

OIL ANALYSIS REPORT

Sample Rating Trend





Machine Id **521031**

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

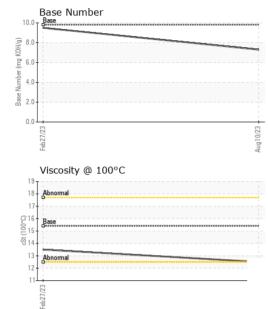
Fluid Condition

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

SAMPLE INFORMATION method limit/base current history1 history2	iAL)			Feb 2023	Aug ² 023		
Contact Collect Coll	SAMPLE INFORI	MATION	method			history1	history2
Cample Date Client Info 10 Aug 2023 27 Feb 2023	Sample Number		Client Info		GFL0085620	GFL0076874	
Machine Age			Client Info		10 Aug 2023	27 Feb 2023	
Client Info Changed	Machine Age	hrs	Client Info		_	6866	
Clichanged Sample Status		hrs	Client Info		202	600	
CONTAMINATION method limit/base current history1 history2	Oil Changed		Client Info		Changed	Changed	
Fuel					NORMAL		
WEAR METALS	CONTAMINAT	ION	method	limit/base	current	history1	history2
WEAR METALS method limit/base current history1 history2 ron ppm ASTM D5185m >110 17 17 Chromium ppm ASTM D5185m >4 1 1 Nickel ppm ASTM D5185m >2 <1	-uel		WC Method	>5	<1.0	<1.0	
Property ASTM D5185m STM	Glycol		WC Method		NEG	0.0	
ASTM D5185m >4	WEAR METAL	S	method	limit/base	current	history1	history2
Strickel	ron	ppm	ASTM D5185m	>110	17	17	
Sirickel	Chromium		ASTM D5185m	>4	1	1	
ASTM D5185m C1 C1 C1 C2 C3 C3 C4 C4 C4 C4 C4 C4	Nickel			>2	<1	0	
Silver	Fitanium		ASTM D5185m		<1	<1	
ASTM D5185m >25 2 3				>2			
December December					_		
Description							
Academium Aca					_		
Anadium ppm ASTM D5185m 0 0 Cadmium ppm ASTM D5185m 0 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 0 16 80 Barium ppm ASTM D5185m 0 0 0 Molybdenum ppm ASTM D5185m 0 0 0 Manganese ppm ASTM D5185m 0 <1 2 Magnesium ppm ASTM D5185m 1010 846 894 Phosphorus ppm ASTM D5185m 1070 1115 1219 Phosphorus ppm ASTM D5185m 1270 1136 1165 Bulfur ppm ASTM D5185m 2060 3290 3568 CONTAMINANTS method limit/base current history1 <td></td> <td></td> <td></td> <td></td> <td>-</td> <td></td> <td></td>					-		
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ADDITIVES					-		
Boron ppm ASTM D5185m 0 16 80		ррпп		limit/hase	-		
Barium		nnm					
Molybdenum ppm ASTM D5185m 60 54 73 Manganese ppm ASTM D5185m 0 <1					-		
Manganese ppm ASTM D5185m 0 <1 2 Magnesium ppm ASTM D5185m 1010 846 894 Calcium ppm ASTM D5185m 1070 1115 1219 Phosphorus ppm ASTM D5185m 1150 930 935 Zinc ppm ASTM D5185m 1270 1136 1165 Sulfur ppm ASTM D5185m 2060 3290 3568 CONTAMINANTS method limit/base current history1 history2 Solicon ppm ASTM D5185m >30 15 ▲ 33 Cotassium ppm ASTM D5185m >20 16 64 Potassium ppm ASTM D5185m >20 16 64 INFRA-RED method limit/base current history1 history2 Soot % *ASTM D7844 >3 <td></td> <td></td> <td></td> <td></td> <td>-</td> <td></td> <td></td>					-		
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Sulfur ppm ASTM D5185m 2060 3290 3568 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >30 15 33 Sodium ppm ASTM D5185m 6 15 Potassium ppm ASTM D5185m >20 16 64 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 0.3 0.2 Nitration Abs/cm *ASTM D7624 >20 9.0 6.8 Sulfation Abs/.1mm *ASTM D7415 >30 19.6 19.4 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 16.5 14.5							
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Sodium ppm ASTM D5185m 6 15	CONTAMINAN	TS		limit/base	current		history2
Potassium ppm ASTM D5185m >20 16 64 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 0.3 0.2 Nitration Abs/cm *ASTM D7624 >20 9.0 6.8 Sulfation Abs/.1mm *ASTM D7415 >30 19.6 19.4 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 16.5 14.5		ppm	ASTM D5185m	>30			
INFRA-RED	Sodium	ppm	ASTM D5185m		6	15	
Soot % % *ASTM D7844 >3 0.3 0.2 Nitration Abs/cm *ASTM D7624 >20 9.0 6.8 Sulfation Abs/.1mm *ASTM D7415 >30 19.6 19.4 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 16.5 14.5	Potassium	ppm	ASTM D5185m	>20	16	64	
Nitration Abs/cm *ASTM D7624 >20 9.0 6.8 Sulfation Abs/.1mm *ASTM D7415 >30 19.6 19.4 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 16.5 14.5	INFRA-RED		method	limit/base	current	history1	history2
Sulfation Abs/.1mm *ASTM D7415 >30 19.6 19.4 FLUID DEGRADATION method limit/base current history1 history2 Dxidation Abs/.1mm *ASTM D7414 >25 16.5 14.5	Soot %	%	*ASTM D7844	>3	0.3	0.2	
FLUID DEGRADATION method limit/base current history1 history2 Dxidation Abs/.1mm *ASTM D7414 >25 16.5 14.5	Nitration	Abs/cm	*ASTM D7624	>20	9.0	6.8	
Oxidation	Sulfation	Abs/.1mm	*ASTM D7415	>30	19.6	19.4	
	FLUID DEGRA	DATION	method	limit/base	current	history1	history2
	Oxidation	Abs/.1mm	*ASTM D7414	>25	16.5	14.5	
	Base Number (BN)		ASTM D2896	9.8		9.5	



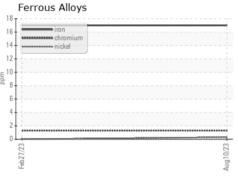
OIL ANALYSIS REPORT

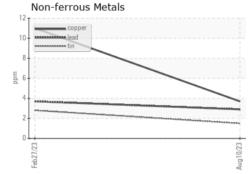


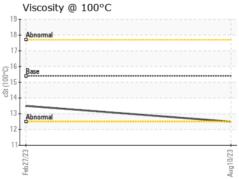
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	
Precipitate	scalar	*Visual	NONE	NONE	NONE	
Silt	scalar	*Visual	NONE	NONE	NONE	
Debris	scalar	*Visual	NONE	NONE	NONE	
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	
Appearance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

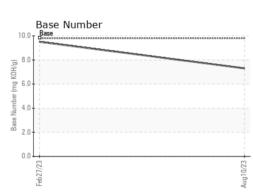
FLUID PROPI	EHILO	method			riistory i	History2
Visc @ 100°C	cSt	ASTM D445	15.4	12.5	13.5	

GRAPHS













Certificate L2367

Laboratory Sample No. Lab Number Unique Number : 10605300 Test Package : FLEET

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : GFL0085620 : 05925353

Received Diagnosed

: 15 Aug 2023 : 16 Aug 2023 Diagnostician : Wes Davis

GFL Environmental - 411 - Kingsford HC

1001 E Blvd Kingsford, MI US 49802

Contact: Service Manager

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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