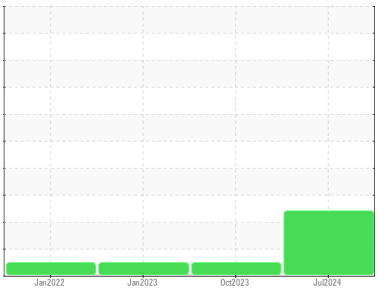
OIL ANALYSIS REPORT

OIL DIAGNOSTICS

Sample Rating Trend



DIRT

Machine Id
DT39
Component
Rear Differential
Fluid
GEAR OIL SAE 75W90 (--- GAL)

DIAGNOSIS

Recommendation
We advise that you check all areas where dirt can enter the system. The oil change at the time of sampling has been noted. Resample at the next service interval to monitor.

Wear
All component wear rates are normal.

Contamination
Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress.

Fluid Condition
The condition of the oil is acceptable for the time in service.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**PCA0116165**	PCA0107500	PCA0084975
Sample Date		Client Info		**12 Jul 2024**	11 Oct 2023	16 Jan 2023
Machine Age	mls	Client Info		**151896**	112618	26194
Oil Age	mls	Client Info		**75000**	75000	26194
Oil Changed		Client Info		**Changed**	Not Changd	Changed
Sample Status				**ABNORMAL**	NORMAL	NORMAL

CONTAMINATION		method	limit/base	current	history1	history2
Water		WC Method	>.2	**NEG**	NEG	NEG

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>500	**312**	98	161
Chromium	ppm	ASTM D5185m	>10	**2**	0	1
Nickel	ppm	ASTM D5185m	>10	**0**	0	0
Titanium	ppm	ASTM D5185m		**1**	0	<1
Silver	ppm	ASTM D5185m		**0**	0	0
Aluminum	ppm	ASTM D5185m	>25	**16**	0	2
Lead	ppm	ASTM D5185m	>25	**0**	0	0
Copper	ppm	ASTM D5185m	>100	**0**	0	<1
Tin	ppm	ASTM D5185m	>10	**0**	0	1
Antimony	ppm	ASTM D5185m	>5	**---**	---	---
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	400	**211**	223	255
Barium	ppm	ASTM D5185m	200	**0**	0	<1
Molybdenum	ppm	ASTM D5185m	12	**7**	5	0
Manganese	ppm	ASTM D5185m		**5**	3	7
Magnesium	ppm	ASTM D5185m	12	**72**	76	0
Calcium	ppm	ASTM D5185m	150	**154**	96	8
Phosphorus	ppm	ASTM D5185m	1650	**1303**	1319	1399
Zinc	ppm	ASTM D5185m	125	**118**	110	17
Sulfur	ppm	ASTM D5185m	22500	**23063**	22239	28597

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>75	**109**	10	61
Sodium	ppm	ASTM D5185m		**6**	1	6
Potassium	ppm	ASTM D5185m	>20	**4**	0	<1

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**	NONE	NONE
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	>.2	**NEG**	NEG	NEG
Free Water	scalar	*Visual		**NEG**	NEG	NEG

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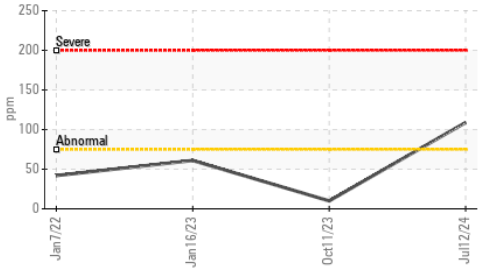
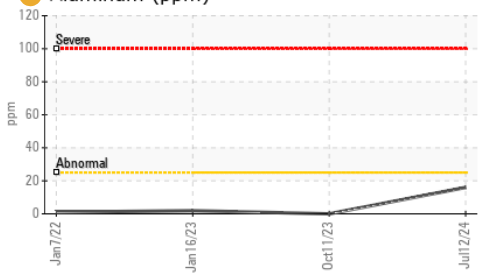
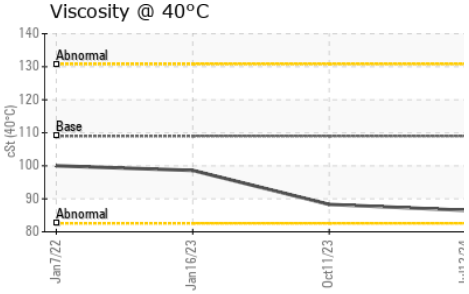
Silicon (ppm)



Aluminum (ppm)



Viscosity @ 40°C

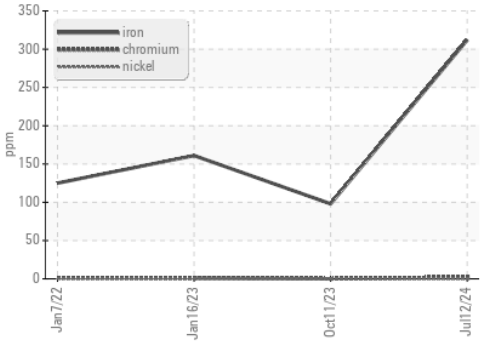


FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	109	**86.5**	88.3	98.6

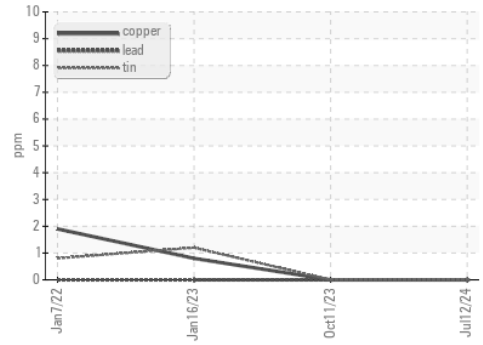
SAMPLE IMAGES	method	limit/base	current	history1	history2
Color			*no image*	*no image*	*no image*
Bottom			*no image*	*no image*	*no image*

GRAPHS

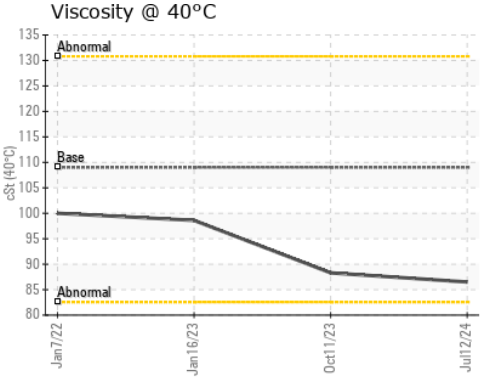
Ferrous Alloys



Non-ferrous Metals



Viscosity @ 40°C



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0116165
Lab Number : 06236580
Unique Number : 11125414
Test Package : FLEET

Received : 15 Jul 2024
Tested : 16 Jul 2024
Diagnosed : 17 Jul 2024 - Sean Felton

NW WHITE & CO - COLUMBIA DIVISION
100 INDEPENDENCE BLVD
COLUMBIA, SC
US 29210
Contact: GEORGE EDWARDS
gedwards@nwwhite.com
T:
F:

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)

Report Id: NWWCOL [WUSCAR] 06236580 (Generated: 07/17/2024 12:29:13) Rev: 1

Submitted By: Paul Riddick