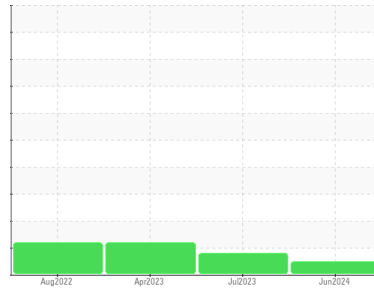


OIL ANALYSIS REPORT



Area
(24091) Rear Load
Machine Id
REL133322
Component
Diesel Engine
Fluid
PETRO CANADA DURON SHP 15W40 (10 GAL)

Sample Rating Trend



NORMAL



DIAGNOSIS

Recommendation

No corrective action is recommended at this time. Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

Fuel content negligible. 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			PCA0122595	PCA0090704	PCA0083189
Sample Date	Client Info			06 Jun 2024	03 Jul 2023	13 Apr 2023
Machine Age	hrs	Client Info		27063	27063	26560
Oil Age	hrs	Client Info		27063	26560	26052
Oil Changed	Client Info			N/A	N/A	N/A
Sample Status				NORMAL	ABNORMAL	ABNORMAL

CONTAMINATION		method	limit/base	current	history1	history2
Water	WC Method		>0.2	NEG	NEG	NEG
Glycol	WC Method			NEG	NEG	NEG

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>120	11	7	15
Chromium	ppm	ASTM D5185m	>20	<1	<1	<1
Nickel	ppm	ASTM D5185m	>5	<1	3	2
Titanium	ppm	ASTM D5185m	>2	<1	1	2
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>20	4	2	4
Lead	ppm	ASTM D5185m	>40	<1	0	0
Copper	ppm	ASTM D5185m	>330	4	<1	2
Tin	ppm	ASTM D5185m	>15	<1	<1	<1
Vanadium	ppm	ASTM D5185m		0	<1	0
Cadmium	ppm	ASTM D5185m		<1	0	0

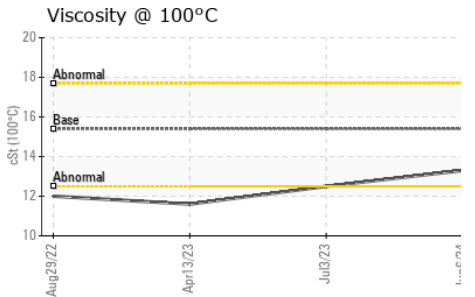
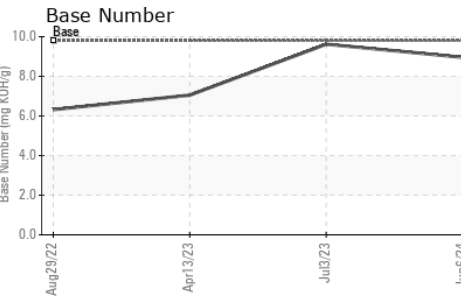
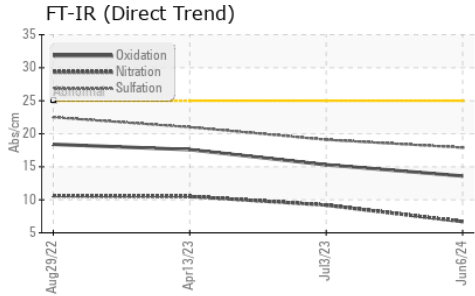
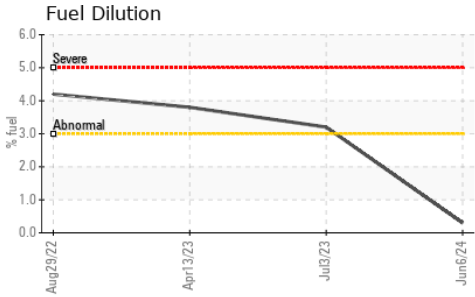
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	14	4	5
Barium	ppm	ASTM D5185m	0	0	2	0
Molybdenum	ppm	ASTM D5185m	60	60	59	52
Manganese	ppm	ASTM D5185m	0	<1	<1	1
Magnesium	ppm	ASTM D5185m	1010	941	848	690
Calcium	ppm	ASTM D5185m	1070	1065	1059	968
Phosphorus	ppm	ASTM D5185m	1150	983	961	770
Zinc	ppm	ASTM D5185m	1270	1214	1179	983
Sulfur	ppm	ASTM D5185m	2060	2964	3068	2512

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	5	2	5
Sodium	ppm	ASTM D5185m		6	2	3
Potassium	ppm	ASTM D5185m	>20	2	1	0
Fuel	%	ASTM D3524	>3.0	0.3	▲ 3.2	▲ 3.8

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>4	0.3	0.3	0.5
Nitration	Abs/cm	*ASTM D7624	>20	6.7	9.2	10.5
Sulfation	Abs/.1mm	*ASTM D7415	>30	17.9	19.1	21.0

FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	13.6	15.3	17.6
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	8.96	9.62	7.05

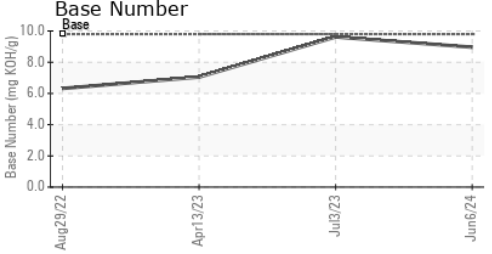
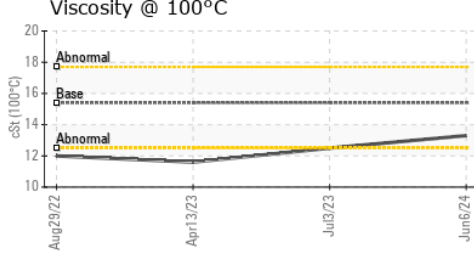
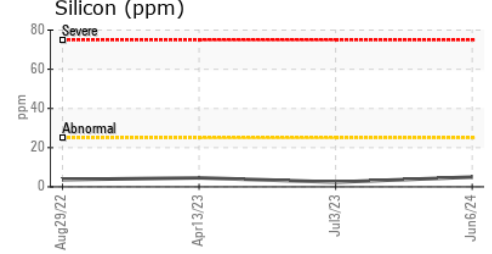
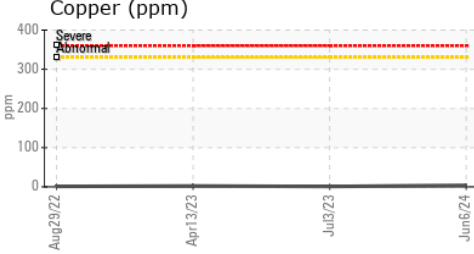
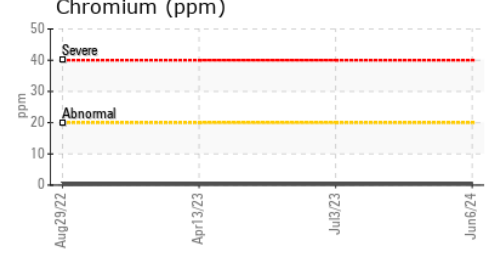
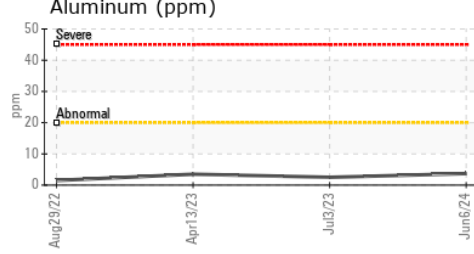
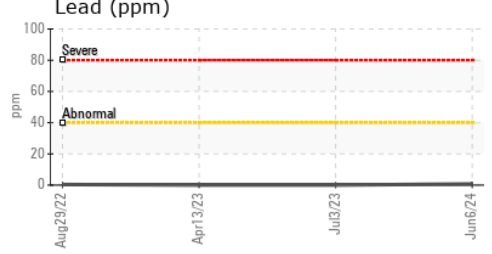
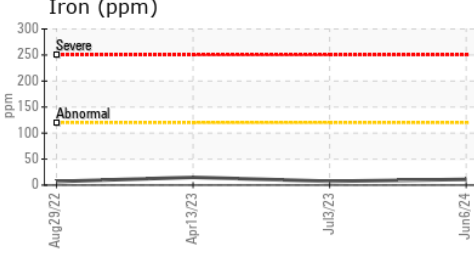
OIL ANALYSIS REPORT



VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
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
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	15.4	13.3	12.5 ▲ 11.6

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0122595 **Received** : 14 Jun 2024
Lab Number : **06210372** **Tested** : 19 Jun 2024
Unique Number : 11083236 **Diagnosed** : 19 Jun 2024 - Wes Davis
Test Package : MOB 2 (Additional Tests: PercentFuel)

UMM - Shop 401 - Norton
 186 South Washington Street
 Norton, MA
 US 02766
 Contact: P Cohen
 pcohen@win-waste.com

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)