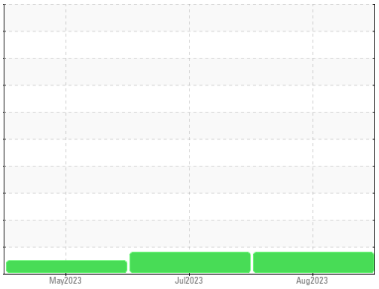
PROBLEM SUMMARY

Sample Rating Trend

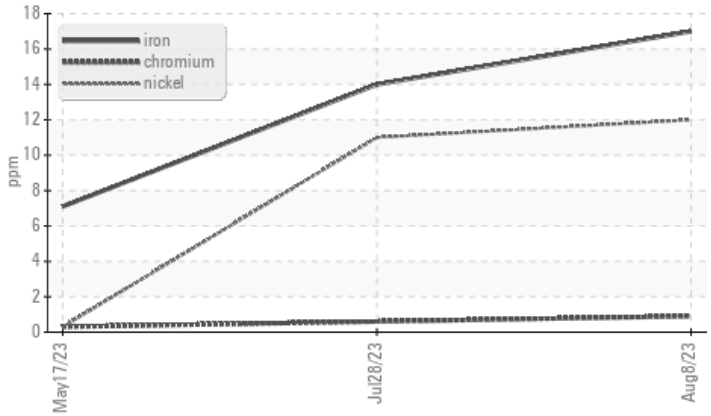


WEAR

Machine Id
JOHN DEERE 624L 624L UNIT 1
Component
Diesel Engine
Fluid
DIESEL ENGINE OIL SAE 40 (--- GAL)

COMPONENT CONDITION SUMMARY

▲ Ferrous Alloys



RECOMMENDATION

No corrective action is recommended at this time. Resample at the next service interval to monitor. Please note that this is a corrected copy for laboratory data update for PQ.

PROBLEMATIC TEST RESULTS

Sample Status				MARGINAL	ABNORMAL	NORMAL
Nickel	ppm	ASTM D5185m	>5	▲ 12	▲ 11	<1

Customer Id: MORDAL
Sample No.: PE0002480
Lab Number: 05925270
Test Package: CONST

To manage this report scan the QR code

To discuss the diagnosis or test data:
Doug Bogart +1 (800)237-1369 x4016
dougb@wearcheckusa.com

To change component or sample information:
Customer Service +1 1-800-237-1369
customerservice@wearcheck.com

RECOMMENDED ACTIONS

There are no recommended actions for this sample.

HISTORICAL DIAGNOSIS

28 Jul 2023 Diag: Don Baldridge

WEAR

No corrective action is recommended at this time. Resample at the next service interval to monitor.Valve wear is indicated. All other component wear rates are normal. There is no indication of any contamination in the oil. The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

view report

17 May 2023 Diag: Don Baldridge

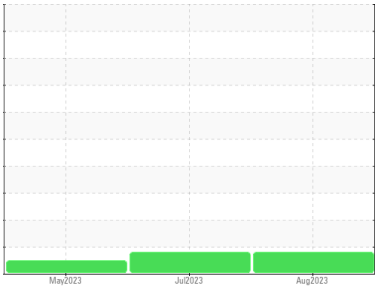
NORMAL

Resample at the next service interval to monitor.All component wear rates are normal. There is no indication of any contamination in the oil. The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

view report

OIL ANALYSIS REPORT

Sample Rating Trend



WEAR

Machine Id
JOHN DEERE 624L 624L UNIT 1
Component
Diesel Engine
Fluid
DIESEL ENGINE OIL SAE 40 (--- GAL)

DIAGNOSIS

Recommendation
No corrective action is recommended at this time. Resample at the next service interval to monitor. Please note that this is a corrected copy for laboratory data update for PQ.

Wear
Valve wear is indicated. All other component wear rates are normal.

Contamination
There is no indication of any contamination in the oil.

Fluid Condition
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**PE0002480**	PE0002564	PE0002494
Sample Date		Client Info		**08 Aug 2023**	28 Jul 2023	17 May 2023
Machine Age	hrs	Client Info		**5433**	5325	5138
Oil Age	hrs	Client Info		**5433**	5325	205
Oil Changed		Client Info		**N/A**	N/A	N/A
Sample Status				**MARGINAL**	ABNORMAL	NORMAL

CONTAMINATION		method	limit/base	current	history1	history2
Fuel		WC Method	>2.1	**<1.0**	<1.0	<1.0
Glycol		WC Method		**NEG**	NEG	NEG

WEAR METALS		method	limit/base	current	history1	history2
PQ		ASTM D8184	>50	**15**	---	---
Iron	ppm	ASTM D5185m	>51	**17**	14	7
Chromium	ppm	ASTM D5185m	>11	**<1**	<1	<1
Nickel	ppm	ASTM D5185m	>5	▲ **12**	▲ 11	<1
Titanium	ppm	ASTM D5185m		**0**	0	0
Silver	ppm	ASTM D5185m	>3	**0**	0	0
Aluminum	ppm	ASTM D5185m	>31	**<1**	1	0
Lead	ppm	ASTM D5185m	>26	**0**	0	0
Copper	ppm	ASTM D5185m	>26	**2**	6	4
Tin	ppm	ASTM D5185m	>4	**0**	<1	<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	250	**0**	2	1
Barium	ppm	ASTM D5185m	10	**0**	0	0
Molybdenum	ppm	ASTM D5185m	100	**58**	61	54
Manganese	ppm	ASTM D5185m		**0**	<1	<1
Magnesium	ppm	ASTM D5185m	450	**1004**	953	901
Calcium	ppm	ASTM D5185m	3000	**1304**	1275	1171
Phosphorus	ppm	ASTM D5185m	1150	**1150**	1080	1025
Zinc	ppm	ASTM D5185m	1350	**1488**	1328	1264
Sulfur	ppm	ASTM D5185m	4250	**4419**	3823	3818

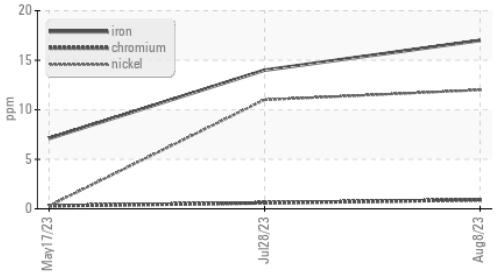
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>22	**3**	3	4
Sodium	ppm	ASTM D5185m	>216	**0**	<1	<1
Potassium	ppm	ASTM D5185m	>20	**0**	<1	<1

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	**1.1**	1	0.5
Nitration	Abs/cm	*ASTM D7624	>20	**7.4**	7.4	5.9
Sulfation	Abs/.1mm	*ASTM D7415	>30	**20.6**	20.7	19.9

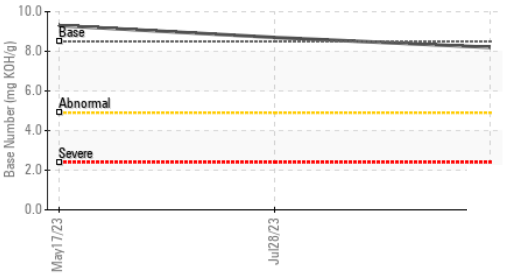
FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	**15.6**	16.2	15.2
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	**8.2**	8.7	9.3

OIL ANALYSIS REPORT

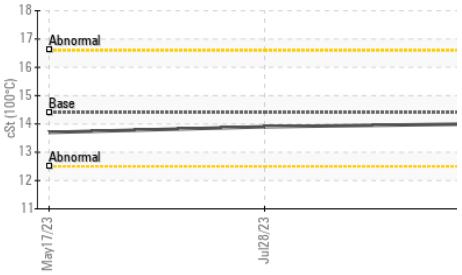
Ferrous Alloys



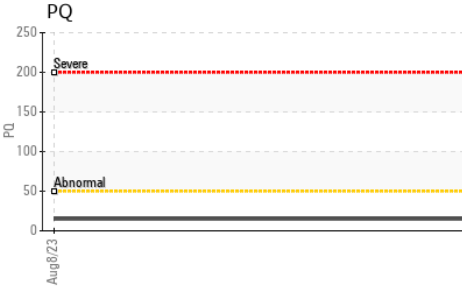
Base Number



Viscosity @ 100°C



PQ

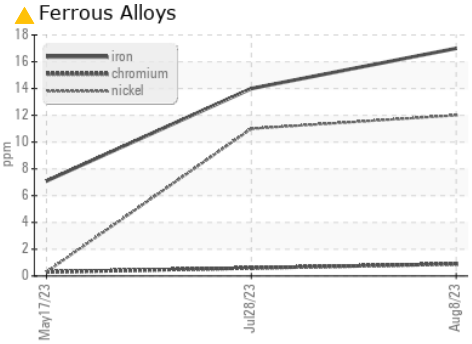


VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Precipitate	scalar	*Visual	NONE	**NONE**	NONE	NONE
Silt	scalar	*Visual	NONE	**NONE**	NONE	NONE
Debris	scalar	*Visual	NONE	**NONE**	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	**NONE**	NONE	NONE
Appearance	scalar	*Visual	NORML	**NORML**	NORML	NORML
Odor	scalar	*Visual	NORML	**NORML**	NORML	NORML
Emulsified Water	scalar	*Visual	>0.21	**NEG**	NEG	NEG
Free Water	scalar	*Visual		**NEG**	NEG	NEG

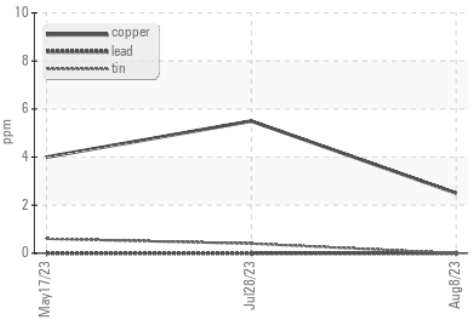
FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	14.4	**14.0**	13.9	13.7

GRAPHS

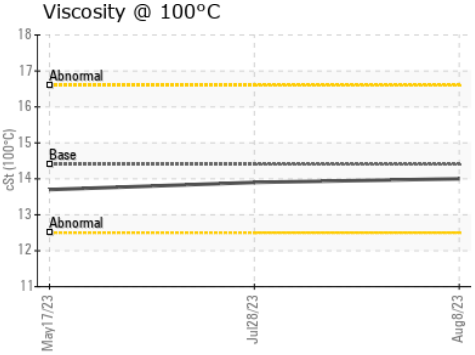
Ferrous Alloys



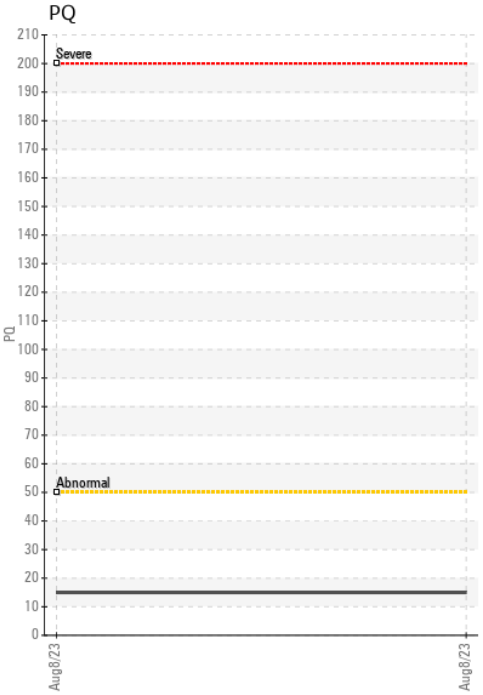
Non-ferrous Metals



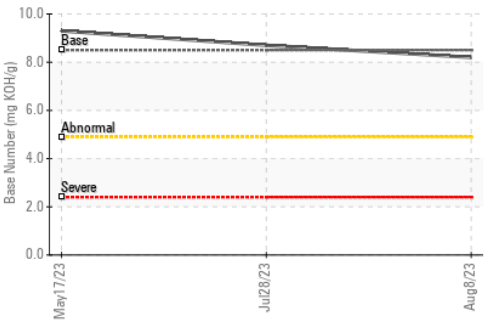
Viscosity @ 100°C



PQ



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PE0002480 **Received** : 15 Aug 2023
Lab Number : 05925270 **Diagnosed** : 24 Aug 2023
Unique Number : 10605217 **Diagnostician** : Doug Bogart
Test Package : CONST (Additional Tests: FT-IR, ICP, KV100, PQ, SCREEN, TBN)

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)

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DALHART, TX
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Report Id: MORDAL [WUSCAR] 05925270 (Generated: 08/24/2023 14:29:36) Rev: 2

Submitted By: ROCHELLE MENDOZA