



WEAR	NORMAL
CONTAMINATION	SEVERE
FLUID CONDITION	ABNORMAL

Area

[W8907]

Machine Id

SANDVIK Sandhills pick and pull car crusher (S/N Pe6068t243328)

Component

Diesel Engine

Fluid

JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (5 GAL)

RECOMMENDATION

We advise that you check for the source of the coolant leak. Check for low coolant level. Oil and filter change at the time of sampling has been noted. We recommend an early resample to monitor this condition. (Customer Sample Comment: W8907)

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0196865	JR0183131	---
Sample Date		Client Info		19 Jun 2024	08 Dec 2023	---
Machine Age	hrs	Client Info		13477	13007	---
Oil Age	hrs	Client Info		13477	13007	---
Filter Age	hrs	Client Info		0	0	---
Oil Changed		Client Info		Changed	N/A	---
Filter Changed		Client Info		Changed	N/A	---
Sample Status				SEVERE	ABNORMAL	---

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	36	42	---
Chromium	ppm	ASTM D5185m	>20	1	2	---
Nickel	ppm	ASTM D5185m	>4	0	<1	---
Titanium	ppm	ASTM D5185m		0	0	---
Silver	ppm	ASTM D5185m	>3	0	0	---
Aluminum	ppm	ASTM D5185m	>20	3	5	---
Lead	ppm	ASTM D5185m	>40	11	0	---
Copper	ppm	ASTM D5185m	>330	13	3	---
Tin	ppm	ASTM D5185m	>15	<1	0	---
Vanadium	ppm	ASTM D5185m		0	0	---
White Metal	scalar	*Visual	NONE	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---

CONTAMINATION

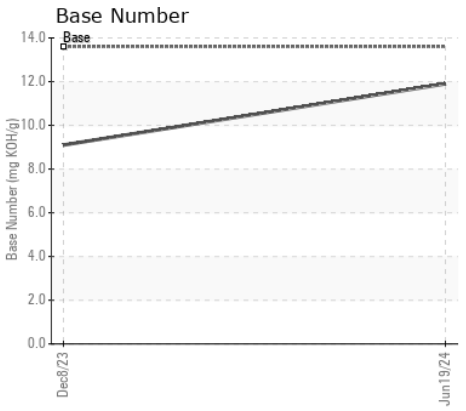
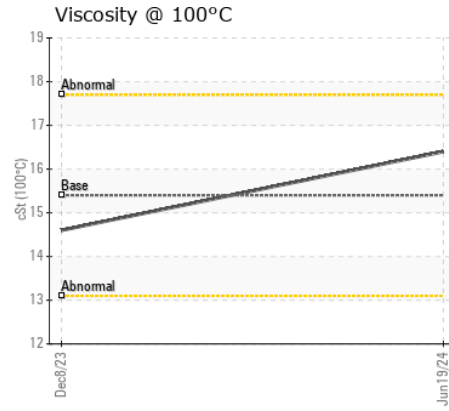
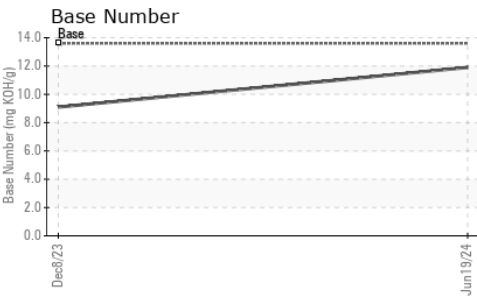
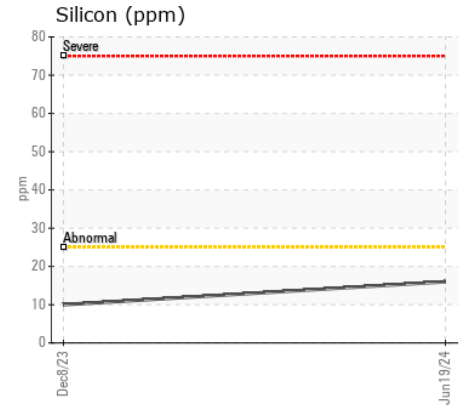
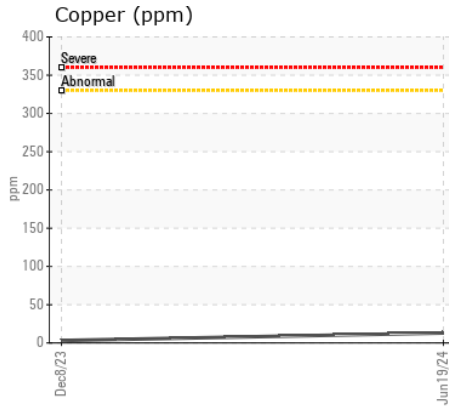
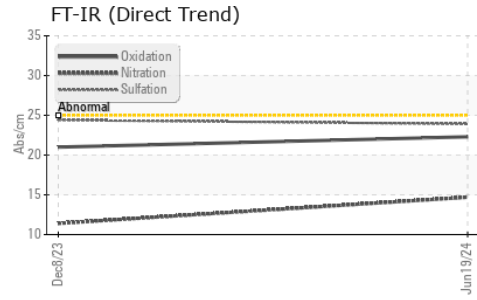
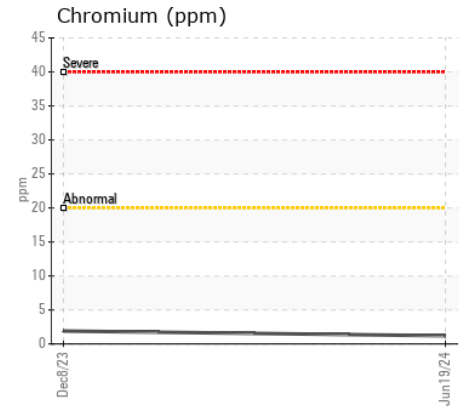
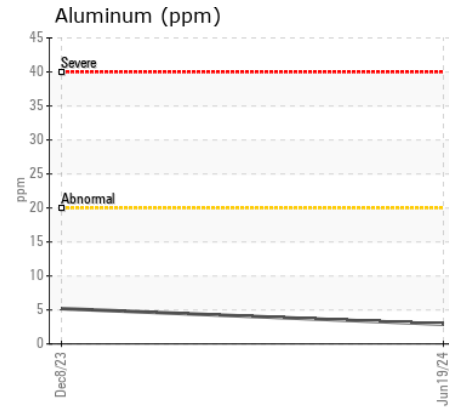
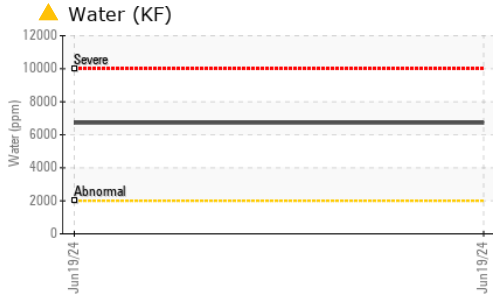
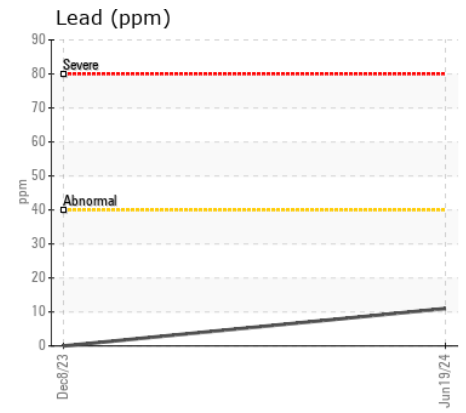
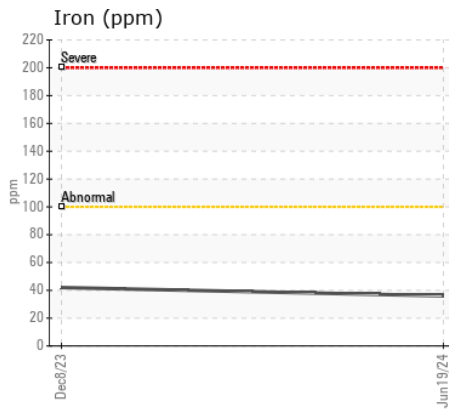
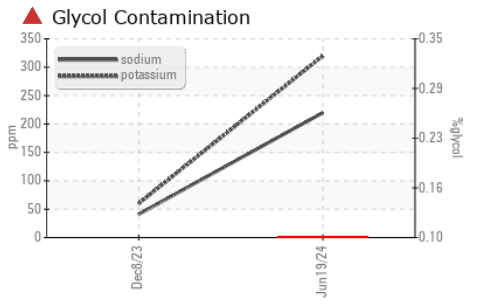
Sodium and/or potassium levels are high. Test for glycol is positive. There is a moderate concentration of water present in the oil.

Silicon	ppm	ASTM D5185m	>25	16	10	---
Potassium	ppm	ASTM D5185m	>20	▲ 320	▲ 60	---
Fuel		WC Method	>5	<1.0	<1.0	---
Water	%	ASTM D6304	>0.2	▲ 0.672	---	---
ppm Water	ppm	ASTM D6304	>2000	▲ 6720	---	---
Glycol	%	*ASTM D2982		▲ 0.10	NEG	---
Soot %	%	*ASTM D7844	>3	0.1	0.1	---
Nitration	Abs/cm	*ASTM D7624	>20	14.7	11.4	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	23.9	24.4	---
Silt	scalar	*Visual	NONE	NONE	NONE	---
Debris	scalar	*Visual	NONE	LIGHT	LIGHT	---
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	---
Appearance	scalar	*Visual	NORML	NORML	NORML	---
Odor	scalar	*Visual	NORML	NORML	NORML	---
Emulsified Water	scalar	*Visual	>0.2	▲ 0.2%	NEG	---

FLUID CONDITION

The BN result indicates that there is suitable alkalinity remaining in the oil. The oil is no longer serviceable due to the presence of contaminants.

Sodium	ppm	ASTM D5185m		▲ 220	41	---
Boron	ppm	ASTM D5185m		76	241	---
Barium	ppm	ASTM D5185m		<1	0	---
Molybdenum	ppm	ASTM D5185m		208	216	---
Manganese	ppm	ASTM D5185m		<1	0	---
Magnesium	ppm	ASTM D5185m		804	687	---
Calcium	ppm	ASTM D5185m		1698	1600	---
Phosphorus	ppm	ASTM D5185m		938	959	---
Zinc	ppm	ASTM D5185m		1241	1191	---
Sulfur	ppm	ASTM D5185m		3698	3082	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	22.3	21.0	---
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	11.9	9.1	---
Visc @ 100°C	cSt	ASTM D445	15.4	16.4	14.6	---



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0196865 **Received** : 24 Jun 2024
Lab Number : 06218031 **Tested** : 25 Jun 2024
Unique Number : 11096228 **Diagnosed** : 25 Jun 2024 - Jonathan Hester
Test Package : MOBCE (Additional Tests: Glycol, KF, TBN)

JRE - HOPE MILLS/FAYETTEVILLE
 5039 HWY 301 SOUTH
 HOPE MILLS, NC
 US 28348
 Contact: FAYETTEVILLE SHOP
 stephen.mullis@jamesriverequipment.com; panastasio@wearcheck.com

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: