

WEAR CONTAMINATION FLUID CONDITION

NORMAL
ATTENTION
NORMAL

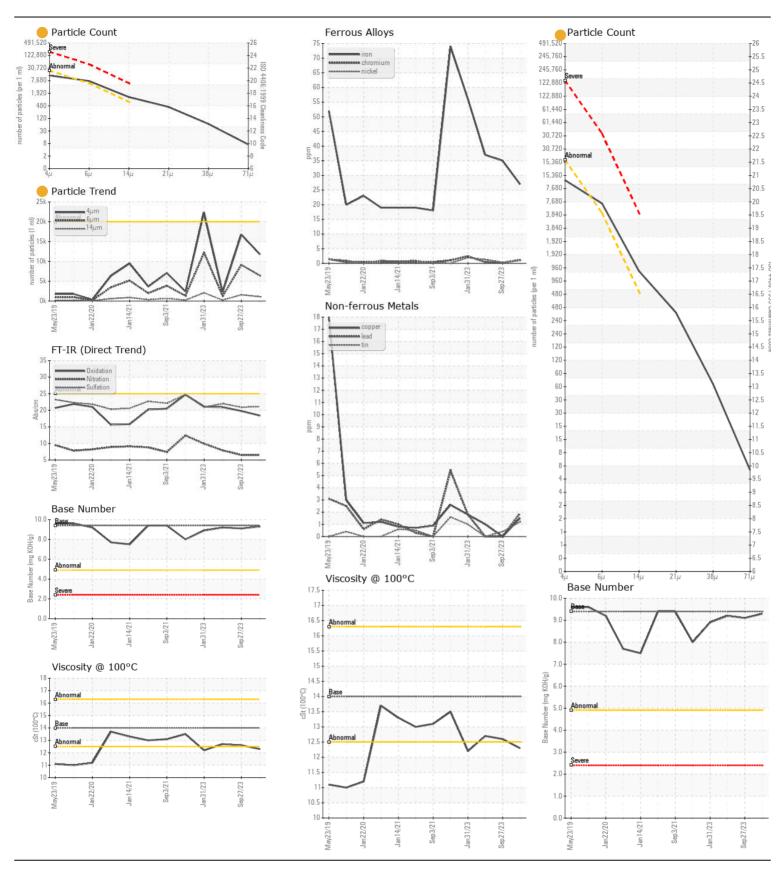
Area

Contracting

7209 7209 Component

Diesel Engine

RECOMMENDATION	Test	UOM	Method	Limit/Abn		History1	History2
O'll and filter about a state time of a graphic base base a state December	Sample Number		Client Info		WC0939400		WC0819012
Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.	Sample Date	lawa	Client Info		16 May 2024	27 Sep 2023	28 Jun 202
	Machine Age	hrs	Client Info		6387	6187	5888
	Oil Age Filter Age	hrs hrs	Client Info		499 499	299 299	575 575
	Oil Changed	1115	Client Info		Changed	Changed	Changed
	Filter Changed		Client Info		Changed	Changed	Changed
	Sample Status		Ollotte little		ATTENTION	ABNORMAL	NORMAL
WEAR	Iron	ppm	ASTM D5185m		27	35	37
All	Chromium	ppm	ASTM D5185m		1	<1	<1
All component wear rates are normal.	Nickel	ppm	ASTM D5185m	>5	1	<1	1
	Titanium	ppm	ASTM D5185m	0	<1	0	<1
	Silver	ppm	ASTM D5185m		<1 3	0	0
	Aluminum Lead	ppm	ASTM D5185m ASTM D5185m		2	<1 0	<1
	Copper	ppm	ASTM D5185m		2	0	1
	Tin	ppm	ASTM D5185m		1	<1	0
	Vanadium	ppm	ASTM D5185m		<1	0	0
	White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
CONTAMINATION	Silicon	ppm	ASTM D5185m		9	6	4
There is a moderate amount of particulates present in the oil.	Potassium	ppm	ASTM D5185m		2	0	2
	Fuel	%	ASTM D3524		<1.0	<1.0	<1.0
	Water		WC Method	>0.21	NEG	NEG	NEG
	Glycol Soot %	%	WC Method *ASTM D7844	· 2	NEG 0.3	NEG 0.2	NEG 0.2
	Nitration	Abs/cm	*ASTM D7624	>20	6.5	6.5	7.9
	Sulfation	Abs/.1mm	*ASTM D7024		21.1	20.9	22.0
	Particles >4µm	7100/.1111111	ASTM D7647		11779	16755	2270
	Particles >6µm		ASTM D7647		6417	△ 9128	1237
	Particles >14µm		ASTM D7647	>640	1092	<u> </u>	210
	Particles >21µm		ASTM D7647	>160	368	<u>\$23</u>	71
	Particles >38µm		ASTM D7647	>40	5 7	<u> </u>	11
	Particles >71μm		ASTM D7647		6	8	1
	Oil Cleanliness		ISO 4406 (c)		21/20/17	<u>21/20/18</u>	18/17/1
	Silt	scalar	*Visual	NONE	NONE	NONE	NONE
	Debris Sand/Dirt	scalar	*Visual	NONE	NONE NONE	NONE NONE	NONE NONE
	Appearance	scalar scalar	*Visual	NORML	NORML	NORML	NORMI
	Odor		*Visual	NORML	NORML	NORML	NORMI
	Emulsified Water			>0.21	NEG	NEG	NEG
FLUID CONDITION	Sodium	ppm	ASTM D5185m		3	2	2
The DN regult indicates that there is suitable all aliable remaining in the	Boron	ppm	ASTM D5185m		73	55	70
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		0	0	14 45
	Molybdenum Manganese	ppm	ASTM D5185m ASTM D5185m	U	48 <1	45 <1	<1 <1
	Magnesium	ppm ppm	ASTM D5165III	0	499	509	467
	Calcium	ppm	ASTM D5185m	J	1622	1629	1745
	Phosphorus	ppm	ASTM D5185m		836	761	811
	Zinc	ppm	ASTM D5185m		920	907	1018
	Sulfur	ppm	ASTM D5185m		3019	2489	3270
	Oxidation	Abs/.1mm	*ASTM D7414	>25	18.4	19.8	20.9
	Base Number (BN)	mg KOH/g	ASTM D2896	9.4	9.3	9.1	9.2
	Visc @ 100°C	cSt	ASTM D445	14	12.3	12.6	12.7





Certificate L2367

Laboratory Sample No. Lab Number

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : WC0939400 : 06185987

Unique Number : 11042739

Received **Tested** Diagnosed

: 21 May 2024 : 23 May 2024 : 23 May 2024 - Jonathan Hester

Test Package : CONST (Additional Tests: FuelDilution, PrtCount, TBN) 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.

T: (919)575-4505 Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012) F: (919)575-0162

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