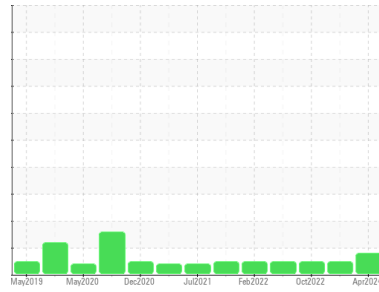




OIL ANALYSIS REPORT

Sample Rating Trend



VISCOSITY



Machine Id
REN - EAST HAIL DRIVE (S/N 748766)
 Component
Hydraulic System
 Fluid
USPI FG HYD 68 (--- 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 oil viscosity is lower than normal. This plus the additive levels indicates the addition of a different brand or type of oil. Confirmed. The AN level is acceptable for this fluid.

SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	USPM36721	USPM26138	USPM25537
Sample Date	Client Info	15 Apr 2024	26 Mar 2023	10 Oct 2022
Machine Age	hrs	Client Info	0	0
Oil Age	hrs	Client Info	0	0
Oil Changed	Client Info	N/A	N/A	N/A
Sample Status		ATTENTION	NORMAL	NORMAL

WEAR METALS

method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >20	0	0
Chromium	ppm	ASTM D5185m >20	<1	0
Nickel	ppm	ASTM D5185m >20	0	0
Titanium	ppm	ASTM D5185m	0	0
Silver	ppm	ASTM D5185m	0	0
Aluminum	ppm	ASTM D5185m >20	0	0
Lead	ppm	ASTM D5185m >20	0	0
Copper	ppm	ASTM D5185m >20	0	<1
Tin	ppm	ASTM D5185m >20	0	0
Vanadium	ppm	ASTM D5185m	0	0
Cadmium	ppm	ASTM D5185m	0	0

ADDITIVES

method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	0
Barium	ppm	ASTM D5185m	0	0
Molybdenum	ppm	ASTM D5185m	0	0
Manganese	ppm	ASTM D5185m	<1	0
Magnesium	ppm	ASTM D5185m	0	0
Calcium	ppm	ASTM D5185m	2	0
Phosphorus	ppm	ASTM D5185m 745	472	305
Zinc	ppm	ASTM D5185m	0	10
Sulfur	ppm	ASTM D5185m 650	868	289

CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >15	<1	0
Sodium	ppm	ASTM D5185m	<1	<1
Potassium	ppm	ASTM D5185m >20	0	0
Water	%	ASTM D6304 >0.05	0.001	0.015
ppm Water	ppm	ASTM D6304 >500	7	152.1

FLUID CLEANLINESS

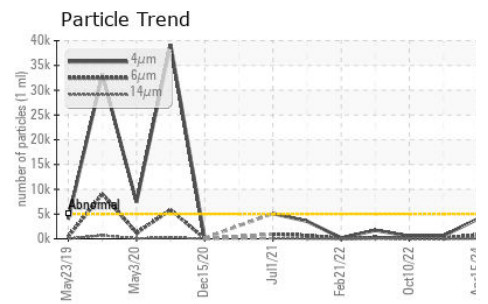
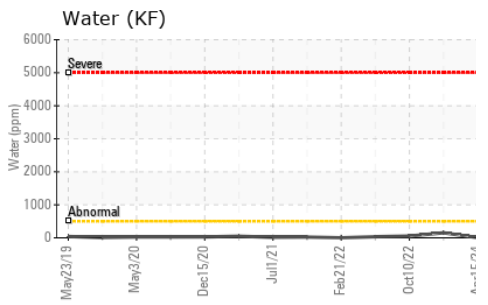
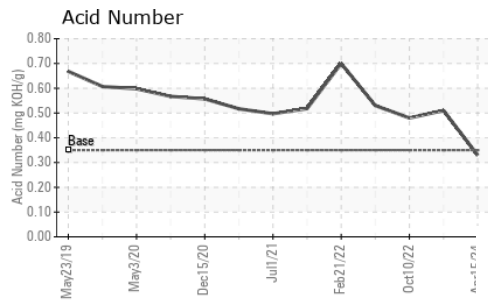
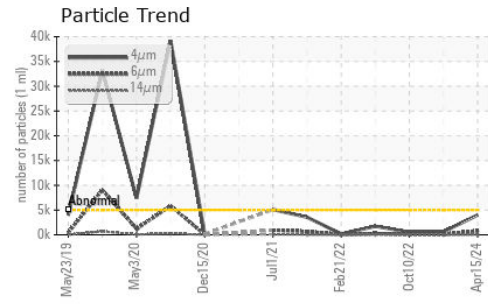
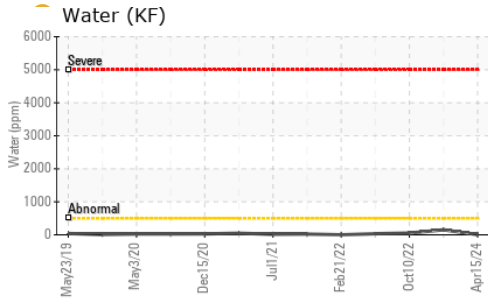
method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647 >5000	4004	600	535
Particles >6µm	ASTM D7647 >1300	844	88	80
Particles >14µm	ASTM D7647 >160	40	7	6
Particles >21µm	ASTM D7647 >40	7	1	1
Particles >38µm	ASTM D7647 >10	0	0	0
Particles >71µm	ASTM D7647 >3	0	0	0
Oil Cleanliness	ISO 4406 (c) >19/17/14	19/17/12	16/14/10	16/13/10

FLUID DEGRADATION

method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045 0.35	0.33	0.51



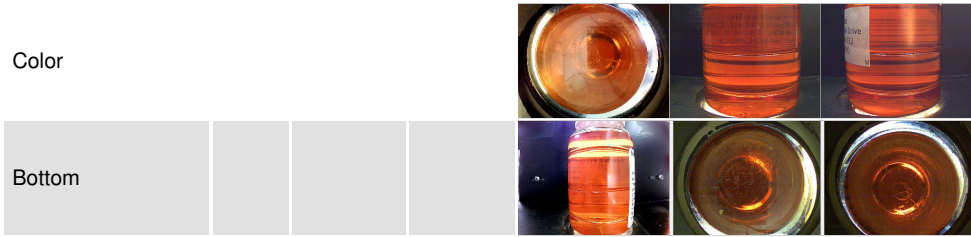
OIL ANALYSIS REPORT



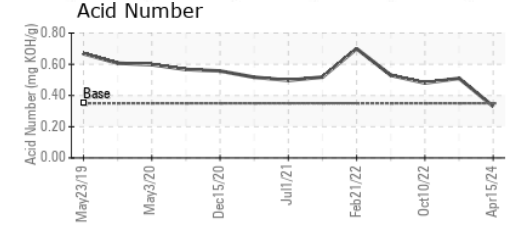
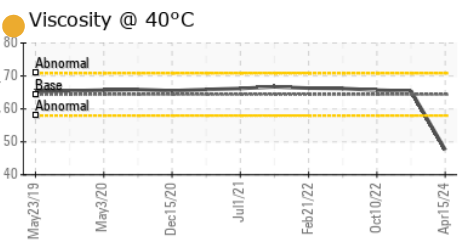
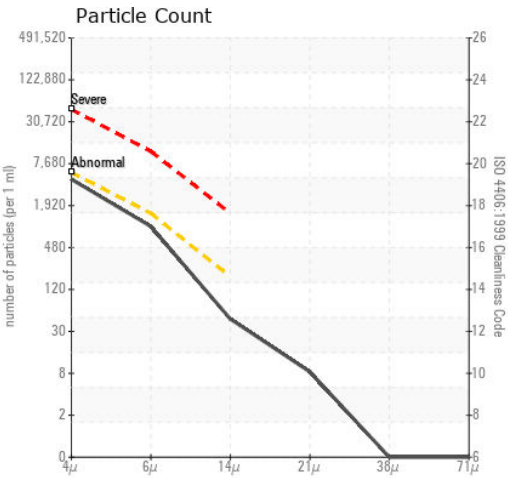
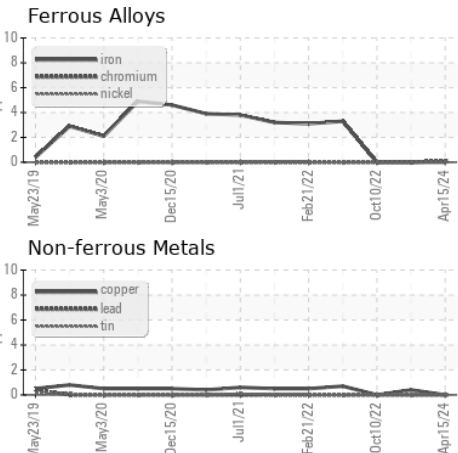
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.05	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	64.4 ● 47.63	65.4	65.7

SAMPLE IMAGES	method	limit/base	current	history1	history2
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GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : USPM36721 **Received** : 16 Apr 2024
Lab Number : 06150436 **Tested** : 18 Apr 2024
Unique Number : 10980514 **Diagnosed** : 18 Apr 2024 - Doug Bogart
Test Package : IND 2

TYSON-HOLCOMB-PRO
 HOLCOMB, KS
 US
 Contact:

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)