

OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL



52000 series Navistar 52621

Diesel Engine

PETRO CANADA DURON SHP 10W30 (40 LTR)

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

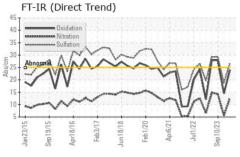
Fluid Condition

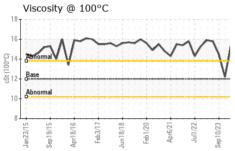
Viscosity of sample indicates oil is within SAE 40 range, advise investigate. The condition of the oil is acceptable for the time in service.

SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0915067	WC0864550	WC0848015
Sample Date		Client Info		02 Apr 2024	02 Oct 2023	10 Sep 2023
Machine Age	mls	Client Info		714808	874960	0
Oil Age	mls	Client Info		18197	18539	0
Oil Changed		Client Info		Changed	Changed	Not Changd
Sample Status				NORMAL	NORMAL	NORMAL
CONTAMINATION	J	method	limit/base	current	history1	history2
Fuel		WC Method	>3.0	<1.0	0.4	<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)	>90	29	7	33
Chromium	ppm	ASTM D5185(m)	>20	<1	0	1
Nickel	ppm	ASTM D5185(m)	>2	0	0	0
Titanium	ppm	ASTM D5185(m)	>2	0	0	0
Silver	ppm	ASTM D5185(m)	>2	0	<1	0
Aluminum	ppm	ASTM D5185(m)	>20	3	1	2
Lead	ppm	ASTM D5185(m)	>40	<1	<1	3
Copper	ppm	ASTM D5185(m)		<1	<1	<1
Tin	ppm	ASTM D5185(m)	>15	0	0	<1
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)	2	5	2	2
Barium	ppm	ASTM D5185(m)	0	0	<1	0
Molybdenum	ppm	ASTM D5185(m)	50	75	61	78
Manganese	ppm	ASTM D5185(m)		<1	0	<1
Magnesium	ppm	ASTM D5185(m)	950	1230	1001	1304
Calcium	ppm	ASTM D5185(m)	1050	1328	1069	1389
Phosphorus	ppm	ASTM D5185(m)	995	1227	1039	1348
Zinc	ppm	ASTM D5185(m)	1180	1462	1229	1574
Sulfur	ppm	ASTM D5185(m)	2600	2673	2654	2881
Lithium	ppm	ASTM D5185(m)		<1	<1	<1
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>25	6	9	19
Sodium	ppm	ASTM D5185(m)		2	2	3
Potassium	ppm	ASTM D5185(m)	>20	0	0	<1
INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	ASTM D7844*	>6	0.7	0	0.6
Nitration	Abs/cm	ASTM D7624*	>20	12.7	5.6	14.2
Sulfation	Abs/.1mm	ASTM D7415*	>30	26.7	18.9	29.2



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FLUID DEGRADA	method	limit/base	current	history1	history2	
Oxidation	Abs/.1mm	ASTM D7414* >25		24.0	14.5	27.9
VISUAL		method	limit/base	current	history1	history2
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 @ 100°C	cSt	ASTM D7279(m)	12.00	15.3	12.2	14.5
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GRAPHS																
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0								60 - Ab								
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Aluminum	ı (ppr	n)						Ch	romi	um (p	pm)					
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Severe								40 - Sev	ere							
0				-				30 - Ab	Ш							
Abnormal								20 - Ab	normal							
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Copper (p			7				0,			(ppm))	7				
Severe Abnormal	1777							80 J Sev								
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Viscosity		0°C	7				0,		ot %			7				
8	7770							8.0 T Sev								
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8	Apr18/16 -	Feb3/17 +	Jun18/18	Feb 1/20	Apr6/21-	Jul1/22	Sep10/23 -	0.0 Jan23/15	Sep19/15	Apr18/16	Feb3/17	Jun18/18	Feb1/20	Apr6/21	Jul1/22	Sen 10/23



CALA ISO 17025:2017 Accredited Laboratory

Laboratory Unique Number : 5762708 Test Package : MOB 1

Sample No. : WC0915067 Lab Number : 02629576

To discuss this sample report, contact Customer Service at 1-800-268-2131.

: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 MANITOULIN TRANSPORT (GARAGE) Received : 17 Apr 2024

Tested : 17 Apr 2024 Diagnosed : 18 Apr 2024 - Kevin Marson

1335 SHAWSON DRIVE MISSISSAUGA, ON CA L4W 1C4

Contact: Travis Spence tspence@manitoulintransport.com T:

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.

F: (905)564-6361

Contact/Location: Travis Spence - MANMIS