

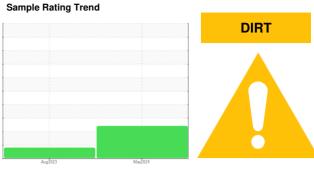
OIL ANALYSIS REPORT

Area [20522]

30-90

Left Final Drive

CONOCO PHILLIPS GUARDOL ECT 15W40 (--- GAL)



DIAGNOSIS

Recommendation

The oil change at the time of sampling has been noted. Resample at the next service interval to monitor.

Wear

The copper level is abnormal. All other component wear rates are normal.

Contamination

Elemental level of silicon (Si) above normal indicating ingress of seal material.

Fluid Condition

The condition of the oil is acceptable for the time in service.

) (GAL)			Aug2023	May2024		
SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0940714	WC0818719	
Sample Date		Client Info		30 May 2024	24 Aug 2023	
Machine Age	hrs	Client Info		2208	1809	
Oil Age	hrs	Client Info		1208	809	
Oil Changed	1113	Client Info		Changed	Not Changd	
Sample Status		Olletti IIIIO		ABNORMAL	ABNORMAL	
CONTAMINATION	J	method	limit/base	current	history1	history2
Water	V		>0.2	NEG	NEG	
WEAR METALS		method	limit/base	current	history1	history2
Iron	nnm	ASTM D5185m	>500	260	209	
Chromium	ppm		>10	6	4	
Nickel	ppm	ASTM D5185m	>10	<1	<1	
Titanium	ppm	ASTM D5185m	>10	<1	<1	
	ppm			0		
Silver	ppm	ASTM D5185m	٥٢		0	
Aluminum	ppm		>25	9	10	
Lead	ppm	ASTM D5185m	>25	<1	<1	
Copper	ppm		>50	<u>^</u> 87	<u>^</u> 74	
Tin	ppm	ASTM D5185m	>10	0	0	
Vanadium	ppm	ASTM D5185m		1	<1	
Cadmium	ppm	ASTM D5185m		0	0	
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	85	4	3	
Barium	ppm	ASTM D5185m		5	<1	
Molybdenum	ppm	ASTM D5185m		8	7	
Manganese	ppm	ASTM D5185m		3	3	
Magnesium	ppm	ASTM D5185m	350	18	16	
Calcium	ppm	ASTM D5185m	1800	4293	4313	
Phosphorus	ppm	ASTM D5185m	1000	897	892	
Zinc	ppm	ASTM D5185m	1100	1026	1057	
Sulfur	ppm	ASTM D5185m	3500	7000	6748	
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>75	<u> </u>	67	
Sodium	ppm	ASTM D5185m		4	0	
Potassium	ppm	ASTM D5185m	>20	3	5	
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	LIGHT	
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	>0.2	NEG	NEG	
Free Water	scalar	*Visual	20.2	NEG	NEG	
9:15:00) Rev: 1	Journal	Vioudi				ES STEELMON



OIL ANALYSIS REPORT







Laboratory Sample No.

: WC0940714 Lab Number : 06207230 Unique Number : 11074691

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received : 11 Jun 2024 **Tested** : 13 Jun 2024

Diagnosed : 13 Jun 2024 - Angela Borella

kevin.marson@wearcheck.com * - Denotes test methods that are outside of the ISO 17025 scope of accreditation.

Test Package : CONST Certificate 12367 To discuss this sample report, contact Customer Service at 1-800-237-1369.

T: (918)728-5749 Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

MANHATTAN ROAD AND BRIDGE

Submitted By: JAMES STEELMON

5601 S 122ND E AVE

Contact: BEN CALDWELL

TULSA, OK

US 74146