



Confidentiality Requested:

Yes  No

KANSAS CORPORATION COMMISSION 1181197  
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: \_\_\_\_\_

1181197

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

<b>DISPOSITION OF GAS:</b> <input type="checkbox"/> Vented <input type="checkbox"/> Sold <input type="checkbox"/> Used on Lease <i>(If vented, Submit ACO-18.)</i>	<b>METHOD OF COMPLETION:</b> <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> _____ <i>(Submit ACO-4)</i>	<b>PRODUCTION INTERVAL:</b> _____ _____
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# John Goldsmith Wellsite Service

Cell and Home Phone:  
316-640-0236

427 Roosevelt St.  
Cheney, KS 67025

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

Well Name: #2 Wicked Witch  
Location: 1980' FSL & 330' FWL, W/2 NW SW, 1-20S-24W  
License Number: API: 15-135-25694  
Spud Date: 11/23/2013  
Surface Coordinates: LAT 38.3399044  
LONG -99.9325769  
Bottom Hole Vertical hole  
Coordinates: Bottom Hole Survey = 1/8 Degree  
Ground Elevation (ft):2322' K.B. Elevation (ft): 2327'  
Logged Interval (ft):3600' To: RTD Total Depth (ft):4520'  
Formation: Mississippian at RTD  
Type of Drilling Fluid:Chemical

Region: Ness County

Drilling Completed: 11/29/2013

Printed by WellSight Log Viewer from WellSight Systems 1-800-447-1534 [www.WellSight.com](http://www.WellSight.com)

### OPERATOR

Company: D & J Oil Company, Inc.  
Address: 4720 West Garriott  
Enid, OK 73703  
(580) 242-3636

### GEOLOGIST

Name: John Goldsmith  
Company: John Goldsmith Wellsite Service  
Address: 427 Roosevelt St.  
Cheney, KS 67025  
316-640-0236

### COMMENTS

Contractor: Murfin Drilling Rig #16  
Pusher: Andy Dinkel (785) 443-2377  
Surface Casing: 5 joints of 8 5/8" set at 218'  
Production Casing: The Well was Plugged.  
Mud by: Andy's Mud  
DST's by: Diamond Testing  
Logs by: Nabors Completion Services (DIL, CN-CD, ML)  
RTD=4520'  
LTD=4521'

## FORMATION TOPS






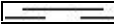
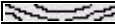





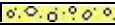
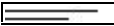




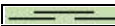


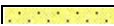




FORMATION	SAMPLE TOPS		LOG TOPS	
	Depth	Datum	Depth	Datum
Heebner Shale	3767'	-1440	3766'	-1439
Lansing	3841'	-1514	3841'	-1514
Stark Shale	4064'	-1737	4063'	-1736
Hushpuckney Shale	4101'	-1774	4101'	-1774
Base of KC	4138'	-1811	4138'	-1811
Marmaton	4178'	-1851	4178'	-1851
Pawnee	4254'	-1927	4254'	-1927
Fort Scott	4335'	-2008	4334'	-2007
Cherokee Shale	4358'	-2031	4357'	-2030
Conglomerate	4401'	-2074	4400'	-2073
Erosional Miss	4435'	-2108	4436'	-2109
Mississippian	4451'	-2124	4451'	-2124
RTD	4520'	-2193		
LTD			4521'	-2194

## DSTs

**DST #1 "Ft Scott" 11/28/2013 30-30-30-30**  
 1st Blw = 1/4" blt to 4.5" (No BB)  
 2nd Blw = WSB blt to 3" (No BB)  
 IFP = 7-34# ISIP = 989# FFP = 35-47# FSIP = 979#  
 HYD = 2181-2151#  
 90' Mud W/ Tr of Oil

**DST #2 "Conglomerate" 11/29/2013 20-20-20-20**  
 1st Blw = Wk Surf Blw (No BB)  
 2nd Blw = Wk Surf Blw (No BB)  
 IFP = 7-11# ISIP = 358# FFP = 12-13# FSIP = 234#  
 HYD = 2200-2190#  
 5' Mud W/ Tr of Oil

## ROCK TYPES

	Anhy		Salt		Dol		Stysh
	Cht		Shale		Dtd		Sdy dolo
	Coal		Shcol		Gry sh		Silty dolo
	Congl		Shgy		Sandylms		Shy dolo
	Dol		Slst		Shale		Shaly ls
	Gyp		Ss		Slstn		
	Lmst		Carb sh		Shlyslts		

## ACCESSORIES

### FOSSIL

- Algae
- Amph
- Belm
- Bioclst
- Brach
- Bryozoa
- Cephal
- Coral
- Crin
- Echin
- Fish
- Foram
- Fossil
- Gastro
- Oolite
- Ostra
- Pelec
- Pellet
- Pisolite



- Plant
- Strom
- Fuss
- Oomold

### MINERAL

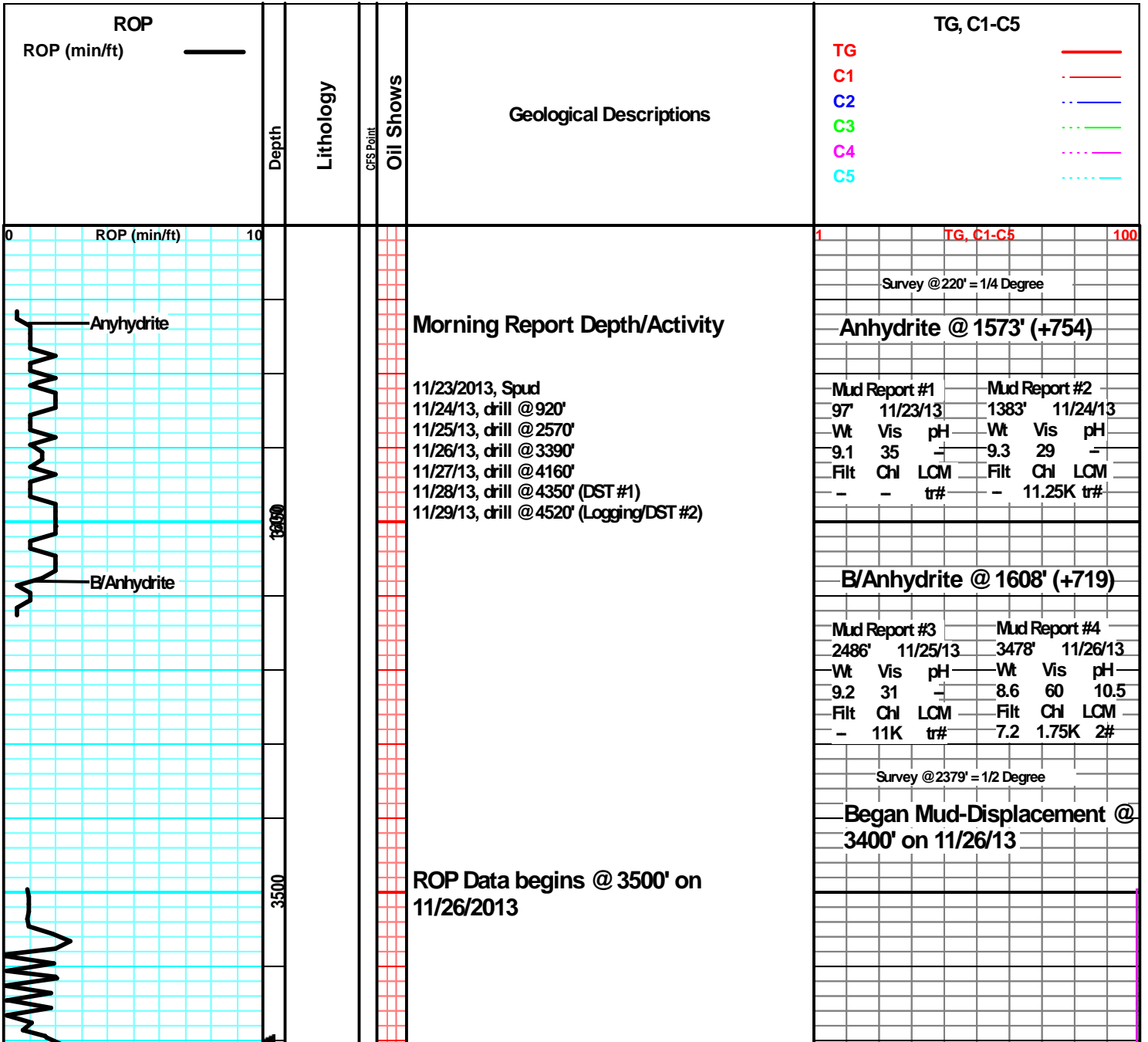
- Anhy
- Arggrn
- Arg
- Bent
- Bit
- Breclfrg
- Calc
- Carb
- Chtdk
- Chtlt
- Dol
- Feldspar
- Ferrpel
- Ferr

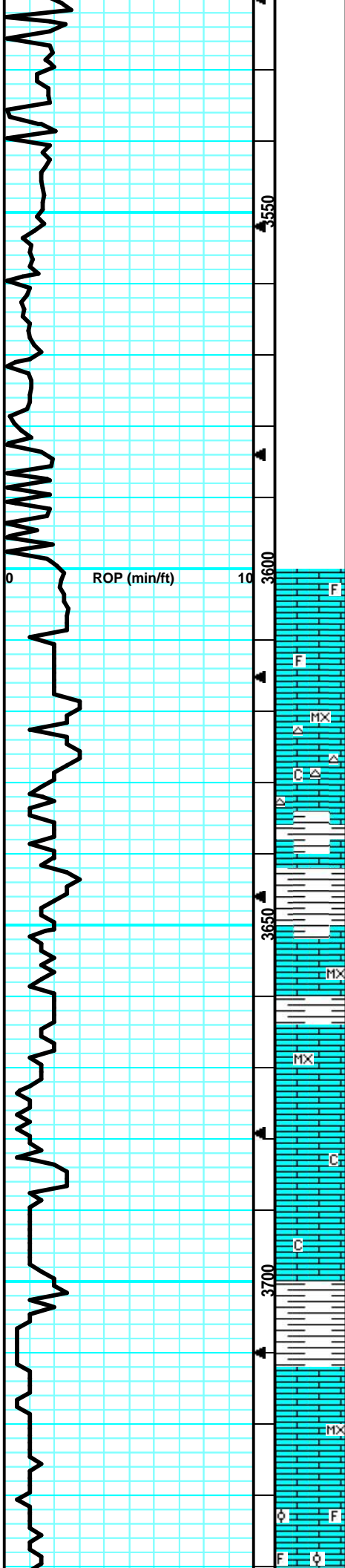


- Glau
- Gyp
- Hvymn
- Kaol
- Marl
- Minxl
- Nodule
- Phos
- Pyr
- Salt
- Sandy
- Silt
- Sil
- Sulphur
- Tuff
- Chlorite
- Dol
- Sand
- Slty

### STRINGER

- Anhy
- Arg
- Bent
- Coal
- Dol
- Gyp
- Ls
- Mrst
- Sltstrg
- Ssstrg
- Carbsh
- Clystn
- Dol
- Grysh
- Gryslt
- Lms
- Sandylms
- Sh
- Sltstn





**Drill cutting samples at 10' intervals start at 3600'.**

LS: gry/tan, fn xln, mott in prt, mostly dense, sub-chlky in prt, sm firm, fw pcs w/ foss frags, tr-nvp, fw SHt gry/drk gry, silty, no cup odr, ns.

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

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

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

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

LS: lt gry/lt tan, fn xln, sm mott in prt, fw foss frags, sm dense, fw brittle, fw sub-chlky in prt, sm 2nd rxln, tr-nvp, fw pcs pur chlk, no cup odr, ns.

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

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

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

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

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

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

LS: tan/gry, fn xln, mostly dense, svrl firm, fw sub-chlky in prt, v fw brittle, tr-nvp, abund pur chlk, fw SHt gry, silty, med crush, no cup odr, ns.

LS: tan/gry, fn-micro xln, fw mott in prt, mostly dense, svrl firm, sm foss frags, tr-nvp, fw pcs pur chlk, fw SHt gry/gm, silty, fw waxy, no cup odr, ns.

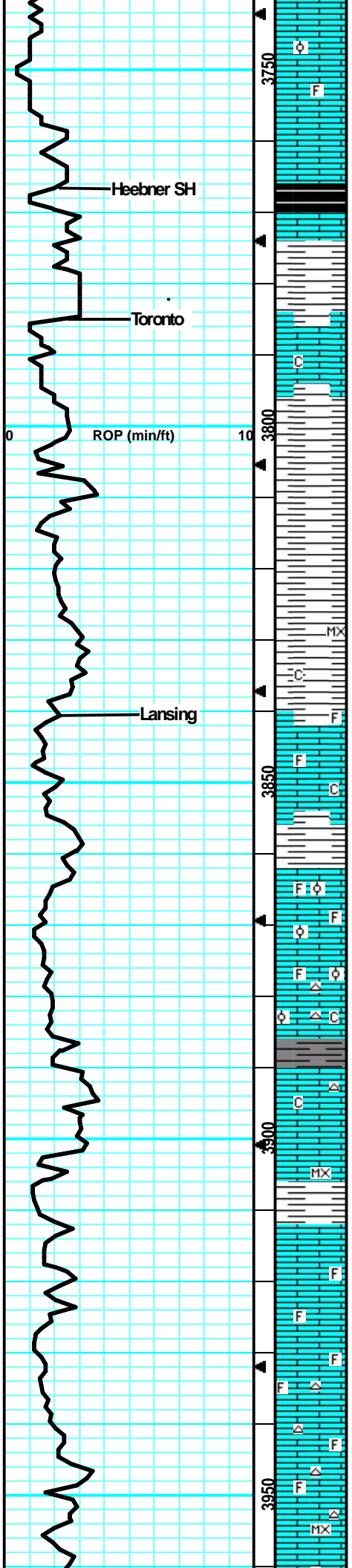
LS: tan/lt gry, fn xln, sm mott, fw foss frags, sm ool, mostly dense, sm firm, fw brittle, fw chlky in prt, tr-nvp, no cup odr, ns.

Mud Check  
Vis 69  
Wt 8.7  
LCM 2#

Mud Check  
Vis 64  
Wt 8.8  
LCM 1.5#

TG, C1-C5 100

Mud Check  
Vis 60  
Wt 8.8  
LCM 1.5#



LS: gry/tan, fn xln, sm matt in prt, fw foss frags, fw dense, sm brittle, sm sub-chlky in prt, tr-sm inxln por, svrl pcs pur chlk, no cup odr, ns.

LS: tan/gry, fn xln, sm matt in prt, mostly dense, sm firm, fw brittle, tr-sm inxln por in fw pcs, fw pcs pur chlk, fw SH: gry/brn, silty, no cup odr, ns.

LS: gry/lt tan, fn xln, sm matt in prt, mostly dense, sm firm, sm brittle/sandy, tr inxln por in sm, sm pcs pur chlk, sm SH: gry/blk, silty, sm carb, soft, no cup odr, ns.

LS: gry/tan, fn xln, mostly dense, sub-chlky in prt, fw brittle, tr-nvp, fw pcs pur chlk, sm SH: gry/blk, silty, sm carb, soft, no cup odr, ns.

LS: gry/tan, fn xln, mostly dense, fw sub-chlky in prt, v fw brittle, tr-nvp, svrl pcs pur chlk, fw SH: gry, silty, soft, no cup odr, ns.

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

LS: gry/lt tan, fn xln, fw slight matt, mostly dense, many firm, fw brittle, tr-nvp, fw SH: gry/blk, silty, fw carb, no cup odr, ns.

LS: gry/lt tan, micro-fn xln, fw slight matt, mostly dense, sm brittle, many firm, tr-nvp, fw SH: gry, silty, med crush, no cup odr, ns.

LS: gry/tan, fn xln, slight matt in prt, mostly dense, fw brittle, sub-chlky in prt, fw flakey/mealy, tr-nvp, fw SH: gry/brn, silty, sm v soft, no cup odr, ns.

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

LS: tan/lt tan, fn xln, sm foss in prt, mostly dense, many firm, sm 2nd xln, tr-nvp, fw pcs pur chlk, fw SH: gry/brn, silty, no cup odr, ns.

LS: tan/lt tan, fn xln, foss in prt, mostly dense, firm, fw hard, tr-nvp, fw pcs pur chlk, fw SH: gry/drk gry, silty, med crush, no cup odr, ns.

LS: gry/tan, fn xln, sm matt in prt, fw foss frags, fw ool, many dense, sm firm, fw brittle, fw flakey/mealy, tr-nvp, no cup odr, ns.

LS: gry/tan, fn xln, sm matt in prt, mostly dense, many firm, fw ool, v fw brittle, tr-nvp, abund of pur chlk, fw SH: gry, silty, med crush, no cup odr, ns.

LS: tan/lt gry, fn xln, mostly dense, fw foss frags, fw brittle, sm sub-chlky in prt, fw Chert: tan, foss, sharp, fw SH: drk gry/blk, silty, fw carb, no cup odr, ns.

LS: lt tan/lt gry, fn xln, mostly dense, fw sub-chlky in prt, many firm, fw brittle, tr-nvp, fw SH: gry/brn, silty, fw soft, no cup odr, ns.

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

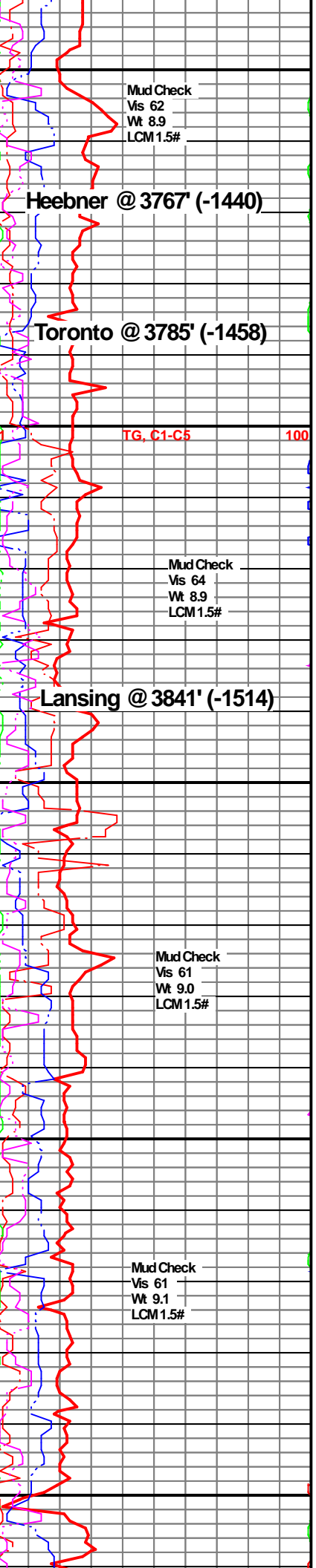
LS: gry/lt tan, fn xln, many dense, sm firm, fw flakey/mealy, fw sub-chlky, tr-nvp, sm SH: gry/grn, silty, soft, fw fissile, no cup odr, ns.

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

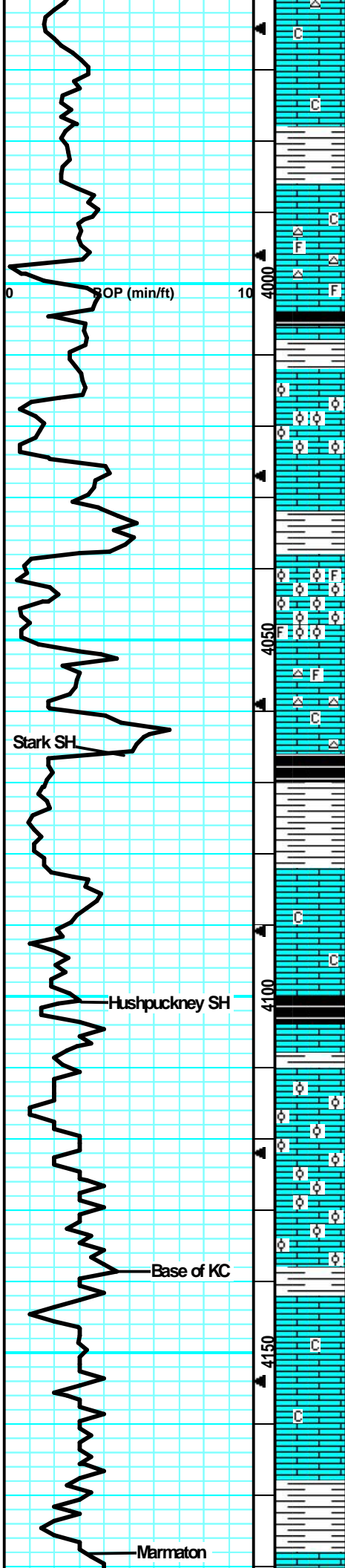
LS: tan/lt tan, fn xln, fw foss in prt, sm brittle, fw dense, tr-nvp, sm Chert: wht/opaque, foss, sharp, no cup odr, ns.

LS: lt tan, fn xln, v fw foss frags in prt, sm brittle, fw sub-chlky in prt, cherty, tr-nvp, sm Chert: wht/opaque, sharp, sm SH: gry/grn/brn, silty, med crush, fw waxy, no cup odr, ns.

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







LS: lt gry/lt tan, fn xln, mostly dense, v fw brittle, sm sub-chlky in prt, rare scat vuggy por, fw pcs pur chl, svrl SH gry/grn, silty, med crush, no cup odr, ns.

LS: tan/lt tan, fn xln, mostly dense, sm 2nd xln, fw brittle, sub-chlky in prt, tr-nvp, svrl SH gry/brn, silty, fissile, no cup odr, ns.

SH: gry/brn/grn, silty, sm waxy, med crush, fw LS: gry/lt tan, fn xln, sm dense, many firm, sub-chlky in prt, tr-nvp, no cup odr, ns.

LS: lt tan, micro-fn xln, mostly dense, sm brittle, sm sub-chlky in prt, tr-nvp, fw Chert: wht/opaque, sharp, fw SH gry/brn, silty, no cup odr, ns.

LS: lt tan, fn xln, fw foss, mostly dense, fw sub-chlky in prt, fw firm, tr-nvp, fw Chert: tan, foss, svrl SH drk gry/brn, silty, sm soft, no cup odr, ns.

LS: crm/lt tan, micro-fn xln, fw ool, mostly dense, fw sub-chlky in prt, fw brittle, many firm, tr-nvp, sm SH gry/grn, silty, no cup odr, ns.

LS: tan/lt tan, fn xln, mostly dense, sm brittle, sm v ool, fw sub-chlky in prt, tr-nvp, fw SH gry, silty, fissile, no cup odr, ns.

LS: tan/lt tan, fn xln, mostly dense, firm, fw sub-chlky in prt, fw flakey like, tr-nvp, fw SH gry/grn, silty, fw waxy, soft, no cup odr, ns.

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

LS: gry/lt tan, fn xln, fw dense, sm flakey/mealy, fw sub-chlky in prt, sm brittle, tr-? intxln por in sm fw Chert: wht/lt gry, sharp, no cup odr, ns.

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

LS: gry/tan, fn xln, sm mott in prt, mostly dense, mostly firm, fw flakey/mealy, tr-nvp, v fw SH gry/grn, silty, fw waxy, no cup odr, ns.

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

LS: tan/lt gry, fn xln, mostly dense, sm firm, fw chlky/brittle, fw flakey/mealy, tr-nvp, fw pcs pur chl, sm SH gry/brn, silty, fissile, no cup odr, ns.

LS: gry/tan, fn-crs xln, mott in prt, mostly dense, sm hard, sm 2nd xln, fw flakey/mealy, tr-nvp, sm SH gry/blk, silty, sm carb, no cup odr, ns.

LS: gry/lt tan, fn xln, fw dense, mostly brittle, sub-chlky in prt, sm ool, tr-? intxln por in fw, abund SH gry/brn, silty, fissile, no cup odr, ns.

LS: tan/gry, fn xln, sm mott in prt, fw dense, many brittle, sm v ool, fw sub-chlky, tr-pr intool por in sm, v fw SH gry/grn, silty, no cup odr, ns.

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

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

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

SH: gry/grn/brn, silty, fw fissile, sm soft, fw LS: tan/lt tan, fn xln, mostly dense, fw brittle, many firm, tr-nvp, fw pcs pur chl, no cup odr, ns.

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

Mud Check  
Vis 51  
Wt 8.9  
LCM 1.5#

Ran in a premix tank.

TG, C1-C5 100

Mud Check  
Vis 58  
Wt 9.0  
LCM 1.5#

Mud Check  
Vis 63  
Wt 9.0  
LCM 1.5#

Stark @ 4064' (-1737)

Hushpuckney @ 4101' (-1774)

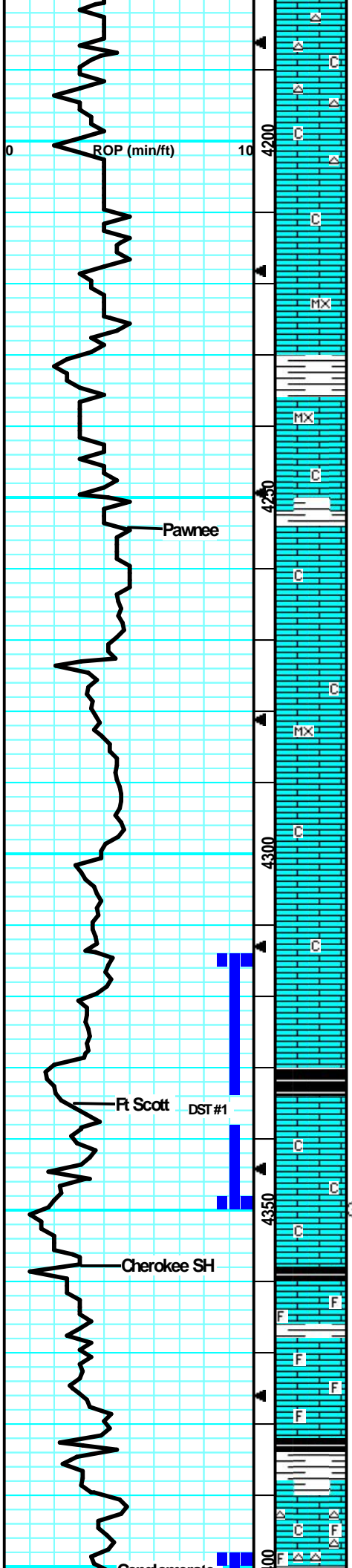
Mud Check  
Vis 60  
Wt 9.0  
LCM 1.5#

B/KC @ 4138' (-1811)

Mud Report #5

4161'	11/27/13		
Wt	Vis	pH	
9.1	58	10.5	
Filt	Chl	LCM	
7.6	2.5K	1.5#	

Marmaton @ 4178' (-1851)



LS: gry/tan, fn xln, sm mott in prt, mostly dense, fw brittle, many firm, sm flakey/mealy, tr-nvp, svrl SH gry/brn, silty, sm fissile, no cup odr, ns.  
 LS: gry/tan, fn xln, sm mott in prt, mostly dense, sm sub-chlky/brittle, tr-nvp, fw Chert: wht/opaque, sharp, fw SH; gry/brn, silty, sm soft, no cup odr, ns.

SH: gry/grn/brn, silty, sm soft, fw fissile, fw waxy, fw LS: lt tan, fn xln, mostly dense, fw brittle, sub-chlky in prt, tr-nvp, no cup odr, ns.

SH: gry/brn/grn, silty, sm fissile, fw waxy, easy-med crush, fw LS: tan/lt tan, fn xln, mostly dense, fw brittle, sub-chlky in prts, tr-nvp, no cup odr, ns.

LS: tan/lt tan, micro-fn xln, mostly dense, sm brittle, fw sub-chlky in prt, sm sandy, tr-nvp, sm SH: gry/brn, sm fissile, no cup odr, ns.

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

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

LS: gry/tan, fn xln, mostly dense, sm firm, fw sub-chlky, fw brittle, tr-nvp, fw SH: gry/brn/grn, silty, fw fissile, no cup odr, ns.

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

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

LS: tan/gry, micro-fn xln, mostly dense, sm firm, fw brittle, fw sub-chlky in prt, tr-nvp, svrl SH: gry/brn, silty, fw fissile, med crush, no cup odr, ns.

LS: tan/gry, fn xln, mostly dense, many firm, fw sub-chlky in prt, tr-nvp, fw pcs w/ drk min stns, no fluor/cut, svrl SH: gry/brn, silty, med crush, no cup odr, ns.

SH: drk gry/gry, silty, fw carb like, med-firm crush, v fw LS: gry/lt brn, fn xln, dense, firm, tr-nvp, no cup odr, ns.

SH: gry/drk gry, silty, soft, fw carb easy-med crush, v fw LS: lt tan/tan, fn xln, mostly dense, fw brittle, tr-nvp, no cup odr, ns.

LS: lt tan/tan, fn xln, slight mott in prt, mostly brittle, fw dense, sm 2nd rxln, pr intxn por in sm, fw patchy stns, wk fluor/no cut, fnt-? cup odr.

LS: tan/lt gry, fn xln, slight mott in prt, many brittle, scat 2nd rxln, pr-fr intxn por/scat rare vug, ss light filmy oil, wk cup odr, dul yel fluor/stm cut.

LS: tan/gry, fn xln, mott in prt, sm dense, fw firm, fw flakey/mealy, tr-nvp, svrl SH: gry/blk, silty, sm carb, abund pr chl, no cup odr, ns.

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

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

LS: tan/lt gry, fn xln, mostly dense, fw foss frags, fw sub-chlky, sm brittle, mostly firm, tr-nvp, svrl SH: gry/blk, silty, fw carb, no cup odr, ns.

LS: tan/gry, fn xln, fw mott in prt, v fw foss frags, mostly dense, sm firm, v fw sub-chlky/brittle, fw flakey/mealy, tr-nvp, abund SH: gry/grn/blk, silty, fw waxy, fw carb, no cup odr, ns.

LS: tan/lt tan, fn xln, mostly dense, fw brittle, many firm, many flakey/mealy, fw spctd drk stns, wk-? fluor/cut, pos drk dead oil, tr-? intxn por in sm, fw Chert: wht/opaque, sharp, svrl SH: gry/brn, silty, no cup odr, nsfo.

Gas Chromatograph threw an error had to reboot and call tech sup

Beginning to Generate a lot of slough in the hole. Abundance of Shale being seen in every sample.

Shale Slough

Shale Slough

Shale Slough

Mud Check  
Vis 59  
Wt 9.1  
LCM 1.5#

**TG, C1-C5** **100**

Mud Check  
Vis 60  
Wt 9.2  
LCM 1#

**Pawnee @ 4254' (-1927)**

Mud Check  
Vis 57  
Wt 9.3  
LCM 1#

DST #1 "Ft Scott"  
11/28/2013 30-30-30-30  
1st Blw= 1/4" bit to 4.5" (No BB)  
2nd Blw= WSB bit to 3" (No BB)  
IFP= 7-34# ISIP= 989# FFP  
= 35-47# FSIP= 979#  
HYD= 2181-2151#  
90' Mud W/ Tr of Oil

**Ft Scott @ 4335' (-2008)**

Survey @ 4350' = 1 1/2 Degrees

**CFS @ 4350'**  
(30"/60")

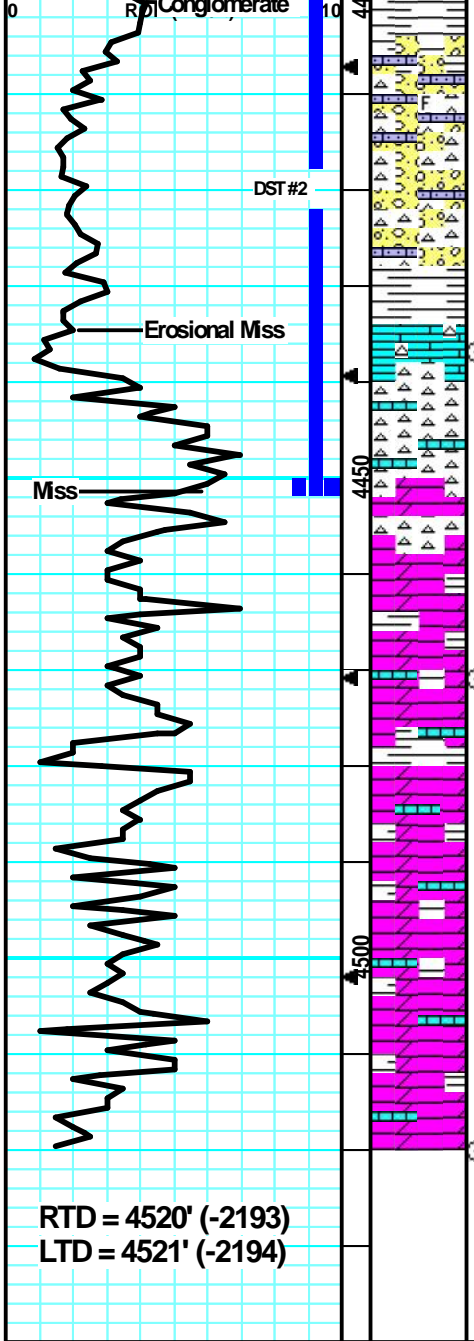
**Cherokee @ 4358' (-2031)**

Chromatograph and Tooke DAQ had a software glitch again. Only was able to run TG hotwire from here down.

Mud Report #6  
4350' 11/28/13

Wt	Vis	pH
9.4	59	10.0
Filt	Chl	LCM
9.6	3.25K	1#

Mud Check  
Vis 58  
Wt 9.4  
LCM 1#



LS: tan/gry, fn xln, mostly dense, firm, fwfoss, tr-nvp, fw Chert: wht/lt tan, lightly stns, wk-? fluor/cut, fwSS: crm/lt tan, fn gm sub md, arg in prt, pr intgrm por, lght brn stns, gd fluor, slwcut on brk, fr cup odr, vssfo.

LS: tan/lt tan, fn xln, mostly dense, fwfirm, smbrittle, fw flakey/mealy, tr-nvp, fwSS: lt tan, fn gm, sub-md, friable, fr intgrm por in sm, lght brn sat stns, dul yel fluor, strm cut, slight cup odr, vssfo.

LS: tan/lt tan, fn xln, fw mott, mostly dense, smfoss in prt, firm, tr-nvp, svrl Chert: wht/yel/org, sharp, smtrip, fw pcs w/ drk spttd stns, wk-fr cup odr, nsfo.

Chert: wht/org/yel, sharp, fwfoss, fwtrip, scat frac/vuggy por, spttd fluor, strm cut, hvy stns, gd cup odr, sssfo, fwLS: lt gry/tan, fn xln, mostly dense, tr-nvp, svrl SH: gry/grn, silty.

Chert: wht/tan/yel, sharp, fwfoss, scat frac/vug por, spttd fluor/strm cut, hvy stns, smDOL: lt tan, fn xln, fwgritty/sucrosic like, scat euhedrl vuggy por in many, scat lght brn stns, dul yel fluor/strm cut, sssfo, gd cup odr.

DOL: lt tan, micro-fn xln, mostly dense, fw brittle, pr intxln/fr scat vug por, scat dul yel fluor/strm cut, slight cup odr, sssfo. 60" Sample: much of the same DOL as above a fw more pcs, w/ wk cup odr.

DOL: gry/lt tan, fn xln, fwdense, smbrittle, fwfirm, scat vug por in sm, lght brn stns in por, vssfo on brk, faint-wk cup odr, abund of SH: gry, silty.

DOL: gry/tan, fn xln, mostly dense, smfirm, pr intxln por in sm, fw LS: gry/tan, fn xln, sub-chlky in prt, fwflakey/mealy, slightly dolimitic, tr-nvp, abund SH: gry/bm, silty, svrl Chert: wht/yel/tan, sharp, smtrip, no cup odr, ns

DOL: gry/lt tan, fn xln, smdense, many firm, pr intxln por in sm, fw scat vug hole, drk stns, wk fluor/cut, fwLS: gry/tan, dense, firm, sub-chlky in prt, abund SH: gry/grn/bm, silty, soft no cup odr, nsfo.

DOL: gry/tan, fn xln, smdense, fwbrittle, mostly firm, scat pr vug por, sm drk stns in vug holes, no gas bub, wk scat fluor/wk-? cut, abund SH: gry/bm, silty, soft, no cup odr, nsfo.

DOL: tan/lt gry, fn xln, mostly firm, many dense, scat pr vuggy por in sm, fwbrittle, tr-? fn intxln por in sm, pos lght brn stns ? scat fluor/cut, fwLS: tan, fn xln, dense, tr-nvp, abund SH: gry/bm/grn, silty, soft, no cup odr, ns.

**Conglomerate @ 4401' (-2074)**

DST #2 "Conglomerate"  
11/29/2013 20-20-20-20  
1st Blw = Wk Surf Blw (No BB)  
2nd Blw = Wk Surf Blw (No BB)  
IFP = 7-11# ISIP = 358# FFP = 12-13# FSIP = 234#  
HYD = 2200-2190#  
5' Mud W Tr of Oil

Loss Torque

Loss Torque

**Ersi Miss @ 4435' (-2108)**

CFS @ 4437' (30"/60")

Mud was getting a little out of hand. Ran in a tank for 30" before drilling ahead.

Rough Drilling  
Kelly Bouncing

**Miss @ 4451' (-2124)**

CFS @ 4465' (30"/60")

Shale Slough

Automatic Driller was surging weight thus causing erratic drill time.

Mud Check  
Vis 52  
Wt 9.3  
LCM 1#

Cont. shows of stains through the DOL section. Possible rock from above.

Shale Slough

Survey @ 4520' = 1/8 Degree

CFS @ 4520' (30"/60")

Mud Report #7  
4520' 11/29/13  
Wt Vis pH  
9.5 52 10.0  
Filt Chi LCM  
8.8 2K 1.5#

RTD = 4520' (-2193)  
LTD = 4521' (-2194)



264296

TICKET NUMBER 44543  
 LOCATION ONKLEY KS.  
 FOREMAN DAMON MI

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

FIELD TICKET & TREATMENT REPORT  
 CEMENT

KS.

DATE	CUSTOMER #	WELL NAME & NUMBER	SECTION	TOWNSHIP	RANGE	COUNTY
11-23-13	5018	WICKED WITCH #2	1	20	24W	NESS
CUSTOMER			TRUCK #			
MAILING ADDRESS			DRIVER			
CITY			TRUCK #			
STATE			DRIVER			
ZIP CODE			TRUCK #			

CUSTOMER DJS OIL CO. NESS CITY  
5402D  
602W  
15  
E INTO

TRUCK # 399 DRIVER DANE R  
566 DRIVER SEREMYS.

JOB TYPE SURFACE HOLE SIZE 12 1/4 HOLE DEPTH 220 CASING SIZE & WEIGHT 8 7/8 24#  
 CASING DEPTH 218 DRILL PIPE \_\_\_\_\_ TUBING \_\_\_\_\_ OTHER \_\_\_\_\_  
 SLURRY WEIGHT 14.8 SLURRY VOL \_\_\_\_\_ WATER gal/sk \_\_\_\_\_ CEMENT LEFT in CASING \_\_\_\_\_  
 DISPLACEMENT 12 1/2 DISPLACEMENT PSI \_\_\_\_\_ MIX PSI \_\_\_\_\_ RATE \_\_\_\_\_

REMARKS: SAFELY MOUNTING RIG UP ON MURFIN 16 CIRCULATED ON BOTTOM  
MIXED 160 SKS CLASS A 3% CALCIUM 2% GEL DISPLACED WITH 12 1/2 BBL  
OF 420 SHUT IN RELEASED PRESSURE WASHED UP AND RIGGED DOWN.

CEMENT DID CIRCULATE  
APPROX 4 BBL TO THE P.L.

THANK YOU DAMON & CREW

ACCOUNT CODE	QUANTITY or UNITS	DESCRIPTION of SERVICES or PRODUCT	UNIT PRICE	TOTAL
54015	1	PUMP CHARGE	1150.00	1150.00
5406	20	MILEAGE	5.25	105.00
5407	7.52	TON MILEAGE DELIVERY (MIN)	430.00	430.00
11045	160 SKS	CLASS A CEMENT	18.55	2968.00
1102	451#	CALCIUM CHLORIDE	.94	423.94
1118B	301#	BETONITE	.27	81.27
			SUBTOTAL	5158.21
			LESS 10.90	515.83
			SUBTOTAL	4642.39
			6.15 SALES TAX	192.24
			ESTIMATED TOTAL	4834.63

completed

Ravin 3737

AUTHORIZATION [Signature] 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

204439

TICKET NUMBER 44573  
LOCATION Oakley Ks  
FOREMAN Jerry Y

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
11-29-13	5018	Wicked Witch #2	1	20S	24W	Ness
CUSTOMER			Ks			
MAILING ADDRESS			TRUCK #	DRIVER	TRUCK #	DRIVER
CITY						

J&J Oil Co  
Ness City  
5th Rd 60  
2 W 15  
E into

JOB TYPE Plug HOLE SIZE ~~7 7/8~~ HOLE DEPTH 4520 CASING SIZE & WEIGHT \_\_\_\_\_  
CASING DEPTH \_\_\_\_\_ DRILL PIPE 4 1/2 TUBING \_\_\_\_\_ OTHER \_\_\_\_\_  
SLURRY WEIGHT 13.8 SLURRY VOL. \_\_\_\_\_ WATER gal/sk \_\_\_\_\_ CEMENT LEFT in CASING \_\_\_\_\_  
DISPLACEMENT \_\_\_\_\_ DISPLACEMENT PSI \_\_\_\_\_ MIX PSI \_\_\_\_\_ RATE \_\_\_\_\_

REMARKS: Safely meeting origin on Martin 16 plug as order of 250 sks 60/40 5% gel 1/4" phaseal  
50 sks @ 1590'  
80 sks @ 790'  
50 sks @ 250'  
20 sks @ 60' 4 9/8" wooden plug  
20 sks MH  
30 sks RH

Thank you  
Jerry & crew

ACCOUNT CODE	QUANTITY or UNITS	DESCRIPTION of SERVICES or PRODUCT	UNIT PRICE	TOTAL
5401	1	PUMP CHARGE	1395 <sup>00</sup>	1395 <sup>00</sup> ✓
5406	20	MILEAGE	5 <sup>25</sup>	105 <sup>00</sup> ✓
5407	10.75	ton mileage delivery (mca)	430 <sup>00</sup>	430 <sup>00</sup> ✓
1131	250 sks	60/40 port mix	15 <sup>86</sup>	3965 <sup>00</sup> ✓
1186	860 #	gel	27	232 <sup>20</sup> ✓
1107	62 #	phaseal	2.32	184 <sup>14</sup> ✓
4432	1	8 5/8 wooden plug	100 <sup>15</sup>	100 <sup>15</sup> ✓
			Subtotal.	6412 <sup>99</sup>
			less 10% disc	6412 <sup>1</sup> ✓
			Subtotal	5770 <sup>88</sup>
			6.15 SALES TAX	248.09 ✓
			ESTIMATED TOTAL	6018.97 ✓

completed

AUTHORIZATION Ary Stahl 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

## General Information Report

### General Information

**Company Name** D&J OIL COMPANY, INC.  
**Contact** CRAIG ROBERTS  
**Well Name** WICKED WITCH #2  
**Unique Well ID** DST #1, FT. SCOTT, 4314-4350  
**Surface Location** SEC 1-20S-24W, NESS CO. KS.  
**Field** H-L  
**Well Type** Vertical  
**Test Type** CONVENTIONAL  
**Formation** DST #1, FT. SCOTT, 4314-4350  
**Well Fluid Type** 01 Oil

**Representative** TIM VENTERS  
**Well Operator** D&J OIL COMPANY, INC.  
**Report Date** 2013/11/28  
**Prepared By** TIM VENTERS  
**Qualified By** JOHN GOLDSMITH

**Start Test Date** 2013/11/28  
**Final Test Date** 2013/11/28

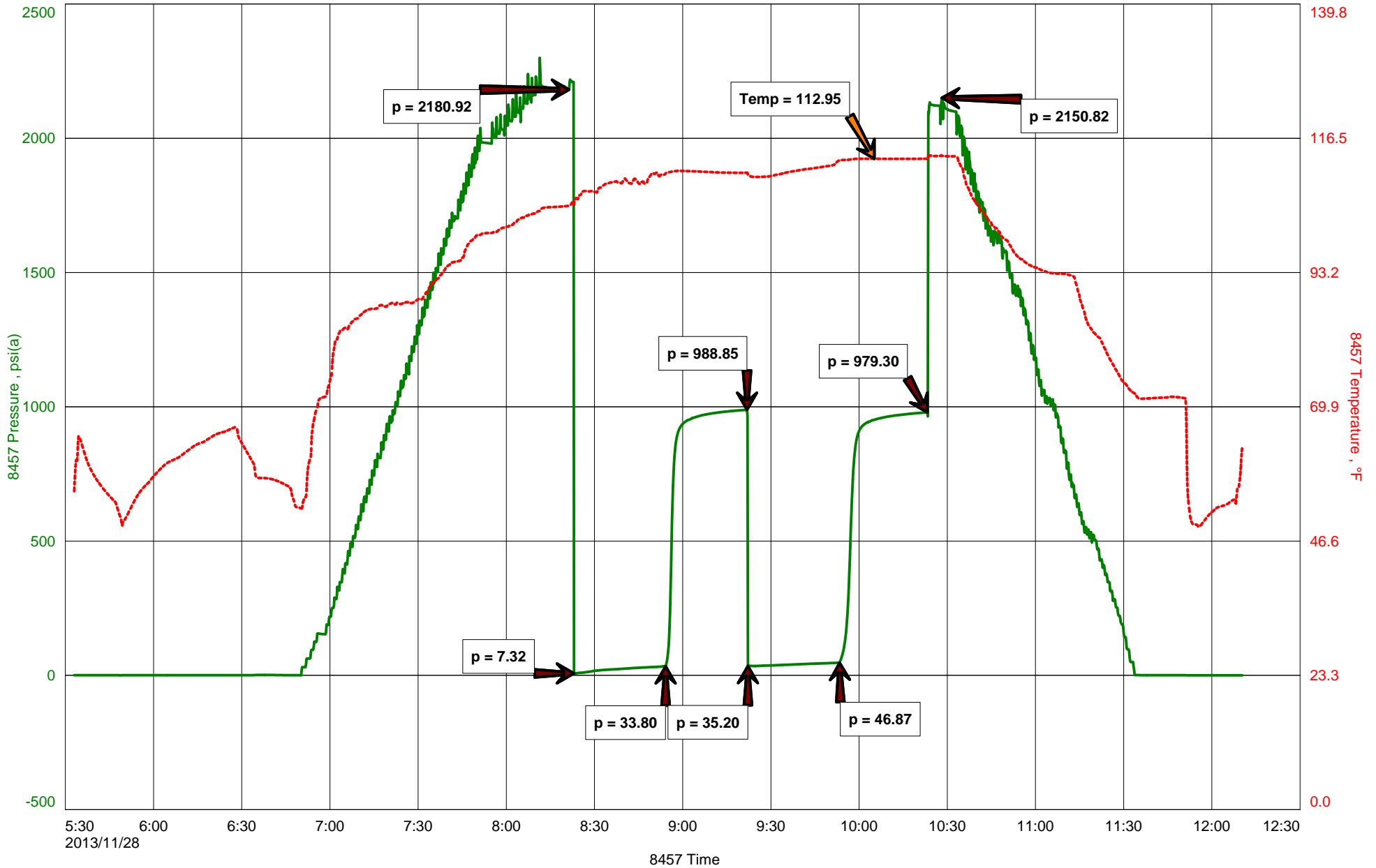
**Start Test Time** 05:33:00  
**Final Test Time** 12:11:00

### Test Recovery:

RECOVERED: 90' MW/TR. O, TRACE OIL, 100% MUD

TOOL SAMPLE: TRACE OIL, 100% MUD

# WICKED WITCH #2





**DIAMOND TESTING**  
P.O. Box 157  
**HOISINGTON, KANSAS 67544**  
(800) 542-7313  
**DRILL-STEM TEST TICKET**  
FILE: WICKEDWITCH2DST1

TIME ON: 05:33  
TIME OFF: 12:11

Company D&J OIL COMPANY, INC. Lease & Well No. WICKED WITCH #2  
Contractor MURFIN DRILLING CO., INC. RIG #16 Charge to D&J OIL COMPANY, INC.  
Elevation 2327 KB Formation FT. SCOTT Effective Pay \_\_\_\_\_ Ft. Ticket No. T289  
Date 11-28-13 Sec. 1 Twp. 20 S Range 24 W County NESS State KANSAS  
Test Approved By JOHN GOLDSMITH Diamond Representative TIMOTHY T. VENTERS

Formation Test No. 1 Interval Tested from 4314 ft. to 4350 ft. Total Depth 4350 ft.  
Packer Depth 4309 ft. Size 6 3/4 in. Packer depth \_\_\_\_\_ ft. Size 6 3/4 in.  
Packer Depth 4314 ft. Size 6 3/4 in. Packer depth \_\_\_\_\_ ft. Size 6 3/4 in.

Depth of Selective Zone Set \_\_\_\_\_

Top Recorder Depth (Inside) 4295 ft. Recorder Number 8457 Cap. 10,000 P.S.I.  
Bottom Recorder Depth (Outside) 4347 ft. Recorder Number 11030 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 30 ft. I.D. 2 1/4 in.  
Weight 9.1 Water Loss 7.6 cc. Weight Pipe Length 0 ft. I.D. 2 7/8 in.  
Chlorides 2,500 P.P.M. Drill Pipe Length 4251 ft. I.D. 3 1/2 in.  
Jars: Make STERLING Serial Number 2 Test Tool Length 33 ft. Tool Size 3 1/2-IF in.  
Did Well Flow? NO Reversed Out NO Anchor Length 36 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 TO 4 1/2 INCHES. (NO BB)  
2nd Open: WEAK SURFACE BLOW, BUILDING TO 3 INCHES. (NO BB)

Recovered 90 ft. of MW/TR. O, TRACE OIL, 100% MUD  
Recovered \_\_\_\_\_ ft. of \_\_\_\_\_  
Recovered \_\_\_\_\_ ft. of \_\_\_\_\_  
Recovered \_\_\_\_\_ ft. of \_\_\_\_\_  
Recovered \_\_\_\_\_ ft. of \_\_\_\_\_

Remarks: _____	Price Job
_____	Other Charges
_____	Insurance
TOOL SAMPLE: <u>TRACE OIL, 100% MUD</u>	Total

Time Set Packer(s) 8:22 AM A.M. P.M. Time Started Off Bottom 10:22 AM A.M. P.M. Maximum Temperature 113 deg.

Initial Hydrostatic Pressure..... (A) 2181 P.S.I.  
Initial Flow Period..... Minutes 30 (B) 7 P.S.I. to (C) 34 P.S.I.  
Initial Closed In Period..... Minutes 30 (D) 989 P.S.I.  
Final Flow Period..... Minutes 30 (E) 35 P.S.I. to (F) 47 P.S.I.  
Final Closed In Period..... Minutes 30 (G) 979 P.S.I.  
Final Hydrostatic Pressure..... (H) 2151 P.S.I.

Diamond Testing shall not be liable for damages of any kind to the property or personnel of the one for whom a test is made or for any loss suffered or sustained, directly or indirectly, through the use of its equipment, or its statement or opinion concerning the result of any test. Tools lost or damaged in the hole shall be paid for at cost by the party for whom the test is made.



# DIAMOND TESTING

## General Information Report

### General Information

**Company Name** D&J OIL COMPANY, INC.  
**Contact** CRAIG ROBERTS  
**Well Name** WICKED WITCH #2  
**Unique Well ID** DST #2, MISSISSIPPIAN, 4398-4452  
**Surface Location** SEC 1-20S-24W, NESS CO. KS.  
**Field** H-L  
**Well Type** Vertical  
**Test Type** STRADDLE  
**Formation** DST #2, MISSISSIPPIAN, 4398-4452  
**Well Fluid Type** 01 Oil

**Representative** TIM VENTERS  
**Well Operator** D&J OIL COMPANY, INC.  
**Report Date** 2013/11/29  
**Prepared By** TIM VENTERS  
**Qualified By** JOHN GOLDSMITH

**Start Test Date** 2013/11/29  
**Final Test Date** 2013/11/29

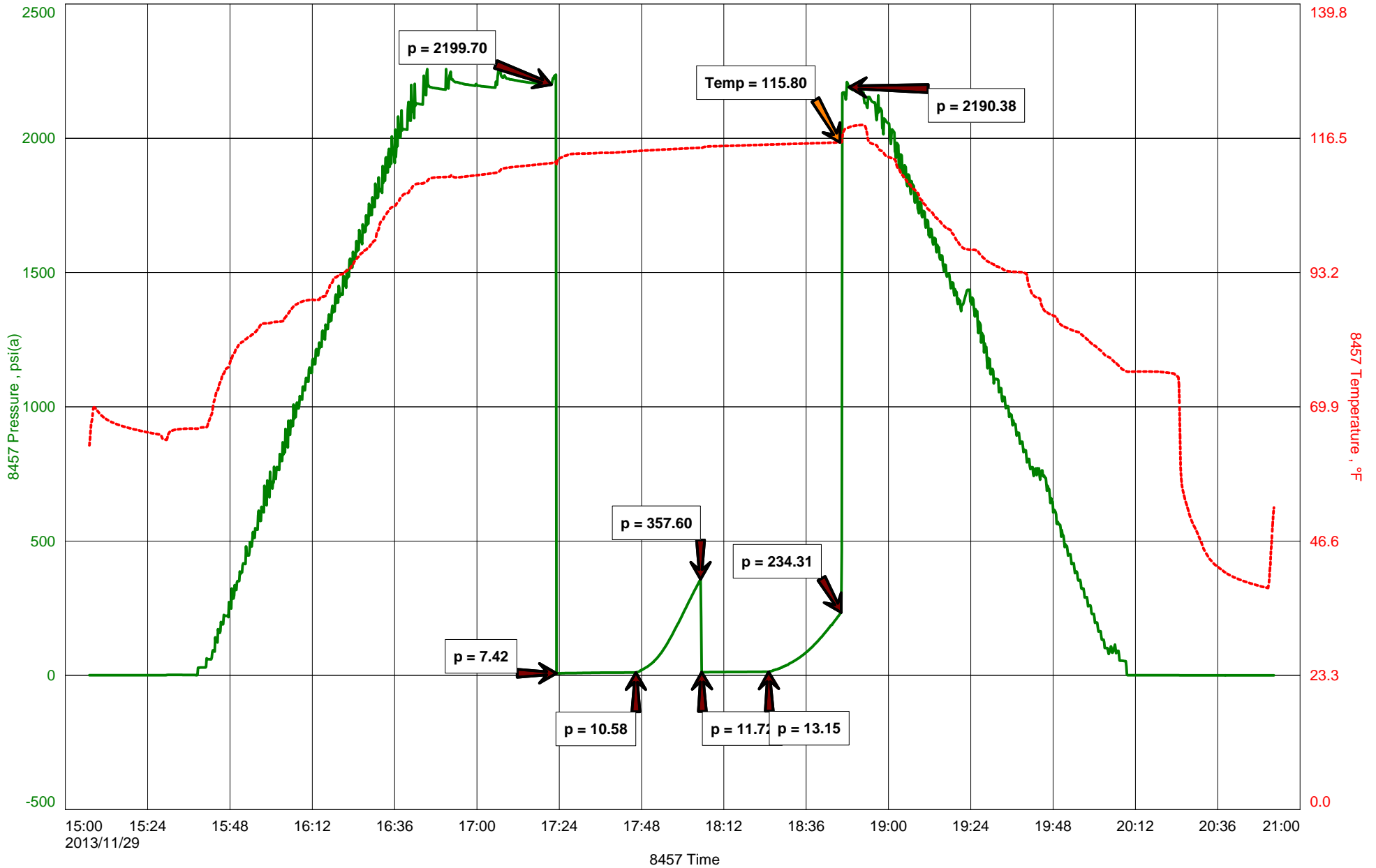
**Start Test Time** 15:07:00  
**Final Test Time** 20:53:00

### Test Recovery:

RECOVERED: 5' MUD W/TR. O, TRACE OIL, 100% MUD

TOOL SAMPLE: TRACE OIL, 100% MUD

# WICKED WITCH #2





**DIAMOND TESTING**  
P.O. Box 157  
**HOISINGTON, KANSAS 67544**  
(800) 542-7313  
**DRILL-STEM TEST TICKET**  
FILE: WICKEDWITCH2DST2

TIME ON: 15:07  
TIME OFF: 20:53

Company D&J OIL COMPANY, INC. Lease & Well No. WICKED WITCH #2  
Contractor MURFIN DRILLING CO., INC. RIG #16 Charge to D&J OIL COMPANY, INC.  
Elevation 2327 KB Formation MISSISSIPPIAN Effective Pay \_\_\_\_\_ Ft. Ticket No. T290  
Date 11-29-13 Sec. 1 Twp. \_\_\_\_\_ 20 S Range \_\_\_\_\_ 24 W County NESS State KANSAS  
Test Approved By JOHN GOLDSMITH Diamond Representative TIMOTHY T. VENTERS

Formation Test No. 2 Interval Tested from 4398 ft. to 4452 ft. Total Depth 4520 ft.  
Packer Depth 4393 ft. Size 6 3/4 in. Packer depth 4452 ft. Size 6 3/4 in.  
Packer Depth 4398 ft. Size 6 3/4 in. Packer depth \_\_\_\_\_ ft. Size 6 3/4 in.

Depth of Selective Zone Set \_\_\_\_\_

Top Recorder Depth (Inside) 4379 ft. Recorder Number 8457 Cap. 10,000 P.S.I.  
Bottom Recorder Depth (Outside) 4449 ft. Recorder Number 11030 Cap. 5,025 P.S.I.  
Below Straddle Recorder Depth 4517 ft. Recorder Number 11029 Cap. 5,025 P.S.I.

Mud Type CHEMICAL Viscosity 52 Drill Collar Length 91 ft. I.D. 2 1/4 in.  
Weight 9.5 Water Loss 8.8 cc. Weight Pipe Length 0 ft. I.D. 2 7/8 in.  
Chlorides 2,000 P.P.M. Drill Pipe Length 4274 ft. I.D. 3 1/2 in.  
Jars: Make STERLING Serial Number 2 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. <sup>32' DP IN ANCHOR</sup> Surface Choke Size 1 in. Bottom Choke Size 5/8 in.

Blow: 1st Open: WEAK SURFACE BLOW THROUGHOUT PERIOD. (NO BB)  
2nd Open: WEAK SURFACE BLOW THROUGHOUT PERIOD. (NO BB)

Recovered <u>5</u> ft. of <u>MW/TR. O, TRACE OIL, 100% MUD</u>	
Recovered _____ ft. of _____	
Recovered _____ ft. of _____	
Recovered _____ ft. of _____	
Recovered _____ ft. of _____	Price Job
Recovered _____ ft. of _____	Other Charges
Remarks: _____	Insurance
TOOL SAMPLE: <u>TRACE OIL, 100% MUD</u>	Total

Time Set Packer(s) 5:24 PM <sup>A.M.</sup>/<sub>P.M.</sub> Time Started Off Bottom 6:44 PM <sup>A.M.</sup>/<sub>P.M.</sub> Maximum Temperature 116 deg.

Initial Hydrostatic Pressure..... (A) 2200 P.S.I.  
Initial Flow Period..... Minutes 20 (B) 7 P.S.I. to (C) 11 P.S.I.  
Initial Closed In Period..... Minutes 20 (D) 358 P.S.I.  
Final Flow Period..... Minutes 20 (E) 12 P.S.I. to (F) 13 P.S.I.  
Final Closed In Period..... Minutes 20 (G) 234 P.S.I.  
Final Hydrostatic Pressure..... (H) 2190 P.S.I.

Diamond Testing shall not be liable for damages of any kind to the property or personnel of the one for whom a test is made or for any loss suffered or sustained, directly or indirectly, through the use of its equipment, or its statement or opinion concerning the result of any test. Tools lost or damaged in the hole shall be paid for at cost by the party for whom the test is made.