

### **OIL ANALYSIS REPORT**

Sample Rating Trend



# FORD 324 (S/N NM0LS7BN4DT158531)

Gasoline Engine

PETRO CANADA SUPREME 5W20 MOTOR OIL (5 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		PCA0100384		
Sample Date		Client Info		15 Aug 2023		
Machine Age	mls	Client Info		32012		
Oil Age	mls	Client Info		1964		
Oil Changed		Client Info		Changed		
Sample Status				NORMAL		
CONTAMINAT	ION	method	limit/base	current	history1	history2
Fuel		WC Method	>4.0	<1.0		
Glycol		WC Method		NEG		
WEAR METAL	S	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>150	12		
Chromium	ppm	ASTM D5185m	>20	<1		
Nickel	ppm	ASTM D5185m	>5	<1		
Titanium	ppm	ASTM D5185m		0		
Silver	ppm	ASTM D5185m	>2	0		
Aluminum	ppm	ASTM D5185m	>40	1		
Lead	ppm	ASTM D5185m	>50	<1		
Copper	ppm	ASTM D5185m	>155	<1		
Tin	ppm	ASTM D5185m	>10	0		
Vanadium	ppm	ASTM D5185m		0		
Cadmium	ppm	ASTM D5185m		0		
ADDITIVES		method		current	history1	history2
ADDITIVES Boron	ppm	method ASTM D5185m	limit/base 183	current 124	history1	history2
	ppm ppm					
Boron	ppm	ASTM D5185m	183	124		
Boron Barium Molybdenum	ppm ppm	ASTM D5185m ASTM D5185m	183 0	124 2		
Boron Barium	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	183 0 36	124 2 62		
Boron Barium Molybdenum Manganese	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	183 0 36 0	124 2 62 <1		 
Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	183 0 36 0 417	124 2 62 <1 446		
Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	183 0 36 0 417 1318	124 2 62 <1 446 1223	   	  
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	183 0 36 0 417 1318 773	124 2 62 <1 446 1223 667	   	
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	124 2 62 <1 446 1223 667 770	    	    
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	124 2 62 <1 446 1223 667 770 2802		
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 <b>limit/base</b> >30	124 2 62 <1 446 1223 667 770 2802 current	     history1	     history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon	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	183 0 36 0 417 1318 773 845 2690 <b>limit/base</b> >30	124 2 62 <1 446 1223 667 770 2802 current 24	     history1	    history2
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 <b>method</b> ASTM D5185m	183 0 36 0 417 1318 773 845 2690 <b>limit/base</b> >30 >400	124 2 62 <1 446 1223 667 770 2802 <u>current</u> 24 3	     history1	     history2
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 <b>imit/base</b> >30 >400 >20	124 2 62 <1 446 1223 667 770 2802 current 24 3 <1	     history1  	     history2
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 <b>imit/base</b> >30 >400 >20	124 2 62 <1 446 1223 667 770 2802 current 24 3 <1 current	     history1   history1	     history2   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	ASTM D5185m ASTM D5185m	183 0 36 0 417 1318 773 845 2690 limit/base >30 >400 >20 limit/base	124 2 62 <1 446 1223 667 770 2802 current 24 3 <1 24 3 <1 0	     history1  history1  history1	     history2  history2
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>	124 2 62 <1 446 1223 667 770 2802 <u>current</u> 24 3 <1 24 3 <1 0 8.7	      history1   history1  	     history2   history2
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 <b>Imit/base</b> >30 >400 >20 <b>Imit/base</b> >20 >20	124 2 62 <1 446 1223 667 770 2802 <b>current</b> 24 3 <1 24 3 <1 0 8.7 19.3	     history1  history1  history1	    history2  history2  history2
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 TS ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D7844 *ASTM D7844	183 0 36 0 417 1318 773 845 2690 <b>imit/base</b> >30 >400 >20 <b>imit/base</b> >20 >30 >30	124 2 62 <1 446 1223 667 770 2802 current 24 3 <1 current 0 8.7 19.3 current	     history1   history1  history1  history1	    history2  history2  history2  history2



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## **OIL ANALYSIS REPORT**

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NONE

VISUAL

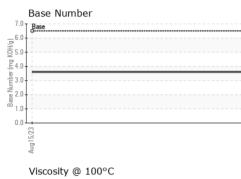
White Metal

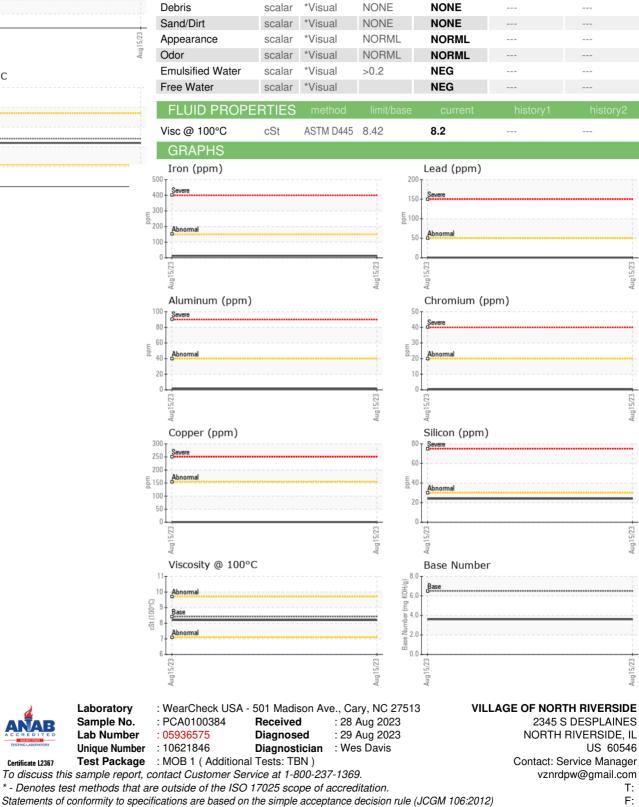
Precipitate

Silt

Debris

Yellow Metal





Contact/Location: Service Manager - VILNOR