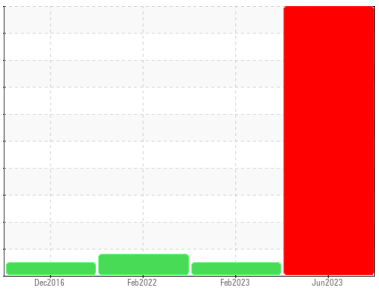
PROBLEM SUMMARY

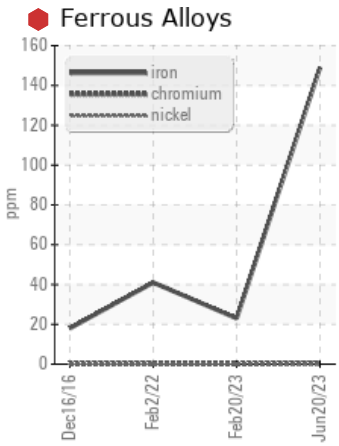
Sample Rating Trend

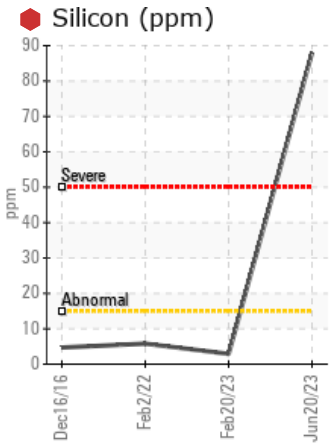


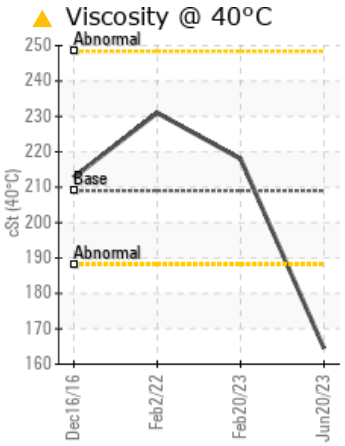
WEAR

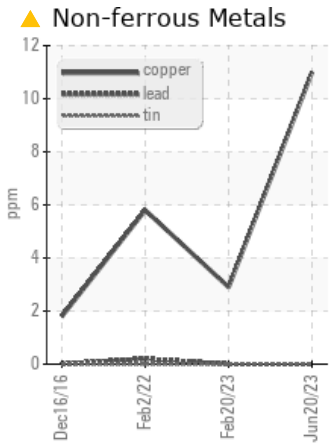
Area
ST37H
Machine Id
BRADEN CH175A-23120-01P-1 (S/N 9603089)
Component
Boom Hoist
Fluid
CHEVRON MEROPA 220 (--- GAL)

COMPONENT CONDITION SUMMARY









RECOMMENDATION

We advise that you check all areas where dirt can enter the system. The oil change at the time of sampling has been noted. We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition.

PROBLEMATIC TEST RESULTS

Sample Status				SEVERE	NORMAL	ABNORMAL
Iron	ppm	ASTM D5185m	>20	**149**	23	41
Copper	ppm	ASTM D5185m	>20	**11**	3	6
Silicon	ppm	ASTM D5185m	>15	**88**	3	6
White Metal	scalar	*Visual	NONE	**MODER**	VLITE	LIGHT
Debris	scalar	*Visual	NONE	**MODER**	LIGHT	NONE
Visc @ 40°C	cSt	ASTM D445	209	**164.5**	218	231

Customer Id: SEALAF
Sample No.: WC0785746
Lab Number: 05900086
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
Inspect Wear Source	---	---	?	We advise that you inspect for the source(s) of wear.
Resample	---	---	?	We recommend an early resample to monitor this condition.
Check Dirt Access	---	---	?	We advise that you check all areas where dirt can enter the system.

HISTORICAL DIAGNOSIS

20 Feb 2023 Diag: Jonathan Hester

NORMAL

Resample at the next service interval to monitor.All component wear rates are normal. There is no indication of any contamination in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report

02 Feb 2022 Diag: Don Baldridge

WEAR

The oil change at the time of sampling has been noted. No corrective action is recommended at this time. Resample at the next service interval to monitor.Gear wear is indicated. All other component wear rates are normal. There is no indication of any contamination in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report

16 Dec 2016 Diag: Don Baldridge

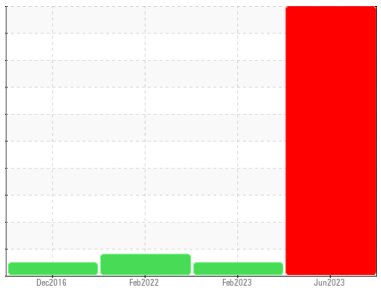
NORMAL

Resample at the next service interval to monitor.All component wear rates are normal. There is no indication of any contamination in the component. The condition of the oil is acceptable for the time in service.

view report

OIL ANALYSIS REPORT

Sample Rating Trend



WEAR

Area
ST37H
Machine Id
BRADEN CH175A-23120-01P-1 (S/N 9603089)
Component
Boom Hoist
Fluid
CHEVRON MEROPA 220 (--- GAL)

DIAGNOSIS

Recommendation
We advise that you check all areas where dirt can enter the system. The oil change at the time of sampling has been noted. We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition.

Wear
The iron level is severe. Moderate concentration of visible metal present.

Contamination
Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress. Moderate concentration of visible dirt/debris present in the oil.

Fluid Condition
The oil viscosity is lower than normal. The AN level is acceptable for this fluid.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**WC0785746**	WC0712801	WC0675850
Sample Date		Client Info		**20 Jun 2023**	20 Feb 2023	02 Feb 2022
Machine Age	yrs	Client Info		**0**	0	0
Oil Age	yrs	Client Info		**1**	0	1
Oil Changed		Client Info		**Changed**	Not Changd	Changed
Sample Status				**SEVERE**	NORMAL	ABNORMAL

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>20	**149**	23	41
Chromium	ppm	ASTM D5185m	>20	**<1**	0	<1
Nickel	ppm	ASTM D5185m	>20	**0**	0	0
Titanium	ppm	ASTM D5185m		**1**	0	0
Silver	ppm	ASTM D5185m		**0**	0	<1
Aluminum	ppm	ASTM D5185m	>20	**4**	0	1
Lead	ppm	ASTM D5185m	>20	**0**	0	<1
Copper	ppm	ASTM D5185m	>20	**11**	3	6
Tin	ppm	ASTM D5185m	>20	**0**	0	0
Antimony	ppm	ASTM D5185m		**---**	---	---
Vanadium	ppm	ASTM D5185m		**<1**	<1	0
Cadmium	ppm	ASTM D5185m		**0**	0	<1

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	40	**12**	8	8
Barium	ppm	ASTM D5185m		**0**	0	0
Molybdenum	ppm	ASTM D5185m		**0**	5	<1
Manganese	ppm	ASTM D5185m		**2**	1	1
Magnesium	ppm	ASTM D5185m		**2**	16	1
Calcium	ppm	ASTM D5185m		**19**	4	40
Phosphorus	ppm	ASTM D5185m	270	**294**	271	259
Zinc	ppm	ASTM D5185m		**262**	4	64
Sulfur	ppm	ASTM D5185m	8600	**6690**	8446	7038

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>15	**88**	3	6
Sodium	ppm	ASTM D5185m		**3**	<1	2
Potassium	ppm	ASTM D5185m	>20	**1**	<1	1

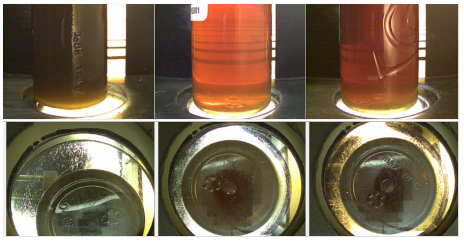
FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.64	**0.45**	0.62	0.53

VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**MODER**	VLITE	LIGHT
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**	LIGHT	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	>0.05	**NEG**	NEG	NEG
Free Water	scalar	*Visual		**NEG**	NEG	NEG

OIL ANALYSIS REPORT

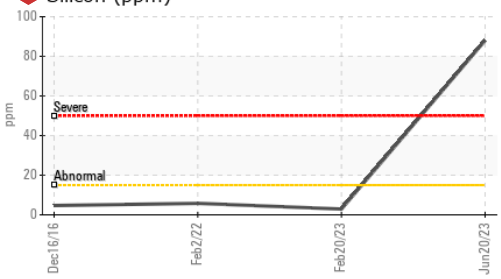
FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	209	▲ **164.5**	218	231

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

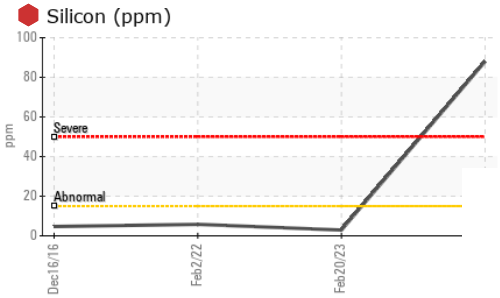


GRAPHS

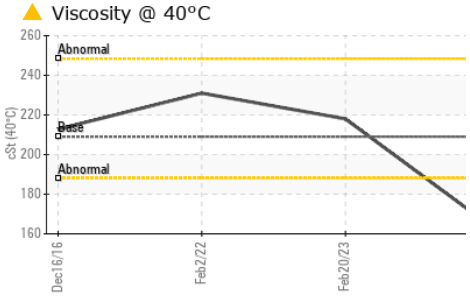
Silicon (ppm)



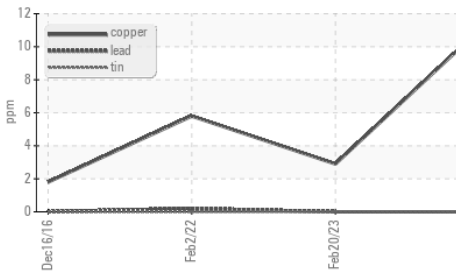
Silicon (ppm)



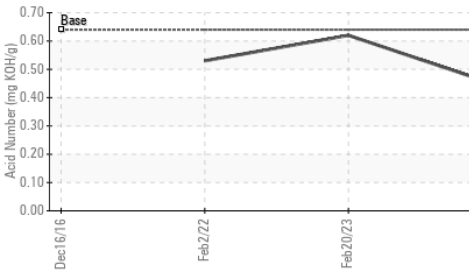
Viscosity @ 40°C



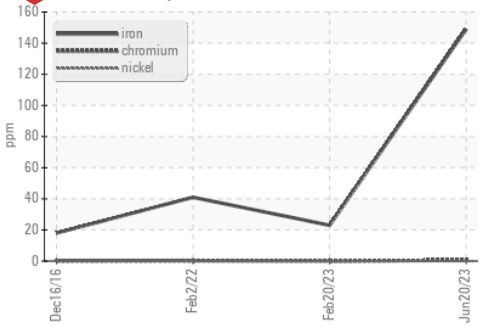
Non-ferrous Metals



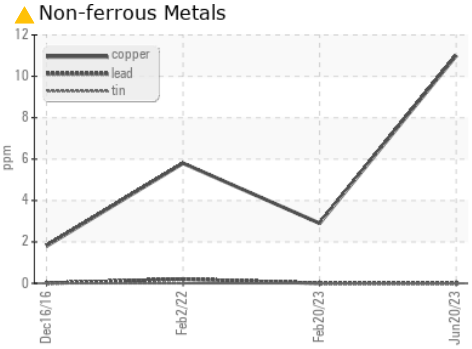
Acid Number



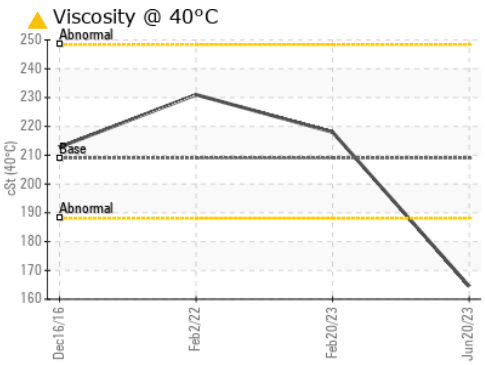
Ferrous Alloys



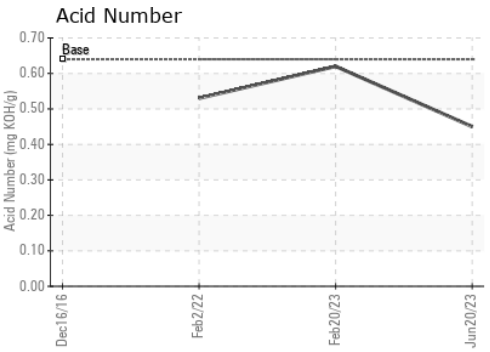
Non-ferrous Metals



Viscosity @ 40°C



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0785746
Lab Number : 05900086
Unique Number : 10561442
Test Package : IND 2

Received : 17 Jul 2023
Diagnosed : 21 Jul 2023
Diagnostician : Jonathan Hester

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)

SEATRAX INC
308 GALBERT ROAD
LAFAYETTE, LA
US 70506
Contact: LORIA HUVAL
LORIA.HUVAL@SEATRAX.COM
T:
F: (337)706-7901