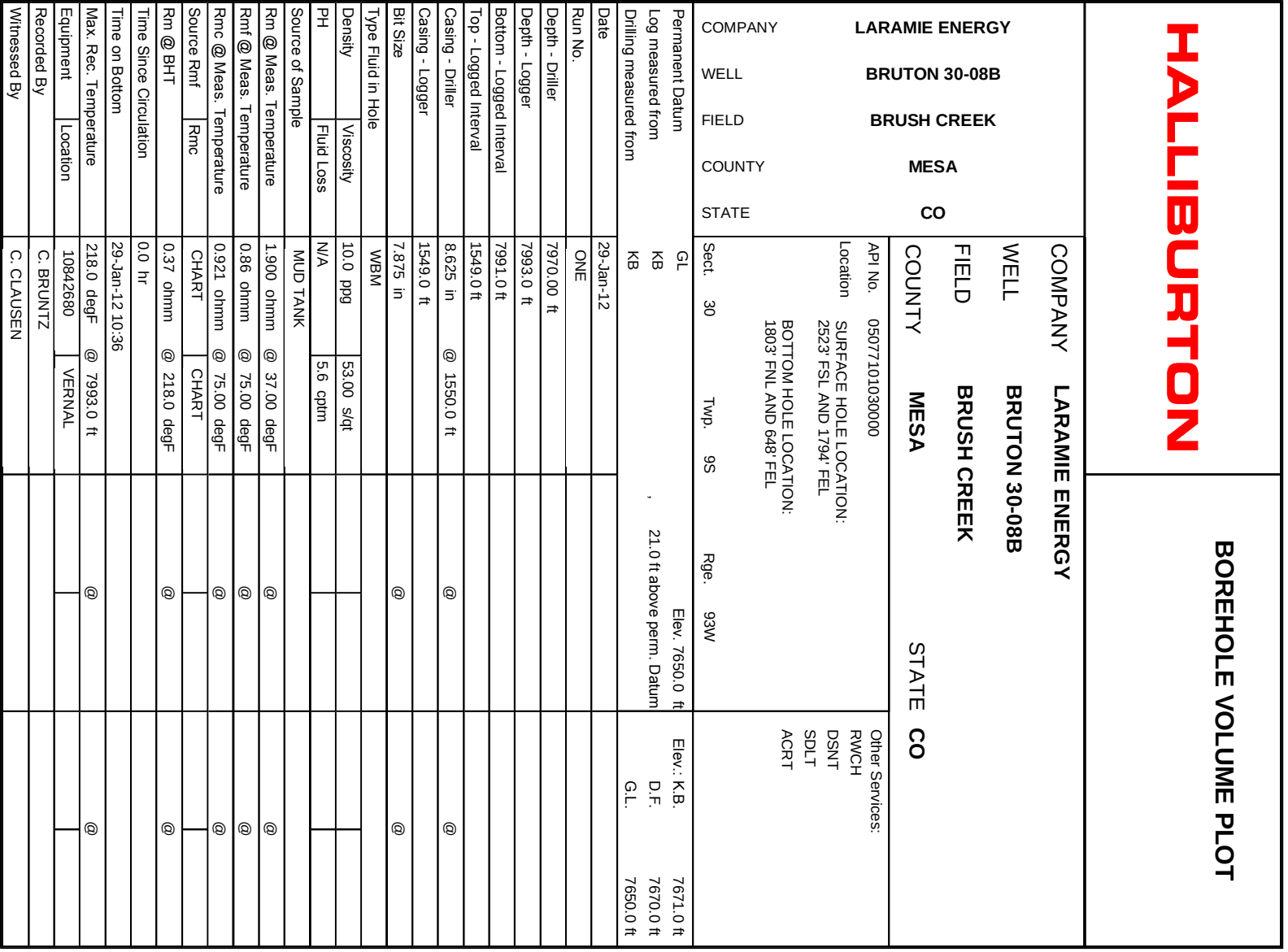

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Service Ticket No.: 9237668		API Serial No.: 05077101030000				PGM Version: WL INSITE R3.4.4 (Build 2)			
CHANGE IN MUD TYPE OR ADDITIONAL SAMPLE						RESISTIVITY SCALE CHANGES			
Date	Sample No.					Type Log	Depth	Scale Up Hole	Scale Down Hole
Depth-Driller									
Type Fluid in Hole									
Density	Viscosity								
Ph	Fluid Loss								
Source of Sample						RESISTIVITY EQUIPMENT DATA			
Rm @ Meas. Temp		@		@		Run No.	Tool Type & No.	Pad Type	Tool Pos.	Other
Rmf @ Meas. Temp.		@		@		ONE	ACRT	N/A	1.5" S.O.	N/A
Rmc @ Meas. Temp.		@		@			I777S021			
Source Rmf	Rmc									
Rm @ BHT		@		@						
Rmf @ BHT		@		@						
Rmc @ BHT		@		@						

EQUIPMENT DATA

GAMMA		ACOUSTIC		DENSITY		NEUTRON	
Run No.	ONE	Run No.		Run No.	ONE	Run No.	ONE
Serial No.	11602915	Serial No.		Serial No.	11577181	Serial No.	11603541
Model No.	GTET	Model No.		Model No.	SDLT	Model No.	DSNT
Diameter	3.625"	No. of Cent.		Diameter	4.5"	Diameter	3.625"
Detector Model No.	GTET	Spacing		Log Type	GAM-GAM	Log Type	NEU-NEU
Type	SCINT			Source Type	CS137	Source Type	AM241BE
Length	8"	LSA [Y/N]		Serial No.	18265B	Serial No.	DSN-362
Distance to Source	10'	FWDA [Y/N]		Strength	1.5Ci	Strength	15Ci

LOGGING DATA

GENERAL		GAMMA		ACOUSTIC		DENSITY		NEUTRON	
Logging Unit No.	10842680	Logging Unit No.	10842680	Logging Unit No.		Logging Unit No.	10842680	Logging Unit No.	10842680
Logging Unit Location	VERNAL	Logging Unit Location	VERNAL	Logging Unit Location		Logging Unit Location	VERNAL	Logging Unit Location	VERNAL
Recorded By	C. BRUNTZ	Recorded By	C. BRUNTZ	Recorded By		Recorded By	C. BRUNTZ	Recorded By	C. BRUNTZ
Witnessed By	C. CLAUSEN	Witnessed By	C. CLAUSEN	Witnessed By		Witnessed By	C. CLAUSEN	Witnessed By	C. CLAUSEN
Time Logger on Bottom	29-Jan-12 10:36	Time Logger on Bottom	29-Jan-12 10:36	Time Logger on Bottom		Time Logger on Bottom	29-Jan-12 10:36	Time Logger on Bottom	29-Jan-12 10:36
Unit Number	3	Unit Number	3	Unit Number		Unit Number	3	Unit Number	3
Location	VERNAL	Location	VERNAL	Location		Location	VERNAL	Location	VERNAL
Recorded By	C. BRUNTZ	Recorded By	C. BRUNTZ	Recorded By		Recorded By	C. BRUNTZ	Recorded By	C. BRUNTZ
Witnessed By	C. CLAUSEN	Witnessed By	C. CLAUSEN	Witnessed By		Witnessed By	C. CLAUSEN	Witnessed By	C. CLAUSEN
Run No.	ONE	Run No.	ONE	Run No.		Run No.	ONE	Run No.	ONE
Depth-Driller	7970.00 ft	Depth-Driller	7970.00 ft	Depth-Driller		Depth-Driller	7970.00 ft	Depth-Driller	7970.00 ft
Depth-Logger	7993.0 ft	Depth-Logger	7993.0 ft	Depth-Logger		Depth-Logger	7993.0 ft	Depth-Logger	7993.0 ft
Bottom Logged Interval	7991.0 ft	Bottom Logged Interval	7991.0 ft	Bottom Logged Interval		Bottom Logged Interval	7991.0 ft	Bottom Logged Interval	7991.0 ft
Top Logged Interval	1549.0 ft	Top Logged Interval	1549.0 ft	Top Logged Interval		Top Logged Interval	1549.0 ft	Top Logged Interval	1549.0 ft
Casing - Logger	1549.0 ft	Casing - Logger	1549.0 ft	Casing - Logger		Casing - Logger	1549.0 ft	Casing - Logger	1549.0 ft
Bit Size	7.875 in	Bit Size	7.875 in	Bit Size		Bit Size	7.875 in	Bit Size	7.875 in
Type Fluid in Hole	WBM	Type Fluid in Hole	WBM	Type Fluid in Hole		Type Fluid in Hole	WBM	Type Fluid in Hole	WBM
Density	10.0 ppg	Density	10.0 ppg	Density		Density	10.0 ppg	Density	10.0 ppg
Viscosity	53.00 s/qt	Viscosity	53.00 s/qt	Viscosity		Viscosity	53.00 s/qt	Viscosity	53.00 s/qt
PH	N/A	PH	N/A	PH		PH	N/A	PH	N/A
Fluid Loss	5.6 cptm	Fluid Loss	5.6 cptm	Fluid Loss		Fluid Loss	5.6 cptm	Fluid Loss	5.6 cptm
Source of Sample	MUD TANK	Source of Sample	MUD TANK	Source of Sample		Source of Sample	MUD TANK	Source of Sample	MUD TANK
Rm @ Meas. Temp	1.900 ohmm @ 37.00 degF	Rm @ Meas. Temp	1.900 ohmm @ 37.00 degF	Rm @ Meas. Temp		Rm @ Meas. Temp	1.900 ohmm @ 37.00 degF	Rm @ Meas. Temp	1.900 ohmm @ 37.00 degF
Rmf @ Meas. Temp	0.86 ohmm @ 75.00 degF	Rmf @ Meas. Temp	0.86 ohmm @ 75.00 degF	Rmf @ Meas. Temp		Rmf @ Meas. Temp	0.86 ohmm @ 75.00 degF	Rmf @ Meas. Temp	0.86 ohmm @ 75.00 degF
Rmc @ Meas. Temp	0.921 ohmm @ 75.00 degF	Rmc @ Meas. Temp	0.921 ohmm @ 75.00 degF	Rmc @ Meas. Temp		Rmc @ Meas. Temp	0.921 ohmm @ 75.00 degF	Rmc @ Meas. Temp	0.921 ohmm @ 75.00 degF
Source Rmf	CHART	Source Rmf	CHART	Source Rmf		Source Rmf	CHART	Source Rmf	CHART
Source Rmc	CHART	Source Rmc	CHART	Source Rmc		Source Rmc	CHART	Source Rmc	CHART
Rm @ BHT	0.37 ohmm @ 218.0 degF	Rm @ BHT	0.37 ohmm @ 218.0 degF	Rm @ BHT		Rm @ BHT	0.37 ohmm @ 218.0 degF	Rm @ BHT	0.37 ohmm @ 218.0 degF
Max Rec Temp	218.0 degF	Max Rec Temp	218.0 degF	Max Rec Temp		Max Rec Temp	218.0 degF	Max Rec Temp	218.0 degF
Equipment No.	10842680	Equipment No.	10842680	Equipment No.		Equipment No.	10842680	Equipment No.	10842680
Location	VERNAL	Location	VERNAL	Location		Location	VERNAL	Location	VERNAL
Time Circulation Stopped	0.0 hr	Time Circulation Stopped	0.0 hr	Time Circulation Stopped		Time Circulation Stopped	0.0 hr	Time Circulation Stopped	0.0 hr
Logger on Bottom	29-Jan-12 10:36	Logger on Bottom	29-Jan-12 10:36	Logger on Bottom		Logger on Bottom	29-Jan-12 10:36	Logger on Bottom	29-Jan-12 10:36
Max Rec Temp	218.0 degF	Max Rec Temp	218.0 degF	Max Rec Temp		Max Rec Temp	218.0 degF	Max Rec Temp	218.0 degF
Equipment No.	10842680	Equipment No.	10842680	Equipment No.		Equipment No.	10842680	Equipment No.	10842680
Location	VERNAL	Location	VERNAL	Location		Location	VERNAL	Location	VERNAL
Recorded By	C. BRUNTZ	Recorded By	C. BRUNTZ	Recorded By		Recorded By	C. BRUNTZ	Recorded By	C. BRUNTZ
Witnessed By	C. CLAUSEN	Witnessed By	C. CLAUSEN	Witnessed By		Witnessed By	C. CLAUSEN	Witnessed By	C. CLAUSEN

GENERAL				GAMMA		ACOUSTIC			DENSITY			NEUTRON		
Run	Depth		Speed	Scale		Scale		Matrix	Scale		Matrix	Scale		Matrix
No.	From	To	ft/min	L	R	L	R		L	R		L	R	
ONE	7993	1549	REC	0	150				30	-10	2.68 g/cc	30	-10	SAND

DIRECTIONAL INFORMATION

Maximum Deviation	@	KOP	@

Remarks: RWCH-GTET-DSNT-SDLT-ACRT RAN IN COMBINATION

ANNULAR HOLE VOLUME CALCULATED FOR 4.5 INCH CASING

BOREHOLE RUGOSITY, TENSION PULLS AND WASHOUTS MAY AFFECT TOOL RESPONSE AND REPEATABILITY

TODAY'S CREW: J.FREW, T. BISHOP

THANK YOU FOR CHOOSING HALLIBURTON ENERGY SERVICES, VERNAL, UT (435)789-2550

HALLIBURTON

PARAMETERS REPORT

Depth ((ft))	Tool Name	Mnemonic	Description	Value	Units
TOP					
	SHARED	BS	Bit Size	7.875	in
	SHARED	UBS	Use Bit Size instead of Caliper for all applications.	No	
	SHARED	MDBS	Mud Base	Water	
	SHARED	MDWT	Borehole Fluid Weight	10.000	ppg
	SHARED	WAGT	Weighting Agent	Natural	
	SHARED	BSAL	Borehole salinity	1600.00	ppm
	SHARED	FSAL	Formation Salinity NaCl	0.00	ppm
	SHARED	KPCT	Percent K in Mud by Weight?	0.00	%
	SHARED	RMUD	Mud Resistivity	1.900	ohmm
	SHARED	TRM	Temperature of Mud	37.0	degF
	SHARED	CSD	Logging Interval is Cased?	No	
	SHARED	ICOD	AHV Casing OD	4.500	in
	SHARED	ST	Surface Temperature	30.0	degF
	SHARED	TD	Total Well Depth	7993.00	ft
	SHARED	BHT	Bottom Hole Temperature	218.0	degF
	SHARED	SVTM	Navigation and Survey Master Tool	NONE	
	SHARED	AZTM	High Res Z Accelerometer Master Tool	GTET	
	SHARED	TEMM	Temperature Master Tool	NONE	
	SHARED	BHSM	Borehole Size Master Tool	NONE	
	Rwa / CrossPlot	XPOK	Process Crossplot?	Yes	
	Rwa / CrossPlot	FCHO	Select Source of F	Automatic	
	Rwa / CrossPlot	AFAC	Archie A factor	0.6200	

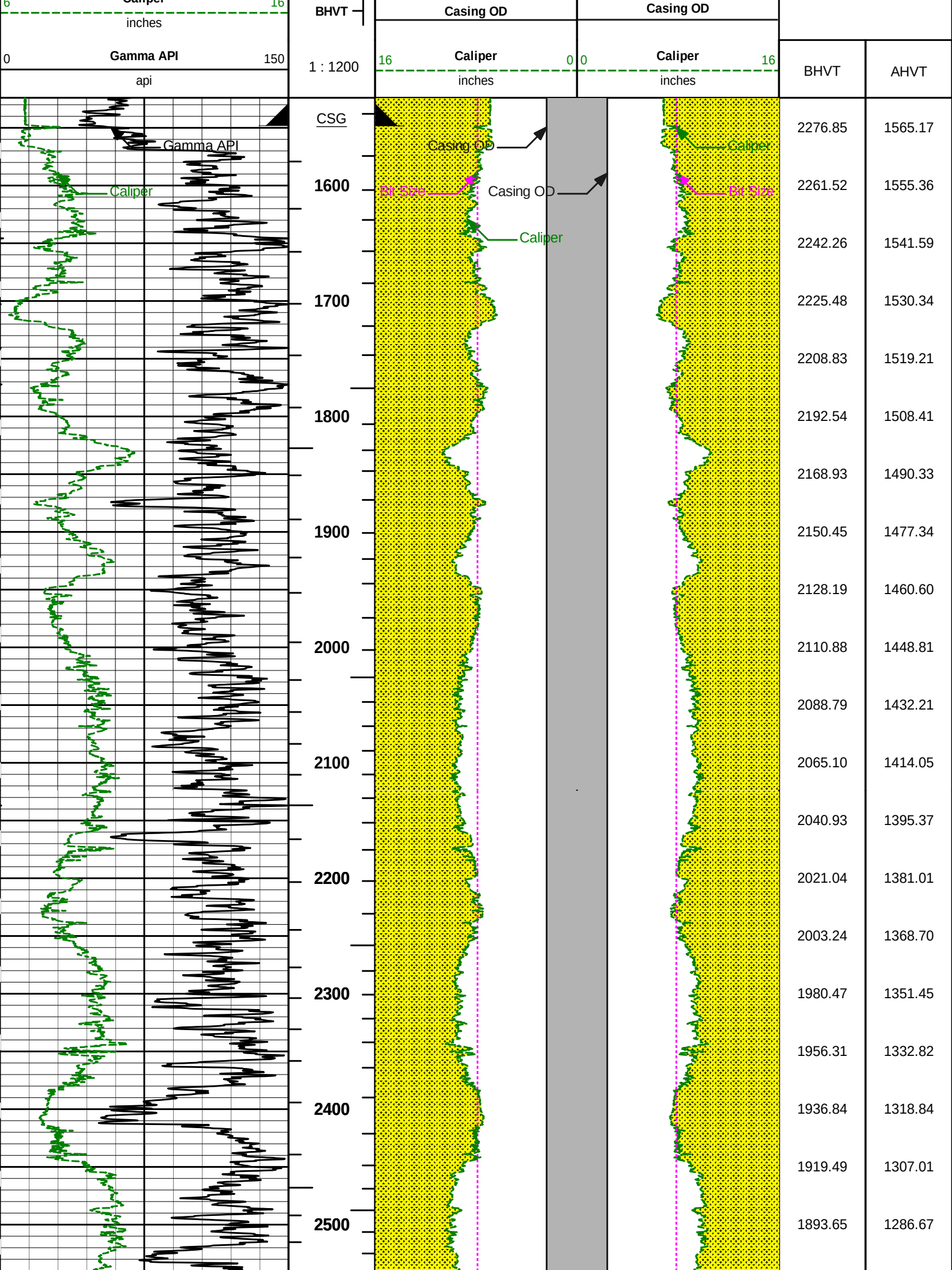
	Rwa / CrossPlot	MFAC	Archie M factor	2.1500	
	Rwa / CrossPlot	RMFR	Rmf Reference	0.10	ohmm
	Rwa / CrossPlot	TMFR	Rmf Ref Temp	75.00	degF
	Rwa / CrossPlot	RWA	Resistivity of Formation Water	0.05	ohmm
	Rwa / CrossPlot	ADP	Use Air Porosity to calculate CrossplotPhi	No	
	GTET	GROK	Process Gamma Ray?	Yes	
	GTET	GRSO	Gamma Tool Standoff	0.000	in
	GTET	GEOK	Process Gamma Ray EVR?	No	
	GTET	TPOS	Tool Position for Gamma Ray Tools.	Eccentered	
	DSNT	DNOK	Process DSN?	Yes	
	DSNT	DEOK	Process DSN EVR?	No	
	DSNT	NLIT	Neutron Lithology	Sandstone	
	DSNT	DNSO	DSN Standoff - 0.25 in (6.35 mm) Recommended	0.000	in
	DSNT	DNTP	Temperature Correction Type	None	
	DSNT	DPRS	DSN Pressure Correction Type	None	
	DSNT	SHCO	View More Correction Options	No	
	DSNT	UTVD	Use TVD for Gradient Corrections?	No	
	DSNT	LHWT	Logging Horizontal Water Tank?	No	
	SDLT	CLOK	Process Caliper Outputs?	Yes	
	SDLT Pad	DNOK	Process Density?	Yes	
	SDLT Pad	DNOK	Process Density EVR?	No	
	SDLT Pad	CB	Logging Calibration Blocks?	No	
	SDLT Pad	SPVT	SDLT Pad Temperature Valid?	Yes	
	SDLT Pad	DTWN	Disable temperature warning	No	
	SDLT Pad	DMA	Formation Density Matrix	2.680	g/cc
	SDLT Pad	DFL	Formation Density Fluid	1.000	g/cc
	ACRt Sonde	RTOK	Process ACRt?	Yes	
	ACRt Sonde	MNSO	Minimum Tool Standoff	1.50	in
	ACRt Sonde	TCS1	Temperature Correction Source	FP Lwr & FP Upr	
	ACRt Sonde	TPOS	Tool Position	Eccentered	
	ACRt Sonde	RMOP	Rmud Source	Mud Cell	
	ACRt Sonde	RMIN	Minimum Resistivity for MAP	0.20	ohmm
	ACRt Sonde	RMIN	Maximum Resistivity for MAP	200.00	ohmm
	ACRt Sonde	THQY	Threshold Quality	0.50	
BOTTOM					

Data: BRUTON_30_08B\0001 TRIPLE_ACRT\004.01 29-Jan-12 12:31 Up **Date: 29-Jan-12 12:51:54**

HALLIBURTON

Plot Time: 29-Jan-12 12:57:08
Plot Range: 1524 ft to 8006.67 ft
Data: BRUTON_30_08B\Well Based\MAIN*
Plot File: \\BHV\IQ_BHV_SDL_RM

AHV USES 4.5" CASING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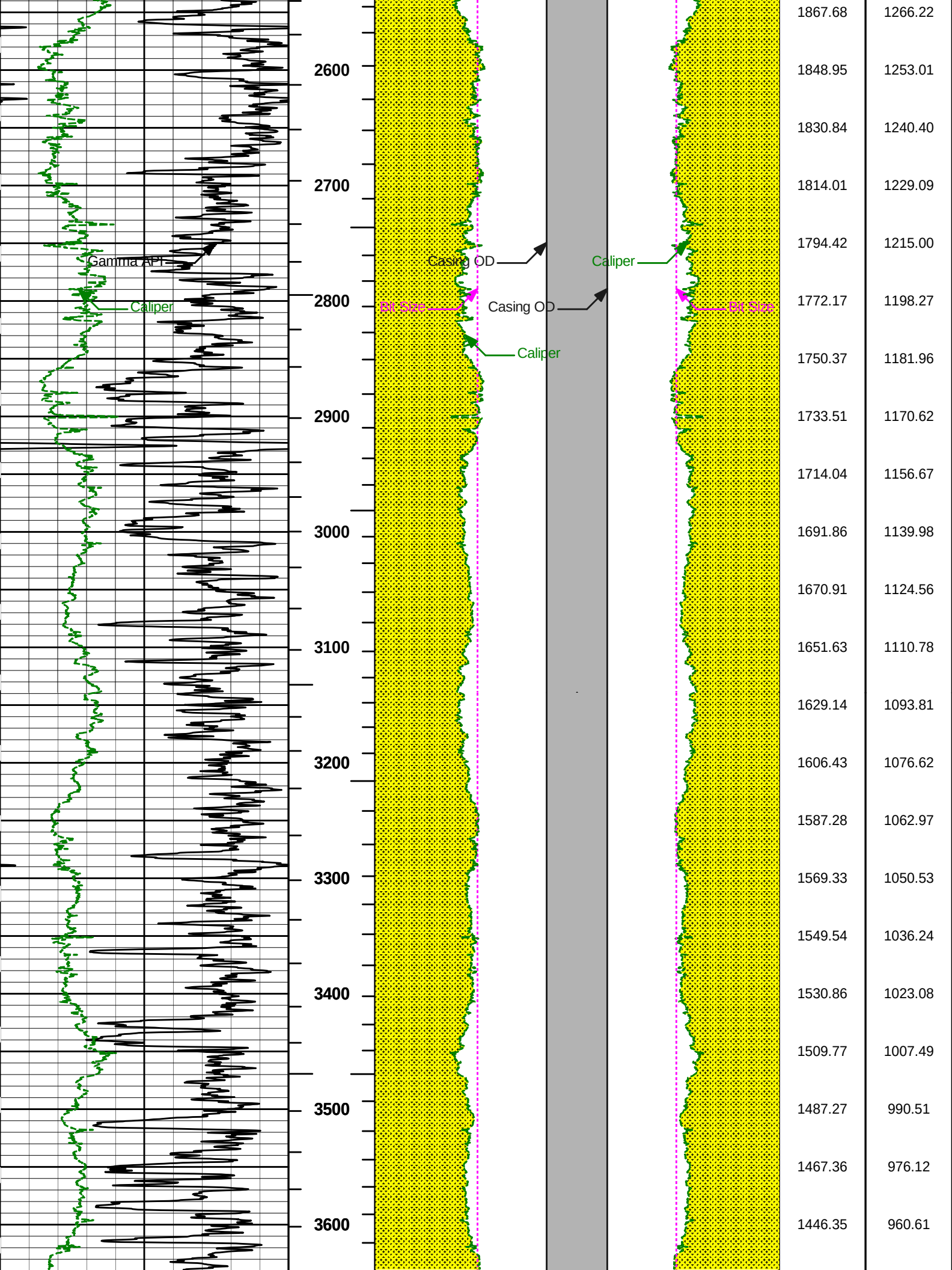
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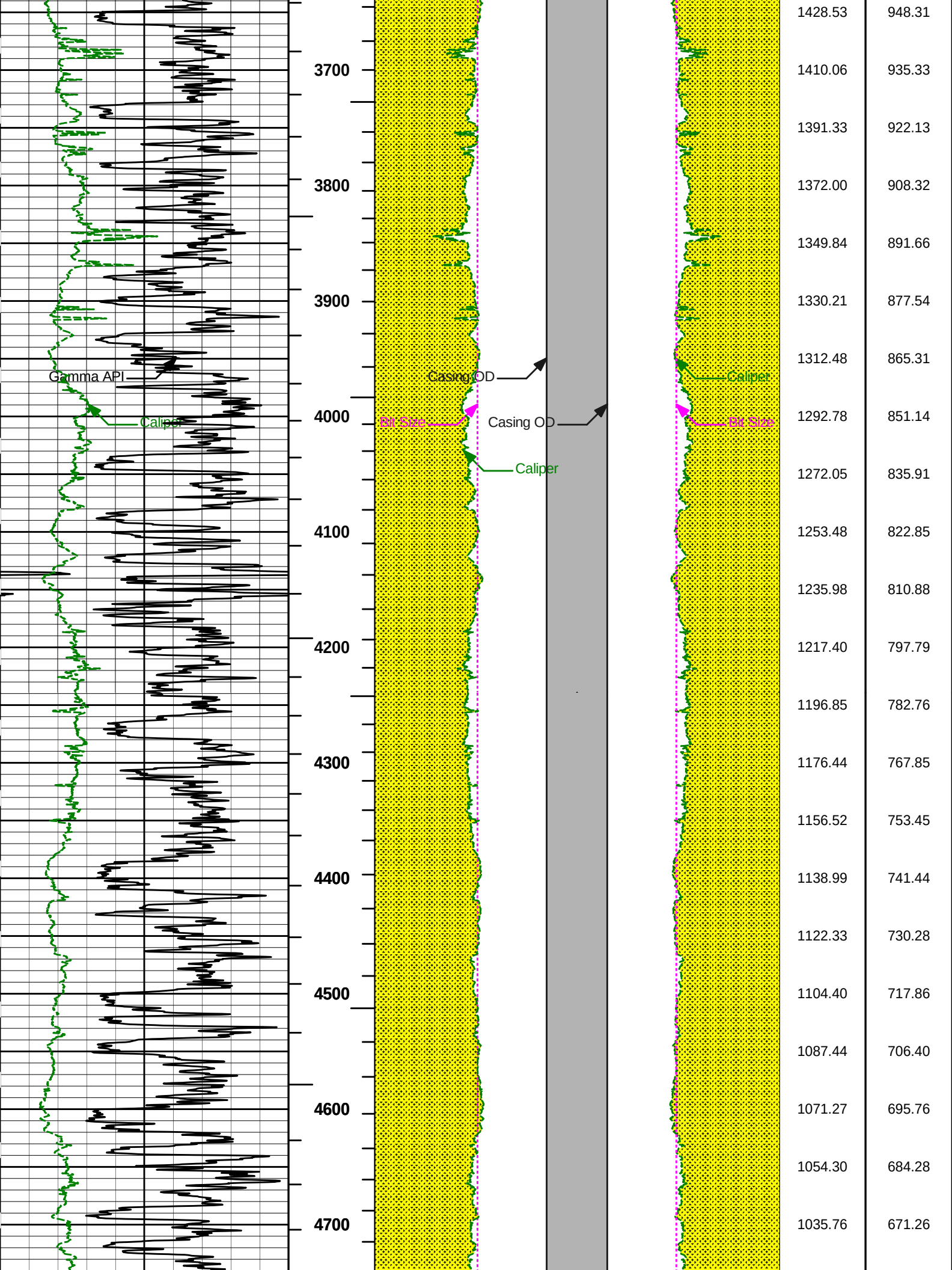
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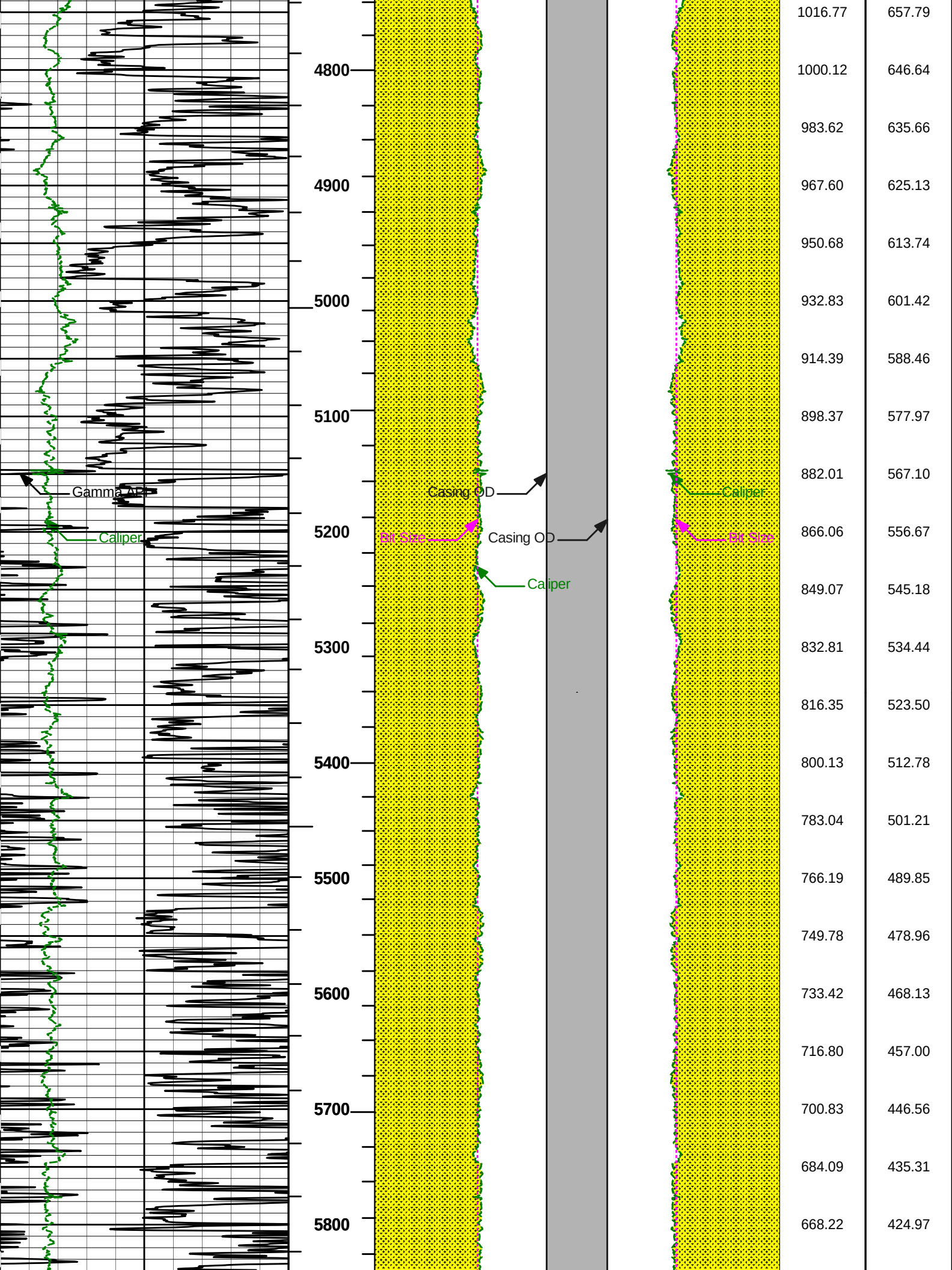
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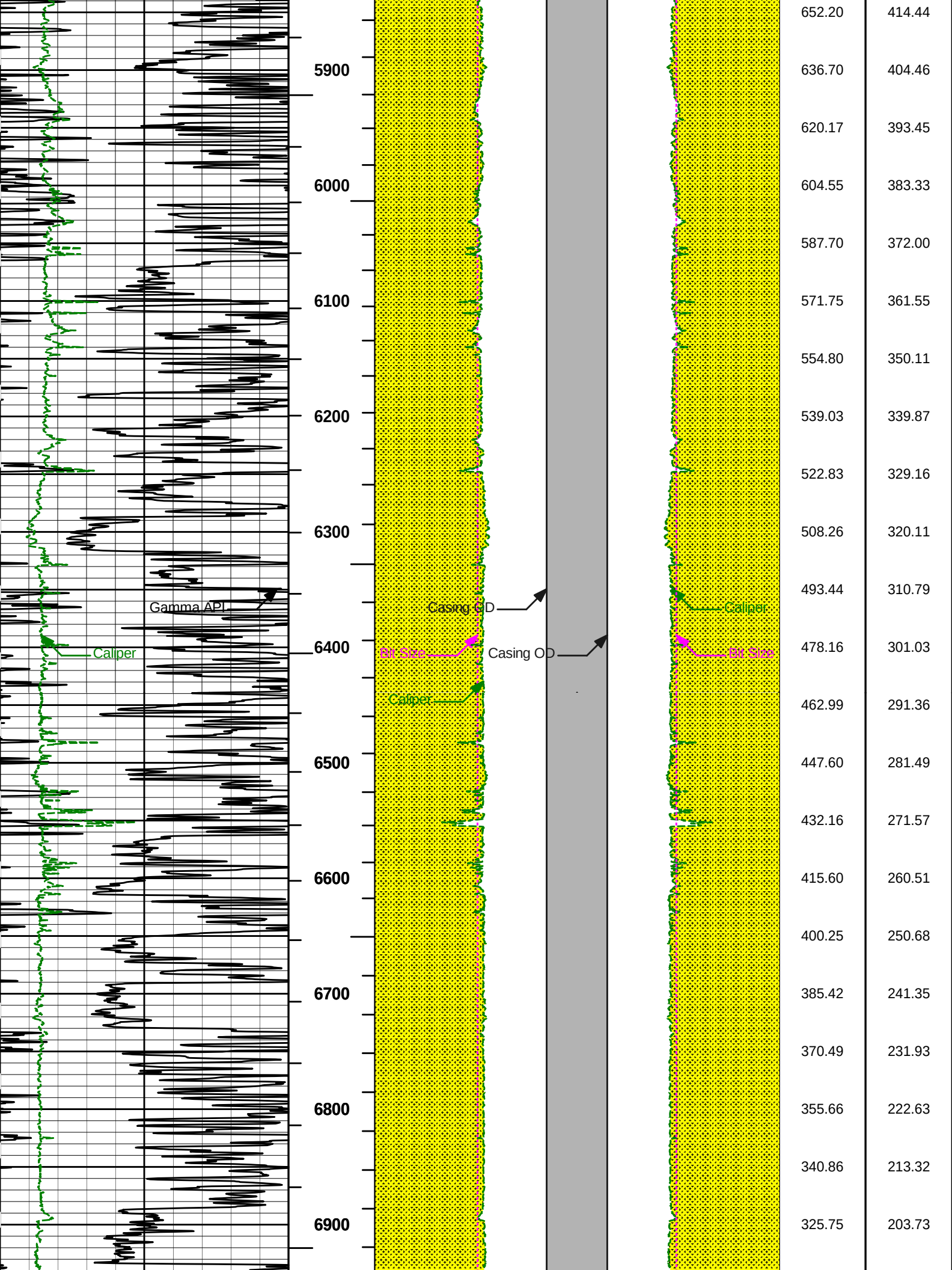
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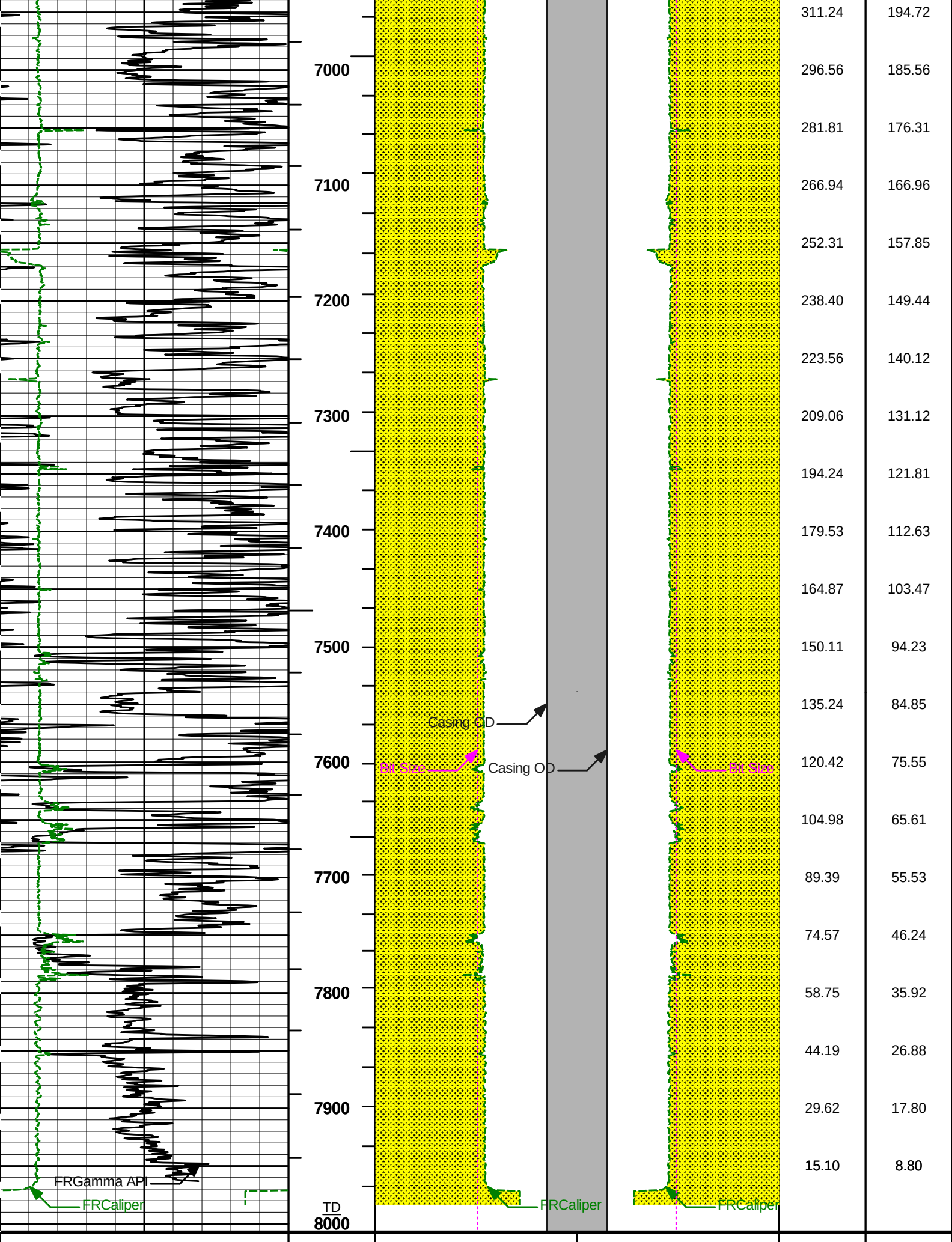
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Casing OD
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Caliper
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0
Caliper
16
BHVT
AHVT

api

6 **Caliper** 16

inches

BHVT

AHVT

inches

Casing OD

16 **Bit Size** 0

inches

inches

Casing OD

0 **Bit Size** 16

inches

HALLIBURTON

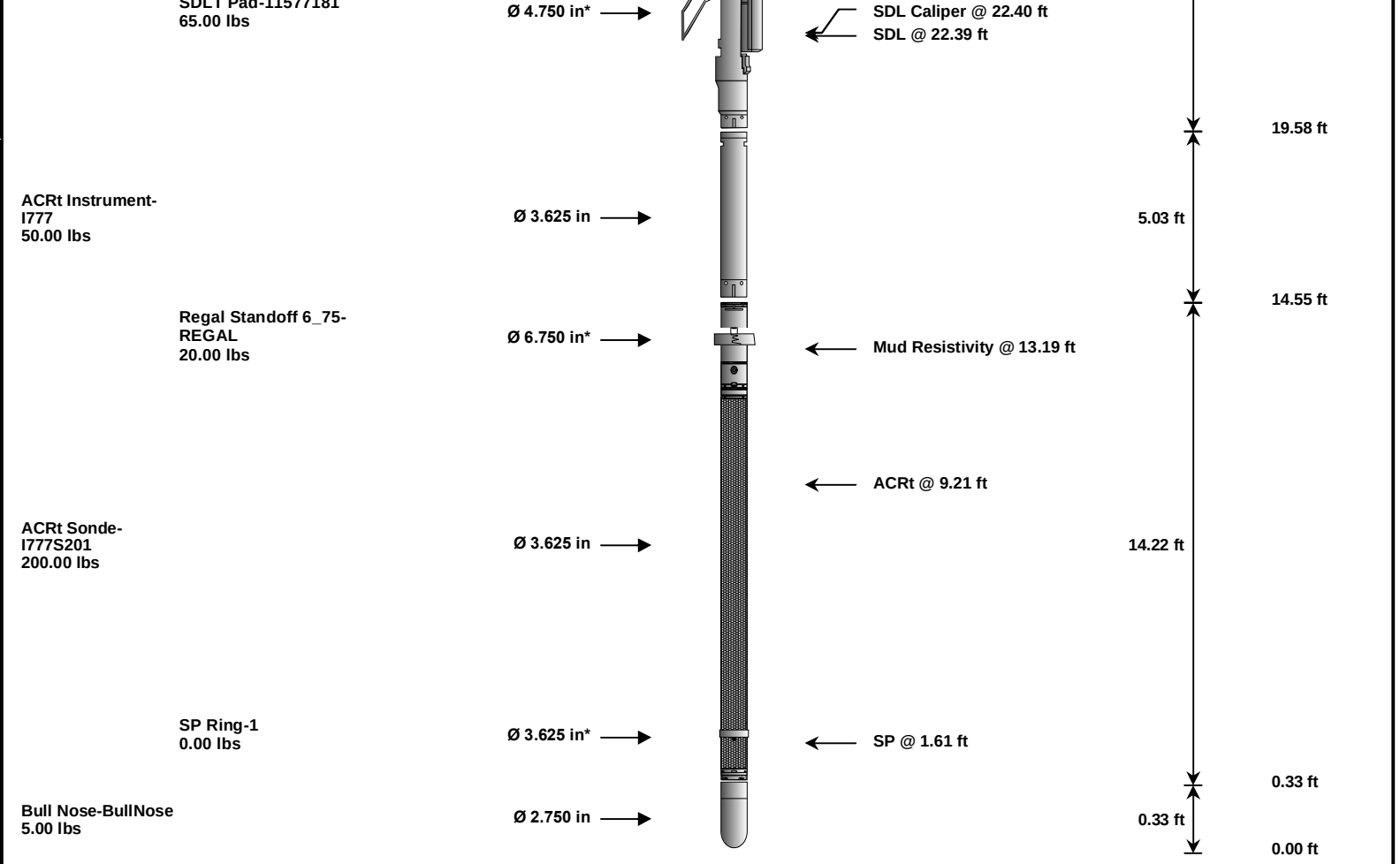
Plot Time: 29-Jan-12 12:57:14
Plot Range: 1524 ft to 8006.67 ft
Data: BRUTON_30_08B\Well Based\MAIN*
Plot File: \\BHV\IQ_BHV_SDL_RM

AHV USES 4.5" CASING

HALLIBURTON

TOOL STRING DIAGRAM REPORT

Description	Overbody Description	O.D.	Diagram	Sensors @ Delays	Length	Accumulated Length
						54.85 ft
RWCH-10895163 135.00 lbs		Ø 3.625 in		Load Cell @ 51.17 ft BH Temperature @ 50.60 ft	6.25 ft	
						48.60 ft
GTET-11602915 165.00 lbs		Ø 3.625 in		GammaRay @ 42.54 ft	8.52 ft	
						40.08 ft
DSNT-11603541 174.00 lbs	DSN Decentralizer-11603541 6.60 lbs	Ø 5.000 in* Ø 3.625 in		DSN Far @ 33.15 ft DSN Near @ 32.40 ft	9.69 ft	
						30.40 ft
SDLT-11577181 360.00 lbs		Ø 4.500 in			10.81 ft	



Mnemonic	Tool Name	Serial Number	Weight (lbs)	Length (ft)		Accumulated Length (ft)	Max.Log. Speed (fpm)
RWCH	Releasable Wireline Cable Head	10895163	135.00	6.25		48.60	300.00
GTET	Gamma Telemetry Tool	11602915	165.00	8.52		40.08	60.00
DSNT	Dual Spaced Neutron	11603541	174.00	9.69		30.40	60.00
DCNT	DSN Decentralizer	11603541	6.60	5.13	*	33.73	300.00
SDLT	Spectral Density Tool	11577181	360.00	10.81		19.58	60.00
SDLP	Density Insite Pad	11577181	65.00	2.55	*	21.79	60.00
ACRt	Array Compensated True Resistivity Instrument Section	I777	50.00	5.03		14.55	300.00
ACRt	Array Compensated True Resistivity	I777S201	200.00	14.22		0.33	300.00
SP	SP Ring	1	0.00	0.25	*	1.61	300.00
RSOF	Regal Standoff 6.75in	REGAL	20.00	0.52	*	13.24	300.00
BLNS	Bull Nose	BullNose	5.00	0.33		0.00	300.00
Total			**1,180.60**	**54.85**			

* Not included in Total Length and Length Accumulation.

Data: BRUTON_30_08B\0001 TRIPLE_ACRT\IDLE **Date: 29-Jan-12 09:40:52**

COMPANY	**LARAMIE ENERGY**		
WELL	**BRUTON 30-08B**		
FIELD	**BRUSH CREEK**		
COUNTY	**MESA**	STATE	**CO**

HALLIBURTON

BOREHOLE VOLUME PLOT