MOB II LUBE PLUS+

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area
EXCAVATOR
Machine Id
JOHN DEERE 470GLC 05-02010-059 (S/N 1FF470GXAGF235024)
Component
Diesel Engine
Fluid
DIESEL ENGINE OIL SAE 15W40 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

WEAR

All component wear rates are normal.

CONTAMINATION

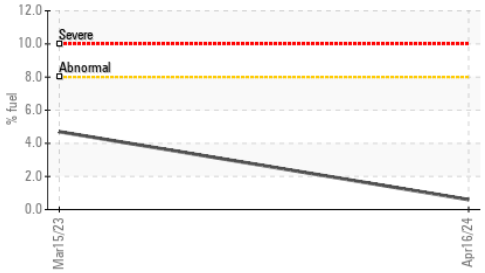
Fuel content negligible. There is no indication of any contamination in the oil.

FLUID CONDITION

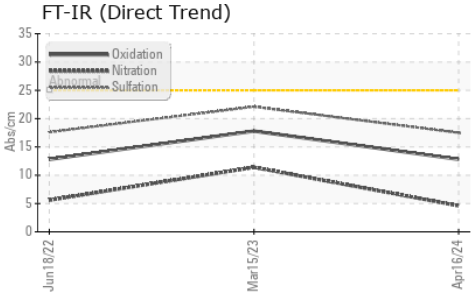
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		LP0000299	WC0661804	WC0661461
Sample Date		Client Info		16 Apr 2024	15 Mar 2023	18 Jun 2022
Machine Age	hrs	Client Info		9002	8346	7814
Oil Age	hrs	Client Info		1188	532	374
Filter Age	hrs	Client Info		0	0	374
Oil Changed		Client Info		Not Changd	Not Changd	Changed
Filter Changed		Client Info		N/A	N/A	Changed
Sample Status				NORMAL	ABNORMAL	NORMAL
Iron	ppm	ASTM D5185m	>58	8	36	4
Chromium	ppm	ASTM D5185m	>11	0	<1	<1
Nickel	ppm	ASTM D5185m	>5	0	▲ 11	1
Titanium	ppm	ASTM D5185m		0	<1	<1
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>49	<1	4	1
Lead	ppm	ASTM D5185m	>10	<1	4	<1
Copper	ppm	ASTM D5185m	>26	0	15	2
Tin	ppm	ASTM D5185m	>4	<1	2	<1
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Silicon	ppm	ASTM D5185m	>22	6	9	3
Potassium	ppm	ASTM D5185m	>20	23	30	<1
Fuel	%	ASTM D3524	>8.0	0.6	▲ 4.7	<1.0
Water		WC Method	>0.21	NEG	NEG	NEG
Glycol	%	*ASTM D2982		NEG	0.0	NEG
Soot %	%	*ASTM D7844	>3	0.1	0.4	0.1
Nitration	Abs/cm	*ASTM D7624	>20	4.6	11.4	5.6
Sulfation	Abs/.1mm	*ASTM D7415	>30	17.5	22.1	17.6
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
Sodium	ppm	ASTM D5185m	>158	9	58	2
Boron	ppm	ASTM D5185m	250	6	18	23
Barium	ppm	ASTM D5185m	10	<1	0	0
Molybdenum	ppm	ASTM D5185m	100	61	83	64
Manganese	ppm	ASTM D5185m		<1	1	<1
Magnesium	ppm	ASTM D5185m	450	936	741	763
Calcium	ppm	ASTM D5185m	3000	1043	1314	1324
Phosphorus	ppm	ASTM D5185m	1150	1123	822	1016
Zinc	ppm	ASTM D5185m	1350	1265	1121	1268
Sulfur	ppm	ASTM D5185m	4250	3703	2939	3327
Oxidation	Abs/.1mm	*ASTM D7414	>25	12.8	17.8	12.8
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	9.68	8.48	8.75
Visc @ 100°C	cSt	ASTM D445	14.4	14.2	▲ 11.3	13.3

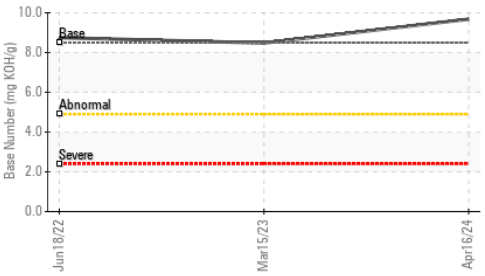
Fuel Dilution



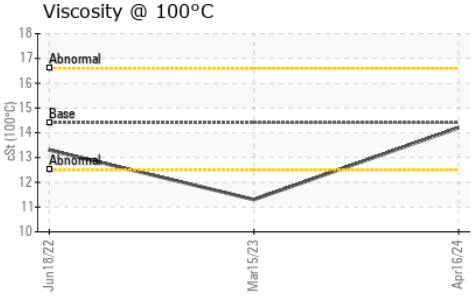
FT-IR (Direct Trend)



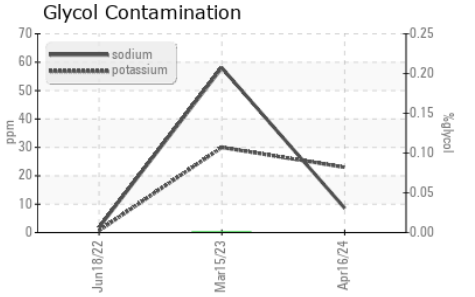
Base Number



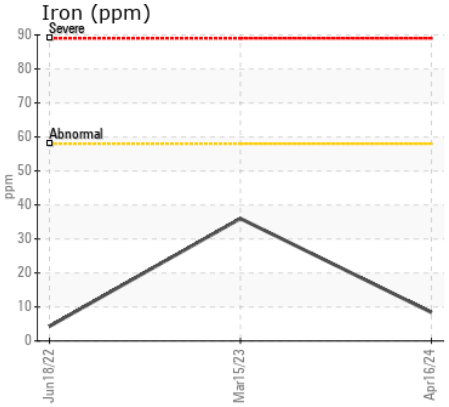
Viscosity @ 100°C



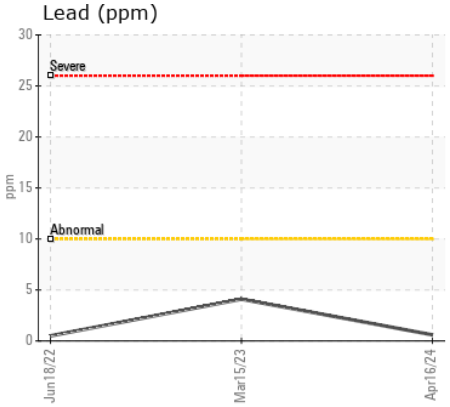
Glycol Contamination



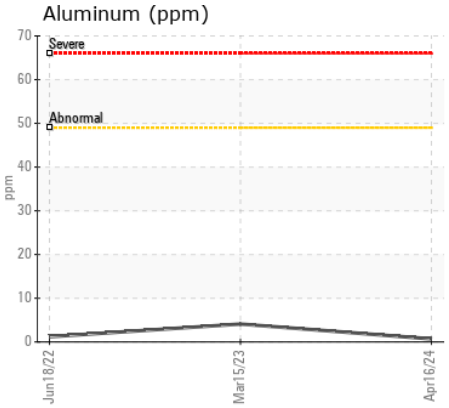
Iron (ppm)



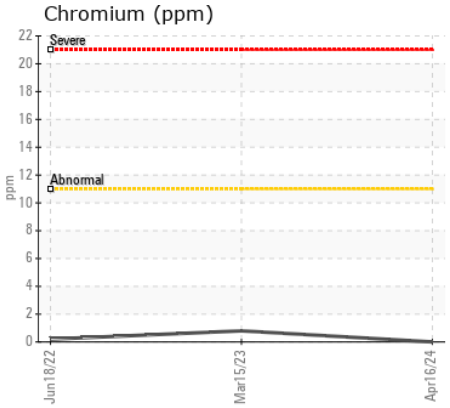
Lead (ppm)



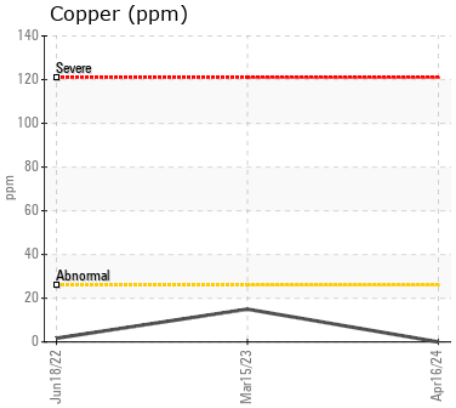
Aluminum (ppm)



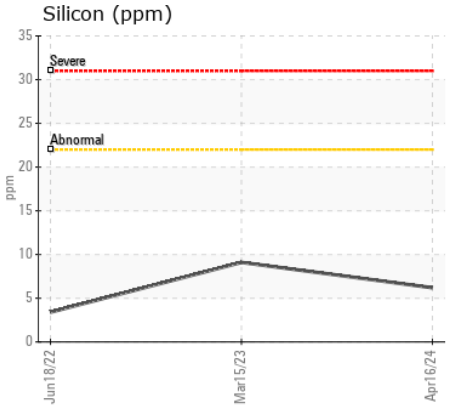
Chromium (ppm)



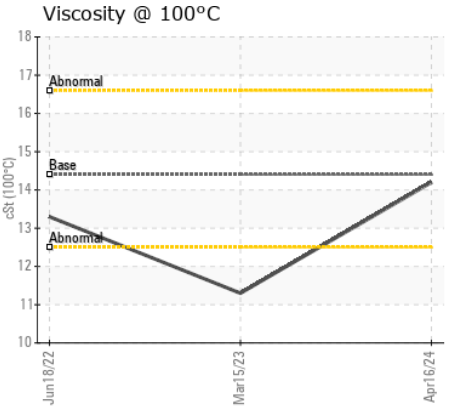
Copper (ppm)



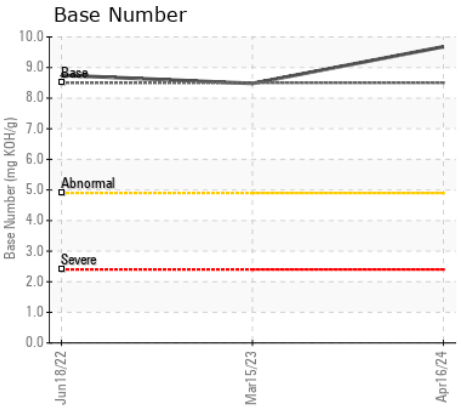
Silicon (ppm)



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : LP0000299 **Received** : 10 May 2024
Lab Number : 06176228 **Tested** : 15 May 2024
Unique Number : 11022281 **Diagnosed** : 15 May 2024 - Sean Felton
Test Package : MOB 2 (Additional Tests: Glycol, PercentFuel)

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)

HAYNES MATERIALS
220-2F MAIN ST
OXFORD, CT
US 06478
Contact: AMANDA BOWLEY
abowley@haynesmaterials.com
T: (203)888-8186
F: