

## **OIL ANALYSIS REPORT**

#### Sample Rating Trend





#### Component Diesel Engine Fluid PETRO CANADA DURON SHP 10W30 (---

### DIAGNOSIS

#### Recommendation

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

#### Wear

All component wear rates are normal.

#### Contamination

Elevated aluminum (AI) 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.

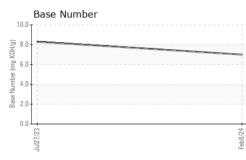
### Fluid Condition

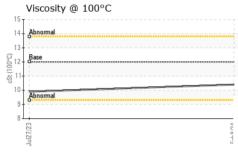
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

iAL)			Jul2023	Feb2024		
SAMPLE INFOR	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PCA0114602	PCA0102927	
Sample Date		Client Info		08 Feb 2024	27 Jul 2023	
Machine Age	mls	Client Info		34124	15726	
Oil Age	mls	Client Info		34124	15726	
Oil Changed		Client Info		Changed	Not Changd	
Sample Status				NORMAL	NORMAL	
CONTAMINAT	ION	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 METAL	S	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>100	79	69	
Chromium	ppm	ASTM D5185m	>20	2	2	
Nickel	ppm	ASTM D5185m	>4	0	1	
Titanium	ppm	ASTM D5185m		0	0	
Silver	ppm	ASTM D5185m	>3	0	0	
Aluminum	ppm	ASTM D5185m	>20	72	65	
Lead	ppm	ASTM D5185m	>40	0	<1	
Copper	ppm			339	296	
Tin Vanadium	ppm	ASTM D5185m ASTM D5185m	>15	6 0	9	
Cadmium	ppm ppm	ASTM D5185m		0	0	
ADDITIVES	le le	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	2	21	35	
Barium	ppm	ASTM D5185m	0	0	2	
Molybdenum	ppm	ASTM D5185m	50	40	43	
Manganese	ppm	ASTM D5185m	0	3	4	
Magnesium	ppm	ASTM D5185m	950	555	513	
Calcium	ppm	ASTM D5185m	1050	1419	1700	
Phosphorus	ppm	ASTM D5185m	995	679	723	
Zinc	ppm	ASTM D5185m	1180	845	898	
Sulfur	ppm	ASTM D5185m	2600	1566	2203	
CONTAMINAN	TS	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	6	7	
Sodium	ppm	ASTM D5185m		3	3	
Potassium	ppm	ASTM D5185m	>20	195	189	
INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	1.1	0.6	
Nitration	Abs/cm	*ASTM D7624	>20	11.4	9.7	
Sulfation	Abs/.1mm	*ASTM D7415	>30	24.0	23.4	
FLUID DEGRAD			limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	25.3	23.7	
Base Number (BN)	mg KOH/g	ASTM D2896		7.0	8.3	



# **OIL ANALYSIS REPORT**







Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

Certificate L2367

F: (215)552-9892