



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ATTENTION
FLUID CONDITION	NORMAL

Area
MTR [166413]
Machine Id
TINHGOV2
Component
Hydraulic System
Fluid
ESSO TERESSO ISO 32 (80 LTR)

RECOMMENDATION

We recommend you service the filters on this component. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0862811	WC0862799	WC0678269
Sample Date		Client Info		06 May 2024	03 Oct 2023	28 Feb 2023
Machine Age	mths	Client Info		0	0	0
Oil Age	mths	Client Info		60	60	60
Filter Age	mths	Client Info		6	6	6
Oil Changed		Client Info		Not Changd	Changed	Not Changd
Filter Changed		Client Info		Cleaned	Cleaned	Cleaned
Sample Status				ATTENTION	ABNORMAL	ABNORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>20	3	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	0
Aluminum	ppm	ASTM D5185(m)	>20	<1	<1	<1
Lead	ppm	ASTM D5185(m)	>20	0	<1	0
Copper	ppm	ASTM D5185(m)	>20	<1	<1	<1
Tin	ppm	ASTM D5185(m)	>20	0	0	0
Vanadium	ppm	ASTM D5185(m)		0	0	0
White Metal	scalar	Visual*	NONE	NONE	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	NONE	NONE	NONE

CONTAMINATION

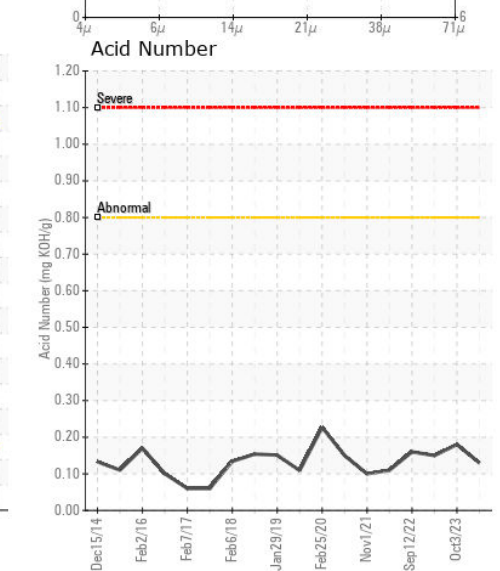
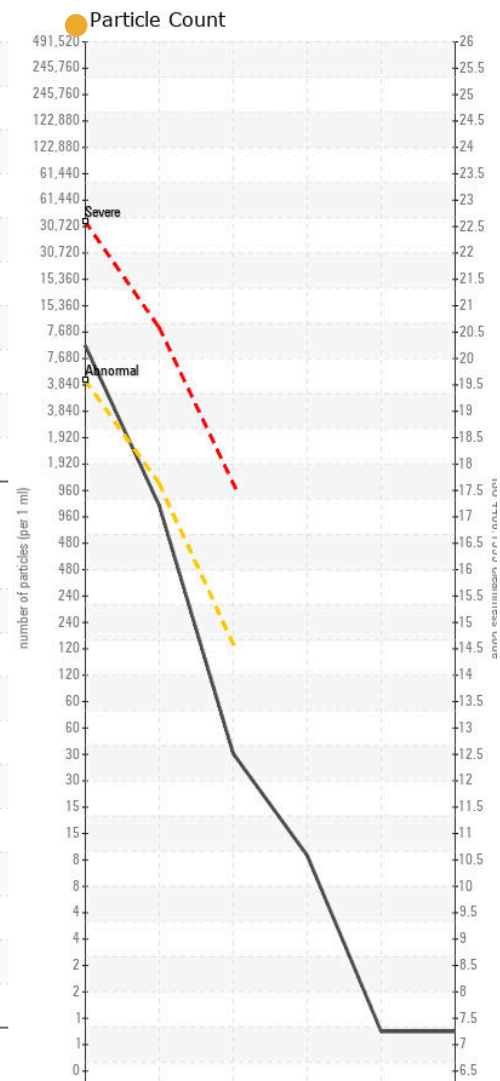
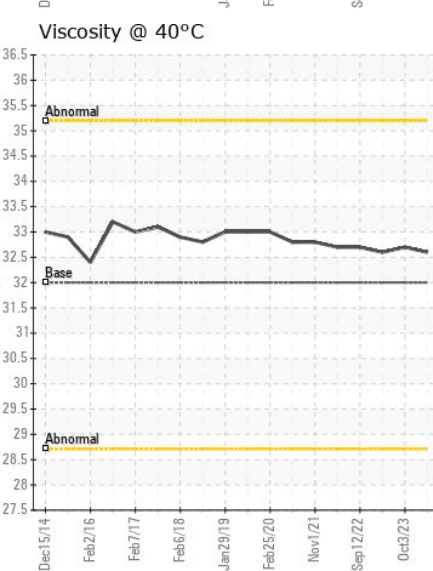
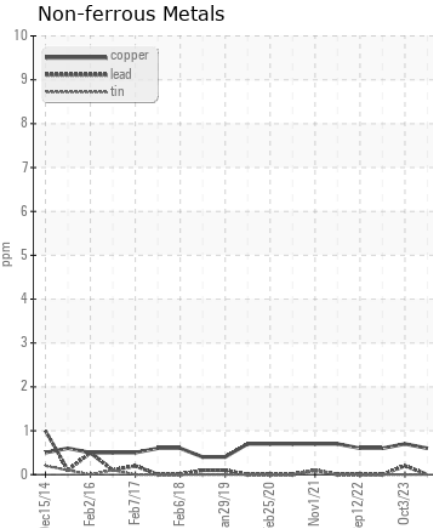
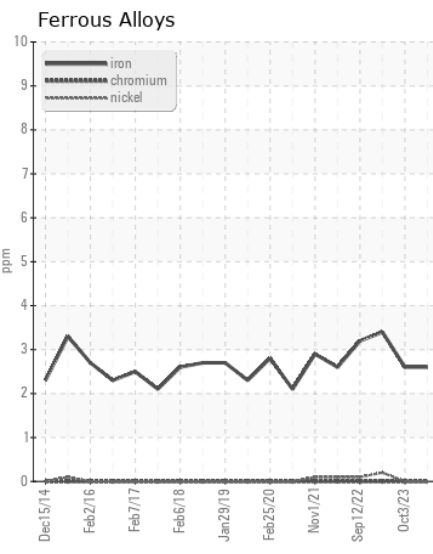
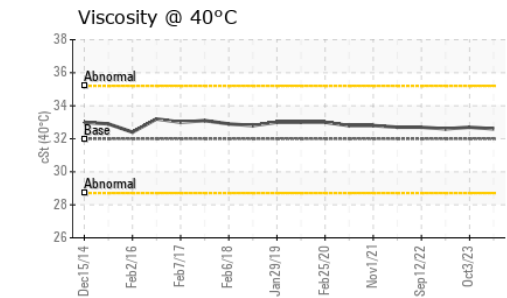
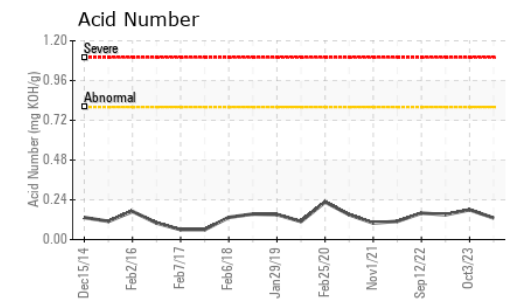
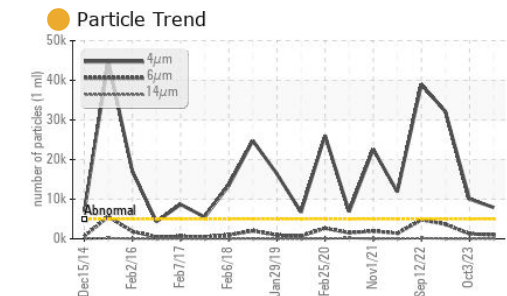
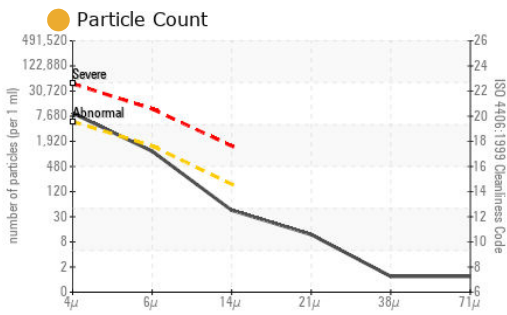
There is a light amount of silt (particulates < 14 microns in size) present in the oil.

Silicon	ppm	ASTM D5185(m)	>15	0	<1	<1
Potassium	ppm	ASTM D5185(m)	>20	<1	0	0
Water		WC Method	>0.05	NEG	NEG	NEG
Particles >4µm		ASTM D7647	>5000	7915	▲ 10019	▲ 32095
Particles >6µm		ASTM D7647	>1300	976	1259	▲ 3673
Particles >14µm		ASTM D7647	>160	38	32	70
Particles >21µm		ASTM D7647	>40	10	7	13
Particles >38µm		ASTM D7647	>10	1	0	0
Particles >71µm		ASTM D7647	>3	1	0	0
Oil Cleanliness		ISO 4406 (c)	>19/17/14	20/17/12	▲ 21/17/12	▲ 22/19/13
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*	>0.05	NEG	NEG	NEG

FLUID CONDITION

The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185(m)		0	0	0
Boron	ppm	ASTM D5185(m)		2	2	2
Barium	ppm	ASTM D5185(m)		0	<1	0
Molybdenum	ppm	ASTM D5185(m)		0	0	0
Manganese	ppm	ASTM D5185(m)		0	0	0
Magnesium	ppm	ASTM D5185(m)		0	0	0
Calcium	ppm	ASTM D5185(m)		0	0	0
Phosphorus	ppm	ASTM D5185(m)		11	12	13
Zinc	ppm	ASTM D5185(m)		13	13	13
Sulfur	ppm	ASTM D5185(m)		2176	2199	2303
Acid Number (AN)	mg KOH/g	ASTM D974*		0.13	0.18	0.15
Visc @ 40°C	cSt	ASTM D7279(m)	32	32.6	32.7	32.6



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0862811
Lab Number : 02634316
Unique Number : 5775469
Test Package : IND 2 (Additional Tests: TAN Man)
Received : 09 May 2024
Tested : 10 May 2024
Diagnosed : 10 May 2024 - Wes Davis

ALGONQUIN POWER SYSTEMS INC.
 354 DAVIS ROAD
 OAKVILLE, ON
 CA L6J 2X1
 Contact: Antonino Champ Fernando
 antoninoChamp.fernando@algonquinpower.com
 T: (905)465-7065
 F: x:

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.