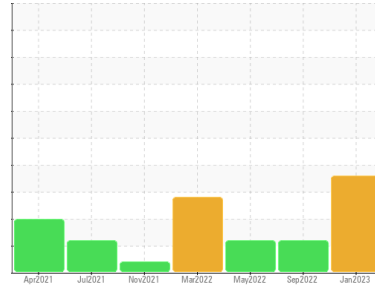




OIL ANALYSIS REPORT

Sample Rating Trend



WEAR



Machine Id
3500 TON

Component
Hydraulic System

Fluid
CHEVRON RANDO HD 100 (800 GAL)

DIAGNOSIS

Recommendation

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

Wear

Copper and iron ppm levels are abnormal.

Contamination

There is a high amount of particulates present in the oil.

Fluid Condition

The AN level is acceptable for this fluid. The condition of the oil is acceptable for the time in service.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		WC0749064	WC0749055	WC0685141
Sample Date	Client Info		23 Jan 2023	22 Sep 2022	15 May 2022
Machine Age	mths	Client Info	6	0	0
Oil Age	mths	Client Info	6	0	0
Oil Changed	Client Info		Filtered	Not Changd	Filtered
Sample Status			ABNORMAL	ABNORMAL	ABNORMAL

CONTAMINATION

	method	limit/base	current	history1	history2
Water	WC Method	>0.05	NEG	NEG	NEG

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >20	▲ 22	8	15
Chromium	ppm	ASTM D5185m >20	<1	0	<1
Nickel	ppm	ASTM D5185m >20	0	0	0
Titanium	ppm	ASTM D5185m	1	<1	<1
Silver	ppm	ASTM D5185m	<1	0	<1
Aluminum	ppm	ASTM D5185m >20	<1	<1	<1
Lead	ppm	ASTM D5185m >20	<1	<1	<1
Copper	ppm	ASTM D5185m >20	▲ 34	29	31
Tin	ppm	ASTM D5185m >20	<1	<1	<1
Vanadium	ppm	ASTM D5185m	<1	<1	0
Cadmium	ppm	ASTM D5185m	<1	0	0

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	0	<1
Barium	ppm	ASTM D5185m	1	0	0
Molybdenum	ppm	ASTM D5185m	<1	<1	<1
Manganese	ppm	ASTM D5185m	<1	<1	<1
Magnesium	ppm	ASTM D5185m	1	<1	0
Calcium	ppm	ASTM D5185m	27	17	26
Phosphorus	ppm	ASTM D5185m	335	330	373
Zinc	ppm	ASTM D5185m	384	339	372
Sulfur	ppm	ASTM D5185m	917	1012	822

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >15	2	0	<1
Sodium	ppm	ASTM D5185m	4	4	6
Potassium	ppm	ASTM D5185m >20	<1	<1	0

FLUID CLEANLINESS

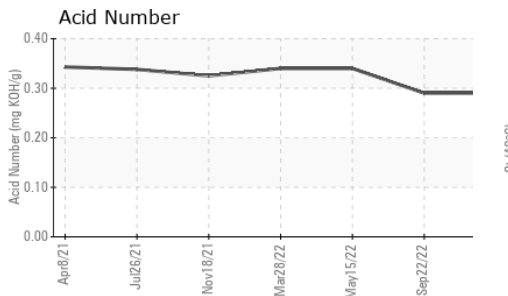
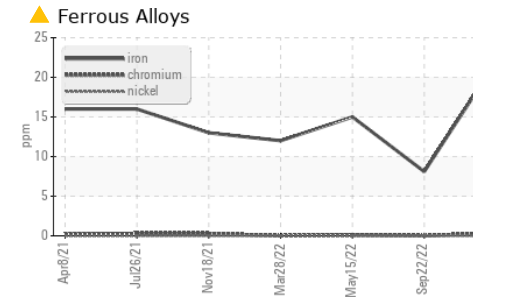
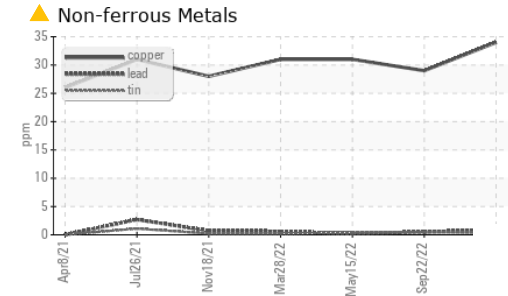
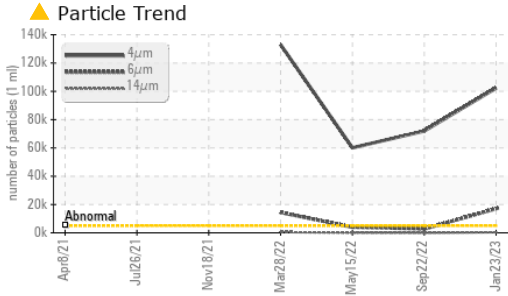
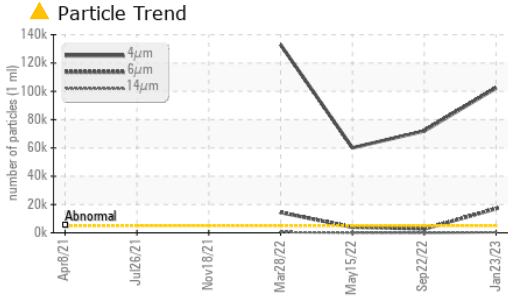
	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>5000	▲ 102298	▲ 71951	▲ 60068
Particles >6µm	ASTM D7647	>1300	▲ 17089	▲ 2718	▲ 3974
Particles >14µm	ASTM D7647	>160	▲ 398	27	94
Particles >21µm	ASTM D7647	>40	▲ 59	3	12
Particles >38µm	ASTM D7647	>10	2	0	0
Particles >71µm	ASTM D7647	>3	0	0	0
Oil Cleanliness	ISO 4406 (c)	>19/17/14	▲ 24/21/16	▲ 23/19/12	▲ 23/19/14

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.29	0.29	0.34



OIL ANALYSIS REPORT



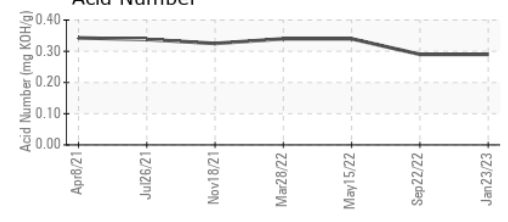
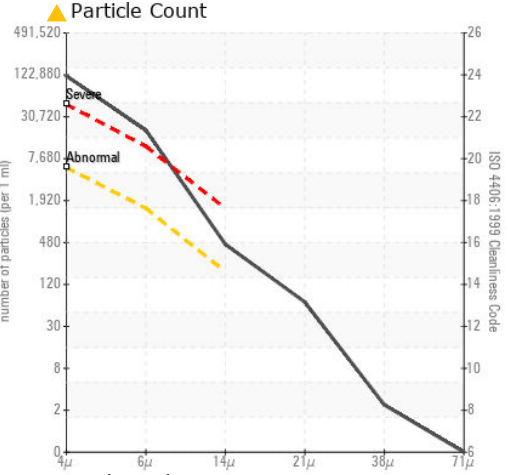
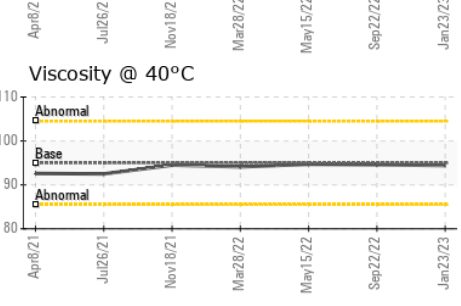
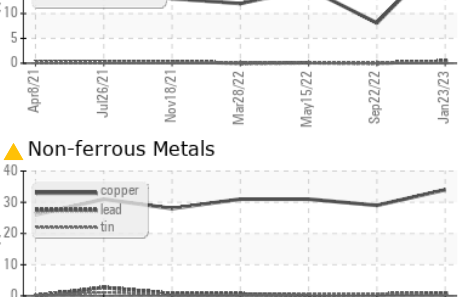
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.05	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	95.0	94.4	94.6

SAMPLE IMAGES	method	limit/base	current	history1	history2
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GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0749064 **Received** : 24 Jan 2023
Lab Number : 05747916 **Diagnosed** : 25 Jan 2023
Unique Number : 10307520 **Diagnostician** : Angela Borella
Test Package : IND 2

ATI METALS - BAKERS - BNO
 6400 ALLOY WAY
 MONROE, NC
 US 28111
 Contact: JODEY BIRCHMORE
 jodey.birchmore@atimetals.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)