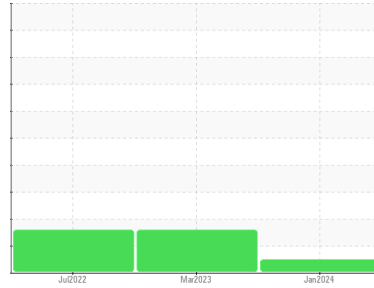




OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL



Area
SOUTH HOLLAND
 Machine Id
TADANO GR150XL-3 RT4182 (S/N FD4182)
 Component
Diesel Engine
 Fluid
DIESEL ENGINE OIL 10W40 (--- 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			HPL0004172	HPL0002886	HPL0000479
Sample Date	Client Info			30 Jan 2024	25 Mar 2023	27 Jul 2022
Machine Age	hrs	Client Info		2363	1429	593
Oil Age	hrs	Client Info		0	684	455
Oil Changed	Client Info			N/A	Changed	Changed
Sample Status				NORMAL	ABNORMAL	ABNORMAL

CONTAMINATION		method	limit/base	current	history1	history2
Fuel	WC Method	>5		<1.0	<1.0	<1.0
Water	WC Method	>0.2		NEG	NEG	NEG
Glycol	WC Method			NEG	NEG	NEG

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>100	26	42	52
Chromium	ppm	ASTM D5185m	>20	<1	1	1
Nickel	ppm	ASTM D5185m	>4	<1	<1	<1
Titanium	ppm	ASTM D5185m		<1	0	<1
Silver	ppm	ASTM D5185m	>3	0	0	<1
Aluminum	ppm	ASTM D5185m	>20	5	2	2
Lead	ppm	ASTM D5185m	>40	2	1	4
Copper	ppm	ASTM D5185m	>330	65	110	189
Tin	ppm	ASTM D5185m	>15	<1	1	2
Vanadium	ppm	ASTM D5185m		0	0	<1
Cadmium	ppm	ASTM D5185m		0	0	0

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	250	2	20	149
Barium	ppm	ASTM D5185m	10	2	0	<1
Molybdenum	ppm	ASTM D5185m	100	457	713	447
Manganese	ppm	ASTM D5185m		1	3	4
Magnesium	ppm	ASTM D5185m	450	849	1007	301
Calcium	ppm	ASTM D5185m	3000	2165	3562	3115
Phosphorus	ppm	ASTM D5185m	1150	848	1193	865
Zinc	ppm	ASTM D5185m	1350	1131	1537	1066
Sulfur	ppm	ASTM D5185m	4250	6643	10938	12523

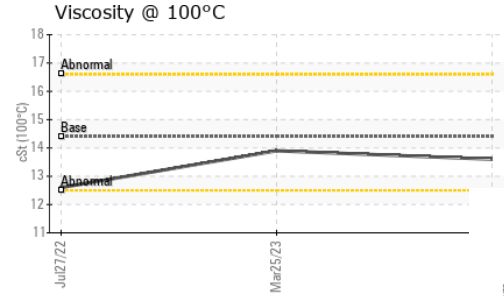
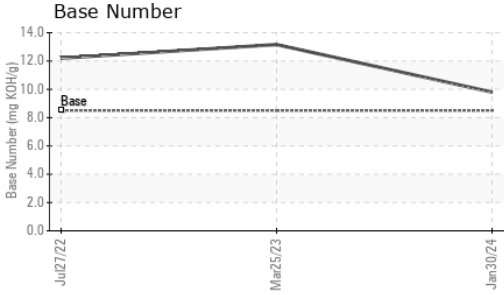
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	12	▲ 25	▲ 30
Sodium	ppm	ASTM D5185m		0	<1	1
Potassium	ppm	ASTM D5185m	>20	2	3	2

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	0.5	0.3	0.2
Nitration	Abs/cm	*ASTM D7624	>20	14.3	13.7	10.2
Sulfation	Abs/.1mm	*ASTM D7415	>30	36.5	37.2	26.5

FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	38.5	39.2	17.4
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	9.80	13.16	12.2



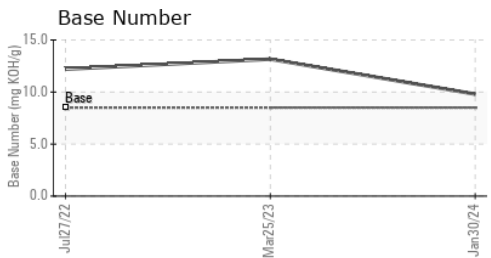
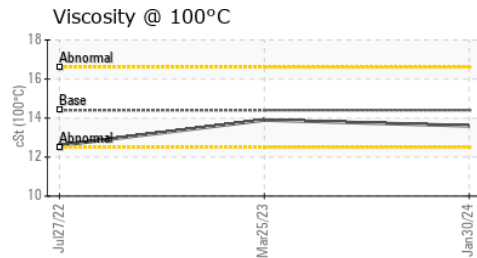
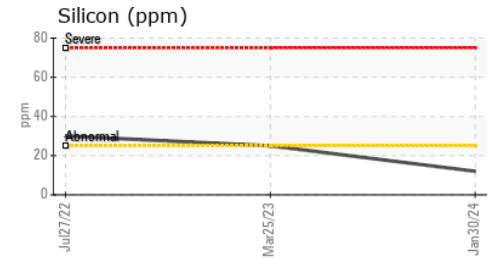
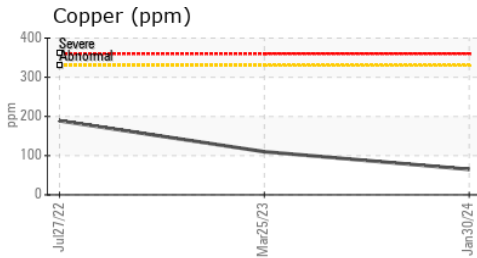
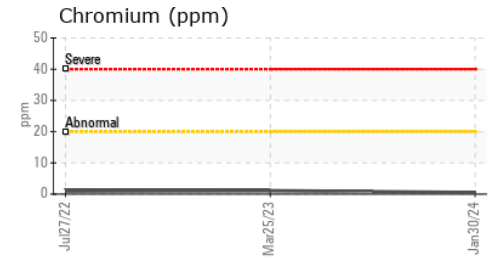
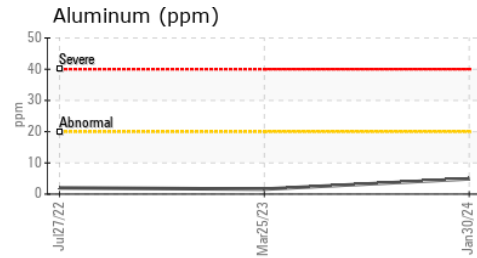
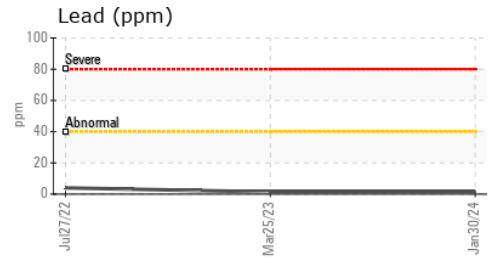
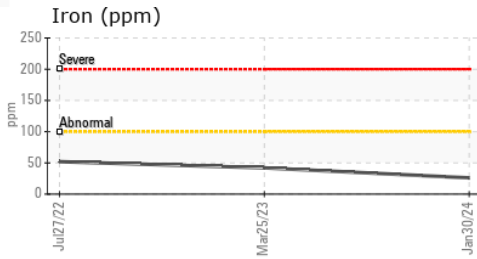
OIL ANALYSIS REPORT



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	13.6	13.9

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : HPL0004172 **Received** : 01 Feb 2024
Lab Number : 06077807 **Diagnosed** : 04 Feb 2024
Unique Number : 10859898 **Diagnostician** : Don Baldrige
Test Package : MOB 2

STEVENSON CRANE
 410 STEVENSON DR
 BOLINGBROOK, IL
 US 60440
 Contact: DAVE KOEHNE
 davidk@stevensoncrane.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: (630)972-9199

F: