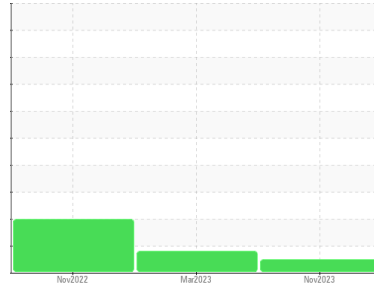# OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL

Area
WATKINS BLOCK TRUCK SHOP OMAHA
Machine Id
117 Chevy Malibu [WATKINS BLOCK TRUCK SHOP OMAHA]
Component
Gasoline Engine
Fluid
MOBIL MOBIL1 SAE 5W20 (--- 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 acceptable for the time in service.

SAMPLE INFORMATION	method	limit/base	current	history1	history2
Sample Number	Client Info		**SBP0005956**	SBP0002199	SBP0001653
Sample Date	Client Info		**21 Nov 2023**	29 Mar 2023	03 Nov 2022
Machine Age	mls	Client Info	**104897**	87945	78938
Oil Age	mls	Client Info	**8221**	9007	9706
Oil Changed		Client Info	**Changed**	Changed	Changed
Sample Status			**NORMAL**	MARGINAL	ABNORMAL

CONTAMINATION	method	limit/base	current	history1	history2
Fuel	WC Method	>4.0	**<1.0**	⚠ 2.4	<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 D5185m	>150	**9**	37	10
Chromium	ppm	ASTM D5185m	>20	**<1**	<1	<1
Nickel	ppm	ASTM D5185m	>5	**0**	0	0
Titanium	ppm	ASTM D5185m		**0**	0	0
Silver	ppm	ASTM D5185m	>2	**0**	0	0
Aluminum	ppm	ASTM D5185m	>40	**2**	7	2
Lead	ppm	ASTM D5185m	>50	**0**	0	0
Copper	ppm	ASTM D5185m	>155	**<1**	<1	1
Tin	ppm	ASTM D5185m	>10	**0**	0	0
Vanadium	ppm	ASTM D5185m		**0**	<1	<1
Cadmium	ppm	ASTM D5185m		**0**	0	0

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		**23**	8	18
Barium	ppm	ASTM D5185m		**2**	0	0
Molybdenum	ppm	ASTM D5185m		**68**	73	70
Manganese	ppm	ASTM D5185m		**0**	<1	<1
Magnesium	ppm	ASTM D5185m		**466**	502	481
Calcium	ppm	ASTM D5185m		**1141**	1255	1193
Phosphorus	ppm	ASTM D5185m		**621**	692	643
Zinc	ppm	ASTM D5185m		**736**	905	793
Sulfur	ppm	ASTM D5185m		**2888**	2642	2837

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>30	**29**	19	⚠ 34
Sodium	ppm	ASTM D5185m	>400	**2**	3	3
Potassium	ppm	ASTM D5185m	>20	**2**	5	2

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844		**0.1**	0.1	0.1
Nitration	Abs/cm	*ASTM D7624	>20	**13.2**	13.3	14.7
Sulfation	Abs/.1mm	*ASTM D7415	>30	**27.5**	26.2	30.8

FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	**22.0**	21.5	24.9
Base Number (BN)	mg KOH/g	ASTM D2896		**3.0**	2.7	3.4

OIL ANALYSIS REPORT

Base Number

Viscosity @ 100°C
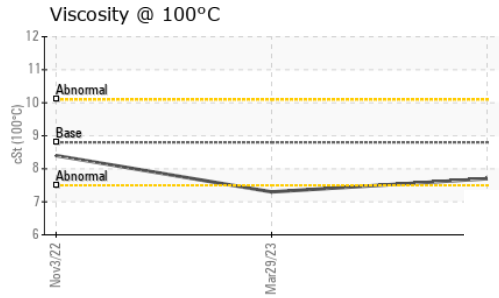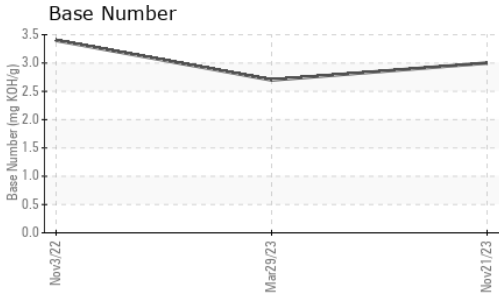
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Precipitate	scalar	*Visual	NONE	**NONE**	NONE	NONE
Silt	scalar	*Visual	NONE	**NONE**	NONE	NONE
Debris	scalar	*Visual	NONE	**NONE**	NONE	NONE
Sand/Dirt	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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	8.8	**7.7**	7.3	⚠ 8.4

GRAPHS

Ferrous Alloys

Non-ferrous Metals

Viscosity @ 100°C

Base Number
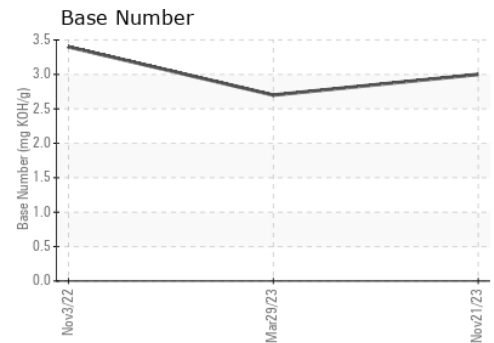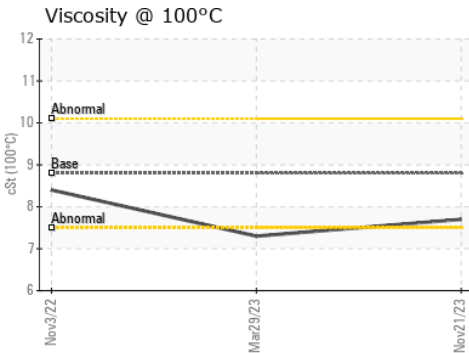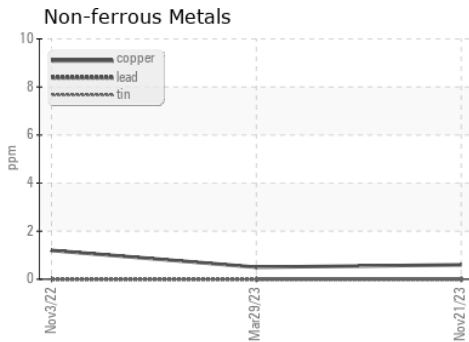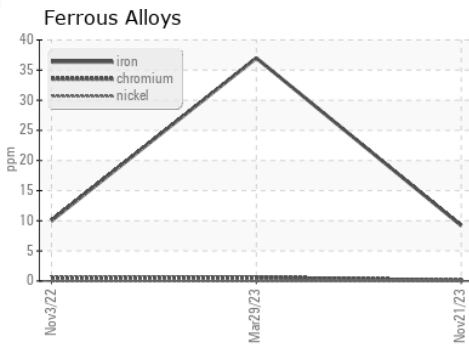
Laboratory

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : SBP0005956 **Received** : 05 Dec 2023
Lab Number : 06025526 **Diagnosed** : 07 Dec 2023
Unique Number : 10770026 **Diagnostician** : Sean Felton
Test Package : FLEET

Watkins Block Truck Shop Omaha - 602227
14306 Giles Rd
Omaha, NE
US 68138
Contact: Dave Hozba
daveh@watkinsconcreteblock.com
T: (402)894-6518
F:

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)

Certificate L2367