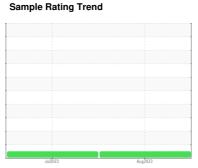


# **OIL ANALYSIS REPORT**

Sa



NORMAL



Machine Id **2227012** 

Component **Diesel Engine** 

PETRO CANADA DURON SHP 10W30 (--- QTS)

### DIAGNOSIS

#### Recommendation

Resample at the next service interval to monitor. Please specify the component make and model with your next sample.

#### Wear

Metal levels are typical for a new component breaking in.

#### 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.

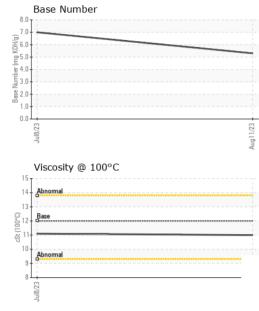
#### **Fluid Condition**

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

QTS)			Jul2023	Aug2023		
SAMPLE INFORI	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PCA0088735	PCA0088705	
Sample Date		Client Info		11 Aug 2023	08 Jul 2023	
Machine Age	mls	Client Info		73000	57250	
Oil Age	mls	Client Info		15000	20000	
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	
Glycol		WC Method	>5	NEG	NEG	
•		VVC IVIELLIOU		NEG	NLG	
WEAR METAL	S	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>100	32	22	
Chromium	ppm	ASTM D5185m	>20	1	<1	
Nickel	ppm	ASTM D5185m	>4	0	<1	
Titanium	ppm	ASTM D5185m		<1	<1	
Silver	ppm	ASTM D5185m	>3	0	<1	
Aluminum	ppm	ASTM D5185m	>20	20	22	
Lead	ppm	ASTM D5185m	>40	2	2	
Copper	ppm	ASTM D5185m	>330	70	76	
Tin	ppm	ASTM D5185m	>15	2	2	
Vanadium	ppm	ASTM D5185m		0	0	
Cadmium	ppm	ASTM D5185m		0	0	
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	2	1	2	
Barium	ppm	ASTM D5185m	0	0	2	
Molybdenum	ppm	ASTM D5185m	50	62	66	
Manganese	ppm	ASTM D5185m	0	1	<1	
Magnesium	ppm	ASTM D5185m	950	835	856	
Calcium	ppm	ASTM D5185m	1050	1108	1187	
Phosphorus	ppm	ASTM D5185m	995	810	864	
Zinc	ppm	ASTM D5185m	1180	1113	1178	
Sulfur	ppm	ASTM D5185m	2600	2142	2562	
CONTAMINAN	TS	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	8	7	
Sodium	ppm	ASTM D5185m		<1	2	
Potassium	ppm	ASTM D5185m	>20	63	65	
INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	0.5	0.4	
Nitration	Abs/cm	*ASTM D7624	>20	10.4	9.8	
Sulfation	Abs/.1mm	*ASTM D7415	>30	21.5	21.4	
FLUID DEGRA	DATION	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	18.5	17.8	
Base Number (BN)	mg KOH/g	ASTM D2896		5.3	7.0	



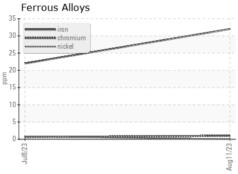
# **OIL ANALYSIS REPORT**

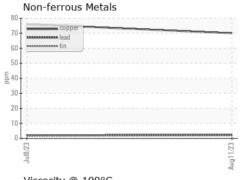


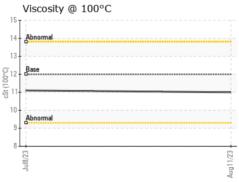
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	
Precipitate	scalar	*Visual	NONE	NONE	NONE	
Silt	scalar	*Visual	NONE	NONE	NONE	
Debris	scalar	*Visual	NONE	NONE	NONE	
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	
Appearance	scalar	*Visual	NORML	NORML	NORML	
Odor	scalar	*Visual	NORML	NORML	NORML	
<b>Emulsified Water</b>	scalar	*Visual	>0.2	NEG	NEG	
Free Water	scalar	*Visual		NEG	NEG	

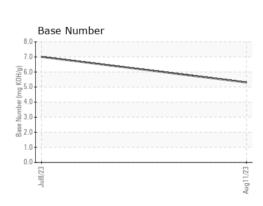
FLUID FROF		memod			HISTOLAL	HISTORYZ
Visc @ 100°C	cSt	ASTM D445	12.00	11.0	11.1	

### **GRAPHS**











Certificate L2367

Laboratory Sample No. Lab Number Unique Number : 10617850 Test Package : FLEET

: PCA0088735 : 05932579

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received : 23 Aug 2023 Diagnosed

: 24 Aug 2023 Diagnostician : Wes Davis

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)

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US 21802

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