

Micro Spherically Focused Log (MSFL-002)



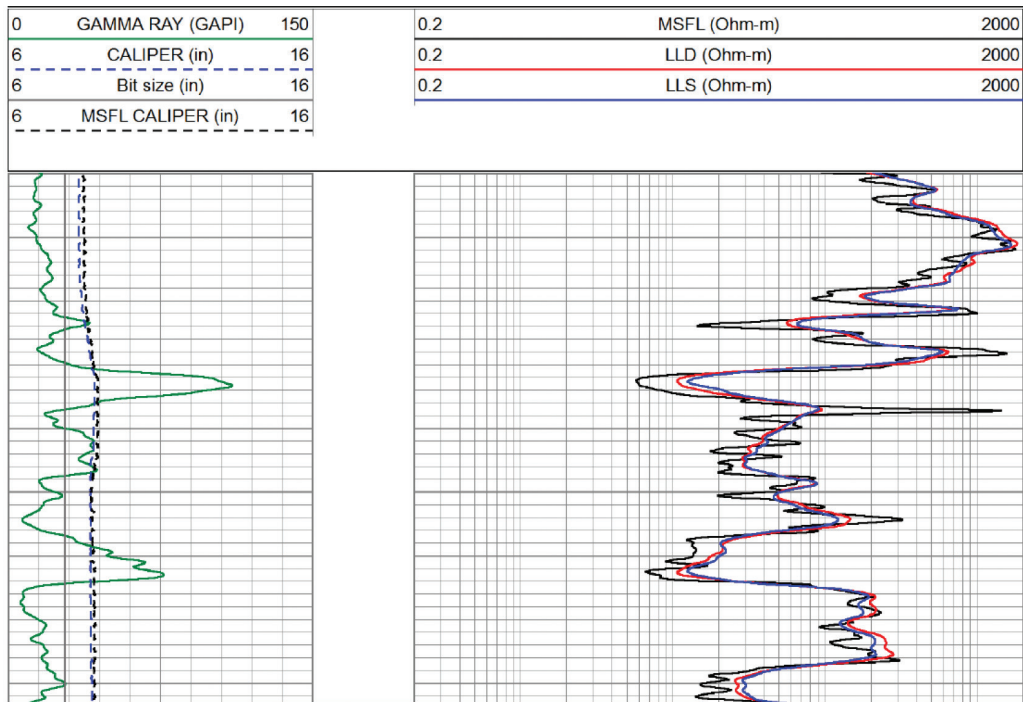
The micro spherically focused log (MSFL) is used to measure the flushed zone resistivity (R_{xo}) in boreholes. The tool has a high vertical resolution, and due to its pad design has limited influence by the borehole. When logged in combination with the DLL, the MSFL will provide the shallow measurement for invasion profiling.

Description

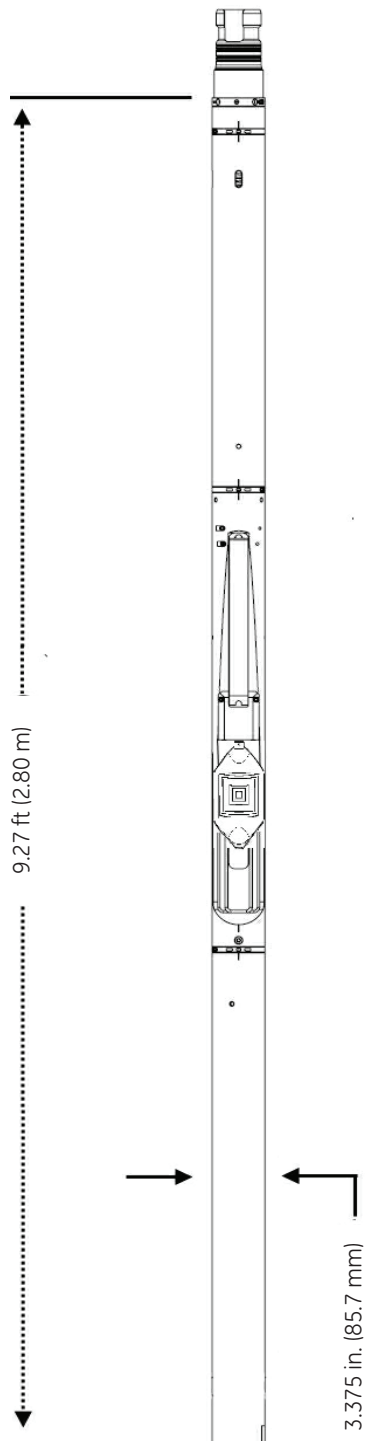
The MSFL is a pad mounted device and incorporates a focusing system to direct its measurement current into the formation. The placement of the measuring electrodes is such that it allows the tool to measure into the flushed zone. The tool uses two fully independent caliper arms to force the pad against the mudcake and output a hole gauge measurement as well.

Features

- Fully compatible with Sondex Ultrawire* tools
- Fully independent tool that can be placed anywhere in the string
- MSFL/MEL use a common sonde body allowing the pads to be interchangeable
- Easy to transport: less than 10 feet in length



Micro Spherically Focused Log (MSFL-002)



Specifications

Maximum OD	3 ³ / ₈ in. (85.7 mm)
Makeup length	9.27 ft (2.8 m)
Weight	194 lb (88 kg)
Maximum temperature	302°F (150°C)
Maximum pressure	20 kpsi (137.9 Mpa)
Minimum hole	6 in. (152 mm)
Maximum hole	16 in. (406 mm)

Sensor Offsets

MSFL	1.91 ft (0.58 m)
------	------------------

Borehole Conditions

Borehole fluids	Fresh, salt
Recommended logging speed	30 ft/min (9.1 m/min)
Tool position	Centralized/Decentralized

Measurement

Accuracy	MSFL: +/- 5% Caliper: +/- 3.8 mm Caliper: +/- 0.15 in.
Vertical resolution	4.0 in. (10.2 cm)
Radial DOI (50%)	4.0 in. (10.2 cm)
Measurement range	0.2–2,000 ohm-m
Primary curves	MSFL
Secondary curves	MSFCAL

Hardware and Power Requirements

Tool bus	Ultrawire
Power	18 VDC 165 mA



GE imagination at work

Visit us online at:
www.ge-energy.com/wireline

*Trademark of General Electric Company.
Copyright ©2014 General Electric Company. All rights reserved.
GEA31118 (03/2014)