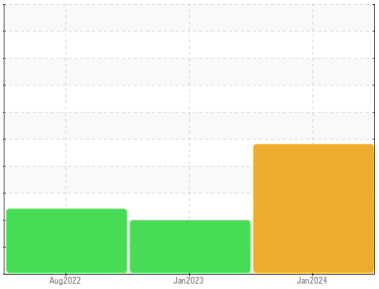
OIL ANALYSIS REPORT

Sample Rating Trend



DIRT

Area
Thermoforming
Machine Id
Line 12 (A) Slide Valve Hydraulic (S/N N/A)
Component
Hydraulic System
Fluid
SUMMIT HYPAR FG-32 (--- GAL)

DIAGNOSIS

▲ Recommendation

We recommend you service the filters on this component if applicable. Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

▲ Contamination

There is a high amount of particulates present in the oil. Elemental level of silicon (Si) above normal.

▲ Fluid Condition

Additive levels indicate the addition of a different brand, or type of oil. Viscosity of sample indicates oil is within ISO 320 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		**TO50001997**	TO50001452	TO50001124
Sample Date		Client Info		**11 Jan 2024**	02 Jan 2023	23 Aug 2022
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	ATTENTION

WEAR METALS		method	limit/base	current	history1	history2
PQ		ASTM D8184		**18**	8	---
Iron	ppm	ASTM D5185m	>20	**9**	<1	0
Chromium	ppm	ASTM D5185m	>20	**<1**	0	0
Nickel	ppm	ASTM D5185m	>20	**0**	0	0
Titanium	ppm	ASTM D5185m		**0**	0	0
Silver	ppm	ASTM D5185m		**0**	0	<1
Aluminum	ppm	ASTM D5185m	>20	**2**	0	0
Lead	ppm	ASTM D5185m	>20	**0**	0	0
Copper	ppm	ASTM D5185m	>20	**<1**	2	5
Tin	ppm	ASTM D5185m	>20	**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	0
Barium	ppm	ASTM D5185m		**3**	0	0
Molybdenum	ppm	ASTM D5185m		**0**	0	0
Manganese	ppm	ASTM D5185m		**0**	0	0
Magnesium	ppm	ASTM D5185m		**0**	<1	0
Calcium	ppm	ASTM D5185m		**0**	118	98
Phosphorus	ppm	ASTM D5185m		▲ **499**	383	315
Zinc	ppm	ASTM D5185m		**0**	371	317
Sulfur	ppm	ASTM D5185m		▲ **169**	2978	1716

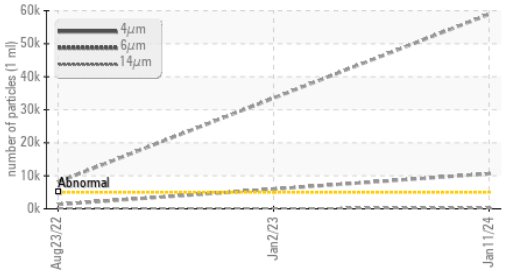
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>15	▲ **98**	▲ 16	11
Sodium	ppm	ASTM D5185m		**0**	0	1
Potassium	ppm	ASTM D5185m	>20	**<1**	2	0
Water	%	ASTM D6304	>0.05	**0.004**	0.005	0.002
ppm Water	ppm	ASTM D6304	>500	**40**	51.9	25.0

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>5000	▲ **58916**	---	▲ 8128
Particles >6µm		ASTM D7647	>1300	▲ **10630**	---	▲ 1322
Particles >14µm		ASTM D7647	>160	▲ **181**	---	▲ 168
Particles >21µm		ASTM D7647	>40	**28**	---	▲ 87
Particles >38µm		ASTM D7647	>10	**1**	---	▲ 13
Particles >71µm		ASTM D7647	>3	**1**	---	2
Oil Cleanliness		ISO 4406 (c)	>19/17/14	▲ **23/21/15**	---	▲ 20/18/15

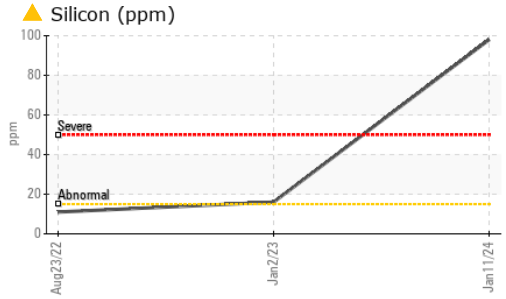
FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		**0.53**	0.41	0.39

OIL ANALYSIS REPORT

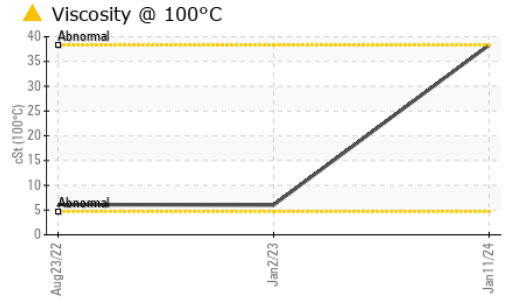
Particle Trend



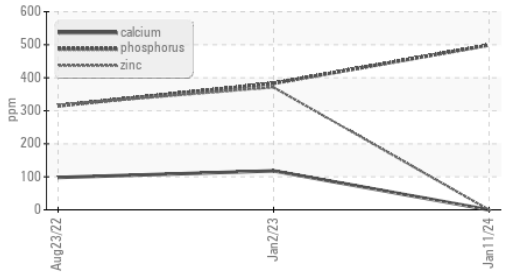
Silicon (ppm)



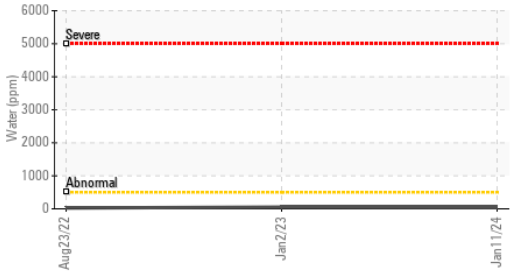
Viscosity @ 100°C



Additives

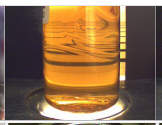
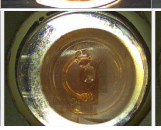
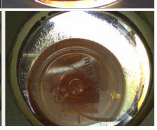


Water (KF)



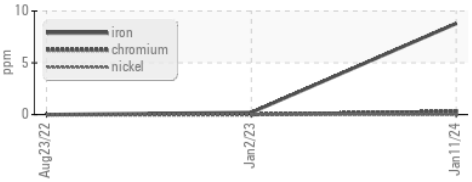
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Precipitate	scalar	*Visual	NONE	**NONE**	NONE	NONE
Silt	scalar	*Visual	NONE	**NONE**	NONE	NONE
Debris	scalar	*Visual	NONE	**NONE**	▲ MODER	LIGHT
Sand/Dirt	scalar	*Visual	NONE	**NONE**	NONE	NONE
Appearance	scalar	*Visual	NORML	**NORML**	NORML	NORML
Odor	scalar	*Visual	NORML	**NORML**	NORML	NORML
Emulsified Water	scalar	*Visual	>0.05	**NEG**	NEG	NEG
Free Water	scalar	*Visual		**NEG**	NEG	NEG

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445		▲ **320**	34.5	34.5
Visc @ 100°C	cSt	ASTM D445		▲ **38.3**	6	6.1
Viscosity Index (VI)	Scale	ASTM D2270		**170**	119	124

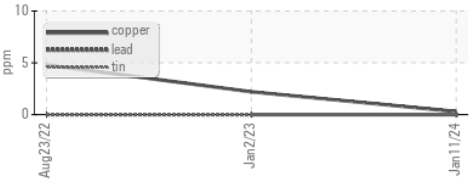
SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

GRAPHS

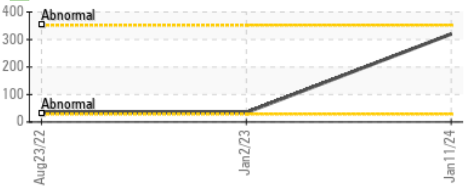
Ferrous Alloys



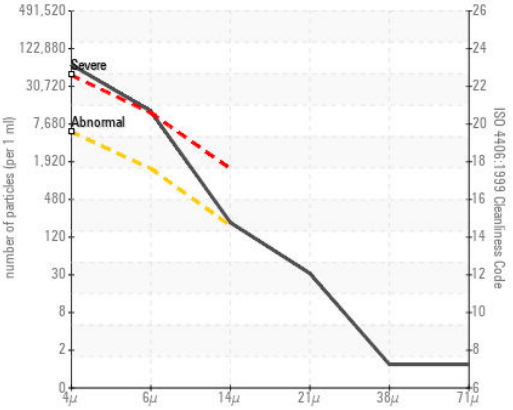
Non-ferrous Metals



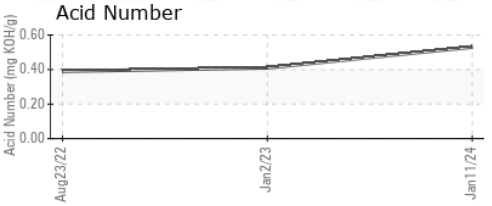
Viscosity @ 40°C



Particle Count



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : TO50001997 **Recieved** : 17 Jan 2024
Lab Number : 06063576 **Diagnosed** : 19 Jan 2024
Unique Number : 10834958 **Diagnostician** : Jonathan Hester
Test Package : IND 2 (Additional Tests: KF, KV100, PQ, VI)

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)

DART CONTAINER CORPORATION
4444 W LEADBETTER DR
DALLAS, TX
US 75236
Contact: YON PALOMINO
yon.palomino@dart.biz
T: (214)775-5673
F:

Report Id: DARDALTX [WUSCAR] 06063576 (Generated: 01/19/2024 16:43:08) Rev: 1

Submitted By: YON PALOMINO