



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	MARGINAL
FLUID CONDITION	ABNORMAL



Machine Id
53.170L []
Component
Diesel Engine
Fluid
MOBIL DELVAC 1300 SUPER15W40 (3 GAL)

RECOMMENDATION

The oil change at the time of sampling has been noted. Resample at the next service interval to monitor. No other corrective action is recommended at this time.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0873984	WC0848913	WC0808099
Sample Date		Client Info		03 Jan 2024	09 Aug 2023	24 May 2023
Machine Age	hrs	Client Info		2040	1684	1372
Oil Age	hrs	Client Info		356	250	672
Filter Age	hrs	Client Info		356	250	672
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				ABNORMAL	SEVERE	ABNORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	5	7	18
Chromium	ppm	ASTM D5185m	>20	0	<1	<1
Nickel	ppm	ASTM D5185m	>2	0	0	<1
Titanium	ppm	ASTM D5185m	>2	0	0	<1
Silver	ppm	ASTM D5185m	>2	0	0	<1
Aluminum	ppm	ASTM D5185m	>25	2	<1	2
Lead	ppm	ASTM D5185m	>40	<1	0	1
Copper	ppm	ASTM D5185m	>330	0	1	11
Tin	ppm	ASTM D5185m	>15	<1	<1	<1
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

Light fuel dilution occurring. No other contaminants were detected in the oil.

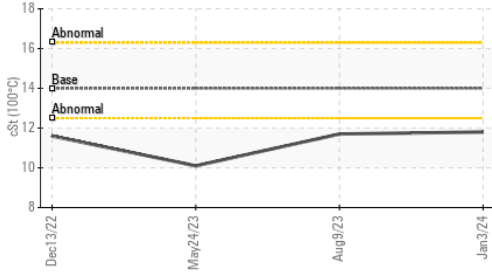
Silicon	ppm	ASTM D5185m	>25	5	4	6
Potassium	ppm	ASTM D5185m	>20	<1	1	2
Fuel	%	ASTM D3524	>5	▲ 4.9	● 9.0	▲ 7.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.2	0.2	0.3
Nitration	Abs/cm	*ASTM D7624	>20	8.1	8.3	10.4
Sulfation	Abs/.1mm	*ASTM D7415	>30	21.5	21.7	23.4
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	NEG

FLUID CONDITION

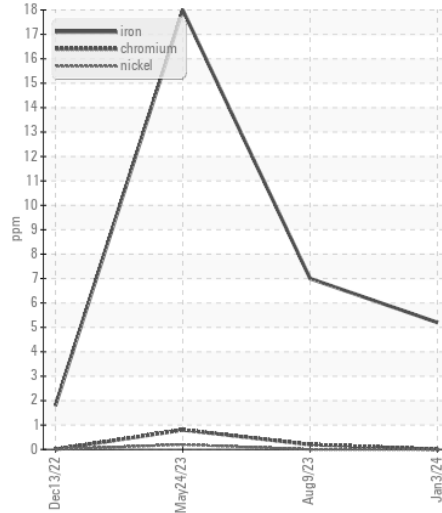
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		1	2	4
Boron	ppm	ASTM D5185m	0	46	43	35
Barium	ppm	ASTM D5185m	0	0	2	0
Molybdenum	ppm	ASTM D5185m	0	37	38	38
Manganese	ppm	ASTM D5185m		<1	<1	1
Magnesium	ppm	ASTM D5185m	0	478	495	446
Calcium	ppm	ASTM D5185m		1490	1604	1624
Phosphorus	ppm	ASTM D5185m		743	730	823
Zinc	ppm	ASTM D5185m		865	869	1021
Sulfur	ppm	ASTM D5185m		2384	2745	2805
Oxidation	Abs/.1mm	*ASTM D7414	>25	21.0	21.1	23.6
Base Number (BN)	mg KOH/g	ASTM D2896	9.4	9.3	9.7	8.5
Visc @ 100°C	cSt	ASTM D445	14	▲ 11.8	▲ 11.7	▲ 10.1

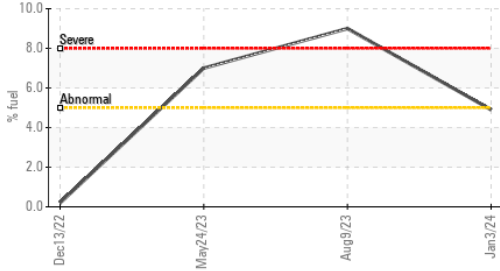
▲ Viscosity @ 100°C



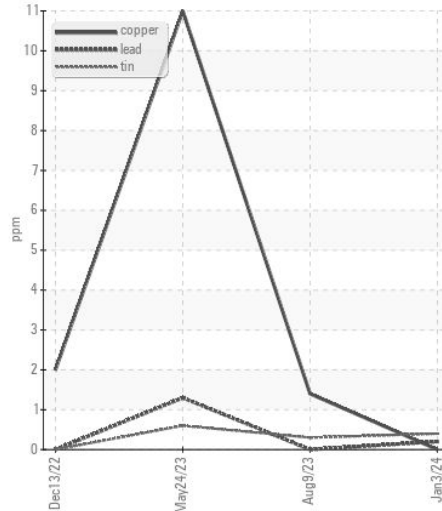
Ferrous Alloys



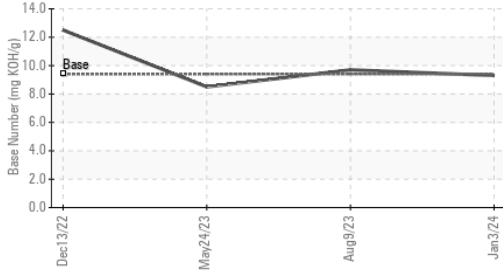
▲ Fuel Dilution



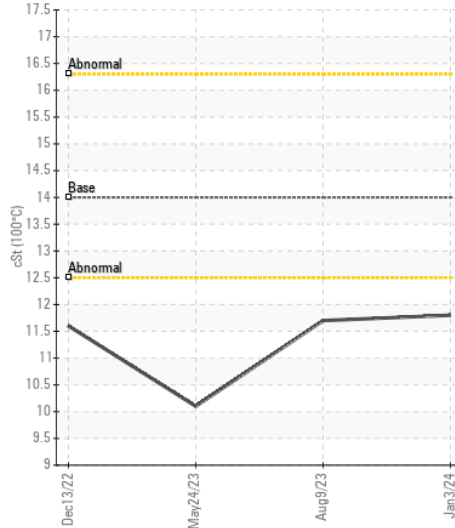
Non-ferrous Metals



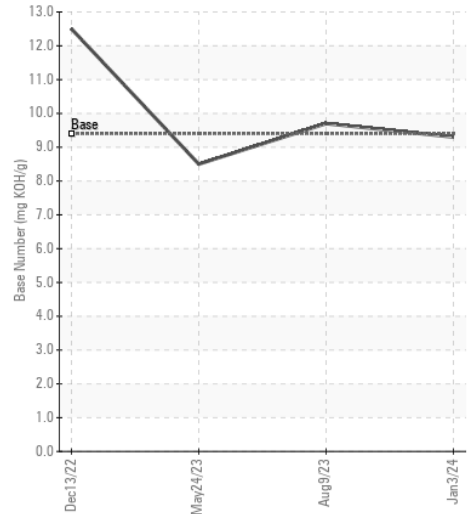
Base Number



▲ Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0873984 **Received** : 16 Jan 2024
Lab Number : 06060886 **Diagnosed** : 18 Jan 2024
Unique Number : 10832268 **Diagnostician** : Wes Davis
Test Package : CONST (Additional Tests: PercentFuel, 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: