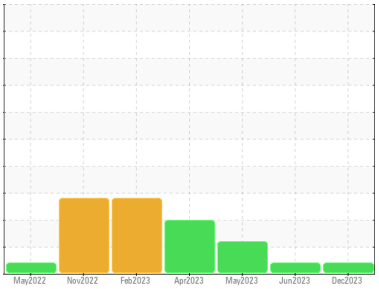
OIL ANALYSIS REPORT

Area
OKLAHOMA/102
Machine Id
76.37L [OKLAHOMA^102]
Component
Diesel Engine
Fluid
MOBIL DELVAC 1300 SUPER15W40 (--- GAL)

Sample Rating Trend



VISCOSITY

DIAGNOSIS

▲ Recommendation
Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor. (Customer Sample Comment: 1412 hrs)

Wear
All component wear rates are normal.

Contamination
There is no indication of any contamination in the oil.

▲ Fluid Condition
The oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**WC0864281**	WC0819967	WC0746726
Sample Date		Client Info		**18 Dec 2023**	15 Jun 2023	10 May 2023
Machine Age	hrs	Client Info		**1412**	1175	1025
Oil Age	hrs	Client Info		**116**	1025	858
Oil Changed		Client Info		**Changed**	Changed	Changed
Sample Status				**ATTENTION**	ATTENTION	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	**17**	20	40
Chromium	ppm	ASTM D5185m	>20	**<1**	2	2
Nickel	ppm	ASTM D5185m	>2	**0**	<1	0
Titanium	ppm	ASTM D5185m	>2	**0**	0	<1
Silver	ppm	ASTM D5185m	>2	**0**	<1	0
Aluminum	ppm	ASTM D5185m	>25	**2**	<1	0
Lead	ppm	ASTM D5185m	>40	**0**	4	8
Copper	ppm	ASTM D5185m	>330	**68**	193	▲ 612
Tin	ppm	ASTM D5185m	>15	**0**	1	2
Vanadium	ppm	ASTM D5185m		**0**	<1	0
Cadmium	ppm	ASTM D5185m		**0**	<1	0

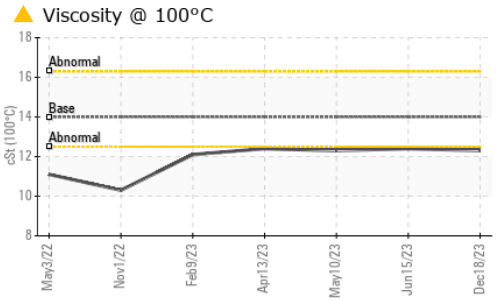
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	**29**	28	12
Barium	ppm	ASTM D5185m	0	**0**	<1	0
Molybdenum	ppm	ASTM D5185m	0	**41**	44	38
Manganese	ppm	ASTM D5185m		**0**	1	1
Magnesium	ppm	ASTM D5185m	0	**517**	585	534
Calcium	ppm	ASTM D5185m		**1605**	1784	1718
Phosphorus	ppm	ASTM D5185m		**745**	773	742
Zinc	ppm	ASTM D5185m		**885**	976	900
Sulfur	ppm	ASTM D5185m		**2571**	2736	2117

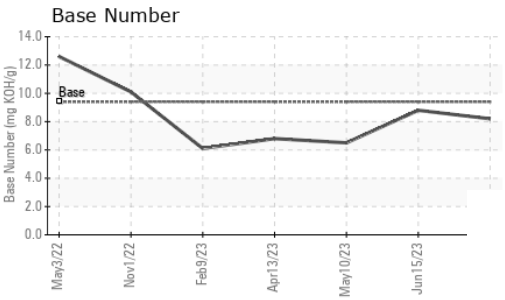
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	**8**	8	15
Sodium	ppm	ASTM D5185m		**1**	4	5
Potassium	ppm	ASTM D5185m	>20	**1**	1	<1

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	**0.4**	0.4	0.8
Nitration	Abs/cm	*ASTM D7624	>20	**8.3**	8.4	12.0
Sulfation	Abs/.1mm	*ASTM D7415	>30	**22.1**	22.7	23.3

FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	**19.6**	20.2	23.2
Base Number (BN)	mg KOH/g	ASTM D2896	9.4	**8.2**	8.8	6.5

OIL ANALYSIS REPORT

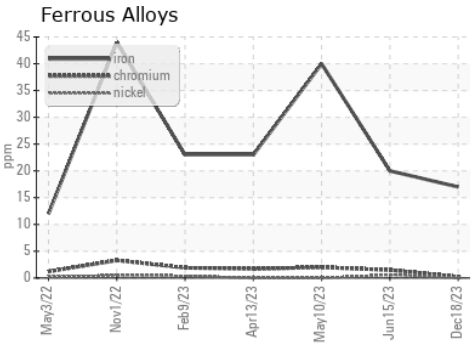


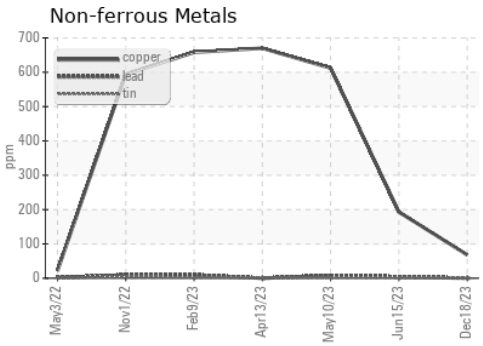


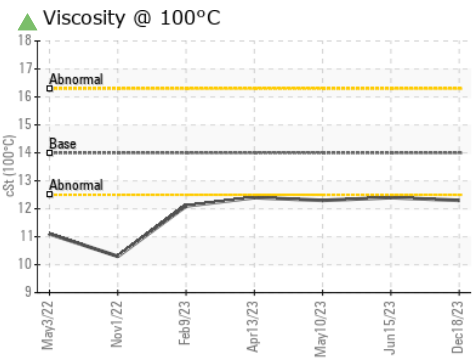
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Precipitate	scalar	*Visual	NONE	**NONE**	NONE	NONE
Silt	scalar	*Visual	NONE	**NONE**	NONE	NONE
Debris	scalar	*Visual	NONE	**NONE**	NONE	NONE
Sand/Dirt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

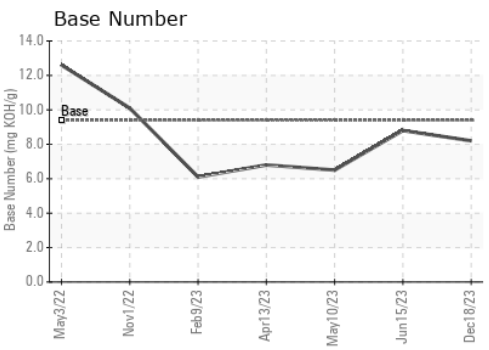
FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	14	▲ **12.3**	▲ 12.4	▲ 12.3

GRAPHS









Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0864281 **Recieved** : 10 Jan 2024
Lab Number : 06056298 **Diagnosed** : 11 Jan 2024
Unique Number : 10822247 **Diagnostician** : Angela Borella
Test Package : CONST (Additional Tests: TBN)

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)

SHERWOOD CONSTRUCTION CO INC
3219 WEST MAY ST
WICHITA, KS
US 67213
Contact: SHAWN SOUTH
shawn.south@sherwood.net
T: x:
F: x:

Report Id: SHEWIC [WUSCAR] 06056298 (Generated: 01/11/2024 16:24:56) Rev: 1

Submitted By: LOUIS BRESHEARS