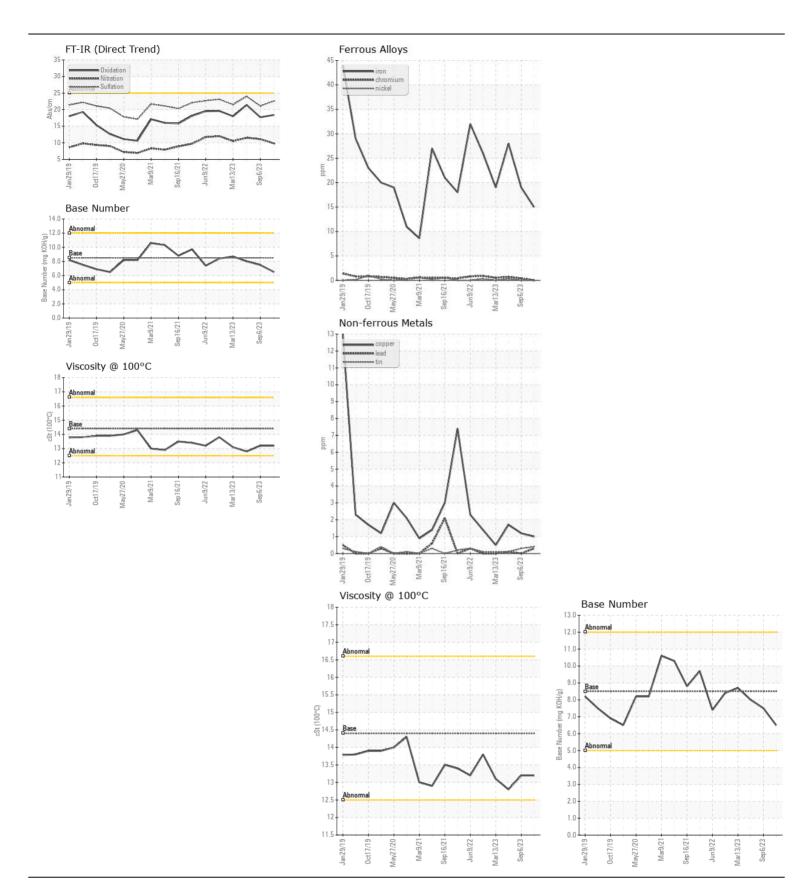
WEAR CONTAMINATION **FLUID CONDITION**

NORMAL NORMAL NORMAL

Machine Id

FSP137686
Component
Diesel Engine

DIESEL ENGINE OIL SAE 15W40 (QTS)							
RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	Liston/1	Liotony?
RECOMMENDATION	Sample Number	UCIVI	Client Info	LIIIIIUAUII	WC0903110	History1 WC0852240	History2 WC0787803
Resample at the next service interval to monitor. Please specify the component make and model with your next sample. Please specify the brand, type, and viscosity of the oil on your next sample.	Sample Date		Client Info		17 Apr 2024	06 Sep 2023	20 Jun 2023
	Machine Age	mls	Client Info		169568	00 Sep 2023	145002
	Oil Age	mls	Client Info		60000	0	0
	Filter Age	mls	Client Info		60000	0	0
	Oil Changed		Client Info		Changed	Changed	Changed
	Filter Changed		Client Info		Changed	Changed	Changed
	Sample Status				NORMAL	NORMAL	NORMAL
WEAR	Iron	ppm	ASTM D5185m	>100	15	19	28
All component wear rates are normal.	Chromium	ppm	ASTM D5185m	>20	0	<1	<1
	Nickel	ppm	ASTM D5185m	>4	0	0	<1
	Titanium	ppm	ASTM D5185m		3	<1	0
	Silver	ppm	ASTM D5185m	>3	0	0	0
	Aluminum	ppm	ASTM D5185m	>20	6	6	6
	Lead	ppm	ASTM D5185m		<1	0	<1
	Copper	ppm	ASTM D5185m		1	1	2
	Tin	ppm	ASTM D5185m	>15	<1	<1	<1
	Vanadium	ppm	ASTM D5185m		0	<1	0
	White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
CONTAMINATION	Silicon	ppm	ASTM D5185m	>25	4	6	7
	Potassium	ppm	ASTM D5185m	>20	4	6	4
There is no indication of any contamination in the oil.	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	0.5	0.5	0.6
	Nitration	Abs/cm	*ASTM D7624	>20	9.8	11.1	11.5
	Sulfation	Abs/.1mm	*ASTM D7415		22.6	21.1	24.0
	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 NORML
	Odor Emulsified Water	scalar	*Visual *Visual	NORML >0.2	NORML NEG	NORML NEG	NEG
<u></u>		Scalai	VISUAI	>0.2	NEG	NEG	INEG
FLUID CONDITION	Sodium	ppm	ASTM D5185m	>158	3	2	2
	Boron	ppm	ASTM D5185m	250	200	3	7
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	65	72	67
	Manganese	ppm	ASTM D5185m		<1	<1	<1
	Magnesium	ppm	ASTM D5185m		548	1104	993
	Calcium	ppm	ASTM D5185m		1490	1285	1119
	Phosphorus	ppm	ASTM D5185m		1016	1125	1080
	Zinc	ppm	ASTM D5185m		1153	1427	1342
	Sulfur	ppm	ASTM D5185m		3677	4134	4230
	Oxidation	Abs/.1mm	*ASTM D7414		18.4	17.7	21.4
	Base Number (BN)				6.5	7.5	8.0
	Visc @ 100°C	cSt	ASTM D445	14.4	13.2	13.2	12.8







Certificate L2367

Laboratory Sample No.

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Lab Number : 06153726

Unique Number : 10983804 Test Package : FLEET

: WC0903110

Received : 18 Apr 2024 **Tested** Diagnosed

: 19 Apr 2024

: 19 Apr 2024 - Wes Davis

FRESHPOINT 8801 EXCHANGE DRVIE 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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