

WEAR	
CONTAMINATION	
FLUID CONDITION	NORMAL



Machine Id CATERPILLAR D5N 109 Component Hydraulic System Fluid PETRO CANADA 10W (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

WEAR

All component wear rates are normal.

CONTAMINATION

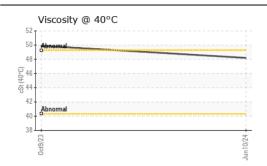
There is no indication of any contamination in the fluid.

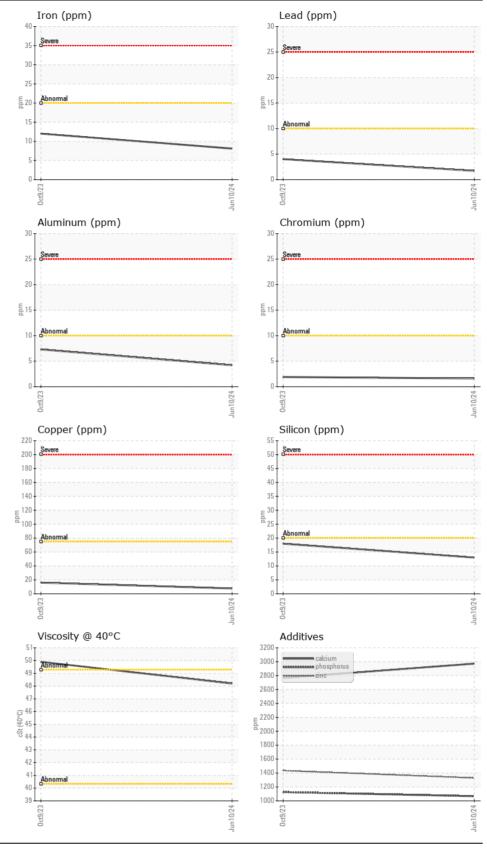
FLUID CONDITION

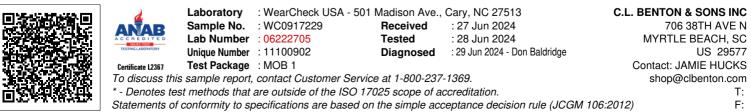
The condition of the fluid is acceptable for the time in service.

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Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0917229	WC0822249	
Sample Date		Client Info		10 Jun 2024	09 Oct 2023	
Machine Age	hrs	Client Info		20951	20316	
Oil Age	hrs	Client Info		5000	273	
Filter Age	hrs	Client Info		540	273	
Oil Changed		Client Info		Not Changd	Not Changd	
Filter Changed		Client Info		Changed	Changed	
Sample Status				NORMAL	NORMAL	
Iron	ppm	ASTM D5185m	>20	8	12	
Chromium	ppm	ASTM D5185m	>10	2	2	
Nickel	ppm	ASTM D5185m	>10	<1	<1	
Titanium	ppm	ASTM D5185m		<1	<1	
Silver	ppm	ASTM D5185m		<1	<1	
Aluminum	ppm	ASTM D5185m	>10	4	7	
Lead	ppm	ASTM D5185m	>10	2	4	
Copper	ppm	ASTM D5185m	>75	8	16	
Tin	ppm	ASTM D5185m	>10	<1	<1	
Vanadium	ppm	ASTM D5185m		<1	<1	
White Metal	scalar	*Visual	NONE	NONE	NONE	
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	
	ooala	viouui	HOHL	HOILE	INOINE	
Silicon		ASTM D5185m	>20	13	18	
	ppm					
Silicon		ASTM D5185m	>20	13	18	
Silicon Potassium	ppm	ASTM D5185m ASTM D5185m	>20 >20	13 2	18 2	
Silicon Potassium Water	ppm ppm	ASTM D5185m ASTM D5185m WC Method	>20 >20 >0.1	13 2 NEG	18 2 NEG	
Silicon Potassium Water Silt	ppm ppm scalar	ASTM D5185m ASTM D5185m WC Method *Visual	>20 >20 >0.1 NONE	13 2 NEG NONE	18 2 NEG NONE	
Silicon Potassium Water Silt Debris	ppm ppm scalar scalar	ASTM D5185m ASTM D5185m WC Method *Visual *Visual	>20 >20 >0.1 NONE NONE	13 2 NEG NONE NONE	18 2 NEG NONE NONE	
Silicon Potassium Water Silt Debris Sand/Dirt	ppm ppm scalar scalar scalar	ASTM D5185m ASTM D5185m WC Method *Visual *Visual	>20 >20 >0.1 NONE NONE NONE	13 2 NEG NONE NONE NONE	18 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	>20 >20 >0.1 NONE NONE NONE	13 2 NEG NONE NONE NONE NORML	18 2 NEG NONE NONE NONE NORML	
Silicon Potassium Water Silt Debris Sand/Dirt Appearance Odor	ppm ppm scalar scalar scalar scalar scalar	ASTM D5185m ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual	>20 >20 >0.1 NONE NONE NONE NORML	13 2 NEG NONE NONE NORE NORML	18 2 NEG NONE NONE NONE NORML 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	>20 >20 >0.1 NONE NONE NONE NORML	13 2 NEG NONE NONE NORE NORML NEG	18 2 NEG NONE NONE NORML NORML NEG	
Silicon Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium	ppm ppm scalar scalar scalar scalar scalar scalar	ASTM D5185m ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual *Visual ASTM D5185m	>20 >20 >0.1 NONE NONE NONE NORML	13 2 NEG NONE NONE NORML NORML NEG 0	18 2 NEG NONE NONE NORML NORML NEG 3	
Silicon Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron	ppm ppm scalar scalar scalar scalar scalar scalar gpm ppm	ASTM D5185m ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual *Visual ASTM D5185m	>20 >20 >0.1 NONE NONE NONE NORML	13 2 NEG NONE NONE NORML NORML NEG 0 95	18 2 NEG NONE NONE NORML NORML NEG 3 88	
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	>20 >20 >0.1 NONE NONE NONE NORML	13 2 NEG NONE NONE NORML NORML NEG 0 95 1	18 2 NEG NONE NONE NONE NORML NORML NEG 3 88 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 ppm	ASTM D5185m ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m ASTM D5185m	>20 >20 >0.1 NONE NONE NONE NORML	13 2 NEG NONE NONE NORML NORML NEG 0 95 1 4	18 2 NEG NONE NONE NORML NEG 3 88 0 5	
Silicon Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum Manganese	ppm ppm scalar scalar scalar scalar scalar gpm ppm ppm	ASTM D5185m ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	>20 >20 >0.1 NONE NONE NONE NORML	13 2 NEG NONE NONE NORML NORML NEG 0 95 1 4 4	18 2 NEG NONE NONE NORML NORML NEG 3 88 0 5 <1	
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	>20 >20 >0.1 NONE NONE NONE NORML	13 2 NEG NONE NONE NORML NORML NEG 0 95 1 4 4 <1 99	18 2 NEG NONE NONE NORML NORML NEG 3 88 0 5 5 <1 210	
Silicon Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Malybdenum 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 ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	>20 >20 >0.1 NONE NONE NONE NORML	13 2 NEG NONE NONE NORML NORML NEG 0 95 1 4 <1 99 2972	18 2 NEG NONE NONE NORML NORML NEG 3 88 0 5 5 <1 210 2766	
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	>20 >20 >0.1 NONE NONE NONE NORML	13 2 NEG NONE NONE NORML NORML NEG 0 95 1 4 <1 99 2972 1067	18 2 NEG NONE NONE NORML NORML NEG 3 88 0 5 <1 210 2766 1126	

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Contact/Location: JAMIE HUCKS - CLBMYR Page 2 of 2