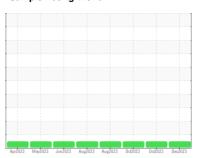


OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



FORD 613 (S/N 1FM5K8AG4NGA27100)

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

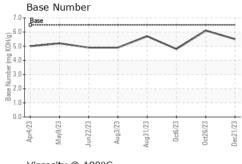
Fluid Condition

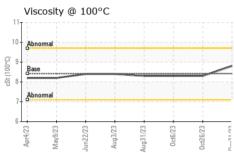
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

OAMBLE NESS	MATION		11 10 10				
SAMPLE INFOR	MATION	method	limit/base	current	history1	history2	
Sample Number		Client Info		PCA0112919	PCA0105346	PCA0105351	
Sample Date		Client Info		21 Dec 2023	26 Oct 2023	06 Oct 2023	
Machine Age	mls	Client Info		30312	27265	26194	
Oil Age	mls	Client Info		1804	1071	2541	
Oil Changed		Client Info		Changed	Changed	N/A	
Sample Status				NORMAL	NORMAL	NORMAL	
CONTAMINATION		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	2	3	5	
Chromium	ppm	ASTM D5185m		<1	<1	<1	
Nickel	ppm	ASTM D5185m	>5	0	<1	<1	
Titanium		ASTM D5185m	>5	<1	<1	<1	
Silver	ppm	ASTM D5185m	>2	0	0	0	
Aluminum	ppm	ASTM D5185m		<1	2		
	ppm			1		3	
Lead	ppm	ASTM D5185m			<1	0	
Copper	ppm	ASTM D5185m		<1	<1	1	
Tin	ppm	ASTM D5185m	>10	<1	0	0	
Vanadium	ppm	ASTM D5185m		0	0	0	
Cadmium	ppm	ASTM D5185m		0	<1	0	
ADDITIVES		method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185m	183	45	86	30	
Barium	ppm	ASTM D5185m	0	0	9	0	
Molybdenum	ppm	ASTM D5185m	36	67	68	67	
Manganese	ppm	ASTM D5185m	0	<1	<1	<1	
Magnesium	ppm	ASTM D5185m	417	563	512	521	
Calcium	ppm	ASTM D5185m	1318	1127	1212	1151	
Phosphorus	ppm	ASTM D5185m	773	727	732	658	
Zinc	ppm	ASTM D5185m	845	823	810	841	
Sulfur	ppm	ASTM D5185m	2690	2644	3081	3226	
CONTAMINAN	TS	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m	>30	14	18	21	
Sodium	ppm	ASTM D5185m	>400	2	1	5	
Potassium	ppm	ASTM D5185m	>20	<1	2	1	
INFRA-RED		method	limit/base	current	history1	history2	
Soot %	%	*ASTM D7844		0	0	0	
Nitration	Abs/cm	*ASTM D7624	>20	7.6	7.3	8.6	
Sulfation	Abs/.1mm	*ASTM D7415	>30	18.5	17.1	19.7	
FLUID DEGRADATION method limit/base current history1 history2							
Oxidation	Abs/.1mm	*ASTM D7414	>25	13.8	12.2	16.0	
Base Number (BN)	mg KOH/g	ASTM D2896		5.5	6.1	4.8	
Dase Number (DIV)	mg KOH/g	AO I WI DZ030	0.0	0.0	0.1	4.0	



OIL ANALYSIS REPORT





VISUAL		method				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

Visc @ 100°C	cS	t	ASTM [D445	8.42		8.8	3		8.3		8	.3	
GRAPHS														
Iron (ppm)						200	Lea	d (ppr	m)					
400 Severe						150	Conserve	e			į			
200 Abnormal						튎 100								
Abnormal						50	Abno	rmal						
0						0	<u> </u>							_
Apr4/23 May9/23 Jun22/23	Aug3/23	Aug31/23	0ct6/23	Oct26/23	Dec21/23		Apr4/23	May9/23	Jun22/23	Aug3/23	Aug31/23.	Oct6/23	0ct26/23	Dec21/23
Aluminum (pp	m)	4						omiun	n (ppr	n)	4			
Severe 80						50 40	Sever	e						1
00						30 Ed 30								
Abnormal 40		-				[™] 20	Abno	rmal						
20						10								
Apr4/23 - May9/23 - Jun22/23 -	Aug3/23 -	Aug31/23	Oct6/23 -	0ct26/23 -	Dec21/23 -	0	Apr4/23	May9/23 -	Jun22/23	Aug3/23 -	Aug31/23	Oct6/23 -	Oct26/23 -	Dec21/23
ح الالالالالالالالالالالالالالالالالالال	Aı	Aug	0	00	Dea			≊ on (p		A	Aug	0	0	Dea
300						80			piii)					
200						60	+							
Abnormal		+				Ed 40	Abno	rmal						
50						20	_	_		-	-	_	-	-
Apr4/23	Aug3/23	1/23	Oct6/23	5/23	1/23	0	Apr4/23	May9/23 +	2/23	Aug3/23 +	1/23	Oct6/23 +	5/23	1/23
- 5		Aug31/23	Oct	Oct26/23	Dec21/23		Apr	Мау	Jun22/23	Aug	Aug31/23 -	Oct	Oct26/23	Dec21/23
Viscosity @ 10	0°C					8.0	т	e Nun	nber					
10 - Abnormal						KOH/g)	Base							
0001) 88 Base						Bu) 4.0						$\overline{}$		
Abnormal 7	 					Base Number (mg KOH/g) 0.0 0.0 0.0 0.0	-							
9 29		23	m			0.0	-	60	m			62	67	
Apr4/23 May9/23 Jun22/23	Aug3/23	Aug31/23.	Oct6/23 ·	Oct26/23	Dec21/23		Apr4/23	May9/23	Jun22/23	Aug3/23	Aug31/23	Oct6/23 ·	0ct26/23	Dec21/23
		A							->		⋖		_	





Laboratory Sample No.

: WearCheck USA - 501 Madison Ave., Cary, NC 27513

: PCA0112919 Lab Number : 06077440 Unique Number : 10859531

Received : 01 Feb 2024 **Tested** Diagnosed

: 02 Feb 2024 Test Package: MOB 1 (Additional Tests: TBN)

: 02 Feb 2024 - Wes Davis

US 60546 Contact: Service Manager vznrdpw@gmail.com

VILLAGE OF NORTH RIVERSIDE

2345 S DESPLAINES

NORTH RIVERSIDE, IL

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)

Report Id: VILNOR [WUSCAR] 06077440 (Generated: 02/08/2024 11:16:52) Rev: 1

Contact/Location: Service Manager - VILNOR

T:

F: