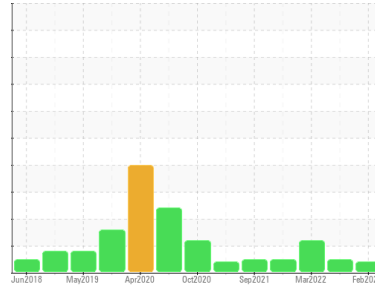


OIL ANALYSIS REPORT

Sample Rating Trend



VIS DEBRIS



Machine Id
DT33
Component
Transmission (Auto)
Fluid
COGNIS EMGARD 2805 ATF (15 mls)

DIAGNOSIS

Recommendation

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

Moderate concentration of visible dirt/debris present in the fluid.

Fluid Condition

The condition of the fluid is acceptable for the time in service.

SAMPLE INFORMATION

method	limit/base	current	history1	history2	
Sample Number	Client Info	PCA0104205	PCA0104125	PCA0071349	
Sample Date	Client Info	02 Feb 2024	31 Aug 2023	31 Mar 2022	
Machine Age	mls	Client Info	302303	287410	231462
Oil Age	mls	Client Info	75000	75000	75000
Oil Changed	Client Info	Changed	Not Changd	Not Changd	
Sample Status		ABNORMAL	NORMAL	ABNORMAL	

CONTAMINATION

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

WEAR METALS

method	limit/base	current	history1	history2
Iron	ppm ASTM D5185m >160	78	59	56
Chromium	ppm ASTM D5185m >5	<1	0	0
Nickel	ppm ASTM D5185m >5	<1	0	0
Titanium	ppm ASTM D5185m	<1	0	0
Silver	ppm ASTM D5185m >5	<1	0	<1
Aluminum	ppm ASTM D5185m >50	29	25	15
Lead	ppm ASTM D5185m >50	6	5	8
Copper	ppm ASTM D5185m >225	24	19	27
Tin	ppm ASTM D5185m >10	2	<1	1
Antimony	ppm ASTM D5185m	---	---	---
Vanadium	ppm ASTM D5185m	<1	0	0
Cadmium	ppm ASTM D5185m	<1	0	0

ADDITIVES

method	limit/base	current	history1	history2
Boron	ppm ASTM D5185m	112	115	83
Barium	ppm ASTM D5185m	0	7	0
Molybdenum	ppm ASTM D5185m	4	3	<1
Manganese	ppm ASTM D5185m	2	<1	<1
Magnesium	ppm ASTM D5185m	24	28	0
Calcium	ppm ASTM D5185m	105	113	101
Phosphorus	ppm ASTM D5185m	309	331	241
Zinc	ppm ASTM D5185m	55	64	6
Sulfur	ppm ASTM D5185m	1796	1889	1147

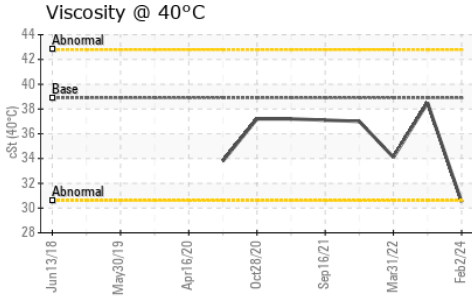
CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m >20	7	6	4
Sodium	ppm ASTM D5185m	0	2	3
Potassium	ppm ASTM D5185m >20	2	1	0

VISUAL

method	limit/base	current	history1	history2
White Metal	scalar *Visual NONE	NONE	NONE	▲ MODER
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	▲ MODER	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

OIL ANALYSIS REPORT



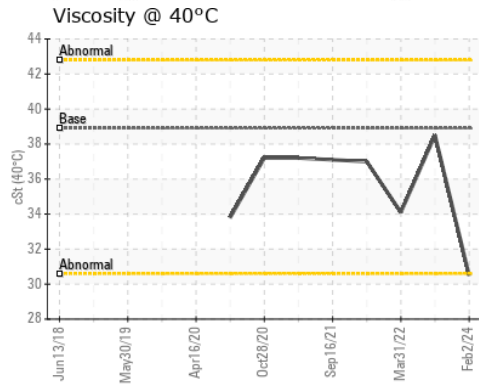
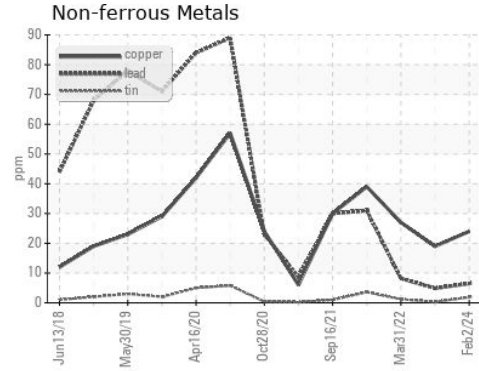
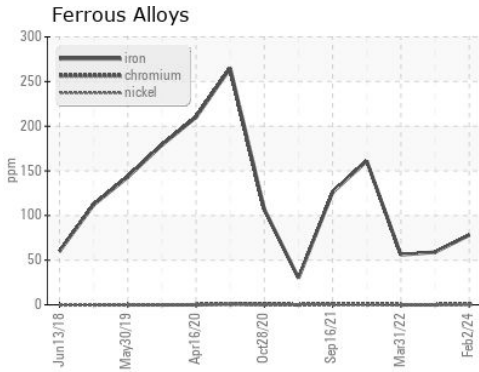
FLUID PROPERTIES

method	limit/base	current	history1	history2	
Visc @ 40°C	cSt ASTM D445	38.9	30.5	38.5	34.1

SAMPLE IMAGES

method	limit/base	current	history1	history2	
Color			no image	no image	no image
Bottom			no image	no image	no image

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0104205 **Received** : 15 Feb 2024
Lab Number : **06091352** **Tested** : 19 Feb 2024
Unique Number : 10884205 **Diagnosed** : 19 Feb 2024 - Don Baldrige
Test Package : FLEET

HK STEEL INC
 400 N PARSON ST
 WEST COLUMBIA, SC
 US 29169
 Contact: GEORGE EDWARDS
 gedwards@nwwhite.com

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)

T:
F: