



TRAAP

Texas Refinery Advanced Analysis Program

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL

Machine Id
JOHN DEERE 4130
 Component
Hydraulic System
 Fluid
TRC SPECIAL 303 (61 QTS)

RECOMMENDATION

No corrective action is recommended at this time. Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		TR06062605	TR05828940	TR05191321
Sample Date		Client Info		08 Nov 2023	03 Apr 2023	21 Dec 2020
Machine Age	hrs	Client Info		2064	1668	972
Oil Age	hrs	Client Info		396	152	148
Filter Age	hrs	Client Info		396	152	148
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				ABNORMAL	ABNORMAL	ABNORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>20	10	10	6
Chromium	ppm	ASTM D5185m	>10	<1	<1	<1
Nickel	ppm	ASTM D5185m	>10	0	0	0
Titanium	ppm	ASTM D5185m		<1	<1	<1
Silver	ppm	ASTM D5185m		0	0	<1
Aluminum	ppm	ASTM D5185m	>10	2	0	0
Lead	ppm	ASTM D5185m	>10	<1	2	<1
Copper	ppm	ASTM D5185m	>75	3	5	3
Tin	ppm	ASTM D5185m	>10	0	0	<1
Vanadium	ppm	ASTM D5185m		0	0	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	LIGHT
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

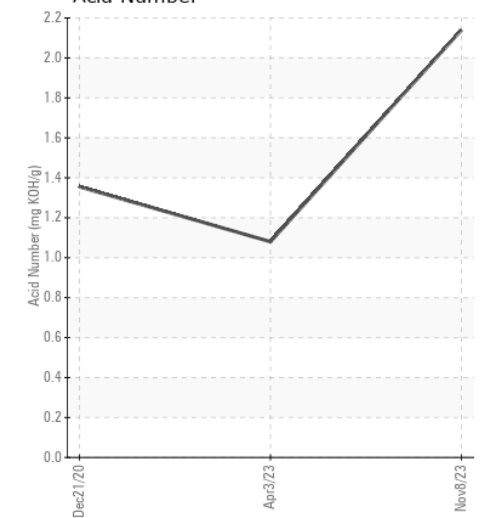
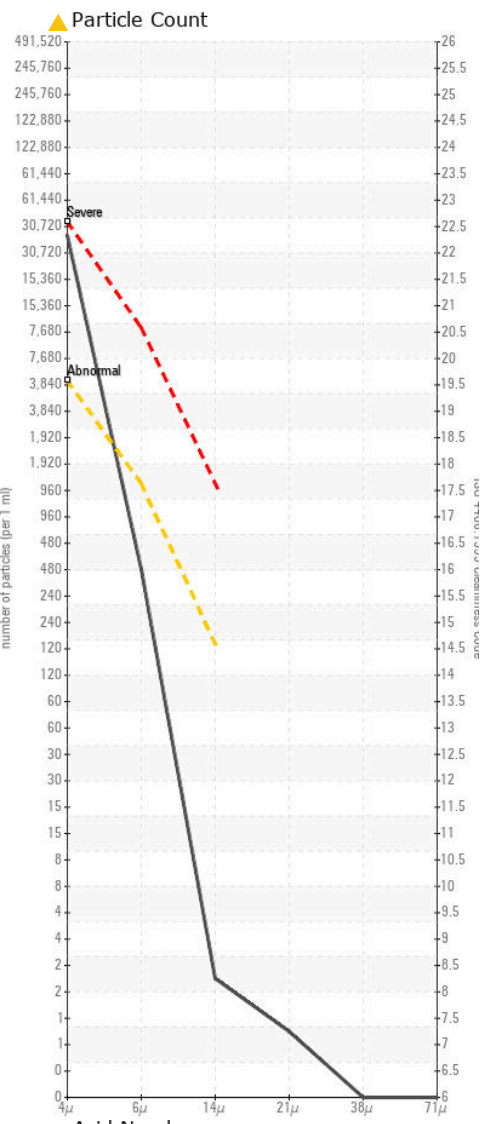
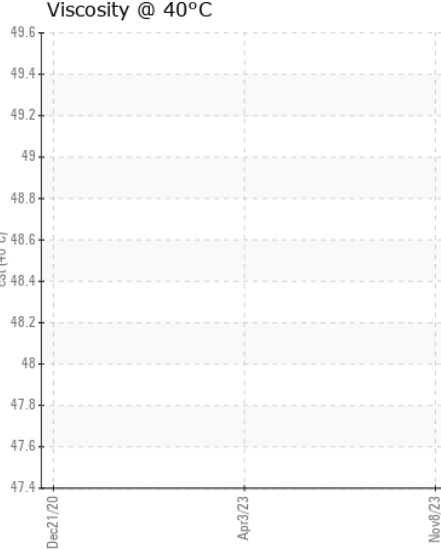
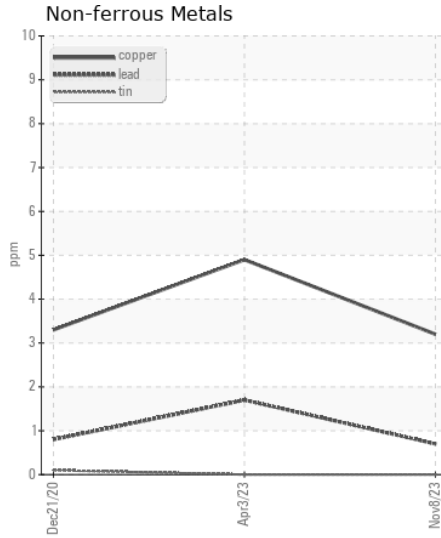
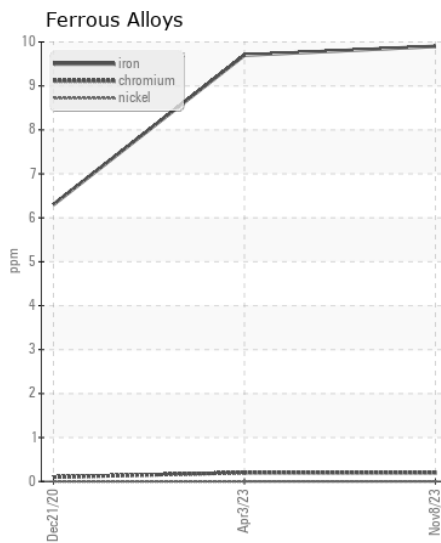
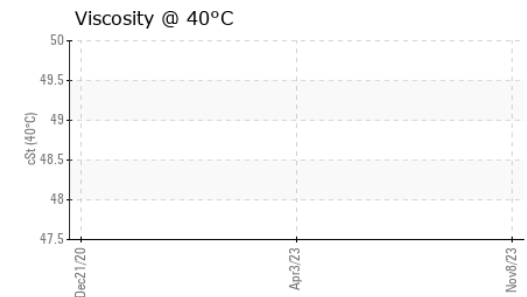
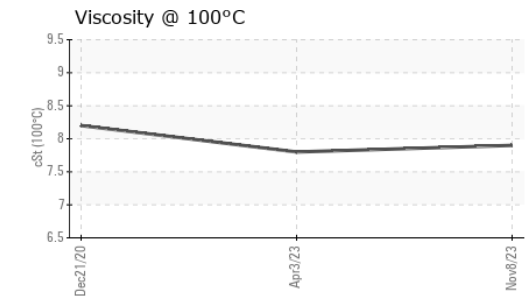
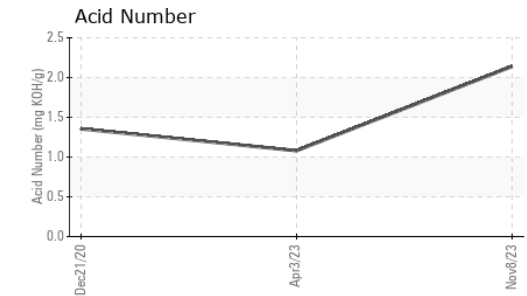
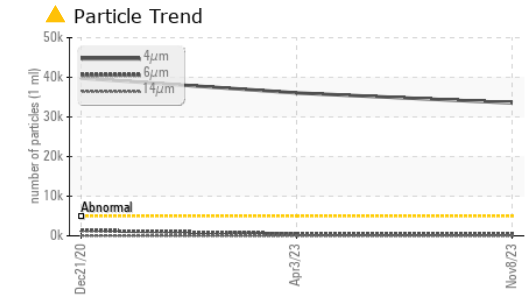
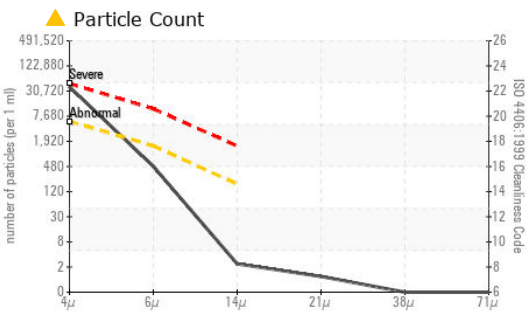
There is a high amount of silt (particulates < 6 microns in size) present in the oil.

Silicon	ppm	ASTM D5185m	>20	19	▲ 27	▲ 27
Potassium	ppm	ASTM D5185m	>20	4	8	2
Water		WC Method	>0.1	NEG	NEG	NEG
Particles >4µm		ASTM D7647	>5000	▲ 33549	▲ 36067	▲ 39786
Particles >6µm		ASTM D7647	>1300	425	463	▲ 1331
Particles >14µm		ASTM D7647	>160	2	6	42
Particles >21µm		ASTM D7647	>40	1	1	10
Particles >38µm		ASTM D7647	>10	0	0	0
Particles >71µm		ASTM D7647	>3	0	0	0
Oil Cleanliness		ISO 4406 (c)	>19/17/14	▲ 22/16/9	▲ 22/16/10	▲ 22/18/13
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

FLUID CONDITION

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

Sodium	ppm	ASTM D5185m		9	10	2
Boron	ppm	ASTM D5185m		153	163	161
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		0	<1	<1
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m		16	15	14
Calcium	ppm	ASTM D5185m		5402	4792	5261
Phosphorus	ppm	ASTM D5185m		1524	1491	1682
Zinc	ppm	ASTM D5185m		1889	1898	1874
Sulfur	ppm	ASTM D5185m		4826	4714	5464
Acid Number (AN)	mg KOH/g	ASTM D8045		2.14	1.08	1.355
Visc @ 40°C	cSt	ASTM D445		48.5	---	---
Visc @ 100°C	cSt	ASTM D445		7.9	7.8	8.2
Viscosity Index (VI)	Scale	ASTM D2270		132	---	---



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : TR06062605 **Received** : 17 Jan 2024
Lab Number : 06062605 **Diagnosed** : 19 Jan 2024
Unique Number : 10833987 **Diagnostician** : Jonathan Hester
Test Package : MOB 2 (Additional Tests: KV100, VI)

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)

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F: