

PROBLEM SUMMARY

Sample Rating Trend

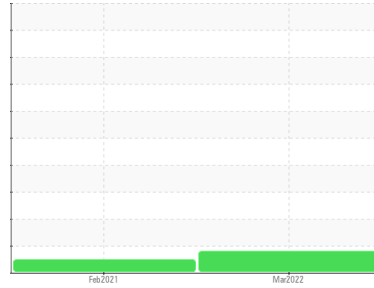
ISO



Machine Id
SIEMENS 14

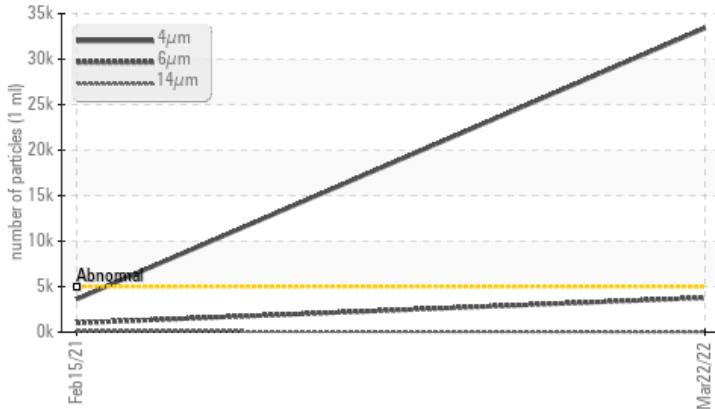
Component
Hydraulic System

Fluid
CHEVRON RANDO HDZ 46 (150 GAL)



COMPONENT CONDITION SUMMARY

▲ Particle Trend



RECOMMENDATION

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

PROBLEMATIC TEST RESULTS

Sample Status			ABNORMAL	NORMAL	---
Particles >4µm	ASTM D7647	>5000	▲ 33418	3615	---
Particles >6µm	ASTM D7647	>1300	▲ 3778	1012	---
Oil Cleanliness	ISO 4406 (c)	>19/17/14	▲ 22/19/12	19/17/14	---

Customer Id: NARPRO
Sample No.: RP0000605
Lab Number: 05503907
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 recommend you service the filters on this component if applicable.

HISTORICAL DIAGNOSIS

15 Feb 2021 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 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.

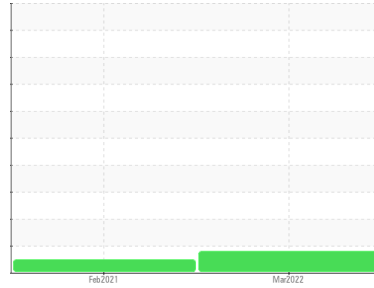
view report





OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Machine Id
SIEMENS 14

Component
Hydraulic System

Fluid
CHEVRON RANDO HDZ 46 (150 GAL)

DIAGNOSIS

▲ Recommendation

We recommend you service the filters on this component if applicable. 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			RP0000605	RP133946	---
Sample Date	Client Info			22 Mar 2022	15 Feb 2021	---
Machine Age	hrs	Client Info		79294	7435	---
Oil Age	hrs	Client Info		0	0	---
Oil Changed	Client Info			N/A	Not Changd	---
Sample Status				ABNORMAL	NORMAL	---

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>20	0	<1	---
Chromium	ppm	ASTM D5185m	>10	0	0	---
Nickel	ppm	ASTM D5185m		0	0	---
Titanium	ppm	ASTM D5185m		0	0	---
Silver	ppm	ASTM D5185m		<1	<1	---
Aluminum	ppm	ASTM D5185m	>10	0	0	---
Lead	ppm	ASTM D5185m	>10	9	<1	---
Copper	ppm	ASTM D5185m	>75	4	1	---
Tin	ppm	ASTM D5185m	>10	0	0	---
Antimony	ppm	ASTM D5185m		---	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	<1	---
Barium	ppm	ASTM D5185m		0	0	---
Molybdenum	ppm	ASTM D5185m		0	0	---
Manganese	ppm	ASTM D5185m		0	0	---
Magnesium	ppm	ASTM D5185m		0	0	---
Calcium	ppm	ASTM D5185m		44	45	---
Phosphorus	ppm	ASTM D5185m		335	353	---
Zinc	ppm	ASTM D5185m		388	424	---

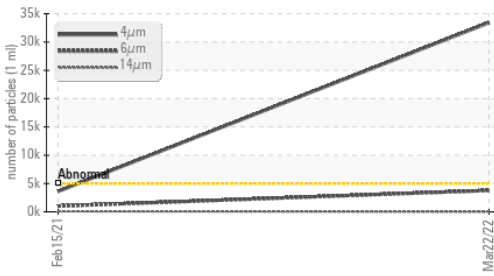
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>20	0	<1	---
Sodium	ppm	ASTM D5185m		6	3	---
Potassium	ppm	ASTM D5185m	>20	0	<1	---
Water	%	ASTM D6304	>0.1	0.003	0.003	---
ppm Water	ppm	ASTM D6304	>1000	28.5	33.5	---

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>5000	▲ 33418	3615	---
Particles >6µm		ASTM D7647	>1300	▲ 3778	1012	---
Particles >14µm		ASTM D7647	>160	35	101	---
Particles >21µm		ASTM D7647	>40	5	34	---
Particles >38µm		ASTM D7647	>10	0	3	---
Particles >71µm		ASTM D7647	>3	0	0	---
Oil Cleanliness		ISO 4406 (c)	>19/17/14	▲ 22/19/12	19/17/14	---

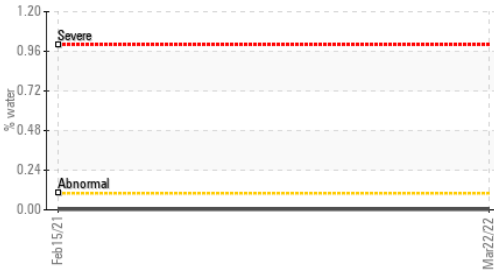
FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		0.36	0.395	---

