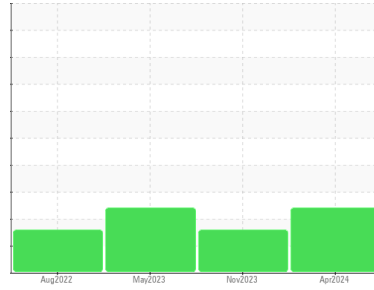




OIL ANALYSIS REPORT

Sample Rating Trend



WATER



Area
[21037]
 Machine Id
20-80
 Component
Left Final Drive
 Fluid
CONOCO PHILLIPS 80W90 MP (--- GAL)

DIAGNOSIS

Recommendation

The oil change at the time of sampling has been noted. Resample at the next service interval to monitor. (Customer Sample Comment: ConocoPhillips 80w/90 mp gear oil)

Wear

All component wear rates are normal.

Contamination

Appearance is milky. There is a light concentration of water present 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		WC0923393	WC0836128	WC0802426
Sample Date	Client Info		17 Apr 2024	03 Nov 2023	25 May 2023
Machine Age	hrs	Client Info	7096	6510	6026
Oil Age	hrs	Client Info	1076	484	488
Oil Changed	Client Info		Changed	Not Changd	Changed
Sample Status			ABNORMAL	ABNORMAL	ABNORMAL

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >500	242	229	▲ 1446
Chromium	ppm	ASTM D5185m >10	3	3	▲ 21
Nickel	ppm	ASTM D5185m >10	<1	<1	1
Titanium	ppm	ASTM D5185m	<1	<1	<1
Silver	ppm	ASTM D5185m	<1	0	0
Aluminum	ppm	ASTM D5185m >25	2	<1	5
Lead	ppm	ASTM D5185m >25	3	2	7
Copper	ppm	ASTM D5185m >50	12	12	▲ 54
Tin	ppm	ASTM D5185m >10	<1	<1	2
Vanadium	ppm	ASTM D5185m	<1	0	0
Cadmium	ppm	ASTM D5185m	0	0	0

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	4	3	6
Barium	ppm	ASTM D5185m	0	7	4
Molybdenum	ppm	ASTM D5185m	<1	<1	<1
Manganese	ppm	ASTM D5185m	3	2	10
Magnesium	ppm	ASTM D5185m	4	4	3
Calcium	ppm	ASTM D5185m	17	18	48
Phosphorus	ppm	ASTM D5185m	323	308	345
Zinc	ppm	ASTM D5185m	12	8	21
Sulfur	ppm	ASTM D5185m	20421	17456	20788

CONTAMINANTS

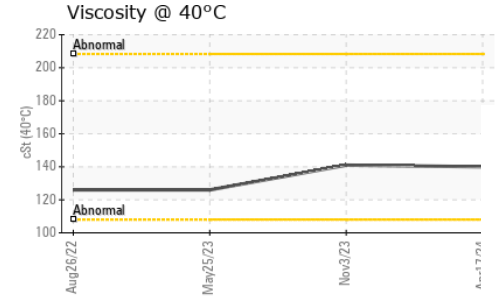
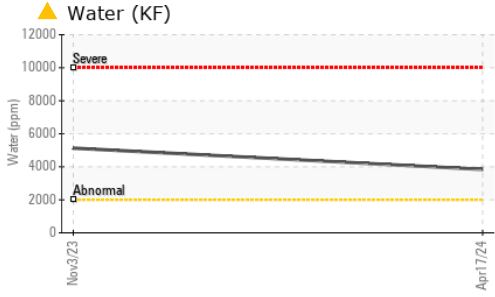
	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >75	15	13	46
Sodium	ppm	ASTM D5185m	<1	0	<1
Potassium	ppm	ASTM D5185m >20	3	2	6
Water	%	ASTM D6304 >0.2	▲ 0.384	▲ 0.513	---
ppm Water	ppm	ASTM D6304 >2000	▲ 3840	▲ 5130	---

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	● HAZY	NORML	NORML
Odor	scalar	*Visual NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual >0.2	0.2%	0.2%	NEG
Free Water	scalar	*Visual	NEG	NEG	NEG



OIL ANALYSIS REPORT

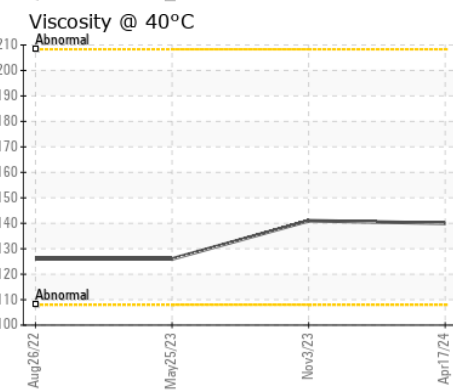
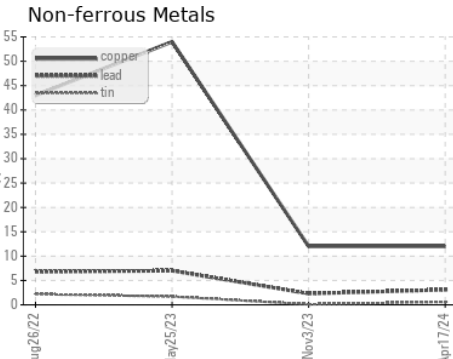
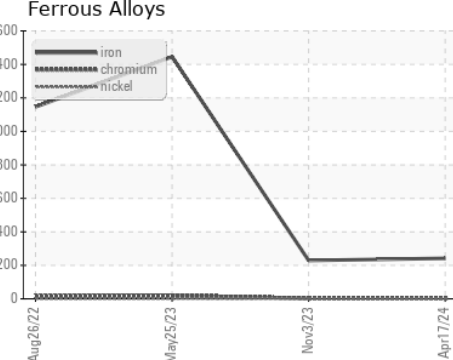


FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	140	141	126

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

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0923393 **Received** : 17 May 2024
Lab Number : **06183569** **Tested** : 21 May 2024
Unique Number : 11034895 **Diagnosed** : 21 May 2024 - Don Baldrige
Test Package : CONST (Additional Tests: KF)

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)