

OIL ANALYSIS REPORT

Sample Rating Trend

DIRT



Component Right Final Drive

GEAR OIL SAE 80W90 (--- GAL)

	SAMPLE INFORM	ATION	method	limit/base	current	history1	history2
eas where dirt can e at the time of mple at the next	Sample Number		Client Info		WC0936927	WC0838011	WC0733216
	Sample Date		Client Info		16 Apr 2024	11 Dec 2023	13 Sep 2023
	Machine Age	hrs	Client Info		5077	5031	4913
	Oil Age	hrs	Client Info		0	0	0
	Oil Changed		Client Info		Changed	Changed	Changed
rmal.	Sample Status				ABNORMAL	NORMAL	ABNORMAL
	CONTAMINATION		method	limit/base	current	history1	history2
nd aluminum (Al) dirt) ingress.	Water		WC Method	>0.2	NEG	NEG	NEG
	WEAR METALS		method	limit/base	current	history1	history2
table for the time in	Iron	ppm	ASTM D5185m	>800	663	273	423
	Chromium	ppm	ASTM D5185m	>10	3	<1	2
	Nickel	ppm	ASTM D5185m	>5	<1	<1	<1
	Titanium	ppm	ASTM D5185m	>15	4	<1	2
	Silver	ppm	ASTM D5185m	>2	0	0	0
	Aluminum	ppm	ASTM D5185m	>75	62	6	22
	Lead	ppm	ASTM D5185m	>10	0	0	0
	Copper	ppm	ASTM D5185m	>75	1	0	<1
	Tin	ppm	ASTM D5185m	>8	0	0	0
	Vanadium	ppm	ASTM D5185m		0	0	0
	Cadmium	ppm	ASTM D5185m		0	0	<1
	ADDITIVES		method	limit/base	current	history1	history2
	Boron	ppm	ASTM D5185m	400	0	0	0
	Barium	ppm	ASTM D5185m	200	<1	0	0
	Molybdenum	ppm	ASTM D5185m	12	0	0	<1
	Manganese	ppm	ASTM D5185m		6	2	7
	Magnesium	ppm	ASTM D5185m	12	5	1	3
	Calcium	ppm	ASTM D5185m	150	89	46	124
	Phosphorus	ppm	ASTM D5185m	1650	766	679	551
	Zinc	ppm	ASTM D5185m	125	38	35	68
	Sulfur	ppm	ASTM D5185m		22883	18049	16927
	CONTAMINANTS		method	limit/base	current	history1	history2
	Silicon	ppm	ASTM D5185m	>400	A 339	41	🔺 136
	Silicon Sodium	ppm ppm	ASTM D5185m ASTM D5185m		▲ 339 4	41 0	▲ 136 <1
				>170			
	Sodium	ppm	ASTM D5185m	>170	4 15	0	<1
	Sodium Potassium	ppm	ASTM D5185m ASTM D5185m	>170 >20	4 15	0 1	<1 7
	Sodium Potassium VISUAL	ppm ppm	ASTM D5185m ASTM D5185m method	>170 >20 limit/base	4 15 current	0 1 history1	<1 7 history2
	Sodium Potassium VISUAL White Metal	ppm ppm scalar	ASTM D5185m ASTM D5185m method *Visual	>170 >20 limit/base NONE	4 15 current NONE	0 1 history1 NONE	<1 7 history2 NONE
	Sodium Potassium VISUAL White Metal Yellow Metal	ppm ppm scalar scalar	ASTM D5185m ASTM D5185m method *Visual *Visual	>170 >20 limit/base NONE NONE	4 15 current NONE NONE	0 1 history1 NONE NONE	<1 7 history2 NONE NONE
	Sodium Potassium VISUAL White Metal Yellow Metal Precipitate	ppm ppm scalar scalar scalar	ASTM D5185m ASTM D5185m *Visual *Visual *Visual	>170 >20 limit/base NONE NONE NONE	4 15 current NONE NONE NONE	0 1 history1 NONE NONE NONE	<1 7 history2 NONE NONE NONE
	Sodium Potassium VISUAL White Metal Yellow Metal Precipitate Silt	ppm ppm scalar scalar scalar scalar	ASTM D5185m ASTM D5185m *Visual *Visual *Visual *Visual	>170 >20 limit/base NONE NONE NONE	4 15 Current NONE NONE NONE NONE	0 1 history1 NONE NONE NONE MODER	<1 7 NONE NONE NONE MODER
	Sodium Potassium VISUAL White Metal Yellow Metal Precipitate Silt Debris	ppm ppm scalar scalar scalar scalar scalar	ASTM D5185m ASTM D5185m *Visual *Visual *Visual *Visual *Visual *Visual	>170 >20 limit/base NONE NONE NONE NONE	4 15 NONE NONE NONE NONE NONE NONE	0 1 NONE NONE NONE MODER NONE	<1 7 NONE NONE NONE MODER NONE
	Sodium Potassium VISUAL White Metal Yellow Metal Precipitate Silt Debris Salt	ppm ppm scalar scalar scalar scalar scalar scalar	ASTM D5185m ASTM D5185m *Visual *Visual *Visual *Visual *Visual *Visual *Visual *Visual	>170 >20 Iimit/base NONE NONE NONE NONE NONE NORE NORML	4 15 NONE NONE NONE NONE NONE NONE	0 1 NONE NONE NONE MODER NONE NONE NONE	<1 7 NONE NONE NONE MODER NONE NONE NONE NORML
	Sodium Potassium VISUAL White Metal Yellow Metal Precipitate Silt Debris Sand/Dirt Appearance	ppm ppm scalar scalar scalar scalar scalar scalar scalar	ASTM D5185m ASTM D5185m *Visual *Visual *Visual *Visual *Visual *Visual	>170 >20 limit/base NONE NONE NONE NONE NONE	4 15 NONE NONE NONE NONE NONE NONE NONE NORE	0 1 NONE NONE NONE MODER NONE NONE	<1 7 NONE NONE NONE MODER NONE NONE

DIAGNOSIS

Recommendation

We advise that you check all areas where dirt can enter the system. The oil change at the time of sampling has been noted. Resample at the next service interval to monitor.

🛑 Wear

All component wear rates are normal.

Contamination

Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress.

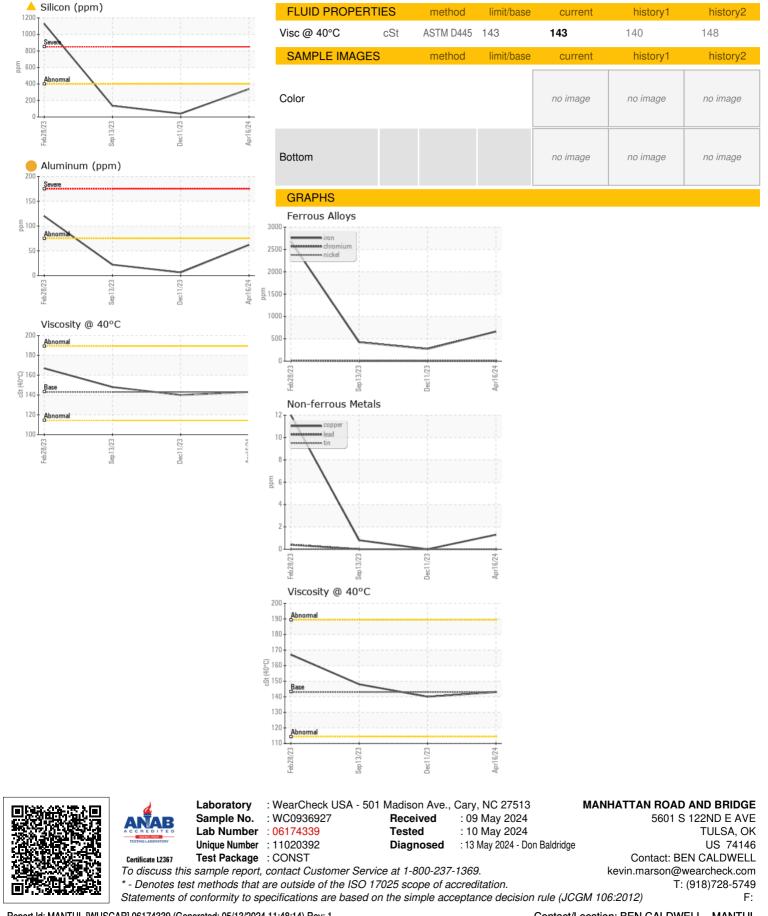
Fluid Condition

The condition of the oil is acceptable for the time in service.

Contact/Location: BEN CALDWELL - MANTUL



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