

OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL



Component **Diesel Engine**

Elui

PETRO CANADA DURON SHP 15W40 (10 GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor. Please specify the component make and model with your next sample.

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.

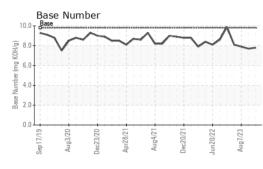
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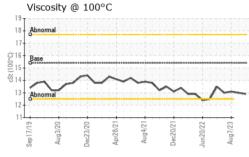


SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PCA0101775	PCA0101724	PCA0095837
Sample Date		Client Info		09 Jan 2024	22 Sep 2023	07 Aug 2023
Machine Age	hrs	Client Info		10270	9709	9280
Oil Age	hrs	Client Info		561	429	683
Oil Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL
CONTAMINAT	ION	method	limit/base	current	history1	history2
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
WEAR METAL	S .	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>100	13	15	15
Chromium	ppm	ASTM D5185m	>20	2	1	1
Nickel	ppm	ASTM D5185m	>4	<1	<1	0
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>20	5	7	6
Lead	ppm	ASTM D5185m	>40	0	<1	0
Copper	ppm	ASTM D5185m	>330	<1	<1	<1
Tin	ppm	ASTM D5185m	>15	<1	<1	<1
Vanadium	ppm	ASTM D5185m		<1	<1	0
Cadmium	ppm	ASTM D5185m		0	0	0
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	9	17	12
Barium	ppm	ASTM D5185m	0	0	0	0
Molybdenum	ppm	ASTM D5185m	60	69	105	69
Manganese	ppm	ASTM D5185m	0	<1	<1	<1
Magnesium	ppm	ASTM D5185m	1010			
Calcium			1010	827	1119	902
	ppm	ASTM D5185m	1010 1070		1119 1561	902 1166
Phosphorus	ppm ppm	ASTM D5185m ASTM D5185m	1070 1150	827 1086 927	1561 1315	1166 999
		ASTM D5185m	1070	827 1086	1561	1166 999 1238
Phosphorus Zinc Sulfur	ppm ppm ppm	ASTM D5185m ASTM D5185m	1070 1150	827 1086 927	1561 1315	1166 999
Phosphorus Zinc	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	1070 1150 1270	827 1086 927 1170	1561 1315 1654	1166 999 1238
Phosphorus Zinc Sulfur CONTAMINAN Silicon	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	1070 1150 1270 2060	827 1086 927 1170 2838	1561 1315 1654 4571	1166 999 1238 3591 history2 3
Phosphorus Zinc Sulfur CONTAMINAN	ppm ppm ppm TS	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method	1070 1150 1270 2060 limit/base	827 1086 927 1170 2838 current	1561 1315 1654 4571 history1	1166 999 1238 3591 history2
Phosphorus Zinc Sulfur CONTAMINAN Silicon	ppm ppm ppm TS ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m	1070 1150 1270 2060 limit/base	827 1086 927 1170 2838 current 4	1561 1315 1654 4571 history1 4	1166 999 1238 3591 history2 3
Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium	ppm ppm ppm TS ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	1070 1150 1270 2060 <i>limit/base</i> >25	827 1086 927 1170 2838 <u>current</u> 4 <1	1561 1315 1654 4571 history1 4 8	1166 999 1238 3591 history2 3 3
Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium	ppm ppm ppm TS ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	1070 1150 1270 2060 <i>limit/base</i> >25 >20	827 1086 927 1170 2838 <u>current</u> 4 <1 1	1561 1315 1654 4571 history1 4 8 15	1166 999 1238 3591 history2 3 3 14
Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED	ppm ppm TS ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	1070 1150 1270 2060 limit/base >25 >20	827 1086 927 1170 2838 current 4 <1 1 current	1561 1315 1654 4571 history1 4 8 15 history1	1166 999 1238 3591 history2 3 3 14 history2
Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot %	ppm ppm TS ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	1070 1150 1270 2060 imit/base >25 >20 imit/base >3	827 1086 927 1170 2838 current 4 <1 1 1 current 0.8	1561 1315 1654 4571 history1 4 8 15 history1 0.6	1166 999 1238 3591 history2 3 3 14 history2 0.8
Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot % Nitration	ppm ppm ppm TS ppm ppm ppm ppm % Abs/cm Abs/.1mm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D7844 *ASTM D7844 *ASTM D7844	1070 1150 1270 2060 imit/base >25 >20 imit/base >3 >20	827 1086 927 1170 2838 current 4 <1 1 current 0.8 7.5	1561 1315 1654 4571 history1 4 8 15 history1 0.6 7.0	1166 999 1238 3591 history2 3 3 3 14 history2 0.8 8.1
Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot % Nitration Sulfation	ppm ppm ppm TS ppm ppm ppm ppm % Abs/cm Abs/.1mm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D7844 *ASTM D7844 *ASTM D7844	1070 1150 1270 2060 limit/base >25 >20 limit/base >3 >20 >30	827 1086 927 1170 2838 current 4 <1 1 1 current 0.8 7.5 18.5	1561 1315 1654 4571 history1 4 8 15 history1 0.6 7.0 18.0	1166 999 1238 3591 history2 3 3 14 history2 0.8 8.1 19.1
Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot % Nitration Sulfation FLUID DEGRAE	ppm ppm TS ppm ppm ppm ppm ppm % Abs/cm Abs/cm Abs/1mm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m *ASTM D7844 *ASTM D7844 *ASTM D7624 *ASTM D7415	1070 1150 1270 2060 imit/base >25 >20 imit/base >30 imit/base >25	827 1086 927 1170 2838 current 4 <1 1 current 0.8 7.5 18.5 current	1561 1315 1654 4571 history1 4 8 15 history1 0.6 7.0 18.0 history1	1166 999 1238 3591 history2 3 3 3 14 history2 0.8 8.1 19.1 history2

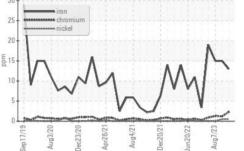


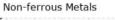
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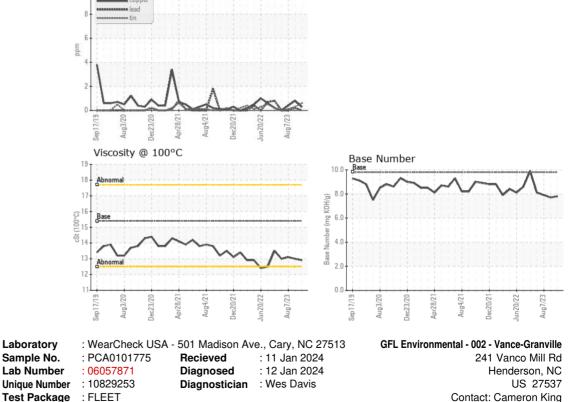


VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG	NEG
FLUID PROPE	RTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	15.4	12.9	13.0	13.1
GRAPHS						
Ferrous Alloys						





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 Certificate L2367
 Test Package
 : FLEET

 To discuss this sample report, contact Customer Service at 1-800-237-1369.
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 * - 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)

cameron.king@gflenv.com

T: (252)438-5333

F: (252)431-1635