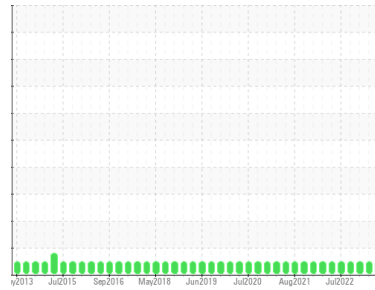




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**STERLING 26**

Component  
**Diesel Engine**

Fluid  
**DISEL ENGINE OIL SAE 15W40 (8 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>RW0004728</b>	RW0004512	RW0004174
Sample Date	Client Info			<b>01 Mar 2024</b>	15 Jul 2023	17 Feb 2023
Machine Age	hrs	Client Info		<b>30562</b>	30036	29721
Oil Age	hrs	Client Info		<b>526</b>	315	304
Oil Changed	Client Info			<b>N/A</b>	Changed	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>33</b>	11	14
Chromium	ppm	ASTM D5185m	>20	<b>1</b>	<1	<1
Nickel	ppm	ASTM D5185m	>4	<b>&lt;1</b>	<1	0
Titanium	ppm	ASTM D5185m		<b>0</b>	0	0
Silver	ppm	ASTM D5185m	>3	<b>0</b>	0	<1
Aluminum	ppm	ASTM D5185m	>20	<b>2</b>	1	<1
Lead	ppm	ASTM D5185m	>40	<b>6</b>	2	2
Copper	ppm	ASTM D5185m	>330	<b>6</b>	4	3
Tin	ppm	ASTM D5185m	>15	<b>&lt;1</b>	<1	0
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Cadmium	ppm	ASTM D5185m		<b>0</b>	0	0

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	250	<b>9</b>	7	4
Barium	ppm	ASTM D5185m	10	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	100	<b>74</b>	67	60
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	0	<1
Magnesium	ppm	ASTM D5185m	450	<b>1116</b>	961	972
Calcium	ppm	ASTM D5185m	3000	<b>1525</b>	1245	1103
Phosphorus	ppm	ASTM D5185m	1150	<b>1269</b>	1077	1000
Zinc	ppm	ASTM D5185m	1350	<b>1616</b>	1307	1300
Sulfur	ppm	ASTM D5185m	4250	<b>4510</b>	3368	3522

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	<b>4</b>	3	4
Sodium	ppm	ASTM D5185m	>158	<b>0</b>	2	<1
Potassium	ppm	ASTM D5185m	>20	<b>0</b>	1	<1

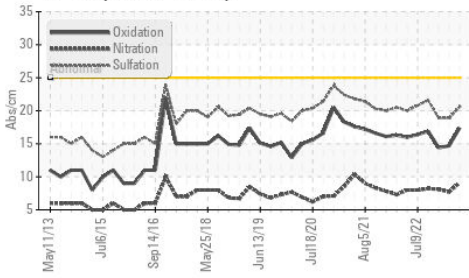
INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	<b>0.3</b>	0.3	0.2
Nitration	Abs/cm	*ASTM D7624	>20	<b>9.1</b>	7.7	8.1
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>20.6</b>	18.9	18.9

FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>17.4</b>	14.7	14.4
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	<b>6.90</b>	10.20	9.80

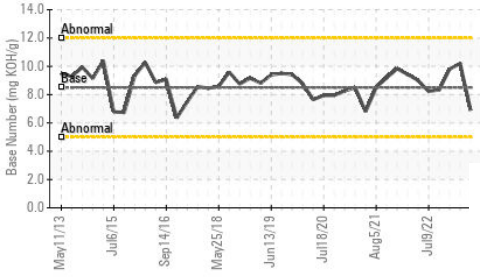


# OIL ANALYSIS REPORT

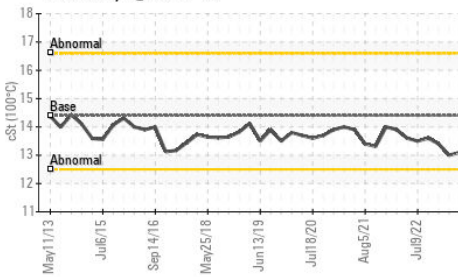
FT-IR (Direct Trend)



Base Number



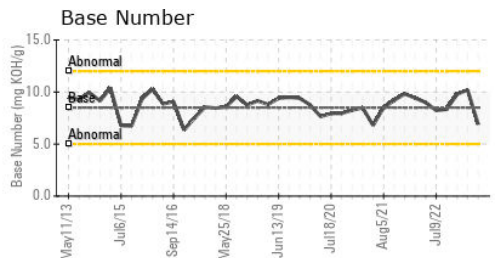
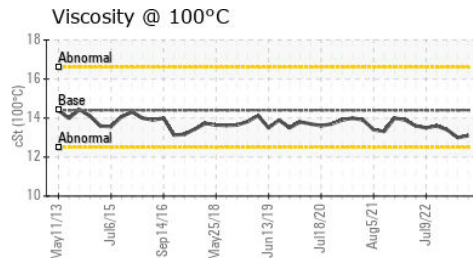
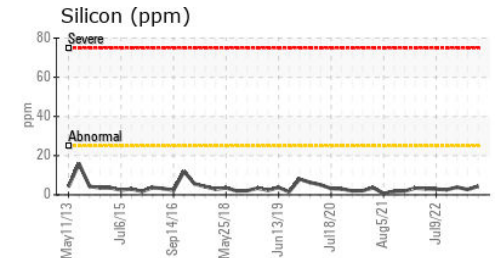
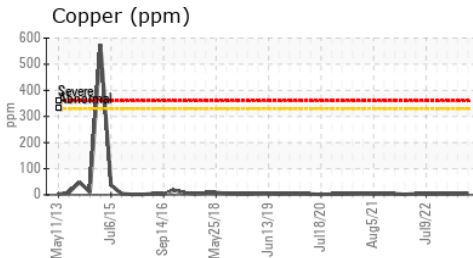
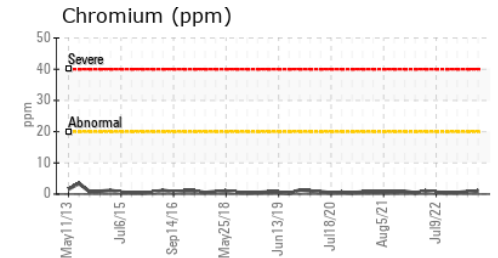
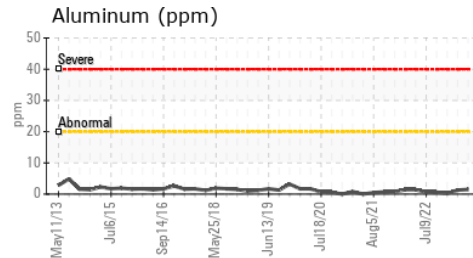
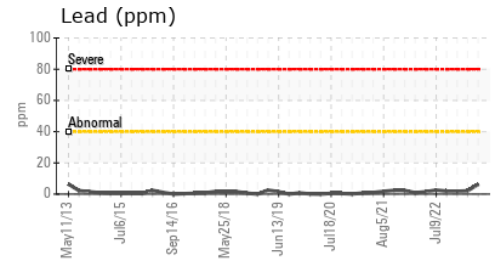
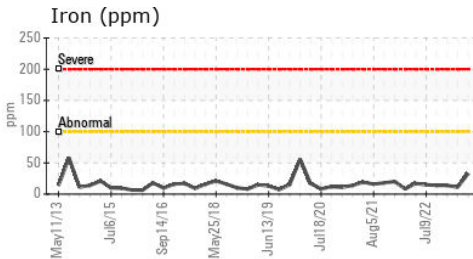
Viscosity @ 100°C



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	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	14.4	13.1	13.0

## GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
 Sample No. : RW0004728  
 Lab Number : 06146734  
 Unique Number : 10976812  
 Test Package : MOB 2

Received : 11 Apr 2024  
 Tested : 15 Apr 2024  
 Diagnosed : 15 Apr 2024 - Wes Davis

HALLACK CONTRACTING, INC.  
 4223 W POLK  
 HART, MI  
 US 49420

Contact: DAN HALLACK KARL BUTCHER  
 shop@hallackcontracting.com

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: (231)873-5081

F: (231)873-2889