



UIN: 02862D0

Oil

Unit No.

Unit:
Make
Model
Serial No.
Site

Compartment:

Name Turbina

Make
Model
Serial No.
Capacity:

Customer:

ALS PATAGONIA SA
Av. Americo Vespucio 2760-H, Conchalí
Santiago Chile

DIAGNOSIS

Test results show MODERATE VARNISH POTENTIAL with the submitted sample. MPC test result indicates an excessive amount of soft contaminants (varnish precursors) present in the sample. Recommend checking system for hot spots and adiabatic compression (micro-dieseling). When possible, it is recommended to inspect system components (especially in low flow areas and cool surfaces) for excessive varnish. Recommend appropriate filtration or other OEM approved method to reduce/remove excessive soft contaminants from the oil. Unable to provide RULER test results, new/unused reference sample not submitted.

ANALYST: Ed.Eckert

LEGEND				
Caution	Severe	Abnormal	Caution	Normal

VARNISH POTENTIAL REPORT



DATE SAMPLED	04-Nov-14	14-Nov-13	22-May-12
DATE RECEIVED	04-Nov-14	12-Dec-13	15-Jun-12
DATE REPORTED	05-Nov-14	17-Feb-14	29-Jun-12

LAB NO.	43020617986	30006309227	43020290259
SIF NO.	16339192	16834379	12183214
TIME ON UNIT			
TIME ON OIL			
OIL BRAND	Unidentified	YPF	YPF
OIL TYPE	Unidentified	Turbina R 68	Turbina R 68
OIL GRADE	Unidentified	ISO 68	ISO 68
OIL ADDED			
FILTER	Not Applicable		
OIL CHANGED			
WO NUMBER			

Ruler			
Amine % (D6971)	N/A	78	80
Phenol % (D6971)	N/A	67	65

Physical / Chemical			
VP Pentane Insolubles	56	165	170
Color (D1500)	6.0		1.0
UC Sediment Rating (MM1169)	1	1	1
Blotter Test	1	1	1

Filter Patch Test			
Membrane Patch Colorimetry	31	16	17

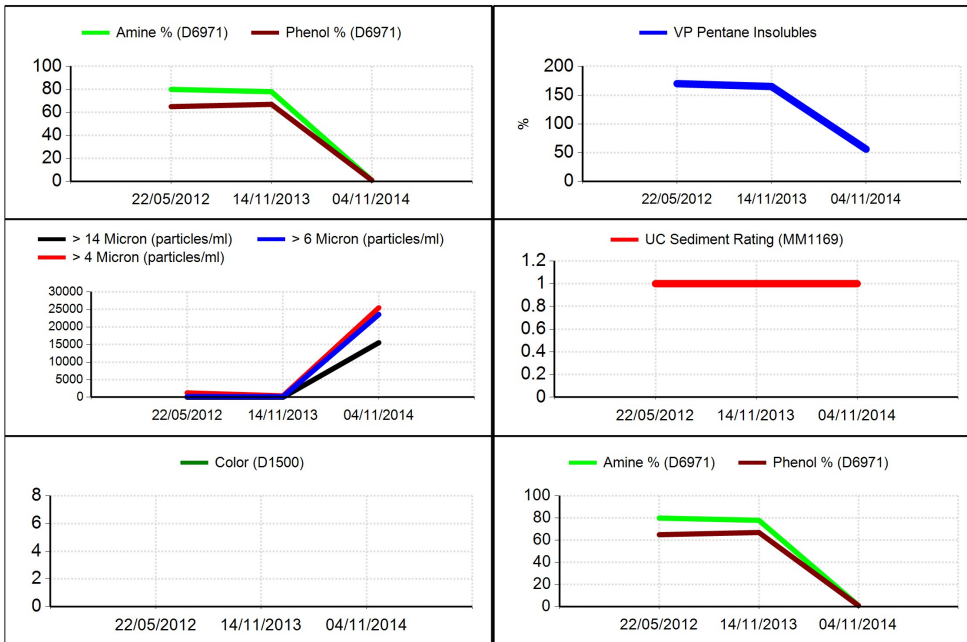
Particle Count			
ISO 4406 Rating	22/22/21	16/15/11	17/15/11
> 4 Micron (particles/ml)	25441	401	1252
> 6 Micron (particles/ml)	23529	164	188
> 14 Micron (particles/ml)	15522	9	18
> 23 Micron (particle/ml)	4029	6	8
> 50 Micron (particles/ml)	22	3	3

Varnish Potential			
Varnish Potential Rating	Moderate	Moderate	Moderate

Current Sample	Lab N° 30006309227	Lab N° 43020290259	Lab N°
See Comments	See Comments	See Comments	



UIN 02862D0



Since services are based on samples and information supplied by others, and since corrective actions, if any, are necessarily taken by others, these services are rendered without any warranty or liability of any kind beyond the actual amount paid to ALS Tribology for the services. Reported recommendations are based on interpretations of the generated test results and historical data. Certain test results appearing in this report may have been tested at other ALS laboratories within the Tribology divisional network.

U.S. Laboratories

- Atlanta, Georgia - 420**
3121 Presidential Drive
Atlanta, GA 30340
800.394.3669
- Valley View, Ohio - 410**
6180 Halle Dr. Suite D
Valley View, OH 44125
800.726.5400
- Kansas City, Kansas - 430**
935 Sunshine Road
Kansas City, KS 66115
800.332.8055
- Phoenix, Arizona - 440**
3319 West Earll Drive
Phoenix, AZ 85017
800.445.7930
- Portland, Oregon - 401**
4943 NW Front Avenue
Portland, OR 97210
800.770.4128
- Sparks, Nevada - 400**
1375 Greg Street, Suite 104
Sparks, NV 89431
800.524.7848

Canadian Laboratories

- Burlington, Ontario - 450**
1240 Burloak Drive, Unit 6
Burlington, ON L7L 6B3
877.732.9559
- Edmonton, Alberta - 402**
10717-176 Street
Edmonton, AB T5S 1K1
888.489.0057

Sales & Marketing

- Houston, Texas**
10450 Stancliff Road, Suite 210
Houston, TX 77099
877.835.8437

International Locations

- Australia**
Brisbane, Perth, Sydney, Muswellbrook
- Europe**
Prague
- New Zealand**
Wellington
- South America**
Santiago de Chile
- Southeast Asia**
Kuala Lumpur, Singapore