IND II

WEAR CHECK

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area
MTR [161249]
Machine Id
TINHGEN3LUB
Component
Bearing
Fluid
ESSO TERESSO ISO 32 (410 LTR)

RECOMMENDATION

Resample at the next service interval to monitor.

WEAR

All component wear rates are normal.

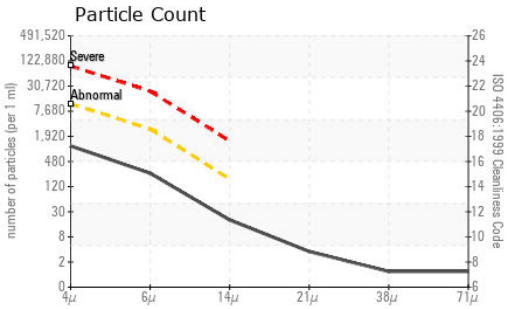
CONTAMINATION

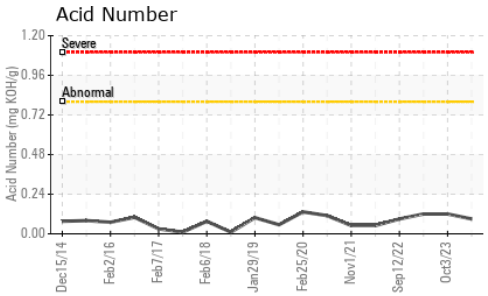
The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The water content is negligible. The system and fluid cleanliness is acceptable.

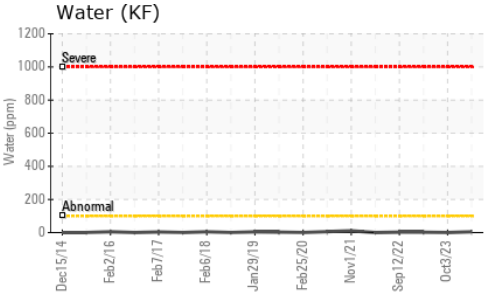
FLUID CONDITION

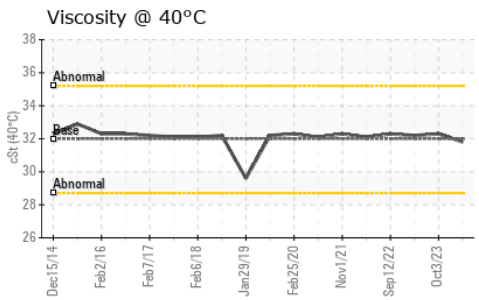
The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

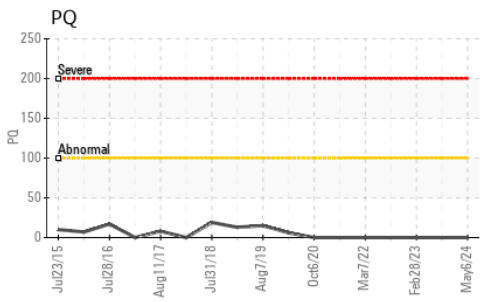
Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		**WC0862803**	WC0862794	WC0678276
Sample Date		Client Info		**06 May 2024**	03 Oct 2023	28 Feb 2023
Machine Age	mths	Client Info		**0**	0	0
Oil Age	mths	Client Info		**60**	60	60
Filter Age	mths	Client Info		**6**	24	6
Oil Changed		Client Info		**Not Changd**	Changed	Not Changd
Filter Changed		Client Info		**Changed**	Not Changd	Changed
Sample Status				**NORMAL**	ATTENTION	NORMAL
PQ		ASTM D8184*		**0**	0	0
Iron	ppm	ASTM D5185(m)	>20	**<1**	<1	<1
Chromium	ppm	ASTM D5185(m)	>20	**0**	0	0
Nickel	ppm	ASTM D5185(m)	>20	**0**	0	0
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	**3**	21	3
Copper	ppm	ASTM D5185(m)	>20	**<1**	<1	0
Tin	ppm	ASTM D5185(m)	>20	**0**	<1	<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**	3	<1
Potassium	ppm	ASTM D5185(m)	>20	**<1**	0	0
Water	%	ASTM D6304*	>2	**0.001**	0.00	0.001
ppm Water	ppm	ASTM D6304*		**5**	0.00	1.9
Particles >4µm		ASTM D7647	>10000	**992**	849	249
Particles >6µm		ASTM D7647	>2500	**221**	202	57
Particles >14µm		ASTM D7647	>160	**17**	8	7
Particles >21µm		ASTM D7647	>40	**3**	2	2
Particles >38µm		ASTM D7647	>10	**1**	0	0
Particles >71µm		ASTM D7647	>3	**1**	0	0
Oil Cleanliness		ISO 4406 (c)	>20/18/14	**17/15/11**	17/15/10	15/13/10
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	**NORML**	NORML	NORML
Odor	scalar	Visual*	NORML	**NORML**	NORML	NORML
Emulsified Water	scalar	Visual*	>2	**NEG**	NEG	NEG
Sodium	ppm	ASTM D5185(m)		**0**	0	0
Boron	ppm	ASTM D5185(m)		**<1**	<1	<1
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)		**<1**	0	0
Calcium	ppm	ASTM D5185(m)		**0**	<1	0
Phosphorus	ppm	ASTM D5185(m)		**1**	5	<1
Zinc	ppm	ASTM D5185(m)		**2**	3	1
Sulfur	ppm	ASTM D5185(m)		**1830**	1467	1901
Acid Number (AN)	mg KOH/g	ASTM D974*		**0.09**	0.12	0.12
Visc @ 40°C	cSt	ASTM D7279(m)	32	**31.8**	32.3	32.2

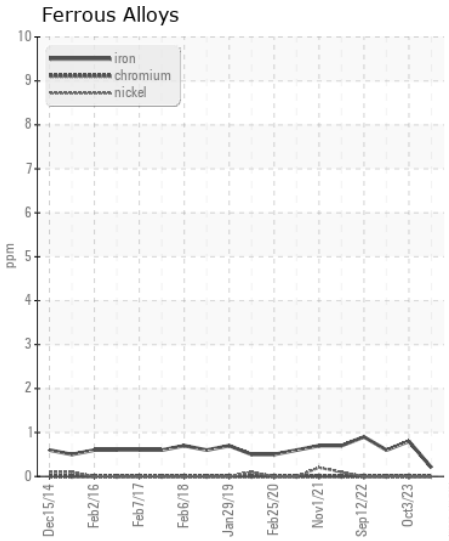


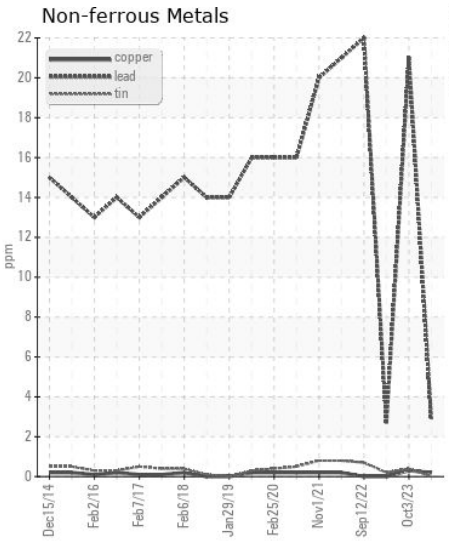


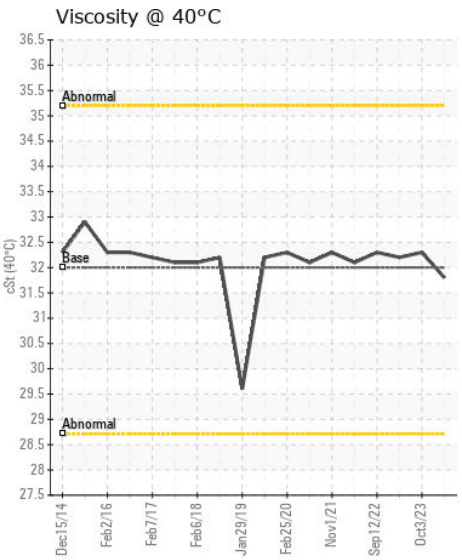


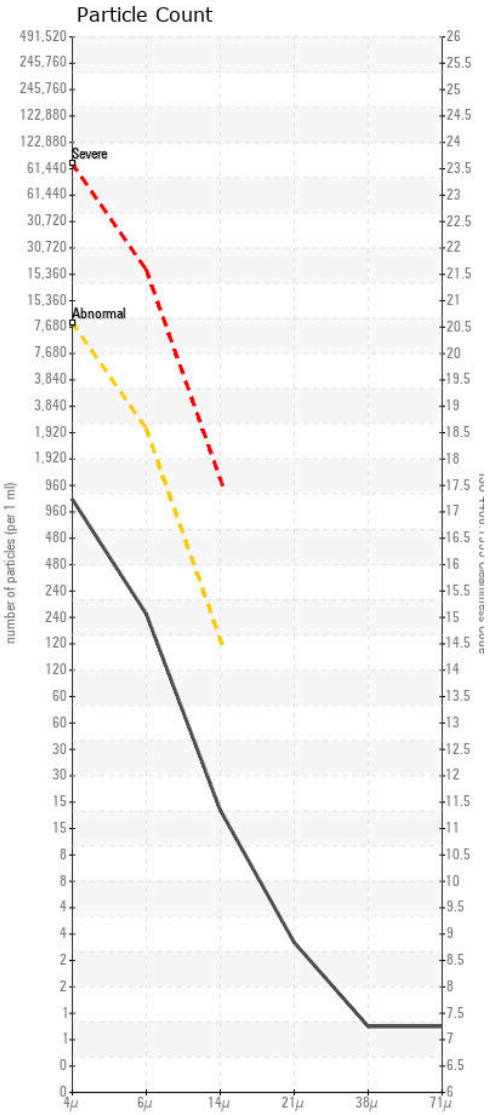


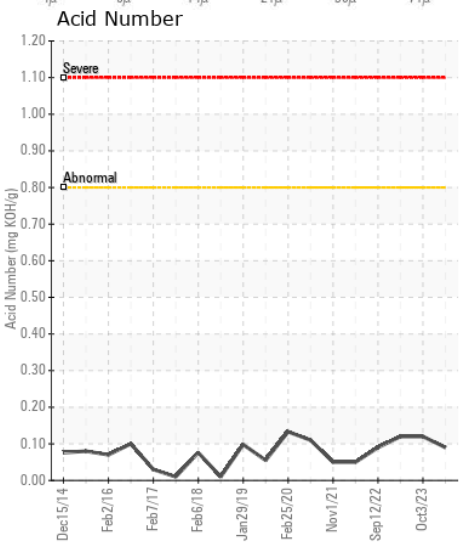












ISO 17025:2017 Accredited Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0862803
Lab Number : 02634323
Unique Number : 5775476
Test Package : IND 2 (Additional Tests: KF, PQ, TAN Man)

Received : 09 May 2024
Tested : 10 May 2024
Diagnosed : 10 May 2024 - Wes Davis

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.

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: