

WEAR NORMAL CONTAMINATION NORMAL FLUID CONDITION NORMAL

M.C. C. F.

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.

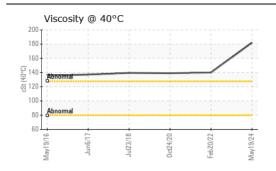
FLUID CONDITION

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		ASTM D5185m	>500	945	1550	A 1005
Iron Chromium	ppm	ASTM D5185m		345	▲ 1559 3	▲ 1335 2
Nickel	ppm	ASTM D5185m	>3	<1 0	1	<1
Titanium	ppm		>3	2	1	
Silver	ppm	ASTM D5185m ASTM D5185m	>2	_		<1
	ppm		>2	0	0	
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	NONE	0	<1	<1
White Metal	scalar	*Visual	NONE	NONE	LIGHT	NONE
Yellow Metal	scalar					
	304141	*Visual	NONE	NONE	NONE	NONE
Silicon	ppm	ASTM D5185m	>100	60	97	82
Silicon	ppm	ASTM D5185m	>100	60	97	82
Silicon Potassium	ppm	ASTM D5185m ASTM D5185m	>100 >20	60 0	97 3	82 2
Silicon Potassium Water	ppm ppm	ASTM D5185m ASTM D5185m WC Method	>100 >20 >.2	60 0 NEG	97 3 NEG	82 2 NEG
Silicon Potassium Water Silt	ppm ppm scalar	ASTM D5185m ASTM D5185m WC Method *Visual	>100 >20 >.2 NONE	60 0 NEG NONE	97 3 NEG NONE	82 2 NEG NONE
Silicon Potassium Water Silt Debris	ppm ppm scalar scalar	ASTM D5185m ASTM D5185m WC Method *Visual *Visual	>100 >20 >.2 NONE NONE	60 0 NEG NONE NONE	97 3 NEG NONE LIGHT	82 2 NEG NONE NONE
Silicon Potassium Water Silt Debris Sand/Dirt	ppm ppm scalar scalar scalar	ASTM D5185m ASTM D5185m WC Method *Visual *Visual *Visual	>100 >20 >.2 NONE NONE NONE	60 0 NEG NONE NONE NONE	97 3 NEG NONE LIGHT NONE	82 2 NEG NONE NONE NONE
Silicon Potassium Water Silt Debris Sand/Dirt Appearance	ppm ppm scalar scalar scalar scalar	ASTM D5185m ASTM D5185m WC Method *Visual *Visual *Visual *Visual	>100 >20 >.2 NONE NONE NONE NORML	60 0 NEG NONE NONE NONE NORML	97 3 NEG NONE LIGHT NONE NORML	82 2 NEG NONE NONE NONE NORML
Silicon Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water	ppm ppm scalar scalar scalar scalar scalar scalar	ASTM D5185m ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual *Visual	>100 >20 >.2 NONE NONE NORE NORML NORML	60 0 NEG NONE NONE NONE NORML NORML NEG	97 3 NEG LIGHT NONE NORML NORML NEG	82 2 NEG NONE NONE NORM NORML NEG
Silicon Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium	ppm ppm scalar scalar scalar scalar scalar scalar ppm	ASTM D5185m ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual *Visual ASTM D5185m	>100 >20 >.2 NONE NONE NORE NORML NORML	60 0 NEG NONE NONE NORML NORML NEG 11	97 3 NEG NONE LIGHT NORML NORML NEG 8	82 2 NEG NONE NONE NORML NORML NEG 5
Silicon Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron	ppm ppm scalar scalar scalar scalar scalar scalar gppm	ASTM D5185m ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual *Visual ASTM D5185m	>100 >20 >.2 NONE NONE NORE NORML NORML	60 0 NEG NONE NONE NORML NORML NEG 11 19	97 3 NEG NONE LIGHT NORML NORML NORML NEG 8 274	82 2 NEG NONE NONE NORML NORML NEG 5 303
Silicon Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium	ppm ppm scalar scalar scalar scalar scalar scalar ppm ppm	ASTM D5185m ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m	>100 >20 >.2 NONE NONE NORE NORML NORML	60 0 NEG NONE NONE NORML NORML NEG 11 19 <1	97 3 NEG NONE LIGHT NONE NORML NORML NEG 8 274 0	82 2 NEG NONE NONE NORML NORML NEG 5 303 0
Silicon Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum	ppm ppm scalar scalar scalar scalar scalar scalar ppm ppm	ASTM D5185m ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m ASTM D5185m	>100 >20 >.2 NONE NONE NORE NORML NORML	60 0 NEG NONE NONE NORML NORML NEG 11 19 <1 3	97 3 NEG NONE LIGHT NORML NORML NEG 8 274 0 1	82 2 NEG NONE NONE NORML NORML NEG 5 303 0 1
Silicon Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum Manganese	ppm ppm scalar scalar scalar scalar scalar scalar ppm ppm ppm	ASTM D5185m ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m ASTM D5185m	>100 >20 >.2 NONE NONE NORE NORML NORML	60 0 NEG NONE NONE NORML NORML NEG 11 19 <1 3 3 3	97 3 NEG NONE LIGHT NORML NORML NORML NEG 8 274 0 1 1 7	82 2 NEG NONE NONE NORML NORML NEG 5 303 0 1 1 5
Silicon Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum Manganese Magnesium	ppm ppm scalar scalar scalar scalar scalar ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	>100 >20 >.2 NONE NONE NORE NORML NORML	60 0 NEG NONE NONE NORML NORML NEG 11 19 <1 3 3 19	97 3 NEG NONE LIGHT NONE NORML NORML NEG 8 274 0 1 7 9	82 2 NEG NONE NONE NORML NORML NEG 5 303 0 1 1 5 7
Silicon Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum Manganese Magnesium	ppm ppm scalar scalar scalar scalar scalar ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	>100 >20 >.2 NONE NONE NORE NORML NORML	60 0 NEG NONE NONE NORML NORML NEG 11 19 <1 3 3 19 3038	97 3 NEG LIGHT NONE NORML NORML NEG 8 274 0 1 7 9 9 566	82 2 NEG NONE NONE NORML NORML NEG 5 303 0 1 5 5 303 0 1 5 5 303
Silicon Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm scalar scalar scalar scalar scalar ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	>100 >20 >.2 NONE NONE NORE NORML NORML	60 0 NEG NONE NONE NORML NORML NEG 11 19 <1 3 3 19 3038 1145	97 3 NEG NONE LIGHT NORML NORML NORML NEG 8 274 0 1 7 9 566 1523	82 2 NEG NONE NONE NORML NORML NEG 5 303 0 1 5 303 0 1 5 5 303 0 1 5 5 303 0 1 1 5 5 303 0 1 1 5 5 303 0 1 1 5 5 303 0 1 1 5 5 303 0 1 1 5 5 303 0 1 1 5 5 303 0 1 1 5 5 303 0 1 1 5 5 303 0 1 1 5 5 303 0 1 1 1 5 5 303 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Silicon Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm scalar scalar scalar scalar scalar ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	>100 >20 >.2 NONE NONE NORE NORML NORML	60 0 NEG NONE NONE NORML NORML NEG 11 19 <1 3 3 19 3038 1145 1238	97 3 NEG NONE LIGHT NONE NORML NORML NEG 8 274 0 1 274 0 1 7 9 566 1523 191	82 2 NEG NONE NONE NORM NORML NEG 5 303 0 1 1 5 7 508 1445 202
Silicon Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm scalar scalar scalar scalar scalar ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	>100 >20 >.2 NONE NONE NORE NORML NORML	60 0 NEG NONE NONE NORML NORML NEG 11 19 <1 3 3 19 3038 1145	97 3 NEG NONE LIGHT NORML NORML NORML NEG 8 274 0 1 7 9 566 1523	82 2 NEG NONE NONE NORML NORML NEG 5 303 0 1 5 303 0 1 5 5 303 0 1 5 5 303 0 1 1 5 5 303 0 1 1 5 5 303 0 1 1 5 5 303 0 1 1 5 5 303 0 1 1 5 5 303 0 1 1 5 5 303 0 1 1 5 5 303 0 1 1 5 5 303 0 1 1 5 5 303 0 1 1 1 5 5 303 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1

Report Id: PEDMOO [WUSCAR] 06191337 (Generated: 05/29/2024 19:07:37) Rev: 1

Submitted By: JEFF CHALMERS



Ferrous Alloys 1600 1500 1400 nickel 1300 1200 1100 1000 900 튭 800 700 600 500 400 300 200 100 0 Jul23/18 eb20/22 May19/24 Mav1 Non-ferrous Metals 6! ead 55 50 45 40 35 30 25 20 15 10 Ę Oct24/20 eb20/22 lay19/24 Viscosity @ 40°C 190 180 170 160 150 140 () 0-0€ 130 ŝ 120 110 100 90 Ab 80 70 May19/24 Jun6/17. Oct24/20 -Feb20/22 -Jul23/18 Mav19/16

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received : 24 May 2024 Tested : 28 May 2024 Diagnosed : 29 May 2024 - Sean Felton

146 MCLELLAND MOORESVILLE, NC US 28115 Contact: LARRY



Test Package : CONST Certificate L2367 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) PEDULLA

T: F:

Laboratory

Sample No.

Lab Number : 06191337

Unique Number : 11048089

: CL0005459

Submitted By: JEFF CHALMERS Page 2 of 2