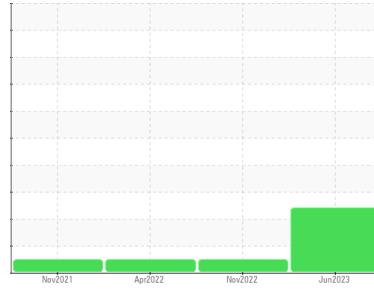




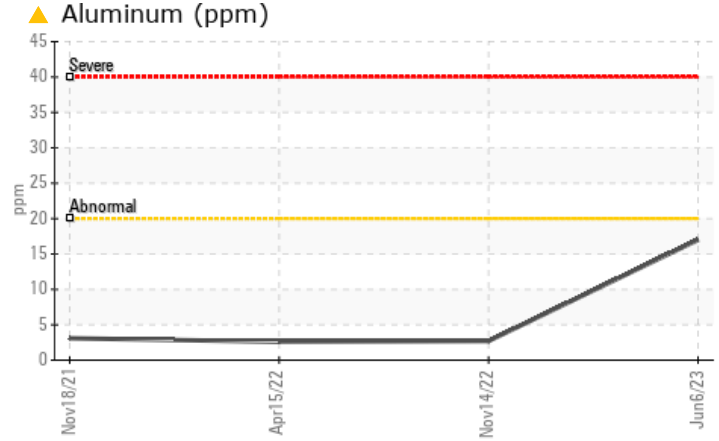
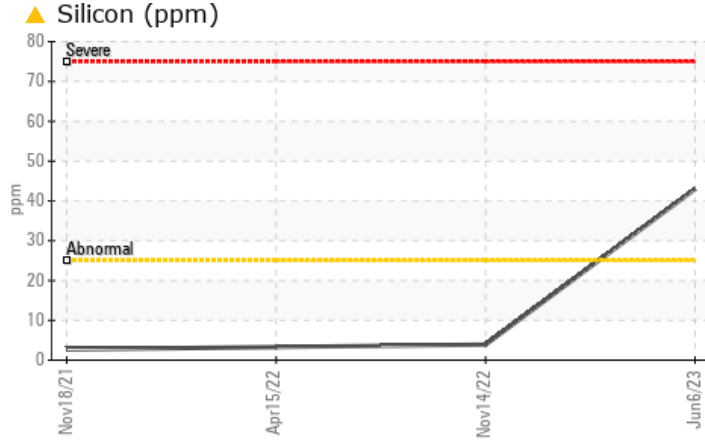
# PROBLEM SUMMARY

Sample Rating Trend



Area  
**OKLAHOMA/1151/COOL - SKID STEER**  
 Machine Id  
**53.156L [OKLAHOMA^1151^COOL - SKID STEER]**  
 Component  
**Diesel Engine**  
 Fluid  
**MOBIL DELVAC 1300 SUPER15W40 (3 GAL)**

## COMPONENT CONDITION SUMMARY



## RECOMMENDATION

We advise that you check the air filter, air induction system, and any areas where dirt may enter the component. Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

## PROBLEMATIC TEST RESULTS

Sample Status				ABNORMAL	NORMAL	NORMAL
Aluminum	ppm	ASTM D5185m	>20	▲ 17	3	3
Silicon	ppm	ASTM D5185m	>25	▲ 43	4	3

Customer Id: SHEWIC  
 Sample No.: WC0821731  
 Lab Number: 05879335  
 Test Package: CONST



To manage this report scan the QR code

To discuss the diagnosis or test data:  
 Don Baldrige +1  
[don.b505@comcast.net](mailto:don.b505@comcast.net)

To change component or sample information:  
 Customer Service +1 1-800-237-1369  
[customerservice@wearcheck.com](mailto:customerservice@wearcheck.com)

## RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Change Fluid	---	---	?	Oil and filter change at the time of sampling has been noted.
Change Filter	---	---	?	Oil and filter change at the time of sampling has been noted.
Check Dirt Access	---	---	?	We advise that you check the air filter, air induction system, and any areas where dirt may enter the component.

## HISTORICAL DIAGNOSIS

### 14 Nov 2022 Diag: Wes Davis

NORMAL



Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

view report



### 15 Apr 2022 Diag: Wes Davis

NORMAL



Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

view report



### 18 Nov 2021 Diag: Don Baldrige

NORMAL



Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

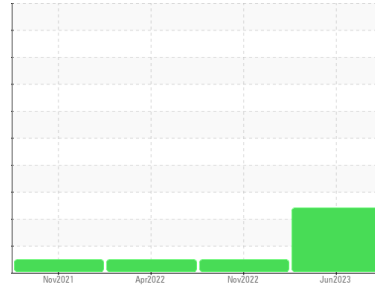
view report





# OIL ANALYSIS REPORT

Sample Rating Trend



**DIRT**



Area  
**OKLAHOMA/1151/COOL - SKID STEER**  
 Machine Id  
**53.156L [OKLAHOMA^1151^COOL - SKID STEER]**  
 Component  
**Diesel Engine**  
 Fluid  
**MOBIL DELVAC 1300 SUPER15W40 (3 GAL)**

## DIAGNOSIS

### Recommendation

We advise that you check the air filter, air induction system, and any areas where dirt may enter the component. 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

Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress.

### 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	history 1	history 2
Sample Number	Client Info	<b>WC0821731</b>	WC0746336	WC0678811
Sample Date	Client Info	<b>06 Jun 2023</b>	14 Nov 2022	15 Apr 2022
Machine Age	hrs	<b>2837</b>	2565	2292
Oil Age	hrs	<b>256</b>	273	288
Oil Changed	Client Info	<b>Changed</b>	Changed	Changed
Sample Status		<b>ABNORMAL</b>	NORMAL	NORMAL

## CONTAMINATION

method	limit/base	current	history 1	history 2
Fuel	WC Method >5	<b>&lt;1.0</b>	<1.0	<1.0
Glycol	WC Method	<b>NEG</b>	NEG	NEG

## WEAR METALS

method	limit/base	current	history 1	history 2
Iron	ppm ASTM D5185m >100	<b>75</b>	8	6
Chromium	ppm ASTM D5185m >20	<b>1</b>	<1	<1
Nickel	ppm ASTM D5185m >4	<b>0</b>	0	0
Titanium	ppm ASTM D5185m	<b>&lt;1</b>	0	0
Silver	ppm ASTM D5185m >3	<b>0</b>	0	0
Aluminum	ppm ASTM D5185m >20	<b>▲ 17</b>	3	3
Lead	ppm ASTM D5185m >40	<b>0</b>	<1	0
Copper	ppm ASTM D5185m >330	<b>3</b>	1	1
Tin	ppm ASTM D5185m >15	<b>1</b>	<1	<1
Antimony	ppm ASTM D5185m	<b>---</b>	---	---
Vanadium	ppm ASTM D5185m	<b>0</b>	0	0
Cadmium	ppm ASTM D5185m	<b>0</b>	0	0

## ADDITIVES

method	limit/base	current	history 1	history 2
Boron	ppm ASTM D5185m 0	<b>53</b>	50	69
Barium	ppm ASTM D5185m 0	<b>0</b>	2	0
Molybdenum	ppm ASTM D5185m 0	<b>41</b>	39	31
Manganese	ppm ASTM D5185m	<b>&lt;1</b>	<1	<1
Magnesium	ppm ASTM D5185m 0	<b>539</b>	455	486
Calcium	ppm ASTM D5185m	<b>1803</b>	1716	1848
Phosphorus	ppm ASTM D5185m	<b>796</b>	749	859
Zinc	ppm ASTM D5185m	<b>953</b>	916	1038
Sulfur	ppm ASTM D5185m	<b>3072</b>	2934	2480

## CONTAMINANTS

method	limit/base	current	history 1	history 2
Silicon	ppm ASTM D5185m >25	<b>▲ 43</b>	4	3
Sodium	ppm ASTM D5185m	<b>4</b>	<1	2
Potassium	ppm ASTM D5185m >20	<b>4</b>	2	3

## INFRA-RED

method	limit/base	current	history 1	history 2
Soot %	% *ASTM D7844 >3	<b>0.1</b>	0.1	0.1
Nitration	Abs/cm *ASTM D7624 >20	<b>7.1</b>	7.7	7.7
Sulfation	Abs/.1mm *ASTM D7415 >30	<b>22.2</b>	23.3	23.2

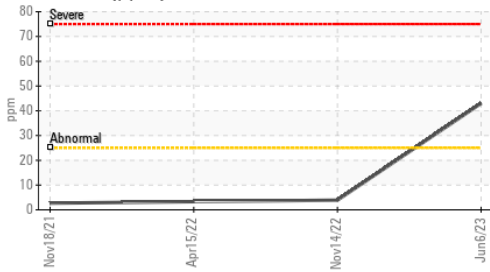
## FLUID DEGRADATION

method	limit/base	current	history 1	history 2
Oxidation	Abs/.1mm *ASTM D7414 >25	<b>20.7</b>	21.6	20.6
Base Number (BN)	mg KOH/g ASTM D2896 9.4	<b>10.5</b>	11.5	10.9

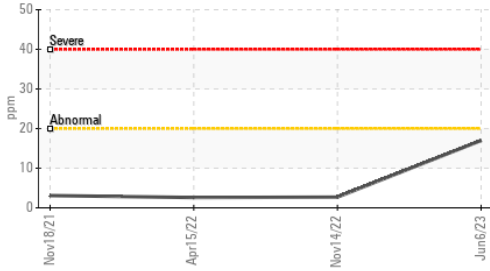


# OIL ANALYSIS REPORT

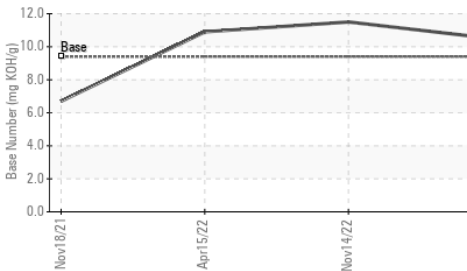
▲ Silicon (ppm)



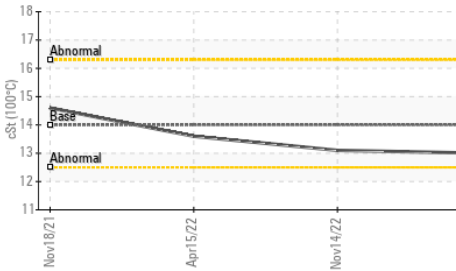
▲ Aluminum (ppm)



Base Number



Viscosity @ 100°C

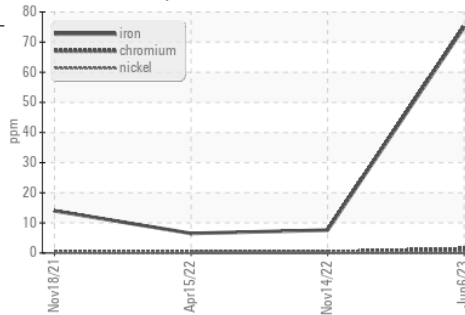


VISUAL	method	limit/base	current	history 1	history 2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

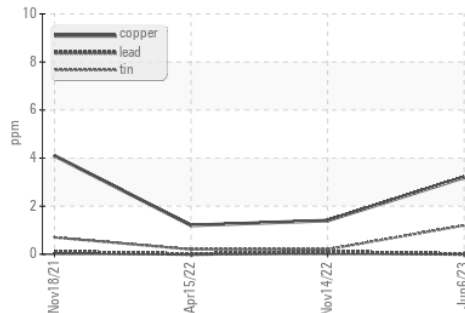
FLUID PROPERTIES	method	limit/base	current	history 1	history 2
Visc @ 100°C	cSt	ASTM D445	14	13.0	13.1

## GRAPHS

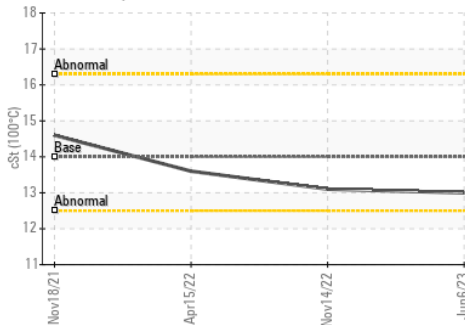
Ferrous Alloys



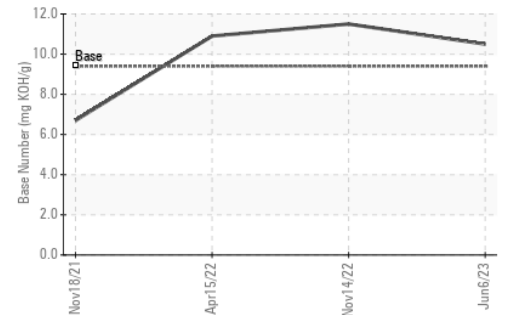
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
 Sample No. : WC0821731 Received : 21 Jun 2023  
 Lab Number : 05879335 Diagnosed : 22 Jun 2023  
 Unique Number : 10524438 Diagnostician : Don Baldrige  
 Test Package : CONST ( Additional Tests: TBN )

**SHERWOOD CONSTRUCTION CO INC**  
 3219 WEST MAY ST  
 WICHITA, KS  
 US 67213  
 Contact: SHAWN SOUTH  
 shawn.south@sherwood.net

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)

T: x:

F: x: