EMPIRICA

The Surface Logging Company

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

Well Name:	15077219540100_Patricia_3507_2-7H_Sidetrack_SandRidge Energy, Inc.
Location:	SEC: # 7, T-35S / R-7W----------HARPER CO., KANSAS
License Number:	AFE # DC 13146 Region: OKAN FIELD
Spud Date:	08/13/2013 Drilling Completed: 08//2013
Surface Coordinates:	SURFACE: 2,440' FSL & 1,730' FWL of SEC: 13, T35S-R-26W, SPOT LOCATION: SE SE SW SE, HARPER COUNTY KANSAS
Bottom Hole Coordinates:	PBHL: 2,310' FEL & 1,980' FSL of SEC: 6, T35S-R-7W
Ground Elevation (ft):	1,332' M.D. K.B. Elevation (ft): 1,350' M.D. (+18' Est)
Logged Interval (ft):	800' M.D. To: 9,420' M.D. Total Depth (ft): 9,420' T.D. M.D.
Formation:	MISSISSIPPIAN (HORIZONTAL WELL)
Type of Drilling Fluid:	DRILLING ON WATER-BASE MUD FROM 800 ft.

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

OPERATOR

Company: SANDRIDGE ENERGY, INC.
Address: 123 ROBERT S KERR AVE
OKLAHOMA CITY, OK 73102-6406

GEOLOGIST

Name: Tammy Alcorn, Geologist
Company: SandRidge Energy, Inc. Oklahoma City, OK 73102
Address: 123 Robert S. Kerr Ave. Oklahoma City, OK 73102
Tammy Alcorn, Office Phone: (405) 429-5723
Cell Phone:(405)651-2825 talcorn@sandridgeenergy.com;

WELL SITE GEOLOGIST

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Empirica Logging, Inc.
P.O. Box 6005
Edmond, OK 73083-6005
PHONE: (405) 340-5545
FAX: (405) 348-8303

COMPANY MAN

COMPANY MEN: Tony Leija & Michael Kulchisky

DRILLING CONTRACTOR

Unit Drilling
Operator License # 34192
Texas Rig # 310
API: # 15-077-21954-01-00
AFE: # DC 13146
Drilled on Water Base Mud,
HORIZONTAL WELL

Comments

2 Manned Logging Services,
(Called in per CoMan on the 08/13/2013)
Start Logging Date: 08/14/2013 @ 695' M.D.
SET 9.625 SURFACE CASING TO 783' M.D.
ON THE 08/14/2013. K.O.P. = ft. M.D.
SET 0 JOINTS of 7" INTERMEDIATE CASING
@ 5,593' M.D.
T.D. Depth @ 9,420 ft. M.D. --- T.D. on the 09/07/2013
RAN (E-Logs) on the 09/0/2013
(FINAL LOG PDF) sent out on the: 09//2013
Released on the 09/0/2013
Thank You!

ROCK TYPES

Anhy
Bent
Brec
Cht
Clyst
Coal
Congl
Dol
Gyp
Igne
Lmst
Meta
Mrlst
Salt
Shale
Shcol
Shgy
Sltst
Ss
Till
Sandstn
Siltstn
Granwash
Dolowash
Cement
Granite
Hotshale

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

BS Boundst
C Chalky
CX Cryxln
E Earthy
FX Finexln
GS Grainst
L Lithogr
MX Microxln
MS Mudst
PS Packst
WS Wackest

OTHER SYMBOLS

IMAGES 2
- Core
- Dst
- 3400
- 4200
- 4300
- 3300
- 3360
- 3500
- 3600
- 3700
- 3800
- 4000
- 3900
- 4100
- 4300
- 4200
- 4400
- 4500
- 4600
- 4700
- 4800
- 4900
- 5000
- 5100
- 5500
- 5400
- 5300
- 5200
- 5600
- 5700
- 5800
- 5900
- 6000
- 6100
- 6200
- 6300
- 6400
- 6600
- 6500
- 6900
- 6800
- 6700
- 7000
- 7100
- 7300
- 7200
- 7700
- 7600
- 7500
- 7400
- 7800
- 7900
- 8100
- 8000
- 8200
- 8300
- 8400
- 8600
- 8500
- 8700
- 8800
- 8900
- 9000
- 9100
- 9200
- 9300
- 9400

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
- Poor
- Fair
- Good
- Excelent
- Csgshoe

Curve Track 1	Depth	% Lithology	Porosity (24% 18% 12% 6%)	Lithologs	Oil Shows	Geological Descriptions	IMAGES	TG, C1-C5	Sample Cut
PATRICIA 2-7H ROP (min/ft) 0–8; Gamma (API) 0–150								TG (units); C1 (units); C2 (units); C3 (units); C4 (units)	CUT

PATRICIA 2-7H ROP (min/ft) 0–8; Gamma (API) 0–150

API # 15077219540100

TWO-MAN LOGGING COMMENCED 08/14/2013

Called out by CoMan

08/13/2013

RATE OF PENETRATION (ROP)

KD=KELLY DOWN

STARTED DRILLING OUT SURFACE CASING 08/15/2013

TAGGED UP ON CEMENT @ 630 ft.

08/14/2013

SANDRIDGE ENERGY INC.
Patricia 3507 2-7H_Sidetrack
SEC. # 7, T-35 S, R-7 W
HARPER COUNTY, KANSAS.
U.S.A.

FIELD: OKAN

RIG - UNIT 310

SPUD DATE: 08/12/2013

SURFACE CASING SET @ 783'

18 JOINTS OF 9 5/8" J-55 CEMENTED

NO SAMPLES UNTILL 3,300'

SURVEY: 811' MD 810.98'TVD
INC. 0.31 / AZ. 64.64
VERTICAL SECTION / 2.22

TG (units) 0–50; C1 (units) 0–70; C2 (units) 0–5; C3 (units) 0–4; C4 (units) 0–1

AFE # DC 13146

GL: 1,332 ft. KB: 1,350 ft.

SURFACE LOCATION:
2,440' FSL & 1,730' FWL
SE SW SE NW

HOT WIRE GAS READINGS

TOTAL GAS UNITS SCALE 0 to 50 UNITS

GAS UNITS ATTENUATION PERCENT SET @ 60

DRILLING ON WATER BASE MUD

PLEASE SEE PDF HEADER FOR ADDITIONAL INFORMATION

SAMPLE CUT 0–200

PATRICIA 2-7H ROP (min/ft) 0–8; Gamma (API) 0–150

O.B. # 1 ,TYPE - HUGUES - FX-65, PDC, SIZE = 12.25", JETS - 6 X 12's, SS# - 667443 DEPTH IN @ 107' Depth out @ 783' Drilled 676' in 6.00 hrs. AVG. ROP = 112.7 ft/ph. NEW BIT # 2 TYPE - HCC- DPD506X - SIZE = 8.75", JETS - 6 X 18's, SS# - 7145507 DEPTH IN @ 783'

TG (units) 0–50; C1 (units) 0–70; C2 (units) 0–5; C3 (units) 0–4; C4 (units) 0–1

GAS UNITS ATTENUATION PERCENT SET @ 60

SAMPLE CUT 0–200

KD

WOB 3.9
RPM 40
PP 1462
SPM 180

850

08/15/2013

900

KD

WOB 22.6
RPM 40
PP 1553
SPM 176

PUMP
SWEEP @
949'

950

1000

0 PATRICIA 2-7H ROP (min/ft) 8
0 Gamma (API) 150

KD

WOB 6.7
RPM 41
PP 1635
SPM 179

1050

NO SAMPLES UNTILL 3,300'

SURVEY: 903' MD 902.98'TVD
INC. 0.03 / AZ. 143.90
VERTICAL SECTION / 2.32

SURVEY: 994' MD 993.98'TVD
INC. 0.04 / AZ. 210.60
VERTICAL SECTION / 2.28

NO SAMPLES UNTILL 3,300'

CG 3u

MW/VIS 8.8/35

DRILLING ON WATER
BASE MUD

CG 4u

MW/VIS 8.8/35

DRILLING ON WATER
BASE MUD

TG (units)
C1 (units)
C2 (units)
C3 (units)
C4 (units)

GAS UNITS 500 SAMPLE CUT 200
ATTENUATION 70
PERCENT SET 5
@ 60 4
1

CG 3u

MW/VIS 8.8/35

SURVEY: 1087' MD 1086.98'TVD
INC. 0.07 / AZ. 344.26
VERTICAL SECTION / 2.30

NO SAMPLES UNTILL 3,300'

DRILLING ON WATER BASE MUD

1100

WOB 8.4
RPM 44
PP 1748
SPM 178

KD

CG 3u

1150

MW/VIS 8.8/35

SURVEY: 1178' MD 1177.98'TVD
INC. 0.03 / AZ. 291.70
VERTICAL SECTION / 2.36

DRILLING ON WATER BASE MUD

1200

0 PATRICIA 2-7H ROP (min/ft) 8
0 Gamma (API) 150

NO SAMPLES UNTILL 3,300'

0 TG (units)
0 C1 (units)
0 C2 (units)
0 C3 (units)
0 C4 (units)

GAS UNITS 500
ATTENUATION 70
PERCENT SET 5
@ 60 4
1

SAMPLE CUT 200

KD

CG 3u

WOB 1.4
RPM 46
PP 1765
SPM 180

1250

MW/VIS 8.8/35

PUMP SWEEP @ 1,275'

SURVEY: 1270' MD 1269.98'TVD
INC. 0.07 / AZ. 106.38
VERTICAL SECTION / 2.36

WOB 7.6
RPM 44
PP 1952
SPM 179

KD

1300

NO SAMPLES UNTILL 3,300'

DRILLING ON WATER
BASE MUD

CG 3u

PUMP
SWEEP @
1,338'

MW/VIS 8.8/35

1350

SURVEY: 1361' MD 1360.98'TVD
INC. 0.13/ AZ. 215.40
VERTICAL SECTION / 2.26

DEPTH @ 1,380'
MW/VIS 8.55/55
PV/YP 13/14
GELS 9/14/0
FIL/CK 7.2/1/32
PH/SOL 10.5/1.2
H2O/OIl 98.8/0.0
CHL 4300
HD 40

PUMP
SWEEP @
1,370'

WOB 15.0
RPM 45
PP 2041
SPM 182

KD

CG 3u

PUMP
SWEEP @
1,398'

DRILLING ON WATER
BASE MUD

1400

0 PATRICIA 2-7H ROP (min/ft) 8
0 Gamma (API) 150

NO SAMPLES UNTILL 3,300'

TG (units)
C1 (units)
C2 (units)
C3 (units)
C4 (units)

GAS UNITS 500
ATTENUATION 70
PERCENT SET 5
@ 60 4
1

SAMPLE CUT 200

PUMP
SWEEP @
1,403'

MW/VIS 8.8/35

1450

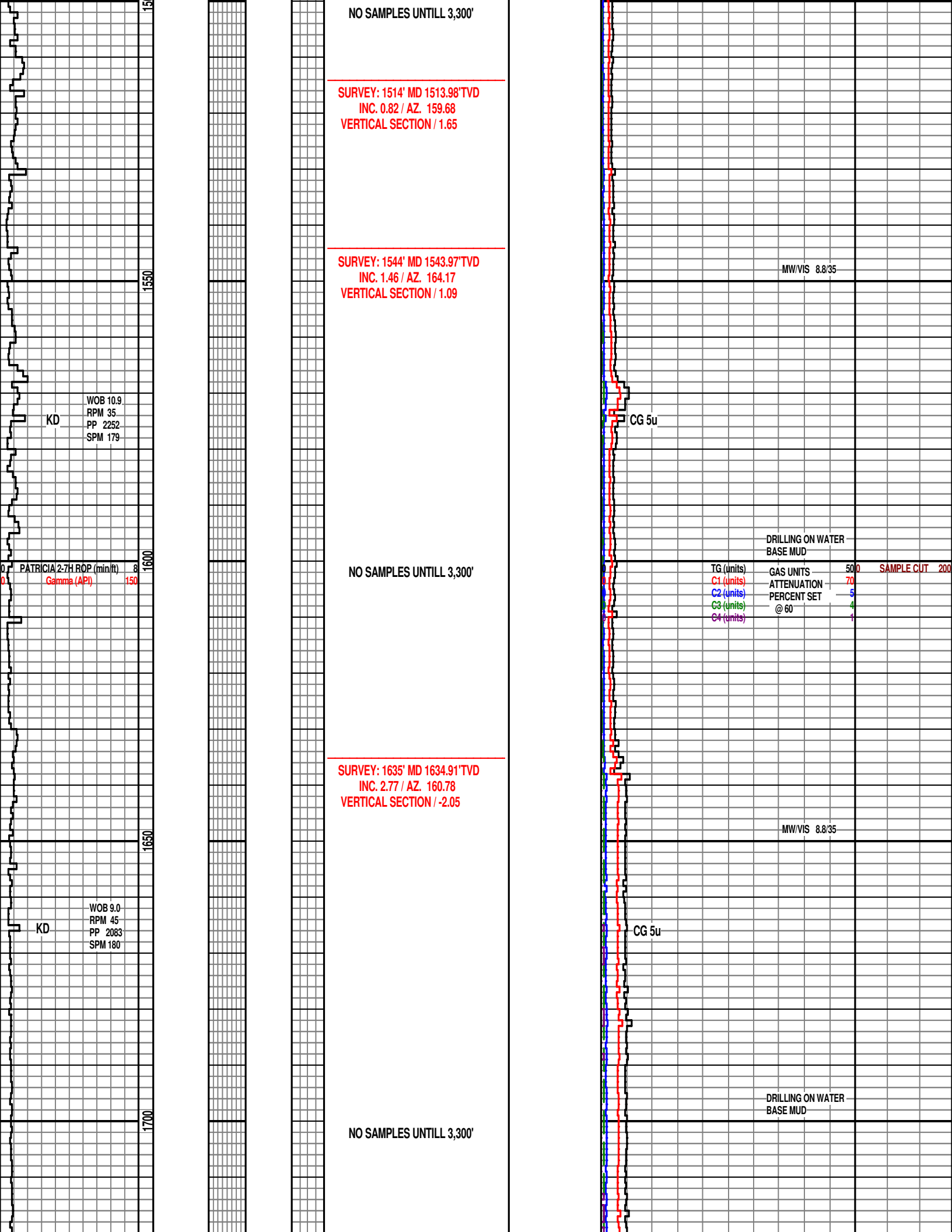
SURVEY: 1452' MD 1451.98'TVD
INC. 0.11 / AZ. 143.22
VERTICAL SECTION / 2.10

WOB 14.7
RPM 44
PP 2079
SPM 183

KD

CG 3u

DRILLING ON WATER
BASE MUD


NO SAMPLES UNTILL 3,300'
SURVEY: 1514' MD 1513.98'TVD
INC. 0.82 / AZ. 159.68
VERTICAL SECTION / 1.65
SURVEY: 1544' MD 1543.97'TVD
INC. 1.46 / AZ. 164.17
VERTICAL SECTION / 1.09
MW/VIS 8.8/35
1550
KD
WOB 10.9
RPM 35
PP 2252
SPM 179
CG 5u
DRILLING ON WATER
BASE MUD
1600
PATRICIA 2-7H ROP (min/ft)
Gamma (API)
150
NO SAMPLES UNTILL 3,300'
TG (units)
C1 (units)
C2 (units)
C3 (units)
C4 (units)
GAS UNITS
ATTENUATION
PERCENT SET
@ 60
500
70
5
4
1
SAMPLE CUT
200
SURVEY: 1635' MD 1634.91'TVD
INC. 2.77 / AZ. 160.78
VERTICAL SECTION / -2.05
MW/VIS 8.8/35
1650
KD
WOB 9.0
RPM 45
PP 2083
SPM 180
CG 5u
DRILLING ON WATER
BASE MUD
1700
NO SAMPLES UNTILL 3,300'

SURVEY: 1727' MD 1726.73'TVD
INC. 4.23 / AZ. 156.49
VERTICAL SECTION / -7.16

1750

KD

WOB 8.9
RPM 35
PP 2252
SPM 180

PUMP
SWEEP @
1,767'

MW/VIS 8.8/35

CG 12u

DRILLING ON WATER
BASE MUD

1800

PATRICIA 2-7H ROP (min/ft) 8
Gamma (API) 150

NO SAMPLES UNTILL 3,300'

TG (units)
C1 (units)
C2 (units)
C3 (units)
C4 (units)

GAS UNITS 500
ATTENUATION 70
PERCENT SET 5
@ 60 4
1

SAMPLE CUT 200

SURVEY: 1822' MD 1821.42'TVD
INC. 5.05 / AZ. 156.36
VERTICAL SECTION / -14.06

1850

KD

WOB 11.7
RPM 43
PP 2366
SPM 170

MW/VIS 8.8/35

CG 28u

DRILLING ON WATER
BASE MUD

1900

NO SAMPLES UNTILL 3,300'

SURVEY: 1917' MD 1916.06'TVD
INC. 4.95 / AZ. 143.68
VERTICAL SECTION / -20.99

08/16/2013

WOB 3.3
RPM 36
KD PP 2405
SPM 174

1950

T.O.O.H. FOR DIR.
TOOL @ 1,947'

CG 18u

MW/VIS 8.8/35

CIRCULATE & CONDITION
MUD TO TRIP OUT @ 1,947'

DRILLING ON WATER
BASE MUD

2000

0 PATRICIA 2-7H ROP (min/ft) 8
0 Gamma (API) 150

NO SAMPLES UNTILL 3,300'

SURVEY: 2012' MD 2010.70'TVD
INC. 5.02 / AZ. 138.06
VERTICAL SECTION / -27.14

TG (units)
C1 (units)
C2 (units)
C3 (units)
C4 (units)

GAS UNITS 500
ATTENUATION 70
PERCENT SET 5
@ 60 4
1

SAMPLE CUT 200

WOB 5.9
RPM 35
PP 2377
SPM 176

KD

CG 14u

MW/VIS 8.8/35

2050

PUMP
SWEEP @
2,069'

DRILLING ON WATER
BASE MUD

2100

NO SAMPLES UNTILL 3,300'

SURVEY: 2106' MD 2101.34'TVD
INC. 5.10 / AZ. 141.11
VERTICAL SECTION / -33.20

WOB 6.4
RPM 36
KD PP 1878
SPM 161

CG 16u

MW/VIS 9.0/32

2150

NO SAMPLES UNTILL 3,300'

DRILLING ON WATER BASE MUD

2200

PATRICIA 2-7H ROP (min/ft) 8
Gamma (API) 150

SURVEY: 2201' MD 2198.97'TVD
INC. 5.04 / AZ. 154.30
VERTICAL SECTION / -40.03

TG (units)
C1 (units)
C2 (units)
C3 (units)
C4 (units)

GAS UNITS 500
ATTENUATION 70
PERCENT SET 5
@ 60 4
1

SAMPLE CUT 200

WOB 12.9
RPM 34
PP 1715
SPM 167

KD

CG 15u

MW/VIS 8.8/35

2250

NO SAMPLES UNTILL 3,300'

DRILLING ON WATER BASE MUD

2300

SURVEY: 2296' MD 2293.60'TVD
INC. 4.99 / AZ. 156.53
VERTICAL SECTION / -47.41

PUMP SWEEP @ 2,338'

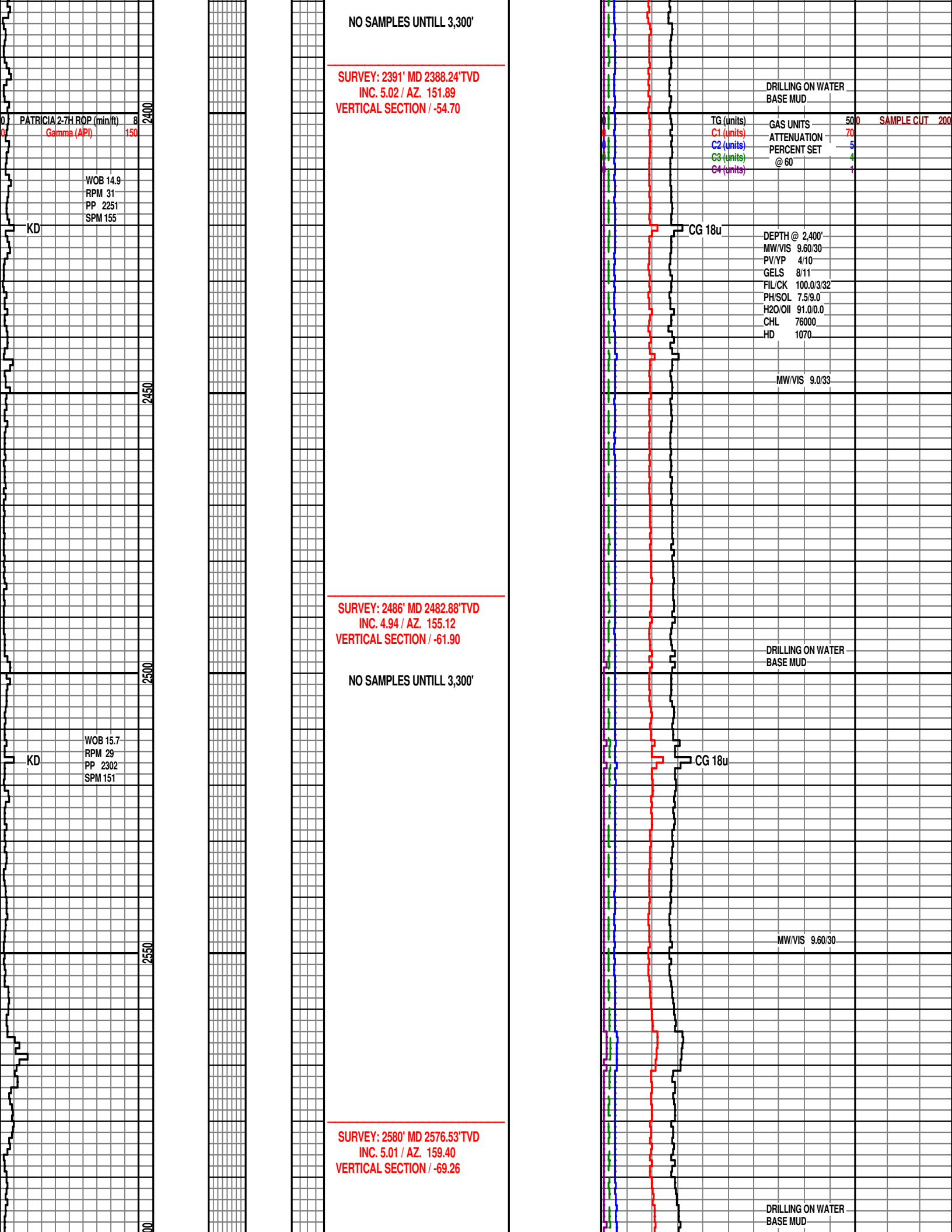
WOB 15.6
RPM 35
PP 2166
SPM 151

KD

CG 16u

MW/VIS 8.8/35

2350


NO SAMPLES UNTILL 3,300'
SURVEY: 2391' MD 2388.24'TVD
INC. 5.02 / AZ. 151.89
VERTICAL SECTION / -54.70
DRILLING ON WATER BASE MUD
PATRICIA 2-7H ROP (min/ft) 8
Gamma (API) 150
2400
TG (units)
C1 (units)
C2 (units)
C3 (units)
C4 (units)
GAS UNITS 500
ATTENUATION 70
PERCENT SET 5
@ 60 4
1
SAMPLE CUT 200
WOB 14.9
RPM 31
PP 2251
SPM 155
KD
CG 18u
DEPTH @ 2,400'
MW/VIS 9.60/30
PV/YP 4/10
GELS 8/11
FIL/CK 100.0/3/32
PH/SOL 7.5/9.0
H2O/Oil 91.0/0.0
CHL 76000
HD 1070
MW/VIS 9.0/33
2450
SURVEY: 2486' MD 2482.88'TVD
INC. 4.94 / AZ. 155.12
VERTICAL SECTION / -61.90
DRILLING ON WATER BASE MUD
NO SAMPLES UNTILL 3,300'
2500
WOB 15.7
RPM 29
PP 2302
SPM 151
KD
CG 18u
MW/VIS 9.60/30
2550
SURVEY: 2580' MD 2576.53'TVD
INC. 5.01 / AZ. 159.40
VERTICAL SECTION / -69.26
DRILLING ON WATER BASE MUD

PATRICIA 2-7H ROP (min/ft) 8
Gamma (API) 150

KD

WOB 16.8
RPM 29
PP 2537
SPM 163

2650

2700

WOB 16.2
RPM 31
PP 2611
SPM 158

KD

2750

WOB 16.2
RPM 28
PP 1674
SPM 192

2800

PATRICIA 2-7H ROP (min/ft) 8
Gamma (API) 150

KD

NO SAMPLES UNTILL 3,300'

SURVEY: 2675' MD 2671.17'TVD
INC. 4.99 / AZ. 165.64
VERTICAL SECTION / -77.02

NO SAMPLES UNTILL 3,300'

SURVEY: 2771' MD 2766.80'TVD
INC. 5.01 / AZ. 169.99
VERTICAL SECTION / -85.10

NO SAMPLES UNTILL 3,300'

TG (units)
C1 (units)
C2 (units)
C3 (units)
C4 (units)

GAS UNITS 500
ATTENUATION 70
PERCENT SET 5
@ 60 4
1

SAMPLE CUT 200

CG 17u

MW/VIS 9.60/30

DRILLING ON WATER
BASE MUD

CG 18u

MW/VIS 9.60/30

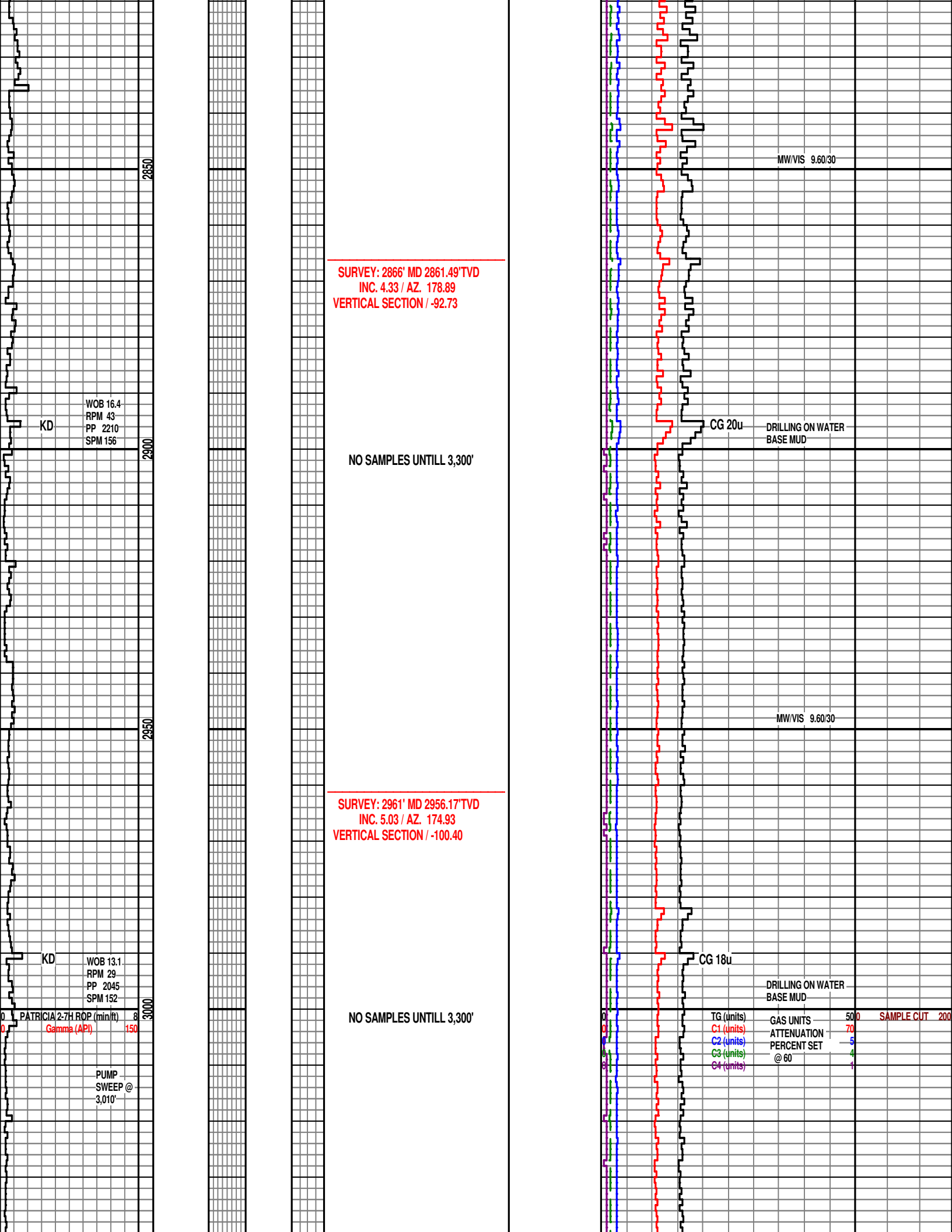
DRILLING ON WATER
BASE MUD

CG 18u

TG (units)
C1 (units)
C2 (units)
C3 (units)
C4 (units)

500
70
5
4
1

SAMPLE CUT 200


2850
MW/VIS 9.60/30
SURVEY: 2866' MD 2861.49'TVD
INC. 4.33 / AZ. 178.89
VERTICAL SECTION / -92.73
WOB 16.4
RPM 43
PP 2210
SPM 156
KD
CG 20u
DRILLING ON WATER
BASE MUD
2900
NO SAMPLES UNTILL 3,300'
2950
MW/VIS 9.60/30
SURVEY: 2961' MD 2956.17'TVD
INC. 5.03 / AZ. 174.93
VERTICAL SECTION / -100.40
KD
WOB 13.1
RPM 29
PP 2045
SPM 152
CG 18u
DRILLING ON WATER
BASE MUD
3000
PATRICIA 2-7H ROP (min/ft)
Gamma (API)
150
NO SAMPLES UNTILL 3,300'
TG (units)
C1 (units)
C2 (units)
C3 (units)
C4 (units)
GAS UNITS
ATTENUATION
PERCENT SET
@ 60
SAMPLE CUT
PUMP
SWEEP @
3,010'

3050

SURVEY: 3054' MD 3048.82'TVD
INC. 4.98 / AZ. 168.96
VERTICAL SECTION / -108.40

MW/VIS 8.6/45

KD

WOB 10.2
RPM 40
PP 2122
SPM 152

CG 17u

DRILLING ON WATER BASE MUD

3100

NO SAMPLES UNTILL 3,300'

MW/VIS 8.9/39

3150

SURVEY: 3149' MD 3143.46'TVD
INC. 4.97 / AZ. 170.57
VERTICAL SECTION / -116.43

WOB 8.6
RPM 43
PP 2526
SPM 173

KD

CG 19u

DRILLING ON WATER BASE MUD

3200

0 PATRICIA 2-7H ROP (min/ft) 8
0 Gamma (API) 150

PUMP SWEEP @ 3,214'

NO SAMPLES UNTILL 3,300'

0 TG (units)
0 C1 (units)
0 C2 (units)
0 C3 (units)
0 C4 (units)

GAS UNITS 500 0 SAMPLE CUT 200
ATTENUATION 70
PERCENT SET 5
@ 60' 4
1

O.B. # 2 , TYPE - HCC-DPD506X - SIZE = 8.75", JETS - 6 X 18's, SS# - 7145507 DEPTH IN @ 783' Depth out @ 783' Drilled 676' in 6.00 hrs. AVG. ROP = 112.7 ft/ph. NEW BIT # 3 TYPE - HUGHES-VGD-R26DX - SIZE = 8.75", JETS - 3 X 18's, SS# - 5217072 DEPTH IN @ 3,296'

SURVEY: 3243' MD 3237.11'TVD
INC. 4.92 / AZ. 169.57
VERTICAL SECTION / -124.34

MW/VIS 8.9/39

3250

WOB 7.8
RPM 40
PP 2431
SPM 171

PUMPED SWEEP @ 3,272'

KD

(PLEASE NOTE)
TAGGED CEMENT @ 3,296'

TIME DRILL FROM 3,296' to 3,318'

3300

BLACK LINE IN THE DEPTH NUMBERS INDICATE SLIDES

ROTATE FROM 3,319' to 3,364'

3350

TIME DRILL FROM 3,364' to 3,373'

KD

08/26/2013
WOB 2.1
RPM 0
PP 2100
SPM 158

PATRICIA 2-7H ROP [min/ft] 8
Gamma (API) 150

3400

3450

KD

WOB 6.9
RPM 0
PP 2636
SPM 160

70% MOSTLY CEMENT, 30% SH: ABUN GRY-LT GRY, SME DRK GRY, SMTH-SUB WXY W/SME RGH TXT, SFT-MOD FRM, PRED BLKY, SME SPLIN, SL/TRS LS: OFF WHT-WHT, CRM, MICRO-XLN, BLKY, CHUKY, MOD FRM TO HD, DNS, NO VIS FLOR, NO VIS CUT, NO RESD RING

SURVEY: 3318' MD 3311.87'TVD
INC. 4.21 / AZ. 168.63
VERTICAL SECTION / -130.14

80% CEMENT, 10% SH: ABUN GRY-LT GRY, SME DRK GRY, SMTH-SUB WXY W/SME RGH TXT, SFT-MOD FRM, PRED BLKY, SME SPLIN, 10% LS: OFF WHT-WHT, CRM, MICRO-XLN, BLKY, CHUKY, MOD FRM TO HD, DNS, NO VIS FLOR, NO VIS CUT, NO RESD RING

50% CEMENT, 10% SH: ABUN GRY-LT GRY, SME DRK GRY, SMTH-SUB WXY W/SME RGH TXT, SFT-MOD FRM, PRED BLKY, SME SPLIN, 40% LS: OFF WHT-WHT, CRM, MICRO-XLN, BLKY, CHUKY, MOD FRM TO HD, DNS, NO VIS FLOR, NO VIS CUT, NO RESD RING

SURVEY: 3380' MD 3373.74'TVD
INC. 3.46 / AZ. 150.00
VERTICAL SECTION / -133.92

SH: GRY-LT GRY, SME DRK GRY, SMTH-SUB WXY W/SME RGH TXT, SFT-MOD FRM, PRED BLKY, SME SPLIN, LS: OFF WHT-WHT, CRM, LT-MED GRY, CRSE ANG GRN, SME MICRO-XLN, OOL, BLKY, CHUKY, MOD FRM TO HD, DNS

SURVEY: 3412' MD 3405.67'TVD
INC. 3.83 / AZ. 119.66
VERTICAL SECTION / -135.22

SH: ABUN DK GRY, BLK GRY, SCAT LT GRY, ORG RCH, CALC, SPLTY, SMTH-SUB WXY LSTR, MOD FRM-FRM, TRS LS: OFF WHT-WHT, CRM, LT-MED GRY, CRSE ANG GRN, SME MICRO-XLN, OOL, BLKY, CHUKY, MOD FRM TO HD, DNS

SURVEY: 3444' MD 3437.57'TVD
INC. 5.51 / AZ. 111.39
VERTICAL SECTION / -136.20

SH: ABUN DK GRY, BLK GRY, SCAT LT GRY, ORG RCH, CALC, SLT, SME SMTH- SUB WXY LSTR, MOD FRM-FRM, TRS LS: OFF WHT-WHT, CRM, LT-MED GRY, MICRO-XLN, OOL, BLKY, CHUKY, MOD FRM TO HD, DNS

CG 21u

FORMATION TRIP GAS 25u MAX @ 3,296'

DRILLING ON WATER BASE MUD

DEPTH @ 3,368'
MW/VIS 8.65/44
PV/YP 8/17
GELS 8/18/0
FIL/CK 5.0/2/32
PH/SOL 10.8/3.0
H2O/Oil 92.0/5.0
CHL 12000
HD 80

PLEASE NOTE SCALE CHANGE @ 3,350'
0 to 150 units

MW/VIS 8.7/47

Scale Change
TG (units) 150
C1 (units) 200
C2 (units) 15
C3 (units) 10
C4 (units) 2

CG 25u

FORMATION GAS 84u MAX @ 3,402'

DRILLING ON WATER BASE MUD

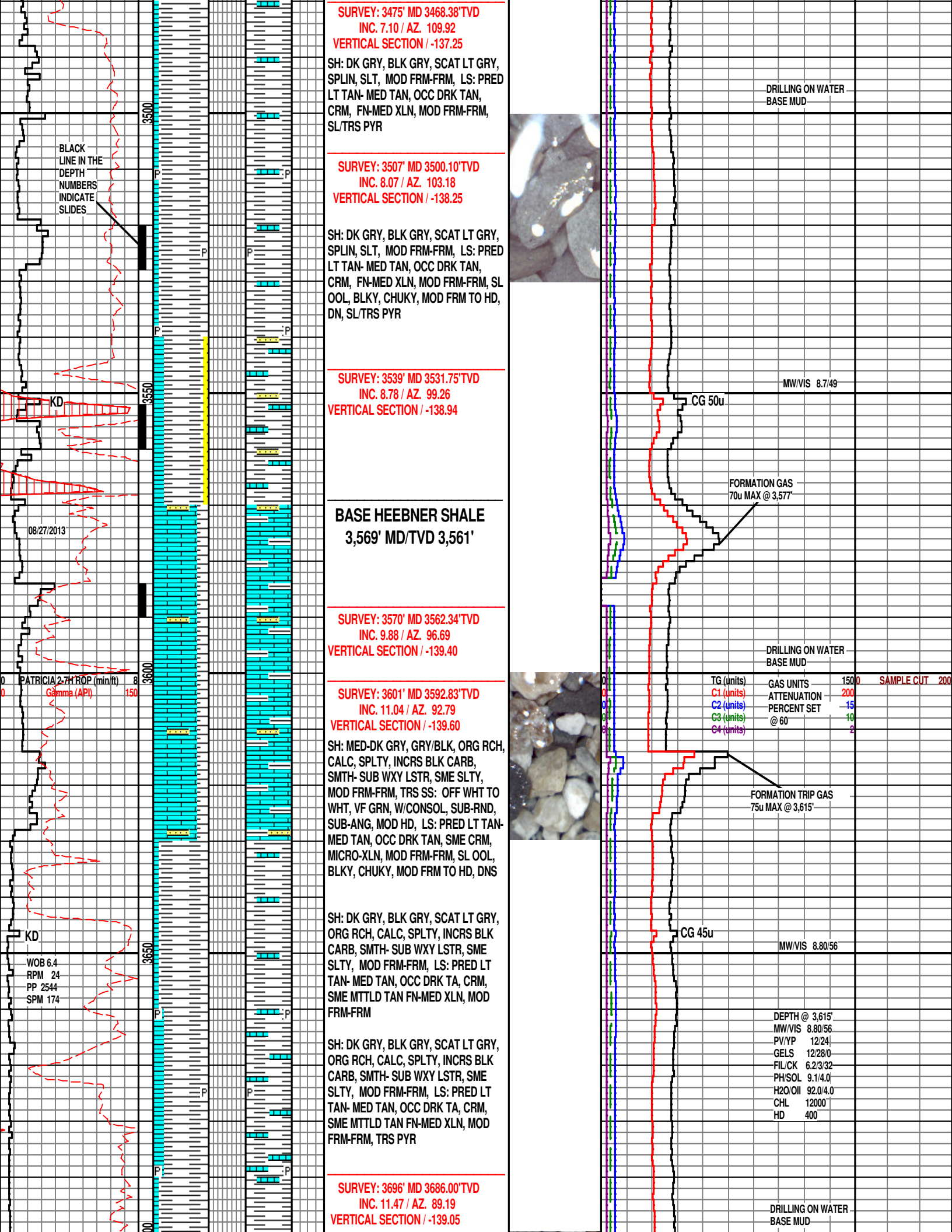
TG (units)
C1 (units)
C2 (units)
C3 (units)
C4 (units)

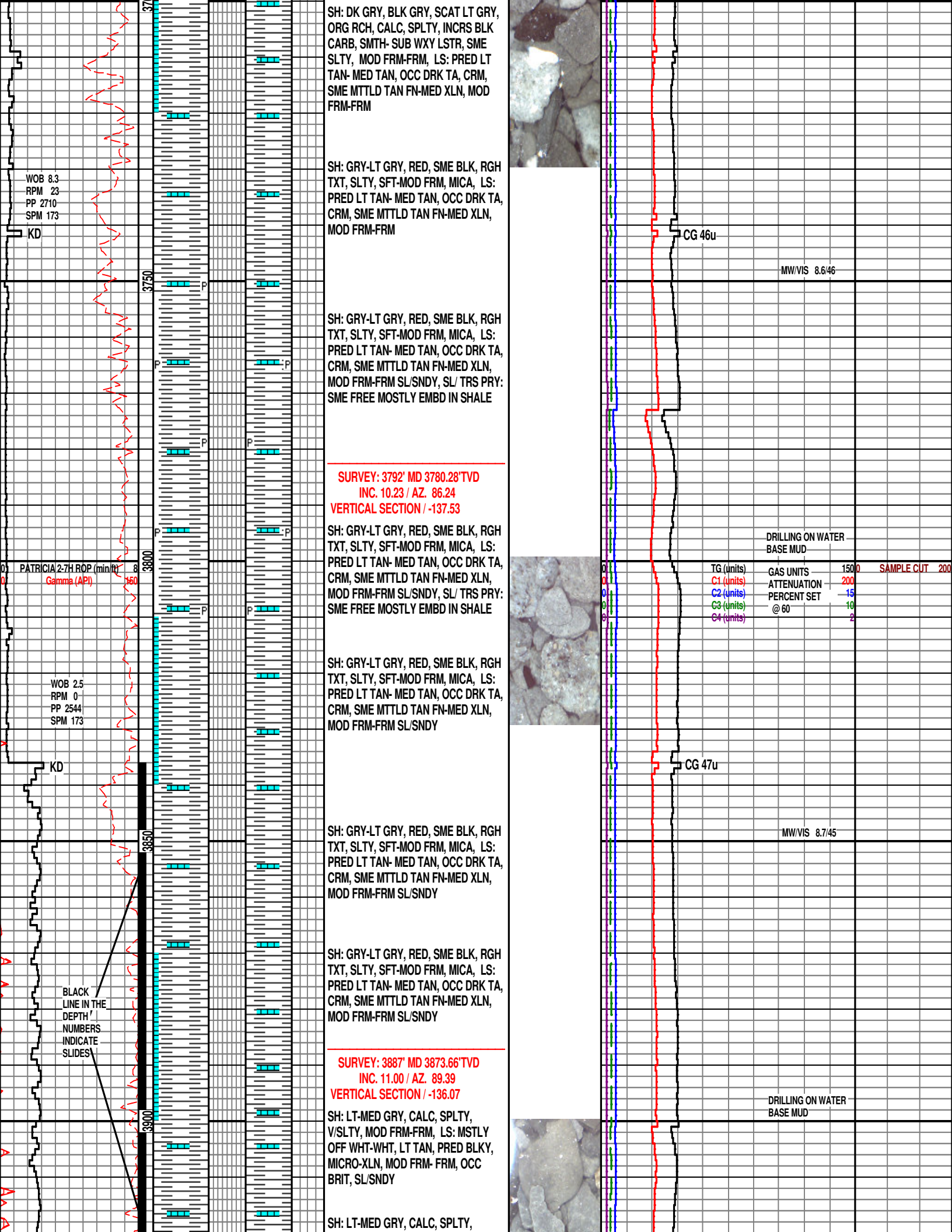
GAS UNITS 1500 SAMPLE CUT 200
ATTENUATION 200
PERCENT SET 15
@ 60 10
2

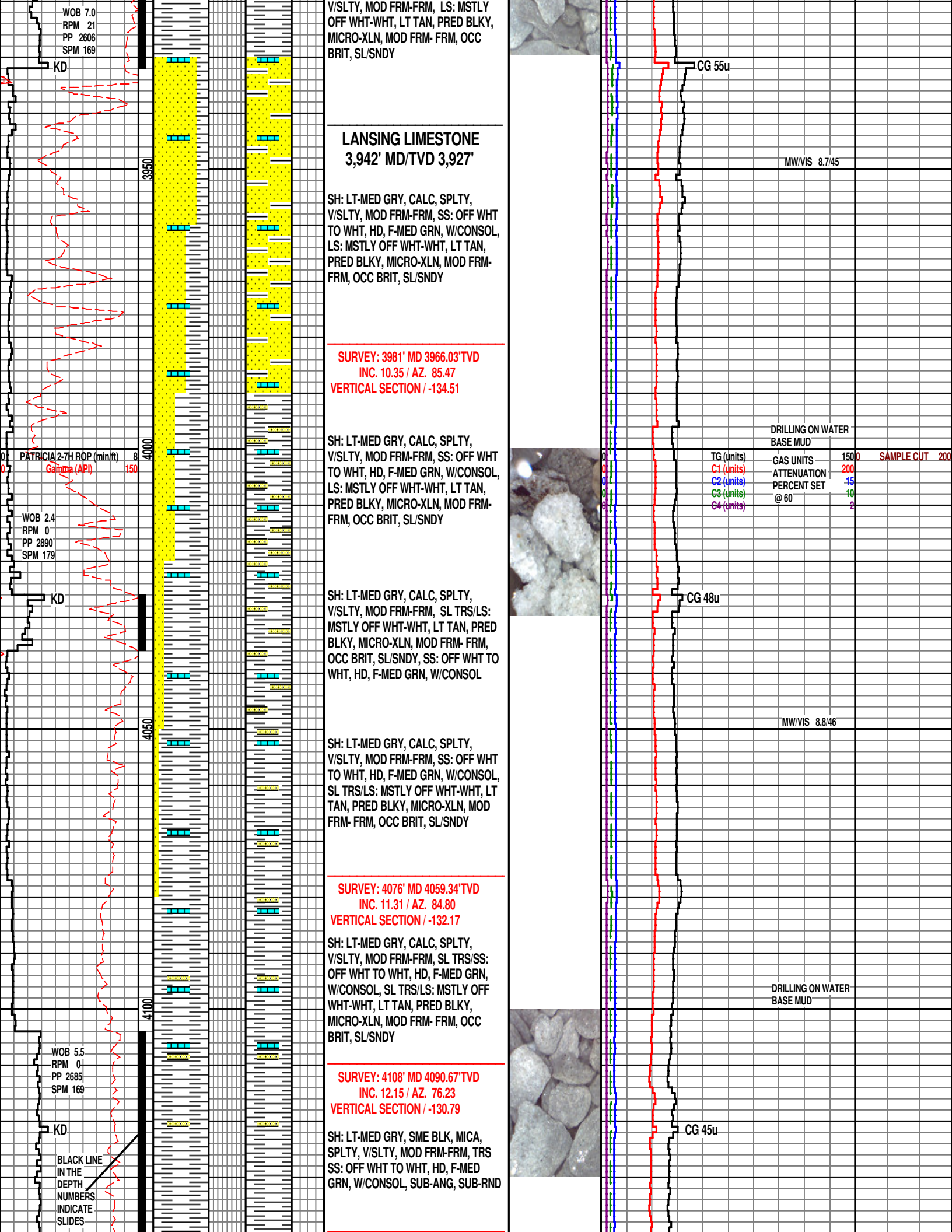
DEPTH @ 3,392'
MW/VIS 8.70/48
PV/YP 9/19
GELS 12/26/0
FIL/CK 6.2/3/32
PH/SOL 12.8/2.0
H2O/Oil 94.0/4.0
CHL 11000
HD 120

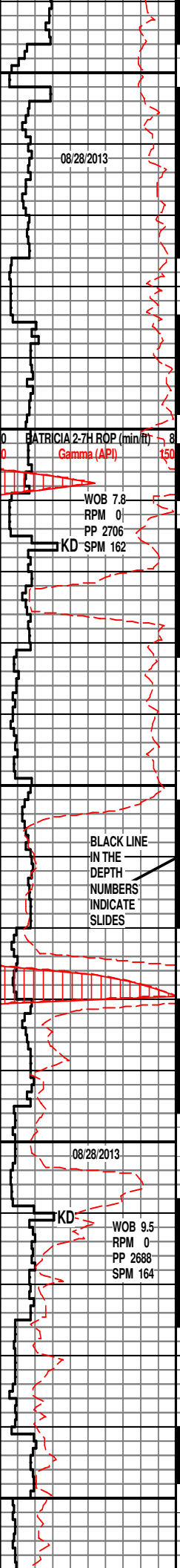
MW/VIS 8.70/48

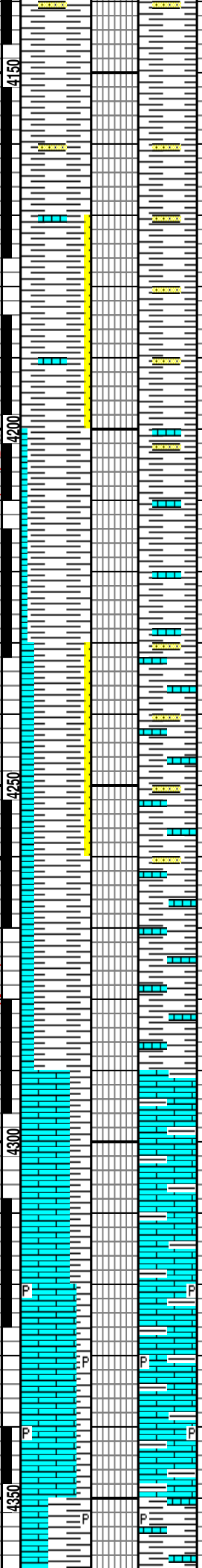
CG 45u


BLACK LINE IN THE DEPTH NUMBERS INDICATE SLIDES
KD
08/27/2013
PATRICIA 2-7H ROP (min/ft)
Gamma (API)
KD
WOB 6.4
RPM 24
PP 2544
SPM 174
3500
3550
3600
3650
SURVEY: 3475' MD 3468.38'TVD
INC. 7.10 / AZ. 109.92
VERTICAL SECTION / -137.25
SH: DK GRY, BLK GRY, SCAT LT GRY, SPLIN, SLT, MOD FRM-FRM, LS: PRED LT TAN- MED TAN, OCC DRK TAN, CRM, FN-MED XLN, MOD FRM-FRM, SL/TRS PYR
SURVEY: 3507' MD 3500.10'TVD
INC. 8.07 / AZ. 103.18
VERTICAL SECTION / -138.25
SH: DK GRY, BLK GRY, SCAT LT GRY, SPLIN, SLT, MOD FRM-FRM, LS: PRED LT TAN- MED TAN, OCC DRK TAN, CRM, FN-MED XLN, MOD FRM-FRM, SL OOL, BLKY, CHUKY, MOD FRM TO HD, DN, SL/TRS PYR
SURVEY: 3539' MD 3531.75'TVD
INC. 8.78 / AZ. 99.26
VERTICAL SECTION / -138.94
BASE HEEBNER SHALE
3,569' MD/TVD 3,561'
SURVEY: 3570' MD 3562.34'TVD
INC. 9.88 / AZ. 96.69
VERTICAL SECTION / -139.40
SURVEY: 3601' MD 3592.83'TVD
INC. 11.04 / AZ. 92.79
VERTICAL SECTION / -139.60
SH: MED-DK GRY, GRY/BLK, ORG RCH, CALC, SPLTY, INCRS BLK CARB, SMTH- SUB WXY LSTR, SME SLTY, MOD FRM-FRM, TRS SS: OFF WHT TO WHT, VF GRN, W/CONSOL, SUB-RND, SUB-ANG, MOD HD, LS: PRED LT TAN- MED TAN, OCC DRK TAN, SME CRM, MICRO-XLN, MOD FRM-FRM, SL OOL, BLKY, CHUKY, MOD FRM TO HD, DNS
SH: DK GRY, BLK GRY, SCAT LT GRY, ORG RCH, CALC, SPLTY, INCRS BLK CARB, SMTH- SUB WXY LSTR, SME SLTY, MOD FRM-FRM, LS: PRED LT TAN- MED TAN, OCC DRK TA, CRM, SME MTTLD TAN FN-MED XLN, MOD FRM-FRM
SH: DK GRY, BLK GRY, SCAT LT GRY, ORG RCH, CALC, SPLTY, INCRS BLK CARB, SMTH- SUB WXY LSTR, SME SLTY, MOD FRM-FRM, LS: PRED LT TAN- MED TAN, OCC DRK TA, CRM, SME MTTLD TAN FN-MED XLN, MOD FRM-FRM, TRS PYR
SURVEY: 3696' MD 3686.00'TVD
INC. 11.47 / AZ. 89.19
VERTICAL SECTION / -139.05
DRILLING ON WATER BASE MUD
MW/VIS 8.7/49
CG 50u
FORMATION GAS 70u MAX @ 3,577'
DRILLING ON WATER BASE MUD
TG (units)
C1 (units)
C2 (units)
C3 (units)
C4 (units)
GAS UNITS 1500
ATTENUATION 200
PERCENT SET @ 60 15
10
2
SAMPLE CUT 200
FORMATION TRIP GAS 75u MAX @ 3,615'
CG 45u
MW/VIS 8.80/56
DEPTH @ 3,615'
MW/VIS 8.80/56
PV/YP 12/24
GELS 12/28/0
FIL/CK 6.2/3/32
PH/SOL 9.1/4.0
H2O/OIl 92.0/4.0
CHL 12000
HD 400
DRILLING ON WATER BASE MUD


SH: DK GRY, BLK GRY, SCAT LT GRY, ORG RCH, CALC, SPLTY, INCRS BLK CARB, SMTH- SUB WXY LSTR, SME SLTY, MOD FRM-FRM, LS: PRED LT TAN- MED TAN, OCC DRK TA, CRM, SME MTTLD TAN FN-MED XLN, MOD FRM-FRM
WOB 8.3
RPM 23
PP 2710
SPM 173
KD
SH: GRY-LT GRY, RED, SME BLK, RGH TXT, SLTY, SFT-MOD FRM, MICA, LS: PRED LT TAN- MED TAN, OCC DRK TA, CRM, SME MTTLD TAN FN-MED XLN, MOD FRM-FRM
CG 46u
MW/VIS 8.6/46
3750
SH: GRY-LT GRY, RED, SME BLK, RGH TXT, SLTY, SFT-MOD FRM, MICA, LS: PRED LT TAN- MED TAN, OCC DRK TA, CRM, SME MTTLD TAN FN-MED XLN, MOD FRM-FRM SL/SNDY, SL/ TRS PRY: SME FREE MOSTLY EMBD IN SHALE
SURVEY: 3792' MD 3780.28'TVD
INC. 10.23 / AZ. 86.24
VERTICAL SECTION / -137.53
SH: GRY-LT GRY, RED, SME BLK, RGH TXT, SLTY, SFT-MOD FRM, MICA, LS: PRED LT TAN- MED TAN, OCC DRK TA, CRM, SME MTTLD TAN FN-MED XLN, MOD FRM-FRM SL/SNDY, SL/ TRS PRY: SME FREE MOSTLY EMBD IN SHALE
DRILLING ON WATER BASE MUD
3800
PATRICIA 2-7H ROP (min/ft)
Gamma (API)
TG (units)
C1 (units)
C2 (units)
C3 (units)
C4 (units)
GAS UNITS 1500
ATTENUATION 200
PERCENT SET 15
@ 60 10
2
SAMPLE CUT 200
SH: GRY-LT GRY, RED, SME BLK, RGH TXT, SLTY, SFT-MOD FRM, MICA, LS: PRED LT TAN- MED TAN, OCC DRK TA, CRM, SME MTTLD TAN FN-MED XLN, MOD FRM-FRM SL/SNDY
WOB 2.5
RPM 0
PP 2544
SPM 173
KD
CG 47u
3850
SH: GRY-LT GRY, RED, SME BLK, RGH TXT, SLTY, SFT-MOD FRM, MICA, LS: PRED LT TAN- MED TAN, OCC DRK TA, CRM, SME MTTLD TAN FN-MED XLN, MOD FRM-FRM SL/SNDY
MW/VIS 8.7/45
SH: GRY-LT GRY, RED, SME BLK, RGH TXT, SLTY, SFT-MOD FRM, MICA, LS: PRED LT TAN- MED TAN, OCC DRK TA, CRM, SME MTTLD TAN FN-MED XLN, MOD FRM-FRM SL/SNDY
BLACK LINE IN THE DEPTH NUMBERS INDICATE SLIDES
SURVEY: 3887' MD 3873.66'TVD
INC. 11.00 / AZ. 89.39
VERTICAL SECTION / -136.07
DRILLING ON WATER BASE MUD
3900
SH: LT-MED GRY, CALC, SPLTY, V/SLTY, MOD FRM-FRM, LS: MSTLY OFF WHT-WHT, LT TAN, PRED BLKY, MICRO-XLN, MOD FRM- FRM, OCC BRIT, SL/SNDY
SH: LT-MED GRY, CALC, SPLTY,


WOB 7.0
RPM 21
PP 2606
SPM 169
KD
3950
4000
4050
4100
PATRICIA 2-7H ROP (min/ft) 8
Gamma (API) 150
WOB 2.4
RPM 0
PP 2890
SPM 179
KD
WOB 5.5
RPM 0
PP 2685
SPM 169
KD
BLACK LINE IN THE DEPTH NUMBERS INDICATE SLIDES
V/SLTY, MOD FRM-FRM, LS: MSTLY OFF WHT-WHT, LT TAN, PRED BLKY, MICRO-XLN, MOD FRM- FRM, OCC BRIT, SL/SNDY
LANSING LIMESTONE
3,942' MD/TVD 3,927'
SH: LT-MED GRY, CALC, SPLTY, V/SLTY, MOD FRM-FRM, SS: OFF WHT TO WHT, HD, F-MED GRN, W/CONSOL, LS: MSTLY OFF WHT-WHT, LT TAN, PRED BLKY, MICRO-XLN, MOD FRM- FRM, OCC BRIT, SL/SNDY
SURVEY: 3981' MD 3966.03'TVD
INC. 10.35 / AZ. 85.47
VERTICAL SECTION / -134.51
SH: LT-MED GRY, CALC, SPLTY, V/SLTY, MOD FRM-FRM, SS: OFF WHT TO WHT, HD, F-MED GRN, W/CONSOL, LS: MSTLY OFF WHT-WHT, LT TAN, PRED BLKY, MICRO-XLN, MOD FRM- FRM, OCC BRIT, SL/SNDY
SH: LT-MED GRY, CALC, SPLTY, V/SLTY, MOD FRM-FRM, SL TRS/LS: MSTLY OFF WHT-WHT, LT TAN, PRED BLKY, MICRO-XLN, MOD FRM- FRM, OCC BRIT, SL/SNDY, SS: OFF WHT TO WHT, HD, F-MED GRN, W/CONSOL
SH: LT-MED GRY, CALC, SPLTY, V/SLTY, MOD FRM-FRM, SS: OFF WHT TO WHT, HD, F-MED GRN, W/CONSOL, SL TRS/LS: MSTLY OFF WHT-WHT, LT TAN, PRED BLKY, MICRO-XLN, MOD FRM- FRM, OCC BRIT, SL/SNDY
SURVEY: 4076' MD 4059.34'TVD
INC. 11.31 / AZ. 84.80
VERTICAL SECTION / -132.17
SH: LT-MED GRY, CALC, SPLTY, V/SLTY, MOD FRM-FRM, SL TRS/SS: OFF WHT TO WHT, HD, F-MED GRN, W/CONSOL, SL TRS/LS: MSTLY OFF WHT-WHT, LT TAN, PRED BLKY, MICRO-XLN, MOD FRM- FRM, OCC BRIT, SL/SNDY
SURVEY: 4108' MD 4090.67'TVD
INC. 12.15 / AZ. 76.23
VERTICAL SECTION / -130.79
SH: LT-MED GRY, SME BLK, MICA, SPLTY, V/SLTY, MOD FRM-FRM, TRS SS: OFF WHT TO WHT, HD, F-MED GRN, W/CONSOL, SUB-ANG, SUB-RND
CG 55u
MW/VIS 8.7/45
DRILLING ON WATER BASE MUD
TG (units)
C1 (units)
C2 (units)
C3 (units)
C4 (units)
GAS UNITS 1500
ATTENUATION 200
PERCENT SET 15
@ 60 10
2
SAMPLE CUT 200
CG 48u
MW/VIS 8.8/46
DRILLING ON WATER BASE MUD
CG 45u





SURVEY: 4140' MD 4121.86'TVD
INC. 13.78 / AZ. 65.59
VERTICAL SECTION / -128.11

SH: LT-MED GRY, SME BLK, MICA, SPLTY, V/SLTY, MOD FRM-FRM, CARB, TRS SS: OFF WHT TO WHT, HD, F-MED GRN, W/CONSOL, SUB-ANG, SUB-RND

SURVEY: 4171' MD 4151.89'TVD
INC. 15.06 / AZ. 56.09
VERTICAL SECTION / -124.03

SH: LT-MED GRY, MICA, SPLTY, SME BLKY, V/SLTY, MOD FRM-FRM, CARB, SS: OFF WHT TO WHT, HD, CRSE ANG GRN, W/CONSOL, W/CMT, LS: OFF WHT-WHT, LT TAN, LT-MED GRY, SME DK GRY, PRED BLKY, MICRO-XLN, MOD FRM- FRM, OCC BRIT, SL/SNDY, DNS

COTTAGE GROVE
4,210' MD/TVD 4,189'

SH: LT-MED GRY, MICA, SPLTY, SME BLKY, V/SLTY, MOD FRM-FRM, CARB, SS: OFF WHT TO WHT, HD, CRSE ANG GRN, W/CONSOL, W/CMT, SUB-RND, SUB-ANG, LS: OFF WHT-WHT, LT TAN, LT-MED GRY, SME DK GRY, PRED BLKY, MICRO-XLN, MOD FRM- FRM, OCC BRIT, SL/SNDY, DNS

SURVEY: 4265' MD 4241.60'TVD
INC. 19.44 / AZ. 32.72
VERTICAL SECTION / -102.67

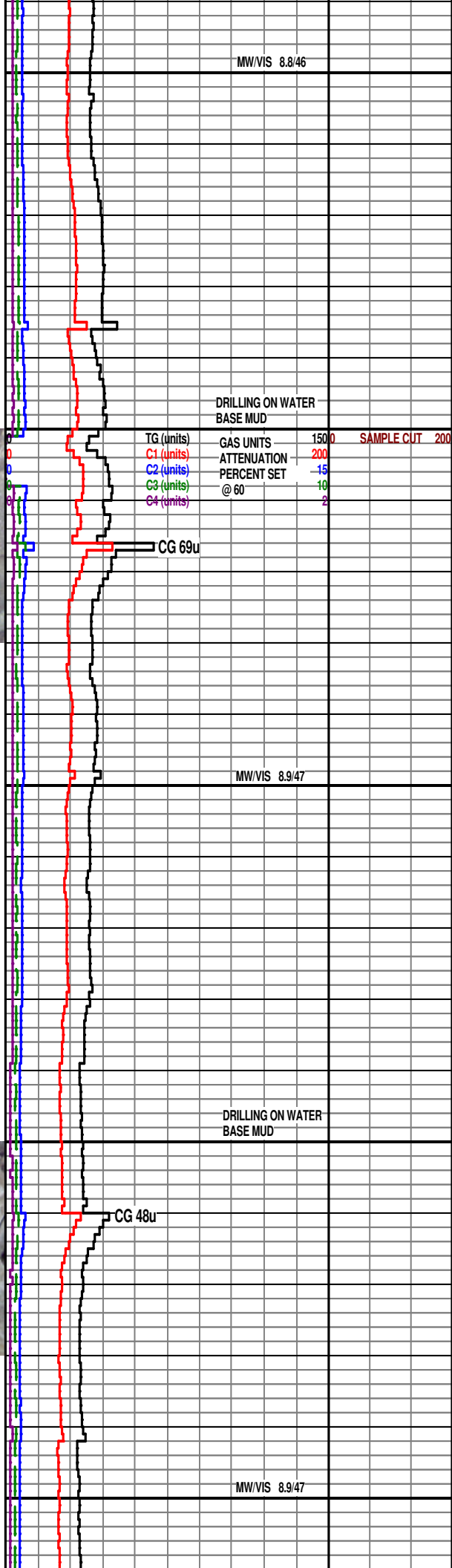
LS: OFF WHT-WHT, LT TAN, LT-MED GRY, SME DK GRY, PRED BLKY, MICRO-XLN, MOD FRM- FRM, OCC BRIT, SL/SNDY, DNS, SH: LT-MED GRY, MICA, SPLTY, SME BLKY, V/SLTY, MOD FRM-FRM

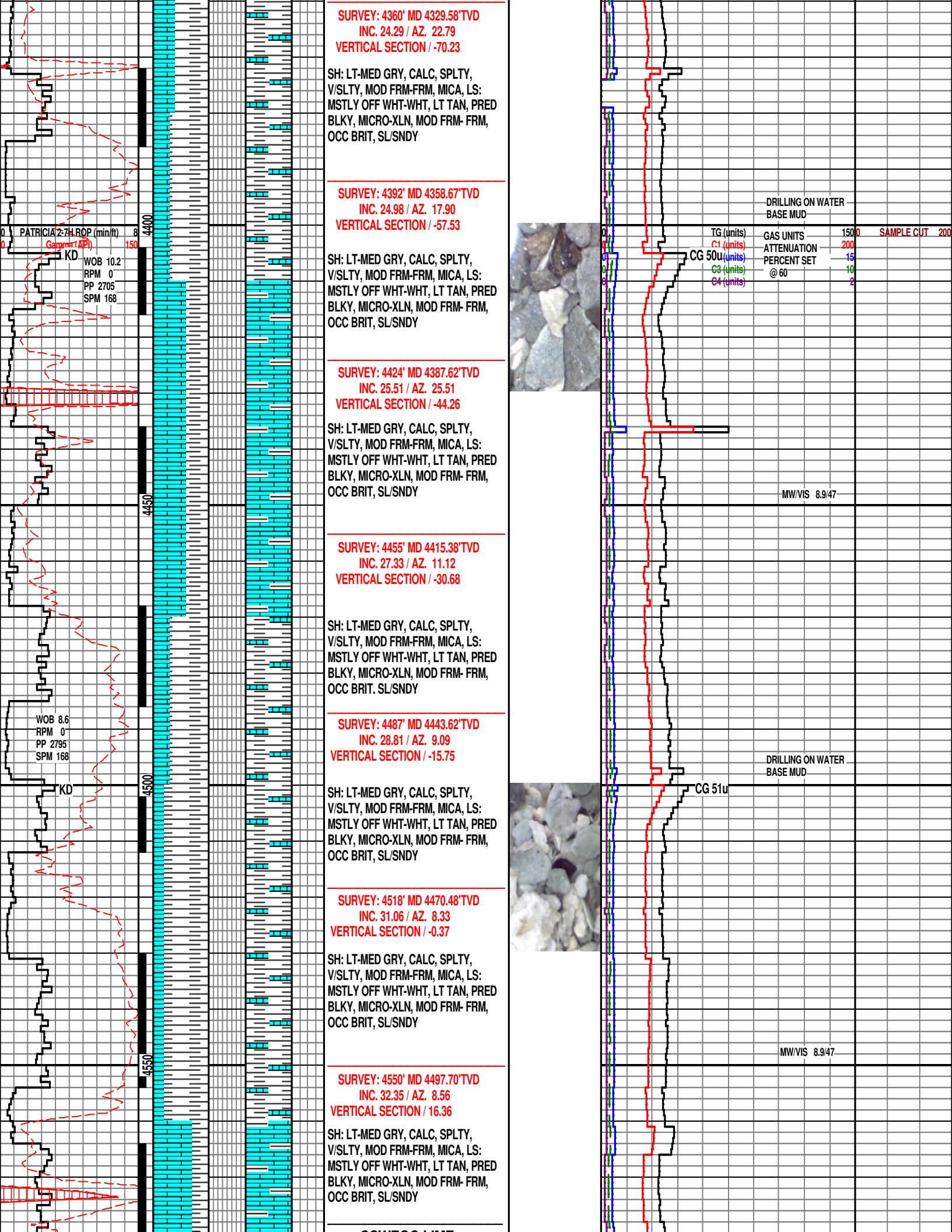
SURVEY: 4297' MD 4271.59'TVD
INC. 21.41 / AZ. 28.89
VERTICAL SECTION / -92.82

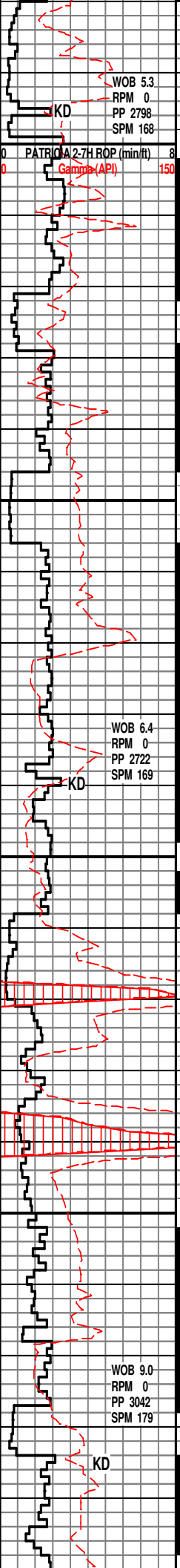
LS: OFF WHT-WHT, LT TAN, LT-MED GRY, SME DK GRY, PRED BLKY, MICRO-XLN, MOD FRM- FRM, OCC BRIT, SL/SNDY, DNS, SH: LT-MED GRY, MICA, SPLTY, SME BLKY, V/SLTY, MOD FRM-FRM, TRS PYR

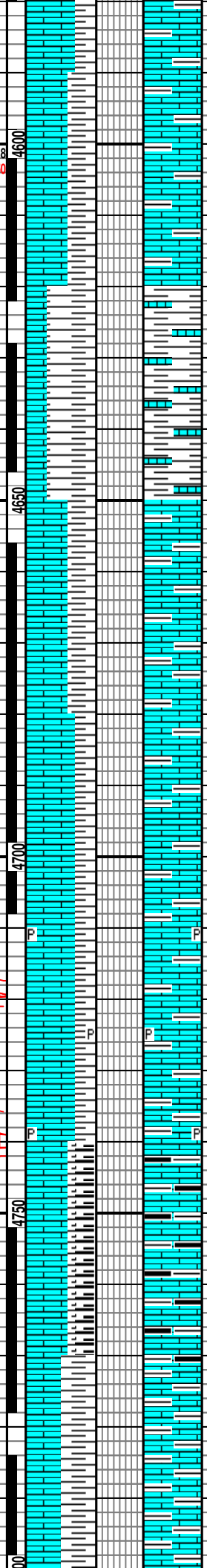
SURVEY: 4329' MD 4301.20'TVD
INC. 23.16 / AZ. 26.09
VERTICAL SECTION / -81.81

LS: OFF WHT-WHT, LT TAN, LT-MED GRY, SME DK GRY, PRED BLKY, MICRO-XLN, MOD FRM- FRM, OCC BRIT, SL/SNDY, DNS, SH: LT-MED GRY, MICA, SPLTY, SME BLKY, V/SLTY, MOD FRM-FRM, TRS PYR




PATRICIA 2-7-1
ROP (min/ft)
Gamma (API)
KD
WOB 10.2
RPM 0
PP 2705
SPM 168
4400
4450
WOB 8.6
RPM 0
PP 2795
SPM 168
KD
4500
4550
SURVEY: 4360' MD 4329.58'TVD
INC. 24.29 / AZ. 22.79
VERTICAL SECTION / -70.23
SH: LT-MED GRY, CALC, SPLTY, V/SLTY, MOD FRM-FRM, MICA, LS: MSTLY OFF WHT-WHT, LT TAN, PRED BLKY, MICRO-XLN, MOD FRM- FRM, OCC BRIT, SL/SNDY
SURVEY: 4392' MD 4358.67'TVD
INC. 24.98 / AZ. 17.90
VERTICAL SECTION / -57.53
SH: LT-MED GRY, CALC, SPLTY, V/SLTY, MOD FRM-FRM, MICA, LS: MSTLY OFF WHT-WHT, LT TAN, PRED BLKY, MICRO-XLN, MOD FRM- FRM, OCC BRIT, SL/SNDY
SURVEY: 4424' MD 4387.62'TVD
INC. 25.51 / AZ. 25.51
VERTICAL SECTION / -44.26
SH: LT-MED GRY, CALC, SPLTY, V/SLTY, MOD FRM-FRM, MICA, LS: MSTLY OFF WHT-WHT, LT TAN, PRED BLKY, MICRO-XLN, MOD FRM- FRM, OCC BRIT, SL/SNDY
SURVEY: 4455' MD 4415.38'TVD
INC. 27.33 / AZ. 11.12
VERTICAL SECTION / -30.68
SH: LT-MED GRY, CALC, SPLTY, V/SLTY, MOD FRM-FRM, MICA, LS: MSTLY OFF WHT-WHT, LT TAN, PRED BLKY, MICRO-XLN, MOD FRM- FRM, OCC BRIT. SL/SNDY
SURVEY: 4487' MD 4443.62'TVD
INC. 28.81 / AZ. 9.09
VERTICAL SECTION / -15.75
SH: LT-MED GRY, CALC, SPLTY, V/SLTY, MOD FRM-FRM, MICA, LS: MSTLY OFF WHT-WHT, LT TAN, PRED BLKY, MICRO-XLN, MOD FRM- FRM, OCC BRIT, SL/SNDY
SURVEY: 4518' MD 4470.48'TVD
INC. 31.06 / AZ. 8.33
VERTICAL SECTION / -0.37
SH: LT-MED GRY, CALC, SPLTY, V/SLTY, MOD FRM-FRM, MICA, LS: MSTLY OFF WHT-WHT, LT TAN, PRED BLKY, MICRO-XLN, MOD FRM- FRM, OCC BRIT, SL/SNDY
SURVEY: 4550' MD 4497.70'TVD
INC. 32.35 / AZ. 8.56
VERTICAL SECTION / 16.36
SH: LT-MED GRY, CALC, SPLTY, V/SLTY, MOD FRM-FRM, MICA, LS: MSTLY OFF WHT-WHT, LT TAN, PRED BLKY, MICRO-XLN, MOD FRM- FRM, OCC BRIT, SL/SNDY
DRILLING ON WATER
BASE MUD
TG (units)
C1 (units)
C2 (units)
C3 (units)
C4 (units)
GAS UNITS
ATTENUATION
PERCENT SET
@ 60
SAMPLE CUT
CG 50u
MW/VIS 8.9/47
DRILLING ON WATER
BASE MUD
CG 51u
MW/VIS 8.9/47





OSWEGO LIME
4,578' MD/TVD 4,521'

SURVEY: 4581' MD 4523.57'TVD
INC. 34.55 / AZ. 9.84
VERTICAL SECTION / 33.33

LS: MSTLY OFF WHT-WHT, LT TAN, PRED BLKY, MICRO-XLN, MOD FRM-FRM, OCC BRIT, SL/SNDY, SH: GRY-LT GRY, SME DRK GRY, SME BLK, RGH TXT, SLTY, SFT-MOD FRM, PRED BLKY-PLTY, MICA

SURVEY: 4613' MD 4549.54'TVD
INC. 36.91 / AZ. 9.22
VERTICAL SECTION / 51.88

LS: MSTLY OFF WHT-WHT, LT TAN, PRED BLKY, MICRO-XLN, MOD FRM-FRM, OCC BRIT, SL/SNDY, SH: GRY-LT GRY, SME DRK GRY, SME BLK, RGH TXT, SLTY, SFT-MOD FRM, PRED BLKY-PLTY, MICA

SURVEY: 4645' MD 4574.59'TVD
INC. 40.04 / AZ. 7.22
VERTICAL SECTION / 71.70

LS: MSTLY OFF WHT-WHT, LT TAN, PRED BLKY, MICRO-XLN, MOD FRM-FRM, OCC BRIT, SL/SNDY, SH: GRY-LT GRY, SME DRK GRY, SME BLK, RGH TXT, SLTY, SFT-MOD FRM, PRED BLKY-PLTY, MICA

SURVEY: 4676' MD 4597.92'TVD
INC. 42.36 / AZ. 6.29
VERTICAL SECTION / 92.06

LS: MSTLY OFF WHT-WHT, LT TAN, PRED BLKY, MICRO-XLN, MOD FRM-FRM, OCC BRIT, SL/SNDY, SH: GRY-LT GRY, SME DRK GRY, SME BLK, RGH TXT, SLTY, SFT-MOD FRM, PRED

SURVEY: 4708' MD 4621.18'TVD
INC. 44.35 / AZ. 7.78
VERTICAL SECTION / 113.96

LS: MSTLY OFF WHT-WHT, LT TAN, PRED BLKY, MICRO-XLN, MOD FRM-FRM, OCC BRIT, SL/SNDY, SH: GRY-LT GRY, SME DRK GRY, SME BLK, RGH TXT, SLTY, SFT-MOD FRM, PRED BLKY-PLTY, MICA, TRS PYR

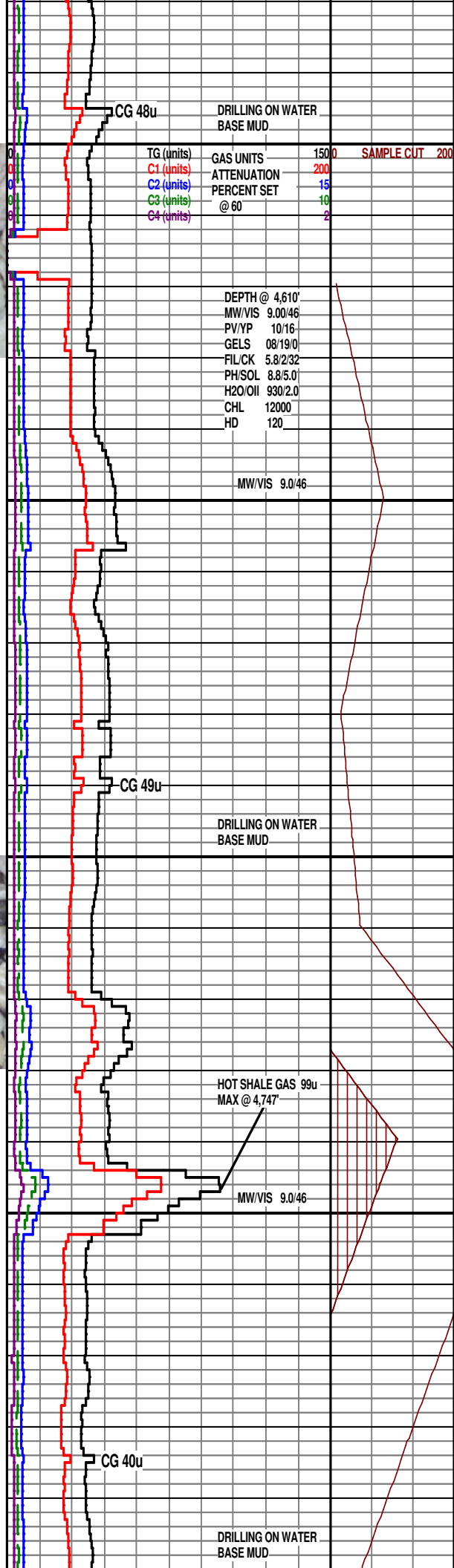
SURVEY: 4740' MD 4643.75'TVD
INC. 45.95 / AZ. 10.24
VERTICAL SECTION / 136.50

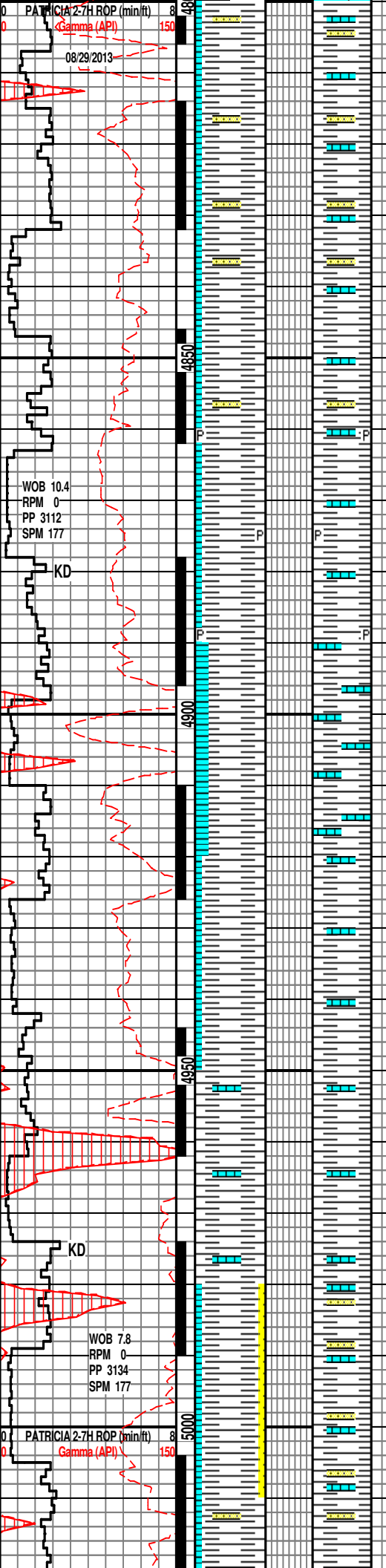
CHEROKEE GROUP
4,745' MD/TVD 4,647'

SH: GRY-LT GRY, RED, SME BLK, RGH TXT, SLTY, SFT-MOD FRM, MICA, LS: MSTLY OFF WHT-WHT, LT TAN, PRED BLKY, MICRO-XLN, MOD FRM- FRM, OCC BRIT, SL/SNDY, NO FLUOR, NO CUT, NO RING

SURVEY: 4771' MD 4664.72'TVD
INC. 48.92 / AZ. 10.06
VERTICAL SECTION / 159.14

SH: GRY-LT GRY, RED, SME BLK, RGH TXT, SLTY, SFT-MOD FRM, MICA, LS: MSTLY OFF WHT-WHT, LT TAN, PRED BLKY, MICRO-XLN, MOD FRM- FRM, OCC BRIT, SL/SNDY, NO FLUOR, SL/TRS SS, NO CUT, NO RING





SURVEY: 4803' MD 4685.06'TVD
INC. 52.12 / AZ. 9.78
VERTICAL SECTION / 183.63

SH: LT-MED GRY, SME RED, BLK, SLTY TXT, SPLIN, TRS SS: WHT/OFF WHT, W/CONSOL, SL/QTZ, HD, LS: OFF WHT-WHT, CRM, BLKY, MICRO-XLN, FRM, DNSE, NO FLUOR, NO CUT, NO RING

SURVEY: 4835' MD 4704.06'TVD
INC. 55.04 / AZ. 9.43
VERTICAL SECTION / 209.19

SH: LT-MED GRY, SME RED, BLK, SLTY TXT, SPLIN, TRS SS: WHT/OFF WHT, W/CONSOL, SL/QTZ, HD, LS: OFF WHT-WHT, CRM, BLKY, MICRO-XLN, FRM, DNSE, NO FLUOR, NO CUT, NO RING

SURVEY: 4866' MD 4721.28'TVD
INC. 57.49 / AZ. 7.06
VERTICAL SECTION / 234.84

SH: LT-MED GRY, SME RED, BLK, SLTY TXT, SPLIN, LS: OFF WHT-WHT, CRM, BLKY, MICRO-XLN, FRM, DNSE, NO FLUOR, SL/TRS PYR, NO CUT, NO RING

SURVEY: 4898' MD 4737.83'TVD
INC. 60.20 / AZ. 6.96
VERTICAL SECTION / 262.15

SH: LT-MED GRY, SME RED, BLK, SLTY TXT, SPLIN, LS: OFF WHT-WHT, CRM, BLKY, MICRO-XLN, FRM, DNSE, NO FLUOR, NO CUT, NO RING

SURVEY: 4930' MD 4753.09'TVD
INC. 62.83 / AZ. 6.78
VERTICAL SECTION / 290.19

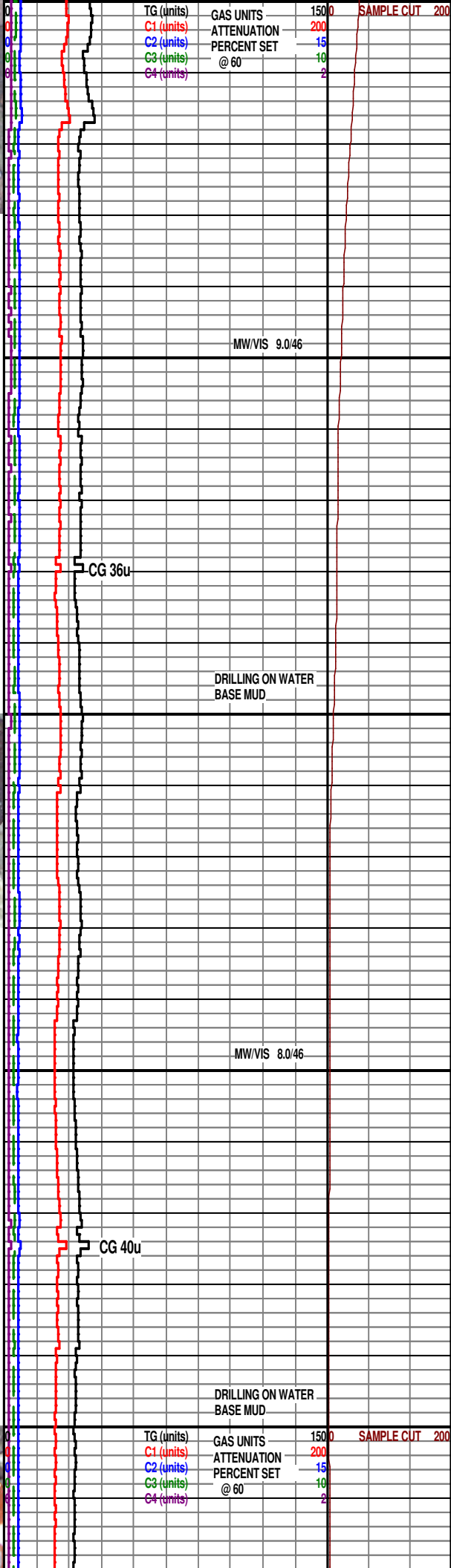
SH: LT-MED GRY, SME RED, BLK, SLTY TXT, SPLIN, TRS LS: OFF WHT-WHT, CRM, BLKY, MICRO-XLN, FRM, DNSE, NO FLUOR, NO CUT, NO RING

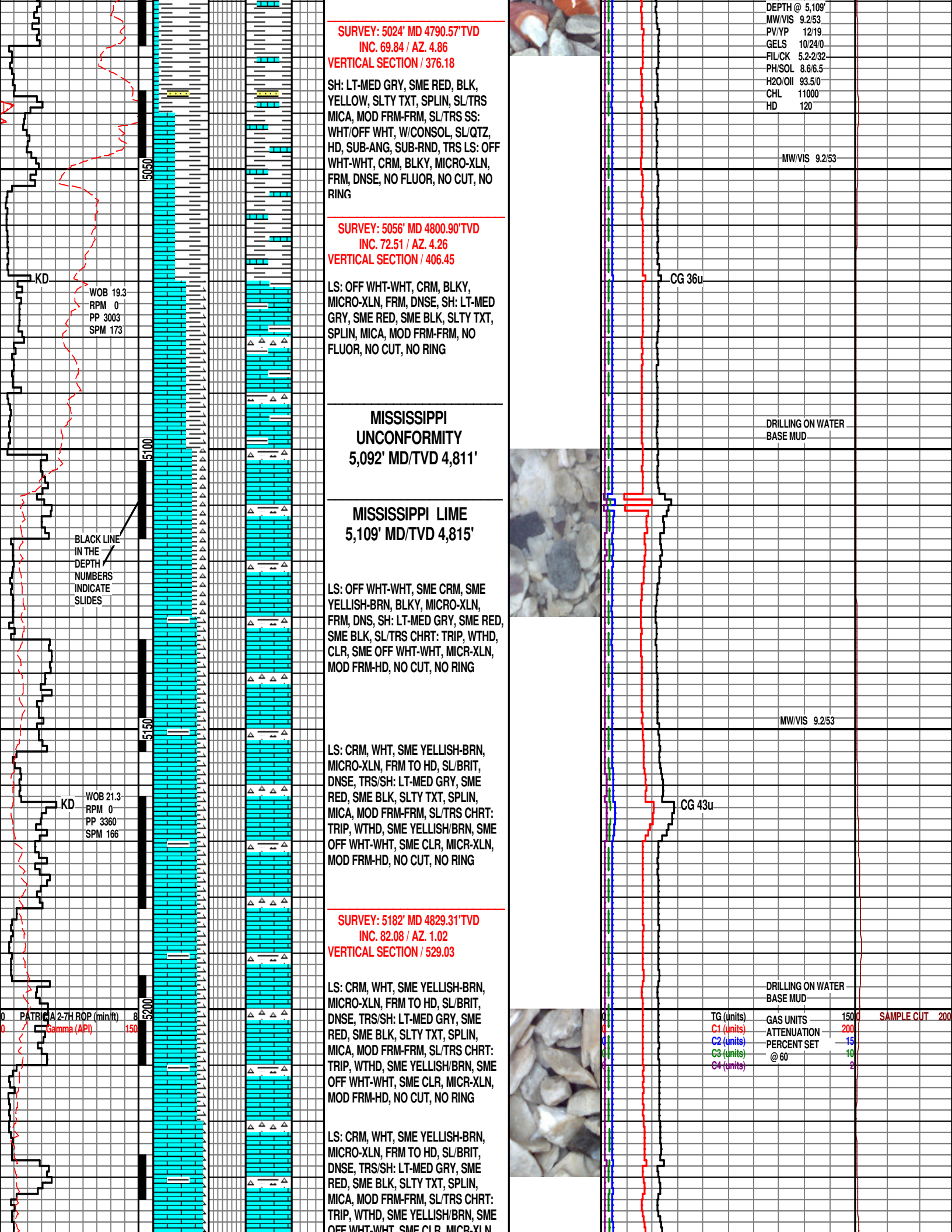
SURVEY: 4961' MD 4766.64'TVD
INC. 65.32 / AZ. 6.52
VERTICAL SECTION / 318.00

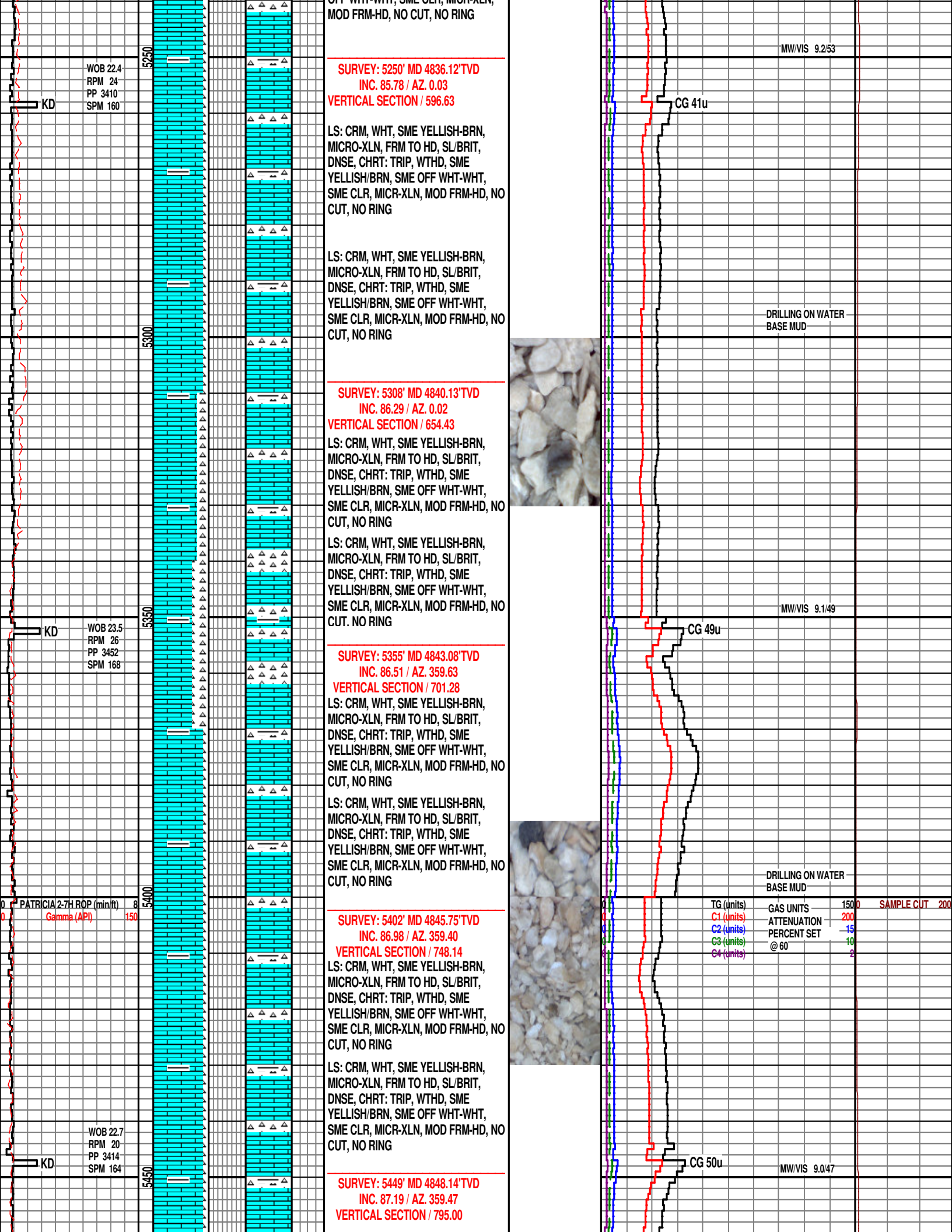
SH: LT-MED GRY, SME RED, BLK, SLTY TXT, SPLIN, SS: WHT/OFF WHT, W/CONSOL, SL/QTZ, HD, LS: OFF WHT-WHT, CRM, BLKY, MICRO-XLN, FRM, DNSE, NO FLUOR, NO CUT, NO RING

SURVEY: 4993' MD 4779.37'TVD
INC. 67.79 / AZ. 5.68
VERTICAL SECTION / 347.31

SH: LT-MED GRY, SME RED, BLK, SLTY TXT, SPLIN, SS: WHT/OFF WHT, W/CONSOL, SL/QTZ, HD, LS: OFF WHT-WHT, CRM, BLKY, MICRO-XLN, FRM, DNSE, NO FLUOR, NO CUT, NO RING




SURVEY: 5024' MD 4790.57'TVD
INC. 69.84 / AZ. 4.86
VERTICAL SECTION / 376.18
SH: LT-MED GRY, SME RED, BLK, YELLOW, SLTY TXT, SPLIN, SL/TRS MICA, MOD FRM-FRM, SL/TRS SS: WHT/OFF WHT, W/CONSOL, SL/QTZ, HD, SUB-ANG, SUB-RND, TRS LS: OFF WHT-WHT, CRM, BLKY, MICRO-XLN, FRM, DNSE, NO FLUOR, NO CUT, NO RING
SURVEY: 5056' MD 4800.90'TVD
INC. 72.51 / AZ. 4.26
VERTICAL SECTION / 406.45
LS: OFF WHT-WHT, CRM, BLKY, MICRO-XLN, FRM, DNSE, SH: LT-MED GRY, SME RED, SME BLK, SLTY TXT, SPLIN, MICA, MOD FRM-FRM, NO FLUOR, NO CUT, NO RING
MISSISSIPPI UNCONFORMITY
5,092' MD/TVD 4,811'
MISSISSIPPI LIME
5,109' MD/TVD 4,815'
LS: OFF WHT-WHT, SME CRM, SME YELLISH-BRN, BLKY, MICRO-XLN, FRM, DNS, SH: LT-MED GRY, SME RED, SME BLK, SL/TRS CHRT: TRIP, WTHD, CLR, SME OFF WHT-WHT, MICR-XLN, MOD FRM-HD, NO CUT, NO RING
LS: CRM, WHT, SME YELLISH-BRN, MICRO-XLN, FRM TO HD, SL/BRIT, DNSE, TRS/SH: LT-MED GRY, SME RED, SME BLK, SLTY TXT, SPLIN, MICA, MOD FRM-FRM, SL/TRS CHRT: TRIP, WTHD, SME YELLISH/BRN, SME OFF WHT-WHT, SME CLR, MICR-XLN, MOD FRM-HD, NO CUT, NO RING
SURVEY: 5182' MD 4829.31'TVD
INC. 82.08 / AZ. 1.02
VERTICAL SECTION / 529.03
LS: CRM, WHT, SME YELLISH-BRN, MICRO-XLN, FRM TO HD, SL/BRIT, DNSE, TRS/SH: LT-MED GRY, SME RED, SME BLK, SLTY TXT, SPLIN, MICA, MOD FRM-FRM, SL/TRS CHRT: TRIP, WTHD, SME YELLISH/BRN, SME OFF WHT-WHT, SME CLR, MICR-XLN, MOD FRM-HD, NO CUT, NO RING
LS: CRM, WHT, SME YELLISH-BRN, MICRO-XLN, FRM TO HD, SL/BRIT, DNSE, TRS/SH: LT-MED GRY, SME RED, SME BLK, SLTY TXT, SPLIN, MICA, MOD FRM-FRM, SL/TRS CHRT: TRIP, WTHD, SME YELLISH/BRN, SME OFF WHT-WHT, SME CLR, MICR-XLN,
DEPTH @ 5,109'
MW/VIS 9.2/53
PV/YP 12/19
GELS 10/24/0
FIL/CK 5.2-2/32
PH/SOL 8.6/6.5
H2O/OIl 93.5/0
CHL 11000
HD 120
MW/VIS 9.2/53
DRILLING ON WATER BASE MUD
MW/VIS 9.2/53
DRILLING ON WATER BASE MUD
5050
5100
5150
5200
KD
WOB 19.3
RPM 0
PP 3003
SPM 173
KD
WOB 21.3
RPM 0
PP 3360
SPM 166
BLACK LINE IN THE DEPTH NUMBERS INDICATE SLIDES
CG 36u
CG 43u
PATRICA 2-7H ROP (min/ft) 8
Gamma (API) 150
TG (units)
C1 (units)
C2 (units)
C3 (units)
C4 (units)
GAS UNITS 150
ATTENUATION 200
PERCENT SET 15
@ 60 10
2
SAMPLE CUT 200


OFF WHT-WHT, SME CLR, MICR-XLN, MOD FRM-HD, NO CUT, NO RING
MW/VIS 9.2/53
5250
WOB 22.4
RPM 24
PP 3410
SPM 160
KD
CG 41u
SURVEY: 5250' MD 4836.12'TVD
INC. 85.78 / AZ. 0.03
VERTICAL SECTION / 596.63
LS: CRM, WHT, SME YELLISH-BRN, MICRO-XLN, FRM TO HD, SL/BRIT, DNSE, CHRT: TRIP, WTHD, SME YELLISH/BRN, SME OFF WHT-WHT, SME CLR, MICR-XLN, MOD FRM-HD, NO CUT, NO RING
LS: CRM, WHT, SME YELLISH-BRN, MICRO-XLN, FRM TO HD, SL/BRIT, DNSE, CHRT: TRIP, WTHD, SME YELLISH/BRN, SME OFF WHT-WHT, SME CLR, MICR-XLN, MOD FRM-HD, NO CUT, NO RING
DRILLING ON WATER BASE MUD
5300
SURVEY: 5308' MD 4840.13'TVD
INC. 86.29 / AZ. 0.02
VERTICAL SECTION / 654.43
LS: CRM, WHT, SME YELLISH-BRN, MICRO-XLN, FRM TO HD, SL/BRIT, DNSE, CHRT: TRIP, WTHD, SME YELLISH/BRN, SME OFF WHT-WHT, SME CLR, MICR-XLN, MOD FRM-HD, NO CUT, NO RING
LS: CRM, WHT, SME YELLISH-BRN, MICRO-XLN, FRM TO HD, SL/BRIT, DNSE, CHRT: TRIP, WTHD, SME YELLISH/BRN, SME OFF WHT-WHT, SME CLR, MICR-XLN, MOD FRM-HD, NO CUT. NO RING
MW/VIS 9.1/49
5350
KD
WOB 23.5
RPM 26
PP 3452
SPM 168
CG 49u
SURVEY: 5355' MD 4843.08'TVD
INC. 86.51 / AZ. 359.63
VERTICAL SECTION / 701.28
LS: CRM, WHT, SME YELLISH-BRN, MICRO-XLN, FRM TO HD, SL/BRIT, DNSE, CHRT: TRIP, WTHD, SME YELLISH/BRN, SME OFF WHT-WHT, SME CLR, MICR-XLN, MOD FRM-HD, NO CUT, NO RING
LS: CRM, WHT, SME YELLISH-BRN, MICRO-XLN, FRM TO HD, SL/BRIT, DNSE, CHRT: TRIP, WTHD, SME YELLISH/BRN, SME OFF WHT-WHT, SME CLR, MICR-XLN, MOD FRM-HD, NO CUT, NO RING
DRILLING ON WATER BASE MUD
5400
PATRICIA 2-7H ROP (min/ft) 8
Gamma (API) 150
TG (units)
C1 (units)
C2 (units)
C3 (units)
C4 (units)
GAS UNITS 1500
ATTENUATION 200
PERCENT SET 15
@ 60 10
2
SAMPLE CUT 200
SURVEY: 5402' MD 4845.75'TVD
INC. 86.98 / AZ. 359.40
VERTICAL SECTION / 748.14
LS: CRM, WHT, SME YELLISH-BRN, MICRO-XLN, FRM TO HD, SL/BRIT, DNSE, CHRT: TRIP, WTHD, SME YELLISH/BRN, SME OFF WHT-WHT, SME CLR, MICR-XLN, MOD FRM-HD, NO CUT, NO RING
LS: CRM, WHT, SME YELLISH-BRN, MICRO-XLN, FRM TO HD, SL/BRIT, DNSE, CHRT: TRIP, WTHD, SME YELLISH/BRN, SME OFF WHT-WHT, SME CLR, MICR-XLN, MOD FRM-HD, NO CUT, NO RING
WOB 22.7
RPM 20
PP 3414
SPM 164
KD
CG 50u
MW/VIS 9.0/47
5450
SURVEY: 5449' MD 4848.14'TVD
INC. 87.19 / AZ. 359.47
VERTICAL SECTION / 795.00

LS: CRM, WHT, SME YELLISH-BRN, MICRO-XLN, FRM TO HD, SL/BRIT, DNSE, CHRT: TRIP, WTHD, SME YELLISH/BRN, SME OFF WHT-WHT, SME CLR, MICR-XLN, MOD FRM-HD, NO CUT, NO RING

LS: CRM, WHT, SME YELLISH-BRN, MICRO-XLN, FRM TO HD, SL/BRIT, DNSE, CHRT: TRIP, WTHD, SME YELLISH/BRN, SME OFF WHT-WHT, SME CLR, MICR-XLN, MOD FRM-HD, NO CUT. NO RING

DRILLING ON WATER BASE MUD

5500

SURVEY: 5497' MD 4850.18'TVD
INC. 87.94 / AZ. 359.02
VERTICAL SECTION / 842.87

LS: CRM, WHT, SME YELLISH-BRN, MICRO-XLN, FRM TO HD, SL/BRIT, DNSE, CHRT: TRIP, WTHD, SME YELLISH/BRN, SME OFF WHT-WHT, SME CLR, MICR-XLN, MOD FRM-HD, NO CUT, NO RING

LS: CRM, WHT, SME YELLISH-BRN, MICRO-XLN, FRM TO HD, SL/BRIT, DNSE, CHRT: TRIP, WTHD, SME YELLISH/BRN, SME OFF WHT-WHT, SME CLR, MICR-XLN, MOD FRM-HD, NO CUT, NO RING

DEPTH @ 5,593'
MW/VIS 9.5/51
PV/YP 13/18
GELS 9/19/0
FIL/CK 5.0-2/32
PH/SOL 9.6/5.0
H2O/Oil 95.0/0
CHL 11000
HD 120

KD

WOB 19.3
RPM 24
PP 3303
SPM 180

CG 49u

5550

SURVEY: 5548' MD 4851.81'TVD
INC. 88.40 / AZ. 359.04
VERTICAL SECTION / 893.75

LS: CRM, WHT, SME YELLISH-BRN, MICRO-XLN, FRM TO HD, SL/BRIT, DNSE, CHRT: TRIP, WTHD, SME YELLISH/BRN, SME OFF WHT-WHT, SME CLR, MICR-XLN, MOD FRM-HD, NO CUT, NO RING

LS: CRM, WHT, SME YELLISH-BRN, MICRO-XLN, FRM TO HD, SL/BRIT, DNSE, CHRT: TRIP, WTHD, SME YELLISH/BRN, SME OFF WHT-WHT, SME CLR, MICR-XLN, MOD FRM-HD, NO CUT, NO RING

MW/VIS 9.5/51

OLD BIT # 3 TYPE - HUGHES- VGD-R26DX - SIZE = 8.75", JETS - 3 X 18's, SN# - 5217072 DEPTH IN @ 3,296' DEPTH OUT 5,593' Drilled 2297' in 44.0 hrs. AVG. ROP = 52.20 ft/ph.

PUMPED 3 40 BBL HIGH VIS SWEEP, CIRCULATE SWEEP OUT WORKING PIPE EVERY 10 MINUTES

CIRCULATE & CONDITION MUD TO T.O.H. @ 5,593 ft.

FORMATION TRIP GAS 67u MAX @ 5,593'

T.D. FOR CASING @ 5,593' on the 08/30/2013 @ 00:05 hrs.

5600

0 PATRICIA 2-7H ROP (min/ft) 8
0 Gamma (API) 150

P.O.O.H. @ 5,593' FOR INTERMEDIATE CASING

DRILLING ON WATER BASE MUD

SURVEY: 5597' MD 4852.89'TVD
INC. 89.07 / AZ. 359.63
VERTICAL SECTION / 942.65

LS: CRM, WHT, SME YELLISH-BRN, MICRO-XLN, FRM TO HD, SL/BRIT, DNSE, CHRT: TRIP, WTHD, SME OFF WHT-WHT, SME CLR, MICR-XLN, MOD FRM-HD, YELLISH FLUOR, NO CUT, NO RING

LS: CRM, WHT, SME YELLISH-BRN, MICRO-XLN, FRM TO HD, SL/BRIT, DNSE, CHRT: TRIP, WTHD, SME OFF WHT-WHT, SME CLR, MICR-XLN, MOD FRM-HD, YELLISH FLUOR, NO CUT, NO RING

TG (units) 0
C1 (units) 0
C2 (units) 0
C3 (units) 0
C4 (units) 0

GAS UNITS 1500
ATTENUATION 200
PERCENT SET 15
@ 60 10
2

SAMPLE CUT 200

NEW BIT # 4 TYPE - HUGHES- DPD506X SIZE = 8 3/4", JETS - 6 X 16's, SN# - 7146467 DEPTH IN @ 3,615' DEPTH OUT @ 5,593'

PUMP SWEEP @ 5,610'

PUMP SWEEP @ 5,636'

KD

WOB 11.2
RPM 45
PP 1344
SPM 86

CG 39u

MW/VIS 8.9/48

5650

LS: CRM, WHT, SME YELLISH-BRN, MICRO-XLN, FRM TO HD, SL/BRIT, DNSE, CHRT: TRIP, WTHD, SME OFF WHT-WHT, SME CLR, MICR-XLN, MOD FRM-HD, YELLISH FLUOR, NO CUT, NO RING

NEW BIT # 5 TYPE - HUGHES- TD405XX SIZE = 6 1/8", JETS - 5 X 12's, SN# - 7145281 DEPTH IN @ 5,593' DEPTH OUT @ 6,057'

LS: CRM, WHT, SME YELLISH-BRN, MICRO-XLN, FRM TO HD, SL/BRIT, DNSE, CHRT: TRIP, WTHD, SME OFF WHT-WHT, SME CLR, MICR-XLN, MOD

FRM-HD, YELLISH FLUOR, NO CUT, NO RING

SURVEY: 5690' MD 4854.47'TVD
INC. 88.98 / AZ. 0.14
VERTICAL SECTION / 1035.53

LS: CRM, WHT, SME YELLISH-BRN, MICRO-XLN, FRM TO HD, SL/BRIT, DNSE, CHRT: TRIP, WTHD, SME OFF WHT-WHT, SME CLR, MICR-XLN, MOD FRM-HD, YELLISH FLUOR, NO CUT, NO RING

LS: CRM, WHT, SME YELLISH-BRN, MICRO-XLN, FRM TO HD, SL/BRIT, DNSE, CHRT: TRIP, WTHD, SME OFF WHT-WHT, SME CLR, MICR-XLN, MOD FRM-HD, YELLISH FLUOR, NO CUT, NO RING

LS: CRM, WHT, SME YELLISH-BRN, MICRO-XLN, FRM TO HD, SL/BRIT, DNSE, CHRT: TRIP, WTHD, SME OFF WHT-WHT, SME CLR, MICR-XLN, MOD FRM-HD, YELLISH FLUOR, NO CUT, FAINT BLU-GNSH RING

LS: CRM, WHT, SME YELLISH-BRN, MICRO-XLN, FRM TO HD, SL/BRIT, DNSE, CHRT: TRIP, WTHD, SME OFF WHT-WHT, SME CLR, MICR-XLN, MOD FRM-HD, YELLISH FLUOR, NO CUT, FAINT BLU-GNSH RING

SURVEY: 5785' MD 4855.65'TVD
INC. 89.60 / AZ. 0.19
VERTICAL SECTION / 1130.43

LS: CRM, WHT, SME YELLISH-BRN, MICRO-XLN, FRM TO HD, SL/BRIT, DNSE, CHRT: TRIP, WTHD, SME OFF WHT-WHT, SME CLR, MICR-XLN, MOD FRM-HD, YELLISH FLUOR, NO CUT, FAINT BLU-GNSH RING

LS: CRM, WHT, SME YELLISH-BRN, MICRO-XLN, FRM TO HD, SL/BRIT, DNSE, CHRT: TRIP, WTHD, SME OFF WHT-WHT, SME CLR, MICR-XLN, MOD FRM-HD, YELLISH FLUOR, NO CUT, FAINT BLU-GNSH RING

LS: CRM, WHT, SME YELLISH-BRN, MICRO-XLN, FRM TO HD, SL/BRIT, DNSE, CHRT: TRIP, WTHD, SME OFF WHT-WHT, SME CLR, MICR-XLN, MOD FRM-HD, YELLISH FLUOR, NO CUT, FAINT BLU-GNSH RING

LS: CRM, WHT, SME YELLISH-BRN, MICRO-XLN, FRM TO HD, SL/BRIT, DNSE, CHRT: TRIP, WTHD, SME OFF WHT-WHT, SME CLR, MICR-XLN, MOD FRM-HD, YELLISH FLUOR, NO CUT, FAINT BLU-GNSH RING

SURVEY: 5880' MD 4856.41'TVD
INC. 89.48 / AZ. 0.22
VERTICAL SECTION / 1225.35

LS: CRM, WHT, SME YELLISH-BRN, MICRO-XLN, FRM TO HD, SL/BRIT, DNSE, CHRT: TRIP, WTHD, SME OFF WHT-WHT, SME CLR, MICR-XLN, MOD

5700
5750
5800
5850

PUMP SWEEP @ 5,735'

KD
WOB 12.3
RPM 44
PP 1435
SPM 85

KD
WOB 16.9
RPM 43
PP 1424
SPM 85

PATRICIA 2-7H ROP (min/ft) 8
Gamma (API) 150

DRILLING ON WATER BASE MUD

CG 41u

MW/VIS 8.6/34

DRILLING ON WATER BASE MUD

TG (units)
C1 (units)
C2 (units)
C3 (units)
C4 (units)

