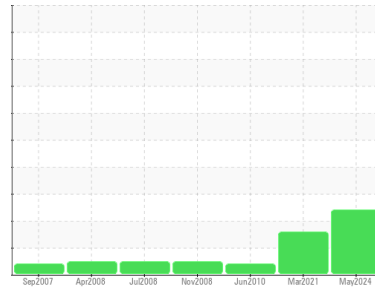




# OIL ANALYSIS REPORT

Area  
**KANSAS/44/EG - OTHER SERVICE**  
 Machine Id  
**53.88L [KANSAS^44^EG - OTHER SERVICE]**  
 Component  
**Diesel Engine**  
 Fluid  
**MOBIL DELVAC 1300 SUPER15W40 (--- GAL)**

Sample Rating Trend



GLYCOL



## DIAGNOSIS

### Recommendation

Check for low coolant level. Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

### Wear

All component wear rates are normal.

### Contamination

Sodium and/or potassium levels are high. Test for glycol is negative.

### Fluid Condition

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

## SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>WC0918063</b>	WC0528175	WC65381015
Sample Date	Client Info		<b>31 May 2024</b>	22 Mar 2021	14 Jun 2010
Machine Age	hrs	Client Info	<b>4982</b>	4755	---
Oil Age	hrs	Client Info	<b>4982</b>	0	---
Oil Changed	Client Info		<b>Changed</b>	Changed	N/A
Sample Status			<b>ATTENTION</b>	ATTENTION	ABNORMAL

## CONTAMINATION

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

## WEAR METALS

	method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m	>100	<b>22</b>	35	14
Chromium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	<1	0
Nickel	ppm	ASTM D5185m	>2	<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>	<1	0
Aluminum	ppm	ASTM D5185m	>25	<b>2</b>	3	1
Lead	ppm	ASTM D5185m	>40	<b>4</b>	5	0
Copper	ppm	ASTM D5185m	>330	<b>3</b>	4	2
Tin	ppm	ASTM D5185m	>15	<b>&lt;1</b>	<1	1
Antimony	ppm	ASTM D5185m		<b>---</b>	<1	---
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	0
Cadmium	ppm	ASTM D5185m		<b>0</b>	0	0

## ADDITIVES

	method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185m	0	<b>35</b>	39	33
Barium	ppm	ASTM D5185m	0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	0	<b>29</b>	54	35
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	1	---
Magnesium	ppm	ASTM D5185m	0	<b>649</b>	542	627
Calcium	ppm	ASTM D5185m		<b>1518</b>	1708	1249
Phosphorus	ppm	ASTM D5185m		<b>808</b>	937	814
Zinc	ppm	ASTM D5185m		<b>949</b>	1129	926
Sulfur	ppm	ASTM D5185m		<b>3026</b>	2516	---

## CONTAMINANTS

	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m	>25	<b>9</b>	12	6
Sodium	ppm	ASTM D5185m		<b>66</b>	56	4
Potassium	ppm	ASTM D5185m	>20	<b>53</b>	46	0
Glycol	%	*ASTM D2982		<b>NEG</b>	NEG	0.00

## INFRA-RED

	method	limit/base	current	history1	history2	
Soot %	%	*ASTM D7844	>3	<b>0.3</b>	0.4	0.5
Nitration	Abs/cm	*ASTM D7624	>20	<b>9.9</b>	9.6	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>20.1</b>	24.4	---

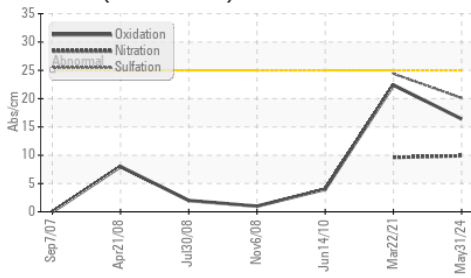
## FLUID DEGRADATION

	method	limit/base	current	history1	history2	
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>16.4</b>	22.4	4
Base Number (BN)	mg KOH/g	ASTM D2896	9.4	<b>8.0</b>	11	---

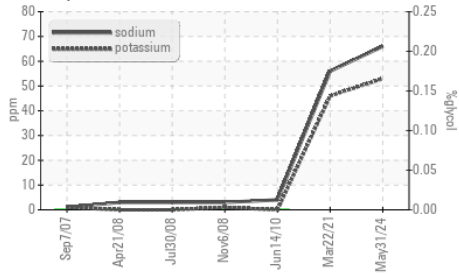


# OIL ANALYSIS REPORT

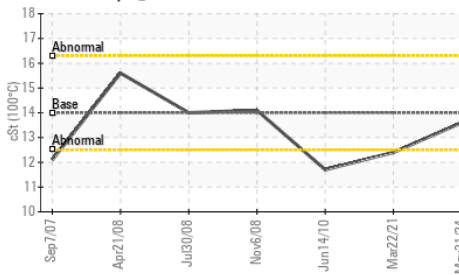
FT-IR (Direct Trend)



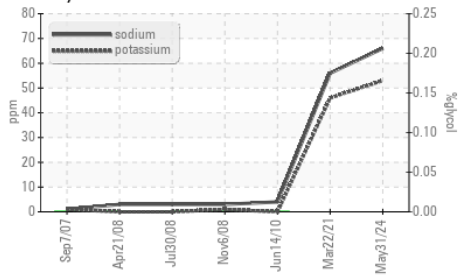
Glycol Contamination



Viscosity @ 100°C



Glycol Contamination

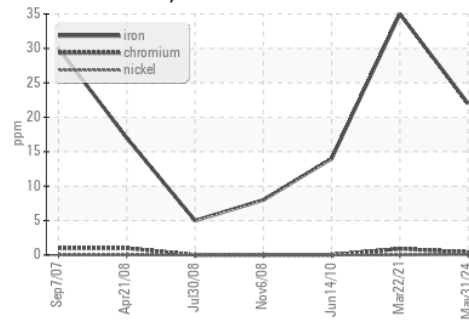


VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance	scalar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

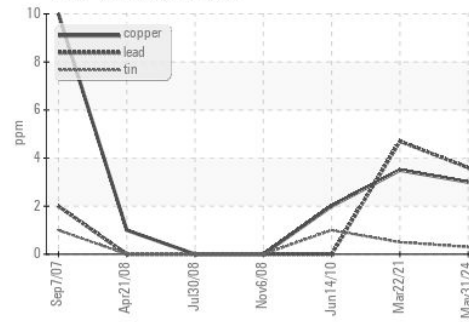
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445 14	13.6	▲ 12.4	▲ 11.7

GRAPHS

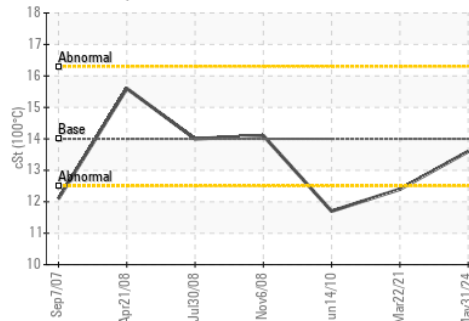
Ferrous Alloys



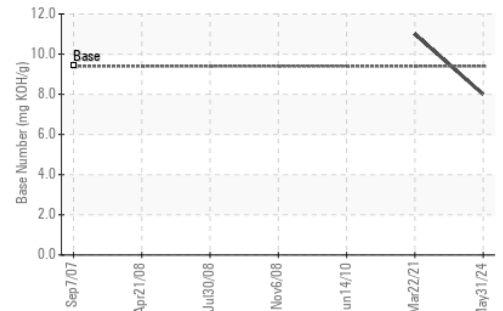
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0918063 **Received** : 13 Jun 2024  
**Lab Number** : 06208417 **Tested** : 14 Jun 2024  
**Unique Number** : 11075878 **Diagnosed** : 14 Jun 2024 - Sean Felton  
**Test Package** : CONST ( Additional Tests: Glycol, TBN )

**SHERWOOD CONSTRUCTION CO INC**  
 3219 WEST MAY ST  
 WICHITA, KS  
 US 67213  
 Contact: DOUG KING  
 doug.king@sherwood.net  
 T: (316)617-3161  
 F: x:

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)