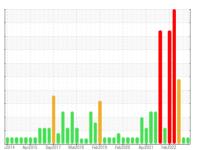


OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id 10256 Component

Diesel Engine

PETRO CANADA DURON SHP 15W40 (11 GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor. (Customer Sample Comment: The hours are incorrect working on fixing the issues)

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

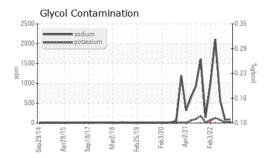
Fluid Condition

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

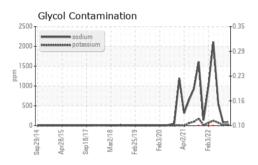
GAL) 2014 Apr2015 Sep2017 Mar2018 Feb2020 Apr2021 Feb2020 Apr2021 Feb2022						
SAMPLE INFORI	MATION	method	limit/base	current	history1	history2
Sample Number Sample Date		Client Info		GFL0050888 29 Sep 2023	GFL0069757 18 Jul 2023	GFL0050834 17 Aug 2022
Machine Age	hrs	Client Info		3960	9068	7017
Oil Changed	hrs	Client Info		3960 Changed	9068 Not Changd	685 Changed
Oil Changed Sample Status		Ciletit iiilo		Changed NORMAL	NORMAL	ABNORMAL
CONTAMINAT	ION	method	limit/base	-	history1	history2
Fuel		WC Method		<1.0	<1.0	<1.0
WEAR METAL	S	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>130	73	62	53
Chromium	ppm	ASTM D5185m	>10	3	3	7
Nickel	ppm	ASTM D5185m	>4	<1	<1	0
Titanium	ppm	ASTM D5185m	>2	0	0	<1
Silver	ppm	ASTM D5185m	>2	0	0	<1
Aluminum	ppm	ASTM D5185m	>20	16	15	<u>^</u> 6
Lead	ppm	ASTM D5185m	>20	1	0	1
Copper	ppm	ASTM D5185m	>125	2	2	12
Tin	ppm	ASTM D5185m	>4	1	<1	<1
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		0	0	0
ADDITIVES		mathad	Paralle /Income	ourrant.	المرسمة ما	history2
ADDITIVES		method	limit/base	current	history1	HISTOLYZ
Boron	ppm	ASTM D5185m	0	9	10	138
	ppm					
Boron		ASTM D5185m	0	9	10	138
Boron Barium	ppm	ASTM D5185m ASTM D5185m	0 0 60	9	10 <1	138 0
Boron Barium Molybdenum	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	0 0 60	9 0 74	10 <1 72	138 0 53
Boron Barium Molybdenum Manganese	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 60 0	9 0 74 <1	10 <1 72 <1	138 0 53 <1
Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 60 0 1010	9 0 74 <1 937	10 <1 72 <1 969	138 0 53 <1 191
Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 60 0 1010 1070	9 0 74 <1 937 1207	10 <1 72 <1 969 1261	138 0 53 <1 191 1835
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 60 0 1010 1070 1150	9 0 74 <1 937 1207 1000	10 <1 72 <1 969 1261 1070	138 0 53 <1 191 1835 937
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 60 0 1010 1070 1150	9 0 74 <1 937 1207 1000	10 <1 72 <1 969 1261 1070 1349	138 0 53 <1 191 1835 937 1116
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 60 0 1010 1070 1150 1270 2060	9 0 74 <1 937 1207 1000 1264 2823	10 <1 72 <1 969 1261 1070 1349 3505	138 0 53 <1 191 1835 937 1116 3312
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	0 0 60 0 1010 1070 1150 1270 2060	9 0 74 <1 937 1207 1000 1264 2823	10 <1 72 <1 969 1261 1070 1349 3505 history1	138 0 53 <1 191 1835 937 1116 3312 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	0 0 60 0 1010 1070 1150 1270 2060	9 0 74 <1 937 1207 1000 1264 2823 current	10 <1 72 <1 969 1261 1070 1349 3505 history1 8 74 13	138 0 53 <1 191 1835 937 1116 3312 history2 27 554 73
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	0 0 60 0 1010 1070 1150 1270 2060 limit/base	9 0 74 <1 937 1207 1000 1264 2823 current 9	10 <1 72 <1 969 1261 1070 1349 3505 history1 8 74	138 0 53 <1 191 1835 937 1116 3312 history2 27 554
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium	ppm	ASTM D5185m	0 0 60 0 1010 1070 1150 1270 2060 limit/base	9 0 74 <1 937 1207 1000 1264 2823 current 9 91	10 <1 72 <1 969 1261 1070 1349 3505 history1 8 74 13	138 0 53 <1 191 1835 937 1116 3312 history2 27 554 73
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium Glycol	ppm	ASTM D5185m	0 0 60 0 1010 1070 1150 1270 2060 limit/base >25	9 0 74 <1 937 1207 1000 1264 2823 current 9 91 26 NEG	10 <1 72 <1 969 1261 1070 1349 3505 history1 8 74 13 NEG	138 0 53 <1 191 1835 937 1116 3312 history2 27 554 73 NEG
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium Glycol INFRA-RED	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m *ASTM D2982	0 0 60 0 1010 1150 1270 2060 limit/base >25 >20	9 0 74 <1 937 1207 1000 1264 2823 current 9 91 26 NEG	10 <1 72 <1 969 1261 1070 1349 3505 history1 8 74 13 NEG history1	138 0 53 <1 191 1835 937 1116 3312 history2 ▲ 27 ▲ 554 ▲ 73 NEG
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium Glycol INFRA-RED Soot %	ppm	ASTM D5185m *ASTM D5185m	0 0 60 0 1010 1150 1270 2060 limit/base >25 >20	9 0 74 <1 937 1207 1000 1264 2823 current 9 91 26 NEG current 2.4	10 <1 72 <1 969 1261 1070 1349 3505 history1 8 74 13 NEG history1 1.7	138 0 53 <1 191 1835 937 1116 3312 history2 ▲ 27 ▲ 554 ▲ 73 NEG history2 0.4
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium Glycol INFRA-RED Soot % Nitration	ppm	ASTM D5185m *ASTM D7844 *ASTM D7624 *ASTM D7624	0 0 60 0 1010 1150 1270 2060 limit/base >25 >20	9 0 74 <1 937 1207 1000 1264 2823 current 9 91 26 NEG current 2.4 13.0	10 <1 72 <1 969 1261 1070 1349 3505 history1 8 74 13 NEG history1 1.7	138 0 53 <1 191 1835 937 1116 3312 history2 ▲ 27 ▲ 554 ▲ 73 NEG history2 0.4 10.2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium Glycol INFRA-RED Soot % Nitration Sulfation	ppm	ASTM D5185m *ASTM D7844 *ASTM D7624 *ASTM D7624	0 0 0 0 1010 1070 1150 1270 2060 limit/base >25 >20	9 0 74 <1 937 1207 1000 1264 2823 current 9 91 26 NEG current 2.4 13.0 26.7	10 <1 72 <1 969 1261 1070 1349 3505 history1 8 74 13 NEG history1 1.7 11.6 23.9	138 0 53 <1 191 1835 937 1116 3312 history2 ▲ 27 ▲ 554 ▲ 73 NEG history2 0.4 10.2 22.0



OIL ANALYSIS REPORT



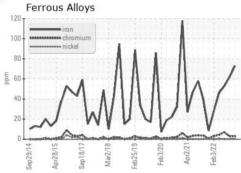
T	ormal					
6 - Base	-					
	ormal	W	M	1	\sim	
0-			1/	-		
8-			- V			

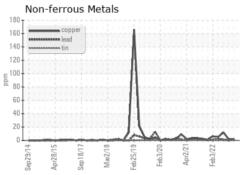


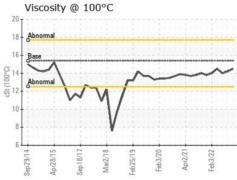
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual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

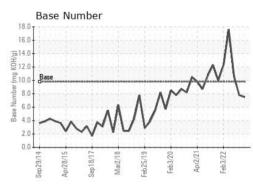
FLUID PROPERTIES		method				history2
Visc @ 100°C	cSt	ASTM D445	15.4	14.5	14.2	14.0

GRAPHS













Certificate L2367

Laboratory Sample No. Lab Number Unique Number

: GFL0050888 : 05969536 : 10676087

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received : 04 Oct 2023 Diagnosed

: 12 Oct 2023 Diagnostician : Doug Bogart

Test Package : FLEET (Additional Tests: Glycol)

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)

Contact: TECHNICIAN ACCOUNT catherine.anastasio@wearcheck.com

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Piedmont, SC

US 29673