



WEAR	<b>NORMAL</b>
CONTAMINATION	<b>ATTENTION</b>
FLUID CONDITION	<b>NORMAL</b>

Area  
**CPT OA FRANKS**  
Machine Id  
**[CPT OA FRANKS] 010 586734-10**  
Component  
**Steering**  
Fluid  
**CHEVRON RANDO HDZ 68 (--- GAL)**

**RECOMMENDATION**

No corrective action is recommended at this time. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>MW06063527</b>	MW06063526	MW05897986
Sample Date		Client Info		<b>16 Jan 2024</b>	30 Oct 2023	30 Jun 2023
Machine Age	hrs	Client Info		<b>0</b>	0	1920
Oil Age	hrs	Client Info		<b>0</b>	0	0
Filter Age	hrs	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>N/A</b>	N/A	N/A
Filter Changed		Client Info		<b>N/A</b>	N/A	N/A
Sample Status				<b>ATTENTION</b>	ATTENTION	ABNORMAL

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>50	<b>&lt;1</b>	<1	<1
Chromium	ppm	ASTM D5185m	>15	<b>&lt;1</b>	<1	0
Nickel	ppm	ASTM D5185m	>5	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m		<b>0</b>	0	<1
Silver	ppm	ASTM D5185m		<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>5	<b>2</b>	2	<1
Lead	ppm	ASTM D5185m	>10	<b>&lt;1</b>	<1	<1
Copper	ppm	ASTM D5185m	>50	<b>9</b>	10	9
Tin	ppm	ASTM D5185m	>5	<b>0</b>	0	0
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	<1
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

**CONTAMINATION**

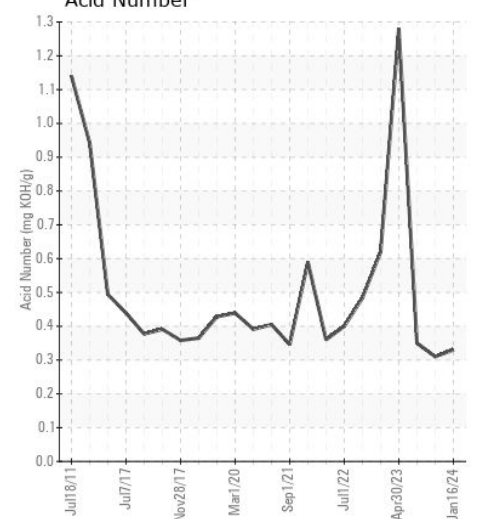
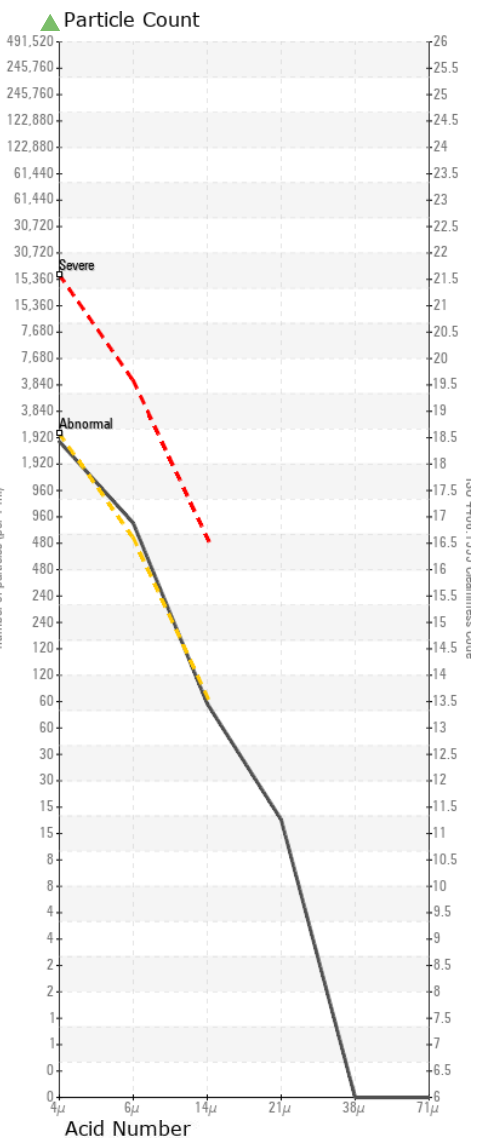
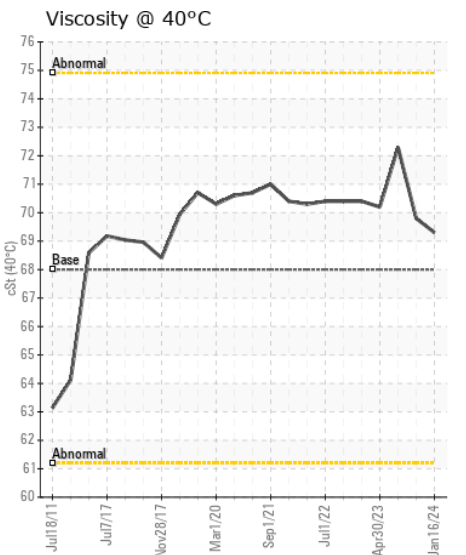
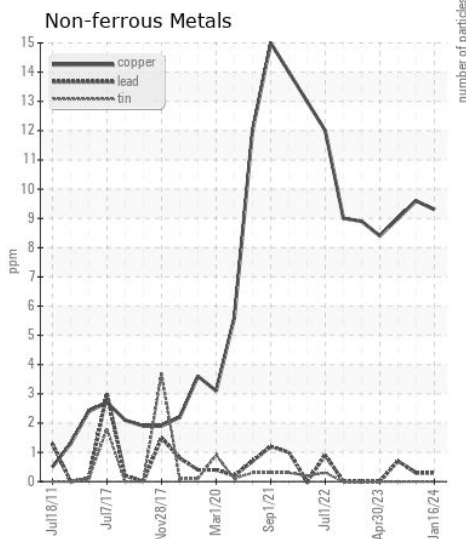
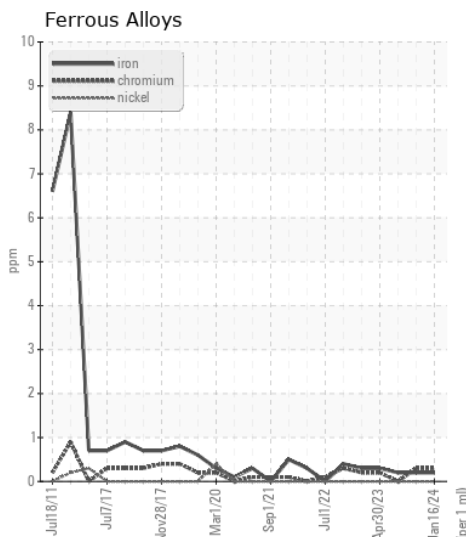
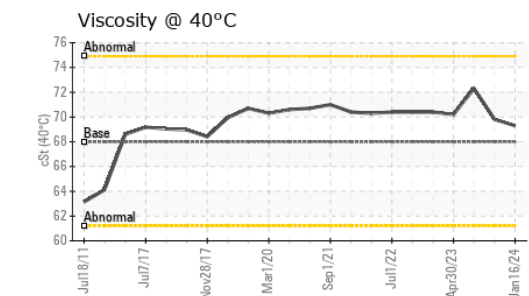
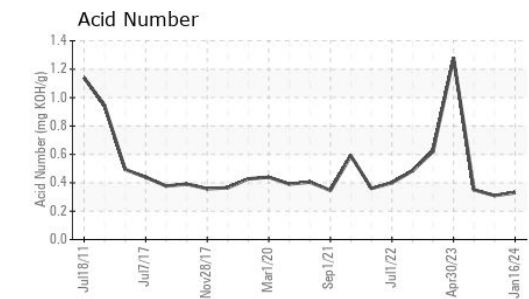
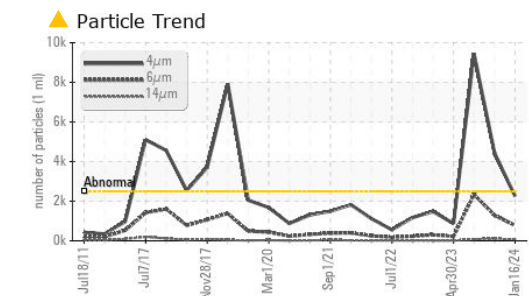
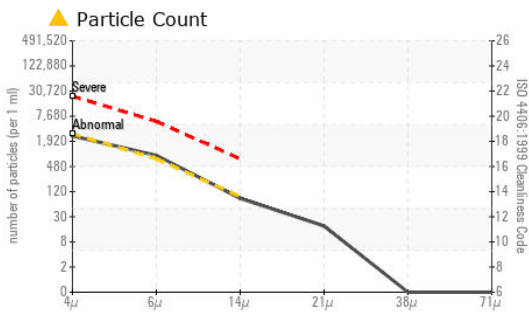
There is a moderate amount of silt (particulates < 14 microns in size) present in the fluid.

Silicon	ppm	ASTM D5185m	>15	<b>0</b>	0	<1
Potassium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	<1	3
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Particles >4µm		ASTM D7647	>2500	<b>2256</b>	▲ 4432	▲ 9449
Particles >6µm		ASTM D7647	>640	<b>776</b>	▲ 1290	▲ 2337
Particles >14µm		ASTM D7647	>80	<b>73</b>	▲ 99	80
Particles >21µm		ASTM D7647	>20	<b>16</b>	▲ 22	17
Particles >38µm		ASTM D7647	>4	<b>0</b>	1	1
Particles >71µm		ASTM D7647	>3	<b>0</b>	0	0
Oil Cleanliness		ISO 4406 (c)	>18/16/13	<b>▲ 18/17/13</b>	▲ 19/17/14	▲ 20/18/13
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>NONE</b>	LIGHT	NONE
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	<b>NEG</b>	NEG	NEG

**FLUID CONDITION**

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

Sodium	ppm	ASTM D5185m		<b>0</b>	0	<1
Boron	ppm	ASTM D5185m	0	<b>&lt;1</b>	<1	<1
Barium	ppm	ASTM D5185m	0	<b>3</b>	3	0
Molybdenum	ppm	ASTM D5185m	0	<b>&lt;1</b>	<1	<1
Manganese	ppm	ASTM D5185m		<b>0</b>	0	0
Magnesium	ppm	ASTM D5185m	0	<b>8</b>	9	11
Calcium	ppm	ASTM D5185m	75	<b>70</b>	72	78
Phosphorus	ppm	ASTM D5185m	275	<b>417</b>	418	388
Zinc	ppm	ASTM D5185m	350	<b>452</b>	456	491
Sulfur	ppm	ASTM D5185m	550	<b>1090</b>	1107	1224
Acid Number (AN)	mg KOH/g	ASTM D8045		<b>0.33</b>	0.31	0.35
Visc @ 40°C	cSt	ASTM D445	68.0	<b>69.3</b>	69.8	72.3



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : MW06063527 **Received** : 17 Jan 2024  
**Lab Number** : 06063527 **Diagnosed** : 19 Jan 2024  
**Unique Number** : 10834909 **Diagnostician** : Don Baldrige  
**Test Package** : MAR 2 ( Additional Tests: PrtCount )

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)

**INGRAM BARGE**  
 900 S 3RD ST  
 PADUCAH, KY  
 US 42003

Contact: JAMES ADAIR  
 james.adair@ingrambarge.com  
 T: (270)415-4467  
 F: (615)695-3697