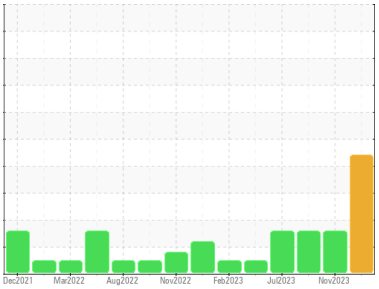
PROBLEM SUMMARY

Sample Rating Trend

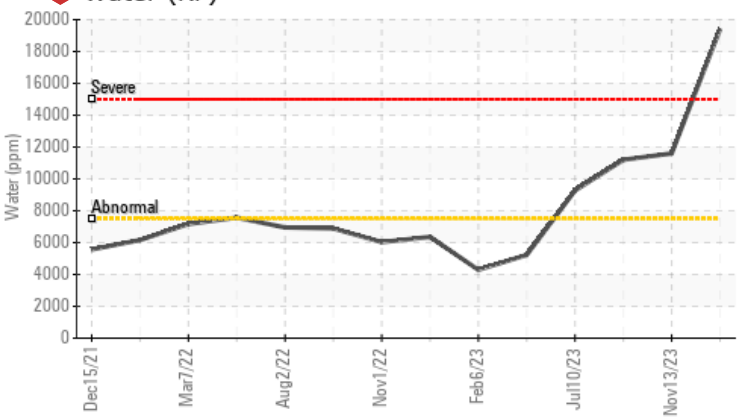


WATER

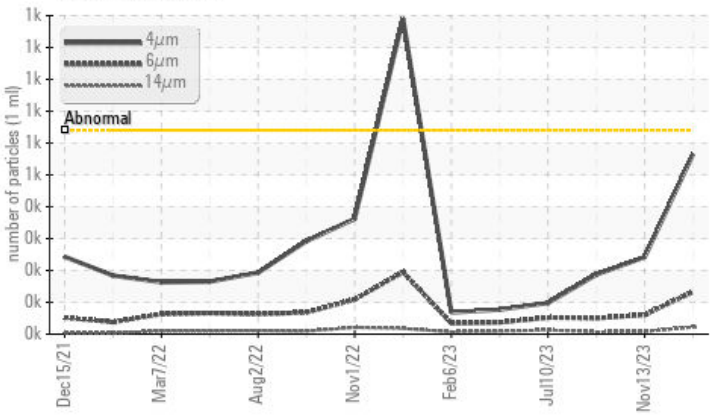
Area
HPU21
Machine Id
HTS26
Component
Hydraulic System
Fluid
ESSO HYJET IV-A PLUS (--- GAL)

COMPONENT CONDITION SUMMARY

Water (KF)



Particle Trend



RECOMMENDATION

We advise that you check for the source of water entry. We advise that you perform a filter service, and use off-line filtration to improve the cleanliness of the system fluid. We recommend an early resample to monitor this condition.

PROBLEMATIC TEST RESULTS

Sample Status				SEVERE	ABNORMAL	ABNORMAL
Water	%	ASTM D6304	>0.750	**1.94**	1.16	1.12
ppm Water	ppm	ASTM D6304	>7500	**19400**	11600	11200
Emulsified Water	scalar	*Visual	>0.750	**0.2%**	NEG	NEG

Customer Id: PARDUBGA
Sample No.: WC0896027
Lab Number: 06058559
Test Package: IND 2

To manage this report scan the QR code

To discuss the diagnosis or test data:
Jonathan Hester +1 919-379-4092 x4092
jhester@wearcheckusa.com

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

RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Change Filter	---	---	?	We advise that you perform a filter service, and use off-line filtration to improve the cleanliness of the system fluid.
Resample	---	---	?	We recommend an early resample to monitor this condition.
Check Water Access	---	---	?	We advise that you check for the source of water entry.
Filter Fluid	---	---	?	We advise that you perform a filter service, and use off-line filtration to improve the cleanliness of the system fluid.

HISTORICAL DIAGNOSIS

13 Nov 2023 Diag: Don Baldridge

WATER

We advise that you check for the source of water entry. Resample at the next service interval to monitor.All component wear rates are normal. There is a moderate concentration of water present in the oil. The amount and size of particulates present in the system are acceptable. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report

18 Sep 2023 Diag: Jonathan Hester

WATER

We advise that you check for the source of water entry. Resample at the next service interval to monitor.All component wear rates are normal. There is a moderate concentration of water present in the oil. The amount and size of particulates present in the system are acceptable. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report

10 Jul 2023 Diag: Jonathan Hester

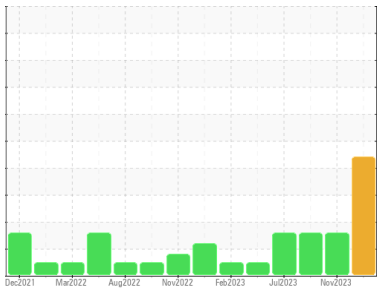
WATER

We advise that you check for the source of water entry. Resample at the next service interval to monitor.All component wear rates are normal. There is a moderate concentration of water present in the oil. The amount and size of particulates present in the system are acceptable. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report

