

600°F Memory X-Y Caliper Tool

The Scientific Production Services **Memory X-Y Caliper** presents internal casing diameter in two perpendicular planes. This gives data on the internal casing condition and shows the extent of the casing wear. It reveals the presence of anomalies on the internal casing wall.

Features

- Battery operated
- Slick line conveyed
- Multiple logging passes to verify repeatability
- Can be run in conjunction with other memory production logging tools (pressure, temperature, gamma ray, collar locator and spinner).

Uses

- Two internal diameter measurements are recorded simultaneously and show details of the mechanical integrity of the casing I.D..
- The tool is powered by lithium batteries and records all data to onboard nonvolatile memory (4MB). With the tool at surface, data is uploaded to a notebook computer and curves plotted.

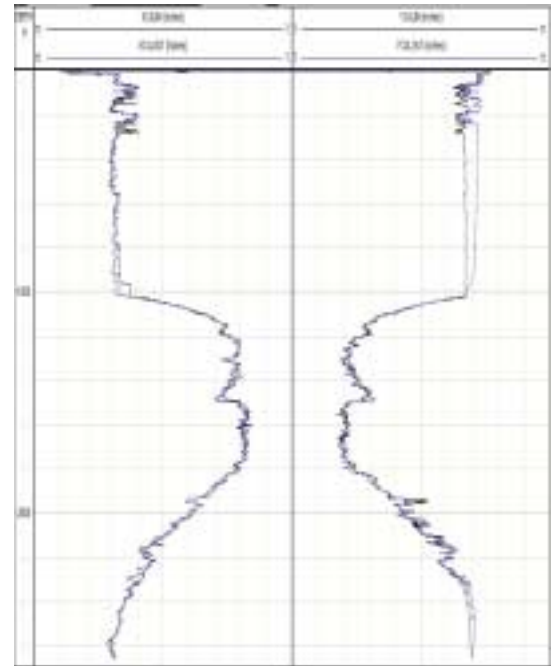
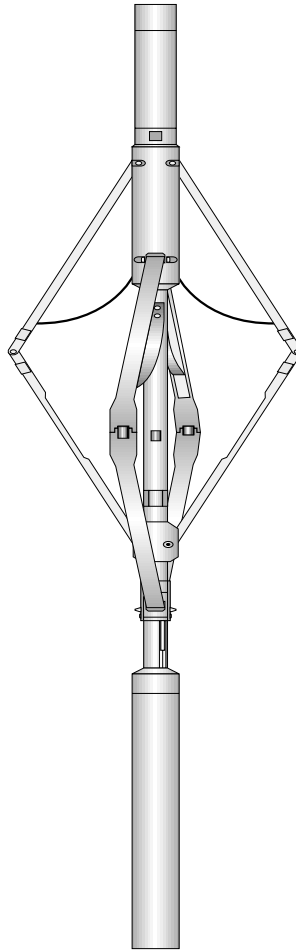
Advantages

The tool operates at temperatures up to 600 F for up to 10 hours. This eliminates the cost associated with cooling the well down before logging. This allows a thorough evaluation of most geothermal and high temperature oil and gas wells.

Identify Problems

- Locates evidence of internal corrosion
- Measures the internal diameter and “out-of-roundness”
- Identifies casing joints with differing weight or wall thickness
- Detects and evaluates defects due to mechanical failure
- Reveals scale or paraffin buildup

X - caliper Y - caliper



Log Example

The tool was run in the above geothermal well on slickline to save both cost and time. The client wanted to check for restrictions or scale buildup. The X-Y Caliper tool logged the interval and the example plot above clearly shows scale buildup from 1000 to 2000'.

Technical Specifications

Tool diameter :	1.75" 44 mm
Tool length:	110" 2.79m
Number of arms:	4
Min. Measuring Range:	3.0" 76.2mm
Max. Measuring Range:	10.5" 267mm
Accuracy:	+/- 0.05"
Logging speed:	30 to 100 fpm 10 to 30 mpm
Temperature Rating:	600°F (315°C)



Scientific Production Services

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NewXY Cal /Apr2002