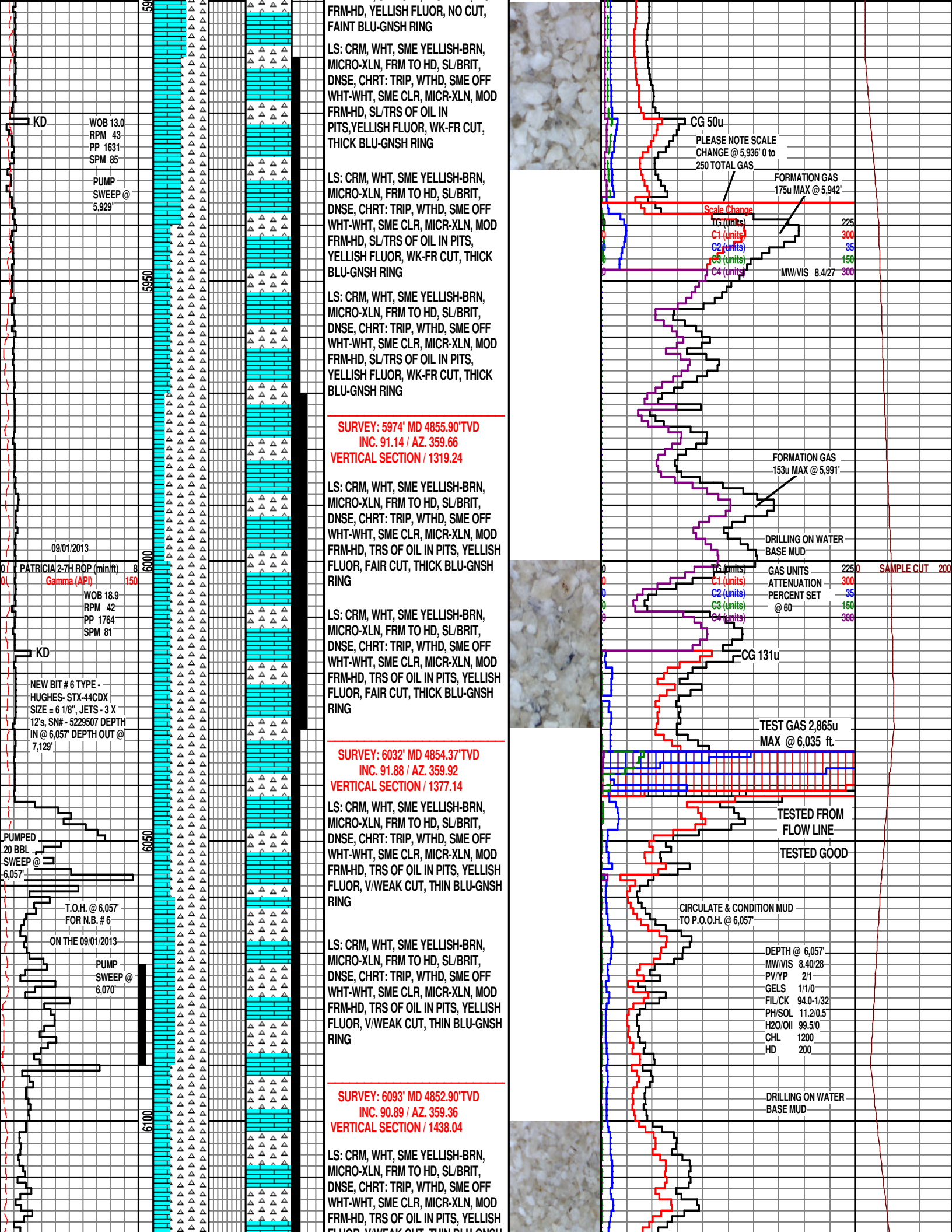
GAS UNITS 1500
ATTENUATION 200
PERCENT SET 15
@ 60 10
2

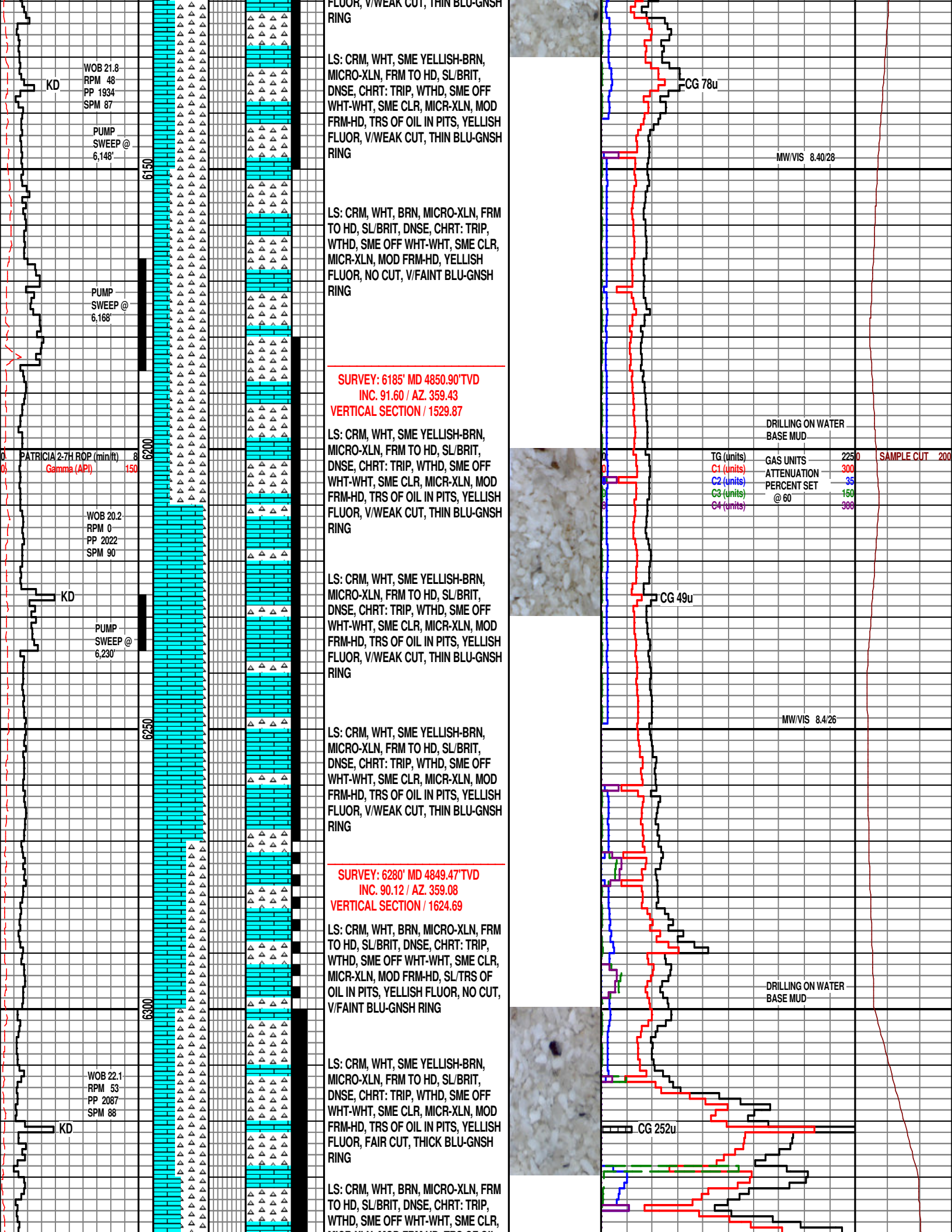
SAMPLE CUT 200

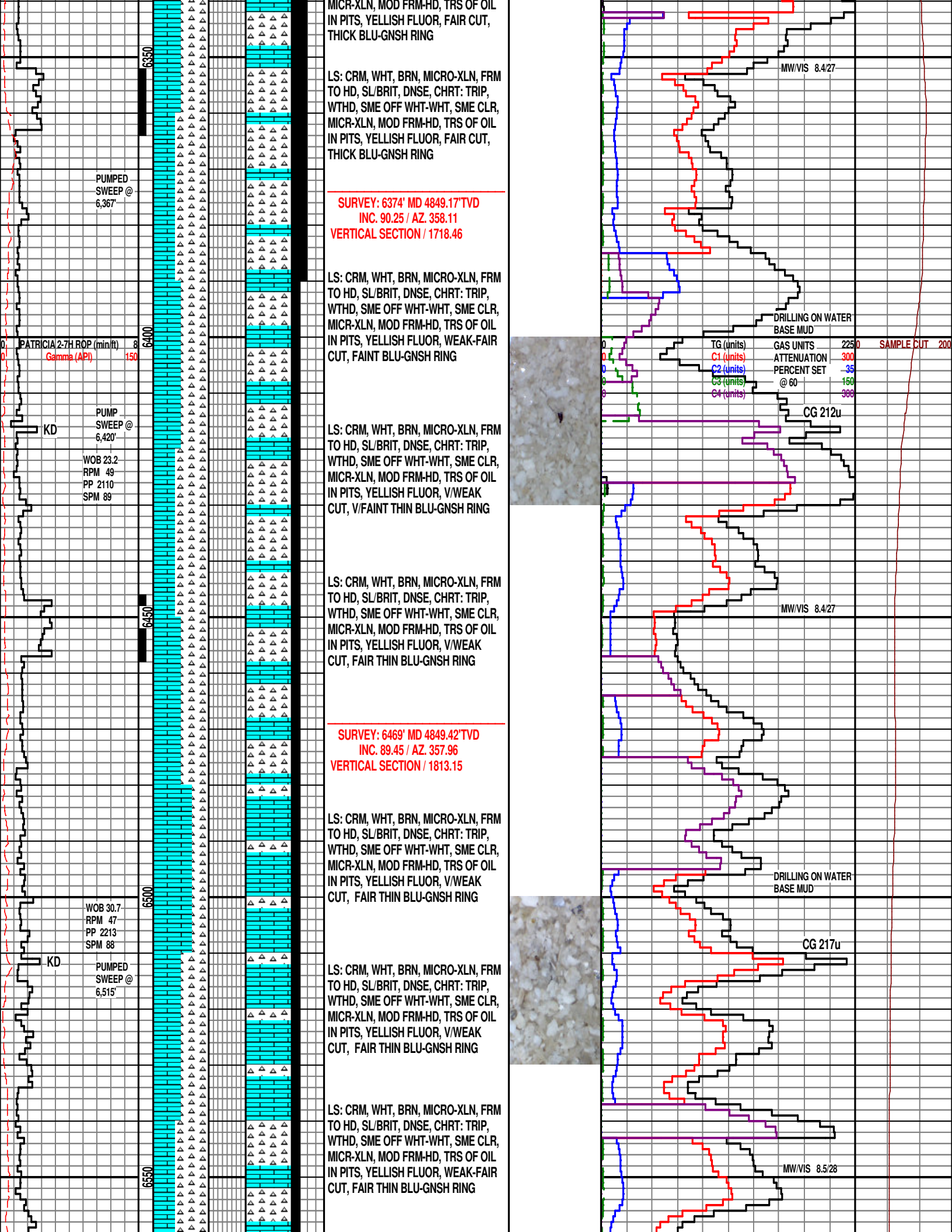
CG 41u

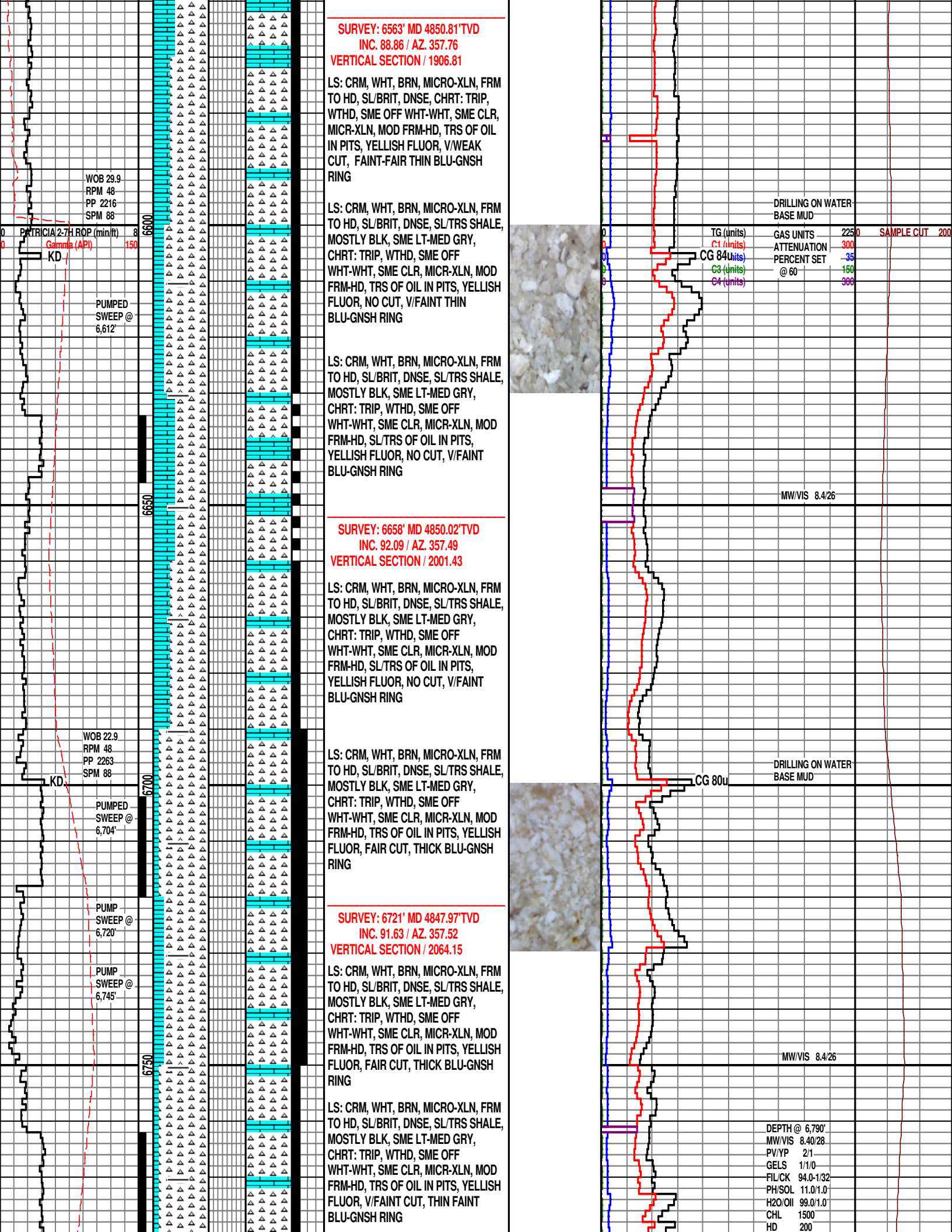
MW/VIS 8.4/27

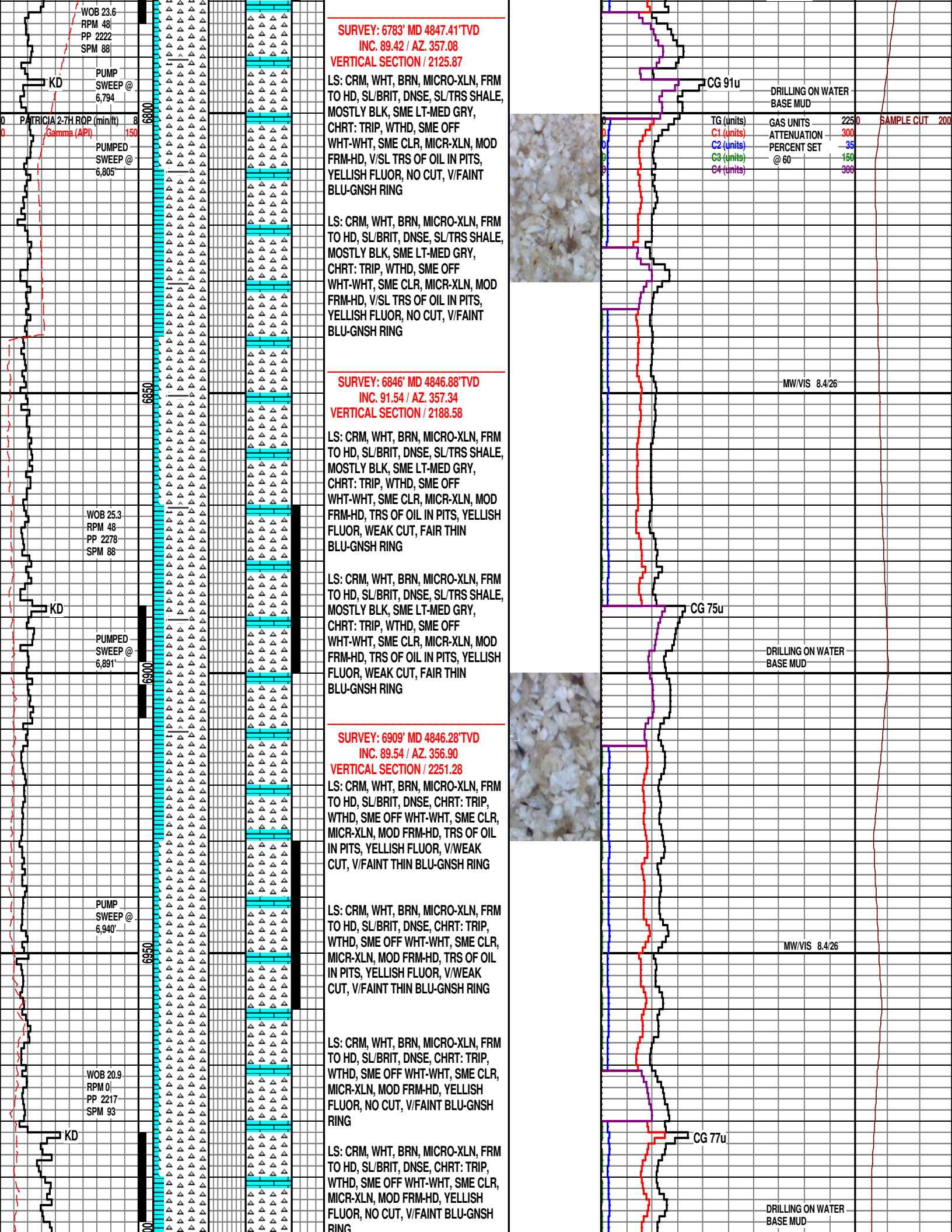
DRILLING ON WATER BASE MUD

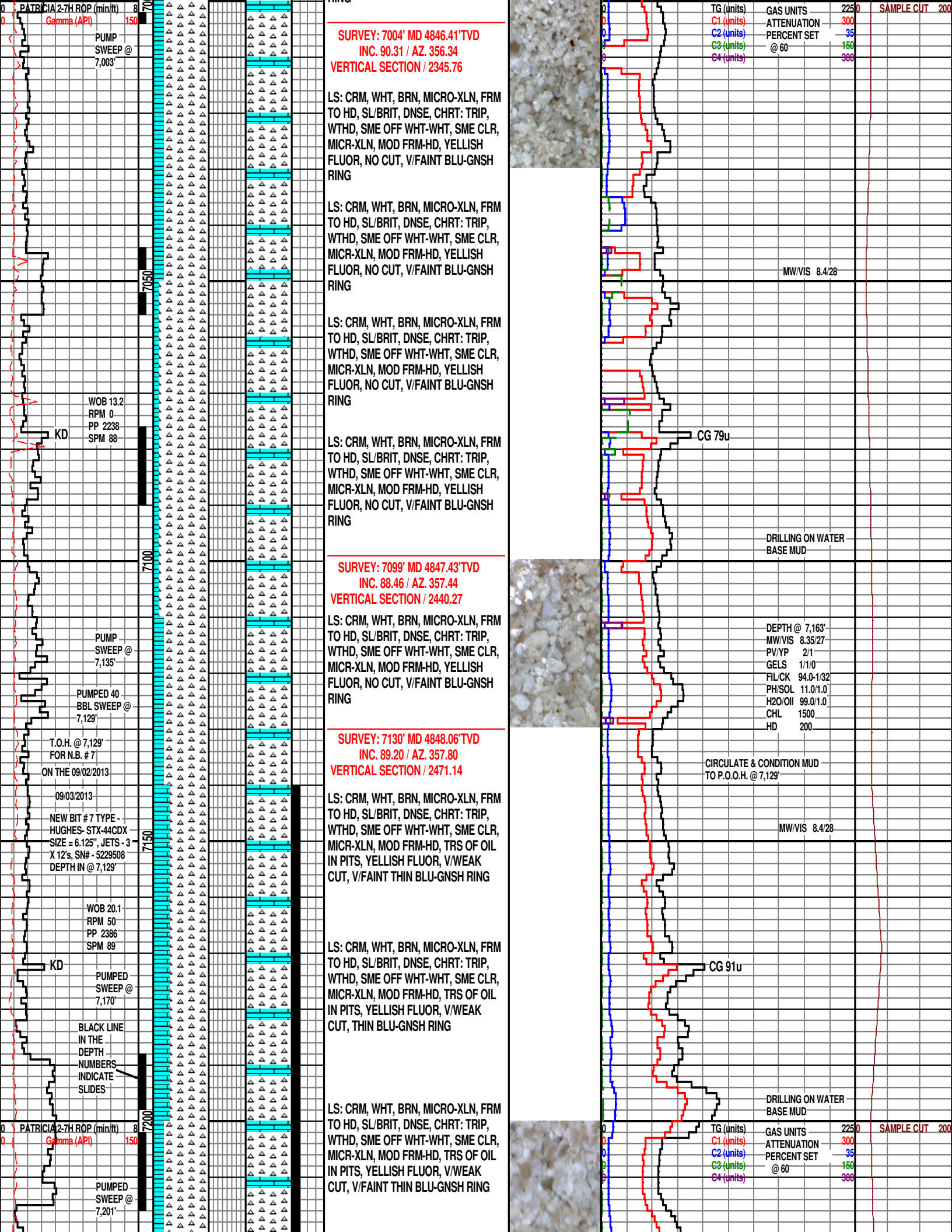

KD
WOB 13.0
RPM 43
PP 1631
SPM 85
PUMP SWEEP @ 5,929'
09/01/2013
PATRICIA 2-7H ROP (min/ft)
Gamma (API)
WOB 18.9
RPM 42
PP 1764
SPM 81
KD
NEW BIT # 6 TYPE - HUGHES- STX-44CDX SIZE = 6 1/8", JETS - 3 X 12's, SN# - 5229507 DEPTH IN @ 6,057' DEPTH OUT @ 7,129'
PUMPED 20 BBL SWEEP @ 6,057'
T.O.H. @ 6,057' FOR N.B. # 6
ON THE 09/01/2013
PUMP SWEEP @ 6,070'
5950
6000
6050
6100
FRM-HD, YELLISH FLUOR, NO CUT, FAINT BLU-GNSH RING
LS: CRM, WHT, SME YELLISH-BRN, MICRO-XLN, FRM TO HD, SL/BRIT, DNSE, CHRT: TRIP, WTHD, SME OFF WHT-WHT, SME CLR, MICR-XLN, MOD FRM-HD, SL/TRS OF OIL IN PITS,YELLISH FLUOR, WK-FR CUT, THICK BLU-GNSH RING
LS: CRM, WHT, SME YELLISH-BRN, MICRO-XLN, FRM TO HD, SL/BRIT, DNSE, CHRT: TRIP, WTHD, SME OFF WHT-WHT, SME CLR, MICR-XLN, MOD FRM-HD, SL/TRS OF OIL IN PITS, YELLISH FLUOR, WK-FR CUT, THICK BLU-GNSH RING
LS: CRM, WHT, SME YELLISH-BRN, MICRO-XLN, FRM TO HD, SL/BRIT, DNSE, CHRT: TRIP, WTHD, SME OFF WHT-WHT, SME CLR, MICR-XLN, MOD FRM-HD, SL/TRS OF OIL IN PITS, YELLISH FLUOR, WK-FR CUT, THICK BLU-GNSH RING
SURVEY: 5974' MD 4855.90'TVD
INC. 91.14 / AZ. 359.66
VERTICAL SECTION / 1319.24
LS: CRM, WHT, SME YELLISH-BRN, MICRO-XLN, FRM TO HD, SL/BRIT, DNSE, CHRT: TRIP, WTHD, SME OFF WHT-WHT, SME CLR, MICR-XLN, MOD FRM-HD, TRS OF OIL IN PITS, YELLISH FLUOR, FAIR CUT, THICK BLU-GNSH RING
LS: CRM, WHT, SME YELLISH-BRN, MICRO-XLN, FRM TO HD, SL/BRIT, DNSE, CHRT: TRIP, WTHD, SME OFF WHT-WHT, SME CLR, MICR-XLN, MOD FRM-HD, TRS OF OIL IN PITS, YELLISH FLUOR, FAIR CUT, THICK BLU-GNSH RING
SURVEY: 6032' MD 4854.37'TVD
INC. 91.88 / AZ. 359.92
VERTICAL SECTION / 1377.14
LS: CRM, WHT, SME YELLISH-BRN, MICRO-XLN, FRM TO HD, SL/BRIT, DNSE, CHRT: TRIP, WTHD, SME OFF WHT-WHT, SME CLR, MICR-XLN, MOD FRM-HD, TRS OF OIL IN PITS, YELLISH FLUOR, V/WEAK CUT, THIN BLU-GNSH RING
LS: CRM, WHT, SME YELLISH-BRN, MICRO-XLN, FRM TO HD, SL/BRIT, DNSE, CHRT: TRIP, WTHD, SME OFF WHT-WHT, SME CLR, MICR-XLN, MOD FRM-HD, TRS OF OIL IN PITS, YELLISH FLUOR, V/WEAK CUT, THIN BLU-GNSH RING
SURVEY: 6093' MD 4852.90'TVD
INC. 90.89 / AZ. 359.36
VERTICAL SECTION / 1438.04
LS: CRM, WHT, SME YELLISH-BRN, MICRO-XLN, FRM TO HD, SL/BRIT, DNSE, CHRT: TRIP, WTHD, SME OFF WHT-WHT, SME CLR, MICR-XLN, MOD FRM-HD, TRS OF OIL IN PITS, YELLISH
CG 50u
PLEASE NOTE SCALE CHANGE @ 5,936' 0 to 250 TOTAL GAS
FORMATION GAS 175u MAX @ 5,942'
Scale Change
TG (units) 225
C1 (units) 300
C2 (units) 35
C3 (units) 150
C4 (units) 300
MW/VIS 8.4/27
FORMATION GAS 153u MAX @ 5,991'
DRILLING ON WATER BASE MUD
GAS UNITS 225
ATTENUATION 300
PERCENT SET @ 60 35
150
300
SAMPLE CUT 200
CG 131u
TEST GAS 2,865u MAX @ 6,035 ft.
TESTED FROM FLOW LINE
TESTED GOOD
CIRCULATE & CONDITION MUD TO P.O.O.H. @ 6,057'
DEPTH @ 6,057'
MW/VIS 8.40/28
PV/YP 2/1
GELS 1/1/0
FIL/CK 94.0-1/32
PH/SOL 11.2/0.5
H2O/OIl 99.5/0
CHL 1200
HD 200
DRILLING ON WATER BASE MUD

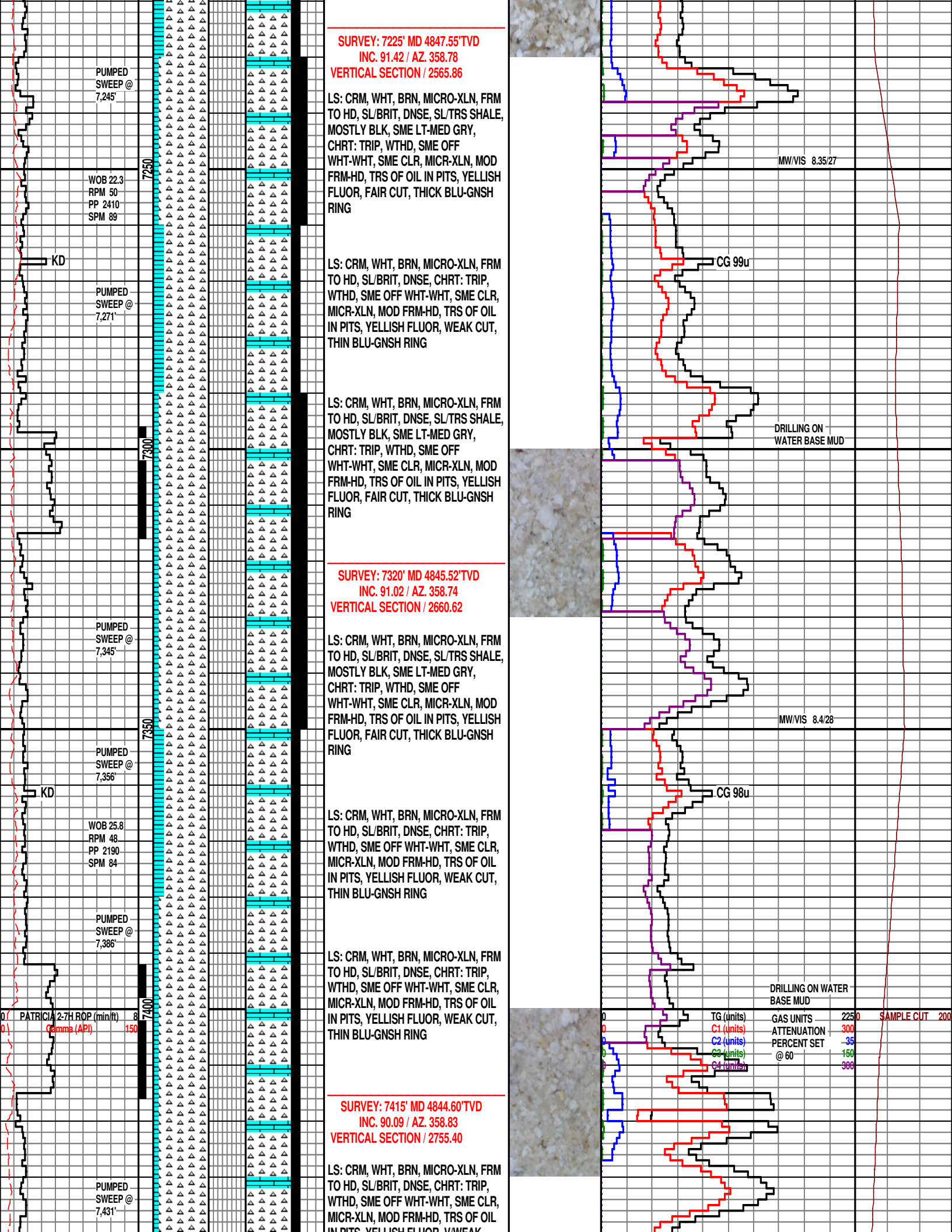

FLUOR, V/WEAK CUT, THIN BLU-GNSH RING
LS: CRM, WHT, SME YELLISH-BRN, MICRO-XLN, FRM TO HD, SL/BRIT, DNSE, CHRT: TRIP, WTHD, SME OFF WHT-WHT, SME CLR, MICR-XLN, MOD FRM-HD, TRS OF OIL IN PITS, YELLISH FLUOR, V/WEAK CUT, THIN BLU-GNSH RING
WOB 21.8
RPM 48
PP 1934
SPM 87
KD
PUMP SWEEP @ 6,148'
CG 78u
MW/VIS 8.40/28
6150
LS: CRM, WHT, BRN, MICRO-XLN, FRM TO HD, SL/BRIT, DNSE, CHRT: TRIP, WTHD, SME OFF WHT-WHT, SME CLR, MICR-XLN, MOD FRM-HD, YELLISH FLUOR, NO CUT, V/FAINT BLU-GNSH RING
PUMP SWEEP @ 6,168'
SURVEY: 6185' MD 4850.90'TVD
INC. 91.60 / AZ. 359.43
VERTICAL SECTION / 1529.87
DRILLING ON WATER BASE MUD
6200
PATRICIA 2-7H ROP (min/ft) 8
Gamma (API) 150
TG (units)
C1 (units)
C2 (units)
C3 (units)
C4 (units)
GAS UNITS 225
ATTENUATION 300
PERCENT SET 35
@ 60 150
300
SAMPLE CUT 200
LS: CRM, WHT, SME YELLISH-BRN, MICRO-XLN, FRM TO HD, SL/BRIT, DNSE, CHRT: TRIP, WTHD, SME OFF WHT-WHT, SME CLR, MICR-XLN, MOD FRM-HD, TRS OF OIL IN PITS, YELLISH FLUOR, V/WEAK CUT, THIN BLU-GNSH RING
WOB 20.2
RPM 0
PP 2022
SPM 90
KD
CG 49u
PUMP SWEEP @ 6,230'
LS: CRM, WHT, SME YELLISH-BRN, MICRO-XLN, FRM TO HD, SL/BRIT, DNSE, CHRT: TRIP, WTHD, SME OFF WHT-WHT, SME CLR, MICR-XLN, MOD FRM-HD, TRS OF OIL IN PITS, YELLISH FLUOR, V/WEAK CUT, THIN BLU-GNSH RING
MW/VIS 8.4/26
6250
LS: CRM, WHT, SME YELLISH-BRN, MICRO-XLN, FRM TO HD, SL/BRIT, DNSE, CHRT: TRIP, WTHD, SME OFF WHT-WHT, SME CLR, MICR-XLN, MOD FRM-HD, TRS OF OIL IN PITS, YELLISH FLUOR, V/WEAK CUT, THIN BLU-GNSH RING
SURVEY: 6280' MD 4849.47'TVD
INC. 90.12 / AZ. 359.08
VERTICAL SECTION / 1624.69
LS: CRM, WHT, BRN, MICRO-XLN, FRM TO HD, SL/BRIT, DNSE, CHRT: TRIP, WTHD, SME OFF WHT-WHT, SME CLR, MICR-XLN, MOD FRM-HD, SL/TRS OF OIL IN PITS, YELLISH FLUOR, NO CUT, V/FAINT BLU-GNSH RING
DRILLING ON WATER BASE MUD
6300
LS: CRM, WHT, SME YELLISH-BRN, MICRO-XLN, FRM TO HD, SL/BRIT, DNSE, CHRT: TRIP, WTHD, SME OFF WHT-WHT, SME CLR, MICR-XLN, MOD FRM-HD, TRS OF OIL IN PITS, YELLISH FLUOR, FAIR CUT, THICK BLU-GNSH RING
WOB 22.1
RPM 53
PP 2087
SPM 88
KD
CG 252u
LS: CRM, WHT, BRN, MICRO-XLN, FRM TO HD, SL/BRIT, DNSE, CHRT: TRIP, WTHD, SME OFF WHT-WHT, SME CLR,

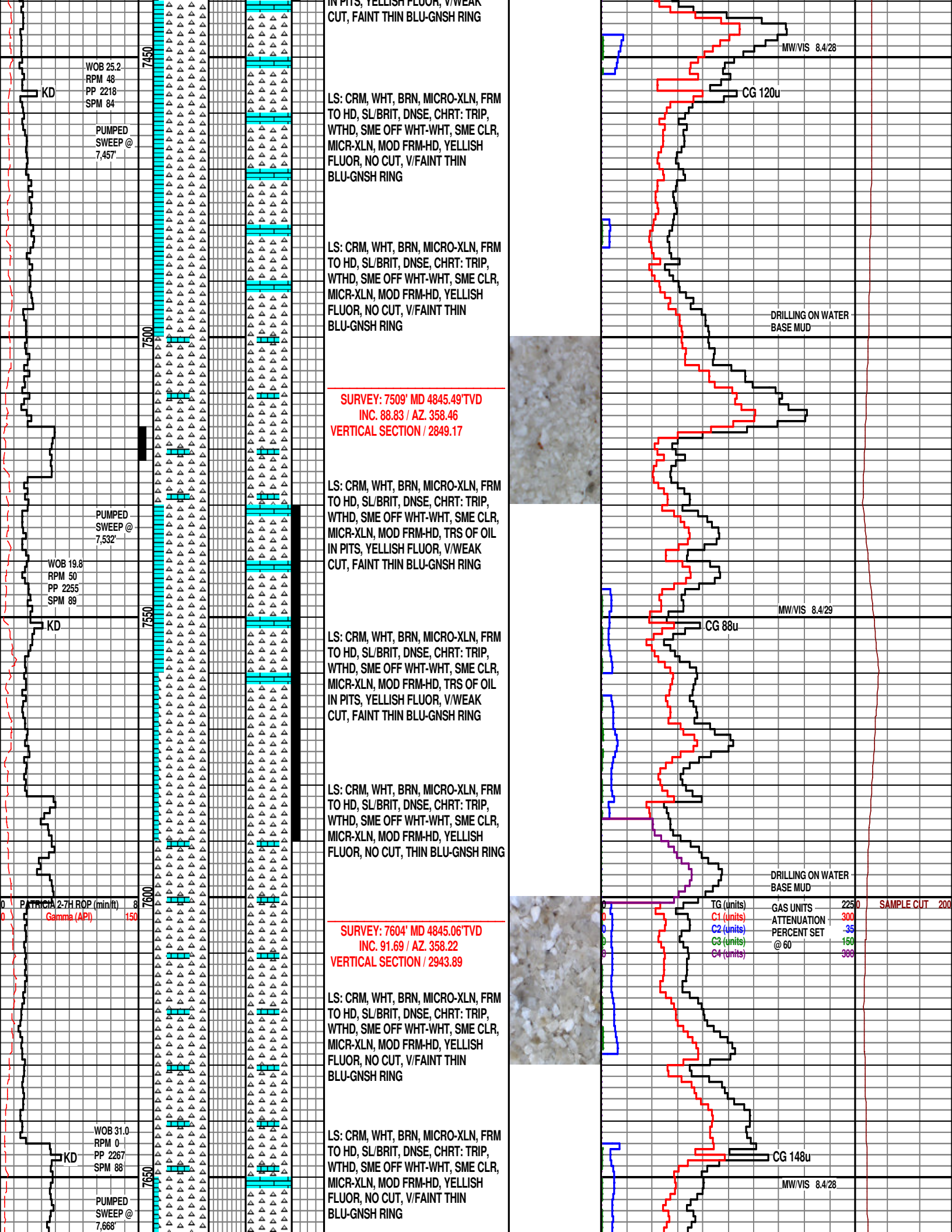

MICR-XLN, MOD FRM-HD, TRS OF OIL IN PITS, YELLISH FLUOR, FAIR CUT, THICK BLU-GNSH RING
6350
LS: CRM, WHT, BRN, MICRO-XLN, FRM TO HD, SL/BRIT, DNSE, CHRT: TRIP, WTHD, SME OFF WHT-WHT, SME CLR, MICR-XLN, MOD FRM-HD, TRS OF OIL IN PITS, YELLISH FLUOR, FAIR CUT, THICK BLU-GNSH RING
MW/VIS 8.4/27
PUMPED SWEEP @ 6,367'
SURVEY: 6374' MD 4849.17'TVD
INC. 90.25 / AZ. 358.11
VERTICAL SECTION / 1718.46
LS: CRM, WHT, BRN, MICRO-XLN, FRM TO HD, SL/BRIT, DNSE, CHRT: TRIP, WTHD, SME OFF WHT-WHT, SME CLR, MICR-XLN, MOD FRM-HD, TRS OF OIL IN PITS, YELLISH FLUOR, WEAK-FAIR CUT, FAINT BLU-GNSH RING
DRILLING ON WATER BASE MUD
6400
PATRICIA 2-7H ROP (min/ft) 8
Gamma (API) 150
TG (units)
C1 (units)
C2 (units)
C3 (units)
C4 (units)
GAS UNITS 2250
ATTENUATION 300
PERCENT SET 35
@ 60 150
300
SAMPLE CUT 200
CG 212u
KD
PUMP SWEEP @ 6,420'
WOB 23.2
RPM 49
PP 2110
SPM 89
LS: CRM, WHT, BRN, MICRO-XLN, FRM TO HD, SL/BRIT, DNSE, CHRT: TRIP, WTHD, SME OFF WHT-WHT, SME CLR, MICR-XLN, MOD FRM-HD, TRS OF OIL IN PITS, YELLISH FLUOR, V/WEAK CUT, V/FAINT THIN BLU-GNSH RING
LS: CRM, WHT, BRN, MICRO-XLN, FRM TO HD, SL/BRIT, DNSE, CHRT: TRIP, WTHD, SME OFF WHT-WHT, SME CLR, MICR-XLN, MOD FRM-HD, TRS OF OIL IN PITS, YELLISH FLUOR, V/WEAK CUT, FAIR THIN BLU-GNSH RING
MW/VIS 8.4/27
6450
SURVEY: 6469' MD 4849.42'TVD
INC. 89.45 / AZ. 357.96
VERTICAL SECTION / 1813.15
LS: CRM, WHT, BRN, MICRO-XLN, FRM TO HD, SL/BRIT, DNSE, CHRT: TRIP, WTHD, SME OFF WHT-WHT, SME CLR, MICR-XLN, MOD FRM-HD, TRS OF OIL IN PITS, YELLISH FLUOR, V/WEAK CUT, FAIR THIN BLU-GNSH RING
DRILLING ON WATER BASE MUD
6500
WOB 30.7
RPM 47
PP 2213
SPM 88
CG 217u
KD
PUMPED SWEEP @ 6,515'
LS: CRM, WHT, BRN, MICRO-XLN, FRM TO HD, SL/BRIT, DNSE, CHRT: TRIP, WTHD, SME OFF WHT-WHT, SME CLR, MICR-XLN, MOD FRM-HD, TRS OF OIL IN PITS, YELLISH FLUOR, V/WEAK CUT, FAIR THIN BLU-GNSH RING
LS: CRM, WHT, BRN, MICRO-XLN, FRM TO HD, SL/BRIT, DNSE, CHRT: TRIP, WTHD, SME OFF WHT-WHT, SME CLR, MICR-XLN, MOD FRM-HD, TRS OF OIL IN PITS, YELLISH FLUOR, WEAK-FAIR CUT, FAIR THIN BLU-GNSH RING
MW/VIS 8.5/28
6550

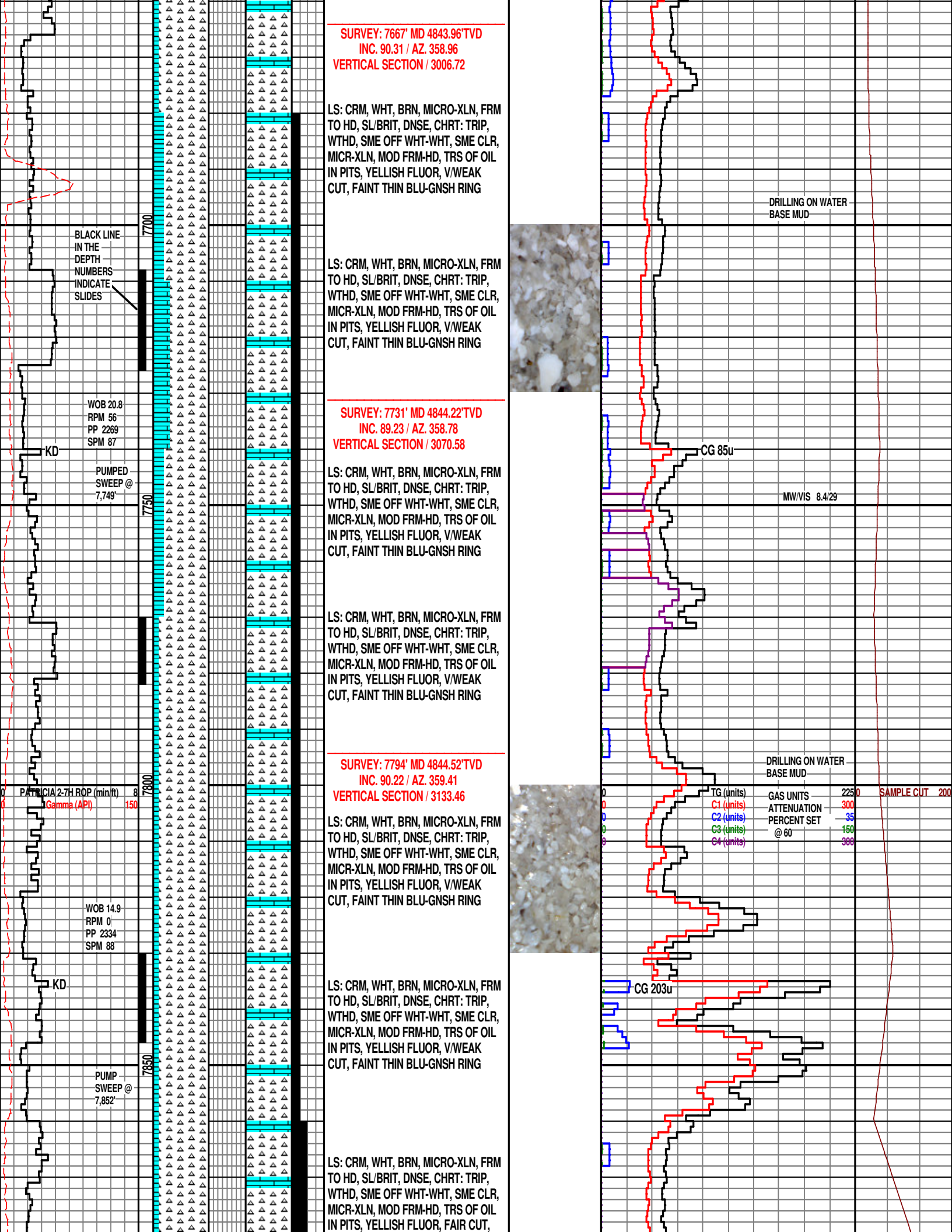

WOB 29.9
RPM 48
PP 2216
SPM 88
PATRICIA 2-7H ROP (min/ft)
Gamma (API)
150
KD
PUMPED SWEEP @ 6,612'
6600
6650
WOB 22.9
RPM 48
PP 2263
SPM 88
KD
PUMPED SWEEP @ 6,704'
6700
PUMP SWEEP @ 6,720'
PUMP SWEEP @ 6,745'
6750
SURVEY: 6563' MD 4850.81'TVD
INC. 88.86 / AZ. 357.76
VERTICAL SECTION / 1906.81
LS: CRM, WHT, BRN, MICRO-XLN, FRM TO HD, SL/BRIT, DNSE, CHRT: TRIP, WTHD, SME OFF WHT-WHT, SME CLR, MICR-XLN, MOD FRM-HD, TRS OF OIL IN PITS, YELLISH FLUOR, V/WEAK CUT, FAINT-FAIR THIN BLU-GNSH RING
LS: CRM, WHT, BRN, MICRO-XLN, FRM TO HD, SL/BRIT, DNSE, SL/TRS SHALE, MOSTLY BLK, SME LT-MED GRY, CHRT: TRIP, WTHD, SME OFF WHT-WHT, SME CLR, MICR-XLN, MOD FRM-HD, TRS OF OIL IN PITS, YELLISH FLUOR, NO CUT, V/FAINT THIN BLU-GNSH RING
LS: CRM, WHT, BRN, MICRO-XLN, FRM TO HD, SL/BRIT, DNSE, SL/TRS SHALE, MOSTLY BLK, SME LT-MED GRY, CHRT: TRIP, WTHD, SME OFF WHT-WHT, SME CLR, MICR-XLN, MOD FRM-HD, SL/TRS OF OIL IN PITS, YELLISH FLUOR, NO CUT, V/FAINT BLU-GNSH RING
SURVEY: 6658' MD 4850.02'TVD
INC. 92.09 / AZ. 357.49
VERTICAL SECTION / 2001.43
LS: CRM, WHT, BRN, MICRO-XLN, FRM TO HD, SL/BRIT, DNSE, SL/TRS SHALE, MOSTLY BLK, SME LT-MED GRY, CHRT: TRIP, WTHD, SME OFF WHT-WHT, SME CLR, MICR-XLN, MOD FRM-HD, SL/TRS OF OIL IN PITS, YELLISH FLUOR, NO CUT, V/FAINT BLU-GNSH RING
LS: CRM, WHT, BRN, MICRO-XLN, FRM TO HD, SL/BRIT, DNSE, SL/TRS SHALE, MOSTLY BLK, SME LT-MED GRY, CHRT: TRIP, WTHD, SME OFF WHT-WHT, SME CLR, MICR-XLN, MOD FRM-HD, TRS OF OIL IN PITS, YELLISH FLUOR, FAIR CUT, THICK BLU-GNSH RING
SURVEY: 6721' MD 4847.97'TVD
INC. 91.63 / AZ. 357.52
VERTICAL SECTION / 2064.15
LS: CRM, WHT, BRN, MICRO-XLN, FRM TO HD, SL/BRIT, DNSE, SL/TRS SHALE, MOSTLY BLK, SME LT-MED GRY, CHRT: TRIP, WTHD, SME OFF WHT-WHT, SME CLR, MICR-XLN, MOD FRM-HD, TRS OF OIL IN PITS, YELLISH FLUOR, FAIR CUT, THICK BLU-GNSH RING
LS: CRM, WHT, BRN, MICRO-XLN, FRM TO HD, SL/BRIT, DNSE, SL/TRS SHALE, MOSTLY BLK, SME LT-MED GRY, CHRT: TRIP, WTHD, SME OFF WHT-WHT, SME CLR, MICR-XLN, MOD FRM-HD, TRS OF OIL IN PITS, YELLISH FLUOR, V/FAINT CUT, THIN FAINT BLU-GNSH RING
TG (units)
C1 (units)
CG 84u
C3 (units)
C4 (units)
GAS UNITS 225
ATTENUATION 300
PERCENT SET 35
@ 60 150
300
SAMPLE CUT 200
DRILLING ON WATER BASE MUD
MW/VIS 8.4/26
CG 80u
DRILLING ON WATER BASE MUD
MW/VIS 8.4/26
DEPTH @ 6,790'
MW/VIS 8.40/28
PV/YP 2/1
GELS 1/1/0
FIL/CK 94.0-1/32
PH/SOL 11.0/1.0
H2O/OIl 99.0/1.0
CHL 1500
HD 200

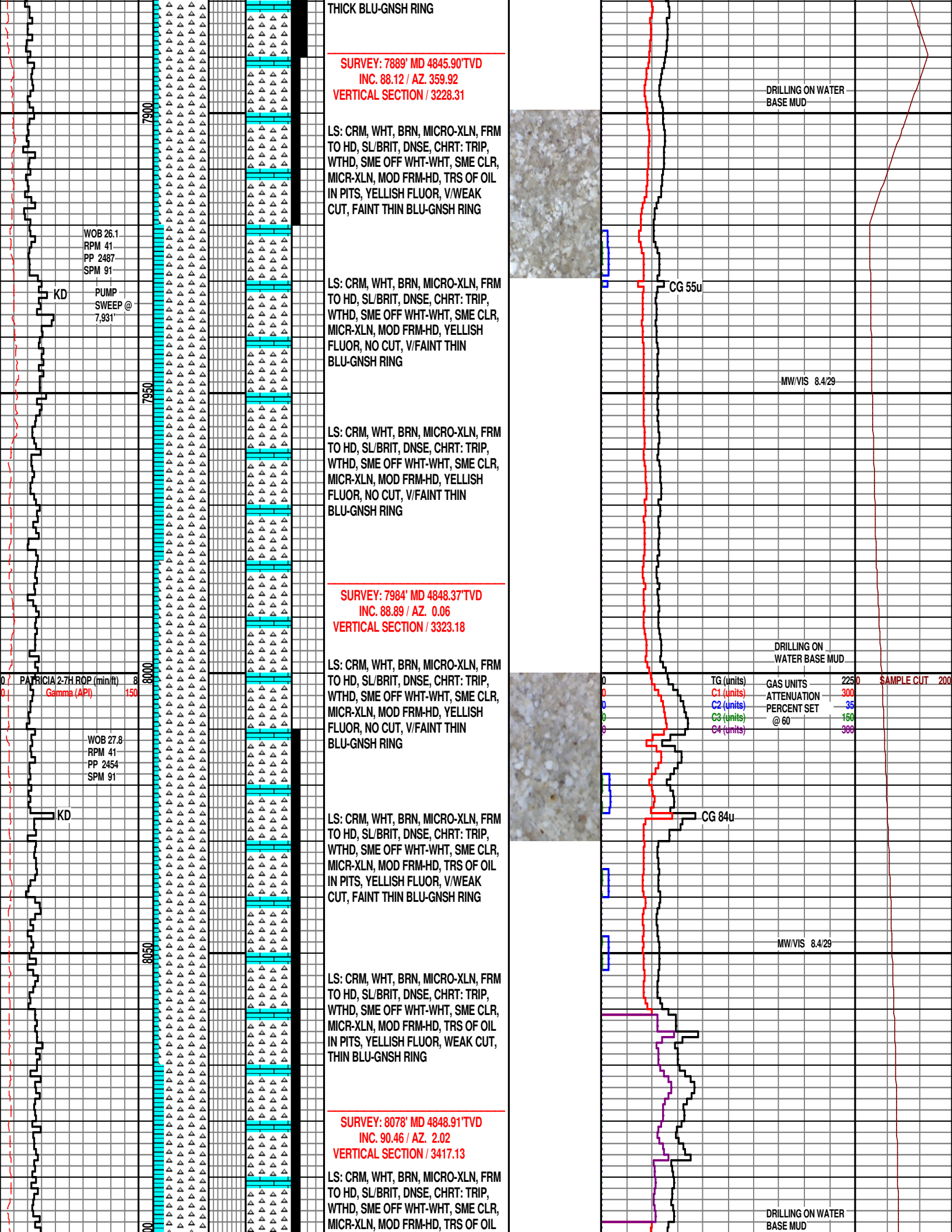

WOB 23.6
RPM 48
PP 2222
SPM 88
KD
PUMP SWEEP @ 6,794
PATRICIA 2-7H ROP (min/ft)
Gamma (API)
150
PUMPED SWEEP @ 6,805'
6800
6850
WOB 25.3
RPM 48
PP 2278
SPM 88
KD
PUMPED SWEEP @ 6,891'
6900
PUMP SWEEP @ 6,940'
6950
WOB 20.9
RPM 0
PP 2217
SPM 93
KD
SURVEY: 6783' MD 4847.41'TVD
INC. 89.42 / AZ. 357.08
VERTICAL SECTION / 2125.87
LS: CRM, WHT, BRN, MICRO-XLN, FRM TO HD, SL/BRIT, DNSE, SL/TRS SHALE, MOSTLY BLK, SME LT-MED GRY, CHRT: TRIP, WTHD, SME OFF WHT-WHT, SME CLR, MICR-XLN, MOD FRM-HD, V/SL TRS OF OIL IN PITS, YELLISH FLUOR, NO CUT, V/FAINT BLU-GNSH RING
LS: CRM, WHT, BRN, MICRO-XLN, FRM TO HD, SL/BRIT, DNSE, SL/TRS SHALE, MOSTLY BLK, SME LT-MED GRY, CHRT: TRIP, WTHD, SME OFF WHT-WHT, SME CLR, MICR-XLN, MOD FRM-HD, V/SL TRS OF OIL IN PITS, YELLISH FLUOR, NO CUT, V/FAINT BLU-GNSH RING
SURVEY: 6846' MD 4846.88'TVD
INC. 91.54 / AZ. 357.34
VERTICAL SECTION / 2188.58
LS: CRM, WHT, BRN, MICRO-XLN, FRM TO HD, SL/BRIT, DNSE, SL/TRS SHALE, MOSTLY BLK, SME LT-MED GRY, CHRT: TRIP, WTHD, SME OFF WHT-WHT, SME CLR, MICR-XLN, MOD FRM-HD, TRS OF OIL IN PITS, YELLISH FLUOR, WEAK CUT, FAIR THIN BLU-GNSH RING
LS: CRM, WHT, BRN, MICRO-XLN, FRM TO HD, SL/BRIT, DNSE, SL/TRS SHALE, MOSTLY BLK, SME LT-MED GRY, CHRT: TRIP, WTHD, SME OFF WHT-WHT, SME CLR, MICR-XLN, MOD FRM-HD, TRS OF OIL IN PITS, YELLISH FLUOR, WEAK CUT, FAIR THIN BLU-GNSH RING
SURVEY: 6909' MD 4846.28'TVD
INC. 89.54 / AZ. 356.90
VERTICAL SECTION / 2251.28
LS: CRM, WHT, BRN, MICRO-XLN, FRM TO HD, SL/BRIT, DNSE, CHRT: TRIP, WTHD, SME OFF WHT-WHT, SME CLR, MICR-XLN, MOD FRM-HD, TRS OF OIL IN PITS, YELLISH FLUOR, V/WEAK CUT, V/FAINT THIN BLU-GNSH RING
LS: CRM, WHT, BRN, MICRO-XLN, FRM TO HD, SL/BRIT, DNSE, CHRT: TRIP, WTHD, SME OFF WHT-WHT, SME CLR, MICR-XLN, MOD FRM-HD, TRS OF OIL IN PITS, YELLISH FLUOR, V/WEAK CUT, V/FAINT THIN BLU-GNSH RING
LS: CRM, WHT, BRN, MICRO-XLN, FRM TO HD, SL/BRIT, DNSE, CHRT: TRIP, WTHD, SME OFF WHT-WHT, SME CLR, MICR-XLN, MOD FRM-HD, YELLISH FLUOR, NO CUT, V/FAINT BLU-GNSH RING
LS: CRM, WHT, BRN, MICRO-XLN, FRM TO HD, SL/BRIT, DNSE, CHRT: TRIP, WTHD, SME OFF WHT-WHT, SME CLR, MICR-XLN, MOD FRM-HD, YELLISH FLUOR, NO CUT, V/FAINT BLU-GNSH RING
CG 91u
DRILLING ON WATER BASE MUD
TG (units)
C1 (units)
C2 (units)
C3 (units)
C4 (units)
GAS UNITS 225
ATTENUATION 300
PERCENT SET @ 60 35
150
300
SAMPLE CUT 200
MW/VIS 8.4/26
CG 75u
DRILLING ON WATER BASE MUD
MW/VIS 8.4/26
CG 77u
DRILLING ON WATER BASE MUD

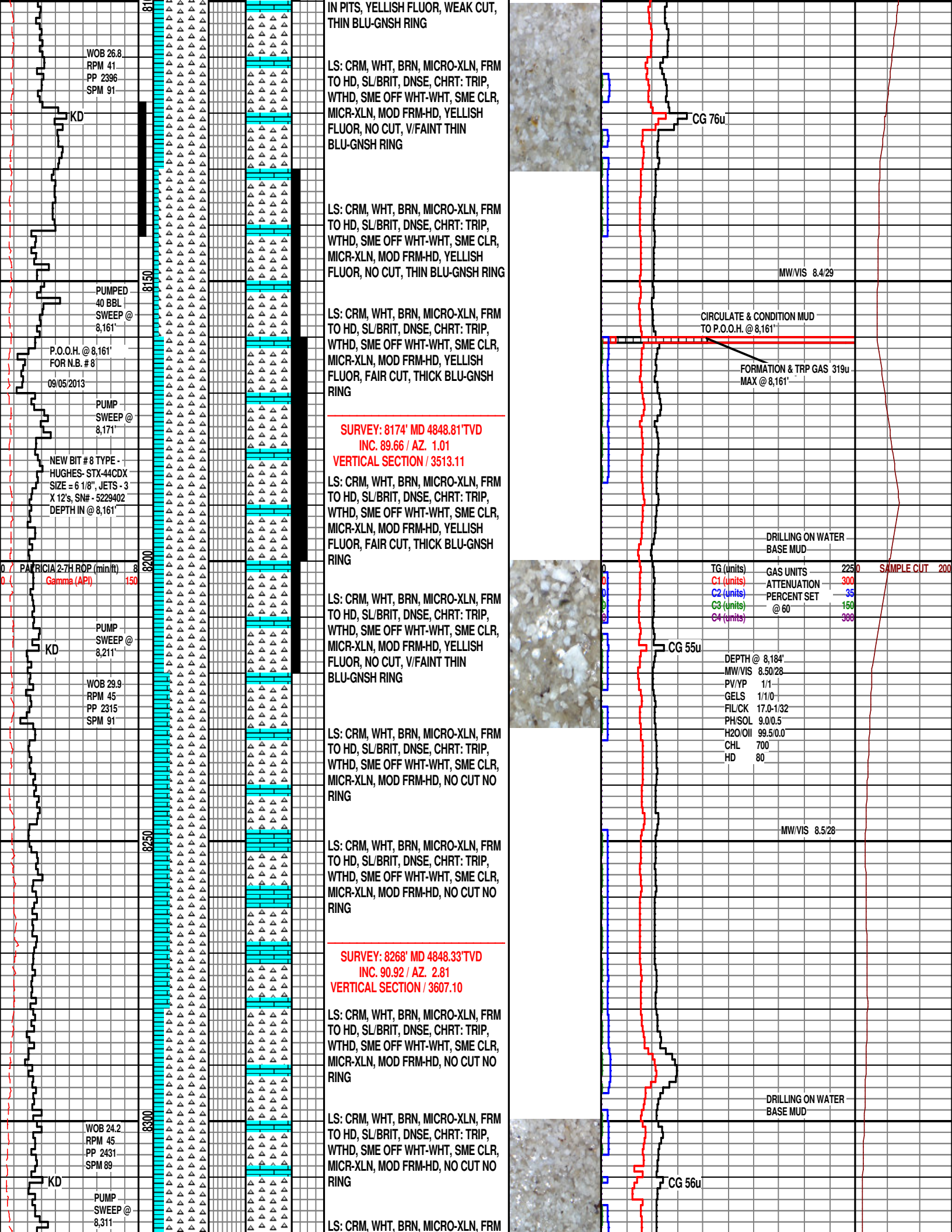

PATRICIA 2-7H ROP (min/ft) 8
Gamma (API) 150
PUMP SWEEP @ 7,003'
7050
WOB 13.2
RPM 0
PP 2238
SPM 88
KD
7100
PUMP SWEEP @ 7,135'
PUMPED 40 BBL SWEEP @ 7,129'
T.O.H. @ 7,129' FOR N.B. # 7
ON THE 09/02/2013
09/03/2013
NEW BIT # 7 TYPE - HUGHES- STX-44CDX SIZE = 6.125", JETS - 3 X 12's, SN# - 5229508 DEPTH IN @ 7,129'
7150
WOB 20.1
RPM 50
PP 2386
SPM 89
KD
PUMPED SWEEP @ 7,170'
BLACK LINE IN THE DEPTH NUMBERS INDICATE SLIDES
7200
PATRICIA 2-7H ROP (min/ft) 8
Gamma (API) 150
PUMPED SWEEP @ 7,201'
SURVEY: 7004' MD 4846.41'TVD
INC. 90.31 / AZ. 356.34
VERTICAL SECTION / 2345.76
LS: CRM, WHT, BRN, MICRO-XLN, FRM TO HD, SL/BRIT, DNSE, CHRT: TRIP, WTHD, SME OFF WHT-WHT, SME CLR, MICR-XLN, MOD FRM-HD, YELLISH FLUOR, NO CUT, V/FAINT BLU-GNSH RING
LS: CRM, WHT, BRN, MICRO-XLN, FRM TO HD, SL/BRIT, DNSE, CHRT: TRIP, WTHD, SME OFF WHT-WHT, SME CLR, MICR-XLN, MOD FRM-HD, YELLISH FLUOR, NO CUT, V/FAINT BLU-GNSH RING
LS: CRM, WHT, BRN, MICRO-XLN, FRM TO HD, SL/BRIT, DNSE, CHRT: TRIP, WTHD, SME OFF WHT-WHT, SME CLR, MICR-XLN, MOD FRM-HD, YELLISH FLUOR, NO CUT, V/FAINT BLU-GNSH RING
LS: CRM, WHT, BRN, MICRO-XLN, FRM TO HD, SL/BRIT, DNSE, CHRT: TRIP, WTHD, SME OFF WHT-WHT, SME CLR, MICR-XLN, MOD FRM-HD, YELLISH FLUOR, NO CUT, V/FAINT BLU-GNSH RING
SURVEY: 7099' MD 4847.43'TVD
INC. 88.46 / AZ. 357.44
VERTICAL SECTION / 2440.27
LS: CRM, WHT, BRN, MICRO-XLN, FRM TO HD, SL/BRIT, DNSE, CHRT: TRIP, WTHD, SME OFF WHT-WHT, SME CLR, MICR-XLN, MOD FRM-HD, YELLISH FLUOR, NO CUT, V/FAINT BLU-GNSH RING
SURVEY: 7130' MD 4848.06'TVD
INC. 89.20 / AZ. 357.80
VERTICAL SECTION / 2471.14
LS: CRM, WHT, BRN, MICRO-XLN, FRM TO HD, SL/BRIT, DNSE, CHRT: TRIP, WTHD, SME OFF WHT-WHT, SME CLR, MICR-XLN, MOD FRM-HD, TRS OF OIL IN PITS, YELLISH FLUOR, V/WEAK CUT, V/FAINT THIN BLU-GNSH RING
LS: CRM, WHT, BRN, MICRO-XLN, FRM TO HD, SL/BRIT, DNSE, CHRT: TRIP, WTHD, SME OFF WHT-WHT, SME CLR, MICR-XLN, MOD FRM-HD, TRS OF OIL IN PITS, YELLISH FLUOR, V/WEAK CUT, THIN BLU-GNSH RING
LS: CRM, WHT, BRN, MICRO-XLN, FRM TO HD, SL/BRIT, DNSE, CHRT: TRIP, WTHD, SME OFF WHT-WHT, SME CLR, MICR-XLN, MOD FRM-HD, TRS OF OIL IN PITS, YELLISH FLUOR, V/WEAK CUT, V/FAINT THIN BLU-GNSH RING
TG (units)
C1 (units)
C2 (units)
C3 (units)
C4 (units)
GAS UNITS 2250
ATTENUATION 300
PERCENT SET 35
@ 60 150
300
SAMPLE CUT 200
MW/VIS 8.4/28
CG 79u
DRILLING ON WATER BASE MUD
DEPTH @ 7,163'
MW/VIS 8.35/27
PV/YP 2/1
GELS 1/1/0
FIL/CK 94.0-1/32
PH/SOL 11.0/1.0
H2O/OIl 99.0/1.0
CHL 1500
HD 200
CIRCULATE & CONDITION MUD TO P.O.O.H. @ 7,129'
MW/VIS 8.4/28
CG 91u
DRILLING ON WATER BASE MUD
TG (units)
C1 (units)
C2 (units)
C3 (units)
C4 (units)
GAS UNITS 2250
ATTENUATION 300
PERCENT SET 35
@ 60 150
300
SAMPLE CUT 200

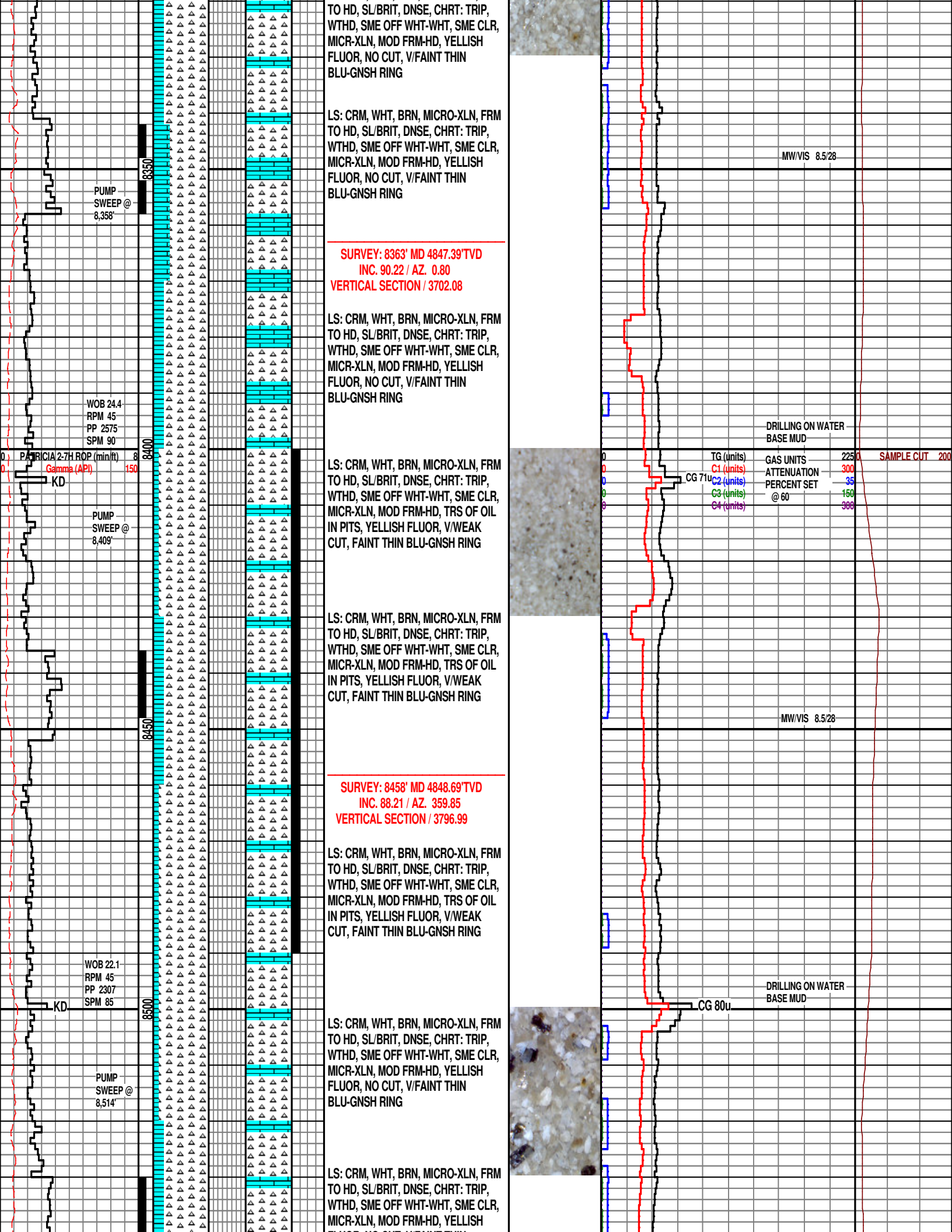

PUMPED SWEEP @ 7,245'
WOB 22.3
RPM 50
PP 2410
SPM 89
KD
PUMPED SWEEP @ 7,271'
PUMPED SWEEP @ 7,345'
PUMPED SWEEP @ 7,356'
KD
WOB 25.8
RPM 48
PP 2190
SPM 84
PUMPED SWEEP @ 7,386'
PUMPED SWEEP @ 7,431'
7250
7300
7350
7400
PATRICIA 2-7H ROP (min/ft)
Gamma (API)
150
SURVEY: 7225' MD 4847.55'TVD
INC. 91.42 / AZ. 358.78
VERTICAL SECTION / 2565.86
LS: CRM, WHT, BRN, MICRO-XLN, FRM TO HD, SL/BRIT, DNSE, SL/TRS SHALE, MOSTLY BLK, SME LT-MED GRY, CHRT: TRIP, WTHD, SME OFF WHT-WHT, SME CLR, MICR-XLN, MOD FRM-HD, TRS OF OIL IN PITS, YELLISH FLUOR, FAIR CUT, THICK BLU-GNSH RING
LS: CRM, WHT, BRN, MICRO-XLN, FRM TO HD, SL/BRIT, DNSE, CHRT: TRIP, WTHD, SME OFF WHT-WHT, SME CLR, MICR-XLN, MOD FRM-HD, TRS OF OIL IN PITS, YELLISH FLUOR, WEAK CUT, THIN BLU-GNSH RING
LS: CRM, WHT, BRN, MICRO-XLN, FRM TO HD, SL/BRIT, DNSE, SL/TRS SHALE, MOSTLY BLK, SME LT-MED GRY, CHRT: TRIP, WTHD, SME OFF WHT-WHT, SME CLR, MICR-XLN, MOD FRM-HD, TRS OF OIL IN PITS, YELLISH FLUOR, FAIR CUT, THICK BLU-GNSH RING
SURVEY: 7320' MD 4845.52'TVD
INC. 91.02 / AZ. 358.74
VERTICAL SECTION / 2660.62
LS: CRM, WHT, BRN, MICRO-XLN, FRM TO HD, SL/BRIT, DNSE, SL/TRS SHALE, MOSTLY BLK, SME LT-MED GRY, CHRT: TRIP, WTHD, SME OFF WHT-WHT, SME CLR, MICR-XLN, MOD FRM-HD, TRS OF OIL IN PITS, YELLISH FLUOR, FAIR CUT, THICK BLU-GNSH RING
LS: CRM, WHT, BRN, MICRO-XLN, FRM TO HD, SL/BRIT, DNSE, CHRT: TRIP, WTHD, SME OFF WHT-WHT, SME CLR, MICR-XLN, MOD FRM-HD, TRS OF OIL IN PITS, YELLISH FLUOR, WEAK CUT, THIN BLU-GNSH RING
LS: CRM, WHT, BRN, MICRO-XLN, FRM TO HD, SL/BRIT, DNSE, CHRT: TRIP, WTHD, SME OFF WHT-WHT, SME CLR, MICR-XLN, MOD FRM-HD, TRS OF OIL IN PITS, YELLISH FLUOR, WEAK CUT, THIN BLU-GNSH RING
SURVEY: 7415' MD 4844.60'TVD
INC. 90.09 / AZ. 358.83
VERTICAL SECTION / 2755.40
LS: CRM, WHT, BRN, MICRO-XLN, FRM TO HD, SL/BRIT, DNSE, CHRT: TRIP, WTHD, SME OFF WHT-WHT, SME CLR, MICR-XLN, MOD FRM-HD, TRS OF OIL IN PITS, YELLISH FLUOR, WEAK CUT,
MW/VIS 8.35/27
CG 99u
DRILLING ON WATER BASE MUD
MW/VIS 8.4/28
CG 98u
DRILLING ON WATER BASE MUD
TG (units)
C1 (units)
C2 (units)
C3 (units)
C4 (units)
GAS UNITS
ATTENUATION
PERCENT SET
@ 60
225
300
35
150
300
SAMPLE CUT
200


IN PITS, YELLISH FLUOR, V/WEAK CUT, FAINT THIN BLU-GNSH RING
7450
WOB 25.2
RPM 48
PP 2218
SPM 84
KD
PUMPED SWEEP @ 7,457'
LS: CRM, WHT, BRN, MICRO-XLN, FRM TO HD, SL/BRIT, DNSE, CHRT: TRIP, WTHD, SME OFF WHT-WHT, SME CLR, MICR-XLN, MOD FRM-HD, YELLISH FLUOR, NO CUT, V/FAINT THIN BLU-GNSH RING
MW/VIS 8.4/28
CG 120u
7500
DRILLING ON WATER BASE MUD
SURVEY: 7509' MD 4845.49'TVD
INC. 88.83 / AZ. 358.46
VERTICAL SECTION / 2849.17
PUMPED SWEEP @ 7,532'
WOB 19.8
RPM 50
PP 2255
SPM 89
7550
KD
MW/VIS 8.4/29
CG 88u
7600
DRILLING ON WATER BASE MUD
PATRICIA 2-7H ROP (min/ft)
Gamma (API)
150
SURVEY: 7604' MD 4845.06'TVD
INC. 91.69 / AZ. 358.22
VERTICAL SECTION / 2943.89
TG (units)
C1 (units)
C2 (units)
C3 (units)
C4 (units)
GAS UNITS
ATTENUATION
PERCENT SET
@ 60
2250
300
-35
150
300
SAMPLE CUT
200
WOB 31.0
RPM 0
PP 2267
SPM 88
KD
CG 148u
7650
MW/VIS 8.4/28
PUMPED SWEEP @ 7,668'


SURVEY: 7667' MD 4843.96'TVD
INC. 90.31 / AZ. 358.96
VERTICAL SECTION / 3006.72
LS: CRM, WHT, BRN, MICRO-XLN, FRM TO HD, SL/BRIT, DNSE, CHRT: TRIP, WTHD, SME OFF WHT-WHT, SME CLR, MICR-XLN, MOD FRM-HD, TRS OF OIL IN PITS, YELLISH FLUOR, V/WEAK CUT, FAINT THIN BLU-GNSH RING
DRILLING ON WATER BASE MUD
BLACK LINE IN THE DEPTH NUMBERS INDICATE SLIDES
7700
LS: CRM, WHT, BRN, MICRO-XLN, FRM TO HD, SL/BRIT, DNSE, CHRT: TRIP, WTHD, SME OFF WHT-WHT, SME CLR, MICR-XLN, MOD FRM-HD, TRS OF OIL IN PITS, YELLISH FLUOR, V/WEAK CUT, FAINT THIN BLU-GNSH RING
WOB 20.8
RPM 56
PP 2269
SPM 87
SURVEY: 7731' MD 4844.22'TVD
INC. 89.23 / AZ. 358.78
VERTICAL SECTION / 3070.58
KD
CG 85u
PUMPED SWEEP @ 7,749'
MW/VIS 8.4/29
7750
LS: CRM, WHT, BRN, MICRO-XLN, FRM TO HD, SL/BRIT, DNSE, CHRT: TRIP, WTHD, SME OFF WHT-WHT, SME CLR, MICR-XLN, MOD FRM-HD, TRS OF OIL IN PITS, YELLISH FLUOR, V/WEAK CUT, FAINT THIN BLU-GNSH RING
LS: CRM, WHT, BRN, MICRO-XLN, FRM TO HD, SL/BRIT, DNSE, CHRT: TRIP, WTHD, SME OFF WHT-WHT, SME CLR, MICR-XLN, MOD FRM-HD, TRS OF OIL IN PITS, YELLISH FLUOR, V/WEAK CUT, FAINT THIN BLU-GNSH RING
DRILLING ON WATER BASE MUD
SURVEY: 7794' MD 4844.52'TVD
INC. 90.22 / AZ. 359.41
VERTICAL SECTION / 3133.46
7800
PATRICIA 2-7H ROP (min/ft) 8
Gamma (API) 150
TG (units)
C1 (units)
C2 (units)
C3 (units)
C4 (units)
GAS UNITS 2250
ATTENUATION 300
PERCENT SET 35
@ 60 150
300
SAMPLE CUT 200
LS: CRM, WHT, BRN, MICRO-XLN, FRM TO HD, SL/BRIT, DNSE, CHRT: TRIP, WTHD, SME OFF WHT-WHT, SME CLR, MICR-XLN, MOD FRM-HD, TRS OF OIL IN PITS, YELLISH FLUOR, V/WEAK CUT, FAINT THIN BLU-GNSH RING
WOB 14.9
RPM 0
PP 2334
SPM 88
KD
CG 203u
LS: CRM, WHT, BRN, MICRO-XLN, FRM TO HD, SL/BRIT, DNSE, CHRT: TRIP, WTHD, SME OFF WHT-WHT, SME CLR, MICR-XLN, MOD FRM-HD, TRS OF OIL IN PITS, YELLISH FLUOR, V/WEAK CUT, FAINT THIN BLU-GNSH RING
7850
PUMP SWEEP @ 7,852'
LS: CRM, WHT, BRN, MICRO-XLN, FRM TO HD, SL/BRIT, DNSE, CHRT: TRIP, WTHD, SME OFF WHT-WHT, SME CLR, MICR-XLN, MOD FRM-HD, TRS OF OIL IN PITS, YELLISH FLUOR, FAIR CUT,


THICK BLU-GNSH RING
SURVEY: 7889' MD 4845.90'TVD
INC. 88.12 / AZ. 359.92
VERTICAL SECTION / 3228.31
DRILLING ON WATER BASE MUD
7900
LS: CRM, WHT, BRN, MICRO-XLN, FRM TO HD, SL/BRIT, DNSE, CHRT: TRIP, WTHD, SME OFF WHT-WHT, SME CLR, MICR-XLN, MOD FRM-HD, TRS OF OIL IN PITS, YELLISH FLUOR, V/WEAK CUT, FAINT THIN BLU-GNSH RING
WOB 26.1
RPM 41
PP 2487
SPM 91
KD
PUMP SWEEP @ 7,931'
LS: CRM, WHT, BRN, MICRO-XLN, FRM TO HD, SL/BRIT, DNSE, CHRT: TRIP, WTHD, SME OFF WHT-WHT, SME CLR, MICR-XLN, MOD FRM-HD, YELLISH FLUOR, NO CUT, V/FAINT THIN BLU-GNSH RING
CG 55u
MW/VIS 8.4/29
7950
LS: CRM, WHT, BRN, MICRO-XLN, FRM TO HD, SL/BRIT, DNSE, CHRT: TRIP, WTHD, SME OFF WHT-WHT, SME CLR, MICR-XLN, MOD FRM-HD, YELLISH FLUOR, NO CUT, V/FAINT THIN BLU-GNSH RING
SURVEY: 7984' MD 4848.37'TVD
INC. 88.89 / AZ. 0.06
VERTICAL SECTION / 3323.18
DRILLING ON WATER BASE MUD
8000
LS: CRM, WHT, BRN, MICRO-XLN, FRM TO HD, SL/BRIT, DNSE, CHRT: TRIP, WTHD, SME OFF WHT-WHT, SME CLR, MICR-XLN, MOD FRM-HD, YELLISH FLUOR, NO CUT, V/FAINT THIN BLU-GNSH RING
PATRICIA 2-7H ROP (min/ft)
Gamma (API)
150
TG (units)
C1 (units)
C2 (units)
C3 (units)
C4 (units)
GAS UNITS
ATTENUATION
PERCENT SET @ 60
225
300
35
150
300
SAMPLE CUT
200
WOB 27.8
RPM 41
PP 2454
SPM 91
KD
CG 84u
LS: CRM, WHT, BRN, MICRO-XLN, FRM TO HD, SL/BRIT, DNSE, CHRT: TRIP, WTHD, SME OFF WHT-WHT, SME CLR, MICR-XLN, MOD FRM-HD, TRS OF OIL IN PITS, YELLISH FLUOR, V/WEAK CUT, FAINT THIN BLU-GNSH RING
MW/VIS 8.4/29
8050
LS: CRM, WHT, BRN, MICRO-XLN, FRM TO HD, SL/BRIT, DNSE, CHRT: TRIP, WTHD, SME OFF WHT-WHT, SME CLR, MICR-XLN, MOD FRM-HD, TRS OF OIL IN PITS, YELLISH FLUOR, WEAK CUT, THIN BLU-GNSH RING
SURVEY: 8078' MD 4848.91'TVD
INC. 90.46 / AZ. 2.02
VERTICAL SECTION / 3417.13
LS: CRM, WHT, BRN, MICRO-XLN, FRM TO HD, SL/BRIT, DNSE, CHRT: TRIP, WTHD, SME OFF WHT-WHT, SME CLR, MICR-XLN, MOD FRM-HD, TRS OF OIL
DRILLING ON WATER BASE MUD


IN PITS, YELLISH FLUOR, WEAK CUT, THIN BLU-GNSH RING
WOB 26.8
RPM 41
PP 2396
SPM 91
KD
LS: CRM, WHT, BRN, MICRO-XLN, FRM TO HD, SL/BRIT, DNSE, CHRT: TRIP, WTHD, SME OFF WHT-WHT, SME CLR, MICR-XLN, MOD FRM-HD, YELLISH FLUOR, NO CUT, V/FAINT THIN BLU-GNSH RING
CG 76u
LS: CRM, WHT, BRN, MICRO-XLN, FRM TO HD, SL/BRIT, DNSE, CHRT: TRIP, WTHD, SME OFF WHT-WHT, SME CLR, MICR-XLN, MOD FRM-HD, YELLISH FLUOR, NO CUT, THIN BLU-GNSH RING
MW/VIS 8.4/29
8150
PUMPED 40 BBL SWEEP @ 8,161'
LS: CRM, WHT, BRN, MICRO-XLN, FRM TO HD, SL/BRIT, DNSE, CHRT: TRIP, WTHD, SME OFF WHT-WHT, SME CLR, MICR-XLN, MOD FRM-HD, YELLISH FLUOR, FAIR CUT, THICK BLU-GNSH RING
CIRCULATE & CONDITION MUD TO P.O.O.H. @ 8,161'
P.O.O.H. @ 8,161' FOR N.B. # 8
09/05/2013
FORMATION & TRP GAS 319u MAX @ 8,161'
PUMP SWEEP @ 8,171'
SURVEY: 8174' MD 4848.81'TVD
INC. 89.66 / AZ. 1.01
VERTICAL SECTION / 3513.11
NEW BIT # 8 TYPE - HUGHES- STX-44CDX SIZE = 6 1/8", JETS - 3 X 12's, SN# - 5229402 DEPTH IN @ 8,161'
LS: CRM, WHT, BRN, MICRO-XLN, FRM TO HD, SL/BRIT, DNSE, CHRT: TRIP, WTHD, SME OFF WHT-WHT, SME CLR, MICR-XLN, MOD FRM-HD, YELLISH FLUOR, FAIR CUT, THICK BLU-GNSH RING
DRILLING ON WATER BASE MUD
8200
PATRICIA 2-7H ROP (min/ft)
Gamma (API) 150
TG (units)
C1 (units)
C2 (units)
C3 (units)
C4 (units)
GAS UNITS 225
ATTENUATION 300
PERCENT SET @ 60 35
150
300
SAMPLE CUT 200
PUMP SWEEP @ 8,211'
KD
LS: CRM, WHT, BRN, MICRO-XLN, FRM TO HD, SL/BRIT, DNSE, CHRT: TRIP, WTHD, SME OFF WHT-WHT, SME CLR, MICR-XLN, MOD FRM-HD, YELLISH FLUOR, NO CUT, V/FAINT THIN BLU-GNSH RING
CG 55u
DEPTH @ 8,184'
MW/VIS 8.50/28
PV/YP 1/1
GELS 1/1/0
FIL/CK 17.0-1/32
PH/SOL 9.0/0.5
H2O/OIl 99.5/0.0
CHL 700
HD 80
WOB 29.9
RPM 45
PP 2315
SPM 91
LS: CRM, WHT, BRN, MICRO-XLN, FRM TO HD, SL/BRIT, DNSE, CHRT: TRIP, WTHD, SME OFF WHT-WHT, SME CLR, MICR-XLN, MOD FRM-HD, NO CUT NO RING
MW/VIS 8.5/28
8250
LS: CRM, WHT, BRN, MICRO-XLN, FRM TO HD, SL/BRIT, DNSE, CHRT: TRIP, WTHD, SME OFF WHT-WHT, SME CLR, MICR-XLN, MOD FRM-HD, NO CUT NO RING
SURVEY: 8268' MD 4848.33'TVD
INC. 90.92 / AZ. 2.81
VERTICAL SECTION / 3607.10
LS: CRM, WHT, BRN, MICRO-XLN, FRM TO HD, SL/BRIT, DNSE, CHRT: TRIP, WTHD, SME OFF WHT-WHT, SME CLR, MICR-XLN, MOD FRM-HD, NO CUT NO RING
DRILLING ON WATER BASE MUD
8300
WOB 24.2
RPM 45
PP 2431
SPM 89
KD
LS: CRM, WHT, BRN, MICRO-XLN, FRM TO HD, SL/BRIT, DNSE, CHRT: TRIP, WTHD, SME OFF WHT-WHT, SME CLR, MICR-XLN, MOD FRM-HD, NO CUT NO RING
CG 56u
PUMP SWEEP @ 8,311'
LS: CRM, WHT, BRN, MICRO-XLN, FRM


TO HD, SL/BRIT, DNSE, CHRT: TRIP, WTHD, SME OFF WHT-WHT, SME CLR, MICR-XLN, MOD FRM-HD, YELLISH FLUOR, NO CUT, V/FAINT THIN BLU-GNSH RING
LS: CRM, WHT, BRN, MICRO-XLN, FRM TO HD, SL/BRIT, DNSE, CHRT: TRIP, WTHD, SME OFF WHT-WHT, SME CLR, MICR-XLN, MOD FRM-HD, YELLISH FLUOR, NO CUT, V/FAINT THIN BLU-GNSH RING
MW/VIS 8.5/28
8350
PUMP SWEEP @ 8,358'
SURVEY: 8363' MD 4847.39'TVD
INC. 90.22 / AZ. 0.80
VERTICAL SECTION / 3702.08
LS: CRM, WHT, BRN, MICRO-XLN, FRM TO HD, SL/BRIT, DNSE, CHRT: TRIP, WTHD, SME OFF WHT-WHT, SME CLR, MICR-XLN, MOD FRM-HD, YELLISH FLUOR, NO CUT, V/FAINT THIN BLU-GNSH RING
WOB 24.4
RPM 45
PP 2575
SPM 90
DRILLING ON WATER BASE MUD
8400
PATRICIA 2-7H ROP (min/ft)
Gamma (API)
150
KD
TG (units)
C1 (units)
C2 (units)
C3 (units)
C4 (units)
CG 71u
GAS UNITS
ATTENUATION
PERCENT SET @ 60
225
300
35
150
300
SAMPLE CUT
200
PUMP SWEEP @ 8,409'
LS: CRM, WHT, BRN, MICRO-XLN, FRM TO HD, SL/BRIT, DNSE, CHRT: TRIP, WTHD, SME OFF WHT-WHT, SME CLR, MICR-XLN, MOD FRM-HD, TRS OF OIL IN PITS, YELLISH FLUOR, V/WEAK CUT, FAINT THIN BLU-GNSH RING
LS: CRM, WHT, BRN, MICRO-XLN, FRM TO HD, SL/BRIT, DNSE, CHRT: TRIP, WTHD, SME OFF WHT-WHT, SME CLR, MICR-XLN, MOD FRM-HD, TRS OF OIL IN PITS, YELLISH FLUOR, V/WEAK CUT, FAINT THIN BLU-GNSH RING
MW/VIS 8.5/28
8450
SURVEY: 8458' MD 4848.69'TVD
INC. 88.21 / AZ. 359.85
VERTICAL SECTION / 3796.99
LS: CRM, WHT, BRN, MICRO-XLN, FRM TO HD, SL/BRIT, DNSE, CHRT: TRIP, WTHD, SME OFF WHT-WHT, SME CLR, MICR-XLN, MOD FRM-HD, TRS OF OIL IN PITS, YELLISH FLUOR, V/WEAK CUT, FAINT THIN BLU-GNSH RING
WOB 22.1
RPM 45
PP 2307
SPM 85
DRILLING ON WATER BASE MUD
KD
8500
CG 80u
LS: CRM, WHT, BRN, MICRO-XLN, FRM TO HD, SL/BRIT, DNSE, CHRT: TRIP, WTHD, SME OFF WHT-WHT, SME CLR, MICR-XLN, MOD FRM-HD, YELLISH FLUOR, NO CUT, V/FAINT THIN BLU-GNSH RING
PUMP SWEEP @ 8,514'
LS: CRM, WHT, BRN, MICRO-XLN, FRM TO HD, SL/BRIT, DNSE, CHRT: TRIP, WTHD, SME OFF WHT-WHT, SME CLR, MICR-XLN, MOD FRM-HD, YELLISH

PUMP SWEEP @ 8,546'

8550

FLUOR, NO CUT, V/FAINT THIN BLU-GNSH RING

MW/VIS 8.5/28

SURVEY: 8553' MD 4850.71'TVD
INC. 89.35 / AZ. 358.79
VERTICAL SECTION / 3891.80

LS: CRM, WHT, BRN, MICRO-XLN, FRM TO HD, SL/BRIT, DNSE, CHRT: TRIP, WTHD, SME OFF WHT-WHT, SME CLR, MICR-XLN, MOD FRM-HD, YELLISH FLUOR, NO CUT, V/FAINT THIN BLU-GNSH RING

WOB 19.7
RPM 45
PP 2560
SPM 91

KD

8600

LS: CRM, WHT, BRN, MICRO-XLN, FRM TO HD, SL/BRIT, DNSE, CHRT: TRIP, WTHD, SME OFF WHT-WHT, SME CLR, MICR-XLN, MOD FRM-HD, NO CUT, NO RING

CG 63u

DRILLING ON WATER BASE MUD

0 PATRICIA 2-7H ROP (min/ft) 8
0 Gamma (API) 150

TG (units) 0
C1 (units) 0
C2 (units) 0
C3 (units) 0
C4 (units) 0

GAS UNITS 2250
ATTENUATION 300
PERCENT SET 35
@ 60 150
300

SAMPLE CUT 200

PUMP SWEEP @ 8,609'

LS: CRM, WHT, BRN, MICRO-XLN, FRM TO HD, SL/BRIT, DNSE, CHRT: TRIP, BRN, WTHD, SME OFF WHT-WHT, SME CLR, MICR-XLN, MOD FRM-HD, NO CUT, NO RING

PUMP SWEEP @ 8,649'

8650

MW/VIS 8.5/28

SURVEY: 8648' MD 4849.52'TVD
INC. 92.09 / AZ. 358.70
VERTICAL SECTION / 3986.57

LS: CRM, WHT, BRN, MICRO-XLN, FRM TO HD, SL/BRIT, DNSE, CHRT: TRIP, BRN, WTHD, SME OFF WHT-WHT, SME CLR, MICR-XLN, MOD FRM-HD, NO CUT, NO RING

WOB 21.1
RPM 53
PP 2458
SPM 87

KD

PUMP SWEEP @ 8,693'

LS: CRM, WHT, BRN, MICRO-XLN, FRM TO HD, SL/BRIT, DNSE, CHRT: TRIP, BRN, WTHD, SME OFF WHT-WHT, SME CLR, MICR-XLN, MOD FRM-HD, NO CUT, NO RING

CG 50u

DRILLING ON WATER BASE MUD

8700

LS: CRM, WHT, BRN, MICRO-XLN, FRM TO HD, SL/BRIT, DNSE, CHRT: TRIP, BRN, WTHD, SME OFF WHT-WHT, SME CLR, MICR-XLN, MOD FRM-HD, NO CUT, NO RING

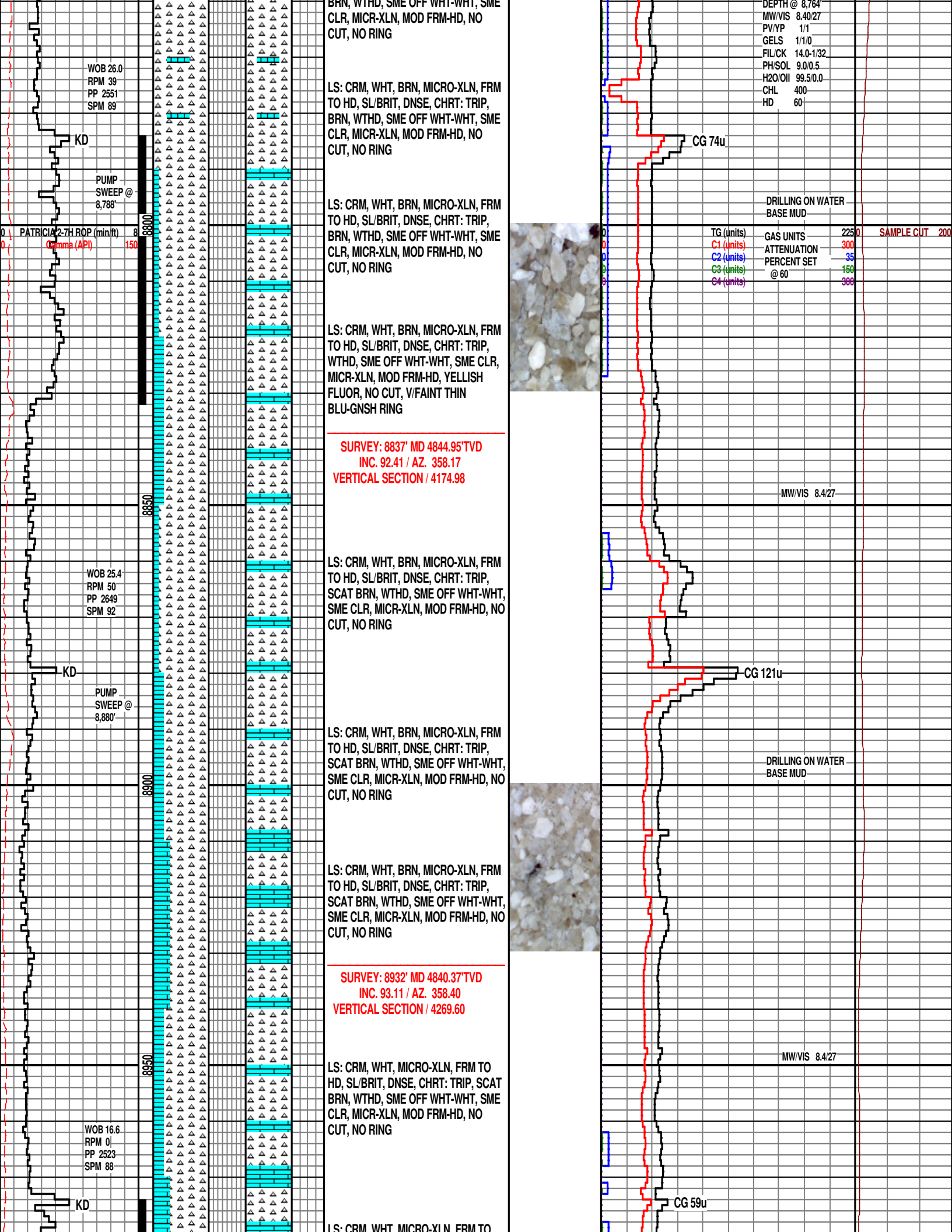
PUMP SWEEP @ 8,733'

SURVEY: 8742' MD 4847.38'TVD
INC. 90.52 / AZ. 358.36
VERTICAL SECTION / 4080.30

MW/VIS 8.4/29

8750

LS: CRM, WHT, BRN, MICRO-XLN, FRM TO HD, SL/BRIT, DNSE, CHRT: TRIP, BRN, WTHD, SME OFF WHT-WHT, SME


BRN, WTHD, SME OFF WHT-WHT, SME CLR, MICR-XLN, MOD FRM-HD, NO CUT, NO RING
WOB 26.0
RPM 39
PP 2551
SPM 89
LS: CRM, WHT, BRN, MICRO-XLN, FRM TO HD, SL/BRIT, DNSE, CHRT: TRIP, BRN, WTHD, SME OFF WHT-WHT, SME CLR, MICR-XLN, MOD FRM-HD, NO CUT, NO RING
KD
PUMP SWEEP @ 8,788'
LS: CRM, WHT, BRN, MICRO-XLN, FRM TO HD, SL/BRIT, DNSE, CHRT: TRIP, BRN, WTHD, SME OFF WHT-WHT, SME CLR, MICR-XLN, MOD FRM-HD, NO CUT, NO RING
8800
PATRICIA 2-7H ROP (min/ft)
Gamma (API)
150
LS: CRM, WHT, BRN, MICRO-XLN, FRM TO HD, SL/BRIT, DNSE, CHRT: TRIP, WTHD, SME OFF WHT-WHT, SME CLR, MICR-XLN, MOD FRM-HD, YELLISH FLUOR, NO CUT, V/FAINT THIN BLU-GNSH RING
SURVEY: 8837' MD 4844.95'TVD
INC. 92.41 / AZ. 358.17
VERTICAL SECTION / 4174.98
8850
WOB 25.4
RPM 50
PP 2649
SPM 92
LS: CRM, WHT, BRN, MICRO-XLN, FRM TO HD, SL/BRIT, DNSE, CHRT: TRIP, SCAT BRN, WTHD, SME OFF WHT-WHT, SME CLR, MICR-XLN, MOD FRM-HD, NO CUT, NO RING
KD
PUMP SWEEP @ 8,880'
LS: CRM, WHT, BRN, MICRO-XLN, FRM TO HD, SL/BRIT, DNSE, CHRT: TRIP, SCAT BRN, WTHD, SME OFF WHT-WHT, SME CLR, MICR-XLN, MOD FRM-HD, NO CUT, NO RING
8900
LS: CRM, WHT, BRN, MICRO-XLN, FRM TO HD, SL/BRIT, DNSE, CHRT: TRIP, SCAT BRN, WTHD, SME OFF WHT-WHT, SME CLR, MICR-XLN, MOD FRM-HD, NO CUT, NO RING
SURVEY: 8932' MD 4840.37'TVD
INC. 93.11 / AZ. 358.40
VERTICAL SECTION / 4269.60
8950
LS: CRM, WHT, MICRO-XLN, FRM TO HD, SL/BRIT, DNSE, CHRT: TRIP, SCAT BRN, WTHD, SME OFF WHT-WHT, SME CLR, MICR-XLN, MOD FRM-HD, NO CUT, NO RING
WOB 16.6
RPM 0
PP 2523
SPM 88
KD
LS: CRM, WHT, MICRO-XLN, FRM TO
DEPTH @ 8,764'
MW/VIS 8.40/27
PV/YP 1/1
GELS 1/1/0
FIL/CK 14.0-1/32
PH/SOL 9.0/0.5
H2O/OIl 99.5/0.0
CHL 400
HD 60
CG 74u
DRILLING ON WATER BASE MUD
TG (units)
C1 (units)
C2 (units)
C3 (units)
C4 (units)
GAS UNITS 225
ATTENUATION 300
PERCENT SET 35
@ 60 150
300
SAMPLE CUT 200
MW/VIS 8.4/27
CG 121u
DRILLING ON WATER BASE MUD
MW/VIS 8.4/27
CG 59u

PUMP SWEEP @ 8,988'

PATRICIA 2-7H ROP (min/ft) 8
Gamma (API) 150

9000

HD, SL/BRIT, DNSE, CHRT: TRIP, BRN, WTHD, SME OFF WHT-WHT, SME CLR, MICR-XLN, MOD FRM-HD, NO CUT, NO RING

LS: CRM, WHT, MICRO-XLN, FRM TO HD, SL/BRIT, DNSE, CHRT: TRIP, SCAT BRN, WTHD, SME OFF WHT-WHT, SME CLR, MICR-XLN, MOD FRM-HD, NO CUT, NO RING

SURVEY: 9027' MD 4838.28'TVD
INC. 89.41 / AZ. 358.28
VERTICAL SECTION / 4364.29

LS: CRM, WHT, MICRO-XLN, FRM TO HD, SL/BRIT, DNSE, CHRT: TRIP, SCAT BRN, WTHD, SME OFF WHT-WHT, SME CLR, MICR-XLN, MOD FRM-HD, NO CUT, NO RING

PUMP SWEEP @ 9,046'

9050

WOB 23.5
RPM 0
PP 2618
SPM 90

KD

LS: CRM, WHT, MICRO-XLN, FRM TO HD, SL/BRIT, DNSE, CHRT: TRIP, WTHD, SME OFF WHT-WHT, SME CLR, MICR-XLN, MOD FRM-HD, NO CUT, NO RING

LS: CRM, WHT, MICRO-XLN, FRM TO HD, SL/BRIT, DNSE, CHRT: TRIP, WTHD, SME OFF WHT-WHT, SME CLR, MICR-XLN, MOD FRM-HD, NO CUT, NO RING

9100

LS: CRM, WHT, MICRO-XLN, FRM TO HD, SL/BRIT, DNSE, CHRT: TRIP, WTHD, SME OFF WHT-WHT, SME CLR, MICR-XLN, MOD FRM-HD, NO CUT, NO RING

SURVEY: 9122' MD 4838.72'TVD
INC. 90.06 / AZ. 357.80
VERTICAL SECTION / 4458.99

PUMPED SWEEP @ 9,137'

LS: CRM, WHT, MICRO-XLN, FRM TO HD, SL/BRIT, DNSE, CHRT: TRIP, WTHD, SME OFF WHT-WHT, SME CLR, SCAT TRS BRN, MICR-XLN, MOD FRM-HD, NO CUT, NO RING

09/07/2013

9150

WOB 24.4
RPM 56
PP 2586
SPM 90

KD

LS: CRM, WHT, MICRO-XLN, FRM TO HD, SL/BRIT, DNSE, CHRT: TRIP, WTHD, SME OFF WHT-WHT, SME CLR, MICR-XLN, MOD FRM-HD, NO CUT, NO RING

PUMPED SWEEP @ 9,173'

LS: CRM, WHT, MICRO-XLN, FRM TO HD, SL/BRIT, DNSE, CHRT: TRIP, WTHD, SME OFF WHT-WHT, SME CLR, MICR-XLN, MOD FRM-HD, NO CUT, NO RING

LS: CRM, WHT, MICRO-XLN, FRM TO

DRILLING ON WATER BASE MUD

TG (units) 0
C1 (units) 0
C2 (units) 0
C3 (units) 0
C4 (units) 0

GAS UNITS 225
ATTENUATION PERCENT SET @ 60 300
35
150
300

SAMPLE CUT 200

MW/VIS 8.4/27

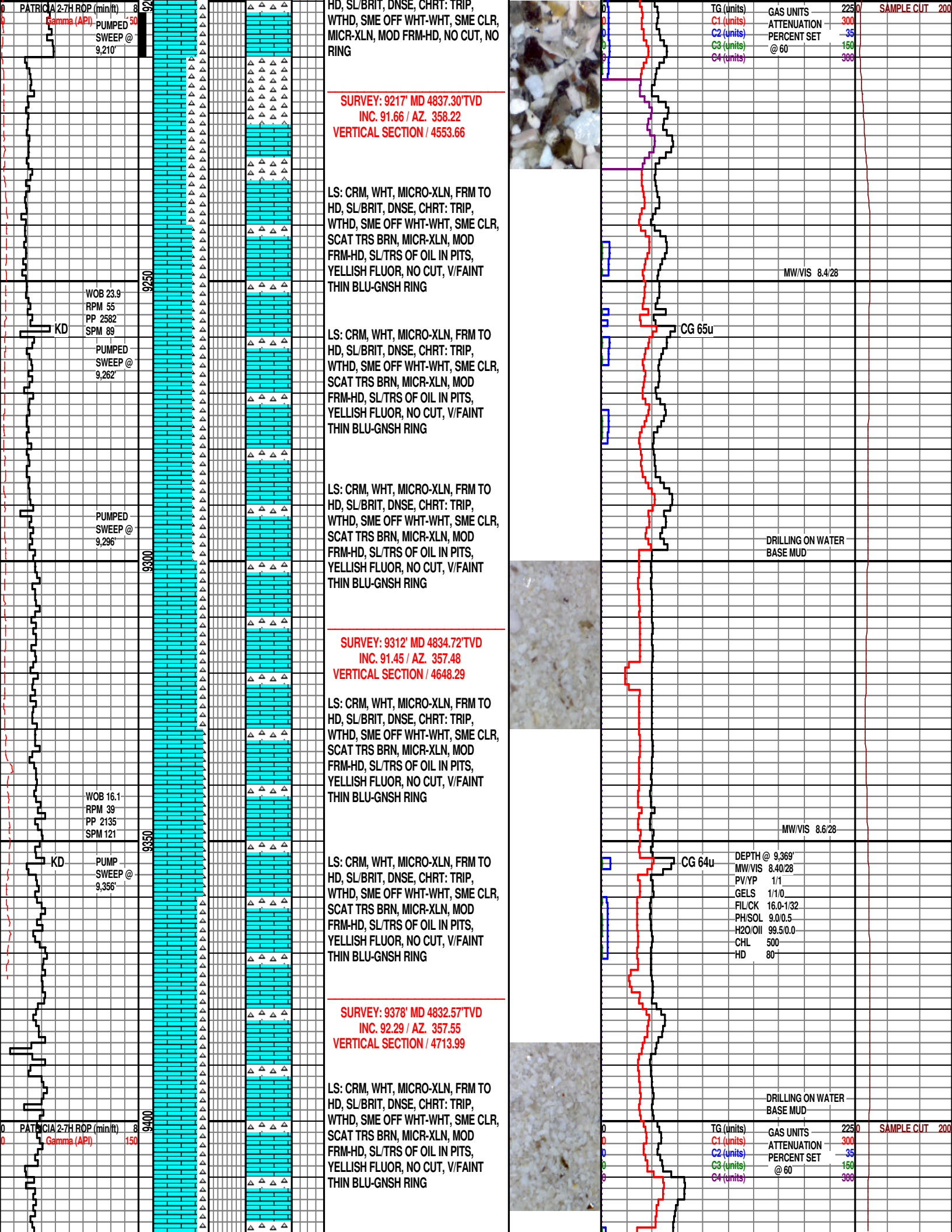
CG 82u

DRILLING ON WATER BASE MUD

MW/VIS 8.4/27

CG 68u

DRILLING ON WATER BASE MUD


PATRICIA 2-7H ROP (min/ft) 8
Gamma (API) 50
PUMPED SWEEP @ 9,210'
9250
WOB 23.9
RPM 55
PP 2582
SPM 89
KD
PUMPED SWEEP @ 9,262'
PUMPED SWEEP @ 9,296'
9300
WOB 16.1
RPM 39
PP 2135
SPM 121
9350
KD
PUMP SWEEP @ 9,356'
9400
PATRICIA 2-7H ROP (min/ft) 8
Gamma (API) 150
HD, SL/BRIT, DNSE, CHRT: TRIP, WTHD, SME OFF WHT-WHT, SME CLR, MICR-XLN, MOD FRM-HD, NO CUT, NO RING
SURVEY: 9217' MD 4837.30'TVD
INC. 91.66 / AZ. 358.22
VERTICAL SECTION / 4553.66
LS: CRM, WHT, MICRO-XLN, FRM TO HD, SL/BRIT, DNSE, CHRT: TRIP, WTHD, SME OFF WHT-WHT, SME CLR, SCAT TRS BRN, MICR-XLN, MOD FRM-HD, SL/TRS OF OIL IN PITS, YELLISH FLUOR, NO CUT, V/FAINT THIN BLU-GNSH RING
LS: CRM, WHT, MICRO-XLN, FRM TO HD, SL/BRIT, DNSE, CHRT: TRIP, WTHD, SME OFF WHT-WHT, SME CLR, SCAT TRS BRN, MICR-XLN, MOD FRM-HD, SL/TRS OF OIL IN PITS, YELLISH FLUOR, NO CUT, V/FAINT THIN BLU-GNSH RING
LS: CRM, WHT, MICRO-XLN, FRM TO HD, SL/BRIT, DNSE, CHRT: TRIP, WTHD, SME OFF WHT-WHT, SME CLR, SCAT TRS BRN, MICR-XLN, MOD FRM-HD, SL/TRS OF OIL IN PITS, YELLISH FLUOR, NO CUT, V/FAINT THIN BLU-GNSH RING
SURVEY: 9312' MD 4834.72'TVD
INC. 91.45 / AZ. 357.48
VERTICAL SECTION / 4648.29
LS: CRM, WHT, MICRO-XLN, FRM TO HD, SL/BRIT, DNSE, CHRT: TRIP, WTHD, SME OFF WHT-WHT, SME CLR, SCAT TRS BRN, MICR-XLN, MOD FRM-HD, SL/TRS OF OIL IN PITS, YELLISH FLUOR, NO CUT, V/FAINT THIN BLU-GNSH RING
LS: CRM, WHT, MICRO-XLN, FRM TO HD, SL/BRIT, DNSE, CHRT: TRIP, WTHD, SME OFF WHT-WHT, SME CLR, SCAT TRS BRN, MICR-XLN, MOD FRM-HD, SL/TRS OF OIL IN PITS, YELLISH FLUOR, NO CUT, V/FAINT THIN BLU-GNSH RING
SURVEY: 9378' MD 4832.57'TVD
INC. 92.29 / AZ. 357.55
VERTICAL SECTION / 4713.99
LS: CRM, WHT, MICRO-XLN, FRM TO HD, SL/BRIT, DNSE, CHRT: TRIP, WTHD, SME OFF WHT-WHT, SME CLR, SCAT TRS BRN, MICR-XLN, MOD FRM-HD, SL/TRS OF OIL IN PITS, YELLISH FLUOR, NO CUT, V/FAINT THIN BLU-GNSH RING
TG (units)
C1 (units)
C2 (units)
C3 (units)
C4 (units)
GAS UNITS 2250
ATTENUATION PERCENT SET @ 60
300
35
150
300
SAMPLE CUT 200
MW/VIS 8.4/28
CG 65u
DRILLING ON WATER BASE MUD
MW/VIS 8.6/28
CG 64u
DEPTH @ 9,369'
MW/VIS 8.40/28
PV/YP 1/1
GELS 1/1/0
FIL/CK 16.0-1/32
PH/SOL 9.0/0.5
H2O/OIl 99.5/0.0
CHL 500
HD 80
DRILLING ON WATER BASE MUD

PUMP SWEEP 40 BBL CIRC.
SWEEP WHILE WORKING
PIPE

WELL T.D. @ 9,420'
ON
09/07/2013

50

SURVEY: 9420' MD 4830.89'TVD
INC. 92.29 / AZ. 357.55
VERTICAL SECTION / 4755.80

PUMP SWEEP 40 BBL CIRC.
SWEEP WHILE WORKING
PIPE