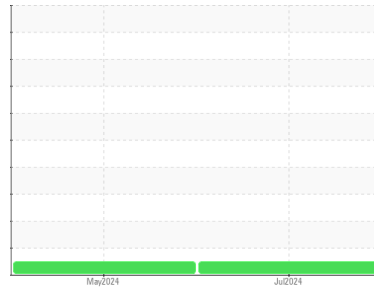




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id

Stadler C13 DM3

Component

Diesel Engine

Fluid

PETRO CANADA DURON UHP 10W40 (--- GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

Fluid Condition

The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		WC0955182	WC0932431	---
Sample Date	Client Info		10 Jul 2024	01 May 2024	---
Machine Age	hrs	Client Info	2444	0	---
Oil Age	hrs	Client Info	0	0	---
Oil Changed	Client Info		N/A	N/A	---
Sample Status			NORMAL	NORMAL	---

CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>5	<1.0	<1.0	---
Water	WC Method	>0.2	NEG	NEG	---
Glycol	WC Method		NEG	NEG	---

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m) >150	6	10	---
Chromium	ppm	ASTM D5185(m) >20	1	2	---
Nickel	ppm	ASTM D5185(m) >2	<1	0	---
Titanium	ppm	ASTM D5185(m) >2	0	0	---
Silver	ppm	ASTM D5185(m) >2	<1	0	---
Aluminum	ppm	ASTM D5185(m) >20	2	2	---
Lead	ppm	ASTM D5185(m) >40	0	0	---
Copper	ppm	ASTM D5185(m) >30	5	14	---
Tin	ppm	ASTM D5185(m) >15	0	0	---
Antimony	ppm	ASTM D5185(m)	0	0	---
Vanadium	ppm	ASTM D5185(m)	0	0	---
Beryllium	ppm	ASTM D5185(m)	0	0	---
Cadmium	ppm	ASTM D5185(m)	0	0	---

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m) 2	66	80	---
Barium	ppm	ASTM D5185(m) 0	<1	<1	---
Molybdenum	ppm	ASTM D5185(m) 60	46	42	---
Manganese	ppm	ASTM D5185(m) 0	0	<1	---
Magnesium	ppm	ASTM D5185(m) 1010	878	828	---
Calcium	ppm	ASTM D5185(m) 1070	1319	1488	---
Phosphorus	ppm	ASTM D5185(m) 1150	718	735	---
Zinc	ppm	ASTM D5185(m) 1270	864	867	---
Sulfur	ppm	ASTM D5185(m) 2060	1915	1881	---
Lithium	ppm	ASTM D5185(m)	<1	<1	---

CONTAMINANTS

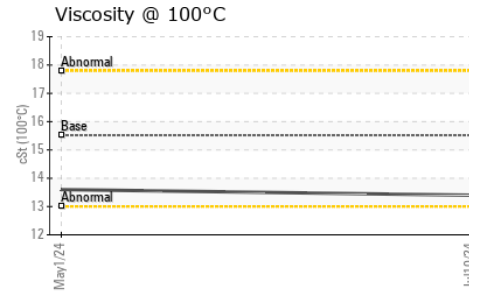
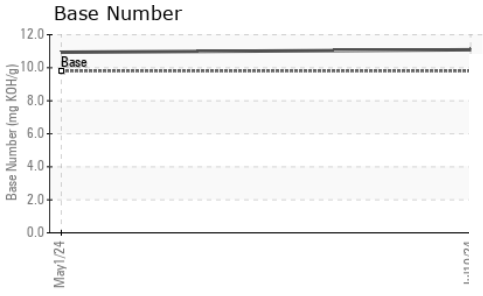
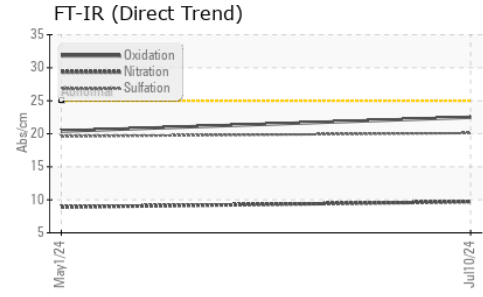
	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m) >25	3	4	---
Sodium	ppm	ASTM D5185(m)	<1	1	---
Potassium	ppm	ASTM D5185(m) >20	1	1	---

INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	ASTM D7844* >3	0	0	---
Nitration	Abs/cm	ASTM D7624* >20	9.7	8.9	---
Sulfation	Abs./1mm	ASTM D7415* >30	20.1	19.6	---



OIL ANALYSIS REPORT

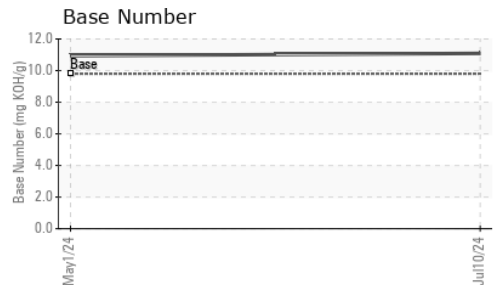
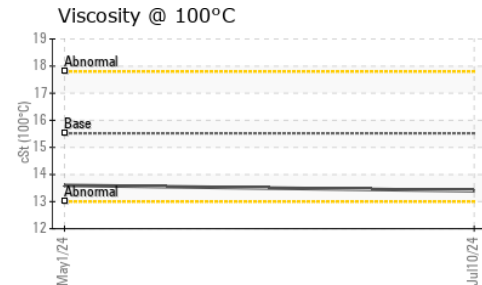
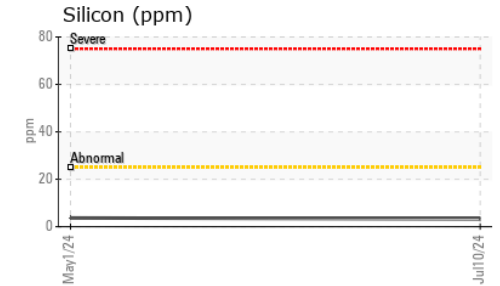
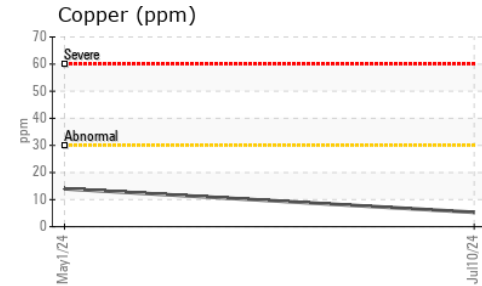
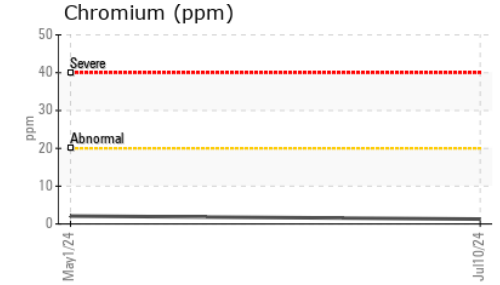
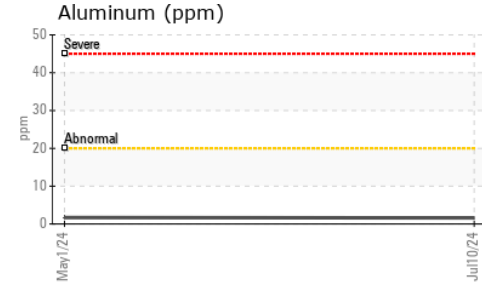
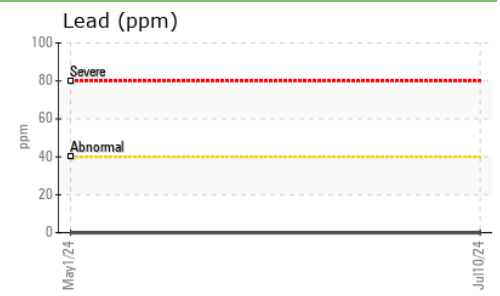
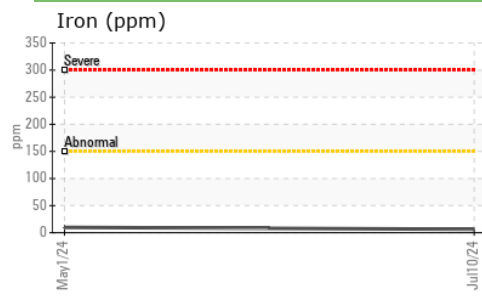


FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	ASTM D7414*	>25	22.5	20.4	---
Base Number (BN)	mg KOH/g	ASTM D2896*	9.8	11.09	10.94	---

VISUAL		method	limit/base	current	history1	history2
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	---
Free Water	scalar	Visual*		NEG	NEG	---

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D7279(m)	15.52	13.4	13.6	---

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0955182 **Received** : 11 Jul 2024
Lab Number : **02647291** **Tested** : 12 Jul 2024
Unique Number : 5812843 **Diagnosed** : 12 Jul 2024 - Wes Davis
Test Package : MOB 2

TransitNext M&R Inc
 3110 Albion Road North
 Ottawa, ON
 CA K1V 9V9
 Contact: Denis Deschamps
 Denis.Deschamps@atkinsrealis.com

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.