

## **OIL ANALYSIS REPORT**

Sample Rating Trend



Machine Id

#### 631683 Component Diesel Engine Fluid PETRO CANADA DURON SHP 10W30 (--- GAL)

### 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.

SAMPLE INFOR	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PCA0125178	PCA0118984	PCA0108379
Sample Date		Client Info		14 Jun 2024	27 Feb 2024	20 Oct 2023
Machine Age	mls	Client Info		50877	42114	14048
Oil Age	mls	Client Info		50877	42114	14048
Oil Changed		Client Info		Not Changd	Changed	Changed
Sample Status				NORMAL	ABNORMAL	ABNORMAL
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	31	101	63
Chromium	ppm	ASTM D5185m	>20	1	4	3
Nickel	ppm	ASTM D5185m	>4	<1	2	<1
Titanium	ppm	ASTM D5185m		12	<1	<1
Silver	ppm	ASTM D5185m	>3	<1	<1	0
Aluminum	ppm	ASTM D5185m	>20	13	40	39
Lead	ppm	ASTM D5185m	>40	0	0	3
Copper	ppm	ASTM D5185m	>330	78	<b>A</b> 374	<b>3</b> 97
Tin	ppm	ASTM D5185m	>15	1	6	5
Vanadium	ppm	ASTM D5185m		<1	<1	0
Cadmium	nnm	ASTM D5185m		•	0	0
Oddinium	ppm	ASTIVI DSTOSIII		0	0	0
ADDITIVES	ррш	method	limit/base	current	0 history1	0 history2
	ppm		limit/base	current 21	-	history2 26
ADDITIVES		method	2	current	history1	history2
ADDITIVES Boron	ppm	method ASTM D5185m	2 0 50	current 21 0 49	history1 21 <1 47	history2 26 0 46
ADDITIVES Boron Barium	ppm ppm	method ASTM D5185m ASTM D5185m	2 0 50 0	current 21 0	history1 21 <1 47 5	history2 26 0 46 4
ADDITIVES Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 0 950	current 21 0 49 1 844	history1 21 <1 47 5 656	history2 26 0 46 4 547
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 0 950 1050	Current 21 0 49 1 844 1324	history1 21 <1 47 5 656 1719	history2 26 0 46 4 547 1596
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	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 21 0 49 1 844 1324 1048	history1 21 <1 47 5 656 1719 893	history2 26 0 46 4 547 1596 692
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm	method     ASTM D5185m	2 0 50 950 1050 995 1180	Current 21 0 49 1 844 1324 1048 1282	history1 21 <1 47 5 656 1719 893 1083	history2 26 0 46 4 547 1596 692 953
ADDITIVES 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	2 0 50 0 950 1050 995	Current 21 0 49 1 844 1324 1048	history1 21 <1 47 5 656 1719 893	history2 26 0 46 4 547 1596 692
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	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 ASTM D5185m	2 0 50 950 1050 995 1180	Current 21 0 49 1 844 1324 1048 1282	history1 21 <1 47 5 656 1719 893 1083	history2 26 0 46 4 547 1596 692 953
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon	ppm ppm ppm ppm ppm ppm ppm ppm	method     ASTM D5185m	2 0 50 950 1050 995 1180 2600	current     21     0     49     1     844     1324     1048     1282     3322     current     5	history1 21 <1 47 5 656 1719 893 1083 1946	history2 26 0 46 4 547 1596 692 953 1578
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm ppm	method     ASTM D5185m	2 0 50 950 1050 995 1180 2600 limit/base	current     21     0     49     1     844     1324     1048     1282     3322     current     5     6	history1     21     <1     47     5     656     1719     893     1083     1946     history1     8     7	history2     26     0     46     4     547     1596     692     953     1578     history2     7     7     7
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	method     ASTM D5185m	2 0 50 950 1050 995 1180 2600	current     21     0     49     1     844     1324     1048     1282     3322     current     5	history1     21     <1     47     5     656     1719     893     1083     1946     history1     8	history2     26     0     46     4     547     1596     692     953     1578     history2     7
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED	ppm ppm ppm ppm ppm ppm ppm ppm ppm <b>TS</b>	method     ASTM D5185m	2 0 50 950 1050 995 1180 2600 limit/base	current     21     0     49     1     844     1324     1048     1282     3322     current     5     6	history1     21     <1     47     5     656     1719     893     1083     1946     history1     8     7	history2     26     0     46     4     547     1596     692     953     1578     history2     7     7     7
ADDITIVES 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	method     ASTM D5185m	2 0 50 0 950 1050 995 1180 2600 <b>limit/base</b> >25 >20 <b>limit/base</b> >3	current     21     0     49     1     844     1324     1048     1282     3322     current     5     6     31     current     0.7	history1   21   <1   47   5   656   1719   893   1083   1946   history1   8   7   124   history1   1.5	history2     26     0     46     4     547     1596     692     953     1578     history2     7     7     112     history2     0.9
ADDITIVES 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 0 950 1050 995 1180 2600 <b>limit/base</b> >25 >20 <b>limit/base</b> >3	current     21     0     49     1     844     1324     1048     1282     3322     current     5     6     31     current	history1   21   <1   47   5   656   1719   893   1083   1946   history1   8   7   124   history1	history2   26   0   46   4   547   1596   692   953   1578   history2   7   7   112   history2
ADDITIVES 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	method     ASTM D5185m	2 0 50 0 950 1050 995 1180 2600 <b>limit/base</b> >25 >20 <b>limit/base</b> >3	current     21     0     49     1     844     1324     1048     1282     3322     current     5     6     31     current     0.7	history1   21   <1   47   5   656   1719   893   1083   1946   history1   8   7   124   history1   1.5	history2     26     0     46     4     547     1596     692     953     1578     history2     7     7     112     history2     0.9
ADDITIVES 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 <b>TS</b> ppm ppm ppm	method     ASTM D5185m     ASTM D5185m	2 0 50 0 950 1050 995 1180 2600 <b>limit/base</b> >25 >20 <b>limit/base</b> >3 >20	current     21     0     49     1     844     1324     1048     1282     3322     current     5     6     31     current     0.7     8.6	history1   21   <1   47   5   656   1719   893   1083   1946   history1   8   7   124   history1   1.5   14.2	history2   26   0   46   4   547   1596   692   953   1578   history2   7   7   112   history2   0.9   11.4
ADDITIVES 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 <b>TS</b> ppm ppm ppm	method     ASTM D5185m     ASTM D5185m	2 0 50 950 1050 995 1180 2600 <b>imit/base</b> >25 <b>imit/base</b> >3 >20	current     21     0     49     1     844     1324     1048     1282     3322     current     5     6     31     current     0.7     8.6     20.3	history1   21   <1   47   5   656   1719   893   1083   1946   history1   8   7   124   history1   1.5   14.2   26.5	history2   26   0   46   4   547   1596   692   953   1578   history2   7   7   112   history2   0.9   11.4   23.6



Abnormal

# **OIL ANALYSIS REPORT**

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VISUAL

White Metal

Yellow Metal

Precipitate

Silt

Debris

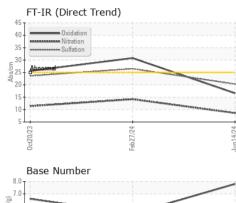
Odor

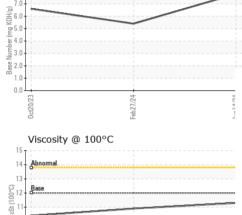
Sand/Dirt

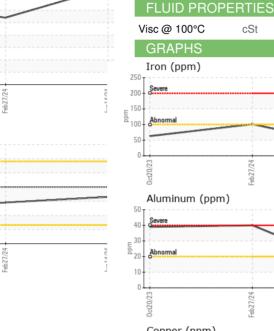
Appearance

Free Water

**Emulsified Water** 

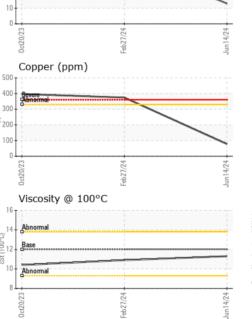


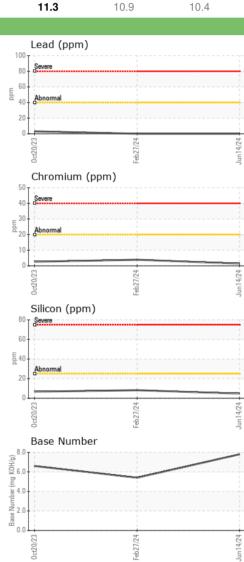




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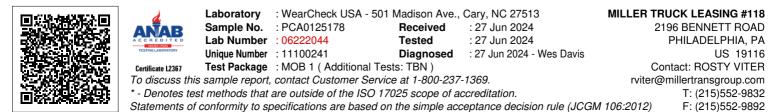
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Contact/Location: ROSTY VITER - MILPHINE

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