



Confidentiality Requested:

Yes  No

KANSAS CORPORATION COMMISSION 1100117  
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: \_\_\_\_\_



1100117

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 <i>(Attach Additional Sheets)</i>	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Log	Formation (Top), Depth and Datum	<input type="checkbox"/> Sample
Samples Sent to Geological Survey	<input type="checkbox"/> Yes <input type="checkbox"/> No	Name	Top	Datum
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:				

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:  Yes  No

Date of First, Resumed Production, SWD or ENHR: \_\_\_\_\_ Producing Method:  Flowing  Pumping  Gas Lift  Other *(Explain)* \_\_\_\_\_

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> _____ <input type="checkbox"/> Other <i>(Specify)</i> _____	<b>PRODUCTION INTERVAL:</b> _____ _____
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Form	ACO1 - Well Completion
Operator	Samuel Gary Jr. & Associates, Inc.
Well Name	MUDD TRUST 1-5
Doc ID	1100117

All Electric Logs Run

DENSITY
INDUCTION
MICRO
SONIC
SPECTRAL GR

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

November 07, 2012

TOM FERTAL  
Samuel Gary Jr. & Associates, Inc.  
1515 WYNKOOP, STE 700  
DENVER, CO 80202

Re: ACO1  
API 15-167-23812-00-00  
MUDD TRUST 1-5  
NE/4 Sec.05-15S-15W  
Russell 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,  
TOM FERTAL



**QUALITY OILWELL CEMENTING, INC.**

PO Box 32 - 740 West Wichita Ave, Russell KS 67665  
 Phone: 785-324-1041 fax: 785-483-1087  
 Email: cementing@ruraltel.net

Date: 7/22/2012  
 Invoice # 807

P.O.#:

Due Date: 8/21/2012

Division: Russell

# Invoice

**Contact:**  
 Samuel Gary Jr & Associates Inc  
**Address/Job Location:**  
 Samuel Gary Jr & Associates Inc  
 1815 11th Street  
 Great Bend, KS 67530

**Reference:**  
 MUDD TRUST 1-5

**Description of Work:**  
 LONG SURFACE JOB

**Services / Items Included:**

	Quantity	Price	Taxable
Labor		\$ 963.85	No
Common-Class A	350	\$ 4,507.22	Yes
8 5/8" Basket	3	\$ 1,000.67	Yes
Bulk Truck Matl-Material Service Charge	390	\$ 823.33	No
Calcium Chloride	13	\$ 654.00	Yes
8 5/8" Centralizer	3	\$ 202.67	Yes
Flo Seal	87	\$ 183.67	Yes
Pump Truck Mileage-Job to Nearest Camp	16	\$ 168.55	No
Premium Gel (Bentonite)	7	\$ 120.29	Yes
8 5/8" Top Rubber Plug	1	\$ 111.89	Yes
Baffle Plate Aluminum, 8 5/8"	1	\$ 95.00	Yes

Item	Quantity	Price	Taxable
Bulk Truck Mileage-Job to Nearest Bulk Plant	16	\$98.63	No

**Invoice Terms:**

Net 30

SubTotal: \$ 8,929.77

Discount Available ONLY if Invoice is Paid & Received within listed terms of invoice: \$ (1,339.47)

SubTotal for Taxable Items: \$ 5,844.09

SubTotal for Non-Taxable Items: \$ 1,746.21

Total: \$ 7,590.30

Tax: \$ 485.06

8.30% Russell County Sales Tax

Amount Due: \$ 8,075.36

Applied Payments:

Balance Due: \$ 8,075.36

**Thank You For Your Business!**

Past Due Invoices are subject to a service charge (annual rate of 24%)  
 This does not include any applicable taxes unless it is listed.  
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**RECEIVED**

**JUL 27 2012**

**SAMUEL GARY JR.  
 & ASSOCIATES, INC.**

ORLG  COMP  W/O  LOE  GG

Account	8200.138
Well/Prospect	
Deck	
AFE	
Approval	<i>[Signature]</i>
Description	

# QUALITY OILWELL CEMENTING, INC.

Federal Tax I.D.# 20-2886107

Phone 785-483-2025  
Cell 785-324-1041

Home Office P.O. Box 32 Russell, KS 67665

No. 807

Date	7-19-12	Sec.	5	Twp.	15	Range	15	County	RUSSELL	State	KANSAS	On-Location		Finish	9:00AM
Lease	MUDD TRUST	Well No.	#1-5			Location GORHAM ST. LINCOLN RD - 1/2 E - S INTO									
Contractor	VAL ENERGY #10				Owner SAM GARY JR. & ASSOC.										
Type Job	L. SURFACE				To Quality Oilwell Cementing, Inc. You are hereby requested to rent cementing equipment and furnish cementer and helper to assist owner or contractor to do work as listed.										
Hole Size	12 1/4"		T.D.		739'										
Csg.	8 5/8"		Depth		739'										
Tbg. Size			Depth		Charge To SAM GARY JR. & ASSOC.										
Tool			Depth		Street 1515 WYNKOOP. STE. 300										
Cement Left in Csg.			Shoe Joint		42'										
Meas Line			Displace		44 BLS										
													Cement Amount Ordered 350 COM - 3% CC - 2% GEL - 1/4 FLO SEAL		

### EQUIPMENT

Pumptrk #15 No.	Cementer	NICK	Common	350
Bulktrk #13 No.	Helper	LEWY	Poz. Mix	
Bulktrk #14 No.	Driver	CISCO	Gel.	7
	Driver		Calcium	13

### JOB SERVICES & REMARKS

Remarks:	Hulls
Rat Hole	Salt
Mouse Hole	Flowseal 87#
Centralizers	Kol-Seal
Baskets	Mud CLR 48
D/V or Port Collar	CFL-117 or CD110 CAF 38
CEMENT DID CIRCULATE ✓	Sand
	Handling 390
	Mileage

### FLOAT EQUIPMENT

	Guide Shoe
	Centralizer 3 - 8 5/8"
	Baskets 3 - 8 5/8"
	AFU Inserts
	Float Shoe
	Latch Down
	1 - 8 5/8" RUBBER PLUG
	1 - 8 5/8" BAFFLE PLATE
	Pumptrk Charge Long Surface
	Mileage 10

THANK YOU!  
*[Signature]*

X Signature

Tax  
Discount  
Total Charge



**QUALITY OILWELL CEMENTING, INC.**  
 PO Box 32 - 740 West Wichita Ave, Russell KS 67665  
 Phone: 785-324-1041 fax: 785-483-1087  
 Email: cementing@ruraltel.net

Date: 7/29/2012  
 Invoice # 923

P.O.#:  
 Due Date: 8/28/2012  
 Division: Russell

# Invoice

**Contact:**  
 Samuel Gary Jr & Associates Inc  
**Address/Job Location:**  
 Samuel Gary Jr & Associates Inc  
 1815 11th Street  
 Great Bend, KS 67530

**Reference:**  
 MUDD TRUST 1-5

**Description of Work:**  
 PLUG JOB

Services / Items Included:	Quantity	Price	Taxable	Item	Quantity	Price	Taxable
Labor		\$ 1,239.23	Yes				
Common-Class A	123	\$ 1,629.22	Yes				
Bulk Truck Mat-Material Service Charge	212	\$ 460.34	Yes				
POZ Mix-Standard	80	\$ 399.54	Yes				
Pump Truck Mileage-Job to Nearest Camp	16	\$ 173.37	Yes				
Flo Seal	50	\$ 108.57	Yes				
Bulk Truck Mileage-Job to Nearest Bulk Plant	16	\$ 101.45	Yes				
Dry Hole Plug	1	\$ 60.80	Yes				

**Invoice Terms:**

Net 30

SubTotal: \$ 4,172.53  
 Discount Available ONLY if Invoice is Paid & Received within listed terms of invoice: \$ (625.88)

SubTotal for Taxable Items: \$ 3,546.65  
 SubTotal for Non-Taxable Items: \$ -

8.30% Russell County Sales Tax

Total: \$ 3,546.65  
 Tax: \$ 294.37

**Thank You For Your Business!**

**Amount Due: \$ 3,841.02**  
**Applied Payments:**  
**Balance Due: \$ 3,841.02**

Past Due Invoices are subject to a service charge (annual rate of 24%)  
 This does not include any applicable taxes unless it is listed.  
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**RECEIVED**  
**AUG 09 2012**  
**SAMUEL GARY JR. & ASSOCIATES, INC.**

Account	8200.145
Well/Prospect	
Deck	
AFE	
Approval	
Description	

# QUALITY OILWELL CEMENTING, INC.

Federal Tax I.D.# 20-2886107

Phone 785-483-2025  
Cell 785-324-1041

Home Office P.O. Box 32 Russell, KS 67665

No. 923

Date	7-26-12	Sec.	5	Twp.	15	Range	15	County	Russell	State	Ks	On Location		Finish	8:30AM	
Lease	Mudd Trust	Well No.	1-5			Location Balta Rd + I-70, S to Lincoln Rd,										
Contractor	Val Energy #6							Owner	4 1/2 W S/Int							
Type Job	Plug							To Quality Oilwell Cementing, Inc.								
Hole Size	17 7/8"							T.D.	3500'							
Csg.								Depth								
Tbg. Size	4 1/2" D.P.							Depth	3383'							
Tool								Depth								
Cement Left in Csg.								Shoe Joint								
Meas Line								Displace	420							
							Charge To Sam Gary Jr. + Associates									
							Street									
							City									
							State									
The above was done to satisfaction and supervision of owner agent or contractor.																
							Cement Amount Ordered 205 5x60/46 4% Gel 1/4# S.									

**EQUIPMENT**

Pumptrk	16	No.	Cementer	Travis	Common	123
			Helper			
Bulktrk	8	No.	Driver	Cody	Poz. Mix	80
			Driver			
Bulktrk	pin	No.	Driver	Rick	Gel.	7
			Driver			

**JOB SERVICES & REMARKS**

Remarks:	Hulls
Rat Hole	Salt
Mouse Hole	Flowseal 50#
Centralizers	Kol-Seal
Baskets	Mud CLR 48
D/V or Port Collar	CFL-117 or CD110 CAF 38
3383' - 25SX	Sand
976' - 25SX	Handling 212
425' - 100 SX	Mileage

**FLOAT EQUIPMENT**

40' - 10SX w/ plug	Guide Shoe
Rathole - 30SX	Centralizer
Mousehole - 15SX	Baskets
Cement did Circulate.	AFU Inserts
	Float Shoe
	Latch Down
	1 - Dry hole plug
	Pumptrk Charge plug
	Mileage 16

Tax

Discount

Total Charge

X Signature *Randy Martin*





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

Well Name: SGA MUDD TRUST 1-5  
 Location: SEC. 5 15S-15W RUSSELL CO., KANSAS  
 License Number: 15-167-23812-0000  
 Spud Date: 7/18/12  
 Surface Coordinates: 1270 FNL/ 2200 FEL  
 Region: WILDCAT  
 Drilling Completed: 7/25/12

Bottom Hole Coordinates:  
 Ground Elevation (ft): 1889' K.B. Elevation (ft): 1899'  
 Logged Interval (ft): 2800' To: 3500' Total Depth (ft): 3500'  
 Formation: Lansing, Arbuckle  
 Type of Drilling Fluid:

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

**OPERATOR**

Company: Samuel Gary Jr. & Assoc.  
 Address: 1515 Wynkoop, Ste. # 700  
 Denver, Colo. 80202  
 Geo: CHRIS MITCHELL

**GEOLOGIST**

Name: Schuyler Hedrick  
 Company: Earth Tech OGL, Inc.  
 Address: PO Box 683  
 Hooker, Okla . 73945  
 Off. 888-543-8378

**ROCK TYPES**

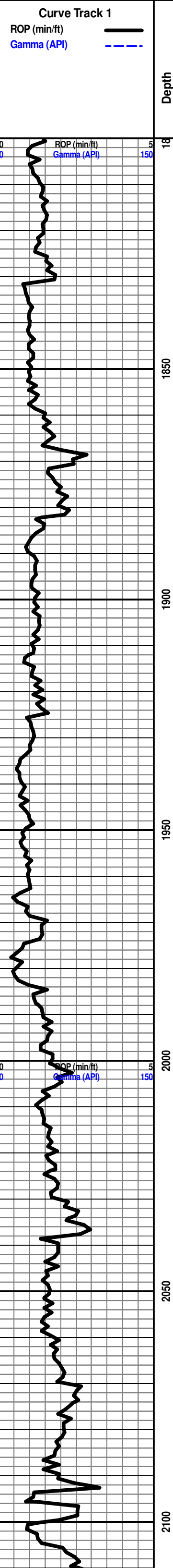
Anhy	Gyp	Shgy	Sandylms
Bent	Igne	Sltst	Shale
Brec	Lmst	Ss	Sltstn
Cht	Meta	Till	Shlyslts
Clyst	Mrlst	Carb sh	Slysh
Coal	Salt	Dol	Lms
Congl	Shale	Dtd	
Dol	Shcol	Gry sh	

**ACCESSORIES**

<b>FOSSIL</b>	<b>MINERAL</b>	Salt	Dol
Algae	Anhy	Sandy	Grysh
Amph	Arggrn	Silt	Gryslt
Belm	Arg	Sil	Lms
Bioclst	Bent	Sulphur	Sandylms
Brach	Bit	Tuff	Sh
Bryozoa	Brecfrag	Chlorite	Sltstn
Cephal	Calc	Dol	
Coral	Carb	Sand	<b>TEXTURE</b>
Crin	Chtdk	Silty	Boundst
Echin	Chtlt	<b>STRINGER</b>	Chalky
Fish	Dol	Anhy	Cryxln
Foram	Feldspar	Arg	Earthy
Fossil	Ferrpel	Bent	Finexln
Gastro	Ferr	Coal	Grainst
Oolite	Glauc	Dol	Lithogr
Ostra	Gyp	Gyp	Microxln
Pelec	Hvymin	Ls	Mudst
Pellet	Kaol	Mrst	Packst
Pisolite	Marl	Sltstrg	Wackest
Plant	Minxl	Ssstrg	
Strom	Nodule	Carbsh	
Fuss	Phos	Clystn	
Oomold	Pyr		

**OTHER SYMBOLS**

<b>POROSITY TYPE</b>	<b>SORTING</b>	Angular	<b>INTERVALS</b>
Earthy	Well	<b>OIL SHOWS</b>	Core
Fenest	Moderate	Even	Dst
Fracture	Poor	Spotted	Dst
Inter	<b>ROUNDING</b>	Ques	<b>EVENTS</b>
Moldic	Rounded	Dead	Rft
Organic	Subrnd	Gas show	Sidewall
Pinpoint	Subang		
Vuggy			



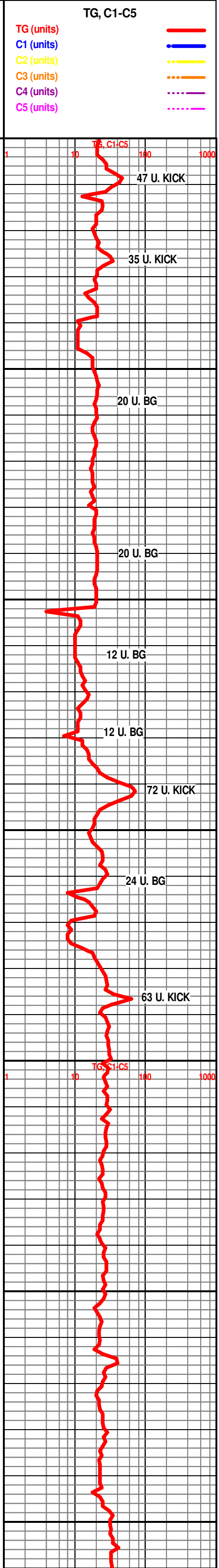
Depth

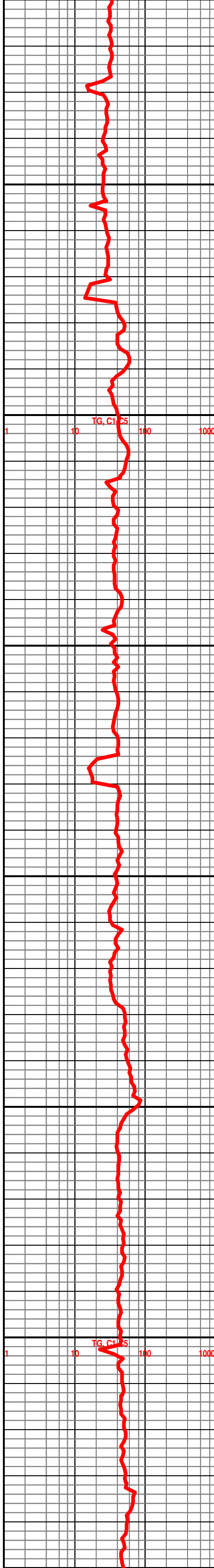
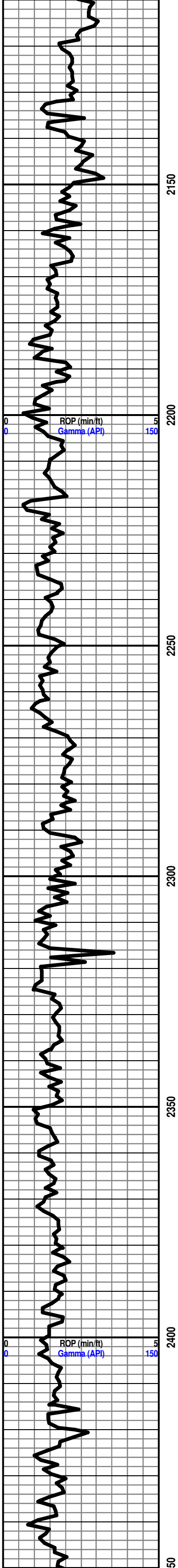
Lithology

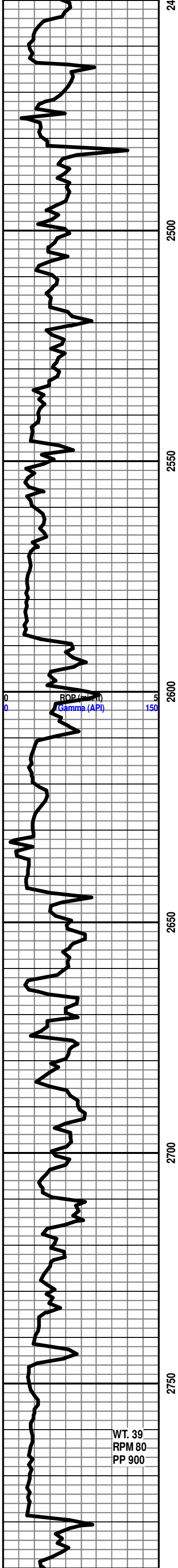
Oil Shows

Geological Descriptions

START UNMANNED UNIT 7/22/12



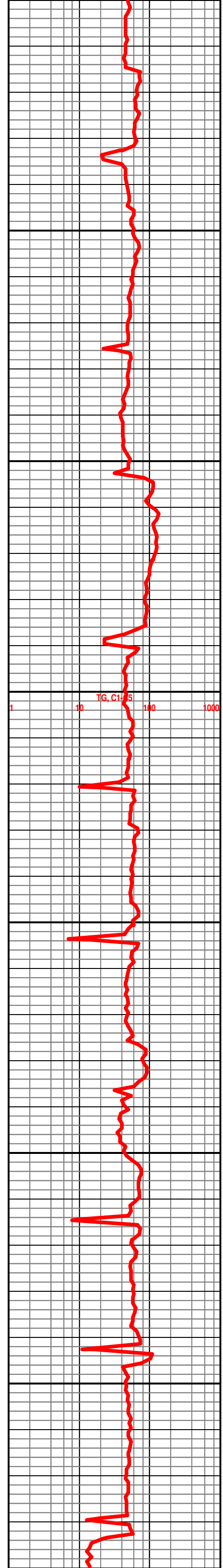


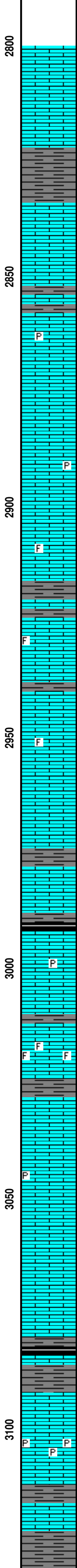
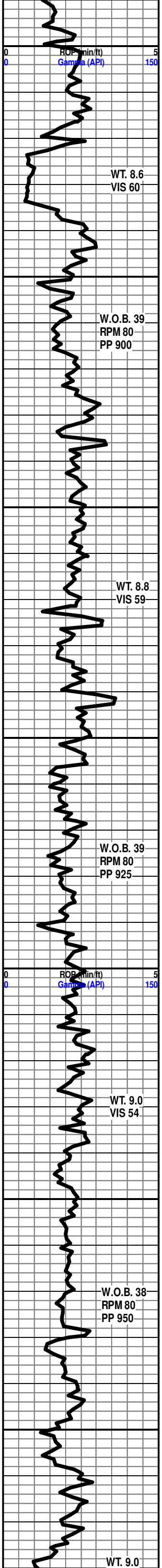


BRS 2588'-689'

HOWARD 2779'-880'

MUD DISPLACEMENT





START 24 HR. MANNED UNIT 7/23/12

NO SAMPLES CAUGHT DUE TO MISCOMMUNICATION W/ RIG

**TOPEKA 2835'-936'**

NO DRILLING BREAK OR GAS KICK

LS- LT TN TO TN GRYISH IP, HD DNS TO BRTT IP, F/VF-XLN MTRX, SCAT IMB CALC-XLS, TR DISS PYR IP, NO VIS FLO, NO VIS POR, NO VIS SHOW

STARTED CATCHING SAMPLES @ 2880'

LS- CRM TO LT TN, HD DNS TO BRTT IP, MD/F-XLN MTRX, S-SUCRO IP, SCAT FREE CALC-XLS IP, TR PYR IP, NO VIS FLO, NO VIS POR, NO VIS SHOW

LS- CRM BFF TO LT TN, HD DNS TO BRTT IP, MD-XLN MTRX, S-CHLKY IP, TR FREE FOSSIL IP, V DUL YEL FLO IP, NO VIS POR, NO VIS CUT OR SHOW

LS- LT TN TO TN, HD DNS TO BRTT IP, MD/F-XLN MTRX, RE-XLN, TR S-CHLKY IP, IMB SM CALC-XLS THRU, V DUL YEL FLO IN 10%, NO VIS POR, NO VIS CUT OR SHOW

**LE COMPTON 2940'-1041'**

LS- TN, HD DNS TO TR BRTT IP, MD/F-XLN MTRX, S-CHLKY IP, SCAT IMB SM CALC-XLS THRU, TR IMB FOSS FRAGS IP, DUL YEL FLO IN 20%, NO VIS POR, NO VIS CUT OR SHOW

SH- LT GY TO GY, FRM TO SFT, BLKY SMTH TXT

SH- BLCK SFT CARB

LS- TN TO DK TN, HD DNS, F/VF-XLN MTRX, TR S-CHLKY IP, TR PYR IP, NO VIS FLO, NO VIS POR, NO VIS SHOW

LS- LT TN TO LT GY IP, HD DNS, MD/F-XLN, RE-XLN, IMB FOSS FRAGS THRU, SCAT FREE FOSSIL, V DUL YEL FLO IN 20%, NO VIS POR, NO VIS CUT OR SHOW

3044'-3046' LS- LT GY TO LT TN IP(W/ DK TN OIL STN IN 10%), HD DNS TO TR BRTT IP, MD/F-XLN, S-SUCRO, TR SCAT DISS PYR IP, V DUL YEL GLD FLO IN 20%, V PR MICRO-VUG POR IP, TR V PR VUG POR IP, FR FLSH CUT IN 30%, PR TO FR SLW STRM CUT IN 20%, NO VIS LCH ON DSH, NO OIL ODOR

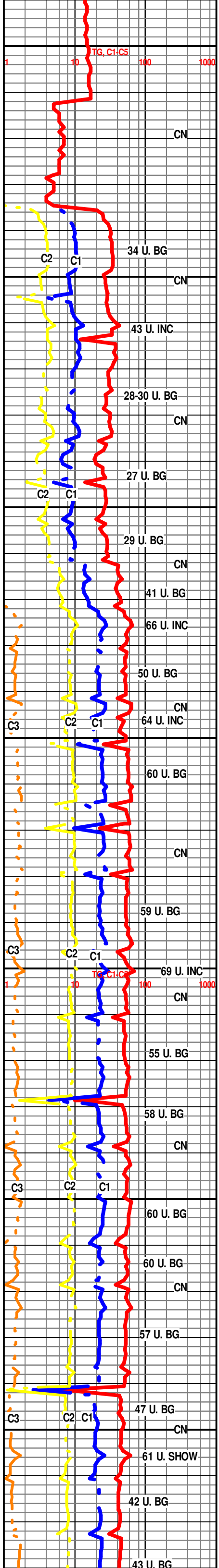
**HEEBNER 3080'-1181'**

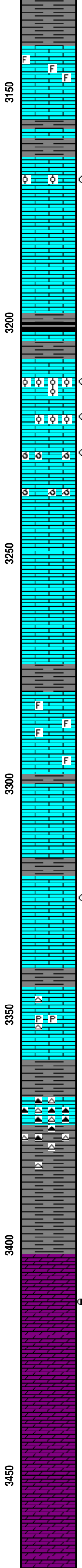
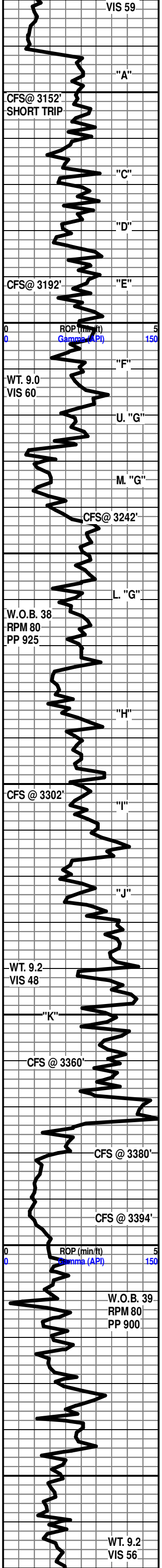
SH- BLCK SFT CARB

3105'-3106' LS- LT GY TO GY TANISH IP (W/ TN OIL STN IN 20%), MD/F-XLN, S-SUCRO IP, ABDT IMB PYR (ON ONE FACES OF ROCK), TR V DUL YEL GLD FLO IP (ON ONE FACES), V DUL YEL GLD FLO IN 10%, V PR TO PR MICRO-VUG POR IN 5% (ON ONE FACES), POSS FRACT POR, FR TO GD FLSH CUT IN 30% (ON ONE FACES), GD SLW STRM CUT IN 40%, LT TN LCH ON DSH, NO OIL ODOR

**DOUGLAS 3124'-1225'**

SH- LT GRN TO LT GY, FRM TO V SFT GMMY IP, SPLNTY SFT TXT





SMITH TX1

**LANSING 3142'-1243'**  
 LS- CRM LT TN TO TN, HD DNS TO TR BRIT IP, F/XLN MTRX, RE-XLN IP, S-CHLKY THRU, IMB FOSS FRAGS THRU, TR IMB SM CALC-XLS IP, DUL YEL FLO IN 20%, NO VIS POR, NO VIS CUT OR SHOW

**LANSING "C" 3164'-1265'**  
 3168'-3170' LS- LT GY TO LT TN IP (W/ DK TN OIL STN IN 30%), HD DNS TO BRIT IP, V RE-XLN MTRX, S-SUCRO, S-CHLKY IP, SCAT IMB SM OOLITES, SFT WHT CHLK IP, DUL YEL GLD FLO IN 20%, SPTTD BRT YEL GLD FLO IN 5%, SCAT PR TO FR VUG POR IN 5%, PR INTER-OOLITIC POR IP, FR TO GD FLSH CUT IN 40%, GD SLW STRM CUT IN 50%, TN LCH ON DSH, LT OIL ODOR

LS- OFF WHT TO CRM BFF, HD DNS TO BRIT IP, MD/F-XLN MTRX, RE-XLN IP, S-CHLKY IP, IMB CALC-XLS THRU, SCAT SFT WHT CHLK IP, DUL YEL FLO IN 30%, NO VIS POR, NO VIS CUT OR SHOW

**LANSING "F" 3208'-1309'**  
 3211'-3213' LS- CRM TO LT TN (W/ LT TN OIL STN IN 20%), HD DNS TO BRIT IP, MD-XLN, RE-XLN, ABDT IMB OOLITES THRU, V-OOLITIC, TR IMB LG CALC-XLS IP, DUL YEL GLD FLO IN 30%, BRT YEL GLD FLO IN 10%, V PR INTER-OOLITIC POR IN 2%, PR WK FLSH CUT IN 30%, PR TO TR FR SLW STRM CUT IN 30%, TR V LT TN LCH ON DSH, NO OIL ODOR

3219'-3220' LS- CRM BFF TO LT TN (W/ TN OIL STN IN 20%), MD-XLN, RE-XLN, V-S CHLKY, SCAT IMB OOLITES, IMB SFT WHT CHLK, YEL GLD FLO IN 20%, SPTTD BRT YEL GLD FLO IP, TR V PR MICRO VUG POR IN 3%, V PR WK FLSH CUT IN 20%, V PR SLW STRM CUT IN 20%, NO VIS LCH ON DSH, NO OIL ODOR

3227'-3229' LS- CRM TO LT TN (DUE TO OIL STN IN 50%), HD DNS TO V-BRIT, MD-XLN, V SUCRO MTRX, S-CHLKY IP, V-OOLMOLDIC, YEL GLD FLO IN 50%, BRT YEL GLD FLO IN 40%, GD OOLMOLDIC POR IN 15%, PR TO TR FR WK FLSH CUT IN 50%, FR TO GD SLW STRM CUT IN 60%, TN LCH ON DSH, GD STRNG OIL ODOR

LS- OFF WHT TO CRM BFF, HD DNS TO TR BRIT IP, F/VF-XLN MTRX, RE-XLN IP, S-CHLKY IP, SCAT IMB SM CALC-XLS IP, DUL YEL FLO IN 30%, NO VIS POR, NO VIS CUT OR SHOW

**LANSING "H" 3281'-1382'**  
 LS- CRM TO LT TN, HD DNS TO BRIT IP, F-XLN, S-CHLKY IP, IMB FOSS FRAGS, FREE FOSSIL IP, TR IMB SM CALC-XLS IP, NO VIS FLO, NO VIS POR, NO VIS SHOW

LS- WHT TO OFF WHT CRM IP, V HD DNS, F/VF-XLN MTRX, RE-XLN IP, SCAT IMB SM TO MD OOLITES THRU, IMB SM CALC-XLS IP, V DUL YEL FLO IN 10%, NO VIS POR, NO VIS CUT OR SHOW

3324'-3326' LS- OFF WHT TO CRM ( W/ DK TN & LIVE OIL STN IN 20%), HD DNS TO TR BRIT IP, MD/F-XLN, RE-XLN IP, S-SUCRO IP, TR IMB SFT WHT CHLK IP, DUL YEL GLD FLO IN 30%, NO FLO IN 70%, V PR TR MICRO-VUG POR IN 2%, POSS FRACT POR, PR TO FR FLSH CUT IN 20%, FR TO GD SLW STRM CUT IN 30%, SLI TR LT TN LCH ON DSH, NO OIL ODOR

LS- WHT TO OFF WHT, V HD DNS, VF/CRYPTO-XLN MTRX, TR S-CHLKY IP, SCAT WHT CHRT IP, TR PYR IP, DUL YEL FLO IN 10%, NO VIS POR, NO VIS CUT OR SHOW

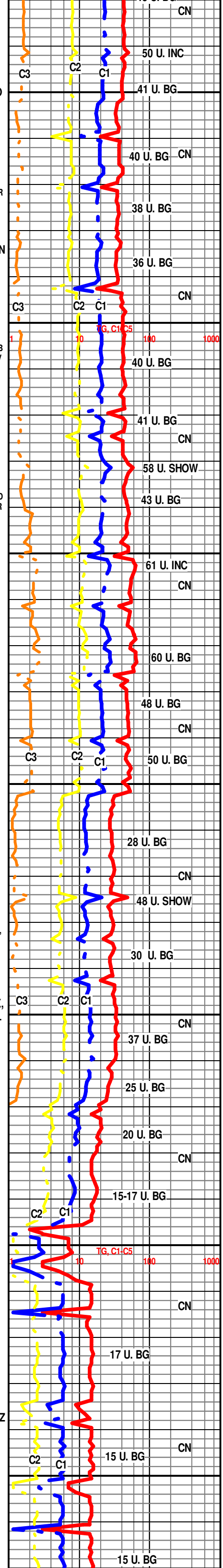
**BKC 3361'-1462'**  
 LS- OFF WHT TO CRM, V HD, CRYPTO-XLN, ABDT MOTT CHRSTS THRU, NO VIS FLO, NO VIS POR, NO VIS SHOW

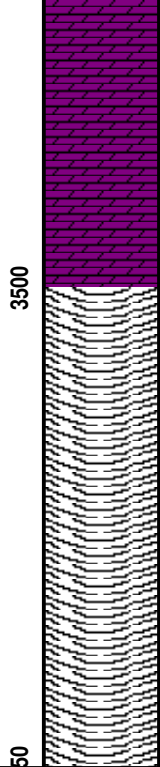
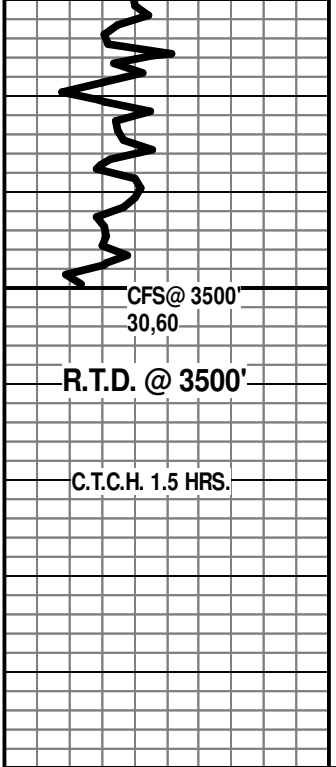
SH- RD TO DK RD, SFT TO V GMMY THRU, SCAT MOTT CHRSTS THRU

**ARBUCKLE 3403'-1462'**  
 3413'-3414' DOLO- TN ( W/ DK TN OIL STN IN 15%), HD DNS TO BRIT, MD-XLN, RE-XLN MTRX, S-SUCRO, ABDT IMB SM TO MD S-ANG CLR QRTZ GRNS THRU, SCAT IMB SM S-ANG DOLO GRNS THRU, DUL YEL GLD FLO IN 20%, SPTTD BRT YEL GLD FLO IN 10%, V PR TO PR INTER-GRN POR IN 2%, PR WK FLSH CUT IN 30%, PR TO FR SLW STRM CUT IN 30%, TR V LT TN LCH ON DSH, NO OIL ODOR

DOLO- LT TN TO TN, HD DNS TO BRIT IP, MD-XLN, RE-XLN MTRX, ABDT SM TO MD S-ANG TO RND CLR QTRZ THRU, IMB MD RND DOLO GRNS, DUL YEL MIN FLO IN 40%, NO VIS POR, NO VIS CUT OR SHOW

DOLO- CRM TO LT TN, HD DNS TO BRIT IP, F-XLN MTRX, RE-XLN, SCAT IMB SM RND DOLO GRNS THRU, TR IMB SM S-ANG CLR QRTZ GRNS IP, YEL MIN FLO IN 30%, NO VIS POR, NO VIS CUT OR SHOW





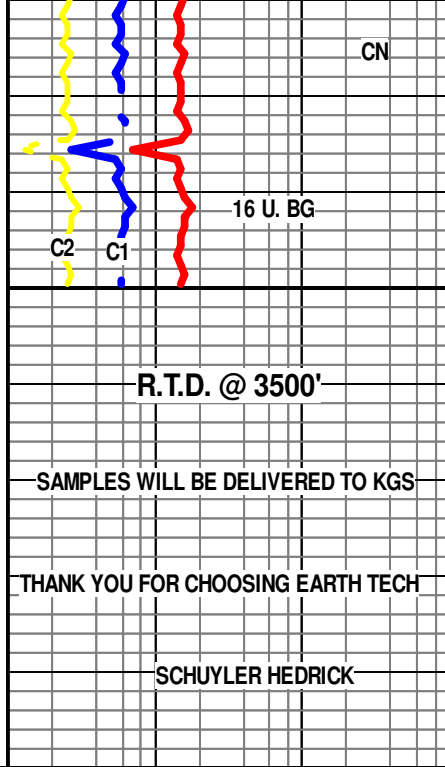
DOLO- WHT TO OFF WHT CRM IP, HD DNS TO TR BRIT IP,  
 MD/F-XLN, RE-XLN, ABDT IMB SM S-ANG CLR QRTZ GRNS  
 THRU, IMB SM S-ANG TO RND DOLO GRNS THRU, BRT  
 YEL MIN FLO IN 20%, NO VIS POR, NO VIS CUT OR  
 SHOW

R.T.D. @ 5:45 P.M. 7/25/12

DROP SURVEY

T.O.F.L. @ 7:15 P.M.

WEATHERFORD/ LIBERAL, KANSAS



R.T.D. @ 3500'

SAMPLES WILL BE DELIVERED TO KGS

THANK YOU FOR CHOOSING EARTH TECH

SCHUYLER HEDRICK