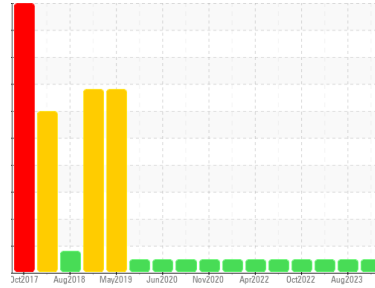




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Area  
**CONSTRUCTORS, INC**  
 Machine Id  
**040615**  
 Component  
**Gasoline Engine**  
 Fluid  
**MOBIL SUPER 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>SBP0005717</b>	SBP0004642	SBP0001297
Sample Date	Client Info			<b>04 Jan 2024</b>	23 Aug 2023	23 Feb 2023
Machine Age	hrs	Client Info		<b>7150</b>	6894	6595
Oil Age	hrs	Client Info		<b>256</b>	299	217
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>39</b>	60	48
Chromium	ppm	ASTM D5185m	>20	<b>2</b>	3	3
Nickel	ppm	ASTM D5185m	>5	<b>&lt;1</b>	<1	<1
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>5</b>	6	5
Lead	ppm	ASTM D5185m	>50	<b>&lt;1</b>	0	0
Copper	ppm	ASTM D5185m	>155	<b>18</b>	23	18
Tin	ppm	ASTM D5185m	>10	<b>&lt;1</b>	0	0
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	0
Cadmium	ppm	ASTM D5185m		<b>0</b>	0	0

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		<b>22</b>	34	61
Barium	ppm	ASTM D5185m		<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>70</b>	77	72
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	1	<1
Magnesium	ppm	ASTM D5185m		<b>541</b>	553	495
Calcium	ppm	ASTM D5185m		<b>1215</b>	1317	1209
Phosphorus	ppm	ASTM D5185m		<b>715</b>	712	658
Zinc	ppm	ASTM D5185m		<b>866</b>	837	783
Sulfur	ppm	ASTM D5185m		<b>2911</b>	3398	3154

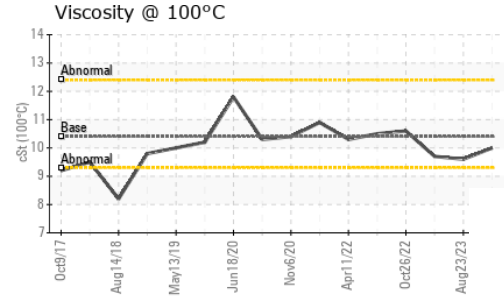
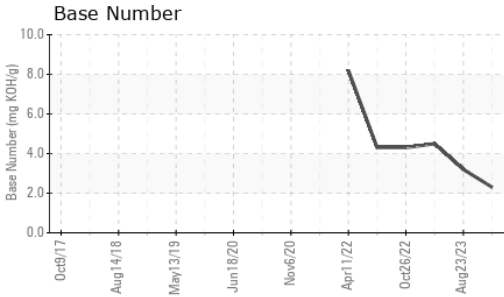
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>30	<b>13</b>	17	11
Sodium	ppm	ASTM D5185m	>400	<b>4</b>	4	3
Potassium	ppm	ASTM D5185m	>20	<b>1</b>	<1	<1

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844		<b>0.1</b>	0.1	0.1
Nitration	Abs/cm	*ASTM D7624	>20	<b>12.5</b>	11.9	10.9
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>25.5</b>	24.0	21.6

FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>21.5</b>	19.9	14.7
Base Number (BN)	mg KOH/g	ASTM D2896		<b>2.3</b>	3.2	4.5



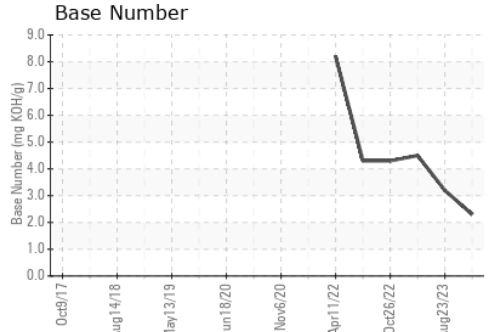
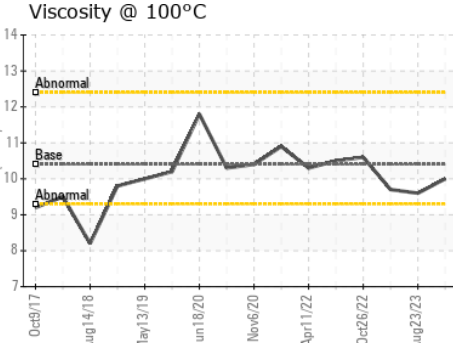
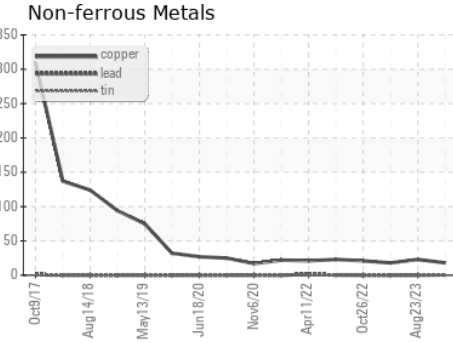
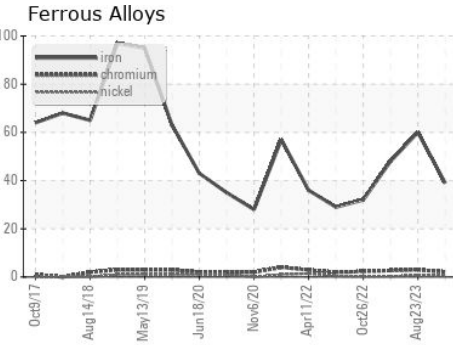
# OIL ANALYSIS REPORT



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	10.4	<b>10.0</b>	9.6	9.7

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : SBP0005717 **Received** : 08 Jan 2024  
**Lab Number** : **06054723** **Diagnosed** : 09 Jan 2024  
**Unique Number** : 10820672 **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:

Certificate L2367  
 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)