

Machine Id JOHN DEERE 30212 Component Left Final Drive Fluid CHEVRON DELO GEAR ESI OIL 80W90 (--- QTS)

RECOMMENDATION

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

WEAR

Gear wear is indicated.

CONTAMINATION

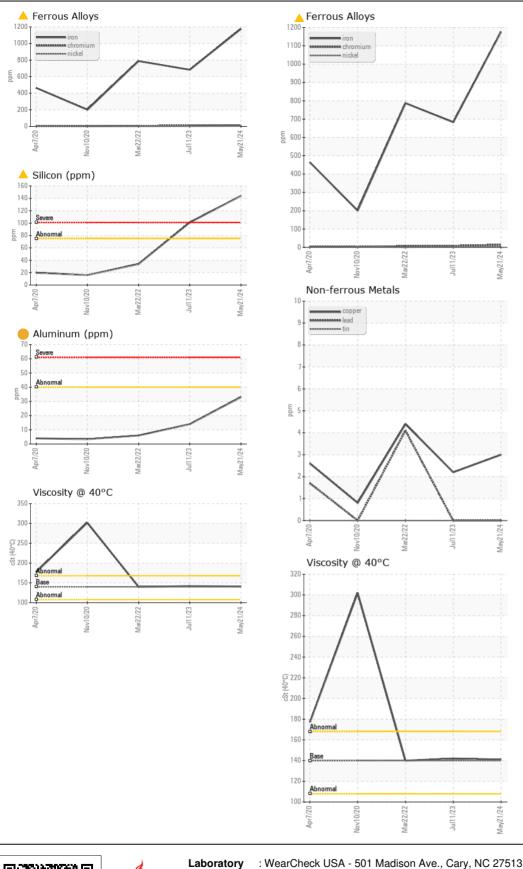
Elemental levels of silicon (Si) and aluminum (Al) indicate aluminasilicate (coarse dirt) ingress.

FLUID CONDITION

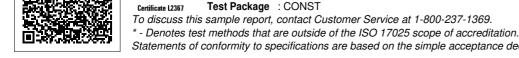
The condition of the oil is acceptable for the time in service.

	Test	UOM	Method	Limit/Abn	Current	History1	History2
	Sample Number		Client Info		WC0924416	WC0822710	WC0639413
	Sample Date		Client Info		21 May 2024	11 Jul 2023	22 Mar 2022
	Machine Age	hrs	Client Info		3801	3076	2165
	Oil Age	hrs	Client Info		750	1000	629
	Filter Age	hrs	Client Info		750	1000	0
	Oil Changed		Client Info		Changed	Changed	Changed
	Filter Changed		Client Info		Changed	Changed	N/A
	Sample Status				ABNORMAL	ABNORMAL	ABNORMAL
	Iron	ppm	ASTM D5185m	>750	▲ 1176	683	▲ 787
	Chromium	ppm	ASTM D5185m	>9	<u>▲</u> 14	8	6
	Nickel	ppm	ASTM D5185m	>10	3	2	0
	Titanium	ppm	ASTM D5185m		3	1	<1
	Silver	ppm	ASTM D5185m		0	0	0
	Aluminum	ppm	ASTM D5185m	>40	<mark>)</mark> 33	1 4	6
	Lead	ppm	ASTM D5185m	>15	0	0	4
	Copper	ppm	ASTM D5185m	>40	3	2	4
	Tin	ppm	ASTM D5185m	>10	0	0	0
	Vanadium	ppm	ASTM D5185m		0	0	0
	White Metal	scalar	*Visual	NONE	MODER	MODER	A HEAVY
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
	Silicon	ppm	ASTM D5185m	>75	1 44	1 01	34
	Silicon Potassium	ppm ppm	ASTM D5185m ASTM D5185m	>75 >20	▲ 144 4	▲ 101 3	34 4
	Potassium		ASTM D5185m	>20	4	3	4
	Potassium Water	ppm	ASTM D5185m WC Method	>20 >0.075	4 NEG	3 NEG	4 NEG
	Potassium Water Silt	ppm scalar	ASTM D5185m WC Method *Visual	>20 >0.075 NONE	4 NEG MODER	3 NEG NONE	4 NEG NONE
	Potassium Water Silt Debris	ppm scalar scalar	ASTM D5185m WC Method *Visual *Visual	>20 >0.075 NONE NONE	4 NEG MODER NONE	3 NEG NONE NONE	4 NEG NONE NONE
	Potassium Water Silt Debris Sand/Dirt	ppm scalar scalar scalar	ASTM D5185m WC Method *Visual *Visual *Visual	>20 >0.075 NONE NONE NONE	4 NEG MODER NONE NONE	3 NEG NONE NONE NONE	4 NEG NONE NONE
	Potassium Water Silt Debris Sand/Dirt Appearance	ppm scalar scalar scalar scalar	ASTM D5185m WC Method *Visual *Visual *Visual *Visual	>20 >0.075 NONE NONE NONE	4 NEG MODER NONE NONE NORML	3 NEG NONE NONE NONE NORML	4 NEG NONE NONE NORE
	Potassium Water Silt Debris Sand/Dirt Appearance Odor	ppm scalar scalar scalar scalar scalar	ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual	>20 >0.075 NONE NONE NORML	4 NEG MODER NONE NONE NORML NORML	3 NEG NONE NONE NONE NORML NORML	4 NEG NONE NONE NORE NORML
	Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water	ppm scalar scalar scalar scalar scalar	ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual *Visual	>20 >0.075 NONE NONE NONE NORML >0.075	4 NEG MODER NONE NONE NORML NORML NEG	3 NEG NONE NONE NORML NORML NEG	4 NEG NONE NONE NORML NORML NEG
	Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium	ppm scalar scalar scalar scalar scalar scalar	ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual *Visual ASTM D5185m	>20 >0.075 NONE NONE NONE NORML >0.075	4 NEG MODER NONE NORE NORML NEG 18	3 NEG NONE NONE NORML NORML NEG 10	4 NEG NONE NONE NORML NORML NEG
	Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron	ppm scalar scalar scalar scalar scalar scalar ppm	ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual *Visual ASTM D5185m	>20 >0.075 NONE NONE NONE NORML >0.075	4 NEG MODER NONE NORML NORML NEG 18 306	3 NEG NONE NONE NORML NORML NEG 10 208	4 NEG NONE NONE NORML NORML NEG 0 101
	Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium	ppm scalar scalar scalar scalar scalar scalar ppm ppm	ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m	>20 >0.075 NONE NONE NONE NORML >0.075	4 NEG MODER NONE NORML NORML NEG 18 306 2	3 NEG NONE NONE NORML NORML NEG 10 208 0	4 NEG NONE NONE NORML NORML NEG 0 101 0
	Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum	ppm scalar scalar scalar scalar scalar ppm ppm ppm	ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m ASTM D5185m	>20 >0.075 NONE NONE NONE NORML >0.075	4 NEG MODER NONE NORML NORML NEG 18 306 2 3	3 NEG NONE NONE NORML NORML NEG 10 208 0 <1	4 NEG NONE NONE NORML NORML NEG 0 101 0 4
	Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum Manganese	ppm scalar scalar scalar scalar scalar ppm ppm ppm ppm	ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	>20 >0.075 NONE NONE NONE NORML >0.075	4 NEG MODER NONE NORML NORML NEG 18 306 2 3 13	3 NEG NONE NONE NORML NORML NEG 10 208 0 <1 9	4 NEG NONE NONE NORML NORML NEG 0 101 0 4 6
	Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum Manganese Magnesium	ppm scalar scalar scalar scalar scalar ppm ppm ppm ppm ppm	ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	>20 >0.075 NONE NONE NONE NORML >0.075	4 NEG MODER NONE NORML NORML NEG 18 306 2 3 13 3 3	3 NEG NONE NONE NORML NORML NEG 10 208 0 <1 9 0	4 NEG NONE NONE NORML NORML NEG 0 101 0 4 6 6 11
	Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Malybdenum Manganese Magnesium Calcium	ppm scalar scalar scalar scalar scalar ppm ppm ppm ppm ppm ppm	ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	>20 >0.075 NONE NONE NONE NORML >0.075	4 NEG MODER NONE NORML NORML NEG 18 306 2 3 13 3 13 3 43	3 NEG NONE NONE NORML NORML NEG 10 208 0 <1 9 0 36	4 NEG NONE NONE NORML NORML NEG 0 101 0 4 6 111 55
	Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum Manganese Magnesium Calcium	ppm scalar scalar scalar scalar scalar ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	>20 >0.075 NONE NONE NONE NORML >0.075	4 NEG MODER NONE NORML NORML NEG 18 306 2 3 13 3 43 43 1136	3 NEG NONE NONE NORML NORML NEG 10 208 0 <1 9 0 <1 9 0 36 1031	4 NEG NONE NONE NORML NORML NEG 0 101 0 4 6 11 55 2469
	Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Barium Malybdenum Manganese Magnesium Calcium Phosphorus	ppm scalar scalar scalar scalar scalar ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	>20 >0.075 NONE NONE NONE NORML >0.075	4 NEG MODER NONE NORE NORML NEG 18 306 2 3 13 3 43 13 3 43 1136 100	3 NEG NONE NONE NORML NORML NEG 10 208 0 <10 9 0 <1 9 0 36 1031 47	4 NEG NONE NONE NORML NORML NEG 0 101 0 4 6 111 55 2469 72

Contact/Location: SCOTT SULLIVAN - MSCDUR



SULLIVAN EASTERN INC 2860 C SLATER RD : 24 May 2024 MORRISVILLE, NC : 28 May 2024 : 29 May 2024 - Sean Felton US 27560 Contact: SCOTT SULLIVAN ssullivan@sullivaneastern.com T: (919)484-8993 Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012) F: (919)484-2136



Sample No.

Lab Number : 06191380

Unique Number : 11048132

: WC0924416

Received

Diagnosed

Tested

Contact/Location: SCOTT SULLIVAN - MSCDUR Page 2 of 2