



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	SEVERE
FLUID CONDITION	NORMAL



Area
OKLAHOMA/115/EG - LOADER
Machine Id
48.83L [OKLAHOMA^115^EG - LOADER]
Component
Hydraulic System
Fluid
MOBIL MOBILTRANS AST 30 (--- GAL)

RECOMMENDATION

Check seals and/or filters for points of contaminant entry. The air breather requires service. If unrated, we recommend that you replace with a suitable micron rated and/or desiccant air breather. If rated, we recommend that you service/replace the breather. The filter change at the time of sampling has been noted. Resample in 30-45 days to monitor this situation.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0886885	WC0848988	WC0738504
Sample Date		Client Info		06 Feb 2024	20 Sep 2023	17 Apr 2023
Machine Age	hrs	Client Info		11101	19800	10346
Oil Age	hrs	Client Info		500	942	18858
Filter Age	hrs	Client Info		500	0	18858
Oil Changed		Client Info		Not Changed	Changed	Changed
Filter Changed		Client Info		Changed	N/A	Changed
Sample Status				SEVERE	SEVERE	ATTENTION

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>20	13	6	4
Chromium	ppm	ASTM D5185m	>10	<1	<1	<1
Nickel	ppm	ASTM D5185m	>10	<1	0	0
Titanium	ppm	ASTM D5185m		<1	<1	0
Silver	ppm	ASTM D5185m		<1	0	0
Aluminum	ppm	ASTM D5185m	>10	2	2	2
Lead	ppm	ASTM D5185m	>10	1	0	0
Copper	ppm	ASTM D5185m	>75	8	4	2
Tin	ppm	ASTM D5185m	>10	<1	<1	0
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

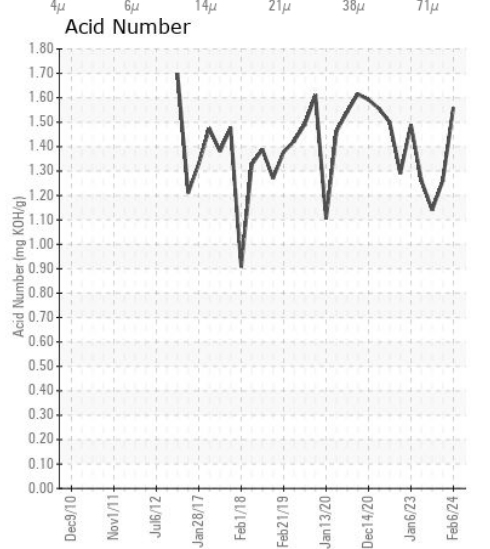
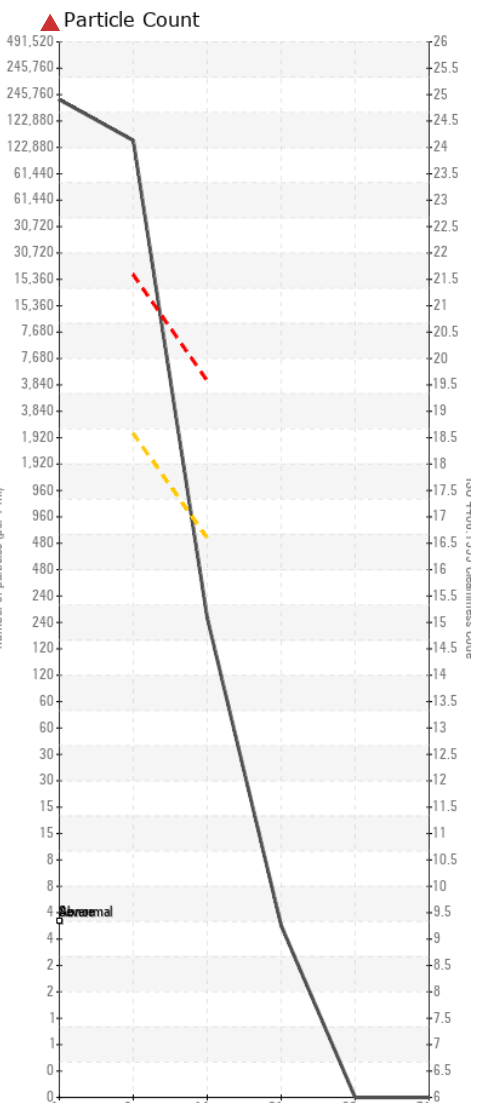
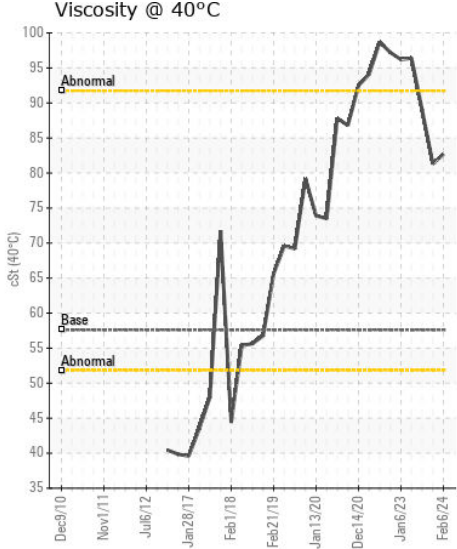
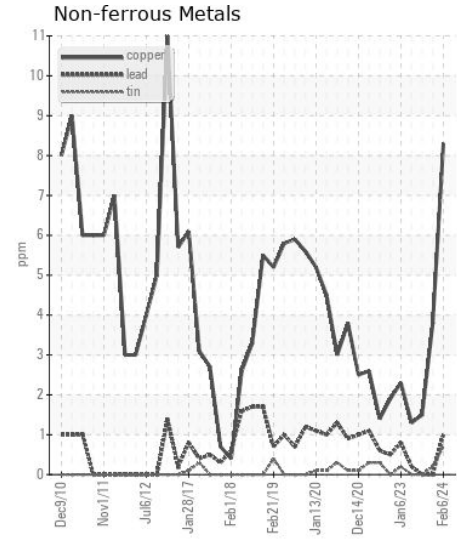
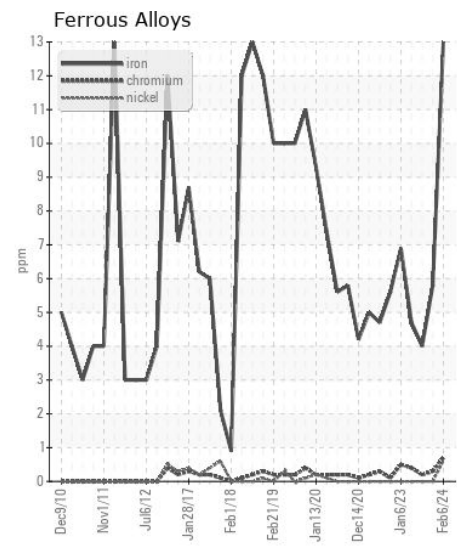
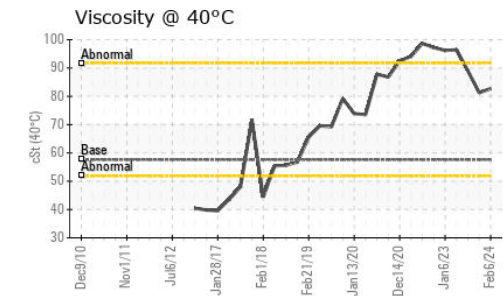
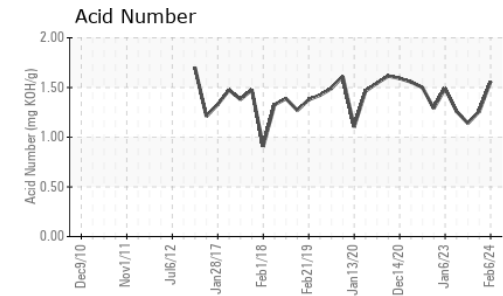
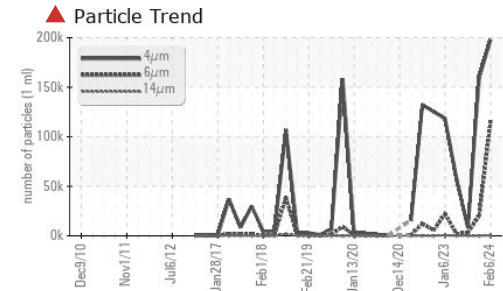
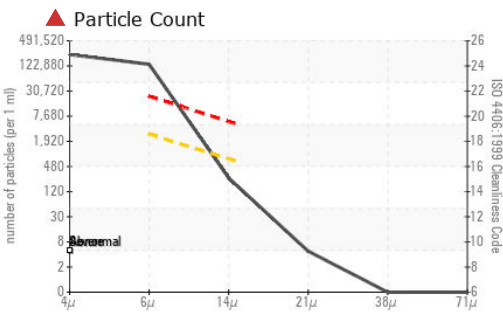
There is a high amount of silt (particulates < 14 microns in size) present in the oil. The system cleanliness code is much higher than the acceptable limit for the target ISO 4406 cleanliness code.

Silicon	ppm	ASTM D5185m	>20	15	11	8
Potassium	ppm	ASTM D5185m	>20	3	<1	0
Water		WC Method	>0.1	NEG	NEG	NEG
Particles >4µm		ASTM D7647		197951	159805	8066
Particles >6µm		ASTM D7647	>2500	▲ 116005	▲ 20384	● 2914
Particles >14µm		ASTM D7647	>640	225	65	185
Particles >21µm		ASTM D7647	>160	4	9	30
Particles >38µm		ASTM D7647	>40	0	0	2
Particles >71µm		ASTM D7647	>10	0	0	0
Oil Cleanliness		ISO 4406 (c)	>-/18/16	▲ 25/24/15	▲ 24/22/13	● 20/19/15
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	>0.1	NEG	NEG	NEG

FLUID CONDITION

The AN level is acceptable for this fluid. The oil is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.

Sodium	ppm	ASTM D5185m		0	4	2
Boron	ppm	ASTM D5185m		59	63	47
Barium	ppm	ASTM D5185m		5	0	0
Molybdenum	ppm	ASTM D5185m		2	<1	<1
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m		16	20	21
Calcium	ppm	ASTM D5185m		2935	3208	3043
Phosphorus	ppm	ASTM D5185m		975	1019	1000
Zinc	ppm	ASTM D5185m		1176	1267	1252
Sulfur	ppm	ASTM D5185m		4995	4664	5546
Acid Number (AN)	mg KOH/g	ASTM D8045		1.56	1.26	1.14
Visc @ 40°C	cSt	ASTM D445	57.6	82.7	81.3	89.0



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0886885 **Received** : 23 Feb 2024
Lab Number : 06098314 **Tested** : 26 Feb 2024
Unique Number : 10896544 **Diagnosed** : 26 Feb 2024 - Wes Davis
Test Package : CONST

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Certificate L2367
 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)