CONST

CHALMERS
Lubrication Service
(704) 660-LUBE(5823)

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
CATERPILLAR PML-1
Component
Rear Differential
Fluid
{not provided} (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor. Please specify the brand, type, and viscosity of the oil on your next sample.

WEAR

All component wear rates are normal.

CONTAMINATION

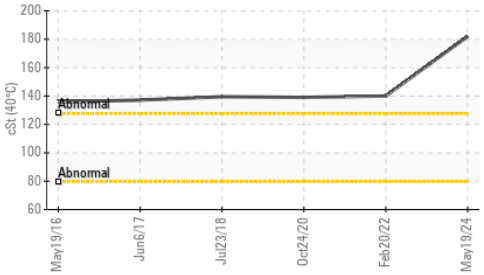
There is no indication of any contamination in the oil.

FLUID CONDITION

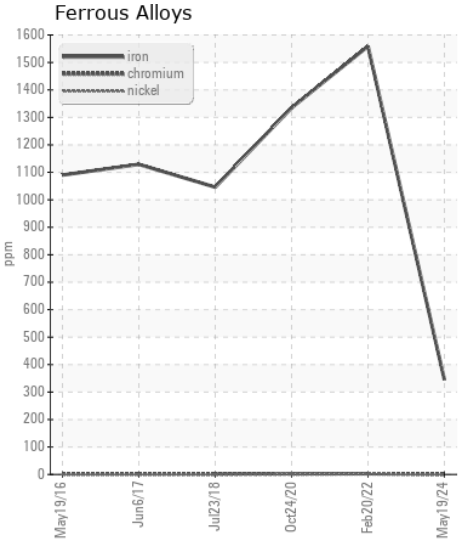
The condition of the oil is acceptable for the time in service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		CL0005459	CL0002929	CL0001648
Sample Date		Client Info		19 May 2024	20 Feb 2022	24 Oct 2020
Machine Age	hrs	Client Info		15685	14810	14340
Oil Age	hrs	Client Info		15685	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Not Changd	Not Changd	Not Changd
Filter Changed		Client Info		N/A	N/A	N/A
Sample Status				NORMAL	SEVERE	SEVERE
Iron	ppm	ASTM D5185m	>500	345	▲ 1559	▲ 1335
Chromium	ppm	ASTM D5185m	>3	<1	3	2
Nickel	ppm	ASTM D5185m	>3	0	1	<1
Titanium	ppm	ASTM D5185m	>2	2	1	<1
Silver	ppm	ASTM D5185m	>2	0	0	<1
Aluminum	ppm	ASTM D5185m	>30	13	17	13
Lead	ppm	ASTM D5185m	>13	0	1	<1
Copper	ppm	ASTM D5185m	>103	62	39	35
Tin	ppm	ASTM D5185m	>5	<1	<1	<1
Vanadium	ppm	ASTM D5185m		0	<1	<1
White Metal	scalar	*Visual	NONE	NONE	LIGHT	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Silicon	ppm	ASTM D5185m	>100	60	97	82
Potassium	ppm	ASTM D5185m	>20	0	3	2
Water		WC Method	>.2	NEG	NEG	NEG
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	LIGHT	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>.2	NEG	NEG	NEG
Sodium	ppm	ASTM D5185m		11	8	5
Boron	ppm	ASTM D5185m		19	274	303
Barium	ppm	ASTM D5185m		<1	0	0
Molybdenum	ppm	ASTM D5185m		3	1	1
Manganese	ppm	ASTM D5185m		3	7	5
Magnesium	ppm	ASTM D5185m		19	9	7
Calcium	ppm	ASTM D5185m		3038	566	508
Phosphorus	ppm	ASTM D5185m		1145	1523	1445
Zinc	ppm	ASTM D5185m		1238	191	202
Sulfur	ppm	ASTM D5185m		7532	17048	16960
Visc @ 40°C	cSt	ASTM D445		182	140	139

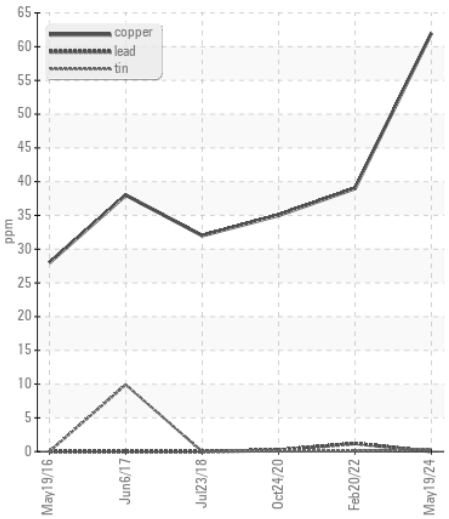
Viscosity @ 40°C



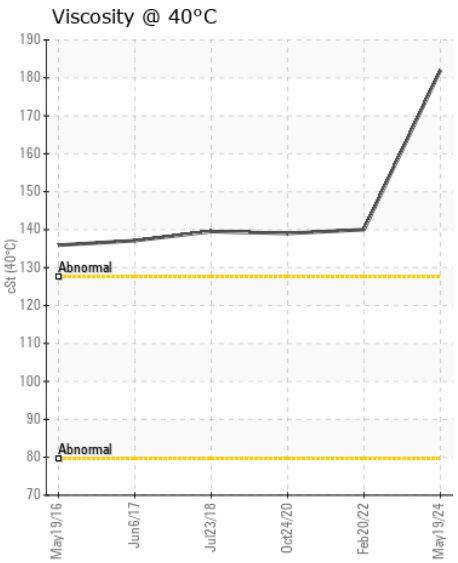
Ferrous Alloys



Non-ferrous Metals



Viscosity @ 40°C



Certificate L2367

Laboratory	: WearCheck USA - 501 Madison Ave., Cary, NC 27513		
Sample No.	: CL0005459	**Received**	: 24 May 2024
Lab Number	: 06191337	**Tested**	: 28 May 2024
Unique Number	: 11048089	**Diagnosed**	: 29 May 2024 - Sean Felton
Test Package	: CONST		

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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