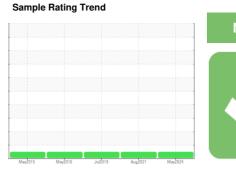


OIL ANALYSIS REPORT

FLEET OTTAWA 6634 (S/N 301323)

Diesel Engine

PETRO CANADA DURON SHP 10W30 (--- QTS)





DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Metal levels are typical for a new component breaking in.

Contamination

There is no indication of any contamination in the

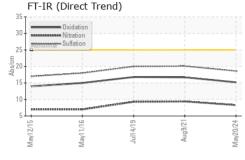
Fluid Condition

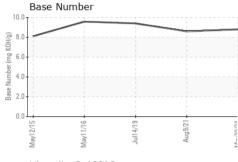
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

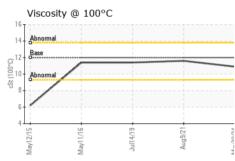
QTS)		May2015	May2016	Jul2019 Aug 2021	May2024	
SAMPLE INFOR	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PCA0124265	PCA0055002	PCA0004684
Sample Date		Client Info		20 May 2024	09 Aug 2021	14 Jul 2019
Machine Age	mls	Client Info		11180	6	11149
Oil Age	mls	Client Info		0	6	0
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	8	42	12
Chromium	ppm	ASTM D5185m	>20	1	5	2
Nickel	ppm	ASTM D5185m	>2	0	3	0
Titanium	ppm	ASTM D5185m	>2	2	<1	<1
Silver	ppm	ASTM D5185m	>2	0	0	<1
Aluminum	ppm	ASTM D5185m	>25	<1	3	2
Lead	ppm	ASTM D5185m	>40	0	2	2
Copper	ppm	ASTM D5185m	>330	1	9	4
Tin	ppm	ASTM D5185m	>15	0	<1	0
Antimony	ppm	ASTM D5185m			0	0
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		0	0	0
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	2	0	10	8
Barium	ppm	ASTM D5185m	0	0	0	0
Maludada	PPIII	AOTIVI DOTOJITI	U	-	0	U
Molybdenum	ppm	ASTM D5185m	50	59	63	58
Manganese						-
	ppm	ASTM D5185m ASTM D5185m ASTM D5185m	50 0 950	59	63 <1 954	58 <1 1020
Manganese Magnesium Calcium	ppm	ASTM D5185m ASTM D5185m	50	59 <1	63 <1	58 <1
Manganese Magnesium	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	50 0 950	59 <1 958	63 <1 954	58 <1 1020
Manganese Magnesium Calcium	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	50 0 950 1050	59 <1 958 1213	63 <1 954 1176	58 <1 1020 1178
Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	50 0 950 1050 995	59 <1 958 1213 1125	63 <1 954 1176 1054	58 <1 1020 1178 993
Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	50 0 950 1050 995 1180	59 <1 958 1213 1125 1293 3738 current	63 <1 954 1176 1054 1301 2594 history1	58 <1 1020 1178 993 1224 2588 history2
Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	50 0 950 1050 995 1180 2600	59 <1 958 1213 1125 1293 3738 current <1	63 <1 954 1176 1054 1301 2594	58 <1 1020 1178 993 1224 2588
Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	50 0 950 1050 995 1180 2600	59 <1 958 1213 1125 1293 3738 current	63 <1 954 1176 1054 1301 2594 history1	58 <1 1020 1178 993 1224 2588 history2
Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	50 0 950 1050 995 1180 2600	59 <1 958 1213 1125 1293 3738 current <1	63 <1 954 1176 1054 1301 2594 history1	58 <1 1020 1178 993 1224 2588 history2 4
Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium	ppm	ASTM D5185m	50 0 950 1050 995 1180 2600 limit/base >25	59 <1 958 1213 1125 1293 3738 current <1	63 <1 954 1176 1054 1301 2594 history1 2	58 <1 1020 1178 993 1224 2588 history2 4
Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium	ppm	ASTM D5185m	50 0 950 1050 995 1180 2600 limit/base >25 >20	59 <1 958 1213 1125 1293 3738 current <1 3 0	63 <1 954 1176 1054 1301 2594 history1 2 1	58 <1 1020 1178 993 1224 2588 history2 4 4 3
Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED	ppm	ASTM D5185m	50 0 950 1050 995 1180 2600 limit/base >25 >20	59 <1 958 1213 1125 1293 3738 current <1 3 0 current	63 <1 954 1176 1054 1301 2594 history1 2 1 0 history1	58 <1 1020 1178 993 1224 2588 history2 4 3 history2
Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot %	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m Method ASTM D5185m	50 0 950 1050 995 1180 2600 limit/base >25 >20 limit/base	59 <1 958 1213 1125 1293 3738 current <1 3 0 current 0.2	63 <1 954 1176 1054 1301 2594 history1 2 1 0 history1 0.3	58 <1 1020 1178 993 1224 2588 history2 4 4 3 history2 0.2
Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot % Nitration	ppm	ASTM D5185m Method ASTM D5185m	50 0 950 1050 995 1180 2600 limit/base >25 >20 limit/base >3 >20	59 <1 958 1213 1125 1293 3738 current <1 3 0 current 0.2 8.3	63 <1 954 1176 1054 1301 2594 history1 2 1 0 history1 0.3 9.4	58 <1 1020 1178 993 1224 2588 history2 4 4 3 history2 0.2 9.3
Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot % Nitration Sulfation	ppm	ASTM D5185m Method ASTM D5185m Method *ASTM D7844 *ASTM D7624 *ASTM D7415	50 0 950 1050 995 1180 2600 limit/base >25 >20 limit/base >3 >20 >30 limit/base	59 <1 958 1213 1125 1293 3738 current <1 3 0 current 0.2 8.3 18.6	63 <1 954 1176 1054 1301 2594 history1 2 1 0 history1 0.3 9.4 20.1	58 <1 1020 1178 993 1224 2588 history2 4 4 3 history2 0.2 9.3 20

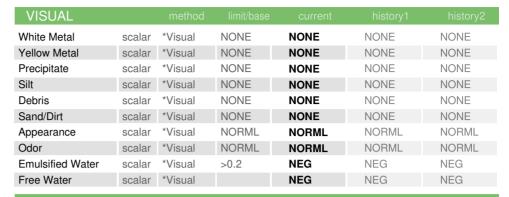


OIL ANALYSIS REPORT



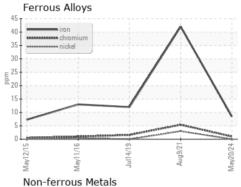


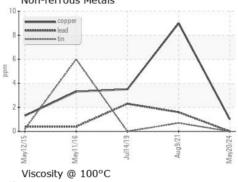


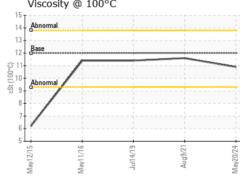


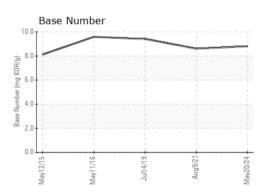
FLUID PROPI	ERTIES	method			history1	history2
Visc @ 100°C	cSt	ASTM D445	12.00	10.9	11.6	11.4

GRAPHS













Laboratory Sample No.

: PCA0124265 Lab Number : 06197273 Unique Number : 11059396

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received : 03 Jun 2024 **Tested** : 03 Jun 2024

Diagnosed : 03 Jun 2024 - Wes Davis

Test Package : FLEET Certificate 12367 To discuss this sample report, contact Customer Service at 1-800-237-1369.

 st - 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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