

OIL ANALYSIS REPORT

Sample Rating Trend



Area GFL035 834035

Diesel Engine PETRO CANADA DURON SHP 15W40 (42 QTS)

SAMPLE INFORMATION method

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 acceptable for the time in service.

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Sample Number		Client Info		GFL0116483	GFL0102333	GFL0071624
Sample Date	la va	Client Info		07 May 2024	23 Jan 2024	11 Oct 2023
Machine Age	hrs	Client Info		0	0	637
Oil Age	hrs	Client Info		600 Not Observed	600	0
Oil Changed		Client Info		Not Changd	Not Changd	N/A
Sample Status				NORMAL	ABNORMAL	NORMAL
CONTAMINATI	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	19	23	54
Chromium	ppm	ASTM D5185m	>20	<1	<1	<1
Nickel	ppm	ASTM D5185m	>5	1	1	2
Titanium	ppm	ASTM D5185m	>2	<1	0	0
Silver	ppm	ASTM D5185m	>2	0	<1	<1
Aluminum	ppm	ASTM D5185m	>20	2	4	0
Lead	ppm	ASTM D5185m	>40	1	2	1
Copper	ppm	ASTM D5185m	>330	3	4	20
Tin	ppm	ASTM D5185m	>15	2	2	1
Vanadium	ppm	ASTM D5185m		<1	0	0
Cadmium	ppm	ASTM D5185m		<1	0	0
ADDITIVES		ام م والا م مور	Parel Dansa		In the term of the	biotory ()
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	limit/base	current 9	nistory i 8	9
	ppm ppm					
Boron		ASTM D5185m	0	9	8	9
Boron Barium	ppm	ASTM D5185m ASTM D5185m	0	9 2	8 <1	9
Boron Barium Molybdenum	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	0 0 60	9 2 58	8 <1 57	9 6 53
Boron Barium Molybdenum Manganese	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 60 0	9 2 58 1	8 <1 57 3	9 6 53 16
Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 60 0 1010	9 2 58 1 560	8 <1 57 3 609	9 6 53 16 710
Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 60 0 1010 1070	9 2 58 1 560 1634	8 <1 57 3 609 1617	9 6 53 16 710 1067
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	0 0 60 0 1010 1070 1150	9 2 58 1 560 1634 759	8 <1 57 3 609 1617 715	9 6 53 16 710 1067 629
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	0 0 60 0 1010 1070 1150 1270	9 2 58 1 560 1634 759 982	8 <1 57 3 609 1617 715 991	9 6 53 16 710 1067 629 877
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	0 0 60 0 1010 1070 1150 1270 2060	9 2 58 1 560 1634 759 982 2618	8 <1 57 3 609 1617 715 991 2373	9 6 53 16 710 1067 629 877 2338
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN	ppm 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 1010 1070 1150 1270 2060	9 2 58 1 560 1634 759 982 2618 current	8 <1 57 3 609 1617 715 991 2373 history1	9 6 53 16 710 1067 629 877 2338 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon	ppm ppm ppm ppm ppm ppm ppm ppm TS	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method	0 0 60 1010 1070 1150 1270 2060	9 2 58 1 560 1634 759 982 2618 2618 current 6	8 <1 57 3 609 1617 715 991 2373 history1 8	9 6 53 16 710 1067 629 877 2338 history2 35
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm TS	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m	0 0 60 0 1010 1070 1150 1270 2060 limit/base	9 2 58 1 560 1634 759 982 2618 <u>current</u> 6 8	8 <1 57 3 609 1617 715 991 2373 history1 8 8 8	9 6 53 16 710 1067 629 877 2338 history2 35 2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm TS	ASTM D5185m ASTM D5185m	0 0 0 1010 1070 1150 1270 2060 limit/base >25 >20	9 2 58 1 560 1634 759 982 2618 <u>current</u> 6 8 6	8 <1 57 3 609 1617 715 991 2373 history1 8 8 8 3	9 6 53 16 710 1067 629 877 2338 history2 35 2 35 2 3
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Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot %	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	0 0 0 1010 1070 1150 1270 2060 limit/base >25 >20 limit/base >20	9 2 58 1 560 1634 759 982 2618 <i>current</i> 6 8 6 8 6 <i>current</i> 0	8 <1 57 3 609 1617 715 991 2373 history1 8 8 8 3 3 history1 0	9 6 53 16 710 1067 629 877 2338 history2 35 2 35 2 3 3 history2 0
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OIL ANALYSIS REPORT

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Lab Number : 0017		Diagnos			Felton		US 27263
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To discuss this sample report, contact • - Denotes test methods that are out	ct Customer Servic	ce at 1-800)-237-1369.	-		jorge.costa	@gflenv.com 36)668-3712

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012) Report Id: GFL035 [WUSCAR] 06176484 (Generated: 05/14/2024 14:28:33) Rev: 1

F: Submitted By: JORGE COSTA

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