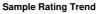


OIL ANALYSIS REPORT





FORD 615 (S/N 1FAHPZMK8JG117474)

Gasoline Engine

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.

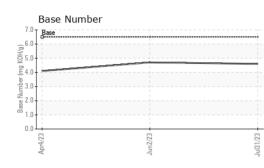
Fluid Condition

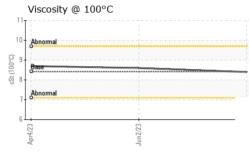
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

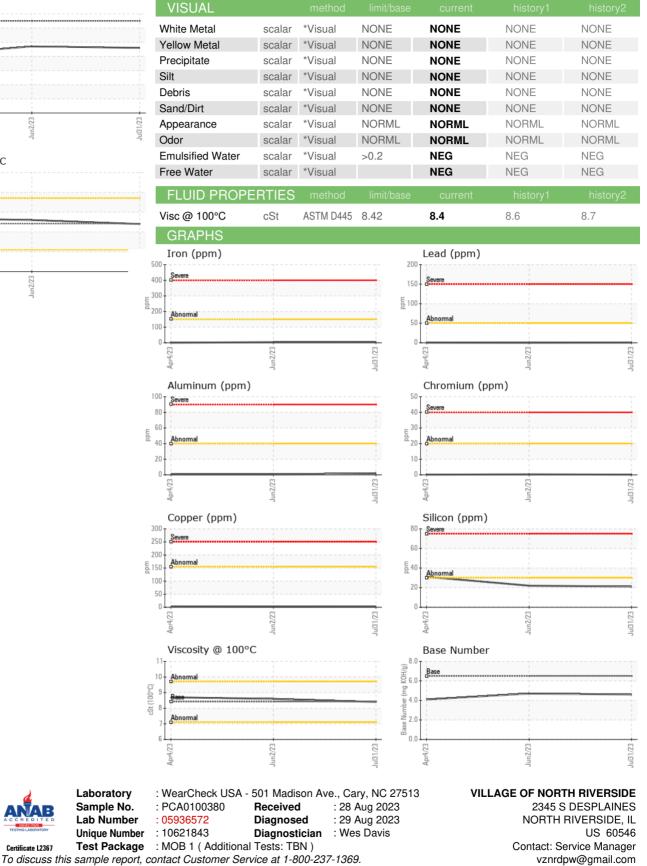
SAMPLE INFORI	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PCA0100380	PCA0097961	PCA0074321
Sample Date		Client Info		31 Jul 2023	02 Jun 2023	04 Apr 2023
Machine Age	mls	Client Info		57389	55208	53349
Oil Age	mls	Client Info		2181	1859	2552
Oil Changed		Client Info		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
Glycol		WC Method		NEG	NEG	NEG
WEAR METALS method limit/base current history1 history2						
Iron		ASTM D5185m	>150	5	4	0
-	ppm			5 <1	<1	<1
Chromium Nickel	ppm	ASTM D5185m		<1 <1	< 1	<1
	ppm	ASTM D5185m	>0		0	
Titanium	ppm	ASTM D5185m	. 0	0		0
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m		2	<1	<1
Lead	ppm	ASTM D5185m		<1	0	<1
Copper	ppm	ASTM D5185m		2	2	3
Tin	ppm	ASTM D5185m	>10	0	0	0
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		0	0	0
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	183	current 35	history1 53	52
	ppm ppm					
Boron		ASTM D5185m	183	35	53	52
Boron Barium	ppm	ASTM D5185m ASTM D5185m	183 0	35 2	53 0	52 0
Boron Barium Molybdenum	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	183 0 36	35 2 62	53 0 61	52 0 63
Boron Barium Molybdenum Manganese	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	183 0 36 0	35 2 62 <1	53 0 61 <1	52 0 63 <1
Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	183 0 36 0 417	35 2 62 <1 438	53 0 61 <1 488	52 0 63 <1 445
Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	183 0 36 0 417 1318	35 2 62 <1 438 1260	53 0 61 <1 488 1279	52 0 63 <1 445 1238
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	183 0 36 0 417 1318 773	35 2 62 <1 438 1260 670	53 0 61 <1 488 1279 724	52 0 63 <1 445 1238 680
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	183 0 36 0 417 1318 773 845	35 2 62 <1 438 1260 670 804	53 0 61 <1 488 1279 724 874	52 0 63 <1 445 1238 680 810
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	183 0 36 0 417 1318 773 845 2690	35 2 62 <1 438 1260 670 804 2696	53 0 61 <1 488 1279 724 874 3283	52 0 63 <1 445 1238 680 810 2403
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	183 0 36 0 417 1318 773 845 2690	35 2 62 <1 438 1260 670 804 2696 current	53 0 61 <1 488 1279 724 874 3283 history1	52 0 63 <1 445 1238 680 810 2403 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method	183 0 36 0 417 1318 773 845 2690 limit/base >30	35 2 62 <1 438 1260 670 804 2696 current 21	53 0 61 <1 488 1279 724 874 3283 history1 22	52 0 63 <1 445 1238 680 810 2403 history2 31
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium	ppm 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 ASTM D5185m ASTM D5185m	183 0 36 0 417 1318 773 845 2690 limit/base >30 >400	35 2 62 <1 438 1260 670 804 2696 <u>current</u> 21 7	53 0 61 <1 488 1279 724 874 3283 history1 22 5	52 0 63 <1 445 1238 680 810 2403 history2 31 4
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm ppm TS	ASTM D5185m ASTM D5185m	183 0 36 0 417 1318 773 845 2690 imit/base >30 >400 >20	35 2 62 <1 438 1260 670 804 2696 <u>current</u> 21 7 <1	53 0 61 <1 488 1279 724 874 3283 history1 22 5 1	52 0 63 <1 445 1238 680 810 2403 history2 31 4 2
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	183 0 36 0 417 1318 773 845 2690 Imit/base >30 >400 >20 Imit/base	35 2 62 <1 438 1260 670 804 2696 current 21 7 <1 current	53 0 61 <1 488 1279 724 874 3283 history1 22 5 1 1 history1	52 0 63 <1 445 1238 680 810 2403 history2 31 4 2 2 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 TS ppm ppm ppm	ASTM D5185m ASTM D5185m	183 0 36 0 417 1318 773 845 2690 Imit/base >30 >400 >20 Imit/base	35 2 62 <1 438 1260 670 804 2696 current 21 7 <1 21 7 <1 0	53 0 61 <1 488 1279 724 874 3283 history1 22 5 1 2 2 5 1 history1 0	52 0 63 <1 445 1238 680 810 2403 history2 31 4 2 2 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	ASTM D5185m ASTM D5185m	183 0 36 0 417 1318 773 845 2690 <i>imit/base</i> >30 >400 >20 <i>imit/base</i>	35 2 62 <1 438 1260 670 804 2696 <u>current</u> 21 7 <1 7 <1 0 9.0	53 0 61 <1 488 1279 724 874 3283 history1 22 5 1 22 5 1 history1 0 7.8	52 0 63 <1 445 1238 680 810 2403 history2 31 4 2 2 history2 0.1 7.9
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	183 0 36 0 417 1318 773 845 2690 imit/base >30 >400 >20 imit/base >20 >20	35 2 62 <1 438 1260 670 804 2696 current 21 7 <1 21 7 <1 0 9.0 19.8	53 0 61 <1 488 1279 724 874 3283 history1 22 5 1 2 2 5 1 1 history1 0 7.8 19.5	52 0 63 <1 445 1238 680 810 2403 history2 31 4 2 2 <u>history2</u> 0.1 7.9 20.4
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot % Nitration Sulfation FLUID DEGRAI	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D7844 *ASTM D7624	183 0 36 0 417 1318 773 845 2690 imit/base >30 >20 20 imit/base >20 >30	35 2 62 <1 438 1260 670 804 2696 current 21 7 <1 21 7 <1 0 9.0 19.8 current	53 0 61 <1 488 1279 724 874 3283 history1 22 5 1 22 5 1 1 history1 0 7.8 19.5 history1	52 0 63 <1 445 1238 680 810 2403 history2 31 4 2 2 history2 0.1 7.9 20.4 history2



OIL ANALYSIS REPORT







* - 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 L2367

Laboratory

Sample No.

Lab Number

Unique Number

T: F: