IND II

WEAR CHECK

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL

Area
[166419]
Machine Id
TINHBASCHPU
Component
Hydraulic System
Fluid
ESSO UNIVIS N 22 (1680 LTR)

RECOMMENDATION

We advise that you check for the source of water entry. Check seals and/or filters for points of contaminant entry. The air breather requires service. If unrated, we recommend that you replace with a suitable micron rated and/or desiccant air breather. If rated, we recommend that you service/replace the breather. We advise that you follow the water drain-off procedure for this component. We advise that you use off-line filtration with water adsorbent filters to attempt to remove the water from this oil. The filter change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

WEAR

All component wear rates are normal.

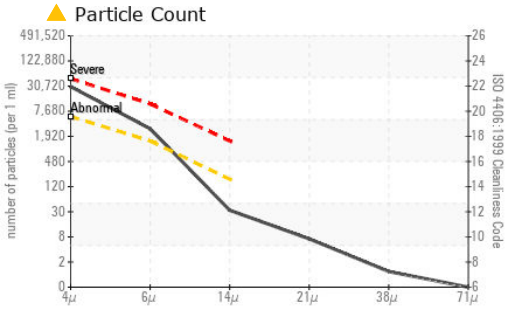
CONTAMINATION

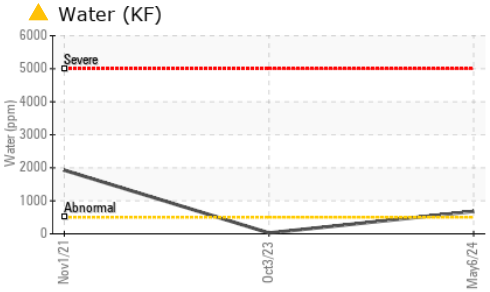
There is a moderate amount of silt (particulates < 14 microns in size) present in the oil. There is a moderate concentration of water present in the oil. Free water present.

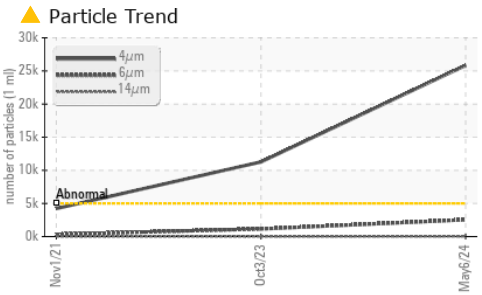
FLUID CONDITION

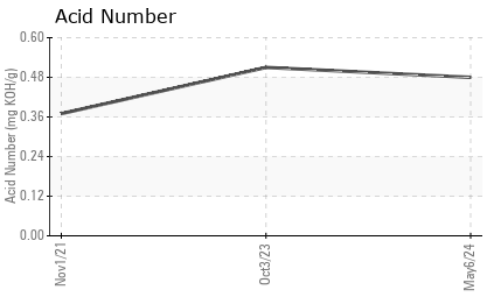
The AN level is acceptable for this fluid.

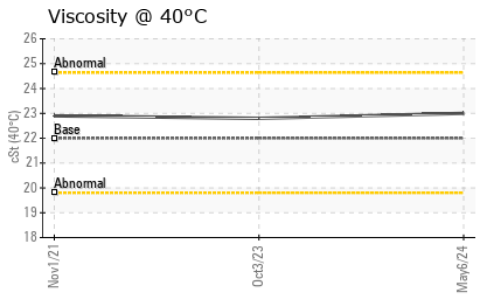
Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0862807	WC0862798	WC0602580
Sample Date		Client Info		06 May 2024	03 Oct 2023	01 Nov 2021
Machine Age	mths	Client Info		0	0	0
Oil Age	mths	Client Info		8	2	8
Filter Age	mths	Client Info		12	6	1
Oil Changed		Client Info		Not Changd	Changed	Not Changd
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				ABNORMAL	ABNORMAL	ABNORMAL
Iron	ppm	ASTM D5185(m)	>20	4	3	3
Chromium	ppm	ASTM D5185(m)	>20	0	0	0
Nickel	ppm	ASTM D5185(m)	>20	0	0	<1
Titanium	ppm	ASTM D5185(m)		0	0	0
Silver	ppm	ASTM D5185(m)		0	<1	<1
Aluminum	ppm	ASTM D5185(m)	>20	0	<1	<1
Lead	ppm	ASTM D5185(m)	>20	6	<1	3
Copper	ppm	ASTM D5185(m)	>20	2	1	2
Tin	ppm	ASTM D5185(m)	>20	0	0	<1
Vanadium	ppm	ASTM D5185(m)		0	0	0
White Metal	scalar	Visual*	NONE	NONE	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	NONE	NONE	NONE
Silicon	ppm	ASTM D5185(m)	>15	0	<1	<1
Potassium	ppm	ASTM D5185(m)	>20	<1	0	<1
Water	%	ASTM D6304*	>0.05	▲ 0.068	0.003	▲ 0.192
ppm Water	ppm	ASTM D6304*	>500	▲ 680	26.2	▲ 1927.2
Particles >4µm		ASTM D7647	>5000	▲ 25845	▲ 11268	4226
Particles >6µm		ASTM D7647	>1300	▲ 2546	1150	333
Particles >14µm		ASTM D7647	>160	29	10	7
Particles >21µm		ASTM D7647	>40	6	2	0
Particles >38µm		ASTM D7647	>10	1	0	0
Particles >71µm		ASTM D7647	>3	0	0	0
Oil Cleanliness		ISO 4406 (c)	>19/17/14	▲ 22/19/12	▲ 21/17/10	19/16/10
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	▲ HAZY	▲ HAZY	NORML
Odor	scalar	Visual*	NORML	NORML	NORML	NORML
Emulsified Water	scalar	Visual*	>0.05	▲ .5%	.2%	▲ .5%
Sodium	ppm	ASTM D5185(m)		0	0	0
Boron	ppm	ASTM D5185(m)	.3	<1	<1	<1
Barium	ppm	ASTM D5185(m)		<1	<1	<1
Molybdenum	ppm	ASTM D5185(m)	0	0	0	0
Manganese	ppm	ASTM D5185(m)		0	0	0
Magnesium	ppm	ASTM D5185(m)	0	<1	0	<1
Calcium	ppm	ASTM D5185(m)	49	10	9	6
Phosphorus	ppm	ASTM D5185(m)	192	309	311	302
Zinc	ppm	ASTM D5185(m)	237	387	393	374
Sulfur	ppm	ASTM D5185(m)		2141	1952	1291
Acid Number (AN)	mg KOH/g	ASTM D974*		0.48	0.51	0.37
Visc @ 40°C	cSt	ASTM D7279(m)	22	23.0	22.8	22.9

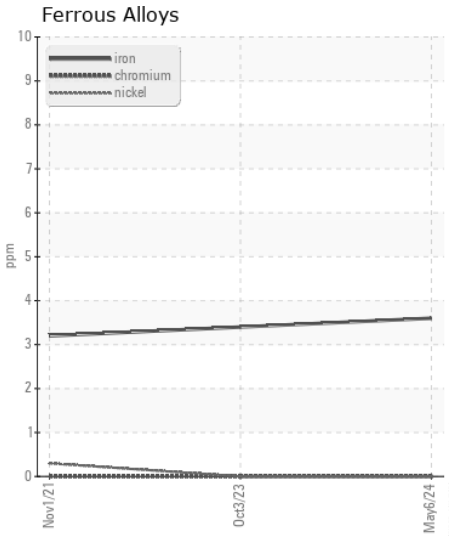


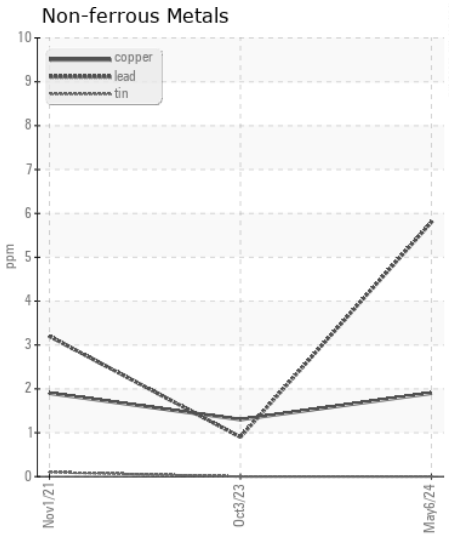


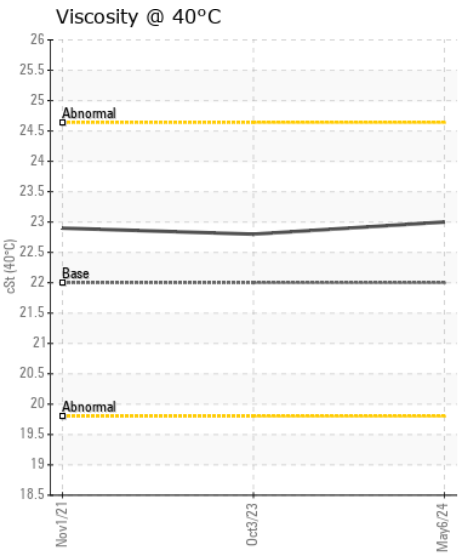


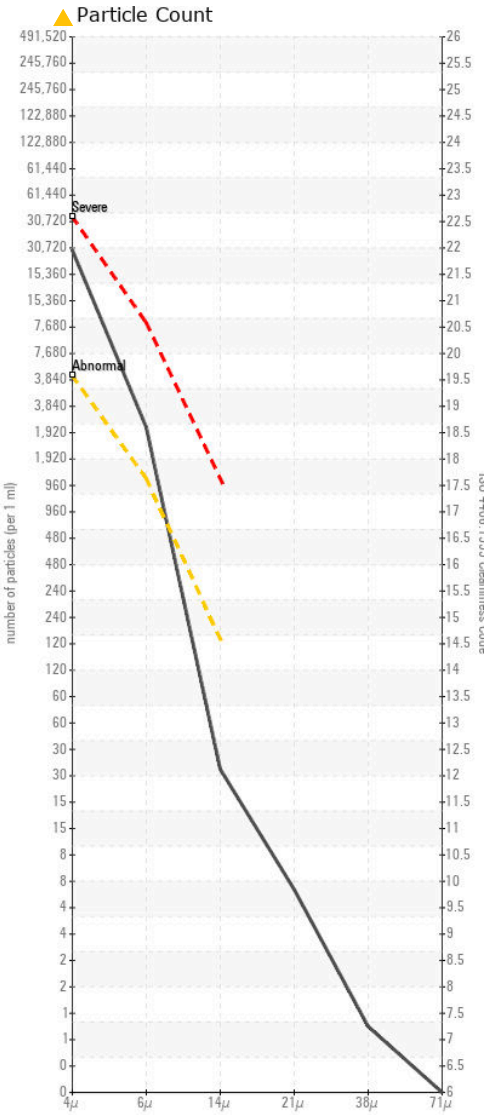


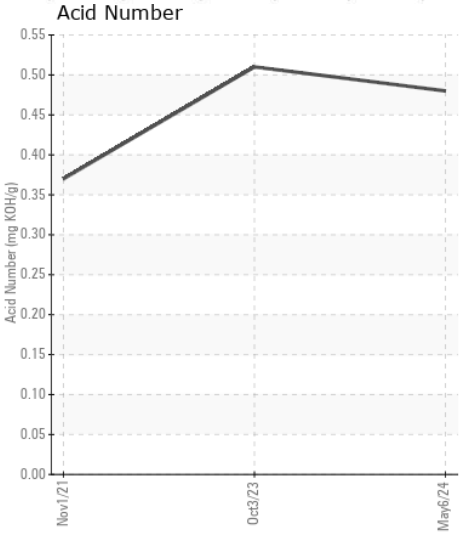












CALA
ISO 17025:2017 Accredited Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0862807
Lab Number : 02634322
Unique Number : 5775475
Test Package : IND 2 (Additional Tests: KF, TAN Man)

Received : 09 May 2024
Tested : 13 May 2024
Diagnosed : 13 May 2024 - Kevin Marson

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.

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