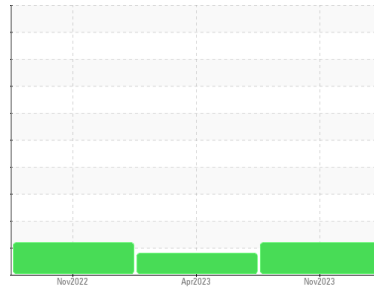


PROBLEM SUMMARY

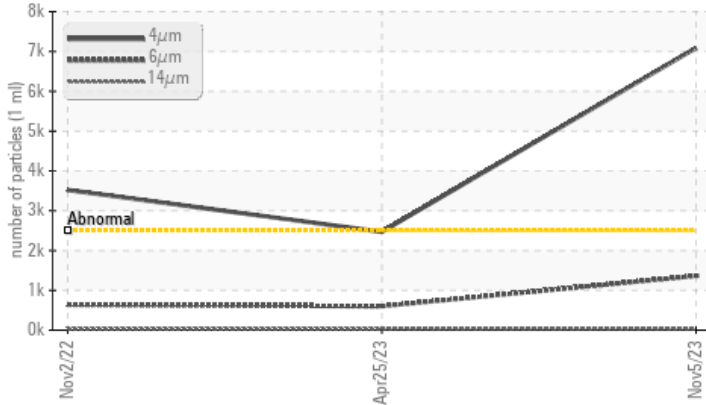
Area
Marcus Hook/Cryogenic/Compressor
 Machine Id
CRYOGENIC COMPRESSOR 30-C-201A
 Component
Rotary Compressor
 Fluid
NOT GIVEN (--- GAL)

Sample Rating Trend



COMPONENT CONDITION SUMMARY

▲ Particle Trend



RECOMMENDATION

We recommend you service the filters on this component. Resample at the next service interval to monitor.

PROBLEMATIC TEST RESULTS

Sample Status			ABNORMAL	ATTENTION	ABNORMAL
Particles >4µm	ASTM D7647	>2500	▲ 7090	2469	▲ 3521
Particles >6µm	ASTM D7647	>320	▲ 1362	▲ 601	▲ 641
Oil Cleanliness	ISO 4406 (c)	>18/15/13	▲ 20/18/12	▲ 18/16/12	▲ 19/17/12

Customer Id: ETCMHOOK
 Sample No.: TO60001812
 Lab Number: 05999962
 Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data:
 Don Baldrige +1
don.b505@comcast.net

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 recommend you service the filters on this component.

HISTORICAL DIAGNOSIS

25 Apr 2023 Diag: Don Baldrige

ISO



No corrective action is recommended at this time. Resample at the next service interval to monitor. All component wear rates are normal. There is a moderate amount of silt (particulates < 14 microns in size) present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report



02 Nov 2022 Diag: Jonathan Hester

ISO

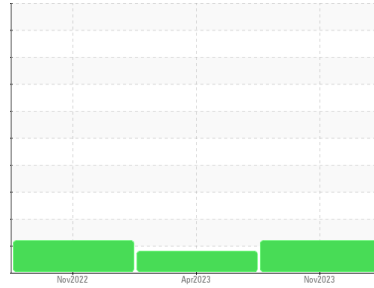


No corrective action is recommended at this time. Resample at the next service interval to monitor. All component wear rates are normal. There is a high amount of silt (particulates < 14 microns in size) present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report



Area
Marcus Hook/Cryogenic/Compressor
 Machine Id
CRYOGENIC COMPRESSOR 30-C-201A
 Component
Rotary Compressor
 Fluid
NOT GIVEN (--- GAL)



DIAGNOSIS

Recommendation

We recommend you service the filters on this component. Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

There is a high amount of silt (particulates < 14 microns in size) present in the oil.

Fluid Condition

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

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		TO60001812	TO90003021	TO90002781
Sample Date	Client Info		05 Nov 2023	25 Apr 2023	02 Nov 2022
Machine Age	hrs	Client Info	0	0	0
Oil Age	hrs	Client Info	0	0	0
Oil Changed	Client Info		N/A	N/A	N/A
Sample Status			ABNORMAL	ATTENTION	ABNORMAL

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >70	0	0	0
Chromium	ppm	ASTM D5185m >10	0	0	0
Nickel	ppm	ASTM D5185m	0	0	0
Titanium	ppm	ASTM D5185m	0	0	0
Silver	ppm	ASTM D5185m	0	0	0
Aluminum	ppm	ASTM D5185m >3	0	0	0
Lead	ppm	ASTM D5185m >4	0	0	0
Copper	ppm	ASTM D5185m >20	0	0	0
Tin	ppm	ASTM D5185m >3	0	0	0
Vanadium	ppm	ASTM D5185m	0	0	0
Cadmium	ppm	ASTM D5185m	0	0	0

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	0	0
Barium	ppm	ASTM D5185m	0	0	0
Molybdenum	ppm	ASTM D5185m	0	0	0
Manganese	ppm	ASTM D5185m	0	0	0
Magnesium	ppm	ASTM D5185m	0	0	0
Calcium	ppm	ASTM D5185m	0	0	0
Phosphorus	ppm	ASTM D5185m	44	42	61
Zinc	ppm	ASTM D5185m	0	0	0
Sulfur	ppm	ASTM D5185m	0	0	0

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >45	0	<1	<1
Sodium	ppm	ASTM D5185m	<1	0	0
Potassium	ppm	ASTM D5185m >20	0	<1	0
Water	%	ASTM D6304 >0.6	0.003	0.002	0.208
ppm Water	ppm	ASTM D6304	31.8	24.4	2080

FLUID CLEANLINESS

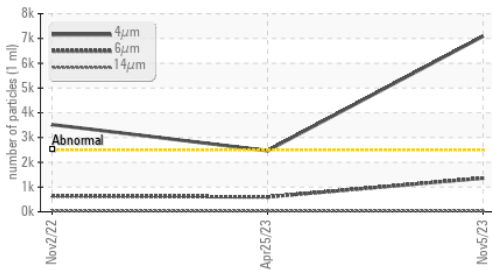
	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>2500	▲ 7090	2469	▲ 3521
Particles >6µm	ASTM D7647	>320	▲ 1362	▲ 601	▲ 641
Particles >14µm	ASTM D7647	>80	30	29	27
Particles >21µm	ASTM D7647	>20	5	6	5
Particles >38µm	ASTM D7647	>4	0	1	0
Particles >71µm	ASTM D7647	>3	0	0	0
Oil Cleanliness	ISO 4406 (c)	>18/15/13	▲ 20/18/12	▲ 18/16/12	▲ 19/17/12

FLUID DEGRADATION

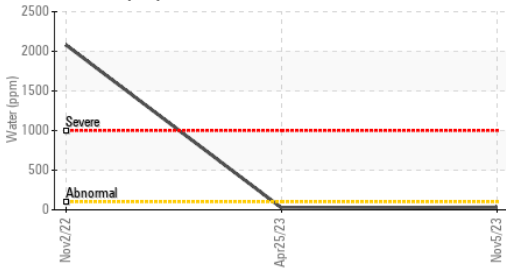
	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.057	0.074	0.05

OIL ANALYSIS REPORT

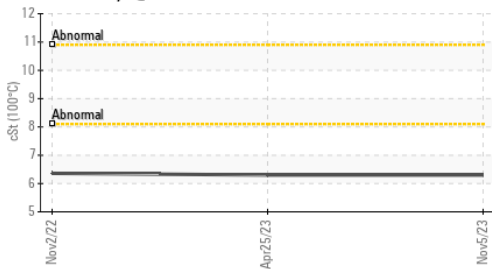
▲ Particle Trend



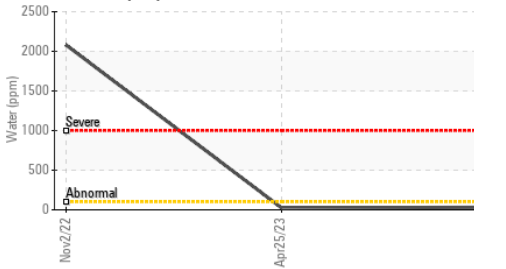
Water (KF)



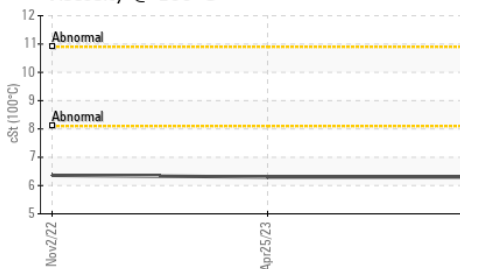
Viscosity @ 100°C



Water (KF)



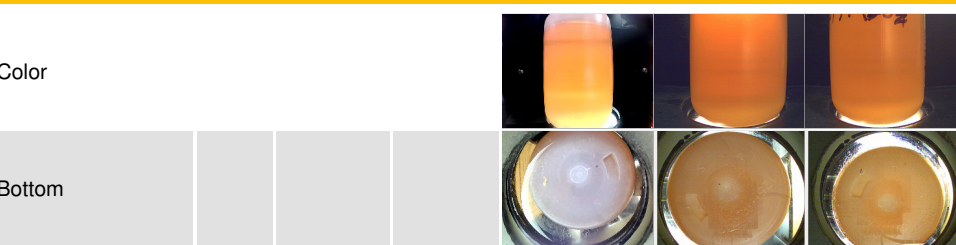
Viscosity @ 100°C



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	>0.6	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

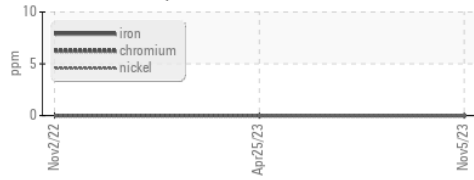
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	32.2	32.2	28.6
Visc @ 100°C	cSt	ASTM D445	6.3	6.3	6.36
Viscosity Index (VI)	Scale	ASTM D2270	150	150	183

SAMPLE IMAGES

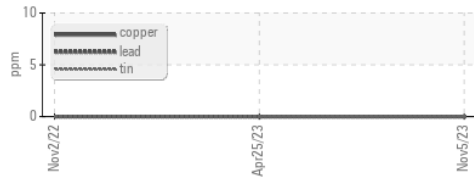


GRAPHS

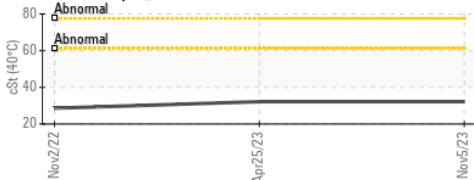
Ferrous Alloys



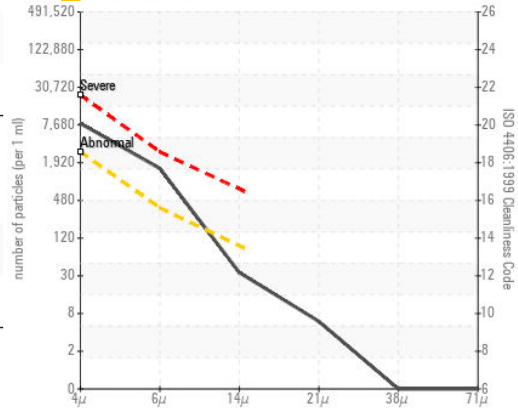
Non-ferrous Metals



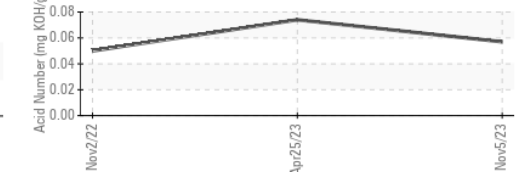
Viscosity @ 40°C



▲ Particle Count



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : TO60001812 **Received** : 06 Nov 2023
Lab Number : 05999962 **Diagnosed** : 08 Nov 2023
Unique Number : 10728322 **Diagnostician** : Don Baldrige
Test Package : IND 2 (Additional Tests: KF, KV100, PrtCount, VI)

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)

ENERGY TRANSFER - MARCUS HOOK
 2ND & GREEN STREETS
 MARCUS HOOK, PA
 US 19061
 Contact: CHRISTOPHER HOFFA
 christopher.hoffa@energytransfer.com

T:
F: