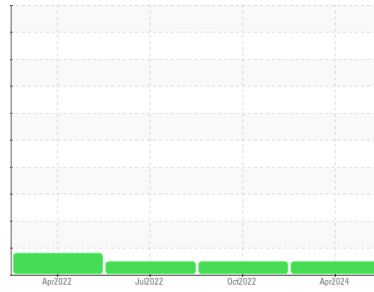




# OIL ANALYSIS REPORT

Machine Id  
**807 genset**  
 Component  
**Diesel Engine**  
 Fluid  
 {not provided} (--- GAL)

## Sample Rating Trend



**NORMAL**



### DIAGNOSIS

#### Recommendation

Resample at the next service interval to monitor. Please specify the brand, type, and viscosity of the oil on your next sample.

#### 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>SBP0006399</b>	SBP0001382	SBP0001439
Sample Date	Client Info			<b>03 Apr 2024</b>	04 Oct 2022	08 Jul 2022
Machine Age	hrs	Client Info		<b>4005</b>	2933	2339
Oil Age	hrs	Client Info		<b>548</b>	594	539
Oil Changed	Client Info			<b>Changed</b>	Changed	Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

CONTAMINATION		method	limit/base	current	history1	history2
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>6</b>	7	6
Chromium	ppm	ASTM D5185m	>20	<b>1</b>	<1	<1
Nickel	ppm	ASTM D5185m	>2	<b>&lt;1</b>	0	0
Titanium	ppm	ASTM D5185m	>2	<b>&lt;1</b>	<1	0
Silver	ppm	ASTM D5185m	>2	<b>0</b>	<1	0
Aluminum	ppm	ASTM D5185m	>25	<b>2</b>	1	1
Lead	ppm	ASTM D5185m	>40	<b>2</b>	<1	1
Copper	ppm	ASTM D5185m	>330	<b>2</b>	2	2
Tin	ppm	ASTM D5185m	>15	<b>1</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>	14	16
Barium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>58</b>	52	47
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	1	<1
Magnesium	ppm	ASTM D5185m		<b>966</b>	827	806
Calcium	ppm	ASTM D5185m		<b>1087</b>	1229	1098
Phosphorus	ppm	ASTM D5185m		<b>1073</b>	980	868
Zinc	ppm	ASTM D5185m		<b>1225</b>	1145	1072
Sulfur	ppm	ASTM D5185m		<b>3328</b>	3388	3302

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	<b>4</b>	4	3
Sodium	ppm	ASTM D5185m		<b>2</b>	2	2
Potassium	ppm	ASTM D5185m	>20	<b>2</b>	0	<1
Fuel	%	ASTM D3524	>5	<b>&lt;1.0</b>	<1.0	<1.0

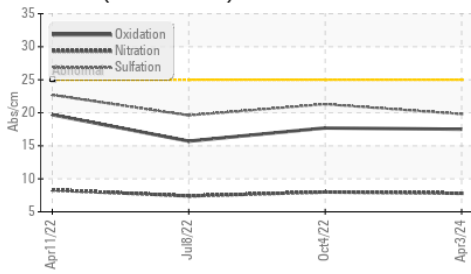
INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	<b>0.1</b>	0.2	0.1
Nitration	Abs/cm	*ASTM D7624	>20	<b>7.8</b>	8.0	7.4
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>19.8</b>	21.3	19.6

FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>17.5</b>	17.7	15.7
Base Number (BN)	mg KOH/g	ASTM D2896		<b>8.6</b>	9.5	9.2

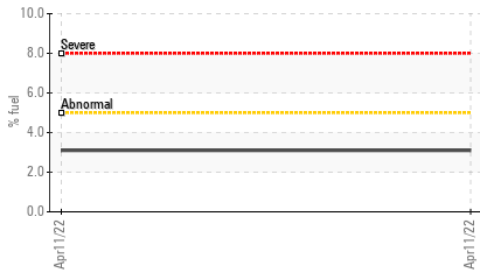


# OIL ANALYSIS REPORT

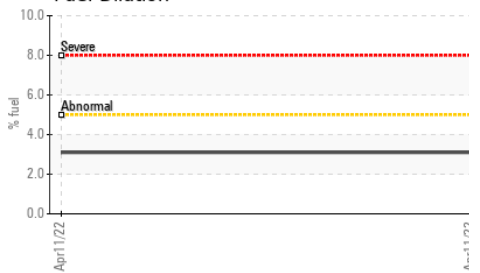
FT-IR (Direct Trend)



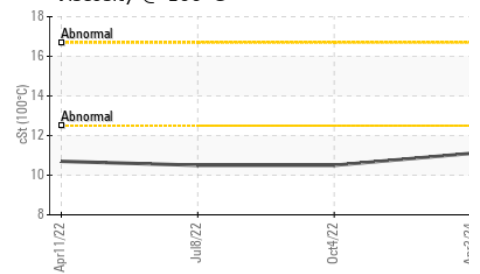
Fuel Dilution



Fuel Dilution



Viscosity @ 100°C

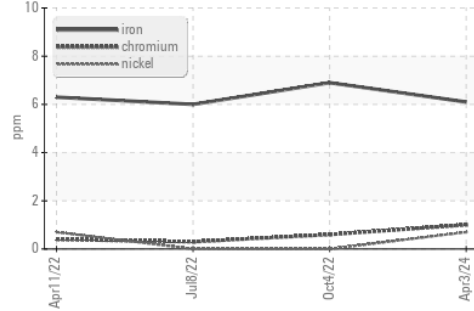


VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance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

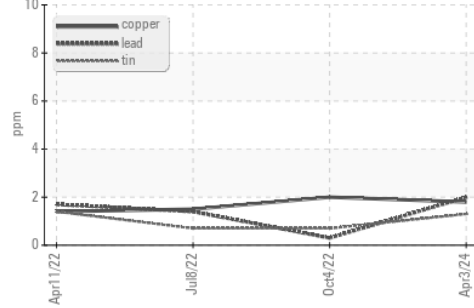
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	11.1	10.5	10.5

### GRAPHS

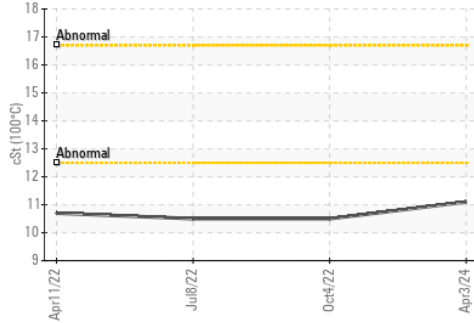
Ferrous Alloys



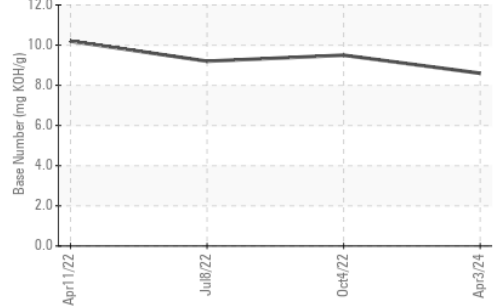
Non-ferrous Metals



Viscosity @ 100°C



Base Number



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : SBP0006399      **Received** : 09 Apr 2024  
**Lab Number** : 06143523      **Tested** : 10 Apr 2024  
**Unique Number** : 10968331      **Diagnosed** : 10 Apr 2024 - Jonathan Hester  
**Test Package** : FLEET ( Additional Tests: FuelDilution )

**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)