

KANSAS CORPORATION COMMISSION **1045924**
OIL & GAS CONSERVATION DIVISION

Form ACO-1

June 2009

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

WELL COMPLETION FORM
WELL HISTORY - DESCRIPTION OF WELL & LEASE

OPERATOR: License # 3842
Name: Larson Engineering, Inc. dba Larson Operating Company
Address 1: 562 W STATE RD 4
Address 2: _____
City: OLMITZ State: KS Zip: 67564 + 8561
Contact Person: Thomas Larson
Phone: (620) 653-7368
CONTRACTOR: License # 33935
Name: H. D. Drilling, LLC
Wellsite Geologist: Robert Lewellyn
Purchaser: _____

Designate Type of Completion:

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

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

Operator: _____
Well Name: _____

Original Comp. Date: _____ Original Total Depth: _____

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

6/24/2010 7/7/2010 7/7/2010
Spud Date or Date Reached TD Completion Date or
Recompletion Date Recompletion Date

API No. 15 - 15-101-22244-00-00

Spot Description: _____

NW SE SE SW Sec. 27 Twp. 19 S. R. 28 ☐ East ☒ West
580 Feet from ☐ North / ☒ South Line of Section
2222 Feet from ☐ East / ☒ West Line of Section

Footages Calculated from Nearest Outside Section Corner:

☐ NE ☐ NW ☐ SE ☒ SW

County: Lane

Lease Name: Stormont Well #: 2-27

Field Name: Stormont

Producing Formation: N/A

Elevation: Ground: 2768 Kelly Bushing: 2775

Total Depth: 4702 Plug Back Total Depth: _____

Amount of Surface Pipe Set and Cemented at: 259 Feet

Multiple Stage Cementing Collar Used? ☐ Yes ☒ No

If yes, show depth set: _____ Feet

If Alternate II completion, cement circulated from: _____

feet depth to: _____ w/ _____ sx cmt.

Drilling Fluid Management Plan

(Data must be collected from the Reserve Pit)

Chloride content: 35000 ppm Fluid volume: 800 bbls

Dewatering method used: Evaporated

Location of fluid disposal if hauled offsite: _____

Operator Name: _____

Lease Name: _____ License #: _____

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

County: _____ Permit #: _____

AFFIDAVIT

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

Submitted Electronically

KCC Office Use ONLY

- ☒ Letter of Confidentiality Received
Date: 10/22/2010
- ☒ Confidential Release Date: 10/21/2012
- ☒ Wireline Log Received
- ☒ Geologist Report Received
- ☐ UIC Distribution
- ALT ☐ I ☒ II ☐ III Approved by: NAOMI JAMES Date: 10/25/2010

Form	ACO1 - Well Completion
Operator	Larson Engineering, Inc. dba Larson Operating Company
Well Name	Stormont 2-27
Doc ID	1045924

Tops

Anhydrite	2103	+672
Base Anhydrite	2131	+644
Heebner Shale	3982	-1207
Lansing-Kansas City	4023	-1248
Stark Shale	4304	-1529
Base Kansas City	4382	-1607
Altamont	4424	-1649
Pawnee	4508	-1733
Fort Scott	4554	-1779
Cherokee	4576	-1801
Cherokee Sand	4636	-1861
Mississippian	4657	-1882



*Mark Parkinson, Governor
Thomas E. Wright, Chairman
Joseph F. Harkins, Commissioner
Ward Loyd, Commissioner*

October 22, 2010

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

Re: ACO1
API 15-101-22244-00-00
Stormont 2-27
SW/4 Sec.27-19S-28W
Lane County, Kansas

Dear Production Department:

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

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

Respectfully,
Thomas Larson

Robert C. Lewellyn

Consulting Petroleum Geologist

P. O. Box 375
Kechi, KS 67067-0609
Office 316-744-2567
Cell 316-518-0495
bobllewellyn@yahoo.com

GEOLOGICAL REPORT

Larson Engineering, Inc.

Stormont No. 2-27

580' FSL & 2222' FWL Sec. 27-19S-28W

Lane County, Kansas

CONTRACTOR:	H D Drilling, LLC, Rig 3
SPUDDED:	June 24, 2010
DRILLING COMPLETED:	July 07, 2010
SURFACE CASING:	8 5/8" @ 259 KBM/175 sx,
ELECTRIC LOGS:	Log-Tech DIL CNL/CDL MEL
ELEVATIONS:	2775 KB 2768 GL

FORMATION TOPS (Electric Log):

Anhydrite	2103 (+ 672)
Base Anhydrite	2131 (+ 644)
Heebner Shale	3982 (-1207)
Lansing-Kansas City Group	4023 (-1248)
Muncie Creek Shale	4204 (-1429)
Stark Shale	4304 (-1529)
Hushpuckney shale	4342 (-1567)
Base Kansas City	4382 (-1607)
Altamont	4424 (-1649)
Pawnee	4508 (-1733)
Myrick Station	4528 (-1753)
Fort Scott	4554 (-1779)
Cherokee	4576 (-1801)
Cherokee Sand	4636 (-1861)
Detrital	4648 (-1873)
Mississippian	4657 (-1882)
Electric Log Total Depth	4702 (-1927)

Samples were examined microscopically from 3800 to Rotary Total Depth. Samples were examined wet and dry and samples from potentially productive zones were viewed under a fluoroscope and checked for oil cut. Following is a description of zones of interest, Drill Stem Tests, etc. For a complete lithologic description of all formations, refer to the sample log in the back pages of this report.

Lansing-Kansas City Zones:

4033-4041 (A Zone)

Limestone, buff, dense to finely crystalline, some cream chalky, poor to fair intercrystalline porosity, some small vug porosity, no show of oil.

4066-4087 (B Zone)

Limestone, buff to tan, dense to finely crystalline, some very poor intercrystalline porosity, no show of oil, some white chert, fresh, opaque.

4085-4108 (C/D Zone)

Limestone, cream to buff, dense to finely crystalline with much chalk, zone is mostly tight with no show of oil, some scattered white to light gray chert.

4114-4120 (E Zone)

Limestone, cream to buff, some gray, finely crystalline and chalky, slightly fossiliferous, zone is mostly tight with no shows of oil.

4129-4146 (F Zone)

Limestone, cream to buff, some tan to mottled, dense to finely crystalline, oolitic in part, slightly fossiliferous, chalky in part, zone is mostly tight with no show of oil, trace of chert, white, fresh, opaque.

4148-4170 (G Zone)

Limestone, buff to tan, finely crystalline and oolitic, partly chalky, good ooliticastic porosity, no show of oil. Much chalk in lower portion with scattered chert, light grey, opaque, fresh.

4214-4240 (H Zone)

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

4242-4271 (I Zone)

Limestone, cream to buff, some tan, dense to finely crystalline and partly fossiliferous, partly chalky, trace of scattered poor intercrystalline porosity, no show of oil.

4278-4283 (J Zone)

Limestone, buff, some grey, finely crystalline and oolitic, fair ooliticastic and interoolitic porosity, rare trace of poor spotted stain, trace of free oil, faint questionable odor, no fluorescence, no cut, porosity mostly (98%) barren.

4318-4326 (K Zone)

Limestone, buff to tan, some gray, dense to finely crystalline, some medium crystalline and partly oolitic, poor to fair intercrystalline porosity, scattered poor to fair spotted stain, slight to fair show of free oil, faint to fair odor, poor fluorescence, fair cut.

Drill Stem Test No. 1 4303-4320

15-30-45-90; blow built to 6 ½" in first flow, no blowback; blow built to bottom of bucket in 28 minutes of second flow, no blowback; recovered 402 feet of muddy water (90% water, 10% mud). ISIP 702# FSIP 699# IFP 20-89# FFP 91-187# IHP 2163# FHP 2108# BHT 134 degrees.

4333-4339 (K2 Zone)

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

Drill Stem Test No. 2 4327-4336

15-30-30-60; blow built to one inch on first flow, no blowback; blow built to ¾" on second flow, no blowback; recovered 100 feet of muddy water (75% water, 25% mud). ISIP 580# FSIP 560# IFP 16-30# FFP 32-55# IHP 2161# FHP 2133# BHT 128 degrees.

4349-4354 (L Zone)

Limestone, buff to tan to mottled, some brown, dense to finely crystalline, some medium crystalline, brittle, fair intercrystalline porosity, poor to fair spotted stain, slight to fair show of free oil, good odor, poor fluorescence, poor cut.

Drill Stem Test No. 3 4342-4354

15-30-15-30; weak surface blow, died in seven minutes of first flow; blow did not return on second flow; recovered one foot of mud. ISIP 17# FSIP 17# IFP 15-16# FFP 16-16# IHP 2184# FHP 2126# BHT 120 degrees.

4354-4364 (L Zone)

Limestone, buff, dense to finely crystalline and mealy, poor to fair intercrystalline porosity with scattered small vug porosity, poor to fair spotted stain, very slight show of free oil, faint odor, poor to fair fluorescence, poor to fair cut.

Drill Stem Test No. 4

4354-4364

15-30-15-30; surface blow died in one minute; blow did not return on second flow; recovered one foot of mud; ISIP 15# FSIP 15# IFP 13-15# FFP 14-15# IHP 2175# FHP 2160# BHT 118 degrees.

4382-4398 (Pleasanton Zone)

The pleasanton section consisted of limestones, buff to tan to brown, mostly dense with scattered finely crystalline, mostly tight with only a trace of very poor intercrystalline porosity, trace of scattered poor spotted stain, no free oil, questionable odor, no fluorescence, and no cut.

4401-4413 (Lenapah Zone)

Limestone, tan to brown, some mottled, dense, some finely crystalline, trace of very poor intercrystalline porosity, one or two pieces with poor spotted stain, no free oil, no odor, no fluorescence, no cut.

4461-4467 (Altamont Zone)

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

Drill Stem Test No. 5

4395-4475

15-30-15-30; weak surface blow, died in five minutes of first flow; blow did not return on second flow; recovered five feet of mud; ISIP 167# FSIP 106# IFP 20-21# FFP 20-22# IHP 2187# FHP 2156# BHT 120 degrees.

4508-4525 (Pawnee Zone)

Limestone, tan to brown, some mottled, dense to finely crystalline, some sub-lithographic, zone is mostly tight with no shows of oil, some scattered buff to tan chert, fresh, opaque.

4528-4549 (Myrick Station Zone)

Limestone, tan to brown, dense to sub-lithographic, some finely crystalline, slightly fossiliferous, zone is mostly tight with rare trace of very poor spotted stain, no free oil, no odor, no fluorescence, no cut.

4554-4576 (Fort Scott Zone)

Limestone, buff to tan to brown, dense to finely crystalline and partly oolitic, some dense-oolitic, some tight oolitic with black oolites, zone is mostly tight with no shows of oil.

4609-4634 (Johnson Zone)

Limestone, buff to tan, some gray, dense to finely crystalline and fossiliferous, partly chalky, some with poor intercrystalline porosity, poor spotted stain, trace of free oil, faint odor, no fluorescence, poor cut.

Drill Stem Test No. 6 4580-4635

15-30-18-30; one-eighth inch blow throughout first flow; blow did not return on second flow; recovered two feet of mud; ISIP 135# FSIP 81# IFP 21-22# FFP 22-23# IHP 2366# FHP 2304# BHT 125 degrees.

4636-4648 (Cherokee Sand Zone)

Sand, buff to light gray, fine grained, subround, well sorted, well cemented to friable, fair intergranular porosity, scattered poor to fair spotted stain, fair show of free oil, fair odor, poor to fair fluorescence, fair cut.

Drill Stem Test No. 7 4620-4655

15-30-15-30; weak surface blow, died in seven minutes of first flow; did not return on second flow; recovered two feet of mud; ISIP 185# FSIP 149# IFP 19-20# FFP 19-20# IHP 2360# FHP 2291# BHT 123 degees.

4648-4657 (Detrital Zone)

Various and varicolored cherts and shales with scattered limestones, zone has no reservoir quality and contains no shows of oil.

4657-4676 (Mississippian Zone)

Limestone, dolomitic, buff to tan, finely crystalline and brittle, flaky, some scattered light gray fresh chert, zone is mostly tight with no shows of oil

4676-4700

Dolomite with scattered dolomitic lime, buff to tan to gray, fine to medium crystalline with scattered poor intercrystalline porosity, no show of oil.

4700

Rotary Total Depth

Conclusions and Recommendations:

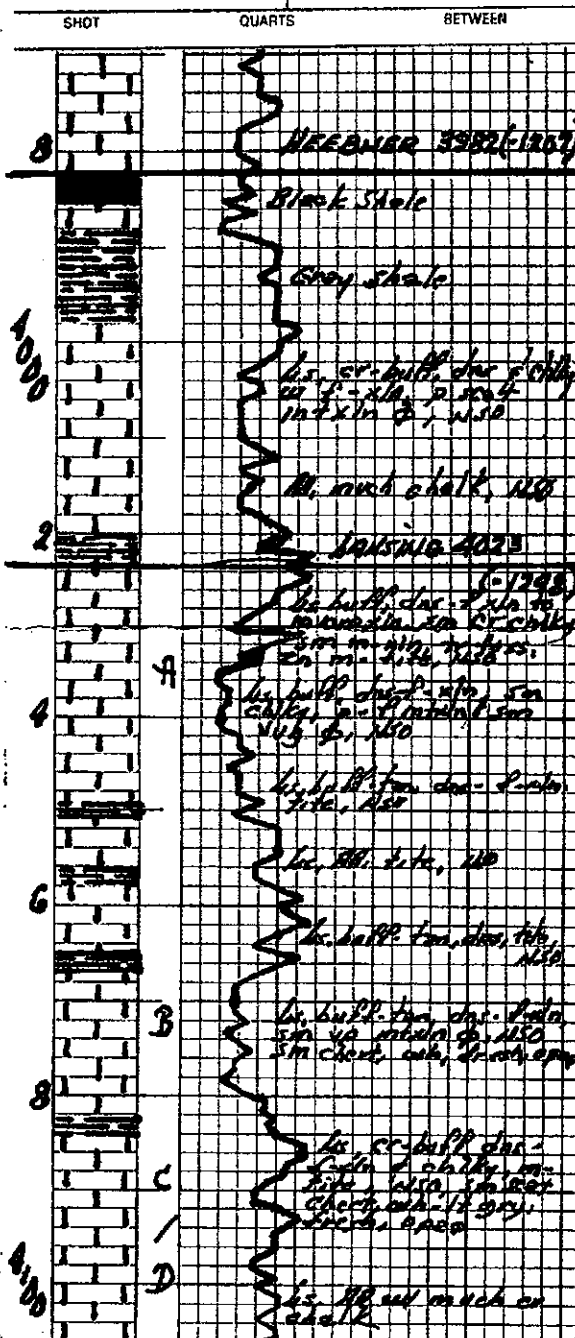
Sample examination, drill stem testing, and electric logging revealed no zones of possible commercial production of oil or gas. It was therefore recommended, and permission granted to plug and abandon the No. 2-27 Stormont.

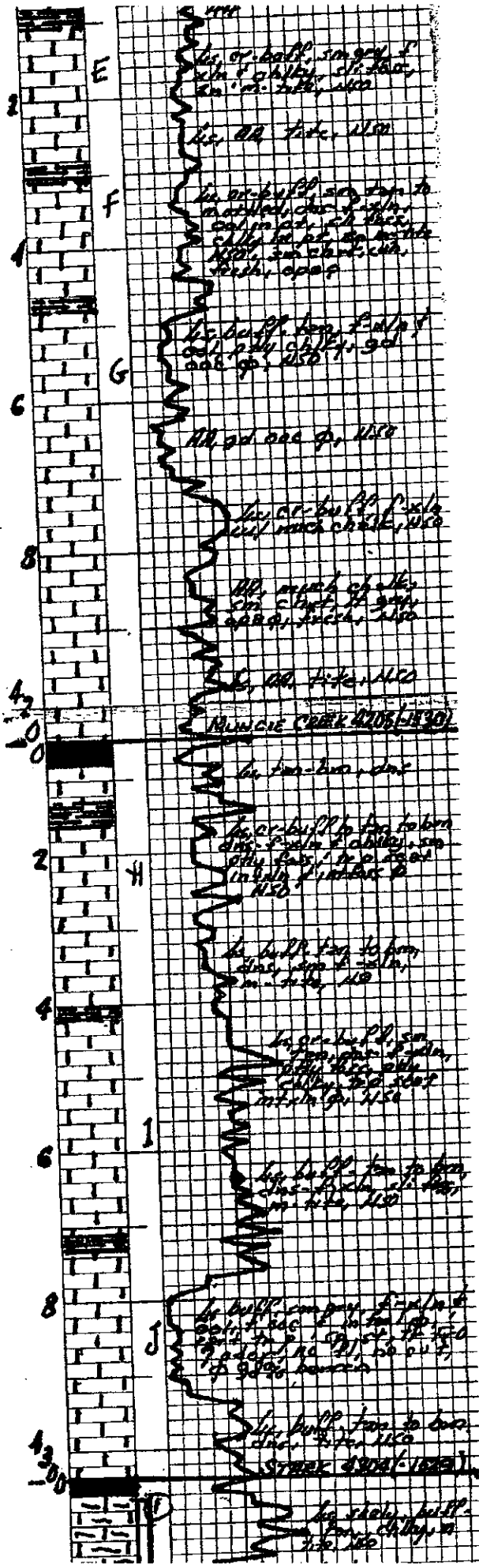
Respectfully submitted,

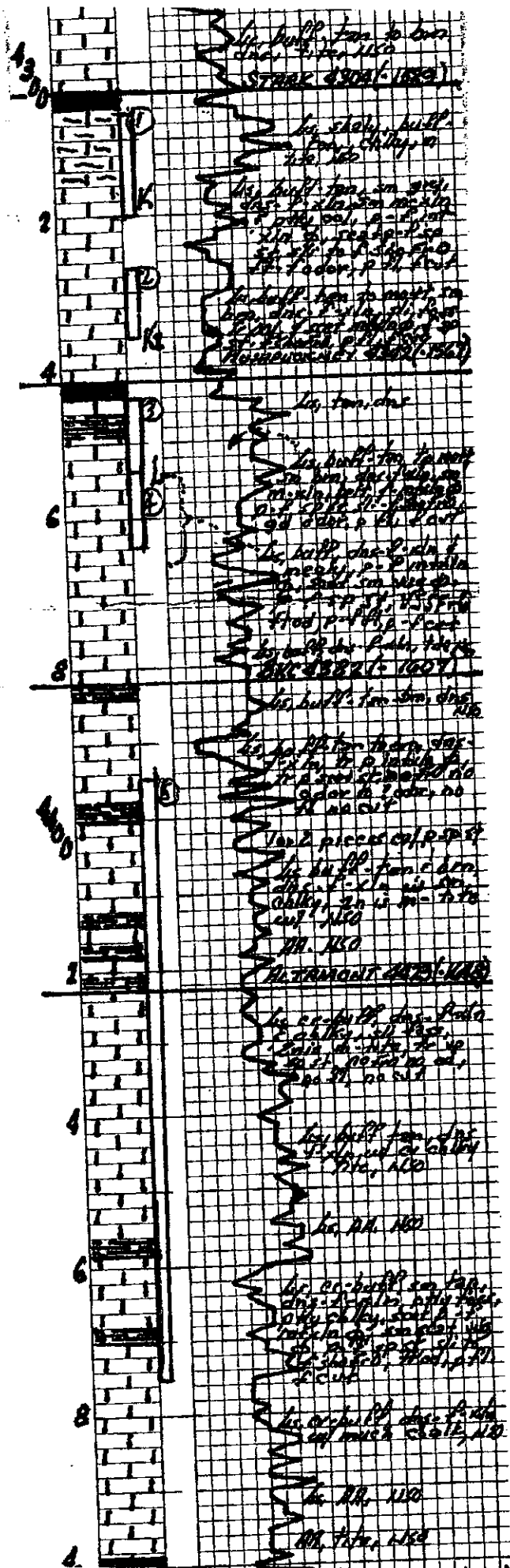
Robert C. Lewellyn
Petroleum Geologist

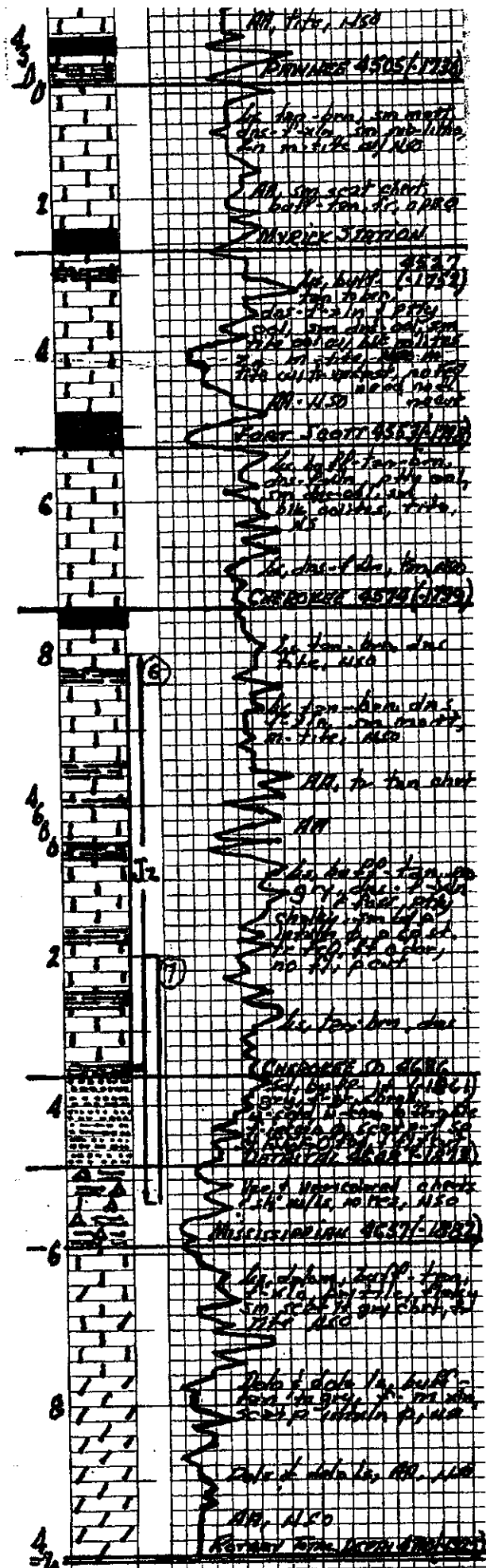
RCL:me

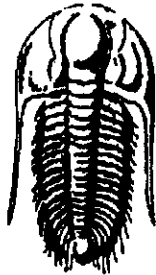
KANSAS		COMPANY	HARSON ENGINEERING
COUNTY	LINE	FARM	STORMONT 2-27
BLOCK	27	SURVEY	Nw Sa Sa Sw
SEC.	27	580' FSL & 2222' FNL	
T.	195	R.	28W
CONTRACTOR		HD Drilling Rig 3	
COMMENCED		06-24-10	
COMPLETED		07-07-10	
REMARKS			
ALTITUDE		2715 KB	
PRODUCTION		D.P.A. Robert C. Lamellen - Geologist	
CASING RECORD			
8 7/8" @ 259 KBM / 175 SX			











**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Prepared For: **Larson Engineering**

562 W. St. Road 4
Olmits, KS 67564-8561

ATTN: Bob Lewellyn

S.27-19-28 Lane, KS

Stormont #2-27

Start Date: 2010.07.01 @ 18:47:25

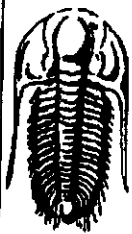
End Date: 2010.07.02 @ 02:20:25

Job Ticket #: 39065 DST #: 1

Trilobite Testing, Inc

PO Box 1733 Hays, KS 67601

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Larson Engineering
562 W. St. Road 4
Olmitz, KS 67564-8561
ATTN: Bob Lewellyn

Stormont #2-27
S.27-19-28 Lane, KS
Job Ticket: 39065 DST#: 1
Test Start: 2010.07.01 @ 18:47:25

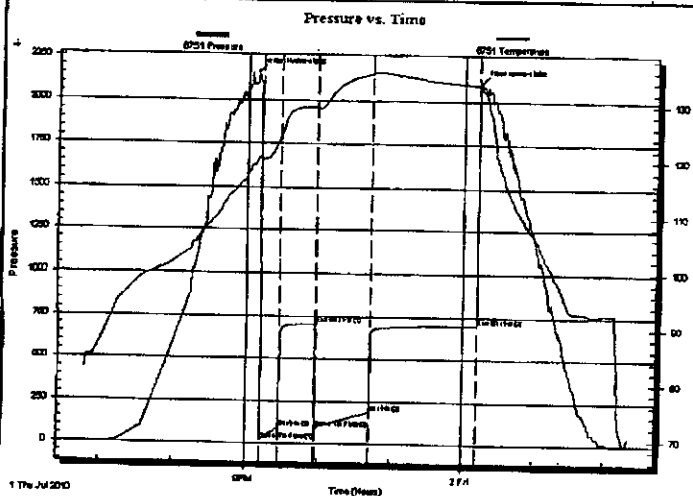
GENERAL INFORMATION:

Formation: **LKC 'K'**
Deviated: **No** Whipstock: ft (KB)
Time Tool Opened: 21:12:10
Time Test Ended: 02:20:25
Interval: **4303.00 ft (KB) To 4320.00 ft (KB) (TVD)**
Total Depth: **4320.00 ft (KB) (TVD)**
Hole Diameter: **7.88 inches** Hole Condition: **Good**

Test Type: **Conventional Bottom Hole**
Tester: **Chuck Smith**
Unit No: **37**
Reference Elevations: **2775.00 ft (KB)**
2768.00 ft (CF)
KB to GR/CF: **7.00 ft**

Serial #: 6751 **Outside**
Press@RunDepth: **186.88 psig @ 4305.00 ft (KB)**
Start Date: **2010.07.01** End Date: **2010.07.02** Capacity: **8000.00 psig**
Start Time: **18:47:30** End Time: **02:20:24** Last Calib.: **2010.07.02**
Time On Btm: **2010.07.01 @ 21:08:25**
Time Off Btm: **2010.07.02 @ 00:13:55**

TEST COMMENT: IF: 6 1/2" Building blow.
IS: No return.
FF: B.O.B. @ 28 min.
FS: No return.



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2163.05	120.16	Initial Hydro-static
4	20.31	119.21	Open To Flow (1)
20	88.87	124.34	Shut-in(1)
49	702.10	129.48	End Shut-in(1)
50	90.95	129.07	Open To Flow (2)
95	186.88	135.37	Shut-in(2)
184	699.01	133.50	End Shut-in(2)
186	2108.06	133.34	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
402.00	MW 10%M 90%W	4.33
0.00	RW: .166 @ 71 Degrees F = 45000 PPM	0.00

Gas Rates

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

DRILL STEM TEST REPORT

TOOL DIAGRAM

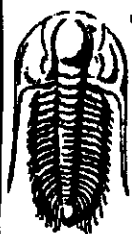
Larson Engineering
562 W. St. Road 4
Olmitz, KS 67564-8561
ATTN: Bob Lewellyn

Stormont #2-27
S.27-19-28 Lane, KS
Job Ticket: 39065 DST#: 1
Test Start: 2010.07.01 @ 18:47:25

Tool Information

Drill Pipe:	Length: 4158.00 ft	Diameter: 3.80 inches	Volume: 58.33 bbl	Tool Weight:	2500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer:	20000.00 lb
Drill Collar:	Length: 144.00 ft	Diameter: 2.25 inches	Volume: 0.71 bbl	Weight to Pull Loose:	70000.00 lb
		Total Volume:	59.04 bbl	Tool Chased	0.00 ft
Drill Pipe Above KB:	26.50 ft			String Weight: Initial	55000.00 lb
Depth to Top Packer:	4303.00 ft			Final	57000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	17.00 ft				
Tool Length:	44.50 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			4276.50	
Shut In Tool	5.00			4281.50	
Hydraulic tool	5.00			4286.50	
Jars	5.00			4291.50	
Safety Joint	2.50			4294.00	
Packer	5.00			4299.00	27.50 Bottom Of Top Packer
Packer	4.00			4303.00	
Stubb	1.00			4304.00	
Perforations	1.00			4305.00	
Recorder	0.00	8357	Inside	4305.00	
Recorder	0.00	6751	Outside	4305.00	
Perforations	12.00			4317.00	
Bullnose	3.00			4320.00	17.00 Bottom Packers & Anchor
Total Tool Length:		44.50			



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

FLUID SUMMARY

Larson Engineering
562 W. St. Road 4
Olmitz, KS 67564-8561

ATTN: Bob Lewellyn

Stormont #2-27

S.27-19-28 Lane, KS

Job Ticket: 39065

DST#: 1

Test Start: 2010.07.01 @ 18:47:25

Mud and Cushion Information

Mud Type: Gel Chem

Mud Weight: 9.00 lb/gal

Viscosity: 52.00 sec/qt

Water Loss: 8.35 in³

Resistivity: 0.00 ohm.m

Salinity: 2400.00 ppm

Filter Cake: 2.00 inches

Cushion Type:

Cushion Length:

Cushion Volume:

Gas Cushion Type:

Gas Cushion Pressure:

ft

bbl

psig

Oil API

0 deg API

Water Salinity:

45000 ppm

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
402.00	MW 10%M 90%W	4.327
0.00	RW: .166 @ 71 Degrees F = 45000 PPM	0.000

Total Length: 402.00 ft

Total Volume: 4.327 bbl

Num Fluid Samples: 0

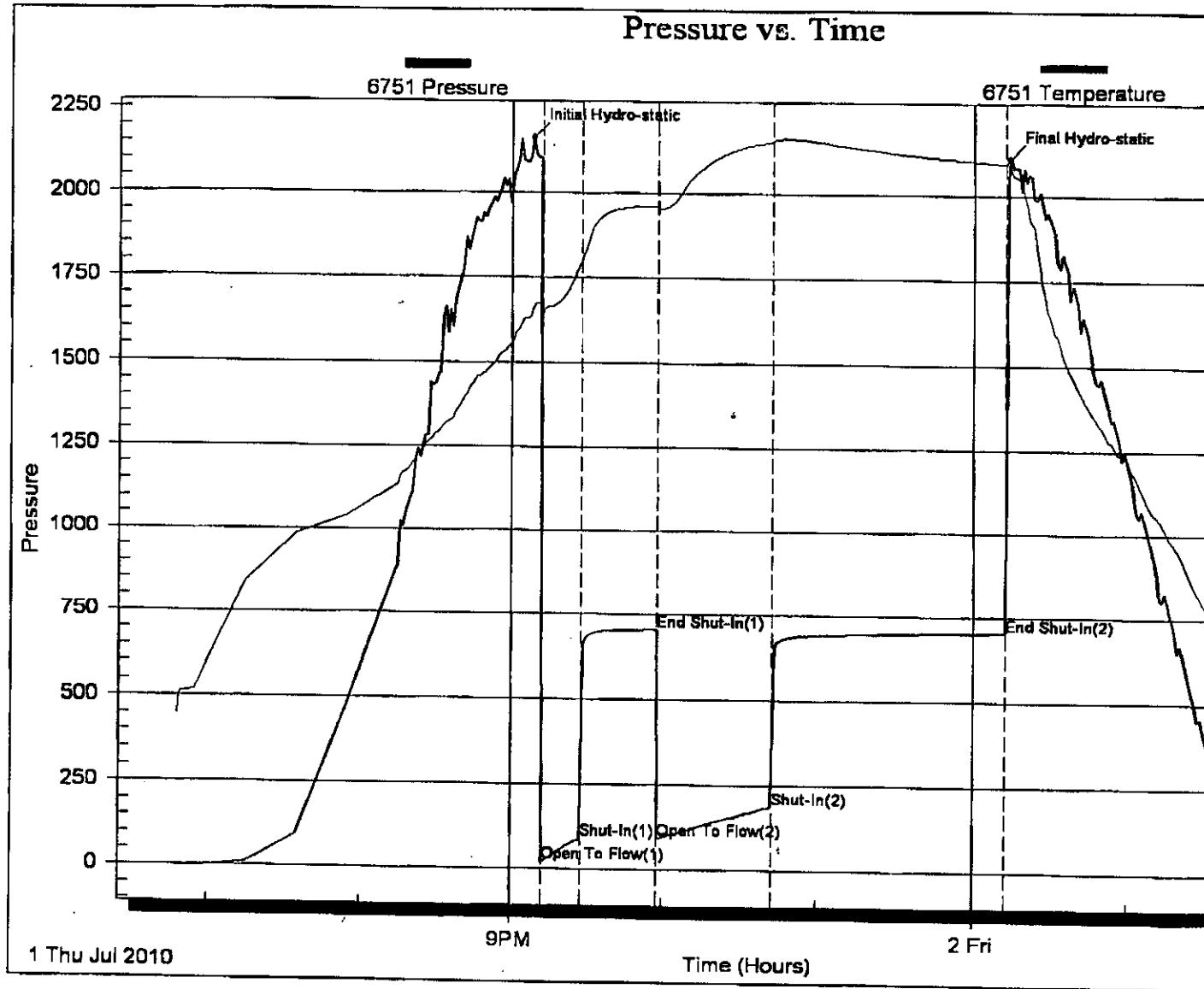
Num Gas Bombs: 0

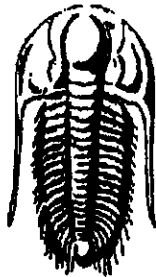
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:





**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Prepared For: **Larson Engineering**

562 W. St. Road 4
Olmitz, KS 67564-8561

ATTN: Bob Lewellyn

S.27-19-28 Lane, KS

Stormont #2-27

Start Date: 2010.07.02 @ 11:16:00

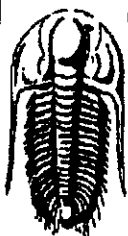
End Date: 2010.07.02 @ 17:33:39

Job Ticket #: 39066 DST #: 2

Trilobite Testing, Inc

PO Box 1733 Hays, KS 67601

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Larson Engineering
562 W. St. Road 4
Olmitz, KS 67564-8561
ATTN: Bob Lewellyn

Stormont #2-27
S.27-19-28 Lane, KS
Job Ticket: 39066 DST#: 2
Test Start: 2010.07.02 @ 11:16:00

GENERAL INFORMATION:

Formation: LKC 'K' - 2
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 13:03:40
Time Test Ended: 17:33:39

Test Type: Conventional Bottom Hole
Tester: Chuck Smith
Unit No: 37

Interval: 4327.00 ft (KB) To 4336.00 ft (KB) (TVD)
Total Depth: 4336.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations: 2775.00 ft (KB)
2768.00 ft (CF)
KB to GR/CF: 7.00 ft

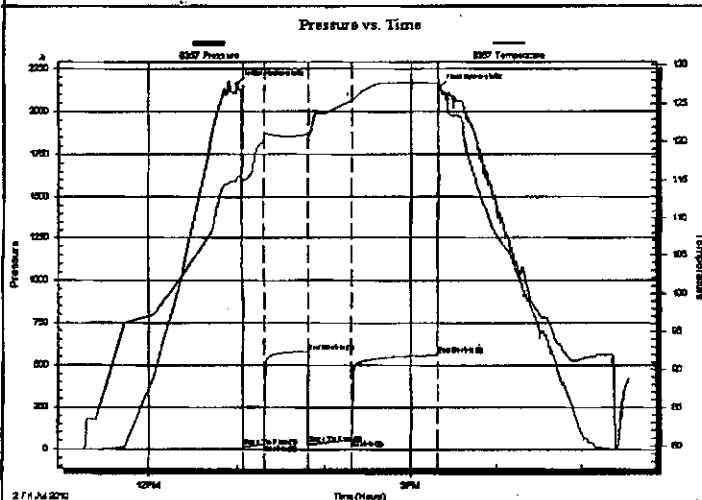
Serial #: 8357

Inside

Press@RunDepth: 54.93 psig @ 4328.00 ft (KB)
Start Date: 2010.07.02 End Date: 2010.07.02
Start Time: 11:16:05 End Time: 17:33:40

Capacity: 8000.00 psig
Last Calib.: 2010.07.02
Time On Btm: 2010.07.02 @ 13:00:10
Time Off Btm: 2010.07.02 @ 15:19:20

TEST COMMENT: IF: 1" Blow.
IS: No return.
FF: 3/4" Blow.
FST: No return.



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2160.65	115.05	Initial Hydro-static
4	15.77	114.84	Open To Flow (1)
19	30.29	120.37	Shut-In(1)
49	580.43	121.05	End Shut-In(1)
49	31.89	120.83	Open To Flow (2)
79	54.93	125.43	Shut-In(2)
139	560.03	127.60	End Shut-In(2)
140	2133.06	127.80	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
100.00	MW 25%M 75%W	0.49
0.00	RW: .180 @ 91 Degrees F = 30000 PPM	0.00

Gas Rates

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

DRILL STEM TEST REPORT

TOOL DIAGRAM

Larson Engineering
562 W. St. Road 4
Olmritz, KS 67564-8561

ATTN: Bob Lewellyn

Stormont #2-27

S.27-19-28 Lane, KS

Job Ticket: 39066

DST#: 2

Test Start: 2010.07.02 @ 11:16:00

Tool Information

Drill Pipe:	Length: 4179.00 ft	Diameter: 3.80 inches	Volume: 58.62 bbl	Tool Weight:	2500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer:	20000.00 lb
Drill Collar:	Length: 144.00 ft	Diameter: 2.25 inches	Volume: 0.71 bbl	Weight to Pull Loose:	70000.00 lb
		Total Volume:	59.33 bbl	Tool Chased	0.00 ft
Drill Pipe Above KB:	23.50 ft			String Weight: Initial	55000.00 lb
Depth to Top Packer:	4327.00 ft			Final	55000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	9.00 ft				
Tool Length:	36.50 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			4300.50	
Shut In Tool	5.00			4305.50	
Hydraulic tool	5.00			4310.50	
Jars	5.00			4315.50	
Safety Joint	2.50			4318.00	
Packer	5.00			4323.00	27.50 Bottom Of Top Packer
Packer	4.00			4327.00	
Stubb	1.00			4328.00	
Recorder	0.00	8357	Inside	4328.00	
Recorder	0.00	6751	Outside	4328.00	
Perforations	5.00			4333.00	
Bullnose	3.00			4336.00	9.00 Bottom Packers & Anchor

Total Tool Length: 36.50



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Larson Engineering
562 W. St. Road 4
Olmitz, KS 67564-8561
ATTN: Bob Lewellyn

Stormont #2-27
S.27-19-28 Lane, KS
Job Ticket: 39066 DST#: 2
Test Start: 2010.07.02 @ 11:16:00

Mud and Cushion Information

Mud Type: Gel Chem

Mud Weight: 9.00 lb/gal

Viscosity: 51.00 sec/qt

Water Loss: 8.34 in³

Resistivity: 0.00 ohm.m

Salinity: 2900.00 ppm

Filter Cake: 2.00 inches

Cushion Type:

Cushion Length: ft

Cushion Volume: bbl

Gas Cushion Type:

Gas Cushion Pressure: psig

Oil API: 0 deg API

Water Salinity: 30000 ppm

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
100.00	MW 25%M 75%W	0.492
0.00	RW: .180 @ 91 Degrees F = 30000 PPM	0.000

Total Length: 100.00 ft Total Volume: 0.492 bbl

Num Fluid Samples: 0

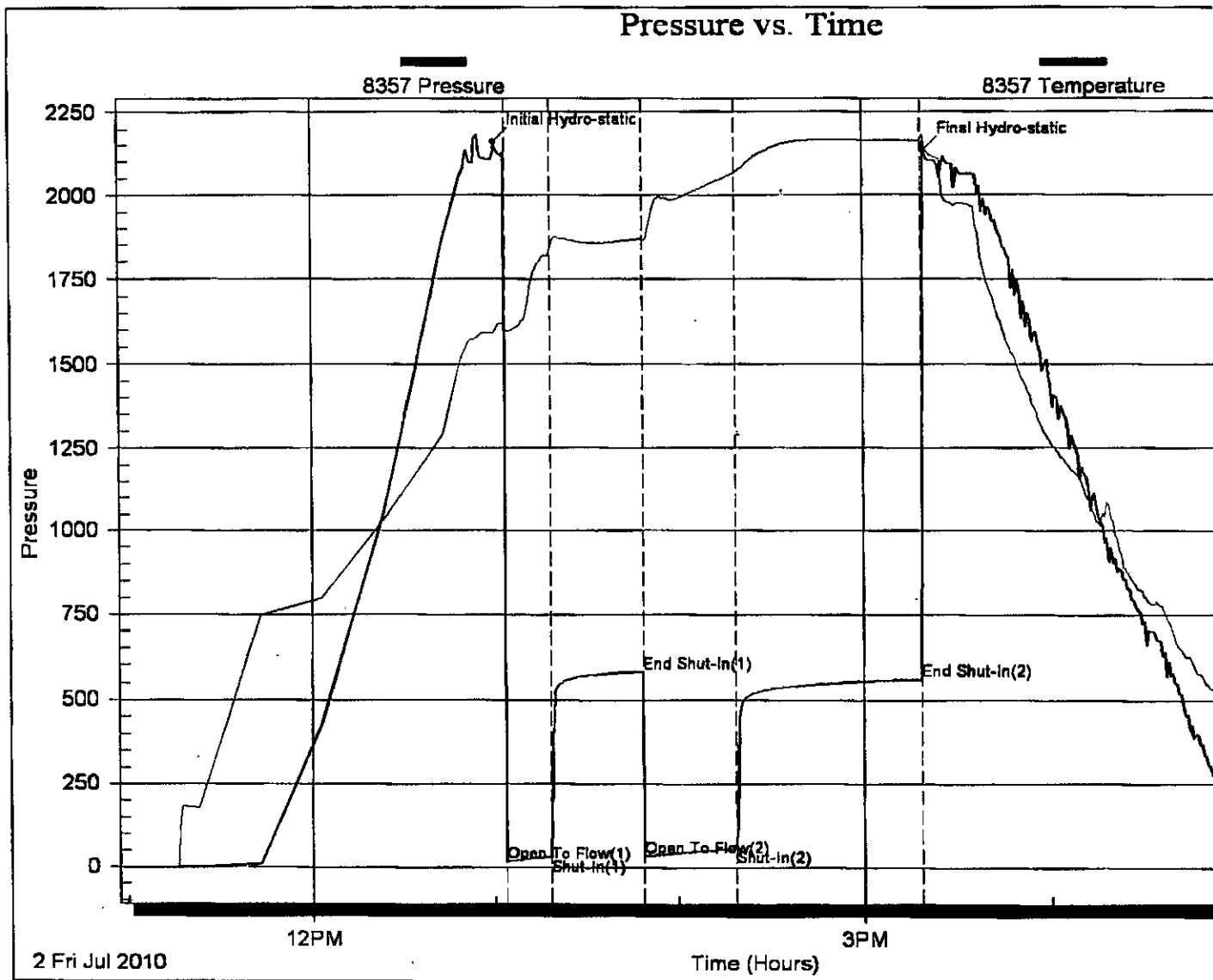
Num Gas Bombs: 0

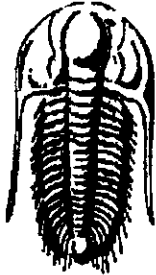
Serial#:

Laboratory Name:

Laboratory Location:

Recovery Comments:





TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

Prepared For: **Larson Engineering**

562 W. St. Road 4
Olmitz, KS 67564-8561

ATTN: Bob Lewellyn

S.27-19-28 Lane, KS

Stormont #2-27

Start Date: 2010.07.03 @ 04:12:00

End Date: 2010.07.03 @ 09:16:30

Job Ticket #: 39067 DST #: 3

Trilobite Testing, Inc

PO Box 1733 Hays, KS 67601

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Larson Engineering
562 W. St. Road 4
Olatz, KS 67564-8561
ATTN: Bob Lewellyn

Stormont #2-27

S.27-19-28 Lane, KS

Job Ticket: 39067

DST#: 3

Test Start: 2010.07.03 @ 04:12:00

GENERAL INFORMATION:

Formation: LKC 'L'

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 05:59:40

Time Test Ended: 09:16:30

Interval: 4342.00 ft (KB) To 4354.00 ft (KB) (TVD)

Total Depth: 4354.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

Test Type: Conventional Bottom Hole

Tester: Chuck Smith

Unit No: 37

Reference Elevations: 2775.00 ft (KB)

2768.00 ft (CF)

KB to GR/CF: 7.00 ft

Serial #: 8357

Inside

Press@RunDepth: 16.19 psig @ 4344.00 ft (KB)

Start Date: 2010.07.03

End Date:

2010.07.03

Start Time: 04:12:05

End Time:

09:16:29

Capacity: 8000.00 psig

Last Calib.: 2010.07.03

Time On Btm: 2010.07.03 @ 05:57:10

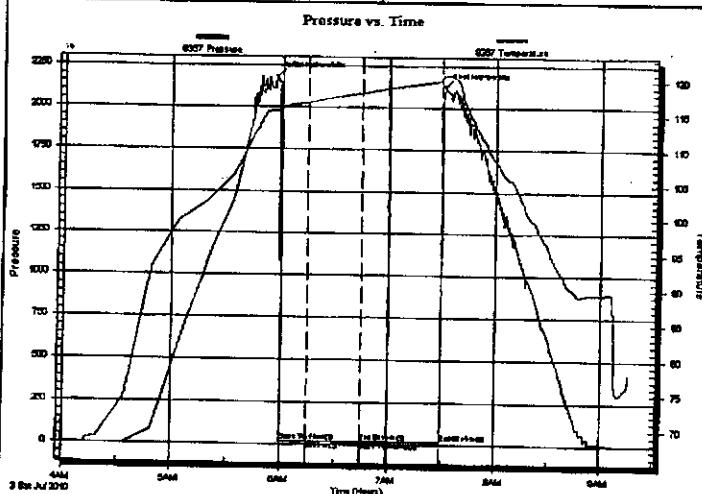
Time Off Btm: 2010.07.03 @ 07:30:30

TEST COMMENT: IF: Surface blow died @ 7 min.

IS: No return.

FF: No blow.

FS: No return.



PRESSURE SUMMARY

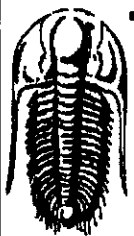
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2184.29	115.62	Initial Hydro-static
3	15.40	114.86	Open To Flow (1)
18	15.85	116.83	Shut-In(1)
48	17.24	118.26	End Shut-In(1)
48	15.81	118.27	Open To Flow (2)
63	16.19	118.90	Shut-In(2)
93	16.59	120.02	End Shut-In(2)
94	2126.45	120.71	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
1.00	M 100%M	0.00

Gas Rates

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

DRILL STEM TEST REPORT

TOOL DIAGRAM

Larson Engineering

Stormont #2-27

562 W. St. Road 4
Olmitz, KS 67564-8561

S.27-19-28 Lane, KS

Job Ticket: 39067

DST#: 3

ATTN: Bob Lewellyn

Test Start: 2010.07.03 @ 04:12:00

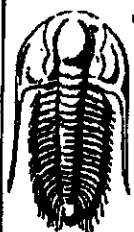
Tool Information

Drill Pipe:	Length: 4180.00 ft	Diameter: 3.80 inches	Volume: 58.63 bbl	Tool Weight:	2500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer:	35000.00 lb
Drill Collar:	Length: 144.00 ft	Diameter: 2.25 inches	Volume: 0.71 bbl	Weight to Pull Loose:	65000.00 lb
		Total Volume:	59.34 bbl	Tool Chased	0.00 ft
Drill Pipe Above KB:	9.50 ft			String Weight: Initial	55000.00 lb
Depth to Top Packer:	4342.00 ft			Final	55000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	12.00 ft				
Tool Length:	39.50 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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Change Over Sub	1.00			4315.50	
Shut In Tool	5.00			4320.50	
Hydraulic tool	5.00			4325.50	
Jars	5.00			4330.50	
Safety Joint	2.50			4333.00	
Packer	5.00			4338.00	27.50 Bottom Of Top Packer
Packer	4.00			4342.00	
Stubb	1.00			4343.00	
Perforations	1.00			4344.00	
Recorder	0.00	8357	Inside	4344.00	
Recorder	0.00	6751	Outside	4344.00	
Perforations	7.00			4351.00	
Bullnose	3.00			4354.00	12.00 Bottom Packers & Anchor

Total Tool Length: 39.50



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Larson Engineering

Stormont #2-27

562 W. St. Road 4
Olmitz, KS 67564-8561

S.27-19-28 Lane, KS

Job Ticket: 39067

DST#: 3

ATTN: Bob Lewellyn

Test Start: 2010.07.03 @ 04:12:00

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

0 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

0 ppm

Viscosity: 50.00 sec/qt

Cushion Volume:

bbl

Water Loss: 8.35 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
1.00	M 100%M	0.005

Total Length: 1.00 ft

Total Volume: 0.005 bbl

Num Fluid Samples: 0

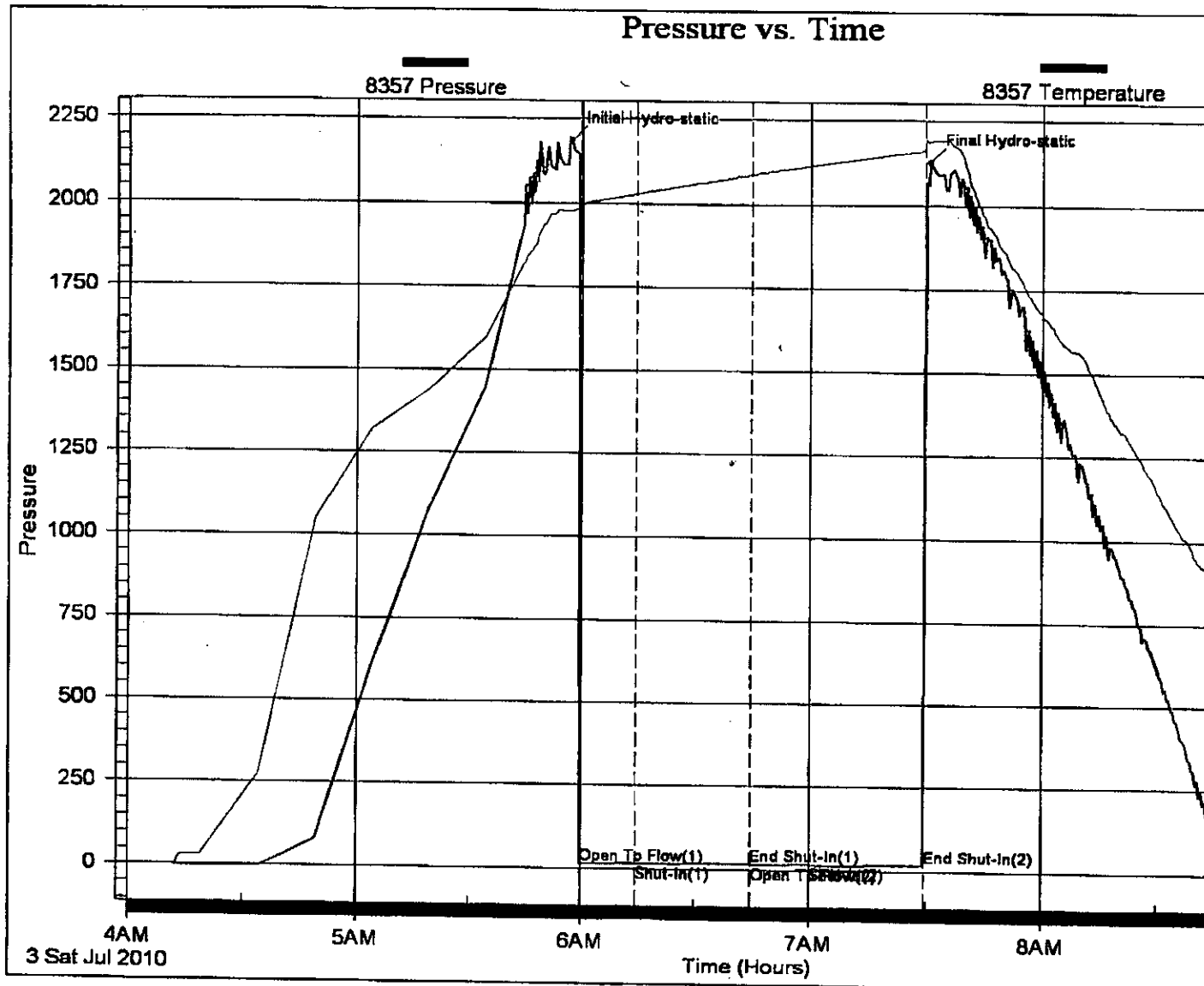
Num Gas Bombs: 0

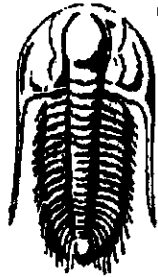
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:





**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Prepared For: **Larson Engineering**

562 W. St. Road 4
Olmits, KS 67564-8561

ATTN: Bob Lewellyn

S.27-19-28 Lane, KS

Stormont #2-27

Start Date: 2010.07.03 @ 18:19:00

End Date: 2010.07.03 @ 23:46:09

Job Ticket #: 39068 DST #: 4

Trilobite Testing, Inc

PO Box 1733 Hays, KS 67601

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



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

Larson Engineering
562 W. St. Road 4
Olmitz, KS 67564-8561
ATTN: Bob Lewellyn

Stormont #2-27
S.27-19-28 Lane, KS
Job Ticket: 39068 DST#: 4
Test Start: 2010.07.03 @ 18:19:00

GENERAL INFORMATION:

Formation: LKC 'L'
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 20:11:10
Time Test Ended: 23:46:09

Test Type: Conventional Bottom Hole
Tester: Chuck Smith
Unit No: 37

Interval: 4354.00 ft (KB) To 4364.00 ft (KB) (TVD)
Total Depth: 4364.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations: 2775.00 ft (KB)
2768.00 ft (CF)
KB to GR/CF: 7.00 ft

Serial #: 8357

Inside

Press@RunDepth: 15.45 psig @ 4356.00 ft (KB)

Start Date: 2010.07.03

End Date:

2010.07.03

Start Time: 18:19:05

End Time:

23:46:10

Capacity: 8000.00 psig

Last Calib.: 2010.07.03

Time On Btm: 2010.07.03 @ 20:07:40

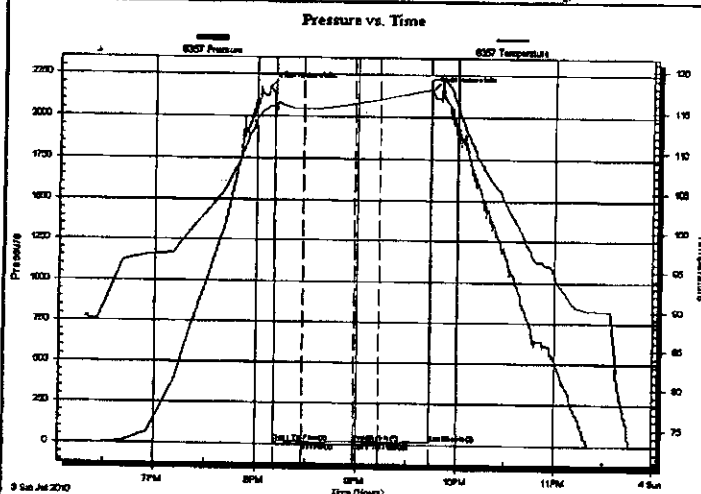
Time Off Btm: 2010.07.03 @ 21:44:30

TEST COMMENT: IF: Surface blow died @ 1 min.

ISI: No return.

FF: No blow.

FSt No return.



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2176.25	115.64	Initial Hydro-static
4	12.81	114.50	Open To Flow (1)
21	15.17	115.30	Shut-In(1)
51	15.27	115.95	End Shut-In(1)
51	14.34	115.95	Open To Flow (2)
66	15.45	116.52	Shut-In(2)
97	15.05	117.78	End Shut-In(2)
97	2159.97	118.92	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
1.00	M 100%M	0.00

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mc/d)
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TRILOBITE
TESTING, INC

DRILL STEM TEST REPORT

TOOL DIAGRAM

Larson Engineering

Stormont #2-27

562 W. St. Road 4
Olmitz, KS 67564-8561

S.27-19-28 Lane, KS

Job Ticket: 39068

DST#: 4

ATTN: Bob Lewellyn

Test Start: 2010.07.03 @ 18:19:00

Tool Information

Drill Pipe:	Length: 4210.00 ft	Diameter: 3.80 inches	Volume: 59.06 bbl	Tool Weight:	2500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer:	20000.00 lb
Drill Collar:	Length: 144.00 ft	Diameter: 2.25 inches	Volume: 0.71 bbl	Weight to Pull Loose:	65000.00 lb
			Total Volume: 59.77 bbl	Tool Chased	0.00 ft
Drill Pipe Above KB:	27.50 ft			String Weight: Initial	55000.00 lb
Depth to Top Packer:	4354.00 ft			Final	55000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	10.00 ft				
Tool Length:	37.50 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			4327.50	
Shut In Tool	5.00			4332.50	
Hydraulic tool	5.00			4337.50	
Jars	5.00			4342.50	
Safety Joint	2.50			4345.00	
Packer	5.00			4350.00	27.50 Bottom Of Top Packer
Packer	4.00			4354.00	
Stubb	1.00			4355.00	
Perforations	1.00			4356.00	
Recorder	0.00	8357	Inside	4356.00	
Recorder	0.00	6751	Outside	4356.00	
Perforations	5.00			4361.00	
Bullnose	3.00			4364.00	10.00 Bottom Packers & Anchor

Total Tool Length: 37.50



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

FLUID SUMMARY

Larson Engineering
562 W. St. Road 4
Olmütz, KS 67564-8561
ATTN: Bob Lewellyn

Stormont #2-27
S.27-19-28 Lane, KS
Job Ticket: 39068 DST#: 4
Test Start: 2010.07.03 @ 18:19:00

Mud and Cushion Information

Mud Type: Gel Chem
Mud Weight: 9.00 lb/gal
Viscosity: 50.00 sec/qt
Water Loss: 8.34 in³
Resistivity: 0.00 ohm.m
Salinity: 2900.00 ppm
Filter Cake: 2.00 inches

Cushion Type:
Cushion Length: ft
Cushion Volume: bbl
Gas Cushion Type:
Gas Cushion Pressure: psig
Oil API: 0 deg API
Water Salinity: 0 ppm

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
1.00	M 100%M	0.005

Total Length: 1.00 ft Total Volume: 0.005 bbl

Num Fluid Samples: 0

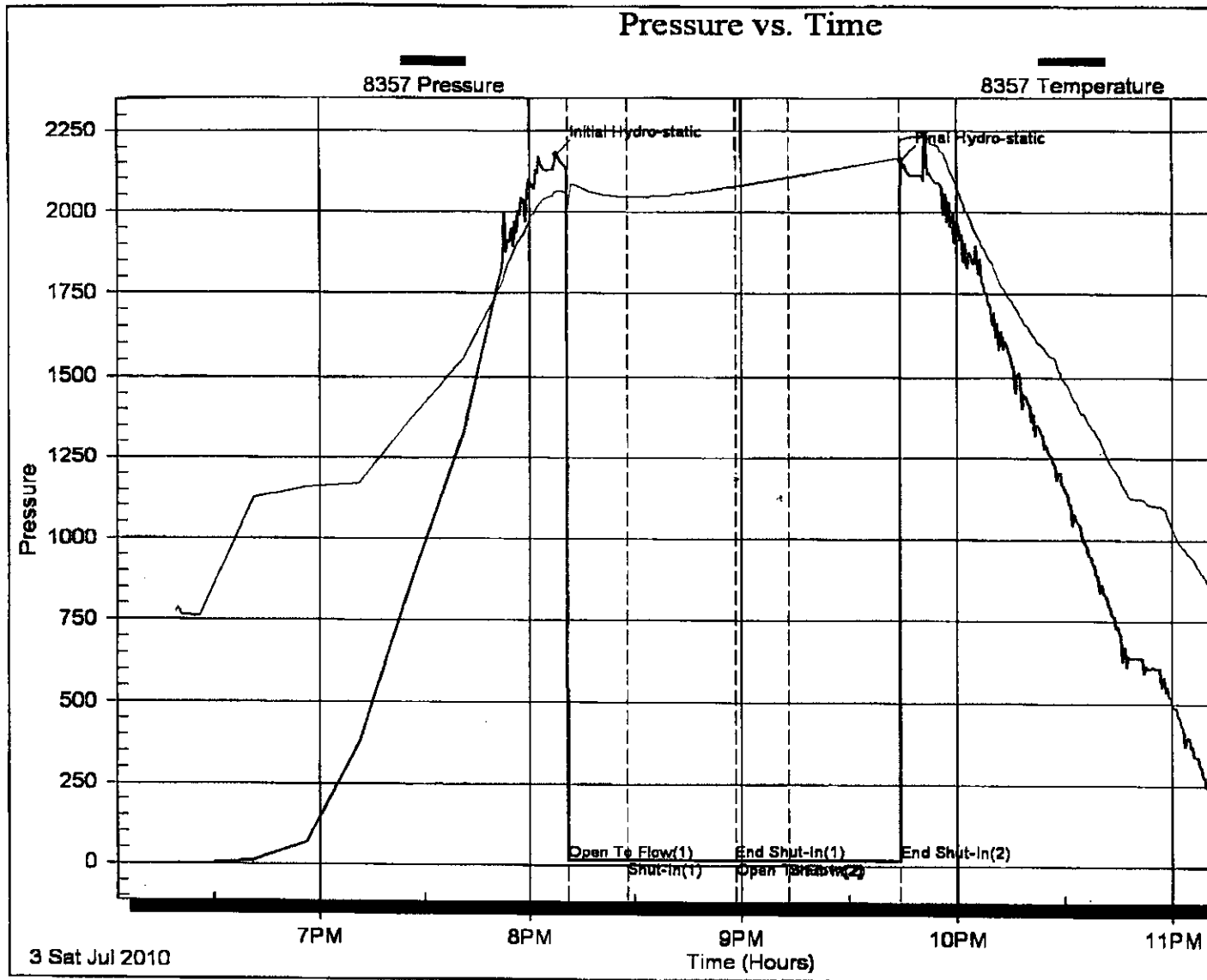
Num Gas Bombs: 0

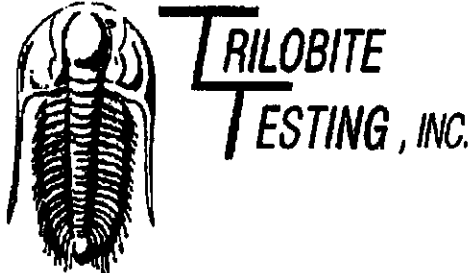
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:





DRILL STEM TEST REPORT

Prepared For: **Larson Engineering**

562 W. St. Road 4
Olmits, KS 67564-8561

ATTN: Bob Lewellyn

S.27-19-28 Lane, KS

Stormont #2-27

Start Date: 2010.07.04 @ 16:08:00

End Date: 2010.07.04 @ 21:52:50

Job Ticket #: 39069 DST #: 5

Trilobite Testing, Inc

PO Box 1733 Hays, KS 67601

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



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

Larson Engineering
562 W. St. Road 4
Olmitz, KS 67564-8561
ATTN: Bob Lewellyn

Stormont #2-27
S.27-19-28 Lane, KS
Job Ticket: 39069 **DST#: 5**
Test Start: 2010.07.04 @ 16:08:00

GENERAL INFORMATION:

Formation: **Altamont**
Deviated: **No** Whipstock: **ft (KB)**
Time Tool Opened: 18:01:20
Time Test Ended: 21:52:50

Test Type: **Conventional Bottom Hole**
Tester: **Chuck Smith**
Unit No: **37**

Interval: **4395.00 ft (KB) To 4475.00 ft (KB) (TVD)**
Total Depth: **4475.00 ft (KB) (TVD)**
Hole Diameter: **7.88 inches** Hole Condition: **Good**

Reference Elevations: **2775.00 ft (KB)**
2768.00 ft (CF)
KB to GRVCF: **7.00 ft**

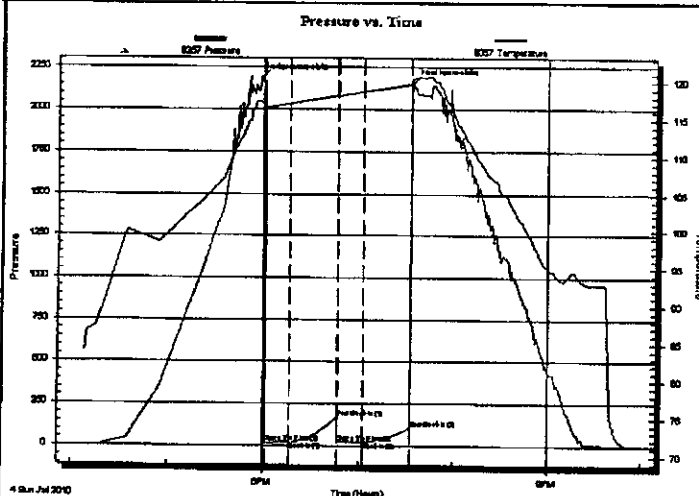
Serial #: 8357

Inside

Press@RunDepth: **22.14 psig @ 4399.00 ft (KB)**
Start Date: **2010.07.04** End Date: **2010.07.04**
Start Time: **16:08:05** End Time: **21:52:50**

Capacity: **8000.00 psig**
Last Calib.: **2010.07.04**
Time On Btm: **2010.07.04 @ 17:58:30**
Time Off Btm: **2010.07.04 @ 19:33:50**

TEST COMMENT: IF: Surface blow died @ 5 min.
IS: No return.
FF: No blow.
FS: No return.



PRESSURE SUMMARY

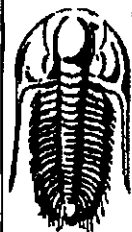
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2186.92	117.28	Initial Hydro-static
3	19.74	115.96	Open To Flow (1)
18	20.80	117.15	Shut-in(1)
48	167.20	118.23	End Shut-in(1)
48	20.12	118.17	Open To Flow (2)
64	22.14	118.76	Shut-in(2)
94	106.25	119.76	End Shut-in(2)
96	2155.76	120.46	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
5.00	M 100%M	0.02

Gas Rates

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

DRILL STEM TEST REPORT

TOOL DIAGRAM

Larson Engineering

562 W. St. Road 4
Olmitz, KS 67564-8561

ATTN: Bob Lewellyn

Stormont #2-27

S.27-19-28 Lane, KS

Job Ticket: 39069

DST#: 5

Test Start: 2010.07.04 @ 16:08:00

Tool Information

Drill Pipe:	Length: 4245.00 ft	Diameter: 3.80 inches	Volume: 59.55 bbl	Tool Weight: 2500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 144.00 ft	Diameter: 2.25 inches	Volume: 0.71 bbl	Weight to Pull Loose: 65000.00 lb
		Total Volume: 60.26 bbl		Tool Chased 0.00 ft
Drill Pipe Above KB:	21.50 ft			String Weight: Initial 55000.00 lb
Depth to Top Packer:	4395.00 ft			Final 55000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	80.00 ft			
Tool Length:	107.50 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			4368.50	
Shut In Tool	5.00			4373.50	
Hydraulic tool	5.00			4378.50	
Jars	5.00			4383.50	
Safety Joint	2.50			4386.00	
Packer	5.00			4391.00	27.50 Bottom Of Top Packer
Packer	4.00			4395.00	
Stubb	1.00			4396.00	
Perforations	3.00			4399.00	
Recorder	0.00	8357	Inside	4399.00	
Recorder	0.00	6751	Outside	4399.00	
Perforations	8.00			4407.00	
Change Over Sub	1.00			4408.00	
Drill Pipe	63.00			4471.00	
Change Over Sub	1.00			4472.00	
Bullnose	3.00			4475.00	80.00 Bottom Packers & Anchor
Total Tool Length:	107.50				



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

FLUID SUMMARY

Larson Engineering

Stormont #2-27

562 W. St. Road 4
Olmitz, KS 67564-8561

S.27-19-28 Lane, KS

Job Ticket: 39069

DST#: 5

ATTN: Bob Lewellyn

Test Start: 2010.07.04 @ 16:08:00

Mud and Cushion Information

Mud Type: Gel Chem

Mud Weight: 9.00 lb/gal

Viscosity: 52.00 sec/qt

Water Loss: 7.58 in³

Resistivity: 0.00 ohm.m

Salinity: 2900.00 ppm

Filter Cake: 2.00 inches

Cushion Type:

Cushion Length:

Cushion Volume:

Gas Cushion Type:

Gas Cushion Pressure:

ft

bbl

psig

Oil API:

Water Salinity:

0 deg API

0 ppm

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
5.00	M 100%M	0.025

Total Length:

5.00 ft

Total Volume:

0.025 bbl

Num Fluid Samples: 0

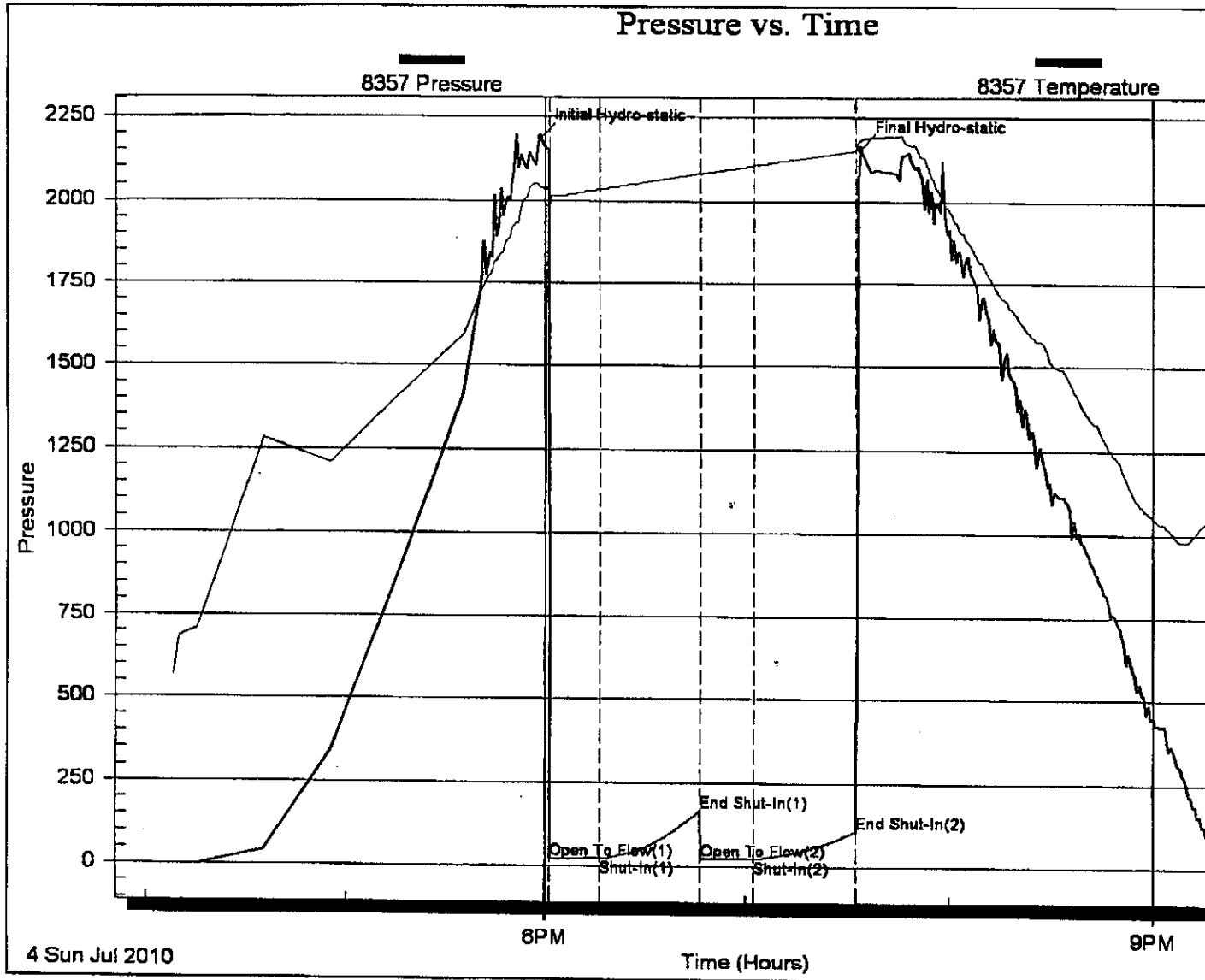
Num Gas Bombs: 0

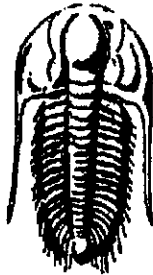
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:





TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

Prepared For: **Larson Engineering**

562 W. St. Road 4
Olmitz, KS 67564-8561

ATTN: Bob Lewellyn

S.27-19-28 Lane, KS

Stormont #2-27

Start Date: 2010.07.05 @ 21:56:00

End Date: 2010.07.06 @ 03:45:45

Job Ticket #: 39070 DST #: 6

Trilobite Testing, Inc

PO Box 1733 Hays, KS 67601

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Larson Engineering
562 W. St. Road 4
Olmitz, KS 67564-8561
ATTN: Bob Lewellyn

Stormont #2-27
S.27-19-28 Lane, KS
Job Ticket: 39070 **DST#: 6**
Test Start: 2010.07.05 @ 21:56:00

GENERAL INFORMATION:

Formation: **Johnson**
Deviated: **No** Whipstock: ft (KB)
Time Tool Opened: 23:57:45
Time Test Ended: 03:45:45

Test Type: **Conventional Bottom Hole**
Tester: **Chuck Smith**
Unit No: **37**

Interval: **4580.00 ft (KB) To 4635.00 ft (KB) (TVD)**
Total Depth: **4635.00 ft (KB) (TVD)**
Hole Diameter: **7.88 inches** Hole Condition: **Good**

Reference Elevations: **2775.00 ft (KB)**
2768.00 ft (CF)
KB to GR/CF: **7.00 ft**

Serial #: 6751

Outside

Press@RunDepth: **23.39 psig @ 4584.00 ft (KB)**

Start Date: **2010.07.05**

End Date:

2010.07.06

Start Time: **21:56:05**

End Time:

03:45:44

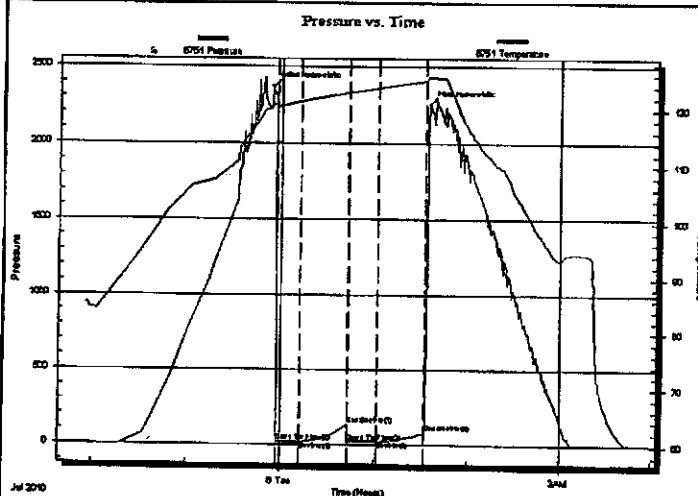
Capacity: **8000.00 psig**

Last Calib.: **2010.07.06**

Time On Btm: **2010.07.05 @ 23:54:30**

Time Off Btm: **2010.07.06 @ 01:34:45**

TEST COMMENT: IF: 1/8" Blow.
IS: No return.
FF: No blow.
FS: No return.



PRESSURE SUMMARY

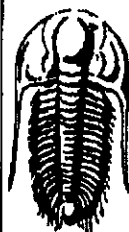
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2366.43	120.58	Initial Hydro-static
4	20.57	120.24	Open To Flow (1)
18	22.43	121.46	Shut-In(1)
49	134.98	123.03	End Shut-In(1)
49	22.08	123.01	Open To Flow (2)
68	23.39	123.82	Shut-In(2)
98	81.43	125.04	End Shut-In(2)
101	2250.11	125.67	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
2.00	M 100%M	0.01

Gas Rates

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

DRILL STEM TEST REPORT

TOOL DIAGRAM

Larson Engineering

Stormont #2-27

562 W. St. Road 4
Omitz, KS 67564-8561

S.27-19-28 Lane, KS

Job Ticket: 39070

DST#: 6

ATTN: Bob Lewellyn

Test Start: 2010.07.05 @ 21:56:00

Tool Information

Drill Pipe:	Length: 4429.00 ft	Diameter: 3.80 inches	Volume: 62.13 bbl	Tool Weight:	2500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer:	25000.00 lb
Drill Collar:	Length: 144.00 ft	Diameter: 2.25 inches	Volume: 0.71 bbl	Weight to Pull Loose:	75000.00 lb
		Total Volume:	62.84 bbl	Tool Chased	0.00 ft
Drill Pipe Above KB:	20.50 ft			String Weight: Initial	56000.00 lb
Depth to Top Packer:	4580.00 ft			Final	56000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	55.00 ft				
Tool Length:	82.50 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			4553.50	
Shut In Tool	5.00			4558.50	
Hydraulic tool	5.00			4563.50	
Jars	5.00			4568.50	
Safety Joint	2.50			4571.00	
Packer	5.00			4576.00	27.50 Bottom Of Top Packer
Packer	4.00			4580.00	
Stubb	1.00			4581.00	
Perforations	3.00			4584.00	
Recorder	0.00	8357	Inside	4584.00	
Recorder	0.00	6751	Outside	4584.00	
Perforations	15.00			4599.00	
Change Over Sub	1.00			4600.00	
Drill Pipe	31.00			4631.00	
Change Over Sub	1.00			4632.00	
Bullnose	3.00			4635.00	55.00 Bottom Packers & Anchor
Total Tool Length:	82.50				



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

FLUID SUMMARY

Larson Engineering

Stormont #2-27

562 W. St. Road 4
Olmitz, KS 67564-8561

S.27-19-28 Lane, KS

Job Ticket: 39070

DST#: 6

ATTN: Bob Lewellyn

Test Start: 2010.07.05 @ 21:56:00

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

0 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

0 ppm

Viscosity: 62.00 sec/qt

Cushion Volume:

bbl

Water Loss: 7.58 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
2.00	M 100%M	0.010

Total Length: 2.00 ft Total Volume: 0.010 bbl

Num Fluid Samples: 0

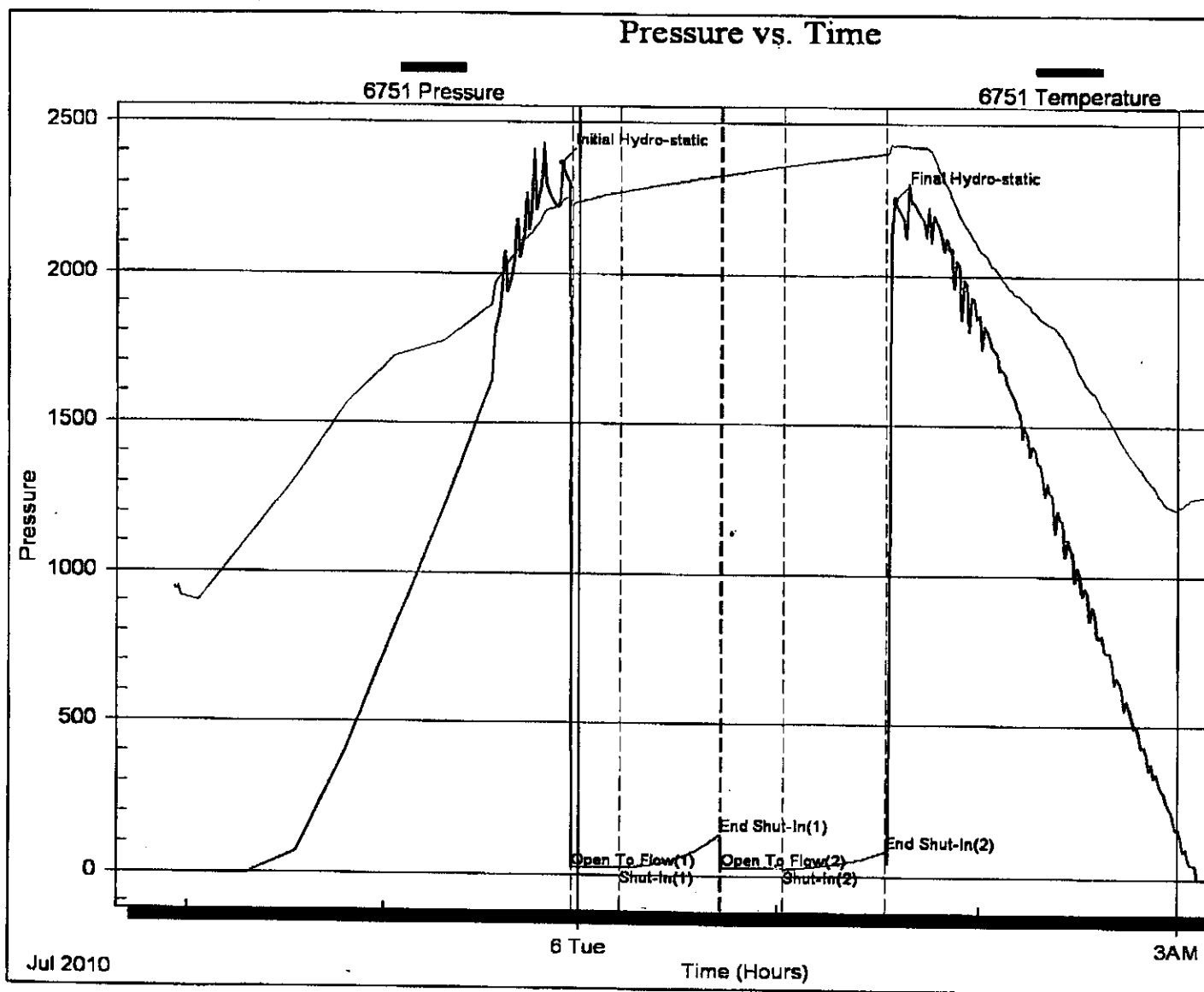
Num Gas Bombs: 0

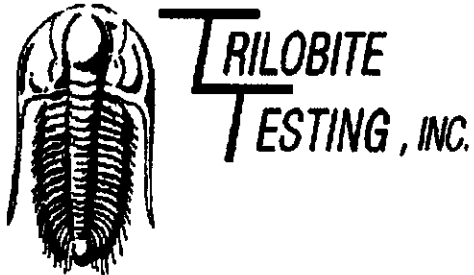
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: API @ Degrees F =





DRILL STEM TEST REPORT

Prepared For: **Larson Engineering**

562 W. St. Road 4
Olmits, KS 67564-8561

ATTN: Bob Lewellyn

S.27-19-28 Lane, KS

Stormont #2-27

Start Date: 2010.07.06 @ 13:28:00

End Date: 2010.07.06 @ 20:24:09

Job Ticket #: 39071 DST #: 7

Trilobite Testing, Inc

PO Box 1733 Hays, KS 67601

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Larson Engineering
562 W. St. Road 4
Olmitz, KS 67564-8561
ATTN: Bob Lewellyn

Stormont #2-27

S.27-19-28 Lane, KS

Job Ticket: 39071

DST#: 7

Test Start: 2010.07.06 @ 13:28:00

GENERAL INFORMATION:

Formation: **Cherokee Sand**

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

Time Tool Opened: 16:22:20

Time Test Ended: 20:24:09

Test Type: **Conventional Bottom Hole**

Tester: **Chuck Smith**

Unit No: **37**

Interval: **4620.00 ft (KB) To 4655.00 ft (KB) (TVD)**

Total Depth: **4655.00 ft (KB) (TVD)**

Hole Diameter: **7.88 inches** Hole Condition: **Good**

Reference Elevations: **2775.00 ft (KB)**

2768.00 ft (CF)

KB to GR/CF: **7.00 ft**

Serial #: **8357**

Inside

Press@RunDepth: **20.04 psig @ 4622.00 ft (KB)**

Start Date: **2010.07.06**

End Date:

2010.07.06

Start Time: **13:28:05**

End Time:

20:24:10

Capacity: **8000.00 psig**

Last Calib.: **2010.07.06**

Time On Btm: **2010.07.06 @ 16:20:00**

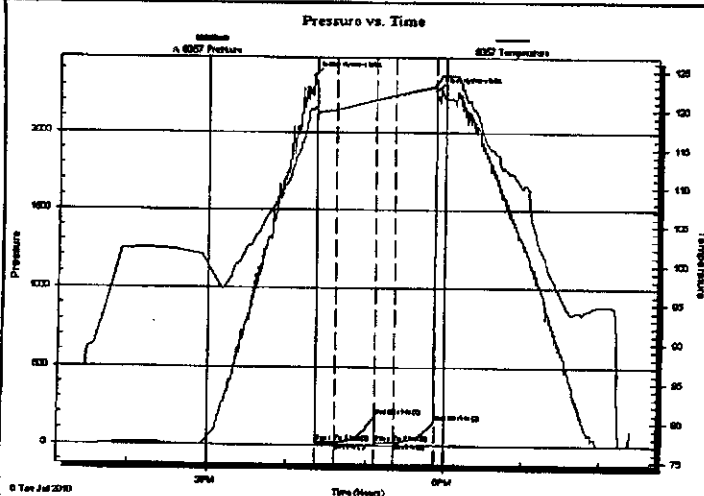
Time Off Btm: **2010.07.06 @ 17:52:50**

TEST COMMENT: **IF: Surface blow died @ 7 min.**

IS: No return.

FF: No blow.

FS: No return.



PRESSURE SUMMARY

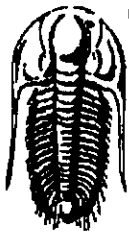
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2360.39	120.08	Initial Hydro-static
3	18.67	119.29	Open To Flow (1)
17	19.60	120.08	Shut-In(1)
47	185.29	121.34	End Shut-In(1)
47	19.35	121.30	Open To Flow (2)
62	20.04	121.92	Shut-In(2)
93	148.53	123.03	End Shut-In(2)
93	2261.40	123.59	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
5.00	M 100%M	0.02

Gas Rates

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

DRILL STEM TEST REPORT

TOOL DIAGRAM

Larson Engineering

Stormont #2-27

562 W. St. Road 4
Olmitz, KS 67564-8561

S.27-19-28 Lane, KS

Job Ticket: 39071

DST#: 7

ATTN: Bob Lewellyn

Test Start: 2010.07.06 @ 13:28:00

Tool Information

Drill Pipe:	Length: 4460.00 ft	Diameter: 3.80 inches	Volume: 62.56 bbl	Tool Weight: 2500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 24000.00 lb
Drill Collar:	Length: 144.00 ft	Diameter: 2.25 inches	Volume: 0.71 bbl	Weight to Pull Loose: 95000.00 lb
		Total Volume:	63.27 bbl	Tool Chased 0.00 ft
Drill Pipe Above KB:	11.50 ft			String Weight: Initial 58000.00 lb
Depth to Top Packer:	4620.00 ft			Final 58000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	35.00 ft			
Tool Length:	62.50 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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Change Over Sub	1.00			4593.50	
Shut In Tool	5.00			4598.50	
Hydraulic tool	5.00			4603.50	
Jars*	5.00			4608.50	
Safety Joint	2.50			4611.00	
Packer	5.00			4616.00	27.50 Bottom Of Top Packer
Packer	4.00			4620.00	
Stubb	1.00			4621.00	
Perforations	1.00			4622.00	
Recorder	0.00	8357	Inside	4622.00	
Recorder	0.00	6751	Outside	4622.00	
Perforations	30.00			4652.00	
Bullnose	3.00			4655.00	35.00 Bottom Packers & Anchor

Total Tool Length: 62.50



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

FLUID SUMMARY

Larson Engineering

Stormont #2-27

562 W. St. Road 4
Olmitz, KS 67564-8561

S.27-19-28 Lane, KS

Job Ticket: 39071

DST#: 7

ATTN: Bob Lewellyn

Test Start: 2010.07.06 @ 13:28:00

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

0 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

0 ppm

Viscosity: 54.00 sec/qt

Cushion Volume:

bbl

Water Loss: 7.98 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 2600.00 ppm

Filter Cake: 2.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
5.00	M 100%M	0.025

Total Length: 5.00 ft

Total Volume: 0.025 bbl

Num Fluid Samples: 0

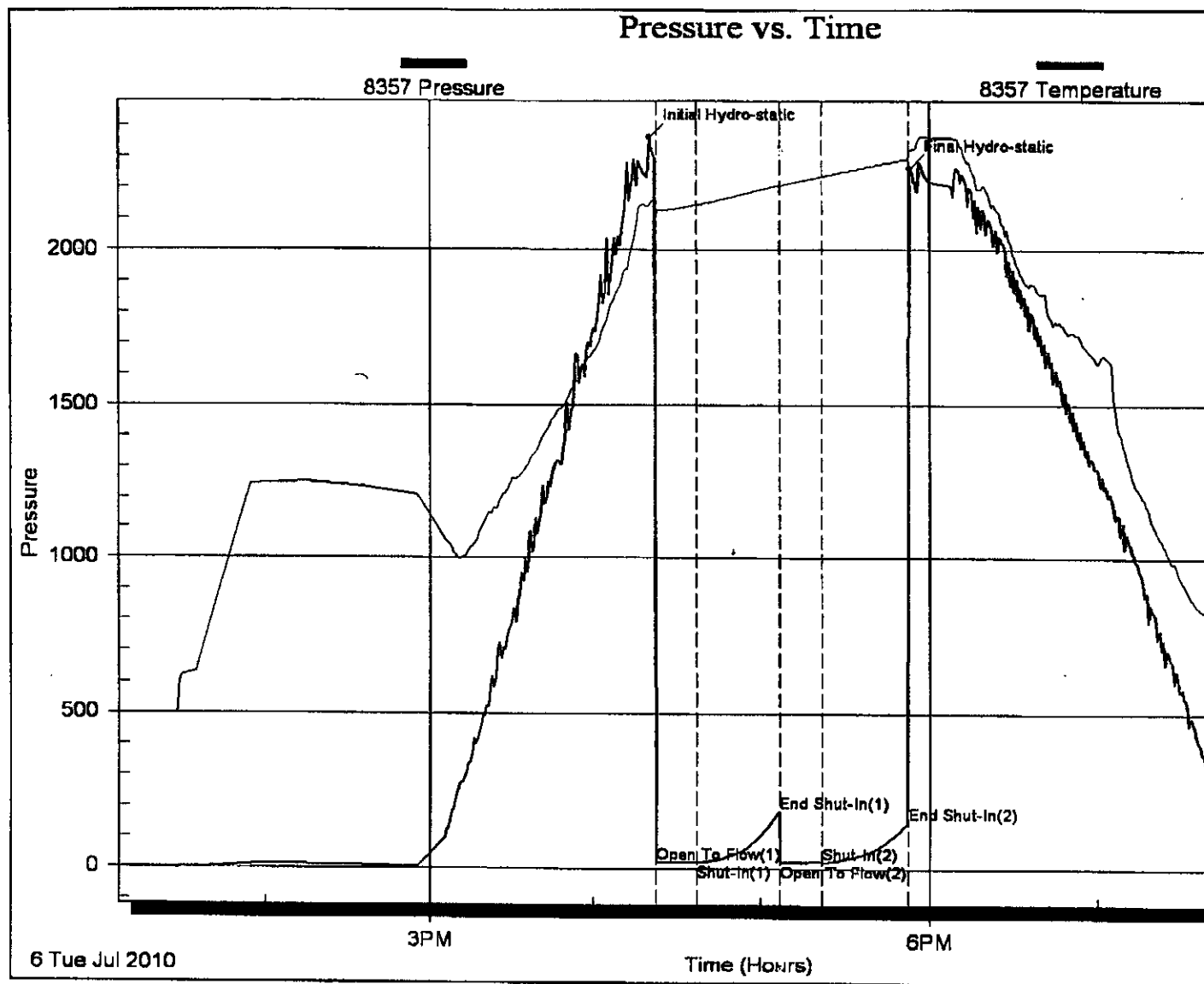
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:



ALLIED CEMENTING CO., LLC. 036719

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

SERVICE POINT:

Great Bend KS

DATE <u>7-7-10</u>	SEC. <u>26</u>	TWP. <u>20S</u>	RANGE <u>24W</u>	CALLED OUT	ON LOCATION	JOB START <u>600 PM</u>	JOB FINISH <u>700 PM</u>
LEASE STATEMENT WELL # <u>2-27</u>		LOCATION <u>Dighton KS South TO</u>			COUNTY <u>hance</u>	STATE <u>KS</u>	
OLD OR NEW (Circle one)		<u>70th RD 3 East North in TO</u>					

CONTRACTOR H-Q Rig 3

TYPE OF JOB Rotary Plug

HOLE SIZE 7 7/8 T.D. 4697

CASING SIZE _____ DEPTH _____

TUBING SIZE _____ DEPTH _____

DRILL PIPE 4 1/2 DEPTH 2130

TOOL _____ DEPTH _____

PRES. MAX _____ MINIMUM _____

MEAS. LINE _____ SHOE JOINT _____

CEMENT LEFT IN CSG. _____

PERFS. _____

DISPLACEMENT _____

OWNER hanson

CEMENT
AMOUNT ORDERED 280 BX 60/40 4920 Gel
4 floreal

COMMON	<u>168</u>	@	<u>13.50</u>	<u>2268.00</u>
POZMIX	<u>112</u>	@	<u>7.55</u>	<u>845.60</u>
GEL	<u>10</u>	@	<u>20.25</u>	<u>202.50</u>
CHLORIDE		@		
ASC		@		
<u>4 floreal</u>	<u>70</u>	@	<u>2.45</u>	<u>171.50</u>
		@		
		@		
		@		
		@		
		@		
		@		
		@		
HANDLING	<u>280</u>	@	<u>2.25</u>	<u>630.00</u>
MILEAGE	<u>280 x 43 x 10</u>			<u>1204.00</u>

TOTAL 5.321.00

REMARKS:

1st plug 2130 mix 50BX Dis 5 BBLs
H38 22 BBLs Rig mud
2nd plug 1330 mix 80BX Dis 12 BBLs
3rd plug 660 mix 50BX Dis 5 BBLs
4th 280 ft mix 80BX Dis .25
Rot mix 305X 5th 604 205X
washup Rig Down

SERVICE

DEPTH OF JOB	<u>2130</u>			
PUMP TRUCK CHARGE				<u>990.00</u>
EXTRA FOOTAGE		@		
MILEAGE	<u>43</u>	@	<u>7.00</u>	<u>301.00</u>
MANIFOLD		@		
		@		
		@		

TOTAL 1291.00

CHARGE TO: hanson

STREET _____

CITY _____ STATE _____ ZIP _____

PLUG & FLOAT EQUIPMENT

	@		
	@		
	@		

To Allied Cementing Co., LLC.

ALLIED CEMENTING CO., LLC. 036706

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

SERVICE POINT:

G - 29 + Bend 1 K1

DATE 6-25-10	SEC. 27	TWP. 19S	RANGE 28W	CALLED OUT	ON LOCATION	JOB START 1230 AM	JOB FINISH 130 AM
LEASE Stormont	WELL # 2-27	LOCATION Dighton KS 8 South				COUNTY Lawrence	STATE KS
OLD OR <u>NEW</u> (Circle one)			TO RD 70 3 East North into				

CONTRACTOR H-D Rig 3

OWNER Lauzon

TYPE OF JOB Sur. Acc.

HOLE SIZE 12 1/4 T.D. 262

CASING SIZE 8 5/8 DEPTH 261

<u>TUBING SIZE</u>	<u>DEPTH</u>
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DRILL PIPE	DEPTH
1	10
2	20
3	30
4	40
5	50
6	60
7	70
8	80
9	90
10	100
11	110
12	120
13	130
14	140
15	150
16	160
17	170
18	180
19	190
20	200
21	210
22	220
23	230
24	240
25	250
26	260
27	270
28	280
29	290
30	300
31	310
32	320
33	330
34	340
35	350
36	360
37	370
38	380
39	390
40	400
41	410
42	420
43	430
44	440
45	450
46	460
47	470
48	480
49	490
50	500
51	510
52	520
53	530
54	540
55	550
56	560
57	570
58	580
59	590
60	600
61	610
62	620
63	630
64	640
65	650
66	660
67	670
68	680
69	690
70	700
71	710
72	720
73	730
74	740
75	750
76	760
77	770
78	780
79	790
80	800
81	810
82	820
83	830
84	840
85	850
86	860
87	870
88	880
89	890
90	900
91	910
92	920
93	930
94	940
95	950
96	960
97	970
98	980
99	990
100	1000

TOOL	DEPTH
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PRES. MAX **MINIMUM**

MEAS. LINE	SHOE JOINT
1	1
2	2
3	3
4	4
5	5
6	6
7	7
8	8
9	9
10	10
11	11
12	12
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89	89
90	90
91	91
92	92
93	93
94	94
95	95
96	96
97	97
98	98
99	99
100	100

CEMENT LEFT IN CSG. 15

PERFS.

DISPLACEMENT 15.50 BBWS

EQUIPMENT

PUMP TRUCK CEMENTER Wayne-D

181 HELPER Awin-R

BULK TRUCK

344 DRIVER Bob-R

BULK TRUCK

#	DRIVER
---	--------

REMARKS:

Pipe on Bottom B-egg Circulation

with Ris mud shut Down

Hook up To Cement line

Mix 175SX class A 398cc 2% Gel

Displacement of CO_2 water-

Shut in Cement and

Circulate. Wash up Rig Down

CHARGE TO: L4030N

STREET

CITY _____ STATE _____ ZIP _____

SERVICE

DEPTH OF JOB 241

PUMP TRUCK CHARGE	990.00
-------------------	--------

EXTRA FOOTAGE @

MILEAGE	53	@	7.00	361.00
---------	----	---	------	--------

MANIFOLD _____ @

_____ @

TOTAL 1291.00

PLUG & FLOAT EQUIPMENT

To Allied Cementing Co., LLC.