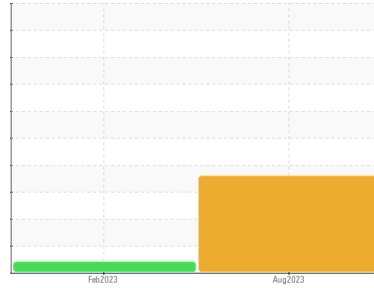




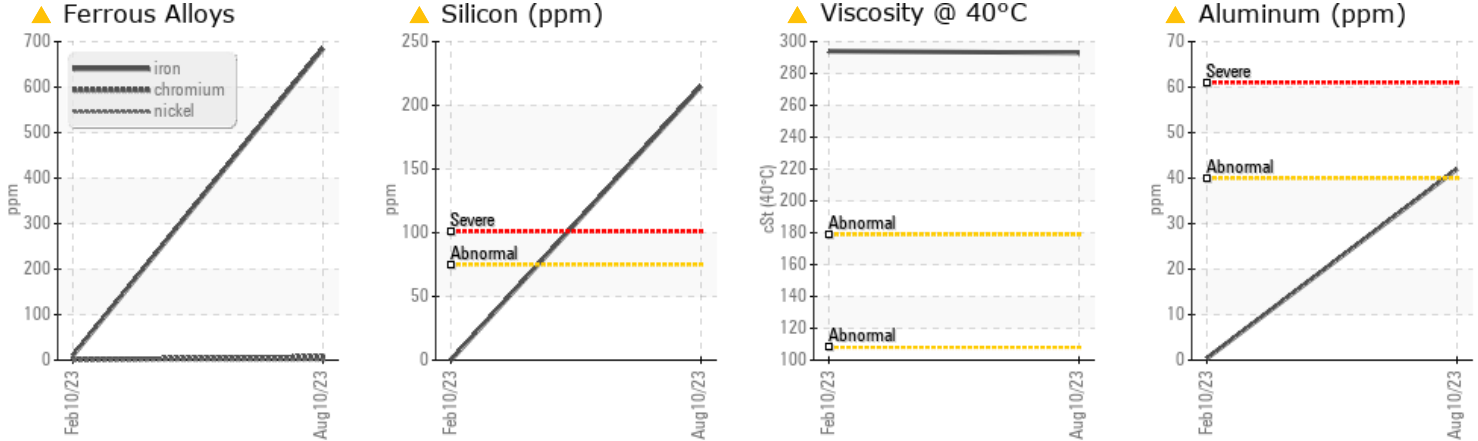
PROBLEM SUMMARY

Sample Rating Trend



Area
[18747]
 Machine Id
40-209
 Component
Left Final Drive
 Fluid
ConocoPhillips 80w/90 (--- GAL)

COMPONENT CONDITION SUMMARY



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. (Customer Sample Comment: ConocoPhillips gear oil 80w/90)

PROBLEMATIC TEST RESULTS

Sample Status	ABNORMAL	ATTENTION	---
Iron	▲ 685	10	---
Aluminum	▲ 42	<1	---
Silicon	▲ 215	0	---
Visc @ 40°C	▲ 293	▲ 294	---

Customer Id: MANTUL
 Sample No.: WC0793334
 Lab Number: 05928983
 Test Package: CONST



To manage this report scan the QR code

To discuss the diagnosis or test data:
 Don Baldrige +1
don.b505@comcast.net

To change component or sample information:
 Customer Service +1 1-800-237-1369
customerservice@wearcheck.com

RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Check Dirt Access	---	---	?	We advise that you check all areas where dirt can enter the system.

HISTORICAL DIAGNOSIS

10 Feb 2023 Diag: Don Baldrige

VISCOSITY



Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. The oil viscosity is higher than normal. Confirm oil type.

view report





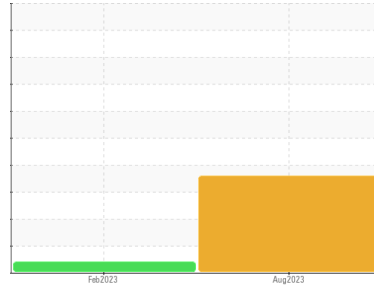
OIL ANALYSIS REPORT

Sample Rating Trend

DIRT



Area
[18747]
 Machine Id
40-209
 Component
Left Final Drive
 Fluid
ConocoPhillips 80w/90 (--- 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. (Customer Sample Comment: ConocoPhillips gear oil 80w/90)

Wear

Gear wear is indicated. All other component wear rates are normal.

Contamination

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

Fluid Condition

The oil viscosity is higher than normal. Confirm oil type.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		WC0793334	WC0754768	---
Sample Date	Client Info		10 Aug 2023	10 Feb 2023	---
Machine Age	hrs	Client Info	3154	2618	---
Oil Age	hrs	Client Info	536	618	---
Oil Changed	Client Info		Changed	Not Changd	---
Sample Status			ABNORMAL	ATTENTION	---

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >750	▲ 685	10	---
Chromium	ppm	ASTM D5185m >9	7	1	---
Nickel	ppm	ASTM D5185m >10	1	<1	---
Titanium	ppm	ASTM D5185m	3	0	---
Silver	ppm	ASTM D5185m	0	<1	---
Aluminum	ppm	ASTM D5185m >40	▲ 42	<1	---
Lead	ppm	ASTM D5185m >15	0	0	---
Copper	ppm	ASTM D5185m >40	1	0	---
Tin	ppm	ASTM D5185m >10	0	<1	---
Vanadium	ppm	ASTM D5185m	<1	1	---
Cadmium	ppm	ASTM D5185m	0	<1	---

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	255	64	---
Barium	ppm	ASTM D5185m	0	<1	---
Molybdenum	ppm	ASTM D5185m	0	0	---
Manganese	ppm	ASTM D5185m	8	<1	---
Magnesium	ppm	ASTM D5185m	8	1	---
Calcium	ppm	ASTM D5185m	37	9	---
Phosphorus	ppm	ASTM D5185m	914	274	---
Zinc	ppm	ASTM D5185m	10	3	---
Sulfur	ppm	ASTM D5185m	24430	6381	---

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >75	▲ 215	0	---
Sodium	ppm	ASTM D5185m >51	2	32	---
Potassium	ppm	ASTM D5185m >20	10	7	---

VISUAL

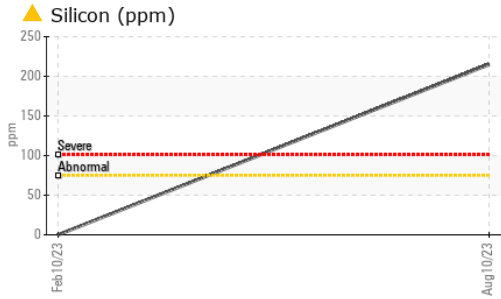
	method	limit/base	current	history1	history2
White Metal	scalar	*Visual NONE	NONE	NONE	---
Yellow Metal	scalar	*Visual NONE	NONE	NONE	---
Precipitate	scalar	*Visual NONE	NONE	NONE	---
Silt	scalar	*Visual NONE	NONE	NONE	---
Debris	scalar	*Visual NONE	NONE	NONE	---
Sand/Dirt	scalar	*Visual NONE	NONE	NONE	---
Appearance	scalar	*Visual NORML	NORML	NORML	---
Odor	scalar	*Visual NORML	NORML	NORML	---
Emulsified Water	scalar	*Visual >0.075	NEG	NEG	---
Free Water	scalar	*Visual	NEG	NEG	---

