



Input DLIS Files						
DEFAULT	TLD_MCFL_CNL_CMV_083LUP	FN:95	PRODUCER	10-Oct-2005 15:33	704.1 M	606.1 M
Output DLIS Files						
DEFAULT	TLD_MCFL_CNL_CMV_086PUP	FN:101	PRODUCER	10-Oct-2005 16:21	704.1 M	612.8 M
RT	TLD_MCFL_CNL_CMV_086PUP	FN:102	PRODUCER	10-Oct-2005 16:21	704.1 M	612.9 M

CMR DEPTH LOG REPORT

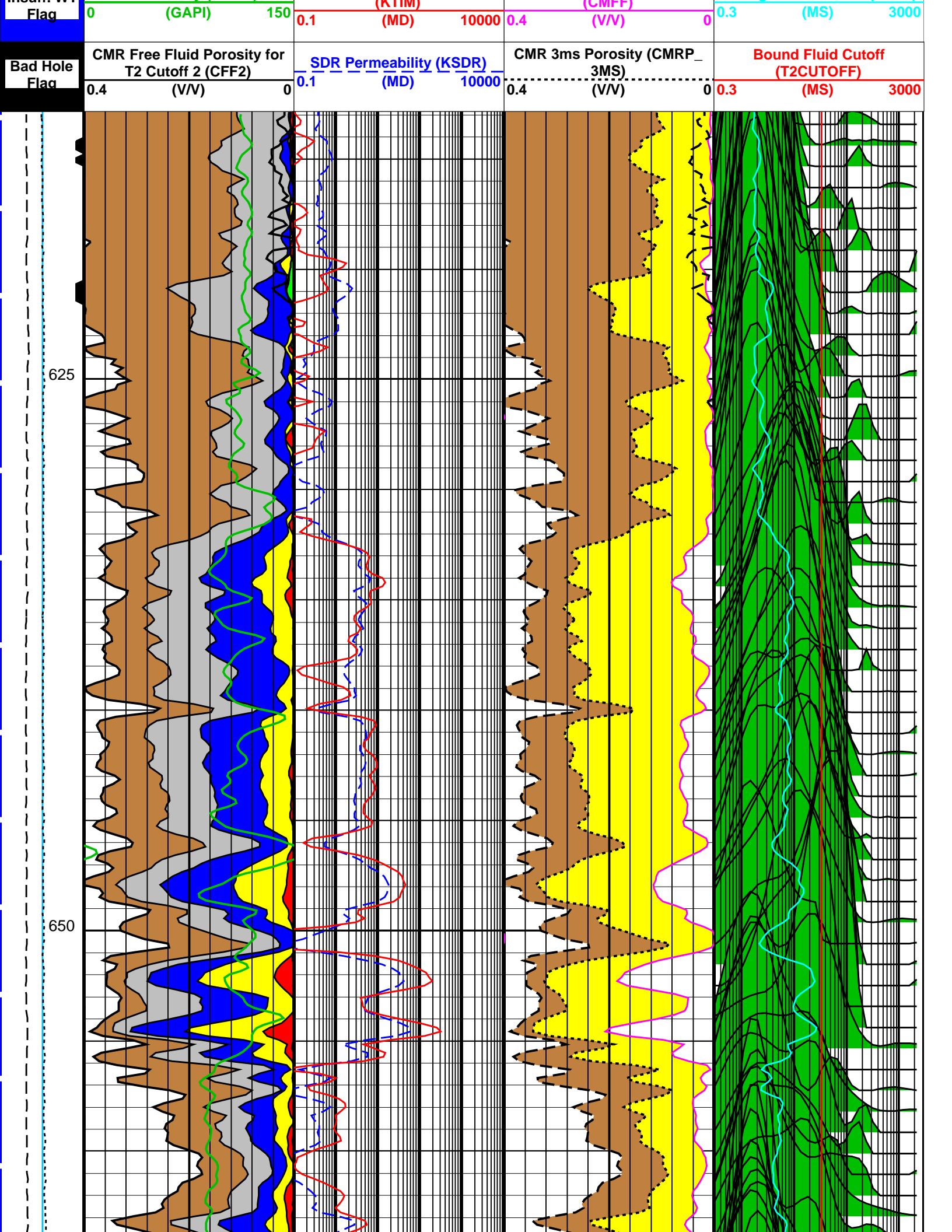
PARAMETER SUMMARY

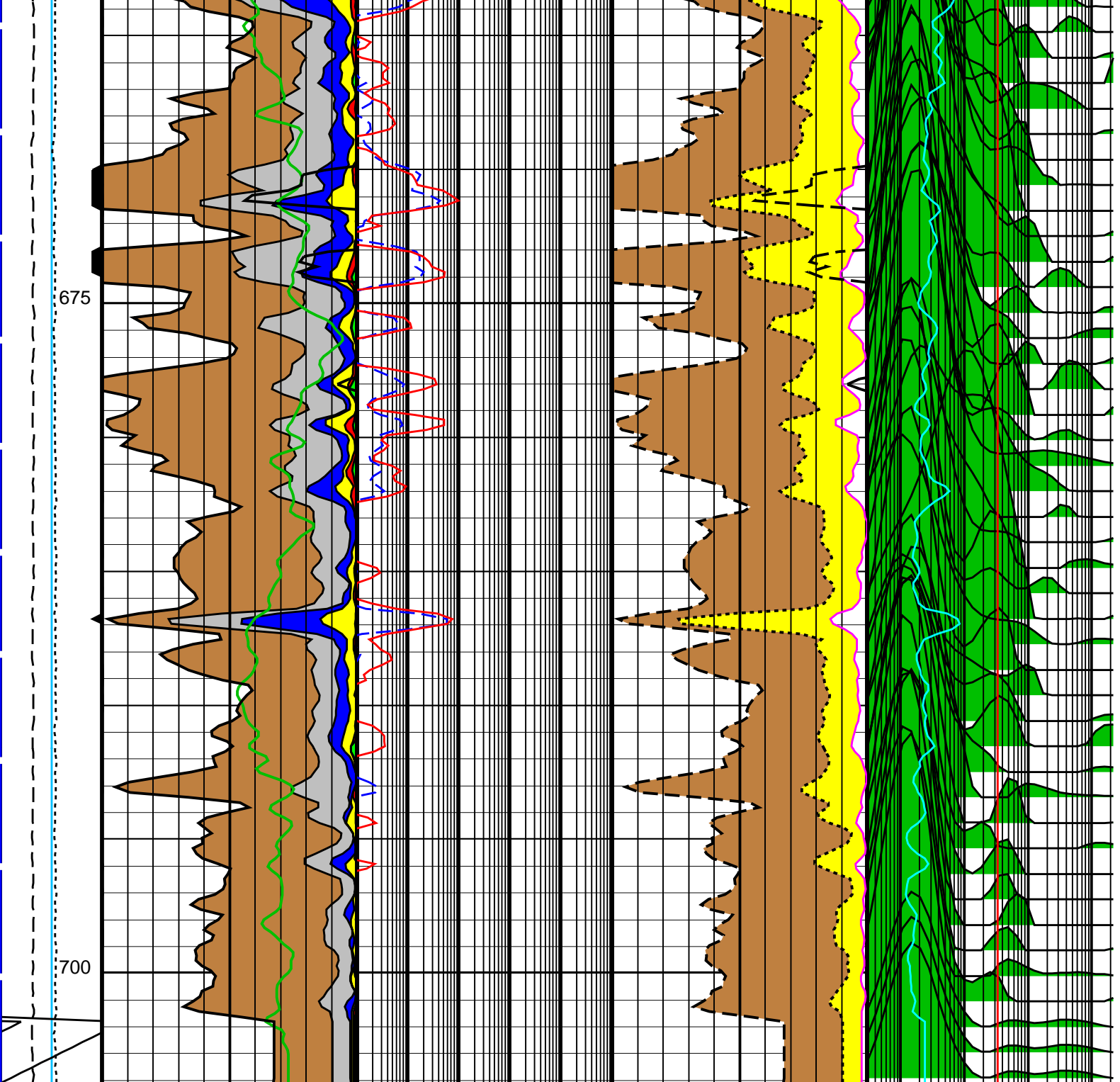
Tool Type: CMV-Plus	Cart. Number: 166	Sonde Number: 136	
Kit Number: 28	DHC Version : 15.0	DSP Version : 12	SP Version : 2062001
Mode: Expert Depth Log – B Mode		LFST Freq(khz) : 2173	LFST Temp(degC) : 46.85
Log Direction: Up	Polarization Correction: Off	EPM: Yes	EPM T1/T2: Auto
Despiking: Off	High Res: Off	KBFV: Off	DMRP: Off
Echo Spacing(us):	(200 200)		
Polarization Times(sec) for:	T1=1s: (infinity 0.02 )	T1=3s: (8.305 0.02 )	T1=5s: (7.647 0.02 )
Number of Echoes:	(3000 30)		
Repetition:	(1 10)	Duty Cycle (highest): 0.0287	
Regularization:	Auto		
T2 Min(msec): 0.3	T2 Max(msec): 3000	T2 Cutoff(msec): 33	T1/T2: 1.5
Number of Components: 30	Downhole Stacking: 3	Uphole Stacking: 1	First Echo Used: No
Multiple T2 Cutoffs(msec):	(0.3 1 3 10 33 100 300 1000 3000)		
Sample Int.(in): 7.5	Req Log Speed (f/h): 800		

PIP SUMMARY

Time Mark Every 60 S

	Bins 7-8			
Calibrated Downhole Force (CDF) (LBF)	Bin 6			
(NO_UPDATE_COUNT)	Bin 5			
Tension (TENS) (LBF)	Bin 4	Small Pore Porosity		
Noise Out of Tolerance	Bin 3	Capillary Bound Fluid Porosity		
Caution Moderate Noise	Bins 1-2	Total CMR Porosity (TCMR)	T2 Distribution (T2_DIST_MW)	
Insuff WT	Gamma Ray (ECGR)	Timur/Coates Permeability (KTIM)	CMR Free Fluid Porosity (CMFF)	T2 Logarithmic Mean (T2LM)





Bad Hole Flag	CMR Free Fluid Porosity for T2 Cutoff 2 (CFF2)	SDR Permeability (KSDR)	CMR 3ms Porosity (CMRP_3MS)	Bound Fluid Cutoff (T2CUTOFF)
	0.4 (V/V) 0	0.1 (MD) 10000	0.4 (V/V) 0	0.3 (MS) 3000
Insuff. WT Flag	Gamma Ray (ECGR)	Timur/Coates Permeability (KTIM)	CMR Free Fluid Porosity (CMFF)	T2 Logarithmic Mean (T2LM)
	0 (GAPI) 150	0.1 (MD) 10000	0.4 (V/V) 0	0.3 (MS) 3000
Caution Moderate Noise	Bins 1-2		Total CMR Porosity (TCMR)	T2 Distribution (T2_DIST_MW)
			0.4 (V/V) 0	60 (US) 89
Noise Out of Tolerance	Bin 3		Capillary Bound Fluid Porosity	
Tension (TENS) (LBF)	Bin 4		Small Pore Porosity	

0	3000	
(NO_UPDATE_COUNT)		
0	(----10)	Bin 5
Calibrated Downhole Force (CDF) (LBF)		Bin 6
0	2000	
		Bins 7–8

# PIP SUMMARY

Time Mark Every 60 S

## Parameters

DLIS Name	Description	Value	
HILTB–FTB: High resolution Integrated Logging Tool–DTS			
BHFL	Borehole Fluid Type	WATER	
BHFL_TLD	HILT Nuclear Mud Base	WATER	
BHS	Borehole Status	OPEN	
BHT	Bottom Hole Temperature (used in calculations)	46	DEGC
BSCO	Borehole Salinity Correction Option	NO	
CCCO	Casing & Cement Thickness Correction Option	NO	
DPPM	Density Porosity Processing Mode	HIRS	
EXSICL	External Shale Indicator Clean Value	20	
EXSISH	External Shale Indicator Shale Value	150	
FEXP	Form Factor Exponent	2	
FNUM	Form Factor Numerator	1	
FPHI	Form Factor Porosity Source	DPHI	
FSAL	Formation Salinity	–50000	PPM
FSCO	Formation Salinity Correction Option	NO	
GCSE	Generalized Caliper Selection	BS	
GDEV	Average Angular Deviation of Borehole from Normal	0	DEG
GGRD	Geothermal Gradient	0.018227	DC/M
GRSE	Generalized Mud Resistivity Selection	CHART_GEN 9	
GTSE	Generalized Temperature Selection	LINEAR_ESTIMATE	
HACPP	Accelerometer PROM Presence	PRESENT_DOWNHOLE	
HART	Accelerometer Reference Temperature	20	DEGC
HDCOD	HILT Density Coal detection	2	G/C3
HDSAD	HILT Density Salt detection	2.1	G/C3
HILT_GAS_DENSITY	HILT Gas Downhole Density	0	G/C3
HILT_GAS_OPTION	HILT Gas Computation Option	OFF	
HNCOD	HILT Neutron Coal detection	45	PU
HNSAD	HILT Neutron Salt detection	5	PU
HPHIECUT	HILT effective Porosity Cutoff	5	PU
HSCO	Hole Size Correction Option	YES	
HSIS	HILT Shale Indicator Selection	GR	
HSWCUT	HILT Water Saturation from AITH cutoff	50	%
MATR	Rock Matrix for Neutron Porosity Corrections	LIMESTONE	
MCCO	Mud Cake Correction Option	NO	
MCOR	Mud Correction	NATU	
MWCO	Mud Weight Correction Option	NO	
NMT	HILT Nuclear Mud Type	NOBARITE	
PHIMAX	HILT max porosity	35	PU
PTCO	Pressure/Temperature Correction Option	NO	
SDAT	Standoff Data Source	SOCN	
SEXP_HILT	HILT Saturation Exponent	2	
SHT	Surface Hole Temperature	20	DEGC
SOCN	Standoff Distance	0.125	IN
SOCO	Standoff Correction Option	NO	
CMRT–B: Combinable Magnetic Resonance Tool – B			
ACQ_METHOD_OPT	Acquisition Method Option	SEQ	
AECS	Auto Electronic Calibration Switch	On	
AFS	Auto Frequency Switch	On	
ATCTRL	Auto Tuning Control	1	
B0_TEMP_COEF	Exponential Coef. for Static B from Temp.	–0.000399947	
BFV_MIN	Minimum BFV	0.02	M3M3
BHS	Borehole Status	OPEN	
BHT	Bottom Hole Temperature (used in calculations)	46	DEGC
CMRP_POLC_MAX	Polar. Correct. Maximum to Trigger Insufficient Wait Time Flag	0.015	M3M3
CMR_FORM_H2O_SAL	Formation Water Salinity	–50000	PPM
CMR_HI_COR_SW	CMR Hydrogen Index Correction Switch	Off	
CMR_HR_OPT	CMR High Resolution Option	Off	
CMR_LOG_DIRECTION	Logging Direction	Up	

CMR_LOG_SPEED	Optimal CMR logging speed	243.84	M/HR
CMR_SIGNAL_PROC_SW	CMR Signal Processing Switch	On	
CMR_TEMP_MC	CMR Temperature during Master Calibration	16.4852	DEGC
CPMG_OPT	Option for CPMG Data	No	
DC_GAS	Diffusion Coefficient of Gas	8	E-4CM2/S
DDFL	Uphole Stacking	1	
DEPTH_CMR_SL	Depth for CMR Station Log	495.858	M
DESPIKE_OPT	Despiking Option	Off	
DE_ALPHA	Diffusion Editing Alpha Coefficient	0.84	
DE_BETA	Diffusion Editing Beta Coefficient	0	
DE_OPT	Diffusion Editing Option	Off	
DMRP_CAL_OPT	DMRP Calculation Option	60/40	
DMRP_OPT	DMRP Option	Off	
DP_OPT	Density Porosity Option	AUTO	
EPM_OPT	Enhanced Precision Mode Option	On	
FLUID_DENSITY	Density of Liquid Phase	1	G/C3
GAMMA_REG	Gamma Regularization - Depth Log	** V **	
GAMMA_REG_SL	Gamma Regularization - Station Log	** V **	
GAS_DENSITY	Density of Gas	0.3	G/C3
GCSE	Generalized Caliper Selection	BS	
GDEV	Average Angular Deviation of Borehole from Normal	0	DEG
GGRD	Geothermal Gradient	0.018227	DC/M
GOR	Gas Oil Ratio	0	
GRSE	Generalized Mud Resistivity Selection	CHART_GEN_9	
GTSE	Generalized Temperature Selection	LINEAR_ESTIMATE	
HIFF	Hydrogen Index of Formation Fluid	1	
HI_GAS	Hydrogen Index of Gas	0.4	
HI_H2O	Hydrogen Index of Water	1	
HI_OBMF	Hydrogen Index of OBMF	1	
HI_OIL	Hydrogen Index of Oil	1	
HP_H0	0th Coefficient for Hall Probe	163.512	
HP_H1	1st Coefficient for Hall Probe	6.63622	
HP_H2	2nd Coefficient for Hall Probe	0	
HP_H3	3rd Coefficient for Hall Probe	0	
INV_MC_AMP	Inverse of Master Calibration Amplitude	0.034266	
KBFV_OPT	KBFV Option	Off	
KECHO_HR_A	Scale Factor for High Resolution Permeability	1	
KECHO_HR_B	Sensitivity Factor for High Resolution Permeability	1	
KSDR_A	Multiplier for SDR Permeability	4	MD
KSDR_B	T2 Exponent for SDR Permeability	2	
KSDR_C	Porosity Exponent for SDR Permeability	4	
KTIM_A	Multiplier for Timur/Coates Permeability	1	MD
KTIM_B	Porosity Exponent for Timur/Coates Permeability	4	
KTIM_C	PHI Ratio Exponent for Timur/Coates Permeability	2	
LFST_SEARCH_FREQ	LFST Search Operating Frequency	2.173e+006	HZ
LOOP_MC	Calibration Loop during Master Calibration	1725.55	
MATR	Rock Matrix for Neutron Porosity Corrections	LIMESTONE	
MATRIX_DENSITY	Density of Formation Matrix	2.65	G/C3
MPHI_SW	Porosity Channel Selection for KBFV Computation	DPHZ	
MRF_B	Oil Diffusion/T2 Scaling Factor for Magnetic Resonance Fluid Technique	1	
NCOMP	Number of Components - Depth Log	30	
NCOMP_OIL	Number of Oil Components	14	
NCOMP_SL	Number of Components - Station Log	30	
NECH_V	Number of Echo Amplitudes per CPMG	** V **	
NMR_FLUID_MODEL	Fluid Model for Magnetic Resonance Fluid Typing	WATER	
NSTACK	Number of Stacks Down-Hole	3	
NWT	Number of Wait Times	2	
OBM	Oil Based Mud	Water	
PHI_FOR_BADF	Porosity Threshold to Trigger Bad Hole Flag	0.4	M3M3
POLC_SW	Polarization Correction Switch	Off	
PT_V	Polarization Times	** V ** S	
Q_SWITCH_ON_TIME	Duration of Q-Switch ON State	10	US
RINGING_COUNT	Number of Ringing Data Samples	100	
RPTN_V	Repetition Number for each Wait Time	** V **	
RSV_WSUM_MUD	R (Residual) Square Value of Window Sum Fit for Mud	** V **	
SEND_ECHO_SW	Send Echo Switch	On	
SHT	Surface Hole Temperature	20	DEGC
SLUINT	Station Logging Update Interval	1	S
SPOILER_COUNT	Number of Spoiler Pulses	8	
SPOILER_WIDTH	Spoiler pulse width	26	
T180	Time Width for 180 degree Pulse	24.4	US
T1T2R_IN	T1/T2 Ratio	1.5	
T1T2R_MAX	T1/T2 Ratio - Maximum	2.5	
T1T2R_MIN	T1/T2 Ratio - Minimum	0.5	
T1T2R_OIL_IN	T1/T2 Ratio for oil - Input	1	
T1_GAS	T1 of Gas	4	S
T1_OBMF	T1 of OBMF	1.8	S
T2C1	T2 Cutoff 1	1	MS
T2C2	T2 Cutoff 2	3	MS
T2C3	T2 Cutoff 3	10	MS
T2C4	T2 Cutoff 4	33	MS
T2C5	T2 Cutoff 5	100	MS
T2C6	T2 Cutoff 6	300	MS
T2C7	T2 Cutoff 7	1000	MS

T2CUT	T2 Cutoff	1000	MS
T2MF	T2 Mud Filtrate	33	MS
T2_DISTRIBUTION_V	T2 Distribution Vector	50000	MS
T2_FOR_BADF	T2 Threshold to Trigger Bad Hole Flag	** V **	
T2_MAX	T2 Maximum	10	MS
T2_MAX_OIL	Maximum T2 for Oil	3000	MS
T2_MIN	T2 Minimum	1590	MS
T2_MIN_OIL	Minimum T2 for Oil	0.3	MS
T90	Time Width for 90 degree Pulse	14	MS
TCP	Time between 90X, 180Y Pulses	14	US
TCP_DIFF	TCP Difference (TCP1 – TCP2)	100	US
TCP_V	Array of TCP's	-8.8	US
TDEL	Difference between Start of Echo and TCP	** V **	US
TEMP_SL	Station Logging Temperature	20	US
VIS_OBMF	Viscosity of OBMF	20	DEGC
WT_V	Acquisition Wait Times	0.708755	CP
X_DC_WATER	Scale Factor for Diffusion Coefficient of Water	** V **	S
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	
BHT	Bottom Hole Temperature (used in calculations)	46	DEGC
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	
GDEV	Average Angular Deviation of Borehole from Normal	0	DEG
GGRD	Geothermal Gradient	0.018227	DC/M
GRSE	Generalized Mud Resistivity Selection	CHART_GEN_9	
GTSE	Generalized Temperature Selection	LINEAR_ESTIMATE	
H1P	HNGS Detector 1 Allow/Disallow In Processing	ALLOW	
H2P	HNGS Detector 2 Allow/Disallow In Processing	ALLOW	
HABK	HNGS Borehole Potassium Running Average	0.0168016	
HALF	HNGS Alpha Filter Length	60	IN
HCRB	HNGS Apply Borehole Potassium Correction	NONE	
HMWM	Mud Weighting Material	BARI	
HNPE	HNGS Processing Enable	YES	
MATR	Rock Matrix for Neutron Porosity Corrections	LIMESTONE	
S1BI	HNGS Detector 1 Calibration Bismuth Count Rate	1.3	CPS
S2BI	HNGS Detector 2 Calibration Bismuth Count Rate	1.3	CPS
SGRC	HNGS Standard Gamma-Ray Correction Flag	YES	
SHT	Surface Hole Temperature	20	DEGC
TPOS	Tool Position	ECCE	
VBA1	HNGS Detector 1 Variable Barite Factor Running Average	0.998065	
VBA2	HNGS Detector 2 Variable Barite Factor Running Average	1.00607	
STI: Stuck Tool Indicator			
LBFR	Trigger for MAXIS First Reading Label	STI	
STKT	STI Stuck Threshold	0.762	M
TDD	Total Depth – Driller	810.00	M
TDL	Total Depth – Logger	806.00	M
System and Miscellaneous			
ALTDPCCHAN	Name of alternate depth channel	SpeedCorrectedDepth	
BS	Bit Size	12.250	IN
BSAL	Borehole Salinity	54450.00	PPM
CSIZ	Current Casing Size	13.375	IN
CWEI	Casing Weight	68.50	LB/F
DFD	Drilling Fluid Density	1.06	G/C3
DO	Depth Offset for Playback	0.0	M
MST	Mud Sample Temperature	30.00	DEGC
PBVSADP	Use alternate depth channel for playback	NO	
PP	Playback Processing	RECOMPUTE	
RMFS	Resistivity of Mud Filtrate Sample	0.1110	OHMM
RW	Resistivity of Connate Water	1.0000	OHMM
TD	Total Depth	810	M
TWS	Temperature of Connate Water Sample	37.78	DEGC

Format: CMRT\_BIN\_POR\_DEPTH\_LOG      Vertical Scale: 1:200      Graphics File Created: 10-Oct-2005 16:21

## OP System Version: 13C0-300

MCM

HILTB-FTB	SRPC-2788-HILT_b	CMRT-B	SPC-2840-CMR_b
HNGC-B	13C0-300	HNGS-BA	13C0-300
DTC-H	13C0-300		

## Input DLIS Files

DEFAULT      TLD\_MCFL\_CNL\_CMR\_083LUP      FN:95      PRODUCER      10-Oct-2005 15:33      704.1 M      606.1 M

Output DLIS Files

DEFAULT	TLD_MCFL_CNL_CMR_086PUP	FN:101	PRODUCER	10-Oct-2005 16:21
RT	TLD_MCFL_CNL_CMR_086PUP	FN:102	PRODUCER	10-Oct-2005 16:21