

# ALLIED CEMENTING CO., LLC. 041538

Federal Tax I.D.# 20-5975804

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

SERVICE POINT:

Russell

DATE <u>6-12-10</u>	SEC. <u>26</u>	TWP. <u>205</u>	RANGE <u>26W</u>	CALLED OUT	ON LOCATION	JOB START <u>3:15 p</u>	JOB FINISH <u>3:45 p</u>
LEASE <u>Goodman Unit</u>	WELL# <u>1-26</u>	LOCATION <u>Becker 115 1 1/2 E</u>			COUNTY <u>Ness</u>	STATE <u>Ks</u>	
OLD OR <input checked="" type="radio"/> NEW (Circle one)		Sito					

CONTRACTOR HO Drilling Rig 3

TYPE OF JOB Surface Job

HOLE SIZE 12 1/4 T.D. 260

CASING SIZE 5 1/2 DEPTH 256.36

TUBING SIZE \_\_\_\_\_ DEPTH \_\_\_\_\_

DRILL PIPE \_\_\_\_\_ DEPTH \_\_\_\_\_

TOOL \_\_\_\_\_ DEPTH \_\_\_\_\_

PRES. MAX \_\_\_\_\_ MINIMUM \_\_\_\_\_

MEAS. LINE \_\_\_\_\_ SHOE JOINT \_\_\_\_\_

CEMENT LEFT IN CSG. 15'

PERFS. \_\_\_\_\_

DISPLACEMENT 15,326.1

OWNER \_\_\_\_\_

CEMENT AMOUNT ORDERED 175 @ 3.42

COMMON	<u>175</u>	@	<u>13.50</u>	<u>2362.50</u>
POZMIX		@		
GEL	<u>3</u>	@	<u>20.25</u>	<u>60.75</u>
CHLORIDE	<u>6</u>	@	<u>51.50</u>	<u>309.00</u>
ASC		@		
		@		
		@		
		@		
		@		
		@		
		@		
		@		
HANDLING	<u>175</u>	@	<u>2.25</u>	<u>393.75</u>
MILEAGE	<u>110/54 p.h.</u>			<u>350.00</u>
TOTAL				<u>3476.00</u>

**EQUIPMENT**

PUMP TRUCK CEMENTER Shane

# 417 HELPER Heath

BULK TRUCK

# 344 DRIVER Bobby

BULK TRUCK

# \_\_\_\_\_ DRIVER \_\_\_\_\_

**REMARKS:**

Rew 6 Str. & Landig Str.

Mixed 175 Str

to Circulate Cement

**SERVICE**

DEPTH OF JOB				
PUMP TRUCK CHARGE			<u>991.00</u>	
EXTRA FOOTAGE		@		
MILEAGE	<u>20</u>	@	<u>7.00</u> <u>140.00</u>	
MANIFOLD		@		
		@		
		@		
TOTAL				<u>1131.00</u>

CHARGE TO: Larson Engineering

STREET \_\_\_\_\_

CITY \_\_\_\_\_ STATE \_\_\_\_\_ ZIP \_\_\_\_\_

**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.

PRINTED NAME LEWIS TRESNER

SIGNATURE Lewis Tresner

SALES TAX (If Any) \_\_\_\_\_

TOTAL CHARGES 1131.00

DISCOUNT \_\_\_\_\_ IF PAID IN 30 DAYS

Thanks!

# ALLIED CEMENTING CO., LLC. 036700

Federal Tax I.D.# 20-5975804

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

SERVICE POINT:  
Great Bend KS

DATE <u>6-22-10</u>	SEC. <u>26</u>	TWP. <u>20S</u>	RANGE <u>26W</u>	CALLED OUT	ON LOCATION	JOB START <u>700 AM</u>	JOB FINISH <u>800 AM</u>
LEASE <u>Goodman</u>	WELL # <u>1-26</u>	LOCATION <u>Beale - 11 South 1 1/2 East</u>			COUNTY <u>NESS</u>	STATE <u>KS</u>	
OLD OR <u>NEW</u> (Circle one)		<u>South into</u>					

CONTRACTOR H-D Rig 2

TYPE OF JOB Rotary Plug

HOLE SIZE 7 3/4 T.D. 4550

CASING SIZE \_\_\_\_\_ DEPTH \_\_\_\_\_

TUBING SIZE \_\_\_\_\_ DEPTH \_\_\_\_\_

DRILL PIPE 7 1/2 DEPTH 1700

TOOL \_\_\_\_\_ DEPTH \_\_\_\_\_

PRES. MAX \_\_\_\_\_ MINIMUM \_\_\_\_\_

MEAS. LINE \_\_\_\_\_ SHOE JOINT \_\_\_\_\_

CEMENT LEFT IN CSG. \_\_\_\_\_

PERFS. \_\_\_\_\_

DISPLACEMENT 27 3/4 Dis

EQUIPMENT

PUMP TRUCK CEMENTER Wayne-D

# 181 HELPER Alvin-R

BULK TRUCK

# 344 DRIVER Bob-R

BULK TRUCK

# \_\_\_\_\_ DRIVER \_\_\_\_\_

REMARKS:

1<sup>st</sup> plug 1700 mix 50SX 20BBLS Dis

2nd plug 870 mix 50SX 7BBLS Dis

3rd plug 290 mix 50SX .25

4th plug 60 mix 20SX .25

Rat mix 30SX .25

wash up Rig Down

CHARGE TO: hanson

STREET \_\_\_\_\_

CITY \_\_\_\_\_ STATE \_\_\_\_\_ ZIP \_\_\_\_\_

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

PRINTED NAME LEWAYNE TRESNER

SIGNATURE Lewayne Tresner

OWNER hanson

CEMENT

AMOUNT ORDERED 200 SX 60/40 4% Gel

4 flo seal

COMMON	<u>120</u>	@ <u>13.50</u>	<u>1620.00</u>
POZMIX	<u>80</u>	@ <u>7.55</u>	<u>604.00</u>
GEL	<u>7</u>	@ <u>20.25</u>	<u>141.75</u>
CHLORIDE		@	
ASC		@	
<u>flo seal</u>	<u>50#</u>	@ <u>2.45</u>	<u>122.50</u>
		@	
		@	
		@	
		@	
		@	
HANDLING	<u>200</u>	@ <u>2.25</u>	<u>450.00</u>
MILEAGE	<u>200 x 20 x .10</u>		<u>400.00</u>

TOTAL 3338.25

SERVICE

DEPTH OF JOB 1700

PUMP TRUCK CHARGE 990.00

EXTRA FOOTAGE @ \_\_\_\_\_

MILEAGE 20 @ 7.00 140.00

MANIFOLD @ \_\_\_\_\_

@ \_\_\_\_\_

@ \_\_\_\_\_

TOTAL 1130.00

PLUG & FLOAT EQUIPMENT

@ \_\_\_\_\_

@ \_\_\_\_\_

@ \_\_\_\_\_

@ \_\_\_\_\_

TOTAL \_\_\_\_\_

SALES TAX (if Any) \_\_\_\_\_

TOTAL CHARGES ~~3338.25~~

DISCOUNT \_\_\_\_\_ IF PAID IN 30 DAYS

# Robert C. Lewellyn

*Consulting Petroleum Geologist*

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

## GEOLOGICAL REPORT

**Larson Engineering, Inc.**  
Goodman Unit No. 1-26  
62' FNL & 2585' FWL Sec. 26-20S-26W  
Ness County, Kansas

CONTRACTOR: H D Drilling, LLC, Rig 3  
SPUDED: June 11, 2010  
DRILLING COMPLETED: June 22, 2010  
SURFACE CASING: 8 5/8" @ 253 KBM/175 sx,  
ELECTRIC LOGS: Log-Tech DIL CNL/CDL MEL  
ELEVATIONS: 2463 KB 2256 GL

### FORMATION TOPS (Electric Log):

Anhydrite	1690 (+ 773)
Base Anhydrite	1724 (+ 739)
Heebner Shale	3781 (-1318)
Lansing-Kansas City Group	3825 (-1362)
Muncie Creek Shale	3990 (-1527)
Stark Shale	4097 (-1634)
Hushpuckney shale	4136 (-1673)
Base Kansas City	4210 (-1747)
Altamont	4248 (-1785)
Pawnee	4281 (-1818)
Myrick Station	4305 (-1842)
Fort Scott	4346 (-1883)
Cherokee Shale	4369 (-1906)
Cherokee Sand	4432 (-1969)
Detrital Zone	4436 (-1973)
Mississippi Lime	4440 (-1977)
Mississippi Spergen	4465 (-2002)
Electric Log Total Depth	4550 (-2087)

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:

3825-3856 (A Zone)

Limestone, cream to buff, dense to finely crystalline, considerable chalk, zone is mostly tight, no show of oil.

3861-3874 (B Zone)

Limestone, cream to buff, dense to finely crystalline and finely oolitic in part, scattered poor intercrystalline and poor oolitic porosity, no show of oil.

3889-3909 (C/D Zone)

Limestone, cream to buff, some tan, dense to finely crystalline, much chalk, zone is tight with no shows of oil.

3911-3916 (E Zone)

Limestone, buff, dense to finely crystalline, some oolitic with dark oolites, zone is mostly tight with no shows of oil

3919-3927 (F Zone)

Limestone, cream to buff, some tan, dense to finely crystalline and partly fossiliferous, scattered poor intercrystalline and interfossil porosity, no show of oil, some light grey fresh chert, opaque.

3944-3950 & 3959-3968 (G Zone)

Limestone, buff, finely crystalline and oolitic, fair to good oolitic porosity, no show of oil. Lower portion becomes dense to finely crystalline with much chalk, tight, no show of oil.

4004-44022 (H Zone)

Limestone, buff to tan, some brown to mottled, dense to finely crystalline, partly oolitic, some dense-oolitic, poor intercrystalline and interoolitic porosity, no show of oil.

4040-4046 (I Zone)

Limestone, buff to tan to brown, some mottled, dense to finely crystalline, fossiliferous in part, zone is mostly tight, no show of oil.

4074-4082 (J Zone)

Limestone, buff to tan, finely crystalline and oolitic, fair to good ooliticastic porosity, no show of oil.

4102-4114 (K Zone)

Limestone, buff to tan, finely crystalline and partly oolitic, fair intercrystalline and ooliticastic porosity, no show of oil, some scattered chalky limestone.

4142-4144 (L Zone)

Limestone, buff to tan, dense to finely crystalline, partly oolitic with poor to fair ooliticastic porosity, no show of oil.

4210-4248 (Pleasanton Zone))

Limestone, cream to buff to tan, dense to finely crystalline and chalky, some slightly fossiliferous, zone is mostly tight, no show of oil.

4248-4277 (Altamont Zone)

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

Drill Stem Test No. 1

4242-4275

15-30-15-30; tool open with bubbles, then no blow; blow did not return on second flow; recovered one foot of mud. ISIP 21# FSIP 19# IFP 17-17# FFP 17-17# BHT 115 degrees.

4281-4297 (Pawnee Zone)

Limestone, cream to buff, some brown, some mottled, dense to finely crystalline and chalky, tight with only a trace of very poor intercrystalline porosity, few pieces with very poor spotted stain, trace of free oil, questionable odor, no fluorescence, no cut.

4305-4338 (Myrick Station Zone)

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

4346-4369 (Fort Scott Zone)

Limestone, buff to tan, some brown, dense to finely crystalline and partly oolitic, poor intercrystalline and interoolitic porosity, trace of poor spotted stain, very slight show of free oil, faint questionable odor, slight fluorescence, very poor cut.

Drill Stem Test No. 2                      4274-4390

15-30-30-60; blow built to one-fourth inch in four minutes, intermittent quarter-inch blow throughout first flow; blow did not return on second flow; recovered 20 feet of slightly oil cut mud (4% gas, 6% oil, 90% mud) ISIP 125# FSIP 93# IFP 22-29# FSIP 31-33# IHP 2082# FHP 2048# BHT 117 degrees.

4404-4426 (Johnson Zone)

Limestone, buff to tan, some medium grey, dense to finely crystalline, slightly fossiliferous, poor intercrystalline and interfossil porosity, trace of poor spotted stain, questionable odor, trace of free oil, no fluorescence, poor cut.

4432-4436 (Cherokee Sand)

Sand, grey to buff, fine grained, subround, well sorted, well cemented to friable, poor intergranular porosity, poor to fair spotted stain, good strong odor, slight show of free oil, poor to fair fluorescence, fair cut.

4436-4440 (Detrital Zone)

Chert, tan, fresh to weathered with scattered poor vuggy porosity, dark to dead stain, some tan, finely crystalline limestone with poor to fair intercrystalline porosity, and scattered dead stain, no free oil, trace of tarry odor, no fluorescence, poor tarry cut.

Drill Stem Test No. 3                      4382-4438

15-30-30-60; quarter inch blow built to ¾ inch blow on first flow; blow did not return on second flow; recovered 30 feet of gas in pipe and 30 feet of gassy oil cut mud (9% gas, 13% oil, 78% mud). ISIP 99# FSIP 68# IFP 22-27# FFP 31-37# IHP 2127# FHP 2098# BHT 117 degrees.

4440-4465 (Mississippian Lime Zone)

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

4465-4492

Dolomite, buff to tan, finely crystalline, some microcrystalline to sucrosic, scattered fair intercrystalline and vugular porosity, no show of oil.

4492-4550

Dolomitic limestone and dolomite, buff to tan, some scattered brown, mostly tight with intermittent streaks of poor scattered intercrystalline porosity, no show of oil.

4550

Rotary Total Depth

Conclusions and Recommendations:

Sample examination, drill stem testing, and electric logging revealed no zones capable of producing oil or gas in commercial quantities in the No. 1-26 Goodman Unit. It was therefore recommended that the well be plugged and abandoned.

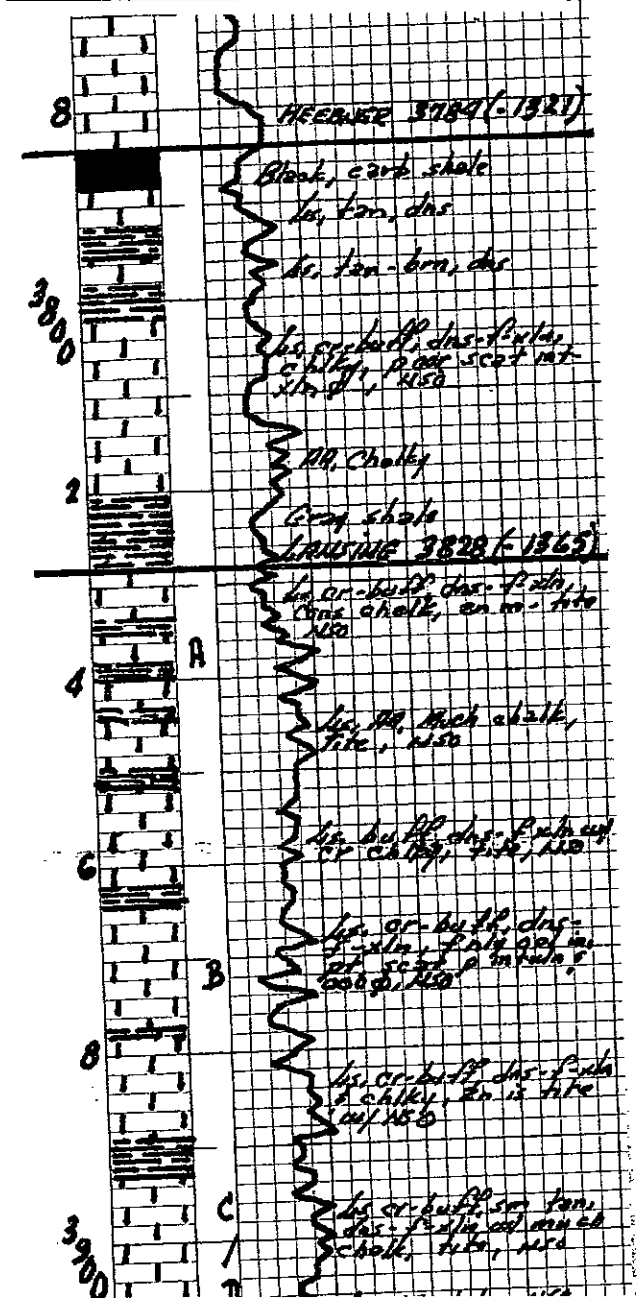
Respectfully submitted,

Robert C. Lewellyn  
Petroleum Geologist

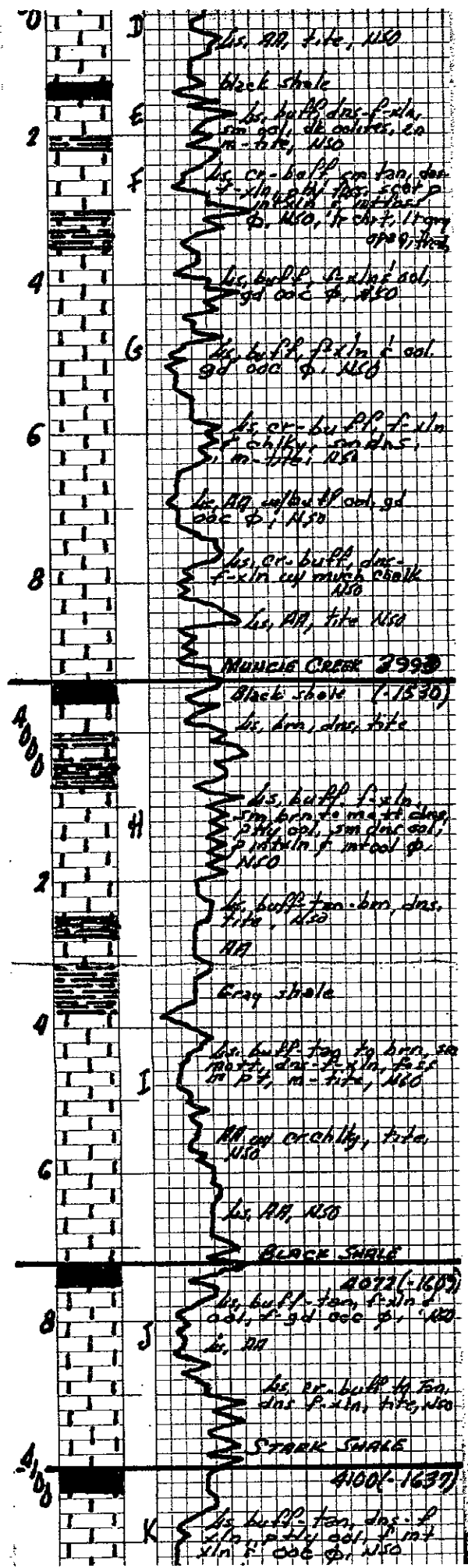
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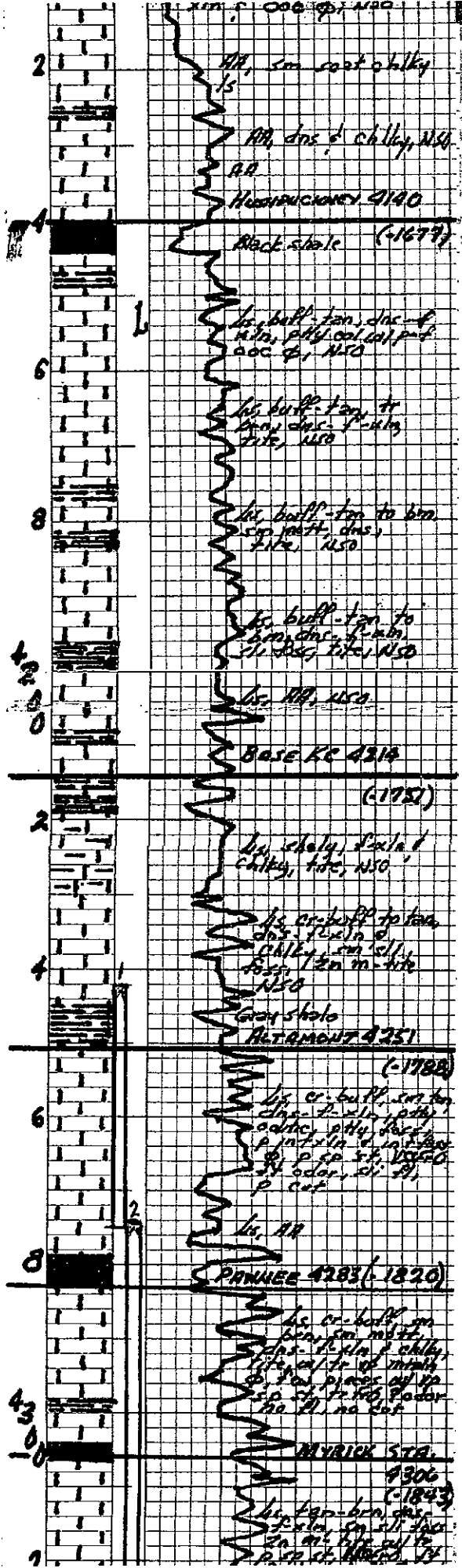
KANSAS COMPANY **LARSON ENGINEERING, INC.**  
 COUNTY NESS FARM **GOODMAN UNIT 1-26** WELL NO.  
 BLOCK SURVEY **62' FNL & 2585 FNL**  
 SEC. **26**  
 T. **20S** R. **26W** TOTAL DEPTH **4550**  
 CONTRACTOR **HD DRILLING, Rio 3**  
 COMMENCED **06-11-2010**  
 COMPLETED **06-22-2010**  
 REMARKS **Robert C. Lamellen - Geologist**  
 ALTITUDE **2463 KB**  
 PRODUCTION **D & M**

CASING RECORD  
**8 5/8" @ 253/KBM/175 SX**  
 SHOT QUARTS BETWEEN









1000 ft. 000 ft. 1000 ft.

1/2  
 100, sm coat chky  
 ls

100, dnc f' chky, NSO  
 RR  
 HUNTINGTON 4140

Black shale (-1677)

ls, buff-tan, dnc f'  
 m, pty, cal, col, pnt  
 ooc p, NSO

ls, buff-tan, fr  
 pty, dnc f'-m  
 fine, NSO

ls, buff-tan to brn  
 sp, pnt, dnc  
 fine, NSO

ls, buff-tan to  
 brn, dnc f'-m  
 m, dnc, fine, NSO

ls, RR, NSO

Base KC 4214  
 (-1751)

ls, shaly, f'ula f'  
 chky, fine, NSO

ls or buff to tan  
 dnc f'-m, pty  
 chky, sm, cal, pnt  
 m, fine, NSO

Gray shale  
 HUNTINGTON 4251  
 (-1782)

ls or buff, sm tan  
 dnc f'-m, pty  
 cal, pty, pnt  
 p, m, pnt, m, m, m  
 p, p, p, p, p, p, p  
 p, p, p, p, p, p, p  
 p, cut

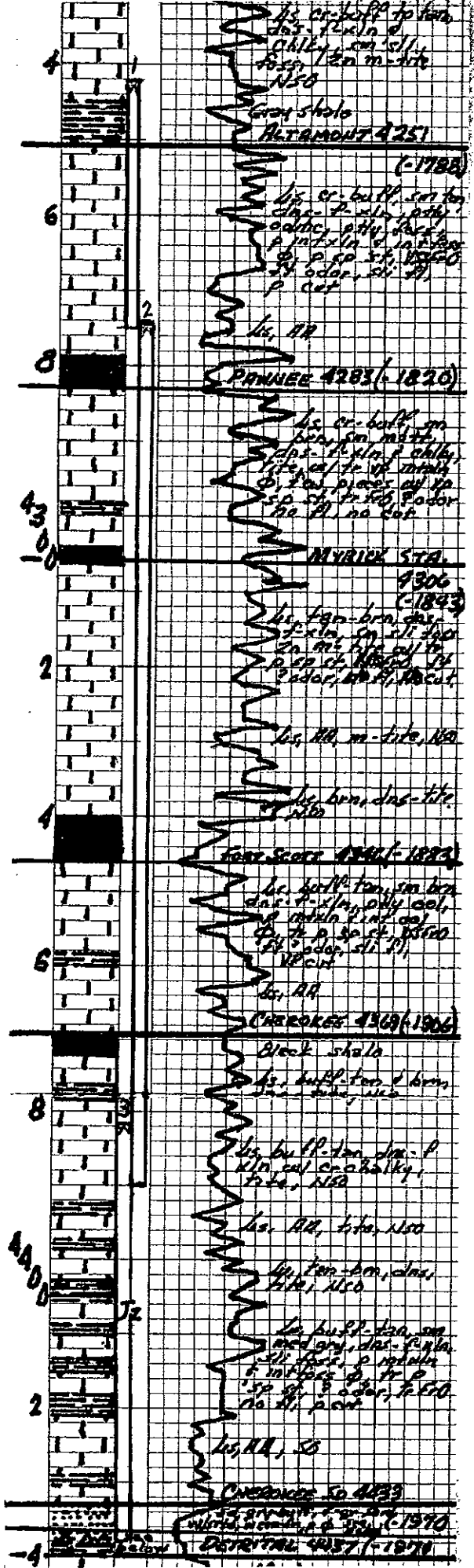
ls, RR

PANZER 4283 (-1820)

ls or buff, sm  
 pty, m, m, m  
 dnc f'-m, chky  
 fine, m, m, m, m  
 m, p, p, p, p, p  
 m, p, p, p, p, p  
 m, p, p, p, p, p

MYRICK STA.  
 4306  
 (-1843)

ls, tan-brn, dnc  
 f'-m, sm, m, m  
 m, m, m, m, m  
 m, p, p, p, p, p



ls. cr. buff. tan  
 das. f. xln d.  
 chky. con. sll. p.  
 f. s. / 20 m. - 40  
 NSB

Gray shale  
 ALTRAMONT 4251  
 (-1788)

ls. cr. buff. tan  
 das. f. xln, chky.  
 odacy. sll. p. / 20  
 f. s. / 20 m. - 40  
 f. s. / 20 m. - 40  
 f. s. / 20 m. - 40  
 p. cut

ls. RR  
 PRINCE 4203 (1820)

ls. cr. buff. tan  
 das. f. xln, chky.  
 f. s. / 20 m. - 40  
 f. s. / 20 m. - 40  
 f. s. / 20 m. - 40  
 f. s. / 20 m. - 40  
 f. s. / 20 m. - 40  
 f. s. / 20 m. - 40  
 p. cut

MYRIEK STA.  
 4306  
 (-1843)

ls. tan-brn. das.  
 f. xln, con. sll. p.  
 f. s. / 20 m. - 40  
 f. s. / 20 m. - 40  
 f. s. / 20 m. - 40  
 f. s. / 20 m. - 40  
 f. s. / 20 m. - 40  
 f. s. / 20 m. - 40  
 p. cut

ls. RR, m. - 40, NSB

ls. brn. das. - tile  
 m. - 40

LONG SCOTT 4346 (1883)

ls. buff. tan, con. brn.  
 das. f. xln, chky. col.  
 f. s. / 20 m. - 40  
 f. s. / 20 m. - 40  
 f. s. / 20 m. - 40  
 f. s. / 20 m. - 40  
 f. s. / 20 m. - 40  
 f. s. / 20 m. - 40  
 p. cut

ls. RR  
 CHAROKEE 4369 (1866)

Black shale  
 ls. buff. tan & brn.  
 f. s. / 20 m. - 40

ls. buff. tan, con. p.  
 chky. and cr. chalky.  
 f. s. / 20 m. - 40

ls. RR, f. s. / 20, NSB

ls. tan-brn. das.  
 f. s. / 20 m. - 40

ls. buff. tan, con.  
 med. gray, das. - f. xln  
 f. s. / 20 m. - 40  
 f. s. / 20 m. - 40  
 f. s. / 20 m. - 40  
 f. s. / 20 m. - 40  
 f. s. / 20 m. - 40  
 f. s. / 20 m. - 40  
 p. cut

ls. RR, 50  
 CROOKER 4433

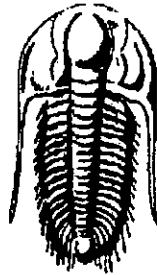
DETROIT 4457 (1870)

4300

4400

-4





**TRILOBITE  
TESTING, INC.**

## DRILL STEM TEST REPORT

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

562 W State Rd 4  
Olmitz, KS 67564

ATTN: Bob Lewellyn

**26 20s 26w Ness KS**

**Goodman Unit #1-26**

Start Date: 2010.06.18 @ 13:53:00

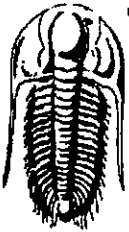
End Date: 2010.06.18 @ 20:24:00

Job Ticket #: 37349                      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, Inc.

562 W State Rd 4  
Olmritz, KS 67564

ATTN: Bob Lewellyn

**Goodman Unit #1-26**

**26 20s 26w Ness KS**

Job Ticket: 37349

DST#: 1

Test Start: 2010.06.18 @ 13:53:00

### GENERAL INFORMATION:

Formation: **Altamont**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 16:11:30

Time Test Ended: 20:24:00

Test Type: Conventional Bottom Hole

Tester: James Wmder

Unit No: 46

Interval: **4242.00 ft (KB) To 4275.00 ft (KB) (TVD)**

Reference Elevations: 2463.00 ft (KB)

Total Depth: 4275.00 ft (KB) (TVD)

2456.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 7.00 ft

**Serial #: 8366** Inside

Press@RunDepth: 17.30 psig @ 4243.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2010.06.18

End Date: 2010.06.18

Last Calib.: 2010.06.18

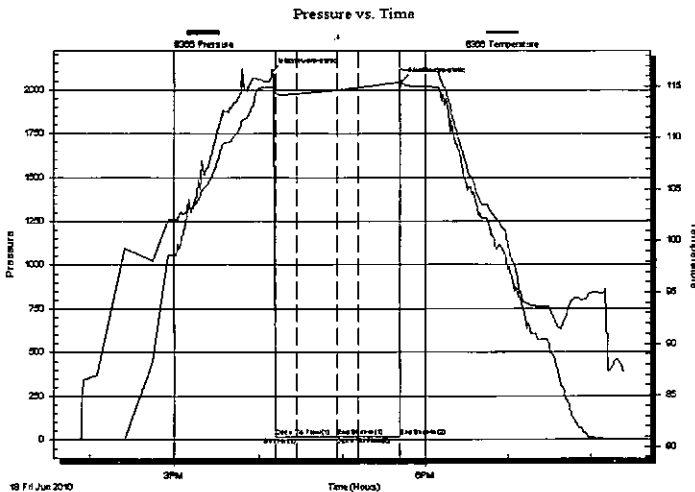
Start Time: 13:53:05

End Time: 20:23:59

Time On Btm: 2010.06.18 @ 16:09:00

Time Off Btm: 2010.06.18 @ 17:42:30

TEST COMMENT: IF: No blow  
IS: No blow back  
FF: No blow  
FS: No blow back



### PRESSURE SUMMARY

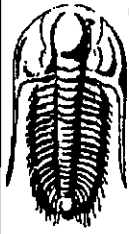
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2104.29	114.87	Initial Hydro-static
3	16.65	114.33	Open To Flow (1)
18	16.74	114.26	Shut-In(1)
47	21.39	114.63	End Shut-In(1)
47	16.62	114.64	Open To Flow (2)
62	17.30	114.88	Shut-In(2)
92	19.25	115.39	End Shut-In(2)
94	2048.21	116.69	Final Hydro-static

### Recovery

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

### Gas Rates

	Choke (Inches)	Pressure (psig)	Gas Rate (Mc/d)



**TRILOBITE  
TESTING, INC**

**DRILL STEM TEST REPORT**

**TOOL DIAGRAM**

Larson Engineering, Inc.

**Goodman Unit #1-26**

562 W State Rd 4  
Olmitz, KS 67564

**26 20s 26w Ness KS**

Job Ticket: 37349

**DST#: 1**

ATTN: Bob Lewellyn

Test Start: 2010.06.18 @ 13:53:00

**Tool Information**

Drill Pipe:	Length: 4095.00 ft	Diameter: 3.80 inches	Volume: 57.44 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: 141.00 ft	Diameter: 2.25 inches	Volume: 0.69 bbl	Weight to Pull Loose: 70000.00 lb
			<u>Total Volume: 58.13 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	21.00 ft			String Weight: Initial 52000.00 lb
Depth to Top Packer:	4242.00 ft			Final 52000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	33.00 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
S.I. Tool	5.00			4220.00	
HYD S.I. Tool	5.00			4225.00	
Jars	5.00			4230.00	
Safety Joint	2.00			4232.00	
Packer	5.00			4237.00	27.00 Bottom Of Top Packer
Packer	5.00			4242.00	
Shale Packer	0.00			4242.00	
Stubb	1.00			4243.00	
Recorder	0.00	8366	Inside	4243.00	
Recorder	0.00	8320	Inside	4243.00	
Perforations	29.00			4272.00	
Bullnose	3.00			4275.00	33.00 Bottom Packers & Anchor

**Total Tool Length: 60.00**



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Larson Engineering, Inc.

**Goodman Unit #1-26**

562 W State Rd 4  
Olmritz, KS 67564

**26 20s 26w Ness KS**

Job Ticket: 37349

DST#: 1

ATTN: Bob Lewellyn

Test Start: 2010.06.18 @ 13:53:00

## Mud and Cushion Information

Mud Type: Gel Chem	Cushion Type:	Oil API:	deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity:	ppm
Viscosity: 46.00 sec/qt	Cushion Volume: bbl		
Water Loss: 7.95 in <sup>3</sup>	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 2300.00 ppm			
Filter Cake: 1.00 inches			

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
1.00	Mud 100%	0.005

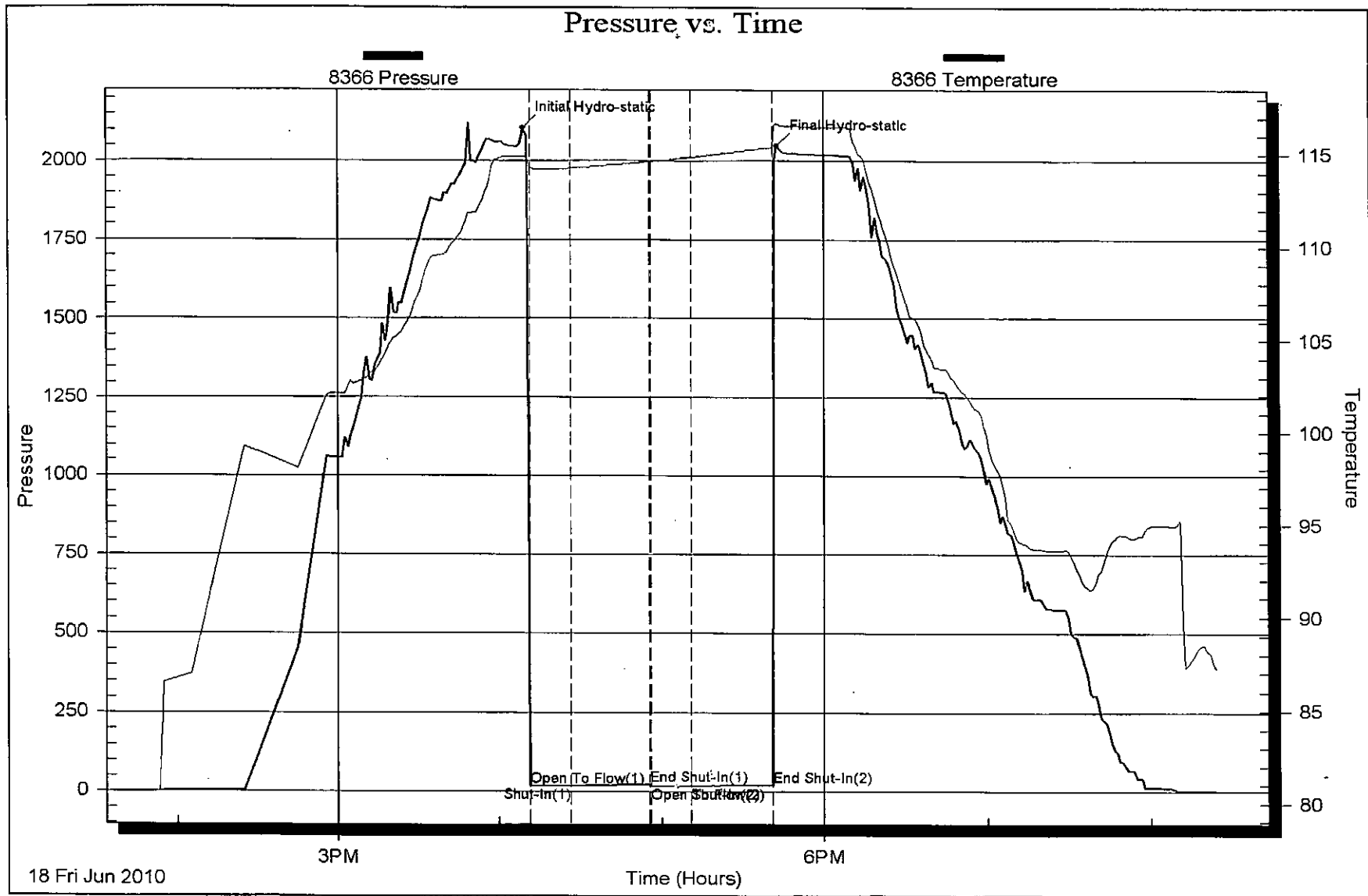
Total Length: 1.00 ft      Total Volume: 0.005 bbl

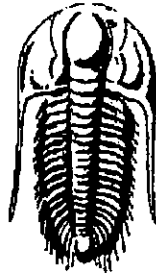
Num Fluid Samples: 0      Num Gas Bombs: 0      Serial #:

Laboratory Name:      Laboratory Location:

Recovery Comments:







**TRILOBITE  
TESTING, INC.**

## DRILL STEM TEST REPORT

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

562 W State Rd 4  
Olmitz, KS 67564

ATTN: Bob Lewellyn

**26 20s 26w Ness KS**

**Goodman Unit #1-26**

Start Date: 2010.06.19 @ 18:04:00

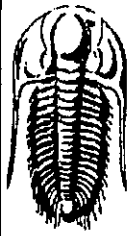
End Date: 2010.06.20 @ 02:01:00

Job Ticket #: 37350                      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, Inc.

562 W State Rd 4  
Olmitz, KS 67564

ATTN: Bob Lewellyn

**Goodman Unit #1-26**

**26 20s 26w Ness KS**

Job Ticket: 37350

DST#: 2

Test Start: 2010.06.19 @ 18:04:00

## GENERAL INFORMATION:

Formation: **Pawnee - Fort Scott**

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

Time Tool Opened: 21:10:00

Time Test Ended: 02:01:00

Test Type: **Conventional Bottom Hole**

Tester: **James Winder**

Unit No: **46**

Interval: **4274.00 ft (KB) To 4390.00 ft (KB) (TVD)**

Total Depth: **4390.00 ft (KB) (TVD)**

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

Reference Elevations: **2463.00 ft (KB)**

**2456.00 ft (CF)**

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

**Serial #: 8366** Inside

Press@RunDepth: **33.38 psig @ 4275.00 ft (KB)**

Start Date: **2010.06.19**

End Date:

**2010.06.20**

Capacity: **8000.00 psig**

Last Calib.:

**2010.06.20**

Start Time: **18:04:05**

End Time:

**02:00:59**

Time On Btm:

**2010.06.19 @ 21:06:00**

Time Off Btm:

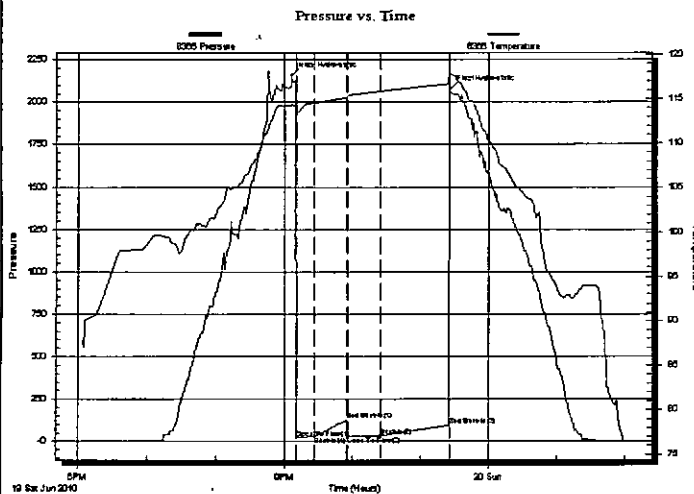
**2010.06.19 @ 23:26:00**

TEST COMMENT: IF: Blow built to 1/4 in 4 min., Intermittent blow @ 1/4" through open

IS: Bled off, No blow back

FF: No blow

FSI: No blow back



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2155.92	114.31	Initial Hydro-static
4	21.61	113.62	Open To Flow (1)
20	28.92	114.53	Shut-In (1)
49	124.74	115.14	End Shut-In (1)
50	31.17	115.27	Open To Flow (2)
79	33.38	115.85	Shut-In (2)
139	93.42	116.68	End Shut-In (2)
140	2073.95	117.99	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
20.00	SOCM 90% m, 6% o, 4% g	0.10

## Gas Rates

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



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Larson Engineering, Inc.

**Goodman Unit #1-26**

562 W State Rd 4  
Olmitz, KS 67564

**26 20s 26w Ness KS**

Job Ticket: 37350

**DST#: 2**

ATTN: Bob Lewellyn

Test Start: 2010.06.19 @ 18:04:00

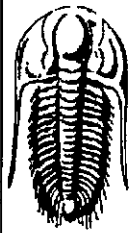
**Tool Information**

Drill Pipe:	Length: 4123.00 ft	Diameter: 3.80 inches	Volume: 57.83 bbl	Tool Weight: 3500.00 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: 141.00 ft	Diameter: 2.25 inches	Volume: 0.69 bbl	Weight to Pull Loose: 65000.00 lb
			<u>Total Volume: 58.52 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	17.00 ft			String Weight: Initial 56000.00 lb
Depth to Top Packer:	4274.00 ft			Final 56000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	116.00 ft			
Tool Length:	143.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
S.I. Tool	5.00			4252.00	
HYD S.I. Tool	5.00			4257.00	
Jars	5.00			4262.00	
Safety Joint	2.00			4264.00	
Packer	5.00			4269.00	27.00 Bottom Of Top Packer
Packer	5.00			4274.00	
Shale Packer	0.00			4274.00	
Shale Packer	0.00			4274.00	
Stubb	1.00			4275.00	
Recorder	0.00	8366	inside	4275.00	
Recorder	0.00	8320	inside	4275.00	
Perforations	15.00			4290.00	
Blank Spacing	94.00			4384.00	
Perforations	3.00			4387.00	
Bullnose	3.00			4390.00	116.00 Bottom Packers & Anchor

**Total Tool Length: 143.00**



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Larson Engineering, Inc.

**Goodman Unit #1-26**

562 W State Rd 4  
Olmitz, KS 67564

**26 20s 26w Ness KS**

Job Ticket: 37350

**DST#: 2**

ATTN: Bob Lewellyn

Test Start: 2010.06.19 @ 18:04:00

## Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 49.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.94 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 3000.00 ppm

Filter Cake: 1.00 inches

## Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
20.00	SOCM 90% m, 6% o, 4% g	0.098

Total Length: 20.00 ft      Total Volume: 0.098 bbl

Num Fluid Samples: 0

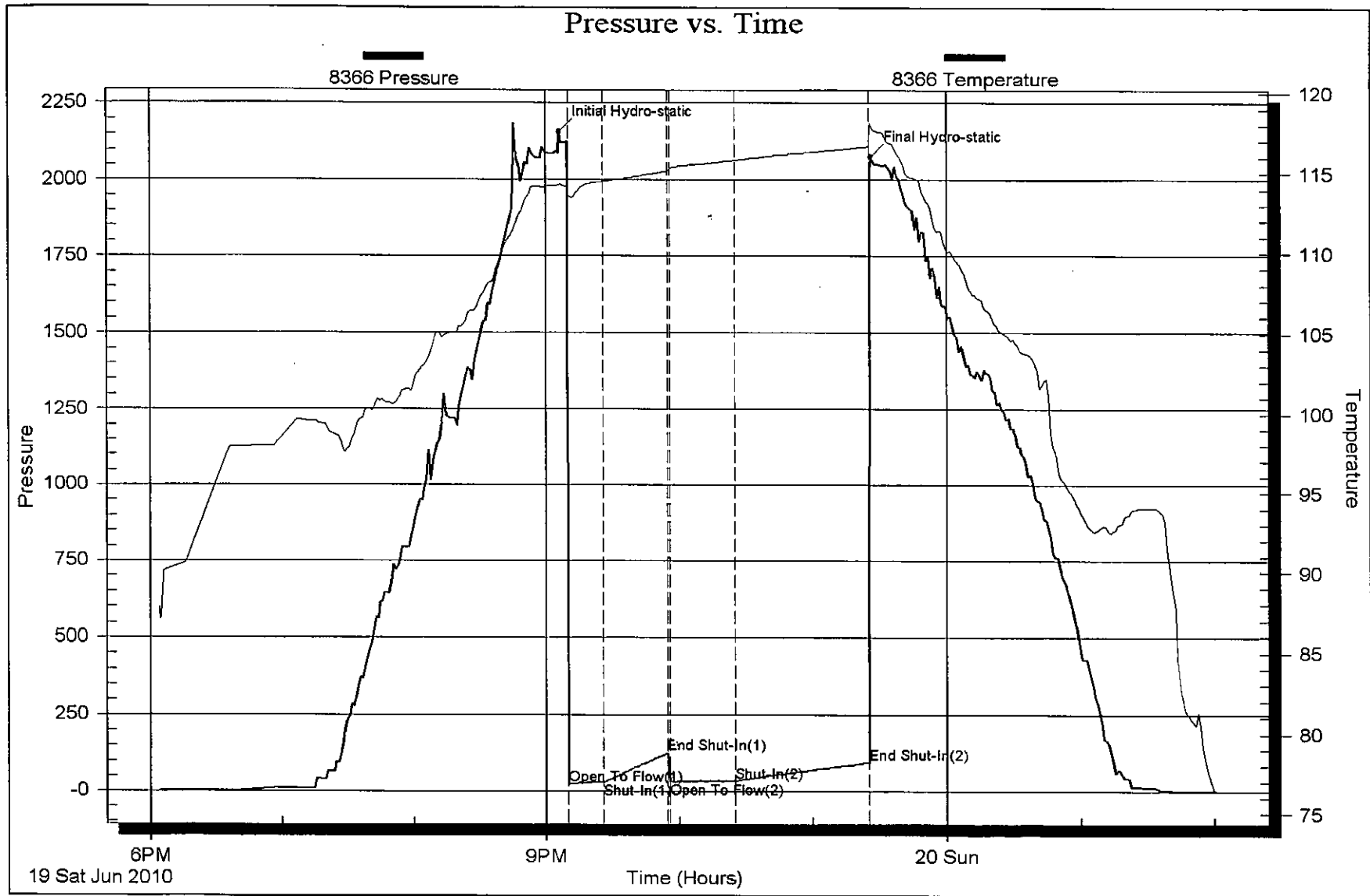
Num Gas Bombs: 0

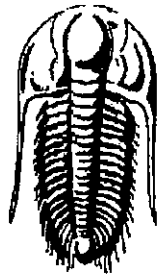
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:





**TRILOBITE  
TESTING, INC.**

## DRILL STEM TEST REPORT

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

562 W State Rd 4  
Olmitz, KS 67564

ATTN: Bob Lewellyn

**26 20s 26w Ness KS**

**Goodman Unit #1-26**

Start Date: 2010.06.20 @ 14:15:00

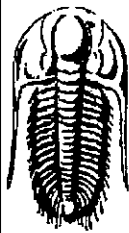
End Date: 2010.06.20 @ 21:42:30

Job Ticket #: 38326                      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, Inc.

562 W State Rd 4  
Olmritz, KS 67564

ATTN: Bob Lewellyn

**Goodman Unit #1-26**

**26 20s 26w Ness KS**

Job Ticket: 38326

DST#: 3

Test Start: 2010.06.20 @ 14:15:00

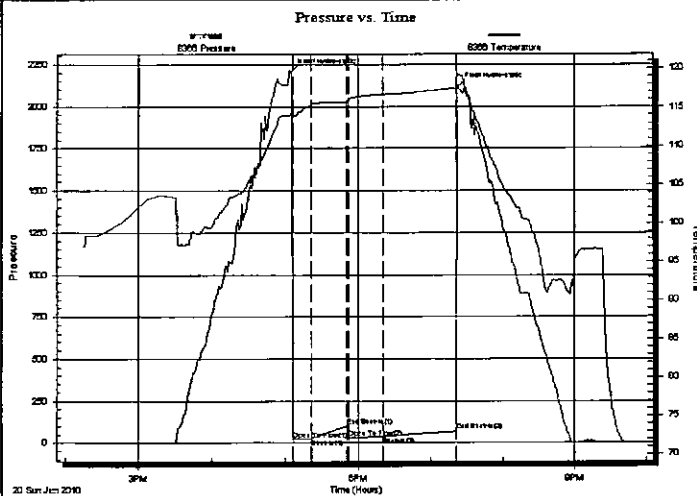
### GENERAL INFORMATION:

Formation: **Cherokee Sand**  
 Deviated: **No** Whipstock: **ft (KB)** Test Type: **Conventional Bottom Hole**  
 Time Tool Opened: 17:06:30 Tester: **James Winder**  
 Time Test Ended: 21:42:30 Unit No: **46**

Interval: **4382.00 ft (KB) To 4438.00 ft (KB) (TVD)** Reference Elevations: **2463.00 ft (KB)**  
 Total Depth: **4438.00 ft (KB) (TVD)** **2456.00 ft (CF)**  
 Hole Diameter: **7.88 inches** Hole Condition: **Fair** KB to GR/CF: **7.00 ft**

**Serial #: 8366** **Inside**  
 Press@RunDepth: **36.58 psig @ 4383.00 ft (KB)** Capacity: **8000.00 psig**  
 Start Date: **2010.06.20** End Date: **2010.06.20** Last Calib.: **2010.06.20**  
 Start Time: **14:15:05** End Time: **21:42:29** Time On Btm: **2010.06.20 @ 17:04:30**  
 Time Off Btm: **2010.06.20 @ 19:22:59**

**TEST COMMENT:** IF: 1/4" blow @ open, built to 3/4"  
 IS: Bled off, No blow back  
 FF: No blow  
 FS: No blow back



### PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2204.32	114.21	Initial Hydro-static
2	21.95	113.85	Open To Flow (1)
17	26.61	115.44	Shut-In(1)
47	99.45	115.74	End Shut-In(1)
48	31.45	116.14	Open To Flow (2)
77	36.58	116.73	Shut-In(2)
137	68.31	117.48	End Shut-In(2)
139	2118.36	119.33	Final Hydro-static

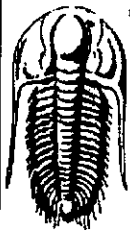
### Recovery

Length (ft)	Description	Volume (bbl)
30.00	GOCM 78% m, 13% o, 9% g	0.15
0.00	GIP = 30'	0.00

### Gas Rates

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





**TRILOBITE  
TESTING, INC**

**DRILL STEM TEST REPORT**

**TOOL DIAGRAM**

Larson Engineering, Inc.

**Goodman Unit #1-26**

562 W State Rd 4  
Olmitz, KS 67564

**26 20s 26w Ness KS**

Job Ticket: 38326

**DST#: 3**

ATTN: Bob Lewellyn

Test Start: 2010.06.20 @ 14:15:00

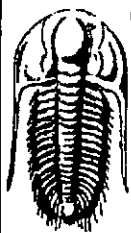
**Tool Information**

Drill Pipe:	Length: 4218.00 ft	Diameter: 3.80 inches	Volume: 59.17 bbl	Tool Weight: 3000.00 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: 141.00 ft	Diameter: 2.25 inches	Volume: 0.69 bbl	Weight to Pull Loose: 62000.00 lb
			<u>Total Volume: 59.86 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	4.00 ft			String Weight: Initial 56000.00 lb
Depth to Top Packer:	4382.00 ft			Final 56000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	56.00 ft			
Tool Length:	83.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
S.I. Tool	5.00			4360.00	
HYD S.I. Tool	5.00			4365.00	
Jars	5.00			4370.00	
Safety Joint	2.00			4372.00	
Packer	5.00			4377.00	27.00 Bottom Of Top Packer
Packer	5.00			4382.00	
Shale Packer	0.00			4382.00	
Stubb	1.00			4383.00	
Recorder	0.00	8366	Inside	4383.00	
Recorder	0.00	8320	Inside	4383.00	
Perforations	15.00			4398.00	
Blank Spacing	33.00			4431.00	
Perforations	4.00			4435.00	
Bullnose	3.00			4438.00	56.00 Bottom Packers & Anchor

**Total Tool Length: 83.00**



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Larson Engineering, Inc.

**Goodman Unit #1-26**

562 W State Rd 4  
Olmitz, KS 67564

**26 20s 26w Ness KS**

Job Ticket: 38326

**DST#: 3**

ATTN: Bob Lewellyn

Test Start: 2010.06.20 @ 14:15:00

## Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 46.00 sec/qt

Cushion Volume:

bbf

Water Loss: 7.95 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 2300.00 ppm

Filter Cake: 1.00 inches

## Recovery Information

Recovery Table

Length ft	Description	Volume bbf
30.00	GOCM 78% <sub>m</sub> , 13% <sub>o</sub> , 9% <sub>g</sub>	0.148
0.00	GIP = 30'	0.000

Total Length: 30.00 ft      Total Volume: 0.148 bbf

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

