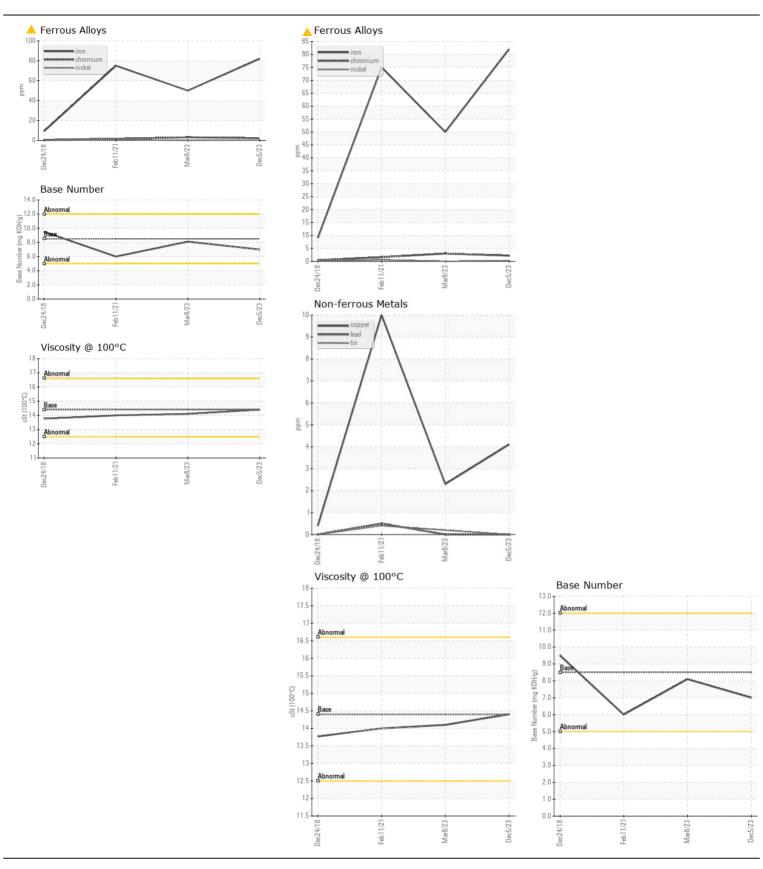


WEAR CONTAMINATION **FLUID CONDITION** **ABNORMAL** NORMAL **NORMAL**

FSP132803 (S/N 213486)

Component Left Diesel Engine							
DIESEL ENGINE OIL SAE 15W40 (QTS)							
RECOMMENDATION	Test Sample Number	UOM	Method Client Info	Limit/Abn	Current WC0874092	History1 WC0797950	History2 WC0535856
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.	Sample Date		Client Info		05 Dec 2023	08 Mar 2023	11 Feb 2021
	Machine Age	hrs	Client Info		0	0	0
	Oil Age	hrs	Client Info		0	0	0
	Filter Age	hrs	Client Info		0	0	0
	Oil Changed		Client Info		Changed	Changed	Changed
	Filter Changed		Client Info		Changed	Changed	Changed
	Sample Status				ABNORMAL	NORMAL	NORMAL
WEAR	Iron	ppm	ASTM D5185m	>80	A 82	50	75
Cylinder, crank, or cam shaft wear is indicated. All other component wear rates are normal.	Chromium	ppm	ASTM D5185m	>5	2	3	2
	Nickel	ppm	ASTM D5185m	>2	<1	0	<1
	Titanium	ppm	ASTM D5185m		0	0	<1
	Silver	ppm	ASTM D5185m	>3	0	0	0
	Aluminum	ppm	ASTM D5185m	>30	10	3	7
	Lead	ppm	ASTM D5185m	>30	0	0	<1
	Copper	ppm	ASTM D5185m	>150	4	2	10
	Tin	ppm	ASTM D5185m	>5	0	<1	<1
	Vanadium	ppm	ASTM D5185m		0	0	<1
	White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
CONTAMINATION	Silicon	ppm	ASTM D5185m	>20	9	6	7
There is no indication of any contamination in the oil.	Potassium	ppm	ASTM D5185m	>20	4	1	3
	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	2	1.2	1.8
	Nitration	Abs/cm	*ASTM D7624	>20	13.4	10.8	11.8
	Sulfation	Abs/.1mm	*ASTM D7415	>30	27.7	23.0	29
	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	Sodium	ppm	ASTM D5185m	>158	0	2	3
The DN years tindicates that there is suitable alkalinity remaining in the	Boron	ppm	ASTM D5185m	250	0	0	12
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.	Barium	ppm	ASTM D5185m	10	0	0	0
	Molybdenum	ppm	ASTM D5185m	100	74	67	17
	Manganese	ppm	ASTM D5185m		<1	<1	<1
	Magnesium	ppm	ASTM D5185m		1174	1047	95
	Calcium	ppm	ASTM D5185m	3000	1261	1121	2478
	Phosphorus	ppm	ASTM D5185m		1182	1062	957
	Zinc	ppm	ASTM D5185m	1350	1430	1342	1146
	Sulfur	ppm	ASTM D5185m		3544	3146	2876
	Oxidation	Abs/.1mm	*ASTM D7414		22.6	18.6	17.2
	Base Number (BN)	mg KOH/g	ASTM D2896		7.0	8.1	6
	Visc @ 100°C	cSt	ASTM D445	14.4	14.4	14.1	14.0

Contact/Location: CRAIG EVANS - FREORL







Certificate L2367

Laboratory Sample No. Lab Number Test Package : FLEET

Unique Number : 10831328

: WC0874092 : 06059946

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Recieved : 12 Jan 2024 Diagnosed : 16 Jan 2024 Diagnostician : Don Baldridge

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) **FRESHPOINT**

8801 EXCHANGE DRVIE ORLANDO, FL US 32809

Contact: CRAIG EVANS evans_craig@sbcglobal.net

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