



Confidentiality Requested:

Yes No

KANSAS CORPORATION COMMISSION 1097688
OIL & GAS CONSERVATION DIVISION

Form ACO-1

August 2013

Form must be Typed
Form must be Signed
All blanks must be Filled

WELL COMPLETION FORM
WELL HISTORY - DESCRIPTION OF WELL & LEASE

OPERATOR: License # _____

Name: _____

Address 1: _____

Address 2: _____

City: _____ State: _____ Zip: _____ + _____

Contact Person: _____

Phone: (_____) _____

CONTRACTOR: License # _____

Name: _____

Wellsite Geologist: _____

Purchaser: _____

Designate Type of Completion:

- New Well Re-Entry Workover
- Oil WSW SWD 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
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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: _____



1097688

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 List All E. Logs Run: _____	<input type="checkbox"/> Log Formation (Top), Depth and Datum <input type="checkbox"/> Sample Name Top Datum
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CASING RECORD <input type="checkbox"/> New <input type="checkbox"/> Used							
Report all strings set-conductor, surface, intermediate, production, etc.							
Purpose of String	Size Hole Drilled	Size Casing Set (In O.D.)	Weight Lbs. / Ft.	Setting Depth	Type of Cement	# Sacks Used	Type and Percent Additives

ADDITIONAL CEMENTING / SQUEEZE RECORD				
Purpose:	Depth Top Bottom	Type of Cement	# Sacks Used	Type and Percent Additives
<input type="checkbox"/> Perforate <input type="checkbox"/> Protect Casing <input type="checkbox"/> Plug Back TD <input type="checkbox"/> Plug Off Zone				

Did you perform a hydraulic fracturing treatment on this well? Yes No *(If No, skip questions 2 and 3)*

Does the volume of the total base fluid of the hydraulic fracturing treatment exceed 350,000 gallons? Yes No *(If No, skip question 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)*

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

TUBING RECORD:	Size:	Set At:	Packer At:	Liner Run: <input type="checkbox"/> Yes <input type="checkbox"/> No
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Date of First, Resumed Production, SWD or ENHR.	Producing Method: <input type="checkbox"/> Flowing <input type="checkbox"/> Pumping <input type="checkbox"/> Gas Lift <input type="checkbox"/> Other <i>(Explain)</i> _____
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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> <input type="checkbox"/> Other <i>(Specify)</i> _____	PRODUCTION INTERVAL: _____ _____
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Conservation Division
Finney State Office Building
130 S. Market, Rm. 2078
Wichita, KS 67202-3802



Phone: 316-337-6200
Fax: 316-337-6211
<http://kcc.ks.gov/>

Mark Sievers, Chairman
Thomas E. Wright, Commissioner
Shari Feist Albrecht, Commissioner

Sam Brownback, Governor

October 16, 2012

John Niernberger
Ritchie Exploration, Inc.
8100 E 22ND ST N # 700
BOX 783188
WICHITA, KS 67278-3188

Re: ACO1
API 15-109-21110-00-00
Eaton 13CD 2
SE/4 Sec.13-13S-32W
Logan County, Kansas

Dear Production Department:

We are herewith requesting that the Well Completion Form ACO-1 and attached information for the subject well be held confidential for a period of two years.

Should you have any questions or need additional information regarding subject well, please contact our office.

Respectfully,
John Niernberger

HEADER

WellSight Systems

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

Measured Depth Log

Well Name: #2 EATON 13CD

Location: sec 13 - twp 13S - rge 32W LOGAN COUNTY

License Number: API #15-109-21,110

Region: KANSAS

Spud Date: 02 JUL 2012

Drilling Completed: 11 JUL 2012

Surface Coordinates: 775' FSL & 775' FEL

115' north & 115' west of SE - SE

Bottom Hole Coordinates: 0.5 degree deviation @ 228, 1 degree deviation @ 1,206,
0.75 degree deviation @ 3,425, 1 degree deviation @ 4,695

Ground Elevation (ft): 2,928 K.B. Elevation (ft): 2,938

Logged Interval (ft): 3,600 To: 4,695 Total Depth (ft): 4,695

Formation: WABAUNSEE to MISSISSIPPIAN

Type of Drilling Fluid: CHEMICAL: displace @ 3,457

Printed by WellSight Log Viewer from WellSight Systems 1-800-447-1534 www.WellSight.com

OPERATOR

Company: Ritchie Exploration, Inc. license # 4767

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

GEOLOGIST

Name: Ted Jochems, Jr.

Company: Consulting Geologist

Address: 212 North Market ste 517
Wichita, Kansas 67202

COMMENTS

CONTRACTOR: Murfin rig #14

(Greg Unruh, toolpusher and Bob Mickelson, relief pusher)

MUD: Mud-Co (Terry Ison and Reid Atkins)

DRILL STEM TESTS: Superior Testers Enterprises
(Ken Swinney)

ELECTRIC LOGS: Superior Well Services (Mitch Rupp)

SURFACE CASING: 8.625" @ 225

PRODUCTION CASING: 4.5" to Mississippian

DRILL STEM TEST #1

3,979 - 4,027 30 - 45 - 45 - 60 LKC C & D zones

IFP: good blow to BOB / 23 minutes

ISIP: 0.25" blowback

M28-581-32W

ISIP: 0.25" blowback
FFP: good blow to BOB / 30 minutes
FSIP: 1.75" blowback
REC: 225' CGO (5% G, 95%O)
360' OCWM (2% O, 60% M, 38% W)
585' total fluid

FP: 63 - 170# / 186 - 289#
SIP: 1,182 - 1,161#
HP: 1,897 - 1,878#

GRAVITY: 30 degrees API corrected
CHLORIDES: 30,000 ppm recovery (3,400 ppm system)
BHT: 120 degrees F
COMMENT: chart indicates very good permeability

DRILL STEM TEST #2

4,160 - 4,186 30 - 30 - 30 - 30 LKC J zone

IFP: weak blow built to 0.125", died / 23 minutes

ISIP: no blowback

FFP: no blow. flush tool, no help

FSIP: no blowback

REC: 10' DM (100% M)

10' total fluid

FP: 41 - 46# / 48 - 53#

SIP: 1,166 - 1,089#

HP: 1,984 - 1,981#

COMMENT: flush does not appear on shut-in curve as it fell between data collection points. chart indicates poor permeability.

DRILL STEM TEST #3

4,230 - 4,265 30 - 45 - 45 - 60 LKC L zone

IFP: weak blow built to 3.5" / 30 minutes

ISIP: no blowback

FFP: no blow. flush tool: weak blow built to 2.75" / 45 minutes


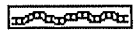
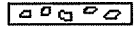

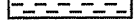
FSIP: no blowback


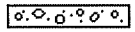



REC: 225' MW (40% M, 60% W)



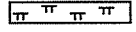

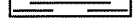
225' total fluids

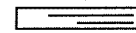
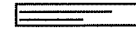

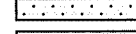
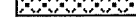
CHLORIDES: 25,000 ppm recovery (3,800 ppm system)

ROCK TYPES




-  Anhy
-  Bent
-  Brec
-  Cht
-  Clyst


-  Coal
-  Congl
-  Dol
-  Gyp
-  Igne

-  Lmst
-  Meta
-  Mrlst
-  Salt
-  Shale

-  Shcol
-  Shgy
-  Slstst
-  Ss
-  Till


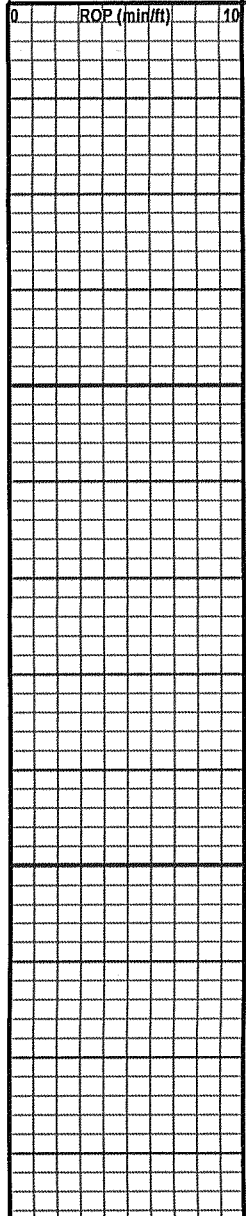

OTHER SYMBOLS

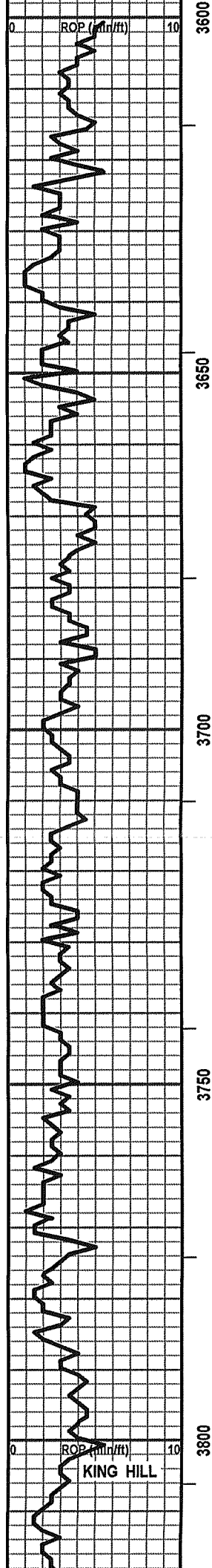
- OIL SHOW**
-  Even
 -  Spotted
 -  Ques

-  Dead
-  Gas

- INTERVAL**
-  Core
 -  Dst

- EVENT**
-  Conn
 -  Rft
 -  Sidewall

Curve Track 1 ROP (min/ft) 	Depth	Lithology	Oil Shows	Geological Descriptions	REMARKS
<p>0 ROP (min/ft) 10</p> 	<p>3500</p>			<p>examine samples wet for color, shows & description; dry for porosity & dry stain. descriptions are lagged up to true depth using mud engineer's calculation for bottoms up.</p> <p>driller's Stone Corral picks from drill time: top: 2,431 (+507) base: 2,453 (+485)</p> <p>LS: gry & off wht, microxtln, fossl, loc chalky, sl cal floodd. poor por. NS sh stringers (s)</p>	<p>"cal floodd" is synonymous with "lithographic" or "dense." this is pervasive replacement by calcite.</p> <p>"cal overgrths" includes calcite crusts, druzi calcite, calcite veinlets and local recrystallization of larger fossils or clasts.</p> <p>"rextlzd" = recrystallized.</p> <p>ANHYDRITE (e-log): 2,429 (+509) BASE (e-log): 2,453 (+485)</p> <p>drill 228 to 3,425 with PDC bit, 3,425 to 4,695 (TD) with tricone.</p> <p>strap @ 3,425 strap 3,426.21 board 3,425.58 board short 0.63</p> <p>mud up @ 3,457</p>



LS: gry to blk, micro-vfgr xtln, forams, loc chalky and / or shaly. v poor por. NS

SLTST: grn & grn, competent, v calc. v poor por. NS

LS: off wht to crm, microxtln, sl cal floodd, loc chalky, forams & relict bivalves. poor por. scarce minute brn stns (no odor), NSO

LS: off wht to crm, microxtln, sl cal floodd, loc chalky, loc pelletal, forams & bryozoans. v poor por. NS

SH: lt brn & lt grn, argil, silty, earthy hematite, minor py.

LS: lt brn, microxtln, cal floodd, loc chalky, loc dolomitic, forams & fusulinids. no intxtln por, loc good vug / fossl cast por. NS

LS: tan to lt gry, microxtln, cal floodd, forams and fusulinids, loc chalky, stringer(s) of red-brn sh. poor por. NS

LS: crm, gry & lt brn, microxtln, cal floodd, forams & fusulinids. por intxtln por, loc fair ppt por. NS

LS: crm, microxtln, v chalky (sl mushy). poor vis por. NS stringer(s) of grn, argil, silty sh.

LS: brn, microxtln, cal floodd, loc sl dolmte. NVP. rare minute brn stns (no odor), NSO

SS: lt maroon, vfgr-fgr, subang to rndd, sl friable, abt mica, minor specular hematite. v poor por. NS

rig check

LS: lt gry to lt brn, microxtln, cal floodd, cal overgrths, ?bivalve? fragments. no vis por. NS

WOP

LS: brn & gry, microxtln, cal floodd, dns. no vis por. NS

SH: red-brn, silty, abt earthy hematite.

LS: lt gry & off wht, microxtln, cal floodd, loc chalky, cal crusts (micro-fgr xtln), fair amounts of earthy hematite. rare cht (gry, cryptxtln). v poor por. NS

SH: red-brn & grn, silty, abt earthy hematite.

LS: gry, microxtln, cal floodd, chalk partings, loc forams, spicules & ?bivalves?, loc earthy hematite. no intxtln por, scarce good vug por. NS

LS: gry, off wht & crm, microxtln, wkly cal floodd, loc v chalky w/ relict bivalves, loc relict forams. poor vis por. NS

LS: gry & off wht, microxtln, cal floodd. no vis por. 1 pc w/ wk brn stn (no odor, v wk brn dry stn), NSO

SH: gry & red-brn, argil, earthy hematite, loc silty w/ plant fragments.

LS: crm, micro-vfgr xtln, rextlzd, loc chalky. poor por. NS

SH: red-brn, gry & blk, argil, loc micac, earthy hmt, rare py. stringer(s) of SS (maroon, vfgr, subrnnd, micac, poor por, NS).

LS: crm to gry, microxtln, cal floodd. NVP. 1pc w/ minute brn stn (no odor), NSO

DOL: crm, microxtln, rextlzd. poor por. NS

LS: crm to tan, microxtln, cal floodd, loc chalky, loc fossl, loc silcfd to cht (wht, cryptxtln, fossl). v poor por. NS

finely ground samples

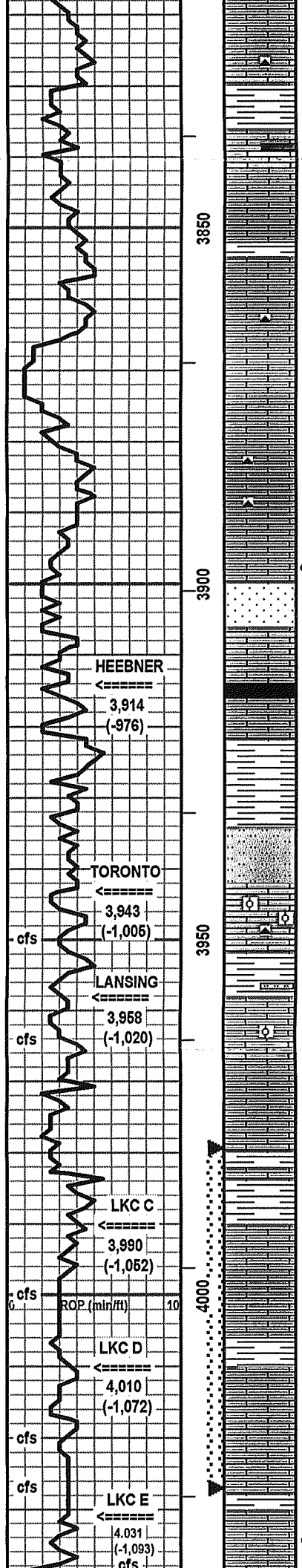
LS: crm to tan, gry, micro-vfgr xtln, rextlzd, cal overgrths. no intxtln por, scarce wk fossl cast por. NS

KING HILL (e-log): 3,799 (-861)

SH: gry, argil, loc carb.

LS: crm & lt gry, microxtln, rextlzd, loc chalky, minor cal crusts. poor vis por. minor brn stns (no odor, no cut), NSO

KING HILL



LS: crm, gry & lt brn, microxtln, cal floodd, cal overgrths, loc pelletal, minor earthy hematite, loc silcfd to cht (pale gry, microxtln). v poor por. NS

SH: red-brn, gry & grn, argil, earthy hematite, rare py.

LS: crm to tan, microxtln, rextlzd, stringer(s) of DOL(crm, vfgr xtln, sucr, poor-fair intxtln por). poor por. NS

LS: off wht to pale gry, microxtln, cal floodd, loc silcfd to cht (lt gry, microxtln). v poor por. NS

SH: gry, argil.

LS: crm & lt gry, microxtln, cal floodd, loc rextlzd, loc silcfd to cht (pale gry, cryptxtln). v poor por. NS

LS: crm, microxtln, cal floodd, v platy, brittle. no vis por. NS

LS: off wht, microxtln, rextlzd, chalky. poor vis por. VSSG on brk, NSG

LS: pale gry, microxtln, cal floodd, relict fossils, loc silcfd to cht (wht, crypt-microxtln, spicules). no vis por. NS

LS: crm, microxtln, rextlzd, somewhat chalky. poor por. 1 tiny pc w/ minute brn poss SO (no odor, good cut).

SS: gry, vfgr-fgr, subrndd, glauc, wk cal cmt. poor por. NS

LS: crm to tan, micro-vfgr xtln, cal floodd, loc sl chalky. poor por. rare brn & blk stns (no odor, no cut), NSO

SH: blk, carb, micac, cal inclusions.

LS: off wht & brn, microxtln, cal floodd. no vis por. minor brn stns & flecks (no odor, no cut), NSO

SH: red-brn, grn & gry, argil, earthy hematite, silty, loc micac.

SLTST: gry, calc, scarce py, plant fragments. v poor por. NS

LS: crm, micro-vfgr xtln, cal floodd, cal overgrths, loc relict oolites, rare cht (crm & orange, ool). poor intxtln por, scarce fair vug por. rare minute brn flecks (no odor, no cut), NSO, VSSG on brk.

SH: gry & red-brn, argil, earthy hematite, stringers of SLTST (gry, calc, poor por, NS)

LS: lt gry to tan, microxtln, cal floodd, loc chalky, relict fossils, loc ool, scarce py. poor intxtln por, loc fair intool por. scarce brn stns (no odor, poss FeOX), NSO

LS: crm, micro-vfgr xtln, cal floodd, cal overgrths, loc rextlzn, relict fossils, minor hmt stns. no vis por. NS

LS: crm, microxtln, cal floodd, dns, cal overgrths, loc ool, relict fossils, chalky partings. no intxtln por, loc fair ppt por. NS

SH: red-brn, grn & gry, earthy hematite, argil.

LS: lt tan, microxtln, cal floodd, cal overgrths, chalk partings, minor hmt stns, relict fossils, scarce glauc. no intxtln por, scarce wk ppt / vug por. NS

LS: lt gry, microxtln, cal floodd, abt forams, cal overgrths. no intxtln por, loc fair vug por. minute brn flecks w/ SO on brk (brn, gassy, no odor, fair cut, patchy brn dry stn).

SH: red-brn, gry & grn, argil, earthy hmt.

LS: crm to tan, microxtln, cal floodd, cal overgrths & crusts, chalk partings, loc abt forams, scarce glauc. no vis por. 1 pc w/ minute blk flecks (no odor, no cut), NSO

LS: crm to pale gry, microxtln, cal floodd, relict fossils (incl forams & spicules). no vis por. NS

SH: red-brn & grn, argil, silty, earthy hmt, rare plant fragments.

LS: pale gry & lt brn, microxtln, cal floodd, cal crusts, loc chalky, relict fossils, glauc. no intxtln por, loc fair vug / ppt por. no apparent shows or stns, no odor. 1 pc gave vv wk cut & patchy dry stn. 1 drplt FO in tray. VSSG on brk.

finely ground samples w/ abt sh cavings.

QUEEN HILL (e-log): 3,854 (-916)

samples finely ground w/ abt sh cavings.

driller advises that last three connections have pulled tight.

HEEBNER (e-log): 3,916 (-978)

TORONTO (e-log): 3,941 (-1,003)

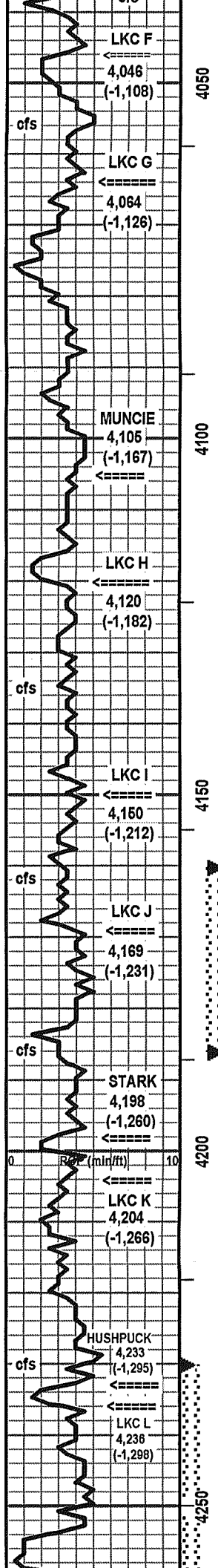
LANSING (E-LOG): 3,959 (-1,021)

DST #1
3,979 - 4,027
REC 225' CGO, 360' OCWM
SIP 1,182 - 1,161#
details above

LKC C (e-log): 3,995 (-1,057)

LKC D (e-log): 4,012 (-1,074)

vis 60 wt 9.1 lcm 2#



SH: grn & red-brn, argil, silty, earthy hematite.
DOL: tan, vfgr xtlm, sucr. NVP rare brn stn (no odor), VSSG on brk, NSO

LS: crm to pale gry, microxtln, cal floodd, cal crusts, loc silcfd to cht (brn & gry, cryptxtln). NVP. rare brn stns (no odor), NSO

LS: tan to brn, micro-vfgr xtlm, cal floodd, cal crusts, loc fossl, cal overgrths. no vis por. minor brn stns (no odor, no cut), NSO

SH: red-brn, grn & gry, argil, earthy & specular hmt, rock granules.

LS: crm, microxtln, cal floodd, cal crusts, vnlt & overgrths. no vis por. NS

LS: crm, micro-fgr xtlm, rextlzd, loc chalky, cal overgrths, loc fossl, loc pyr. loc fair vug or intxtln por. NS

LS: pale gry, micro-fgr xtlm, cal floodd, xtlm cal overgrths, cal crusts, loc abt fossls. no vis por. NS

LS: gry & crm, microxtln, cal floodd, cal crusts, cal overgrths, loc wht chalk bed, dk gry FeOX coatings, rare ?bivalves?. v poor por. NS

SH: blk & dk brn, carb, micac, calc inclusions, scarce bdd py.

LS: gry, microxtln, cal floodd, cal crusts, rare py. no vis por. NS

SH: red-brn, grn, gry, maroon, argil, silty, earthy & specular hematite, rock granules, scarce clr selenite.

SLTST: grn & gry, microgranular silt, argil, micac, mushy, stringer(s) of gry fgr SS (fair intran por, NS).

LS: brn, gry & off wht, micro-vfgr xtlm, hvly cal floodd, abt cal crusts, loc chalky, minor relict fossls, loc silcfd to cht (brn & pale gry, cryptxtln). no / poor vis por. abt blk, tarry dd oil (no odor, no cut, loc looks like blk sh (?sh injection?)), NSO

SH: grn, gry & red-brn, argil, micac, earthy & specular hmt, py.

LS: crm, microxtln, cal floodd, cal overgrths. NVP. NS

SLTST: grn, micro-granular silt, argil, micac. poor por. NS

SH: grn, gry & red-brn, argil, micac, earthy & specular hmt.

LS: gry, microxtln, cal floodd, cal crusts, minor fossls, loc silcfd to cht (gry, cryptxtln). NVP NS

LS: gry to crm, microxtln, cal floodd, minor cal crusts, loc abt forams, loc wht chalk beds (loc mushy) w/ relict bivalves, loc silcfd to cht (crm & wht, cryptxtln, forams). poor vis por. scarce brn stns (no odor), NS

SH: red-brn, grn & brn, argil, earthy hmt, rock granules. stringer of SLTST: gry-brn, v calc, poor por, NS.

LS: crm, microxtln, cal floodd, loc chalky, loc abt forams, loc silcfd to cht (crm & wht, crypt-microxtln, forams). poor vis por, loc vugs lined w/ druzi cal. 1 pc w/ SSO (brn, wk odor, good cut, wk brn dry stn)

stringer of DOL: tan, fgr sucr, fair intxtln por, NS.

LS: lt gry & lt brn, microxtln, cal floodd, cal crusts, relict fossls. no vis por. NS

SH: blk, carb, micac, cal inclusions.

LS: brn, microxtln, hvly cal floodd, cal crusts. NVP NS

SH: maroon, grn & gry, argil, minor hematite, rare fossls.

LS: lt gry & off wht, microxtln, cal floodd, cal crusts, loc v chalky, loc sndd, relict fossls. no intxtln por, rare isolated vugs. NS

LS: lt gry & tan, micro-vfgr xtlm, rextlzd, loc chalky, minor blk Feox coatings. poor vis por. NS

LS: lt gry & tan, microxtln, cal floodd, cal crusts, minor xtlm cal overgrths, loc chalky, blk FeOX coatings, scarce py, loc silcfd to cht (gry & wht, cryptxtln, scarce fossls). v poor vis por. scarce brn stns (no odor, no cut), NSO

SH: blk, carb, sl micac, cal inclusions & overgrths.

LS: dk brn, micro-vfgr xtlm, hvly cal floodd, cal crusts. NVP NS

LS: off wht (loc mottled brn), v chalky (mushy), mealy, relict bivalves. v poor vis por. rare brn flecks (no odor, no cut), NSO

LS: brn-gry, microxtln, cal floodd, cal crusts, cal overgrths, minor py, loc cht (wht, cryptxtln). no vis por. scarce brn dd oil stns (no odor, no cut), NSO

DOL: tan, vfgr xtlm, sucr, loc fgr-mgr dol, rare py. fair to good micro xtlm por, loc vugs. GSO on brk (brn, VSSG, fair odor, slow fair cut,

LKC E (e-log): 4,043 (-1,106)

LKC F (e-log): 4,050 (-1,112)

LKC G (e-log): 4,068 (-1,130)

MUNCIE CREEK (e-log): 4,114 (-1,176)

LKC H (e-log): 4,126 (-1,188)

LKC I (e-log): 4,167 (-1,219)

DST #2
 4,160 - 4,186
 REC 10' DM
 SIP 1,166 - 1,089#
 details above

LKC J (e-log): 4,176 (-1,237)

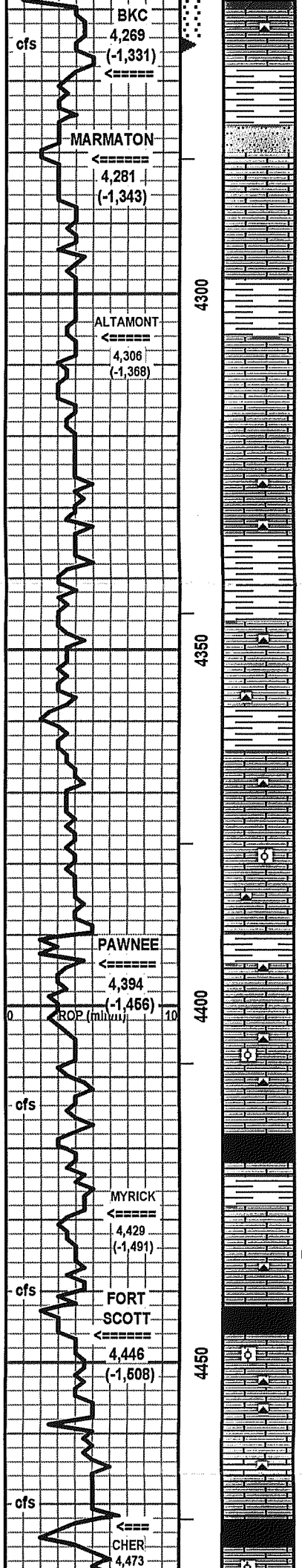
STARK (e-log): 4,194 (-1,256)

LKC K (e-log): 4,204 (-1,266)

HUSHPUCKNEY (e-log): 4,229 (-1,291)

LKC L (e-log): 4,234 (-1,296)

DST #3
 4,230 - 4,265
 REC 225' MW
 SIP 1,260 - 1,240#
 details above



patchy to satd honey dry stn).
 LS: gry-tan, microxtln, cal floodd, loc chalky, scarce py, loc silcfd to cht (wht, cryptxtln, pyr). poor vis por. minor stns, NSO

SH: grn, gry & red-brn, argil, loc silty, earthy hematite, rock granules.

SLTST: gry-grn, microxtln (loc vfgr), argil, calc, micac. NVP NS

LS: tan to brn & crm, microxtln, cal floodd, cal crusts & overgrths, chalk partings w/ relict bivalves. no vis por. NS

SH: gry, grn, red-brn & maroon, argil, loc silty, calc, earthy hematite.

LS: crm and gry, microxtln, cal floodd, chalk partings. poor vis por. NS

LS: lt brn, microxtln, cal floodd, cal crusts, xtln cal overgrths. no vis por. NS

LS: lt gry, microxtln, cal floodd, cal crusts, loc pelletal, scarce cht (gry, cryptxtln, bndd). no vis por. NS

SH: grn, gry & red-brn, argil (loc mushy), loc micac, loc silty, earthy hematite, minor py, minor rock granules.

LS: brn > tan & gry, microxtln, cal floodd, cal crusts, loc silcfd to cht (brn & wht, microxtln). no vis por. NS

SH: grn, gry, blk, red-brn & maroon, argil, loc silty, micac, earthy & specular hematite.

LS: crm to tan, microxtln, cal floodd, loc chalky, cal crusts, scarce silcfn to cht (pale gry, cryptxtln). poor vis por. NS

LS: tan to pale gry, microxtln, cal floodd, cal crusts, loc chalky, loc ool, scarce py, loc silcfd to cht (smoky & orange, cryptxtln + pale gry, microxtln). no / poor vis por. NS

SH: grn, gry, blk & red-brn, argil, micac, cal inclusions, poss loc carb, scarce py.

LS: crm, microxtln, rextlzd, chalky, loc relict fossils, loc silcfd to cht (pale blue, cryptxtln, fossl, pyr). poor vis por. NS

LS: crm to tan & brn, microxtln, cal floodd, fossl, loc ool, loc silcfd to cht (pale blue, cryptxtln, ool, pyr). no vis intxtln por, scarce ooc por. NS

SH: blk, carb, sl micac, cal inclusions.

LS: gry-brn, microxtln, cal floodd, cht (brn, fossl). NVP NS

SH: grn, gry & red-brn, argil, micac, earthy hematite.

LS: off wht, lt gry & brn, micro-vfgr xtln, rextlzd, loc cal floodd, loc chalky, loc mealy, minor fossils, loc cht (pale gry, microxtln. poor intxtln & vug por. minor brn stns & flecks (poss v wk odor, no cut), NSFO

SH: blk carb, micac, cal inclusions.

LS: brn & lt gry, microxtln, cal floodd, cal crusts, loc ool, loc chalky, scarce cht (brn, cryptxtln, fossl). no / poor vis por. minor brn stns & flecks (no odor, no cut), NSO

LS: tan, brn & lt gry, microxtln, cal floodd, loc rextlzd, scarce ool, loc silcfd to cht (wht, brn & pale blue, cryptxtln), rare py. no / poor por. NS

SH: blk, carb, micac, cal inclusions (wht & pink), py.

LS: gry-brn, microxtln, cal floodd, ool, cal crusts, no vis por. NS

BKC (e-log): 4,266 (-1,328)

MARMATON (e-log): 4,273 (-1,335)

ALTAMONT (e-log): 4,299 (-1,361)

abt sh cavings.

v abt sh cavings.

PAWNEE (e-log): 4,391 (-1,453)

abt sh cavings.

MYRICK STATION (e-log): 4,428 (-1,490)

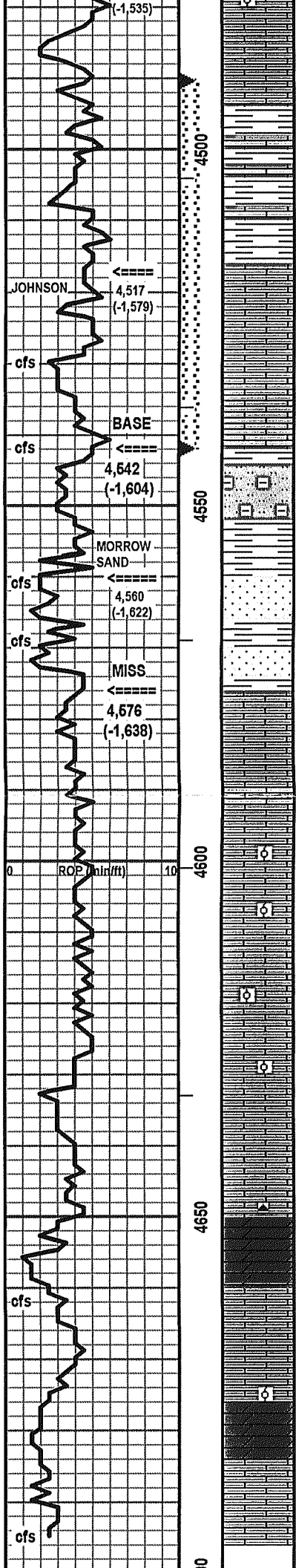
abt sh cavings.

FORT SCOTT (e-log): 4,444 (-1,506)

abt sh cavings.

v abt sh cavings.

CHEROKEE SH (e-log): 4,470 (-1,532)



LS: gry-brn, microxtln, cal floodd, cal crusts. no vis por. NS

LS: lt gry, microxtln, cal floodd, cal crusts. poor vis por. scarce wk brn stns (no odor, slow fair cut, wk brn dry stn), NSFO

intbdd thin beds of LS: gry, microxtln, cal floodd, loc chalky, cal crusts, cal overgrths. poor vis por. NS

and

SH: blk, carb, micac, bdd cal (off wht) + grn & gry, argil, pyr, micac, loc silty, rock granules.

LS: brn, gry & tan, microxtln, cal floodd, cal crusts, loc rextlzd & chalky, mgr-cgr druzi cal, scarce py. v poor vis intxtln por, rare isolated vugs. no odor, NS.

LS: brn, tan & off wht, microxtln, rextlzd, cal crusts, loc chalky, druzi cal, loc cal floodd. poor intxtln por, loc good vug & fossl cast por. VSSO (blk & brn, wk-fair odor, abt brn dry stn, slow fair cut, VSSG on brk)

SLTST: gry & grn, microxtln silt in clay matrix (competent to friable), variable grain contact, loc limonite stn, scarce sd & granules. NVP NS

SH: grn, gry & yel, argil, abt limonite stn, loc fissle, rare plant fragments.

SS: lt grn, silt to vfgr granular, subrndd, argil, non-calc, variably friable, glauc, loc mottled maroon & gry, rare rock granules. v poor por. NS

SH: grn, dove gry & yel, argil, silty, brn cht granules.

LS: wht, vfgr granular, subrndd, competent to friable. poor por. NS

SH: grn, gry, tan & yel, argil, loc silty, earthy hematite, limonite stn

LS: crm, microxtln, chalky, loc cal floodd, loc relict forams, loc sndd. poor vis por. NS

LS: gry to brn, micro-vfgr xtln, cal floodd, chalk partings, cal overgrths, rare py, rare glauc, loc forams. no / poor por. NS

LS: brn & gry, microxtln, cal floodd, loc chalky, loc ool, rare py, rare glauc. no / poor vis por. 1 pc w/ wk brn stn (no odor, no cut), NSO

LS: crm, microxtln, chalky, ool, minor dk brn coatings (no odor, no cut, ?FeOX?). poor vis por. NSO

LS: crm, microxtln, cal floodd, loc chalky, loc ool, rare py. poor vis por. NS

LS: crm, microxtln, chalky, ool, sndd (mgr). poor vis por. NS

LS: lt brn, microxtln, cal floodd, cal crusts, scarce forams. no vis por. NS

LS: wht, microxtln, cal floodd, loc chalky, cal overgrths, loc silefd to cht (wht, microxtln, relict fossls. NVP NS

DOL: honey brn, microxtln, sl sucr. poor intxtln por, loc good vug por. VSSG on brk, NSO

LS: lt brn, microxtln, cal floodd, cal crusts, loc fossl (forams & crinoids). NVP NS

LS: crm to wht, microxtln, chalky (loc mushy), ool. poor vis por. NS

DOL: dk brn, microxtln, sl sucr. no intxtln por, minor fair vug por. NS

LS: gry-brn, microxtln, rextlzd, chalky, forams. poor vis por. NS

DST #4
4,490 - 4,542
REC 15' DM w/ SO in tool
SIP 1,169 - 1,126#
details above

JOHNSON ZONE (e-log): 4,514 (-1,576)

sample catcher advises that sample box smells strongly of oil.

BASE (e-log): 4,535 (-1,297)

MORROW SAND (e-log): 4,556 (-1,618)

MISSISSIPPIAN (e-log): 4,570 (-1,632)

470

RTD 4,695

LTD 4,694

Ritchie Exploration, Inc.

#2 Eaton 13CD

775' FSL & 775' FEL

sec 13 - twp 13S - rge 32W

Logan County, Kansas



#2 Eaton 13CD

775' FSL & 775' FEL

115' N & 115' W of SE SE Section 13-13S-32W

Logan County, Kansas

API# 15-109-21110-0000

Elevation: 2928' GL, 2938' KB

Sample Tops			Ref. Well
Anhydrite	2431'	+507	+4
B/Anhydrite	2452'	+486	+2
Heebner	3914'	-976	+18
Toronto	3943'	-1005	+13
Lansing	3958'	-1020	+15
LKC "C"	3990'	-1052	+18
LKC "D"	4010'	-1072	+13
Muncie Shale	4105'	-1167	+16
LKC "H"	4120'	-1182	+14
LKC "J"	4169'	-1231	+19
Stark	4198'	-1260	+10
Hush.	4233'	-1295	+9
BKC	4269'	-1331	+9
Marmaton	4281'	-1343	+9
Altamont	4306'	-1368	+10
Pawnee	4394'	-1456	+14
Myrick	4429'	-1491	+13
Fort Scott	4446'	-1508	+12
Cherokee	4473'	-1535	+11
Johnson	4517'	-1579	+12
Morrow Sand	4560'	-1622	+9
Mississippian	4576'	-1638	+6
RTD	4695'	-1757	

ALLIED OIL & GAS SERVICES, LLC 056752

Federal Tax I.D.# 20-6976804

REMIT TO P.O. BOX 31
RUSSELL, KANSAS 67665

SERVICE POINT

Oakley, KS

DATE <u>7/2/11</u>	SEC. <u>13</u>	TWP. <u>13</u>	RANGE <u>33</u>	CALLED OUT	ON LOCATION	JOB START	JOB FINISH
LEASE <u>Eaton CDB</u>	WELL # <u>#2</u>	LOCATION <u>Oakley 135 1E 1S 3/4 E</u>				COUNTY <u>Logan</u>	STATE <u>KS</u>
OLD OR NEW (Circle one) <u>NEW</u>						1.01	7.8

CONTRACTOR Murphy 14

OWNER Same

TYPE OF JOB Surf Seal

HOLE SIZE 10 7/8 T.D.

CASING SIZE 8 7/8 DEPTH 228'

TUBING SIZE DEPTH

DRILL PIPE DEPTH

TOOL DEPTH

PRES. MAX MINIMUM

MEAS. LINE SHO JOINT

CEMENT LEFT IN CSO. 15'

PFRS.

DISPLACEMENT 13.56 bbl

EQUIPMENT

CEMENT AMOUNT ORDERED 175 com 300 cc

2.07 gal

COMMON	<u>175</u>	@ <u>16.25</u>	<u>2843.75</u>
POZMIX		@	
GEL	<u>3</u>	@ <u>21.00</u>	<u>63.00</u>
CHLORIDE	<u>6</u>	@ <u>58.00</u>	<u>348.00</u>
ASC		@	

PUMP TRUCK CEMENTER Alan Ryan

822-402 HELPER Wayne McElroy

BULK TRUCK

823-404 DRIVER Chris Helms

BULK TRUCK

DRIVER

HANDLING 189.04 ct @ 2.10 397.41

MILBAGE 2.5 mile / 700 @ 16.37/mile 40.93

138.19 TOTAL 4003.29

3978.86

REMARKS:

Ran case, Circumfer, Mix

Cement Displace Cement.

Cement 24d Circumfer

Tank 4m, Wayne, Chris

SERVICE

DEPTH OF JOB 228'

PUMP TRUCK CHARGE 1125.00

BXTRA FOOTAGE @

MILBAGE 16 @ 5.00 112.00

MANIFOLD 16 @ 4.00 64.00

TOTAL 1301.00

CHARGE TO: Ritchie Exploration

STREET

CITY STATE ZIP

PLUG & FLOAT EQUIPMENT

@

@

@

@

@

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.

TOTAL

SALES TAX (if Any) 254.02

TOTAL CHARGES 3,324.86 5,279.86

DISCOUNT 20 1055.99 IF PAID IN 30 DAYS

PRINTED NAME

SIGNATURE Ronald W. Mickelson

R



CONSOLIDATED
Oil Well Services, LLC

TICKET NUMBER 36980
LOCATION Oakley, KS
FOREMAN Kelly Gabe

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	
2-12-12	7173	#2 Section 13 CD	13	135	3200	Logan	
CUSTOMER		OAKLEY		TRUCK #	DRIVER	TRUCK #	DRIVER
MAILING ADDRESS		5 to 49th Rd		399	Damon M		
CITY		IE 15		566	Thomas B		
STATE		ie N into					
ZIP CODE							

JOB TYPE Prod HOLE SIZE 2 7/8 HOLE DEPTH 41695 CASING SIZE & WEIGHT 4 1/2 10 1/2
 CASING DEPTH 4666 DRILL PIPE _____ TUBING PC top # 5552 OTHER PC @ 2403
 SLURRY WEIGHT 14 SLURRY VOL _____ WATER gal/sk _____ CEMENT LEFT in CASING _____
 DISPLACEMENT 743/4 DISPLACEMENT PSI _____ MIX PSI _____ RATE _____

REMARKS: safety meeting, rigged up on Murfin drilling Rig #14 ran float equip centralizers on JT # 1, 7, 12, 15, 17, 19, 51, 52, baskets 2, 53, 68 85, 92, part collar top of # 53, hooked up to circulate for 30 mins, pumped 5 bbl water, mud flush, 5 bbl water, mixed 30sk RH, 20MH, mixed, 225sk OWC 5# Kolseal down center, washed out pump, released plug, displaced with 743/4 bbl water with 700# lift + plug landed @ 1200#, released Pressure float held, washed out pump, left location.

*Thank You
Sunny, Kelly & crew*

ACCOUNT CODE	QUANTITY or UNITS	DESCRIPTION of SERVICES or PRODUCT	UNIT PRICE	TOTAL
5401C	1	PUMP CHARGE	3020.00	3020.00
5406	10	MILEAGE	5.00	50.00
1136	275 sks	OWC	22.52	6201.25
1104	1375 #	Kol-seal	0.516	720.00
1137	71 #	CDI-26	9.94	687.99
54167	14.3	Ton Mileage delivery	1.07	15.19
4201	1	4 1/2" guide shoe (I)	138.00	138.00
4226	1	4 1/2" AFH insert (I)	193.00	193.00
4139	8	4 1/2" Turbo centralizers (I)	60.00	480.00
4103	5	4 1/2" basket (I)	261.00	1305.00
41284	1	4 1/2" part collar (I)	1890.00	1890.00
				15,145.24
				1514.53
				13630.73
			SALES TAX	818.89
			ESTIMATED TOTAL	14,449.61

Ravin 3737

10:00AM AUTHORIZATION

[Signature]

TITLE _____

DATE 2-12-12

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.

251188

[Signature]

