



PROBLEM SUMMARY

Sample Rating Trend

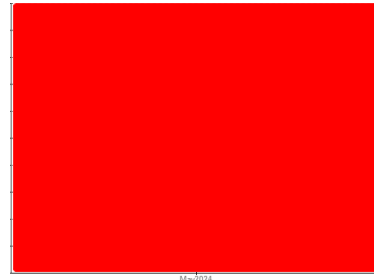
WEAR

Area
TULSA [22921]

Machine Id
80-257

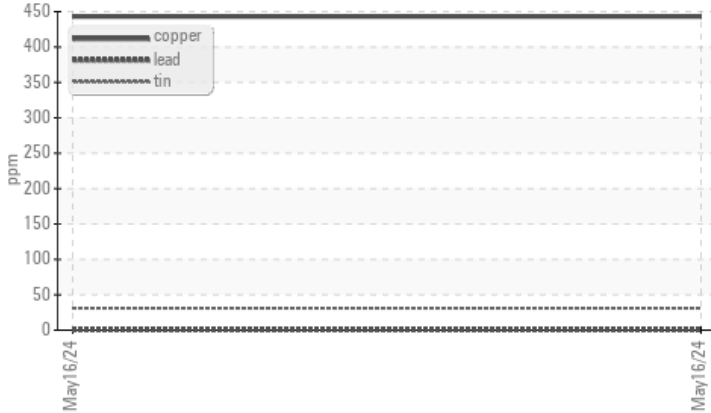
Component
Rear Left Final Drive

Fluid
CONOCO PHILLIPS 80W90 MP (--- GAL)



COMPONENT CONDITION SUMMARY

▲ Non-ferrous Metals



RECOMMENDATION

The oil change at the time of sampling has been noted. We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition. (Customer Sample Comment: ConocoPhillips 80w/90 mp gear oil)

PROBLEMATIC TEST RESULTS

Sample Status				SEVERE	---	---
Copper	ppm	ASTM D5185m	>50	▲ 443	---	---
Tin	ppm	ASTM D5185m	>10	▲ 31	---	---

Customer Id: MANTUL
 Sample No.: WC0923314
 Lab Number: 06220083
 Test Package: CONST



To manage this report scan the QR code

To discuss the diagnosis or test data:
 Sean Felton +1 919-379-4092
sfelton@wearcheckusa.com

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

RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Inspect Wear Source	---	---	?	We advise that you inspect for the source(s) of wear.
Resample	---	---	?	We recommend an early resample to monitor this condition.

HISTORICAL DIAGNOSIS



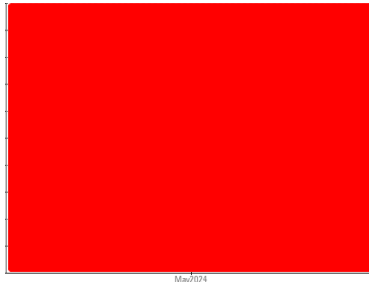
OIL ANALYSIS REPORT

Sample Rating Trend

WEAR



Area
TULSA [22921]
 Machine Id
80-257
 Component
Rear Left Final Drive
 Fluid
CONOCO PHILLIPS 80W90 MP (--- GAL)



DIAGNOSIS

▲ Recommendation

The oil change at the time of sampling has been noted. We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition. (Customer Sample Comment: ConocoPhillips 80w/90 mp gear oil)

▲ Wear

Bearing and/or bushing wear is indicated.

Contamination

There is no indication of any contamination in the oil.

Fluid Condition

The oil is no longer serviceable as a result of the abnormal and/or severe wear.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		WC0923314	---	---
Sample Date	Client Info		16 May 2024	---	---
Machine Age	hrs	Client Info	5478	---	---
Oil Age	hrs	Client Info	1478	---	---
Oil Changed	Client Info		Changed	---	---
Sample Status			SEVERE	---	---

CONTAMINATION

	method	limit/base	current	history1	history2
Water	WC Method	>0.2	NEG	---	---

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>500	94	---
Chromium	ppm	ASTM D5185m	>10	1	---
Nickel	ppm	ASTM D5185m	>10	<1	---
Titanium	ppm	ASTM D5185m		<1	---
Silver	ppm	ASTM D5185m		<1	---
Aluminum	ppm	ASTM D5185m	>25	4	---
Lead	ppm	ASTM D5185m	>25	<1	---
Copper	ppm	ASTM D5185m	>50	▲ 443	---
Tin	ppm	ASTM D5185m	>10	▲ 31	---
Vanadium	ppm	ASTM D5185m		<1	---
Cadmium	ppm	ASTM D5185m		<1	---

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		122	---
Barium	ppm	ASTM D5185m		0	---
Molybdenum	ppm	ASTM D5185m		2	---
Manganese	ppm	ASTM D5185m		2	---
Magnesium	ppm	ASTM D5185m		15	---
Calcium	ppm	ASTM D5185m		3524	---
Phosphorus	ppm	ASTM D5185m		1414	---
Zinc	ppm	ASTM D5185m		1542	---
Sulfur	ppm	ASTM D5185m		9405	---

CONTAMINANTS

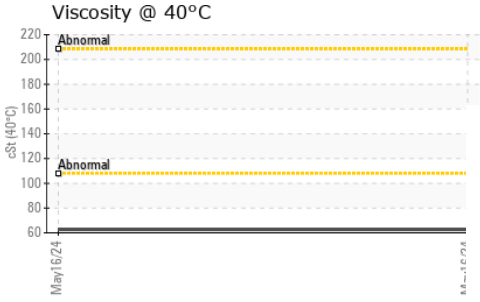
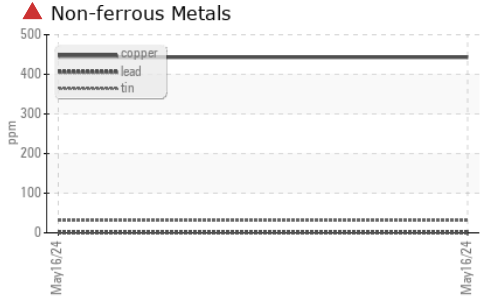
	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>75	25	---
Sodium	ppm	ASTM D5185m		8	---
Potassium	ppm	ASTM D5185m	>20	3	---

VISUAL

	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	LIGHT	---
Debris	scalar	*Visual	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance	scalar	*Visual	NORML	NORML	---
Odor	scalar	*Visual	NORML	NORML	---
Emulsified Water	scalar	*Visual	>0.2	NEG	---
Free Water	scalar	*Visual		NEG	---



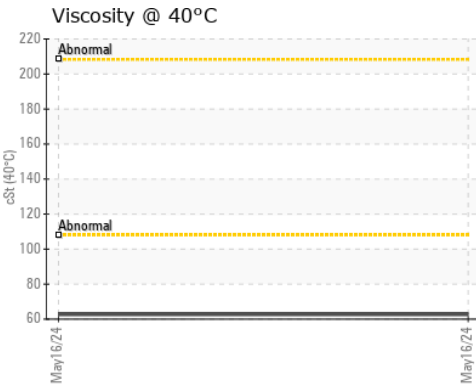
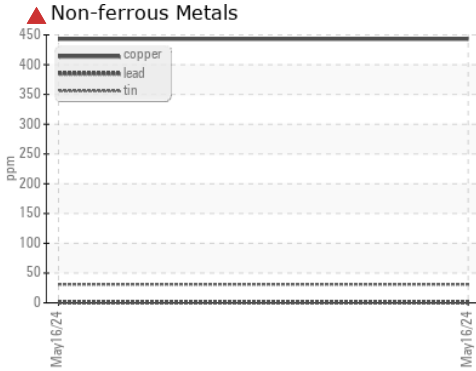
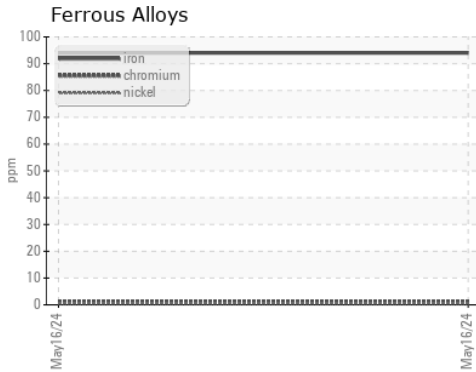
OIL ANALYSIS REPORT



FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	62.7	---	---

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. : WC0923314
Lab Number : 06220083
Unique Number : 11098280
Test Package : CONST

Received : 25 Jun 2024
Tested : 26 Jun 2024
Diagnosed : 27 Jun 2024 - Sean Felton

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

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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F: