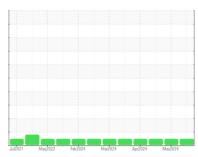


# **OIL ANALYSIS REPORT**

### Sample Rating Trend







Machine Id
SPC2
Component
Diesel Engine

### PETRO CANADA DURON HP 15W40 (9 GAL

## 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.

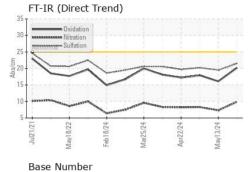
#### **Fluid Condition**

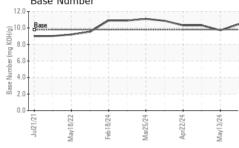
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

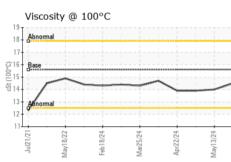
L)		Jul2021	May2022 Feb2024	Mar2024 Apr2024 M	ay2024	
SAMPLE INFORI	MATION	method	limit/base	current	history1	history2
Sample Number Sample Date		Client Info		PCA0123731 26 Jun 2024	PCA0123800 13 May 2024	PCA0123774 06 May 2024
Machine Age	hrs	Client Info		10450	9562	9404
Oil Age	hrs	Client Info		888	0	0
Oil Changed		Client Info		Changed	Changed	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	15	7	11
Chromium	ppm	ASTM D5185m	>20	0	<1	<1
Nickel	ppm	ASTM D5185m	>4	<1	<1	<1
Titanium	ppm	ASTM D5185m		0	<1	<1
Silver	ppm	ASTM D5185m	>3	0	<1	<1
Aluminum	ppm	ASTM D5185m	>20	1	1	1
Lead	ppm	ASTM D5185m	>40	0	<1	<1
Copper	ppm	ASTM D5185m	>330	<1	1	2
Tin	ppm	ASTM D5185m	>15	<1	<1	<1
Vanadium	ppm	ASTM D5185m		0	<1	<1
Cadmium	ppm	ASTM D5185m		0	0	0
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		3	<1	2
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		68	64	65
Manganese	ppm	ASTM D5185m		<1	0	0
Magnesium	ppm	ASTM D5185m		1099	972	987
Calcium	ppm	ASTM D5185m		1190	1094	1133
Phosphorus	ppm	ASTM D5185m		1181	1135	1158
Zinc	ppm	ASTM D5185m		1425	1267	1307
Sulfur	ppm	ASTM D5185m		3829	3471	3497
CONTAMINAN	TS	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	3	4	4
Sodium	ppm	ASTM D5185m		2	<1	<1
Potassium	ppm	ASTM D5185m	>20	<1	2	2
INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	0.2	0.1	0.2
Nitration	Abs/cm	*ASTM D7624	>20	9.9	7.3	8.3
Sulfation	Abs/.1mm	*ASTM D7415	>30	21.5	19.5	20.2
FLUID DEGRA	OATION	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	20.2	16.1	17.9
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	10.46	9.72	10.31



# **OIL ANALYSIS REPORT**





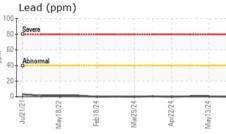


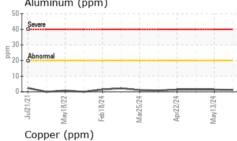
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual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

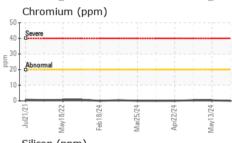
FLUID FROF	LULIES	method			HISTOLAL	1115101 y 2
Visc @ 100°C	cSt	ASTM D445	15.6	14.5	14.0	13.9

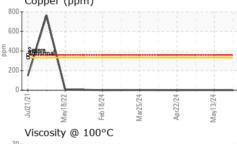
200 - Severe								
150 Abnom	nal							
Jul21/21	May18/22 -	Feb18/24 -	Mar25/24 +-	Apr22/24				
Aluminum (ppm)								
40 - Severe								

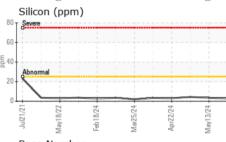
**GRAPHS** Iron (ppm)

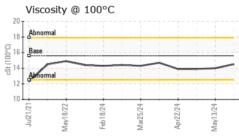


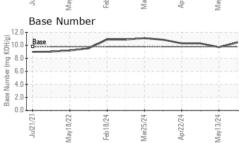
















Certificate 12367

Laboratory Sample No.

: PCA0123731 Lab Number : 06226460 Unique Number : 11109953

Test Package : MOB 2

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received : 02 Jul 2024 **Tested** : 03 Jul 2024

Diagnosed

: 03 Jul 2024 - Wes Davis

To discuss this sample report, contact Customer Service at 1-800-237-1369.

1500 COMMERCIAL AVE MINGO JUNCTION, OH US 43938 Contact: FRANK NALLY

fnally@scrapmetalservices.com T:

SCRAP METAL SERVICES (SMS Mill Services LLC)

\* - 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)

F: