KOLAR Document ID: 1457245

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 # 35263
Name: Enterra Resources, LLC
Address 1: PO BOX 5278
Address 2:
City: EDMOND State: OK Zip: 73083 + 5278
Contact Person: Les Evans
Phone: (405) 341-0005
CONTRACTOR: License # 35226
Name: Quest Drilling Services, LLC
Wellsite Geologist: Tim Hedrick (Earth-Tech)
Purchaser: Plains Marketing, LP

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 #:

11/16/2018 Spud Date or Recompletion Date
11/26/2018 Date Reached TD
12/20/2018 Completion Date or Recompletion Date

API No.: 15-189-22857-00-00
Spot Description:
NE - SW - SW - NE Sec. 13 Twp. 31 S. R. 35 ☐ East ☑ West
2080 Feet from ☑ North / ☐ South Line of Section
2030 Feet from ☑ East / ☐ West Line of Section
Footages Calculated from Nearest Outside Section Corner:
☑ NE ☐ NW ☐ SE ☐ SW
GPS Location: Lat: *(e.g. xx.xxxxx)* , Long: *(e.g. -xxx.xxxxx)*
Datum: ☐ NAD27 ☐ NAD83 ☐ WGS84
County: Stevens
Lease Name: RUELLA POTTS Well #: 4
Field Name: Lahey
Producing Formation: Morrow
Elevation: Ground: 2918 Kelly Bushing: 2925
Total Vertical Depth: 5472 Plug Back Total Depth: 5438
Amount of Surface Pipe Set and Cemented at: 1720 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: 4000 ppm Fluid volume: 370 bbls
Dewatering method used: Haul Off Pit
Location of fluid disposal if hauled offsite:
Operator Name: Triple LLC
Lease Name: Goertzen 31A-27 License #: 34889
Quarter NE Sec. 27 Twp. 29 S. R. 39 ☐ East ☑ West
County: Stanton Permit #: 32018

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: 04/11/2019
☐ **Confidential Release Date:**
☑ **Wireline Log Received** ☐ **Drill Stem Tests Received**
☑ **Geologist Report / Mud Logs Received**
☐ **UIC Distribution**
ALT ☑ **I** ☐ **II** ☐ **III** **Approved by:** Karen Ritter **Date:** 04/16/2019

Operator Name: Enterra Resources, LLC Lease Name: RUELLA POTTS Well #: 4

Sec. 13 Twp. 31 S. R. 35 ☐ East ☑ West County: Stevens

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 *(Attach Additional Sheets)*	☐ Yes	☑ No
Samples Sent to Geological Survey	☐ Yes	☑ No
Cores Taken	☐ Yes	☑ No
Electric Log Run	☑ Yes	☐ No
Geologist Report / Mud Logs	☑ Yes	☐ No

List All E. Logs Run:

Dual Induction
Dual Comp Porosity
Microresistivity

☑ Log Formation (Top), Depth and Datum ☐ Sample

Name	Top	Datum
Council Grove	2541	+384
Heebner	3986	-1061
Lansing	4110	-1185
Kansas City	4562	-1637
Marmaton	4785	-1860
Atoka	5179	-2254
Morrow	5316	-2391

CASING RECORD ☐ New ☑ 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
Surface	12.25	9.625	40	1720	A-CON/PP	550	CaCl 3%/2%
Production	8.75	7	26	5463	50/50 POZ	275	CaCl 10%

ADDITIONAL CEMENTING / SQUEEZE RECORD

Purpose:
☐ Perforate
☑ Protect Casing
☐ Plug Back TD
☐ Plug Off Zone

Depth Top Bottom	Type of Cement	# Sacks Used	Type and Percent Additives
0-3037	A-CON	250	CaCl 3%
-			DV tool @ 3037

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: 12/20/2018

Producing Method: ☐ Flowing ☐ Pumping ☐ Gas Lift ☑ Other *(Explain)* Swabbing

Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio	Gravity
	3	0	0		39

DISPOSITION OF GAS:
☐ Vented ☐ Sold ☐ Used on Lease
(If vented, Submit ACO-18.)

METHOD OF COMPLETION:
☐ Open Hole ☑ Perf. ☐ Dually Comp. *(Submit ACO-5)* ☐ Commingled *(Submit ACO-4)*

PRODUCTION INTERVAL:

Top	Bottom
5350	5384

Shots Per Foot	Perforation Top	Perforation Bottom	Bridge Plug Type	Bridge Plug Set At	Acid, Fracture, Shot, Cementing Squeeze Record *(Amount and Kind of Material Used)*
4	5350	5384			3400 gals 7.5% HCL

TUBING RECORD: Size: 2.875 Set At: 5395 Packer At: NONE

Mail to: KCC - Conservation Division, 266 N. Main, Suite 220, Wichita, Kansas 67202

Form	ACO1 - Well Completion
Operator	Enterra Resources, LLC
Well Name	RUELLA POTTS 4
Doc ID	1457245

Casing

Purpose Of String	Size Hole Drilled	Size Casing Set	Weight	Setting Depth	Type Of Cement	Number of Sacks Used	Type and Percent Additives
Surface	12.25	9.625	40	1720	A-CON/PP	550	CaCl 3%/2%
Production	8.75	7	26	5463	50/50 POZ	275	CaCl 10%

BASIC ENERGY SERVICES

PRESSURE PUMPING

Job Log

Liberal Yard #1717 - Phone 620-624-2277 - 1700 S. Country Estates Road, Liberal KS 67901

Customer:	Enterra	**Cement Pump No.:**	38117, 19919 10.5Hrs.	**Operator TRK No.:**	96816		
Address:	PO Box 5278	**Ticket #:**	1718 17231 L	**Bulk TRK No.:**	14354, 19578 Jesse	33021, 14284	
City, State, Zip:	Edmond Ok 73083	**Job Type:**	Z42 - Cement Surface Casing				
Service District:	1718 - Liberal, Ks.	**Well Type:**	OIL				
Well Name and No.:	Ruella Potts #4	**Well Location:**	13,31,35	**County:**	Stevens	**State:**	Ks

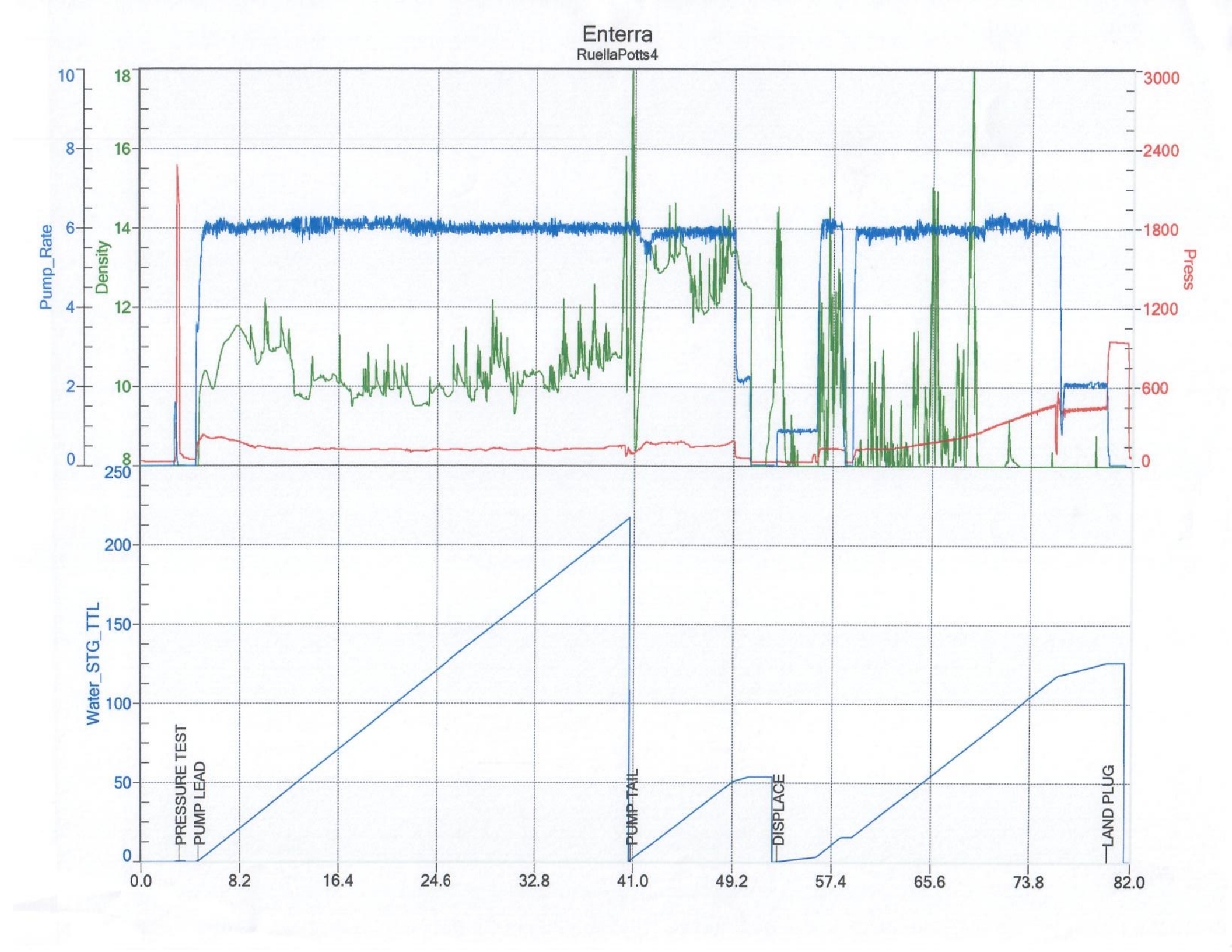
Type of Cmt	Sacks	Additives	Truck Loaded On		
A-Con' Blend	375	3% Calcium Chloride, 1/4# Polyflake, .2% WCA-1	14354, 19578 Jesse	Front	Back
Premium Plus Cement	175	2% Calcium Chloride, 1/4# Polyflake	33021, 14284	Front	Back
				Front	Back

Lead/Tail:	Weight #1 Gal.	Cu/Ft/sk	Water Requirements	CU. FT.	Man Hours / Personnel	
Lead:	11.4	2.95	18.1	1106.25	TT Man Hours:	47
Tail:	14.8	1.34	6.33	234.5	# of Men on Job:	3

Time (am/pm)	(BPM)	Volume (BBLS)	Pumps T	Pumps C	Pressure(PSI) Tubing	Pressure(PSI) Casing	Description of Operation and Materials
11:30							ON LOCATION
11:45							SAFETY MEETING & WAIT
5:40 PM							RIG UP
7:30 PM							RIG TO CIRCULATE
7:50 PM							RIG TO PT
19:53							PRESSURE TEST TO 2200PSI
19:55	6	197.0 slurry				230	PUMP 375SX LEAD @ 11.4#
8:30 PM	6	41.7 slurry				100	PUMP 175SX TAIL @ 14.8#
20:41							SHUTDOWN / DROP PLUG
20:44	6.1	10 Thru 30				130	DISPLACE
	6	40				130	
	6	50				160	
	6	60				190	
	6	70				210	
	6	80				250	
	6.2	90				330	
	6	100				370	
	6	110				440	
21:08	6	117				470	SLOW RATE TO 2.1BPM @ 430PSI
	2.1	120				440	
21:11	2.1	127.3				450	LAND PLUG / PRESSURE UP TO PSI
21:13							RELEASE BACK --- FLOAT HELD
							JOB COMPLETE

Size Hole	12 1/4"	Depth				TYPE	Plug Container	
Size & Wt. Csg.	9 5/8" 40#	Depth	1720.48'	New / Used		Packer	Depth	
Landing Press.	382.5psi	Depth				Retainer	Depth	
Shoe Jt.	40.91'	Type				Perfs	CIBP	

Customer Signature:	Basic Representative:	Daniel Beck
	Basic Signature:	Daniel Beck
	Date of Service:	11/17/2018


Enterra
RuellaPotts4
Pump_Rate
Density
Press
Water_STG_TTL
PRESSURE TEST
PUMP LEAD
PUMP TAIL
DISPLACE
LAND PLUG
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8.2
16.4
24.6
32.8
41.0
49.2
57.4
65.6
73.8
82.0

BASIC ENERGY SERVICES

PRESSURE PUMPING

Liberal Yard #1717 - Phone 620-624-2277 - 1700 S. Country Estates Road, Liberal KS 67901

Job Log

Customer:	Enterra	**Cement Pump No.:**	38117, 19919 24Hrs.	**Operator TRK No.:**	96816		
Address:	PO Box 5278	**Ticket #:**	1718 17239 L	**Bulk TRK No.:**	19827, 19808 Oscar	70897, 37725 Jesse	
City, State, Zip:	Edmond Ok 73083	**Job Type:**	Z42 - Cement Production Casing				
Service District:	1718 - Liberal, Ks.	**Well Type:**	OIL				
Well Name and No.:	Ruella Potts #4	**Well Location:**	13,31,35	**County:**	Stevens	**State:**	Ks

Type of Cmt	Sacks	Additives	Truck Loaded On		
50/50 Poz	275	5% Gypsum, 10% Salt, 5# Gilsonite, .8% C-17, 1/4# Defoamer	19827, 19808 Oscar	Front	Back
A-Con' Blend	250	3% Calcium Chloride, 1/4# Polyflake	70897, 37725 Jesse	Front	Back
				Front	Back

	Weight #1 Gal.	Cu/Ft/sk	Water Requirements	CU. FT.	Man Hours / Personnel	
Lead/Tail:						
Tail Stage 1:	13.8	1.49	6.64	409.75	TT Man Hours:	110
Tail Stage 2:	11.4	2.95	18.1	737.5	# of Men on Job:	4

Time (am/pm)	(BPM)	Volume (BBLS)	Pumps T	Pumps C	Pressure(PSI) Tubing	Pressure(PSI) Casing	Description of Operation and Materials
17:50							ON LOCATION & SAFETY MEETING
6:45							RIG UP & WAIT
8:00 AM							RIG TO CIRCULATE & WAIT
10:05 AM							RIG TO PT
10:27 AM							PRESSURE TEST TO 3500PSI
10:31	3.4	11.9				260	PUMP 500GALLONS MUD FLUSH
10:36	7	72.9 slurry				420	PUMP 275SX TAIL @ 13.8# / STAGE 1
10:47 AM							SHUTDOWN / DROP PLUG / WP
10:56	7	10 Thru 90				110	DISPLACE W/ 4%KCL
11:10	7	90.7				110	DISPLACE W/ MUD
	7	90.7 Thru 160				110	
	7	170				350	
	7	180				520	
	6.8	190				650	
11:24	6.7	198				720	SLOW RATE TO 2.0BPM @ 460
	2	200				510	
11:36	1.7	208.3				810	LAND PLUG / PRESSURE UP TO 1570PSI
11:38							RELEASE BACK --- LATCH DOWN HELD
11:41							DROP OPENING TOOL
12:00							PUMP OPENING TOOL W/ 800PSI
12:07							CONNECT TO RIG TO CIRCULATE
16:00							RIG TO PT
16:10	7	131.3 slurry				230	PUMP 250SX TAIL @ 11.4# / STAGE 2

Size Hole	8 3/4"	Depth				TYPE	Plug Container		
Size & Wt. Csg.	7" 26#	Depth	5465.36'	DV Tool	3079.06'	Packer		Depth	
Landing Press. 1	726.6psi	Landing Press. 2	490.1psi			Retainer		Depth	
Shoe Jt.	11.75'	Type				Perfs		CIBP	

Customer Signature:	Basic Representative:	Daniel Beck
	Basic Signature:	Daniel Beck
	Date of Service:	11/30/2018

BASIC ENERGY SERVICES

PRESSURE PUMPING

Job Log

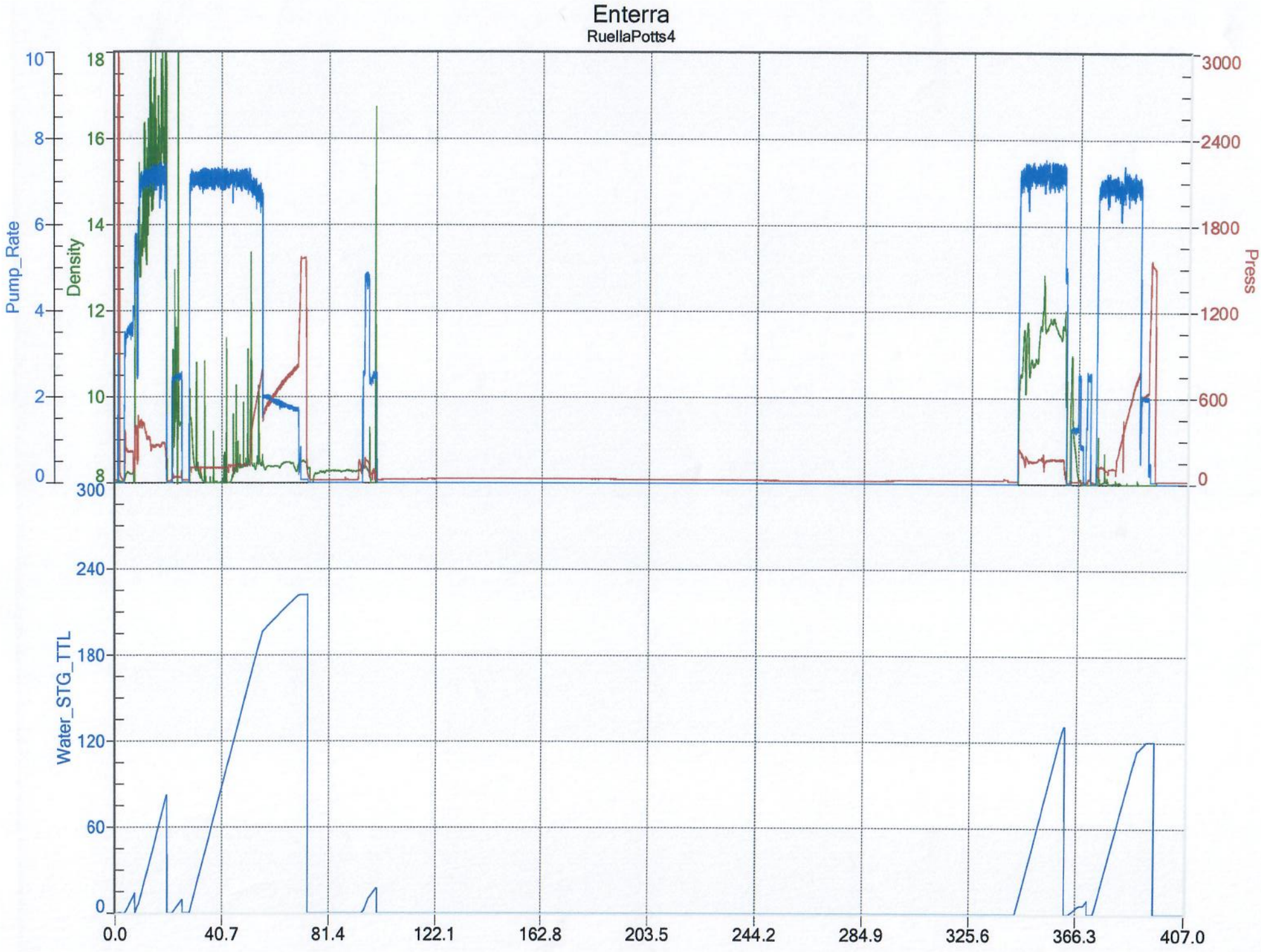
Liberal Yard #1717 - Phone 620-624-2277 - 1700 S. Country Estates Road, Liberal KS 67901

Customer:	Enterra	**Cement Pump No.:**	38117, 19919 24Hrs.	**Operator TRK No.:**	96816		
Address:		**Ticket #:**	1718 17239 L	**Bulk TRK No.:**	19827, 19808 Oscar	70897, 37725 Jesse	
City, State, Zip:		**Job Type:**	Z42 - Cement Production Casing				
Service District:	1718 - Liberal Ks	**Well Type:**	OIL				
Well Name and No.:	Ruella Potts #4	**Well Location:**	13,31,35	**County:**	Stevens	**State:**	Ks

Time (am/pm)	(BPM)	Volume (BBLS)	Pumps T	Pumps C	Pressure(PSI) Tubing	Pressure(PSI) Casing	Description of Operation and Materials
16:30							SHUTDOWN / DROP PLUG /WP
16:40	7	10				120	DISPLACE W/ 4%KCL
	7	20				110	
	7	30				110	
	7	40				110	
	7	50				110	
	7	60				250	
	7	70				380	
	7	80				490	
	7	90				610	
	7	100				720	AT 105BBLS IN CEMENT RETURNS
4:57 PM	7	107				770	SLOW RATE TO 2.0BPM @ 590PSI
	2	110				610	
5:00 PM	2	117.6				650	LAND CLOSING TOOL / PRESSURE UP TO 1550PS
17:02							RELEASE BACK --- PLUG HELD
							JOB COMPLETE

Size Hole	8 3/4"	Depth				TYPE	Plug Container	
Size & Wt. Csg.	7" 26#	Depth	5465.36'	DV Tool	3079.06'	Packer		Depth
Landing Press. 1	726.6psi	Landing Press. 2	490.1psi			Retainer		Depth
Shoe Jt.	11.75'	Type				Perfs		CIBP

Customer Signature:	Basic Representative:	Daniel Beck
	Basic Signature:	Daniel Beck
	Date of Service:	11/30/2018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RuellaPotts4
Pump_Rate
Density
Press
Water_STG_TTL
0
2
4
6
8
10
8
10
12
14
16
18
0
600
1200
1800
2400
3000
0
60
120
180
240
300
0.0
40.7
81.4
122.1
162.8
203.5
244.2
284.9
325.6
366.3
407.0

ONSITE GEOLOGICAL LABORATORIES
EARTH - TECH

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

Well Name:	RUELLA POTTS # 4		
Well Id:			
Location:	Sec 13 31S 35 E, Stevens County, Kansas		
License Number:	15-189-22857-00	Region:	
Spud Date:	Nov. 12, 2018	Drilling Completed:	Nov.26th 2018
Surface Coordinates:	2080' FNL & 2030' FEL		
Bottom Hole Coordinates:			
Ground Elevation (ft):	2918'	K.B. Elevation (ft):	2924'
Logged Interval (ft):	3900' To: 5472'	Total Depth (ft):	5472'
Formation:	Morrow		
Type of Drilling Fluid:	Natural Chemical		

OPERATOR

Company: ENTERRA RESOURCES, LLC
Address: PO Box 5278
Edmond, Okla. 73083-5278
Co. Rep. Mr. Marion Hutchison

GEOLOGIST

Name: Tim Hedrick
Company: .Earth Tech OGL, Inc
Address: PO Box 683
Hooker, Okla. 73945
888-543-8378 Cell: 580-754-0062

ROCK TYPES

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

ACCESSORIES

MINERAL
- Anhy
- Arggrn
- Arg
- Bent
- Bit
- Brecfrag
- Calc
- Carb
- Chtdk
- Chtlt
- Dol
- Feldspar
- Ferrpel
- Ferr
- Glau
- Gyp
- Hvymin
- Kaol
- Marl
- Minxl
- Nodule
- Phos
- Pyr
- Salt
- Sandy
- Silt
- Sil
- Sulphur
- Tuff
- Chlorite
- Dol
- Sand
- Slty

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

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

TEXTURE
- Boundst
- Chalky
- Cryxln
- Earthy
- Finexln
- Grainst
- Lithogr
- Microxln
- Mudst
- Packst
- Wackest

OTHER SYMBOLS

POROSITY TYPE
- Earthy
- Fenest
- Fracture
- Inter
- Moldic
- Organic
- Pinpoint
- Vuggy

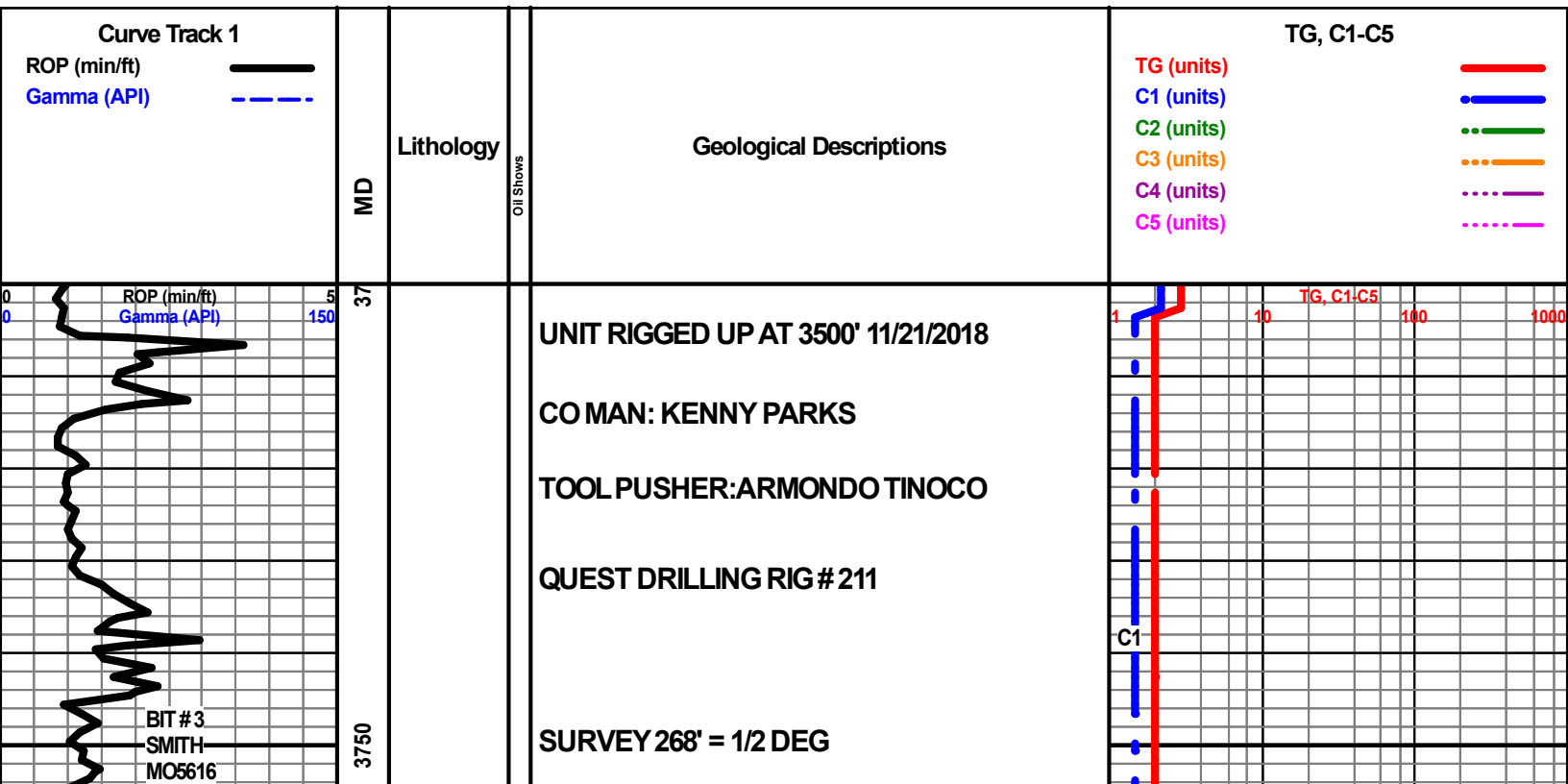
SORTING
- Well
- Moderate
- Poor

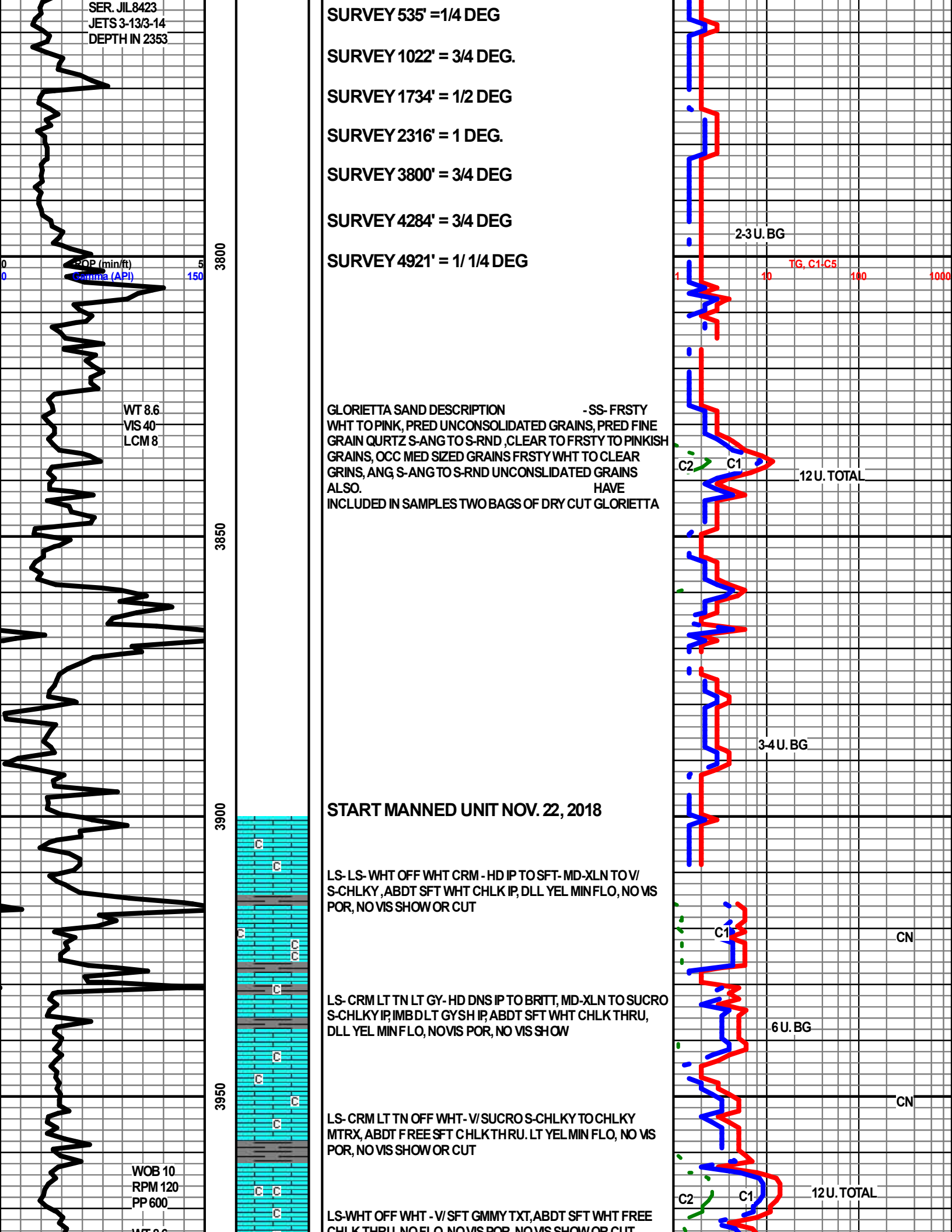
ROUNDING
- Rounded
- Subrnd
- Subang
- Angular

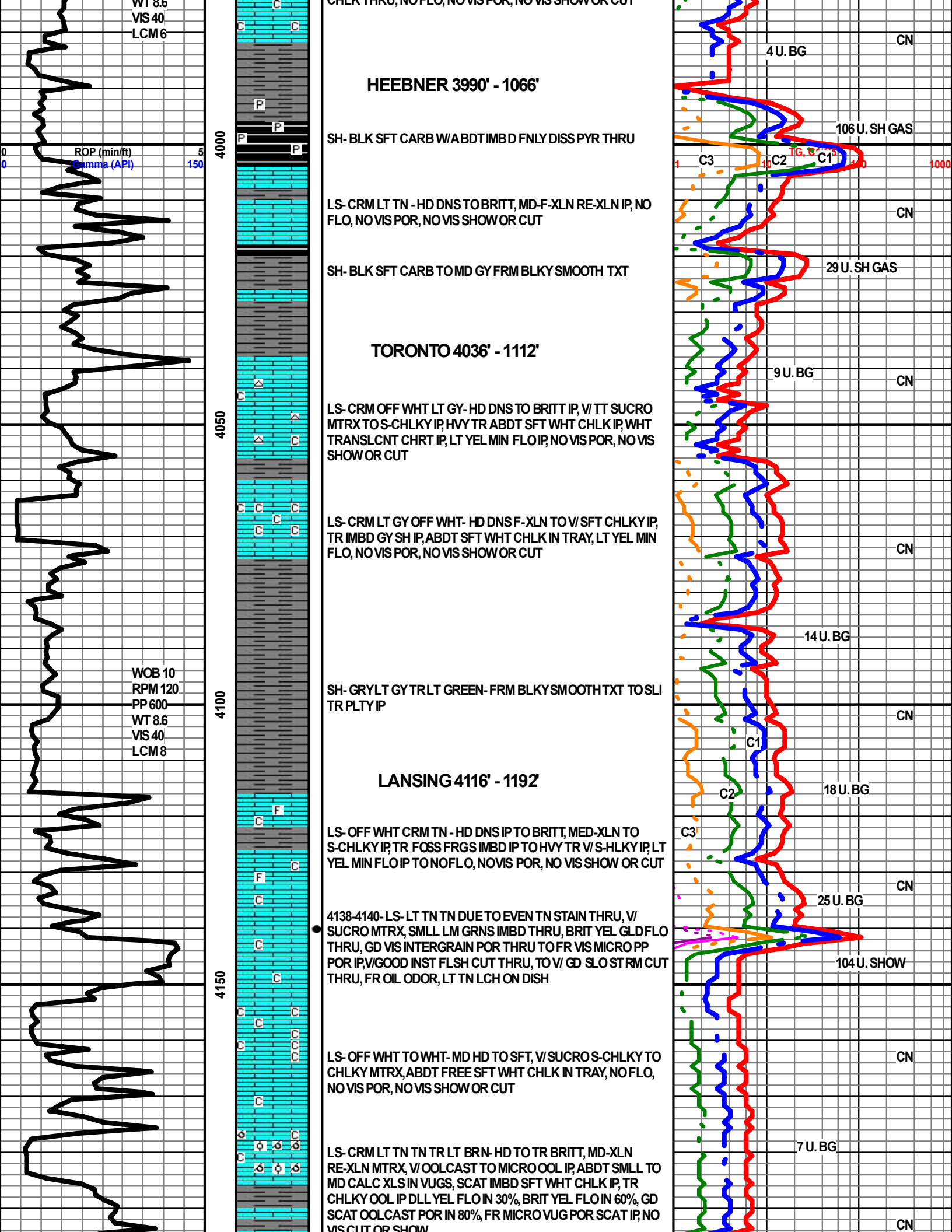
OIL SHOWS
- Even
- Spotted
- Ques
- Dead
- Gas show

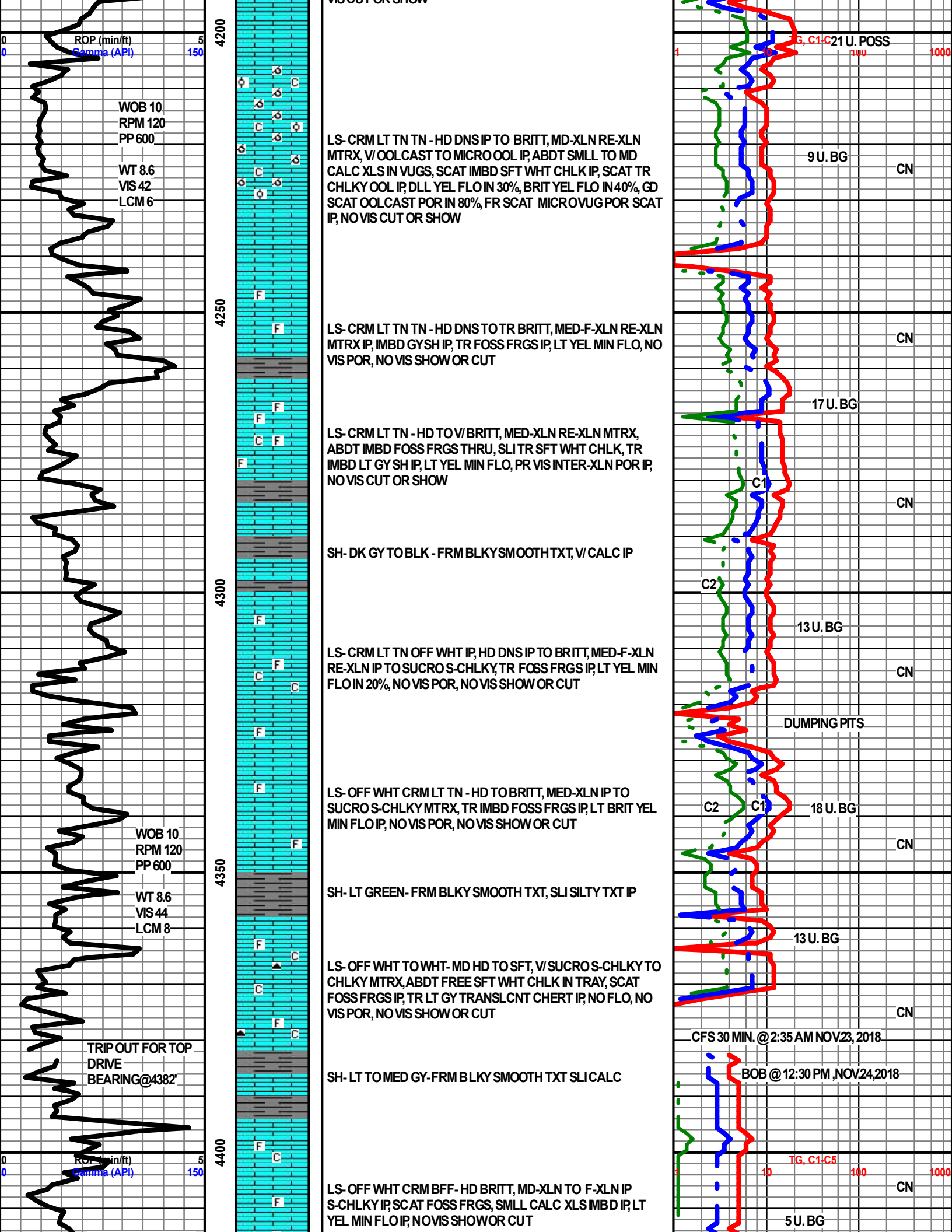
INTERVALS
- Core
- Dst
- Dst

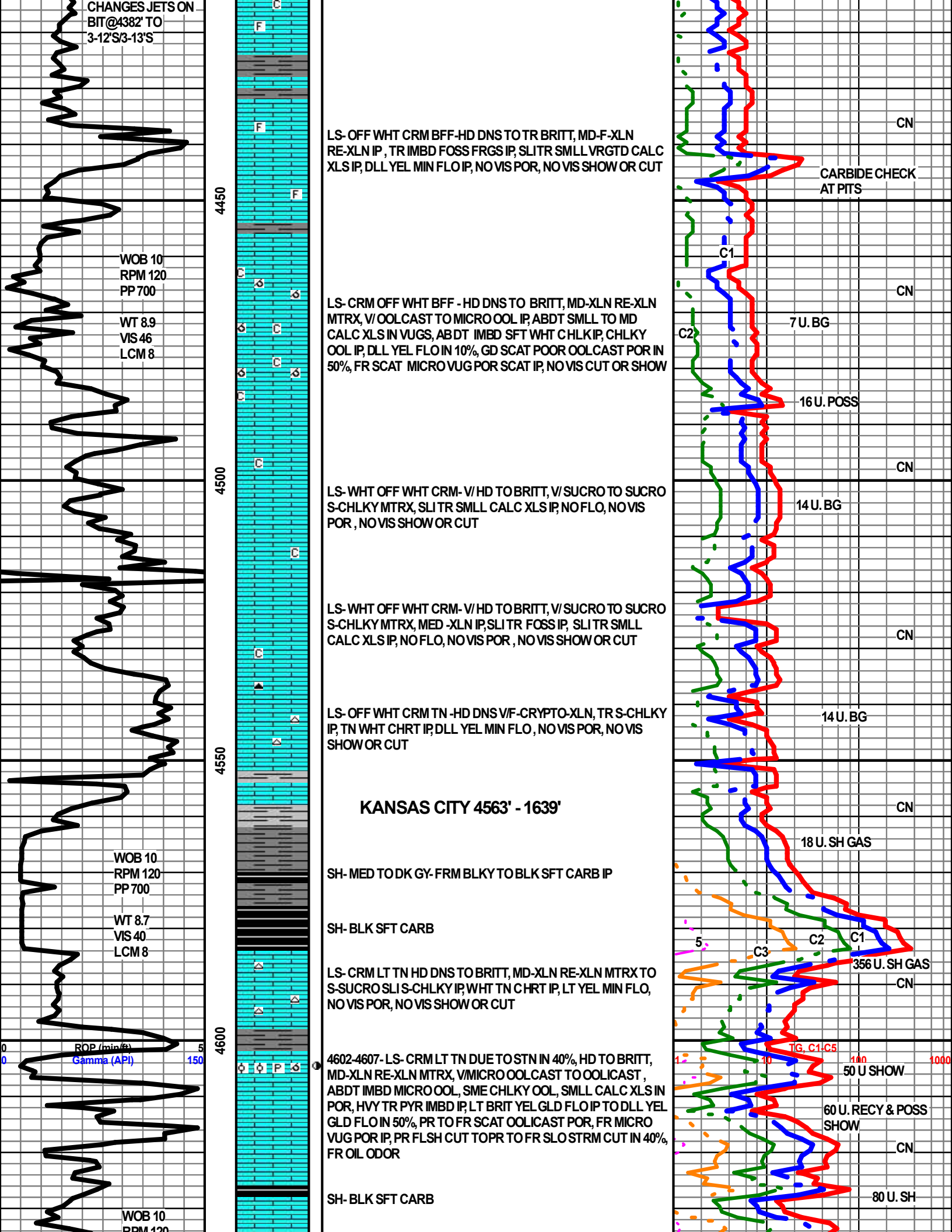
EVENTS
- Rft
- Sidewall

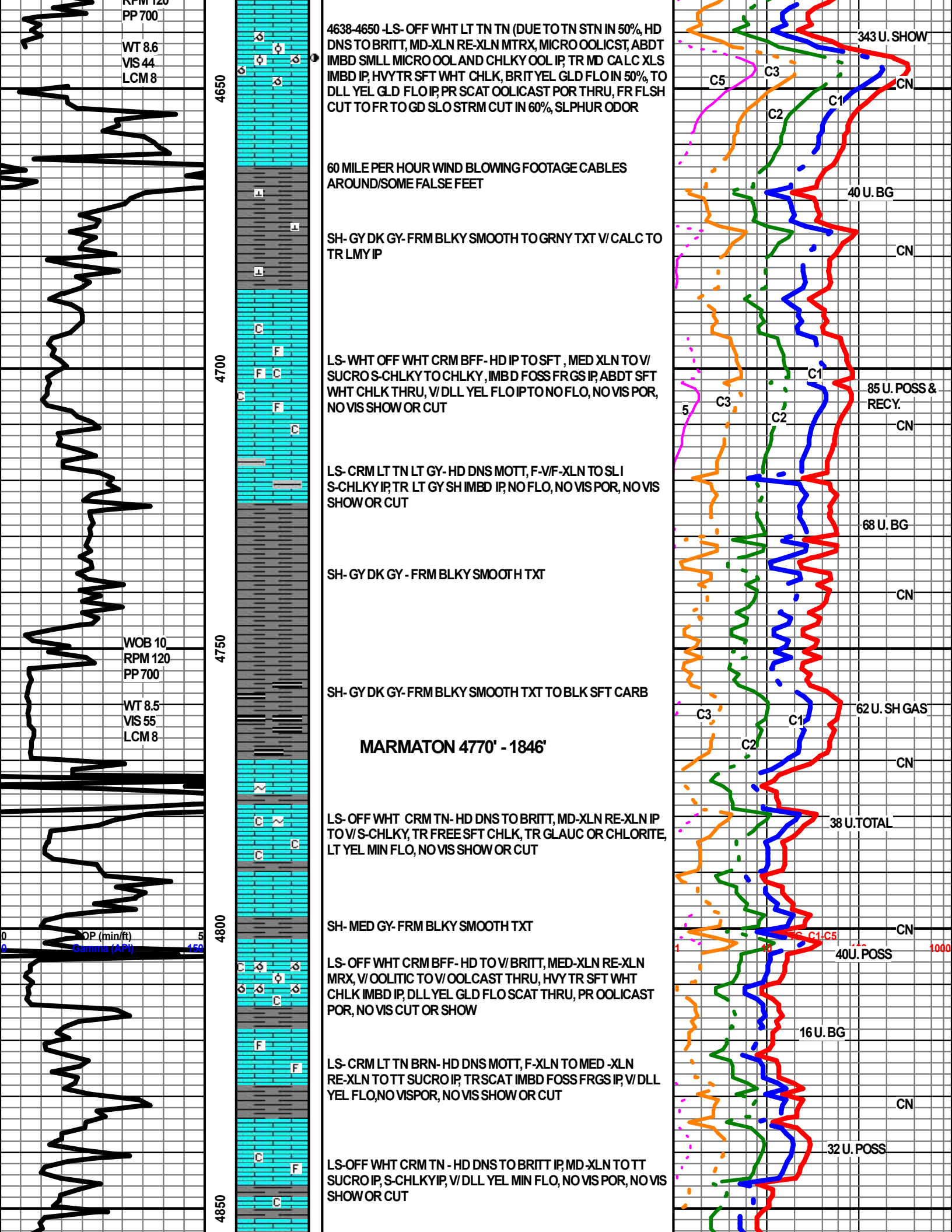


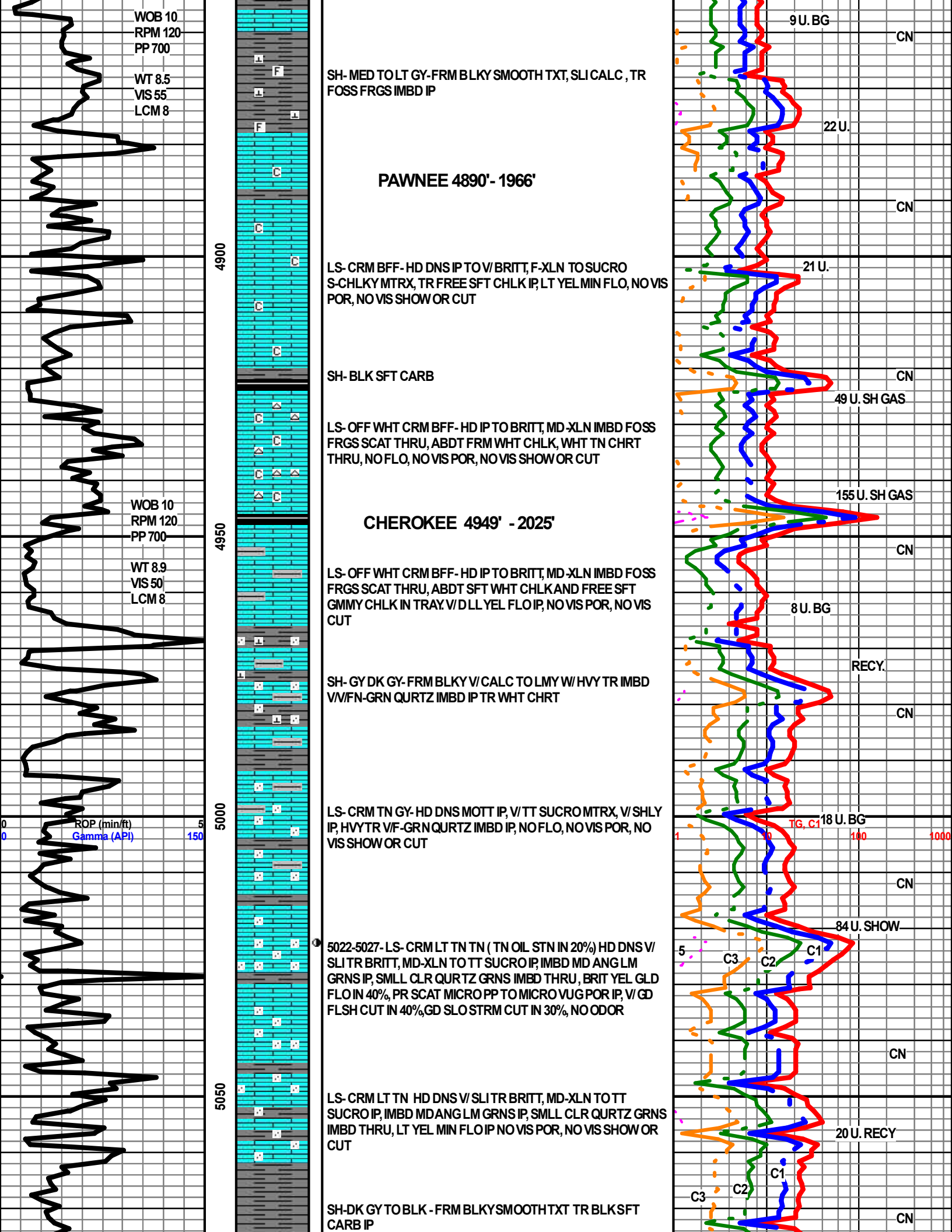

SER. JIL8423
JETS 3-13/3-14
DEPTH IN 2353
0
ROP (min/ft)
5
0
Gamma (API)
150
3800
3850
3900
3950
WT 8.6
VIS 40
LCM 8
WOB 10
RPM 120
PP 600
SURVEY 535' =1/4 DEG
SURVEY 1022' = 3/4 DEG.
SURVEY 1734' = 1/2 DEG
SURVEY 2316' = 1 DEG.
SURVEY 3800' = 3/4 DEG
SURVEY 4284' = 3/4 DEG
SURVEY 4921' = 1/ 1/4 DEG
2-3 U. BG
TG, C1-C5
1
10
100
1000
GLORIETTA SAND DESCRIPTION - SS- FRSTY WHT TO PINK, PRED UNCONSOLIDATED GRAINS, PRED FINE GRAIN QURTZ S-ANG TO S-RND ,CLEAR TO FRSTY TO PINKISH GRAINS, OCC MED SIZED GRAINS FRSTY WHT TO CLEAR GRINS, ANG, S-ANG TO S-RND UNCONSLIDATED GRAINS ALSO. HAVE INCLUDED IN SAMPLES TWO BAGS OF DRY CUT GLORIETTA
C2
C1
12 U. TOTAL
3-4 U. BG
START MANNED UNIT NOV. 22, 2018
LS- LS- WHT OFF WHT CRM - HD IP TO SFT- MD-XLN TO V/ S-CHLKY ,ABDT SFT WHT CHLK IP, DLL YEL MIN FLO, NO VIS POR, NO VIS SHOW OR CUT
C1
CN
LS- CRM LT TN LT GY- HD DNS IP TO BRITT, MD-XLN TO SUCRO S-CHLKY IP, IMB D LT GY SH IP, ABDT SFT WHT CHLK THRU, DLL YEL MIN F LO, NO VIS POR, NO VIS SHOW
6 U. BG
CN
LS- CRM LT TN OFF WHT- V/ SUCRO S-CHLKY TO CHLKY MTRX, ABDT F REE SFT C HLK TH RU. LT YEL MIN FLO, NO VIS POR, NO VIS SHOW OR CUT
C2
C1
12 U. TOTAL
LS-WHT OFF WHT - V/ SFT GMMY TXT, ABDT SFT WHT FREE

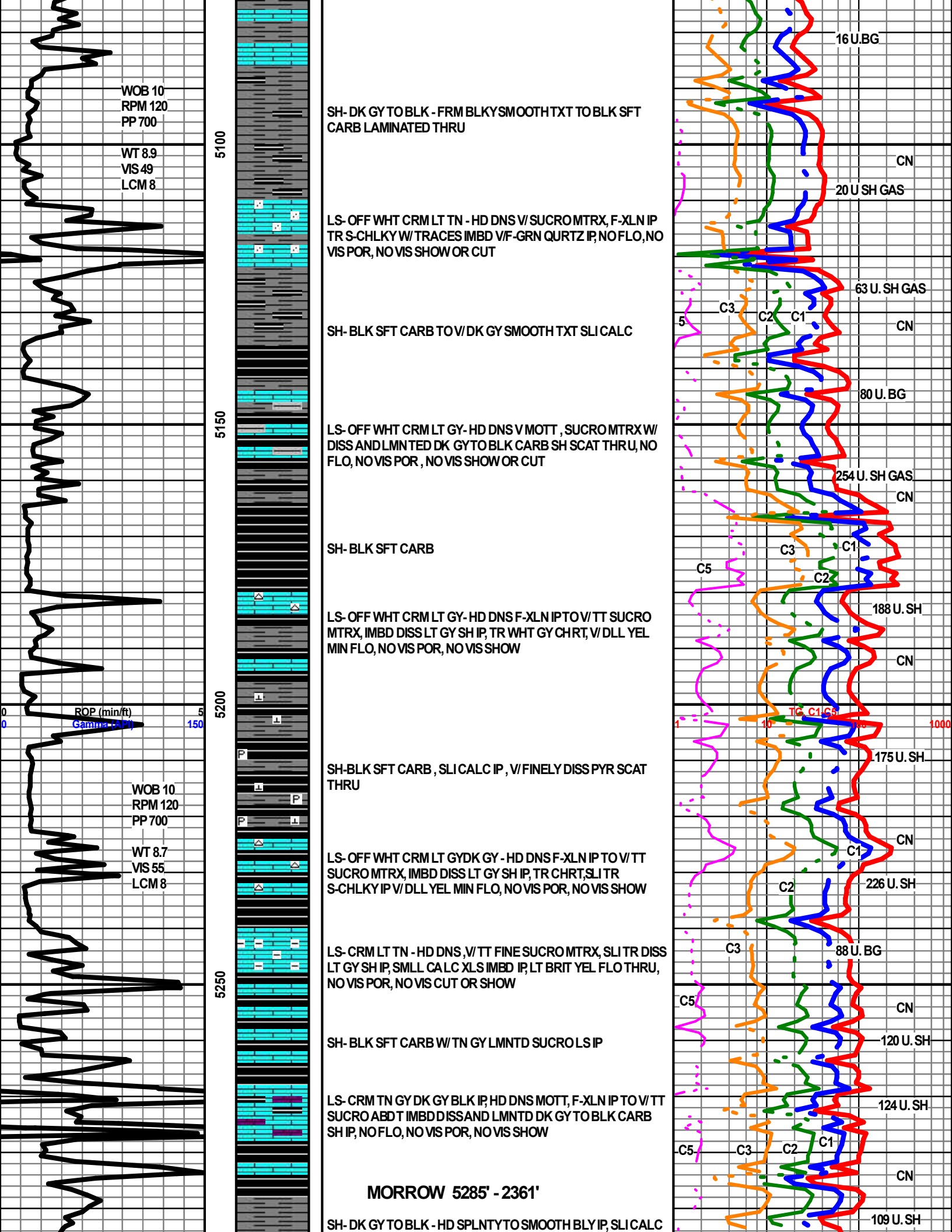

WT 8.6
VIS 40
LCM 6
0
ROP (min/ft)
5
0
Gamma (API)
150
4000
HEEBNER 3990' - 1066'
SH- BLK SFT CARB W/A BDT IMB D FNLY DISS PYR THRU
4 U. BG
CN
106 U. SH GAS
C3
C2
C1
1
10
100
1000
LS- CRM LT TN - HD DNS TO BRITT, MD-F-XLN RE-XLN IP, NO FLO, NO VIS POR, NO VIS SHOW OR CUT
CN
SH- BLK SFT CARB TO MD GY FRM BLKY SMOOTH TXT
29 U. SH GAS
4050
TORONTO 4036' - 1112'
9 U. BG
CN
LS- CRM OFF WHT LT GY- HD DNS TO BRITT IP, V/ TT SUCRO MTRX TO S-CHLKY IP, HVY TR ABDT SFT WHT CHLK IP, WHT TRANSLCNT CHRT IP, LT YEL MIN FLO IP, NO VIS POR, NO VIS SHOW OR CUT
LS- CRM LT GY OFF WHT- HD DNS F-XLN TO V/ SFT CHLKY IP, TR IMBD GY SH IP, ABDT SFT WHT CHLK IN TRAY, LT YEL MIN FLO, NO VIS POR, NO VIS SHOW OR CUT
CN
14 U. BG
WOB 10
RPM 120
PP 600
WT 8.6
VIS 40
LCM 8
4100
SH- GRY LT GY TR LT GREEN- FRM BLKY SMOOTH TXT TO SLI TR PLTY IP
CN
C1
LANSING 4116' - 1192'
C2
18 U. BG
C3
LS- OFF WHT CRM TN - HD DNS IP TO BRITT, MED-XLN TO S-CHLKY IP, TR FOSS FRGS IMBD IP TO HVY TR V/ S-HLKY IP, LT YEL MIN FLO IP TO NO FLO, NO VIS POR, NO VIS SHOW OR CUT
CN
25 U. BG
4138-4140- LS- LT TN TN DUE TO EVEN TN STAIN THRU, V/ SUCRO MTRX, SMLL LM GRNS IMBD THRU, BRIT YEL GLD FLO THRU, GD VIS INTERGRAIN POR THRU TO FR VIS MICRO PP POR IP, V/GOOD INST FLSH CUT THRU, TO V/ GD SLO STRM CUT THRU, FR OIL ODOR, LT TN LCH ON DISH
104 U. SHOW
4150
LS- OFF WHT TO WHT- MD HD TO SFT, V/ SUCRO S-CHLKY TO CHLKY MTRX, ABDT FREE SFT WHT CHLK IN TRAY, NO FLO, NO VIS POR, NO VIS SHOW OR CUT
CN
7 U. BG
LS- CRM LT TN TN TR LT BRN- HD TO TR BRITT, MD-XLN RE-XLN MTRX, V/ OOLCAST TO MICRO OOL IP, ABDT SMLL TO MD CALC XLS IN VUGS, SCAT IMBD SFT WHT CHLK IP, TR CHLKY OOL IP DLL YEL FLO IN 30%, BRIT YEL FLO IN 60%, GD SCAT OOLCAST POR IN 80%, FR MICRO VUG POR SCAT IP, NO
CN

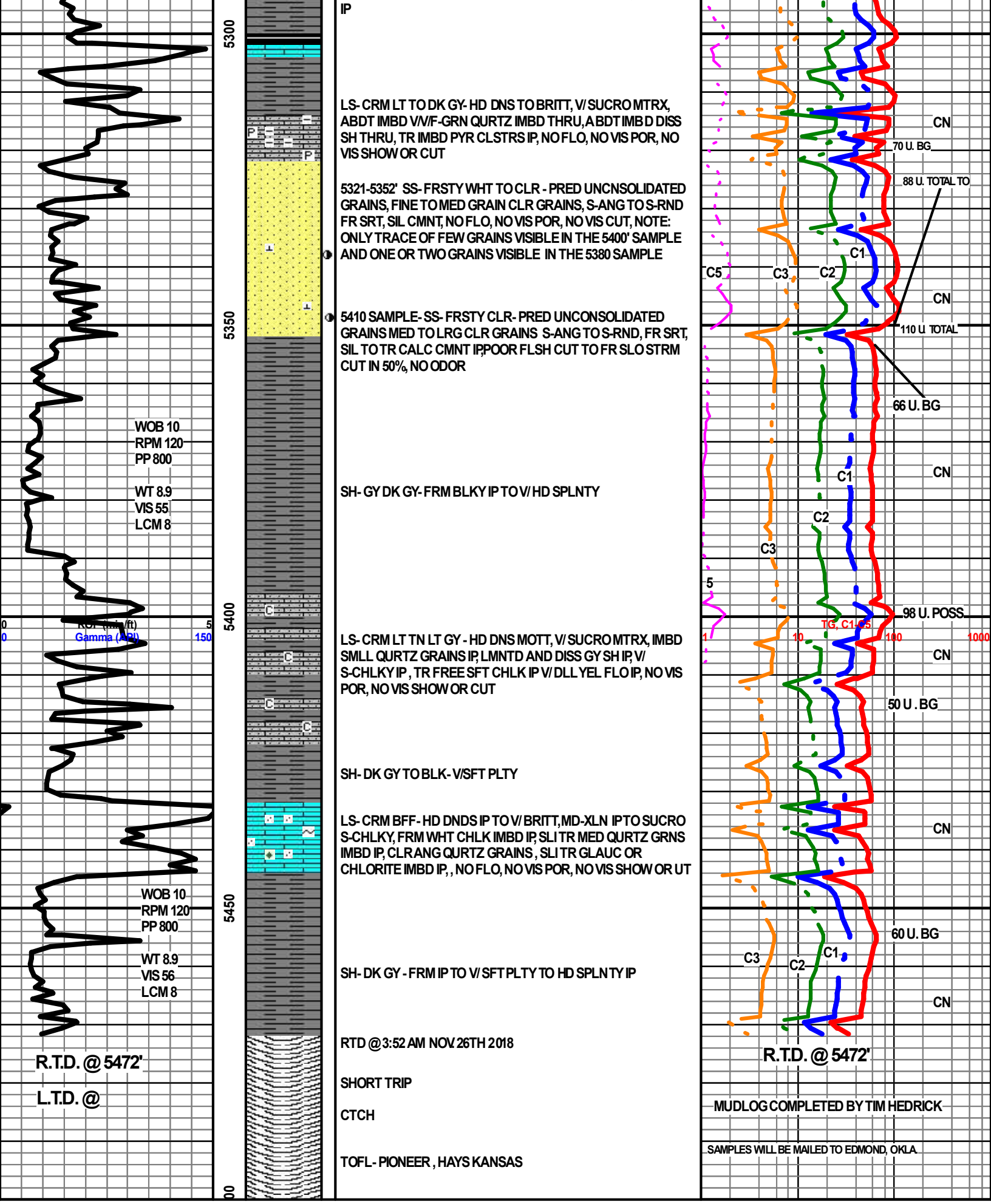

0
ROP (min/ft)
5
0
Gamma (API)
150
WOB 10
RPM 120
PP 600
WT 8.6
VIS 42
LCM 6
WOB 10
RPM 120
PP 600
WT 8.6
VIS 44
LCM 8
TRIP OUT FOR TOP DRIVE
BEARING@4382'
4200
4250
4300
4350
4400
LS- CRM LT TN TN - HD DNS IP TO BRITT, MD-XLN RE-XLN MTRX, V/ OOLCAST TO MICRO OOL IP, ABDT SMLL TO MD CALC XLS IN VUGS, SCAT IMBD SFT WHT CHLK IP, SCAT TR CHLKY OOL IP, DLL YEL FLO IN 30%, BRIT YEL FLO IN 40%, GD SCAT OOLCAST POR IN 80%, FR SCAT MICROVUG POR SCAT IP, NO VIS CUT OR SHOW
LS- CRM LT TN TN - HD DNS TO TR BRITT, MED-F-XLN RE-XLN MTRX IP, IMBD GY SH IP, TR FOSS FRGS IP, LT YEL MIN FLO, NO VIS POR, NO VIS SHOW OR CUT
LS- CRM LT TN - HD TO V/ BRITT, MED-XLN RE-XLN MTRX, ABDT IMBD FOSS FRGS THRU, SLI TR SFT WHT CHLK, TR IMBD LT GY SH IP, LT YEL MIN FLO, PR VIS INTER-XLN POR IP, NO VIS CUT OR SHOW
SH- DK GY TO BLK - FRM BLKY SMOOTH TXT, V/ CALC IP
LS- CRM LT TN OFF WHT IP, HD DNS IP TO BRITT, MED-F-XLN RE-XLN IP TO SUCRO S-CHLKY, TR FOSS FRGS IP, LT YEL MIN FLO IN 20%, NO VIS POR, NO VIS SHOW OR CUT
LS- OFF WHT CRM LT TN - HD TO BRITT, MED-XLN IP TO SUCRO S-CHLKY MTRX, TR IMBD FOSS FRGS IP, LT BRIT YEL MIN FLO IP, NO VIS POR, NO VIS SHOW OR CUT
SH- LT GREEN- FRM BLKY SMOOTH TXT, SLI SILTY TXT IP
LS- OFF WHT TO WHT- MD HD TO SFT, V/ SUCRO S-CHLKY TO CHLKY MTRX, ABDT FREE SFT WHT CHLK IN TRAY, SCAT FOSS FRGS IP, TR LT GY TRANSLCNT CHERT IP, NO FLO, NO VIS POR, NO VIS SHOW OR CUT
SH- LT TO MED GY- FRM BLKY SMOOTH TXT SLI CALC
LS- OFF WHT CRM BFF- HD BRITT, MD-XLN TO F-XLN IP S-CHLKY IP, SCAT FOSS FRGS, SMLL CALC XLS IMBD IP, LT YEL MIN FLO IP, NO VIS SHOW OR CUT
TG, C1-C5
1
10
100
1000
21 U. POSS
9 U. BG
CN
CN
17 U. BG
C1
CN
C2
13 U. BG
CN
DUMPING PITS
C2
C1
18 U. BG
CN
13 U. BG
CN
CFS 30 MIN. @ 2:35 AM NOV.23, 2018
BOB @ 12:30 PM ,NOV.24,2018
TG, C1-C5
1
10
100
1000
CN
5 U. BG


CHANGES JETS ON BIT@4382' TO 3-12'S/3-13'S
WOB 10
RPM 120
PP 700
WT 8.9
VIS 46
LCM 8
WOB 10
RPM 120
PP 700
WT 8.7
VIS 40
LCM 8
WOB 10
ROP (min/ft)
Gamma (API)
4450
4500
4550
4600
LS- OFF WHT CRM BFF-HD DNS TO TR BRITT, MD-F-XLN RE-XLN IP , TR IMBD FOSS FRGS IP, SLI TR SMLL VRGTD CALC XLS IP, DLL YEL MIN FLO IP, NO VIS POR, NO VIS SHOW OR CUT
LS- CRM OFF WHT BFF - HD DNS TO BRITT, MD-XLN RE-XLN MTRX, V/ OOLCAST TO MICRO OOL IP, ABDT SMLL TO MD CALC XLS IN VUGS, ABDT IMBD SFT WHT CHLK IP, CHLKY OOL IP, DLL YEL FLO IN 10%, GD SCAT POOR OOLCAST POR IN 50%, FR SCAT MICRO VUG POR SCAT IP, NO VIS CUT OR SHOW
LS- WHT OFF WHT CRM- V/ HD TO BRITT, V/ SUCRO TO SUCRO S-CHLKY MTRX, SLI TR SMLL CALC XLS IP, NO FLO, NO VIS POR , NO VIS SHOW OR CUT
LS- WHT OFF WHT CRM- V/ HD TO BRITT, V/ SUCRO TO SUCRO S-CHLKY MTRX, MED -XLN IP, SLI TR FOSS IP, SLI TR SMLL CALC XLS IP, NO FLO, NO VIS POR , NO VIS SHOW OR CUT
LS- OFF WHT CRM TN -HD DNS V/F-CRYPTO-XLN, TR S-CHLKY IP, TN WHT CHRT IP, DLL YEL MIN FLO , NO VIS POR, NO VIS SHOW OR CUT
KANSAS CITY 4563' - 1639'
SH- MED TO DK GY- FRM BLKY TO BLK SFT CARB IP
SH- BLK SFT CARB
LS- CRM LT TN HD DNS TO BRITT, MD-XLN RE-XLN MTRX TO S-SUCRO SLI S-CHLKY IP, WHT TN CHRT IP, LT YEL MIN FLO, NO VIS POR, NO VIS SHOW OR CUT
4602-4607- LS- CRM LT TN DUE TO STN IN 40%, HD TO BRITT, MD-XLN RE-XLN MTRX, V/MICRO OOLCAST TO OOLICAST , ABDT IMBD MICRO OOL, SME CHLKY OOL, SMLL CALC XLS IN POR, HVY TR PYR IMBD IP, LT BRIT YEL GLD FLO IP TO DLL YEL GLD FLO IN 50%, PR TO FR SCAT OOLICAST POR, FR MICRO VUG POR IP, PR FLSH CUT TOPR TO FR SLO STRM CUT IN 40%, FR OIL ODOR
SH- BLK SFT CARB
CARBIDE CHECK AT PITS
C1
C2
7 U. BG
16 U. POSS
14 U. BG
14 U. BG
18 U. SH GAS
C3
5
356 U. SH GAS
TG, C1-C5
50 U SHOW
60 U. RECY & POSS SHOW
80 U. SH
CN


RPM 120
PP 700
WT 8.6
VIS 44
LCM 8
4650
4638-4650 -LS- OFF WHT LT TN TN (DUE TO TN STN IN 50%, HD DNS TO BRITT, MD-XLN RE-XLN MTRX, MICRO OOLICST, ABDT IMBD SMLL MICRO OOL AND CHLKY OOL IP, TR MD CALC XLS IMBD IP, HVYTR SFT WHT CHLK, BRIT YEL GLD FLO IN 50%, TO DLL YEL GLD FLO IP, PR SCAT OOLICAST POR THRU, FR FLSH CUT TO FR TO GD SLO STRM CUT IN 60%, SLPHUR ODOR
343 U. SHOW
C5
C3
C1
C2
CN
60 MILE PER HOUR WIND BLOWING FOOTAGE CABLES AROUND/SOME FALSE FEET
40 U. BG
SH- GY DK GY- FRM BLKY SMOOTH TO GRNY TXT V/ CALC TO TR LMY IP
CN
4700
LS- WHT OFF WHT CRM BFF- HD IP TO SFT , MED XLN TO V/ SUCRO S-CHLKY TO CHLKY , IMBD FOSS FRGS IP, ABDT SFT WHT CHLK THRU, V/ DLL YEL FLO IP TO NO FLO, NO VIS POR, NO VIS SHOW OR CUT
C1
85 U. POSS & RECY.
5
C3
C2
CN
LS- CRM LT TN LT GY- HD DNS MOTT, F-V/F-XLN TO SLI S-CHLKY IP, TR LT GY SH IMBD IP, NO FLO, NO VIS POR, NO VIS SHOW OR CUT
68 U. BG
SH- GY DK GY - FRM BLKY SMOOTH TXT
CN
WOB 10
RPM 120
PP 700
4750
WT 8.5
VIS 55
LCM 8
SH- GY DK GY- FRM BLKY SMOOTH TXT TO BLK SFT CARB
C3
C1
62 U. SH GAS
C2
MARMATON 4770' - 1846'
CN
LS- OFF WHT CRM TN- HD DNS TO BRITT, MD-XLN RE-XLN IP TO V/ S-CHLKY, TR FREE SFT CHLK, TR GLAUC OR CHLORITE, LT YEL MIN FLO, NO VIS SHOW OR CUT
38 U.TOTAL
4800
SH- MED GY- FRM BLKY SMOOTH TXT
CN
0
ROP (min/ft)
5
0
Gamma (API)
150
C1-C5
1
1000
LS- OFF WHT CRM BFF- HD TO V/ BRITT, MED-XLN RE-XLN MRX, V/ OOLITIC TO V/ OOLCAST THRU, HVY TR SFT WHT CHLK IMBD IP, DLL YEL GLD FLO SCAT THRU, PR OOLICAST POR, NO VIS CUT OR SHOW
40U. POSS
16 U. BG
LS- CRM LT TN BRN- HD DNS MOTT, F-XLN TO MED -XLN RE-XLN TO TT SUCRO IP, TR SCAT IMBD FOSS FRGS IP, V/ DLL YEL FLO,NO VISPOR, NO VIS SHOW OR CUT
CN
32 U. POSS
4850
LS-OFF WHT CRM TN - HD DNS TO BRITT IP, MD -XLN TO TT SUCRO IP, S-CHLKY IP, V/ DLL YEL MIN FLO, NO VIS POR, NO VIS SHOW OR CUT


WOB 10
RPM 120
PP 700
WT 8.5
VIS 55
LCM 8
4900
SH- MED TO LT GY-FRM BLKY SMOOTH TXT, SLI CALC , TR FOSS FRGS IMBD IP
PAWNEE 4890'- 1966'
LS- CRM BFF- HD DNS IP TO V/ BRITT, F-XLN TO SUCRO S-CHLKY MTRX, TR FREE SFT CHLK IP, LT YEL MIN FLO, NO VIS POR, NO VIS SHOW OR CUT
SH- BLK SFT CARB
LS- OFF WHT CRM BFF- HD IP TO BRITT, MD-XLN IMBD FOSS FRGS SCAT THRU, ABDT FRM WHT CHLK, WHT TN CHRT THRU, NO FLO, NO VIS POR, NO VIS SHOW OR CUT
WOB 10
RPM 120
PP 700
WT 8.9
VIS 50
LCM 8
4950
CHEROKEE 4949' - 2025'
LS- OFF WHT CRM BFF- HD IP TO BRITT, MD-XLN IMBD FOSS FRGS SCAT THRU, ABDT SFT WHT CHLK AND FREE SFT GMMY CHLK IN TRAY. V/ D LL YEL FLO IP, NO VIS POR, NO VIS CUT
SH- GY DK GY- FRM BLKY V/ CALC TO LMY W/ HVY TR IMBD V/V/FN-GRN QURTZ IMBD IP TR WHT CHRT
5000
ROP (min/ft)
Gamma (API)
LS- CRM TN GY- HD DNS MOTT IP, V/ TT SUCRO MTRX, V/ SHLY IP, HVY TR V/F-GRN QURTZ IMBD IP, NO FLO, NO VIS POR, NO VIS SHOW OR CUT
5022-5027- LS- CRM LT TN TN (TN OIL STN IN 20%) HD DNS V/ SLI TR BRITT, MD-XLN TO TT SUCRO IP, IMBD MD ANG LM GRNS IP, SMLL CLR QURTZ GRNS IMBD THRU , BRIT YEL GLD FLO IN 40%, PR SCAT MICRO PP TO MICRO VUG POR IP, V/ GD FLSH CUT IN 40%,GD SLO STRM CUT IN 30%, NO ODOR
5050
LS- CRM LT TN HD DNS V/ SLI TR BRITT, MD-XLN TO TT SUCRO IP, IMBD MD ANG LM GRNS IP, SMLL CLR QURTZ GRNS IMBD THRU, LT YEL MIN FLO IP NO VIS POR, NO VIS SHOW OR CUT
SH-DK GY TO BLK - FRM BLKY SMOOTH TXT TR BLK SFT CARB IP
9 U. BG
CN
22 U.
CN
21 U.
CN
49 U. SH GAS
155 U. SH GAS
CN
8 U. BG
RECY.
CN
TG, C1
18 U. BG
CN
84 U. SHOW
C3
C2
C1
CN
20 U. RECY
C1
C2
C3
CN


WOB 10
RPM 120
PP 700
WT 8.9
VIS 49
LCM 8
5100
SH- DK GY TO BLK - FRM BLKY SMOOTH TXT TO BLK SFT CARB LAMINATED THRU
LS- OFF WHT CRM LT TN - HD DNS V/ SUCRO MTRX, F-XLN IP TR S-CHLKY W/ TRACES IMBD V/F-GRN QURTZ IP, NO FLO, NO VIS POR, NO VIS SHOW OR CUT
SH- BLK SFT CARB TO V/ DK GY SMOOTH TXT SLI CALC
5150
LS- OFF WHT CRM LT GY- HD DNS V MOTT , SUCRO MTRX W/ DISS AND LMNTED DK GY TO BLK CARB SH SCAT THRU, NO FLO, NO VIS POR , NO VIS SHOW OR CUT
SH- BLK SFT CARB
LS- OFF WHT CRM LT GY- HD DNS F-XLN IP TO V/ TT SUCRO MTRX, IMBD DISS LT GY SH IP, TR WHT GY CHRT, V/ DLL YEL MIN FLO, NO VIS POR, NO VIS SHOW
0
ROP (min/ft)
5
0
Gamma (API)
150
5200
WOB 10
RPM 120
PP 700
WT 8.7
VIS 55
LCM 8
SH-BLK SFT CARB , SLI CALC IP , V/ FINELY DISS PYR SCAT THRU
LS- OFF WHT CRM LT GYDK GY - HD DNS F-XLN IP TO V/ TT SUCRO MTRX, IMBD DISS LT GY SH IP, TR CHRT,SLI TR S-CHLKY IP V/ DLL YEL MIN FLO, NO VIS POR, NO VIS SHOW
LS- CRM LT TN - HD DNS ,V/ TT FINE SUCRO MTRX, SLI TR DISS LT GY SH IP, SMLL CALC XLS IMBD IP, LT BRIT YEL FLO THRU, NO VIS POR, NO VIS CUT OR SHOW
5250
SH- BLK SFT CARB W/ TN GY LMNTD SUCRO LS IP
LS- CRM TN GY DK GY BLK IP, HD DNS MOTT, F-XLN IP TO V/ TT SUCRO ABDT IMBD DISS AND LMNTD DK GY TO BLK CARB SH IP, NO FLO, NO VIS POR, NO VIS SHOW
MORROW 5285' - 2361'
SH- DK GY TO BLK - HD SPLNTY TO SMOOTH BLY IP, SLI CALC
16 U.BG
CN
20 U SH GAS
63 U. SH GAS
C3
C2
C1
5
CN
80 U. BG
254 U. SH GAS
CN
C3
C1
C5
C2
188 U. SH
CN
TG C1 C2 C3
1
10
100
1000
175 U. SH
CN
C1
C2
226 U. SH
C3
88 U. BG
C5
CN
120 U. SH
124 U. SH
C5
C3
C2
C1
CN
109 U. SH


IP
LS- CRM LT TO DK GY- HD DNS TO BRITT, V/ SUCRO MTRX, ABDT IMBD V/V/F-GRN QURTZ IMBD THRU, A BDT IMB D DISS SH THRU, TR IMBD PYR CLSTRS IP, NO FLO, NO VIS POR, NO VIS SHOW OR CUT
5321-5352' SS- FRSTY WHT TO CLR - PRED UNCNSOLIDATED GRAINS, FINE TO MED GRAIN CLR GRAINS, S-ANG TO S-RND FR SRT, SIL CMNT, NO FLO, NO VIS POR, NO VIS CUT, NOTE: ONLY TRACE OF FEW GRAINS VISIBLE IN THE 5400' SAMPLE AND ONE OR TWO GRAINS VISIBLE IN THE 5380 SAMPLE
5410 SAMPLE- SS- FRSTY CLR- PRED UNCONSOLIDATED GRAINS MED TO LRG CLR GRAINS S-ANG TO S-RND, FR SRT, SIL TO TR CALC CMNT IP, POOR FLSH CUT TO FR SLO STRM CUT IN 50%, NO ODOR
WOB 10
RPM 120
PP 800
WT 8.9
VIS 55
LCM 8
SH- GY DK GY- FRM BLKY IP TO V/ HD SPLNTY
LS- CRM LT TN LT GY - HD DNS MOTT, V/ SUCRO MTRX, IMBD SMLL QURTZ GRAINS IP, LMNTD AND DISS GY SH IP, V/ S-CHLKY IP , TR FREE SFT CHLK IP V/ DLL YEL FLO IP, NO VIS POR, NO VIS SHOW OR CUT
SH- DK GY TO BLK- V/SFT PLTY
LS- CRM BFF- HD DNDS IP TO V/ BRITT, MD-XLN IP TO SUCRO S-CHLKY, FRM WHT CHLK IMBD IP, SLI TR MED QURTZ GRNS IMBD IP, CLR ANG QURTZ GRAINS , SLI TR GLAUC OR CHLORITE IMBD IP, , NO FLO, NO VIS POR, NO VIS SHOW OR UT
WOB 10
RPM 120
PP 800
WT 8.9
VIS 56
LCM 8
SH- DK GY - FRM IP TO V/ SFT PLTY TO HD SPLNTY IP
RTD @ 3:52 AM NOV 26TH 2018
SHORT TRIP
CTCH
TOFL- PIONEER , HAYS KANSAS
R.T.D. @ 5472'
L.T.D. @
5300
5350
5400
5450
0
ROP (min/ft)
5
0
Gamma (API)
150
CN
70 U. BG
88 U. TOTAL TO
C1
C5
C3
C2
CN
110 U. TOTAL
66 U. BG
C1
CN
C2
C3
5
98 U. POSS
TG, C1-C5
1
10
100
1000
CN
50 U . BG
CN
60 U. BG
C3
C2
C1
CN
R.T.D. @ 5472'
MUDLOG COMPLETED BY TIM HEDRICK
SAMPLES WILL BE MAILED TO EDMOND, OKLA.

Conservation Division
266 N. Main St., Ste. 220
Wichita, KS 67202-1513

Kansas
Corporation Commission

Phone: 316-337-6200
Fax: 346-337-6211
http://kcc.ks.gov/

April 11, 2019

Les Evans
Enterra Resources, LLC
PO BOX 5278
EDMOND, OK 73083-5278

Re: ACO-1
API 15-189-22851-00-00
RUELLA POTTS 4
NE/4 Sec.13-31S-35W
Stevens County, Kansas

Dear Les Evans:

K.A.R. 82-3-107 provides for all completion information to be filed within 120 days of the spud date. Subsection(e)(2) of that regulation states "All rights to confidentiality shall be lost if the filings are not timely."

The above referenced well was spudded on 11/16/2018 and the ACO-1 was received on April 11, 2019 (not within the 120 days timely requirement).

Therefore, your request for confidential treatment of data contained within the ACO-1 filing cannot be granted at this time.

If you should have any questions, please do not hesitate to contact me at (316)337-6200.

Sincerely,

Production Department