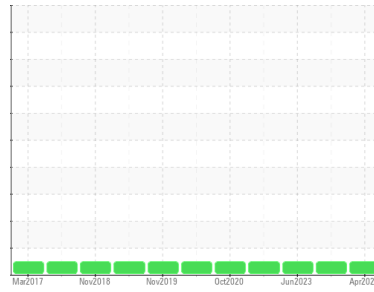




# OIL ANALYSIS REPORT

## Sample Rating Trend



**NORMAL**



Area  
**CONSTRUCTORS, INC**

Machine Id  
**13-0359**

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>SBP0005756</b>	SBP0004640	SBP0004437
Sample Date	Client Info		<b>04 Apr 2024</b>	23 Aug 2023	04 Jun 2023
Machine Age	hrs	Client Info	<b>23095</b>	22802	22453
Oil Age	hrs	Client Info	<b>293</b>	349	352
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	>3.0	<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	>100	<b>8</b>	7	8
Chromium	ppm	ASTM D5185m	>15	<b>1</b>	<1	0
Nickel	ppm	ASTM D5185m	>4	<b>&lt;1</b>	0	0
Titanium	ppm	ASTM D5185m	>2	<b>&lt;1</b>	0	0
Silver	ppm	ASTM D5185m	>2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>15	<b>3</b>	2	2
Lead	ppm	ASTM D5185m	>50	<b>1</b>	0	0
Copper	ppm	ASTM D5185m	>170	<b>1</b>	<1	<1
Tin	ppm	ASTM D5185m	>4	<b>1</b>	0	0
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
Cadmium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0

### ADDITIVES

	method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185m		<b>18</b>	24	13
Barium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>51</b>	59	52
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	0
Magnesium	ppm	ASTM D5185m		<b>819</b>	914	864
Calcium	ppm	ASTM D5185m		<b>1259</b>	1369	1234
Phosphorus	ppm	ASTM D5185m		<b>1011</b>	1050	955
Zinc	ppm	ASTM D5185m		<b>1144</b>	1258	1170
Sulfur	ppm	ASTM D5185m		<b>3346</b>	3772	3608

### CONTAMINANTS

	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m	>25	<b>8</b>	4	3
Sodium	ppm	ASTM D5185m		<b>3</b>	2	3
Potassium	ppm	ASTM D5185m	>20	<b>2</b>	0	<1

### INFRA-RED

	method	limit/base	current	history1	history2	
Soot %	%	*ASTM D7844	>6	<b>0.1</b>	0.1	0.1
Nitration	Abs/cm	*ASTM D7624	>20	<b>6.5</b>	5.1	5.2
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>20.2</b>	18.6	18.7

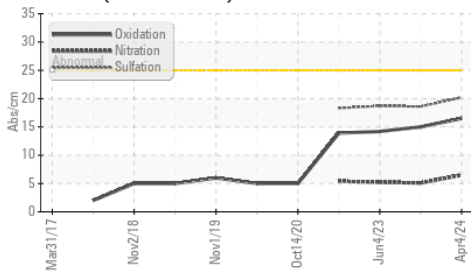
### FLUID DEGRADATION

	method	limit/base	current	history1	history2	
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>16.5</b>	15.0	14.2
Base Number (BN)	mg KOH/g	ASTM D2896	10.5	<b>8.0</b>	9.5	9.5

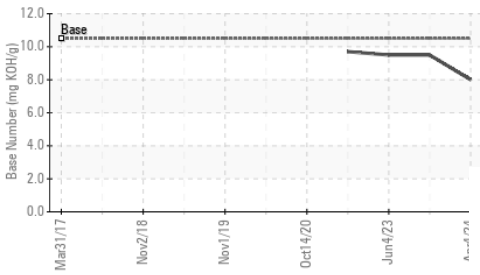


# OIL ANALYSIS REPORT

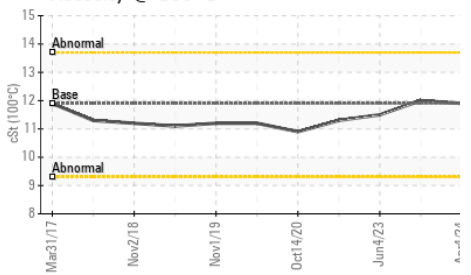
FT-IR (Direct Trend)



Base Number



Viscosity @ 100°C

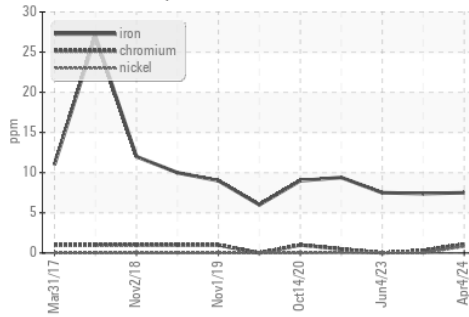


VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance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

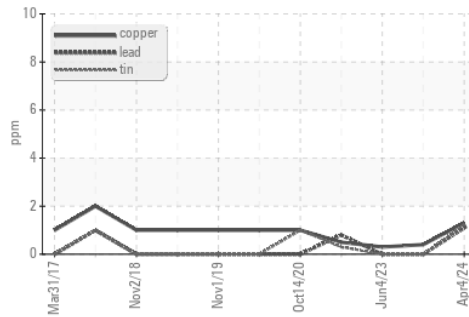
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	11.9	12.0	11.5

## GRAPHS

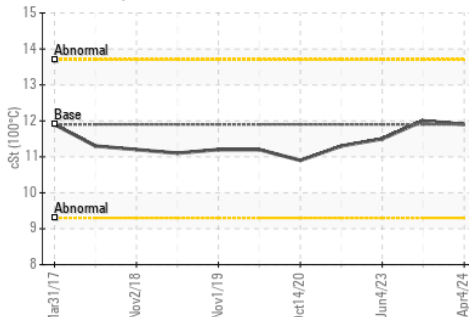
Ferrous Alloys



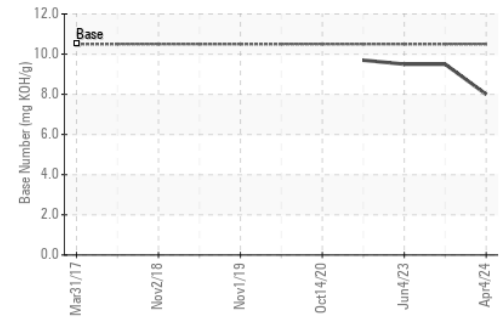
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : SBP0005756      **Received** : 09 Apr 2024  
**Lab Number** : **06143530**      **Tested** : 10 Apr 2024  
**Unique Number** : 10968338      **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)