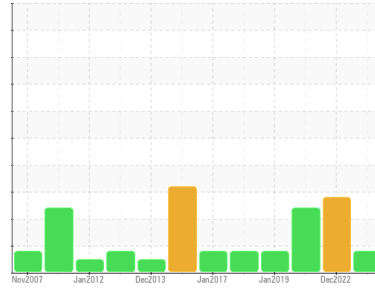




OIL ANALYSIS REPORT

Sample Rating Trend



WEAR



Machine Id
022-006-000-0000 (S/N 27212)

Component
Hydraulic System

Fluid
SHELL TELLUS S3 M 46 (22 GAL)

DIAGNOSIS

▲ Recommendation

No corrective action is recommended at this time. Resample at the next service interval to monitor.

▲ Wear

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

Contamination

There is no indication of any contamination in the component. The amount and size of particulates present in the system is acceptable.

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		WC0776326	WC0649101	WC0649111
Sample Date	Client Info		09 Jan 2024	22 Dec 2022	13 Dec 2021
Machine Age	yrs	Client Info	20	0	0
Oil Age	yrs	Client Info	2	0	0
Oil Changed	Client Info		Not Chngd	N/A	N/A
Sample Status			MARGINAL	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 >40	2	2	3
Chromium	ppm	ASTM D5185m >4	0	0	0
Nickel	ppm	ASTM D5185m >20	0	0	0
Titanium	ppm	ASTM D5185m	<1	0	0
Silver	ppm	ASTM D5185m	0	0	1
Aluminum	ppm	ASTM D5185m >4	2	0	<1
Lead	ppm	ASTM D5185m >10	<1	0	2
Copper	ppm	ASTM D5185m >60	▲ 109	▲ 95	▲ 159
Tin	ppm	ASTM D5185m >4	<1	0	<1
Antimony	ppm	ASTM D5185m	---	---	0
Vanadium	ppm	ASTM D5185m	0	0	0
Cadmium	ppm	ASTM D5185m	0	0	0

ADDITIVES

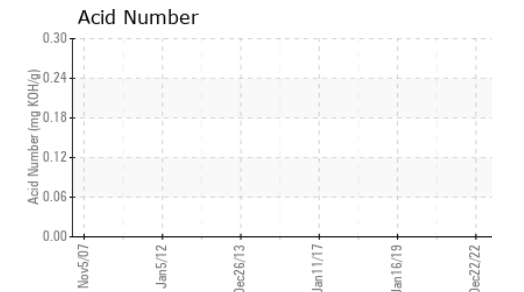
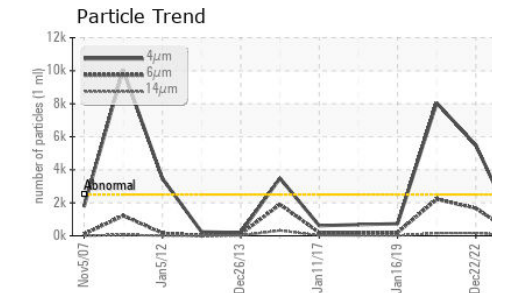
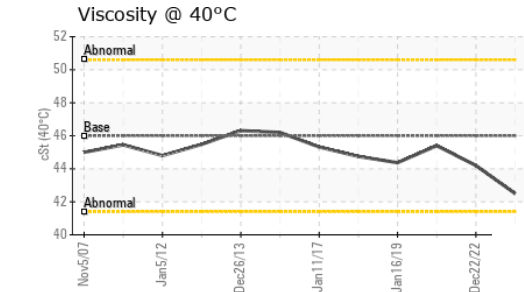
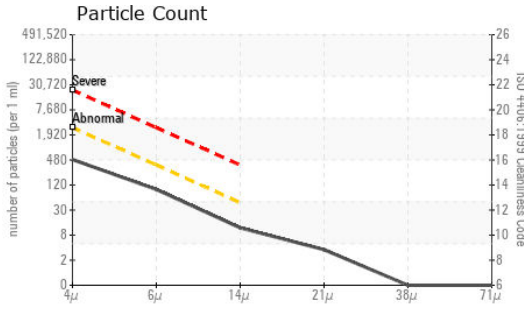
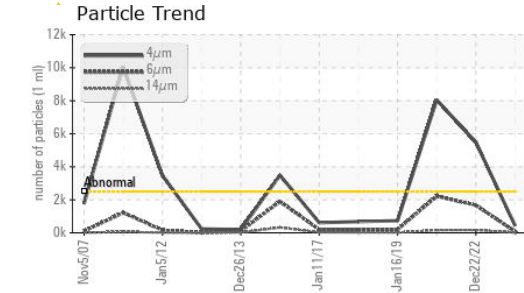
	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 0	0	0	1
Barium	ppm	ASTM D5185m 3	0	0	0
Molybdenum	ppm	ASTM D5185m 0	1	<1	2
Manganese	ppm	ASTM D5185m	<1	0	0
Magnesium	ppm	ASTM D5185m 0	3	2	4
Calcium	ppm	ASTM D5185m 0	115	113	190
Phosphorus	ppm	ASTM D5185m 106	273	257	294
Zinc	ppm	ASTM D5185m 0	234	238	259
Sulfur	ppm	ASTM D5185m	3385	3396	3702

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >20	<1	<1	2
Sodium	ppm	ASTM D5185m	0	2	3
Potassium	ppm	ASTM D5185m >20	1	0	0

FLUID CLEANLINESS

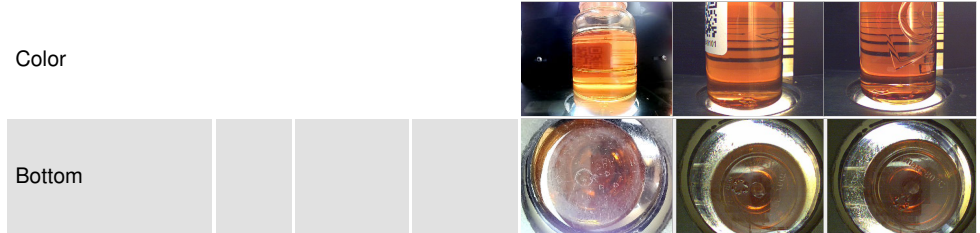
	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>2500	433	▲ 5481	▲ 8051
Particles >6µm	ASTM D7647	>320	83	▲ 1669	▲ 2217
Particles >14µm	ASTM D7647	>40	10	▲ 170	▲ 163
Particles >21µm	ASTM D7647	>10	3	▲ 46	▲ 35
Particles >38µm	ASTM D7647	>3	0	2	4
Particles >71µm	ASTM D7647	>3	0	0	0
Oil Cleanliness	ISO 4406 (c)	>18/15/12	16/14/10	▲ 20/18/15	▲ 20/18/15



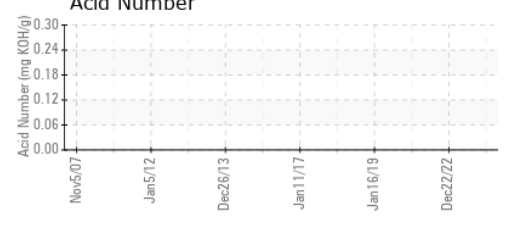
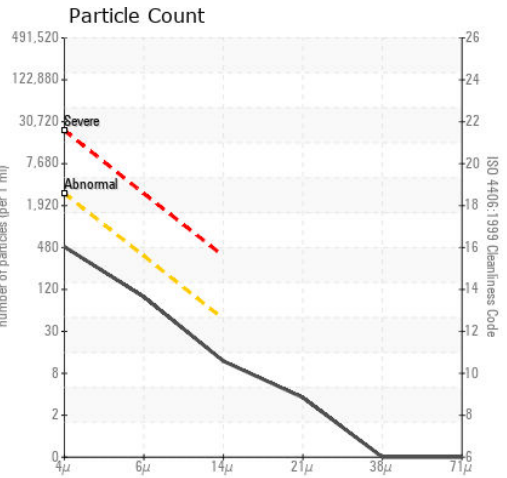
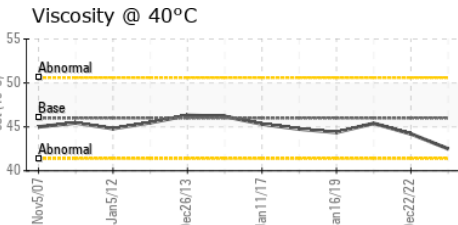
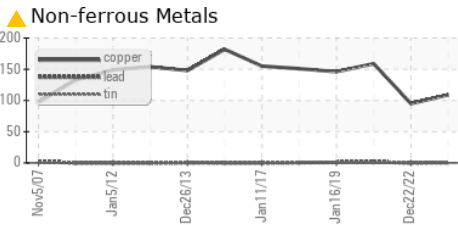
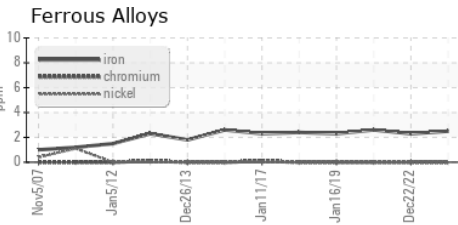
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	VLITE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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	42.5	44.2

SAMPLE IMAGES	method	limit/base	current	history1	history2
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GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0776326 **Received** : 11 Jan 2024
Lab Number : 06057964 **Diagnosed** : 12 Jan 2024
Unique Number : 10829346 **Diagnostician** : Doug Bogart
Test Package : IND 2

PRECISION MEDICAL PRODUCTS INC
 44 DENVER RD
 DENVER, PA
 US 17517
 Contact: Mike Weaver
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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)