KANSAS CORPORATION COMMISSION
OIL & GAS CONSERVATION DIVISION

1056620

Form ACO-1
June 2009
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:

- [x] New Well
- [ ] Re-Entry
- [ ] Workover

- [ ] Oil
- [ ] WSW
- [ ] SWD
- [ ] SIOW
- [ ] Gas
- [x] 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
- [ ] Conv. to GSW
- [ ] Plug Back: Plug Back Total Depth
- [ ] Commingled Permit #:
- [ ] Dual Completion Permit #:
- [ ] SWD Permit #:
- [ ] ENHR Permit #:
- [ ] GSW Permit #:

4/16/2011	4/22/2011	4/24/2011
Spud Date or Recompletion Date	Date Reached TD	Completion Date or Recompletion Date

API No. 15 - 15-119-21283-00-00
Spot Description:
SW - NE - NW - NW Sec. 4 Twp. 34 S. R. 29 [ ] East [x] West
495 Feet from [x] North / [ ] South Line of Section
765 Feet from [ ] East / [x] West Line of Section
Footages Calculated from Nearest Outside Section Corner:
[ ] NE [x] NW [ ] SE [ ] SW
County: Meade
Lease Name: LARRABEE EXT. Well #: 3-4
Field Name:
Producing Formation: D&A
Elevation: Ground: 2558 Kelly Bushing: 2570
Total Depth: 6397 Plug Back Total Depth:
Amount of Surface Pipe Set and Cemented at: 1551 Feet
Multiple Stage Cementing Collar Used? [ ] Yes [x] 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: 14000 ppm Fluid volume: 1800 bbls
Dewatering method used: Hauled to Disposal

Location of fluid disposal if hauled offsite:

Operator Name: Dillco Fluid Service, Inc.
Lease Name: Regier IE License #: 6652
Quarter NE Sec. 17 Twp. 33 S. R. 27 [ ] East [x] West
County: Meade Permit #: D21232

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

- [ ] **Letter of Confidentiality Received**
  Date:
- [ ] **Confidential Release Date:**
- [x] **Wireline Log Received**
- [x] **Geologist Report Received**
- [ ] **UIC Distribution**

ALT [x] **I** [ ] **II** [ ] **III** **Approved by:** Deanna Garrisor **Date:** 05/31/2011

Side Two

1056620

Operator Name: O'Brien Energy Resources Corp. Lease Name: LARRABEE EXT. Well #: 3-4

Sec. 4 Twp. 34 S. R. 29 ☐ East ☑ West County: Meade

INSTRUCTIONS: Show important tops and base 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. Attach complete copy of all Electric Wire-line Logs surveyed. Attach final geological well site report.

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

Electric Log Submitted Electronically ☑ Yes ☐ No
(If no, Submit Copy)

List All E. Logs Run:

Dual Induction
Microlog
Compensated Neutron Density

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

Name	Top	Datum
Attached	Attached	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	1551.00	ACON/PREMIUM	550	3%CaCl,.25#flosea

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
-			
-			

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

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	LARRABEE EXT. 3-4
Doc ID	1056620

Tops

Name	Top	Datum
HEEBNER	4434	-1858
TORNONTO	4464	-1888
LANSING	4610	-2034
MARMATON	5250	-2674
CHEROKEE	5448	-2872
ATOKA	5645	-3069
MORROW	5770	-3194
MISSISSIPPI CHESTER	5857	-3281
STE. GENEVIEVE	6236	-3660
ST. LOUIS	6294	-3718
TD	6397	-3821

BASIC ENERGY SERVICES
Liberal, Kansas

Cement Report

Customer: O'Brien Energy	Lease No.	Date: 4-17-11
Lease: Larabee Ext	Well #: 3-4	Service Receipt: 01595
Casing: 8 5/8 24# / Depth: 1550	County: Meade	State: KS
Job Type: Surface	Formation	Legal Description: 4-34-29

Pipe Data

Casing size: 8 5/8 24#	Tubing Size		
Depth: 1550	Depth		
Volume: 96bls	Volume		
Max Press: 1500	Max Press		
Well Connection: 8 5/8	Annulus Vol.		
Plug Depth: 1508	Packer Depth		

Perforating Data

Shots/Ft	From	To

Cement Data

Lead: 400sk-A-Con
2.95 Ft3-sk
18.16 Gal-sk 11.4 #s

Tail in: 150sk-Prem
1.34 Ft3 sk Plus Cmt
6.33 Gal-sk 14.8 #

Time	Casing Pressure	Tubing Pressure	Bbls. Pumbed	Rate	Service Log: 7:00 AM Yard
900					Arrive On Location
930					Safety Meeting - Rig Up
955					Rig Running in Casing
1115					Circulate w/ Rig
1130					Hookup to BES
1150	1800		1.0	.5	Pressure Test
1200	400		210	5.0	Pump Lead cmt @ 11.4 #s
1240	300		37	3.5	Pump Tail cmt @ 14.8 #s
1255					Wash Up - Drop Plug
1300	400		76	4.7	Displace
1320	650		20	2.5	Displace - Slow Rate
1330	1200		.5	.5	Bump Plug - Float Held
					Cement To Surface
					Job Complete
					Thanks For Using BasicEnergy Services

Service Units	19816	19828.19919	19805.19808	19827.19883	X-Tra	
Driver Names	E. Chavez	Robert M.	Joseph	David C.	Hector	

Roger Person
Customer Representative

Station Manager

Tom Chavez
Cementer

Taylor Printing, Inc.

BASIC ENERGY SERVICES
Liberal, Kansas

Cement Report

Customer O'Brien Energy	Lease No.		Date 4/23/11
Lease Larrabee Ext	Well # 3-4	Service Receipt	
Casing	Depth	County Meade	State KS
Job Type PTA	Formation	Legal Description 4-34-29	

Pipe Data		Perforating Data		Cement Data
Casing size	Tubing Size	Shots/Ft		Lead 160sx 60/40 Poz @13.5# 1.50cuft/sk 4% gel 7.50gal/sk
Depth	Depth	From	To	
Volume	Volume	From	To	
Max Press	Max Press	From	To	Tail in
Well Connection	Annulus Vol.	From	To	
Plug Depth	Packer Depth	From	To	

Time	Casing Pressure	Tubing Pressure	Bbls. Pumbed	Rate	Service Log
21:30					on loc, Spot trucks, Saftey mtg
23:20		100	10	4	Pump H2O spcr
23:24		100	0	5	St mix 60sk@4107 @13.5# 50sk
23:27		0	13.3	2	Pmp H2O spcr
23:30		0	2	5	mud
23:31		0	17	—	Shutdown Pull to 460'
4/24/11					
05:5[illegible]		50	10	4.5	H2O spacer
[illegible]		40	0	5	St Mix 40sk @13.5#
[illegible]		0	10.6	4	Pmp H2O
[illegible]		0	2	—	Shutdown Pull to 60'
[illegible]		0	0	4	St Mix 20sk @13.5#
[illegible]		0	5.3	—	Shutdown, Pull RHM
[illegible]		0			Plug RHM
07:30					Wash up PTA
07:35					Job Complete

Service Units	19[illegible]	30116314543	14355 19517			
Driver Names	C. Hinz	R. Kris	J. [illegible]			

Customer Representative — [signature]
Station Manager — [signature]
Cementer — [signature]

Taylor Printing, Inc.

O'Brien Energy Resources, Inc.

Larrabee Extension No. 3-4

Section 4, T34S, R29W

Meade County, Kansas

April, 2011

Well Summary

The O'Brien Energy Resources, Corporation, Larrabee Extension No. 3-4 was drilled to a total depth of 6395' in the Mississippian St. Louis Formation in a total of 122 rotating hours and without any problems. Appreciation to Duke Rig 6 hands.

The Larrabbee Extension No. 3-4 offset the Larrabee No. 1-4 by 3190' to the west. Formation tops came in high relative to this offset. The Heebner, Toronto and Lansing came in 24', 20' and 16' high respectively. The Marmaton, 8' high. The Cherokee, Atoka and Morrow ran 20', 16' and 26' high. The Chester came in 11' high and the Ste. Genevieve, 16' high. The Marmaton came in 13' low relative to the Raydon Exploration, No. 1-4 Irish Flats, to the Southeast. The Morrow and Chester, 10' low relative to this offset.

Several worthy hydrocarbon shows were encountered during the drilling of this test. The Marmaton(5250'-5262') consists of a Limestone: Medium to light mottled brown, oomicrite, micro to finely crystalline, microsucrosic in part, brittle, clean, very soft and chalky in part, very fossiliferous & oolitic with good moldic porosity with sparry calcite infill, intercrystalline & vuggy porosity, bright light speckled blue hydrocarbon fluorescence(6% spl), slow streaming to bleeding cut, trace light oil stain. A 60 Unit gas increase was noted.

The Chester(5992'-5999') consists of a Limestone to a very calcareous Sandstone: Medium to dark mottled gray to brown, speckled black, hard to friable in part, fine well sorted grains, very calcareous, argillaceous, occasional good intergranular & vuggy porosity, speckled black oil stain, dark brown live oil, speckled gold brown hydrocarbon fluorescence(5% spl), excellent streaming cut. A 160 Unit gas increase occured.

The Lower Chester(6140'-6146') consists of a Limestone: Medium to dark brown with oil staining, oomicrite, microcrystalline, microsucrosic, brittle, clean to argillaceous, very oolitic with excellent oomoldic porosity, occasional vuggy and intercrystalline porosity with matrix oil staining, dull brown to bright yellow hydrocarbon fluorescence(8% spl), excellent fast streaming cut, trace live dark brown oil. A 430 Unit gas kick was documented. This interval tested tight and recovered 428' of gas and 130' of gas cut mud(10% gas).

Additional minor shows were documented(attached mudlog).

The Larrabee Extension No. 3-4 was plugged and abandoned 4/24/11.

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, David Ward
Well:	Larrabee Extension No. 3-4
Location:	510' FNL & 770' FWL, Section 4, T34S, R29W, Meade County, Kansas – South of Meade.
Elevation:	Ground Level 2564', Kelly Bushing 2576'
Contractor:	Duke Drilling Rig No. 6, Type: Double jacknife, triple stand, Toolpusher Rick Schollenbarger, Drillers: , Danny White, Mike Brewer
Company Man:	Roger Pearson – Liberal, Kansas
Spud Date:	4/16/11
Total Depth:	4/22/11, Driller 6395', Logger 6397', St. Louis
Casing Program:	39 joints of 8 5/8", J55, 24Lbs/ft, set at 1550'.
Mud Program:	Mud Co./Service Mud Inc., Engineer Brad Boritz, mud up 2600'.
Wellsite Consultant:	Peter Debenham with mudlogging trailer, Call depth 4000', Box 350, Drake, CO 80515, 720/220-4860.
Samples:	30' to 5750', 10' to TD. Zones of interest saved.
Electric Logs:	Weatherford, Engineer Lynn Scott, 1)Dual Induction 2) Compensated Neutron Litho Density 3) Microlog
Drill Stem Testing:	Trilobite, Engineer Leal Carson. DST No. 1(6136'-6195'), Chester Fm.
Status:	Plugged and abandoned 4/24/11

WELL CHRONOLOGY

DATE	6 AM DEPTH	FOOTAGE	RIG ACTIVITY
4/14			Move to location and rig up.
4/15			Mix spud mud and pump water. Drill rathole and mousehole. Rig up rotary tolls. Unload and strap casing.
4/16	1070'	1070'	Rig up. Spud in 12 ¼" surface hole to 1070'. Survey(1/2 deg.).
4/17	1550'	480'	To 1550' and circulate and condition mud. Rig up casing crew and run and cement 36 joints of 8 5/8" set at 1550' with 460 sacks A-con(1/4 lbs floseal, 3% cc) and 150 sacks Class A(1/4 lbs & 2% cc). Wait on cement. Back off 8 5/8". install wellhead and nipple up BOP and pressure test blind rams. Trip in.
4/18	2870'	1320'	Trip in. Drill plug and cement and 7 7/8" hole to 1800' and trip for Bit No. 3. To 2870'. Survey(1/4 deg.). Service rig and dump suction and displace mud system at 2600'.
4/19	4060'	1190'	
4/20	5048'	988'	Survey(1/2 deg.). To 5048' and wiper trip 28 stands and circulate. To 5095'.
4/21	6070'	1022'	Circulate for samples at 5258'. Drilling.
4/22	6395'TD	325'	To 6395'TD and circulate and condition mud. Wiper trip 40 stands and circulate and condition. Drop survey(1/2 deg.) and trip out for e-logs and run same. Wait on tester.
4/23	TD		Wait on tester and load out test tool. Trip in and run DST No. 1(6136'-6195'), Chester Fm. Trip tool and load out same. Trip to bottom and circulate. Trip out laying down and plug and abandon well. Rig down.

BIT RECORD

NO.	MAKE	TYPE	SIZE	OUT	FOOTAGE	HOURS
1	HTC	GTX-63	12 ¼"	1550'	1550'	24 ¾
2	HTC	GX 28	7 7/8"	1800'	250'	4 ½
3	HTC	Q506F	7 7/8"	6395'	4595'	93
				Total Rotating Hours:		122'
				Average:		52.42 Ft/hr

DEVIATION RECORD - degree

1005' ½, 1550' 2, 2572' 1/2, 4327' ½, 6395' ½

MUD PROPERTIES

DATE	DEPTH	WT	VIS	PV	YP	pH	WL	CL	LCM-LBS/BBL
4/17	1550'	9.4	33	2	4	7.0	n/c	32.5K	4
4/18	2420'	9.7	28	1	2	7.0	n/c	92K	0
4/19	3646'	9.4	38	6	8	7.0	n/c	12.6K	2
4/20	4677'	9.3	40	8	14	10.0	9.2	2K	2
4/21	5676'	9.3	52	15	22	10.5	8.0	2.5K	4
4/22	6395'	9.3	53	16	20	10.5	8.0	2K	2

ELECTRIC LOG FORMATION TOPS- KB Elev. 2576'

			*Larrabee No. 1-4	
FORMATION	DEPTH	DATUM	DATUM	POSITION
Heebner	4434'	-1858'	-1882'	+24'
Toronto	4464'	-1888'	-1908'	+20'
Lansing	4610'	-2034'	-2050'	+16'
Marmaton	5250'	-2674'	-2682'	+8'
Cherokee	5448'	-2872'	-2892'	+20'
Atoka	5645'	-3069'	-3085'	+16'
Morrow	5770'	-3194'	-3220'	+26'
Mississippi Chester	5857'	-3281'	-3292'	+11'
Ste. Genevieve	6236'	-3660'	-3676'	+16'
St. Louis	6294'	-3718'		
TD	6397'	-3821'		

*O'Brien Energy, Larrabee No. 1-4, 330'FNL & 1320'FEL, Sec. 4 – 3190' to the East, K.B. Elev. 2550'.

DRILL STEM DATA

DST NO. 1:(6136'-6195'), Chester Fm.
Type: Straddle, Times: 24-68-20-122
Blows: IF – Bottom of bucket in 12 min., FF – Weak to 3" blow, SI's – no blow back.

PERIOD	PSI
IH	3085
IF	101 - 178
ISI	1348
FF	167 - 107
FSI	1265
FH	2988

BHT 135 deg. F.
RECOVERY: 428' gas, 130' gas cut mud(10% gas). Sample Chamber – 2000 ml mud(20% gas), 500 PSI.

LITHOLOGY STRIP LOG
WellSight Systems
Scale 1:240 (5"=100') Imperial

Well Name:	O'Brien Energy, Larrabee Extension No. 3-4		
Location:	510'FNL & 770'FWL, Section 4, 34S, R29W, Meade Co., KS		
Licence Number:	API: 15-119-21283	**Region:**	Hougoton
Spud Date:	4/16/11	**Drilling Completed:**	4/22/11
Surface Coordinates:	510'FNL & 770'FWL, Section 4, 34S, R29W, Meade Co., KS		
Bottom Hole Coordinates:	510'FNL & 770'FWL, Section 4, 34S, R29W, Meade Co., KS		
Ground Elevation (ft):	2564'	**K.B. Elevation (ft):**	2576'
Logged Interval (ft):	4000' To: TD	**Total Depth (ft):**	6395'
Formation:	Lansing, Marmaton, Morrow, Chester, St. Louis		
Type of Drilling Fluid:	Chemical Gel/LSND/LCM, mud up 4000'		

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

Engineer Roger Pearson, Duke Drilling Rig No. 6, T.P. Rick S., Drillers Terry Sorter, Danny White, Mike Brewer, Service Mud/Mud Cp. engineer Brad Bortz, 8 5/8" set to 1550', Trilobite Testing, P&A 4/24/11.

ROCK TYPES

ACCESSORIES

FOSSIL
- Algae
- Amph
- Belm
- Biocist
- 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

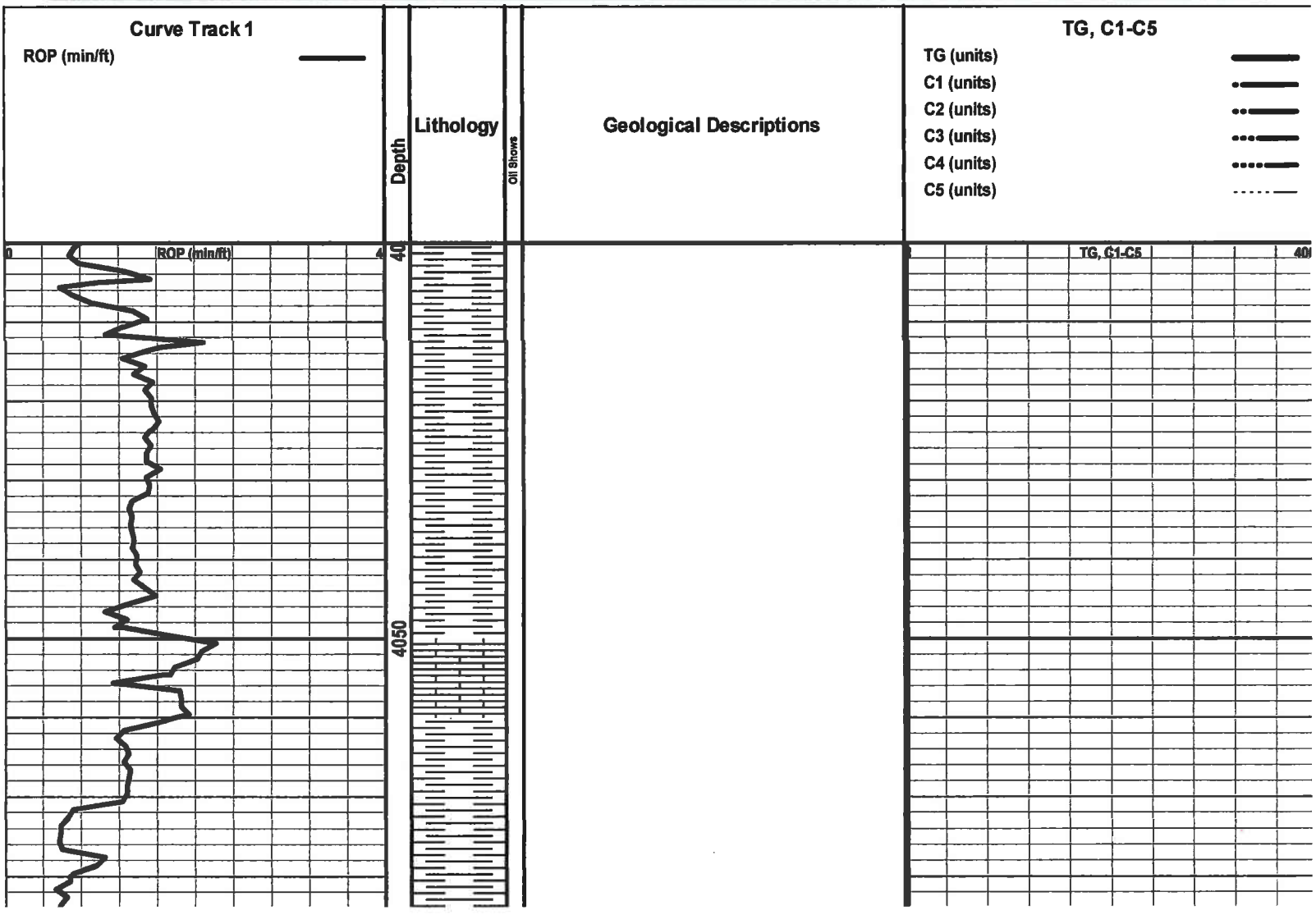
EVENTS
- Rft
- Sidewall

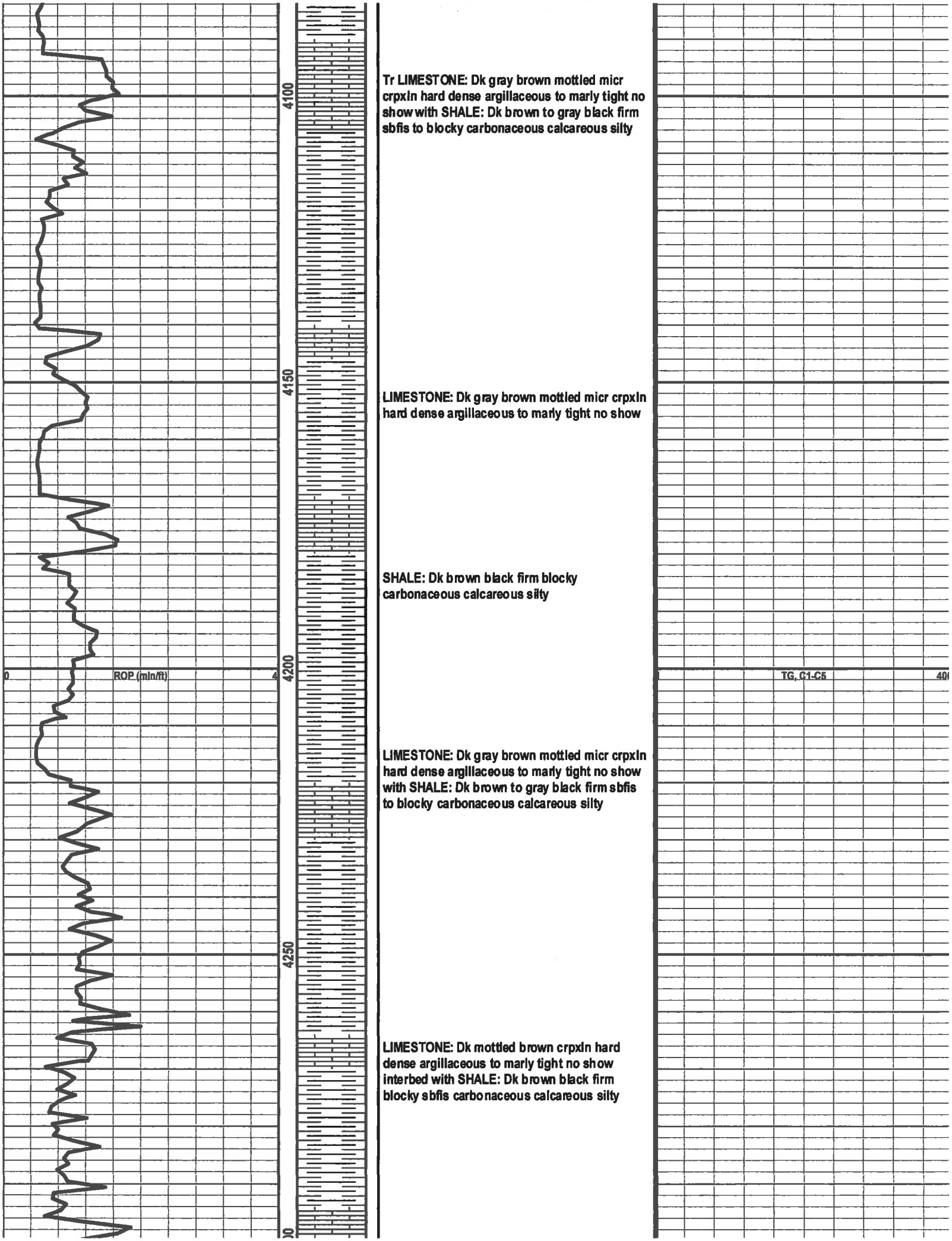
POROSITY TYPE
- Earthy
- Fenest
- Fracture
- Inter
- Moldic
- Organic
- Pinpoint
- Vuggy

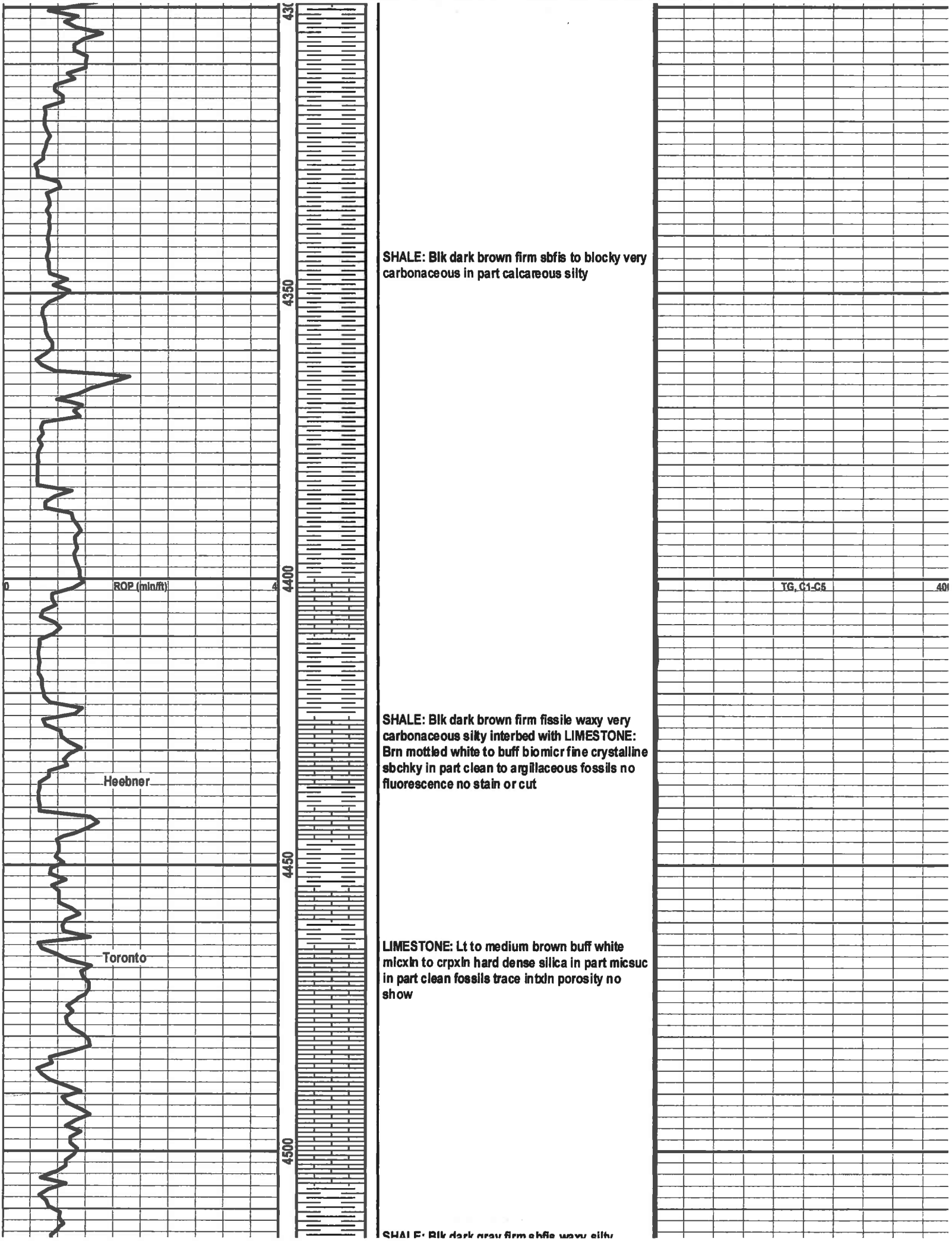
SORTING
- Well
- Moderate
- Poor

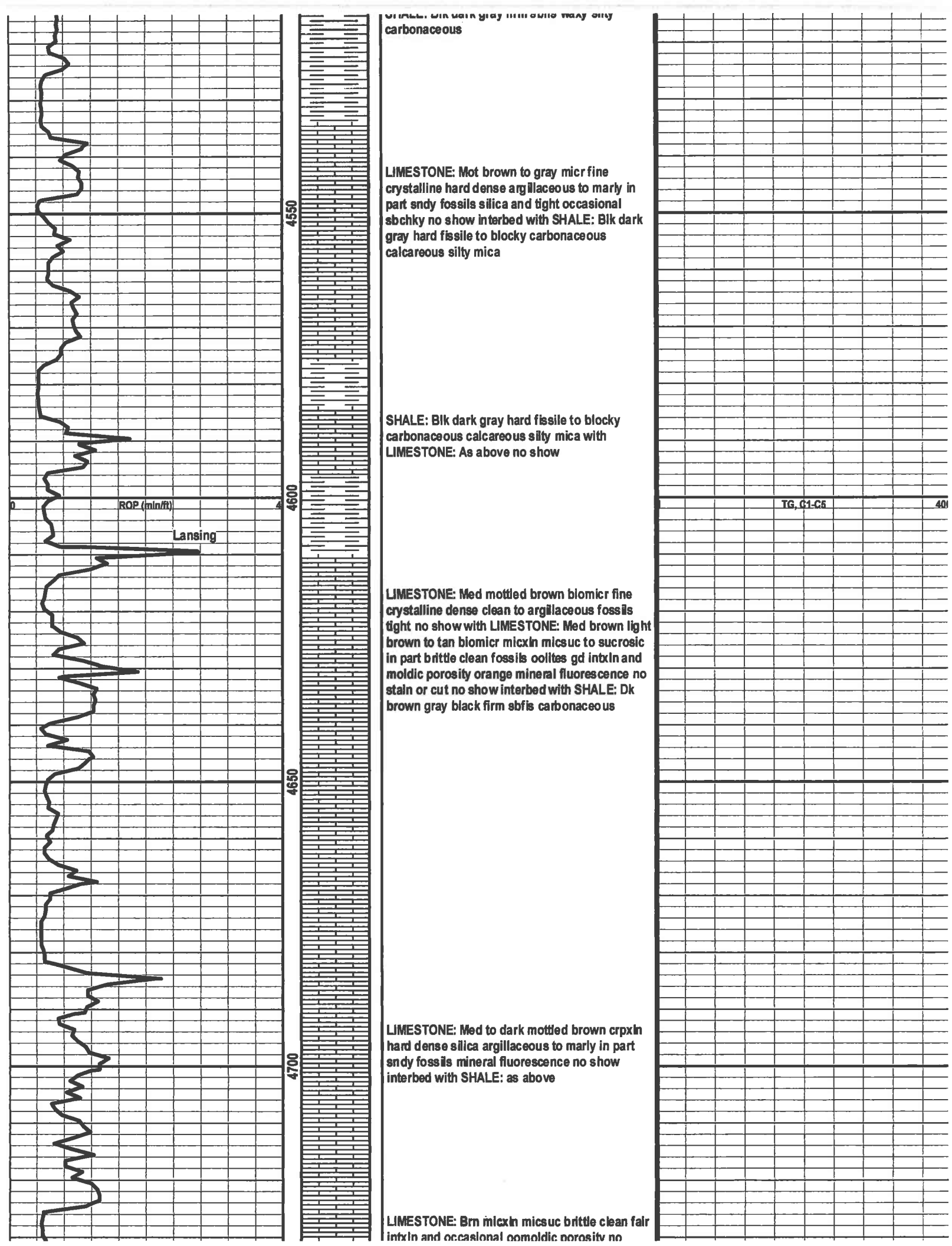
ROUNDING
- Rounded
- Subrnd
- Subang
- Angular

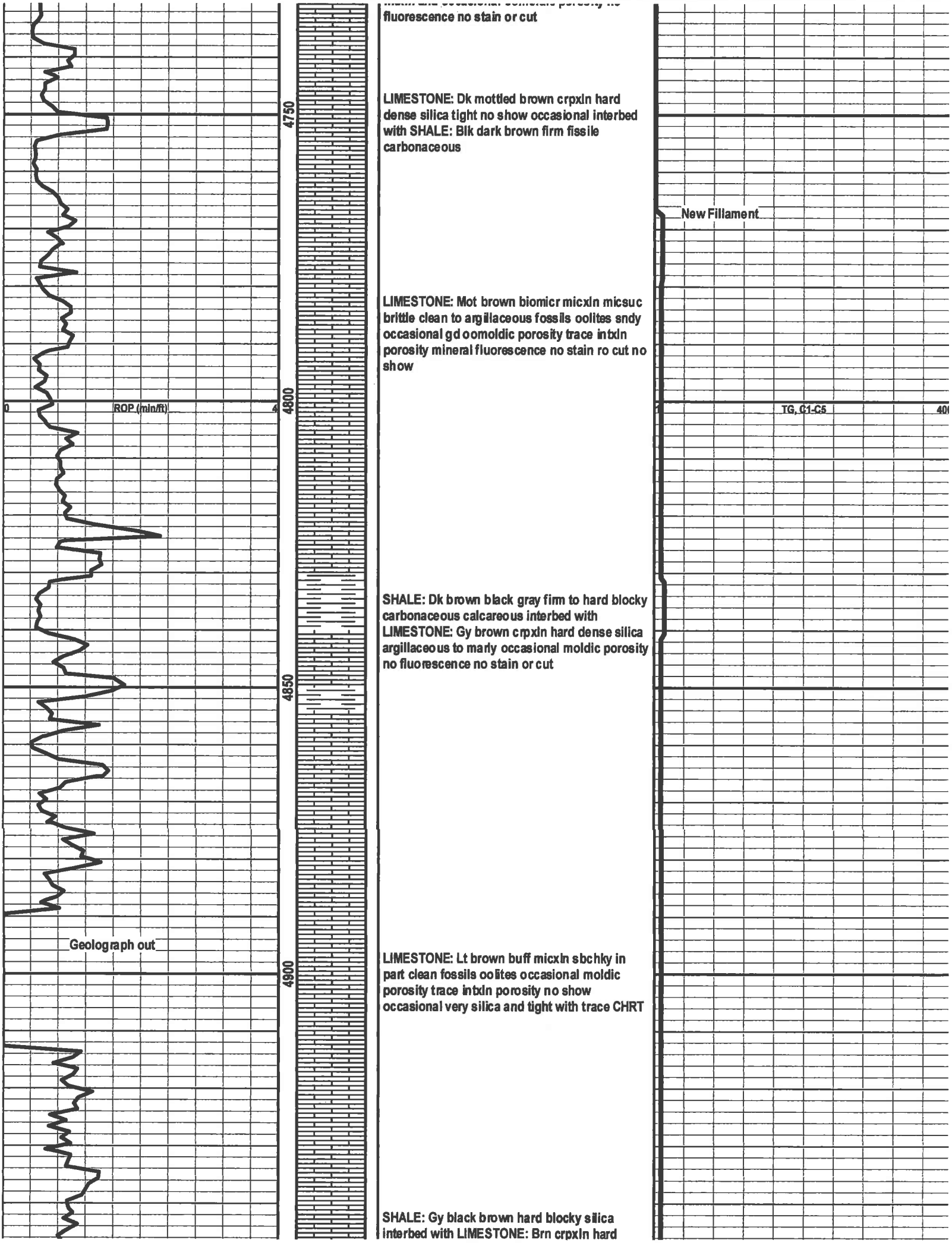
OIL SHOWS
- Even
- Spotted
- Ques
- Dead

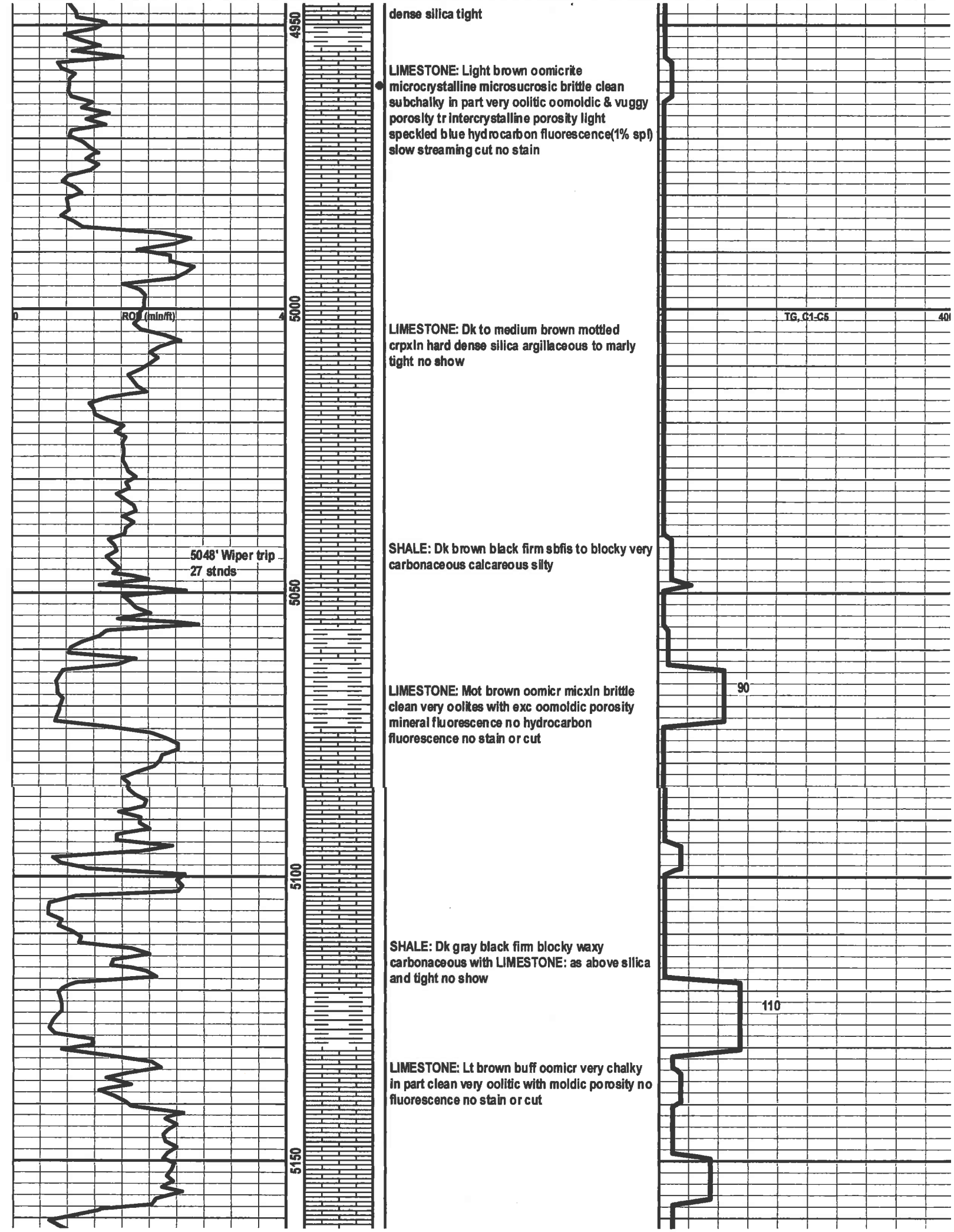


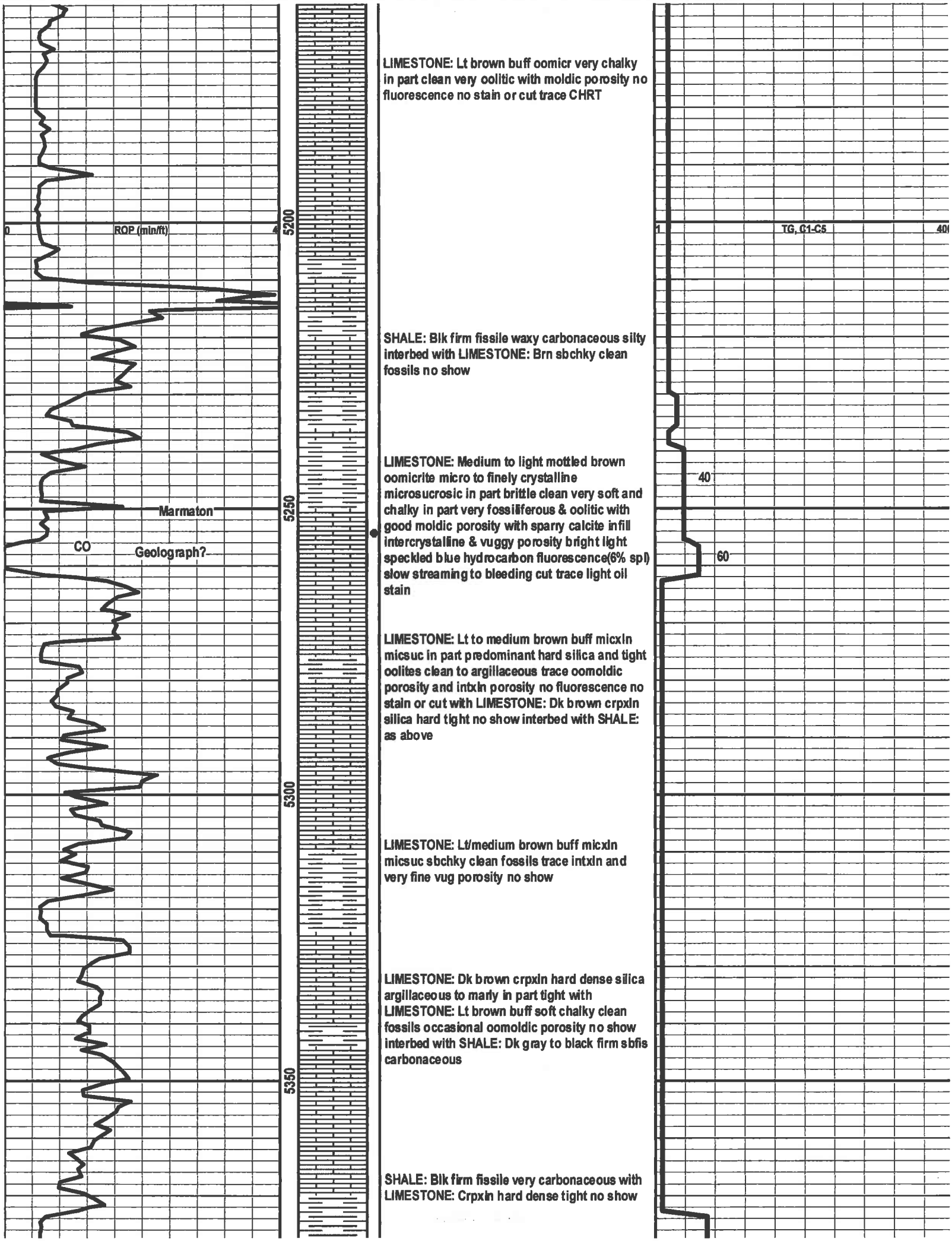

4100
4150
4200
4250
0
ROP (min/ft)
4
TG, C1-C5
Tr LIMESTONE: Dk gray brown mottled micr crpxln hard dense argillaceous to marly tight no show with SHALE: Dk brown to gray black firm sbfis to blocky carbonaceous calcareous silty
LIMESTONE: Dk gray brown mottled micr crpxln hard dense argillaceous to marly tight no show
SHALE: Dk brown black firm blocky carbonaceous calcareous silty
LIMESTONE: Dk gray brown mottled micr crpxln hard dense argillaceous to marly tight no show with SHALE: Dk brown to gray black firm sbfis to blocky carbonaceous calcareous silty
LIMESTONE: Dk mottled brown crpxln hard dense argillaceous to marly tight no show interbed with SHALE: Dk brown black firm blocky sbfis carbonaceous calcareous silty

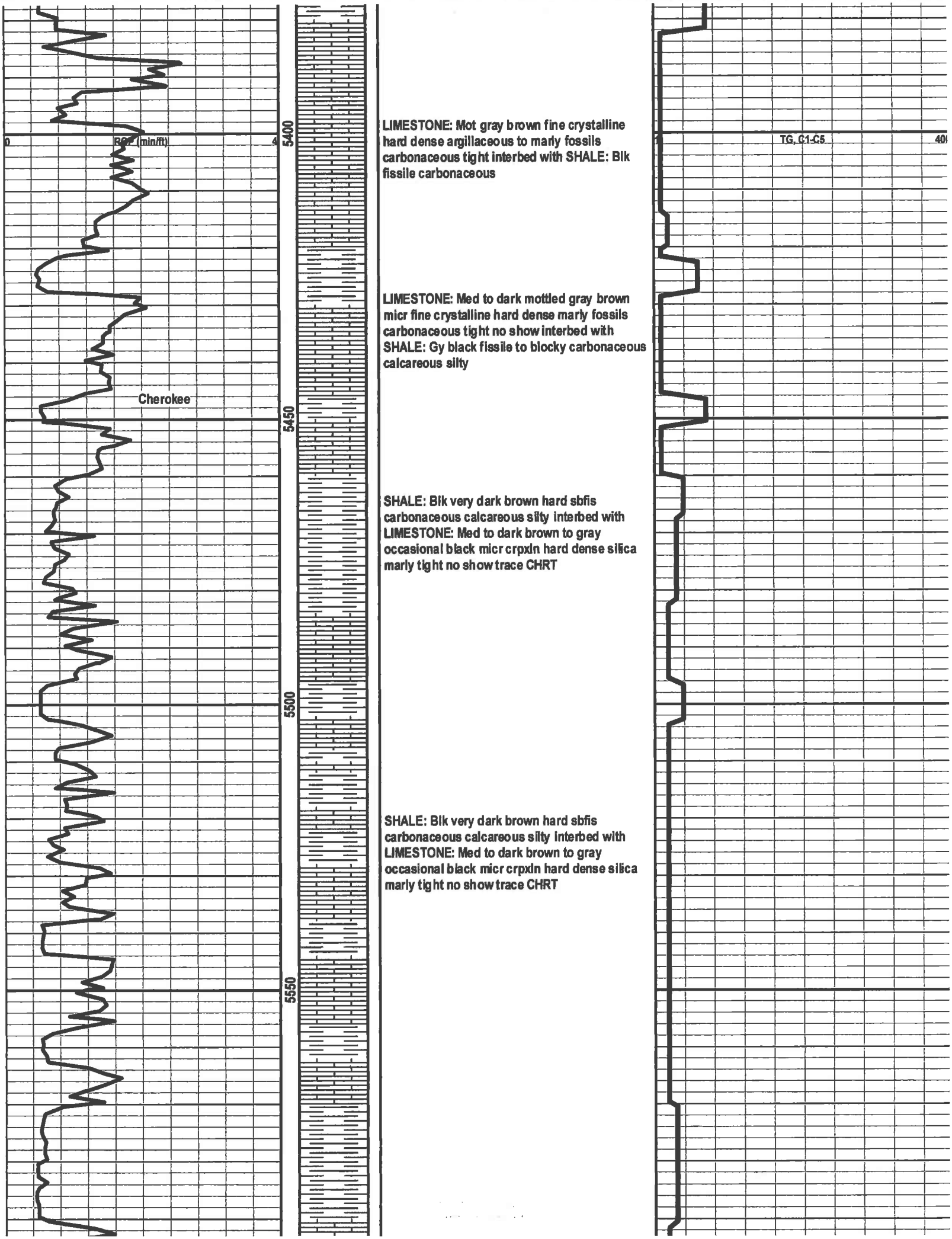

ROP (min/ft)
TG, C1-C5
4350
4400
4450
4500
Heebner
Toronto
SHALE: Blk dark brown firm sbfis to blocky very carbonaceous in part calcareous silty
SHALE: Blk dark brown firm fissile waxy very carbonaceous silty interbed with LIMESTONE: Brn mottled white to buff biomicr fine crystalline sbchky in part clean to argillaceous fossils no fluorescence no stain or cut
LIMESTONE: Lt to medium brown buff white micxln to crpxln hard dense silica in part micsuc in part clean fossils trace intxln porosity no show
SHALE: Blk dark gray firm sbfis wavy silty

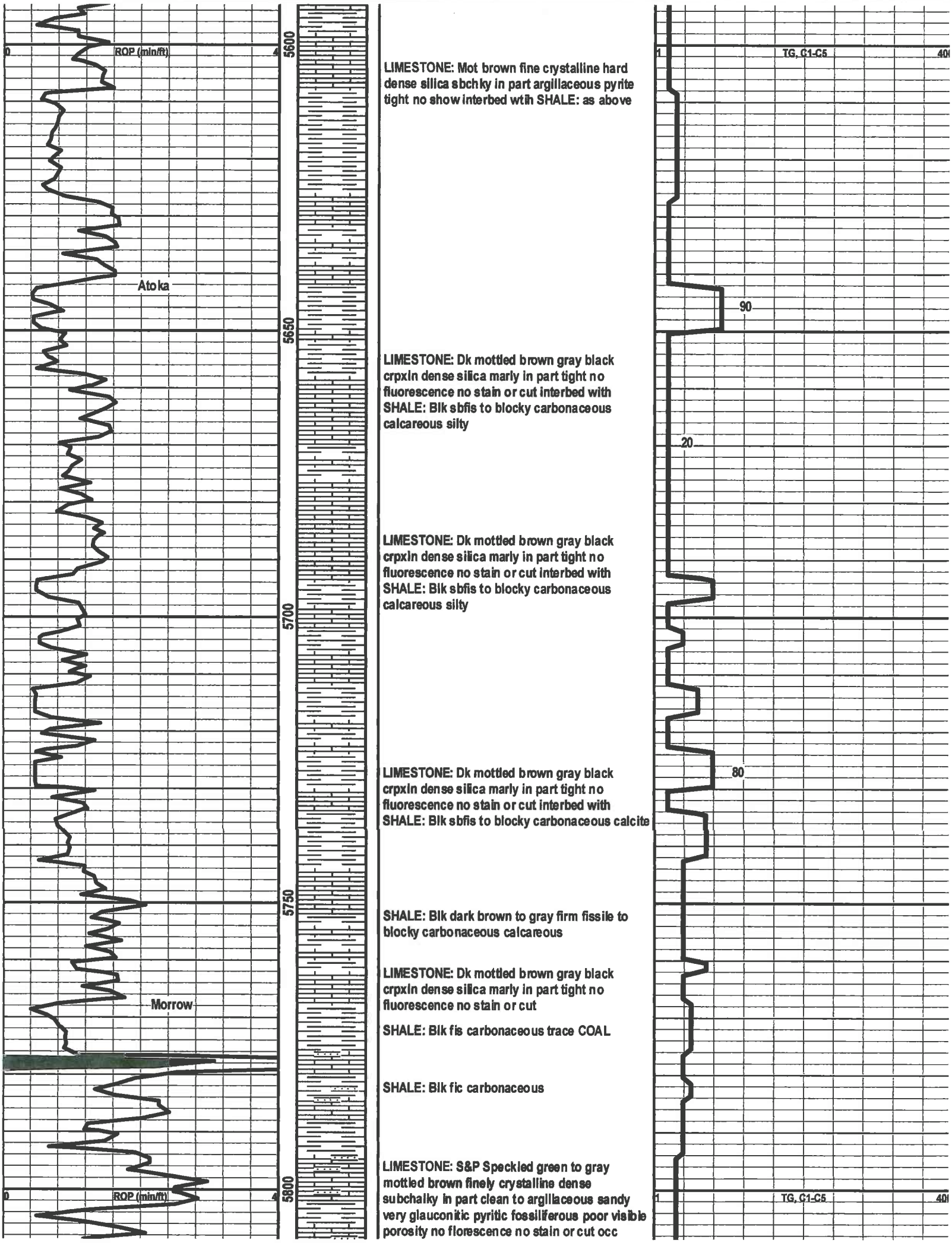

SHALE: Blk dark gray firm sbfis waxy silty carbonaceous
LIMESTONE: Mot brown to gray micr fine crystalline hard dense argillaceous to marly in part sndy fossils silica and tight occasional sbchky no show interbed with SHALE: Blk dark gray hard fissile to blocky carbonaceous calcareous silty mica
SHALE: Blk dark gray hard fissile to blocky carbonaceous calcareous silty mica with LIMESTONE: As above no show
0
ROP (min/ft)
4
TG, C1-C5
40
4550
4600
4650
4700
Lansing
LIMESTONE: Med mottled brown biomicr fine crystalline dense clean to argillaceous fossils tight no show with LIMESTONE: Med brown light brown to tan biomicr micxln micsuc to sucrosic in part brittle clean fossils oolites gd intxln and moldic porosity orange mineral fluorescence no stain or cut no show interbed with SHALE: Dk brown gray black firm sbfis carbonaceous
LIMESTONE: Med to dark mottled brown crpxln hard dense silica argillaceous to marly in part sndy fossils mineral fluorescence no show interbed with SHALE: as above
LIMESTONE: Brn micxln micsuc brittle clean fair intxln and occasional oomoldic porosity no

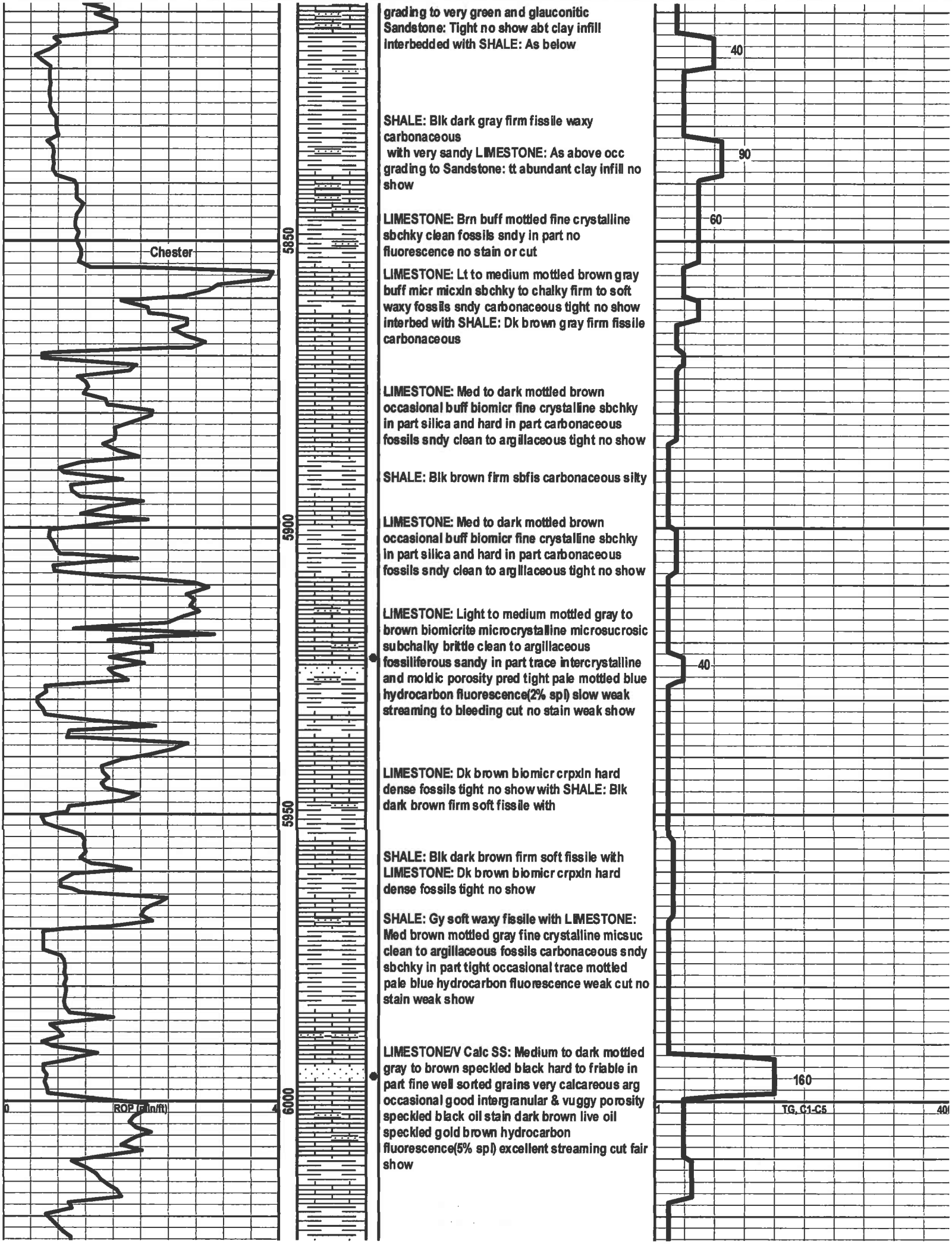

fluorescence no stain or cut
LIMESTONE: Dk mottled brown crpxln hard dense silica tight no show occasional interbed with SHALE: Blk dark brown firm fissile carbonaceous
New Fillament
LIMESTONE: Mot brown biomicr micxln micsuc brittle clean to argillaceous fossils oolites sndy occasional gd oomoldic porosity trace intxln porosity mineral fluorescence no stain ro cut no show
0
ROP (min/ft)
4
4750
4800
TG, C1-C5
40
SHALE: Dk brown black gray firm to hard blocky carbonaceous calcareous interbed with LIMESTONE: Gy brown crpxln hard dense silica argillaceous to marly occasional moldic porosity no fluorescence no stain or cut
4850
Geolograph out
4900
LIMESTONE: Lt brown buff micxln sbchky in part clean fossils oolites occasional moldic porosity trace intxln porosity no show occasional very silica and tight with trace CHRT
SHALE: Gy black brown hard blocky silica interbed with LIMESTONE: Brn crpxln hard


dense silica tight
LIMESTONE: Light brown oomicrite microcrystalline microsucrosic brittle clean subchalky in part very oolitic oomoldic & vuggy porosity tr intercrystalline porosity light speckled blue hydrocarbon fluorescence(1% spl) slow streaming cut no stain
ROP (min/ft)
TG, C1-C5
LIMESTONE: Dk to medium brown mottled crpxln hard dense silica argillaceous to marly tight no show
5048' Wiper trip
27 stnds
SHALE: Dk brown black firm sbfis to blocky very carbonaceous calcareous silty
LIMESTONE: Mot brown oomicr micxln brittle clean very oolites with exc oomoldic porosity mineral fluorescence no hydrocarbon fluorescence no stain or cut
90
SHALE: Dk gray black firm blocky waxy carbonaceous with LIMESTONE: as above silica and tight no show
110
LIMESTONE: Lt brown buff oomicr very chalky in part clean very oolitic with moldic porosity no fluorescence no stain or cut
4950
5000
5050
5100
5150


0
ROP (min/ft)
4
5200
5250
5300
5350
Marmaton
CO
Geolograph?
1
TG, C1-C5
40
60
LIMESTONE: Lt brown buff oomicr very chalky in part clean very oolitic with moldic porosity no fluorescence no stain or cut trace CHRT
SHALE: Blk firm fissile waxy carbonaceous silty interbed with LIMESTONE: Brn sbchky clean fossils no show
LIMESTONE: Medium to light mottled brown oomicrite micro to finely crystalline microsucrosic in part brittle clean very soft and chalky in part very fossiliferous & oolitic with good moldic porosity with sparry calcite infil intercrystalline & vuggy porosity bright light speckled blue hydrocarbon fluorescence(6% spl) slow streaming to bleeding cut trace light oil stain
LIMESTONE: Lt to medium brown buff micxln micsuc in part predominant hard silica and tight oolites clean to argillaceous trace oomoldic porosity and intxln porosity no fluorescence no stain or cut with LIMESTONE: Dk brown crpxln silica hard tight no show interbed with SHALE: as above
LIMESTONE: Lt/medium brown buff micxln micsuc sbchky clean fossils trace intxln and very fine vug porosity no show
LIMESTONE: Dk brown crpxln hard dense silica argillaceous to marly in part tight with LIMESTONE: Lt brown buff soft chalky clean fossils occasional oomoldic porosity no show interbed with SHALE: Dk gray to black firm sbfis carbonaceous
SHALE: Blk firm fissile very carbonaceous with LIMESTONE: Crpxln hard dense tight no show


0
ROP (min/ft)
4
5400
5450
5500
5550
Cherokee
TG, C1-C5
40
LIMESTONE: Mot gray brown fine crystalline hard dense argillaceous to marly fossils carbonaceous tight interbed with SHALE: Blk fissile carbonaceous
LIMESTONE: Med to dark mottled gray brown micr fine crystalline hard dense marly fossils carbonaceous tight no show interbed with SHALE: Gy black fissile to blocky carbonaceous calcareous silty
SHALE: Blk very dark brown hard sbfis carbonaceous calcareous silty interbed with LIMESTONE: Med to dark brown to gray occasional black micr crpxln hard dense silica marly tight no show trace CHRT
SHALE: Blk very dark brown hard sbfis carbonaceous calcareous silty interbed with LIMESTONE: Med to dark brown to gray occasional black micr crpxln hard dense silica marly tight no show trace CHRT


0
ROP (min/ft)
4
Atoka
Morrow
0
ROP (min/ft)
4
5600
5650
5700
5750
5800
LIMESTONE: Mot brown fine crystalline hard dense silica sbchky in part argillaceous pyrite tight no show interbed wtih SHALE: as above
LIMESTONE: Dk mottled brown gray black crpxln dense silica marly in part tight no fluorescence no stain or cut interbed with SHALE: Blk sbfis to blocky carbonaceous calcareous silty
LIMESTONE: Dk mottled brown gray black crpxln dense silica marly in part tight no fluorescence no stain or cut interbed with SHALE: Blk sbfis to blocky carbonaceous calcareous silty
LIMESTONE: Dk mottled brown gray black crpxln dense silica marly in part tight no fluorescence no stain or cut interbed with SHALE: Blk sbfis to blocky carbonaceous calcite
SHALE: Blk dark brown to gray firm fissile to blocky carbonaceous calcareous
LIMESTONE: Dk mottled brown gray black crpxln dense silica marly in part tight no fluorescence no stain or cut
SHALE: Blk fis carbonaceous trace COAL
SHALE: Blk fic carbonaceous
LIMESTONE: S&P Speckled green to gray mottled brown finely crystalline dense subchalky in part clean to argillaceous sandy very glauconitic pyritic fossiliferous poor visible porosity no florescence no stain or cut occ
1
TG, C1-C5
40
90
20
80
1
TG, C1-C5
40



grading to very green and glauconitic Sandstone: Tight no show abt clay infill interbedded with SHALE: As below

SHALE: Blk dark gray firm fissile waxy carbonaceous with very sandy LIMESTONE: As above occ grading to Sandstone: tt abundant clay infill no show

LIMESTONE: Brn buff mottled fine crystalline sbchky clean fossils sndy in part no fluorescence no stain or cut

LIMESTONE: Lt to medium mottled brown gray buff micr micxln sbchky to chalky firm to soft waxy fossils sndy carbonaceous tight no show interbed with SHALE: Dk brown gray firm fissile carbonaceous

LIMESTONE: Med to dark mottled brown occasional buff biomicr fine crystalline sbchky in part silica and hard in part carbonaceous fossils sndy clean to argillaceous tight no show

SHALE: Blk brown firm sbfis carbonaceous silty

LIMESTONE: Med to dark mottled brown occasional buff biomicr fine crystalline sbchky in part silica and hard in part carbonaceous fossils sndy clean to argillaceous tight no show

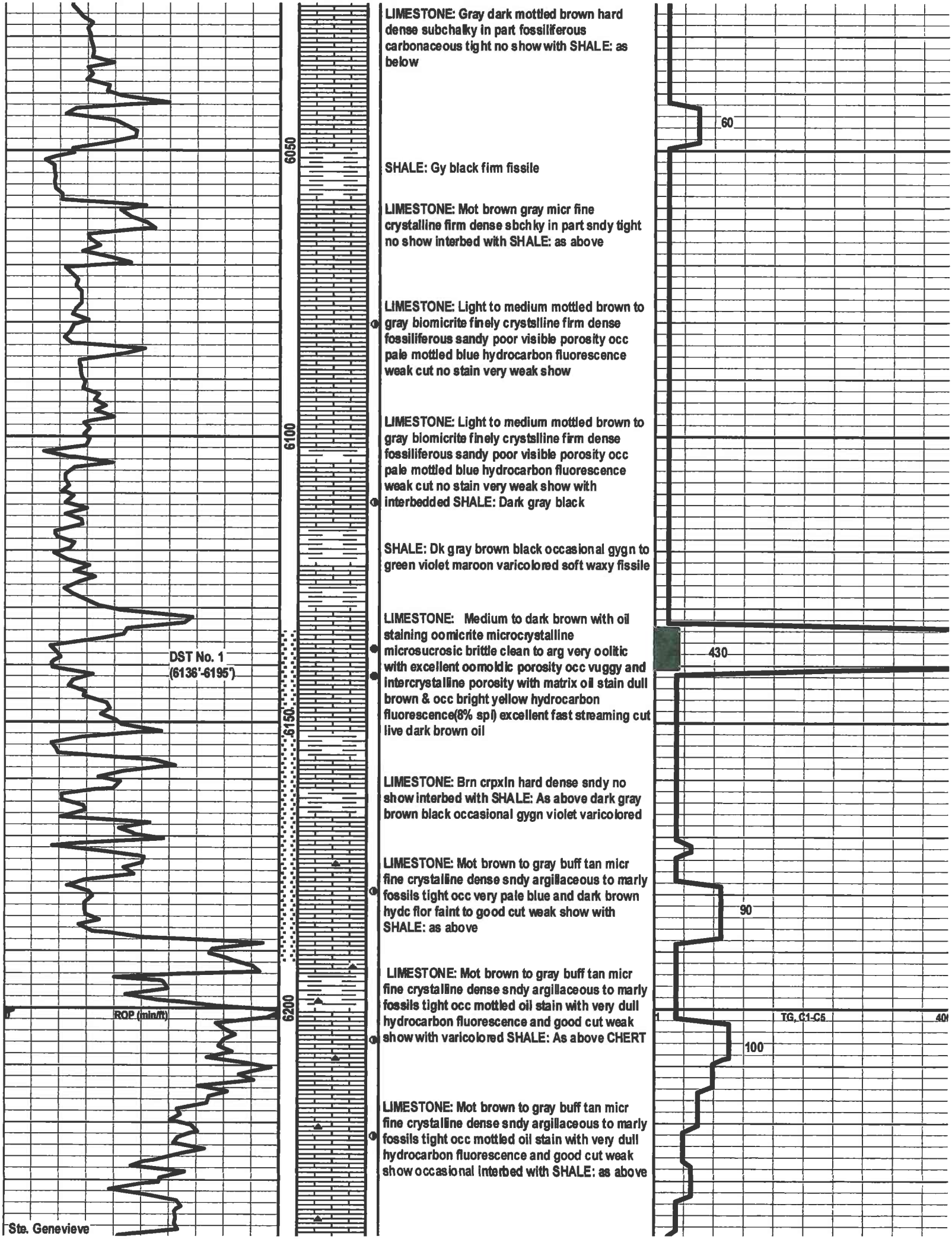
LIMESTONE: Light to medium mottled gray to brown biomicrite microcrystalline microsucrosic subchalky brittle clean to argillaceous fossiliferous sandy in part trace intercrystalline and moldic porosity pred tight pale mottled blue hydrocarbon fluorescence(2% spl) slow weak streaming to bleeding cut no stain weak show

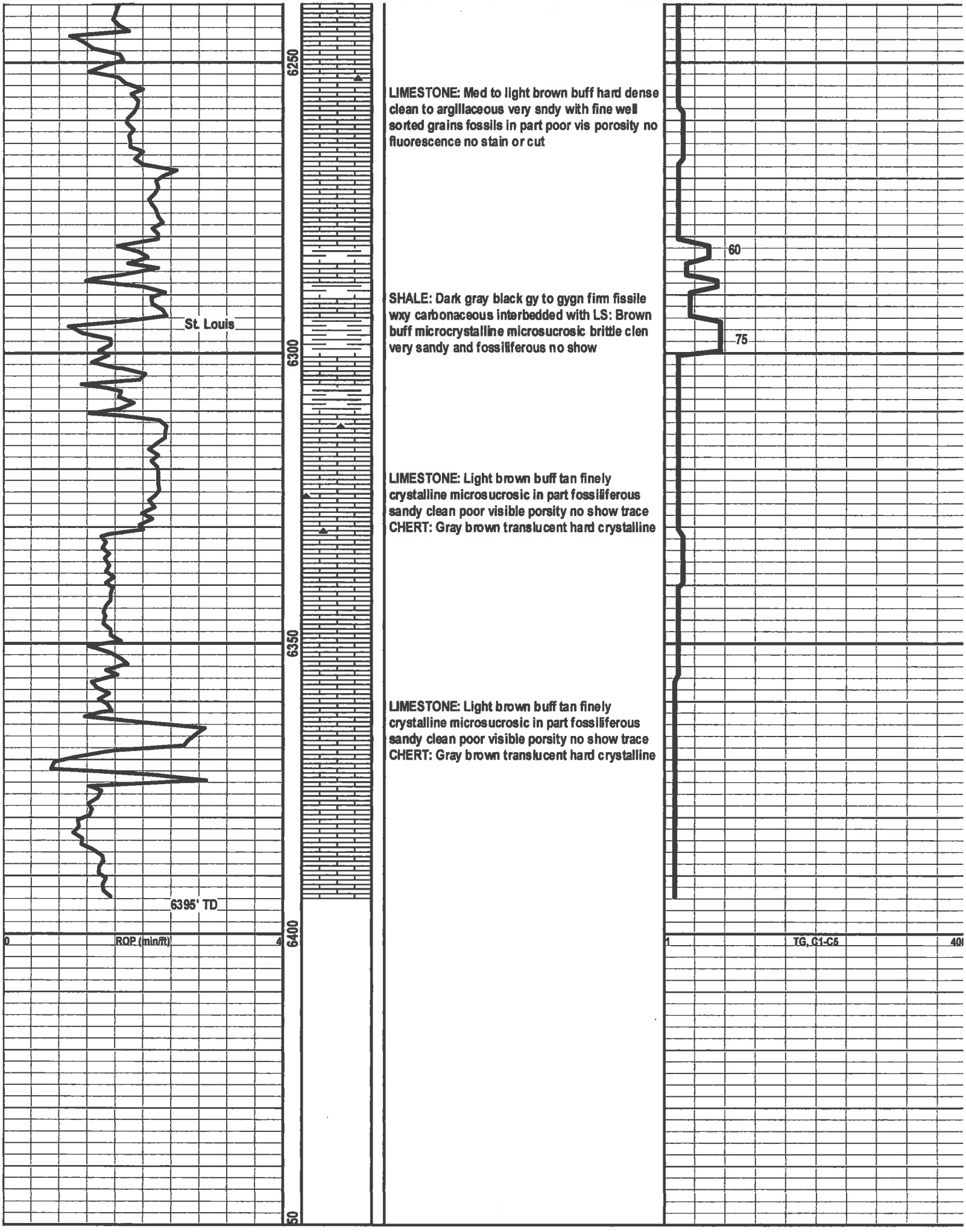
LIMESTONE: Dk brown biomicr crpxln hard dense fossils tight no show with SHALE: Blk dark brown firm soft fissile with

SHALE: Blk dark brown firm soft fissile with LIMESTONE: Dk brown biomicr crpxln hard dense fossils tight no show

SHALE: Gy soft waxy fissile with LIMESTONE: Med brown mottled gray fine crystalline micsuc clean to argillaceous fossils carbonaceous sndy sbchky in part tight occasional trace mottled pale blue hydrocarbon fluorescence weak cut no stain weak show

LIMESTONE/V Calc SS: Medium to dark mottled gray to brown speckled black hard to friable in part fine well sorted grains very calcareous arg occasional good intergranular & vuggy porosity speckled black oil stain dark brown live oil speckled gold brown hydrocarbon fluorescence(5% spl) excellent streaming cut fair show


LIMESTONE: Gray dark mottled brown hard dense subchalky in part fossiliferous carbonaceous tight no show with SHALE: as below
SHALE: Gy black firm fissile
LIMESTONE: Mot brown gray micr fine crystalline firm dense sbchky in part sndy tight no show interbed with SHALE: as above
LIMESTONE: Light to medium mottled brown to gray biomicrite finely crystslline firm dense fossiliferous sandy poor visible porosity occ pale mottled blue hydrocarbon fluorescence weak cut no stain very weak show
LIMESTONE: Light to medium mottled brown to gray biomicrite finely crystslline firm dense fossiliferous sandy poor visible porosity occ pale mottled blue hydrocarbon fluorescence weak cut no stain very weak show with interbedded SHALE: Dark gray black
SHALE: Dk gray brown black occasional gygn to green violet maroon varicolored soft waxy fissile
LIMESTONE: Medium to dark brown with oil staining oomicrite microcrystalline microsucrosic brittle clean to arg very oolitic with excellent oomoldic porosity occ vuggy and intercrystalline porosity with matrix oil stain dull brown & occ bright yellow hydrocarbon fluorescence(8% spl) excellent fast streaming cut live dark brown oil
LIMESTONE: Brn crpxln hard dense sndy no show interbed with SHALE: As above dark gray brown black occasional gygn violet varicolored
LIMESTONE: Mot brown to gray buff tan micr fine crystalline dense sndy argillaceous to marly fossils tight occ very pale blue and dark brown hydc flor faint to good cut weak show with SHALE: as above
LIMESTONE: Mot brown to gray buff tan micr fine crystalline dense sndy argillaceous to marly fossils tight occ mottled oil stain with very dull hydrocarbon fluorescence and good cut weak show with varicolored SHALE: As above CHERT
LIMESTONE: Mot brown to gray buff tan micr fine crystalline dense sndy argillaceous to marly fossils tight occ mottled oil stain with very dull hydrocarbon fluorescence and good cut weak show occasional interbed with SHALE: as above
DST No. 1
(6136'-6195')
6050
6100
6150
6200
ROP (min/ft)
TG, C1-C5
60
430
90
100
Ste. Genevieve


St. Louis
6395' TD
0
ROP (min/ft)
4
6250
6300
6350
6400
50
LIMESTONE: Med to light brown buff hard dense clean to argillaceous very sndy with fine well sorted grains fossils in part poor vis porosity no fluorescence no stain or cut
SHALE: Dark gray black gy to gygn firm fissile wxy carbonaceous interbedded with LS: Brown buff microcrystalline microsucrosic brittle clen very sandy and fossiliferous no show
LIMESTONE: Light brown buff tan finely crystalline microsucrosic in part fossiliferous sandy clean poor visible porsity no show trace
CHERT: Gray brown translucent hard crystalline
LIMESTONE: Light brown buff tan finely crystalline microsucrosic in part fossiliferous sandy clean poor visible porsity no show trace
CHERT: Gray brown translucent hard crystalline
60
75
1
TG, C1-C5

TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Prepared For: **O'Brien Energy**

18 Congress St STE 207
Portsmouth, NH 03601

ATTN: Roger Pearson

4-34s-29w Meade,KS

Larrabee Ext 3-4

Start Date: 2011.04.23 @ 03:40:00
End Date: 2011.04.23 @ 15:28:45
Job Ticket #: 042433 DST #: 1

Trilobite Testing, Inc
PO Box 1733 Hays, KS 67601
ph: 785-625-4778 fax: 785-625-5620

DRILL STEM TEST REPORT

TRILOBITE TESTING, INC

O'Brien Energy

18 Congress St STE 207
Portsmouth, NH 03601

ATTN: Roger Pearson

Larrabee Ext 3-4

4-34s-29w Meade,KS

Job Ticket: 042433 **DST#: 1**

Test Start: 2011.04.23 @ 03:40:00

GENERAL INFORMATION:

Formation: **Chester**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 07:57:30
Time Test Ended: 15:28:45

Test Type: Conventional Straddle
Tester: Leal Cason
Unit No: 45

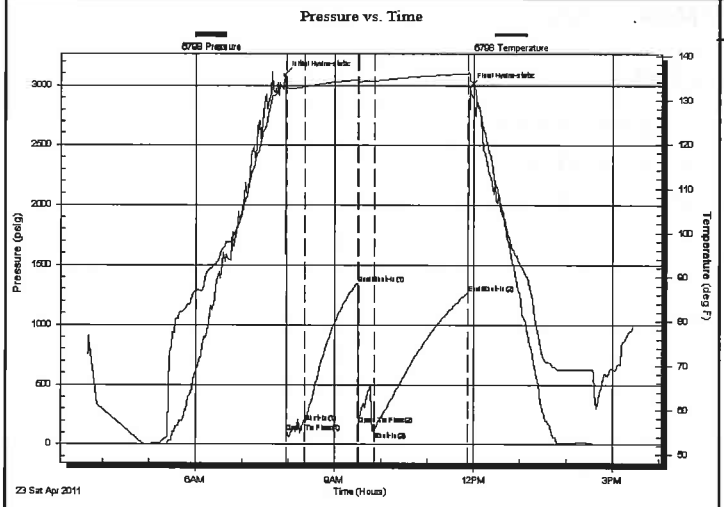
Interval: 6136.00 ft (KB) To 6195.00 ft (KB) (TVD)
Total Depth: 6396.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations: 2576.00 ft (KB)
2564.00 ft (CF)
KB to GR/CF: 12.00 ft

Serial #: 6798 **Outside**
Press@RunDepth: 107.12 psig @ 6137.00 ft (KB)
Start Date: 2011.04.23 End Date: 2011.04.23
Start Time: 03:40:01 End Time: 15:28:45

Capacity: 8000.00 psig
Last Calib.: 2011.04.23
Time On Btm: 2011.04.23 @ 07:55:00
Time Off Btm: 2011.04.23 @ 11:55:30

TEST COMMENT: IF: Fair Blow, BOB in 12 minutes, Died back to 6 inches
ISI: Bled Off, No Blow back
FF: Weak Blow, 3 inches
FSI: Bled Off, No Blow back



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	3085.15	133.07	Initial Hydro-static
3	101.42	132.83	Open To Flow (1)
27	178.35	132.95	Shut-In(1)
95	1347.84	134.54	End Shut-In(1)
96	166.77	134.18	Open To Flow (2)
116	107.12	134.29	Shut-In(2)
238	1265.58	135.92	End Shut-In(2)
241	2988.45	134.66	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
0.00	428 Feet GIP	0.00
130.00	GCM 10%G 90%M	0.64

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)

DRILL STEM TEST REPORT

O'Brien Energy

18 Congress St STE 207
Portsmouth, NH 03601

ATTN: Roger Pearson

Larrabee Ext 3-4

4-34s-29w Meade,KS

Job Ticket: 042433 **DST#: 1**

Test Start: 2011.04.23 @ 03:40:00

GENERAL INFORMATION:

Formation: **Chester**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 07:57:30
Time Test Ended: 15:28:45

Test Type: Conventional Straddle
Tester: Leal Cason
Unit No: 45

Interval: 6136.00 ft (KB) To 6195.00 ft (KB) (TVD)
Total Depth: 6396.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Good

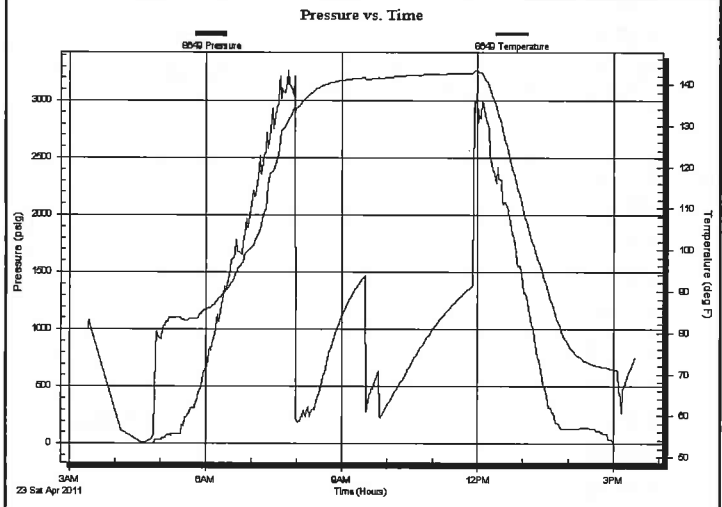
Reference Elevations: 2576.00 ft (KB)
2564.00 ft (CF)
KB to GR/CF: 12.00 ft

Serial #: 8649 **Below (Straddle)**

Press@RunDepth: psig @ 6199.00 ft (KB)
Start Date: 2011.04.23 End Date: 2011.04.23
Start Time: 03:24:33 End Time: 15:28:21

Capacity: 8000.00 psig
Last Calib.: 2011.04.23
Time On Btm:
Time Off Btm:

TEST COMMENT: IF: Fair Blow , BOB in 12 minutes, Died back to 6 inches
ISI: Bled Off, No Blow back
FF: Weak Blow , 3 inches
FSI: Bled Off, No Blow back



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation

Recovery

Length (ft)	Description	Volume (bbl)
0.00	428 Feet GIP	0.00
130.00	GCM 10%G 90%M	0.64

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)

TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

TOOL DIAGRAM

O'Brien Energy

18 Congress St STE 207
Portsmouth, NH 03601

ATTN: Roger Pearson

Larrabee Ext 3-4

4-34s-29w Meade,KS

Job Ticket: 042433 **DST#: 1**

Test Start: 2011.04.23 @ 03:40:00

Tool Information

Drill Pipe:	Length:	5738.00 ft	Diameter:	3.80 inches	Volume:	80.49 bbl	
Heavy Wt. Pipe:	Length:	0.00 ft	Diameter:	0.00 inches	Volume:	0.00 bbl	
Drill Collar:	Length:	372.00 ft	Diameter:	2.25 inches	Volume:	1.83 bbl	
					Total Volume:	82.32 bbl	

Drill Pipe Above KB:	4.00 ft
Depth to Top Packer:	6136.00 ft
Depth to Bottom Packer:	6195.00 ft
Interval between Packers:	59.00 ft
Tool Length:	293.00 ft
Number of Packers:	3 Diameter: 6.75 inches

Tool Weight:	2100.00 lb
Weight set on Packer:	25000.00 lb
Weight to Pull Loose:	110000.0 lb
Tool Chased	0.00 ft
String Weight: Initial	98000.00 lb
Final	99000.00 lb

Tool Comments:
Top Packer Is A Shale Packer Straddle packer failed

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths	
Shut In Tool	5.00			6111.00		
Sampler	3.00			6114.00		
Hydraulic tool	5.00			6119.00		
Jars	5.00			6124.00		
Safety Joint	2.00			6126.00		
Packer	5.00			6131.00	30.00	Bottom Of Top Packer
Packer	5.00			6136.00		
Stubb	1.00			6137.00		
Recorder	0.00	8367	Inside	6137.00		
Recorder	0.00	6798	Outside	6137.00		
Perforations	7.00			6144.00		
Change Over Sub	1.00			6145.00		
Drill Pipe	31.00			6176.00		
Change Over Sub	1.00			6177.00		
Perforations	17.00			6194.00		
Blank Off Sub	1.00			6195.00	59.00	Tool Interval
Packer	3.00			6198.00		
Change Over Sub	1.00			6199.00		
Recorder	0.00	8649	Below	6199.00		
Drill Pipe	187.00			6386.00		
Change Over Sub	1.00			6387.00		
Perforations	9.00			6396.00		
Bullnose	3.00			6399.00	204.00	Bottom Packers & Anchor
Total Tool Length:	**293.00**					

DRILL STEM TEST REPORT

FLUID SUMMARY

O'Brien Energy

18 Congress St STE 207
Portsmouth, NH 03601

ATTN: Roger Pearson

Larrabee Ext 3-4

4-34s-29w Meade,KS

Job Ticket: 042433 **DST#: 1**

Test Start: 2011.04.23 @ 03:40:00

Mud and Cushion Information

Mud Type:	Gel Chem	Cushion Type:		Oil API:	deg API
Mud Weight:	9.00 lb/gal	Cushion Length:	ft	Water Salinity:	ppm
Viscosity:	53.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	7.98 in³	Gas Cushion Type:			
Resistivity:	ohm.m	Gas Cushion Pressure:	psig		
Salinity:	8000.00 ppm				
Filter Cake:	0.20 inches				

Recovery Information

Recovery Table

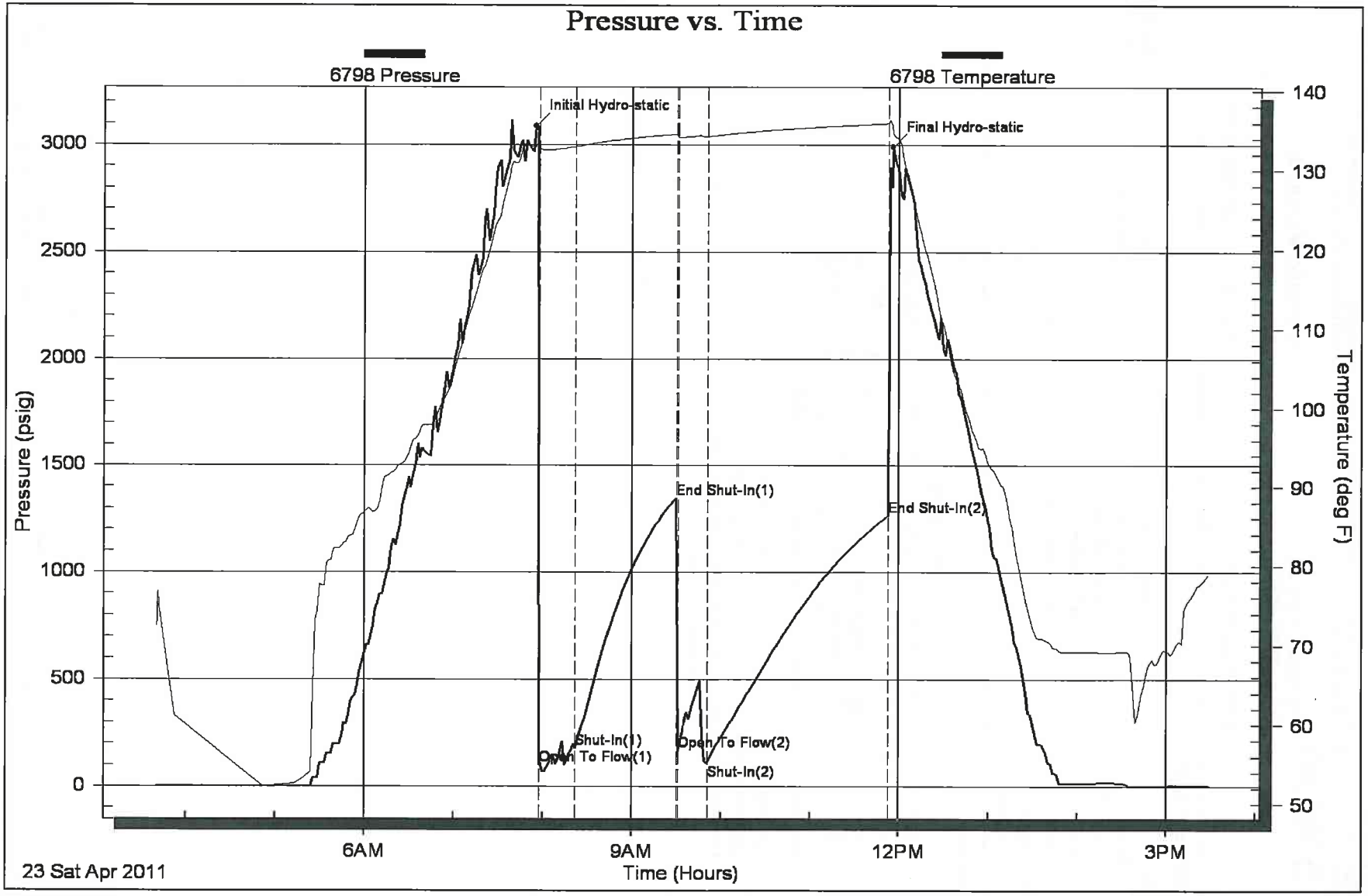
Length ft	Description	Volume bbl
0.00	428 Feet GIP	0.000
130.00	GCM 10%G 90%M	0.639

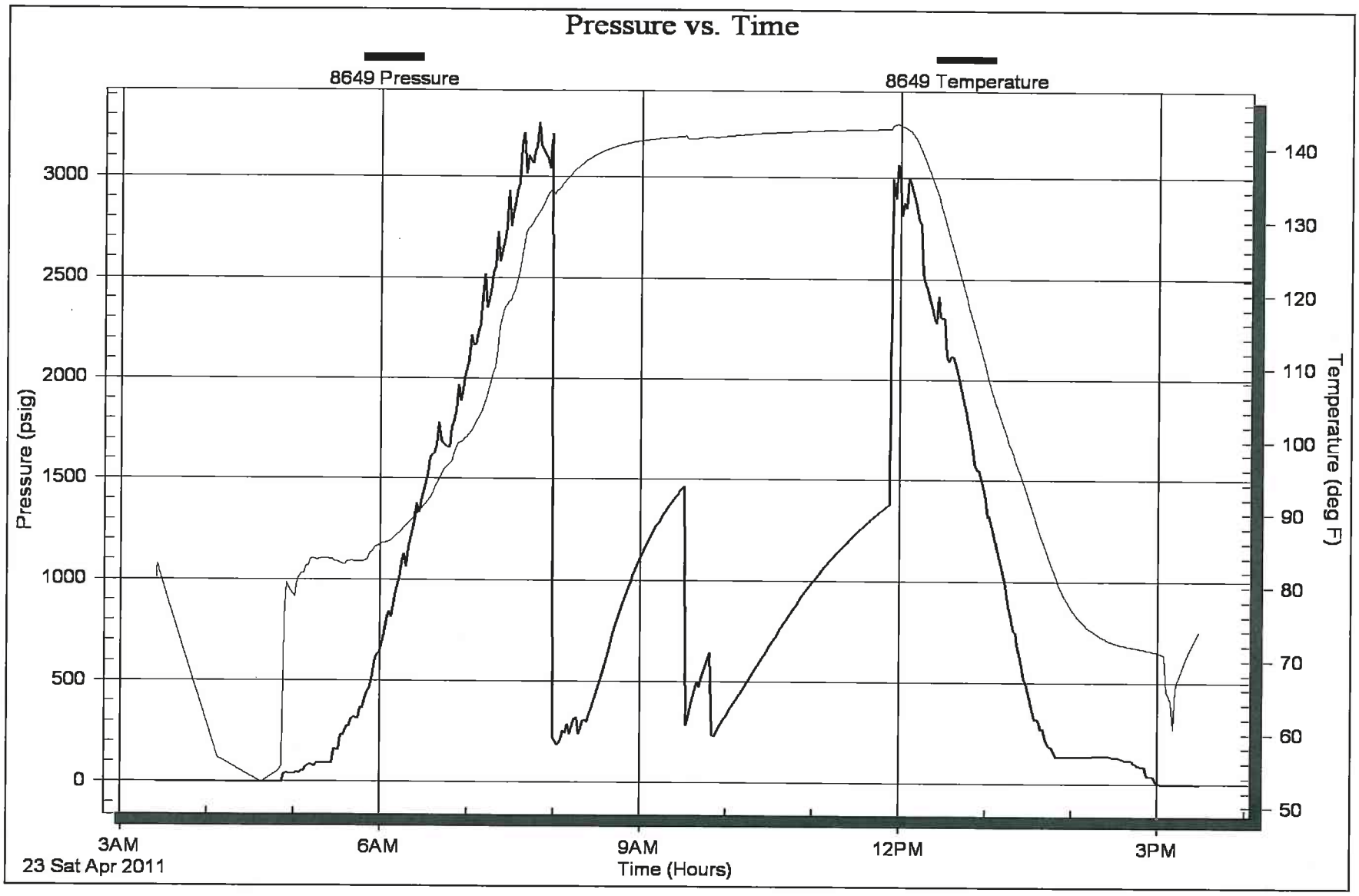
Total Length: 130.00 ft Total Volume: 0.639 bbl

Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:

Laboratory Name: Laboratory Location:

Recovery Comments: Sampler Data: 2000mL GCM @ 500 PSI
Mud Was 20%G 80%M


Pressure vs. Time
6798 Pressure
6798 Temperature
Initial Hydro-static
Final Hydro-static
End Shut-In(1)
End Shut-In(2)
Shut-In(1)
Open To Flow(1)
Open To Flow(2)
Shut-In(2)
Pressure (psig)
Temperature (deg F)
3000
2500
2000
1500
1000
500
0
140
130
120
110
100
90
80
70
60
50
6AM
9AM
12PM
3PM
23 Sat Apr 2011
Time (Hours)


Pressure vs. Time
8649 Pressure
8649 Temperature
Pressure (psig)
Temperature (deg F)
3000
2500
2000
1500
1000
500
0
140
130
120
110
100
90
80
70
60
50
3AM
23 Sat Apr 2011
6AM
9AM
Time (Hours)
12PM
3PM