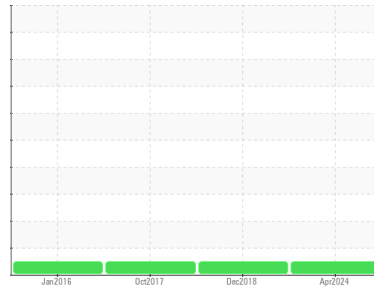


OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id
SCREW PUMP 1

Component
Gearbox

Fluid
FUCHS RENOLIN UNISYN CKC ISO 320 (48 GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

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			PCAI2002630	PCAI2001443	PCAI2001852
Sample Date	Client Info			14 Apr 2024	19 Dec 2018	04 Oct 2017
Machine Age	yrs	Client Info		0	6	6
Oil Age	yrs	Client Info		0	0	0
Oil Changed	Client Info			N/A	Not Chngd	Not Chngd
Sample Status				NORMAL	NORMAL	NORMAL

CONTAMINATION		method	limit/base	current	history1	history2
Water	WC Method		>0.2	NEG	NEG	NEG

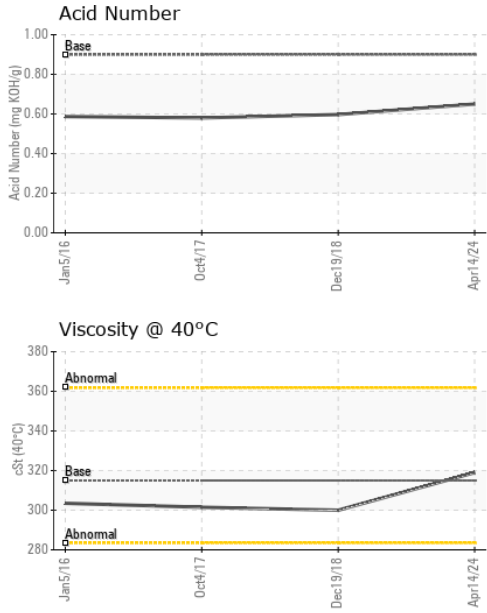
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>200	11	14	3
Chromium	ppm	ASTM D5185m	>15	<1	0	0
Nickel	ppm	ASTM D5185m	>15	<1	<1	0
Titanium	ppm	ASTM D5185m		<1	0	0
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>25	2	0	<1
Lead	ppm	ASTM D5185m	>100	<1	<1	2
Copper	ppm	ASTM D5185m	>200	<1	<1	0
Tin	ppm	ASTM D5185m	>25	<1	<1	0
Antimony	ppm	ASTM D5185m	>5	---	0	0
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	25	6	6	2
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		<1	0	<1
Manganese	ppm	ASTM D5185m		<1	0	<1
Magnesium	ppm	ASTM D5185m		1	<1	0
Calcium	ppm	ASTM D5185m	17	4	1	3
Phosphorus	ppm	ASTM D5185m	200	476	300	291
Zinc	ppm	ASTM D5185m		3	3	5
Sulfur	ppm	ASTM D5185m	5000	9316	4072	1880

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>50	1	1	1
Sodium	ppm	ASTM D5185m		0	<1	<1
Potassium	ppm	ASTM D5185m	>20	<1	0	<1

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.9	0.65	0.597	0.580

OIL ANALYSIS REPORT

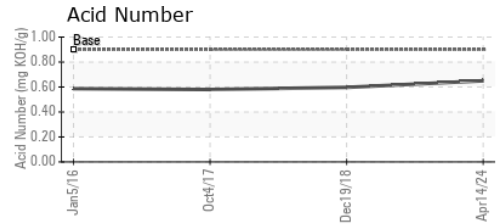
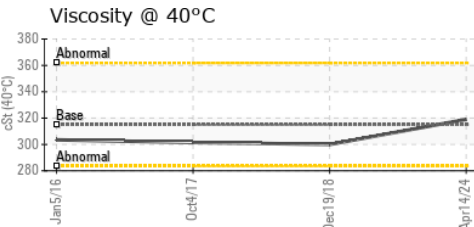
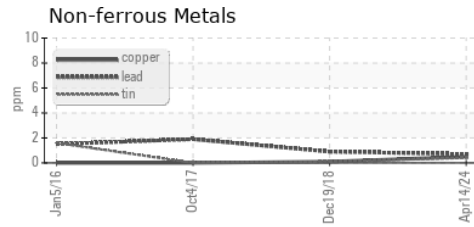
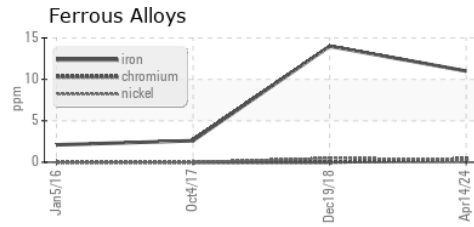


VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445 315	319	300.0	301.5

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color			no image		
Bottom			no image		

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCAI2002630 **Received** : 12 Apr 2024
Lab Number : **06148119** **Tested** : 15 Apr 2024
Unique Number : 10978197 **Diagnosed** : 17 Apr 2024 - Jonathan Hester
Test Package : IND 2

LOWELL REGIONAL WASTE WATER UTILITY
 451 FIRST ST BLVD, ROUTE 110
 LOWELL, MA
 US 01850
 Contact: FRED HAMEL
 fhamel@lowellma.gov
 T: (978)606-8483
 F: (978)441-9578

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)