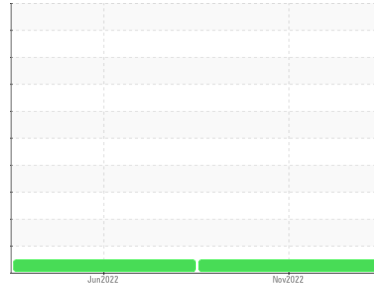




# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Machine Id  
**93033**  
 Component  
**Diesel Engine**  
 Fluid  
**{not provided} (10 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>SBP0000749</b>	SBP0000948	---
Sample Date	Client Info		<b>18 Nov 2022</b>	10 Jun 2022	---
Machine Age	mls	Client Info	<b>429067</b>	0	---
Oil Age	mls	Client Info	<b>10000</b>	0	---
Oil Changed	Client Info		<b>Changed</b>	Changed	---
Sample Status			<b>NORMAL</b>	NORMAL	---

## CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>5	<b>&lt;1.0</b>	<1.0	---
Water	WC Method	>0.2	<b>NEG</b>	NEG	---
Glycol	WC Method		<b>NEG</b>	NEG	---

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >100	<b>73</b>	73	---
Chromium	ppm	ASTM D5185m >20	<b>3</b>	3	---
Nickel	ppm	ASTM D5185m >4	<b>&lt;1</b>	0	---
Titanium	ppm	ASTM D5185m	<b>&lt;1</b>	<1	---
Silver	ppm	ASTM D5185m >3	<b>&lt;1</b>	<1	---
Aluminum	ppm	ASTM D5185m >20	<b>4</b>	4	---
Lead	ppm	ASTM D5185m >40	<b>13</b>	5	---
Copper	ppm	ASTM D5185m >330	<b>2</b>	2	---
Tin	ppm	ASTM D5185m >15	<b>2</b>	2	---
Vanadium	ppm	ASTM D5185m	<b>&lt;1</b>	0	---
Cadmium	ppm	ASTM D5185m	<b>0</b>	0	---

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	<b>21</b>	7	---
Barium	ppm	ASTM D5185m	<b>0</b>	<1	---
Molybdenum	ppm	ASTM D5185m	<b>34</b>	52	---
Manganese	ppm	ASTM D5185m	<b>1</b>	1	---
Magnesium	ppm	ASTM D5185m	<b>618</b>	816	---
Calcium	ppm	ASTM D5185m	<b>1619</b>	1239	---
Phosphorus	ppm	ASTM D5185m	<b>795</b>	1025	---
Zinc	ppm	ASTM D5185m	<b>980</b>	1262	---
Sulfur	ppm	ASTM D5185m	<b>3115</b>	2835	---

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	<b>13</b>	10	---
Sodium	ppm	ASTM D5185m	<b>6</b>	9	---
Potassium	ppm	ASTM D5185m >20	<b>5</b>	6	---

## INFRA-RED

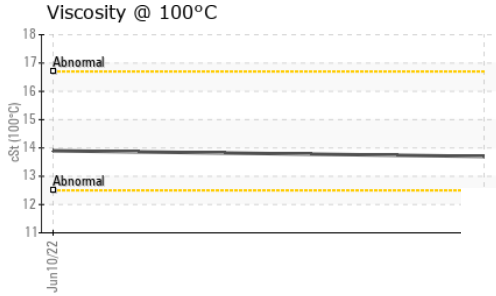
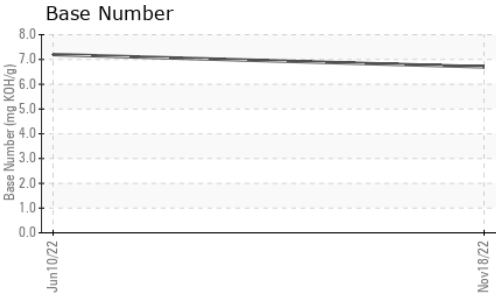
	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >3	<b>1.6</b>	1.2	---
Nitration	Abs/cm	*ASTM D7624 >20	<b>17.7</b>	14.0	---
Sulfation	Abs/.1mm	*ASTM D7415 >30	<b>32.9</b>	26.8	---

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	<b>37.3</b>	24.9	---
Base Number (BN)	mg KOH/g	ASTM D2896	<b>6.7</b>	7.2	---



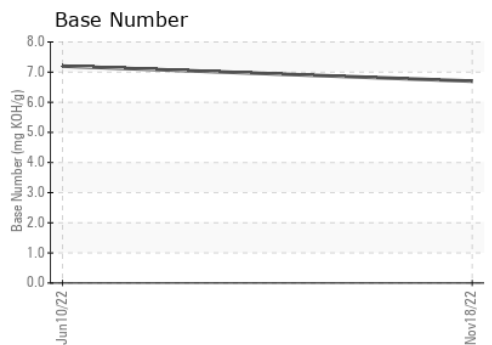
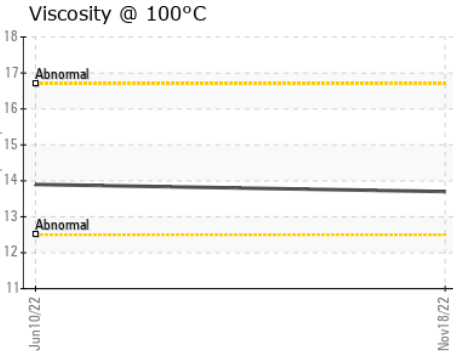
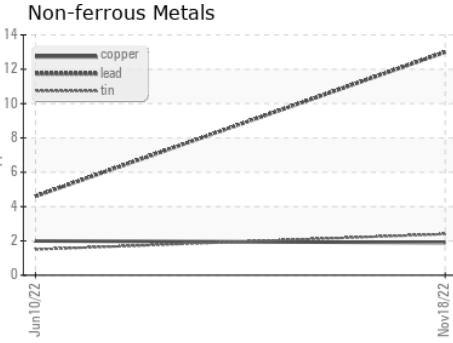
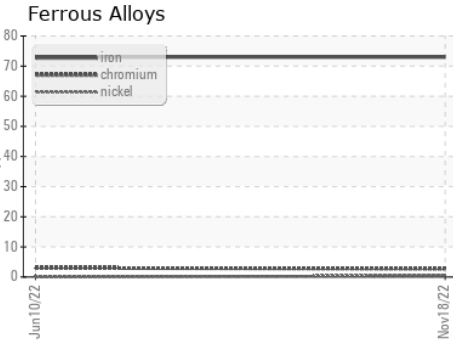
# OIL ANALYSIS REPORT



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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	<b>13.7</b>	13.9	---

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : SBP0000749 **Recieved** : 05 Dec 2022  
**Lab Number** : **05709175** **Diagnosed** : 07 Dec 2022  
**Unique Number** : 10243750 **Diagnostician** : Don Baldrige  
**Test Package** : FLEET

**Sapp Bros. Fleet - Peru Location**  
 3130 May Road  
 Peru, IL  
 US 61354  
 Contact: Matt Ossola  
 MOssola@SAPPBROS.NET  
 T:  
 F:

Certificate L2367  
 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)