MOB II WEAR CHECK

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
CASE 165 PUMA 35317
Component
Diesel Engine
Fluid
CHEVRON DELO 400 50T 15W40 - API CK 4/5N (17 QTS)

RECOMMENDATION

Resample at the next service interval to monitor.

WEAR

All component wear rates are normal.

CONTAMINATION

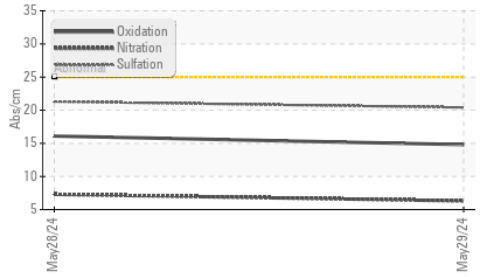
The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.

FLUID CONDITION

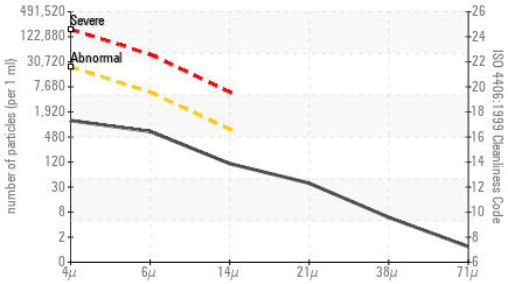
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		KLFK202283	KLFK202284	---
Sample Date		Client Info		29 May 2024	28 May 2024	---
Machine Age	hrs	Client Info		27572	27909	---
Oil Age	hrs	Client Info		354	691	---
Filter Age	hrs	Client Info		354	691	---
Oil Changed		Client Info		Not Changd	Not Changd	---
Filter Changed		Client Info		Not Changd	Not Changd	---
Sample Status				NORMAL	ATTENTION	---
Iron	ppm	ASTM D5185m	>100	9	13	---
Chromium	ppm	ASTM D5185m	>20	<1	<1	---
Nickel	ppm	ASTM D5185m	>4	0	<1	---
Titanium	ppm	ASTM D5185m		<1	<1	---
Silver	ppm	ASTM D5185m	>3	0	0	---
Aluminum	ppm	ASTM D5185m	>20	2	3	---
Lead	ppm	ASTM D5185m	>40	0	0	---
Copper	ppm	ASTM D5185m	>330	<1	2	---
Tin	ppm	ASTM D5185m	>15	0	0	---
Vanadium	ppm	ASTM D5185m		<1	<1	---
White Metal	scalar	*Visual	NONE	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---
Silicon	ppm	ASTM D5185m	>25	4	4	---
Potassium	ppm	ASTM D5185m	>20	2	2	---
Fuel		WC Method	>5	<1.0	<1.0	---
Water		WC Method	>0.2	NEG	NEG	---
Glycol		WC Method		NEG	NEG	---
Soot %	%	*ASTM D7844	>3	0.3	0.3	---
Nitration	Abs/cm	*ASTM D7624	>20	6.3	7.3	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	20.4	21.3	---
Particles >4µm		ASTM D7647	>20000	1044	7534	---
Particles >6µm		ASTM D7647	>5000	569	4104	---
Particles >14µm		ASTM D7647	>640	97	698	---
Particles >21µm		ASTM D7647	>160	33	235	---
Particles >38µm		ASTM D7647	>40	5	36	---
Particles >71µm		ASTM D7647	>10	1	4	---
Oil Cleanliness		ISO 4406 (c)	>21/19/16	17/16/14	20/19/17	---
Silt	scalar	*Visual	NONE	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	---
Appearance	scalar	*Visual	NORML	NORML	NORML	---
Odor	scalar	*Visual	NORML	NORML	NORML	---
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	---
Sodium	ppm	ASTM D5185m		1	2	---
Boron	ppm	ASTM D5185m		376	295	---
Barium	ppm	ASTM D5185m		0	0	---
Molybdenum	ppm	ASTM D5185m		85	85	---
Manganese	ppm	ASTM D5185m		0	0	---
Magnesium	ppm	ASTM D5185m		360	346	---
Calcium	ppm	ASTM D5185m		1361	1366	---
Phosphorus	ppm	ASTM D5185m		1036	1041	---
Zinc	ppm	ASTM D5185m		1237	1239	---
Sulfur	ppm	ASTM D5185m		3174	3131	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	14.8	16.1	---
Base Number (BN)	mg KOH/g	ASTM D2896		8.29	7.97	---
Visc @ 100°C	cSt	ASTM D445		13.7	13.6	---

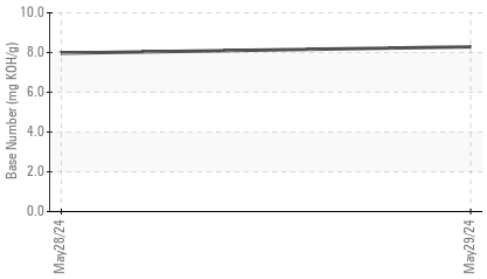
FT-IR (Direct Trend)



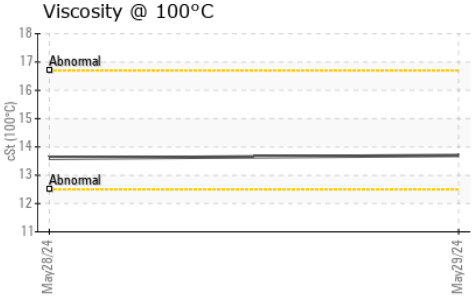
Particle Count



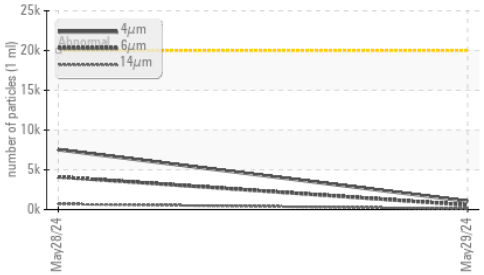
Base Number



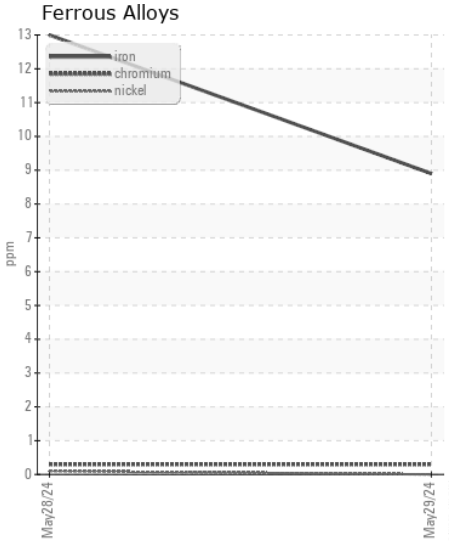
Viscosity @ 100°C



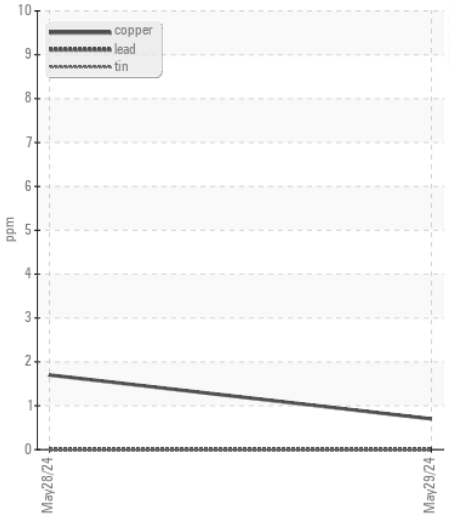
Particle Trend



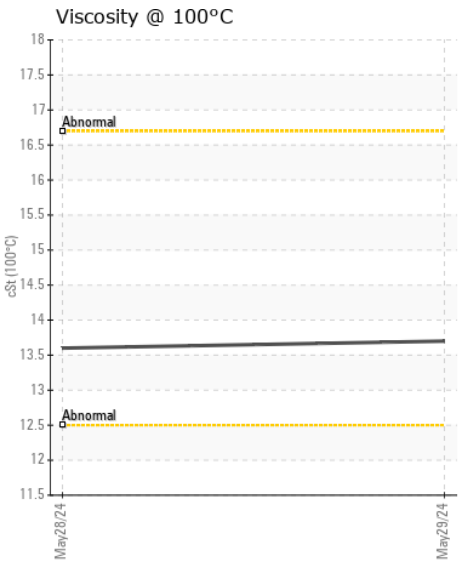
Ferrous Alloys



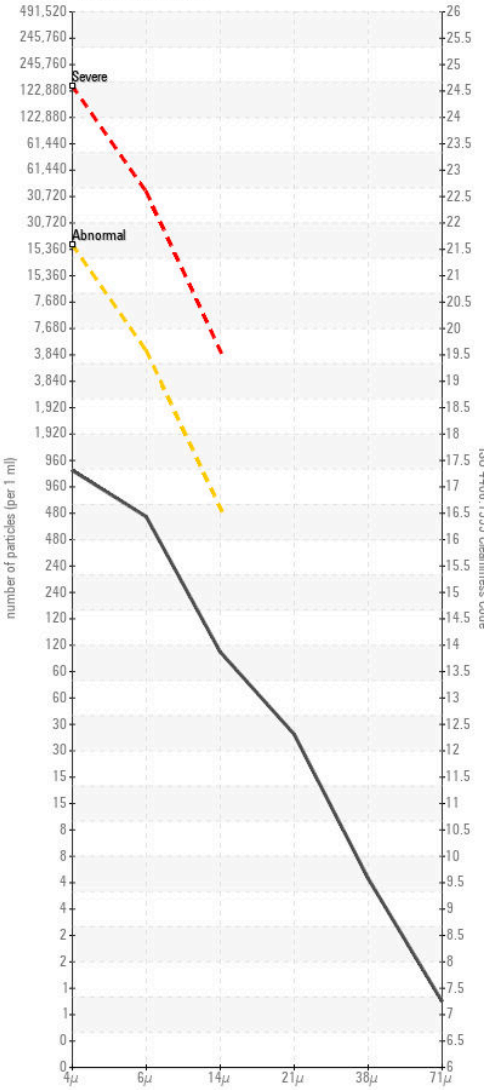
Non-ferrous Metals



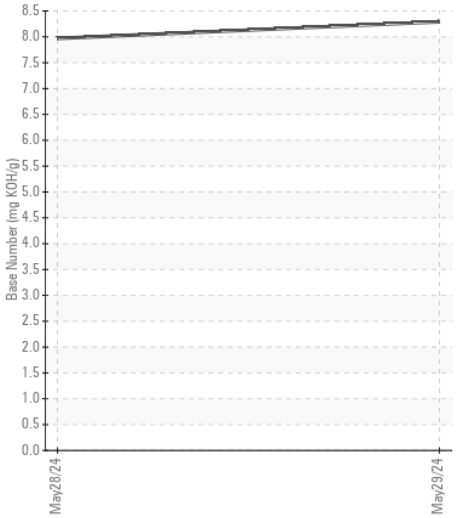
Viscosity @ 100°C



Particle Count



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KLFK202283 **Received** : 16 Jul 2024
Lab Number : 06238572 **Tested** : 18 Jul 2024
Unique Number : 11127406 **Diagnosed** : 18 Jul 2024 - Wes Davis
Test Package : MOB 2 (Additional Tests: PrtCount)

To discuss this sample report, contact Customer Service at 1-800-237-1369.
** - Denotes test methods that are outside of the ISO 17025 scope of accreditation.*
Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

KLEENOIL MEXICO
, ZZ
MX
Contact: SALVADOR DOMINGUEZ
sdominguez@kleenoilla.com
T:
F: