



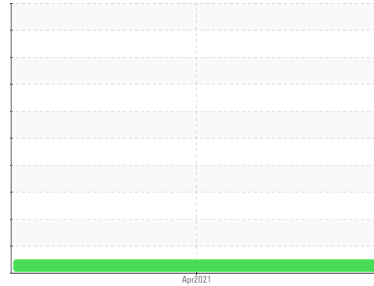
# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Area  
**SAPP BROS PETROLEUM / OMAHA [21105301042]**  
 Machine Id  
**Bulk tank C**  
 Component  
**Diesel Engine**  
 Fluid  
**SAE 15W40 (--- GAL)**



## DIAGNOSIS

### Recommendation

Little or no information is provided as to the component and lubricant being tested. Recommendations are therefore generic in nature and may not apply to the current application. Please forward information as to equipment type, reservoir capacity, lubricant type and any pertinent information to allow for a more accurate assessment. Resample at the next service interval to monitor. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample. Please specify the component make and model with your next sample. 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>SBP05301042</b>	---	---
Sample Date	Client Info		<b>08 Apr 2021</b>	---	---
Machine Age	hrs	Client Info	<b>0</b>	---	---
Oil Age	hrs	Client Info	<b>0</b>	---	---
Oil Changed	Client Info		<b>Not Chngd</b>	---	---
Sample Status			<b>NORMAL</b>	---	---

## CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method		<b>&lt;1.0</b>	---	---

## WEAR METALS

	method	limit/base	current	history1	history2
PQ	ASTM D8184*		<b>1</b>	---	---
Iron	ppm	ASTM D5185(m)	<b>0</b>	---	---
Chromium	ppm	ASTM D5185(m)	<b>0</b>	---	---
Nickel	ppm	ASTM D5185(m)	<b>0</b>	---	---
Titanium	ppm	ASTM D5185(m)	<b>0</b>	---	---
Silver	ppm	ASTM D5185(m)	<b>0</b>	---	---
Aluminum	ppm	ASTM D5185(m)	<b>1</b>	---	---
Lead	ppm	ASTM D5185(m)	<b>0</b>	---	---
Copper	ppm	ASTM D5185(m)	<b>0</b>	---	---
Tin	ppm	ASTM D5185(m)	<b>0</b>	---	---
Vanadium	ppm	ASTM D5185(m)	<b>0</b>	---	---
Cadmium	ppm	ASTM D5185(m)	<b>0</b>	---	---

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)	<b>3</b>	---	---
Barium	ppm	ASTM D5185(m)	<b>0</b>	---	---
Molybdenum	ppm	ASTM D5185(m)	<b>42</b>	---	---
Manganese	ppm	ASTM D5185(m)	<b>0</b>	---	---
Magnesium	ppm	ASTM D5185(m)	<b>712</b>	---	---
Calcium	ppm	ASTM D5185(m)	<b>744</b>	---	---
Phosphorus	ppm	ASTM D5185(m)	<b>784</b>	---	---
Zinc	ppm	ASTM D5185(m)	<b>869</b>	---	---

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	<b>3</b>	---	---
Sodium	ppm	ASTM D5185(m)	<b>0</b>	---	---
Potassium	ppm	ASTM D5185(m)	<b>2</b>	---	---
Chlorine	ppm	ASTM D5185(m)	<b>0</b>	---	---
Glycol	%	ASTM D7922*	<b>0.0</b>	---	---

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs./1mm	ASTM D7414*	<b>12</b>	---	---
Base Number (BN)	mg KOH/g	ASTM D2896*	<b>9.0</b>	---	---

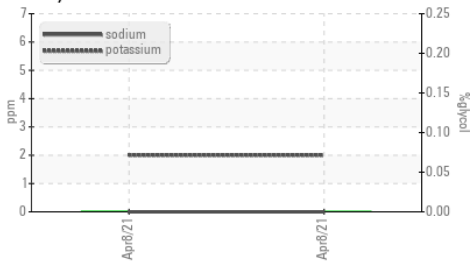
## FLUID PROPERTIES

	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D7279(m)	<b>15.5</b>	---	---



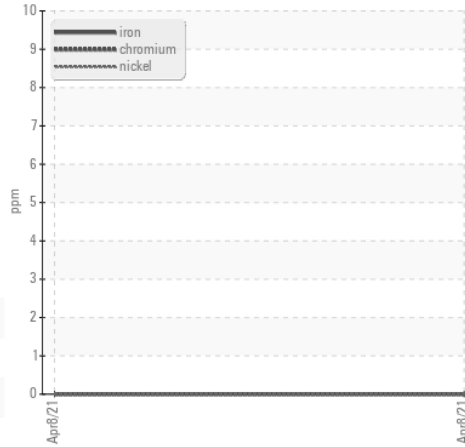
# OIL ANALYSIS REPORT

Glycol Contamination

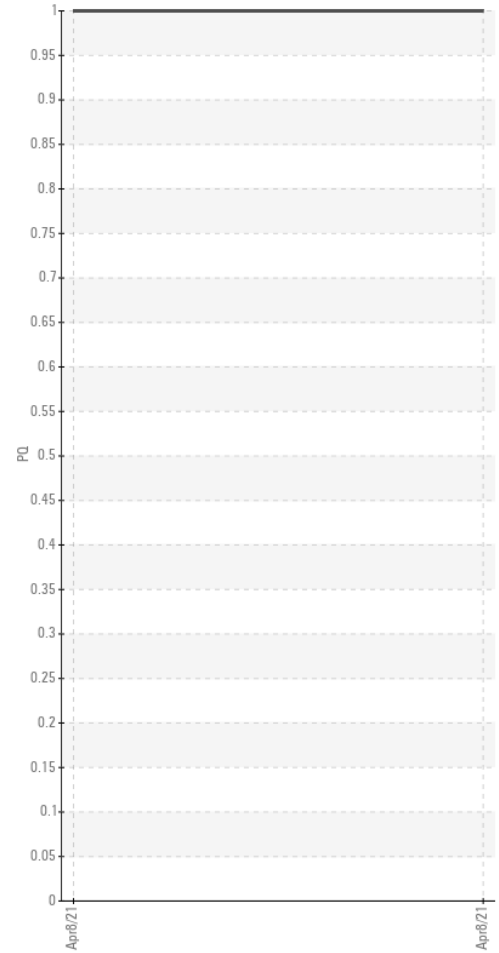


## GRAPHS

Ferrous Alloys



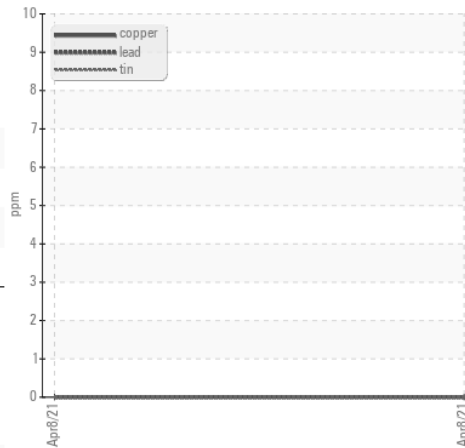
PQ



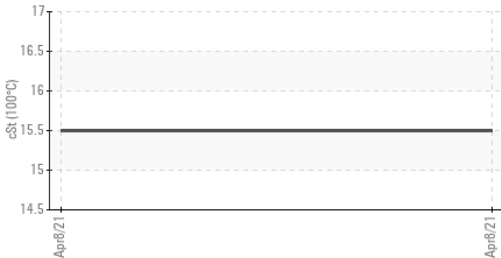
Base Number



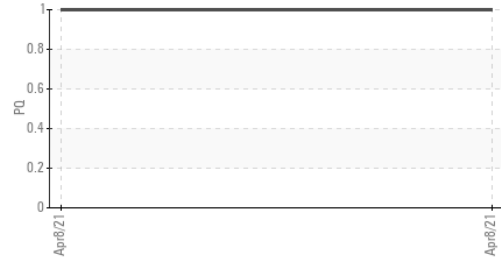
Non-ferrous Metals



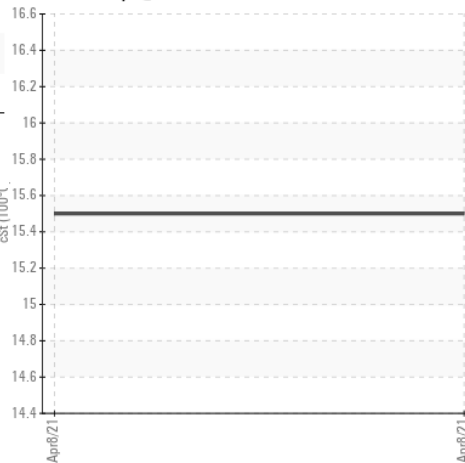
Viscosity @ 100°C



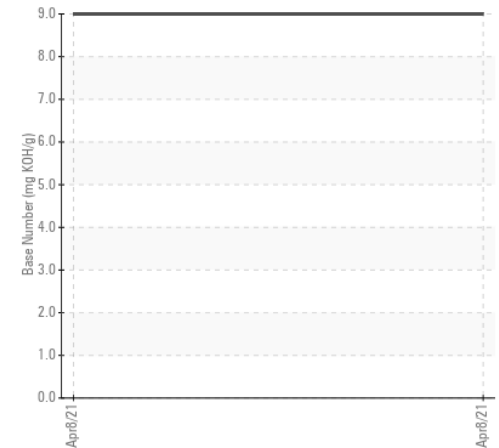
PQ



Viscosity @ 100°C



Base Number



**Laboratory** : WearCheck -  
**Sample No.** : SBP05301042 **Received** : 15 Apr 2021  
**Lab Number** : 05301042 **Diagnosed** : 22 Jul 2021  
**Unique Number** : 14445095 **Diagnostician** : Wes Davis  
**Test Package** : FLEET ( Additional Tests: FT-IR, Glycol, ICP, KV100, PQ, TBN )  
 To discuss this sample report, contact Customer Service at 1-800-268-2131.  
 Test denoted (\*) outside scope of accreditation, (m) method modified, (e) tested at external lab.  
 Validity of results and interpretation are based on the sample and information as supplied.

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