

OIL ANALYSIS REPORT

Sample Rating Trend



Machine Id 732012

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.

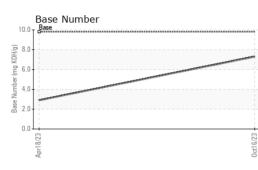
Fluid Condition

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

SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		GFL0084653	GFL0078008	
Sample Date		Client Info		16 Oct 2023	18 Apr 2023	
Machine Age	mls	Client Info		0	35867	
Oil Age	mls	Client Info		0	0	
Oil Changed		Client Info		Changed	Not Changd	
Sample Status				NORMAL	ABNORMAL	
WEAR METAL	S	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	8	29	
Chromium	ppm	ASTM D5185m	>4	<1	2	
Nickel	ppm	ASTM D5185m	>2	0	1	
Titanium	ppm	ASTM D5185m		<1	<1	
Silver	ppm	ASTM D5185m	>3	0	0	
Aluminum	ppm	ASTM D5185m	>9	2	3	
Lead	ppm	ASTM D5185m	>30	4	11	
Copper	ppm	ASTM D5185m	>35	1	4	
Tin	ppm	ASTM D5185m	>4	<1	2	
Vanadium	ppm	ASTM D5185m		<1	0	
Cadmium	ppm	ASTM D5185m		0	0	
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	33	6	
Barium	ppm	ASTM D5185m	0	0	0	
Molybdenum	ppm	ASTM D5185m	60	52	65	
Manganese	ppm	ASTM D5185m	0	<1	2	
Magnesium	ppm	ASTM D5185m	1010	592	666	
Calcium	ppm	ASTM D5185m	1070	1736	1881	
Phosphorus	ppm	ASTM D5185m	1150	816	839	
Zinc	ppm	ASTM D5185m	1270	1006	1133	
Sulfur	ppm	ASTM D5185m	2060	2492	2794	
CONTAMINAN	TS	method	limit/base	current	history1	history2
Silicon			100	_		
	ppm	ASTM D5185m	>+100	4	8	
Sodium	ppm	ASTM D5185m ASTM D5185m	>+100	4 5	8 12	
			>+100 >20			
Sodium	ppm	ASTM D5185m		5	12	
Sodium Potassium	ppm	ASTM D5185m ASTM D5185m	>20	5 3	12 2	
Sodium Potassium INFRA-RED	ppm ppm	ASTM D5185m ASTM D5185m method	>20	5 3 current	12 2 history1	 history2
Sodium Potassium INFRA-RED Soot %	ppm ppm %	ASTM D5185m ASTM D5185m method *ASTM D7844	>20 limit/base	5 3 current 0	12 2 history1 0	 history2
Sodium Potassium INFRA-RED Soot % Nitration	ppm ppm % Abs/cm Abs/.1mm	ASTM D5185m ASTM D5185m method *ASTM D7844 *ASTM D7624	>20 limit/base >20	5 3 current 0 8.1	12 2 history1 0 13.1	 history2
Sodium Potassium INFRA-RED Soot % Nitration Sulfation	ppm ppm % Abs/cm Abs/.1mm	ASTM D5185m ASTM D5185m Method *ASTM D7844 *ASTM D7624 *ASTM D7415	>20 limit/base >20 >30	5 3 current 0 8.1 20.3	12 2 history1 0 13.1 28.0	 history2



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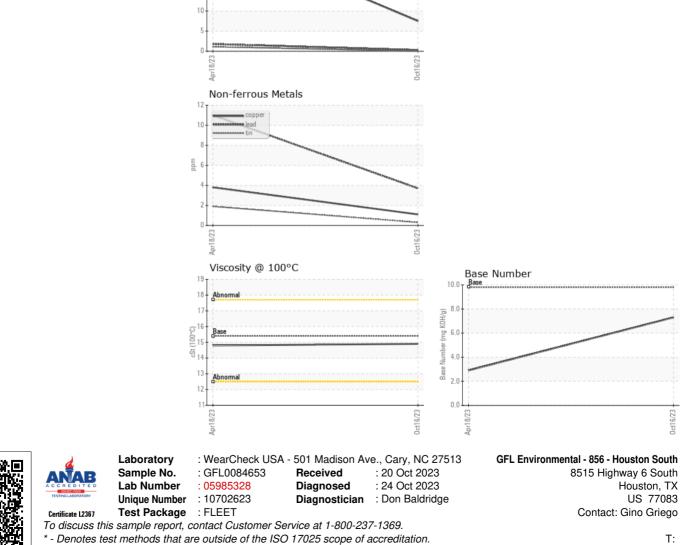






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VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	
Precipitate	scalar	*Visual	NONE	NONE	NONE	
Silt	scalar	*Visual	NONE	NONE	NONE	
Debris	scalar	*Visual	NONE	NONE	NONE	
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	
Appearance	scalar	*Visual	NORML	NORML	NORML	
Odor	scalar	*Visual	NORML	NORML	NORML	
Emulsified Water	scalar	*Visual	>0.1	NEG	NEG	
Free Water	scalar	*Visual		NEG	NEG	
FLUID PROPE	RTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	15.4	14.9	14.8	
GRAPHS						
Ferrous Alloys						
iron 1						
25 - sessesses chromium						
10						
15-						



Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

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