



WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	ABNORMAL

Area
STEPHEN P VENABLE
Machine Id
[STEPHEN P VENABLE] 010 590046-10
Component
Steering
Fluid
TEXACO RANDO HDZ 68 (--- GAL)

RECOMMENDATION

We recommend that you drain the fluid and perform a filter service on this component if not already done. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		MW0067987	MW0051489	MW0042309
Sample Date		Client Info		22 May 2024	02 Feb 2023	02 Nov 2022
Machine Age	hrs	Client Info		0	0	0
Oil Age	hrs	Client Info		0	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	N/A	N/A
Filter Changed		Client Info		N/A	N/A	Not Chngd
Sample Status				ABNORMAL	ABNORMAL	ABNORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>50	<1	3	8
Chromium	ppm	ASTM D5185m	>15	0	<1	0
Nickel	ppm	ASTM D5185m	>5	1	0	<1
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m		<1	0	1
Aluminum	ppm	ASTM D5185m	>5	1	0	<1
Lead	ppm	ASTM D5185m	>10	<1	0	0
Copper	ppm	ASTM D5185m	>50	1	2	2
Tin	ppm	ASTM D5185m	>5	1	<1	0
Vanadium	ppm	ASTM D5185m		<1	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

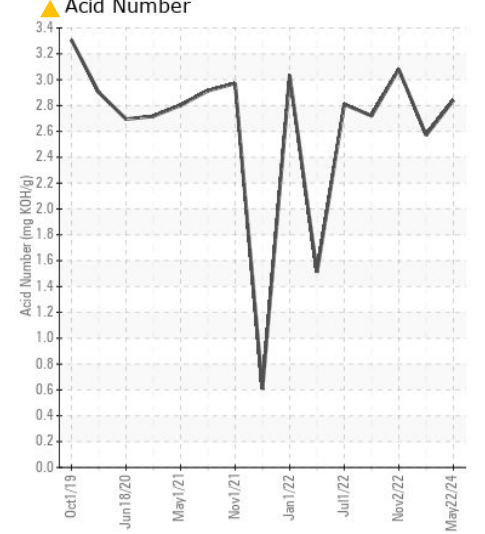
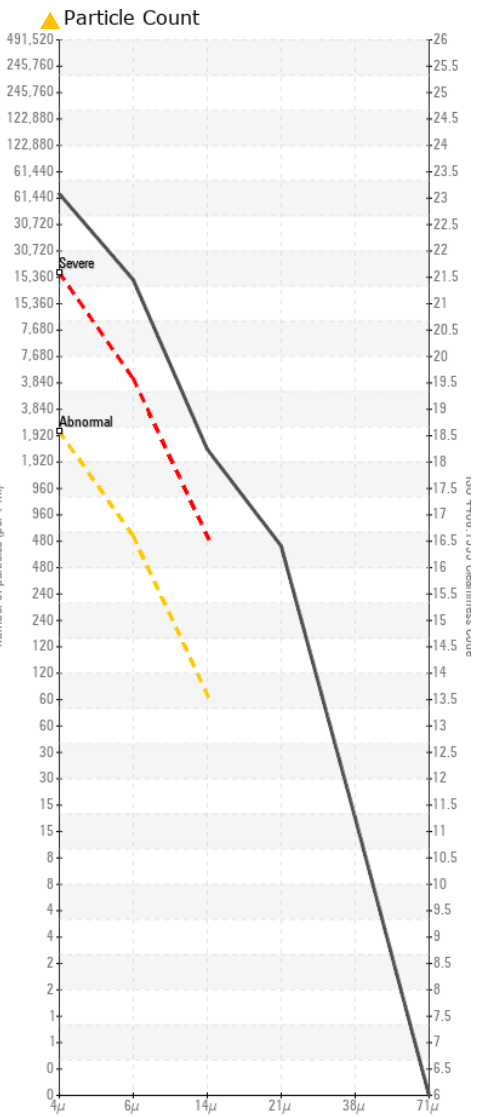
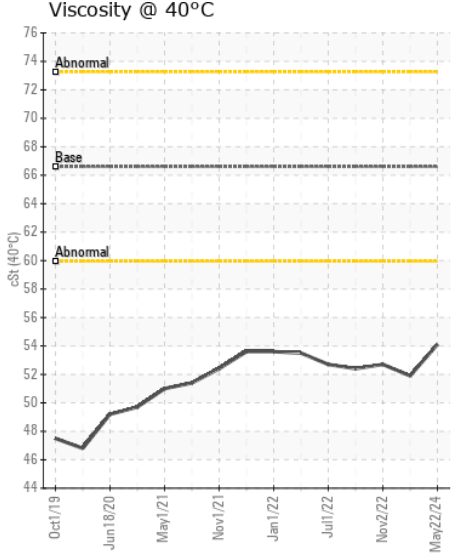
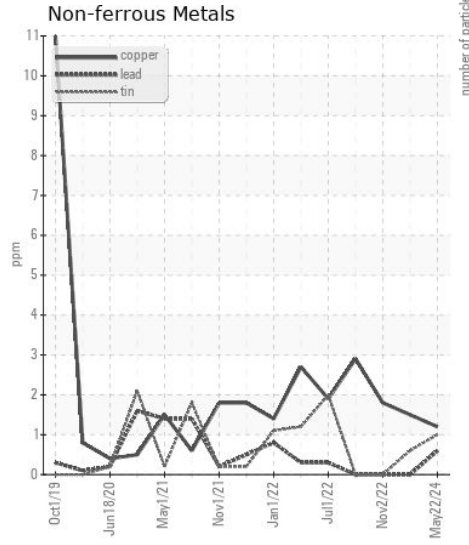
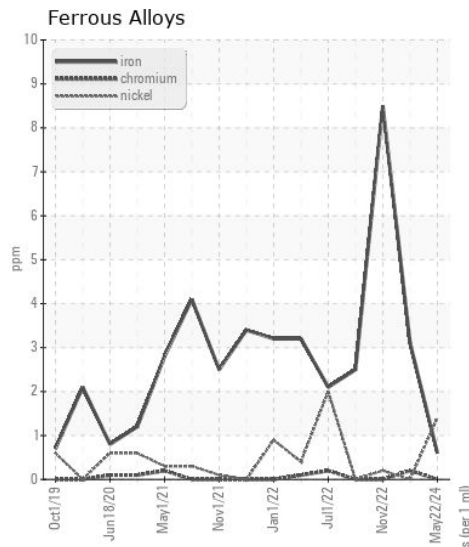
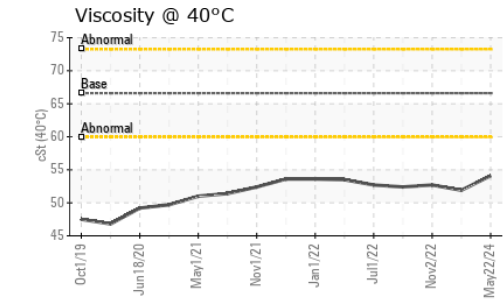
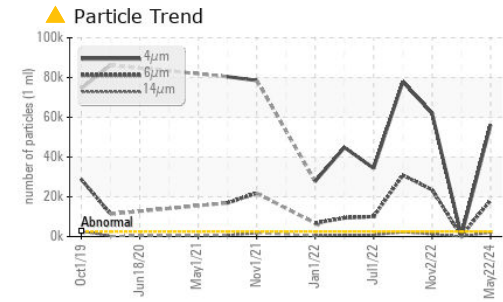
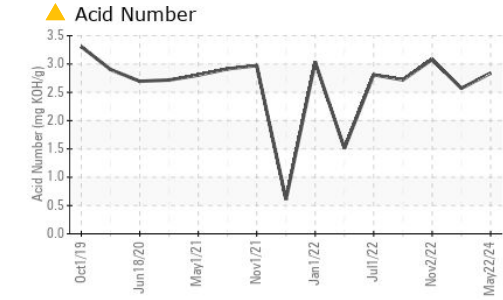
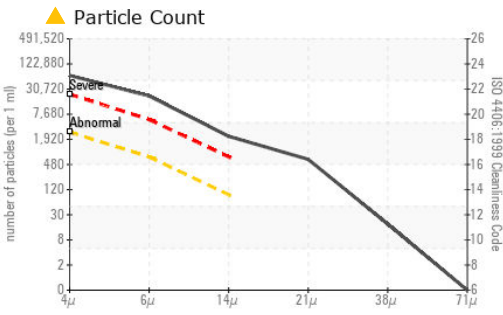
There is a high amount of particulates present in the fluid.

Silicon	ppm	ASTM D5185m	>15	8	7	6
Potassium	ppm	ASTM D5185m	>20	6	2	1
Water		WC Method	>0.2	NEG	NEG	NEG
Particles >4µm		ASTM D7647	>2500	▲ 56117	537	▲ 61959
Particles >6µm		ASTM D7647	>640	▲ 18221	293	▲ 23524
Particles >14µm		ASTM D7647	>80	▲ 1984	50	▲ 1183
Particles >21µm		ASTM D7647	>20	▲ 559	17	▲ 227
Particles >38µm		ASTM D7647	>4	▲ 16	3	▲ 5
Particles >71µm		ASTM D7647	>3	0	0	0
Oil Cleanliness		ISO 4406 (c)	>18/16/13	▲ 23/21/18	16/15/13	▲ 23/22/17
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	>0.2	NEG	0.2%	NEG

FLUID CONDITION

The AN level is above the recommended limit.

Sodium	ppm	ASTM D5185m		2	2	0
Boron	ppm	ASTM D5185m		6	10	14
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		0	0	0
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m		4	2	3
Calcium	ppm	ASTM D5185m		7	17	18
Phosphorus	ppm	ASTM D5185m		330	368	362
Zinc	ppm	ASTM D5185m		27	43	27
Sulfur	ppm	ASTM D5185m		144	82	143
Acid Number (AN)	mg KOH/g	ASTM D8045		▲ 2.84	2.57	▲ 3.08
Visc @ 40°C	cSt	ASTM D445	66.6	54.1	51.9	52.7



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : MW0067987 **Received** : 28 May 2024
Lab Number : 06192758 **Tested** : 30 May 2024
Unique Number : 11049510 **Diagnosed** : 30 May 2024 - Don Baldrige
Test Package : MAR 2 (Additional Tests: PrtCount)

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

Contact: JOHNNY HINES
 johnny.hines@ingrambarga.com
 T: (270)415-4467
 F: (615)695-3697

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)