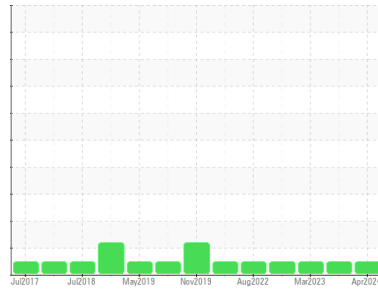




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Area  
**CONSTRUCTORS, INC**

Machine Id  
**09-0753**

Component  
**Front Diesel Engine**

Fluid  
**MOBIL DELVAC 1300 SUPER 10W30 (--- 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>SBP0005753</b>	SBP0000691	SBP0003717
Sample Date	Client Info		<b>03 Apr 2024</b>	28 Jun 2023	31 Mar 2023
Machine Age	hrs	Client Info	<b>30649</b>	30375	30016
Oil Age	hrs	Client Info	<b>274</b>	359	256
Oil Changed	Client Info		<b>Changed</b>	Changed	N/A
Sample Status			<b>NORMAL</b>	NORMAL	NORMAL

## 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>	NEG	NEG

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >100	<b>5</b>	4	4
Chromium	ppm	ASTM D5185m >20	<b>2</b>	<1	1
Nickel	ppm	ASTM D5185m >4	<b>&lt;1</b>	0	0
Titanium	ppm	ASTM D5185m	<b>&lt;1</b>	0	0
Silver	ppm	ASTM D5185m >3	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m >20	<b>2</b>	<1	0
Lead	ppm	ASTM D5185m >40	<b>4</b>	2	2
Copper	ppm	ASTM D5185m >330	<b>2</b>	2	<1
Tin	ppm	ASTM D5185m >15	<b>2</b>	1	1
Vanadium	ppm	ASTM D5185m	<b>&lt;1</b>	<1	0
Cadmium	ppm	ASTM D5185m	<b>&lt;1</b>	0	0

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	<b>0</b>	3	1
Barium	ppm	ASTM D5185m	<b>&lt;1</b>	0	0
Molybdenum	ppm	ASTM D5185m	<b>56</b>	55	58
Manganese	ppm	ASTM D5185m	<b>&lt;1</b>	0	<1
Magnesium	ppm	ASTM D5185m	<b>931</b>	943	1055
Calcium	ppm	ASTM D5185m	<b>1063</b>	1116	1168
Phosphorus	ppm	ASTM D5185m	<b>1022</b>	959	1074
Zinc	ppm	ASTM D5185m	<b>1187</b>	1213	1376
Sulfur	ppm	ASTM D5185m	<b>3198</b>	3435	3745

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	<b>6</b>	9	4
Sodium	ppm	ASTM D5185m	<b>8</b>	3	1
Potassium	ppm	ASTM D5185m >20	<b>8</b>	<1	2

## INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >3	<b>0.1</b>	0.1	0.1
Nitration	Abs/cm	*ASTM D7624 >20	<b>7.8</b>	6.9	6.7
Sulfation	Abs/.1mm	*ASTM D7415 >30	<b>19.6</b>	19.6	18.9

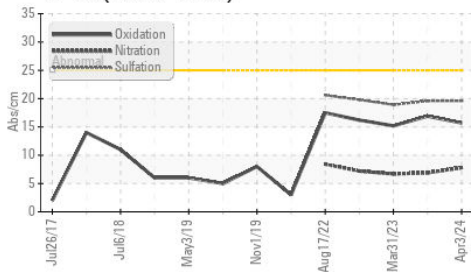
## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	<b>15.7</b>	16.9	15.2
Base Number (BN)	mg KOH/g	ASTM D2896 10.5	<b>7.5</b>	8.5	8.9

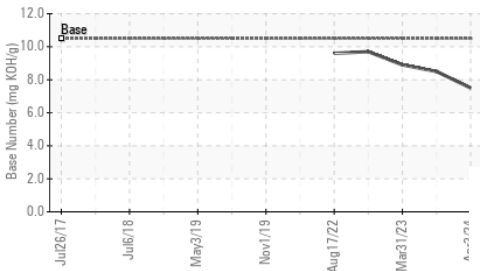


# OIL ANALYSIS REPORT

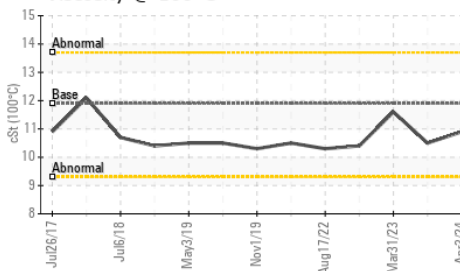
FT-IR (Direct Trend)



Base Number



Viscosity @ 100°C

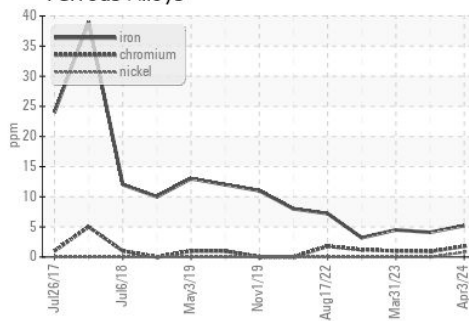


VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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

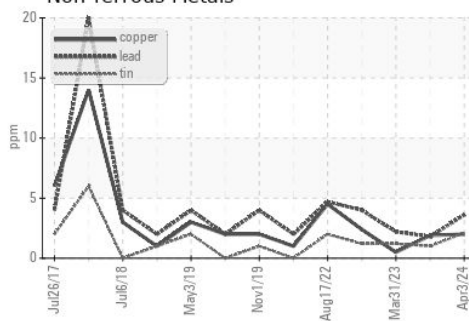
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	11.9	10.5	11.6

## GRAPHS

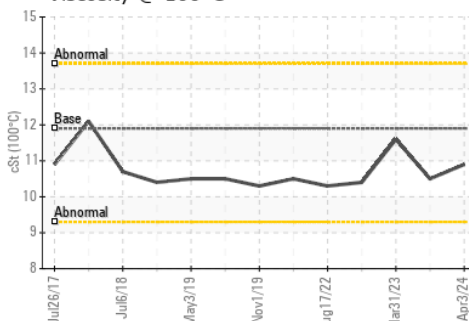
Ferrous Alloys



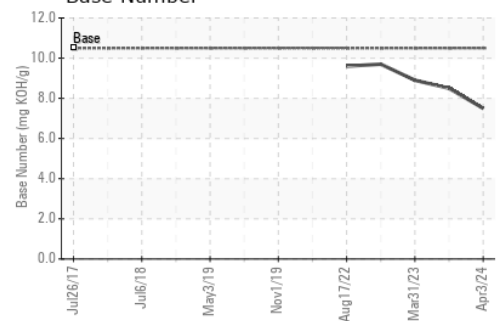
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : SBP0005753      **Received** : 09 Apr 2024  
**Lab Number** : 06143526      **Tested** : 10 Apr 2024  
**Unique Number** : 10968334      **Diagnosed** : 12 Apr 2024 - Jonathan Hester  
**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)