

OIL ANALYSIS REPORT

Sample Rating Trend



Machine Id **125276** Component

Diesel Engine

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

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor. Please specify the component make and model with your next sample.

Wear

Metal levels are typical for a new component breaking in.

Contamination

There is no indication of any contamination in the oil.

Fluid Condition

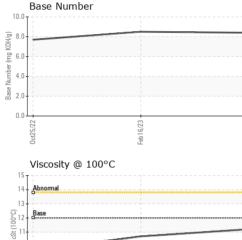
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

TS)		Oct	2022	Feb2023 Jul202	3	
SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PCA0101312	PCA0092380	PCA0082001
Sample Date		Client Info		06 Jul 2023	16 Feb 2023	25 Oct 2022
Machine Age	mls	Client Info		2963	7541	0
Oil Age	mls	Client Info		0	0	0
Oil Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	ABNORMAL
CONTAMINAT	ION	method	limit/base	current	history1	history2
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Glycol		WC Method		NEG	NEG	NEG
WEAR METAL	S	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>100	29	16	31
Chromium	ppm	ASTM D5185m		<1	0	<1
Nickel	ppm	ASTM D5185m	>4	<1	0	<1
Titanium	ppm	ASTM D5185m	-	0	0	0
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m		6	5	8
Lead	ppm	ASTM D5185m	>40	1	0	2
Copper	ppm	ASTM D5185m		125	24	120
Tin	ppm	ASTM D5185m	>15	2	<1	3
Vanadium	ppm	ASTM D5185m	210	0	0	<1
Cadmium	ppm	ASTM D5185m		0	0	0
				U	0	0
ADDITIVES	pp	method	limit/base	current	history1	history2
ADDITIVES Boron		method	limit/base	current	history1	
Boron	ppm	method ASTM D5185m	2	current 10		history2
Boron Barium	ppm ppm	method ASTM D5185m ASTM D5185m	2 0	current 10 0	history1 28 0	history2 164 4
Boron Barium Molybdenum	ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50	current 10 0 64	history1 28 0 57	history2 164 4 12
Boron Barium Molybdenum Manganese	ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 0	current 10 0 64 <1	history1 28 0 57 <1	history2 164 4 12 3
Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 0 950	current 10 0 64 <1 863	history1 28 0 57 <1 734	history2 164 4 12 3 17
Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 0 950 1050	current 10 0 64 <1 863 1147	history1 28 0 57 <1 734 1159	history2 164 4 12 3 17 1044
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 0 950 1050 995	current 10 0 64 <1 863 1147 1047	history1 28 0 57 <1 734 1159 882	history2 164 4 12 3 17 1044 781
Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 0 950 1050	current 10 0 64 <1 863 1147	history1 28 0 57 <1 734 1159	history2 164 4 12 3 17 1044
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m	2 0 50 950 1050 995 1180	current 10 0 64 <1 863 1147 1047 1224	history1 28 0 57 <1	history2 164 4 12 3 17 1044 781 973
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 950 1050 995 1180 2600	Current 10 0 64 <1 863 1147 1047 1224 3090	history1 28 0 57 <1 734 1159 882 1118 3090	history2 164 4 12 3 17 1044 781 973 3114
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon	ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 950 1050 995 1180 2600	current 10 0 64 <1 863 1147 1047 1224 3090 current	history1 28 0 57 <1	history2 164 4 12 3 17 1044 781 973 3114 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN	ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m	2 0 50 950 1050 995 1180 2600 limit/base >25	current 10 0 64 <1 863 1147 1047 1224 3090 current 10	history1 28 0 57 <1	history2 164 4 12 3 17 1044 781 973 3114 history2 ▲ 57
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m	2 0 50 950 1050 995 1180 2600 limit/base >25	current 10 0 64 <1 863 1147 1047 1224 3090 current 10 0	history1 28 0 57 <1	history2 164 4 12 3 17 1044 781 973 3114 • history2 ▲ 57 4
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m	2 0 50 950 1050 995 1180 2600 limit/base >25	current 10 0 64 <1 863 1147 1047 1224 3090 current 10 0 2	history1 28 0 57 <1	history2 164 4 12 3 17 1044 781 973 3114 bistory2 ▲ 57 4 5
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m	2 0 50 950 1050 995 1180 2600 imit/base >25 >20 imit/base >3	current 10 0 64 <1 863 1147 1047 1224 3090 current 10 0 2 current	history1 28 0 57 <1	history2 164 4 12 3 17 1044 781 973 3114 history2 57 4 5 history2
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 TS ppm ppm	method ASTM D5185m	2 0 50 950 1050 995 1180 2600 limit/base >25 >20 limit/base >3 >20	current 10 0 64 <1 863 1147 1047 1224 3090 current 10 0 2 current 0.4	history1 28 0 57 <1	history2 164 4 12 3 17 1044 781 973 3114 bistory2 ↓ 57 4 57 4 5 history2 0.1
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	method ASTM D5185m	2 0 50 950 1050 995 1180 2600 limit/base >25 >20 limit/base >3 >20	current 10 0 64 <1 863 1147 1047 1224 3090 current 10 2 current 0.4 9.3	history1 28 0 57 <1	 history2 164 4 12 3 17 1044 781 973 3114 history2 57 4 5 history2 0.1 8.4
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	method ASTM D5185m ASTM D5185m	2 0 50 0 950 1050 995 1180 2600 imit/base >25 20 imit/base >3 >20 30	current 10 0 64 <1 863 1147 1047 1224 3090 current 10 0 2 current 0.4 9.3 19.6	history1 28 0 57 <1	history2 164 12 3 17 1044 781 973 3114 bistory2 57 4 57 4 5 history2 0.1 8.4 15.8

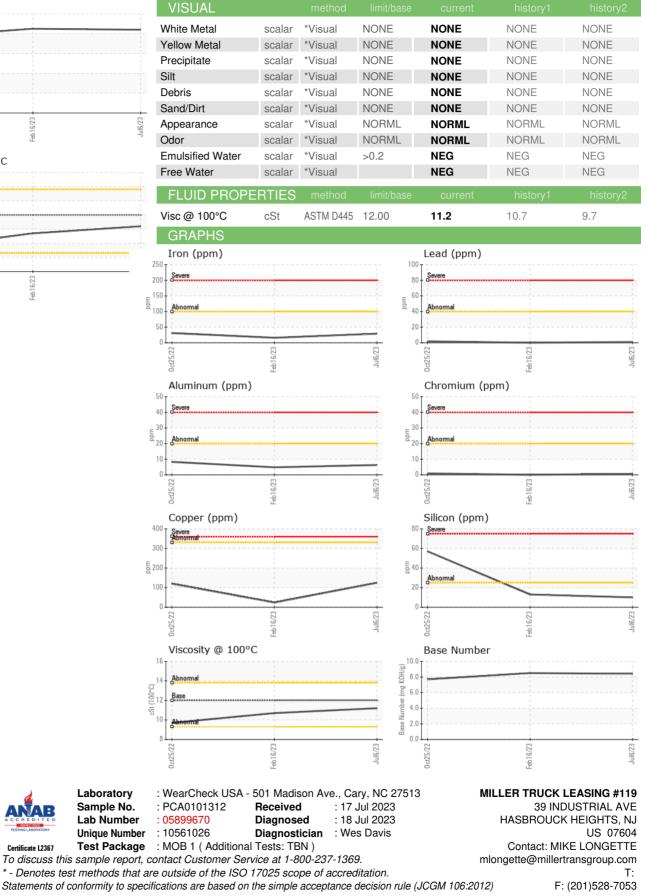


Abnorma

OIL ANALYSIS REPORT



Feb16/23



Certificate L2367

Contact/Location: MIKE LONGETTE - MILRUT