



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id  
**214**  
 Component  
**Diesel Engine**  
 Fluid  
**{not provided} (--- GAL)**

### RECOMMENDATION

The oil change at the time of sampling has been noted. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>DE0000493</b>	---	---
Sample Date		Client Info		<b>19 Jun 2024</b>	---	---
Machine Age	mls	Client Info		<b>12649</b>	---	---
Oil Age	mls	Client Info		<b>12649</b>	---	---
Filter Age	mls	Client Info		<b>12649</b>	---	---
Oil Changed		Client Info		<b>Changed</b>	---	---
Filter Changed		Client Info		<b>N/A</b>	---	---
Sample Status				<b>NORMAL</b>	---	---

### WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	<b>82</b>	---	---
Chromium	ppm	ASTM D5185m	>20	<b>2</b>	---	---
Nickel	ppm	ASTM D5185m	>4	<b>&lt;1</b>	---	---
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	---	---
Silver	ppm	ASTM D5185m	>3	<b>&lt;1</b>	---	---
Aluminum	ppm	ASTM D5185m	>20	<b>20</b>	---	---
Lead	ppm	ASTM D5185m	>40	<b>&lt;1</b>	---	---
Copper	ppm	ASTM D5185m	>330	<b>25</b>	---	---
Tin	ppm	ASTM D5185m	>15	<b>2</b>	---	---
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	---	---
White Metal	scalar	*Visual	NONE	<b>NONE</b>	---	---
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	---	---

### CONTAMINATION

There is no indication of any contamination in the oil.

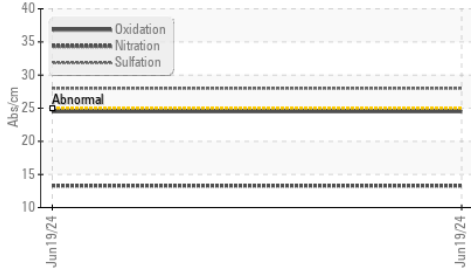
Silicon	ppm	ASTM D5185m	>25	<b>21</b>	---	---
Potassium	ppm	ASTM D5185m	>20	<b>48</b>	---	---
Fuel		WC Method	>5	<b>&lt;1.0</b>	---	---
Water		WC Method	>0.2	<b>NEG</b>	---	---
Glycol		WC Method		<b>NEG</b>	---	---
Soot %	%	*ASTM D7844	>3	<b>0.8</b>	---	---
Nitration	Abs/cm	*ASTM D7624	>20	<b>13.3</b>	---	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>28.0</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>	---	---

### FLUID CONDITION

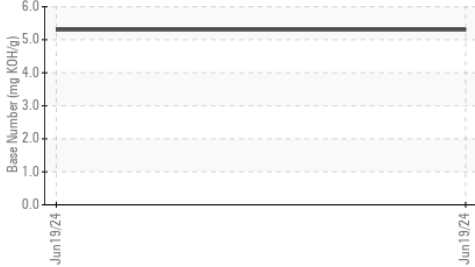
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		<b>4</b>	---	---
Boron	ppm	ASTM D5185m		<b>13</b>	---	---
Barium	ppm	ASTM D5185m		<b>1</b>	---	---
Molybdenum	ppm	ASTM D5185m		<b>25</b>	---	---
Manganese	ppm	ASTM D5185m		<b>4</b>	---	---
Magnesium	ppm	ASTM D5185m		<b>948</b>	---	---
Calcium	ppm	ASTM D5185m		<b>1411</b>	---	---
Phosphorus	ppm	ASTM D5185m		<b>1062</b>	---	---
Zinc	ppm	ASTM D5185m		<b>1150</b>	---	---
Sulfur	ppm	ASTM D5185m		<b>3339</b>	---	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>24.5</b>	---	---
Base Number (BN)	mg KOH/g	ASTM D2896		<b>5.3</b>	---	---
Visc @ 100°C	cSt	ASTM D445		<b>13.2</b>	---	---

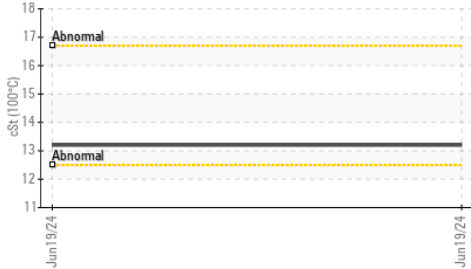
FT-IR (Direct Trend)



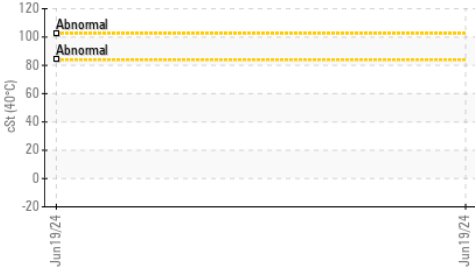
Base Number



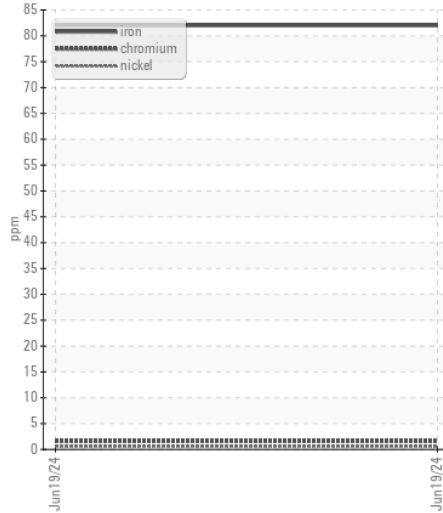
Viscosity @ 100°C



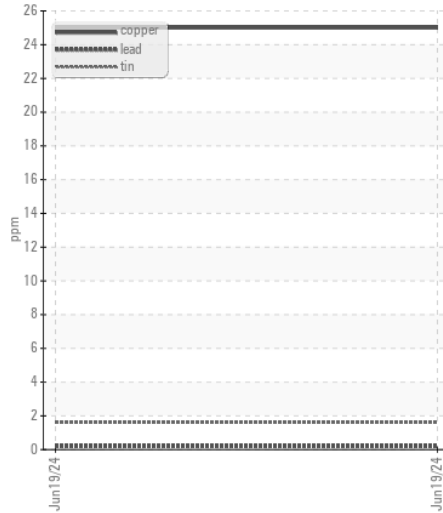
Viscosity @ 40°C



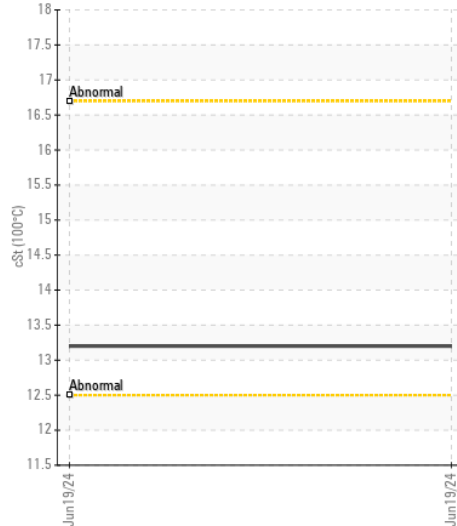
Ferrous Alloys



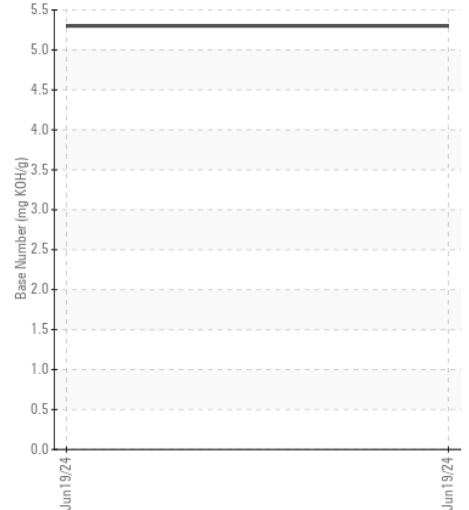
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513

Sample No. : DE0000493

Lab Number : 06224189

Unique Number : 11102386

Test Package : FLEET ( Additional Tests: KV40 )

Received : 28 Jun 2024

Tested : 01 Jul 2024

Diagnosed : 01 Jul 2024 - Angela Borella

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)

Iroquois Bar Corp.

155 Commerce Drive

Lacakwana, NY

US 14218

Contact: Denver Persinger

dpersinger@iroquoisbar.com

T:

F: