

# **OIL ANALYSIS REPORT**

Sample Rating Trend

NORMAL



Machine Id 350M Component **Diesel Engine** 

PETRO CANADA DURON SHP 15W40 (--- 0

## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor.

All component wear rates are normal.

### Contamination

There is no indication of any contamination in the

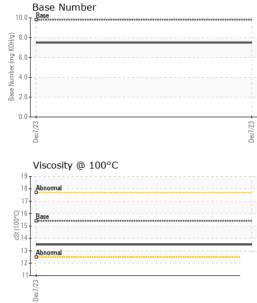
## **Fluid Condition**

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

AL)				Dec2023		
SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		GFL0059297		
Sample Date		Client Info		07 Dec 2023		
Machine Age	hrs	Client Info		18369		
Oil Age	hrs	Client Info		18369		
Oil Changed		Client Info		Changed		
Sample Status				NORMAL		
CONTAMINATI	ON	method	limit/base	current	history1	history2
Fuel		WC Method	>3.0	<1.0		
Water		WC Method	>0.2	NEG		
Glycol		WC Method		NEG		
WEAR METALS	3	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>90	41		
Chromium	ppm	ASTM D5185m	>20	2		
Nickel	ppm	ASTM D5185m	>2	0		
Titanium	ppm	ASTM D5185m	>2	0		
Silver	ppm	ASTM D5185m	>2	0		
Aluminum	ppm	ASTM D5185m	>20	3		
Lead	ppm	ASTM D5185m	>40	1		
Copper	ppm	ASTM D5185m	>330	3		
Tin	ppm	ASTM D5185m	>15	0		
Vanadium	ppm	ASTM D5185m		0		
Cadmium	ppm	ASTM D5185m		0		
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	<1		
Barium	ppm	ASTM D5185m	0	0		
Molybdenum	ppm	ASTM D5185m	60	53		
Manganese	ppm	ASTM D5185m	0	<1		
Magnesium	ppm	ASTM D5185m	1010	959		
Calcium	ppm	ASTM D5185m	1070	1036		
Phosphorus	ppm	ASTM D5185m	1150	1015		
Zinc	ppm	ASTM D5185m	1270	1205		
Sulfur	ppm	ASTM D5185m	2060	2770		
CONTAMINAN <sup>*</sup>	TS	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	7		
Sodium	ppm	ASTM D5185m		38		
Potassium	ppm	ASTM D5185m	>20	<1		
INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>6	1		
Nitration	Abs/cm	*ASTM D7624	>20	13.4		
Sulfation	Abs/.1mm	*ASTM D7415	>30	24.8		
FLUID DEGRAD	ATION	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	25.1		
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	7.5		



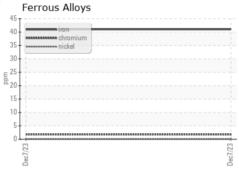
# **OIL ANALYSIS REPORT**

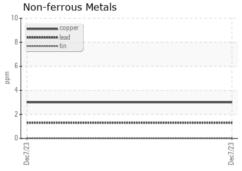


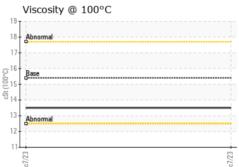
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE		
Yellow Metal	scalar	*Visual	NONE	NONE		
Precipitate	scalar	*Visual	NONE	NONE		
Silt	scalar	*Visual	NONE	NONE		
Debris	scalar	*Visual	NONE	NONE		
Sand/Dirt	scalar	*Visual	NONE	NONE		
Appearance	scalar	*Visual	NORML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

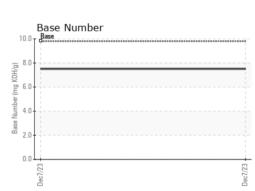
FLUID FROF		memod			HISTOLAL	HISTORYZ
Visc @ 100°C	cSt	ASTM D445	15.4	13.5		

## **GRAPHS**











Laboratory Sample No. Lab Number

: GFL0059297 : 06033116 Unique Number : 10782907 Test Package : FLEET

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Recieved : 13 Dec 2023 Diagnosed : 15 Dec 2023

Diagnostician : Don Baldridge

Certificate L2367 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)

GFL Environmental - 410 - Michigan West

39000 Van Born Rd Wayne, MI US 48184

Contact: Belal Dgheish bdgheish@gflenv.com T: (734)714-2340