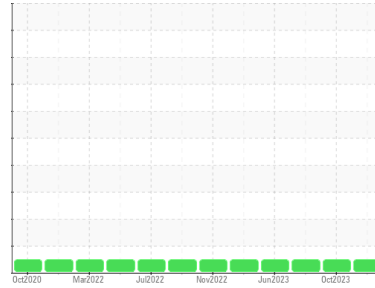




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Area  
**CONSTRUCTORS, INC**  
 Machine Id  
**040604**  
 Component  
**Gasoline Engine**  
 Fluid  
**MOBIL 1 5W30 (--- 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 suitable for further service.

## SAMPLE INFORMATION

method	limit/base	current	history1	history2	
Sample Number	Client Info	<b>SBP0005744</b>	SBP0004891	SBP0004596	
Sample Date	Client Info	<b>11 Jan 2024</b>	26 Oct 2023	06 Sep 2023	
Machine Age	hrs	Client Info	<b>6170</b>	5853	5535
Oil Age	hrs	Client Info	<b>317</b>	318	288
Oil Changed	Client Info	<b>Changed</b>	Changed	Changed	
Sample Status		<b>NORMAL</b>	NORMAL	NORMAL	

## CONTAMINATION

method	limit/base	current	history1	history2
Fuel	WC Method >4.0	<b>&lt;1.0</b>	<1.0	<1.0
Water	WC Method >0.2	<b>NEG</b>	NEG	NEG
Glycol	WC Method	<b>NEG</b>	NEG	NEG

## WEAR METALS

method	limit/base	current	history1	history2
Iron	ppm ASTM D5185m >150	<b>3</b>	4	7
Chromium	ppm ASTM D5185m >20	<b>&lt;1</b>	0	<1
Nickel	ppm ASTM D5185m >5	<b>0</b>	0	0
Titanium	ppm ASTM D5185m	<b>&lt;1</b>	0	0
Silver	ppm ASTM D5185m >2	<b>0</b>	0	0
Aluminum	ppm ASTM D5185m >40	<b>2</b>	2	1
Lead	ppm ASTM D5185m >50	<b>&lt;1</b>	0	0
Copper	ppm ASTM D5185m >155	<b>&lt;1</b>	<1	0
Tin	ppm ASTM D5185m >10	<b>2</b>	<1	<1
Vanadium	ppm ASTM D5185m	<b>&lt;1</b>	0	0
Cadmium	ppm ASTM D5185m	<b>0</b>	0	0

## ADDITIVES

method	limit/base	current	history1	history2
Boron	ppm ASTM D5185m 94	<b>108</b>	30	28
Barium	ppm ASTM D5185m 0.0	<b>0</b>	0	0
Molybdenum	ppm ASTM D5185m 0.0	<b>69</b>	64	69
Manganese	ppm ASTM D5185m	<b>&lt;1</b>	<1	<1
Magnesium	ppm ASTM D5185m 1388	<b>489</b>	492	526
Calcium	ppm ASTM D5185m 820	<b>1181</b>	1081	1217
Phosphorus	ppm ASTM D5185m 720	<b>626</b>	643	672
Zinc	ppm ASTM D5185m 780	<b>778</b>	725	785
Sulfur	ppm ASTM D5185m 2240	<b>2678</b>	2519	3178

## CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m >30	<b>9</b>	12	13
Sodium	ppm ASTM D5185m >400	<b>2</b>	2	2
Potassium	ppm ASTM D5185m >20	<b>0</b>	1	<1

## INFRA-RED

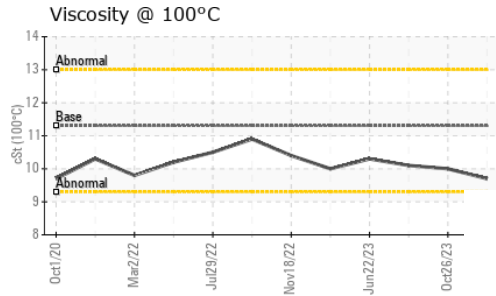
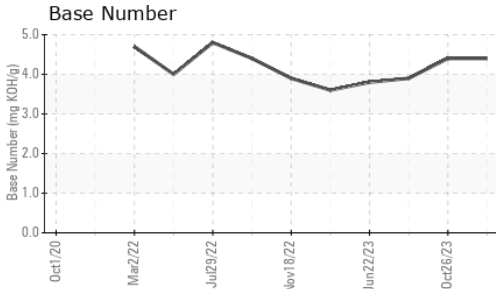
method	limit/base	current	history1	history2
Soot %	% *ASTM D7844	<b>0</b>	0	0.1
Nitration	Abs/cm *ASTM D7624 >20	<b>8.8</b>	9.8	9.7
Sulfation	Abs/.1mm *ASTM D7415 >30	<b>18.6</b>	22.0	22.1

## FLUID DEGRADATION

method	limit/base	current	history1	history2
Oxidation	Abs/.1mm *ASTM D7414 >25	<b>12.0</b>	15.6	16.6
Base Number (BN)	mg KOH/g ASTM D2896	<b>4.4</b>	4.4	3.9



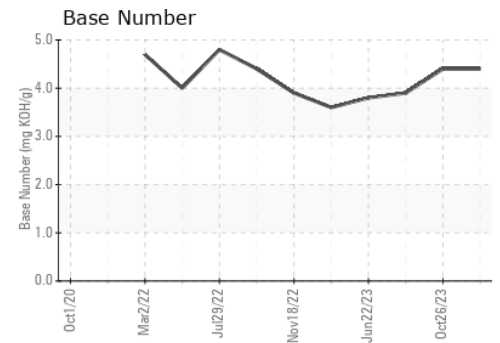
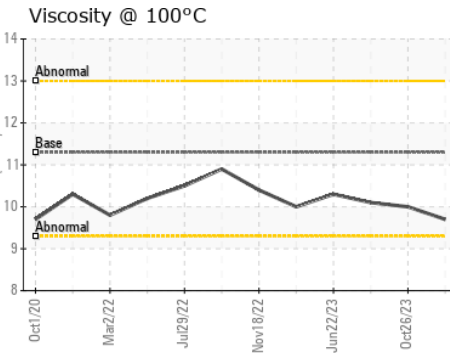
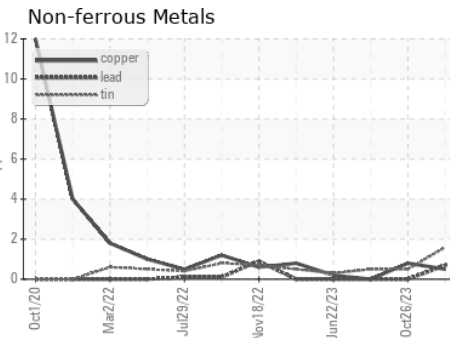
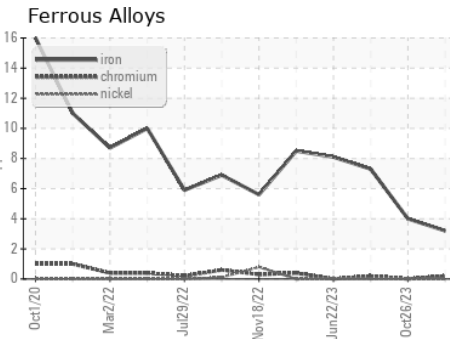
# OIL ANALYSIS REPORT



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	11.3	<b>9.7</b>	10.0	10.1

## GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : SBP0005744 **Recieved** : 16 Jan 2024  
**Lab Number** : **06061877** **Diagnosed** : 17 Jan 2024  
**Unique Number** : 10833259 **Diagnostician** : Wes Davis  
**Test Package** : FLEET

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

Contact: Loren Michael  
LorenM@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)