



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	ABNORMAL

Machine Id
SANDVIK DD321 JUM007
 Component
Hydraulic System
 Fluid
SHELL 15W40 (170 LTR)

RECOMMENDATION

We advise that you check for the source of water entry. We recommend that you drain the oil from the component if this has not already been done. Confirm the source of the lubricant being utilized for top-up/fill. We recommend an early resample to monitor this condition. Please contact your representative for information regarding the proper sampling kits for your service. NOTE: We recommend using MOB 2 test kits, this testkit includes Particle Count to determine the ISO cleanliness of the fluid.

WEAR

All component wear rates are normal.

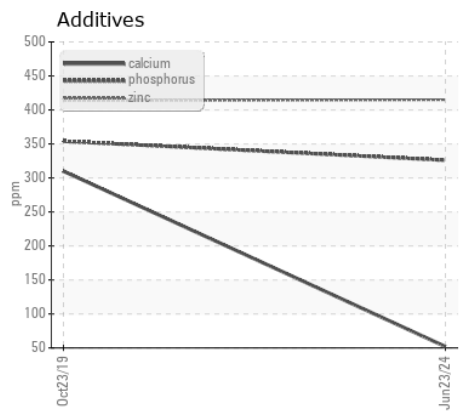
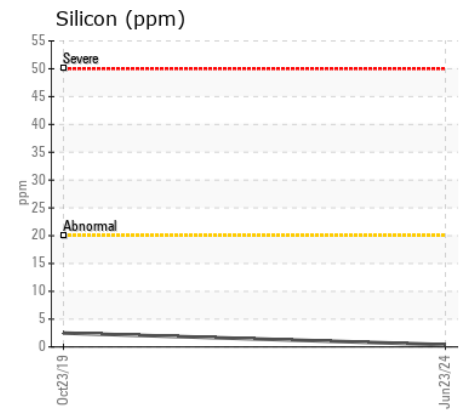
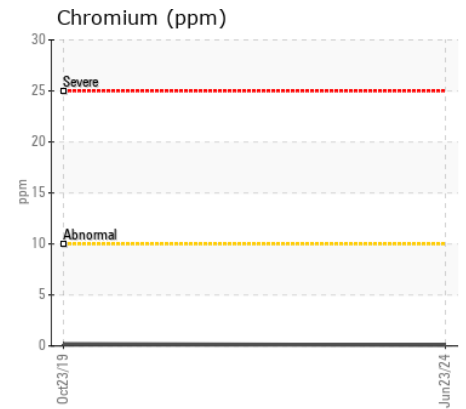
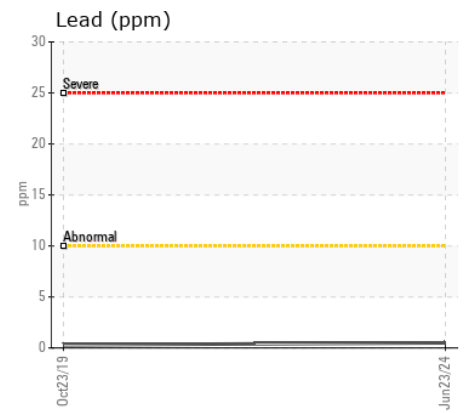
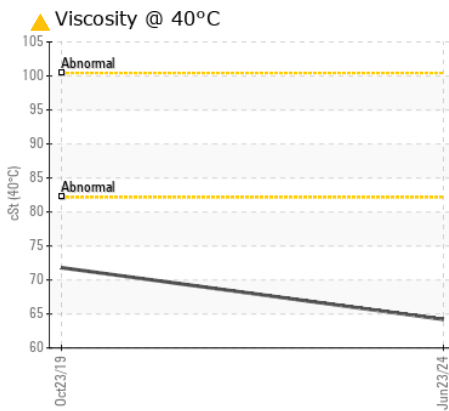
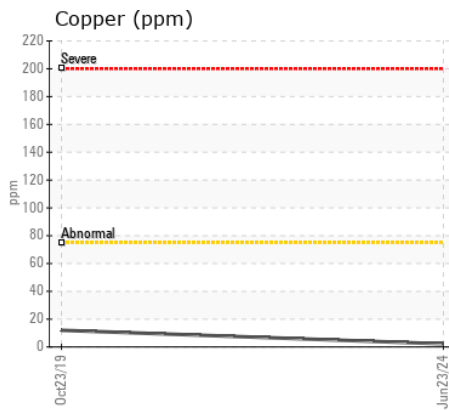
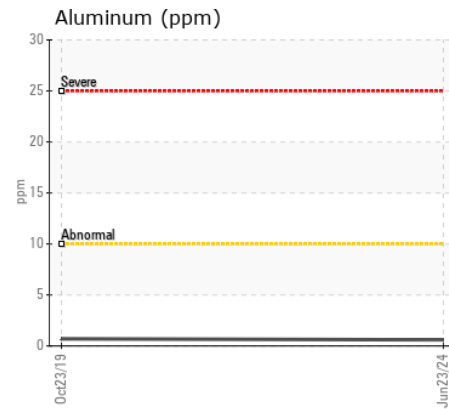
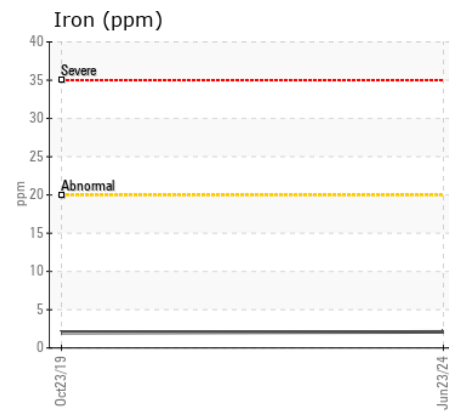
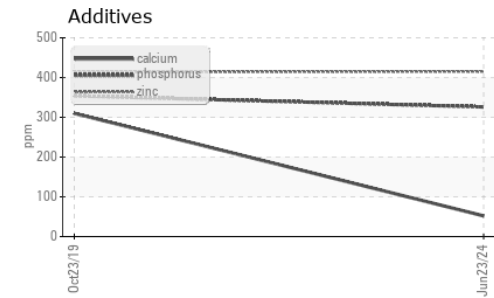
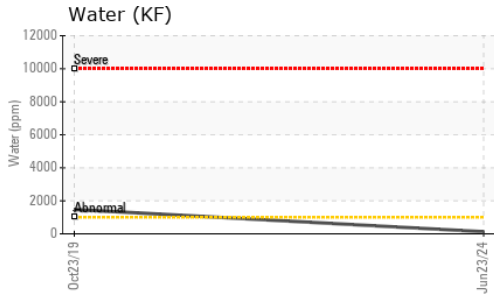
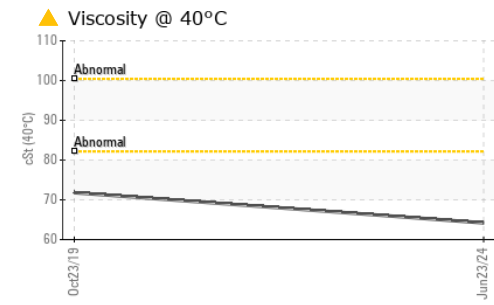
CONTAMINATION

There is a moderate concentration of water present in the oil. Free water present.

FLUID CONDITION

Viscosity of sample indicates oil is within ISO 68 range, advise investigate. This plus the additive levels indicates that this is not the same brand, or type of oil as reported. The oil is no longer serviceable due to the presence of contaminants.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC	WC992244	---
Sample Date		Client Info		23 Jun 2024	23 Oct 2019	---
Machine Age	hrs	Client Info		1000	309	---
Oil Age	hrs	Client Info		0	309	---
Filter Age	hrs	Client Info		0	309	---
Oil Changed		Client Info		N/A	Changed	---
Filter Changed		Client Info		N/A	Changed	---
Sample Status				ABNORMAL	ABNORMAL	---
Iron	ppm	ASTM D5185(m)	>20	2	2	---
Chromium	ppm	ASTM D5185(m)	>10	<1	<1	---
Nickel	ppm	ASTM D5185(m)	>10	<1	<1	---
Titanium	ppm	ASTM D5185(m)		0	<1	---
Silver	ppm	ASTM D5185(m)		<1	<1	---
Aluminum	ppm	ASTM D5185(m)	>10	<1	<1	---
Lead	ppm	ASTM D5185(m)	>10	<1	<1	---
Copper	ppm	ASTM D5185(m)	>75	2	12	---
Tin	ppm	ASTM D5185(m)	>10	0	0	---
Vanadium	ppm	ASTM D5185(m)		0	0	---
White Metal	scalar	Visual*	NONE	NONE	▲ LIGHT	---
Yellow Metal	scalar	Visual*	NONE	NONE	NONE	---
Silicon	ppm	ASTM D5185(m)	>20	<1	2	---
Potassium	ppm	ASTM D5185(m)	>20	<1	<1	---
Water	%	ASTM D6304*	>0.1	0.012	▲ 0.147	---
ppm Water	ppm	ASTM D6304*	>1000	128	▲ 1474.2	---
Silt	scalar	Visual*	NONE	NONE	VLITE	---
Debris	scalar	Visual*	NONE	VLITE	▲ LIGHT	---
Sand/Dirt	scalar	Visual*	NONE	NONE	NONE	---
Appearance	scalar	Visual*	NORML	▲ WGOIL	NORML	---
Odor	scalar	Visual*	NORML	NORML	NORML	---
Emulsified Water	scalar	Visual*	>0.1	1%	▲ .2%	---
Sodium	ppm	ASTM D5185(m)	>150	0	0	---
Boron	ppm	ASTM D5185(m)		<1	2	---
Barium	ppm	ASTM D5185(m)		0	<1	---
Molybdenum	ppm	ASTM D5185(m)		0	1	---
Manganese	ppm	ASTM D5185(m)		0	0	---
Magnesium	ppm	ASTM D5185(m)		<1	11	---
Calcium	ppm	ASTM D5185(m)		52	310	---
Phosphorus	ppm	ASTM D5185(m)		326	354	---
Zinc	ppm	ASTM D5185(m)		415	414	---
Sulfur	ppm	ASTM D5185(m)		6677	1045	---
Visc @ 40°C	cSt	ASTM D7279(m)		▲ 64.2	▲ 71.8	---



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC **Received** : 24 Jun 2024
Lab Number : 02643762 **Tested** : 25 Jun 2024
Unique Number : 5801301 **Diagnosed** : 26 Jun 2024 - Kevin Marson
Test Package : MOB 1 (Additional Tests: KF)

Agnico Eagle Canada
 1350 Government Rd. W, MACASSA COMPLEX
 Kirkland Lake, ON
 CA P2N 3J1
 Contact: Jay Gould
 MacassaMobileUGPlanning@agnicoeagle.com
 T: (705)567-5208
 F: (705)567-5221

To discuss this sample report, contact Customer Service at 1-800-268-2131.
 Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab.
 Validity of results and interpretation are based on the sample and information as supplied.