



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Area
56000 series
Machine Id
Freightliner 56160
Component
Diesel Engine
Fluid
PETRO CANADA DURON SHP 10W30 (38 LTR)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0904856	WC0864013	WC0828156
Sample Date		Client Info		23 Apr 2024	18 Oct 2023	19 Jun 2023
Machine Age	mls	Client Info		352204	314079	277282
Oil Age	mls	Client Info		39973	36798	39743
Filter Age	mls	Client Info		39973	36798	39743
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)	>65	24	21	20
Chromium	ppm	ASTM D5185(m)	>5	2	2	2
Nickel	ppm	ASTM D5185(m)	>3	<1	<1	0
Titanium	ppm	ASTM D5185(m)	>5	0	0	0
Silver	ppm	ASTM D5185(m)	>2	0	<1	<1
Aluminum	ppm	ASTM D5185(m)	>35	10	9	9
Lead	ppm	ASTM D5185(m)	>10	0	<1	<1
Copper	ppm	ASTM D5185(m)	>180	12	12	13
Tin	ppm	ASTM D5185(m)	>8	<1	<1	<1
Vanadium	ppm	ASTM D5185(m)		0	0	0

CONTAMINATION

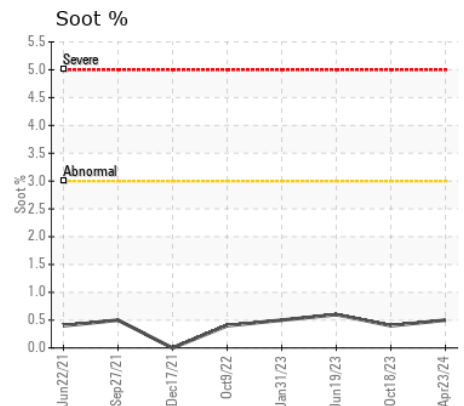
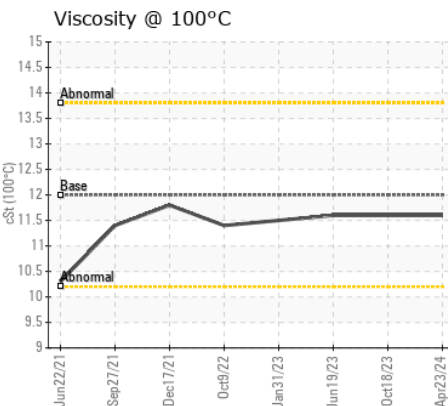
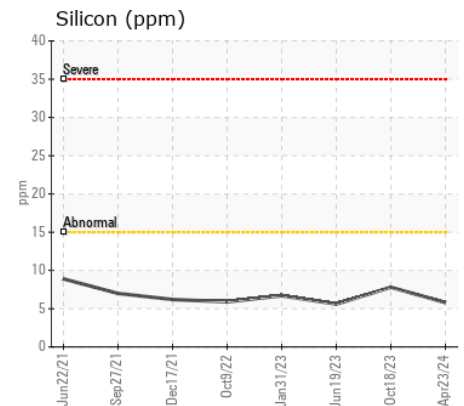
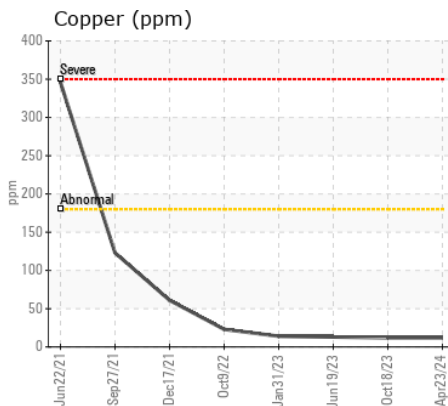
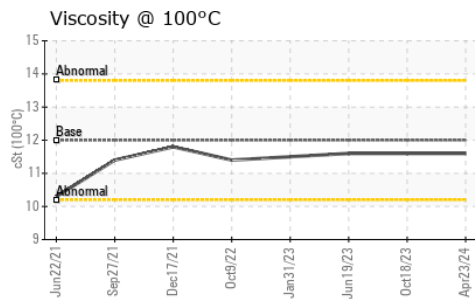
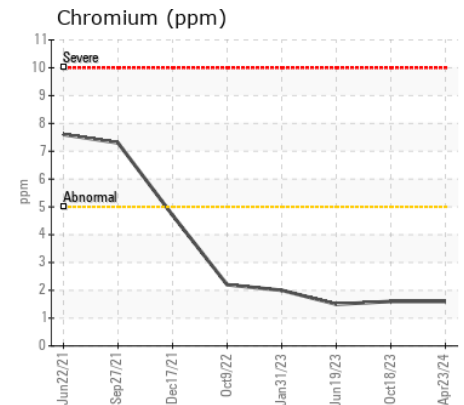
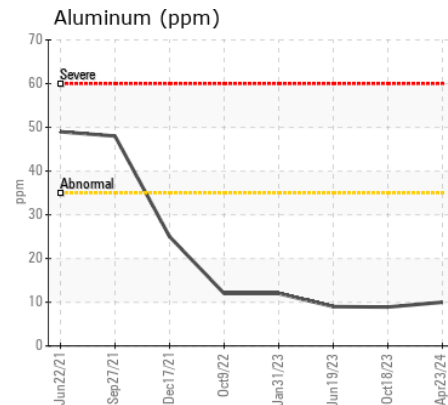
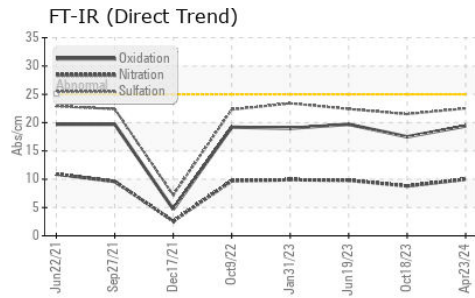
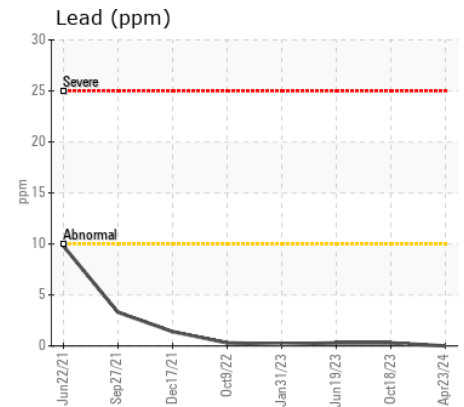
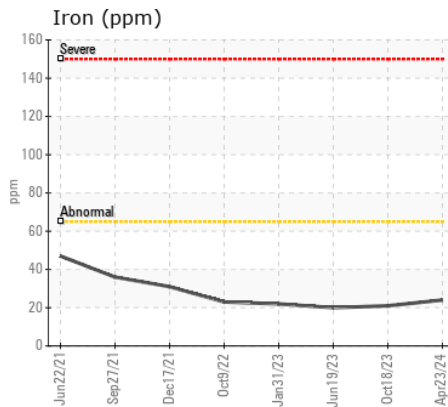
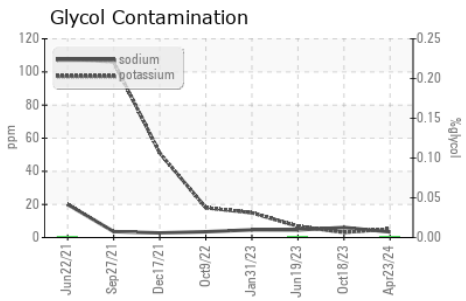
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>15	6	8	6
Potassium	ppm	ASTM D5185(m)	>20	5	3	7
Fuel		WC Method	>3.0	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol	%	ASTM D7922*		0.0	NEG	0.0
Soot %	%	ASTM D7844*	>3	0.5	0.4	0.6
Nitration	Abs/cm	ASTM D7624*	>20	10.0	8.8	9.8
Sulfation	Abs/.1mm	ASTM D7415*	>30	22.5	21.5	22.4
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)		3	6	5
Boron	ppm	ASTM D5185(m)	2	3	4	<1
Barium	ppm	ASTM D5185(m)	0	0	0	0
Molybdenum	ppm	ASTM D5185(m)	50	63	64	62
Manganese	ppm	ASTM D5185(m)	0	<1	0	<1
Magnesium	ppm	ASTM D5185(m)	950	1023	1026	1023
Calcium	ppm	ASTM D5185(m)	1050	1145	1194	1113
Phosphorus	ppm	ASTM D5185(m)	995	988	1044	1060
Zinc	ppm	ASTM D5185(m)	1180	1239	1295	1264
Sulfur	ppm	ASTM D5185(m)	2600	2102	2255	2078
Oxidation	Abs/.1mm	ASTM D7414*	>25	19.4	17.5	19.7
Visc @ 100°C	cSt	ASTM D7279(m)	12.00	11.6	11.6	11.6



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0904856 **Received** : 30 Apr 2024
Lab Number : 02632223 **Tested** : 30 Apr 2024
Unique Number : 5773376 **Diagnosed** : 30 Apr 2024 - Wes Davis
Test Package : MOB 1 (Additional Tests: Glycol)

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.