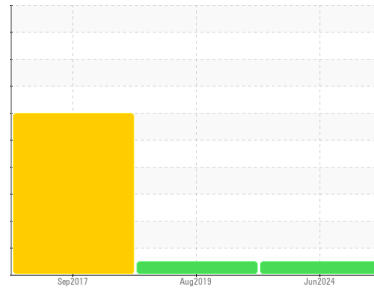




# OIL ANALYSIS REPORT

Area  
**CONSTRUCTORS, INC**  
 Machine Id  
**131705**  
 Component  
**Diesel Engine**  
 Fluid  
**MOBIL DELVAC 1300 SUPER 10W30 (--- GAL)**

Sample Rating Trend



**NORMAL**



## 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>SBP0006781</b>	SBP17273037	SBP72143029
Sample Date	Client Info			<b>10 Jun 2024</b>	02 Aug 2019	25 Sep 2017
Machine Age	hrs	Client Info		<b>2218</b>	1634	514
Oil Age	hrs	Client Info		<b>584</b>	538	514
Oil Changed	Client Info			<b>Changed</b>	Changed	Changed
Sample Status				<b>NORMAL</b>	NORMAL	SEVERE

CONTAMINATION		method	limit/base	current	history1	history2
Fuel	WC Method	>5		<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>	0.0	0.0

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>100	<b>12</b>	13	29
Chromium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	0	0
Nickel	ppm	ASTM D5185m	>2	<b>&lt;1</b>	0	0
Titanium	ppm	ASTM D5185m	>2	<b>0</b>	0	0
Silver	ppm	ASTM D5185m	>2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>25	<b>2</b>	3	2
Lead	ppm	ASTM D5185m	>40	<b>0</b>	0	0
Copper	ppm	ASTM D5185m	>330	<b>11</b>	52	▲ 706
Tin	ppm	ASTM D5185m	>15	<b>0</b>	0	0
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	0
Cadmium	ppm	ASTM D5185m		<b>2</b>	0	0

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		<b>42</b>	30	6
Barium	ppm	ASTM D5185m		<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>36</b>	42	58
Manganese	ppm	ASTM D5185m		<b>2</b>	0	0
Magnesium	ppm	ASTM D5185m		<b>431</b>	540	887
Calcium	ppm	ASTM D5185m		<b>1813</b>	1611	1006
Phosphorus	ppm	ASTM D5185m		<b>749</b>	767	914
Zinc	ppm	ASTM D5185m		<b>914</b>	847	1021
Sulfur	ppm	ASTM D5185m		<b>2800</b>	---	---

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	<b>5</b>	5	10
Sodium	ppm	ASTM D5185m		<b>6</b>	4	10
Potassium	ppm	ASTM D5185m	>20	<b>4</b>	1	5
Chlorine	ppm	ASTM D5185m		<b>---</b>	0	0

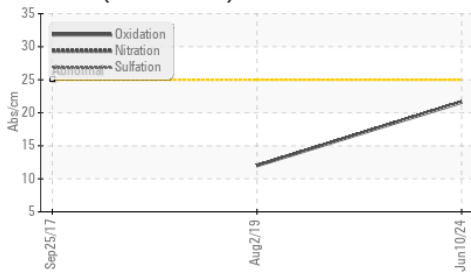
INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	<b>0.1</b>	0.04	0.05
Nitration	Abs/cm	*ASTM D7624	>20	<b>9.8</b>	---	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>21.1</b>	---	---

FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>21.6</b>	12	---
Base Number (BN)	mg KOH/g	ASTM D2896	10.5	<b>7.7</b>	---	---

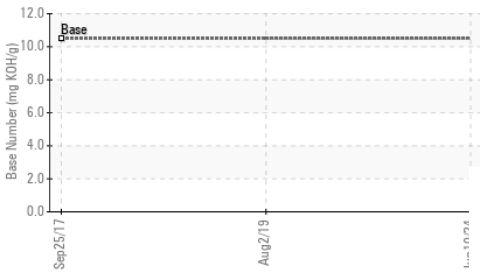


# OIL ANALYSIS REPORT

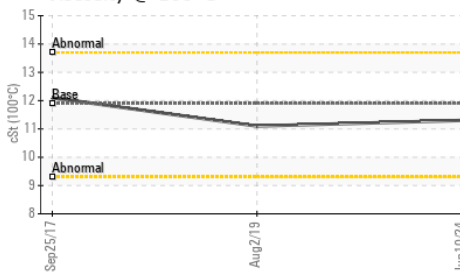
FT-IR (Direct Trend)



Base Number



Viscosity @ 100°C

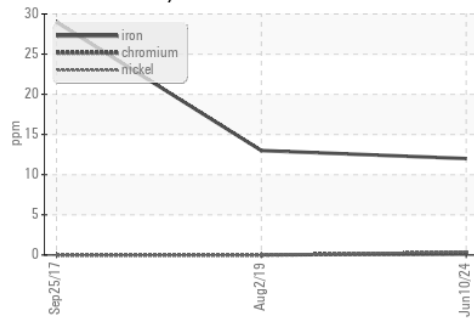


VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	<b>NONE</b>	---
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	---
Precipitate	scalar	*Visual	NONE	<b>NONE</b>	---
Silt	scalar	*Visual	NONE	<b>NONE</b>	---
Debris	scalar	*Visual	NONE	<b>NONE</b>	---
Sand/Dirt	scalar	*Visual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

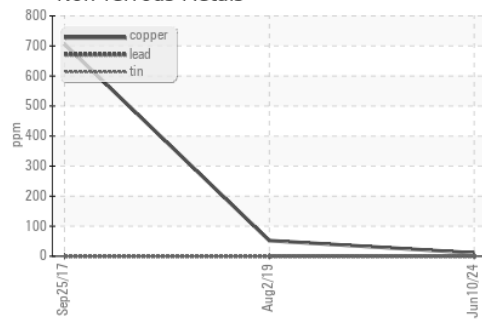
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	11.9	<b>11.3</b>	11.1

## GRAPHS

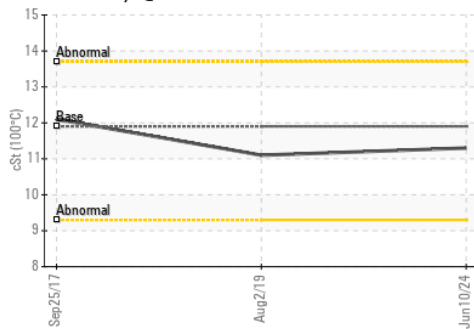
Ferrous Alloys



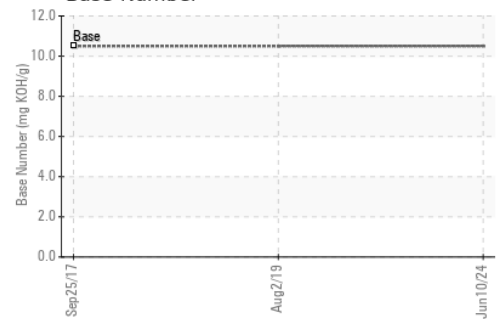
Non-ferrous Metals



Viscosity @ 100°C



Base Number



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : SBP0006781      **Received** : 13 Jun 2024  
**Lab Number** : 06209431      **Tested** : 15 Jun 2024  
**Unique Number** : 11076892      **Diagnosed** : 15 Jun 2024 - Wes Davis  
**Test Package** : FLEET

**Constructors Inc. - 603659**  
 1815 Y Street  
 Lincoln, NE  
 US 68508  
 Contact: Loren Michael  
 LorenM@constructorslincoln.com

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)