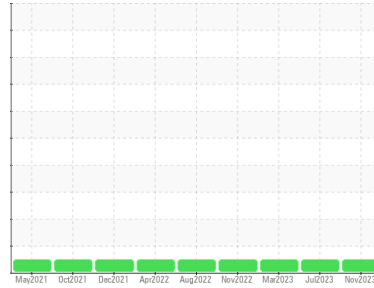




OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL



Area
[20128]
 Machine Id
80-214

Component
Diesel Engine
 Fluid

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

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			WC0836246	WC0802414	WC0793311
Sample Date	Client Info			03 Nov 2023	18 Jul 2023	30 Mar 2023
Machine Age	hrs	Client Info		7658	7428	7127
Oil Age	hrs	Client Info		230	301	264
Oil Changed	Client Info			Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL

CONTAMINATION		method	limit/base	current	history1	history2
Fuel	WC Method	>5		<1.0	<1.0	<1.0
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	18	18	29
Chromium	ppm	ASTM D5185m	>20	<1	<1	1
Nickel	ppm	ASTM D5185m	>4	0	0	0
Titanium	ppm	ASTM D5185m		1	0	<1
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>20	3	3	3
Lead	ppm	ASTM D5185m	>40	0	<1	0
Copper	ppm	ASTM D5185m	>330	<1	3	1
Tin	ppm	ASTM D5185m	>15	0	<1	<1
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		0	0	0

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	85	53	50	59
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		3	31	10
Manganese	ppm	ASTM D5185m		<1	0	<1
Magnesium	ppm	ASTM D5185m	350	699	599	808
Calcium	ppm	ASTM D5185m	1800	1260	1754	1341
Phosphorus	ppm	ASTM D5185m	1000	1052	1112	1130
Zinc	ppm	ASTM D5185m	1100	1208	1351	1305
Sulfur	ppm	ASTM D5185m	3500	3578	4708	4731

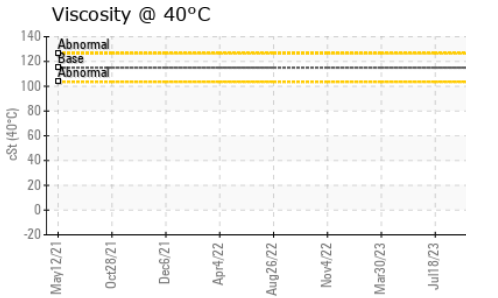
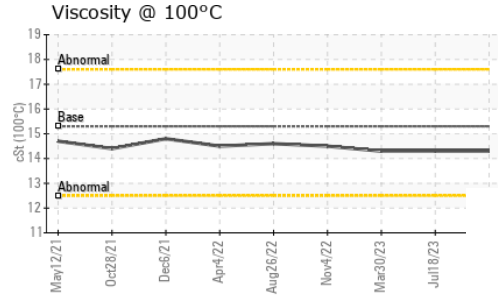
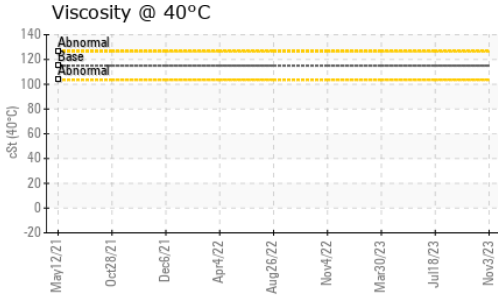
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	9	7	10
Sodium	ppm	ASTM D5185m		0	2	3
Potassium	ppm	ASTM D5185m	>20	2	4	2

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	0.3	0.4	0.4
Nitration	Abs/cm	*ASTM D7624	>20	8.7	9.5	9.1
Sulfation	Abs/.1mm	*ASTM D7415	>30	19.7	19.6	18.3

FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	13.8	14.0	13.9
Base Number (BN)	mg KOH/g	ASTM D2896	9.5	7.7	7.3	7.3



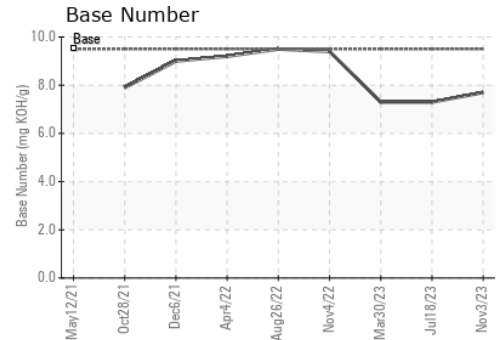
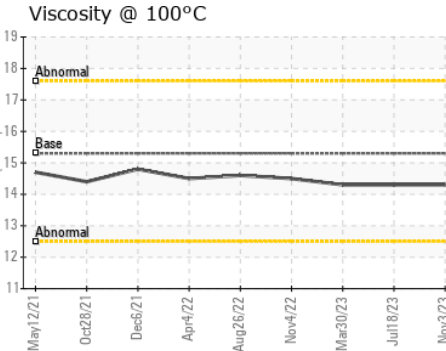
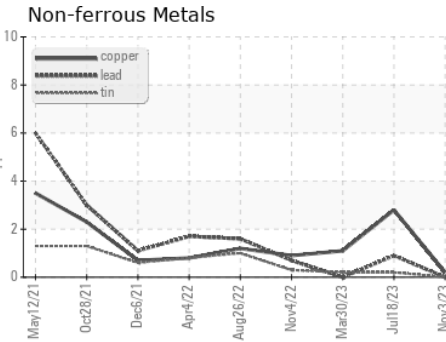
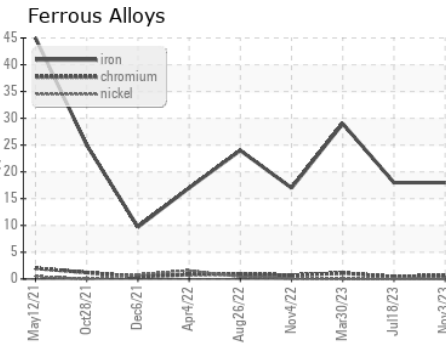
OIL ANALYSIS REPORT



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	15.3	14.3	14.3

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
 Sample No. : WC0836246 Received : 16 Nov 2023
 Lab Number : 06010095 Diagnosed : 20 Nov 2023
 Unique Number : 10749239 Diagnostician : Don Baldrige
 Test Package : CONST (Additional Tests: KV40, 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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