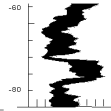


ABS

Advanced Borehole Services



GAMMA RAY-RESISTIVITY (16-64)

WELL OSF-110

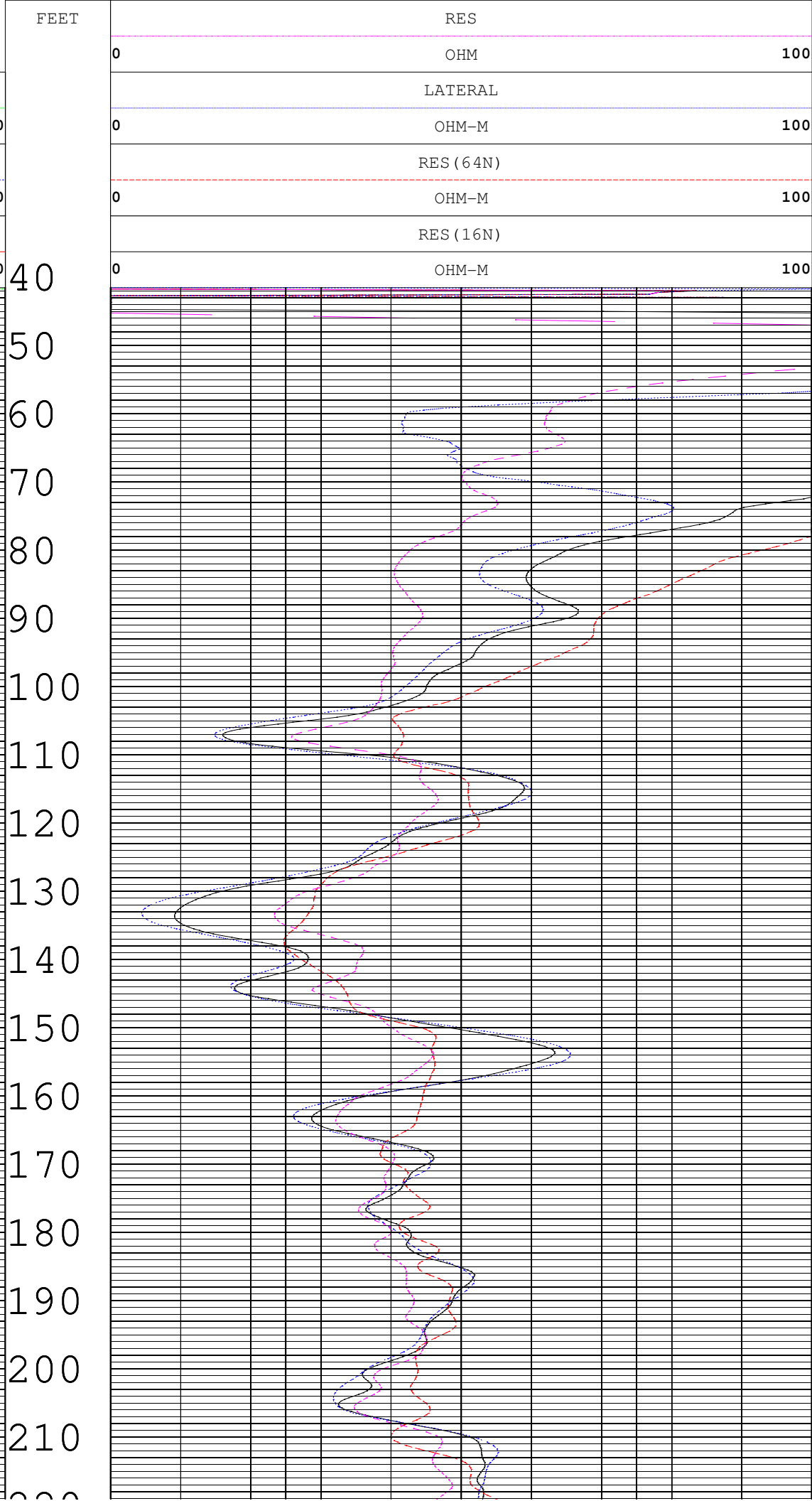
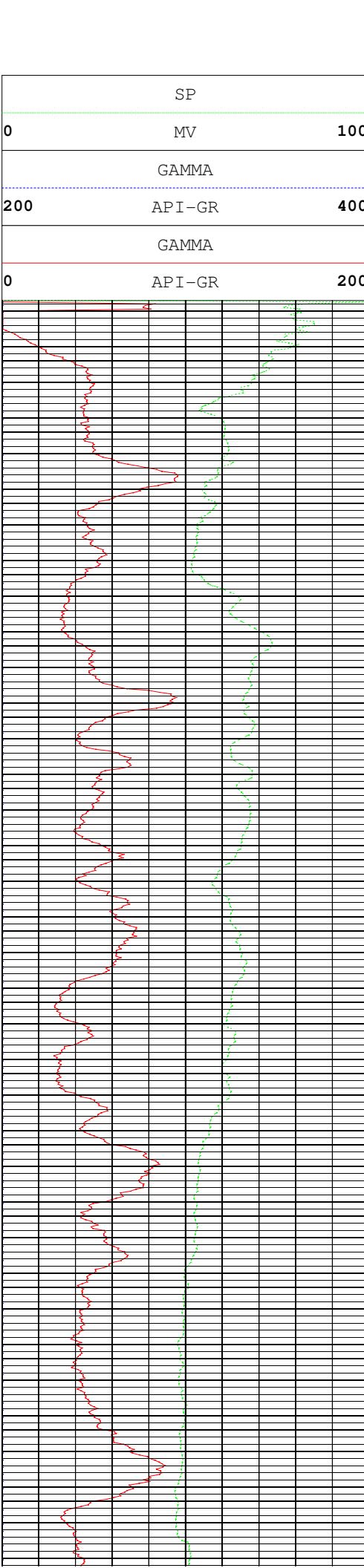
COMPANY	: HUSS DRILLING	OTHER SERVICES: 9074 8044 9320
WELL	: WELL OSF-110	
FIELD	: DESERET	
COUNTY	: OSCEOLA	
STATE	: FLORIDA	

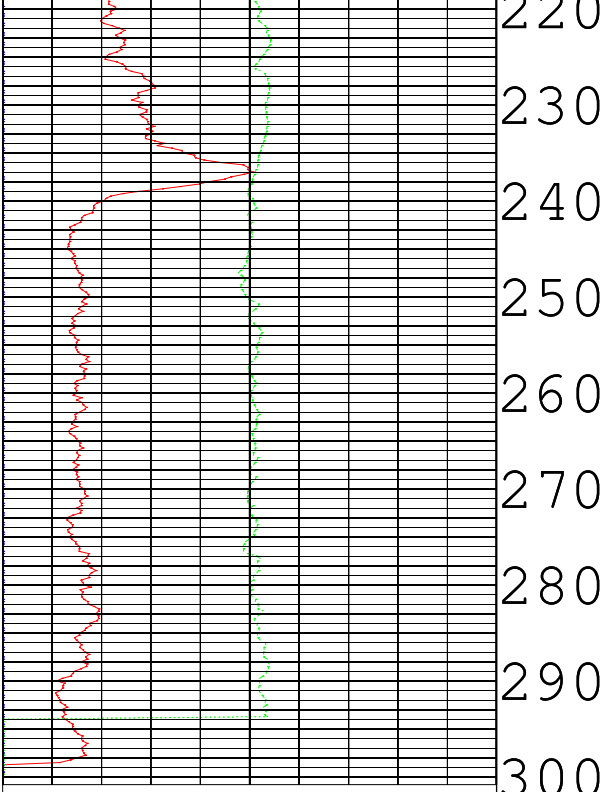
LOCATION	:
SECTION	: None
TOWNSHIP	: None
RANGE	: None
API NO.	:
UNIQUE WELL ID.	:

PERMANENT DATUM	: MSL	ELEVATION KB:	None
LOG MEASURED FROM:	GS	ELEVATION DF:	NA
DRL MEASURED FROM:	NA	ELEVATION GL:	NA

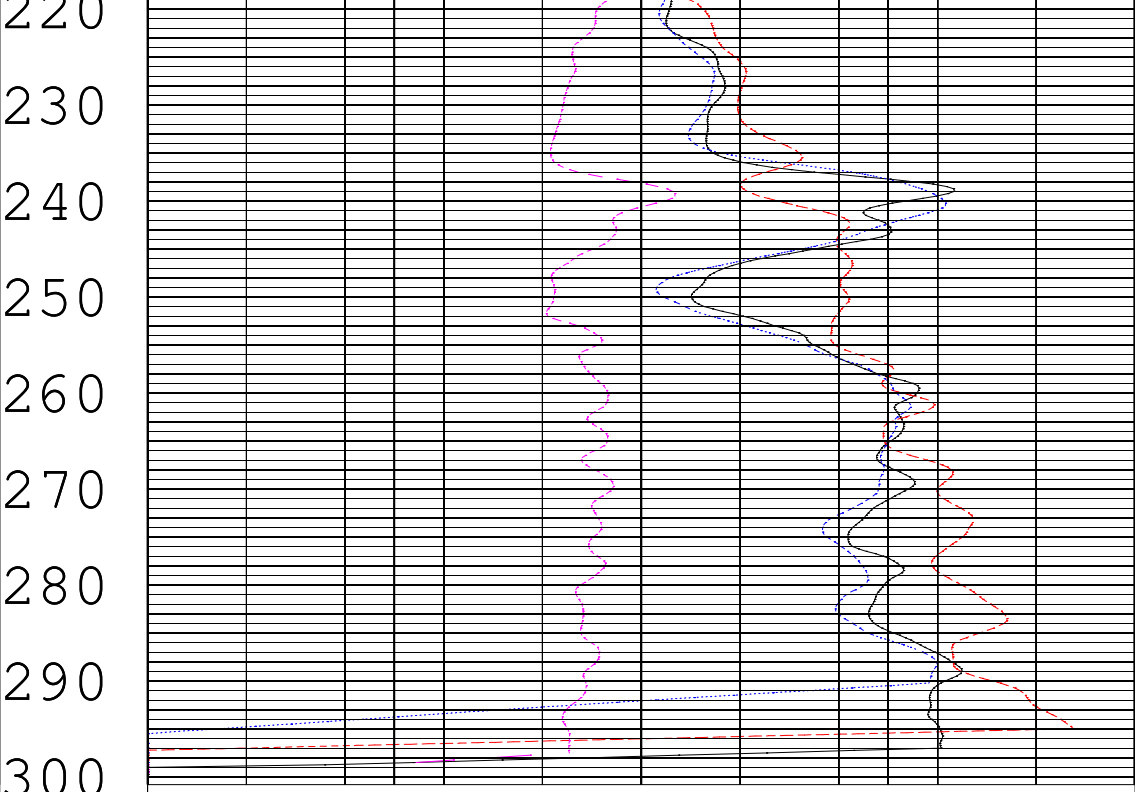
DATE	: 06/19/17
DEPTH DRILLER	: 302
BIT SIZE	: 6
LOG TOP	: 41.50
LOG BOTTOM	: 300.50
CASING OD	:
CASING BOTTOM	: 60
CASING TYPE	: CLOCK
BOREHOLE FLUID	: MUD
RM TEMPERATURE	: 0
MUD RES	: 0
MUD WEIGHT	:
WITNESSED BY	:
RECORDED BY	: AFB
REMARKS 1	:
REMARKS 2	:

ALL SERVICES PROVIDED SUBJECT TO STANDARD TERMS AND CONDITIONS





0	API-GR	200
	GAMMA	
200	API-GR	400
	GAMMA	
0	MV	100
	SP	



0	OHM-M	100
	RES (16N)	
0	OHM-M	100
	RES (64N)	
0	OHM-M	100
	LATERAL	
0	OHM	100
	RES	

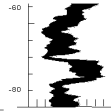
FEET

TOOL CALIBRATION WELL OSF-110 06/19/17 13:31
TOOL 8044A TM VERSION 0
SERIAL NUMBER 938

	DATE	TIME	SENSOR	STANDARD	RESPONSE
1	Jan03,03	10:49:05	GAMMA	0.001 [API-GR]	0.00 [CPS]
	Jan03,03	07:49:05	GAMMA	180.000 [API-GR]	169.00 [CPS]
2	May16,17	19:08:20	RES (FL	41.600 [OHM-M]	54104.00 [CPS]
	May16,17	19:08:20	RES (FL	0.100 [OHM-M]	11978.00 [CPS]
3	Aug17,14	17:00:23	SP	0.000 [MV]	59670.00 [CPS]
	Aug17,14	17:00:23	SP	395.000 [MV]	23612.00 [CPS]
4	Aug17,14	15:38:06	RES (16I	0.000 [OHM-M]	4284.00 [CPS]
	Aug17,14	15:38:06	RES (16I	1996.000 [OHM-M]	103525.00 [CPS]
5	Aug17,14	15:38:38	RES (64I	0.000 [OHM-M]	4160.00 [CPS]
	Aug17,14	15:38:38	RES (64I	1990.000 [OHM-M]	102789.00 [CPS]
6	Aug17,14	17:19:05	TEMP	71.700 [DEG F]	63355.00 [CPS]
	Aug17,14	17:19:05	TEMP	81.500 [DEG F]	58740.00 [CPS]
7	Aug17,14	15:39:11	RES	0.000 [OHM]	9855.00 [CPS]
	Aug17,14	15:39:11	RES	988.000 [OHM]	58788.00 [CPS]

ABS

Advanced Borehole Services



FULL WAVE BHC ACOUSTIC-VDL

WELL OSF-110

COMPANY	: HUSS DRILLING	OTHER SERVICES: 9074 8044 9320
WELL	: WELL OSF-110	
FIELD	: DESERET	
COUNTY	: OSCEOLA	
STATE	: FLORIDA	

LOCATION	:
SECTION	: None
TOWNSHIP	: None
RANGE	: None
API NO.	:
UNIQUE WELL ID.	:

PERMANENT DATUM	: MSL	ELEVATION KB:	None
LOG MEASURED FROM:	GS	ELEVATION DF:	NA
DRL MEASURED FROM:	NA	ELEVATION GL:	NA

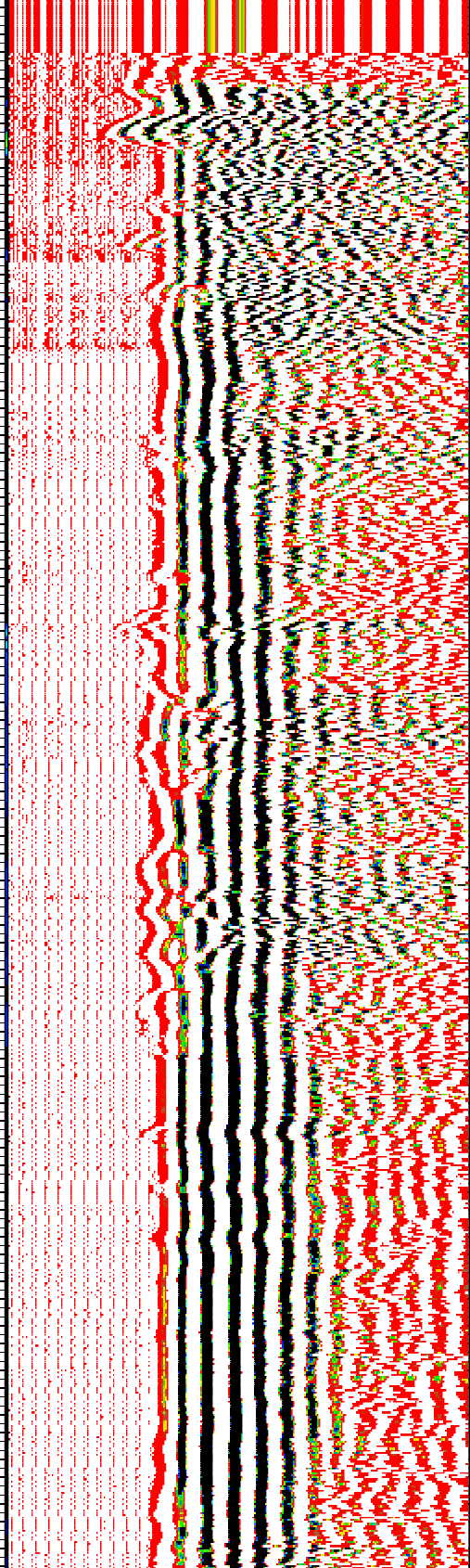
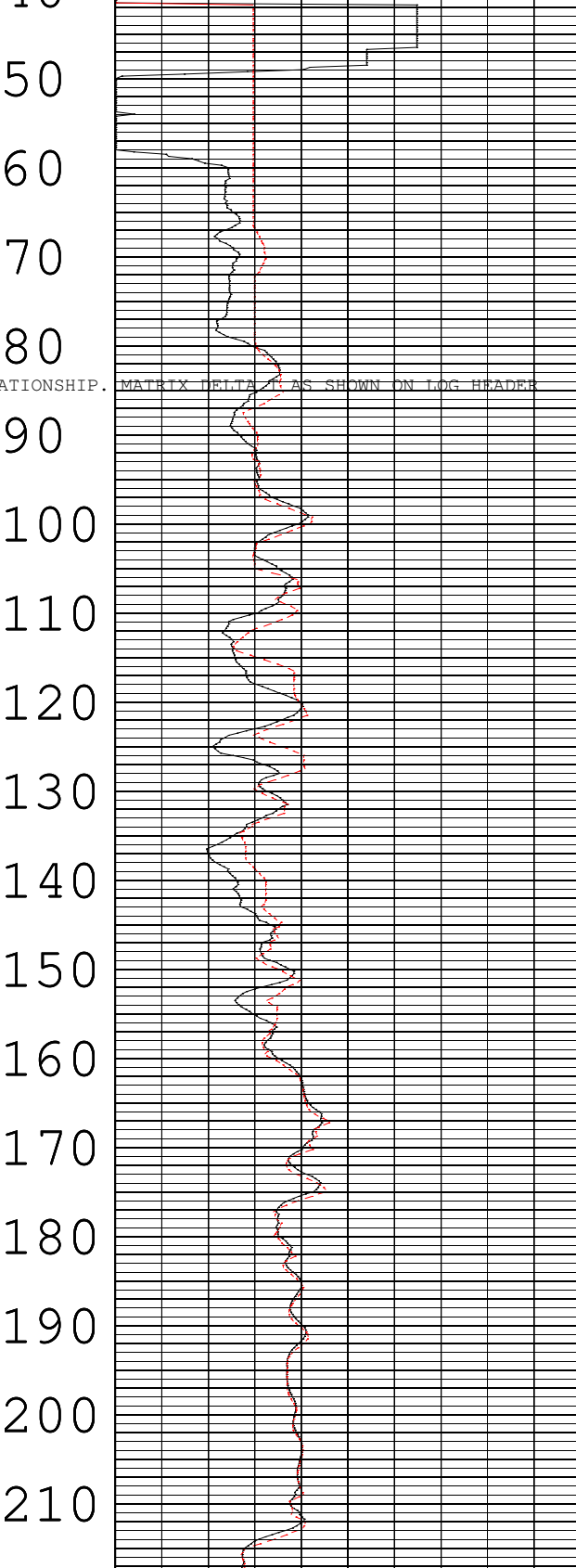
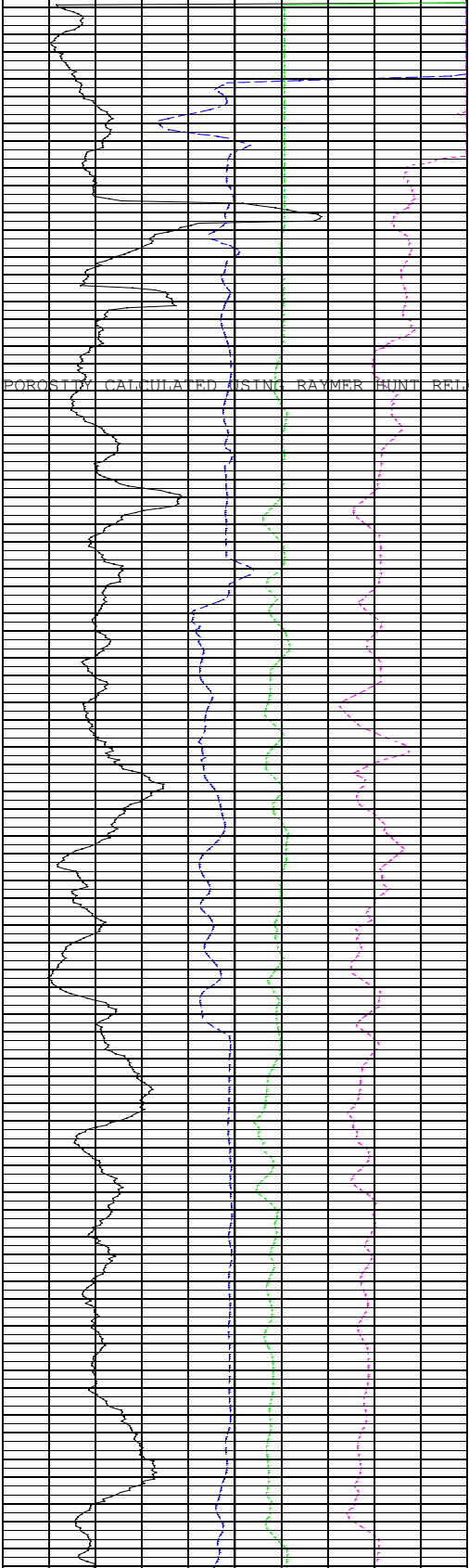
DATE	: 06/19/17
DEPTH DRILLER	: 302
BIT SIZE	: 6
LOG TOP	: 40.50
LOG BOTTOM	: 300.25
CASING OD	:
CASING BOTTOM	: 60
CASING TYPE	: CLOCK
BOREHOLE FLUID	: MUD
RM TEMPERATURE	: 0
MUD RES	: 0
MUD WEIGHT	:
WITNESSED BY	:
RECORDED BY	: AFB
REMARKS 1	:
REMARKS 2	:

ALL SERVICES PROVIDED SUBJECT TO STANDARD TERMS AND CONDITIONS

POR (SON)		
-100	PERCENT	100
TIME (F)		
100	USEC	800
TIME (N)		
100	USEC	800
GAMMA		
0	API-GR	300

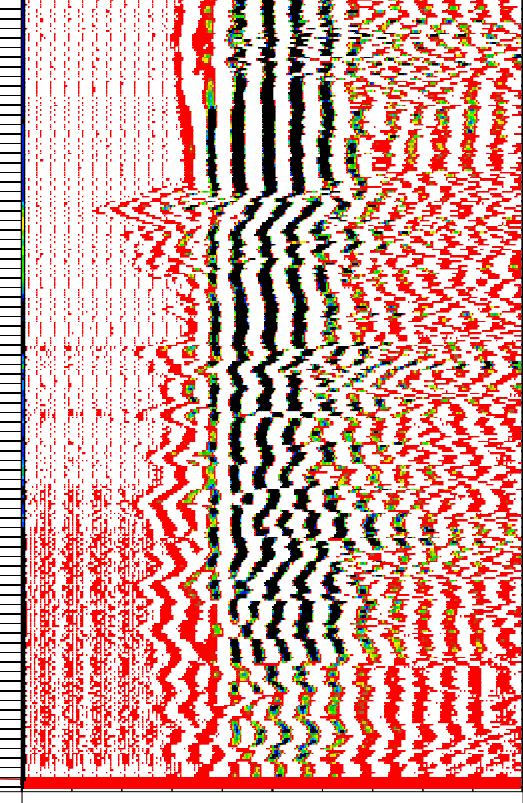
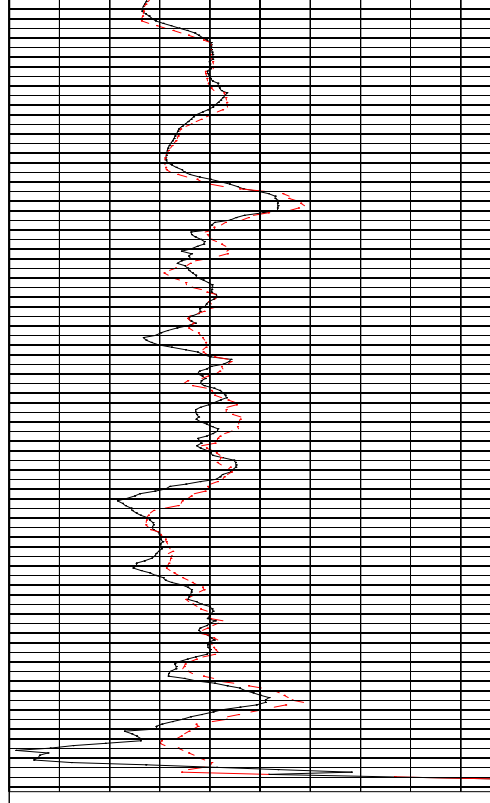
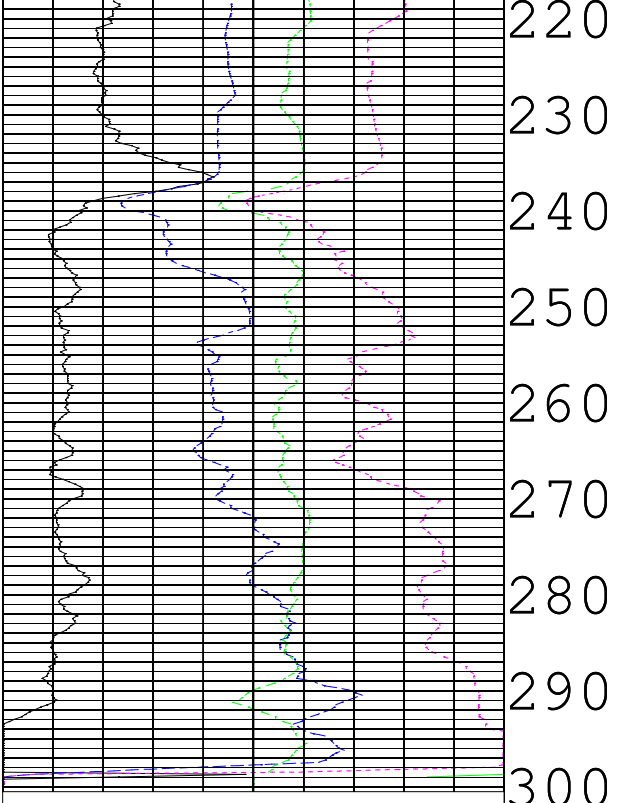
FEET		
DELTAT		
300	USEC/FT	0
BHC-DELT		
300	USEC/FT	0

SONIC (N)		
100	USEC	1200



POROSITY CALCULATED USING RAYMER HUNT RELATIONSHIP.

MATRIX DELTA AS SHOWN ON LOG HEADER



0	API-GR	300
	GAMMA	
100	USEC	800
	TIME (N)	
100	USEC	800
	TIME (F)	
-100	PERCENT	100
	POR (SON)	

300	USEC/FT	0
	BHC-DELT	
300	USEC/FT	0
	DELTAT	

0	USEC	1200
	SONIC (N)	

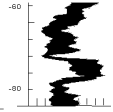
FEET

TOOL CALIBRATION WELL OSF-110 06/19/17 13:49
TOOL 9320A2 TM VERSION 0
SERIAL NUMBER 667

	DATE	TIME	SENSOR	STANDARD	RESPONSE
1	Apr12,99	23:12:30	GAMMA	Default [CPS]	Default [CPS]
	Apr12,99	20:12:30	GAMMA	Default [CPS]	Default [CPS]

ABS

Advanced Borehole Services



GAMMA RAY (API)-CALIPER

WELL OSF-110

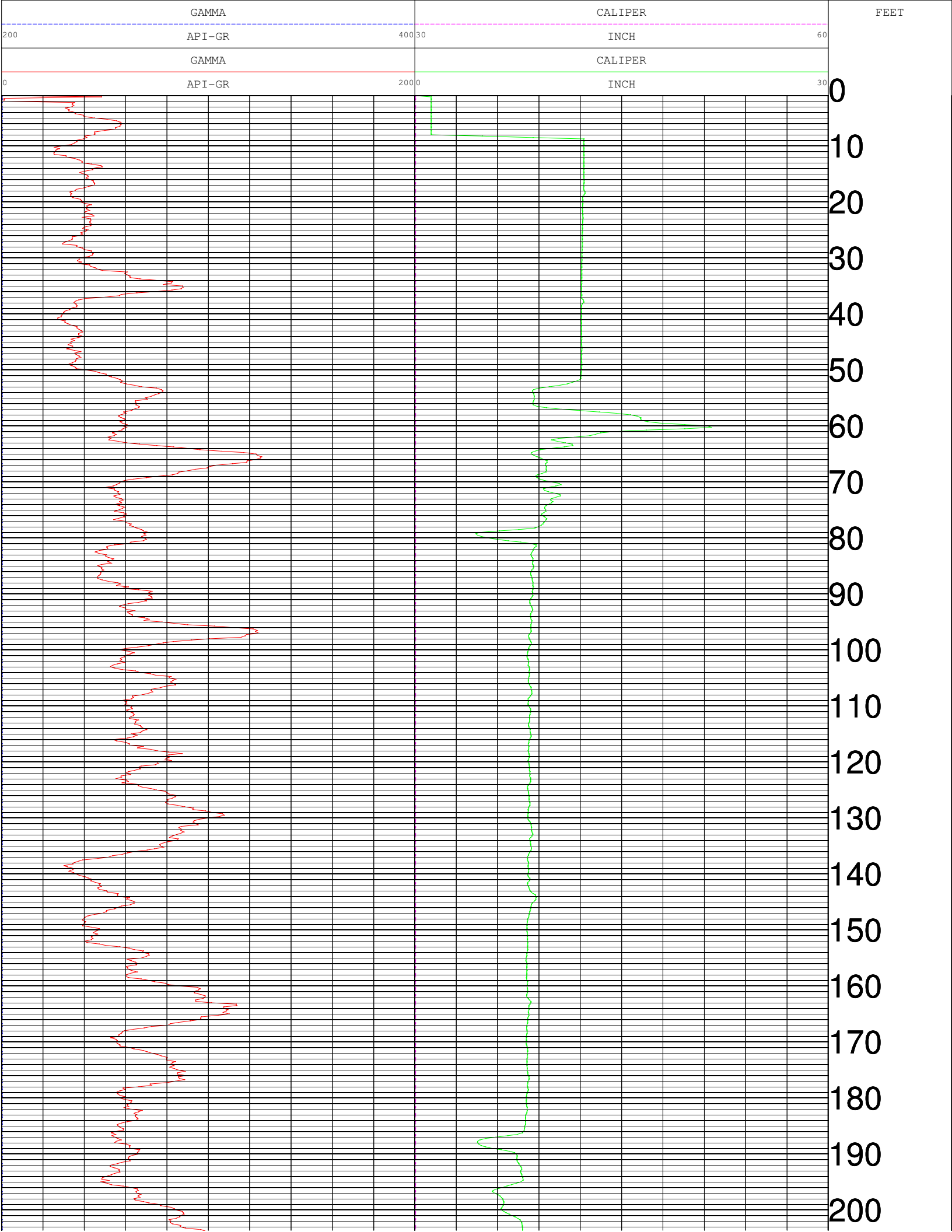
COMPANY	: HUSS DRILLING	OTHER SERVICES: 9074 8044 9320
WELL	: WELL OSF-110	
FIELD	: DESERET	
COUNTY	: OSCEOLA	
STATE	: FLORIDA	

LOCATION	:
SECTION	: None
TOWNSHIP	: None
RANGE	: None
API NO.	:
UNIQUE WELL ID.	:

PERMANENT DATUM	: MSL	ELEVATION KB:	None
LOG MEASURED FROM:	GS	ELEVATION DF:	NA
DRL MEASURED FROM:	NA	ELEVATION GL:	NA

DATE	: 06/19/17
DEPTH DRILLER	: 302
BIT SIZE	: 6
LOG TOP	: 1.00
LOG BOTTOM	: 301.25
CASING OD	:
CASING BOTTOM	: 60
CASING TYPE	: CLOCK
BOREHOLE FLUID	: MUD
RM TEMPERATURE	: 0
MUD RES	: 0
MUD WEIGHT	:
WITNESSED BY	:
RECORDED BY	: AFB
REMARKS 1	:
REMARKS 2	:

ALL SERVICES PROVIDED SUBJECT TO STANDARD TERMS AND CONDITIONS



FEET

GAMMA

CALIPER

API-GR

INCH

GAMMA

CALIPER

API-GR

INCH

200

400

60

0

200

30

0

10

20

30

40

50

60

70

80

90

100

110

120

130

140

150

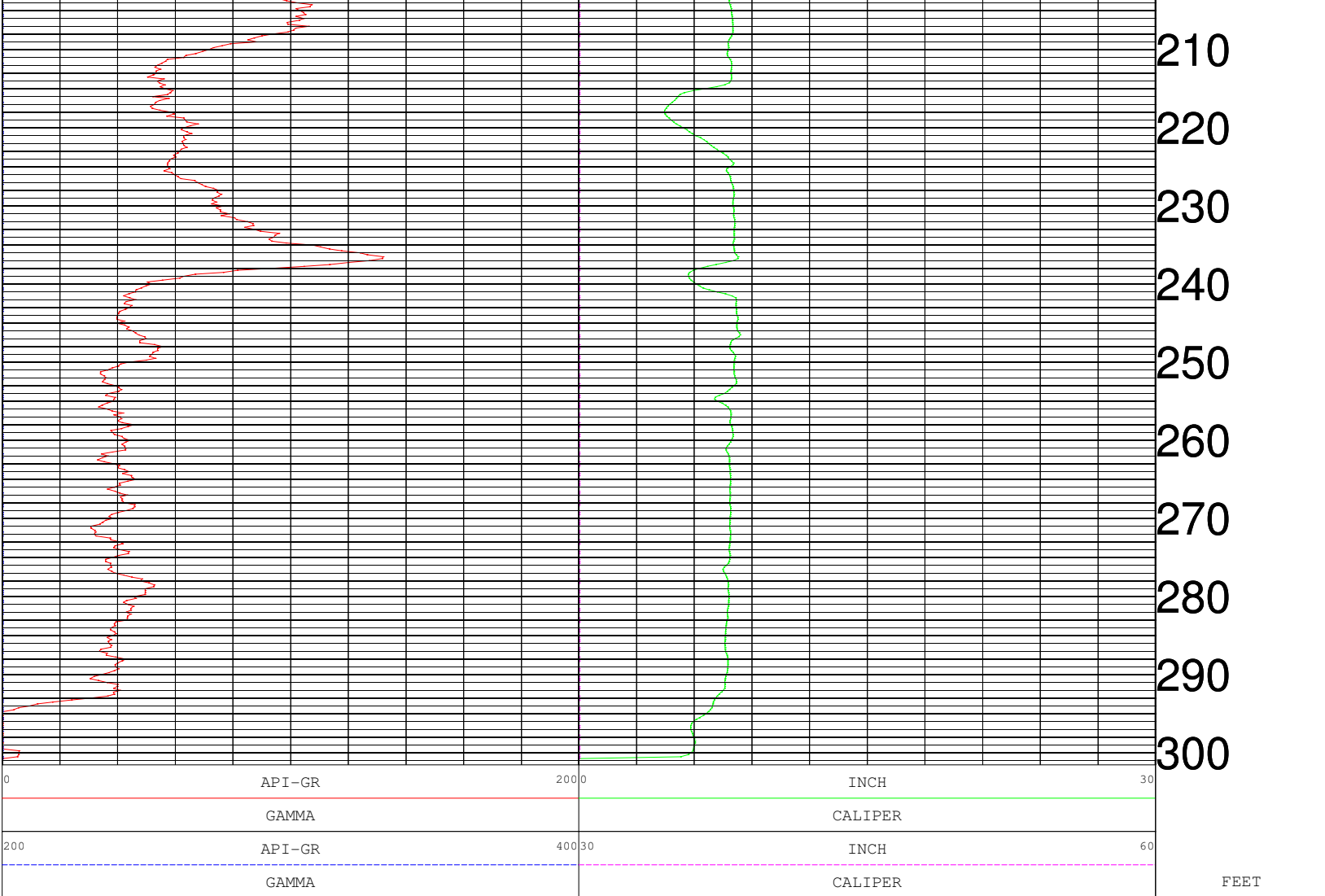
160

170

180

190

200



TOOL CALIBRATION WELL OSF-110 06/19/17 13:07

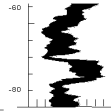
TOOL 9074A1 TM VERSION 0

SERIAL NUMBER 857

	DATE	TIME	SENSOR	STANDARD		RESPONSE	
1	Jan12,03	07:10:06	GAMMA	Default	[CPS]	Default	[CPS]
	Jan12,03	04:10:06	GAMMA	180.000	[API-GR]	205.00	[CPS]
2	May11,17	21:01:04	CALIPER	3.000	[INCH]	156245.00	[CPS]
	May11,17	21:01:04	CALIPER	5.000	[INCH]	150790.00	[CPS]
3	May11,17	12:56:07	CALIPERL	6.000	[INCH]	151386.00	[CPS]
	May11,17	12:56:07	CALIPERL	35.500	[INCH]	86954.00	[CPS]
4	Dec13,00	22:19:45	CALIPERX	Default	[CPS]	Default	[CPS]
	Dec13,00	22:19:45	CALIPERX	Default	[CPS]	Default	[CPS]

ABS

Advanced Borehole Services



COMBINATION LOG STATIC WATER QUALITY OSF-110

COMPANY : HUSS DRILLING	OTHER SERVICES: 8044 9320
WELL : OSF-110	
FIELD : DESERET RANCH	
COUNTY : OSCEOLA	
STATE : FLORIDA	

LOCATION :	
SECTION : None	
TOWNSHIP : None	
RANGE : None	
API NO. :	
UNIQUE WELL ID. :	

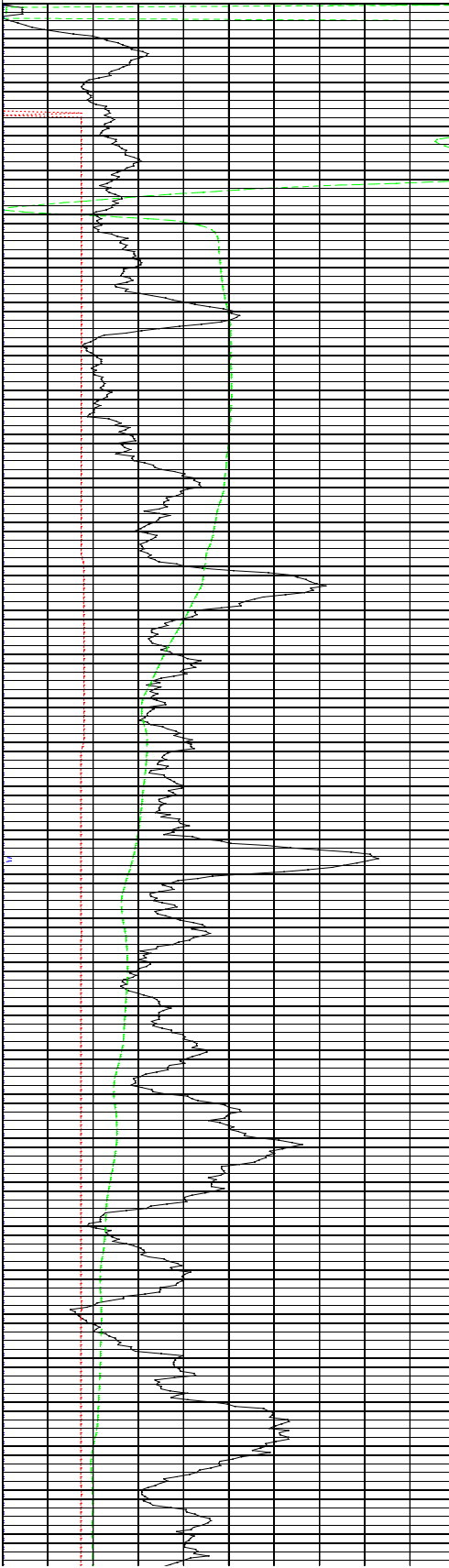
PERMANENT DATUM : MSL	ELEVATION KB: None
LOG MEASURED FROM: TOP CAS	ELEVATION DF: NA
DRL MEASURED FROM: NA	ELEVATION GL: NA

DATE : 07/19/17
DEPTH DRILLER : 600
BIT SIZE : 6
LOG TOP : -2.00
LOG BOTTOM : 603.25
CASING OD :
CASING BOTTOM : 280
CASING TYPE : STEEL
BOREHOLE FLUID : FOR
RM TEMPERATURE : 0
MUD RES : 0
MUD WEIGHT :
WITNESSED BY :
RECORDED BY : AFB
REMARKS 1 : HQ CORE
REMARKS 2 :

ALL SERVICES PROVIDED SUBJECT TO STANDARD TERMS AND CONDITIONS

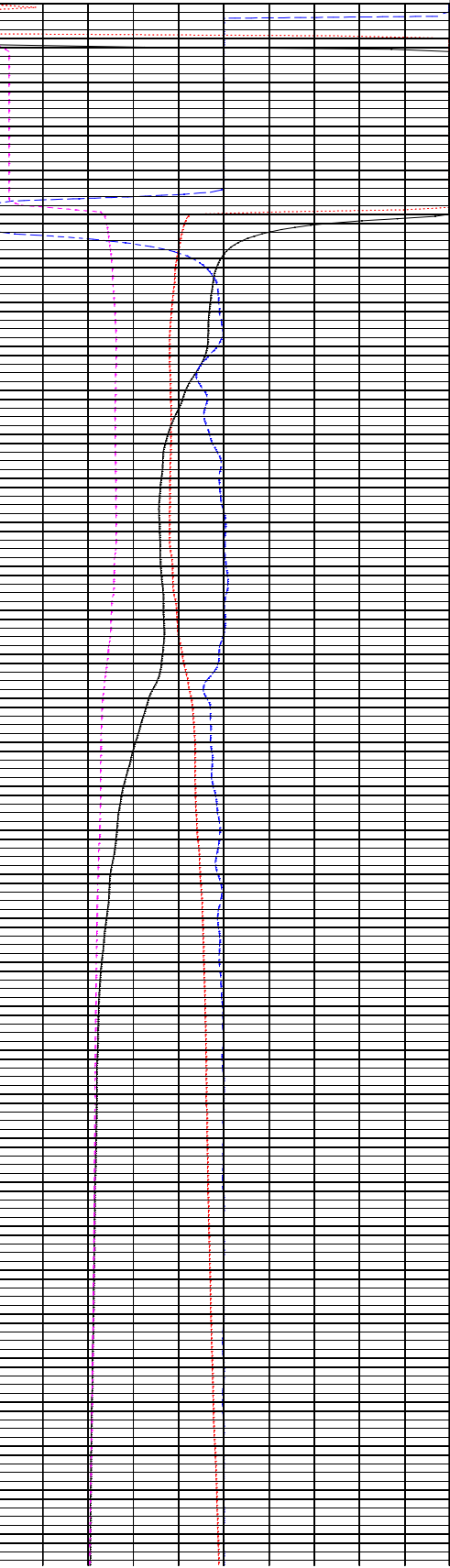
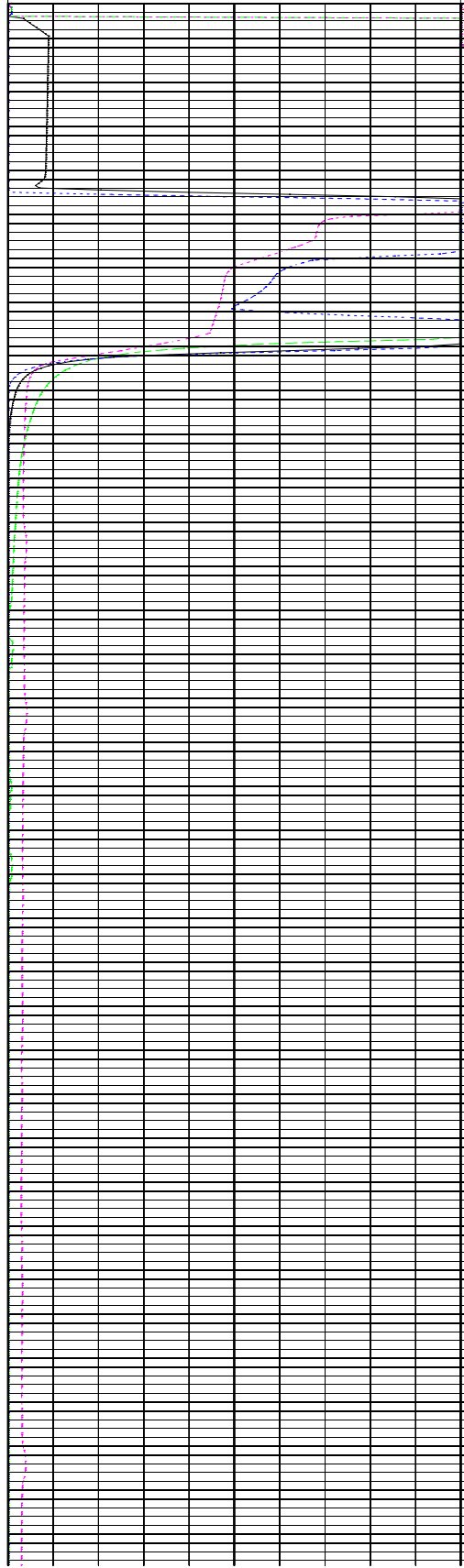
CALIPER		
0	INCH	25
SP		
0	MV	500
GAMMA		
100	API-GR	400
GAMMA		
0	API-GR	100

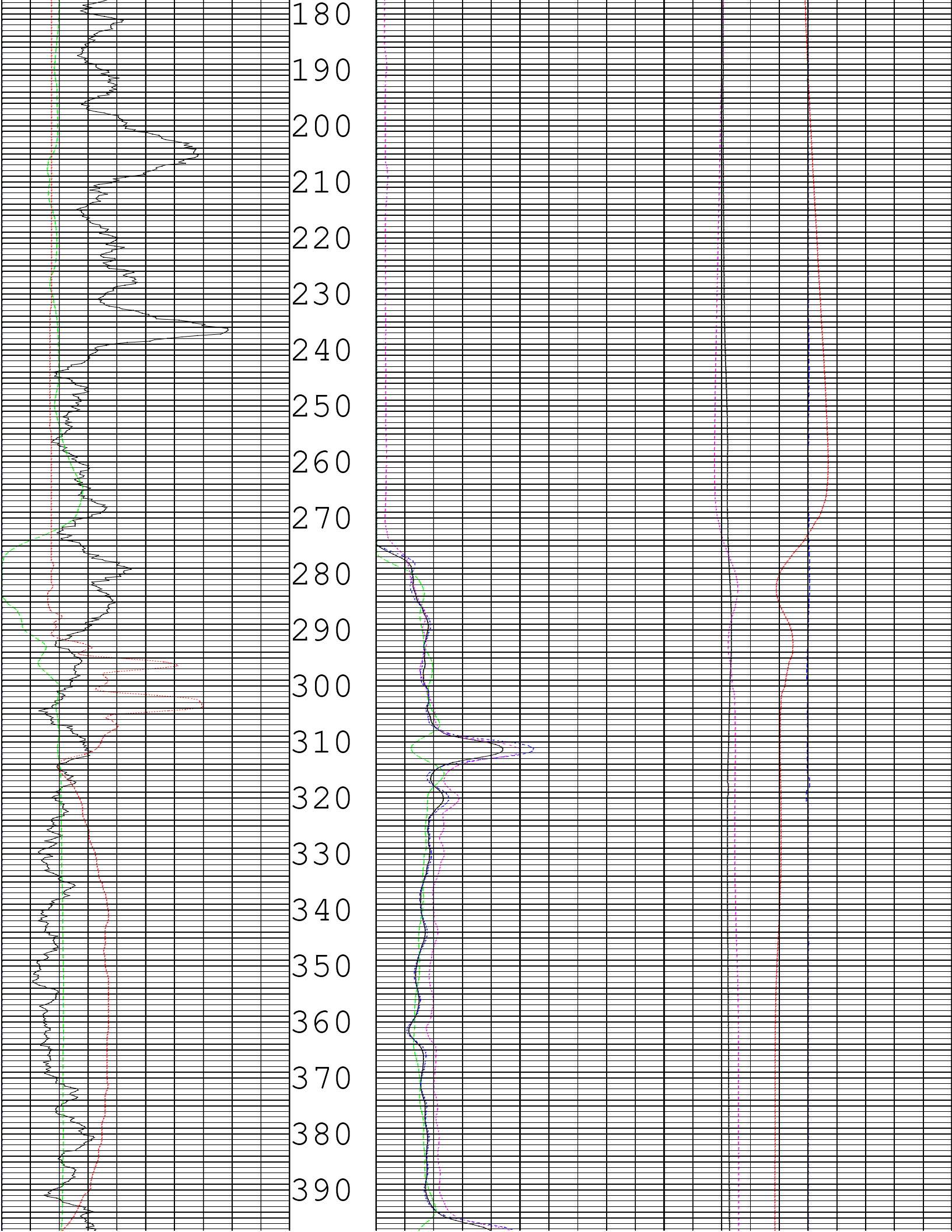
FEET	
0	
10	
20	
30	
40	
50	
60	
70	
80	
90	
100	
110	
120	
130	
140	
150	
160	
170	

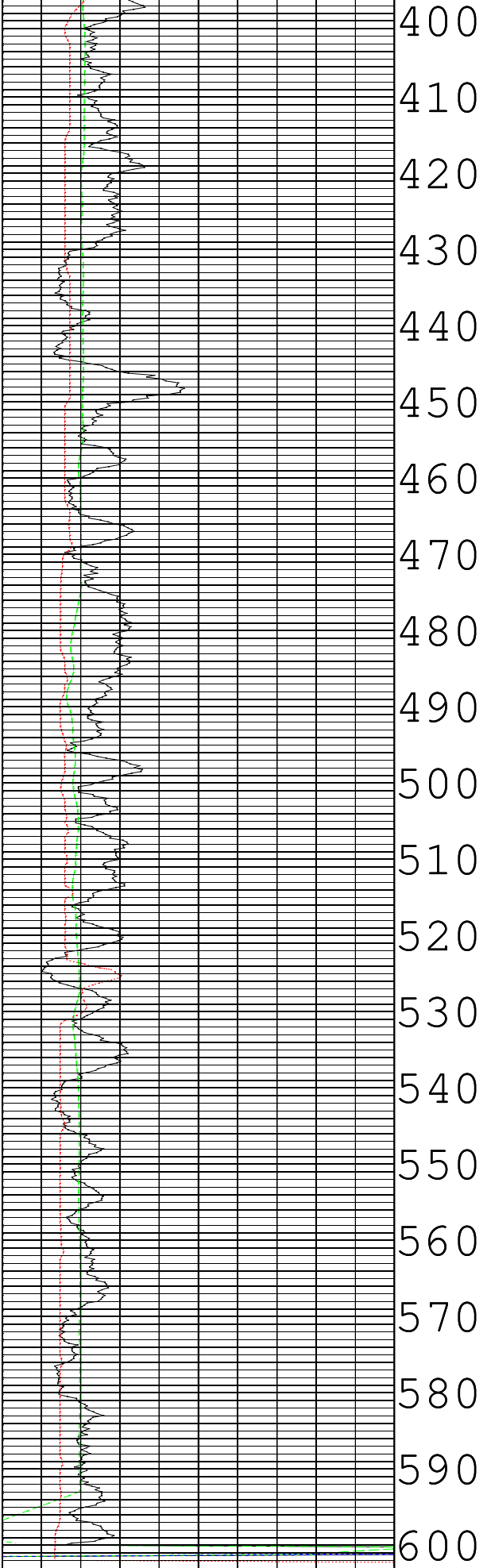


RES		
0	OHM	5000
LATERAL		
0	OHM-M	5000
RES (64N)		
0	OHM-M	500-0.5
RES (16N)		
0	OHM-M	50070

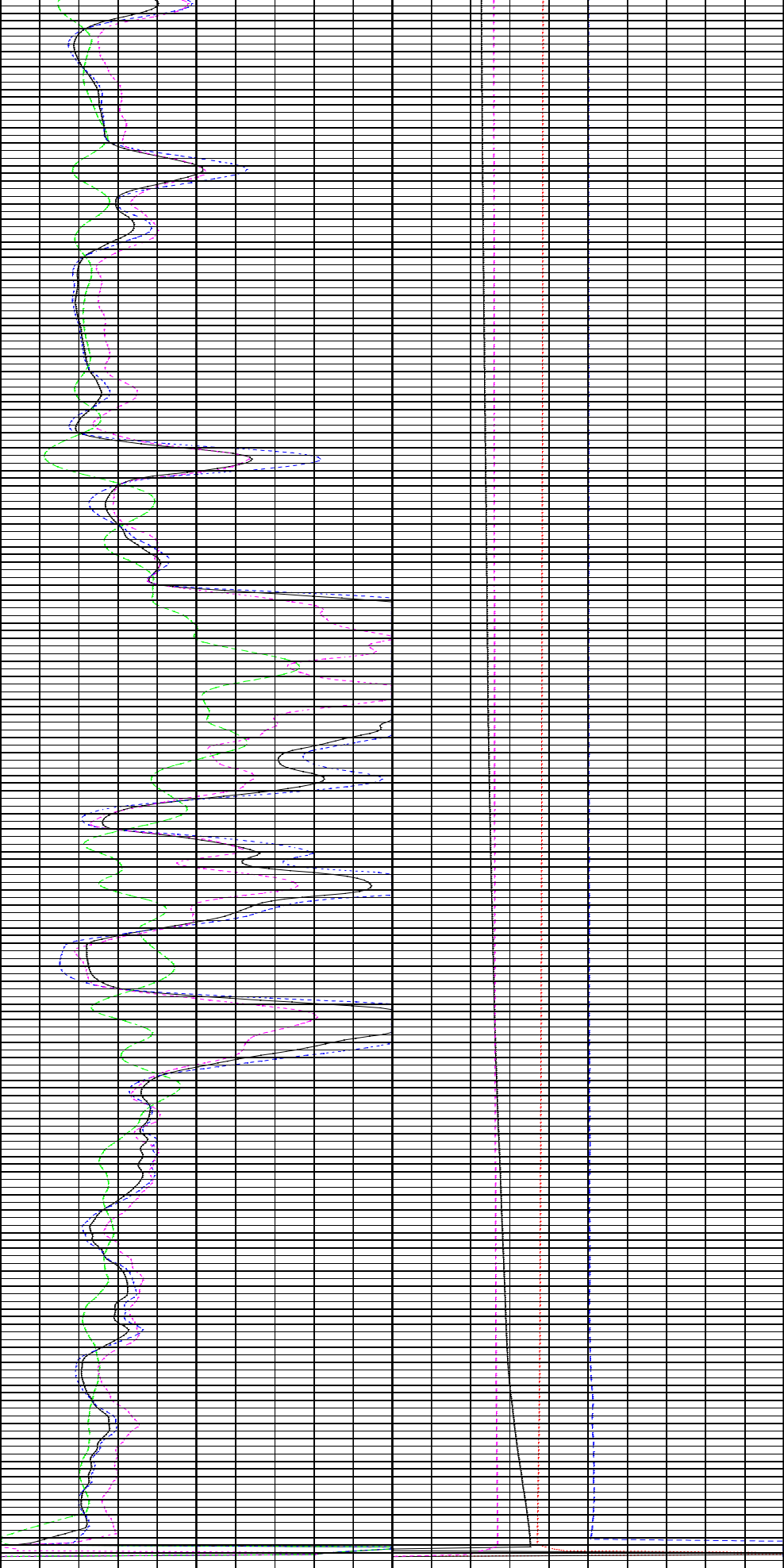
SP COND	
US/CM	2000
RES (FL)	
OHM-M	50
DEL TEMP	
DEG F	0.5
TEMP	
DEG F	90







0 100 API-GR 100 400
 GAMMA



0 500 70 DEG F 90
 OHM-M RES (16N) TEMP
 0 500-0.5 DEG F 0.5

0	APF GR	100	0	OHM-M	500	0.0	DEL T	0.0
	GAMMA			RES (64N)			DEL TEMP	
0	MV	500	0	OHM-M	5000		OHM-M	5000
	SP			LATERAL			RES (FL)	
0	INCH	25	0	OHM	5000		US/CM	2000
	CALIPER			RES			SP COND	
			FEET					

TOOL CALIBRATION OSF-110 07/19/17 11:15

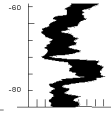
TOOL 8044A TM VERSION 0

SERIAL NUMBER 938

	DATE	TIME	SENSOR		STANDARD		RESPONSE
1	Jan03,03	10:49:05	GAMMA	0.001	[API-GR]	0.00	[CPS]
	Jan03,03	07:49:05	GAMMA	180.000	[API-GR]	169.00	[CPS]
2	May16,17	19:08:20	RES (FL	41.600	[OHM-M]	54104.00	[CPS]
	May16,17	19:08:20	RES (FL	0.100	[OHM-M]	11978.00	[CPS]
3	Aug17,14	17:00:23	SP	0.000	[MV]	59670.00	[CPS]
	Aug17,14	17:00:23	SP	395.000	[MV]	23612.00	[CPS]
4	Aug17,14	15:38:06	RES (16]	0.000	[OHM-M]	4284.00	[CPS]
	Aug17,14	15:38:06	RES (16]	1996.000	[OHM-M]	103525.00	[CPS]
5	Aug17,14	15:38:38	RES (64]	0.000	[OHM-M]	4160.00	[CPS]
	Aug17,14	15:38:38	RES (64]	1990.000	[OHM-M]	102789.00	[CPS]
6	Aug17,14	17:19:05	TEMP	71.700	[DEG F]	63355.00	[CPS]
	Aug17,14	17:19:05	TEMP	81.500	[DEG F]	58740.00	[CPS]
7	Aug17,14	15:39:11	RES	0.000	[OHM]	9855.00	[CPS]
	Aug17,14	15:39:11	RES	988.000	[OHM]	58788.00	[CPS]

ABS

Advanced Borehole Services



FULL WAVE BHC ACOUSTIC-VDL

OSF-110

COMPANY	: HUSS DRILLING	OTHER SERVICES: 8044 9320
WELL	: OSF-110	
FIELD	: DESERET RANCH	
COUNTY	: OSCEOLA	
STATE	: FLORIDA	

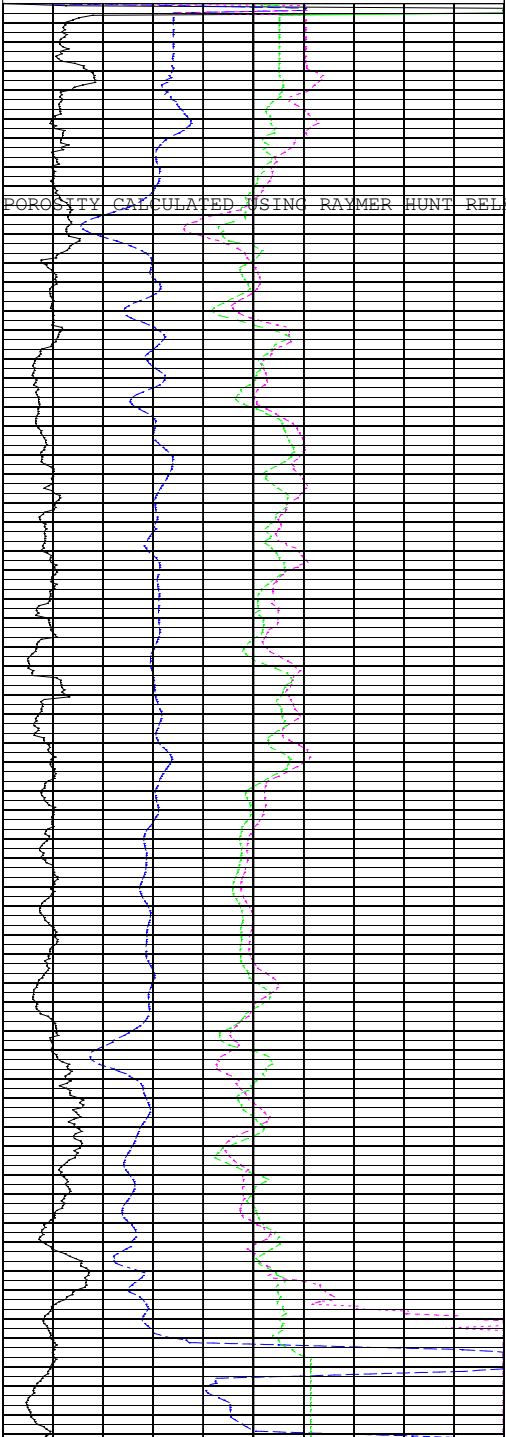
LOCATION	:
SECTION	: None
TOWNSHIP	: None
RANGE	: None
API NO.	:
UNIQUE WELL ID.	:

PERMANENT DATUM	: MSL	ELEVATION KB:	None
LOG MEASURED FROM:	TOP CAS	ELEVATION DF:	NA
DRL MEASURED FROM:	NA	ELEVATION GL:	NA

DATE	: 07/19/17
DEPTH DRILLER	: 600
BIT SIZE	: 6
LOG TOP	: 288.00
LOG BOTTOM	: 446.00
CASING OD	:
CASING BOTTOM	: 280
CASING TYPE	: STEEL
BOREHOLE FLUID	: FOR
RM TEMPERATURE	: 0
MUD RES	: 0
MUD WEIGHT	:
WITNESSED BY	:
RECORDED BY	: AFB
REMARKS 1	: HQ CORE
REMARKS 2	:

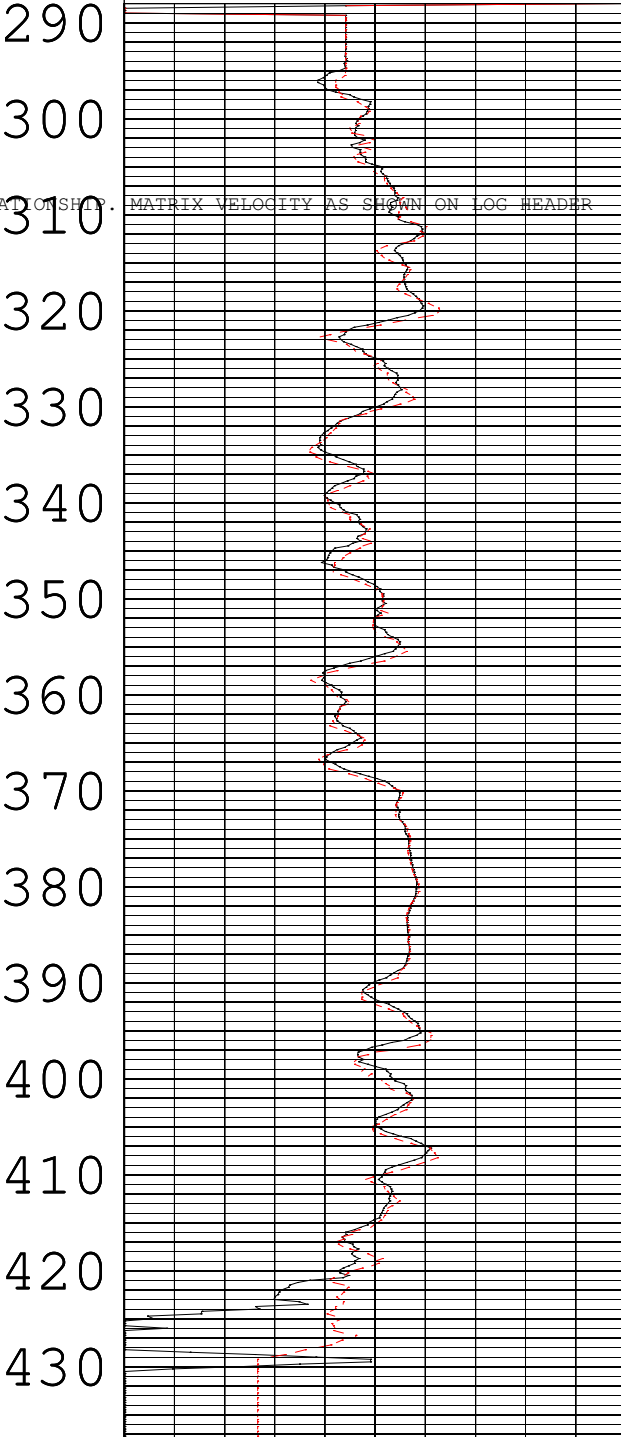
ALL SERVICES PROVIDED SUBJECT TO STANDARD TERMS AND CONDITIONS

POR (SON)		
-100	PERCENT	100
TIME (F)		
100	USEC	800
TIME (N)		
100	USEC	800
GAMMA		
0	API-GR	300



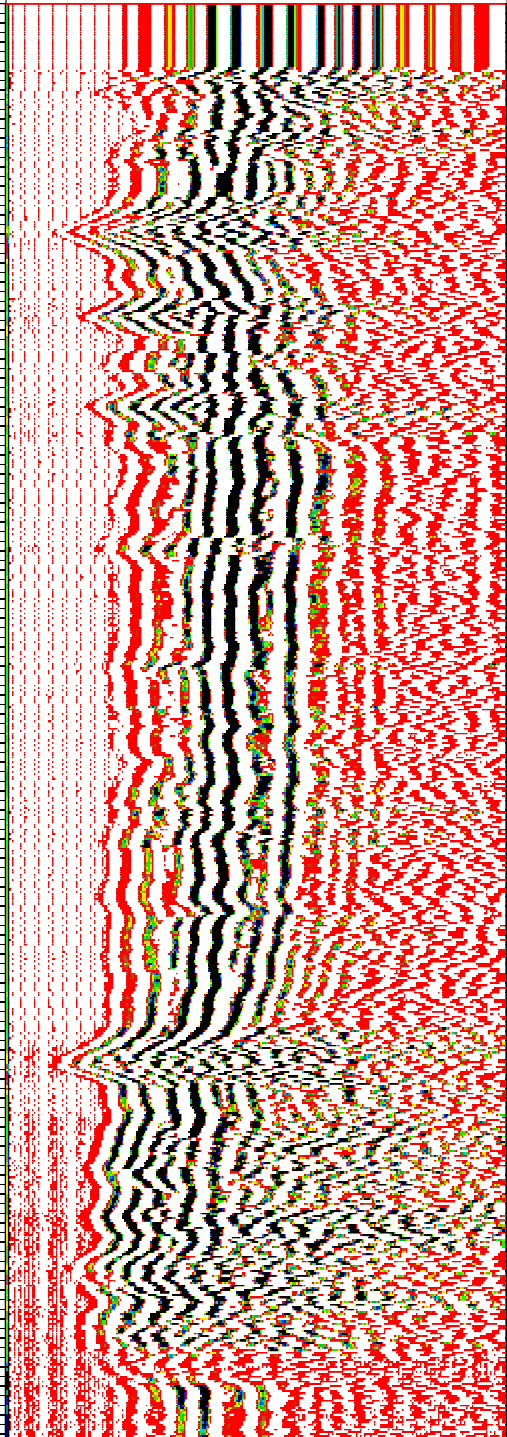
API-GR		300
GAMMA		
100	USEC	800
TIME (N)		

FEET		
DELTAT		
300	USEC/FT	0
BHC-DELT		
300	USEC/FT	0



USEC/FT		0
BHC-DELT		
300	USEC/FT	0
DELTAT		

SONIC (N)		
100	USEC	1200



SONIC (N)		
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POROSITY CALCULATED USING RAYMER HUNT RELATIONSHIP.

MATRIX VELOCITY AS SHOWN ON LOG HEADER.

100	USEC	800	
	TIME (F)		
-100	PERCENT	100	
	POR (SON)		FEET

TOOL CALIBRATION OSF-110 07/19/17 12:41
TOOL 9320A2 TM VERSION 0
SERIAL NUMBER 667

	DATE	TIME	SENSOR	STANDARD	RESPONSE
1	Apr12,99	23:12:30	GAMMA	Default [CPS]	Default [CPS]
	Apr12,99	20:12:30	GAMMA	Default [CPS]	Default [CPS]