



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	SEVERE
FLUID CONDITION	ABNORMAL

Machine Id
831
Component
Diesel Engine
Fluid
{not provided} (--- QTS)

RECOMMENDATION

We advise that you check the fuel injection system. We recommend that you drain the oil from the component if this has not already been done. We recommend an early resample to monitor this condition.

WEAR

All component wear rates are normal.

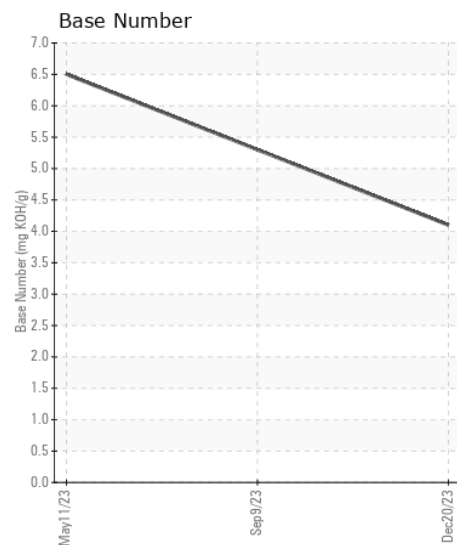
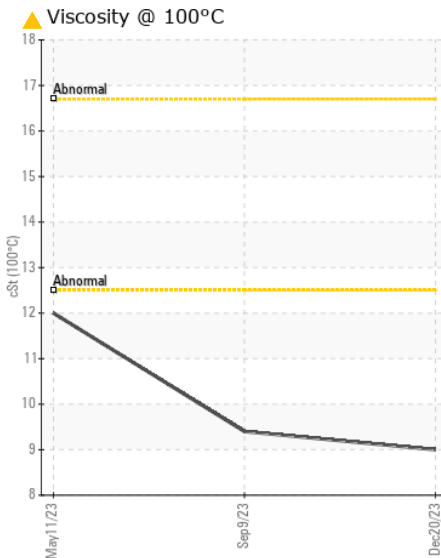
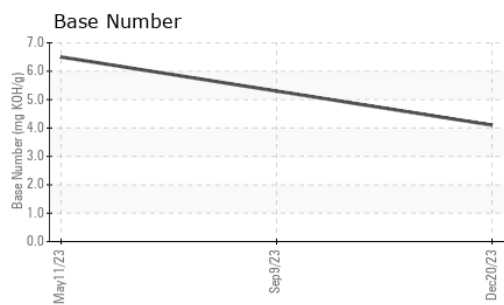
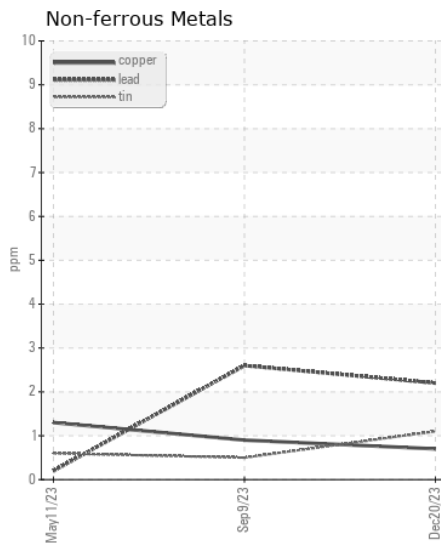
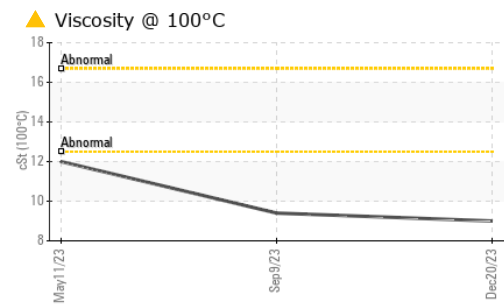
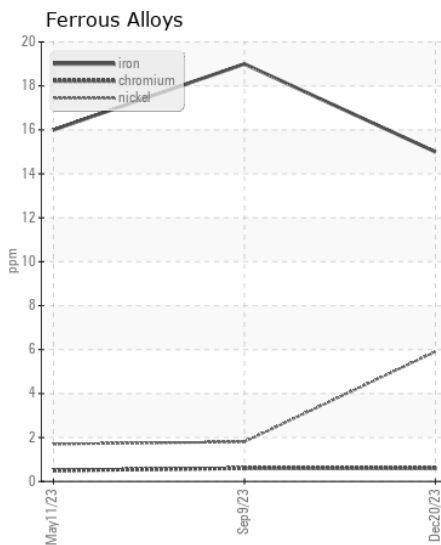
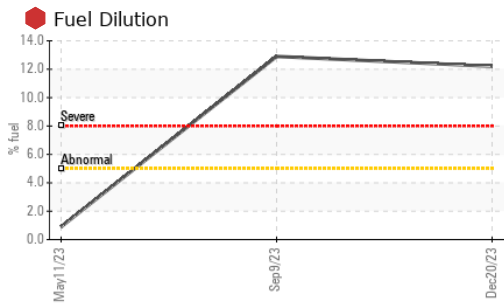
CONTAMINATION

There is a high amount of fuel present in the oil.

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. The oil is no longer serviceable due to the presence of contaminants.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		TLY0001850	TLY0001837	TLY0001602
Sample Date		Client Info		20 Dec 2023	09 Sep 2023	11 May 2023
Machine Age	mls	Client Info		142658	135158	123613
Oil Age	mls	Client Info		0	0	0
Filter Age	mls	Client Info		0	0	0
Oil Changed		Client Info		N/A	N/A	Changed
Filter Changed		Client Info		N/A	N/A	N/A
Sample Status				SEVERE	SEVERE	NORMAL
Iron	ppm	ASTM D5185m	>100	15	19	16
Chromium	ppm	ASTM D5185m	>20	<1	<1	<1
Nickel	ppm	ASTM D5185m	>4	6	2	2
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m	>3	<1	0	<1
Aluminum	ppm	ASTM D5185m	>20	6	7	3
Lead	ppm	ASTM D5185m	>40	2	3	<1
Copper	ppm	ASTM D5185m	>330	<1	<1	1
Tin	ppm	ASTM D5185m	>15	1	<1	<1
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Silicon	ppm	ASTM D5185m	>25	5	5	4
Potassium	ppm	ASTM D5185m	>20	1	0	2
Fuel	%	ASTM D3524	>5	12.2	12.9	0.9
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.5	0.6	0.6
Nitration	Abs/cm	*ASTM D7624	>20	10.2	10.7	10.3
Sulfation	Abs/.1mm	*ASTM D7415	>30	21.7	21.9	21.7
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
Sodium	ppm	ASTM D5185m		6	6	3
Boron	ppm	ASTM D5185m		14	12	15
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		48	42	54
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m		582	512	614
Calcium	ppm	ASTM D5185m		1311	1422	1463
Phosphorus	ppm	ASTM D5185m		732	658	750
Zinc	ppm	ASTM D5185m		921	886	987
Sulfur	ppm	ASTM D5185m		2232	2117	2475
Oxidation	Abs/.1mm	*ASTM D7414	>25	20.2	22.7	21.1
Base Number (BN)	mg KOH/g	ASTM D2896		4.1	5.3	6.5
Visc @ 100°C	cSt	ASTM D445		9	9.4	12.0



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : TLY0001850 **Received** : 08 Jan 2024
Lab Number : 06054670 **Diagnosed** : 12 Jan 2024
Unique Number : 10820619 **Diagnostician** : Jonathan Hester
Test Package : CONST (Additional Tests: PercentFuel, TBN)

COCKEYS ENTERPRISES
 3300 TRANSWAY RD
 HALETHORP, MD
 US 21227
 Contact: FRANK ROLNIAK
 frank.rolniak@cockeys.com

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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F: