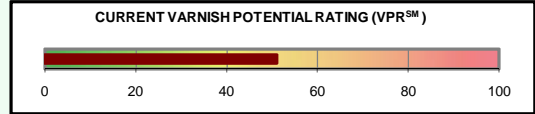


COMP REF #

STATUS FOR: **901999** WAS **ABNORMAL** ON **09/23/08**

QSASM QUANTITATIVE SPECTROPHOTOMETRIC ANALYSIS

ANALYSTS, INC.
FIELD SERVICE EXAMPLE REPORT
INDUSTRIAL APPLICATIONS
0



| UNIT ID | COMPONENT ID | COMPONENT REF NO | OIL TYPE |
|--------------------|--------------|------------------|---------------|
| UNIT 1 GAS TURBINE | TURBINE | 901999 | NALUBE ISO 32 |
| SAMPLE NUMBER | ANALYST | SAMPLE DATE | REPORT DATE |
| 9999 | | 09/23/08 | 10/6/08 |

INTERPRETATION OF CURRENT DATA

The varnish potential of the lubricant is **ABNORMAL**. This means that there is an increased level of soft contaminants due to oil degradation. These soft contaminants will form varnish in tight clearance zones or cooler spots in the system. The oil may also cause servo valves to stick or seize causing a unit trip, especially after a shut-down and the unit is being brought back online. Inspect filters and reservoir (when possible) for signs of varnish formation and bearings for temperature increases. Pay particular attention to "last chance" filters and pencil strainers before the hydraulic circuit's valve blocks. Investigate electrostatic separation, balance charged precipitation and cellulose adsorption filtration as potential technologies to lower the soft contaminant and varnish potential. Recommend re-sampling in one month. Please refer to the routine report for additional data and recommendations.

The QSA Varnish Potential Rating describes the used lubricant's propensity to produce harmful deposits. Ratings and sample severity are assigned based on the level of varnish-producing contaminants present in the lubricant sample.

QView



| RESULT | DESCRIPTION |
|--------|---|
| 51 | VARNISH POTENTIAL RATING (VPR SM) |
| 124 | FILTER WEIGHT (mg/L) |

HISTORICAL VPRSM

