



WEAR CHECK

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	ABNORMAL

Machine Id
FSP 133838
 Component
Diesel Engine
 Fluid
DIESEL ENGINE OIL SAE 15W40 (--- QTS)

RECOMMENDATION

Oil and filter change at the time of sampling has been noted. No corrective action is recommended at this time. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0874091	WC0797906	WC0738736
Sample Date		Client Info		05 Dec 2023	19 Apr 2023	10 Oct 2022
Machine Age	mls	Client Info		0	0	276224
Oil Age	mls	Client Info		0	0	0
Filter Age	mls	Client Info		0	0	0
Oil Changed		Client Info		Changed	Changed	N/A
Filter Changed		Client Info		Changed	Changed	N/A
Sample Status				ABNORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	51	41	76
Chromium	ppm	ASTM D5185m	>20	1	<1	2
Nickel	ppm	ASTM D5185m	>4	1	<1	0
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>20	7	5	8
Lead	ppm	ASTM D5185m	>40	0	0	<1
Copper	ppm	ASTM D5185m	>330	<1	1	2
Tin	ppm	ASTM D5185m	>15	<1	<1	<1
Vanadium	ppm	ASTM D5185m		<1	0	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

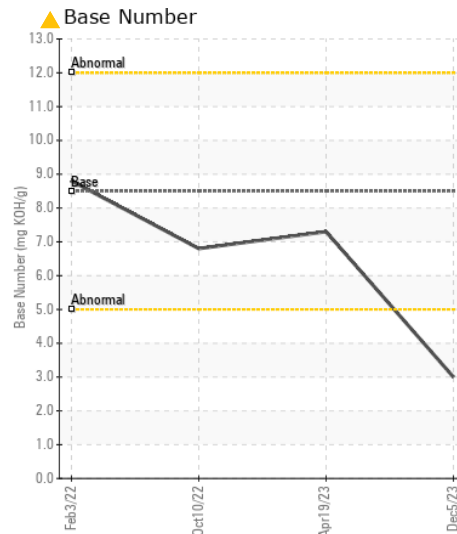
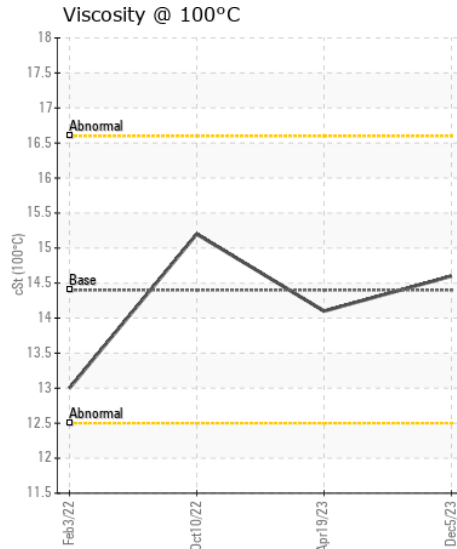
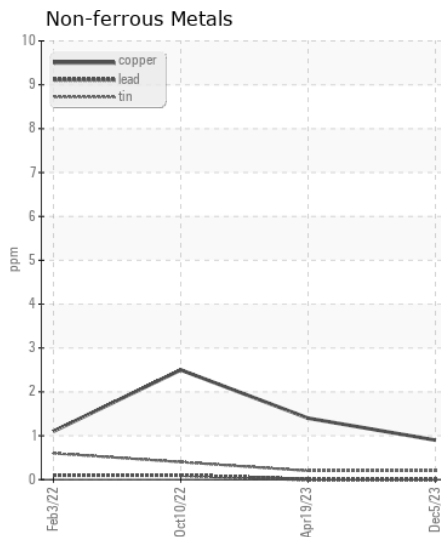
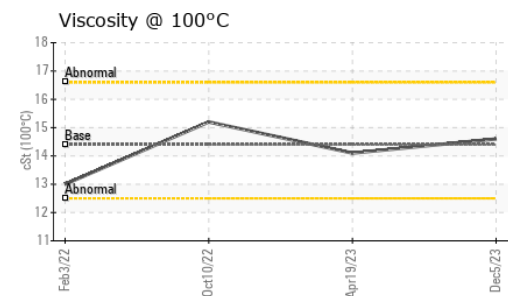
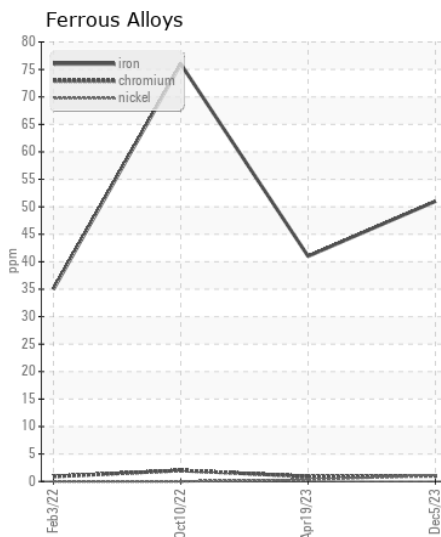
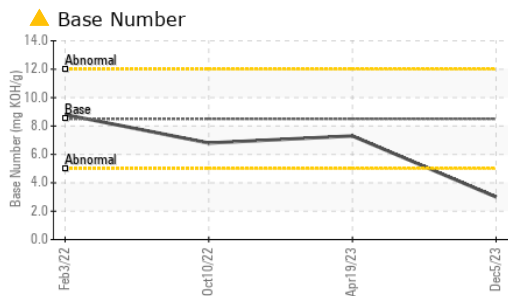
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	7	5	9
Potassium	ppm	ASTM D5185m	>20	5	6	9
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	1.4	1.1	2.3
Nitration	Abs/cm	*ASTM D7624	>20	13.6	14.0	18.1
Sulfation	Abs/.1mm	*ASTM D7415	>30	27.1	27.1	37.5
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 level is low.

Sodium	ppm	ASTM D5185m	>158	2	<1	2
Boron	ppm	ASTM D5185m	250	<1	0	1
Barium	ppm	ASTM D5185m	10	0	0	0
Molybdenum	ppm	ASTM D5185m	100	75	75	77
Manganese	ppm	ASTM D5185m		<1	<1	1
Magnesium	ppm	ASTM D5185m	450	1179	1071	1210
Calcium	ppm	ASTM D5185m	3000	1229	1223	1493
Phosphorus	ppm	ASTM D5185m	1150	1218	1163	1319
Zinc	ppm	ASTM D5185m	1350	1536	1442	1644
Sulfur	ppm	ASTM D5185m	4250	3071	3444	3414
Oxidation	Abs/.1mm	*ASTM D7414	>25	24.7	23.4	33.2
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	▲ 3.0	7.3	6.8
Visc @ 100°C	cSt	ASTM D445	14.4	14.6	14.1	15.2



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0874091 **Received** : 30 Jan 2024
Lab Number : 06074459 **Diagnosed** : 31 Jan 2024
Unique Number : 10856550 **Diagnostician** : Sean Felton
Test Package : FLEET

FRESHPOINT
 8801 EXCHANGE DRIVE
 ORLANDO, FL
 US 32809
 Contact: CRAIG EVANS
 evans_craig@sbcglobal.net

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)