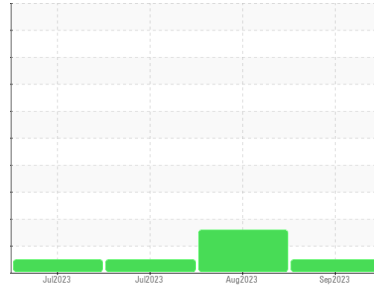




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Area
KDAC
 Machine Id
200250
 Component
Diesel Engine
 Fluid

PETRO CANADA DURON SHP 10W30 (40 LTR)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. 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			WC0852038	WC0852035	WC0814946
Sample Date	Client Info			27 Sep 2023	25 Aug 2023	19 Jul 2023
Machine Age	kms	Client Info		160227	142846	77692
Oil Age	kms	Client Info		35195	17814	0
Oil Changed	Client Info			Not Chngd	Not Chngd	N/A
Sample Status				NORMAL	ABNORMAL	NORMAL

CONTAMINATION		method	limit/base	current	history1	history2
Fuel	WC Method		>3.0	<1.0	<1.0	<1.0
Glycol	WC Method			NEG	0.0	NEG

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>90	16	9	3
Chromium	ppm	ASTM D5185(m)	>20	1	1	<1
Nickel	ppm	ASTM D5185(m)	>2	<1	<1	0
Titanium	ppm	ASTM D5185(m)	>2	0	<1	0
Silver	ppm	ASTM D5185(m)	>2	<1	<1	<1
Aluminum	ppm	ASTM D5185(m)	>20	19	12	3
Lead	ppm	ASTM D5185(m)	>40	1	2	0
Copper	ppm	ASTM D5185(m)	>330	2	1	<1
Tin	ppm	ASTM D5185(m)	>15	<1	<1	0
Antimony	ppm	ASTM D5185(m)		0	0	0
Vanadium	ppm	ASTM D5185(m)		0	0	0
Beryllium	ppm	ASTM D5185(m)		0	0	0
Cadmium	ppm	ASTM D5185(m)		0	0	0

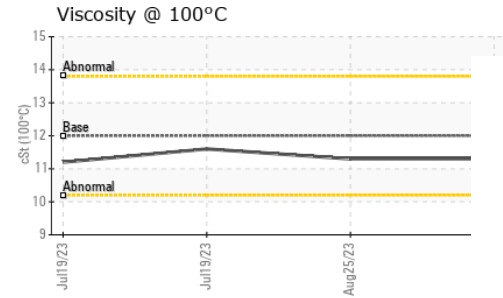
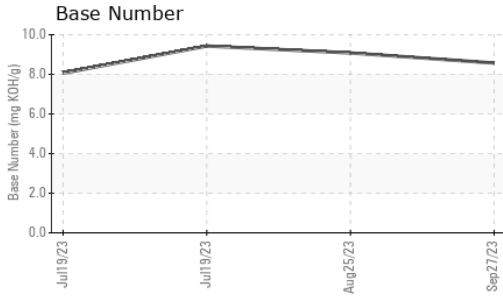
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)	2	5	5	6
Barium	ppm	ASTM D5185(m)	0	<1	0	0
Molybdenum	ppm	ASTM D5185(m)	50	62	58	57
Manganese	ppm	ASTM D5185(m)	0	0	<1	<1
Magnesium	ppm	ASTM D5185(m)	950	997	950	954
Calcium	ppm	ASTM D5185(m)	1050	1100	1046	1017
Phosphorus	ppm	ASTM D5185(m)	995	1014	1029	1047
Zinc	ppm	ASTM D5185(m)	1180	1244	1167	1139
Sulfur	ppm	ASTM D5185(m)	2600	2565	2536	2568
Lithium	ppm	ASTM D5185(m)		<1	<1	<1

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>25	5	4	5
Sodium	ppm	ASTM D5185(m)		2	2	1
Potassium	ppm	ASTM D5185(m)	>20	43	27	7

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	ASTM D7844*	>6	0	0	0
Nitration	Abs/cm	ASTM D7624*	>20	6.7	6.1	4.5
Sulfation	Abs/.1mm	ASTM D7415*	>30	19.1	19.5	17.9



OIL ANALYSIS REPORT

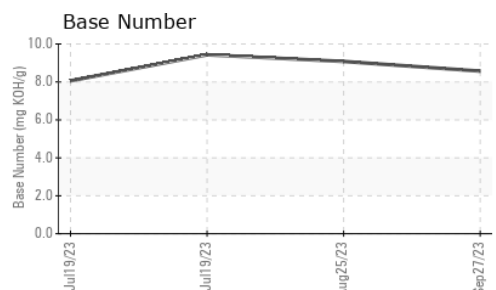
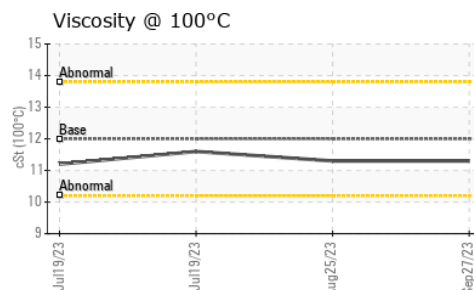
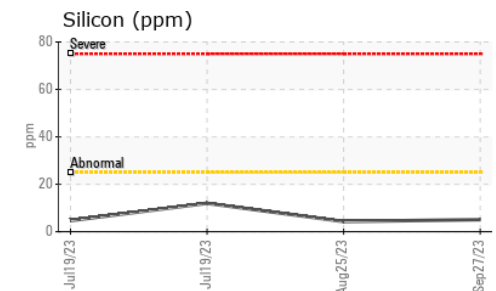
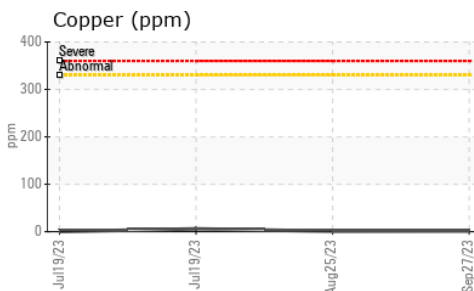
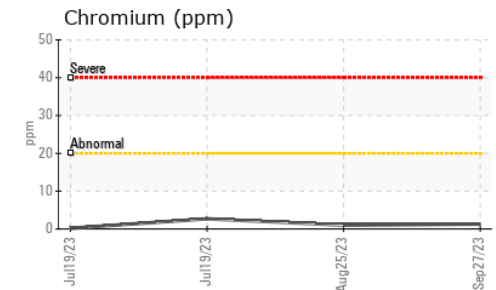
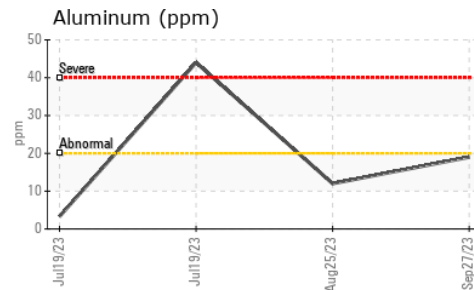
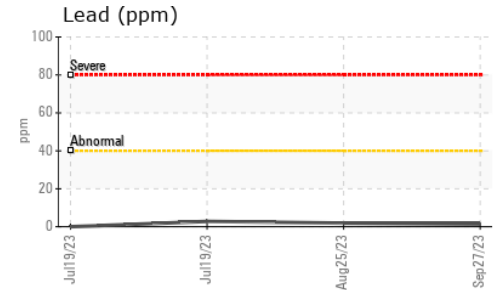
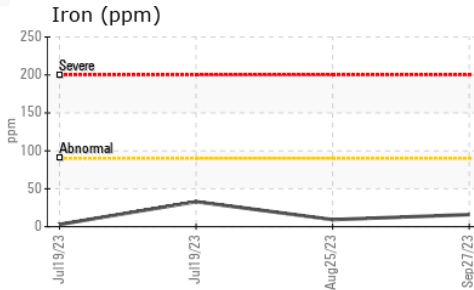


FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	ASTM D7414*	>25	14.6	14.1	12.8
Base Number (BN)	mg KOH/g	ASTM D2896*		8.57	9.08	9.43

VISUAL		method	limit/base	current	history1	history2
Emulsified Water	scalar	Visual*	>0.2	NEG	▲ .2%	NEG
Free Water	scalar	Visual*		NEG	▲ 1%	NEG

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D7279(m)	12.00	11.3	11.3	11.6

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0852038 **Received** : 02 Oct 2023
Lab Number : **02586024** **Diagnosed** : 03 Oct 2023
Unique Number : 5655090 **Diagnostician** : Kevin Marson
Test Package : MOB 2

WFR Technical Services
 5389 Riverside Drive
 Burlington, ON
 CA L7L 3Y1
 Contact: William Ridley
 wfr.technical.services@gmail.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.

T:
F: