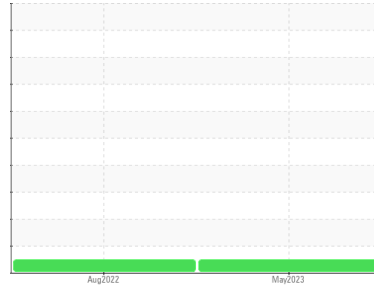




OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL



Area
[17584]
 Machine Id
20-80
 Component
Swing Drive
 Fluid
CONOCOPHILLIPS 80W90 (--- GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor. (Customer Sample Comment: ConocoPhillips gear oil 80w/90)

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

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			WC0802424	WC0619369	---
Sample Date	Client Info			25 May 2023	26 Aug 2022	---
Machine Age	hrs	Client Info		6026	5538	---
Oil Age	hrs	Client Info		488	5241	---
Oil Changed	Client Info			Changed	N/A	---
Sample Status				NORMAL	NORMAL	---

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>400	49	44	---
Chromium	ppm	ASTM D5185m	>10	<1	<1	---
Nickel	ppm	ASTM D5185m	>10	0	0	---
Titanium	ppm	ASTM D5185m		0	<1	---
Silver	ppm	ASTM D5185m		0	0	---
Aluminum	ppm	ASTM D5185m	>25	1	0	---
Lead	ppm	ASTM D5185m	>50	0	<1	---
Copper	ppm	ASTM D5185m	>200	0	<1	---
Tin	ppm	ASTM D5185m	>10	0	<1	---
Vanadium	ppm	ASTM D5185m		0	<1	---
Cadmium	ppm	ASTM D5185m		0	0	---

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		47	40	---
Barium	ppm	ASTM D5185m		0	0	---
Molybdenum	ppm	ASTM D5185m		0	<1	---
Manganese	ppm	ASTM D5185m		2	1	---
Magnesium	ppm	ASTM D5185m		4	15	---
Calcium	ppm	ASTM D5185m		10	6	---
Phosphorus	ppm	ASTM D5185m		452	406	---
Zinc	ppm	ASTM D5185m		0	2	---
Sulfur	ppm	ASTM D5185m		21976	16884	---

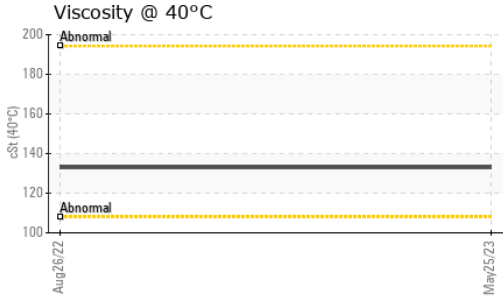
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>50	2	3	---
Sodium	ppm	ASTM D5185m		<1	1	---
Potassium	ppm	ASTM D5185m	>20	1	4	---

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	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	---
Appearance	scalar	*Visual	NORML	NORML	NORML	---
Odor	scalar	*Visual	NORML	NORML	NORML	---
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	---
Free Water	scalar	*Visual		NEG	NEG	---

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

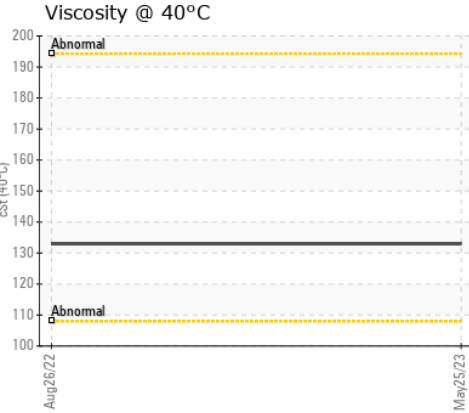
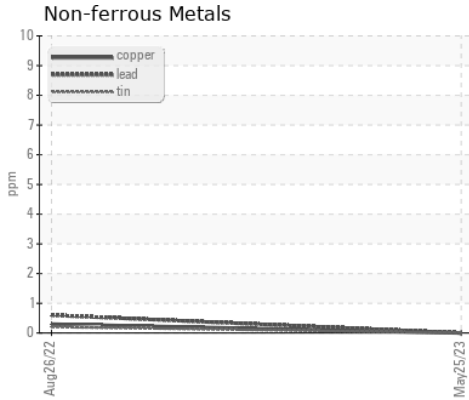
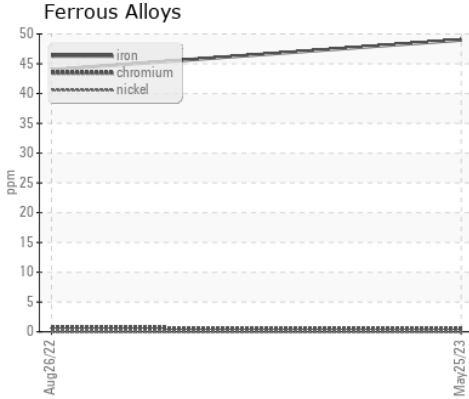


OIL ANALYSIS REPORT



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

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0802424 **Received** : 29 Aug 2023
Lab Number : **05938006** **Diagnosed** : 31 Aug 2023
Unique Number : 10628618 **Diagnostician** : Don Baldrige
Test Package : CONST

MANHATTAN ROAD AND BRIDGE
 5601 S 122ND E AVE
 TULSA, OK
 US 74146
 Contact: LANCE HARMON
 lance.harmon@manhattanrb.com
 T: (918)576-9071
 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)