

HALLIBURTON

SIX-ARM DIPMETER
SHIVA COMPUTATION
9 X 3 X 30

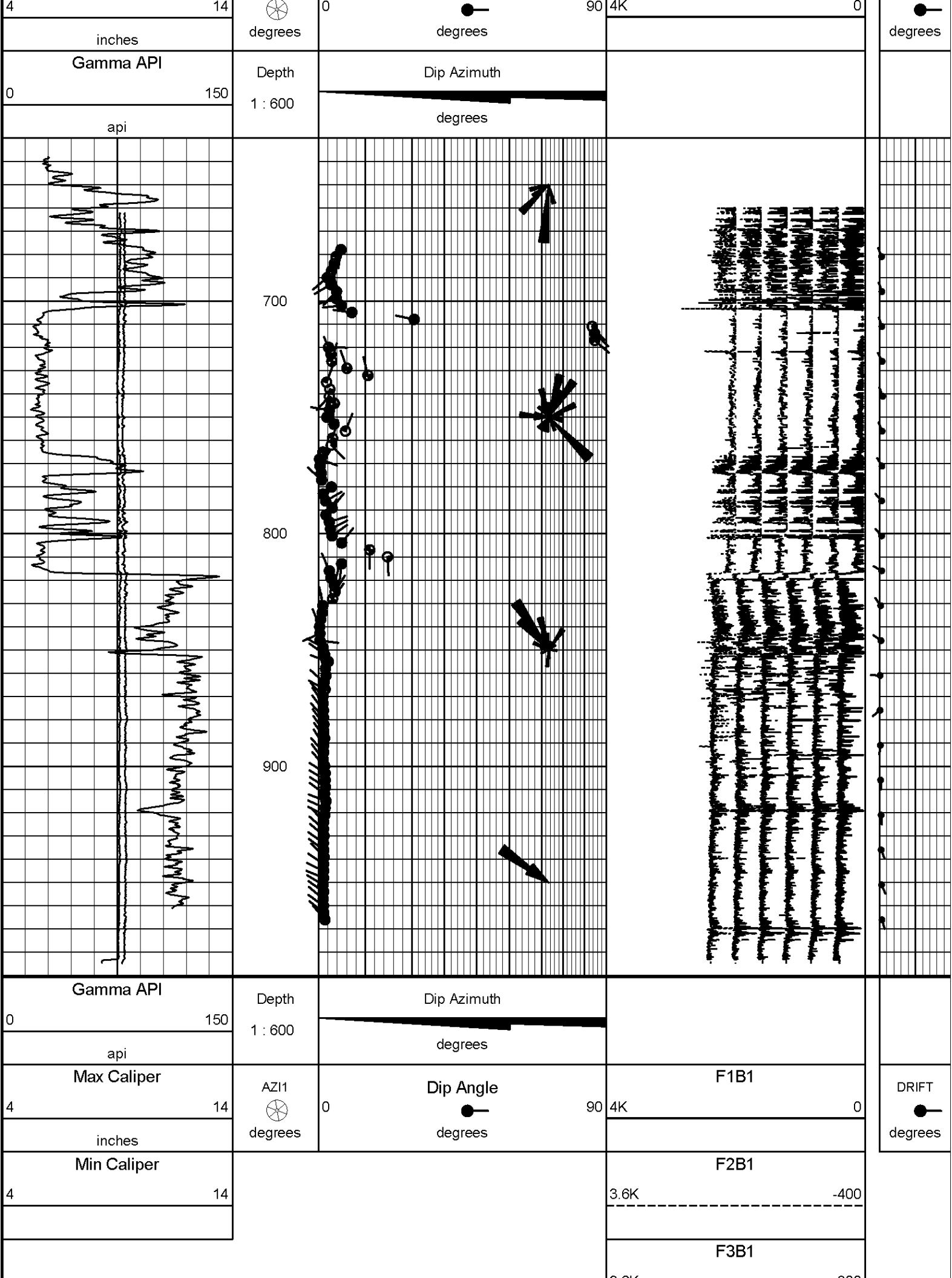
COMPANY				STORM CAT ENERGY (USA) OPERATING CORP.					
WELL				BALLARD 1-18H					
FIELD				B-43					
COUNTY				VAN BUREN					
STATE				ARKANSAS					
Permanent Datum		GROUND LEVEL		Sect. 18		Twp. 11N		Rge. 16W	
Log measured from		KELLY BUSHING		Elev. 1682.0 ft		Elev. K.B.		1697.0 ft	
Drilling measured from		KELLY BUSHING		15.0 ft above perm. Datum		D.F.		1696.0 ft	
Date		23-Mar-08 08:15		G.L.		1682.0 ft			
Run No.		1							
Depth - Driller		981.0 ft							
Depth - Logger		985.0 ft							
Bottom - Logged Interval		983							
Top - Logged Interval		655							
Casing - Driller		9.625 in		@ 651.0 ft					
Casing - Logger		655.0 ft							
Bit Size		8.875 in		@					
Type Fluid in Hole		WBM							
Density		Viscosity							
PH		Fluid Loss							
Source of Sample									
Rm @ Meas. Temperature		1.54 ohmm		@ 56.00 degF		@			
Rmf @ Meas. Temperature		1.32 ohmm		@ 56.00 degF		@			
Rmc @ Meas. Temperature		1.81 ohmm		@ 56.00 degF		@			
Source Rmf		Rmc		CALC		CALC			
Rm @ BHT		1.05 ohmm		@ 85.0 degF		@			
Time Since Circulation		3.0 hr							
Time on Bottom		23-Mar-08 10:00							
Max. Rec. Temperature		85.0 degF		@ 980.0 ft		@			
Equipment		Location		10975786		FORT SMITH			
Recorded By		SCHICKEDANZ							
Witnessed By		MR. MAJORS							

Fold here

Service Ticket No.: 5766794				API Serial No.: 03-141-10356				PGM Version: WL INSITE R2.0 (Build 22)							
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 816_708	N/A	1.5" S.O.	N/A					
Rmc @ Meas. Temp.		@		@											
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.	10971172			Serial No.				Serial No.	378_477_870			Serial No.	10951378		
Model No.	GTET			Model No.				Model No.	SDLT			Model No.	DSNT		
Diameter	3.625"			No. of Cent.				Diameter	4.75"			Diameter	3.625"		
Detector Model No.	T-102			Spacing				Log Type	GAM-GAM			Log Type	NEU-NEU		
Type	SCINT							Source Type	CS-137			Source Type	AM241BE		
Length	8"			LSA [Y/N]				Serial No.	20784B			Serial No.	DSN-373		
Distance to Source	11'			FWDA [Y/N]				Strength	1.5 Ci			Strength	15 Ci		
LOGGING DATA															

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	TD	CSG	REC	0	150				30%	-10%	2.71	30%	-10%	LIME		
DIRECTIONAL INFORMATION																
Maximum Deviation									@	KOP						@
Remarks: AHV PLOT CALCULATED FOR 5.5-INCH CASING																
NO MUD INFORMATION AVAILABLE																
HALLIBURTON DOES NOT GUARANTEE THE ACCURACY OF ANY INTERPRETATION OF THE LOG DATA, CONVERSION OF LOG DATA TO PHYSICAL ROCK PARAMETERS OR RECOMMENDATIONS WHICH MAY BE GIVEN BY HALLIBURTON PERSONNEL OR WHICH APPEAR ON THE LOG OR IN ANY OTHER FORM. ANY USER OF SUCH DATA, INTERPRETATIONS, CONVERSIONS, OR RECOMMENDATIONS AGREES THAT HALLIBURTON IS NOT RESPONSIBLE EXCEPT WHERE DUE TO GROSS NEGLIGENCE OR WILLFUL MISCONDUCT, FOR ANY LOSS, DAMAGES, OR EXPENSES RESULTING FROM THE USE THEREOF.																
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			F6B1		
			2K	-2K	
			F5B1		
			2.4K	-1.6K	
			F4B1		
			2.8K	-1.2K	
<div>Min Caliper</div> <div>414</div>			F3B1		
			3.2K	-800	
			F2B1		
			3.6K	-400	
Max Caliper	AZI1	Dip Angle	F1B1		DRIFT



3.2K	-800
F4B1	
2.8K	-1.2K
F5B1	
2.4K	-1.6K
F6B1	
2K	-2K

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Plot File: \\-LOCAL-\\STORMCAT_BALARD\\0002 D4TS-GAMMA-ISO-SED\\SED\\SED SHIVA_with_pad_data Version: R4.1.3

Plot Time: 23-Mar-08 11:31:19Plot Range: 630 ft to 990 ft




Data: STORMCAT_BALARD\\0002 D4TS-GAMMA-ISO-SED\\SHIVA3*

HALLIBURTON

Plot File: \\-LOCAL-\\STORMCAT_BALARD\\0002 D4TS-GAMMA-ISO-SED\\SED\\SED SHIVA_with_pad_data Version: R4.1.3

Plot Time: 23-Mar-08 11:31:19Plot Range: 638 ft to 986 ft

Data: STORMCAT_BALARD\\0002 D4TS-GAMMA-ISO-SED\\SHIVA3*

			F6B1		
			2K	-2K	
			F5B1		
			2.4K	-1.6K	
			F4B1		
			2.8K	-1.2K	
			F3B1		
			3.2K	-800	
			F2B1		
			3.6K	-400	
			F1B1		
			4K	0	
Min Caliper			AZI1	Dip Angle	DRIFT
4	14		0		
			degrees	degrees	degrees
Max Caliper					
4	14				

inches

degrees

degrees

degrees

Gamma API

Depth

Dip Azimuth

0

150

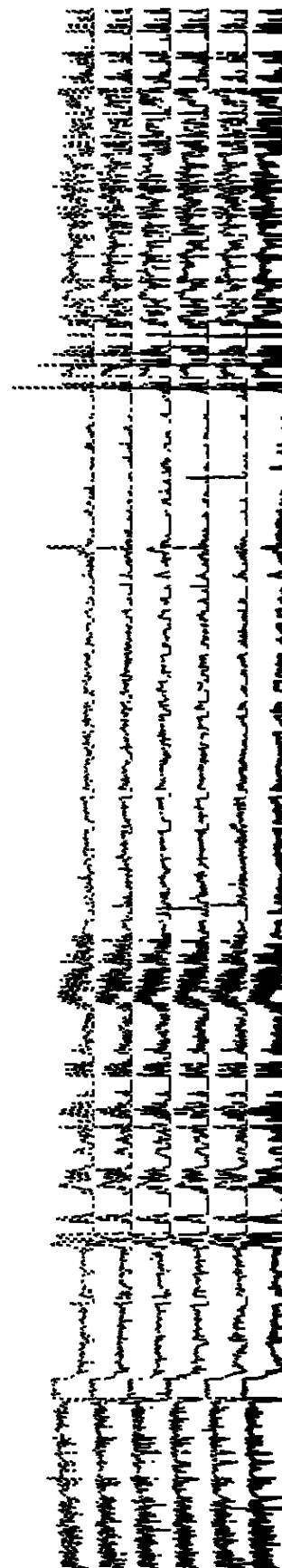
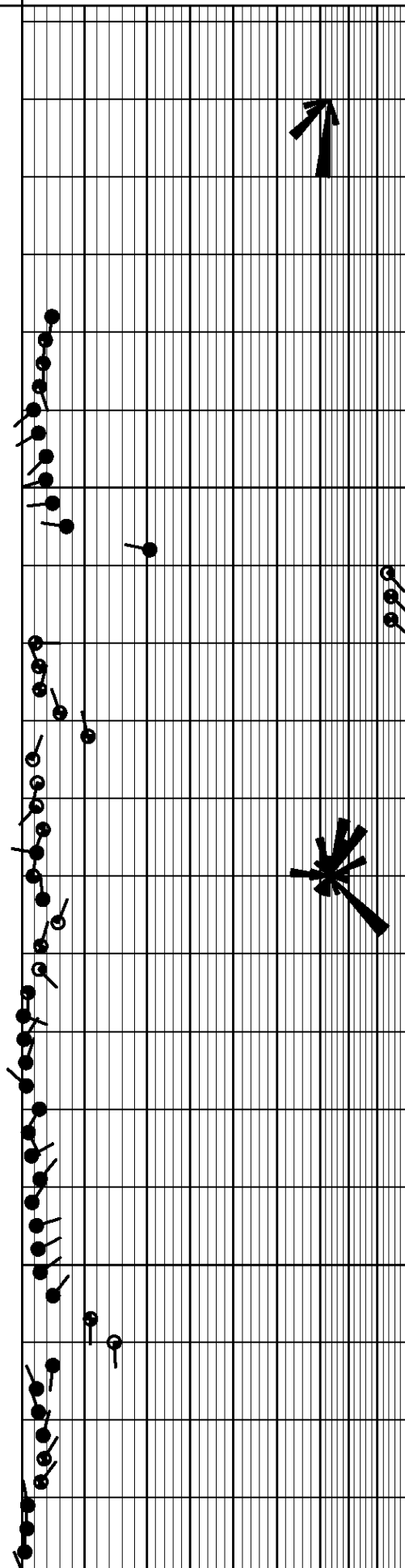
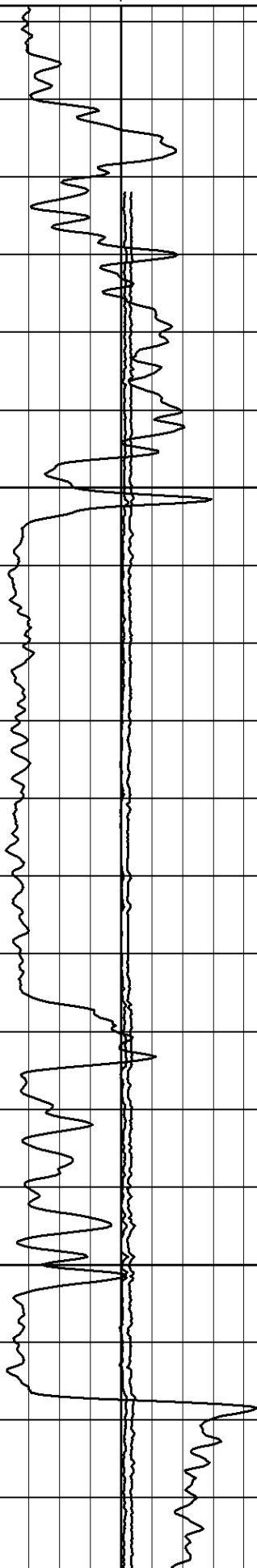
1 : 240

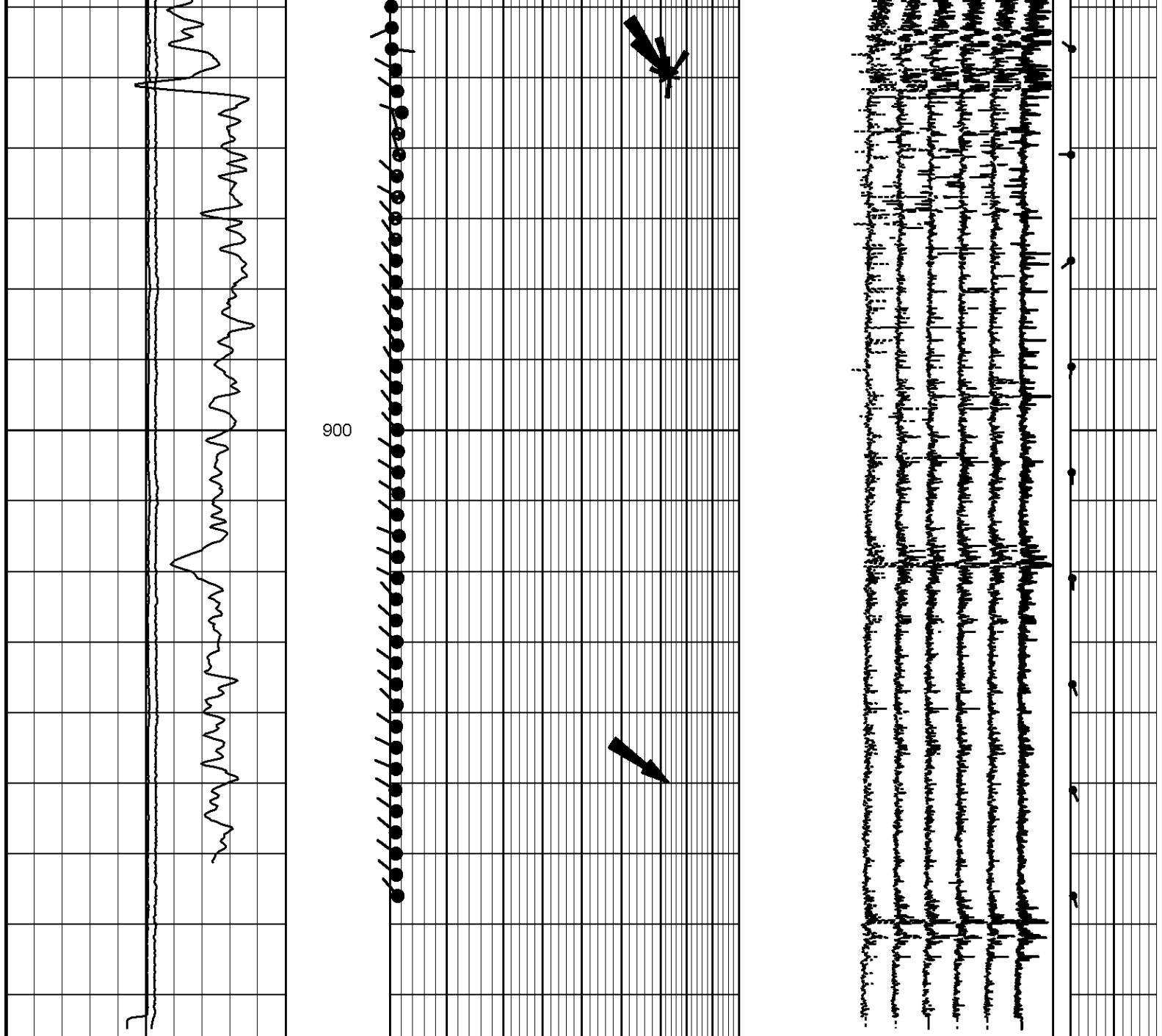
degrees








api

700

800





Gamma API		Depth 1 : 240	Dip Azimuth			
0	150					
api			degrees			
Max Caliper		AZI1  degrees	Dip Angle		F1B1	
4	14		0 90		4K 0	
inches			degrees			
Min Caliper						DRIFT  degrees
4	14					
				F2B1		
				3.6K -400		
						
				F3B1		
				3.2K -800		
						
				F4B1		
				2.8K -1.2K		
						

F5B1	
2.4K	-1.6K
F6B1	
2K	-2K

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
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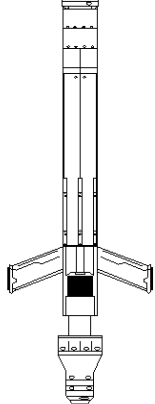
Plot Time: 23-Mar-08 11:31:23 Plot Range: 638 ft to 986 ft

Data: STORMCAT_BALARD\\0002 D4TS-GAMMA-ISO-SED\\SHIVA3*

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TOOL STRING DIAGRAM REPORT

Description	OD/Sensors	Diagram	Sensors	Tool Length	Accumulated Length
CH-PROT01 30.00 lbs	O.D. = 3.63 in			1.92 ft	40.05 ft
					38.13 ft
D4TS-A148 100.00 lbs	O.D. = 3.63 in			6.50 ft	
					31.63 ft
NGRT-A076 176.00 lbs	O.D. = 3.63 in			8.00 ft	
			GammaRay @ 24.96 ft		23.63 ft
ISOLATOR 30.00 lbs	O.D. = 3.63 in			1.32 ft	21.88 ft
SED-2746NAV_2708WBM 400.00 lbs	O.D. = 4.25 in			22.31 ft	



SED Pads @ 1.53 ft

0.00 ft

Tool Mnemonic	Tool Name	Serial Number	Weight (lbs)	Length (ft)	Length Accumulation (ft)	Max Logging Speed (fpm)
CH	Cable Head	PROT01	30.00	1.92	38.13	300.00
D4TS	D4TS	A148	100.00	6.50	31.63	300.00
NGRT	NGRT	A076	176.00	8.00	23.63	60.00
ISOL	ISOL	ISOLATOR	30.00	1.32	22.31	300.00
SED	SED	2746NAV_2708WBM	400.00	22.31	0.00	30.00
Total			736.00	40.05		30.00
Data: STORMCAT_BALARD\0002 D4TS-GAMMA-ISO-SED\IDLE						Date: 23-Mar-08 11:29:31

COMPANY	STORM CAT ENERGY (USA) OPERATING CORP.		
WELL	BALLARD 1-18H		
FIELD	B-43		
COUNTY	VAN BUREN	STATE	ARKANSAS
HALLIBURTON		SIX-ARM DIPMETER SHIVA COMPUTATION 9 X 3 X 30	