

OIL ANALYSIS REPORT

Sample Rating Trend



528030-651132 Component Diesel Engine

PETRO CANADA DURON SHP 15W40 (8 GAL)

SAMPLE INFORMATION meth

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Machine Id

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

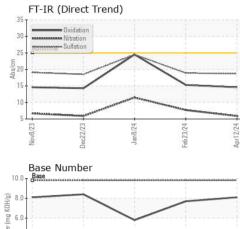
Fluid Condition

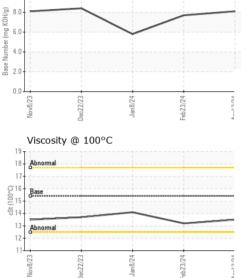
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

SAMPLE INFOR		method	limit/base	current	nistory i	nistory2
Sample Number		Client Info		GFL0065431	GFL0098678	GFL0098726
Sample Date		Client Info		12 Apr 2024	23 Feb 2024	08 Jan 2024
Machine Age	hrs	Client Info		8879	8458	8350
Oil Age	hrs	Client Info		150	150	150
Oil Changed		Client Info		Not Changd	Not Changd	Not Changd
Sample Status				NORMAL	NORMAL	NORMAL
-				Normize		
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	7	14	18
Chromium	ppm	ASTM D5185m	>20	<1	<1	<1
Nickel	ppm	ASTM D5185m	>5	0	<1	<1
Titanium	ppm	ASTM D5185m		0	<1	<1
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>20	<1	3	2
Lead	ppm	ASTM D5185m	>40	0	<1	6
Copper	ppm	ASTM D5185m	>330	<1	3	2
Tin	ppm	ASTM D5185m	>15	<1	<1	<1
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		0	0	0
	1-1-			-		-
		method			history1	history2
ADDITIVES	222		limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	1	1	<1
Boron Barium	ppm	ASTM D5185m ASTM D5185m	0	1 0	1 0	<1 0
Boron Barium Molybdenum	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	0 0 60	1 0 58	1 0 58	<1 0 58
Boron Barium Molybdenum Manganese	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 60 0	1 0 58 <1	1 0 58 <1	<1 0 58 <1
Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 60 0 1010	1 0 58 <1 969	1 0 58 <1 955	<1 0 58 <1 919
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	1 0 58 <1 969 1058	1 0 58 <1 955 1000	<1 0 58 <1 919 1003
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	1 0 58 <1 969 1058 1103	1 0 58 <1 955 1000 999	<1 0 58 <1 919 1003 992
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	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	1 0 58 <1 969 1058 1103 1280	1 0 58 <1 955 1000 999 1262	<1 0 58 <1 919 1003 992 1191
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 1010 1070 1150 1270 2060	1 0 58 <1 969 1058 1103	1 0 58 <1 955 1000 999 1262 3226	<1 0 58 <1 919 1003 992 1191 3001
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	1 0 58 <1 969 1058 1103 1280	1 0 58 <1 955 1000 999 1262	<1 0 58 <1 919 1003 992 1191
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 1010 1070 1150 1270 2060	1 0 58 <1 969 1058 1103 1280 3548	1 0 58 <1 955 1000 999 1262 3226	<1 0 58 <1 919 1003 992 1191 3001
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	1 0 58 <1 969 1058 1103 1280 3548 current	1 0 58 <1 955 1000 999 1262 3226 history1	<1 0 58 <1 919 1003 992 1191 3001 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 Limit/base	1 0 58 <1 969 1058 1103 1280 3548 current 3	1 0 58 <1 955 1000 999 1262 3226 history1 5	<1 0 58 <1 919 1003 992 1191 3001 history2 5
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 1010 1070 1150 1270 2060 Limit/base	1 0 58 <1 969 1058 1103 1280 3548 Current 3 2	1 0 58 <1 955 1000 999 1262 3226 history1 5 4	<1 0 58 <1 919 1003 992 1191 3001 history2 5 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	1 0 58 <1 969 1058 1103 1280 3548 current 3 2 0	1 0 58 <1 955 1000 999 1262 3226 history1 5 4 3	<1 0 58 <1 919 1003 992 1191 3001 history2 5 2 2 3
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED	ppm ppm ppm ppm ppm ppm ppm ppm TS	ASTM D5185m ASTM D5185m	0 0 0 1010 1070 1150 1270 2060 2060 225 >25 >20 imit/base >20	1 0 58 <1 969 1058 1103 1280 3548 <u>current</u> 3 2 0 <u>current</u> 0.2	1 0 58 <1 955 1000 999 1262 3226 history1 5 4 3 3 history1	<1 0 58 <1 919 1003 992 1191 3001 bistory2 5 2 3 bistory2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot %	ppm ppm ppm ppm ppm ppm ppm ppm TS ppm ppm	ASTM D5185m ASTM D5185m	0 0 0 1010 1070 1150 1270 2060 2060 225 >25 >20 imit/base >20	1 0 58 <1 969 1058 1103 1280 3548 current 3 2 0 0	1 0 58 <1 955 1000 999 1262 3226 history1 5 4 3 3 <i>history1</i> 0.3	<1 0 58 <1 919 1003 992 1191 3001 history2 5 2 3 3 history2 0.2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot % Nitration	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	0 0 0 1010 1070 1150 1270 2060 <i>limit/base</i> >25 >20 <i>limit/base</i> >4 >20	1 0 58 <1 969 1058 1103 1280 3548 <i>current</i> 3 2 0 <i>current</i> 0.2 5.9	1 0 58 <1 955 1000 999 1262 3226 history1 5 4 3 3 history1 0.3 7.7	<1 0 58 <1 919 1003 992 1191 3001 history2 5 2 3 3 history2 0.2 11.5
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot % Nitration Sulfation	ppm ppm ppm ppm ppm ppm ppm ppm TS ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D7844 *ASTM D7844 *ASTM D7844	0 0 0 1010 1070 1150 2260 2060 225 220 220 imit/base >4 >20 >30	1 0 58 <1 969 1058 1103 1280 3548 Current 3 2 0 Current 0.2 5.9 18.7 Current	1 0 58 <1 955 1000 999 1262 3226 history1 5 4 3 3 history1 0.3 7.7 18.9 history1	<1 0 58 <1 919 1003 992 1191 3001 history2 5 2 3 history2 0.2 11.5 24.5 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot % Nitration Sulfation	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	0 0 0 1010 1070 1150 1270 2060 /////////////////////////////////	1 0 58 <1 969 1058 1103 1280 3548 <u>current</u> 3 2 0 <u>current</u> 0.2 5.9 18.7	1 0 58 <1 955 1000 999 1262 3226 history1 5 4 3 3 <u>history1</u> 0.3 7.7 18.9	<1 0 58 <1 919 1003 992 1191 3001 bistory2 5 2 3 history2 0.2 11.5 24.5

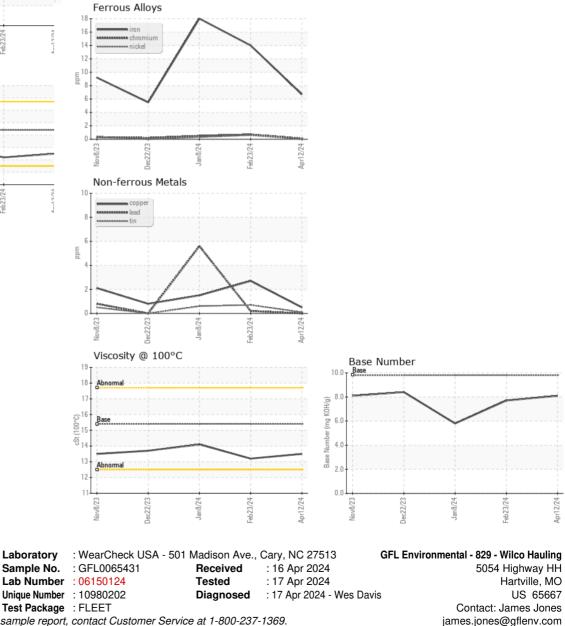


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VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*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	13.5	13.2	14.1
GRAPHS						



Certificate L2367 Test Pace To discuss this sample i * - Denotes test method Statements of conformit

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 Certificate L2367
 Test Package
 : FLEET

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

 * - 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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