

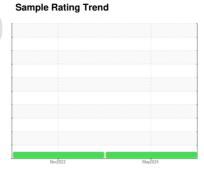
OIL ANALYSIS REPORT

Area [23363]

55-47

Diesel Engine

CONOCO PHILLIPS GUARDOL ECT 15W40 (





DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

All component wear rates are normal.

Contamination

There is no indication of any contamination in the

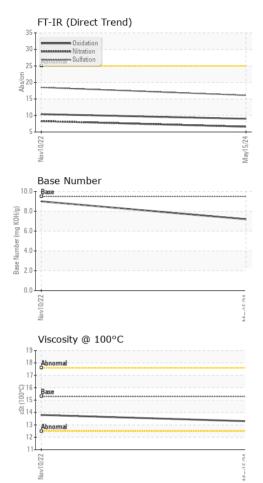
Fluid Condition

The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

(GAL)			Nov2022	May2024		
SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0923430	WC0619997	
Sample Date		Client Info		15 May 2024	10 Nov 2022	
Machine Age	hrs	Client Info		3291	3034	
Oil Age	hrs	Client Info		257	0	
Oil Changed		Client Info		Changed	Changed	
Sample Status				NORMAL	NORMAL	
CONTAMINATIO	V	method	limit/base	current	history1	history2
Fuel		WC Method	>5	<1.0	<1.0	
Water		WC Method	>0.2	NEG	NEG	
Glycol		WC Method		NEG	NEG	
WEAR METALS		method	limit/base	current	history1	history2
ron	ppm	ASTM D5185m	>100	38	79	
Chromium	ppm	ASTM D5185m	>20	1	3	
Nickel	ppm	ASTM D5185m	>4	<1	<1	
Titanium	ppm	ASTM D5185m		<1	<1	
Silver	ppm	ASTM D5185m	>3	0	0	
Aluminum	ppm	ASTM D5185m	>20	4	11	
Lead	ppm	ASTM D5185m	>40	<1	2	
Copper	ppm	ASTM D5185m	>330	2	7	
Tin	ppm	ASTM D5185m	>15	<1	<1	
Vanadium	ppm	ASTM D5185m		<1	<1	
Cadmium	ppm	ASTM D5185m		<1	0	
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	85	<1	4	
Barium	ppm	ASTM D5185m		0	0	
Molybdenum	ppm	ASTM D5185m		3	2	
Manganese	ppm	ASTM D5185m		<1	<1	
Magnesium	ppm	ASTM D5185m	350	41	25	
Calcium	ppm	ASTM D5185m	1800	2419	2362	
Phosphorus	ppm	ASTM D5185m	1000	915	907	
Zinc	ppm	ASTM D5185m	1100	1188	1191	
Sulfur	ppm	ASTM D5185m	3500	4053	4274	
CONTAMINANTS	;	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	10	13	
Sodium	ppm	ASTM D5185m		2	1	
Potassium	ppm	ASTM D5185m	>20	3	2	
INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	0.1	0.4	
Nitration	Abs/cm	*ASTM D7624	>20	6.6	8.3	
Sulfation	Abs/.1mm	*ASTM D7415	>30	16.1	18.5	
FLUID DEGRADA	ATION	method	limit/base	current	history1	history2
					<u> </u>	•
Oxidation	Abs/.1mm	*ASTM D7414	>25	9.0	10.4	



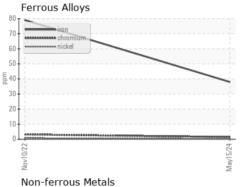
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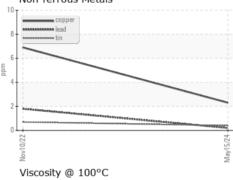


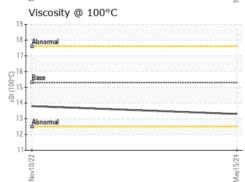
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	
Precipitate	scalar	*Visual	NONE	NONE	NONE	
Silt	scalar	*Visual	NONE	NONE	NONE	
Debris	scalar	*Visual	NONE	NONE	NONE	
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	
Appearance	scalar	*Visual	NORML	NORML	NORML	
Odor	scalar	*Visual	NORML	NORML	NORML	
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	
Free Water	scalar	*Visual		NEG	NEG	
FLUID DDODEDT					111	1

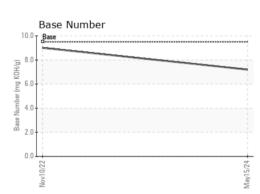
FLUID PHOPENTIES		memod			riistory i	History2	
Visc @ 100°C	cSt	ASTM D445	15.3	13.3	13.8		

GRAPHS













Certificate 12367

Laboratory Sample No.

: WC0923430 Lab Number : 06207293 Unique Number : 11074754

To discuss this sample report, contact Customer Service at 1-800-237-1369.

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

: 11 Jun 2024 : 13 Jun 2024

: 13 Jun 2024 - Angela Borella

US 74146 Contact: BEN CALDWELL kevin.marson@wearcheck.com

5601 S 122ND E AVE

* - 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)

Test Package : CONST (Additional Tests: TBN)

Report Id: MANTUL [WUSCAR] 06207293 (Generated: 06/15/2024 09:18:39) Rev: 1

MANHATTAN ROAD AND BRIDGE

T: (918)728-5749

TULSA, OK