**WEAR CONTAMINATION FLUID CONDITION** 

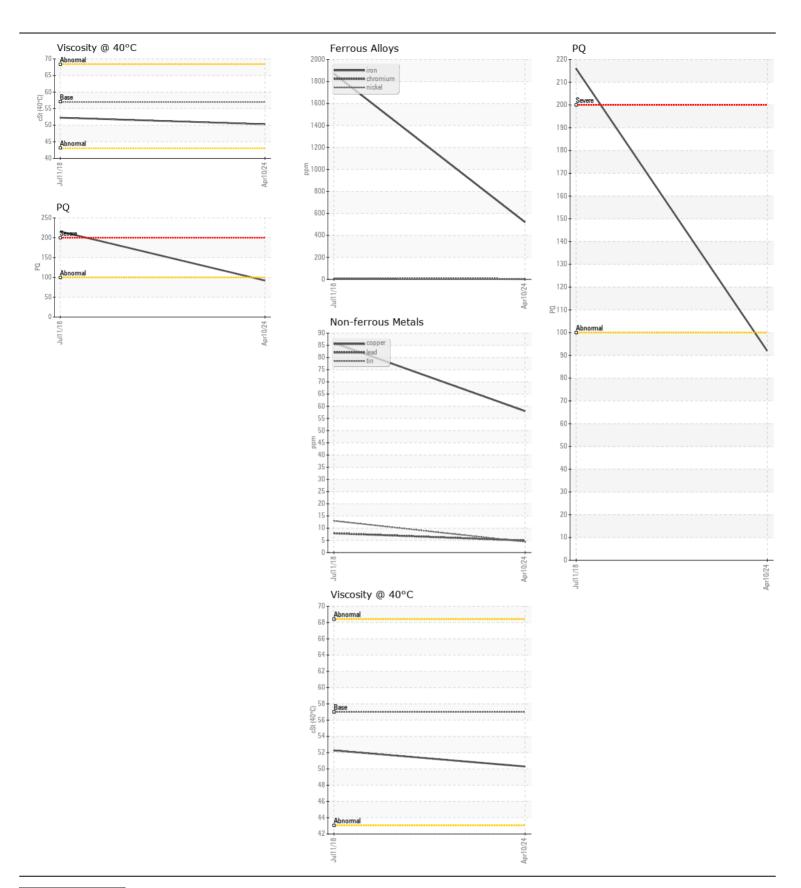
**NORMAL ABNORMAL NORMAL** 



## Machine Id **JOHN DEERE 544K 1DW544KPLEE661679**

Front Differential

JOHN DEERE HY-GARD HYD/	TRANS ( C	TS)					
RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
No corrective action is recommended at this time. Resample at the next service interval to monitor.	Sample Number		Client Info		JR0205058	JRMC460164	
	Sample Date		Client Info		10 Apr 2024	11 Jul 2018	
	Machine Age	hrs	Client Info		10581	4336	
	Oil Age	hrs	Client Info		0	0	
	Filter Age	hrs	Client Info		0	0	
	Oil Changed		Client Info		N/A	Changed	
	Filter Changed		Client Info		N/A	N/A	
	Sample Status				ABNORMAL	ABNORMAL	
WEAR	PQ		ASTM D8184		92	216	
All component wear rates are normal.	Iron	ppm	ASTM D5185m	>500	520	<u>▲</u> 1871	
	Chromium	ppm	ASTM D5185m	>10	3	9	
	Nickel	ppm	ASTM D5185m	>10	4	8	
	Titanium	ppm	ASTM D5185m		1	1	
	Silver	ppm	ASTM D5185m		<1	0	
	Aluminum	ppm	ASTM D5185m	>25	2	7	
	Lead	ppm	ASTM D5185m		5	8	
	Copper	ppm	ASTM D5185m		58	86	
	Tin	ppm	ASTM D5185m	>10	4	13	
	Vanadium	ppm	ASTM D5185m		<1	<1	
	White Metal	scalar	*Visual	NONE	NONE	NONE	
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	
CONTAMINATION  Moderate concentration of visible dirt/debris present in the oil.	Silicon	ppm	ASTM D5185m	>75	24	50	
	Potassium	ppm	ASTM D5185m	>20	3	4	
	Water		WC Method	>.2	NEG	NEG	
	Silt	scalar	*Visual	NONE	MODER	NONE	
	Debris	scalar	*Visual	NONE	▲ MODER	NONE	
	Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	
	Appearance	scalar	*Visual	NORML	NORML	NORML	
	Odor	scalar	*Visual	NORML	NORML	NORML	
	Emulsified Water	scalar	*Visual	>.2	NEG	0.2%	
FLUID CONDITION	Sodium	ppm	ASTM D5185m		2	13	
The condition of the oil is acceptable for the time in service.	Boron	ppm	ASTM D5185m		8	3	
	Barium	ppm	ASTM D5185m		<1	9	
	Molybdenum	ppm	ASTM D5185m	0	5	0	
	Manganese	ppm	ASTM D5185m		7	21	
	Magnesium	ppm	ASTM D5185m		98	94	
	Calcium	ppm	ASTM D5185m	3570	3559	3366	
	Phosphorus	ppm	ASTM D5185m	1290	1146	1036	
	Zinc	ppm	ASTM D5185m	1640	1193	938	
	Sulfur	ppm	ASTM D5185m	F7.0	4761	3370	
Papart Id. IAMCRE IM/ISCARI 06146120 (Canarated: 04/15/2024 20:25:10) Pays 1	Visc @ 40°C	cSt	ASTM D445		50.3	52.27	





Laboratory Sample No.

: WearCheck USA - 501 Madison Ave., Cary, NC 27513

: JR0205058 Lab Number : 06146139

Unique Number: 10976217

**Tested** Diagnosed Test Package : CONST ( Additional Tests: PQ )

Received

: 11 Apr 2024

: 12 Apr 2024

: 15 Apr 2024 - Don Baldridge

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.

JRE - GREENSBORO 411 SOUTH REGIONAL ROAD

GREENSBORO, NC US 27409

Contact: NICK GALLAHER NGALLAHER@JRENET.COM

T: (336)668-2762 Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012) F: (336)665-9556