James River Equipment
CONST
OIL ANALYSIS REPORT

WEAR	**NORMAL**
CONTAMINATION	**ABNORMAL**
FLUID CONDITION	**NORMAL**

Area
[05W47555]
Machine Id
JOHN DEERE PM061171
Component
Brake
Fluid
JOHN DEERE HY-GARD HYD/TRANS (1 QTS)

RECOMMENDATION

The fluid change at the time of sampling has been noted. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		**JR0218314**	JR0176358	JR0119942
Sample Date		Client Info		**21 Jun 2024**	16 Jun 2023	08 Feb 2022
Machine Age	hrs	Client Info		**2994**	1947	957
Oil Age	hrs	Client Info		**1047**	1000	0
Filter Age	hrs	Client Info		**0**	0	0
Oil Changed		Client Info		**Changed**	Changed	Changed
Filter Changed		Client Info		**N/A**	N/A	N/A
Sample Status				**ABNORMAL**	NORMAL	ABNORMAL

WEAR

All component wear rates are normal.

Test	UOM	Method	Limit/Abn	Current	History1	History2
PQ		ASTM D8184		**84**	28	147
Iron	ppm	ASTM D5185m	>350	**214**	24	334
Chromium	ppm	ASTM D5185m	>5	**<1**	<1	<1
Nickel	ppm	ASTM D5185m	>5	**1**	0	0
Titanium	ppm	ASTM D5185m		**9**	<1	32
Silver	ppm	ASTM D5185m		**<1**	0	0
Aluminum	ppm	ASTM D5185m	>8	**9**	0	5
Lead	ppm	ASTM D5185m	>10	**5**	0	12
Copper	ppm	ASTM D5185m	>150	**4**	4	2
Tin	ppm	ASTM D5185m	>5	**<1**	<1	<1
Vanadium	ppm	ASTM D5185		**<1**	0	<1
White Metal	scalar	*Visual	NONE	**NONE**	MODER	MODER
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE

CONTAMINATION

Elemental level of silicon (Si) above normal.

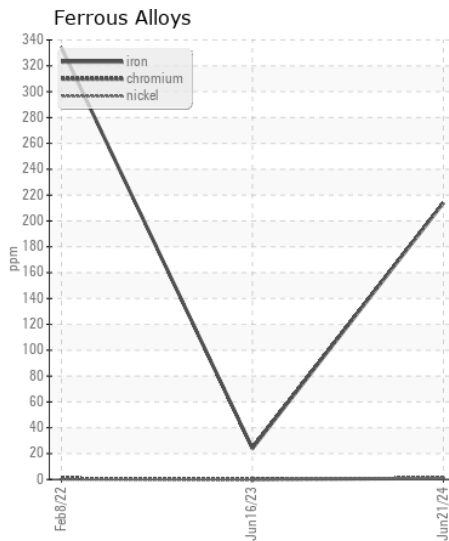| Test	UOM	Method	Limit/Abn	Current	History1	History2
Silicon	ppm	ASTM D5185m	>400	▲ **247**	6	▲ 702
Potassium	ppm	ASTM D5185m	>20	**13**	0	18
Water		WC Method	>0.2	**NEG**	NEG	NEG
Silt	scalar	*Visual	NONE	**NONE**	NONE	NONE
Debris	scalar	*Visual	NONE	**NONE**	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	**NONE**	NONE	NONE
Appearance	scalar	*Visual	NORML	**NORML**	NORML	NORML
Odor	scalar	*Visual	NORML	**NORML**	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	**NEG**	NEG	NEG

FLUID CONDITION

The condition of the fluid is acceptable for the time in service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sodium	ppm	ASTM D5185m		**51**	1	46
Boron	ppm	ASTM D5185m	6	**72**	10	219
Barium	ppm	ASTM D5185m	0	**0**	5	0
Molybdenum	ppm	ASTM D5185m	0	**145**	7	211
Manganese	ppm	ASTM D5185m		**4**	<1	4
Magnesium	ppm	ASTM D5185m	145	**177**	131	523
Calcium	ppm	ASTM D5185m	3570	**2588**	3440	1644
Phosphorus	ppm	ASTM D5185m	1290	**951**	1035	741
Zinc	ppm	ASTM D5185m	1640	**1003**	1264	761
Sulfur	ppm	ASTM D5185m		**3410**	4424	2876
Visc @ 40°C	cSt	ASTM D445	57.0	**73.5**	56.2	74.0
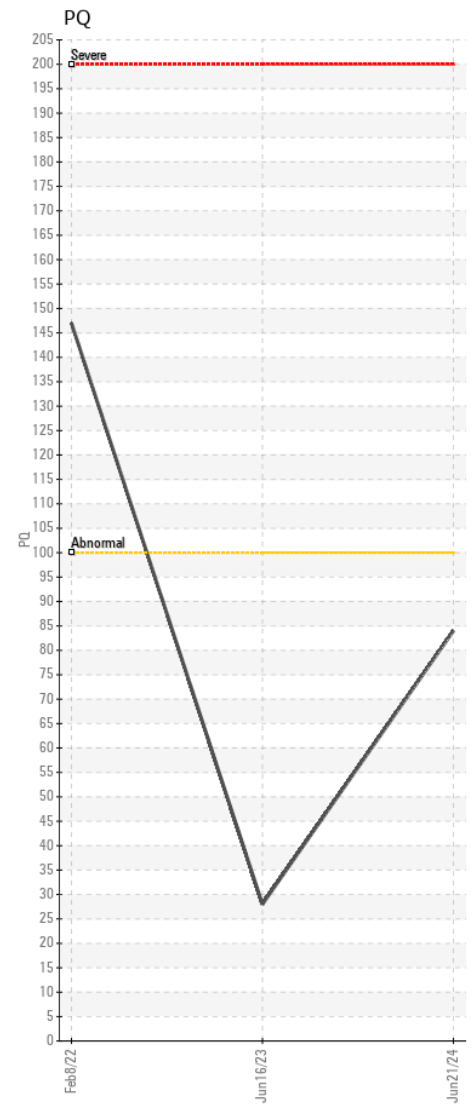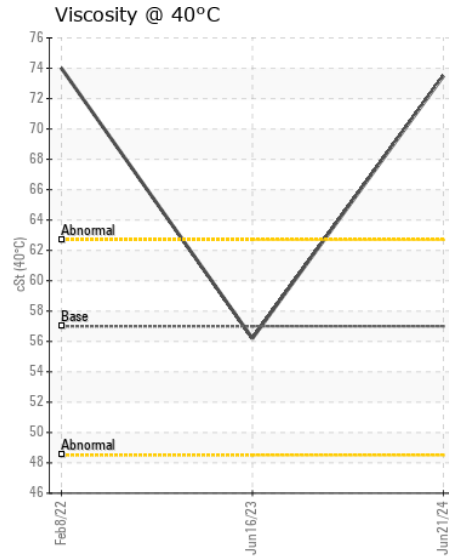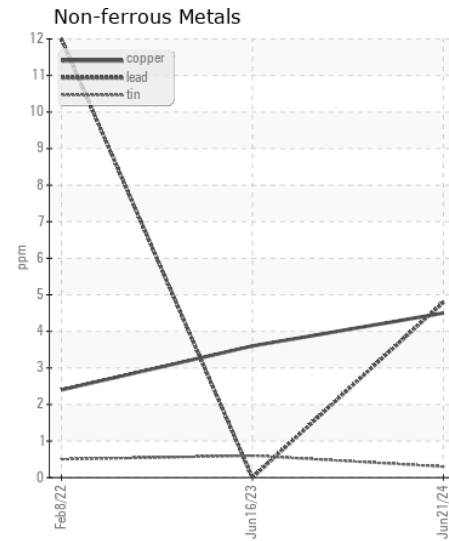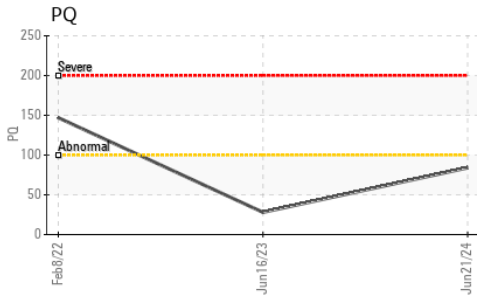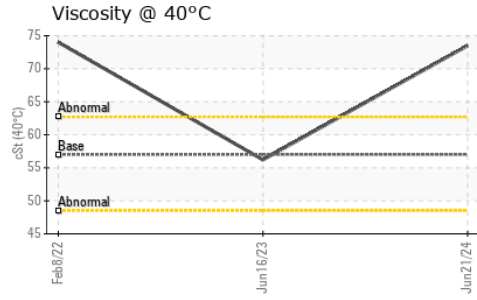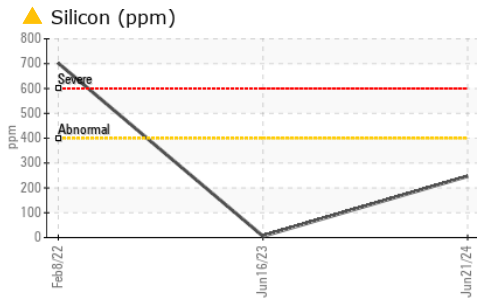
Silicon (ppm)

Viscosity @ 40°C

PQ

Ferrous Alloys

Legend: iron, chromium, nickel

Non-ferrous Metals

Legend: copper, lead, tin

Viscosity @ 40°C

PQ

FITZGERALD EXCAVATING
PO BOX 2168
WINCHESTER, VA
US 22604
Contact: Service Manager

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)

T:
F: