



OIL ANALYSIS REPORT

WEAR	ABNORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL

Machine Id
RASA 60 IN MTBM 60 IN RASA MTBM

Component
2 Gear Motor

Fluid
{not provided} (--- GAL)

RECOMMENDATION

We advise that you check all areas where dirt can enter the system. We recommend an early resample to monitor this condition. Please specify the brand, type, and viscosity of the oil on your next sample.

WEAR

Gear wear is indicated.

CONTAMINATION

Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress. Moderate concentration of visible dirt/debris present in the oil. There is a light concentration of water present in the oil.

FLUID CONDITION

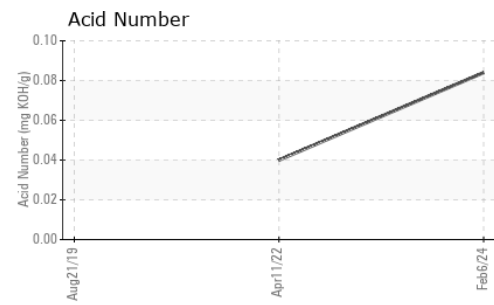
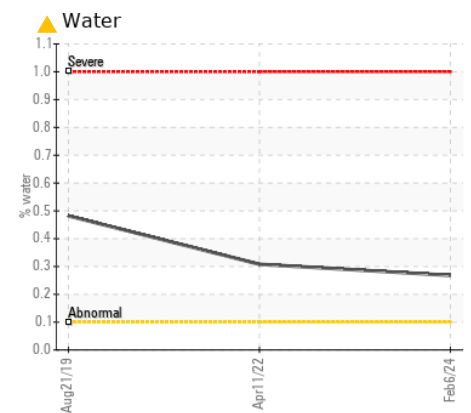
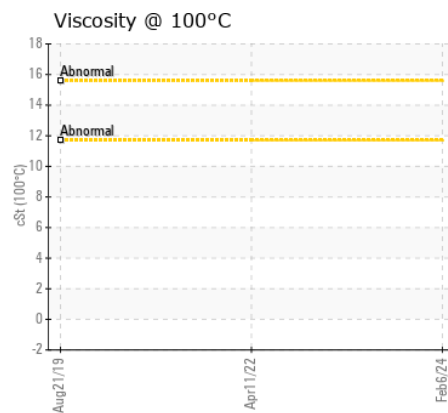
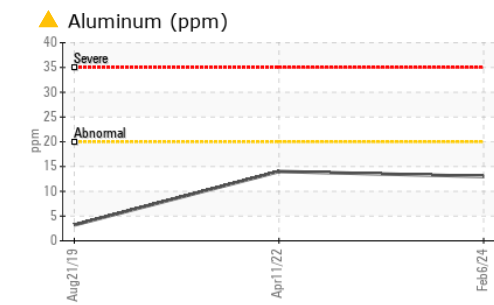
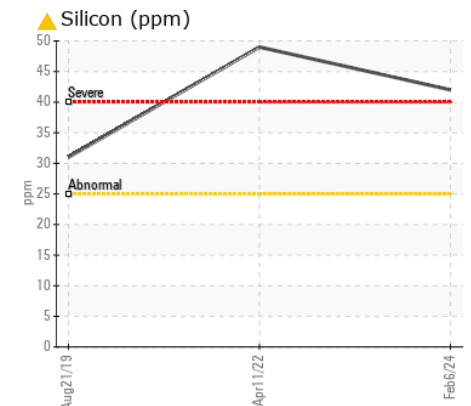
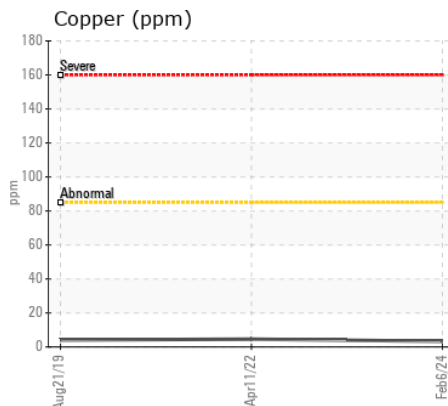
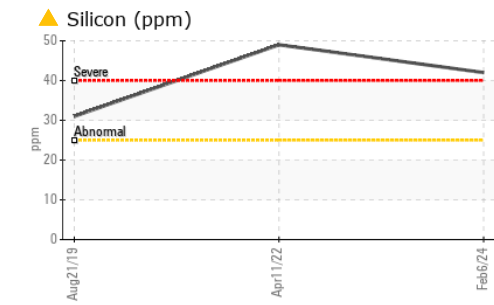
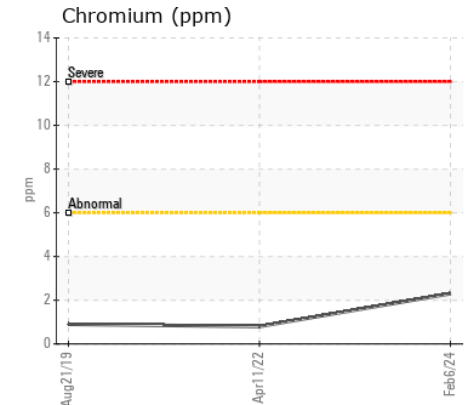
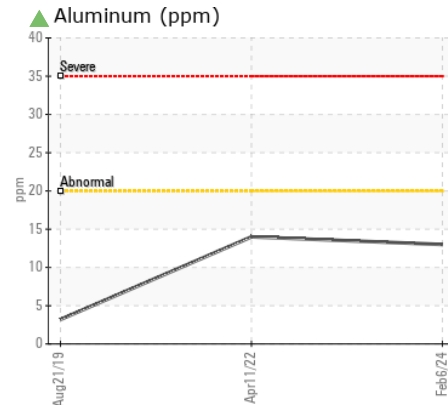
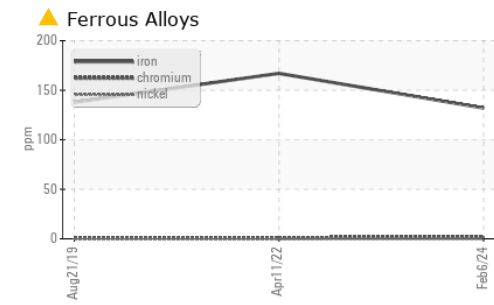
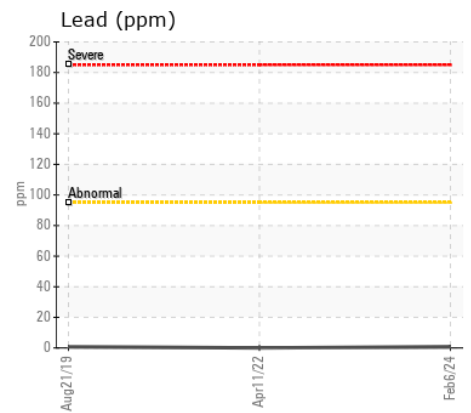
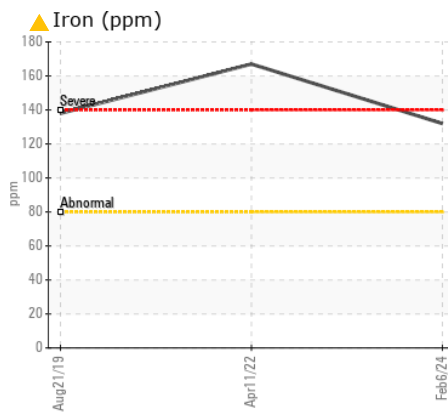
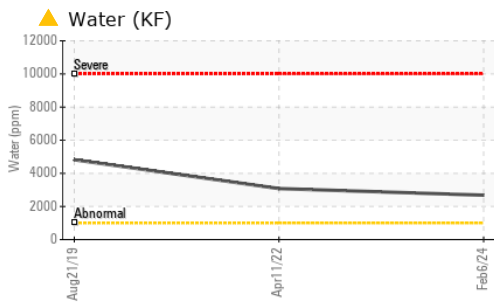
The AN level is acceptable for this fluid.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		DC0021924	DC0018398	DC0000652
Sample Date		Client Info		06 Feb 2024	11 Apr 2022	21 Aug 2019
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	N/A
Sample Status				ABNORMAL	ABNORMAL	ABNORMAL

Iron	ppm	ASTM D5185m	>80	▲ 132	▲ 167	▲ 138
Chromium	ppm	ASTM D5185m	>6	2	<1	<1
Nickel	ppm	ASTM D5185m	>2	0	0	0
Titanium	ppm	ASTM D5185m	>2	<1	3	<1
Silver	ppm	ASTM D5185m	>2	0	0	<1
Aluminum	ppm	ASTM D5185m	>20	▲ 13	▲ 14	3
Lead	ppm	ASTM D5185m	>95	<1	0	<1
Copper	ppm	ASTM D5185m	>85	3	5	4
Tin	ppm	ASTM D5185m	>9	0	0	0
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	LIGHT	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

Silicon	ppm	ASTM D5185m	>25	▲ 42	▲ 49	▲ 31
Potassium	ppm	ASTM D5185m	>20	4	3	0
Fuel		WC Method	>4.0	<1.0	<1.0	<1.0
Water	%	ASTM D6304	>0.1	▲ 0.268	▲ 0.308	▲ 0.482
ppm Water	ppm	ASTM D6304	>1000	▲ 2680	▲ 3080	▲ 4820
Glycol		WC Method		NEG	NEG	NEG
Silt	scalar	*Visual	NONE	▲ MODER	▲ MODER	NONE
Debris	scalar	*Visual	NONE	LIGHT	▲ MODER	▲ MODER
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	▲ HAZY	NORML	▲ MILKY
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.1	0.2%	0.2%	0.2%

Sodium	ppm	ASTM D5185m		1	0	1
Boron	ppm	ASTM D5185m		0	4	3
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		0	<1	<1
Manganese	ppm	ASTM D5185m		2	1	<1
Magnesium	ppm	ASTM D5185m		0	5	4
Calcium	ppm	ASTM D5185m		44	32	114
Phosphorus	ppm	ASTM D5185m		35	136	123
Zinc	ppm	ASTM D5185m		27	40	54
Sulfur	ppm	ASTM D5185m		13224	13273	10706
Acid Number (AN)	mg KOH/g	ASTM D8045		0.084	0.04	---
Visc @ 40°C	cSt	ASTM D445		167	135	139



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : DC0021924 **Received** : 09 Feb 2024
Lab Number : 06084936 **Tested** : 12 Feb 2024
Unique Number : 10872381 **Diagnosed** : 12 Feb 2024 - Don Baldrige
Test Package : MOB 2 (Additional Tests: KF, KV40)

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)

SECA UNDERGROUND
 8228 FISCHER RD, PO BOX 656
 DUNDALK, MD
 US 21222
 Contact: SEAN-PAUL WARNICK
 seanpaul.warnick@seca-tunnel.com
 T: (443)740-1527
 F: