

KANSAS CORPORATION COMMISSION
OIL & GAS CONSERVATION DIVISION

1277440

Form ACO-1

November 2016

Form must be Typed

Form must be Signed

All blanks must be Filled

Confidentiality Requested:

 Yes No**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 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 SWGPS 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 DistributionALT 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)</i> <i>(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:	
----------------	-------	---------	------------	--

Summary of Changes

Lease Name and Number: D. Schumacher 1

API/Permit #: 15-109-21428-00-00

Doc ID: 1277440

Correction Number: 1

Approved By: NAOMI JAMES

Field Name	Previous Value	New Value
Approved Date	11/17/2015	01/14/2016
Date of First or Resumed Production or SWD or Enhr Liner Run?		01/07/2016
		No
Producing Method Pumping	No	Yes
Production - Barrels Oil		135
Production - Barrels of Water		0.00
Production - Oil Gravity		30
Save Link	../..kcc/detail/operatorEditDetail.cfm?docID=1271346	../..kcc/detail/operatorEditDetail.cfm?docID=1277440
Tubing Set At		4787
Tubing Size		2.875



Confidentiality Requested:

Yes No

KANSAS CORPORATION COMMISSION 1271346
OIL & GAS CONSERVATION DIVISION

Form ACO-1

August 2013

Form must be Typed

Form must be Signed

All blanks must be Filled

CONFIDENTIAL 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
- Plug Back Conv. to GSW Conv. to Producer
- 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

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
- Geologist Report Received
- UIC Distribution
- ALT I II III Approved by: _____ Date: _____

John Goldsmith Wellsite Service

Cell and Home Phone:
316-640-0236

427 Roosevelt St.
Cheney, KS 67025

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

Well Name: D. Schumacher #1

API: 15-109-21428

Location: 1830' FNL, 1020' FWL, SECTION 23-15S-36W, E/2 SW NW

License Number:

Region: Logan County

Spud Date: 08/04/2015

Drilling Completed: 08/14/2015

Surface Coordinates: LAT 38.7396344

LONG -101.2948871

Bottom Hole Vertical hole

Coordinates: 3/4 Degree Deviation

Ground Elevation (ft): 3294'

K.B. Elevation (ft): 3305'

Logged Interval (ft): 3700' To: RTD

Total Depth (ft): 4910

Formation: Mississippian at RTD

Type of Drilling Fluid: Chemical

Printed by STRIP.LOG from WellSight Systems 1-800-447-1534 www.WellSight.com

OPERATOR

Company: Ritchie Exploration, Inc.

Address: 8100 E 22nd St. N #700

Wichita, KS 67226

(316) 691-9500

GEOLOGIST

Name: John Goldsmith

Company: John Goldsmith Wellsite Service

Address: 427 Roosevelt St

Cheney, KS 67025

(316) 640-0236

COMMENTS

Contractor: Murfin Drilling Rig #21

Pusher: Juan Tinoco

Surface Casing: 5 joints of 8 5/8" set at 213'

Production Casing: 5.5" Production Casing was installed.

Mud by: MudCo

DST's by: Trilobite Testing

Logs by: Pioneer Energy Services (DIL, CN-CD)

RTD=4910'

LTD=4909'

FORMATION TOPS

FORMATION	SAMPLE TOPS		LOG TOPS	
	Depth	Datum	Depth	Datum
Heebner Shale	4001'	-696	4001'	-696
Toronto	4018'	-713	4018'	-713
Lansing	4050'	-745	4050'	-745
Muncie Creek Shale	4222'	-917	4221'	-916
Stark Shale	4316'	-1011	4315'	-1010
Hushpuckney Shale	4360'	-1055	4360'	-1055
Base of KC	4397'	-1092	4396'	-1091
Marmaton	4441'	-1136	4440'	-1135
Pawnee	4534'	-1229	4534'	-1229
Little Osage Shale	4565'	-1260	4563'	-1258
Excello Shale	4582'	-1277	4581'	-1276
Cherokee Shale	4613'	-1308	4613'	-1308
Johnson Zone	4697'	-1392	4697'	-1392
Morrow	4748'	-1443	4747'	-1442
Mississippian	4822'	-1517	4822'	-1517
RTD	4910'	-1605		
LTD			4909'	-1604

DSTs

DST #1 3996'-4046' "Toronto" 8/7/2015 30-45-45-60

1st Blw: Blt to 9.5" (No BB)

2nd Blw: Blt to BOB in 37" (No BB)

IFP: 43-157# ISIP: 1082# FFP: 167-232# FSIP: 1074#

HYD: 1976-1838#

Rec: 30' OCM (2% Oil), 186' Mud, 122' OCMW (2% Oil, 85% Wtr), 122' MCW (60% Wtr)

DST #2 4081'-4174' "KC E/F" 8/8/2015 30-45-30-60

1st Blw: Blt to BOB in 4" (No BB)

2nd Blw: Blt to BOB in 5" (No BB)

IFP: 92-381# ISIP: 1176# FFP: 388-542# FSIP: 1177#

HYD: 1995-1916#

Rec: 620' MUD, 248' MCW (70% Wtr), 244' MCW (90% Wtr)

DST #3 4418'-4480' "Altamont A" 8/9/2015 30-45-45-60

1st Blw: Blt to BOB in 3" (BB blt to 1/8")

2nd Blw: Blt to BOB in 3" (No BB)

IFP: 170-394# ISIP: 1021# FFP: 430-618# FSIP: 1021#

HYD: 2248-2084#

Rec: 826' MCGO (85% Oil, 10% Gas), 124' MCGO (65% Oil, 25% Gas), 248' MCGO (50% Oil, 25% Gas), 122' GCMO (60% Oil, 10% Gas), 122' GCMO (80% Oil, 10% Gas)

DST #4 4475'-4500' "Altamont B" 8/10/2015 30-30-30-30

1st Blw: No Blw (No BB)




2nd Blw: No Blw flushed, Wk blw dead instantly (No BB)

IFP: 21-23# ISIP: 48# FFP: 20-23# FSIP: 167#




HYD: 2230-2147#




Rec: 2' Mud

ROCK TYPES

 Anhy
 Cht
 Congl

 Dol
 Lmst
 Shale

 Slstst
 Ss
 Carb sh





 Gry sh
 Sandylms
 Shaly ls

ACCESSORIES

EVENTS

 Circ
 Conn

FOSSIL

 Brach
 Bryozoa
 Crin
 Foram





 F Fossil
 Gastro
 Oolite
 Ostra
 Pellet
 Plant
 Fuss
 Oomold

MINERAL

 Calc
 Chtdk
 Chtlt
 Feldspar
 Glau
 Hvymn
 Nodule
 Pyr

 Sulphur

TEXTURE

 Chalky
 Crslxn
 Finexln
 Microxln

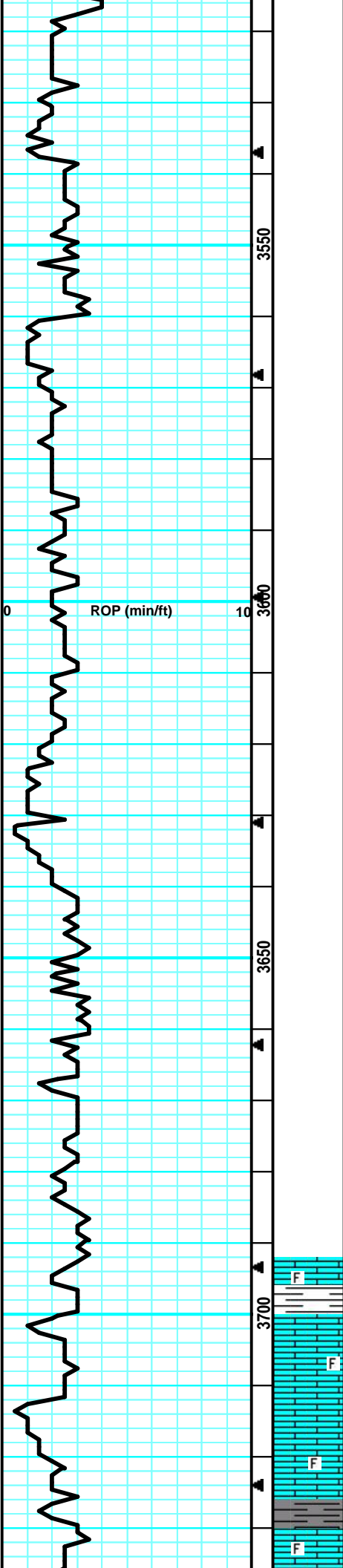
ROP (min/ft)	Depth	Lithology	Oil Shows	Geological Descriptions	Remarks
0	0				Survey @213' = 1/4 Degree
	2560	Anhydrite		Morning Report Depth/Activity 08/04/2015, Spud 08/05/15, drill @680' 08/06/15, drill @2415' 08/07/15, drill @3345' (DST #1) 08/08/15, drill @3916' (DST #2) 08/09/15, drill @4095' (DST #3) 08/10/15, drill @4315' (DST #4) 08/11/15, drill @4480' 08/12/15, drill @4562' 08/13/15, drill @4851' 08/14/15, drill @4910'	Mud-Co Check #1 @0' 08/01/15 Anhydrite @ 2568' (+737) Survey @1030' = 1/4 Degree B/Anhydrite @ 2587' (+718) Survey @1538' = 1/4 Degree
	2690	B/Anhydrite			Mud-Co Check #2 @ 955' 08/04/15 wt vis pH 8.8 29 8.0 Filt chr LCM NC 200 Tr Mud-Co Check #3 @ 2470' 08/05/15 wt vis pH 9.7 32 7.5 Filt chr LCM NC 81K 2#
	3500			ROP Data begin @ 3500' - 08/06/2015	Mud Displacement @ 3421' Survey @2046' = 1/2 Degree
					Mud-Co Check #4 @ 3385' 08/06/15 wt vis pH 9.7 35 7.0

Filt chr LCM
NC 67K 3#

Survey @2555' = 1 Degree

Survey @3032' = 1 Degree

Survey @3568' = 1/2 Degree



Samples began @ 3700' - 08/06/2015

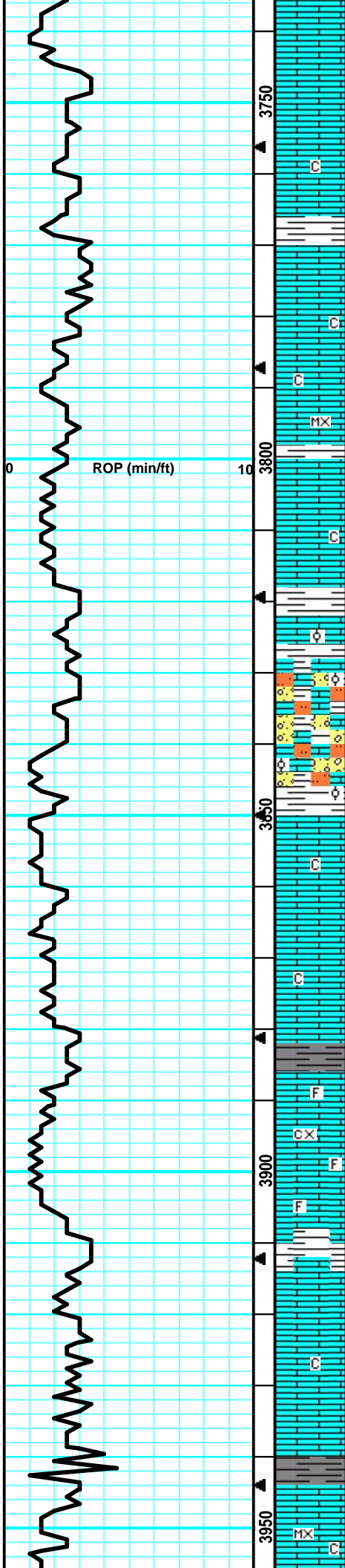
LS: gry/lt tan, slight mott in prt, fn xln, fw foss frags, fw dense, many brittle, sub-chlky, tr-nvp, fw pcs pur chl, no cup odr, ns.

LS: gry/tan, slight mott, fn xln, fw foss frags, fw dense, sm brittle, sub-chlky in prt, tr-nvp, no cup odr, ns.

LS: tan/gry, slight mott, fn xln, sm foss in prt, fw grainy, tr-pr intxln por in fw, fw SH: brn/gry, silty, soft, no cup odr, ns.

LS: gry/tan, slight mott, fn xln, fw foss frags, sm dense, tr-nvp, fw SH: brn/gry, silty, no cup odr, ns.

LS: gry/lt gry, mott in prt, fn xln, many foss, sm dense, fw firm, tr-nvp, fw pcs SH: drk grv, silty, med crush, no



cup odr, ns.

LS: gry/lt gry, slight mott, fn xln, sm dense, fw brittle, sub-chlky, tr-nvp, fw SHt gry, silty, no cup odr, ns.

LS: gry/lt gry, slight mott in prt, fn xln, many dense, sm brittle, sub-chlky in prt, tr-nvp, fw pcs pur clk, no cup odr, ns.

LS: gry/tan, slight mott, fn xln, sm dense, many brittle, sub-chlky in prt, tr-nvp, fw pcs pur chl, no cup odr, ns.

LS: tan/lt tan, sing, fn xln, sm dense, mostly brittle, fw pcs w/ pr inxln por, fw pcs pur chl, no cup odr, ns.

LS: lt tan, sing, fn xln, mostly dense, sub-chlky, sm brittle, fw dense/firm, tr-nvp, fw pcs pur chl, no cup odr, ns.

LS: lt tan/crm, sing, micro-fn xln, mostly dense, sub-chlky, sm brittle, fw firm, tr-nvp, fw pcs pur chl, no cup odr, ns.

LS: tan/lt tan, slight mott, fn xln, sm dense, sm brittle, fw gritty, tr-nvp, fw pcs pur chl, no cup odr, ns.

LS: tan/gry, slight mott, fn xln, sm brittle, many sandy/gritty, tr-? inxln por in sm, fw pcs pur chl, no cup odr, ns.

LS: tan/lt tan, slight mott, fn xln, sm dense, sm brittle, fw gritty, tr-nvp, sm pur chl, no cup odr, ns.

LS: tan/lt tan, slight mott, fn xln, fw ool in prt, mostly brittle, fw sandy/gritty, tr-? inxln por in fw, no cup odr, ns.

LS: lt tan, slight mott in prt, fn xln, fw ool, mostly brittle, fw gritty, tr-? inxln por, no cup odr, ns.

LS: crm/lt tan, sing, fn xln, fw dense, mostly brittle, many v chlky, friable, tr-nvp, svrl pcs pur chl, no cup odr, ns.

LS: lt tan, slight mott, fn xln, fw dense, mostly brittle, fw gritty/grainy, sub-chlky, tr-nvp, no cup odr, ns.

LS: tan/lt tan, slight mott, fn xln, sm dense, mostly brittle, sm grainy, sub-chlky, tr-nvp, fw pcs pur chl, no cup odr, ns.

LS: tan/lt tan, mott in prt, fn xln, fw foss frags, sm dense, many brittle, sub-chlky, tr-nvp, fw SHt gry, silty, no cup odr, ns.

LS: gry/tan, mott in prt, fn-crs xln, fw foss frags, sm dense, sm brittle, fw sub-chlky in prt, tr-nvp, fw SHt gry/gm, silty, soft, no cup odr, ns.

LS: tan/gry, slight mott, fn xln, fw foss, sm dense, sm brittle, sub-chlky in prt, tr-nvp, fw SHt brn/gry, silty, no cup odr, ns.

LS: tan/lt gry, slight mott in prt, fn xln, many dense, sm brittle, fw sub-chlky, tr-nvp, fw SHt brn/gry, silty, no cup odr, ns.

LS: lt tan/lt gry, slight mott, fn xln, sm dense, mostly brittle, fw gritty like, sub-chlky, tr-nvp, fw SHt brn, silty, no cup odr, ns.

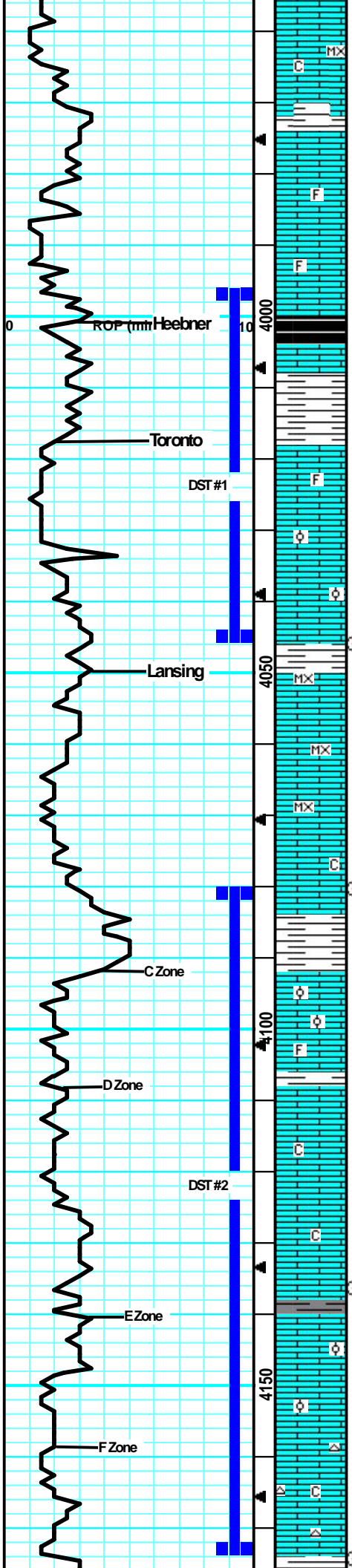
LS: lt tan/gry, slight mott, fn xln, sm dense, many brittle, fw gritty like, sub-chlky in prt, tr-nvp, fw SHt brn, silty, no cup odr, ns.

LS: tra, sing, fn xln, many dense, mostly brittle, sub-chlky in prt, tr-nvp, sm pur chl, sm SHt drk gry, silty, sm soft, no cup odr, ns.

LS: tan/lt tan, sing, micro-fn xln, mostly dense, mostly brittle, sub-chlky, tr-nvp, fw pcs pur chl, fw SHt arv/lt

Mud-Co Check #5 @
3945' 08/07/15

wt	vis	pH
9.0	58	11.5
Flt	chr	LCM
6.4	4K	3#



blu, clay, soft, no cup odr, ns.

LS: tan/lt tan, mostly sing, micro-fn xln, mostly dense, sm brittle, sub-chlky, tr-nvp, fw SHt gry, silty, sm soft, no cup odr, ns.

LS: tan/lt tan, slight mott in prt, fn xln, mostly dense, sm brittle, sub-chlky, tr-nvp, svrl SHt brn/gry, silty, no cup odr, ns.

LS: tan/lt tan, slight mott, fn xln, fw foss frags, sm dense, svrl brittle, sub-chlky in prt, tr-nvp, fw SHt brn, silty, no cup odr, ns.

LS: tan/lt tan, slight mott, fn xln, fw foss frags, sm brittle, fw grainy, sub-chlky, tr-nvp, fw pcs pur chlk, fw SHt brn, silty, no cup odr, ns.

LS: tan/lt gry, slight mott, fn xln, fw dense, mostly brittle, fw gritty, tr-? intxn por in sm, abund SHt blk/brn, silty, many carb, no cup odr, ns.

LS: tan/lt tan, slight mott, fn xln, fw foss frags, mostly brittle, fw dense, tr-nvp, abund SHt blk/brn, silty, many carb, no cup odr, ns.

LS: gry/tan, slight mott, fn xln, many brittle, pr-fr por on edges, 2-3 pcs w/ drk stns on edges, dul yel fluor, strn cut, sso on brk, sml glob of oil float on crush in water, faint-? cup odr.

LS: tan/lt tan, slight mott, fn xln, sm ool, mostly brittle, svrl pcs w/ spstd stns in por, fr-gd intool por, svrl sml sphr of oil on wtr, gd fluor/cut, gd cup odr, fr-gd sfo.

LS: crm/lt tan, sing, micro-fn xln, mostly dense, mostly brittle, sub-chlky, tr-nvp, svrl pcs pur chlk, fw SHt gry/brn, silty, no cup odr, ns.

LS: crm/lt tan, sing, micro-fn xln, mostly dense, many brittle, chlky, tr-nvp, svrl pcs pur chlk, fw SHt drk gry/gm, silty, soft, no cup odr, ns.

LS: lt tan/tan, mostly sing, micro-fn xln, mostly brittle, many dense, mostly chlky, tr-nvp, sm pur chlk, fw SHt gry/gm silty, no cup odr, ns.

LS: lt tan/lt gry, mostly sing, micro-fn xln, mostly dense, sm brittle, fw firm, sub-chlky, tr-nvp, svrl pcs pur chlk, no cup odr, ns.

LS: lt gry/lt tan, mostly sing, fn xln, mostly brittle, dense, sub-chlky, fw pcs w/ 2nd rxln, tr-nvp, fw pcs pur chlk, no cup odr, ns.

LS: lt gry/lt tan, sing, fn xln, mostly brittle, mostly dense, sub-chlky, tr-nvp, abund SHt brn/gry, silty, soft, no cup odr, ns.

LS: lt gry/tan, mostly sing, fn xln, fw pcs ool, many brittle, sm dense, sub-chlky, tr-nvp, fw SHt gry/gm, silty, no cup odr, ns.

LS: tan/lt gry, slight mott i prt, fn xln, v fw foss frags, sm brittle, sm pr scat intxn por on edges, lght brn stns on edge in 2 pcs, dul yel fluor, gd cut, vssfo, no cup odr.

LS: tan/lt tan, mostly sing, fn xln, mostly dense, sm brittle, sub-chlky in prt, tr-nvp, svrl pcs pur chlk, no cup odr, ns.

LS: tan/lt gry, mostly sing, fn xln, sm dense, sm brittle, sub-chlky, fw flakey in prt, tr-nvp, fw pcs pur chlk, no cup odr, ns.

LS: lt gry/tan, mostly sing, fn xln, many dense, sm brittle, fw firm, tr-nvp, fw pcs pur chlk, fw SHt lt gry/gm, silty, no cup odr, ns.

LS: gry/tan, slight mott in prt, fn xln, fw dense, sm brittle, fw firm, sm flakey/mealy, tr-nvp, fw SHt gry, silty, no cup odr, ns.

LS: gry/lt tan, slight mott, fn xln, fw ool, mostly brittle, sm fr intxn por in fw, 1-2 pcs w/ lght brn patchy stns, dul yel fluor, gd cut on brk, wk cup odr, vssfo.

LS: lt gry/lt tan, mostly sing, fn xln, mostly dense, sm firm, tr-pr intxn por in fw, lght brn surf stns, dul yel fluor, fr-gd cut resid, nsfo, faint-wk cup odr.

LS: tan/lt gry, mostly sing, fn xln, many dense, sm brittle, 1 pc w/ fr intxn por w/ sho, mostly likely from above, sm SHt: gry/gm, silty, no cup odr, ns.

LS: tan/lt tan, sing, fn xln, mostly dense, many brittle, sub-chlky in prt, tr-nvp, fw pcs pur chlk, svrl Chert: wht/lt gry, foss, sharp, fw SHt: gry, silty, no cup odr, ns.

DST #1 3996'-4046' "Toronto" 8/7/2015
 30-45-45-60
 1st Blw: Blt to 9.5" (No BB)
 2nd Blw: Blt to BOB in 37" (No BB)
 IFP: 43-157# ISIP: 1082# FFP: 167-232#
 FSIIP: 1074#
 HYD: 1976-1838#
 Rec: 30' OCM (2% Oil), 186' Mud, 122' OCMW (2% Oil, 85% Wtr), 122' MCW (60% Wtr)

Heebner @ 4001' (-696)

Toronto @ 4018' (-713)

Survey @ 4046' = 1/2 Degree

CFS @ 4046'
(30"/60")

Lansing @ 4050' (-745)

CFS @ 4080'
(30"/60")

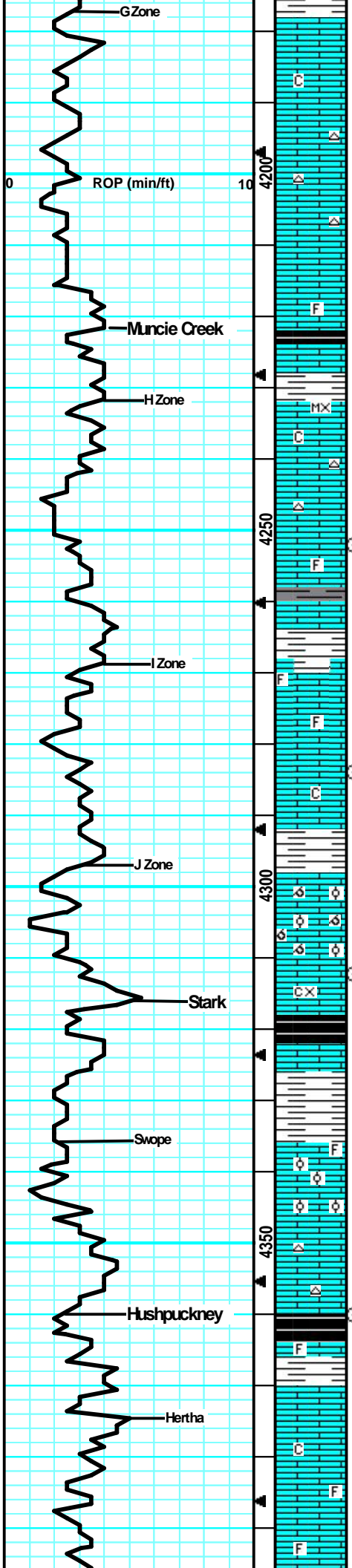
DST #2 4081'-4174' "KCEF" 8/8/2015
 30-45-30-60
 1st Blw: Blt to BOB in 4" (No BB)
 2nd Blw: Blt to BOB in 5" (No BB)
 IFP: 92-381# ISIP: 1176# FFP: 388-542#
 FSIIP: 1177#
 HYD: 1995-1916#
 Rec: 620' MUD, 248' MCW (70% Wtr), 244' MCW (90% Wtr)

CFS @ 4136'
(30"/60")

Mud-Co Check #6 @

4133'	08/08/15	
wt	vis	pH
9.1	67	10.0
Flt	chl	LCM
8.8	6K	3#

CFS @ 4174'



LS: tan/lt tan, sing, fn xln, mostly dense, sm brittle, fw firm, sub-chlky in prt, tr-nvp, svrl pcs pur chlk, fw SH: drk gry/gm, silty, no cup odr, ns.

LS: lt gry/lt tan, sing, fn xln, mostly dense, mostly brittle, sub-chlky, tr-nvp, fw pcs pur chlk, no cup odr, ns.

LS: lt tan/crm, sing, fn xln, dense, brittle, sub-chlky, tr-nvp, svrl pcs pur chlk, sm Chert: wht/lt gry, foss, sharp, no cup odr, ns.

LS: lt tan/tan, sing, fn xln, mostly dense, many brittle, sub-chlky in prt, fw pcs pur chlk, fw Chert: wht/opaque, sharp, no cup odr, ns.

LS: lt gry/lt tan, sing, fn xln, sm dense, many brittle, sub-chlky, sm flakey, tr-nvp, fw Chert: wht/lt gry, sharp, fw SH: gry, silty, no cup odr, ns.

LS: gry/tan, mott in prt, fn xln, sm foss in prt, many flakey/mealy, tr-nvp, svrl SH: blk/gry/gm, silty, many carb, no cup odr, ns.

LS: crm/lt tan, mostly sing, micro-fn xln, dense, brittle, fw firm, sub-chlky, tr-nvp, svrl Chert: wht/opaque, sharp, no cup odr, ns.

LS: crm/lt tan/lt gry, mostly sing, micro-fn xln, many dense, mostly brittle, sub-chlky, tr-nvp, svrl pcs pur chlk, sm Chert: wht/opaque, sharp, no cup odr, ns.

LS: gry/lt tan, slight mott in prt, fn xln, fw foss frags, mostly dense, sm brittle, sub-chlky in prt, tr-nvp, fw SH: brn/lt gry, silty, no cup odr, ns.

LS: lt tan/tan, slight mott, fn xln, fw foss frags, sm dense, sm brittle, sub-chlky in prt, tr-nvp, fw pcs pur chlk, no cup odr, ns.

LS: tan/lt brn, slight mott, fn xln, fw foss frags, fw dense, sm flakey, tr-nvp, 1-2 pcs w/ por lght brn stns, ? fluor, no cut, nsfo.

LS: lt tan/lt gry, slight mott, fn xln, mostly brittle, fw dense, fw pcs w/ por in xln por on edges, 2-3 pcs w/ drk hvy stns on edges, wk fluor, fr cut, vss hvy visc o, no cup odr.

LS: lt gry/lt brn, slight mott, mostly dense, fw firm, fw flakey, fw sub-chlky, tr-nvp, fw SH: gry, silty, no cup odr, ns.

LS: tan/gry, mott in prt, fn xln, mostly dense, sm dense, fw firm, fw flakey, tr-nvp, sub-chlky in fw, fw SH: gry/brn, silty, no cup odr, ns.

LS: lt gry, mott in prt, fn xln, svrl ool, mostly brittle, svrl pcs w/ fr oolcast por, fw sub-chlky, tr-nvp, no cup odr, ns.

LS: lt gry, mott, fn xln, ool, brittle, sm fr oolcast por, fw SH: gry, silty, no cup odr, ns.

LS: gry/tan, mott in prt, fn-crs xln, fw brittle, many flakey/mealy, pr-fr in xln por in sm, svrl SH: blk/drk gry, silty, carb, no cup odr, ns.

LS: gry/tan, slight mott in prt, fn xln, many dense, sm firm, fw chlky, tr-nvp, fw SH: brn/gry, silty, no cup odr, ns.

LS: lt tan/lt gry, slight mott, fn xln, sm foss/ool, sm dense, many brittle, chlky, tr-nvp, sm pur chlk, no cup odr, ns.

LS: tan/lt gry, mott in prt, fn xln, sm v foss/ool, mostly brittle, sm firm, tr-pr infoss por in fw, 2nd rxln in prt, svrl pcs pur chlk, no cup odr, ns.

LS: tan/lt tan, mostly sing, fn xln, mostly dense, sm brittle, tr-nvp, fw pcs pur chlk, fw Chert: gry, sharp, no cup odr, ns.

LS: gry/tan, mott, fn xln, sm foss, fw dense, sm firm, sm 2nd rxln, flakey, tr-nvp, svrl SH: blk/drk gry, carb, sm silty, no cup odr, ns.

LS: gry/lt gry, most sing, fn xln, many dense, sm firm, sub-chlky in prt, fw flakey, tr-nvp, fw SH: blk, sm carb, no cup odr, ns.

LS: lt gry/lt tan, slight mott, fn xln, fw foss, sm brittle, sm flakey/mealy, chlky, tr-nvp, fw pcs pur chlk, no cup odr, ns.

LS: lt gry/tan, slight mott, fn xln, fw foss in prt, sm dense, many brittle, sub-chlky, tr-nvp, sm SH: gry,

(30"/60")

Muncie Creek @ 4222' (-917)

CFS @ 4252'
(30"/60")

CFS @ 4254'
(30"/60")

CFS @ 4312'
(30"/60")

Stark @ 4316' (-1011)

Mud-Co Check #7 @
4355' 08/09/15

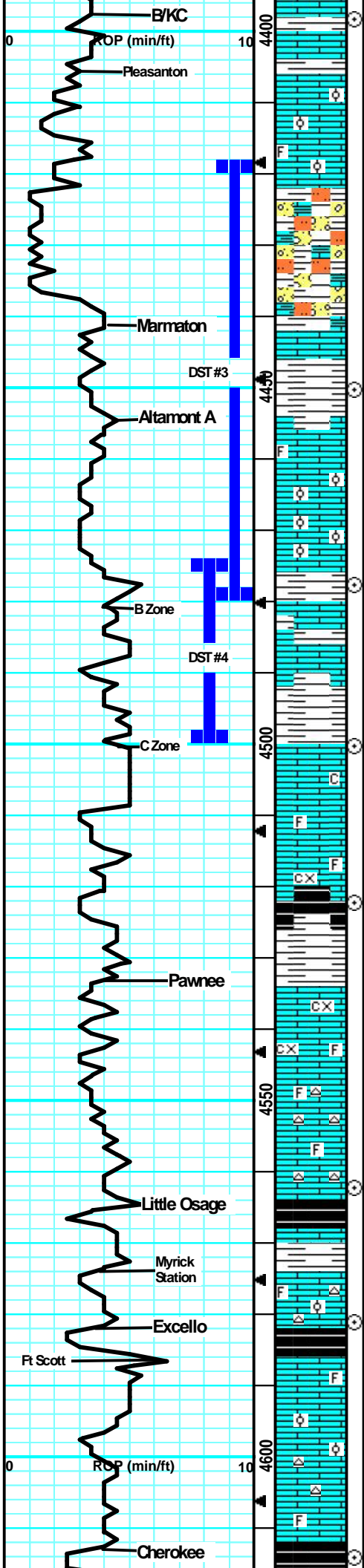
wt	vis	pH
9.3	54	11.0
Flt	chl	LCM
8.8	6.6K	3#

CFS @ 4360'
(30"/60")

Hushpuckney @ 4364' (-1055)

B/KC @ 4397' (-1092)

CFS @ 4398'



On 8/9/2015 Between tour change, no 4420' sample was collected.

LS: lt gry/lt tan, mott in prt, fn xln, sm ool, many brittle, sm flakey like, tr-? intxln por, fw pcs chlk, svrl SH: brn/gry, silty, no cup odr, ns.

LS: lt gry/tan, slight mott, fn xln, sm foss/ool, mostly brittle, sub-chlky, tr-nvp, fw pcs pur chlk, svrl SH: brn/gry, silty, no cup odr, ns.

LS: tan/gry, slight mott, fn xln, dense, sm brittle, tr-nvp, fw SS: gry, fn grn, arg, silty, tr-nvp, fw SltStr: gry/blu, gritty, friable, svrl SH: gry/blu, silty, soft, no cup odr, ns.

LS: tan/lt tan, slight mott, fn xln, many dense, 2 pcs w/ scat fn ppt intxln por, sat stns, dul yel fluor, strn cut, vssfo on brk no cup odr.

LS: tan, mostly sing, fn xln, mostly dense, 3 pcs w/ ppt intxln por. patchy stns, dul yel fluor, vssfo, no cup odr.

LS: tan/lt gry, slight mott, fn xln, fw foss, mostly brittle, sub-chlky, fr-gd intxln por, lght brn sppty stain, gld fluor, strn cut, fr sfo on brk, faint-wk cup odr.

LS: tan/lt gry, mott, fn xln, sm v ool, mostly brittle, gd intool/vuggy por in many pcs, drk hvy sat stns, grt fluor/cut, gd cup odr, gd sfo.

30" Smpl: much of the sho desc above, less pieces w/ sho, more, LS: lt gry, dense, brittle, tr-nvp, wk cup odr, fr sfo.

LS: lt gry/lt tan, slight mott in prt, fn xln, mostly dense, sm brittle, sm scat ppt intxln por, fn salt/pep stain in 5-6 pcs, dul yel fluor, strn cut, sml sphr of oil cling on brk, ssfo, fr cup odr.

LS: tan/lt tan, mostly sing, micro-fn xln, mostly dense, many brittle, pr ppt intxln por, scat patchy lght brn stns, dul yel fluor, gd cut, fr odr, vssfo on cruch.

LS: tan/gry, slight mott, fn xln, many brittle, many flakey/melay, fw sub-chlky, tr-nvp, fw pcs pur chlk, no cup odr, ns.

LS: gry/tan, slight mott, fn xln fw foss frags, sm dense, many brittle, sm flakey/mealy, 2nd rxln in prt, tr-nvp, sm SH: blk/drk gry, silty fw carb, no cup odr, ns.

LS: gry/tan/lt brn, mott, fn-crs xln, fw dense, many firm, many flakey/mealy, tr-nvp, abund SH: gry/blk, silty, fw carb, no cup odr, ns.

LS: gry/tan, sing, fn xln, mostly dense, sm firm, sub-chlky, fw flakey, tr-nvp, fw pcs pur chlk, no cup odr, sn.

LS: gry/tan, slight mott, fn-crs xln, many foss, sm firm, many flakey/melay, fw sub-chlky, tr-nvp, no cup odr, ns.

LS: tan/gry, mott in prt, fn xln, fw foss frags, many firm, fw flakey, tr-nvp, fw Chert: gry/smokey, sharp, fw SH: gry, silty, med crush, no cup odr, ns.

LS: gry/lt brn, mott in prt, fn xln, fw foss, flakey/mealy, tr-nvp, sm Chert: gry, foss, sharp, svrl SH: blk, carb, friable, no cup odr, ns.

LS: tan/gry, mott, fn xln, foss/ool in prt, many brittle, fw dense, sm brittle, sub-chlky in prt, tr-nvp, no cup odr, ns.

LS: gry/tan, mostly mott, fn xln, many profus foss/ool, many dense, sm firm, tr-nvp, fw Chert: gry/wht, foss/ool, sharp, abund SH: blk, carb, no cup odr, ns.

LS: gry/tan, mott in prt, fn xln, sm ool, sm dense, many brittle, sm flakey/mealy, tr-? intxln por in fw, no cup odr, ns.

LS: tan/gry, slight mott, fn xln, fw foss, sm brittle, fw flakey/mealy, tr-nvp, fw Chert: wht/gry, foss, sharp, no cup odr, ns.

LS: gry/lt brn, slight mott, fn xln, sm foss crin/frags, sm dense, fw flakey/mealy, tr-nvp, sm SH: gry/blk, fw silty, sm carb, no cup odr, ns.

(30"/60")

DST #3 4418'-4480' "Altamont A" 8/9/2015
30-45-45-60
1st Blw: Blt to BOB in 3" (BB blt to 1/8")
2nd Blw: Blt to BOB in 3" (No BB)
IFP: 170-394# ISIP: 1021# FFP: 430-618# FSP: 1021#
HYD: 2248-2084#
Rec: 826' MCGO (85% Oil, 10% Gas), 124' MCGO (65% Oil, 25% Gas), 248' MCGO (50% Oil, 25% Gas), 122' GCMO (60% Oil, 10% Gas), 122' GCMO (80% Oil, 10% Gas)

Marmaton @ 4441' (-1136)

CFS @ 4450'
(30"/60")

DST #4 4475'-4500' "Altamont B"
8/10/2015 30-30-30-30
1st Blw: No Blw (No BB)
2nd Blw: No Blw/flushed, Wk blw dead instantly (No BB)
IFP: 21-23# ISIP: 48# FFP: 20-23# FSP: 167#
HYD: 2230-2147#
Rec: 2' Mud

CFS @ 4478'
(30"/60")

Mud-Co Check #8 @
4480' 08/10/15
wt vis pH
9.1 50 10.5
Filt chlr LCM
9.6 7.2K 2#

CFS @ 4500'
(30"/60")

Survey @ 4500' = 3/4 Degree

CFS @ 4522'
(30"/60")

Pawnee @ 4534' (-1229)

Mud-Co Check #9 @
4572' 08/11/15
wt vis pH
9.1 55 11.0
Filt chlr LCM
7.2 6K 2#

CFS @ 4562'
(30"/60")

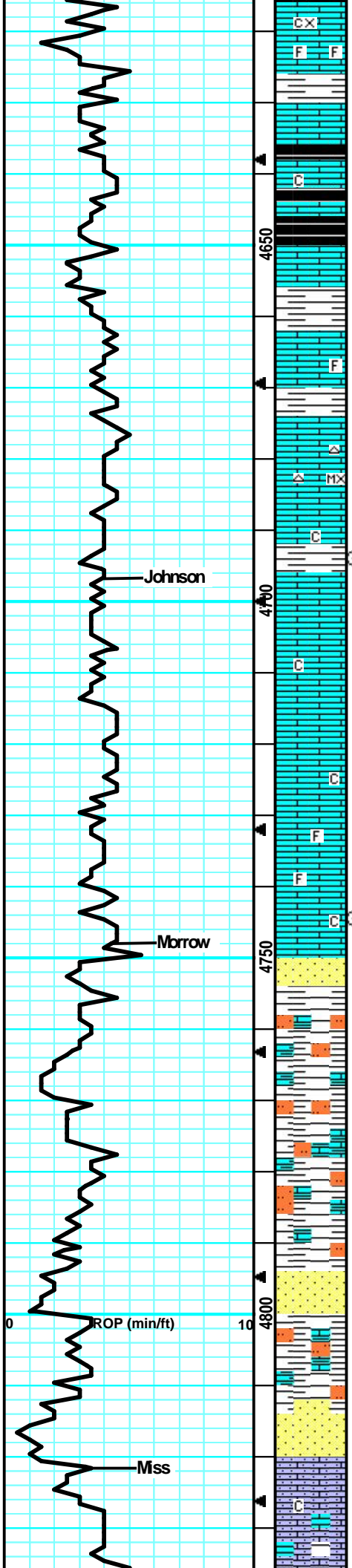
Little Osage @ 4565' (-1260)

CFS @ 4581'
(30"/60")

Excelllo @ 4582' (-1277)

Cherokee @ 4613' (-1308)

CFS @ 4614'



LS: tan/lt gry, mott in prt, fn-crs xln, fw foss frags, mostly brittle, fw flakey/mealy, tr-nvp, fw SH: blk, carb, no cup odr, ns.

LS: tan/lt gry, slight mott, fn xln, fw foss/ool, mostly brittle, fw flakey/mealy, tr-nvp, fw pcs pur chlk, fw SH: drk gry/blk, silty, fw carb, no cup odr, ns.

LS: lt brn/lt gry, slight mott, fn xln, mostly dense, many firm, sub-chlky in prt, tr-nvp, sm SH: gry/blk, many silty, fw carb, no cup odr, ns.

LS: lt brn/gry, slight mott, fn xln, mostly dense, sm firm, sub-chlky, fw flakey, tr-nvp, fw SH: drk gry, silty, sm firm, no cup odr, ns.

LS: lt gry/gry, slight mott, fn xln, mostly dense, sm firm, fw flakey, tr-nvp, fw SH: gry/drk gry, silty, soft, no cup odr, ns.

LS: gry/lt brn, slight mott in prt, fn xln, fw foss, mostly dense, many firm, fw flakey, tr-nvp, svrl SH: drk gry/blk, silty, sm carb, no cup odr, ns.

LS: tan/gry, mostly sing, fn xln, mostly dense, many firm, fw sub-chlky, tr-nvp, fw Chert: brn, foss, trip, sharp, fw SH: gry, silty, no cup odr, ns.

LS: tan/lt tan, sing, micro-fn xln, mostly dense, sub-chlky, fw flakey, tr-nvp, fw Chert: wht/tan, foss, sharp, fw SH: gry, silty, no cup odr, ns.

LS: tan/gry, slight mott, fn xln, mostly dense, sm firm, sub-chlky, flakey, tr-nvp, sm SH: gry/brn, silty, sm soft, no cup odr, ns.

LS: tan/gry, slight mott, fn xln, fwdense, sm brittle, fw flakey, sub-chlky in prt, tr-nvp, abund SH: drk gry/gry, silty, soft, no cup odr, ns.

LS: gry/tan, slight mott, fn xln, mostly dense, sm firm, sub-chlky in fw, tr-nvp, abund SH: gry/grn, silty, soft, no cup odr, ns.

LS: tan/lt tan, slight mott, fn xln, mostly dense, fw firm, sub-chlky, fw flakey, tr-nvp, abund SH: gry/blu/grn, silty, soft, no cup odr, ns.

LS: tan/lt tan, slight mott, fn xln, mostly dense, fw brittle, sub-chlky, fw flakey, tr-nvp, abund SH: gry/blu, silty, no cup odr, ns.

LS: lt tan/tan, slight mott, fn xln, v fw foss frags, sm dense, mostly brittle, sub-chlky in prt, tr-nvp, svrl SH: gry/brn/grn, silty, no cup odr, ns.

LS: tan/gry, slight mott, fn xln, sm dense, many brittle, sm flakey, sub-chlky, tr-nvp, abund SH: gry/blu, silty, soft, fw gritty, no cup odr, ns.

LS: gry/tan, slight mott, fn xln, fw foss frags, mostly dense, sm hard, fw sub-chlky, tr-nvp, svrl SH: gry/grn/brn, silty, sm v soft, fw gritty, no cup odr, ns.

SH: gry/grn/brn, silty, sm soft, fw waxy, fw SS: grn, fn-crs xln, sub-rnd, arg, glauc, firm, tr-nvp, no cup odr, ns.

SH: drk gry/grn/brn, silty, soft, fw waxy, fw StStr: lt gry, gritty friable, soft, fw SS: grn, crs grn, sub-rnd, arg, friable, glauc, tr-nvp, no cup odr, ns.

SH: drk gry/grn, silty, soft, fw StStr: lt gm/lt gry, gritty, friable, fw LS: lt tan, mott, fn xln, sub-chlky, brittle, tr-nvp, no cup odr, ns.

SH: gry/drk gry/grn, silty, soft, fw StStr: lt gry/lt gry, gritty, friable, v soft, fw LS: lt tan/lt gry, mott, fn xln, brittle, tr-nvp, no cup odr, ns.

SH: gry/grn/lt brn, silty, v soft, friable, fw SS: gry/wht, fn grn, arg, sub-chlky, friable, brittle, glauc, tr-? intgrn por, no cup odr, ns.

SH: gry/grn, silty, soft, friable, fw SS: gry/grn, fn-crs xln, arg, sub-rnd, sm firm, glauc, tr-nvp, no cup odr, ns.

SS: gry/grn/lt gry, fn-crs grn, arg, silc, firm, fw friable, sm glauc, tr-nvp, fw StStr: lt gry, v fn grn, gritty, firm, tr-nvp, abund SH: gry/grn, silty, soft, no cup odr, ns.

LS: crm/lt tan, slight mott, fn xln, sandy/gritty, sm brittle, sub-chlky, sm friable, tr-nvp, sm SH: gry/grn, silty, sm soft, no cup odr, ns.

LS: cram/lt tan, slight mott in prt, fn xln, mostly sandy/gritty, sub-chlky, fw brittle, sm flakey/mealy,

(30"/60")

CFS @ 4694'
(30"/60")

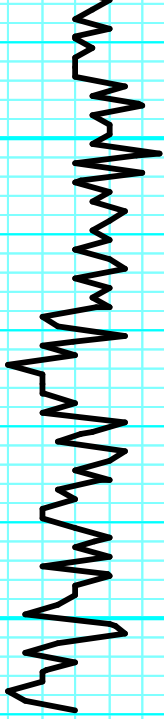
Johnson @ 4697' (-1392)

CFS @ 4744'
(30"/60")

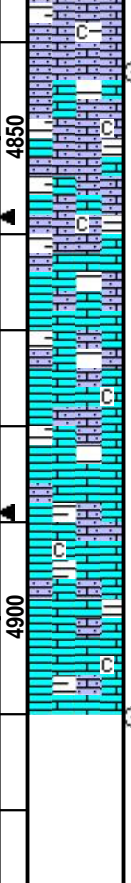
Morrow @ 4748' (-1443)

Miss @ 4822' (-1517)

Abund of shale slto



RTD 4910' (-1605)
LTD 4909' (-1604)



tr-nvp, svrl SHt gry/drk gry, silty, soft, no cup odr, ns.

SHt gry/drk gry/grn, silty, soft, fw friable, fw LS: crm/lt tan, slight mott, fn xln, sandy/gritty, sub-chlky, fw friable, tr-nvp, no cup odr, ns.

LS: lt tan, slight mott, fn xln, sandy/gritty in prt, sm dense, mostly brittle, sub-chlky, tr-nvp, svrl SHt drk gry/bm/grn, silty, fw fissile, no cup odr, ns.

LS: lt tan/crm, slight mott, fn xln, sm sandy/gritty, sub-chlky, fw dense/brittle, tr-nvp, svrl SHt drk gry/bm, silty, fw fissile, no cup odr, ns.

LS: lt tan, slight mott, fn xln, fw sandy/gritty, sub-chlky, fw dense, tr-nvp, svrl SHt gry/bm, silty, many soft, no cup odr, ns.

LS: tan/lt tan, mostly sing, fn xln, fw sandy/gritty, sm brittle, fw dense, tr-nvp, svrl SHt gry, silty, soft, no cup odr, ns.

LS: lt tan, mostly sing, fn xln, dense, sm brittle, sub-chlky in prt, tr-nvp, abund SHt gry/bm, silty, soft, no cup odr, ns.

LS: lt tan, slight mott, fn xln, many dense, sm brittle, sub-chlky in prt, tr-nvp, abund SHt gry, silty, soft, no cup odr, ns.

CFS @ 4843'
(30"/60")

Mud-Co Check #10 @
4860' 08/12/15

wt	vis	pH
9.3	54	11.0
Filt	chl	LCM
8.0	5K	3#

Survey @ 4910' = 3/4 Degree

CFS @ 4910'
(30"/60")

Length in samples. Most likely Morrow rocks



RITCHIE

EXPLORATION, INC.
Wichita, Kansas

#1 D. Schumacher

1830' FNL & 1020' FWL

150' N & 30' E of E/2 SW NW Section 23-15S-36W

Logan County, Kansas

API# 15-109-21428-0000

Elevation: GL: 3294', KB: 3305'

Sample Tops			Ref. Well
Anhydrite	2565'	+740	+7
B/Anhydrite	2587'	+718	+3
Heebner	4001'	-696	+2
Toronto	4017'	-712	+10
Lansing	4053'	-748	+3
Muncie	4222'	-917	+1
Stark Shale	4317'	-1012	Flat
Hush	4358'	-1053	+1
BKC	4399'	-1094	+1
Marmaton	4442'	-1137	+2
Altamont	4453'	-1148	-1
Pawnee	4530'	-1225	+2
Myrick	4574'	-1269	Flat
Fort Scott	4586'	-1281	+3
Cherokee	4613'	-1308	+4
Johnson	4699'	-1394	+3
Morrow	4750'	-1445	+1
Mississippian	4821'	-1516	+5
RTD	4910'	-1605	

ALLIED OIL & GAS SERVICES, LLC

Federal Tax I.D. #20-5975804

067830

REMIT TO P.O. BOX 93999
SOUTHLAKE, TEXAS 76092

SERVICE POINT: Ocala, KS

DATE <u>8-3-15</u>	SEC. <u>23</u>	TWP. <u>15</u>	RANGE <u>36</u>	CALLED OUT	ON LOCATION <u>5:30pm</u>	JOB START <u>6:30pm</u>	JOB FINISH <u>7:00pm</u>
LEASE <u>D. Schumacher</u>		WELL # <u>1</u>	LOCATION <u>Russell Spring, S to Dakota Rd</u>		COUNTY <u>Logan</u>	STATE <u>KS</u>	
OLD OR <u>(NEW)</u> (Circle one)			<u>E to Rd 200, 1/4 S, E into</u>				

CONTRACTOR Martin 21 OWNER Same

TYPE OF JOB Surface
 HOLE SIZE 12 1/4 TD. 216'
 CASING SIZE 8 5/8 DEPTH 216'
 TUBING SIZE _____ DEPTH _____
 DRILL PIPE _____ DEPTH _____
 TOOL _____ DEPTH _____

CEMENT
AMOUNT ORDERED 165 sks com 3% CC
2 1/2 gal

PRES. MAX _____ MINIMUM _____
 MEAS. LINE _____ SHOE JOINT _____
 CEMENT LEFT IN CSG. 15
 PERFS. _____
 DISPLACEMENT 12.50 bbl H₂O

COMMON 165 sks @ 17.90 2953.50
 POZMIX _____ @ _____
 GEL 370# @ .50 185.00
 CHLORIDE 965 # @ 1.10 517.50
 ASC _____ @ _____

EQUIPMENT
 PUMP TRUCK # 431 CEMENTER Paul Bauer
 HELPER Brandon Wilkerson
 BULK TRUCK # 891/287 DRIVER Alan Ryan
 BULK TRUCK # _____ DRIVER _____

_____ @ _____
 _____ @ _____
 _____ @ _____
 _____ @ _____
 _____ @ _____
 _____ @ _____
 _____ @ _____
 _____ @ _____
 _____ @ _____
 _____ @ _____
 _____ @ _____
 _____ @ _____

TOTAL 3,620.00

DISCOUNT 40% 1448.00

REMARKS:
Mix 165 sks
Displacement water
cement did circ.
5 bbl to pit
Thank you!
Paul + crew

SERVICE

HANDLING 178.42 ft³ @ 2.48 442.48
 MILEAGE P. 14 hrs 155 mi x 2.75 1231.18
 DEPTH OF JOB 216'
 PUMP TRUCK CHARGE _____ 1512.25
 EXTRA FOOTAGE _____ @ _____
 HV MILEAGE 55 @ 7.90 423.50
 LV MILEAGE 55 @ 4.40 242.00

TOTAL 3,851.41

DISCOUNT 40% 1540.56

CHARGE TO: Ritchie
 STREET _____
 CITY _____ STATE _____ ZIP _____

PLUG & FLOAT EQUIPMENT

_____ @ _____
 _____ @ _____
 _____ @ _____
 _____ @ _____
 _____ @ _____
 TOTAL _____
 DISCOUNT _____ %

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

PRINTED NAME Ivan Tinoco
 SIGNATURE Ivan Tinoco

SALES TAX (If Any) _____
 TOTAL CHARGES 7,471.41
 DISCOUNT 2,988.56 (40%) IF PAID IN 30 DAYS
 NET TOTAL 4,482.84 IF PAID IN 30 DAYS



CONSOLIDATED
Oil Well Services, LLC

PO Box 884, Chanute, KS 66720
620-431-9210 or 800-467-8676

3919
3832

TICKET NUMBER 49515

LOCATION Oakley, KS

FOREMAN Jeremy R

FIELD TICKET & TREATMENT REPORT
CEMENT

INVOICE # 805393

KS

DATE	CUSTOMER #	WELL NAME & NUMBER	SECTION	TOWNSHIP	RANGE	COUNTY
8/17/15	7173	Shoemaker 10	23	155	36W	Logan
CUSTOMER Ritchie EXP		Russell springs S to Oakley E to 200 1/2 S E into	TRUCK #	DRIVER	TRUCK #	DRIVER
MAILING ADDRESS			753	Mike R	.	
CITY			5284 T129	Collins		
STATE						
ZIP CODE						

JOB TYPE Port collar HOLE SIZE 2 7/8 HOLE DEPTH _____ CASING SIZE & WEIGHT _____
 CASING DEPTH _____ DRILL PIPE _____ TUBING _____ OTHER PC 2517
 SLURRY WEIGHT 12.8 SLURRY VOL _____ WATER gal/sk _____ CEMENT LEFT in CASING _____
 DISPLACEMENT 14 DISPLACEMENT PSI _____ MIX PSI _____ RATE _____

REMARKS: Safety meeting and rig up on well pressured up tool to 1200 open tool checked for blow tied on tubing mixed 300 lbs 60/40 8% gel 1/16 fls with 300lb HULLS closed tool pressured to 1200lb let stand 5 minutes ran 5 joints of tubing reversed out job done.

Cement did circulate

THANK YOU
Kelly & crew

ACCOUNT CODE	QUANTITY or UNITS	DESCRIPTION of SERVICES or PRODUCT	UNIT PRICE	TOTAL
CE0454	1	PUMP CHARGE	1900.00	1900.00
CE0002	50	MILEAGE	7.15	357.50
CE0710			1	
	13.95	ton mileage delivery	1.75	1220.62
CC5831	300	Lite-weight Blend VIII (60:40:8)	17.50	5250.00
CC6075	75	Celloflake	2.00	150.00
CC6080	500	Cotton Seed HULLS	0.50	250.00
		Subtotal		9128.12
		less 30% disc		2738.44
		Total		6389.68
		SALES TAX		316.41
		ESTIMATED TOTAL		6706.09

Ravin 3737

AUTHORIZATION

TITLE

DATE

I acknowledge that the payment terms, unless specifically amended in writing on the front of the form or in the customer's account records, at our office, and conditions of service on the back of this form are in effect for services identified on this form.



CONSOLIDATED
Oil Well Services, LLC

PO Box 884, Chanute, KS 66720
620-431-9210 or 800-467-8676

FIELD TICKET & TREATMENT REPORT
CEMENT

3877
3796

TICKET NUMBER 47815
LOCATION Oakley KS
FOREMAN Jerry Y
Mus S

84

DATE	CUSTOMER #	WELL NAME & NUMBER	SECTION	TOWNSHIP	RANGE	COUNTY
8-13-15	7173	Shoemaker 1D	23	15S	36W	Logan
CUSTOMER			TRUCK #	DRIVER	TRUCK #	DRIVER
MAILING ADDRESS			693	Cody R		
CITY				Lance R		
STATE		ZIP CODE				

JOB TYPE long string HOLE SIZE 7 7/8 HOLE DEPTH 4910 CASING SIZE & WEIGHT 5 1/2 15.5 #
CASING DEPTH 4894' DRILL PIPE _____ TUBING _____ OTHER PCE 2577
SLURRY WEIGHT 14.2 SLURRY VOL. 1.42 WATER gal/sk _____ CEMENT LEFT in CASING 21'
DISPLACEMENT 115.95 DISPLACEMENT PSI _____ MIX PSI _____ RATE _____

REMARKS: Safety meeting and rig up on Martin 21 run & lost equip turbos on 1, 2, 5, 6, 7, 8, 12, 56, 58; 75 baskets on 9, 57, 74 Port Collar top of 57 @ 2577 run casing to bottom pump ball then circulate 1 hr pump 5 bbl H₂O mix mud flush pump 5 bbl H₂O spacer mix 200 sks Thixobland III 5# Kalseal 14# FL 115 1/4# CAF 38 per sk shut down clean pump & lines & release plug displace with 116 bbl fresh water plug landed @ 1100' with 1100' final lift released back & float held press to 500' & shut in

30 sks Rh 20 sks MH

Thank you Jerry & crew

P.C.S.N. 1501148

ACCOUNT CODE	QUANTITY or UNITS	DESCRIPTION of SERVICES or PRODUCT	UNIT PRICE	TOTAL
CE0454	1	PUMP CHARGE	3900 ⁰⁰	3900 ⁰⁰
CE0002	50	MILEAGE	7 ¹⁵	357 ⁵⁰
CE0710	11.75	ton mileage delivery	1 ¹⁵	1028 ¹²
CC5862	250 sks	Thixobland III (OWC)	26 ⁰⁰	6500 ⁰⁰
CC6677	1250 #	Kalseal	50	6250 ⁰⁰
CC6028	59 #	FL 115	13 ²²	781 ²⁵
CC6155	36 #	CAF 38	10 ²⁰	367 ²⁰
CC625	500 gal	mud flush	65	325 ⁰⁰
CP8433	1	5 1/2 AFU float shoe	250 ⁰⁰	250 ⁰⁰
CP8576	10	5 1/2 turbalizers	110 ⁰⁰	1100 ⁰⁰
CP8629	3	5 1/2 baskets	385 ⁰⁰	1155 ⁰⁰
CP8776	1	5 1/2 Port collar	2850 ⁰⁰	2850 ⁰⁰
CP8254	1	5 1/2 latch down gusy	400 ⁰⁰	400 ⁰⁰
			Subtotal	19639 ⁵⁵
			less 30% disc	5891 ²²
			Subtotal	13747 ⁶⁵
			SALES TAX	1148 ³²
			ESTIMATED TOTAL	14896 ⁰¹

Flavin 9737

AUTHORIZATION Guy Row TITLE _____ DATE _____

I acknowledge that the payment terms, unless specifically amended in writing on the front of the form or in the customer's account records, at our office, and conditions of service on the back of this form are in effect for services identified on this form.