



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	ATTENTION



Area
OKLAHOMA/3/EG - LOADER
Machine Id
48.85L [OKLAHOMA^3^EG - LOADER]
Component
Diesel Engine
Fluid
MOBIL DELVAC 1300 SUPER15W40 (--- GAL)

RECOMMENDATION

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0886868	WC0886974	WC0857504
Sample Date		Client Info		20 Feb 2024	02 Jan 2024	27 Oct 2023
Machine Age	hrs	Client Info		31947	31603	31209
Oil Age	hrs	Client Info		31603	31209	206
Filter Age	hrs	Client Info		31603	31209	206
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				ATTENTION	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>85	32	34	38
Chromium	ppm	ASTM D5185m	>5	2	<1	<1
Nickel	ppm	ASTM D5185m	>5	<1	0	0
Titanium	ppm	ASTM D5185m	>2	<1	0	<1
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>40	2	1	<1
Lead	ppm	ASTM D5185m	>25	1	<1	<1
Copper	ppm	ASTM D5185m	>350	3	3	4
Tin	ppm	ASTM D5185m	>5	1	<1	<1
Vanadium	ppm	ASTM D5185m		<1	0	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

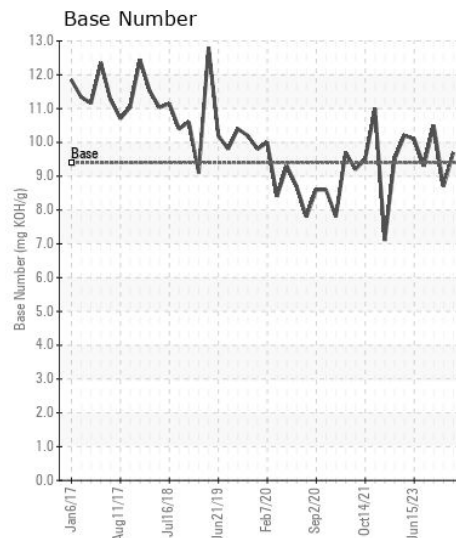
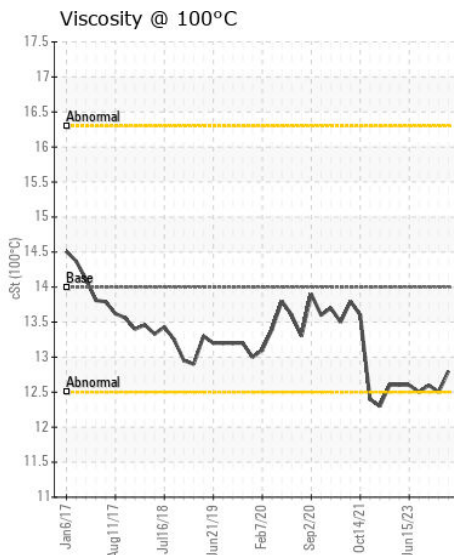
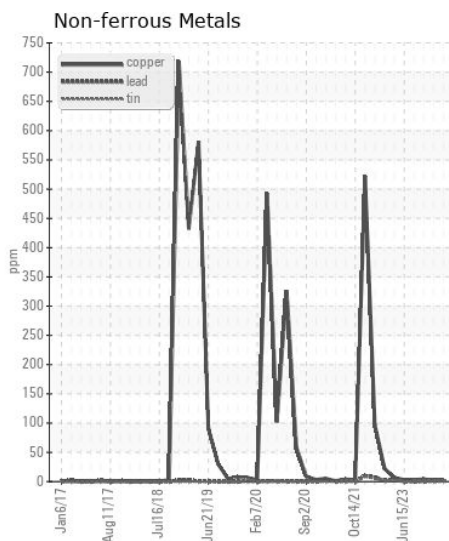
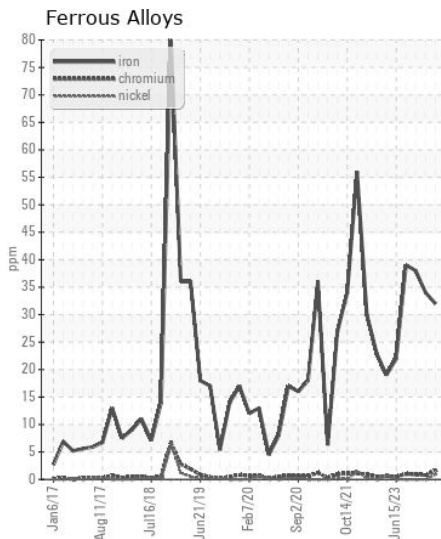
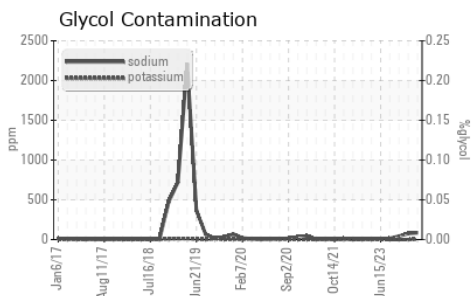
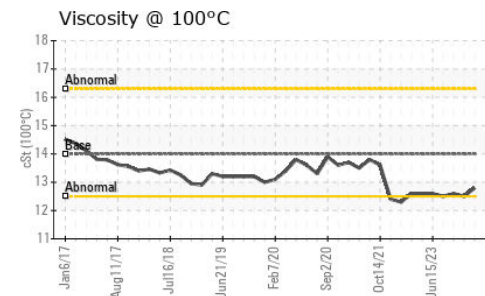
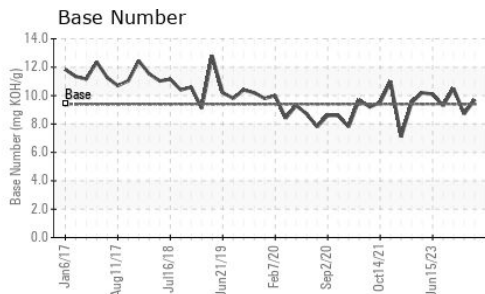
Sodium and/or potassium levels are high. Test for glycol is negative.

Silicon	ppm	ASTM D5185m	>40	6	6	7
Potassium	ppm	ASTM D5185m	>20	2	0	0
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol	%	*ASTM D2982		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.7	0.6	1
Nitration	Abs/cm	*ASTM D7624	>20	8.7	8.2	9.2
Sulfation	Abs/.1mm	*ASTM D7415	>30	23.0	22.9	23.0
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		84	75	44
Boron	ppm	ASTM D5185m	0	16	13	17
Barium	ppm	ASTM D5185m	0	1	0	0
Molybdenum	ppm	ASTM D5185m	0	51	44	41
Manganese	ppm	ASTM D5185m		1	<1	<1
Magnesium	ppm	ASTM D5185m	0	398	408	418
Calcium	ppm	ASTM D5185m		1724	1817	1667
Phosphorus	ppm	ASTM D5185m		685	832	682
Zinc	ppm	ASTM D5185m		870	908	881
Sulfur	ppm	ASTM D5185m		2567	2707	2480
Oxidation	Abs/.1mm	*ASTM D7414	>25	20.2	20.7	20.1
Base Number (BN)	mg KOH/g	ASTM D2896	9.4	9.7	8.7	10.5
Visc @ 100°C	cSt	ASTM D445	14	12.8	12.5	12.6



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0886868 **Received** : 28 Feb 2024
Lab Number : 06102730 **Tested** : 01 Mar 2024
Unique Number : 10900960 **Diagnosed** : 01 Mar 2024 - Jonathan Hester
Test Package : CONST (Additional Tests: Glycol, 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)