BAKER HUGHES

Baker Atlas

RT EXPLORER
MICRO LATEROLOG
GAMMA RAY LOG

FILE NO:

API NO: 05083652700000

COMPANY KINDER MORGAN
WELL SAND CANYON #8
FIELD MCELMO DOME
COUNTY MONTEZUMA STATE COLORADO

Ver. 3.87

LOCATION:
SHL: 2712' FWL & 1803' FSL

SEC 7 TWP 36N RGE 18W

OTHER SERVICES
CCL/GR
ZDL/CN/GR
BHP

PERMANENT DATUM G.L. ELEVATION 6397 FT
LOG MEASURED FROM K.B. 19.5 FT ABOVE P.D.
DRILL. MEAS. FROM KELLY BUSHING

ELEVATIONS:
KB 6416.5 FT
DF 6415.5 FT
GL 6397.0 FT

DATE		22-AUG-2010			
RUN	TRIP	1	1		
SERVICE ORDER		576762			
DEPTH DRILLER		7942 FT			
DEPTH LOGGER		7942 FT			
BOTTOM LOGGED INTERVAL		7942 FT			
TOP LOGGED INTERVAL		7500 FT			
CASING DRILLER		7.625 IN	@ 7761 FT	@	
CASING LOGGER		7764 FT			
BIT SIZE		6.5 IN			
TYPE OF FLUID IN HOLE		WATER			
DENSITY	VISCOSITY	N/A	N/A		
PH	FLUID LOSS	N/A	N/A		
SOURCE OF SAMPLE		N/A			
RM AT MEAS. TEMP.		N/A	@ N/A	@	
RMF AT MEAS. TEMP.		N/A	@ N/A	@	
RMC AT MEAS. TEMP.		N/A	@ N/A	@	
SOURCE OF RMF	RMC	N/A	N/A		
RM AT BHT		1.949 OHMM	@ 128 DEGF	@	
TIME SINCE CIRCULATION		8 HOURS			
MAX. RECORDED TEMP.		128 DEGF			
EQUIP. NO.	LOCATION	HL-6741	GRAND JCT		
RECORDED BY		DONALDSON			
WITNESSED BY		KORNEGAY			

CASING RECORD

SIZE	WEIGHT	GRADE	FROM	TO
7.625 IN	26 LB/F	K-55	0 FT	4000 FT

BOREHOLE RECORD

BIT SIZE	FROM	TO
6.5 IN	7761 FT	7942 FT

REMARKS

RUN 1 TRIP 1 :

- CLOSED CALIPER ON MILL PRIOR TO GOING INTO CASING IN ORDER TO PREVENT TOOL DAMAGE TO MILL PAD
- NO RMF OR RMC DUE THE FACT WELL FILLED WITH FRESH WATER
- LOG CORRELATED TO SCHLUMBERGER OPEN HOLE LOG 30-NOV-1990
- CREW: MCCORMICK/COATE
- THANK YOU FOR CHOOSING BAKER ATLAS

EQUIPMENT DATA

RUN	TRIP	TOOL	SERIES NO.	SERIAL NO.	POSITION
1	1	TTRM	3981XA	10475109	FREE
1	1	TELEMETRY	3514XB	10340806	FREE
1	1	GR	1329XA	10338529	FREE
1	1	ISO	4485XA	10475109	FREE
1	1	ORIT	4401XA	10318249	FREE
1	1	RT EXPLORER	1241XA	10558713	FREE
1	1	MLL	1243XA	11568854	PAD DEVICE
1	1	ISO	4485XA	10475110	FREE

MAIN LOG 1"/100FT SCALE

ECLIPS 6.01 Feb 21, 2008
Updates: 1,39,40 Patches: 1,2,4,5,6

Mon Aug 23 02:32:44 2010

Perplt /main/62 Cplot Pdf_Cpp /main/16 Fileview 5.42

PARAMETER AND FILTER SUMMARY REPORT

FILE: /dat1a/576762/k57cc03.prm
LOGGING MODE: DEPTH DIRECTION: UP
TOP DEPTH: 7618.500 ft BOTTOM DEPTH: 7973.000 ft

SYMMETRIC FILTER

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	INTERVAL (ft) TOP	BOTTOM
TTRM	FILTER ()	medium (1)		"	"
	FILTER (.h)	medium (1)		"	"
	FILTER (.l)	medium (1)		"	"
SPEED	FILTER (.h)	medium (1)		"	"
	FILTER (.l)	medium (1)		"	"
GR	FILTER ()	medium (1)		"	"
	FILTER (.h)	medium (1)		"	"
	FILTER (.l)	medium (1)		"	"
SL-II	FILTER	medium (1)		"	"
MULL	FILTER ()	light (2a)		"	"
	FILTER (.h)	light (2a)		"	"
	FILTER (.l)	light (2a)		"	"
CALA (3rd CALIPER)	FILTER ()	medium(1)		"	"
	FILTER (.l)	medium(1)		"	"
	FILTER (.l)	medium(1)		"	"
MLL	FILTER ()	light (2a)		"	"
	FILTER (.l)	light (2a)		"	"
	FILTER (.l)	light (2a)		"	"

BOREHOLE & CEMENT

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	INTERVAL (ft) TOP	BOTTOM
BIT SIZE	BIT SIZE	6.500	in	"	"
MUD SAMPLE RESISTIVITY	MUD SAMPLE TEMP	77.0	degF	"	"
	MUD SAMPLE RES	1.000	ohm.m	"	"
BOREHOLE TEMP from GRADIENT	Known BH REF TEMP	77.0	degF	"	"
	at BH REF DEPTH	0.0	ft	"	"
	with TEMP GRADIENT	1.200	0.01 degF/ft	"	"
BOREHOLE CORR DIAMETER SOURCE	CALIPER/FIXED DIA. (wlbh*)	USE CALIPER		"	"
BH MUD RESISTIVITY SOURCE	RMUD SOURCE	TOOL MEASURED		"	"

SLII PROCESSING

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	INTERVAL (ft) TOP	BOTTOM
E MATRIX	OPEN/CASED HOLE	OPEN HOLE		"	"
SLII AUTOGAIN	AUTO GAIN	AUTO GAIN ON		"	"
SLII ENERGY RANGE	ENERGY RANGE	1.30-5.00 MeV		"	"
SPECTRUM CALIBRATION	MODE	AUTOMATIC		"	"

MULL PARMS

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	INTERVAL (ft)	
				TOP	BOTTOM
MULL BOREHOLE CORRECTION	BOREHOLE CORR	ON			
	TOOL POSITION	CENTRALIZED		' '	' '

CURVE DESCRIPTION REPORT

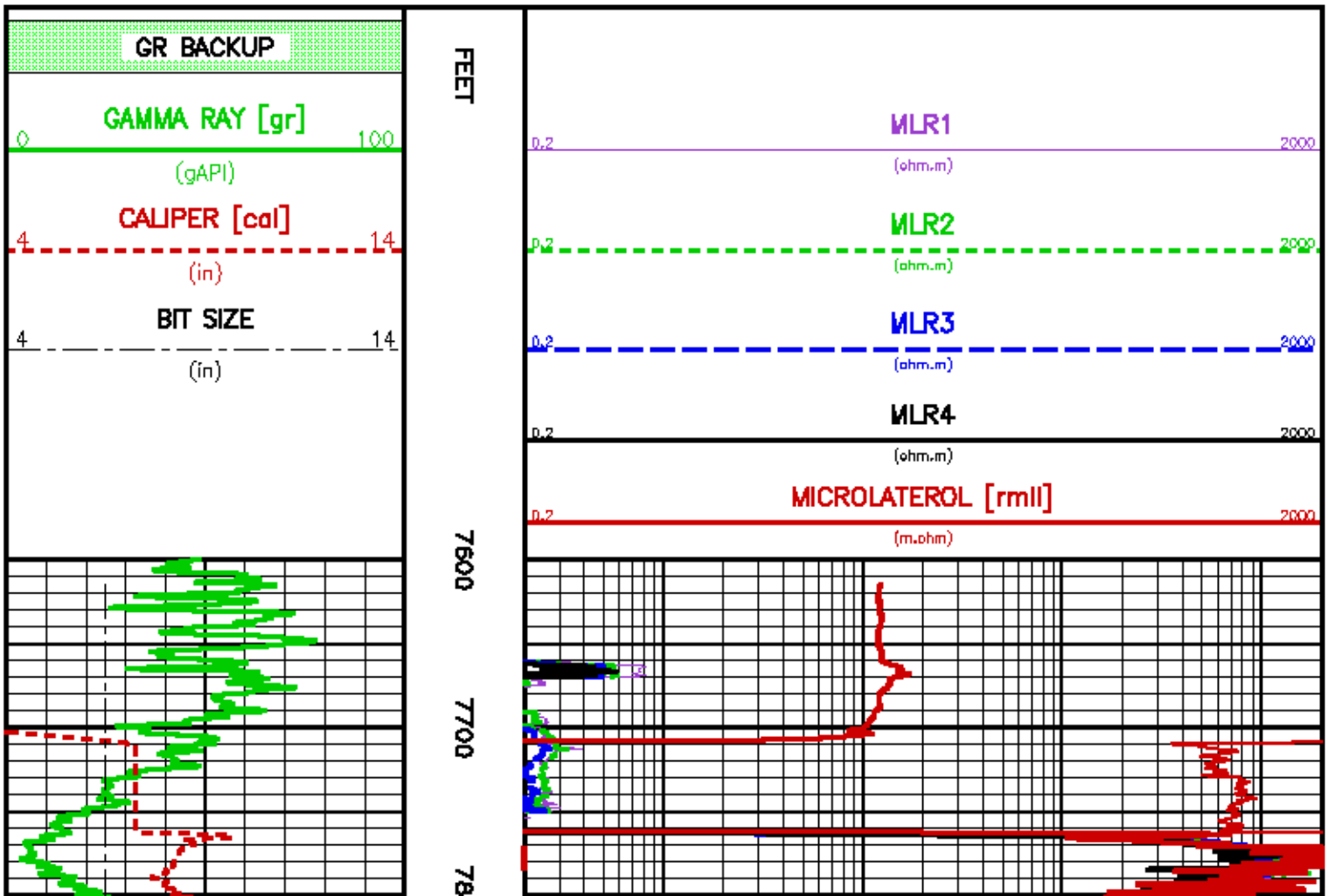
CURVE NAME	CURVE ALIAS	CREATION DATE	CURVE DESCRIPTION
F1:BIT	BIT	Aug 23 02:17:32 2010	BIT SIZE
F1:CAL	CAL	Aug 23 02:17:32 2010	CALIPER
F1:GR	GR	Aug 23 02:17:32 2010	GAMMA RAY
F1:MLR1	MLR1	Aug 23 02:17:32 2010	SHALLOW 1 RESISTIVITY
F1:MLR2	MLR2	Aug 23 02:17:32 2010	SHALLOW 2 RESISTIVITY
F1:MLR3	MLR3	Aug 23 02:17:32 2010	SHALLOW 3 RESISTIVITY
F1:MLR4	MLR4	Aug 23 02:17:32 2010	SHALLOW 4 RESISTIVITY
F1:RMLL	RMLL	Aug 23 02:17:32 2010	RESISTIVITY

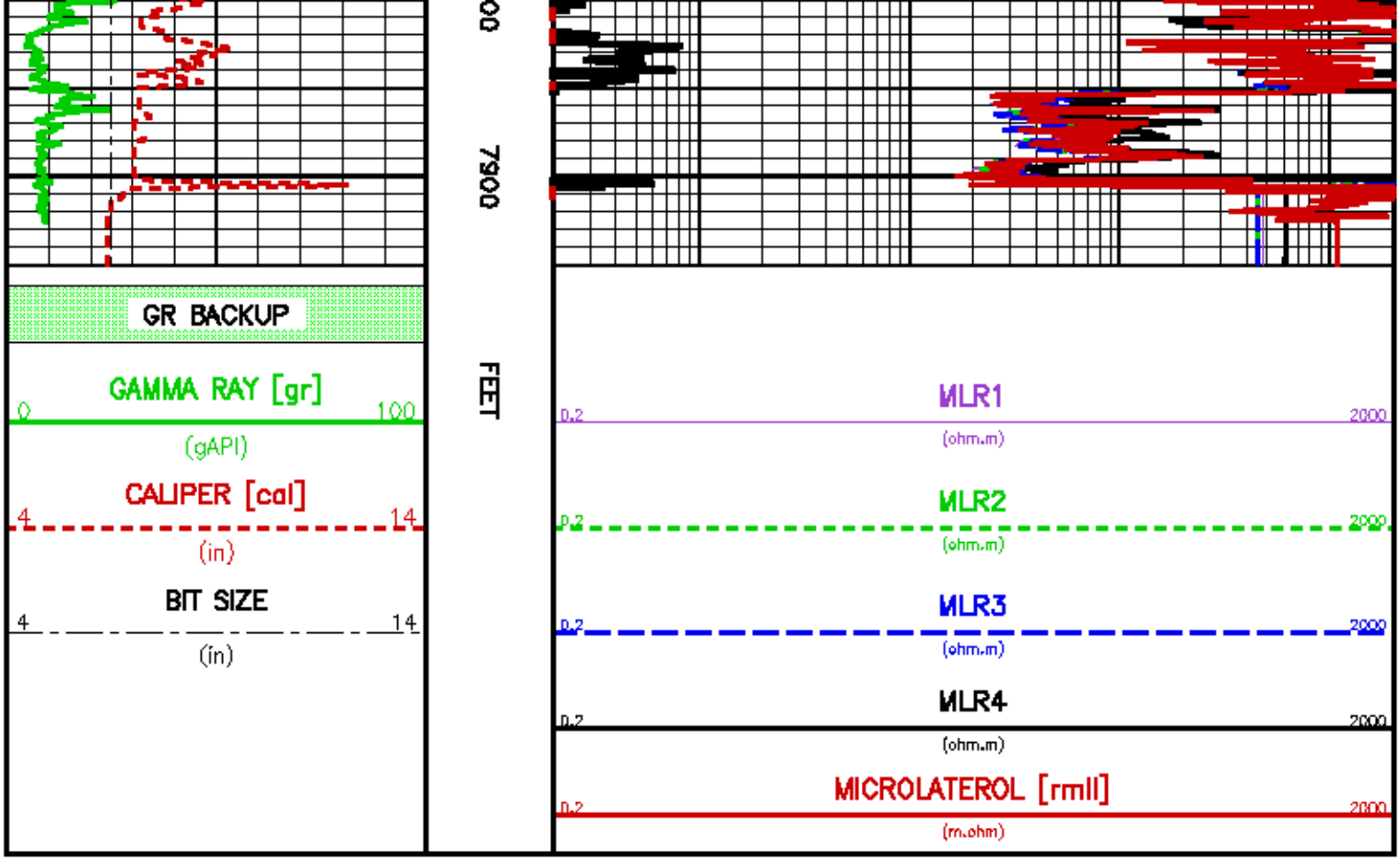
CURVE MEASURE POINT OFFSET

CURVE	OFFSET (ft)	CURVE	OFFSET (ft)	CURVE	OFFSET (ft)	CURVE	OFFSET (ft)
BIT	0.00	GR	42.12	MLR2	18.25	MLR4	18.25
CAL	1.50	MLR1	18.25	MLR3	18.25	RMLL	1.50

Presentation : mfg1:/dat1a/576762/KINDER_RT_MN_1.pdf [1"/100' Scale]
Plot Interval : 7600 - 7950 Feet

Data File 1 : F1 : mfg1:/dat1a/576762/kd7ca03_MN.dlis
Created On : Aug 23 02:17:32 2010
Company : KINDER MORGAN
Well : SAND CANYON #8
Field : MCELMO DOME
File Interval : 7560.75 - 7970 Feet
Dct : kd7ca





MAIN LOG 2"/100FT SCALE

ECLIPS 6.01 Feb 21, 2008
Updates: 1,39,40 Patches: 1,2,4,5,6

Mon Aug 23 02:32:24 2010

Perplt /main/62 Cplot Pdf_Cpp /main/16 Fileview 5.42

PARAMETER AND FILTER SUMMARY REPORT

FILE: /dat1a/576762/k87ca03.prm
LOGGING MODE: DEPTH DIRECTION: UP
TOP DEPTH: 7618.500 ft BOTTOM DEPTH: 7975.000 ft

SYMMETRIC FILTER

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	INTERVAL (ft) TOP	BOTTOM
TTRM	FILTER ()	medium (1)		"	"
	FILTER (.h)	medium (1)		"	"
	FILTER (.l)	medium (1)		"	"
SPEED	FILTER (.h)	medium (1)		"	"
	FILTER (.l)	medium (1)		"	"
GR	FILTER ()	medium (1)		"	"
	FILTER (.h)	medium (1)		"	"
	FILTER (.l)	medium (1)		"	"
SL-11	FILTER	medium (1)		"	"
MULL	FILTER ()	light (2a)		"	"
	FILTER (.h)	light (2a)		"	"
	FILTER (.l)	light (2a)		"	"
CALA (3rd CALIPER)	FILTER ()	medium(1)		"	"
	FILTER (.l)	medium(1)		"	"
	FILTER (.l)	medium(1)		"	"

MLL	FILTER (.) FILTER (.I) FILTER (.J)	light (2a) light (2a) light (2a)		" " "	" " "

BOREHOLE & CEMENT

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	INTERVAL (ft)	
BIT SIZE	BIT SIZE	6.500	in	TOP	BOTTOM
MUD SAMPLE RESISTIVITY	MUD SAMPLE TEMP	77.0	degF	"	"
	MUD SAMPLE RES	1.000	ohm.m	"	"
BOREHOLE TEMP from GRADIENT	Known BH REF TEMP	77.0	degF	"	"
	at BH REF DEPTH	0.0	ft	"	"
	with TEMP GRADIENT	1.200	0.01 degF/ft	"	"
BOREHOLE CORR DIAMETER SOURCE	CALIPER/FIXED DIA. (slbh*)	USE CALIPER		"	"
BH MUD RESISTIVITY SOURCE	RMUD SOURCE	TOOL MEASURED		"	"

SLII PROCESSING

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	INTERVAL (ft)	
E MATRIX	OPEN/CASED HOLE	OPEN HOLE		TOP	BOTTOM
SLII AUTOGAIN	AUTO GAIN	AUTO GAIN ON		"	"
SLII ENERGY RANGE	ENERGY RANGE	1.30-3.00 MeV		"	"
SPECTRUM CALIBRATION	MODE	AUTOMATIC		"	"

MULL PARMS

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	INTERVAL (ft)	
MULL BOREHOLE CORRECTION	BOREHOLE CORR	ON		TOP	BOTTOM
	TOOL POSITION	CENTRALIZED		"	"

CURVE DESCRIPTION REPORT

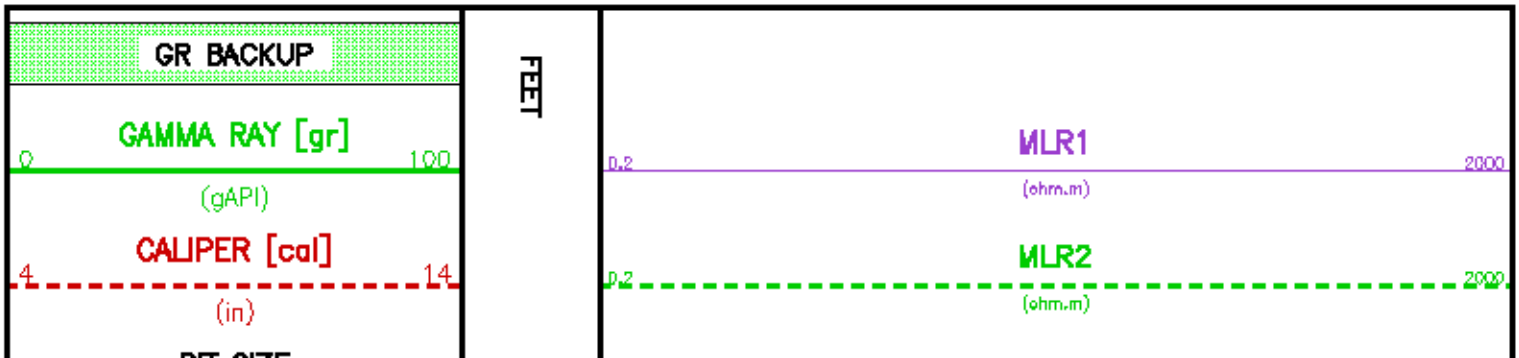
CURVE NAME	CURVE ALIAS	CREATION DATE	CURVE DESCRIPTION
F1:BIT	BIT	Aug 25 02:17:52 2010	BIT SIZE
F1:CAL	CAL	Aug 25 02:17:52 2010	CALIPER
F1:GR	GR	Aug 25 02:17:52 2010	GAMMA RAY
F1:MLR1	MLR1	Aug 25 02:17:52 2010	SHALLOW 1 RESISTIVITY
F1:MLR2	MLR2	Aug 25 02:17:52 2010	SHALLOW 2 RESISTIVITY
F1:MLR3	MLR3	Aug 25 02:17:52 2010	SHALLOW 3 RESISTIVITY
F1:MLR4	MLR4	Aug 25 02:17:52 2010	SHALLOW 4 RESISTIVITY
F1:RMLL	RMLL	Aug 25 02:17:52 2010	RESISTIVITY

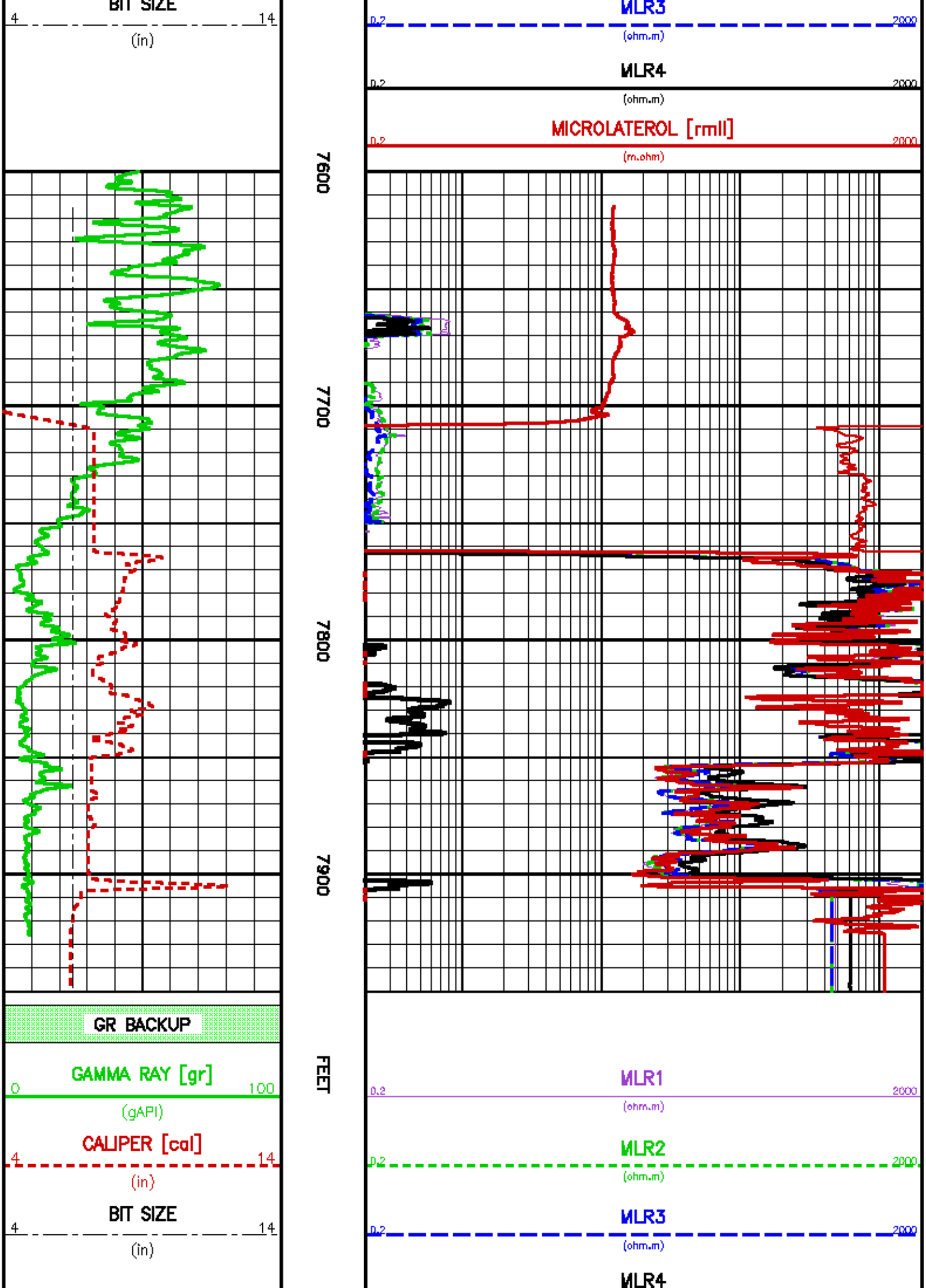
CURVE MEASURE POINT OFFSET

CURVE	OFFSET (ft)	CURVE	OFFSET (ft)	CURVE	OFFSET (ft)	CURVE	OFFSET (ft)
BIT	0.00	GR	42.12	MLR2	18.25	MLR4	18.25
CAL	1.50	MLR1	18.25	MLR3	18.25	RMLL	1.50

Presentation : mfg1:/dat1a/576762/KINDER_RT_MN_2.pdf [2"/100' Scale]
Plot Interval : 7600 - 7950 Feet

Data File 1 : F1 : mfg1:/dat1a/576762/k87oa05_MN.dif
Created On : Aug 25 02:17:52 2010
Company : KINDER MORGAN
Well : SAND CANYON 88
Field : MCELMO DOME
File Interval : 7560.75 - 7970 Feet
Out : k87oa

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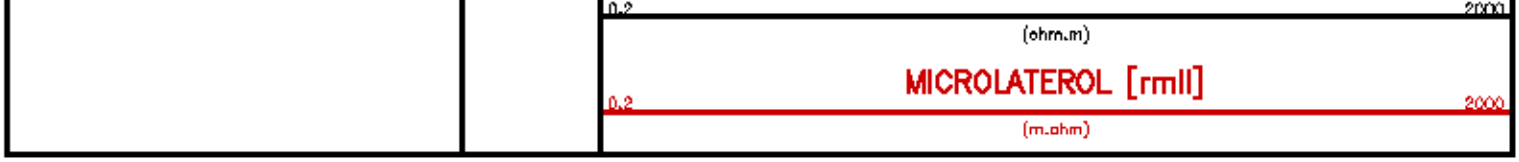
4
14
(in)
MLR3
0.2
2000
(ohm.m)
MLR4
0.2
2000
(ohm.m)
MICROLATEROL [rmll]
0.2
2000
(m.ohm)
7600
7700
7800
7900
FEET
GR BACKUP
GAMMA RAY [gr]
0
100
(gAPI)
CALIPER [cal]
4
14
(in)
BIT SIZE
4
14
(in)
MLR1
0.2
2000
(ohm.m)
MLR2
0.2
2000
(ohm.m)
MLR3
0.2
2000
(ohm.m)
MLR4



MAIN LOG 5"/100FT SCALE

ECLIPS 6.01 Feb 21, 2008
Updates: 1,39,40 Patches: 1,2,4,5,6

Mon Aug 23 02:34:58 2010

Perplt /main/62 Cplot Pdf_Cpp /main/16 Fileview 5.42

PARAMETER AND FILTER SUMMARY REPORT

FILE: /dat1a/576762/k87cc05.prm
LOGGING MODE: DEPTH DIRECTION: UP
TOP DEPTH: 7618.500 ft BOTTOM DEPTH: 7973.000 ft

SYMMETRIC FILTER

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	INTERVAL (ft) TOP	BOTTOM
TTRM	FILTER ()	medium (1)		"	"
	FILTER (.h)	medium (1)		"	"
	FILTER (.l)	medium (1)		"	"
SPEED	FILTER (.h)	medium (1)		"	"
	FILTER (.l)	medium (1)		"	"
GR	FILTER ()	medium (1)		"	"
	FILTER (.h)	medium (1)		"	"
	FILTER (.l)	medium (1)		"	"
SL-II	FILTER	medium (1)		"	"
MULL	FILTER ()	light (2n)		"	"
	FILTER (.h)	light (2n)		"	"
	FILTER (.l)	light (2n)		"	"
CALA (3rd CALIPER)	FILTER ()	medium(1)		"	"
	FILTER (.l)	medium(1)		"	"
	FILTER (.l)	medium(1)		"	"
MLL	FILTER ()	light (2n)		"	"
	FILTER (.l)	light (2n)		"	"
	FILTER (.l)	light (2n)		"	"

BOREHOLE & CEMENT

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	INTERVAL (ft) TOP	BOTTOM
BIT SIZE	BIT SIZE	6.500	in	TOP	BOTTOM
MUD SAMPLE RESISTIVITY	MUD SAMPLE TEMP	77.0	degF	"	"
	MUD SAMPLE RES	1.000	ohm.m	"	"
BOREHOLE TEMP from GRADIENT	Known BH REF TEMP	77.0	degF	"	"
	at BH REF DEPTH	0.0	ft	"	"
	with TEMP GRADIENT	1.200	0.01 degF/ft	"	"
BOREHOLE CORR DIAMETER SOURCE	CALIPER/FIXED DIA. (albh*)	USE CALIPER		"	"
BH MUD RESISTIVITY SOURCE	RMUD SOURCE	TOOL MEASURED		"	"

SLII PROCESSING

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	INTERVAL (ft) TOP	BOTTOM
E MATRIX	OPEN/CASED HOLE	OPEN HOLE		TOP	BOTTOM
SLII AUTOGAIN	AUTO GAIN	AUTO GAIN ON		"	"
SLII ENERGY RANGE	ENERGY RANGE	1.30-3.00 MeV		"	"
SPECTRUM CALIBRATION	MODE	AUTOMATIC		"	"

MULL PARMS

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	INTERVAL (ft)

MULL BOREHOLE CORRECTION	BOREHOLE CORR TOOL POSITION	ON CENTRALIZED	TOP ''	BOTTOM ''

CURVE DESCRIPTION REPORT

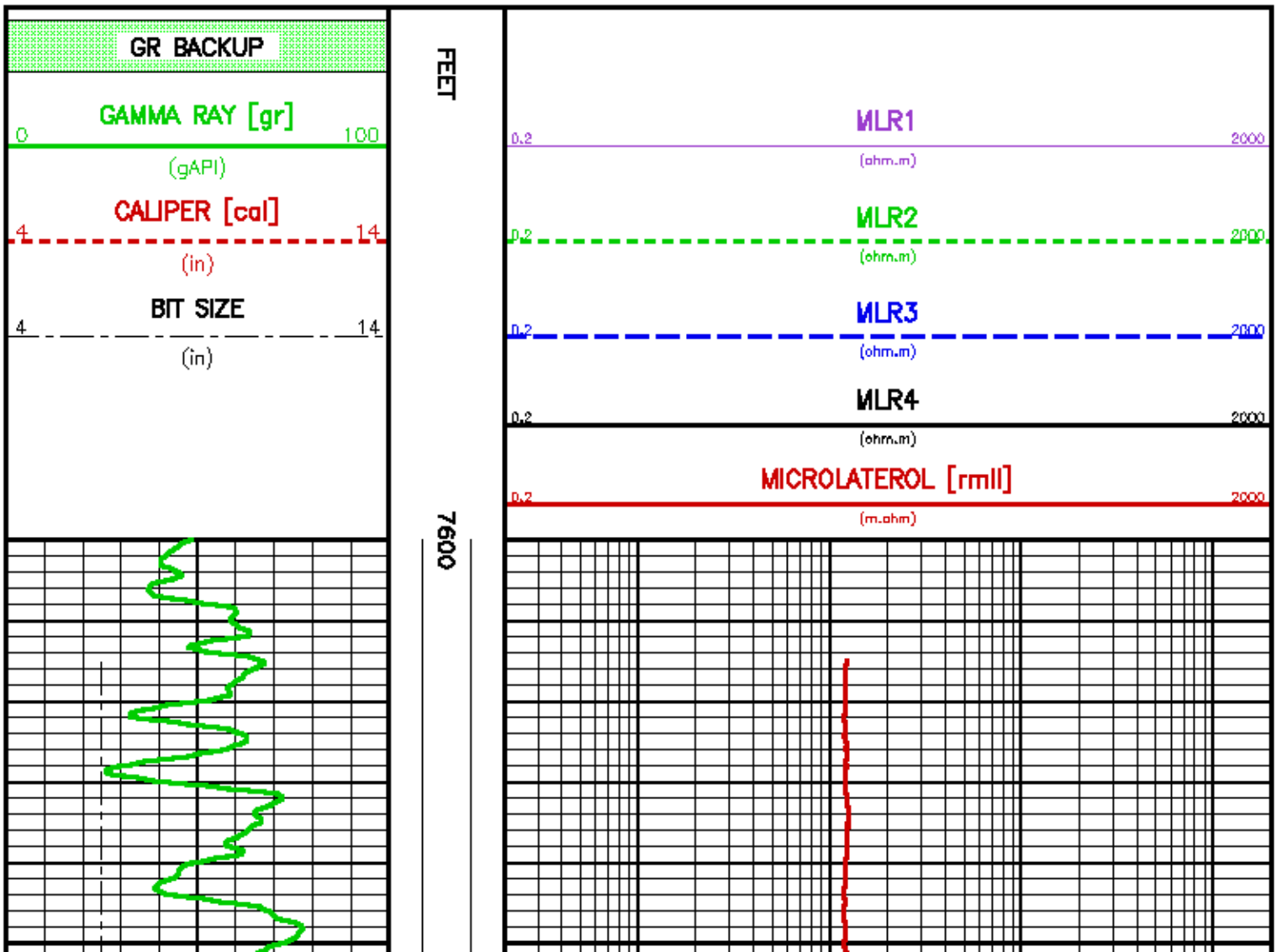
CURVE NAME	CURVE ALIAS	CREATION DATE	CURVE DESCRIPTION
F1:BIT	BIT	Aug 25 02:17:32 2010	BIT SIZE
F1:CAL	CAL	Aug 25 02:17:32 2010	CALIPER
F1:GR	GR	Aug 25 02:17:32 2010	GAMMA RAY
F1:MLR1	MLR1	Aug 25 02:17:32 2010	SHALLOW 1 RESISTIVITY
F1:MLR2	MLR2	Aug 25 02:17:32 2010	SHALLOW 2 RESISTIVITY
F1:MLR3	MLR3	Aug 25 02:17:32 2010	SHALLOW 3 RESISTIVITY
F1:MLR4	MLR4	Aug 25 02:17:32 2010	SHALLOW 4 RESISTIVITY
F1:RMLL	RMLL	Aug 25 02:17:32 2010	RESISTIVITY

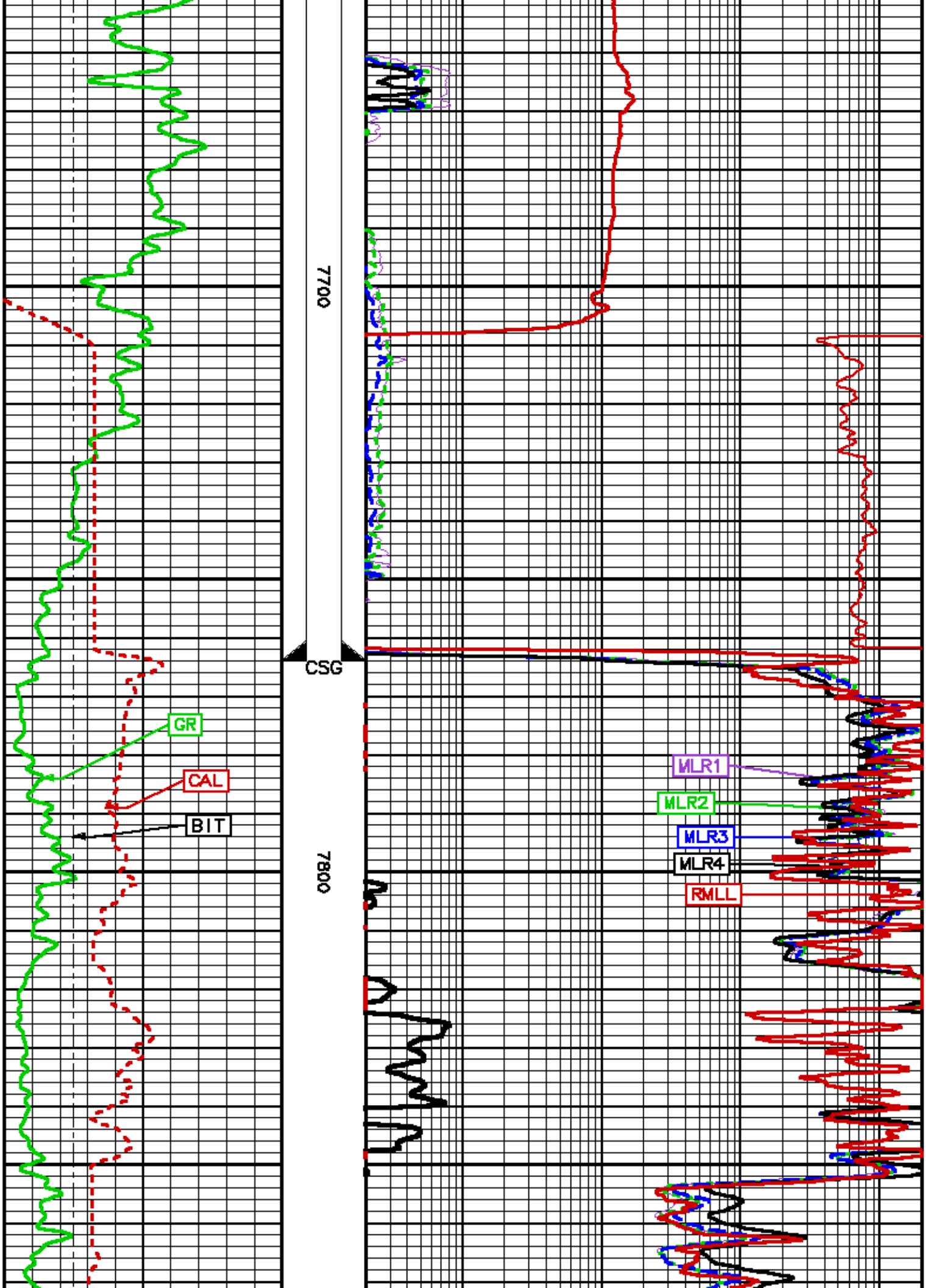
CURVE MEASURE POINT OFFSET

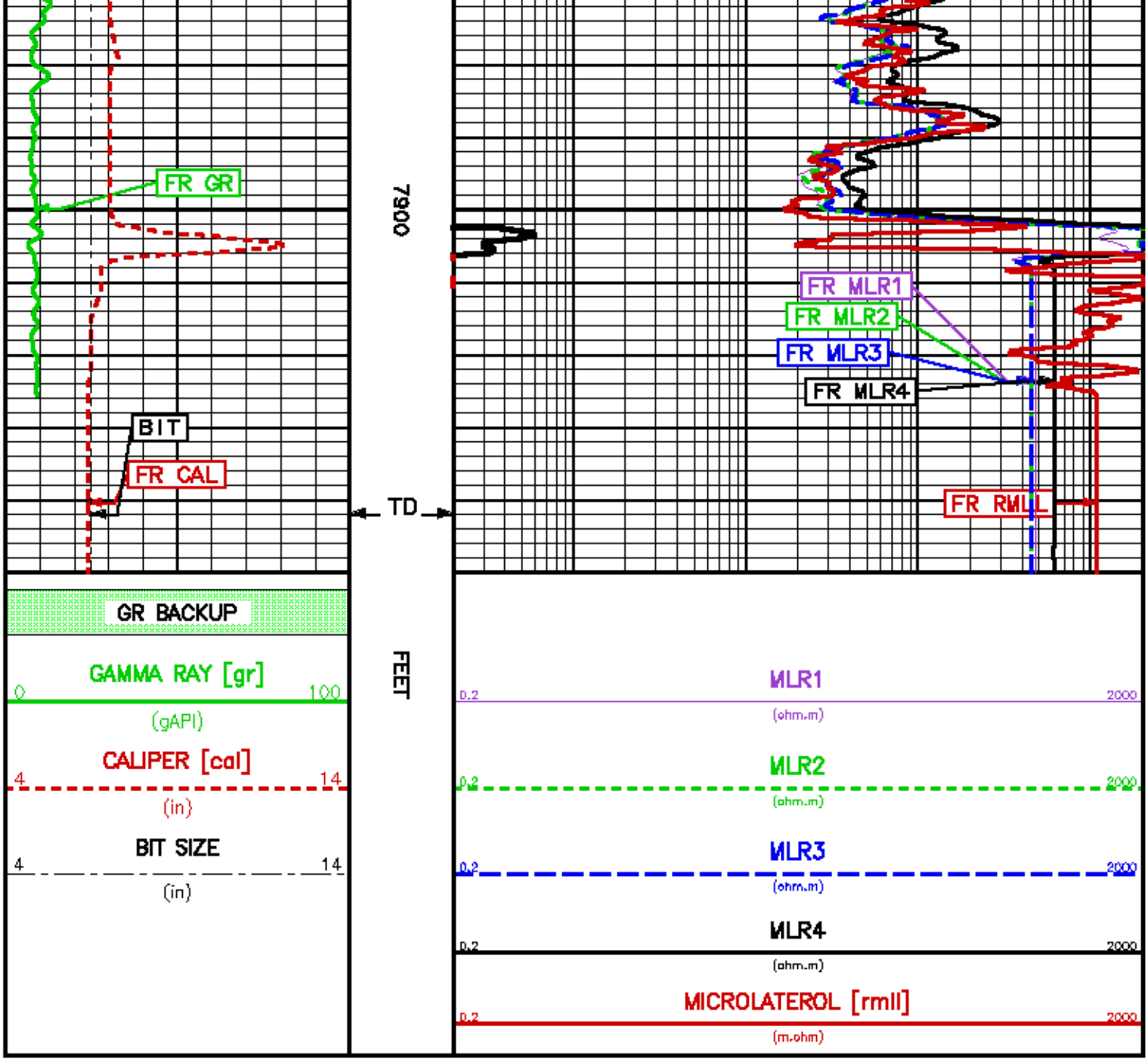
CURVE	OFFSET (ft)	CURVE	OFFSET (ft)	CURVE	OFFSET (ft)	CURVE	OFFSET (ft)
BIT	0.00	GR	42.12	MLR2	18.25	MLR4	18.25
CAL	1.50	MLR1	18.25	MLR3	18.25	RMLL	1.50

Presentation : mfg1:/dat1a/576762/KINDER_RT_MN_5.pdf [5"/100' Scale]
Plot Interval : 7600 - 7950 Feet

Data File 1 : F1 : mfg1:/dat1a/576762/kd7aa05_MN.dlis
Created On : Aug 25 02:17:32 2010
Company : KINDER MORGAN
Well : SAND CANYON #8
Field : MCELMO DOME
File Interval : 7560.75 - 7970 Feet
Set : kd7aa




7700
CSG
7800
GR
CAL
BIT
MLR1
MLR2
MLR3
MLR4
RMLL



REPEAT LOG 5"/100FT SCALE

ECLIPS 6.01 Feb 21, 2008
Updates: 1,39,40 Patches: 1,2,4,5,6

Mon Aug 23 02:23:34 2010

Perpit /main/62 Cplot Pdf_Cpp /main/16 Fileview 5.42

PARAMETER AND FILTER SUMMARY REPORT

FILE: /data/576762/k67cc02.prm
LOGGING MODE: DEPTH DIRECTION: UP
TOP DEPTH: 7744.750 ft BOTTOM DEPTH: 7973.000 ft

SYMMETRIC FILTER

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	INTERVAL (ft)	
				TOP	BOTTOM
TTRM	FILTER ()	medium (1)		"	"
	FILTER (.h)	medium (1)		"	"
	FILTER (.l)	medium (1)		"	"
SPEED	FILTER (.h)	medium (1)		"	"
	FILTER (.l)	medium (1)		"	"
GR	FILTER ()	medium (1)		"	"
	FILTER (.h)	medium (1)		"	"
	FILTER (.l)	medium (1)		"	"
SL-II	FILTER	medium (1)		"	"
MLL	FILTER ()	light (2a)		"	"
	FILTER (.h)	light (2a)		"	"
	FILTER (.l)	light (2a)		"	"
CALA (3rd CALIPER)	FILTER ()	medium(1)		"	"
	FILTER (.l)	medium(1)		"	"
	FILTER (.l)	medium(1)		"	"
MLL	FILTER ()	light (2a)		"	"
	FILTER (.l)	light (2a)		"	"
	FILTER (.l)	light (2a)		"	"

BOREHOLE & CEMENT

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	INTERVAL (ft)	
				TOP	BOTTOM
BIT SIZE	BIT SIZE	6.500	in	"	"
MUD SAMPLE RESISTIVITY	MUD SAMPLE TEMP	77.0	degF	"	"
	MUD SAMPLE RES	1.000	ohm.m	"	"
BOREHOLE TEMP from GRADIENT	Known BH REF TEMP	77.0	degF	"	"
	at BH REF DEPTH	0.0	ft	"	"
	with TEMP GRADIENT	1.200	0.01 degF/ft	"	"
BOREHOLE CORR DIAMETER SOURCE	CALIPER/FIXED DIA. (=lbh*)	USE CALIPER		"	"
BH MUD RESISTIVITY SOURCE	RMUD SOURCE	TOOL MEASURED		"	"

SLII PROCESSING

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	INTERVAL (ft)	
				TOP	BOTTOM
E MATRIX	OPEN/CASED HOLE	OPEN HOLE		"	"
SLII AUTOGAIN	AUTO GAIN	AUTO GAIN ON		"	"
SLII ENERGY RANGE	ENERGY RANGE	1.30-5.00 MeV		"	"
SPECTRUM CALIBRATION	MODE	AUTOMATIC		"	"

MULL PARMS

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	INTERVAL (ft)	
				TOP	BOTTOM
MULL BOREHOLE CORRECTION	BOREHOLE CORR	ON		"	"
	TOOL POSITION	CENTRALIZED			

CURVE DESCRIPTION REPORT

CURVE NAME	CURVE ALIAS	CREATION DATE	CURVE DESCRIPTION
F1:BIT	BIT	Aug 23 02:06:32 2010	BIT SIZE
F1:CAL	CAL	Aug 23 02:06:32 2010	CALIPER
F1:GR	GR	Aug 23 02:06:32 2010	GAMMA RAY
F1:MLR1	MLR1	Aug 23 02:06:32 2010	SHALLOW 1 RESISTIVITY
F1:MLR2	MLR2	Aug 23 02:06:32 2010	SHALLOW 2 RESISTIVITY
F1:MLR3	MLR3	Aug 23 02:06:32 2010	SHALLOW 3 RESISTIVITY
F1:MLR4	MLR4	Aug 23 02:06:32 2010	SHALLOW 4 RESISTIVITY
F1:RMLL	RMLL	Aug 23 02:06:32 2010	RESISTIVITY

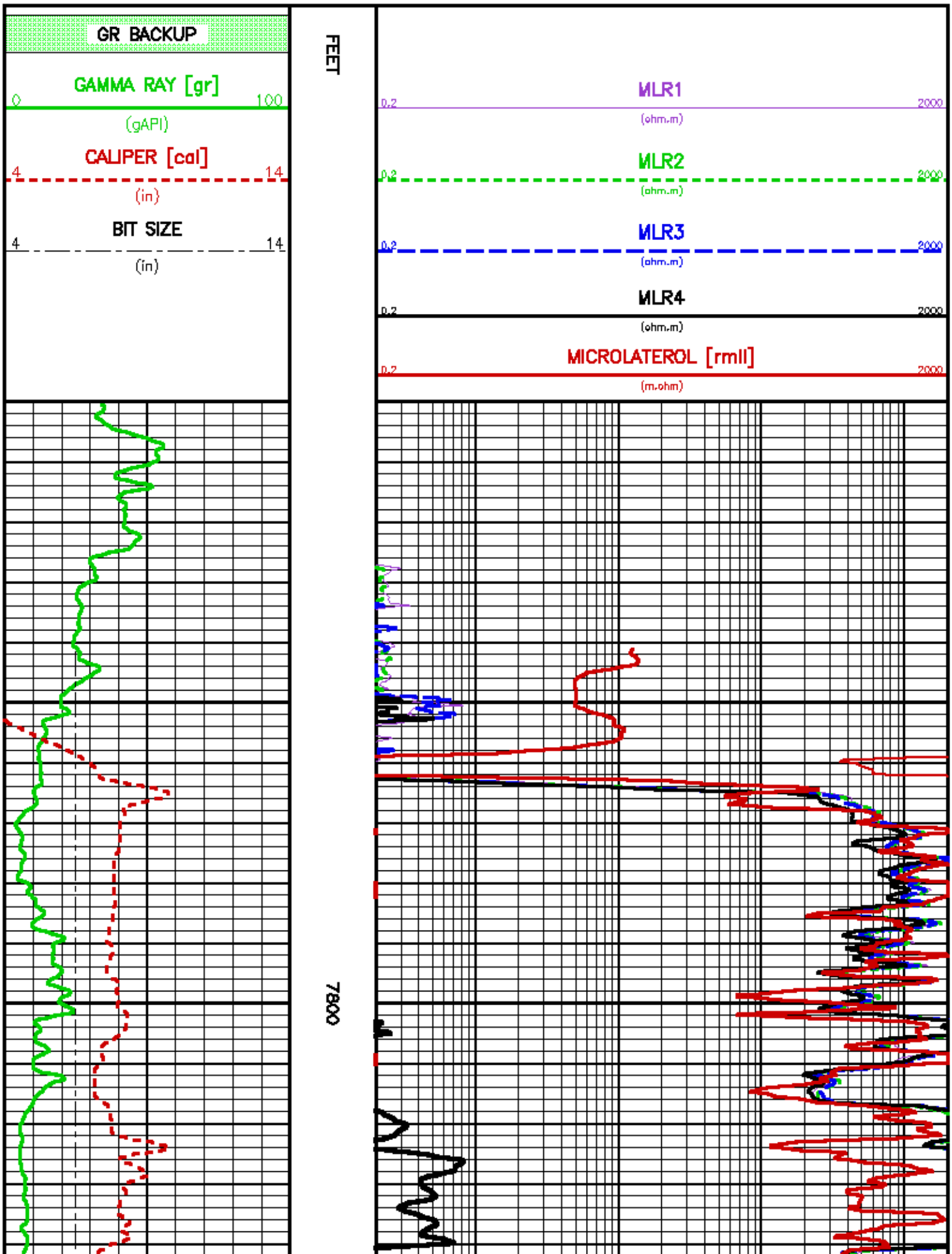
CURVE MEASURE POINT OFFSET

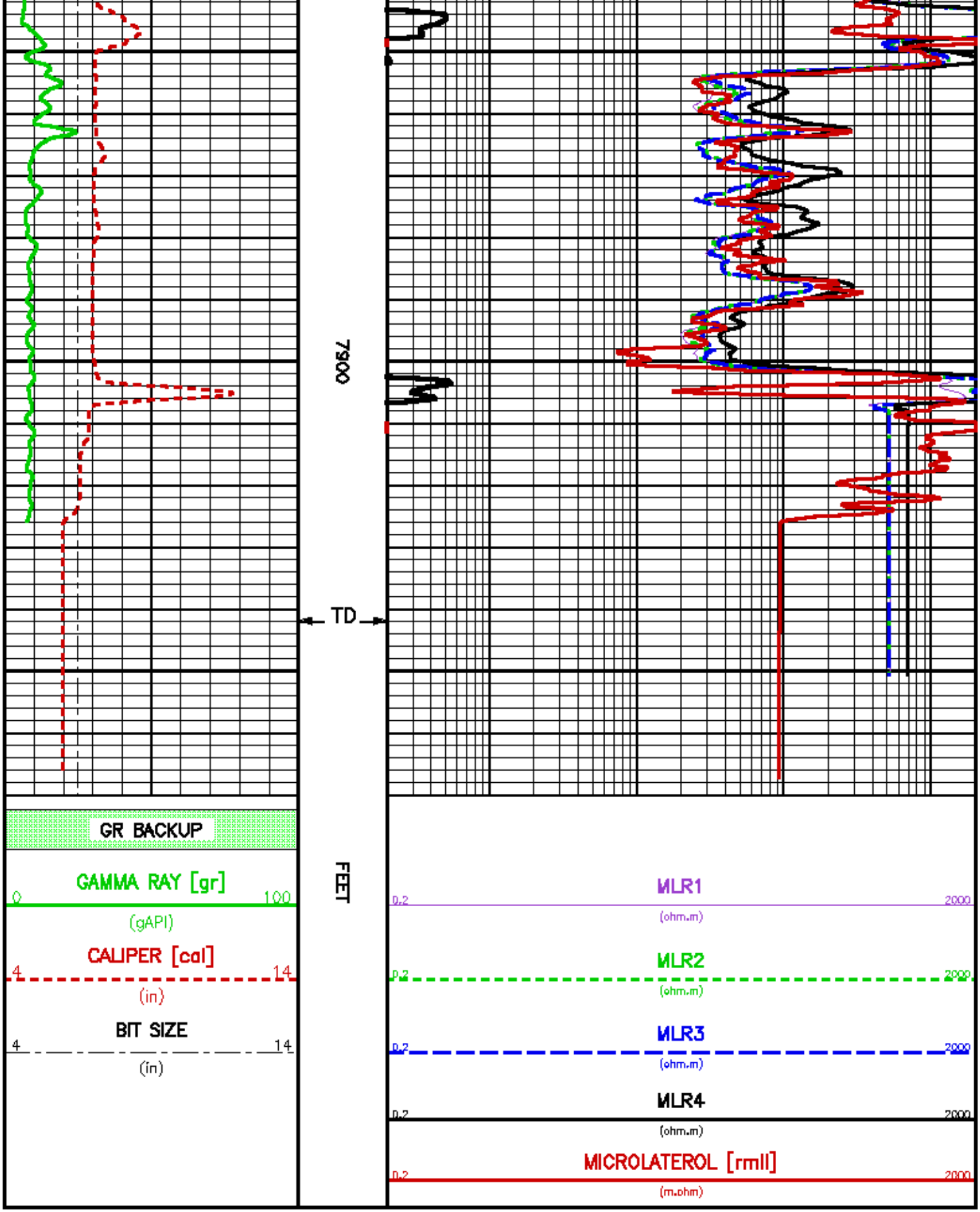
CURVE	OFFSET (ft)	CURVE	OFFSET (ft)	CURVE	OFFSET (ft)	CURVE	OFFSET (ft)
BIT	0.00	GR	42.12	MLR2	18.25	MLR4	18.25
CAL	1.50	MLR1	18.25	MLR3	18.25	RMLL	1.50

Presentation : mfg1:/dat1a/576762/KINDER_RT_RPT.pdf [5"/100' Scale]
Plot Interval : 7700.5 - 7970 Feet

Data File 1 : F1 : mfg1:/dat1a/576762/ld7ca02_RPT.ldf
Created On : Aug 23 02:06:32 2010
Company : KINDER MORGAN
Well : SAND CANYON 88

Field : MCELMO DOME
File Interval : 7887 - 7975 Feet
Dst : kb7aa





CALIBRATION / VERIFICATION SUMMARY

Source File /dlis/[illegible]

GR PRIMARY CALIBRATION SUMMARY

TOOL #: 1329XA 10338529 DATE/TIME PERFORMED: Thu Jul 29 13:35:05 2010

UNIT #: 3880TA HL6741 CALB JIG #: 4702NK BA-856

	BACKGROUND (cts/s)	CALBRTR ON (cts/s)	GR DIFF (cts/s)	MULT	BACKGROUND (gAPI)	CALBRTR ON (gAPI)	CALBRTR (gAPI)
GR	254.20	1181.11	926.9	0.162	41.14	191.14	150
			830.0 990.0				

MULL_RES PRIMARY CALIBRATION SUMMARY

TOOL #: 1241XB 10558713 DATE/TIME PERFORMED: Mon Aug 23 01:42:36 2010

UNIT #: 3880TA HL6741

CAL FACTORS	F1	F2	F3	F4
MIOL Real	10.95 10.57 11.23	10.95 10.57 11.23	10.95 10.57 11.23	10.95 10.57 11.23
MIOL Quad	-0.00 -0.18 0.18	-0.01 -0.18 0.18	-0.01 -0.18 0.18	0.02 -0.18 0.18
AIOL Real	10.4 -200.0 200.0	-17.0 -200.0 200.0	-22.4 -200.0 200.0	-4.4 -200.0 200.0
AIOL Quad	-6.6 -200.0 200.0	10.6 -200.0 200.0	15.2 -200.0 200.0	19.3 -200.0 200.0
MIOM Real	100.6 97.0 103.0	100.6 97.0 103.0	100.6 97.0 103.0	100.6 97.0 103.0
MIOM Quad	0.393 -1.750 1.750	0.695 -1.750 1.750	0.592 -1.750 1.750	0.196 -1.750 1.750
AIOM Real	-19.3 -200.0 200.0	8.1 -200.0 200.0	-6.6 -200.0 200.0	12.5 -200.0 200.0
AIOM Quad	11.9 -200.0 200.0	-1.9 -200.0 200.0	7.8 -200.0 200.0	0.6 -200.0 200.0
MIOH Real	4009 3857 4095	4009 3857 4095	4009 3857 4095	4009 3857 4095
MIOH Quad	-3.60 -69.40 69.40	-7.85 -69.40 69.40	-6.49 -69.40 69.40	0.23 -69.40 69.40
AIOH Real	-213 -2000 2000	-60 -2000 2000	28 -2000 2000	-74 -2000 2000
AIOH Quad	-62 -2000 2000	17 -2000 2000	-121 -2000 2000	49 -2000 2000
MVML Real	1.000 0.999 1.001	1.000 0.999 1.001	1.000 0.999 1.001	1.000 0.999 1.001
MVML Quad	0.000 -0.001 0.001	0.000 -0.001 0.001	0.000 -0.001 0.001	0.000 -0.001 0.001
AVML Real	-1.2 -200.0 200.0	-19.9 -200.0 200.0	6.7 -200.0 200.0	-9.6 -200.0 200.0
AVML Quad	-8.5 -200.0 200.0	12.5 -200.0 200.0	-0.9 -200.0 200.0	11.7 -200.0 200.0

MULL_RES AFTER LOG VERIFICATION SUMMARY

TOOL #: 1241XB 10558713 DATE/TIME PERFORMED: Mon Aug 23 02:29:44 2010 DAYS SINCE CAL: 0

UNIT #: 3880TA HL6741

VER FACTORS	F1	F2	F3	F4
MIOL Real	10.97 10.67 11.23	10.97 10.67 11.23	10.97 10.67 11.23	10.97 10.67 11.23
MIOL Quad	-0.00 -0.19 0.19	-0.01 -0.19 0.19	-0.01 -0.19 0.19	0.02 -0.19 0.19
AIOL Real	-19.6 -200.0 200.0	14.6 -200.0 200.0	11.3 -200.0 200.0	-9.6 -200.0 200.0
AIOL Quad	21.6 -200.0 200.0	7.8 -200.0 200.0	2.9 -200.0 200.0	-10.1 -200.0 200.0
MIOM Real	100.7 97.0 103.0	100.7 97.0 103.0	100.7 97.0 103.0	100.7 97.0 103.0
MIOM Quad	0.392 -1.750 1.750	0.702 -1.750 1.750	0.598 -1.750 1.750	0.166 -1.750 1.750
AIOM Real	-9.7 -200.0 200.0	-34.7 -200.0 200.0	14.8 -200.0 200.0	4.8 -200.0 200.0
AIOM Quad	-5.8 -200.0 200.0	-4.2 -200.0 200.0	2.6 -200.0 200.0	-16.3 -200.0 200.0
MIOH Real	4014 3857 4095	4013 3857 4095	4013 3857 4095	4014 3857 4095
MIOH Quad	-4.07 -69.40 69.40	-8.11 -69.40 69.40	-6.70 -69.40 69.40	-0.59 -69.40 69.40
AIOH Real	-148 -2000 2000	39 -2000 2000	218 -2000 2000	-278 -2000 2000
AIOH Quad	173 -2000 2000	-24 -2000 2000	-167 -2000 2000	-528 -2000 2000
MVML Real	1.000 0.999 1.001	1.000 0.999 1.001	1.000 0.999 1.001	1.000 0.999 1.001

MVML Quad	0.000 (-0.001 – 0.001)	0.000 (-0.001 – 0.001)	0.000 (-0.001 – 0.001)	0.000 (-0.001 – 0.001)
AVML Real	10.8 (-200.0 – 200.0)	-1.6 (-200.0 – 200.0)	39.6 (-200.0 – 200.0)	-2.9 (-200.0 – 200.0)
AVML Quad	1.5 (-200.0 – 200.0)	-7.9 (-200.0 – 200.0)	-1.0 (-200.0 – 200.0)	12.0 (-200.0 – 200.0)

CAL PRIMARY CALIBRATION SUMMARY

TOOL #: 1243XA 11588954 DATE/TIME PERFORMED: Thu Aug 5 09:03:24 2010

UNIT #: 3880TA HL6741

	SIZE (In)	VALUE (mV)	MULTIPLIER	ADD
SMALL RING	7.000	552		
LARGE RING	11.000	811	0.01547	-1.54156

MLL PRIMARY CALIBRATION SUMMARY

TOOL #: 1243XA 11588954 DATE/TIME PERFORMED: Thu Aug 5 08:57:08 2010

UNIT #: 3880TA HL6741

	Raw Low ohm	Raw High ohm	Mult	Add	K-factor	Eng Low (ohm.m)	Eng High (ohm.m)
RESISTIVITY	101.24 (95.00 – 105.00)	101009.8 (95000.0 – 105000.0)	0.990	-0.234	0.01429	1.43 (1.36 – 1.50)	1428.6 (1380.0 – 1500.0)

MLL AFTER LOG VERIFICATION SUMMARY

TOOL #: 1243XA 11588954 DATE/TIME PERFORMED: Mon Aug 23 02:30:25 2010 DAYS SINCE CAL: 17

UNIT #: 3880TA HL6741

	Raw Low (mV/mA)	Raw High (mV/mA)	Mult	Add	Eng Low (m.ohm)	Eng High (m.ohm)
RESISTIVITY	101.56 (95.00 – 105.00)	101321.4 (95000.0 – 105000.0)	0.990	-0.234	1.43 (1.36 – 1.50)	1433.0 (1360.0 – 1500.0)

INSTRUMENT CONFIGURATION

Source File /dal1a/576702/h87cd*-kla

CABLEHEAD
Series : CABL335
Mnemonic : CBLH
Diameter : 3.38"
Weight : 24 lbs

TTRM SUB
Series : 3981XA
Mnemonic : TTRM
Diameter : 3.63"

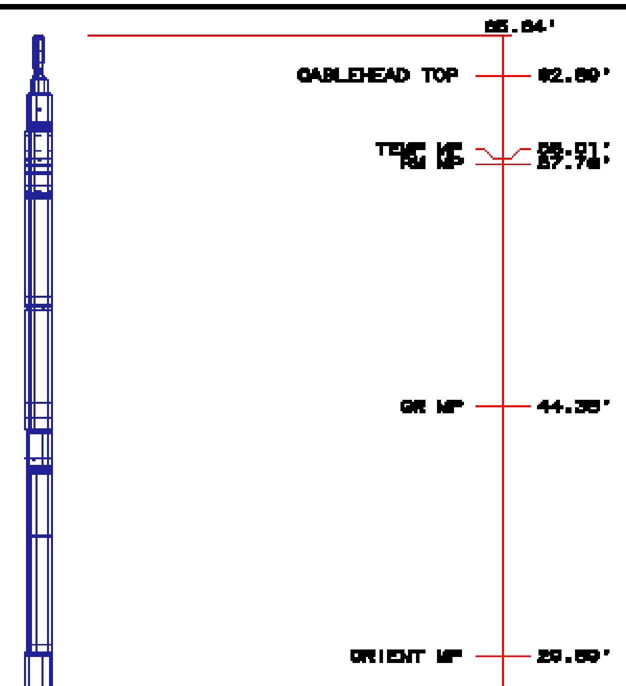
WTS COMMON REMOTE
Series : 3514XB
Mnemonic : WTS
Diameter : 3.63"
Weight : 128 lbs
Length : 8.22'

DIGITAL SPECTRALOG
Series : 1329XA
Mnemonic : DSL
Diameter : 3.63"
Weight : 130 lbs
Length : 7.31'
Measure Point : 1.60' : GR MP

MASS ISOLATION SUB
Series : 4465XA

DIGITAL ORIENTATION
Series : 4401XB
Mnemonic : ORIT
Diameter : 3.38"
Weight : 110 lbs
Length : 10.81'
Measure Point : 0.00' : ORIENT MP

WTS MULTILATEROLOG POWER ADAPTER
Series : 1241PA

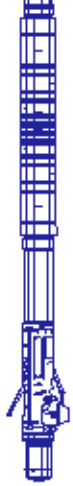


MTS MULTILATEROLOG
Series : 1241XB
Mnemonic : MULL
Diameter : 4.00"
Weight : 210 lbs
Length : 13.84'
Measure Point: 6.93': MULL mp

MTS MINILOG
Series : 1243XA
Mnemonic : ML
Diameter : 4.00"
Weight : 268 lbs
Length : 11.25'
Measure Point: 1.63': MP

MASS ISOLATION SUB
Series : 4486XA
BULL PLUG 2 5/8

TOTAL LENGTH: 66.64'
MAX DIAMETER: 0'4.00"



MULL mp — 20.44'
MP — 3.69'
0.00'

BAKER HUGHES

Baker Atlas

EOLIPS

COMPANY	KINDER MORGAN		FILE NO:
WELL	SAND CANYON #B		
FIELD	MCELMO DOME		API NO:
COUNTY	MONTEZUMA	STATE COLORADO	05083652700000

LOCATION:
SHL: 2712' FNL & 1603' FSL

SEC 7 TWP 36N RGE 18W

ELEVATIONS:
KB 6416.5 FT
DF 6415.5 FT
GL 6397.0 FT

DATE 22-AUG-2010