Confidentiality Requested:
☐ Yes ☐ No

KANSAS CORPORATION COMMISSION
OIL & GAS CONSERVATION DIVISION

1156357

Form ACO-1
August 2013
Form must be Typed
Form must be Signed
All blanks must be Filled

WELL COMPLETION FORM
WELL HISTORY - DESCRIPTION OF WELL & LEASE

OPERATOR: License # 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: NCRA, DCP

Designate Type of Completion:

☑ New Well ☐ Re-Entry ☐ Workover

☐ Oil ☐ WSW ☐ SWD ☐ SIOW
☐ Gas ☐ D&A ☐ ENHR ☐ SIGW
☑ OG ☐ GSW ☐ Temp. Abd.
☐ CM *(Coal Bed Methane)*
☐ Cathodic ☐ Other *(Core, Expl., etc.)*:

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

Operator:
Well Name:
Original Comp. Date: Original Total Depth:

☐ Deepening ☐ Re-perf. ☐ Conv. to ENHR ☐ Conv. to SWD
☐ Plug Back ☐ Conv. to GSW ☐ Conv. to Producer

☐ Commingled Permit #:
☐ Dual Completion Permit #:
☐ SWD Permit #:
☐ ENHR Permit #:
☐ GSW Permit #:

07/11/2013	07/17/2013	8/30/2013
Spud Date or Recompletion Date	Date Reached TD	Completion Date or Recompletion Date

API No. 15 - 15-119-21341-00-00
Spot Description:
_ - _ - SW - NW Sec. 21 Twp. 33 S. R. 30 ☐ East ☑ West
1980 Feet from ☑ North / ☐ South Line of Section
660 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: Meyer Well #: 1-21
Field Name: Wildcat
Producing Formation: Morrow
Elevation: Ground: 2716 Kelly Bushing: 2727
Total Vertical Depth: 6398 Plug Back Total Depth:
Amount of Surface Pipe Set and Cemented at: 1495 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: 9800 ppm Fluid volume: 900 bbls
Dewatering method used: Hauled to Disposal

Location of fluid disposal if hauled offsite:

Operator Name: Max Papay
Lease Name: Sneed License #: 34021
Quarter NW Sec. 14 Twp. 34 S. R. 30 ☐ East ☑ West
County: Meade Permit #: 15-119-20027

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: 09/10/2013
☑ **Confidential Release Date:** 09/10/2015
☑ **Wireline Log Received**
☑ **Geologist Report Received**
☐ **UIC Distribution**
ALT ☑ **I** ☐ **II** ☐ **III** **Approved by:** NAOMI JAMES **Date:** 09/11/2013

1156357

Operator Name: O'Brien Energy Resources Corp. Lease Name: Meyer Well #: 1-21

Sec. 21 Twp. 33 S. R. 30 ☐ 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

List All E. Logs Run:

Neutron
Induction
Micro

☑ 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	1495	aconn blend	550	3%CaCl, 1.4# floseal
Production	7.875	4.5	10.5	6370	AA2	320	

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	-			
	-			

Did you perform a hydraulic fracturing treatment on this well? ☐ Yes ☐ No *(If No, skip questions 2 and 3)*

Does the volume of the total base fluid of the hydraulic fracturing treatment exceed 350,000 gallons? ☐ Yes ☐ No *(If No, skip question 3)*

Was the hydraulic fracturing treatment information submitted to the chemical disclosure registry? ☐ Yes ☐ No *(If No, fill out Page Three of the ACO-1)*

Shots Per Foot	PERFORATION RECORD - Bridge Plugs Set/Type Specify Footage of Each Interval Perforated	Acid, Fracture, Shot, Cement Squeeze Record *(Amount and Kind of Material Used)*	Depth
2	5798-5808 CIBP @ 5750	acidize w/ 1200 gal 7.5% NEFE HCl	Perfs
2	4430-4436	acidize w/ 1000 gal 15% NEFE HCl	Perfs

TUBING RECORD: Size: Set At: Packer At: Liner Run: ☐ Yes ☐ No

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

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

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)* ☐ Other *(Specify)* _____

PRODUCTION INTERVAL:

Mail to: KCC - Conservation Division, 130 S. Market - Room 2078, Wichita, Kansas 67202

Form	ACO1 - Well Completion
Operator	O'Brien Energy Resources Corp.
Well Name	Meyer 1-21
Doc ID	1156357

Tops

Name	Top	Datum
Heebner	4402	-1674
Toronto	4426	-1698
Lansing	4544	-1816
Marmaton	5193	-2456
Cherokee	5412	-2684
Atoka	5621	-2893
Morrow	5746	-3018
Chester	5888	-3160
Ste. Genevieve	6092	-3364
St. Louis	6282	-3554

Conservation Division
Finney State Office Building
130 S. Market, Rm. 2078
Wichita, KS 67202-3802

Kansas
Corporation Commission

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

September 10, 2013

Joseph Forma
O'Brien Energy Resources Corp.
18 CONGRESS ST, STE 207
PORTSMOUTH, NH 03801-4091

Re: ACO1
API 15-119-21341-00-00
Meyer 1-21
NW/4 Sec.21-33S-30W
Meade County, Kansas

Dear Production Department:

We are herewith requesting that the Well Completion Form ACO-1 and attached information for the subject well be held confidential for a period of two years.

Should you have any questions or need additional information regarding subject well, please contact our office.

Respectfully,

Joseph Forma
Vice President
O'Brien Energy Resources Corp.

O'Brien Energy Resources, Inc.

Meyer No. 1-21

Section 21, T33S, R30W

Meade County, Kansas

July, 2013

Well Summary

The Meyer No. 1-21 was drilled to a total depth of 6400' in the St. Louis in 90 hours for a fast average of 71 feet/hour. It offset the City Service, Meyer 2E by approximately 1880' to the SE. Formation tops came low relative to this offset. The Heebner ran 20' low. Thickening occurred consistently to total depth. The Lansing, Marmaton and Cherokee ran 22', 47' and 70' low respectively. The Atoka, Morrow and Chester ran 79', 86' and 98' low and the Ste. Genevieve came in 108' low.

The Morrow "B" Sandstone(5798'-5808') consists of a Sandstone in 6% of the samples – Medium mottled brown, hard to friable in part, fine upper to medium lower, well sorted subround grains, siliceous and some clay cement, glauconitic, micaceous, carbonaceous inclusions, fair visible intergranular and vuggy porosity, pale light blue and occasionally yellow fluorescence in all the sandstone, fair to good streaming cut, brown matrix oil stain and trace live oil and gas bubbles when crushed, show somewhat dissipates when dried. A 220 Unit gas kick was documented. 20% porosity is noted on logs. It could be that a true representative sample of this intervals may not have been collected in the sample box as what was noted was relatively tight and did not represent 20% porosity.

A 720 Unit gas kick occurred in the Toronto(4426'-4440') and consists of a biomicrite Limestone with intercrystalline and moldic porosity. No show was documented. Another interesting interval is noted in the Toronto(4474'-4483') and with an associated gas increase of 150 Units.

4 ½" production casing was run on the Meyer No. 1-21 on 7/17/13 to production test the above mentioned shows.

Respectfully Submitted,

Peter Debenham

WELL DATA

Operator:	O'Brien Energy Resources, Inc., John Forma – Portsmouth, NH Geologist: Paul Wiemann – Denver, CO
Prospect Geologist:	Ed Schuett, Dave Ward
Well:	Meyer No. 1-21
API No.:	15-119-21341
Location:	1980' FNL & 660' FWL, Section 21, T33S, R30W, Meade County, Kansas – South of Plains.
Elevation:	Ground Level 2716', Kelly Bushing 2728'
Contractor:	Duke Drilling Rig No. 6, Type: Double jacknife, triple stand, Toolpusher Jose Gonzales, Drillers: Danny White, Richard TaFoya, Darryl LaRoche, Saul Garcia
Company Man:	Roger Pearson – Liberal, Kansas
Spud Date:	7/11/2013
Total Depth:	7/16/2013, Driller 6400', Logger 6398', St. Louis Fm.
Casing Program:	39 joints of 8 5/8", J55, 24Lbs/ft, set at 1495'. 4 ½" production casing to TD.
Mud Program:	Mud Co./Service Mud Inc., Engineer Justin Whiting, mud up 2600'.
Wellsite Consultant:	Peter Debenham with mudlogging trailer, Call depth 3000', Box 350, Drake, CO 80515, 720/220-4860.
Samples:	30' to 5700', 20' to TD and 10' through zones of interest. Dry sample cut sent to KGS Sample Log Library – Wichita, kS.
Electric Logs:	Weatherford, engineer Adam Sill, 1)Array Induction, 2)Photo Density/Neurton, 3) Microlog – High Res. repeat section.
Status:	4 1/2 " production casing to TD on 7/17/2013.

WELL CHRONOLOGY

DATE	10 PM DEPTH	FOOTAGE	RIG ACTIVITY
7/10			Move to location and rig up. Mix spud mud and drill rat hole and mouse hole.
7/11	1495'	1495'	Spud in 12 ¼" surface hole to 1495' and circulate. Run surveys (1/4, ½ deg.). Drop survey(1 ¾ deg.) and trip out and run and cement 8 5/8" casing set at 1495'.
7/12	2330'	835'	Cement did circulate. Pick up drill pipe and back off end joint and nipple up BOP and test blind rams(150 – 1000 Lbs). Trip in and test pipe rams. Drill plug and cement and 7 7/8" to 2330'. Survey(1 deg.). Change out swivel packing.
7/13	4080'	1750'	Displace mud system at 2600' and service rig. Clean suction and survey(1 deg.).
7/14	4998'	918'	Clean suction and grease draw works and survey(1 deg.). To 4998' and circulate and wiper trip 36 stands and circulate – pull tight.
7/15	5950'	952'	Trip in with wiper trip. Survey(1 deg.) and rig service.
7/16	6400'TD	450'	To 4600'TD and circulate. Wiper trip 41 stands and circulate. Drop survey(1 deg.) and trip out and run Elogs. Unload casing.
7/17	TD		Trip in and circulate. Trip out laying down and run and cement 4 ½" prodcution casing to TD. Rig down.

BIT RECORD

NO.	MAKE	TYPE	SIZE	OUT	FOOTAGE	HOURS
1	JZ	IPGC	12 ¼"	1495'	1495'	11
2		Mi616	7 7/8"	6400'	4905'	78 ¾
				Total Rotating Hours:		89 3/4
				Average:		71.31 ft/hr

DEVIATION RECORD - degree

493' ¼, 929' ½, 1495' 1 ¾, 2153' 1, 3112' ¾, 3747' 1, 5312' 1, 5876' 1, td 1

MUD PROPERTIES

DATE	DEPTH	WT	VIS	PV	YP	WL	pH	CL	LCM-LBS/BBL
7/10	Make up water								
7/11	1210'	8.8	28	3	5	n/c	7.0	1400	4
7/12	1591'	8.8	28	1	2	n/c	7.0	16.8k	0
7/13	3153'	9.1	35	5	9	n/c	7.0	8.8k	1
7/14	4896'	9.3	51	15	17	10.4	9,0	7.1k	2
7/15	5490'	9.1	47	14	14	8.8	10.5	6.1k	2
7/16	6400'TD	9.3	55	17	21	8.4	10.5	5.5	2

ELECTRIC LOG FORMATION TOPS- KB Elev. 2728''

FORMATION	DEPTH	DATUM	*Meyer 2E DATUM	POSITION
Surface casing	1495'			
Heebner	4402'	-1674'	-1654'	-20'
Toronto	4426'	-1698'	-1680'	-18'
Lansing	4544'	-1816'	-1794'	-22'
Marmaton	5193'	-2456'	-2418'	-47'
Cherokee	5412'	-2684'	-2614'	-70'
Atoka	5621'	-2893'	-2814'	-79'
Morrow	5746'	-3018'	-2932'	-86'
Mississippi Chester	5888'	-3160'	-3062'	-98'
Ste. Genevieve	6092'	-3364'	-3256'	-108'
St. Louis	6282'	-3554'	NDE	
TD	6400'			

*City Service, Meyer 2E, SW NE NE, sec. 20 – app. 1800' to the NW., K.B. Elev. 2728'

LITHOLOGY STRIP LOG

WellSight Systems

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

Well Name:	O'Brien Energy Resources, Meyer No. 1-21		
Location:	1980'FNL & 660FWL, Section 21, 33S, R30W, Meade Co., KS		
Licence Number:	API: 15-119-21341	**Region:**	Hougoton
Spud Date:	7/11/13	**Drilling Completed:**	7/16/13
Surface Coordinates:	1980'FNL & 660FWL, Section 21, 33S, R30W, Meade Co., KS		
Bottom Hole Coordinates:	1980'FNL & 660FWL, Section 21, 33S, R30W, Meade Co., KS		
Ground Elevation (ft):	2716'	**K.B. Elevation (ft):**	2728'
Logged Interval (ft):	4200' To: TD	**Total Depth (ft):**	6413'
Formation:	Lansing, Marmaton, Morrow, Chester, St. Louis		
Type of Drilling Fluid:	Chemical Gel/LSND/LCM, displaced 3600'		

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

OPERATOR

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

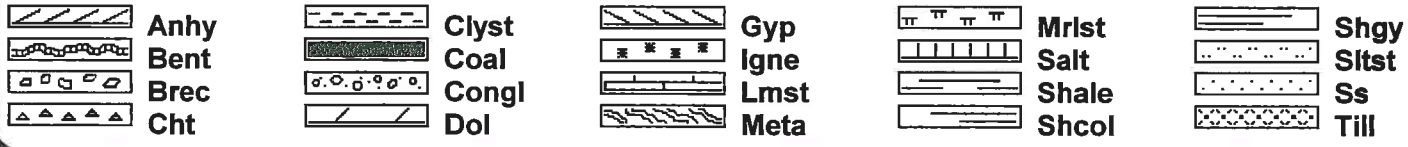
GEOLOGIST

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

Comments

Drilling engineer Roger Pearson, Duke Drilling Rig No. 6, T.P. Jose Gonzales, Weatherford logs engineer Adam Sill, Service Mud engineer Justin Whiting, 8 5/8" set to 1495', 4 1/2" production casing to TD.

ROCK TYPES



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

STRINGER
- Anhy
- Arg
- Bent
- Coal
- Dol
- Gyp
- Ls
- Mrst
- Sltstrg
- Ssstrg

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

OTHER SYMBOLS

INTERVALS
- Core
- Dst

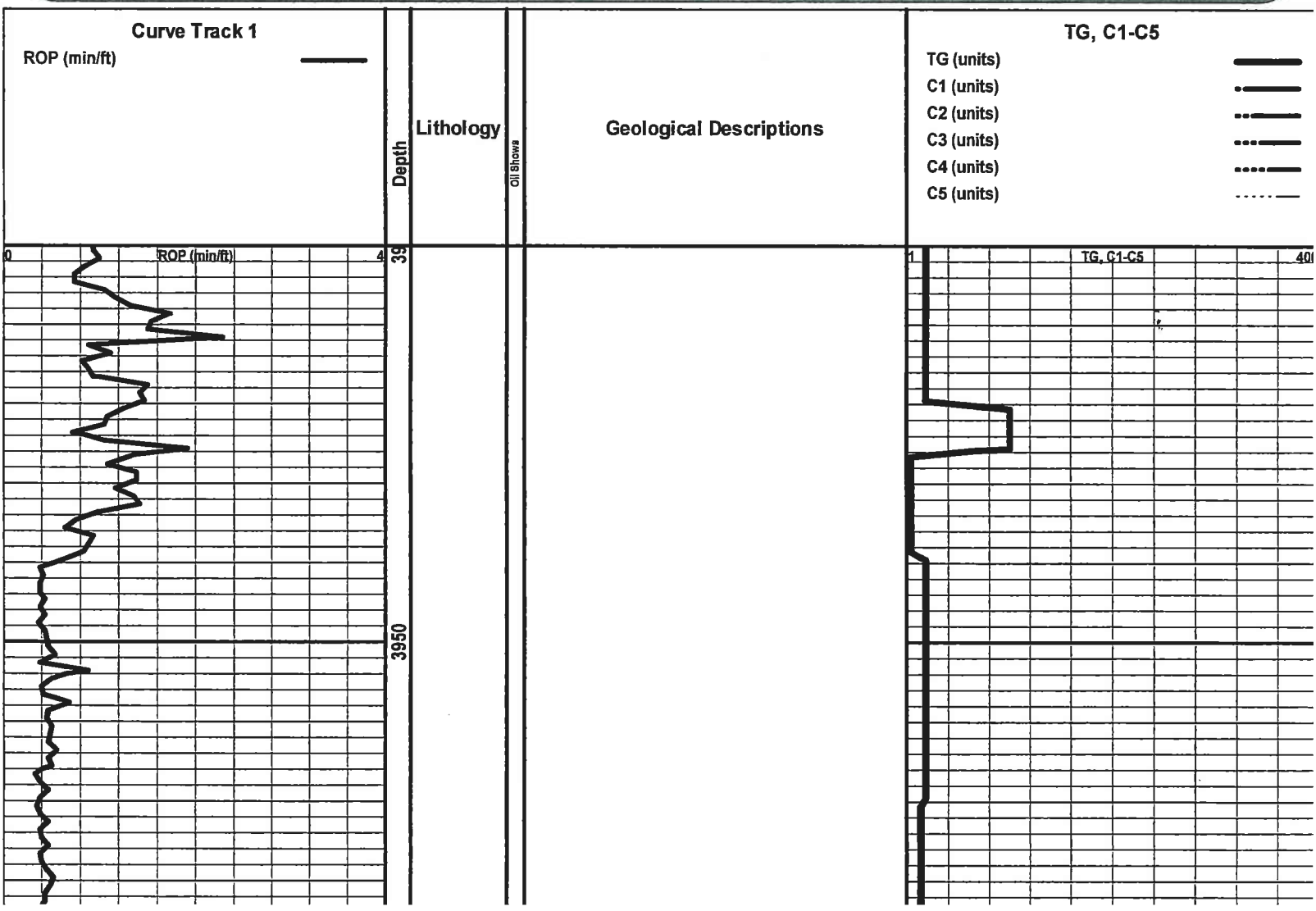
EVENTS
- Rft
- Sidewall

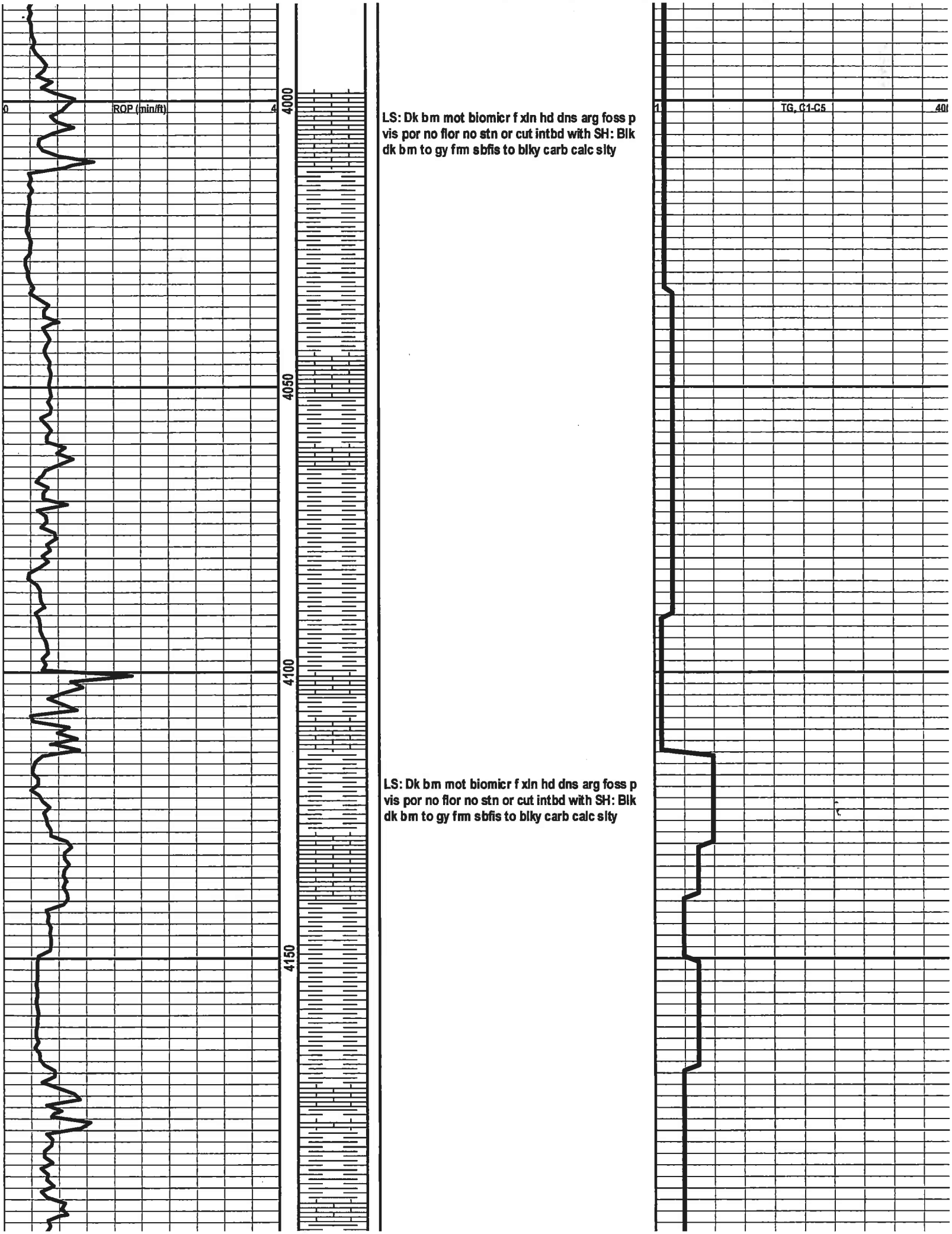
POROSITY TYPE
- Earthy
- Fenest
- Fracture
- Inter
- Moldic
- Organic
- Pinpoint
- Vuggy

SORTING
- Well
- Moderate
- Poor

ROUNDING
- Rounded
- Subrnd
- Subang
- Angular

OIL SHOWS
- Even
- Spotted
- Ques
- Dead

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4000
4050
4100
4150
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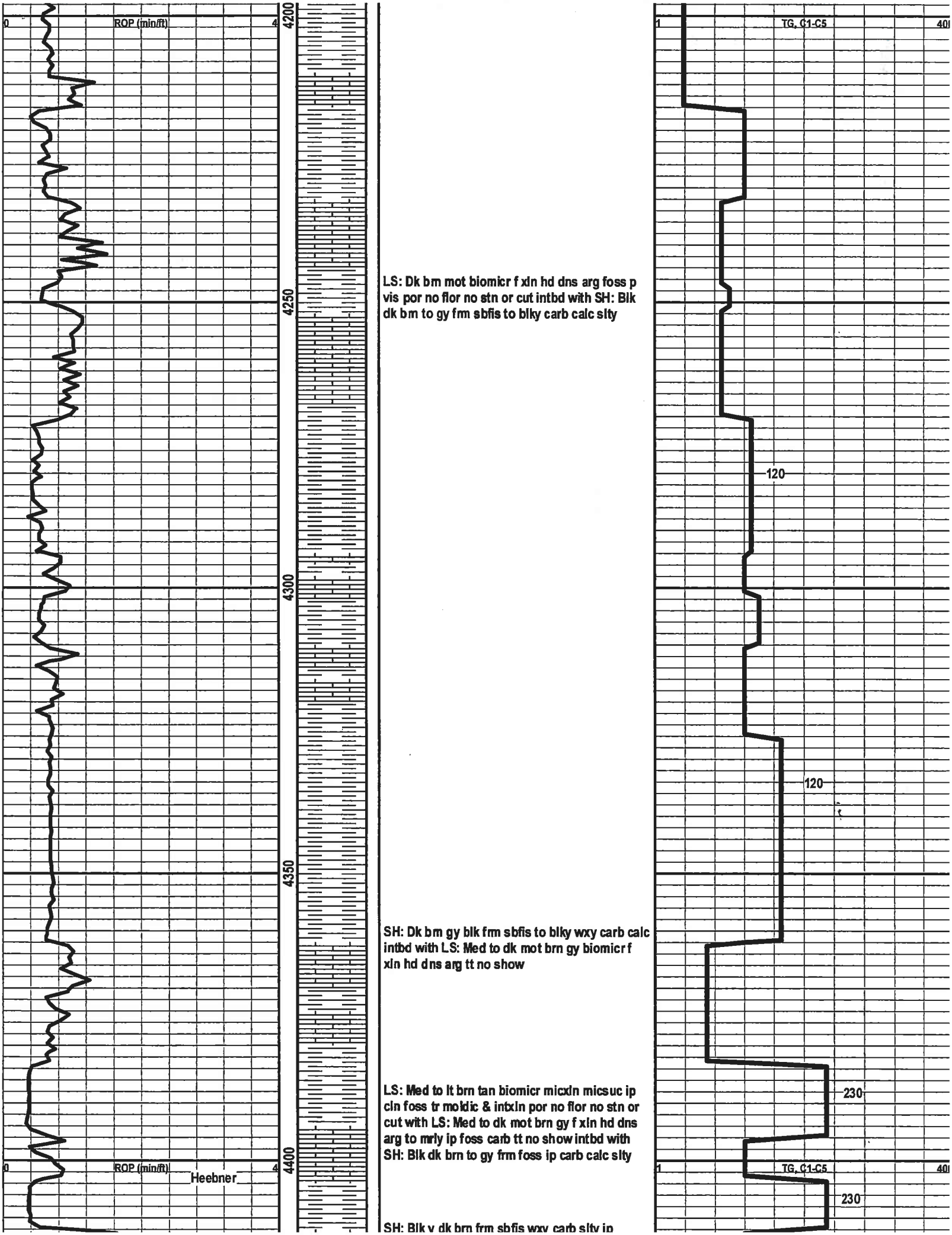
LS: Dk brn mot biomicr f xln hd dns arg foss p vis por no flor no stn or cut intbd with SH: Blk dk brn to gy frm sbfis to blky carb calc slty
1
TG, C1-C5
40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ROP (min/ft)
4
4200
4250
4300
4350
4400
0
ROP (min/ft)
4
Heebner
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SH: Dk brn gy blk frm sbfis to blky wxy carb calc intbd with LS: Med to dk mot brn gy biomicr f xln hd dns arg tt no show
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SH: Blk v dk brn frm sbfis wxy carb slty ip
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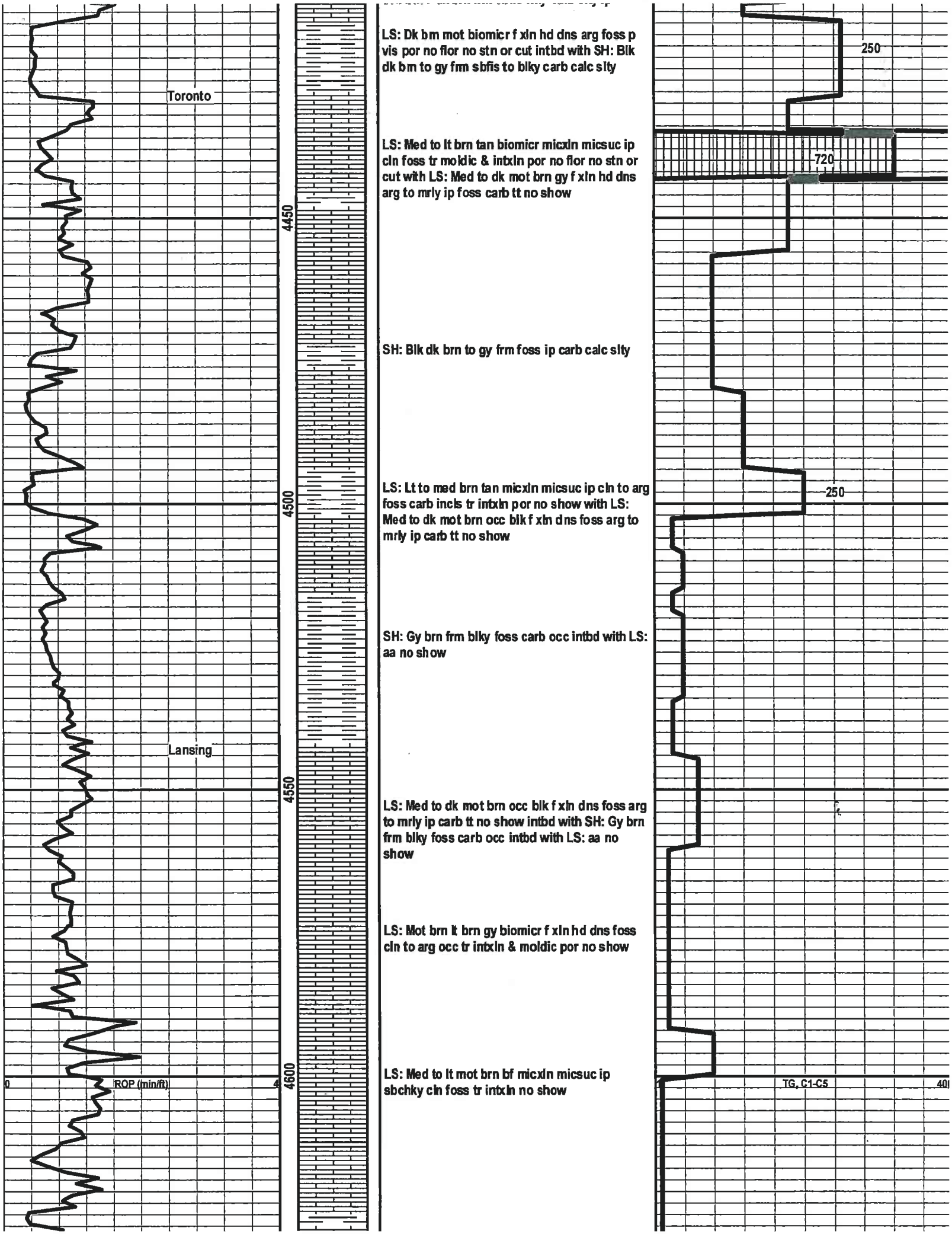
TG, C1-C5
40
120
120
230
1
TG, C1-C5
40
230


Toronto
Lansing
4450
4500
4550
4600
ROP (min/ft)
LS: Dk brn mot biomicr f xln hd dns arg foss p vis por no flor no stn or cut intbd with SH: Blk dk brn to gy frm sbfis to blky 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
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
SH: Gy brn frm blky foss carb occ intbd with LS: aa no show
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: Mot brn lt brn gy biomicr f xln hd dns foss cln to arg occ tr intxln & moldic por no show
LS: Med to lt mot brn bf micxln micsuc ip sbchky cln foss tr intxln no show
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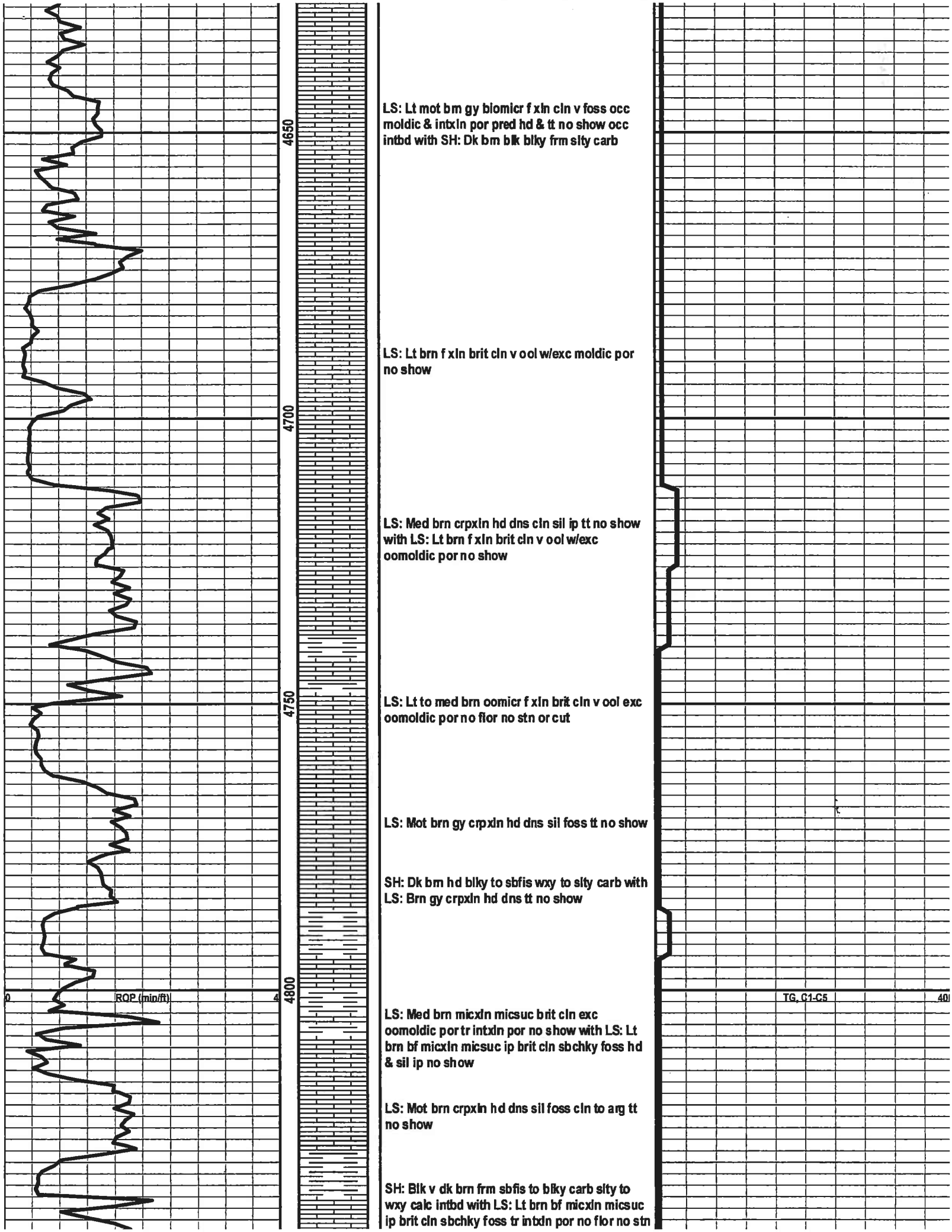
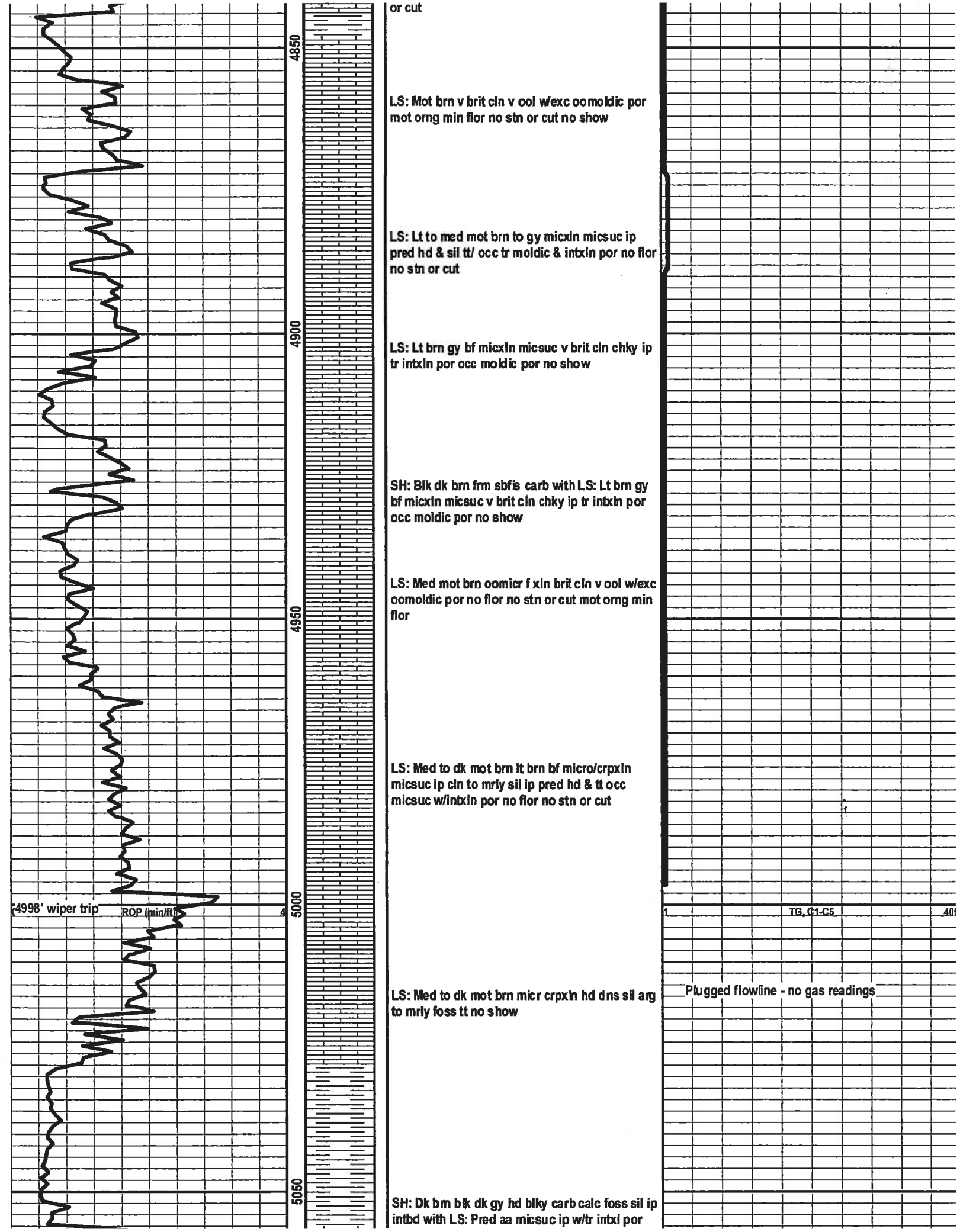
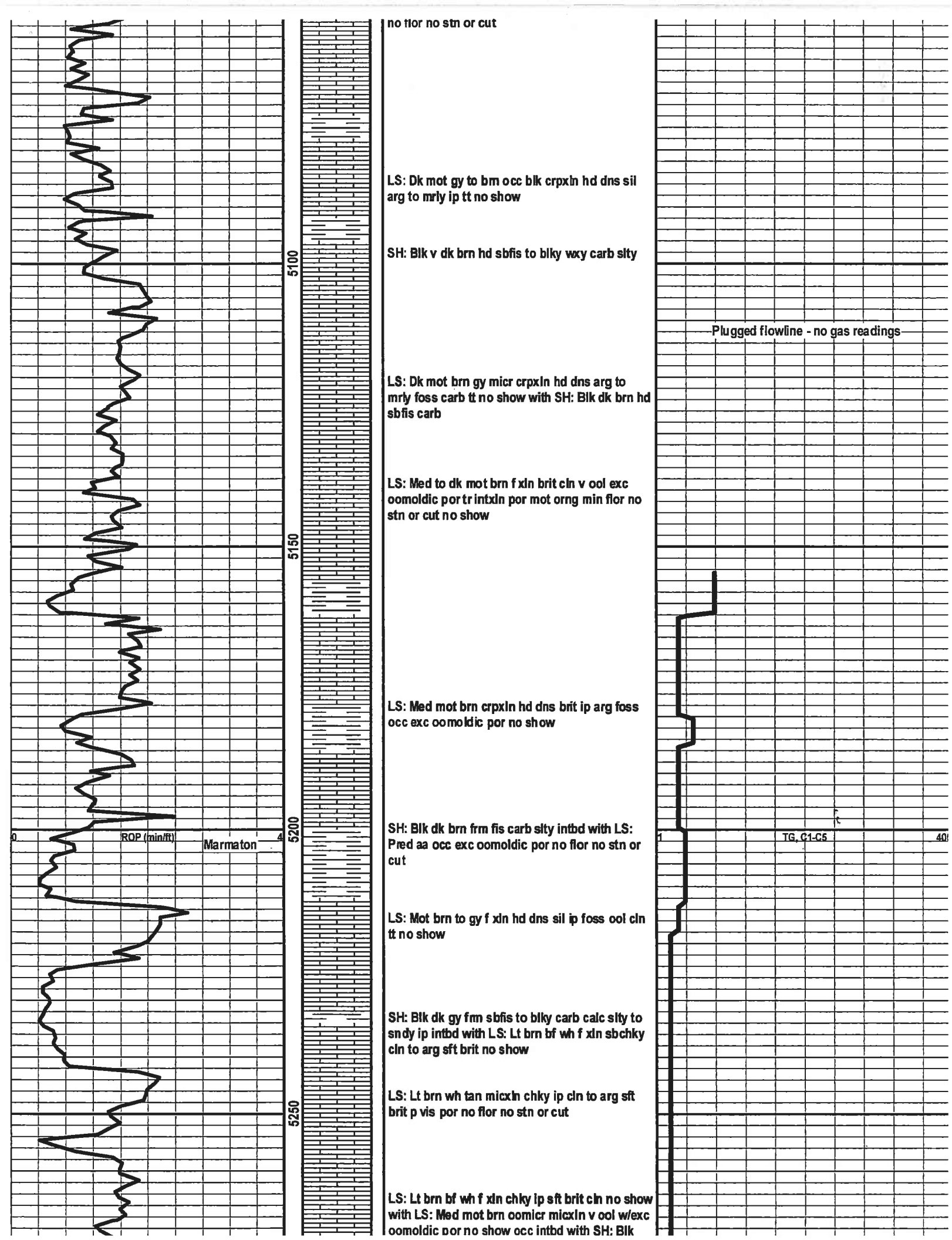
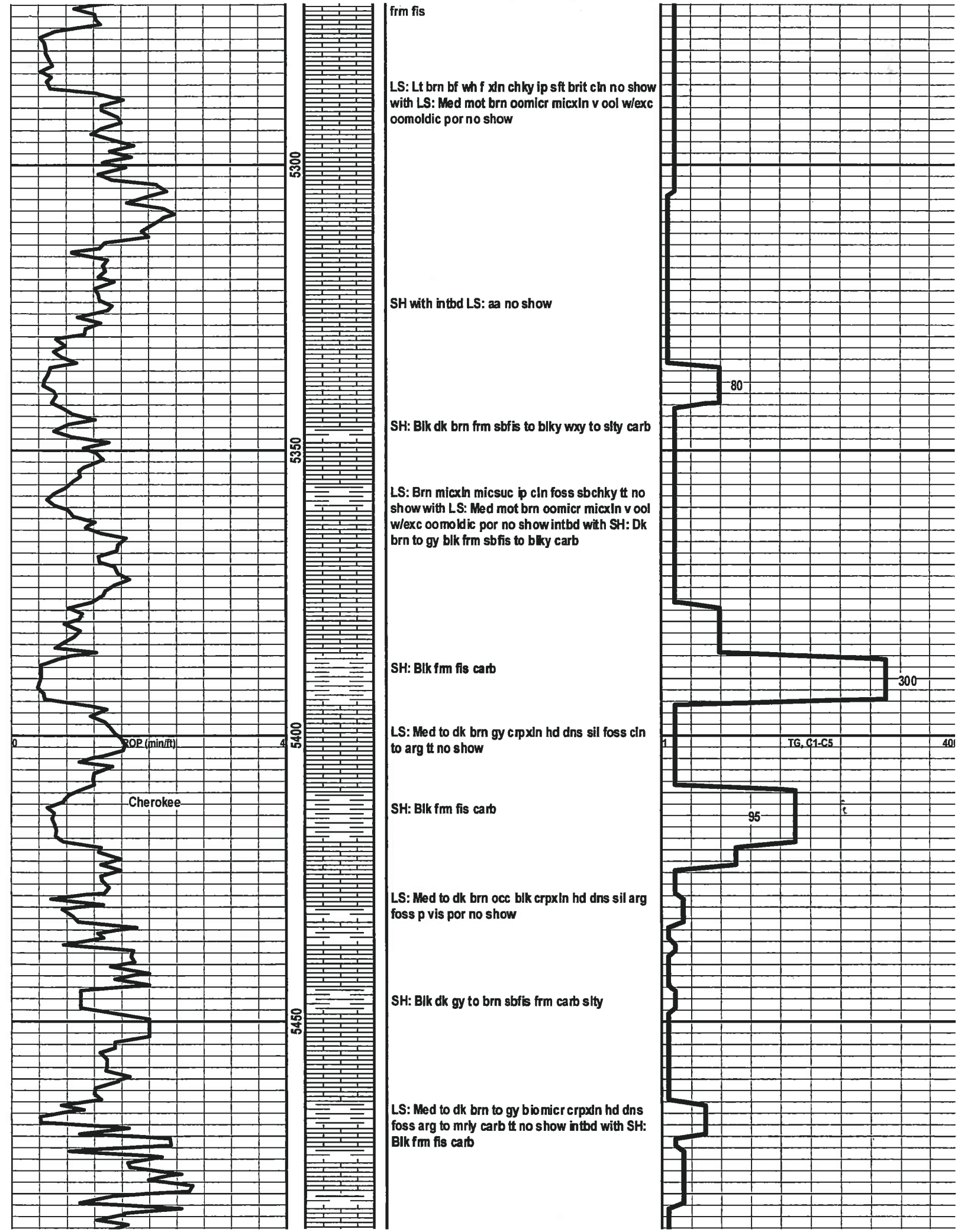
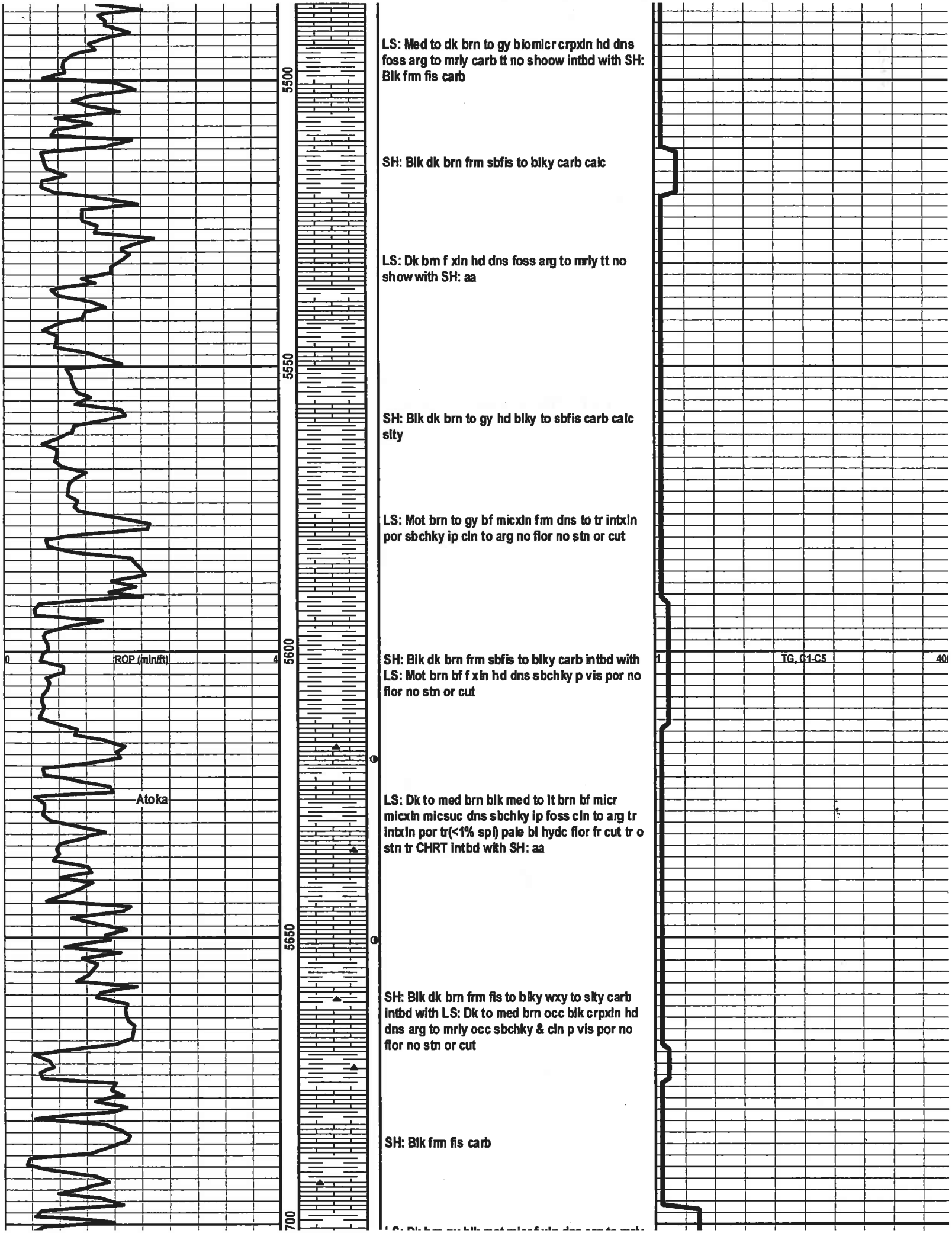
720
250
TG, C1-C5

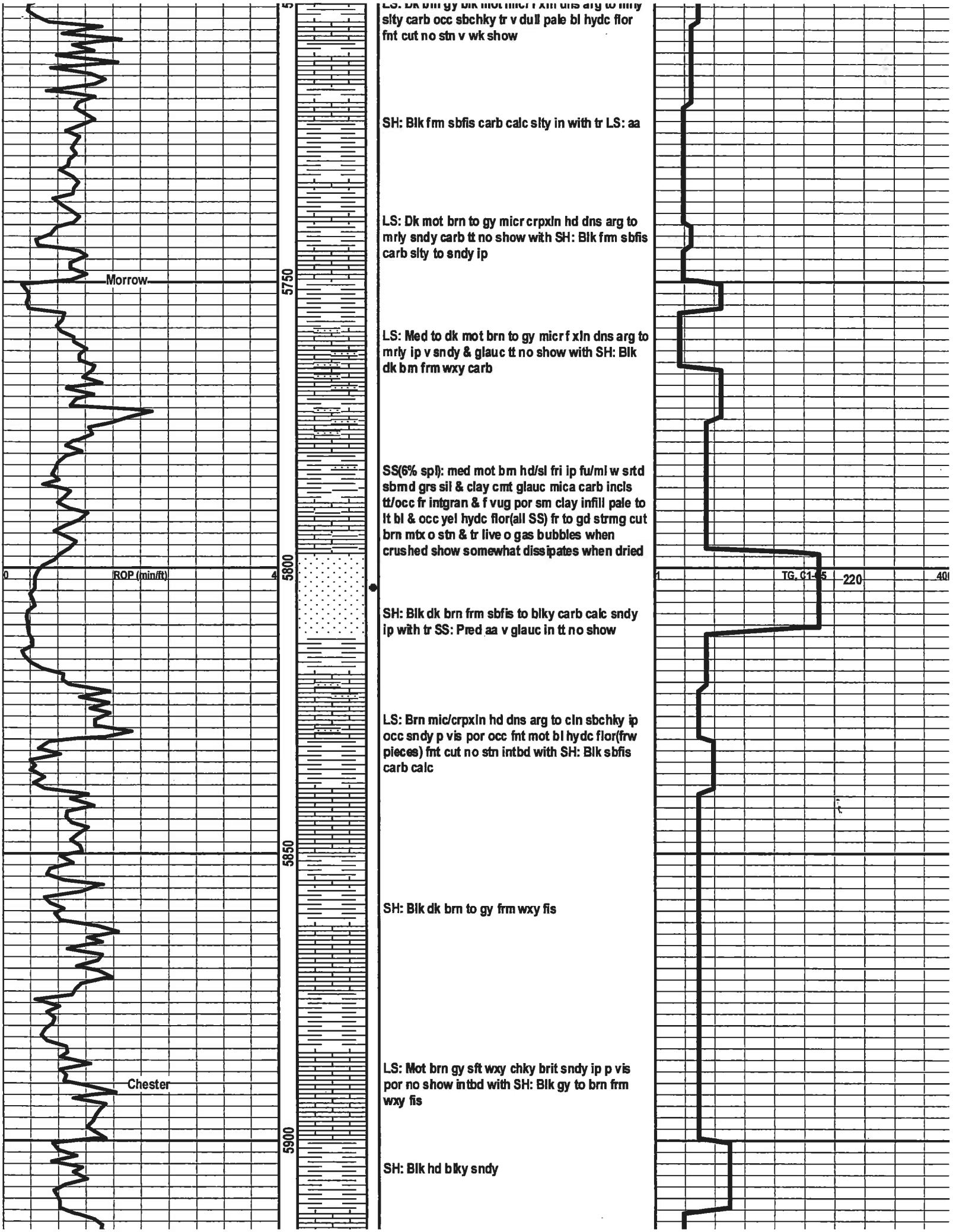

4650
4700
4750
4800
ROP (min/ft)
TG, C1-C5
LS: Lt mot brn gy biomicr f xln cln v foss occ moldic & intxln por pred hd & tt no show occ intbd with SH: Dk brn blk blky frm slty carb
LS: Lt brn f xln brit cln v ool w/exc moldic por no show
LS: Med brn crpxln hd dns cln sil ip tt no show with LS: Lt brn 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
SH: Dk brn hd blky to sbfis wxy to slty carb with LS: Brn gy crpxln hd dns tt no show
LS: Med brn micxln micsuc brit cln exc oomoldic por tr intxln por no show with LS: Lt brn bf micxln micsuc ip brit cln sbchky foss hd & sil ip 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

