

OIL ANALYSIS REPORT

Sample Rating Trend





Machine Id 727041 Component

Diesel 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

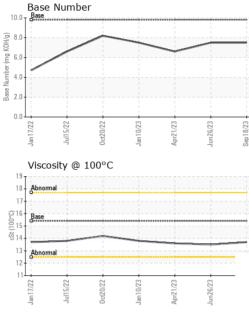
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sample Number Client Info GFL0091546 GFL0082742 GFL0081232 Sample Date Client Info 18 Sep 2023 25 Jun 2023 21 Apr 2023 Machine Age hrs Client Info 13 695 13044 12541 Oil Age hrs Client Info NAR Changed Changed Sample Status Client Info NNA Changed Changed GIVOTAMINATION method salo <1.0 NORMAL NORMAL GIVOTAMINATION method salo <1.0 <1.0 <1.0 GIVOTAMINATION WC Method s3.0 <1.0 <1.0 NEG GIVOTAMINATION ppm ASTM 051655 s2.0 0 <1.0 <1.0 GIVOTAMINATION ppm ASTM 051655 s2.0 0 0 <1.0 <1.0 GIVOTAMINATION ppm ASTM 051655 s2.0 0 0 0 <1.0 GIVOTAMINATION ppm ASTM 051655 s2.0 0 0	SAMPLE INFOR	MATION	method	limit/base	current	history1	history2	
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	Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Silicon Sodium Potassium INFRA-RED Soot % Nitration Sulfation	ppm ppm ppm ppm ppm ppm ppm TS ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	60 0 1010 1070 1150 1270 2060 imit/base >25 >20 imit/base >4 >20 >30	59 0 961 1161 971 1251 3212 current 6 6 6 <1 current 0.4 8.3 19.2	58 <1 891 1089 956 1218 2805 history1 3 2 1 1 history1 0.2 7.1 19.7	60 <1 970 1090 985 1268 3191 history2 3 <1 0 history2 0.2 6.7 16.9	
Base Number (BN) mg KOH/g ASTM D2896 9.8 7.5 6.6	Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot % Nitration Sulfation FLUID DEGRAD	ppm ppm ppm ppm ppm ppm ppm TS ppm ppm ppm ppm ppm	ASTM D5185m ASTM D7844 *ASTM D7624 *ASTM D7624	60 0 1010 1070 1150 2060 imit/base >25 20 imit/base >20 >20 imit/base	59 0 961 1161 971 1251 3212 current 6 6 6 6 <1 current 0.4 8.3 19.2 current	58 <1 891 1089 956 1218 2805 history1 3 2 1 3 2 1 1 0.2 7.1 19.7 history1	60 <1 970 1090 985 1268 3191 history2 3 <1 0 history2 0.2 6.7 16.9 history2	
	Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot % Nitration Sulfation FLUID DEGRAM	ppm ppm ppm ppm ppm ppm ppm TS ppm ppm ppm ppm ppm ppm ppm ppm ppm pp	ASTM D5185m ASTM D7844 *ASTM D7624 *ASTM D7415	60 0 1010 1070 1150 2060 imit/base >25 20 imit/base >20 >20 imit/base	59 0 961 1161 971 1251 3212 current 6 6 6 <1 current 0.4 8.3 19.2 current 15.4	58 <1 891 1089 956 1218 2805 history1 3 2 1 3 2 1 0.2 7.1 19.7 history1 15.4	60 <1 970 1090 985 1268 3191 history2 3 <1 0 history2 0.2 6.7 16.9 history2 13.7	



OIL ANALYSIS REPORT

VISUAL



O 0 000002 Jan 10/23	Jun26/23	White Metal Yellow Metal Precipitate Silt Debris Sand/Dirt Appearance Odor Emulsified Water Free Water	scalar scalar scalar scalar scalar scalar scalar scalar scalar	*Visual *Visual *Visual *Visual *Visual *Visual *Visual *Visual *Visual	NONE NONE NONE NONE NONE NORML NORML >0.2	NONE NONE NONE NONE NONE NORML NORML NEG NEG	NONE NONE NONE NONE NONE NORML NORML NEG NEG	NONE NONE NONE NONE NORML NORML NEG NEG
		FLUID PROPE	RTIES	method	limit/base	current	history1	history2
		Visc @ 100°C	cSt	ASTM D445	15.4	13.7	13.5	13.6
		GRAPHS						
		Ferrous Alloys						
UGI2U/22 Jan10/23 An21/23		Competence of the second secon	Jan 10/23	Apr21/23	Sep 18/23			
		22 22 0	23	23	23			
		ZZ/2[1wp Viscosity @ 100°C	Jan10/23	Apr21/23	E2/811des (0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,	Base Number		
		12			0.0			
		Jan 17/22	Jan 10/23 -	Apr21/23 - Jun26/23 -	Sep18/23	Jan17/22 - Jul15/22 - Oct20/22 -	Jan10/23 - Apr21/23 -	Jun26/23 - Sep18/23 -
* - Denotes tes	t methods that a	: WearCheck USA - 5 : GFL0091546 F : 05958309 F : 10659522 F	on Ave., Ca	ry, NC 27513 Sep 2023 Sep 2023 s Davis itation.	GFL En	GFL Environmental - 465 - Pontiac 888 Baldwin Pontiac, MI US 48340 Contact: Ricky Matthews rickymathews@gflenv.com T: (586)825-9514		



Submitted By: Ricky Matthews