



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area
[Z20279]

Machine Id
DAF ROCK 83

Component
Diesel Engine

Fluid
DIESEL ENGINE OIL SAE 40 (38 LTR)

RECOMMENDATION

Resample at the next service interval to monitor. The fluid was not specified, however, a fluid match indicates that this fluid is (GENERIC) DIESEL ENGINE OIL SAE 40. Please confirm.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC06176861	WC06043804	WC05977550
Sample Date		Client Info		22 Apr 2024	30 Nov 2023	03 Oct 2023
Machine Age	kms	Client Info		792589	749297	731379
Oil Age	kms	Client Info		0	0	0
Filter Age	kms	Client Info		0	0	0
Oil Changed		Client Info		N/A	N/A	Changed
Filter Changed		Client Info		N/A	N/A	Changed
Sample Status				NORMAL	ATTENTION	ABNORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	18	9	30
Chromium	ppm	ASTM D5185m	>20	<1	<1	1
Nickel	ppm	ASTM D5185m	>4	0	<1	0
Titanium	ppm	ASTM D5185m		<1	0	<1
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>20	2	3	4
Lead	ppm	ASTM D5185m	>40	<1	0	2
Copper	ppm	ASTM D5185m	>330	4	3	8
Tin	ppm	ASTM D5185m	>15	1	0	<1
Vanadium	ppm	ASTM D5185m		<1	<1	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

There is no indication of any contamination in the oil.

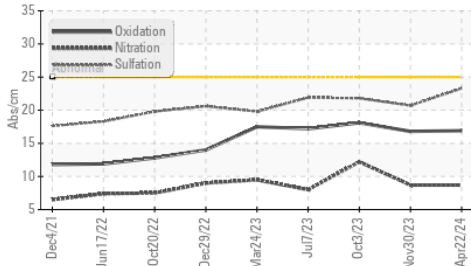
Silicon	ppm	ASTM D5185m	>25	10	19	▲ 29
Potassium	ppm	ASTM D5185m	>20	2	<1	4
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	1	0.6	0.9
Nitration	Abs/cm	*ASTM D7624	>20	8.7	8.7	12.2
Sulfation	Abs/.1mm	*ASTM D7415	>30	23.3	20.7	21.8
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

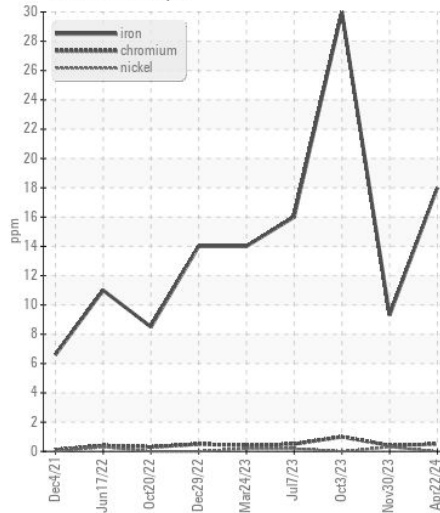
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m	>216	8	● 107	▲ 886
Boron	ppm	ASTM D5185m	250	189	309	109
Barium	ppm	ASTM D5185m	10	2	<1	0
Molybdenum	ppm	ASTM D5185m	100	102	92	85
Manganese	ppm	ASTM D5185m		<1	1	<1
Magnesium	ppm	ASTM D5185m	450	410	428	449
Calcium	ppm	ASTM D5185m	3000	1566	1918	1706
Phosphorus	ppm	ASTM D5185m	1150	1116	765	588
Zinc	ppm	ASTM D5185m	1350	1217	844	812
Sulfur	ppm	ASTM D5185m	4250	3590	2694	2430
Oxidation	Abs/.1mm	*ASTM D7414	>25	16.9	16.8	18.1
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	6.0	5.2	7.5
Visc @ 100°C	cSt	ASTM D445	14.4	14.0	13.5	13.8

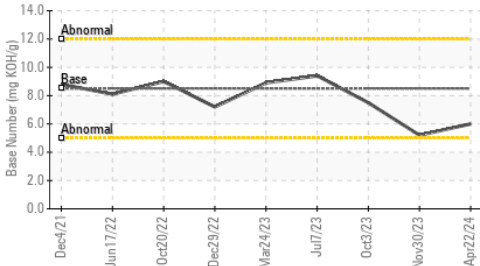
FT-IR (Direct Trend)



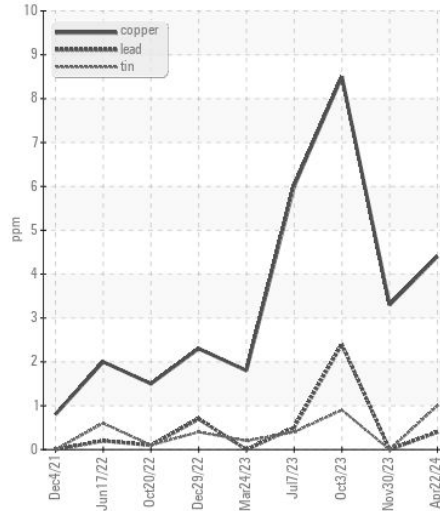
Ferrous Alloys



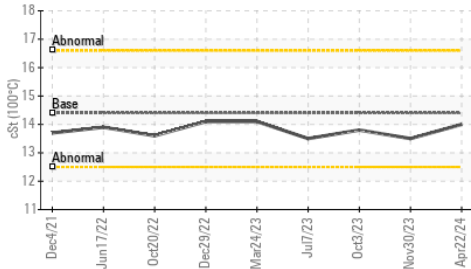
Base Number



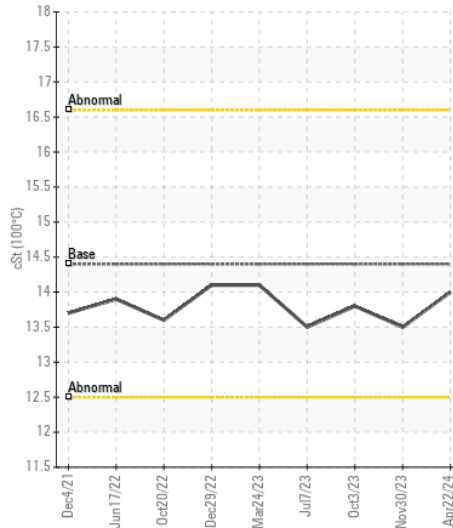
Non-ferrous Metals



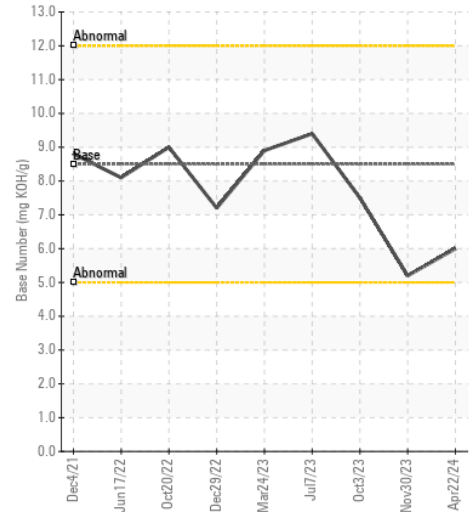
Viscosity @ 100°C



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513

Sample No. : WC06176861

Lab Number : 06176861

Unique Number : 11022914

Test Package : FLEET

Received : 13 May 2024

Tested : 14 May 2024

Diagnosed : 14 May 2024 - Wes Davis

TR GROUP

781 GREAT SOUTH RD

PENROSE AUCKLAND, ZZ

NZ 1061

Contact: DAVE TENNANT

dave.tennant@trgroup.co.nz

T:

F:

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)