

## Machine Id VOLVO L120H 633400 Component Hydraulic System Fluid VALVOLINE ALLFLEET 10W (--- GAL)

Recommendation   Test   UOM   Method   LimitAn   Current   History1   VCP442187
Besample at the next service interval to monitor.     Sample Number Sample Date     Client Info     VCP442187        Sample Date     Client Info     20 Feb 2024     19 Oct 2023        Machine Age     hrs     Client Info     0     1010        Oil Age     hrs     Client Info     0     1010        Oil Changed     Client Info     0     0      Oil Age     hrs     Client Info     0     0        Oil Changed     Client Info     Changed     Changed      All Changed      All Changed      ABNORMAL      ABNORMAL
Resample at the next service interval to monitor.     Sample Date     Client Info     20 Feb 2024     19 Oct 2023        Machine Age     hrs     Client Info     0     0        Oil Age     hrs     Client Info     0     0        Filter Age     Nor     Client Info     0     0        Oil Changed     Client Info     0     0        Oil Changed     Client Info     0     0        All component wear rates are normal.     Iron     pm     ASTM 05185m     >20     2     <1        Nickel     ppm     ASTM 05185m     >10     <1     0        Silver     ppm     ASTM 05185m     >20     2     <1     1        All uminum     ppm     ASTM 05185m     >20     1     1        Silver     ppm     ASTM 05185m     >20     1     1        Copper     pm     ASTM 05185m     >20     1     1 </th
Machine Age     hrs     Client Info     2033     1010        Oil Age     hrs     Client Info     0     1010        Filter Age     hrs     Client Info     0     0        Filter Age     hrs     Client Info     Changed     Not Changed     Not Changed     Not Changed        All component wear rates are normal.     Iron     pm     ASTM D5185m     >50     5     4        Nickel     ppm     ASTM D5185m     >20     2     <1        Nickel     ppm     ASTM D5185m     >0     5     4        Silver     ppm     ASTM D5185m     >20     2     <1     0        All component wear rates are normal.     Filter Age     ppm     ASTM D5185m     >20     2     <1     1     0        Silver     ppm     ASTM D5185m     >20     1     1      -     -     -     -     -     -     -     - </th
Oil Age     hrs     Client Info     0     1010        Filter Age     hrs     Client Info     0     0        Oil Changed     Client Info     Changed     Not Changed     Changed     Changed     Changed     Changed     Changed     Changed     Changed     Changed        WEAR     Iron     ppm     ASTM D5185m     >50     5     4        All component wear rates are normal.     Iron     ppm     ASTM D5185m     >20     2     <1     0        Nickel     ppm     ASTM D5185m     >20     2     <1     0        Nickel     ppm     ASTM D5185m     >20     2     <1     0        Silver     ppm     ASTM D5185m     >20     1     1     0        Lead     ppm     ASTM D5185m     >20     1     1        Visual     NONE     NONE     NONE     NONE     NONE        Visu
Filter Âge     hrs     Client Info     0     0
Oil ChangedClient InfoChanged Changed Sample StatusChanged Changed 
Filter Changed Sample Status     Client Info     Changed NORMAL
Sample Status     NORMAL     ABNORMAL        WEAR     Iron     ppm     ASTM D5185m     >50     5     4        All component wear rates are normal.     Chromium     ppm     ASTM D5185m     >20     2     <1        Nickel     ppm     ASTM D5185m     >10     <1     0        Nickel     ppm     ASTM D5185m     <1     <1     0        All component wear rates are normal.     ritanium     ppm     ASTM D5185m     >20     2     <1     0        Nickel     ppm     ASTM D5185m     >20     1     1
WEAR     Iron     ppm     ASTM D5185m     >50     5     4     -       All component wear rates are normal.     Promium     ppm     ASTM D5185m     >20     2     <1     -       Nickel     ppm     ASTM D5185m     >10     <1     0     -       Titanium     ppm     ASTM D5185m     <20     <1     <1     0     -       Aluminum     ppm     ASTM D5185m     >20     <1     1     -     -       Lead     ppm     ASTM D5185m     >20     <1     1     -     -       Copper     ppm     ASTM D5185m     >20     <1     <1     -     -       Vanadium     ppm     ASTM D5185m     >20     <1     <1     -     -       Vanadium     ppm     ASTM D5185m     >20     <1     <1     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -
All component wear rates are normal.   Chromium   ppm   ASTM D5185m   >20   2   <1   -     Nickel   ppm   ASTM D5185m   >10   <1   0   -     Titanium   ppm   ASTM D5185m   <1   0   -     Silver   ppm   ASTM D5185m   <1   0   -     Aluminum   ppm   ASTM D5185m   <20   1   1   -     Lead   ppm   ASTM D5185m   >20   1   1   -     Copper   ppm   ASTM D5185m   >20   1   1   -     Vanadium   ppm   ASTM D5185m   >20   2   1   -     Vellow Metal   scalar   *Visual   NONE   NONE<
All component wear rates are normal.   Nickel   ppm   ASTM D5185m   >10   <1   0   -     Titanium   ppm   ASTM D5185m   <   <1   0   -     Silver   ppm   ASTM D5185m   >20   <1   0   -     Aluminum   ppm   ASTM D5185m   >20   <1   1   0   -     Lead   ppm   ASTM D5185m   >20   <1   1   1   -     Lead   ppm   ASTM D5185m   >20   2   1   1   -     Lead   ppm   ASTM D5185m   >20   2   1   -   -     Lead   ppm   ASTM D5185m   >20   2   1   -   -     Vanadium   ppm   ASTM D5185m   >20   2   1   -   -     Vanadium   ppm   ASTM D5185m   >20   2   1   -   -     Vanadium   ppm   ASTM D5185m   >20   2   1   -   -     Velow Metal   scalar   'Visual   NONE   NO
Titanium   ppm   ASTM D5185m   <1   <1   <1   <1   <1   <1   <1   <1   <1   <1   <1   <1   <1   <1   <1   <1   <1   <1   <1   <1   <1   <1   <1   <1   <1   <1   <1   <1   <1   <1   <1   <1   <1   <1   <1   <1   <1   <1   <1   <1   <1   <1   <1   <1   <1   <1   <1   <1   <1   <1   <1   <1   <1   <1   <1   <1   <1   <1   <1   <1   <1   <1   <1   <1   <1   <1   <1   <1   <1   <1   <1   <1   <1   <1   <1   <1   <1   <1   <1   <1   <1   <1   <1   <1   <1   <1   <1   <1   <1   <1   <1   <1   <1   <1   <1   <1   <1   <1   <1   <1   <1   <1   <1   <1   <1   1   <1   1   1<
Silver   ppm   ASTM D5185m   <1   0   -     Aluminum   ppm   ASTM D5185m   >20   <1   1   -     Lead   ppm   ASTM D5185m   >20   1   1   -     Copper   ppm   ASTM D5185m   >20   2   1   -   -     Copper   ppm   ASTM D5185m   >20   2   1   -   -     Tin   ppm   ASTM D5185m   >20   <1   <1   -   -     Vanadium   ppm   ASTM D5185m   >20   <1   <1   -   -     Vanadium   ppm   ASTM D5185m   >20   <1   <1   -   -     Vanadium   ppm   ASTM D5185m   >20   <1   <1   -   -     Vanadium   ppm   ASTM D5185m   >20   <1   <1   -   -     Valor   wdter   Visual   NONE   NONE   NONE   -   -     Potassium   ppm   ASTM D5185m   >20   2   1   -  V
Aluminum   pm   ASTM D5185m   >20   <1   1   -     Lead   ppm   ASTM D5185m   >20   1   1   -     Copper   ppm   ASTM D5185m   >20   2   1   -     Tin   ppm   ASTM D5185m   >20   21   <1   -     Vanadium   ppm   ASTM D5185m   >20   <1   <1   -     Vellow Metal   scalar   *Visual   NONE   NONE   NONE   -     Vellow Metal   scalar   *Visual   NONE   NONE   -   -     Potassium   ppm   ASTM D5185m   >20   <
Lead   ppm   ASTM D5185m   >20   1   1   1     Lead   ppm   ASTM D5185m   >20   2   1   1     Copper   ppm   ASTM D5185m   >20   2   1   1     Tin   ppm   ASTM D5185m   >20   2   1   -     Vanadium   ppm   ASTM D5185m   >20   <1   <1   -     Value   scalar   *Visual   NONE   NONE   NONE   -     Vellow Metal   scalar   *Visual   NONE   NONE   NONE   -     The amount and size of particulates present in the system are acceptable. There is no indication of any contamination in the oil.   Silicon   ppm   ASTM D5185m   >20   2   1   -     Particles >4µm   ASTM D5185m   >20   2   11841   -
Copper     ppm     ASTM D5185m     >20     2     1     -       Tin     ppm     ASTM D5185m     >20     <1     <1     -       Vanadium     ppm     ASTM D5185m     >20     <1     <1     -       Vanadium     ppm     ASTM D5185m     0     0     0     -       White Metal     scalar     *Visual     NONE     NONE     NONE     NONE     -       Yellow Metal     scalar     *Visual     NONE     NONE     NONE     -     -       The amount and size of particulates present in the system are acceptable. There is no indication of any contamination in the oil.     Silicon     ppm     ASTM D5185m     >20     2     1     -       Particles >4µm     ASTM D7647     >5000     2572     11841     -       Particles >6µm     ASTM D7647     >100     101     192     -       Particles >21µm     ASTM D7647     >10     3     2     -
Tin   ppm   ASTM D5185m   >20   <1   <1   -1     Vanadium   ppm   ASTM D5185m   0   0   0   -1     White Metal   scalar   *Visual   NONE   NONE   NONE   NONE   NONE     Vellow Metal   scalar   *Visual   NONE   NONE   NONE   NONE   NONE   -1     The amount and size of particulates present in the system are acceptable. There is no indication of any contamination in the oil.   Silicon   ppm   ASTM D5185m   >20   2   1   -1     Particles >4µm   Q   ASTM D7647   >5000   2572   A 11841   -1     Particles >6µm   ASTM D7647   >100   101   192   -1     Particles >21µm   ASTM D7647   >40   37   48   -1     Particles >38µm   ASTM D7647   >10   3   2   -1
VanadiumpmASTM D5185m000White Metalscalar*VisualNONENONENONENONEVellow Metalscalar*VisualNONENONENONENONENONEThe amount and size of particulates present in the system are acceptable. There is no indication of any contamination in the oil.SiliconppmASTM D5185m>2021-WaterWC Method>0.2NEGNEGParticles >4µmASTM D7647>5000257211841-Particles >6µmASTM D7647>100101192-Particles >21µmASTM D7647>403748-Particles >38µmASTM D7647>1032-
White Metal Yellow Metalscalar*VisualNONENONENONENONENONECONTAMINATIONSiliconppmASTM D5185m>2032-The amount and size of particulates present in the system are acceptable. There is no indication of any contamination in the oil.SiliconppmASTM D5185m>2021-Patricles >4µmImage: SiliconppmASTM D7647>50002572A11841-Patricles >4µmImage: SiliconSTM D7647>100101A192-Patricles >21µmASTM D7647>403748-Patricles >38µmImage: SiliconASTM D7647>1032-
Yellow Metalscalar*VisualNONENONENONECONTAMINATIONSiliconppmASTM D5185m>2032The amount and size of particulates present in the system are acceptable. There is no indication of any contamination in the oil.SiliconppmASTM D5185m>2021WaterWC Method>0.2NEGNEGParticles >4µmASTM D7647>5000257211841Particles >6µmASTM D7647>1007122849Particles >14µmASTM D7647>403748Particles >38µmASTM D7647>1032
Silicon   ppm   ASTM D5185m   >20   3   2   -     The amount and size of particulates present in the system are acceptable. There is no indication of any contamination in the oil.   Silicon   ppm   ASTM D5185m   >20   2   1   -     Water   WC Method   >0.2   NEG   NEG   -   -     Particles >4µm   ASTM D7647   >5000   2572   ▲ 11841   -     Particles >6µm   ASTM D7647   >100   712   ▲ 2849   -     Particles >14µm   ASTM D7647   >160   101   ▲ 192   -     Particles >21µm   ASTM D7647   >40   37   48   -     Particles >38µm   ASTM D7647   >10   3   2   -
Potassium   ppm   ASTM D5185m   >20   2   1      The amount and size of particulates present in the system are acceptable. There is no indication of any contamination in the oil.   Water   WC Method   >0.2   NEG   NEG      Particles >4µm   Image: Solution of any contamination in the oil.   Particles >4µm   ASTM D7647   >5000   2572   Image: 11841      Particles >6µm   ASTM D7647   >100   T12   2849      Particles >14µm   ASTM D7647   >160   101   192      Particles >21µm   ASTM D7647   >40   37   48      Particles >38µm   ASTM D7647   >10   3   2
Potassium   ppm   ASTM D5185m   >20   2   1      The amount and size of particulates present in the system are acceptable. There is no indication of any contamination in the oil.   Water   WC Method   >0.2   NEG   NEG      Particles >4µm   Image: Solution of any contamination in the oil.   Particles >4µm   ASTM D7647   >5000   2572   Image: 11841      Particles >6µm   ASTM D7647   >100   T12   2849      Particles >14µm   ASTM D7647   >160   101   192      Particles >21µm   ASTM D7647   >40   37   48      Particles >38µm   ASTM D7647   >10   3   2
The amount and size of particulates present in the system are acceptable. There is no indication of any contamination in the oil.   Water   WC Method   >0.2   NEG   NEG      Particles >4µm   ASTM D7647   >5000   2572   11841      Particles >6µm   ASTM D7647   >1300   712   2849      Particles >14µm   ASTM D7647   >160   101   192      Particles >21µm   ASTM D7647   >40   37   48      Particles >38µm   ASTM D7647   >10   3   2
acceptable. There is no indication of any contamination in the oil. Particles >4µm ASTM D7647 >5000 2572 ▲ 11841 - Particles >6µm ASTM D7647 >1300 712 ▲ 2849 - Particles >14µm ASTM D7647 >160 101 ▲ 192 - Particles >21µm ASTM D7647 >40 37 48 - Particles >38µm ASTM D7647 >10 3 22 -
Particles >6μm   ASTM D7647   >1300   712   ▲ 2849   -     Particles >14μm   ASTM D7647   >160   101   ▲ 192   -     Particles >21μm   ASTM D7647   >40   37   48   -     Particles >38μm   ASTM D7647   >10   3   2   -
Particles >14μm   ASTM D7647   >160   101   ▲ 192   →     Particles >21μm   ASTM D7647   >40   37   48   →     Particles >38μm   ASTM D7647   >10   3   2   →
Particles >21μm   ASTM D7647   >40   37   48   -     Particles >38μm   ASTM D7647   >10   3   2   -
Particles >38μm     ASTM D7647     >10     3     2
Particles >71μm ASTM D7647 >3 0 0
Oil Cleanliness ISO 4406 (c) >19/17/14 ▲ 21/19/15
Silt scalar *Visual NONE NONE -
Debris scalar *Visual NONE LIGHT NONE
Sand/Dirt scalar *Visual NONE NONE -
Appearance scalar *Visual NORML NORML NORML -
Odor scalar *Visual NORML NORML NORML -
Emulsified Water scalar *Visual >0.2 NEG NEG
FLUID CONDITION Sodium ppm ASTM D5185m 0 0 -
The AN level is acceptable for this fluid. The condition of the oil is
cuitable for further sonice
Molybdenum ppm ASTM D5185m 14 1
Manganese ppm ASTM D5185m <1 0
Manganese     ppm     ASTM D5185m     <1
Manganese   ppm   ASTM D5185m   <1
Manganese     ppm     ASTM D5185m     <1

Sulfur

ppm ASTM D5185m

Acid Number (AN) mg KOH/g ASTM D8045

Visc @ 40°C cSt ASTM D445 34.57

2196

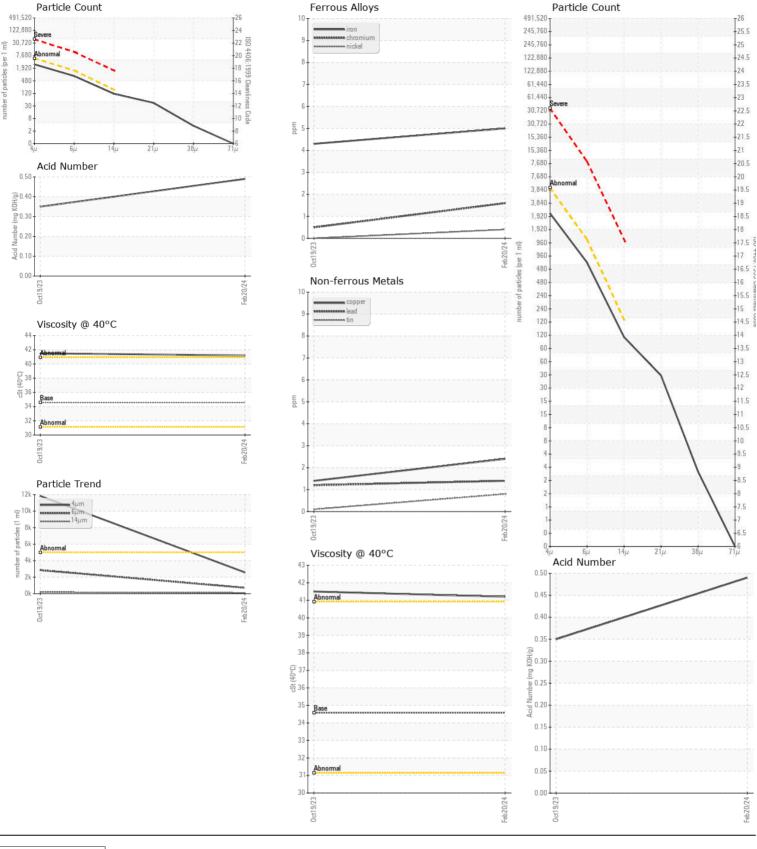
0.35

41.5 ----

2256

0.49

41.2



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513 **CITY CARTING** Sample No. : VCP437220 Received 221 OLD GATE LN : 23 Feb 2024 Lab Number : 06098297 MILFORD, CT Tested : 26 Feb 2024 Unique Number : 10896527 : 26 Feb 2024 - Don Baldridge US 06460 Diagnosed Test Package : MOB 2 Contact: TAVINS BANKS Certificate L2367 To discuss this sample report, contact Customer Service at 1-800-237-1369. tavins@citycart.net \* - Denotes test methods that are outside of the ISO 17025 scope of accreditation. T: (203)223-3885 Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012) F:

хř.

Contact/Location: TAVINS BANKS - CITMILCON