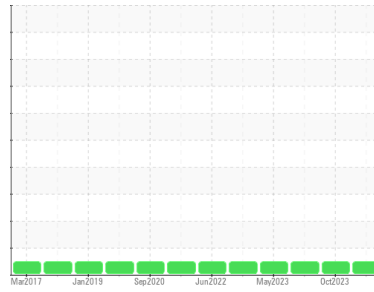




Area
[21404 READY MIX]
 Machine Id
VOLVO L90H 623326
 Component
Diesel Engine
 Fluid
VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3 (--- GAL)

Sample Rating Trend



NORMAL

DIAGNOSIS

Recommendation
 Resample at the next service interval to monitor.

Wear
 All component wear rates are normal.

Contamination
 There is no indication of any contamination in the oil.

Fluid Condition
 The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			ASC0006427	VCE254224	VCP422292
Sample Date	Client Info			05 Apr 2024	27 Oct 2023	24 Jul 2023
Machine Age	hrs Client Info			14372	13257	13120
Oil Age	hrs Client Info			0	0	0
Oil Changed	Client Info			Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL

CONTAMINATION		method	limit/base	current	history1	history2
Fuel	WC Method	>6.0		<1.0	<1.0	<1.0
Water	WC Method	>0.1		NEG	NEG	NEG
Glycol	WC Method			NEG	NEG	NEG

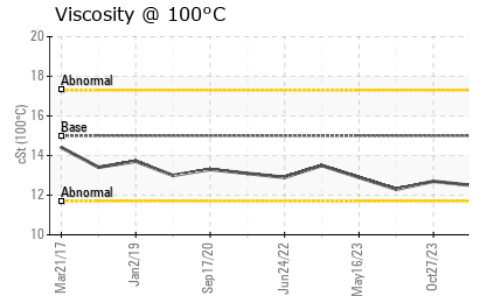
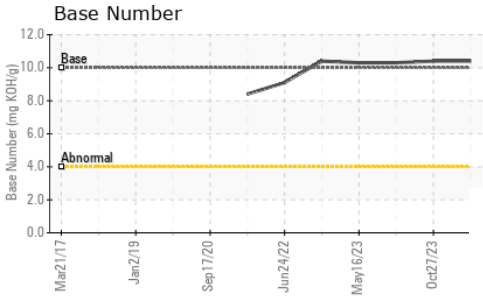
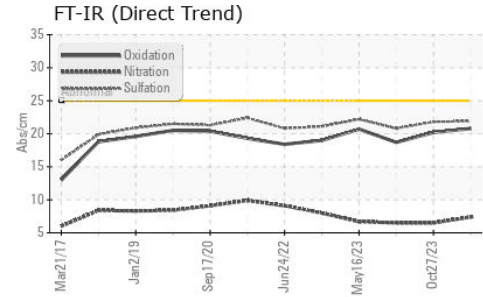
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm ASTM D5185m	>100		8	5	4
Chromium	ppm ASTM D5185m	>10		1	<1	<1
Nickel	ppm ASTM D5185m	>10		<1	<1	0
Titanium	ppm ASTM D5185m			<1	<1	0
Silver	ppm ASTM D5185m	>2		0	0	0
Aluminum	ppm ASTM D5185m	>10		4	3	2
Lead	ppm ASTM D5185m	>20		<1	0	0
Copper	ppm ASTM D5185m	>15		1	<1	<1
Tin	ppm ASTM D5185m	>10		1	<1	0
Vanadium	ppm ASTM D5185m			<1	<1	0
Cadmium	ppm ASTM D5185m			<1	<1	0

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm ASTM D5185m	2.5		57	42	48
Barium	ppm ASTM D5185m	0.0		0	<1	0
Molybdenum	ppm ASTM D5185m	0.7		43	43	43
Manganese	ppm ASTM D5185m	0.0		<1	0	<1
Magnesium	ppm ASTM D5185m	256		537	514	546
Calcium	ppm ASTM D5185m	2057		1802	1603	1675
Phosphorus	ppm ASTM D5185m	935		979	964	959
Zinc	ppm ASTM D5185m	1223		1157	1165	1157
Sulfur	ppm ASTM D5185m	4079		3189	3334	3487

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m	>20		15	11	12
Sodium	ppm ASTM D5185m			1	4	2
Potassium	ppm ASTM D5185m	>20		1	2	0

INFRA-RED		method	limit/base	current	history1	history2
Soot %	% *ASTM D7844	>3		0.2	0.2	0.2
Nitration	Abs/cm *ASTM D7624	>20		7.4	6.5	6.5
Sulfation	Abs/.1mm *ASTM D7415	>30		21.9	21.8	20.8

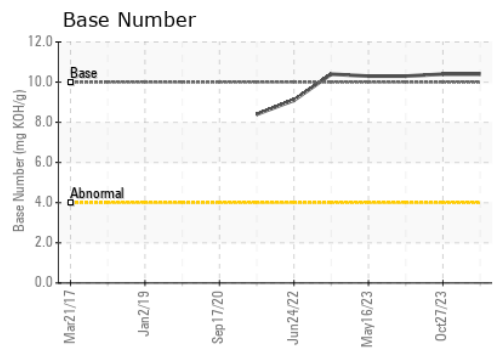
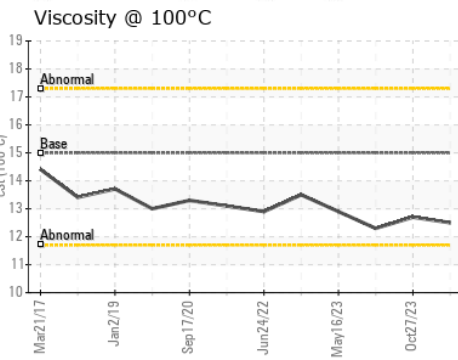
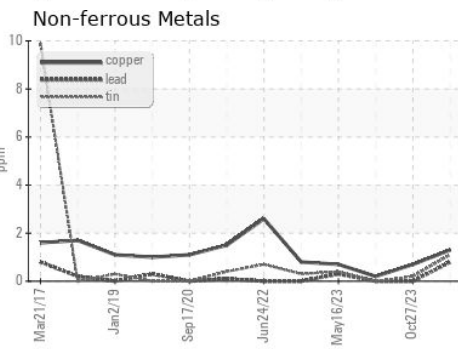
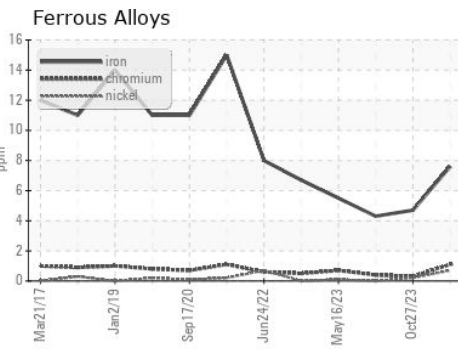
FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm *ASTM D7414	>25		20.8	20.2	18.7
Base Number (BN)	mg KOH/g ASTM D2896	10		10.4	10.4	10.3



PARAMETER	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	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 @ 100°C	cSt	ASTM D445	15.0	12.5	12.7

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : ASC0006427
Lab Number : 06144077
Unique Number : 10968885
Test Package : CONST (Additional Tests: TBN)
Received : 10 Apr 2024
Tested : 11 Apr 2024
Diagnosed : 11 Apr 2024 - Wes Davis

520 - ASCENDUM MACHINERY INC - KNOXVILLE
 5730 RUTLEDGE PIKE
 KNOXVILLE, TN
 US 37924
 Contact: BRANDON GRANT
 brandon.grant@ascendummachinery.com
 T: (865)525-1845
 F: (865)525-0251

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)