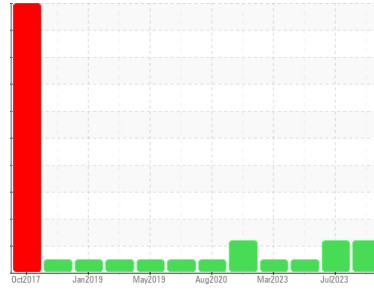




# PROBLEM SUMMARY

Area  
**CONSTRUCTORS, INC**  
 Machine Id  
**CHEVROLET GASOLINE 040695**  
 Component  
**Gasoline Engine**  
 Fluid  
**MOBIL MOBIL 1 EXT PERFORMANCE 5W20 (--- GAL)**

Sample Rating Trend



## DEGRADATION



### COMPONENT CONDITION SUMMARY

No relevant graphs to display


### RECOMMENDATION

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

### PROBLEMATIC TEST RESULTS

Sample Status				<b>MARGINAL</b>	MARGINAL	NORMAL
Base Number (BN)	mg KOH/g	ASTM D2896	8.3	<b>▲ 2.4</b>	▲ 2.2	2.5

**Customer Id:** CONLINNE  
**Sample No.:** SBP0004638  
**Lab Number:** 05935935  
**Test Package:** FLEET



*To manage this report scan the QR code*

*To discuss the diagnosis or test data:*  
 Sean Felton +1 919-379-4092  
[sfelton@wearcheckusa.com](mailto:sfelton@wearcheckusa.com)

*To change component or sample information:*  
 Customer Service +1 1-800-237-1369  
[customerservice@wearcheck.com](mailto:customerservice@wearcheck.com)

## RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Change Fluid	---	---	?	Oil and filter change at the time of sampling has been noted.
Change Filter	---	---	?	Oil and filter change at the time of sampling has been noted.

## HISTORICAL DIAGNOSIS

### 14 Jul 2023 Diag: Doug Bogart

#### DEGRADATION



Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. The BN level is low.

[view report](#)



### 01 Jun 2023 Diag: Jonathan Hester

#### NORMAL



Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

[view report](#)



### 31 Mar 2023 Diag: Don Baldrige

#### NORMAL



Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

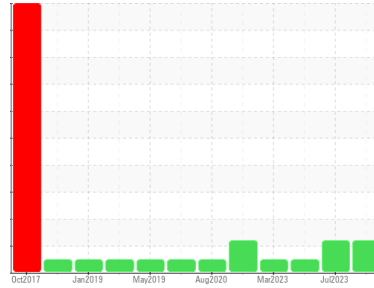
[view report](#)





# OIL ANALYSIS REPORT

Sample Rating Trend



**DEGRADATION**



Area  
**CONSTRUCTORS, INC**  
 Machine Id  
**CHEVROLET GASOLINE 040695**  
 Component  
**Gasoline Engine**  
 Fluid  
**MOBIL MOBIL 1 EXT PERFORMANCE 5W20 (--- GAL)**

**DIAGNOSIS**

**Recommendation**

Oil and filter change at the time of sampling has been noted. 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 level is low.

**SAMPLE INFORMATION**

method	limit/base	current	history1	history2
Sample Number	Client Info	<b>SBP0004638</b>	SBP0004551	SBP0004440
Sample Date	Client Info	<b>23 Aug 2023</b>	14 Jul 2023	01 Jun 2023
Machine Age	hrs	<b>8103</b>	7773	7445
Oil Age	hrs	<b>330</b>	328	377
Oil Changed	Client Info	<b>Changed</b>	Changed	Changed
Sample Status		<b>MARGINAL</b>	MARGINAL	NORMAL

**CONTAMINATION**

method	limit/base	current	history1	history2
Fuel	WC Method >4.0	<b>&lt;1.0</b>	<1.0	<1.0
Glycol	WC Method	<b>NEG</b>	NEG	NEG

**WEAR METALS**

method	limit/base	current	history1	history2
Iron	ppm ASTM D5185m >150	<b>7</b>	8	7
Chromium	ppm ASTM D5185m >20	<b>&lt;1</b>	<1	0
Nickel	ppm ASTM D5185m >5	<b>0</b>	<1	0
Titanium	ppm ASTM D5185m	<b>0</b>	<1	0
Silver	ppm ASTM D5185m >2	<b>0</b>	0	0
Aluminum	ppm ASTM D5185m >40	<b>2</b>	2	3
Lead	ppm ASTM D5185m >50	<b>0</b>	<1	0
Copper	ppm ASTM D5185m >155	<b>2</b>	2	2
Tin	ppm ASTM D5185m >10	<b>0</b>	<1	0
Vanadium	ppm ASTM D5185m	<b>&lt;1</b>	<1	0
Cadmium	ppm ASTM D5185m	<b>0</b>	0	0

**ADDITIVES**

method	limit/base	current	history1	history2
Boron	ppm ASTM D5185m 100	<b>23</b>	19	29
Barium	ppm ASTM D5185m	<b>0</b>	1	0
Molybdenum	ppm ASTM D5185m 80	<b>78</b>	76	73
Manganese	ppm ASTM D5185m	<b>&lt;1</b>	<1	0
Magnesium	ppm ASTM D5185m 800	<b>577</b>	545	552
Calcium	ppm ASTM D5185m 1125	<b>1363</b>	1281	1410
Phosphorus	ppm ASTM D5185m 720	<b>722</b>	683	710
Zinc	ppm ASTM D5185m 790	<b>870</b>	856	879
Sulfur	ppm ASTM D5185m 2100	<b>3101</b>	2689	3278

**CONTAMINANTS**

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m >30	<b>19</b>	16	19
Sodium	ppm ASTM D5185m >400	<b>2</b>	2	3
Potassium	ppm ASTM D5185m >20	<b>0</b>	2	<1

**INFRA-RED**

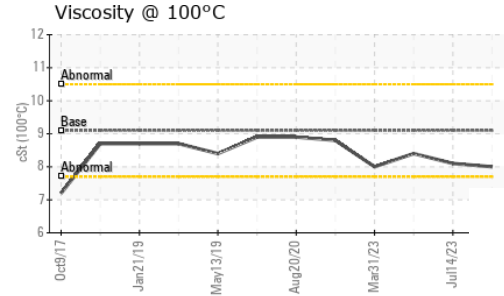
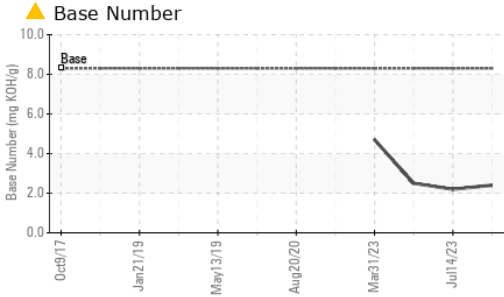
method	limit/base	current	history1	history2
Soot %	% *ASTM D7844	<b>0</b>	0	0.1
Nitration	Abs/cm *ASTM D7624 >20	<b>10.4</b>	11.3	10.8
Sulfation	Abs/.1mm *ASTM D7415 >30	<b>25.3</b>	25.2	27.2

**FLUID DEGRADATION**

method	limit/base	current	history1	history2
Oxidation	Abs/.1mm *ASTM D7414 >25	<b>22.9</b>	24.0	23.0
Base Number (BN)	mg KOH/g ASTM D2896 8.3	<b>▲ 2.4</b>	▲ 2.2	2.5



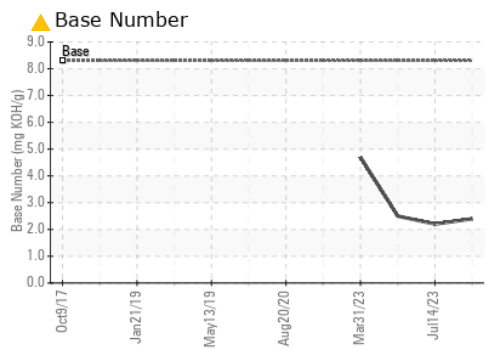
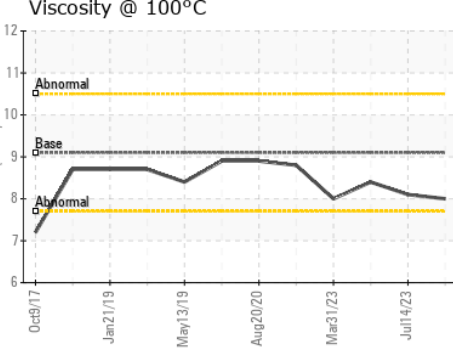
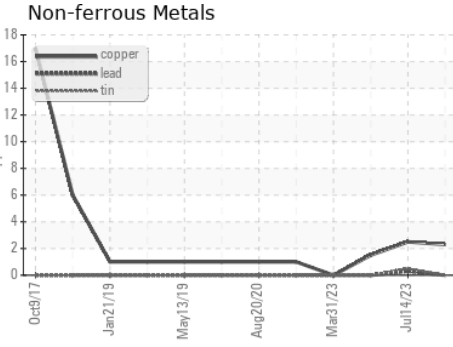
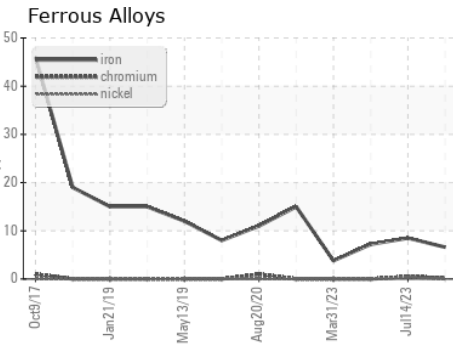
# OIL ANALYSIS REPORT



VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 100°C	cSt	ASTM D445	9.1	<b>8</b>	8.1	8.4

## GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : SBP0004638 **Received** : 28 Aug 2023  
**Lab Number** : **05935935** **Diagnosed** : 29 Aug 2023  
**Unique Number** : 10621206 **Diagnostician** : Sean Felton  
**Test Package** : FLEET

**Constructors Inc. - 603659**  
 1815 Y Street  
 Lincoln, NE  
 US 68508

Contact: Jack Linhart  
 jackl@constructorslincoln.com  
 T: (402)434-2157  
 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)