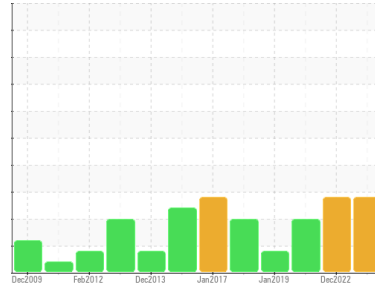




OIL ANALYSIS REPORT

Sample Rating Trend



WEAR



Area
MOLDING 165
 Machine Id
022-005-000-0000 5A (S/N 57582)
 Component
Hydraulic System
 Fluid
SHELL TELLUS S3 M 46 (57 GAL)

DIAGNOSIS

Recommendation

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

Wear

The copper level is abnormal. All other component wear rates are normal.

Contamination

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

Fluid Condition

The condition of the oil is acceptable for the time in service.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		WC0776327	WC0649107	WC0649112
Sample Date	Client Info		09 Jan 2024	22 Dec 2022	14 Dec 2021
Machine Age	hrs	Client Info	20	0	0
Oil Age	hrs	Client Info	2	0	0
Oil Changed	Client Info		Not Chngd	N/A	N/A
Sample Status			ABNORMAL	ABNORMAL	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	2	<1	1
Chromium	ppm	ASTM D5185m >20	0	0	0
Nickel	ppm	ASTM D5185m >20	0	0	0
Titanium	ppm	ASTM D5185m	<1	0	0
Silver	ppm	ASTM D5185m	0	0	2
Aluminum	ppm	ASTM D5185m >20	2	0	0
Lead	ppm	ASTM D5185m >20	0	0	<1
Copper	ppm	ASTM D5185m >20	▲ 41	▲ 39	▲ 39
Tin	ppm	ASTM D5185m >20	<1	0	<1
Antimony	ppm	ASTM D5185m	---	---	0
Vanadium	ppm	ASTM D5185m	0	0	0
Cadmium	ppm	ASTM D5185m	0	0	<1

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 0	<1	0	<1
Barium	ppm	ASTM D5185m 3	0	0	0
Molybdenum	ppm	ASTM D5185m 0	<1	0	0
Manganese	ppm	ASTM D5185m	0	0	0
Magnesium	ppm	ASTM D5185m 0	<1	<1	0
Calcium	ppm	ASTM D5185m 0	48	50	57
Phosphorus	ppm	ASTM D5185m 106	316	301	322
Zinc	ppm	ASTM D5185m 0	350	352	370
Sulfur	ppm	ASTM D5185m	1080	1103	794

CONTAMINANTS

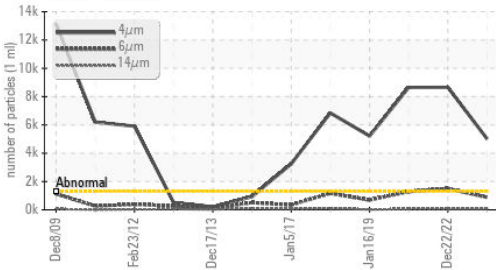
	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >15	<1	<1	<1
Sodium	ppm	ASTM D5185m	0	<1	0
Potassium	ppm	ASTM D5185m >20	1	0	0

FLUID CLEANLINESS

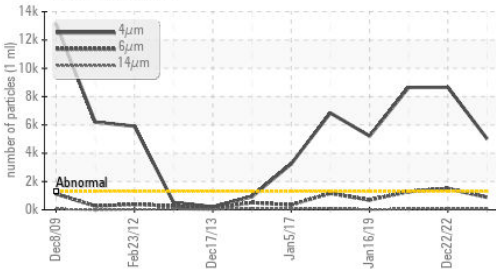
	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>1300	▲ 5012	▲ 8651	▲ 8646
Particles >6µm	ASTM D7647	>320	▲ 886	▲ 1505	▲ 1284
Particles >14µm	ASTM D7647	>40	▲ 60	▲ 61	▲ 59
Particles >21µm	ASTM D7647	>10	▲ 18	▲ 13	14
Particles >38µm	ASTM D7647	>3	1	0	2
Particles >71µm	ASTM D7647	>3	0	0	0
Oil Cleanliness	ISO 4406 (c)	>17/15/12	▲ 20/17/13	▲ 20/18/13	▲ 20/17/13

OIL ANALYSIS REPORT

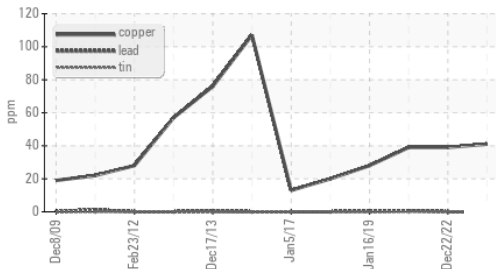
▲ Particle Trend



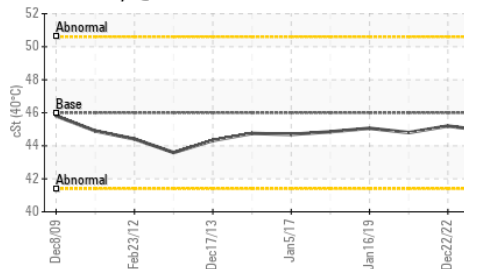
▲ Particle Trend



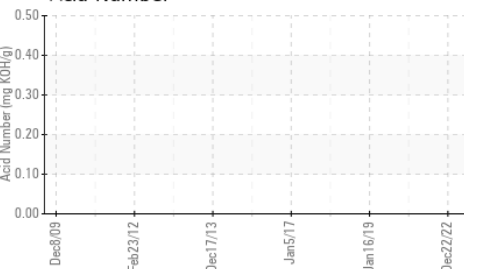
▲ Non-ferrous Metals



Viscosity @ 40°C



Acid Number



VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.05	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

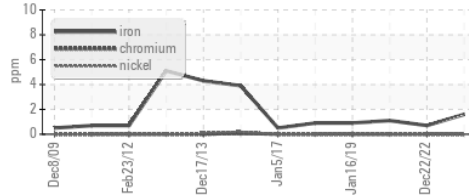
FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 40°C	cSt	ASTM D445	46.0	44.9	45.2	44.8

SAMPLE IMAGES	method	limit/base	current	history1	history2
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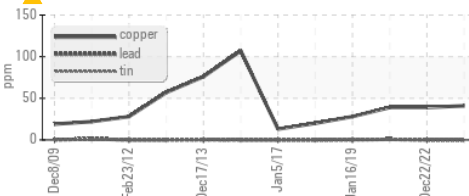


GRAPHS

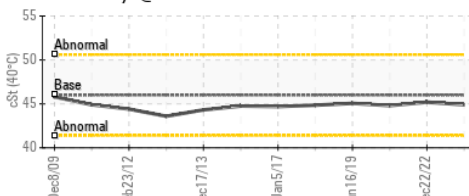
Ferrous Alloys



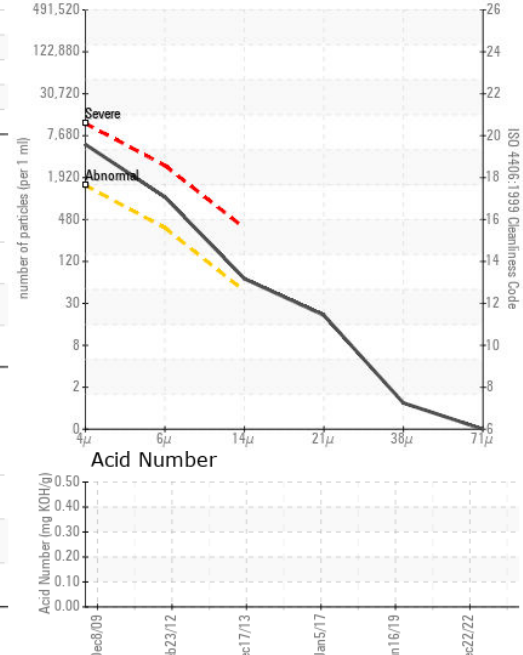
▲ Non-ferrous Metals



Viscosity @ 40°C



▲ Particle Count



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0776327 **Received** : 11 Jan 2024
Lab Number : 06057960 **Diagnosed** : 12 Jan 2024
Unique Number : 10829342 **Diagnostician** : Doug Bogart
Test Package : IND 2

PRECISION MEDICAL PRODUCTS INC
 44 DENVER RD
 DENVER, PA
 US 17517
 Contact: Mike Weaver
 m.weaver@precmed.net
 T: (717)335-3700
 F: (717)335-0007

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)