

OIL ANALYSIS REPORT

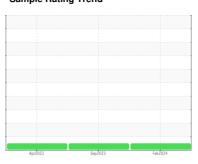
Sample Rating Trend

NORMAL

FORD 800 (S/N 1FM5K8D80EGC13894)

Gasoline Engine

PETRO CANADA SUPREME 5W20 MOTOR OIL (6 GAL)





DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

All component wear rates are normal.

Contamination

There is no indication of any contamination in the

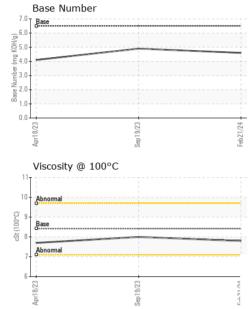
Fluid Condition

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

Client Info	OIL (6 GAL)		Ap	2023	Sep2023 Feb20	24	
Sample Date	SAMPLE INFORI	MATION	method	limit/base	current	history1	history2
Machine Age mls Client Info 119851 117563 114547 Dil Age mls Client Info 2288 3016 2070 Dil Changed Client Info Changed Changed Changed Changed Changed Changed Changed Changed NORMAL	Sample Number		Client Info		PCA0117695	PCA0100394	PCA0096248
Dil Age	Sample Date		Client Info		21 Feb 2024	19 Sep 2023	18 Apr 2023
Changed Changed Changed NORMAL NORMAL NORMAL NORMAL	Machine Age	mls	Client Info		119851	117563	114547
CONTAMINATION method limit/base current history1 history2	Oil Age	mls	Client Info		2288	3016	2070
CONTAMINATION method limit/base current history1 history2	Oil Changed		Client Info		Changed	Changed	Changed
Fuel	Sample Status				NORMAL	NORMAL	NORMAL
Water Glycol WC Method WC Method >0.2 NEG NEG NEG NEG NEG NEG WEAR METALS method limit/base current history1 history2 Iron ppm ASTM D5185m >150 4 4 5 Chromium ppm ASTM D5185m >20 <1	CONTAMINAT	ION	method	limit/base	current	history1	history2
NEG Neg	-uel		WC Method	>4.0	<1.0	<1.0	<1.0
WEAR METALS	<i>N</i> ater		WC Method	>0.2	NEG	NEG	NEG
Chromium	Glycol		WC Method		NEG	NEG	NEG
Chromium	WEAR METAL	S	method	limit/base	current	history1	history2
Strickel	ron	ppm	ASTM D5185m	>150	4	4	5
Description	Chromium	ppm	ASTM D5185m	>20	<1	0	0
Silver	Nickel	ppm	ASTM D5185m	>5	0	0	0
Aluminum	Titanium	ppm	ASTM D5185m		0	<1	0
December December	Silver	ppm	ASTM D5185m	>2	0	0	0
Copper	Aluminum	ppm	ASTM D5185m	>40	2	<1	1
Tin	_ead	ppm	ASTM D5185m	>50	0	<1	0
Azanadium ppm ASTM D5185m 0 0 0 0 Cadmium ppm ASTM D5185m 0 0 0 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 183 94 85 104 Barium ppm ASTM D5185m 0 0 0 0 0 Wollybdenum ppm ASTM D5185m 36 60 58 66 Manganese ppm ASTM D5185m 36 60 58 66 Manganesium ppm ASTM D5185m 36 417 496 487 560 Calcicium ppm ASTM D5185m 1318 1070 1226 1176 Phosphorus ppm ASTM D5185m 773 698 671 682 Zinc ppm ASTM D5185m 2690 2644 2885 3074 CONTAMINANTS method	Copper	ppm	ASTM D5185m	>155	6	5	4
ADDITIVES	Γin	ppm	ASTM D5185m	>10	<1	<1	0
ADDITIVES	√anadium	ppm	ASTM D5185m		0	0	0
Soron ppm ASTM D5185m 183 94 85 104	Cadmium	ppm	ASTM D5185m		0	0	0
Barium	ADDITIVES		method	limit/base	current	history1	history2
Molybdenum ppm ASTM D5185m 36 60 58 66 Manganese ppm ASTM D5185m 0 <1	Boron	ppm	ASTM D5185m	183	94	85	104
Manganese ppm ASTM D5185m 0 <1 1 1 Magnesium ppm ASTM D5185m 417 496 487 560 Calcium ppm ASTM D5185m 1318 1070 1226 1176 Phosphorus ppm ASTM D5185m 773 698 671 682 Zinc ppm ASTM D5185m 845 789 832 814 Sulfur ppm ASTM D5185m 2690 2644 2885 3074 CONTAMINANTS method limit/base current history1 history2 Solicon ppm ASTM D5185m >30 17 22 20 Sodium ppm ASTM D5185m >40 3 5 4 Potassium ppm ASTM D5185m >20 2 2 <1	Barium	ppm	ASTM D5185m	0	0	0	0
Magnesium ppm ASTM D5185m 417 496 487 560 Calcium ppm ASTM D5185m 1318 1070 1226 1176 Phosphorus ppm ASTM D5185m 773 698 671 682 Zinc ppm ASTM D5185m 845 789 832 814 Sulfur ppm ASTM D5185m 2690 2644 2885 3074 CONTAMINANTS method limit/base current history1 history2 Solicon ppm ASTM D5185m >30 17 22 20 Sodium ppm ASTM D5185m >400 3 5 4 Potassium ppm ASTM D5185m >20 2 2 <1	Molybdenum	ppm			60	58	66
Calcium ppm ASTM D5185m 1318 1070 1226 1176 Phosphorus ppm ASTM D5185m 773 698 671 682 Zinc ppm ASTM D5185m 845 789 832 814 Sulfur ppm ASTM D5185m 2690 2644 2885 3074 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >30 17 22 20 Sodium ppm ASTM D5185m >400 3 5 4 Potassium ppm ASTM D5185m >20 2 2 <1	Manganese	ppm	ASTM D5185m	0	<1	1	1
Phosphorus ppm ASTM D5185m 773 698 671 682 Zinc ppm ASTM D5185m 845 789 832 814 Sulfur ppm ASTM D5185m 2690 2644 2885 3074 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >30 17 22 20 Sodium ppm ASTM D5185m >400 3 5 4 Potassium ppm ASTM D5185m >20 2 2 <1	Magnesium	ppm	ASTM D5185m	417	496	487	560
Zinc ppm ASTM D5185m 845 789 832 814 Sulfur ppm ASTM D5185m 2690 2644 2885 3074 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >30 17 22 20 Sodium ppm ASTM D5185m >400 3 5 4 Potassium ppm ASTM D5185m >20 2 2 <1 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 0 0 0 Nitration Abs/cm *ASTM D7624 >20 9.1 9.0 8.3 Sulfation Abs/.1mm *ASTM D7415 >30 19.0 19.5 17.4 FLUID DEGRADATION method limit/base current history1 history2 Dxidation Abs/.1mm *ASTM D7414	Calcium	ppm	ASTM D5185m	1318	1070	1226	1176
Sulfur ppm ASTM D5185m 2690 2644 2885 3074 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >30 17 22 20 Sodium ppm ASTM D5185m >400 3 5 4 Potassium ppm ASTM D5185m >20 2 2 <1 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 0 0 0 Nitration Abs/cm *ASTM D7624 >20 9.1 9.0 8.3 Sulfation Abs/.1mm *ASTM D7415 >30 19.0 19.5 17.4 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 13.0 14.1 12.1	Phosphorus	ppm	ASTM D5185m	773	698	671	682
CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >30 17 22 20 Sodium ppm ASTM D5185m >400 3 5 4 Potassium ppm ASTM D5185m >20 2 2 <1	Zinc	ppm	ASTM D5185m	845	789	832	814
Solition ppm ASTM D5185m >30 17 22 20			ASTM D5185m	2690	2644	2885	3074
Sodium ppm ASTM D5185m >400 3 5 4 Potassium ppm ASTM D5185m >20 2 2 <1 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 0 0 0 Nitration Abs/cm *ASTM D7624 >20 9.1 9.0 8.3 Sulfation Abs/.1mm *ASTM D7415 >30 19.0 19.5 17.4 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 13.0 14.1 12.1	CONTAMINAN	TS	method	limit/base	current	history1	history2
Potassium ppm ASTM D5185m >20 2 2 <1 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 0 0 0 Nitration Abs/cm *ASTM D7624 >20 9.1 9.0 8.3 Sulfation Abs/.1mm *ASTM D7415 >30 19.0 19.5 17.4 FLUID DEGRADATION method limit/base current bistory1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 13.0 14.1 12.1		ppm	ASTM D5185m	>30	17		20
INFRA-RED		ppm	ASTM D5185m	>400	3	5	4
Soot % % *ASTM D7844 0 0 0 Nitration Abs/cm *ASTM D7624 >20 9.1 9.0 8.3 Sulfation Abs/.1mm *ASTM D7415 >30 19.0 19.5 17.4 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 13.0 14.1 12.1	Potassium	ppm	ASTM D5185m	>20	2	2	<1
Nitration Abs/cm *ASTM D7624 >20 9.1 9.0 8.3 Sulfation Abs/.1mm *ASTM D7415 >30 19.0 19.5 17.4 FLUID DEGRADATION method limit/base current current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 13.0 14.1 12.1	INFRA-RED		method	limit/base	current	history1	history2
Sulfation Abs/.1mm *ASTM D7415 >30 19.0 19.5 17.4 FLUID DEGRADATION method limit/base current bistory1 history2 Dxidation Abs/.1mm *ASTM D7414 >25 13.0 14.1 12.1	Soot %	%	*ASTM D7844		0		
FLUID DEGRADATION method limit/base current history1 history2 Dxidation Abs/.1mm *ASTM D7414 >25 13.0 14.1 12.1	Nitration	Abs/cm	*ASTM D7624	>20	9.1	9.0	8.3
Oxidation	Sulfation	Abs/.1mm	*ASTM D7415	>30	19.0	19.5	17.4
	FLUID DEGRA	DATION	method	limit/base	current	history1	history2
Base Number (BN) mg KOH/g ASTM D2896 6.5 4.6 4.9 4.1	Oxidation	Abs/.1mm	*ASTM D7414	>25	13.0	14.1	12.1
	Base Number (BN)	mg KOH/g	ASTM D2896	6.5	4.6	4.9	4.1



OIL ANALYSIS REPORT



VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG	NEG
FLUID PROPE	RTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	8.42	7.8	8	7.7

GRAPHS					
Iron (ppm)			Lead (ppm)		
Severe			Severe		
			100		
Abnormal			Abnormal		
			50 Abnormal		
1/23	1/23 -	124	0/23	1/23	
Apr18/23	Sep19/23	Feb21/24	Apr18/23	Sep19/23	
Aluminum (ppm)			Chromium (p	pm)	
Severe			Severe		
			Abnormal		
Abnormal		-	20 Abnormal		
			10		
1/23	1/23	124	0 1/23	1/23	
Apr18/23	Sep19/23	Feb21/24	Apr18/23	Sep19/23	
Copper (ppm)			Silicon (ppm)		
Severe			80 - Severe		
Abnormal			60		
-	u u u u u u u u u u u u u u u u u u u		Abnormal		
†			20		
	- 1/23	124	0453		
Apr18/23	Sep19/23	Feb21/24	Apr18/23	Sep19/23	
Viscosity @ 100°0	С		Base Number	-	
Abnormal			Base		
15			8 6.0		
Base			4.0+		
Abnormal			Base 2 6.0 -		
1/23	Sep19/23 +-	Feb21/24	Apr18/23	Sep 19/23 +-	
Apr18/23	p 1	b21	€	p19	





Laboratory

Lab Number : 06105028 Unique Number : 10903258

Sample No. : PCA0117695

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received : 29 Feb 2024 **Tested** : 01 Mar 2024

Diagnosed : 01 Mar 2024 - Wes Davis

Test Package: MOB 1 (Additional Tests: TBN)

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)

VILLAGE OF NORTH RIVERSIDE

2345 S DESPLAINES NORTH RIVERSIDE, IL US 60546

Contact: Service Manager

vznrdpw@gmail.com

T: F:

Report Id: VILNOR [WUSCAR] 06105028 (Generated: 03/01/2024 13:32:57) Rev: 1

Contact/Location: Service Manager - VILNOR