



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	ABNORMAL

Machine Id
WIRTGEN 001877
Component
2 Diesel Engine
Fluid
CASTROL VECTON 15W40 CK4 (7 GAL)

RECOMMENDATION

We advise that you check the fuel injection system. Oil and filter change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0800351	WC0757949	WC0701027
Sample Date		Client Info		21 Dec 2023	24 Jan 2023	20 Oct 2022
Machine Age	hrs	Client Info		6259	5352	5216
Oil Age	hrs	Client Info		315	136	553
Filter Age	hrs	Client Info		315	136	553
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				ABNORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	13	5	31
Chromium	ppm	ASTM D5185m	>20	<1	<1	1
Nickel	ppm	ASTM D5185m	>2	<1	0	0
Titanium	ppm	ASTM D5185m	>2	<1	0	<1
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>25	4	2	4
Lead	ppm	ASTM D5185m	>40	<1	<1	<1
Copper	ppm	ASTM D5185m	>330	8	6	15
Tin	ppm	ASTM D5185m	>15	<1	<1	<1
Vanadium	ppm	ASTM D5185m		<1	<1	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

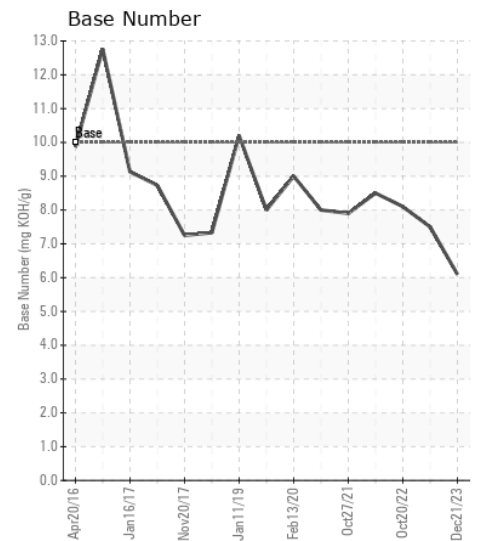
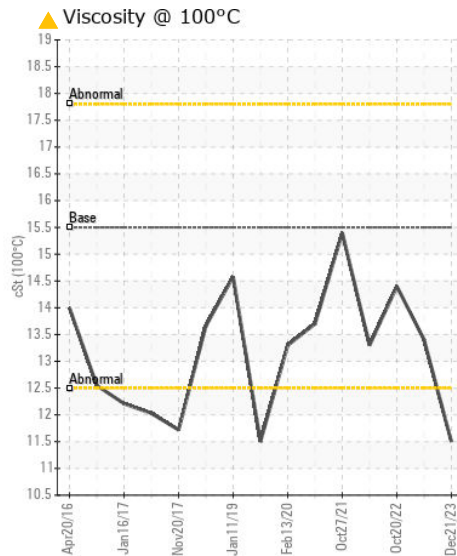
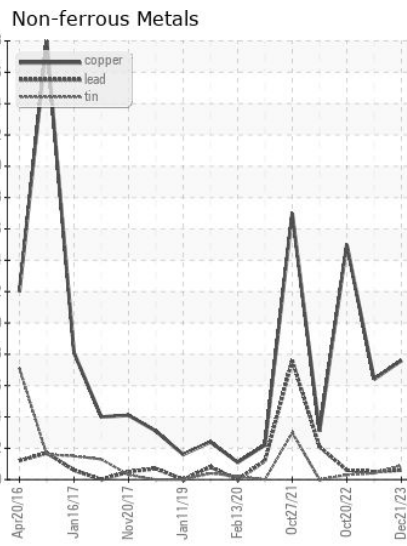
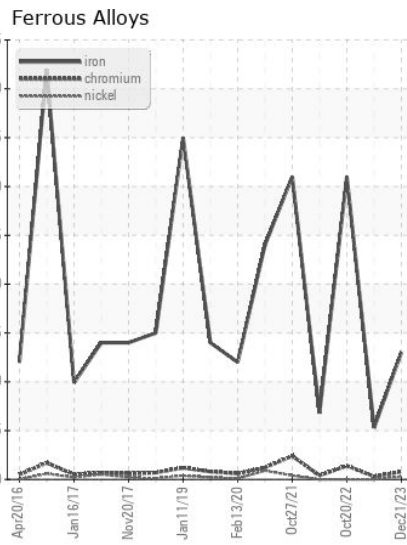
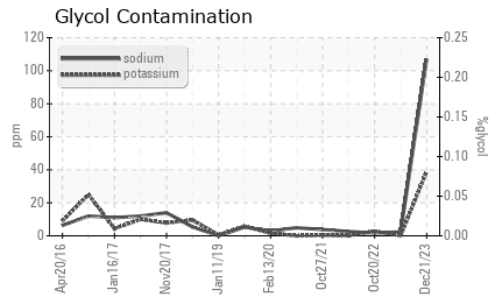
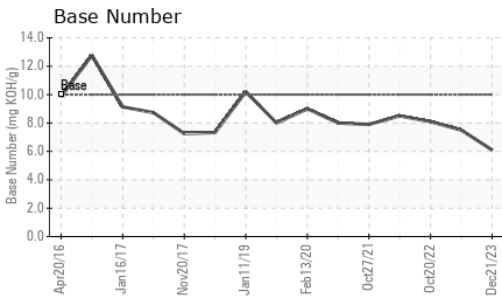
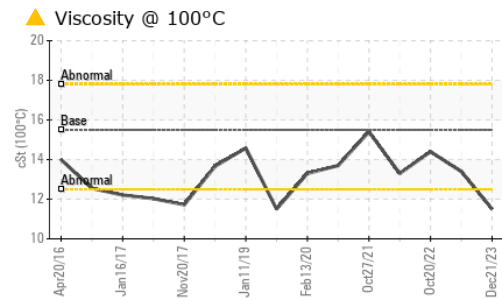
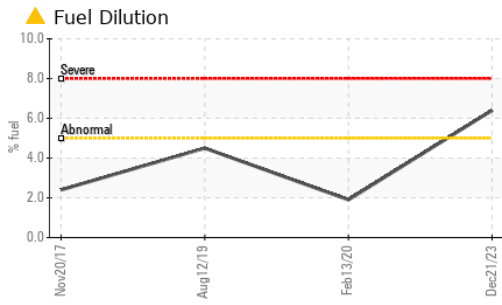
Sodium and/or potassium levels are high. There is a moderate amount of fuel present in the oil. Test for glycol is negative.

Silicon	ppm	ASTM D5185m	>25	7	5	6
Potassium	ppm	ASTM D5185m	>20	39	0	3
Fuel	%	ASTM D3524	>5	▲ 6.4	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol	%	*ASTM D2982		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.3	0.3	2.6
Nitration	Abs/cm	*ASTM D7624	>20	11.0	7.9	13.6
Sulfation	Abs/.1mm	*ASTM D7415	>30	19.8	17.5	27.0
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	NEG

FLUID CONDITION

Fuel is present in the oil and is lowering the viscosity. The BN result indicates that there is suitable alkalinity remaining in the oil.

Sodium	ppm	ASTM D5185m		▲ 107	2	2
Boron	ppm	ASTM D5185m		24	72	28
Barium	ppm	ASTM D5185m		0	0	2
Molybdenum	ppm	ASTM D5185m		85	84	87
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m		81	76	95
Calcium	ppm	ASTM D5185m		1886	2079	2129
Phosphorus	ppm	ASTM D5185m		979	967	957
Zinc	ppm	ASTM D5185m		1135	1172	1150
Sulfur	ppm	ASTM D5185m		3341	4000	3532
Oxidation	Abs/.1mm	*ASTM D7414	>25	17.4	13.2	18.4
Base Number (BN)	mg KOH/g	ASTM D2896	10	6.1	7.5	8.1
Visc @ 100°C	cSt	ASTM D445	15.5	▲ 11.5	13.4	14.4



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0800351 **Received** : 12 Jan 2024
Lab Number : 06060072 **Diagnosed** : 16 Jan 2024
Unique Number : 10831454 **Diagnostician** : Doug Bogart
Test Package : CONST (Additional Tests: FuelDilution, Glycol, PercentFuel, 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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