

Tool & Curve Mnemonics

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1 Tool Mnemonics - by Type

Type	Description	Mnemonic
Resistivity	Array Induction Sonde	AIS
	Dual Laterolog Sonde	DLS
	Compact Array Induction	MAI
	Compact Dual Laterolog Sonde	MDL
	Compact Shallow Focussed Resistivity	MFE
	Micro Log Sonde	MLS
	Compact Micro Log Sonde	MML
	Compact MicroLaterolog Sonde	MMR
	Micro Resistivity Sonde	MRS
	Mud Resistivity Sonde	RMS
Nuclear	Compensated Density Sonde	CDS
	Compensated Neutron Sonde	CNS
	Epithermal Neutron Sonde	ENS
	Compact Comms Gamma Sonde	MCG
	Compact Dual Neutron Sonde	MDN
	Compact Gamma Sub	MGS
	Compact PhotoDensity Sonde	MPD
	Nuclear Combination Sonde	NCS*
	Photo Density Sonde	PDS
	Photo Nuclear Sonde	PNS**
	Spectral Gamma Sonde	SGS

Type	Description	Mnemonic
Acoustic	Acoustic Scanning Tool	AST
	Compensated Sonic Sonde	CSS
	Long Spaced Compensated Sonic Sonde	LCS
	Compact Sonic Sonde	MSS
Seismic	Seismic Air Gun	SAG
	Seismic Reference Sonde	SRS
Dipmeter	Borehole Geometry Sonde	BGS
	Multi Button Dipmeter	MBD
	Precision Strata Dipmeter	PSD
	Scratcher Dipmeter Sonde	SDC
Production	Fluid Conductivity Sonde	FCS
Logging	Fluid Density Sonde	FDS
Services	Full Bore Flowmeter Sonde	FFS
	In Line Flowmeter Sonde	IFS
	Pressure Gauge Carrier	PGC
	Pressure Temperature Sonde	PTS
	Quartz Pressure Gauge	QPG
	Thermal Neutron Decay Sonde	TDS
Formation Testers	Repeat Formation Sampler	RFS
Perforating Services	Barjet Gun	BJG
	Expendable Hollow Carrier	EHC
	Gamma Ray & Collar Locator	GCL
	Hollow Steel Carrier	HSC
	Retrievable Tubing Gun	RTG
	Tubing Conveyed Perforating	TCP

Type	Description	Mnemonic
Cased Hole	Back Off Service	BOS
	Baker Setting Tool	BST
	Chemical Cutting Tool	CCT
	Severing Tool	SVT
	Tubular Cutters	TCU
	Tubing and Casing Puncher	TPU
Auxiliary Services	High Resolution Temperature	BHT
	Free Point Indicator	FPI
	Compact UltraSonic Gas Detector	MGD
	Compact Two Arm Caliper Sonde	MTC
	Pipe Conveyed Logging	PCL
	Stiff Bridle Tool	SBT
	Sidewall Core Gun	SCG
	Two Arm Caliper	TAC
	Tension Compression Sub	TCS
	Ultrasonic Gas Detector	UGD

2 Tool Mnemonics - Alphabetical Listing

Mnemonic	Description
AIS	Array Induction Sonde
AST	Acoustic Scanning Tool
BGS	Borehole Geometry Sonde
BHT	High Resolution Temperature
BJG	Barjet Gun
BOS	Back Off Service
BST	Baker Setting Tool
CCT	Chemical Cutting Tool
CDS	Compensated Density Sonde
CNS	Compensated Neutron Sonde
CSS	Compensated Sonic Sonde
DLS	Dual Laterolog Sonde
DPCL	Drill Pipe Conveyed Logging
EHC	Expendable Hollow Carrier
ENS	Epithermal Neutron Sonde
FCS	Fluid Conductivity Sonde
FDS	Fluid Density Sonde
FFS	Full Bore Flowmeter Sonde
FPI	Free Point Indicator
GCL	Gamma Ray and Collar Locator
HSC	Hollow Steel Carrier
IFS	In Line Flowmeter Sonde
LCS	Long Spaced Compensated Sonic Sonde
MAI	Compact Array Induction Sonde
MBD	Multi Button Dipmeter
MCG	Compact Comms Gamma Sonde
MDL	Compact Dual Laterolog Sonde
MDN	Compact Dual Neutron Sonde
MFE	Compact Shallow Focussed Resistivity Sonde

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MGD Compact UltraSonic Gas Detector

MGS Compact Gamma Sub

MHT Compact High Resolution Temperature Sub

MLS Micro Log Sonde

MML Compact Micro Log Sonde

MMR Compact MicroLaterolog Sonde

MPD Compact PhotoDensity Sonde

MRS Micro Resistivity Sonde

MSS Compact Sonic Sonde

MTC Compact Two Arm Caliper Sonde

NCS Nuclear Combination Sonde

PDS Photo Density Sonde

PGC Pressure Gauge Carrier

PNS Photo Nuclear Sonde

PSD Precision Strata Dipmeter

PTS Pressure Temperature Sonde

QPG Quartz Pressure Gauge

RFS Repeat Formation Sampler

RMS Mud Resistivity Sonde

RTG Retrievable Tubing Gun

SAG Seismic Air Gun

SBT Stiff Bridle Tool

SCG Sidewall Core Gun

SDC Scratcher Dipmeter Sonde

SGS Spectral Gamma Sonde

SRS Seismic Reference Sonde

SVT Severing Tool

TAC Two Arm Caliper

TCP Tubing Conveyed Perforating

TCS Tension Compression Sub

TCU Tubular Cutters

TDS Thermal Neutron Decay Sonde

TPU Tubing and Casing Puncher

UGD Ultrasonic Gas Detector

3 Sub Mnemonics

Tool strings are constructed by joining together individual items of downhole equipment known as subs. Measurement subs may be complete tools or part of tools, whilst non-measurement subs link other subs together, or may be used to achieve some desirable geometrical configuration.

In some cases, the same type of measurement sub may be used in more than one tool (an example being the Borehole Geometry Navigation Sub used in the Precision Strata Dipmeter and Acoustic Scanning Tool).

Each sub has a unique mnemonic. The Downhole Configuration Diagram printed on logs acquired with SS1 software shows the subs that make up each tool string, and their mnemonics are listed in the Tool Table part of an LIS file.

3.1 Measurement Subs

These are listed alphabetically. In some cases, tools are made up of a single sub.

Where this is not the case, the associated list of tools indicates where the subs are used.

ATS Acoustic Transducer Sub

Temperature Sonde

BGC Borehole Geometry Caliper Sub

BGN Borehole Geometry Navigation Sub

- Acoustic Scanning Tool

- Borehole Geometry Sonde

- Acoustic Scanning Tool

Borehole Geometry Sonde

Multi Button Dipmeter

Precision Strata Dipmeter

BHT Borehole High Resolution - Compensated Density Sonde

Photo Density Sonde

CDS	Compensated Density Sonde	- Nuclear Combination Sonde
CNS	Compensated Neutron Sonde	- Nuclear Combination Sonde
		Photo Nuclear Sonde
DCS	Dipmeter Caliper Sub	- Multi Button Dipmeter
		Precision Strata Dipmeter
DLG	Dual Laterolog Lower Guard Sub	- Dual Laterolog Sonde
DLE	Dual Laterolog Electrode Sub	- Dual Laterolog Sonde
DLP	Dual Laterolog Processing Sub	- Dual Laterolog Sonde
DSC	Induction Electronics Sub	- Array Induction Sonde
DSS	Induction Coil Section Sub	- Array Induction Sonde
MLS	Micro Laterolog Sonde	
MRS	Micro Resistivity Sonde	- Dual Laterolog Sonde
MTS	Micro Acoustic Transducer Sub	- Log Spaced Compensated Sonic
		Sonde
PDS	Photo Density Sonde	- Photo Nuclear Sonde
RMS	Mud Resistivity Sonde	- Array Induction Sonde
SBT	Stiff Bridle Tool	- Dual Laterolog Sonde
SGS	Spectral Gamma Sonde	
SGD	Sonic Gas Detector	- Nuclear Combination Sonde
		Photo Nuclear Sonde
SPS	Sonic Processing Sub	- Compensated Sonic Sonde
TAC	Two Arm Caliper	
TCS	Tension Compression Sub	
WPS	Waveform Sonic Processing Sub	- Compensated Sonic Sonde
		Long Compensated Sonic Sonde

3.2 Non Measurement Subs

CTA Coiled Tubing Adaptor

HFS Hole Finder Sub

ISA Inter Sub Adapter

ISC Inter Sonde Adjustable Crank

ITA Inter Tool Adapter

ITI Inter Tool Isolator

LNK Link Sub

MBE Compact Bridle Electrode

MBS Compact Battery Sub

MHF Compact Hole Finder

MIS Compact In-Line Centraliser/Eccentraliser

MLK Compact Link Sub

MTA Compact Inter-Tool Adapter

PKJ Production Knuckle Joint

PRC Production Roller Centraliser

SBS Sinker Bar Sub

SHA Swivel Head Adapter

SKJ Slim Knuckle Joint

4 Curve Mnemonics - by Tool

This section contains a comprehensive list of curve names associated with each tooltype. The curve description is that which appears on the log header (some abbreviations have been expanded).

A Sub List is provided for those tools supported by SS1 data acquisition software; the list provides information needed to validate certain styles of LIS file (see Section 5). The List identifies the particular sub from which a measurement originates. Multiple entries mean that the same measurement is made by more than one sub; no entry for an SS1 supported tool means that the corresponding curve is part of a private status channel or has been generated at the surface.

The curve lists for Compact (M-Series) tools refer to data acquired with the Windows Logging Software after March 1999.

Tool: AIS (Array Induction Sonde)

Curve Name	Description	Sub List
APOR	Apparent Porosity	DSS
CIL1	Induction Channel 1	DSS
CIL2	Induction Channel 2	DSS
CIL3	Induction Channel 3	DSS
CIL4	Induction Channel 4	DSS
CILD	Deep Conductivity	DSS
CILM	Medium Conductivity	DSS
GRCD	Gamma Ray, Raw	DSC
GRDI	Gamma Ray	DSC
RILD	Deep Induction Resistivity	DSS
RILM	Medium Induction Resistivity	DSS
RSFE	Shallow Focussed Electric	DSC
RSFR	Shallow Focussed Electric Raw	DSC
RXRT	Rxo/Rt	DSC
SFEI	Focussed Electric Current	DSC
SP	Spontaneous Potential	DSS
SPR	Raw Spontaneous Potential	DSS
SW	Water Saturation	DSC
TDSI	Tension Of Cable	
TEXD	Borehole Temperature	DSS
TIND	Sonde Temperature	

VX1	Vx Receiver 1	DSS
VX2	Vx Receiver 2	DSS
VX3	Vx Receiver 3	DSS
VX4	Vx Receiver 4	DSS

Tool: AST (Acoustic Scanning Tool)

Curve Name	Description
AAZD	Apparent Azimuth
ACCX	X Accelerometer
ACCY	Y Accelerometer
ACCZ	Z Accelerometer and time (not plottable)
AMPB	Compensated Amplitude Bias
AVOL	Annular Volume
AZBM	Mean Azimuth
AZBT	Azimuth of Tool
AZID	Borehole Azimuth
BIT	Bit Size
CABX	X Acoustic Caliper
CABY	Y Acoustic Caliper
DISC	Discriminators
FMAG	Field Magnitude
GRCF	PSD Gamma Ray Raw
GRD4	PSD Gamma Ray
HVOL	Hole Volume
MAGX	X Magnetometer
MAGY	Y Magnetometer
MAGZ	Z Magnetometer
RBAD	Relative Bearing
RSSC	Received Signal
RSSN	Received Signal Raw
TBTV	Tension of Cable
TEXF	PSD Borehole Temperature
TILD	Borehole Tilt
WAV3	Amplitude
WAV4	Two Way Travel Time
WAV5	Compensated Amplitudes
ZACC	Accelerometer Z (Plottable)

Tool: CCL (Casing Collar Locator)

Curve Name	Description
COLC	Collar Detector Copy
COLD	Collar Detector
CTIE	CLL Tie in Log
GRCC	CCL Gamma Ray Raw
GRCG	CCL Gamma Ray
GUN1	Gun One

GUN2	Gun Two
GUN3	Gun Three
GUN4	Gun Four
PERF	Perforations
TCCL	Tension of Cable

Tool: CSS (Compensated Sonic Sonde)

Curve Name	Description	Sub List
DT1	Delta T1	
DT1D	Delta T1 Despiked	ATS MTS
DT2	Delta T2	
DT2D	Delta T2 Despiked	ATS MTS
DTCM	Delta-t Compensated	ATS MTS
SPOR	Sonic Porosity	ATS MTS
T1R2	Sonic T1R2 Transit Time	ATS MTS
T1R4	Sonic T1R4 Transit Time	ATS MTS
T2R1	Sonic T2R1 Transit Time	ATS MTS
T2R3	Sonic T2R3 Transit Time	ATS MTS
TBCA	Tension of Cable	

Tool: CDS (Compensated Density Sonde)

Curve Name	Description	Sub List
AVOL	Annular Volume	
BIT	Bit Size	
CACN	Density Caliper Raw	CDS
CANC	Density Caliper	CDS
DCOR	Density Correction	CDS
DCRF	Far Density Counts	CDS
DCRN	Near Density Counts	CDS
DEN	Density	CDS
DPOR	Limestone Density Porosity	CDS
DPRD	Dolomite Density Porosity	CDS
DPRL	Limestone Density Porosity	CDS
DPRS	Sandstone Density Porosity	CDS
HDEN	High Resolution Density	CDS
HTDF	Long Spaced Density EHT	
HTDN	Short Spaced Density EHT	
HVOL	Hole Volume	
LDEN	Long Linear Density	CDS
MTXD	Matrix Density	CDS
SDEN	Short Linear Density	CDS
TEXN	Borehole Temperature	CDS
TINN	Sonde Temperature	CDS
TNCS	Tension Of Cable	

Tool: CNS (Compensated Neutron Sonde)

Curve Name	Description	Sub List
BHT	Borehole Temperature Raw	CNS BHT
BHTD	Differential Temperature	CNS BHT
BHTF	Borehole Temperature Log	CNS BHT
GRCN	NCS Gamma Ray Raw	CNS
GRDP*	PNS Gamma Ray Raw	CNS
GRNC	NCS Gamma Ray	CNS
GRPD*	PNS Gamma Ray Raw	CNS
HTGR	NCS Gamma Ray Tube EHT	
NCRF	Long Spaced Neutron	CNS
NCRN	Short Spaced Neutron	CNS
NPOR	Limestone Neutron Porosity	
NPRD	Dolomite Neutron Porosity	CNS
NPRL	Limestone Neutron Porosity	CNS
NPRS	Sandstone Neutron Porosity	CNS
NRAT	Neutron Ratio	CNS
TNCS	Tension Of Cable	
XPOR	Crossplot Porosity	CNS

^{*}These mnemonics replace GRCN and GRNC when the CNS is combined with a PDS.

Tool: DLS (Dual Laterolog Sonde)

Curve Name	Description	Sub List
BIT	Bit Size	
CADF	Microlog Caliper	MRS MLS
CALE	Microlog Caliper Raw	MRS MLS
DLL	Deep Laterolog	DLE
DLLI	Deep Laterolog Current	DLE
DLLV	Deep Laterolog Voltage	DLE
GLL	Groningen Laterolog	DLE
GLLV	Groningen Voltage	DLE
GRCL	DLS Gamma Ray Raw	DLE
GRLL	DLS Gamma Ray	DLE
HVOL	Hole Volume	
MINV	Micro-Inverse	MRS MLS
MIVV	Micro-Inverse Voltage	MRS MLS
MLL	Micro-Laterolog	MRS
MLLI	Micro-Laterolog Current	MRS
MLLV	Micro-Laterolog Voltage	MRS
MNLI	Micro-Normal Current	MRS MLS
MNLV	Micro-Normal Voltage	MRS MLS
MNRL	Micro-Normal 2"	MRS MLS
MS1I	Medium Laterolog Current	DLE
MS1V	Medium Laterolog Voltage	DLE
MS2I	Micro-Spherical Current 2	DLE
MSF1	Medium Laterolog	DLE

MSF2	Micro-Spherically Focussed 2	DLE
SLL	Shallow Laterolog	DLE
SLLI	Shallow Laterolog Current	DLE
SLLV	Shallow Laterolog Volts	DLE
SPLL	DLS Spontaneous Potential	DLP SBT
SPRL	Laterolog SP	DLP SBT
TDFE	Tension Of Cable	
TEXL	DLS Borehole Temperature	DLP

Tool: LCS (Long Compensated Sonic)

Curve Name	Description	Sub List
ATEN	Signal Attenuation (between received	vers)
DISC	Discriminators	
DT1A	3-5ft Delta Time	ATS
DT2A	3-4ft Delta Time	ATS
DT3A	8-10ft Delta Time	ATS
DT1B	3-5ft Delta Time	ATS
DT2B	3-4ft Delta Time	ATS
DT3B	8-10ft Delta Time	ATS
DTC1	3-5ft Compensated Sonic	ATS
DTC2	3-4ft Compensated Sonic	ATS
DTC3	8-10ft Compensated Sonic	ATS
DUM6	Dummy 6	
DUM7	Dummy 7	
DUM8	Dummy 8	
DUM9	Dummy 9	
GA31	W3T1 Gain	
GA32	W3T2 Gain	
GA41	W4T1 Gain	
GA42	W4T2 Gain	
IPVF	Delta-t (P)	
IPVR	Delta-t (P) Raw	
ISVF	Delta-t (S)	
ISVR	Delta-t (S) Raw	
POIS	Poisson's Ratio	
R1T1	Sonic R1T1 Transit Time	ATS
R1T2	Sonic R1T2 Transit Time	ATS
R2T1	Sonic R2T1 Transit Time	ATS
R2T2	Sonic R2T2 Transit Time	ATS
R3T1	Sonic R2T1 Transit Time	ATS
R3T2	Sonic R3T2 Transit Time	ATS
R4T1	Sonic R4T1 Transit Time	ATS
R4T2	Sonic R4T2 Transit Time	ATS
SEMB	Semblance (between waveforms)	
SPOR	Sonic Porosity	ATS
TLSS	Tension Of Cable	
VPVS	Velocity Ration (Vp/Vs)	
W3T1	8' Waveform	

W3T2	7' Waveform
W4T1	10' Waveform
W4T2	9' Waveform

Tool: MAI (Compact Array Induction Sonde)

Curve Name	Description
AIAT	MAI Array Temperature
AIBT	Borehole Temperature Raw
AIIT	MAI Internal Temperature
AIR1	Induction Receiver 1
AIR2	Induction Receiver 2
AIR3	Induction Receiver 3
AIR4	Induction Receiver 4
AIST	MAI Status
AITC	MAI Transmitter Current
AIX1	Induction VX1
AIX2	Induction VX2
AIX3	Induction VX3
AIX4	Induction VX4
BHTD	Differential Temperature
BHTF	Borehole Temperature
CIL1	Conductivity Receiver 1
CIL2	Conductivity Receiver 2
CIL3	Conductivity Receiver 3
CIL4	Conductivity Receiver 4
CILD	Deep Conductivity
CILM	Medium Conductivity
CILS	Shallow Conductivit
RILM	Medium Induction
RILD	Deep Induction y
SYM1	Symmetrised Receiver 1
SYM2	Symmetrised Receiver 2
SYM3	Symmetrised Receiver 3
SYM4	Symmetrised Receiver 4
VEC0	Shallow Induction
VEC1	Near Induction
VEC2	Near Medium Induction
VEC3	Far Medium Induction
VEC4	Far Induction
VEC5	Deepest Induction

Tool: MBD (Multi Button Dipmeter)

Curve Name	Description
AAZD	Apparent Azimuth
ACCX	X Accelerometer
ACCY	Y Accelerometer

ACCZ Z Accelerometer and time

AZID Borehole Azimuth

BIT Bit Size
CALX X Caliper
CALY Y Caliper

CNCT Concatenated Data Channel

FMAG Field Magnitude GRCF PSD Gamma Ray Raw

HVOL Hole Volume
MAGX X Magnetometer
MAGY Y Magnetometer
MAGZ Z Magnetometer
PADV Pad Voltage

Pad 1 (Right Hand) PI11 Pad 1 (Left Hand) PI12 Pad 1 (Speed) PI13 Pad 2 (Right Hand) PI21 Pad 2 (Left Hand) PI22 PI23 Pad 2 (Speed) Pad 3 (Right Hand) PI31 Pad 3 (Left Hand) PI32 PI33 Pad 3 (Speed) PI41 Pad 4 (Right Hand) Pad 4 (Left Hand) PI42 PI43 Pad 4 (Speed) **RBAD** Relative Bearing Tension Of Cable **TFDH TILD** Borehole Tilt

Tool: MCG (Compact Comms Gamma Sonde)

Curve Name	Description
CCLG	Casing Collar Locator
CGCL	CCL Raw
CGDT	Downhole Tension
CGGR	Gamma Ray Raw
CGIT	MCG Internal Temperature
CGSP	SP Raw
CGST	MCG Status
CGVN	Line Voltage (-ve)
CGVP	Line Voltage (+ve)
CGVT	Line Voltage
CGXT	MCG External Temperature
GRGC	Gamma Ray
SPCG	Spontaneous Potential

Tool: MDL (Compact Dual Laterolog Sonde)

Curve Name	Description
DLA1	A1D Electrode Voltage
DLDC	Deep Current Check
DLDG	Deep Guard Current
DLDI	Deep Current
DLDV	Deep Voltage
DLGV	Groningen Voltage
DLIT	MDL Internal Temperature
DLSP	SP Voltage Raw
DLSV	Shallow Voltage
DLSI	Shallow Current
DLSG	Shallow Guard Current
DLSC	Shallow Current Check
DLV1	V1 Electrode Voltage
DLVD	Deep Voltage Check
DLVR	Voltage Reference
DLVS	Shallow Voltage Check
DLZS	A/D Zero Voltage
DDLL	Deep Laterolog
DGLL	Groningen Laterolog
DSLL	Shallow Laterolog
SPDL	SP

Tool: MDN (Compact Dual Neutron Sonde)

Curve Name	Description
DNFD	Far Neutron Raw
DNFT	Far Neutron Dead Time
DNIT	MDN Internal Temperature
DNND	Near Neutron Raw
DNNT	Near Neutron Dead Time
DNST	MDN Status
NPOR	Base Neutron Porosity
NPRL	Limestone Neutron Porosity
NPRS	Sandstone Neutron Porosity
NPRD	Dolomite Neutron Porosity
NRAT	Neutron Ratio (Near/Far)

Tool: MFE (Compact Shallow Focussed Resistivity Sonde)

Curve Name	Description
FEFE	Shallow FE
FEFR	Shallow FE (No Correction)
FEFV	MFE Fish Voltage
FEIT	MFE Internal Temperature

FEQR Quadrature FE (No Correction)

FEQS Quadrature FE FERI MFE Current FERV MFE Voltage

FESI MFE Sense DC Current

FEST MFE Status

FEXI MFE Quadrature Current FEXV MFE Quadrature Voltage

Tool: MLS/MRS (Microresistivity/Microlog Sonde)

Curve Name Description

AVOL Annular Volume

BIT Bit Size CAL Caliper

CAMR Micro-Resistivity Caliper
GRCM MLS Gamma Ray Raw
GRMR MLS Gamma Ray
HVOL Hole Volume
MR1F Micro-Inverse 1"
MR2F Micro-Inverse 2"

MRMC Caliper Motor Current MRS1 Micro-Inverse 1" Raw MRS2 Micro-Inverse 2" Raw

SPR MLS SP Raw

TEXM MLS Borehole Temperature
TINM MLS Sonde Temperature

TMRS Tension Of Cable

Tool: MML/MMR (Compact Microlog/MicroLaterolog Sonde)

Curve Name Description **AVOL** Annular Volume Hole Volume **HVOL MLCP** MML Caliper Raw MML Internal Temperature **MLIT** MML Motor Current **MLMC** MML Motor Voltage **MLMV** Micro-Normal Voltage **MLNV MLIV** Micro-Inverse Voltage MML Caliper **MLTC** Micro-Normal Current **MMLI** Micro-Normal MNRL

MINV

Micro-Inverse

Tool: MPD (Compact PhotoDensity Sonde)

Curve Name	Description
AVOL	Annular Volume
BHTF	Borehole Temperature
BHTD	Differential Temperature
CLDC	Density Caliper
DCCP	Density Caliper Raw
DCOR	Density Correction
DEN	Compensated Density
DENF	Far Spaced Density
DENN	Near Spaced Density
DPOR	Base Density Porosity
DPRD	Dolomite Density Porosity
DPRL	Limestone Density Porosity
DPRS	Sandstone Density Porosity
HDEN	Vectar Processed Density
HVOL	Hole Volume
MTXD	Matrix density
PCIT	MPD Internal Temperature
PCMC	MPD Motor Current
PCST	MDC Status
PDFC	Far Density Counts
PDFE	MPD Far EHT
PDFL	Far Lock Counts
PDFS	Far Density Spectrum
PDFT	Far Density Dead Time
PDHD	MPD PE Hard Counts
PDNC	Near Density Counts
PDNE	MPD Near EHT
PDNL	Near Lock Counts
PDNS	Near Density Spectrum
PDIT	MPD Internal Temperature
PDNT	Near Density Dead Time
PDPE	PE
PDSF	MPD PE Soft Counts
PDST	MPD Status
PFTC	Far Total Counts,No D/T
PNTC	Near Total Counts, No D/T

Tool: PDS (Photo Density Sonde)

Curve Name	Description	Sub List
AVOL	Annular Volume	
BHTD	Differential Temperature	PDS BHT
BHTF	Borehole Temperature Log	PDS BHT
BIT	Bit Size	
CADP	Density Caliper Raw	PDS
CAPD	Density Caliper	PDS

DCOR	Density Correction	PDS
DCRF	Far Density Counts	PDS
DCRN	Near Density Counts	PDS
DEN	Density	PDS
DPOR	Limestone Density Porosity	PDS
DPRD	Dolomite Density Porosity	PDS
DPRL	Limestone Density Porosity	PDS
DPRS	Sandstone Density Porosity	PDS
DSPF	Far Density Spectrum	PDS
DSPN	Near Density Spectrum	PDS
G1DN	Near Density Gate 1	
G2DN	Near Density Gate 2	
G3DN	Near Density Gate 3	
G4DN	Near Density Gate 4	
G5DN	Near Density Gate 5	
GNDF	Far Density Gates 1-5	
HDEN	High Resolution Density	PDS
HVOL	Hole Volume	
LBDF	Far Look Balance Curve	PDS
LBDN	Near Look Balance Curve	PDS
LDEN	Long Linear Density	PDS
MTXD	Matrix Density	PDS
PEDF	Far Pe Curve	PDS
PEDN	Near Pe Curve	PDS
RSDF	Far Resolution Curve	PDS
RSDN	Near Resolution Curve	PDS
SDEN	Short Linear Density	PDS
TPDS	Tension Of Cable	
XPOR	Crossplot Porosity	CNS

Tool: MSS (Compact Sonic Sonde - Including CBL)

Curve Name	Description
FGAP FGTR DL11 DL12 DL21	Fixed Gate Peak Amplitude Fixed Gate Transit Time 4' Discriminator Level 6' Discriminator Level 3' Discriminator Level
DL22 DT34 DT35 DT45 DT46 DT56	5' Discriminator Level 3-4' Compensated Sonic 3-5' Compensated Sonic 4-5' Compensated Sonic 4-6' Compensated Sonic 5-6' Compensated Sonic
DTSM PK11 PK12 PK21 PK22	Smeared 3-4' Sonic 4' Peak Amplitude 6' Peak Amplitude 3' Peak Amplitude 5' Peak Amplitude

PT12	6' Time To Peak Amplitude
PT21	3' Time To Peak Amplitude
PT22	5' Time To Peak Amplitude
RN11	4' Road Noise Max. Deflection
RN12	6' Road Noise Max. Deflection
RN21	3' Road Noise Max. Deflection
RN22	5' Road Noise Max. Deflection
SPRD	Dolomite Sonic Porosity
SPRL	Limestone Sonic Porosity
SPRS	Sandstone Sonic Porosity
STGN	MSS Gain Status
STIT	MSS Internal Temperature
STPK	MSS Peak Status
STSS	MSS Status
STWS	MSS Waveform Segment Status
TR11	4' Transit Time
TR12	6' Transit Time
TR21	3' Transit Time
TR22	5' Transit Time
TS11	4' Transit Time Set
TS12	6' Transit Time Set
TS21	3' Transit Time Set
TS22	5' Transit Time Set
WSEG	Waveform Segment

PT11

4' Time To Peak Amplitude

Tool: MTC (Compact Two Arm Caliper)

Description
Two Arm Caliper
Two Arm Caliper Raw
MTC Internal Temperature
MTC Motor Current
MTC Motor Voltage
MTC Status

Tool: PRD (Production Logging Suite: FCS, FDS, FFS, IFS, PGC, PTS, QPG)

Curve Name	Description	Sub List
AFDN	Amplified Fluid Density	FDS
CCLP	CCL	PTS
COFR	Continuous Flow Rate	IFS
CONF	Filtered Conductivity	
DTEP	PTS Differential Temperature	PTS
FBFR	Fullbore Flow Rate	FFS
FDEN	Fluid Density	FDS
FDLT	Delta Flow	FFS IFS
FDNS	Fluid Density Raw	FDS

FLOC	Continuous Flowmeter Raw	IFS
FLOF	Fullbore Flowmeter Raw	FFS
FLTC	Continuous Flowmeter Revolution Time	
FLTF	Fullbore Flowmeter Revolution Time	FFS
FTOT	Total Flow	FFS IFS
GRCP	PTS Gamma Ray Raw	PTS
GRPR	PTS Gamma Ray	PTS
HORN	Horner Time	
HPF	HP Pressure	PGC
HPPP	HP Frequency	PGC
LSPD	Logging Speed	
PERF	Perforations	
SAL1	Fluid Conductivity	
SGF	Strain Gauge Pressure	PTS
SGPP	Strain Gauge Pressure Raw	PTS
TEPP	PTS Borehole Temperature Raw	PTS
TEXP	PTS Borehole Temperature	PTS
TIMP	Time Between Depth Increments	
TPRD	Tension Of Cable	

Tool: PSD (Precision Strata Dipmeter)

Curve Name	Description	Sub List
AAZD	Apparent Azimuth	BGN
ACCX	X Accelerometer	BGN
ACCY	Y Accelerometer	BGN
ACCZ	Z Accelerometer & time (not plottable)	BGN
AREF	Azimuth of Pad 1	BGN
AVOL	Annular Volume	
AZIC	Dip Azimuth (True North)	
AZID	Borehole Azimuth	BGN
BIT	Bit Size	
BRKT	Breakout Angle	BGN
CALX	X Caliper	DCS
CALY	Y Caliper	DCS
CAXR	X Caliper Raw	DCS
CAYR	Y Caliper Raw	DCS
CORC	Correlation Value	
DIPC	Dip Angle	
FMAG	Field Magnitude	BGN
GRCF	PSD Gamma Ray Raw	BGN
GRD4	PSD Gamma Ray	BGN
HVOL	Hole Volume	
MAGX	X Magnetometer	BGN
MAGY	Y Magnetometer	BGN
MAGZ	Z Magnetometer	BGN
PADP	Pad Pressure	BGN
PADV	Pad Voltage	
PI1	Pad 1 Resistance	

Speed Pad 1 Resistance	
Pad 2 Resistance	
Speed Pad 2 Resistance	
Pad 3 Resistance	
Pad 4 Resistance	
Relative Bearing	BGN
Relative Bearing (high side of hole)	BGN
AZID (relative to True North)	
True Depth	BGN
PSD Borehole Temperature	BGN
Tension Of Cable	
Tension Of Cable	
Borehole Tilt	
Accelerometer Z (plottable)	
	Pad 2 Resistance Speed Pad 2 Resistance Pad 3 Resistance Pad 4 Resistance Relative Bearing Relative Bearing (high side of hole) AZID (relative to True North) True Depth PSD Borehole Temperature Tension Of Cable Tension Of Cable Borehole Tilt

Tool: RFS (Repeat Formation Sampler)

Curve Name	Description
FHPG	Fractional HP Pressure
FPCC	Formation Pressure (Cylindrical)
FPSS	Formation Pressure (Spherical)
GRCR	RFS Gamma Ray Raw
GRRF	RFS Gamma Ray
HHUN	HP Pressure 100's
HONE	HP Pressure 1's
HPPC	HP Pressure Copy
HPPF	HP Pressure
HPPR	HP Frequency
HPTM	HP Temperature
HTEN	HP Pressure 10's
HTHO	HP Pressure 1000's
HTTH	HP Pressure 10000's
HYMC	Hydraulic Motor Current
HYPP	Hydraulic Piston Position
HYPR	Hydraulic Pressure
SGPC	Strain Gauge Pressure Copy
SGPF	Strain Gauge Pressure
SGPR	Strain Gauge Pressure Raw
SGTM	Strain Gauge Temperature
SHUN	Strain Gauge Pressure 100's
SONE	Strain Gauge Pressure 1's
STEN	Strain Gauge Pressure 10's
STHO	Strain Gauge Pressure 1000's
STTH	Strain Gauge Pressure 10000's
TPRE	Time Since Pre-Test
TRFS	Tension Of Cable
TSAM	Time Since Sample
VCMC	Valve Motor Current

Tool: RMS (Mud Resistivity Sonde)

Curve Name	e Description	Sub List
RMSF	RM Resistivity	RMS
RMSI	RM Current	RMS
RMSV	RM Voltage	RMS

Tool: SGS (Spectral Gamma Sonde)

Curve Name	Description	Sub List
GCGR	Corrected Gamma Ray	SGS
GRPO	Potassium Gamma	SGS
GRSG	Spectral Gamma Ray	SGS
GRTH	Thorium Gamma	SGS
GRUR	Uranium Gamma	SGS
HTSG	Gamma Detector EHT	SGS
RAKT	Thorium/Potassium Ratio	SGS
RAKU	Uranium/Potassium Ratio	SGS
RAUT	Thorium/Uranium Ratio	SGS
SGD1	Discriminator 1 (Gamma Ray Ray	v)
SGD2	Discriminator 2	
SGD3	Discriminator 3	
SGD4	Discriminator 4	
SGD5	Discriminator 5	
SGD6	Discriminator 6	
SGG1	Gate 1	
SGG2	Gate 2	
SGG3	Gate 3	
SGG4	Gate 4	
SGG5	Gate 5	
SGDT	Spectral Gamma Spectrum	SGS
TSGS	Tension Of Cable	

Tool: TAC (Two Arm Caliper)

Curve Name	Description	Sub List
AVOL	Annular Volume	
BIT	Bit Size	
CAL2	Y Caliper Raw	TAC
CALT	Y Caliper	TAC
CALY	Y Caliper	
HVOL	Hole Volume	
TTAC	Tension Of Cable	

Tool: TDS (Thermal Neutron Decay Sonde)

Curve Name	Description
BSF	Far Borehole Sigma
BSN	Near Borehole Sigma
CCLT	CCL
CRAT	N/F Count Rate Ratio
DECF	Far TDS Decay
DECN	Near TDS Decay
DECT	Decay Integration Time
DTEP	PTS Differential Temperature
FSF	Far Formation Sigma
FSFC	Far Corrected Sigma
FSN	Near Formation Sigma
FSNA	Near Apparent Sigma
FSNC	Near Corrected Sigma
GRBF	Far Background Gamma Raw
GRBN	Near Background Gamma Raw
GRCP	PTS Gamma Ray Raw
GRFB	Far Background Gamma
GRNB	Near Background Gamma
GRPR	PTS Gamma Ray
PLSF	Far Pulse Height
PLSN	Near Pulse Height
SGF	Strain Gauge Pressure
SGPP	Strain Gauge Pressure Raw
TCRF	Far Count Rate
TCRN	Near Count Rate
TEPP	PTS Borehole Temperature
TPOR	TDT Porosity
TTDS	Tension Of Cable

Tool: TCS (Tension Compression Sub)

Curve Name Description

MARK Analogue Channel 0

Miscellaneous: the following mnemonics replace equivalent tool mnemonics when data are acquired with SS1 acquisition software.

Curve Name	Description
AVOL	Annular Volume
BIT	Bit Size
HVOL	Hole Volume
RWA	Apparent Water Resistivity
TSS1	Tension of Cable

5 Curve Mnemonics - Alphabetical Listing

CURVE	CURVE NAME	TOOL
AAZD	Apparent Azimuth	PSD
AAZD	Apparent Azimuth	AST
AAZD	Apparent Azimuth	MBD
ACCX	X Accelerometer	MBD
ACCX	X Accelerometer	PSD
ACCX	X Accelerometer	AST
ACCY	Y Accelerometer	AST
ACCY	Y Accelerometer	MBD
ACCY	Y Accelerometer	PSD
ACCZ	Z Accelerometer and time (not plottable)	AST
ACCZ	Z Accelerometer and time	MBD
ACCZ	Z Accelerometer & time (not plottable)	PSD
AFDN	Amplified Fluid Density	PRD
AIAT	MAI Array Temperature	MAI
AIBT	Borehole Temperature Raw	MAI
AIIT	MAI Internal Temperature	MAI
AIR1	Induction Receiver 1	MAI
AIR2	Induction Receiver 2	MAI
AIR3	Induction Receiver 3	MAI
AIR4	Induction Receiver 4	MAI
AIST	MAI Status	MAI
AITC	MAI Transmitter Current	MAI
AIX1	Induction VX1	MAI
AIX2	Induction VX2	MAI
AIX3	Induction VX3	MAI
AIX4	Induction VX4	MAI
AMPB	Compensated Amplitude Bias	AST
APOR	Apparent Porosity	AIS
AREF	Azimuth of Pad 1	PSD
ATEN	Signal Attenuation (between receivers)	LCS
AVOL	Annular Volume	MML/MMR
AVOL	Annular Volume	MPD
AVOL	Annular Volume	AST
AVOL	Annular Volume	MBD
AVOL	Annular Volume	MLS/MRS
AVOL	Annular Volume	PDS
AVOL	Annular Volume	PSD
AVOL	Annular Volume	TAC

17D) (A COTT
AZBM	Mean Azimuth	AST
AZBT	Azimuth of Tool	AST
AZIC	Dip Azimuth (True North)	PSD
AZID	Borehole Azimuth	AST
AZID	Borehole Azimuth	MBD
AZID	Borehole Azimuth	PSD
BHT	Borehole Temperature Raw	CNS
BHTD	Differential Temperature	CNS
BHTD	Differential Temperature	MAI
BHTD	Differential Temperature	MPD
BHTD	Differential Temperature	PDS
BHTF	Borehole Temperature	MAI
BHTF	Borehole Temperature	MPD
BHTF	Borehole Temperature Log	CNS
BHTF	Borehole Temperature Log	PDS
BIT	Bit Size	AST
BIT	Bit Size	CDS
BIT	Bit Size	DLS
BIT	Bit Size	MBD
BIT	Bit Size	MLS/MRS
BIT	Bit Size	PDS
BIT	Bit Size	PSD
BIT	Bit Size	TAC
BRKT	Breakout Angle	PSD
BSF	Far Borehole Sigma	TDS
BSN	Near Borehole Sigma	TDS
CABX	X Acoustic Caliper	AST
CABY	Y Acoustic Caliper	AST
CACN	Density Caliper Raw	CDS
CADF	Microlog Caliper	DLS
CADP	Density Caliper Raw	PDS
CAL	Caliper	MLS/MRS
CAL2	Y Caliper Raw	TAC
CALE	Microlog Caliper Raw	DLS
CALT	Y Caliper	TAC
CALX	X Caliper	MBD
CALX	X Caliper	PSD
CALY	Y Caliper	MBD
CALY	Y Caliper	PSD
CALY	-	TAC
	Y Caliper	
CANG	Micro-Resistivity Caliper	MLS/MRS
CANC	Density Caliper	CDS
CAPD	Density Caliper	PDS
CAXR	X Caliper Raw	PSD
CAYR	Y Caliper Raw	PSD
CCLG	Casing Collar Locator	MCG
CCLP	CCL	PRD

CCLT	CCI	TDC
CCLT	CCL	TDS
CGCL	CCL Raw	MCG
CGDT	Downhole Tension	MCG
CGGR	Gamma Ray Raw	MCG
CGIT	MCG Internal Temperature	MCG
CGSP	SP Raw	MCG
CGST	MCG Status	MCG
CGVN	Line Voltage (-ve)	MCG
CGVP	Line Voltage (+ve)	MCG
CGVT	Line Voltage	MCG
CGXT	MCG External Temperature	MCG
CIL1	Conductivity Receiver 1	MAI
CIL1	Induction Channel 1	AIS
CIL2	Conductivity Receiver 2	MAI
CIL2 CIL2	Induction Channel 2	AIS
CIL3		MAI
	Conductivity Receiver 3	
CIL3	Induction Channel 3	AIS
CIL4	Conductivity Receiver 4	MAI
CIL4	Induction Channel 4	AIS
CILD	Deep Conductivity	MAI
CILD	Deep Conductivity	AIS
CILM	Medium Conductivity	MAI
CILM	Medium Conductivity	AIS
CILS	Shallow Conductivit	MAI
CLDC	Density Caliper	MPD
CLTC	Two Arm Caliper	MTC
CNCT	Concatenated Data Channel	MBD
COFR	Continuous Flow Rate	PRD
COLC	Collar Detector Copy	CCL
COLD	Collar Detector	CCL
CONF	Filtered Conductivity	PRD
CORC	Correlation Value	PSD
CRAT		TDS
	N/F Count Rate Ratio	
CTIE	CLL Tie in Log	CCL
DCCP	Density Caliper Raw	MPD
DCOR	Density Correction	MPD
DCOR	Density Correction	CDS
DCOR	Density Correction	PDS
DCRF	Far Density Counts	CDS
DCRF	Far Density Counts	PDS
DCRN	Near Density Counts	CDS
DCRN	Near Density Counts	PDS
DDLL	Deep Laterolog	MDL
DECF	Far TDS Decay	TDS
DECN	Near TDS Decay	TDS
DECT	Decay Integration Time	TDS
DEN	Compensated Density	MPD
	Compensation Denoity	11111

DEN	Density	CDS
DEN	Density	PDS
DENF	Far Spaced Density	MPD
DENN	Near Spaced Density	MPD
DGLL	Groningen Laterolog	MDL
DIPC	Dip Angle	PSD
DISC	Discriminators	AST
DISC	Discriminators	LCS
DL11	4' Discriminator Level	MSS
DL11 DL12	6' Discriminator Level	MSS
DL12 DL21	3' Discriminator Level	MSS
DL21 DL22	5' Discriminator Level	MSS
DLA1	A1D Electrode Voltage	MDL
DLDC	Deep Current Check	MDL
DLDG	Deep Guard Current	MDL
DLDI	Deep Current	MDL
DLDV	Deep Voltage	MDL
DLGV	Groningen Voltage	MDL
DLGV	MDL Internal Temperature	MDL
DLL	Deep Laterolog	DLS
DLLI	Deep Laterolog Current	DLS
DLLV	Deep Laterolog Voltage	DLS
DLSC	Shallow Current Check	MDL
DLSG	Shallow Guard Current	MDL
DLSG	Shallow Current	MDL
DLSP	SP Voltage Raw	MDL
DLSV	Shallow Voltage	MDL
DLSV DLV1	V1 Electrode Voltage	MDL
DLVI	Deep Voltage Check	MDL
DLVR	Voltage Reference	MDL
DLVS	Shallow Voltage Check	MDL
DLVS	A/D Zero Voltage	MDL
DNFD	Far Neutron Raw	MDN
DNFT	Far Neutron Dead Time	MDN
DNIT	MDN Internal Temperature	MDN
DNND	Near Neutron Raw	MDN
DNNT	Near Neutron Dead Time	MDN
DNST	MDN Status	MDN
DPOR	Base Density Porosity	MPD
DPOR	• •	CDS
DPOR	Limestone Density Porosity	PDS
DPRD	Limestone Density Porosity	MPD
DPRD	Dolomite Density Porosity	CDS
DPRD	Dolomite Density Porosity	PDS
DPRL	Dolomite Density Porosity	MPD
DPRL	Limestone Density Porosity	CDS
DPRL	Limestone Density Porosity	PDS
DIKL	Limestone Density Porosity	r D3

DDDC	C 1-4 D : D : - :	MDD
DPRS	Sandstone Density Porosity	MPD
DPRS	Sandstone Density Porosity	CDS
DPRS	Sandstone Density Porosity	PDS
DSLL	Shallow Laterolog	MDL
DSPF	Far Density Spectrum	PDS
DSPN	Near Density Spectrum	PDS
DT1	Delta T1	CCS
DT1A	3-5ft Delta Time	LCS
DT1B	3-5ft Delta Time	LCS
DT1D	Delta T1 Despiked	CCS
DT2	Delta T2	CCS
DT2A	3-4ft Delta Time	LCS
DT2B	3-4ft Delta Time	LCS
DT2D	Delta T2 Despiked	CCS
DT34	3-4' Compensated Sonic	MSS
DT35	3-5' Compensated Sonic	MSS
DT3A	8-10ft Delta Time	LCS
DT3B	8-10ft Delta Time	LCS
DT45	4-5' Compensated Sonic	MSS
DT46	4-6' Compensated Sonic	MSS
DT56	5-6' Compensated Sonic	MSS
DTC1	3-5ft Compensated Sonic	LCS
DTC2	3-4ft Compensated Sonic	LCS
DTC3	8-10ft Compensated Sonic	LCS
DTCM	Delta-t Compensated	CCS
DTEP	PTS Differential Temperature	TDS
DTEP	PTS Differential Temperature	PRD
DTSM	Smeared 3-4' Sonic	MSS
DUM6	Dummy 6	LCS
DUM7	Dummy 7	LCS
DUM8	Dummy 8	LCS
DUM9	Dummy 9	LCS
FBFR	Fullbore Flow Rate	PRD
		PRD
FDEN	Fluid Density	
FDLT	Delta Flow	PRD
FDNS	Fluid Density Raw	PRD
FEFE	Shallow FE	MFE
FEFR	Shallow FE (No Correction)	MFE
FEFV	MFE Fish Voltage	MFE
FEIT	MFE Internal Temperature	MFE
FEQR	Quadrature FE (No Correction)	MFE
FEQS	Quadrature FE	MFE
FERI	MFE Current	MFE
FERV	MFE Voltage	MFE
FESI	MFE Sense DC Current	MFE
FEST	MFE Status	MFE
FEXI	MFE Quadrature Current	MFE
1 1/2 11	1711 12 Quadrature Ourrein	1411 L

	1 mm o 1 mm 1	
FEXV	MFE Quadrature Voltage	MFE
FGAP	Fixed Gate Peak Amplitude	MSS
FGTR	Fixed Gate Transit Time	MSS
FHPG	Fractional HP Pressure	RFS
FLOC	Continuous Flowmeter Raw	PRD
FLOF	Fullbore Flowmeter Raw	PRD
FLTC	Continuous Flowmeter Revolution Time	PRD
FLTF	Fullbore Flowmeter Revolution Time	PRD
FMAG	Field Magnitude	AST
FMAG	Field Magnitude	MBD
FMAG	Field Magnitude	PSD
FPCC	Formation Pressure (Cylindrical)	RFS
FPSS	Formation Pressure (Spherical)	RFS
FSF	Far Formation Sigma	TDS
FSFC	Far Corrected Sigma	TDS
FSN	Near Formation Sigma	TDS
FSNA	Near Apparent Sigma	TDS
FSNC		TDS
	Near Corrected Sigma	
FTOT	Total Flow	PRD
G1DN	Near Density Gate 1	PDS
G2DN	Near Density Gate 2	PDS
G3DN	Near Density Gate 3	PDS
G4DN	Near Density Gate 4	PDS
G5DN	Near Density Gate 5	PDS
GA31	W3T1 Gain	LCS
GA32	W3T2 Gain	LCS
GA41	W4T1 Gain	LCS
GA42	W4T2 Gain	LCS
GCGR		SGS
	Corrected Gamma Ray	
GLL	Groningen Laterolog	DLS
GLLV	Groningen Voltage	DLS
GNDF	Far Density Gates 1-5	PDS
GRBF	Far Background Gamma Raw	TDS
GRBN	Near Background Gamma Raw	TDS
GRCC	CCL Gamma Ray Raw	CCL
GRCD	Gamma Ray, Raw	AIS
GRCF	PSD Gamma Ray Raw	AST
GRCF	PSD Gamma Ray Raw	MBD
GRCF	PSD Gamma Ray Raw	PSD
GRCG	·	CCL
	CCL Gamma Ray	
GRCL	DLS Gamma Ray Raw	DLS
GRCM	MLS Gamma Ray Raw	MLS/MRS
GRCN	NCS Gamma Ray Raw	CNS
GRCP	PTS Gamma Ray Raw	PRD
GRCP	PTS Gamma Ray Raw	TDS
GRCR	RFS Gamma Ray Raw	RFS
GRD4	PSD Gamma Ray	AST
	•	

	707 C 7	Dan
GRD4	PSD Gamma Ray	PSD
GRDI	Gamma Ray	AIS
GRDP	PNS Gamma Ray Raw	CNS
GRFB	Far Background Gamma	TDS
GRGC	Gamma Ray	MCG
GRLL	DLS Gamma Ray	DLS
GRMR	MLS Gamma Ray	MLS/MRS
GRNB	Near Background Gamma	TDS
GRNC	NCS Gamma Ray	CNS
GRPD	PNS Gamma Ray Raw	CNS
GRPO	Potassium Gamma	SGS
GRPR	PTS Gamma Ray	PRD
GRPR	PTS Gamma Ray	TDS
GRRF	RFS Gamma Ray	RFS
GRSG	Spectral Gamma Ray	SGS
GRTH	Thorium Gamma	SGS
GRUR	Uranium Gamma	SGS
GUN1	Gun One	CCL
GUN2	Gun Two	CCL
GUN3	Gun Three	CCL
GUN4	Gun Four	CCL
HDEN	Vectar Processed Density	MPD
HDEN	High Resolution Density	CDS
HDEN	•	PDS
HHUN	High Resolution Density HP Pressure 100's	RFS
HONE	HP Pressure 1's Horner Time	RFS
HORN		PRD
HPF	HP Pressure	PRD
HPPC	HP Pressure Copy	RFS
HPPF	HP Pressure	RFS
HPPP	HP Frequency	PRD
HPPR	HP Frequency	RFS
HPTM	HP Temperature	RFS
HTDF	Long Spaced Density EHT	CDS
HTDN	Short Spaced Density EHT	CDS
HTEN	HP Pressure 10's	RFS
HTGR	NCS Gamma Ray Tube EHT	CNS
HTHO	HP Pressure 1000's	RFS
HTSG	Gamma Detector EHT	SGS
HTTH	HP Pressure 10000's	RFS
HVOL	Hole Volume	MML/MMR
HVOL	Hole Volume	MPD
HVOL	Hole Volume	AST
HVOL	Hole Volume	CDS
HVOL	Hole Volume	DLS
HVOL	Hole Volume	MBD
HVOL	Hole Volume	MLS/MRS

*****		P.P. 6
HVOL	Hole Volume	PDS
HVOL	Hole Volume	PSD
HVOL	Hole Volume	TAC
HYMC	Hydraulic Motor Current	RFS
HYPP	Hydraulic Piston Position	RFS
HYPR	Hydraulic Pressure	RFS
IPVF	Delta-t (P)	LCS
IPVR	Delta-t (P) Raw	LCS
ISVF	Delta-t (S)	LCS
ISVR	Delta-t (S) Raw	LCS
LBDF	Far Look Balance Curve	PDS
LBDN	Near Look Balance Curve	PDS
		CDS
LDEN	Long Linear Density	
LDEN	Long Linear Density	PDS
LSPD	Logging Speed	PRD
MAGX	X Magnetometer	AST
MAGX	X Magnetometer	MBD
MAGX	X Magnetometer	PSD
MAGY	Y Magnetometer	AST
MAGY	Y Magnetometer	MBD
MAGY	Y Magnetometer	PSD
MAGZ	Z Magnetometer	AST
MAGZ	Z Magnetometer	MBD
MAGZ	Z Magnetometer	PSD
MINV	Micro-Inverse	MML/MMR
MINV	Micro-Inverse	DLS
MIVV	Micro-Inverse Voltage	DLS
MLCP	MML Caliper Raw	MML/MMR
MLIT	MML Internal Temperature	MML/MMR
MLIV	Micro-Inverse Voltage	MML/MMR
MLL	Micro-Laterolog	DLS
MLLI	Micro-Laterolog Current	DLS
MLLV	Micro-Laterolog Current Micro-Laterolog Voltage	DLS
MLMC	MML Motor Current	MML/MMR
MLMV	MML Motor Voltage	MML/MMR
MLNV	Micro-Normal Voltage	MML/MMR
MLTC	MML Caliper	MML/MMR
MMLI	Micro-Normal Current	MML/MMR
MNLI	Micro-Normal Current	DLS
MNLV	Micro-Normal Voltage	DLS
MNRL	Micro-Normal	MML/MMR
MNRL	Micro-Normal 2"	DLS
MR1F	Micro-Inverse 1"	MLS/MRS
MR2F	Micro-Inverse 2"	MLS/MRS
MRMC	Caliper Motor Current	MLS/MRS
MRS1	Micro-Inverse 1" Raw	MLS/MRS
MRS2	Micro-Inverse 2" Raw	MLS/MRS

MS1I	Medium Laterolog Current	DLS
MS1V	Medium Laterolog Voltage	DLS
MS2I	Micro-Spherical Current 2	DLS
MSF1	Medium Laterolog	DLS
MSF2	Micro-Spherically Focussed 2	DLS
MTXD	Matrix density	MPD
MTXD		CDS
	Matrix Density	
MTXD	Matrix Density	PDS
NCRF	Long Spaced Neutron	CNS
NCRN	Short Spaced Neutron	CNS
NPOR	Base Neutron Porosity	MDN
NPOR	Limestone Neutron Porosity	CNS
NPRD	Dolomite Neutron Porosity	MDN
NPRD	Dolomite Neutron Porosity	CNS
NPRL	Limestone Neutron Porosity	MDN
NPRL	Limestone Neutron Porosity	CNS
NPRS	•	MDN
NPRS	Sandstone Neutron Porosity	
	Sandstone Neutron Porosity	CNS
NRAT	Neutron Ratio (Near/Far)	MDN
NRAT	Neutron Ratio	CNS
PADP	Pad Pressure	PSD
PADV	Pad Voltage	MBD
PADV	Pad Voltage	PSD
PCIT	MPD Internal Temperature	MPD
PCMC	MPD Motor Current	MPD
PCST	MDC Status	MPD
PDFC	Far Density Counts	MPD
PDFE	MPD Far EHT	MPD
PDFL	Far Lock Counts	MPD
PDFS	Far Density Spectrum	MPD
PDFT	Far Density Dead Time	MPD
PDHD	MPD PE Hard Counts	MPD
PDIT	MPD Internal Temperature	MPD
PDNC	Near Density Counts	MPD
PDNE	MPD Near EHT	MPD
PDNL	Near Lock Counts	MPD
PDNS	Near Density Spectrum	MPD
PDNT	Near Density Dead Time	MPD
PDPE	PE	MPD
PDSF	MPD PE Soft Counts	MPD
PDST	MPD Status	MPD
PEDF	Far Pe Curve	PDS
PEDN	Near Pe Curve	PDS
PERF	Perforations	CCL
PERF	Perforations	PRD
PFTC	Far Total Counts, No D/T	MPD
PI1	Pad 1 Resistance	PSD

PI11	Pad 1 (Right Hand)	MBD
PI12	Pad 1 (Left Hand)	MBD
PI13	Pad 1 (Speed)	MBD
PI1A	Speed Pad 1 Resistance	PSD
PI2	Pad 2 Resistance	PSD
PI21	Pad 2 (Right Hand)	MBD
PI22	Pad 2 (Left Hand)	MBD
PI23	Pad 2 (Speed)	MBD
PI2A	Speed Pad 2 Resistance	PSD
PI3	Pad 3 Resistance	PSD
PI31	Pad 3 (Right Hand)	MBD
PI32		MBD
	Pad 3 (Left Hand)	
PI33	Pad 3 (Speed)	MBD
PI4	Pad 4 Resistance	PSD
PI41	Pad 4 (Right Hand)	MBD
PI42	Pad 4 (Left Hand)	MBD
PI43	Pad 4 (Speed)	MBD
PK11	4' Peak Amplitude	MSS
PK12	•	
	6' Peak Amplitude	MSS
PK21	3' Peak Amplitude	MSS
PK22	5' Peak Amplitude	MSS
PLSF	Far Pulse Height	TDS
PLSN	Near Pulse Height	TDS
PNTC	Near Total Counts,No D/T	MPD
POIS	Poisson's Ratio	LCS
PT11	4' Time To Peak Amplitude	MSS
PT12	6' Time To Peak Amplitude	MSS
PT21	3' Time To Peak Amplitude	MSS
PT22	5' Time To Peak Amplitude	MSS
R1T1	Sonic R1T1 Transit Time	LCS
R1T2	Sonic R1T2 Transit Time	LCS
R2T1	Sonic R2T1 Transit Time	LCS
R2T2	Sonic R2T2 Transit Time	LCS
R3T1	Sonic R2T1 Transit Time	LCS
R3T2	Sonic R3T2 Transit Time	LCS
R4T1	Sonic R4T1 Transit Time	LCS
R4T2	Sonic R4T2 Transit Time	LCS
RAKT	Thorium/Potassium Ratio	SGS
RAKU	Uranium/Potassium Ratio	SGS
RAUT		SGS
	Thorium/Uranium Ratio	
RBAD	Relative Bearing	AST
RBAD	Relative Bearing	MBD
RBAD	Relative Bearing	PSD
RBHS	Relative Bearing (high side of hole)	PSD
RILD	Deep Induction y	MAI
RILD	Deep Induction Resistivity	AIS
RILM	Medium Induction	MAI
IXILIVI	Mediani induction	14141

RILM	Medium Induction Resistivity	AIS
RMSF	Rm Resistivity	RMS
RMSI	Rm Current	RMS
RMSV	Rm Voltage	RMS
RN11	4' Road Noise Max. Deflection	MSS
RN12	6' Road Noise Max. Deflection	MSS
RN21	3' Road Noise Max. Deflection	MSS
RN22	5' Road Noise Max. Deflection	MSS
RSDF	Far Resolution Curve	PDS
RSDN	Near Resolution Curve	PDS
RSFE	Shallow Focussed Electric	AIS
RSFR	Shallow Focussed Electric Raw	AIS
RSSC	Received Signal	AST
RSSN	Received Signal Raw	AST
RXRT	Rxo/Rt	AIS
SAL1	Fluid Conductivity	PRD
SDEN	Short Linear Density	CDS
SDEN	Short Linear Density	PDS
SEMB	Semblance (between waveforms)	LCS
SFEI	Focussed Electric Current	AIS
SGD1	Discriminator 1 (Gamma Ray Raw)	SGS
SGD2	Discriminator 2	SGS
SGD3	Discriminator 3	SGS
SGD4	Discriminator 4	SGS
SGD5	Discriminator 5	SGS
SGD6	Discriminator 6	SGS
SGDT	Spectral Gamma Spectrum	SGS
SGF	Strain Gauge Pressure	PRD
SGF	Strain Gauge Pressure	TDS
SGG1	Gate 1	SGS
SGG2	Gate 2	SGS
SGG3	Gate 3	SGS
SGG4	Gate 4	SGS
SGG5	Gate 5	SGS
SGPC	Strain Gauge Pressure Copy	RFS
SGPF	Strain Gauge Pressure	RFS
SGPP	Strain Gauge Pressure Raw	PRD
SGPP	Strain Gauge Pressure Raw	TDS
SGPR	Strain Gauge Pressure Raw	RFS
SGTM	Strain Gauge Temperature	RFS
SHUN	Strain Gauge Pressure 100's	RFS
SLL	Shallow Laterolog	DLS
SLLI	Shallow Laterolog Current	DLS
SLLV	Shallow Laterolog Volts	DLS
SONE	Strain Gauge Pressure 1's	RFS
SP	Spontaneous Potential	AIS
SPCG	Spontaneous Potential	MCG

SPDL	SP	MDL
SPLL	DLS Spontaneous Potential	DLS
SPOR	Sonic Porosity	CCS
SPOR	Sonic Porosity	LCS
SPR	Raw Spontaneous Potential	AIS
SPR	MLS SP Raw	MLS/MRS
SPRD	Dolomite Sonic Porosity	MSS
SPRL	Limestone Sonic Porosity	MSS
SPRL	Laterolog SP	DLS
SPRS	Sandstone Sonic Porosity	MSS
STEN	Strain Gauge Pressure 10's	RFS
STGN	MSS Gain Status	MSS
STHO	Strain Gauge Pressure 1000's	RFS
STIT	MSS Internal Temperature	MSS
STPK	MSS Peak Status	MSS
STSS	MSS Status	MSS
STTH	Strain Gauge Pressure 10000's	RFS
STWS	MSS Waveform Segment Status	MSS
SW	Water Saturation	AIS
SYM1	Symmetrised Receiver 1	MAI
SYM2	Symmetrised Receiver 2	MAI
SYM3	Symmetrised Receiver 3	MAI
SYM4	Symmetrised Receiver 4	MAI
T1R2	Sonic T1R2 Transit Time	CCS
T1R4	Sonic T1R4 Transit Time	CCS
T2R1	Sonic T2R1 Transit Time	CCS
T2R3	Sonic T2R3 Transit Time	CCS
TAZI	AZID (relative to True North)	PSD
TBCA	Tension of Cable	CCS
TBTV	Tension of Cable	AST
TCCL	Tension of Cable	CCL
TCCP	Two Arm Caliper Raw	MTC
TCIT	MTC Internal Temperature	MTC
TCMC	MTC Motor Current	MTC
TCMV	MTC Motor Voltage	MTC
TCRF	Far Count Rate	TDS
TCRN	Near Count Rate	TDS
TCST	MTC Status	MTC
TDEP	True Depth	PSD
TDFE	Tension Of Cable	DLS
TDSI	Tension Of Cable	AIS
TEPP	PTS Borehole Temperature Raw	PRD
TEPP	PTS Borehole Temperature	TDS
TEXD	Borehole Temperature	AIS
TEXF	PSD Borehole Temperature	AST
TEXF	PSD Borehole Temperature	PSD
TEXL	DLS Borehole Temperature	DLS

TEXM	MLS Borehole Temperature	MLS/MRS
TEXN	Borehole Temperature	CDS
TEXP	PTS Borehole Temperature	PRD
TFDH	Tension Of Cable	MBD
TFDR	Tension Of Cable	PSD
TFDS	Tension Of Cable	PSD
TILD	Borehole Tilt	AST
TILD	Borehole Tilt	MBD
TILD	Borehole Tilt	PSD
TIMP	Time Between Depth Increments	PRD
TIND	Sonde Temperature	AIS
TINM	MLS Sonde Temperature	MLS/MRS
TINN	Sonde Temperature	CDS
TLSS	Tension Of Cable	LCS
TMRS	Tension Of Cable	MLS/MRS
TNCS	Tension Of Cable	CDS
TNCS	Tension Of Cable	CNS
TPDS	Tension Of Cable	PDS
TPOR	TDT Porosity	TDS
TPRD	Tension Of Cable	PRD
TPRE	Time Since Pre-Test	RFS
TR11	4' Transit Time	MSS
TR12	6' Transit Time	MSS
TR21	3' Transit Time	MSS
TR22	5' Transit Time	MSS
TRFS	Tension Of Cable	RFS
TS11	4' Transit Time Set	MSS
TS12	6' Transit Time Set	MSS
TS21	3' Transit Time Set	MSS
TS22	5' Transit Time Set	MSS
TSAM	Time Since Sample	RFS
TSGS	Tension Of Cable	SGS
TTAC	Tension Of Cable	TAC
TTDS	Tension Of Cable	TDS
VCMC	Valve Motor Current	RFS
VEC0	Shallow Induction	MAI
VEC1	Near Induction	MAI
VEC2	Near Medium Induction	MAI
VEC3	Far Medium Induction	MAI
VEC4	Far Induction	MAI
VEC5	Deepest Induction	MAI
VPVS	Velocity Ration (Vp/Vs)	LCS
VX1	Vx Receiver 1	AIS
VX2	Vx Receiver 2	AIS
VX3	Vx Receiver 3	AIS
VX4	Vx Receiver 4	AIS
W3T1	8' Waveform	LCS

W3T2	7' Waveform	LCS
W4T1	10' Waveform	LCS
W4T2	9' Waveform	LCS
WAV3	Amplitude	AST
WAV4	Two Way Travel Time	AST
WAV5	Compensated Amplitudes	AST
WSEG	Waveform Segment	MSS
XPOR	Crossplot Porosity	CNS
XPOR	Crossplot Porosity	PDS
ZACC	Accelerometer Z (Plottable)	AST
ZACC	Accelerometer Z (Plottable)	PSD

6 LIS Format Mnemonics

The LIS file format is the most widely used exchange format for log data. Customer files generated to the LIS format involve a transcription from the Reeves proprietary storage format used during acquisition and processing.

During transcription, standard LIS curve mnemonics will normally be substituted for Reeves mnemonics whenever there is generic equivalence. For example, the generic LIS mnemonic GR replaces Gamma Ray curves. If there is no generic equivalent, the Reeves mnemonic is retained.

Some LIS reading systems (Log Base from Schlumberger and Pagoda developed by Schlumberger for Shell) incorporate a curve validation capability which uses a database of service company - specific mnemonics. In particular, they cross check the list of subs contained in the optional Tool Table part of the LIS file with the list of curves contained in the log data part of the file.

LIS files generated to this standard use Reeves mnemonics only i.e. no substitutions take place.

For open hole data acquired with SS1 software, the mnemonics listed in Section 3 and 4 allow proper validations.

For production logging data, and for data acquired with software other than SS1 software, some additional cross-referencing information is required.

Production Logging Suite Subs & Curve Mnemonics Cross Reference

The following table identifies the measurement subs from which individual curves originate. Refer to Section 4 for the curve description. Note that some measurements are present on more than one sub.

Curve Mnemonics	Sub(s)	Curve Mnemonics	Sub(s)
AFDN	FDS	FLTF	FFC, FFS
CCLP	PTS	FTOT	FFS, IFS
COFR	IFS	GRCP	PTS
CONF	FDS	GRPR	PTS
DTEP	PTS	HPF	PGC
FBFR	FFS	HPPP	PGC
FDEN	FDS	SAL1	FDS
FDLT	FFS, IFS	SGF	PTS
FDNS	FDS	SGPP	PTS
FLOC	IFS	TEPP	PTS
FLOF	FFS	TEXP	PTS
FLTC	IFS		

The Production Logging curves HORN, LSPD, PERF, TIMP and TPRD originate at the surface and may be associated with any sub.

Data Acquired With Software Other Than SS1

Most open hole data are acquired with SS1 software. It permits tool strings to be configured using any of the supported sondes, and contains a database of subs from which information is extracted for inclusion into the Tool Table part of an LIS file. Tools that are not supported by SS1 software have their data acquired by tool or combination-specific software systems. Each system has a unique Software Service Name. In these cases the Software Service Name is substituted for the physical tool names in the LIS Tool Table.

The following list of Software Service Names are those that are currently supported.

Software Services Name	Description
BTV	AST acquisition
CCL	analogue GCL acquisition
FDH	MBD acquisition
FDR	PSD acquisition with real time dip computation
FDX	PSD and BGS acquisition without real time dips
LSS	LCS acquisition, waveform mode
NC1	1cm sampled neutron-density acquisition
RFS	RFS acquisition
SNC	CBL acquisition using the CNS sub from the NCS tool
SPD	CBL acquisition using the CNS sub from the PDS tool
TDS	TDS acquisition

The following is a list of Software Service Names that are no longer supported, but which may be present in older data sets.

Software Services Names	Description
BCA	CSS acquisition
CSN	CSS/NCS combination acquisition
DDL	AIS/DLS combination acquisition
DFE	DLS/MLS/MRS combination acquisition
DLC	CSS/LCS/AIS combination acquisition
DSI	AIS acquisition
DTT	AIS/TAC/TAC combination acquisition
FD2	FDH system with 2mm sampling
LCS	LCS acquisition
LLC	CSS (or LCS)/DLS/TAC combination acquisition
MRX	MRS acquisition
NCG	NCS/SGS combination acquisition
NCM	NCS/MRS combination acquisition
NCS	NCS acquisition

NDI NCS/AIS combination acquisition

NDL NCS/DLS/TAC combination acquisition

NGT NCS/SGS/TAC combination acquisition

NLC NCS/CCS (or LCS)/TAC combination acquisition

PDD PNS/AIS/BHT/TAC combination acquisition

PDG PNS/SGS combination acquisition

PDI PNS/AIS/TAC combination acquisition
PDL PNS/DLS/TAC combination acquisition

PDM PNS/MRS/TAC combination acquisition

PDX PNS acquisition

PDT PNS/TAC combination with 2.5cm sampling

PST PNS/CSS/TAC combination acquisition

SDI CSS/AIS combination acquisition

SDL CSS/DLS/TAC combination acquisition

SGX SGS acquisition

SVI CSS/BGN combination acquisition

TAC TAC acquisition

XXL NCS/CSS/AIS/TAC combination acquisition

Software Service Names & Curve Mnemonics Cross Referencing

Not all the curve names listed in Section 4 are supported by current non-SS1 software. BTV, CCL, FDH, RFS and TDS software systems do support all curves given for their associated tools. FDR, FDX, LSS, NC1, SNC and SPD support a sub-set of curves from the associated tools. This must be taken into account if curve names are to be validated against Software Service Names.

The **FDR** software system supports all Precision Strata Dipmeter curves except AREF, BRKT, CAXR, CAYR, RBHS, TDEP and TFDS.

The **FDX** software system supports all Precision Strata Dipmeter Curves except AZIC, CAXR, CAYR, CORC, DIPC, TAZI, TDEP and TFDR.

The **LSS** software system supports all Long Compensated Sonic curves except DT1A, DT2A, DT3A, DT1B, DT2B, DT3B, DTC1, DTC2 and DTC3.

The NC1 software system supports all Compensated Density Sonde curves except CACN, DPRD, DPRL, DRRS, HDEN and TNCS. It also supports all Compensated Neutron Sonde curves except BHT, BHTD, BHTF, NRPD, NPRL, NPRS, TNCS and XPOR.

The following curve mnemonics are supported by the SNC and SPD software systems (refer to Section 4 for Curve description):

Curve Mnemonic	Software System	Curve Mnemonic	Software System
ВНТ	SNC	PAMF	SNC, SPD
BHTF	SPD	PAMP	SNC, SPD
COLD	SNC, SPD	R1T2	SNC, SPD
DCRF	SNC	R2T2	SNC, SPD
DCRN	SNC	R3T2	SNC, SPD
DSPF	SPD	R4T2	SNC, SPD
DSPN	SPD	SPOR	SNC
DT1	SNC, SPD	STNC	SPD
DT1D	SNC, SPD	STPD	SNC, SPD
DT2	SNC, SPD	STSS	SNC, SPD
DT2D	SNC, SPD	T1R2	SNC, SPD
DTCM	SNC, SPD	T1R4	SNC, SPD
GRCC	SNC	T2R1	SNC, SPD
GRDP	SPD	T2R3	SNC, SPD
GRPD	SPD	TEXN	SNC
NCRF	SNC, SPD	TINN	SNC
NCRN	SNC, SPD	TSNC	SNC
NPOR	SNC, SPD	WAV1	SNC,SPD
NRAT	SNC, SPD		