

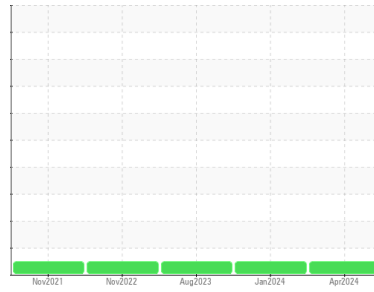


OIL ANALYSIS REPORT



Area
[22705]
 Machine Id
30-96L
 Component
Diesel Engine
 Fluid
CONOCO PHILLIPS GUARDOL ECT 15W40 (--- GAL)

Sample Rating Trend



NORMAL



DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

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.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		WC0836202	WC0836152	WC0802434
Sample Date	Client Info		24 Apr 2024	04 Jan 2024	04 Aug 2023
Machine Age	hrs	Client Info	3118	2842	2466
Oil Age	hrs	Client Info	276	376	597
Oil Changed	Client Info		Changed	Changed	Changed
Sample Status			NORMAL	NORMAL	NORMAL

CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>2.1	<1.0	<1.0	<1.0
Water	WC Method	>0.21	NEG	NEG	NEG
Glycol	WC Method		NEG	NEG	NEG

WEAR METALS

	method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m	>51	24	24	12
Chromium	ppm	ASTM D5185m	>11	<1	<1	<1
Nickel	ppm	ASTM D5185m	>5	0	<1	1
Titanium	ppm	ASTM D5185m		<1	<1	<1
Silver	ppm	ASTM D5185m	>3	0	0	<1
Aluminum	ppm	ASTM D5185m	>31	1	2	2
Lead	ppm	ASTM D5185m	>26	0	0	<1
Copper	ppm	ASTM D5185m	>26	2	<1	1
Tin	ppm	ASTM D5185m	>4	<1	0	<1
Vanadium	ppm	ASTM D5185m		0	0	<1
Cadmium	ppm	ASTM D5185m		0	0	0

ADDITIVES

	method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185m	85	97	95	82
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		3	1	29
Manganese	ppm	ASTM D5185m		<1	0	<1
Magnesium	ppm	ASTM D5185m	350	778	724	540
Calcium	ppm	ASTM D5185m	1800	1321	1291	1706
Phosphorus	ppm	ASTM D5185m	1000	1059	1081	1048
Zinc	ppm	ASTM D5185m	1100	1224	1190	1247
Sulfur	ppm	ASTM D5185m	3500	4306	4125	4386

CONTAMINANTS

	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m	>22	6	4	4
Sodium	ppm	ASTM D5185m	>31	6	3	4
Potassium	ppm	ASTM D5185m	>20	4	3	3

INFRA-RED

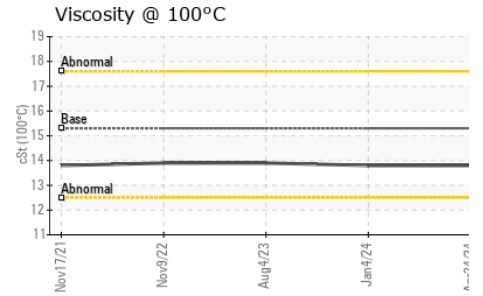
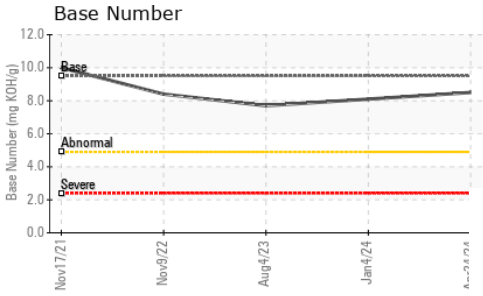
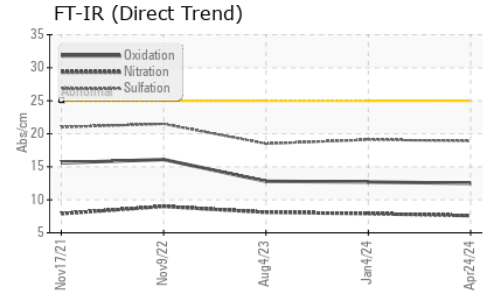
	method	limit/base	current	history1	history2	
Soot %	%	*ASTM D7844	>3	0.2	0.2	0.2
Nitration	Abs/cm	*ASTM D7624	>20	7.6	7.9	8.1
Sulfation	Abs/.1mm	*ASTM D7415	>30	18.9	19.1	18.5

FLUID DEGRADATION

	method	limit/base	current	history1	history2	
Oxidation	Abs/.1mm	*ASTM D7414	>25	12.5	12.7	12.8
Base Number (BN)	mg KOH/g	ASTM D2896	9.5	8.5	8.1	7.7



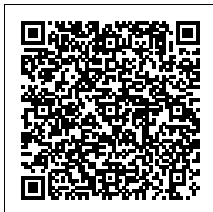
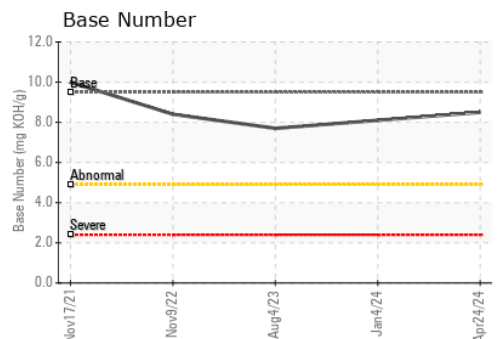
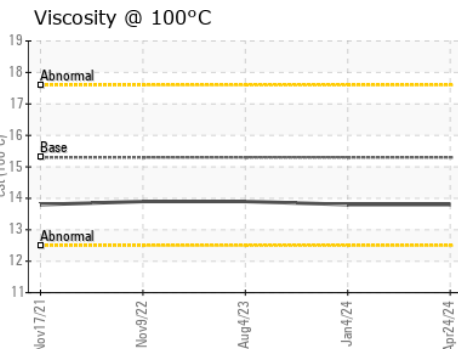
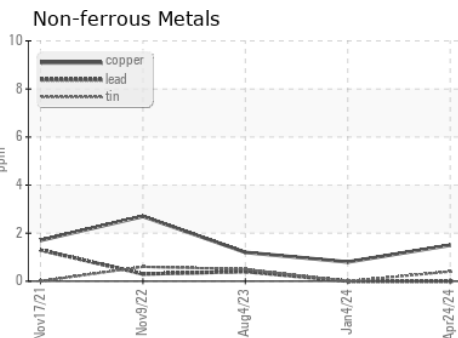
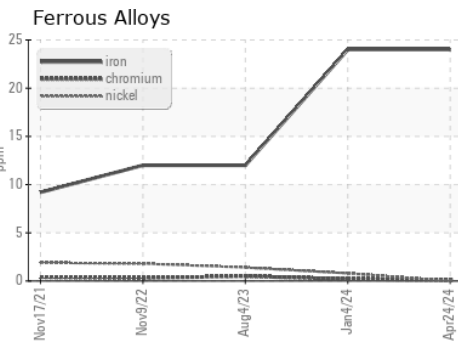
OIL ANALYSIS REPORT



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	>0.21	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 100°C	cSt	ASTM D445	15.3	13.8	13.8	13.9

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0836202 **Received** : 17 May 2024
Lab Number : **06183617** **Tested** : 21 May 2024
Unique Number : 11034943 **Diagnosed** : 21 May 2024 - Wes Davis
Test Package : CONST (Additional Tests: TBN)

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 US 74146
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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)