

OIL ANALYSIS REPORT

KA-63201 "B"

Component

Heat Transfer Fluid

HEAT TRANSFER FLUID ISO 32 (--- GAL)

Sample Rating Trend October April 19 A



DIAGNOSIS

Recommendation

Resample at the next service interval to monitor. Please specify the brand, type, and viscosity of the oil on your next sample. LUBE360 Oil Diagnostics recommends using HTTFL sample kits for heat transfer fluids. Please contact us at 1-800-268-2131 and provide a purchase order for \$245 + HST in order to conduct additional testing (boiling points @ 10%, 50%, and 90%, percent boiling < 335°C, and solids) to determine the suitability for continued use. Please contact your representative for information regarding the proper sampling kits for your service.

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination in the component(unconfirmed).

Fluid Condition

The AN level is acceptable for this fluid. The condition of the fluid is acceptable for the time in service (unconfirmed).

0e2015 Au2019 Au2023								
SAMPLE INFOR	DMATIO		limit/base			hiotom ()		
	RIVIA I IO		imilybase	current	history1	history2		
Sample Number		Client Info		PC0061562	PC	PC		
Sample Date		Client Info		11 Aug 2023	05 Apr 2019	18 Oct 2016		
Machine Age	hrs	Client Info		2100	0	0		
Oil Age	hrs	Client Info		0	0	0		
Oil Changed		Client Info		N/A	N/A	N/A		
Sample Status				NORMAL	NORMAL	NORMAL		
WEAR META	LS	method	limit/base	current	history1	history2		
Iron	ppm	ASTM D5185(m)	>200	1	0	<1		
Chromium	ppm	ASTM D5185(m)	>21	0	0	0		
Nickel	ppm	ASTM D5185(m)	>21	<1	0	0		
Titanium	ppm	ASTM D5185(m)	>21	0	0	0		
Silver	ppm	ASTM D5185(m)	>21	0	0	0		
Aluminum	ppm	ASTM D5185(m)	>21	0	0	0		
Lead	ppm	ASTM D5185(m)	>21	0	0	0		
Copper	ppm	ASTM D5185(m)	>21	<1	0	<1		
Tin	ppm	ASTM D5185(m)	>21	0	0	0		
Antimony	ppm	ASTM D5185(m)	>21	0	0	0		
Vanadium	ppm	ASTM D5185(m)		0	0	0		
Beryllium	ppm	ASTM D5185(m)		0	0	0		
Cadmium	ppm	ASTM D5185(m)		0	0	0		
ADDITIVES		method	limit/base	current	history1	history2		
Boron	ppm	ASTM D5185(m)	5	<1	0	0		
Barium	ppm	ASTM D5185(m)	5	0	0	0		
Molybdenum	ppm	ASTM D5185(m)	5	0	0	0		
Manganese	ppm	ASTM D5185(m)		0	<1	0		
Magnesium	ppm	ASTM D5185(m)	5	0	<1	0		
Calcium	ppm	ASTM D5185(m)	5	<1	1	3		
Phosphorus	ppm	ASTM D5185(m)	250	39	19	122		
Zinc	ppm	ASTM D5185(m)	5	2	2	4		
Sulfur	ppm	ASTM D5185(m)	3000	689	514	37		
Lithium	ppm	ASTM D5185(m)		<1	0	<1		
CONTAMINA	NTS	method	limit/base	current	history1	history2		
Silicon	ppm	ASTM D5185(m)	>25	<1	<1	<1		
Sodium	ppm	ASTM D5185(m)	>21	<1	<1	<1		
Potassium	ppm	ASTM D5185(m)	>20	<1	0	0		
ELLUD DE CO								

0.04

FLUID DEGRADATION method

Acid Number (AN)

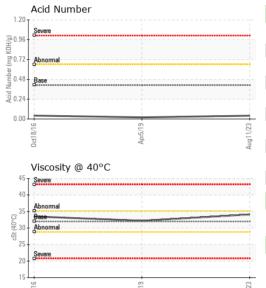
mg KOH/g ASTM D974* 0.41

0.020

0.041



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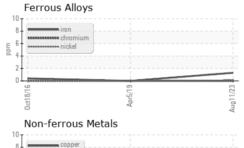


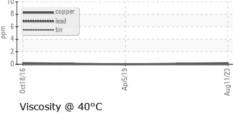
VISUAL		method				history2
White Metal	scalar	Visual*	NONE	NONE	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	NONE	NONE	NONE
Precipitate	scalar	Visual*	NONE	NONE	NONE	NONE
Silt	scalar	Visual*	NONE	NONE	NONE	NONE
Debris	scalar	Visual*	NONE	NONE	NONE	VLITE
Sand/Dirt	scalar	Visual*	NONE	NONE	NONE	NONE
Appearance	scalar	Visual*	NORML	NORML	NORML	NORML
Odor	scalar	Visual*	NORML	NORML	NORML	NORML
Emulsified Water	scalar	Visual*	>0.0601	NEG	NEG	NEG
Free Water	scalar	Visual*		NEG	NEG	NEG
FLUID PROPE	RTIES	method	limit/base	current	history1	history2
					•	•
Visc @ 40°C	cSt	ASTM D7279(m)	32	34.1	32.2	33.5

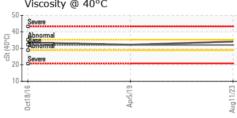
SAMPLE IMAGES Color

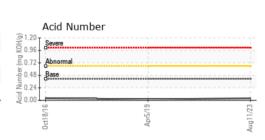


GRAPHS











CALA ISO 17025:2017 Accredited Laboratory

Laboratory Sample No. Lab Number Unique Number : 5643176

Test Package : MAR 2

: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 : PC0061562 : 02582111

Received Diagnosed

: 13 Sep 2023 : 14 Sep 2023 Diagnostician : Kevin Marson

To discuss this sample report, contact Customer Service at 1-800-268-2131. Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab. Validity of results and interpretation are based on the sample and information as supplied.

Suncor - Terra Nova Projects

Scotia Centre, 235 Water Strret St. John's, NL CA A1C 1B6 Contact: Josh Hynes joshynes@suncor.com T: (709)778-3575

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