



WEAR CHECK

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	ABNORMAL



Machine Id
606110 CATERPILLAR 262D
Component
Diesel Engine
Fluid
SHELL 15W40 (--- GAL)

RECOMMENDATION

The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

WEAR

All component wear rates are normal.

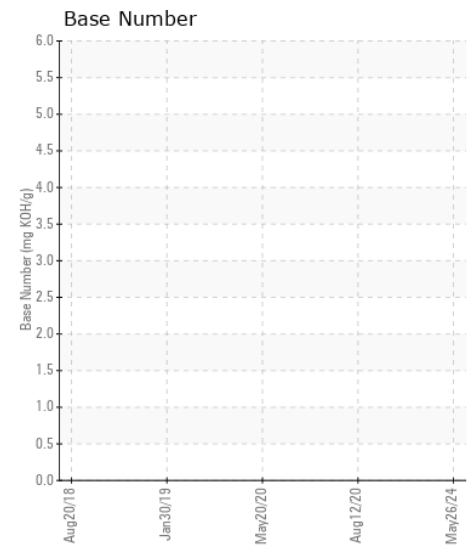
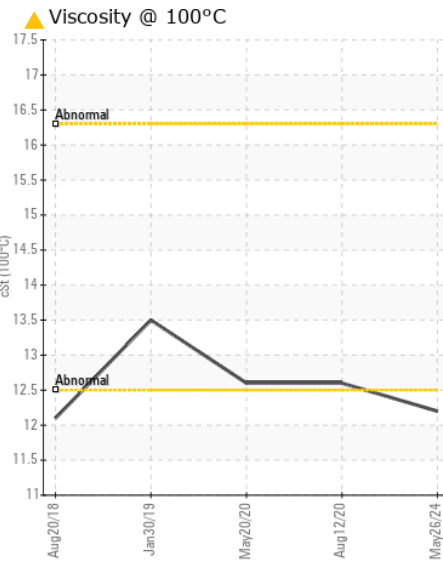
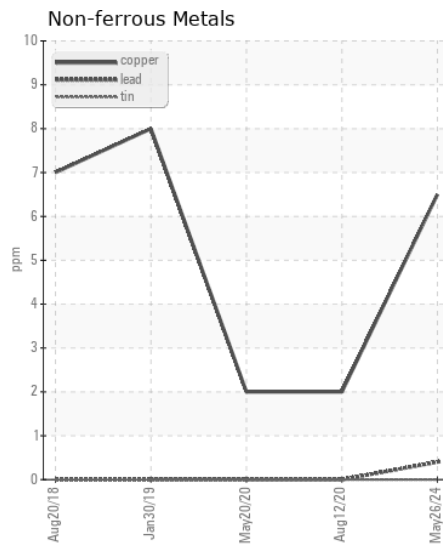
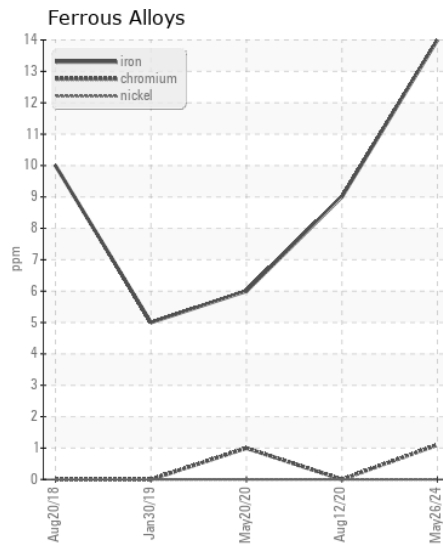
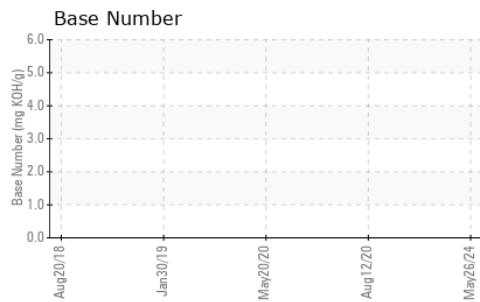
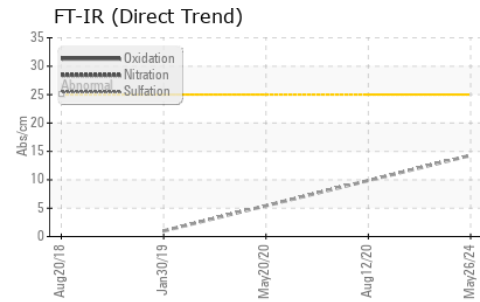
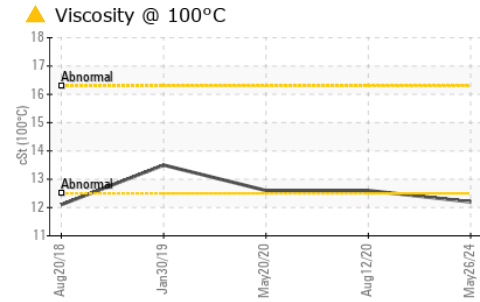
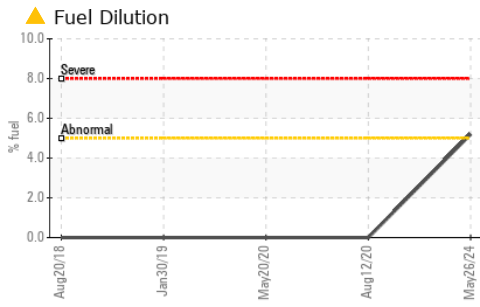
CONTAMINATION

There is a moderate amount of fuel present in the oil. Tests confirm the presence of fuel in the oil.

FLUID CONDITION

Sulfur ppm levels are abnormally high. Visc @ 100°C is abnormally low. The BN result indicates that there is suitable alkalinity remaining in the oil. Fuel is present in the oil and is lowering the viscosity. The oil is no longer serviceable due to the presence of contaminants.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0788683	WC65176042	WC70178001
Sample Date		Client Info		26 May 2024	12 Aug 2020	20 May 2020
Machine Age	hrs	Client Info		3212	1456	1243
Oil Age	hrs	Client Info		250	---	---
Filter Age	hrs	Client Info		250	---	---
Oil Changed		Client Info		Changed	Changed	Not Changd
Filter Changed		Client Info		Changed	Changed	Not Changd
Sample Status				ABNORMAL	SEVERE	SEVERE
Iron	ppm	ASTM D5185m	>100	14	9	6
Chromium	ppm	ASTM D5185m	>20	1	0	1
Nickel	ppm	ASTM D5185m	>2	0	0	0
Titanium	ppm	ASTM D5185m	>2	<1	▲ 5	▲ 6
Silver	ppm	ASTM D5185m	>2	<1	0	1
Aluminum	ppm	ASTM D5185m	>25	4	2	1
Lead	ppm	ASTM D5185m	>40	<1	0	0
Copper	ppm	ASTM D5185m	>330	6	2	2
Tin	ppm	ASTM D5185m	>15	0	0	0
Vanadium	ppm	ASTM D5185m		<1	0	0
White Metal	scalar	*Visual	NONE	NONE	---	---
Yellow Metal	scalar	*Visual	NONE	NONE	---	---
Silicon	ppm	ASTM D5185m	>25	9	5	5
Potassium	ppm	ASTM D5185m	>20	4	0	3
Chlorine	ppm	ASTM D5185m		---	0	0
Fuel	%	ASTM D3524	>5	▲ 5.2	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	0.0	0.0
Soot %	%	*ASTM D7844	>3	0.1	0.43	0.41
Nitration	Abs/cm	*ASTM D7624	>20	8.7	---	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	17.9	---	---
Silt	scalar	*Visual	NONE	NONE	---	---
Debris	scalar	*Visual	NONE	NONE	---	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---	---
Appearance	scalar	*Visual	NORML	NORML	---	---
Odor	scalar	*Visual	NORML	NORML	---	---
Emulsified Water	scalar	*Visual	>0.2	NEG	---	---
Sodium	ppm	ASTM D5185m	>150	4	6	5
Boron	ppm	ASTM D5185m		62	50	65
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		61	16	16
Manganese	ppm	ASTM D5185m		<1	0	0
Magnesium	ppm	ASTM D5185m		58	538	543
Calcium	ppm	ASTM D5185m		2123	1296	1314
Phosphorus	ppm	ASTM D5185m		952	687	717
Zinc	ppm	ASTM D5185m		1097	744	778
Sulfur	ppm	ASTM D5185m		▲ 4074	---	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	14.3	---	---
Base Number (BN)	mg KOH/g	ASTM D2896		5.9	---	---
Visc @ 100°C	cSt	ASTM D445		▲ 12.2	▲ 12.6	▲ 12.6



Certificate L2367

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

Sample No. : WC0788683

Lab Number : 06191577

Unique Number : 11048329

Test Package : FLEET (Additional Tests: FuelDilution, PercentFuel)

Received : 24 May 2024

Tested : 30 May 2024

Diagnosed : 30 May 2024 - Wes Davis

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)

TRI-CITY HIGHWAY

145 PODPADIC ROAD

RICHMONDVILLE, NY

US 12149

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