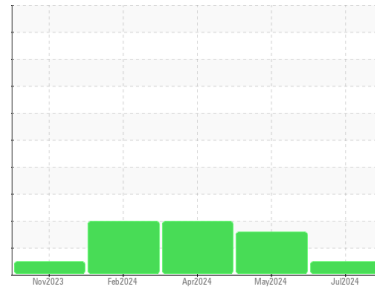




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Area

MINING

Machine Id

ME-56 SHUTTLEWAGON SW-25 52513046A

Component

Hydraulic System

Fluid

CAT HYDO (--- GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.

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		WC0950857	WC0910905	WC0910929
Sample Date	Client Info		15 Jul 2024	28 May 2024	15 Apr 2024
Machine Age	hrs	Client Info	12414	11858	10300
Oil Age	hrs	Client Info	500	2000	150
Oil Changed	Client Info		N/A	Changed	Not Chngd
Sample Status			NORMAL	ATTENTION	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
Chromium	ppm	ASTM D5185m	>10	0	0
Nickel	ppm	ASTM D5185m	>10	0	0
Titanium	ppm	ASTM D5185m		0	0
Silver	ppm	ASTM D5185m		0	0
Aluminum	ppm	ASTM D5185m	>10	0	0
Lead	ppm	ASTM D5185m	>10	0	0
Copper	ppm	ASTM D5185m	>75	<1	<1
Tin	ppm	ASTM D5185m	>10	0	0
Vanadium	ppm	ASTM D5185m		0	0
Cadmium	ppm	ASTM D5185m		0	0

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		0	<1
Barium	ppm	ASTM D5185m		0	0
Molybdenum	ppm	ASTM D5185m		<1	0
Manganese	ppm	ASTM D5185m		0	<1
Magnesium	ppm	ASTM D5185m		11	13
Calcium	ppm	ASTM D5185m		212	207
Phosphorus	ppm	ASTM D5185m	1100	734	733
Zinc	ppm	ASTM D5185m	1210	928	904
Sulfur	ppm	ASTM D5185m		2042	1990

CONTAMINANTS

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

FLUID CLEANLINESS

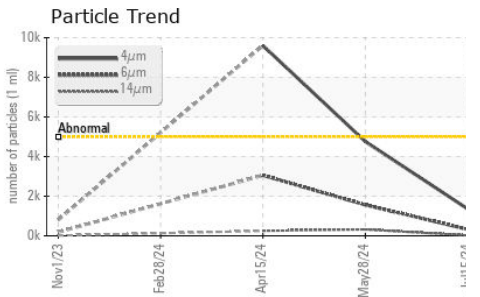
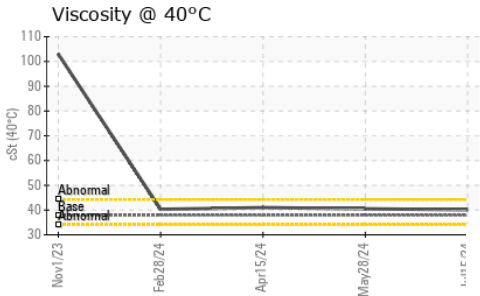
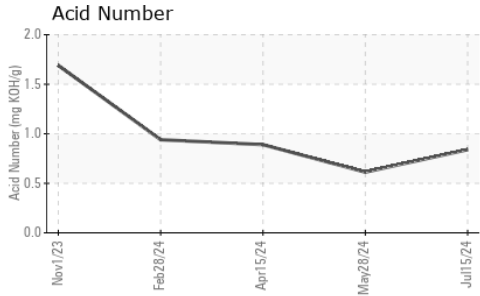
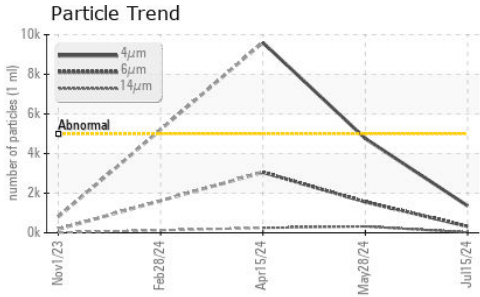
	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>5000	1359	4759	9602
Particles >6µm	ASTM D7647	>1300	325	1559	3054
Particles >14µm	ASTM D7647	>160	22	320	248
Particles >21µm	ASTM D7647	>40	6	108	62
Particles >38µm	ASTM D7647	>10	0	5	2
Particles >71µm	ASTM D7647	>3	0	0	0
Oil Cleanliness	ISO 4406 (c)	>19/17/14	18/16/12	19/18/15	20/19/15

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.84	0.613	0.89



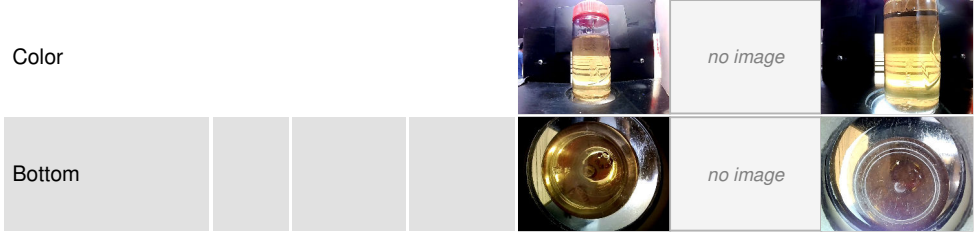
OIL ANALYSIS REPORT



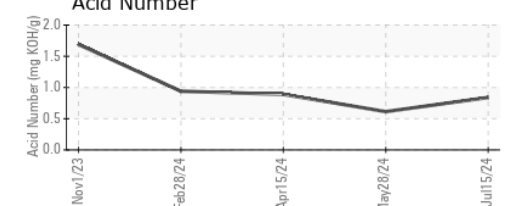
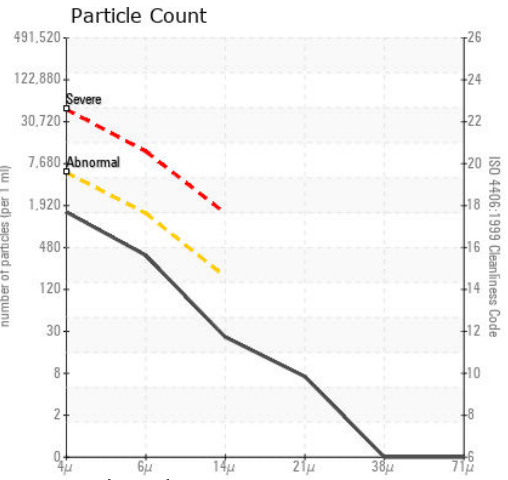
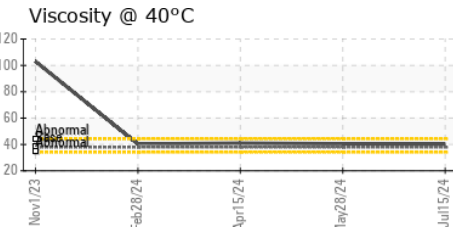
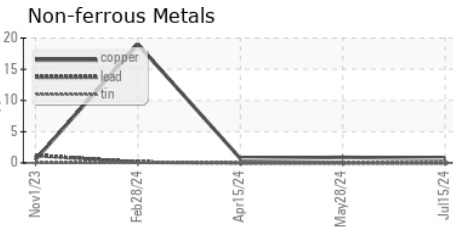
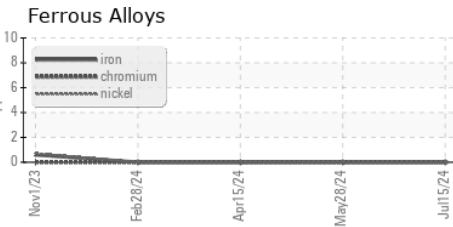
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	LIGHT
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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	37.9	40.1	40.5

SAMPLE IMAGES	method	limit/base	current	history1	history2
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GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0950857 **Received** : 19 Jul 2024
Lab Number : 06241607 **Tested** : 22 Jul 2024
Unique Number : 11130441 **Diagnosed** : 22 Jul 2024 - Wes Davis
Test Package : CONST

COVIA - CAMDEN - 094
 1700 SAND MILL RD
 CAMDEN, TN
 US 38320
 Contact: TRACY KEE
 tracy.kee@coviacorp.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)