Schlumberger

Company: **DIVERSIFIED DRILLING**

Well: **CALOOSAHATCHEE ASR TEST CORE (CCBRY-1)**
Field: **BERRY GROVE**
County: **HENDRY** State: **FLORIDA**

County: HENDRY
Field: BERRY GROVE
Location:
Well: CALOOSAHATCHEE ASR TEST
Company: DIVERSIFIED DRILLING

SPECTRAL GAMMA RAY

LOCATION

		Elev.:	K.B. 5 ft
			G.L.
			D.F.
Permanent Datum:	GROUND LEVEL	Elev.:	0 ft
Log Measured From:	RKB	5.0 ft	above Perm. Datum
Drilling Measured From:	RKB		

API Serial No.	Section	Township	Range

Logging Date		6-Jan-2005			
Run Number		1			
Depth Driller		1011 ft			
Schlumberger Depth		1018 ft			
Bottom Log Interval		1018 ft			
Top Log Interval		203 ft			
Casing Driller Size @ Depth		8.000 in @	200 ft	@	
Casing Schlumberger		203 ft			
Bit Size		7.875 in			
Type Fluid In Hole		FRESH MUD			
MUD Density	Viscosity	9.1 lbm/gal	44 s		
Fluid Loss	PH		9.2		
Source Of Sample		AIT SENSOR			
RM @ Measured Temperature		3.430 ohm.m @	79 degF	@	
RMF @ Measured Temperature		2.570 ohm.m @	79 degF	@	
RMC @ Measured Temperature		5.145 ohm.m @	79 degF	@	
Source RMF	RMC	CALCULATED\	CALCULATED		
RM @ MRT	RMF @ MRT	3.314 @ 82	2.483 @ 82	@	@
Maximum Recorded Temperatures		82 degF	82	82	
Circulation Stopped	Time	6-Jan-2005	6:00		
Logger On Bottom	Time	6-Jan-2005	16:45		
Unit Number	Location	2121	LAUREL,E.S.		
Recorded By		MIGUEL QUINONES			
Witnessed By		FRANK PROCTA			

	Run 1	Run 2	Run 3	Run 4

Logging Date						
Run Number						
Depth Driller						
Schlumberger Depth						
Bottom Log Interval						
Top Log Interval						
Casing Driller Size @ Depth		@			@	
Casing Schlumberger						
Bit Size						
Type Fluid In Hole						
MUD Density	Viscosity					
Fluid Loss	PH					
Source Of Sample						
RM @ Measured Temperature		@			@	
RMF @ Measured Temperature		@			@	
RMC @ Measured Temperature		@			@	
Source RMF	RMC					
RM @ MRT	RMF @ MRT	@	@		@	@
Maximum Recorded Temperatures						
Circulation Stopped	Time					
Logger On Bottom	Time					
Unit Number	Location					
Recorded By						
Witnessed By						

DISCLAIMER
THE USE OF AND RELIANCE UPON THIS RECORDED-DATA BY THE HEREIN NAMED COMPANY (AND ANY OF ITS AFFILIATES, PARTNERS, REPRESENTATIVES, AGENTS, CONSULTANTS AND EMPLOYEES) IS SUBJECT TO THE TERMS AND CONDITIONS AGREED UPON BETWEEN SCHLUMBERGER AND THE COMPANY, INCLUDING: (a) RESTRICTIONS ON USE OF THE RECORDED-DATA; (b) DISCLAIMERS AND WAIVERS OF WARRANTIES AND REPRESENTATIONS REGARDING COMPANY'S USE OF AND RELIANCE UPON THE RECORDED-DATA; AND (c) CUSTOMER'S FULL AND SOLE RESPONSIBILITY FOR ANY INFERENCE DRAWN OR DECISION MADE IN CONNECTION WITH THE USE OF THIS RECORDED-DATA.

OTHER SERVICES1	OTHER SERVICES2
OS1:	OS1:
OS2:	OS2:
OS3:	OS3:
OS4:	OS4:
OS5:	OS5:
REMARKS: RUN NUMBER 1	REMARKS: RUN NUMBER 2
TOOL RAN AS PER TOOL SKETCH	

LOG CORRELATED WITH SWS PLATFORM EXPRESSS LOG DATED 6-JAN-2005

CREW: D. BLACKWELL, M. WELCH

THANK YOU FOR USING SCHLUMBERGER

RUN 1		RUN 2	
SERVICE ORDER #:	10955693	SERVICE ORDER #:	
PROGRAM VERSION:	12C0-301	PROGRAM VERSION:	
FLUID LEVEL:	0 ft	FLUID LEVEL:	

LOGGED INTERVAL	START	STOP	LOGGED INTERVAL	START	STOP

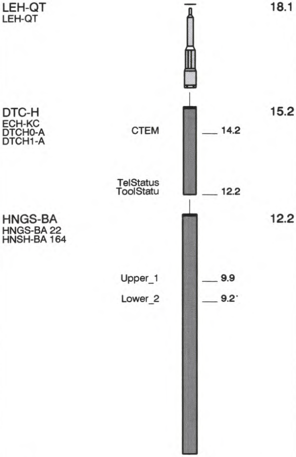
EQUIPMENT DESCRIPTION

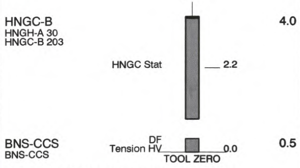
RUN 1	RUN 2

SURFACE EQUIPMENT

GSR-U
WITM (DTS)-A

DOWNHOLE EQUIPMENT





MAXIMUM STRING DIAMETER 3.75 IN
MEASUREMENTS RELATIVE TO TOOL ZERO
ALL LENGTHS IN FEET

Schlumberger

Main Pass 5"=100'

MAXIS 500 Field Log

Output DLIS Files

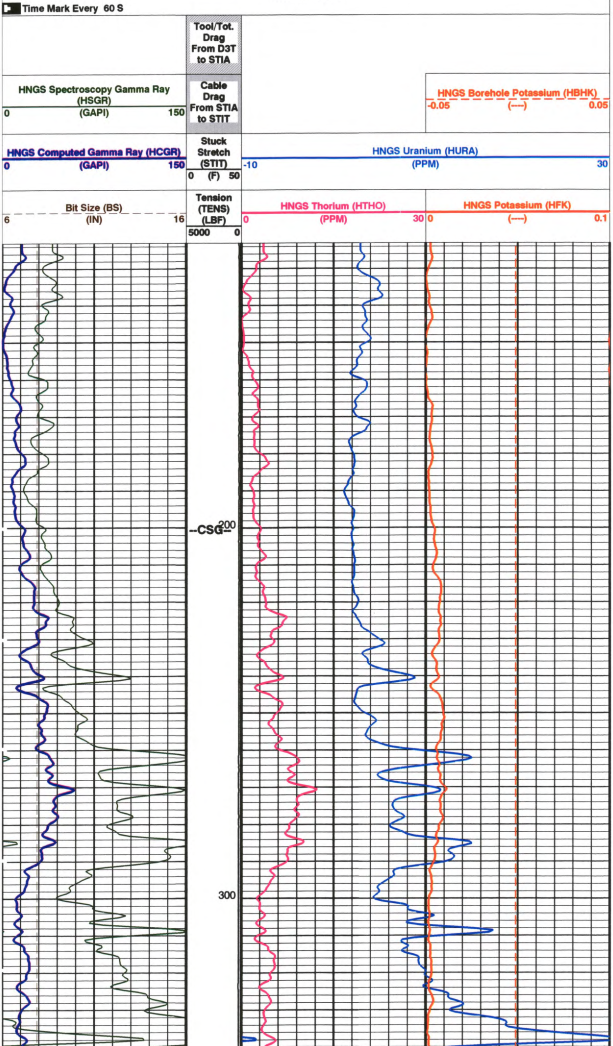
DEFAULT	**NGS_041LUP**	**FN:40**	**PRODUCER**	**06-Jan-2005 16:03**	**1012.5 FT**	**123.0 FT**

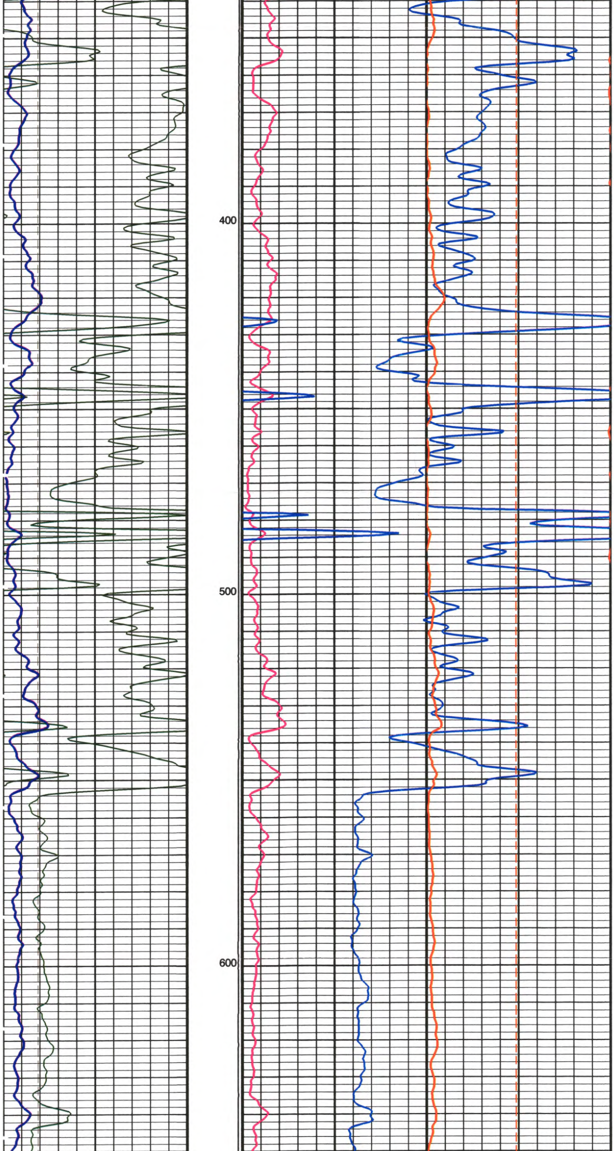
OP System Version: 12C0-301

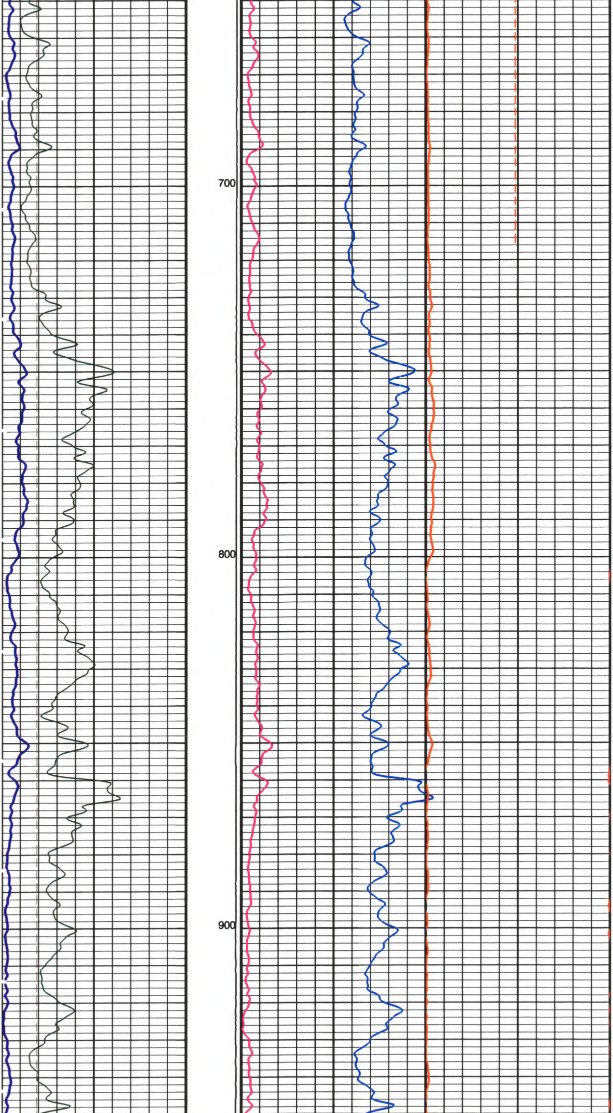
MCM

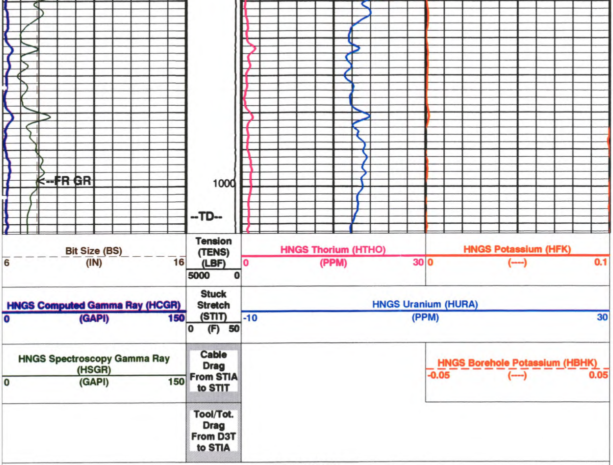
HNGC-B	**SPC-2602-NUCL**	**HNGS-BA**	**SPC-2602-NUCL**
DTC-H	**12C0-301**		

PIP SUMMARY









PIP SUMMARY

▶ Time Mark Every 60 S

Parameters

DLIS Name	Description	Value	
	HNGS-BA: Hostile Natural Gamma Ray Sonde		
BAR1	HNGS Detector 1 Barite Constant	1	
BAR2	HNGS Detector 2 Barite Constant	1	
BHK	HNGS Borehole Potassium Correction Concentration	0	
BHS	Borehole Status	OPEN	
CSD1	Inner Casing Outer Diameter	0	IN
CSD2	Outer Casing Outer Diameter	0	IN
CSW1	Inner Casing Weight	0	LB/F
CSW2	Outer Casing Weight	0	LB/F
DBCC	HNGS Barite Constant Correction Flag	NONE	
GCSE	Generalized Caliper Selection	BS	
H1P	HNGS Detector 1 Allow/Disallow In Processing	ALLOW	
H2P	HNGS Detector 2 Allow/Disallow In Processing	ALLOW	
HABK	HNGS Borehole Potassium Running Average	0	
HALF	HNGS Alpha Filter Length	60	IN
HCRB	HNGS Apply Borehole Potassium Correction	NONE	
HMWM	Mud Weighting Material	NATU	
HNPE	HNGS Processing Enable	YES	
S1BI	HNGS Detector 1 Calibration Bismuth Count Rate	1.4	CPS
S2BI	HNGS Detector 2 Calibration Bismuth Count Rate	0.2	CPS
SGRC	HNGS Standard Gamma-Ray Correction Flag	YES	
TPOS	Tool Position	ECCE	
VBA1	HNGS Detector 1 Variable Barite Factor Running Average	0	
VBA2	HNGS Detector 2 Variable Barite Factor Running Average	0	
	HOLEV: Integrated Hole/Cement Volume		
BHS	Borehole Status	OPEN	
GCSE	Generalized Caliper Selection	BS	
	STI: Stuck Tool Indicator		
LBFR	Trigger for MAXIS First Reading Label	STI	
STKT	STI Stuck Threshold	2.5	FT
TDD	Total Depth - Driller	1011.00	FT
TDL	Total Depth - Logger	1018.00	FT
	System and Miscellaneous		
BS	Bit Size	7.875	IN
DFD	Drilling Fluid Density	9.10	LB/G

Format: HNGSNGT Vertical Scale: 5" per 100' Graphics File Created: 06-Jan-2005 16:03

OP System Version: 12C0-301

MCM

HNGC-B	SPC-2602-NUCL	HNGS-BA	SPC-2602-NUCL
DTC-H	12C0-301		

Output DLIS Files

DEFAULT NGS_041LUP FN:40 PRODUCER 06-Jan-2005 16:03

Schlumberger

Repeat Section 5"=100'

MAXIS 500 Field Log

Output DLIS Files

DEFAULT NGS_040LUP FN:39 PRODUCER 06-Jan-2005 15:54 1012.5 FT 775.0 FT

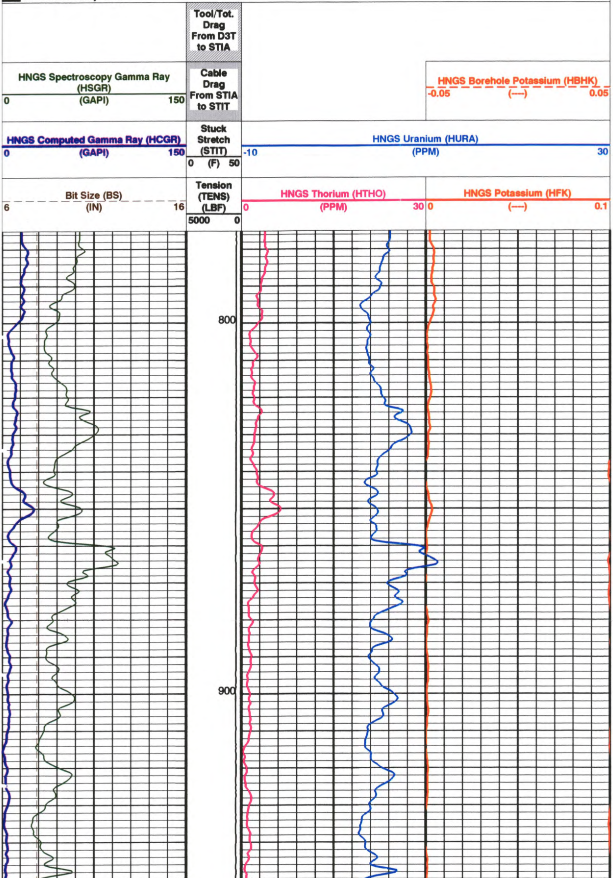
OP System Version: 12C0-301

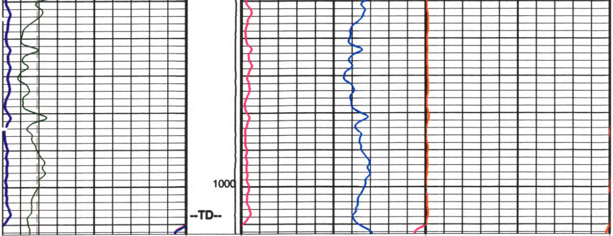
MCM

HNGC-B DTC-H	SPC-2602-NUCL 12C0-301	HNGS-BA	SPC-2602-NUCL

PIP SUMMARY

■ Time Mark Every 60 S





Bit Size (BS)
6 (IN) 16

Tension (TENS) (LBF)
5000 0

HNGS Thorium (HTHO)
0 (PPM) 30

HNGS Potassium (HFK)
0 (----) 0.1

HNGS Computed Gamma Ray (HCGR)
0 (GAPI) 150

Stuck Stretch (STIT)
0 (F) 50

HNGS Uranium (HURA)
-10 (PPM) 30

HNGS Spectroscopy Gamma Ray (HSGR)
0 (GAPI) 150

Cable Drag From STIA to STIT

HNGS Borehole Potassium (HBHK)
-0.05 (----) 0.05

Tool/Tot. Drag From D3T to STIA

PIP SUMMARY

▪ Time Mark Every 60 S

Parameters

DLIS Name	Description	Value	
	HNGS-BA: Hostile Natural Gamma Ray Sonde		
BAR1	HNGS Detector 1 Barite Constant	1	
BAR2	HNGS Detector 2 Barite Constant	1	
BHK	HNGS Borehole Potassium Correction Concentration	0	
BHS	Borehole Status	OPEN	
CSD1	Inner Casing Outer Diameter	0	IN
CSD2	Outer Casing Outer Diameter	0	IN
CSW1	Inner Casing Weight	0	LB/F
CSW2	Outer Casing Weight	0	LB/F
DBCC	HNGS Barite Constant Correction Flag	NONE	
GCSE	Generalized Caliper Selection	BS	
H1P	HNGS Detector 1 Allow/Disallow In Processing	ALLOW	
H2P	HNGS Detector 2 Allow/Disallow In Processing	ALLOW	
HABK	HNGS Borehole Potassium Running Average	0	
HALF	HNGS Alpha Filter Length	60	IN
HCRB	HNGS Apply Borehole Potassium Correction	NONE	
HMWM	Mud Weighting Material	NATU	
HNPE	HNGS Processing Enable	YES	
S1BI	HNGS Detector 1 Calibration Bismuth Count Rate	1.4	CPS
S2BI	HNGS Detector 2 Calibration Bismuth Count Rate	0.2	CPS
SGRC	HNGS Standard Gamma-Ray Correction Flag	YES	
TPOS	Tool Position	ECCE	
VBA1	HNGS Detector 1 Variable Barite Factor Running Average	0	
VBA2	HNGS Detector 2 Variable Barite Factor Running Average	0	
	HOLEV: Integrated Hole/Cement Volume		
BHS	Borehole Status	OPEN	
GCSE	Generalized Caliper Selection	BS	
	STI: Stuck Tool Indicator		
LBFR	Trigger for MAXIS First Reading Label	STI	
STKT	STI Stuck Threshold	2.5	FT
TDD	Total Depth - Driller	1011.00	FT
TDL	Total Depth - Logger	1018.00	FT
	System and Miscellaneous		
BS	Bit Size	7.875	IN
DFD	Drilling Fluid Density	9.10	LB/G

Format: HNGSNGT Vertical Scale: 5" per 100' Graphics File Created: 06-Jan-2005 15:54

OP System Version: 12C0-301

MCM

HNGC-B	SPC-2602-NUCL	HNGS-BA	SPC-2602-NUCL
DTC-H	12C0-301		

Output DLIS Files

DEFAULT NGS_040LUP FN:39 PRODUCER 06-Jan-2005 15:54

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Calibrations

MAXIS 500 Field Log

Calibration and Check Summary

Measurement	Nominal	Master	Before	After	Change	Limit	Units
Hostile Natural Gamma Ray Sonde Wellsite Calibration - Detector 1 Check							
Before: 3-Jan-2005 18:43							
Na 511 Peak Loc	40.00	N/A	39.48	N/A	N/A	1.000	
Na 511 Peak Res	15.50	N/A	15.62	N/A	N/A	2.000	%
High Voltage	1150	N/A	1125	N/A	N/A	N/A	V
Na 1785 Peak Loc	142.6	N/A	142.9	N/A	N/A	7.000	
Na 1785 Peak Res	8.500	N/A	8.479	N/A	N/A	2.000	%
Temperature	59.90	N/A	76.16	N/A	N/A	N/A	DEGF
Na Count Rate	45.00	N/A	40.84	N/A	N/A	8.000	CPS
Hostile Natural Gamma Ray Sonde Wellsite Calibration - Detector 2 Check							
Before: 3-Jan-2005 18:43							
Na 511 Peak Loc	40.00	N/A	40.57	N/A	N/A	1.000	
Na 511 Peak Res	15.50	N/A	15.56	N/A	N/A	2.000	%
High Voltage	1150	N/A	1154	N/A	N/A	N/A	V
Na 1785 Peak Loc	142.6	N/A	144.3	N/A	N/A	7.000	
Na 1785 Peak Res	8.500	N/A	7.872	N/A	N/A	2.000	%
Temperature	59.90	N/A	75.49	N/A	N/A	N/A	DEGF
Na Count Rate	45.00	N/A	41.40	N/A	N/A	8.000	CPS
Hostile Natural Gamma Ray Sonde Wellsite Calibration - Ratio Of Detector 1 To Detector 2							
Before: 3-Jan-2005 18:43							
Coincidence Count Rate Ratio	1.000	N/A	0.9812	N/A	N/A	0.05000	

Hostile Natural Gamma Ray Cartridge - B / Equipment Identification

Primary Equipment:		
HNGC Cartridge	HNGC - B	203
Auxiliary Equipment:		
HNGC Housing	HNGH - A	30

Hostile Natural Gamma Ray Sonde / Equipment Identification

Primary Equipment:		
HNGS Sonde	HNGS - BA	22
Auxiliary Equipment:		
HNGS Sonde Housing	HNSH - BA	164
Gamma Source Radioactive	GSR - U	

Hostile Natural Gamma Ray Sonde Wellsite Calibration
Detector 1 Check

Phase	Na 511 Peak Loc	Value	Phase	Na 511 Peak Res %	Value	Phase	High Voltage V	Value
Before		39.48	Before		15.62	Before		1125
	37.50 (Minimum) 40.00 (Nominal) 42.50 (Maximum)			12.00 (Minimum) 15.50 (Nominal) 19.00 (Maximum)			900.0 (Minimum) 1150 (Nominal) 1600 (Maximum)	
Phase	**Na 1785 Peak Loc**	**Value**	**Phase**	**Na 1785 Peak Res %**	**Value**	**Phase**	**Temperature DEGF**	**Value**
Before		142.9	Before		8.479	Before		76.16
	135.0 (Minimum) 142.6 (Nominal) 150.3 (Maximum)			7.000 (Minimum) 8.500 (Nominal) 11.00 (Maximum)			-20.00 (Minimum) 59.90 (Nominal) 140.0 (Maximum)	
Phase	**Na Count Rate CPS**	**Value**						
Before		40.84						
	10.00 (Minimum) 45.00 (Nominal) 100.0 (Maximum)							

Before: 3-Jan-2005 18:43

Hostile Natural Gamma Ray Sonde Wellsite Calibration
Detector 2 Check

Phase	Na 511 Peak Loc	Value	Phase	Na 511 Peak Res %	Value	Phase	High Voltage V	Value
Before		40.57	Before		15.56	Before		1154
	37.50 (Minimum) 40.00 (Nominal) 42.50 (Maximum)			12.00 (Minimum) 15.50 (Nominal) 19.00 (Maximum)			900.0 (Minimum) 1150 (Nominal) 1600 (Maximum)	
Phase	**Na 1785 Peak Loc**	**Value**	**Phase**	**Na 1785 Peak Res %**	**Value**	**Phase**	**Temperature DEGF**	**Value**
Before		144.3	Before		7.872	Before		75.49
	135.0 (Minimum) 142.6 (Nominal) 150.3 (Maximum)			7.000 (Minimum) 8.500 (Nominal) 11.00 (Maximum)			-20.00 (Minimum) 59.90 (Nominal) 140.0 (Maximum)	
Phase	**Na Count Rate CPS**	**Value**						
Before		41.40						
	10.00 (Minimum) 45.00 (Nominal) 100.0 (Maximum)							

Before: 3-Jan-2005 18:43

Hostile Natural Gamma Ray Sonde Wellsite Calibration
Ratio Of Detector 1 To Detector 2

Phase	Coincidence Count Rate Ratio	Value
Before		0.9812
	0.9500 (Minimum) 1.000 (Nominal) 1.050 (Maximum)	

Before: 3-Jan-2005 18:43

Company:	**DIVERSIFIED DRILLING**
Well:	**CALOOSAHATCHEE ASR TEST CORE (CCBRY-1)**
Field:	**BERRY GROVE**
County:	**HENDRY**
State:	**FLORIDA**

Schlumberger

SPECTRAL GAMMA RAY