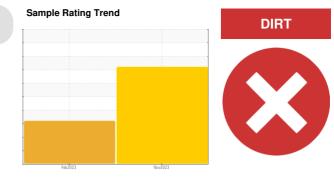


PROBLEM SUMMARY

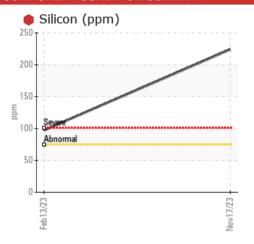
[20136] 40-205L

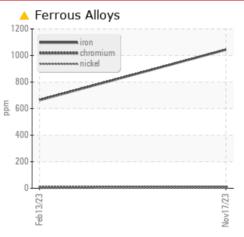
Component **Left Final Drive**

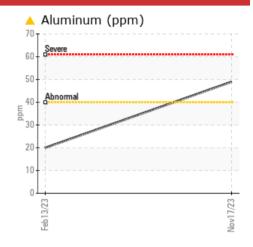
ConocoPhillips 80w/90 (--- GAL)



COMPONENT CONDITION SUMMARY







RECOMMENDATION

We advise that you check all areas where dirt can enter the system. 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 80w/90 gear oil)

PROBLEMATIC TEST RESULTS										
Sample Status				SEVERE	ABNORMAL					
Iron	ppm	ASTM D5185m	>750	1044	△ 664					
Chromium	ppm	ASTM D5185m	>9	1 0	6					
Silicon	ppm	ASTM D5185m	>75	224	4 97					

Customer Id: MANTUL **Sample No.:** WC0836192 Lab Number: 06077880 Test Package: CONST



To manage this report scan the QR code

To discuss the diagnosis or test data:

Don Baldridge +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		
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 Dirt Access			?	We advise that you check all areas where dirt can enter the system.		

HISTORICAL DIAGNOSIS

13 Feb 2023 Diag: Don Baldridge

DIRT



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. Gear wear is indicated. Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress. The condition of the oil is acceptable for the time in service.



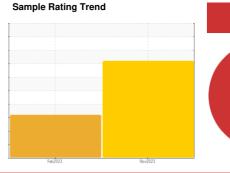


OIL ANALYSIS REPORT

Area [20136] 40-205L

Left Final Drive

ConocoPhillips 80w/90 (--- GAL)





DIAGNOSIS

Recommendation

We advise that you check all areas where dirt can enter the system. 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 80w/90 gear oil)

Wear

Gear wear is indicated.

Contamination

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

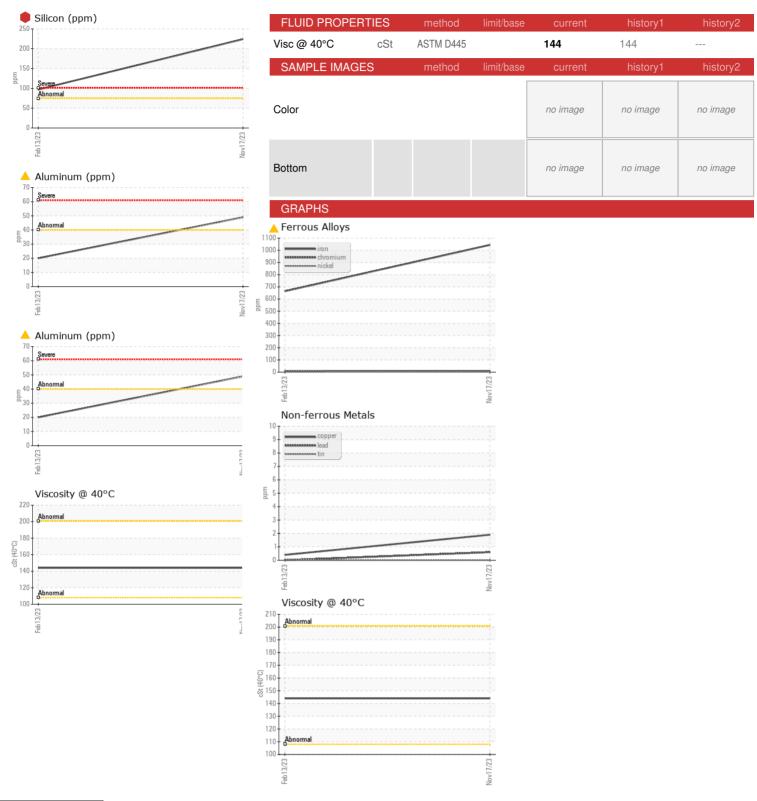
Fluid Condition

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

			Feb2023	Nov2023		
SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0836192	WC0754855	
Sample Date		Client Info		17 Nov 2023	13 Feb 2023	
Machine Age	hrs	Client Info		3463	2930	
Oil Age	hrs	Client Info		532	999	
Oil Changed		Client Info		Not Changd	Changed	
Sample Status				SEVERE	ABNORMAL	
CONTAMINATIO	N	method	limit/base	current	history1	history2
Water		WC Method	>0.075	NEG	NEG	
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>750	1044	△ 664	
Chromium	ppm	ASTM D5185m	>9	<u> </u>	6	
Nickel	ppm	ASTM D5185m	>10	5	2	
Titanium	ppm	ASTM D5185m		3	<1	
Silver	ppm	ASTM D5185m		0	0	
Aluminum	ppm	ASTM D5185m	>40	4 9	2 0	
Lead	ppm	ASTM D5185m	>15	<1	0	
Copper	ppm	ASTM D5185m	>40	2	<1	
Tin	ppm	ASTM D5185m	>10	0	0	
Vanadium	ppm	ASTM D5185m		0	0	
Cadmium	ppm	ASTM D5185m		<1	0	
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		110	106	
Barium	ppm	ASTM D5185m		0	0	
Molybdenum	ppm	ASTM D5185m		<1	<1	
Manganese	ppm	ASTM D5185m		10	7	
Magnesium	ppm	ASTM D5185m		8	4	
Calcium	ppm	ASTM D5185m		46	19	
Phosphorus	ppm	ASTM D5185m		696	658	
Zinc	ppm	ASTM D5185m		9	10	
Sulfur	ppm	ASTM D5185m		18166	20291	
CONTAMINANTS	3	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>75	224	<u> </u>	
Sodium	ppm	ASTM D5185m	>51	<1	3	
Potassium	ppm	ASTM D5185m	>20	19	9	
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	



OIL ANALYSIS REPORT







Certificate L2367

Laboratory Sample No.

Lab Number : 06077880 Unique Number : 10859971

Test Package : CONST

: WC0836192

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received : 01 Feb 2024 : 02 Feb 2024 **Tested** Diagnosed

: 04 Feb 2024 - Don Baldridge

MANHATTAN ROAD AND BRIDGE 5601 S 122ND E AVE

TULSA, OK US 74146

T: (918)728-5749

Contact: BEN CALDWELL kevin.marson@wearcheck.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)