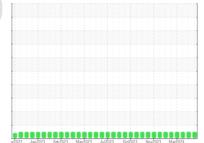


OIL ANALYSIS REPORT

Sample Rating Trend









MONTGOMERY Machine to 420043

Diesel Engine

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

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

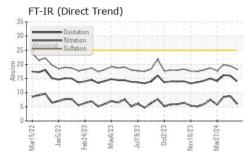
Fluid Condition

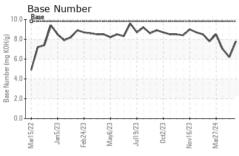
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

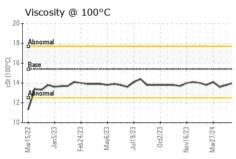
	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		GFL0127258	GFL0118426	GFL0118448
Sample Date		Client Info		16 Jul 2024	06 May 2024	18 Apr 2024
Machine Age	hrs	Client Info		2171	1966	1920
Oil Age	hrs	Client Info		2171	1966	1920
Oil Changed		Client Info		Not Changd	Not Changd	Not Changd
Sample Status				NORMAL	NORMAL	NORMAL
CONTAMINAT	ION	method	limit/base	current	history1	history2
Fuel		WC Method	>3.0	<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	>120	5	11	10
Chromium	ppm	ASTM D5185m	>20	0	<1	<1
Nickel	ppm	ASTM D5185m	>5	<1	0	0
Titanium	ppm	ASTM D5185m		0	0	<1
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>20	1	1	1
Lead	ppm	ASTM D5185m	>40	0	<1	<1
Copper	ppm	ASTM D5185m	>330	2	8	5
Tin	ppm	ASTM D5185m	>15	0	0	<1
Vanadium	ppm	ASTM D5185m	710	0	0	<1
Cadmium	ppm	ASTM D5185m		0	0	0
ADDITIVES	ррпп	method	limit/base	current	history1	history2
					•	
Boron	ppm	ASTM D5185m	0	2	0	<1
Barium	ppm		0	0	0	0
Molybdenum	ppm	ASTM D5185m	60	59	63	58
Manganese	ppm					
Magnesium		ASTM D5185m		0	<1	<1
-	ppm	ASTM D5185m	1010	964	1033	897
Calcium	ppm	ASTM D5185m ASTM D5185m	1010 1070	964 1035	1033 1160	897 1031
Calcium Phosphorus	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	1010 1070 1150	964 1035 1044	1033 1160 1103	897 1031 882
Calcium Phosphorus Zinc	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	1010 1070 1150 1270	964 1035 1044 1297	1033 1160 1103 1346	897 1031 882 1108
Calcium Phosphorus Zinc Sulfur	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	1010 1070 1150 1270 2060	964 1035 1044 1297 3627	1033 1160 1103 1346 3512	897 1031 882 1108 2879
Calcium Phosphorus Zinc Sulfur CONTAMINAN	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method	1010 1070 1150 1270 2060 limit/base	964 1035 1044 1297 3627 current	1033 1160 1103 1346 3512 history1	897 1031 882 1108 2879 history2
Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon	ppm ppm ppm ppm TS	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m	1010 1070 1150 1270 2060	964 1035 1044 1297 3627 current	1033 1160 1103 1346 3512 history1	897 1031 882 1108 2879 history2
Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m Method ASTM D5185m ASTM D5185m	1010 1070 1150 1270 2060 limit/base >25	964 1035 1044 1297 3627 current 5	1033 1160 1103 1346 3512 history1 6	897 1031 882 1108 2879 history2 6 4
Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon	ppm ppm ppm ppm TS	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m	1010 1070 1150 1270 2060 limit/base	964 1035 1044 1297 3627 current	1033 1160 1103 1346 3512 history1	897 1031 882 1108 2879 history2
Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium	ppm ppm ppm ppm TS ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m Method ASTM D5185m ASTM D5185m	1010 1070 1150 1270 2060 limit/base >25	964 1035 1044 1297 3627 current 5	1033 1160 1103 1346 3512 history1 6	897 1031 882 1108 2879 history2 6 4
Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium	ppm ppm ppm ppm TS ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m	1010 1070 1150 1270 2060 limit/base >25 >20	964 1035 1044 1297 3627 current 5 2	1033 1160 1103 1346 3512 history1 6 5	897 1031 882 1108 2879 history2 6 4
Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED	ppm ppm ppm ppm TS ppm ppm	ASTM D5185m	1010 1070 1150 1270 2060 limit/base >25 >20 limit/base	964 1035 1044 1297 3627 current 5 2 2	1033 1160 1103 1346 3512 history1 6 5 2	897 1031 882 1108 2879 history2 6 4 1
Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot %	ppm ppm ppm ppm ppm TS ppm ppm ppm	ASTM D5185m method *ASTM D7844	1010 1070 1150 1270 2060 limit/base >25 >20 limit/base	964 1035 1044 1297 3627 current 5 2 2 current	1033 1160 1103 1346 3512 history1 6 5 2 history1 0.4	897 1031 882 1108 2879 history2 6 4 1 history2
Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot % Nitration	ppm ppm ppm ppm TS ppm ppm ppm Abs/cm	ASTM D5185m method *ASTM D7844 *ASTM D7624 *ASTM D7415	1010 1070 1150 1270 2060 limit/base >25 >20 limit/base	964 1035 1044 1297 3627 current 5 2 2 current 0.2 6.1	1033 1160 1103 1346 3512 history1 6 5 2 history1 0.4 8.8	897 1031 882 1108 2879 history2 6 4 1 history2 0.3 8.5
Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot % Nitration Sulfation	ppm ppm ppm ppm TS ppm ppm ppm Abs/cm	ASTM D5185m method *ASTM D7844 *ASTM D7624 *ASTM D7415	1010 1070 1150 1270 2060 limit/base >25 >20 limit/base >4 >20 >30	964 1035 1044 1297 3627 current 5 2 2 current 0.2 6.1 18.3	1033 1160 1103 1346 3512 history1 6 5 2 history1 0.4 8.8 19.4	897 1031 882 1108 2879 history2 6 4 1 history2 0.3 8.5 19.9



OIL ANALYSIS REPORT



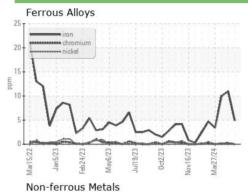


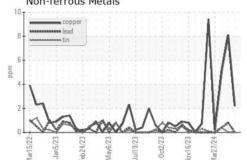


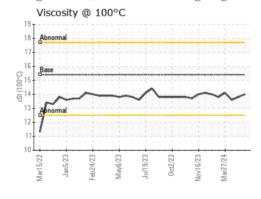
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	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

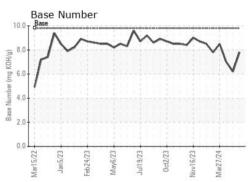
FLUID PROPERTIES		method				history2
Visc @ 100°C	cSt	ASTM D445	15.4	14.0	13.8	13.6

GRAPHS













Certificate 12367

Laboratory Sample No. Lab Number : 06240028

Test Package : FLEET

: GFL0127258 Unique Number : 11128862

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received : 18 Jul 2024 **Tested** : 19 Jul 2024

Diagnosed : 19 Jul 2024 - Wes Davis

GFL Environmental - 955 - Montgomery

1121 Wilbanks St Montgomery, AL US 36108

Contact: LISA REEVES

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)

Report Id: GFL955 [WUSCAR] 06240028 (Generated: 07/19/2024 11:20:57) Rev: 1

Submitted By: Lisa Goldman

T:

F: