

# WEAR ATTENTION CONTAMINATION ABNORMAL FLUID CONDITION NORMAL

#### Machine Id **110** Component **Transmission (Auto)** Fluid **ATF (PAO) (--- GAL)**

RECOMMENDATION

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

### WEAR

The aluminum level is abnormal. All other component wear rates are normal.

## CONTAMINATION

Elemental levels of silicon (Si) and aluminum (AI) indicate aluminasilicate (coarse dirt) ingress.

## FLUID CONDITION

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

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Toot		Mothod	l imit/Abr	Current	History	History
rest	UOIVI		LIIIII(/ADN			
				10 May 0001	04 101 0000	OL0003609
Sample Date	mle			10 Mar 2024	1 c0001	25 Sep 2022
Machine Age	mis			1912/5	160031	123510
Oil Age	mis			1912/5	0	0
Filter Age	mls	Client Info		0	0	0
Oil Changed		Client Info		Not Changd	Not Changd	Not Changd
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				ABNORMAL	NORMAL	NORMAL
Iron	ppm	ASTM D5185m	>160	152	120	118
Chromium	ppm	ASTM D5185m	>5	<1	<1	<1
Nickel	ppm	ASTM D5185m	>5	<1	0	0
Titanium	ppm	ASTM D5185m		<1	<1	0
Silver	ppm	ASTM D5185m	>5	0	0	0
Aluminum	ppm	ASTM D5185m	>50	<b>2</b> 6	16	13
Lead	ppm	ASTM D5185m	>50	32	29	31
Copper	ppm	ASTM D5185m	>225	31	23	21
Tin	ppm	ASTM D5185m	>10	1	<1	<1
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
	a sistem	*) // 1			NONE	NIGNE
Yellow Metal	scalar	^ Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	^VISUAI	NONE	NONE	NONE	NONE
Silicon	ppm	ASTM D5185m	>20	NONE	5	5
Yellow Metal Silicon Potassium Water	ppm ppm	ASTM D5185m ASTM D5185m	>20 >20	NONE	5 2 NEG	5 4
Yellow Metal Silicon Potassium Water	ppm ppm	ASTM D5185m ASTM D5185m WC Method	>20 >20 >0.1	NONE 23 5 NEG NONE	5 2 NEG	5 4 NEG
Yellow Metal Silicon Potassium Water Silt	ppm ppm scalar	ASTM D5185m ASTM D5185m WC Method *Visual	>20 >20 >0.1 NONE	NONE 23 5 NEG NONE NONE	5 2 NEG NONE	5 4 NEG NONE
Yellow Metal Silicon Potassium Water Silt Debris Sand/Dirt	ppm ppm scalar scalar	ASTM D5185m ASTM D5185m WC Method *Visual *Visual	>20 >20 >0.1 NONE NONE	NONE 23 5 NEG NONE NONE NONE	5 2 NEG NONE NONE	5 4 NEG NONE NONE
Yellow Metal Silicon Potassium Water Silt Debris Sand/Dirt Appearance	ppm ppm scalar scalar scalar scalar	ASTM D5185m ASTM D5185m WC Method *Visual *Visual *Visual	>20 >20 >0.1 NONE NONE NONE	NONE 23 5 NEG NONE NONE NONE NONE NONE	5 2 NEG NONE NONE NONE	5 4 NEG NONE NONE NONE
Yellow Metal Silicon Potassium Water Silt Debris Sand/Dirt Appearance Odor	scalar ppm ppm scalar scalar scalar scalar	ASTM D5185m ASTM D5185m WC Method *Visual *Visual *Visual *Visual	>20 >20 >0.1 NONE NONE NONE NORML	NONE 23 5 NEG NONE NONE NONE NONE NORML	5 2 NEG NONE NONE NONE NORML	5 4 NEG NONE NONE NONE NORM
Yellow Metal 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	>20 >20 >0.1 NONE NONE NONE NORML NORML >0.1	NONE 23 5 NEG NONE NONE NONE NONE NORML NORML NEG	5 2 NEG NONE NONE NONE NORML NORML	5 4 NEG NONE NONE NONE NORML NORML NEG
Yellow Metal Silicon Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water	scalar ppm ppm scalar scalar scalar scalar scalar scalar	ASTM D5185m ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual *Visual	>20 >20 >0.1 NONE NONE NONE NORML >0.1	NONE 23 5 NEG NONE NONE NONE NORML NORML NEG	5 2 NEG NONE NONE NONE NORML NORML NEG	5 4 NEG NONE NONE NONE NORML NORML NEG
Yellow Metal Silicon Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium	scalar 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 NORML NORML >0.1	NONE 23 5 NEG NONE NONE NONE NORML NORML NEG 8	5 2 NEG NONE NONE NORML NORML NEG 9	5 4 NEG NONE NONE NORML NORML NEG 6
Yellow Metal Silicon Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron	scalar ppm ppm scalar scalar scalar scalar scalar scalar ppm	ASTM D5185m ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m	>20 >20 >0.1 NONE NONE NORML NORML >0.1	NONE 23 5 NEG NONE NONE NONE NONE NORML NEG 8 103	NONE 5 2 NEG NONE NONE NORML NORML NEG 9 105	NONE 5 4 NEG NONE NONE NORML NORML NEG 6 102
Yellow Metal Silicon Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium	scalar 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 NORML >0.1 175 5	NONE 23 5 NEG NONE NONE NONE NORML NORML NEG 8 103 0	S 2 NEG NONE NONE NORML NORML NEG 9 105 <1	5 4 NEG NONE NONE NORML NORML NEG 6 102 0
Yellow Metal Silicon Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum	scalar ppm ppm scalar scalar scalar scalar scalar scalar ppm ppm	ASTM D5185m ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m ASTM D5185m	<ul> <li>&gt;20</li> <li>&gt;20</li> <li>&gt;0.1</li> <li>NONE</li> <li>NONE</li> <li>NORML</li> <li>NORML</li> <li>&gt;0.1</li> <li>175</li> <li>5</li> <li>5</li> </ul>	NONE 23 5 NEG NONE NONE NONE NORML NORML NEG 8 103 0 <1	NONE           5           2           NEG           NONE           NONE           NORML           NORML           NEG           9           105           <1           0	NONE       5       4       NEG       NONE       NONE       NORML       NEG       6       102       0       0
Yellow Metal Silicon Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum Manganese	scalar ppm ppm scalar scalar scalar scalar scalar scalar ppm ppm ppm	ASTM D5185m ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	>20 >20 >0.1 NONE NONE NONE NORML >0.1 175 5 5	NONE 23 5 NEG NONE NONE NONE NONE NORML NEG 8 103 0 <1 6	NONE           2           NEG           NONE           NONE           NORML           NORML           NORML           9           105           <1           0           5	NONE         5         4         NEG         NONE         NONE         NORML         NORML         NEG         6         102         0         0         6
Yellow Metal Silicon Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum Manganese Magnesium	scalar ppm ppm scalar scalar scalar scalar scalar ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	>20 >20 >0.1 NONE NONE NORML NORML >0.1 175 5 5 5	NONE 23 5 NEG NONE NONE NONE NORML NORML NEG 8 103 0 <1 6 1	5           2           NEG           NONE           NONE           NORML           NORML           NEG           9           105           <1           0           5           5           5	NONE           5           4           NEG           NONE           NONE           NORML           NORML           NEG           6           102           0           6           102           0           6           112
Yellow Metal Silicon Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum Manganese Magnesium Calcium	scalar ppm ppm scalar scalar scalar scalar scalar scalar ppm ppm ppm ppm ppm	<ul> <li>Visual</li> <li>ASTM D5185m</li> <li>ASTM D5185m</li> <li>WC Method</li> <li>*Visual</li> <li>*Visual</li> <li>*Visual</li> <li>*Visual</li> <li>*Visual</li> <li>*Visual</li> <li>ASTM D5185m</li> </ul>	<ul> <li>&gt;20</li> <li>&gt;20</li> <li>&gt;0.1</li> <li>NONE</li> <li>NONE</li> <li>NORML</li> <li>NORML</li> <li>&gt;0.1</li> <li>175</li> <li>5</li> <li>5</li> <li>5</li> <li>125</li> </ul>	NONE 23 5 NEG NONE NONE NONE NONE NORML NORML NEG 8 103 0 <11 6 1 46	NONE         2         NEG         NONE         NONE         NORML         NORML         NEG         9         105         <1         0         5         5         5         5         5         5         5         5         52	NONE           5           4           NEG           NONE           NONE           NORML           NORML           NEG           6           102           0           6           102           0           102           102           102           102           102           102           0           6           112
Yellow Metal Silicon Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum Manganese Magnesium Calcium	scalar ppm ppm scalar scalar scalar scalar scalar scalar ppm ppm ppm ppm ppm ppm	<ul> <li>Visual</li> <li>ASTM D5185m</li> <li>ASTM D5185m</li> <li>WC Method</li> <li>*Visual</li> <li>*Visual</li> <li>*Visual</li> <li>*Visual</li> <li>*Visual</li> <li>*Visual</li> <li>ASTM D5185m</li> </ul>	<ul> <li>&gt;20</li> <li>&gt;20</li> <li>&gt;0.1</li> <li>NONE</li> <li>NONE</li> <li>NONE</li> <li>NORML</li> <li>NORML</li> <li>&gt;0.1</li> <li>175</li> <li>5</li> <li>5</li> <li>125</li> <li>290</li> </ul>	NONE 23 5 NEG NONE NONE NONE NONE NORML NEG 8 103 0 <1 6 1 46 295	NONE 5 2 NEG NONE NONE NORML NORML NEG 9 105 <10 0 5 5 5 5 52 261	NONE         5         4         NEG         NONE         NONE         NORML         NORML         NORML         NORML         0         6         102         0         6         102         0         6         1102         261
Yellow Metal Silicon Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	scalar ppm ppm scalar scalar scalar scalar scalar ppm ppm 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 ASTM D5185m	<ul> <li>&gt;20</li> <li>&gt;20</li> <li>&gt;20</li> <li>&gt;0.1</li> <li>NONE</li> <li>NONE</li> <li>NORML</li> <li>NORML</li> <li>&gt;0.1</li> <li>&gt;0.1</li> <li>5</li> <li>5</li> <li>5</li> <li>125</li> <li>290</li> <li>10</li> </ul>	NONE 23 5 NEG NONE NONE NONE NORML NORML NEG 8 103 0 <11 6 1 46 295 10	5         2         NEG         NONE         NORML         NORML         NORML         105         <1         0         5         5         5         5         5         5         52         261         22	NONE         5         4         NEG         NONE         NORML         NORML         NORML         NORML         0         6         102         0         6
Yellow Metal Silicon Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	scalar ppm ppm scalar scalar scalar scalar scalar scalar ppm ppm ppm ppm ppm ppm ppm ppm ppm	<ul> <li>Visual</li> <li>ASTM D5185m</li> <li>ASTM D5185m</li> <li>WC Method</li> <li>*Visual</li> <li>*Visual</li> <li>*Visual</li> <li>*Visual</li> <li>*Visual</li> <li>*Visual</li> <li>ASTM D5185m</li> </ul>	<ul> <li>&gt;20</li> <li>&gt;20</li> <li>&gt;20</li> <li>&gt;0.1</li> <li>NONE</li> <li>NONE</li> <li>NORML</li> <li>NORML</li> <li>&gt;0.1</li> <li>75</li> <li>5</li> <li>5</li> <li>125</li> <li>290</li> <li>10</li> <li>400</li> </ul>	NONE 23 5 NEG NONE NONE NORML NORML NEG 8 103 0 <103 0 <1 6 1 46 295 10 599	NONE         5         2         NEG         NONE         NORML         NORML         NEG         9         105         <10         5         5         5         5         5         5         5         5         52         261         22         6556	NONE         5         4         NEG         NONE         NORML         NORML         NEG         102         0         6         102         6         1102         0         6         201         7         766

Submitted By: JEFF CHALMERS



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: WearCheck USA - 501 Madison Ave., Cary, NC 27513 **RACE CITY STEEL** Laboratory Received 4052 N HWY 16 Sample No. : CL0005219 : 18 Mar 2024 Lab Number : 06121847 : 19 Mar 2024 DENVER, NC Tested : 21 Mar 2024 - Angela Borella US 28037 Unique Number : 10935998 Diagnosed Test Package : CONST Contact: SERVICE MANAGER 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. T:

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Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

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