MOB I

Dura-Check Fluid Analysis

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ATTENTION
FLUID CONDITION	ATTENTION

Machine Id
M02029
Component
Diesel Engine
Fluid
DIESEL ENGINE OIL SAE 15W40 (--- GAL)

RECOMMENDATION

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

WEAR

All component wear rates are normal.

CONTAMINATION

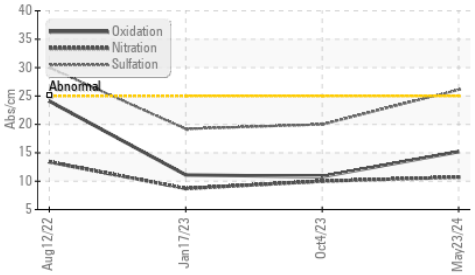
Sodium and/or potassium levels remain high. Test for glycol is negative.

FLUID CONDITION

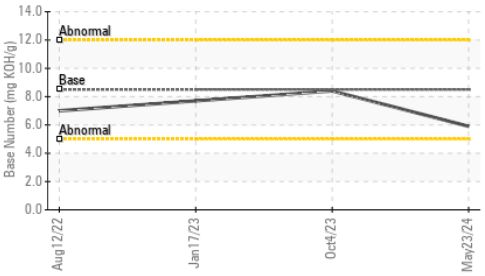
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is acceptable for the time in service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		DC0036416	DC0028250	DC0023031
Sample Date		Client Info		23 May 2024	04 Oct 2023	17 Jan 2023
Machine Age	mls	Client Info		53762	259137	19751
Oil Age	mls	Client Info		0	0	0
Filter Age	mls	Client Info		0	0	0
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				ATTENTION	ABNORMAL	NORMAL
Iron	ppm	ASTM D5185m	>100	60	66	38
Chromium	ppm	ASTM D5185m	>20	4	8	2
Nickel	ppm	ASTM D5185m	>4	<1	4	<1
Titanium	ppm	ASTM D5185m		<1	<1	0
Silver	ppm	ASTM D5185m	>3	<1	0	0
Aluminum	ppm	ASTM D5185m	>20	8	8	7
Lead	ppm	ASTM D5185m	>40	1	0	0
Copper	ppm	ASTM D5185m	>330	2	3	1
Tin	ppm	ASTM D5185m	>15	<1	<1	0
Vanadium	ppm	ASTM D5185m		<1	<1	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Silicon	ppm	ASTM D5185m	>25	6	9	4
Potassium	ppm	ASTM D5185m	>20	53	▲ 379	19
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol	%	*ASTM D2982		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	1.9	0.9	1
Nitration	Abs/cm	*ASTM D7624	>20	10.7	10.0	8.7
Sulfation	Abs/.1mm	*ASTM D7415	>30	26.1	20.0	19.2
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	>158	95	▲ 795	3
Boron	ppm	ASTM D5185m	250	<1	1	<1
Barium	ppm	ASTM D5185m	10	0	12	0
Molybdenum	ppm	ASTM D5185m	100	9	48	4
Manganese	ppm	ASTM D5185m		1	2	<1
Magnesium	ppm	ASTM D5185m	450	69	71	49
Calcium	ppm	ASTM D5185m	3000	2300	1933	2229
Phosphorus	ppm	ASTM D5185m	1150	925	876	860
Zinc	ppm	ASTM D5185m	1350	1025	1018	1023
Sulfur	ppm	ASTM D5185m	4250	4062	3507	3240
Oxidation	Abs/.1mm	*ASTM D7414	>25	15.2	10.8	11.1
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	5.9	8.4	7.7
Visc @ 100°C	cSt	ASTM D445	14.4	13.8	13.5	13.9

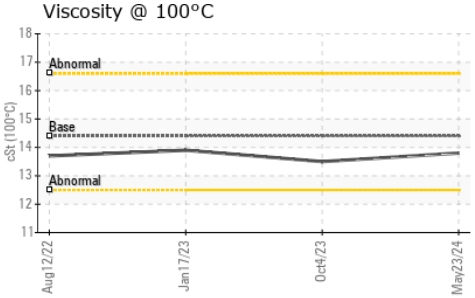
FT-IR (Direct Trend)



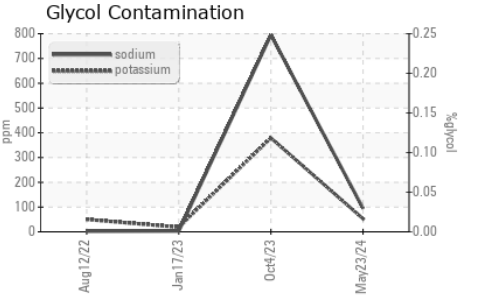
Base Number



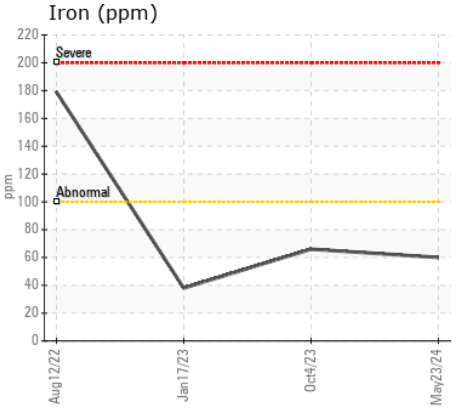
Viscosity @ 100°C



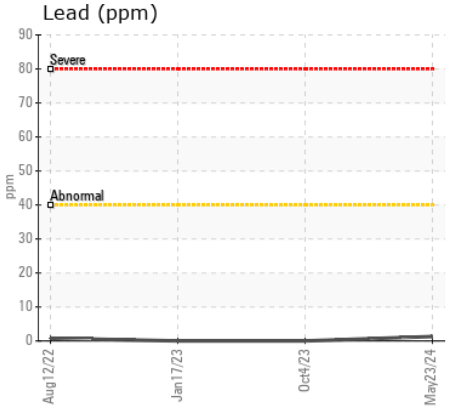
Glycol Contamination



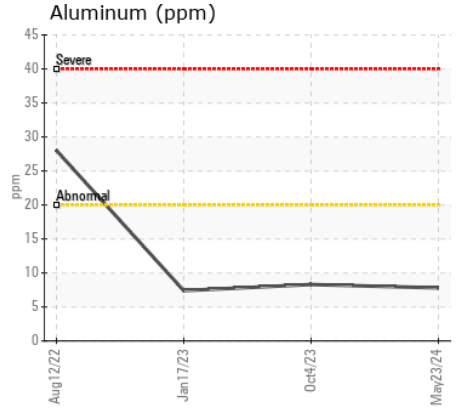
Iron (ppm)



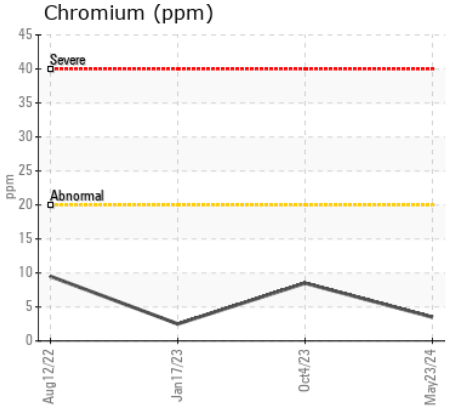
Lead (ppm)



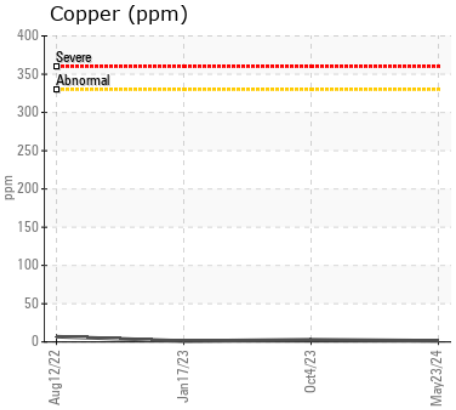
Aluminum (ppm)



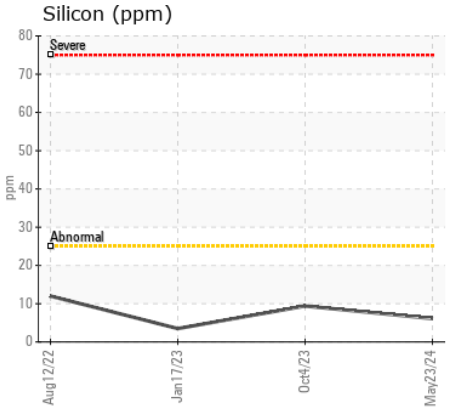
Chromium (ppm)



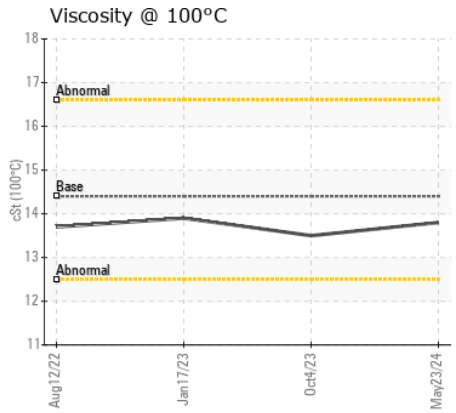
Copper (ppm)



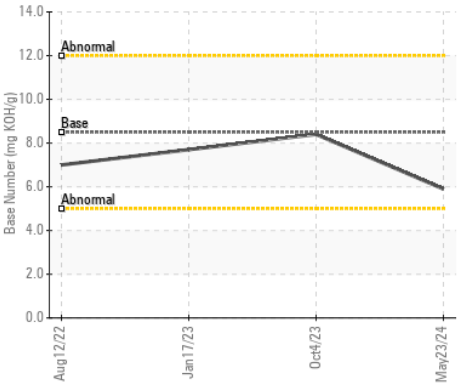
Silicon (ppm)



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : DC0036416 **Received** : 29 May 2024
Lab Number : 06194827 **Tested** : 31 May 2024
Unique Number : 11056950 **Diagnosed** : 31 May 2024 - Jonathan Hester
Test Package : MOB 1 (Additional Tests: Glycol, TBN)

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)

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