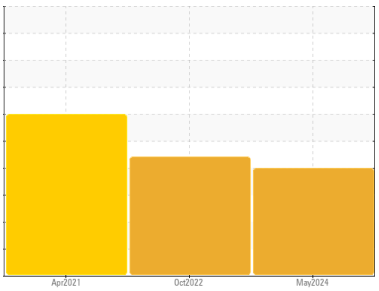
OIL ANALYSIS REPORT

Sample Rating Trend



DIRT

Machine Id
80-217
Component
Rear Left Final Drive
Fluid
CONOCO PHILLIPS POWERTRAN (--- 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. We recommend an early resample to monitor this condition.

Wear
Bearing and/or gear wear is indicated.

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		**WC0766475**	WC0619468	WC0548870
Sample Date		Client Info		**02 May 2024**	18 Oct 2022	02 Apr 2021
Machine Age	hrs	Client Info		**6923**	5863	4870
Oil Age	hrs	Client Info		**6923**	730	1000
Oil Changed		Client Info		**Changed**	Changed	Changed
Sample Status				**ABNORMAL**	ABNORMAL	SEVERE

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	>500	▲ **604**	▲ 914	81
Chromium	ppm	ASTM D5185m	>10	**8**	▲ 13	2
Nickel	ppm	ASTM D5185m	>10	**<1**	<1	<1
Titanium	ppm	ASTM D5185m		**1**	2	<1
Silver	ppm	ASTM D5185m		**<1**	0	0
Aluminum	ppm	ASTM D5185m	>25	● **7**	● 19	1
Lead	ppm	ASTM D5185m	>25	**2**	0	1
Copper	ppm	ASTM D5185m	>50	▲ **65**	33	▲ 715
Tin	ppm	ASTM D5185m	>10	**<1**	0	<1
Antimony	ppm	ASTM D5185m	>5	**---**	---	<1
Vanadium	ppm	ASTM D5185m		**<1**	0	0
Cadmium	ppm	ASTM D5185m		**0**	0	<1

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		**85**	2	114
Barium	ppm	ASTM D5185m		**0**	<1	0
Molybdenum	ppm	ASTM D5185m		**2**	<1	<1
Manganese	ppm	ASTM D5185m		**6**	8	2
Magnesium	ppm	ASTM D5185m		**27**	7	12
Calcium	ppm	ASTM D5185m		**2624**	146	3363
Phosphorus	ppm	ASTM D5185m		**977**	304	1125
Zinc	ppm	ASTM D5185m		**1079**	78	1540
Sulfur	ppm	ASTM D5185m		**8311**	18516	8263

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>75	▲ **69**	▲ 140	25
Sodium	ppm	ASTM D5185m		**4**	3	23
Potassium	ppm	ASTM D5185m	>20	**3**	5	1

VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**MODER**	MODER	NONE
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Precipitate	scalar	*Visual	NONE	**NONE**	NONE	NONE
Silt	scalar	*Visual	NONE	**MODER**	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	>0.2	**NEG**	NEG	NEG
Free Water	scalar	*Visual		**NEG**	NEG	NEG

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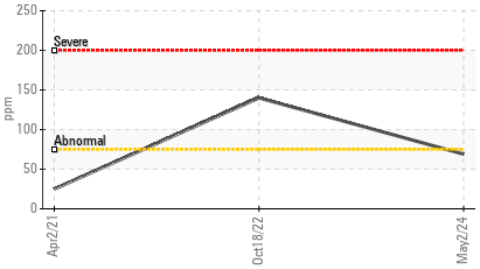
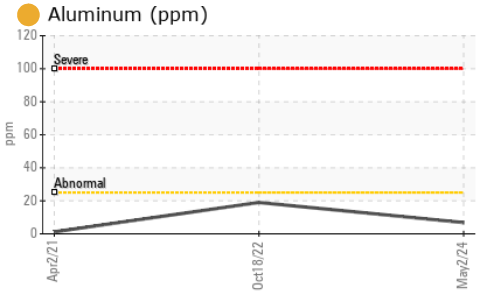
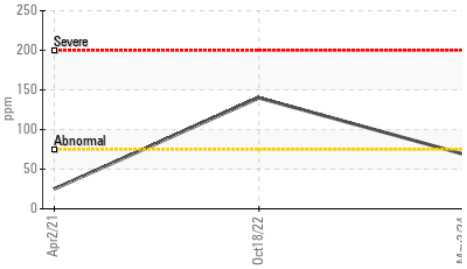
Silicon (ppm)



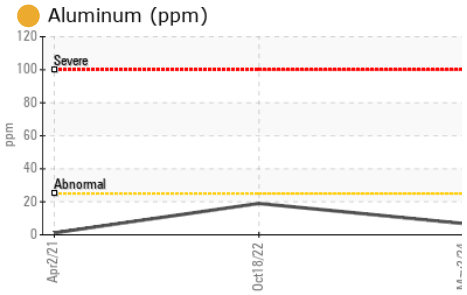
Aluminum (ppm)



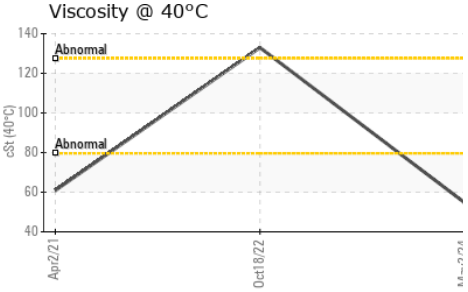
Silicon (ppm)



Aluminum (ppm)



Viscosity @ 40°C

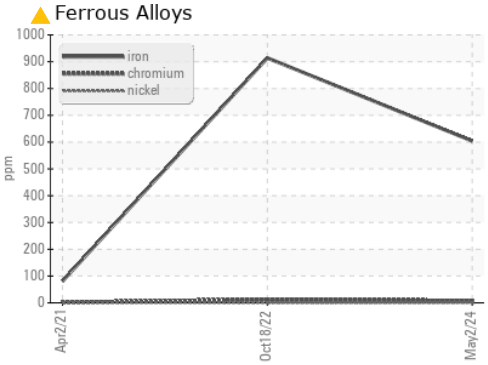


FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445		**54.7**	133	60.9

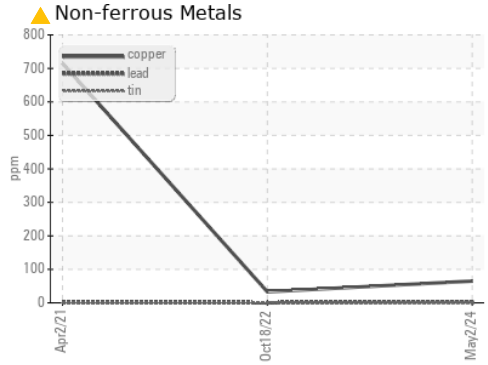
SAMPLE IMAGES	method	limit/base	current	history1	history2
Color			*no image*	*no image*	*no image*
Bottom			*no image*	*no image*	*no image*

GRAPHS

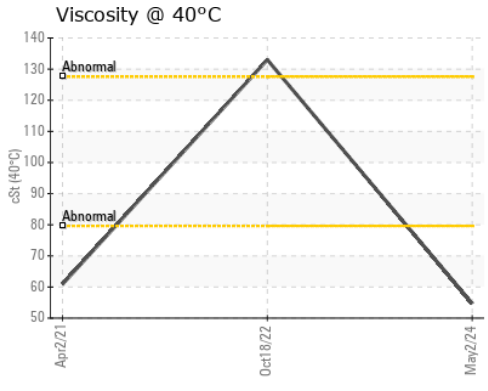
Ferrous Alloys



Non-ferrous Metals



Viscosity @ 40°C



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0766475
Lab Number : 06181822
Unique Number : 11033148
Test Package : CONST

Received : 16 May 2024
Tested : 17 May 2024
Diagnosed : 20 May 2024 - Sean Felton

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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Report Id: MANTUL [WUSCAR] 06181822 (Generated: 05/20/2024 12:29:18) Rev: 1

Submitted By: RICHARD PUGH