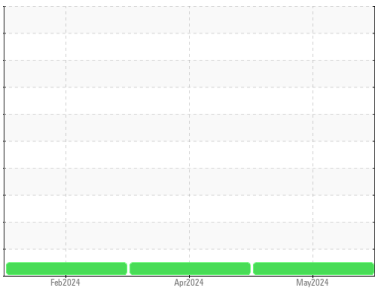
OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL

Machine Id
FORD 515613
Component
Gasoline Engine
Fluid
DIESEL ENGINE OIL SAE 5W30 (--- 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 INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**PC0085529**	PC0085545	PC0085560
Sample Date		Client Info		**22 May 2024**	05 Apr 2024	20 Feb 2024
Machine Age	kms	Client Info		**15020**	11011	6957
Oil Age	kms	Client Info		**0**	0	0
Oil Changed		Client Info		**N/A**	N/A	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 METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>150	**14**	11	8
Chromium	ppm	ASTM D5185(m)	>20	**<1**	0	0
Nickel	ppm	ASTM D5185(m)	>5	**0**	0	<1
Titanium	ppm	ASTM D5185(m)		**<1**	<1	0
Silver	ppm	ASTM D5185(m)	>2	**0**	0	0
Aluminum	ppm	ASTM D5185(m)	>40	**4**	3	3
Lead	ppm	ASTM D5185(m)	>50	**0**	0	<1
Copper	ppm	ASTM D5185(m)	>155	**8**	8	8
Tin	ppm	ASTM D5185(m)	>10	**0**	0	0
Antimony	ppm	ASTM D5185(m)		**0**	0	0
Vanadium	ppm	ASTM D5185(m)		**0**	0	0
Beryllium	ppm	ASTM D5185(m)		**0**	0	0
Cadmium	ppm	ASTM D5185(m)		**0**	0	0

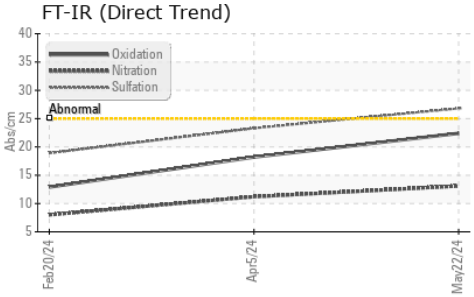
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)	250	**39**	49	108
Barium	ppm	ASTM D5185(m)	10	**<1**	<1	0
Molybdenum	ppm	ASTM D5185(m)	100	**79**	77	77
Manganese	ppm	ASTM D5185(m)		**1**	1	<1
Magnesium	ppm	ASTM D5185(m)	450	**522**	504	512
Calcium	ppm	ASTM D5185(m)	3000	**1240**	1219	1251
Phosphorus	ppm	ASTM D5185(m)	1150	**659**	632	669
Zinc	ppm	ASTM D5185(m)	1350	**748**	723	739
Sulfur	ppm	ASTM D5185(m)	4250	**2247**	2206	2450
Lithium	ppm	ASTM D5185(m)		**<1**	<1	<1

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>30	**38**	34	33
Sodium	ppm	ASTM D5185(m)	>400	**5**	4	3
Potassium	ppm	ASTM D5185(m)	>20	**1**	<1	<1

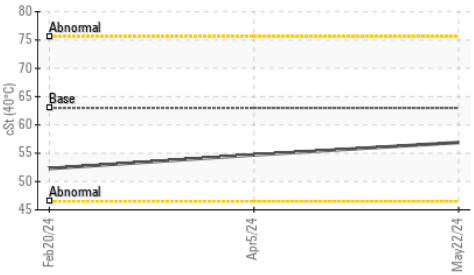
INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	ASTM D7844*		**0**	0	0
Nitration	Abs/cm	ASTM D7624*	>20	**13.1**	11.2	8.0
Sulfation	Abs/.1mm	ASTM D7415*	>30	**26.8**	23.3	18.9

OIL ANALYSIS REPORT

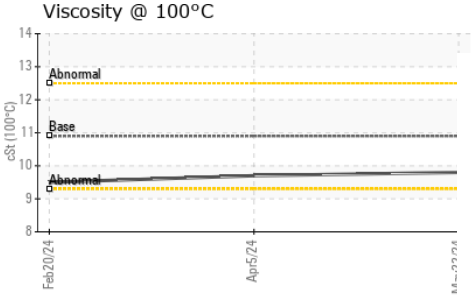
FT-IR (Direct Trend)



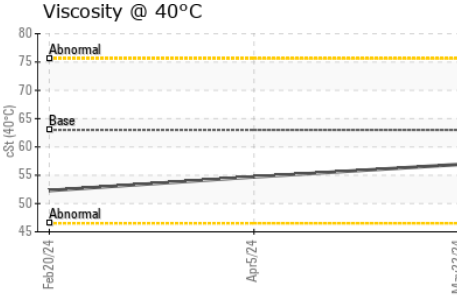
Viscosity @ 40°C



Viscosity @ 100°C



Viscosity @ 40°C



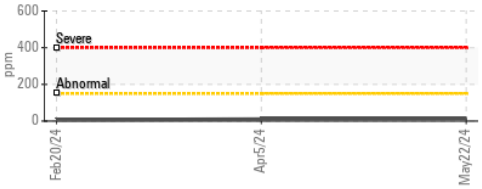
FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	ASTM D7414*	>25	**22.4**	18.2	12.9
Base Number (BN)	mg KOH/g	ASTM D2896*	8.5	**4.58**	5.06	6.52

VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	**NONE**	VLITE	NONE
Yellow Metal	scalar	Visual*	NONE	**NONE**	NONE	NONE
Precipitate	scalar	Visual*	NONE	**NONE**	NONE	VLITE
Silt	scalar	Visual*	NONE	**NONE**	VLITE	NONE
Debris	scalar	Visual*	NONE	**VLITE**	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

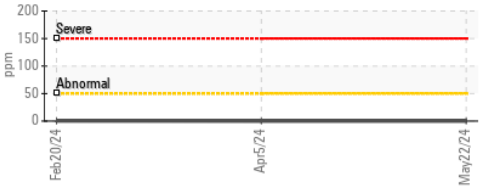
FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	63	**56.9**	54.7	52.3
Visc @ 100°C	cSt	ASTM D7279(m)	10.9	**9.8**	9.7	9.5
Viscosity Index (VI)	Scale	ASTM D2270*	165	**158**	163	167

GRAPHS

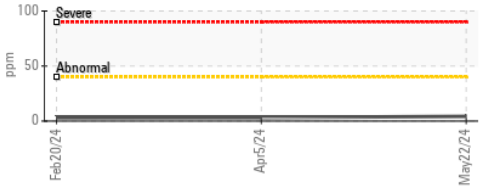
Iron (ppm)



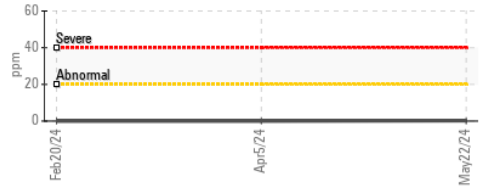
Lead (ppm)



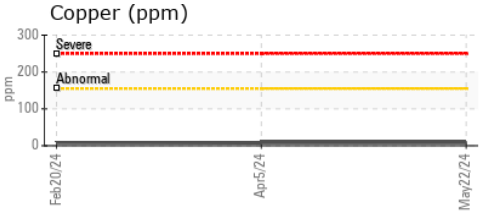
Aluminum (ppm)



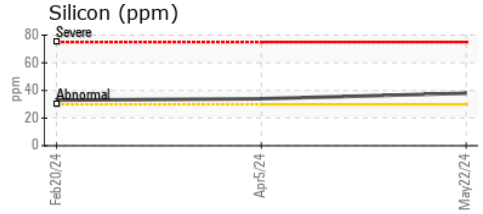
Chromium (ppm)



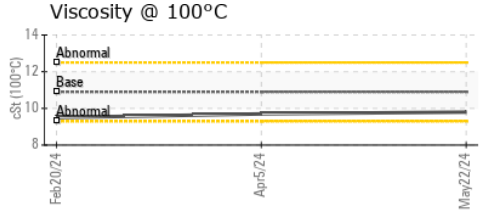
Copper (ppm)



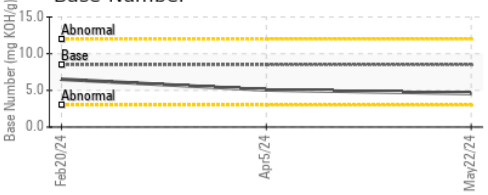
Silicon (ppm)



Viscosity @ 100°C



Base Number



ISO 17025:2017 Accredited Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : PC0085529 **Received** : 27 May 2024
Lab Number : 02637622 **Tested** : 28 May 2024
Unique Number : 5786784 **Diagnosed** : 28 May 2024 - Wes Davis
Test Package : MOB 2 (Additional Tests: KV40, VI)

UPS CANADA
2900 STEELES AVE W
CONCORD, ON
CA L4K 3S2
Contact: Service Manager

To discuss this sample report, contact Customer Service at 1-800-268-2131.
Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab.
Validity of results and interpretation are based on the sample and information as supplied.

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F: