

## **OIL ANALYSIS REPORT**

Sample Rating Trend

# NORMAL

# FORD 682 (S/N 1FM5K8ARXJGB11977)

Component Gasoline Engine

Fluid PETRO CANADA SUPREME 5W20 MOTOR OIL (6 GAL)

### 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.

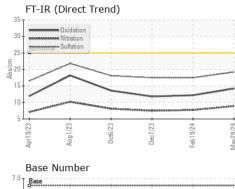
#### Fluid Condition

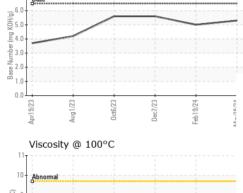
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

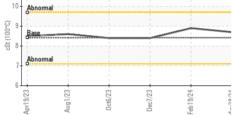
SAMPLE INFOR	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PCA0123152	PCA0117697	PCA0112899
Sample Date		Client Info		28 May 2024	19 Feb 2024	07 Dec 2023
Machine Age	mls	Client Info		61447	59303	57843
Oil Age	mls	Client Info		2144	1460	1548
Oil Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL
CONTAMINAT	ION	method	limit/base	current	history1	history2
Fuel		WC Method	>4.0	<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	>150	11	9	4
Chromium	ppm	ASTM D5185m		0	<1	<1
Nickel	ppm	ASTM D5185m	>5	0	0	<1
Titanium	ppm	ASTM D5185m	-	0	0	<1
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm		>40	1	2	2
Lead	ppm	ASTM D5185m		0	<1	0
Copper	ppm	ASTM D5185m		2	2	2
Tin	ppm	ASTM D5185m		0	<1	0
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium		ASTM D5185m				0
Odumum	ppm	ASTIVI DOTODITI		0	0	0
ADDITIVES	ррп	method	limit/base	current	0 history1	history2
ADDITIVES		method		current	history1	history2
ADDITIVES Boron	ppm	method ASTM D5185m	limit/base 183 0	current 63	history1 93	-
ADDITIVES Boron Barium	ppm ppm	method ASTM D5185m ASTM D5185m	183 0	current 63 0	history1 93 0	history2 96 0
ADDITIVES Boron Barium Molybdenum	ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m	183	current 63 0 66	history1 93	history2 96
ADDITIVES Boron Barium Molybdenum Manganese	ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m	183 0 36	current 63 0	history1 93 0 64	history2 96 0 62
ADDITIVES Boron Barium Molybdenum	ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	183 0 36 0	current 63 0 66 <1	history1 93 0 64 <1	history2 96 0 62 0
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	183 0 36 0 417	current 63 0 66 <1 614	history1 93 0 64 <1 585	history2 96 0 62 0 489
ADDITIVES Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	183 0 36 0 417 1318	current     63     0     66     <1     614     1298	history1 93 0 64 <1 585 1141	history2 96 0 62 0 489 1097
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	183 0 36 0 417 1318 773	current     63     0     66     <1     614     1298     762	history1 93 0 64 <1 585 1141 766	history2 96 0 62 0 489 1097 685
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	183 0 36 0 417 1318 773 845	current     63     0     66     <1     614     1298     762     897	history1   93   0   64   <1   585   1141   766   874	history2 96 0 62 0 489 1097 685 782
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 ASTM D5185m ASTM D5185m	183 0 36 0 417 1318 773 845 2690	Current 63 0 66 <1 614 1298 762 897 3241	history1   93   0   64   <1   585   1141   766   874   2748	history2 96 0 62 0 489 1097 685 782 2921
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN	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 ASTM D5185m	183 0 36 0 417 1318 773 845 2690	current   63   0   66   <1   614   1298   762   897   3241   current	history1   93   0   64   <1   585   1141   766   874   2748   history1	history2 96 0 62 0 489 1097 685 782 2921 history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon	ppm ppm ppm ppm ppm ppm ppm ppm ppm	method     ASTM D5185m	183 0 36 0 417 1318 773 845 2690 <b>limit/base</b> >30 >400	current     63     0     66     <1     614     1298     762     897     3241     current     18	history1   93   0   64   <1   585   1141   766   874   2748   history1   17	history2     96     0     62     0     489     1097     685     782     2921     history2     16
ADDITIVES 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	183 0 36 0 417 1318 773 845 2690 <b>limit/base</b> >30 >400	current     63     0     66     <1     614     1298     762     897     3241     current     18     30	history1   93   0   64   <1   585   1141   766   874   2748   history1   17   3	history2     96     0     62     0     489     1097     685     782     2921     history2     16     4
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 <b>TS</b> ppm ppm	method   ASTM D5185m	183 0 36 0 417 1318 773 845 2690 <b>limit/base</b> >30 >400 >20 <b>limit/base</b>	current   63   0   66   <1   614   1298   762   897   3241   current   18   30   2	history1   93   0   64   <1   585   1141   766   874   2748   history1   17   3   1   history1   0	history2     96     0     62     0     489     1097     685     782     2921     history2     16     4     2     history2     0.1
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED	ppm ppm ppm ppm ppm ppm ppm ppm <b>TS</b> ppm ppm	method     ASTM D5185m	183 0 36 0 417 1318 773 845 2690 <b>limit/base</b> >30 >400 >20 <b>limit/base</b>	current   63   0   66   <1   614   1298   762   897   3241   current   18   30   2   current	history1   93   0   64   <1   585   1141   766   874   2748   history1   17   3   1   history1	history2   96   0   62   0   489   1097   685   782   2921   history2   16   4   2   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 <b>TS</b> ppm ppm	method   ASTM D5185m	183 0 36 0 417 1318 773 845 2690 <b>limit/base</b> >30 >400 >20 <b>limit/base</b>	current   63   0   66   <1   614   1298   762   897   3241   current   18   30   2   current   0.1	history1   93   0   64   <1   585   1141   766   874   2748   history1   17   3   1   history1   0	history2     96     0     62     0     489     1097     685     782     2921     history2     16     4     2     history2     0.1
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 ppm	method   ASTM D5185m	183 0 36 0 417 1318 773 845 2690 <i>imit/base</i> >30 >400 >20 <i>imit/base</i>	current     63     0     66     <1     614     1298     762     897     3241     current     18     30     2     current     0.1     8.9	history1   93   0   64   <1   585   1141   766   874   2748   history1   17   3   1   history1   0   7.7	history2     96     0     62     0     489     1097     685     782     2921     history2     16     4     2     history2     0.1     7.5
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 ppm	method     ASTM D5185m     ASTM D5185m	183 0 36 0 417 1318 773 845 2690 <b>Imit/base</b> >30 >400 >20 <b>Imit/base</b> >20 <b>S</b>	current   63   0   66   <1   614   1298   762   897   3241   current   18   30   2   current   0.1   8.9   19.2	history1   93   0   64   <1   585   1141   766   874   2748   history1   17   3   1   history1   0   7.7   17.5	history2   96   0   62   0   489   1097   685   782   2921   history2   16   4   2   history2   0.1   7.5   17.5

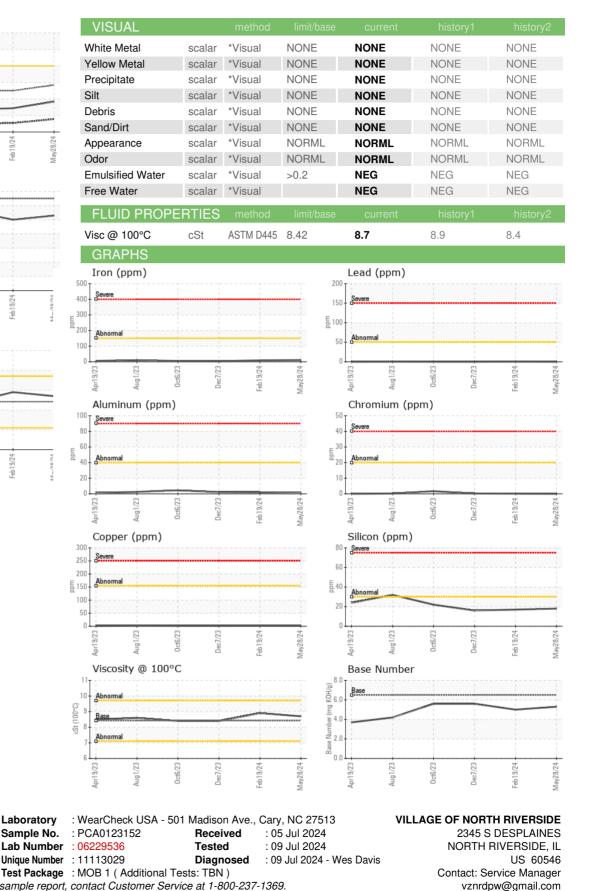


# **OIL ANALYSIS REPORT**











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)

Certificate 12367

Laboratory

Sample No.

Contact/Location: Service Manager - VILNOR

T:

F: