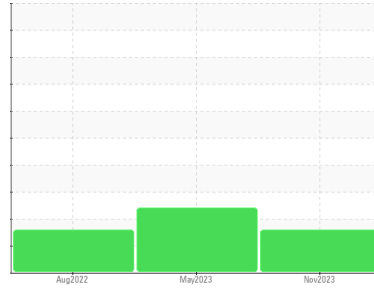




PROBLEM SUMMARY

Sample Rating Trend



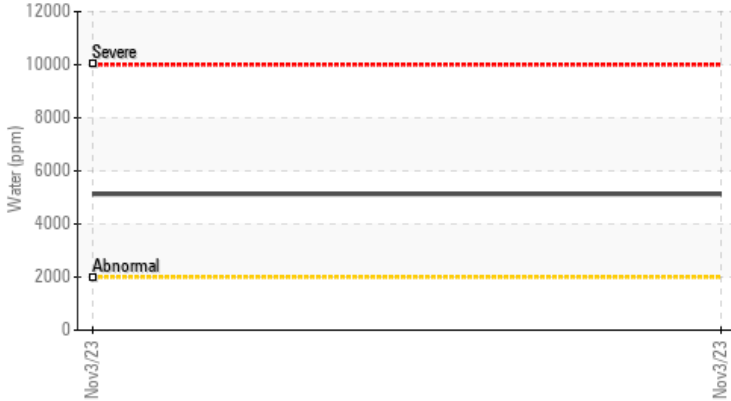
WATER



Area
[19757]
 Machine Id
20-80
 Component
Left Final Drive
 Fluid
CONOCO PHILLIPS GEAR 80W90 (--- GAL)

COMPONENT CONDITION SUMMARY

▲ Water (KF)



RECOMMENDATION

We advise that you check for the source of water entry. We recommend that you drain the oil from the component if this has not already been done. We recommend an early resample to monitor this condition. (Customer Sample Comment: ConocoPhillips gear oil 80w/90)

PROBLEMATIC TEST RESULTS

Sample Status				ABNORMAL	ABNORMAL	ABNORMAL
Water	%	ASTM D6304	>0.2	▲ 0.513	---	---
ppm Water	ppm	ASTM D6304	>2000	▲ 5130	---	---

Customer Id: MANTUL
Sample No.: WC0836128
Lab Number: 06009213
Test Package: CONST



To manage this report scan the QR code

To discuss the diagnosis or test data:
 Angela Borella +1 800-237-1369
angela.borella@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
Change Fluid	---	---	?	We recommend that you drain the oil from the component if this has not already been done.
Resample	---	---	?	We recommend an early resample to monitor this condition.
Check Water Access	---	---	?	We advise that you check for the source of water entry.

HISTORICAL DIAGNOSIS

25 May 2023 Diag: Don Baldrige

WEAR



The oil change at the time of sampling has been noted. No corrective action is recommended at this time. We recommend an early resample to monitor this condition. Bearing and/or gear wear is indicated. There is no indication of any contamination in the oil. The condition of the oil is acceptable for the time in service.

view report



26 Aug 2022 Diag: Don Baldrige

WEAR



No corrective action is recommended at this time. Resample at the next service interval to monitor. Gear wear is indicated. All other component wear rates are normal. There is no indication of any contamination in the oil. The condition of the oil is acceptable for the time in service.

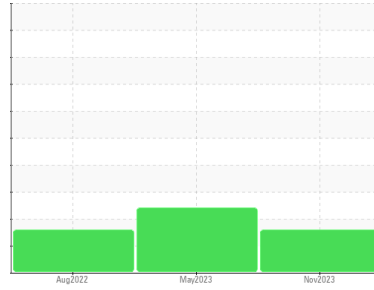
view report





OIL ANALYSIS REPORT

Sample Rating Trend



WATER



Area
[19757]
 Machine Id
20-80

Component
Left Final Drive

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

DIAGNOSIS

▲ Recommendation

We advise that you check for the source of water entry. We recommend that you drain the oil from the component if this has not already been done. We recommend an early resample to monitor this condition. (Customer Sample Comment: ConocoPhillips gear oil 80w/90)

Wear

All component wear rates are normal.

▲ Contamination

There is a moderate concentration of water present in the oil.

Fluid Condition

The oil is no longer serviceable due to the presence of contaminants.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		WC0836128	WC0802426	WC0619278
Sample Date	Client Info		03 Nov 2023	25 May 2023	26 Aug 2022
Machine Age	hrs	Client Info	6510	6026	5538
Oil Age	hrs	Client Info	484	488	5241
Oil Changed	Client Info		Not Chngd	Changed	N/A
Sample Status			ABNORMAL	ABNORMAL	ABNORMAL

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >500	229	▲ 1446	▲ 1146
Chromium	ppm	ASTM D5185m >10	3	▲ 21	▲ 16
Nickel	ppm	ASTM D5185m >10	<1	1	<1
Titanium	ppm	ASTM D5185m	<1	<1	<1
Silver	ppm	ASTM D5185m	0	0	0
Aluminum	ppm	ASTM D5185m >25	<1	5	3
Lead	ppm	ASTM D5185m >25	2	7	7
Copper	ppm	ASTM D5185m >50	12	▲ 54	43
Tin	ppm	ASTM D5185m >10	<1	2	2
Vanadium	ppm	ASTM D5185m	0	0	<1
Cadmium	ppm	ASTM D5185m	0	0	<1

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	3	6	7
Barium	ppm	ASTM D5185m	7	4	0
Molybdenum	ppm	ASTM D5185m	<1	<1	<1
Manganese	ppm	ASTM D5185m	2	10	8
Magnesium	ppm	ASTM D5185m	4	3	1
Calcium	ppm	ASTM D5185m	18	48	61
Phosphorus	ppm	ASTM D5185m	308	345	310
Zinc	ppm	ASTM D5185m	8	21	25
Sulfur	ppm	ASTM D5185m	17456	20788	16643

CONTAMINANTS

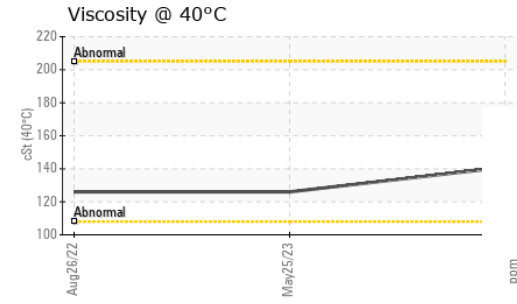
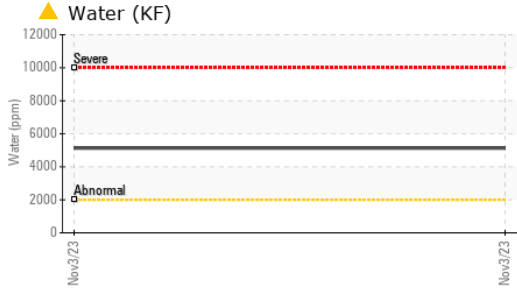
	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >75	13	46	20
Sodium	ppm	ASTM D5185m	0	<1	2
Potassium	ppm	ASTM D5185m >20	2	6	8
Water	%	ASTM D6304 >0.2	▲ 0.513	---	---
ppm Water	ppm	ASTM D6304 >2000	▲ 5130	---	---

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 >0.2	0.2%	NEG	NEG
Free Water	scalar	*Visual	NEG	NEG	NEG



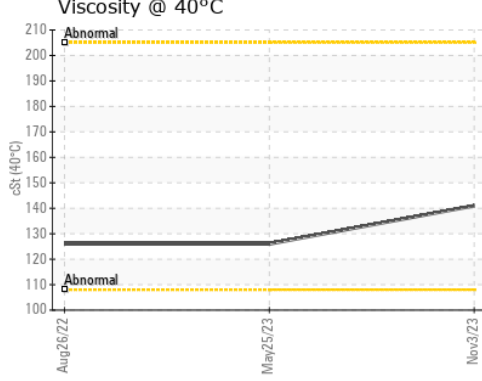
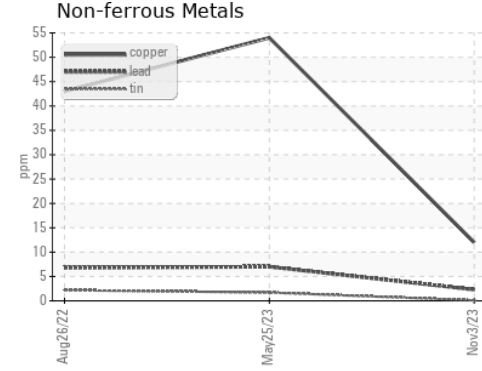
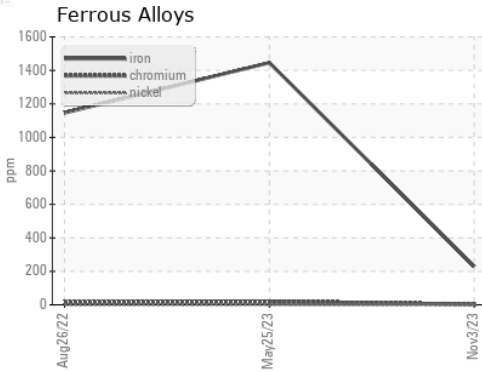
OIL ANALYSIS REPORT



FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	141	126	126

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. : WC0836128 **Received** : 15 Nov 2023
Lab Number : 06009213 **Diagnosed** : 17 Nov 2023
Unique Number : 10742975 **Diagnostician** : Angela Borella
Test Package : CONST (Additional Tests: KF)

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 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)