

## **OIL ANALYSIS REPORT**

#### Sample Rating Trend





#### Component Diesel Engine

Fluid 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

All component wear rates are normal.

#### Contamination

There is no indication of any contamination in the oil.

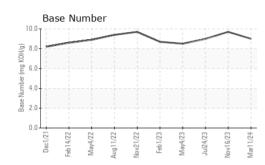
#### Fluid Condition

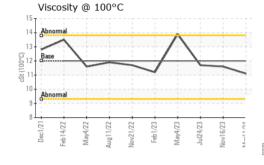
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

(TS)		Dec2021 Feb2	022 May2022 Aug2022 Nov2	0022 Feb2023 May2023 Jul2023 Nov2	023 Mar2024	
SAMPLE INFOR	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PCA0120662	PCA0113359	PCA0103021
Sample Date		Client Info		11 Mar 2024	16 Nov 2023	24 Jul 2023
Machine Age	mls	Client Info		103082	96845	88992
Oil Age	mls	Client Info		0	0	0
Oil Changed		Client Info		Changed	N/A	Changed
Sample Status				NORMAL	NORMAL	NORMAL
CONTAMINAT	ION	method	limit/base	current	history1	history2
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
WEAR METAL	S	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>100	21	21	32
Chromium	ppm	ASTM D5185m	>20	<1	<1	<1
Nickel	ppm	ASTM D5185m	>4	0	0	0
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>20	2	3	2
Lead	ppm	ASTM D5185m	>40	1	<1	3
Copper	ppm	ASTM D5185m	>330	1	3	2
Tin	ppm	ASTM D5185m	>15	<1	<1	<1
Vanadium	ppm	ASTM D5185m		<1	0	<1
Cadmium	ppm	ASTM D5185m		0	0	0
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	2	4	16	9
Barium	ppm	ASTM D5185m	0	0	0	0
Volybdenum	ppm	ASTM D5185m	50	61	64	69
Manganese	ppm	ASTM D5185m	0	<1	<1	<1
Magnesium	ppm	ASTM D5185m	950	867	873	1004
Calcium	ppm	ASTM D5185m	1050	1095	1253	1259
Phosphorus	ppm	ASTM D5185m	995	928	1070	1083
Zinc	ppm	ASTM D5185m	1180	1089	1301	1358
Sulfur	ppm	ASTM D5185m	2600	3237	3211	3818
CONTAMINAN	ITS	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	3	5	5
Sodium	ppm	ASTM D5185m		5	3	4
Potassium	ppm	ASTM D5185m	>20	0	2	1
INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	0.7	0.9	1.3
Nitration	Abs/cm	*ASTM D7624	>20	8.7	9.3	10.7
Sulfation	Abs/.1mm	*ASTM D7415	>30	19.3	20.4	21.7
FLUID DEGRAI	DATION	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	15.7	16.3	17.8
Base Number (BN)		ASTM D2896		9.0	9.7	9.0

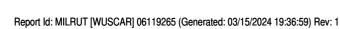


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Nov21/22 + Feb1/23 +	Jul24/23 +	GRAPHS Iron (ppm) 200 Severe 100 Abnomial			10 8 <u>E</u> <sup>6</sup> 4 2	Abnormal		
		Aluminum (ppm)	Nov21/22	May4/23 Jul24/23 Nov16/23	12/11/2W	Chromium (p)	ud Aug 11/22 Nov21/22 Feb1/23	Jul24/23 Nov16/23
		Copper (ppm)	Nov21/22 - Feb1/23 -	May4/23 - Jui24/23 - Mov16/23 -		Silicon (ppm)	Aug11/22 - Nov21/22 - Feb1/23 - Feb1/23 - Mar4/23 - Mar4	Jul24/23 - Nov16/23
		Viscosity @ 100°	Ö Nov21/22 - Feb1/23 -	Map4/23-	er (mg K0H/g) 10.	Base Number	Aug 11/22 - Nov21/22 - Feb1/23 - May4/23 - May	- E2/21/U Nov16/23 -
		Dec1/21 Feb14/22 May4/22 May122 Aug11/22	Nov21/22	May4/23 + Jul24/23 + Nov16/23 +	0.	)- ,	Aug 11/22 +	Jul24/23



Contact/Location: MIKE LONGETTE - MILRUT