MOB I

Dura-Check Fluid Analysis

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	MARGINAL
FLUID CONDITION	ABNORMAL

Machine Id
M32010
Component
Diesel Engine
Fluid
DIESEL ENGINE OIL SAE 15W40 (--- QTS)

RECOMMENDATION

Oil and filter change at the time of sampling has been noted. No corrective action is recommended at this time. Resample at the next service interval to monitor.

WEAR

All component wear rates are normal.

CONTAMINATION

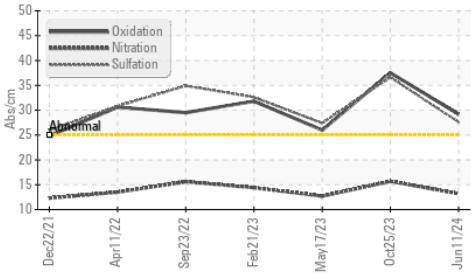
There is a light concentration of water present in the oil.

FLUID CONDITION

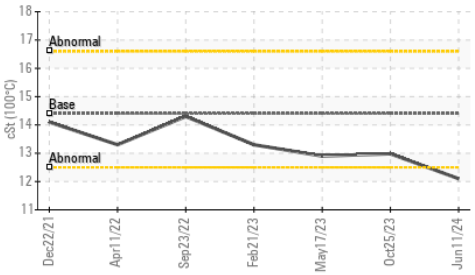
Fuel is present in the oil and is lowering the viscosity. The BN result indicates that there is suitable alkalinity remaining in the oil.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		DC0034081	DC0028264	DC0026336
Sample Date		Client Info		11 Jun 2024	25 Oct 2023	17 May 2023
Machine Age	mls	Client Info		93207	78845	65131
Oil Age	mls	Client Info		6732	5634	4611
Filter Age	mls	Client Info		6732	5634	4611
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				ABNORMAL	ABNORMAL	NORMAL
Iron	ppm	ASTM D5185m	>100	60	▲ 169	66
Chromium	ppm	ASTM D5185m	>20	1	2	0
Nickel	ppm	ASTM D5185m	>4	<1	1	0
Titanium	ppm	ASTM D5185m		5	1	7
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>20	17	▲ 31	12
Lead	ppm	ASTM D5185m	>40	<1	0	0
Copper	ppm	ASTM D5185m	>330	120	2	<1
Tin	ppm	ASTM D5185m	>15	<1	<1	0
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	9	11	5
Potassium	ppm	ASTM D5185m	>20	6	18	12
Fuel	%	ASTM D3524	>5	▲ 2.4	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	0.0	NEG
Soot %	%	*ASTM D7844	>3	1	1.7	0.9
Nitration	Abs/cm	*ASTM D7624	>20	13.2	15.7	12.7
Sulfation	Abs/.1mm	*ASTM D7415	>30	27.6	▲ 36.6	27.4
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	5	5	7
Boron	ppm	ASTM D5185m	250	47	38	73
Barium	ppm	ASTM D5185m	10	0	0	0
Molybdenum	ppm	ASTM D5185m	100	43	0	3
Manganese	ppm	ASTM D5185m		1	2	0
Magnesium	ppm	ASTM D5185m	450	459	25	117
Calcium	ppm	ASTM D5185m	3000	1843	2444	2546
Phosphorus	ppm	ASTM D5185m	1150	1035	1064	1104
Zinc	ppm	ASTM D5185m	1350	1329	1364	1487
Sulfur	ppm	ASTM D5185m	4250	2859	3327	4448
Oxidation	Abs/.1mm	*ASTM D7414	>25	▲ 29.2	37.5	26.0
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	8.5	4.1	4.5
Visc @ 100°C	cSt	ASTM D445	14.4	▲ 12.1	12.98	12.9

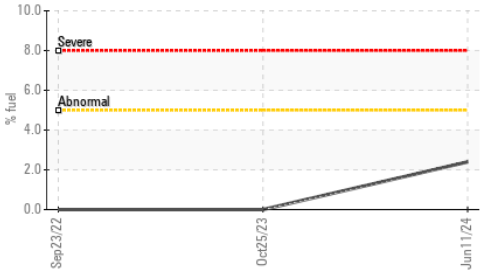
FT-IR (Direct Trend)



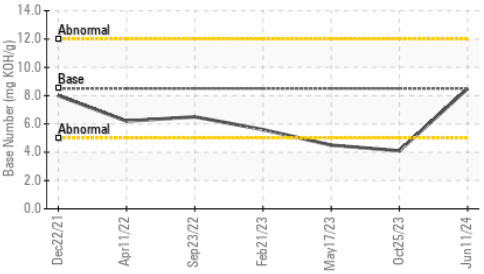
Viscosity @ 100°C



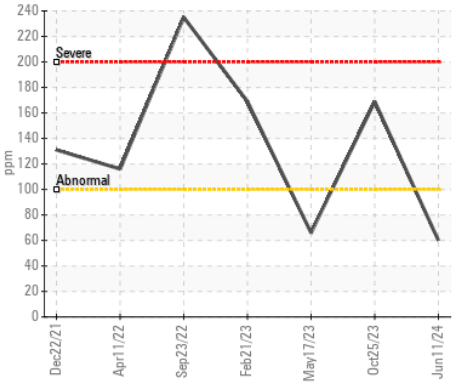
Fuel Dilution



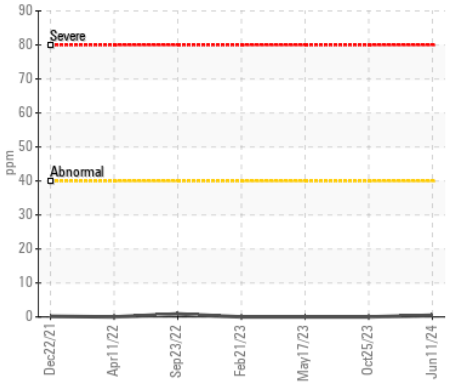
Base Number



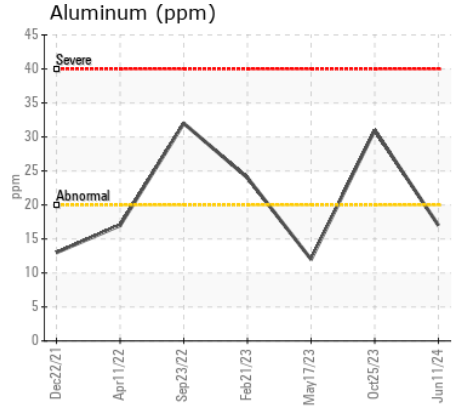
Iron (ppm)



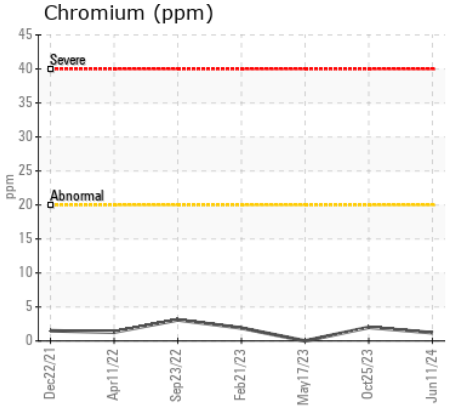
Lead (ppm)



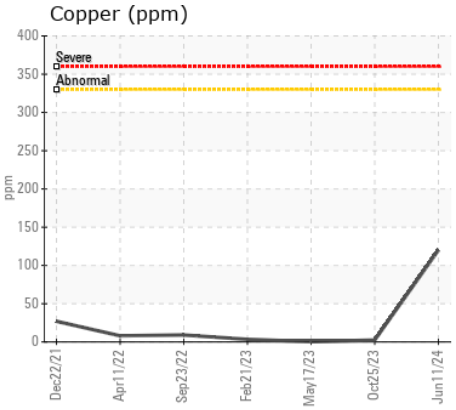
Aluminum (ppm)



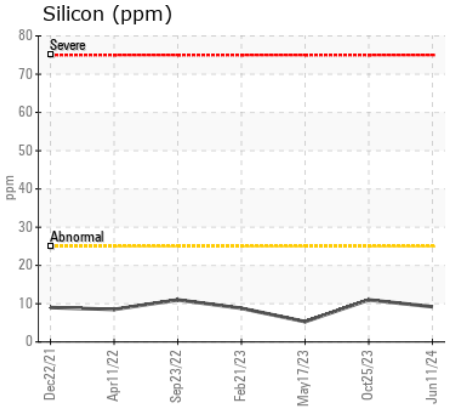
Chromium (ppm)



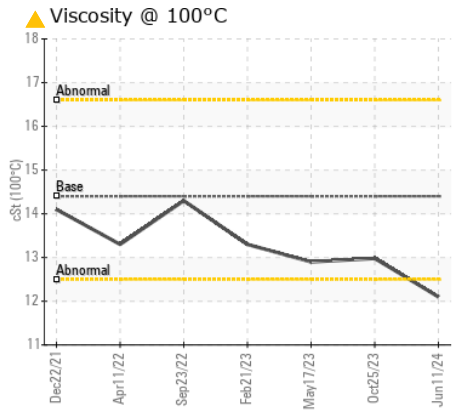
Copper (ppm)



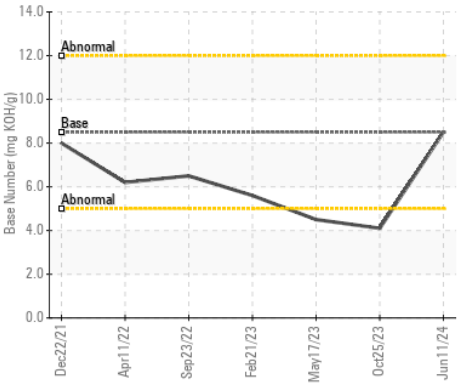
Silicon (ppm)



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : DC0034081 **Received** : 10 Jul 2024
Lab Number : 06232111 **Tested** : 12 Jul 2024
Unique Number : 11115604 **Diagnosed** : 12 Jul 2024 - Sean Felton
Test Package : MOB 1 (Additional Tests: FuelDilution, PercentFuel, 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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