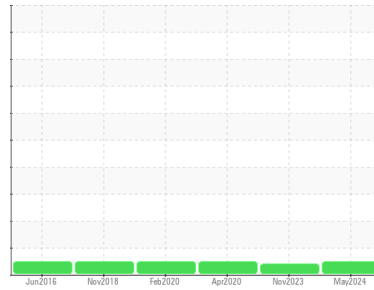


OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL


Machine Id
JOHN DEERE 1DW648LXAFF670477
 Component
Diesel Engine
 Fluid
JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (--- GAL)

DIAGNOSIS
Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

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 acceptable for the time in service.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			JR0210286	JR0184543	JR0041153
Sample Date	Client Info			07 May 2024	06 Nov 2023	03 Apr 2020
Machine Age	hrs	Client Info		7810	60	5004
Oil Age	hrs	Client Info		0	60	0
Oil Changed	Client Info			Changed	Changed	Changed
Sample Status				NORMAL	ATTENTION	NORMAL

CONTAMINATION		method	limit/base	current	history1	history2
Fuel	WC Method	>2.1		<1.0	0.2	<1.0
Water	WC Method	>0.21		NEG	NEG	NEG
Glycol	WC Method			NEG	NEG	NEG

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>51	17	10	28
Chromium	ppm	ASTM D5185m	>11	<1	<1	<1
Nickel	ppm	ASTM D5185m	>5	2	<1	<1
Titanium	ppm	ASTM D5185m		<1	0	0
Silver	ppm	ASTM D5185m	>3	<1	0	0
Aluminum	ppm	ASTM D5185m	>31	8	4	8
Lead	ppm	ASTM D5185m	>26	<1	<1	0
Copper	ppm	ASTM D5185m	>26	5	8	12
Tin	ppm	ASTM D5185m	>4	1	0	<1
Antimony	ppm	ASTM D5185m		---	---	2
Vanadium	ppm	ASTM D5185m		<1	0	0
Cadmium	ppm	ASTM D5185m		<1	0	0

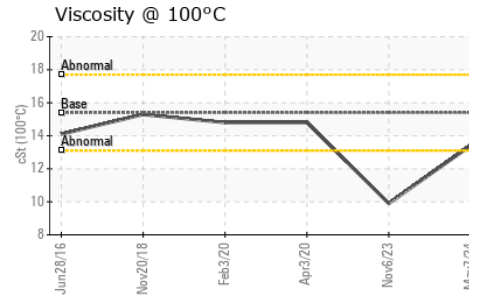
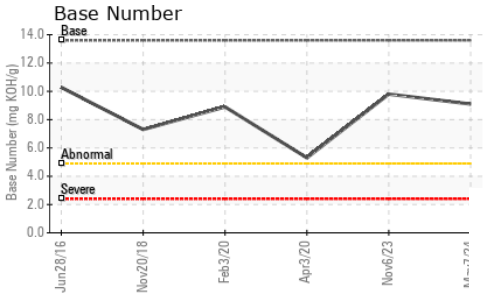
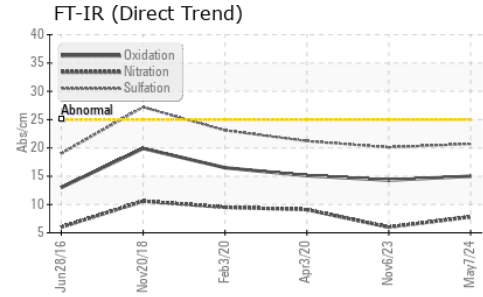
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		399	306	130
Barium	ppm	ASTM D5185m		3	2	0
Molybdenum	ppm	ASTM D5185m		371	256	247
Manganese	ppm	ASTM D5185m		1	2	<1
Magnesium	ppm	ASTM D5185m		1102	785	738
Calcium	ppm	ASTM D5185m		1909	1344	1302
Phosphorus	ppm	ASTM D5185m		1229	814	789
Zinc	ppm	ASTM D5185m		1478	1041	894
Sulfur	ppm	ASTM D5185m		4352	3296	1705

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>22	10	9	5
Sodium	ppm	ASTM D5185m	>31	5	<1	4
Potassium	ppm	ASTM D5185m	>20	4	3	2

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	0.2	0.1	1.1
Nitration	Abs/cm	*ASTM D7624	>20	7.8	6.0	9.1
Sulfation	Abs/.1mm	*ASTM D7415	>30	20.7	20.1	21.2

FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	15.0	14.3	15.1
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	9.1	9.8	5.3

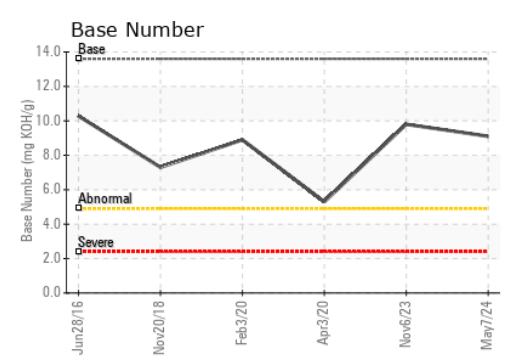
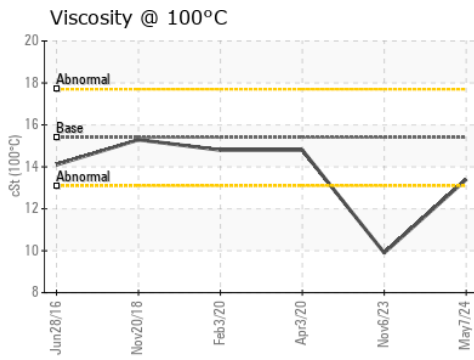
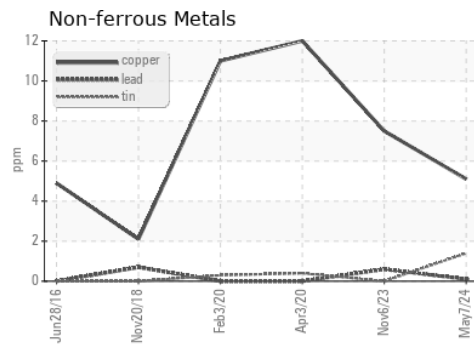
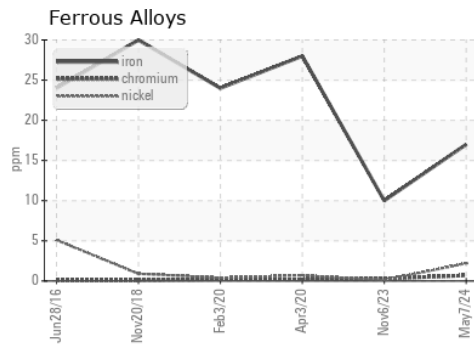
OIL ANALYSIS REPORT



VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
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
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 100°C	cSt	ASTM D445	15.4	13.4	9.9	14.8

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0210286 **Received** : 14 May 2024
Lab Number : 06178473 **Tested** : 15 May 2024
Unique Number : 11029799 **Diagnosed** : 16 May 2024 - Sean Felton
Test Package : CONST (Additional Tests: TBN)

RUSH GIBSON LOGGING LLC
 1517 FROGTOWN RD
 BLUEMONT, VA
 US 20135
 Contact: RUSH GIBSON
 rushgibsonlogging@yahoo.com
 T: (540)539-8145
 F:

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)