OIL ANALYSIS REPORT

Sample Rating Trend



WATER

Area
HPU21
Machine Id
HTS26
Component
Hydraulic System
Fluid
ESSO HYJET IV-A PLUS (--- GAL)

DIAGNOSIS

Recommendation

We advise that you check for the source of water entry. We advise that you perform a filter service, and use off-line filtration to improve the cleanliness of the system fluid. We recommend an early resample to monitor this condition.

Wear

All component wear rates are normal.

Contamination

There is a moderate amount of particulates present in the oil. There is a high concentration of water present in the oil. The system cleanliness is above the acceptable limit for the target ISO 4406 cleanliness code.

Fluid Condition

The AN level is acceptable for this fluid.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**WC0896027**	WC0817744	WC0817667
Sample Date		Client Info		**09 Jan 2024**	13 Nov 2023	18 Sep 2023
Machine Age	mths	Client Info		**0**	0	0
Oil Age	mths	Client Info		**0**	0	0
Oil Changed		Client Info		**N/A**	N/A	N/A
Sample Status				**SEVERE**	ABNORMAL	ABNORMAL

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>20	**0**	1	2
Chromium	ppm	ASTM D5185m	>20	**0**	0	6
Nickel	ppm	ASTM D5185m	>20	**0**	0	0
Titanium	ppm	ASTM D5185m		**0**	0	0
Silver	ppm	ASTM D5185m		**0**	0	0
Aluminum	ppm	ASTM D5185m	>20	**0**	0	3
Lead	ppm	ASTM D5185m	>20	**<1**	0	0
Copper	ppm	ASTM D5185m	>20	**<1**	<1	<1
Tin	ppm	ASTM D5185m	>20	**<1**	<1	1
Vanadium	ppm	ASTM D5185m		**0**	<1	0
Cadmium	ppm	ASTM D5185m		**0**	0	<1

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		**2**	5	7
Barium	ppm	ASTM D5185m		**0**	0	0
Molybdenum	ppm	ASTM D5185m		**0**	0	0
Manganese	ppm	ASTM D5185m		**0**	<1	<1
Magnesium	ppm	ASTM D5185m		**0**	0	2
Calcium	ppm	ASTM D5185m	110	**97**	116	122
Phosphorus	ppm	ASTM D5185m	37	**29784**	31432	50000
Zinc	ppm	ASTM D5185m		**3**	6	0
Sulfur	ppm	ASTM D5185m	220	**212**	305	374

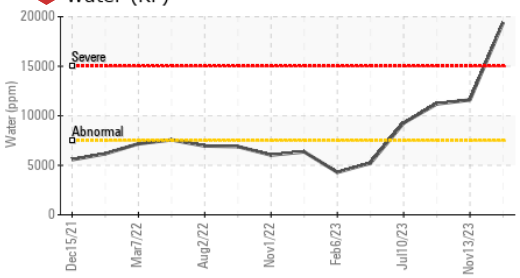
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>15	**0**	<1	1
Sodium	ppm	ASTM D5185m		**5**	5	4
Potassium	ppm	ASTM D5185m	>20	**23**	34	33
Water	%	ASTM D6304	>0.750	⬢ **1.94**	▲ 1.16	▲ 1.12
ppm Water	ppm	ASTM D6304	>7500	⬢ **19400**	▲ 11600	▲ 11200

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>640	**565**	242	187
Particles >6µm		ASTM D7647	>160	**133**	61	50
Particles >14µm		ASTM D7647	>20	▲ **22**	8	7
Particles >21µm		ASTM D7647	>4	▲ **7**	3	2
Particles >38µm		ASTM D7647	>3	**1**	0	0
Particles >71µm		ASTM D7647	>3	**0**	0	0
Oil Cleanliness		ISO 4406 (c)	>16/14/11	▲ **16/14/12**	15/13/10	15/13/10

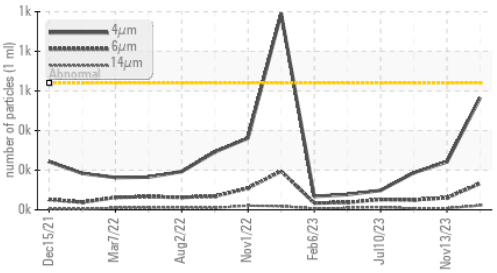
FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.04	**0.171**	0.142	0.326

OIL ANALYSIS REPORT

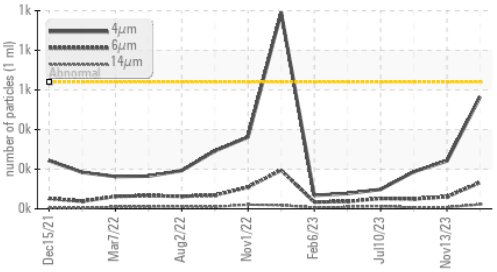
Water (KF)



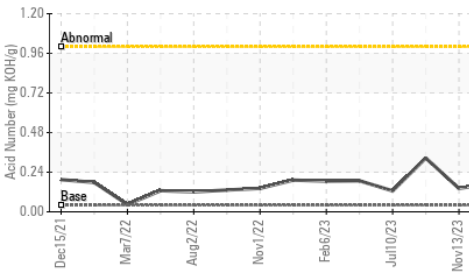
Particle Trend



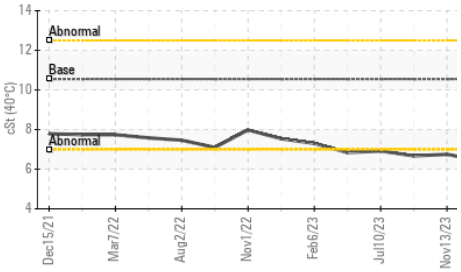
Particle Trend



Acid Number

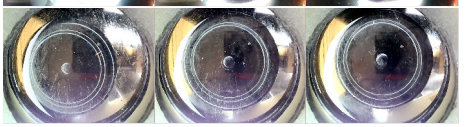


Viscosity @ 40°C



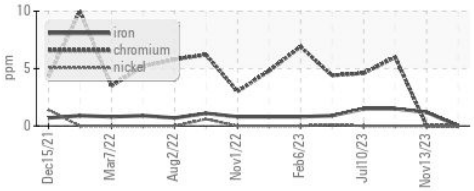
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Precipitate	scalar	*Visual	NONE	**NONE**	NONE	NONE
Silt	scalar	*Visual	NONE	**NONE**	NONE	NONE
Debris	scalar	*Visual	NONE	**NONE**	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	**NONE**	NONE	NONE
Appearance	scalar	*Visual	NORML	**NORML**	NORML	NORML
Odor	scalar	*Visual	NORML	**NORML**	NORML	NORML
Emulsified Water	scalar	*Visual	>0.750	**0.2%**	NEG	NEG
Free Water	scalar	*Visual		**NEG**	NEG	NEG

FLUID PROPERTIES		method	limit/base	current	history1	history2
Specific Gravity		*ASTM D1298	.996	**0.997**	1.001	1.000
Visc @ 40°C	cSt	ASTM D445	10.55	**6.43**	6.75	6.67

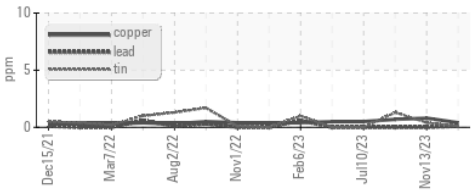
SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

GRAPHS

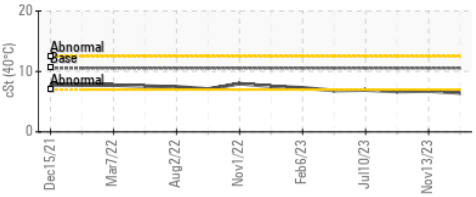
Ferrous Alloys



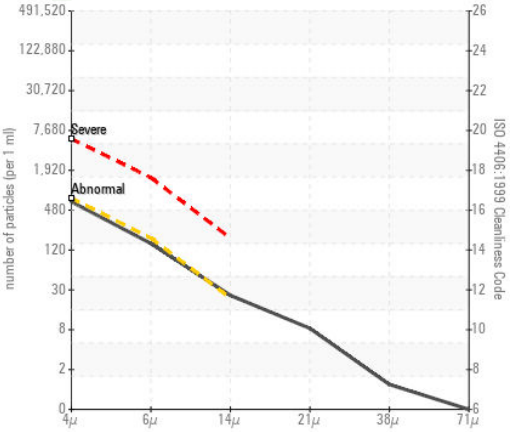
Non-ferrous Metals



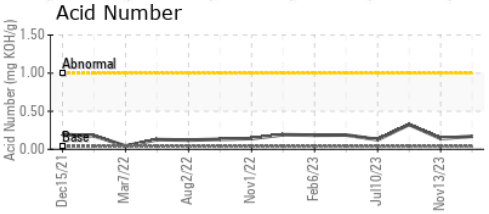
Viscosity @ 40°C



Particle Count



Acid Number



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0896027 **Recieved** : 11 Jan 2024
Lab Number : 06058559 **Diagnosed** : 15 Jan 2024
Unique Number : 10829941 **Diagnostician** : Jonathan Hester
Test Package : IND 2 (Additional Tests: KF, SpecGravity)

Certificate L2367

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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