FLUID PROPERTIES

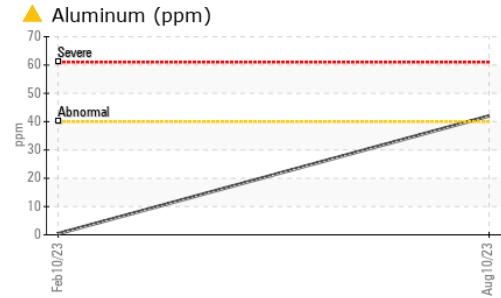
	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	▲ 293	▲ 294	---



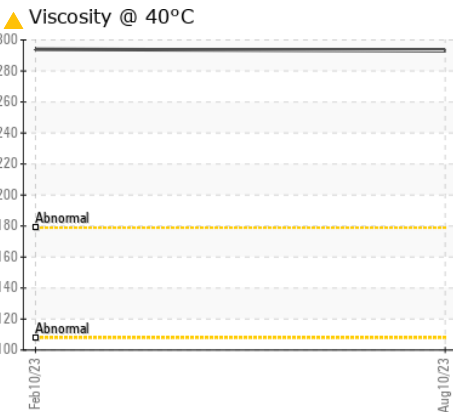
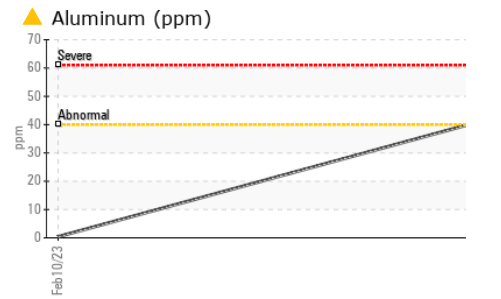
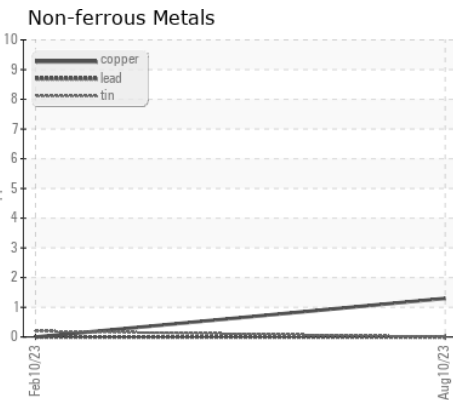
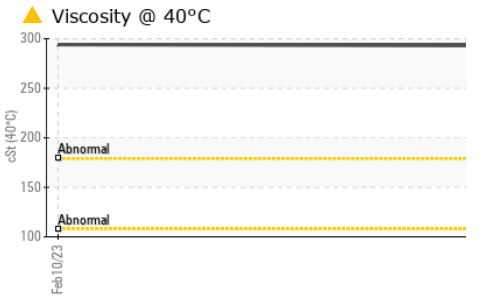
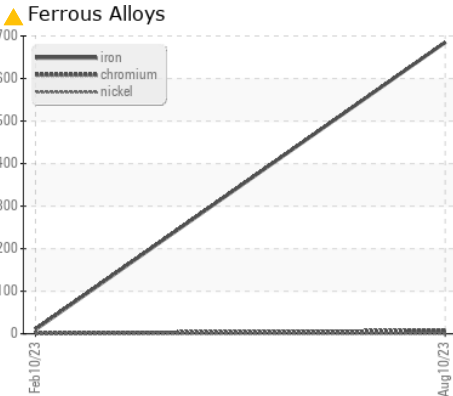
OIL ANALYSIS REPORT



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



GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0793334 **Received** : 18 Aug 2023
Lab Number : 05928983 **Diagnosed** : 22 Aug 2023
Unique Number : 10608930 **Diagnostician** : Don Baldrige
Test Package : CONST

MANHATTAN ROAD AND BRIDGE
 5601 S 122ND E AVE
 TULSA, OK
 US 74146
 Contact: JAMES STEELMON
 james.steelmon@manhattanrb.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)