

Confidentiality Requested:

Yes No

**KANSAS CORPORATION COMMISSION
OIL & GAS CONSERVATION DIVISION**

Form ACO-1

January 2018

Form must be Typed

Form must be Signed

All blanks must be Filled

**WELL COMPLETION FORM
WELL HISTORY - DESCRIPTION OF WELL & LEASE**

OPERATOR: License # _____

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

Gas DH EOR

OG GSW

CM (Coal Bed Methane)

Cathodic Other (Core, Expl., etc.): _____

If Workover/Re-entry: Old Well Info as follows:

Operator: _____

Well Name: _____

Original Comp. Date: _____ Original Total Depth: _____

Deepening Re-perf. Conv. to EOR Conv. to SWD

Plug Back Liner Conv. to GSW Conv. to Producer

Commingled Permit #: _____

Dual Completion Permit #: _____

SWD Permit #: _____

EOR Permit #: _____

GSW Permit #: _____

Spud Date or Recompletion Date _____ Date Reached TD _____ Completion Date or Recompletion Date _____

API No.: _____

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 Drill Stem Tests Received

Geologist Report / Mud Logs Received

UIC Distribution

ALT I II III Approved by: _____ Date: _____

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 Geologist Report / Mud Logs <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				

1. Did you perform a hydraulic fracturing treatment on this well? Yes No *(If No, skip questions 2 and 3)*
2. Does the volume of the total base fluid of the hydraulic fracturing treatment exceed 350,000 gallons? Yes No *(If No, skip question 3)*
3. Was the hydraulic fracturing treatment information submitted to the chemical disclosure registry? Yes No *(If No, fill out Page Three of the ACO-1)*

Date of first Production/Injection or Resumed Production/Injection:	Producing Method: <input type="checkbox"/> Flowing <input type="checkbox"/> Pumping <input type="checkbox"/> Gas Lift <input type="checkbox"/> Other <i>(Explain)</i> _____			
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> <i>(Submit ACO-4)</i>	PRODUCTION INTERVAL: Top Bottom
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Shots Per Foot	Perforation Top	Perforation Bottom	Bridge Plug Type	Bridge Plug Set At	Acid, Fracture, Shot, Cementing Squeeze Record <i>(Amount and Kind of Material Used)</i>

TUBING RECORD:	Size:	Set At:	Packer At:	
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Form	ACO1 - Well Completion
Operator	Merit Energy Company, LLC
Well Name	WENU 403
Doc ID	1512694

All Electric Logs Run

BOREHOLE COMPENSATED SONIC LOG
COMPENSATED NEUTRON PEL DENSITY MICRO LOG
COMPOSITE LOG
MICROLOG
PHASED INDUCTION SHALLOW FOCUSE SP LOG

Form	ACO1 - Well Completion
Operator	Merit Energy Company, LLC
Well Name	WENU 403
Doc ID	1512694

Tops

Name	Top	Datum
HEEBNER	4027	.
LANSING	4077	.
MARMATON	4703	.
CHEROKEE	4866	.
ATOKA	5043	.
MORROW	5190	.
TOP WENU ZONE	5357	.
CHESTER LIME	5395	.
ST GENEVIEVE	5455	.

MBC WELL LOGGING LLC

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

Well Name: WENU 403 AFE: 64676 MERIT ENERGY CO LLC
 Well Id: API 15-081-22211-00-00
 Location: HASKELL COUNTY, KANSAS USA
 License Number: 32446
 Spud Date: 12/26/2019
 Surface Coordinates: SHL 873'feI- 2023'fni-SEC 04-T28S-R34W
 LAT: 37.6402670 LONG: -101.0380480
 Bottom Hole Coordinates: HLS-DIL/SP/GR CNL/CAL/PE/BHV SONIC SFC- GR TO SFC'
 Ground Elevation (ft): 3077' K.B. Elevation (ft): 3089'
 Logged Interval (ft): 4000' To: 5604' Total Depth (ft): ELOG:
 Formation: MORROW
 Type of Drilling Fluid: MUDCO JUSTIN WHITING CELL (620)-214-3630
 Region: EUBANK NORTH
 Drilling Completed: 12/30/2019

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





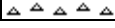
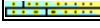


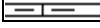








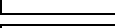






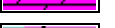




OPERATOR

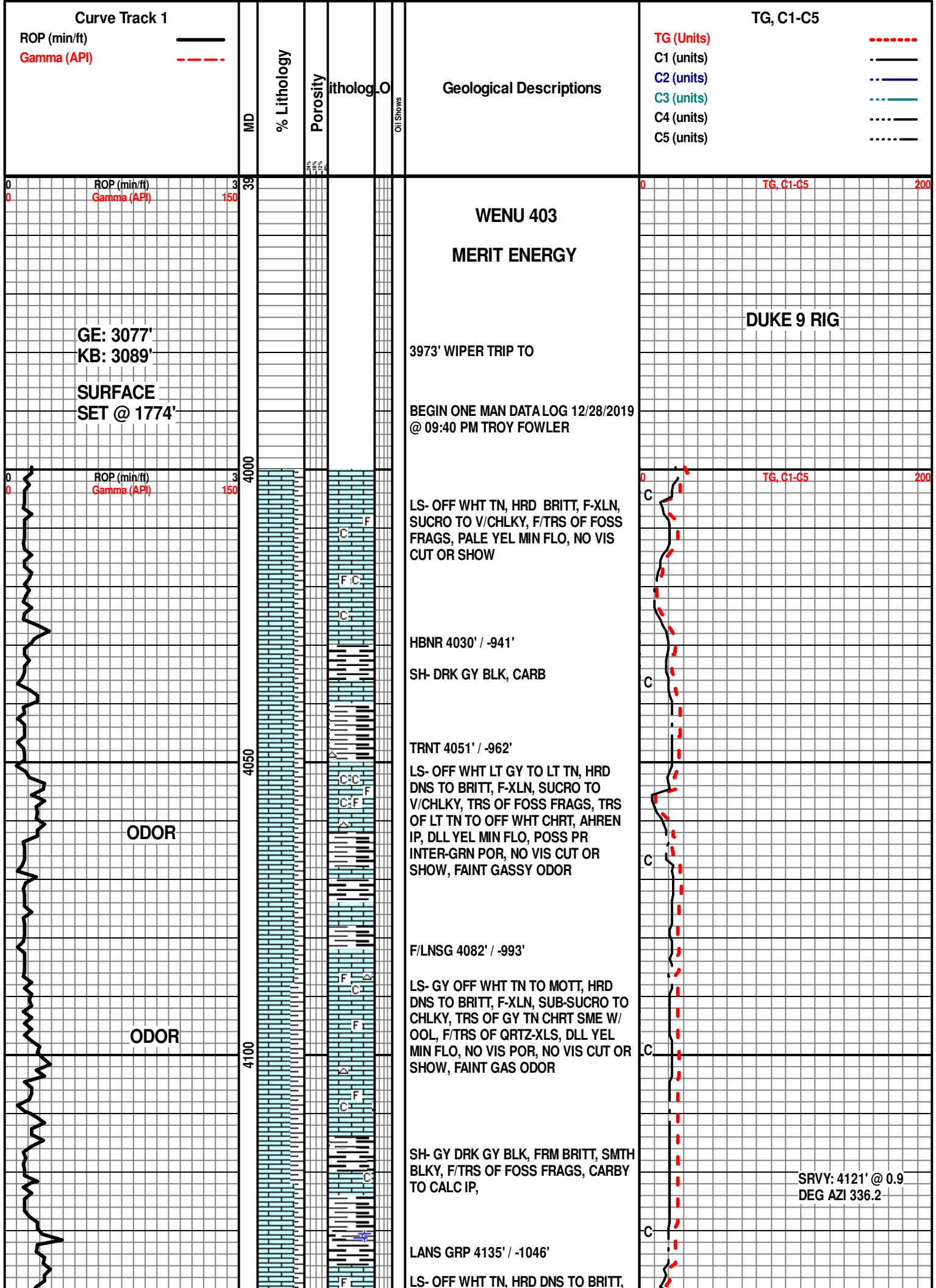
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 Address: ATTN MARTIN LANGE GEOLOGY
 13727 NOEL RD STE 1200
 DALLAS, TEXAS 75240

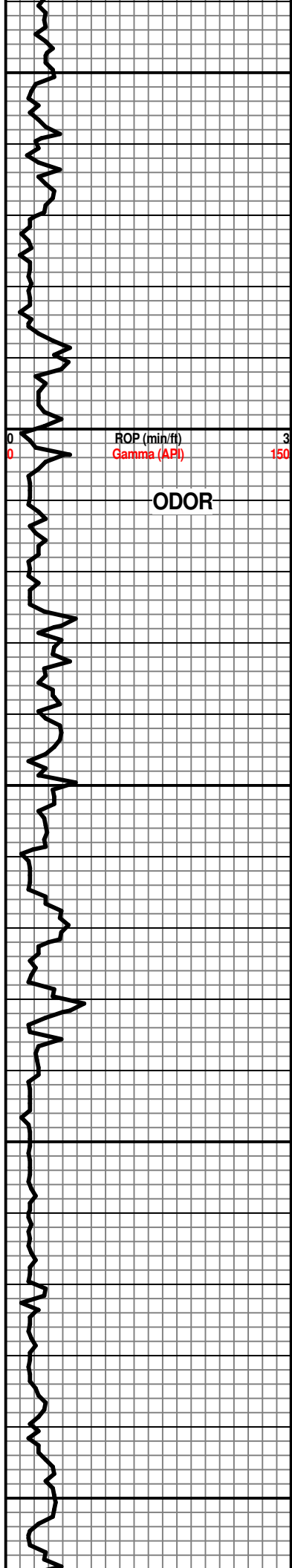
MUDLOGGER

Name: TROY FOWLER
 Company: MBC WELL LOGGING LLC
 Address: 21156 RD 22
 MEADE, KANSAS 67864

ROCK TYPES

	Anhy		Ls & ooids		Sndy sh		Stgensndy-arkos
	Brec		Oolitic ls -1		Sltst-1		Sndy ool ls
	Cht		Stgensndy-arkos		Sltly-shale		Sndy-ls-1
	Coal		New ls-1		Lmy ss-1		Calc shale
	Congl		Carby shale		Arkosic snd		Granitewash
	Shly dolomite		Lmy carby sh-3		Ss		Ls shly-b
	Chty sndy shly dol		Carb sh		Grn sh strk		Poor sortd ss
	New symbol		Gyp		Grn mott gy sh		Snd-ls-sh
	Dolo new		Sltst		Lmy sh-2		
	New dolomite 20		Salt		Shale-1		
	Newdolo ls 2		Sndy sh--red		Red sh-1		





4150
4200
4250
4300
4350



F-XLN TO SNDY TXT, V/CHLKY, POSS MICRO-OOL IP, TRS OFF WHT CHRT, TRS OF TRS OF QRTZ-XLS, DLL YEL MIN FLO, POSS PR MICRO-PP POR, NO VIS CUT R SHOW, FAINT ODOR

SH- GY DRK GY TO BLK, GRNY, CARBY

LS- TN GY OFF WHT TO MOTT, HRD DNS TO BRITT, F-XLN TO M/F-OOL FR/PR SORTD, V/CHLKY, TRS OF TN CHRT, DLL YEL FLO, PR/FR OOLICASTIC POR, NO VIS CUT OR SHOW, FAINT ODOR

SH- GY DRK GY, FRM BRITT, SMTH BLKY TO GRNY, POSS CARBY TO CALC IP

LS- OFF WHT TN TO GY, HRD DNS, F-XLN, CHLKY, TRS OF FOSS FRAG, TRS OF OOL PR-SORTD, TRS OF GY CHRT, QRTX-XLS, SHLY IP, DLL YEL MIN FLO, NO VIS POR, NO VIS CUT OR SHOW, NO DET ODOR

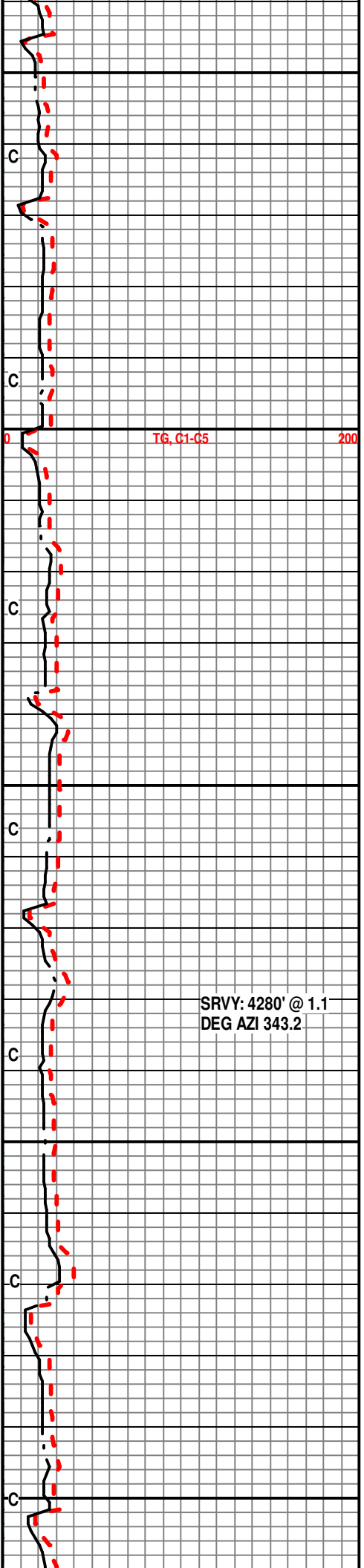
LS-GY OFF WHT LT TN TO BUFF, HRD DNS TO BRITT, F/VF-XLN, CHLK, TRS OF GY OFF WHT TO LT TN VIT CHRT, DLL YEL MIN FLO, NO VIS POR, NO VIS CUT OR SHOW

LS- OFF GY DRK GY TN TO MOTT, HRD DNS TO BRITT, F/XLN TO M/F-OOL PR SORTD SME SHADOW OOL, CHLKY, GY OFF WHT CHRT, DLL YEL MIN FLO, PR/FR OOLICASTIC POR, NO VIS CUT OR SHOW, NO ODOR

LS- OFF WHT TN LT GY TO BUFF. HRD DNS TO BRITT, F/VF-XLN M/F-OOL PR SORTD TO SNDY, SUCRO TO V/CHLKY, FOSS FRAGS, CALC GRNS, F/TRS OF QTRZ-XLS, DLL YEL MIN FLO, PR/FR OOLICASTIC TO PR MICRO VUG POR IP, NO VIS CUT OR SHOW

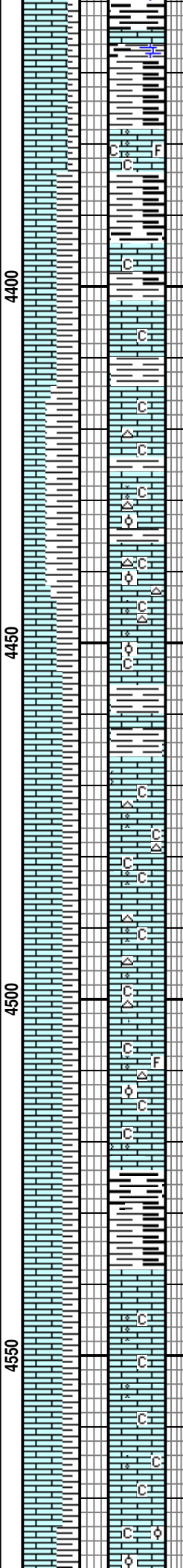
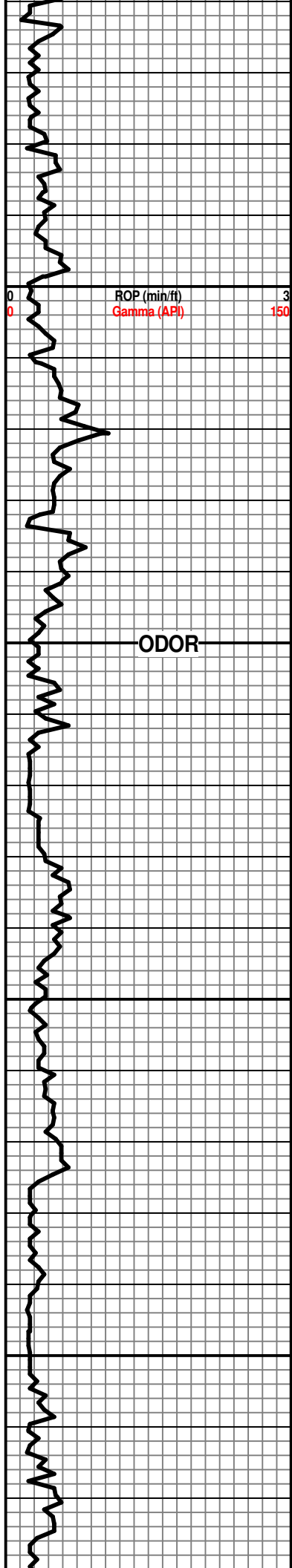
LS- CRM OFF WHT LT GY, HRD BRITT, VF-XLN, V/CHLKY, ABNDT OFF WHT CHLK, TRS OF OOL PR SORTD, YEL MIN FLO, NO VIS POR, NO VIS CUT OR SHOW

MNCRK 4354' / -1265'



TG, C1-C5 200

SRVY: 4280' @ 1.1 DEG AZI 343.2



SH- SFT BLK CARB, SMTH BLKY TO PLTY

LS- CRM OFF WHT TO LT TN, HRD BRITT, F-XLN, CHLKY, F/TRS MICRO OOL PR SORTD, F/TRS OF FOSS FRAGS, PALE DLL YEL MIN FLO, POSS PR MICRO-VUG POR, NO VIS CUT OR SHOW, NO DET ODOR

B DRUM 4399' / -1310'

LS- GY OFF WHT TN MOTT, HRD BRITT, F/VF-XLN, V/CHLKY, DLL YEL MIN FLO, NO VIS POR, NO VIS CUT OR SHOW

LS- OFF WHT GY TN, HRD DNS TO BRITT, F-XLN, SUCRO TO V/CHLKY, TRS OF TN CHRT, F/TRS OF FOSS FRAGS, TRS OF PR SORTD OOL SCATT SME SHADOW, YEL MIN FLO, NO VIS POR, NO VIS CUT OR SHOW, F/ODOR

ODOR

SH- GY DRK GY, FRM BRITT, BLKY GRNY, CALC IP

LS- TN GY OFF WHT, HRD DNS TO BRITT, F/V-XLN POSS VF MICRO-OOL, V/CHLKY, TRS TO TN GY CHRT SME W/ OOL, DLL YEL FLO, PR OOLICASTIC POR, NO VIS CUT OR SHOW, SLI F/ODOR

LS- TN GY OFF WHT TO MOTT, HRD DNS TO BRITT, F-XLN, SUB-SUCRO TO CHLKY, TRS OF MICRO-OOL SME SHADOW, TRS OF TN CHRT SME W/ OOL, TRS OF FOSS FRAGS, DLL YEL MIN FLO, POSS PR OOLICAST POR, NO VIS CUT OR SHOW, F/ODOR

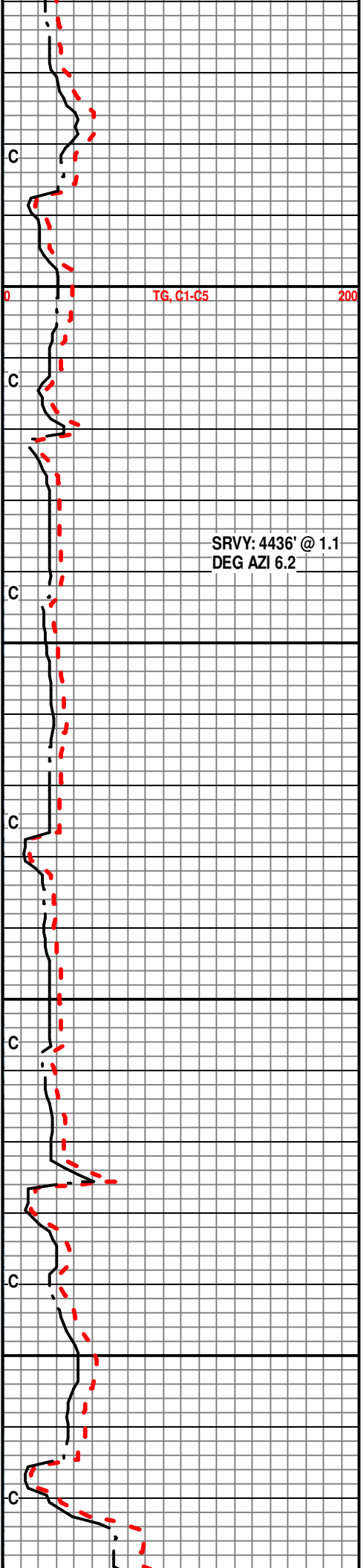
STARK 4525' / -1436'

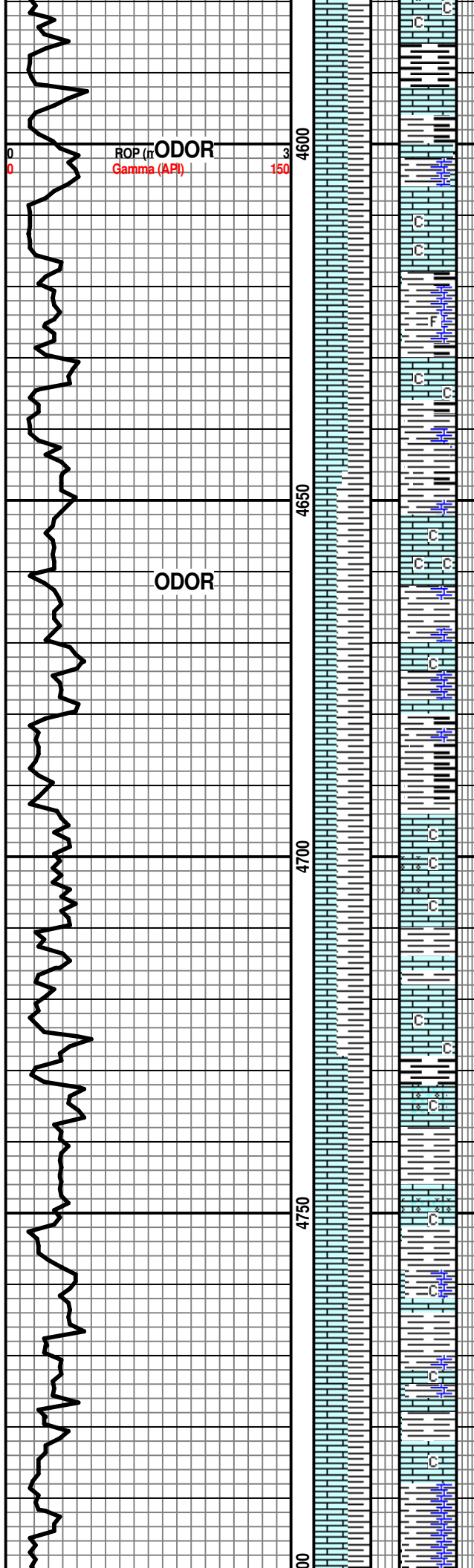
SH- DRK GY BLK, CARBY

SWOPE 4538' / -1449'

LS- GY OFF WHT TO TN, HRD DNS TO BRITT, F-XLN TO M/F TO MICRO-OOL GRNS PR/FR SORTD IP, V/CHLKY, DLL BLU/YEL FLO IP TO DLL YEL MIN FLO, POSS PR MICRO VUG POR, NO VIS CUT OR SHOW, F/ODOR

LS- OFF WHT GY TN MOTT, HRD BRITT, F/VF-XLN, SUCRO TO V/CHLKY, TRS OF OOL FR SORTD IP, F/TRS OF DRK GY CHRT, DLL YEL MIN FLO, POSS PR INTER-GRN POR TO MICRO-VUG IP, NO VIS CUT OR SHOW, FR/ODOR





HUSH SH 4586' / -1497'

SH- BLK CARB SH

HERTHA LS 4600' / -1511'

LS- TN GY OFF WHT TO MOTT, HRD
DNS TO BRITT, F/VF-XLN, SUB-CHLKY,
SCATT SHADOW OOL, DLL YEL MIN
FLO, NO VIS POR, NO VIS CUT OR
SHOW, F/ODOR

SH- GY DRK GY GRN TO BLK, FRM
BRITT SFT IP, SMTH GRNY, SILTY IP,
CALC TO CARBY, FOSS FRAGS

LS- TN GY OFF WHT TO MOTT, HRD
DNS TO BRITT, F/VF-XLN, SUB-SUCRO
TO CHLKY, SHLY IP, V/DLL YEL MIN
FLO, NO VIS POR, NO VIS CUT OR
SHOW, ODOR

SH- GY DRK GY TO BLK, SMTH BLKY
TO GRNY, CARB TO CALC, TRS OF BLK
CHRT

MRMNT GRP 4695' / -1606'

LS- GY DRK GY OFF WHT TN, HRD DNS
TO BRITT, F-XLN, CHLKY, GY TN CHRT,
SME SCATT OOL IP, DLL YEL MIN FLO,
POSS PR MICRO-PP PR IP, NO VIS CUT
OR SHOW, F/ODOR

SH- GY DRK GY BRN, GRNY SILTY,
CALC TO CARB

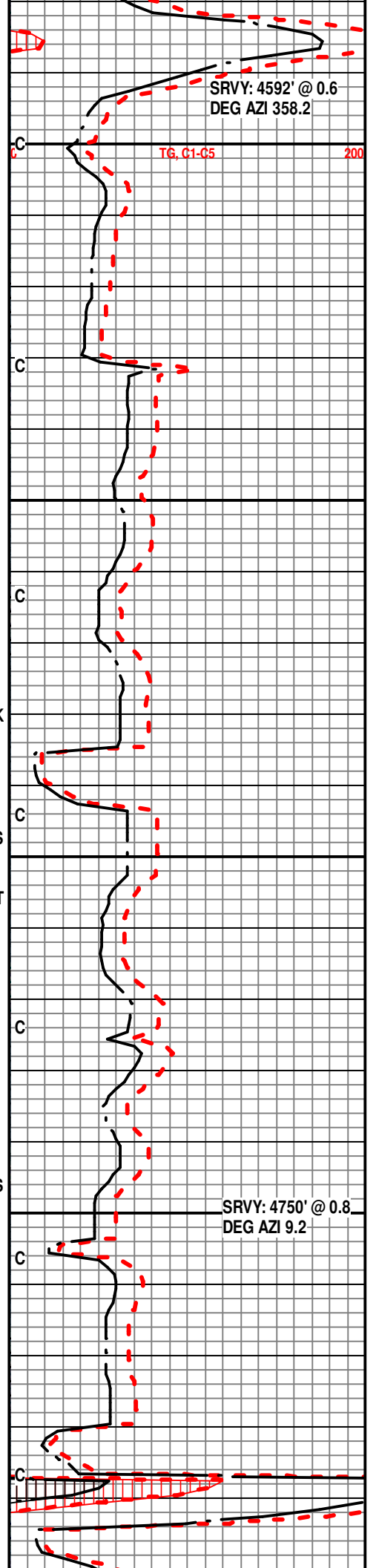
SH- DRK GY BLK CARB

LS- TN GY DRK GY OFF WHT TO MOTT,
HRD DNS TO BRITT, F-XLN TO
F/VF-OOL FR/PR SORTD, CHLKY, GY
DRK GY CHRT SME W/ OOL, DLL YEL
MIN FLO, PR OOLICASTIC POR, NO VIS
CUT OR SHOW, NO ODOR

SH- GY DRK GY TO BLK, FRM BRITT,
GRNY, CARBY IP

SHLY LS- GY OFF WHT TO MOTT, HRD
DNS TO BRITT, F/VF-XLN, CHLKY,
FOSS FRAGS, IMBD TO DISS BLK SH,
F/TRS OF TN CHRT, DLL YEL MIN FLO,
NO VIS POR, NO VIS CUT OR SHOW

SH- DRK GY BLK CARB

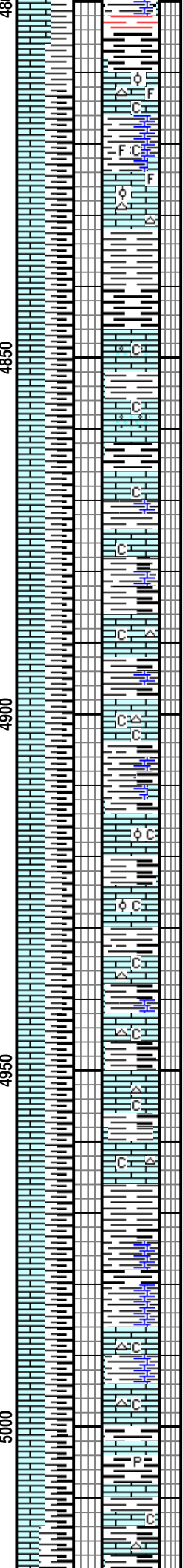
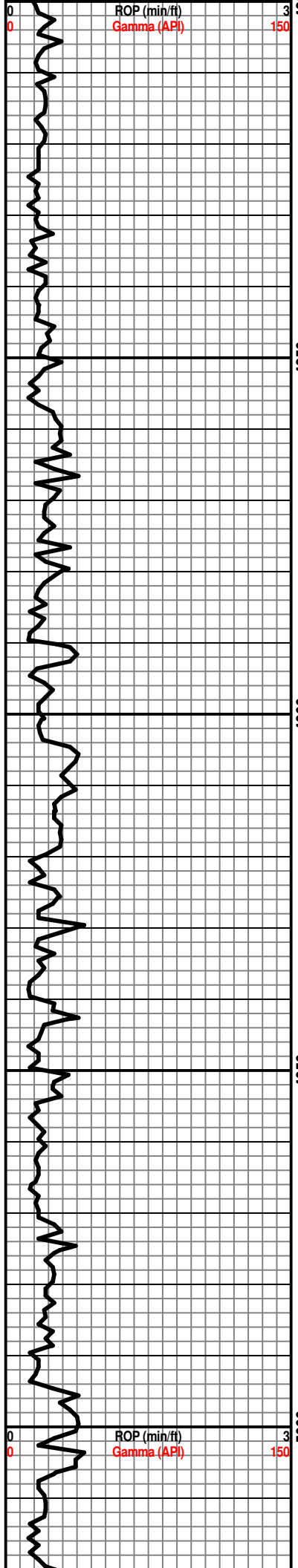


SRVY: 4592' @ 0.6
DEG AZI 358.2

TG, C1-C5

200

SRVY: 4750' @ 0.8
DEG AZI 9.2



PAWNEE 4808' / -1719'

LS- OFF WHT TN GY, HRD DNS TO BRITT, F-XLN, V/CHLKY, TRS OF SHADOW OOL, SHLY IP, TRS OF TN GY CHRT SME W/ FOSS FRAGS, DLL YEL MIN FLO, POSS PR MICRO-PP POR, NO VIS CUT OR SHOW, NO ODOR

SH- BLK CARB

LS-CRM OFF WHT TN GY TO MOTT, HRD BRITT, F/VF-XLN, SUCRO TO CHLKY, F/TRS OF OOL, TRS OF LT GY CHRT, DLL YEL MIN FLO, NO VIS POR, NO VIS CUT OR SHOW, NO ODOR

CHRK GRP 4864' / -1775'

INTERBD SH & LS- GY DRK GY BLK CARBY SHLS & GY OFF WHT TO TN, CHLKY LS, SME FOSS FRAGS AND SCATT OOL, TN GY CHRT IP

LS- GY DRK GY TN, HRD SNS TO BRITT, F-XLN, SUB-CHLKY, TRS OF FOSS FRAGS, DRK GY CHRT, SHLY IP DISS TO GY BLK SH, SHADOW OOL SCATT, V/DLL YEL MIN FLO, NO VIS POR, NO VIS CUT OR SHOW, NO ODOR

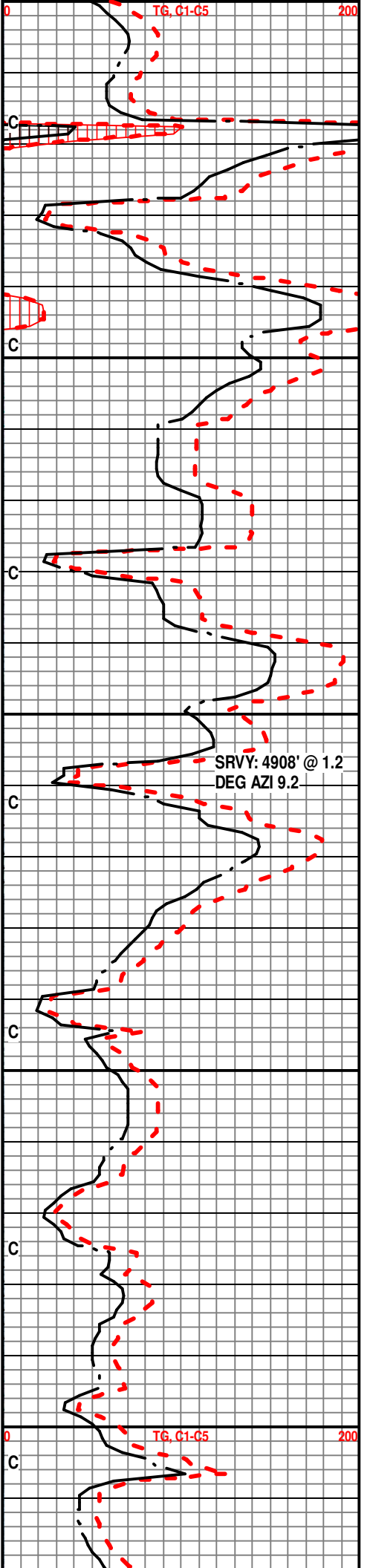
LS- TN DRK GY OFF WHT TO MOTT, HRD DNS, F/VF-XLN, SUCRO TO CHLKY, TN GY CHRT, V/DLL YEL FLO, NO VIS POR, NO VIS CUT OR SHOW

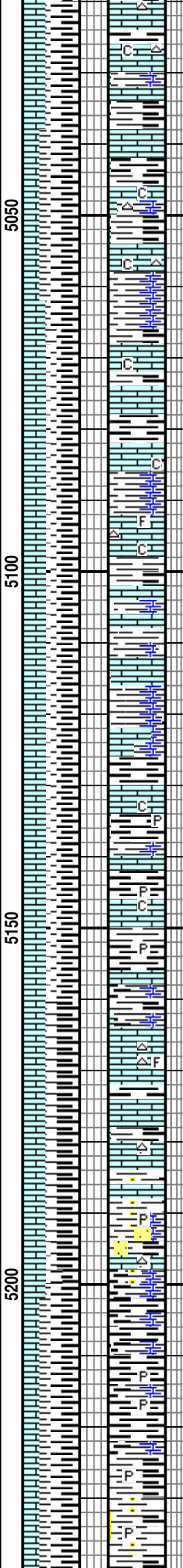
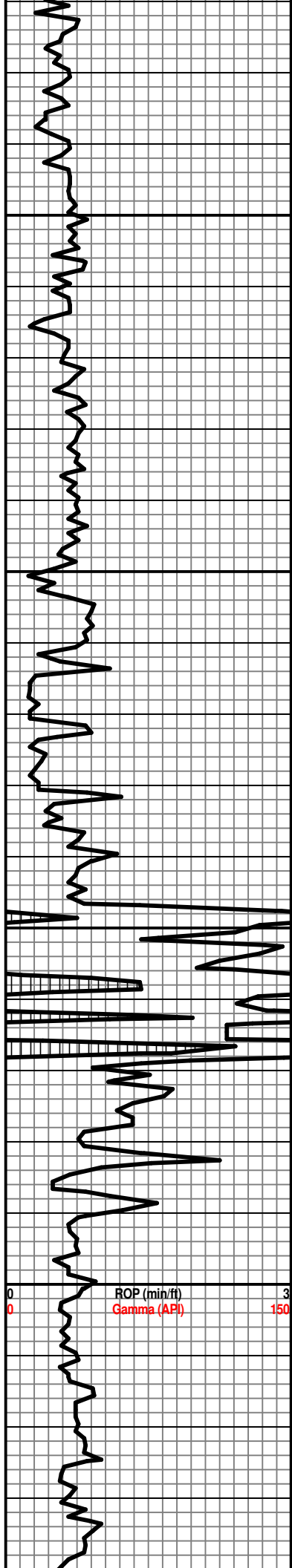
SH- SILTY CARBY GY DRK GY TO BLK, CALC IP

LS- GY DRK GY OFF WHT, HRD DNS TO BRITT, F/VF-XLN, CHLKY, TRS OF TN GY CHRT, DLL YEL MIN FLO, NO VIS CUT OR SHOW

SH- GY DRK GY BLK, FRM BRITT, GRNY, CALC, TRS OF PYR

LS- DRK GY TN BRN TO MOTT, HRD DNS TO BRITT, F-XLN, SUCRO TO





CHLKY, TRS OF TN CHRT, F/TRS OF FOSS FRAGS, TRS OF QTRZ-XLS, DLL YEL MIN FLO, NO VIS POR, NO VIS CUT OR SHOW

SH- BLK CARB, GRNY TO PLTY
ATKN GRP 5048' / -1959'

LS- OFF WHT TN GY, HRD DNS TO BRITT, F-XLN, CHLKY, TRS OF GY TN CHRT, IMBD DISS GY BLK SH, DLL YEL MIN FLO, NO VIS CUT OR SHOW

SH- GY DRK GY BRN BLK, FRM BRITT, CARBY

LS- TN GY OFF WHT, HRD DNS, F-XLN, SUCRO TO CHLKY, TRS OF TN CHRT, SHLY IP, FOSS FRAGS, DLL YEL MIN FLO, NO VIS POR, NO VIS CUT OR SHOW, NO ODOR

SH- DRK GY BLK GRNISH, CARBY CALC, SILTY

ATOKA SH 5126' / -2037'

SH- BLK CARB, FRM BRITT, PYR, CALC IP

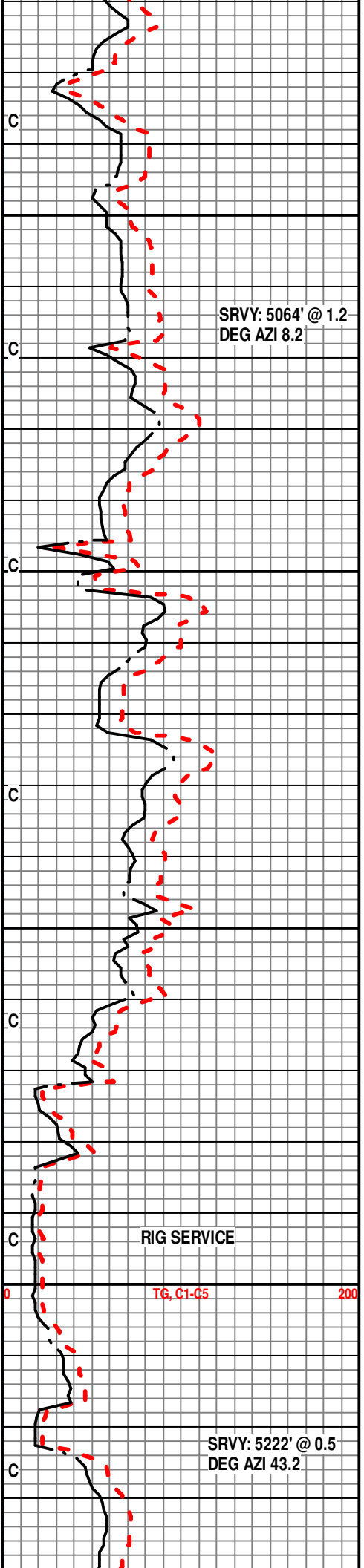
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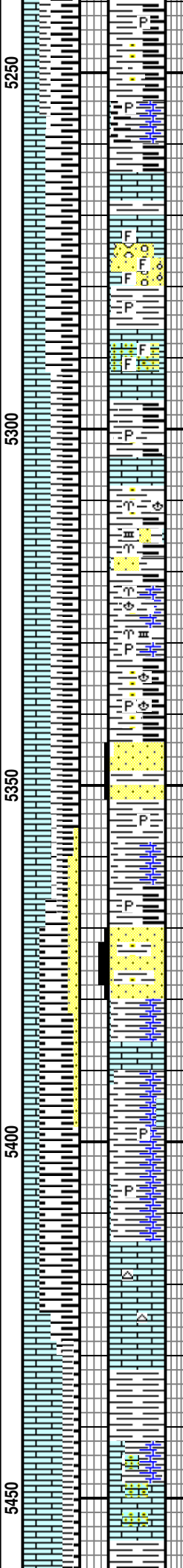
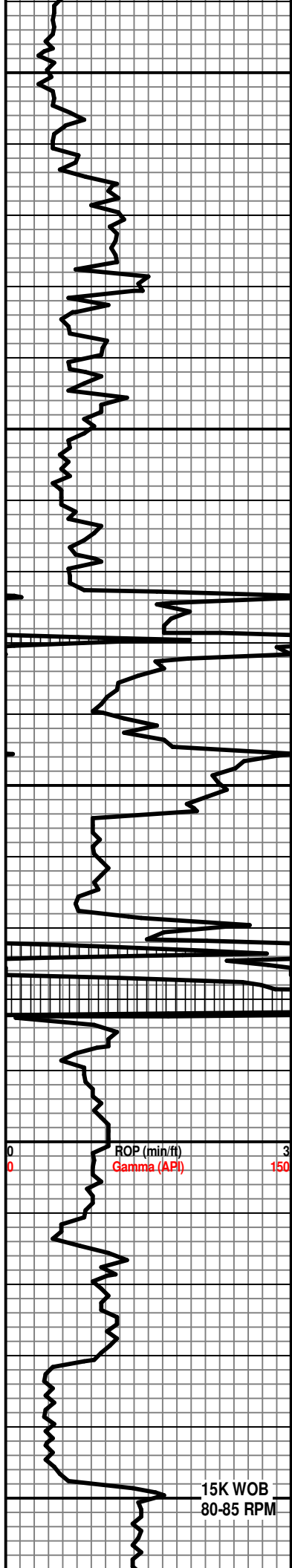
SH- DRK GY BLK, FRM BRITT TO SFT, BLKY, GRNY, TRS OF CHRT, FOSS FRAGS, PYR, SNDY CALC

MRRW GRP 5212' / -2182'

SH- GY DRK GY GRN, FRM BRITT SFT, SILTY, CALC, PYR, SMTH SPNTY

SILTY SH- DRGY GY BLK GRN DUAB, GRNY SNDY, CARBY, CALC IP, PYR





SH- GY DRK BLK, SILTY, SNDY, FOSS FRAGS, PYR, CALC, CARB

LS- GY DRK GY TN BUFF TO MOTT, HRD DNS BRITT, M/F-XLN, SUB-CHLKY, GRNY, SHLY, SNDY, FRAGMENTAL, FOSS FRAGS, SPOTTY YEL FLO TO NO VIS FLO, POSS PR INTER-GRN TO INTER-FOSS POR, WEAK MILKY BLU FLUSH CUT, NO DET ODOR

SNDY SILTY SH- GY BLK TN BRN, FRM FRI TO TT, VV-F GRNS, FOSS FRAGS, WEAK MILKY GRN FLUSH CUT, NO ODOR

SH- GY DRK GY BLK TO GRNISH, FRM BRITT TO SFT, BLKY GRNY, SNDY, PYR, FOSS FRAGS

SS- TN GY, FRM TT TO SLI FRI, CONSLD, F/VF-QRTZ GRNS, RND SUB-ANG, VERY DIRTY/ SHLY INCL, NO FLO, PR INTERGRN-POR, WEAK SLO MILKY BLU FLUSH TO SLO STRM CUT, NO ODOR

SS- TN DRK GY TO CLR, HRD TT TO FRI, CONSLD, VV-F-QRTZ GRN, SUB ANG, SILC CMNT, POSS OIL SATURATED DIRTY APPEARANCE POSS SILTY, NO FLO, FAST BRIGHT MILKY BLUE FLUSH CUT TO FAST MILKY STREAM CUT, NO ODOR, FIRST SAMPLES WERE VERY DIRTY LATER SAMPLES WERE LESS SO

5382' TOH FOR BIT, RETURN TO DRILLING 01:45 AM 12/30/2019

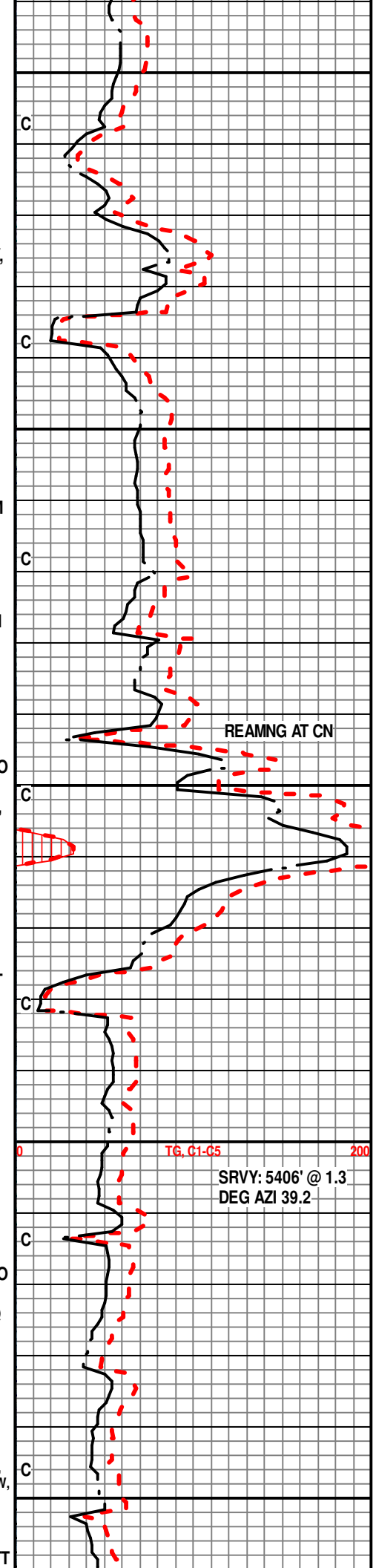
SH- GY DRK GY BLK BRN TO DUAB, FRM BRITT TO SFT, SMTH BLKY TO GRNY, CALC TO SLI SILTY, PYR

CSTR LM 5415' / -2326'

LS- GY DRK GY OFF WHT, HRD DNS TO BRITT, F/VF-XLN SLI CRYPTO, SUCRO TO SUB-CHLKY, TRS OF TN GY OPAQ CHRT, DLL YEL MIN FLO, NO VIS POR, NO VIS CUT OR SHOW, NO ODOR

LS- TN GY OFF WHT, HRD DNS, F/VF-XLN, SNDY IP, SUCRO TO SUB CHLKY, TRS OF TN OFF WHT CHRT, SME DISS CARB SH IP, DLL YEL MIN FLO, POSS PR INTER-GRN POR, NO VIS CUT OR SHOW, NO ODOR

SH- GY LT GY GRNISH BRN, FRM BRITT



SRVY: 5406' @ 1.3 DEG AZI 39.2

TG, C1-C5

15K WOB
80-85 RPM

ROP (min/ft)
Gamma (API)

TO SFT, GRNY BLKY, CALC

ST GEN 5465' / -2376'

OOL LS- CRM OFF WHT TN TO LT GY
HRD DNS TO BRITT, F/VF-MICRO-OOL
GRNS FR/WELL SORTD, SUCRO TO
CHLKY, DLL GLD YEL FLO, PR
INTER-GRN POR, NO VIS CUT OR
SHOW, NO DET ODOR

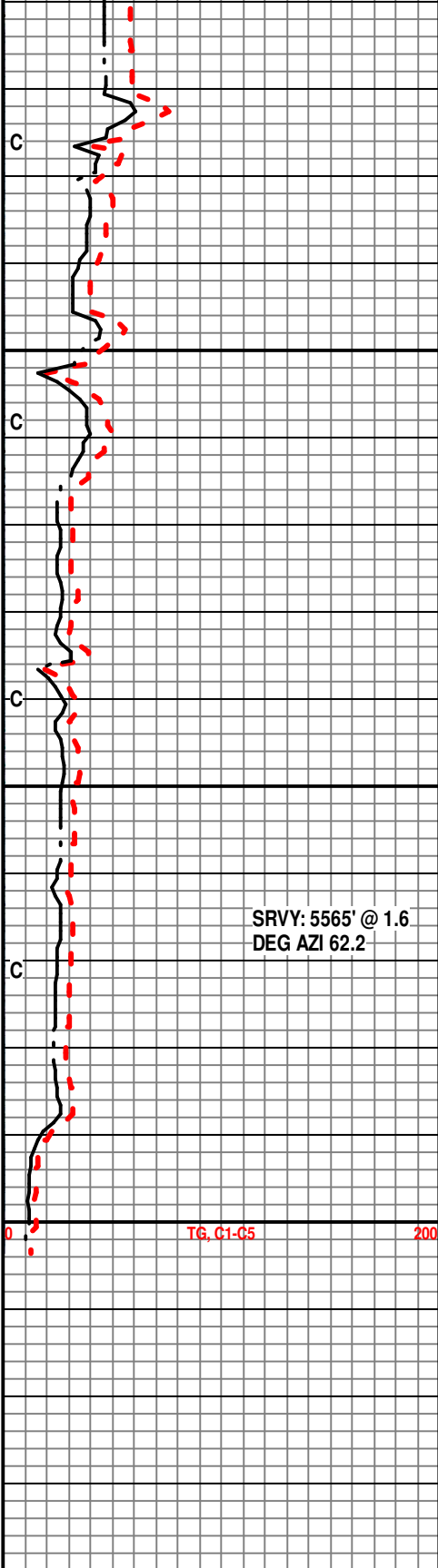
OOL LS- CRM OFF WHT GY LT GY, HRD
DNS TO BRITT, F/VF-MICRO-OOL GRNS
FR/WELL SORTD, SUCRO TO CHLKY,
TRS OF GY TN OPAQ CHRT, BLK
SPECKLES IP, DLL GLD YEL FLO, PR
INTER-GRN POR, NO VIS CUT OR
SHOW, NO DET ODOR

SH- GY GRN, FRM SFT, SMTH SOAPY
TXT. SPLNTY IP

OOL LS- TN GY OFF WHT, HRD DNS
BRITT, M/F-OOL GRNS PR/FR SORTD,
20% LS CONTENT, SUCRO TO CHLKY,
TRS GY TN CHRT SME W/ INCL, DLL
MUSTRD YEL FLO, POSS PR
INTER-GRN POR IP, NO VIS CUT OR
SHOW, NO DET ODOR

OOL LS- TN GY OFF WHT, HRD DNS
BRITT, M/F-OOL GRNS PR/FR SORTD,
40% LS CONTENT, SUCRO TO CHLKY,
TRS GY TN OPAQ CHRT, DLL PALE
MUSTRD YEL/BLUISH FLO, POSS PR
INTER-GRN POR IP, NO VIS CUT OR
SHOW, NO DET ODOR

RTD 5604' @ 06:15 AM 12/30/2014



SRVY: 5565' @ 1.6
DEG AZI 62.2

TG, C1-C5

CFS 30/60



HURRICANE SERVICES INC

Customer	Merit Energy	Lease & Well #	WENU #403	Date	12/27/2019
Service District	Oakley, KS	County & State	Haskell, KS	Legals S/T/R	Sec 4 - T28S - R34W
Job Type	Surface Casing	<input type="checkbox"/> PROD <input type="checkbox"/> INJ <input type="checkbox"/> SWD	New Well?	<input checked="" type="checkbox"/> YES <input type="checkbox"/> No	Ticket #
Job #	ICT3026				

Equipment #	Driver	Job Safety Analysis - A Discussion of Hazards & Safety Procedures			
74	Scott Green	<input type="checkbox"/> Hard hat	<input type="checkbox"/> Gloves	<input type="checkbox"/> Lockout/Tagout	<input type="checkbox"/> Warning Signs & Flagging
230	Josh Mosier	<input type="checkbox"/> H2S Monitor	<input type="checkbox"/> Eye Protection	<input type="checkbox"/> Required Permits	<input type="checkbox"/> Fall Protection
194 / 254	John Polley	<input type="checkbox"/> Safety Footwear	<input type="checkbox"/> Respiratory Protection	<input type="checkbox"/> Slip/Trip/Fall Hazards	<input type="checkbox"/> Specific Job Sequence/Expectations
181 / 256	Kale Ochs	<input type="checkbox"/> FRC/Protective Clothing	<input type="checkbox"/> Additional Chemical/Acid PPE	<input type="checkbox"/> Overhead Hazards	<input type="checkbox"/> Muster Point/Medical Locations
		<input type="checkbox"/> Hearing Protection	<input type="checkbox"/> Fire Extinguisher	<input type="checkbox"/> Additional concerns or issues noted below	

Comments

Directions: Garden City, KS - 18 miles south on HWY83, 9 miles west on CR 50, 2.6 miles south on CR DD, west into.

Product/ Service Code	Description	Unit of Measure	Quantity	List Price/Unit	Gross Amount	Item Discount	Net Amount
C015	Cement Pump	ea	1.00				\$1,275.00
M015	Light Equipment Mileage	mi	115.00				\$195.50
M010	Heavy Equipment Mileage	mi	115.00				\$391.00
M025	Ton Mileage	tm	3,828.00				\$4,670.50
CP025	H-Con	sack	500.00				\$8,925.00
CP120	Flo-Seal	lb	128.50				\$185.94
CP085	Class C Cement	sack	168.00				\$2,805.00
CP100	Calcium Chloride	lb	310.00				\$197.63
CP120	Flo-Seal	lb	35.00				\$123.46
FE250	8 5/8" Centralizer	ea	8.00				\$459.00
FE260	8 5/8" Guide Shoe	ea	1.00				\$510.00
FE271	8 5/8" Float Collar - AFU	ea	1.00				\$765.00
FE235	8 5/8" Rubber Plug	ea	1.00				\$148.75

WENU 403
64674
83001075
Sublette
12-27-19
OAKLEY

Customer Section: On the following scale how would you rate Hurricane Services Inc.?		Gross:		Net:	\$20,851.78
Based on this job, how likely is it you would recommend HSI to a colleague?		Total Taxable	\$ -	Tax Rate:	
<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/> 7 <input type="checkbox"/> 8 <input checked="" type="checkbox"/> 9 <input type="checkbox"/> 10 <small>Unlikely</small> <small>Extremely Likely</small>		State tax laws deem certain products and services used on new wells to be sales tax exempt. Hurricane Services relies on the customer provided well information above to make a determination if services and/or products are tax exempt.		Sale Tax:	\$ -
Good to go!		HSI Representative:		Scott Green	
		Total:		\$ 20,851.78	

TERMS: Cash in advance unless Hurricane Services Inc. (HSI) has approved credit prior to sale. Credit terms of sale for approved accounts are total invoice due on or before the 30th day from the date of invoice. Past due accounts shall pay interest on the balance past due at the rate of 1 1/2% per month or the maximum allowable by applicable state or federal laws. In the event it is necessary to employ an agency and/or attorney to affect the collection, Customer hereby agrees to pay all fees directly or indirectly incurred for such collection. In the event that Customer's account with HSI becomes delinquent, HSI has the right to revoke any discounts previously applied in arriving at net invoice price. Upon revocation, the full invoice price without discount is immediately due and subject to collection. Prices quoted are estimates only and are good for 30 days from the date of issue. Pricing does not include federal, state, or local taxes, or royalties and stated price adjustments. Actual charges may vary depending upon time, equipment, and material ultimately required to perform these services. Any discount is based on 30 days net payment terms or cash. **DISCLAIMER NOTICE:** Technical data is presented in good faith, but no warranty is stated or implied. HSI assumes no liability for advice or recommendations made concerning the results from the use of any product or service. The information presented is a best estimate of the actual results that may be achieved and should be used for comparison purposes and HSI makes no guarantee of future production performance. Customer represents and warrants that well and all associated equipment in acceptable condition to receive services by HSI. Likewise, the customer guarantees proper operational care of all customer owned equipment and property while HSI is on location performing services. The authorization below acknowledges the receipt and acceptance of all terms/conditions stated above, and Hurricane has been provided accurate well information in determining taxable services.

x *Kale Ochs*

CUSTOMER AUTHORIZATION SIGNATURE



CEMENT TREATMENT REPORT

Customer:	Merit Energy	Well:	WENU #403	Ticket:	ICT3026
City, State:	Dallas, TX	County:	Haskell, KS	Date:	12/27/2019
Field Rep:	Rodney Gonzales	S-T-R:	Sec 4 - T28S - R34W	Service:	Surface Casing

Downhole Information

Hole Size:	12.25 in
Hole Depth:	1784 ft
Casing Size:	8.625 in
Casing Depth:	1774 ft
Drill Pipe:	in
Depth:	ft
Tool / Packer:	
Depth:	ft
Displacement:	110.0 bbls

Calculated Lead Slurry

Weight:	12.1 # / sx
Water / Sx:	15.02 gal / sx
Yield:	2.50 ft ³ / sx
Bbls / Ft.:	0.0735
Depth:	ft
Annular Volume:	bbls
Excess:	130%
Total Slurry:	222.6 bbls
Total Sacks:	500 sx

Product	% / #	#
Class A	100.00	47000
Poz		
Gel		
CaCl	3.00	1410
Gypsum	2.00	940
Metso	2.00	940
PhenoSeal		
Flo Seal	0.50	250
Salt (bww)		
Total		50,540

Calculated Tail Slurry

Weight:	14.8 # / sx
Water / Sx:	6.68 gal / sx
Yield:	1.37 ft ³ / sx
Bbls / Ft.:	0.0735
Depth:	ft
Annular Volume:	bbls
Excess:	0%
Total Slurry:	40.5 bbls
Total Sacks:	165 sx

Product	% / #	#
Class C	100.00	15510
Poz		
Gel		
CaCl	2.00	310
Gypsum		
Metso		
PhenoSeal		
Flo Seal	0.50	83
Salt (bww)		
Total		15,903

TIME	RATE	PSI	BBLs	REMARKS
5:30				Call out
7:30				Depart yard
9:50				Arrive on locn. Rig @ TD circulating & conditioning
9:55				JSA, discuss moving on, spotting & rig-up of equipment
10:00				Move on, spot & rig-up equipment
10:30				Rig-up complete. Rig TOH w/ DP
12:00				Rig-up casing crew
12:15				RIH w/ 8.625" 24ppt J-55 casing
14:20				Casing @ setting depth.
14:30	8.5	150.0		Circulate & condition
14:56	2.5	110.0	5.0	Pump H2O
15:00		3,000.0		Pressure test
15:02	5.5	190.0	10.0	Pump H2O
15:05	5.5	250.0		Mix & pump 500sx lead slurry @ 12.1ppg. Y - 2.5cuft/sk; MR - 15.02g/sk
15:22	6.3	280.0	100.0	Rate & pressure
15:39	6.1	250.0	200.0	Rate & pressure
15:41			223.0	End Lead
15:43	3.5	140.0		Mix & pump 165sx tail slurry @ 14.8ppg. Y - 1.37cuft/sk; MR - 6.68g/sk
15:55			40.5	Stop
15:56				Release top plug
15:58	7.0	200.0		Displace w/ H2O
16:16	2.0	470.0	100.0	Slow rate
16:20		1,060.0	110.0	Bump plug. Final circulating pressure 490psi @ 2bpm
16:23				B/O, check float. 1/2bbl back
16:25				JSA, discuss rigging down & racking up equipment
16:30				Rig down & rack up
16:55				JSA, discuss journey management
17:00				Depart location
Thanks for calling Hurricane Services Inc				

C-TC 708625 TRK 0007.

CREW		UNIT	SUMMARY		
Cementer:	Scott Green	74	Average Rate	Average Pressure	Total Fluid
Pump Operator:	Josh Mosier	230	5.21111 bpm	555 psi	789 bbls
Bulk #1:	John Polley	194 / 254			
Bulk #2:	Kate Octs	181 / 256			



Customer	Merit Energy	Lease & Well #	WENU #403	Date	12/31/2019
Service District	Oakley	County & State	Haskell, KS	Legals S/T/R	Sec 4 - T28S - R34W
Job Type	2 Stage Longstring [®] PROD	<input type="checkbox"/> INJ	<input type="checkbox"/> SWD	New Well?	<input type="checkbox"/> YES <input type="checkbox"/> No
Equipment #	Driver	Job Safety Analysis - A Discussion of Hazards & Safety Procedures			

74	Scott Green	<input type="checkbox"/> Hard hat	<input type="checkbox"/> Gloves	<input type="checkbox"/> Lockout/Tagout	<input type="checkbox"/> Warning Signs & Flagging
230	Jeff	<input type="checkbox"/> H2S Monitor	<input type="checkbox"/> Eye Protection	<input type="checkbox"/> Required Permits	<input type="checkbox"/> Fall Protection
181 / 256	Kale Ochs	<input type="checkbox"/> Safety Footwear	<input type="checkbox"/> Respiratory Protection	<input type="checkbox"/> Slip/Trip/Fall Hazards	<input type="checkbox"/> Specific Job Sequence/Expectations
67	Josh Mosier	<input type="checkbox"/> FRC/Protective Clothing	<input type="checkbox"/> Additional Chemical/Acid PPE	<input type="checkbox"/> Overhead Hazards	<input type="checkbox"/> Muster Point/Medical Locations
		<input type="checkbox"/> Hearing Protection	<input type="checkbox"/> Fire Extinguisher	<input type="checkbox"/> Additional concerns or issues noted below	


Comments
 2 Stage Longstring - Float Collar at +/- 5565'; DV tool at +/- 4780'; Cement design per L.L.; Rig to supply mixing water
 1st Stage: 500 gal mud flush ahead; 130 sx of Merit blend; circulate 4 hours between stages
 2nd Stage: 500 gal mud flush ahead; 140 sx of Merit blend; 25 sx ea. RH & MH

Product/ Service Code	Description	Unit of Measure	Quantity	List Price/Unit	Gross Amount	Item Discount	Net Amount
CP020	Cement Pump - Multi Stage	ea	1.00				\$2,125.00
MR310	Heavy Equipment Mileage	mi	115.00				\$391.00
MR016	Light Equipment Mileage	mi	116.00				\$195.50
MR020	Ton Mileage	tm	1,895.00				\$2,411.03
CP035	Type H Cement	sack	180.00				\$2,584.00
CP041	Fly Ash	sack	120.00				\$1,224.00
CP036	Bentonite Gel	lb	500.00				\$137.19
CP103	Gypsum	lb	2,810.00				\$1,028.29
CP110	Kol Seal	lb	1,000.00				\$1,020.00
CP120	Flo-Seal	lb	30.00				\$119.00
CP131	Cement Fluid Loss	lb	128.00				\$946.69
CP135	Defoamer	lb	87.00				\$455.60
CP140	Salt	sack	80.00				\$340.00
CP170	Mud Flush	gal	1,000.00				\$850.00
RF125	5 1/2" Centralizer	ea	10.00				\$816.00

WENU 403
12/31/19
33001075
Sublet

Customer Section: On the following scale how would you rate Hurricane Services Inc.?	Gross:	Net:	\$12,518.29
Based on this job, how likely is it you would recommend HSI to a colleague?	Total Taxable \$ -	Tax Rate:	
<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/> 7 <input type="checkbox"/> 8 <input type="checkbox"/> 9 <input type="checkbox"/> 10 Unlikely Extremely Likely	State tax laws deem certain products and services used on new wells to be sales tax exempt. Hurricane Services relies on the customer provided well information above to make a determination if services and/or products are tax exempt.	Sale Tax:	\$ -
		Total:	\$ 12,518.29
HSI Representative:			

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X  **CUSTOMER AUTHORIZATION SIGNATURE**



CEMENT TREATMENT REPORT

Customer: Merit Energy	Well: WENU #403	Ticket: ICT3045
City, State: Dallas, TX	County: Haskell, KS	Date: 12/31/2019
Field Rep: Rodney Gonzales	S-T-R: Sec 4 - T28S - R34W	Service: 2 Stage Longstring

Downhole Information	
Hole Size:	7.875 in
Hole Depth:	5604 ft
Casing Size:	5.5 in
Casing Depth:	5604 ft
Tubing / Liner:	in
Depth:	ft
Tool / Packer:	DV Tool
Depth:	4780 ft
Displacement:	129.1 bbls

Calculated Slurry	
Weight:	13.6 # / sx
Water / Sx:	7.40 gal / sx
Yield:	1.60 ft ³ / sx
Bbls / Ft.:	0.0309
Depth:	5604 ft
Annular Volume:	bbls
Excess:	25%
Total Slurry:	37.0 bbls
Total Sacks:	130 sx

Product	% / #	#
Class H	50.00	6110
Poz	50.00	4810
Gel	2.00	218
C-17	0.50	55
Gypsum	6.00	655
Defoamer	0.25	27
Kol Seal	5.00	650
PhenoSeal	0.25	33
Salt (bww)	10.00	802
Total		13,360

TIME	RATE	PSI	BBLs	REMARKS
4:00				Call out
7:00				Start to RIH w/ 5.5" 17ppf J-55 casing
6:00				Depart
8:00				Josh M. on locn
8:35				Make-up DV tool to casing
11:10				Casing @ setting depth
11:30	8.5	350.0		Rig circulate & condition hole
11:40				Crew on locn
11:45				JSA, discuss moving on, spitting & rigging up equipment
11:50				Move on, spot & rig-up equipment
				STAGE 1
12:55	3.0	220.0	5.0	Pump freshwater spacer
12:57		4,000.0		Pressure test
12:59	3.0	230.0	12.0	Pump mudflush spacer
13:03	3.0	220.0	5.0	Pump freshwater spacer
13:06	6.5	450.0	37.0	Mix & pump 130sx cement slurry @ 13.6ppg. Y - 1.6, MR - 7.4g/sk
13:14				Shutdown
13:16				Wash-up pumps & lines / Release 1st stage L/D dart
13:20	5.0	100.0	20.0	Start to displace w/ freshwater
13:24	7.0	250.0		Continue to displace w/ 9.2ppg WBM
13:37	2.0	80.0	105.0	Slow rate, to pass thru DV tool
13:41	3.0	310.0	115.0	Increase rate
13:44		1,150.0	129.0	Bump plug. Final circulating pressure - 550psi
13:50				Bleed off, floats & floats holding, 2bbl back.
13:53				Drop opening tool (Bomb). Wait 35mins

CREW		UNIT	SUMMARY		
Cementer:	Scott Green	74	Average Rate	Average Pressure	Total Fluid
Pump Operator:	Jeff	230	4.55556 bpm	669 psi	428 bbls
Bulk #1:	Kale Ochs	181 / 256			
Bulk #2:	Josh Mosier	67			



CEMENT TREATMENT REPORT

Customer: Merit Energy	Well: WENU #403	Ticket: ICT3045
City, State: Dallas, TX	County: Haskell, KS	Date: 12/31/2019
Field Rep: Rodney Gonzales	S-T-R: Sec 4 - T28S - R34W	Service: 2 Stage Longstring

Downhole Information	
Hole Size:	7.875 in
Hole Depth:	5604 ft
Casing Size:	5.5 in
Casing Depth:	5604 ft
Tubing / Liner:	in
Depth:	ft
Tool / Packer:	DV Tool
Depth:	4780 ft
Displacement:	110.9 bbls

Calculated Slurry	
Weight:	13.6 # / sx
Water / Sx:	7.40 gal / sx
Yield:	1.60 ft ³ / sx
Bbls / Ft.:	0.0309
Depth:	4779.95 ft
Annular Volume:	bbls
Excess:	35%
Total Slurry:	76.4 bbls
Total Sacks:	190 sx

Product	% / #	#
Class H	50.00	8930
Poz	50.00	7030
Gel	2.00	319
C-17	0.50	80
Gypsum	6.00	958
Defoamer	0.25	40
Kol Seal	5.00	950
PhenoSeal	0.25	48
Salt (bww)	10.00	1172
Total		19,526

TIME	RATE	PSI	BBLs	REMARKS
14:30	1.2	1,020.0		Open tool w/ 1020psi
14:31	5.6	360.0		Increase rate & confirm tool is open
14:38			40.0	Shutdown & handover to rig
14:42	6.5	170.0		Rig continues to circulate hole
17:30				Rig stop circulating
				STAGE 2
17:39	5.4	210.0	5.0	Pump freshwater spacer
17:40	5.4	140.0	12.0	Pump mudflush spacer
17:42	5.4	190.0	5.0	Pump freshwater spacer
17:50	2.0	50.0	7.1	Plug rathole w/ 25sx cement slurry @ 13.6ppg.
17:55	2.0	50.0	7.1	Plug mousehole w/ 25sx cement slurry @ 13.6ppg.
18:00	6.0	400.0	39.9	Mix & pump 140sx cement slurry @ 13.6ppg. Y - 1.6cuft/sk, MR - 7.4g/sk.
18:10				Shutdown / Release closing plug
18:16	6.5	250.0		Displace w/ freshwater
18:34	3.0	500.0	100.0	Slow rate to 3bpm
18:36		2,510.0	110.0	Bump plug. Final circulating pressure - 600psi
18:39				Bleed off, tool closed. 1.25bbl back to tank
18:40				Wash-up pumps & lines
18:45				JSA, discuss rigging down & racking up equipment
18:50				Rig down & rack up equipment
19:10				JSA, discuss journey management
19:15				Depart locn
				Thanks for calling Hurricane Services Inc

CREW		UNIT	SUMMARY		
Cementer:	Scott Green	74	Average Rate	Average Pressure	Total Fluid
Pump Operator:	Jeff	230	4.45455 bpm	488 psi	326 bbls
Bulk #1:	Kale Ochs	181 / 256			
Bulk #2:	Josh Mosier	67			