



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	ABNORMAL



Area
OKLAHOMA/102/TR - OTHER SERVICE

Machine Id
48.04L [OKLAHOMA^102^TR - OTHER SERVICE]

Component
Diesel Engine

Fluid
MOBIL DELVAC 1300 SUPER15W40 (--- GAL)

RECOMMENDATION

The oil 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		WC0887013	WC0886971	WC0873931
Sample Date		Client Info		13 Feb 2024	02 Jan 2024	17 Nov 2023
Machine Age	hrs	Client Info		16951	16624	16377
Oil Age	hrs	Client Info		16624	16377	221
Filter Age	hrs	Client Info		16624	16377	221
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				ABNORMAL	ABNORMAL	MARGINAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	10	4	6
Chromium	ppm	ASTM D5185m	>20	<1	<1	0
Nickel	ppm	ASTM D5185m	>2	<1	0	0
Titanium	ppm	ASTM D5185m	>2	<1	0	0
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>25	4	2	2
Lead	ppm	ASTM D5185m	>40	1	<1	<1
Copper	ppm	ASTM D5185m	>330	<1	<1	0
Tin	ppm	ASTM D5185m	>15	<1	<1	0
Vanadium	ppm	ASTM D5185m		<1	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

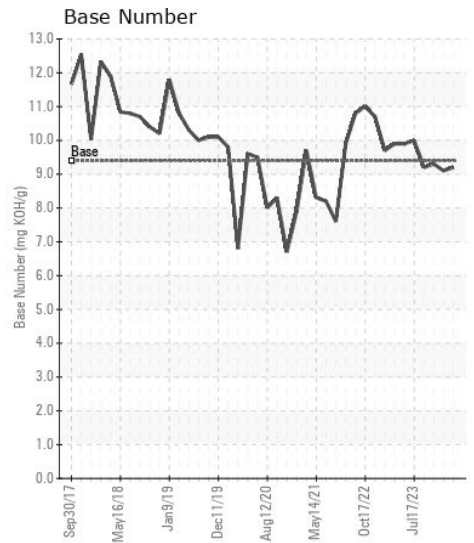
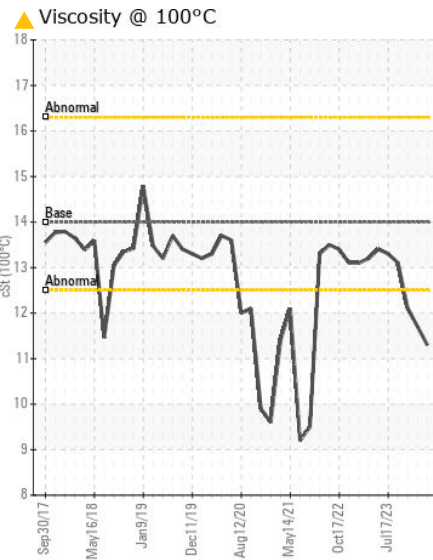
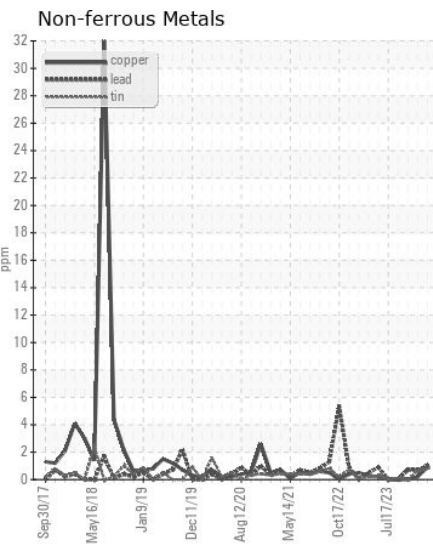
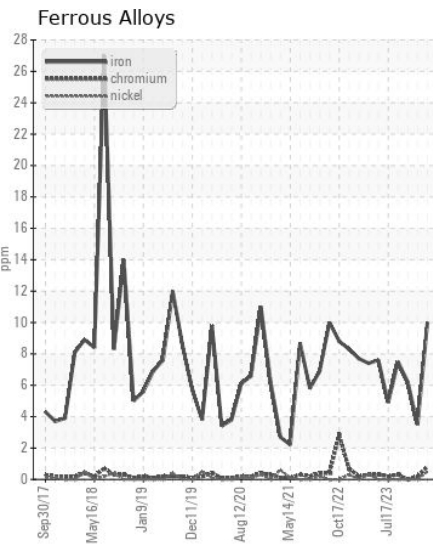
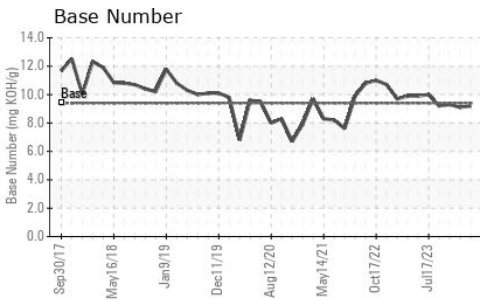
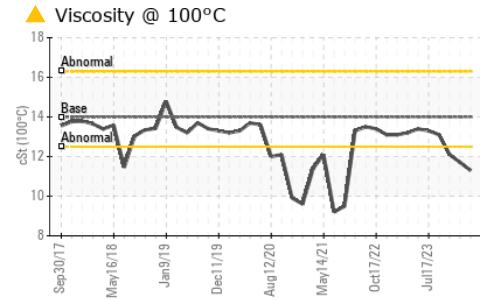
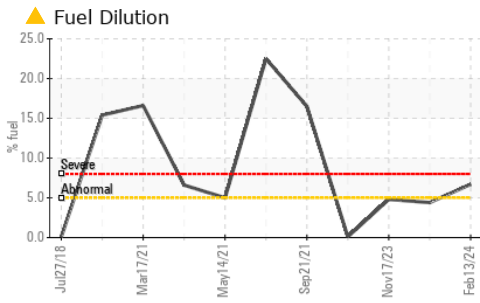
There is a moderate amount of fuel present in the oil. Tests confirm the presence of fuel in the oil.

Silicon	ppm	ASTM D5185m	>25	8	3	4
Potassium	ppm	ASTM D5185m	>20	2	0	0
Fuel	%	ASTM D3524	>5	▲ 6.7	▲ 4.4	▲ 4.8
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.5	0.2	0.8
Nitration	Abs/cm	*ASTM D7624	>20	7.8	7.7	8.2
Sulfation	Abs/.1mm	*ASTM D7415	>30	21.4	21.1	21.8
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. Fuel is present in the oil and is lowering the viscosity. The oil is no longer serviceable due to the presence of contaminants.

Sodium	ppm	ASTM D5185m		2	2	1
Boron	ppm	ASTM D5185m	0	55	34	28
Barium	ppm	ASTM D5185m	0	1	0	0
Molybdenum	ppm	ASTM D5185m	0	57	36	37
Manganese	ppm	ASTM D5185m		<1	<1	0
Magnesium	ppm	ASTM D5185m	0	645	454	490
Calcium	ppm	ASTM D5185m		2168	1581	1730
Phosphorus	ppm	ASTM D5185m		1044	767	806
Zinc	ppm	ASTM D5185m		1212	841	972
Sulfur	ppm	ASTM D5185m		3749	2467	2581
Oxidation	Abs/.1mm	*ASTM D7414	>25	19.4	19.4	19.7
Base Number (BN)	mg KOH/g	ASTM D2896	9.4	9.2	9.1	9.3
Visc @ 100°C	cSt	ASTM D445	14	▲ 11.3	▲ 11.7	12.1



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0887013 **Received** : 27 Feb 2024
Lab Number : 06102297 **Tested** : 04 Mar 2024
Unique Number : 10900527 **Diagnosed** : 04 Mar 2024 - Wes Davis
Test Package : CONST (Additional Tests: FuelDilution, PercentFuel, 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)