

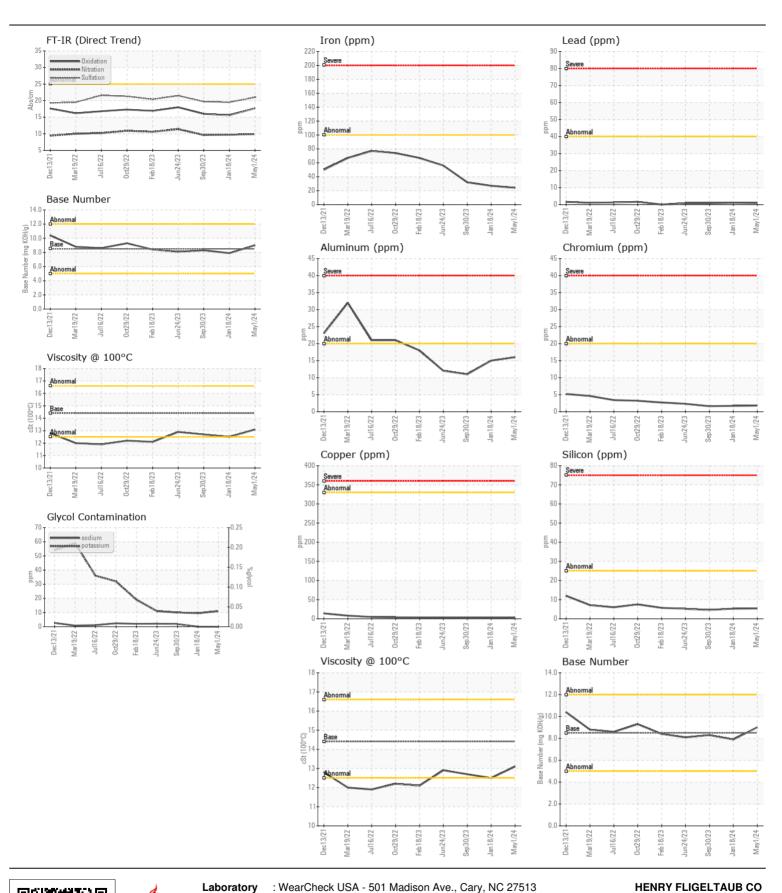
WEAR CONTAMINATION **FLUID CONDITION**

NORMAL NORMAL NORMAL

Machine Id

619
Component
Diesel Engine

DIESEL ENGINE OIL SAE 15W40 (GAL)							
RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Resample at the next service interval to monitor. Please specify the component make and model with your next sample.	Sample Number		Client Info		WC0745786	WC0745780	WC074577
	Sample Date		Client Info		01 May 2024	18 Jan 2024	30 Sep 202
	Machine Age	hrs	Client Info		5303	4706	4086
	Oil Age	hrs	Client Info		0	0	0
	Filter Age	hrs	Client Info		0	0	0
	Oil Changed		Client Info		N/A	Changed	Changed
	Filter Changed		Client Info		N/A	Changed	Changed
	Sample Status				NORMAL	NORMAL	NORMAL
VEAR	Iron	ppm	ASTM D5185m	>100	24	27	32
All component wear rates are normal.	Chromium	ppm	ASTM D5185m	>20	2	2	2
	Nickel	ppm	ASTM D5185m	>4	1	2	<1
	Titanium	ppm	ASTM D5185m		<1	<1	<1
	Silver	ppm	ASTM D5185m	>3	0	0	0
	Aluminum	ppm	ASTM D5185m	>20	16	15	11
	Lead	ppm	ASTM D5185m	>40	<1	1	<1
	Copper	ppm	ASTM D5185m	>330	3	3	2
	Tin	ppm	ASTM D5185m	>15	2	2	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	Silicon	ppm	ASTM D5185m	>25	5	5	5
	Potassium	ppm	ASTM D5185m	>20	11	10	10
There is no indication of any contamination in the oil.	Fuel		WC Method		<1.0	<1.0	<1.0
	Water		WC Method	>0.2	NEG	NEG	NEG
	Glycol	%	*ASTM D2982		NEG	NEG	NEG
	Soot %	%	*ASTM D7844	>3	0.5	0.5	0.5
	Nitration	Abs/cm	*ASTM D7624	>20	9.9	9.7	9.6
	Sulfation	Abs/.1mm	*ASTM D7415	>30	21.0	19.5	19.7
	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	NORM
	Odor	scalar	*Visual	NORML	NORML	NORML	NORM
	Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	NEG
FLUID CONDITION	Sodium	ppm	ASTM D5185m	>158	0	0	2
	Boron	ppm	ASTM D5185m	250	2	10	5
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	2	14	0
	Molybdenum	ppm	ASTM D5185m	100	73	72	69
	Manganese	ppm	ASTM D5185m		<1	<1	<1
	Magnesium	ppm	ASTM D5185m	450	991	815	950
	Calcium	ppm	ASTM D5185m	3000	1256	1205	1216
	Phosphorus	ppm	ASTM D5185m	1150	1229	999	1047
	Zinc	ppm	ASTM D5185m		1363	1180	1291
	Sulfur	ppm	ASTM D5185m	4250	3469	3316	2918
	Oxidation	Abs/.1mm	*ASTM D7414	>25	17.7	15.6	16.0
	Base Number (BN)	mg KOH/g	ASTM D2896	8.5	9.0	7.9	8.3
	Visc @ 100°C		ASTM D445		13.1	12.5	12.7







Certificate L2367

Laboratory Sample No. Lab Number

: WC0745786 : 06176580 Unique Number : 11022633

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received

: 10 May 2024 **Tested** Diagnosed Test Package : MOBCE (Additional Tests: Glycol, TBN)

: 15 May 2024

: 15 May 2024 - Sean Felton

Contact: DON MACLEOD dmacleod@fligeltaub.com T: (812)423-6219

1719 W LOUISIANA ST

EVANSVILLE, IN

F: (812)425-5140

US 47710

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)