INDEPENDENT TECHNICAL
ASSESSMENT REPORT

No: 13/700

Date: July 30, 2000
I.T.A.R. No.: 13/700
Country: Australia
State: Queensland

CLIENT NAME:
Linder and May

PRODUCT/SERVICES:

Ultra Low Temperature Cryogenic Cabinets

ADDRESS:

69 Crockford street, Northgate QLD 4013

PURPOSE:

Evaluation of minus 80 degree celsius ultra low temperature cabinet using a cascade refrigeration system.

METHODOLOGY:

Linder and May had experienced evaporator oil logging and capillary blocking problems using polyolester lubricants in this particular equipment and decided to try ROC S2 32 Cst lubricant. The unit was tested in the workshop prior to shipment and the results appeared positive.

A field trial of six months was then completed. The unit was then returned for a complete investigation which involved a full strip down, an inspection of the compressor, capillary tube, drier, oil separator and an independent oil analysis by a NATA approved laboratory (available upon request).

RESULTS :

The compressor oil level had not changed from the initial fill, the oil separator was as per the initial fill, the capillary tube was checked and no oil or additive deposit was found. The evaporator was dry indicating no oil had moved from the compressor during the six months of continually operating at -80 degrees C.

The oil analysis showed no deterioration in the oil the acid level at 0.01ppm was well below acceptable concentrations. The oil viscosity had not altered nor was there any metal or chemical contamination considered problematic in the sample.

CONCLUSIONS :

ROC Oil is ideally suited to low temperature applications.

It’s ability to lubricate effectively without evaporator oil

logging or capillary blockage ensures superior performance advantages are achieved.

TEST INFORMATION ON PRODUCTS CONTAINED IN THIS REPORT DOES NOT IMPLY AN ENDORSEMENT BY THE INDEPENDENT TEST COMPANY.

FOR FURTHER INFORMATION PLEASE CONTACT:

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