



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	ABNORMAL

Machine Id
FSP135052
 Component
Diesel Engine
 Fluid
DIESEL ENGINE OIL SAE 15W40 (--- QTS)

RECOMMENDATION

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		WC0875907	WC0787685	WC0696560
Sample Date		Client Info		20 Feb 2024	25 Sep 2023	26 Sep 2022
Machine Age	mls	Client Info		260323	248748	227502
Oil Age	mls	Client Info		10000	0	0
Filter Age	mls	Client Info		10000	0	0
Oil Changed		Client Info		Changed	N/A	Changed
Filter Changed		Client Info		Changed	N/A	Changed
Sample Status				ABNORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	19	39	10
Chromium	ppm	ASTM D5185m	>20	<1	2	<1
Nickel	ppm	ASTM D5185m	>4	0	1	0
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>20	4	6	3
Lead	ppm	ASTM D5185m	>40	<1	3	<1
Copper	ppm	ASTM D5185m	>330	1	2	<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

CONTAMINATION

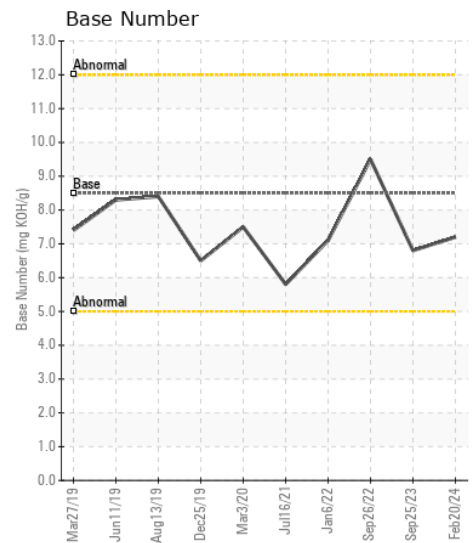
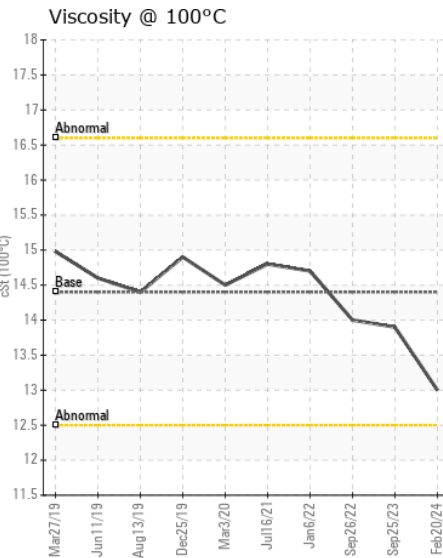
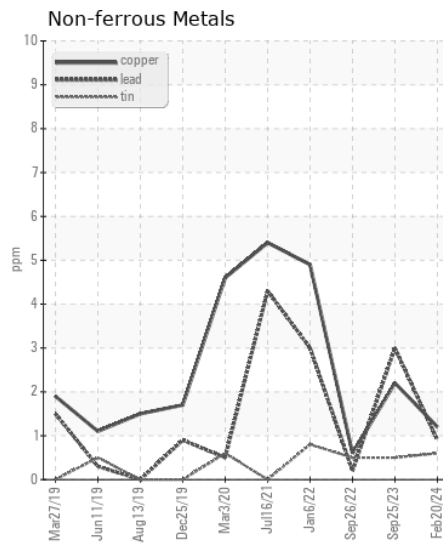
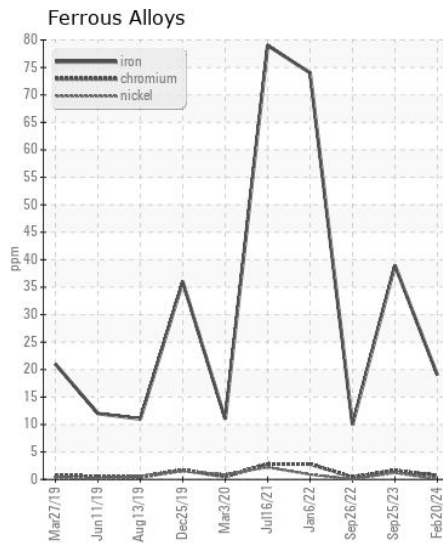
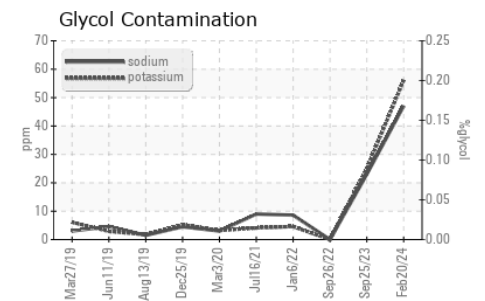
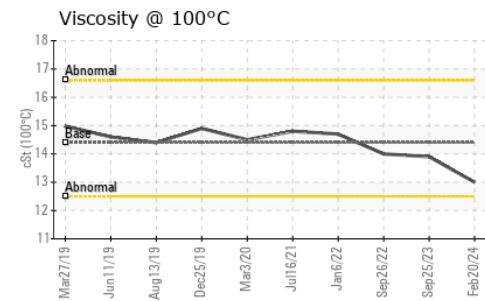
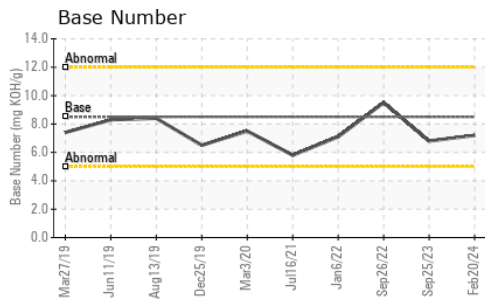
Sodium and/or potassium levels are high. Test for glycol is negative.

Silicon	ppm	ASTM D5185m	>25	7	7	4
Potassium	ppm	ASTM D5185m	>20	56	25	0
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol	%	*ASTM D2982		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.6	1	0.5
Nitration	Abs/cm	*ASTM D7624	>20	12.3	14.0	10.9
Sulfation	Abs/.1mm	*ASTM D7415	>30	23.1	26.9	22.6
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 acceptable for the time in service.

Sodium	ppm	ASTM D5185m	>158	47	23	0
Boron	ppm	ASTM D5185m	250	8	<1	4
Barium	ppm	ASTM D5185m	10	0	0	0
Molybdenum	ppm	ASTM D5185m	100	65	69	59
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m	450	922	978	799
Calcium	ppm	ASTM D5185m	3000	1143	1079	1243
Phosphorus	ppm	ASTM D5185m	1150	1058	1003	949
Zinc	ppm	ASTM D5185m	1350	1271	1298	1158
Sulfur	ppm	ASTM D5185m	4250	3115	3438	3412
Oxidation	Abs/.1mm	*ASTM D7414	>25	21.1	24.4	19.3
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	7.2	6.8	9.5
Visc @ 100°C	cSt	ASTM D445	14.4	13.0	13.9	14.0



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0875907 **Received** : 29 Feb 2024
Lab Number : 06104963 **Tested** : 05 Mar 2024
Unique Number : 10903193 **Diagnosed** : 05 Mar 2024 - Jonathan Hester
Test Package : FLEET (Additional Tests: Glycol)

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)

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F: