



**WELL COMPLETION FORM**  
**WELL HISTORY - DESCRIPTION OF WELL & LEASE**

OPERATOR: License # \_\_\_\_\_

Name: \_\_\_\_\_

Address 1: \_\_\_\_\_

Address 2: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_ + \_\_\_\_\_

Contact Person: \_\_\_\_\_

Phone: ( \_\_\_\_\_ ) \_\_\_\_\_

CONTRACTOR: License # \_\_\_\_\_

Name: \_\_\_\_\_

Wellsite Geologist: \_\_\_\_\_

Purchaser: \_\_\_\_\_

Designate Type of Completion:

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

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

Operator: \_\_\_\_\_

Well Name: \_\_\_\_\_

Original Comp. Date: \_\_\_\_\_ Original Total Depth: \_\_\_\_\_

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

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

API No. 15 - \_\_\_\_\_

Spot Description: \_\_\_\_\_

\_\_\_\_\_-\_\_\_\_\_-\_\_\_\_\_- Sec. \_\_\_\_\_ Twp. \_\_\_\_\_ S. R. \_\_\_\_\_  East  West

\_\_\_\_\_ Feet from  North /  South Line of Section

\_\_\_\_\_ Feet from  East /  West Line of Section

Footages Calculated from Nearest Outside Section Corner:

- NE       NW       SE       SW

County: \_\_\_\_\_

Lease Name: \_\_\_\_\_ Well #: \_\_\_\_\_

Field Name: \_\_\_\_\_

Producing Formation: \_\_\_\_\_

Elevation: Ground: \_\_\_\_\_ Kelly Bushing: \_\_\_\_\_

Total Depth: \_\_\_\_\_ Plug Back Total Depth: \_\_\_\_\_

Amount of Surface Pipe Set and Cemented at: \_\_\_\_\_ Feet

Multiple Stage Cementing Collar Used?  Yes  No

If yes, show depth set: \_\_\_\_\_ Feet

If Alternate II completion, cement circulated from: \_\_\_\_\_

feet depth to: \_\_\_\_\_ w/ \_\_\_\_\_ sx cmt.

**Drilling Fluid Management Plan**

(Data must be collected from the Reserve Pit)

Chloride content: \_\_\_\_\_ ppm Fluid volume: \_\_\_\_\_ bbls

Dewatering method used: \_\_\_\_\_

Location of fluid disposal if hauled offsite: \_\_\_\_\_

Operator Name: \_\_\_\_\_

Lease Name: \_\_\_\_\_ License #: \_\_\_\_\_

Quarter \_\_\_\_\_ Sec. \_\_\_\_\_ Twp. \_\_\_\_\_ S. R. \_\_\_\_\_  East  West

County: \_\_\_\_\_ Permit #: \_\_\_\_\_

**AFFIDAVIT**

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

Submitted Electronically

**KCC Office Use ONLY**

- Letter of Confidentiality Received  
Date: \_\_\_\_\_
- Confidential Release Date: \_\_\_\_\_
- Wireline Log Received
- Geologist Report Received
- UIC Distribution
- ALT  I  II  III Approved by: \_\_\_\_\_ Date: \_\_\_\_\_



1079759

Operator Name: \_\_\_\_\_ Lease Name: \_\_\_\_\_ Well #: \_\_\_\_\_

Sec. \_\_\_\_\_ Twp. \_\_\_\_\_ S. R. \_\_\_\_\_  East  West County: \_\_\_\_\_

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

Drill Stem Tests Taken <input type="checkbox"/> Yes <input type="checkbox"/> No <i>(Attach Additional Sheets)</i>  Samples Sent to Geological Survey <input type="checkbox"/> Yes <input type="checkbox"/> No  Cores Taken <input type="checkbox"/> Yes <input type="checkbox"/> No Electric Log Run <input type="checkbox"/> Yes <input type="checkbox"/> No Electric Log Submitted Electronically <input type="checkbox"/> Yes <input type="checkbox"/> No <i>(If no, Submit Copy)</i>  List All E. Logs Run:	<input type="checkbox"/> Log Formation (Top), Depth and Datum <input type="checkbox"/> Sample  Name Top Datum
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CASING RECORD <input type="checkbox"/> New <input type="checkbox"/> Used							
Report all strings set-conductor, surface, intermediate, production, etc.							
Purpose of String	Size Hole Drilled	Size Casing Set (In O.D.)	Weight Lbs. / Ft.	Setting Depth	Type of Cement	# Sacks Used	Type and Percent Additives

ADDITIONAL CEMENTING / SQUEEZE RECORD				
Purpose:	Depth Top Bottom	Type of Cement	# Sacks Used	Type and Percent Additives
_____ Perforate _____ Protect Casing _____ Plug Back TD _____ Plug Off Zone				

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

TUBING RECORD:      Size: \_\_\_\_\_ Set At: \_\_\_\_\_ Packer At: \_\_\_\_\_ Liner Run:  Yes  No

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

Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio	Gravity
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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 type="checkbox"/> Perf. <input type="checkbox"/> Dually Comp. <input type="checkbox"/> Commingled <i>(Submit ACO-5)</i> <input type="checkbox"/> Other <i>(Specify)</i> _____ <input type="checkbox"/> Other <i>(Specify)</i> _____	PRODUCTION INTERVAL: _____ _____
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Form	ACO1 - Well Completion
Operator	HERMAN L. LOEB, LLC
Well Name	Panning 1-19
Doc ID	1079759

Tops

Name	Top	Datum
Chase	1734	160
Tarkio LMST	2596	-702
Tarkio SS	2626	-732
Howard	2792	-898
Topeka	2868	-974
Queen Hill Shale	3043	-1149
Heebner Shale	3138	-1244
Toronto	3156	-1262
Douglas Shale	3173	-1279
Brown LMST	3252	-1358
Lansing 'A'	3262	-1368
Base Kansas City	3490	-1596
Conglomerate	3498	-1604
Arbuckle	3510	-1616

# LITHOLOGY STRIP LOG

## WellSight Systems

Scale 1:240 (5"=100') Imperial

Well Name: Panning #1-19  
Location: 2306' FSL & 990' FWL, Sec. 19-T20S-R13W, Barton Co., KS.  
Licence Number: 15-009-25655-0000 Region: Pritchard North  
Spud Date: 2/10/2012 Drilling Completed: 2/18/12  
Surface Coordinates: 2306' FSL & 990' FWL, Sec. 19-T20S-R13W

Bottom Hole Same as above  
Coordinates:  
Ground Elevation (ft): 1885' K.B. Elevation (ft): 1894'  
Logged Interval (ft): 1700' To: 3600' Total Depth (ft): 3600'  
Formation: Arbuckle at Total Depth.  
Type of Drilling Fluid: Freshwater/Gel to 2566'; Chemical Gel 2566' to 3600'  
Printed by MUD.LOG from WellSight Systems 1-800-447-1534 www.WellSight.com

### OPERATOR

Company: Herman L. Loeb, LLC.  
Address: P.O. Box 838  
Lawrenceville, IL. 62439-0838

### GEOLOGIST

Name: Jon D. Christensen  
Company: Consulting Petroleum Geologist  
Address: 9002 W. Silver Hollow St.  
Wichita, KS. 67205-8856

### Cores

None Taken

### DSTs

DST #1(Lansing 'A') 3266' - 3281'(Corrected Depths to Log) Test Times 15"-45"-30"-60" IFP Weak 0.5" Blow, FFP Weak 0.75" Blow, no Blowback on SI's; REC: 3' VSOCM(1%O, 99%M), no water; IFP 12-19#, ISIP 68#, FFP 13-19#, FSIP 44#, IHP 1663#, FHP 1510#, BHT 103 Deg. F.

DST #2(Lansing 'B' - 'E' zones) 3282' - 3338'(Corrected Depths to Log) Test Times 15"-45"-45"-90" IFP Fair 4" Blow, FFP Fair Blow building to Strong Blow BOB/31", no Blowback on SI's; REC: 620' Gas in Pipe, 61' GWM w/few oil specks(2%G, 10%W, 88%M)CI 87,000, Mud 5000; IFP 20-28#, ISIP 673#, FFP 29-49#, FSIP 629#, IHP 1672#, FHP 1713#, BHT 102 Deg. F.

DST #3(KC. 'I' & 'J' zones) 3409' - 3430'(Corrected Depths to Log) Test Times 15"-45"-30"-60" IFP Weak Surface Blow, FFP Weak Surface Blow, no Blowback on SI's; REC: 2' Drilling Mud, no Shows; IFP 18-24#, ISIP 188#, FFP 21-23#, FSIP 67#, IHP 1620#, FHP 1649#, BHT 103 Deg. F.

DST #4(Arbuckle) 3515' - 3537'(Corrected Depths to Log) Test Times 15"-45"-60"-90" IFP Fair 3.5" Blow, FFP No Blow - Flush tool - Good Surge - Fair Blow built to 10", no Blowback on SI's; REC: Trc. Gas in Pipe, 230' GOCM(avg. 2%G, 12%O, 86%M), no Water; IFP 33-49#, ISIP 1166#, FFP 52-128#, FSIP 1127#, IHP 1747#, FHP 1683#, BHT 107 Deg. F.

## Comments

2/10/12 MIRU Sterling Drilling Co. Rig #4, Spud at 7:30 PM.; 2/11/12 Drilling at 500'; 2/12/12 TD. 795' - WOC; 2/13/12 Drilling at 1950'; 2/14/12 Drilling at 2640'; 2/15/12 TD. 3283' - Short trip for DST #1; 2/16/12 TD. 3340' - DST #2; 2/17/12 Drilling at 3455'; 2/18/12 RTD. 3600' - Reached TD. at 4:10 AM., TOH for Logs; 2/19/12 RTD. 3600'/LTD. 3600' Production Casing set - Tear down rig.

Set new 8 5/8"(24#) Surface Casing at 792' w/ 400 sx. Cement did Circulate to Cellar(Basic Energy Services). PD. 10:30 PM. 2/11/12.

Set new 5 1/2"(15.5#) Production Casing at 3591' w/ 85 sx. of "Loeb Blend". PD. 3:45 AM. 2/19/12. Port Collar at 2728'.

Surveys: 0.75 Deg. at 795'(Surface Casing); 0.75 Deg. at 3283'(DST #1); 0.75 Deg. at 3432'(DST #3); 0.75 Deg. at 3600' RTD.

Pipe Strap at 3283'(DST #1): Strap 0.32' Short to the Board, no correction made to the Board.


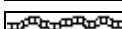
After review of the Superior Well Services Logs, DST data, structural position, and positive shows of commercial amounts of hydrocarbons, the operator elected to set new 5 1/2" Production Casing for completion in the Arbuckle.

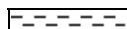

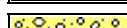

LOG TOPS: Chase(Herington) 1734(+160), Stotler/Tarkio Lmst. 2596(-702), Tarkio SS 2626(-732), Howard 2792(-898), Topeka 2868(-974), Queen Hill Shale 3043(-1149), Heebner Shale 3138(-1244), Toronto 3156(-1262), Douglas Shale 3173(-1279), Brown Lmst. 3252(-1358), Lansing 'A' 3262(-1368), Base Kansas City 3490(-1596), Conglomerate 3498(-1604), Arbuckle 3510(-1616).





Prior to abandonment of the Panning #1-19, the Tarkio Sand should be perforated and tested from 2626' - 2632' due to gas kick and oil shows. Also, the Falls City Lmst. should be perforated and tested from 2440' - 2442' due to the gas kick. Also, the upper Chase Herington and Krider zones should be perforated and tested from 1736' - 1746', and 1758' - 1764', respectively, based on the gas kicks observed while drilling.

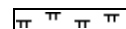
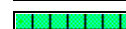

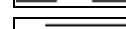
NOTE: This log was shifted upward by 1' - 2' for correlation purposes with the Superior Well Services Logs.



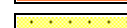

### ROCK TYPES

	Anhy
	Bent
	Brec
	Cht

	Clyst
	Coal
	Congl
	Dol

	Gyp
	Igne
	Lmst
	Meta

	Mrlst
	Salt
	Shale
	Shcol

	Shgy
	Sltst
	Ss
	Till

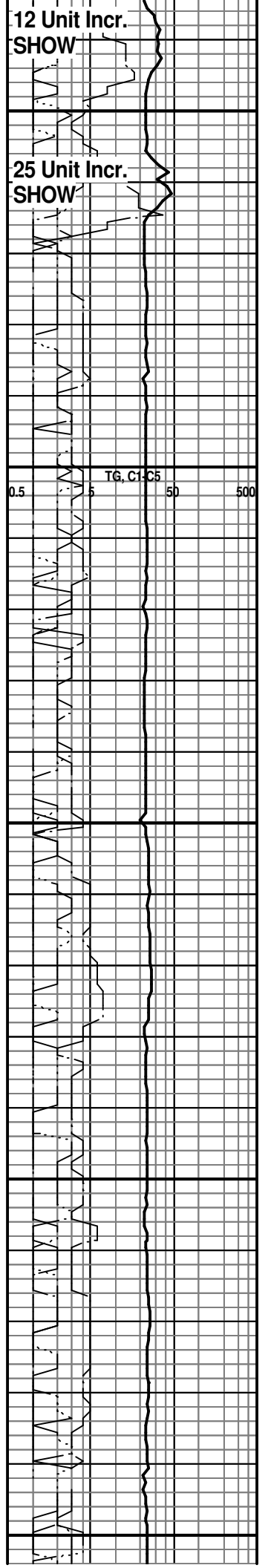
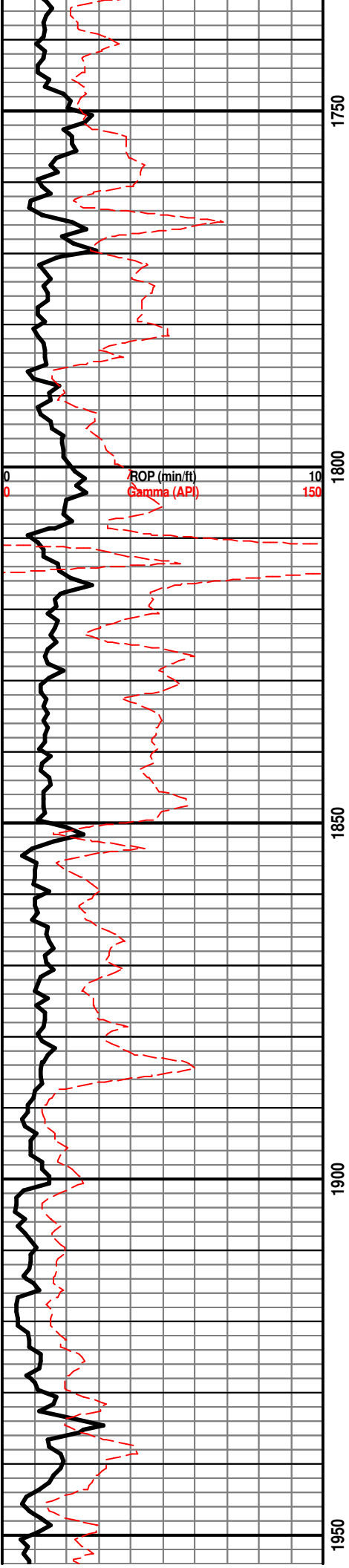


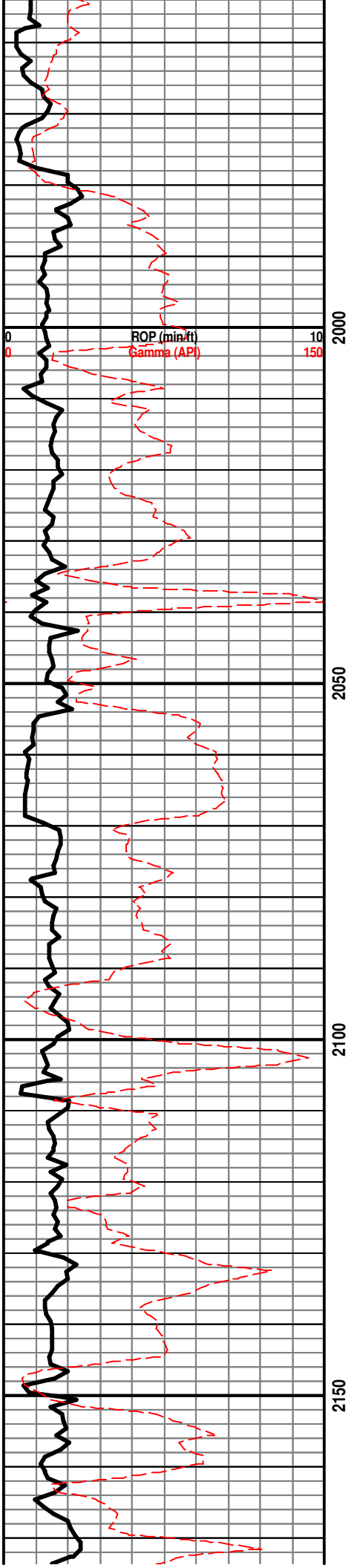
CHASE(Herrington) 1734(+160)

CHASE(Krider) 1756(+138)

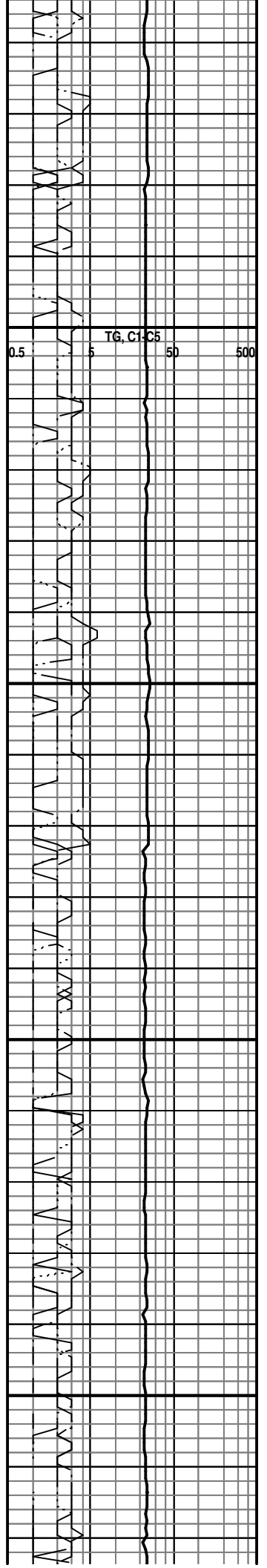
12 Unit Incr.  
SHOW

25 Unit Incr.  
SHOW

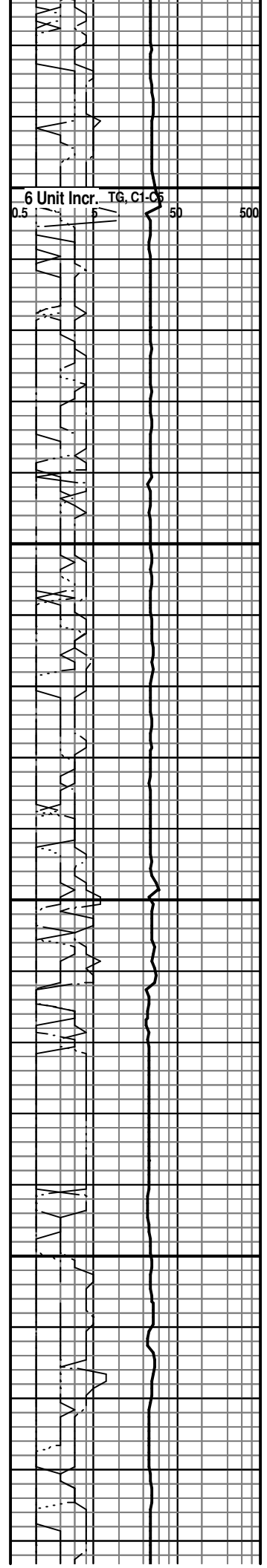
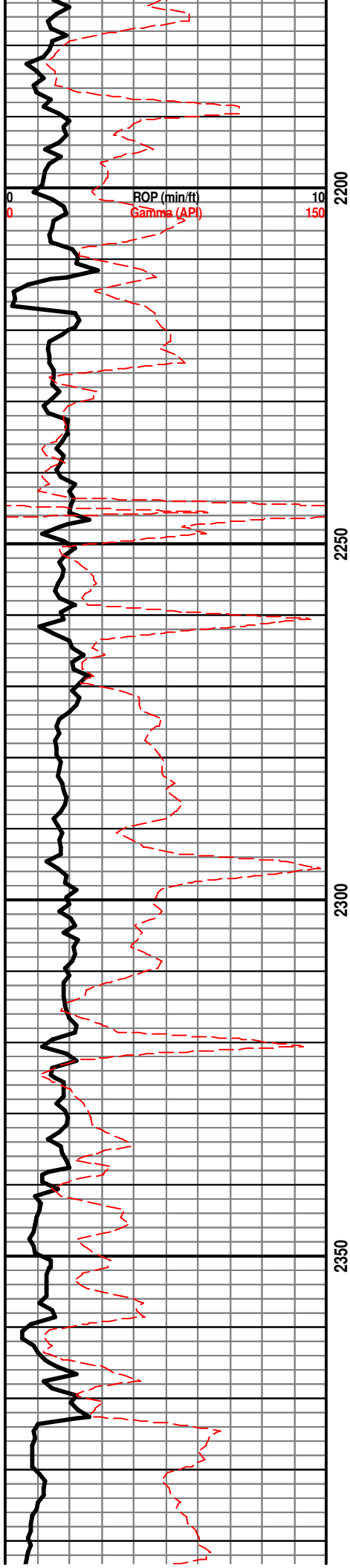


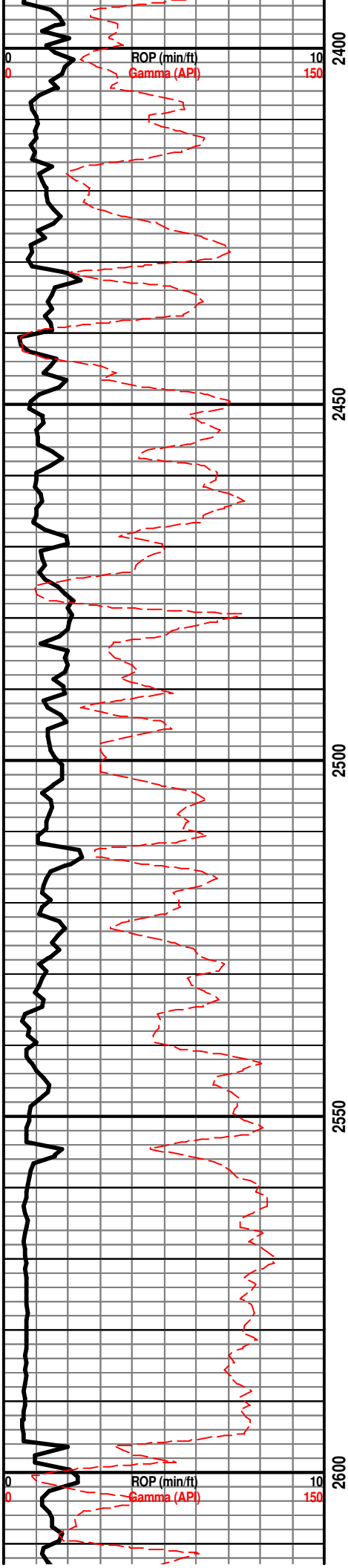


COUNCIL GROVE 2054(-160)





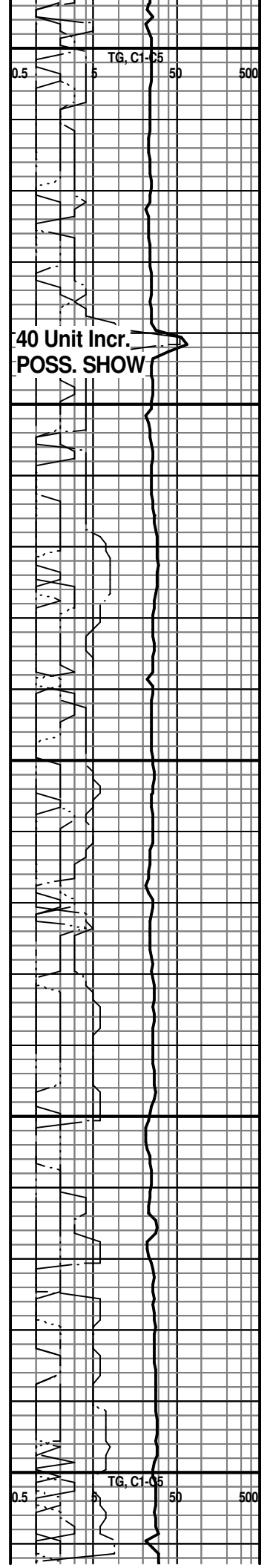




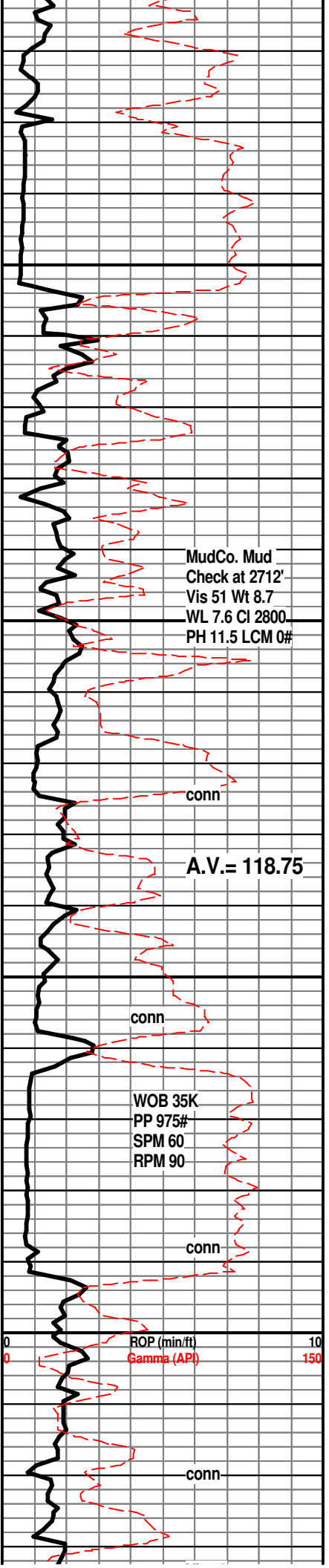
FALLS CITY LMST. 2438(-544)

Displace Mud System at 2566'

STOTLER/TARKIO LMST. 2596(-702)



40 Unit Incr.  
POSS. SHOW



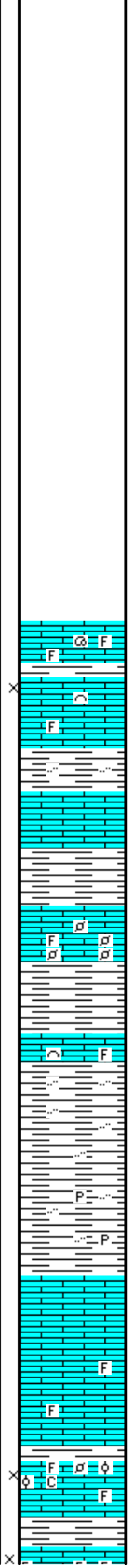
MudCo. Mud  
 Check at 2712'  
 Vis 51 Wt 8.7  
 WL 7.6 CI 2800  
 PH 11.5 LCM 0#

A.V. = 118.75

WOB 35K  
 PP 975#  
 SPM 60  
 RPM 90

ROP (min/ft)  
 Gamma (API)

2650  
2700  
2750  
2800



**TARKIO SAND 2626(-732)**

TRC. of SS, fg qtz, SFO, good intergran por, live gassy oil, faint odor, brite yel fluor (this sand was found in a lower sample)

**10' Wet and Dry Samples start at 2700'**

LM; off wh, tan, cream, foss ip, scat fair interpart por, med yel min fluor, no stn or odor, no gas kick, ns.

SH; grn, gy grn, soft, silty ip.

LM; lt to med brn, hd, most blocky, micritic, tite

SH; med gy, occ dk gy, firm

LM; med brn, occ gy brn, foss ip, scat small foss pellets, most well cem, med yel min fluor, no stn or odor, ns.

LM; med gy, hd, foss ip, tite

SH; med gy, fiss, smooth, occ silty

SH; med to dk gy, fiss, scat dissem pyr, occ foss

**HOWARD 2792(-898)**

LM; med gy, gy brn, tan, most dense, blocky, hd, no vis por, interbdd dh brn dense micrite, no fluor, ns.

LM; med gy brn, med brn, dense, occ well cem foss mat, blocky, no vis por, ns.

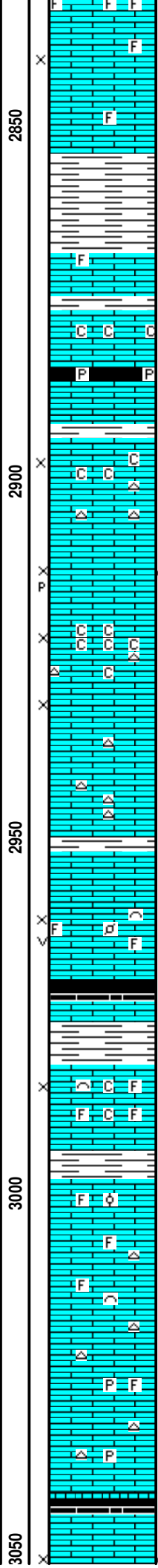
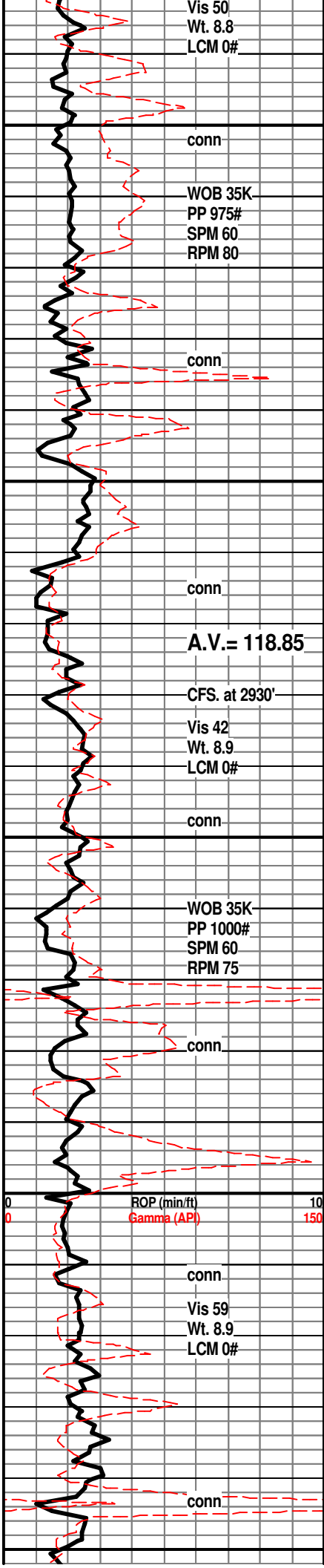
LM; tan to buff, cream, foss - pelletal ip, fair interpart por, some partly chalky mtx, lt yel min fluor only, no stn or odor, ns.

**58 Unit Incr. SHOW**

Recycle

Recycle?

TG, C1-C5



LM; tan to lt brn, fxln w/scat foss mat, poor interpart por, dull yel min fluor only, no stn or odor, ns.

SH; med gy, grn, lmy, firm

**TOPEKA 2868(-974)**  
LM; lt to med brn, hd, most dense, scat well cem foss mat, no vis por, no stn odor, ns.  
LM; off wh, wh, buff, fxln, interbdd partly chalky lmst, spotted lt yel min fluor, no stn or odor, no gas kick, ns.  
SH; dk gy/blk, carb ip, occ pyr, thinly bdd

LM; tan to off wh, buff, fxln, fair interxln por, minor soft chalky mtx, interbdd hd dense occ cherty micrite, no stn or odor, ns.

LM; off wh, med to occ cse xln, fair interxln w/occ p-p por, scat med brn spotted oil stn, occ med yel fluor, v. faint odor, poor cut - poor show  
LM; off wh, wh, cream, med xln, v. chalky - soft mtx, poor to fair intersxln por, trc dk brn oil stn, most barren, scat lt gy cht

LM; tan to lt brn, foss ip, scat poor interpart por, interbdd gy foss cht, no fluor, no stn or odor, ns.

LM; tan to lt brn, hd, most micritic, scat gy/off wh cht, ns.

LM; tan to cream, off wh, foss, scat fair interpart w/occ vug por, much soft chalky mtx, scat lt yel fluor, no vis stn, no odor, ns.

**KING HILL SHALE 2971(-1077)**  
SH; dk gy, blk, fiss

LM; tan to off wh, lt brn, foss, interbdd med xln lmst, scat fair interxln por, occ soft chalky mtx, lt yel min fluor only, no stn or odor, ns.

SH; dk gy, trc blk, platy

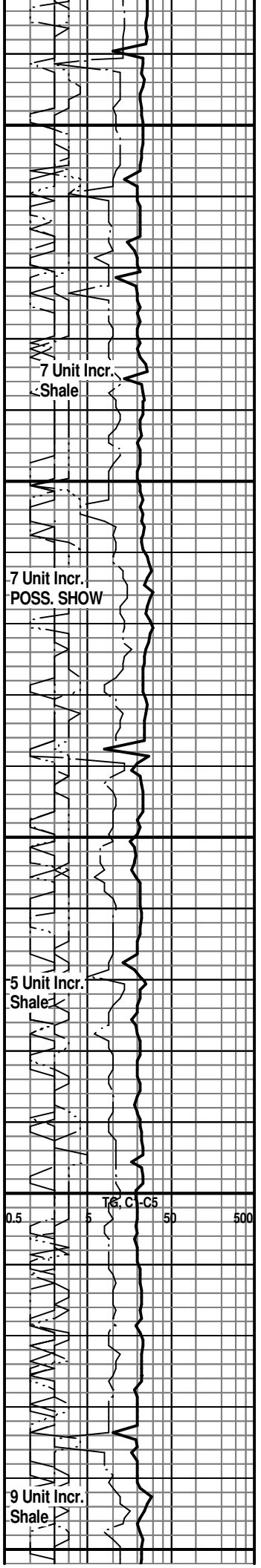
LM; tan to buff, lt brn, fxln, much dense, occ well cem foss, no fluor, ns.

LM; tan to lt brn, buff, scat foss mat, most well cem, occ cherty w/gy to off wh cht, no vis por, no fluor, ns.

LM; tan to off wh, buff, fxln to micritic, scat pyr, hd, no vis por, scat lt yel min fluor only, ns.

**QUEEN HILL SHALE 3043(-1149)**  
SH; blk, carb ip, platy

LM; off wh, tan, foss to finely pelletal, interbdd med xln



partly chalky mst, fair interpart/interxin por, few pcs. w/dk brn hvy oil stn, no odor, lt yel fluor, no gas kick

LM; tan to lt brn, most dense, blocky, scat gy to tan cht, no vis por, no fluor, ns.

LM; tan to off wh, foss - finely pelletal, fair to gd interpart por, minor soft chalky mtx, dull to lt yel min fluor only, no stn or odor, ns.

LM; tan to lt brn, buff, most dense, micritic, scat gy to off wh cht, no vis por, ns.

**HEEBNER SHALE 3138(-1244)**

SH; blk, carb ip, platy

LM; med brn, hd, micritic, tite

SH; lt gy grn, silty, firm to soft, some sticky

**TORONTO 3156(-1262)**

LM; off wh, tan, foss ip, occ oolitic/pelletal, scat fair p-p and vug por, scat dk brn oil stn, dull to lt yel fluor only, faint odor, fair/gd cut, some bleeding oil, SSFO, por. looks discontinuous, poor/fair show

**DOUGLAS SHALE 3173(-1279)**

SH; lt gy to grn, silty, interbdd vf gr qtz ss and shaly ss

SLTST; lt gy, firm, platy, occ mica

SS; lt gy, vf to fgr qtz, mica, dirty - argil, poor intergran por, no stn, ns.

SH; lt gy, silty, soft, some sticky, platy, interbdd vf gr qtz occ mica tite ss, ns.

SH; med to occ dk gy, platy to flakey, most smooth, rarely silty

**BROWN LMST. 3252(-1358)**

LM; med brn, dense, blocky, tite

**LANSING 'A' 3262(-1268)**

LM; off wh, f to med xln, rarely finely oolitic, fair p-p/small vug por, med yel fluor, gd odor, SFO, some bleeding oil, spotted/even stn, instant cut

22 Unit Incr. Shale

Recycle Shale

10 Unit Incr. SHOW

0.5 TG, C1-C5 5 50 500

95 Unit Incr. SHOW

Vis 52  
Wt. 9.1  
LCM 0#  
conn

WOB 35K  
PP 1015#  
SPM 60  
RPM 75

conn

A.V.= 118.90

conn

Vis 60  
Wt. 9.1  
LCM 0#

conn

ROP (min/ft)  
Gamma (A Conn)

WOB 35K  
PP 1025#  
SPM 60  
RPM 75

conn

Vis 60  
Wt. 9.1  
LCM 0#

conn

DST #1  
Lansing A

3100

3150

3200

3250

3266' - 3281'  
**Corrected**  
CFS. at 3281'  
MudCo. Mud  
Check at 3283'  
Vis 49 Wt. 9.2  
WL 8.0 Cl 4800  
PH 10.5 LCM 0#

DST #2  
Lans 'B - E'  
3282' - 3338'  
**Corrected**  
Vis 56  
Wt. 9.2  
LCM 0#  
conn

CFS. at 3338'  
MudCo. Mud  
Check at 3340'  
Vis 56 Wt. 9.05  
WL 8.0 Cl 5000  
PH 10.5 LCM 0#

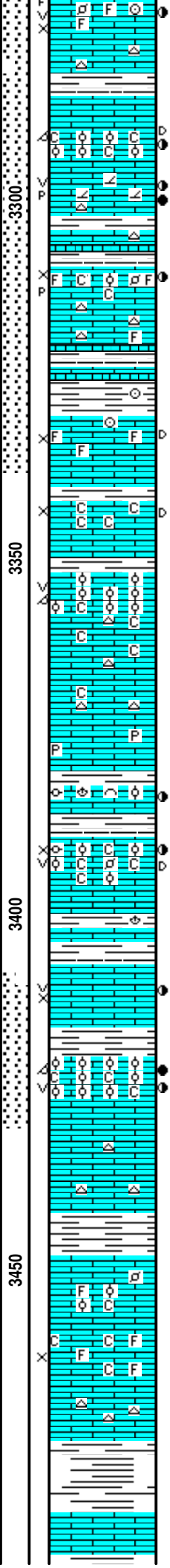
**A.V.= 118.60**  
conn  
WOB 38K  
PP 1000#  
SPM 60  
RPM 75

Vis 48  
Wt. 9.2  
conn  
CFS. at 3398'

DST #4  
K.C. 'I' & 'J'  
3409' - 3430'  
**Corrected**  
CFS. at 3430'  
Vis 48  
Wt. 9.2  
LCM 0#

conn  
WOB 38K  
PP 975#  
SPM 60  
RPM 75

R=Rough Drilling



LM; off wh, foss ip, fair interpart w/scat vug por, trc frags w/stn on frac face, med yel fluor, v. gd odor, gd cut, SFO, trc gas bubbles

**DST #1: Lansing 'A' 3266' - 3281'**  
**LANSING 'B' 3285(-1391)**  
LM; tan, off wh, foss - finely pelletal to oolitic, much blk tar/gils, chalky soft ip, med yel fluor, faint odor, very little live shows, no FO  
LM; off wh, fxln, fair p-p/ vug por, brite yel fluor, fair/gd odor, dolo ip, spotted/even lt brn stn, SFO

**LANSING 'C/D' 3309(-1415)**  
LM; tan to off wh, cse xln/foss ip, fair interxln w/occ p-p por, med brn spotted stn, SSFO, med/brite yel fluor, fair odor, partly chalky mtx, some dk hvy residual oil  
SH; med to dk gy, platy, foss ip.

**LANSING 'E' 3330(-1436)**  
LM; tan to lt brn, foss ip, well cem, poor to no vis interpart por, trc dk brn residual oil stn, no odor, trc dull yel fluor, tite  
**DST #2: Lansing 'B'-'E' 3282' - 3338'**  
LM; off wh, buff, fxln, v. chalky, soft, poor to fair interxln por, dull/lt yel fluor, scat dk brn residual stn, no odor, poor cut

**LANSING 'G' 3352(-1458)**  
LM; off wh, tan, lt gy, oolitic, med to occ lrg moldic por, rare vug por, no fluor, no stn or odor, barren, rare oolitic cht, occ chalky, ns.  
LM; tan to lt gy, lt brn, most dense, blocky, scat tan cht, minor chalky mtx, no fluor, ns.

LM; med to dk gy brn, hd, pyr ip, dense  
LM; med/dk brn, foss, hd, scat dk brn stn, tite  
**LANSING/K.C. 'H' 3389(-1495)**  
LM; off wh, lt brn, oolitic - highly foss ip, poor/fair interpart por, vug por ip, spotted dk brn stn, med/brite yel fluor, fair cut, no FO, faint odor, chalky ip, some barren por, poor show

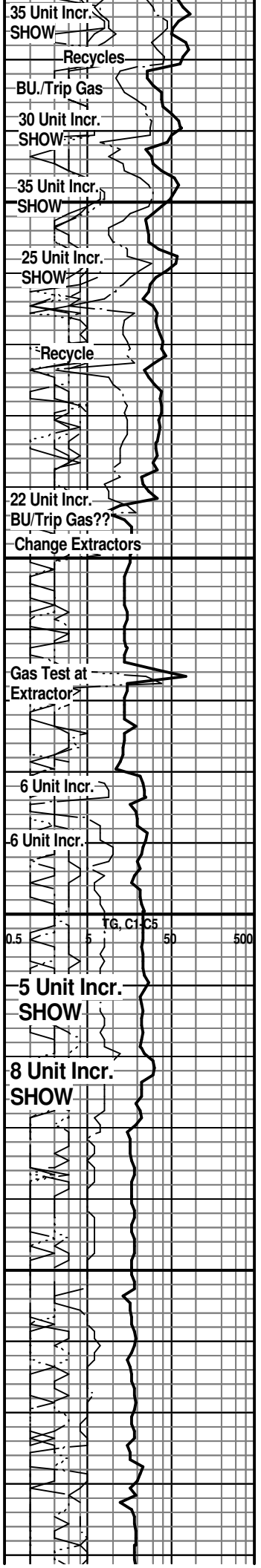
SH; lt gy, grn, platy, foss ip.  
**K.C. 'I' 3407(-1513)**  
LM; off wh, tan, oolitic, foss, most well cem, poor interpart/scat vug por, v. spotted med brn stn, rare med yel fluor, no FO., faint odor, tite

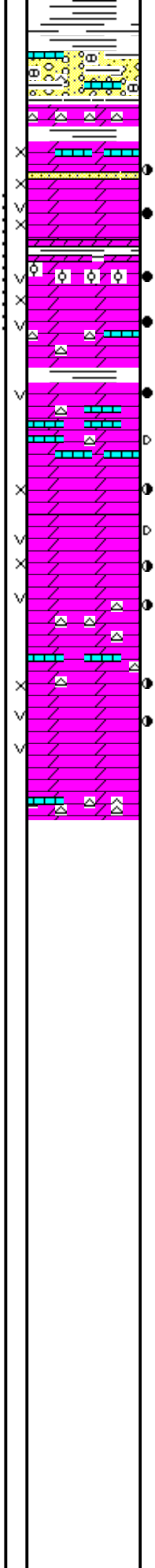
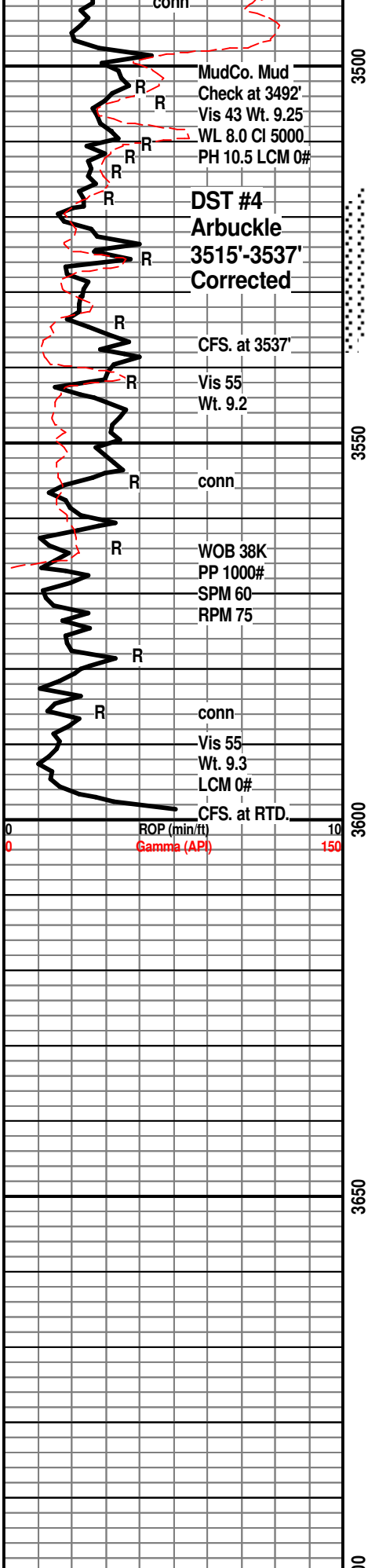
**K.C. 'J' 3420(-1526)**  
LM; off wh, tan, oolitic, well dev. oomoldic por, occ vug por, much med to dk brn live oil stn, SFO, fair odor, med/brite yel fluor, gd cut, some barren por w/occ chalky mtx  
**DST #3: K.C. 'I' + 'J' 3409' - 3430'**  
LM; tan to off wh, buff, most dense, blocky, scat gy to off wh cht, no vis por, ns.

**K.C. 'K' 3448(-1554)**  
LM; off wh, tan, foss - finely oolitic ip, scat chalky mtx, dull yel fluor, no stn or odor, no gas kick, ns.  
LM; lt gy, off wh, foss, fair interpart por, minor grn clay incl, no fluor, no stn or odor, occ soft chalky mtx, ns.

LM; off wh, lt gy, foss ip, occ fxln, most well cem, scat off wh cht, no vis por, no fluor, ns.  
SH; varic: rust red, yel, gy, grn, platy

LM; rose red, red brn, weath appearance, blocky  
**BASE KANSAS CITY 3490(-1596)**





SH; varic: grn, red - rust red, maroon, brn, gy

CONGL; weath varic lmst, some nodular, varic shales, trc cht, some weathered cherty dolo

**ARBUCKLE 3510(-1616)**  
DOL; off wh, lt brn, sucrosic/fine rhombic, lmy ip, fair interpart por, spotted stn, fair odor, med yel fluor, Trc. FO, trc ss w/oil stn and fluor  
DOL; lt golden brn, sucrosic to med rhombic, spotted/even lt brn stn, SFO, gd odor, most w/gd interxln/vug por, golden fluor, gd cut, gd odor  
DOL; tan - lt brn, hd, lmy, turquoise sh interbdd  
DOL; med brn, oil saturated, oolitic ip, fine to med rhombic, GSFO, gd odor, golden fluor, even stn, gd cut, some pcs. bleeding oil, lmy ip.

**DST #4: Arbuckle 3515' - 3537'**  
DOL; med brn, med rhombic, some cherty, some well dev. vug por, med yel fluor, scat pcs. w/blk tar/gils, sev. pcs. w/live oil saturation and SFO, gd odor, gd cut, interbdd hd lmy dolo w/blk tarry dead oil, scat wh fresh cht, trc grn to turquoise shale

DOL; tan to med brn, sucrosic to med xln, gd interxln w/occc vug por, mostly blk tar/dead oil, med yel fluor, fair odor, decreasing odor

DOL; off wh, lt/med brn, gd vug por, spotted live stn w/SSFO, cherty w/wh fresh cht, med yel fluor, fair/gd odor, interbdd hd lmy dol

DOL; off wh, lt brn, sucrosic to med/rarely cse rhombic, scat well dev. interxln and vug por, some oil saturation, v. gd odor, med yel fluor

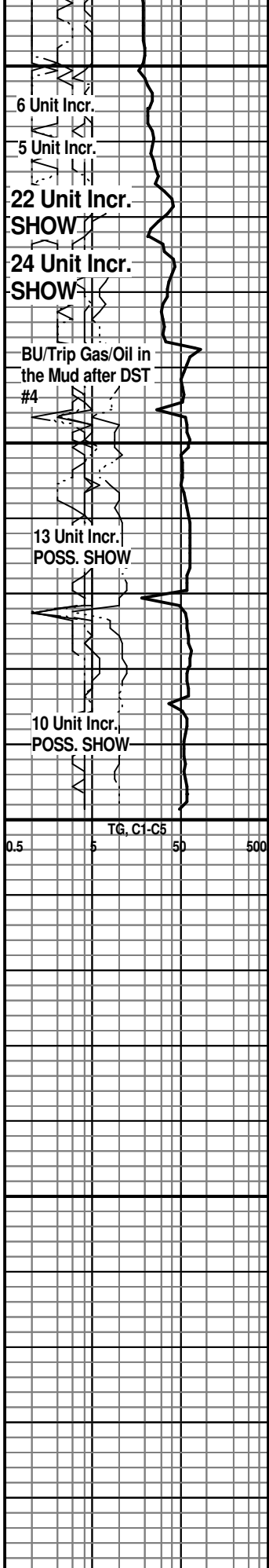
DOL; off wh, v. cherty, lmy, hd, blocky

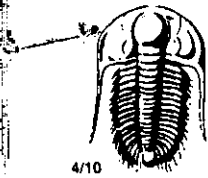
RTD. 3600' at 4:10 AM. 2/18/12

LTD. 3600'

Superior Well Services DIL, NEU/DEN  
w/PE, Microlog

**NOTE: This log was shifted upward by 1' - 2' for correlation purposes with the Superior Well Service LOGS.**





# TRILOBITE TESTING INC.

P.O. Box 1733 • Hays, Kansas 67601

## Test Ticket

NO. 45752

Well Name & No. Panning 1-19 Test No. 1 Date 02/15/12  
 Company Herman L. Loeb, LLC Elevation ~~1894~~ 1894 KB ~~1885~~ 1885 GL  
 Address PO Box 838 Lawrenceville, IL 62439  
 Co. Rep / Geo. Jon Christensen Rig Sterling 4  
 Location: Sec. 19 Twp. 20S Rge. 13W Co. Barton State KS

Interval Tested 3268 - 3283 Zone Tested Lansing "A"  
 Anchor Length 15 Drill Pipe Run 3095 Mud Wt. 9.2  
 Top Packer Depth 3263 Drill Collars Run 182 Vis 49  
 Bottom Packer Depth 3268 Wt. Pipe Run 0 WL 80  
 Total Depth 3283 Chlorides 4800 ppm System LCM

Blow Description IF weak blow, 1/2 inch  
ISI: NO Blow Back  
FF: weak blow, 3/4 inch  
FSI: NO Blow Back

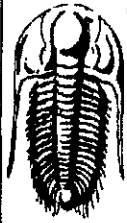
Rec	Feet of	%gas	%oil	%water	%mud
<u>3</u>	<u>VSOCM</u>		<u>1</u>		<u>99</u>
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 3 BHT 103° Gravity N/C API RW N/C @ N/C °F Chlorides N/C ppm

(A) Initial Hydrostatic <u>1663</u>	<input checked="" type="checkbox"/> Test	T-On Location <u>09:15</u>
(B) First Initial Flow <u>12</u>	<input type="checkbox"/> Jars	T-Started <u>10:19</u>
(C) First Final Flow <u>19</u>	<input checked="" type="checkbox"/> Safety Joint	T-Open <u>12:24</u>
(D) Initial Shut-In <u>68</u>	<input type="checkbox"/> Circ Sub	T-Pulled <u>15:05</u>
(E) Second Initial Flow <u>13</u>	<input type="checkbox"/> Hourly Standby	T-Out <u>16:31</u>
(F) Second Final Flow <u>19</u>	<input checked="" type="checkbox"/> Mileage <u>90</u>	Comments _____
(G) Final Shut-In <u>44</u>	<input type="checkbox"/> Sampler	
(H) Final Hydrostatic <u>1510</u>	<input type="checkbox"/> Straddle	<input type="checkbox"/> Ruined Shale Packer
Initial Open <u>15</u>	<input type="checkbox"/> Shale Packer	<input type="checkbox"/> Ruined Packer
Initial Shut-In <u>45</u>	<input type="checkbox"/> Extra Packer	<input type="checkbox"/> Extra Copies
Final Flow <u>30</u>	<input type="checkbox"/> Extra Recorder	Sub Total _____
Final Shut-In <u>60</u>	<input type="checkbox"/> Day Standby	Total _____
	<input type="checkbox"/> Accessibility	MP/DST Disc't _____
	Sub Total _____	

Approved By [Signature] Our Representative [Signature]  
 Trilobite Testing Inc. shall not be liable for damaged of any kind of the property or personnel of the one for whom a test is made, or for any loss suffered or sustained, directly or indirectly, through the use of its equipment, or its statements or opinion concerning the results of any test, tools lost or damaged in the hole shall be paid for at cost by the party for whom the test is made.





**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

Herman L Loeb, LLC  
PO Box 838  
Lawrenceville, IL 62439  
ATTN: Jon Christensen

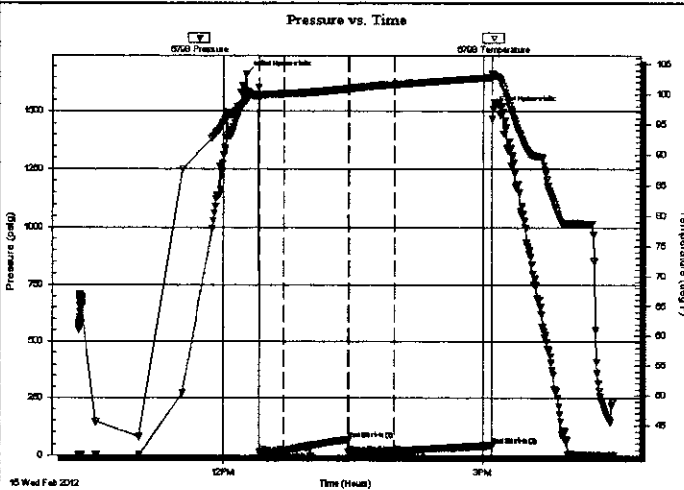
**19-20S-13W Barton**  
**Panning 1-19**  
Job Ticket: 45752      **DST#: 1**  
Test Start: 2012.02.15 @ 10:19:28

## GENERAL INFORMATION:

Formation: **Lansing "A"**  
Deviated: No Whipstock      ft (KB)  
Time Tool Opened: 12:24:43  
Time Test Ended: 16:31:13  
Test Type: Conventional Bottom Hole (Initial)  
Tester: Leal Cason  
Unit No: 45  
Interval: **3268.00 ft (KB) To 3283.00 ft (KB) (TVD)**  
Reference Elevations: 1894.00 ft (KB)  
Total Depth: 3283.00 ft (KB) (TVD)      1885.00 ft (CF)  
Hole Diameter: 7.88 inches Hole Condition: Good      KB to GR/CF: 9.00 ft

**Serial #: 6798      Inside**  
Press@RunDepth: 18.68 psig @ 3269.00 ft (KB)      Capacity: 8000.00 psig  
Start Date: 2012.02.15      End Date: 2012.02.15      Last Calib.: 2012.02.15  
Start Time: 10:19:28      End Time: 16:31:13      Time On Btrm: 2012.02.15 @ 12:15:43  
Time Off Btrm: 2012.02.15 @ 15:06:28

**TEST COMMENT:** IF: Weak Blow, 1/2 inch  
IS: No Blow Back  
FF: Weak Blow, 3/4 inch  
FS: No Blow Back



## PRESSURE SUMMARY

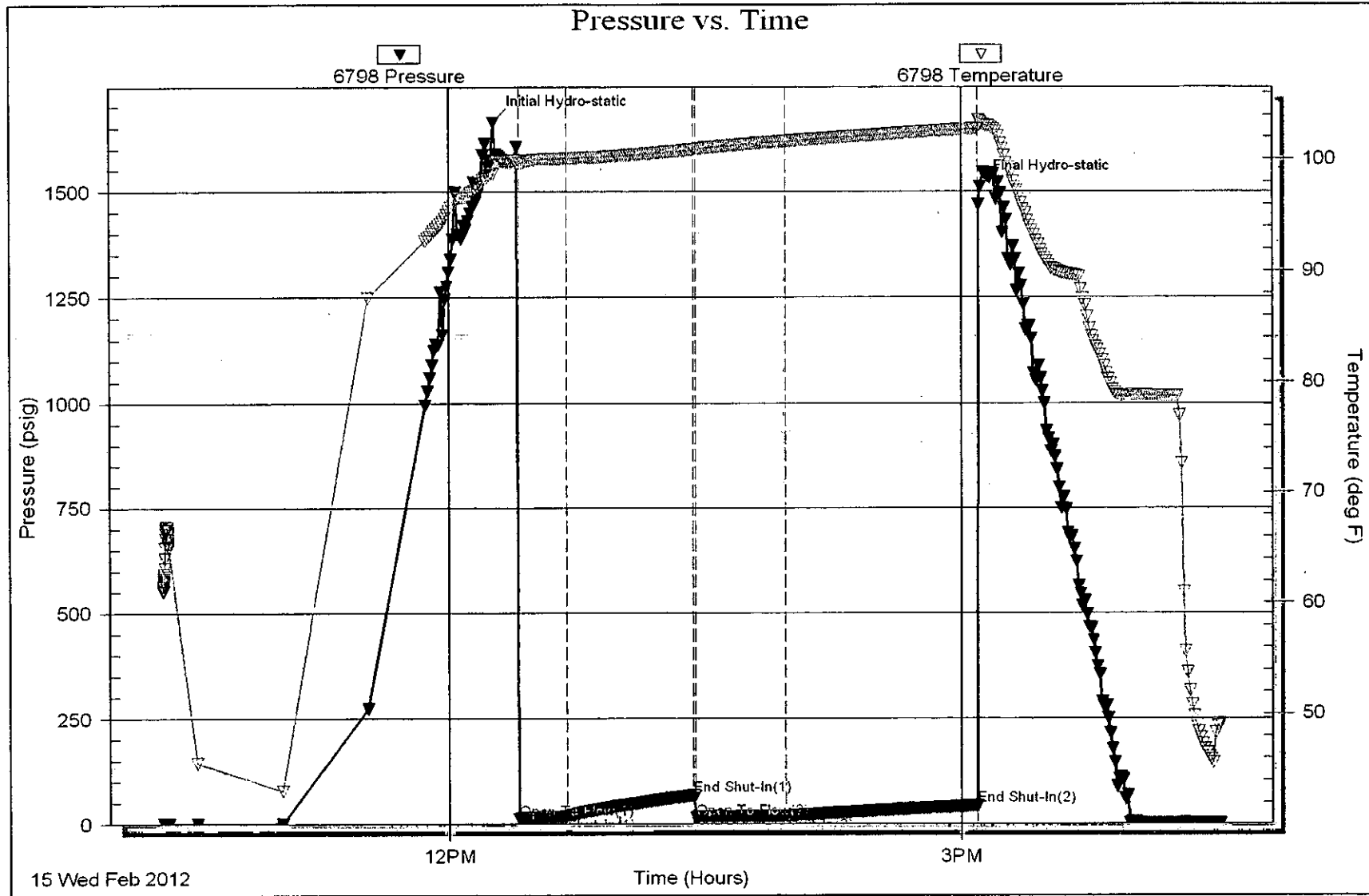
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1663.67	98.70	Initial Hydro-static
9	12.34	99.60	Open To Flow (1)
26	18.65	100.09	Shut-In(1)
71	68.15	100.87	End Shut-In(1)
71	13.36	100.94	Open To Flow (2)
103	18.68	101.62	Shut-In(2)
170	43.81	102.77	End Shut-In(2)
171	1510.67	103.34	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
3.00	VSOQM 1%O 99%M	0.01

## Gas Rates

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





# TRILOBITE TESTING INC.

P.O. Box 1733 • Hays, Kansas 67601

## Test Ticket

NO. 45753

Well Name & No. Panning 1-19 Test No. 2 Date 02/16/12  
 Company Herman L Loeb LLC Elevation 1894 KB 1885 GL  
 Address PO Box 838 Lawrenceville, IL 62439  
 Co. Rep / Geo. Jon Christensen Rig Sterling 4  
 Location: Sec. 19 Twp. 20S Rge. 13 W Co. Barton State KS

Interval Tested 3284 - 3340 Zone Tested Lansing "B, C, D, & E"  
 Anchor Length 56 Drill Pipe Run 3094 Mud Wt. 9.2  
 Top Packer Depth 3279 Drill Collars Run 182 Vis 58  
 Bottom Packer Depth 3284 Wt. Pipe Run 0 WL 8.0  
 Total Depth 3340 Chlorides 4800 ppm System LCM

Blow Description IF: Fair Blow, 4 inches  
IST: NO Blow Back  
FF: Fair Blow, BOB in 31 minutes  
FST: NO Blow Back

Rec	Feet of	%gas	%oil	%water	%mud
<u>620</u>	<u>CIP</u>				
<u>61</u>	<u>GWCM</u>	<u>2</u>		<u>10</u>	<u>88</u>

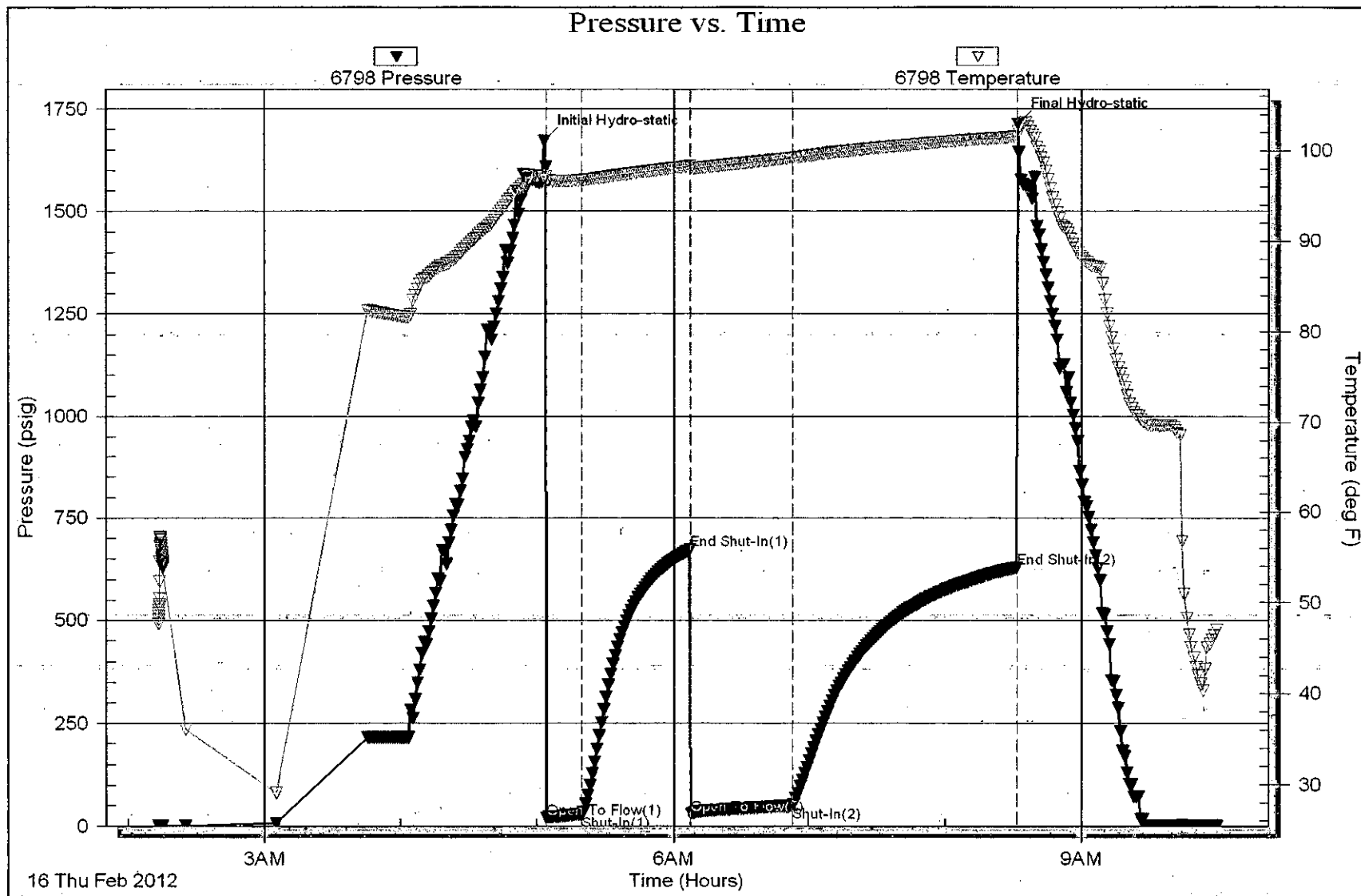
Rec Total 61 BHT 102 Gravity N/C API RW .2 @ 31 °F Chlorides 87000 ppm

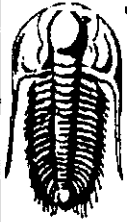
(A) Initial Hydrostatic <u>1672</u>	<input checked="" type="checkbox"/> Test	T-On Location <u>01:15</u>
(B) First Initial Flow <u>20</u>	<input type="checkbox"/> Jars	T-Started <u>02:13</u>
(C) First Final Flow <u>28</u>	<input checked="" type="checkbox"/> Safety Joint	T-Open <u>05:04</u>
(D) Initial Shut-In <u>673</u>	<input type="checkbox"/> Circ Sub	T-Pulled <u>08:31</u>
(E) Second Initial Flow <u>29</u>	<input type="checkbox"/> Hourly Standby	T-Out <u>09:59</u>
(F) Second Final Flow <u>49</u>	<input checked="" type="checkbox"/> Mileage <u>(90)</u>	Comments
(G) Final Shut-In <u>629</u>	<input type="checkbox"/> Sampler	
(H) Final Hydrostatic <u>1713</u>	<input type="checkbox"/> Straddle	<input type="checkbox"/> Ruined Shale Packer

Initial Open <u>15</u>	<input type="checkbox"/> Shale Packer	<input type="checkbox"/> Ruined Packer
Initial Shut-In <u>45</u>	<input type="checkbox"/> Extra Packer	<input type="checkbox"/> Extra Copies
Final Flow <u>45</u>	<input type="checkbox"/> Extra Recorder	Sub Total
Final Shut-In <u>90</u>	<input type="checkbox"/> Day Standby	Total
	<input type="checkbox"/> Accessibility	MP/DST Disc't
	Sub Total	

Approved By [Signature] Our Representative [Signature]

Trilobite Testing Inc. shall not be liable for damaged of any kind of the property or personnel of the one for whom a test is made, or for any loss suffered or sustained, directly or indirectly, through the use of its equipment, or its statements or opinion concerning the results of any test, tools lost or damaged in the hole shall be paid for at cost by the party for whom the test is made.





**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

Herman L Loeb, LLC  
 PO Box 838  
 Lawrenceville, IL 62439  
 ATTN: Jon Christensen

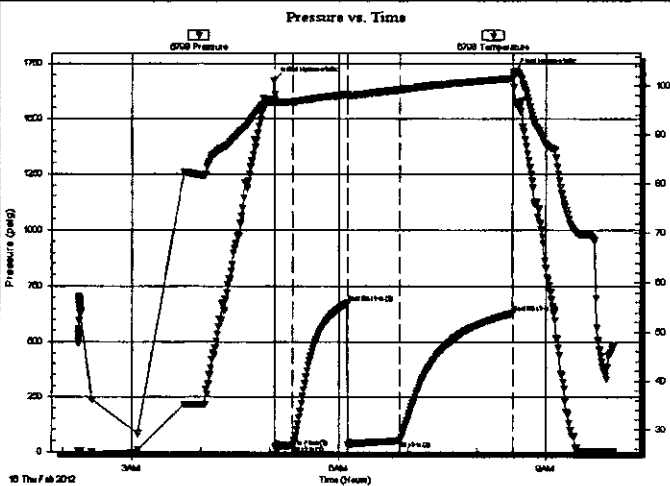
**19-20S-13W Barton**  
**Panning 1-19**  
 Job Ticket: 45753      **DST#: 2**  
 Test Start: 2012.02.16 @ 02:13:05

## GENERAL INFORMATION:

Formation: **Lansing "B, C, D, &**  
 Deviated: **No Whipstock**      ft (KB)  
 Test Type: **Conventional Bottom Hole (Reset)**  
 Time Tool Opened: **05:04:20**  
 Tester: **Leal Cason**  
 Time Test Ended: **09:59:20**  
 Unit No: **45**  
 Interval: **3284.00 ft (KB) To 3340.00 ft (KB) (TVD)**  
 Reference Elevations: **1894.00 ft (KB)**  
 Total Depth: **3340.00 ft (KB) (TVD)**  
**1885.00 ft (CF)**  
 Hole Diameter: **7.88 inches** Hole Condition: **Good**  
 KB to GR/CF: **9.00 ft**

**Serial #: 6798**      **Inside**  
 Press@RunDepth: **49.47 psig @ 3285.00 ft (KB)**      Capacity: **8000.00 psig**  
 Start Date: **2012.02.16**      End Date: **2012.02.16**      Last Calib.: **2012.02.16**  
 Start Time: **02:13:05**      End Time: **09:59:20**      Time On Btm: **2012.02.16 @ 05:03:05**  
 Time Off Btm: **2012.02.16 @ 08:31:50**

**TEST COMMENT:** **IF: Fair Blow, 4 inches**  
**IS: No Blow Back**  
**FF: Fair Blow, BOB in 31 minutes**  
**FS: No Blow Back**



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1671.94	97.22	Initial Hydro-static
2	20.19	96.58	Open To Flow (1)
17	28.46	96.73	Shut-In(1)
65	673.43	98.28	End Shut-In(1)
65	28.84	98.05	Open To Flow (2)
110	49.47	99.21	Shut-In(2)
209	629.43	101.55	End Shut-In(2)
209	1713.09	102.16	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
0.00	GP 620 Feet	0.00
61.00	GWCM 2%G 10%W 90%M	0.30

\* Recovery from multiple tests

## Gas Rates

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



# TRILOBITE TESTING INC.

P.O. Box 1733 • Hays, Kansas 67601

## Test Ticket

NO. 45754

Well Name & No. Hanning 1+L9 Test No. 3 Date 02/16/12  
 Company Herman L LOEB, LLC Elevation 1894 KB 1885 GL  
 Address PO BOX 838 Loweranceville IL 62439  
 Co. Rep / Geo. Jon Christensen Rig STERLING 4  
 Location: Sec. 19 Twp. 20S Rge. 13W Co. Barton State KS

Interval Tested 3411' - 3432 Zone Tested KC "I+J"  
 Anchor Length 21 Drill Pipe Run 3222 Mud Wt. 9.2  
 Top Packer Depth 3406 Drill Collars Run 182 Vis 55  
 Bottom Packer Depth 3411 Wt. Pipe Run 0 WL 8.0'  
 Total Depth 3432 Chlorides 5000 ppm System LCM

Blow Description IF: Weak Surface Blow  
ISF: NO Blow Back  
FF: Weak Surface Blow  
FSI: NO Blow Back

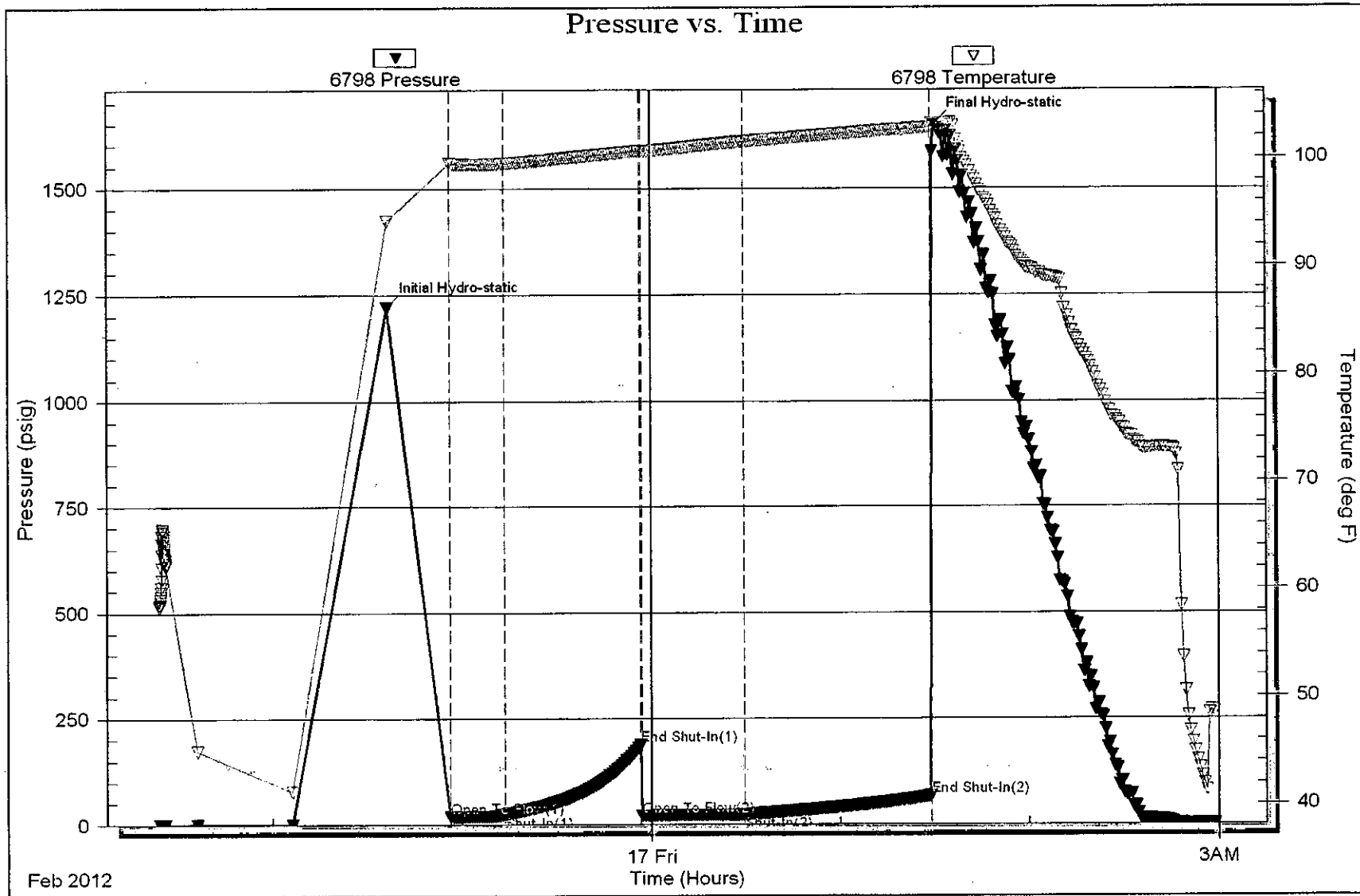
Rec	Feet of	%gas	%oil	%water	%mud
<u>2</u>	<u>Drig Mud</u>				
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

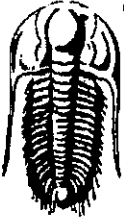
Rec Total 2 BHT 103° Gravity N/C API RW N/C @ N/C F Chlorides N/C ppm

(A) Initial Hydrostatic 1220  Test T-On Location 20:45  
 (B) First Initial Flow 18  Jars T-Started 21:24  
 (C) First Final Flow 24  Safety Joint T-Open 22:56  
 (D) Initial Shut-In 188  Circ Sub T-Pulled 01:28  
 (E) Second Initial Flow 21  Hourly Standby T-Out 02:59  
 (F) Second Final Flow 23  Mileage (90x) Comments \_\_\_\_\_  
 (G) Final Shut-In 67  Sampler \_\_\_\_\_  
 (H) Final Hydrostatic 1649  Straddle \_\_\_\_\_  Ruined Shale Packer \_\_\_\_\_  
 Shale Packer \_\_\_\_\_  Ruined Packer \_\_\_\_\_  
 Extra Packer \_\_\_\_\_  Extra Copies \_\_\_\_\_  
 Extra Recorder \_\_\_\_\_ Sub Total \_\_\_\_\_  
 Day Standby \_\_\_\_\_ Total \_\_\_\_\_  
 Accessibility \_\_\_\_\_ MP/DST Disc't \_\_\_\_\_  
 Sub Total \_\_\_\_\_

Initial Open 15  
 Initial Shut-In 45  
 Final Flow 30  
 Final Shut-In 60

Approved By [Signature] Our Representative [Signature]  
 Trilobite Testing Inc. shall not be liable for damaged of any kind of the property or personnel of the one for whom a test is made, or for any loss suffered or sustained, directly or indirectly, through the use of its equipment, or its statements or opinion concerning the results of any test, tools lost or damaged in the hole shall be paid for at cost by the party for whom the test is made.





**TRILOBITE  
TESTING, INC**

## DRILL STEM TEST REPORT

Herman L Loeb, LLC  
PO Box 838  
Lawrenceville, IL 62439  
ATTN: Jon Christensen

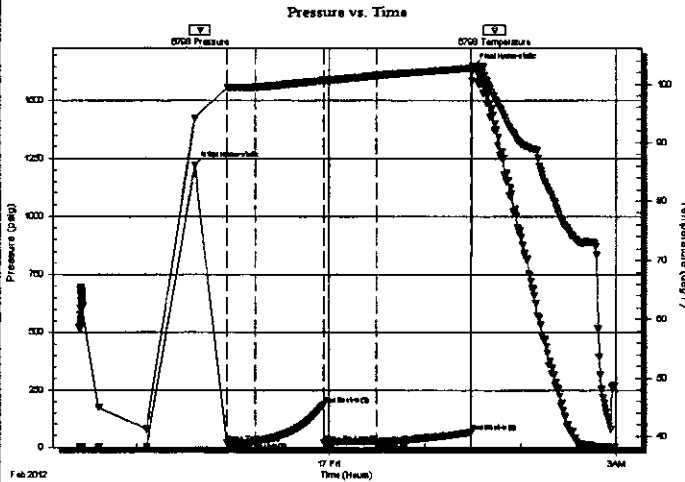
**19-20S-13W Barton**  
**Panning 1-19**  
Job Ticket: 45754      **DST#: 3**  
Test Start: 2012.02.16 @ 21:24:08

### GENERAL INFORMATION:

Formation: **KC "I & J"**  
Deviated: **No** Whipstock:                      ft (KB)  
Time Tool Opened: 22:56:08  
Time Test Ended: 02:59:08  
Interval: **3411.00 ft (KB) To 3432.00 ft (KB) (TVD)**  
Total Depth: **3432.00 ft (KB) (TVD)**  
Hole Diameter: **7.88 inches** Hole Condition: **Good**  
Test Type: **Conventional Bottom Hole (Reset)**  
Tester: **Leal Cason**  
Unit No: **45**  
Reference Elevations: **1894.00 ft (KB)**  
**1885.00 ft (CF)**  
KB to GR/CF: **9.00 ft**

**Serial #: 6798**      **Inside**  
Press@RunDepth: **23.32 psig @ 3412.00 ft (KB)**      Capacity: **8000.00 psig**  
Start Date: **2012.02.16**      End Date: **2012.02.17**      Last Calib.: **2012.02.17**  
Start Time: **21:24:08**      End Time: **02:59:08**      Time On Btm: **2012.02.16 @ 22:36:08**  
Time Off Btm: **2012.02.17 @ 01:30:08**

**TEST COMMENT:** IF: Weak Surface Blow  
IS: No Blow Back  
FF: Weak Surface Blow  
FS: No Blow Back



### PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1220.62	94.15	Initial Hydro-static
20	18.22	99.48	Open To Flow (1)
38	24.20	99.49	Shut-In(1)
81	188.03	100.64	End Shut-In(1)
81	20.77	100.58	Open To Flow (2)
114	23.32	101.47	Shut-In(2)
173	67.34	102.76	End Shut-In(2)
174	1649.41	103.14	Final Hydro-static

### Recovery

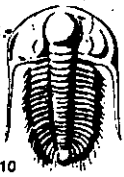
Length (ft)	Description	Volume (bbl)
2.00	DRLG Mud	0.01

\* Recovery from multiple tests

### Gas Rates

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





# TRILOBITE TESTING INC.

P.O. Box 1733 • Hays, Kansas 67601

## Test Ticket

NO. 45755

4/10

Well Name & No. Panning 1-19 Test No. @ 4 Date 02/17/12  
 Company Herman L Loeb LLC Elevation 1894 KB 1885 GL  
 Address PO BOX 838 Lawrenceville, IL 62439  
 Co. Rep/Geo. Jon Christensen Rig Sterling 4  
 Location: Sec. 19 Twp. 20S Rge. 13W Co. Barton State KS

Interval Tested 3516 - 3538 Zone Tested Arbuckle  
 Anchor Length 22 Drill Pipe Run 3319 Mud Wt. 9.2  
 Top Packer Depth 3511 Drill Collars Run 177 Vis 61  
 Bottom Packer Depth 3518 Wt. Pipe Run 0 WL 8.8  
 Total Depth 3538 Chlorides 5000 ppm System LCM

Blow Description IF: Fair Blow, 3 1/2 inches  
IST: NO Blow Back  
FF: NO BLOW, Flushed TOOL, Fair Blow, Built to 10 inches  
FSI: NO Blow Back

Rec	Feet of	%gas	%oil	%water	%mud
<u>50</u>	<u>OCM</u>	<u>15</u>		<u>85</u>	
<u>120</u>	<u>OCM</u>	<u>12</u>		<u>88</u>	
<u>60</u>	<u>60CM</u>	<u>5</u>	<u>10</u>	<u>85</u>	

Rec Total 230 BHT 107° Gravity N/C API RW N/C @ N/C °F Chlorides N/C ppm

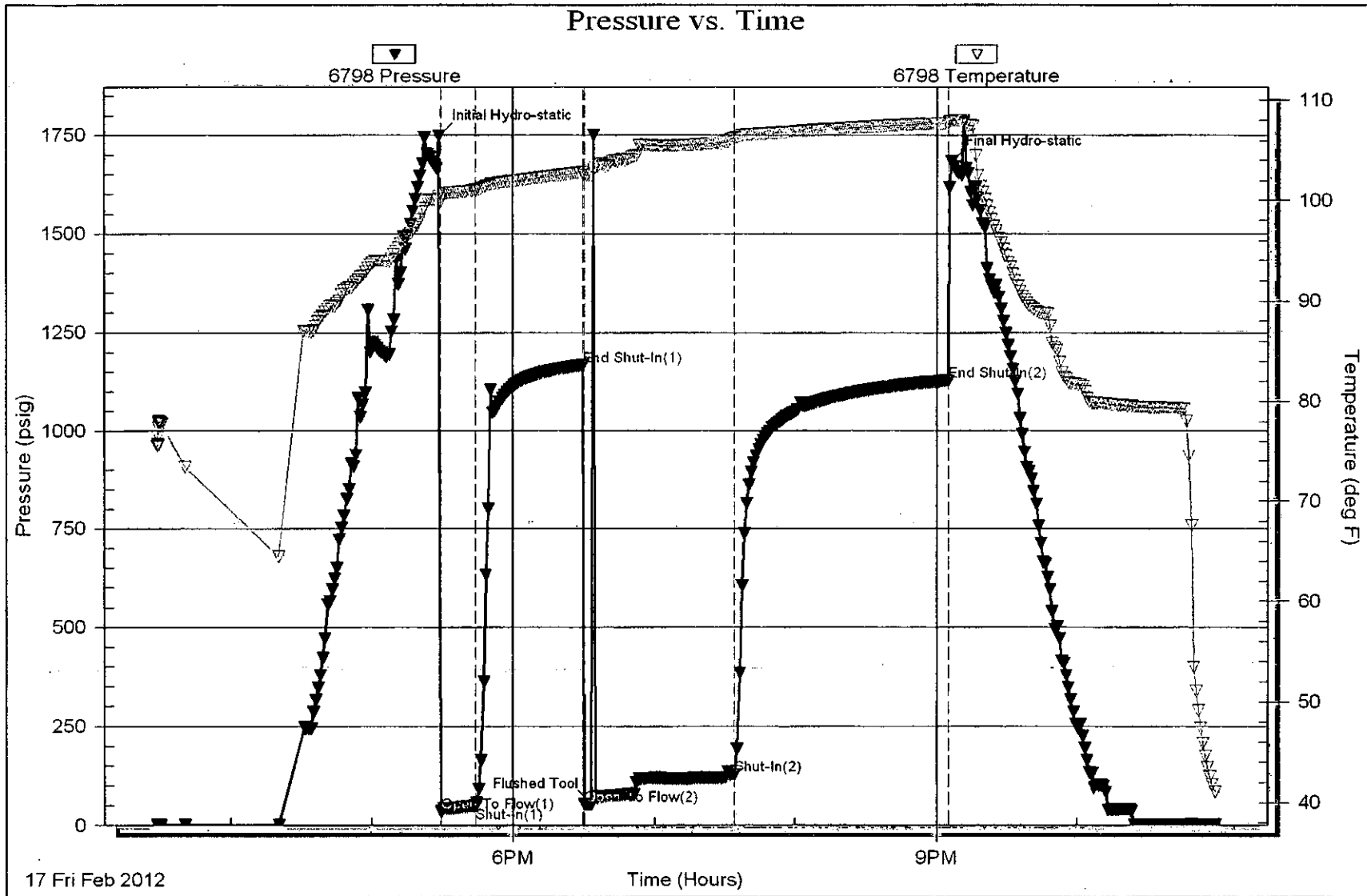
- (A) Initial Hydrostatic 1747
- (B) First Initial Flow 33
- (C) First Final Flow 49
- (D) Initial Shut-In 1166
- (E) Second Initial Flow 52
- (F) Second Final Flow 128
- (G) Final Shut-In 1127
- (H) Final Hydrostatic 1683

- Test
  - Jars
  - Safety Joint
  - Circ Sub
  - Hourly Standby
  - Mileage (90)
  - Sampler
  - Straddle
  - Shale Packer
  - Extra Packer
  - Extra Recorder
  - Day Standby
  - Accessibility
  - Sub Total
- T-On Location 14:45  
 T-Started 15:28  
 T-Open 17:28  
 T-Pulled 21:04  
 T-Out 22:58  
 Comments

Initial Open 15  
 Initial Shut-In 45  
 Final Flow 60  
 Final Shut-In 90

Approved By [Signature] Our Representative [Signature]

TriLOBITE Testing Inc. shall not be liable for damaged of any kind of the property or personnel of the one for whom a test is made, or for any loss suffered or sustained, directly or indirectly, through the use of its equipment, or its statements or opinions concerning the results of any test, tools lost or damaged in the hole shall be paid for at cost by the party for whom the test is made.





**TRILOBITE TESTING, INC**

# DRILL STEM TEST REPORT

Herman L. Loeb, LLC  
 PO Box 838  
 Lawrenceville, IL 62439  
 ATTN: Jon Christensen

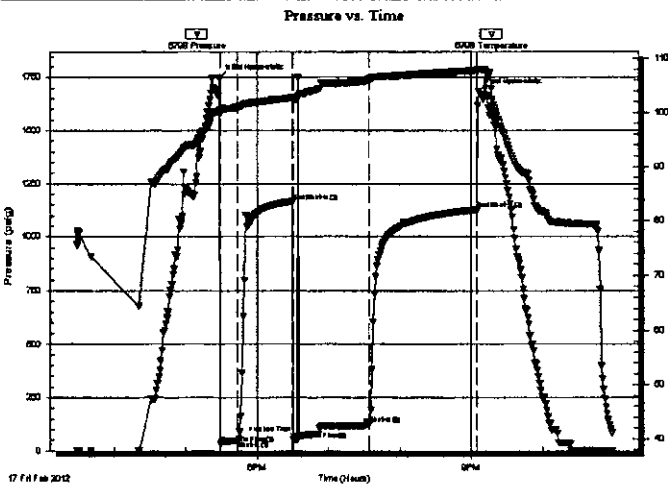
**19-20S-13W Barton**  
**Panning 1-19**  
 Job Ticket: 45755      **DST#: 4**  
 Test Start: 2012.02.17 @ 15:28:25

## GENERAL INFORMATION:

Formation: **Arbuckle**  
 Deviated: **No Whipstock**      ft (KB)  
 Test Type: **Conventional Bottom Hole (Reset)**  
 Time Tool Opened: 17:28:55  
 Tester: **Leal Cason**  
 Time Test Ended: 22:58:40  
 Unit No: **45**  
 Interval: **3516.00 ft (KB) To 3538.00 ft (KB) (TVD)**  
 Reference Elevations: **1894.00 ft (KB)**  
 Total Depth: **3538.00 ft (KB) (TVD)**  
**1885.00 ft (CF)**  
 Hole Diameter: **7.88 inches** Hole Condition: **Good**  
 KB to GR/CF: **9.00 ft**

**Serial #: 6798**      **Inside**  
 Press@RunDepth: **127.63 psig @ 3517.00 ft (KB)**      Capacity: **8000.00 psig**  
 Start Date: **2012.02.17**      End Date: **2012.02.17**      Last Calib.: **2012.02.17**  
 Start Time: **15:28:25**      End Time: **22:58:40**      Time On Btrr: **2012.02.17 @ 17:28:10**  
 Time Off Btrr: **2012.02.17 @ 21:06:10**

**TEST COMMENT:** IF: Fair Blow, 3 1/2 inches  
 IS: No Blow Back  
 FF: No Blow, Flushed Tool, Fair Blow, Built to 10 inches  
 FS: No Blow Back



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1747.12	100.44	Initial Hydro-static
1	33.16	99.99	Open To Flow (1)
16	48.58	101.00	Shut-In(1)
62	1166.32	102.82	End Shut-In(1)
63	51.87	102.52	Open To Flow (2)
65	52.99	102.54	Flushed Tool
126	127.63	106.20	Shut-In(2)
217	1127.47	107.74	End Shut-In(2)
218	1682.83	107.96	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
60.00	GOCM 5%G 10%O 85%M	0.30
120.00	OCM 12%O 88%M	0.59
50.00	OCM 15%O 85%M	0.68

## Gas Rates

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

\* Recovery from multiple tests



788 Panning  
LH20

PAGE 1 of 1	CUST NO 1007589	INVOICE DATE 02/15/2012
INVOICE NUMBER 1718 - 90830691		

Pratt (620) 672-1201  
 B HERMAN L LOEB LLC  
 I PO Box: 838  
 L LAWRENCEVILLE  
 L IL US 62439  
 T  
 O ATTN: ACCOUNTS PAYABLE

J LEASE NAME Panning 1-19  
 O LOCATION  
 B COUNTY Barton  
 S STATE KS  
 I JOB DESCRIPTION Cement-New Well Casing/Pi  
 T JOB CONTACT

JOB #	EQUIPMENT #	PURCHASE ORDER NO.	TERMS	DUE DATE
40430197	19905		Net - 30 days	03/16/2012

	QTY	U of M	UNIT PRICE	INVOICE AMOUNT
<i>For Service Dates: 02/11/2012 to 02/11/2012</i>				
0040430197				
171805233A Cement-New Well Casing/Pi 02/11/2012				
Cement 8 5/8" Surface				
A-Con Common Cement	200.00	EA	14.40	2,880.00 T
Common Cement	200.00	EA	12.80	2,560.00 T
Celloflake	100.00	EA	2.96	296.00 T
Calcium Chloride	940.00	EA	0.84	789.60 T
Sugar	50.00	EA	1.60	80.00 T
Top Rubber Cement Plug 8 5/8"	1.00	EA	180.00	180.00
8 5/8" Guide Shoe(Red)	1.00	EA	440.00	440.00
Baffle Plate Aluminum 8 5/8"(Blue)	1.00	EA	136.00	136.00
Heavy Equipment Mileage	100.00	MI	5.60	560.00
Proppant and Bulk Delivery Charge	940.00	MI	1.28	1,203.20
Blending & Mixing Service Charge	400.00	MI	1.12	448.00
Unit Mileage Charge-Pickups, Vans & Cars	50.00	HR	3.40	170.00
Plug Container Utilization Charge	1.00	EA	200.00	200.00
Depth Charge; 501-1000'	1.00	HR	960.00	960.00
Service Supervisor	1.00	HR	140.00	140.00

PLEASE REMIT TO:	SEND OTHER CORRESPONDENCE TO:	SUB TOTAL	11,042.80
BASIC ENERGY SERVICES, LP	BASIC ENERGY SERVICES, LP	TAX	482.21
PO BOX 841903	PO BOX 10460	INVOICE TOTAL	11,525.01
DALLAS, TX 75284-1903	MIDLAND, TX 79702		



**BASIC**  
ENERGY SERVICES

PRESSURE PUMPING & WIRELINE

10244 NE Hwy. 61  
P.O. Box 8613  
Pratt, Kansas 67124  
Phone 620-672-1201

FIELD SERVICE TICKET  
1718 05233 A

DATE \_\_\_\_\_ TICKET NO. \_\_\_\_\_

DATE OF JOB <u>2-11-12</u> DISTRICT <u>KANSAS</u>		NEW WELL <input checked="" type="checkbox"/> OLD WELL <input type="checkbox"/> PROD <input type="checkbox"/> INJ <input type="checkbox"/> WDW <input type="checkbox"/> CUSTOMER ORDER NO.:							
CUSTOMER <u>Herman L. Loeb LLC</u>		LEASE <u>Panning # 1-19</u> WELL NO.:							
ADDRESS		COUNTY <u>Barton</u> 19-20-13 STATE <u>KANSAS</u>							
CITY STATE		SERVICE CREW <u>Allen, Mike, Mikel.</u>							
AUTHORIZED BY		JOB TYPE: <u>8 5/8" Surface</u> <u>CNW</u>							
EQUIPMENT#	HRS	EQUIPMENT#	HRS	EQUIPMENT#	HRS	TRUCK CALLED	DATE	AM	TIME
<u>#38433</u>	<u>1 1/2</u>					<u>2-11-12</u>	<u>2-11-12</u>	<u>AM</u>	<u>400</u>
<u>19903-19905</u>	<u>1 1/2</u>					ARRIVED AT JOB	<u>2-11-12</u>	<u>AM</u>	<u>5:15</u>
<u>19960-19918</u>	<u>1 1/2</u>					START OPERATION	<u>2-11-12</u>	<u>AM</u>	<u>900</u>
						FINISH OPERATION	<u>2-11-12</u>	<u>AM</u>	<u>1100</u>
						RELEASED	<u>2-11-12</u>	<u>AM</u>	<u>1130</u>
						MILES FROM STATION TO WELL	<u>50-miles</u>		

CONTRACT CONDITIONS: (This contract must be signed before the job is commenced or merchandise is delivered).

The undersigned is authorized to execute this contract as an agent of the customer. As such, the undersigned agrees and acknowledges that this contract for services, materials, products, and/or supplies includes all of and only those terms and conditions appearing on the front and back of this document. No additional or substitute terms and/or conditions shall become a part of this contract without the written consent of an officer of Basic Energy Services LP.

SIGNED: \_\_\_\_\_  
(WELL OWNER, OPERATOR, CONTRACTOR OR AGENT)

ITEM/PRICE REF. NO.	MATERIAL, EQUIPMENT AND SERVICES USED	UNIT	QUANTITY	UNIT PRICE	\$ AMOUNT
CP100	Common	SK	200		\$ 3200 00
CP101	A-Conn Blend Common	SK	200		\$ 3600 00
CC102	cell Flake	lb	100		\$ 370 00
CC109	Calcium Chloride	lb	940		\$ 987 00
CF105	Top Rubber cmt Plug 8 5/8"	EA	1		\$ 225 00
CF203	8 5/8" Guide Shoe Red	EA	1	550	\$ 550 00
CF753	Baffle Plate Aluminum 8 5/8 Blue	EA	1		\$ 170 00
CC131	sugar	lb	50		\$ 100 00
FA00	unit mileage charge Pickup	mi	50		\$ 212 50
FA01	Heavy Equip. Mileage	mi	100		\$ 700 00
E113	Bulk Delivery Charge	TM	940		\$ 1540 00
CE201	Depth Charge 501-1000'	4-hr	1		\$ 1200 00
CE210	Blending & mixing Service Chg.	SK	400		\$ 260 00
CE204	Plug Container Utilization Chg.	Job	1		\$ 250 00
S003	Service Supervisor First Shift on Loc.	EA	1		\$ 175 00
SUB TOTAL					\$ 11,042 80

CHEMICAL / ACID DATA:			

SERVICE & EQUIPMENT	%TAX ON \$	
MATERIALS	%TAX ON \$	
TOTAL		

SERVICE REPRESENTATIVE Allen F. Worth THE ABOVE MATERIAL AND SERVICE ORDERED BY CUSTOMER AND RECEIVED BY: Herman L. Loeb

(WELL OWNER OPERATOR CONTRACTOR OR AGENT)

FIELD SERVICE ORDER NO.

Customer Herman L. Loeb LLC	Lease No. 1	Date 2-11-12
Lease PANNING	Well # 1-19	
Field Order # #05233A	Station Pratt KS	Casing 8 5/8"
Type Job 8 5/8" Surface	Formation CNW	Depth 192'
		County Barton
		State KS
		Legal Description 19-20-13

PIPE DATA		PERFORATING DATA		FLUID USED		TREATMENT RESUME		
Casing Size	Tubing Size	Shots/Ft		Acid	RATE	PRESS	ISIP	
8 5/8"								
Depth 192'	Depth	From	To	200 - SKs A-con Bl	Max	Comm	12.6 #/gal	5 Min.
Volume 49.60	Volume	From	To	200 - SKs com. 20%	Min	CL 1/4" C.F.		10 Min.
Max Press 500	Max Press	From	To	Frac	Avg			15 Min.
Well Connection PC	Annulus Vol.	From	To		HHP Used			Annulus Pressure
Plug Depth 780	Packer Depth	From	To	Flush Disp H30	Gas Volume			Total Load

Customer Representative LANNY "TP"	Station Manager SCOTTY	Treater ALLEN
---------------------------------------	---------------------------	------------------

Service Units	28443	19903	19905	19960	19918				
Driver Names	Allen	Mike	Matt	Mike	Lawrence				

Time	Casing Pressure	Tubing Pressure	Bbls. Pumped	Rate	Service Log
5:15 PM					DN Loc. Discuss Safety, setup plan job. Finished making short trip. CIR @ 795'
6:30					start out of Hole w/ Bit
7:00					out of Hole, Rig up to Run 8 5/8" csg.
7:45					Start 8 5/8" csg. 24" shoe jt. 12.22 w/ Guide Shoe + Baffle IN collar - weld collars + strap
9:00					Casing @ 792' CIR w/ Rig.
9:30	2.00"		75 1/2	5	mit 200 SKs A-con @ 12.6 #
10:00			42 3/4	4	mit 200 SKs common 20% CL 1/4 C.F. 15.6
10:10					Finish mit Release TOP Rubber Plug 8 5/8"
10:30	500"		49 1/2	2	Start Disp. Plug down - shut IN @ well. Release PSI - OK. wash up + Rackup equip
11:30					Job complete.
					thanks - Allen, Mike, Mike L. CMT TO CELLAR - Large cellar



*788 Panning  
6420*

PAGE 1 of 1	CUST NO 1007589	INVOICE DATE 02/22/2012
INVOICE NUMBER 1718 - 90836356		

Pratt (620) 672-1201  
 B HERMAN L LOEB LLC  
 I PO Box: 838  
 L LAWRENCEVILLE  
 T IL US 62439  
 O ATTN: ACCOUNTS PAYABLE

J LEASE NAME Panning 1-19  
 O LOCATION  
 B COUNTY Barton  
 S STATE KS  
 I JOB DESCRIPTION Cement-New Well Casing/Pi  
 E JOB CONTACT

JOB #	EQUIPMENT #	PURCHASE ORDER NO.	TERMS	DUE DATE
40432546	20920		Net - 30 days	03/23/2012

	QTY	U of M	UNIT PRICE	INVOICE AMOUNT
<i>For Service Dates: 02/19/2012 to 02/19/2012</i>				
0040432546				
171805810A Cement-New Well Casing/Pi 02/19/2012				
Cement 5 1/2" Longstring				
50/50 POZ	85.00	EA	8.80	747.96 T
60/40 POZ	50.00	EA	9.60	479.97 T
Celloflake	22.00	EA	2.96	65.12 T
KCL Potassium Chloride	195.00	EA	1.20	233.99 T
Gypsum	360.00	EA	0.60	215.99 T
Gilsonite	510.00	EA	0.54	273.34 T
FLA-322	36.00	EA	6.00	215.99 T
Mud Flush	1,000.00	EA	0.69	687.96 T
Claymax KCL Substitute	4.00	EA	28.00	111.99 T
5 1/2" Port Collar	1.00	EA	2,799.86	2,799.86
Latch Down Plug & Baffle 5 1/2"(Blue)	1.00	EA	319.98	319.98
Auto Fill Float Shoe 5 1/2"(Blue)	1.00	EA	287.98	287.98
Turbolizer 5 1/2" (Blue)	10.00	EA	88.00	879.95
5 1/2" Basket(Blue)	2.00	EA	231.99	463.97
Cement Scratchers Cable Type 5 1/2"	6.00	EA	60.00	359.98
Heavy Equipment Mileage	100.00	MI	5.60	559.97
Unit Mileage Charge-Pickups, Vans & Cars	50.00	HR	3.40	169.99
Proppant and Bulk Delivery Charge	288.00	MI	1.28	368.62
Blending & Mixing Service Charge	135.00	MI	1.12	151.19
Depth Charge; 3001-4000"	1.00	HR	1,727.90	1,727.90
Plug Container Utilization Charge	1.00	EA	199.99	199.99
Service Supervisor	1.00	HR	139.99	139.99

PLEASE REMIT TO:	SEND OTHER CORRESPONDENCE TO:	SUB TOTAL	11,461.68
BASIC ENERGY SERVICES, LP	BASIC ENERGY SERVICES, LP	TAX	221.36
PO BOX 841903	PO BOX 10460	INVOICE TOTAL	11,683.04
DALLAS, TX 75284-1903	MIDLAND, TX 79702		



**BASIC**<sup>SM</sup>  
ENERGY SERVICES  
PRESSURE PUMPING & WIRELINE

10244 NE Hwy. 61  
P.O. Box 8613  
Pratt, Kansas 67124  
Phone 620-672-1201

FIELD SERVICE TICKET  
1718 05810 A

DATE \_\_\_\_\_ TICKET NO. \_\_\_\_\_

DATE OF JOB <b>2-19-12</b>		DISTRICT <b>Pratt</b>		NEW WELL <input checked="" type="checkbox"/> OLD WELL <input type="checkbox"/>		PROD <input type="checkbox"/> INJ <input type="checkbox"/> WDW <input type="checkbox"/>		CUSTOMER ORDER NO.:	
CUSTOMER <b>Herman L LOEB LLe</b>				LEASE <b>Panning</b>		<b>1-19</b>		WELL NO.	
ADDRESS				COUNTY <b>Barton</b>		STATE <b>KS</b>			
CITY				STATE		SERVICE CREW <b>Melson Bower Sullivan</b>			
AUTHORIZED BY				JOB TYPE: <b>CNW 5/2 LS</b>					
EQUIPMENT#	HRS	EQUIPMENT#	HRS	EQUIPMENT#	HRS	TRUCK CALLED	DATE	AM	TIME
<b>33708 20920</b>							<b>2-18-12</b>		<b>6:00</b>
<b>19826 19860</b>						ARRIVED AT JOB	<b>2-18-12</b>	AM	<b>8:45</b>
<b>37900</b>						START OPERATION	<b>2-19-12</b>	AM	<b>3:00</b>
						FINISH OPERATION	<b>2-19-12</b>	PM	<b>3:35</b>
						RELEASED	<b>2-19-12</b>	AM	<b>4:15</b>
						MILES FROM STATION TO WELL	<b>50</b>		

CONTRACT CONDITIONS: (This contract must be signed before the job is commenced or merchandise is delivered).

The undersigned is authorized to execute this contract as an agent of the customer. As such, the undersigned agrees and acknowledges that this contract for services, materials, products, and/or supplies includes all of and only those terms and conditions appearing on the front and back of this document. No additional or substitute terms and/or conditions shall become a part of this contract without the written consent of an officer of Basic Energy Services LP.

SIGNED: \_\_\_\_\_  
(WELL OWNER, OPERATOR, CONTRACTOR OR AGENT)

ITEM/PRICE REF. NO.	MATERIAL, EQUIPMENT AND SERVICES USED	UNIT	QUANTITY	UNIT PRICE	\$ AMOUNT
CP 104	50/50 POZ	SK	85		935 00
CP 103	60/40 POZ	SK	50		600 00
CL 102	Cellulose	lb	22		81 40
C 700	Potassium Chloride	lb	195		292 50
CL 113	Gypsum	lb	360		270 00
CL 129	FLA-322	lb	36		270 00
CL 201	Gilsonite	lb	510		341 90
CF 481	Port Collar	eq	1		3,500 00
CF 607	Latch Down Plug	eq	1		400 00
CF 1251	AUTO FILL FLOAT SHOE	eq	1		360 00
CF 1651	Turbolizer	eq	10		1,100 00
CF 1901	Basket	eq	2		580 00
CF 2001	Scratchers	eq	6		450 00
C 704	KCl Substitute	gal	4		140 00
CL 151	mud FLUSH	gal	1000		860 00
E 100	Pickup Mileage	mi	50		212 50
E 101	Heavy Mileage	mi	100		700 00
E 113	Bulk Delivery	TM	288		460 00
LE 204	Depth Charge	4hr	1		2,140 00

SUB TOTAL

CHEMICAL / ACID DATA:			

SERVICE & EQUIPMENT	%TAX ON \$	
MATERIALS	%TAX ON \$	
TOTAL		

SERVICE REPRESENTATIVE <b>Robert Williams</b>	THE ABOVE MATERIAL AND SERVICE ORDERED BY CUSTOMER AND RECEIVED BY: _____ (WELL OWNER OPERATOR CONTRACTOR OR AGENT)
---	--

FIELD SERVICE ORDER NO. \_\_\_\_\_





Customer <b>HERMAN - LOEB</b>	Lease No.	Date <b>02-19-12</b>			
Lease <b>PANNINO</b>	Well # <b>1-19</b>				
Field Order # <b>5870</b>	Station <b>PRATT KS</b>	Casing <b>5 1/2</b>	Depth <b>3591</b>	County <b>BARTON</b>	State <b>KS</b>
Type Job <b>CNW 5 1/2 Long Strip</b>	Formation			Legal Description <b>19-20-13</b>	

PIPE DATA		PERFORATING DATA		FLUID USED		TREATMENT RESUME		
Casing Size	Tubing Size	Shots/Ft		Acid	RATE	PRESS	ISIP	
<b>5 1/2</b>				Pre Pad	Max		5 Min.	
Depth <b>3591'</b>	Depth	From	To	Pad	Min		10 Min.	
Volume <b>85</b>	Volume	From	To	Frac	Avg		15 Min.	
Max Press <b>2,000</b>	Max Press	From	To		HHP Used		Annulus Pressure	
Well Connection <b>P.C.</b>	Annulus Vol.	From	To	Flush	Gas Volume		Total Load	
Plug Depth <b>3511</b>	Packer Depth	From	To					

Customer Representative	Station Manager <b>DAVE SCOTT</b>	Treater <i>[Signature]</i>
-------------------------	--------------------------------------	-------------------------------

Service Units	<b>37900</b>	<b>33708</b>	<b>20920</b>	<b>19826</b>	<b>19860</b>				
Driver Names	<b>Gallison</b>	<b>M. P. [unclear]</b>	<b>Bow PR</b>						

Time	Casing Pressure	Tubing Pressure	Bbls. Pumped	Rate	Service Log
<b>8:30 am</b>					<b>ON too soft, meet</b>
					<b>Run 86 str 5 1/2 - 15-5 csg.</b>
					<b>Basket 5, 19 cont. 1, 2, 3, 4, 5, 11, 19, 22, 32, 42</b>
					<b>Port Collar 51 210 2728'</b>
					<b>Break Circ. @ 40 str AND 70 str.</b>
<b>1:50 am</b>					<b>CASING ON BOTTOM</b>
<b>2:00</b>					<b>Hook Rig circ.</b>
<b>3:00</b>	<b>250</b>		<b>24</b>	<b>3</b>	<b>1st mud flush</b>
			<b>5</b>		<b>1st SPEAR</b>
				<b>4</b>	<b>mix cont 85 str 50/50 @ 14 ppg.</b>
			<b>20</b>		<b>cont mix str. shut down wash, lines, pumps</b>
					<b>Release Plug</b>
				<b>6</b>	<b>1st Dip w/ 2% KCL 4<sup>20</sup></b>
	<b>350</b>		<b>68</b>		<b>1st Psi</b>
	<b>550</b>			<b>3.5</b>	<b>Slow Rate</b>
<b>3:30</b>	<b>1500</b>		<b>85</b>		<b>plug down</b>
			<b>7</b>		<b>plug RH w/ 30 str</b>
			<b>6</b>		<b>plug MH w/ 20 str</b>
					<b>5013 complete</b>

**THANK YOU**