

OIL ANALYSIS REPORT

Sample Rating Trend



Machine Id **D-235** Component **Right Final Drive** Fluid **JOHN DEERE HY-GARD HYD/TRANS (--- GAL)**

DIAGNOSIS

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.

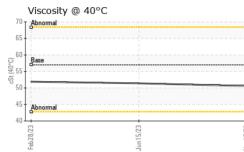
Fluid Condition

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

SAMPLE INFORM	IATION	method				history2
Sample Number		Client Info		WC0828502	WC0828477	WC0780388
Sample Date		Client Info		15 Nov 2023	15 Jun 2023	28 Feb 2023
Machine Age	hrs	Client Info		1140	545	266
Oil Age	hrs	Client Info		1140	545	266
Oil Changed		Client Info		Changed	Not Changd	Changed
Sample Status				NORMAL	NORMAL	NORMAL
CONTAMINATION	J	method	limit/base	current	history1	history2
Water		WC Method		NEG	NEG	NEG
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>500	135	68	67
Chromium	ppm	ASTM D5185m	>10	2	1	2
Nickel	ppm	ASTM D5185m	>10	<1	0	0
Titanium	ppm	ASTM D5185m		0	0	<1
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>25	1	3	<1
Lead	ppm	ASTM D5185m	>25	<1	0	<1
Copper	ppm	ASTM D5185m	>50	<1	0	<1
Tin	ppm	ASTM D5185m	>10	<1	0	<1
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		0	0	0
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	6	1	0	<1
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm		0	0	<1	<1
Manganese	ppm	ASTM D5185m	-	4	2	4
Magnesium	ppm	ASTM D5185m	145	99	81	103
Calcium	ppm	ASTM D5185m	3570	3416	2669	3441
Phosphorus	ppm	ASTM D5185m	1290	1041	814	949
Zinc		1011010010	1200	-		0-10
200	nnm	ASTM D5185m	1640	1285		1223
Sulfur	ppm ppm	ASTM D5185m ASTM D5185m	1640	1285 3943	984 3389	1223 3726
	ppm ppm	ASTM D5185m	1640 limit/base		984 3389	3726
CONTAMINANTS	ppm		limit/base	3943	984 3389 history1	3726 history2
CONTAMINANTS Silicon	ppm ppm	ASTM D5185m method ASTM D5185m	limit/base >75	3943 current 14	984 3389	3726 history2 15
CONTAMINANTS	ppm	ASTM D5185m method	limit/base	3943 current	984 3389 history1	3726 history2
CONTAMINANTS Silicon Sodium	ppm ppm	ASTM D5185m method ASTM D5185m ASTM D5185m	limit/base	3943 current 14 3	984 3389 history1 11 1	3726 history2 15 2
CONTAMINANTS Silicon Sodium Potassium	ppm ppm	ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m	limit/base >75 >20	3943 current 14 3 2	984 3389 history1 11 1 1	3726 history2 15 2 3
CONTAMINANTS Silicon Sodium Potassium VISUAL White Metal	ppm ppm ppm ppm	ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m method	limit/base >75 >20 limit/base	3943 current 14 3 2 current	984 3389 history1 11 1 1 1 history1	3726 history2 15 2 3 history2
CONTAMINANTS Silicon Sodium Potassium VISUAL White Metal Yellow Metal	ppm ppm ppm ppm scalar	ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m method *Visual	limit/base >75 >20 limit/base NONE	3943 current 14 3 2 current NONE	984 3389 history1 11 1 1 1 history1 NONE	3726 history2 15 2 3 history2 NONE
CONTAMINANTS Silicon Sodium Potassium VISUAL White Metal Yellow Metal	ppm ppm ppm ppm ppm scalar scalar	ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m *Visual *Visual	limit/base >75 >20 limit/base NONE NONE	3943 current 14 3 2 current NONE NONE	984 3389 history1 11 1 1 history1 NONE NONE	3726 history2 15 2 3 history2 NONE NONE
CONTAMINANTS Silicon Sodium Potassium VISUAL White Metal Yellow Metal Precipitate	ppm ppm ppm ppm ppm scalar scalar scalar	ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m *Visual *Visual *Visual	limit/base >75 >20 limit/base NONE NONE NONE	3943 current 14 3 2 current NONE NONE NONE	984 3389 history1 11 1 1 history1 NONE NONE NONE	3726 history2 15 2 3 history2 NONE NONE NONE
CONTAMINANTS Silicon Sodium Potassium VISUAL White Metal Yellow Metal Precipitate Silt Debris	ppm ppm ppm ppm ppm scalar scalar scalar scalar scalar scalar	ASTM D5185m method ASTM D5185m ASTM D5185m *Visual *Visual *Visual *Visual *Visual *Visual	limit/base >75 >20 limit/base NONE NONE NONE NONE NONE	3943 current 14 3 2 current NONE NONE NONE LIGHT NONE	984 3389 history1 11 1 1 history1 NONE NONE NONE NONE NONE NONE	3726 history2 15 2 3 history2 NONE NONE NONE NONE NONE NONE
CONTAMINANTS Silicon Sodium Potassium VISUAL White Metal Yellow Metal Precipitate Silt Debris Sand/Dirt	ppm ppm ppm ppm scalar scalar scalar scalar scalar scalar	ASTM D5185m method ASTM D5185m ASTM D5185m *Visual *Visual *Visual *Visual *Visual *Visual *Visual *Visual	limit/base >75 >20 limit/base NONE NONE NONE NONE NONE NONE	3943 current 14 3 2 current NONE NONE NONE LIGHT NONE NONE NONE	984 3389 history1 11 1 1 1 NONE NONE NONE NONE NONE NONE	3726 history2 15 2 3 history2 NONE NONE NONE NONE NONE NONE NONE
CONTAMINANTS Silicon Sodium Potassium VISUAL White Metal Yellow Metal Precipitate Silt Debris Sand/Dirt Appearance	ppm ppm ppm ppm scalar scalar scalar scalar scalar scalar scalar	ASTM D5185m method ASTM D5185m ASTM D5185m *Visual *Visual *Visual *Visual *Visual *Visual *Visual *Visual *Visual *Visual	limit/base >75 >20 limit/base NONE NONE NONE NONE NONE NONE NONE NON	3943 current 14 3 2 current NONE NONE LIGHT NONE NONE NONE NONE NONE	984 3389 history1 11 1 1 history1 NONE NONE NONE NONE NONE NONE NONE NON	3726 history2 15 2 3 history2 NONE NONE NONE NONE NONE NONE NONE NON
CONTAMINANTS Silicon Sodium Potassium VISUAL White Metal Yellow Metal Precipitate Silt Debris Sand/Dirt Appearance Odor	ppm ppm ppm ppm scalar scalar scalar scalar scalar scalar scalar scalar	ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m *Visual *Visual *Visual *Visual *Visual *Visual *Visual *Visual *Visual *Visual	limit/base >75 >20 limit/base NONE NONE NONE NONE NONE NONE NONE NON	3943 current 14 3 2 current NONE NONE NONE LIGHT NONE NONE NONE NONE NONE	984 3389 history1 11 1 1 NONE NONE NONE NONE NONE NONE N	3726 history2 15 2 3 history2 NONE NONE NONE NONE NONE NONE NONE NON
CONTAMINANTS Silicon Sodium Potassium VISUAL White Metal Yellow Metal Precipitate Silt Debris Sand/Dirt Appearance	ppm ppm ppm ppm scalar scalar scalar scalar scalar scalar scalar	ASTM D5185m method ASTM D5185m ASTM D5185m *Visual *Visual *Visual *Visual *Visual *Visual *Visual *Visual *Visual *Visual	limit/base >75 >20 limit/base NONE NONE NONE NONE NONE NONE NONE NON	3943 current 14 3 2 current NONE NONE LIGHT NONE NONE NONE NONE NONE	984 3389 history1 11 1 1 history1 NONE NONE NONE NONE NONE NONE NONE NON	3726 history2 15 2 3 history2 NONE NONE NONE NONE NONE NONE NONE NON



OIL ANALYSIS REPORT



	FLUID PROPE	RTIES	method	limit/base	current	history1	history2
	Visc @ 40°C	cSt	ASTM D445	57.0	50.6	51.4	51.9
	SAMPLE IMAG	GES	method	limit/base	current	history1	history2
23	Color				no image	no image	no image
Nov15/23	Bottom				no image	no image	no image
	GRAPHS					2	
	Ferrous Alloys						
	120 - iron iron chromium -		/				
	100						
E C C C C C C C C C C C C C C C C C C C	80-						
-	60-						
	40 -						
	20						
	Feb28/23	Jun 15/23		Nov15/23			
				Nov			
	Non-ferrous Me	etais					
	9 - copper 8 - copper 8 - copper 10						
	7-						
	<u>ال</u> 5						
	4						
	2						
	Feb28/23	Jun15/23		Nov15/23			
	 Viscosity @ 40'			No			
		C					
	65 -						
	60						
0000	55						
ć	3 50						
	45						
	Abnormal						
	40 Left 28/23	Jun15/23 -		Nav15/23 +			
	-B-	Jun		Nov			
ooratory nple No. Number que Number	: WearCheck USA : WC0828502 : 06009939 : 10749083	A - 501 Madi Received Diagnos Diagnos	d : 16 ed : 20	ry, NC 2751 Nov 2023 Nov 2023 1 Baldridge	3		JKE LAZZAR ETTEVILLE R RALEIGH, N US 2760
t Package	: CONST	-		_			t: NICK DIXO
	contact Customer S re outside of the IS				NICK	DIXON@DUKE T:	LAZZAM.CO (919)760-779



Report Id: DUKRAL [WUSCAR] 06009939 (Generated: 11/20/2023 14:14:01) Rev: 1

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