



Weatherford®

Tooke Rockies, Inc.
(A Weatherford Company)

884 Implement Dr.
Dickinson, ND 58601
701-227-4408

717 West Platte
PO BOX 435
Casper, WY 82601
307-265-2124

Surface Logging Systems

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

Well Name: Zukowski 17-1 (Pilot Hole)
Location: NE/NE Sec. 17, T4S, R64W, Arapahoe County, CO.
License Number: API- 05-005-07208-01 (Pilot) Region: DJ Basin
Spud Date: 7/6/2013 Drilling Completed: 7/10/2013
Surface Coordinates: 660' FNL & 250' FEL of NE/NE Sec. 17, T4S. R64W, Arapahoe County, Colorado.

Bottom Hole 461' FNL & 256' FEL
Coordinates:
Ground Elevation (ft): 5648' K.B. Elevation (ft): 5672'
Logged Interval (ft): 6000' To: 7995 Total Depth (ft): 7995'
Formation: Niobrara/Dakota
Type of Drilling Fluid: INVERT/WATER BASE

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

OPERATOR

Company: Conoco/Phillips
Address: 600 N. Dairy Ashford
WL 3 3056
Houston, TX 77079

GEOLOGIST

Name: Todd Thiesse, Gabe Genitempo
Company: Tooke Rockies/ Weatherford SLS
Address: PO Box 435
Casper, WY. 82602
307.265.2124

Supervision

Project Geologist: John Ostergren- Conoco/Phillips
Drilling Engineer: Gary Hamilton, Ben Tolman- Conoco/Phillips
Drilling Sup: Bob Strickler- Conoco/Phillips
Company Rep: Richard Perez, Wes Evans(Day Leads)
Company Rep: Frank Holubec, Clint Goins, Wayne Morgan(Night Leads)
Well Site Safety: Rainey Schexnider, James Orr
Contact Geologist: Abby Tomkiewicz- Conoco/Phillips
Drilling & Comp. Mgr: Derly Gonzalez-Conoco/Phillips

CORE

Contractor:
Core #:
Formation:
Core Interval: From: Cut:
 To: Recovered:

Bit type:
Size:
Coring Time:

Comments

Drilling Co.--H & P, Rig #280
Toolpusher- Mike Stevens, Josh Coleman
Dir./MWD Co.- Sperry
Mud Co.- Baroid/Haliburton, Dave Howell, Chase Putnam

ROCK TYPES

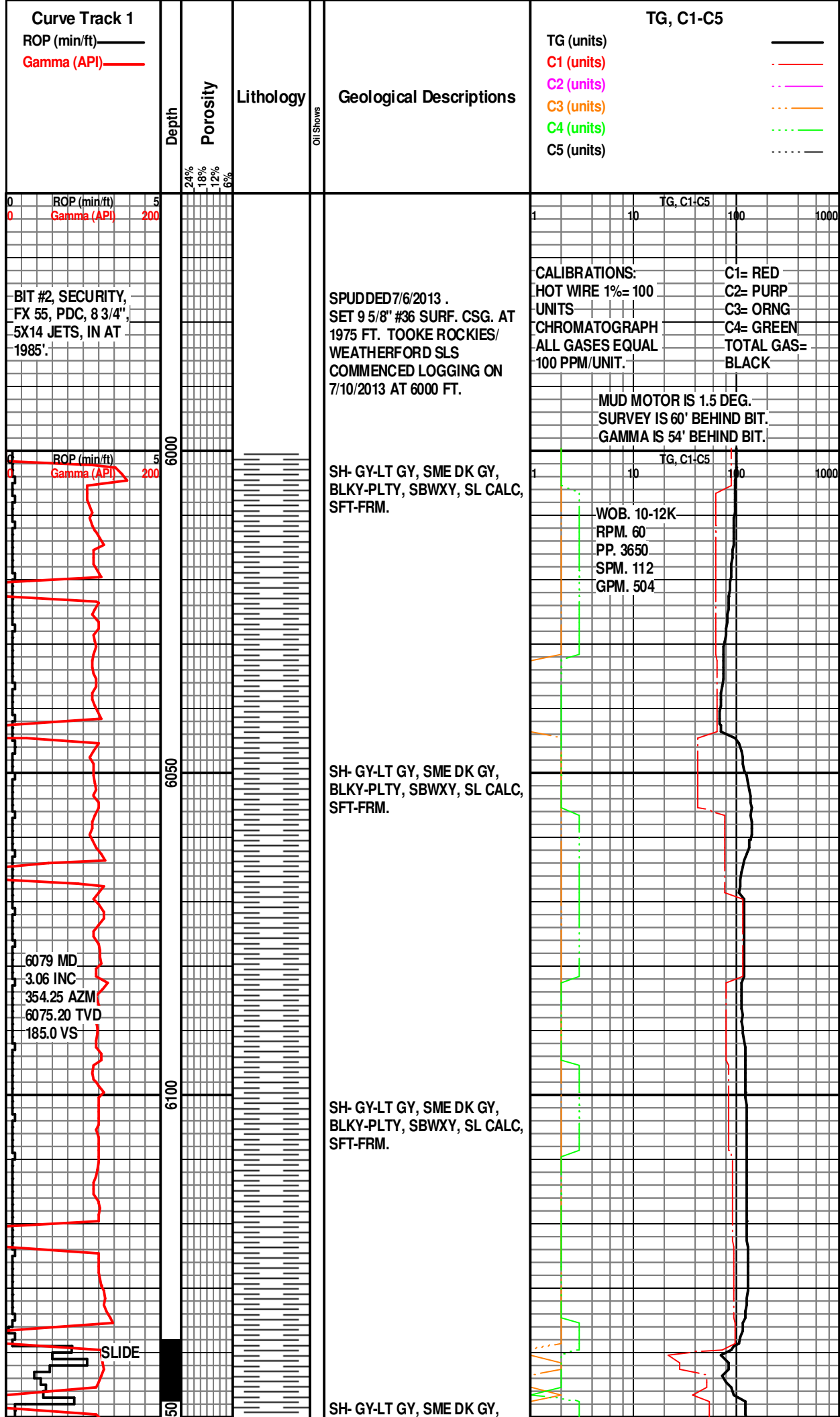
	Anhy		Clyst		Gyp		Mrlst		Shgy
	Bent		Coal		Igne		Salt		Sltst
	Brec		Congl		Lmst		Shale		Ss
	Cht		Dol		Meta		Shcol		Till

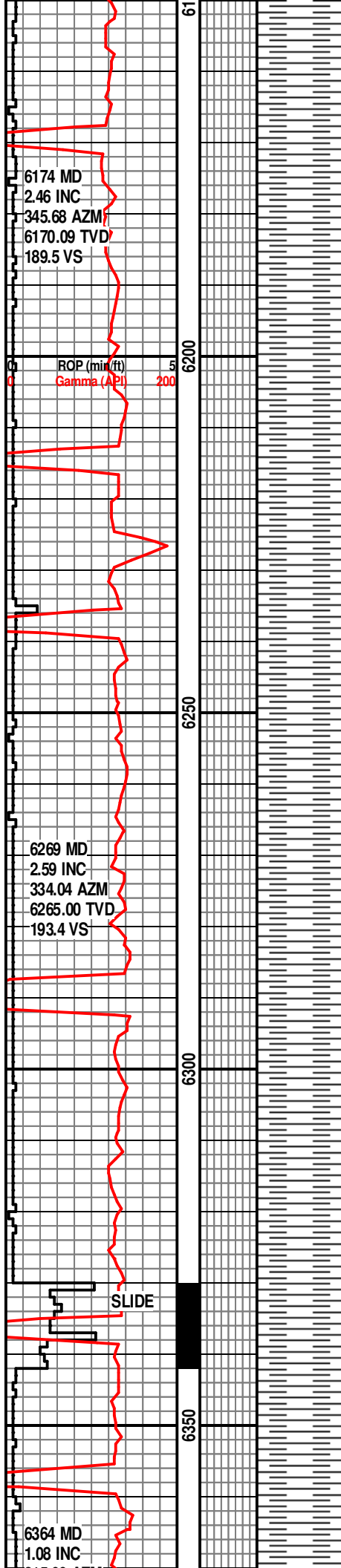
ACCESSORIES

MINERAL		FOSSIL		Ostra		TEXTURE	
	Anhy		Algae		Pelec		Sltstrg
	Arggrn		Amph		Pellet		Ssstrg
	Arg		Belm		Pisolite		Boundst
	Bent		Bioclst		Plant		Chalky
	Bit		Brach		Strom		Cryxln
	Brecfrag		Bryozoa				Earthy
	Calc		Cephal				Finexln
	Carb		Coral				Grainst
	Chtdk		Crin				Lithogr
	Chtlt		Echin				Microxln
	Dol		Fish				Mudst
	Feldspar		Foram				Packst
	Ferrpel		Fossil				Wackest
	Ferr		Gastro				
	Glau		Oolite				

OTHER SYMBOLS

POROSITY TYPE		ROUNDING		EVENTS	
	Earthy		Rounded		Rft
	Fenest		Subrnd		Sidewall
	Fracture		Subang		
	Inter		Angular		
	Moldic				
	Organic				
	Pinpoint				





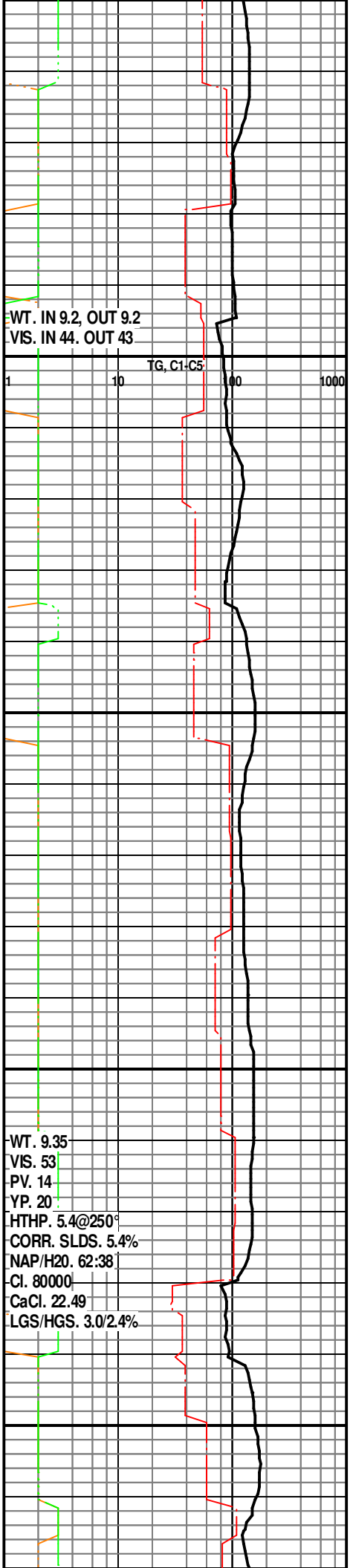
BLKY-PLTY, SBWXY, SL CALC,
SFT-FRM.

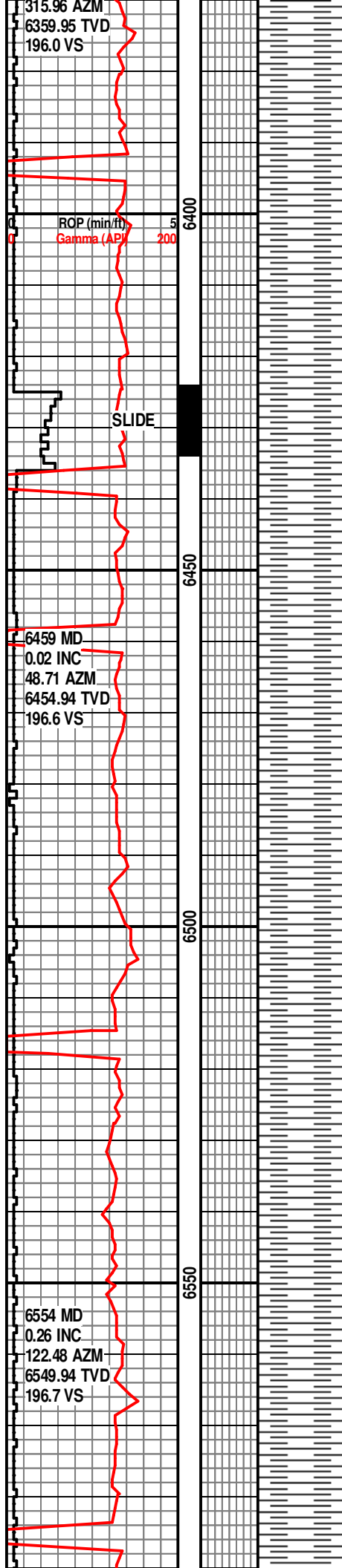
SH- GY-LT GY, SME DK GY,
BLKY-PLTY, SBWXY, SL CALC,
SFT-FRM, TR BRN CLYSTN.

SH- GY-LT GY, SME DK GY,
BLKY-PLTY, SBWXY, SL CALC,
SFT-FRM, TR BRN & GY GN
CLYSTN.

SH- GY-LT GY, SME DK GY,
BLKY-PLTY, SBWXY, SL CALC,
SFT-FRM, TR BRN & GY GN
CLYSTN.

SH- GY-LT GY, SME DK GY,
BLKY-PLTY, SBWXY, SL CALC,
SFT-FRM, TR LT GY CLYSTN.





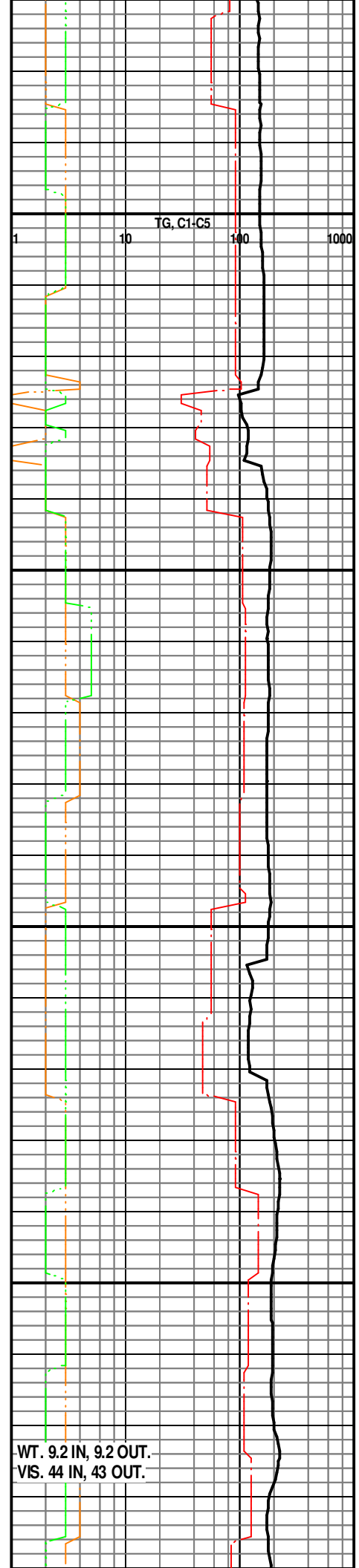
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SBWXY, SL CALC, SFT-FRM.

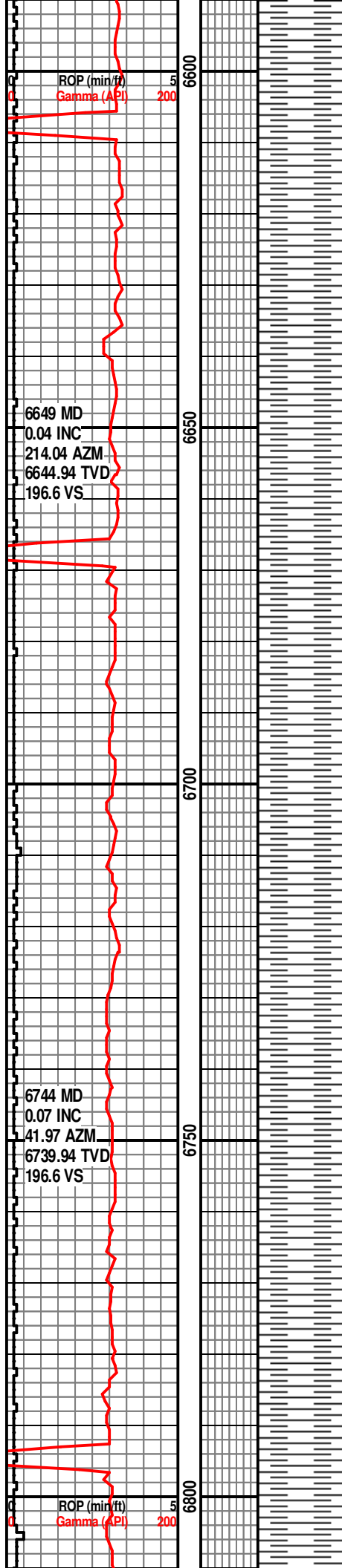
SH- LT GY-GY, BLKY-PLTY,
SBWXY, SL CALC, SFT-FRM

SH- LT GY-GY, BLKY-PLTY,
SBWXY, SL CALC, SFT-FRM

SH- GY-LT GY, BLKY-PLTY,
SBWXY, SL-NON CALC, V
SFT-FRM.

SH- GY-LT GY, BLKY-PLTY,
SBWXY, SL-NON CALC, V
SFT-FRM.





SH- GY-LT GY, BLKY-PLTY,
SBWXY, SL-NON CALC, V
SFT-FRM.

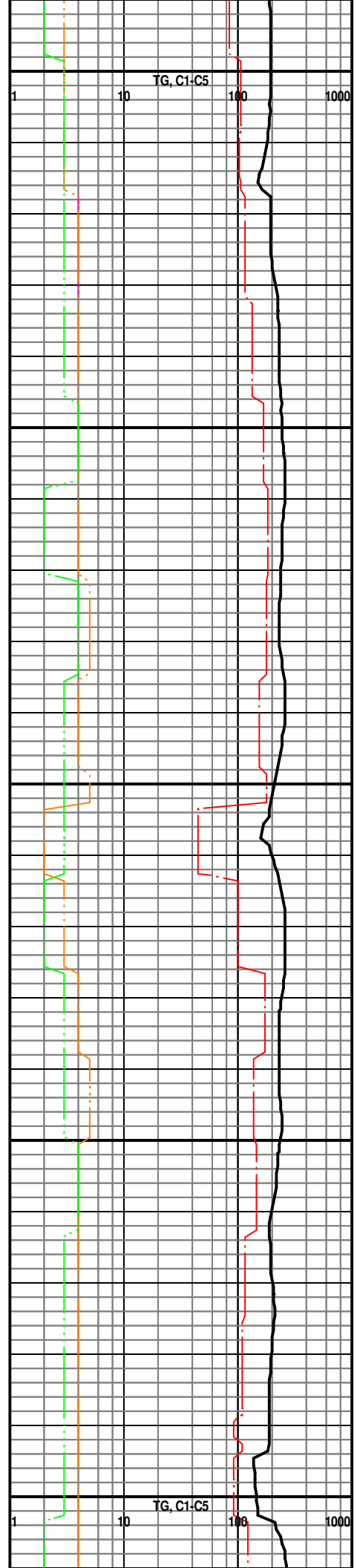
SH- LT GY-GY, BLKY-PLTY,
SBWXY, SL-NON CALC, V
SFT-FRM.

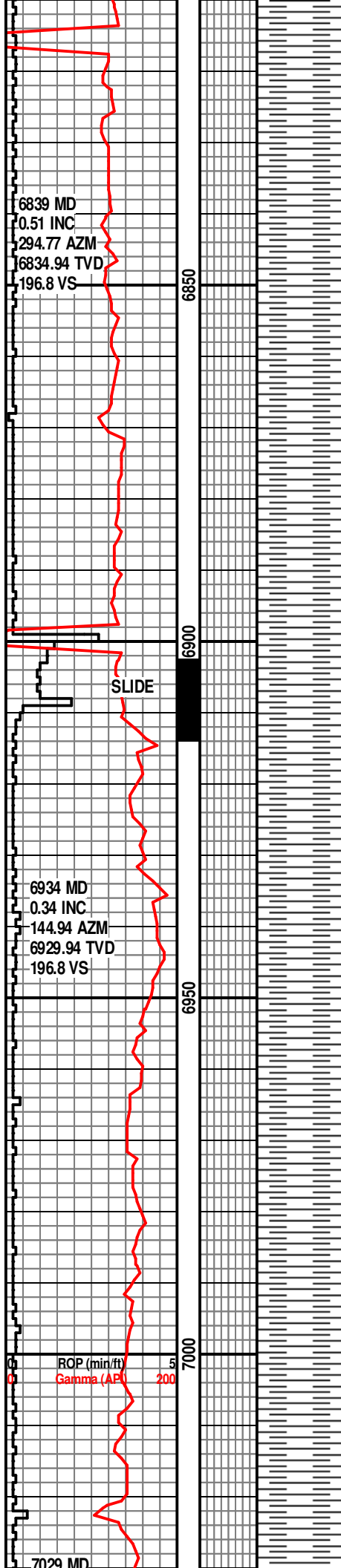
SH- LT GY-GY, BLKY-PLTY,
SBWXY, SL-NON CALC, V
SFT-FRM.

SH- LT GY-GY, BLKY-PLTY,
SBWXY, SL-NON CALC, V
SFT-FRM.

SH- GY-M GY, LT GY, OCC DK
BRN, BLKY-PLTY, SBWXY, SL
CALC, SFT-FRM

SH- GY-M GY, LT GY, OCC DK
BRN, BLKY-PLTY, SBWXY, SL
CALC, SFT-FRM.





SH- GY-M GY, LT GY, OCC DK
BRN, BLKY-PLTY, SBWXY, SL
CALC, SFT-FRM.

SH- GY-M GY, LT GY,
BLKY-PLTY, SBWXY, SL-NON
CALC, V SFT-FRM.

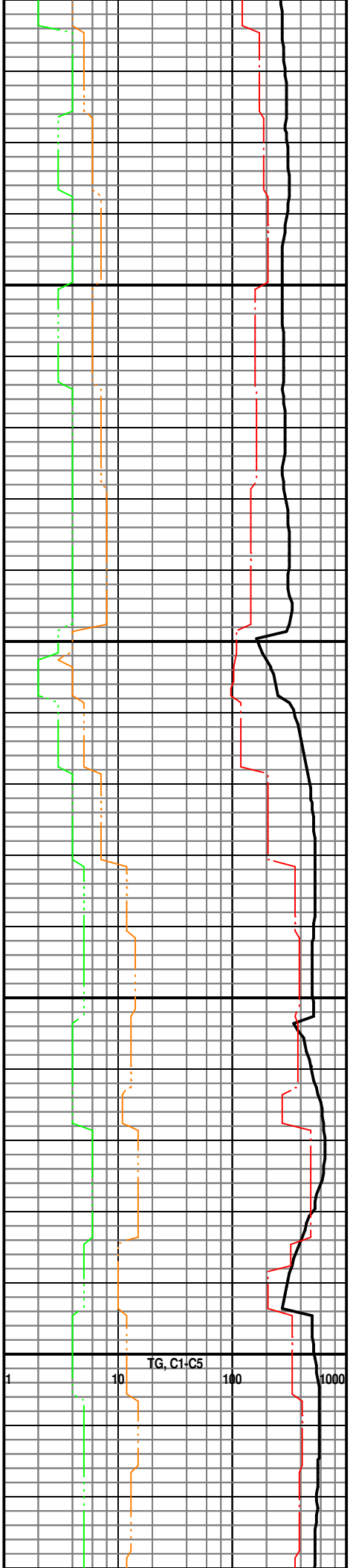
SH- GY-M GY, LT GY,
BLKY-PLTY, SBWXY, SL-NON
CALC, V SFT-FRM.

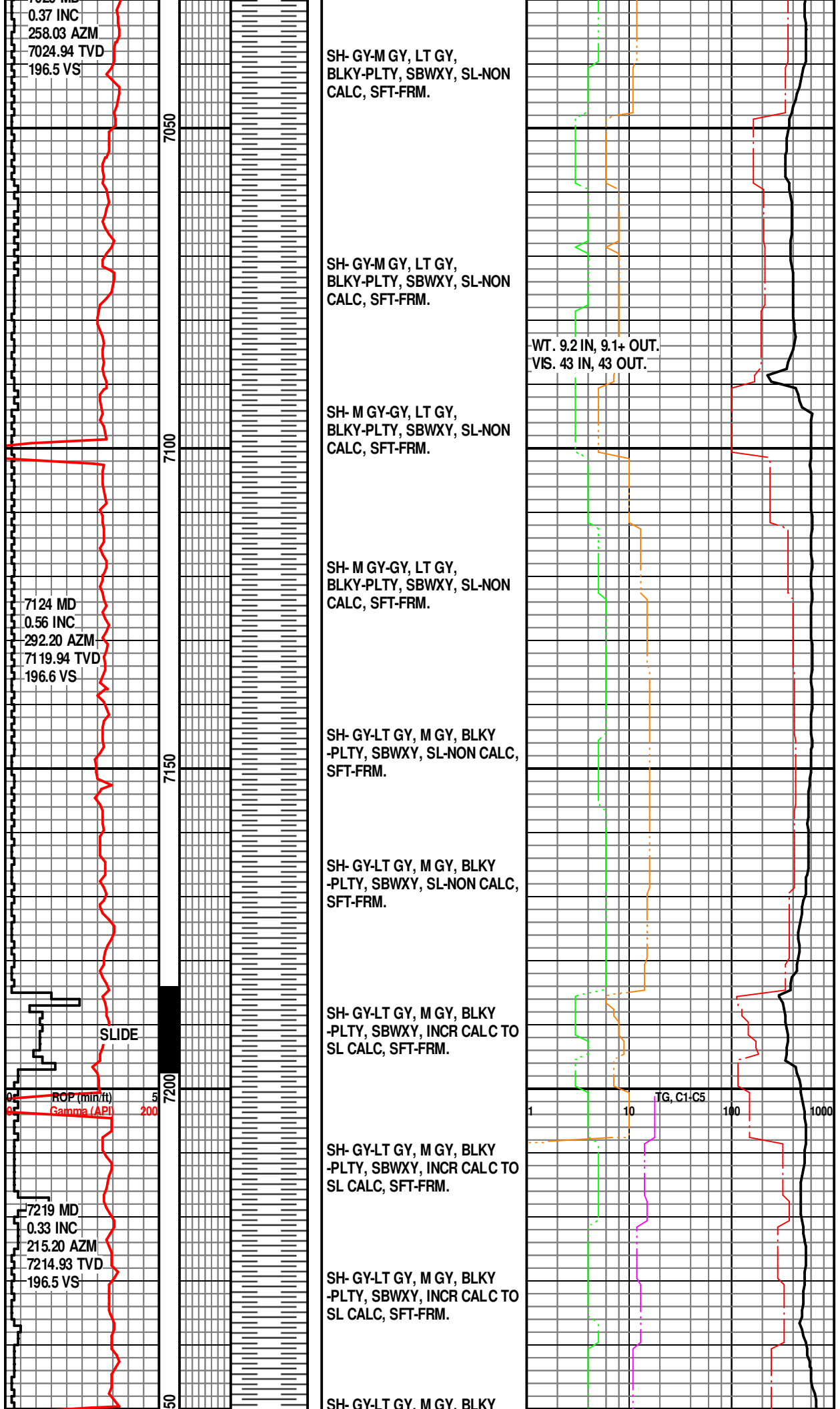
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BLKY-PLTY, SBWXY, SL-NON
CALC, V SFT-FRM.

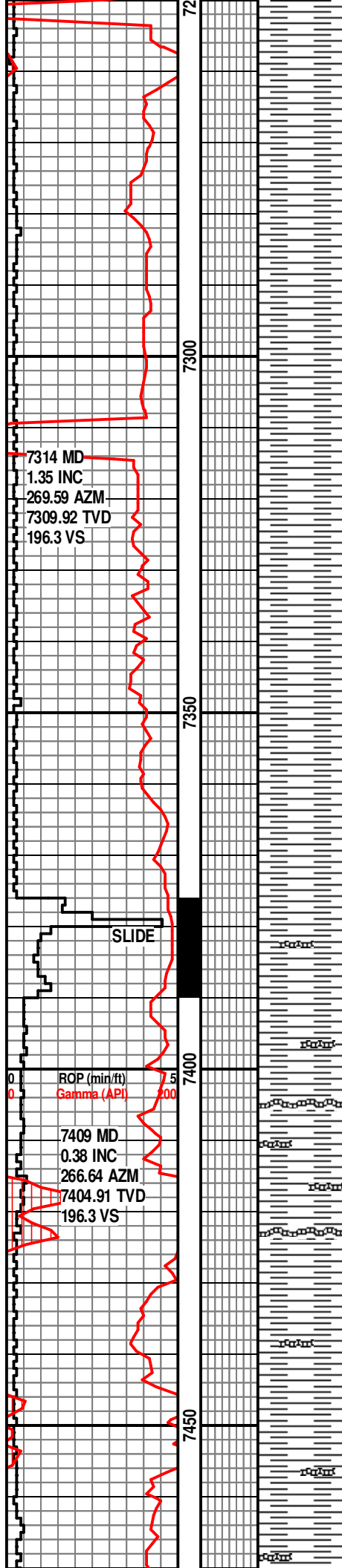
SH- M GY-GY, LT GY,
BLKY-PLTY, SBWXY, SL-NON
CALC, SFT-FRM.

SH- M GY-GY, LT GY,
BLKY-PLTY, SBWXY, SL-NON
CALC, SFT-FRM.

SH- GY-M GY, LT GY,
BLKY-PLTY, SBWXY, SL-NON
CALC, SFT-FRM.







-PLTY, SBWXY, SL CALC,
SFT-FRM.

SH- GY-LT GY, M GY, BLKY
-PLTY, SBWXY, CALC,
SFT-FRM.

SH- GY-LT GY, M GY,
BLKY-PLTY, SBWXY, CALC,
SFT-FRM.

SH- GY-LT GY, M GY,
BLKY-PLTY, SBWXY, CALC,
SFT-FRM.

SH- GY-LT GY, M GY, SME DK
GY, BLKY-PLTY, SBWXY,
CALC, SFT-FRM.

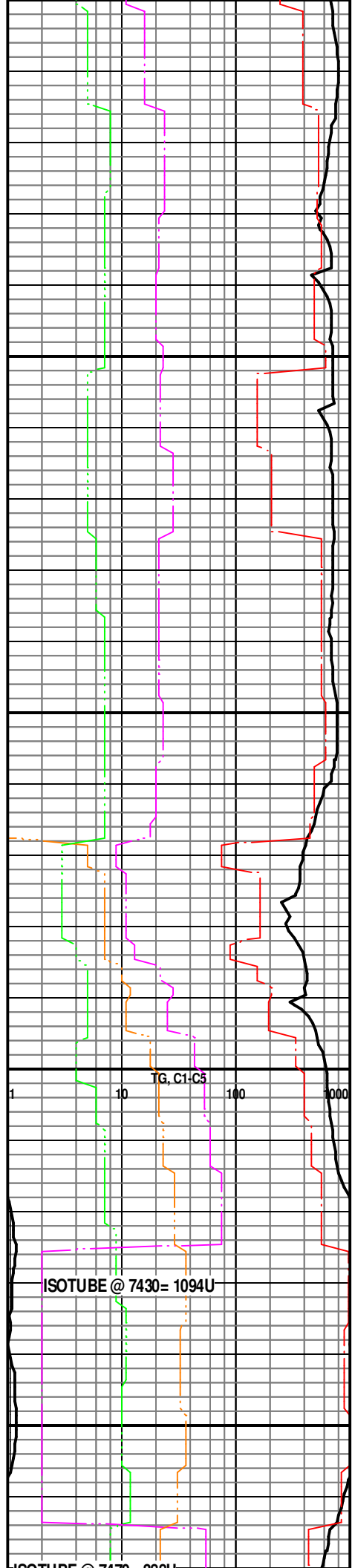
SH- GY-LT GY, SME DK GY,
BLKY-PLTY, SBWXY, CALC,
SFT-FRM. W/ TR BENT- GY-GN.

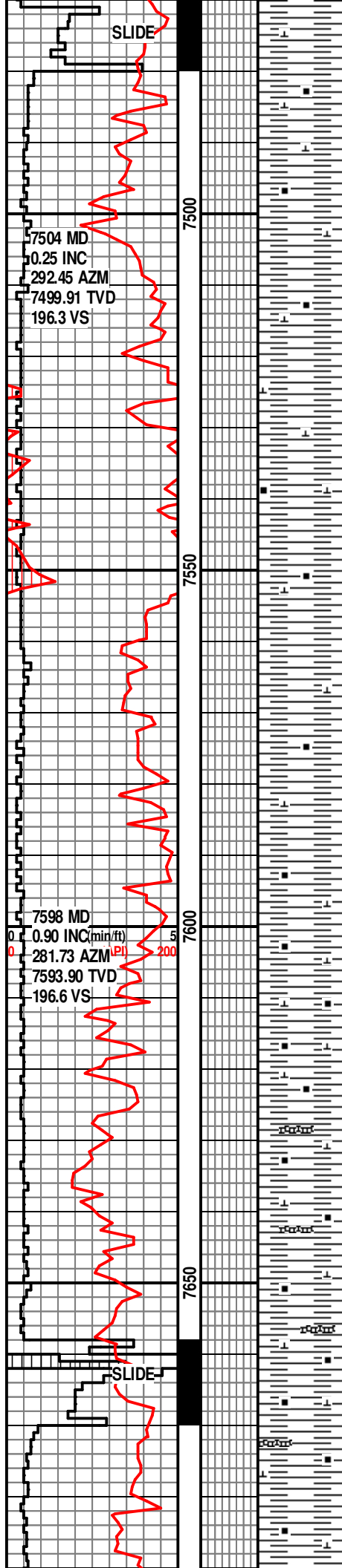
SH- GY-LT GY, SME DK GY,
BLKY-PLTY, SBWXY, CALC,
SFT-FRM. W/ BENT- GY-GN,
CRM-WH.

SH- DK GY- GY- LT GY, BLKY-
PLTY, SBWXY, V CALC-LMY,
CARB, SFT-FRM. W/ TR BENT.

SH- DK GY- GY- LT GY, BLKY-
PLTY, SBWXY, V CALC-LMY,
CARB, SFT-FRM,

SH- DK GY-M GY, OCC LT GY,
BLKY-PLTY, SBWXY, V
CALC-LMY, CARB IN PT,





SFT-FRM. W/ TR BENT.

SMPL TOP NIOBRARA AT 7475'.

SH- DK GY-M GY, OCC LT GY,
BLKY-PLTY, SBWXY, V
CALC-LMY, CARB IN PT,
SFT-FRM.

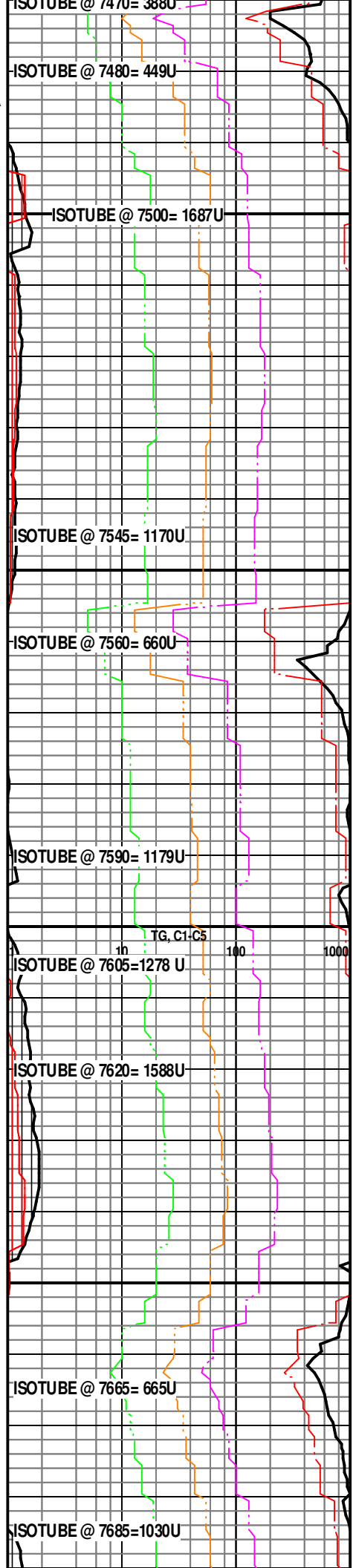
SH- DK GY-M GY, OCC LT GY,
BLKY-PLTY, SBWXY, V
CALC-LMY, CARB IN PT,
SFT-FRM.

SH- DK GY-M GY, BLKY-PLTY,
SBWXY, V CALC-LMY, CARB,
TR CALC FL FRAC & CALCITE,
SFT-FRM.

SH- DK GY-M GY, BLKY-PLTY,
SBWXY, V CALC-LMY, CARB,
TR CALC FL FRAC & CALCITE,
SFT-FRM.

SH- DK GY-GY, BLKY-PLTY,
SBWXY, V CALC-LMY, CARB,
SFT-FRM. W/ TR BENT-
TAN-WH, LT GY-GN.

SH- DK GY-GY, BLKY-PLTY,
SBWXY, V CALC-LMY, CARB,
SFT-FRM. W/ TR BENT.



ISOTUBE @ 7470= 388U

ISOTUBE @ 7500= 1687U

ISOTUBE @ 7545= 1170U

ISOTUBE @ 7560= 660U

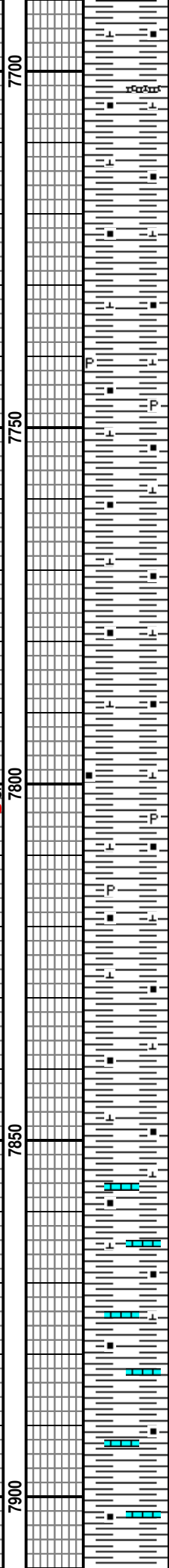
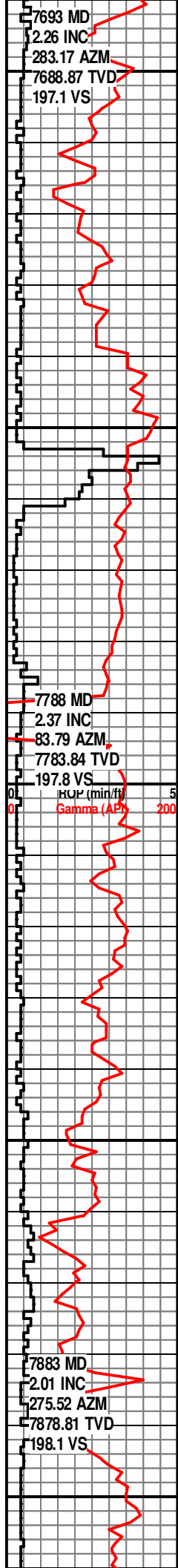
ISOTUBE @ 7590= 1179U

ISOTUBE @ 7605=1278 U

ISOTUBE @ 7620= 1588U

ISOTUBE @ 7665= 665U

ISOTUBE @ 7685=1030U



SH- DK GY-GY, BLKY-PLTY,
SBWXY, V CALC-LMY, CARB,
SFT-FRM. W/ TR BENT.

SH- DK GY-GY, BLKY-PLTY,
SBWXY, V CALC-LMY, CARB,
SFT-FRM. W/ TR BENT & PYR.

SH- DK GY-GY, BLKY-PLTY,
SBWXY, V CALC-LMY, CARB,
SFT-FRM.

SH- DK GY-GY, BLKY-PLTY,
SBWXY, V CALC-LMY, CARB,
SFT-FRM. W/ TR BENT & PYR.

SH- DK GY-GY, BLKY-PLTY,
SBWXY, V CALC-LMY, CARB,
SFT-FRM.

SH- DK GY-GY, BLKY-PLTY,
SBWXY, CALC-LMY, CARB,
SFT-FRM, TR LS- BRN, HD,
MICXLN, DNS.

SH- DK GY-GY, BLKY-PLTY,
SBWXY, CALC-LMY, CARB,
SFT-FRM, TR LS, CALC, BENT.

SH- DK GY-GY, BLKY-PLTY

WT. 9.2 IN, 9.2 OUT.
VIS. 44 IN, 44 OUT.

ISOTUBE @ 7725=596U

ISOTUBE @ 7795= 907U

ISOTUBE @ 7830= U

1 10 100 1000
TG, C1-C5

