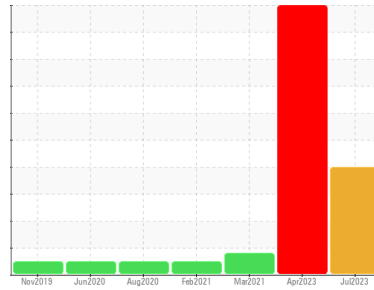




OIL ANALYSIS REPORT

Sample Rating Trend



WEAR



Machine Id
ARTISAN 240 TRK216 (S/N VZ-02-0002)

Component
Front Right Planetary
Fluid
SAE 80W90 (--- GAL)

DIAGNOSIS

Recommendation

We advise that you check for visible metal particles in the oil. We recommend that you drain the oil from the component if this has not already been done. We recommend an early resample to monitor this condition.

Wear

PQ levels are abnormal. Iron ppm levels are abnormal. Light concentration of visible metal present. Gear wear is indicated. The high ferrous density (PQ) index indicates that abnormal wear is occurring.

Contamination

There is no indication of any contamination in the oil.

Fluid Condition

Viscosity of sample indicates oil is within SAE 80W140 range, advise investigate. The oil is no longer serviceable as a result of the abnormal and/or severe wear.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		WC0749523	WC0835126	WC0558361
Sample Date	Client Info		05 Jul 2023	05 Apr 2023	16 Mar 2021
Machine Age	hrs	Client Info	7560	8056	5515
Oil Age	hrs	Client Info	0	0	0
Oil Changed	Client Info		Not Chngd	N/A	Not Chngd
Sample Status			ABNORMAL	SEVERE	ABNORMAL

WEAR METALS

	method	limit/base	current	history1	history2
PQ	ASTM D8184*		▲ 1559	0	419
Iron	ppm	ASTM D5185(m) >500	▲ 986	▲ 1421	▲ 576
Chromium	ppm	ASTM D5185(m) >10	8	▲ 10	4
Nickel	ppm	ASTM D5185(m) >10	<1	<1	<1
Titanium	ppm	ASTM D5185(m)	0	0	0
Silver	ppm	ASTM D5185(m)	0	0	<1
Aluminum	ppm	ASTM D5185(m) >25	<1	2	2
Lead	ppm	ASTM D5185(m) >25	0	0	0
Copper	ppm	ASTM D5185(m) >75	1	3	2
Tin	ppm	ASTM D5185(m) >10	0	0	0
Antimony	ppm	ASTM D5185(m) >5	<1	0	<1
Vanadium	ppm	ASTM D5185(m)	0	0	0
Beryllium	ppm	ASTM D5185(m)	0	0	0
Cadmium	ppm	ASTM D5185(m)	0	0	0

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m) 200	47	89	63
Barium	ppm	ASTM D5185(m) 0	<1	<1	<1
Molybdenum	ppm	ASTM D5185(m) 0	<1	1	<1
Manganese	ppm	ASTM D5185(m)	12	16	7
Magnesium	ppm	ASTM D5185(m) 0	<1	2	<1
Calcium	ppm	ASTM D5185(m) 20	5	45	10
Phosphorus	ppm	ASTM D5185(m) 1000	500	502	530
Zinc	ppm	ASTM D5185(m) 20	7	16	10
Sulfur	ppm	ASTM D5185(m) 22000	14093	8654	9788
Lithium	ppm	ASTM D5185(m)	1	1	2

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m) >75	7	10	12
Sodium	ppm	ASTM D5185(m) >50	<1	2	2
Potassium	ppm	ASTM D5185(m) >20	<1	<1	<1

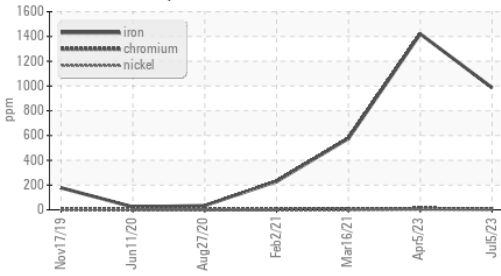
VISUAL

	method	limit/base	current	history1	history2	
White Metal	scalar	Visual*	NONE	▲ LTMOD	HEAVY	VLITE
Yellow Metal	scalar	Visual*	NONE	NONE	NONE	NONE
Precipitate	scalar	Visual*	NONE	NONE	NONE	NONE
Silt	scalar	Visual*	NONE	NONE	NONE	VLITE
Debris	scalar	Visual*	NONE	NONE	NONE	VLITE
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
Free Water	scalar	Visual*		NEG	NEG	NEG

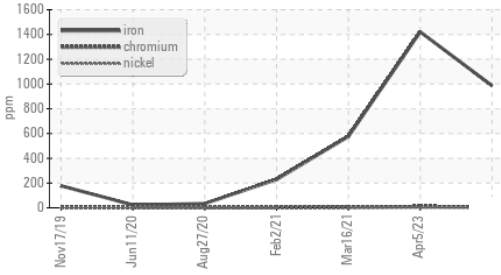


OIL ANALYSIS REPORT

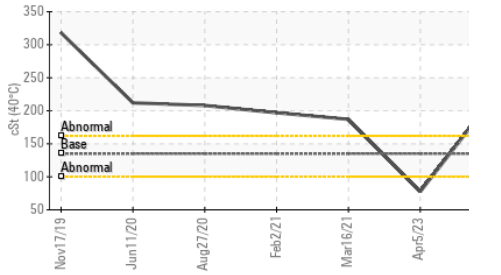
▲ Ferrous Alloys



▲ Ferrous Alloys

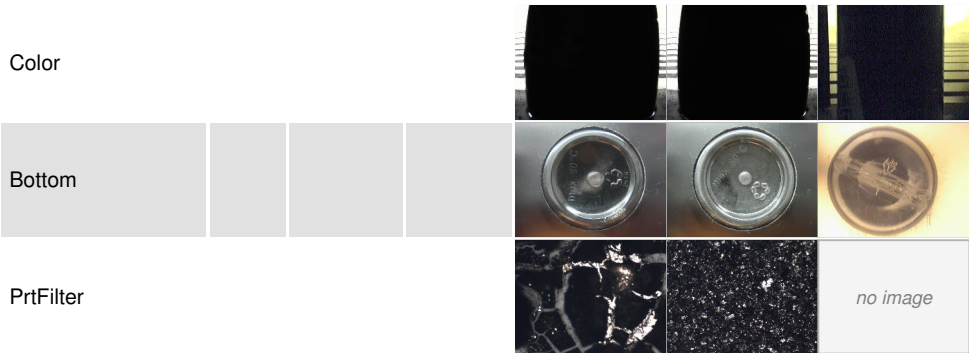


Viscosity @ 40°C



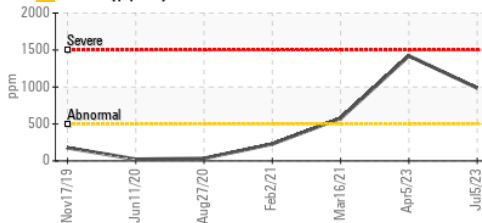
FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	135	217	▲ 77.6	187

SAMPLE IMAGES		method	limit/base	current	history1	history2
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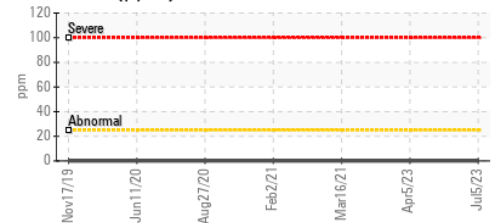


GRAPHS

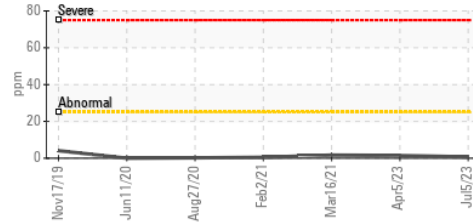
▲ Iron (ppm)



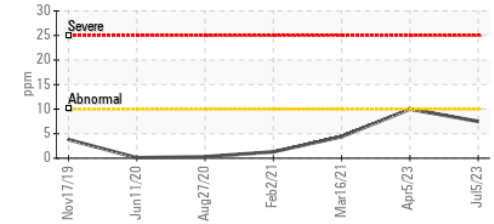
Lead (ppm)



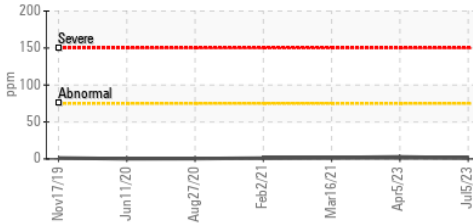
Aluminum (ppm)



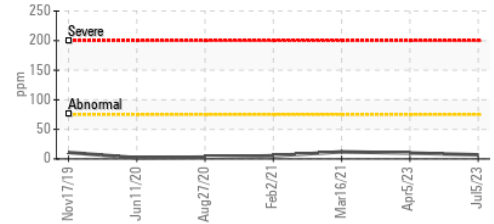
Chromium (ppm)



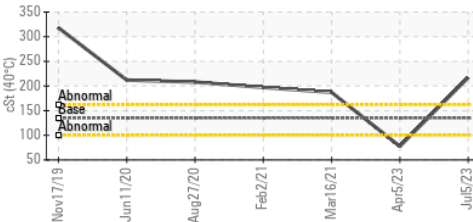
Copper (ppm)



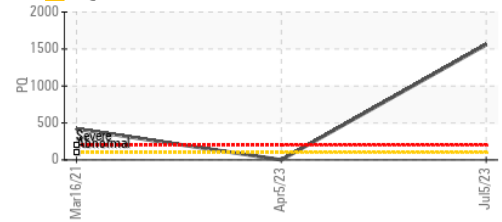
Silicon (ppm)



Viscosity @ 40°C



▲ PQ



ISO 17025:2017
Accredited
Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9

Sample No. : WC0749523

Lab Number : 02578194

Unique Number : 5631254

Test Package : MOB 1 (Additional Tests: Bottom, BottomAnalysis, FilterPatch, PQ)

Received : 24 Aug 2023

Diagnosed : 25 Aug 2023

Diagnostician : Kevin Marson

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.