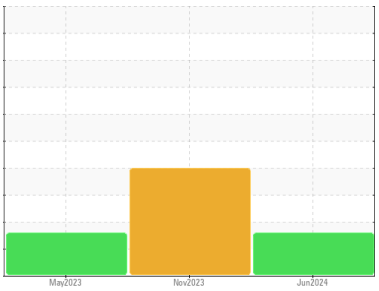
KIMBRO FLUID SOLUTIONS

OIL ANALYSIS REPORT

Area
HOTLINE/120 MILL
Machine Id
#1 PINCH ROLL REDUCER BTM 1415-004-0010 BTM
Component
Bottom Gearbox
Fluid
CITGO COMPOUND EP 320 (20 GAL)

Sample Rating Trend



VISCOSITY

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.

Fluid Condition
Viscosity of sample indicates oil is within ISO 460 range, advise investigate. Confirm oil type. The AN level is acceptable for this fluid.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**KFS0004448**	KFS0004814	KFS0003344
Sample Date		Client Info		**19 Jun 2024**	10 Nov 2023	31 May 2023
Machine Age	hrs	Client Info		**0**	0	0
Oil Age	hrs	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	>0.2	**NEG**	NEG	NEG

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>200	**<1**	5	28
Chromium	ppm	ASTM D5185m	>15	**0**	0	0
Nickel	ppm	ASTM D5185m	>15	**0**	0	0
Titanium	ppm	ASTM D5185m		**0**	0	<1
Silver	ppm	ASTM D5185m		**0**	0	0
Aluminum	ppm	ASTM D5185m	>25	**<1**	<1	<1
Lead	ppm	ASTM D5185m	>100	**0**	0	0
Copper	ppm	ASTM D5185m	>200	**0**	2	2
Tin	ppm	ASTM D5185m	>25	**0**	0	0
Vanadium	ppm	ASTM D5185m		**0**	0	0
Cadmium	ppm	ASTM D5185m		**0**	0	0

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		**0**	0	2
Barium	ppm	ASTM D5185m		**0**	0	0
Molybdenum	ppm	ASTM D5185m		**0**	0	0
Manganese	ppm	ASTM D5185m		**0**	0	<1
Magnesium	ppm	ASTM D5185m		**0**	2	0
Calcium	ppm	ASTM D5185m		**<1**	4	<1
Phosphorus	ppm	ASTM D5185m		**122**	116	95
Zinc	ppm	ASTM D5185m		**0**	9	0
Sulfur	ppm	ASTM D5185m		**6617**	5274	6628

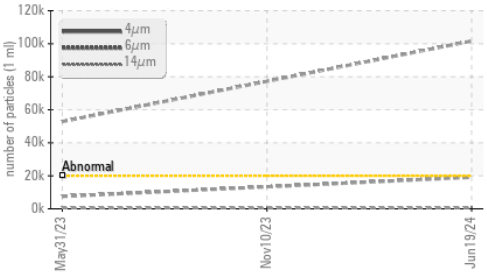
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>50	**<1**	<1	3
Sodium	ppm	ASTM D5185m		**0**	0	<1
Potassium	ppm	ASTM D5185m	>20	**<1**	1	<1

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>20000	▲ **101633**	---	▲ 52875
Particles >6µm		ASTM D7647	>5000	▲ **19136**	---	● 7526
Particles >14µm		ASTM D7647	>640	**473**	---	395
Particles >21µm		ASTM D7647	>160	**97**	---	75
Particles >38µm		ASTM D7647	>40	**5**	---	4
Particles >71µm		ASTM D7647	>10	**1**	---	0
Oil Cleanliness		ISO 4406 (c)	>21/19/16	▲ **24/21/16**	---	▲ 23/20/16

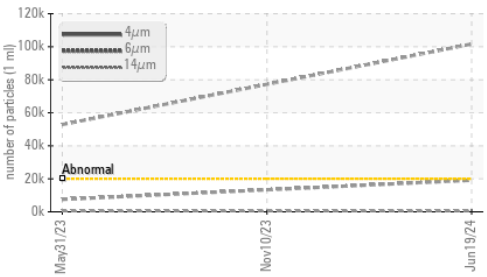
FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		**0.36**	0.36	0.35

OIL ANALYSIS REPORT

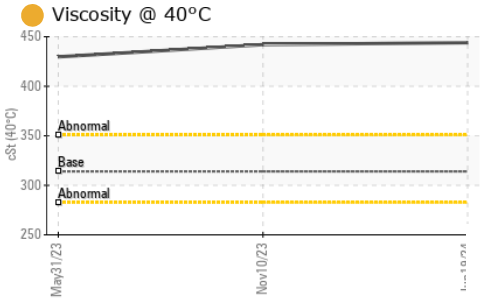
Particle Trend



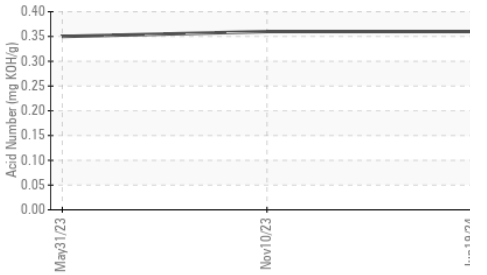
Particle Trend



Viscosity @ 40°C

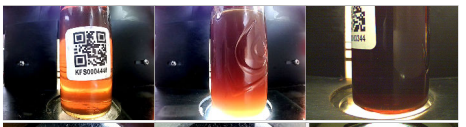


Acid Number



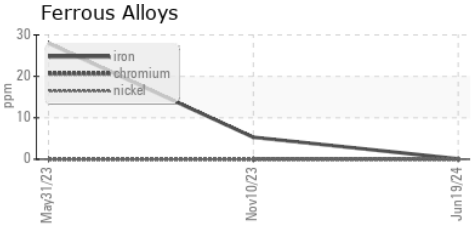
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Precipitate	scalar	*Visual	NONE	**NONE**	NONE	NONE
Silt	scalar	*Visual	NONE	**NONE**	▲ MODER	NONE
Debris	scalar	*Visual	NONE	**NONE**	▲ MODER	LIGHT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

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	314	● **444**	● 442	● 429.7

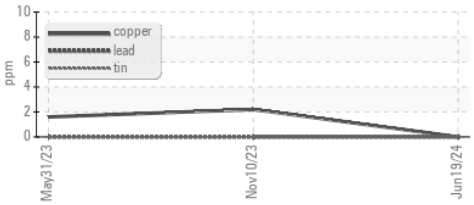
SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

GRAPHS

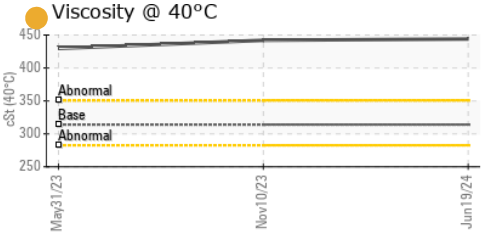
Ferrous Alloys



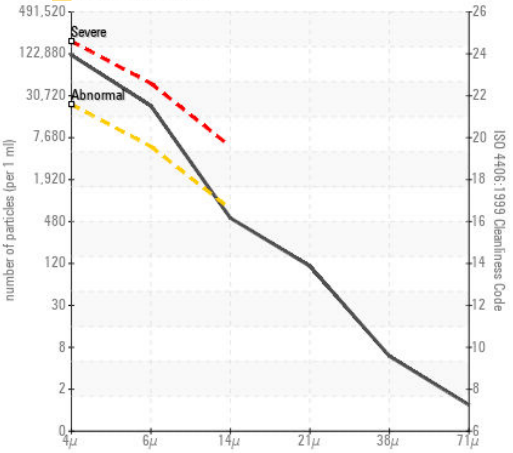
Non-ferrous Metals



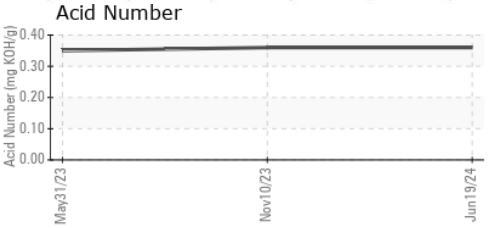
Viscosity @ 40°C



Particle Count



Acid Number



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KFS0004448
Lab Number : 06219645
Unique Number : 11097842
Test Package : IND 2 (Additional Tests: PrtCount)

Received : 25 Jun 2024
Tested : 26 Jun 2024
Diagnosed : 26 Jun 2024 - Don Baldridge

Certificate L2367

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)

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