KOLAR Document ID: 1318644

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 # 4767
Name: Ritchie Exploration, Inc.
Address 1: 8100 E 22ND ST N # 700
Address 2: BOX 783188
City: WICHITA State: KS Zip: 67278 + 3188
Contact Person: Peter Fiorini
Phone: (316) 691-9500
CONTRACTOR: License # 33575
Name: WW Drilling, LLC
Wellsite Geologist: John Goldsmith
Purchaser: Plains Marketing

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 #:

06/17/2016 Spud Date or Recompletion Date
06/27/2016 Date Reached TD
06/27/2016 Completion Date or Recompletion Date

API No.: 15-171-21170-00-00
Spot Description: 140'N & 120'E of
__ - E2 - W2 - SE Sec. 34 Twp. 17 S. R. 32 ☐ East ☑ West
1460 Feet from ☐ North / ☑ South Line of Section
1530 Feet from ☑ East / ☐ West Line of Section
Footages Calculated from Nearest Outside Section Corner:
☐ NE ☐ NW ☑ SE ☐ SW
GPS Location: Lat: *(e.g. xx.xxxxx)* , Long: *(e.g. -xxx.xxxxx)*
Datum: ☐ NAD27 ☐ NAD83 ☐ WGS84
County: Scott
Lease Name: YORK 34D Well #: 1
Field Name:
Producing Formation: Altamont
Elevation: Ground: 2980 Kelly Bushing: 2985
Total Vertical Depth: 4710 Plug Back Total Depth: 4664
Amount of Surface Pipe Set and Cemented at: 250 Feet
Multiple Stage Cementing Collar Used? ☑ Yes ☐ No
If yes, show depth set: 2242 Feet
If Alternate II completion, cement circulated from: 0
feet depth to: 2242 w/ 250 sx cmt.

Drilling Fluid Management Plan
(Data must be collected from the Reserve Pit)
Chloride content: 9700 ppm Fluid volume: 830 bbls
Dewatering method used: Evaporated
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: 10/05/2016
☑ **Confidential Release Date:** 10/05/2018
☑ **Wireline Log Received** ☐ **Drill Stem Tests Received**
☑ **Geologist Report / Mud Logs Received**
☐ **UIC Distribution**
ALT ☐ I ☑ II ☐ III **Approved by:** Karen Ritter **Date:** 10/05/2016

Operator Name: Ritchie Exploration, Inc. Lease Name: YORK 34D Well #: 1

Sec. 34 Twp. 17 S. R. 32 ☐ East ☑ West County: Scott

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 *(Attach Additional Sheets)*	☑ Yes	☐ No
Samples Sent to Geological Survey	☑ Yes	☐ No
Cores Taken	☐ Yes	☑ No
Electric Log Run	☑ Yes	☐ No
Geologist Report / Mud Logs	☐ Yes	☐ No

List All E. Logs Run:

Dual Comp Porosity Micro & Dual Ind Log

☐ Log Formation (Top), Depth and Datum ☑ Sample

Name	Top	Datum
See Attached		

CASING RECORD ☑ New ☐ 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
Surface	12.25	8.63	28	250	Common	175	3% cc, 2% gel
Production	7.88	5.5	15.5	4706	OWC	170	10% salt, 2% gel, 1/4% CDI-26 & 5-1/4%

ADDITIONAL CEMENTING / SQUEEZE RECORD

Purpose:	Depth Top Bottom	Type of Cement	# Sacks Used	Type and Percent Additives
☐ Perforate ☐ Protect Casing ☐ Plug Back TD ☐ Plug Off Zone	-			
	-			

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:
08/22/2016	☐ Flowing ☑ Pumping ☐ Gas Lift ☐ Other *(Explain)*

Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio	Gravity
	23.38		0		28

DISPOSITION OF GAS:	METHOD OF COMPLETION:	PRODUCTION INTERVAL: Top	Bottom
☐ Vented ☐ Sold ☐ Used on Lease *(If vented, Submit ACO-18.)*	☐ Open Hole ☑ Perf. ☐ Dually Comp. *(Submit ACO-5)* ☐ Commingled *(Submit ACO-4)*		

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

TUBING RECORD:	Size:	Set At:	Packer At:
	2.38	4653	

Mail to: KCC - Conservation Division, 266 N. Main, Suite 220, Wichita, Kansas 67202

Form	ACO1 - Well Completion
Operator	Ritchie Exploration, Inc.
Well Name	YORK 34D 1
Doc ID	1318644

Perforations

Shots Per Foot	Perforation Record	Material Record	Depth
4	4350.5 - 4358	750 gals 15% NE	
4	4388 - 4392		

Form	ACO1 - Well Completion
Operator	Ritchie Exploration, Inc.
Well Name	YORK 34D 1
Doc ID	1318644

Casing

Purpose Of String	Size Hole Drilled	Size Casing Set	Weight	Setting Depth	Type Of Cement	Number of Sacks Used	Type and Percent Additives
Surface	12.25	8.63	28	250	Common	175	3% cc, 2% gel
Production	7.88	5.5	15.5	4706	OWC	170	10% salt, 2% gel, 1/4% CDI-26 & 5-1/4% Kol-Seal

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 York 34D		
Location:	1460' FSL, 1530' FEL, SECTION 34-17S-32W		
License Number:	API: 15-171-21170	Region:	Scott County
Spud Date:	06/17/2016	Drilling Completed:	06/28/2016
Surface Coordinates:	LAT 38.5302796 LONG -100.8383798		
Bottom Hole Coordinates:	Vertical hole 1.25 Degree Deviation		
Ground Elevation (ft):	2979'	K.B. Elevation (ft):	2985'
Logged Interval (ft):	3600' To: RTD	Total Depth (ft):	4710
Formation:	Mississippian at RTD		
Type of Drilling Fluid:	Chemical		

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 AND BIT RECORDS

Contractor: WW Drilling Rig #2
Pusher: Lonnie Lang

Collar Talley: 414'

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

Bit Record

Size	Type	Footage	Condition	Serial #
12 1/4	Sm-tooth	0-250'	New	RD 6702
7 7/8	Sm-F 27	250'-4710'	New	RH 2415

COMMENTS

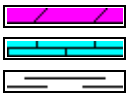
Surface Casing: 6 joints of 8 5/8" set at 250'
Production Casing: 5.5" Production casing was installed.
Mud by: MudCo
DST's by: Diamond Testing
Logs by: Superior Well Services (DIL, CN-CD, ML)
RTD=4710'
LTD=4710'

FORMATION TOPS & DATUMS

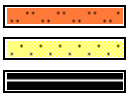
FORMATION	SAMPLE TOPS Depth	Datum	LOG TOPS Depth	Datum
Heebner Shale	3898'	-913	3898'	-913
Toronto	3919'	-934	3919'	-934
Lansing	3948'	-963	3948'	-963
Muncie Creek Shale	4120'	-1135	4120'	-1135
Stark Shale	4219'	-1234	4219'	-1234
Hushpuckney Shale	4252'	-1267	4252'	-1267
Base of KC	4304'	-1319	4304'	-1319
Marmaton	4344'	-1359	4344'	-1359
Altamont	4351'	-1366	4350'	-1365
Pawnee	4434'	-1449	4434'	-1449
Myrick Station	4476'	-1491	4476'	-1491
Ft Scott	4486'	-1501	4486'	-1501
Cherokee Shale	4512'	-1527	4512'	-1527
Johnson Zone	4552'	-1567	4552'	-1567
Morrow	4596'	-1611	4596'	-1611
Mississippian	4616'	-1631	4616'	-1631
RTD	4710'	-1725		
LTD			4710'	-1725

ROCK TYPES

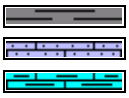
Anhy
Cht
Congl



Dol
Lmst
Shale



Sltst
Ss
Carb sh



Gry sh
Sandylms
Shaly ls

ACCESSORIES

EVENTS

- Circ
- Conn

FOSSIL

- Brach
- Bryozoa
- Crin
- Foram
- Fossil
- Gastro
- Oolite
- Fuss
- Oomold

MINERAL

- Calc
- Chtdk
- Chtlt
- Glau
- Pyr
- Sil
- Sulphur

TEXTURE

- Chalky
- Crsxln
- Finexln
- Microxln

DSTs

DST #1 "LKC E" 4032'-4054' 6-21-16 30-45-45-60
1st Blw: Wk 1/4" Blw blt to BOB in 13.5min (No BB)
2nd Blw: Wk Surf blt to 8.5" (No BB)
IFP: 12-167# ISIP: 1002# FFP: 168-328# FSIP: 1002#
Hyd: 1924-1928#
Rec: 200' SMCW (92% WTR), 500' WTR.

DST #2 "LKC H" 4118'-4160' 6-22-16 30-30-30-30
1st Blw: 3" Blw blt to BOB in 1.5min (No BB)
2nd Blw: Wk 1/2" Blw blt to BOB in 3.5min (No BB)
IFP: 240-675# ISIP: 825# FFP: 697-812# FSIP: 861#
Hyd: 1999-1993#
Rec: 60' WCMw/TrO (36%Wtr), 395' Wtr, 910' SMCW (96%Wtr), 415' HMCW (60%Wtr).

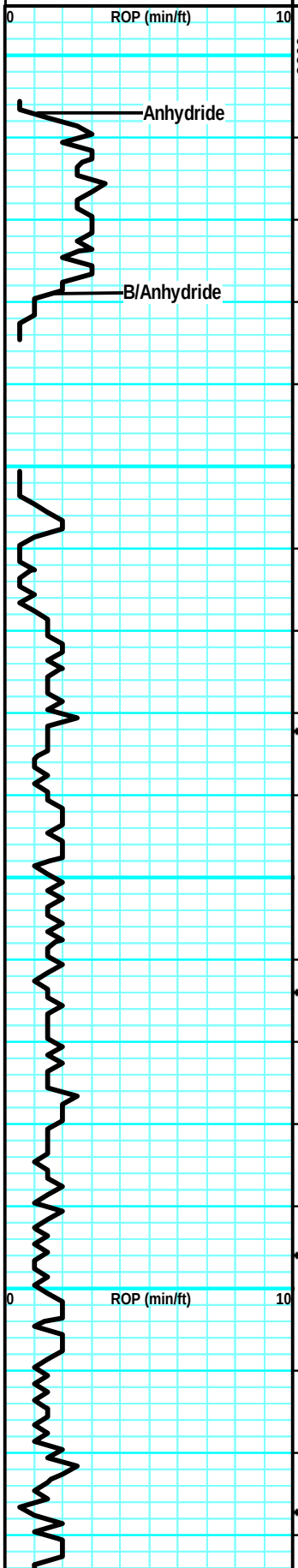
DST #3 "LKC I" 4161'-4190' 6-23-16 30-45-45-60
1st Blw: Wk Surf Blw blt to 1/4" (No BB)
2nd Blw: V Wk Surf Blw died in 23min (No BB)
IFP: 8-9# ISIP: 33# FFP: 9-10# FSIP: 27#
Hyd: 1985-1983#
Rec: 2' Mw/OSpts.

DST #4 "LKC J/K" 4191'-4258' 6-23-16 30-45-45-60
1st Blw: 1.5" Blw blt to BOB 4.5min (No BB)
2nd Blw: Wk Surf Blw blt to BOB in 7min (No BB)
IFP: 47-343# ISIP: 917# FFP: 353-603# FSIP: 916#
Hyd: 2017-1996#
Rec: 50' SOHMCW (7%Oil, 59%Wtr), 690' HMCWw/TrO (60%Wtr), 565' SMCWw/TrO (98%Wtr).

DST #5 "Altamont A" 4316'-4382' 6-24-16 30-45-45-60
1st Blw: 1/2" Blw blt to BOB 13min (No BB)
2nd Blw: 1/2" Blw blt to BOB in 11min (No BB)
IFP: 27-96# ISIP: 987# FFP: 104-147# FSIP: 982#
Hyd: 2094-2088#
Rec: 530' GIP, 35' GSMCO(90%O), 310' GMCO (57%O).

DST #6 "Altamont B" 4384'-4408' 6-25-16 30-45-45-60
1st Blw: Wk Surf Blw blt to 9.5" (No BB)
2nd Blw: 1/4" Blw blt to BOB in 32" (No BB)
IFP: 11-44# ISIP: 1106# FFP: 57-64# FSIP: 1088#
Hyd: 2119-2118#
Rec: 375' GIP, 5' GO(97%O), 120' GVHMCO (44%O).

DST #7 "Cherokee" 4506'-4611' 6-26-16 30-30-30-30
1st Blw: 1/4" Blw died to back to surf blw (No BB)
2nd Blw: Wk surf blw died in 2min (No BB)
IFP: 12-19# ISIP: 787# FFP: 20-08# FSIP: 712#
Hyd: 2216-2205#
Rec: 20' Mud.



Depth

Lithology

CFS Point

Oil Shows

Geological Descriptions

Daily Morning Activity/Report

June 17, 2016: Spud, 7:30am
06/18/16: drlg, 965'
06/19/16: drlg, 2600'
06/20/16: drlg, 3372'
06/21/16: circ, 3940' (DST #1)
06/22/16: drlg, 4096' (DST #2)
06/23/16: testing, 4190' (DST #3, DST #4)
06/24/16: circ, 4304' (DST #5)
06/25/16: drlg, 4408' (DST #6)
06/26/16: drlg, 4518' (DST #7)
06/27/16: drlg, 4640'

LS: crm/lt tan, sing, fn xln, fw foss in prt, mostly brit, chlky in prt, tr-nvp, v fw SH: gry, silty, no cup odr, ns.

LS: lt tan, slght mott in prt, fn xln, sm foss in prt, fw brach, sm dense, many brittle, sub-chlky in prt, tr-nvp, v fw SH: gry, no cup odr, ns.

LS: gry/tan, mott in prt, fn xln, sm foss frags/brach, sm dense, fw brittle, tr-nvp, sm SH: gry, silty, med crush, no cup odr, ns.

LS: gry/tan, slght mott, fn xln, sm foss in prt, brach/frags, dense, brit, tr-nvp, fw SH: gry, silty, no cup odr, ns.

LS: gry/lt tan, brn, sing, fn xln, v fw foss frags, mostly

Remarks

Anhydride @ 2307' (+678)

Survey @ 250' = 3/4 Degree

Mud-Co Check #2
@ 250' 6/17/16

B/Anydride @ 2329' (+656)

Mud-Co Check #3
@ 1209' 6/18/16

wt	vis	pH
8.8	29	7.5
Filt	chlr	LCM
n/c	200	0#

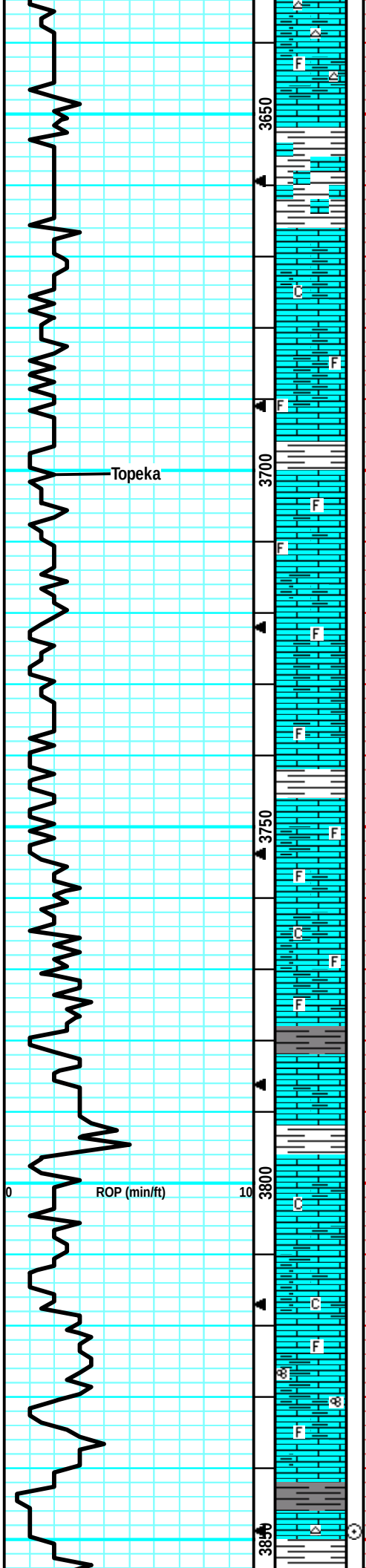
Mud-Co Check #4
@ 2688' 6/19/16

wt	vis	pH
9.1	32	7.0
Filt	chlr	LCM
n/c	29K	2#

Mud-Co Check #5
@ 3442' 6/20/16

wt	vis	pH
8.6	67	11.5
Filt	chlr	LCM
6.4	2.2K	3#

Mud Displaced @ 3422' (700bbls)



dense, sm brit, tr-nvp, fw Chert: gry, foss, sharp, no cup odr, ns.

LS: gry, slght mott, fn xln, fw foss frags, mostly brittl, sm dense, tr-nvp, fw Chert: gry, foss, sharp, svrl SH: gry, silty, soft, no cup odr, ns.

LS: gry, slght mott in prt, fn xln, v fw foss frags, mostly brit, sm dens, tr-nvp, abund SH: gry, silty, soft, fw SltStn: gritty, v soft, no cup odr, ns.

LS: lt tan/gry, slght mott, fn xln, many brit, sm dense, tr-nvp, svrl SH: gry, silty, sm soft, no cup odr, ns.

LS: lt tan/lt gry, mostly sing, fn xln, mostly brit, sub-chlky in prt, sm scat pr intxln por in fw, fw SH: gry, silty, no cup odr, ns.

LS: lt gry/tan, slght mott, fn xln, fw foss frags, mostly brit, sub-chlky, tr-nvp, fw SH: gry, silty, no cup odr, ns.

LS: gry/tan, slght mott, fn xln, fw foss frags, fw flakey/mealy, brit, sub-chlky, tr-nvp, 2-3 pcs w/ drk stns, no fluor/cut, no cup odr, nsfo.

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

LS: gry/tan, mott in prt, fn xln, fw foss, fw flakey/grainy, mostly brit, tr-nvp, sm SH: gry/brn, silty, no cup odr, ns.

LS: gry/tan, mott in prt, fn xln, fw foss in prt, fw sandy/grainy, many brit, tr-nvp, fw SH: gry/brn, silty, no cup odr, ns.

LS: tan/lt gry, slght mott in prt, fn xln, fw foss in prt, many brit, sub-chlky in prt, tr-nvp, no cup odr, ns.

LS: tan/lt tan, slght mott in prt, fn xln, v fw foss in prt, mostly brit, sub-chlky in prt, tr-nvp, fw pcs pur chlk, no cup odr, ns.

LS: tan/lt tan, slght mott in prt, fn xln, v fw foss frags, mostly brit, sub-chlky, tr-nvp, fw SH: gyr, silty, no cup odr, ns.

LS: tan/lt tan, slght mott, fn xln, v fw foss frags, fw dens, mostly brit, sub-chlky, tr-nvp, fw pcs w/ drk brn spts, no fluor/cut, no cup odr, ns.

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

LS: lt gry/tan, slght mott, fn xln, sm dense, fw firm, tr-nvp, svrl SH: gry/brn, silty, fw fissile, no cup odr, ns.

LS: tan/lt gry, slght mott in prt, fn xln, sm dense, fw firm, sub-chlky in prt, tr-nvp, fw pcs pur chlk, fw SH: gry, silty, no cup odr, ns.

LS: tan/lt gry, mostly sing, fn xln, svrl dens, fw britl, fw flakey/mealy, sub-chlky, tr-nvp, fw pcs pur chlk, no cup odr, ns.

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

LS: tan/lt gry, slght mott, fn xln, sm foss, frags/foram, sm brit, sub-chlky in prt, tr-nvp, sm SH: brn/gry, silty, no cup odr, ns.

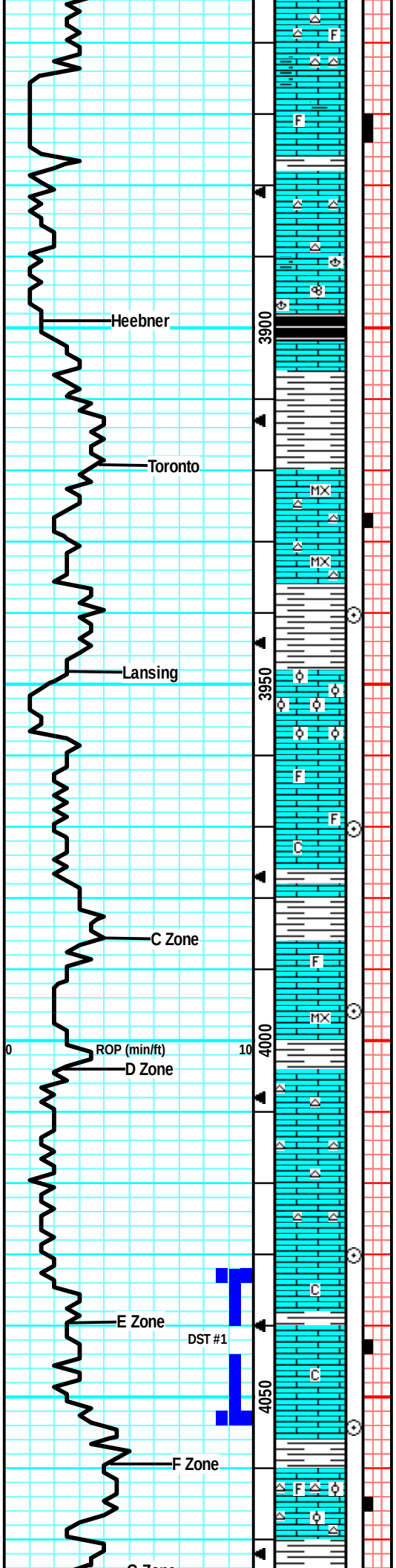
LS: tan/lt gry, slght mott, fn xln, fw foss frags, sm brit, sm dens, sub-chlky in prt, tr-nvp, v fw SH: gry, silty, no cup odr, ns.

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

LS: tan/lt gry, slght mott in prt, fn xln, fw foss frags, many brit, sm flakey, sub-chlky, tr-nvp, fw Chert: wht/lt

Wiper Short Trip 25 Stands

CFS @ 3849'
(30"/60")



many brit, sm flakey, sub-chlky, tr-nvp, fw Chert: wht/t tan, foss fuss/frags, sharp, no cup odr, ns.

LS: tan/gry, slght mott in prt, fn xln, fw foss frags, sm brit, sub-chlky, tr-nvp, fw SH: gry, silty, no cup odr, ns.

LS: gry/lt tan, slght mott in prt, fn xln, sm brit, fw flakey, pr intxln por in fw, 3-4 pcs w/ patchy brn stns, wk fluor, pos cut, ss hvy oil on brk, faint-? odr

LS: gry/tan, mostly mott, fn xln, sm dens, sm brit, fw flakey, tr-nvp, svrl pcs drk min stns, no fluor, tr-nvp, fw Chert: wht/gry, foss, sharp, fw SH; gry/blu, silty, no cup odr, ns.

LS: lt brn/gry, mostly mott, fn xln, fw foss brach/foram, sm dens, fw brit, drk spttd min stns, no fluor, svrl SH: gry/brn, silty, no odr, ns.

Heeber @ 3898' (-913)

LS: tan/gry, mott in prt, fn xln, svrl dense, sm brit, tr-nvp, abund SH: blk/gry, silty, soft, many carb, no cup odr, ns.

LS: gry/tan, slght mott, fn xln, mostly dense, sm brittle, tr-nvp, svrl SH: gry/brn, silty, sm soft, no cup odr, ns.

Toronto @ 3919' (-934)

LS: crm/lt tan, sing, micro-fn xln, dense, brittle, sub-chlkiy in prt, ptchy brn stns, pr intxln por, dul yel fluor, strm cut, vssfo on brk, no odr.

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

CFS @ 3940'
(30"/60")

LS: tan/lt gry, mostly sing, fn xln, mostly dens, sm brit, sub-chlky in prt, tr-nvp, abund SH: gry/brn, silty, no cup odr, ns.

Lansing @ 3948' (-963)

LS: tan/lt tan, mostly mott, fn xln, mostly v ool, mostly brittle, gd intool/oolcast por, fw SH: gry, silty, fissile, no cup odr, ns.

LS: lt tan/crm/lt gry, mostly sing, fn xln, sm foss/ool, sm dens, sm brit, sub-chlky in prt, tr-nvp, no cup odr, ns.

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

CFS @ 3970'
(30"/60")

LS: gry/tan, slght mott, fn xln, v fw foss frags, sm dense, sm firm, sub-chlky, fw flakey/mealy, tr-nvp, svrl SH: gry/brn, silty, no cup odr, ns.

LS: tan, mott in prt, fn xln, sm ool, mostly dens, sm brittle, fw flakey, tr-nvp, fw firm, fw SH: gry/blu, silty, no cup odr, ns.

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

Mud-Co Check #6
@ 3978' 6/21/16

wt	vis	pH
9.3	58	10.5
Filt	chlr	LCM
7.2	1.5K	1.5#

LS: tan/lt gry, sing, fn xln, mostly dense, sm firm, sub-chlky, tr-nvp, svrl SH: gry/blu/brn, silty, no cup odr, ns.

LS: crm/lt tan/lt gry, sing, fn xln, sm dens, mostly brit, chlky, tr-pr intxln por in sm, sm Chert: wht/opaque, sharp, no cup odr, ns.

LS: lt gry/lt tan, slght mott, fn xln, sm dens, mostly brit, chlky, pr intxln por in sm, svrl pcs pur chlk, sm Chert: wht/opaq, foss, sharp, no cup odr, ns.

CFS @ 4030'
(30"/60")

LS: gry/tan, slght mott, fn xln, mostly brittle, sm fr intxln por, slght vuggy, no sho, fw pcs chlk, fw SH: gry/brn, silty, fissile, no cup odr.

Stp Smpl: LS: tan/lt tan, slght mott, fn xln, brittle, sm chlky, patchy lght brn stns, gd fluor/cut, vssfo on brk, fr-gd cup odr.

Survey @ 4054' = 1 1/4 Degrees

30" Smpl: lt tan/tan, slght mott, fn xln, mostly brittle, sm dense, sub-chlky in prt, tr-pr intxln por in sm, sm dul yel fluor, vss lght filmy oil on brk, fr cup odr, 60" LS: tan, slght mott, fn xln, dense, patchy lght brn stns, fr cup odr, gas bub on brk, ssfo in 4-5 pcs.

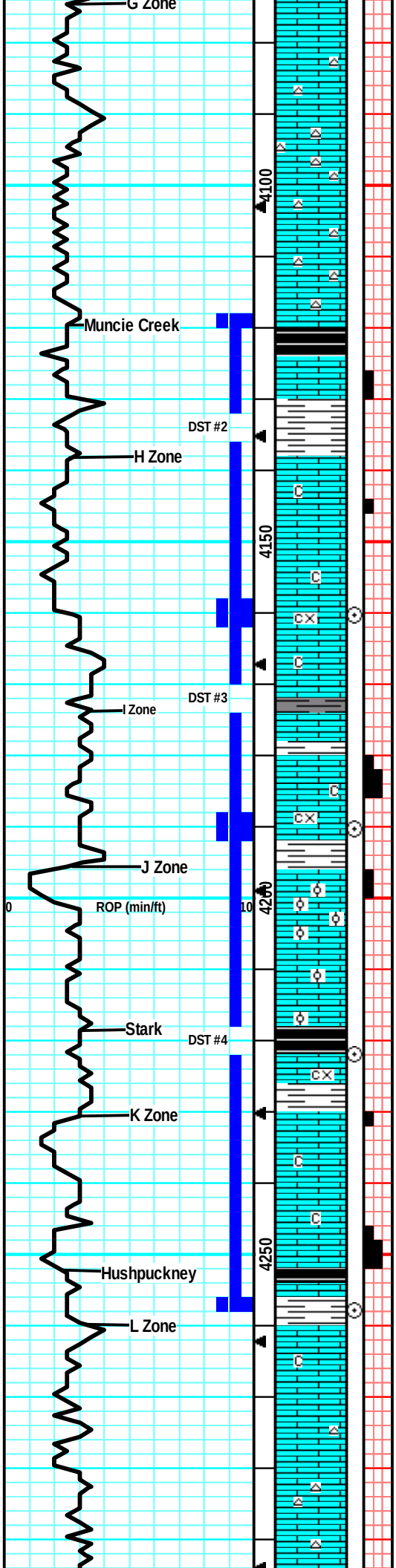
CFS @ 4054'
(30"/60")

Too windy to strap pipe.

LS: tan/lt brn, slght mott, fn xln, dense, sm firm, many flakey/mealy, tr-nvp, sm Chert: lt gry/lt brn, ool/foss, sharp, no cup odr, ns.

LS: tan/lt gry, slgh tmott in prt, fn xln, sm dense, fw brit, sub-chlky in prt, fw flakey, tr-nvp, 1 pcs w/ v sml lght brn stn on edge, dul yel fluor, slw pos cut, no cup odr, sho pos from above.

DST #1 "LKC E" 4032'-4054'
6-21-16 30-45-45-60
1st Blw: Wk 1/4" Blw blt to BOB in 13.5min (No BB)
2nd Blw: Wk Surf blt to 8.5" (No BB)
IFP: 12-167# ISIP: 1002# FFP:



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

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

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

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

LS: lt tan/lt gry, fw slght mott, fn xln, most dens, sm brit, sub-chlky, fw flakey, tr-nvp, svrl pcs pur chlk, fw Chert: wht/opaq, sharp, no odr, ns.

LS: gry/lt brn, mott in prt, fn xln, mostly brit, sm fr intxln por/slght vuggy, brn sphr of oil clng to rx chp, faint quick odr, ssfo in 2 pcs, svrl SH: blk, silty, carb.

LS: gry/lt brn, mott in prt, fn xln, mostly dense, sm firm, flakey/mealy, tr-ppt intxln por in fw, sm brn patchy brn stns, v sml sphr of oil on brk in 2-3 pcs, faint-? cup odr.

LS: gry/lt tan, slght mott, fn xln, sm dense, fw firm, sub-chlky, tr-nvp, 2 pcs w/ pr intxln por on edge, drk brn stn, lght fo clng to rx chp, min gas bub, vssfo, fr cup odr.

LS: lt tan/gry, mostly sing, fn xln, mostly dens, sm brittle, sub-chlkiy in prt, fw flakey, tr-nvp, 3-4 pcs w/ drk hvy tarry stns, wk fluor, hvy vis oil, faint-? cup odr, fr sho fo.

LS: gry/lt brn, slght mott, fn-crs xln, mostly dense, sm brittle, sub-chlky in prt, sm flakey/mealy, tr-nvp, fw SH: drk gry, silty, soft, fw carb, no cup odr, ns.

LS: lt tan/lt gry, sing, micro-fn xln, mostly dense, mostly brit, sub-chlky, sm fr intxln por on edges, patchy brn stns mostly on edge, dul yel fluor, 4-5 pcs w/ ssfo on rx chp, fr sfo on brk, fr-gd odr bldg undr lght.

LS: gry/tan, slght mott, fn xln, mostly brit, sub-chlky in prt, sm flakey, svrl pcs w/ fr intxln/slght vuggy por, many 15+ pcs w/ spttd salt/pep brn stns, dul yel fluor, strm cut, fr sfo on brk, gd cup odr incrs to strng undr lght.

LS: lt gry/tan, slght mott, fn-crs xln, many frim, sm flakey/mealy, tr-nvp, svrl SH: gry/brn, silty, sm soft, no cup odr, ns.

LS: gry/lt tan, slght mott, fn xln, sm ool, many dens, svrl firm, fw pcs w/ slght vuggy/pr oolcast por, drk sat stns in por, dul yel fluor, strm cut, fr cup odr, ssfo on brk in 5-6 pcs.

LS: gry/tan, slght mott, fn xln, sm ool, many dense, sm brit, fw sub-chlky, pr scat vuggy por, dul yel fluor, sat stns in por, vssfo on brk in 3-4 pcs, slght cup odr.

LS: gry/tan, mott in prt, fn-crs xln, many dense, sm brittle, fw sub-chlky in prt, many flakey/mealy, tr-nvp, fw pcs SH: blk, silty, carb, no cup odr, ns.

LS: gry/tan, slght mott, fn xln, many brittle, fw flakey, sub-chlky in prt, tr-pr ppt intxln por in svrl pcs, slt/pep stns, dul yel fluor, pos cut resid, ssfo in 4-5pcs, slght cup odr, svrl SH: blk, carb.

LS: gry/lt tan, slght mott in prt, fn xln, mostly brittle, sub-chlky in prt, fr ppt intxln por, patchy salt/pep stns, ssfo on brk in svrl pcs, fr cup odr.

LS: lt gry/lt tan, slght mott, fn xln, mostly dense, sm brittle, sub-chlky, 2 pcs w/ gd intxln por, sat w/ oil in por, gd sfo on brk, fr-gd cup odr. 60" Smpl: more dense rock on 2 pcs w/ sho. faint-? cup odr.

LS: gry/tan, slght mott, fn xln, mostly dense, many firm, sub-chlky in prt, tr-nvp, 2 pcs w/ pr intxln por, patchy brn stns, vssfo on brk, pos from above, fw SH: blk, silty, carb, no cup odr.

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

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

LS: lt gry/lt tan, mostly sing, fn xln, many dense, sm brittle, sub-chlky, tr-nvp, fw pcs pur chlk, fw Chert:

168-328# FSIP: 1002#
Hyd: 1924-1928#
Rec: 200' SMCW (92% WTR), 500' WTR.

Mud-Co Check #7
@ 4154' 6/22/16
wt vis pH
9.3 54 10.5
Filt chlr LCM
8.8 3.8K 1#

Muncie Creek @ 4120' (-1135)

DST #2 "LKC H" 4118'-4160'
6-22-16 30-30-30-30
1st Blw: 3" Blw blt to BOB in 1.5min (No BB)
2nd Blw: Wk 1/2" Blw blt to BOB in 3.5min (No BB)
IFP: 240-675# ISIP: 825# FFP: 697-812# FSIP: 861#
Hyd: 1999-1993#
Rec: 60' WCMw/TrO (36%Wtr), 395' Wtr, 910' SMCW (96%Wtr), 415' HMCW (60%Wtr).

Pipe Strap was .87ft short to the board.

CFS @ 4160' (30"/60")

DST #3 "LKC I" 4161'-4190'
6-23-16 30-45-45-60
1st Blw: Wk Surf Blw blt to 1/4" (No BB)
2nd Blw: V Wk Surf Blw died in 23min (No BB)
IFP: 8-9# ISIP: 33# FFP: 9-10# FSIP: 27#
Hyd: 1985-1983#
Rec: 2' Mw/OSpts.

CFS @ 4190' (30"/60")

Stark @ 4219' (-1234)

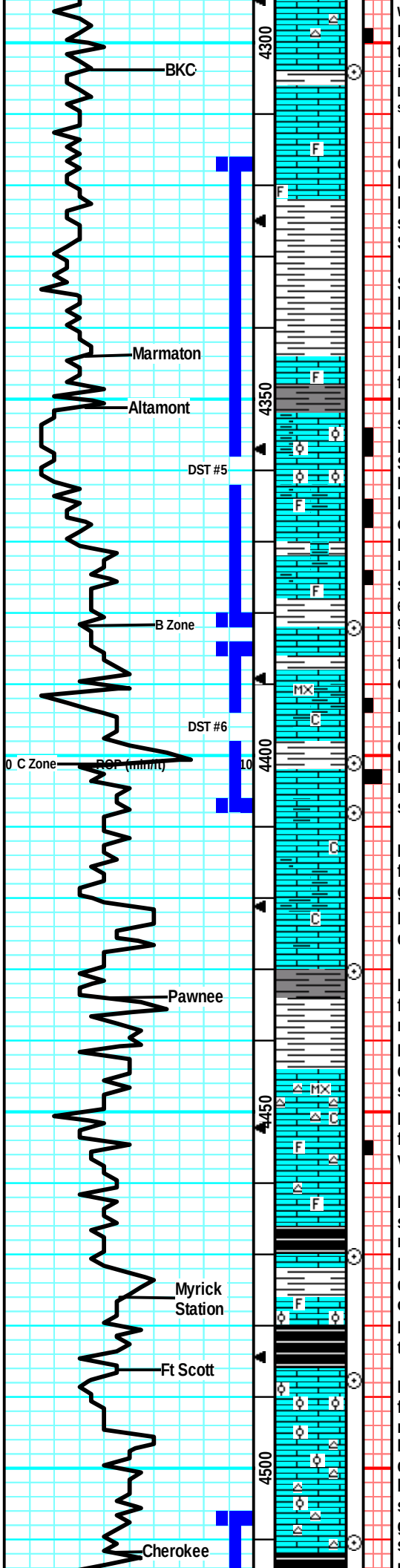
Mud-Co Check #8
@ 4190' 6/23/16
wt vis pH
9.2 59 10.0
Filt chlr LCM
8.8 4K 1#

CFS @ 4222' (30"/60")

DST #4 "LKC J/K" 4191'-4258'
6-23-16 30-45-45-60
1st Blw: 1.5" Blw blt to BOB 4.5min (No BB)
2nd Blw: Wk Surf Blw blt to BOB in 7min (No BB)
IFP: 47-343# ISIP: 917# FFP: 353-603# FSIP: 916#
Hyd: 2017-1996#
Rec: 50' SOHMCW (7%Oil, 59%Wtr), 690' HMCWw/TrO (60%Wtr), 565' SMCWw/TrO (98%Wtr).

Hushpuckney @ 4252' (-1267)

CFS @ 4258' (30"/60")



wht/opaq, sharp, no cup odr, ns.

LS: gry/tan, slght mott in prt, fn xln, fw dense, fw flaky, tr-nvp, 3-4 pcs w/ patchy brn stns, tight ppt intxln por in prt, vssfo on brk, fr cup odr.

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

LS: tan/lt gry, slght mott, fn xln, sm foss in prt, many dense, sm flakey, sub-chlky, tr-nvp, svrl SH: drk brn/gry, silty, no cup odr, ns.

LS: tan/lt gry, slght mott, fn xln, many dense, flakey, fw sub-chlky, tr-nvp, fw SltStn: gry, gritty, brit, fw frib, fw SH: drkgry/brn, silty, fissile, no cup odr, ns.

SH: gry/blu/brn, silty, soft, fw SltStn: gry, sandy/gritty, britt, fw LS: gry/tan, mott in prt, fw flakey, firm, tr-nvp, no cup odr, ns.

LS: tan/lt gry, slght mott, fn xln, fw foss frags, many brit, sub-chlky, fw flakey, tr-nvp, svrl SH: gry/brn, silty, fw soft, no cup odr, ns.

LS: tan/gry, slght mott, fn xln, sm foss/ool, many dens, sm brittle, flakey, tr-nvp, 3-4 pcs w/ pr intfoss/intool por, drk brn stns in por, ssfo on brk, no cup odr, abund SH: gry/brn.

LS: lt tan/lt gry, slght mott, fn xln, sm foss/ool, mostly britty, sm fr intfoss/intool por, lght brn stns in por, ssfo on brk in 5-6 pcs, faint cup odr.

LS: tan/lt tan, slght mott in prt, fn xln, fw foss frags, mostly brittle, sm flakey, sub-chlky, tr-nvp, 2-3 pcs w/ sho like abov, no cup odr.

60" Smpl: Much like the above, on 2 pcs w/ vssfo, svrl more pcs SH: gry/brn silty, sm soft, no cup odr.

LS: tan/gry, slght mott, fn xln, most dens, sm firm, tr-nvp, 2 pcs w/ pr part intxln por, spttd brn stns, vssfo on brk, fnt-? cup odr, svrl SH.

LS: lt tan/tan, micro-fn xln, many dense, fw firm, patchy drk brn snts, pr ppt intxln por, ssfo in 8-10 pcs, dul yel fluor, slght cup odr on brk.

LS: lt tan/tan, slght mott, fn xln, micro-fn xln, fw foss, mostly firm, sm fr intxln/slght vuggy, spttd lght brn stns in por, fr sfo on brk in 10+ pcs, fr cup odr.

LS: gry/tan, slght mott in prt, fn xln, mostly flakey/mealy, sub-chlky, fw brit, tr-nvp, fw pcs SH: drk gyr, silty, fissile, no cup odr, ns.

LS: gry/lt brn, mott in prt, fn xln, fw foss frags, mostly dens, sm firm, flakey/mealy, tr-nvp, no cup odr, ns.

LS: gry/lt tan, slght5 mott, fn xln, mostly dense, sm firm, flakey/mealy, tr-nvp, fw SH: drk gry/gry, silty, med crush, no cup odr, ns.

LS: lt gry/lt tan, mostly sing, micro-fn xln, mostly dense, sm firm, tr-nvp, fw Chert: lt gry/wht, opaq, sharp, no cup odr, ns.

LS: lt gry/lt tan, slght mott, fn xln, mostly dense, sm firm, tr-nvp, svrl pcs w/ patchy lght brn stns, wk fluor, v slw cut, sm SH: gry/wht, sharp, nsfo, no cup odr.

LS: gry/lt brn, mott in prt, fn xln, fw foss frags, dens, sm firm, fw flakey, tr-nvp, fw SH: gry, silty, med crush, no cup odr, ns.

LS: tan/gry, slght mott, fn xln, fw foss/ool, mostly dense, frim, flakey, tr-nvp, fw SH: drk gry, silty, no cup odr, ns.

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

LS: gry/brn, mott, fn xln, sm v ool, mostly brit, sm friable, fw flakey, tr-nvp, v fw SH: gry, silty, no cup odr, ns.

LS: gry/lt brn, mott in prt, fn xln, sm v ool, mostly dense, sm firm, tr-nvp, 2 pcs w/ v tight pr intool por, lght brn stn on each, wk fluor, pos cut resid, v sml sphr of oil on brk in hgh mag, no cup odr. 60"Smpl: LS: gry/tan, fn xln, fw foss firm, tr-nvp, fw Chert: gry, sharp, no cup odr, ns.

LS: lt brn/gry, mott, fn xln, prefus ool, mostly brittle,

CFS @ 4304'
(30"/60")

BKC @ 4304' (-1319)

DST #5 "Altamont A" 4316'-4382' 6-24-16
30-45-45-60
1st Blw: 1/2" Blw blt to BOB 13min (No BB)
2nd Blw: 1/2" Blw blt to BOB in 11min (No BB)
IFP: 27-96# ISIP: 987# FFP: 104-147# FSIP: 982#
Hyd: 2094-2088#
Rec: 530' GIP, 35' GSMCO(90%O), 310' GMCO (57%O).

Marmaton @ 4344' (-1359)

Mud-Co Check #9 @ 4381' 6/24/16

wt	vis	pH
9.3	53	10.5
Filt	chlr	LCM
8.0	3.5K	2#

Altamont @ 4351' (-1366)

CFS @ 4382'
(30"/60")

DST #6 "Altamont B"
4384'-4408' 6-25-16
30-45-45-60
1st Blw: Wk Surf Blw blt to 9.5" (No BB)
2nd Blw: 1/4" Blw blt to BOB in 32" (No BB)
IFP: 11-44# ISIP: 1106# FFP: 57-64# FSIP: 1088#
Hyd: 2119-2118#
Rec: 375' GIP, 5' GO(97%O), 120' GVHMCO (44%O).

CFS @ 4401'
(30"/60")

CFS @ 4408'
(30"/60")

Mud-Co Check #10 @ 4408' 6/25/16

wt	vis	pH
9.3	54	10.0
Filt	chlr	LCM
7.2	4.5K	1#

CFS @ 4430'
(30"/60")

Pawnee @ 4434' (-1449)

CFS @ 4470'
(30"/60")

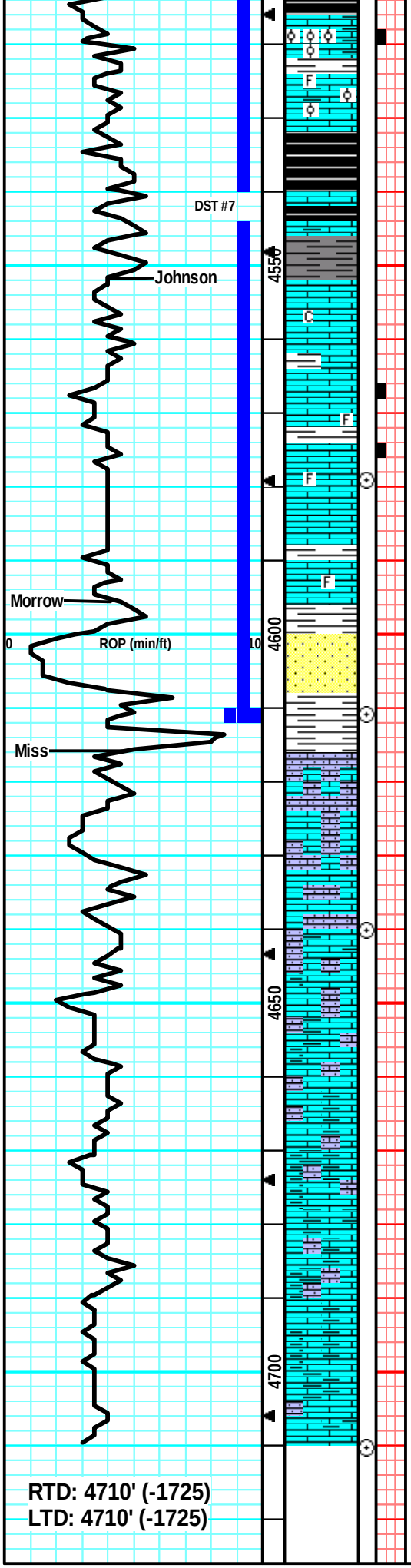
Myrick Station @ 4476' (-1491)

Ft Scott @ 4486' (-1501)

CFS @ 4488'
(30"/60")

CFS @ 4510'
(30"/60")

Cherokee @ 4512' (-1527)



LS: lt brn/gry, mott, fn xln, prolus ool, mostly brittle, tr-pr intool por, 3 pcs w/ lght brn stns in por, dul yel fluor, vssfo on brk, faint-? cup odr.

LS: gry/lt brn, mott, fn xln, many v ool, sm dense, sm firm, tr-nvp, fw pcs SH: drk gyr, silty, no cup odr, ns.

LS: tan/gry, mott in prt, fn xln, many foss/ool, many flakey, sm brit, tr-pr intxln por in fw, svrl SH: drk gry/blk, silty, fw carb, no cup odr, ns.

LS: gry/tan, slght mott, fn xln, sm dense, mostly flakey/mealy, sm brittle, fw firm, tr-nvp, svrl SH: gry, silty, sm black/carb, no cup odr, ns.

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

LS: gry/tan, slght mott, fn xln, many dense, sm flakey/mealy, sm brit, tr-nvp, 2-3 pcs w/ drk brn spttd stns, wk-? flour, nfo on brk, pos drk dead oil, no cup odr.

LS: lt gry/tan, slght mott, fn xln, fw foss frags, mostly dense, sm brittle, sub-chlky, tr-ppt intxln por in fw (tght), dul yel fluor in sm, spttd lght brn stns, vssfo in 2-3 pcs, no cup odr.

LS: gry/lt tan, slght mott, fn xln, sm brit, flakey/mealy, tr-? intxln por, spttd drk brn stns in fw, sml glb hvy tarry vis oil, no cup odr.

LS: gry/lt brn, mott in prt, fn xln, fw foss frags, many flakey/mealy, sm firm, tr-nvp, fw SH: gry/brn, silty, no cup odr, ns.

LS: gry/tan, mott, fn xln, sm foss, many flakey, sm britt, tr-nvp, svrl SH: gry/brn, silty, sm gritty, sm v soft, no cup odr, ns. Drilling break indicates good sand zone, only 1 pcs of fn gr qrtz sand found in 2 trays, clean, v friable, v brit, fr intgrn por.

SH: gry/brn/grn/oliv, silty, sm fissile, wthrd, fw SS: gry/crm, fn grn, sb rnd, arg, brit, fw glauc, tr-? intgrn por in couple, svrl LS: lt gry/lt tan, slght mott, fn xln, tr-nvp, no cup odr, ns.

LS: tan/lt tan, mostly sing, fn xln, many dens, sandy/gritty in prt, brit, sm gd intxln por in fw pcs, no cup odr, ns.

LS: tan/lt tan, slght mott, fn xln, sm brittle, many flakey/mealy, sm sandy/gritty like, sub-chlky in prt, tr-nvp, no cup odr, ns.

LS: tan/lt tan, mostly sing, fn xln, fw dense, mostly brit, many flakey, fw sandy/grainy, tr-nvp, fw pcs pur chlk, no cup odr, ns.

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

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

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

LS: lt tan/lt gry, slght mott in prt, fn xln, mostly brittle, many flakey/mealy, sandy/grainy in prt, tr-nvp, fw SH: gry, silty, no cup odr, ns.

LS: lt tan/lt gry, slght mott, fn xln, sm brittle, many flakey/mealy, fw sandy/grainy, tr-nvp, fw SH: gry/brn, silty, no cup odr, ns.

LS: lt gry/lt tan, slght mott in prt, fn xln, many brit, mostly flakey/mealy, tr-nvp, sm SH: gry/brn, silty, no cup odr, ns.

Cherokee @ 4512' (-1527)

DST #7 "Cherokee" 4506'-4611' 6-26-16
30-30-30-30
1st Blw: 1/4" Blw died to back to surf blw (No BB)
2nd Blw: Wk surf blw died in 2min (No BB)
IFP: 12-19# ISIP: 787# FFP: 20-08# FSIP: 712#
Hyd: 2216-2205#
Rec: 20' Mud.

Johnson @ 4552' (-1567)

Mud-Co Check #11
@ 4564' 6/26/16

wt	vis	pH
9.3	64	9.5
Filt	chlr	LCM
8.8	4.7K	2#

CFS @ 4579'
(30"/60")

Morrow @ 4596' (-1611)

CFS @ 4611'
(30"/60")

Mississippi @ 4616' (-1631)

CFS @ 4640'
(30"/60")

Mud-Co Check #12
@ 4643' 6/27/16

wt	vis	pH
9.1	60	10.5
Filt	chlr	LCM
8.0	4K	3#

CFS @ 4710'
(30"/60")

Survey @ 4710' = 1 1/4 Degrees

RITCHIE
EXPLORATION, INC.
Wichita, Kansas

#1 York 34D
1460' FSL & 1530' FEL
140' N & 120' E of E/2 W/2 SE/4 Section 34-17S-32W
Scott County, Kansas
API# 15-171-21170-0000
Elevation: GL: 2980', KB: 2985'

Sample Tops			Ref. Well
Anhydrite	2309'	+676	+3
B/Anhydrite	2329'	+656	+2
Heebner	3906'	-921	+4
Toronto	3925'	-940	+4
Lansing	3949'	-964	+4
Muncie Shale	4123'	-1138	+2
Stark Shale	4232'	-1247	-1
Hush	4269'	-1284	-2
BKC	4304'	-1319	+5
Altamont	4352'	-1367	+4
Fort Scott	4486'	-1501	+5
Cherokee	4514'	-1529	+3
Johnson	4556'	-1571	+2
Mississippian	4620'	-1635	+9
RTD	4710'	-1725	

P.O. Box 783188
Wichita, Kansas 67278-3188

(316) 691-9500
Fax (316) 691-9550
rei@ritchie-exp.com

8100 E. 22nd St. N., Bldg. 700
Wichita, Kansas 67226-2328

ALLIED OFS, LLC

Federal Tax I.D. #81-2169190

68003

REMIT TO: Allied OFS, LLC
P.O. Box 133366
Spring, TX 77393

SERVICE POINT: Oakley

DATE 6-12-10	SEC. 34	TWP. 17s	RANGE 34w	CALLED OUT	ON LOCATION 11:00 Am	JOB START 11:00 AM	JOB FINISH 11:30 Am
LEASE York 340	WELL # 1		LOCATION Scott City 3N 3¾ E			COUNTY Scott	STATE KS
OLD OR (NEW) (Circle one)			N to Into				

CONTRACTOR WW 2
TYPE OF JOB Surface
HOLE SIZE 12¼ T.D. 250'
CASING SIZE 8⅝ DEPTH 250'
TUBING SIZE DEPTH
DRILL PIPE DEPTH
TOOL DEPTH
PRES. MAX MINIMUM
MEAS. LINE SHOE JOINT
CEMENT LEFT IN CSG. 15'
PERFS.
DISPLACEMENT 14.9 BBL

OWNER Same

CEMENT

AMOUNT ORDERED 125 sks com 3%cc 2% gel

COMMON	125 sks	@ 12.90	3132.50
POZMIX		@	
GEL	329#	@ 15.0	164.50
CHLORIDE	494#	@ 1.10	543.40
ASC		@	
		@	
		@	
		@	
		@	
		@	
		@	
		@	
		@	
		TOTAL	3840.40
		DISCOUNT 48%	1843.39

EQUIPMENT

PUMP TRUCK # 431 CEMENTER Andrew Forslund
HELPER Terry Heinach
BULK TRUCK # 412 DRIVER Cory Brown
BULK TRUCK # DRIVER

REMARKS:

Cement in Cellar

Thank you

SERVICE

HANDLING	189.23 cu/ft	@ 2.48	469.29
MILEAGE	2.25 Ton/mile	8.63 Tm	1062.24
DEPTH OF JOB	250'		
PUMP TRUCK CHARGE			1512.25
EXTRA FOOTAGE		@	
HV MILEAGE	45 miles	@ 2.20	346.50
LV MILEAGE	45 miles	@ 4.40	198.00
		@	
		@	
		TOTAL	3594.00
		DISCOUNT 48%	1725.12

CHARGE TO: Ritchie Exploration
STREET
CITY STATE ZIP

PLUG & FLOAT EQUIPMENT

	@	
	@	
	@	
	@	
	@	
	TOTAL	
	DISCOUNT %	

To: Allied OFS, 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.

SALES TAX (If Any)
TOTAL CHARGES 7,434.40
DISCOUNT 3,568.51 (48%) IF PAID IN 30 DAYS
NET TOTAL 3,865.88 IF PAID IN 30 DAYS

PRINTED NAME
SIGNATURE

6067

5971 Invoice #857925

TICKET NUMBER 51494

LOCATION Oakley KS

FOREMAN Jerry V

Miles 5

CONSOLIDATED
Well Services, LLC

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

FIELD TICKET & TREATMENT REPORT

CEMENT

DATE	CUSTOMER #	WELL NAME & NUMBER	SECTION	TOWNSHIP	RANGE	COUNTY
6-28-16	7173	Yoi K3D #1	34	17S	32W	Scott KS

CUSTOMER: Ritchie Exp

MAILING ADDRESS:

CITY: | STATE: | ZIP CODE:

Scott City N to 180 E 3 miles N on Wilson

TRUCK #	DRIVER	TRUCK #	DRIVER
731	Cory D		
772-T429			

JOB TYPE Long string HOLE SIZE 7 7/8 HOLE DEPTH 4710 CASING SIZE & WEIGHT 5½ 15.5

CASING DEPTH 4706 DRILL PIPE TUBING OTHER PC. @ 2242

SLURRY WEIGHT 14.2 SLURRY VOL 1.42 WATER gal/sk CEMENT LEFT in CASING 22'

DISPLACEMENT 112 bbl DISPLACEMENT PSI MIX PSI RATE

REMARKS: Safty meeting rig up on WH2 run float equip. turbos on 1, 2, 4, 5, 10, 58, 60, 74 baskets on 7, 59, 73 Port collar on top 59 set @ 2242 run casing to bottom pump ball thru circulate 1hr pump mud flush with water spacers mix 170 sks thixobland III shut down release plug clean pump & lines displace with 113 bbl fresh water plug landed @ 1700 # final lift 1200 # released back - float held press back to 500 # shut in 2hrs.

30 sks Rathole

Thank You
Jerry & crew

ACCOUNT CODE	QUANITY or UNITS	DESCRIPTION of SERVICES or PRODUCT	UNIT PRICE	TOTAL
CE0454	1	PUMP CHARGE	3900.00	3900.00
CE0002	30	MILEAGE	7.15	214.50
CE0711	9.4	ton mileage delivery (min)	660.00	660.00
CC5862	200 sks	Thixobland III	26.00	5200.00
CC6077	1000 #	Kolseal	.50	500.00
CC6000	50 #	CDI-26	7.85	392.50
CC6155	28 #	CAF-38	10.20	285.60
CC6125	500 gal	mud flush	.65	325.00
CP8485	1	5½ AFU Floatshoe	585.00	585.00
CP8254	1	5½ latch down assy	400.00	400.00
CP8576	8	5½ turbolizers	110.00	880.00
CP8629	3	5½ baskets	385.00	1155.00
CP8776	1	5½ Port Collar # 1506104	2850.00	2850.00
			subtotal	17347.60
			-40%	6939.04
			subtotal	10408.56
			SALES TAX	641.23
			ESTIMATED TOTAL	$ 11,049.79

Ravin 3737

AUTHORIZTION Cory Rowe 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

6141
6045

Invoice #808028

TICKET NUMBER 51500
LOCATION Oakley Ks
FOREMAN Jerry / Walt D

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

FIELD TICKET & TREATMENT REPORT

CEMENT

DATE	CUSTOMER #	WELL NAME & NUMBER	SECTION	TOWNSHIP	RANGE	COUNTY
7-7-16	7183	York 34D #1	34	17s	32w	Scott Ks

CUSTOMER: Ritchie Exp
MAILING ADDRESS:
CITY: STATE: ZIP CODE:

Scott City Nto 180 E 3 miles No Wind

TRUCK #	DRIVER	TRUCK #	DRIVER
731	Miles		
772 729			

JOB TYPE Port Collar HOLE SIZE HOLE DEPTH CASING SIZE & WEIGHT 5 1/2 15.5
CASING DEPTH DRILL PIPE TUBING 2 3/8 OTHER PC @ 2242
SLURRY WEIGHT 12.5 SLURRY VOL 1.89 WATER gal/sk CEMENT LEFT in CASING
DISPLACEMENT 7 1/2 bbl DISPLACEMENT PSI MIX PSI RATE

REMARKS: Safty Meeting rig up on Hasker Service. Test tool @ 1200# hold 5 min open tool take inj rate 4 1/2 bbl/min @ 300 # mix 250 sks Lite blend III and 500# hulls wash up displace w/ 7 1/2 bbl shut down close tool & press to 1200# for 5 min released run 5 jts & reverse clean w/ 20 bbl pull tubing press casing to 500# & shut in

Cemented circulate 6 bbl 76 bbl to pit

Thank you
Jerry & crew

ACCOUNT CODE	QUANITY or UNITS	DESCRIPTION of SERVICES or PRODUCT	UNIT PRICE	TOTAL
CE0451	1	PUMP CHARGE	1900.00	1900.00
CE0002	30	MILEAGE	7.15	214.50
CE0711	10.75	ton mileage delivery min	660.00	660.00
CC5831	250 sks	Lite Blend III	17.50	4375.00
CC6075	63 #	cello flake	2.00	126.00
CC6080	500 #	hulls	.50	250.00
			Subtotal	7525.50
			-40%	3010.20
			Subtotal	4515.30
			SALES TAX	242.30
			ESTIMATED TOTAL	4757.60

9053

Ravin 3737

AUTHORIZTION Cory Rowe 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.

DIAMOND TESTING, LLC

TESTER : TIM VENTERS
CELL # 620-388-6333

General Information

Company Name	RITCHIE EXPLORATION, INC.		
Contact	JUSTIN CLEGG	Job Number	T534
Well Name	YORK 34D #1	Representative	TIM VENTERS
Unique Well ID	DST #1, LKC "E", 4032-4054	Well Operator	RITCHIE EXPLORATION, INC.
Surface Location	SEC 34-17S-32W, SCOTT CO. KS.	Report Date	2016/06/22
Well License Number		Prepared By	TIM VENTERS
Field	WILDCAT		
Well Type	Vertical		

Test Information

Test Type	CONVENTIONAL		
Formation	DST #1, LKC "E", 4032-4054		
Well Fluid Type	01 Oil		
Test Purpose	Initial Test		
Start Test Date	2016/06/21	Start Test Time	18:33:00
Final Test Date	2016/06/22	Final Test Time	01:48:00
Gauge Name	5504		

Test Results

RECOVERED: 200' SMCW, 92% WATER, 8% MUD
500' WATER, 100% WATER
700' TOTAL FLUID

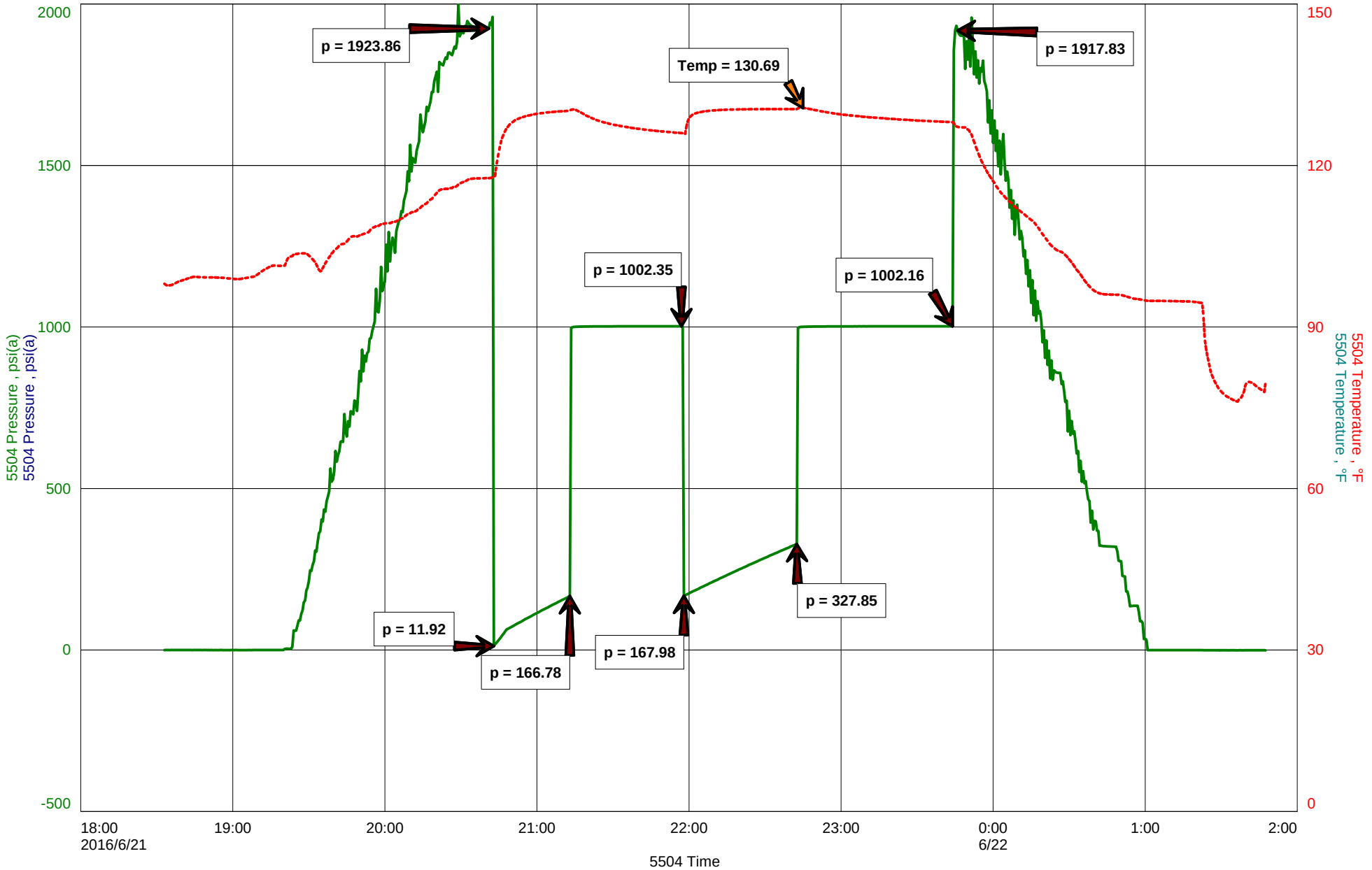
TOOL SAMPLE: SPECKS OIL, 90% WATER, 10% MUD

CHLORIDES: 33,000 ppm
PH: 7.5
RW: .26 @ 63 deg.

RITCHIE EXPLORATION, INC.
DST #1, LKC "E", 4032-4054
Start Test Date: 2016/06/21
Final Test Date: 2016/06/22

YORK 34D #1
Formation: DST #1, LKC "E", 4032-4054
Pool: WILDCAT
Job Number: T534

YORK 34D #1



DIAMOND TESTING
P.O. Box 157
HOISINGTON, KANSAS 67544
(800) 542-7313

DRILL-STEM TEST TICKET
FILE: YORK34D1DST1

TIME ON: 18:33 6-21-16
TIME OFF: 01:48 6-22-16

Company RITCHIE EXPLORATION, INC. Lease & Well No. YORK 34D #1

Contractor WW DRILLING, LLC RIG #2 Charge to RITCHIE EXPLORATION, INC.

Elevation 2985 KB Formation LKC "E" Effective Pay ____ Ft. Ticket No. T534

Date 6-21-16 Sec. 34 Twp. 17 S Range 32 W County SCOTT State KANSAS

Test Approved By JOHN GOLDSMITH Diamond Representative TIM VENTERS

Formation Test No. 1 Interval Tested from 4032 ft. to 4054 ft. Total Depth 4054 ft.

Packer Depth 4027 ft. Size 6 3/4 in. Packer depth ____ ft. Size 6 3/4 in.

Packer Depth 4032 ft. Size 6 3/4 in. Packer depth ____ ft. Size 6 3/4 in.

Depth of Selective Zone Set ____

Top Recorder Depth (Inside) 4013 ft. Recorder Number 5504 Cap. 5,000 P.S.I.

Bottom Recorder Depth (Outside) 4051 ft. Recorder Number 11029 Cap. 5,025 P.S.I.

Below Straddle Recorder Depth ____ ft. Recorder Number ____ Cap. ____ P.S.I.

Mud Type CHEMICAL Viscosity 58 Drill Collar Length 119 ft. I.D. 2 1/4 in.

Weight 9.3 Water Loss 7.2 cc. Weight Pipe Length 0 ft. I.D. 2 7/8 in

Chlorides 1,500 P.P.M. Drill Pipe Length 3880 ft. I.D. 3 1/2 in

Jars: Make STERLING Serial Number 4 Test Tool Length 33 ft. Tool Size 3 1/2-IF in

Did Well Flow? NO Reversed Out NO Anchor Length 22 ft. Size 4 1/2-FH in

Main Hole Size 7 7/8 Tool Joint Size 4 1/2 XH in. Surface Choke Size 1 in. Bottom Choke Size 5/8 in

Blow: 1st Open: WEAK 1/4 INCH BLOW, BUILDING, REACHING BOB 13 1/2 MIN. (NO BB)

2nd Open: WEAK SURFACE BLOW, BUILDING TO 8 1/2 INCHES. (NO BB)

Recovered 200 ft. of SMCW, 92% WATER, 8% MUD

Recovered 500 ft. of WATER, 100% WATER

Recovered 700 ft. of TOTAL FLUID

Recovered ____ ft. of ____

Recovered ____ ft. of CHLORIDES: 33,000 ppm

Recovered ____ ft. of PH: 7.5

Remarks: RW: .26 @ 63 deg.

TOOL SAMPLE: SPECKS OIL, 90% WATER, 10% MUD

Price Job	
Other Charges	
Insurance	
Total	

Time Set Packer(s) 8:43 PM A.M. P.M. Time Started Off Bottom 11:43 PM A.M. P.M. Maximum Temperature 131 deg.

Initial Hydrostatic Pressure ..... (A) 1924 P.S.I.

Initial Flow Period ..... Minutes 30 (B) 12 P.S.I. to (C) 167 P.S.I.

Initial Closed In Period ..... Minutes 45 (D) 1002 P.S.I.

Final Flow Period ..... Minutes 45 (E) 168 P.S.I. to (F) 328 P.S.I.

Final Closed In Period ..... Minutes 60 (G) 1002 P.S.I.

Final Hydrostatic Pressure ..... (H) 1918 P.S.I.

DIAMOND TESTING, LLC

TESTER : TIM VENTERS
CELL # 620-388-6333

General Information

Company Name	RITCHIE EXPLORATION, INC.		
Contact	JUSTIN CLEGG	Job Number	T535
Well Name	YORK 34D #1	Representative	TIM VENTERS
Unique Well ID	DST #2, LKC "H", 4118-4160	Well Operator	RITCHIE EXPLORATION, INC.
Surface Location	SEC 34-17S-32W, SCOTT CO. KS.	Report Date	2016/06/22
Well License Number		Prepared By	TIM VENTERS
Field	WILDCAT		
Well Type	Vertical		

Test Information

Test Type	CONVENTIONAL		
Formation	DST #2, LKC "H", 4118-4160		
Well Fluid Type	01 Oil		
Test Purpose	Initial Test		
Start Test Date	2016/06/22	Start Test Time	11:51:00
Final Test Date	2016/06/22	Final Test Time	19:05:00
Gauge Name	5504		

Test Results

RECOVERED: 415' HMCW, 60% WATER, 40% MUD
910' SMCW, 96% WATER, 4% MUD
395' WATER, 100% WATER
60' WCM W/TR. O, TRACE OIL, 36% WATER, 64% MUD
1780' TOTAL FLUID

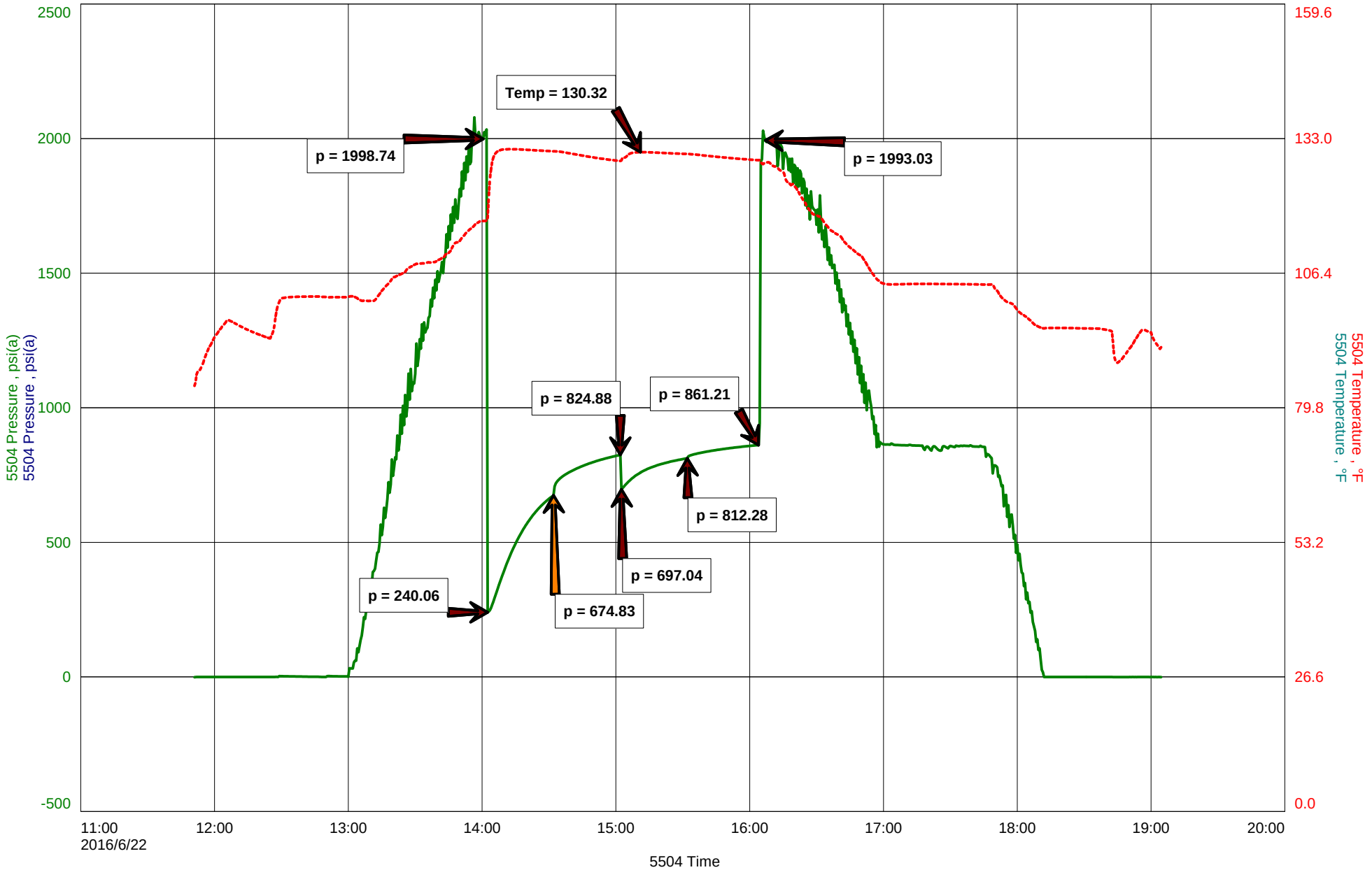
TOOL SAMPLE: 100% WATER

CHLORIDES: 26,000 ppm
PH: 7.5
RW: .28 @ 66 deg.

RITCHIE EXPLORATION, INC.
DST #2, LKC "H", 4118-4160
Start Test Date: 2016/06/22
Final Test Date: 2016/06/22

YORK 34D #1
Formation: DST #2, LKC "H", 4118-4160
Pool: WILDCAT
Job Number: T535

YORK 34D #1



DIAMOND TESTING
P.O. Box 157
HOISINGTON, KANSAS 67544
(800) 542-7313

DRILL-STEM TEST TICKET
FILE: YORK34D1DST2

TIME ON: 11:51
TIME OFF: 19:05

Company RITCHIE EXPLORATION, INC. Lease & Well No. YORK 34D #1

Contractor WW DRILLING, LLC RIG #2 Charge to RITCHIE EXPLORATION, INC.

Elevation 2985 KB Formation LKC "H" Effective Pay Ft. Ticket No. T535

Date 6-22-16 Sec. 34 Twp. 17 S Range 32 W County SCOTT State KANSAS

Test Approved By JOHN GOLDSMITH Diamond Representative TIM VENTERS

Formation Test No. 2 Interval Tested from 4118 ft. to 4160 ft. Total Depth 4160 ft.

Packer Depth 4113 ft. Size 6 3/4 in. Packer depth ft. Size 6 3/4 in.

Packer Depth 4118 ft. Size 6 3/4 in. Packer depth ft. Size 6 3/4 in.

Depth of Selective Zone Set

Top Recorder Depth (Inside) 4099 ft. Recorder Number 5504 Cap. 5,000 P.S.I.

Bottom Recorder Depth (Outside) 5157 ft. Recorder Number 11029 Cap. 5,025 P.S.I.

Below Straddle Recorder Depth ft. Recorder Number Cap. P.S.I.

Mud Type CHEMICAL Viscosity 54 Drill Collar Length 119 ft. I.D. 2 1/4 in.

Weight 9.3 Water Loss 8.8 cc. Weight Pipe Length 0 ft. I.D. 2 7/8 in

Chlorides 3,800 P.P.M. Drill Pipe Length 3966 ft. I.D. 3 1/2 in

Jars: Make STERLING Serial Number 4 Test Tool Length 33 ft. Tool Size 3 1/2-IF in

Did Well Flow? NO Reversed Out YES Anchor Length 42 ft. Size 4 1/2-FH in

Main Hole Size 7 7/8 Tool Joint Size 4 1/2 XH in. Surface Choke Size 1 in. Bottom Choke Size 5/8 in

Blow: 1st Open: STRONG 3 INCH BLOW, BUILDING, REACHING BOB 1 1/2 MIN. (NO BB)

2nd Open: WEAK 1/2 INCH BLOW, BUILDING, REACHING BOB 3 MIN. (NO BB)

Recovered 415 ft. of HMCW, 60% WATER, 40% MUD

Recovered 910 ft. of SMCW, 96% WATER, 4% MUD

Recovered 395 ft. of WATER, 100% WATER

Recovered 60 ft. of WCM W/TR. O, TRACE OIL, 36% WATER, 64% MUD

Recovered 1780 ft. of TOTAL FLUIDS CHLORIDES: 26,000 ppm

Recovered ft. of PH: 7.5

Remarks: RW: .28 @ 66 deg.

TOOL SAMPLE: 100% WATER

Price Job	
Other Charges	
Insurance	
Total	

Time Set Packer(s) 2:02 PM A.M. P.M. Time Started Off Bottom 4:02 PM A.M. P.M. Maximum Temperature 130 deg.

Initial Hydrostatic Pressure..... (A) 1999 P.S.I.

Initial Flow Period..... Minutes 30 (B) 240 P.S.I. to (C) 675 P.S.I.

Initial Closed In Period..... Minutes 30 (D) 825 P.S.I.

Final Flow Period..... Minutes 30 (E) 697 P.S.I. to (F) 812 P.S.I.

Final Closed In Period..... Minutes 30 (G) 861 P.S.I.

Final Hydrostatic Pressure..... (H) 1993 P.S.I.

DIAMOND TESTING, LLC

TESTER : TIM VENTERS
CELL # 620-388-6333

General Information

Company Name	RITCHIE EXPLORATION, INC.		
Contact	JUSTIN CLEGG	Job Number	T536
Well Name	YORK 34D #1	Representative	TIM VENTERS
Unique Well ID	DST #3, LKC "I", 4161-4190	Well Operator	RITCHIE EXPLORATION, INC.
Surface Location	SEC 34-17S-37W, SCOTT CO. KS.	Report Date	2016/06/23
Well License Number		Prepared By	TIM VENTERS
Field	WILDCAT		
Well Type	Vertical		

Test Information

Test Type	CONVENTIONAL		
Formation	DST #3, LKC "I", 4161-4190		
Well Fluid Type	01 Oil		
Test Purpose	Initial Test		
Start Test Date	2016/06/23	Start Test Time	01:42:00
Final Test Date	2016/06/23	Final Test Time	08:23:00
Gauge Name	5504		

Test Results

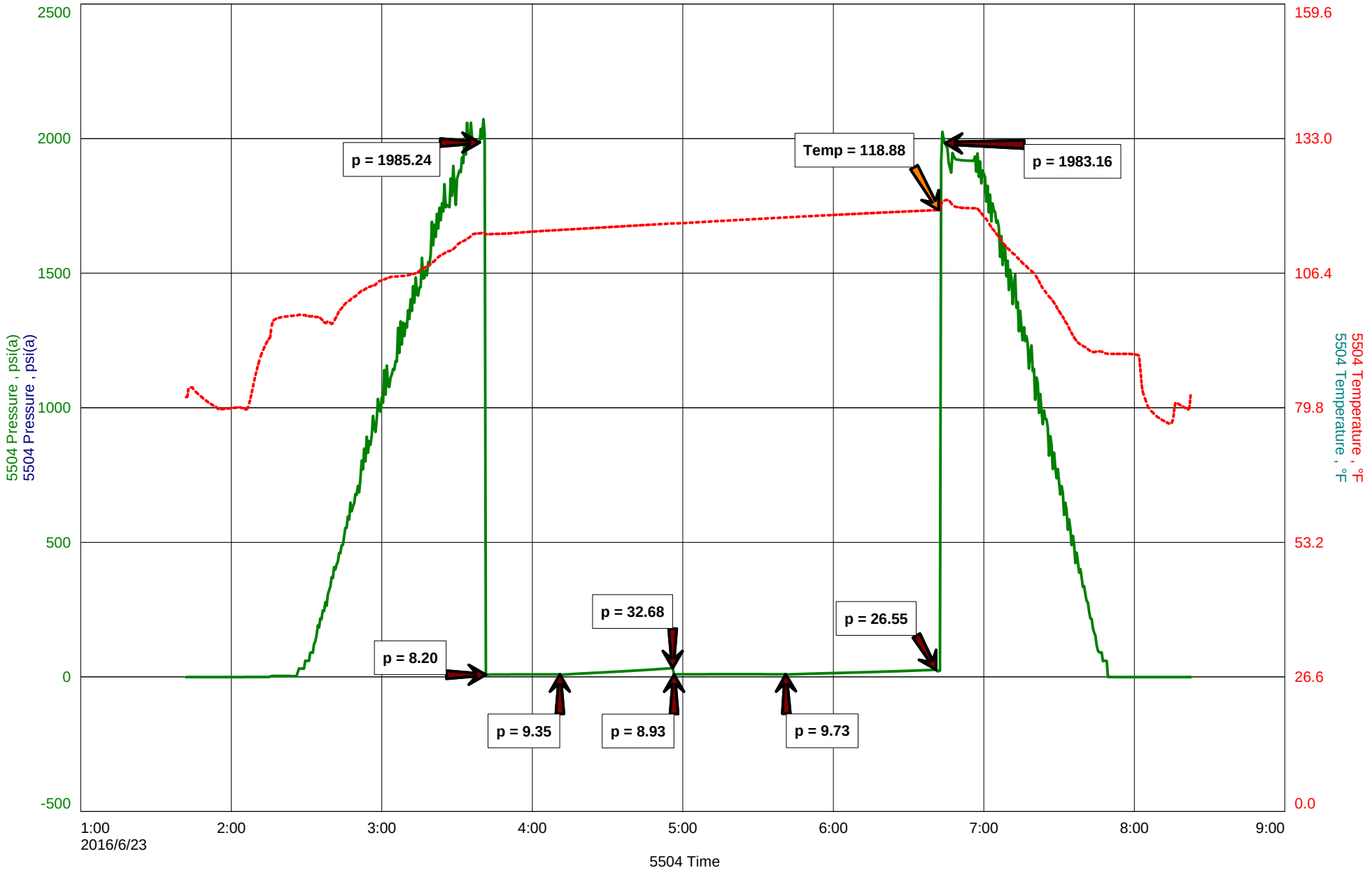
RECOVERED: 2' M W/ SP. O, SPECKS OIL, 100% MUD

TOOL SAMPLE: TRACE OIL, 100% MUD

RITCHIE EXPLORATION, INC.
DST #3, LKC "I", 4161-4190
Start Test Date: 2016/06/23
Final Test Date: 2016/06/23

YORK 34D #1
Formation: DST #3, LKC "I", 4161-4190
Pool: WILDCAT
Job Number: T536

YORK 34D #1



DIAMOND TESTING
P.O. Box 157
HOISINGTON, KANSAS 67544
(800) 542-7313

DRILL-STEM TEST TICKET
FILE: YORK34D1DST3

TIME ON: 01:42
TIME OFF: 08:23

Company RITCHIE EXPLORATION, INC. Lease & Well No. YORK 34D #1

Contractor WW DRILLING, LLC RIG #2 Charge to RITCHIE EXPLORATION, INC.

Elevation 2985 KB Formation LKC "I" Effective Pay Ft. Ticket No. T536

Date 6-23-16 Sec. 34 Twp. 17 S Range 32 W County SCOTT State KANSAS

Test Approved By JOHN GOLDSMITH Diamond Representative TIM VENTERS

Formation Test No. 3 Interval Tested from 4161 ft. to 4190 ft. Total Depth 4190 ft.

Packer Depth 4156 ft. Size 6 3/4 in. Packer depth ft. Size 6 3/4 in.

Packer Depth 4161 ft. Size 6 3/4 in. Packer depth ft. Size 6 3/4 in.

Depth of Selective Zone Set

Top Recorder Depth (Inside) 4142 ft. Recorder Number 5504 Cap. 5,000 P.S.I.

Bottom Recorder Depth (Outside) 4187 ft. Recorder Number 11029 Cap. 5,025 P.S.I.

Below Straddle Recorder Depth ft. Recorder Number Cap. P.S.I.

Mud Type CHEMICAL Viscosity 54 Drill Collar Length 119 ft. I.D. 2 1/4 in.

Weight 9.3 Water Loss 8.8 cc. Weight Pipe Length 0 ft. I.D. 2 7/8 in

Chlorides 3,800 P.P.M. Drill Pipe Length 4009 ft. I.D. 3 1/2 in

Jars: Make STERLING Serial Number 4 Test Tool Length 33 ft. Tool Size 3 1/2-IF in

Did Well Flow? NO Reversed Out NO Anchor Length 29 ft. Size 4 1/2-FH in

Main Hole Size 7 7/8 Tool Joint Size 4 1/2 XH in. Surface Choke Size 1 in. Bottom Choke Size 5/8 in

Blow: 1st Open: WEAK SURFACE BLOW, BUILDING TO 1/4 INCH. (NO BB)

2nd Open: VERY WEAK SURFACE BLOW LASTING 23 MIN. (NO BB)

Recovered 2 ft. of M W/SP. O, SPECKS OIL, 100% MUD

Recovered ft. of

Recovered ft. of

Recovered ft. of

Recovered ft. of

Recovered ft. of

Remarks:

TOOL SAMPLE: TRACE OIL, 100% MUD

Price Job	
Other Charges	
Insurance	
Total	

Time Set Packer(s) 3:41 AM A.M. P.M. Time Started Off Bottom 6:41 AM A.M. P.M. Maximum Temperature 119 deg.

Initial Hydrostatic Pressure ..... (A) 1985 P.S.I.

Initial Flow Period ..... Minutes 30 (B) 8 P.S.I. to (C) 9 P.S.I.

Initial Closed In Period ..... Minutes 45 (D) 33 P.S.I.

Final Flow Period ..... Minutes 45 (E) 9 P.S.I. to (F) 10 P.S.I.

Final Closed In Period ..... Minutes 60 (G) 27 P.S.I.

Final Hydrostatic Pressure ..... (H) 1983 P.S.I.

DIAMOND TESTING, LLC

TESTER : TIM VENTERS
CELL # 620-388-6333

General Information

Company Name	RITCHIE EXPLORATION, INC.		
Contact	JUSTIN CLEGG	Job Number	T537
Well Name	YORK 34D #1	Representative	TIM VENTERS
Unique Well ID	DST #4, LKC "J&K", 4191-4258	Well Operator	RITCHIE EXPLORATION, INC.
Surface Location	SEC 34-17S-32W, SCOTT CO. KS.	Report Date	2016/06/24
Well License Number		Prepared By	TIM VENTERS
Field	WILDCAT		
Well Type	Vertical		

Test Information

Test Type	CONVENTIONAL		
Formation	DST #4, LKC "J&K", 4191-4258		
Well Fluid Type	01 Oil		
Test Purpose	Initial Test		
Start Test Date	2016/06/23	Start Test Time	18:08:00
Final Test Date	2016/06/24	Final Test Time	01:41:00
Gauge Name	5504		

Test Results

RECOVERED: 50' SOHMCW, 7% OIL, 59% WATER, 34% MUD
690' HMCW W/TR. O, TRACE OIL, 60% WATER, 40% MUD
565' SMCW W/TR. O, TRACE OIL, 98% WATER, 2% MUD
1305' TOTAL FLUID

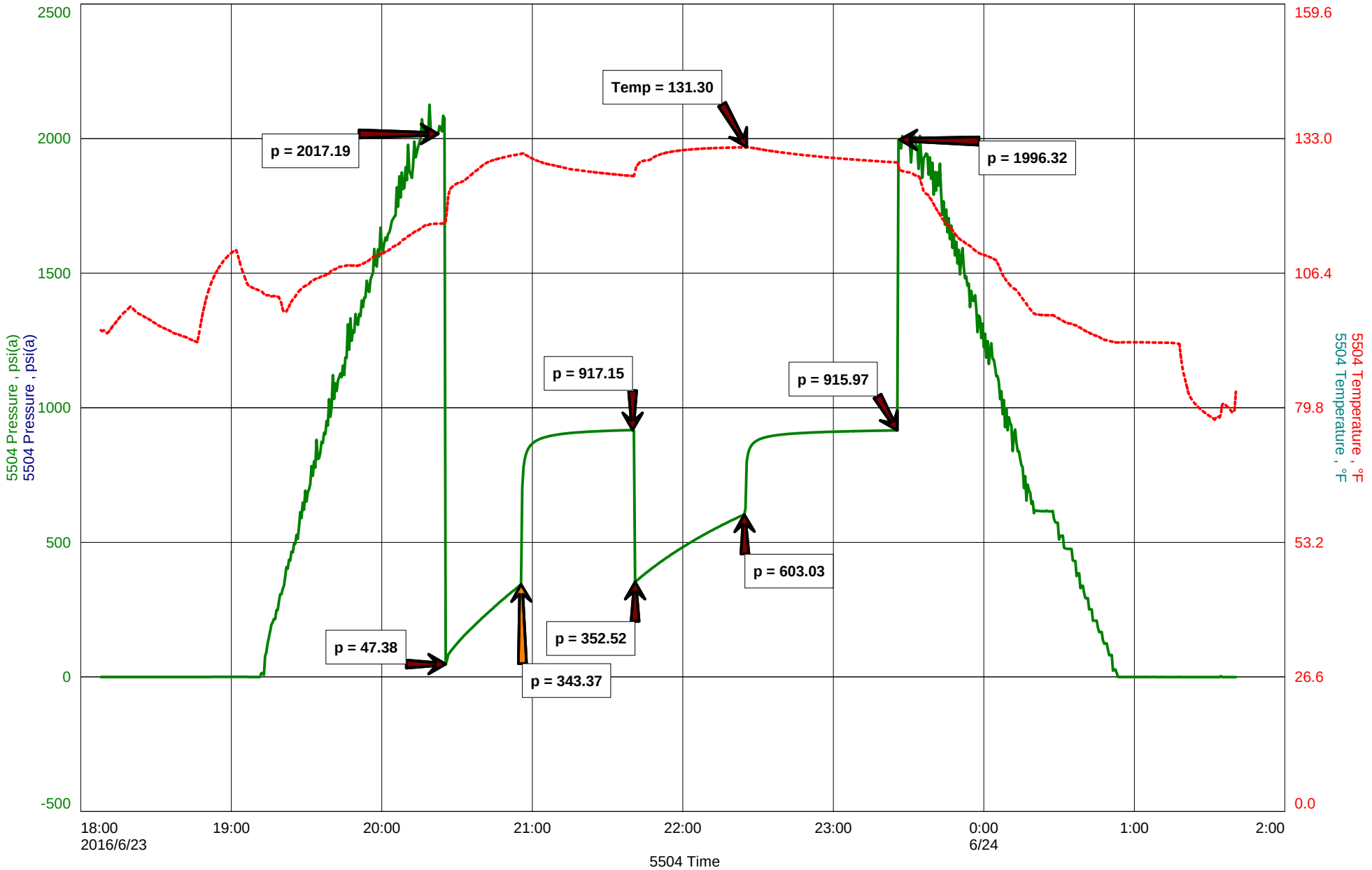
TOOL SAMPLE: 45% OIL, 37% WATER, 18% MUD

CHLORIDES: 29,000 ppm
PH: 8.0
RW: .23 @ 60 deg.

RITCHIE EXPLORATION, INC.
DST #4, LKC "J&K", 4191-4258
Start Test Date: 2016/06/23
Final Test Date: 2016/06/24

YORK 34D #1
Formation: DST #4, LKC "J&K", 4191-4258
Pool: WILDCAT
Job Number: T537

YORK 34D #1



DIAMOND TESTING
P.O. Box 157
HOISINGTON, KANSAS 67544
(800) 542-7313

DRILL-STEM TEST TICKET
FILE: YORK34D1DST4

TIME ON: 18:08 6-23-16
TIME OFF: 01:41 6-24-16

Company RITCHIE EXPLORATION, INC. Lease & Well No. YORK 34D #1

Contractor WW DRILLING, LLC RIG #2 Charge to RITCHIE EXPLORATION, INC.

Elevation 2985 KB Formation LKC "J&K" Effective Pay _____ Ft. Ticket No. T537

Date 6-23-16 Sec. 34 Twp. 17 S Range 32 W County SCOTT State KANSAS

Test Approved By JOHN GOLDSMITH Diamond Representative TIM VENTERS

Formation Test No. 4 Interval Tested from 4191 ft. to 4258 ft. Total Depth 4258 ft.

Packer Depth 4186 ft. Size 6 3/4 in. Packer depth _____ ft. Size 6 3/4 in.

Packer Depth 4191 ft. Size 6 3/4 in. Packer depth _____ ft. Size 6 3/4 in.

Depth of Selective Zone Set _____

Top Recorder Depth (Inside) 4172 ft. Recorder Number 5504 Cap. 5,000 P.S.I.

Bottom Recorder Depth (Outside) 4255 ft. Recorder Number 11029 Cap. 5,025 P.S.I.

Below Straddle Recorder Depth _____ ft. Recorder Number _____ Cap. _____ P.S.I.

Mud Type CHEMICAL Viscosity 59 Drill Collar Length 119 ft. I.D. 2 1/4 in.

Weight 9.2 Water Loss 8.8 cc. Weight Pipe Length 0 ft. I.D. 2 7/8 in

Chlorides 4,000 P.P.M. Drill Pipe Length 4039 ft. I.D. 3 1/2 in

Jars: Make STERLING Serial Number 4 Test Tool Length 33 ft. Tool Size 3 1/2-IF in

Did Well Flow? NO Reversed Out NO Anchor Length 35 ft. Size 4 1/2-FH in

Main Hole Size 7 7/8 Tool Joint Size 4 1/2 XH in. 32' DP IN ANCHOR Surface Choke Size 1 in. Bottom Choke Size 5/8 in

Blow: 1st Open: GOOD 1 1/2 INCH BLOW, BUILDING, REACHING BOB 4 1/2 MI (NO BB)

2nd Open: WEAK SURFACE BLOW, BUILDING, REACHING BOB 7 MIN. (NO BB)

Recovered 50 ft. of SOHMCW, 7% OIL, 59% WATER, 34% MUD

Recovered 690 ft. of HMCW W/TR. O, TRACE OIL, 60% WATER, 40% MUD

Recovered 565 ft. of SMCW W/TR. O, TRACE OIL, 989% WATER, 2% MUD

Recovered 1305 ft. of TOTAL FLUID

Recovered _____ ft. of CHLORIDES: 29,000 ppm

Recovered _____ ft. of PH: 8.0

Remarks: RW: .23 @ 60 deg.

TOOL SAMPLE: 45% OIL, 37% WATER, 18% MUD

Price Job	
Other Charges	
Insurance	
Total	

Time Set Packer(s) 8:25 PM A.M. P.M. Time Started Off Bottom 11:25 PM A.M. P.M. Maximum Temperature 131 deg.

Initial Hydrostatic Pressure..... (A) 2017 P.S.I.

Initial Flow Period..... Minutes 30 (B) 47 P.S.I. to (C) 343 P.S.I.

Initial Closed In Period..... Minutes 45 (D) 917 P.S.I.

Final Flow Period..... Minutes 45 (E) 353 P.S.I. to (F) 603 P.S.I.

Final Closed In Period..... Minutes 60 (G) 916 P.S.I.

Final Hydrostatic Pressure..... (H) 1996 P.S.I.

DIAMOND TESTING, LLC

TESTER : TIM VENTERS
CELL # 620-388-6333

General Information

Company Name	RITCHIE EXPLORATION, INC.		
Contact	JUSTIN CLEGG	Job Number	T538
Well Name	YORK 34D #1	Representative	TIM VENTERS
Unique Well ID	DST #5, ALTAMONT "A", 4316-4382	Well Operator	RITCHIE EXPLORATION, INC.
Surface Location	SEC 34-17S-32W, SCOTT CO. KS.	Report Date	2016/06/25
Well License Number		Prepared By	TIM VENTERS
Field	WILDCAT		
Well Type	Vertical		

Test Information

Test Type	CONVENTIONAL
Formation	DST #5, ALTAMONT "A", 4316-4382
Well Fluid Type	01 Oil
Test Purpose	Initial Test

Start Test Date	2016/06/24	Start Test Time	16:26:00
Final Test Date	2016/06/25	Final Test Time	00:16:00

Gauge Name	5504

Test Results

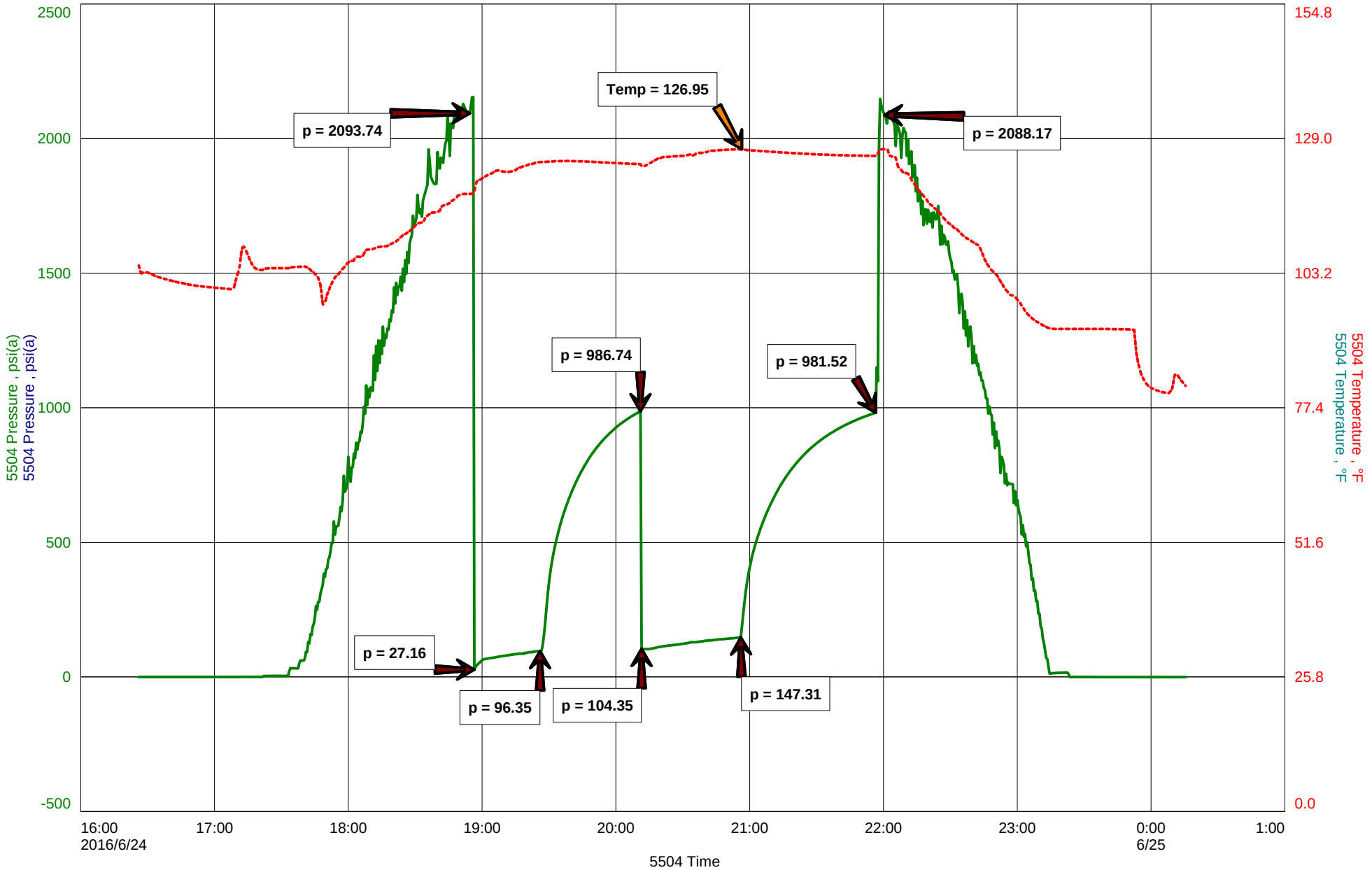
RECOVERED: 530' GAS IN PIPE
35' G,SMCO, 8% GAS, 90% OIL, 2% MUD, GRAVITY: 31
310' G,MCO, 14% GAS, 57% OIL, 29% MUD
345' TOTAL FLUID

TOOL SAMPLE: 8% GAS, 44% OIL, 48% MUD

RITCHIE EXPLORATION, INC.
DST #5, ALTAMONT "A", 4316-4382
Start Test Date: 2016/06/24
Final Test Date: 2016/06/25

YORK 34D #1
Formation: DST #5, ALTAMONT "A", 4316-4382
Pool: WILDCAT
Job Number: T538

YORK 34D #1



DIAMOND TESTING
P.O. Box 157
HOISINGTON, KANSAS 67544
(800) 542-7313

DRILL-STEM TEST TICKET
FILE: YORK34D1DST5

TIME ON: 16:26 6-24-16
TIME OFF: 00:16 6-25-16

Company RITCHIE EXPLORATION, INC. Lease & Well No. YORK 34D #1

Contractor WW DRILLING, LLC RIG #2 Charge to RITCHIE EXPLORATION, INC.

Elevation 2985 KB Formation ALTAMONT "A" Effective Pay _____ Ft. Ticket No. T538

Date 6-24-16 Sec. 34 Twp. 17 S Range 32 W County SCOTT State KANSAS

Test Approved By JOHN GOLDSMITH Diamond Representative TIM VENTERS

Formation Test No. 5 Interval Tested from 4316 ft. to 4382 ft. Total Depth 4382 ft.

Packer Depth 4311 ft. Size 6 3/4 in. Packer depth _____ ft. Size 6 3/4 in.

Packer Depth 4316 ft. Size 6 3/4 in. Packer depth _____ ft. Size 6 3/4 in.

Depth of Selective Zone Set _____

Top Recorder Depth (Inside) 4297 ft. Recorder Number 5504 Cap. 5,000 P.S.I.

Bottom Recorder Depth (Outside) 4379 ft. Recorder Number 11029 Cap. 5,025 P.S.I.

Below Straddle Recorder Depth _____ ft. Recorder Number _____ Cap. _____ P.S.I.

Mud Type CHEMICAL Viscosity 53 Drill Collar Length 119 ft. I.D. 2 1/4 in.

Weight 9.3 Water Loss 8.0 cc. Weight Pipe Length 0 ft. I.D. 2 7/8 in

Chlorides 3,500 P.P.M. Drill Pipe Length 4164 ft. I.D. 3 1/2 in

Jars: Make STERLING Serial Number 4 Test Tool Length 33 ft. Tool Size 3 1/2-IF in

Did Well Flow? NO Reversed Out NO Anchor Length 34 ft. Size 4 1/2-FH in

Main Hole Size 7 7/8 Tool Joint Size 4 1/2 XH in. 32' DP IN ANCHOR Surface Choke Size 1 in. Bottom Choke Size 5/8 in

Blow: 1st Open: WEAK 1/2 INCH BLOW, BUILDING, REACHING BOB 13 MIN. (VWS BB)

2nd Open: WEAK 1/2 INCH BLOW, BUILDING, REACHING BOB 11 MIN. (NO BB)

Recovered 530 ft. of GAS IN PIPE

Recovered 35 ft. of G,SMCO, 8% GAS, 90% OIL, 2% MUD, GRAVITY: 31

Recovered 310 ft. of G,MCO, 14% GAS, 57% OIL, 29% MUD

Recovered 345 ft. of TOTAL FLUID

Recovered _____ ft. of _____

Recovered _____ ft. of _____

Remarks: THE BLOW BACK ON THE INITIAL SHUT-IN ONLY LASTED ABOUT 15 MIN.

TOOL SAMPLE: 8% GAS, 44% OIL, 48% MUD

Price Job	
Other Charges	
Insurance	
Total	

Time Set Packer(s) 6:56 PM A.M. P.M. Time Started Off Bottom 9:56 PM A.M. P.M. Maximum Temperature 127 deg.

Initial Hydrostatic Pressure..... (A) 2094 P.S.I.

Initial Flow Period..... Minutes 30 (B) 27 P.S.I. to (C) 96 P.S.I.

Initial Closed In Period..... Minutes 45 (D) 987 P.S.I.

Final Flow Period..... Minutes 45 (E) 104 P.S.I. to (F) 147 P.S.I.

Final Closed In Period..... Minutes 60 (G) 982 P.S.I.

Final Hydrostatic Pressure..... (H) 2088 P.S.I.

DIAMOND TESTING, LLC

TESTER : TIM VENTERS
CELL # 620-388-6333

General Information

Company Name	RITCHIE EXPLORATION, INC.		
Contact	JUSTIN CLEGG	Job Number	T539
Well Name	YORK 34D #1	Representative	TIM VENTERS
Unique Well ID	DST #6, ALTAMONT "B", 4384-4408	Well Operator	RITCHIE EXPLORATION, INC.
Surface Location	SEC 34-17S-32W, SCOTT CO. KS.	Report Date	2016/06/25
Well License Number		Prepared By	TIM VENTERS
Field	WILDCAT		
Well Type	Vertical		

Test Information

Test Type	CONVENTIONAL
Formation	DST #6, ALTAMONT "B", 4384-4408
Well Fluid Type	01 Oil
Test Purpose	Initial Test

Start Test Date	2016/06/25	Start Test Time	08:06:00
Final Test Date	2016/06/25	Final Test Time	14:40:00

Gauge Name	5504

Test Results

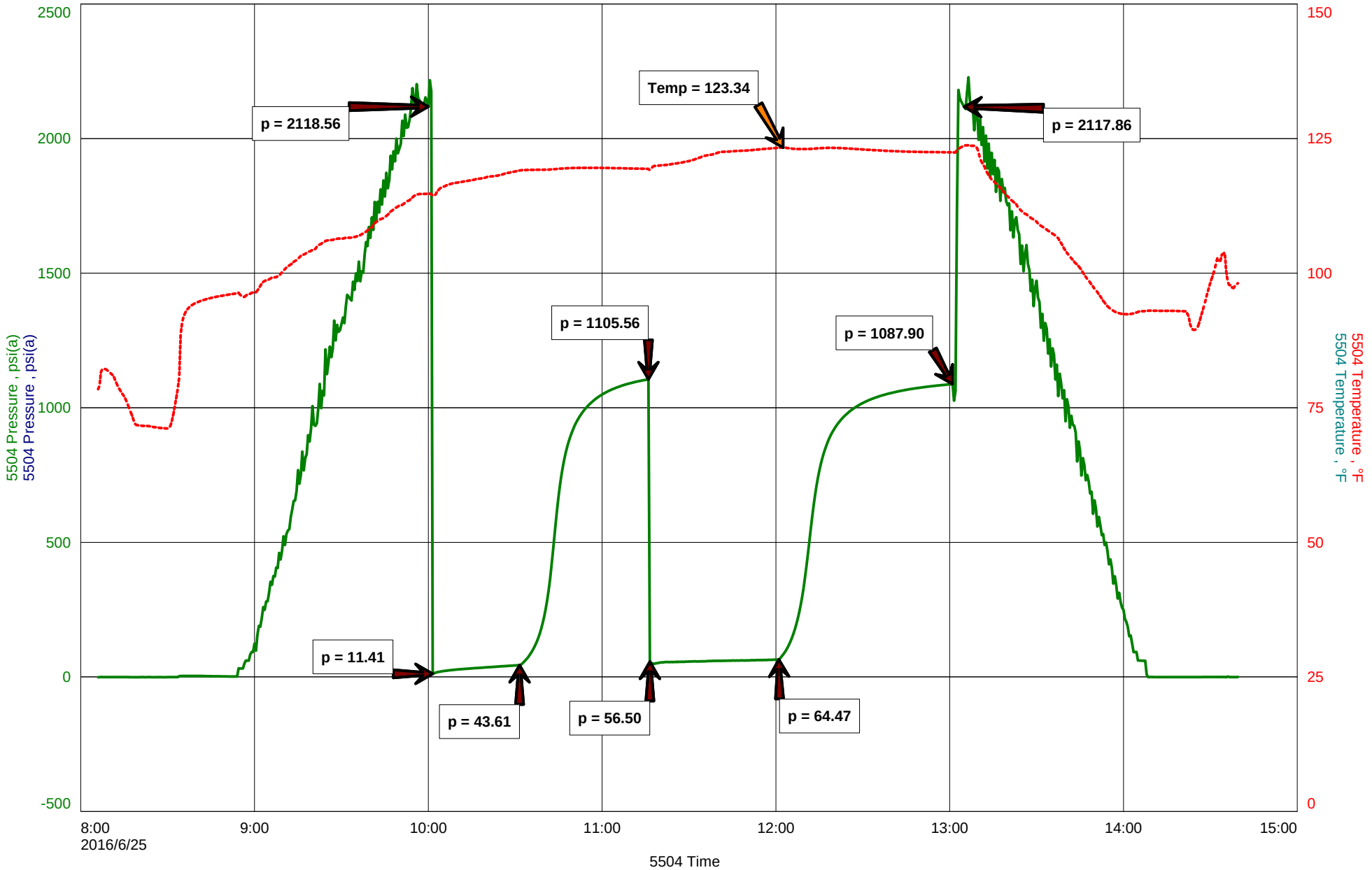
RECOVERED: 375' GAS IN PIPE
5' GO, 3% GAS, 97% OIL, GRAVITY: 33
120' G,VHMCO, 15% GAS, 44% OIL, 41% MUD
125' TOTAL FLUID

TOOL SAMPLE: 8% GAS, 92% OIL

RITCHIE EXPLORATION, INC.
DST #6, ALTAMONT "B", 4384-4408
Start Test Date: 2016/06/25
Final Test Date: 2016/06/25

YORK 34D #1
Formation: DST #6, ALTAMONT "B", 4384-4408
Pool: WILDCAT
Job Number: T539

YORK 34D #1



DIAMOND TESTING
P.O. Box 157
HOISINGTON, KANSAS 67544
(800) 542-7313

DRILL-STEM TEST TICKET
FILE: YORK34D1DST6

TIME ON: 08:06
TIME OFF: 14:40

Company RITCHIE EXPLORATION, INC. Lease & Well No. YORK 34D #1

Contractor WW DRILLING, LLC RIG #2 Charge to RITCHIE EXPLORATION, INC.

Elevation 2985 KB Formation ALTAMONT "B" Effective Pay _____ Ft. Ticket No. T539

Date 6-25-16 Sec. 34 Twp. 17 S Range 32 W County SCOTT State KANSAS

Test Approved By JOHN GOLDSMITH Diamond Representative TIM VENTERS

Formation Test No. 6 Interval Tested from 4384 ft. to 4408 ft. Total Depth 4408 ft.

Packer Depth 4379 ft. Size 6 3/4 in. Packer depth _____ ft. Size 6 3/4 in.

Packer Depth 4384 ft. Size 6 3/4 in. Packer depth _____ ft. Size 6 3/4 in.

Depth of Selective Zone Set _____

Top Recorder Depth (Inside) 4365 ft. Recorder Number 5504 Cap. 5,000 P.S.I.

Bottom Recorder Depth (Outside) 4405 ft. Recorder Number 11029 Cap. 5,025 P.S.I.

Below Straddle Recorder Depth _____ ft. Recorder Number _____ Cap. _____ P.S.I.

Mud Type CHEMICAL Viscosity 54 Drill Collar Length 119 ft. I.D. 2 1/4 in.

Weight 9.3 Water Loss 7.2 cc. Weight Pipe Length 0 ft. I.D. 2 7/8 in

Chlorides 4,500 P.P.M. Drill Pipe Length 4232 ft. I.D. 3 1/2 in

Jars: Make STERLING Serial Number 4 Test Tool Length 33 ft. Tool Size 3 1/2-IF in

Did Well Flow? NO Reversed Out NO Anchor Length 24 ft. Size 4 1/2-FH in

Main Hole Size 7 7/8 Tool Joint Size 4 1/2 XH in. Surface Choke Size 1 in. Bottom Choke Size 5/8 in

Blow: 1st Open: WEAK SURFACE BLOW, BUILDING TO 9 1/2 INCHES. (NO BB)

2nd Open: WEAK 1/4 INCH BLOW, BUILDING, REACHING BOB 32 MIN. (WS BB)

Recovered 375 ft. of GAS IN PIPE

Recovered 5 ft. of GO, 3% GAS. 97% OIL, GRAVITY: 33

Recovered 120 ft. of G,VHMCO, 15% GAS, 44% OIL, 41% MUD

Recovered 125 ft. of TOTAL FLUID

Recovered _____ ft. of _____

Recovered _____ ft. of _____

Remarks: _____

TOOL SAMPLE: 8% GAS, 92% OIL

Price Job	
Other Charges	
Insurance	
Total	

Time Set Packer(s) 10:01 AM A.M. P.M. Time Started Off Bottom 1:01 PM A.M. P.M. Maximum Temperature 123 deg.

Initial Hydrostatic Pressure..... (A) 2119 P.S.I.

Initial Flow Period..... Minutes 30 (B) 11 P.S.I. to (C) 44 P.S.I.

Initial Closed In Period..... Minutes 45 (D) 1106 P.S.I.

Final Flow Period..... Minutes 45 (E) 57 P.S.I. to (F) 64 P.S.I.

Final Closed In Period..... Minutes 60 (G) 1088 P.S.I.

Final Hydrostatic Pressure..... (H) 2118 P.S.I.

DIAMOND TESTING, LLC

TESTER : TIM VENTERS
CELL # 620-388-6333

General Information

Company Name	RITCHIE EXPLORATION, INC.		
Contact	JUSTIN CLEGG	Job Number	T540
Well Name	YORK 34D #1	Representative	TIM VENTERS
Unique Well ID	DST #7, CHEROKEE, 4506-4611	Well Operator	RITCHIE EXPLORATION, INC.
Surface Location	SEC 34-17S-32W, SCOTT CO. KS.	Report Date	2016/06/27
Well License Number		Prepared By	TIM VENTERS
Field	WILDCAT		
Well Type	Vertical		

Test Information

Test Type	CONVENTIONAL		
Formation	DST #7, CHEROKEE, 4506-4611		
Well Fluid Type	01 Oil		
Test Purpose	Initial Test		
Start Test Date	2016/06/26	Start Test Time	19:07:00
Final Test Date	2016/06/27	Final Test Time	01:20:00
Gauge Name	5504		

Test Results

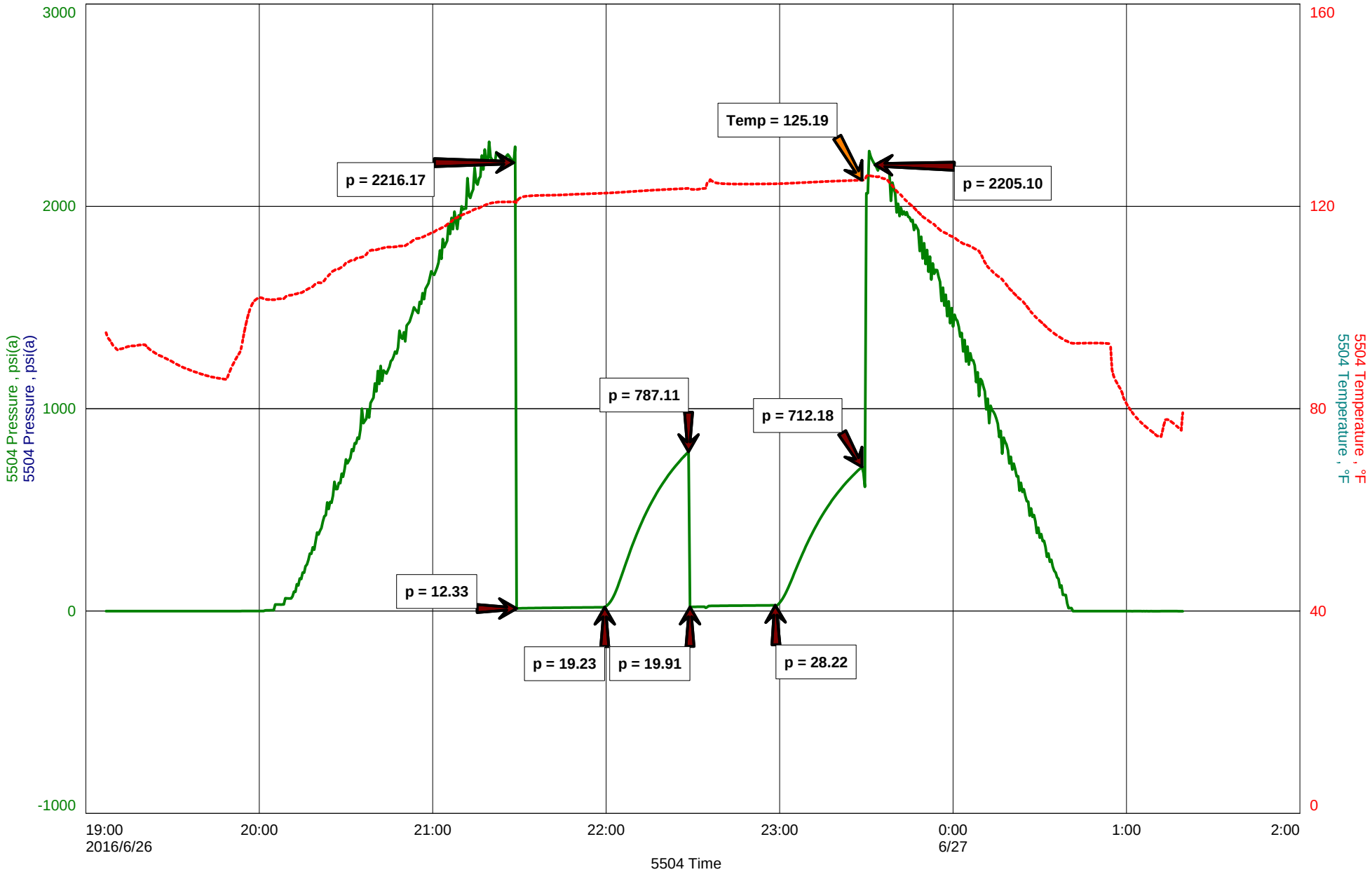
RECOVERED: 20' MUD

TOOL SAMPLE: TRACE OIL, 100% MUD

RITCHIE EXPLORATION, INC.
DST #7, CHEROKEE, 4506-4611
Start Test Date: 2016/06/26
Final Test Date: 2016/06/27

YORK 34D #1
Formation: DST #7, CHEROKEE, 4506-4611
Pool: WILDCAT
Job Number: T540

YORK 34D #1



DIAMOND TESTING
P.O. Box 157
HOISINGTON, KANSAS 67544
(800) 542-7313

DRILL-STEM TEST TICKET
FILE: YORK34D1DST7

TIME ON: 19:07 6-26-16
TIME OFF: 01:20 6-27-16

Company RITCHIE EXPLORATION, INC. Lease & Well No. YORK 34D #1

Contractor WW DRILLING, LLC RIG #2 Charge to RITCHIE EXPLORATION, INC.

Elevation 2985 KB Formation CHEROKEE Effective Pay ____ Ft. Ticket No. T540

Date 6-26-16 Sec. 34 Twp. 17 S Range 32 W County SCOTT State KANSAS

Test Approved By JOHN GOLDSMITH Diamond Representative TIM VENTERS

Formation Test No. 7 Interval Tested from 4506 ft. to 4611 ft. Total Depth 4611 ft.

Packer Depth 4501 ft. Size 6 3/4 in. Packer depth ____ ft. Size 6 3/4 in.

Packer Depth 4506 ft. Size 6 3/4 in. Packer depth ____ ft. Size 6 3/4 in.

Depth of Selective Zone Set ____

Top Recorder Depth (Inside) 4487 ft. Recorder Number 5504 Cap. 5,000 P.S.I.

Bottom Recorder Depth (Outside) 4608 ft. Recorder Number 11029 Cap. 5,025 P.S.I.

Below Straddle Recorder Depth ____ ft. Recorder Number ____ Cap. ____ P.S.I.

Mud Type CHEMICAL Viscosity 64 Drill Collar Length 119 ft. I.D. 2 1/4 in.

Weight 9.3 Water Loss 8.8 cc. Weight Pipe Length 0 ft. I.D. 2 7/8 in

Chlorides 4,700 P.P.M. Drill Pipe Length 4354 ft. I.D. 3 1/2 in

Jars: Make STERLING Serial Number 4 Test Tool Length 33 ft. Tool Size 3 1/2-IF in

Did Well Flow? NO Reversed Out NO Anchor Length 42 ft. Size 4 1/2-FH in

63' DP IN ANCHOR

Main Hole Size 7 7/8 Tool Joint Size 4 1/2 XH in. Surface Choke Size 1 in. Bottom Choke Size 5/8 in

Blow: 1st Open: WEAK 1/4 INCH BLOW, DECREASING TO A SURFACE BLOW. (NO BB)

2nd Open: VERY WEAK SURFACE BLOW, LASTING 2 MIN. (NO BB)

Recovered 20 ft. of MUD

Recovered ____ ft. of ____

Recovered ____ ft. of ____

Recovered ____ ft. of ____

Recovered ____ ft. of ____

Recovered ____ ft. of ____

Price Job

Other Charges

Remarks: WE FLUSHED TOOL 5 MIN. INTO FINAL FLOW AND GOT A WEAK SURFACE BLOW THAT LASTED 9 MIN.

Insurance

TOOL SAMPLE: TRACE OIL, 100% MUD

Total

Time Set Packer(s) 9:29 PM A.M. P.M. Time Started Off Bottom 11:29 PM A.M. P.M. Maximum Temperature 125 deg.

Initial Hydrostatic Pressure ..... (A) 2216 P.S.I.

Initial Flow Period ..... Minutes 30 (B) 12 P.S.I. to (C) 19 P.S.I.

Initial Closed In Period ..... Minutes 30 (D) 787 P.S.I.

Final Flow Period ..... Minutes 30 (E) 20 P.S.I. to (F) 28 P.S.I.

Final Closed In Period ..... Minutes 30 (G) 712 P.S.I.

Final Hydrostatic Pressure ..... (H) 2205 P.S.I.