

Machine Id
JOHN DEERE 624L 624L UNIT 1
 Component
Transmission (Manual)
 Fluid
TDH FLUID SAE 75W80 (--- 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 oil. The amount and size of particulates present in the system are acceptable.

Fluid Condition

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

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			PE0002529	PE0002507	PE0002504
Sample Date	Client Info			15 Nov 2023	20 Oct 2023	06 Oct 2023
Machine Age	hrs	Client Info		5959	5740	5585
Oil Age	hrs	Client Info		5740	5585	5585
Oil Changed	Client Info			N/A	N/A	N/A
Sample Status				NORMAL	NORMAL	NORMAL

CONTAMINATION		method	limit/base	current	history1	history2
Water	WC Method		>0.1	NEG	NEG	NEG

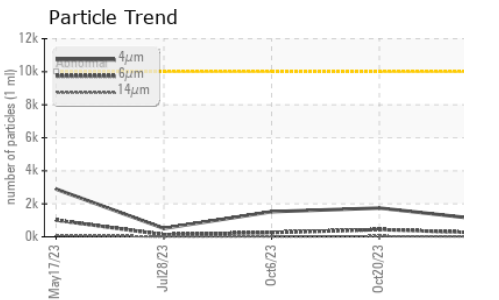
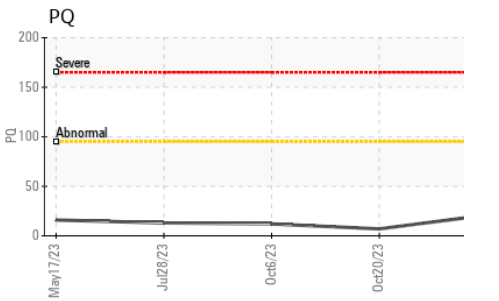
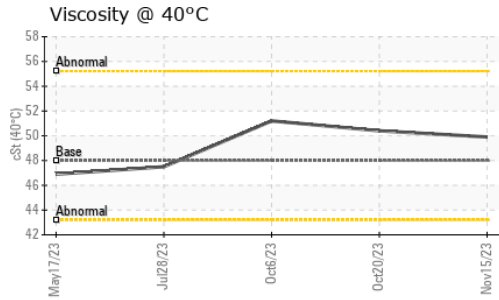
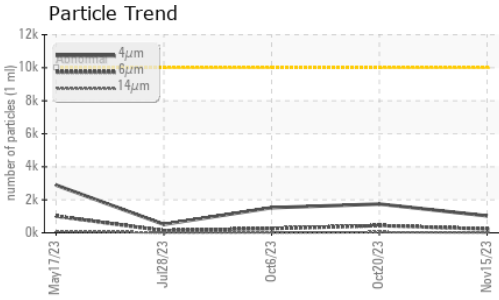
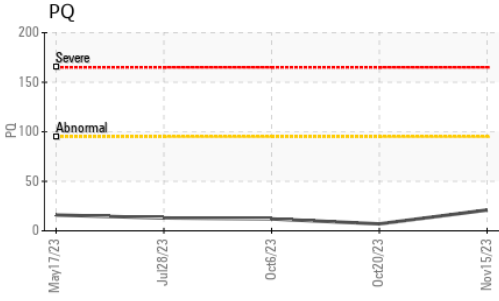
WEAR METALS		method	limit/base	current	history1	history2
PQ		ASTM D8184	>95	21	7	12
Iron	ppm	ASTM D5185m	>200	33	26	25
Chromium	ppm	ASTM D5185m	>5	<1	0	0
Nickel	ppm	ASTM D5185m	>5	<1	<1	0
Titanium	ppm	ASTM D5185m		<1	0	0
Silver	ppm	ASTM D5185m	>7	0	<1	0
Aluminum	ppm	ASTM D5185m	>25	2	2	<1
Lead	ppm	ASTM D5185m	>45	<1	0	0
Copper	ppm	ASTM D5185m	>225	2	1	1
Tin	ppm	ASTM D5185m	>10	0	0	0
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		<1	0	0

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	10	1	0	2
Barium	ppm	ASTM D5185m	10	9	0	0
Molybdenum	ppm	ASTM D5185m	10	<1	0	7
Manganese	ppm	ASTM D5185m		<1	<1	0
Magnesium	ppm	ASTM D5185m	100	83	94	86
Calcium	ppm	ASTM D5185m	3500	3107	3110	2966
Phosphorus	ppm	ASTM D5185m	1150	1003	1065	978
Zinc	ppm	ASTM D5185m	1150	1124	1221	1133
Sulfur	ppm	ASTM D5185m	5000	3809	3707	3625

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>125	16	15	15
Sodium	ppm	ASTM D5185m		0	0	<1
Potassium	ppm	ASTM D5185m	>20	2	0	0

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>10000	1026	1745	1522
Particles >6µm		ASTM D7647	>2500	228	439	260
Particles >14µm		ASTM D7647	>320	18	37	21
Particles >21µm		ASTM D7647	>80	5	8	4
Particles >38µm		ASTM D7647	>20	0	0	0
Particles >71µm		ASTM D7647	>4	0	0	0
Oil Cleanliness		ISO 4406 (c)	>20/18/15	17/15/11	18/16/12	18/15/12

OIL ANALYSIS REPORT

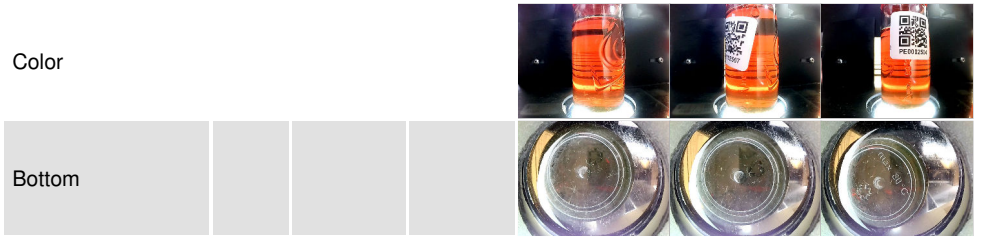


FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	2.25	1.05	1.23	1.24

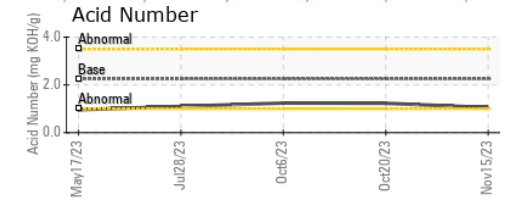
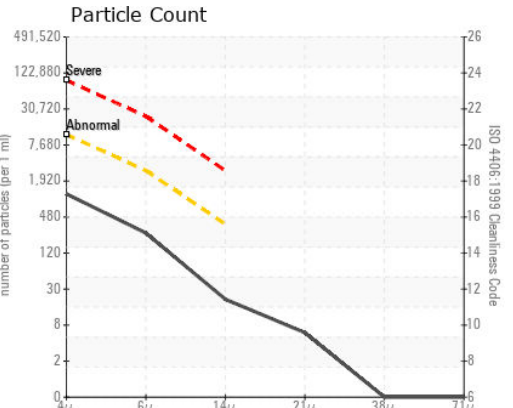
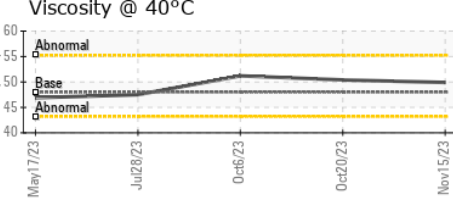
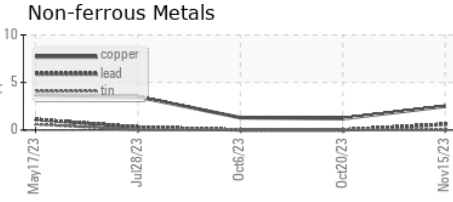
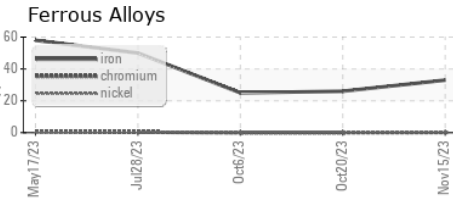
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.1	NEG	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG	NEG

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	48	49.9	50.4	51.2

SAMPLE IMAGES		method	limit/base	current	history1	history2
---------------	--	--------	------------	---------	----------	----------



GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PE0002529 **Received** : 21 Nov 2023
Lab Number : **06013920** **Diagnosed** : 23 Nov 2023
Unique Number : 10753064 **Diagnostician** : Don Baldrige
Test Package : CONST (Additional Tests: ICP, KV40, PQ, PrtCount, SCREEN)
 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.
 Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

MORNING STAR DAIRY
 801 FM 694
 DALHART, TX
 US 79022
 Contact: JOHN DEVRIES
 johndevries@gmail.com
 T:
 F: