

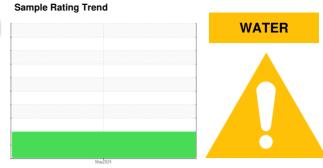
OIL ANALYSIS REPORT

TULSA [22921]

80-257

Component Differential

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)

All component wear rates are normal.

Contamination

There is a light concentration of water present in the

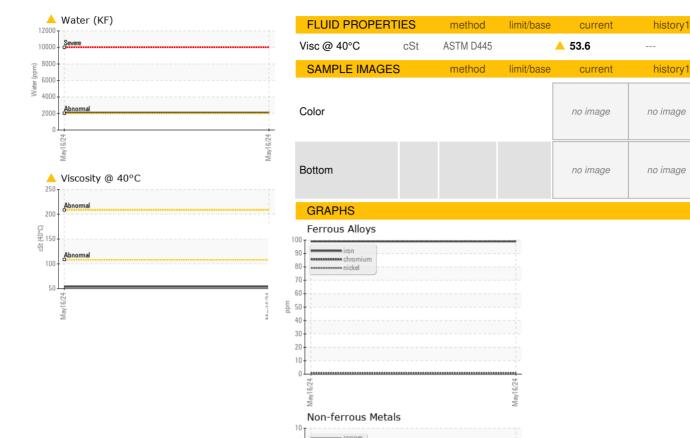
▲ Fluid Condition

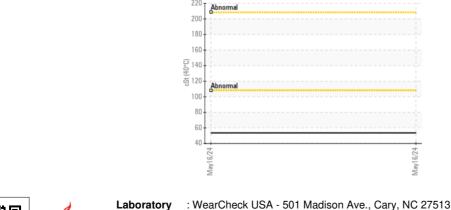
The oil viscosity is lower than normal. Confirm oil

				May2024		
SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0923319		
Sample Date		Client Info		16 May 2024		
Machine Age	hrs	Client Info		5477		
Oil Age	hrs	Client Info		2000		
Oil Changed		Client Info		Changed		
Sample Status				ABNORMAL		
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>500	99		
Chromium	ppm	ASTM D5185m	>10	<1		
Nickel	ppm	ASTM D5185m	>10	0		
Titanium	ppm	ASTM D5185m		0		
Silver	ppm	ASTM D5185m		0		
Aluminum	ppm	ASTM D5185m	>25	<1		
Lead	ppm	ASTM D5185m	>25	0		
Copper	ppm	ASTM D5185m	>100	<1		
Tin	ppm	ASTM D5185m	>10	0		
Vanadium	ppm	ASTM D5185m		0		
Cadmium	ppm	ASTM D5185m		0		
ADDITIVES		method	limit/base	current	history1	history2
Boron	nnm	ASTM D5185m		113		
Barium	ppm	ASTM D5185m		<1		
Molybdenum		ASTM D5185m		<1		
	ppm			2		
Manganese	ppm	ASTM D5185m ASTM D5185m		12		
Magnesium	ppm			2930		
Calcium	ppm	ASTM D5185m				
Phosphorus	ppm	ASTM D5185m		1127		
Zinc	ppm	ASTM D5185m		1279		
Sulfur	ppm	ASTM D5185m		6104		
CONTAMINANTS	5	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>75	21		
Sodium	ppm	ASTM D5185m		8		
Potassium	ppm	ASTM D5185m		0		
Water	%	ASTM D6304	>.2	△ 0.209		
ppm Water	ppm	ASTM D6304	>2000	<u>^</u> 2090		
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	MODER		
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	>.2	0.2%		
Free Water	scalar	*Visual		NEG		



OIL ANALYSIS REPORT





Viscosity @ 40°C





Certificate 12367

Laboratory Sample No.

Lab Number : 06207228 Unique Number : 11074689

: WC0923319

Test Package : CONST (Additional Tests: KF)

Received **Tested**

: 11 Jun 2024 Diagnosed

: 13 Jun 2024 : 13 Jun 2024 - Angela Borella

TULSA, OK US 74146 Contact: JAMES STEELMON

5601 S 122ND E AVE

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)

james.steelmon@manhattanrb.com

MANHATTAN ROAD AND BRIDGE

T:

F:

history2

history2

no image

no image