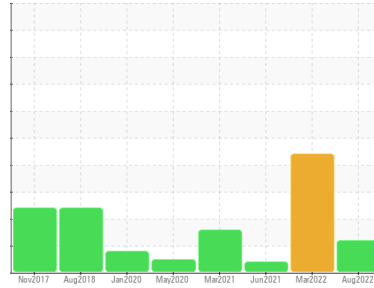




OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Area
Prufrock1
 Machine Id
PR1-8-HAF
 Component
After Hydraulic System
 Fluid
CHEVRON RANDO HD 68 (1500 GAL)

DIAGNOSIS

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 oil.

Fluid Condition

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

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			WC0676927	WC0676945	WC0596675
Sample Date	Client Info			17 Aug 2022	03 Mar 2022	20 Jun 2021
Machine Age	hrs	Client Info		0	0	0
Oil Age	hrs	Client Info		200	0	200
Oil Changed	Client Info			N/A	N/A	N/A
Sample Status				ATTENTION	SEVERE	ABNORMAL

CONTAMINATION		method	limit/base	current	history1	history2
Water	WC Method		>0.05	NEG	NEG	NEG

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>20	<1	0	0
Chromium	ppm	ASTM D5185m	>20	0	0	0
Nickel	ppm	ASTM D5185m	>20	<1	0	0
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m		3	0	1
Aluminum	ppm	ASTM D5185m	>20	<1	<1	0
Lead	ppm	ASTM D5185m	>20	0	<1	<1
Copper	ppm	ASTM D5185m	>20	18	▲ 22	10
Tin	ppm	ASTM D5185m	>20	<1	0	0
Antimony	ppm	ASTM D5185m		---	---	0
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		<1	0	<1

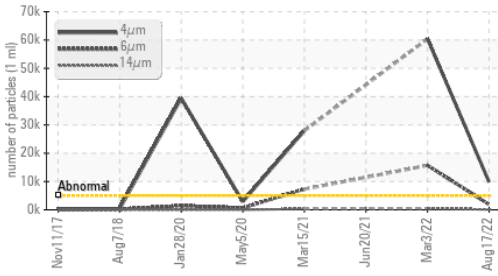
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		4	0	<1
Barium	ppm	ASTM D5185m		<1	0	0
Molybdenum	ppm	ASTM D5185m		0	0	0
Manganese	ppm	ASTM D5185m		0	0	0
Magnesium	ppm	ASTM D5185m		0	0	0
Calcium	ppm	ASTM D5185m		42	47	39
Phosphorus	ppm	ASTM D5185m		333	391	333
Zinc	ppm	ASTM D5185m		409	449	438
Sulfur	ppm	ASTM D5185m		1205	717	885

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>15	<1	2	<1
Sodium	ppm	ASTM D5185m		0	5	1
Potassium	ppm	ASTM D5185m	>20	0	0	0

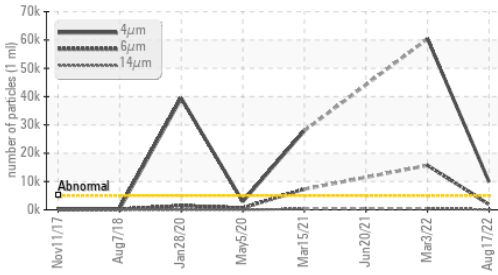
FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>5000	▲ 9860	● 60390	---
Particles >6µm		ASTM D7647	>1300	▲ 1899	● 15695	---
Particles >14µm		ASTM D7647	>160	123	▲ 456	---
Particles >21µm		ASTM D7647	>40	25	▲ 100	---
Particles >38µm		ASTM D7647	>10	1	3	---
Particles >71µm		ASTM D7647	>3	0	0	---
Oil Cleanliness		ISO 4406 (c)	>19/17/14	▲ 20/18/14	● 23/21/16	---

OIL ANALYSIS REPORT

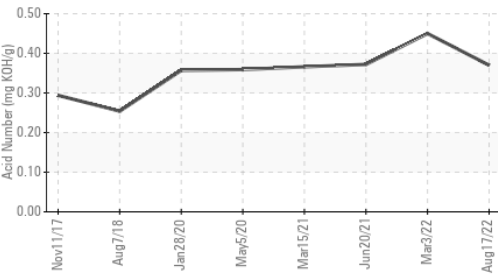
Particle Trend



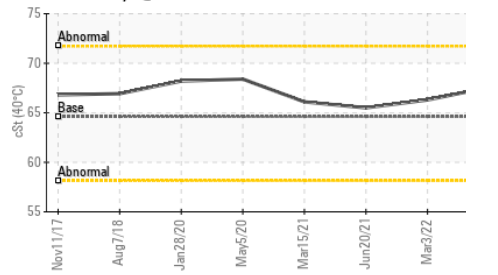
Particle Trend



Acid Number



Viscosity @ 40°C

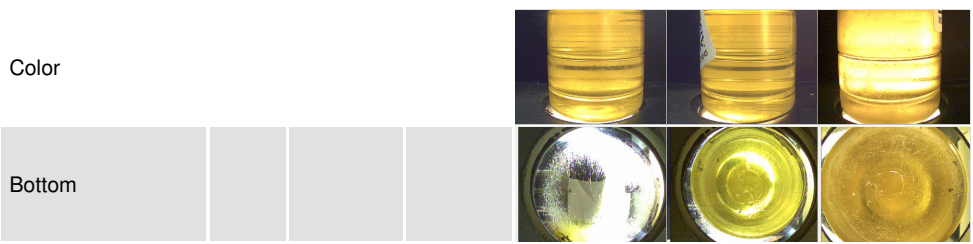


FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		0.37	0.45	0.372

VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	VLITE	VLITE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	LIGHT	VLITE	▲ MODER
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
Free Water	scalar	*Visual		NEG	NEG	NEG

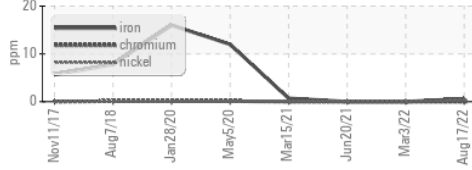
FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	64.6	67.57	66.3	65.5

SAMPLE IMAGES

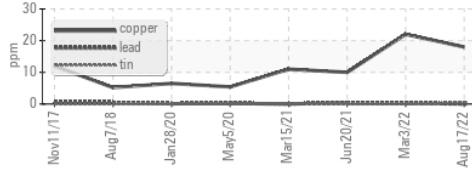


GRAPHS

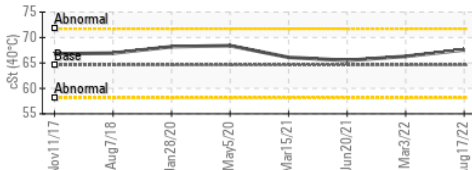
Ferrous Alloys



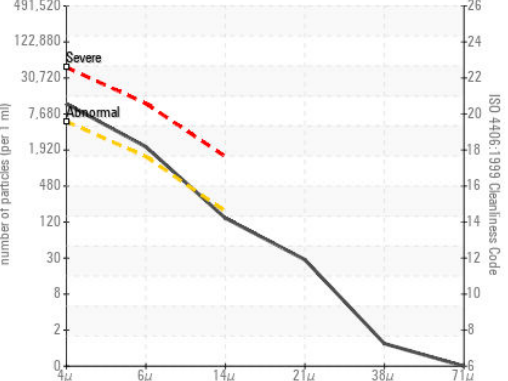
Non-ferrous Metals



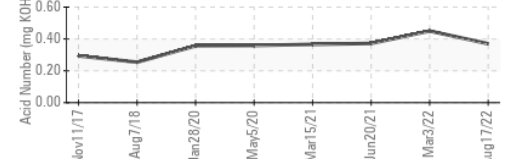
Viscosity @ 40°C



Particle Count



Acid Number



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0676927 **Received** : 18 Aug 2022
Lab Number : 05621115 **Diagnosed** : 18 Aug 2022
Unique Number : 10100622 **Diagnostician** : Jonathan Hester
Test Package : IND 2

The Boring Company
 1 Rocket Road
 Hawthorne, CA
 US 90250
 Contact: Shawn McGraw
 shawn@boringcompany.com
 T: (416)939-4485
 F:

Certificate L2367
 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)