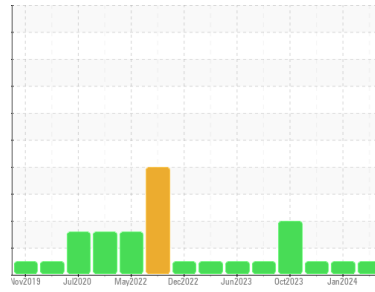




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**KENWORTH 91**

Component  
**Diesel Engine**

Fluid  
**SWEPKO 306 ENGINE OIL SAE 15W40 (11 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. The amount and size of particulates present in the system are acceptable.

### 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>KL0013722</b>	KL0013010	KL0011624
Sample Date	Client Info		<b>27 Mar 2024</b>	27 Jan 2024	31 Oct 2023
Machine Age	mls	Client Info	<b>1186725</b>	1173835	152273
Oil Age	mls	Client Info	<b>50000</b>	0	36862
Oil Changed	Client Info		<b>Changed</b>	N/A	Changed
Sample Status			<b>NORMAL</b>	NORMAL	NORMAL

## CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>5	<b>&lt;1.0</b>	<1.0	<1.0
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>22</b>	20	64
Chromium	ppm	ASTM D5185m >20	<b>0</b>	<1	<1
Nickel	ppm	ASTM D5185m >2	<b>0</b>	<1	<1
Titanium	ppm	ASTM D5185m >2	<b>&lt;1</b>	<1	<1
Silver	ppm	ASTM D5185m >2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m >25	<b>2</b>	4	4
Lead	ppm	ASTM D5185m >40	<b>0</b>	<1	4
Copper	ppm	ASTM D5185m >330	<b>6</b>	5	14
Tin	ppm	ASTM D5185m >15	<b>0</b>	<1	<1
Vanadium	ppm	ASTM D5185m	<b>&lt;1</b>	<1	0
Cadmium	ppm	ASTM D5185m	<b>0</b>	<1	<1

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	<b>205</b>	306	81
Barium	ppm	ASTM D5185m	<b>0</b>	0	6
Molybdenum	ppm	ASTM D5185m	<b>285</b>	332	280
Manganese	ppm	ASTM D5185m	<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m	<b>485</b>	547	584
Calcium	ppm	ASTM D5185m	<b>1563</b>	1413	1374
Phosphorus	ppm	ASTM D5185m	<b>941</b>	1060	996
Zinc	ppm	ASTM D5185m	<b>1085</b>	1098	1097
Sulfur	ppm	ASTM D5185m	<b>4342</b>	4205	3802

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	<b>8</b>	9	8
Sodium	ppm	ASTM D5185m	<b>1</b>	0	2
Potassium	ppm	ASTM D5185m >20	<b>0</b>	2	2

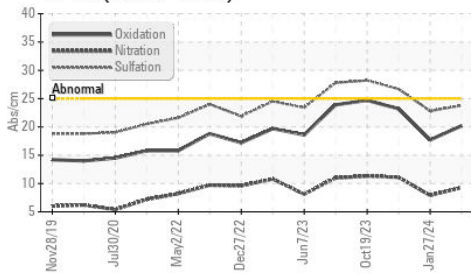
## INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >3	<b>0.5</b>	0.4	1.2
Nitration	Abs/cm	*ASTM D7624 >20	<b>9.3</b>	7.9	11.1
Sulfation	Abs./1mm	*ASTM D7415 >30	<b>23.8</b>	22.8	26.7

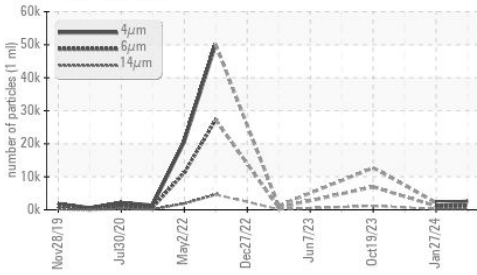


# OIL ANALYSIS REPORT

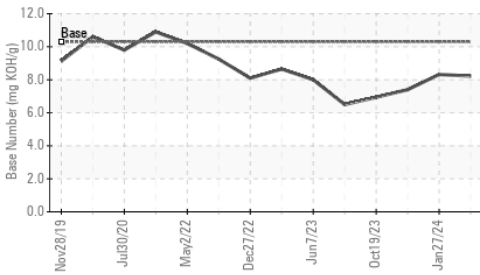
FT-IR (Direct Trend)



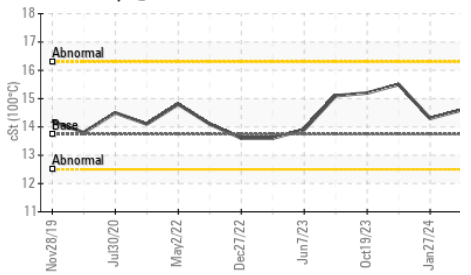
Particle Trend



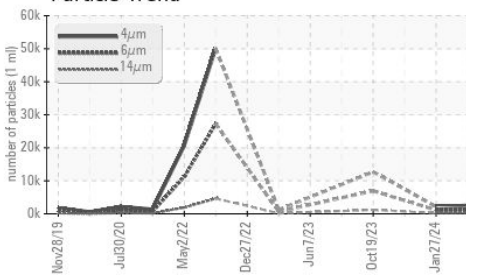
Base Number



Viscosity @ 100°C



Particle Trend



FLUID CLEANLINESS	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647		<b>2575</b>	2123	---
Particles >6µm	ASTM D7647	>5000	<b>1403</b>	1156	---
Particles >14µm	ASTM D7647	>640	<b>239</b>	197	---
Particles >21µm	ASTM D7647	>160	<b>80</b>	66	---
Particles >38µm	ASTM D7647	>40	<b>12</b>	10	---
Particles >71µm	ASTM D7647	>10	<b>1</b>	1	---
Oil Cleanliness	ISO 4406 (c)	>19/16	<b>18/15</b>	17/15	---

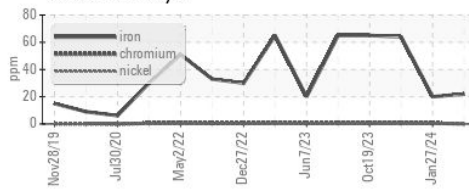
FLUID DEGRADATION	method	limit/base	current	history1	history2	
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>20.2</b>	17.7	23.2
Base Number (BN)	mg KOH/g	ASTM D2896	10.3	<b>8.22</b>	8.32	7.4

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	<b>NEG</b>	NEG	NEG
Free Water	scalar	*Visual		<b>NEG</b>	NEG	NEG

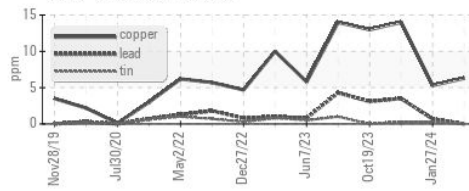
FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 100°C	cSt	ASTM D445	13.74	<b>14.6</b>	14.3	15.5

## GRAPHS

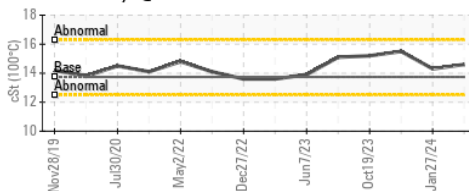
Ferrous Alloys



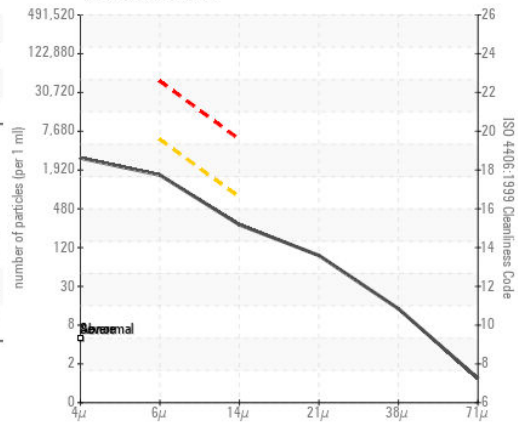
Non-ferrous Metals



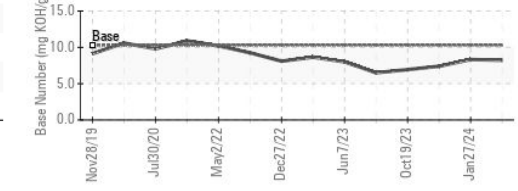
Viscosity @ 100°C



Particle Count



Base Number



Certificate L2367

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

Sample No. : KL0013722

Lab Number : **06138735**

Unique Number : 10963543

Test Package : MOB 2 ( Additional Tests: PrtCount )

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)

Received : 04 Apr 2024

Tested : 05 Apr 2024

Diagnosed : 06 Apr 2024 - Don Baldrige

**JIMENEZ CUSTOM HARVESTING, INC.**

1000 WEST BRADY

CLOVIS, NM

US 88101

Contact: JOHN JIMENEZ

juan@sileros.com

T: (505)769-2786

F: (505)769-1817