KOLAR Document ID: 1473660

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 # 32211
Name: O'Brien Energy Resources Corp.
Address 1: 18 CONGRESS ST, STE 207
Address 2:
City: PORTSMOUTH State: NH Zip: 03801 + 4091
Contact Person: Joseph Forma
Phone: (603) 427-2099
CONTRACTOR: License # 5929
Name: Duke Drilling Co., Inc.
Wellsite Geologist: Peter Debenham
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 #:

6/23/2019	6/29/2019	10/8/2019
Spud Date or Recompletion Date	Date Reached TD	Completion Date or Recompletion Date

API No.: 15-119-21427-00-00
Spot Description:
SW- NW- NE -NW Sec. 9 Twp. 33 S. R. 29 ☐ East ☑ West
363 Feet from ☑ North / ☐ South Line of Section
1478 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: Meade
Lease Name: PREEDY Well #: 5-9
Field Name:
Producing Formation: St.Louis
Elevation: Ground: 2592 Kelly Bushing: 2604
Total Vertical Depth: 6235 Plug Back Total Depth:
Amount of Surface Pipe Set and Cemented at: 1569 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: 7800 ppm Fluid volume: 5500 bbls
Dewatering method used: Hauled to Disposal
Location of fluid disposal if hauled offsite:
Operator Name: Max Papay LLC
Lease Name: Feldman 1-18 License #: 34021
Quarter SW Sec. 18 Twp. 34 S. R. 28 ☐ East ☑ West
County: Meade Permit #: D23094.0

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: 10/08/2019
☐ **Confidential Release Date:** 10/07/2021
☑ **Wireline Log Received** ☐ **Drill Stem Tests Received**
☑ **Geologist Report / Mud Logs Received**
☐ **UIC Distribution**
ALT ☑ **I** ☐ **II** ☐ **III** **Approved by:** Karen Ritter **Date:** 10/10/2019

Operator Name: O'Brien Energy Resources Corp. Lease Name: PREEDY Well #: 5-9

Sec. 9 Twp. 33 S. R. 29 ☐ East ☑ West County: Meade

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 ☐ Yes ☑ No
(Attach Additional Sheets)

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:

Induction
Bond

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

Name: Attached Top: Attached Datum: Attached

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	8.625	24	1569	Acon Blend	850	3%CaCl, 1/4# floseal
Production	7.875	4.5	10.5	6242	AA2	185	2%CaCl, 1/4# floseal

ADDITIONAL CEMENTING / SQUEEZE RECORD

Purpose:	Depth Top Bottom	Type of Cement	# Sacks Used	Type and Percent Additives
☐ Perforate ☐ Protect Casing ☐ Plug Back TD ☐ 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: ☐ Flowing ☐ Pumping ☐ Gas Lift ☐ Other *(Explain)*

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

DISPOSITION OF GAS:	METHOD OF COMPLETION:	PRODUCTION INTERVAL: Top	Bottom
☐ Vented ☐ Sold ☐ Used on Lease *(If vented, Submit ACO-18.)*	☐ Open Hole ☑ Perf. ☐ Dually Comp. *(Submit ACO-5)* ☐ Commingled *(Submit ACO-4)*	6102	6117

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)*
6	6102	6117			Acidize w/ 1500 gal NEFE 20% HCl & 10% Acetic

TUBING RECORD: Size: 2.3750 Set At: 6034 Packer At:

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

Form	ACO1 - Well Completion
Operator	O'Brien Energy Resources Corp.
Well Name	PREEDY 5-9
Doc ID	1473660

Tops

Name	Top	Datum
Heebner	4397	-1793
Toronto	4424	-1820
Lansing	4545	-1941
Marmaton	5176	-2572
Cherokee	5355	-2751
Atoka	5606	-3002
Morrow	5664	-3060
Mississippi Chester	5778	-3174
Ste. Genevieve	6014	-3410
St. Louis	6102	-3498

Form	ACO1 - Well Completion
Operator	O'Brien Energy Resources Corp.
Well Name	PREEDY 5-9
Doc ID	1473660

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	8.625	24	1569	Acon Blend	850	3%CaCl, 1/4# floseal
Production	7.875	4.5	10.5	6242	AA2	185	2%CaCl, 1/4# floseal

BASIC ENERGY SERVICES

PRESSURE PUMPING

Job Log

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

Customer:	O'Brien Energy	Cement Pump No.:	38117, 19919 16Hrs.	Operator TRK No.:	96816		
Address:	18 Congress St. Suite 207	Ticket #:	1718 19572 L	Bulk TRK No.:	19827, 37725	30463, 19578 Oscar	
City, State, Zip:	Portsmouth NH 03801	Job Type:	Z-42 Cement Surface Casing				
Service District:	1718 - Liberal, Ks.	Well Type:	OIL				
Well Name and No.:	Preedy 5-9	Well Location:	9-33-29	County:	Meade	State:	Kansas

Type of Cmt	Sacks	Additives	Truck Loaded On		
A-Con' Blend	375	3% Calcium Chloride, 1/4# Polyflake, .2%WCA-1	19827, 37725	Front	Back
Premium Plus Cement	150	2% Calcium Chloride, 1/4# Polyflake	30463, 19578 Oscar	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:	64
Tail:	14.8	1.34	6.33	201	# 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
19:45							ON LOCATION
20:15							SAFETY MEETING
9:00 PM							RIG UP
10:30 PM							RIG TO CIRCULATE
10:45 PM							SAFETY MEETING
23:05							RIG TO PT
23:09							PRESSURE TEST TO 2210PSI
11:15 PM	5	197.0 slurry				100	PUMP 375SX LEAD @ 11.4#
12:53	5	35.7 slurry				80	PUMP 150SX TAIL @ 14.8#
0:02							SHUTDOWN / DROP PLUG
0:04	5	10				40	DISPLACE
	5	20				30	
	5	30				30	
	5	40				30	
	5	50				60	
	5	60				100	
	5	70				180	
	5	80				250	
0:24	4.9	87				300	SLOW RATE TO 2.0BPM @ 260PSI
	2	90				270	
0:29	2	97.4				310	LAND PLUG / PRESSURE UP TO PSI
0:31							RELEASE BACK --- FLOAT HELD
							NO CEMENT TO SURFACE / WAIT TO 1"

Size Hole	12 1/4"	Depth	1569'			TYPE	Plug Container	
Size & Wt. Csg.	8 5/8" 24#	Depth	1572.80'	New / Used		Packer	Depth	
Landing Press.	316.5psi	Depth				Retainer	Depth	
Shoe Jt.	40.60'	Type				Perfs	CIBP	

Customer Signature:	
Basic Representative:	Daniel Beck
Basic Signature:	Daniel Beck
Date of Service:	6/25/2019

BASIC ENERGY SERVICES

PRESSURE PUMPING

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

Job Log

Customer:	O'Brien Energy	Cement Pump No.:	38117, 19919 16Hrs.	Operator TRK No.:	96816		
Address:	18 Congress St. Suite 207	Ticket #:	1718 19572 L	Bulk TRK No.:	19827, 37725	30463, 19578 Oscar	
City, State, Zip:	Portsmouth NH 03801	Job Type:	Z-42 Cement Surface Casing				
Service District:	1718 - Liberal, Ks.	Well Type:	OIL				
Well Name and No.:	Preedy 5-9	Well Location:	9-33-29	County:	Meade	State:	Kansas

Type of Cmt	Sacks	Additives	Truck Loaded On		
Premium Plus Cement	200	Neat	30463, 19578	Front	Back
Premium Plus Cement	125	2% Calcium Chloride	30463, 19578	Front	Back
				Front	Back

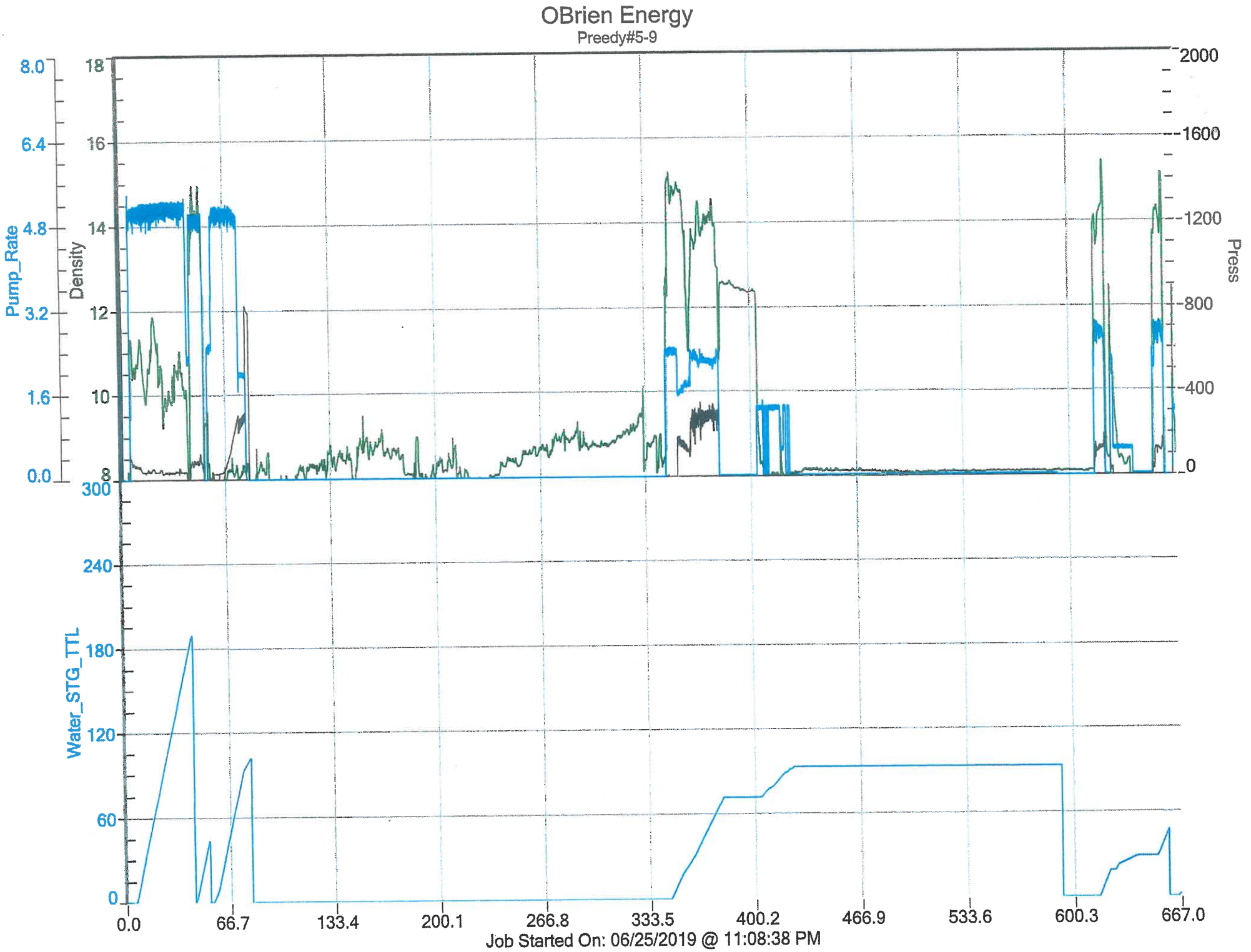
Lead/Tail:	Weight #1 Gal.	Cu/Ft/sk	Water Requirements	CU. FT.	Man Hours / Personnel	
1" @ 100':	14.8	1.33	6.34	266	TT Man Hours:	64
1" @ 35':	14.8	1.34	6.33	167.5	# of Men on Job:	3

Time (am/pm)	(BPM)	Volume (BBLS)	Pumps T	Pumps C	Pressure(PSI) Tubing	Pressure(PSI) Casing	Description of Operation and Materials
4:12							RIG UP TO 1"
4:45							TAG @ 100'
4:56 AM	2.4	47.3 slurry			10		PUMP THROUGH ' OF 1" W/ 200SX @ 14.8#
5:33 AM	2.4				310		SHUTDOWN / CEMENT NOT TO SURFACE
9:05 AM							RIG UP 1" TAG @ 35'
9:27	2.7	29.8 slurry			180		
10:10							CEMENT TO SURFACE
							JOB COMPLETE

Size Hole	12 1/4"	Depth	1569'			TYPE	Plug Container	
Size & Wt. Csg.	8 5/8" 24#	Depth	1572.80'	New / Used		Packer	Depth	
Landing Press.	316.5psi	Depth				Retainer	Depth	
Shoe Jt.	40.60'	Type				Perfs	CIBP	

Basic Representative:	Daniel Beck
Basic Signature:	Daniel Beck
Date of Service:	6/25/2019

Customer Signature: X


OBrien Energy
Preedy#5-9
Pump_Rate
8.0
6.4
4.8
3.2
1.6
0.0
Density
18
16
14
12
10
8
Press
2000
1600
1200
800
400
0
Water_STG_TTL
300
240
180
120
60
0
0.0
66.7
133.4
200.1
266.8
333.5
400.2
466.9
533.6
600.3
667.0
Job Started On: 06/25/2019 @ 11:08:38 PM

BASIC ENERGY SERVICES

PRESSURE PUMPING

Job Log

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

Customer:	Obrien Energy	Cement Pump No.:	70897, 19919 6Hrs.	Operator TRK No.:	96816		
Address:	18 Congress St. Suite 207	Ticket #:	1718 19577 L	Bulk TRK No.:	14354, 19808 Kirby	14354, 19808	
City, State, Zip:	Portsmouth NH 03801	Job Type:	Z42 - Cement Production Casing				
Service District:	1718 - Liberal, Ks.	Well Type:	OIL				
Well Name and No.:	Preedy 5-9	Well Location:	5,33,29	County:	Meade	State:	Ks

Type of Cmt	Sacks	Additives	Truck Loaded On		
60/40 Poz	50		14354, 19808 Kirby	Front	Back
AA2	185	5% w-60, 10% Salt, .6% c-17, 1/4# Defoamer, 5# Gilsonite, 1/3#/sk OWB	14354, 19808	Front	Back
Rat & Mouse	50			Front	Back

	Weight #1 Gal.	Cu/Ft/sk	Water Requirements	CU. FT.	Man Hours / Personnel	
Lead/Tail:						
Lead:	12	2.08	11.89	104	TT Man Hours:	40.5
Tail:	14.8	1.52	6.7	281.2	# of Men on Job:	3

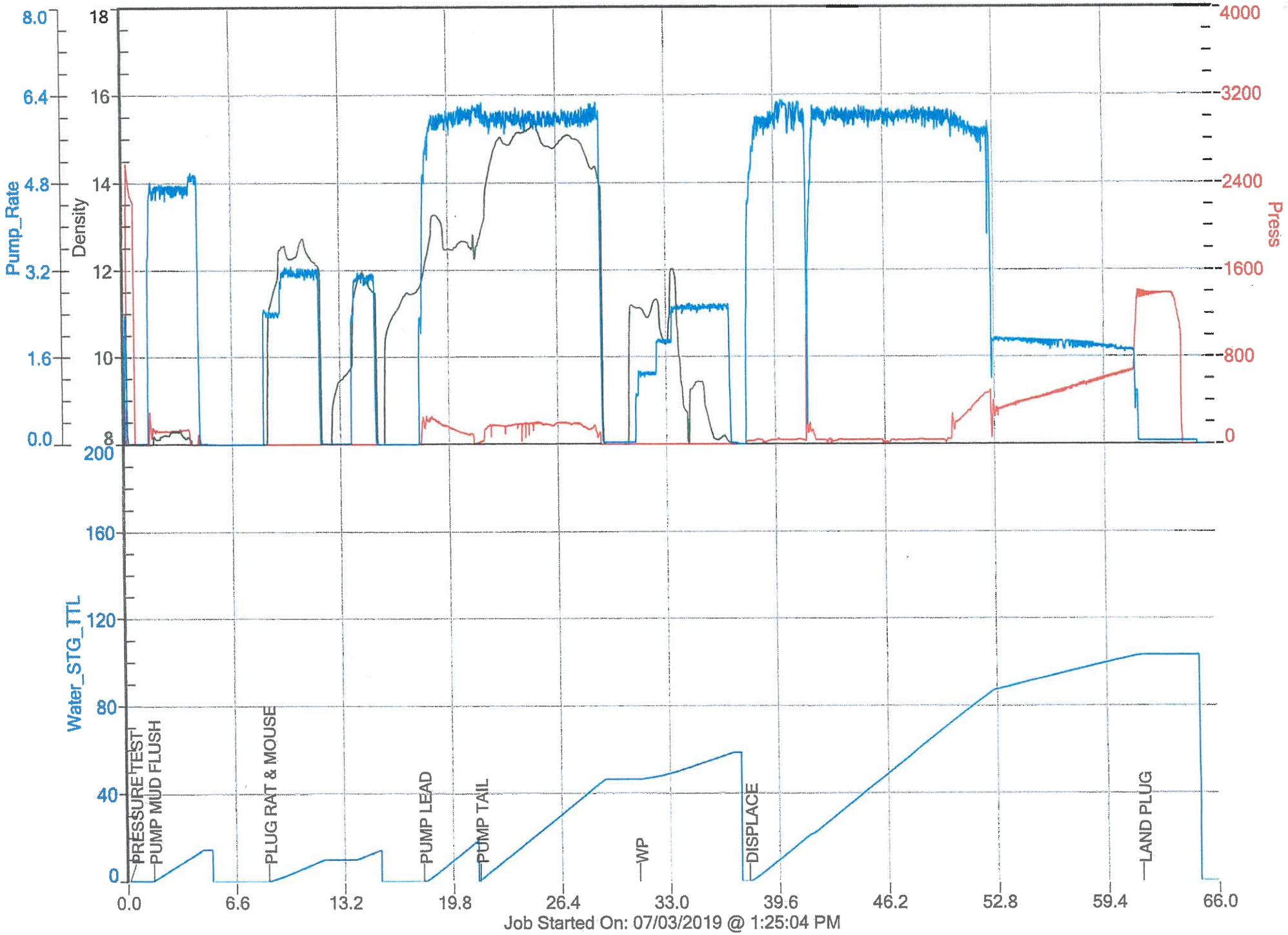
Time (am/pm)	(BPM)	Volume (BBLS)	Pumps T	Pumps C	Pressure(PSI) Tubing	Pressure(PSI) Casing	Description of Operation and Materials
9:05							ON LOCATION
9:30							SAFETY MEETING
10:00 AM							RIG UP
11:00 AM							RIG TO CIRCULATE
11:15 AM							SAFETY MEETING
13:25	4.6	11.9				170	PUMP 500GALLONS MUD FLUSH
13:30							PLUG RAT & MOUSE W/ 50SX
1:43 PM	6	18.5 slurry				240	PUMP 50SX LEAD @ 12#
13:46	6	50.0 slurry				120	PUMP 185SX TAIL @ 14.8#
13:54							SHUTDOWN / DROP PLUG / WP
14:03	6	10				40	DISPLACE W/ 3%KCL
	6.2	20				40	
	6	30				40	
	6	40				40	
	6	50				40	
	6	60				40	
	6	70				250	
	5.8	80				350	
	5.7	88				420	SLOW RATE TO 2.0BPM @ 320PSI
	1.8	90				600	
14:27	1.7	98.7				680	LAND PLUG / PRESSURE UP TO 1400PSI
14:29							RELEASE BACK --- PLUG HELD
							JOB COMPLETE

Size Hole	7 7/8"	Depth				TYPE	Plug Container	
Size & Wt. Csg.	4 1/2" 10.5#	Depth	6235'	New / Used		Packer	Depth	
tbg.	704.1psi	Depth				Retainer	Depth	
Top Plugs	22.25'	Type				Perfs	CIBP	

Customer Signature:	
Basic Representative:	Daniel Beck
Basic Signature:	Daniel Beck
Date of Service:	7/3/2019

OBrien Energy

Preedy5-9



O'Brien Energy Resources, Inc.
Preedy No. 5-9, Angell South Field
Section 9, T33S, R29W
Meade County, Kansas
June, 2019

Well Summary

The Preedy No. 5-9 was drilled to a total depth of 6235' in the St. Louis Formation. Problems occurred with lost circulation while drilling the surface hole. The logging tool got stuck at 6200' and necessitated fishing.

One of the closest offsets was the Keystone No. 3-4, approximately 1200' to the NW. Formation tops came in considerably lower relative to this offset. Formations from the Heebner to the Marmaton ran 22' to 27' low. The Cherokee, Atoka and Morrow came in 31' low, the primary objective St. Louis came in 30' low. Formation tops ran high relative to the Preedy No. 1-9 to the East. The Heebner came in 12' low, the Atoka and Morrow, 3' low. The Basal Chester, Ste. Genevieve and St. Louis came in 3', 5' and 17' high respectively.

The only hydrocarbon show documented during the drilling of this test occurred in the St. Louis(6110'-6118') and consists of a Dolomite: Dark mottled brown, medium to dark speckled brown, microcrystalline, microsucrosic to sucrosic in part, chalky in part, brittle to hard, clean, very siliceous in part, Chert nodules, v fossiliferous in part with good interparticle and moldic porosity, occasionally good intercrystalline porosity, dull speckled orange to occasional bright yellow hydrocarbon fluorescence(10% spl), excellent fast streaming cut, live oil and oil stain, slight oil odor. A 90 Unit mud gas increase was recorded on the hotwire.

4 ½" production casing was run on the Preedy No. 5-9 on 7/3/19 for St. Louis oil production.

Respectfully Submitted,

Peter Debenham

WELL DATA

Operator:	O'Brien Energy Resources, Inc., John Forma – Portsmouth, NH Geologist: Paul Wiemann – Denver, CO
Prospect Geologist:	David Ward, Ed Schuett, Denver
Well:	Preedy No. 5-9, Angell South Field
API:	15-119-21427
Location:	363'FNL & 1478'FWL, Section 9, 33S, R29W, Meade Co. Kansas – Southeast of Plains.
Elevation:	Ground Level 2592', Kelly Bushing 2604'
Contractor:	Duke Drilling Rig No. 1, T.P. Mike Godfrey, Drillers Juan, Saul and Carlos
Company Man:	Dana Geathouse
Spud Date:	6/23/19, 4:45 am.
Total Depth:	6/29/19, 2 AM, Driller 6235', Logger 6242', St. Louis Formation
Casing Program:	39 joints of 8 5/8", J-55, 24Lbs/ft, set at 1569' with 375 sacks A-Con blend(3%cc & ¼ lb flake) tail with 150 sacks Pem Plus(2%cc, ¼ bl Poly Flake), cement did not circulate, services by Basic. 4 1/2" production casing set to TD.'
Mud Program:	Winter Mud, engineer Paul White, displaced 2589', Chemical gel/LCM.
Wellsite Consultant:	Peter Debenham, Call depth 4000', Box 350, Drake, CO 80515, 720/220-4860.
Mudlogging trailer:	MBC Logging, Meade.
Samples:	30' to 5600', 20' to TD.
Electric Logs:	Eli Logging, Hays, KS, Engineer Jeff Luebbers, 1) Dual Induction – logged while going in.
Status:	4 ½" production casing run to TD on 7/3/19.

WELL CHRONOLOGY

DATE	AM Report DEPTH	FOOTAGE	RIG ACTIVITY
6/23	244’	244’	Move to location and rig up. Move water, water pump down, and mix spud mud. Drill rathole and mousehole and spud in 12 ¼” surface hole. Heavy rain. To 244’.
6/24	1060’	816’	12 ¼” to 637’ and lost circulation at 606’. Trip out and fill hole from surface with 16 ppb/LCM mud. Pick up drill collars and ream to bottom and circulate every kelly down and lost circulation. Dry drill to 737’ and gain circulation. Control drill to 1060’ and lost circulation(280 bbls).
6/25	1580’	520’	To 1580’ with slow returns(app. 280 bbls) and circulate. Drop survey(1/2 deg.) and trip out. Run and cement 39 joints of 8 5/8”, 254 lbs/ft, J-55 STC set at 1569’ with 375 sacks A-Con Blend, tail 150 sacks Prem Plus(2% CC, ¼ lb PolyFlake) – did not circulate. Wait on cement 4 hours and run in with 1”, tagged cement at 100’ and pump 200 sacks Class C cement – did not circulate to surface. Wait on additional cement.
6/26	2715’	1135’	Tagged cement at 35’. Pump 125 sacks Class C through 1”. Wait on cement 2 hours. Drill plug and cement and nipple up and pressure test BOP. Drill to 2589’ and displace mud system. To 2715’.
6/27	4400’	1689’	Drilling ahead.
6/28	5915’	1515’	
6/29	6235’TD	320’	To 6235’TD and circulate. Wiper trip 27 stands and circulate. Trip out for logs and log bottom 35’, stuck logging tool at 6200’. Wait on orders and wait on fishermen.
6/30	TD		Wait on fishing company and trip in with side door overshot and work to fish. Top of tool at 6175’. Work on fish and trip out of hole, left caliper arm in the hole.
7/1	TD		Wait on fishing tools and trip in and ream bridges and circulate. Rig up logging tool with gamma ray and determine where caliper arm is(6188’). Trip in with bit and circulate and condition hole. Trip out and trip in with new overshot.

7/2 TD Work to tool and fish. Trip out with fish. Trip in with bit and circulate.

7/3 TD Trip out laying down and run and cement 4 ½" production casing to TD. Rig down. Rig released(4:30 PM).

7/4 Happy Birthday USA!

BIT RECORD

NO.	MAKE	TYPE	SIZE	OUT	FOOTAGE	HOURS
1	V516		12 ¼"	1580'	1580'	15 ¾
2	5195		7 7/8"	6235	4655'	65 ½
				Total Rotating Hours:		81 ¼
				Average:		76.7
				Ft/hr		

DEVIATION RECORD - degree

1580' ½, 2116' ¾, 2715' ¾, 4418' 1, 5112' 1, 6235' 1

MUD PROPERTIES

DATE	DEPTH	WT	VIS	PV	YP	pH	WL	CL	LCM-LBS/BBL
6/23	422'	9.6	40	9	12	8.5	nc	2K	12
6/24	725'	9.1	50	13	16	8.5	nc	1.5K	15
6/25	1580'	8.4	26	1	2	8.0	nc	1K	0
6/26	2957'	8.7	40	17	11	10.0	18	6K	4.5
6/27	4460'	8.75	49	18	12	9.5	12	6K	6
6/28	5489'	8.95	43	17	11	9	9	5K	5
6/29	6235'	9.1	53	17	14	9.5	8	3K	6
6/30	6235'	8.9	55	17	15	9.5	8	3K	6
7/1	6235'	8.95	45	14	12	10.0	8	2K	4

ELECTRIC LOG FORMATION TOPS- KB Elev. 2604’

			*Keystone No. 3-4	
FORMATION	**DEPTH**	**DATUM**	**DATUM**	**POSITION**
Casing	1569’			
Heebner	4397’	-1793’	-1769’	-24’
Toronto	4424’	-1820’	-1796’	-24’
Lansing	4545’	-1941’	-1914’	-27’
Marmaton	5176’	-2572’	-2550’	-22’
Cherokee	5355’	-2751’	-2720’	-31’
Atoka	5606’	-3002’	-2970’	-32’
Morrow	5664’	-3060’	-3029’	-31’
Mississippi Chester	5778’	-3174	-3150’	-24
Basal Chester	5974’	-3370’	-3337’	-33’
Ste. Genevieve	6014’	-3410’	-3368’	-42’
St. Louis	6102’	-3498’	-3468’	-30’
TD	6242’			

*O’Brien Energy Resources, Keystone No. 3-4, 380’ FSL & 729’ FWL, Section 4, 33 S, 29W – 1200’ to the NW., K.B. Elev. 2597’.

			*Preedy No. 1-9	
FORMATION	**DEPTH**	**DATUM**	**DATUM**	**POSITION**
Casing	1569’			
Heebner	4397’	-1793’	-1781’	-12’
Toronto	4424’	-1820’	-1807’	-13’
Lansing	4545’	-1941’	-1925’	-16’
Marmaton	5176’	-2572’	-2573’	+1’
Cherokee	5355’	-2751’	-2749’	-2’
Atoka	5606’	-3002’	-3000’	-2’
Morrow	5664’	-3060’	-3057’	-3’
Mississippi Chester	5778’	-3174	-3185’	+10’
Basal Chester	5974’	-3370’	-3373’	+3’
Ste. Genevieve	6014’	-3410’	-3415’	+5’
St. Louis	6102’	-3498’	-3515’	+17’
TD	6242’			

*O’Brien Energy Resources, Preedy No. 1-9, to the SW., K.B. Elev. 2645’.

OPERATOR

Company: O'Brien Energy Resources, Corp.
Address: 18 Congress St., Suite 207
Portsmouth, NH 03801
President/Owner John Forma, Geologist Paul Wiemann

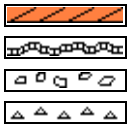
GEOLOGIST

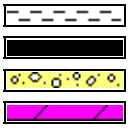
Name: Wellsite: Peter Debenham
Company: Petrolific Consulting Services
Address: P.O. Box 350
Drake, CO 80515
720/220-4860, Petrolific@gmail.com

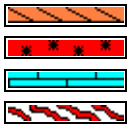
Comments

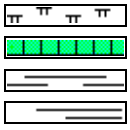
Company Man: Dana Geathouse, Duke Drilling Rig No. 1, T.P. Mike Godfrey, Drillers Juan, Saul and Carlos, Winter Mud, engineer Paul White, displaced 2600', Chemical gel/LCM, Weatherford, engineer Matt McGlothlin, Array Induction, Compensated Neutron/Density, Microlog, Hi Res.

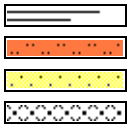
ROCK TYPES


Anhy
Bent
Brec
Cht


Clyst
Coal
Congl
Dol


Gyp
Igne
Lmst
Meta


Mrlst
Salt
Shale
Shcol


Shgy
Sltst
Ss
Till

ACCESSORIES

FOSSIL

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

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
Ssstrg

STRINGER

Anhy
Arg
Bent
Coal
Dol
Gyp
Ls
Mrst
Sltstrg

TEXTURE

Boundst
Chalky
Cryxln
Earthy
Finexln
Grainst
Lithogr
Microxln
Mudst
Packst
Wackest

OTHER SYMBOLS

INTERVALS

Core
Dst

EVENTS

Rft
Sidewall

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

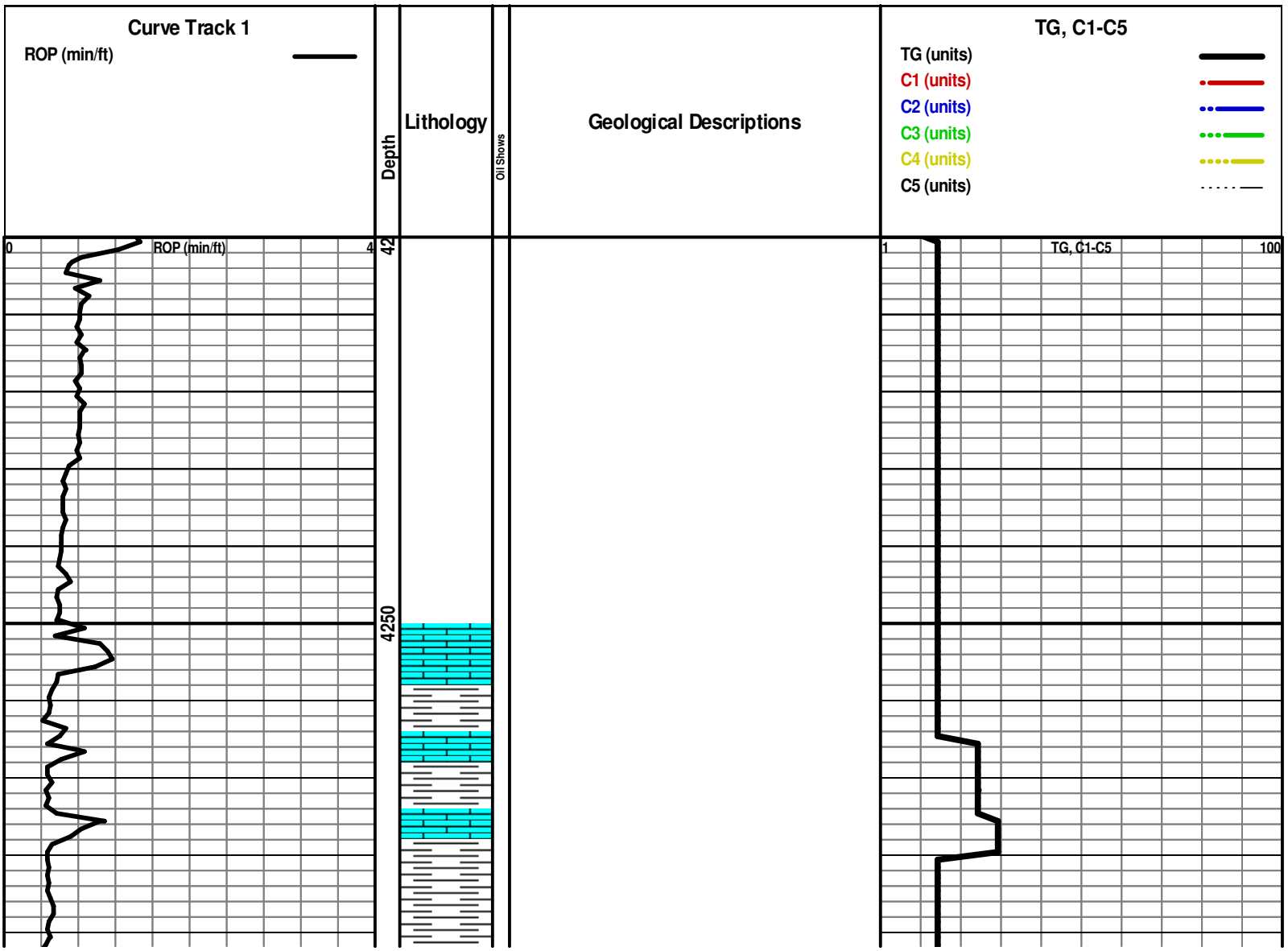
Petrolific Consulting Services

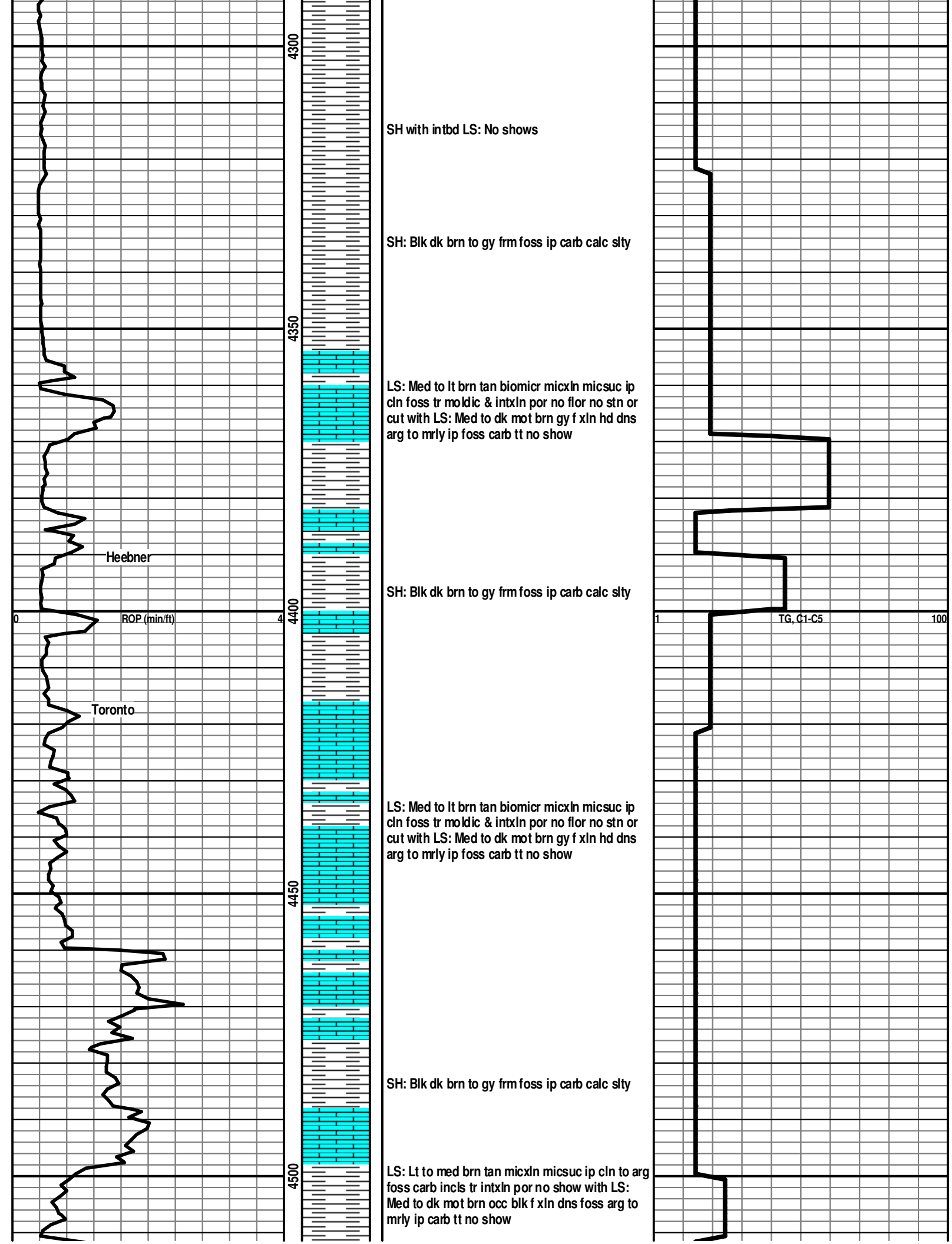
Peter Debenham
P.O. Box 350
Drake, Colorado 80515

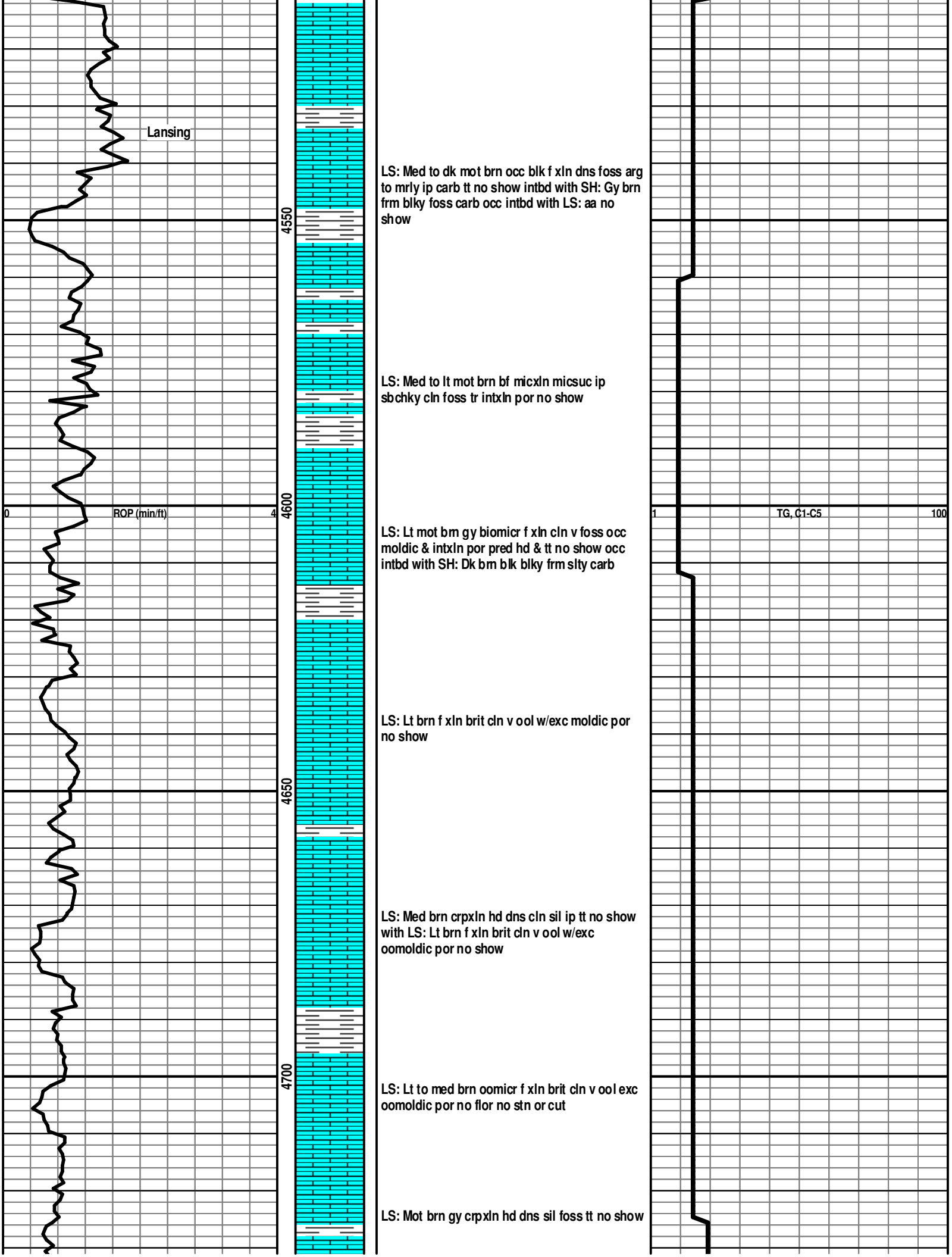
Wellsite Geology
720/220-4860
petrolific@earthlink.net

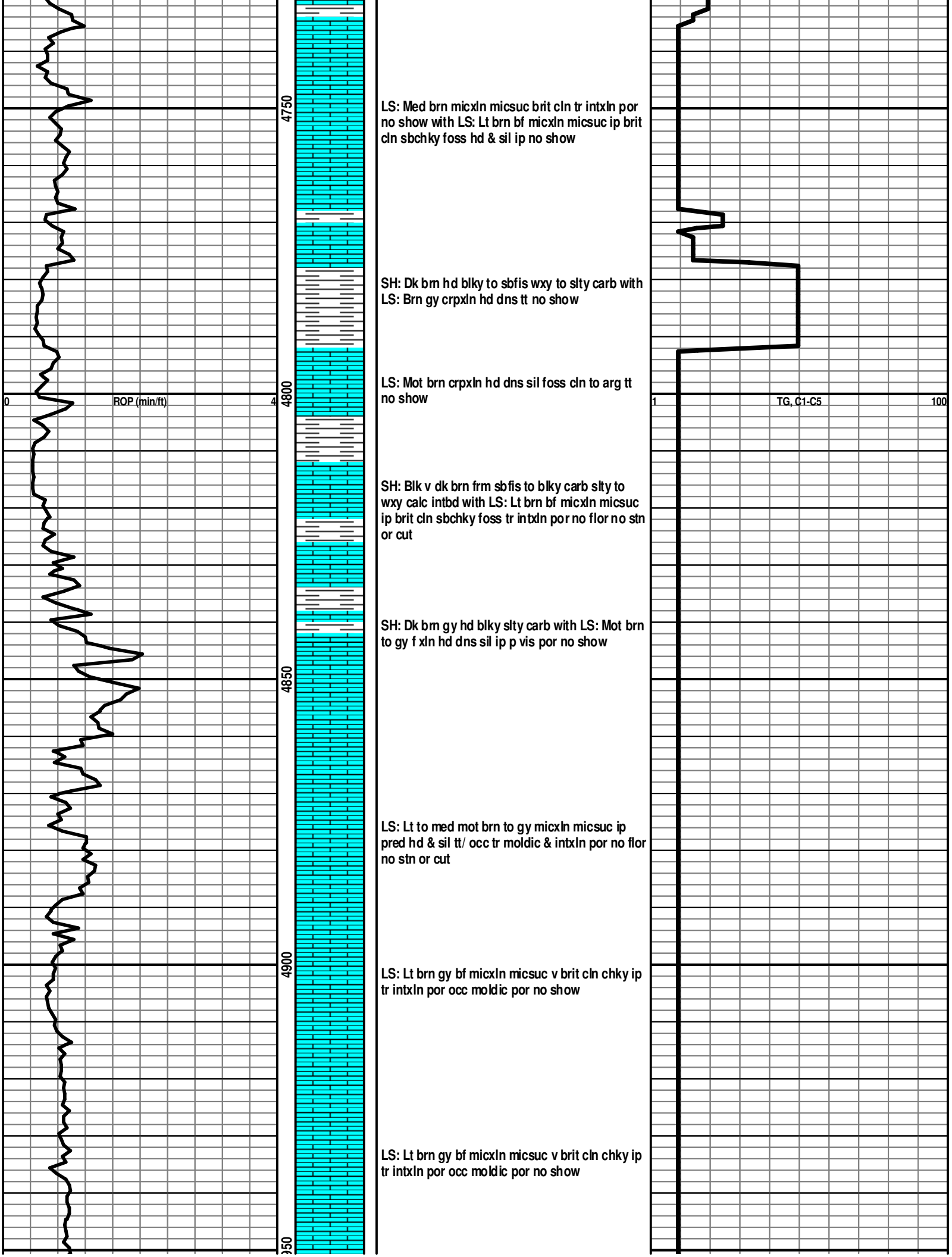
Scale 1:240 (5"=100') Imperial

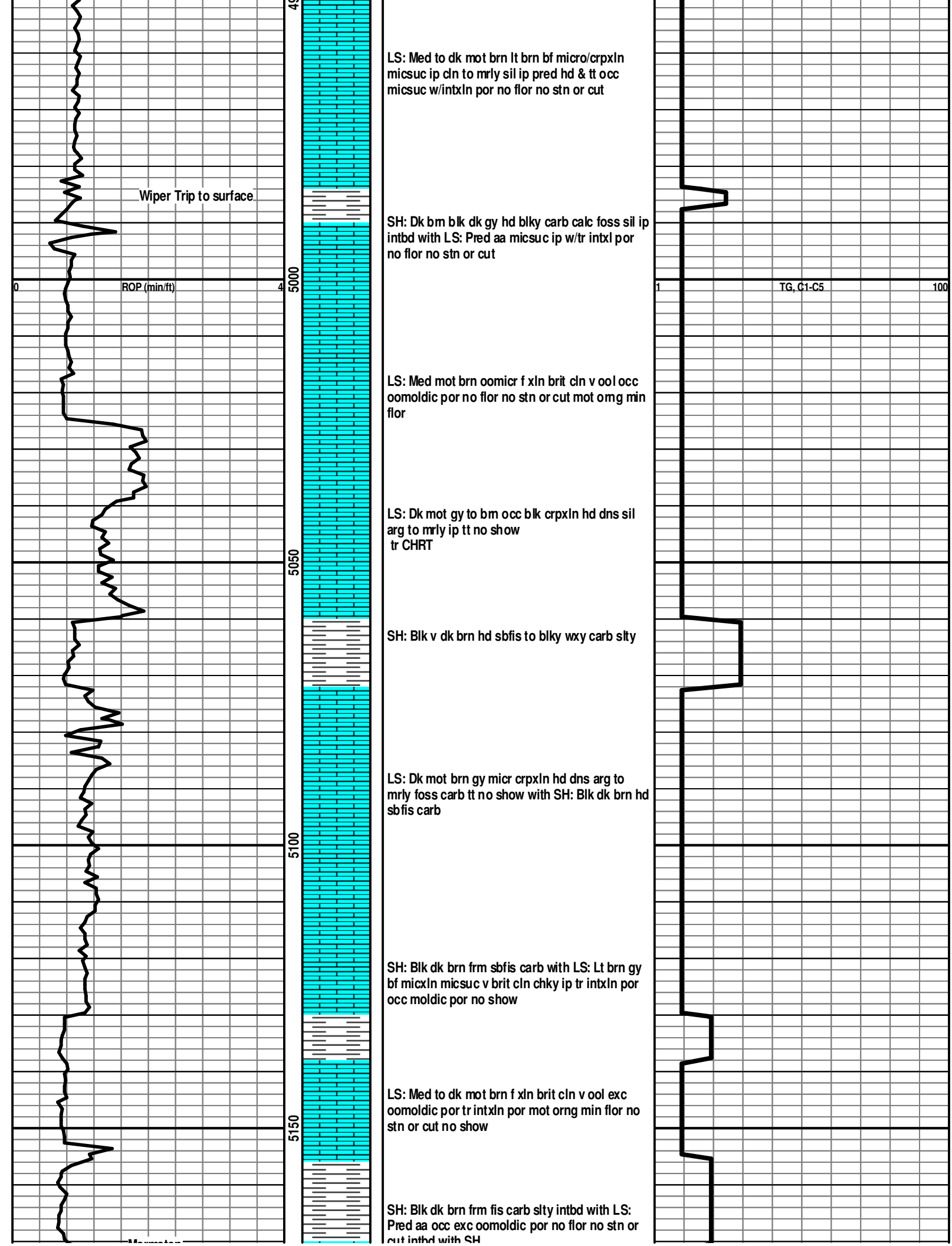
Well Name:	Preedy No. 5-9, Angell South Field		
Location:	363' FNL & 1478' FWL, Sec. 9, T33S, R29W, Meade Co., KS		
Licence Number:	API: 15-119-21427	Region:	Hougoton
Spud Date:	6/22/19	Drilling Completed:	6/29/19
Surface Coordinates:	363' FNL & 1478' FWL, Sec. 9, T33S, R29W, Meade Co., KS		
Bottom Hole Coordinates:	363' FNL & 1478' FWL, Sec. 9, T33S, R29W, Meade Co., KS		
Ground Elevation (ft):	2592'	K.B. Elevation (ft):	2604'
Logged Interval (ft):	4200' To: TD	Total Depth (ft):	6235'
Formation:	Lansing, Morrow, Chester, Ste Genevieve, St. Louis		
Type of Drilling Fluid:	Chemical Gel/LSND/LCM, mud up 2610'		

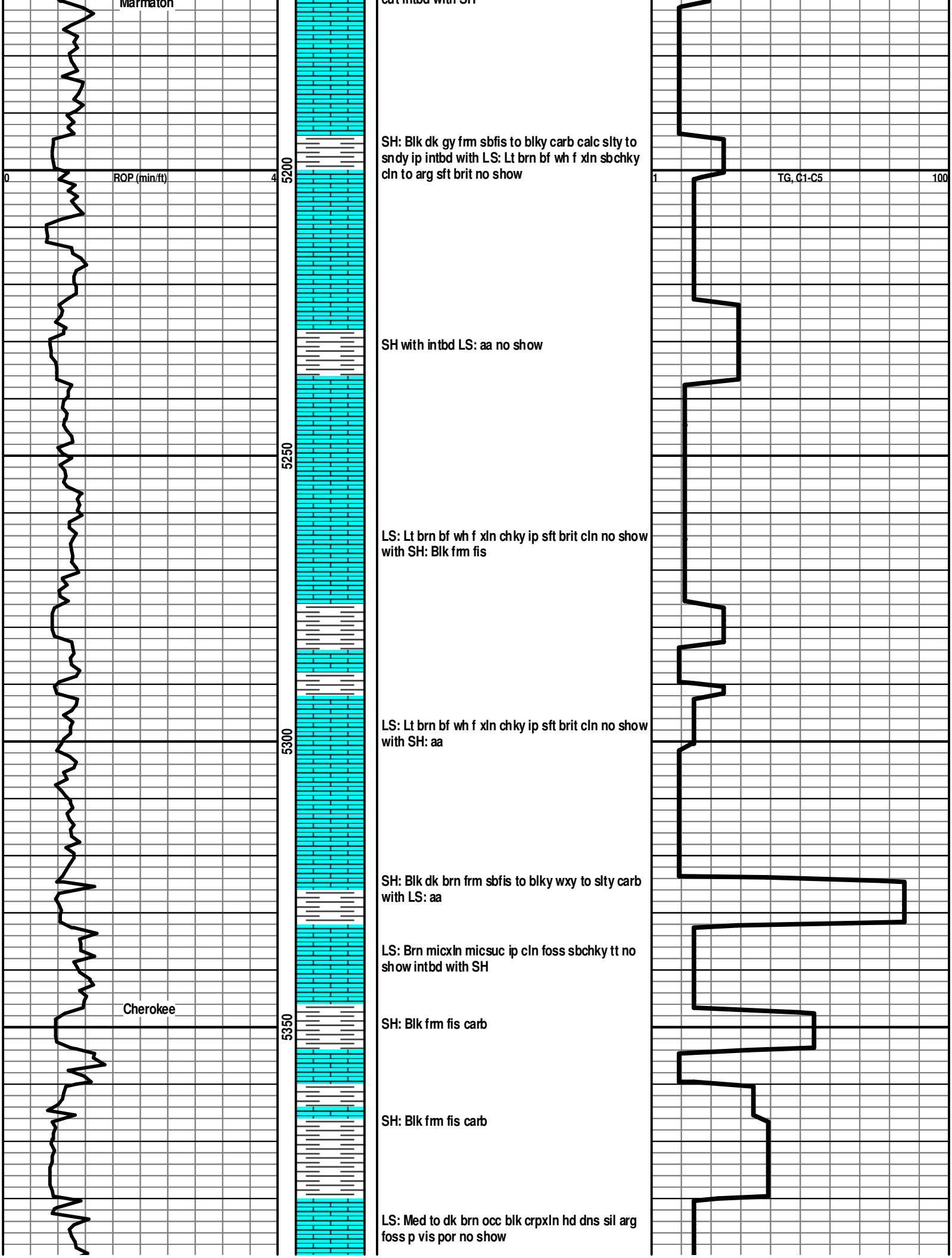


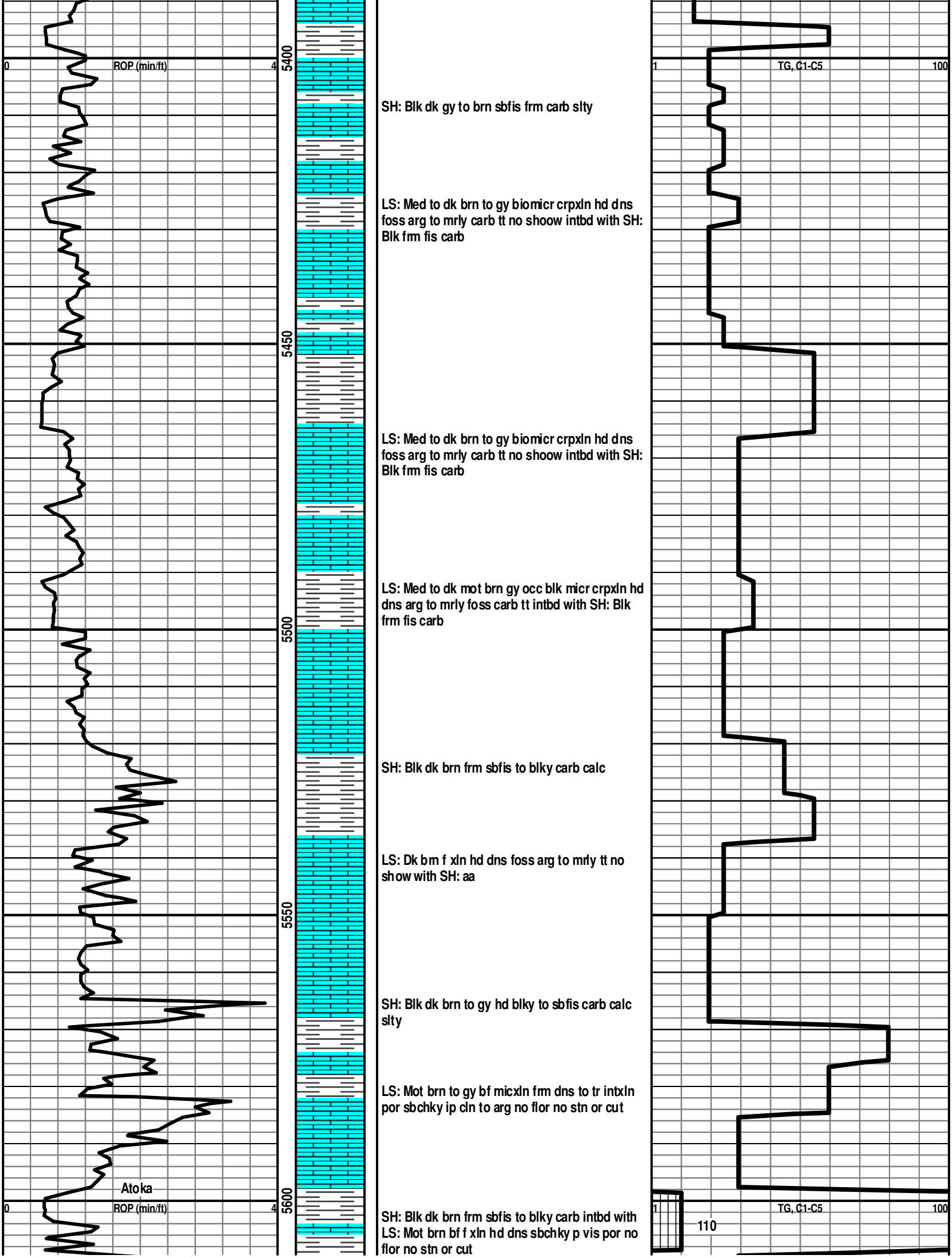

4300
4350
4400
4450
4500
SH with intbd LS: No shows
SH: Blk dk brn to gy frm foss ip carb calc slty
LS: Med to lt brn tan biomicr micxln micsuc ip cln foss tr moldic & intxln por no flor no stn or cut with LS: Med to dk mot brn gy f xln hd dns arg to mrly ip foss carb tt no show
Heebner
SH: Blk dk brn to gy frm foss ip carb calc slty
0
ROP (min/ft)
4
1
TG, C1-C5
100
Toronto
LS: Med to lt brn tan biomicr micxln micsuc ip cln foss tr moldic & intxln por no flor no stn or cut with LS: Med to dk mot brn gy f xln hd dns arg to mrly ip foss carb tt no show
SH: Blk dk brn to gy frm foss ip carb calc slty
LS: Lt to med brn tan micxln micsuc ip cln to arg foss carb incls tr intxln por no show with LS: Med to dk mot brn occ blk f xln dns foss arg to mrly ip carb tt no show

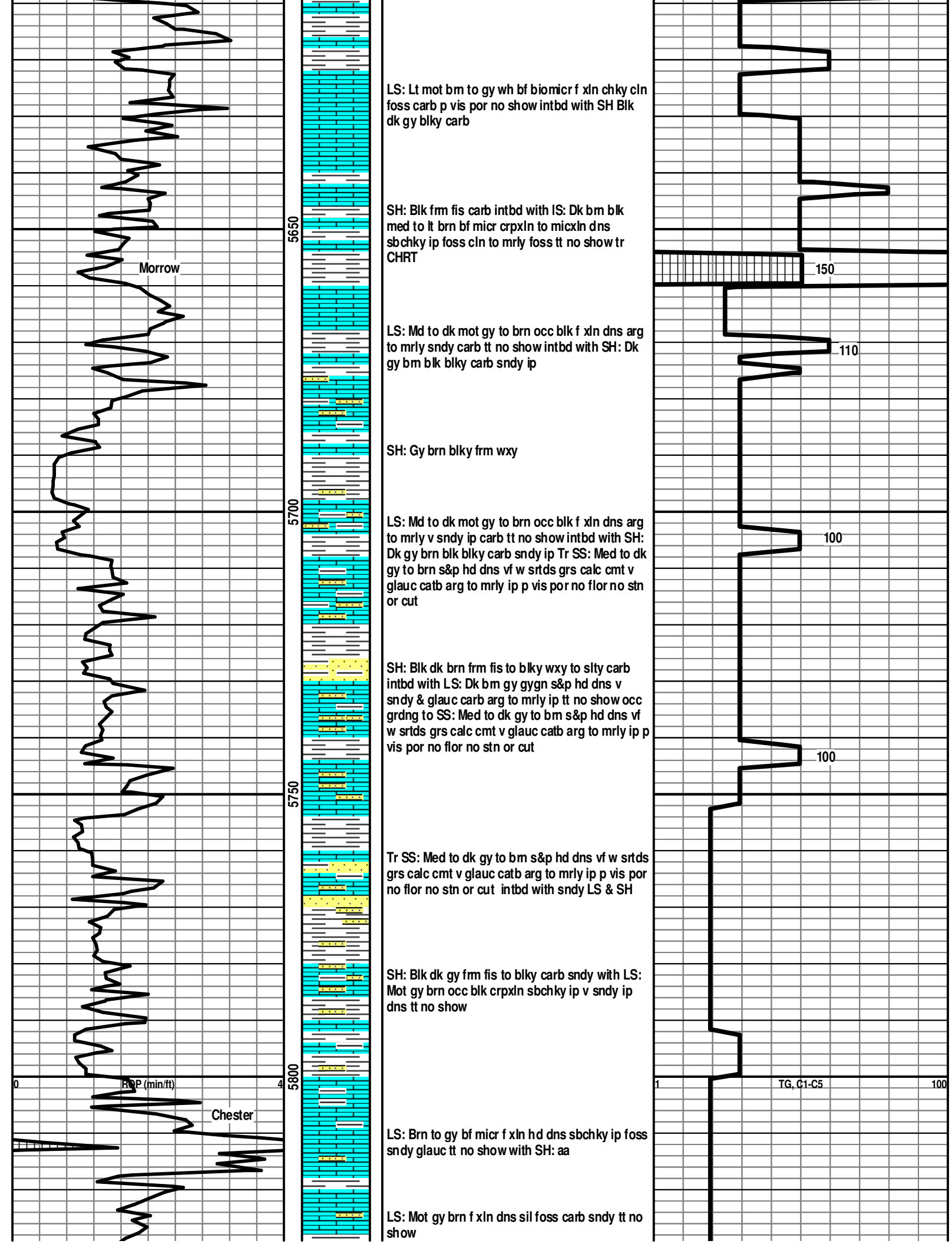

Lansing
4550
4600
4650
4700
0
ROP (min/ft)
4
1
TG, C1-C5
100
LS: Med to dk mot brn occ blk f xln dns foss arg to mrly ip carb tt no show intbd with SH: Gy brn frm blky foss carb occ intbd with LS: aa no show
LS: Med to lt mot brn bf micxln micsuc ip sbchky cln foss tr intxln por no show
LS: Lt mot brn gy biomicr f xln cln v foss occ moldic & intxln por pred hd & tt no show occ intbd with SH: Dk brn blk blky frm slty carb
LS: Lt brn f xln brit cln v ool w/exc moldic por no show
LS: Med brn crpxln hd dns cln sil ip tt no show with LS: Lt brn f xln brit cln v ool w/exc oomoldic por no show
LS: Lt to med brn oomicr f xln brit cln v ool exc oomoldic por no flor no stn or cut
LS: Mot brn gy crpxln hd dns sil foss tt no show

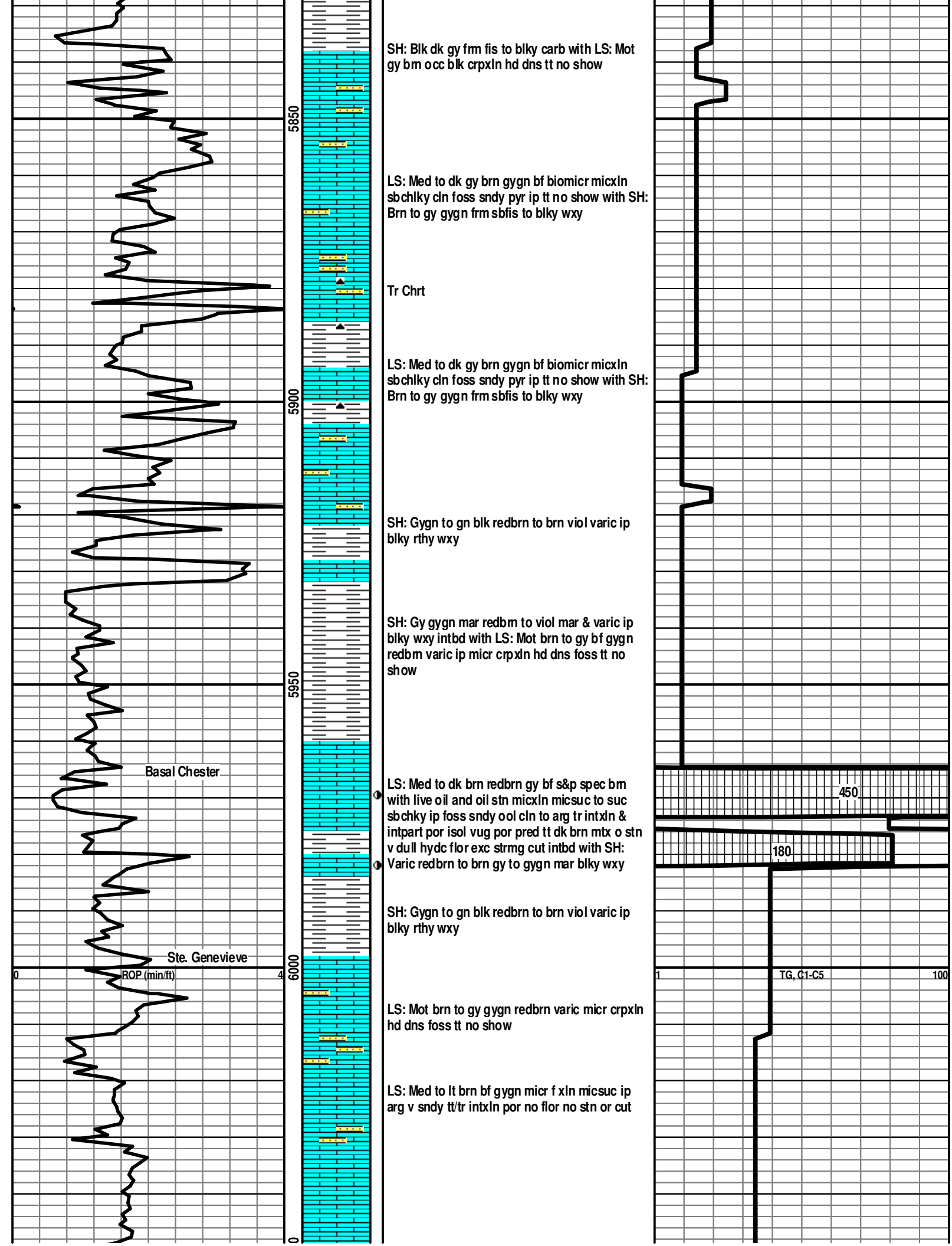

0
ROP (min/ft)
4
4750
4800
4850
4900
1
TG, C1-C5
100
LS: Med brn micxln micsuc brit cln tr intxln por no show with LS: Lt brn bf micxln micsuc ip brit cln sbchky foss hd & sil ip no show
SH: Dk brn hd blky to sbfis wxy to slty carb with LS: Brn gy crpxln hd dns tt no show
LS: Mot brn crpxln hd dns sil foss cln to arg tt no show
SH: Blk v dk brn frm sbfis to blky carb slty to wxy calc intbd with LS: Lt brn bf micxln micsuc ip brit cln sbchky foss tr intxln por no flor no stn or cut
SH: Dk brn gy hd blky slty carb with LS: Mot brn to gy f xln hd dns sil ip p vis por no show
LS: Lt to med mot brn to gy micxln micsuc ip pred hd & sil tt/ occ tr moldic & intxln por no flor no stn or cut
LS: Lt brn gy bf micxln micsuc v brit cln chky ip tr intxln por occ moldic por no show
LS: Lt brn gy bf micxln micsuc v brit cln chky ip tr intxln por occ moldic por no show

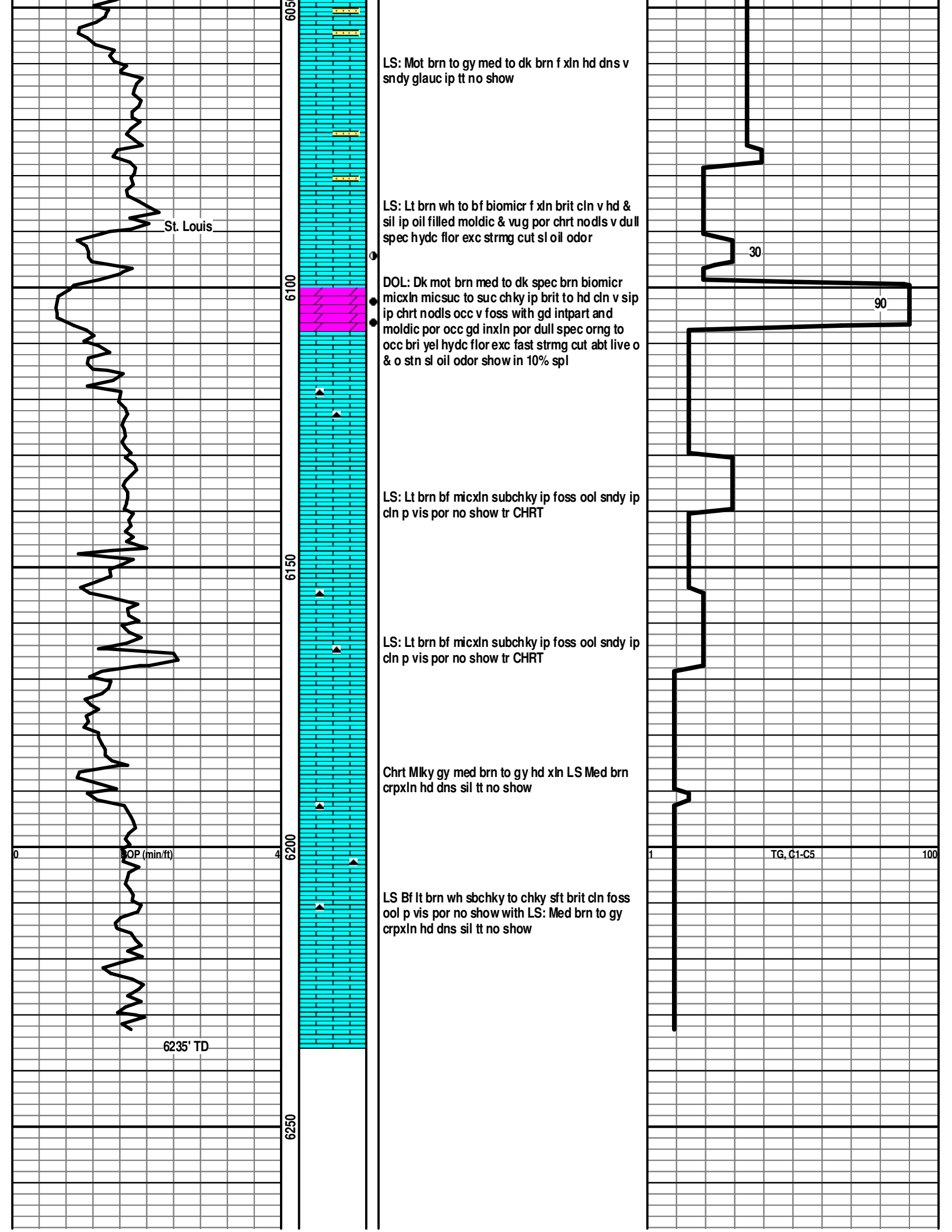

Wiper Trip to surface
0
ROP (min/ft)
4
5000
5050
5100
5150
1
TG, C1-C5
100
LS: Med to dk mot brn lt brn bf micro/crpxln micsuc ip cln to mrly sil ip pred hd & tt occ micsuc w/intxln por no flor no stn or cut
SH: Dk brn blk dk gy hd blky carb calc foss sil ip intbd with LS: Pred aa micsuc ip w/tr intxl por no flor no stn or cut
LS: Med mot brn oomicr f xln brit cln v ool occ oomoldic por no flor no stn or cut mot orng min flor
LS: Dk mot gy to brn occ blk crpxln hd dns sil arg to mrly ip tt no show
tr CHRT
SH: Blk v dk brn hd sbfis to blky wxy carb slty
LS: Dk mot brn gy micr crpxln hd dns arg to mrly foss carb tt no show with SH: Blk dk brn hd sbfis carb
SH: Blk dk brn frm sbfis carb with LS: Lt brn gy bf micxln micsuc v brit cln chky ip tr intxln por occ moldic por no show
LS: Med to dk mot brn f xln brit cln v ool exc oomoldic por tr intxln por mot orng min flor no stn or cut no show
SH: Blk dk brn frm fis carb slty intbd with LS: Pred aa occ exc oomoldic por no flor no stn or


Marmaton
0
ROP (min/ft)
4
5200
5250
5300
Cherokee
5350
cut intbd with SH
SH: Blk dk gy frm sbfis to blky carb calc slty to sndy ip intbd with LS: Lt brn bf wh f xln sbchky cln to arg sft brit no show
SH with intbd LS: aa no show
LS: Lt brn bf wh f xln chky ip sft brit cln no show with SH: Blk frm fis
LS: Lt brn bf wh f xln chky ip sft brit cln no show with SH: aa
SH: Blk dk brn frm sbfis to blky wxy to slty carb with LS: aa
LS: Brn micxln micsuc ip cln foss sbchky tt no show intbd with SH
SH: Blk frm fis carb
SH: Blk frm fis carb
LS: Med to dk brn occ blk crpxln hd dns sil arg foss p vis por no show
1
TG, C1-C5
100


0
ROP (min/ft)
4
5400
5450
5500
5550
5600
Atoka
1
TG, C1-C5
100
SH: Blk dk gy to brn sbfis frm carb slty
LS: Med to dk brn to gy biomicr crpxln hd dns foss arg to mrly carb tt no shoow intbd with SH: Blk frm fis carb
LS: Med to dk brn to gy biomicr crpxln hd dns foss arg to mrly carb tt no shoow intbd with SH: Blk frm fis carb
LS: Med to dk mot brn gy occ blk micr crpxln hd dns arg to mrly foss carb tt intbd with SH: Blk frm fis carb
SH: Blk dk brn frm sbfis to blky carb calc
LS: Dk brn f xln hd dns foss arg to mrly tt no show with SH: aa
SH: Blk dk brn to gy hd blky to sbfis carb calc slty
LS: Mot brn to gy bf micxln frm dns to tr intxln por sbchky ip cln to arg no flor no stn or cut
SH: Blk dk brn frm sbfis to blky carb intbd with LS: Mot brn bf f xln hd dns sbchky p vis por no flor no stn or cut


Morrow
Chester
0
ROP (min/ft)
4
5650
5700
5750
5800
LS: Lt mot brn to gy wh bf biomicr f xln chky cln foss carb p vis por no show intbd with SH Blk dk gy blky carb
SH: Blk frm fis carb intbd with lS: Dk brn blk med to lt brn bf micr crpxln to micxln dns sbchky ip foss cln to mrly foss tt no show tr CHRT
LS: Md to dk mot gy to brn occ blk f xln dns arg to mrly sndy carb tt no show intbd with SH: Dk gy brn blk blky carb sndy ip
SH: Gy brn blky frm wxy
LS: Md to dk mot gy to brn occ blk f xln dns arg to mrly v sndy ip carb tt no show intbd with SH: Dk gy brn blk blky carb sndy ip Tr SS: Med to dk gy to brn s&p hd dns vf w srtds grs calc cmt v glauc catb arg to mrly ip p vis por no flor no stn or cut
SH: Blk dk brn frm fis to blky wxy to slty carb intbd with LS: Dk brn gy gygn s&p hd dns v sndy & glauc carb arg to mrly ip tt no show occ grdng to SS: Med to dk gy to brn s&p hd dns vf w srtds grs calc cmt v glauc catb arg to mrly ip p vis por no flor no stn or cut
Tr SS: Med to dk gy to brn s&p hd dns vf w srtds grs calc cmt v glauc catb arg to mrly ip p vis por no flor no stn or cut intbd with sndy LS & SH
SH: Blk dk gy frm fis to blky carb sndy with LS: Mot gy brn occ blk crpxln sbchky ip v sndy ip dns tt no show
LS: Brn to gy bf micr f xln hd dns sbchky ip foss sndy glauc tt no show with SH: aa
LS: Mot gy brn f xln dns sil foss carb sndy tt no show
150
110
100
100
1
TG, C1-C5
100


5850
5900
5950
6000
Basal Chester
Ste. Genevieve
0
ROP (min/ft)
4
1
TG, C1-C5
100
450
180
SH: Blk dk gy frm fis to blky carb with LS: Mot gy brn occ blk crpxln hd dns tt no show
LS: Med to dk gy brn gygn bf biomicr micxln sbchlky cln foss sndy pyr ip tt no show with SH: Brn to gy gygn frm sbfis to blky wxy
Tr Chrt
LS: Med to dk gy brn gygn bf biomicr micxln sbchlky cln foss sndy pyr ip tt no show with SH: Brn to gy gygn frm sbfis to blky wxy
SH: Gygn to gn blk redbrn to brn viol varic ip blky rthy wxy
SH: Gy gygn mar redbrn to viol mar & varic ip blky wxy intbd with LS: Mot brn to gy bf gygn redbrn varic ip micr crpxln hd dns foss tt no show
LS: Med to dk brn redbrn gy bf s&p spec brn with live oil and oil stn micxln micsuc to suc sbchky ip foss sndy ool cln to arg tr intxln & intpart por isol vug por pred tt dk brn mtx o stn v dull hydc flor exc strmg cut intbd with SH: Varic redbrn to brn gy to gygn mar blky wxy
SH: Gygn to gn blk redbrn to brn viol varic ip blky rthy wxy
LS: Mot brn to gy gygn redbrn varic micr crpxln hd dns foss tt no show
LS: Med to lt brn bf gygn micr f xln micsuc ip arg v sndy tt/tr intxln por no flor no stn or cut


St. Louis
6235' TD
6050
6100
6150
6200
6250
0
ROP (min/ft)
4
1
TG, C1-C5
100
30
90
LS: Mot brn to gy med to dk brn f xln hd dns v sndy glauc ip tt no show
LS: Lt brn wh to bf biomicr f xln brit cln v hd & sil ip oil filled moldic & vug por chrt nodls v dull spec hydc flor exc strmg cut sl oil odor
DOL: Dk mot brn med to dk spec brn biomicr micxln micsuc to suc chky ip brit to hd cln v sip ip chrt nodls occ v foss with gd intpart and moldic por occ gd inxln por dull spec orng to occ bri yel hydc flor exc fast strmg cut abt live o & o stn sl oil odor show in 10% spl
LS: Lt brn bf micxln subchky ip foss ool sndy ip cln p vis por no show tr CHRT
LS: Lt brn bf micxln subchky ip foss ool sndy ip cln p vis por no show tr CHRT
Chrt Mlky gy med brn to gy hd xln LS Med brn crpxln hd dns sil tt no show
LS Bf lt brn wh sbchky to chky sft brit cln foss ool p vis por no show with LS: Med brn to gy crpxln hd dns sil tt no show