OIL ANALYSIS REPORT

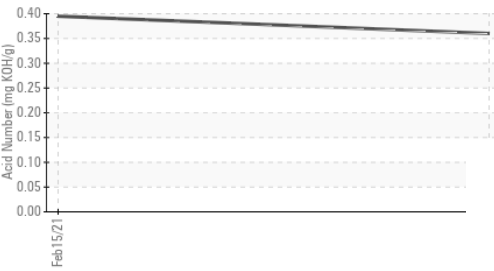
▲ Particle Trend



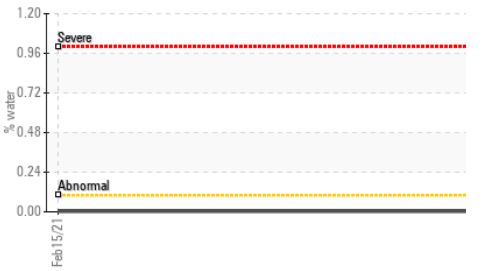
Water



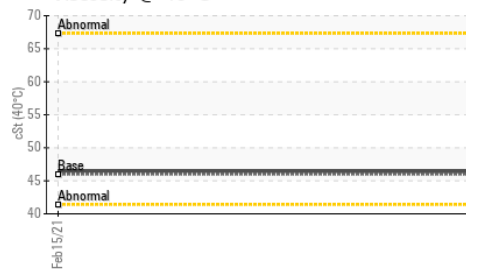
Acid Number



Water



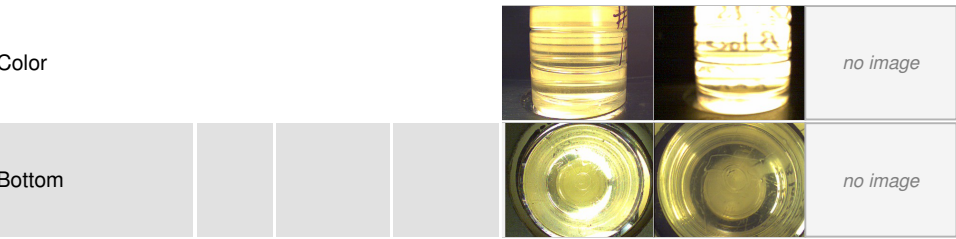
Viscosity @ 40°C



VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	---
Debris	scalar	*Visual	NONE	LIGHT	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance	scalar	*Visual	NORML	NORML	---
Odor	scalar	*Visual	NORML	NORML	---
Emulsified Water	scalar	*Visual	>0.1	NEG	---
Free Water	scalar	*Visual		NEG	---

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	46.0	46.4	46.5

SAMPLE IMAGES	method	limit/base	current	history1	history2
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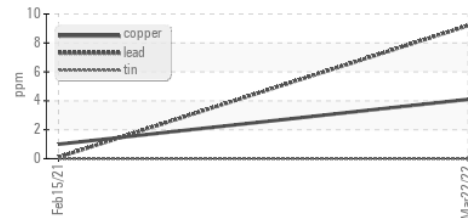


GRAPHS

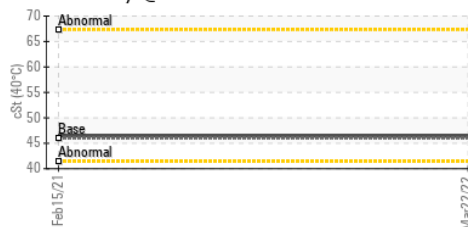
Ferrous Alloys



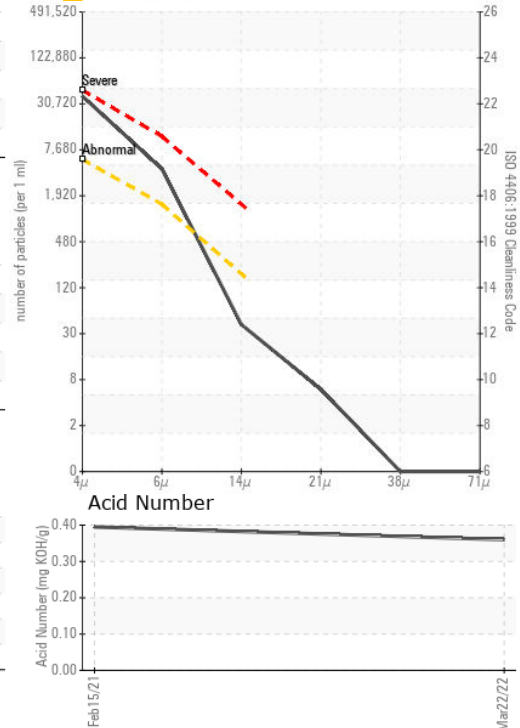
Non-ferrous Metals



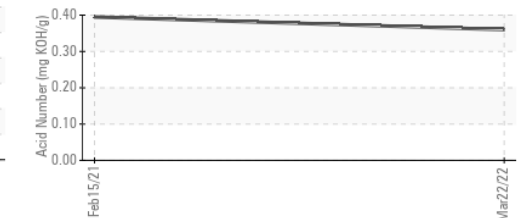
Viscosity @ 40°C



▲ Particle Count



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : RP0000605 **Received** : 28 Mar 2022
Lab Number : 05503907 **Diagnosed** : 31 Mar 2022
Unique Number : 9908144 **Diagnostician** : Jonathan Hester
Test Package : IND 2

NARRAGANSETT BAY COMMISSION
 2 ERNEST ST.
 PROVIDENCE, RI
 US 02905
 Contact: RON GOODINSON
 rgoodinson@narrabay.com
 T: (401)461-8848
 F: (401)461-0170

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)