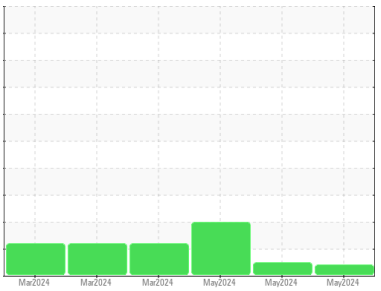
OIL ANALYSIS REPORT

Machine Id
947754
Component
Hydraulic System
Fluid
R&O OIL ISO 32 (--- GAL)

Sample Rating Trend



VIS DEBRIS

DIAGNOSIS

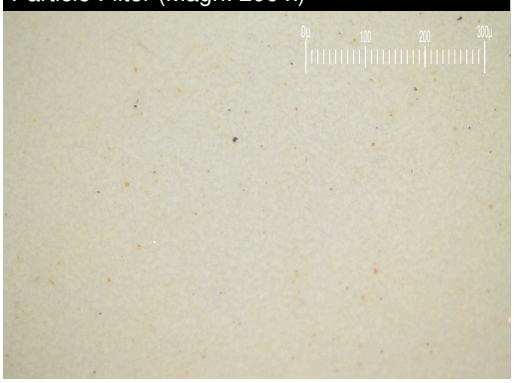
Recommendation
We recommend you service the filters on this component. Resample at the next service interval to monitor. We were unable to perform a particle count due to a high concentration of particles present in this sample.

Wear
All component wear rates are normal.

Contamination
Moderate concentration of visible dirt/debris present in the oil.

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

Particle Filter (Magn: 200 x)



SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**PH0000143**	PH0000151	PH0000142
Sample Date		Client Info		**10 May 2024**	09 May 2024	08 May 2024
Machine Age	hrs	Client Info		**0**	0	0
Oil Age	hrs	Client Info		**0**	0	0
Oil Changed		Client Info		**N/A**	N/A	N/A
Sample Status				**ABNORMAL**	NORMAL	ABNORMAL

CONTAMINATION		method	limit/base	current	history1	history2
Water		WC Method	>0.05	**NEG**	NEG	NEG

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>20	**3**	2	3
Chromium	ppm	ASTM D5185m	>20	**0**	0	0
Nickel	ppm	ASTM D5185m	>20	**<1**	0	<1
Titanium	ppm	ASTM D5185m		**0**	0	0
Silver	ppm	ASTM D5185m		**0**	0	0
Aluminum	ppm	ASTM D5185m	>20	**0**	0	0
Lead	ppm	ASTM D5185m	>20	**1**	1	2
Copper	ppm	ASTM D5185m	>20	**4**	4	4
Tin	ppm	ASTM D5185m	>20	**<1**	<1	<1
Vanadium	ppm	ASTM D5185m		**0**	0	0
Cadmium	ppm	ASTM D5185m		**0**	0	0

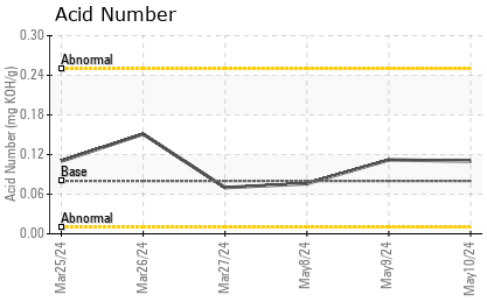
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	5	**0**	0	0
Barium	ppm	ASTM D5185m	5	**0**	0	0
Molybdenum	ppm	ASTM D5185m	5	**0**	0	0
Manganese	ppm	ASTM D5185m		**1**	1	1
Magnesium	ppm	ASTM D5185m	5	**0**	0	0
Calcium	ppm	ASTM D5185m	5	**4**	4	4
Phosphorus	ppm	ASTM D5185m	100	**31**	27	28
Zinc	ppm	ASTM D5185m	25	**25**	26	27
Sulfur	ppm	ASTM D5185m	1500	**1674**	1628	1649

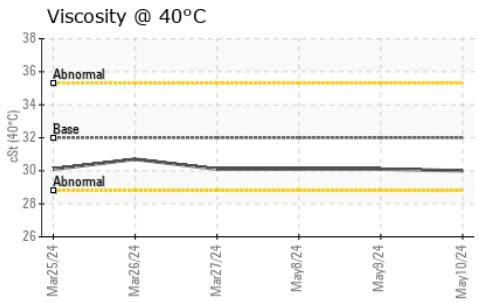
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>15	**1**	11	1
Sodium	ppm	ASTM D5185m		**2**	2	2
Potassium	ppm	ASTM D5185m	>20	**0**	0	0

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>10000	**---**	677	▲ 42116
Particles >6µm		ASTM D7647	>2500	**---**	274	▲ 8473
Particles >14µm		ASTM D7647	>320	**---**	37	▲ 359
Particles >21µm		ASTM D7647	>80	**---**	9	▲ 81
Particles >38µm		ASTM D7647	>20	**---**	0	7
Particles >71µm		ASTM D7647	>4	**---**	0	1
Oil Cleanliness		ISO 4406 (c)	>20/18/15	**---**	17/15/12	▲ 23/20/16

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.08	**0.11**	0.112	0.076

OIL ANALYSIS REPORT

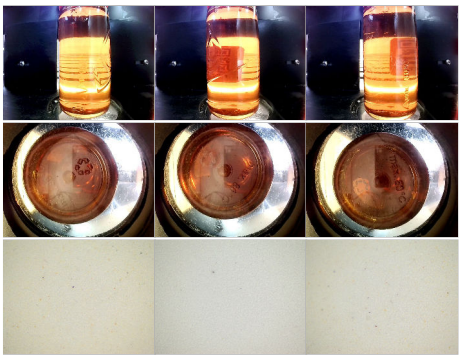




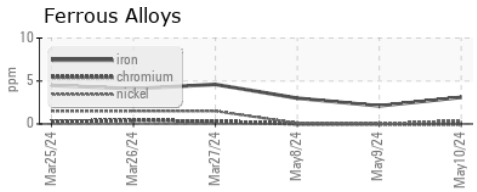
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Precipitate	scalar	*Visual	NONE	**NONE**	NONE	NONE
Silt	scalar	*Visual	NONE	**NONE**	NONE	NONE
Debris	scalar	*Visual	NONE	▲ **MODER**	NONE	LIGHT
Sand/Dirt	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
Free Water	scalar	*Visual		**NEG**	NEG	NEG

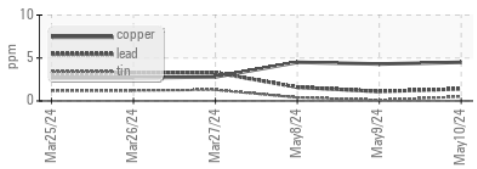
FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	32	**30.0**	30.1	30.1

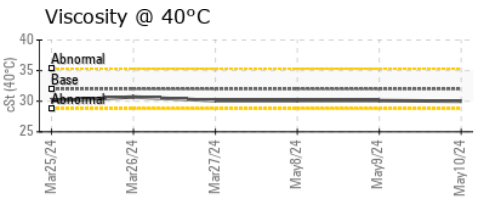
SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					
PrtFilter					

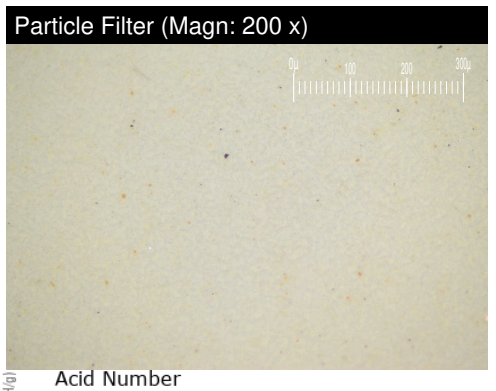


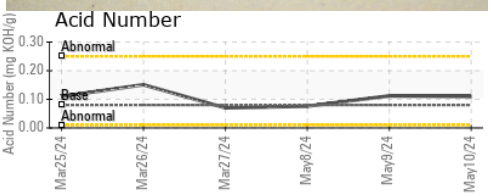
GRAPHS











Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PH0000143 **Received** : 13 May 2024
Lab Number : 06177094 **Tested** : 16 May 2024
Unique Number : 11023147 **Diagnosed** : 16 May 2024 - Jonathan Hester
Test Package : PLANT (Additional Tests: PrtFilter)

Certificate L2367

To discuss this sample report, contact Customer Service at 1-800-237-1369.
** - Denotes test methods that are outside of the ISO 17025 scope of accreditation.*
Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

ALLTECH ENGINEERING CORP
2515 PILOT KNOB RD
MENDOTA HEIGHTS, MN
US 55120
Contact: JAKE ANDERSON
janderson@alltechengineering.com
T: (715)607-0738
F: