

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 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	C&M Exploration, LLC
Well Name	RACHEL DAVIDSON 31-1
Doc ID	1322704

All Electric Logs Run

Compensated Density / Neutron
Dual Induction
Microlog
Sonic
Cement Bond

Form	ACO1 - Well Completion
Operator	C&M Exploration, LLC
Well Name	RACHEL DAVIDSON 31-1
Doc ID	1322704

Perforations

Shots Per Foot	Perforation Record	Material Record	Depth
4	4266-4270	Acidized	4266-4270
4	4273-4280	Acidized	4273-4280

MBC WELL LOGGING LLC

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

Well Name: RACHEL DAVIDSON 31-1 C & M EXPLORATION LLC
 Location: PRATT COUNTY, KANSAS USA
 Licence Number: 35335
 Spud Date: 9-16-16
 Surface Coordinates: 2,120'fml, 198'fwi SEC 31-T27S-R11W
 Bottom Hole Coordinates: ELI WLS HAYES, KS DIL/MEL/SONIC/CDL/CNL/PE
 API-15-119-21314-00
 Ground Elevation (ft): 1726' K.B. Elevation (ft): 1737'
 Logged Interval (ft): 3400 To: 4514 Total Depth (ft): E-LOG4510
 Formation: RTD ARBUCKLE DOLO
 Type of Drilling Fluid: MUDCO BRAD BORTZ ENGINEER

Region: SOUTHFORK

Drilling Completed: 9-23-16

WW DRLG RIG 14 # 33575-CHARLES CRAWFORD COREP /GEO/SUPERVISOR

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






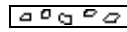


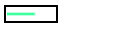

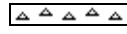
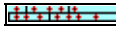


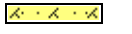






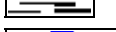

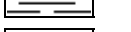










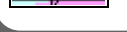


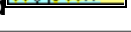
OPERATOR

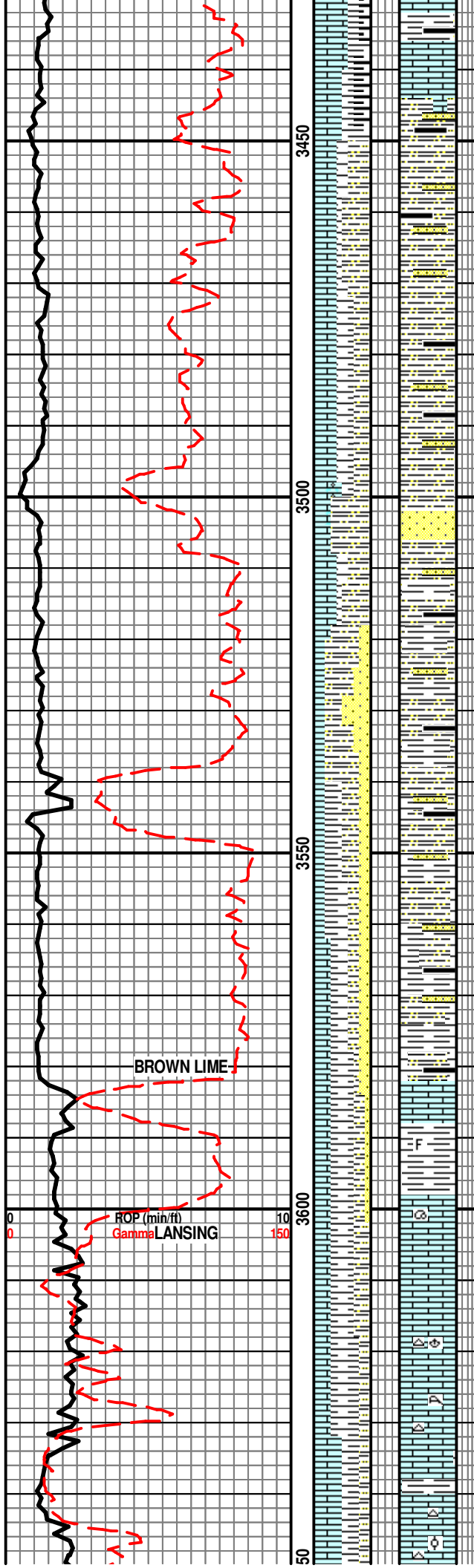
Company: C & M EXPLORATION LLC
 Address:

MUDLOGGER

Name: AUSTIN GARNER//TROY FOWLER
 Company: MBC WELL LOGGING LLC
 Address: 21156 RD 22 (620)873-2953
 MEADE, KANSAS 67864

ROCK TYPES

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



LS- TN GY BUFF, HRD DNS TO BRITT, F/VF-XLN, SUCRO TO SLI CHLKY, POSS DOLO IP, DLL YEL FLO, PR VUG POR IP, NO VIS CUT OR SHOW

SNDY SH- GY DRK GY, FRM BRITT, GRNY BLKY TO PLTY, TRS OF DISS BLK SH, TRS OF MICA, VVF SS STRNGS IP, SDM YEL FLO IP, NO VIS POR, NO VIS CUT OR SHOW

SNDY SH- GY TN, FRM BRITT, GRNY TO PLTY, DISS TO LAMN BL SH, SME SPOTTY GY SH IP, TRS OF MICA, CARBY, SS STRNGS IP, YEL FLO IP, NO VIS POR, NO VIS CUT OR SHOW

SS- CLR FRSTY TO LT GY, TT TO SLI FRI, VVF-QRTZ GRNS, WELL SORTD, CONSOLIDATED BLKY, SILC CMNT, SILTY IP, TRS OF MICA, IMBD TO DISS BLK SH/ ORGANIC MATTER POSS CARBY, NO VIS FLO, NO VIS POR OR SHOW, NO DET ODOR

SNDY SH- MOUSY GY DRK GY BLK TO BRN, FRM BRITT TO SFT, GRNY TO BLKY, SILTY IP, TRS OF MICA, TRS OF IMBD TO DISS BLK CARBY SH, SME DRK GY BLKY SH IP

SH- GY DRK GY GRN BLK TO BRN, FRM BRITT TO SFT, SMTH BLKY GRNY, GUMMY IP. TRS OF CARB, SNDY IP, TRS OF MICA, CALC IP

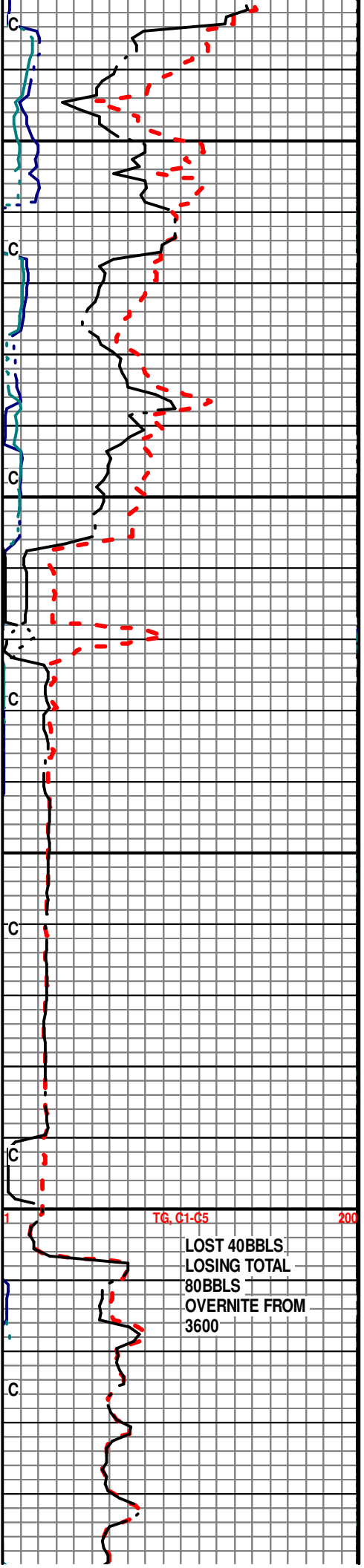
BROWN LM 3582-1845ss

LS- TN BRN GY TO BUFF, HRD DNS, F/VF-XLN, SUB-SUCRO TO SLI CHLKY, TRS OF FOSS FRAGS, TN CHRT IP, YEL MIN FLO, NO VIS POR, NO VIS CUT OR SHOW, NO ODOR

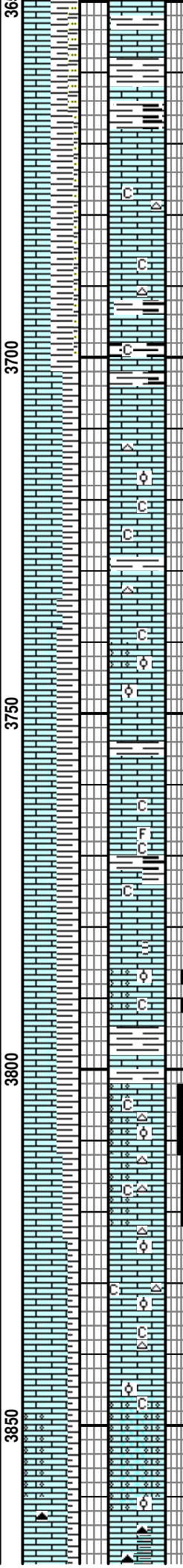
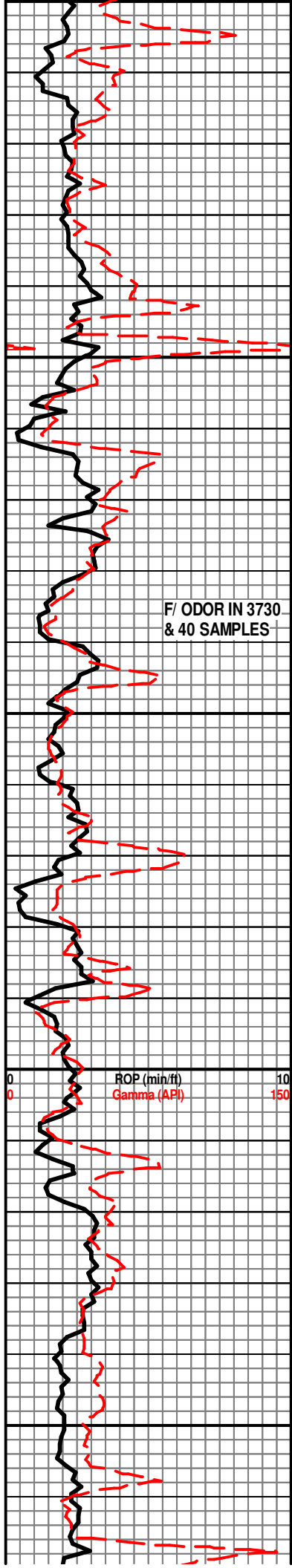
LANSING 3601-1864ss

LS- CRM OFF WHTBRN TO LT GY, HRD DNS TO BRITT, F/VF-XLN, SUCRO TO CHLKY, TRS OF FOSS FRAGS, DLL YEL MIN FLO, NO VIS POR, NO VIS CUT OR SHOW, NO ODOR

LS- TN BRN OFF WHT TO LT TN, HRD BRITT, F/V-XLN, SUB-SUCRO TO CHLKY, TRS OF TN CHRT, F/TRS OF OOL, NO VIS FLO, PR MICRO-PP POR



TG, C1-C5 200
 LOST 40BBLs
 LOSING TOTAL
 80BBLs
 OVERNITE FROM
 3600



IP, NO VIS CUT OR SHOW, NO DET ODOR

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

LS- TN GY OFF WHT TO BUFF, HRD DNS TO BRITT, F-XLN, SUCRO TO CHLKY IP, F/TRS OF OOL, TN GY SEMI OPAQ CHRT, DLL SPOTTY YEL MIN FLO, NO VIS POR, NO VIS CUT OR SHOW, FAINT GASSY ODOR

LS- CRM OFF WHT TO LT TN, HRD DNS TO BRITT, F-XLN, SUB-SUCRO TO CHLKY IP, TRS OF OOL SME IN TN CHRT, DLL YEL MIN FLO IP TO NO VIS FLO THRU, PR MICRO-PP POR, NO VIS CUT OR SHOW, NO ODOR

LS- CRM TN TO BUFF, HRD DNS, F-XLN, CHLKY IP, TN SEMI OPAQ CHRT W/ FOSS FRAGS, DLL YEL MIN FLO IP, NO VIS POR, NO VIS CUT OR SHOW

SH- DRK GY BLK, FRM BRITT, SMTH SPLNTY, TRS OF PYR NODS, CARBY

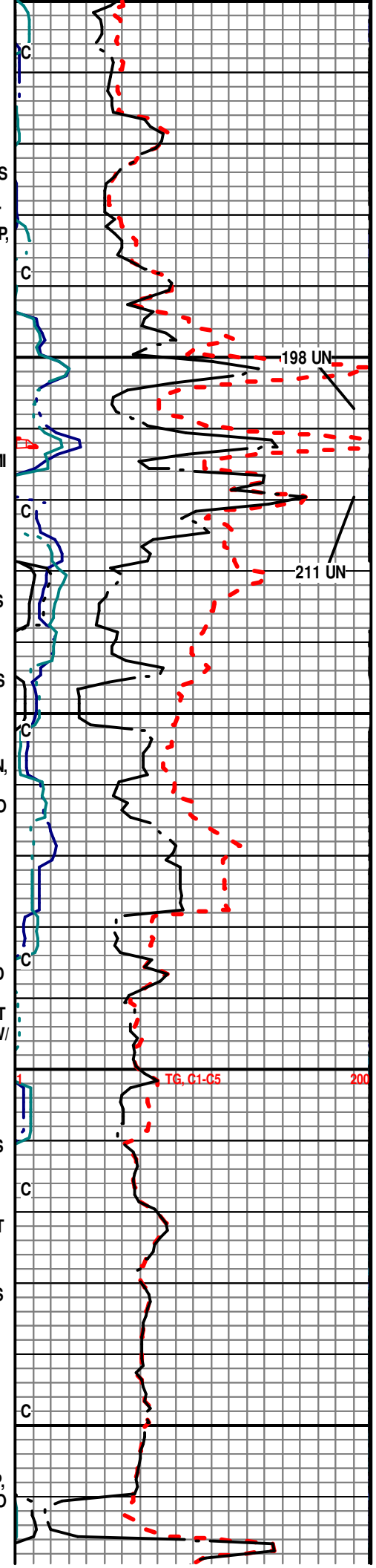
LS- CRM OFF WHT BRN TO LT TN, HRD DNS TO BRITT, F-XLN TO SLI RE-XLN, SUB-SUCRO TO CHLKY, OOLITIC IP, LT TN TO GY SEMI OPAQ CHRT IP SME W/ OOL, SPOTTY DLL YEL MIN FLO, PR VUG TO MICRO-PP POR, NO VIS CUT OR SHOW, NO ODOR

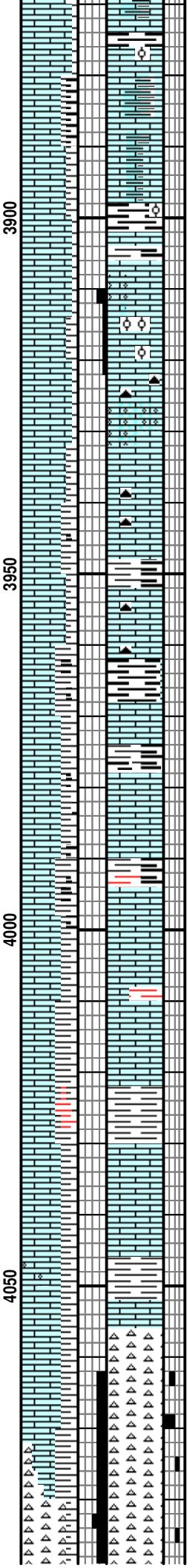
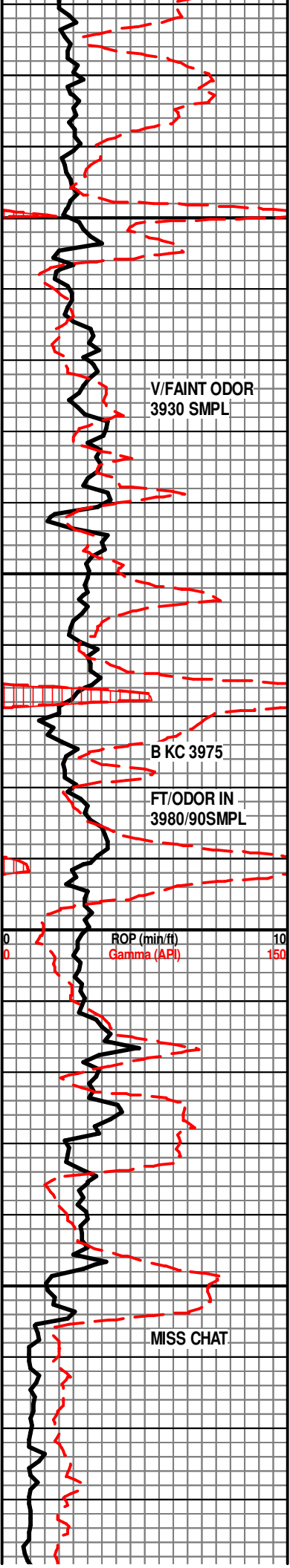
LS- CRM OFF WHT TO LT TN, HRD DNS TO BRITT, F-XLN, CHLKY, OOLITIC IP, TN OPAQ CHRT IP SME W/ OOL, SPOTTY DLL YEL MIN FLO TO PALE GLD FLO, OOLCAST POR, NO VIS CUT OR SHOW, NO ODOR

LS- CRM OFF WHT TO LT TN, HRD DNS TO BRITT, F-XLN, SUB-SUCRO TO CHLKY, TRS OF OOL F/SORTD, DLL YEL MUSTARD FLO, PR OOLCASTIC POR, NO VIS CUT OR SHOW

LS; LT TN, P/SRTDS VF-LWR MED HEAVY RIM COATED OOL, RD TO ELIP, CLR VF XTL SPAR CMT, SME CHLK, NO ODOR, MFNSOC

DK TN HD DNS XLN SHLY FRAC LS





W/SME COMNGLD CHLK, TR SHELL PRINTS
 BLK CARB SH

LS; CRM-TN F-XLN, CHLKY EDGES

LS; OFF WH, SLI BUFF, GRITTY, CMTED SPAR NODS, SME SHADOW OOL, CHLKY IP, NO VIS POR, V/WEAK ODOR, PP & SCATT BLK ASPH TO D.O.S. FAINT GOLD FLOR, NO CUT WET, TR GAS BUBL AFTER SITTING IN H2O, FLASH CUT DRY

MED TO LT TN HD DNS XLN W/CALCITE FRAC FILL, INCRS CHT,

SH; BLK CARB SME GY & GRN

LS; TN FOSS FRGMTL, PYR

SH; LT GY SME GRN, SME BLK, FRM BLKY, SME HD SLTY SNDY TR GRNWH SS NO SHOW

BKC 3956-2219ss

DK CHOC TO TN HD DNS XLN SME LMY DK BRN SH

LS; GRN TO TN HD XLN SME CHOR

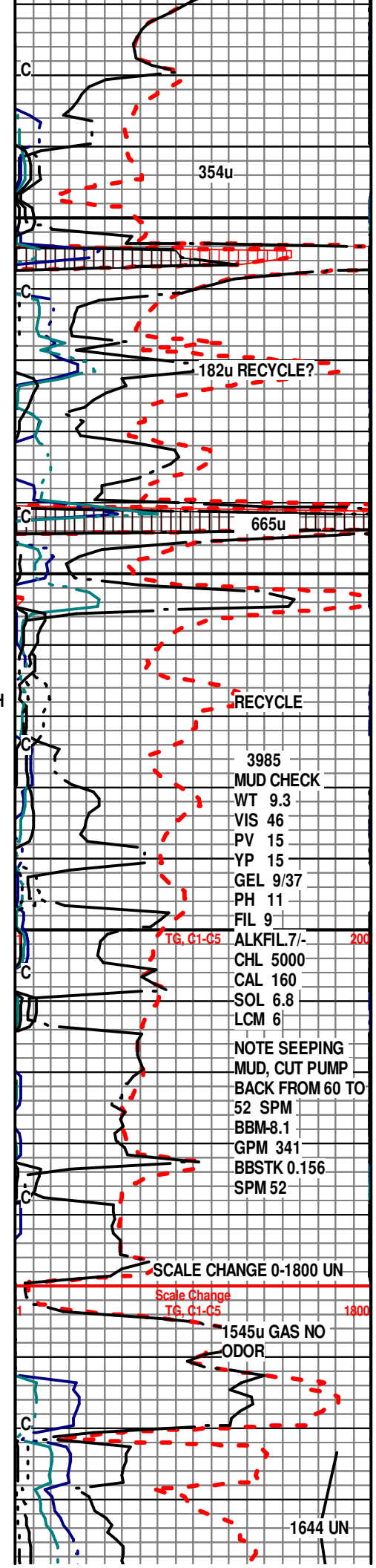
LS; GY TN HD DNS FLAKEY XLN, SLI SHLY, LAM GRN CLAY, TR REDISH SLTY SH NO ODOR MFNSOC

LS; LT TN CRYP XLN, FRAC, CHJOR, SME LT GRN SH, SCATT GOLD FLOR, NO ODOR, NSOC

SH; GY MED GY SLI GRN W/ABDT FOSS FRGMTL LS

MISS 4056-2361ss

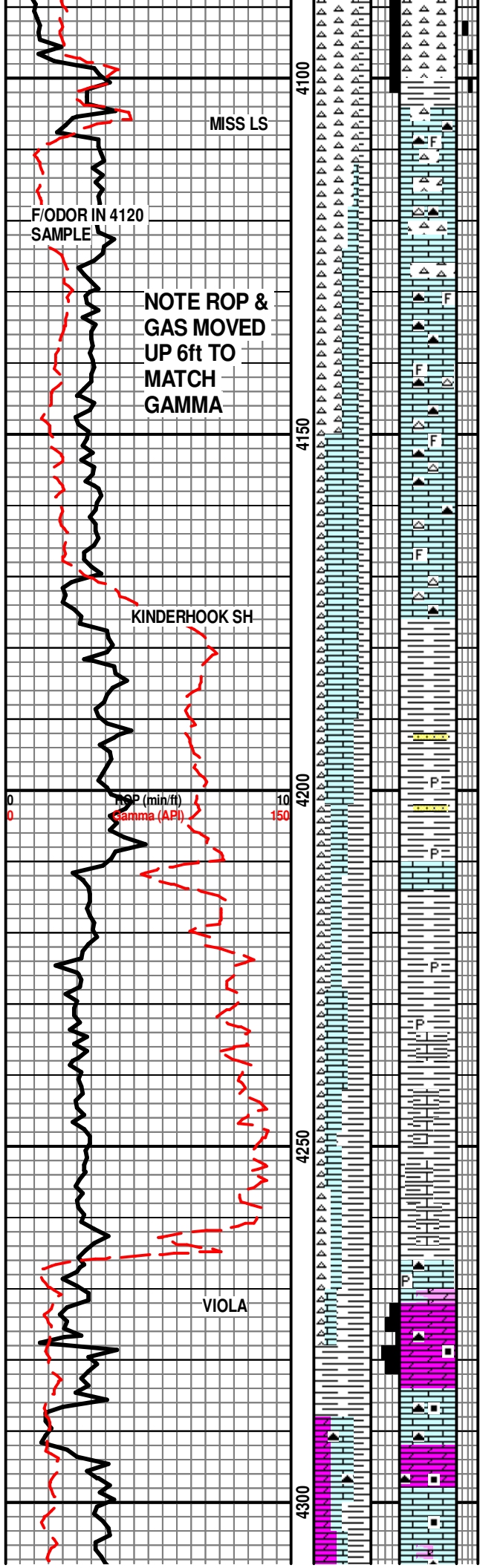
CHAT; MOTT WH, OPAQ, BRN, TRIP, SHADOW FOSS, MOTT BRN STNG, SME GILSI, SME D.O.S. NO ODOR, FEW GAS BUBLS, SME VIT CHRT W/SPICULES, MED GOLD TO PURPLISH GOLD FLOR, SLO MILKY CUT ON WET PCES, FLASH STRMG MILKY CUT "DRY"



3985
 MUD CHECK
 WT 9.3
 VIS 46
 PV 15
 YP 15
 GEL 9/37
 PH 11
 FIL 9
 ALKFIL.7/-
 CHL 5000
 CAL 160
 SOL 6.8
 LCM 6

NOTE SEEPING
 MUD, CUT PUMP
 BACK FROM 60 TO
 52 SPM
 BBM-8.1
 GPM 341
 BBSTK 0.156
 SPM 52

SCALE CHANGE 0-1800 UN
 Scale Change
 TG, C1-C5



MISS LM 4098-2361ss

LS- TN BUFF TO OFF WHT, HRD DNS TO BRITT, F/VF-XLN, CHLKY IP, ABNDT TRS OF TN GY BRN WHT OPAQ CHRT, TRS OF FOSS FRAGS, DLL YEL MIN FLO, POSS PR VUG POR, NO VIS CUT OR SHOW

LS- TN OFF WHT, HRD DNS TO BRITT, F/VF-XLN, CHLKY IP, ABNDT TRS OF TN GY BRN WHT OPAQ CHRT, F/FOSS FRAGS, DLL YEL MIN FLO, NO VIS POR POR, NO VIS CUT OR SHOW

LS- TN BRN OFF WHT TO MOTT, HRD DNS, F-XLN, SUB-CHLKY IP, ABNDT TRS OF TN GY BRN WHT OPAQ CHRT, F/FOSS FRAGS, DLL YEL MIN FLO, NO VIS POR POR, NO VIS CUT OR SHOW

KINDHK 4174-2437ss

SH- MOUSY GY DRK GY GRN TO BLK, FRM BRITT, SMTH BLKY TO GRNY, POSS CALC IP, RATTY

SH- DAUB GY DRK GY GRN, FRM BRITT, SMTH BLKY TO GRNY, CALC IP, TRS OF PYR, SILTY IP POSS SS STRNGS

LS- GY OFF WHT, HRD BRITT, SUB-CHLKY, SHLY IP, NO VIS FLO, NO VIS POR, NO VIS CUT OR SHOW

SH- GY DRK GY, FRM BRITT TO SFT, SMTH BLKY TO GUMMY IP, SILTY TO CALC, TRS OF PYR

SH MED GY GY, BLKY, PYR, SME SLOW CALC OCC LS STRINGERR

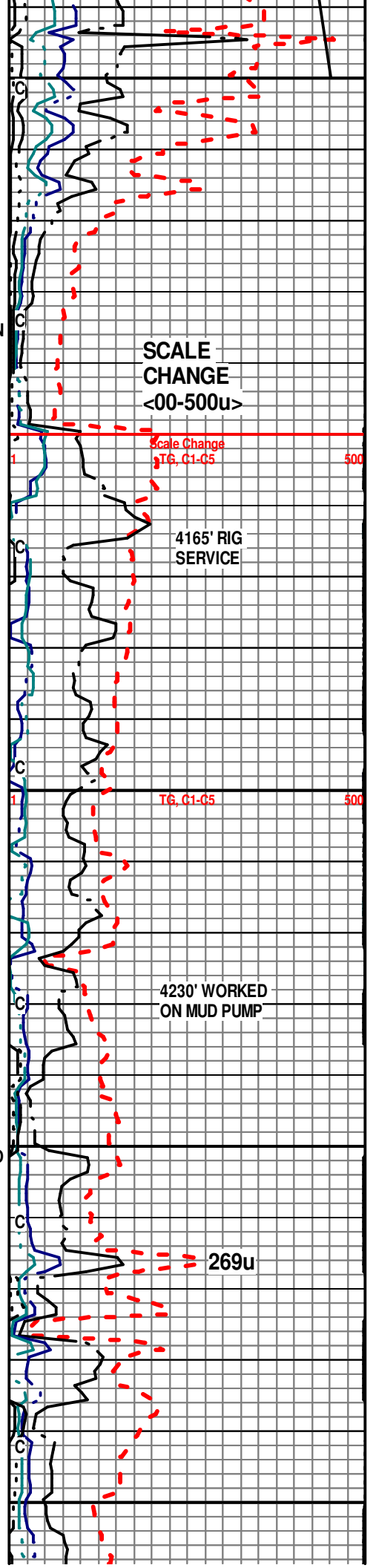
SH; GY DK GY SMO, W/VF PLELL, TO BLKY-FLAKEY, LMY IP, PYR

VIOLA 4262-2525ss

LS; GY BRN HD DNS XLN

DOLO; LT GYSIH TO GYISH BRN, BRN, VF SUGARY, 60-70% INSOLUBLE PARTICLES, ABDT MOTT WH DK GY VIT CHT W/FOSS PCS, TR GAS BUBL AFTER 20min ON DOLO, TR OIL ON CRUSH (1), FAINT DISAPATING ODOR, DULL GOLD TO BLK FLOR, V/THIN SLO MILKY CUT, FLASH CUT ON "DRY" PCES

BRN DK BRN, HD XLN TO GLRNY F-XLN, B RN TO DK GY VIT CHT, SME



SCALE CHANGE
<00-500u>

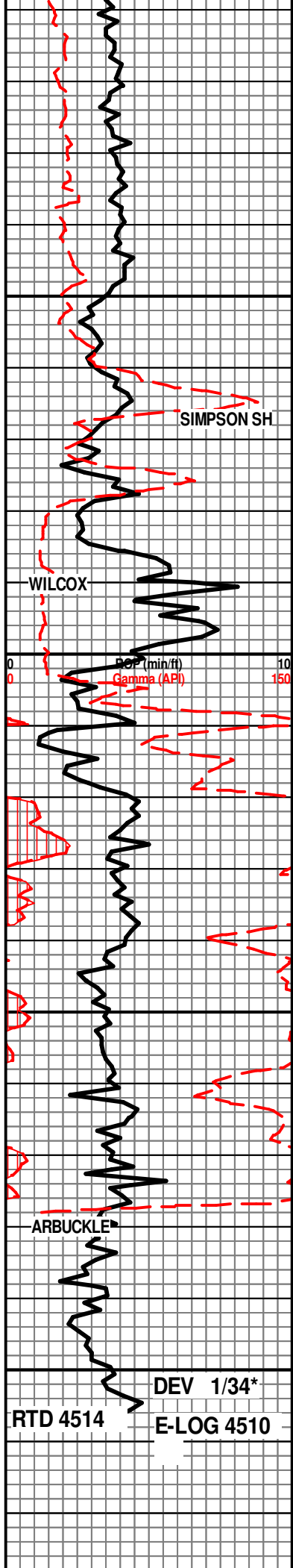
Scale Change
TG, C1-C5

4165' RIG SERVICE

TG, C1-C5

4230' WORKED ON MUD PUMP

269u



CHT W/DK GY MED SH NOD MIX, NO ODOR, SCATT DK YEL FLOR NSOC

M DKS BRN HD DNS CRYP XLN, SME BLK SPTS, SME PYR, DOLOMITIC IP, SCATT SHADOW FOSS FRGS NO SHOW

DOLO LS- TN OFF WHT GY TO BUFF, HRD DNS TO BRITT, F/VF-XLN, SUCRO TO CHLKY, TN GY SEMI OPAQ CHRT, TRS OF IMBD MICRO PYR, V/DLL YEL FLO, NO VIS POR, NO VIS CUT OR SHOW, NO DET ODOR

LS- TN BRN GY TO MOTT, HRD DNS TO BRITT IP, F/VF-XLN, SUB-CHLKY, ABNDT GY DRK GY CHRT, V/DLL YEL FLO, NO VIS POR, NO VIS CUT OR SHOW, NO DET ODOR

SIMPSON 4362-2625ss

SNDY DOLO- TN BRN, HRD DNS, M/F-GRNS FR/SORTD, MG RHOMBS, IMBD DISS BLK SH. NO VIS FLO, POSS PR INTERGRN TO INTER-XLN POR LOOKS TT, NO VIS CUT OR SHOW, NO DET ODOR

SS- OFF WHT CLR TO FRSTY, SLI TT TO FRI THRU, MED/F QRTZ GRNS, RND SUB-RND, FR/WELL SRTD, SILC CMNT TO CALC IP, TRS OF SFT WHT CHLK IP, TRS OF IMBD TO DISS BLK ORGANIC SH, PALE YEL FLO IP, FR/GD INTER-GRN POR, WEAK MILKY YEL FLUSH CUT, NO DET ODOR

SH; MOTT BRN-GY GRN, MICRO PELL IP, INCRS DK GY BRN TR LT PURPL, CALC SH

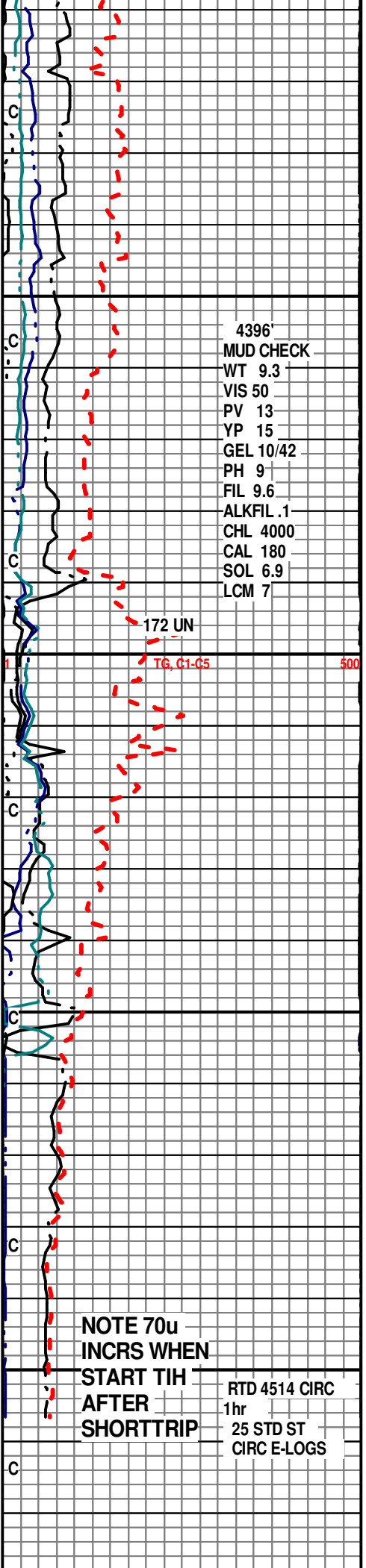
LS; MOTT BRN DBNS XLKN FRGMLT LS, PYR DOLOMITIC IP, NO SHOW

SS; OFF WH, SME LT BRN CAST, W/SRTD VF-F GR, S-RD, FRI TO HD TT, ABDT GLAU, SME PYR, MICRO CARB PCES, IP, TR OVER-ALL STNG, PP GILSN STNG, TR GAS BUBL, NO DET ODOR, FEW MED TO BRITE FYEL -SLI GRNISH FLOR, FLASH MILKEY CRUSH CUT "WET" INTGR POR 5-9% EST, BRITE GOLD HEAVY RESID CUT

LS; & DOLOMITIC LS, DK BRN, GRITTY, MICRO CARB MATL, BLK TO FAINTGOLD FLOR, NO ODOR, NSOC

DOLO; TN, BUFF, SME SLI GY, VF F LRHOMB, SME W/SHDW FOSS PCES, PYR, NO ODOR, MUSTARD GOLD FLOR, NSOC NO ODOR

THANKS FOR USING
MBC WELL LOGGING
AUSTIN & MARLA GARNER
& TROY FOWLER



4396'
MUD CHECK
WT 9.3
VIS 50
PV 13
YP 15
GEL 10/42
PH 9
FIL 9.6
ALKFIL .1
CHL 4000
CAL 180
SOL 6.9
LCM 7

172 UN

TG, C1-C5

500

NOTE 70u
INCRS WHEN
START TIH
AFTER
SHORTTRIP

RTD 4514 CIRC
1hr
25 STD ST
CIRC E-LOGS

RTD 4514 DEV 1/34* E-LOG 4510



PAGE	CUST NO	YARD #	INVOICE DATE
1 of 1	1010866	1718	09/26/2016
INVOICE NUMBER			
92234246			

Pratt (620) 672-1201
 B C & M EXPLORATION LLC
 I PO BOX 14331
 L TULSA
 L OK US 74159
 T
 O ATTN:

J LEASE NAME Rachel Davidson 31-1
 O LOCATION
 B COUNTY Pratt
 S STATE KS
 I JOB DESCRIPTION Cement-New Well Casing/Pi
 E JOB CONTACT

JOB #	EQUIPMENT #	PURCHASE ORDER NO.	TERMS	DUE DATE
40967461	27463-0		Cash Sale	09/26/2016

	QTY	U of M	UNIT PRICE	INVOICE AMOUNT
For Service Dates: 09/17/2016 to 09/17/2016				
0040967461				
171814019A Cement-New Well Casing/Pi 09/17/2016 CNW 8 5/8 Surface				
60/40 POZ	350.00	EA	7.20	2,520.00 T
Celloflake	88.00	EA	2.22	195.36 T
Calcium Chloride	903.00	EA	0.63	568.89 T
Wodden Cement Plug 8 5/8	1.00	EA	96.00	96.00
Flapper Type Insert Float Valve 8 5/8"	1.00	EA	168.00	168.00
Sugar	100.00	EA	3.00	300.00 T
"Unit Mileage Chg (PU, cars one way)"	6.00	MI	2.70	16.20
Heavy Equipment Mileage	12.00	MI	4.50	54.00
"Proppant & Bulk Del. Chgs., per ton mil	90.30	EA	1.50	135.45
Depth Charge; 0-500'	1.00	EA	600.00	600.00
Blending & Mixing Service Charge	350.00	BAG	0.84	294.00
"Service Supervisor, first 8 hrs on loc.	1.00	EA	105.00	105.00
Plug Container Utilization	1.00	EA	150.00	150.00

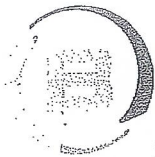
PAID IN FULL

PLEASE REMIT TO:	SEND OTHER CORRESPONDENCE TO:	SUB TOTAL	5,202.90
BASIC ENERGY SERVICES, LP	BASIC ENERGY SERVICES, LP	TAX	295.70
PO BOX 841903	801 CHERRY ST, STE 2100	INVOICE TOTAL	5,498.60
DALLAS, TX 75284-1903	FORT WORTH, TX 76102		

92234246

40967461

FIELD SERVICE TICKET
1718 14019 A



BASICSM
ENERGY SERVICES
PRESSURE PUMPING & WIRELINE

10244 NE Hwy. 61
P.O. Box 8613
Pratt, Kansas 67124
Phone 620-672-1201

31-27-11 DATE TICKET NO.

DATE OF JOB 9-17-16	DISTRICT KANSAS	NEW WELL <input checked="" type="checkbox"/>	OLD WELL <input type="checkbox"/>	PROD <input type="checkbox"/>	INJ <input type="checkbox"/>	WDW <input type="checkbox"/>	CUSTOMER ORDER NO.:		
CUSTOMER CAM EXPLORATION LLC		LEASE RACHEL DAVIDSON				WELL NO 31-1			
ADDRESS		COUNTY PRATT		STATE KS					
CITY		STATE		SERVICE CREW MCNUL PIERCE ADAMS					
AUTHORIZED BY PHO CHECK # 1026		JOB TYPE: CNW 85/8 SURFACE							
EQUIPMENT#	HRS	EQUIPMENT#	HRS	EQUIPMENT#	HRS	TRUCK CALLED	DATE	AM PM	TIME
27463	3/4					ARRIVED AT JOB		AM PM	9:30
19918	1/2					START OPERATION		AM PM	1:30
						FINISH OPERATION		AM PM	1:45
						RELEASED		AM PM	
						MILES FROM STATION TO WELL			13

CONTRACT CONDITIONS: (This contract must be signed before the job is commenced or merchandise is delivered).

The undersigned is authorized to execute this contract as an agent of the customer. As such, the undersigned agrees and acknowledges that this contract for services, materials, products, and/or supplies includes all of and only those terms and conditions appearing on the front and back of this document. No additional or substitute terms and/or conditions shall become a part of this contract without the written consent of an officer of Basic Energy Services LP.

SIGNED: *[Signature]*
(WELL OWNER, OPERATOR, CONTRACTOR OR AGENT)

ITEM/PRICE REF. NO.	MATERIAL, EQUIPMENT AND SERVICES USED	UNIT	QUANTITY	UNIT PRICE	\$ AMOUNT
CP103	60/40 P02	SK	350		4200 -
CC102	CELLOFLAKE	lb	88		325 60
CC109	CALCIUM CHLORIDE	lb	903		948 15
CF153	WOODEN CEMENT PAUL 85/8	EA	1		160 -
CF143	FLAPPER TYPE INSERT FLOAT VALVE 85/8	EA	1		280 -
CC131	SUGAR	lb	100		500 -
E100	P.V. MILEAGE	MI	6		27 -
E101	HEAVY EQUIPMENT MILEAGE	MI	12		90 -
E113	PROPAGANT BULK DELIVERY	T/M	90		225 75
CE200	DEPTH CHARGE 0-500'	EA	1		1000 -
CE240	BLENDED & MIXING SERVICE CHARGE	SK	350		490 -
S003	SERVICE SUPERVISOR	EA	1		125 -
CE504	PAUL CONTAINER UTILIZATION	EA	1		250 -
SUB TOTAL					8671 50

CHEMICAL / ACID DATA:			

SERVICE & EQUIPMENT	%TAX ON \$	
MATERIALS	%TAX ON \$	
TOTAL		4702 90 5202 90

DISCOUNTED PRICE + TAX: *[Signature]*

SERVICE REPRESENTATIVE: <i>[Signature]</i>	THE ABOVE MATERIAL AND SERVICE ORDERED BY CUSTOMER AND RECEIVED BY: <i>[Signature]</i> (WELL OWNER OPERATOR CONTRACTOR OR AGENT)
--	---

FIELD SERVICE ORDER NO.

BASIC

energy services, L.P.

TREATMENT REPORT

Customer <i>CEM EXPORTATION LLC</i>	Lease No.	Date <i>9-17-16</i>
Lease <i>RACHEL DAVIDSON</i>	Well # <i>31-1</i>	
Field Order # <i>19019</i>	Station <i>PRATT K</i>	Casing <i>8 5/8</i>
Type Job <i>CNW SURFACE 8 5/8</i>	Depth	County <i>PRATT</i>
	Formation	State <i>K</i>
		Legal Description <i>31-27-11</i>

PIPE DATA		PERFORATING DATA		FLUID USED		TREATMENT RESUME		
Casing Size <i>8 5/8</i>	Tubing Size	Shots/Ft		Acid <i>350SK 60/40 PZ</i>	RATE	PRESS	ISIP	
Depth	Depth	From	To	Pre. Pad <i>2% BENTONITE GEL</i>	Max		5 Min.	
Volume	Volume	From	To	Pad <i>3% CALCIUM CHLORIDE</i>	Min		10 Min.	
Max Press	Max Press	From	To	Frac <i>1.5% CELLULOSE</i>	Avg		15 Min.	
Well Connection	Annulus Vol.	From	To		HHP Used		Annulus Pressure	
Plug Depth	Packer Depth	From	To	Flush	Gas Volume		Total Load	

Customer Representative	Station Manager <i>GORDLEY</i>	Treater <i>MCGWIRE</i>
Service Units <i>70752</i>	<i>27463</i>	<i>19889-19918</i>
Driver Names <i>MCGWIRE</i>	<i>FISKE</i>	<i>TODD</i>

Time	Casing Pressure	Tubing Pressure	Bbls. Pumped	Rate	Service Log
					<i>COO LOCATION SAFETY MTC</i>
					<i>DROP BALL</i>
					<i>RIG UP TO CASING</i>
<i>1340</i>			<i>5</i>	<i>3</i>	<i>START H2O AHEAD</i>
<i>1342</i>				<i>35</i>	<i>MIX 350 SK @ 148</i>
<i>1405</i>			<i>77</i>		<i>SHUT DOWN DROP PLUG</i>
				<i>35</i>	<i>START DISPACEMENT</i>
					<i>CIRC CEMENT TO PBT</i>
<i>1415</i>	<i>200</i>		<i>165</i>		<i>SHUT DOWN</i>
					<i>JOB COMPLETE</i>
					<i>THANK YOU</i>



PAGE	CUST NO	YARD #	INVOICE DATE
1 of 1	1010866	1718	09/26/2016
INVOICE NUMBER			
92234352			

Pratt (620) 672-1201
 B C & M EXPLORATION LLC
 I PO BOX 14331
 L TULSA
 L OK US 74159
 T
 O ATTN:

J LEASE NAME Rachel Davidson 31-1
 O LOCATION
 B COUNTY Pratt
 S STATE KS
 I JOB DESCRIPTION Cement-New Well Casing/Pi
 T
 E JOB CONTACT

JOB #	EQUIPMENT #	PURCHASE ORDER NO.	TERMS	DUE DATE
40967486	27463-0		Cash Sale	09/26/2016

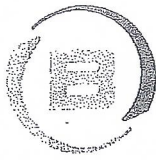
	QTY	U of M	UNIT PRICE	INVOICE AMOUNT
For Service Dates: 09/24/2016 to 09/24/2016				
0040967486				
171813973A Cement-New Well Casing/Pi 09/24/2016 CNW 5 1/2 Long String				
AA-2 CMT	175.00	EA	9.35	1,636.25 T
60/40 POZ	30.00	EA	6.60	198.00 T
Celloflake	44.00	EA	2.04	89.54 T
Salt	812.00	EA	0.28	223.30 T
Cement Friction Reducer	50.00	EA	3.30	165.00 T
FLA-327	50.00	EA	4.13	206.25 T
Gilsonite	875.00	EA	0.37	322.44 T
5 1/2" Latchdown Plug & Baffle	1.00	EA	220.00	220.00
5 1/2" Autofill Float Shoe	1.00	EA	198.00	198.00
5 1/2" Turbolizer	9.00	EA	60.50	544.50
Mud Flush	500.00	EA	0.83	412.50 T
Sugar	100.00	EA	2.75	275.00 T
"Unit Mileage Chg (PU, cars one way)"	6.00	MI	2.48	14.85
Heavy Equipment Mileage	12.00	MI	4.13	49.50
"Proppant & Bulk Del. Chgs., per ton mil	57.30	EA	1.38	78.79
Depth Charge; 4001-5000'	1.00	EA	1,386.00	1,386.00
Blending & Mixing Service Charge	205.00	BAG	0.77	157.85
"Service Supervisor, first 8 hrs on loc.	1.00	EA	96.25	96.25
Plug Container	1.00	EA	137.50	137.50

PAID IN FULL

PLEASE REMIT TO:	SEND OTHER CORRESPONDENCE TO:	SUB TOTAL	6,411.52
BASIC ENERGY SERVICES, LP	BASIC ENERGY SERVICES, LP	TAX	291.08
PO BOX 841903	801 CHERRY ST, STE 2100	INVOICE TOTAL	6,702.60
DALLAS, TX 75284-1903	FORT WORTH, TX 76102		

42234352

40967486



BASIC
ENERGY SERVICES
PRESSURE PUMPING & WIRELINE

10244 NE Hwy. 61
P.O. Box 8613
Pratt, Kansas 67124
Phone 620-672-1201

DATE 10000

FIELD SERVICE TICKET
1718 13973 A

DATE _____ TICKET NO. _____

DATE OF JOB 9-24-16 DISTRICT Pratt				NEW WELL <input checked="" type="checkbox"/> OLD WELL <input type="checkbox"/> PROD <input type="checkbox"/> INJ <input type="checkbox"/> WDW <input type="checkbox"/> CUSTOMER ORDER NO.:			
CUSTOMER CAM Exploration				LEASE Rachel Davidson		WELL NO. 317	
ADDRESS				COUNTY Pratt		STATE KS	
CITY STATE				SERVICE CREW MATTAI ANTHONY MARTINEZ			
AUTHORIZED BY				JOB TYPE: CON 5 1/2 LONG STAIRS			
EQUIPMENT#	HRS	EQUIPMENT#	HRS	EQUIPMENT#	HRS	TRUCK CALLED	DATE 9-24-16 TIME 11:30
27463 X	1					ARRIVED AT JOB	TIME 1:40
19860 X	0.5					START OPERATION	TIME 3:30
						FINISH OPERATION	TIME 4:30
						RELEASED	TIME 5:30
						MILES FROM STATION TO WELL	6

CONTRACT CONDITIONS: (This contract must be signed before the job is commenced or merchandise is delivered).

The undersigned is authorized to execute this contract as an agent of the customer. As such, the undersigned agrees and acknowledges that this contract for services, materials, products, and/or supplies includes all of and only those terms and conditions appearing on the front and back of this document. No additional oral or written terms and/or conditions shall become a part of this contract without the written consent of an officer of Basic Energy Services LP.

SIGNED: *[Signature]*
(WELL OWNER, OPERATOR, CONTRACTOR OR AGENT)

ITEM/PRICE REF. NO.	MATERIAL, EQUIPMENT AND SERVICES USED	UNIT	QUANTITY	UNIT PRICE	\$ AMOUNT
CP 105	AA-2 cement	SK	175		2,975 00
CP 103	60/40 P02	SK	30		360 00
CC 102	cellulose	lb	44		162 80
CC 111	SALT	lb	812		406 00
CC 112	CMF friction reducer	lb	50		300 00
CC 124	PIA-327	lb	50		375 00
CC 201	Gilsonite	lb	875		586 25
CF 607	LATCH DOWN Plug + bucket 5 1/2	EA	1		400 00
CF 1251	AUTO FILL FIDAT SHOP 5 1/2	EA	1		360 00
CF 1651	TURBOLIZER 5 1/2	EA	9		990 00
CC 151	Mud Flush	gal	500		750 00
CC 131	SUGAR	lb	500		350 00
E 150	PIG miles	mi	6		27 00
E 101	Heavy eq. miles	mi	12		90 00
E 113	Prod + bulk del	TN	57.3		143 25
CE 235	DEPTH charger 4001-5000'	4hr	1		2,520 00
CE 240	blend + mix charger	SK	205		287 00
S 003	Supervisor	EA	1		175 00
CE 534	plug container	DB	1		250 00
SUB TOTAL					11,407 30

CHEMICAL / ACID DATA:			

SERVICE & EQUIPMENT	%TAX ON \$	
MATERIALS	%TAX ON \$	
TOTAL		6,702 60

SERVICE REPRESENTATIVE Mike Mattai	THE ABOVE MATERIAL AND SERVICE ORDERED BY CUSTOMER AND RECEIVED BY: <i>[Signature]</i> (WELL OWNER OPERATOR CONTRACTOR OR AGENT)
---	---

FIELD SERVICE ORDER NO.

Customer CTM EXPLOIATION	Lease No.	Date 9-24-16
Lease Rachel Davidson	Well # 31-1	
Field Order # 13473	Station Pratt	Casing 5 1/2 Depth 4501 County Pratt State KS
Type Job CNW 5 1/2 long string	Formation	Legal Description 31-275-11W

PIPE DATA		PERFORATING DATA		FLUID USED		TREATMENT RESUME		
Casing Size 5 1/2	Tubing Size	Shots/Ft		Acid CNT 175 SKS	AA-2	RATE .25 CF	PRESS 10% SALT	ISIP .3% FRICTUM
Depth 4501	Depth	From	To	Pre Pad	Max	.3%	FLUID LOSS	5 Min. 5 PPS SILSOL
Volume 107.1	Volume	From	To	Pad 50 SM	Min	60/40 PZ	2%	10 Min. 9-21
Max Press 1500	Max Press	From	To	Frac	Avg			15 Min.
Well Connection P.C.	Annulus Vol.	From	To		HHP Used			Annulus Pressure
Plug Depth 4480.67	Packer Depth	From	To	Flush	Gas Volume			Total Load

Customer Representative Charles Crowford	Station Manager Kevin Goldroy	Treater Mike Mattel
Service Units 37580	27463	84980 19860
Driver Names Mattel	ANTHONY	MARTINEZ

Time	Casing Pressure	Tubing Pressure	Bbls. Pumped	Rate	Service Log
1:40 PM					ON LOCATION, SARRY MEETING
2:30					TURBOS ON 2, 5, 8, 11, 14, 17, 20, 23, 26
2:42					CSNG ON BOTTOM
3:30	200		3	5	HOOK TO CSNG / BREAK CIRC W. RIG
3:31	200		12	5	PUMP 12 bbl AND FLUSH
3:36	200		42	4.5	MIX 175 SKS AA-2
3:50	-		4	3	RELEASE PLUG / WASH PUMP + LIFT
3:55	100		-	3	START DISPLACEMENT
4:20	200		80	2	LIFT PRESSURE
4:28				2	SLOW RATE
4:30				-	PLUG DOWN, RELEASED + LIFT
			7.5	2	PLUG FAT + PROUSE HOLDING
					JOB COMPLETE
					THANK YOU,
					MIKE MATTEL
					JAKE + DANIEL



10213 Bluestem Blvd.
 P.O. Box 464
 Pratt, KS 67124

Invoice

Date	Invoice #
10/20/2016	1812

Bill To
C&M EXPLORATION LLC. PO Box 14331 Tulsa, OK 74159

PAID #1032
 (A/R) #19

Lease Name
Rachel Davidson 31-1

Unit #	Terms	Job Type
1	Net 30	completion

Quantity	Description	Rate	Amount
	OCTOBER 17, 2016 To location and rigged up. Hooked up casing jars and swab lines. Shut in and shut down for the day.		
3	Rig #1 - Single/Double	185.00	555.00T
	OCTOBER 18, 2016 To location and hooked up swab tee and started swabbing. Swabbed well down. Laid down swab and put head, head adapter and orbit valve on. Put 20 BBLS 5% KCL water down casing. Unloaded rods and tubing. Rigged up perforators and perforated @ 4266'-70' and 4273'-80'. Rigged down perforators and took orbit valve and adapter off. Tallied and ran packer and tubing. Set packer @ 4240'. Broke down casing swab and hooked up tubing swab. Ran and tagged fluid @ 2850'. Swabbed well down and hooked up acid truck. Treated well with 2500 gals, 20% MCA, 40 BBLS, 5% KCL flush - 101 BBLS total load. Rigged down acid truck and released packer. Ran 2 Jts to knock perf balls down. Pulled 2 Jts and set slips and packed head off. Shut well in and shut down for the day.		
13	Rig #1 - Single/Double	185.00	2,405.00T
1	POWER TUBING TONGS - per trip	65.00	65.00T
1	THREAD DOPE	50.00	50.00T
1	CASING SWAB TOOLS	100.00	100.00T
3	OIL SAVER RUBBERS	21.00	63.00T
15	5 1/2" V Ring	19.25	288.75T
7	2 7/8" MV swab cup	27.00	189.00T
1	SWAB LINE - PER DAY	115.00	115.00T

Please make checks payable to:
 American Well Service, LLC.
 PO Box 464
 Pratt, KS 67124
 Office - (620)672-5625

Sales Tax (0.0%)
Total
Payments/Credits
Balance Due



10213 Bluestem Blvd.
P.O. Box 464
Pratt, KS 67124

Invoice

Date	Invoice #
10/20/2016	1812

Bill To
C&M EXPLORATION LLC. PO Box 14331 Tulsa, OK 74159

Lease Name
Rachel Davidson 31-1

Unit #	Terms	Job Type
1	Net 30	completion

Quantity	Description	Rate	Amount
3	CLEANING SOLVENT OCTOBER 19, 2016 To location and hooked up swab tree and started swabbing. Tagged fluid @ 1950'. Swabbed well down to 3600', swabbed 98 BBLS total. Broke down swab and unset slips. Pulled tubing, then ran tubing and landed SN @ 4268'. Packed off well head, shut well in and shut down for the day.	4.00	12.00
13.5	Rig #1 - Single/Double	185.00	2,497.50T
2	POWER TUBING TONGS - per trip	65.00	130.00T
1	THREAD DOPE	50.00	50.00T
6	OIL SAVER RUBBERS	21.00	126.00T
10	2 7/8" TA swab cup	26.88	268.80T
6	2 7/8" MV swab cup	27.00	162.00T
1	SWAB LINE - PER DAY	115.00	115.00T
4	CLEANING SOLVENT OCTOBER 20, 2016 To location and rigged for rods. Ran pump & rods in singles. Tagged Bottom and respaced well. Waited on PR, liner and liner head. Picked up tool, trash and swab lines. Put together PR and ran. Seated pump and loaded tubing. Longstroked well and pressured up tubing to 300#, it held. Tagged bottom and respaced well. Hung well on and plumbed in lead line. Rigged down and moved from location.	4.00	16.00
7.5	Rig #1 - Single/Double	185.00	1,387.50T
1	Rod Tongs - per trip	55.00	55.00T

Please make checks payable to:
American Well Service, LLC.
PO Box 464
Pratt, KS 67124
Office - (620)672-5625

Sales Tax (0.0%)

Total

Payments/Credits

Balance Due



10213 Bluestem Blvd.
 P.O. Box 464
 Pratt, KS 67124

Invoice

Date	Invoice #
10/20/2016	1812

Bill To
C&M EXPLORATION LLC. PO Box 14331 Tulsa, OK 74159

Lease Name
Rachel Davidson 31-1

Unit #	Terms	Job Type
1	Net 30	completion

Quantity	Description	Rate	Amount
2	CLEANING SOLVENT IN bull plug 29' x 2 7/8" tail Jt 2 7/8" perf sub 136 Jts-2 7/8" 1-10'x2 7/8" sub 6' GA 2 1/2"x1 1/2"x12' RWB 170-3/4" rods 1-2', 1-4'x3/4" subs 1 1/4"x16' PR w/ 1 1/2"x10' liner	4.00	8.00

Please make checks payable to: American Well Service, LLC. PO Box 464 Pratt, KS 67124 Office - (620)672-5625	Sales Tax (0.0%)	\$0.00
	Total	\$8,658.55
	Payments/Credits	\$0.00
	Balance Due	\$8,658.55
Terms, Net 30. Payments for invoices not received by due date will be subject to finance charge.		

Pro-Stim Chemicals, LLC

P.O. Box 247
Trenton, NE 69044-0247

Invoice

Date	Invoice #
10/24/2016	127243

Bill To
C & M EXPLORATION PO BOX 14331 TULSA, OK 74159

Ship To
RACHEL DAVIDSON 31-1

Requested By	Terms	Service Date	Lease
CHARLIE	Net 30	10/18/2016	R DAVIDSON 31-1

Quantity	Item Code	Description	Price Each	Amount
2,500	MCA ACID - 15%	GALLONS	1.33	3,325.00
40	KCL BIOCID - 2%	BRLS	3.82	152.80
		SUBTOTAL		3,477.80
	DISCOUNT		-20.00%	-695.56
1	BALL LAUNCHER		80.00	80.00
75	BALLS	EACH	2.10	157.50
1	DUMP JOB		158.00	158.00
2	TRUCK TIME	HOURS	95.00	190.00
		PACKER 4240		
		Sales Tax - PRATT CO.	8.25%	0.00

*PAID #1043
\$ 3,367.74
AFE #20*

Phone #	Fax #	E-mail	Total
308.334.5181		prostim@hotmail.com	\$3,367.74

Payment in full is due on the tenth day of the month. Interest of 24% per annum will be charged on all past-due balances. In the event of non-payment, customer will pay all costs of collection, including reasonable attorney fees and costs.

Pro-Stim Chemicals LLC

Acidizing Report

Customer: **CTM Exploration** Pro-Stim Chemical Yard: **Cunningham** Date: **10/18/16**
 Well Name & Number: **Rachel Davidson #31-1** Formation: **A17** Pro-Stim Number: **A17**
 County: **Pratt** State: **KS** Interval: _____

Well Type: Completion Recompletion Workover Oil Gas Water Disposal Perforation OH

Job Pumped Via: Tubing Casing Annulus CTU Combination Plug Depth: _____ Packer Depth: **4240**

Casing Size: **5 1/2** GRD: _____ WT: _____ Depth: _____ Tubing Size: **2 7/8** Spot: _____
 Casing Vol: _____ Tbg Vol: _____ Ann Vol: _____ OH Vol: _____ Total Displacement: **40**

Customer Representative Signature _____



3000 15# MCA
75 Balls
40 BBLS 2# KCL

Treatment Record

Time	Type Fluid	Rate BMP	Increment Vol Bbls	Cum Vol Bbls	Pressure		Observations
					Tubing	Casing	
1	Acid	4.5		6.5	0	0	Safety Meeting
3	Acid	4.5		12.0	0	0	Pre-Test to LET SET 10 MIN
5	Acid	4.5		19.5	0	0	
6	Acid	4.5		23.3	0	0	Well Loaded
7	Acid	0		23.6	900	0	
8	Acid	0		23.9	1100	0	100 PSI Per min
9	Acid	0		24.1	1500	0	100 PSI in 30 sec
14	Acid	0		24.3	1800	0	300 in 1 min
15	Acid	1.0		25	900	0	Started Balls
16	Acid	3.5		27	1200	0	
17	Acid	4.8		29	1100	0	
18	Acid	6.5		34	1200	0	
19	Acid	6.5		40	1150	0	
20	Acid	6.5		45	1150	0	
21	Acid	6.5		51	1400	0	
22	Acid	6.5		58	1600	0	
23	Acid	6.5		60	1650	0	Acid Gone
24	Flush	6.5		65	1900	0	
25	Flush	6.5		69	2200	0	Balled off
26	Flush	4.5		75	1500	0	
28	Flush	4.5		85	1800	0	Serged balls off
30	Flush	6.5		101	1250		Twice

Treatment Synopsis

Avg Inj Rate	Fluid BPM 5.5	Total Injected		H2O 40	Acid 60	Oil
Treating Pts	Max 2200	Final 1250	Avg 1300	ISIP 350	5'SI 170	10'SI 100
					20'SI 40	15'SI 40
				0-19 min	20 VAC	25
						30