



# OIL ANALYSIS REPORT

WEAR	<b>NORMAL</b>
CONTAMINATION	<b>ABNORMAL</b>
FLUID CONDITION	<b>ABNORMAL</b>

Machine Id  
**LOAD KING STINGER 340-94 TC0027 (S/N 200027)**

Component  
**Diesel Engine**

Fluid  
**DIESEL ENGINE OIL 10W40 (6 GAL)**

## RECOMMENDATION

We advise that you check the fuel injection system. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>HPL0002613</b>	HPL0003241	HPL0001715
Sample Date		Client Info		<b>29 Dec 2023</b>	08 Jun 2023	26 Oct 2022
Machine Age	hrs	Client Info		<b>1470</b>	3148	2044
Oil Age	hrs	Client Info		<b>0</b>	772	760
Filter Age	hrs	Client Info		<b>0</b>	772	760
Oil Changed		Client Info		<b>N/A</b>	Changed	Changed
Filter Changed		Client Info		<b>N/A</b>	Changed	Changed
Sample Status				<b>ABNORMAL</b>	ABNORMAL	ABNORMAL

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>90	<b>36</b>	46	66
Chromium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	2	2
Nickel	ppm	ASTM D5185m	>2	<b>0</b>	<1	0
Titanium	ppm	ASTM D5185m	>2	<b>0</b>	<1	0
Silver	ppm	ASTM D5185m	>2	<b>0</b>	0	<1
Aluminum	ppm	ASTM D5185m	>20	<b>7</b>	5	4
Lead	ppm	ASTM D5185m	>40	<b>0</b>	<1	<1
Copper	ppm	ASTM D5185m	>330	<b>3</b>	6	19
Tin	ppm	ASTM D5185m	>15	<b>0</b>	<1	<1
Vanadium	ppm	ASTM D5185m		<b>0</b>	<1	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

## CONTAMINATION

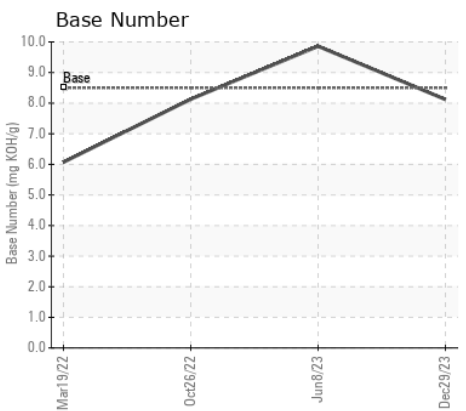
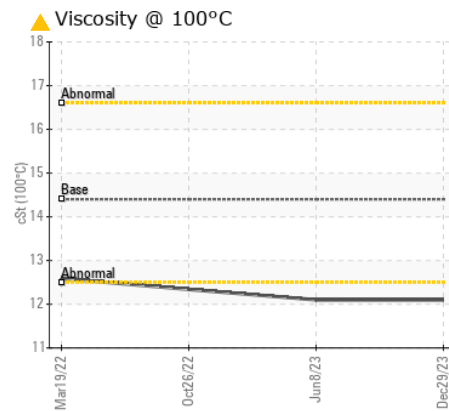
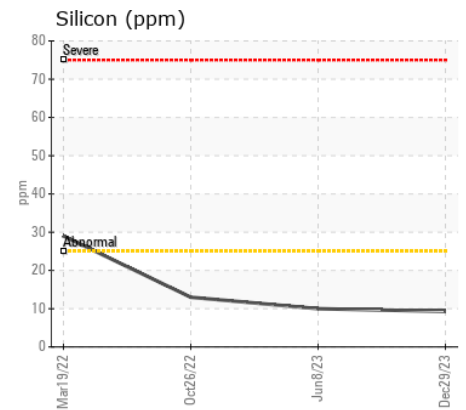
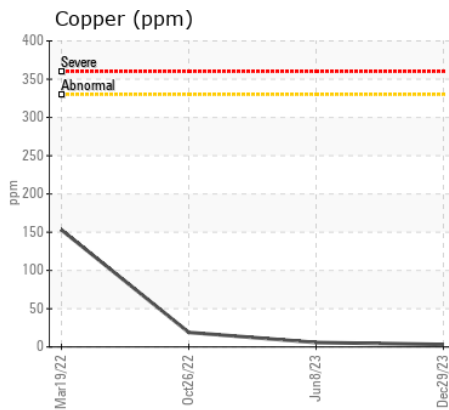
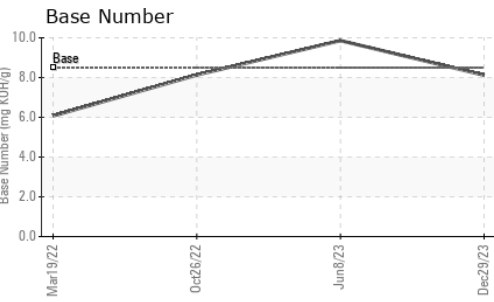
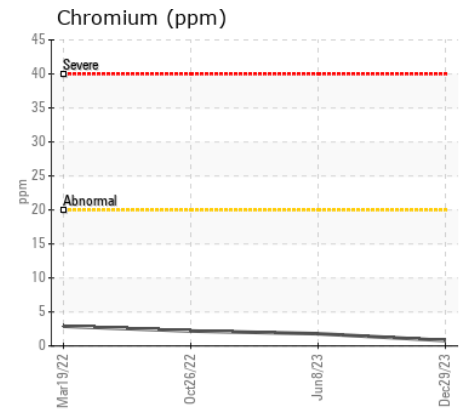
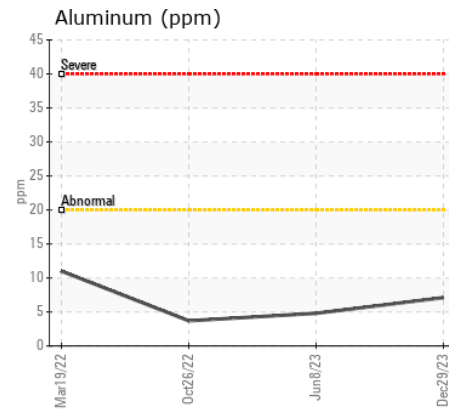
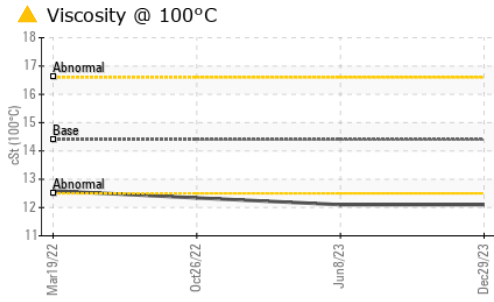
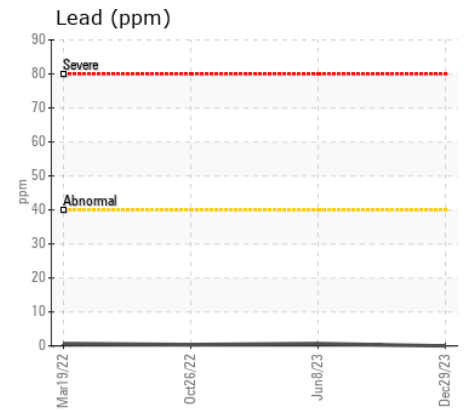
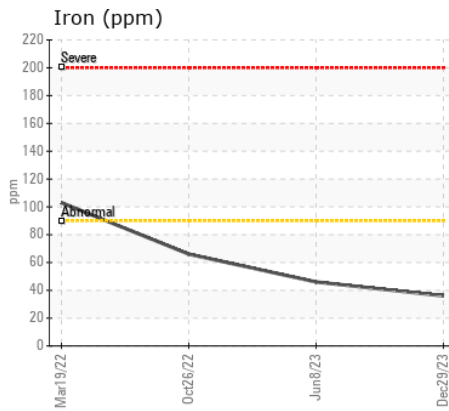
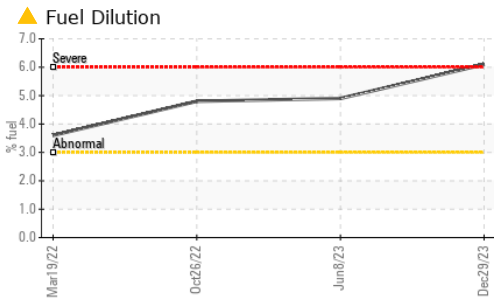
There is a moderate amount of fuel present in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>9</b>	10	13
Potassium	ppm	ASTM D5185m	>20	<b>1</b>	1	7
Fuel	%	ASTM D3524	>3.0	<b>▲ 6.1</b>	▲ 4.9	▲ 4.8
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844	>6	<b>0.9</b>	0.9	1.1
Nitration	Abs/cm	*ASTM D7624	>20	<b>16.9</b>	17.1	18.2
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>41.9</b>	43.0	46.3
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	<b>NEG</b>	NEG	NEG

## FLUID CONDITION

Fuel is present in the oil and is lowering the viscosity. The BN result indicates that there is suitable alkalinity remaining in the oil.

Sodium	ppm	ASTM D5185m		<b>3</b>	3	3
Boron	ppm	ASTM D5185m	250	<b>0</b>	0	4
Barium	ppm	ASTM D5185m	10	<b>&lt;1</b>	0	0
Molybdenum	ppm	ASTM D5185m	100	<b>566</b>	554	463
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	1	2
Magnesium	ppm	ASTM D5185m	450	<b>975</b>	980	882
Calcium	ppm	ASTM D5185m	3000	<b>2404</b>	2605	2316
Phosphorus	ppm	ASTM D5185m	1150	<b>1015</b>	972	828
Zinc	ppm	ASTM D5185m	1350	<b>1216</b>	1246	1151
Sulfur	ppm	ASTM D5185m	4250	<b>7415</b>	8602	7231
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>46.7</b>	47.0	50.5
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	<b>8.12</b>	9.86	8.13
Visc @ 100°C	cSt	ASTM D445	14.4	<b>▲ 12.1</b>	▲ 12.1	▲ 12.34



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : HPL0002613 **Received** : 08 Jan 2024  
**Lab Number** : 06054146 **Diagnosed** : 11 Jan 2024  
**Unique Number** : 10820095 **Diagnostician** : Jonathan Hester  
**Test Package** : MOB 2 ( Additional Tests: PercentFuel )

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)

**STEVENS ON CRANE**  
 410 STEVENSON DR  
 BOLINGBROOK, IL  
 US 60440

Contact: DAVE KOEHNE  
 davidk@stevensoncrane.com

T: (630)972-9199

F: