



# OIL ANALYSIS REPORT

WEAR	<b>NORMAL</b>
CONTAMINATION	<b>ABNORMAL</b>
FLUID CONDITION	<b>NORMAL</b>

Machine Id  
**NORTH PRESS**  
Component  
**Hydraulic System**  
Fluid  
**{not provided} (--- GAL)**

## 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		<b>PE0002641</b>	PE0002640	PE0002634
Sample Date		Client Info		<b>17 Apr 2024</b>	16 Apr 2024	21 Jan 2024
Machine Age	hrs	Client Info		<b>0</b>	0	0
Oil Age	hrs	Client Info		<b>0</b>	0	0
Filter Age	hrs	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>N/A</b>	N/A	N/A
Filter Changed		Client Info		<b>N/A</b>	N/A	N/A
Sample Status				<b>ABNORMAL</b>	ABNORMAL	ABNORMAL

## WEAR

All component wear rates are normal.

PQ		ASTM D8184		<b>19</b>	15	16
Iron	ppm	ASTM D5185m	>20	<b>1</b>	1	2
Chromium	ppm	ASTM D5185m	>10	<b>&lt;1</b>	<1	2
Nickel	ppm	ASTM D5185m	>10	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m		<b>0</b>	0	0
Silver	ppm	ASTM D5185m		<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>10	<b>2</b>	2	2
Lead	ppm	ASTM D5185m	>10	<b>0</b>	0	0
Copper	ppm	ASTM D5185m	>75	<b>2</b>	2	4
Tin	ppm	ASTM D5185m	>10	<b>0</b>	0	0
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

## CONTAMINATION

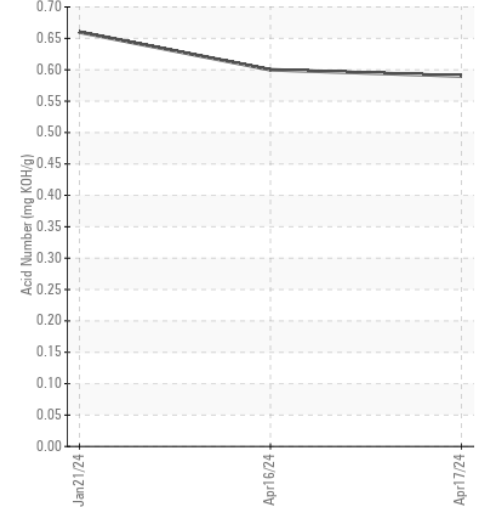
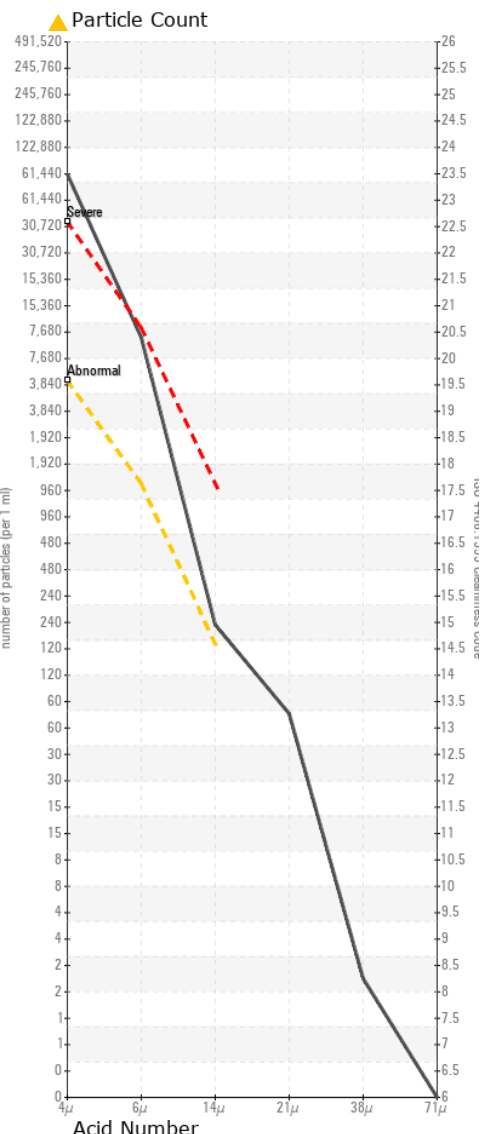
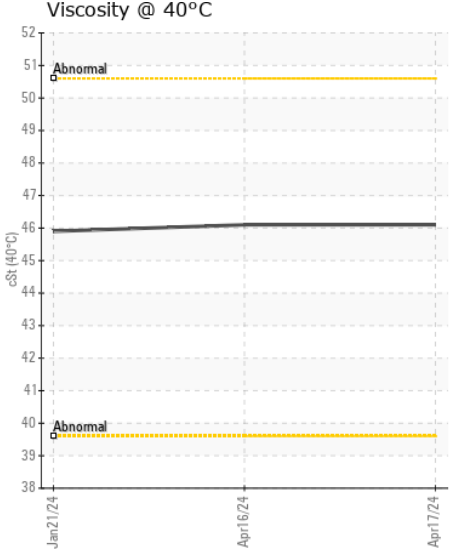
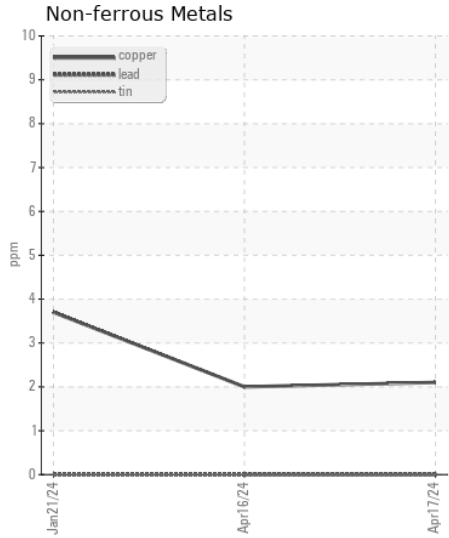
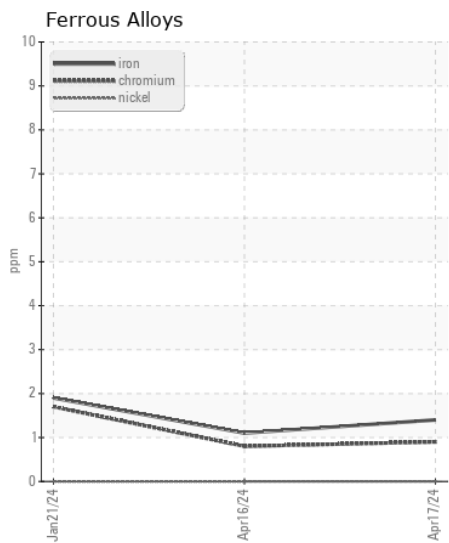
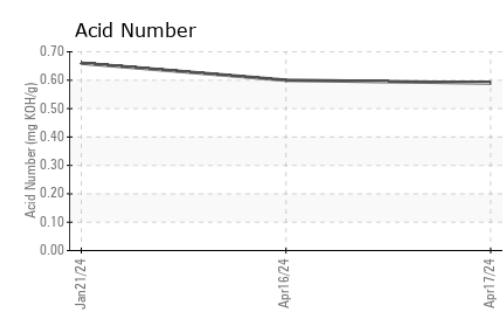
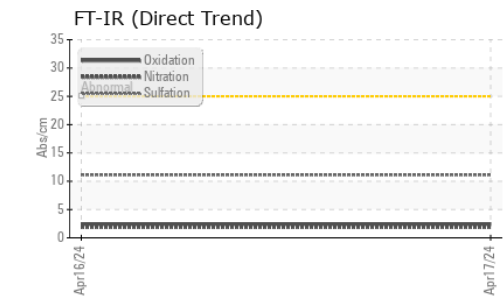
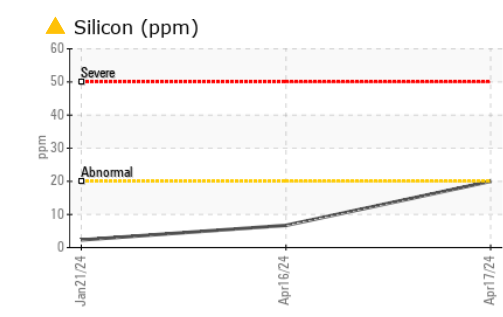
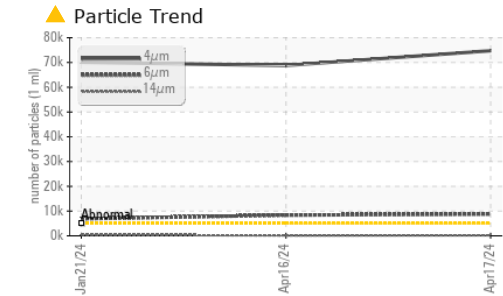
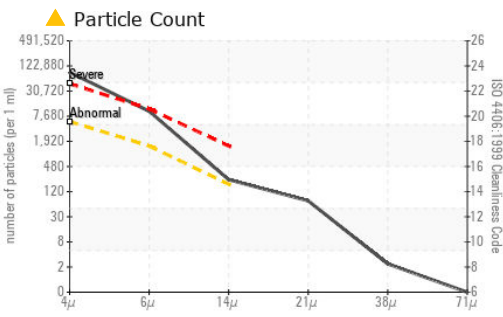
There is a high amount of particulates present in the oil. Elemental level of silicon (Si) above normal indicating ingress of seal material.

Silicon	ppm	ASTM D5185m	>20	<b>▲ 20</b>	7	2
Potassium	ppm	ASTM D5185m	>20	<b>0</b>	0	0
Water		WC Method	>0.1	<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844		<b>0</b>	0	---
Nitration	Abs/cm	*ASTM D7624		<b>1.9</b>	1.9	---
Sulfation	Abs/.1mm	*ASTM D7415		<b>11.1</b>	11.1	---
Particles >4µm		ASTM D7647	>5000	<b>▲ 74750</b>	▲ 68790	▲ 70083
Particles >6µm		ASTM D7647	>1300	<b>▲ 8793</b>	▲ 8354	▲ 6870
Particles >14µm		ASTM D7647	>160	<b>▲ 205</b>	142	▲ 358
Particles >21µm		ASTM D7647	>40	<b>▲ 64</b>	39	▲ 136
Particles >38µm		ASTM D7647	>10	<b>2</b>	2	8
Particles >71µm		ASTM D7647	>3	<b>0</b>	0	0
Oil Cleanliness		ISO 4406 (c)	>19/17/14	<b>▲ 23/20/15</b>	▲ 23/20/14	▲ 23/20/16
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	*Visual	>0.1	<b>NEG</b>	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 D5185m		<b>&lt;1</b>	1	1
Boron	ppm	ASTM D5185m		<b>4</b>	5	6
Barium	ppm	ASTM D5185m		<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>186</b>	182	221
Manganese	ppm	ASTM D5185m		<b>0</b>	0	<1
Magnesium	ppm	ASTM D5185m		<b>0</b>	0	<1
Calcium	ppm	ASTM D5185m		<b>23</b>	45	28
Phosphorus	ppm	ASTM D5185m		<b>497</b>	507	480
Zinc	ppm	ASTM D5185m		<b>481</b>	489	484
Sulfur	ppm	ASTM D5185m		<b>1564</b>	1638	1495
Oxidation	Abs/.1mm	*ASTM D7414		<b>2.4</b>	2.4	---
Acid Number (AN)	mg KOH/g	ASTM D8045		<b>0.59</b>	0.60	0.66
Visc @ 40°C	cSt	ASTM D445		<b>46.1</b>	46.1	45.9



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : PE0002641 **Received** : 26 Apr 2024 4049 CARSON AVE HAZELGREEN RD NE  
**Lab Number** : 06161344 **Tested** : 29 Apr 2024 SALEM, OR  
**Unique Number** : 10996767 **Diagnosed** : 30 Apr 2024 - Jonathan Hester US 97305  
**Test Package** : PLANT ( Additional Tests: FT-IR, ICP, KV40, OxidationStability, PQ, PrtCount, SCRTAC) **Service Manager**  
 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)