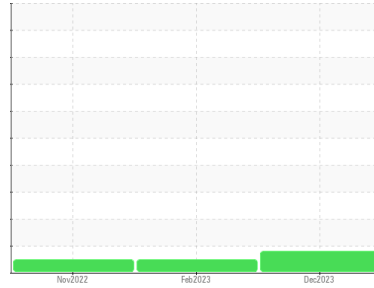




OIL ANALYSIS REPORT

Sample Rating Trend



WEAR



Area
[17587]
 Machine Id
10-586

Component
Diesel Engine
 Fluid

CONOCO PHILLIPS GUARDOL ECT 10W30 (--- GAL)

DIAGNOSIS

▲ Recommendation

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

▲ Wear

Cylinder, crank, or cam shaft wear is indicated.

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		WC0836135	WC0754790	WC0754795
Sample Date	Client Info		18 Dec 2023	14 Feb 2023	04 Nov 2022
Machine Age	mls	Client Info	75762	35159	25752
Oil Age	mls	Client Info	40603	9407	0
Oil Changed	Client Info		Changed	Changed	Changed
Sample Status			ABNORMAL	NORMAL	NORMAL

CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>5	<1.0	<1.0	1.6
Water	WC Method	>0.2	NEG	NEG	NEG
Glycol	WC Method		NEG	NEG	NEG

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >100	▲ 165	28	46
Chromium	ppm	ASTM D5185m >20	5	2	2
Nickel	ppm	ASTM D5185m >4	<1	<1	<1
Titanium	ppm	ASTM D5185m	100	84	82
Silver	ppm	ASTM D5185m >3	0	0	0
Aluminum	ppm	ASTM D5185m >20	136	38	70
Lead	ppm	ASTM D5185m >40	0	0	<1
Copper	ppm	ASTM D5185m >330	5	1	5
Tin	ppm	ASTM D5185m >15	0	<1	<1
Vanadium	ppm	ASTM D5185m	<1	<1	<1
Cadmium	ppm	ASTM D5185m	0	0	0

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	34	106	93
Barium	ppm	ASTM D5185m	0	<1	<1
Molybdenum	ppm	ASTM D5185m	13	1	6
Manganese	ppm	ASTM D5185m	1	<1	1
Magnesium	ppm	ASTM D5185m	442	431	393
Calcium	ppm	ASTM D5185m	2138	1782	1769
Phosphorus	ppm	ASTM D5185m 1100	1129	988	958
Zinc	ppm	ASTM D5185m 1220	1420	1235	1185
Sulfur	ppm	ASTM D5185m	4115	4391	4256

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	23	13	12
Sodium	ppm	ASTM D5185m	6	4	4
Potassium	ppm	ASTM D5185m >20	321	82	174

INFRA-RED

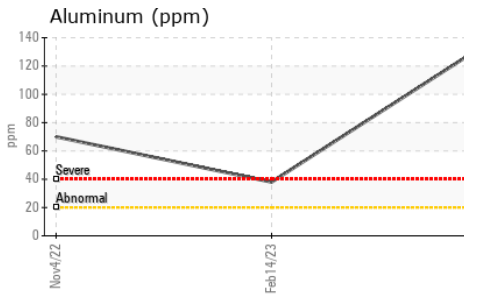
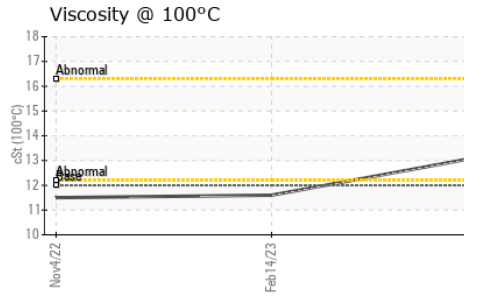
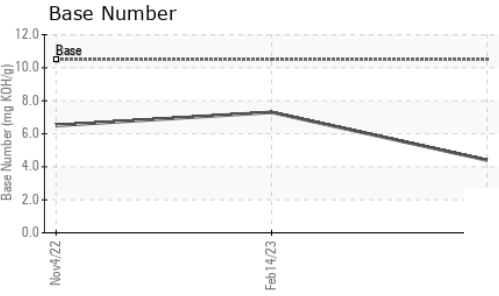
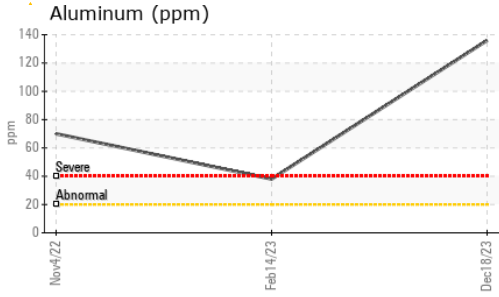
	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >3	0.9	0.2	0.2
Nitration	Abs/cm	*ASTM D7624 >20	14.4	10.0	9.8
Sulfation	Abs/.1mm	*ASTM D7415 >30	36.0	21.4	22.6

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	35.3	17.5	20.5
Base Number (BN)	mg KOH/g	ASTM D2896 10.5	4.4	7.3	6.5



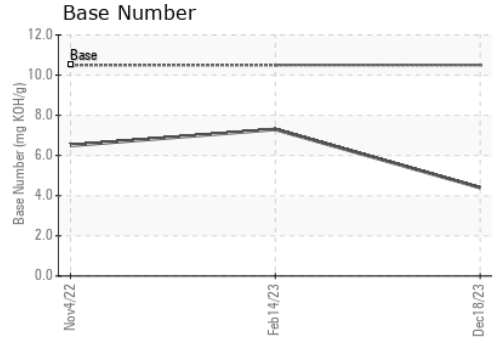
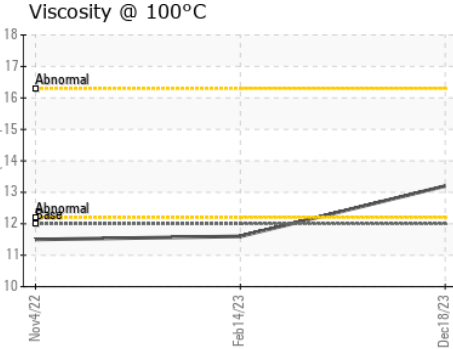
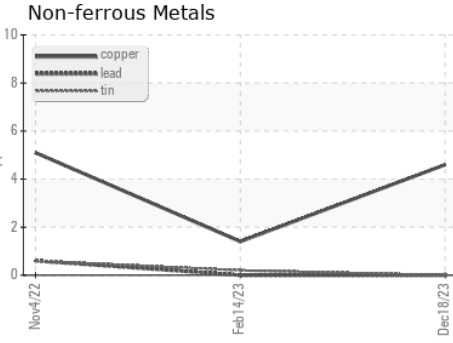
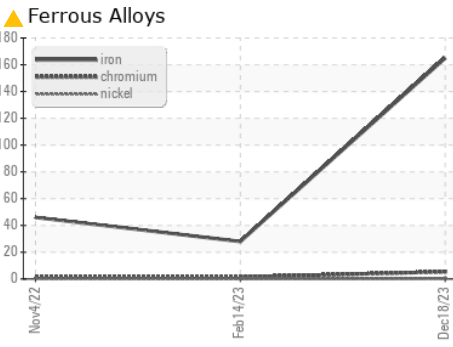
OIL ANALYSIS REPORT



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	>0.2	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 100°C	cSt	ASTM D445	12.0	13.2	11.6	11.5

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0836135 **Recieved** : 09 Jan 2024
Lab Number : 06055801 **Diagnosed** : 10 Jan 2024
Unique Number : 10821750 **Diagnostician** : Jonathan Hester
Test Package : CONST (Additional Tests: TBN)

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)

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