

OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id **433004**

Component **Natural Gas Engine**

PETRO CANADA DURON SHP 15W40 (--- GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

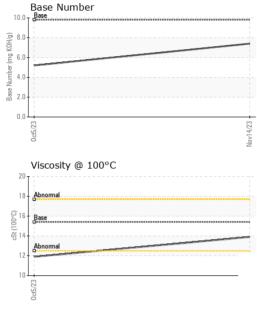
Fluid Condition

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

Sample Date Client Info 14 Nov 2023 05 Machine Age hrs Client Info 903 0 Oil Age hrs Client Info 903 0 Oil Changed Client Info Not Changd C		
Sample Date	history1	history2
Machine Age	GFL0084660	
Dil Age	05 Oct 2023	
Dil Changed Client Info Not Change Normal Amorana Contamination	0	
NORMAL A	0	
CONTAMINATION method limit/base current Water WC Method >0.1 NEG WEAR METALS method limit/base current ron ppm ASTM D5185m >50 7 Chromium ppm ASTM D5185m >4 <1	Changed	
Water WC Method >0.1 NEG WEAR METALS method limit/base current Iron ppm ASTM D5185m >50 7 Chromium ppm ASTM D5185m >4 <1	ATTENTION	
WEAR METALS method limit/base current ron ppm ASTM D5185m >50 7 Chromium ppm ASTM D5185m >4 <1	history1	history2
Chromium	NEG	
Description	history1	history2
Nickel	22	
Description	<1	
Silver	1	
Ast Description Abs Description Ast Description Abs Description Ast Description Abs Description Ast Description Abs Description Abs Description Abs Description Ast Description Abs Description Desc	<1	
December December	0	
Copper ppm ASTM D5185m >35 1 Fin ppm ASTM D5185m >4 <1	3	
ASTM D5185m ASTM D5185m ASTM D5185m Docadmium Docadmium	3	
Vanadium ppm ASTM D5185m 0 Cadmium ppm ASTM D5185m 0 ADDITIVES method limit/base current Boron ppm ASTM D5185m 0 14 Barium ppm ASTM D5185m 0 <1	10	
Cadmium ppm ASTM D5185m 0 ADDITIVES method limit/base current Boron ppm ASTM D5185m 0 14 Barium ppm ASTM D5185m 0 <1	2	
ADDITIVES	<1	
Soron ppm ASTM D5185m 0 14	0	
Sarium	history1	history2
Molybdenum ppm ASTM D5185m 60 48 Manganese ppm ASTM D5185m 0 1 Magnesium ppm ASTM D5185m 1010 604 Calcium ppm ASTM D5185m 1070 1436 Phosphorus ppm ASTM D5185m 1150 803 Zinc ppm ASTM D5185m 1270 910 Sulfur ppm ASTM D5185m 2060 2266 CONTAMINANTS method limit/base current Silicon ppm ASTM D5185m >+100 23 Sodium ppm ASTM D5185m 0 0 Potassium ppm ASTM D5185m >20 2 INFRA-RED method limit/base current Soot % % *ASTM D7844 0 Witration Abs/cm *ASTM D7624 >20 9.0 Sulfation Abs/.1mm *ASTM D7415 >30 20.1	13	
Manganese ppm ASTM D5185m 0 1 Magnesium ppm ASTM D5185m 1010 604 Calcium ppm ASTM D5185m 1070 1436 Phosphorus ppm ASTM D5185m 1150 803 Zinc ppm ASTM D5185m 1270 910 Sulfur ppm ASTM D5185m 2060 2266 CONTAMINANTS method limit/base current Solicon ppm ASTM D5185m >+100 23 Sodium ppm ASTM D5185m 0 0 Potassium ppm ASTM D5185m >20 2 INFRA-RED method limit/base current Soot % % *ASTM D7844 0 Vitration Abs/cm *ASTM D7624 >20 9.0 Sulfation Abs/.1mm *ASTM D7415 >30 20.1	5	
Magnesium ppm ASTM D5185m 1010 604 Calcium ppm ASTM D5185m 1070 1436 Phosphorus ppm ASTM D5185m 1150 803 Zinc ppm ASTM D5185m 1270 910 Sulfur ppm ASTM D5185m 2060 2266 CONTAMINANTS method limit/base current Silicon ppm ASTM D5185m >+100 23 Sodium ppm ASTM D5185m 0 0 Potassium ppm ASTM D5185m >20 2 INFRA-RED method limit/base current Soot % % *ASTM D7844 0 Vitration Abs/cm *ASTM D7624 >20 9.0 Sulfation Abs/.1mm *ASTM D7415 >30 20.1	51	
Calcium ppm ASTM D5185m 1070 1436 Phosphorus ppm ASTM D5185m 1150 803 Zinc ppm ASTM D5185m 1270 910 Sulfur ppm ASTM D5185m 2060 2266 CONTAMINANTS method limit/base current Silicon ppm ASTM D5185m >+100 23 Sodium ppm ASTM D5185m 0 0 Potassium ppm ASTM D5185m >20 2 INFRA-RED method limit/base current Soot % % *ASTM D7844 0 Vitration Abs/cm *ASTM D7624 >20 9.0 Sulfation Abs/.1mm *ASTM D7415 >30 20.1	4	
Phosphorus ppm ASTM D5185m 1150 803 Zinc ppm ASTM D5185m 1270 910 Sulfur ppm ASTM D5185m 2060 2266 CONTAMINANTS method limit/base current Silicon ppm ASTM D5185m >+100 23 Sodium ppm ASTM D5185m >20 2 INFRA-RED method limit/base current Soot % % *ASTM D7844 0 Vitration Abs/cm *ASTM D7624 >20 9.0 Sulfation Abs/.1mm *ASTM D7415 >30 20.1	790	
Phosphorus ppm ASTM D5185m 1150 803 Zinc ppm ASTM D5185m 1270 910 Sulfur ppm ASTM D5185m 2060 2266 CONTAMINANTS method limit/base current Silicon ppm ASTM D5185m >+100 23 Sodium ppm ASTM D5185m >20 2 INFRA-RED method limit/base current Soot % % *ASTM D7844 0 Nitration Abs/cm *ASTM D7624 >20 9.0 Sulfation Abs/.1mm *ASTM D7415 >30 20.1	1153	
Zinc	640	
Sulfur ppm ASTM D5185m 2060 2266 CONTAMINANTS method limit/base current Silicon ppm ASTM D5185m >+100 23 Sodium ppm ASTM D5185m 0 0 Potassium ppm ASTM D5185m >20 2 INFRA-RED method limit/base current Soot % % *ASTM D7844 0 Nitration Abs/cm *ASTM D7624 >20 9.0 Sulfation Abs/.1mm *ASTM D7415 >30 20.1	883	
Solition	2242	
Sodium ppm ASTM D5185m 0 Potassium ppm ASTM D5185m >20 2 INFRA-RED method limit/base current Soot % % *ASTM D7844 0 Nitration Abs/cm *ASTM D7624 >20 9.0 Sulfation Abs/.1mm *ASTM D7415 >30 20.1	history1	history2
Potassium ppm ASTM D5185m >20 2 INFRA-RED method limit/base current Goot % % *ASTM D7844 0 Nitration Abs/cm *ASTM D7624 >20 9.0 Sulfation Abs/.1mm *ASTM D7415 >30 20.1	93	
INFRA-RED method limit/base current Soot % % *ASTM D7844 0 Nitration Abs/cm *ASTM D7624 >20 9.0 Sulfation Abs/.1mm *ASTM D7415 >30 20.1	5	
Soot % % *ASTM D7844 0 Nitration Abs/cm *ASTM D7624 >20 9.0 Sulfation Abs/.1mm *ASTM D7415 >30 20.1	11	
Vitration Abs/cm *ASTM D7624 >20 9.0 Sulfation Abs/.1mm *ASTM D7415 >30 20.1	history1	history2
Sulfation Abs/.1mm *ASTM D7415 >30 20.1	0	
	10.8	
FLUID DEGRADATION method limit/base current	21.5	
	history1	history2
Oxidation	19.4	
Base Number (BN) mg KOH/g ASTM D2896 9.8 7.4	5.2	



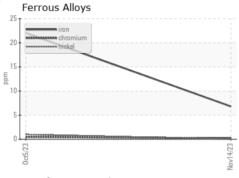
OIL ANALYSIS REPORT

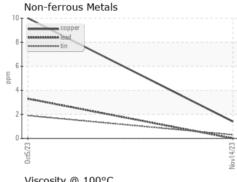


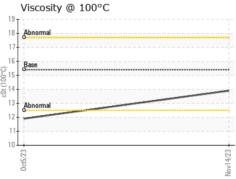
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	LIGHT	NONE	
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	
Precipitate	scalar	*Visual	NONE	NONE	NONE	
Silt	scalar	*Visual	NONE	NONE	NONE	
Debris	scalar	*Visual	NONE	NONE	NONE	
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	
Appearance	scalar	*Visual	NORML	NORML	NORML	
Odor	scalar	*Visual	NORML	NORML	NORML	
Emulsified Water	scalar	*Visual	>0.1	NEG	NEG	
Free Water	scalar	*Visual		NEG	NEG	
FLUID PROPE	RTIES	method	limit/base	current	history1	history2

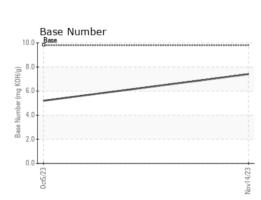
FLUID PROPE		method			HISTORY	History2
Visc @ 100°C	cSt	ASTM D445	15.4	13.9	△ 11.9	

GRAPHS













Certificate L2367

Laboratory Sample No. Lab Number Test Package : FLEET

Unique Number : 10749169

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : GFL0091994 : 06010025

Received Diagnosed Diagnostician : Don Baldridge

: 16 Nov 2023 : 20 Nov 2023 GFL Environmental - 856 - Houston South

8515 Highway 6 South Houston, TX US 77083

Contact: Gino Griego

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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F: