



Machine Id
PAUL F BROTZGE
Component
Steering
Fluid
CHEVRON RANDO HD 68 (240 GAL)

RECOMMENDATION

No corrective action is recommended at this time. The filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

WEAR

All component wear rates are normal.

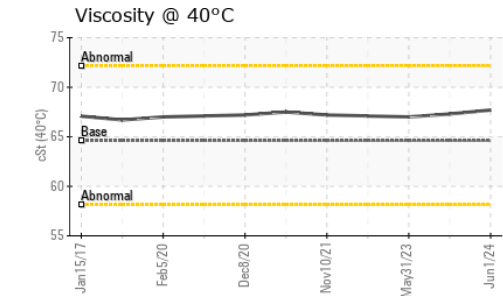
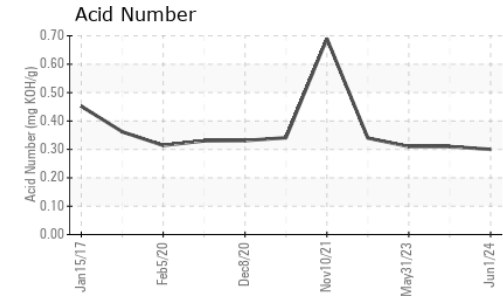
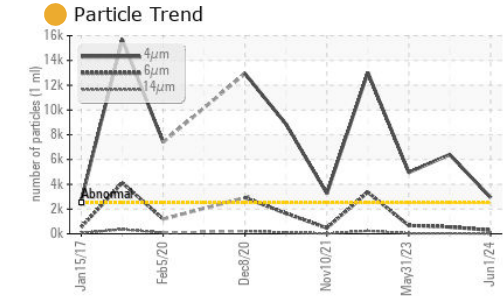
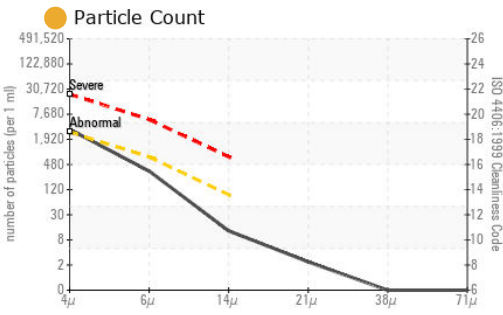
CONTAMINATION

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

FLUID CONDITION

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

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		MW0053164	MW0066426	MW0046356
Sample Date		Client Info		01 Jun 2024	26 Jan 2024	31 May 2023
Machine Age	hrs	Client Info		64029	0	25448
Oil Age	hrs	Client Info		64029	0	0
Filter Age	hrs	Client Info		0	6	0
Oil Changed		Client Info		Not Changed	Not Changed	Not Changed
Filter Changed		Client Info		Changed	Not Changed	Changed
Sample Status				ATTENTION	ABNORMAL	ATTENTION
Iron	ppm	ASTM D5185m	>50	6	4	5
Chromium	ppm	ASTM D5185m	>15	<1	<1	<1
Nickel	ppm	ASTM D5185m	>5	<1	0	0
Titanium	ppm	ASTM D5185m		<1	<1	<1
Silver	ppm	ASTM D5185m		<1	0	0
Aluminum	ppm	ASTM D5185m	>5	3	0	<1
Lead	ppm	ASTM D5185m	>10	2	<1	0
Copper	ppm	ASTM D5185m	>50	18	17	15
Tin	ppm	ASTM D5185m	>5	<1	0	0
Vanadium	ppm	ASTM D5185m		<1	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Silicon	ppm	ASTM D5185m	>15	2	5	<1
Potassium	ppm	ASTM D5185m	>20	1	0	0
Water		WC Method	>0.2	NEG	NEG	NEG
Particles >4µm		ASTM D7647	>2500	2924	6401	4956
Particles >6µm		ASTM D7647	>640	293	551	670
Particles >14µm		ASTM D7647	>80	11	42	31
Particles >21µm		ASTM D7647	>20	2	13	6
Particles >38µm		ASTM D7647	>4	0	1	1
Particles >71µm		ASTM D7647	>3	0	0	0
Oil Cleanliness		ISO 4406 (c)	>18/16/13	19/15/11	20/16/13	19/17/12
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	>0.2	NEG	NEG	NEG
Sodium	ppm	ASTM D5185m		0	1	<1
Boron	ppm	ASTM D5185m		0	0	0
Barium	ppm	ASTM D5185m		1	0	0
Molybdenum	ppm	ASTM D5185m		<1	0	0
Manganese	ppm	ASTM D5185m		<1	0	<1
Magnesium	ppm	ASTM D5185m		<1	0	0
Calcium	ppm	ASTM D5185m		32	26	40
Phosphorus	ppm	ASTM D5185m		332	298	330
Zinc	ppm	ASTM D5185m		403	337	388
Sulfur	ppm	ASTM D5185m		718	634	833
Acid Number (AN)	mg KOH/g	ASTM D8045		0.30	0.31	0.31
Visc @ 40°C	cSt	ASTM D445	64.6	67.7	67.3	67.0



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : MW0053164
Lab Number : 06217259
Unique Number : 11090123
Test Package : MAR 2 (Additional Tests: PrtCount)
Received : 21 Jun 2024
Tested : 25 Jun 2024
Diagnosed : 25 Jun 2024 - Don Baldrige

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)

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