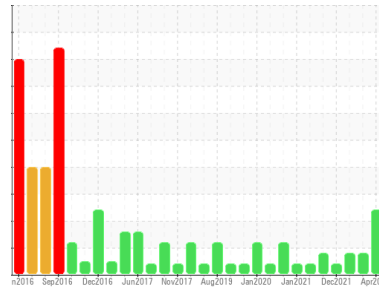




OIL ANALYSIS REPORT

Sample Rating Trend



Machine Id
7101
 Component
Hydraulic System
 Fluid
 {not provided} (--- GAL)

DIAGNOSIS

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

Wear
 All component wear rates are normal.

Contamination
 There is a high amount of silt (particulates < 14 microns in size) present in the oil. Elemental level of silicon (Si) above normal.

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

SAMPLE INFORMATION	method	limit/base	current	history1	history2
Sample Number	Client Info		PTK0001407	PTK0000357	PTK0001283
Sample Date	Client Info		19 Apr 2024	09 Nov 2023	23 Nov 2022
Machine Age	wks	Client Info	0	0	0
Oil Age	wks	Client Info	0	0	0
Oil Changed	Client Info		N/A	N/A	N/A
Sample Status			ABNORMAL	ABNORMAL	ABNORMAL

CONTAMINATION	method	limit/base	current	history1	history2
Water	WC Method	>0.1	NEG	NEG	NEG

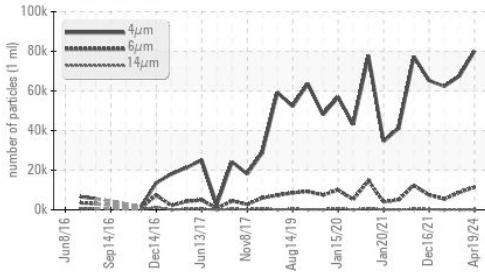
WEAR METALS	method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m	>20	7	3	3
Chromium	ppm	ASTM D5185m	>10	<1	0	0
Nickel	ppm	ASTM D5185m	>10	1	0	<1
Titanium	ppm	ASTM D5185m		<1	<1	0
Silver	ppm	ASTM D5185m		<1	0	0
Aluminum	ppm	ASTM D5185m	>10	5	3	<1
Lead	ppm	ASTM D5185m	>10	1	0	0
Copper	ppm	ASTM D5185m	>75	1	0	0
Tin	ppm	ASTM D5185m	>10	1	0	0
Antimony	ppm	ASTM D5185m		---	---	---
Vanadium	ppm	ASTM D5185m		<1	0	0
Cadmium	ppm	ASTM D5185m		<1	0	0

ADDITIVES	method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185m		27	27	22
Barium	ppm	ASTM D5185m		<1	0	0
Molybdenum	ppm	ASTM D5185m		1	0	<1
Manganese	ppm	ASTM D5185m		<1	<1	0
Magnesium	ppm	ASTM D5185m		2	3	1
Calcium	ppm	ASTM D5185m		12	0	3
Phosphorus	ppm	ASTM D5185m		333	309	341
Zinc	ppm	ASTM D5185m		8	0	1
Sulfur	ppm	ASTM D5185m		18924	15607	19511

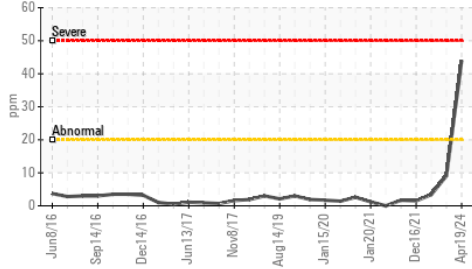
CONTAMINANTS	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m	>20	▲ 44	9	3
Sodium	ppm	ASTM D5185m		3	2	<1
Potassium	ppm	ASTM D5185m	>20	2	2	<1

FLUID CLEANLINESS	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647		80186	67498	62314
Particles >6µm	ASTM D7647	>2500	▲ 11420	▲ 8845	▲ 5370
Particles >14µm	ASTM D7647	>320	123	74	75
Particles >21µm	ASTM D7647	>80	21	10	14
Particles >38µm	ASTM D7647	>20	0	0	1
Particles >71µm	ASTM D7647	>4	0	0	0
Oil Cleanliness	ISO 4406 (c)	>18/15	▲ 21/14	▲ 20/13	▲ 20/13

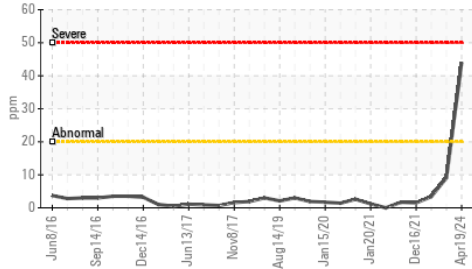
▲ Particle Trend



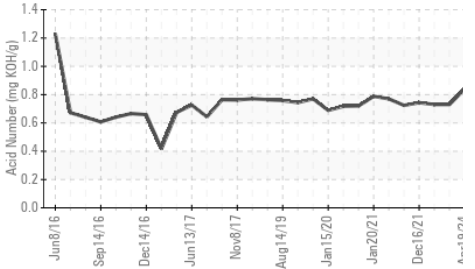
▲ Silicon (ppm)



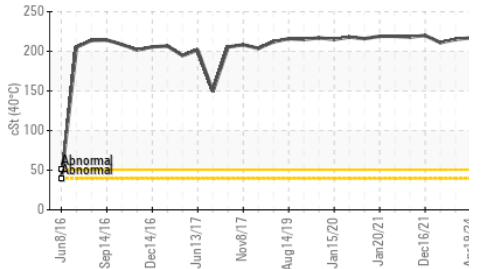
▲ Silicon (ppm)



Acid Number



Viscosity @ 40°C



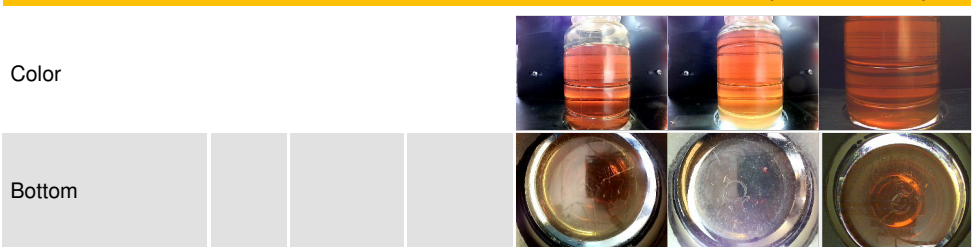
FLUID DEGRADATION

method	limit/base	current	history1	history2
Acid Number (AN) mg KOH/g	ASTM D8045	0.84	0.73	0.73
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	NEG	NEG	NEG
Free Water	scalar *Visual	NEG	NEG	NEG

FLUID PROPERTIES

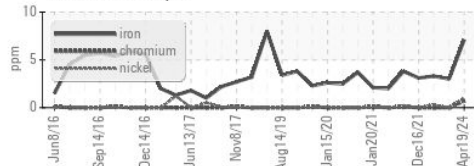
method	limit/base	current	history1	history2
Visc @ 40°C cSt	ASTM D445	217	215	211

SAMPLE IMAGES

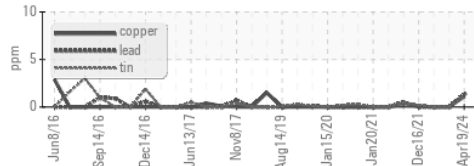


GRAPHS

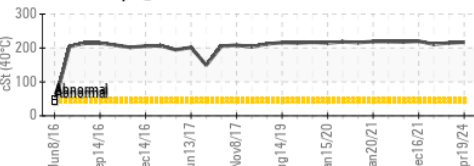
Ferrous Alloys



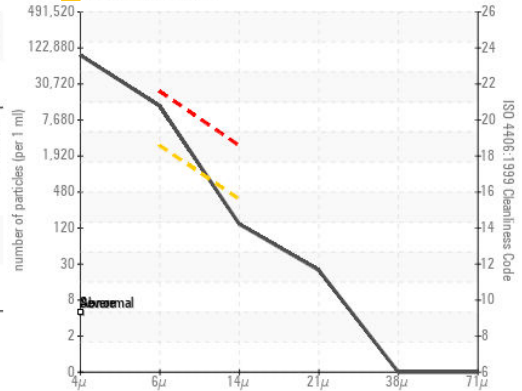
Non-ferrous Metals



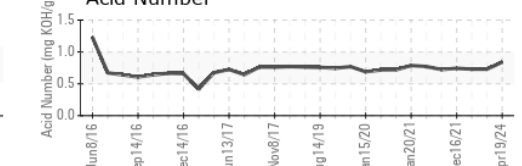
Viscosity @ 40°C



▲ Particle Count



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513

Sample No. : PTK0001407

Lab Number : 06159783

Unique Number : 10995206

Test Package : MOB 2

Received : 24 Apr 2024

Tested : 25 Apr 2024

Diagnosed : 26 Apr 2024 - Don Baldrige

GRAPHIC PACKAGING

1500 NICHOLAS BLVD

ELK GROVE, IL

US 60017

Contact: TONY HILDY

anthonyhildy@graphicpkg.com

T: (847)437-1700

F:

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)