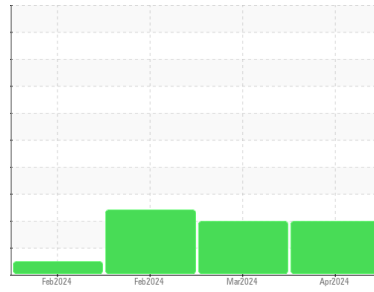


OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Machine Id
SPC-02
 Component
Hydraulic System
 Fluid
SHELL ECOSAFE S3 DU 46 (--- GAL)

DIAGNOSIS

Recommendation

The filter change at the time of sampling has been noted. Resample at the next service interval to monitor. Please specify the component make and model with your next sample.

Wear

All component wear rates are normal.

Contamination

There is a light 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			PCA0118445	PCA0118505	PCA0118522
Sample Date	Client Info			08 Apr 2024	01 Mar 2024	18 Feb 2024
Machine Age	hrs	Client Info		8864	8072	7813
Oil Age	hrs	Client Info		0	0	0
Oil Changed	Client Info			Changed	Not Changd	Not Changd
Sample Status				ATTENTION	ABNORMAL	ABNORMAL

CONTAMINATION		method	limit/base	current	history1	history2
Water	WC Method		>0.1	NEG	NEG	NEG

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>20	0	0	<1
Chromium	ppm	ASTM D5185m	>10	0	0	<1
Nickel	ppm	ASTM D5185m	>10	0	0	<1
Titanium	ppm	ASTM D5185m		0	0	<1
Silver	ppm	ASTM D5185m		0	0	<1
Aluminum	ppm	ASTM D5185m	>10	<1	0	<1
Lead	ppm	ASTM D5185m	>10	<1	0	<1
Copper	ppm	ASTM D5185m	>75	2	<1	2
Tin	ppm	ASTM D5185m	>10	<1	2	1
Vanadium	ppm	ASTM D5185m		0	0	<1
Cadmium	ppm	ASTM D5185m		0	0	<1

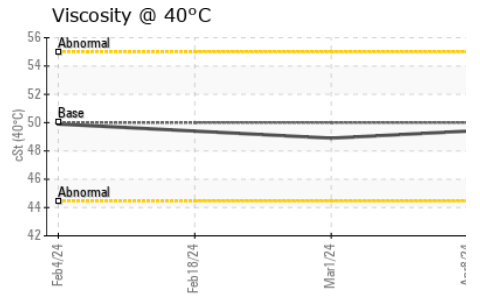
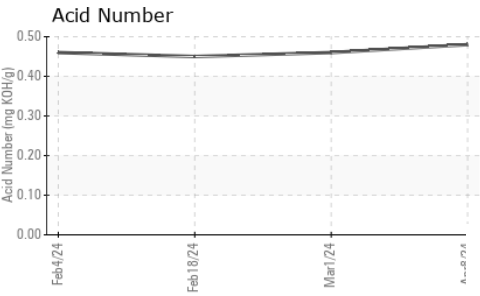
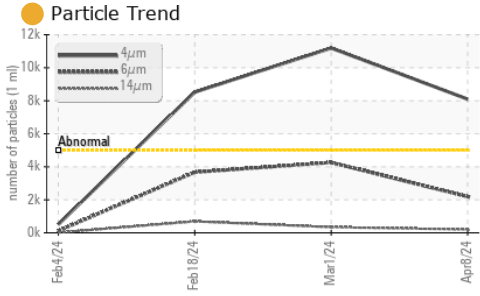
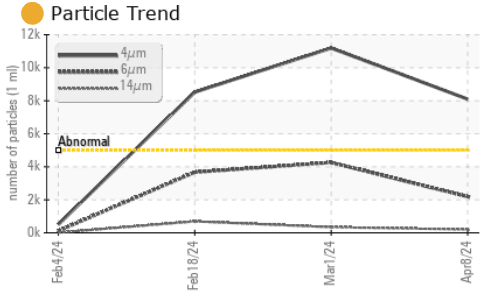
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		0	0	0
Barium	ppm	ASTM D5185m		0	0	5
Molybdenum	ppm	ASTM D5185m		0	0	1
Manganese	ppm	ASTM D5185m		<1	0	<1
Magnesium	ppm	ASTM D5185m		1	0	<1
Calcium	ppm	ASTM D5185m		1	2	6
Phosphorus	ppm	ASTM D5185m		674	742	621
Zinc	ppm	ASTM D5185m		0	2	9
Sulfur	ppm	ASTM D5185m		4073	3755	3718

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>20	<1	0	1
Sodium	ppm	ASTM D5185m		1	0	0
Potassium	ppm	ASTM D5185m	>20	3	0	<1

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>5000	8097	▲ 11194	● 8522
Particles >6µm		ASTM D7647	>1300	2192	▲ 4261	▲ 3668
Particles >14µm		ASTM D7647	>160	196	▲ 342	▲ 693
Particles >21µm		ASTM D7647	>40	58	● 75	▲ 271
Particles >38µm		ASTM D7647	>10	3	2	▲ 28
Particles >71µm		ASTM D7647	>3	0	0	5
Oil Cleanliness		ISO 4406 (c)	>19/17/14	20/18/15	▲ 21/19/16	▲ 20/19/17

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		0.48	0.46	0.45

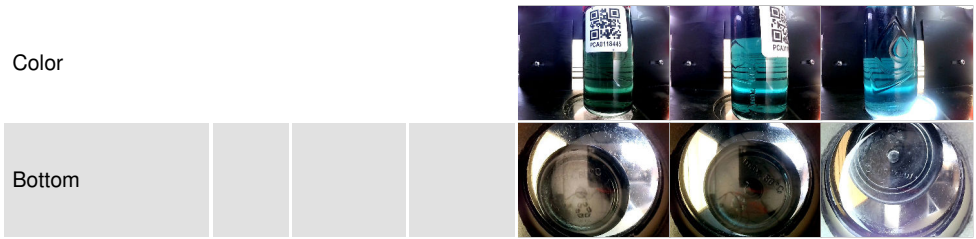
OIL ANALYSIS REPORT



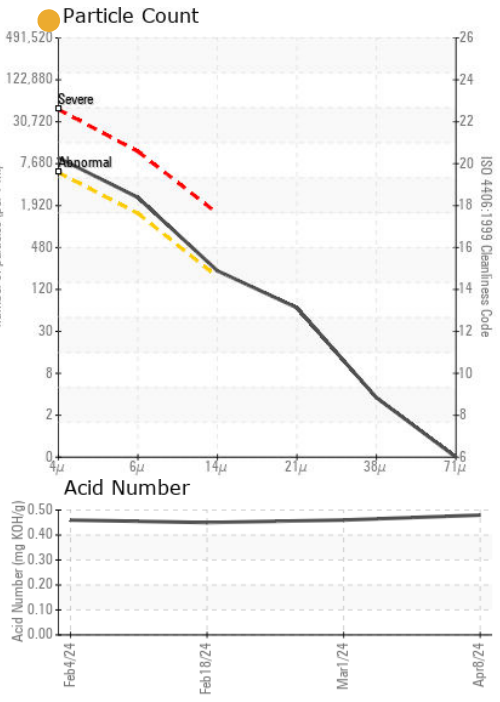
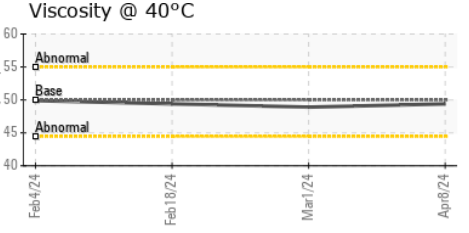
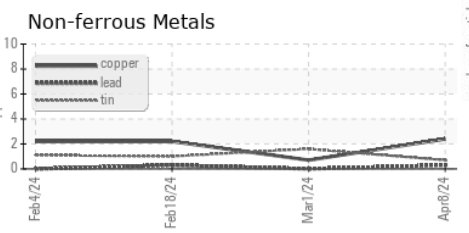
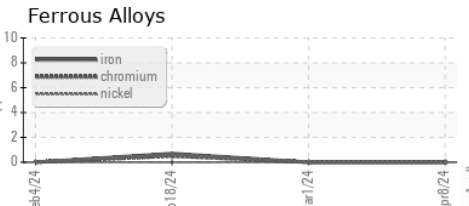
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	LIGHT	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.1	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	50.0	49.4	49.4

SAMPLE IMAGES	method	limit/base	current	history1	history2
---------------	--------	------------	---------	----------	----------



GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0118445
Lab Number : 06153037
Unique Number : 10983115
Test Package : MOB 2

Received : 18 Apr 2024
Tested : 19 Apr 2024
Diagnosed : 19 Apr 2024 - Wes Davis

SCRAP METAL SERVICES (SMS Mill Services LLC)
 1500 COMMERCIAL AVE
 MINGO JUNCTION, OH
 US 43938
 Contact: FRANK NALLY
 fnally@scrapmetalservices.com

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)