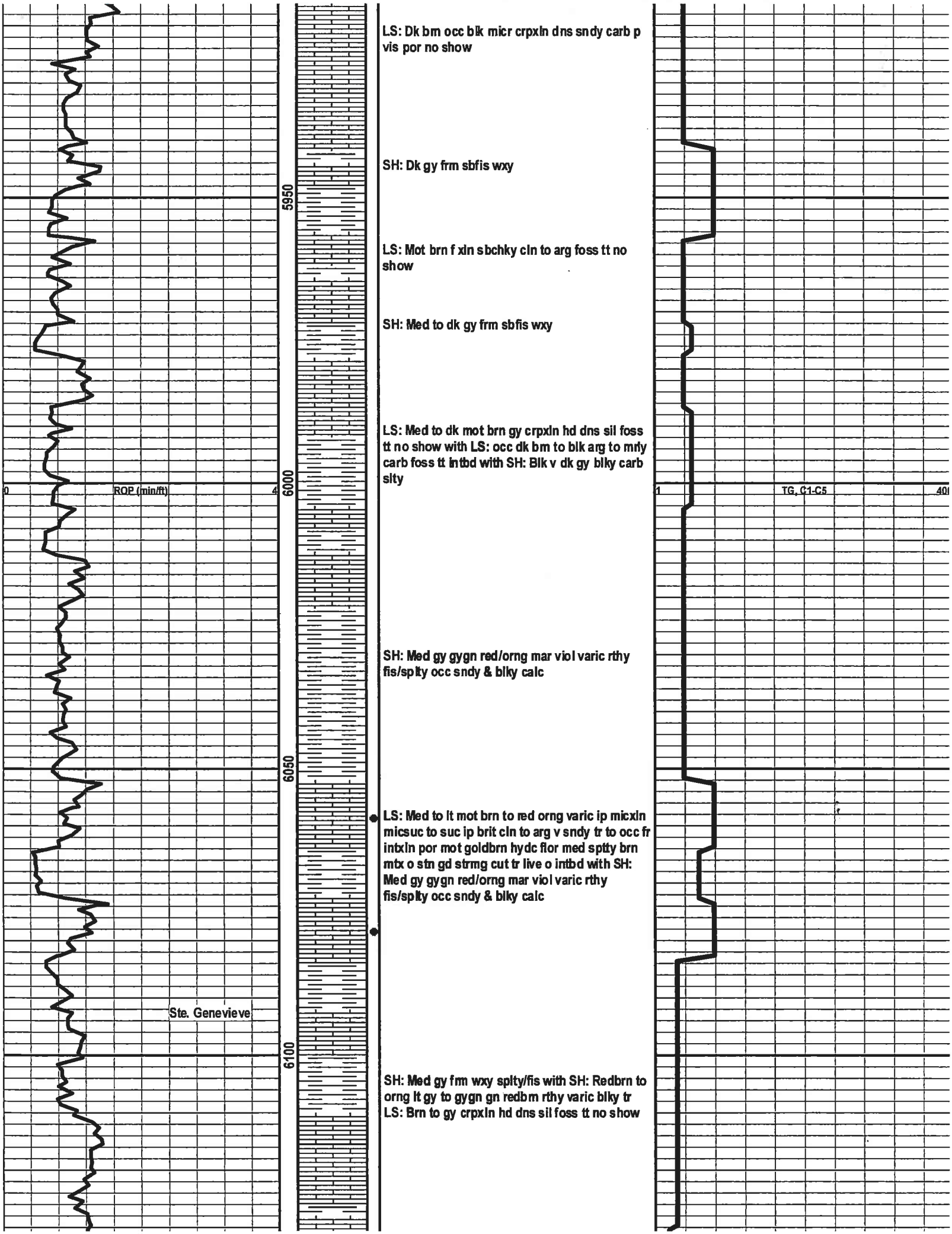

4850
4900
4950
5000
5050
4998' wiper trip
ROP (min/ft)
4
1
TG, C1-C5
40
or cut
LS: Mot brn v brit cln v ool w/exc oomoldic por mot orng min flor no stn or cut no show
LS: Lt to med mot brn to gy micxln micsuc ip pred hd & sil tt/ occ tr moldic & intxln por no flor no stn or cut
LS: Lt brn gy bf micxln micsuc v brit cln chky ip tr intxln por occ moldic por no show
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 mot brn oomicr f xln brit cln v ool w/exc oomoldic por no flor no stn or cut mot orng min flor
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
Plugged flowline - no gas readings
LS: Med to dk mot brn micr crpxln hd dns sil arg to mrly foss tt no show
SH: Dk brn blk dk gy hd blky carb calc foss sil ip intbd with LS: Pred aa micsuc ip w/tr intxl por

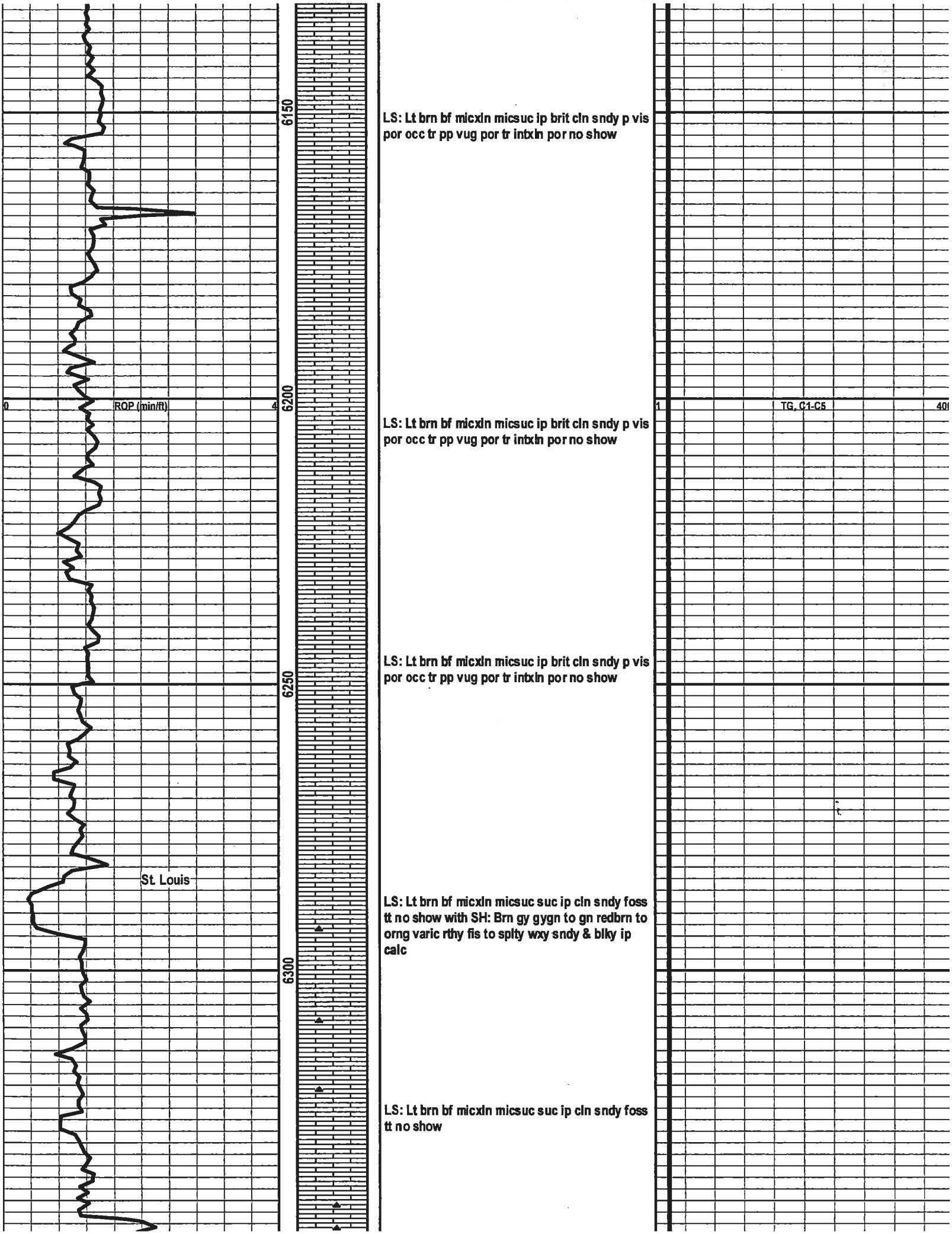

no flor no stn or cut
LS: Dk mot gy to brn occ blk crpxln hd dns sil arg to mrly ip tt no show
SH: Blk v dk brn hd sbfis to blky wxy carb slty
Plugged flowline - no gas readings
LS: Dk mot brn gy micr crpxln hd dns arg to mrly foss carb tt no show with SH: Blk dk brn hd sbfis carb
LS: Med to dk mot brn f xln brit cln v ool exc oomoldic por tr intxln por mot orng min flor no stn or cut no show
LS: Med mot brn crpxln hd dns brit ip arg foss occ exc oomoldic por no show
SH: Blk dk brn frm fis carb slty intbd with LS: Pred aa occ exc oomoldic por no flor no stn or cut
LS: Mot brn to gy f xln hd dns sil ip foss ool cln tt no show
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
LS: Lt brn wh tan micxln chky ip cln to arg sft brit p vis por no flor no stn or cut
LS: Lt brn bf wh f xln chky ip sft brit cln no show with LS: Med mot brn oomicr micxln v ool w/exc oomoldic por no show occ intbd with SH: Blk
5100
5150
5200
5250
ROP (min/ft)
Marmaton
TG, C1-C5

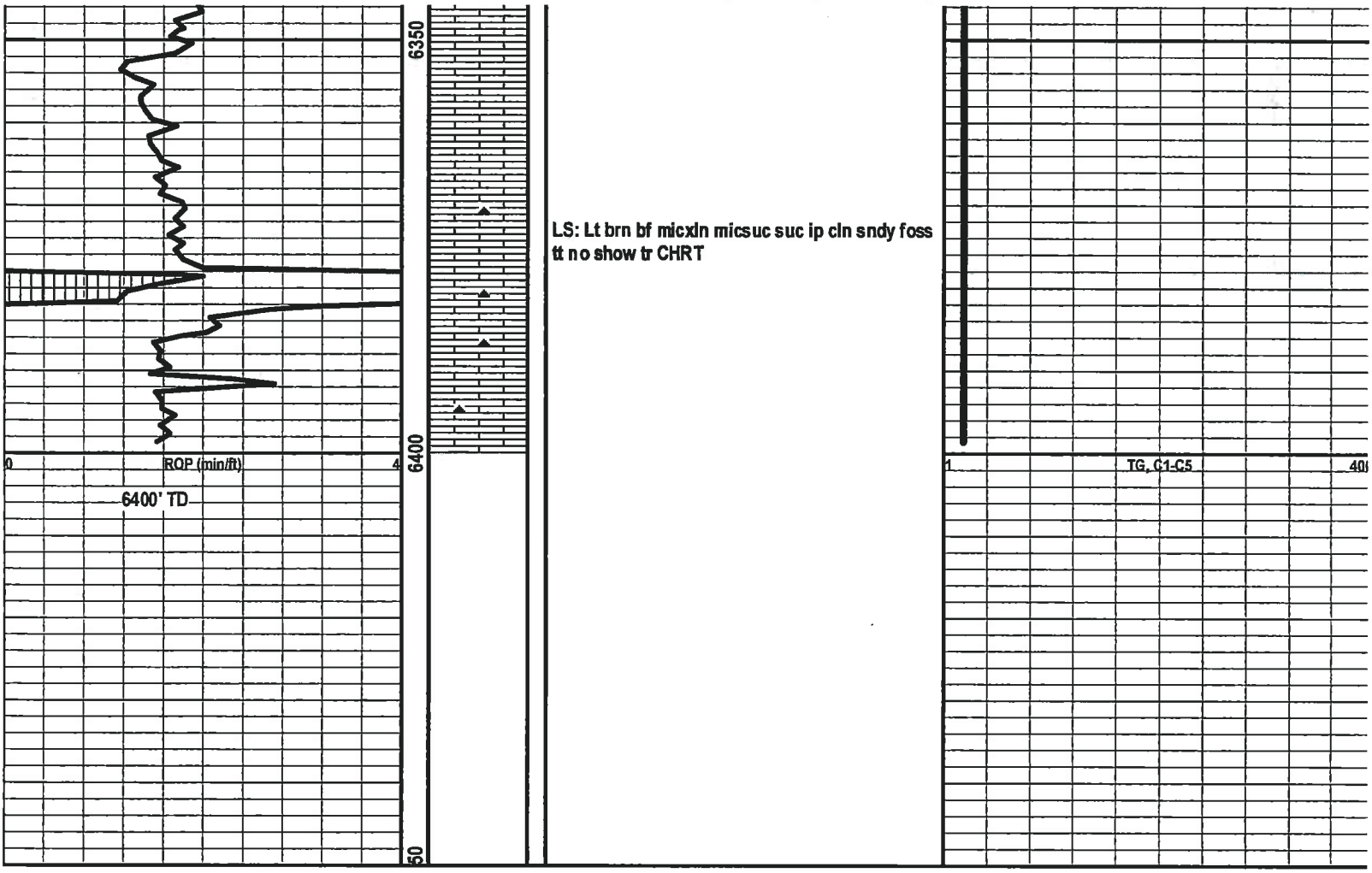

frm fis
LS: Lt brn bf wh f xln chky ip sft brit cln no show with LS: Med mot brn oomicr micxln v ool w/exc oomoldic por no show
SH with intbd LS: aa no show
SH: Blk dk brn frm sbfis to blky wxy to slty carb
LS: Brn micxln micsuc ip cln foss sbchky tt no show with LS: Med mot brn oomicr micxln v ool w/exc oomoldic por no show intbd with SH: Dk brn to gy blk frm sbfis to blky carb
SH: Blk frm fis carb
LS: Med to dk brn gy crpxln hd dns sil foss cln to arg tt no show
SH: Blk frm fis carb
LS: Med to dk brn occ blk crpxln hd dns sil arg foss p vis por no show
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 show intbd with SH: Blk frm fis carb
5300
5350
5400
5450
0
ROP (min/ft)
4
Cherokee
1
TG, C1-C5
40
80
300
95

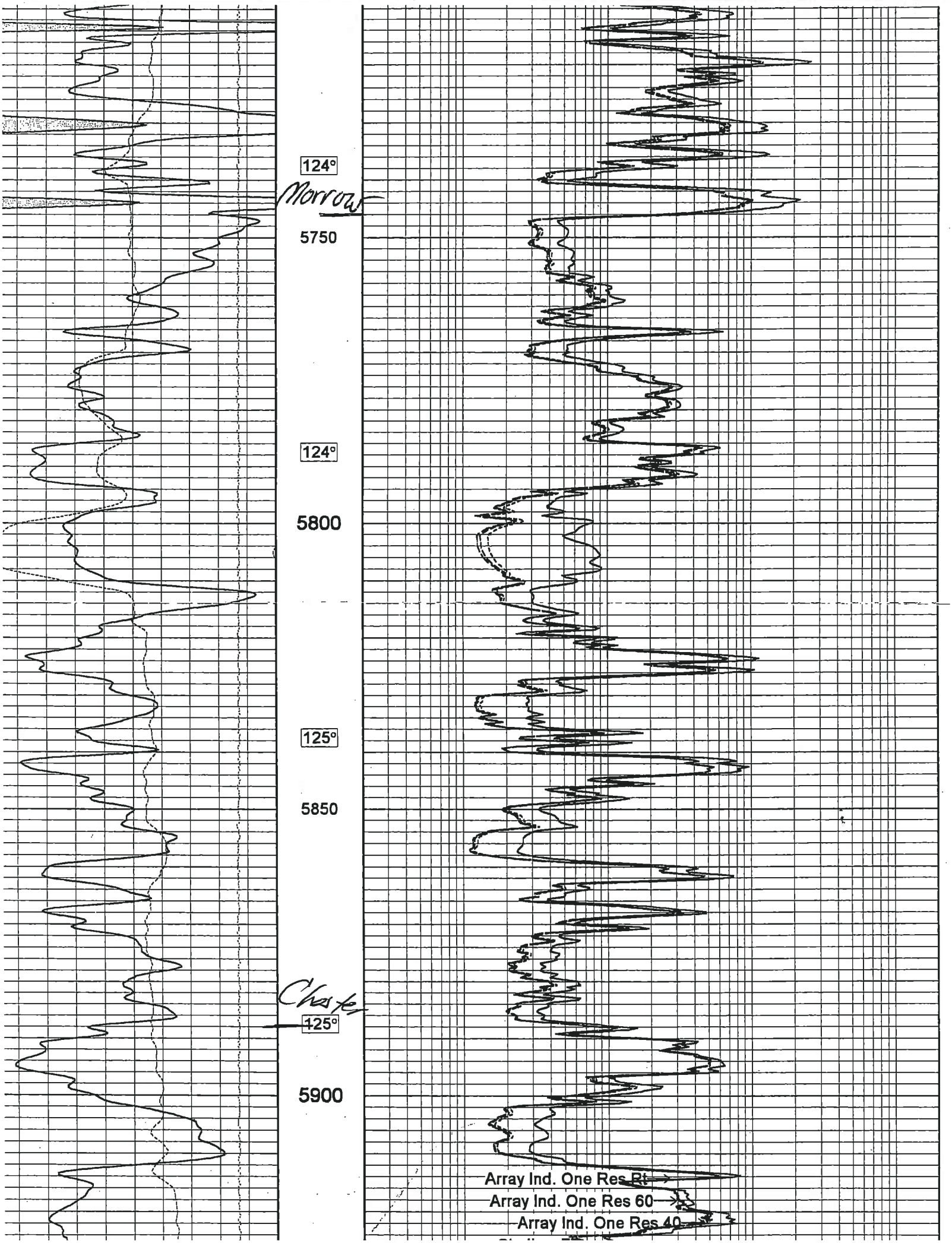

5500
5550
5600
5650
5700
0
ROP (min/ft)
4
1
TG, C1-C5
40
Atoka
LS: Med to dk brn to gy biomicr crpxln hd dns foss arg to mrly carb tt no shoow intbd with SH: Blk frm fis carb
SH: Blk dk brn frm sbfis to blky carb calc
LS: Dk brn f xln hd dns foss arg to mrly tt no show with SH: aa
SH: Blk dk brn to gy 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
LS: Dk to med brn blk med to lt brn bf micr micxln micsuc dns sbchky ip foss cln to arg tr intxln por tr(<1% spl) pale bl hydc flor fr cut tr o stn tr CHRT intbd with SH: aa
SH: Blk dk brn frm fis to blky wxy to slty carb intbd with LS: Dk to med brn occ blk crpxln hd dns arg to mrly occ sbchky & cln p vis por no flor no stn or cut
SH: Blk frm fis carb

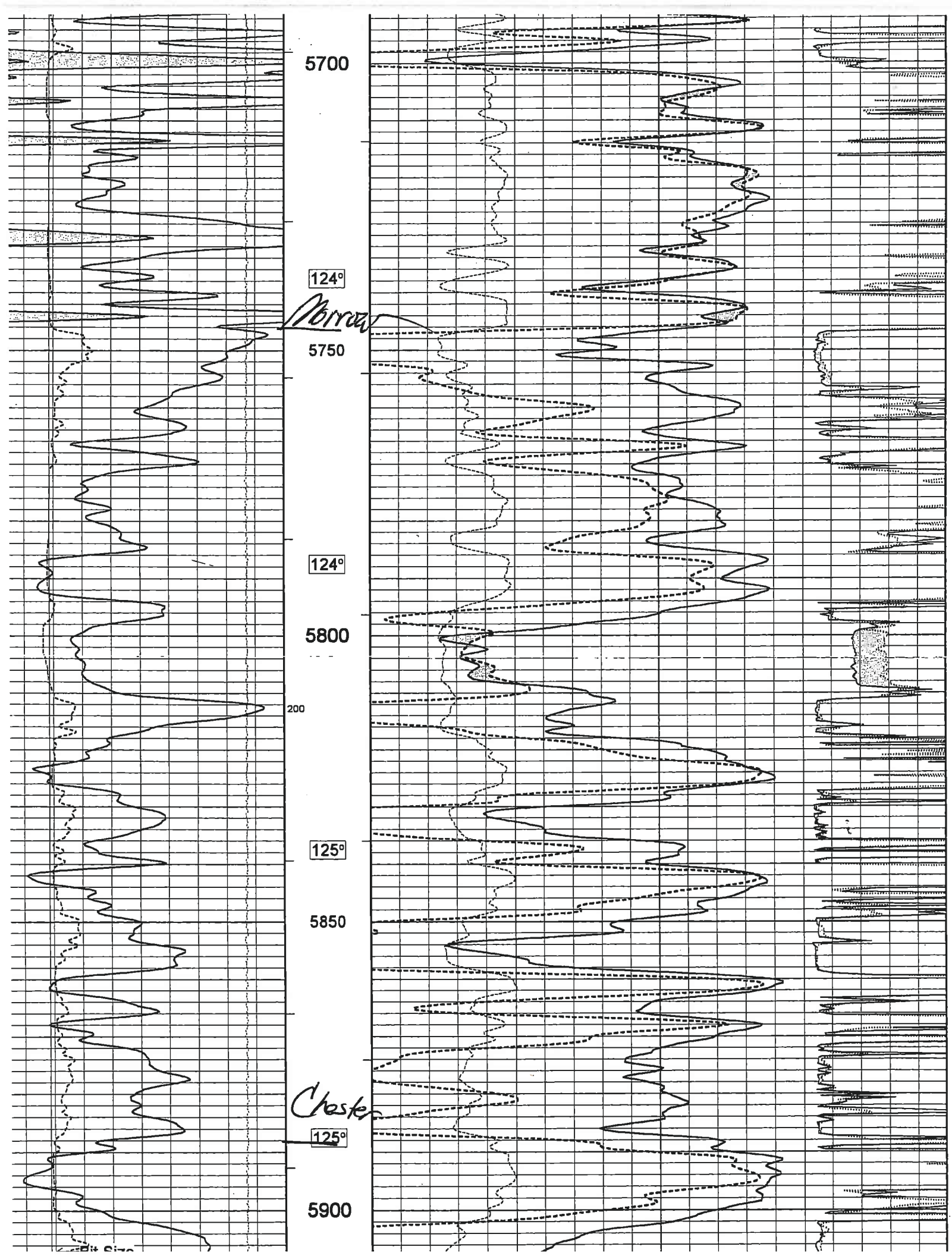

slty carb occ sbchky tr v dull pale bl hydc flor fnt cut no stn v wk show
SH: Blk frm sbfis carb calc slty in with tr LS: aa
LS: Dk mot brn to gy micr crpxln hd dns arg to mrly sndy carb tt no show with SH: Blk frm sbfis carb slty to sndy ip
Morrow
LS: Med to dk mot brn to gy micr f xln dns arg to mrly ip v sndy & glauc tt no show with SH: Blk dk brn frm wxy carb
SS(6% spl): med mot brn hd/sl fri ip fu/ml w srtd sbrnd grs sil & clay cmt glauc mica carb incls tt/occ fr intgran & f vug por sm clay infill pale to lt bl & occ yel hydc flor(all SS) fr to gd strmg cut brn mtx o stn & tr live o gas bubbles when crushed show somewhat dissipates when dried
0
ROP (min/ft)
4
5750
5800
5850
5900
1
TG, C1-C5
220
SH: Blk dk brn frm sbfis to blky carb calc sndy ip with tr SS: Pred aa v glauc in tt no show
LS: Brn mic/crpxln hd dns arg to cln sbchky ip occ sndy p vis por occ fnt mot bl hydc flor(frw pieces) fnt cut no stn intbd with SH: Blk sbfis carb calc
SH: Blk dk brn to gy frm wxy fis
Chester
LS: Mot brn gy sft wxy chky brit sndy ip p vis por no show intbd with SH: Blk gy to brn frm wxy fis
SH: Blk hd blky sndy

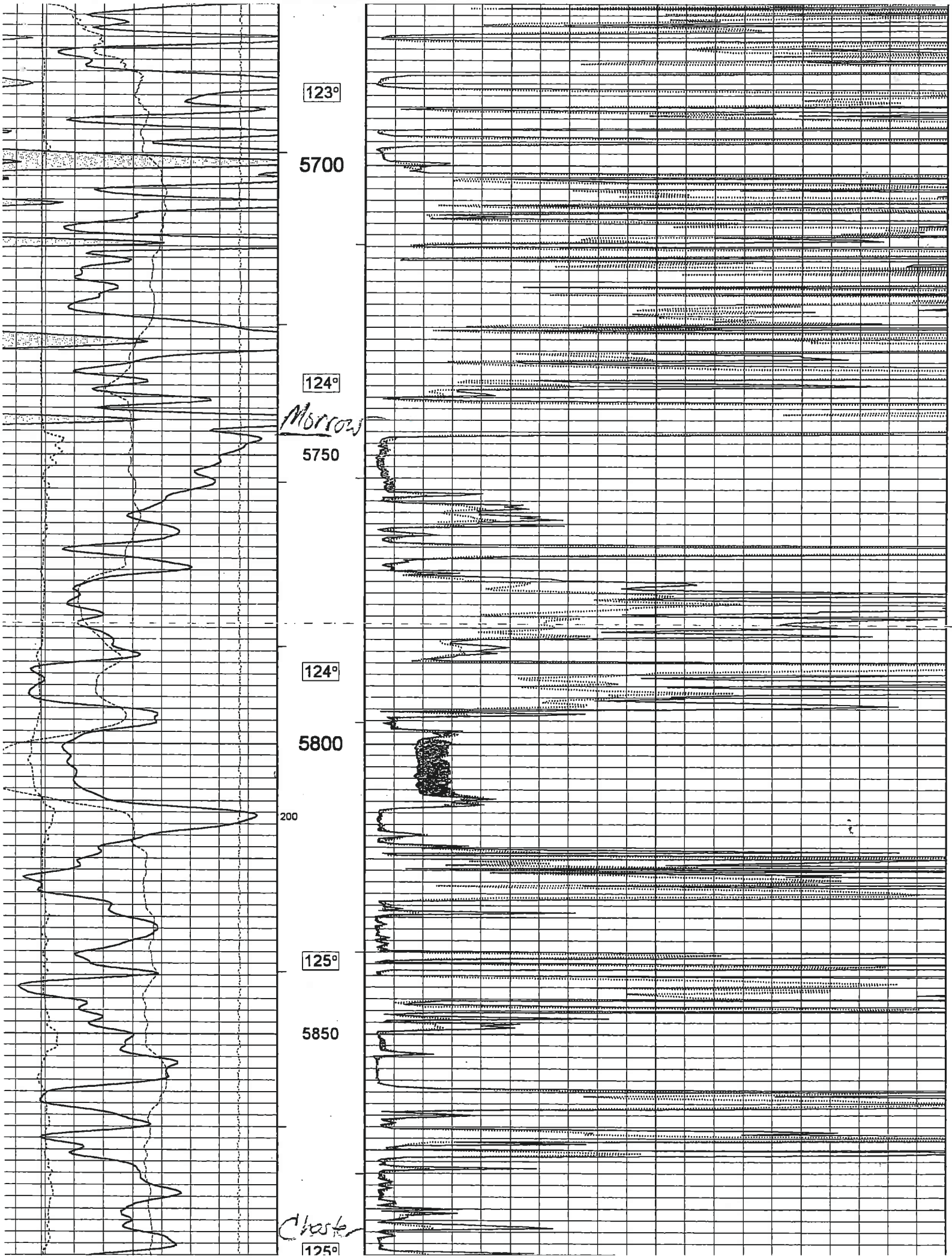

LS: Dk brn occ blk micr crpxln dns sndy carb p vis por no show
SH: Dk gy frm sbfis wxy
LS: Mot brn f xln sbchky cln to arg foss tt no show
SH: Med to dk gy frm sbfis wxy
LS: Med to dk mot brn gy crpxln hd dns sil foss tt no show with LS: occ dk brn to blk arg to mrly carb foss tt intbd with SH: Blk v dk gy blky carb slty
SH: Med gy gygn red/orng mar viol varic rthy fis/splty occ sndy & blky calc
LS: Med to lt mot brn to red orng varic ip micxln micsuc to suc ip brit cln to arg v sndy tr to occ fr intxln por mot goldbrn hydc flor med sptty brn mtx o stn gd strmg cut tr live o intbd with SH: Med gy gygn red/orng mar viol varic rthy fis/splty occ sndy & blky calc
SH: Med gy frm wxy splty/fis with SH: Redbrn to orng lt gy to gygn gn redbrn rthy varic blky tr
LS: Brn to gy crpxln hd dns sil foss tt no show
0
ROP (min/ft)
4
5950
6000
6050
6100
Ste. Genevieve
1
TG, C1-C5
40


0
ROP (min/ft)
4
6150
6200
6250
6300
St. Louis
LS: Lt brn bf micxln micsuc ip brit cln sndy p vis por occ tr pp vug por tr intxln por no show
LS: Lt brn bf micxln micsuc ip brit cln sndy p vis por occ tr pp vug por tr intxln por no show
LS: Lt brn bf micxln micsuc ip brit cln sndy p vis por occ tr pp vug por tr intxln por no show
LS: Lt brn bf micxln micsuc suc ip cln sndy foss tt no show with SH: Brn gy gygn to gn redbrn to orng varic rthy fis to splty wxy sndy & blky ip calc
LS: Lt brn bf micxln micsuc suc ip cln sndy foss tt no show
1
TG, C1-C5


6350
6400
50
0
ROP (min/ft)
4
6400' TD
LS: Lt brn bf micxln micsuc suc ip cln sndy foss tt no show tr CHRT
1
TG, C1-C5
40


124°
Morrow
5750
124°
5800
125°
5850
Chester
125°
5900
Array Ind. One Res Rt
Array Ind. One Res 60
Array Ind. One Res 40


5700
124°
Morrow
5750
124°
5800
200
125°
5850
Chester
125°
5900


123°
5700
124°
Morrow
5750
124°
5800
200
125°
5850
Chester
125°

BASIC ENERGY SERVICES
Liberal, Kansas

Cement Report

Customer OBrien Energy	Lease No.	Date 7-11-13	
Lease Meyer	Well # 1-21	Service Receipt	
Casing 8 5/8	Depth 1495	County Meade	State KS
Job Type 2-42	Formation	Legal Description Sec 21-T-33-R-30	

Pipe Data

Casing size 8 5/8	Tubing Size		
Depth 1495	42' shoejoint	Depth	
Volume 92.41		Volume	
Max Press 1500		Max Press	
Well Connection 8 5/8		Annulus Vol.	
Plug Depth		Packer Depth	

Perforating Data

Shots/Ft	From	To
	From	To
	From	To
	From	To
	From	To

Cement Data

Lead yield 2.95
400sks gal/sk 18.10
Density 11.8

Tail in yield 1.34
150sks gal/sk 6.33
Density 14.8

Time	Casing Pressure	Tubing Pressure	Bbls. Pumbed	Rate	Service Log
7:00					On Location
7:30					Safty Meeting & Rig up
10:50		1800			Prime up Psi Test
10:56	50		210	5.0	Start Lead Cement
11:35	50		35	5.0	Start Tail Cement
11:48			—	—	Shut Down Wash up
11:50					Drop Plug
11:52	50		1	4.0	Start Displacement
12:01	150		40	4.0	Circulate Cement to Pit
12:06	250		70	2.0	Slowdown Rate
12:09	300		80	1.0	Slowdown Rate
12:15	800		92	—	Plug landed
12:20	800				Released Back Float Held

Service Units	39878	30463	37547	33021 / 14284	38750	19842
Driver Names	Juan	Mario		Greg	Carlos	

Roger Pearson
Customer Representative

Jerry Bennett
Station Manager

Juan Ortiz
Cementer

Taylor Printing, Inc.

BASIC ENERGY SERVICES
Liberal, Kansas

Cement Report

Customer: O'Brien Energy	Lease No.	Date: 7-12-13	
Lease: Meyer	Well #: 1-21	Service Receipt: 03462	
Casing: 7 & 4½	Depth	County: Meade	State: KS
Job Type	Formation	Legal Description: 21-33-30	

Pipe Data		Perforating Data		Cement Data
Casing size: 4½" 10.5#	Tubing Size	Shots/Ft		Lead: 185 sk AA2
Depth: 6377'	Depth	From	To	
Volume: Disp- 102 bbl	Volume	From	To	
Max Press: 1500 #	Max Press	From	To	Tail in: 140 sk AA2
Well Connection: TD- 6400'	Annulus Vol.	From	To	
Plug Depth: ST- 42'	Packer Depth	From	To	

Time	Casing Pressure	Tubing Pressure	Bbls. Pumbed	Rate	Service Log
12:00					on loc- site assesment
12:15					spot trucks-rig up
3:00					safety meeting & JSA
3:30					pressure test 3000#
3:25	200		12	4	pump 500 gal mudflush
3:27	200		49.75	5	mix + pump 185 sk AA2 @ 14.8 ppg- 1.51 ft3/sk
3:45					wash lines - drop plug
3:50	0		0	6	disp csg.
4:00	100		25	6	pump 25 bbl H2O - switch to mud 77 bbl
4:25	900		90	2	slow rate
4:30	1600		102	0	land latch down plug
4:55	1200				open DV tool @ 1200# circ loc. - plug rat + mouse
7:15	200		12	4	pump 500 gal mudflush
7:25					mix + pump 140 sk AA2 @
	200		37.7	5	14.8 ppg- 1.51 ft3/sk
7:40	0		0	6	drop plug - disp csg
7:55	700		60	2	slow rate
8:00	1200		72	0	land plug - float held
					job complete

Service Units	34726	27462	30463-37547			
Driver Names	A Duran	L Martinez	D Beck			

R Pearson — Customer Representative

J Bennett — Station Manager

A Duran — Cementer