

Company: University Of Utah

Well: FORGE 78B-32

Field: None

County: Beaver State: Utah

Platform Express
Compensated Neutron

County: Beaver						
Field: None						
Location: Lat: 38.500171, Long: -112.88221						
Well: FORGE 78B-32						
Company: University Of Utah						
Compensated Neutron						
				Location:		
				Lat: 38.500171, Long: -112.88221	Elev.: K.B. 5565.50 ft G.L. 5536.00 ft D.F.	
				Permanent Datum:	Ground Level	Elev.: 5536.00 f
				Log Measured From:	Kelly Bushing	29.50 ft
				Drilling Measured From:	Kelly Bushing	above Perm.Datum
				API Serial No.	Section:	Longitude: 112° 52' 55.956" W
				NRC 42-00090-03		Latitude: 38° 30' 0.616" N

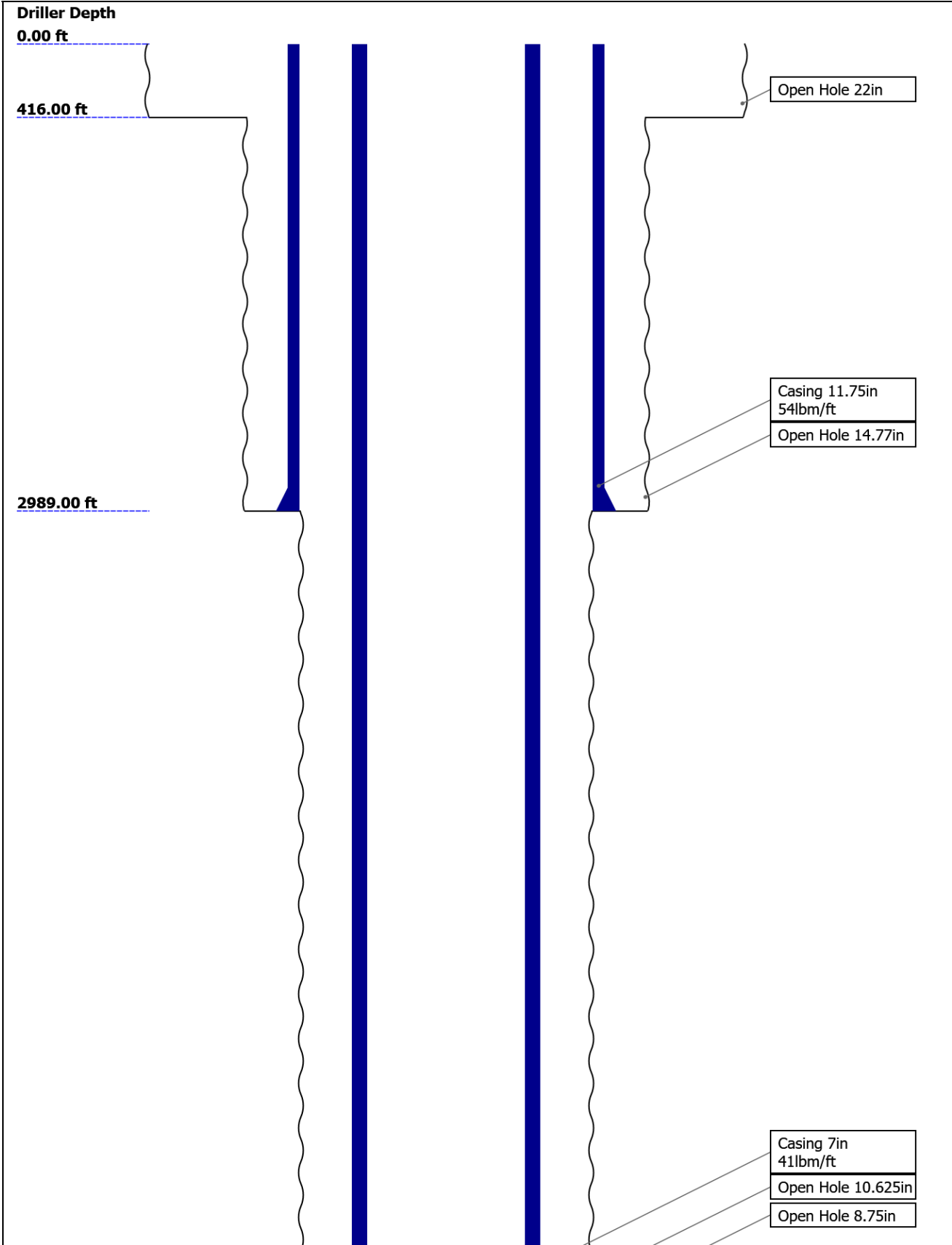
Disclaimer

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Well Sketch



1B: Toolstring				1B: Remarks	
Equip name	Length		MP name	Offset	Tool was run as per tool sketch All logging intervals as per client request
LEH-MT	92.55				
LEH-MT					
			Mud Tem perature	90.61	
AH-234	89.4				
QTGC-B	88.21				
UDFH-PL					
STGC-GR					
STGC-ACC					
Z:7					
STGC-B:81					
21			GR	84.87	
			STGC	0.00	
			Accelerometer	0.00	
QILE-A	77.54				

QCNT 69.9
UDFH-PAT
NPV-S
QCNC-A:2
NSR-L:4545

CNTM 63.94

CNL Porosity 60.54

AH-238[2] 57.98
]

AH-238[1] 55.98
]

QSLT-B:80 53.98
22
UDFH-PA
QSTC-BB:8
02
QSAS-BB:8
022
UDFH-PP
QSLC-BA:8
002

CBL_UP 46.32

VDL_UP 45.32

RX_ARRAY 43.82

VDL_LOW 42.32

DT_DDB 41.82

HC
CBL_LOW 41.32

QAIT-A:430.97
UDFH-PLB
SAIC-A:94
QAIS-A:43
AQRM



Lengths are in ft

Maximum Outer Diameter = 14.625 in

Line: Sensor Location, Value: Gating Offset

All measurements are relative to TOOL_ZERO

Depth Summary

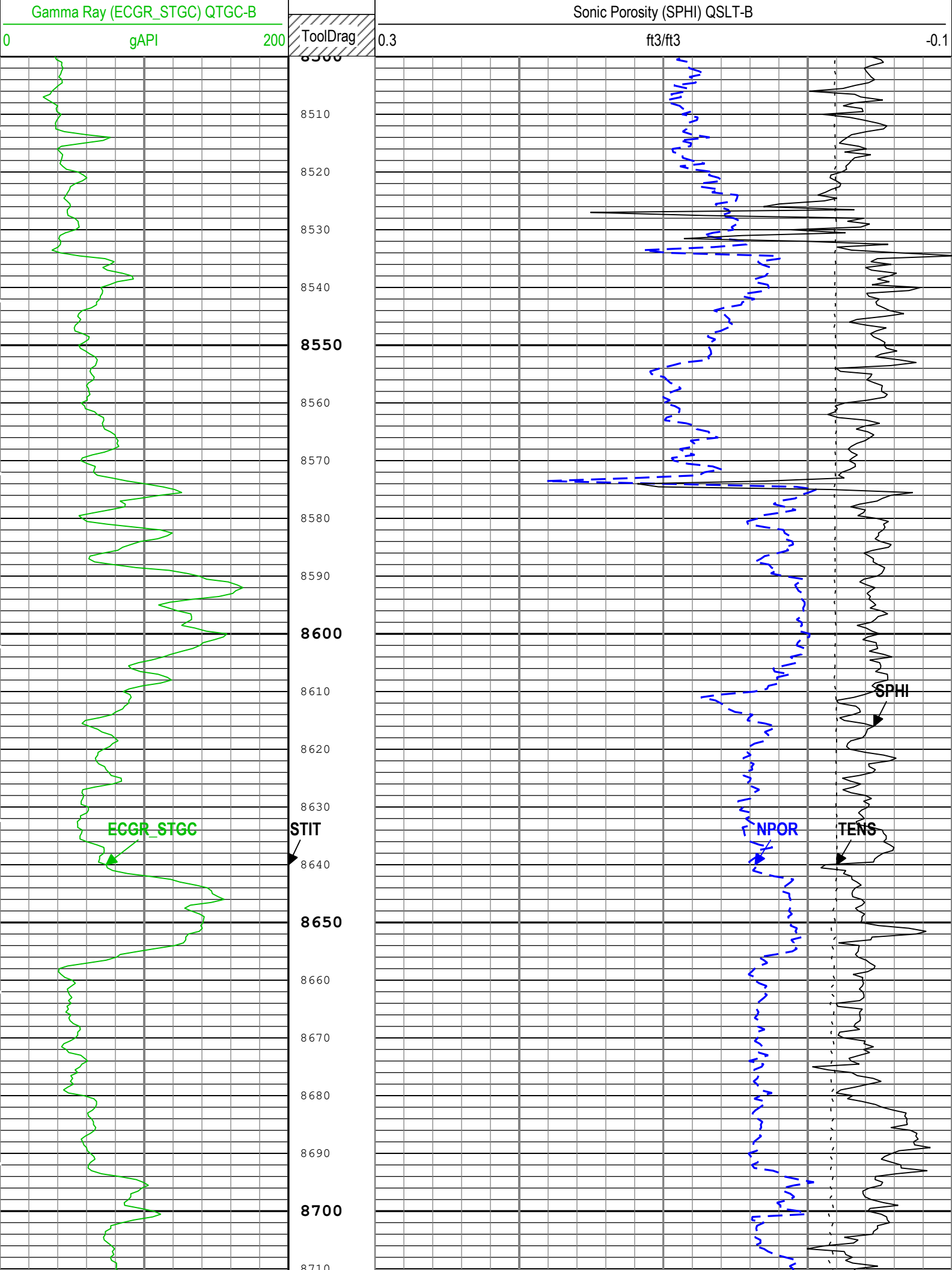
	1B		
--	----	--	--

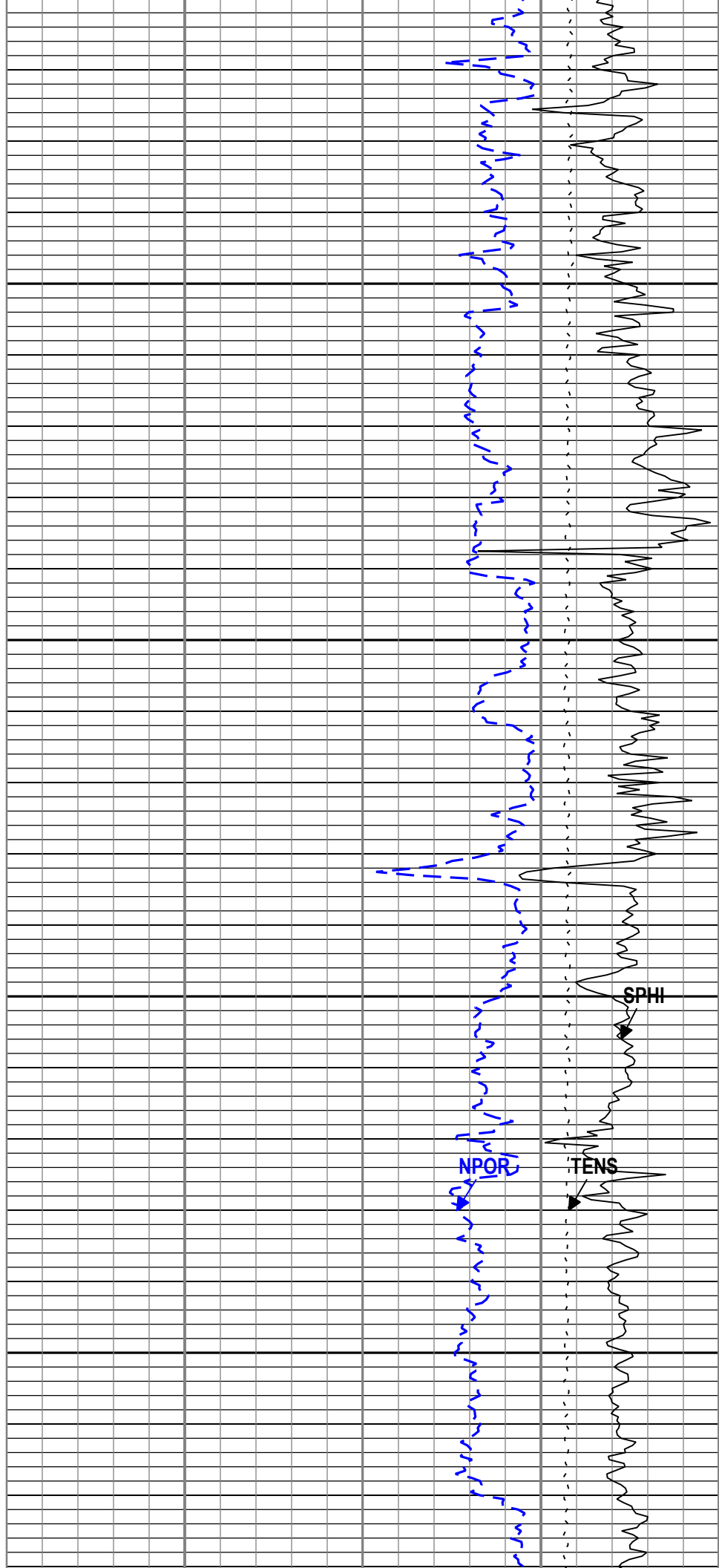
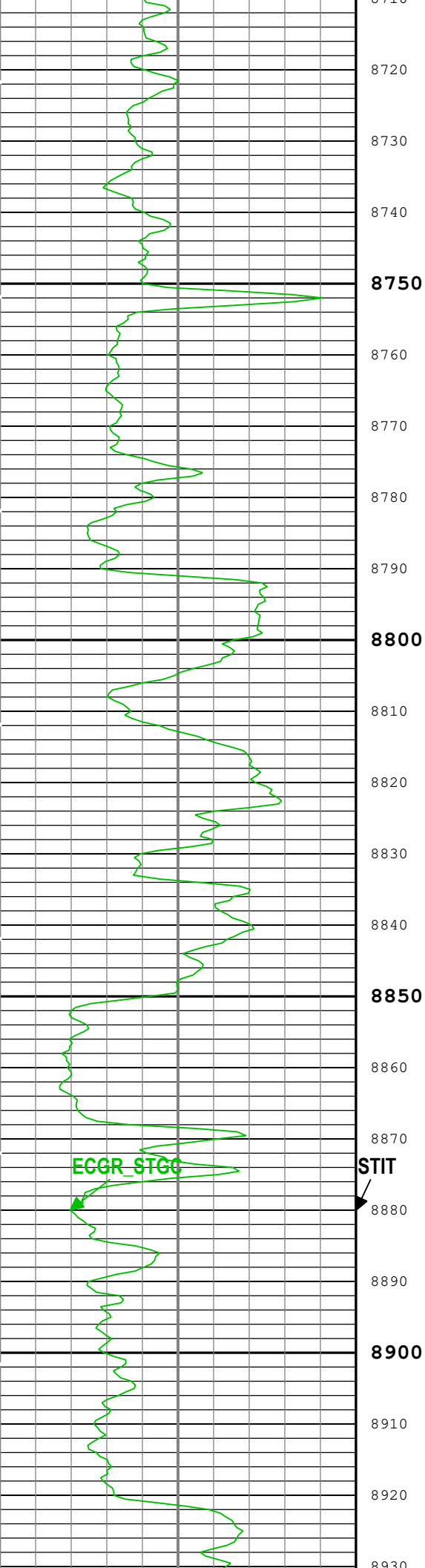
Depth Measuring Device

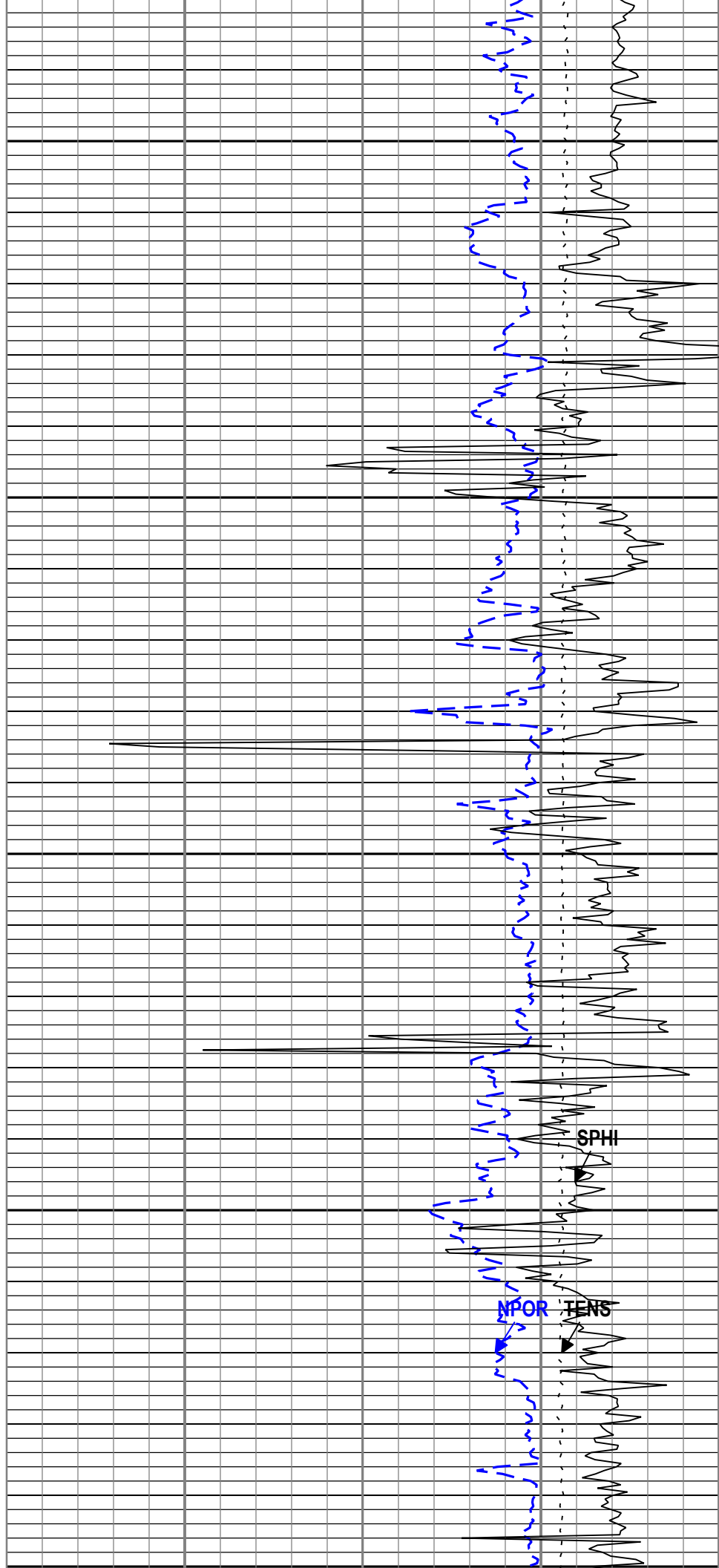
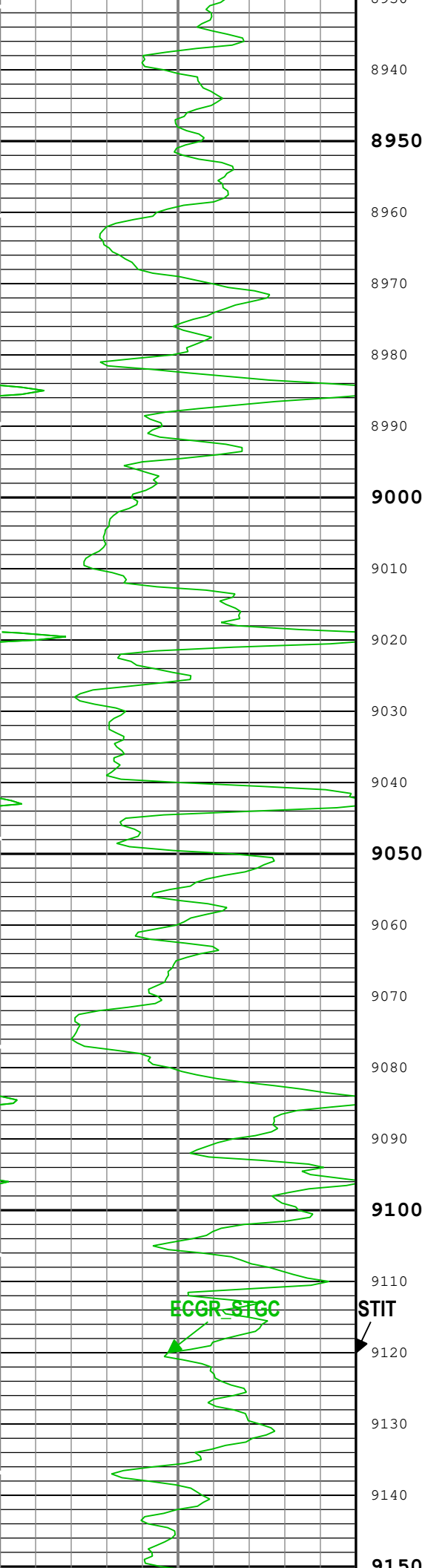
Type	IDW-JA		
Serial Number	6160		
Calibration Date	30-Sep-2020		
Calibrator Serial Number	57		
Calibration Cable Type	7-46 AXS		
Wheel Correction 1	-9		
Wheel Correction 2	-7		

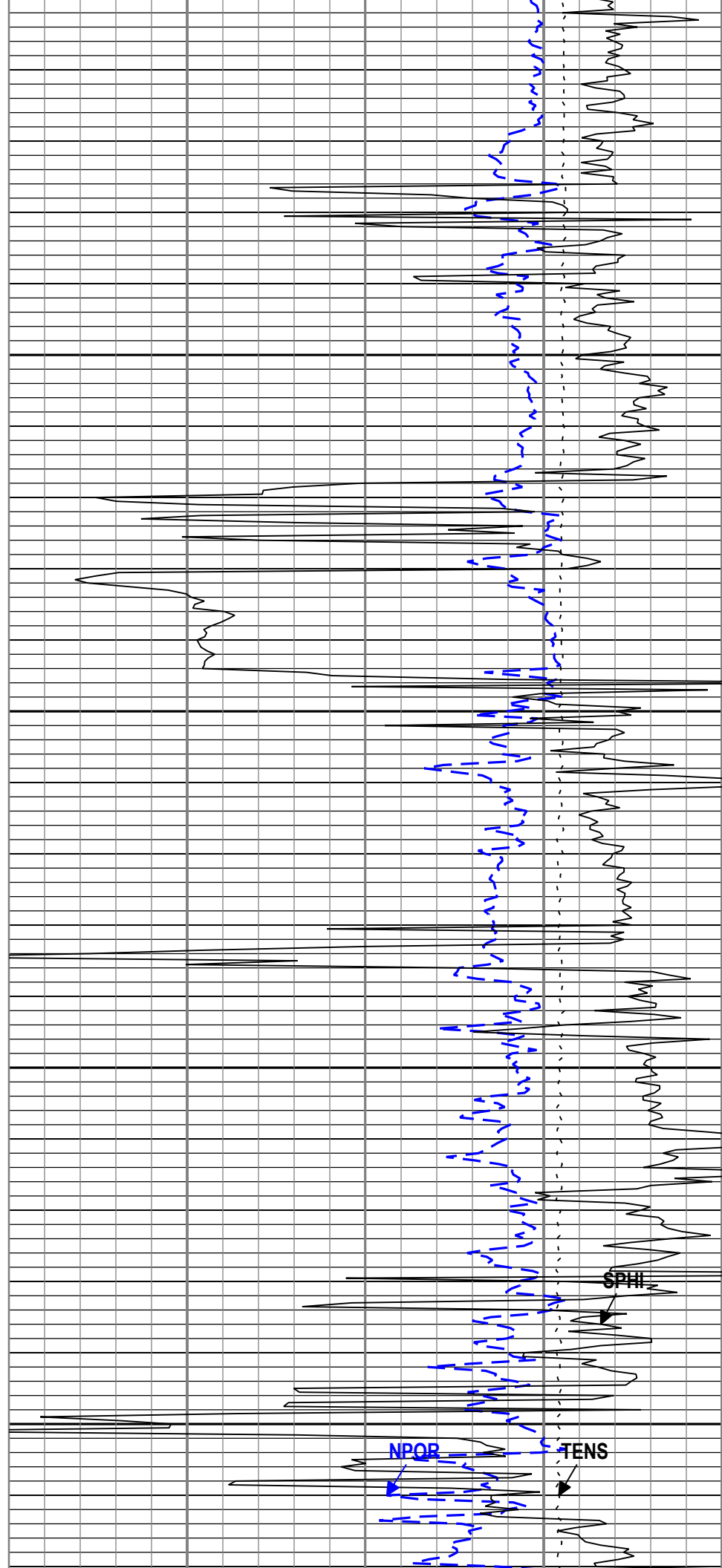
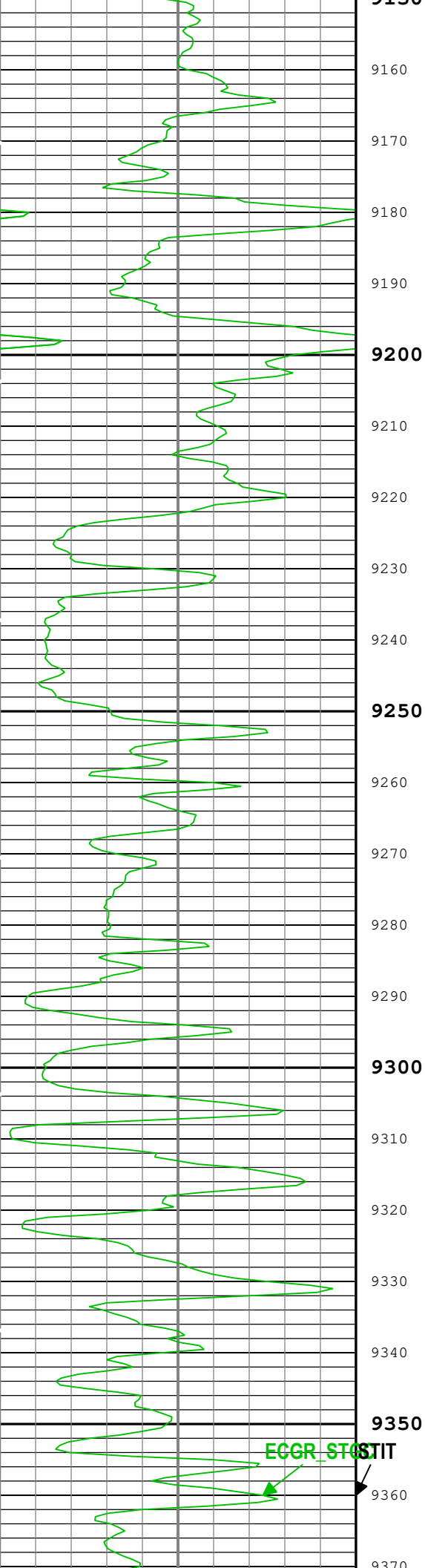
Tension Device

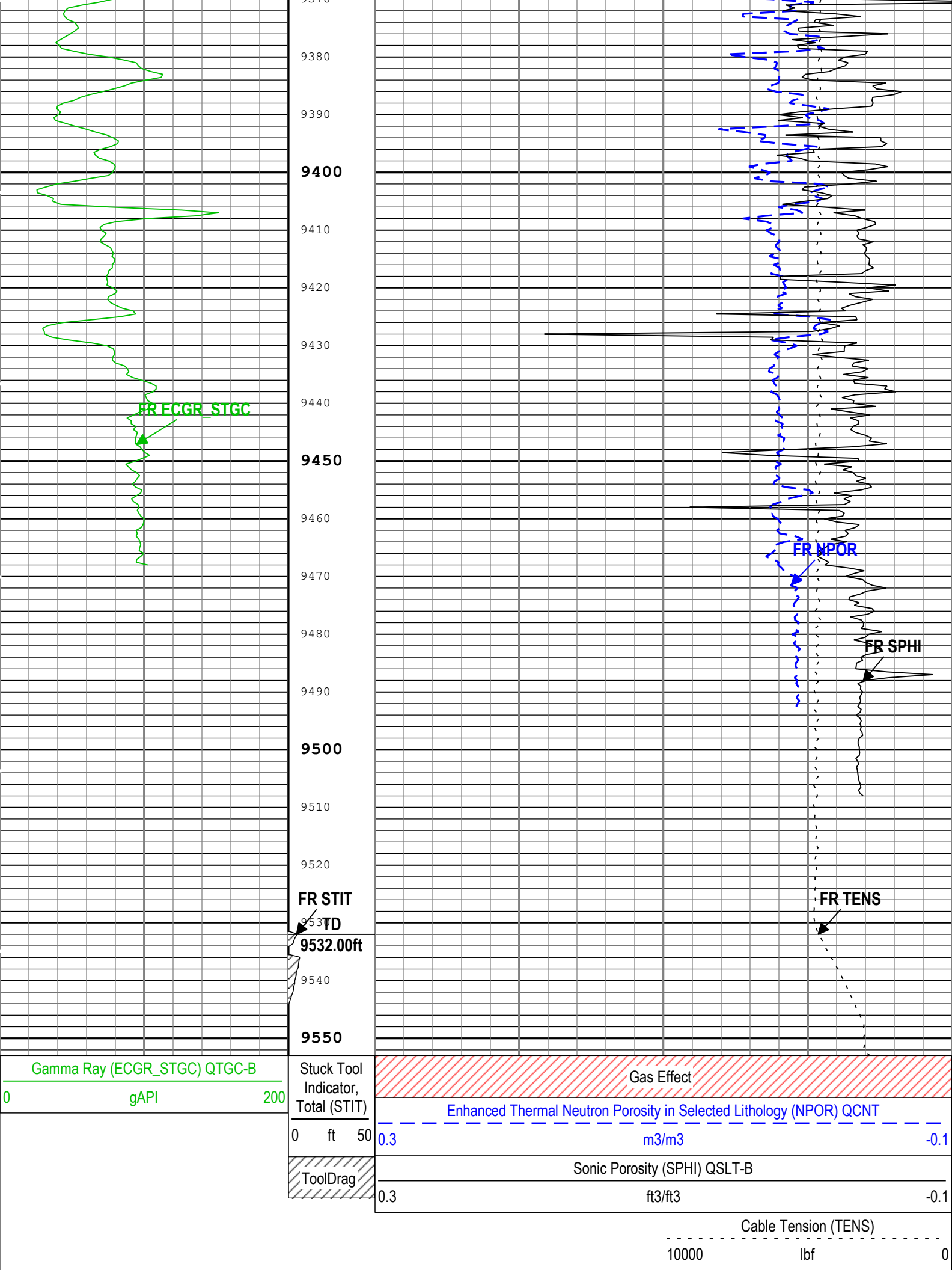
Type	CMTD-B/A								
Serial Number	946								
Calibration Date	02-Jun-2020								
Calibrator Serial Number	78165A								
Number of Calibration Points	10								
Calibration Root Mean Square Error	8								
Calibration Peak Error	12								
Logging Cable									
Type	7-46A-XS								
Serial Number	1219083								
Length	18000.00 ft								
Conveyance Type	Wireline								
Rig Type	Land								
1B:Depth Control Parameters		Depth Control Remarks							
Log Sequence	First Log In the Well	Schlumberger depth control procedures followed							
Rig Up Length At Surface		IDW used as primary depth control system							
Rig Up Length At Bottom		Z-Chart used as secondary depth control system							
Rig Up Length Correction									
Stretch Correction									
Tool Zero Check At Surface									
1B									
5" Porosity									
Pass Summary									
Run Name	Pass Objective	Direction	Top	Bottom	Start	Stop	DSC Mode	Depth Shift	Include Parallel Data
1B	Log[4]:Up	Up	7538.68 ft	9553.06 ft	30-Jul-2021 1:59:13 AM	30-Jul-2021 2:41:25 AM	ON	22.92 ft	Yes
All depths are referenced to toolstring zero									
Log	Company:University Of Utah Well:FORGE 78B-32 1B: Log[4]:Up:S035								
Description: HGNS standard resolution porosities for Platform Express Format: Log (Porosity-5) Index Scale: 5 in per 100 ft Index Unit: ft Index Type: Measured Depth Creation Date: 30-Jul-2021 07:08:44									
Channel	Source	Sampling							
GR	QTGC-B:QTGC-B:STGC-B	6in							
NPOR	QCNT:QCNT:QCNC-A	6in							
SPHI	QSLT-B:QSAS-BB:QSAS-BB	6in							
STIT	DepthCorrection	6in							
TENS	WLWorkflow	6in							
TIME_1900	WLWorkflow	0.1in							
TIME_1900 - Time Marked every 60.00 (s)									
							Cable Tension (TENS)		
							10000	lbf	0
				Gas Effect					
				Enhanced Thermal Neutron Porosity in Selected Lithology (NPOR) QCNT					
				0.3	m3/m3				-0.1
				0	ft	50			
				Stuck Tool Indicator, Total (STIT)					











Channel Processing Parameters

1B: Parameters

Parameter	Description	Tool	Value	Unit
BARI(ISSBAR)	Barite Mud Presence Flag	Borehole	No	
BHS	Borehole Status (Open or Cased Hole)	Borehole	Open	
BHT	Bottom Hole Temperature	Borehole	419	degF
BS	Bit Size	WLSESSION	Depth Zoned	in
BSAL	Borehole Salinity	Borehole	700	ppm
CBLO	Casing Bottom (Logger)	WLSESSION	8530	ft
CDTS	Correction for Delta-T Shale, Empirical	Borehole	100	us/ft
DC_MODE	Depth Correction Mode	DepthCorrection	Real-time	
DFD	Drilling Fluid Density	Borehole	8.3	lbm/gal
DFT_CATEGORY	Drilling Fluid Type	Borehole	Water	
DTCS	Slim Sonic Compressional Delta-T Source for DTCO Channel	QSLT-B	DT	
DTF	Delta-T Fluid	Borehole	189	us/ft
DTM	Delta-T Matrix	Borehole	56	us/ft
FSAL	Formation Salinity	Borehole	0	ppm
GCSE_DOWN_PASS	Generalized Caliper Selection for WL Log Down Passes	Borehole	BS(RT)	
GCSE_UP_PASS	Generalized Caliper Selection for WL Log Up Passes	Borehole	BS(RT)	
GTSE	Generalized Temperature Selection, from Measured or Computed Temperature	Borehole	MTEM	
MATR	Rock Matrix for Neutron Porosity Corrections	Borehole	LIMESTONE	
MFST	Mud Filtrate Sample Temperature	Borehole	62	degF
MST	Mud Sample Temperature	Borehole	62	degF
RMFS	Resistivity of Mud Filtrate Sample	Borehole	4.42	ohm.m
RMS	Resistivity of Mud Sample	Borehole	5.2	ohm.m
SOCN	Standoff Distance of the Gamma Ray Tool	QTGC-B	0	in
SPFS	Sonic Porosity Formula	Borehole	Raymer-Hunt	
SPM_LT	STC Processing Mode - Lower Transmitter	QSLT-B	Receiver	
SPM_UT	STC Processing Mode - Upper Transmitter	QSLT-B	Receiver	
TD	Total Measured Depth	Borehole	9532	ft
TPOS_STGC	Tool Position: Centered or Eccentered	QTGC-B	Eccentered	

Depth Zone Parameters

Parameter	Value	Start (ft)	Stop (ft)
BS	10.625	8500	8514
BS	8.75	8514	8530
BS	5.75	8530	9532
All depth are actual.			

Tool Control Parameters

1B: Parameters

Parameter	Description	Tool	Value	Unit
DDE1	Digitizing Delay 1	QSLT-B	40	us
DDE2	Digitizing Delay 2	QSLT-B	40	us
GAI1	SSLT Manual Gain 1	QSLT-B	High	
GAI2	SSLT Manual Gain 2	QSLT-B	High	
MAX LOG SPEED	Toolstring Maximum Logging Speed	WLSESSION	1800	ft/h

MODE	SSLT Firing Mode	QSLT-B	DT_BHC	
RATE	Firing Rate	QSLT-B	8.93	Hz
VDM	SSLT VDL Display Mode	QSLT-B	NONE	

1B

5" Porosity

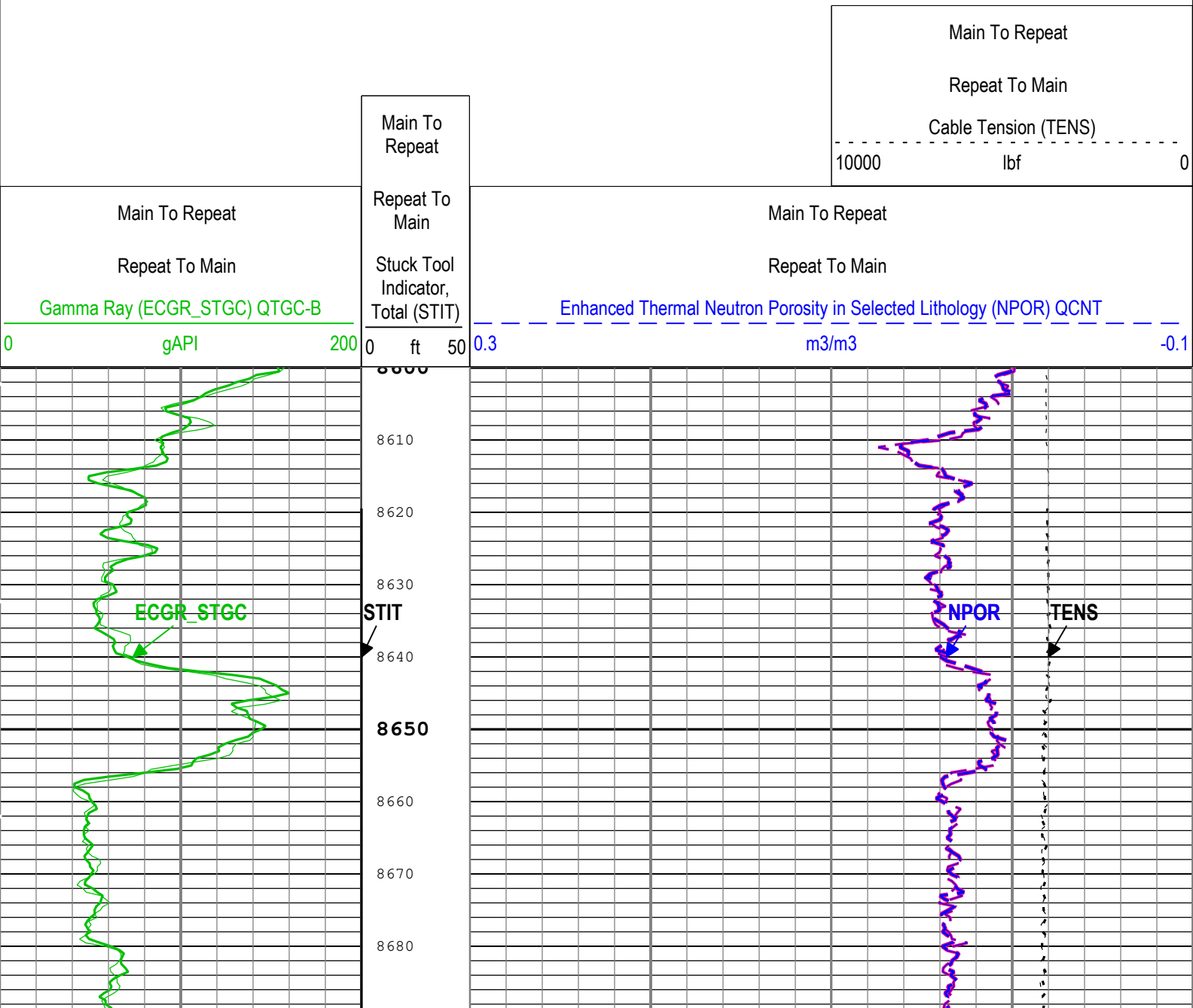
Pass Summary									
Run Name	Pass Objective	Direction	Top	Bottom	Start	Stop	DSC Mode	Depth Shift	Include Parallel Data
1B	Log[2]:Up	Up	8619.16 ft	9106.98 ft	30-Jul-2021 1:43:32 AM	30-Jul-2021 1:56:03 AM	ON	20.83 ft	Yes
1B	Log[4]:Up	Up	7538.68 ft	9553.06 ft	30-Jul-2021 1:59:13 AM	30-Jul-2021 2:41:25 AM	ON	22.92 ft	Yes

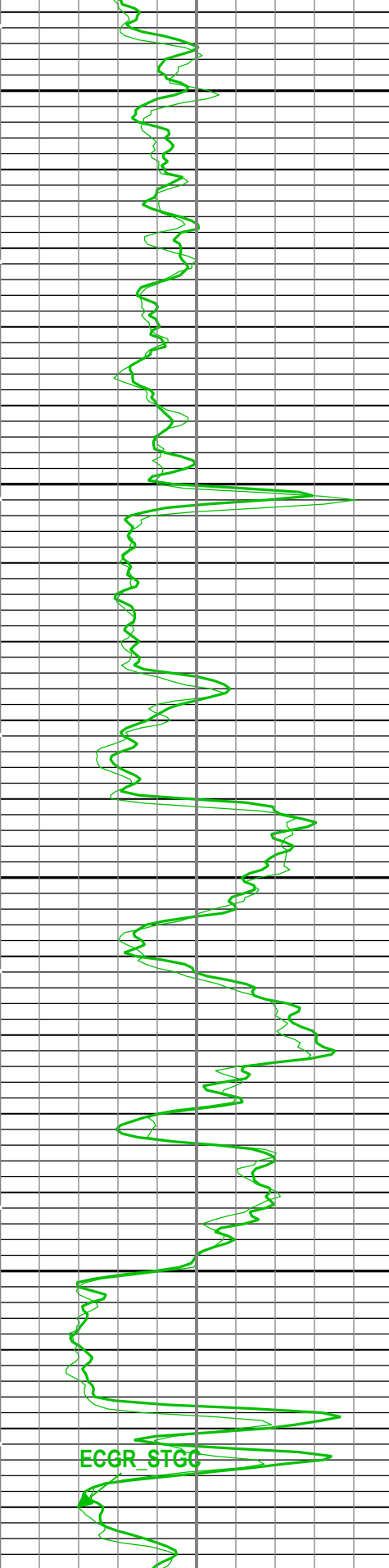
All depths are referenced to toolstring zero

Log	Company:University Of Utah	Well:FORGE 78B-32
		1B: Log[4]:Up:S035

Description: HGNS standard resolution porosities for Platform Express Format: Log (Porosity-5 RA) Index Scale: 5 in per 100 ft Index Unit: ft Index Type: Measured Depth Creation Date: 30-Jul-2021 07:08:46

TIME_1900 - Time Marked every 60.00 (s)



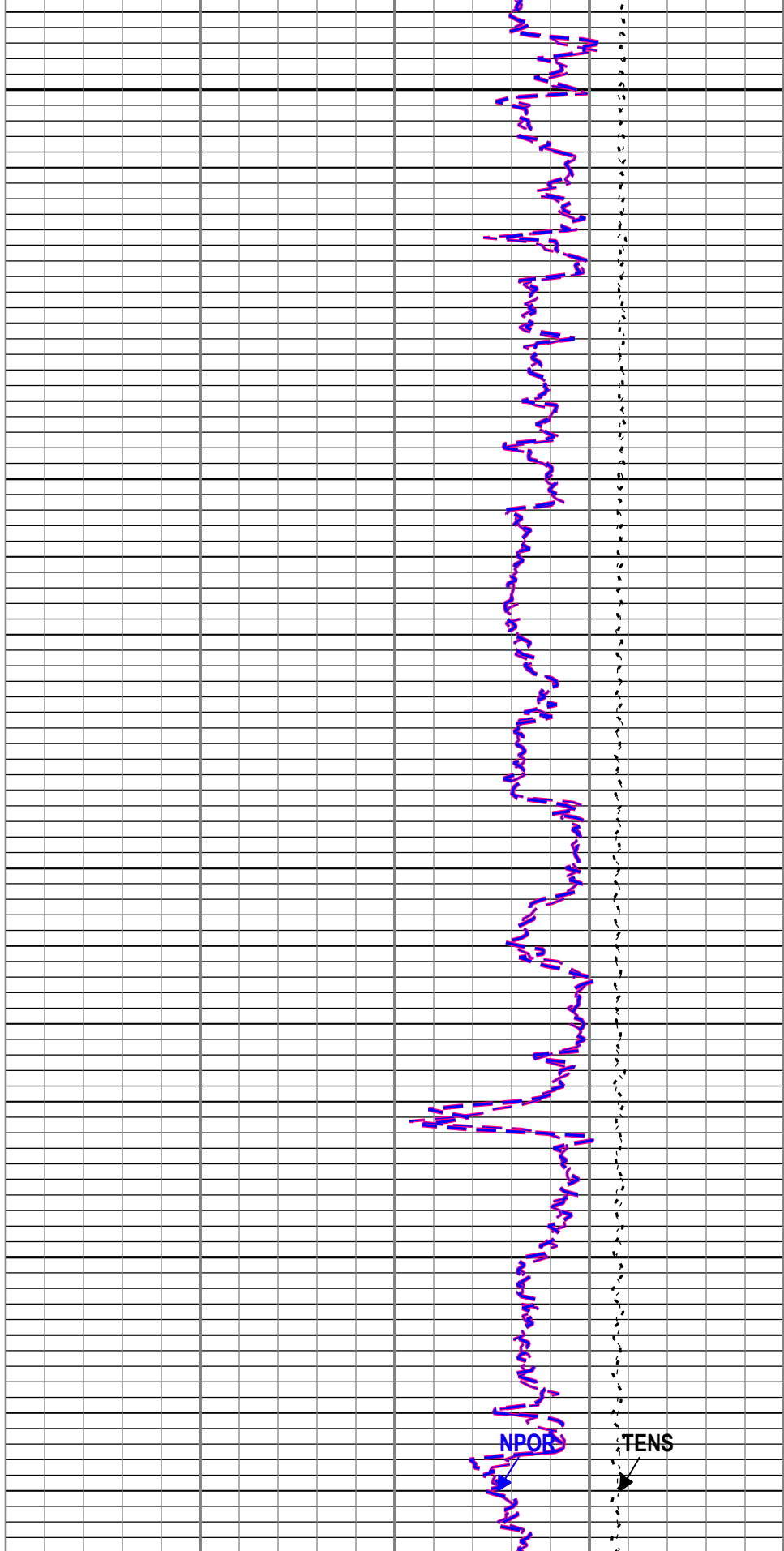


8690
8700
8710
8720
8730
8740
8750
8760
8770
8780
8790
8800
8810
8820
8830
8840
8850
8860
8870
8880

STIT

Main To Repeat
Repeat To Main
Repeat To Main

Gamma Ray (ECGR_STGC) QTGC-B



TENS

Main To Repeat
Repeat To Main

Enhanced Thermal Neutron Porosity in Selected Lithology (NPOR) QCNT

0	gAPI	200	0.3	m3/m3	-0.1		
			Stuck Tool Indicator, Total (STIT)				
			0 ft 50				
			Main To Repeat				
			Repeat To Main				
			Cable Tension (TENS)				

			10000	lbf	0		

TIME_1900 - Time Marked every 60.00 (s)

Description: HGNS standard resolution porosities for Platform Express Format: Log (Porosity-5 RA) Index Scale: 5 in per 100 ft Index Unit: ft Index Type: Measured Depth Creation Date: 30-Jul-2021 07:08:46

Channel Processing Parameters

1B: Parameters

Parameter	Description	Tool	Value	Unit
BARI(ISSBAR)	Barite Mud Presence Flag	Borehole	No	
BHS	Borehole Status (Open or Cased Hole)	Borehole	Open	
BHT	Bottom Hole Temperature	Borehole	419	degF
BS	Bit Size	WLSESSION	5.75	in
BSAL	Borehole Salinity	Borehole	700	ppm
CBLO	Casing Bottom (Logger)	WLSESSION	8530	ft
DC_MODE	Depth Correction Mode	DepthCorrection	Real-time	
DFD	Drilling Fluid Density	Borehole	8.3	lbm/gal
DFT_CATEGORY	Drilling Fluid Type	Borehole	Water	
FSAL	Formation Salinity	Borehole	0	ppm
GCSE_DOWN_PASS	Generalized Caliper Selection for WL Log Down Passes	Borehole	BS(RT)	
GCSE_UP_PASS	Generalized Caliper Selection for WL Log Up Passes	Borehole	BS(RT)	
GTSE	Generalized Temperature Selection, from Measured or Computed Temperature	Borehole	MTEM	
MATR	Rock Matrix for Neutron Porosity Corrections	Borehole	LIMESTONE	
MFST	Mud Filtrate Sample Temperature	Borehole	62	degF
MST	Mud Sample Temperature	Borehole	62	degF
RMFS	Resistivity of Mud Filtrate Sample	Borehole	4.42	ohm.m
RMS	Resistivity of Mud Sample	Borehole	5.2	ohm.m
SOCN	Standoff Distance of the Gamma Ray Tool	QTGC-B	0	in
TD	Total Measured Depth	Borehole	9532	ft
TPOS_STGC	Tool Position: Centered or Eccentered	QTGC-B	Eccentered	

Tool Control Parameters

1B: Parameters

Parameter	Description	Tool	Value	Unit
MAX_LOG_SPEED	Toolstring Maximum Logging Speed	WLSESSION	1800	ft/h

Calibration Report

QAIT-A (Slim Hostile Array Induction Tool - A) Calibration - Run 1B

Primary Equipment :			
	Slim Hot Array Induction Sonde	QAIS-A	43
Auxiliary Equipment :			
	QAIT Rm/SP Bottom Nose	AQRM	
	Slim Array Induction Electronics Cartridge	SAIC-A	94

AIT Sonde Calibration - Test Loop Gain

Master (EEPROM): 03:47:46 11-Mar-2021

Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit		
-------------	------	-------	---------	-----------	--------	------------	--	--

Test Loop Gain - 0		Master	1.000	0.950	1.012	1.050	<div><div></div><div></div><div></div><div></div><div></div></div>
Test Loop Phase - 0	deg	Master	0	-3.000	0.326	3.000	<div><div></div><div></div><div></div><div></div><div></div></div>
Test Loop Gain - 1		Master	1.000	0.950	1.011	1.050	<div><div></div><div></div><div></div><div></div><div></div></div>
Test Loop Phase - 1	deg	Master	0	-3.000	0.454	3.000	<div><div></div><div></div><div></div><div></div><div></div></div>
Test Loop Gain - 2		Master	1.000	0.950	1.016	1.050	<div><div></div><div></div><div></div><div></div><div></div></div>
Test Loop Phase - 2	deg	Master	0	-3.000	0.012	3.000	<div><div></div><div></div><div></div><div></div><div></div></div>
Test Loop Gain - 3		Master	1.000	0.950	1.011	1.050	<div><div></div><div></div><div></div><div></div><div></div></div>
Test Loop Phase - 3	deg	Master	0	-3.000	0.112	3.000	<div><div></div><div></div><div></div><div></div><div></div></div>
Test Loop Gain - 4		Master	1.000	0.950	1.008	1.050	<div><div></div><div></div><div></div><div></div><div></div></div>
Test Loop Phase - 4	deg	Master	0	-3.000	0.052	3.000	<div><div></div><div></div><div></div><div></div><div></div></div>
Test Loop Gain - 5		Master	1.000	0.950	1.017	1.050	<div><div></div><div></div><div></div><div></div><div></div></div>
Test Loop Phase - 5	deg	Master	0	-3.000	0.268	3.000	<div><div></div><div></div><div></div><div></div><div></div></div>
Test Loop Gain - 6		Master	1.000	0.950	1.025	1.050	<div><div></div><div></div><div></div><div></div><div></div></div>
Test Loop Phase - 6	deg	Master	0	-3.000	0.262	3.000	<div><div></div><div></div><div></div><div></div><div></div></div>
Test Loop Gain - 7		Master	1.000	0.950	1.023	1.050	<div><div></div><div></div><div></div><div></div><div></div></div>
Test Loop Phase - 7	deg	Master	0	-3.000	-0.272	3.000	<div><div></div><div></div><div></div><div></div><div></div></div>

AIT Sonde Calibration - Sonde Error Correction

Master (EEPROM):		03:47:46 11-Mar-2021					
Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit	<div><div></div><div></div><div></div><div></div><div></div></div>
Sonde Error Correction Real - 0	mS/m	Master	-----	-1166.000	-535.925	-216.000	<div><div></div><div></div><div></div><div></div><div></div></div>
Sonde Error Correction Quad - 0		Master	-----	-2700.000	729.997	2700.000	<div><div></div><div></div><div></div><div></div><div></div></div>
Sonde Error Correction Real - 1	mS/m	Master	-----	187.000	280.733	377.000	<div><div></div><div></div><div></div><div></div><div></div></div>
Sonde Error Correction Quad - 1		Master	-----	-625.000	139.282	625.000	<div><div></div><div></div><div></div><div></div><div></div></div>
Sonde Error Correction Real - 2	mS/m	Master	-----	24.000	93.836	174.300	<div><div></div><div></div><div></div><div></div><div></div></div>
Sonde Error Correction Quad - 2		Master	-----	-350.000	16.560	350.000	<div><div></div><div></div><div></div><div></div><div></div></div>
Sonde Error Correction Real - 3	mS/m	Master	-----	5.000	55.223	95.000	<div><div></div><div></div><div></div><div></div><div></div></div>
Sonde Error Correction Quad - 3		Master	-----	-250.000	102.589	250.000	<div><div></div><div></div><div></div><div></div><div></div></div>
Sonde Error Correction Real - 4	mS/m	Master	-----	-2.000	19.493	40.000	<div><div></div><div></div><div></div><div></div><div></div></div>
Sonde Error Correction Quad - 4		Master	-----	-63.000	11.885	63.000	<div><div></div><div></div><div></div><div></div><div></div></div>
Sonde Error Correction Real - 5	mS/m	Master	-----	-9.000	3.589	15.000	<div><div></div><div></div><div></div><div></div><div></div></div>
Sonde Error Correction Quad - 5		Master	-----	-50.000	13.356	50.000	<div><div></div><div></div><div></div><div></div><div></div></div>
Sonde Error Correction Real - 6	mS/m	Master	-----	-2.000	3.067	10.000	<div><div></div><div></div><div></div><div></div><div></div></div>
Sonde Error Correction Quad - 6		Master	-----	-30.000	-11.403	30.000	<div><div></div><div></div><div></div><div></div><div></div></div>
Sonde Error Correction Real - 7	mS/m	Master	-----	-5.000	-0.098	5.000	<div><div></div><div></div><div></div><div></div><div></div></div>
Sonde Error Correction Quad - 7		Master	-----	-30.000	-1.876	30.000	<div><div></div><div></div><div></div><div></div><div></div></div>

AIT Mud Calibration - Mud Calibration Gain

Master (EEPROM):		03:47:46 11-Mar-2021					
Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit	<div><div></div><div></div><div></div><div></div><div></div></div>
Coarse Gain		Master	1.000	0.800	1.038	1.200	<div><div></div><div></div><div></div><div></div><div></div></div>
Fine Gain		Master	1.000	0.800	1.039	1.200	<div><div></div><div></div><div></div><div></div><div></div></div>

AIT Electronics Check - Thru Calibration Check

Master (EEPROM):		03:47:46 11-Mar-2021		Before (Measured):		01:05:49 30-Jul-2021		After:	
Measurement		Unit	Phase	Nominal	Low Limit	Actual	High Limit	<div><div></div><div></div><div></div><div></div><div></div></div>	
Thru Cal Mag - 0	V	Master	----	0.330	0.555	0.770	<div><div></div><div></div><div></div><div></div><div></div></div>		
		Before	----	0.330	0.553	0.770	<div><div></div><div></div><div></div><div></div><div></div></div>		
		After	----	----	----	----	<div><div></div><div></div><div></div><div></div><div></div></div>		
		Before-Master	----	----	-0.002	----	<div><div></div><div></div><div></div><div></div><div></div></div>		
		After-Before	----	----	----	----	<div><div></div><div></div><div></div><div></div><div></div></div>		
Thru Cal Phase - 0	deg	Master	----	137.000	-135.247	-103.000	<div><div></div><div></div><div></div><div></div><div></div></div>		
		Before	----	137.000	-143.163	-103.000	<div><div></div><div></div><div></div><div></div><div></div></div>		
		After	----	----	----	----	<div><div></div><div></div><div></div><div></div><div></div></div>		
		Before-Master	----	----	-7.916	----	<div><div></div><div></div><div></div><div></div><div></div></div>		
		After-Before	----	----	----	----	<div><div></div><div></div><div></div><div></div><div></div></div>		
Thru Cal Mag - 1	V	Master	----	0.594	0.992	1.386	<div><div></div><div></div><div></div><div></div><div></div></div>		
		Before	----	0.594	0.988	1.386	<div><div></div><div></div><div></div><div></div><div></div></div>		
		After	----	----	----	----	<div><div></div><div></div><div></div><div></div><div></div></div>		
		Before-Master	----	----	-0.004	----	<div><div></div><div></div><div></div><div></div><div></div></div>		
		After-Before	----	----	----	----	<div><div></div><div></div><div></div><div></div><div></div></div>		
Thru Cal Phase - 1	deg	Master	----	136.000	-136.315	-104.000	<div><div></div><div></div><div></div><div></div><div></div></div>		
		Before	----	136.000	-144.242	-104.000	<div><div></div><div></div><div></div><div></div><div></div></div>		
		After	----	----	----	----	<div><div></div><div></div><div></div><div></div><div></div></div>		

		Before-Master After-Before	----- -----	----- -----	-7.927 -----	----- -----	<div><div></div><div></div></div> <div><div></div><div></div></div>
Thru Cal Mag - 2	V	Master Before After Before-Master After-Before	----- ----- ----- ----- -----	0.312 0.312 ----- ----- -----	0.521 0.518 ----- -0.003 -----	0.728 0.728 ----- ----- -----	<div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div>
Thru Cal Phase - 2	deg	Master Before After Before-Master After-Before	----- ----- ----- ----- -----	132.000 132.000 ----- ----- -----	-141.557 -149.513 ----- -7.956 -----	-108.000 -108.000 ----- ----- -----	<div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div>
Thru Cal Mag - 3	V	Master Before After Before-Master After-Before	----- ----- ----- ----- -----	0.384 0.384 ----- ----- -----	0.633 0.629 ----- -0.004 -----	0.896 0.896 ----- ----- -----	<div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div>
Thru Cal Phase - 3	deg	Master Before After Before-Master After-Before	----- ----- ----- ----- -----	131.000 131.000 ----- ----- -----	-143.431 -151.402 ----- -7.971 -----	-109.000 -109.000 ----- ----- -----	<div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div>
Thru Cal Mag - 4	V	Master Before After Before-Master After-Before	----- ----- ----- ----- -----	0.726 0.726 ----- ----- -----	1.162 1.155 ----- -0.007 -----	1.694 1.694 ----- ----- -----	<div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div>
Thru Cal Phase - 4	deg	Master Before After Before-Master After-Before	----- ----- ----- ----- -----	125.000 125.000 ----- ----- -----	-152.689 -160.734 ----- -8.045 -----	-115.000 -115.000 ----- ----- -----	<div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div>
Thru Cal Mag - 5	V	Master Before After Before-Master After-Before	----- ----- ----- ----- -----	1.068 1.068 ----- ----- -----	1.683 1.673 ----- -0.010 -----	2.492 2.492 ----- ----- -----	<div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div>
Thru Cal Phase - 5	deg	Master Before After Before-Master After-Before	----- ----- ----- ----- -----	122.000 122.000 ----- ----- -----	-154.900 -162.982 ----- -8.082 -----	-118.000 -118.000 ----- ----- -----	<div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div>
Thru Cal Mag - 6	V	Master Before After Before-Master After-Before	----- ----- ----- ----- -----	1.170 1.170 ----- ----- -----	1.816 1.807 ----- -0.009 -----	2.730 2.730 ----- ----- -----	<div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div>
Thru Cal Phase - 6	deg	Master Before After Before-Master After-Before	----- ----- ----- ----- -----	121.000 121.000 ----- ----- -----	-156.659 -164.785 ----- -8.126 -----	-119.000 -119.000 ----- ----- -----	<div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div>
Thru Cal Mag - 7	V	Master Before After Before-Master After-Before	----- ----- ----- ----- -----	0.852 0.852 ----- ----- -----	1.330 1.318 ----- -0.012 -----	1.988 1.988 ----- ----- -----	<div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div>
Thru Cal Phase - 7	deg	Master Before After Before-Master After-Before	----- ----- ----- ----- -----	115.000 115.000 ----- ----- -----	-156.577 -165.043 ----- -8.466 -----	-125.000 -125.000 ----- ----- -----	<div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div>
SPA Zero	mV	Master Before	----- -----	-50.000 -50.000	-0.138 -0.094	50.000 50.000	<div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div></div>

		Before		-50.000	-0.034	50.000	
		After	----	----	----	----	
		Before-Master	----	----	0.044	----	
		After-Before	----	----	----	----	
SPA Plus	mV	Master	----	941.000	990.201	1040.000	
		Before	----	941.000	990.888	1040.000	
		After	----	----	----	----	
		Before-Master	----	----	0.687	----	
		After-Before	----	----	----	----	
Temperature Zero	V	Master	----	-0.050	0.000	0.050	
		Before	----	-0.050	0.000	0.050	
		After	----	----	----	----	
		Before-Master	----	----	0.000	----	
		After-Before	----	----	----	----	
Temperature Plus	V	Master	----	0.870	0.917	0.960	
		Before	----	0.870	0.918	0.960	
		After	----	----	----	----	
		Before-Master	----	----	0.001	----	
		After-Before	----	----	----	----	

QSLT-B (SlimXtreme Sonic Logging Tool - B) Calibration - Run 1B

Primary Equipment :

SlimXtreme Sonic Array Sonde Segment - BB

QSAS-BB

8022

CBL Amplitude Normalization - CBL Accumulations

Master:

Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit		
Sonic Amplitude Upper Transmitter - Receiver 5 (SA_U5) - 0		Master	----	----	----	----		
Sonic Raw Amplitude Upper Transmitter - Receiver 1 (RA_U1) - 0	mV	Master	----	----	----	----		
Sonic Amplitude Lower Transmitter - Receiver 1 (SA_L1) - 0		Master	----	----	----	----		
Sonic Raw Amplitude Lower Transmitter - Receiver 5 (RA_L5) - 0	mV	Master	----	----	----	----		

CBL Amplitude Normalization - CBL/VDL Coefficients

Master*

Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit		
CBL Correction Factor for Upper Transmitter (CBCF_UT)		Master	0.500	----	NOT DONE	----		
CBL Correction Factor for Lower Transmitter (CBCF_LT)		Master	0.500	----	NOT DONE	----		
VDR Ratio between UT and LT for CBLB Mode (VDR)		Master	1.000	----	NOT DONE	----		

CBL Amplitude Free Pipe Adjustment - Free Pipe Measurements

Before:

Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit		
CBL Amplitude (CBLF) - 0	mV	Before	----	-----	-----	-----		
CBL Reference Amplitude (CBRA) - 0	mV	Before	----	-----	-----	-----		
Measurement Depth (DEPTH) - 0	ft	Before	----	-----	-----	-----		

CBL Amplitude Free Pipe Adjustment - CBL Amplitude Coefficients

Before:

Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit		
CBL Adjustment Factor (CBL_ADJUST_FACTOR)		Before	1.000	0.300	NOT DONE	3.000		
Depth of Before Calibration (BDEP)	ft	Before	----	----	NOT DONE	----		

QCNT (SlimExtreme Compensated Neutron Tool) Calibration - Run 1B

Primary Equipment :

Compensated Neutron Cartridge SlimXtreme

QCNC-A

2

Auxiliary Equipment :

Calibration Parameter :

Water Temperature

CNT Neutron Calibration - CNT Neutron Accumulations

Master (Measured):	20:46:51 17-Jul-2021	Before (Measured):	09:41:51 18-Jul-2021	After:			
Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit	
Near Zero Measurement	1/s	Master	----	0	0.668	5.000	
		Before	----	0	0.267	5.000	
		After	----	----	----	----	
		Before-Master	----	----	-0.401	----	
		After-Before	----	----	----	----	
Far Zero Measurement	1/s	Master	----	0	1.636	5.000	
		Before	----	0	0.999	5.000	
		After	----	----	----	----	
		Before-Master	----	----	-0.637	----	
		After-Before	----	----	----	----	
Near Plus Measurement	1/s	Master	7328.000	5600.000	5955.926	8700.000	
		Before	----	----	----	----	
		After	----	----	----	----	
		Before-Master	----	----	----	----	
		After-Before	----	----	----	----	
Far Plus Measurement	1/s	Master	1600.000	1300.000	1496.078	1900.000	
		Before	----	----	----	----	
		After	----	----	----	----	
		Before-Master	----	----	----	----	
		After-Before	----	----	----	----	

CNT Neutron Calibration - CNT Neutron Coefficients

Master (Measured):	20:46:51 17-Jul-2021	Before (Measured):	09:41:51 18-Jul-2021	After:			
Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit	
Near Corrected Plus Measurement	1/s	Master	7328.000	5600.000	5980.594	8700.000	
		Before	----	----	----	----	
		After	----	----	----	----	
		Before-Master	----	----	----	----	
		After-Before	----	----	----	----	
Far Corrected Plus Measurement	1/s	Master	1600.000	1300.000	1515.994	1900.000	
		Before	----	----	----	----	
		After	----	----	----	----	
		Before-Master	----	----	----	----	
		After-Before	----	----	----	----	
Near Corrected Gain		Master	1.000	0.797	1.225	1.304	
		Before	----	----	----	----	
		After	----	----	----	----	
		Before-Master	----	----	----	----	
		After-Before	----	----	----	----	
Far Corrected Gain		Master	1.000	0.842	1.055	1.231	
		Before	----	----	----	----	
		After	----	----	----	----	
		Before-Master	----	----	----	----	
		After-Before	----	----	----	----	
Computed Thermal Neutron Ratio Average		Master	4.240	3.740	3.945	4.740	
		Before	----	----	----	----	
		After	----	----	----	----	
		Before-Master	----	----	----	----	
		After-Before	----	----	----	----	

CNT Neutron Calibration - CNT Neutron Ratio R6 Measurement

Master (Measured):	20:46:51 17-Jul-2021	Before (Measured):	09:41:51 18-Jul-2021	After:			
Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit	
Near R6 Measurement	1/s	Master	5000.000	4750.000	4999.806	5250.000	
		Before	5000.000	4750.000	4999.871	5250.000	
		After	----	----	----	----	

		Before-Master After-Before	----- -----	----- -----	0.065 -----	----- -----	<div></div>
Far R6 Measurement	1/s	Master Before After Before-Master After-Before	833.330 833.330 ----- ----- -----	791.660 791.660 ----- ----- -----	833.301 833.323 ----- 0.022 -----	875.000 875.000 ----- ----- -----	<div><div></div></div> <div></div> <div></div> <div></div> <div></div>
Ratio R6 Computed Ratio		Master Before After Before-Master After-Before	6.000 6.000 6.000 ----- -----	5.430 5.430 5.430 ----- -----	6.000 6.000 NOT DONE 0.000 -----	6.630 6.630 6.630 ----- -----	<div><div></div></div> <div></div> <div></div> <div></div> <div></div>

QTGC-B (SlimXtreme Telemetry Gamma-ray Cartridge - B (3.0 in. OD)) Calibration - Run 1B							
Primary Equipment : <div> STGC-B Cartridge STGC-B 8121 </div>							
Auxiliary Equipment : <div> Accelerometer STGC-ACCZ 7 </div>							
Calibration Parameter : <div> JIG-BKG (Jig minus background reference) 165 </div>							

STGC Accelerometer Calibration - STGC Read EEPROM Coefficient							
Master (EEPROM):		14:58:40 19-Jul-2021					
Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit	<div></div>
Accelerometer Coefficients - 0		Master	0	-----	3.79700E+000	-----	<div></div>
Accelerometer Coefficients - 1		Master	0	-----	-3.90300E-003	-----	<div></div>
Accelerometer Coefficients - 2		Master	0	-----	2.97600E-005	-----	<div></div>
Accelerometer Coefficients - 3		Master	0	-----	-4.56300E-008	-----	<div></div>
Accelerometer Coefficients - 4		Master	0	-----	2.74030E+000	-----	<div></div>
Accelerometer Coefficients - 5		Master	0	-----	2.64830E-004	-----	<div></div>
Accelerometer Coefficients - 6		Master	0	-----	4.39200E-007	-----	<div></div>
Accelerometer Coefficients - 7		Master	0	-----	2.85580E-010	-----	<div></div>
Accelerometer Coefficients - 8		Master	0	-----	-2.73150E+002	-----	<div></div>
Accelerometer Coefficients - 9		Master	0	-----	1.00000E+000	-----	<div></div>

STGC Gamma-Ray Calibration - Gamma-Ray Coefficients							
Before (Measured):		09:32:58 18-Jul-2021 Expired by 10 days After:					
Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit	<div></div>
Gamma-Ray Gain		Before	1.000	0.900	1.029	1.100	<div><div></div></div>
		After	-----	-----	-----	-----	<div></div>
		After-Before	-----	-----	-----	-----	<div></div>

STGC Gamma-Ray Calibration - Gamma-Ray Accumulations							
Before (Measured):		09:32:58 18-Jul-2021 Expired by 10 days After:					
Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit	<div></div>
RGR Background Measurement	gAPI	Before	-----	0	77.109	120.000	<div><div></div></div>
		After	-----	-----	-----	-----	<div></div>
		After-Before	-----	-----	-----	-----	<div></div>
RGR Plus Measurement	gAPI	Before	191.400	172.260	185.968	210.540	<div><div></div></div>
		After	-----	-----	NOT DONE	-----	<div></div>
		After-Before	-----	-----	-----	-----	<div></div>

STGC Gamma-Ray Plateau Check - Gamma-Ray Plateau Check							
Before:		After:					
Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit	<div></div>
RGR Zero Plateau Check - 0	gAPI	Before	-----	-----	-----	-----	<div></div>
		After	-----	-----	-----	-----	<div></div>
		After-Before	-----	-----	-----	-----	<div></div>
RGR Plus Plateau Check - 0	gAPI	Before	-----	-----	-----	-----	<div></div>
		After	-----	-----	-----	-----	<div></div>
		After-Before	-----	-----	-----	-----	<div></div>
RGR Minus Plateau Check - 0	gAPI	Before	-----	-----	-----	-----	<div></div>

		After	----	----	----	----		
		After-Before	----	----	----	----		

LEH-MT (Logging Equipment Head - MT, 3-3/8 inch 31 pin HPHT with Tension and Temperature Sensor (Need STGC/HTGC to process temperature signal)) Calibration - Run 1B

Primary Equipment :
Logging Equipment Head - MT, 3-3/8 inch 31 pin HPHT with Tension and Temperature Sensor (Need STGC/HTGC to process temperature signal) LEH-MT

HTEN Master Calibration - HTEN Master Calibration

Master:							
Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit	
HTEN Shop Gain		Master	1.000	0.800	NOT DONE	4.500	
HTEN Shop Offset	lbf	Master	0	-1000.000	NOT DONE	1000.000	

HTEN Before Calibration - HTEN Before Calibration

Before:							
Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit	
RHTE Zero Measurement - 0	lbf	Before	----	----	----	----	
RHTE Plus Measurement - 0	lbf	Before	----	----	----	----	
HTEN Gain - 0		Before	----	----	----	----	
HTEN Offset - 0	lbf	Before	----	----	----	----	

Company:	University Of Utah	Schlumberger
Well:	FORGE 78B-32	
Field:	None	
County:	Beaver	
State:	Utah	
Platform Express		
Compensated Neutron		