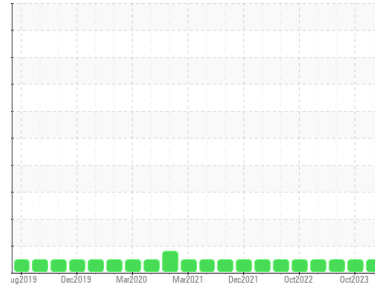




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id
NOVA 1713

Component
Natural Gas Engine

Fluid
VALVOLINE PREMIUM BLUE 9200 15W40 (--- 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 condition of the oil is acceptable for the time in service.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			WC0890954	WC0849770	WC0791279
Sample Date	Client Info			10 Jan 2024	04 Oct 2023	30 Mar 2023
Machine Age	kms	Client Info		377722	0	322035
Oil Age	kms	Client Info		0	0	0
Oil Changed	Client Info			N/A	N/A	Changed
Sample Status				NORMAL	NORMAL	NORMAL

CONTAMINATION		method	limit/base	current	history1	history2
Water	WC Method	>0.1		NEG	NEG	NEG
Glycol	WC Method			---	0.0	---

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>50	15	12	12
Chromium	ppm	ASTM D5185(m)	>4	1	<1	<1
Nickel	ppm	ASTM D5185(m)	>2	<1	<1	<1
Titanium	ppm	ASTM D5185(m)		0	0	1
Silver	ppm	ASTM D5185(m)	>3	<1	<1	<1
Aluminum	ppm	ASTM D5185(m)	>9	3	2	2
Lead	ppm	ASTM D5185(m)	>30	1	2	2
Copper	ppm	ASTM D5185(m)	>35	9	10	13
Tin	ppm	ASTM D5185(m)	>4	<1	<1	<1
Antimony	ppm	ASTM D5185(m)		0	0	<1
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)		6	5	7
Barium	ppm	ASTM D5185(m)		0	<1	0
Molybdenum	ppm	ASTM D5185(m)		61	61	54
Manganese	ppm	ASTM D5185(m)		0	0	<1
Magnesium	ppm	ASTM D5185(m)		965	931	840
Calcium	ppm	ASTM D5185(m)		1447	1387	1361
Phosphorus	ppm	ASTM D5185(m)		847	748	756
Zinc	ppm	ASTM D5185(m)		1008	993	885
Sulfur	ppm	ASTM D5185(m)		2171	2021	1927
Lithium	ppm	ASTM D5185(m)		<1	<1	<1

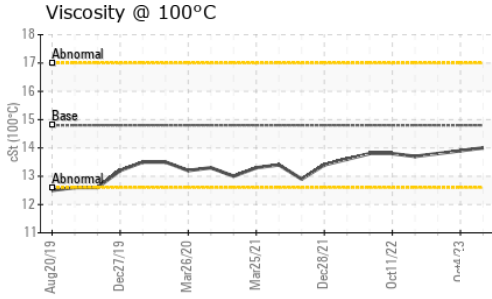
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>+100	6	5	4
Sodium	ppm	ASTM D5185(m)		5	3	4
Potassium	ppm	ASTM D5185(m)	>20	3	17	2

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	ASTM D7844*		0	0	0
Nitration	Abs/cm	ASTM D7624*	>20	14.9	13.1	13.9
Sulfation	Abs/.1mm	ASTM D7415*	>30	27.5	25.2	28.5

FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	ASTM D7414*	>25	25.0	23.7	24.5



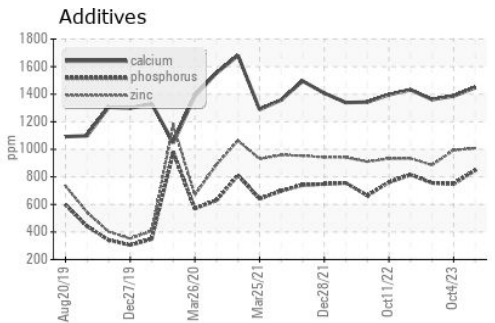
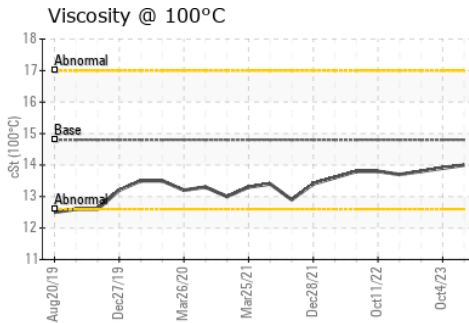
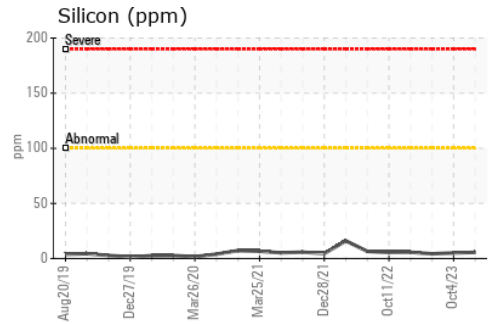
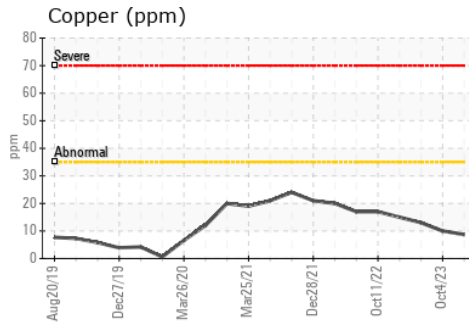
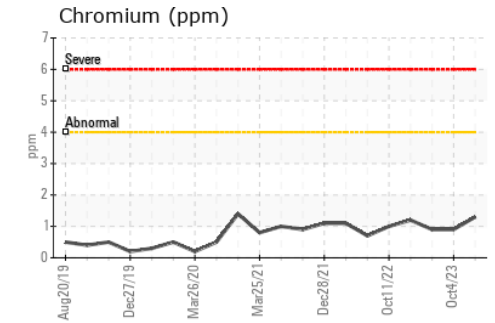
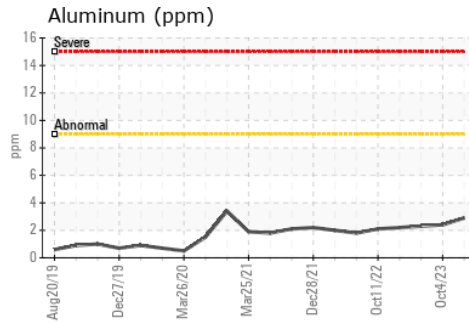
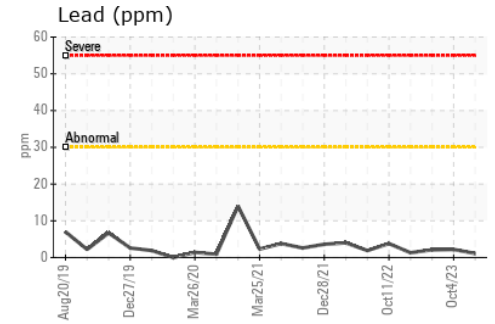
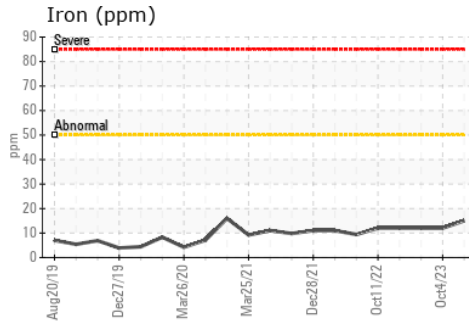
OIL ANALYSIS REPORT



VISUAL	method	limit/base	current	history1	history2
Emulsified Water	scalar	Visual*	>0.1	NEG	NEG
Free Water	scalar	Visual*		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D7279(m)	14.8	14.0	13.9

GRAPHS



ISO 17025:2017
Accredited
Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0890954
Lab Number : 02609271
Unique Number : 5710357
Test Package : MOB 1

Received : 17 Jan 2024
Diagnosed : 17 Jan 2024
Diagnostician : Kevin Marson

CITY OF HAMILTON
 2200 UPPER JAMES., MOUNTAIN TRANSIT STOREROOM
 MOUNT HOPE, ON
 CA L0R 1W0
 Contact: Jeff Parr
 jeff.parr@hamilton.ca
 T: (905)546-2424
 F: (905)679-4502

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.