



TRAAP

Texas Refinery Advanced Analysis Program

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
JOHN DEERE 4440 1
 Component
Diesel Engine
 Fluid
MAG 1 MULTI SYNTHETIC 15W40 (4 GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		TR06218428	TR06077835	---
Sample Date		Client Info		09 Jun 2024	27 Jan 2024	---
Machine Age	hrs	Client Info		0	5376	---
Oil Age	hrs	Client Info		50	126	---
Filter Age	hrs	Client Info		50	126	---
Oil Changed		Client Info		Not Changd	Not Changd	---
Filter Changed		Client Info		Not Changd	Not Changd	---
Sample Status				NORMAL	SEVERE	---

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>51	35	16	---
Chromium	ppm	ASTM D5185m	>11	<1	<1	---
Nickel	ppm	ASTM D5185m	>5	<1	1	---
Titanium	ppm	ASTM D5185m		<1	<1	---
Silver	ppm	ASTM D5185m	>3	<1	0	---
Aluminum	ppm	ASTM D5185m	>31	3	2	---
Lead	ppm	ASTM D5185m	>26	4	▲ 26	---
Copper	ppm	ASTM D5185m	>26	16	▲ 27	---
Tin	ppm	ASTM D5185m	>4	<1	<1	---
Vanadium	ppm	ASTM D5185m		<1	0	---
White Metal	scalar	*Visual	NONE	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---

CONTAMINATION

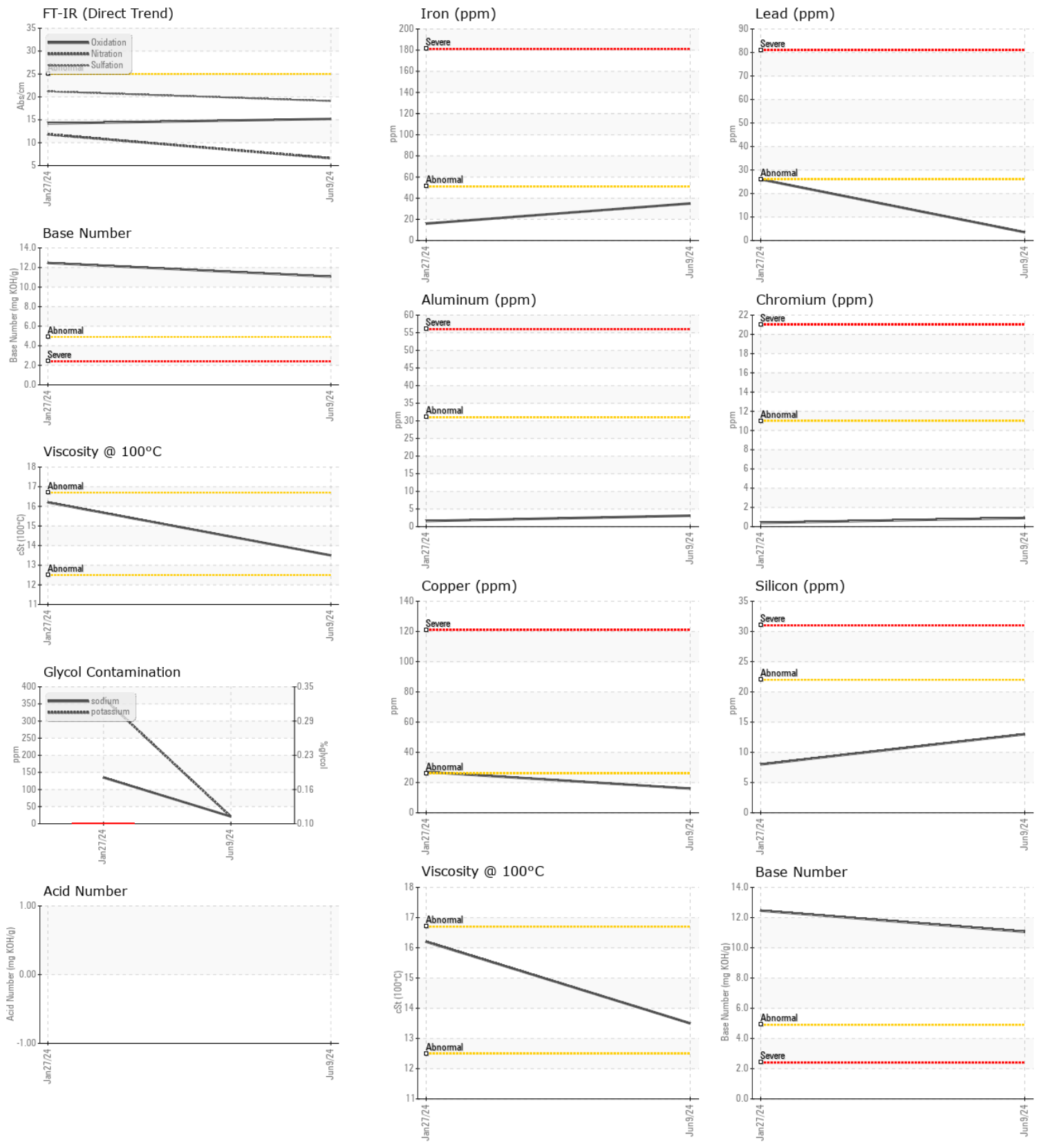
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>22	13	8	---
Potassium	ppm	ASTM D5185m	>20	21	▲ 367	---
Fuel		WC Method	>2.1	<1.0	<1.0	---
Water		WC Method	>0.21	NEG	NEG	---
Glycol	%	*ASTM D2982		NEG	▲ 0.10	---
Soot %	%	*ASTM D7844	>3	0.1	0.1	---
Nitration	Abs/cm	*ASTM D7624	>20	6.6	11.8	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	19.1	21.2	---
Silt	scalar	*Visual	NONE	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	---
Appearance	scalar	*Visual	NORML	NORML	NORML	---
Odor	scalar	*Visual	NORML	NORML	NORML	---
Emulsified Water	scalar	*Visual	>0.21	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	>31	21	▲ 135	---
Boron	ppm	ASTM D5185m		5	30	---
Barium	ppm	ASTM D5185m		<1	<1	---
Molybdenum	ppm	ASTM D5185m		66	64	---
Manganese	ppm	ASTM D5185m		2	<1	---
Magnesium	ppm	ASTM D5185m		1000	72	---
Calcium	ppm	ASTM D5185m		1354	2962	---
Phosphorus	ppm	ASTM D5185m		1129	761	---
Zinc	ppm	ASTM D5185m		1360	729	---
Sulfur	ppm	ASTM D5185m		4299	3140	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	15.2	14.2	---
Base Number (BN)	mg KOH/g	ASTM D2896		11.06	12.46	---
Visc @ 100°C	cSt	ASTM D445		13.5	16.2	---



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : TR06218428 **Received** : 24 Jun 2024
Lab Number : 06218428 **Tested** : 25 Jun 2024
Unique Number : 11096625 **Diagnosed** : 25 Jun 2024 - Sean Felton
Test Package : MOB 2 (Additional Tests: PQ, TAN Man)

CLAY MALLORY
 806 W 5TH ST
 WALLOWA, OR
 US 97885
 Contact: RON GROGAN

Certificate L2367
 To discuss this sample report, contact Customer Service at 1-800-827-0711.
 * - 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)

T:
F: