

OIL ANALYSIS REPORT

Sample Rating Trend



FORD 614 (S/N 1FM5K8AB2L9C01064)

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.

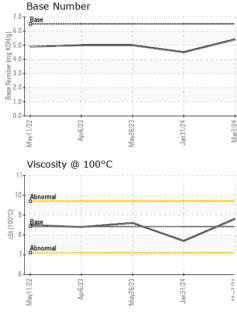
Fluid Condition

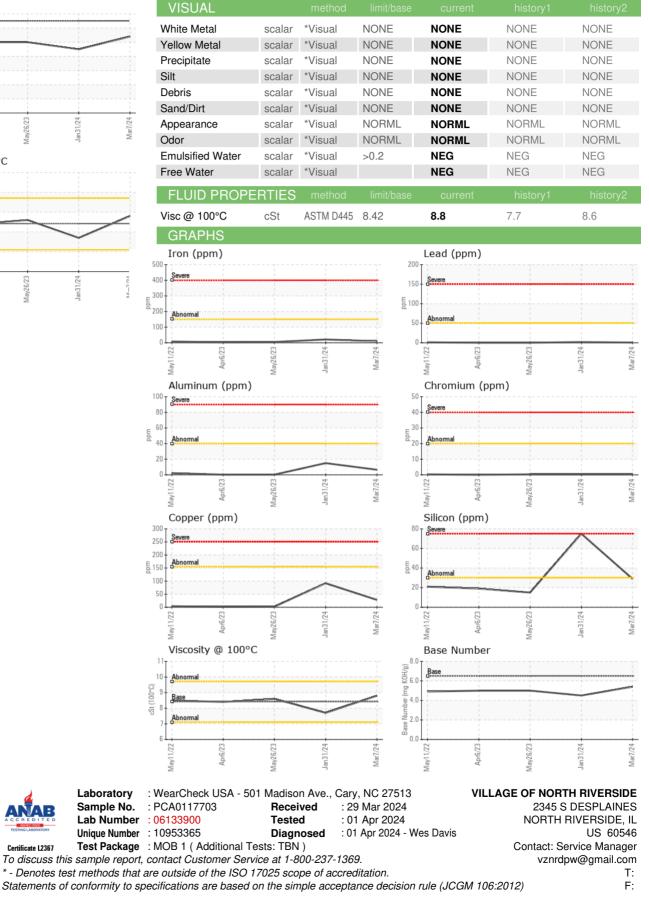
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PCA0117703	PCA0112909	PCA0097963
Sample Date		Client Info		07 Mar 2024	31 Jan 2024	26 May 2023
Machine Age	mls	Client Info		3508	1851	27248
Oil Age	mls	Client Info		1657	1851	1939
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	10	21	5
Chromium	ppm	ASTM D5185m	>20	<1	<1	<1
Nickel	ppm		>5	<1	0	0
Titanium	ppm	ASTM D5185m	-	<1	0	0
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>40	6	15	<1
Lead	ppm	ASTM D5185m	>50	<1	2	0
Copper	ppm	ASTM D5185m	>155	28	92	2
Tin	ppm	ASTM D5185m	>10	<1	<1	0
Vanadium	ppm	ASTM D5185m		<1	0	0
Cadmium	ppm	ASTM D5185m		<1	0	0
ADDITIVES		method	limit/base	current	history1	history2
ADDITIVES Boron	ppm	method ASTM D5185m	limit/base 183	current 50	history1 63	history2 57
	ppm ppm					
Boron		ASTM D5185m	183	50	63	57
Boron Barium	ppm	ASTM D5185m ASTM D5185m	183 0	50 <1	63 2	57 0
Boron Barium Molybdenum	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	183 0 36	50 <1 79	63 2 124	57 0 61
Boron Barium Molybdenum Manganese	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	183 0 36 0	50 <1 79 4	63 2 124 17	57 0 61 <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	50 <1 79 4 549	63 2 124 17 371	57 0 61 <1 492
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	50 <1 79 4 549 1230	63 2 124 17 371 1216	57 0 61 <1 492 1299
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	50 <1 79 4 549 1230 697	63 2 124 17 371 1216 640	57 0 61 <1 492 1299 728
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN	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	50 <1 79 4 549 1230 697 857	63 2 124 17 371 1216 640 755	57 0 61 <1 492 1299 728 882
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon	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	50 <1 79 4 549 1230 697 857 2540 current 29	63 2 124 17 371 1216 640 755 2404 history1 75	57 0 61 <1 492 1299 728 882 3306 history2 15
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	183 0 36 0 417 1318 773 845 2690	50 <1 79 4 549 1230 697 857 2540 current	63 2 124 17 371 1216 640 755 2404 history1	57 0 61 <1 492 1299 728 882 3306 history2
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 ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method	183 0 36 0 417 1318 773 845 2690 limit/base	50 <1 79 4 549 1230 697 857 2540 current 29	63 2 124 17 371 1216 640 755 2404 history1 75	57 0 61 <1 492 1299 728 882 3306 history2 15
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED	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 limit/base >30 >400	50 <1 79 4 549 1230 697 857 2540 current 29 14 2 2	63 2 124 17 371 1216 640 755 2404 history1 75 9 5 5 history1	57 0 61 <1 492 1299 728 882 3306 history2 15 4 <1 ×1
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 limit/base >30 >400 >20 limit/base	50 <1 79 4 549 1230 697 857 2540 current 29 14 29 14 2 2 0	63 2 124 17 371 1216 640 755 2404 history1 75 9 5 5 history1 0	57 0 61 <1 492 1299 728 882 3306 history2 15 4 <1 5 4 <1 history2 0
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 TS ppm ppm ppm	ASTM D5185m ASTM D5185m	183 0 36 0 417 1318 773 845 2690 limit/base >30 >400 >20 limit/base	50 <1 79 4 549 1230 697 857 2540 <i>current</i> 29 14 29 14 2 <i>current</i> 0 7.9	63 2 124 17 371 1216 640 755 2404 history1 75 9 5 9 5 history1 0 7.4	57 0 61 <1 492 1299 728 882 3306 history2 15 4 <1 4 <1 history2 0 7.9
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 limit/base >30 >400 >20 limit/base	50 <1 79 4 549 1230 697 857 2540 current 29 14 29 14 2 2 0	63 2 124 17 371 1216 640 755 2404 history1 75 9 5 5 history1 0	57 0 61 <1 492 1299 728 882 3306 history2 15 4 <1 5 4 <1 history2 0
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 t 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>	50 <1 79 4 549 1230 697 857 2540 <i>current</i> 29 14 29 14 2 <i>current</i> 0 7.9	63 2 124 17 371 1216 640 755 2404 history1 75 9 5 9 5 history1 0 7.4	57 0 61 <1 492 1299 728 882 3306 history2 15 4 <1 4 <1 history2 0 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 t ppm ppm	ASTM D5185m ASTM D5185m	183 0 36 0 417 1318 773 845 2690 Imit/base >30 >400 >20 Imit/base >20 S	50 <1 79 4 549 1230 697 857 2540 current 29 14 29 14 2 2 current 0 7.9 18.3	63 2 124 17 371 1216 640 755 2404 history1 75 9 5 5 history1 0 7.4 18.4	57 0 61 <1 492 1299 728 882 3306 history2 15 4 <1 history2 0 7.9 18.7



OIL ANALYSIS REPORT





Certificate L2367

Contact/Location: Service Manager - VILNOR