



WEAR	NORMAL
CONTAMINATION	ATTENTION
FLUID CONDITION	NORMAL

Area
NDA
Machine Id
NDA (S/N STEERING)

Component
Hydraulic System
Fluid
CHEVRON RANDO HD 68 (400 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		MW0060749	MW0050564	MW0054725
Sample Date		Client Info		22 Jan 2024	21 Oct 2023	20 Jul 2023
Machine Age	hrs	Client Info		4576	30647	0
Oil Age	hrs	Client Info		4576	30647	23505
Filter Age	hrs	Client Info		4576	0	23505
Oil Changed		Client Info		Not Changd	N/A	Not Changd
Filter Changed		Client Info		Not Changd	Not Changd	Not Changd
Sample Status				ATTENTION	NORMAL	ATTENTION

WEAR

All component wear rates are normal.

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

CONTAMINATION

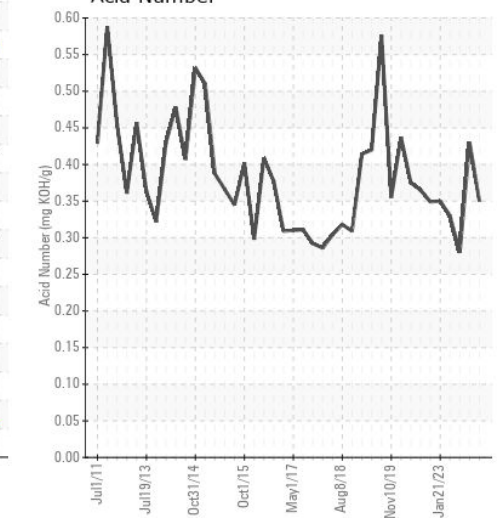
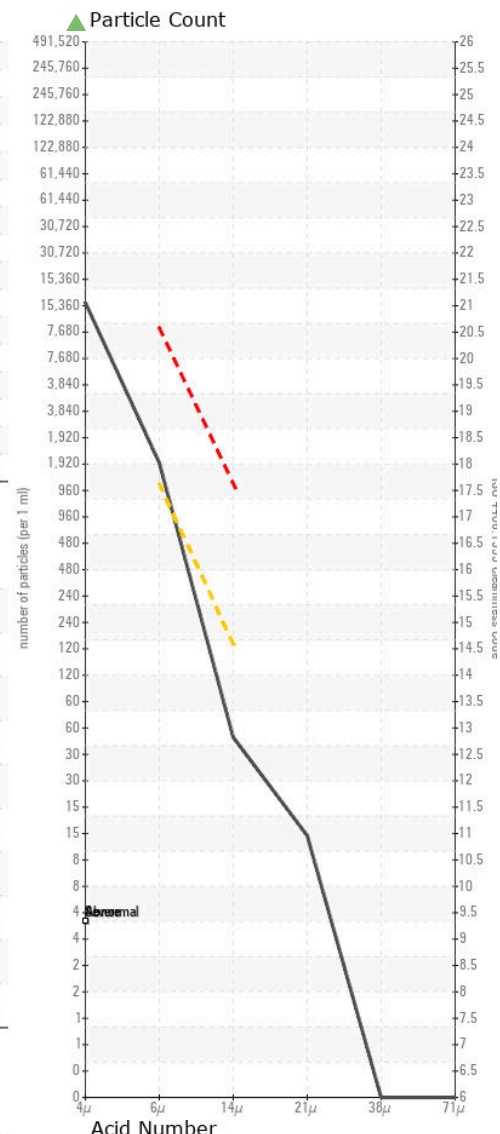
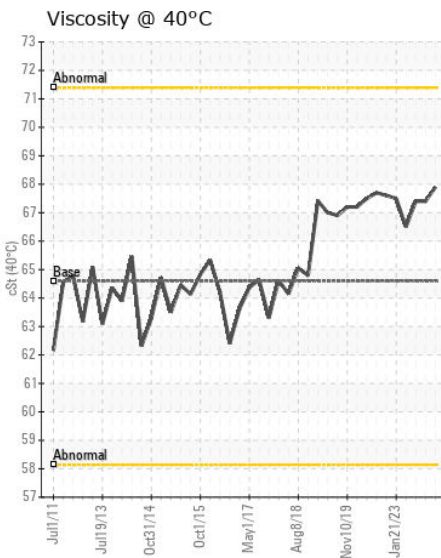
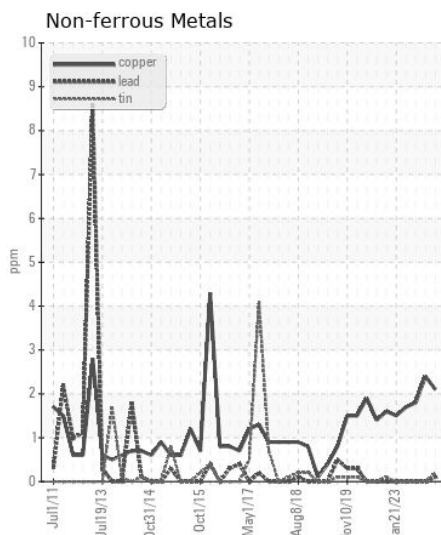
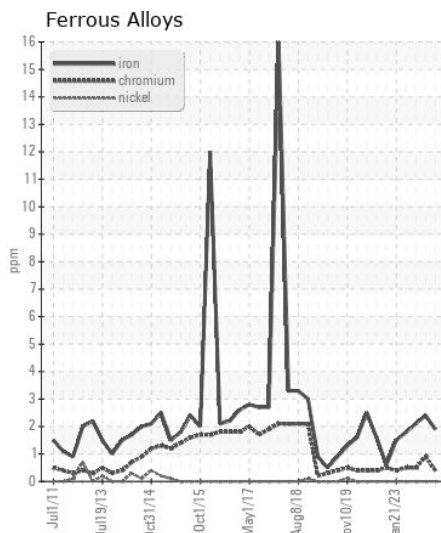
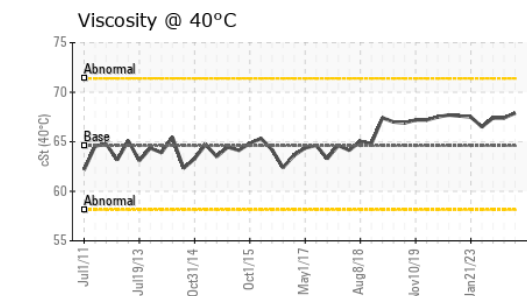
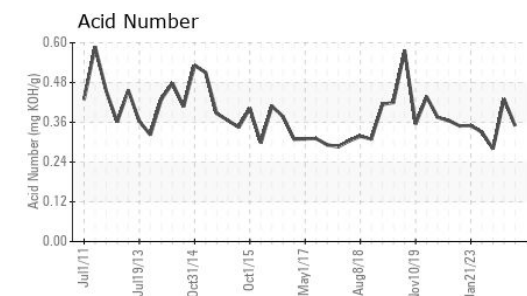
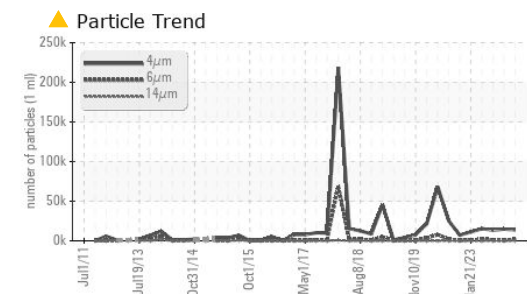
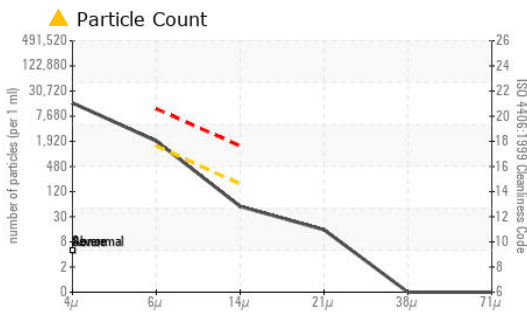
There is a light amount of silt (particulates < 14 microns in size) present in the oil.

Silicon	ppm	ASTM D5185m	>15	0	<1	0
Potassium	ppm	ASTM D5185m	>20	2	<1	<1
Water		WC Method	>0.05	NEG	NEG	NEG
Particles >4µm		ASTM D7647		13902	14741	13551
Particles >6µm		ASTM D7647	>1300	▲ 1708	538	▲ 1398
Particles >14µm		ASTM D7647	>160	47	5	29
Particles >21µm		ASTM D7647	>40	13	1	8
Particles >38µm		ASTM D7647	>10	0	0	1
Particles >71µm		ASTM D7647	>3	0	0	0
Oil Cleanliness		ISO 4406 (c)	>-/17/14	▲ 21/18/13	21/16/10	▲ 21/18/12
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		0	2	0
Boron	ppm	ASTM D5185m		0	0	0
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		<1	0	<1
Manganese	ppm	ASTM D5185m		0	<1	0
Magnesium	ppm	ASTM D5185m		<1	0	3
Calcium	ppm	ASTM D5185m		48	5	81
Phosphorus	ppm	ASTM D5185m		288	276	345
Zinc	ppm	ASTM D5185m		410	372	442
Sulfur	ppm	ASTM D5185m		852	493	1078
Acid Number (AN)	mg KOH/g	ASTM D8045		0.35	0.43	0.28
Visc @ 40°C	cSt	ASTM D445	64.6	67.9	67.4	67.4



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : MW0060749 **Received** : 30 Jan 2024
Lab Number : 06074645 **Diagnosed** : 31 Jan 2024
Unique Number : 10856736 **Diagnostician** : Wes Davis
Test Package : MAR 2

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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)