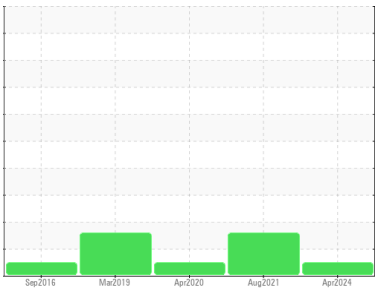
McCLUNG LOGAN EQUIPMENT COMPANY

OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL

Machine Id
VOLVO L180G 19399
Component
Hydraulic System
Fluid
CHEVRON HYDRAULIC OIL AW ISO 46 (40 GAL)

DIAGNOSIS

Recommendation
Resample at the next service interval to monitor.

Wear
All component wear rates are normal.

Contamination
The amount and size of particulates present in the system are acceptable. There is no indication of any contamination 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		**ML0001155**	VCP318151	VCP276642
Sample Date		Client Info		**09 Apr 2024**	20 Aug 2021	10 Apr 2020
Machine Age	hrs	Client Info		**15712**	13690	11177
Oil Age	hrs	Client Info		**4000**	0	0
Oil Changed		Client Info		**Changed**	Not Changd	Changed
Sample Status				**NORMAL**	ABNORMAL	NORMAL

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	>50	**<1**	3	3
Chromium	ppm	ASTM D5185m	>20	**<1**	<1	<1
Nickel	ppm	ASTM D5185m	>10	**<1**	<1	0
Titanium	ppm	ASTM D5185m		**<1**	0	<1
Silver	ppm	ASTM D5185m		**0**	0	0
Aluminum	ppm	ASTM D5185m	>20	**1**	<1	<1
Lead	ppm	ASTM D5185m	>20	**1**	0	<1
Copper	ppm	ASTM D5185m	>150	**<1**	1	1
Tin	ppm	ASTM D5185m	>20	**1**	0	0
Antimony	ppm	ASTM D5185m		**---**	1	0
Vanadium	ppm	ASTM D5185m		**<1**	0	0
Cadmium	ppm	ASTM D5185m		**<1**	<1	0

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		**0**	6	78
Barium	ppm	ASTM D5185m		**0**	0	0
Molybdenum	ppm	ASTM D5185m		**1**	<1	2
Manganese	ppm	ASTM D5185m		**<1**	0	0
Magnesium	ppm	ASTM D5185m		**6**	6	11
Calcium	ppm	ASTM D5185m		**69**	166	187
Phosphorus	ppm	ASTM D5185m		**382**	351	344
Zinc	ppm	ASTM D5185m		**435**	394	437
Sulfur	ppm	ASTM D5185m		**2522**	3370	2056

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>20	**<1**	2	3
Sodium	ppm	ASTM D5185m		**0**	2	<1
Potassium	ppm	ASTM D5185m	>20	**<1**	3	<1

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647		**1831**	6285	1281
Particles >6µm		ASTM D7647	>2500	**299**	▲ 3004	293
Particles >14µm		ASTM D7647	>80	**13**	▲ 969	22
Particles >21µm		ASTM D7647	>20	**6**	▲ 422	6
Particles >38µm		ASTM D7647	>4	**0**	▲ 16	0
Particles >71µm		ASTM D7647	>3	**0**	0	0
Oil Cleanliness		ISO 4406 (c)	>--/18/13	**18/15/11**	▲ 20/19/17	17/15/12

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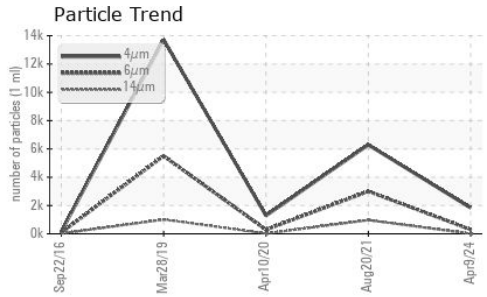
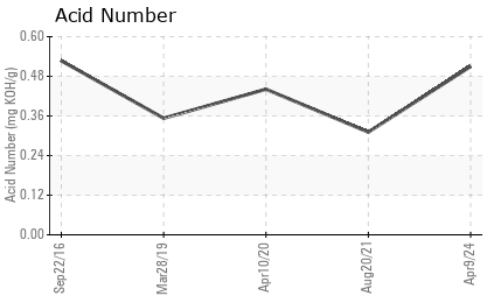
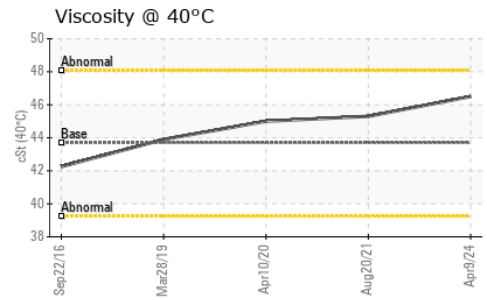
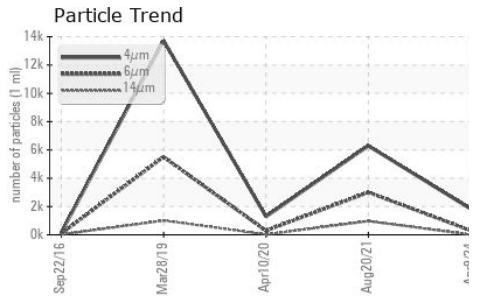






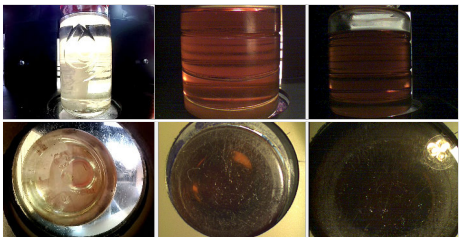


FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		**0.51**	0.311	0.441

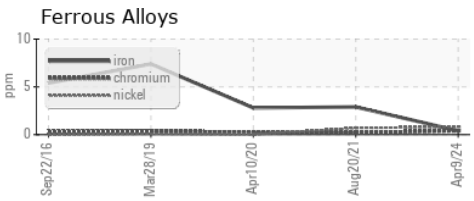
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Precipitate	scalar	*Visual	NONE	**NONE**	NONE	NONE
Silt	scalar	*Visual	NONE	**NONE**	NONE	NONE
Debris	scalar	*Visual	NONE	**NONE**	LIGHT	NONE
Sand/Dirt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

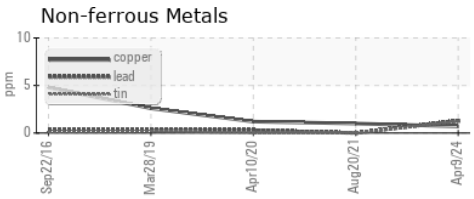
FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	43.7	**46.5**	45.3	45.0

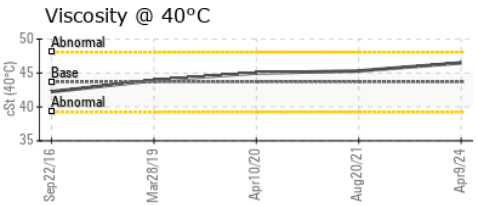
SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

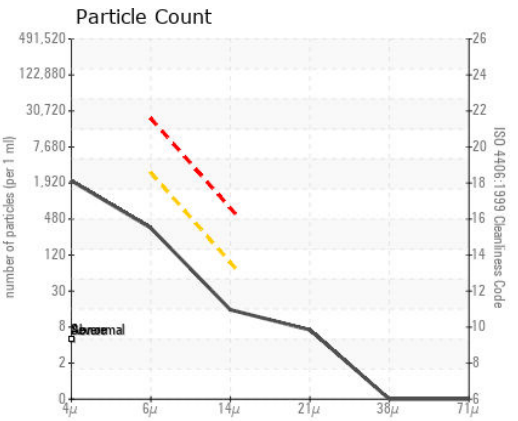


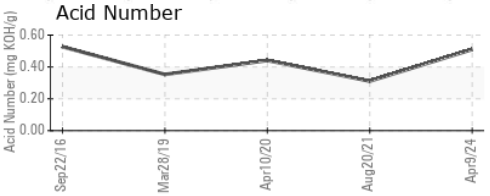
GRAPHS











ANAB ACCREDITED ISO/IEC 17025 TESTING LABORATORY
Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : ML0001155
Lab Number : 06147260
Unique Number : 10977338
Test Package : CONST

Received : 12 Apr 2024
Tested : 15 Apr 2024
Diagnosed : 16 Apr 2024 - Don Baldridge

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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