



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
56167
 Component
Diesel Engine
 Fluid
DIESEL ENGINE OIL SAE 10W30 (--- LTR)

RECOMMENDATION

Resample at the next service interval to monitor. Please specify the component make and model with your next sample.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0904857	WC0854859	WC0864006
Sample Date		Client Info		23 Apr 2024	19 Jan 2024	26 Oct 2023
Machine Age	hrs	Client Info		185605	147744	36765
Oil Age	hrs	Client Info		37862	34154	36765
Filter Age	hrs	Client Info		37862	34154	36765
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>100	28	41	36
Chromium	ppm	ASTM D5185(m)	>20	3	7	6
Nickel	ppm	ASTM D5185(m)	>4	0	<1	<1
Titanium	ppm	ASTM D5185(m)		0	0	0
Silver	ppm	ASTM D5185(m)	>3	0	0	<1
Aluminum	ppm	ASTM D5185(m)	>20	18	47	37
Lead	ppm	ASTM D5185(m)	>40	<1	3	1
Copper	ppm	ASTM D5185(m)	>330	81	133	39
Tin	ppm	ASTM D5185(m)	>15	0	0	<1
Vanadium	ppm	ASTM D5185(m)		0	0	0
White Metal	scalar	Visual*	NONE	VLITE	---	---
Yellow Metal	scalar	Visual*	NONE	NONE	---	---

CONTAMINATION

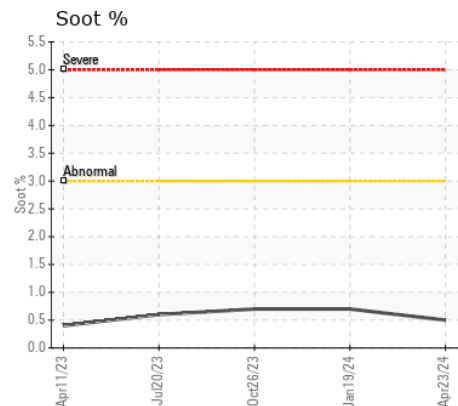
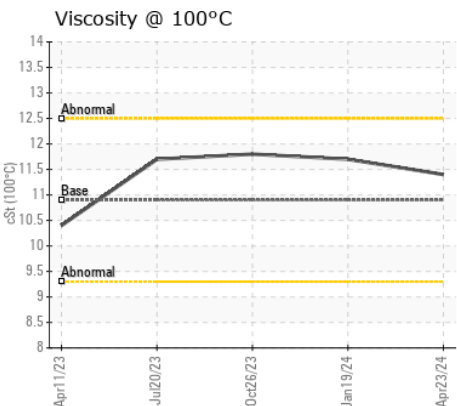
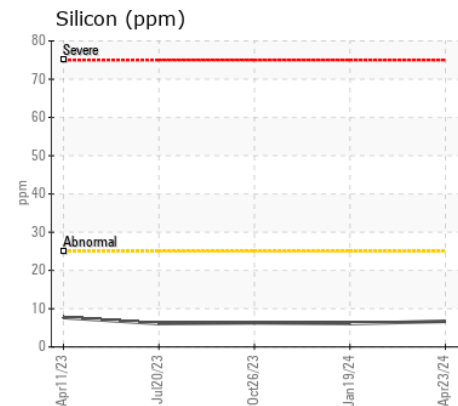
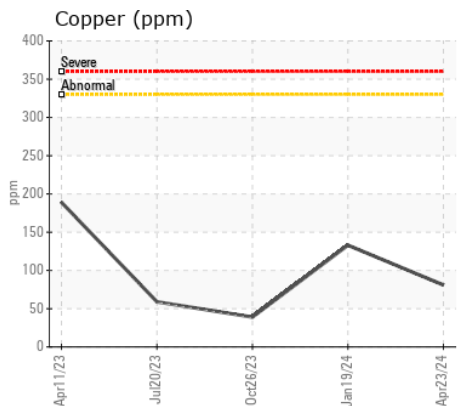
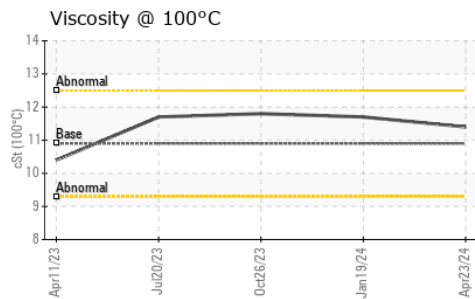
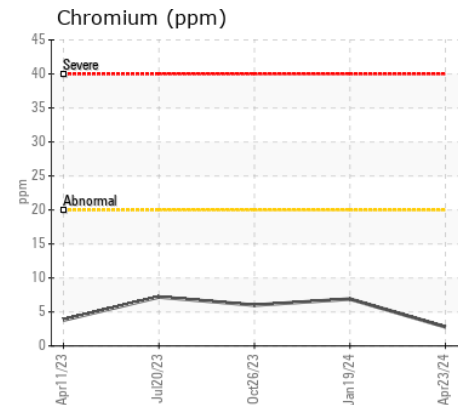
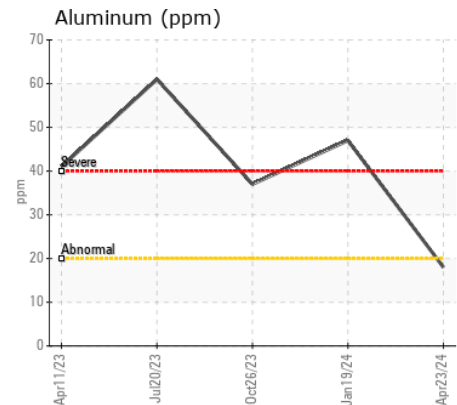
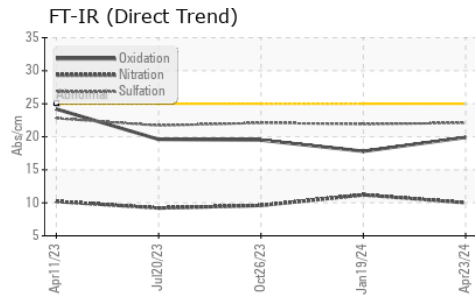
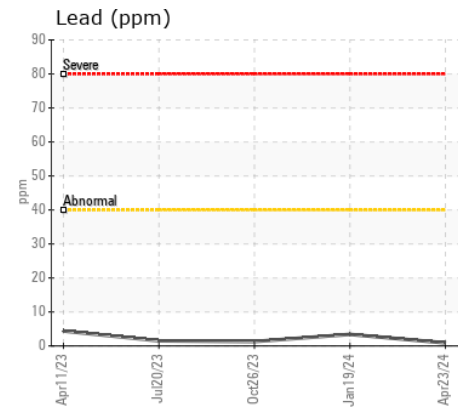
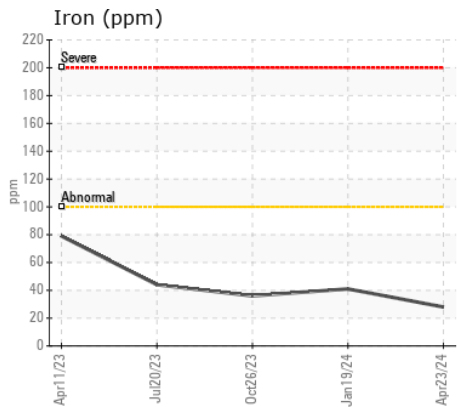
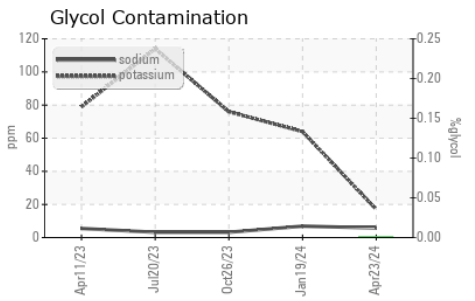
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	7	6	6
Potassium	ppm	ASTM D5185(m)	>20	17	64	76
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol	%	ASTM D7922*		0.0	NEG	NEG
Soot %	%	ASTM D7844*	>3	0.5	0.7	0.7
Nitration	Abs/cm	ASTM D7624*	>20	10.0	11.2	9.6
Sulfation	Abs/.1mm	ASTM D7415*	>30	22.1	21.9	22.1
Silt	scalar	Visual*	NONE	NONE	---	---
Debris	scalar	Visual*	NONE	NONE	---	---
Sand/Dirt	scalar	Visual*	NONE	NONE	---	---
Appearance	scalar	Visual*	NORML	NORML	---	---
Odor	scalar	Visual*	NORML	NORML	NORML	NORML
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	NEG

FLUID CONDITION

The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185(m)		6	7	3
Boron	ppm	ASTM D5185(m)	250	3	2	2
Barium	ppm	ASTM D5185(m)	10	0	0	<1
Molybdenum	ppm	ASTM D5185(m)	100	64	62	69
Manganese	ppm	ASTM D5185(m)		<1	<1	<1
Magnesium	ppm	ASTM D5185(m)	450	1037	945	1110
Calcium	ppm	ASTM D5185(m)	3000	1148	1104	1255
Phosphorus	ppm	ASTM D5185(m)	1150	973	840	1070
Zinc	ppm	ASTM D5185(m)	1350	1235	1148	1375
Sulfur	ppm	ASTM D5185(m)	4250	1744	1953	2034
Oxidation	Abs/.1mm	ASTM D7414*	>25	19.9	17.8	19.5
Visc @ 100°C	cSt	ASTM D7279(m)	10.9	11.4	11.7	11.8



ISO 17025:2017
Accredited
Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0904857 **Received** : 30 Apr 2024
Lab Number : 02632299 **Tested** : 30 Apr 2024
Unique Number : 5773452 **Diagnosed** : 30 Apr 2024 - Wes Davis
Test Package : MOB 1 (Additional Tests: Glycol, Visual)

MANITOU LIN TRANSPORT
 75 MUMFORD ROAD
 LIVELY, ON
 CA P3Y 1L1
 Contact: Todd Smith
 tosmith@manitoulintransport.com
 T: (705)562-3302
 F: x:

To discuss this sample report, contact Customer Service at 1-800-268-2131.
 Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab.
 Validity of results and interpretation are based on the sample and information as supplied.