OIL ANALYSIS REPORT

Sample Rating Trend

ISO

Machine Id
INDUSTRIAL LUBRICANT 15W40 BULK
Component
Tank New (Unused) Oil
Fluid
{not provided} (--- LTR)

DIAGNOSIS

Recommendation
This is a baseline read-out on the submitted sample. Please note that this is a corrected copy for laboratory data updates for elements.

Contamination
There is a high amount of particulates present in the oil.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**KL0009579**	---	---
Sample Date		Client Info		**12 Jan 2023**	---	---
Machine Age	mls	Client Info		**0**	---	---
Oil Age	mls	Client Info		**0**	---	---
Oil Changed		Client Info		**N/A**	---	---
Sample Status				**ABNORMAL**	---	---

CONTAMINATION		method	limit/base	current	history1	history2
Water		WC Method		**NEG**	---	---

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m		**2**	---	---
Chromium	ppm	ASTM D5185m		**<1**	---	---
Nickel	ppm	ASTM D5185m		**<1**	---	---
Titanium	ppm	ASTM D5185m		**0**	---	---
Silver	ppm	ASTM D5185m		**<1**	---	---
Aluminum	ppm	ASTM D5185m		**1**	---	---
Lead	ppm	ASTM D5185m		**1**	---	---
Copper	ppm	ASTM D5185m		**0**	---	---
Tin	ppm	ASTM D5185m		**<1**	---	---
Vanadium	ppm	ASTM D5185m		**<1**	---	---
Cadmium	ppm	ASTM D5185m		**0**	---	---

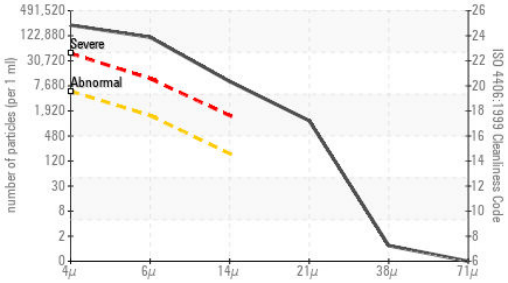
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		**315**	---	---
Barium	ppm	ASTM D5185m		**0**	---	---
Molybdenum	ppm	ASTM D5185m		**56**	---	---
Manganese	ppm	ASTM D5185m		**<1**	---	---
Magnesium	ppm	ASTM D5185m		**341**	---	---
Calcium	ppm	ASTM D5185m		**1521**	---	---
Phosphorus	ppm	ASTM D5185m		**1005**	---	---
Zinc	ppm	ASTM D5185m		**980**	---	---
Sulfur	ppm	ASTM D5185m		**3760**	---	---

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m		**5**	---	---
Sodium	ppm	ASTM D5185m		**2**	---	---
Potassium	ppm	ASTM D5185m	>20	**5**	---	---

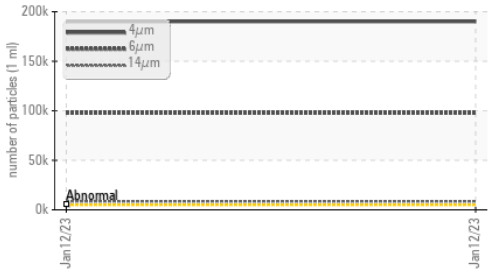
FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>5000	▲ **190094**	---	---
Particles >6µm		ASTM D7647	>1300	▲ **97672**	---	---
Particles >14µm		ASTM D7647	>160	▲ **8502**	---	---
Particles >21µm		ASTM D7647	>40	▲ **978**	---	---
Particles >38µm		ASTM D7647	>10	**1**	---	---
Particles >71µm		ASTM D7647	>3	**0**	---	---
Oil Cleanliness		ISO 4406 (c)	>19/17/14	▲ **25/24/20**	---	---

OIL ANALYSIS REPORT

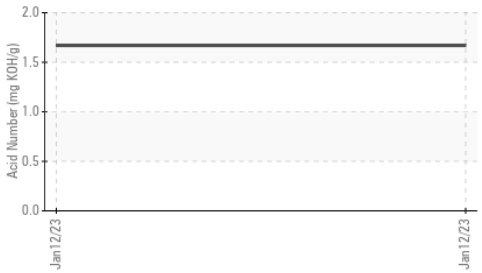
Particle Count



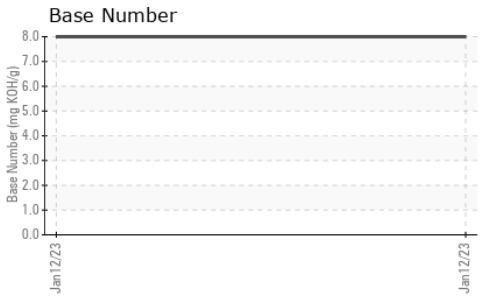
Particle Trend



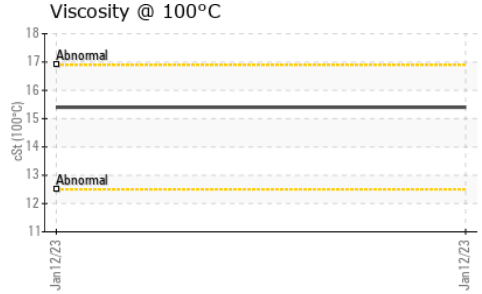
Acid Number



Base Number



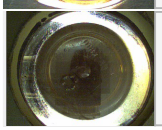
Viscosity @ 100°C



FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		**1.67**	---	---
Base Number (BN)	mg KOH/g	ASTM D2896		**8.00**	---	---

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

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445		**115**	---	---
Visc @ 100°C	cSt	ASTM D445		**15.4**	---	---
Viscosity Index (VI)	Scale	ASTM D2270		**140**	---	---

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

Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KL0009579
Lab Number : 05740141
Unique Number : 10294740
Test Package : MOB 2 (Additional Tests: FT-IR, ICP-NewOil, KV100, PrtCount, TBN, VI)

Received : 16 Jan 2023
Tested : 15 Feb 2023
Diagnosed : 15 Feb 2023 - Doug Bogart

PUREFRAC LLC
13216 TX-191
MIDLAND, TX
US 79707
Contact: 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)

T:
F: