

Machine Id JOHN DEERE 160G 1FF160GXAMF058248 Component Pump Drive Fluid JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (--- GAL)

RECOMMENDATION

The oil change at the time of sampling has been noted. No corrective action is recommended at this time. Resample at the next service interval to monitor.

WEAR

All component wear rates are normal.

CONTAMINATION

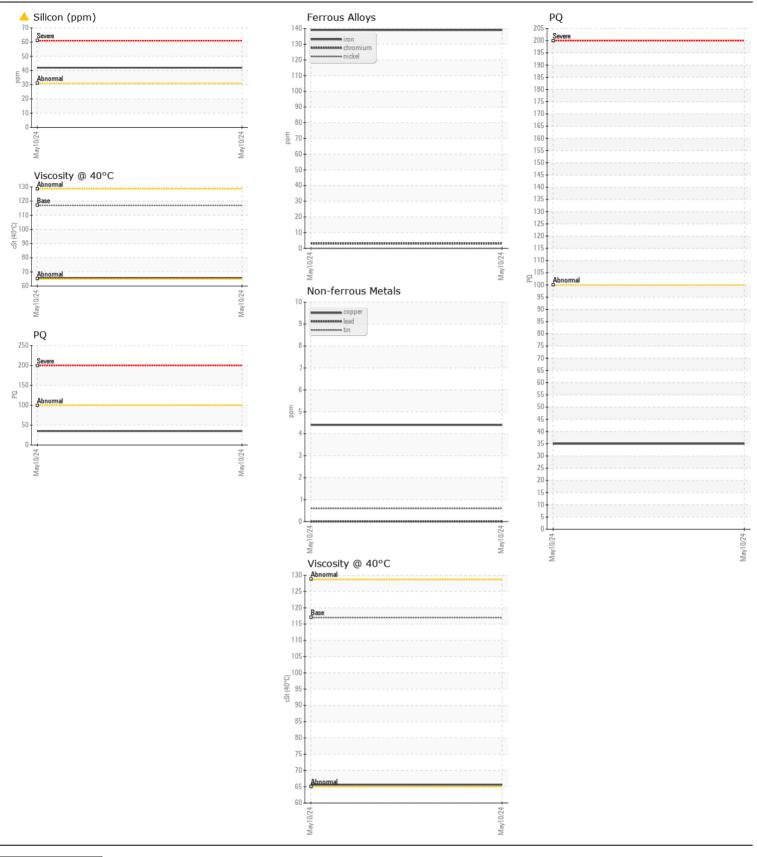
Elemental level of silicon (Si) above normal indicating ingress of seal material.

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		JR0212148		
Sample Date		Client Info		10 May 2024		
Machine Age	hrs	Client Info		1232		
Oil Age	hrs	Client Info		1232		
Filter Age	hrs	Client Info		1232		
Oil Changed		Client Info		Changed		
Filter Changed		Client Info		Changed		
Sample Status				ABNORMAL		
				~		
PQ		ASTM D8184		35		
Iron	ppm	ASTM D5185m	>151	139		
Chromium	ppm	ASTM D5185m	>11	3		
Nickel	ppm	ASTM D5185m	>10	0		
Titanium	ppm	ASTM D5185m		1		
Silver	ppm	ASTM D5185m	04	0		
Aluminum	ppm	ASTM D5185m	>21	7		
Lead	ppm	ASTM D5185m	>51	0		
Copper	ppm	ASTM D5185m	>51	4		
Tin	ppm	ASTM D5185m	>4	<1		
Vanadium	ppm	ASTM D5185m		<1		
White Metal	scalar	*Visual	NONE	NONE		
Yellow Metal	scalar	*Visual	NONE	NONE		
Yellow Metal Silicon			NONE >31	NONE		
	ppm	ASTM D5185m				
Silicon			>31	4 2	 	
Silicon Potassium	ppm	ASTM D5185m ASTM D5185m	>31 >20	▲ 42 1	 	
Silicon Potassium Water	ppm ppm	ASTM D5185m ASTM D5185m WC Method	>31 >20 >0.1	▲ 42 1 NEG		
Silicon Potassium Water Silt	ppm ppm scalar	ASTM D5185m ASTM D5185m WC Method *Visual	>31 >20 >0.1 NONE	A2 1 NEG NONE		
Silicon Potassium Water Silt Debris Sand/Dirt	ppm ppm scalar scalar	ASTM D5185m ASTM D5185m WC Method *Visual *Visual	>31 >20 >0.1 NONE NONE	A 42 1 NEG NONE LIGHT	 	
Silicon Potassium Water Silt Debris	ppm ppm scalar scalar scalar	ASTM D5185m ASTM D5185m WC Method *Visual *Visual *Visual	>31 >20 >0.1 NONE NONE NONE	42 1 NEG NONE LIGHT 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	>31 >20 >0.1 NONE NONE NONE NORML	 42 1 NEG NONE LIGHT 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	>31 >20 >0.1 NONE NONE NORML NORML	A 2 1 NEG NONE LIGHT NONE NORML 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 *Visual	>31 >20 >0.1 NONE NONE NORML NORML	A 2 1 NEG NONE LIGHT 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 *Visual	>31 >20 >0.1 NONE NONE NORML NORML >0.1	 42 1 NEG NONE LIGHT NORML NORML NEG 		
Silicon Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium	ppm ppm scalar scalar scalar scalar scalar scalar gpm	ASTM D5185m ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual *Visual ASTM D5185m	>31 >20 >0.1 NONE NONE NORML NORML >0.1	 42 1 NEG NONE LIGHT NORML NORML NEG 5 140 2 		
Silicon Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron	ppm ppm scalar scalar scalar scalar scalar scalar gpm	ASTM D5185m ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual *Visual ASTM D5185m	>31 >20 >0.1 NONE NONE NORML NORML >0.1	 42 1 NEG NONE LIGHT NORML NORML NEG 5 140 		
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	>31 >20 >0.1 NONE NONE NORML NORML >0.1	 42 1 NEG NONE LIGHT NORML NORML NEG 5 140 2 		
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 ASTM D5185m ASTM D5185m ASTM D5185m	>31 >20 >0.1 NONE NONE NORML NORML >0.1	 42 NEG NONE LIGHT NORML NORML NORML S 140 2 142 		
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	>31 >20 >0.1 NONE NONE NORML NORML >0.1	 42 NEG NONE LIGHT NORML NORML NORML S 140 2 142 4 		
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 ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	>31 >20 >0.1 NONE NONE NORML NORML >0.1	 42 NEG NONE LIGHT NORML NORML NORML NEG 5 140 2 142 4 300 		
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 ppm	ASTM D5185m ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	>31 >20 >0.1 NONE NONE NORML NORML >0.1	 42 1 NEG NONE LIGHT NORML NORML NORML 140 2 142 4 300 3307 		
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	>31 >20 >0.1 NONE NONE NORML NORML >0.1	 42 NEG NONE LIGHT NORML NORML NORML 140 2 142 4 300 3307 1107 		

Contact/Location: DAVID ZIEG - JAMASH



JRE - ASHLAND Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513 Sample No. : JR0212148 Received 11047 LEADBETTER RD : 13 May 2024 Lab Number : 06177466 Tested ASHLAND, VA : 14 May 2024 Unique Number : 11023519 Diagnosed : 15 May 2024 - Don Baldridge US 23005 Test Package : CONST (Additional Tests: PQ) Contact: DAVID ZIEG Certificate L2367 To discuss this sample report, contact Customer Service at 1-800-237-1369. dzieg@jamesriverequipment.com * - Denotes test methods that are outside of the ISO 17025 scope of accreditation. T: (804)798-6001 Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012) F: (804)798-0292

Contact/Location: DAVID ZIEG - JAMASH Page 2 of 2