



OIL ANALYSIS REPORT

WEAR	ATTENTION
CONTAMINATION	ABNORMAL
FLUID CONDITION	ABNORMAL

Area

FLETCHER MINYARD E JR - TLD O/O

Machine Id

NAVISTAR 3019593

Component

Diesel Engine

Fluid

CHEVRON DELO 400 MULTIGRADE 15W40 (--- GAL)

RECOMMENDATION

We advise that you check the air filter, air induction system, and any areas where dirt may enter the component. We recommend that you drain the oil and perform a filter service on this component if not already done. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		NL0002177	NL0001222	---
Sample Date		Client Info		18 Jun 2024	09 May 2022	---
Machine Age	mls	Client Info		747843	15688	---
Oil Age	mls	Client Info		747843	15688	---
Filter Age	mls	Client Info		0	15688	---
Oil Changed		Client Info		N/A	Changed	---
Filter Changed		Client Info		N/A	Changed	---
Sample Status				ABNORMAL	NORMAL	---

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	36	14	---
Chromium	ppm	ASTM D5185m	>20	2	<1	---
Nickel	ppm	ASTM D5185m	>4	<1	0	---
Titanium	ppm	ASTM D5185m		<1	0	---
Silver	ppm	ASTM D5185m	>3	0	0	---
Aluminum	ppm	ASTM D5185m	>20	6	2	---
Lead	ppm	ASTM D5185m	>40	10	0	---
Copper	ppm	ASTM D5185m	>330	1	0	---
Tin	ppm	ASTM D5185m	>15	<1	0	---
Vanadium	ppm	ASTM D5185m		<1	0	---
White Metal	scalar	*Visual	NONE	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---

CONTAMINATION

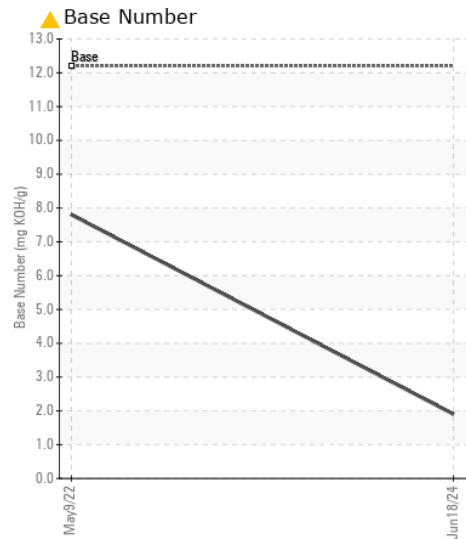
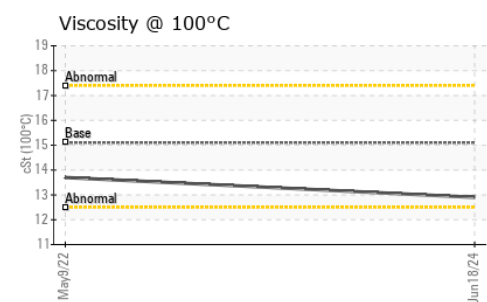
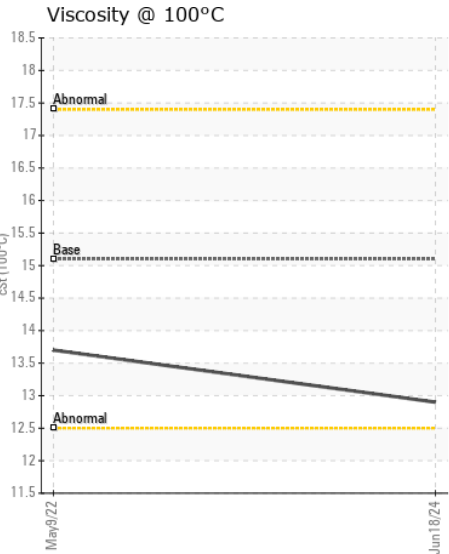
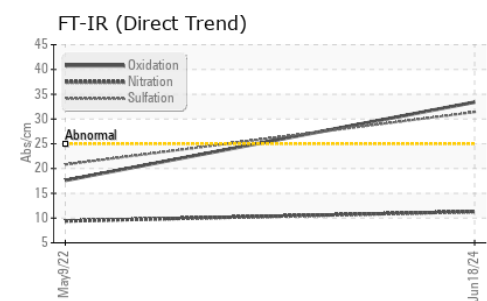
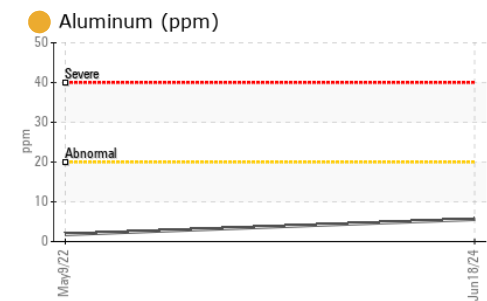
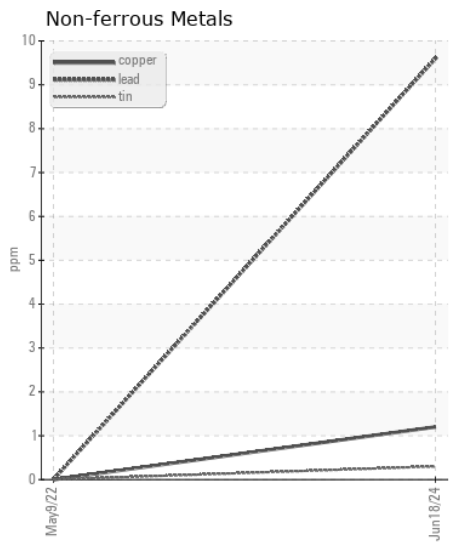
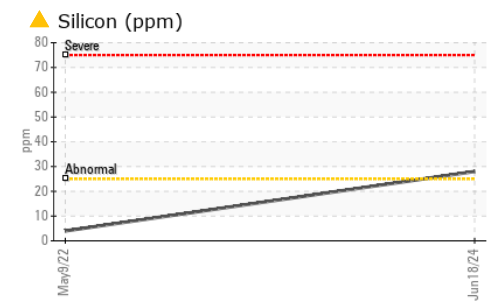
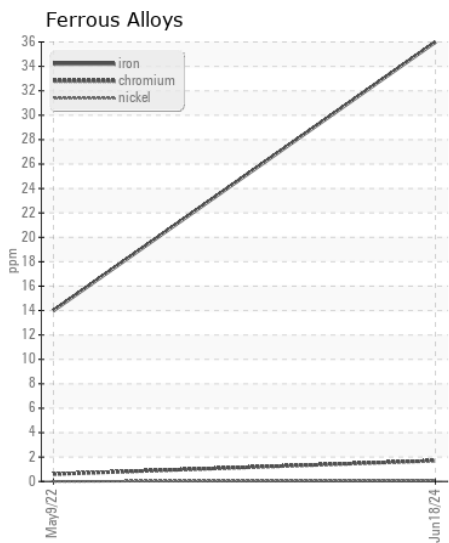
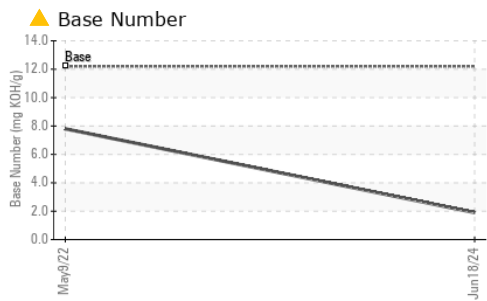
Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress.

Silicon	ppm	ASTM D5185m	>25	28	4	---
Potassium	ppm	ASTM D5185m	>20	4	<1	---
Fuel		WC Method	>5	<1.0	<1.0	---
Water		WC Method	>0.2	NEG	NEG	---
Glycol		WC Method		NEG	NEG	---
Soot %	%	*ASTM D7844	>3	0.5	0.4	---
Nitration	Abs/cm	*ASTM D7624	>20	11.3	9.4	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	31.4	20.8	---
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	---

FLUID CONDITION

The BN level is low. The oil is no longer serviceable.

Sodium	ppm	ASTM D5185m		1	1	---
Boron	ppm	ASTM D5185m		81	9	---
Barium	ppm	ASTM D5185m		0	0	---
Molybdenum	ppm	ASTM D5185m		96	62	---
Manganese	ppm	ASTM D5185m		<1	<1	---
Magnesium	ppm	ASTM D5185m		519	948	---
Calcium	ppm	ASTM D5185m		1802	1215	---
Phosphorus	ppm	ASTM D5185m	1360	975	960	---
Zinc	ppm	ASTM D5185m	1480	1256	1284	---
Sulfur	ppm	ASTM D5185m		3296	3227	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	33.4	17.6	---
Base Number (BN)	mg KOH/g	ASTM D2896	12.2	1.9	7.8	---
Visc @ 100°C	cSt	ASTM D445	15.1	12.9	13.7	---



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : NL0002177
Lab Number : 06216490
Unique Number : 11089354
Test Package : FLEET
Received : 20 Jun 2024
Tested : 22 Jun 2024
Diagnosed : 23 Jun 2024 - Don Baldrige

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Certificate L2367
 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)