

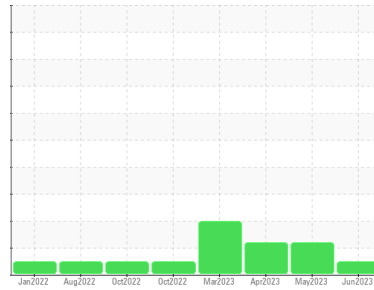


OIL ANALYSIS REPORT



Area
KANSAS/44
Machine Id
78.262 [KANSAS^44]
Component
Diesel Engine
Fluid
MOBIL DELVAC 1300 SUPER15W40 (15)

Sample Rating Trend



NORMAL



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	history 1	history 2
Sample Number	Client Info		WC0745936	WC0781163	WC0781140
Sample Date	Client Info		14 Jun 2023	23 May 2023	19 Apr 2023
Machine Age	hrs	Client Info	10155	10141	10015
Oil Age	hrs	Client Info	9798	9784	9784
Oil Changed	Client Info		Changed	N/A	N/A
Sample Status			NORMAL	ABNORMAL	ABNORMAL

CONTAMINATION

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

WEAR METALS

	method	limit/base	current	history 1	history 2
Iron	ppm	ASTM D5185m >100	73	59	63
Chromium	ppm	ASTM D5185m >20	2	1	<1
Nickel	ppm	ASTM D5185m >2	0	1	0
Titanium	ppm	ASTM D5185m >2	0	<1	0
Silver	ppm	ASTM D5185m >2	0	<1	0
Aluminum	ppm	ASTM D5185m >25	7	▲ 33	▲ 35
Lead	ppm	ASTM D5185m >40	3	15	8
Copper	ppm	ASTM D5185m >330	26	90	86
Tin	ppm	ASTM D5185m >15	<1	4	2
Vanadium	ppm	ASTM D5185m	0	<1	0
Cadmium	ppm	ASTM D5185m	0	0	0

ADDITIVES

	method	limit/base	current	history 1	history 2
Boron	ppm	ASTM D5185m 0	63	39	43
Barium	ppm	ASTM D5185m 0	0	0	0
Molybdenum	ppm	ASTM D5185m 0	35	37	39
Manganese	ppm	ASTM D5185m	1	<1	1
Magnesium	ppm	ASTM D5185m 0	530	534	545
Calcium	ppm	ASTM D5185m	1625	1641	1699
Phosphorus	ppm	ASTM D5185m	748	788	753
Zinc	ppm	ASTM D5185m	901	960	955
Sulfur	ppm	ASTM D5185m	3169	2749	2915

CONTAMINANTS

	method	limit/base	current	history 1	history 2
Silicon	ppm	ASTM D5185m >25	10	8	9
Sodium	ppm	ASTM D5185m	2	3	2
Potassium	ppm	ASTM D5185m >20	<1	3	0

INFRA-RED

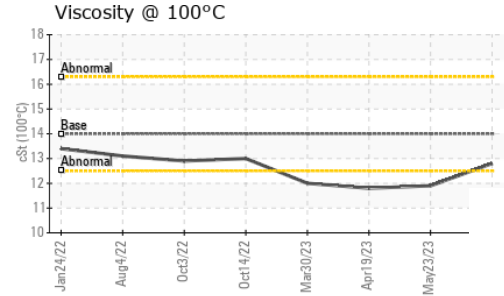
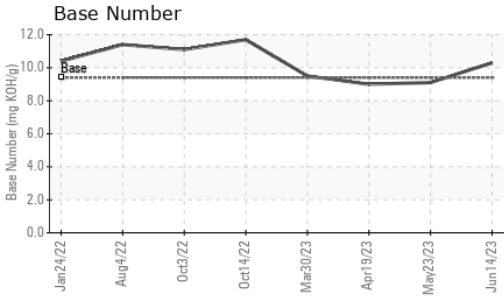
	method	limit/base	current	history 1	history 2
Soot %	%	*ASTM D7844 >3	0.2	0.8	0.8
Nitration	Abs/cm	*ASTM D7624 >20	5.6	10.0	9.7
Sulfation	Abs/.1mm	*ASTM D7415 >30	21.4	22.6	21.9

FLUID DEGRADATION

	method	limit/base	current	history 1	history 2
Oxidation	Abs/.1mm	*ASTM D7414 >25	18.3	20.9	20.4
Base Number (BN)	mg KOH/g	ASTM D2896 9.4	10.3	9.1	9.0



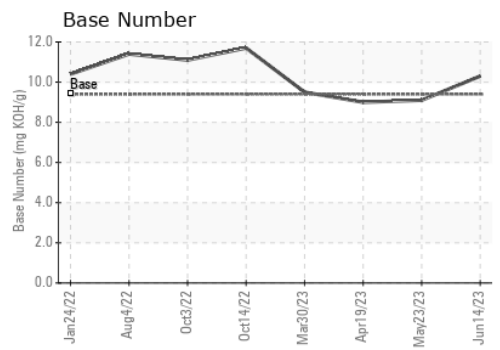
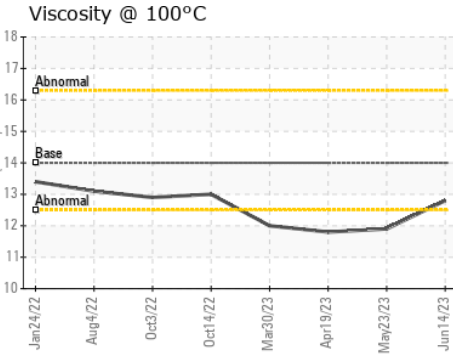
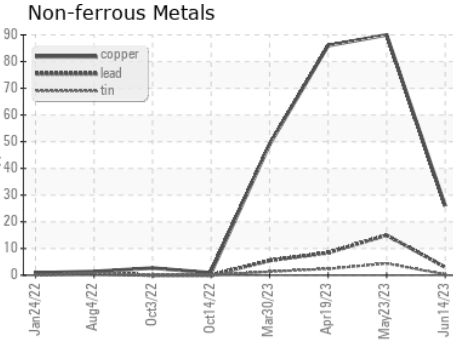
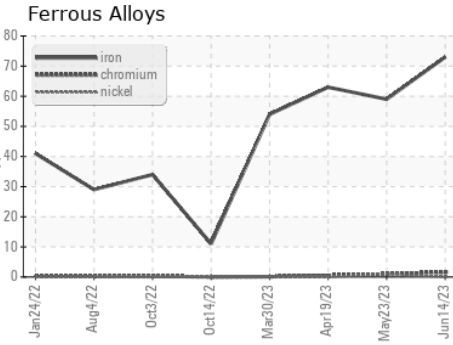
OIL ANALYSIS REPORT



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	12.8	▲ 11.9	▲ 11.8

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0745936 **Received** : 21 Jun 2023
Lab Number : 05879352 **Diagnosed** : 22 Jun 2023
Unique Number : 10524455 **Diagnostician** : Wes Davis
Test Package : CONST (Additional Tests: TBN)

SHERWOOD CONSTRUCTION CO INC
 3219 WEST MAY ST
 WICHITA, KS
 US 67213
 Contact: RANDY ROBERTS
 randy.roberts@sherwood.net
 T: (316)943-6491
 F: x:

Certificate L2367
 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)