



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area
52000 series
Machine Id
International 52663
Component
Diesel Engine
Fluid
PETRO CANADA DURON SHP 10W30 (40 LTR)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0904867	WC0864004	WC0813042
Sample Date		Client Info		25 Apr 2024	29 Oct 2023	30 Apr 2023
Machine Age	mls	Client Info		440294	417936	394472
Oil Age	mls	Client Info		22358	23464	22002
Filter Age	mls	Client Info		22358	23464	22002
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)	>165	40	41	27
Chromium	ppm	ASTM D5185(m)	>5	2	2	3
Nickel	ppm	ASTM D5185(m)	>4	0	0	<1
Titanium	ppm	ASTM D5185(m)	>2	0	0	<1
Silver	ppm	ASTM D5185(m)	>2	0	<1	0
Aluminum	ppm	ASTM D5185(m)	>20	3	3	3
Lead	ppm	ASTM D5185(m)	>150	3	6	2
Copper	ppm	ASTM D5185(m)	>90	1	1	<1
Tin	ppm	ASTM D5185(m)	>5	0	<1	<1
Vanadium	ppm	ASTM D5185(m)		0	0	0

CONTAMINATION

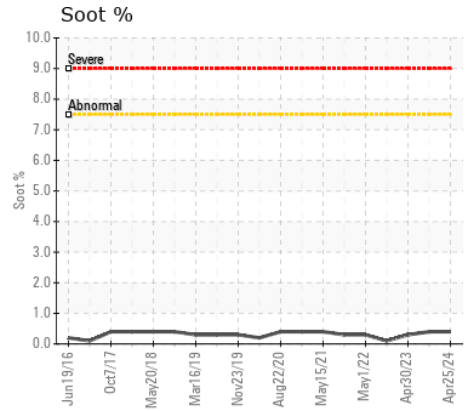
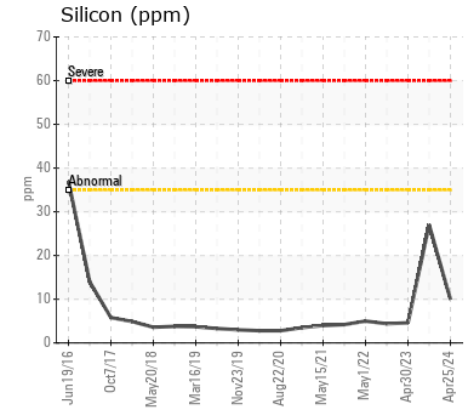
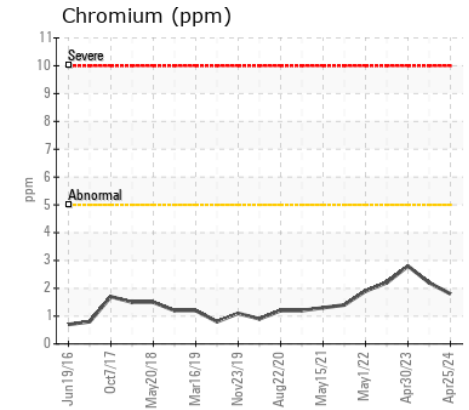
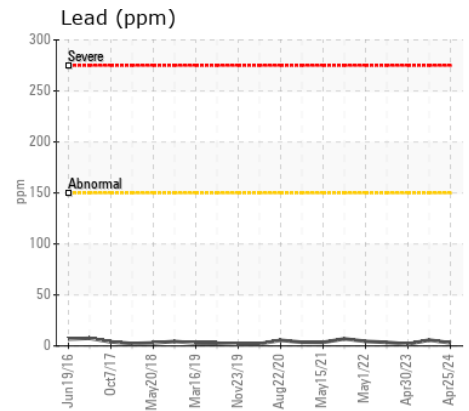
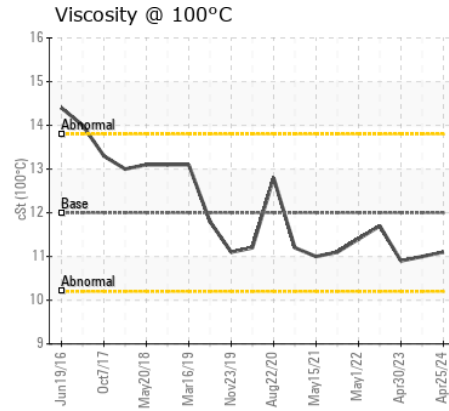
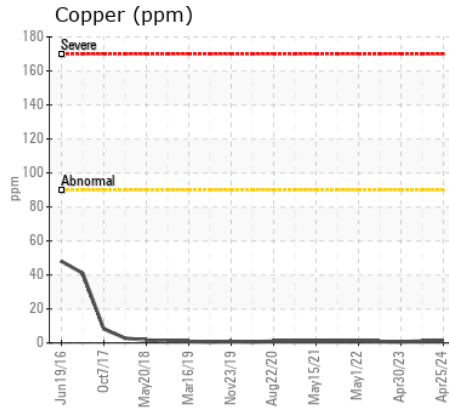
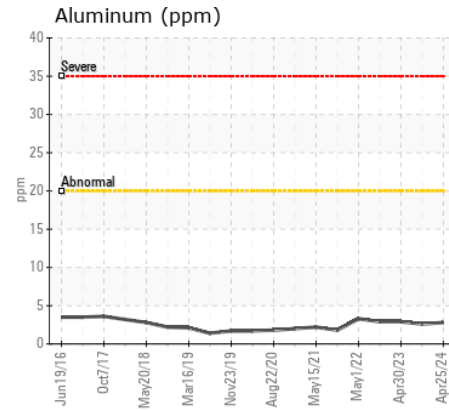
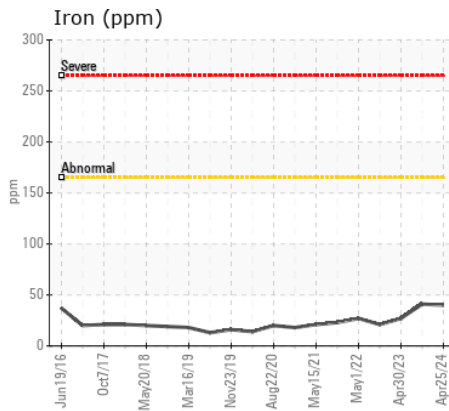
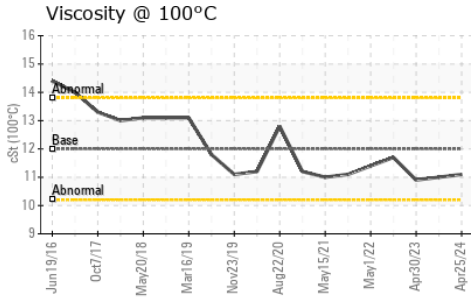
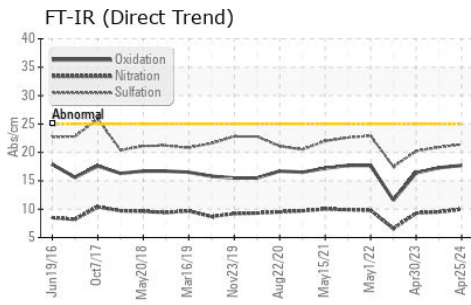
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>35	10	27	5
Potassium	ppm	ASTM D5185(m)	>20	0	0	1
Fuel		WC Method	>3.0	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	ASTM D7844*	>7.5	0.4	0.4	0.3
Nitration	Abs/cm	ASTM D7624*	>20	10.0	9.5	9.3
Sulfation	Abs/.1mm	ASTM D7415*	>30	21.4	20.9	20.2
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)		2	2	2
Boron	ppm	ASTM D5185(m)	2	4	4	11
Barium	ppm	ASTM D5185(m)	0	0	<1	0
Molybdenum	ppm	ASTM D5185(m)	50	65	68	64
Manganese	ppm	ASTM D5185(m)	0	<1	0	<1
Magnesium	ppm	ASTM D5185(m)	950	1043	1083	1005
Calcium	ppm	ASTM D5185(m)	1050	1160	1218	1133
Phosphorus	ppm	ASTM D5185(m)	995	1085	1111	1120
Zinc	ppm	ASTM D5185(m)	1180	1288	1356	1234
Sulfur	ppm	ASTM D5185(m)	2600	2559	2712	2699
Oxidation	Abs/.1mm	ASTM D7414*	>25	17.7	17.3	16.4
Visc @ 100°C	cSt	ASTM D7279(m)	12.00	11.1	11.0	10.9



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0904867
Lab Number : 02632295
Unique Number : 5773448
Test Package : MOB 1

Received : 30 Apr 2024
Tested : 30 Apr 2024
Diagnosed : 30 Apr 2024 - Wes Davis

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.