

Confidentiality Requested:

Yes No

KANSAS CORPORATION COMMISSION
OIL & GAS CONSERVATION DIVISION

Form ACO-1

January 2018

Form must be Typed

Form must be Signed

All blanks must be Filled

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

Gas DH EOR

OG GSW

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 EOR Conv. to SWD

Plug Back Liner Conv. to GSW Conv. to Producer

Commingled Permit #: _____

Dual Completion Permit #: _____

SWD Permit #: _____

EOR Permit #: _____

GSW Permit #: _____

Spud Date or Date Reached TD Completion Date or Recompletion Date

API No.: _____

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

GPS Location: Lat: _____, Long: _____
(e.g. xx.xxxxx) (e.g. -xxx.xxxxx)

Datum: NAD27 NAD83 WGS84

County: _____

Lease Name: _____ Well #: _____

Field Name: _____

Producing Formation: _____

Elevation: Ground: _____ Kelly Bushing: _____

Total Vertical 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

Confidentiality Requested

Date: _____

Confidential Release Date: _____

Wireline Log Received Drill Stem Tests Received

Geologist Report / Mud Logs Received

UIC Distribution

ALT I II III Approved by: _____ Date: _____

Operator Name: _____ Lease Name: _____ Well #: _____

Sec. _____ Twp. _____ S. R. _____ East West County: _____

INSTRUCTIONS: Show important tops 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.

Final Radioactivity Log, Final Logs run to obtain Geophysical Data and Final Electric Logs must be emailed to kcc-well-logs@kcc.ks.gov. Digital electronic log files must be submitted in LAS version 2.0 or newer AND an image file (TIFF or PDF).

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 Geologist Report / Mud Logs <input type="checkbox"/> Yes <input type="checkbox"/> No List All E. Logs Run:	<input type="checkbox"/> Log Formation (Top), Depth and Datum <input type="checkbox"/> Sample Name Top Datum
--	---

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
<input type="checkbox"/> Perforate <input type="checkbox"/> Protect Casing <input type="checkbox"/> Plug Back TD <input type="checkbox"/> Plug Off Zone				

1. Did you perform a hydraulic fracturing treatment on this well? Yes No *(If No, skip questions 2 and 3)*
2. Does the volume of the total base fluid of the hydraulic fracturing treatment exceed 350,000 gallons? Yes No *(If No, skip question 3)*
3. Was the hydraulic fracturing treatment information submitted to the chemical disclosure registry? Yes No *(If No, fill out Page Three of the ACO-1)*

Date of first Production/Injection or Resumed Production/Injection:	Producing Method: <input type="checkbox"/> Flowing <input type="checkbox"/> Pumping <input type="checkbox"/> Gas Lift <input type="checkbox"/> Other <i>(Explain)</i> _____				
Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio	Gravity

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) (Submit ACO-4)</i>	PRODUCTION INTERVAL: Top Bottom
---	--	------------------------------------

Shots Per Foot	Perforation Top	Perforation Bottom	Bridge Plug Type	Bridge Plug Set At	Acid, Fracture, Shot, Cementing Squeeze Record <i>(Amount and Kind of Material Used)</i>

TUBING RECORD:	Size:	Set At:	Packer At:	
----------------	-------	---------	------------	--

Form	ACO1 - Well Completion
Operator	HERMAN L. LOEB, LLC
Well Name	YOST 4-28
Doc ID	1431881

Tops

Name	Top	Datum
Blaine Anhy.	1150	1060
Chase	2441	-231
Heebner Shale	4039	-1829
Lansing 'A'	4202	-1992
Lansing/KC 'H'	4360	-2150
K.C. 'I'	4402	-2192
Swope	4503	-2293
Base KC	4584	-2374
Miss Chert	4761	-2551
Kinderhook Sand	4823	-2613

LITHOLOGY STRIP LOG

WellSight Systems

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

Well Name: Yost #4-28
Location: 1650' FSL & 1980' FWL, Sec. 28-T27S-R18W, Kiowa Co., KS.
Licence Number: 15-097-21845-00-00 Region: Einsel Field
Spud Date: 10/4/2018 Drilling Completed: 10/12/18
Surface Coordinates: 1650' FSL & 1980' FWL, Sec. 28-T27S-R18W

Bottom Hole Same as Above
Coordinates:
Ground Elevation (ft): 2199' K.B. Elevation (ft): 2210'
Logged Interval (ft): 3900' To: 4840' Total Depth (ft): 4840'
Formation: Kinderhook at Total Depth
Type of Drilling Fluid: Freshwater/Gel to 3399'; Chemical Gel 3399' to 4840'

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: 277 S. Maple Dunes Ct.
Wichita, KS. 67235-7500

Cores

None Taken

DSTs

DST #1(Lower K.C. 'H' + Upper K.C. 'I' Zone) 4390' - 4416'(Corrected Depths to Log) Test Times 30"-45"-30"-60" IFP Weak Blow built to 3.25", FFP Fair Blow built to 5.75", no Blowback on SI's; REC: 176' Gas in Pipe, 10' OCWM(5%O, 15%W, 80%M), 60' WM(55%W, 45%M), 60' GWM(5%G, 68%W, 27%M) CI 69,000 from MudCo.; IFP 12-45#, ISIP 1341#, FFP 51-75#, FSIP 1330#, IHP 2191#, FHP 2180#, BHT 115 Deg. F.

DST #2(Kansas City 'J' Zone) 4440' - 4458'(Corrected Depths to Log) Test Times 30"-45"-30"-60" IFP Weak Blow Built to 1.96", FFP Weak Blow built to 2.01", no Blowback on SI's; REC: 30' Gas in Pipe, 61' GCWM(3%G, 35%W, 62%M) CI 25,000 from MudCo., Mud 7000; IFP 12-30#, ISIP 1016#, FFP 34-47#, FSIP 1030#, IHP 2207#, FHP 2178#, BHT 106 Deg. F.

DST #3(Cherokee - Miss. Chert) 4736' - 4796'(Corrected Depths to Log) Test Times 30"-45"-30"-60" IFP Fair Blow built to 7", FFP Fair Blow built to 6", no Blowback on SI's; REC: 210' Rich Gas in Pipe, 30' Drlg. Mud w/oil specks, no water; IFP 43-46#, ISIP 118#, FFP 43-46#, FSIP 164#, IHP 2412#, FHP 2375#, BHT 117 Deg. F.

Comments

10/4/18 MIRU Sterling Drilling Co. Rig #4, Spud at 7:30 PM.; 10/5/18 TD. 613' - CCH to set Surf. Csg.; 10/6/18 Drilling at 1010'; 10/7/18 Drilling at 2889'; 10/8/18 Drilling at 3955'; 10/9/18 TD. 4418' - Short Trip for DST #1; 10/10/18 TD. 4430' - CFS; 10/11/18 Drilling at 4575'; 10/12/18 TD. 4798' - DST #3, Reached TD. 4840' at 4:48 PM; 10/13/18 RTD. 4840', LTD. 4839' - LDDP - P & A completed at 11:30 AM.

Set new 8 5/8"(24#) Surface Casing at 608' KB. with 350 sacks cement(Basic Energy Services). Cement did Circulate. PD. at 12:15 PM. 10/5/18.

Surveys: 0.50 Deg. at 613'(Surface Casing); 0.25 Deg. at 3940'(Bit Trip); 1.0 Deg. at 4418'(DST #1); 1.25 Deg. at 4798'(DST #3).


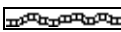
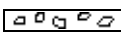
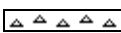
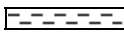







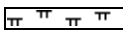
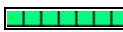
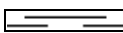
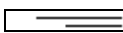
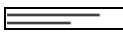



Pipe Strap at 3940'(Bit Trip): Strap 1.16' Short to the Board, no correction made to the Board.

After review if the Halliburton logs, DST and sample data, the operator elected to Plug and Abandon the #4-28 Yost at RTD. 4840' due to lack of commercial amounts of recoverable hydrocarbons.








































































LOG TOPS: Blaine Anhy. 1150(+1060), Chase 2441(-231), Stotler Lmst. 3398(-1188), Howard 3602(-1392), Heebner Shale 4039(-1829), Toronto 4052(-1842), Brown Lmst. 4191(-1981), Lansing 'A' 4202(-1992), Lansing/K.C. 'H' 4360(-2150), K.C. 'I' 4402(-2192), K.C. 'J' 4451(-2241), Stark Shale 4494(-2284), Swope 4503(-2293), Hertha 4554(-2344), Base K.C. 4584(-2374), Pleasanton 4612(-2402), Marmaton 4630(-2420), Pawnee 4674(-2464), Cherokee Shale 4714(-2504), Miss. Chert 4761(-2551), Kinderhook Shale 4796(-2586), Kinderhook Sand 4823(-2613).

NOTE: This log was shifted upward by 2' for correlation purposes with the Halliburton logs.

ROCK TYPES

 Anhy  Bent  Brec  Cht	 Clyst  Coal  Congl  Dol	 Gyp  Igne  Lmst  Meta	 Mrlst  Salt  Shale  Shcol	 Shgy  Sltst  Ss  Till
---	---	---	---	---

ACCESSORIES

MINERAL  Anhy  Arggrn  Arg  Bent  Bit  Brecfrag  Calc  Carb  Chtdk  Chtlt  Dol  Feldspar  Ferrpel  Ferr  Glau	 Gyp  Hvymin  Kaol  Marl  Minxl  Nodule  Phos  Pyr  Salt  Sandy  Silt  Sil  Sulphur  Tuff	FOSSIL  Algae  Amph  Belm  Bioclst  Brach  Bryozoa  Cephal  Coral  Crin  Echin  Fish  Foram  Fossil  Gastro  Oolite	 Ostra  Pelec  Pellet  Pisolite  Plant  Strom STRINGER  Anhy  Arg  Bent  Coal  Dol  Gyp  Ls  Mrst	 Sltstrg  Ssstrg TEXTURE  Boundst  Chalky  Cryxln  Earthy  Finexln  Grainst  Lithogr  Microxln  Mudst  Packst  Wackst
---	--	--	--	--

OTHER SYMBOLS

- POROSITY**
- [E] Earthy
 - [B] Fenest
 - [F] Fracture
 - [X] Inter
 - [M] Moldic
 - [O] Organic
 - [P] Pinpoint

[V] Vuggy

- SORTING**
- [W] Well
 - [M] Moderate
 - [P] Poor

- ROUNDING**
- [R] Rounded
 - [r] Subrnd
 - [a] Subang
 - [A] Angular

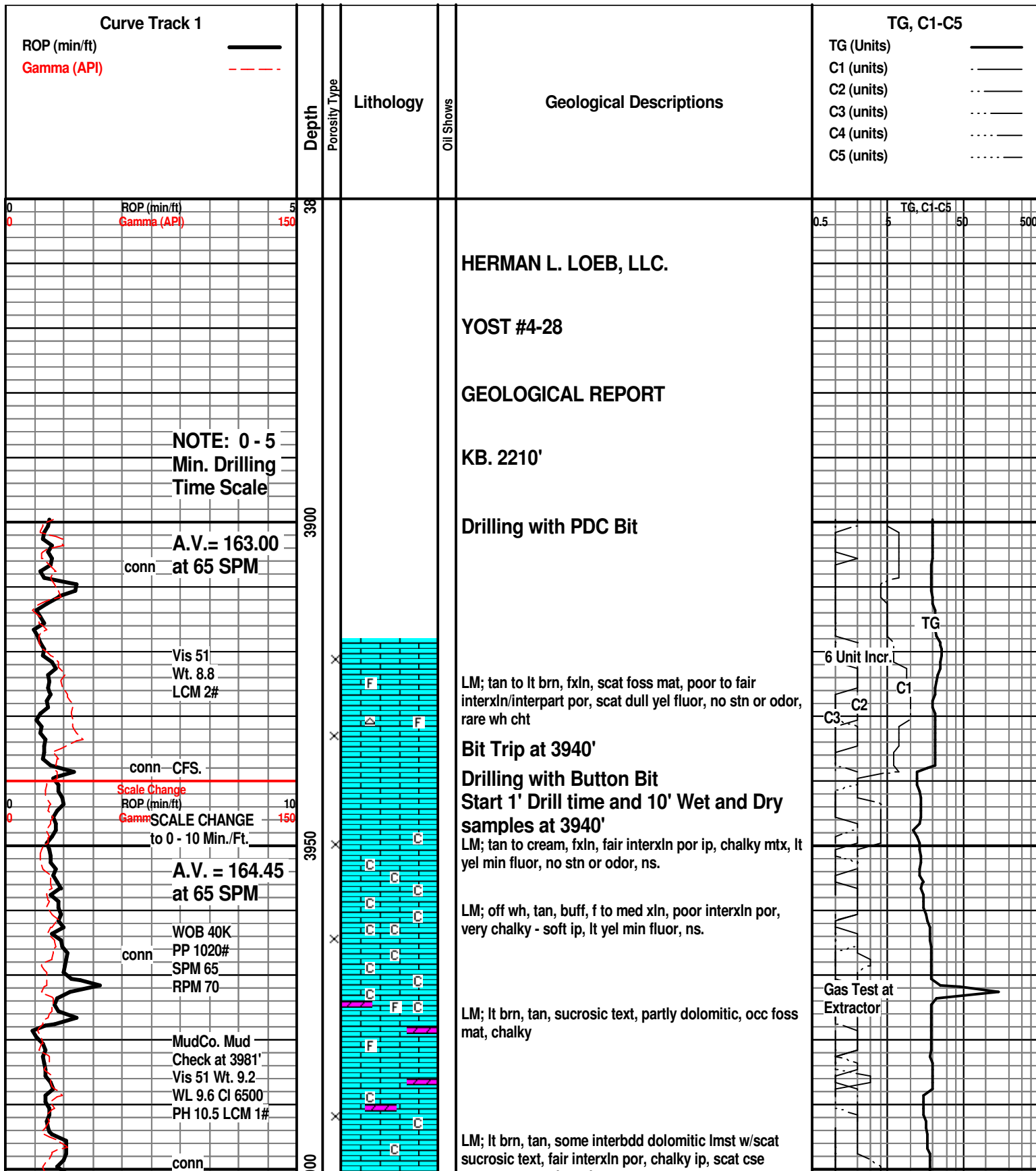
OIL SHOW

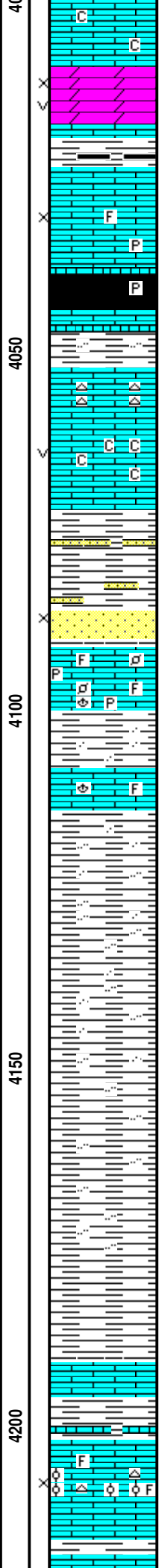
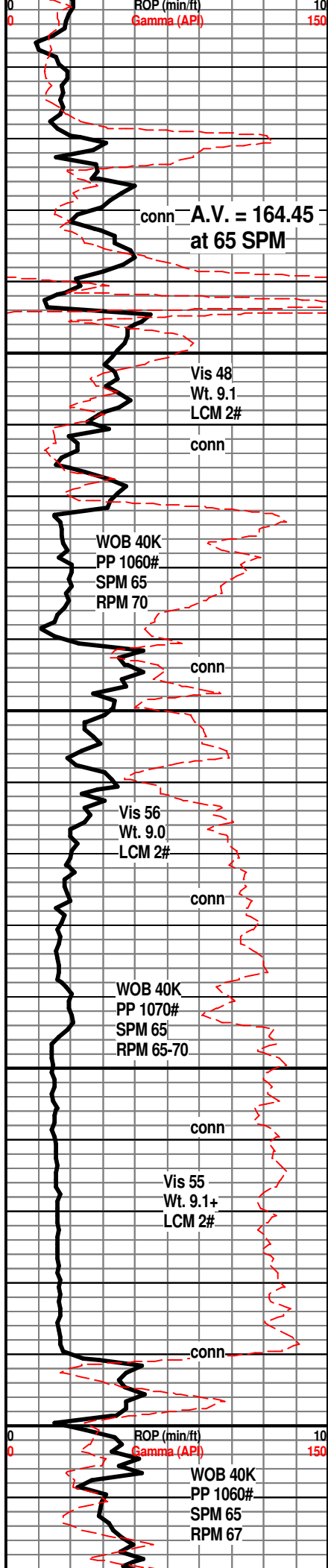
- [●] Even

- [●] Spotted
- [○] Ques
- [D] Dead

- INTERVAL**
- [■] Core
 - [□] Dst

- EVENT**
- [▽] Rft
 - [▲] Sidewall





opaque spar calc xtals, ns.

DOL; lt brn, sucrosic, fair interxln w/occ small vug por, lt yel min fluor, no stn or odor, ns.

SH; med to dk gy, rare blk, platy

LM; lt to occ med brn, most dense, interbdd fxln to foss lmst w/poor interxln por, trc pyr, dull yel fluor, ns.

HEEBNER SHALE 4039(-1829)
SH; blk, carb, platy, trc pyr.
LM; med to dk brn, dense, micritic
SH; grn, gy grn, silty, firm

TORONTO 4052(-1842)
LM; tan - cream, off wh, fxln, scat wh fresh cht, interbdd soft chalk and chalky lmst, poor interxln w/occ small vug por, scat lt yel fluor, no stn or odor, ns.

DOUGLAS SHALE 4072(-1862)
SH; lt gy, occ pale gy grn, sandy, most soft

SS; lt gy, vf to f gr qtz, mica, poorly sorted, fri ip w/fair intergran por, interbdd lt gy sh

LM; tan to med brn, foss - pelletal ip, scat pyr, hd, blocky, lt yel min fluor, no vis por, ns.

SH; lt gy, sandy ip, soft

LM; med to dk brn, foss ip, most dense - blocky, no vis por, ns.

SH; lt gy, silty to occ sandy, platy

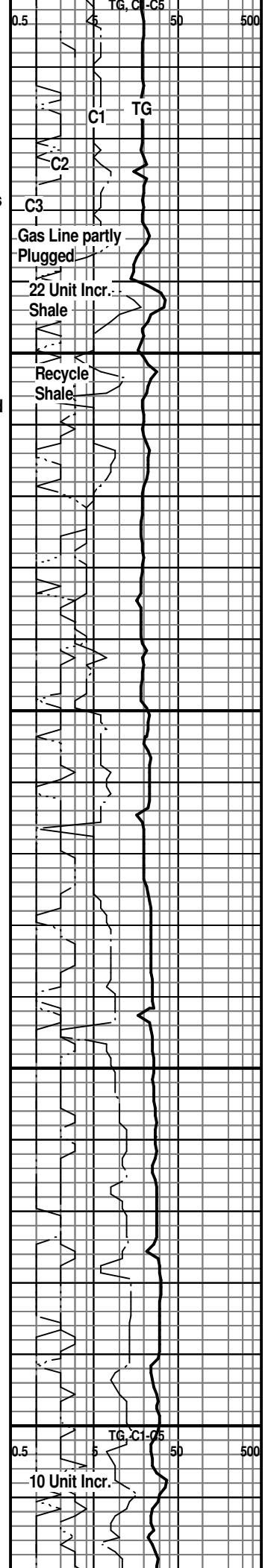
SH; lt to med gy, platy, silty to occ sandy

SH; lt to med gy, platy, occ silty

BROWN LMST. 4191(-1981)
LM; med brn, dense, micritic

LANSING 'A' 4202(-1992)
LM; lt to med brn, foss - partly oolitic, most well cem, poor interpart por, scat lt yel fluor, no vis stn, no odor, looks tite, few pcs of oolitic cht

SH; med gy, gy grn, platy



LANSING 'B' 4225(-2015)

LM; off wh, tan, f to med xln, most tite, scat poor interxln por, no fluor, rare wh to off wh cht, ns.

LM; off wh, lt gy, fxln, chalky soft mtx ip, occ p-p and small vug por, no stn or odor, no gas kick, ns.

LM; tan to cream, off wh, fxln, soft ip w/occ chalky mtx, no fluor, poor interxln por, ns.

LM; med to dk brn, hd, blocky, scat brn fresh cht, tite

SH; med gy, gy grn, fiss.

DOL; tan, off wh, sucrosic, fair interxln w/occ vug por, dull yel to no fluor, poss. faint odor, no vis stn, no cut

LM; tan to lt brn, hd, scat tan to lt brn cht, most dense - micritic, tite

LM; tan, foss - oolitic ip, abnt cht - off wh, tan, lt brn, fresh, poor oomoldic por, dull yel fluor, no stn or odor, ns.

LM; tan, oolitic, fair oomoldic and occ vug por, scat foss mat, dull yel min fluor, no stn or odor, no gas kick, ns.

LM; lt brn, sucrosic text, partly dolomitic, poor to fair interxln/vug por, cherty, no stn or odor, ns.

LM; tan, off wh, scat cse spar calc xtals, chalky ip, ns.

LM; lt brn, dense, scat gy cht, tite

SH; med gy, platy, foss ip.

LANSING/K.C. 'H' ZONE 4360(-2150)

LM; lt brn, oolitic, fairly well dev. moldic and vug por, brittle ip, dull yel fluor, no stn or odor, questionable gas bubbles??

LM; tan to lt gy, gy brn, blocky, scat cht, tite

LM; off wh, finely oolitic/pelletal, fair interpart por, fair odor, med yel fluor, SSFO when crushed(light oil), few gas bubbles, fair/gd cut, mostly spotted lt brn stn, some tite

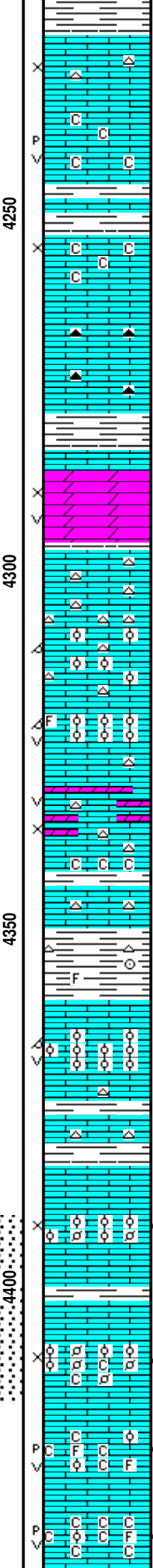
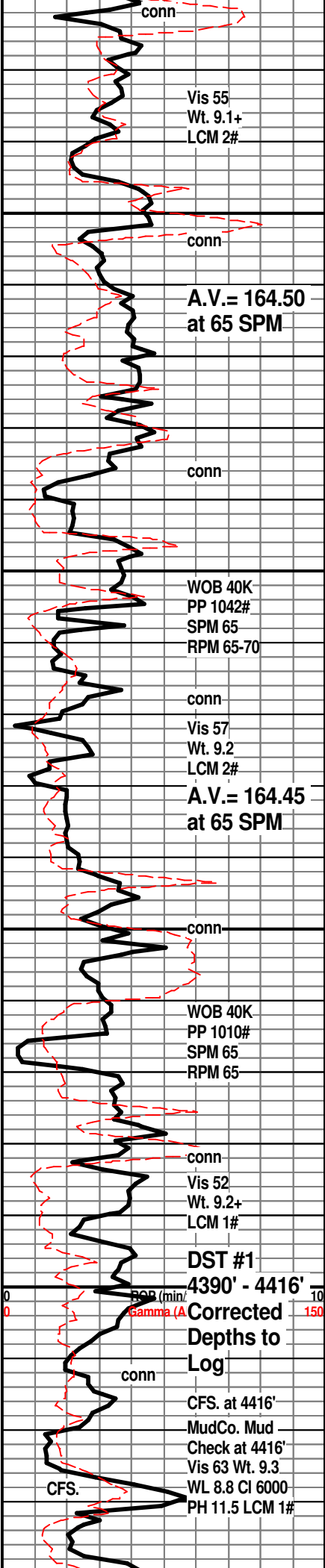
KANSAS CITY 'I' ZONE 4402(-2192)

LM; off wh, finely oolitic/pelletal, fair interpart por, gd to strong odor, much brite yel fluor, SFO, sev. gas bubbles, spotted lt brn stn, fair to gd cut, few pcs. with better por, chalky ip.

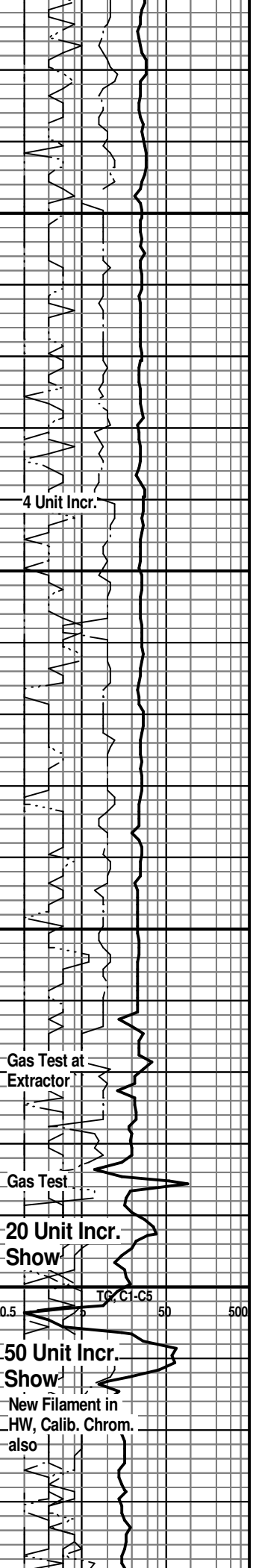
DST #1: K.C. 'H' + 'I' 4390' - 4416'

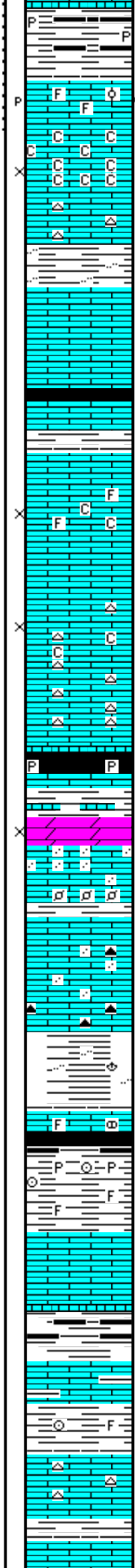
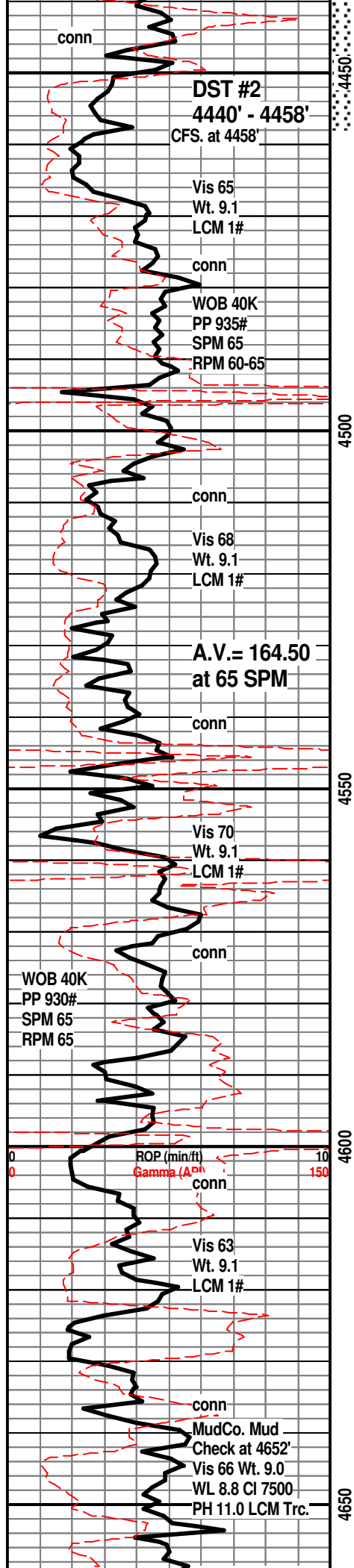
LM; off wh, foss, scat well dev. p-p and vug por, spotted lt brn stn, gd to strong odor, most barren por, scat med to occ brite yel fluor, chalky ip, no gas kick

LM; tan to cream, wh, foss ip, very chalky - soft, scat fair p-p and vug por, faint odor, scat med yel fluor, no vis stn, odor from above??



LM; tan to cream, wh, foss ip, very chalky - soft, scat fair p-p and vug por, faint odor, scat med yel fluor, no vis stn, odor from above??





vis stn, uclr from above!

SH; dk gy to blk, carb ip, scat pyr

KANSAS CITY 'J' ZONE 4451(-2241)
 LM; tan to cream, fxln, occ foss, chalky mtz, scat med/brite yel fluor, fair odor, few pcs w/fair p-p por, spotty lt oil stn, alot looks fairly tite

DST #2: K.C. 'J' Zone 4440' - 4458'
Corrected Depths to Log
 LM; off wh, wh, fxln, very chalky - soft, poor vis interxln por, no fluor, no stn or odor, ns.

SH; med gy, gy grn, silty ip, firm

LM; med to dk brn, hd, blocky, tite

STARK SHALE 4494(-2284)
 SH; blk, carb ip, platy

SWOPE 4503(-2293)
 LM; wh, off wh, rare lt gy, med xln w/occ foss mat, poor to fair interxln/interpart por, minor chalky mtz, no fluor, no stn or odor, ns.

LM; off wh, tan, f to med xln, scat off wh to brn cht, poor interxln por, occ chalky, no fluor, ns.

LM; med brn, hd, occ brn cht, tite

HUSH. SHALE 4545(-2335)
 SH; blk, carb ip, scat pyr

HERTHA 4554(-2344)
 DOL; wh, off wh, sucrosic, soft, fair to gd interxln por, lt yel min fluor, no stn or odor, ns.

LM; off wh, sandy - siliceous, hd, blocky, no vis por, no fluor, ns, interbdd foss - finely pelletal tite lmst.

LM; med brn, gritty/sandy text, tite, scat dk gy/dk brn cht, ns.

BASE KANSAS CITY 4584(-2374)
 SH; gy grn, rust red, foss ip, flakey, occ silty

LM; med brn, foss ip, nodular, tite

SH; grn, gy grn, rare blk, platy, occ waxy, pyr, occ foss

PLEASANTON 4612(-2402)
 LM; tan to lt gy, most massive bdd, blocky, no vis por, no fluor, ns.

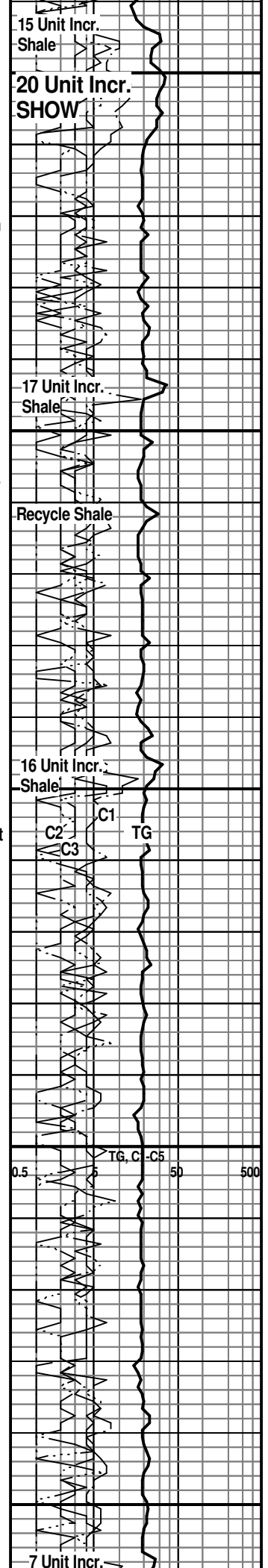
SH; med to dk gy, blk, varic - rust red, platy

MARMATON 4630(-2420)
 LM; lt gy brn, pale grn, argil ip, tite

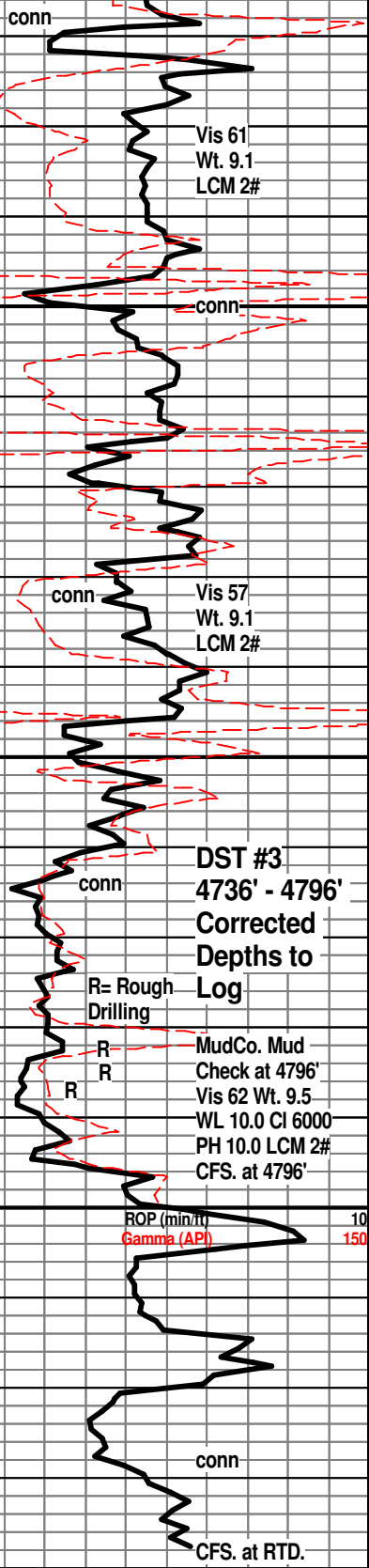
SH; med gy, grn, firm, foss ip.

ALTAMONT 4643(-2433)
 LM; tan to buff, cream, most dense - micritic, blocky, scat trans/pale org cht, no vis por, no fluor, ns.

LM; tan to buff, foss ip, rare small ooids/nellets, most



A.V.= 164.45
at 65 SPM



Vis 61
Wt. 9.1
LCM 2#

Vis 57
Wt. 9.1
LCM 2#

DST #3
4736' - 4796'
Corrected
Depths to
Log

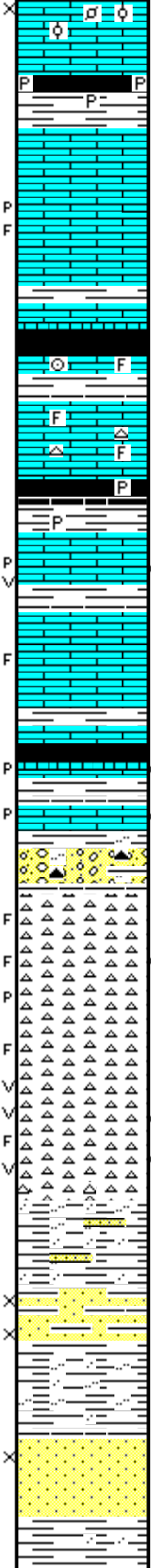
R= Rough
Drilling

MudCo. Mud
Check at 4796'
Vis 62 Wt. 9.5
WL 10.0 CI 6000
PH 10.0 LCM 2#
CFS. at 4796'

ROP (min/hr)
Gamma (API)

conn
CFS. at RTD.

4700
4750
4800
4850



LM; tan to buff, fxl n, most dense, most w/lt yel fluor, no odor, looks tite

SH; blk, dk gy, carb ip, scat pyr, blocky
PAWNEE 4674(-2464)

LM; off wh, tan, fxl n, most dense, most w/lt yel fluor, no vis por, no stn or odor, ns.

LM; tan to cream, buff, fxl n to micritic, few pcs w/dk brn to blk residual stn - gilsonite, dull yel fluor, v. poor p-p por, few calc fld fracs, no odor

SH; blk, carb, gassy w/faint gas odor
LM; med brn, foss ip, thinly bdd

LM; tan to lt brn, foss ip, dense, blocky, no vis por, no fluor, scat tan cht, tite

CHEROKEE SHALE 4714(-2504)
SH; blk, platy, scat pyr

LM; tan to cream, fxl n, scat fair p-p and occ vug por, lt yel fluor, spotted med brn stn, no odor, fair to gd cut

LM; tan to cream, buff, fxl n, most dense, few pcs w/lt brn edge stn - fracs, dull yel fluor, no odor

SH; blk, thinly bdd
LM; med brn, scat fair p-p por, much dk brn oil stn, golden yel fluor, instant cut

CONGL; org cht, weath lmst, shaly
MISSISSIPPI CHERT 4761(-2551)
CHT; wh, lt gy, yel, most fresh, some trip, sev. fracs w/edge stn, no odor, scat lt yel fluor, no F.O. visible, rare pcs w/p-p por and lt oil stn, some dead blk gilsonite, few gas bubbles

CHT; wh, most fresh, abnt fracs, scat lrg vug por, most dead oil - gilsonite, faint gas odor, dull to lt yel fluor, SSFO - some spotted live stn

CHT; wh, off wh, pale grn, most fresh, scat vugs and fracs, occ live oil stn, no odor, dull yel fluor

DST #3: Cher. + Miss. 4836' - 4796'
KINDERHOOK SHALE 4796(-2586)
SH; lt gy grn, silty, interbdd pale grn sandy sh

SS; wh, vf gr, argil, poor intergran por, stingers, no fluor, no stn or odor, ns.

SH; med gy, gy grn, waxy, occ silty to sandy, firm

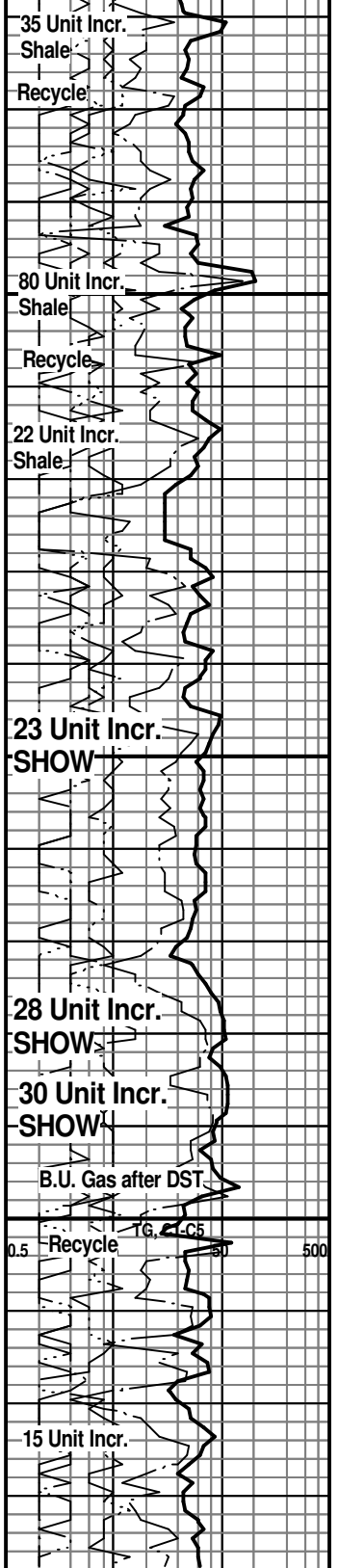
KINDERHOOK SAND 4823(-2613)
SS; clr, wh, most f gr qtz, clusters, poor to fair intergran por, f srt, no odor, v. dull yel fluor, few clusters w/blk tar/gilsonite, trc dk residual oil stn, no live oil shows

SH; med gy, gy grn, waxy ip, flakey, occ silty

RTD. 4840' at 4:48 PM 10/12/18

LTD. 4839'
Halliburton ACRT, NEU/DEN/PE,
Microlog

NOTE: This log was shifted upward by





TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

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

28-27s-18w Kiowa Co.
Yost # 4-28
 Job Ticket: 64718 **DST#: 1**
 Test Start: 2018.10.09 @ 13:04:00

GENERAL INFORMATION:

Formation: **KC. "I" zone**
 Deviated: No Whipstock: ft (KB)
 Test Type: Conventional Bottom Hole (Initial)
 Time Tool Opened: 20:24:15 Tester: Matt Smith
 Time Test Ended: 01:40:00 Unit No: 68
 Interval: **4392.00 ft (KB) To 4418.00 ft (KB) (TVD)** Reference Elevations: 2210.00 ft (KB)
 Total Depth: 4418.00 ft (KB) (TVD) 2199.00 ft (CF)
 Hole Diameter: 7.88 inches Hole Condition: Fair KB to GR/CF: 11.00 ft

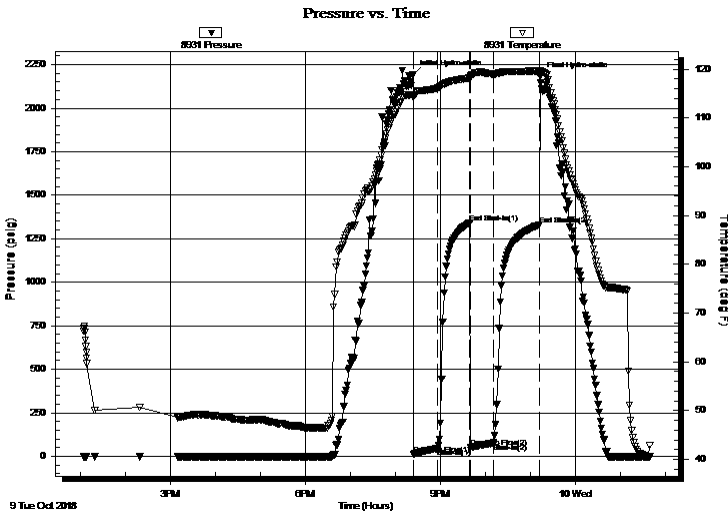
Serial #: 8931

Inside

Press@RunDepth: 75.39 psig @ 4393.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2018.10.09 End Date: 2018.10.10 Last Calib.: 2018.10.10
 Start Time: 13:04:05 End Time: 01:40:00 Time On Btm: 2018.10.09 @ 20:23:45
 Time Off Btm: 2018.10.09 @ 23:13:00

TEST COMMENT: IF: Weak blow . Built to 3 1/4".
 IS: No blow .
 FF: Weak - Fair blow . Built to 5 3/4".
 FS: No blow .

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2190.95	114.82	Initial Hydro-static
1	12.28	114.17	Open To Flow (1)
33	44.94	116.17	Shut-In(1)
76	1341.41	118.19	End Shut-In(1)
77	50.71	118.48	Open To Flow (2)
107	75.39	119.00	Shut-In(2)
169	1330.24	119.59	End Shut-In(2)
170	2179.58	119.75	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
60.00	Slight GMCW 5%g 27%m 68%w	0.30
60.00	MCW 45%m 55%w	0.30
10.00	OWCM 5%o 15%w 80%m	0.05
0.00	176' G.I.P.	0.00

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

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

28-27s-18w Kiowa Co.
Yost # 4-28
 Job Ticket: 64718 **DST#: 1**
 Test Start: 2018.10.09 @ 13:04:00

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: 61000 ppm	
Viscosity: 63.00 sec/qt	Cushion Volume: bbl		
Water Loss: 8.79 in ³	Gas Cushion Type:		
Resistivity: 6000.00 ohm.m	Gas Cushion Pressure: psig		
Salinity: ppm			
Filter Cake: 0.20 inches			

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
60.00	Slight GMCW 5%g 27%m 68%w	0.295
60.00	MCW 45%m 55%w	0.295
10.00	OWCM 5%o 15%w 80%m	0.049
0.00	176' G.I.P.	0.000

Total Length: 130.00 ft Total Volume: 0.639 bbl
 Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #: none
 Laboratory Name: Laboratory Location:
 Recovery Comments: RW .25 @ 42.8 Degrees = 61000 Chlorides.
 176 Ft Gas In Pipe.
 Worked Drum plate on draw works.

Serial #: 8931

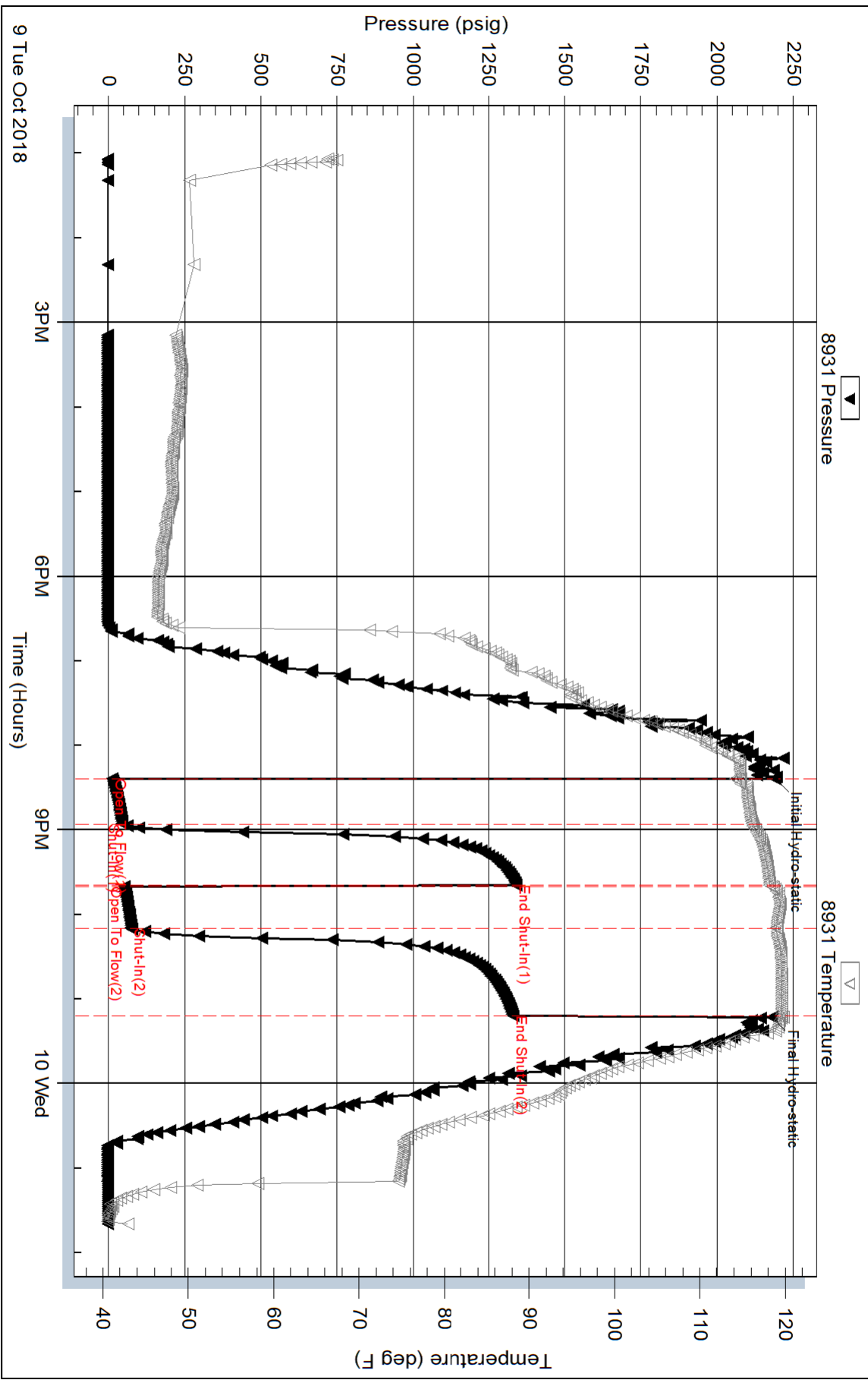
Inside

Herrnan L. Loeb, LLC

Yost #4-28

DST Test Number: 1

Pressure vs. Time

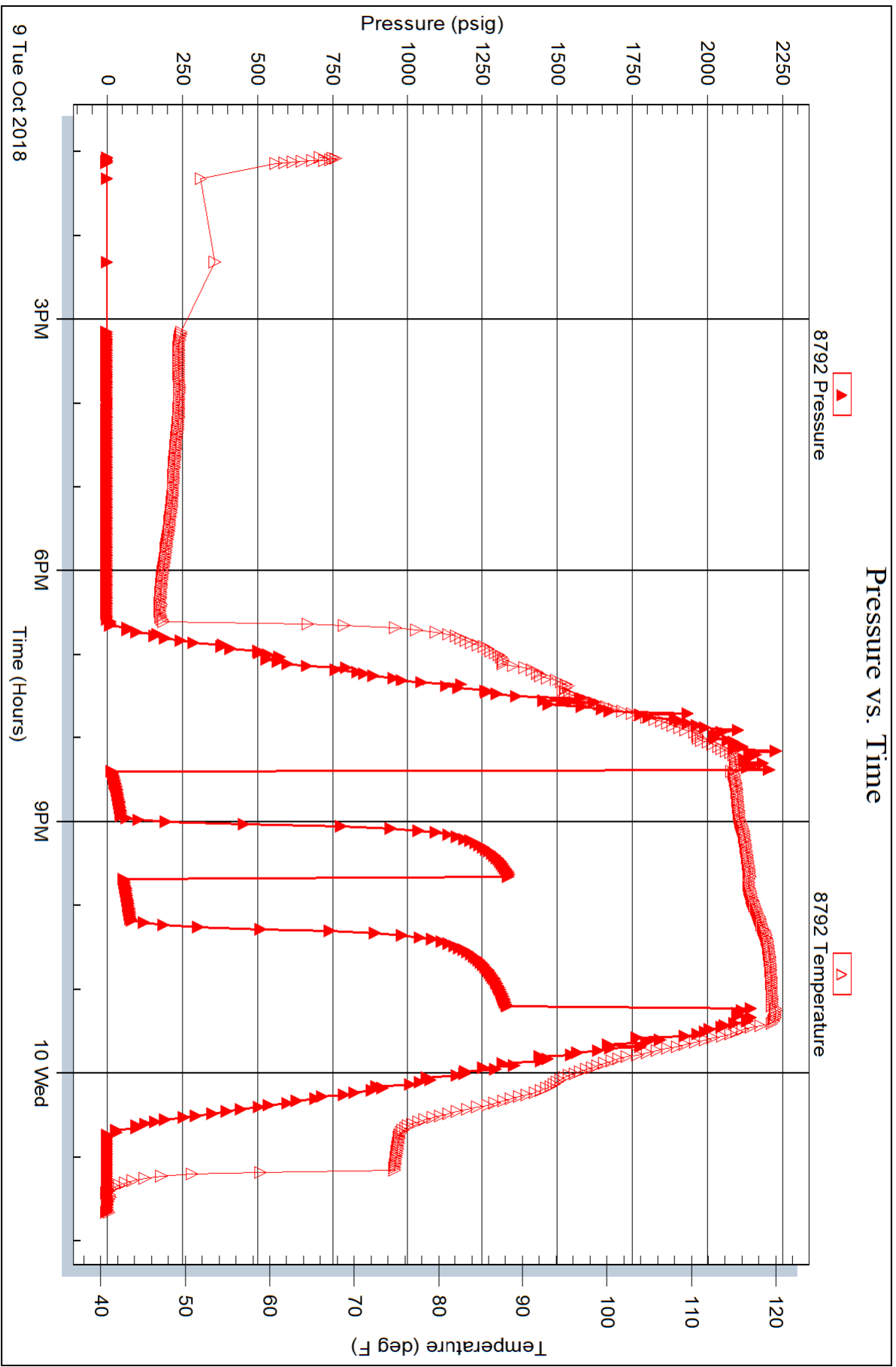


Serial #: 8792

Outside Herran L. Loeb, LLC

Yost #4-28

DST Test Number: 1





**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

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

28-27s-18w Kiowa Co.
Yost # 4-28
 Job Ticket: 64719 **DST#: 2**
 Test Start: 2018.10.10 @ 12:38:45

GENERAL INFORMATION:

Formation: **KC." J" zone**
 Deviated: No Whipstock: ft (KB)
 Test Type: Conventional Bottom Hole (Reset)
 Time Tool Opened: 14:43:45 Tester: Matt Smith
 Time Test Ended: 19:45:15 Unit No: 68
 Interval: **4442.00 ft (KB) To 4460.00 ft (KB) (TVD)** Reference Elevations: 2210.00 ft (KB)
 Total Depth: 4460.00 ft (KB) (TVD) 2199.00 ft (CF)
 Hole Diameter: 7.88 inches Hole Condition: Fair KB to GR/CF: 11.00 ft

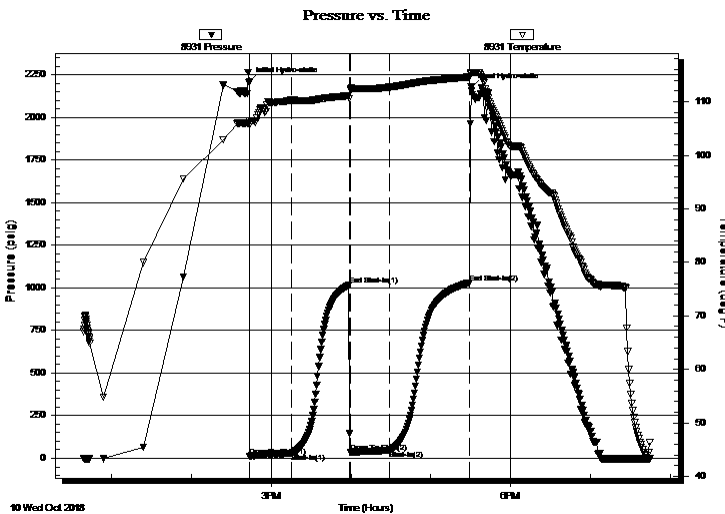
Serial #: 8931

Inside

Press@RunDepth: 46.82 psig @ 4443.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2018.10.10 End Date: 2018.10.10 Last Calib.: 2018.10.10
 Start Time: 12:38:50 End Time: 19:45:14 Time On Btm: 2018.10.10 @ 14:43:30
 Time Off Btm: 2018.10.10 @ 17:30:15

TEST COMMENT: IF: Weak blow . Built to 1.96".
 IS: No blow .
 FF: Weak blow . Built to 2.01".
 FS: No blow .

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2207.19	106.35	Initial Hydro-static
1	12.28	105.58	Open To Flow (1)
32	30.09	110.30	Shut-In(1)
75	1015.57	111.12	End Shut-In(1)
76	34.10	112.21	Open To Flow (2)
106	46.82	112.74	Shut-In(2)
166	1030.30	114.63	End Shut-In(2)
167	2177.67	115.47	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
61.00	Oil scum GWCM 3%g 35%w 62%m	0.30
0.00	30' G.I.P.	0.00

* Recovery from multiple tests

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

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

28-27s-18w Kiowa Co.
Yost # 4-28
 Job Ticket: 64719 **DST#: 2**
 Test Start: 2018.10.10 @ 12:38:45

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:	44000 ppm
Viscosity: 65.00 sec/qt	Cushion Volume: bbl		
Water Loss: 8.79 in ³	Gas Cushion Type:		
Resistivity: 7000.00 ohm.m	Gas Cushion Pressure: psig		
Salinity: ppm			
Filter Cake: 0.20 inches			

Recovery Information

Recovery Table

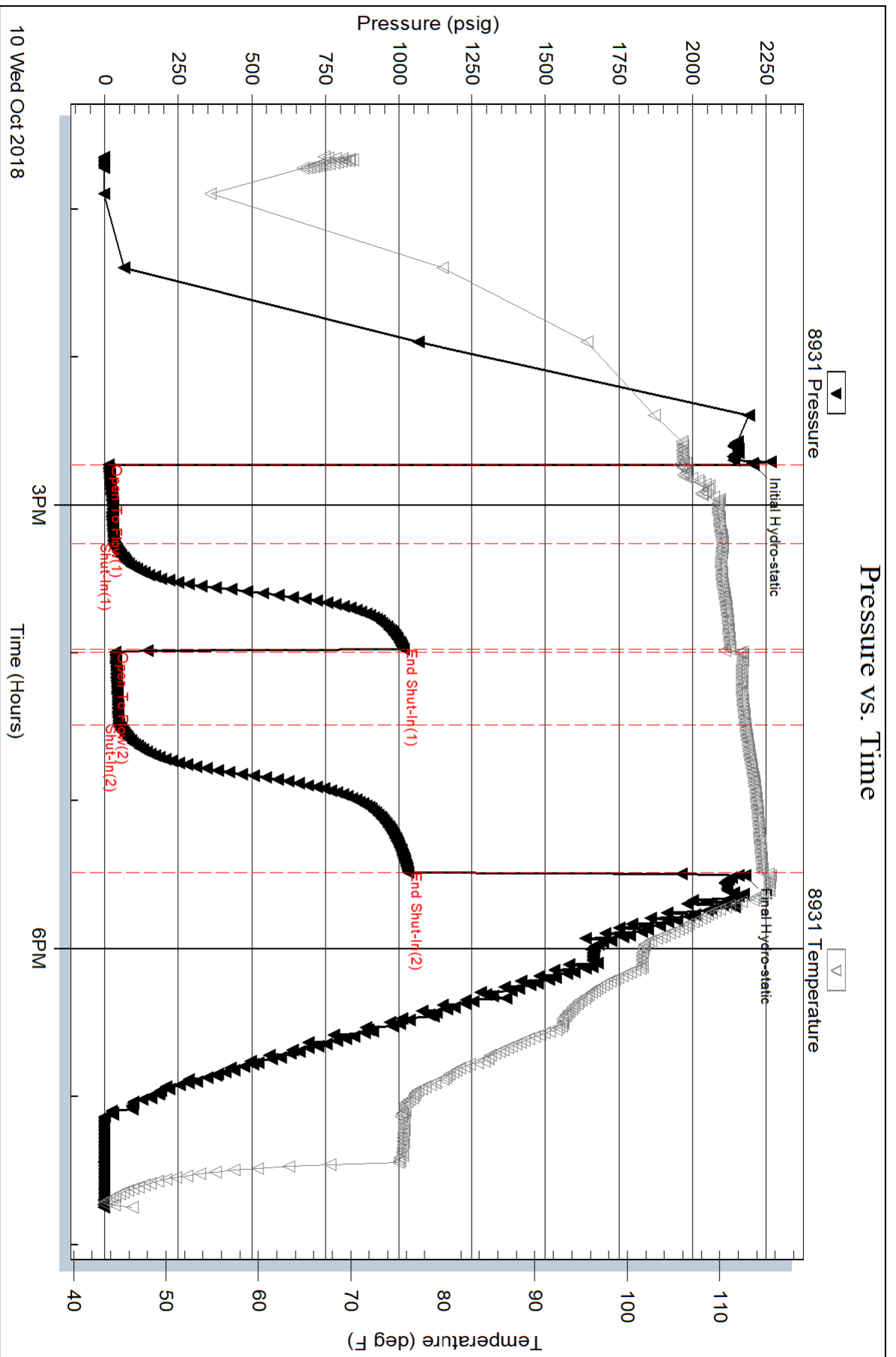
Length ft	Description	Volume bbl
61.00	Oil scum GWCM 3%g 35%w 62%m	0.300
0.00	30' G.I.P.	0.000

Total Length: 61.00 ft Total Volume: 0.300 bbl

Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #: none

Laboratory Name: Laboratory Location:

Recovery Comments: RW is .25 @ 47 degrees = 44,000 Chlorides.
 30 Ft Gas In Pipe.





**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

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

28-27s-18w Kiowa,KS

Yost #4-28

Job Ticket: 63470

DST#: 3

Test Start: 2018.10.12 @ 03:29:00

GENERAL INFORMATION:

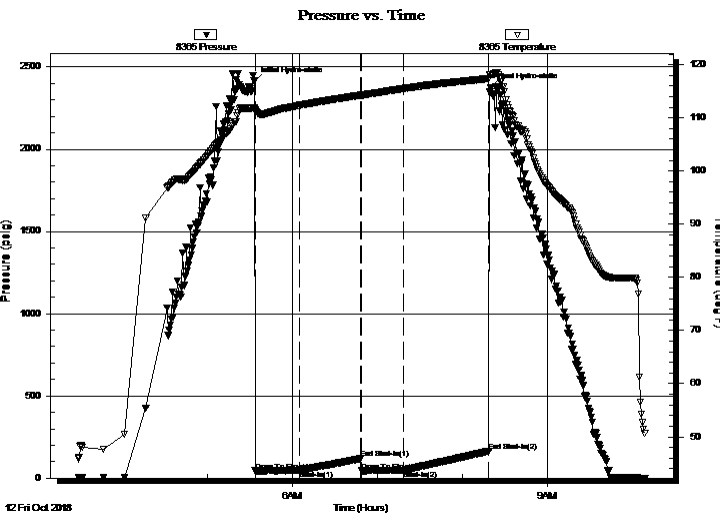
Formation: **Mississippi**
 Deviated: No Whipstock: ft (KB)
 Test Type: Conventional Bottom Hole (Initial)
 Time Tool Opened: 05:34:02 Tester: Ken Swinney Benny Mu
 Time Test Ended: 10:09:02 Unit No: 72 Pratt
 Interval: **4738.00 ft (KB) To 4798.00 ft (KB) (TVD)** Reference Elevations: 2210.00 ft (KB)
 Total Depth: 4798.00 ft (KB) (TVD) 2199.00 ft (CF)
 Hole Diameter: 7.88 inches Hole Condition: Fair KB to GR/CF: 11.00 ft

Serial #: 8365

Inside

Press@RunDepth: 46.55 psig @ 4777.80 ft (KB) Capacity: psig
 Start Date: 2018.10.12 End Date: 2018.10.12 Last Calib.: 2018.10.12
 Start Time: 03:29:01 End Time: 10:09:02 Time On Btm: 2018.10.12 @ 05:33:17
 Time Off Btm: 2018.10.12 @ 08:20:02

TEST COMMENT: I.F. 30 Minutes/ Blow built to 7 "
 I.S.I. 45 Minutes/ no blow back
 F.F. 30 Minutes/ Blow built to 6"
 F.S.I. 60 Minutes/ no blow back



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2412.42	111.83	Initial Hydro-static
1	43.06	111.44	Open To Flow (1)
32	46.81	112.34	Shut-In(1)
75	118.20	114.25	End Shut-In(1)
76	43.82	114.27	Open To Flow (2)
105	46.55	115.50	Shut-In(2)
166	164.42	117.42	End Shut-In(2)
167	2375.05	118.03	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
30.00	Mud w/show oil in tool/ Mud 100%	0.15
0.00	210 GIP	0.00

Gas Rates

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



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

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

28-27s-18w Kiowa, KS

Yost #4-28

Job Ticket: 63470

DST#: 3

Test Start: 2018.10.12 @ 03:29:00

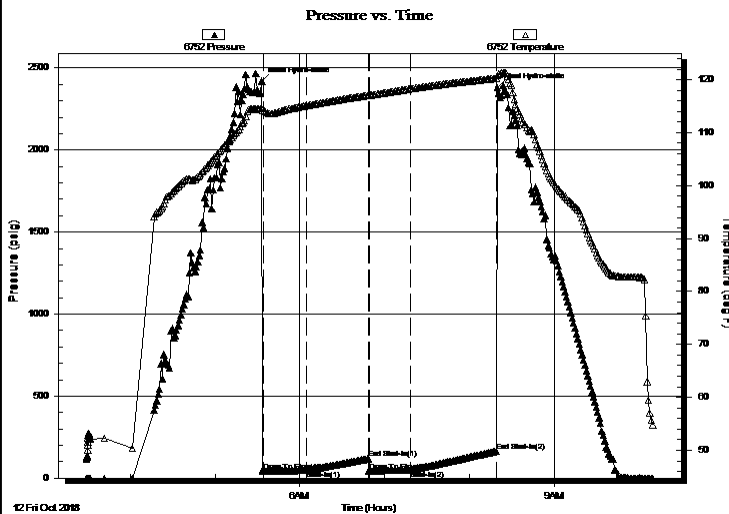
GENERAL INFORMATION:

Formation: **Mississippi**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 05:34:02
 Time Test Ended: 10:09:02
 Interval: **4738.00 ft (KB) To 4798.00 ft (KB) (TVD)**
 Total Depth: 4798.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Fair
 Test Type: Conventional Bottom Hole (Initial)
 Tester: Ken Swinney Benny Mu
 Unit No: 72 Pratt
 Reference Elevations: 2210.00 ft (KB)
 2199.00 ft (CF)
 KB to GR/CF: 11.00 ft

Serial #: 6752 Outside

Press@RunDepth: 164.79 psig @ 4778.80 ft (KB) Capacity: psig
 Start Date: 2018.10.12 End Date: 2018.10.12 Last Calib.: 2018.10.12
 Start Time: 03:29:01 End Time: 10:10:02 Time On Btm: 2018.10.12 @ 05:33:02
 Time Off Btm: 2018.10.12 @ 08:19:47

TEST COMMENT: I.F. 30 Minutes/ Blow built to 7"
 I.S.I. 45 Minutes/ no blow back
 F.F. 30 Minutes/ Blow built to 6"
 F.S.I. 60 Minutes/ no blow back



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2415.50	114.63	Initial Hydro-static
1	41.80	114.18	Open To Flow (1)
32	46.99	115.10	Shut-In(1)
76	118.75	117.03	End Shut-In(1)
76	43.95	117.03	Open To Flow (2)
106	46.74	118.27	Shut-In(2)
166	164.79	120.29	End Shut-In(2)
167	2382.47	120.82	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
30.00	Mud w/show oil in tool/ Mud 100%	0.15
0.00	210 GIP	0.00

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

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

28-27s-18w Kiowa,KS
Yost #4-28
 Job Ticket: 63470 **DST#: 3**
 Test Start: 2018.10.12 @ 03:29:00

Mud and Cushion Information

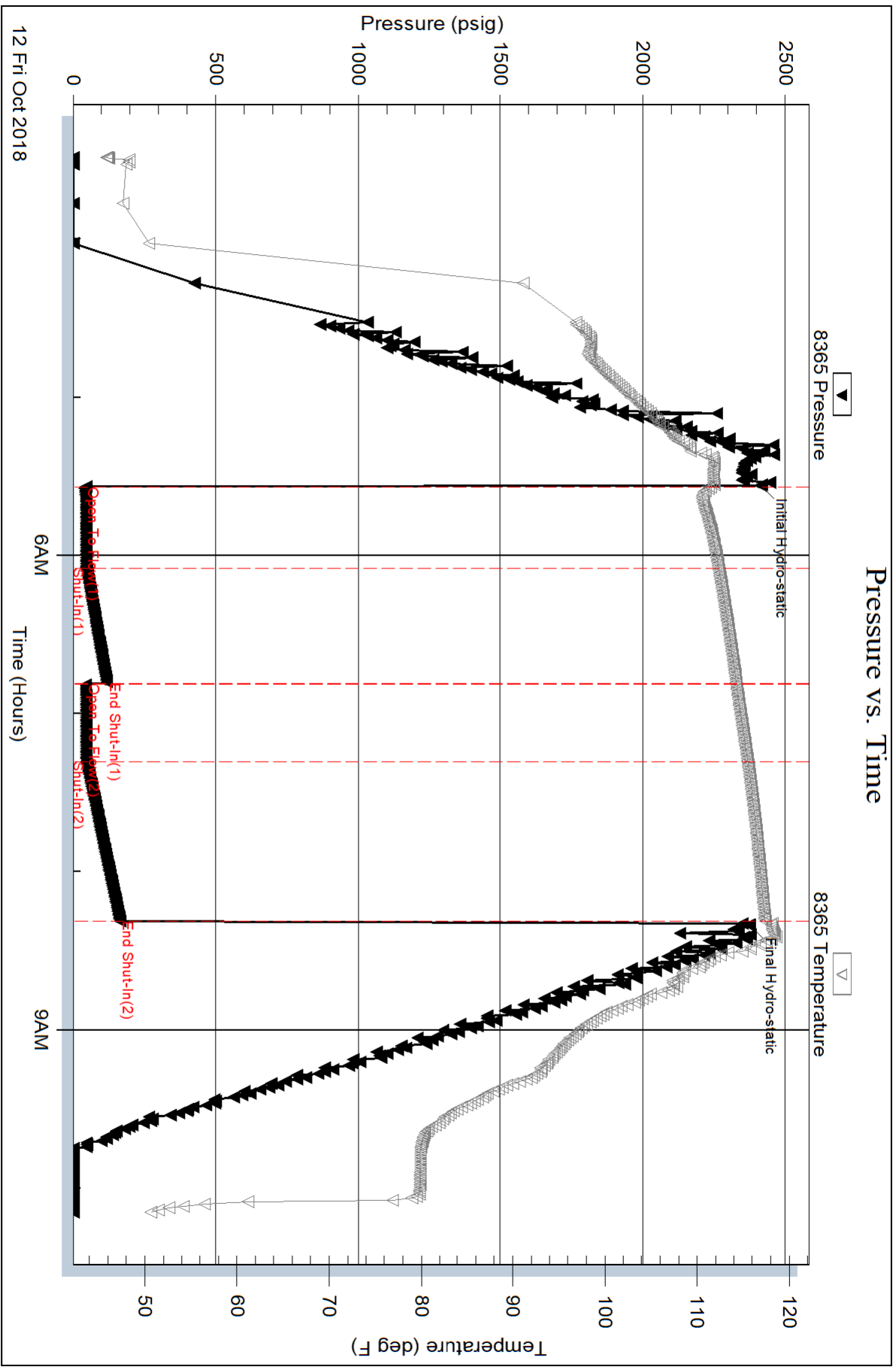
Mud Type: Gel Chem	Cushion Type:	Oil API:	deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity:	ppm
Viscosity: 66.00 sec/qt	Cushion Volume: bbl		
Water Loss: 8.79 in ³	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 7500.00 ppm			
Filter Cake: 1.00 inches			

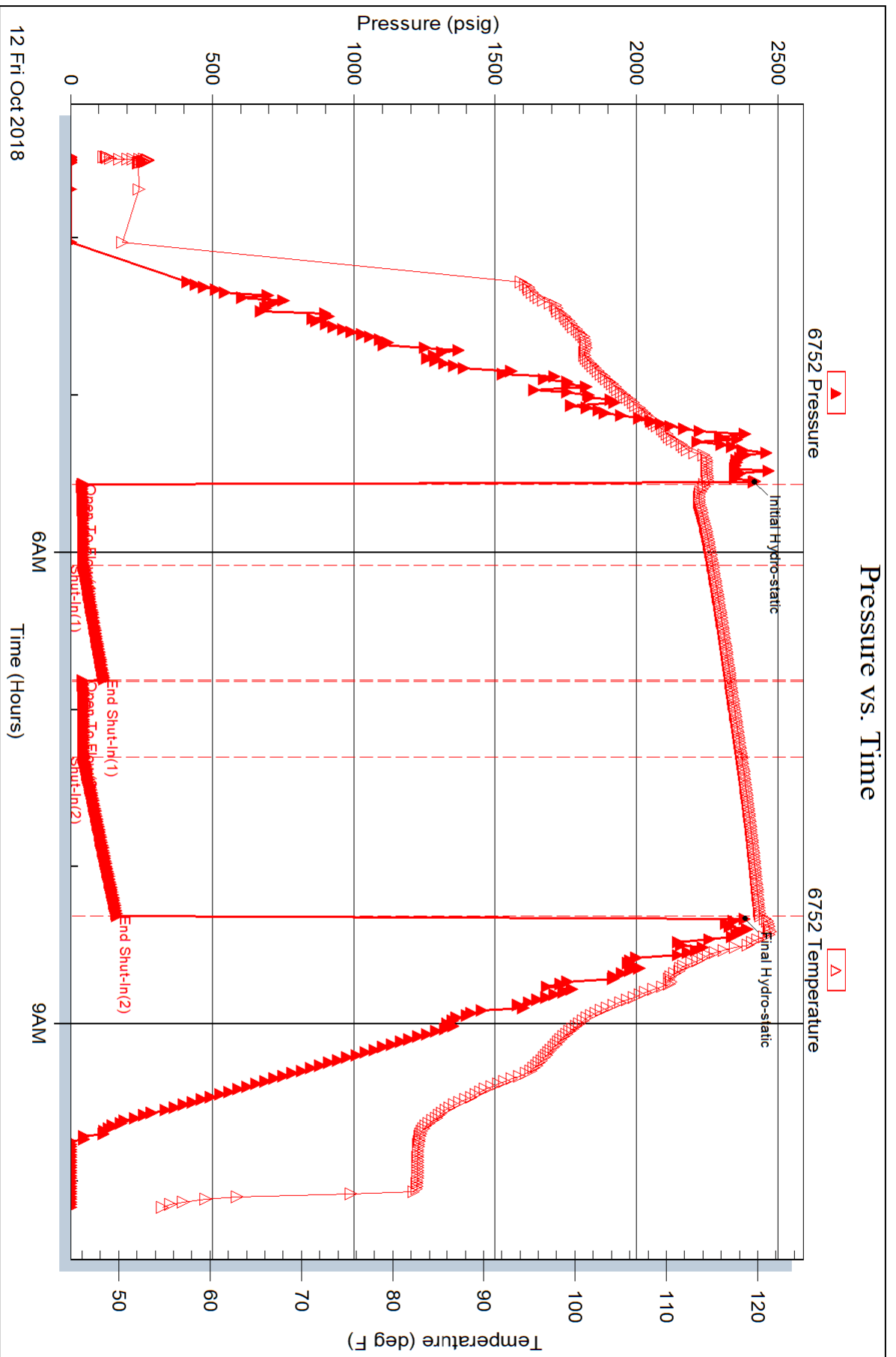
Recovery Information

Recovery Table

Length ft	Description	Volume bbl
30.00	Mud w /show oil in tool/ Mud 100%	0.148
0.00	210 GIP	0.000

Total Length: 30.00 ft Total Volume: 0.148 bbl
 Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
 Laboratory Name: Laboratory Location:
 Recovery Comments:





10/15

4

8



PAGE	CUST NO	YARD #	INVOICE DATE
1 of 1	1007589	1718	10/10/2018
INVOICE NUMBER			
92821918			

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 Yost 4-28
 O LOCATION
 B COUNTY Kiowa
 S STATE KS
 I JOB DESCRIPTION Cement-New Well Casing/Pi
 T JOB CONTACT
 E

6076 - 6420 - YOST 4

JOB #	EQUIPMENT #	PURCHASE ORDER NO.	TERMS	DUE DATE
41138394	86779		Net - 30 days	11/09/2018

	QTY	U of M	UNIT PRICE	INVOICE AMOUNT
For Service Dates: 10/05/2018 to 10/05/2018				
0041138394				
171817433A Cement-New Well Casing/Pi 10/05/2018 Cement Surface				
A-Con' Blend	175.00	EA	10.84	1,896.93 T
60/40 POZ	175.00	EA	7.23	1,264.62 T
Celloflake	88.00	LB	2.23	196.08 T
Calcium Chloride	948.00	LB	0.63	599.43 T
Top Rubber Cement Plug, 8 5/8"	1.00	EA	135.49	135.49
Guide Shoe - Regular, 8 5/8" (Blue)	1.00	EA	228.84	228.84
Baffle Plate Aluminum, 8 5/8" (Blue)	1.00	EA	102.37	102.37
Sugar	100.00	LB	3.01	301.10 T
"Unit Mileage Chg (PU, cars one way)"	40.00	MI	2.71	108.40
Heavy Equipment Mileage	80.00	MI	4.52	361.32
Proppant & Bulk Del. Chgs., per ton mil	632.00	EA	1.51	951.48
Blending & Mixing Service Charge	350.00	SK	0.84	295.08
Plug Container Utilization Charge	1.00	EA	150.55	150.55
Depth Charge; 501'-1000'	1.00	EA	722.64	722.64
"Service Supervisor, first 8 hrs on loc.	1.00	EA	104.81	104.81

PAID
 85615
 OCT 23 2018
 SCANNED

PLEASE REMIT TO:	SEND OTHER CORRESPONDENCE TO:	SUB TOTAL	7,419.14
BASIC ENERGY SERVICES, LP	BASIC ENERGY SERVICES, LP	TAX	319.36
PO BOX 841903	801 CHERRY ST, STE 2100	INVOICE TOTAL	7,738.50
DALLAS, TX 75284-1903	FORT WORTH, TX 76102		



BASICSM
ENERGY SERVICES
PRESSURE PUMPING & WIRELINE

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

Trmt-29

FIELD SERVICE TICKET
1718 17433 A

DATE _____ TICKET NO. _____

DATE OF JOB <i>10-5-14</i>	DISTRICT <i>Pratt Kansas</i>	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 <i>Herman Loeb</i>		LEASE <i>Yost</i>				WELL NO <i>4-28</i>			
ADDRESS		COUNTY <i>Kiowa</i>		STATE <i>Kansas</i>					
CITY		STATE		SERVICE CREW <i>Fennis, Mike, Bose</i>					
AUTHORIZED BY		JOB TYPE: <i>8.625 slickline 2-42</i>							
EQUIPMENT#	HRS	EQUIPMENT#	HRS	EQUIPMENT#	HRS	TRUCK CALLED	DATE <i>10-5-14</i>	AM PM	TIME <i>0540</i>
<i>466779</i>	<i>3</i>					ARRIVED AT JOB		AM PM	<i>0700</i>
<i>19460</i>	<i>3</i>					START OPERATION		AM PM	<i>0930</i>
						FINISH OPERATION		AM PM	<i>1230</i>
						RELEASED		AM PM	<i>01300</i>
						MILES FROM STATION TO WELL			<i>40</i>

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: *[Signature]*
(WELL OWNER, OPERATOR, CONTRACTOR OR AGENT)

ITEM/PRICE REF. NO.	MATERIAL, EQUIPMENT AND SERVICES USED	UNIT	QUANTITY	UNIT PRICE	\$ AMOUNT
CP101	A-con Blend common	SK	175		3150.00
CP103	60/40 Poz	SK	175		2100.00
CC102	Cellulose	lb	88		325.60
CC104	Calcium chloride	lb	948		995.40
CF105	4 5/8 Top rubber plug	EA	1		225.00
CF253	4 5/8 Regular Guide shoe (Blue)	EA	1		380.00
CF753	4 5/8 Alum. Alum Baffle Plate (Blue)	EA	1		170.00
CC131	Sugar	lb	500		500.00
F100	Pickup mileage	m.	40		160.00
F101	Heavy equipment mileage	m.	60		600.00
F113	Bulk delivery charge per ton mile	Ton	632		1540.00
CB201	Depth charge 501'-1000'	1/HR	1		1200.00
CF240	Blending & mixing charge	SK	350		490.00
CF509	Plug container utilization charge	Sub	1		250.00
S003	Secure supervisor Field Assessment	EA	1		175.00
SUB TOTAL					12321.00

CHEMICAL / ACID DATA:			

SERVICE & EQUIPMENT	%TAX ON \$	
MATERIALS	%TAX ON \$	
TOTAL		<i>7419.14</i>

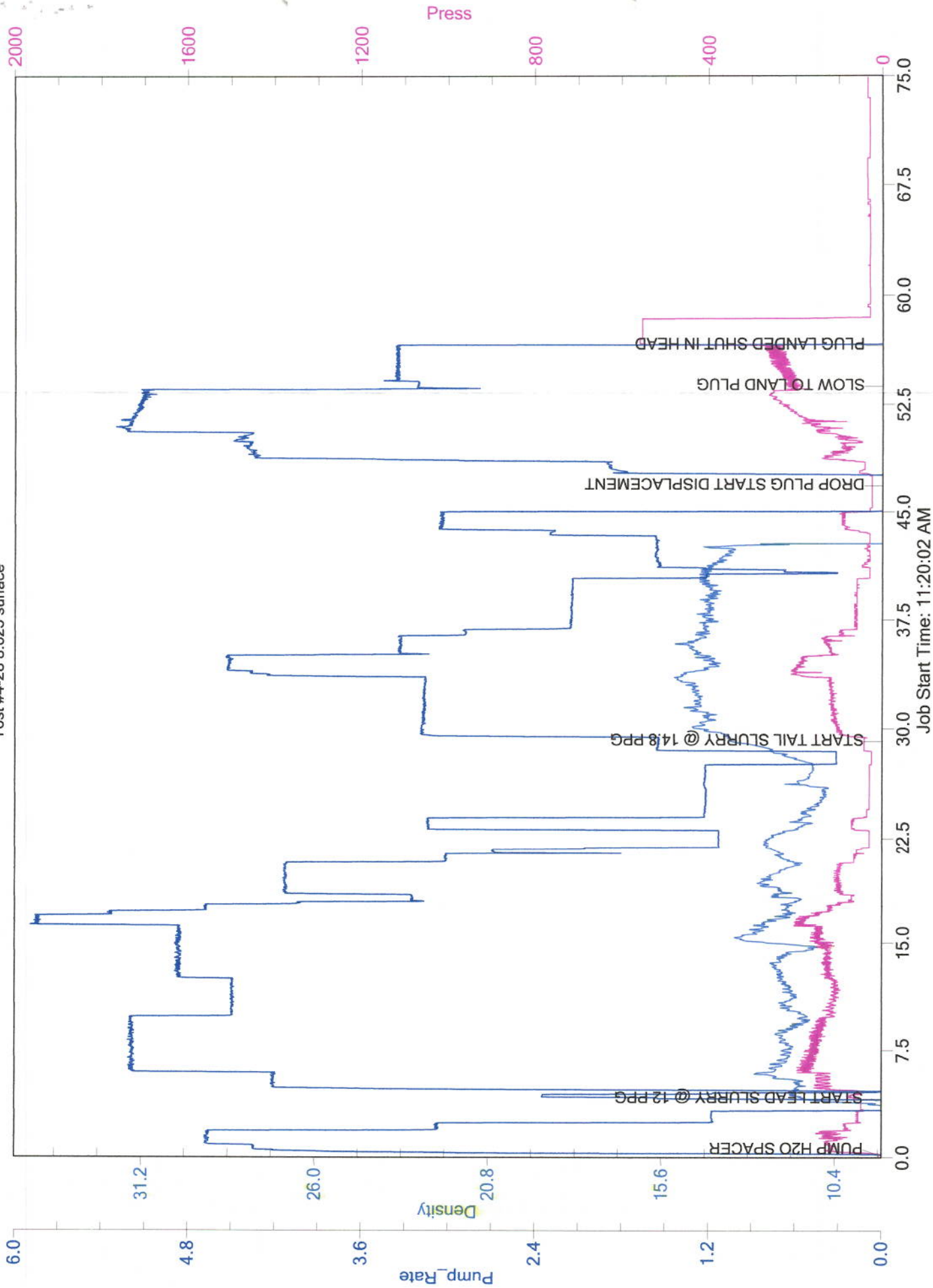
SERVICE REPRESENTATIVE *[Signature]*

THE ABOVE MATERIAL AND SERVICE ORDERED BY CUSTOMER AND RECEIVED BY: *[Signature]*
(WELL OWNER OPERATOR CONTRACTOR OR AGENT)

FIELD SERVICE ORDER NO.

Herman Loeb

Yost #4-28 8.625 surface



10/22



PAGE	CUST NO	YARD #	INVOICE DATE
1 of 1	1007589	1718	10/14/2018
INVOICE NUMBER			
92824266			

Pratt (620) 672-1201

B HERMAN L LOEB LLC
 I PO Box: 838
 L LAWRENCEVILLE
 L IL US 62439

J LEASE NAME Yost 4-28
 O LOCATION
 B COUNTY Kiowa
 S STATE KS
 I JOB DESCRIPTION Cement-New Well Casing/Pi
 T JOB CONTACT
 E

ATTN: ACCOUNTS PAYABLE

6076 → 6420 → YOST4

JOB #	EQUIPMENT #	PURCHASE ORDER NO.	TERMS	DUE DATE
41138925	27463		Net - 30 days	11/13/2018

	QTY	U of M	UNIT PRICE	INVOICE AMOUNT
For Service Dates: 10/13/2018 to 10/13/2018				
0041138925				
171816948A Cement-New Well Casing/Pi 10/13/2018 Cement PTA				
60/40 POZ	170.00	EA	7.23	1,228.49
"Unit Mileage Chg (PU, cars one way)"	40.00	MI	2.71	108.40
Heavy Equipment Mileage	80.00	MI	4.52	361.32
Proppant & Bulk Del. Chgs., per ton mil	294.00	EA	1.51	442.62
Blending & Mixing Service Charge	170.00	SK	0.84	143.32
Depth Charge; 1001'-2000'	1.00	EA	903.30	903.30
"Service Supervisor, first 8 hrs on loc.	1.00	EA	105.13	105.13

PAID
 85892
 NOV 06 2018

SCANNED

PLEASE REMIT TO:	SEND OTHER CORRESPONDENCE TO:	SUB TOTAL	3,292.58
BASIC ENERGY SERVICES, LP	BASIC ENERGY SERVICES, LP	TAX	92.14
PO BOX 841903	801 CHERRY ST, STE 2100	INVOICE TOTAL	3,384.72
DALLAS, TX 75284-1903	FORT WORTH, TX 76102		

