OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	ABNORMAL

Machine Id
CUMMINS 846-4253
Component
Diesel Engine
Fluid
MOBIL DELVAC 1300 SUPER15W40 (24 QTS)

RECOMMENDATION

The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

WEAR

All component wear rates are normal.

CONTAMINATION

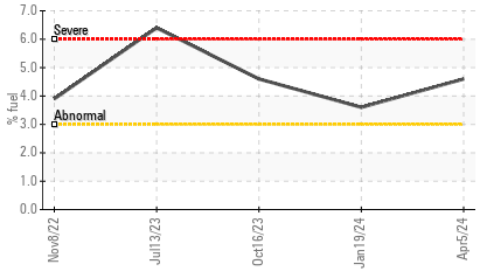
There is a moderate amount of fuel present in the oil. Tests confirm the presence of fuel in the oil.

FLUID CONDITION

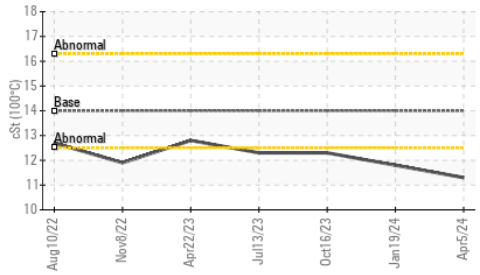
The BN result indicates that there is suitable alkalinity remaining in the oil. Fuel is present in the oil and is lowering the viscosity. The oil is no longer serviceable due to the presence of contaminants.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		RPL0019292	RPL0017385	RPL0015787
Sample Date		Client Info		05 Apr 2024	19 Jan 2024	16 Oct 2023
Machine Age	mls	Client Info		123238	118487	113387
Oil Age	mls	Client Info		0	5100	15296
Filter Age	mls	Client Info		0	5100	15296
Oil Changed		Client Info		Changed	Not Changd	Not Changd
Filter Changed		Client Info		Changed	Not Changd	Not Changd
Sample Status				ABNORMAL	ABNORMAL	ABNORMAL
Iron	ppm	ASTM D5185m	>90	18	11	24
Chromium	ppm	ASTM D5185m	>20	1	<1	<1
Nickel	ppm	ASTM D5185m	>2	2	<1	0
Titanium	ppm	ASTM D5185m	>2	<1	<1	0
Silver	ppm	ASTM D5185m	>2	<1	0	0
Aluminum	ppm	ASTM D5185m	>20	6	2	9
Lead	ppm	ASTM D5185m	>40	1	<1	<1
Copper	ppm	ASTM D5185m	>330	20	18	35
Tin	ppm	ASTM D5185m	>15	1	<1	<1
Vanadium	ppm	ASTM D5185m		<1	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Silicon	ppm	ASTM D5185m	>25	5	4	4
Potassium	ppm	ASTM D5185m	>20	13	6	18
Fuel	%	ASTM D3524	>3.0	▲ 4.6	▲ 3.6	▲ 4.6
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>6	0.3	0.2	0.4
Nitration	Abs/cm	*ASTM D7624	>20	8.3	6.7	8.8
Sulfation	Abs/.1mm	*ASTM D7415	>30	22.2	20.2	21.2
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	NEG
Sodium	ppm	ASTM D5185m		1	0	<1
Boron	ppm	ASTM D5185m	0	1	2	1
Barium	ppm	ASTM D5185m	0	0	0	0
Molybdenum	ppm	ASTM D5185m	0	59	60	54
Manganese	ppm	ASTM D5185m		1	<1	<1
Magnesium	ppm	ASTM D5185m	0	858	919	891
Calcium	ppm	ASTM D5185m		1027	940	1037
Phosphorus	ppm	ASTM D5185m		1057	933	922
Zinc	ppm	ASTM D5185m		1170	1192	1205
Sulfur	ppm	ASTM D5185m		3433	2999	2888
Oxidation	Abs/.1mm	*ASTM D7414	>25	20.8	17.8	20.0
Base Number (BN)	mg KOH/g	ASTM D2896	9.4	6.8	7.9	5.0
Visc @ 100°C	cSt	ASTM D445	14	▲ 11.3	▲ 11.8	▲ 12.3

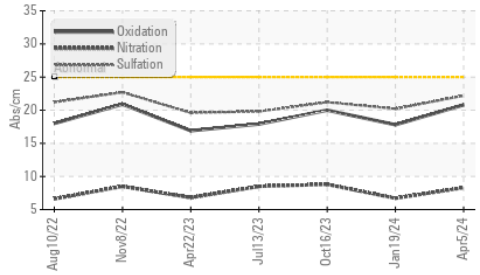
Fuel Dilution



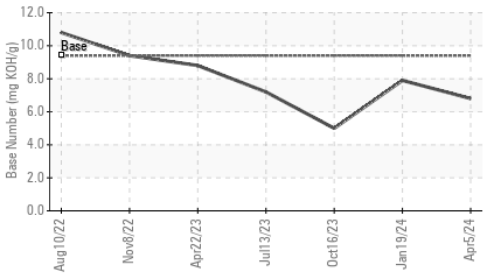
Viscosity @ 100°C



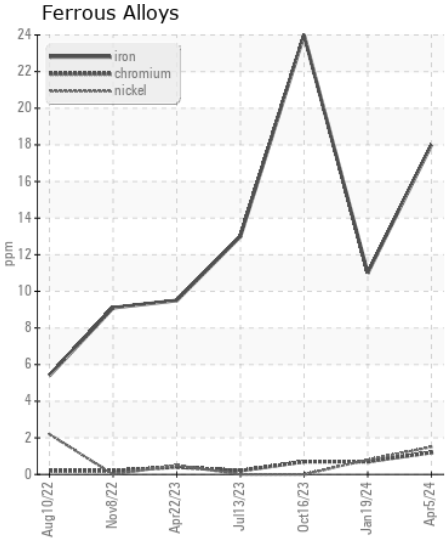
FT-IR (Direct Trend)



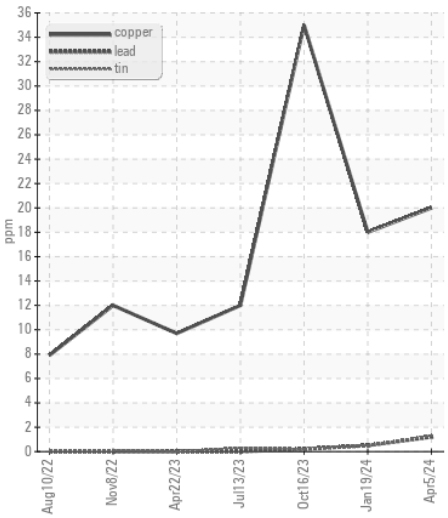
Base Number



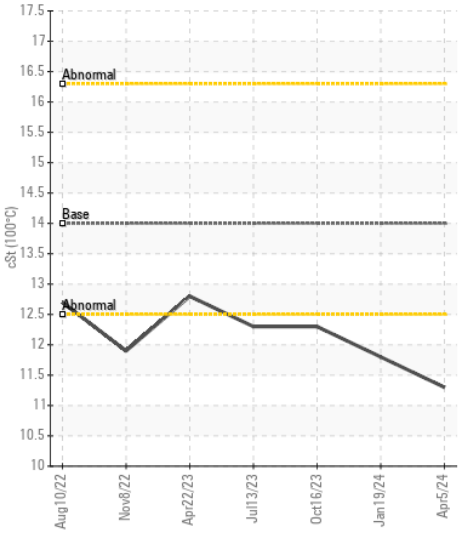
Ferrous Alloys



Non-ferrous Metals



Viscosity @ 100°C



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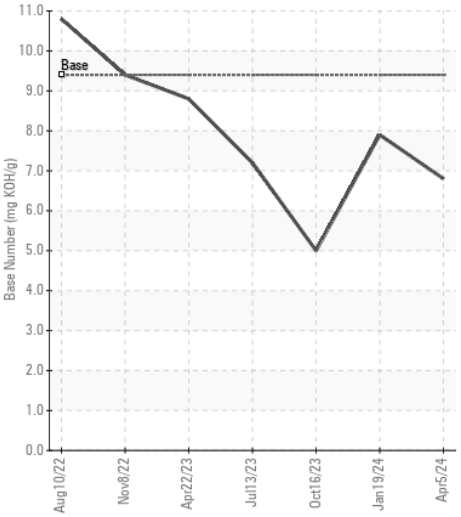

Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : RPL0019292
Lab Number : 06152916
Unique Number : 10982994
Test Package : FLEET (Additional Tests: PercentFuel)

Received : 18 Apr 2024
Tested : 22 Apr 2024
Diagnosed : 22 Apr 2024 - Wes Davis

RTL PACLEASE - 7006 - Pico Rivera
7837 Telegraph Rd
Pico Rivera, CA
US 90660
Contact: GERARDO CARROLA
carrolag@rushenterprises.com
T:
F:

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)