



TRAAP

Texas Refinery Advanced Analysis Program

# OIL ANALYSIS REPORT

WEAR	<b>NORMAL</b>
CONTAMINATION	<b>NORMAL</b>
FLUID CONDITION	<b>NORMAL</b>

Machine Id  
**JOHN DEERE 4125**

Component  
**Diesel Engine**

Fluid  
**TRC PRO-SPEC III SYNTHETIC BLEND 15W40 (4 GAL)**

## RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>TR06062981</b>	TR05739860	TR05191571
Sample Date		Client Info		<b>04 Dec 2023</b>	13 Dec 2022	30 Dec 2020
Machine Age	hrs	Client Info		<b>2146</b>	1842	1368
Oil Age	hrs	Client Info		<b>304</b>	474	127
Filter Age	hrs	Client Info		<b>304</b>	474	127
Oil Changed		Client Info		<b>Changed</b>	Changed	Changed
Filter Changed		Client Info		<b>Changed</b>	Changed	Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>51	<b>10</b>	14	4
Chromium	ppm	ASTM D5185m	>11	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185m	>5	<b>0</b>	<1	<1
Titanium	ppm	ASTM D5185m		<b>0</b>	<1	<1
Silver	ppm	ASTM D5185m	>3	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>31	<b>2</b>	3	2
Lead	ppm	ASTM D5185m	>26	<b>&lt;1</b>	2	2
Copper	ppm	ASTM D5185m	>26	<b>1</b>	2	1
Tin	ppm	ASTM D5185m	>4	<b>0</b>	<1	0
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	0	1
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

## CONTAMINATION

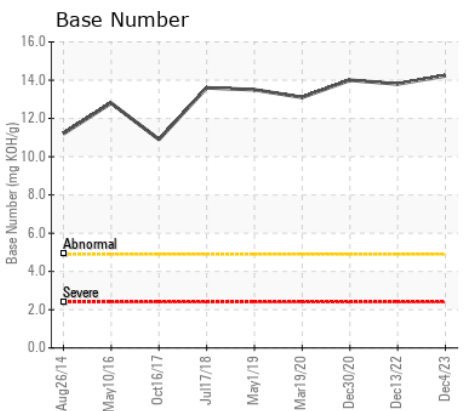
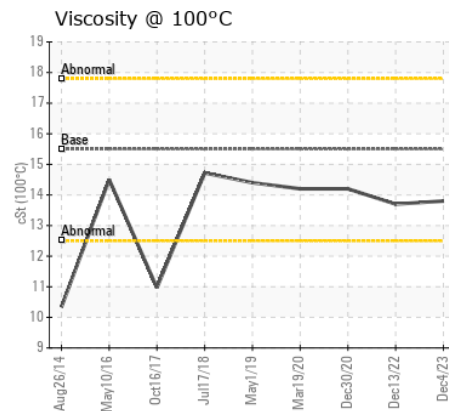
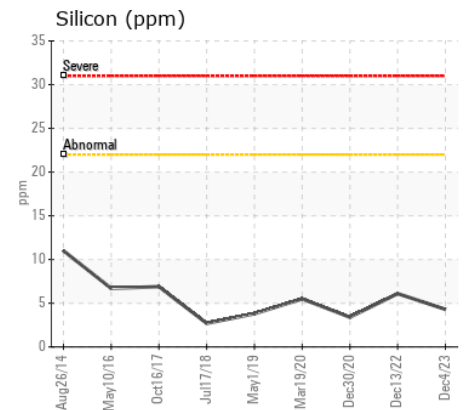
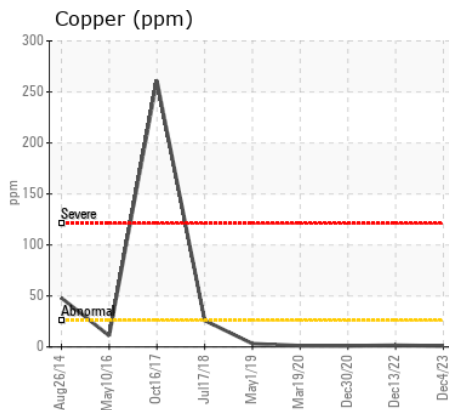
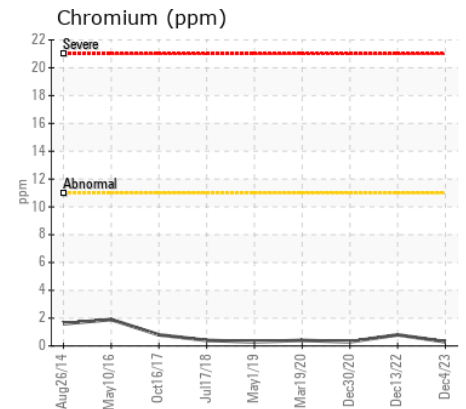
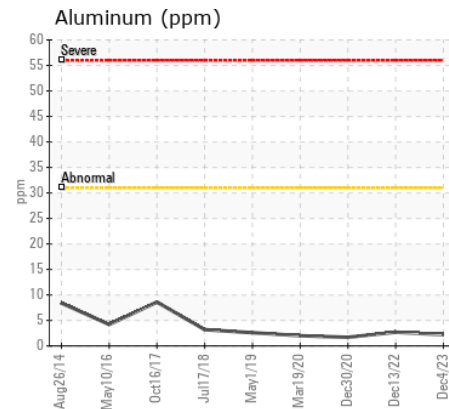
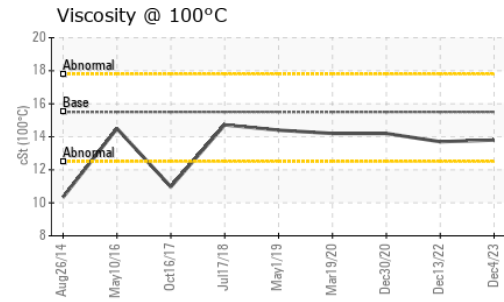
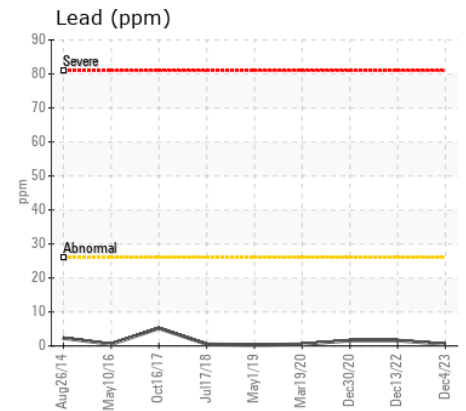
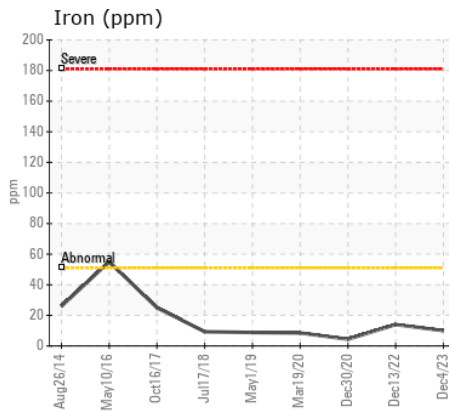
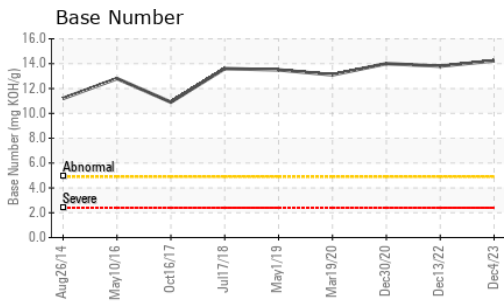
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>22	<b>4</b>	6	3
Potassium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	1	0
Fuel		WC Method	>2.1	<b>&lt;1.0</b>	<1.0	<1.0
Water		WC Method	>0.21	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844	>3	<b>0.1</b>	0.1	0.1
Nitration	Abs/cm	*ASTM D7624	>20	<b>5.9</b>	6.9	5.4
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>17.0</b>	17.9	19
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	*Visual	>0.21	<b>NEG</b>	NEG	NEG

## 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.

Sodium	ppm	ASTM D5185m	>31	<b>2</b>	2	3
Boron	ppm	ASTM D5185m		<b>0</b>	0	<1
Barium	ppm	ASTM D5185m		<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m		<b>8</b>	22	14
Calcium	ppm	ASTM D5185m		<b>4882</b>	5203	3511
Phosphorus	ppm	ASTM D5185m		<b>886</b>	999	687
Zinc	ppm	ASTM D5185m		<b>1157</b>	1182	850
Sulfur	ppm	ASTM D5185m		<b>4109</b>	4923	2724
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>9.9</b>	10.8	12
Base Number (BN)	mg KOH/g	ASTM D2896		<b>14.23</b>	13.80	14.0
Visc @ 100°C	cSt	ASTM D445	15.5	<b>13.8</b>	13.7	14.2



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : TR06062981 **Received** : 17 Jan 2024  
**Lab Number** : 06062981 **Diagnosed** : 18 Jan 2024  
**Unique Number** : 10834363 **Diagnostician** : Sean Felton  
**Test Package** : MOB 2

**RANDALL COUNTY ROAD DEPT.**  
 301 WEST HIGHWAY 60  
 CANYON, TX  
 US 79015  
 Contact: MIKE LEWIS

To discuss this sample report, contact Customer Service at 1-800-827-0711.

\* - 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)

T:  
F: