1067724

KANSAS CORPORATION COMMISSION
OIL & GAS CONSERVATION DIVISION

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 # 33168
Name: Woolsey Operating Company, LLC
Address 1: 125 N MARKET STE 1000
Address 2:
City: WICHITA State: KS Zip: 67202 + 1729
Contact Person: DEAN PATTISON
Phone: (316) 267-4379
CONTRACTOR: License # 33132
Name: Dan D Drilling
Wellsite Geologist: CURTIS COVEY
Purchaser: PLAINS MARKETING / BLUESTEM GAS MARKETING

Designate Type of Completion:

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

- [ ] Oil
- [ ] WSW
- [ ] SWD
- [ ] SIOW
- [ ] Gas
- [ ] D&A
- [ ] ENHR
- [ ] SIGW
- [x] 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 #:

7/18/2011	08/13/2011	08/16/2011
Spud Date or Recompletion Date	Date Reached TD	Completion Date or Recompletion Date

API No. 15 - 15-007-23725-01-00
Spot Description:
NE - SW - NE - SE Sec. 8 Twp. 34 S. R. 11 [ ] East [x] West
1840 Feet from [ ] North / [x] South Line of Section
670 Feet from [x] East / [ ] West Line of Section

Footages Calculated from Nearest Outside Section Corner:
[ ] NE [ ] NW [x] SE [ ] SW

County: Barber
Lease Name: WILEY TRUST Well #: 3-H
Field Name: RHODES SOUTH
Producing Formation: MISSISSIPPIAN
Elevation: Ground: 1362 Kelly Bushing: 1384
Total Depth: 9215 Plug Back Total Depth: 9187
Amount of Surface Pipe Set and Cemented at: 271 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: 2500 ppm Fluid volume: 1800 bbls
Dewatering method used: Hauled to Disposal

Location of fluid disposal if hauled offsite:

Operator Name: WOOSLEY OPERATING COMPANY LLC
Lease Name: HARBAUGH 2 SWD License #: 33168
Quarter SE Sec. 32 Twp. 33 S. R. 11 [ ] East [x] West
County: BARBER Permit #: D-30333

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

- [x] **Letter of Confidentiality Received**
  Date: 11/15/2011
- [x] **Confidential Release Date:** 11/14/2013
- [x] **Wireline Log Received**
- [x] **Geologist Report Received**
- [ ] **UIC Distribution**

ALT [x] **I** [ ] **II** [ ] **III** **Approved by:** NAOMI JAMES **Date:** 11/22/2011

Side Two

[redacted]

1067724

Operator Name: Woolsey Operating Company, LLC Lease Name: WILEY TRUST Well #: 3-H

Sec. 8 Twp. 34 S. R. 11 ☐ East ☑ West County: Barber

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:

GAMMA

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

Name	Top	Datum
DOUGLAS	3668	-2284
MISSISSIPPIAN	4558	-3171

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
Attached	Attached	Attached	Attached	Attached	Attached	Attached	Attached

ADDITIONAL CEMENTING / SQUEEZE RECORD

Purpose:	Depth Top Bottom	Type of Cement	# Sacks Used	Type and Percent Additives
☐ Perforate ☐ Protect Casing ☐ Plug Back TD ☐ Plug Off Zone	2000-2500	COMMON	250	Purpose: To re-drill for straight hole
	-			

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
	see attached		

TUBING RECORD: Size: 2.375 x 4.7# Set At: 4716 Packer At:

Liner Run: ☐ Yes ☐ No

Date of First, Resumed Production, SWD or ENHR. 09/13/2011

Producing Method: ☐ Flowing ☐ Pumping ☑ Gas Lift ☐ Other *(Explain)*

Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio	Gravity
	80		440		

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	Woolsey Operating Company, LLC
Well Name	WILEY TRUST 3-H
Doc ID	1067724

Casing

Purpose Of String	Size Hole Drilled	Size Casing Set	Weight	Setting Depth	Type Of Cement	Number of Sacks Used	Type and Percent Additives
CONDUCTOR	32	20	53	40	GROUT	4	4 YARDS not sx
SURFACE	17.5	13.375	48	271	60/40 POZ	300	2% gel, 3% cc
INTERMEDIATE	8.75	7	23	4753	60/40 POZ	30	
INTERMEDIATE	8.75	7	23	4753	PREMIUM	200	10% salt, 10% Cal-set, .8% FLA-322, 1/4# celoflake
PRODUCTION	7.875	4.5	11.6	4969	NONE	0	NO CEMENT USED

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

Kansas
Corporation Commission

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

Mark Sievers, Chairman
Ward Loyd, Commissioner
Thomas E. Wright, Commissioner

Sam Brownback, Governor

November 15, 2011

DEAN PATTISON
Woolsey Operating Company, LLC
125 N MARKET STE 1000
WICHITA, KS 67202-1729

Re: ACO1
API 15-007-23725-01-00
WILEY TRUST 3-H
SE/4 Sec.08-34S-11W
Barber County, Kansas

Dear Production Department:

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

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

Respectfully,
DEAN PATTISON

P.O. #

ORDERED BY Mike Sharp

BIG BUCKETS RATHOLE DRILLING
P.O. Box 5252
Enid, Oklahoma 73702
Phone (580) 233-9850
Fax (580) 233-4588

№ 4697

Date 7/7/11

Bill To Woolsey Operating LLC

Address

Lease Wiley Trust #3-11

Legal SE/4 Sec 8-34N-11W

County Barber, Ks

Rig Don D Drlg #5

DESCRIPTION	AMOUNT	
Furnish Men & Equipment To Drill Rat, Mouse hole & run 15" Tinhorn (Boots) drill Cellar 5' of 60" & 45 ft. of 30" hole - remove dirt from loc.		
Materials Furnished 45 ft. of 20" pipe - 4 yds of 8 sk grout 5' of 60" tinhorn (cellar) & 50' of 15" Tinhorn & Rat & Mouse hole boots	$6250.	00
JUL 11 2011		
Operator Dean Whittington Approved By Total	$6250	00

BASIC SM ENERGY SERVICES
PRESSURE PUMPING & WIRELINE

10244 NE Hwy. 61
P.O. Box 8613
Pratt, Kansas 67124
Phone 620-672-1201

FIELD SERVICE TICKET

1718 03443 A

DATE TICKET NO.

DATE OF JOB 7-19-11 DISTRICT Pratt Ks	NEW WELL ☑ OLD WELL ☐ PROD ☐ INJ ☐ WDW ☐ CUSTOMER ORDER NO.:
CUSTOMER Woolsey Operating	LEASE Wiley Trust 3-4 WELL NO.
ADDRESS	COUNTY BARBER STATE KS
CITY STATE	SERVICE CREW Sullivan, Melson, Phye
AUTHORIZED BY	JOB TYPE: CNW 13 3/8 Cond.

EQUIPMENT#	HRS	EQUIPMENT#	HRS	EQUIPMENT#	HRS
33708-20920	35	mi			
19960-19918	35	m			
37900					

	DATE		TIME
TRUCK CALLED	7-18-11	AM (PM)	6:30
ARRIVED AT JOB		AM PM	8:45
START OPERATION	7-19-11	(AM) PM	1:20
FINISH OPERATION		(AM) PM	2:00
RELEASED		AM PM	2:30
MILES FROM STATION TO WELL			45

WELL FILE
Regulatory Correspondence
Drlg / Comp Workovers
Tests / Meters Operations

CONTRACT CONDITIONS: (This contract must be signed before the job is commenced or merchandise is delivered).
The undersigned is authorized to execute this contract as an agent of the customer. As such, the undersigned agrees and acknowledges that this contract for services, materials, products, and/or supplies includes all of and only those terms and conditions appearing on the front and back of this document. No additional or substitute terms and/or conditions shall become a part of this contract without the written consent of an officer of Basic Energy Services LP.

SIGNED: Raymond Tuttle
(WELL OWNER, OPERATOR, CONTRACTOR OR AGENT)

ITEM/PRICE REF. NO.	MATERIAL, EQUIPMENT AND SERVICES USED	UNIT	QUANTITY	UNIT PRICE	$ AMOUNT
CP 103	60/40 poz cmt	SK	300		3,600 00
CC 102	Cellflake	lb	25		277 50
CC 107	Calcium chloride	lb	774		812 70
E 100	pickup mileage	mi	45		191 25
E 101	Heavy Eqmt mileage	mi	90		630 00
E 113	Bulk Delivery	TM	551		928 80
CE 200	Depth charge 0-500	EA	1		1,000 00
CE 240	Blending - Mixing	SK	300		420 00
S003	Service Supervisor	EA	1		175 00

SUB TOTAL

CHEMICAL / ACID DATA:			

SERVICE & EQUIPMENT	%TAX ON $	
MATERIALS	%TAX ON $	
	TOTAL	5,222.91

Thank you

SERVICE REPRESENTATIVE Robert Allen

THE ABOVE MATERIAL AND SERVICE ORDERED BY CUSTOMER AND RECEIVED BY: Raymond Tuttle
(WELL OWNER OPERATOR CONTRACTOR OR AGENT)

FIELD SERVICE ORDER NO.

CLOUD LITHO - Abilene, TX

BASIC ENERGY SERVICES
PRESSURE PUMPING & WIRELINE

10244 NE Hwy. 61
P.O. Box 8613
Pratt, Kansas 67124
Phone 620-672-1201

FIELD SERVICE TICKET

1718 04338 A

DATE TICKET NO.

DATE OF JOB 7-23-11 DISTRICT PRATT, KS	NEW WELL ☑ OLD WELL ☐ PROD ☐ INJ ☐ WDW ☐ CUSTOMER ORDER NO.:
CUSTOMER WOOLSEY OPERATING CO LLC	LEASE WILEY TRUST WELL NO. 3-H
ADDRESS	COUNTY BARBER STATE KS.
CITY STATE	SERVICE CREW KG, ROB, JOE, MIKE L.
AUTHORIZED BY	JOB TYPE: CMW - WHIPSTOCK PLUG

EQUIPMENT#	HRS	EQUIPMENT#	HRS	EQUIPMENT#	HRS
19907		19832	1/		
		21010	1/2		
37900					
33708	1/2				
20920	1/2				

	DATE	AM PM	TIME
TRUCK CALLED	7-23		0700
ARRIVED AT JOB		AM PM	1030
START OPERATION		AM PM	1115
FINISH OPERATION		AM PM	1145
RELEASED		AM PM	1230
MILES FROM STATION TO WELL	45		

WELL FILE
Regulatory Correspondence
Drlg / Comp Workovers
Tests / Meters Operations

CONTRACT CONDITIONS: (This contract must be signed before the job is commenced or merchandise is delivered).
The undersigned is authorized to execute this contract as an agent of the customer. As such, the undersigned agrees and acknowledges that this contract for services, materials, products, and/or supplies includes all of and only those terms and conditions appearing on the front and back of this document. No additional or substitute terms and/or conditions shall become a part of this contract without the written consent of an officer of Basic Energy Services LP.

SIGNED:
(WELL OWNER, OPERATOR, CONTRACTOR OR AGENT)

ITEM/PRICE REF. NO.	MATERIAL, EQUIPMENT AND SERVICES USED	UNIT	QUANTITY	UNIT PRICE	$ AMOUNT
CP100	COMMON CEMENT	SK.	250		4000.00
P700	20/40 MESH SAND	CWT.	25		775.00
CC102	CELLFLAKE	lb.	63		233.10
CC105	C-41P	lb.	59		236.00
CC109	CALCIUM CHLORIDE	lb.	470		493.50
CC112	CFR	lb.	235		1410.00
E100	PICKUP MILE	mile	45		191.25
E101	TRUCK MILE	mile	90		630.00
E113	BULK DELIVERY	TM	529		846.00
CE203	PUMP CHARGE	EA.	1		1800.00
CE240	BLENDING CHARGE	SK.	250		350.00
S003	SERVICE SUPERVISOR	EA	1		175.00

CHEMICAL / ACID DATA:			

SUB TOTAL 8800.48

SERVICE & EQUIPMENT	%TAX ON $	
MATERIALS	%TAX ON $	
	TOTAL	

SERVICE REPRESENTATIVE K. GOADSEY

THE ABOVE MATERIAL AND SERVICE ORDERED BY CUSTOMER AND RECEIVED BY: Wm R Hallada
(WELL OWNER OPERATOR CONTRACTOR OR AGENT)

FIELD SERVICE ORDER NO.

CLOUD LITHO - Abilene, TX

BASIC ENERGY SERVICES
PRESSURE PUMPING & WIRELINE

10244 NE Hwy. 61
P.O. Box 8613
Pratt, Kansas 67124
Phone 620-672-1201

FIELD SERVICE TICKET

1718 04709 A

DATE TICKET NO.

DATE OF JOB 7-31-2011 DISTRICT PRATT, KS.	NEW WELL ☑ OLD WELL ☐ PROD ☐ INJ ☐ WDW ☐ CUSTOMER ORDER NO.:
CUSTOMER WOOLSEY OPERATING	LEASE WILEY TRUST WELL NO. 3-11
ADDRESS	COUNTY BARBER STATE KS.
CITY STATE	SERVICE CREW ORLANDO, LESLEY, MITCHELL
AUTHORIZED BY	JOB TYPE: CNW - 7" L.S.

EQUIPMENT#	HRS	EQUIPMENT#	HRS	EQUIPMENT#	HRS
27283	1.5				
27463	1.5				
30464-19808	1.5				

WELL FILE
Regulatory Correspondence
Drlg / Comp Workovers
Tests / Meters Operations

	DATE	AM/PM	TIME
TRUCK CALLED	7-31-11	AM/PM	11:30
ARRIVED AT JOB		AM/PM	3:30
START OPERATION		AM/PM	7:00
FINISH OPERATION		AM/PM	8:30
RELEASED		AM/PM	9:00
MILES FROM STATION TO WELL	45		

CONTRACT CONDITIONS: (This contract must be signed before the job is commenced or merchandise is delivered).
The undersigned is authorized to execute this contract as an agent of the customer. As such, the undersigned agrees and acknowledges that this contract for services, materials, products, and/or supplies includes all of and only those terms and conditions appearing on the front and back of this document. No additional or substitute terms and/or conditions shall become a part of this contract without the written consent of an officer of Basic Energy Services LP.

SIGNED: X Mike Thomas
(WELL OWNER, OPERATOR, CONTRACTOR OR AGENT)

ITEM/PRICE REF. NO.	MATERIAL, EQUIPMENT AND SERVICES USED	UNIT	QUANTITY	UNIT PRICE	$ AMOUNT
CL 100	PREMIUM / COMMON	SK	200		3,200 00
CL 103	100/40 POZ	SK	30		360 00
CC 102	CELL-FLAKE	lb	58		214 60
CC 111	SALT	lb	1133		566 50
CC 113	GYPSUM	lb	1880		1,410 00
CC 129	FLA-322	lb	151		1,132 50
CF 104	TOP RUBBER CMT. PLUG, 7"	EA	1		110 00
CF 1282	SURE SEAL CEMENTED FLOAT SHOE, 7"	EA	1		800 00
CF 1894	SURE SEAL FLOAT COLLAR, 7"	EA	1		1,020 00
CF 1752	CENTRALIZER, 7"	EA	7		595 00
CF 3000	INDUSTRIAL RUBBER THREADLOCK KIT	EA	1		34 00
CC 151	MUD FLUSH	GAL	500		430 00
F 100	PICKUP MILEAGE	MI	45		191 25
F 101	HEAVY EQUIPMENT MILEAGE	MI	90		630 00
F 113	BULK DELIVERY CHARGE	TM	482		770 40
CE 205	DEPTH CHARGE; 5001'-10000'	HR	1-4	2520 -	~~2,880 00~~
CE 240	BLENDING SERVICE CHARGE	SK	230		322 00
CE 504	PLUG CONTAINER CHARGE	JOB	1		250 00
S 003	SERVICE SUPERVISOR	EA	1		175 00

SUB TOTAL DLS 11,048 44

CHEMICAL / ACID DATA:			

SERVICE & EQUIPMENT	%TAX ON $	
MATERIALS	%TAX ON $	
	TOTAL	

SEP - 2 2011

SERVICE REPRESENTATIVE Deron Fisher

THE ABOVE MATERIAL AND SERVICE ORDERED BY CUSTOMER AND RECEIVED BY: X Mike Thomas
(WELL OWNER OPERATOR CONTRACTOR OR AGENT)

FIELD SERVICE ORDER NO.

CLOUD LITHO - Abilene, TX

Tres Management, Inc. — Completion / Workover Report

Operator:	WOOLSEY OPER.			**Well Name:**	WILEY TRUST 3-H
Date:	9/7/2011	**Report No.:**	1	**Cty, State:**	WILEY TRUST 3-H

Current / Planned Operations: FRAC

Casing Record			**Tubing Record**			**Packer / Bridge Plug Record**		
Size	Depth		Size	Type	Depth	Brand	Model	Depth
0	0		0	0		0		
0	0		0	0	0	0	0	0

Perforation Record	Formation	From	To	Density	Shots per ft.	Total shots	Gun Type
	0	0	0				

Hours	**Operation**
	WEDNESDAY 9-7-11
	STAGE 1
	7:00 MIRU BASIC FRAC , PRESS TEST 5,000 # , FRAC PORT = 9131'
	10% MIRA = 1,000 GAL. PAD = 66,000 GALS, FRAC = 249,000 GALS
	FLUSH = 10500 GAL . 30/70 BROWN = 183,750 # ATP= 3,960
	MTP = 4997# , AR = 85 BPM , MR = 85 BPM , ISIP = 580# , FB = 1,500#
	STAGE 2
	FRAC PORT = 8,496' , 10% MIRA = 1,000 GALS , PAD = 13,000 GALS
	FRAC = 29,000 GALS , FLUSH = 9,744 GALS , 30/70 BROWN = 21,250#
	ATP= 3,960# , MTP = 4,997# , AR = 87 BPM , MR = 87 BPM .
	ISIP = 301 # , FB = 940 #
	STAGE 3
	FRAC PORT = 8,008' , 10% MIRA = 1,000 GALS , PAD = 44,000 GALS
	FRAC = 166,000 GALS , FLUSH = 9,450 GALS , 30/70 BROWN = 122,500#
	ATP = 2,720 # , MP = 2,817 # , AR = 93 BPM , MR = 93 BPM .
	ISIP = 301 # , FB = 530 # .
	STAGE 4
	FRAC PORT = 7,701' , 10% MIRA = 1,000 GALS , PAD = 44,000 GALS
	FRAC = 166,000 GALS , FLUSH = 9,240 GALS , 30/70 BROWN = 122,500 #
	ATP = 3,420 # , MP = 4,030 # , AR = 95 BPM , MR = 95 BPM ,
	ISIP = 925 # , FB = 1,300 #
	STAGE 5
	FRAC PORT = 7,348' , 10% MIRA = 1,000 GALS , PAD = 44,000 GALS
	FRAC = 166,000 GALS , FLUSH = 9,030 GALS , 30/70 BROWN = 122,500 #
	ATP = 3,020 # , MP = 4,030 # , AR = 95 BPM , MR = 95 BPM .
	ISIP = 862 # , FB = 1370 #
	STAGE 6
	FRAC PORT = 6,951' , 10% MIRA = 1,000 GALS , PAD = 22,000 GALS
	FRAC = 83,000 GALS , FLUSH = 8,778 GALS , 30/70 BROWN = 61,250 #
	ATP = 3,010 # , MP = 4,002 # , AR = 95 BPM , MR = 95 BPM .
	ISIP = 805 # , FB = 1,260 #
	SECURE WELL , SIFN

Daily Cost					**Fluid Record**			
Compl Rig	$ -		Snub		Zone			
Rentals			Slick Line		24 hr rec.			
CBL			Tubing		Total rec			
Perf			Wellhead		BLWTR			
Water	$ -		Pipeline		Swab Rate			
Pump Serv			Construction		Flow Rate			
Acid / Frac			Surf. Equip.		Flow Press.			
Pkr / Plugs			Superv.	$ 1,250.00	Misc. Information			
Flow Test			Misc.		Jts. Tubing on Hand		0	
Disposal			Contingency		Jts. Tubing in Hole		0	
Drill Out	$ -	$ -	DAILY	$ 1,250.00	Safety Meeting Held		YES	
Coil Tbg		$ 1,250.00	PREV. CUM.	$ -	Accidents:		NO	
Cement			CUM	$ 1,250.00	Consultant: MICK GREEN			

Tres Management, Inc. — Completion / Workover Report

Operator:	WOOLSEY OPER.			**Well Name:**	WILEY TRUST 3-H
Date:	9/8/2011	**Report No.:**	3	**Cty, State:**	WILEY TRUST 3-H

Current / Planned Operations: FRAC

Casing Record			**Tubing Record**			**Packer / Bridge Plug Record**		
Size	Depth		Size	Type	Depth	Brand	Model	Depth
0	0		0	0		0		
			0	0	0	0	0	0

Perforation Record	Formation	From	To	Density	Shots per ft.	Total shots	Gun Type
	0	0	0				

Hours	**Operation**
	THURSDAY 9-8-11
	STAGE # 7
	7:00 SICP = 80 # , PRESS TEST 5,000# , FRAC PORT = 6,682' , 10%MIRA = 1,000 GALS ,PAD = 13,000 GALS FRAC = 29,000 GALS , FLUSH = 8568 GALS, 30/70 BROWN = 21,250 # ATP = 2,390 # , MTP = 3,100 # , AR = 96 BPM , MR = 96 BPM. ISIP = 810 # , FB = 1,050 # .
	STAGE # 8
	FRAC PORT = 6,370' , 10% MIRA = 1,000 GALS , PAD = 44,000 GALS FRAC = 166,000 GALS , FLUSH = 8,400 GALS , 30/70 BROWN = 122,500 # ATP = 1970 # , MTP = 2,595 # , AR = 96 BPM , MR = 97 BPM , ISIP = 643 # , FB = 860 #
	STAGE # 9
	FRAC PORT = 5,969' , 10 % MIRA = 1,000 GALS , PAD = 13,000 GALS
	FRAC = 29,000 GALS , FLUSH = 8,114 GALS , 30/70 BROWN = 21,250 # ATP = 1,850 # , MTP = 2,937 # , AR = 97 BPM , MR = 98 BPM . ISIP = 527 # , FB = 720 #
	STAGE 10
	FRAC PORT = 5,696' , 10 % MIRA = 1,000 GALS , PAD = 18,000 GALS . FRAC = 48,000 GALS , FLUSH = 7,938 GALS , 30/70 BROWN = 35,000 # . ATP = 1,760 # , MTP = 2,491 # , AR =97 BPM , MR = 98 BPM , ISIP = 508 # , FB = 753 #
	STAGE 11

	FRAC PORT = 5,298' , 10 % MIRA = 1,000 GALS , PAD = 21,000 GALS .
	ATP = 1,400 # MTP = 2,380 , AR = 98 BPM , MR = 98 BPM
	ISIP = 320# , FB = 700 #

	STAGE 12
	FRAC PORT = 4,894' , 10% MIRA = 1,000 GALS PAD = 22,000 GALS FRAC = 83,000 GALS , FLUSH = 13,000 GALS , 30/70 BROWN = 61,250 # ATP = 1,281 # , MTP = 1,810 # , AR = 99 BPM , MR = 100 BPM . ISIP = 367 # , 5 MIN 0 , FB = 700 # LTR = 42,606 BBLS RDMO BASIC FRAC , SECURE WELL SIFN .

Daily Cost					**Fluid Record**			
Compl Rig			Snub		Zone			
Rentals	$ 1,500.00		Slick Line		24 hr rec.			
CBL			Tubing		Total rec			
Perf			Wellhead		BLWTR			
Water			Pipeline		Swab Rate			
Pump Serv	$ 26,000.00		Construction		Flow Rate			
Acid / Frac	$ 400,000.00		Surf. Equip.		Flow Press.			
Pkr / Plugs	$ 4,500.00		Superv.	$ 1,250.00	Misc. Information			
Flow Test			Misc.	$ 26,000.00	Jts. Tubing on Hand		0	
Disposal			Contingency		Jts. Tubing in Hole		0	
Drill Out		$ 432,000.00	DAILY	$ 459,250.00	Safety Meeting Held	YES		
Coil Tbg		$ 27,250.00	PREV. CUM.	$ 1,250.00	Accidents:	NO		
Cement			CUM	$ 460,500.00	Consultant: MICK GREEN			

Tres Management, Inc. — Completion / Workover Report

Operator:	WOOLSEY OPER.			**Well Name:**	WILEY TRUST 3-H
Date:	9/9/2011	**Report No.:**	3	**Cty, State:**	WILEY TRUST 3-H

Current / Planned Operations: FRAC

Casing Record			**Tubing Record**			**Packer / Bridge Plug Record**		
Size	Depth		Size	Type	Depth	Brand	Model	Depth
0	0		0	0		0		
			0	0	0	0	0	0

Perforation Record	Formation	From	To	Density	Shots per ft.	Total shots	Gun Type
	0	0	0				

Hours	**Operation**
	FRIDAY 9-9-11
	Shut down waiting on coil tubing

Daily Cost					**Fluid Record**			
Compl Rig			Snub		Zone			
Rentals			Slick Line		24 hr rec.			
CBL			Tubing		Total rec			
Perf			Wellhead		BLWTR			
Water			Pipeline		Swab Rate			
Pump Serv			Construction		Flow Rate			
Acid / Frac			Surf. Equip.		Flow Press.			
Pkr / Plugs			Superv.	$ 1,250.00	Misc. Information			
Flow Test			Misc.	$ 26,000.00	Jts. Tubing on Hand			
Disposal			Contingency		Jts. Tubing in Hole			
Drill Out			DAILY	$ 459,250.00	Safety Meeting Held			
Coil Tbg			PREV. CUM.	$ 1,250.00	Accidents:			
Cement			CUM	$ 460,500.00	Consultant: MICK GREEN			

Tres Management, Inc. — Completion / Workover Report

Operator:	WOOLSEY OPER.			**Well Name:**	WILEY TRUST 3-H
Date:	9/10/2011	**Report No.:**	5	**Cty, State:**	MEDICINE LODGE KS.

Current / Planned Operations: DRILLING OUT

Casing Record		Tubing Record			Packer / Bridge Plug Record		
Size	Depth	Size	Type	Depth	Brand	Model	Depth
7 23#	0	0	0		0		
4.5 11.6#							
0	0	0	0	0	0	0	0

Perforation Record	Formation	From	To	Density	Shots per ft.	Total shots	Gun Type
	0	0	0	0			

Hours	Operation
	SATURDAY 9-10-11
	7:.00 SICP = 100# , MIRU GREAT WHITE 2' COIL UNIT
	PU , RIH W/ , TTS 3 5/8 MILL , 2 7/8 MOTOR , JAR , D SUB ,
	DRILL OUT FRAC PORTS AS FOLLOWS 4,894' , 5,298' , 5,969'
	6,370' , 6,682' , 6,951' , 7,348' , 7,701 ,8,008' , 8,496 .
	CONT. IN HOLE TO 9,131' . SHORT TRIPPING AFTER EVERY
	TWO FRACK PORTS TO MAINTAIN BS PRESS , PUMPING 2.5 BBLS
	FLUID 1,500 SCF OF N2 . PUMPING GEL SWEEPS AFTER EVERY PORT
	L.D MOTOR AND MILL , RDMO COIL UNIT , WHP = 0
	SECURE WELL SIFN
	PUMPED 2282 BBLS OF FRESH WATER
	REC. 993 BBLS OF LOAD WATER
	LTR = 43,895 BBLS

Daily Cost					Fluid Record			
Compl Rig			Snub		Zone			
Rentals	$ 21,000.00		Slick Line		24 hr rec.			
CBL			Tubing		Total rec			
Perf			Wellhead		BLWTR			
Water	$ 1,000.00		Pipeline		Swab Rate			
Pump Serv			Construction		Flow Rate			
Acid / Frac			Surf. Equip.		Flow Press.			
Pkr / Plugs			Superv.		Misc. Information			
Flow Test	$ 1,500.00		Misc.		Jts. Tubing on Hand		0	
Disposal			Contingency		Jts. Tubing in Hole		0	
Drill Out	$ 180,000.00	$ 203,500.00	DAILY	$ 203,500.00	Safety Meeting Held		YES	
Coil Tbg		$ -	PREV. CUM.	$ 512,500.00	Accidents:		NO	
Cement			CUM	$ 716,000.00	Consultant: MICK GREEN			

Tres Management, Inc. — Completion / Workover Report

Operator:	WOOLSEY OPER.			**Well Name:**	WILEY TRUST 3-H
Date:	9/12/2011	**Report No.:**	6	**Cty, State:**	MEDICINE LODGE KS.

Current / Planned Operations:	RUNNING TUBING

Casing Record		**Tubing Record**			**Packer / Bridge Plug Record**		
Size	Depth	Size	Type	Depth	Brand	Model	Depth
7' 23#	4781'	2.375	4.7# J 55	4,718'	0	R	4,718'
4.5 11.6#	4230 - 9,187'						
0	0	0	0	0	0	0	0

Perforation Record	Formation	From	To	Density	Shots per ft.	Total shots	Gun Type
	MISS.	0	0	0		PORTS	

Hours	**Operation**	
	MONDAY 9-12-11	
	10:00 FCP = 0 , MIRU RED HILLS W/S ,UNLOAD AND TALLY	
	148 JTS OF NEW 2.375 J-55 ,4.7# TUBING . N.D FRAC VALVE	
	N.U BOPS . PU , RIH , W/ MODEL R PKR , 1 JT S.N , GLV AS FOLLOWS.	
	KB = 15'	
	52 JTS = 1,685' ---------- 1,700'	14 JTS = 454' ---------- 3,663'
	GLV # 7 = 4.10 ---------- 1,704'	GLV # 3 = 4.10' -------- 3,667'
	17 JTS = 551' ---------- 2,256'	13 JTS = 421' ---------- 4,088'
	GLV # 6 = 4.10' ---------- 2,260'	GLV # 2 = 4.10' -------- 4,092'
	15 JTS = 486' ---------- 2,746'	17 JTS = 551' ---------- 4,644'
	GLV # 5 = 4.10' ---------- 2,750'	GLV # 1 = 4.10' -------- 4,648'
	14 JTS = 454' ---------- 3,204'	2 JTS = 64'---------- 4,712'
	GLV # 4 = 4.10' ---------- 3,208'	PKR = 5' ---------- 4,718'
	144 JTS TOTAL IN WELL	
	N.D BOPS N.U TREE . SECURE WELL SIFN . TURN OVER TO PROD.	
	THANKS MICK GREEN	

Daily Cost					**Fluid Record**			
Compl Rig	$ 3,000.00		Snub		Zone			
Rentals	$ 3,000.00		Slick Line		24 hr rec.			
CBL			GLV	$ 4,600.00	Total rec			
Perf			Wellhead	$ 3,600.00	BLWTR			
Water			Pipeline		Swab Rate			
Pump Serv			Construction		Flow Rate			
Acid / Frac			Surf. Equip.		Flow Press.			
Pkr / Plugs	$ 1,700.00		Superv.	$ 1,250.00	Misc. Information			
Flow Test			Misc.		Jts. Tubing on Hand		4	
Disposal			Contingency		Jts. Tubing in Hole		144	
Drill Out		$ 7,700.00	DAILY	$ 17,150.00	Safety Meeting Held			
Coil Tbg		$ 9,450.00	PREV. CUM.	$ 717,250.00	Accidents:			
Cement			CUM	$ 734,400.00	Consultant:	MICK GREEN		

Covey
The Well Watchers

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

Well Name:	WILEY TRUST 3-H		
Location:	Section 8 - Township 34 South - Range 11 West		
Licence Number:	15-007-23,725 - 01-00	Region:	Barber County, KS.
Spud Date:	18 July 2011	Drilling Completed:	13 August 2011
Surface Coordinates:	1,840' FSL & 670' FEL		
Bottom Hole Coordinates:	Horizontal RTD (9,215'MD) reported to be 4,671.9' S & 944.5' W of surface		
Ground Elevation (ft):	1,368'	K.B. Elevation (ft):	1,384'
Logged Interval (ft):	3,900' To: 4,130' MD	Total Depth (ft):	9,215'MD
Formation:	Douglas ------> Mississippian Chert		
Type of Drilling Fluid:	Chemical .... 4,100'MD --> 4,764'MD / Poly Plus (Water) .... 4,764'MD --> 9,215'MD		

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

OPERATOR

Company: WOOLSEY OPERATING COMPANY, LLC
Address: 125 North Water, Suite 1000
Wichita, Kansas 67202
(316) 267-4379

Geologist:
Dean Pattisson

GEOLOGIST

Name: Curtis Covey
Company: COVEY - The Well Watchers
Address: 6548 Bedford Circle
Derby,Kansas 67037
Office: (316) 776 - 0367

wellsitegeo1@gmail.com
Cell: (316) 217-4679

KB: 1,389'

FORMATION TOPS

GL: 1,373'

Formation	Rotary Sample Depth (Datum)	E-log Depth (Datum)
Haskell (Brown)	3,916' (-2,532')*	No open hole logging
Stark SH	3,946' (-2,562')*	
Hushpuckney SH	NP	
B / KC	NP	
Pawnee LS	NP	
Cherokee Gp	NP	
Mississippian Chert	NP	

* NRS - DTO

RTD: 9,215'MD LTD: NA ATD: NA Rotary sample depth is ? to E-logger's depth. E-Loggers: NA

17-1/2" Hole

18 July --- Spud @ 5pm. Drill to 276'.
19 --- Run 13-3/8" casing.
Set casing @ 271'.
Cemented w/ 300 sx 60/40 Poz (3% CC). [Basic]
Cement did circulate.
Plug down @ 3am. WOC.

12-1/4" Hole

19 July --- 6am @ 276'.
Under surface casing @ 10:45am.
Drilled to 1,002'.

8-3/4" Hole (Vertical)

20 July --- 6am @ 1,002'.
21 --- 6am @ 2,447'. Geolog 1.
22 --- 6am @ 4,130".
T/O for BHA @ 4,130'.
T/O to lay down DP. Survey.
23 --- Cement plug in hole [Basic]. WOC.
24 --- WOC. Drilled cement from 1,885' - 1,933'. Time Drilling cement.
25 July --- Time Drilling cement & formation.
Drilled to 1,971' T/O for BHA.
26 --- Getting Toolface to enter Sidetrack.
Resume Drilling @ 6:50am.
See Geolog 2 -or- Geolog 2A.

HOLE DEVIATION (276' - 2,475'MD) CONTRACTOR REPORTED

DEPTH	/ TVD	--- INCLINATION	AZIMUTH	NORTH	SOUTH	EAST	WEST	DOGLEG deg/100'
276'	/	--- 1,00						
550'	/	--- 0.25						
980'	/	--- 0.75						
1,315'	/	--- 0.50						
1,977'	/	--- 0.75						
2,475'	/	--- 0.75						

Wireline machine broke.

Geolog 1. Drilled to 4,130'. Discovered crooked hole. Cemented plug uphole.
Drilled Cement plug (1,885'-1,933'). Resumed drilling new hole.

See Geolog 2 (Vertical & Curve) and Geolog 2A (Curve & Horizontal).

BIT RECORD

DATE	SIZE	TYPE	JET SIZE	DEPTH IN / OUT	CUM. FT.	HOURS	ROP
18 July	17-1/2"	RTC / DSR6160	20's	40' / 276'	276'	4.00	69.0
19 July	12-1/4"	REED EH111	16's	276' / 1,002'	726'	10.00	72.6
20 July	8-3/4"	REED X616M-C1	6 - 15's	1,002' / 4,130'	3,128'	37.50	83.4

See Geolog 2 -or- Geolog 2A for redrill and horizontal hole bit information.

ROCK TYPES

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

LITHOLOGY
- Anhy
- Bent
- Brec
- Cht
- Clyst
- Coal
- Granite wash
- Congl
- Dol lmst
- Silty dol
- Calc dol
- Dol 2
- Dol
- Gyp
- Igne
- Lmst 2
- Lmst
- Meta
- Mrlst
- Salt
- Shale 3
- Shale 3
- Shale
- Shcol
- Shgy
- Sltst
- Ss
- Till
- Ss 2

MINERAL
- Mica
- 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
- Copper
- Ooliticastic
- Ooloid
- Oolite
- Sucrosic
- Dark specks

STRINGER
- Calc dol
- Silty dol
- Anhy
- Arg
- Bent
- Coal
- Dol
- Gyp
- Ls
- Mrst
- Calc dol
- Sltstrg
- Ssstrg
- Chalk
- New symbol

SHOW
- Oil
- Spotted
- Ques
- Dead
- Gas
- Oil/gas
- Bed contact

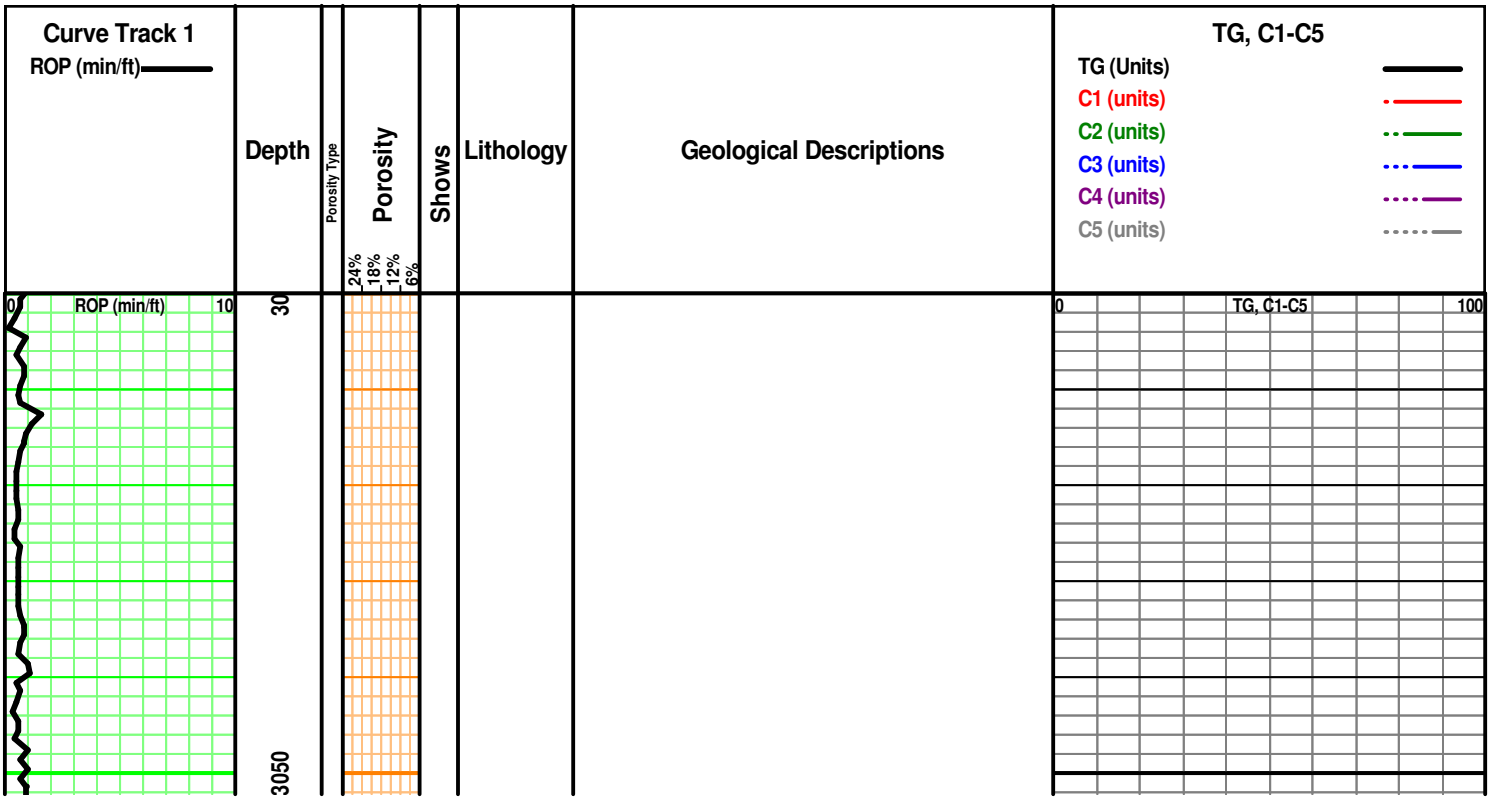
ACCESSORIES
- Algae
- Amph
- Belm
- Bioclst
- Brach
- Bryozoa
- Cephal
- Coral
- Spore
- Crin
- Echin
- Fish
- Foram
- Fossil
- Gastro
- Oolite
- Ostra
- Pelec
- Pellet
- Pisolite
- Plant
- Strom

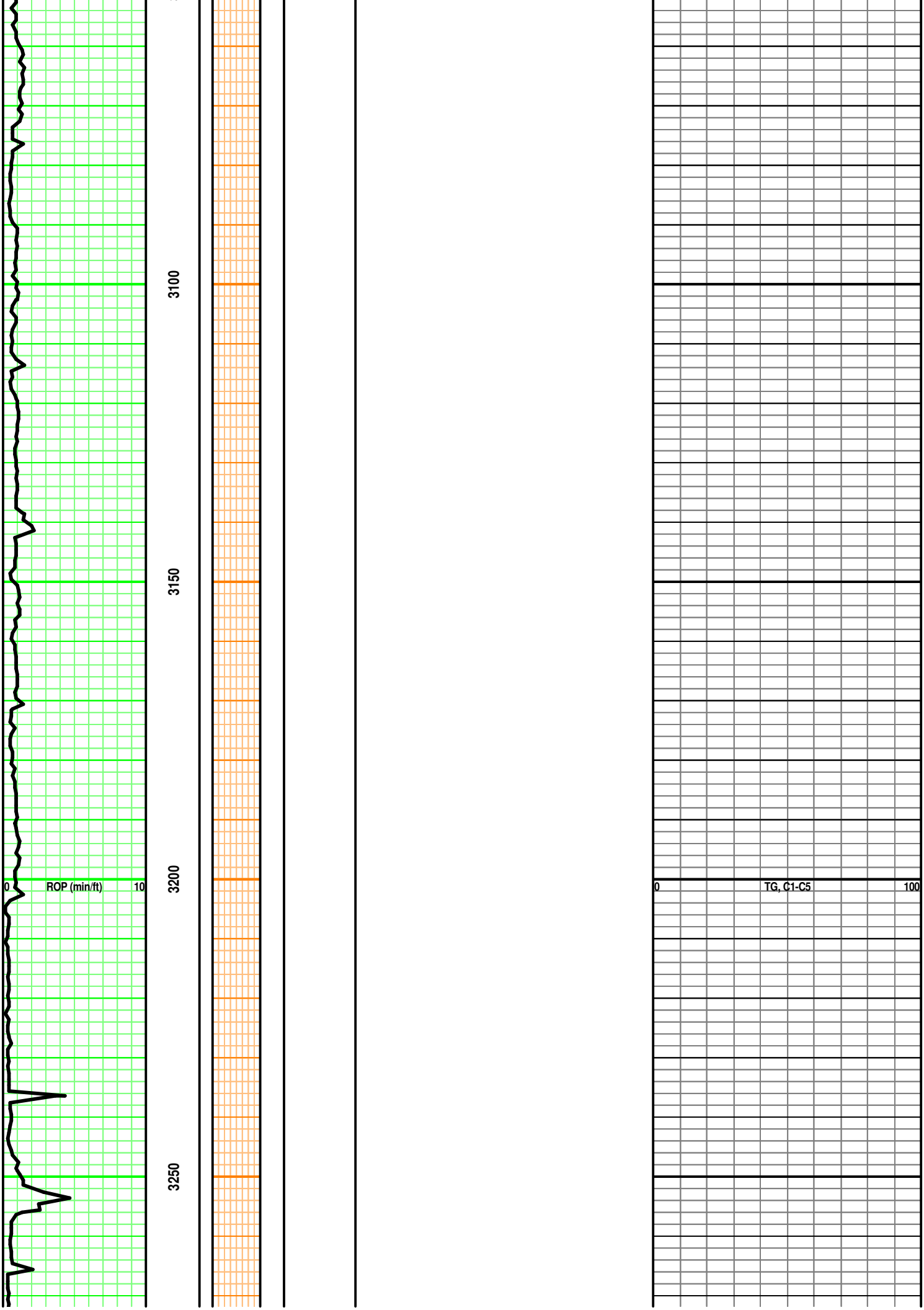
OTHER SYMBOLS

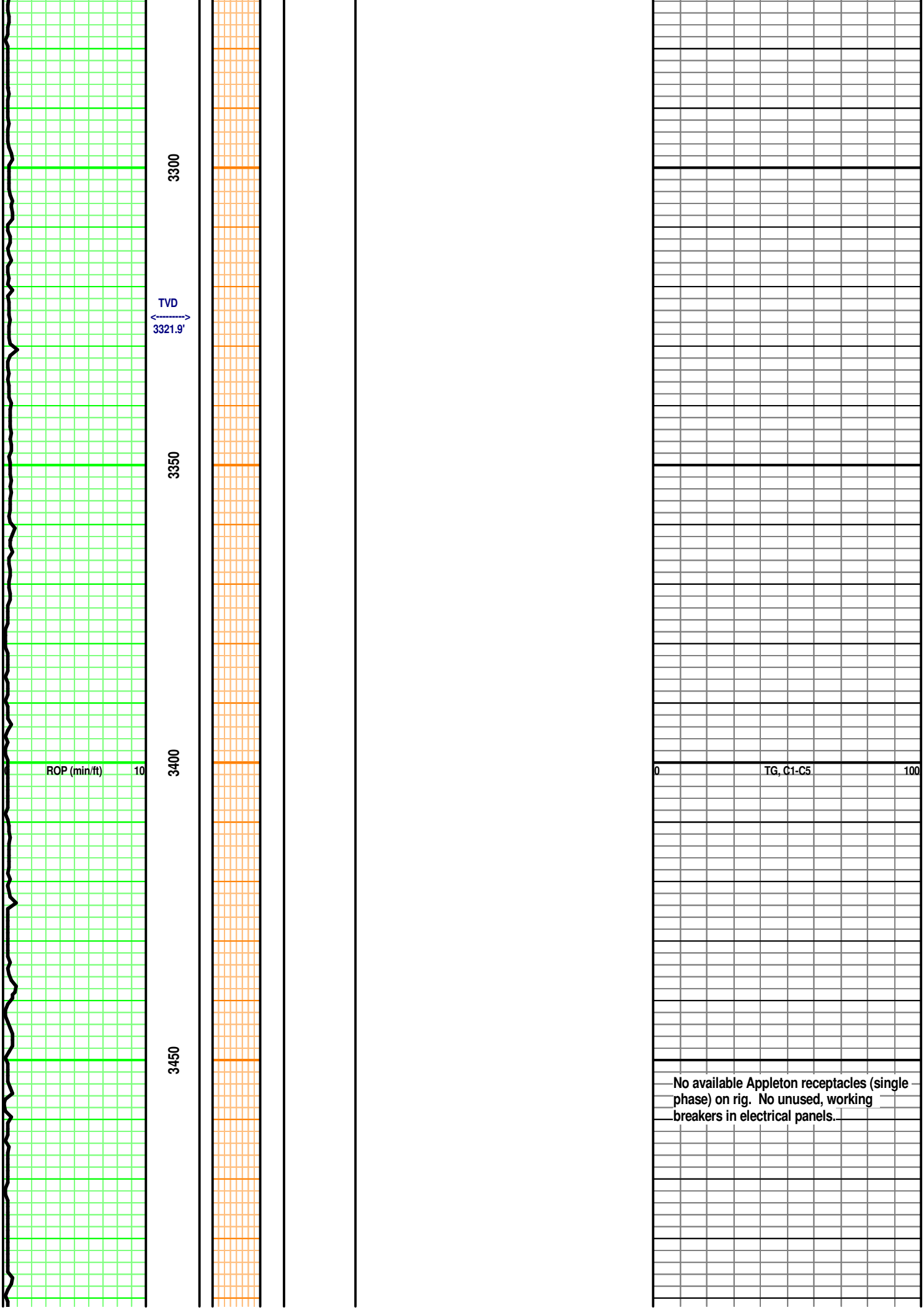
ACTIVITY
- Lost circulation
- Circulate for sample 2
- Circulate for samples
- Rtd
- Bit trip

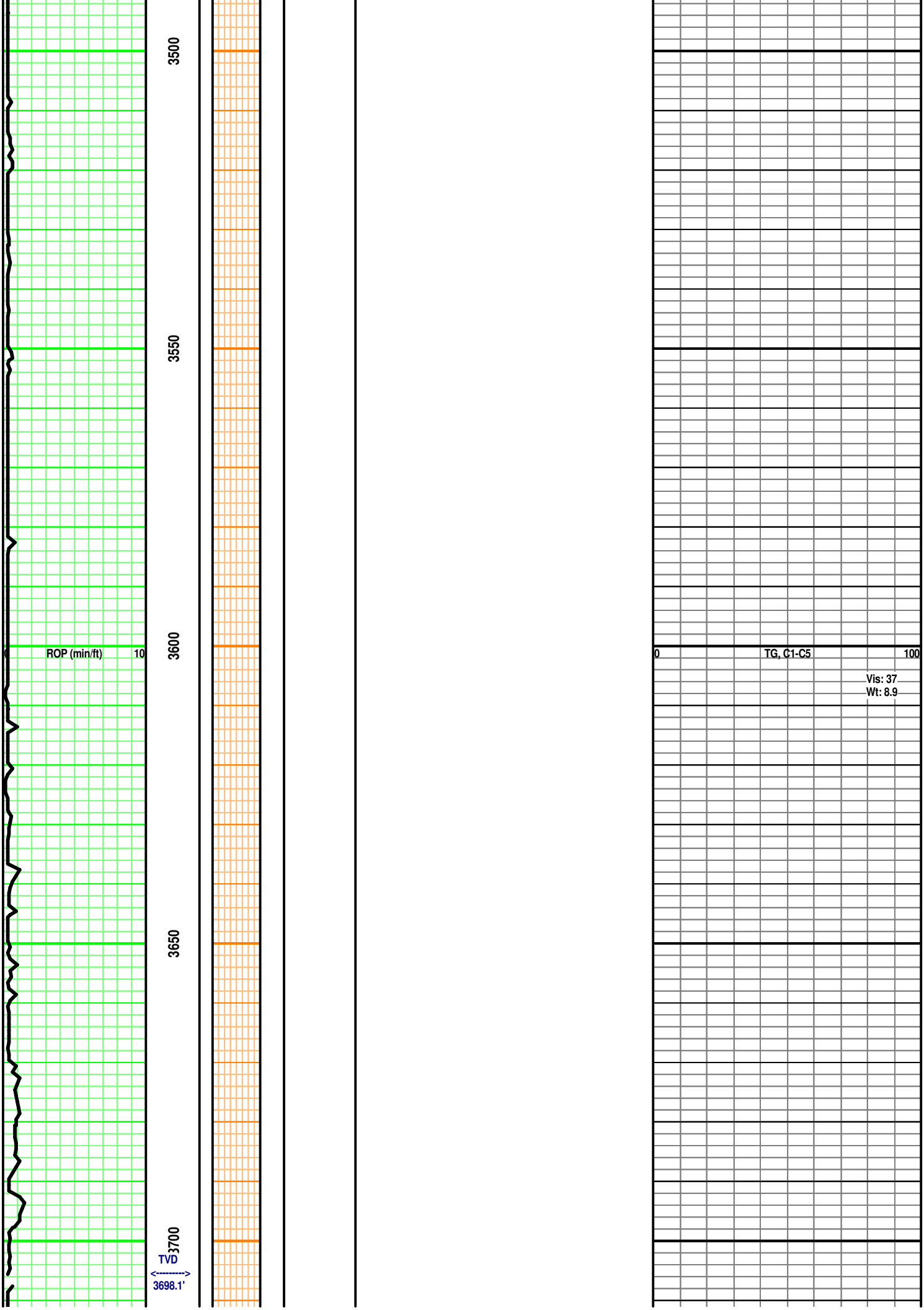
INTERVAL
- Core
- Dst
- Jammed core

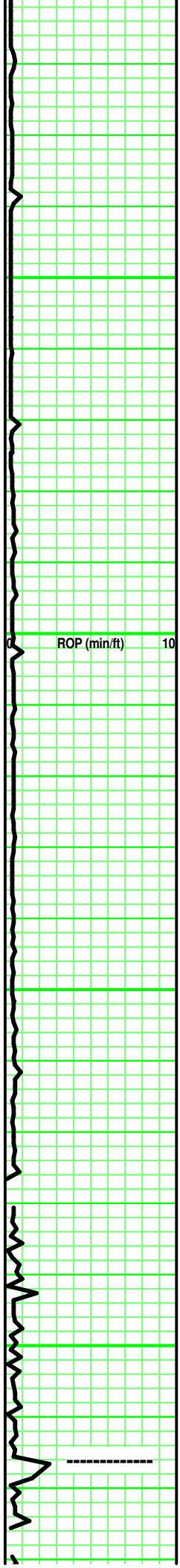
EVENT
- Connection
- Rft
- Sidewall




3100
3150
3200
3250
0
ROP (min/ft)
10
0
TG, C1-C5
100


3300
TVD
<---------->
3321.9'
3350
3400
ROP (min/ft)
10
0
TG, C1-C5
100
3450
No available Appleton receptacles (single phase) on rig. No unused, working breakers in electrical panels.


3500
3550
3600
3650
3700
TVD
<---------->
3698.1'
0
ROP (min/ft)
10
0
TG, C1-C5
100
Vis: 37
Wt: 8.9



3750

3800

3850

3900

100 units = 1% gas

0 TG, C1-C5 100

Rigged up gas detection trailer to generator used by other onsite trailers.

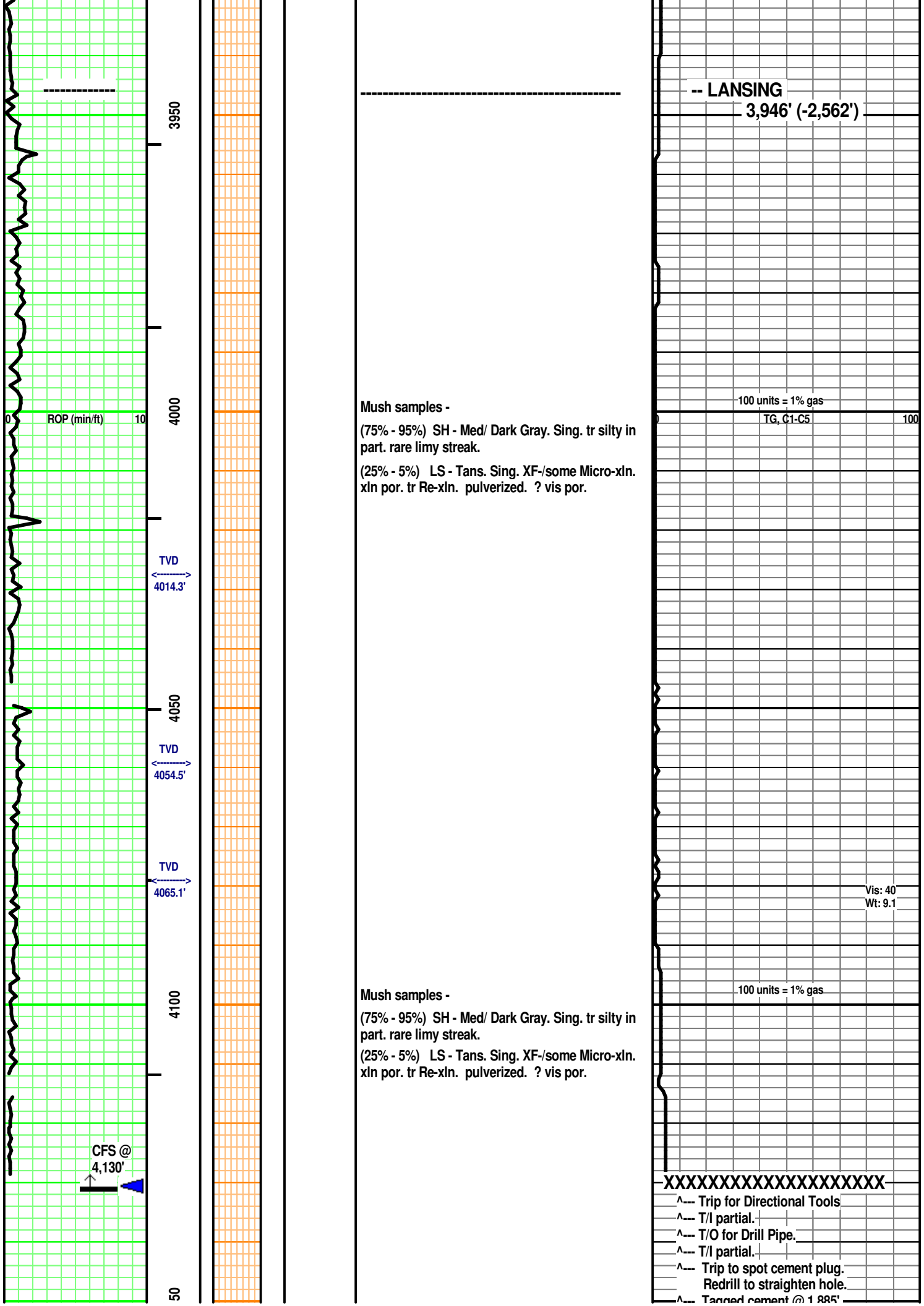
Extractor located in possum belly of shale shaker.

Mush samples -

(75% - 95%) SH - Med/ Dark Gray. Sing. tr silty in part. rare limy streak.

(25% - 5%) LS - Tans. Sing. XF-/some Micro-xln. xln por. tr Re-xln. pulverized. ? vis por.

-- HASKELL
3,916' (-2,532')



Mush samples -

(75% - 95%) SH - Med/ Dark Gray. Sing. tr silty in part. rare limy streak.

(25% - 5%) LS - Tans. Sing. XF-/some Micro-xln. xln por. tr Re-xln. pulverized. ? vis por.

Mush samples -

(75% - 95%) SH - Med/ Dark Gray. Sing. tr silty in part. rare limy streak.

(25% - 5%) LS - Tans. Sing. XF-/some Micro-xln. xln por. tr Re-xln. pulverized. ? vis por.

Drilled cement: 1,885'-1,933'.

WILEY TRUST 3-H

1,840' FSL & 670' FEL 8-T34S-R11W
Barber County, Kansas

Wellsite Geologist:
Curtis Covey
COVEY - The Well Watchers

Well Number: 1,120

WOOLSEY OPERATING CO. LLC.
Wichita, Kansas

GEOLOG 1

0 ROP (min/ft) 10

4200

GEOLOG 1

0 TG, C1-C5 100

See GEOLOG 2 - Vertical & Curve
3,500' MD - 4,764' MD

See GEOLOG 2A - Curve & Horizontal
4,100' MD - 9,215' MD

Covey

The Well Watchers

HORIZONTAL LITHOLOGY STRIP LOG

WellSight Systems

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

Well Name:	WILEY TRUST 3-H		
Location:	Section 8 - Township 34 South - Range 11 West		
License Number:	15-007-23,725 - 01-00	Region:	Barber Cty, KS.
Spud Date:	18 July 2011	Drilling Completed:	13 August 2011
Surface Coordinates:	1,840' FSL & 670' FEL, SE/4		
Bottom Hole Coordinates:	Horizontal RTD (9,215'MD) reported to be 4,671.9' S & 944.5' W of surface coordinates.		
Ground Elevation (ft):	1,368'	K.B. Elevation (ft):	1,384'
Logged Interval (ft):	4,100'MD To: 9,215'MD	Total Depth (ft):	9,215'MD
Formation:	Lansing -----> Mississippian Chert		
Type of Drilling Fluid:	Chemical .... 4,100'MD --> 4,764'MD / Poly Plus (Water) .... 4,764'MD --> 9,215'MD		

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

OPERATOR

Company: WOOLSEY OPERATING COMPANY, LLC
Address: 125 North Market, Suite 1000
Wichita, Kansas 67202

Geologists:
Dean Pattisson
Brian Wilhite

GEOLOGIST

Name: Curtis E. Covey
Company: COVEY - The Well Watchers
Address: 6548 Bedford Circle
Derby, Kansas 67037
Office: (316) 776-0367 Cell: (316) 217-4679

KB: 1,384' GL: 1,368'

FORMATION TOPS

Formation	Rotary Sample Depth (Datum)	E-log Depth (Datum)
Heebner Sh	3,936' (-2,252')*	No open hole log.
Toronto	3,648' (-2,264')*	
Douglas Sh	3,668' (-2,284')*	
Haskell (Brown)	3,905' (-2,521')*	
Lansing	3,905' (-2,812')*	
Stark SH	4,326' MD / TVD 4,321' (-2,937')	
Hushpuckney SH	4,358' MD / TVD 4,352' (-2,968')	
B / KC	4,413' MD / TVD 4,400' (-3,016')	
Pawnee LS	4,528' MD / TVD 4,489' (-3,105')	
Mississippian Chert	4,652' MD / TVD 4,558' (-3,174')	

RTD: 9,215 'MD LTD: N / A ATD: N /A Rotary sample depth is ? to E-log depth. E-Loggers: NA

2011

DAILY DRILLING STATUS -- JULY

2011

GEOLOG 1 - VERTICAL

17-1/2" Hole

18 July --- Spud @ 5pm. Drill to 276'.
19 --- Run 13-3/8" casing.
Set casing @ 271'.
Cemented w/ 300 sx 60/40 Poz
(3% CC). [Basic]
Cement did circulate.
Plug down @ 3am. WOC.

12-1/4" Hole

19 July --- 6am @ 276'.
Under surface casing @ 10:45am.
Drilled to 1,002'.

8-3/4" Hole (Vertical & Curve)

20 July --- 6am @ 1,002'.
21 --- 6am @ 2,447'. Geolog 1.
22 --- 6am @ 4,130".
T/O for BHA @ 4,130'.
T/O to lay down DP. Survey.
23 --- Cement plug in hole [Basic]. WOC.
24 --- WOC. Drilled cement from
1,885' - 1,933'. Time Drilling cement.
25 July --- Time Drilling cement & formation.
Drilled to 1,971' T/O for BHA.
26 --- Getting Toolface to enter
Sidetrack.
Resume Drilling @ 6:50am.
See Geolog 2.

2011

DAILY DRILLING STATUS -- JULY & AUGUST

GEOLOG 2 - VERTICAL & CURVE

GEOLOG 2A - CURVE & HORIZONTAL

2011

8-3/4" Hole (Vertical & Curve)

25 July --- Time Drilling cement & formation.
Cement (1,885'-1,933').
Drilled to 1,971' T/O for BHA.
26 --- Getting Toolface to enter
Sidetrack.
Resume Drilling @ 6:50am.
7am @ 1,980'.
27 --- 7am @ 2,820'.
28 --- 7am @ 3,635'.
See Geolog 2. Drill to 4,130'.
Start and ....
29 --- 7am @ 4,130'. Finish trip
for BHA.
30 --- 7am @ 4,545' MD. Drill to 4,764' MD.
31 --- Prep hole. Set 7" casing @
4,760' MD. WOC.

6-1/8" Hole (Curve & Horizontal)

1 Aug --- WOC. Resumed
Drilling @ 2pm.
2 --- 7am @ 4,920' MD. T/O.
3 --- 7am @ 5,151' MD. Washed
one joint to bottom.
Resumed Drilling @ 9:30am.
4 --- 7am @ 5,730' MD.
5 --- 7am @ 6,195' MD. Trip @6,258'
MD for Bit/Batteries.
Resumed Drilling @ 8:05pm.
6 --- 7am @ 6,620' MD. Trip @
6,959' MD for Motor/Bit.
7 --- 7am @ 6,959' MD.
Resumed Drilling @ 8:35am.

6-1/8" Hole (Curve & Horizontal)

8 Aug --- Trip @ 7,398' MD (Tool Failure).
7am @ 7,398' MD.
Resumed Drilling @ 6:45pm.
9 --- 7am @ 7,700' MD.
Trip @ 7,857' MD.
10 --- Resumed Drilling @ 1:35am.
7am @ 7,990' MD.
11 --- 7am @ 8,395' MD.
Bit Trip @ 8,436' MD.
12 --- Resumed Drilling @ 2:50am.
7am @ 8,520' MD.
13 --- 7am @ 8,870' MD.
RTD (9,215' MD) @ 9:52pm.

HOLE DEVIATION (276' - 2,475'MD) CONTRACTOR REPORTED

276' /	---	1,00
550' /	---	0.25
980' /	---	0.75
1,315' /	---	0.50
1,977' /	---	0.75
2,475' /	---	0.75

Wireline machine broke.

Geolog 1. Drilled to 4,130'. Discovered crooked hole. Cemented plug uphole. Drilled Cement plug (1,885'-1,933'). Resumed drilling new hole.

See Geolog 2 (Vertical & Curve) and Geolog 2A (Horizontal).

HOLE DEVIATION (0' - 6,887' MD) Selected Directional / MWD Surveys

DEPTH	/ TVD	---	INCLINATION	AZIMUTH	NORTH	SOUTH	EAST	WEST	DOGLEG deg/100'
0' /	0'	---	0.0	0.0	0.0	0.0'	0.0'	0.0'	0.00
667' /	666.98'	---	0.5	321.4	5.0'			1.1'	0.14
1,885' /	1,884.8'	---	1.5	110.3	15.1'		10.8'		0.29
2,455' /	2,454.5'	---	1.8	289.1	7.5'		9.3'		0.51
3,020' /	3,019.4'	---	0.6	245.2	25.5'		0.1'		0.16
3,522' /	3,521.3'	---	1.3	345.7	29.2'			1.5'	0.49
4,082' /	4,081.1'	---	2.1	223.3	34.6'			9.3'	0.00
4,242' /	4,240.5'	---	10.2	199.6	22.7'			14.5'	10.65
4,399' /	4,387.3'	---	30.0	192.8		29.4'		26.3'	13.10
4,493' /	4,486.3'	---	46.6	196.1		82.4'		40.2'	14.08
4,618' /	4,542.3'	---	58.8	191.8		175.7'		64.3'	12.99
4,713' /	4,582.0'	---	71.8	191.4		260.6'		80.9'	12.99
4,812' /	4,607.5'	---	77.6	194.0		353.6'		100.9'	14.40
4,908' /	4,618.6'	---	89.3	189.7		446.7'		120.9'	7.22
5,002' /	4,616.9'	---	93.0	189.0		539.6'		134.6'	5.81
5,097' /	4,612.2'	---	92.3	188.5		633.5'		148.9'	0.65
5,220' /	4,607.0'	---	91.2	190.8		754.6'		169.2'	4.04
5,314' /	4606.0'	---	89.9	191.3		846.9'		187.3'	1.16
5,409' /	4,604.2'	---	90.0	192.4		970.2'		212.8'	0.70
5,504' /	4,605.0'	---	88.8	192.0		1,032.8'		226.3'	0.99
5,598' /	4,606.9'	---	89.7	191.7		1,124.7'		246.1'	2.07
5,693' /	4,607.2'	---	89.6	191.6		1,217.8'		264.9'	0.32
5,819' /	4,607.6'	---	89.7	192.9		1,340.9'		291.6'	0.65
5,914' /	4,607.0'	---	90.6	192.5		1,433.6'		312.6'	0.70
6,009' /	4,605.4'	---	90.6	192.0		1,526.5'		332.5'	1.87
6,103' /	4,604.2'	---	91.2	190.5		1,618.6'		351.0'	2.52
6,192' /	4,603.3'	---	89.8	190.7		1,706.0'		367.7'	1.39
6,318' /	4,603.8'	---	89.5	190.3		1,830.0'		390.0'	0.32
6,413' /	4,604.6'	---	89.5	191.1		1,923.4'		407.4'	2.19
6,508' /	4,605.3'	---	89.5	190.3		2,016.8'		424.8'	0.31
6,603' /	4,606.3'	---	89.5	190.3		2,110.3'		441.8'	0.97
6,697' /	4,606.4'	---	89.9	190.5		2,202.6'		459.1'	0.46
6,792' /	4,606.3'	---	89.4	190.9		2,296.0'		476.5'	3.24
6,887' /	4,605.3'	---	91.6	192.1		2,389.0'		495.8'	2.28

(4,764' MD = Projected TVD 4,594.8' Incl @ 79.13 deg Azi @ 191.88)

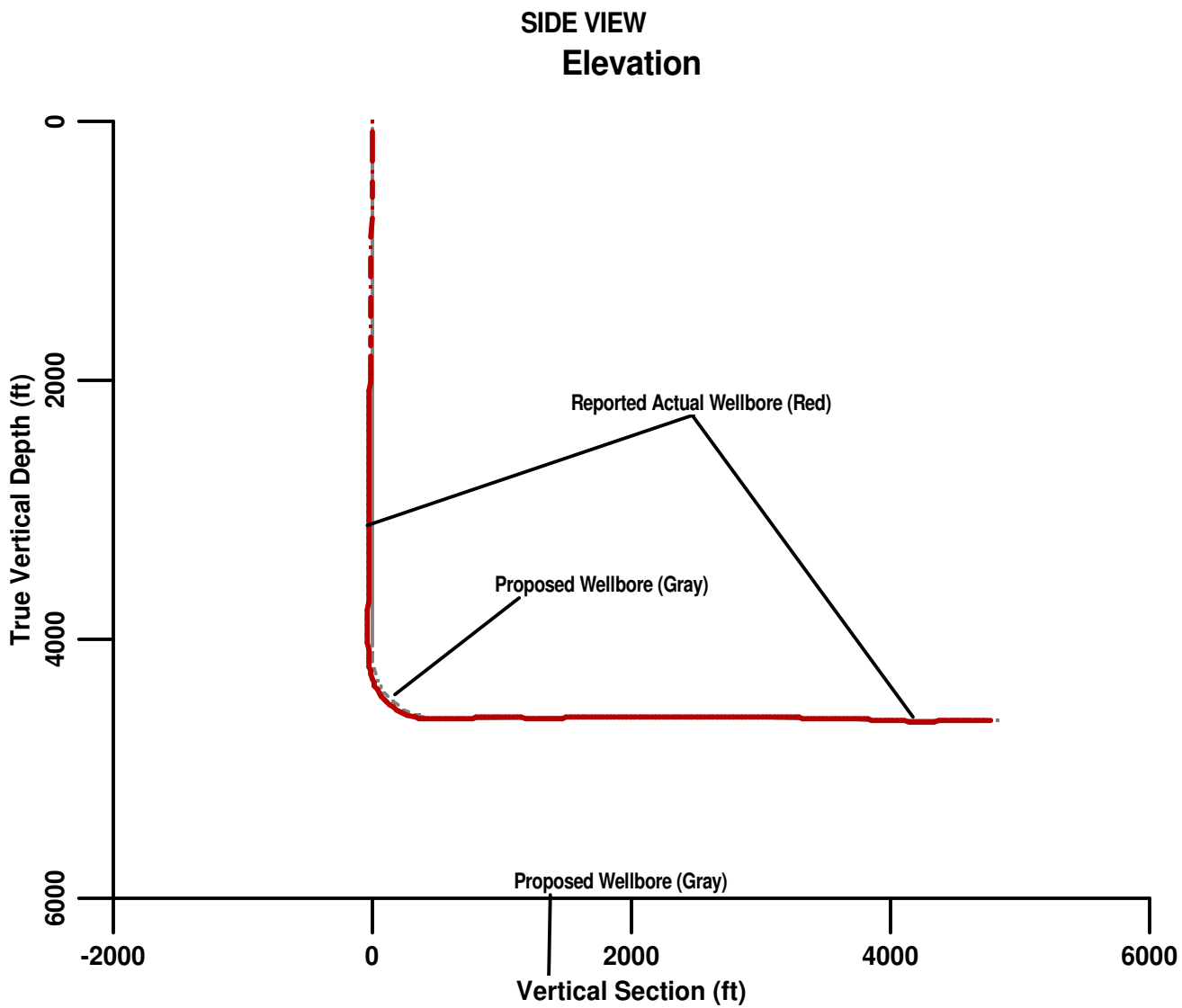
PanAmerican Drilling Services ..... Oklahoma City, Oklahoma

HOLE DEVIATION (7,013' - 9,215'MD) Selected Directional / MWD Surveys

DEPTH / TVD	---	INCLINATION	AZIMUTH	NORTH	SOUTH	EAST	WEST	DOGLEG deg/100'
7,013' / 4,599.9'	---	92.2	191.2		2,512.1'		522.2'	3.04
7,109' / 4,596.4'	---	91.4	190.7		2,606.3'		540.6'	2.69
7,204' / 4,594.7'	---	89.6	188.9		2,699.8'		556.9'	4.61
7,299' / 4,596.5'	---	89.3	189.5		2,793.7'		571.2'	3.22
7,399' / 4,596.5'	---	87.3	189.3		2,886.5'		586.4'	1.56
7,519' / 4,605.3'	---	88.6	189.2		3,010.7'		606.4'	5.04
7,614' / 4,605.9'	---	89.1	188.7		3,104.5'		621.3'	3.22
7,708' / 4,606.3'	---	90.1	188.4		3197.4'		635.6'	2.66
7,803' / 4,608.3'	---	86.4	187.9		3291.3'		649.9'	9.23
7,898' / 4,614.3'	---	86.9	189.0		3,385.1'		663.7'	2.88
7,992' / 4,618.5'	---	87.8	190.3		3,477.6'		679.8'	0.72
8,087' / 4,619.4'	---	91.6	191.2		3,539.5'		691.7'	3.37
8,213' / 4,618.0'	---	88.7	191.1		3,694.4'		722.7'	6.28
8,303' / 4,621.1'	---	87.3	191.6		3,787.4'		741.8'	1.59
8,404' / 4,626.7'	---	87.5	192.3		3,881.3'		761.2'	2.44
8,499' / 4,631.1'	---	87.6	192.3		3,973.9'		781.5'	1.02
8,594' / 4,633.6'	---	89.6	193.5		4,066.4'		802.9'	1.98
8,689' / 4,635.2'	---	89.0	192.6		4,159.1'		823.9'	2.69
8,816' / 4,632.9'	---	91.7	193.7		4,282.4'		854.0'	2.10
8,911' / 4,629.9'	---	91.3	193.0		4,374.8'		875.9'	0.99
9,005' / 4,628.7'	---	90.8	193.3		4,466.4'		897.3'	2.90
9,100' / 4,624.9'	---	92.3	193.5		4,624.9'		919.3'	2.92
9,215' / 4,623.3' *	---	90.1	192.3		4,623.3'		944.5'	0.00

* Actual Wellbore Projected to RTD

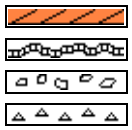
PanAmerican Drilling Services ..... Oklahoma City, Oklahoma


SIDE VIEW
Elevation
True Vertical Depth (ft)
0
2000
4000
6000
Reported Actual Wellbore (Red)
Proposed Wellbore (Gray)
Proposed Wellbore (Gray)
-2000
0
2000
4000
6000
Vertical Section (ft)

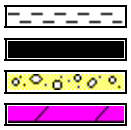
BIT RECORD

DATE	SIZE	TYPE	JET SIZE	DEPTH IN / OUT	CUM. FT.	HOURS	ROP
18 July	17-1/2"	RTC / DSR6160	20's	40' / 276'	276'	4.00	69.0
19 July	12-1/4"	REED EH111	16's	276' / 1,002'	726'	10.00	72.6
20 July	8-3/4"	REED X616M-C1	6 - 15's	1,002' / 4,130'	3,128'	37.50	83.4
Plug back .... Drill cement (1,885' - 1,933') .... drill fresh hole.							
22 July	8-3/4"	REED M4035PDH	3 - 18's	1,885' / 4,130'	2,245'	85.50	26.3
29 July	8-3/4"	REED R20AMPDH	3 - 18's	4,130' / 4,764'	634'	32.00	19.8
1 Aug	6-1/8"	REED R30APDH	3 - 20's	4,764' / 5,151'	367'	28.00	13.1
3 Aug	6-1/8"	REED SL61APDH	3 - 20's	5,151' / 6,258'	1,034'	44.50	23.2
5 Aug	6-1/8"	REED SL61APDH	3 - 20's	6,258' / 6,959'	701'	21.00	33.4
7 Aug	6-1/8"	REED R44APDH2	3 - 20's	6,959' / 7,398'	439'	15.00	29.3
8 Aug	6-1/8"	REED 44APDH2	3 - 20's	7,398' / 7,859'	461'	18.00	25.6
10 Aug	6-1/8"	HUGHES STX-50DX	3 - 20's	7,859' / 8,436'	577'	31.50	18.3
12 Aug	6-1/8"	REED R50PDH2	3 - 20's	8,436' / 9,215'	799'	42.00	19.0

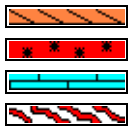
ROCK TYPES



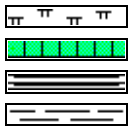
Anhy
Bent
Brec
Cht



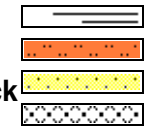
Clyst
Coal
Congl
Dol



Gyp
Igne
Lmst
Meta



Mrlst
Salt
Shale black
Shale



Shcol
Sltst
Ss
Till

ACCESSORIES

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

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

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

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

OTHER SYMBOLS

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

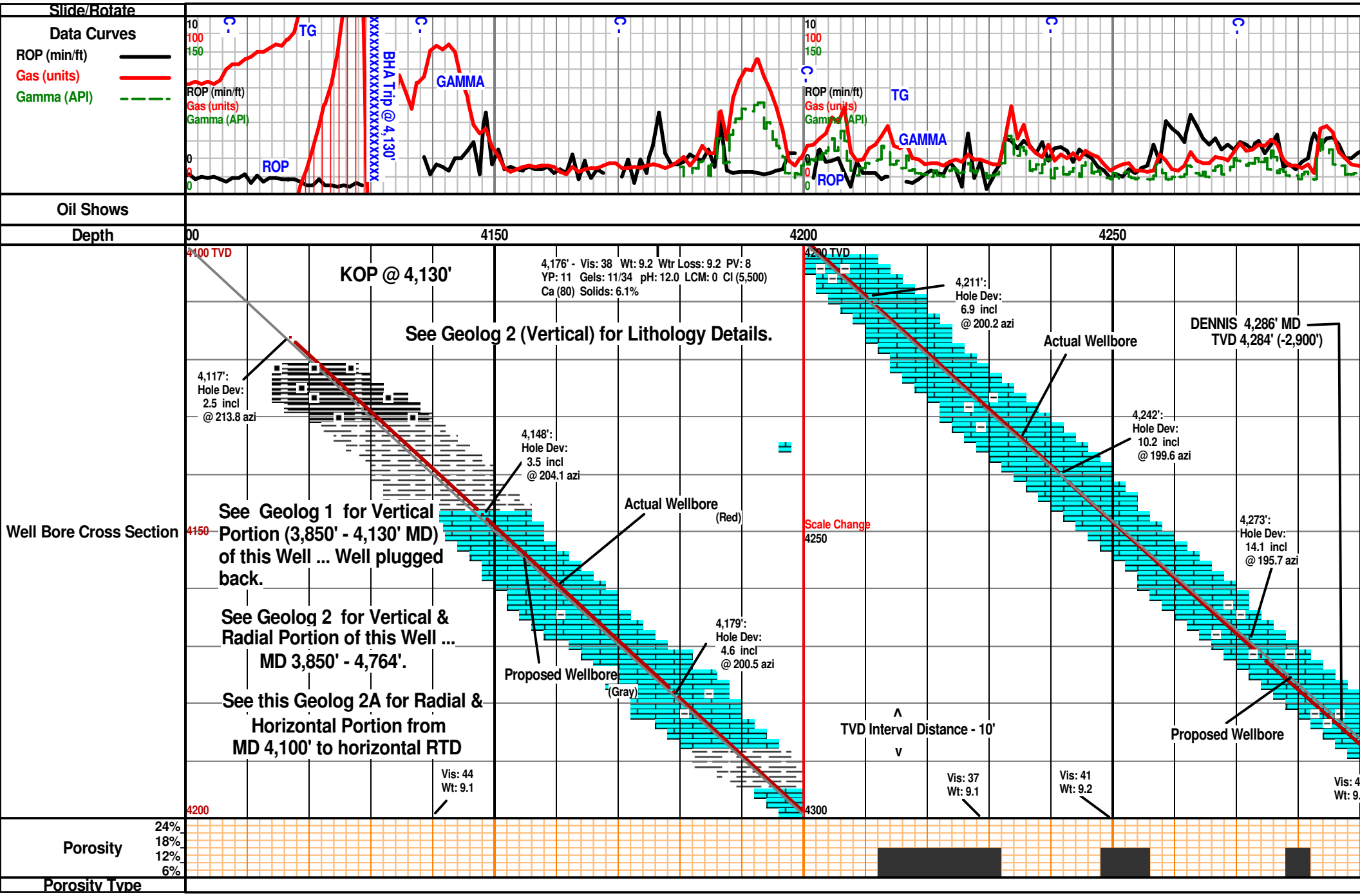
SORTING
- Well
- Moderate
- Poor

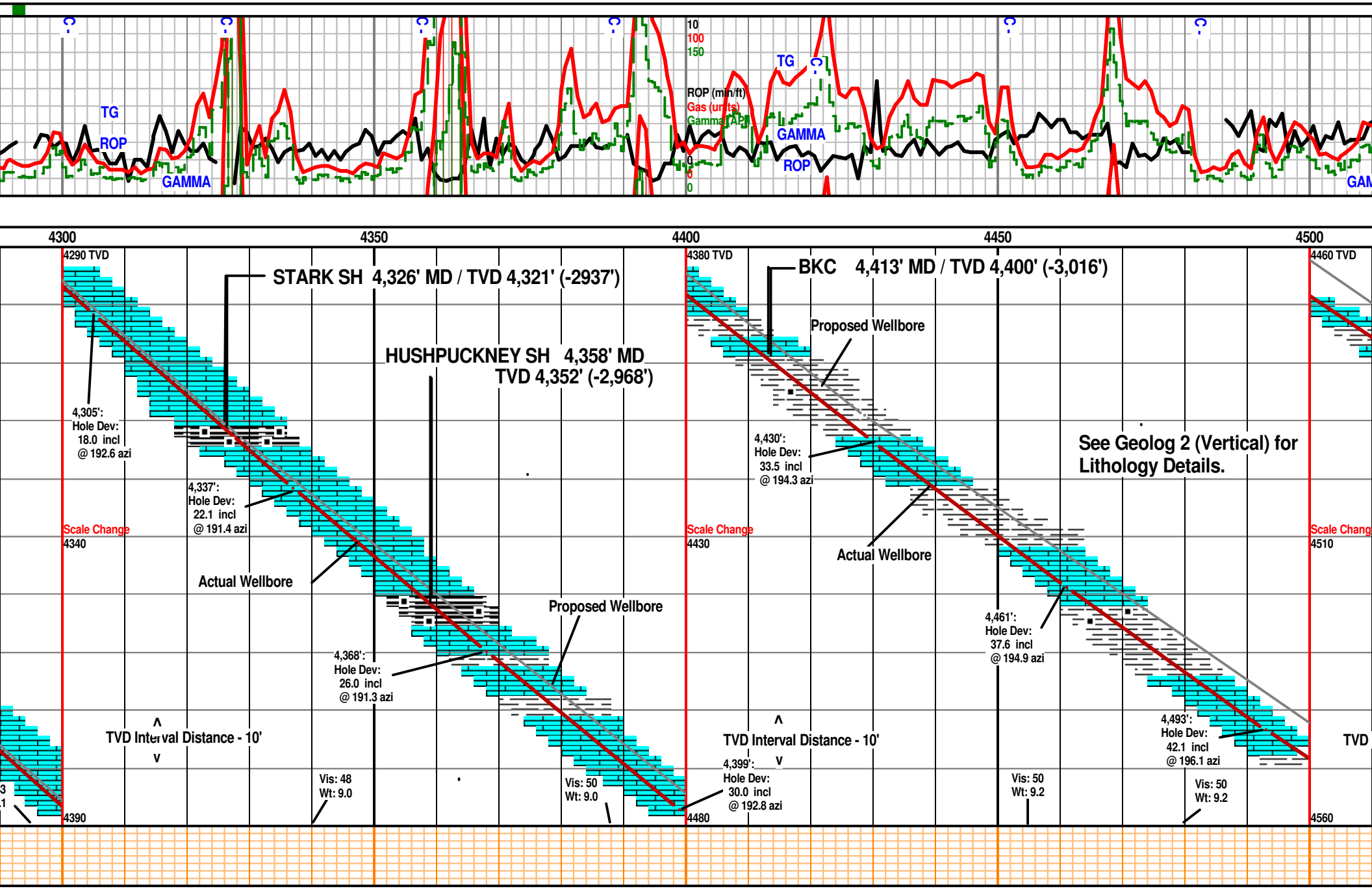
ROUNDING
- Rounded
- Subrnd
- Subang
- Angular

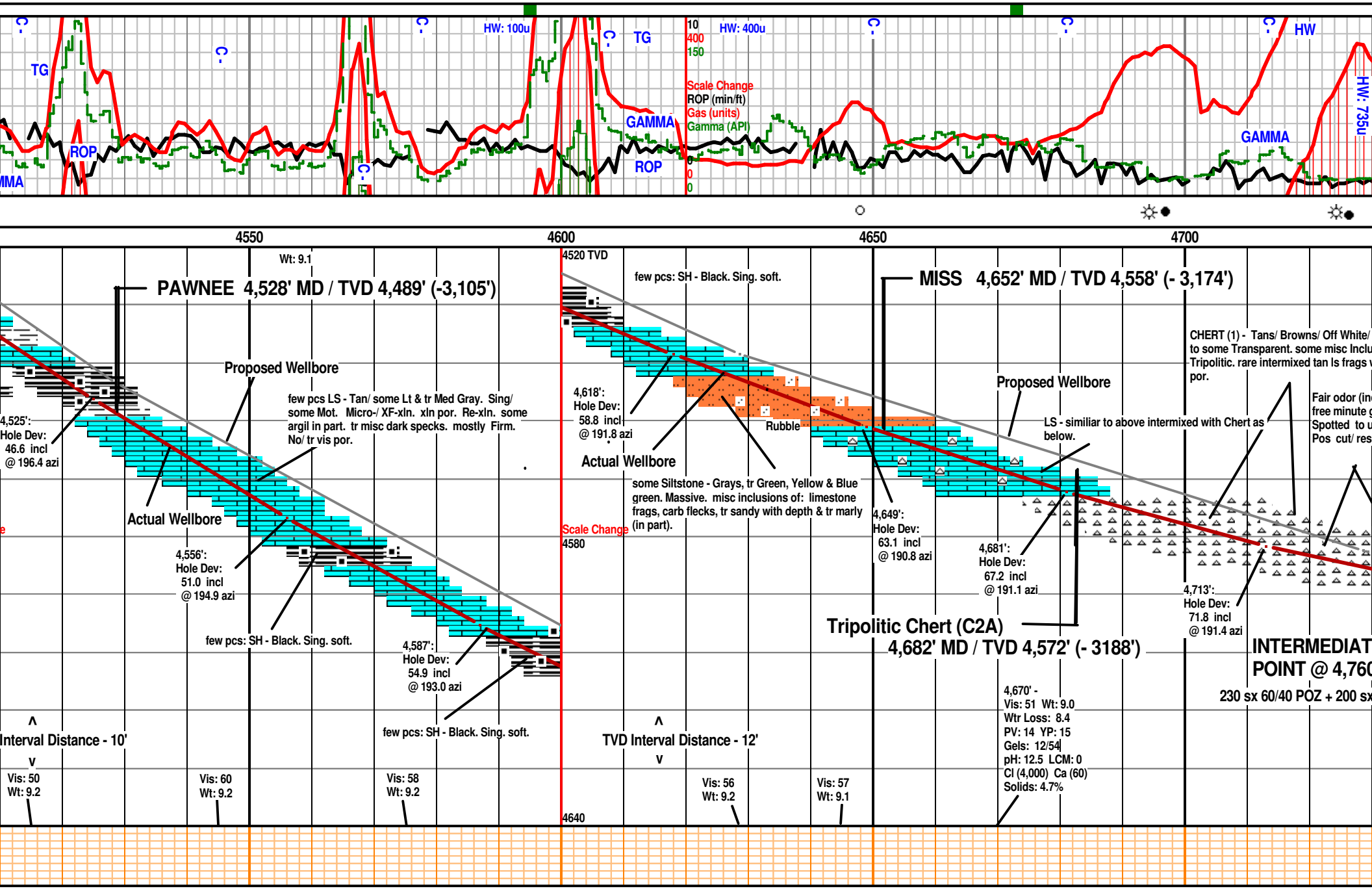
OIL SHOW
- Gas
- Even
- Spotted
- Ques
- Dead

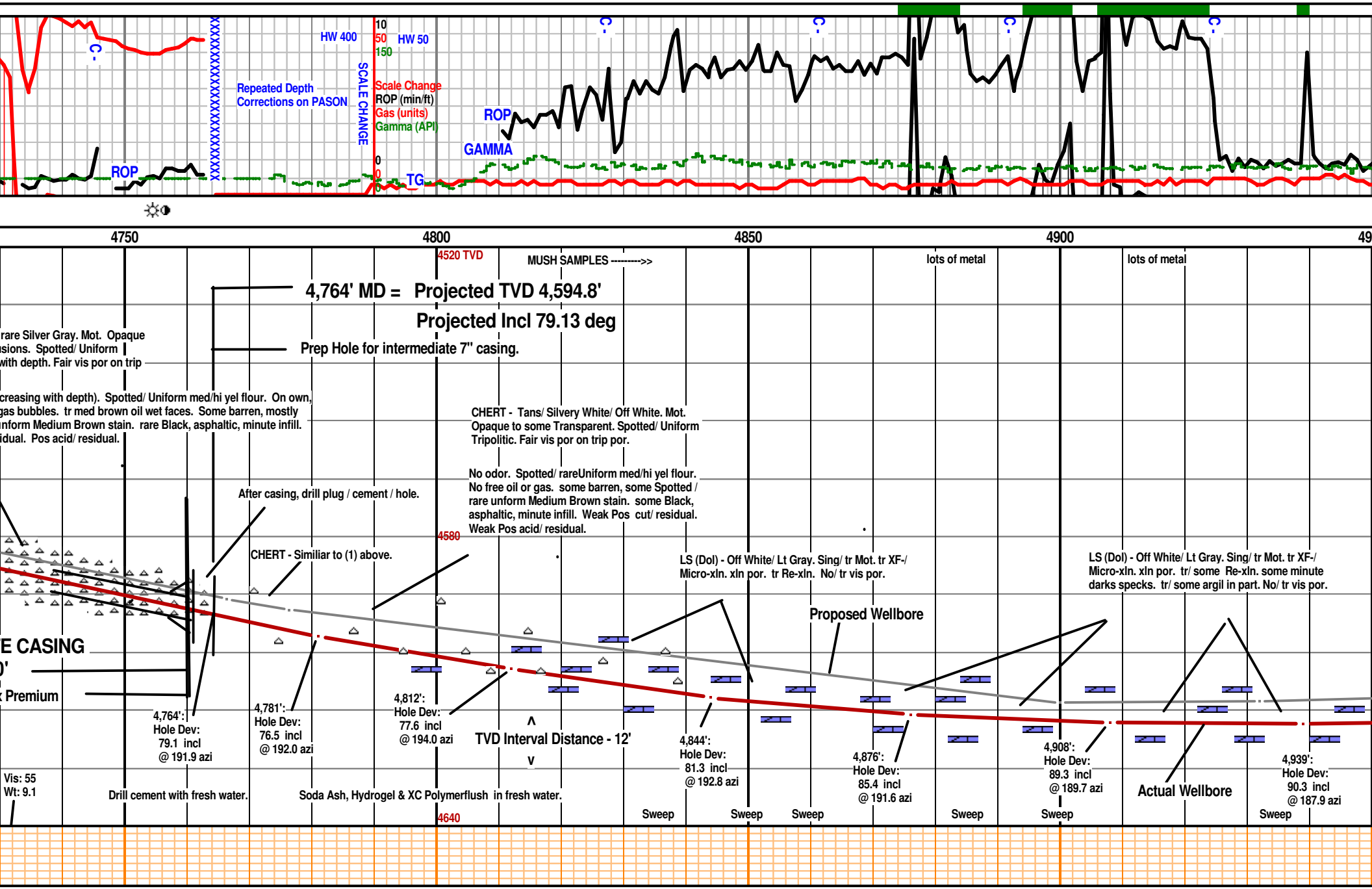
INTERVAL
- Core
- Dst

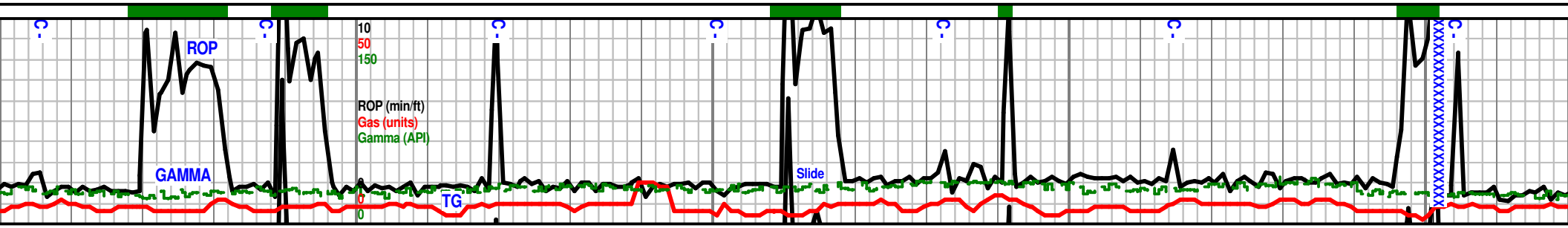
EVENT
- Rft
- Sidewall

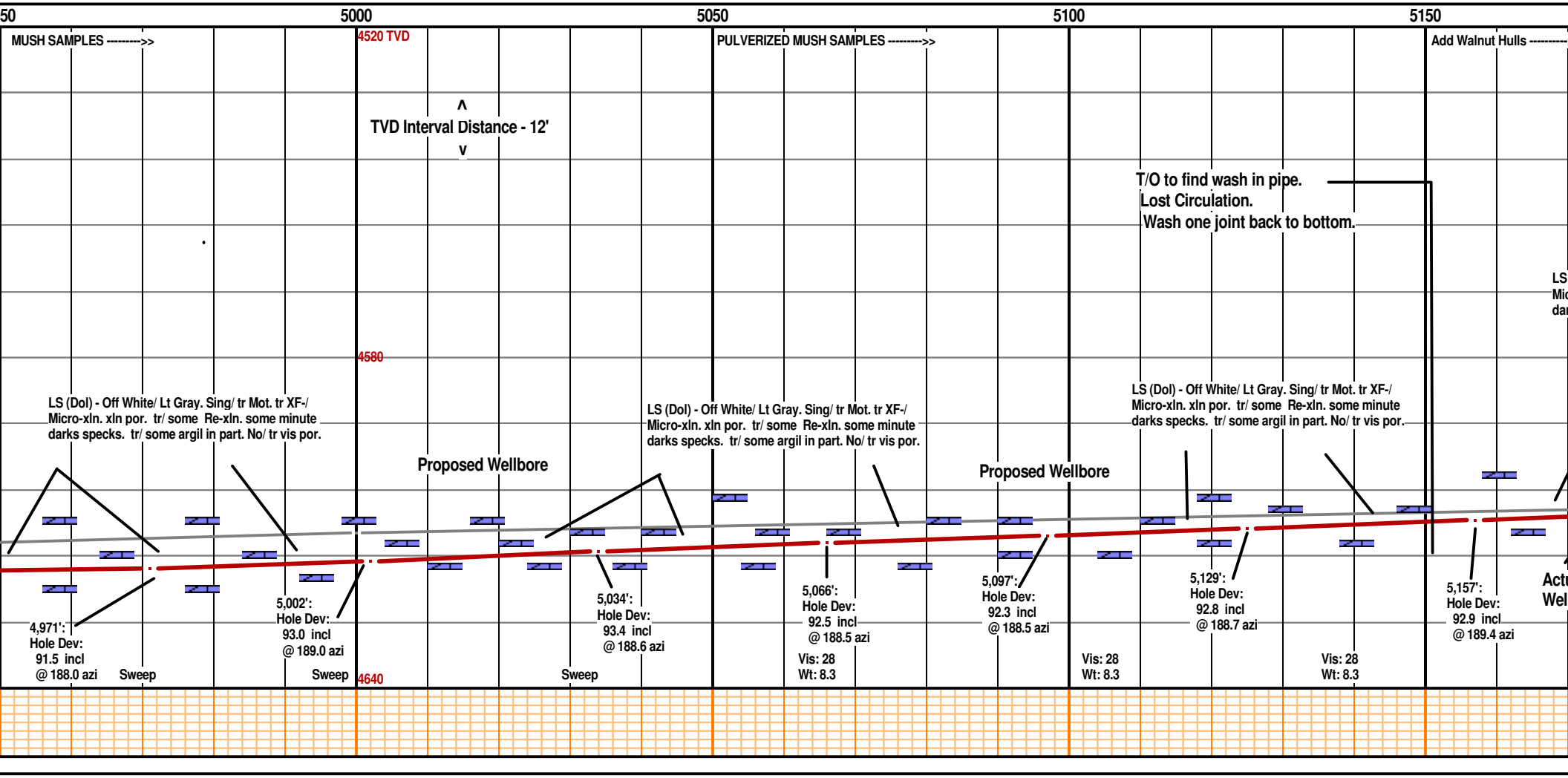

Slide/Rotate
Data Curves
ROP (min/ft)
Gas (units)
Gamma (API)
TG
ROP
GAMMA
BHA Trip @ 4,130'
Oil Shows
Depth
4150
4200
4250
Well Bore Cross Section
4100 TVD
KOP @ 4,130'
4,176' - Vis: 38 Wt: 9.2 Wtr Loss: 9.2 PV: 8
YP: 11 Gels: 11/34 pH: 12.0 LCM: 0 Cl (5,500)
Ca (80) Solids: 6.1%
See Geolog 2 (Vertical) for Lithology Details.
4,117': Hole Dev: 2.5 incl @ 213.8 azi
4,148': Hole Dev: 3.5 incl @ 204.1 azi
Actual Wellbore (Red)
See Geolog 1 for Vertical Portion (3,850' - 4,130' MD) of this Well ... Well plugged back.
See Geolog 2 for Vertical & Radial Portion of this Well ... MD 3,850' - 4,764'.
See this Geolog 2A for Radial & Horizontal Portion from MD 4,100' to horizontal RTD
4,179': Hole Dev: 4.6 incl @ 200.5 azi
Proposed Wellbore (Gray)
Vis: 44 Wt: 9.1
4200
4300
Scale Change
4250
4,211': Hole Dev: 6.9 incl @ 200.2 azi
Actual Wellbore
DENNIS 4,286' MD TVD 4,284' (-2,900')
4,242': Hole Dev: 10.2 incl @ 199.6 azi
4,273': Hole Dev: 14.1 incl @ 195.7 azi
TVD Interval Distance - 10'
Proposed Wellbore
Vis: 37 Wt: 9.1
Vis: 41 Wt: 9.2
Porosity
24%
18%
12%
6%
Porosity Type

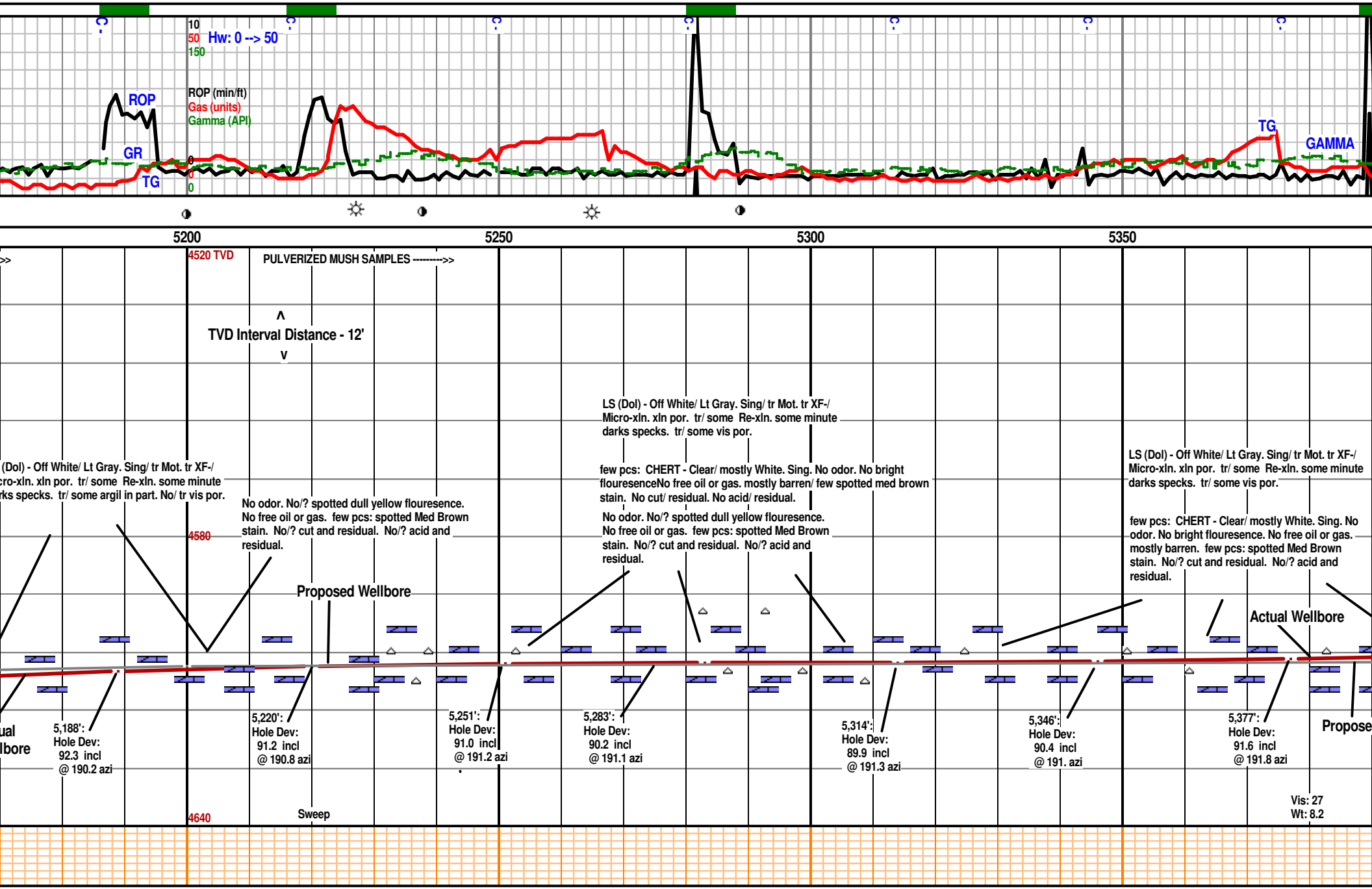

TG
ROP
GAMMA
10
100
150
ROP (min/ft)
Gas (units)
Gamma (API)
0
0
0
4300
4350
4400
4450
4500
4290 TVD
4380 TVD
4460 TVD
STARK SH 4,326' MD / TVD 4,321' (-2937')
HUSHPUCKNEY SH 4,358' MD
TVD 4,352' (-2,968')
BKC 4,413' MD / TVD 4,400' (-3,016')
Proposed Wellbore
4,305':
Hole Dev:
18.0 incl
@ 192.6 azi
4,337':
Hole Dev:
22.1 incl
@ 191.4 azi
4,430':
Hole Dev:
33.5 incl
@ 194.3 azi
See Geolog 2 (Vertical) for
Lithology Details.
Scale Change
4340
Scale Change
4430
Scale Chang
4510
Actual Wellbore
Actual Wellbore
Proposed Wellbore
4,368':
Hole Dev:
26.0 incl
@ 191.3 azi
4,461':
Hole Dev:
37.6 incl
@ 194.9 azi
TVD Interval Distance - 10'
TVD Interval Distance - 10'
4,493':
Hole Dev:
42.1 incl
@ 196.1 azi
TVD
Vis: 48
Wt: 9.0
Vis: 50
Wt: 9.0
4,399':
Hole Dev:
30.0 incl
@ 192.8 azi
Vis: 50
Wt: 9.2
Vis: 50
Wt: 9.2
4390
4480
4560

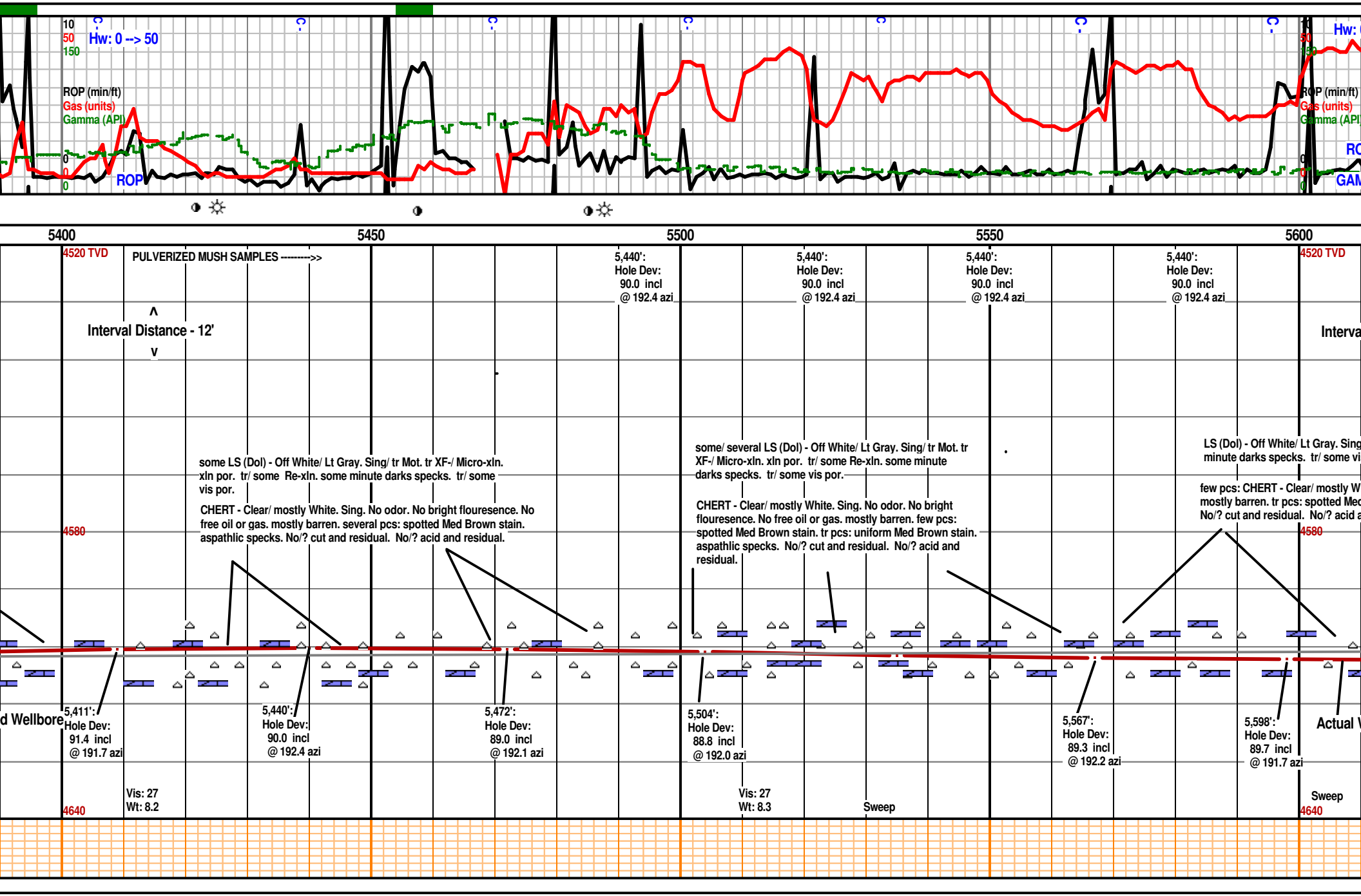

TG
ROP
GAMMA
HW: 100u
HW: 400u
HW
HW: 735u
10
400
150
Scale Change
ROP (min/ft)
Gas (units)
Gamma (API)
4550
4600
4650
4700
Wt: 9.1
PAWNEE 4,528' MD / TVD 4,489' (-3,105')
Proposed Wellbore
few pcs LS - Tan/ some Lt & tr Med Gray. Sing/ some Mot. Micro-/ XF-xln. xln por. Re-xln. some argil in part. tr misc dark specks. mostly Firm. No/ tr vis por.
4,525': Hole Dev: 46.6 incl @ 196.4 azi
Actual Wellbore
4,556': Hole Dev: 51.0 incl @ 194.9 azi
few pcs: SH - Black. Sing. soft.
4,587': Hole Dev: 54.9 incl @ 193.0 azi
few pcs: SH - Black. Sing. soft.
Interval Distance - 10'
Vis: 50 Wt: 9.2
Vis: 60 Wt: 9.2
Vis: 58 Wt: 9.2
4520 TVD
few pcs: SH - Black. Sing. soft.
4,618': Hole Dev: 58.8 incl @ 191.8 azi
Actual Wellbore
Rubble
some Siltstone - Grays, tr Green, Yellow & Blue green. Massive. misc inclusions of: limestone frags, carb flecks, tr sandy with depth & tr marly (in part).
Scale Change
4580
4640
TVD Interval Distance - 12'
Vis: 56 Wt: 9.2
Vis: 57 Wt: 9.1
MISS 4,652' MD / TVD 4,558' (- 3,174')
Proposed Wellbore
LS - similiar to above intermixed with Chert as below.
4,649': Hole Dev: 63.1 incl @ 190.8 azi
4,681': Hole Dev: 67.2 incl @ 191.1 azi
Tripolitic Chert (C2A)
4,682' MD / TVD 4,572' (- 3188')
4,670' - Vis: 51 Wt: 9.0 Wtr Loss: 8.4 PV: 14 YP: 15 Gels: 12/54 pH: 12.5 LCM: 0 Cl (4,000) Ca (60) Solids: 4.7%
CHERT (1) - Tans/ Browns/ Off White/ to some Transparent. some misc Inclu Tripolitic. rare intermixed tan ls frags v por.
Fair odor (in free minute g Spotted to u Pos cut/ res
4,713': Hole Dev: 71.8 incl @ 191.4 azi
INTERMEDIAT POINT @ 4,760
230 sx 60/40 POZ + 200 sx

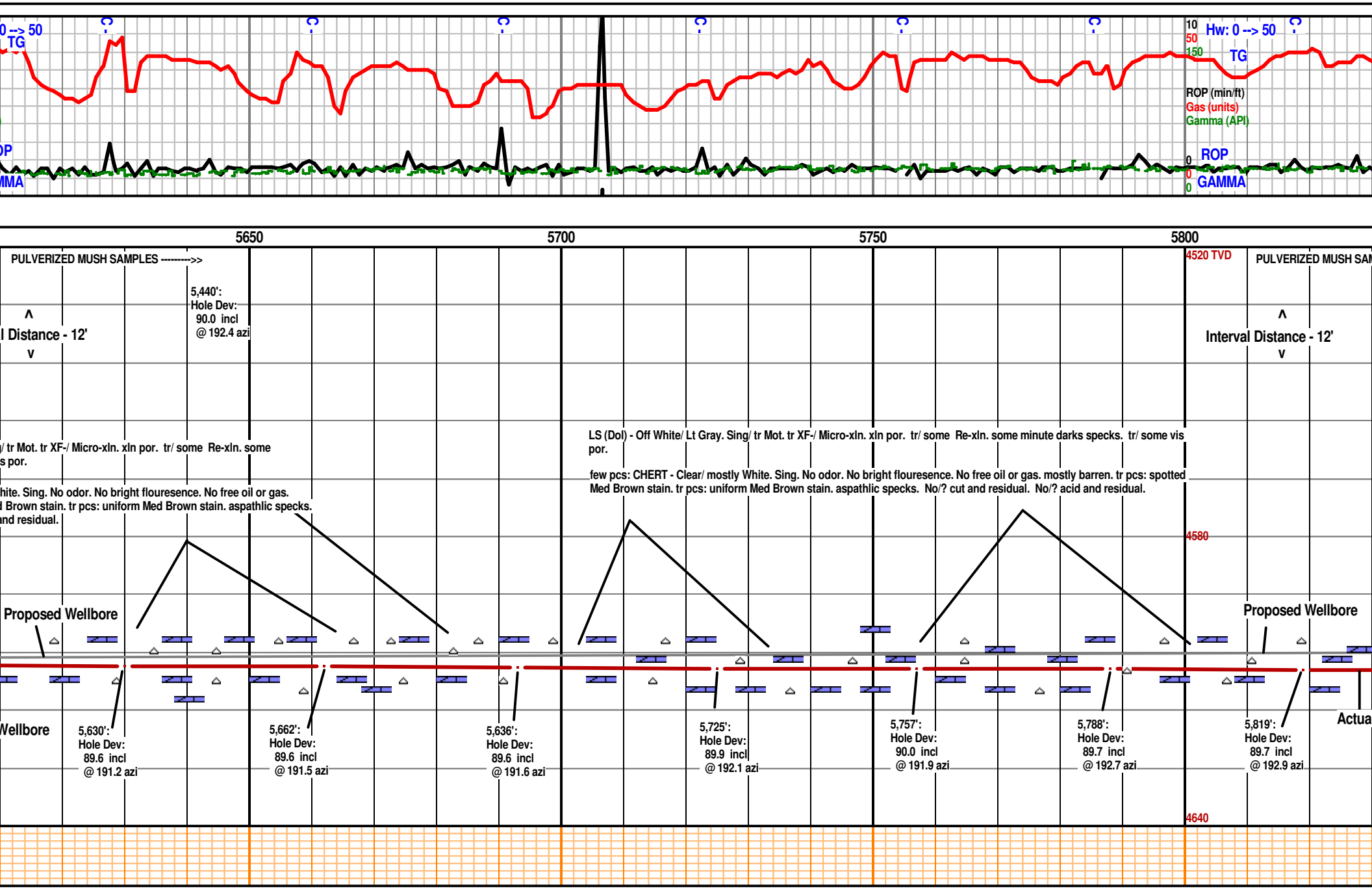

HW 400
HW 50
10
50
150
Scale Change
ROP (min/ft)
Gas (units)
Gamma (API)
SCALE CHANGE
Repeated Depth
Corrections on PASON
ROP
GAMMA
TG
4750
4800
4850
4900
4520 TVD
MUSH SAMPLES --------->>
lots of metal
lots of metal
4,764' MD = Projected TVD 4,594.8'
Projected Incl 79.13 deg
Prep Hole for intermediate 7" casing.
rare Silver Gray. Mot. Opaque
sions. Spotted/ Uniform
with depth. Fair vis por on trip
creasing with depth). Spotted/ Uniform med/hi yel flour. On own,
gas bubbles. tr med brown oil wet faces. Some barren, mostly
nform Medium Brown stain. rare Black, asphaltic, minute infill.
idual. Pos acid/ residual.
CHERT - Tans/ Silvery White/ Off White. Mot.
Opaque to some Transparent. Spotted/ Uniform
Tripolitic. Fair vis por on trip por.
No odor. Spotted/ rareUniform med/hi yel flour.
No free oil or gas. some barren, some Spotted /
rare unform Medium Brown stain. some Black,
asphaltic, minute infill. Weak Pos cut/ residual.
Weak Pos acid/ residual.
After casing, drill plug / cement / hole.
4580
CHERT - Similiar to (1) above.
LS (Dol) - Off White/ Lt Gray. Sing/ tr Mot. tr XF-/
Micro-xln. xln por. tr Re-xln. No/ tr vis por.
LS (Dol) - Off White/ Lt Gray. Sing/ tr Mot. tr XF-/
Micro-xln. xln por. tr/ some Re-xln. some minute
darks specks. tr/ some argil in part. No/ tr vis por.
Proposed Wellbore
E CASING
0'
k Premium
4,764':
Hole Dev:
79.1 incl
@ 191.9 azi
4,781':
Hole Dev:
76.5 incl
@ 192.0 azi
4,812':
Hole Dev:
77.6 incl
@ 194.0 azi
TVD Interval Distance - 12'
4,844':
Hole Dev:
81.3 incl
@ 192.8 azi
4,876':
Hole Dev:
85.4 incl
@ 191.6 azi
4,908':
Hole Dev:
89.3 incl
@ 189.7 azi
Actual Wellbore
4,939':
Hole Dev:
90.3 incl
@ 187.9 azi
Vis: 55
Wt: 9.1
Drill cement with fresh water.
Soda Ash, Hydrogel & XC Polymerflush in fresh water.
4640
Sweep
Sweep
Sweep
Sweep
Sweep
Sweep

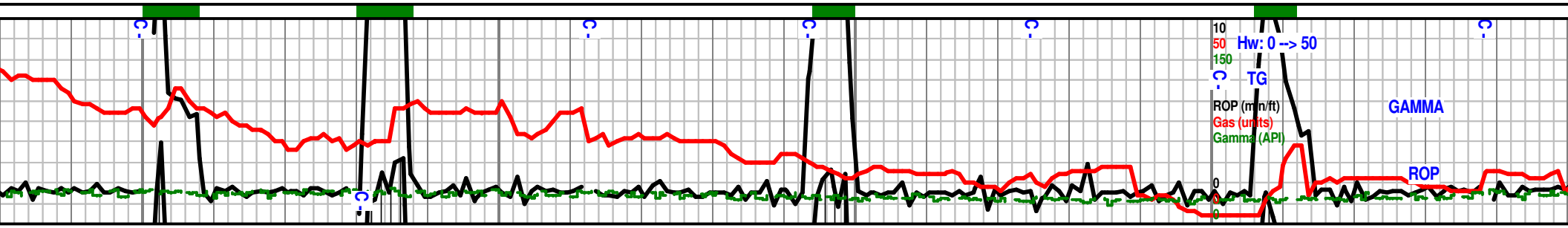

ROP
GAMMA
TG
Slide
10
50
150
ROP (min/ft)
Gas (units)
Gamma (API)
0
0

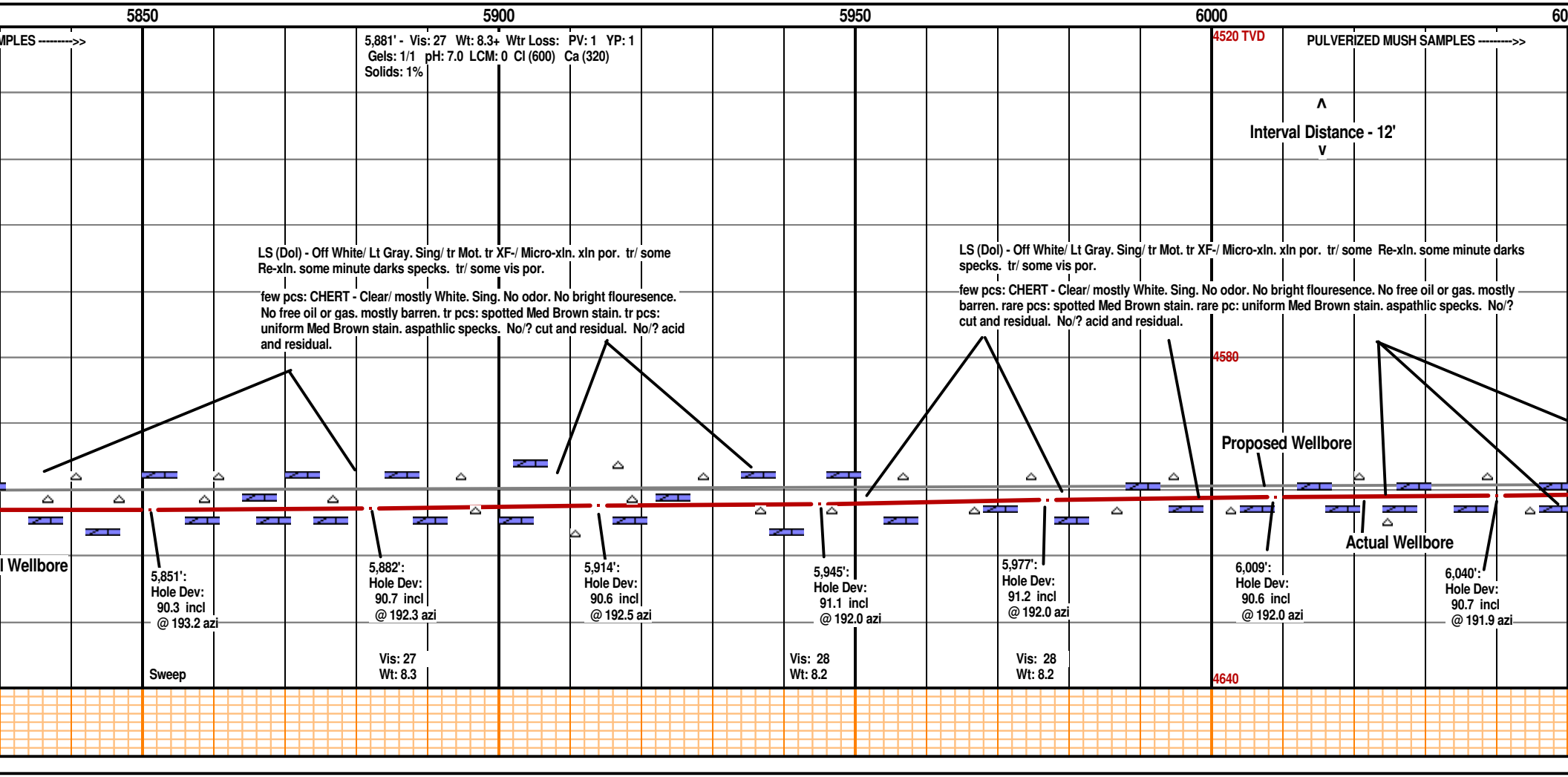

50
5000
5050
5100
5150
MUSH SAMPLES -------->>
4520 TVD
PULVERIZED MUSH SAMPLES -------->>
Add Walnut Hulls ---------
TVD Interval Distance - 12'
T/O to find wash in pipe.
Lost Circulation.
Wash one joint back to bottom.
4580
LS (Dol) - Off White/ Lt Gray. Sing/ tr Mot. tr XF-/ Micro-xln. xln por. tr/ some Re-xln. some minute darks specks. tr/ some argil in part. No/ tr vis por.
Proposed Wellbore
4,971': Hole Dev: 91.5 incl @ 188.0 azi
Sweep
5,002': Hole Dev: 93.0 incl @ 189.0 azi
Sweep
4640
5,034': Hole Dev: 93.4 incl @ 188.6 azi
Sweep
5,066': Hole Dev: 92.5 incl @ 188.5 azi
Vis: 28
Wt: 8.3
5,097': Hole Dev: 92.3 incl @ 188.5 azi
Vis: 28
Wt: 8.3
5,129': Hole Dev: 92.8 incl @ 188.7 azi
Vis: 28
Wt: 8.3
5,157': Hole Dev: 92.9 incl @ 189.4 azi

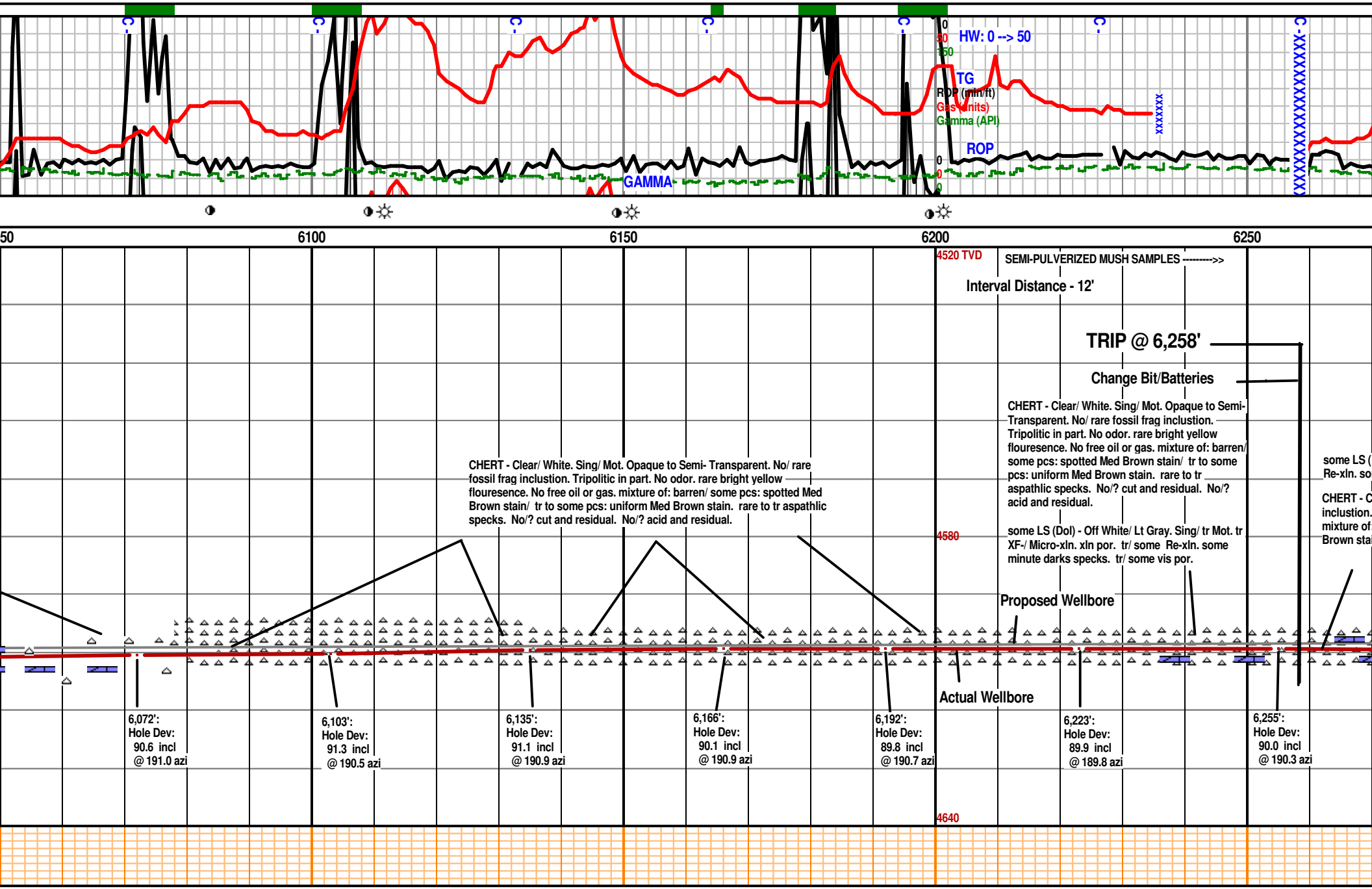

10
50
150
Hw: 0 --> 50
ROP (min/ft)
Gas (units)
Gamma (API)
ROP
GR
TG
TG
GAMMA
0
0
0
5200
5250
5300
5350
4520 TVD
PULVERIZED MUSH SAMPLES --------->>
TVD Interval Distance - 12'
4580
4640
(Dol) - Off White/ Lt Gray. Sing/ tr Mot. tr XF-/
cro-xln. xln por. tr/ some Re-xln. some minute
rks specks. tr/ some argil in part. No/ tr vis por.
No odor. No/? spotted dull yellow flouresence.
No free oil or gas. few pcs: spotted Med Brown
stain. No/? cut and residual. No/? acid and
residual.
LS (Dol) - Off White/ Lt Gray. Sing/ tr Mot. tr XF-/
Micro-xln. xln por. tr/ some Re-xln. some minute
darks specks. tr/ some vis por.
few pcs: CHERT - Clear/ mostly White. Sing. No odor. No bright
flouresenceNo free oil or gas. mostly barren/ few spotted med brown
stain. No cut/ residual. No acid/ residual.
No odor. No/? spotted dull yellow flouresence.
No free oil or gas. few pcs: spotted Med Brown
stain. No/? cut and residual. No/? acid and
residual.
LS (Dol) - Off White/ Lt Gray. Sing/ tr Mot. tr XF-/
Micro-xln. xln por. tr/ some Re-xln. some minute
darks specks. tr/ some vis por.
few pcs: CHERT - Clear/ mostly White. Sing. No
odor. No bright flouresence. No free oil or gas.
mostly barren. few pcs: spotted Med Brown
stain. No/? cut and residual. No/? acid and
residual.
Proposed Wellbore
Actual Wellbore
ual
lbore
5,188':
Hole Dev:
92.3 incl
@ 190.2 azi
5,220':
Hole Dev:
91.2 incl
@ 190.8 azi
5,251':
Hole Dev:
91.0 incl
@ 191.2 azi
5,283':
Hole Dev:
90.2 incl
@ 191.1 azi
5,314':
Hole Dev:
89.9 incl
@ 191.3 azi
5,346':
Hole Dev:
90.4 incl
@ 191. azi
5,377':
Hole Dev:
91.6 incl
@ 191.8 azi
Propose
Sweep
Vis: 27
Wt: 8.2

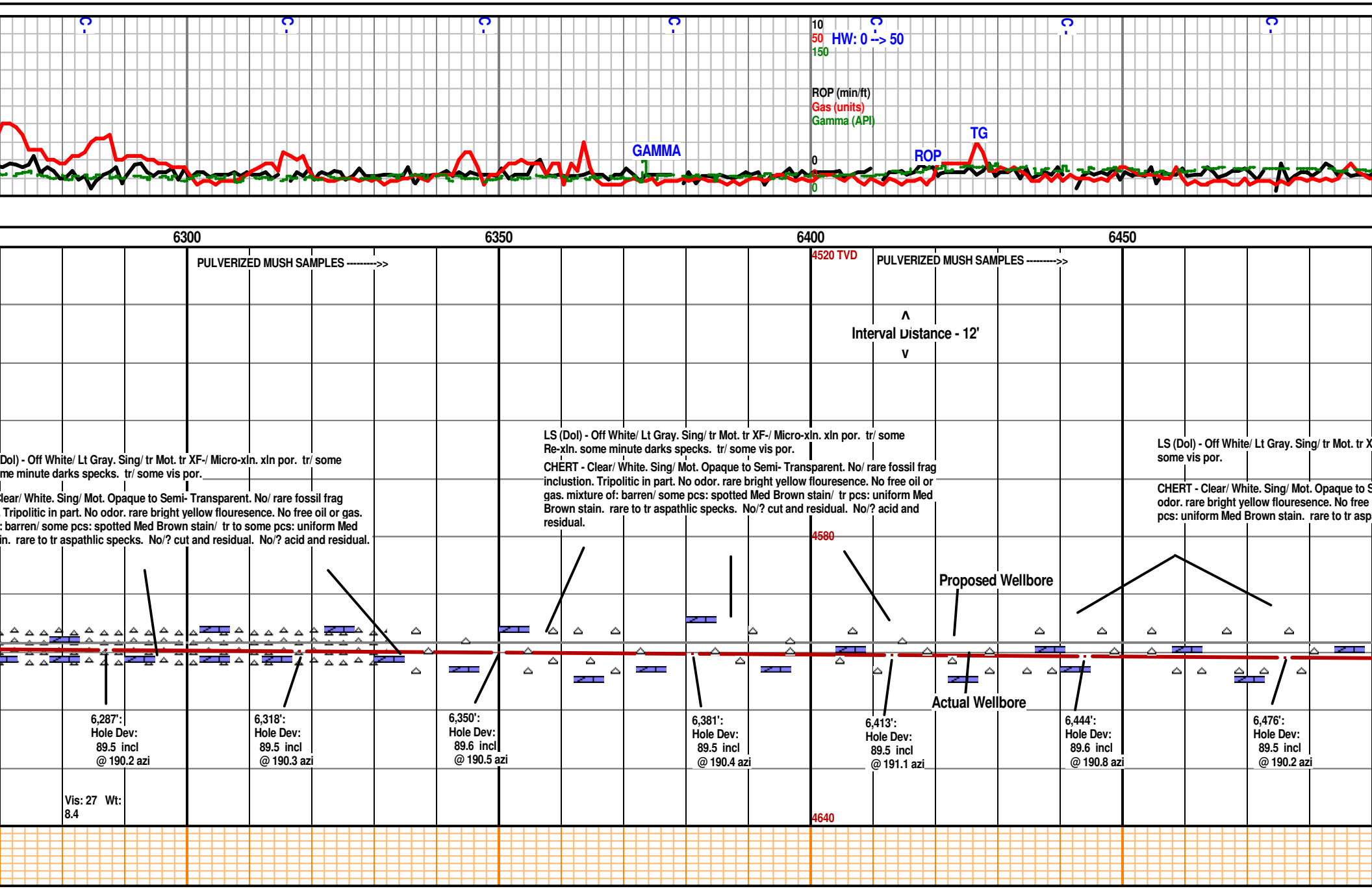

10
50
150
Hw: 0 --> 50
ROP (min/ft)
Gas (units)
Gamma (API)
0
0
0
ROP
5400
5450
5500
5550
5600
4520 TVD
PULVERIZED MUSH SAMPLES -------->>
Interval Distance - 12'
4580
4640
5,440':
Hole Dev:
90.0 incl
@ 192.4 azi
some LS (Dol) - Off White/ Lt Gray. Sing/ tr Mot. tr XF-/ Micro-xln. xln por. tr/ some Re-xln. some minute darks specks. tr/ some vis por.
CHERT - Clear/ mostly White. Sing. No odor. No bright flouresence. No free oil or gas. mostly barren. several pcs: spotted Med Brown stain. aspathlic specks. No/? cut and residual. No/? acid and residual.
some/ several LS (Dol) - Off White/ Lt Gray. Sing/ tr Mot. tr XF-/ Micro-xln. xln por. tr/ some Re-xln. some minute darks specks. tr/ some vis por.
CHERT - Clear/ mostly White. Sing. No odor. No bright flouresence. No free oil or gas. mostly barren. few pcs: spotted Med Brown stain. tr pcs: uniform Med Brown stain. aspathlic specks. No/? cut and residual. No/? acid and residual.
LS (Dol) - Off White/ Lt Gray. Sing
minute darks specks. tr/ some vi
few pcs: CHERT - Clear/ mostly W
mostly barren. tr pcs: spotted Med
No/? cut and residual. No/? acid a
Interva
d Wellbore
5,411':
Hole Dev:
91.4 incl
@ 191.7 azi
5,440':
Hole Dev:
90.0 incl
@ 192.4 azi
5,472':
Hole Dev:
89.0 incl
@ 192.1 azi
5,504':
Hole Dev:
88.8 incl
@ 192.0 azi
5,567':
Hole Dev:
89.3 incl
@ 192.2 azi
5,598':
Hole Dev:
89.7 incl
@ 191.7 azi
Actual
Vis: 27
Wt: 8.2
Vis: 27
Wt: 8.3
Sweep
Sweep

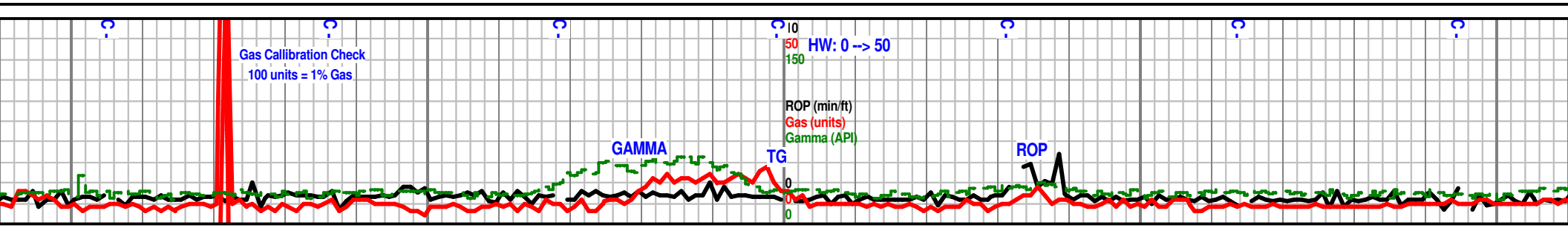

0 --> 50
TG
OP
MMA
Hw: 0 --> 50
TG
10
50
150
ROP (min/ft)
Gas (units)
Gamma (API)
0
ROP
0
0
GAMMA
5650
5700
5750
5800
PULVERIZED MUSH SAMPLES --------->>
4520 TVD
PULVERIZED MUSH SAM
5,440':
Hole Dev:
90.0 incl
@ 192.4 azi
l Distance - 12'
Interval Distance - 12'
/ tr Mot. tr XF-/ Micro-xln. xln por. tr/ some Re-xln. some
s por.
hite. Sing. No odor. No bright flouresence. No free oil or gas.
l Brown stain. tr pcs: uniform Med Brown stain. aspathlic specks.
and residual.
LS (Dol) - Off White/ Lt Gray. Sing/ tr Mot. tr XF-/ Micro-xln. xln por. tr/ some Re-xln. some minute darks specks. tr/ some vis
por.
few pcs: CHERT - Clear/ mostly White. Sing. No odor. No bright flouresence. No free oil or gas. mostly barren. tr pcs: spotted
Med Brown stain. tr pcs: uniform Med Brown stain. aspathlic specks. No/? cut and residual. No/? acid and residual.
4580
Proposed Wellbore
Proposed Wellbore
Wellbore
Actua
5,630':
Hole Dev:
89.6 incl
@ 191.2 azi
5,662':
Hole Dev:
89.6 incl
@ 191.5 azi
5,636':
Hole Dev:
89.6 incl
@ 191.6 azi
5,725':
Hole Dev:
89.9 incl
@ 192.1 azi
5,757':
Hole Dev:
90.0 incl
@ 191.9 azi
5,788':
Hole Dev:
89.7 incl
@ 192.7 azi
5,819':
Hole Dev:
89.7 incl
@ 192.9 azi
4640

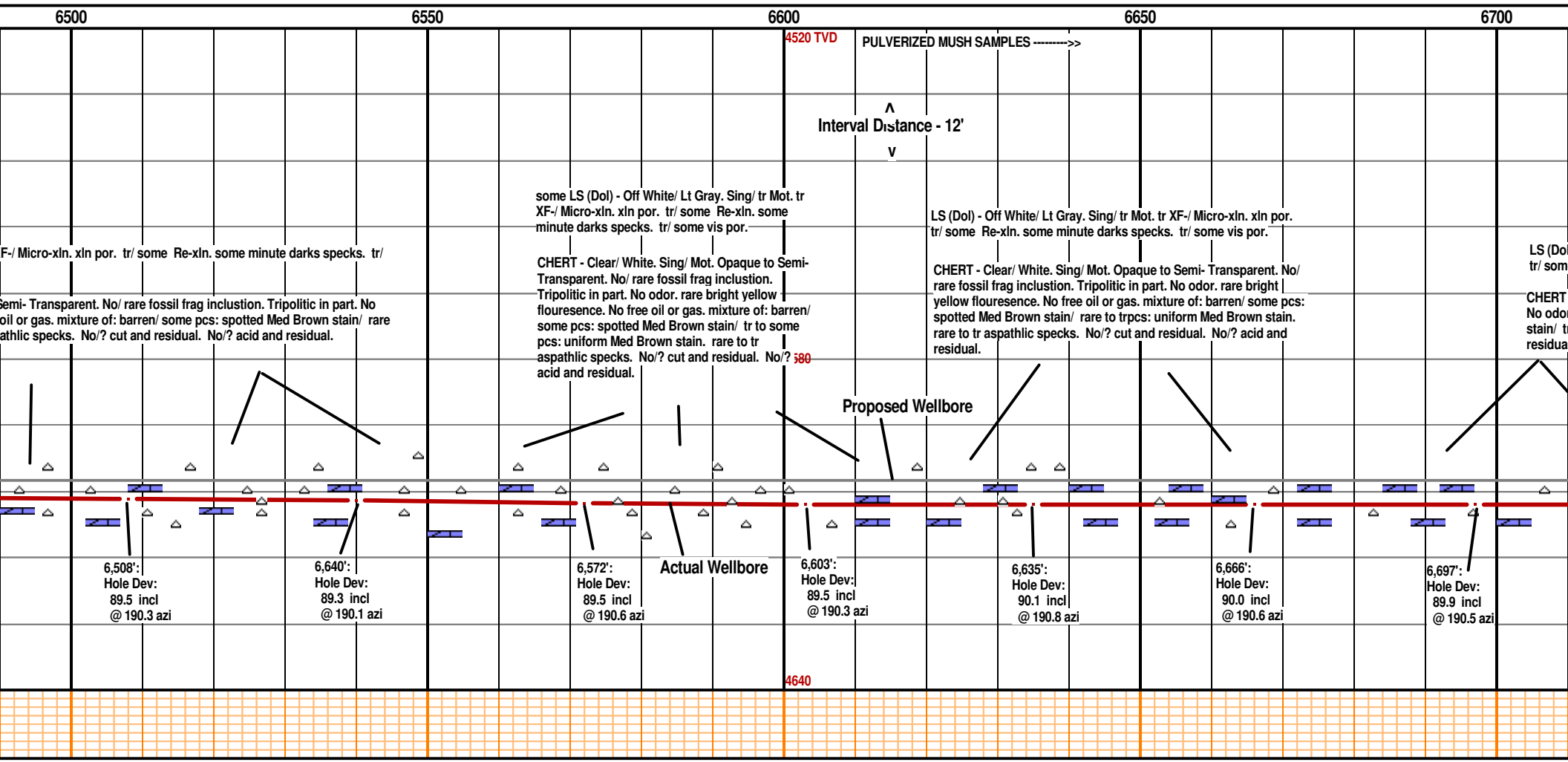

10
50
150
Hw: 0 --> 50
TG
ROP (min/ft)
Gas (units)
Gamma (API)
GAMMA
ROP
0
0

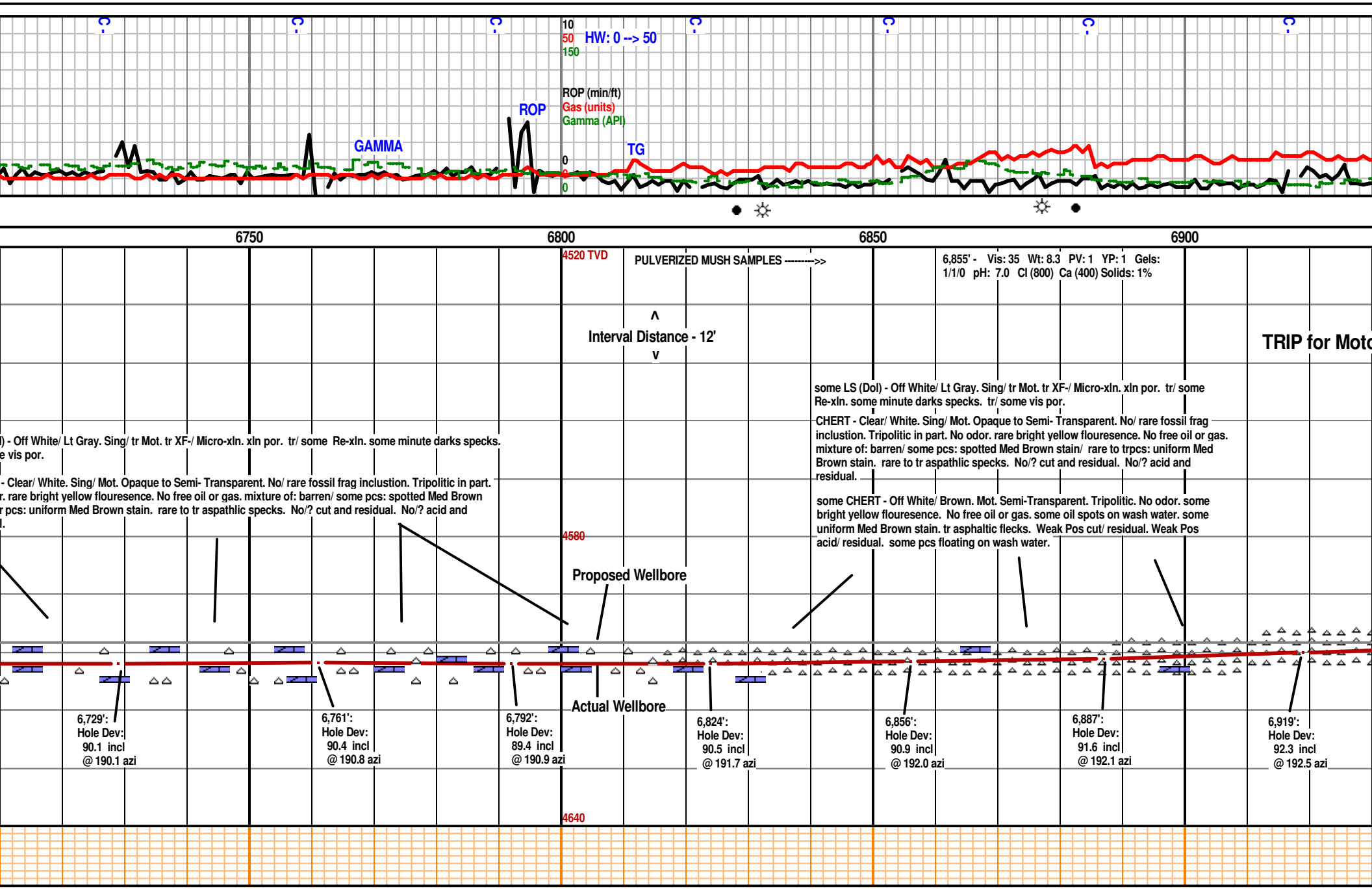

5850
5900
5950
6000
60
MPLES --------->>
5,881' - Vis: 27 Wt: 8.3+ Wtr Loss: PV: 1 YP: 1
Gels: 1/1 pH: 7.0 LCM: 0 Cl (600) Ca (320)
Solids: 1%
4520 TVD
PULVERIZED MUSH SAMPLES --------->>
Interval Distance - 12'
LS (Dol) - Off White/ Lt Gray. Sing/ tr Mot. tr XF-/ Micro-xln. xln por. tr/ some Re-xln. some minute darks specks. tr/ some vis por.
few pcs: CHERT - Clear/ mostly White. Sing. No odor. No bright flouresence. No free oil or gas. mostly barren. tr pcs: spotted Med Brown stain. tr pcs: uniform Med Brown stain. aspathlic specks. No/? cut and residual. No/? acid and residual.
LS (Dol) - Off White/ Lt Gray. Sing/ tr Mot. tr XF-/ Micro-xln. xln por. tr/ some Re-xln. some minute darks specks. tr/ some vis por.
few pcs: CHERT - Clear/ mostly White. Sing. No odor. No bright flouresence. No free oil or gas. mostly barren. rare pcs: spotted Med Brown stain. rare pc: uniform Med Brown stain. aspathlic specks. No/? cut and residual. No/? acid and residual.
4580
Proposed Wellbore
Actual Wellbore
l Wellbore
5,851': Hole Dev: 90.3 incl @ 193.2 azi
5,882': Hole Dev: 90.7 incl @ 192.3 azi
5,914': Hole Dev: 90.6 incl @ 192.5 azi
5,945': Hole Dev: 91.1 incl @ 192.0 azi
5,977': Hole Dev: 91.2 incl @ 192.0 azi
6,009': Hole Dev: 90.6 incl @ 192.0 azi
6,040': Hole Dev: 90.7 incl @ 191.9 azi
Sweep
Vis: 27 Wt: 8.3
Vis: 28 Wt: 8.2
Vis: 28 Wt: 8.2
4640

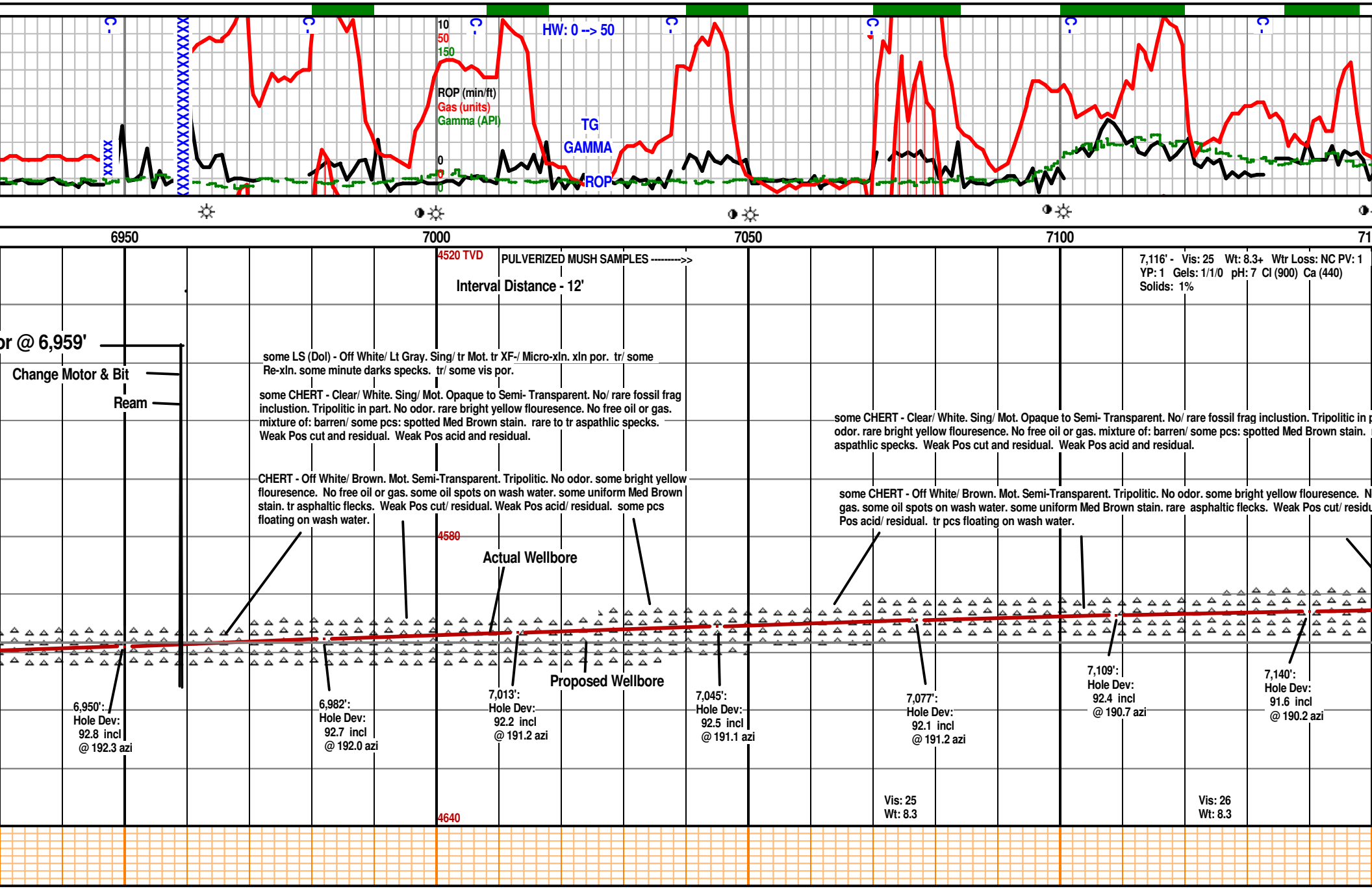

HW: 0 --> 50
TG
ROP (min/ft)
Gas (units)
Gamma (API)
ROP
GAMMA
6100
6150
6200
6250
4520 TVD
4580
4640
SEMI-PULVERIZED MUSH SAMPLES -------->>
Interval Distance - 12'
TRIP @ 6,258'
Change Bit/Batteries
CHERT - Clear/ White. Sing/ Mot. Opaque to Semi- Transparent. No/ rare fossil frag inclustion. Tripolitic in part. No odor. rare bright yellow flouresence. No free oil or gas. mixture of: barren/ some pcs: spotted Med Brown stain/ tr to some pcs: uniform Med Brown stain. rare to tr aspathlic specks. No/? cut and residual. No/? acid and residual.
some LS (Dol) - Off White/ Lt Gray. Sing/ tr Mot. tr XF-/ Micro-xln. xln por. tr/ some Re-xln. some minute darks specks. tr/ some vis por.
CHERT - Clear/ White. Sing/ Mot. Opaque to Semi- Transparent. No/ rare fossil frag inclustion. Tripolitic in part. No odor. rare bright yellow flouresence. No free oil or gas. mixture of: barren/ some pcs: spotted Med Brown stain/ tr to some pcs: uniform Med Brown stain. rare to tr aspathlic specks. No/? cut and residual. No/? acid and residual.
Proposed Wellbore
Actual Wellbore
6,072': Hole Dev: 90.6 incl @ 191.0 azi
6,103': Hole Dev: 91.3 incl @ 190.5 azi
6,135': Hole Dev: 91.1 incl @ 190.9 azi
6,166': Hole Dev: 90.1 incl @ 190.9 azi
6,192': Hole Dev: 89.8 incl @ 190.7 azi
6,223': Hole Dev: 89.9 incl @ 189.8 azi
6,255': Hole Dev: 90.0 incl @ 190.3 azi

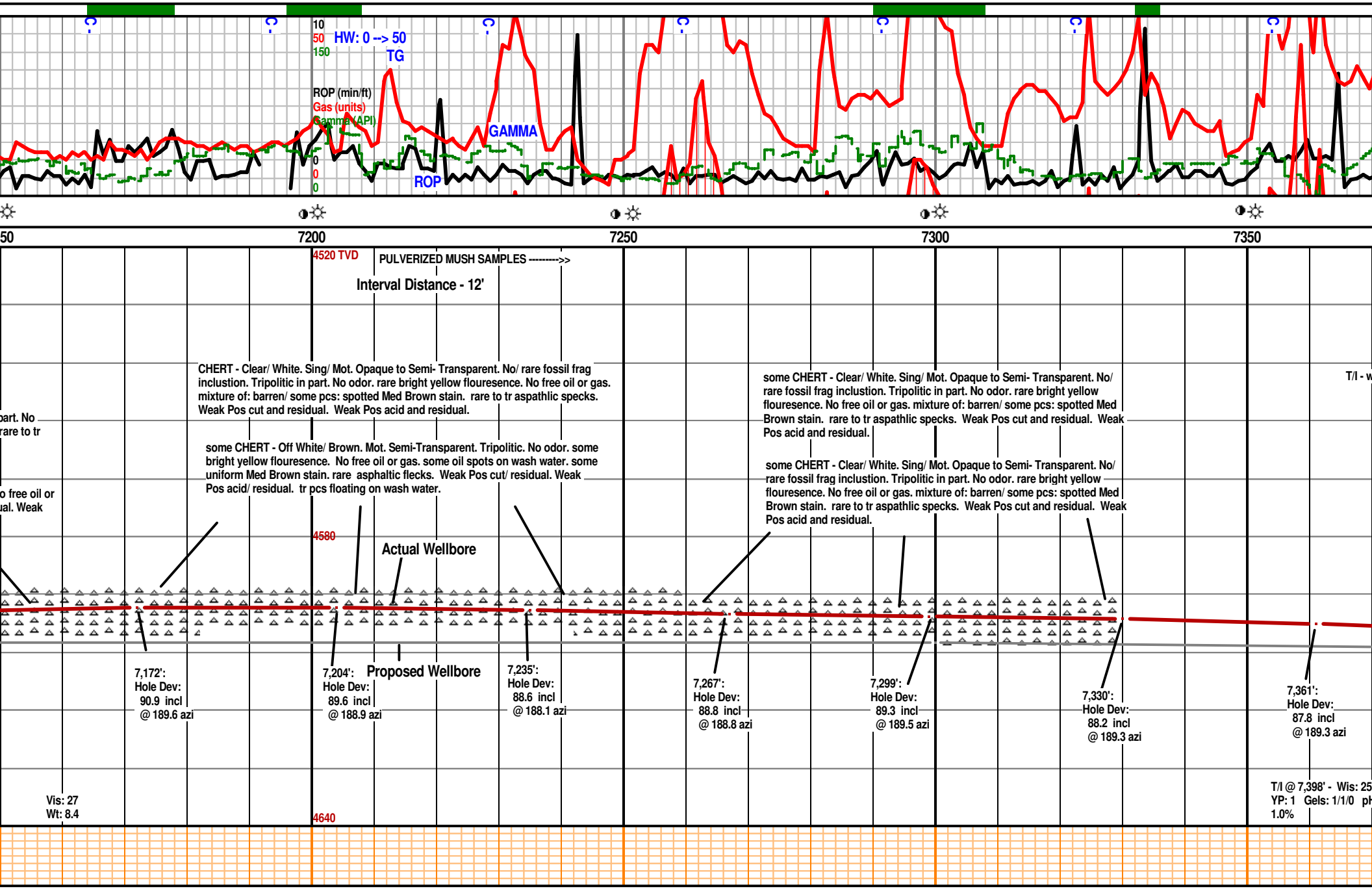

10
50
150
HW: 0 --> 50
ROP (min/ft)
Gas (units)
Gamma (API)
GAMMA
ROP
TG
0
0
6300
6350
6400
6450
4520 TVD
PULVERIZED MUSH SAMPLES --------->>
PULVERIZED MUSH SAMPLES --------->>
Interval Distance - 12'
Dol) - Off White/ Lt Gray. Sing/ tr Mot. tr XF-/ Micro-xln. xln por. tr/ some
me minute darks specks. tr/ some vis por.
lear/ White. Sing/ Mot. Opaque to Semi- Transparent. No/ rare fossil frag
Tripolitic in part. No odor. rare bright yellow flouresence. No free oil or gas.
barren/ some pcs: spotted Med Brown stain/ tr to some pcs: uniform Med
in. rare to tr aspathlic specks. No/? cut and residual. No/? acid and residual.
LS (Dol) - Off White/ Lt Gray. Sing/ tr Mot. tr XF-/ Micro-xln. xln por. tr/ some
Re-xln. some minute darks specks. tr/ some vis por.
CHERT - Clear/ White. Sing/ Mot. Opaque to Semi- Transparent. No/ rare fossil frag
inclustion. Tripolitic in part. No odor. rare bright yellow flouresence. No free oil or
gas. mixture of: barren/ some pcs: spotted Med Brown stain/ tr pcs: uniform Med
Brown stain. rare to tr aspathlic specks. No/? cut and residual. No/? acid and
residual.
LS (Dol) - Off White/ Lt Gray. Sing/ tr Mot. tr X
some vis por.
CHERT - Clear/ White. Sing/ Mot. Opaque to S
odor. rare bright yellow flouresence. No free
pcs: uniform Med Brown stain. rare to tr asp
4580
Proposed Wellbore
Actual Wellbore
6,287':
Hole Dev:
89.5 incl
@ 190.2 azi
6,318':
Hole Dev:
89.5 incl
@ 190.3 azi
6,350':
Hole Dev:
89.6 incl
@ 190.5 azi
6,381':
Hole Dev:
89.5 incl
@ 190.4 azi
6,413':
Hole Dev:
89.5 incl
@ 191.1 azi
6,444':
Hole Dev:
89.6 incl
@ 190.8 azi
6,476':
Hole Dev:
89.5 incl
@ 190.2 azi
Vis: 27 Wt:
8.4
4640

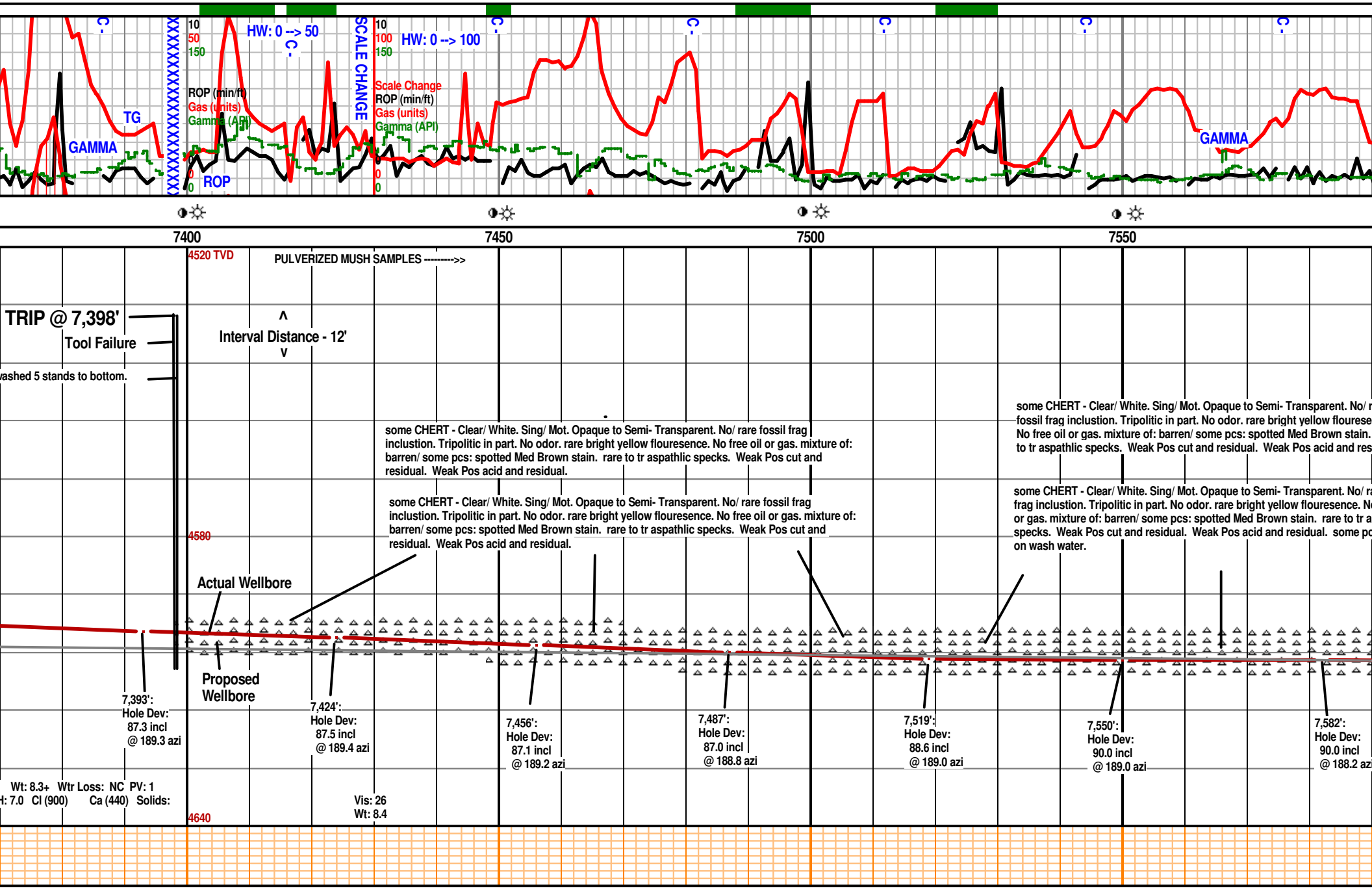

Gas Callibration Check
100 units = 1% Gas
HW: 0 --> 50
ROP (min/ft)
Gas (units)
Gamma (API)
GAMMA
TG
ROP
10
50
150
0
0
0

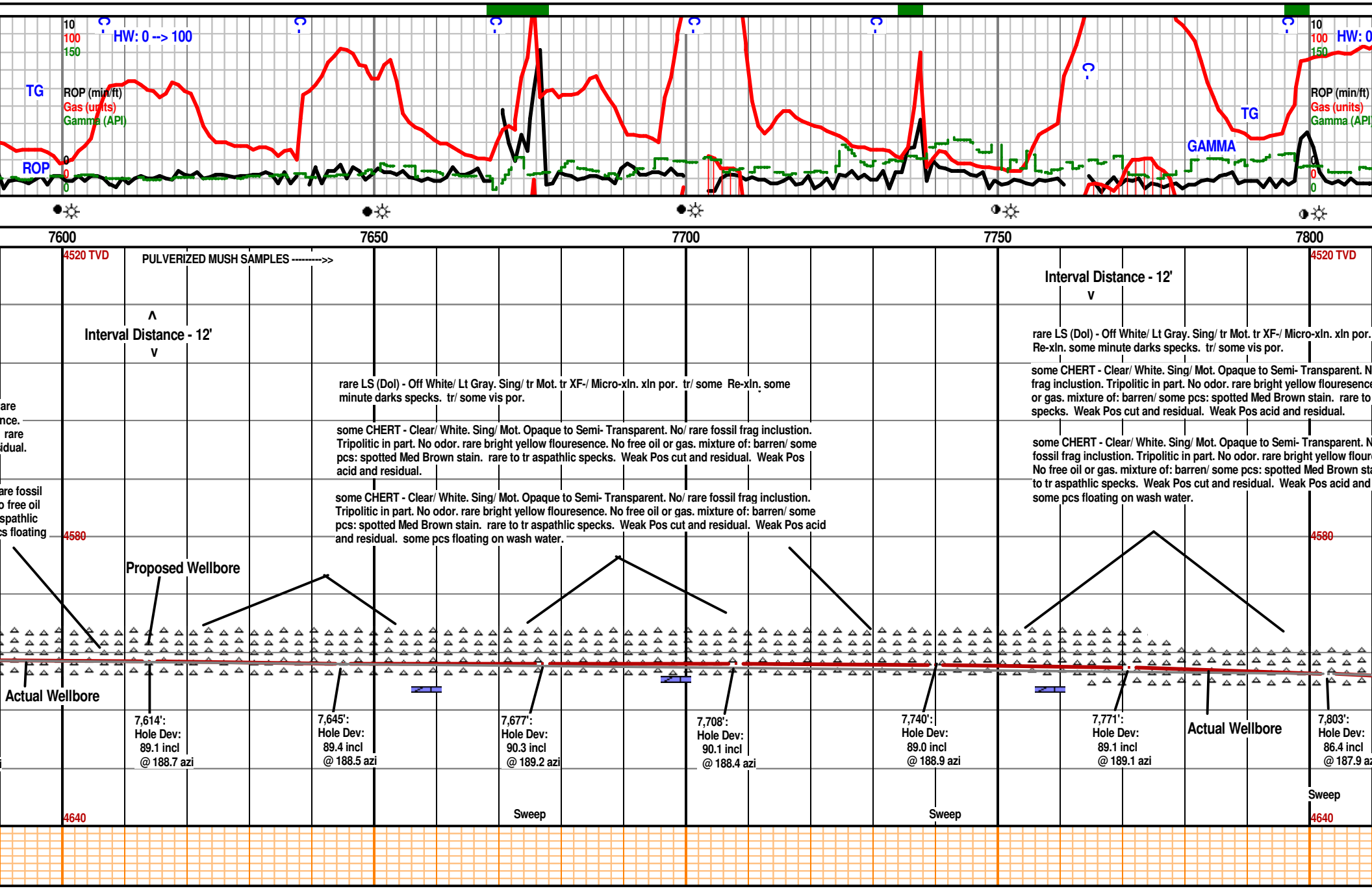

6500
6550
6600
6650
6700
4520 TVD
PULVERIZED MUSH SAMPLES --------->>
Interval Distance - 12'
F-/ Micro-xln. xln por. tr/ some Re-xln. some minute darks specks. tr/
Semi- Transparent. No/ rare fossil frag inclusion. Tripolitic in part. No
oil or gas. mixture of: barren/ some pcs: spotted Med Brown stain/ rare
athlic specks. No/? cut and residual. No/? acid and residual.
some LS (Dol) - Off White/ Lt Gray. Sing/ tr Mot. tr
XF-/ Micro-xln. xln por. tr/ some Re-xln. some
minute darks specks. tr/ some vis por.
CHERT - Clear/ White. Sing/ Mot. Opaque to Semi-
Transparent. No/ rare fossil frag inclustion.
Tripolitic in part. No odor. rare bright yellow
flouresence. No free oil or gas. mixture of: barren/
some pcs: spotted Med Brown stain/ tr to some
pcs: uniform Med Brown stain. rare to tr
aspathlic specks. No/? cut and residual. No/?
acid and residual.
580
LS (Dol) - Off White/ Lt Gray. Sing/ tr Mot. tr XF-/ Micro-xln. xln por.
tr/ some Re-xln. some minute darks specks. tr/ some vis por.
CHERT - Clear/ White. Sing/ Mot. Opaque to Semi- Transparent. No/
rare fossil frag inclustion. Tripolitic in part. No odor. rare bright
yellow flouresence. No free oil or gas. mixture of: barren/ some pcs:
spotted Med Brown stain/ rare to trpcs: uniform Med Brown stain.
rare to tr aspathlic specks. No/? cut and residual. No/? acid and
residual.
LS (Dol
tr/ som
CHERT
No odo
stain/ t
residua
Proposed Wellbore
Actual Wellbore
6,508':
Hole Dev:
89.5 incl
@ 190.3 azi
6,640':
Hole Dev:
89.3 incl
@ 190.1 azi
6,572':
Hole Dev:
89.5 incl
@ 190.6 azi
6,603':
Hole Dev:
89.5 incl
@ 190.3 azi
6,635':
Hole Dev:
90.1 incl
@ 190.8 azi
6,666':
Hole Dev:
90.0 incl
@ 190.6 azi
6,697':
Hole Dev:
89.9 incl
@ 190.5 azi
4640

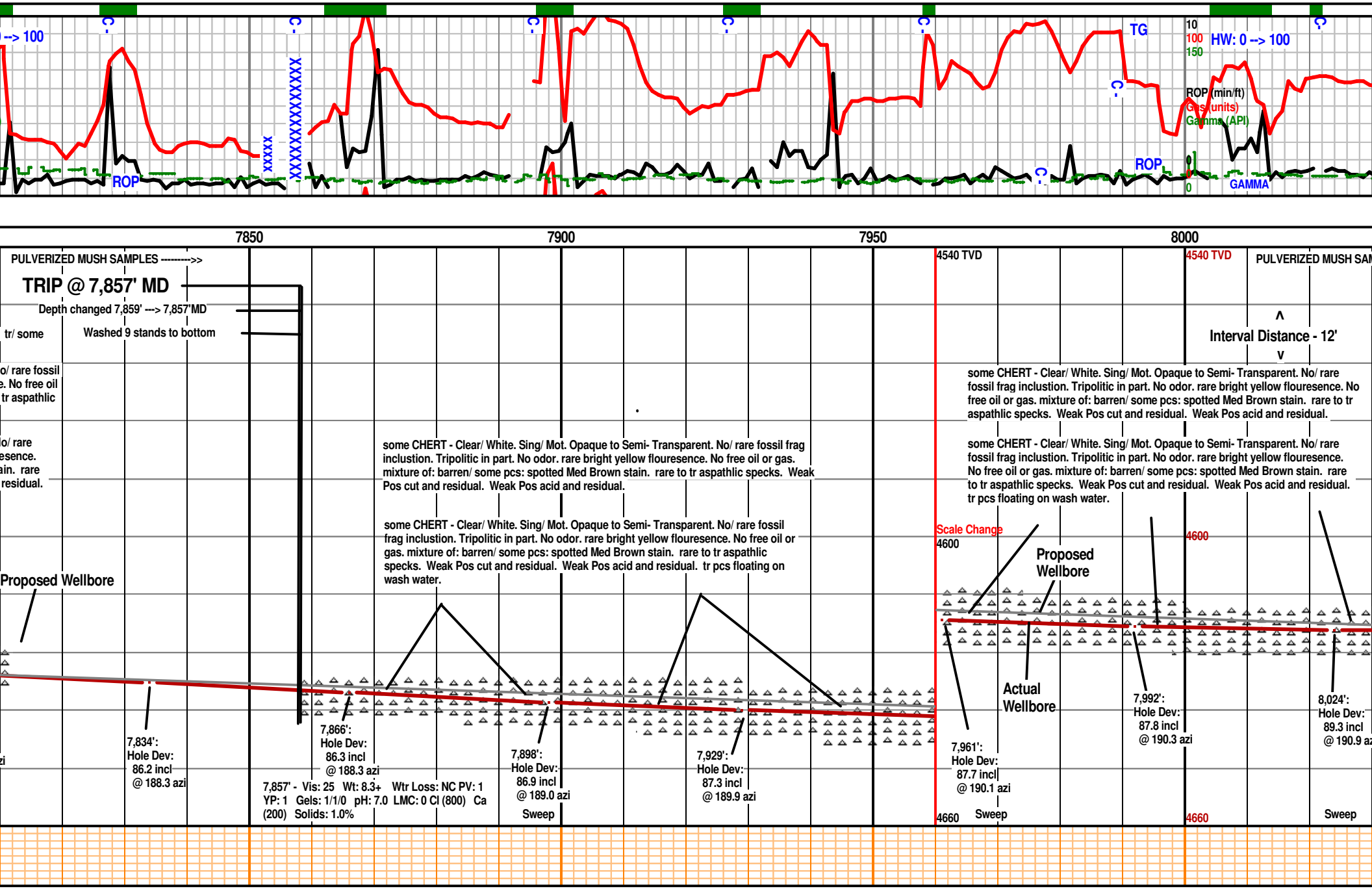

10
50
150
HW: 0 --> 50
ROP (min/ft)
Gas (units)
Gamma (API)
ROP
GAMMA
TG
0
0
6750
6800
6850
6900
4520 TVD
PULVERIZED MUSH SAMPLES -------->>
6,855' - Vis: 35 Wt: 8.3 PV: 1 YP: 1 Gels: 1/1/0 pH: 7.0 Cl (800) Ca (400) Solids: 1%
Interval Distance - 12'
TRIP for Moto
some LS (Dol) - Off White/ Lt Gray. Sing/ tr Mot. tr XF-/ Micro-xln. xln por. tr/ some Re-xln. some minute darks specks. tr/ some vis por.
CHERT - Clear/ White. Sing/ Mot. Opaque to Semi- Transparent. No/ rare fossil frag inclustion. Tripolitic in part. No odor. rare bright yellow flouresence. No free oil or gas. mixture of: barren/ some pcs: spotted Med Brown stain/ rare to trpcs: uniform Med Brown stain. rare to tr aspathlic specks. No/? cut and residual. No/? acid and residual.
some CHERT - Off White/ Brown. Mot. Semi-Transparent. Tripolitic. No odor. some bright yellow flouresence. No free oil or gas. some oil spots on wash water. some uniform Med Brown stain. tr asphaltic flecks. Weak Pos cut/ residual. Weak Pos acid/ residual. some pcs floating on wash water.
) - Off White/ Lt Gray. Sing/ tr Mot. tr XF-/ Micro-xln. xln por. tr/ some Re-xln. some minute darks specks.
e vis por.
- Clear/ White. Sing/ Mot. Opaque to Semi- Transparent. No/ rare fossil frag inclustion. Tripolitic in part.
r. rare bright yellow flouresence. No free oil or gas. mixture of: barren/ some pcs: spotted Med Brown
r pcs: uniform Med Brown stain. rare to tr aspathlic specks. No/? cut and residual. No/? acid and
l.
4580
Proposed Wellbore
Actual Wellbore
6,729': Hole Dev: 90.1 incl @ 190.1 azi
6,761': Hole Dev: 90.4 incl @ 190.8 azi
6,792': Hole Dev: 89.4 incl @ 190.9 azi
6,824': Hole Dev: 90.5 incl @ 191.7 azi
6,856': Hole Dev: 90.9 incl @ 192.0 azi
6,887': Hole Dev: 91.6 incl @ 192.1 azi
6,919': Hole Dev: 92.3 incl @ 192.5 azi
4640

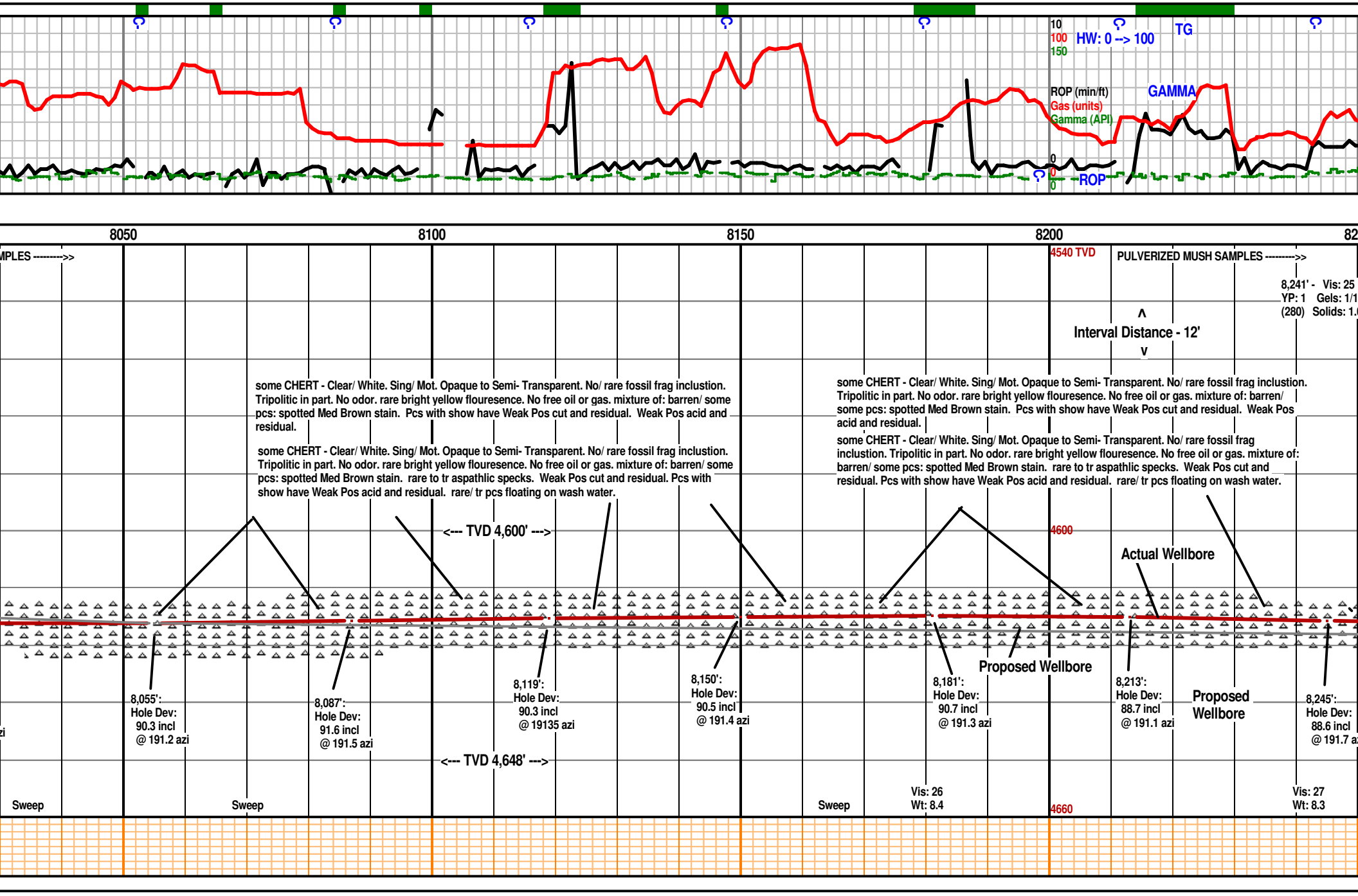

HW: 0 --> 50
10
50
150
ROP (min/ft)
Gas (units)
Gamma (API)
TG
GAMMA
ROP
0
0
0
6950
7000
7050
7100
4520 TVD
PULVERIZED MUSH SAMPLES -------->>
Interval Distance - 12'
7,116' - Vis: 25 Wt: 8.3+ Wtr Loss: NC PV: 1
YP: 1 Gels: 1/1/0 pH: 7 Cl (900) Ca (440)
Solids: 1%
or @ 6,959'
Change Motor & Bit
Ream
some LS (Dol) - Off White/ Lt Gray. Sing/ tr Mot. tr XF-/ Micro-xln. xln por. tr/ some Re-xln. some minute darks specks. tr/ some vis por.
some CHERT - Clear/ White. Sing/ Mot. Opaque to Semi- Transparent. No/ rare fossil frag inclustion. Tripolitic in part. No odor. rare bright yellow flouresence. No free oil or gas. mixture of: barren/ some pcs: spotted Med Brown stain. rare to tr aspathlic specks. Weak Pos cut and residual. Weak Pos acid and residual.
CHERT - Off White/ Brown. Mot. Semi-Transparent. Tripolitic. No odor. some bright yellow flouresence. No free oil or gas. some oil spots on wash water. some uniform Med Brown stain. tr asphaltic flecks. Weak Pos cut/ residual. Weak Pos acid/ residual. some pcs floating on wash water.
4580
Actual Wellbore
Proposed Wellbore
some CHERT - Clear/ White. Sing/ Mot. Opaque to Semi- Transparent. No/ rare fossil frag inclustion. Tripolitic in p
odor. rare bright yellow flouresence. No free oil or gas. mixture of: barren/ some pcs: spotted Med Brown stain.
aspathlic specks. Weak Pos cut and residual. Weak Pos acid and residual.
some CHERT - Off White/ Brown. Mot. Semi-Transparent. Tripolitic. No odor. some bright yellow flouresence. N
gas. some oil spots on wash water. some uniform Med Brown stain. rare asphaltic flecks. Weak Pos cut/ residu
Pos acid/ residual. tr pcs floating on wash water.
6,950': Hole Dev: 92.8 incl @ 192.3 azi
6,982': Hole Dev: 92.7 incl @ 192.0 azi
7,013': Hole Dev: 92.2 incl @ 191.2 azi
7,045': Hole Dev: 92.5 incl @ 191.1 azi
7,077': Hole Dev: 92.1 incl @ 191.2 azi
7,109': Hole Dev: 92.4 incl @ 190.7 azi
7,140': Hole Dev: 91.6 incl @ 190.2 azi
Vis: 25
Wt: 8.3
Vis: 26
Wt: 8.3
4640

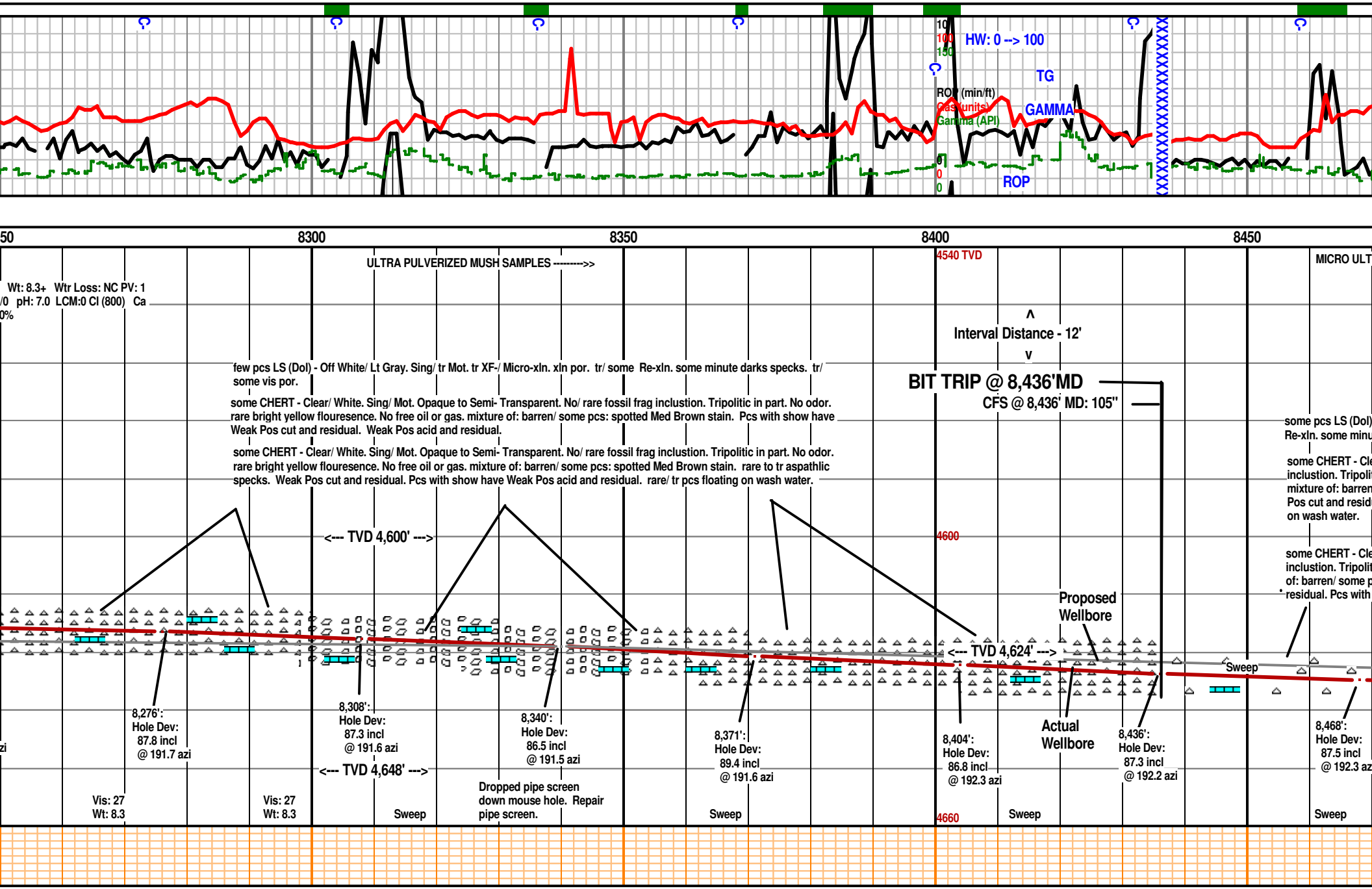

10
50
150
HW: 0 --> 50
TG
ROP (min/ft)
Gas (units)
Gamma (API)
GAMMA
ROP
0
0
0
50
7200
7250
7300
7350
4520 TVD
PULVERIZED MUSH SAMPLES -------->>
Interval Distance - 12'
CHERT - Clear/ White. Sing/ Mot. Opaque to Semi- Transparent. No/ rare fossil frag inclustion. Tripolitic in part. No odor. rare bright yellow flouresence. No free oil or gas. mixture of: barren/ some pcs: spotted Med Brown stain. rare to tr aspathlic specks. Weak Pos cut and residual. Weak Pos acid and residual.
some CHERT - Off White/ Brown. Mot. Semi-Transparent. Tripolitic. No odor. some bright yellow flouresence. No free oil or gas. some oil spots on wash water. some uniform Med Brown stain. rare asphaltic flecks. Weak Pos cut/ residual. Weak Pos acid/ residual. tr pcs floating on wash water.
some CHERT - Clear/ White. Sing/ Mot. Opaque to Semi- Transparent. No/ rare fossil frag inclustion. Tripolitic in part. No odor. rare bright yellow flouresence. No free oil or gas. mixture of: barren/ some pcs: spotted Med Brown stain. rare to tr aspathlic specks. Weak Pos cut and residual. Weak Pos acid and residual.
some CHERT - Clear/ White. Sing/ Mot. Opaque to Semi- Transparent. No/ rare fossil frag inclustion. Tripolitic in part. No odor. rare bright yellow flouresence. No free oil or gas. mixture of: barren/ some pcs: spotted Med Brown stain. rare to tr aspathlic specks. Weak Pos cut and residual. Weak Pos acid and residual.
4580
Actual Wellbore
Proposed Wellbore
7,172': Hole Dev: 90.9 incl @ 189.6 azi
7,204': Hole Dev: 89.6 incl @ 188.9 azi
7,235': Hole Dev: 88.6 incl @ 188.1 azi
7,267': Hole Dev: 88.8 incl @ 188.8 azi
7,299': Hole Dev: 89.3 incl @ 189.5 azi
7,330': Hole Dev: 88.2 incl @ 189.3 azi
7,361': Hole Dev: 87.8 incl @ 189.3 azi
Vis: 27
Wt: 8.4
4640
T/I @ 7,398' - Wis: 25
YP: 1 Gels: 1/1/0 pH
1.0%

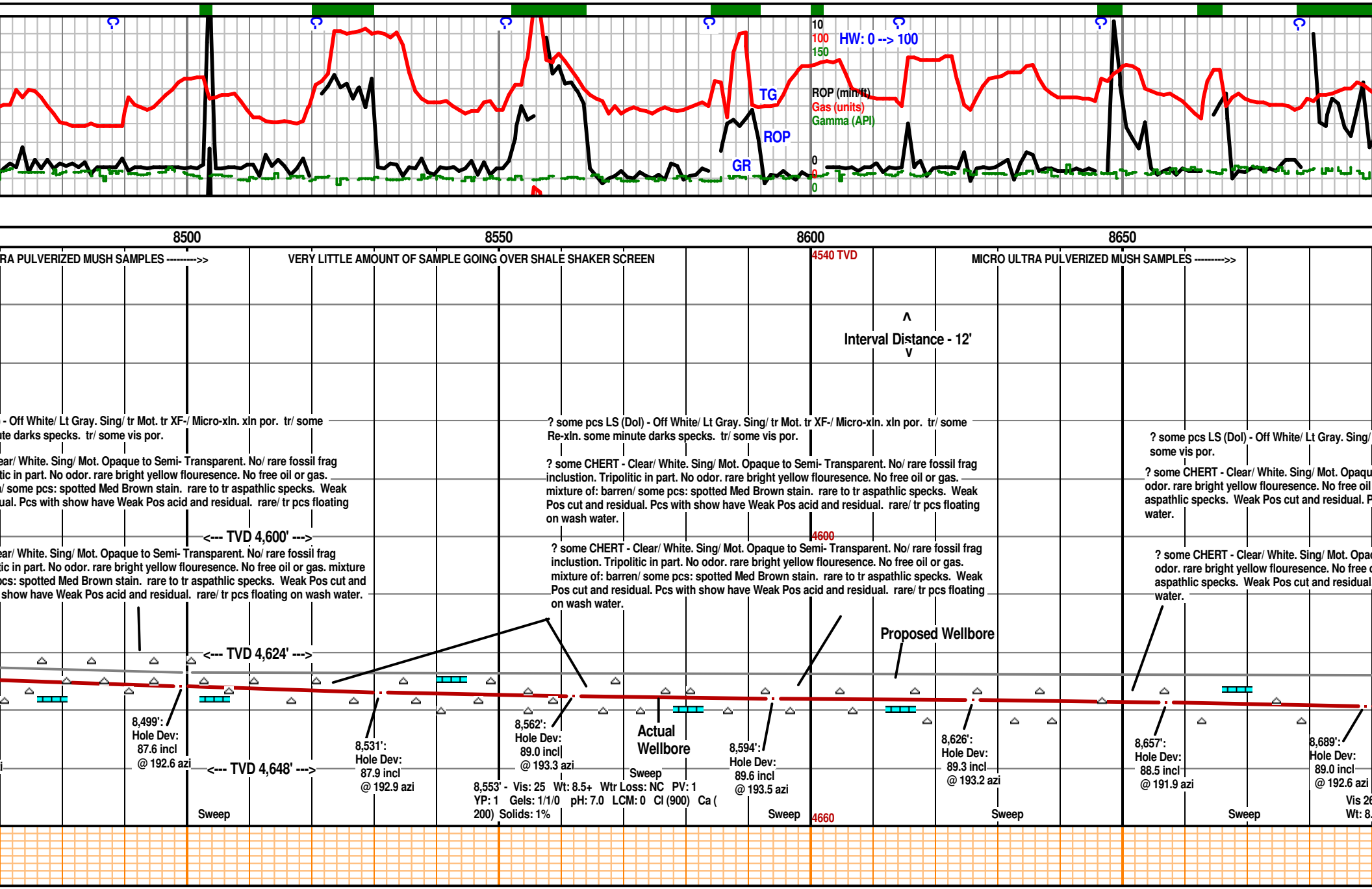

HW: 0 --> 50
HW: 0 --> 100
SCALE CHANGE
Scale Change
ROP (min/ft)
Gas (units)
Gamma (API)
GAMMA
TG
ROP
7400
7450
7500
7550
4520 TVD
4580
4640
PULVERIZED MUSH SAMPLES -------->>
TRIP @ 7,398'
Tool Failure
ashed 5 stands to bottom.
Interval Distance - 12'
Actual Wellbore
Proposed Wellbore
some CHERT - Clear/ White. Sing/ Mot. Opaque to Semi- Transparent. No/ rare fossil frag inclustion. Tripolitic in part. No odor. rare bright yellow flouresence. No free oil or gas. mixture of: barren/ some pcs: spotted Med Brown stain. rare to tr aspathlic specks. Weak Pos cut and residual. Weak Pos acid and residual.
some CHERT - Clear/ White. Sing/ Mot. Opaque to Semi- Transparent. No/ rare fossil frag inclustion. Tripolitic in part. No odor. rare bright yellow flouresence. No free oil or gas. mixture of: barren/ some pcs: spotted Med Brown stain. rare to tr aspathlic specks. Weak Pos cut and residual. Weak Pos acid and residual.
some CHERT - Clear/ White. Sing/ Mot. Opaque to Semi- Transparent. No/ r fossil frag inclustion. Tripolitic in part. No odor. rare bright yellow flouresec No free oil or gas. mixture of: barren/ some pcs: spotted Med Brown stain. to tr aspathlic specks. Weak Pos cut and residual. Weak Pos acid and res
some CHERT - Clear/ White. Sing/ Mot. Opaque to Semi- Transparent. No/ r frag inclustion. Tripolitic in part. No odor. rare bright yellow flouresence. N or gas. mixture of: barren/ some pcs: spotted Med Brown stain. rare to tr a specks. Weak Pos cut and residual. Weak Pos acid and residual. some pc on wash water.
7,393': Hole Dev: 87.3 incl @ 189.3 azi
7,424': Hole Dev: 87.5 incl @ 189.4 azi
7,456': Hole Dev: 87.1 incl @ 189.2 azi
7,487': Hole Dev: 87.0 incl @ 188.8 azi
7,519': Hole Dev: 88.6 incl @ 189.0 azi
7,550': Hole Dev: 90.0 incl @ 189.0 azi
7,582': Hole Dev: 90.0 incl @ 188.2 azi
Wt: 8.3+ Wtr Loss: NC PV: 1
H: 7.0 Cl (900) Ca (440) Solids:
Vis: 26
Wt: 8.4

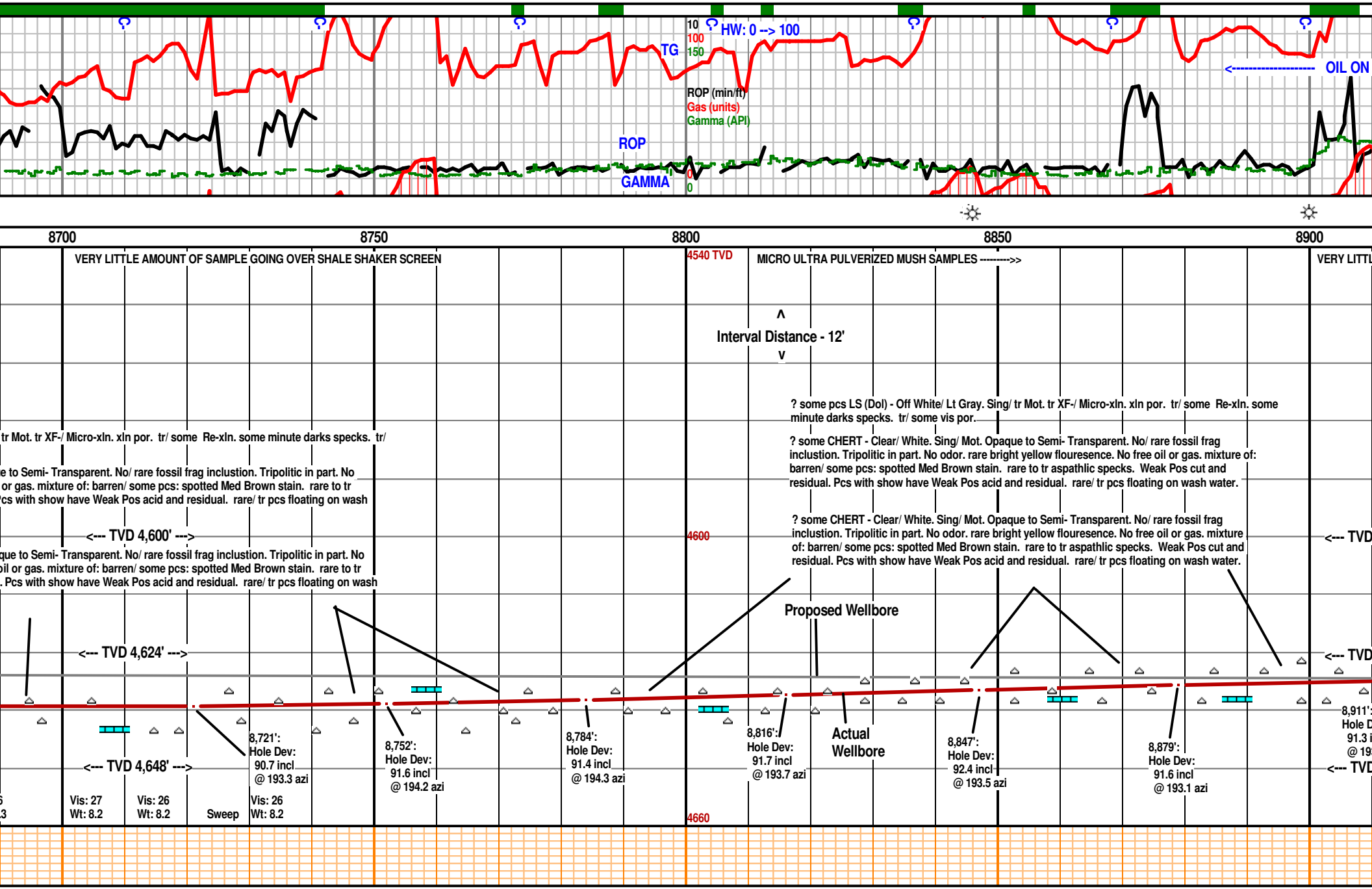

HW: 0 --> 100
TG
ROP
ROP (min/ft)
Gas (units)
Gamma (API)
GAMMA
10
100
150
0
7600
7650
7700
7750
7800
4520 TVD
4580
4640
PULVERIZED MUSH SAMPLES --------->>
Interval Distance - 12'
rare LS (Dol) - Off White/ Lt Gray. Sing/ tr Mot. tr XF-/ Micro-xln. xln por. tr/ some Re-xln. some minute darks specks. tr/ some vis por.
some CHERT - Clear/ White. Sing/ Mot. Opaque to Semi- Transparent. No/ rare fossil frag inclustion. Tripolitic in part. No odor. rare bright yellow flouresence. No free oil or gas. mixture of: barren/ some pcs: spotted Med Brown stain. rare to tr aspathlic specks. Weak Pos cut and residual. Weak Pos acid and residual.
some CHERT - Clear/ White. Sing/ Mot. Opaque to Semi- Transparent. No/ rare fossil frag inclustion. Tripolitic in part. No odor. rare bright yellow flouresence. No free oil or gas. mixture of: barren/ some pcs: spotted Med Brown stain. rare to tr aspathlic specks. Weak Pos cut and residual. Weak Pos acid and residual. some pcs floating on wash water.
Proposed Wellbore
Actual Wellbore
7,614': Hole Dev: 89.1 incl @ 188.7 azi
7,645': Hole Dev: 89.4 incl @ 188.5 azi
7,677': Hole Dev: 90.3 incl @ 189.2 azi
7,708': Hole Dev: 90.1 incl @ 188.4 azi
7,740': Hole Dev: 89.0 incl @ 188.9 azi
7,771': Hole Dev: 89.1 incl @ 189.1 azi
7,803': Hole Dev: 86.4 incl @ 187.9 azi
Sweep

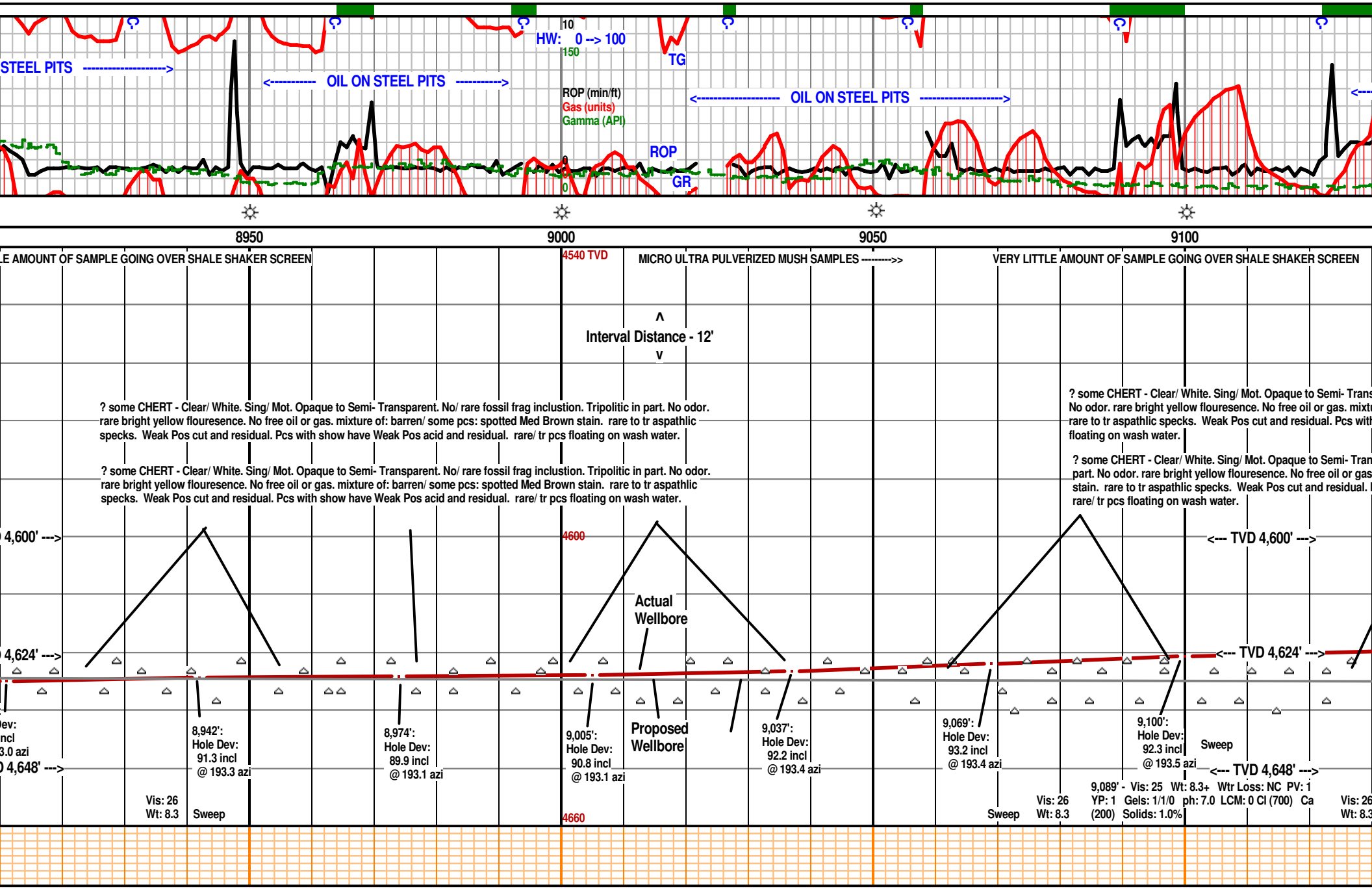

--> 100
ROP
TG
HW: 0 --> 100
10
100
150
ROP (min/ft)
Gas (units)
Gamma (API)
GAMMA
0
7850
7900
7950
8000
PULVERIZED MUSH SAMPLES --------->>
TRIP @ 7,857' MD
Depth changed 7,859' ---> 7,857'MD
Washed 9 stands to bottom
tr/ some
o/ rare fossil
e. No free oil
tr aspathlic
o/ rare
esence.
ain. rare
residual.
Proposed Wellbore
7,834':
Hole Dev:
86.2 incl
@ 188.3 azi
7,857' - Vis: 25 Wt: 8.3+ Wtr Loss: NC PV: 1
YP: 1 Gels: 1/1/0 pH: 7.0 LMC: 0 Cl (800) Ca
(200) Solids: 1.0%
7,866':
Hole Dev:
86.3 incl
@ 188.3 azi
some CHERT - Clear/ White. Sing/ Mot. Opaque to Semi- Transparent. No/ rare fossil frag inclustion. Tripolitic in part. No odor. rare bright yellow flouresence. No free oil or gas. mixture of: barren/ some pcs: spotted Med Brown stain. rare to tr aspathlic specks. Weak Pos cut and residual. Weak Pos acid and residual.
7,898':
Hole Dev:
86.9 incl
@ 189.0 azi
Sweep
some CHERT - Clear/ White. Sing/ Mot. Opaque to Semi- Transparent. No/ rare fossil frag inclustion. Tripolitic in part. No odor. rare bright yellow flouresence. No free oil or gas. mixture of: barren/ some pcs: spotted Med Brown stain. rare to tr aspathlic specks. Weak Pos cut and residual. Weak Pos acid and residual. tr pcs floating on wash water.
7,929':
Hole Dev:
87.3 incl
@ 189.9 azi
4540 TVD
Scale Change
4600
4660
7,961':
Hole Dev:
87.7 incl
@ 190.1 azi
Sweep
Proposed
Wellbore
Actual
Wellbore
some CHERT - Clear/ White. Sing/ Mot. Opaque to Semi- Transparent. No/ rare fossil frag inclustion. Tripolitic in part. No odor. rare bright yellow flouresence. No free oil or gas. mixture of: barren/ some pcs: spotted Med Brown stain. rare to tr aspathlic specks. Weak Pos cut and residual. Weak Pos acid and residual.
some CHERT - Clear/ White. Sing/ Mot. Opaque to Semi- Transparent. No/ rare fossil frag inclustion. Tripolitic in part. No odor. rare bright yellow flouresence. No free oil or gas. mixture of: barren/ some pcs: spotted Med Brown stain. rare to tr aspathlic specks. Weak Pos cut and residual. Weak Pos acid and residual. tr pcs floating on wash water.
7,992':
Hole Dev:
87.8 incl
@ 190.3 azi
4540 TVD
4600
4660
PULVERIZED MUSH SAM
Interval Distance - 12'
8,024':
Hole Dev:
89.3 incl
@ 190.9 az
Sweep

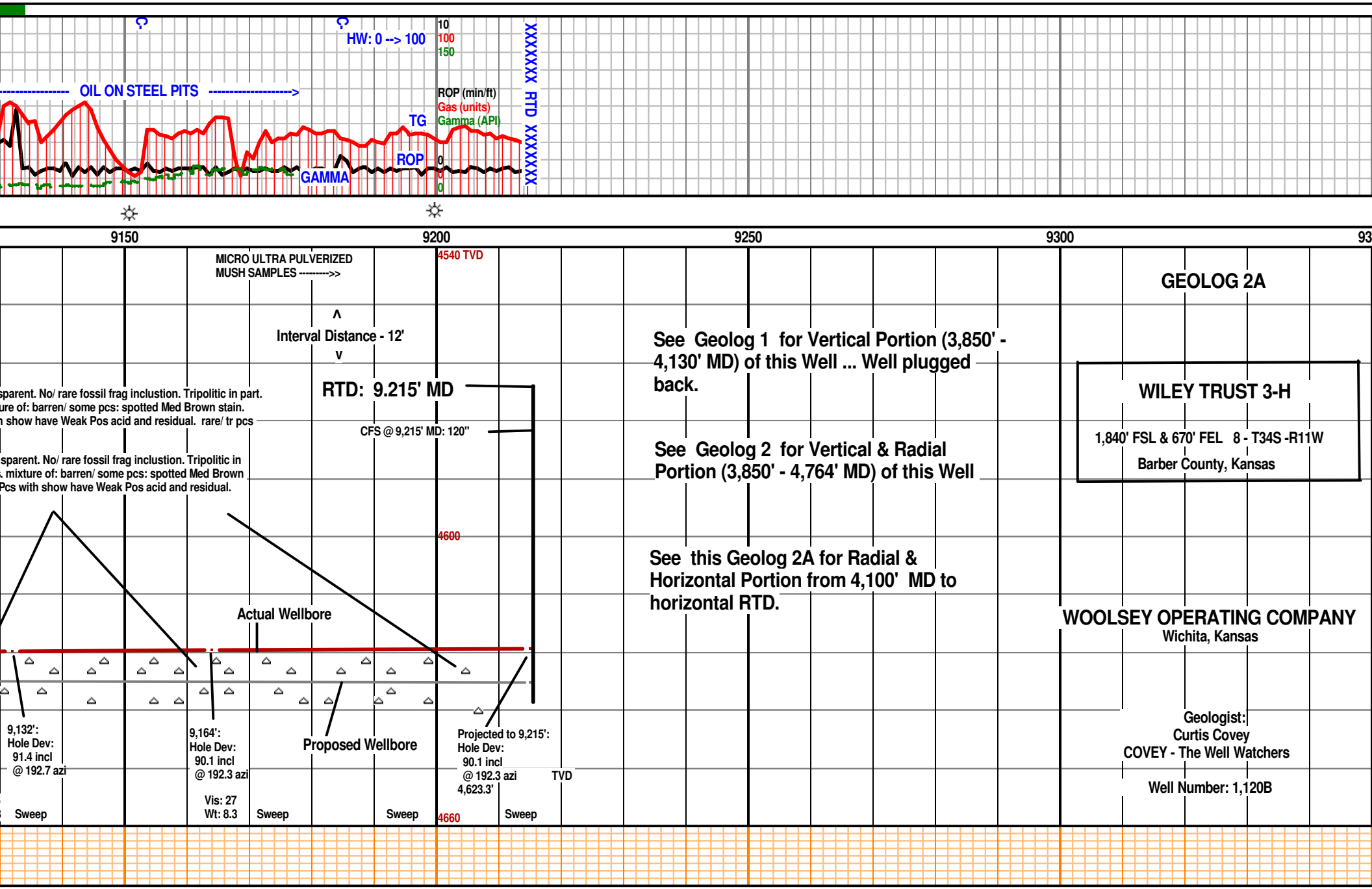

10
100
150
HW: 0 --> 100
TG
ROP (min/ft)
Gas (units)
Gamma (API)
GAMMA
0
0
0
ROP
8050
8100
8150
8200
MPLES --------->>
4540 TVD
PULVERIZED MUSH SAMPLES --------->>
8,241' - Vis: 25
YP: 1 Gels: 1/1
(280) Solids: 1.
Interval Distance - 12'
some CHERT - Clear/ White. Sing/ Mot. Opaque to Semi- Transparent. No/ rare fossil frag inclustion. Tripolitic in part. No odor. rare bright yellow flouresence. No free oil or gas. mixture of: barren/ some pcs: spotted Med Brown stain. Pcs with show have Weak Pos cut and residual. Weak Pos acid and residual.
some CHERT - Clear/ White. Sing/ Mot. Opaque to Semi- Transparent. No/ rare fossil frag inclustion. Tripolitic in part. No odor. rare bright yellow flouresence. No free oil or gas. mixture of: barren/ some pcs: spotted Med Brown stain. rare to tr aspathlic specks. Weak Pos cut and residual. Pcs with show have Weak Pos acid and residual. rare/ tr pcs floating on wash water.
some CHERT - Clear/ White. Sing/ Mot. Opaque to Semi- Transparent. No/ rare fossil frag inclustion. Tripolitic in part. No odor. rare bright yellow flouresence. No free oil or gas. mixture of: barren/ some pcs: spotted Med Brown stain. Pcs with show have Weak Pos cut and residual. Weak Pos acid and residual.
some CHERT - Clear/ White. Sing/ Mot. Opaque to Semi- Transparent. No/ rare fossil frag inclustion. Tripolitic in part. No odor. rare bright yellow flouresence. No free oil or gas. mixture of: barren/ some pcs: spotted Med Brown stain. rare to tr aspathlic specks. Weak Pos cut and residual. Pcs with show have Weak Pos acid and residual. rare/ tr pcs floating on wash water.
<--- TVD 4,600' --->
4600
Actual Wellbore
Proposed Wellbore
8,055':
Hole Dev:
90.3 incl
@ 191.2 azi
8,087':
Hole Dev:
91.6 incl
@ 191.5 azi
8,119':
Hole Dev:
90.3 incl
@ 19135 azi
8,150':
Hole Dev:
90.5 incl
@ 191.4 azi
8,181':
Hole Dev:
90.7 incl
@ 191.3 azi
8,213':
Hole Dev:
88.7 incl
@ 191.1 azi
Proposed
Wellbore
8,245':
Hole Dev:
88.6 incl
@ 191.7 a
<--- TVD 4,648' --->
Sweep
Sweep
Sweep
Vis: 26
Wt: 8.4
Vis: 27
Wt: 8.3
4660


HW: 0 --> 100
TG
GAMMA
ROP
ROP (min/ft)
Gas (units)
Gamma (API)
8300
8350
8400
8450
4540 TVD
4600
4660
ULTRA PULVERIZED MUSH SAMPLES --------->>
Wt: 8.3+ Wtr Loss: NC PV: 1
/0 pH: 7.0 LCM:0 Cl (800) Ca
0%
Interval Distance - 12'
BIT TRIP @ 8,436'MD
CFS @ 8,436' MD: 105"
few pcs LS (Dol) - Off White/ Lt Gray. Sing/ tr Mot. tr XF-/ Micro-xln. xln por. tr/ some Re-xln. some minute darks specks. tr/ some vis por.
some CHERT - Clear/ White. Sing/ Mot. Opaque to Semi- Transparent. No/ rare fossil frag inclustion. Tripolitic in part. No odor. rare bright yellow flouresence. No free oil or gas. mixture of: barren/ some pcs: spotted Med Brown stain. Pcs with show have Weak Pos cut and residual. Weak Pos acid and residual.
some CHERT - Clear/ White. Sing/ Mot. Opaque to Semi- Transparent. No/ rare fossil frag inclustion. Tripolitic in part. No odor. rare bright yellow flouresence. No free oil or gas. mixture of: barren/ some pcs: spotted Med Brown stain. rare to tr aspathlic specks. Weak Pos cut and residual. Pcs with show have Weak Pos acid and residual. rare/ tr pcs floating on wash water.
<--- TVD 4,600' --->
<--- TVD 4,624' --->
<--- TVD 4,648' --->
Proposed Wellbore
Actual Wellbore
8,276': Hole Dev: 87.8 incl @ 191.7 azi
8,308': Hole Dev: 87.3 incl @ 191.6 azi
8,340': Hole Dev: 86.5 incl @ 191.5 azi
8,371': Hole Dev: 89.4 incl @ 191.6 azi
8,404': Hole Dev: 86.8 incl @ 192.3 azi
8,436': Hole Dev: 87.3 incl @ 192.2 azi
8,468': Hole Dev: 87.5 incl @ 192.3 az
Vis: 27 Wt: 8.3
Vis: 27 Wt: 8.3
Sweep
Dropped pipe screen down mouse hole. Repair pipe screen.
Sweep
Sweep
Sweep
Sweep
MICRO ULT
some pcs LS (Dol) Re-xln. some minu
some CHERT - Cle inclustion. Tripoli mixture of: barren Pos cut and resid on wash water.
some CHERT - Cle inclustion. Tripolit of: barren/ some p residual. Pcs with


10
100
150
HW: 0 --> 100
ROP (min/ft)
Gas (units)
Gamma (API)
TG
ROP
GR
0
0
0
8500
8550
8600
8650
RA PULVERIZED MUSH SAMPLES --------->>
VERY LITTLE AMOUNT OF SAMPLE GOING OVER SHALE SHAKER SCREEN
4540 TVD
MICRO ULTRA PULVERIZED MUSH SAMPLES --------->>
Interval Distance - 12'
- Off White/ Lt Gray. Sing/ tr Mot. tr XF-/ Micro-xln. xln por. tr/ some
te darks specks. tr/ some vis por.
ear/ White. Sing/ Mot. Opaque to Semi- Transparent. No/ rare fossil frag
tic in part. No odor. rare bright yellow flouresence. No free oil or gas.
/ some pcs: spotted Med Brown stain. rare to tr aspathlic specks. Weak
ual. Pcs with show have Weak Pos acid and residual. rare/ tr pcs floating
<--- TVD 4,600' --->
ear/ White. Sing/ Mot. Opaque to Semi- Transparent. No/ rare fossil frag
tic in part. No odor. rare bright yellow flouresence. No free oil or gas. mixture
pcs: spotted Med Brown stain. rare to tr aspathlic specks. Weak Pos cut and
show have Weak Pos acid and residual. rare/ tr pcs floating on wash water.
<--- TVD 4,624' --->
<--- TVD 4,648' --->
? some pcs LS (Dol) - Off White/ Lt Gray. Sing/ tr Mot. tr XF-/ Micro-xln. xln por. tr/ some
Re-xln. some minute darks specks. tr/ some vis por.
? some CHERT - Clear/ White. Sing/ Mot. Opaque to Semi- Transparent. No/ rare fossil frag
inclustion. Tripolitic in part. No odor. rare bright yellow flouresence. No free oil or gas.
mixture of: barren/ some pcs: spotted Med Brown stain. rare to tr aspathlic specks. Weak
Pos cut and residual. Pcs with show have Weak Pos acid and residual. rare/ tr pcs floating
on wash water.
4600
? some CHERT - Clear/ White. Sing/ Mot. Opaque to Semi- Transparent. No/ rare fossil frag
inclustion. Tripolitic in part. No odor. rare bright yellow flouresence. No free oil or gas.
mixture of: barren/ some pcs: spotted Med Brown stain. rare to tr aspathlic specks. Weak
Pos cut and residual. Pcs with show have Weak Pos acid and residual. rare/ tr pcs floating
on wash water.
Proposed Wellbore
? some pcs LS (Dol) - Off White/ Lt Gray. Sing/
some vis por.
? some CHERT - Clear/ White. Sing/ Mot. Opaqu
odor. rare bright yellow flouresence. No free oil
aspathlic specks. Weak Pos cut and residual. P
water.
? some CHERT - Clear/ White. Sing/ Mot. Opa
odor. rare bright yellow flouresence. No free
aspathlic specks. Weak Pos cut and residual
water.
8,499': Hole Dev: 87.6 incl @ 192.6 azi
8,531': Hole Dev: 87.9 incl @ 192.9 azi
8,562': Hole Dev: 89.0 incl @ 193.3 azi
Actual Wellbore
8,594': Hole Dev: 89.6 incl @ 193.5 azi
8,626': Hole Dev: 89.3 incl @ 193.2 azi
8,657': Hole Dev: 88.5 incl @ 191.9 azi
8,689': Hole Dev: 89.0 incl @ 192.6 azi
Vis 26
Wt: 8.
Sweep
8,553' - Vis: 25 Wt: 8.5+ Wtr Loss: NC PV: 1
YP: 1 Gels: 1/1/0 pH: 7.0 LCM: 0 Cl (900) Ca (
200) Solids: 1%
Sweep
4660
Sweep
Sweep


10
100
150
TG
HW: 0 --> 100
ROP (min/ft)
Gas (units)
Gamma (API)
ROP
GAMMA
0
0
<---------- OIL ON
8700
8750
8800
8850
8900
VERY LITTLE AMOUNT OF SAMPLE GOING OVER SHALE SHAKER SCREEN
4540 TVD
MICRO ULTRA PULVERIZED MUSH SAMPLES --------->>
VERY LITTL
Interval Distance - 12'
? some pcs LS (Dol) - Off White/ Lt Gray. Sing/ tr Mot. tr XF-/ Micro-xln. xln por. tr/ some Re-xln. some minute darks specks. tr/ some vis por.
? some CHERT - Clear/ White. Sing/ Mot. Opaque to Semi- Transparent. No/ rare fossil frag inclustion. Tripolitic in part. No odor. rare bright yellow flouresence. No free oil or gas. mixture of: barren/ some pcs: spotted Med Brown stain. rare to tr aspathlic specks. Weak Pos cut and residual. Pcs with show have Weak Pos acid and residual. rare/ tr pcs floating on wash water.
tr Mot. tr XF-/ Micro-xln. xln por. tr/ some Re-xln. some minute darks specks. tr/
e to Semi- Transparent. No/ rare fossil frag inclustion. Tripolitic in part. No
or gas. mixture of: barren/ some pcs: spotted Med Brown stain. rare to tr
cs with show have Weak Pos acid and residual. rare/ tr pcs floating on wash
<--- TVD 4,600' --->
4600
que to Semi- Transparent. No/ rare fossil frag inclustion. Tripolitic in part. No
il or gas. mixture of: barren/ some pcs: spotted Med Brown stain. rare to tr
. Pcs with show have Weak Pos acid and residual. rare/ tr pcs floating on wash
Proposed Wellbore
<--- TVD 4,624' --->
<--- TVD
<--- TVD
8,721':
Hole Dev:
90.7 incl
@ 193.3 azi
8,752':
Hole Dev:
91.6 incl
@ 194.2 azi
8,784':
Hole Dev:
91.4 incl
@ 194.3 azi
8,816':
Hole Dev:
91.7 incl
@ 193.7 azi
Actual
Wellbore
8,847':
Hole Dev:
92.4 incl
@ 193.5 azi
8,879':
Hole Dev:
91.6 incl
@ 193.1 azi
8,911':
Hole D
91.3 i
@ 19
<--- TVD 4,648' --->
<--- TVD
Vis: 27
Wt: 8.2
Vis: 26
Wt: 8.2
Sweep
Vis: 26
Wt: 8.2
4660


STEEL PITS ---------->
<---------- OIL ON STEEL PITS ---------->
HW: 0 --> 100
10
150
TG
ROP (min/ft)
Gas (units)
Gamma (API)
ROP
GR
0
<---------- OIL ON STEEL PITS ---------->
8950
9000
9050
9100
LE AMOUNT OF SAMPLE GOING OVER SHALE SHAKER SCREEN
4540 TVD
MICRO ULTRA PULVERIZED MUSH SAMPLES --------->>
VERY LITTLE AMOUNT OF SAMPLE GOING OVER SHALE SHAKER SCREEN
Interval Distance - 12'
? some CHERT - Clear/ White. Sing/ Mot. Opaque to Semi- Transparent. No/ rare fossil frag inclustion. Tripolitic in part. No odor. rare bright yellow flouresence. No free oil or gas. mixture of: barren/ some pcs: spotted Med Brown stain. rare to tr aspathlic specks. Weak Pos cut and residual. Pcs with show have Weak Pos acid and residual. rare/ tr pcs floating on wash water.
? some CHERT - Clear/ White. Sing/ Mot. Opaque to Semi- Transparent. No/ rare fossil frag inclustion. Tripolitic in part. No odor. rare bright yellow flouresence. No free oil or gas. mixture of: barren/ some pcs: spotted Med Brown stain. rare to tr aspathlic specks. Weak Pos cut and residual. Pcs with show have Weak Pos acid and residual. rare/ tr pcs floating on wash water.
? some CHERT - Clear/ White. Sing/ Mot. Opaque to Semi- Trans
No odor. rare bright yellow flouresence. No free oil or gas. mixtu
rare to tr aspathlic specks. Weak Pos cut and residual. Pcs with
floating on wash water.
? some CHERT - Clear/ White. Sing/ Mot. Opaque to Semi- Tran
part. No odor. rare bright yellow flouresence. No free oil or gas
stain. rare to tr aspathlic specks. Weak Pos cut and residual.
rare/ tr pcs floating on wash water.
4,600' --->
4600
<--- TVD 4,600' --->
Actual Wellbore
4,624' --->
<--- TVD 4,624' --->
Proposed Wellbore
8,942': Hole Dev: 91.3 incl @ 193.3 azi
8,974': Hole Dev: 89.9 incl @ 193.1 azi
9,005': Hole Dev: 90.8 incl @ 193.1 azi
9,037': Hole Dev: 92.2 incl @ 193.4 azi
9,069': Hole Dev: 93.2 incl @ 193.4 azi
9,100': Hole Dev: 92.3 incl @ 193.5 azi
Sweep
4,648' --->
<--- TVD 4,648' --->
Vis: 26
Wt: 8.3
Sweep
4660
9,089' - Vis: 25 Wt: 8.3+ Wtr Loss: NC PV: 1
YP: 1 Gels: 1/1/0 ph: 7.0 LCM: 0 Cl (700) Ca
(200) Solids: 1.0%
Sweep
Vis: 26
Wt: 8.3
Vis: 26
Wt: 8.3



See Geolog 1 for Vertical Portion (3,850' - 4,130' MD) of this Well ... Well plugged back.

See Geolog 2 for Vertical & Radial Portion (3,850' - 4,764' MD) of this Well

See this Geolog 2A for Radial & Horizontal Portion from 4,100' MD to horizontal RTD.

GEOLOG 2A

WILEY TRUST 3-H

1,840' FSL & 670' FEL 8 - T34S -R11W

Barber County, Kansas

WOOLSEY OPERATING COMPANY

Wichita, Kansas

Geologist:
Curtis Covey
COVEY - The Well Watchers

Well Number: 1,120B

50

Woolsey Operating Company, LLC

WOC Wiley Trust #3-H

Barber County, Kansas

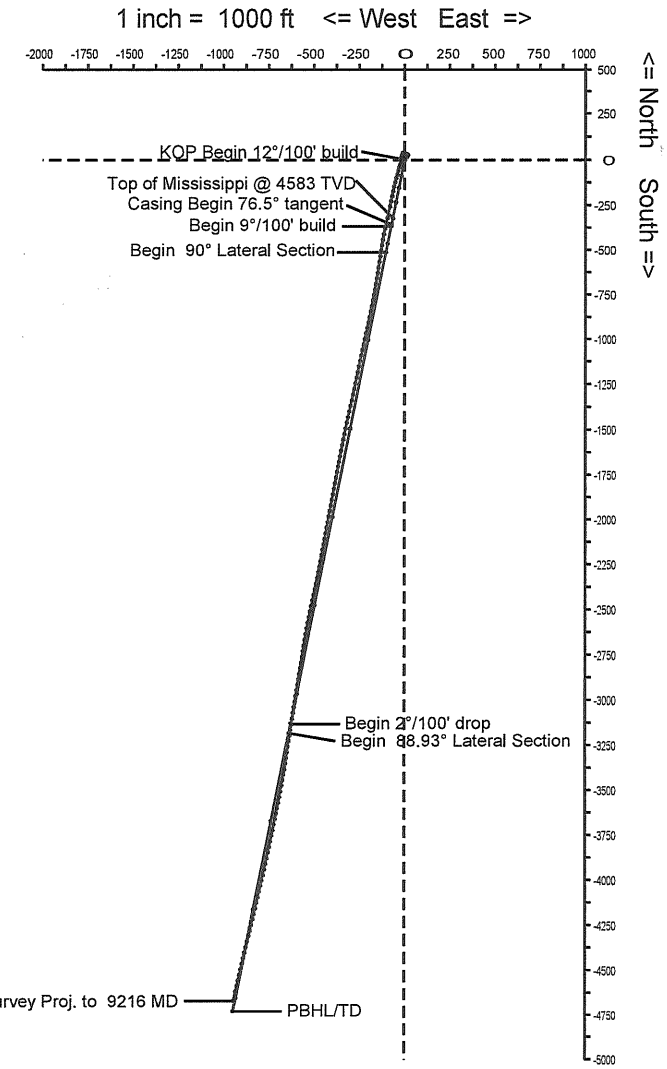
WELL PROFILE DATA rev2

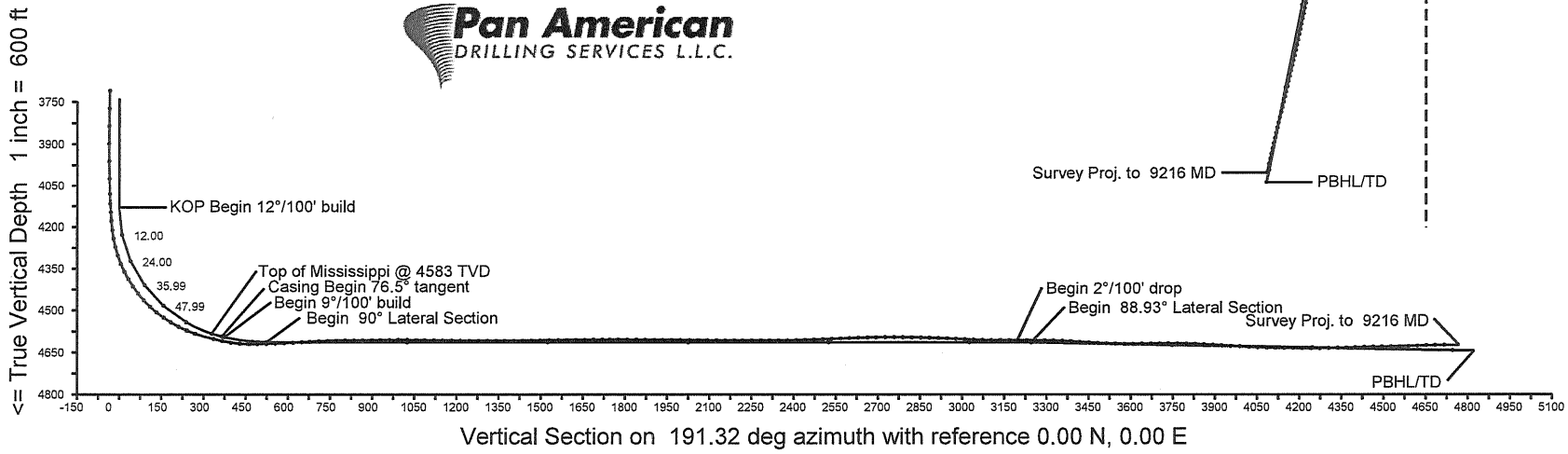
MD	Inc.	Azi.	TVD	N/-S	E/-W	DLS	Comment 07-12-2011
4129	0.00	191.32	4129	0	0	0.00	KOP Begin 12°/100' build
4729	72.07	191.32	4583	-324	-65	12.00	Top of Mississippi @ 4583 TVD
4766	76.50	191.32	4593	-359	-72	12.00	Casing Begin 76.5° tangent
4776	76.50	191.32	4595	-368	-74	0.00	Begin 9°/100' build
4927	90.00	191.32	4613	-515	-103	8.96	Begin 90° Lateral Section
7595	90.00	191.32	4613	-3131	-627	0.00	Begin 2°/100' drop
7649	88.93	191.31	4614	-3183	-637	2.00	Begin 88.93° Lateral Section
9224	88.93	191.31	4643	-4728	-946	0.00	PBHL/TD

WELL PROFILE DATA svys

MD	Inc.	Azi.	TVD	N/-S	E/-W	DLS	Comment 08-26-2011
9216	90.10	192.30	4623	-4672	-945	0.00	Survey Proj. to 9216 MD

Pan American DRILLING SERVICES L.L.C.





final directional

Pan American Drilling Services, LLC

Company: Woolsey Operating Company, LLC
Well: WOC Wiley Trust #3-H
Location: Barber County, Kansas

Date:26-Aug-2011
Surveys
Page 1
Job #: 5358

NAD27 Ks South gr elev=1368 RKB=1383

MD (feet)	Inclination (degrees)	Azimuth (degrees)	TVD (feet)	N/-S (feet)	E/-W (feet)	DLS (deg/100')	VS @ 191.32° Az (feet)	Grid Y	Grid X	Comments
Surface Location								**157601.99**	**1990382.84**	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	157601.99	1990382.84	
385.00	0.70	355.10	384.99	2.34	-0.20	0.18	-2.26	157604.34	1990382.64	
667.00	0.50	321.40	666.98	5.02	-1.12	0.14	-4.70	157607.01	1990381.73	
974.00	0.90	4.70	973.95	8.47	-1.75	0.21	-7.96	157610.46	1990381.09	
1278.00	0.80	31.60	1277.92	12.66	-0.45	0.13	-12.32	157614.65	1990382.40	
1593.00	1.20	70.50	1592.88	15.63	3.82	0.24	-16.08	157617.63	1990386.66	
1814.00	1.60	103.60	1813.81	15.68	9.00	0.40	-17.14	157617.67	1990391.84	
1885.00	1.50	110.30	1884.79	15.12	10.83	0.29	-16.96	157617.12	1990393.67	
1917.00	1.40	92.10	1916.78	14.96	11.61	1.47	-16.95	157616.96	1990394.46	
1951.00	1.80	55.10	1950.77	15.25	12.47	3.19	-17.40	157617.25	1990395.31	
1982.00	2.30	37.00	1981.75	16.03	13.24	2.62	-18.32	157618.02	1990396.08	
2013.00	2.60	30.50	2012.72	17.13	13.97	1.32	-19.54	157619.13	1990396.81	
2077.00	2.70	25.10	2076.65	19.75	15.35	0.42	-22.38	157621.74	1990398.19	
2140.00	2.20	358.10	2139.59	22.30	15.94	1.97	-25.00	157624.29	1990398.78	
2204.00	1.80	329.20	2203.56	24.39	15.38	1.67	-26.94	157626.38	1990398.22	
2267.00	1.70	300.70	2266.53	25.72	14.07	1.38	-27.98	157627.71	1990396.91	
2329.00	1.40	291.70	2328.51	26.47	12.58	0.62	-28.42	157628.46	1990395.42	
2392.00	1.50	284.80	2391.49	26.96	11.07	0.32	-28.61	157628.96	1990393.91	
2455.00	1.80	289.10	2454.46	27.50	9.33	0.51	-28.79	157629.49	1990392.18	
2518.00	1.40	285.00	2517.43	28.02	7.65	0.66	-28.98	157630.01	1990390.50	
2581.00	0.80	244.00	2580.42	28.03	6.52	1.51	-28.76	157630.02	1990389.36	
2644.00	0.90	228.10	2643.42	27.50	5.75	0.40	-28.10	157629.50	1990388.59	
2707.00	0.70	245.40	2706.41	27.01	5.03	0.49	-27.48	157629.01	1990387.88	
2770.00	0.90	260.90	2769.40	26.77	4.20	0.47	-27.08	157628.77	1990387.04	
2833.00	1.20	260.20	2832.39	26.58	3.06	0.48	-26.67	157628.58	1990385.90	
2896.00	1.40	238.40	2895.38	26.07	1.75	0.84	-25.91	157628.06	1990384.59	
2957.00	0.70	245.10	2956.37	25.52	0.78	1.16	-25.18	157627.51	1990383.62	
3020.00	0.60	245.20	3019.36	25.22	0.13	0.16	-24.76	157627.21	1990382.97	
3083.00	0.30	268.70	3082.36	25.08	-0.33	0.55	-24.53	157627.07	1990382.51	
3146.00	0.50	311.70	3145.36	25.26	-0.70	0.55	-24.63	157627.25	1990382.14	

Pan American Drilling Services, LLC

Company: Woolsey Operating Company, LLC
Well: WOC Wiley Trust #3-H
Location: Barber County, Kansas

Date:26-Aug-2011
Surveys

Job #: 5358

NAD27 Ks South gr elev=1368 RKB=1383

MD (feet)	Inclination (degrees)	Azimuth (degrees)	TVD (feet)	N/-S (feet)	E/-W (feet)	DLS (deg/100')	VS @ 191.32° Az (feet)	Grid Y	Grid X	Comments
3208.00	0.40	314.80	3207.36	25.59	-1.06	0.17	-24.88	157627.58	1990381.78	
3271.00	0.40	336.20	3270.36	25.95	-1.30	0.24	-25.19	157627.94	1990381.54	
3333.00	0.60	351.90	3332.35	26.47	-1.44	0.39	-25.67	157628.46	1990381.40	
3396.00	0.60	11.30	3395.35	27.12	-1.42	0.32	-26.31	157629.11	1990381.42	
3460.00	1.00	353.40	3459.34	28.00	-1.42	0.73	-27.18	157629.99	1990381.42	
3522.00	1.30	354.70	3521.33	29.24	-1.54	0.49	-28.37	157631.23	1990381.30	
3586.00	0.90	21.20	3585.32	30.43	-1.43	1.00	-29.56	157632.42	1990381.41	
3648.00	1.20	7.30	3647.31	31.53	-1.17	0.63	-30.68	157633.52	1990381.67	
3711.00	1.40	351.10	3710.29	32.94	-1.21	0.66	-32.06	157634.93	1990381.64	
3774.00	1.50	328.10	3773.27	34.40	-1.76	0.93	-33.39	157636.39	1990381.08	
3836.00	1.50	313.80	3835.25	35.65	-2.78	0.60	-34.41	157637.65	1990380.07	
3899.00	1.20	285.90	3898.24	36.40	-4.01	1.13	-34.91	157638.40	1990378.84	
3962.00	1.80	261.20	3961.21	36.43	-5.62	1.38	-34.62	157638.43	1990377.22	
4025.00	2.10	244.90	4024.18	35.79	-7.64	1.00	-33.60	157637.79	1990375.20	
4082.00	2.10	223.30	4081.14	34.59	-9.30	1.38	-32.09	157636.58	1990373.54	
4117.00	2.50	213.80	4116.11	33.49	-10.17	1.58	-30.84	157635.48	1990372.67	
4148.00	3.50	204.10	4147.07	32.06	-10.93	3.61	-29.29	157634.06	1990371.91	
4179.00	4.60	200.50	4177.99	30.03	-11.75	3.64	-27.14	157632.03	1990371.09	
4211.00	6.90	200.50	4209.83	27.03	-12.87	7.19	-23.98	157629.02	1990369.97	
4242.00	10.20	199.60	4240.48	22.70	-14.45	10.65	-19.42	157624.69	1990368.39	
4274.00	14.10	195.70	4271.76	16.28	-16.45	12.45	-12.73	157618.27	1990366.39	
4305.00	18.00	192.60	4301.54	7.96	-18.52	12.88	-4.17	157609.96	1990364.32	
4337.00	22.10	191.40	4331.60	-2.77	-20.79	12.88	6.79	157599.23	1990362.05	
4368.00	26.00	191.30	4359.90	-15.15	-23.28	12.58	19.43	157586.84	1990359.57	
4399.00	30.00	192.80	4387.27	-29.38	-26.33	13.10	33.97	157572.61	1990356.52	
4430.00	33.50	194.30	4413.63	-45.23	-30.16	11.57	50.27	157556.76	1990352.69	
4461.00	37.60	194.90	4438.84	-62.67	-34.70	13.27	68.26	157539.33	1990348.14	
4493.00	42.10	196.10	4463.40	-82.42	-40.19	14.27	88.70	157519.58	1990342.65	
4525.00	46.60	196.40	4486.28	-103.89	-46.45	14.08	110.98	157498.11	1990336.39	
4556.00	51.00	194.90	4506.70	-126.34	-52.73	14.65	134.24	157475.65	1990330.11	

Pan American Drilling Services, LLC

Company: Woolsey Operating Company, LLC
Well: WOC Wiley Trust #3-H
Location: Barber County, Kansas

Date:26-Aug-2011
Surveys

Job #: 5358

NAD27 Ks South gr elev=1368 RKB=1383

MD (feet)	Inclination (degrees)	Azimuth (degrees)	TVD (feet)	N/-S (feet)	E/-W (feet)	DLS (deg/100')	VS @ 191.32° Az (feet)	Grid Y	Grid X	Comments
4587.00	54.90	193.00	4525.37	-150.35	-58.68	13.50	158.95	157451.64	1990324.16	
4618.00	58.80	191.80	4542.32	-175.70	-64.25	12.99	184.89	157426.30	1990318.59	
4649.00	63.10	190.80	4557.37	-202.27	-69.55	14.15	211.98	157399.73	1990313.29	
4681.00	67.20	191.10	4570.81	-230.77	-75.07	12.84	241.01	157371.23	1990307.77	
4713.00	71.80	191.40	4582.02	-260.16	-80.92	14.40	270.98	157341.84	1990301.92	
4781.00	76.50	192.00	4600.59	-324.19	-94.18	6.96	336.37	157277.80	1990288.66	
4812.00	77.60	194.00	4607.53	-353.63	-100.98	7.22	366.57	157248.37	1990281.86	
4844.00	81.30	192.80	4613.39	-384.22	-108.27	12.14	398.00	157217.77	1990274.58	
4876.00	85.40	191.60	4617.10	-415.28	-114.98	13.34	429.78	157186.71	1990267.86	
4908.00	89.30	189.70	4618.58	-446.69	-120.89	13.55	461.73	157155.30	1990261.96	
4939.00	90.30	187.90	4618.68	-477.33	-125.63	6.64	492.70	157124.67	1990257.21	
4971.00	91.50	188.00	4618.18	-509.01	-130.05	3.76	524.64	157092.98	1990252.79	
5002.00	93.00	189.00	4616.96	-539.65	-134.63	5.81	555.58	157062.34	1990248.21	
5034.00	93.40	188.60	4615.18	-571.22	-139.52	1.77	587.50	157030.77	1990243.32	
5066.00	92.50	188.50	4613.53	-602.82	-144.27	2.83	619.42	156999.17	1990238.57	
5097.00	92.30	188.50	4612.23	-633.46	-148.85	0.65	650.35	156968.54	1990233.99	
5125.00	92.80	188.70	4610.99	-661.11	-153.03	1.92	678.29	156940.88	1990229.81	
5157.00	92.90	189.40	4609.40	-692.68	-158.06	2.21	710.23	156909.32	1990224.78	
5189.00	92.30	190.20	4607.94	-724.18	-163.50	3.12	742.18	156877.82	1990219.34	
5220.00	91.20	190.80	4607.00	-754.64	-169.15	4.04	773.16	156847.35	1990213.70	
5251.00	91.00	191.20	4606.40	-785.07	-175.06	1.44	804.16	156816.92	1990207.78	
5283.00	90.20	191.10	4606.07	-816.46	-181.25	2.52	836.16	156785.53	1990201.59	
5314.00	89.90	191.30	4606.04	-846.87	-187.27	1.16	867.16	156755.12	1990195.57	
5346.00	90.40	191.40	4605.96	-878.25	-193.57	1.59	899.16	156723.75	1990189.27	
5377.00	91.60	191.80	4605.42	-908.61	-199.80	4.08	930.15	156693.39	1990183.04	
5409.00	91.40	191.70	4604.58	-939.93	-206.31	0.70	962.14	156662.07	1990176.53	
5440.00	90.00	192.40	4604.20	-970.24	-212.79	5.05	993.13	156631.75	1990170.06	
5472.00	89.10	192.10	4604.45	-1001.51	-219.57	2.96	1025.13	156600.48	1990163.27	
5504.00	88.80	192.00	4605.04	-1032.80	-226.25	0.99	1057.12	156569.19	1990156.59	
5535.00	88.60	192.50	4605.74	-1063.09	-232.83	1.74	1088.11	156538.91	1990150.01	

Pan American Drilling Services, LLC

Company: Woolsey Operating Company, LLC
Well: WOC Wiley Trust #3-H
Location: Barber County, Kansas

Date:26-Aug-2011
Surveys

Job #: 5358
NAD27 Ks South gr elev=1368 RKB=1383

MD (feet)	Inclination (degrees)	Azimuth (degrees)	TVD (feet)	N/-S (feet)	E/-W (feet)	DLS (deg/100')	VS @ 191.32° Az (feet)	Grid Y	Grid X	Comments
5567.00	89.30	192.20	4606.33	-1094.34	-239.67	2.38	1120.10	156507.65	1990143.17	
5598.00	89.70	191.70	4606.60	-1124.67	-246.09	2.07	1151.09	156477.33	1990136.75	
5630.00	89.60	191.20	4606.79	-1156.03	-252.44	1.59	1183.09	156445.96	1990130.40	
5662.00	89.60	191.50	4607.02	-1187.40	-258.74	0.94	1215.09	156414.59	1990124.10	
5693.00	89.60	191.60	4607.23	-1217.77	-264.95	0.32	1246.09	156384.22	1990117.89	
5725.00	89.90	192.10	4607.37	-1249.09	-271.52	1.82	1278.09	156352.90	1990111.32	
5757.00	90.00	191.90	4607.40	-1280.39	-278.17	0.70	1310.09	156321.60	1990104.67	
5788.00	89.70	192.70	4607.48	-1310.68	-284.78	2.76	1341.08	156291.31	1990098.07	
5819.00	89.70	192.90	4607.64	-1340.91	-291.64	0.65	1372.07	156261.08	1990091.20	
5851.00	90.30	193.20	4607.64	-1372.08	-298.87	2.10	1404.06	156229.91	1990083.97	
5882.00	90.70	192.30	4607.37	-1402.32	-305.71	3.18	1435.04	156199.68	1990077.13	
5914.00	90.60	192.50	4607.01	-1433.57	-312.58	0.70	1467.04	156168.43	1990070.26	
5945.00	91.10	192.00	4606.55	-1463.86	-319.16	2.28	1498.03	156138.13	1990063.68	
5977.00	91.20	192.00	4605.91	-1495.15	-325.81	0.31	1530.02	156106.84	1990057.03	
6009.00	90.60	192.00	4605.41	-1526.45	-332.46	1.88	1562.01	156075.54	1990050.38	
6040.00	90.70	191.90	4605.05	-1556.78	-338.88	0.46	1593.01	156045.22	1990043.96	
6072.00	90.60	191.00	4604.69	-1588.14	-345.23	2.83	1625.01	156013.86	1990037.61	
6103.00	91.20	190.50	4604.20	-1618.59	-351.01	2.52	1656.00	155983.40	1990031.83	
6135.00	91.10	190.90	4603.56	-1650.03	-356.95	1.29	1687.99	155951.97	1990025.89	
6166.00	90.10	190.90	4603.24	-1680.47	-362.82	3.23	1718.99	155921.53	1990020.03	
6192.00	89.80	190.70	4603.26	-1706.00	-367.69	1.39	1744.99	155895.99	1990015.15	
6223.00	89.90	189.80	4603.34	-1736.51	-373.20	2.92	1775.98	155865.48	1990009.64	
6255.00	90.00	190.30	4603.37	-1768.02	-378.79	1.59	1807.98	155833.98	1990004.05	
6287.00	89.50	190.20	4603.51	-1799.51	-384.48	1.59	1839.97	155802.49	1989998.36	
6318.00	89.50	190.30	4603.78	-1830.01	-390.00	0.32	1870.96	155771.98	1989992.84	
6350.00	89.60	190.50	4604.03	-1861.48	-395.78	0.70	1902.96	155740.51	1989987.07	
6381.00	89.50	190.40	4604.27	-1891.97	-401.40	0.46	1933.95	155710.02	1989981.44	
6413.00	89.50	191.10	4604.55	-1923.41	-407.37	2.19	1965.95	155678.59	1989975.48	
6444.00	89.60	190.80	4604.80	-1953.84	-413.25	1.02	1996.95	155648.15	1989969.59	
6476.00	89.50	190.20	4605.05	-1985.30	-419.09	1.90	2028.94	155616.69	1989963.76	

Pan American Drilling Services, LLC

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Well: WOC Wiley Trust #3-H
Location: Barber County, Kansas

Date:26-Aug-2011
Surveys

Job #: 5358

NAD27 Ks South gr elev=1368 RKB=1383

MD (feet)	Inclination (degrees)	Azimuth (degrees)	TVD (feet)	N/-S (feet)	E/-W (feet)	DLS (deg/100')	VS @ 191.32° Az (feet)	Grid Y	Grid X	Comments
6508.00	89.50	190.30	4605.33	-2016.79	-424.78	0.31	2060.94	155585.20	1989958.06	
6540.00	89.30	190.10	4605.66	-2048.28	-430.45	0.88	2092.93	155553.71	1989952.40	
6572.00	89.50	190.60	4606.00	-2079.76	-436.20	1.68	2124.92	155522.23	1989946.65	
6603.00	89.50	190.30	4606.27	-2110.25	-441.82	0.97	2155.92	155491.75	1989941.02	
6635.00	90.10	190.80	4606.38	-2141.71	-447.68	2.44	2187.92	155460.29	1989935.17	
6666.00	90.00	190.60	4606.35	-2172.17	-453.43	0.72	2218.91	155429.83	1989929.41	
6697.00	89.90	190.50	4606.38	-2202.64	-459.11	0.46	2249.91	155399.35	1989923.73	
6729.00	90.10	190.10	4606.38	-2234.13	-464.83	1.40	2281.91	155367.87	1989918.01	
6761.00	90.40	190.80	4606.24	-2265.60	-470.63	2.38	2313.90	155336.40	1989912.21	
6792.00	89.40	190.90	4606.29	-2296.04	-476.47	3.24	2344.90	155305.95	1989906.37	
6824.00	90.50	191.70	4606.32	-2327.42	-482.74	4.25	2376.90	155274.57	1989900.10	
6856.00	90.90	192.00	4605.93	-2358.74	-489.31	1.56	2408.90	155243.26	1989893.53	
6887.00	91.60	192.10	4605.25	-2389.04	-495.78	2.28	2439.88	155212.95	1989887.06	
6919.00	92.30	192.50	4604.17	-2420.29	-502.59	2.52	2471.86	155181.70	1989880.25	
6950.00	92.80	192.30	4602.79	-2450.54	-509.24	1.74	2502.82	155151.46	1989873.60	
6982.00	92.70	192.00	4601.25	-2481.79	-515.97	0.99	2534.78	155120.21	1989866.87	
7013.00	92.20	191.20	4599.93	-2512.12	-522.20	3.04	2565.76	155089.87	1989860.64	
7045.00	92.50	191.10	4598.61	-2543.49	-528.38	0.99	2597.73	155058.50	1989854.46	
7077.00	92.10	191.20	4597.33	-2574.86	-534.56	1.29	2629.70	155027.13	1989848.28	
7109.00	91.40	190.70	4596.35	-2606.27	-540.64	2.69	2661.69	154995.73	1989842.20	
7140.00	91.60	190.20	4595.54	-2636.74	-546.26	1.74	2692.67	154965.25	1989836.58	
7172.00	90.90	189.60	4594.84	-2668.26	-551.76	2.88	2724.65	154933.74	1989831.08	
7204.00	89.60	188.90	4594.70	-2699.84	-556.90	4.61	2756.63	154902.15	1989825.94	
7235.00	88.60	188.10	4595.19	-2730.50	-561.49	4.13	2787.59	154871.50	1989821.36	
7267.00	88.80	188.60	4595.92	-2762.15	-566.13	1.68	2819.54	154839.85	1989816.71	
7299.00	89.30	189.50	4596.45	-2793.75	-571.16	3.22	2851.51	154808.25	1989811.68	
7330.00	88.20	189.30	4597.12	-2824.32	-576.23	3.61	2882.48	154777.67	1989806.62	
7361.00	87.80	189.30	4598.20	-2854.90	-581.23	1.29	2913.45	154747.10	1989801.61	
7393.00	87.30	189.30	4599.57	-2886.45	-586.40	1.56	2945.40	154715.55	1989796.44	
7424.00	87.50	189.40	4600.98	-2917.00	-591.43	0.72	2976.35	154684.99	1989791.41	

Pan American Drilling Services, LLC

Company: Woolsey Operating Company, LLC
Well: WOC Wiley Trust #3-H
Location: Barber County, Kansas

Date:26-Aug-2011
Surveys

Job #: 5358

VS @ 191.32° Az
NAD27 Ks South gr elev=1368 RKB=1383

MD (feet)	Inclination (degrees)	Azimuth (degrees)	TVD (feet)	N/-S (feet)	E/-W (feet)	DLS (deg/100')	VS (feet)	Grid Y	Grid X	Comments
7456.00	87.10	189.20	4602.49	-2948.55	-596.60	1.40	3008.29	154653.45	1989786.25	
7487.00	87.00	188.80	4604.08	-2979.12	-601.44	1.33	3039.22	154622.87	1989781.40	
7519.00	88.60	189.00	4605.31	-3010.71	-606.39	5.04	3071.17	154591.28	1989776.46	
7550.00	90.00	189.00	4605.69	-3041.33	-611.24	4.52	3102.14	154560.66	1989771.61	
7582.00	90.00	189.20	4605.69	-3072.93	-616.30	0.63	3134.12	154529.07	1989766.55	
7614.00	89.10	188.70	4605.94	-3104.54	-621.27	3.22	3166.09	154497.46	1989761.57	
7645.00	89.40	188.50	4606.35	-3135.18	-625.91	1.16	3197.05	154466.81	1989756.93	
7677.00	90.30	189.20	4606.43	-3166.80	-630.83	3.56	3229.02	154435.19	1989752.01	
7708.00	90.10	188.40	4606.32	-3197.44	-635.57	2.66	3259.99	154404.56	1989747.27	
7740.00	89.00	188.90	4606.57	-3229.07	-640.39	3.78	3291.96	154372.92	1989742.45	
7771.00	89.10	189.10	4607.09	-3259.69	-645.24	0.72	3322.93	154342.31	1989737.61	
7803.00	86.40	187.90	4608.34	-3291.31	-649.96	9.23	3354.86	154310.69	1989732.88	
7834.00	86.20	188.30	4610.34	-3321.93	-654.32	1.44	3385.75	154280.06	1989728.52	
7866.00	86.30	188.30	4612.44	-3353.53	-658.93	0.31	3417.63	154248.46	1989723.91	
7898.00	86.90	189.00	4614.33	-3385.11	-663.73	2.88	3449.54	154216.88	1989719.11	
7929.00	87.30	189.90	4615.90	-3415.65	-668.82	3.17	3480.48	154186.34	1989714.02	
7961.00	87.70	190.10	4617.30	-3447.13	-674.37	1.40	3512.45	154154.86	1989708.47	
7992.00	87.80	190.30	4618.52	-3477.62	-679.85	0.72	3543.42	154124.37	1989702.99	
8024.00	89.30	190.90	4619.33	-3509.06	-685.74	5.05	3575.40	154092.93	1989697.10	
8055.00	90.30	191.20	4619.43	-3539.49	-691.68	3.37	3606.40	154062.51	1989691.16	
8087.00	91.60	191.50	4618.90	-3570.86	-697.98	4.17	3638.40	154031.14	1989684.86	
8119.00	90.30	191.30	4618.37	-3602.22	-704.30	4.11	3670.39	153999.77	1989678.54	
8150.00	90.50	191.40	4618.16	-3632.61	-710.40	0.72	3701.39	153969.38	1989672.44	
8181.00	90.70	191.30	4617.83	-3663.01	-716.50	0.72	3732.39	153938.99	1989666.34	
8213.00	88.70	191.10	4618.00	-3694.39	-722.72	6.28	3764.39	153907.60	1989660.12	
8245.00	88.60	191.70	4618.75	-3725.75	-729.04	1.90	3796.38	153876.24	1989653.80	
8276.00	87.80	191.70	4619.73	-3756.10	-735.32	2.58	3827.36	153845.90	1989647.52	
8308.00	87.30	191.60	4621.09	-3787.41	-741.78	1.59	3859.33	153814.59	1989641.06	
8340.00	86.50	191.50	4622.82	-3818.71	-748.18	2.52	3891.28	153783.28	1989634.66	
8371.00	86.40	191.60	4624.74	-3849.03	-754.37	0.46	3922.22	153752.97	1989628.47	

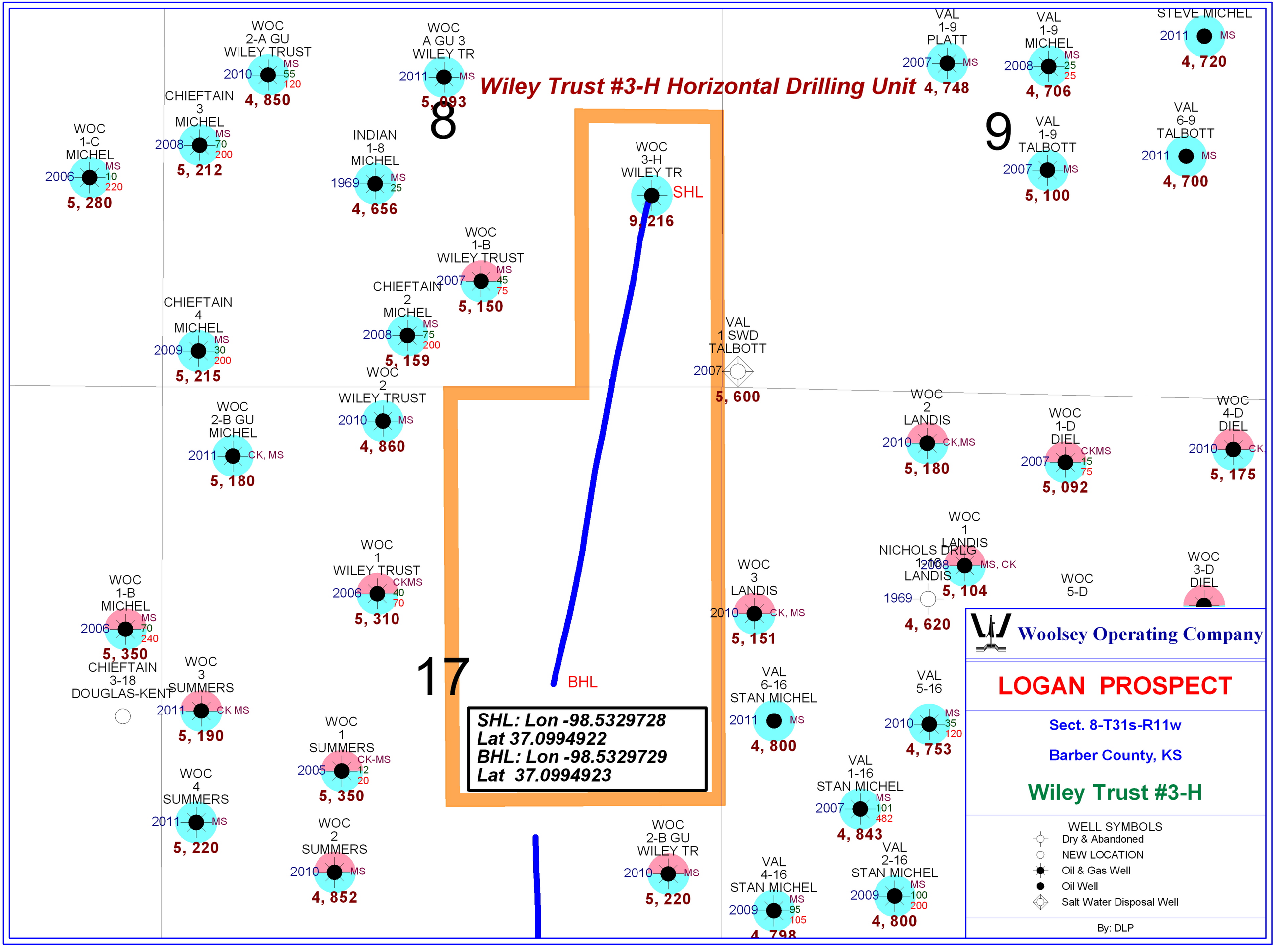
Pan American Drilling Services, LLC

Company: Woolsey Operating Company, LLC
Well: WOC Wiley Trust #3-H
Location: Barber County, Kansas

Date:26-Aug-2011
Surveys

Job #: 5358
NAD27 Ks South gr elev=1368 RKB=1383

MD (feet)	Inclination (degrees)	Azimuth (degrees)	TVD (feet)	N/-S (feet)	E/-W (feet)	DLS (deg/100')	VS @ 191.32° Az (feet)	Grid Y	Grid X	Comments
8404.00	86.80	192.30	4626.70	-3881.25	-761.19	2.44	3955.16	153720.74	1989621.65	
8436.00	87.30	192.20	4628.35	-3912.48	-767.97	1.59	3987.12	153689.51	1989614.87	
8468.00	87.50	192.60	4629.80	-3943.71	-774.84	1.40	4019.08	153658.29	1989608.00	
8499.00	87.60	192.30	4631.13	-3973.95	-781.52	1.02	4050.04	153628.04	1989601.33	
8531.00	87.90	192.90	4632.38	-4005.15	-788.49	2.10	4082.01	153596.84	1989594.35	
8562.00	89.00	193.30	4633.22	-4035.34	-795.51	3.78	4112.98	153566.66	1989587.33	
8594.00	89.60	193.50	4633.61	-4066.46	-802.93	1.98	4144.96	153535.53	1989579.91	
8626.00	89.30	193.20	4633.92	-4097.60	-810.32	1.33	4176.94	153504.40	1989572.52	
8657.00	88.50	191.90	4634.51	-4127.85	-817.05	4.92	4207.92	153474.15	1989565.79	
8689.00	89.00	192.60	4635.21	-4159.11	-823.84	2.69	4239.91	153442.88	1989559.00	
8721.00	90.70	193.30	4635.29	-4190.30	-831.01	5.75	4271.90	153411.70	1989551.83	
8752.00	91.60	194.20	4634.67	-4220.40	-838.38	4.11	4302.86	153381.59	1989544.46	
8784.00	91.40	194.30	4633.84	-4251.41	-846.25	0.70	4334.81	153350.59	1989536.59	
8816.00	91.70	193.70	4632.97	-4282.44	-853.99	2.10	4366.76	153319.55	1989528.85	
8847.00	92.40	193.50	4631.86	-4312.56	-861.28	2.35	4397.72	153289.44	1989521.57	
8879.00	91.60	193.10	4630.74	-4343.68	-868.63	2.79	4429.68	153258.32	1989514.21	
8911.00	91.30	193.00	4629.93	-4374.84	-875.86	0.99	4461.66	153227.15	1989506.99	
8942.00	91.30	193.30	4629.23	-4405.02	-882.91	0.97	4492.63	153196.97	1989499.93	
8974.00	89.90	193.10	4628.90	-4436.17	-890.21	4.42	4524.61	153165.82	1989492.63	
9005.00	90.80	193.30	4628.71	-4466.35	-897.29	2.97	4555.59	153135.64	1989485.55	
9037.00	92.20	193.40	4627.87	-4497.48	-904.68	4.39	4587.56	153104.52	1989478.16	
9069.00	93.20	193.40	4626.36	-4528.57	-912.09	3.13	4619.51	153073.42	1989470.76	
9100.00	92.30	193.50	4624.87	-4558.69	-919.29	2.92	4650.45	153043.31	1989463.55	
9132.00	91.40	192.70	4623.84	-4589.84	-926.54	3.76	4682.42	153012.16	1989456.30	
9164.00	90.10	192.30	4623.42	-4621.07	-933.46	4.25	4714.40	152980.92	1989449.38	
9216.00	90.10	192.30	4623.33	-4671.88	-944.54	0.00	4766.40	152930.11	1989438.30	Survey Proj


Wiley Trust #3-H Horizontal Drilling Unit
8
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WOC 2-A GU WILEY TRUST 2010 MS 55 120 4, 850
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VAL 1-9 PLATT 2007 MS 4, 748
VAL 1-9 MICHEL 2008 MS 25 25 4, 706
STEVE MICHEL 2011 MS 4, 720
CHIEFTAIN 3 MICHEL 2008 MS 70 200 5, 212
WOC 1-C MICHEL 2006 MS 10 220 5, 280
INDIAN 1-8 MICHEL 1969 MS 25 4, 656
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VAL 6-9 TALBOTT 2011 MS 4, 700
WOC 1-B WILEY TRUST 2007 MS 45 75 5, 150
CHIEFTAIN 2 MICHEL 2008 MS 75 200 5, 159
CHIEFTAIN 4 MICHEL 2009 MS 30 200 5, 215
VAL 1 SWD TALBOTT 2007 5, 600
WOC 2 WILEY TRUST 2010 MS 4, 860
WOC 2-B GU MICHEL 2011 CK, MS 5, 180
WOC 2 LANDIS 2010 CK,MS 5, 180
WOC 1-D DIEL 2007 CKMS 15 75 5, 092
WOC 4-D DIEL 2010 CK 5, 175
WOC 1 WILEY TRUST 2006 CKMS 40 70 5, 310
WOC 1 LANDIS NICHOLS DRLG 1946 2008 MS, CK 5, 104
WOC 3 LANDIS 2010 CK, MS 5, 151
WOC 5-D
WOC 3-D DIEL
1969 4, 620
WOC 1-B MICHEL 2006 MS 70 240 5, 350
CHIEFTAIN 3-18 DOUGLAS-KENT
WOC 3 SUMMERS 2011 CK MS 5, 190
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Lat 37.0994922
BHL: Lon -98.5329729
Lat 37.0994923
VAL 6-16 STAN MICHEL 2011 MS 4, 800
VAL 5-16 2010 MS 35 120 4, 753
WOC 1 SUMMERS 2005 CK-MS 12 20 5, 350
VAL 1-16 STAN MICHEL 2007 MS 101 482 4, 843
WOC 4 SUMMERS 2011 MS 5, 220
WOC 2 SUMMERS 2010 MS 4, 852
WOC 2-B GU WILEY TR 2010 MS 5, 220
VAL 4-16 STAN MICHEL 2009 MS 95 105 4, 798
VAL 2-16 STAN MICHEL 2009 MS 100 200 4, 800
Woolsey Operating Company
LOGAN PROSPECT
Sect. 8-T31s-R11w
Barber County, KS
Wiley Trust #3-H
WELL SYMBOLS
Dry & Abandoned
NEW LOCATION
Oil & Gas Well
Oil Well
Salt Water Disposal Well
By: DLP