

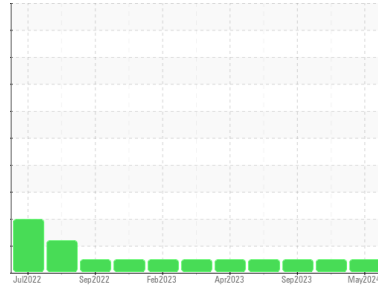


OIL ANALYSIS REPORT



Area
OKLAHOMA/102/EG - DOZER
 Machine Id
38.88 [OKLAHOMA^102^EG - DOZER]
 Component
Diesel Engine
 Fluid
MOBIL DELVAC 1300 SUPER15W40 (--- GAL)

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	history1	history2
Sample Number	Client Info		WC0886891	WC0874016	WC0857377
Sample Date	Client Info		22 May 2024	19 Dec 2023	25 Sep 2023
Machine Age	hrs	Client Info	2980	2733	2508
Oil Age	hrs	Client Info	472	225	671
Oil Changed	Client Info		Changed	Not Changd	Changed
Sample Status			NORMAL	NORMAL	NORMAL

CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method		<1.0	<1.0	<1.0
Water	WC Method		NEG	NEG	NEG
Glycol	WC Method		NEG	NEG	NEG

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	32	16	67
Chromium	ppm	ASTM D5185m	<1	<1	1
Nickel	ppm	ASTM D5185m	0	0	0
Titanium	ppm	ASTM D5185m	0	0	0
Silver	ppm	ASTM D5185m	0	0	0
Aluminum	ppm	ASTM D5185m	<1	<1	2
Lead	ppm	ASTM D5185m	<1	<1	3
Copper	ppm	ASTM D5185m	6	3	12
Tin	ppm	ASTM D5185m	0	<1	1
Vanadium	ppm	ASTM D5185m	0	0	0
Cadmium	ppm	ASTM D5185m	0	0	0

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	24	37	32
Barium	ppm	ASTM D5185m	0	0	2
Molybdenum	ppm	ASTM D5185m	43	39	43
Manganese	ppm	ASTM D5185m	<1	<1	1
Magnesium	ppm	ASTM D5185m	571	483	505
Calcium	ppm	ASTM D5185m	1736	1672	1736
Phosphorus	ppm	ASTM D5185m	796	795	767
Zinc	ppm	ASTM D5185m	1002	876	954
Sulfur	ppm	ASTM D5185m	2975	2464	2453

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	5	4	12
Sodium	ppm	ASTM D5185m	2	2	2
Potassium	ppm	ASTM D5185m	0	0	<1

INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	0.4	0.3	0.6
Nitration	Abs/cm	*ASTM D7624	8.6	7.8	10.6
Sulfation	Abs/.1mm	*ASTM D7415	22.3	22.8	23.5

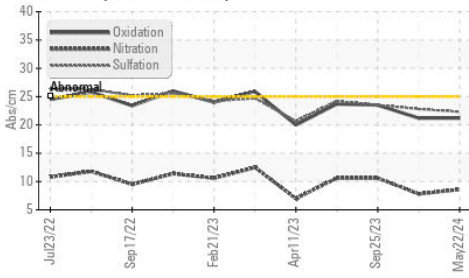
FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	21.2	21.2	23.5
Base Number (BN)	mg KOH/g	ASTM D2896	9.3	9.5	7.6

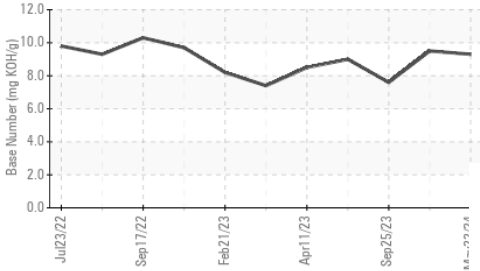


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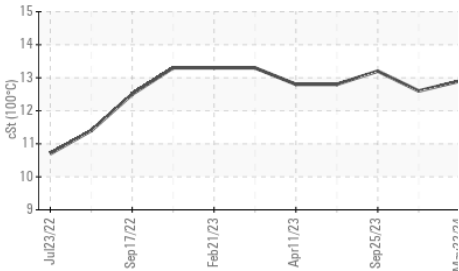
FT-IR (Direct Trend)



Base Number



Viscosity @ 100°C

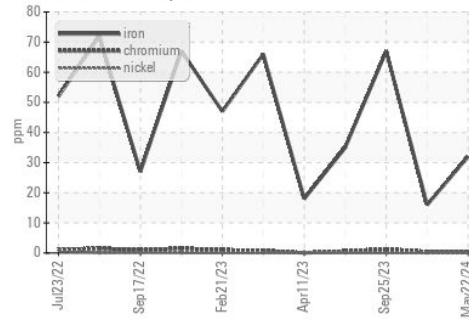


VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	NEG	NEG	NEG
Free Water	scalar	*Visual	NEG	NEG	NEG

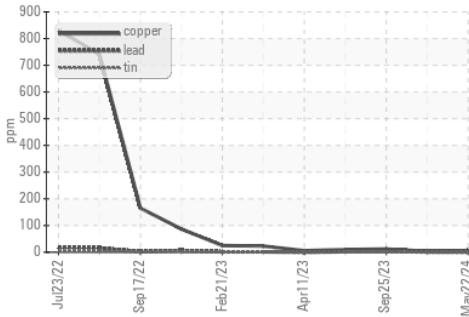
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	12.9	12.6	13.2

GRAPHS

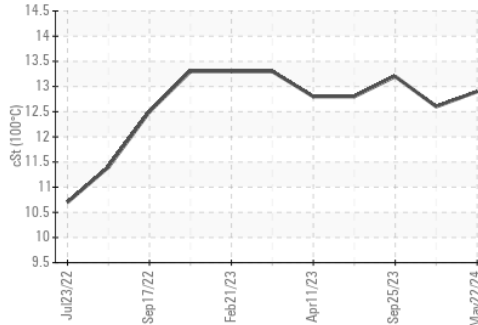
Ferrous Alloys



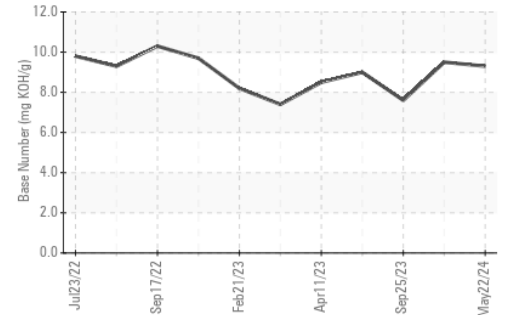
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0886891 **Received** : 05 Jun 2024
Lab Number : 06199947 **Tested** : 06 Jun 2024
Unique Number : 11062070 **Diagnosed** : 06 Jun 2024 - Wes Davis
Test Package : CONST (Additional Tests: TBN)

SHERWOOD CONSTRUCTION CO INC
 3219 WEST MAY ST
 WICHITA, KS
 US 67213
 Contact: DOUG KING
 doug.king@sherwood.net
 T: (316)617-3161
 F: x:

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)