35:05

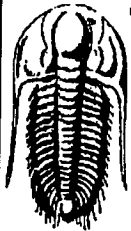
End Date: 2010.03.29 @ 00:32:29

Job Ticket #: 37099 DST #: 10

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601.

ph: 785-625-4778 fax: 785-625-5620



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Larson Engineering, Inc.

562 W State Rd 4
Olmitz KS 67564-8561

ATTN: Bob Lew elyn

Ohmart #1-15

15-17s-31w Scott KS

Job Ticket: 37099

DST#: 10

Test Start: 2010.03.28 @ 17:35:05

GENERAL INFORMATION:

Formation: **Pawnee, Ft.Scott, Ch**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 20:15:15

Time Test Ended: 00:32:29

Test Type: Conventional Bottom Hole

Tester: Mike Roberts

Unit No: 48

Interval: **4400.00 ft (KB) To 4500.00 ft (KB) (TVD)**

Total Depth: 4500.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 2924.00 ft (KB)

2919.00 ft (CF)

KB to GR/CF: 5.00 ft

Serial #: 8322

Inside

Press@RunDepth: 24.91 psig @ 4401.00 ft (KB)

Start Date: 2010.03.28

End Date:

2010.03.29

Capacity: 8000.00 psig

Last Calib.: 2010.03.29

Start Time: 17:35:05

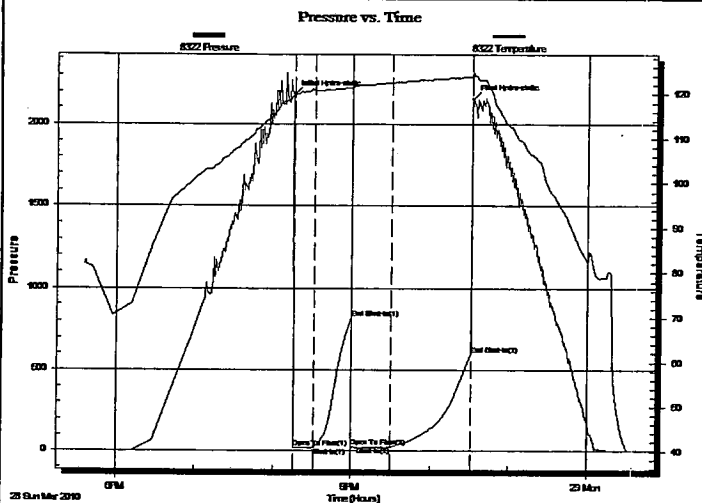
End Time:

00:32:29

Time On Btm: 2010.03.28 @ 20:15:00

Time Off Btm: 2010.03.28 @ 22:31:44

TEST COMMENT: IF: Built to 1/2 blow
IS: No return
FF: Built to weak surface blow
FS: No return



PRESSURE SUMMARY

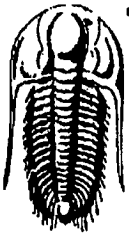
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2182.05	119.60	Initial Hydro-static
1	18.35	119.27	Open To Flow (1)
17	21.15	120.86	Shut-In(1)
45	815.75	121.45	End Shut-In(1)
45	25.76	121.43	Open To Flow (2)
75	24.91	122.57	Shut-In(2)
136	595.96	123.88	End Shut-In(2)
137	2155.11	124.68	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
15.00	m 100%	0.21

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Larson Engineering, Inc.
562 W State Rd 4
Olmitz KS 67564-8561
ATTN: Bob Lew elyn

Ohmart #1-15
15-17s-31w Scott KS
Job Ticket: 37099 DST#: 10
Test Start: 2010.03.28 @ 17:35:05

Tool Information

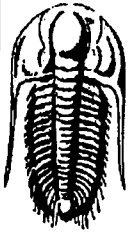
Drill Pipe:	Length: 4400.00 ft	Diameter: 3.80 inches	Volume: 61.72 bbl	Tool Weight: 1500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose: 65000.00 lb
			<u>Total Volume: 61.72 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	28.00 ft			String Weight: Initial 56000.00 lb
Depth to Top Packer:	4400.00 ft			Final 57000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	100.00 ft			
Tool Length:	128.00 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			4373.00	
Shut In Tool	5.00			4378.00	
Hydraulic tool	5.00			4383.00	
Jars	5.00			4388.00	
Safety Joint	3.00			4391.00	
Packer	5.00			4396.00	28.00 Bottom Of Top Packer
Packer	4.00			4400.00	
Stubb	1.00			4401.00	
Recorder	0.00	8322	Inside	4401.00	
Recorder	0.00	8166	Inside	4401.00	
Drill Pipe	63.00			4464.00	
Change Over Sub	1.00			4465.00	
Perforations	30.00			4495.00	
Bullnose	5.00			4500.00	100.00 Bottom Packers & Anchor

Total Tool Length: 128.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Larson Engineering, Inc.

Ohmart #1-15

562 W State Rd 4
Olmitz KS 67564-8561

15-17s-31w Scott KS

Job Ticket: 37099

DST#: 10

ATTN: Bob Lewellyn

Test Start: 2010.03.28 @ 17:35:05

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

0 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

0 ppm

Viscosity: 62.00 sec/qt

Cushion Volume:

bbl

Water Loss: 6.38 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 4000.00 ppm

Filter Cake: 2.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
15.00	m 100%	0.210

Total Length: 15.00 ft Total Volume: 0.210 bbl

Num Fluid Samples: 0

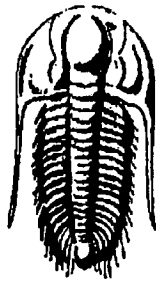
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

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

562 W State Rd 4
Olmitz KS 67564-8561

ATTN: Bob Lewellyn

15-17s-31w Scott KS

Ohmart #1-15

Start Date: 2010.03.29 @ 10:45:05

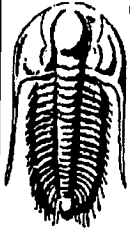
End Date: 2010.03.29 @ 18:16:59

Job Ticket #: 37100 DST #: 11

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

ph: 785-625-4778 fax: 785-625-5620



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Larson Engineering, Inc.

562 W State Rd 4
Olmitz KS 67564-8561

ATTN: Bob Lewellyn

Ohmart #1-15

15-17s-31w Scott KS

Job Ticket: 37100

DST#: 11

Test Start: 2010.03.29 @ 10:45:05

GENERAL INFORMATION:

Formation: **Johnson**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 12:52:30

Time Test Ended: 18:16:59

Test Type: Conventional Bottom Hole

Tester: Mike Roberts

Unit No: 48

Interval: **4506.00 ft (KB) To 4565.00 ft (KB) (TVD)**

Total Depth: 3916.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 2924.00 ft (KB)

2919.00 ft (CF)

KB to GR/CF: 5.00 ft

Serial #: 8322 Inside

Press@RunDepth: 118.71 psig @ 4507.00 ft (KB)

Start Date: 2010.03.29

End Date:

2010.03.29

Capacity: 8000.00 psig

Last Calib.: 2010.03.29

Start Time: 10:45:05

End Time:

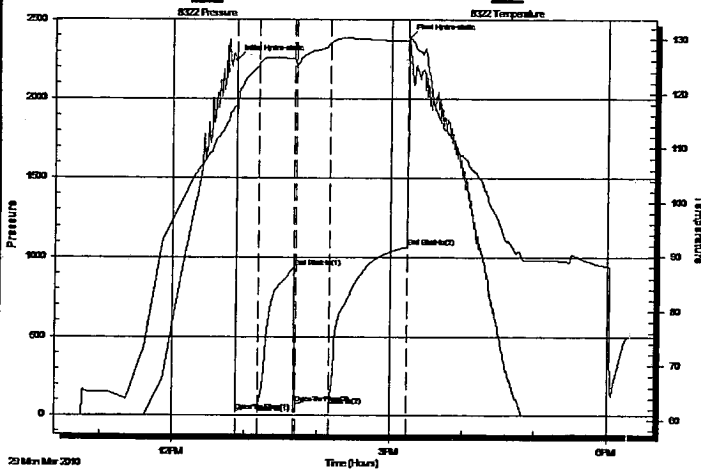
18:16:59

Time On Btm: 2010.03.29 @ 12:52:15

Time Off Btm: 2010.03.29 @ 15:14:29

TEST COMMENT: IF:BOB in 5 min.
IS:No return blow
FF:BOB in 4 min
FS:Return blow in 20 min., built to 1 1/2" blow

Pressure vs. Time



PRESSURE SUMMARY

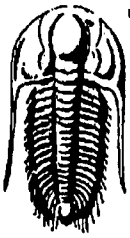
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2249.72	117.51	Initial Hydro-static
1	27.05	116.51	Open To Flow (1)
19	70.70	125.33	Shut-In(1)
49	940.12	126.34	End Shut-In(1)
50	76.16	125.24	Open To Flow (2)
78	118.71	129.24	Shut-In(2)
142	1067.23	129.60	End Shut-In(2)
143	2387.91	130.26	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
30.00	CO	0.42
124.00	GCMO 20% g 30% m 50%o	1.74
62.00	MCGO 20%m 30%g 50% o	0.87
62.00	GCMO 20%g 30%m 50o%o	0.87
0.00	AP= 80 Degress @ 31 corrected to 29	0.00
0.00	RW=NA	0.00

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Larson Engineering, Inc.

Ohmart #1-15

562 W State Rd 4
Olmitz KS 67564-8561

15-17s-31w Scott KS

Job Ticket: 37100

DST#: 11

ATTN: Bob Lewellyn

Test Start: 2010.03.29 @ 10:45:05

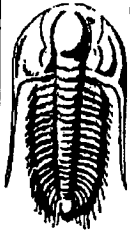
Tool Information

Drill Pipe:	Length: 4510.00 ft	Diameter: 3.80 inches	Volume: 63.26 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: 65000.00 lb
			<u>Total Volume: 63.26 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	32.00 ft			String Weight: Initial 52000.00 lb
Depth to Top Packer:	4506.00 ft			Final 60000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	59.00 ft			
Tool Length:	87.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		
Tool Comments:				

Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			4479.00	
Shut In Tool	5.00			4484.00	
Hydraulic tool	5.00			4489.00	
Jars	5.00			4494.00	
Safety Joint	3.00			4497.00	
Packer	5.00			4502.00	28.00 Bottom Of Top Packer
Packer	4.00			4506.00	
Stubb	1.00			4507.00	
Recorder	0.00	8322	Inside	4507.00	
Recorder	0.00	8166	Inside	4507.00	
Change Over Sub	1.00			4508.00	
Drill Pipe	31.00			4539.00	
Change Over Sub	1.00			4540.00	
Perforations	20.00			4560.00	
Bullnose	5.00			4565.00	59.00 Bottom Packers & Anchor

Total Tool Length: 87.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Larson Engineering, Inc.

Ohmart #1-15

562 W State Rd 4
Olmitz KS 67564-8561

15-17s-31w Scott KS

Job Ticket: 37100

DST#: 11

ATTN: Bob Lewellyn

Test Start: 2010.03.29 @ 10:45:05

Mud and Cushion Information

Mud Type: Gel Chem	Cushion Type:	Oil API: 29 deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity: 0 ppm
Viscosity: 62.00 sec/qt	Cushion Volume: bbl	
Water Loss: 6.38 in ³	Gas Cushion Type:	
Resistivity: 0.00 ohm.m	Gas Cushion Pressure: psig	
Salinity: 4000.00 ppm		
Filter Cake: 2.00 inches		

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
30.00	CO	0.421
124.00	GCMO 20% g 30% m 50%o	1.739
62.00	MCGO 20%m 30%g 50% o	0.870
62.00	GCMO 20%g 30%m 50o%o	0.870
0.00	API= 80 Degress @ 31 corrected to 29	0.000
0.00	RW=NA	0.000

Total Length: 278.00 ft Total Volume: 3.900 bbl

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

Laboratory Name: Laboratory Location:

Recovery Comments:

