

## **OIL ANALYSIS REPORT**

### LAKE WENDELL - RANDY EDWARDS **JOHN DEERE 9510 681045** Component

**Hydraulic System** TDH FLUID SAE 75W80 (--- QTS)

#### DIAGNOSIS

#### Recommendation

Resample at the next service interval to monitor. The fluid was not specified, however, a fluid match indicates that this fluid is (GENERIC) TDH FLUID SAE 75W80. Please confirm.

#### Wear

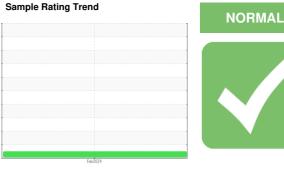
All component wear rates are normal.

#### Contamination

The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.

#### Fluid Condition

The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.





		<u>k</u>		Feb 2024		
SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC06136259		
Sample Date		Client Info		26 Feb 2024		
Machine Age	hrs	Client Info		4791		
Oil Age	hrs	Client Info		0		
Oil Changed		Client Info		N/A		
Sample Status				NORMAL		
CONTAMINATIO	N	method	limit/base	current	history1	history2
Water		WC Method	>0.1	NEG		
WEAR METALS		method	limit/base	current	history1	history2
PQ		ASTM D8184		12		
Iron	ppm	ASTM D5185m	>20	3		
Chromium	ppm	ASTM D5185m	>10	<1		
Nickel	ppm	ASTM D5185m	>10	<1		
Titanium	ppm	ASTM D5185m		<1		
Silver	ppm	ASTM D5185m		<1		
Aluminum	ppm	ASTM D5185m	>10	2		
Lead	ppm	ASTM D5185m	>10	2		
Copper	ppm	ASTM D5185m	>75	17		
Tin	ppm	ASTM D5185m	>10	1		
Vanadium	ppm	ASTM D5185m		<1		
Cadmium	ppm	ASTM D5185m		<1		
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	10	2		
Barium	ppm	ASTM D5185m	10	0		
Molybdenum	ppm	ASTM D5185m	10	3		
Manganese	ppm	ASTM D5185m		<1		
Magnesium	ppm	ASTM D5185m	100	22		
Calcium	ppm	ASTM D5185m	3500	2911		
Phosphorus	ppm	ASTM D5185m	1150	1156		
Zinc	ppm	ASTM D5185m	1150	1180		
Sulfur	ppm	ASTM D5185m	5000	3854		
CONTAMINANTS	6	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>20	4		
Sodium	ppm	ASTM D5185m		<1		
Potassium	ppm	ASTM D5185m	>20	3		
FLUID CLEANLIN	NESS	method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>5000	312		
Particles >6µm		ASTM D7647	>1300	52		
Particles >14µm		ASTM D7647	>160	6		
Particles >21µm		ASTM D7647	>40	2		
Particles >38µm		ASTM D7647	>10	0		

ASTM D7647 >3

ISO 4406 (c) >19/17/14

Particles >71µm **Oil Cleanliness** 

0

15/13/10



Abnorma 100

> 50 0 Feb26/24

61 Ê 5 of particles (1 n 8 % ing 2k 2 11 0k Feb26/2

> 58 56 Abnormal

54 ()-52 ()-0<del>1</del> 50 48

Base 46 44 Abnormal 42 Feb26/24

PQ 250

Abnorma 100 50

200

150 Ы

nL

6

Ê 51 cles (1 41 ited 3k 10 2k 11

<sub>0k</sub> L

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# **OIL ANALYSIS REPORT**

	PQ	FLUID DEGRAD	ATION	method	limit/ba	ase	current	
0 - 0 -	Severe	Acid Number (AN)	mg KOH/g	ASTM D8045			1.96	
		VISUAL		method	limit/ba	ase	current	
n.	Abnormal	White Metal	scalar	*Visual	NONE	100	NONE	
		Yellow Metal	scalar	*Visual	NONE		NONE	
U -		Precipitate	scalar	*Visual	NONE		NONE	
0 -	24 24	Silt	scalar	*Visual	NONE		NONE	
	Feb 26/24 Feb 26/24	Debris	scalar	*Visual	NONE		NONE	
		Sand/Dirt	scalar	*Visual	NONE		NONE	
k -	Particle Trend	Appearance	scalar	*Visual	NORML	-	NORML	
k-	4μm 9	Odor	scalar	*Visual	NORML	_	NORML	
k -	μ	Emulsified Water	scalar	*Visual	>0.1		NEG	
k -		Free Water	scalar	*Visual			NEG	
k -		FLUID PROPER	ΓIES	method	limit/ba	ase	current	
k -		Visc @ 40°C	cSt	ASTM D445	48		44.6	
k -		SAMPLE IMAGE	9	method	limit/ba	200	current	
	Feb 26/24 Feb 26/24	SAMPLE IMAGE	5	methou	IIITIII/Da	150	current	
	N/							
8 -	Viscosity @ 40°C	Color					· ·	n
6.	Abnormal							
4 · 2 ·							BECAN	
0.		Bottom					* 68/04/5	n
8.	Base D	Dottom					HYD	
6. 4.	Abnormal							
2.	-	GRAPHS						
	Feb 26/24	Ferrous Alloys			4	Р 191,520 т	article Count	-
	u. u	iron				22,880 -		
n -	PQ	ā 5-				Se	vere	
0	Severe					30,720		
U -		07 <del>1</del>			/24	7,680 Ab	normal	
0.		Feb 26/2			Feb26/24 s {per 1 m	1,920-		٠.
0 -	Abnormal	Non-ferrous Meta	ls		Feb26/24 - particles (per 1 ml)	480		1
0.	-	20 copper			er of p	120-		
0.		15- E 10-			qunu	30-		
	Feb 26/24	5						
	<u>ب</u>					8-		-
	Particle Trend	Feb 26/24			Feb26/24	2-		
к -	Abnorman 4µm	<sup>™</sup> Viscosity @ 40°C			æ	0 4µ	6 <sub>µ</sub>	14µ
ŀ.	νασασασασα ο μετηγραφικά το μετηγραφικό το μετηγρι	60 T				₽ 10 - 10	Acid Number	
k-		S5- Abnormal				(B/HO) 200	Abnormal	
k.	•	() 55 - Base () 00 - Base				La 2.0	Base	
k -		43 Abnormal				2	Abnormal	
k -		40 + +2/			\$/24	Acid Acid		
	Feb.26/24	Feb26/24			Feb26/2	Feh 26/24		
Ċ		: WearCheck USA - 50						QL
	Sample No.	: WC06136259 r : 06136259	Recei Teste		2 Apr 202 3 Apr 202			
		r : 10955724	Diagr		Apr 2024		Davis	
ĺ		e : CONST ( Additional T			2			~

QUALITY EQUIPMENT LLC 2783 HWY 70 BUS E SMITHFIELD, NC US 27577 Contact: COY STANLEY cstanley@qualityequip.com T: (919)934-2701 Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012) F:

21µ

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no image

no image

24

20 8

0 4406:1999 Clea

14

12 0

-eb26/24.

no image

no image

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.

Contact/Location: COY STANLEY - QUASMI