



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	ABNORMAL



Area
OKLAHOMA/102/EG - DOZER
Machine Id
35.11L [OKLAHOMA^102^EG - DOZER]
Component
Diesel Engine
Fluid
MOBIL DELVAC 1300 SUPER15W40 (--- GAL)

RECOMMENDATION

We advise that you check for the source of the coolant leak. Check for low coolant level. Oil and filter change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0821744	WC0807931	WC0821732
Sample Date		Client Info		15 Feb 2024	21 Jun 2023	08 Jun 2023
Machine Age	hrs	Client Info		8776	8306	8278
Oil Age	hrs	Client Info		470	50	189
Filter Age	hrs	Client Info		470	50	189
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				ABNORMAL	ABNORMAL	SEVERE

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	50	12	78
Chromium	ppm	ASTM D5185m	>20	2	<1	2
Nickel	ppm	ASTM D5185m	>2	1	<1	0
Titanium	ppm	ASTM D5185m	>2	<1	0	0
Silver	ppm	ASTM D5185m	>2	<1	<1	0
Aluminum	ppm	ASTM D5185m	>25	11	<1	3
Lead	ppm	ASTM D5185m	>40	<1	0	<1
Copper	ppm	ASTM D5185m	>330	260	▲ 208	51
Tin	ppm	ASTM D5185m	>15	<1	<1	2
Vanadium	ppm	ASTM D5185m		<1	0	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

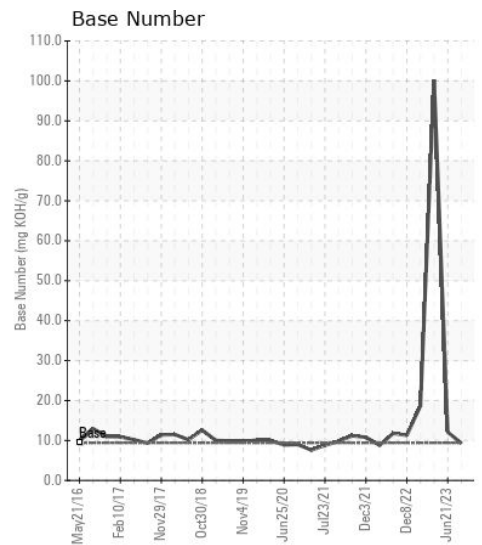
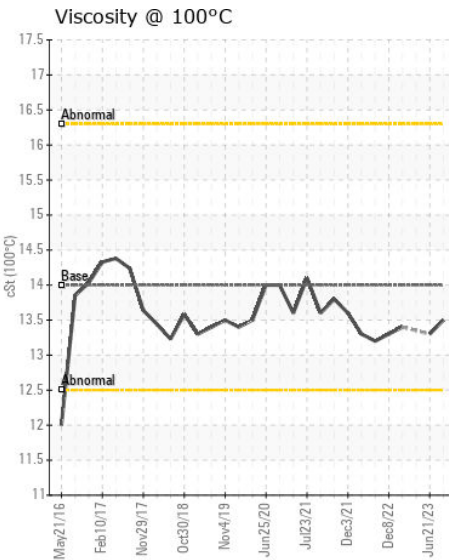
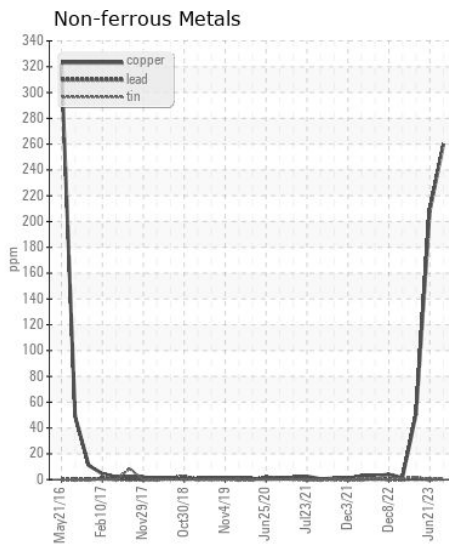
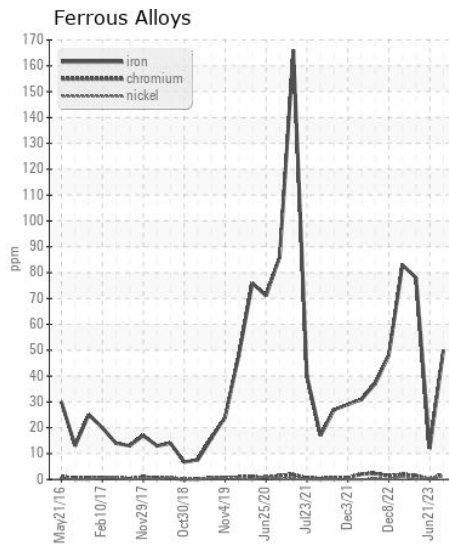
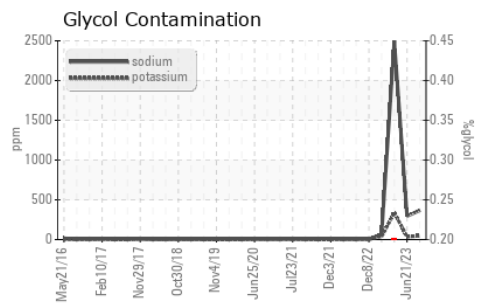
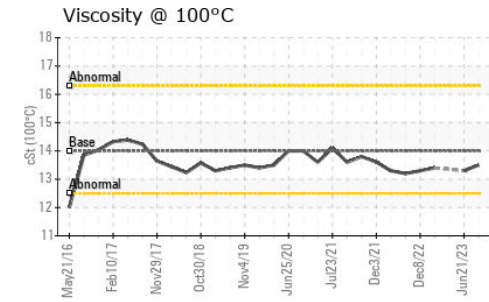
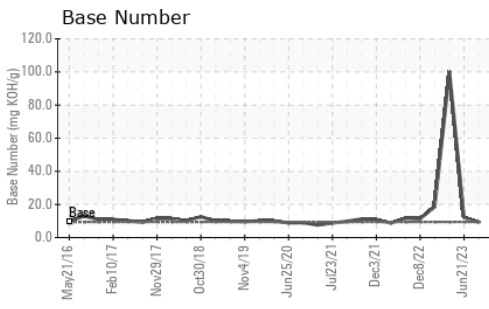
Sodium and/or potassium levels are high.

Silicon	ppm	ASTM D5185m	>25	16	8	23
Potassium	ppm	ASTM D5185m	>20	▲ 47	▲ 37	▲ 337
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol	%	*ASTM D2982		NEG	NEG	▲ 0.20
Soot %	%	*ASTM D7844	>3	0.3	0.1	0.4
Nitration	Abs/cm	*ASTM D7624	>20	9.5	6.1	23.7
Sulfation	Abs/.1mm	*ASTM D7415	>30	22.2	22.1	0.0
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	● MILKY
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	▲ 0.2%

FLUID CONDITION

The BN result indicates that there is suitable alkalinity remaining in the oil.

Sodium	ppm	ASTM D5185m		▲ 367	▲ 295	▲ 2495
Boron	ppm	ASTM D5185m	0	19	29	173
Barium	ppm	ASTM D5185m	0	2	0	0
Molybdenum	ppm	ASTM D5185m	0	140	103	520
Manganese	ppm	ASTM D5185m		3	1	1
Magnesium	ppm	ASTM D5185m	0	666	460	307
Calcium	ppm	ASTM D5185m		2180	1626	1059
Phosphorus	ppm	ASTM D5185m		916	741	598
Zinc	ppm	ASTM D5185m		1212	860	628
Sulfur	ppm	ASTM D5185m		3373	2469	1989
Oxidation	Abs/.1mm	*ASTM D7414	>25	22.0	19.7	23.3
Base Number (BN)	mg KOH/g	ASTM D2896	9.4	9.3	12.1	100.2
Visc @ 100°C	cSt	ASTM D445	14	13.5	13.3	---



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0821744 **Received** : 28 Feb 2024
Lab Number : 06102724 **Tested** : 04 Mar 2024
Unique Number : 10900954 **Diagnosed** : 04 Mar 2024 - Jonathan Hester
Test Package : CONST (Additional Tests: Glycol, TBN)

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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)