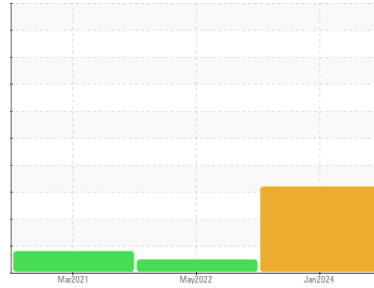




OIL ANALYSIS REPORT

Sample Rating Trend



WEAR



Machine Id
STUFF MEZZ 1 - STUFF LINE 3

Component
Hydraulic System

Fluid
ESSO NUTO H ISO 46 (--- GAL)

DIAGNOSIS

Recommendation

We recommend you service the filters on this component. We advise an early resample to confirm this situation. We were unable to perform a particle count due to a high concentration of particles present in this sample.

Wear

The iron level is abnormal.

Contamination

Moderate concentration of visible dirt/debris present in the oil.

Fluid Condition

The oil viscosity is higher than normal. This plus the additive levels indicates the addition of a different brand or type of oil. Confirmed. The AN level is acceptable for this fluid.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		USP0004847	USP235785	USP217776
Sample Date	Client Info		17 Jan 2024	01 May 2022	28 Mar 2021
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	NORMAL	ABNORMAL

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >20	▲ 26	<1	1
Chromium	ppm	ASTM D5185m >20	0	0	0
Nickel	ppm	ASTM D5185m >20	<1	0	0
Titanium	ppm	ASTM D5185m	<1	0	0
Silver	ppm	ASTM D5185m	0	0	1
Aluminum	ppm	ASTM D5185m >20	5	0	<1
Lead	ppm	ASTM D5185m >20	0	0	0
Copper	ppm	ASTM D5185m >20	<1	3	3
Tin	ppm	ASTM D5185m >20	0	0	0
Antimony	ppm	ASTM D5185m	---	---	0
Vanadium	ppm	ASTM D5185m	0	0	0
Cadmium	ppm	ASTM D5185m	0	0	<1

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 0	0	0	2
Barium	ppm	ASTM D5185m 0	0	0	0
Molybdenum	ppm	ASTM D5185m 0	0	0	0
Manganese	ppm	ASTM D5185m	<1	0	0
Magnesium	ppm	ASTM D5185m 5	0	0	0
Calcium	ppm	ASTM D5185m 50	▲ 0	38	46
Phosphorus	ppm	ASTM D5185m 330	▲ 96	322	326
Zinc	ppm	ASTM D5185m 410	▲ 41	414	412
Sulfur	ppm	ASTM D5185m 2700	▲ 466	2311	2499

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >15	13	1	2
Sodium	ppm	ASTM D5185m	4	0	<1
Potassium	ppm	ASTM D5185m >20	<1	<1	0
Water	%	ASTM D6304 >0.05	0.022	0.002	0.007
ppm Water	ppm	ASTM D6304 >500	228	18.0	72.4

FLUID CLEANLINESS

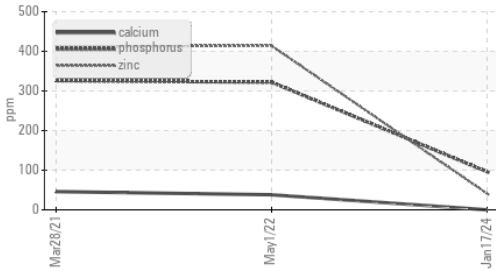
	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>5000	---	197	▲ 19718
Particles >6µm	ASTM D7647	>1300	---	39	▲ 2267
Particles >14µm	ASTM D7647	>160	---	2	75
Particles >21µm	ASTM D7647	>40	---	0	13
Particles >38µm	ASTM D7647	>10	---	0	0
Particles >71µm	ASTM D7647	>3	---	0	0
Oil Cleanliness	ISO 4406 (c)	>19/17/14	---	15/12/9	▲ 21/18/13

FLUID DEGRADATION

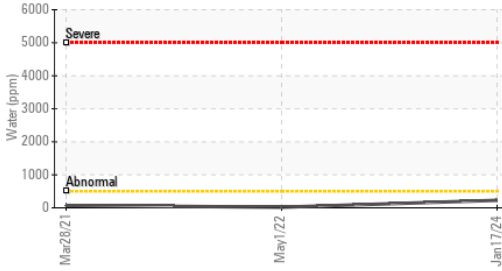
	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045 0.45	0.12	0.27	0.236

OIL ANALYSIS REPORT

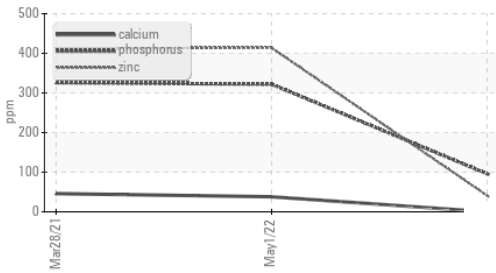
▲ Additives



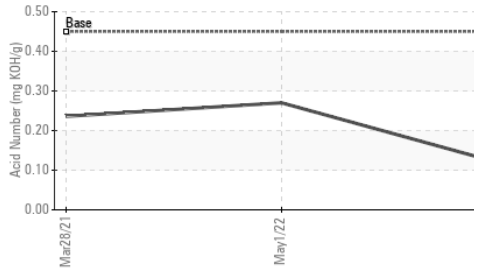
Water (KF)



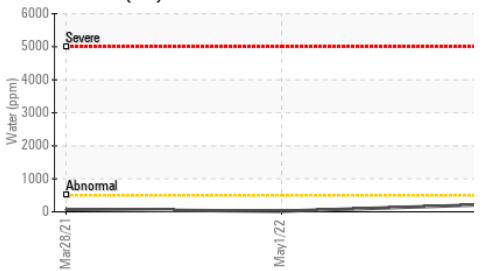
▲ Additives



Acid Number



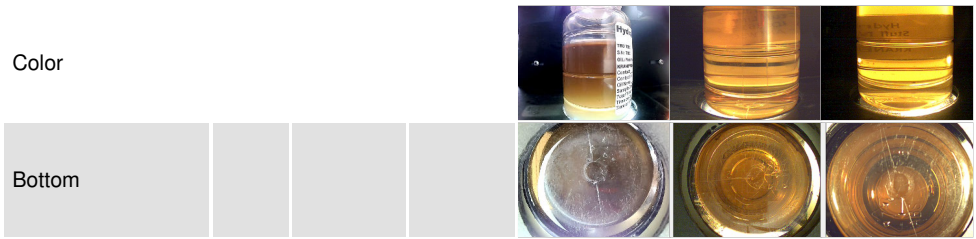
Water (KF)



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	▲ MODER	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.05	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

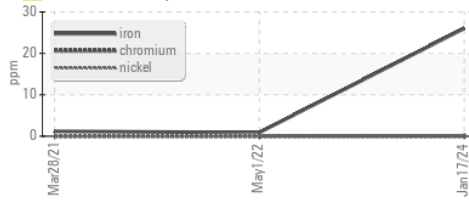
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445 46	▲ 103	49.4	48.4

SAMPLE IMAGES	method	limit/base	current	history1	history2
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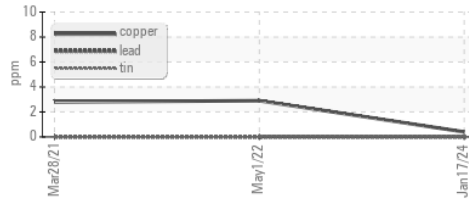


GRAPHS

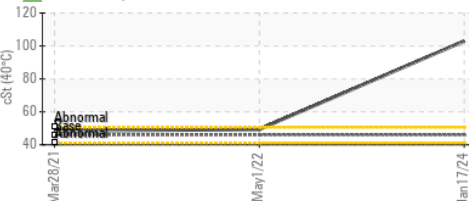
▲ Ferrous Alloys



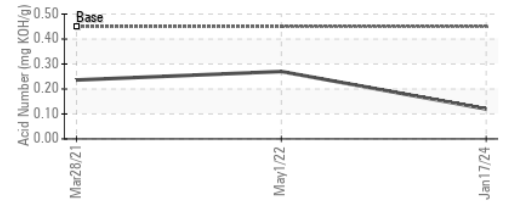
Non-ferrous Metals



▲ Viscosity @ 40°C



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : USP0004847 **Received** : 18 Jan 2024
Lab Number : 06064405 **Diagnosed** : 26 Jan 2024
Unique Number : 10835787 **Diagnostician** : Doug Bogart
Test Package : IND 2

KraftHeinz - Newberry - Plant 8335
 3704 LOUIS RICH DR
 NEWBERRY, SC
 US 29108
 Contact:

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: