ETXLL-SPV 2023-0366
Marignane, June 14th, 2023

APPROVAL

It is hereby certified that the company

SPECTRO OIL AG (5067074)
LANDSTRASSE 23
4303 KAISERAUGST – SWITZERLAND

is qualified for following
SPECIAL PROCESSES

- Materials Testing (Lab Testing)
  - Microanalysis X (EDX method)
  - Particle analysis : morphology
  - ***Acid Number of Petroleum Products (TAN)***
  - ***Kinematic Viscosity by Houillon Viscometer***
  - ***Determination of Water in Petroleum Products***
  - ICP-AES Atomic Emission Spectrometry of Used Oils
  - ***Ferrous Wear Debris Monitoring in Service Fluids***

This qualification is granted under
the conditions and restrictions defined in appendix 1

Special Processes Management

Compan julien
Signature numérique de Compan julien
Date : 2023.07.13 10:00:30 +02'00'

AH Laboratory

Olivier Jaubert - SIG
Signature numérique de Olivier Jaubert - SIG
Date : 2023.07.10 08:33:00 +02'00'

AIRBUS

RECORD OF REVISIONS

Issue	Modified by	Description of Change / modified pages	Date of change
-	E. GEREONE ETXLL	**ETXLL-SPV 2023-366** *cancels and replaces* **ETLL 2006-6297 iss A** & **ETLL 2012-6222 iss A** (p.3/4) – Regularization according to the update of L072 305 and L072 311.	14.06.2023

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APPENDIX 1

SPECIAL PROCESS : **MATERIALS TESTING (LAB TESTING) 1/2**

- Microanalysis X (EDX method)
- Particle analysis : morphology
- ***Acid Number of Petroleum Products (TAN)***
- ***Kinematic Viscosity by Houillon Viscometer***
- ***Determination of Water in Petroleum Products***
- ICP-AES Atomic Emission Spectrometry of Used Oils
- ***Ferrous Wear Debris Monitoring in Service Fluids***

Performed in accordance with the following documents :

Other Documentation :

- *ASTM E-1508*	*Standard Guide for Quantitative Analysis by Energy-Dispersive Spectroscopy*
- *ASTM D-664*	*Standard Test Method for Acid Number of Petroleum Products by Potentiometric Titration*
- *ASTM D-7279*	*Standard Test Method for Kinematic Viscosity of Transparent and Opaque Liquids by Automated Houillon Viscometer*
- *ASTM D-445*	*Standard Test Method for Kinematic Viscosity of Transparent and Opaque Liquids (and Calculation of Dynamic Viscosity)*
- *ASTM D-6304*	*Standard Test Method for Determination of Water in Petroleum Products, Lubricating Oils, and Additives by Coulometric Karl Fischer Titration*
- *ASTM D-8184*	*Standard Test Method for Ferrous Wear Debris Monitoring in In-Service Fluids Using a Particle Quantifier Instrument*
- ASTM D-5185	Standard Test Method for Multielement Determination of Used and Unused Lubricating Oils and Base Oils by Inductively Coupled Plasma Atomic Emission Spectrometry (ICP-AES)

Supplier Documentation :

- Test Method	M013 (in house SPECTRO-OIL Test Method)

With the following resources :

- N/A

This qualification could be suspended or cancelled at any time in case of decrease in quality. All modifications initiated by supplier must be submitted to Airbus Helicopters for approval. In case of Airbus Helicopters documentation revision, modifications have to be implemented or request for deviation have to be submitted to Airbus Helicopters for approval.

APPENDIX 1

SPECIAL PROCESS : **MATERIALS TESTING (LAB TESTING) 2/2**

- Microanalysis X (EDX method)
- Particle analysis : morphology
- ***Acid Number of Petroleum Products (TAN)***
- ***Kinematic Viscosity by Houillon Viscometer***
- ***Determination of Water in Petroleum Products***
- ICP-AES Atomic Emission Spectrometry of Used Oils
- ***Ferrous Wear Debris Monitoring in Service Fluids***

Performed in accordance with the following documents :

This Qualification is based on the following results :

- Qualification program	OIQL 2006-6058 (Spectrometry analysis) EDDLL 2012-6033 (Particle Analysis) *ETXLL 2023-2051*
- Monitoring audit report	ETLL 2017-1012 *2023-2052*
- *Action plan*	*N/A (no CAR)*
- AH test report	OIQL n° 2006-3181 (Results of the round robin SPECTRO-OIL AG/EC) EDDLL 2011-6338 (Particle analysis laboratories) *2022-3359 (Oil)*
- Qualification Note	EDDLL 2012-6296
- *AH note*	*ETMD 2021-0152 issue B (H175 MGB oil analysis)* *U600A0518E01_TN iss A*

The Qualification is subject to the following specific conditions :

Safety class : N/A
Design applicability : AH/AHD according EI021 HS5011.

Restrictions :

None

This qualification could be suspended or cancelled at any time in case of decrease in quality. All modifications initiated by supplier must be submitted to Airbus Helicopters for approval. In case of Airbus Helicopters documentation revision, modifications have to be implemented or request for deviation have to be submitted to Airbus Helicopters for approval.