



CALIPER LOG

FILE NO: MD11798	COMPANY HOLLY FRONTIER - NAVAJO
API NO: 30-015-44677	WELL NAVAJO REFINING WDW #4
	FIELD ARTESIA
	COUNTY EDDY
	STATE NEW MEXICO

Ver. 4.10	LOCATION: 1217' FSL & 2443' FWL SECTION 23, T17S, R27E N.M.P.M. SURVEY	OTHER SERVICES RTEXMILLGR STAR
FINAL PRINT		

PERMANENT DATUM	GL	ELEVATION	3565.8 FT
LOG MEASURED FROM	KB	20 FT	ABOVE P.D.
DRILL. MEAS. FROM	KB		

ELEVATIONS:
KB 3565.8 FT
DF 3584.8 FT
GL 3565.8 FT

DATE	TRIP	29-JUN-2018	03-AUG-2018
RUN	3	1	4
SERVICE ORDER	134542		139174
DEPTH DRILLER	10360 FT		10700 FT
DEPTH LOGGER	10360 FT		10668 FT
BOTTOM LOGGED INTERVAL	10360 FT		10665 FT
TOP LOGGED INTERVAL	9740 FT		10322 FT
CASING DRILLER	13.375 IN	@ 1680 FT	9.625 IN @ 10326 FT
CASING LOGGER	1680 FT		10322 FT
BIT SIZE	12.25 IN		8.5 IN
TYPE OF FLUID IN HOLE	WBM		WBM
DENSITY	9.7 LB/G	44 CP	8.4 LB/G
PH	10	N/A	10
SOURCE OF SAMPLE	FLOWLINE		FLOWLINE
RM AT MEAS. TEMP.	0.091 OHMM	@ 75 DEGF	0.117 OHMM @ 77 DEGF
RMF AT MEAS. TEMP.	0.077 OHMM	@ 75 DEGF	0.101 OHMM @ 77 DEGF
RMC AT MEAS. TEMP.	0.122 OHMM	@ 75 DEGF	0.133 OHMM @ 77 DEGF
SOURCE OF RMF	RMC	MEASURED	MEASURED
RM AT BHT	0.193 OHMM	@ 167 DEGF	0.099 OHMM @ 170.24 DEGF
TIME SINCE CIRCULATION	9 HRS		12 HRS
MAX. RECORDED TEMP.	168 DEGF		170.24 DEGF
EQUIP. NO.	HL6690	MIDLAND, TX	HL6845
RECORDED BY	JKOSKI		O. ROBLES / B. TELLER
WITNESSED BY	KCOOK		K. COOK

IN MAKING INTERPRETATIONS OF LOGS OUR EMPLOYEES WILL GIVE THE CUSTOMER THE BENEFIT OF THEIR BEST JUDGEMENT. BUT SINCE ALL INTERPRETATIONS ARE OPINIONS BASED ON INFERENCES FROM ELECTRICAL OR OTHER MEASUREMENTS, WE CANNOT, AND WE DO NOT GUARANTEE THE ACCURACY OR CORRECTNESS OF ANY INTERPRETATION. WE SHALL NOT BE LIABLE OR RESPONSIBLE FOR ANY LOSS, COST, DAMAGES, OR EXPENSES WHATSOEVER INCURRED OR SUSTAINED BY THE CUSTOMER RESULTING FROM ANY INTERPRETATION MADE BY ANY OF OUR EMPLOYEES.

REMARKS

RUN 3 TRIP 1: DATA TIED INTO RUN 2 DATA

BOREHOLE AND CEMENT VOLUME PRESENTED (TOTAL VOLUME LESS 9.625" CASING)
1 SMALL TICK = 10 CUBIC FEET
1 MEDIUM TICK = 100 CUBIC FEET
1 LARGE TICK = 1000 CUBIC FEET

PORZC AND CNC RECORDED AND PRESENTED ON A LIMESTONE MATRIX
CNC IS CALIPER AND CASING CORRECTED

RIG: PATRIOT #4
CREW: J. ESPINOZA / A. FERREBUS

RUN 4 TRIP 1: DATA TIED INTO RUN 3 DATA

BOREHOLE AND CEMENT VOLUME PRESENTED (TOTAL VOLUME LESS THAN 7" CASING)
1 SMALL TICK = 10 CU. FT
1 MEDIUM TICK = 100 CU. FT
1 LARGE TICK = 1000 CU. FT

PORZC & CNC RECORDED ON A LIMESTONE MATRIX
CNC IS CASING AND CALIPER CORRECTED

EQUIPMENT DATA

RUN	TRIP	TOOL	SERIES NO.	SERIAL NO.	POSITION
4	2	TTRM	3981XA	12030561	FREE
4	2	COMM	3514XA	Z188453	FREE
4	2	GAMMA	1329XA	10330272	DECENTRALIZED
4	2	NEUTRON	2446XA	10080837	FREE
4	2	DENSITY	2234XA	12429124	PAD-DEVICE

MAIN LOG 2"/100FT SCALE

ECLIPS 7.0i ECLIPS General Release Rel 7.0i Thu Jun 08 20:36:10 CDT 2017
Patches: 3

Plotted: Fri Aug 3 18:05:12 2018

PARAMETER AND FILTER SUMMARY REPORT

File: /dat1a/md11798r4/p87cc03.prm
LOGGING MODE: DEPTH DIRECTION: UP
TOP DEPTH: 10259.250 ft BOTTOM DEPTH: 10672.500 ft

SYMMETRIC FILTER

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	INTERVAL (ft)	
Y AXIS CALIPER	FILTER ()	medium (1)		TOP	BOTTOM
TENSION	FILTER ()	medium (1)		"	"
GR	FILTER ()	medium (1)		"	"
CALIPER	FILTER ()	medium (1)		"	"
	FILTER (.h)	medium (1)		"	"
	FILTER (.i)	medium (1)		"	"

BOREHOLE & CEMENT

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	INTERVAL (ft)	
CASING - BOREHOLE & CEMENT VOLUME	CASING O.D.	7.000	in	TOP	BOTTOM
BIT SIZE	BIT SIZE	8.500	in	"	"

CURVE DESCRIPTION REPORT

CURVE NAME	CREATION DATE	CURVE DESCRIPTION
F1:BIT	N/A	BIT SIZE
F1:BVOL	N/A	BOREHOLE VOLUME
F1:CAL	N/A	CALIPER
F1:CVOL	N/A	CEMENT VOLUME
F1:GR	N/A	GAMMA RAY
F1:TEN	N/A	DIFFERENTIAL TENSION

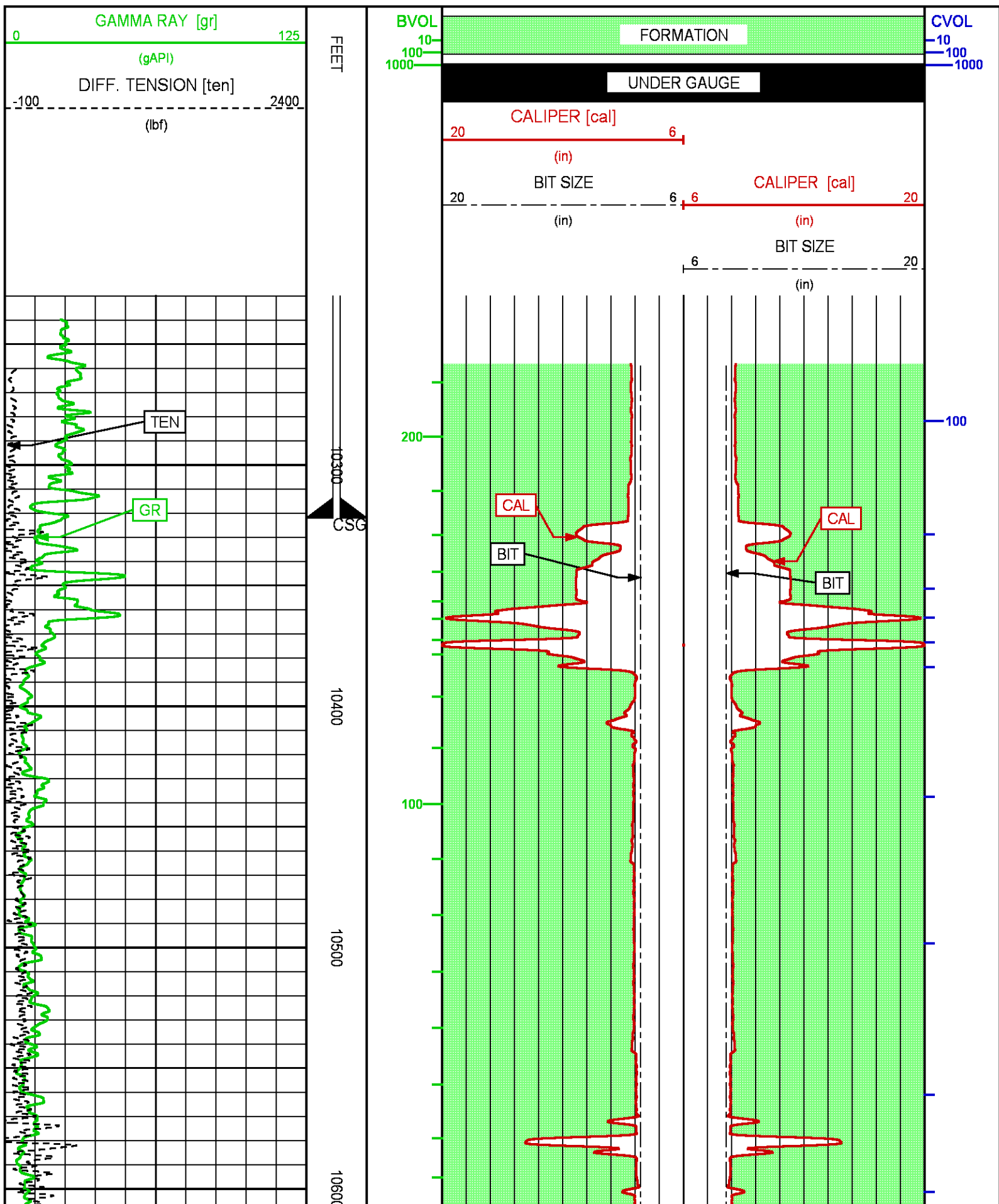
CURVE MEASURE POINT OFFSET

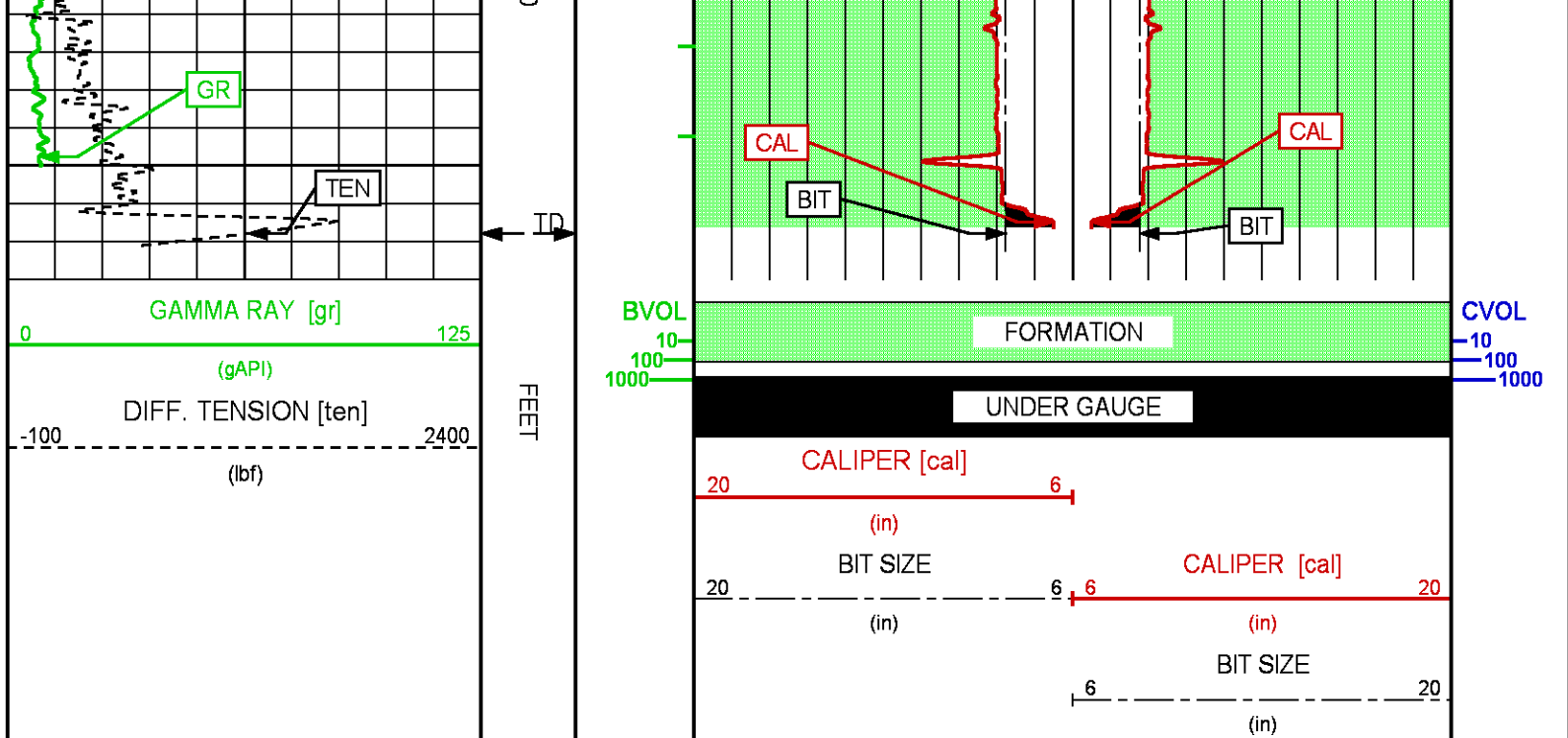
CURVE	OFFSET (ft)	CURVE	OFFSET (ft)	CURVE	OFFSET (ft)	CURVE	OFFSET (ft)
BIT	0.00	CAL	-3.00	GR	-20.38	TEN	0.00

Presentation : SysA:bhp1cal.fvpdf [2"/100' Scale]
Plot Interval : 10239.8 - 10672.5 Feet

Data File 1 : E1 : SysA:/dat1a/md11798r4/R4PQR MAIN.ytf

Data File : F:\Data\1735141R41 GR_MAIN.txt
Created On : N/A
Company : HOLLY FRONTIER - NAVAJO
Well : NAVAJO REFINING WDW #4
Field : ARTESIA
File Interval : 10225.2 - 10672.5 Feet
OCT : p87cc





**BAKER
HUGHES**
a GE company



COMPANY
WELL
FIELD
COUNTY

HOLLY FRONTIER - NAVAJO
NAVAJO REFINING WDW #4
ARTESIA
EDDY

STATE **NEW MEXICO**

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