



WEAR	NORMAL
CONTAMINATION	ATTENTION
FLUID CONDITION	NORMAL

Machine Id
SAR (S/N REAR STEERING)

Component
Hydraulic System

Fluid
CHEVRON RANDO HD 68 (300 GAL)

RECOMMENDATION

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

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		MW0065259	MW0060832	MW0060826
Sample Date		Client Info		29 May 2024	29 Feb 2024	01 Dec 2023
Machine Age	hrs	Client Info		8201	0	0
Oil Age	hrs	Client Info		8201	6296	3667
Filter Age	hrs	Client Info		8201	0	3667
Oil Changed		Client Info		Not Chngd	Not Chngd	Not Chngd
Filter Changed		Client Info		Not Chngd	Not Chngd	Not Chngd
Sample Status				ATTENTION	ATTENTION	ABNORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>20	0	0	0
Chromium	ppm	ASTM D5185m	>10	0	0	0
Nickel	ppm	ASTM D5185m	>10	0	0	0
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>10	0	0	0
Lead	ppm	ASTM D5185m	>20	0	2	<1
Copper	ppm	ASTM D5185m	>20	12	9	10
Tin	ppm	ASTM D5185m	>10	0	0	<1
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

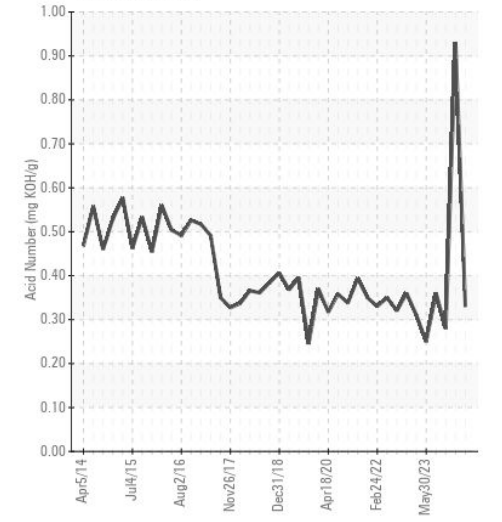
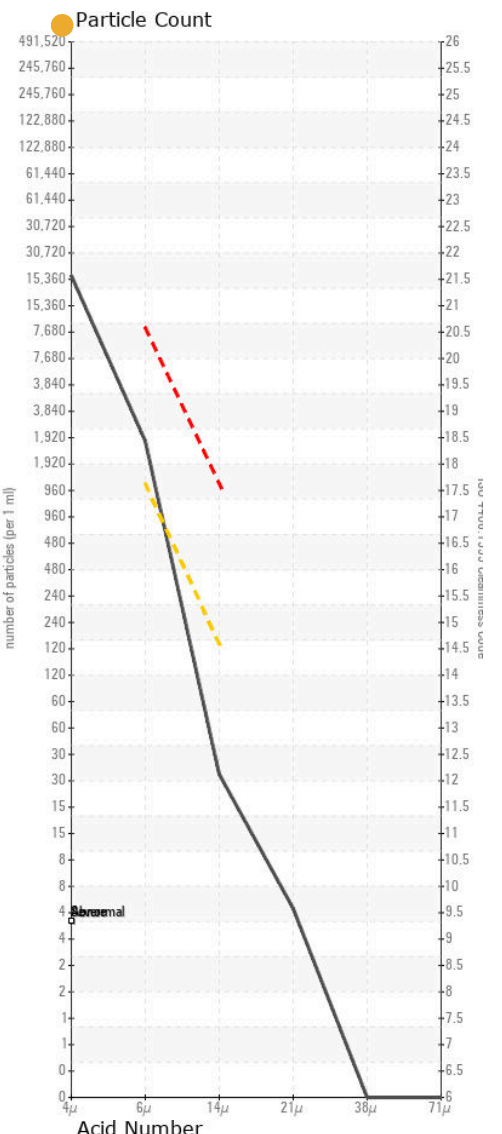
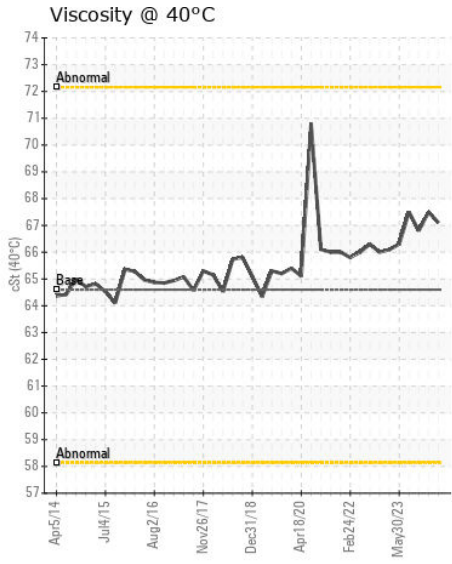
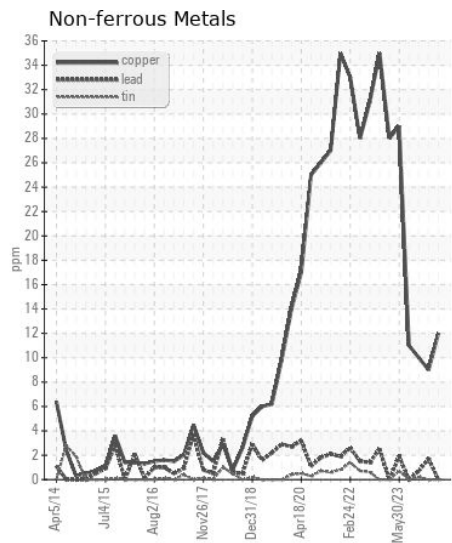
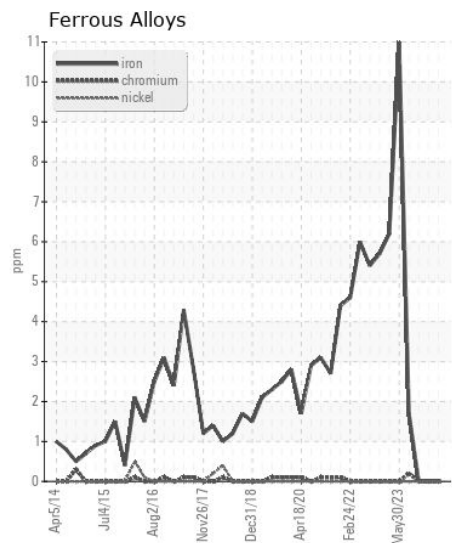
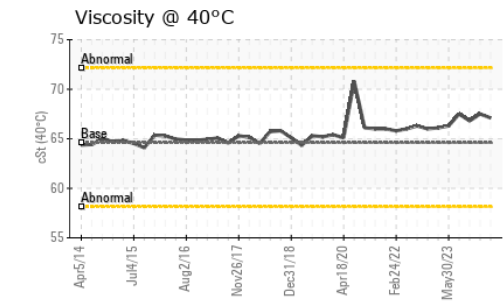
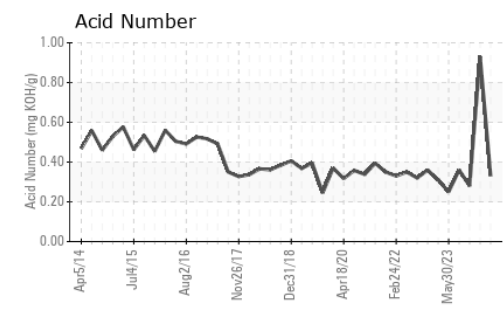
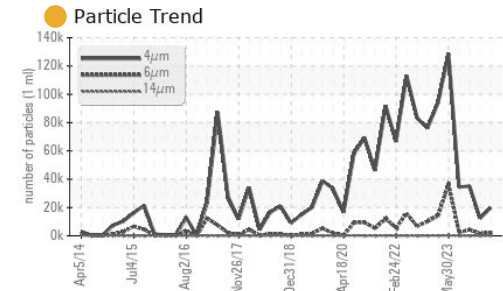
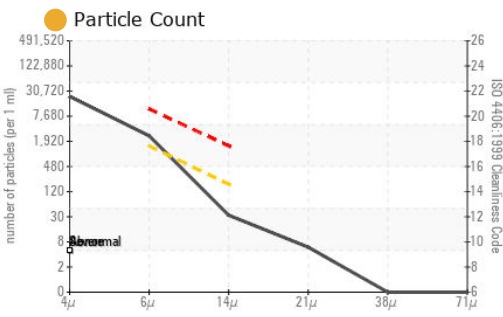
There is a light amount of silt (particulates < 14 microns in size) present in the oil.

Silicon	ppm	ASTM D5185m	>15	0	0	<1
Potassium	ppm	ASTM D5185m	>20	0	<1	<1
Water		WC Method	>0.05	NEG	NEG	NEG
Particles >4µm		ASTM D7647		19789	12419	35098
Particles >6µm		ASTM D7647	>1300	2273	1586	4290
Particles >14µm		ASTM D7647	>160	29	37	52
Particles >21µm		ASTM D7647	>40	5	11	11
Particles >38µm		ASTM D7647	>10	0	1	1
Particles >71µm		ASTM D7647	>3	0	0	0
Oil Cleanliness		ISO 4406 (c)	>-/17/14	21/18/12	21/18/12	22/19/13
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	>0.05	NEG	NEG	NEG

FLUID CONDITION

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

Sodium	ppm	ASTM D5185m		1	0	0
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	<1
Magnesium	ppm	ASTM D5185m		0	0	0
Calcium	ppm	ASTM D5185m		34	30	32
Phosphorus	ppm	ASTM D5185m		335	307	334
Zinc	ppm	ASTM D5185m		402	368	411
Sulfur	ppm	ASTM D5185m		881	810	724
Acid Number (AN)	mg KOH/g	ASTM D8045		0.33	0.93	0.28
Visc @ 40°C	cSt	ASTM D445	64.6	67.1	67.5	66.8



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : MW0065259
Lab Number : 06219620
Unique Number : 11097817
Test Package : MAR 2
Received : 25 Jun 2024
Tested : 26 Jun 2024
Diagnosed : 26 Jun 2024 - Wes Davis

AMERICAN RIVER TRANSPORTATION CO.
 P.O. BOX 2889
 ST. LOUIS, MO
 US 63111
 Contact: BRIAN GRIEWING
 brian.griewing@adm.com
 T:
 F: (314)481-5278

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)