



OIL ANALYSIS REPORT

WEAR	ABNORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
JOHN DEERE 22408
 Component
Diesel Engine
 Fluid
CHEVRON 15W40 (13 QTS)

RECOMMENDATION

Oil and filter change at the time of sampling has been noted. No corrective action is recommended at this time. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0950539	WC0913805	WC0905219
Sample Date		Client Info		10 Jul 2024	23 Apr 2024	14 Mar 2024
Machine Age	hrs	Client Info		13258	13023	12838
Oil Age	hrs	Client Info		1000	250	100
Filter Age	hrs	Client Info		1000	250	100
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				ABNORMAL	NORMAL	NORMAL

WEAR

Cylinder, crank, or cam shaft wear is indicated. All other component wear rates are normal.

Iron	ppm	ASTM D5185m	>51	▲ 93	21	22
Chromium	ppm	ASTM D5185m	>11	7	<1	<1
Nickel	ppm	ASTM D5185m	>5	4	<1	0
Titanium	ppm	ASTM D5185m		1	2	<1
Silver	ppm	ASTM D5185m	>3	<1	<1	0
Aluminum	ppm	ASTM D5185m	>31	8	5	2
Lead	ppm	ASTM D5185m	>26	12	4	0
Copper	ppm	ASTM D5185m	>26	7	1	1
Tin	ppm	ASTM D5185m	>4	<1	1	0
Vanadium	ppm	ASTM D5185m		<1	<1	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

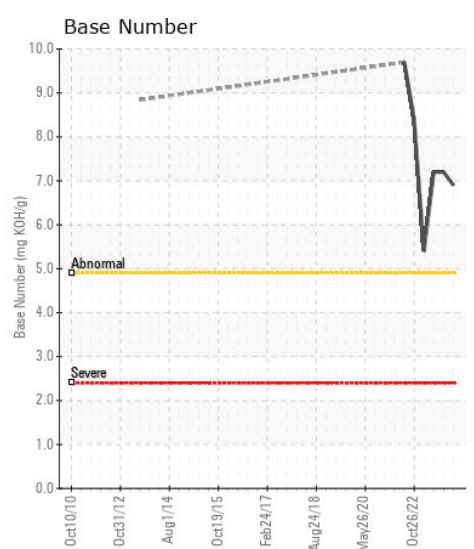
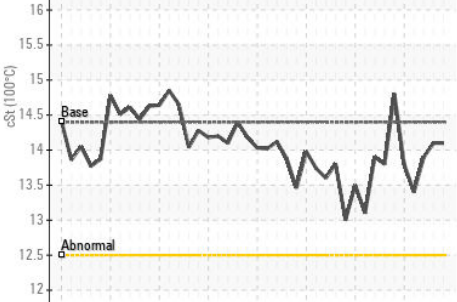
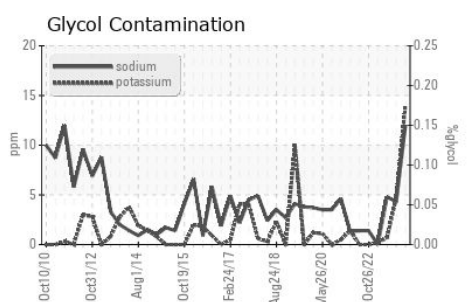
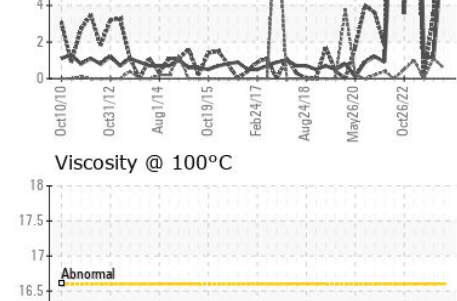
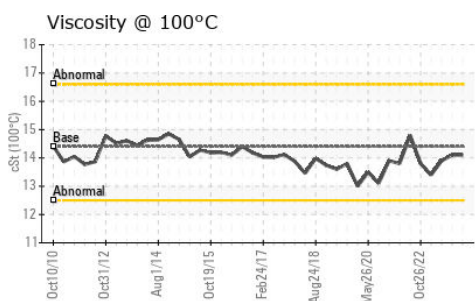
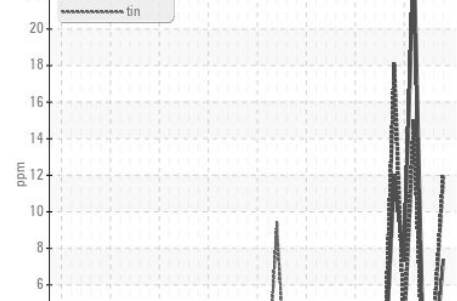
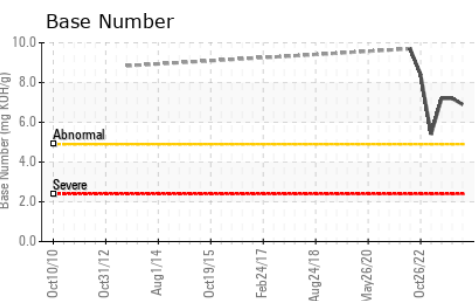
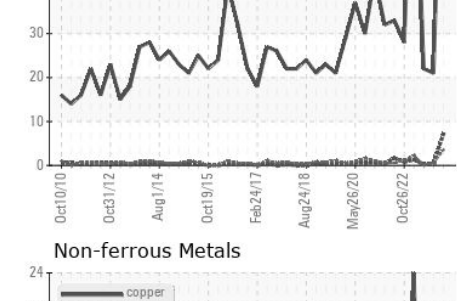
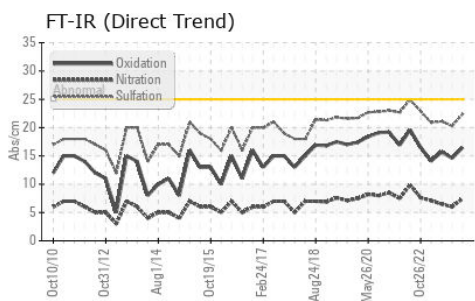
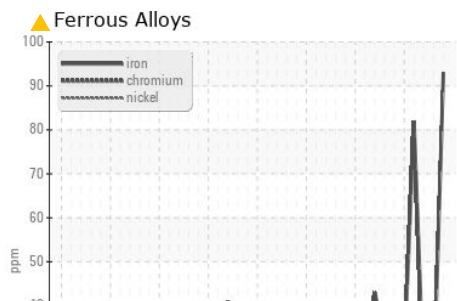
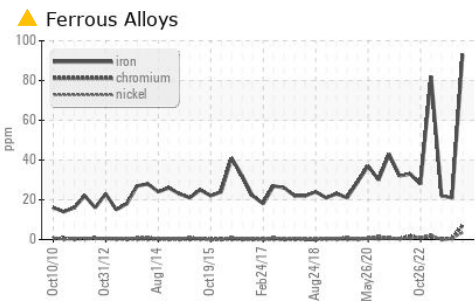
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>22	17	8	6
Potassium	ppm	ASTM D5185m	>20	14	5	<1
Fuel		WC Method	>2.1	<1.0	<1.0	<1.0
Water		WC Method	>0.21	NEG	NEG	NEG
Glycol	%	*ASTM D2982		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.6	0.3	0.3
Nitration	Abs/cm	*ASTM D7624	>20	7.5	6.0	6.5
Sulfation	Abs/.1mm	*ASTM D7415	>30	22.4	20.3	21.1
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	>0.21	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	>50	12	4	5
Boron	ppm	ASTM D5185m		307	410	365
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		97	95	82
Manganese	ppm	ASTM D5185m		<1	0	<1
Magnesium	ppm	ASTM D5185m		390	398	386
Calcium	ppm	ASTM D5185m		1457	1452	1354
Phosphorus	ppm	ASTM D5185m		1051	1085	981
Zinc	ppm	ASTM D5185m		1245	1238	1170
Sulfur	ppm	ASTM D5185m		2942	3152	3164
Oxidation	Abs/.1mm	*ASTM D7414	>25	16.5	14.6	15.7
Base Number (BN)	mg KOH/g	ASTM D2896		6.9	7.2	7.2
Visc @ 100°C	cSt	ASTM D445	14.4	14.1	14.1	13.9



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0950539 **Received** : 11 Jul 2024
Lab Number : **06233037** **Tested** : 12 Jul 2024
Unique Number : 11116530 **Diagnosed** : 12 Jul 2024 - Don Baldridge
Test Package : CONST (Additional Tests: Glycol, TBN)

SULLIVAN EASTERN INC
 2860 C SLATER RD
 MORRISVILLE, NC
 US 27560
 Contact: SCOTT SULLIVAN
 ssullivan@sullivaneastern.com
 T: (919)484-8993
 F: (919)484-2136

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)