

Wellsite Services, LLC

John Goldsmith
(316) 640-0236

427 Roosevelt St.
Cheney, KS 67025

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

Well Name: #1 Beagley 24C
API: 15-109-21510
Location: 595' FSL & 1,180' FWL, Sec 24-15S-36W, S/2 SW
License Number: REI #4767
Spud Date: 7/20/2017
Surface Coordinates: LAT: 38.7318531
LONG: -101.2761180
Bottom Hole Vertical Hole
Coordinates: 1 Degree Deviation
Ground Elevation (ft): 3276'
Logged Interval (ft): 3750' To: RTD
Formation: Mississippian at RTD
Type of Drilling Fluid: Chemical

Region: Logan County
Drilling Completed: 7/28/2017

K.B. Elevation (ft): 3281'
Total Depth (ft): 4910'

Printed by MUD.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: WellSite Services LLC
Address: 427 Roosevelt St.
Cheney, KS 67025
(316) 640-0236

RIG RECORDS

Contractor: WW Drilling Rig #10
Pusher: Ricky Hilgers

Collar Tally: 441'

Pump: National K-380
Liner & Stroke: 6 x 14

BIT RECORDS

Size:	Type:	Footage:	Condition:	Hours:	Serial #:
12 1/4"	Sm-tooth	0-232'	RR	2.25	RH 6605
7 7/8"	Sm-F27	232'-4910'	New	92.25	RJ 3489

COMMENTS

Surface Casing: 5 joints of 8 5/8" set @ 232'
Production Casing: No production casing was set.
Mud by: MudCo
DST's by: Trilobite Testing
Logs by: Halliburton (DIL, CN-CD, ML)
RTD=4910' LTD=4908'

FORMATION TOPS

FORMATION	SAMPLE TOPS		LOG TOPS	
	Depth	Datum	Depth	Datum
B/Anhydrite	2568'	+713	2566'	+711
Stotler	3636'	-355	3634'	-353
Heebner Shale	3995'	-714	3993'	-712
Toronto	4010'	-729	4009'	-728
Lansing	4031'	-750	4029'	-748
Muncie Creek Shale	4218'	-937	4217'	-936
Stark Shale	4318'	-1037	4316'	-1035
Hushpuckney Shale	4360'	-1079	4358'	-1077
Base of KC	4394'	-1113	4392'	-1111
Marmaton	4438'	-1157	4436'	-1155
Altamont	4448'	-1167	4447'	-1166
Pawnee	4520'	-1239	4518'	-1237
Myrick	4568'	-1287	4565'	-1284
Ft Scott	4579'	-1298	4577'	-1296
Cherokee Shale	4608'	-1327	4605'	-1324
Johnson Zone	4670'	-1389	4668'	-1387
Morrow	4742'	-1461	4741'	-1460
Mississippian	4832'	-1551	4831'	-1550
RTD	4910'	-1629		
LTD			4908'	-1627

DST's

DST #1 "Altamont A" 4438'-4470' 7-25-17 30-30-30-30

1st Blw: Wk surf blw dead in 4min (No BB)

2nd Blw: No blw, flushed and no blw (No BB)

IFP: 18-17# ISIP: 21# FFP: 16-19# FSIP: 22#

Hyd: 2242-2175#

Rec: 1' Mud.

DST #2 "Altamont B/C" 4468'-4514' 7-26-17 30-30-30-30

1st Blw: Lght surg on open, then dead (No BB)

2nd Blw: No blw, flushed, lght surg, then dead (No BB)

IFP: 18-17# ISIP: 24# FFP: 16-18# FSIP: 27#

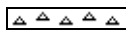
Hyd: 2178-2151#

Rec: 1' Mud w/ oil spots in tool.

ROCK TYPES



Anhy



Cht



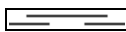
Congl



Dol



Lmst



Shale



Sltst



Ss



Carb sh



Sandy lms



Shaly ls

ACCESSORIES

EVENTS

Circ

Conn

FOSSIL

Brach

Bryozoa

Crin



Foram



Fossil



Gastro



Oolite



Ostra



Fuss



Oolcast

MINERAL

Calc

Chtdk

Chtlt

Glau

Pyr

Sil

TEXTURE

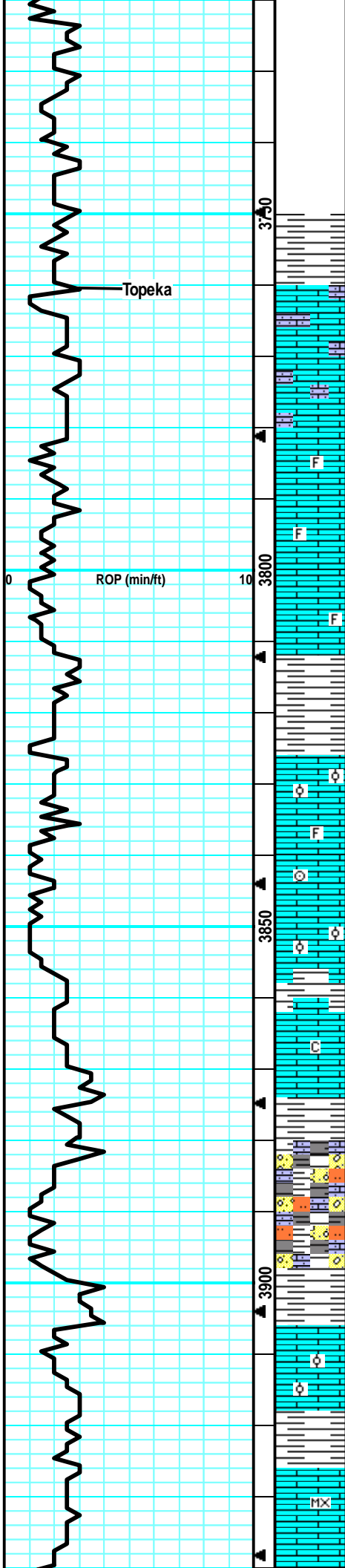
Chalky

CrsxlIn

FinexIn

MicroxIn

<p>Drilling Time</p> <p>ROP (min/ft) ———</p>	<p>Depth</p>	<p>Lithology</p>	<p>CFS Point</p>	<p>Oil Shows</p>	<p>Geological Descriptions</p>	<p>Remarks</p>
	<p>2550</p> <p>3600</p>	<p>Anhydrite</p> <p>B/Anhydrite</p>		<p>Morning Report/Activity</p> <p>July 20, 2017: Spud 2:30pm</p> <p>7/21/17: drlg @ 863'</p> <p>7/22/18: drly @ 3000'</p> <p>7/23/17: drlg @ 3855'</p> <p>7/24/17: drlg @ 4160'</p> <p>7/25/17: DST #1 (Altamont "A")</p> <p>7/26/17: DST #2 (Altamont "B/C")</p> <p>7/27/17: drlg @ 4657'</p> <p>7/28/17: RTD = 4910'</p>	<p>Survey @ 232' = 1/2 Degree</p> <p>Anhydrite @ 2549' (+732)</p>	<p>B/Anhydrite @ 2568' (+713)</p> <p>MudCo Check #2 @ 3098'</p> <p>07/22/17 @ 8:30am</p> <p>Wt: 9.5 Vis: 30</p> <p>pH: 7.0 Fil: n/c</p> <p>Chir: 68K LCM: 2#</p>
	<p>3600</p> <p>3650</p> <p>3700</p>	<p>Stotler</p>		<p>DT begins @ 3600' on 7/23/17</p>	<p>Stotler @ 3636' (-355)</p>	



Samples caught @ 3750' on 7/23/17

SH: gry/brn, silty, mostly soft, v fw LS: gry, slght mott, fn xln, tr-nvp, no odr, ns.

LS: tan/gry, slght mott, fn xln, many dense, fw sand grns, tr-nvp, no cup odr, ns.

LS: crm/lt gry, sing, fn xln, fw foss, frags, mostly brittle, fw sub-chlky, tr-nvp, no cup odr, ns.

LS: crm/lt tan, sing, fn xln, v fw foss frags, mostly britl, sub-chlky, tr-nvp, no cup odr, ns.

SH: drk gry/gry, silty, sm v soft, fissile

LS: lt tan/gry, slght mott, fn xln, fw ool, many brittle, tr-nvp, fw SH: gry, silty, soft, no odr, ns.

LS: gry/tan, slght mott, fn xln, fw foss frags, mostly dense, firm, tr-nvp, no cup odr, ns.

LS: tan/gry, mott in prt, fn xln, foss w/ crin/frags, sm firm, tr-nvp, no cup odr, ns.

LS: tan, slght mott, fn xln, fw ool, mostly brittle, sub-chlky, fw pcs w/ scat vug por, no cup odr, ns.

LS: lt gry/tan, sing, fn xln, mostly dense, sm brittle, sub-chky in prt, tr-nvp, no cup odr, ns.

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

LS: gry, mott, fn xln, sandy/flakey, mealy, brittle, sm friabl, tr-nvp, sm SH: gry/brn, silty, fw drk gry, no cup odr, ns.

SH: gry/drk gry, silty, soft, fw SlStn: lt brn, gritty, friable, v soft, no odr, no sho.

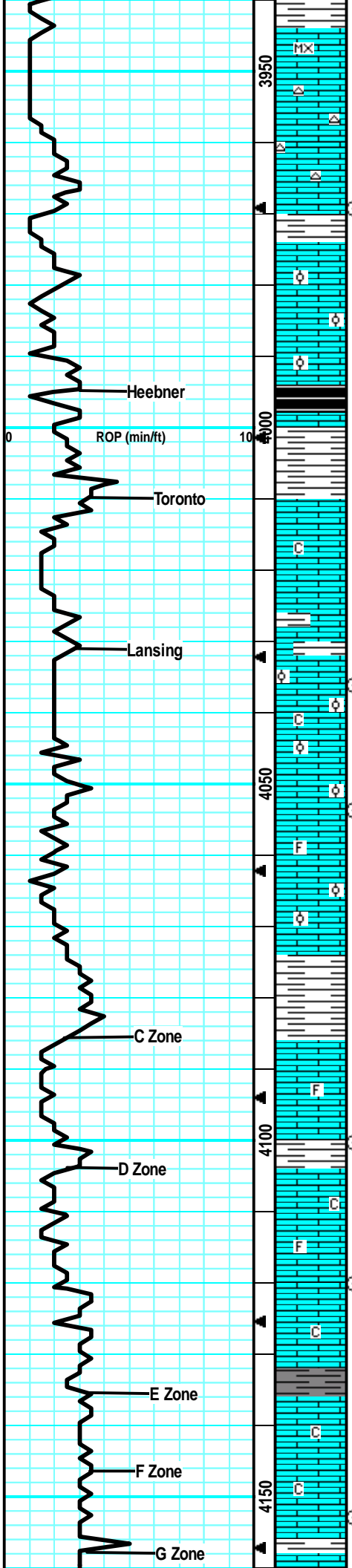
LS: tan/lt tan, slght mott, fn xln, sm ool, fw brittle, fw pcs w/ pr oolcast por, fw pcs w/ drk min stns, no cup odr, ns.

SH: gry/brn, silty, soft, fw LS: tan/lt gry, sing, fn xln, dense, firm, tr-nvp, no cup odr, ns.

LS: lt gry/lt tan, sing, micro-fn xln, dense, sm brittle, fw foss, sm cherty, tr-nvp, no cup odr, ns.

Topeka @ 3760' (-479)

MudCo Check #3 @ 3930'
 07/23/17 @ 9:30am
 Wt: 8.9 Vis: 64
 pH: 11.5 Filt: 6.4
 Chr: 3.5K LCM: 1#



SH: brn, silty, soft.

LS: lt tan/lt tan, mostly sing, micro-fn xln, v fw flakey, mostly dense, tr-nvp, no cup odr, ns.

LS: gry/lt tan, sing, fn xln, mostly dense, fw flakey, tr-nvp, no cup odr, ns.

LS: tan/lt tan, sing, fn xln, mostly brit, sub-chlky, tr-nvp, fw Chert: wht/opaq, sharp, no odr, ns.

LS: gry, slight mott, fn xln, dense, firm, tr-nvp, svrl SH: gry/drk gry, silty, no cup odr, ns.

LS: tan/lt gry, sing, fn xln, fw ool, mostly brittle, fw scat vug por, no cup odr, ns.

LS: gry/tan, mott, fn xln, fw foss frags, mostly brittle, tr-nvp, fw SH: blk, silty, carb, no cup odr, ns.

LS: gry, mott, fn xln, many foss, sm brit, tr-nvp, fw SH: blk, silty, carb, fw gry, soft, no cup odr, ns.

LS: tan, slight mott, fn xln, dense, sm brittle, pr intxln por in sm, spttd lght brn stns, dul yel fluor, v sml sphr of oil on brk, no cup odr.

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

LS: gry/lt tan, sing, fn xln, many dense, sm brittle, fw pcs w/ scat vug por, no cup odr, ns.

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

LS: tan/lt tan, slight mott, many v ool, sm brittle, sm gd intool/vug por, fw pcs w/ pr brn stns, wk fluor, nsfo, no cup odr.

LS: lt tan, sing, fn xln, fw foss frags, mostly dense, many brittle, chlky, tr-nvp, svrl pcs pur chl, no odr, ns.

Much of the same LS, infx fw LS: gry, mott, ool, brittle, tr-? intool por, no odr, ns.

LS: tan, mostly sing, fn xln, v fw foss, mostly dense, brittle, sub-chlky, tr-nvp, svrl pcs pur chl, fw Chert: wht/gry, foss, no cup odr, ns.

LS: tan/lt gry, fw slight mott, fn xln, sm foss/ool, many brittle, cpl pcs w/ gd intfoss/intool por, svrl pcs pur chl, no cup odr, ns.

LS: gry/tan, slight mott, fn xln, fw foss, sm dense, sm flakey, tr intfoss por in fw, no cup odr, ns.

LS: tan, sing, fn xln, dense, brittle, chlky, tr-nvp, svrl pcs pur chl, fw SH: gry/grn, silty, no odr, ns.

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

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

LS: tan/lt gry, sing, fn xln, mostly dns, fw flakey, sub-chlky in prt, tr-nvp, fw SH: gry, silty, no cup odr, ns.

LS: tan/lt gry, sing, fn xln, fw flakey, many brittle, chlky, fw flakey like, tr-nvp, fw pcs pur chl, fw SH: gry/blu, silty, soft, no cup odr, ns.

LS: tan/lt gry, sing, fn xln, micro-fn xln, dense, brittle, chlky, tr-nvp, sm pur chl, no cup odr, ns.

LS: tan/lt gry, sing, fn xln, fw foss, fw ool, mostly dense, sm brittle, tr-nvp, fw Chert: gry/wht, foss, fw

Short Trip 35 Stands... Pulled very Tight!

CFS @ 3969' (30"/60")

Heebner @ 3995' (-714)

Toronto @ 4010' (-729)

Lansing @ 4031' (-750)

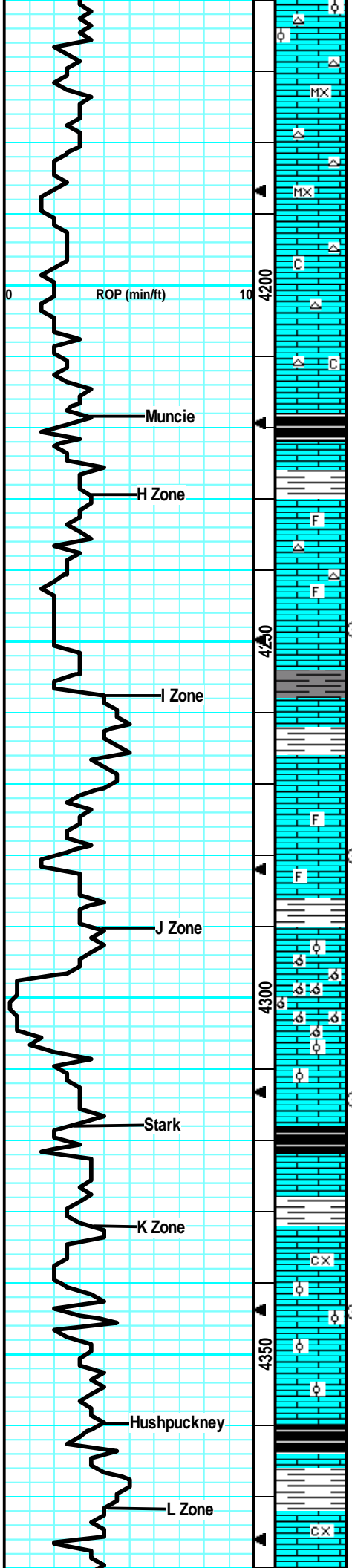
CFS @ 4036' (30"/60")

CFS @ 4054' (30"/60")

CFS @ 4100' (30"/60")

CFS @ 4120' (30"/60")

CFS @ 4153' (30"/60")



SH: gry/brn, silty, no odr, ns.

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

LS: tan/lt gry, sing, micro-fn xln, dense, sm brittle, chlky in prt, svrl pcs pur chlk, no odr, ns.

Much of the same as above, fw SH: gry, silty, med crush, no odr, ns.

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

LS: tan, sing, fn xln, mostly dense, many brittle, chlky, tr-nvp, fw pcs pur chlk, fw Chert: wht, foss, sharp, no cup odr, ns.

SH: blk, silty, carb, no odr, ns.

LS: gry/tan, slight mott, fn xln, fw foss frags, sm firm, tr-nvp, fw pcs w/ drk min stns, no fluor/cut, fw SH: gry/drk gry, silty, no odr, ns.

LS: tan/lt tan, slight mott, fn xln, v fw sml foss, many dense, sm firm, sub-chlky in a fw, tr-nvp, no cup odr, ns.

LS: tan/lt gry, slight mott, fn xln, sm foss in prt, many dense, tr-nvp, fw Chert: wht/opaq, foss, sharp, no odr, ns.

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

LS: gry/lt brn, slight mott, fn xln, dense, firm, 3 pcs w/ patchy stns on edge, wk fluor, v sml sphr of oil on brk, no cup odr.

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

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

LS: gry/tan, mott in prt, fn xln, many foss, fw ool, many mealy, sub-chlky, tr-nvp, fw SH: gry/brn, silty, no cup odr, ns.

LS: gry/crm, mott, fn xln, profus ool, many brittle, mostly v gd oolcast por, fw ool/tight, no cup odr, ns.

60" Smpl: had much less oolcast LS and much more dense, flakey, sub-chlky, tr-nvp.

LS: gry/lt tan, slight mott, fn xln, many foss, many dense, sm brittle, tr-nvp, svrl SH: blk, carb, silty soft, no cup odr, ns.

SH: blk/gry, silty, soft, many carb, fw LS: gry, slight mott, fn xln, fw foss, sub-chlky, tr-nvp, no odr, ns.

LS: gry/lt brn, mott, fn-crs xln, foss w/ brach/crin, firm, sm flakey, tr-nvp, fw SH: gry, silty, no cup odr, ns.

LS: gry/tan, mott, fn xln, foss in prt, sm ool, many firm, sm brittle, tr-nvp, fw pcs pur chlk, no cup odr, ns.

LS: gry/tan, mott, fn xln, sm ool, svrl dense, sm firm, sub-chlky in prt, tr-nvp, fw SH: blk, silty, carb, no cup odr, ns.

LS: drk gry/tan, slight mott in prt, fn xln, mostly dense, many flakey, sub-chlky in fw, tr-nvp, svrl SH: blk, silty, carb, no cup odr, ns.

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

Muncie @ 4218' (-937)

MudCo Check #4 @ 4220'
 07/24/17 @ 10:00am
 Wt: 9.0 Vis: 61
 pH: 11.0 Filt: 6.4
 Chir: 3.4K LCM: 1#

CFS @ 4248'
 (30"/60")

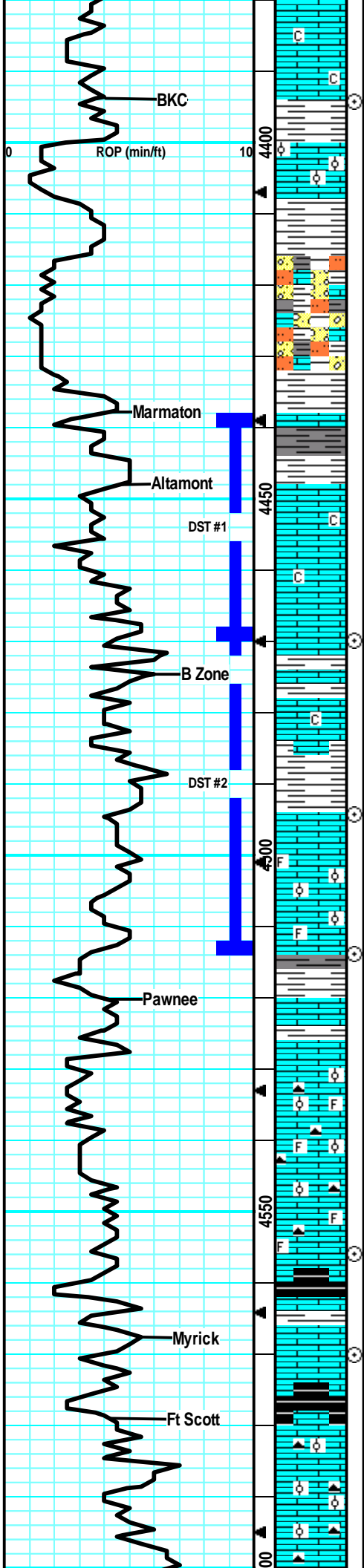
CFS @ 4280'
 (30"/60")

CFS @ 4314'
 (30"/60")

Stark @ 4318' (-1037)

CFS @ 4344'
 (30"/60")

Hushpuckney @ 4360' (-1079)



LS: gry/tan, sing, fn xln, mostly dense, sub-chlky, sm brittle, fw pcs pur chl, fw SH: gry/brn, silty, no cup odr, ns.

LS: gry/tan, slght mott, fn xln, many foss, sm dense, many brittle, sub-chlky, tr-nvp, w SH: drk gry/gry, silty, no cup odr, ns.

LS: gry, slght mott, fn xln, v fw foss, fw ool, fw lrg inclus, v brittle, gd intxln por, fw SH: gry/brn, silty, no cup odr, ns.

LS: gry/tan, mostly sing, fn xln, v fw foss, mostly dense, sm firm, v fw w/ fr intxln por, v fw SH: gry, silty, med crush, no odr, ns.

SH: gry/brn/grn, silty, soft, fw SlStn: lt gry, gritty, friabl, v soft, fw LS: gry/lt brn, mott, fn xln, flakey, tr-nvp, no odr, ns.

SH: gry/drk gry/brn, silty, soft, fw SlStn: lt gry/grn, v soft, gritty, friable, fw LS: gry, slght mott, fn xln, flakey, tr-nvp, no cup odr, ns.

SH: gry/drk gry/brn, silty, soft, fw SlStn: lt gry, gritty, fw LS: gry/lt tan, sing, fn xln, dense, sub-chlky, tr-nvp, no cup odr, ns.

LS: tan, slght mott, fn xln, dense, firm, fw pcs w lrg inclus, sub-chlky, tr-nvp, fw SH: gry/brn, silty, no odr, ns.

LS: gry/lt tan, sing, fn xln, dense, sub-chlky, fw brit, tr-pr intxln in v fw pcs, 2 pcs w/ patchy drk stns, dul yel fluor, ssfo on brk, no cup odr.

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

LS: gry/tan, slght mott, fn xln, mostly dense, sub-chlky, many flakey/mealy, tr-nvp, svrl SH: gry/brn, silty, sm soft, no odr, ns.

LS: tan/gry, mostly sing, fn xln, fw foss frags, mostly dense, sub-chlky, sm firm, tr-nvp, svrl SH: gry/brn, silty, med crush, no cup odr, ns.

SH: gry/brn, silty, no cup odr, ns.

LS: tan/lt gry, sing, fn xln, mostly dense, sub-chlky, fw firm, tr-np, no clup odr, ns.

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

LS: tan/lt brn, mott, fn xln, profus foss/ool, dense mtrx, firm, tr-nvp, fw Chert: wht/tan, foss/ool, sharp, no cup odr, ns.

SH: gry/drk gry/brn, silty, soft, fw LS: gry/lt brn, dense, firm, sm flakey/mealy, tr-nvp, no cup odr, ns.

SH: gry/blk, fw carb, svrl LS: gry, slght mott, fn xln, fw foss, sub-chlky, sm flakey, tr-nvp, no cup odr, ns.

LS: gry/lt brn, mott, fn-crs xln, v foss/ool, many flakey, mostly firm, tr-pr intxln por in fw, sm Chert: gry/wht, foss, sharp, fw pcs w/ lght brn spts, no fluor/cut, no cup odr, nsfo.

LS: gry/tan, mott, fn-crs xln, profus foss/ool, mostly flakey/mealy, sm firm, tr-pr intxln, sm intfoss por, fw SH: gry, silty, fw Chert: gry/wht, foss, no cup odr, ns.

LS: gry, mott, fn-crs xln, v foss, mostly flakey/mealy, sm firm, tr-nvp, no cup odr, ns.

SH: blk, med crush, carb, sm drk gry, silty, soft

LS: gry, slght mott, fn xln, many flakey/mealy, sub-chlky in prt, fw w/ pr intxln por, fw pcs w/ spttd lght brn stns, ? fluor, no sfo, no cup odr.

LS: gry, slght mott, fn xln, mostly dense, sm flakey, sub-chlky, in prt, tr-nvp, svrl SH: blk, silty, many carb, no cup odr, ns.

LS: tan/gry, mott, fn xln, many ool, sm firm, sm dense, grainy in prt, tr-nvp, fw SH: blk, silty, carb, no cup odr, ns.

LS: gry/tan, mott, fn xln, profus ool, sm dense/firm, many flakey, tr-nvp, sm Chert: gry/wht, ool, sharp, no cup odr, ns.

BKC @ 4394' (-1113)

DST #1 "Altamont A" 4438'-4470'
 7-25-17 30-30-30-30
 1st Blw: Wk surf blw dead in 4min (No BB)
 2nd Blw: No blw, flushed and no blw (No BB)
 IFP: 18-17# ISIP: 21# FFP: 16-19# FSIP: 22#
 Hyd: 2242-2175#
 Rec: 1' Mud.

Marmaton @ 4438' (-1157)

Altamont @ 4448' (-1167)

Pipe Strap = 1.27 Short

Survey @ 4470' = 1 Degree

CFS @ 4470' (30"/60")

MudCo Check #5 @ 4470'
 07/25/17 @ 9:00am
 Wt: 9.2 Vis: 58
 pH: 10.5 Filt: 8.0
 Chlr: 5.0K LCM: 1#

CFS @ 4494' (30"/60")

MudCo Check #6 @ 4513'
 07/26/17 @ 9:10am
 Wt: 9.1 Vis: 50
 pH: 10.0 Filt: 7.2
 Chlr: 5.5K LCM: 1#

CFS @ 4514' (30"/60")

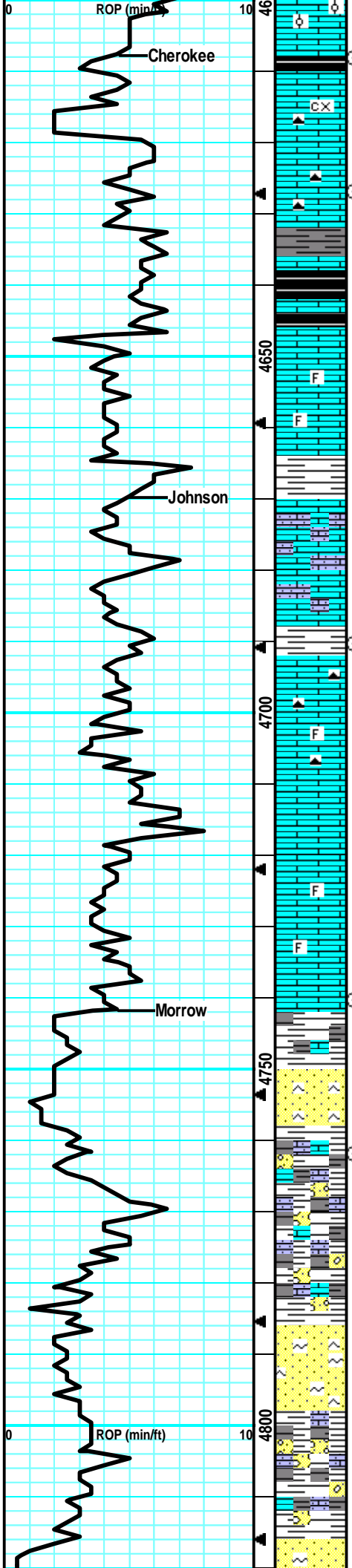
Pawnee @ 4520' (-1239)

DST #2 "Altamont B/C" 4468'-4514' 7-26-17
 30-30-30-30
 1st Blw: Lght surg on open, then dead (No BB)
 2nd Blw: No blw, flushed, lght surg, then dead (No BB)
 IFP: 18-17# ISIP: 24# FFP: 16-18# FSIP: 27#
 Hyd: 2178-2151#
 Rec: 1' Mud w/ oil spots in tool.

CFS @ 4556' (30"/60")

Myrick @ 4568' (-1287)

Ft Scott @ 4579' (-1298)



cup odr, no.

LS: gry/lt brn, mott, fn xln, ool, sm flakey, many firm, tr-nvp, no cup odr, ns.

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

LS: tan/lt gry, slight mott, fn xln, fw foss, many dense, sm brittle, sub-chlky, tr-nvp, fw Chert: wht/gry, foss, sharp, no cup odr, ns.

LS: gry/drk gry, sing, fn xln, mostly dense, sub-chlky, sm firm, tr-nvp, sm SH: drk gry, silty, soft, no cup odr, ns.

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

LS: gry/tan, slight mott, fn xln, fw foss, sm lrg inclus, dense, firm, flakey/mealy, tr-nvp, sm SH: drk gry/blk, silty, fw carb, no odr, ns.

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

LS: gry/tan, mott in prt, fn xln, many firm, sm dense, sandy/grainy in prt, tr-nvp, no cup odr, ns.

LS: gry/tan, mott in prt, fn xln, v fw sandy/grainy, firm, sm flakey/mealy, tr-nvp, v fw SH: gry, silty, soft, no odr, ns.

LS: gry/lt brn, mott in prt, fn xln, mostly firm, sm dense, flakey/mealy, fw sandy/grny, tr-nvp, fw SH: gry, silty, med crush, no cup odr, ns.

LS: gry/tan, slight mott, fn xln, sm foss, mostly dense, firm, flakey/mealy, tr-nvp, fw Chert: gry/brn, foss, sharp, fw SH: blk, silty, carb, no odr, ns.

LS: tan/gry, slight mott, fn xln, mostly dense, flakey/mealy, firm, tr-nvp, fw pcs w/ drk min stns, no fluor/cut, no cup odr, ns.

LS: drk gry/tan, mott, fn xln, sm foss, dense, sm v firm, flakey/mealy in prt, tr-nvp, fw Chert: foss, sharp, fw SH: drk gry/blk, silty, fw carb, no cup odr, ns.

LS: drk gry/tan, mott, fn xln, sm foss in prt, fn xln, v firm, many flakey/mealy, tr-nvp, fw pcs w/ drk min stns, no fluor/cut, fw Chert: gry/tan, foss, sharp, no cup odr, ns.

SH: gry/grn/yel, wthrd, silty, med crush, LS: gry/tan, mott in prt, fn xln, firm, flakey/mealy, tr-nvp, no cup odr, ns.

SH: gry/brn/yel/grn, silty, med crush, fw SS: lt brn, fn grn, arg, silty, dirty, fw LS: gry, flakey, tr-nvp, no cup odr, ns.

SH: gry/yel/grn, wthrd, silty, soft, fw LS: gry, mott, fn-crs xln, sandy/grny, sm frabl, tr-nvp, no cup odr, ns.

SS: grn/blu, fn-crs grn, pr sort, sm firm, arg, glauc, fw lrg qrtz grns, tr-nvp, svrl SH: gry/grn/brn, silty, no cup odr, ns.

SS: gry/blu, fn-crs grn, pr sort, sm brit, many firm, arg/drity, glauc, sil cem, tr-pr intgrn por in v fw, abund SH: gry/grn, silty, soft, no cup odr, ns.

SS: grn/blu, fr-crs grn, pr sort, arg, sil cem, sm brittle, fw friable, glauc, tr-nvp, abund SH: gry/grn, silty, soft, fw waxy, no cup odr, ns.

SH: gry/blu/grn, silty, soft, fw waxy, fw yel/wthrd, v fw pr srt, arg, SS like desc above.

SH: gry/grn/brn, silty, soft, fw waxy, fw LS: gry, slight mott, fn xln, flakey, tr-nvp, no odr, ns.

SS: crm/lt tan, sing, fn xln, wl sort, brit, friab, silc cem.

CFS @ 4608'
(30"/60")

Cherokee @ 4608' (-1327)

CFS @ 4627'
(30"/60")

Johnson @ 4670' (-1389)

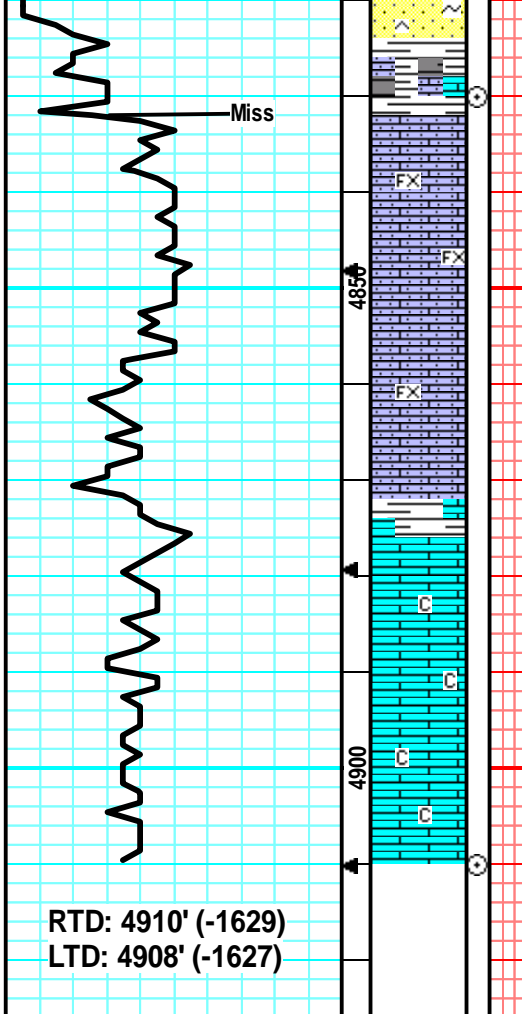
CFS @ 4690'
(30"/60")

MudCo Check #7 @ 4690'
07/27/17 @ 9:30am
Wt: 9.1 Vis: 59
pH: 10.0 Fil: 8.8
Chr: 6.5K LCM: 1#

CFS @ 4740'
(30"/60")

Morrow @ 4742' (-1461)

CFS @ 4762'
(30"/60")



fr intgrn por, glauc in prt, abund SH: gry/grn, silty, soft, no cup odr, no fluor/cut, ns.
 SH: gry/grn/brn, silty, soft, sm waxy, no cup odr, ns.

LS: crm/lt tan, sandy/gritty, sub-chlky, brittle, sm friable, tr-nvp, abund SH: gry/grn, silty, sm fissile, no cup odr, ns.

LS: crm/lt tan, sandy/gritty, sub-chlky, brittle, in prt, tr-nvp, abund SH: gry/grn, silty, no cup odr, ns.

LS: crm/lt gry, sandy/gritty, sub-chlky, sm brittle, fw friable, tr-nvp, abund SH: gry/grn, silty, soft, no cup odr, ns.

LS: lt gry/tan, slght mott, fn xln, many flakey/mealy, sub-chlky, tr-nvp, fw LS: crm, sandy/gritty, brittle, friab, tr-nvp, no odr, ns.

LS: tan/lt gry, slght mott, fn xln, v fw sandy/grtty, fn xln, sm brittle, flakey/mealy, tr-nvp, chlky in prt, no cup odr, ns.

CFS @ 4830'
 (30"/60")
Miss @ 4832' (-1551)

MudCo Check #8 @ 4910'
 07/28/17 @ 9:00am
 Wt: 9.2 Vis: 59
 pH: 10.5 Filt: 8.0
 Chlr: 6.0K LCM: 2#

CFS @ 4910'
(30"/60")

Survey @ 4910' = 1 Degree

RTD: 4910' (-1629)
 LTD: 4908' (-1627)