MOB I WEAR CHECK

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	ABNORMAL

Machine Id
2008 NOVA 156
Component
Rear Diesel Engine
Fluid
ESSO XD-3 EXTRA 15W40 (--- GAL)

RECOMMENDATION

The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

WEAR

All component wear rates are normal.

CONTAMINATION

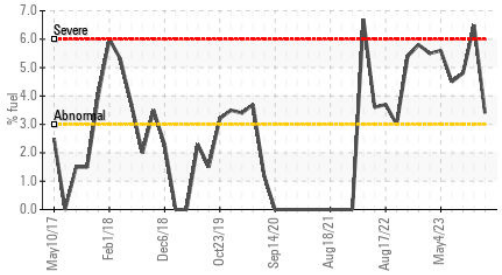
There is a moderate amount of fuel present in the oil. Tests confirm the presence of fuel in the oil.

FLUID CONDITION

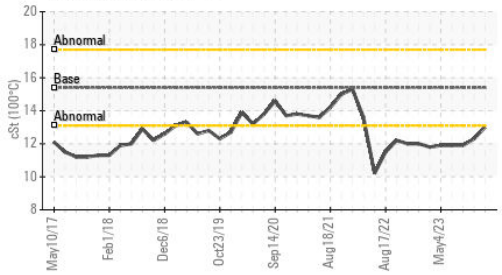
Fuel is present in the oil and is lowering the viscosity. The oil is no longer serviceable due to the presence of contaminants.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0889105	WC0866486	WC0816352
Sample Date		Client Info		29 Dec 2023	20 Dec 2023	06 Oct 2023
Machine Age	kms	Client Info		0	0	0
Oil Age	kms	Client Info		1408	9413	11051
Filter Age	kms	Client Info		1408	9413	11051
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		N/A	N/A	N/A
Sample Status				ABNORMAL	SEVERE	ABNORMAL
Iron	ppm	ASTM D5185(m)	>75	10	37	41
Chromium	ppm	ASTM D5185(m)	>5	<1	1	1
Nickel	ppm	ASTM D5185(m)	>4	<1	<1	<1
Titanium	ppm	ASTM D5185(m)	>2	0	0	0
Silver	ppm	ASTM D5185(m)	>2	0	0	<1
Aluminum	ppm	ASTM D5185(m)	>15	2	5	5
Lead	ppm	ASTM D5185(m)	>25	0	<1	2
Copper	ppm	ASTM D5185(m)	>100	<1	1	2
Tin	ppm	ASTM D5185(m)	>4	0	0	0
Vanadium	ppm	ASTM D5185(m)		0	0	0
White Metal	scalar	Visual*	NONE	NONE	---	---
Yellow Metal	scalar	Visual*	NONE	NONE	---	---
Silicon	ppm	ASTM D5185(m)	>25	3	6	8
Potassium	ppm	ASTM D5185(m)	>20	11	8	6
Fuel	%	ASTM D7593*	>3.0	▲ 3.4	⬢ 6.5	▲ 4.8
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol	%	ASTM D7922*		0.0	NEG	NEG
Soot %	%	ASTM D7844*	>6	0.1	0.7	0.7
Nitration	Abs/cm	ASTM D7624*	>20	6.8	10.9	12.0
Sulfation	Abs/.1mm	ASTM D7415*	>30	21.3	26.2	32.7
Silt	scalar	Visual*	NONE	NONE	---	---
Debris	scalar	Visual*	NONE	NONE	---	---
Sand/Dirt	scalar	Visual*	NONE	NONE	---	---
Appearance	scalar	Visual*	NORML	NORML	---	---
Odor	scalar	Visual*	NORML	NORML	NORML	NORML
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	NEG
Sodium	ppm	ASTM D5185(m)	>192	2	3	3
Boron	ppm	ASTM D5185(m)		137	72	55
Barium	ppm	ASTM D5185(m)		0	0	<1
Molybdenum	ppm	ASTM D5185(m)		1	<1	2
Manganese	ppm	ASTM D5185(m)		0	0	<1
Magnesium	ppm	ASTM D5185(m)		20	16	34
Calcium	ppm	ASTM D5185(m)	3780	2083	2099	2070
Phosphorus	ppm	ASTM D5185(m)	1370	935	822	792
Zinc	ppm	ASTM D5185(m)	1500	1074	975	981
Sulfur	ppm	ASTM D5185(m)	3800	3058	2879	2667
Oxidation	Abs/.1mm	ASTM D7414*	>25	17.6	25.7	37.6
Visc @ 100°C	cSt	ASTM D7279(m)	15.4	▲ 13.0	▲ 12.3	▲ 11.9

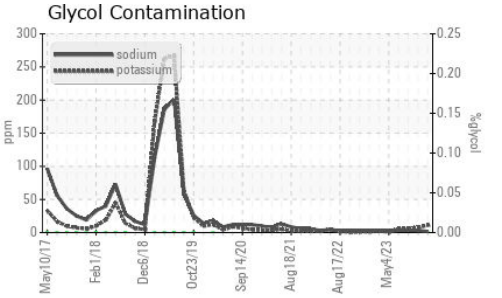
Fuel Dilution



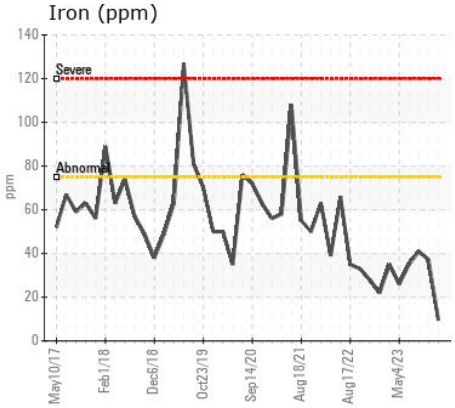
Viscosity @ 100°C



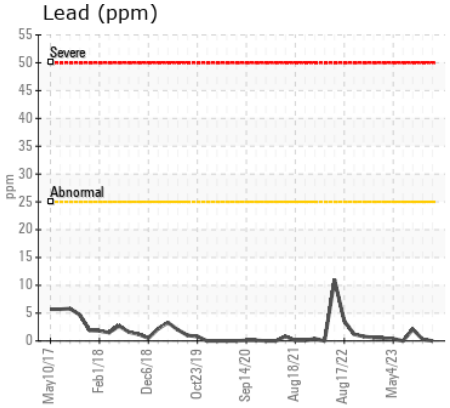
Glycol Contamination



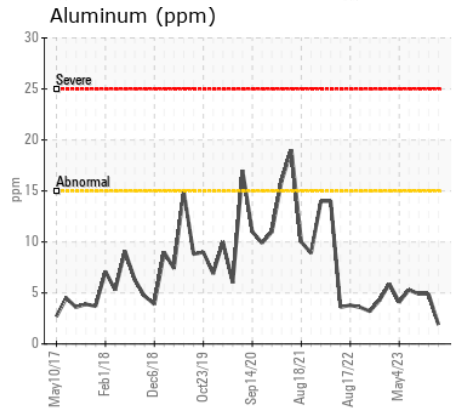
Iron (ppm)



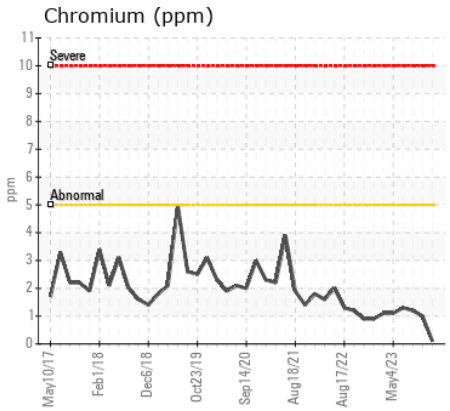
Lead (ppm)



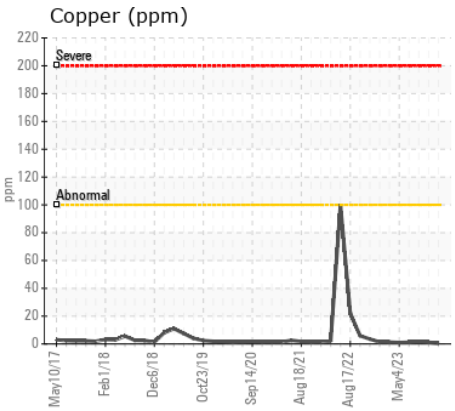
Aluminum (ppm)



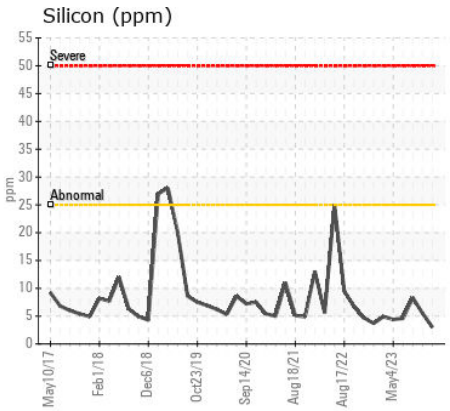
Chromium (ppm)



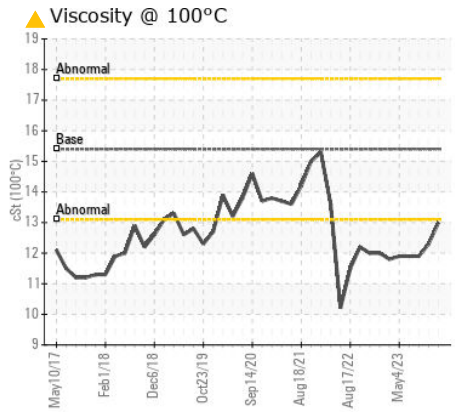
Copper (ppm)



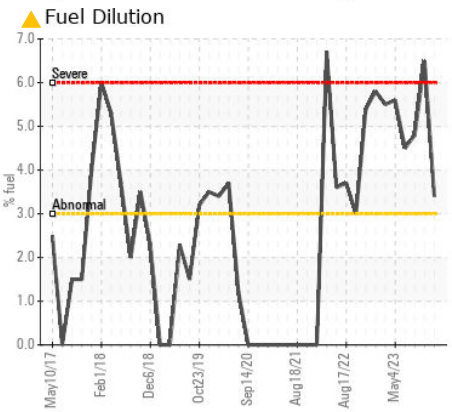
Silicon (ppm)



Viscosity @ 100°C



Fuel Dilution



CALA
ISO 17025:2017 Accredited Laboratory

Laboratory	: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9		
Sample No.	: WC0889105	**Recieved**	: 05 Jan 2024
Lab Number	: 02606752	**Diagnosed**	: 08 Jan 2024
Unique Number	: 5707838	**Diagnostician**	: Wes Davis
Test Package	: MOB 1 (Additional Tests: Glycol, PercentFuel, Visual)		

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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