

#### Machine Id **E-ONE L-13** Component **Hydraulic System** Fluid **AW HYDRAULIC OIL ISO 32 (--- QTS)**

#### RECOMMENDATION

Resample at the next service interval to monitor. Please specify the brand, type, and viscosity of the oil on your next sample.

### WEAR

All component wear rates are normal.

## CONTAMINATION

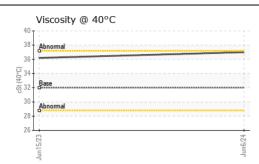
There is no indication of any contamination in the oil.

# FLUID CONDITION

The condition of the oil is acceptable for the time in service.

TestUOMMethodLimit/mCurrentHistory1History2Sample NumberClient InfoMC0947564WC0818250Sample DateClient InfoG Ju 202415 Jun 2023Machine AgehrsClient InfoS57555755Oil AgehrsClient InfoS5750Filter AngehrsClient InfoN/ANot ChangedOil ChangedClient InfoN/ANot ChangedFilter ChangedClient InfoN/ANot ChangedSample StatusNORMALNORMALIronppmASTM D5185m>10<10NickelppmASTM D5185m>10<10NickelppmASTM D5185m>10<10SilverppmASTM D5185m>10<10AluminumppmASTM D5185m>10<10VanadiumppmASTM D5185m>10<10VanadiumppmASTM D5185m>20<1<1VanadiumppmASTM D5185m>20<1<1VanadiumppmASTM D5185m>20<1<1VanadiumppmASTM D5185m>20<1<1VanadiumppmASTM D5185m>20<1<1Vanadiumpp							
Sample DateClient InfoOf Jun 202315 Jun 2023Machine AgehrsClient Info557555750Oil AgehrsClient Info55750Filter AgehrsClient InfoN/ANot ChangdOil ChangedClient InfoN/ANot ChangdFilter ChangedClient InfoN/ANot ChangdSample StatusClient InfoN/ANot ChangdIronppmASTM D5185>201<1NickelppmASTM D5185>10<1<1<NickelppmASTM D5185>10<1<1<NickelppmASTM D5185>10<10NickelppmASTM D5185>10<10NickelppmASTM D5185>10<10AluminumppmASTM D5185>10<10VanadiumppmASTM D5185>10<10Yellow Metalscalar"VisualNONENONENONESiliconppmASTM D5185>20<1<1Yellow Metalscalar"VisualNONENONENONESiliconppmASTM D5185>20<1<1SiliconppmASTM D5185>20<1<1Solicon<	Test	UOM	Method	Limit/Abn	Current	History1	History2
Machine AgehrsClient Info557555750Oil AgehrsClient Info00Filter AgehrsClient InfoN/ANot ChangdOil ChangedClient InfoN/ANot ChangdFilter ChangedClient InfoN/ANot ChangdSample StatusClient InfoN/ANot ChangdIronppmASTM D5185n>201<1ChromiumppmASTM D5185n>10<10NickelppmASTM D5185n>10<10SilverppmASTM D5185n>10<10SilverppmASTM D5185n>10<10CopperppmASTM D5185n>10<10VanadiumppmASTM D5185n>10<10VanadumppmASTM D5185n>20<10Valdendscalar'VisualNONENONENONEValdoutppmASTM D5185n>20<10ValdoutppmASTM D5185n>201<1ValdoutppmASTM D5185n>201<1ValdoutppmASTM D5185n>201<1ValdoutppmASTM D5185n>201<1Valdoutppm<	Sample Number		Client Info		WC0947564	WC0818250	
Oil AgehrsClient Info557509Filter AgehrsClient InfoN/ANot ChangdOil ChangedClient InfoN/ANot ChangdFilter ChangedQClient InfoN/ANot ChangdSample StatusN/ANot ChangdIronppmASTM D5185>201<1ChromiumppmASTM D5185>10<10NickelppmASTM D5185>10<10SilverppmASTM D5185>10<10AluminumppmASTM D5185>10<10LeadppmASTM D5185>10<10VanadiumppmASTM D5185>10<10VanadiumppmASTM D5185>10<10VanadiumppmASTM D5185>10<10VanadiumppmASTM D5185>10<10VanadiumppmASTM D5185>20<10Valuescalar'VisualNONENONENONEValuescalar'VisualNONENONE<SilconppmASTM D5185>201<1SilconppmASTM D5185>201<1Silconppm<	Sample Date		Client Info		06 Jun 2024	15 Jun 2023	
Filter Age Oil ChangedhrsClient Info00Gil ChangedClient InfoN/ANot ChangdFilter ChangedClient InfoN/ANot ChangdSample StatusVNORMALNORMALIronppmASTM D5185>201<1ChromiumppmASTM D5185>10<10NickelppmASTM D5185>10<10NickelppmASTM D5185>10<10SilverppmASTM D5185>10<10AluminumppmASTM D5185>10<10AluminumppmASTM D5185>10<10VanadiumppmASTM D5185>10<10VanadiumppmASTM D5185>20<10Vellow Metalscalar'VisualNONENONENONESiliconppmASTM D5185>20<1<1SiliconppmASTM D5185>20<1<1SiliconppmASTM D5185>20<1<1SiliconppmASTM D5185>20<1<1SiliconppmASTM D5185>20<1<1SoliconppmASTM D5185>20<1<1Siliconppm<	Machine Age	hrs	Client Info		5575	5575	
Oil ChangedClient InfoN/ANot ChangdFilter ChangedClient InfoN/ANot ChangdSample StatusNORMALNORMALIronppmASTM D5185>201<1ChromiumppmASTM D5185>10<10NickelppmASTM D5185>10<10NickelppmASTM D5185>10<10AluminumppmASTM D5185<10<10AluminumppmASTM D5185>10<10CopperppmASTM D5185>10<10VanadiumppmASTM D5185>10<10VanadiumppmASTM D5185>10<10Vellow Metalscalar'VisualNONENONENONESiliconppmASTM D5185>201<1Vatarvon Metalscalar'VisualNONENONESiliconppmASTM D5185>201<1SiliconppmASTM D5185>201<1SiliconppmASTM D5185>201<1SoliconppmASTM D5185>201<1SiliconppmASTM D5185>201<1SoliconppmASTM D	Oil Age	hrs	Client Info		5575	0	
Filter ChangedClient InfoN/ANot ChangedSample StatusClient InfoN/ANot ChangedIronppmASTM D5185m>201<1IronppmASTM D5185m>10<10NickelppmASTM D5185m>10<1<1NickelppmASTM D5185m<1<1<1NickelppmASTM D5185m<1<10<SilverppmASTM D5185m<120<AluminumppmASTM D5185m>10<10<LeadppmASTM D5185m>10<10<CopperppmASTM D5185m>10<10<VanadiumppmASTM D5185m>10<10<VanadiumppmASTM D5185m>10<10<Vellow Metalscalar*VisualNONENONENONE<SiliconppmASTM D5185m>20<1<1<SiliconppmASTM D5185m>20<1<<SiliconppmASTM D5185m>20<1<1<SiliconppmASTM D5185m>20<1<1<SiliconppmASTM D5185m>20<1<1<SiliconppmASTM D5185m>20<1<1<SoliconppmASTM D5185m>20	Filter Age	hrs	Client Info		0	0	
Sample StatusNORMALNORMALNORMALNORMALIronppmASTM D5185m>201<1ChromiumppmASTM D5185m>10<10NickelppmASTM D5185m>10<1<1TitaniumppmASTM D5185m<100SilverppmASTM D5185m<100AluminumppmASTM D5185m>10<10LeadppmASTM D5185m>10<10CopperppmASTM D5185m>10<10VanadiumppmASTM D5185m>10<10VanadiumppmASTM D5185m>10<10Vellow Metalscalar*VisualNONENONENONEVellow Metalscalar*VisualNONENONENONESiliconppmASTM D5185m>20<1<1VaterWC Method>.1NONENONESilitonscalar*VisualNONENONENONESilitonscalar*VisualNONENONENONESilitscalar*VisualNORNORESand/Dirtscalar*VisualNORNOREAppearancescalar*VisualNORNORE<	Oil Changed		Client Info		N/A	Not Changd	
IronppmASTM D5185m>201<1	Filter Changed		Client Info		N/A	Not Changd	
Chromium  ppm  ASTM D5185m  >10  <1	Sample Status				NORMAL	NORMAL	
Chromium  ppm  ASTM D5185m  >10  <1							
NickelppmASTM D5185m>10<1	-						
TitaniumppmASTM D5185m<1		ppm					
Silver  ppm  ASTM D5185m  <1				>10			
AluminumppmASTM D5185m>1020LeadppmASTM D5185m>10<10CopperppmASTM D5185m>7553TinppmASTM D5185m>10<10VanadiumppmASTM D5185m>10<10White Metalscalar*VisualNONENONENONEYellow Metalscalar*VisualNONENONENONESiliconppmASTM D5185m>20<1<1PotassiumppmASTM D5185m>20<1<1WaterWC Method>0.1NEGNONESilitscalar*VisualNONENONENONESand/Dirtscalar*VisualNONENONENONEAppearancescalar*VisualNORMLNORMLNORMLGoroscalar*VisualNORMLNORMLNORMLSodiumppmASTM D5185m510BariumppmASTM D5185m510MaganeseppmASTM D5185m5222MagnesiumppmASTM D5185m20082833MagnesiumppmASTM D5185m20082833SodiumppmASTM D51		ppm					
Lead  ppm  ASTM D5185m  >10  <1	Silver	ppm	ASTM D5185m			0	
Copper  ppm  ASTM D5185m  >75  5  3     Tin  ppm  ASTM D5185m  >10  <1  0     Vanadium  ppm  ASTM D5185m   <1  0     White Metal  scalar  *Visual  NONE  NONE  NONE     Yellow Metal  scalar  *Visual  NONE  NONE  NONE     Silicon  ppm  ASTM D5185m  >20  1  <1     Potassium  ppm  ASTM D5185m  >20  <1  <1     Water  WC Method  >0.1  NEG  NEG     Silt  scalar  *Visual  NONE  NONE  NONE     Debris  scalar  *Visual  NONE  NORE  NORML     Appearance  scalar  *Visual  NORML  NORML  NORML     Godor  scalar  *Visual  N		ppm					
TinppmASTM D5185m>10<1	Lead	ppm	ASTM D5185m	>10	<1	0	
VanadiumppmASTM D5185m<1	Copper	ppm		>75	5	3	
White Metalscalar*VisualNONENONENONENONEYellow Metalscalar*VisualNONENONENONESiliconppmASTM D5185m>201<1PotassiumppmASTM D5185m>20<1<1WaterWC Method>0.1NEGNEGSilitscalar*VisualNONENONENONEDebrisscalar*VisualNONENONENONESand/Dirtscalar*VisualNONENONENONEAppearancescalar*VisualNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLSodiumppmASTM D5185m500BariumppmASTM D5185m510ManganeseppmASTM D5185m222MagnesiumppmASTM D5185m208283PhosphorusppmASTM D5185m370175162SulfurppmASTM D5185m37011681229	Tin	ppm	ASTM D5185m	>10	<1	0	
Yellow Metal  scalar  *Visual  NONE  NONE  NONE     Silicon  ppm  ASTM D5185m  >20  1  <1     Potassium  ppm  ASTM D5185m  >20  <1  <1     Water  WC Method  >0.1  NEG  NEG     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     Godor  scalar  *Visual  NORML  NORML  NORML     Boron  ppm  ASTM D5185m  5  0  0     Barium  ppm  ASTM D5185m  5  1  0     Molybdenum  ppm  ASTM D5185m	Vanadium	ppm	ASTM D5185m		<1	0	
SiliconppmASTM D5185m>201<1	White Metal	scalar	*Visual	NONE	NONE	NONE	
PotassiumppmASTM D5185m>20<1	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	
WaterWC Method>0.1NEGNEGSiltscalar*VisualNONENONENONEDebrisscalar*VisualNONENONENONESand/Dirtscalar*VisualNONENONENONEAppearancescalar*VisualNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.1NEGNEGSodiumppmASTM D5185m500BariumppmASTM D5185m510MolybdenumppmASTM D5185m5<10MagnesiumppmASTM D5185m208283PhosphorusppmASTM D5185m300362355ZincppmASTM D5185m37011681229	Silicon	ppm	ASTM D5185m	>20	1	<1	
Siltscalar*VisualNONENONENONEDebrisscalar*VisualNONENONENONENONESand/Dirtscalar*VisualNONENONENONENONEAppearancescalar*VisualNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.1NEGNEGSodiumppmASTM D5185m500BoronppmASTM D5185m510BariumppmASTM D5185m510MolybdenumppmASTM D5185m510MaganeseppmASTM D5185m250222PhosphorusppmASTM D5185m300362355PhosphorusppmASTM D5185m37011681229	Potassium	ppm	ASTM D5185m	>20	<1	<1	
Debrisscalar*VisualNONENONENONENONESand/Dirtscalar*VisualNONENONENONENONEAppearancescalar*VisualNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.1NEGNEGSodiumppmASTM D5185m500BoronppmASTM D5185m510BariumppmASTM D5185m510MolybdenumppmASTM D5185m510MagnesiumppmASTM D5185m2522CalciumppmASTM D5185m200822833PhosphorusppmASTM D5185m300362355ZincppmASTM D5185m250011681229	Water		WC Method	>0.1	NEG	NEG	
Sand/Dirtscalar*VisualNONENONENONEAppearancescalar*VisualNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.1NEGNEGSodiumppmASTM D5185m500BoronppmASTM D5185m500BariumppmASTM D5185m510MolybdenumppmASTM D5185m5<10MagnesiumppmASTM D5185m2008283PhosphorusppmASTM D5185m300362355ZincppmASTM D5185m37011681229	Silt	scalar	*Visual	NONE	NONE	NONE	
Appearancescalar*VisualNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.1NEGNEGSodiumppmASTM D5185m500BoronppmASTM D5185m510BariumppmASTM D5185m510MolybdenumppmASTM D5185m510ManganeseppmASTM D5185m25210MagnesiumppmASTM D5185m20082833PhosphorusppmASTM D5185m3003623555ZincppmASTM D5185m37011681229	Debris	scalar	*Visual	NONE	NONE	NONE	
Odorscalar*VisualNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.1NEGNEGSodiumppmASTM D5185m <b>0</b> 0BoronppmASTM D5185m <b>50</b> 0BariumppmASTM D5185m <b>51</b> 0MolybdenumppmASTM D5185m <b>51</b> 0ManganeseppmASTM D5185m <b>252</b> 2MagnesiumppmASTM D5185m200 <b>82</b> 833PhosphorusppmASTM D5185m300 <b>362</b> 3555ZincppmASTM D5185m370 <b>1168</b> 1229	Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	
Emulsified Waterscalar*Visual>0.1NEGNEGSodiumppmASTM D5185m <b>0</b> 0BoronppmASTM D5185m5 <b>0</b> 0BariumppmASTM D5185m5 <b>1</b> 0MolybdenumppmASTM D5185m5 <b>1</b> 0ManganeseppmASTM D5185m25 <b>21</b> 0MagnesiumppmASTM D5185m20082833PhosphorusppmASTM D5185m300362355ZincppmASTM D5185m37011681229	Appearance	scalar	*Visual	NORML	NORML	NORML	
Sodium  ppm  ASTM D5185m  0  0     Boron  ppm  ASTM D5185m  5  0  0     Barium  ppm  ASTM D5185m  5  1  0     Barium  ppm  ASTM D5185m  5  1  0     Molybdenum  ppm  ASTM D5185m  5  <1  0     Manganese  ppm  ASTM D5185m  25  <1  0     Magnesium  ppm  ASTM D5185m  25  <2  2     Calcium  ppm  ASTM D5185m  200  82  83     Phosphorus  ppm  ASTM D5185m  300  362  355     Zinc  ppm  ASTM D5185m  370  175  162     Sulfur  ppm  ASTM D5185m  2500  1168  1229	Odor	scalar	*Visual	NORML	NORML	NORML	
Boron  ppm  ASTM D5185m  5  0  0     Barium  ppm  ASTM D5185m  5  1  0     Molybdenum  ppm  ASTM D5185m  5  1  0     Manganese  ppm  ASTM D5185m  25   1  0     Magnesium  ppm  ASTM D5185m  25  2  2     Calcium  ppm  ASTM D5185m  200  82  83     Phosphorus  ppm  ASTM D5185m  300  362  355     Zinc  ppm  ASTM D5185m  370  175  162     Sulfur  ppm  ASTM D5185m  2500  1168  1229	Emulsified Water	scalar	*Visual	>0.1	NEG	NEG	
Barium  ppm  ASTM D5185m  5  1  0     Molybdenum  ppm  ASTM D5185m  5  1  0     Manganese  ppm  ASTM D5185m  5  <1	Sodium	ppm	ASTM D5185m		0	0	
Molybdenum  ppm  ASTM D5185m  5  <1	Boron	ppm	ASTM D5185m	5	0	0	
Manganese  ppm  ASTM D5185m  <1	Barium	ppm	ASTM D5185m	5	1	0	
Magnesium  ppm  ASTM D5185m  25  2  2     Calcium  ppm  ASTM D5185m  200  82  83     Phosphorus  ppm  ASTM D5185m  300  362  355     Zinc  ppm  ASTM D5185m  370  175  162     Sulfur  ppm  ASTM D5185m  2500  1168  1229	Molybdenum	ppm	ASTM D5185m	5	<1	0	
Calcium  ppm  ASTM D5185m  200  82  83     Phosphorus  ppm  ASTM D5185m  300  362  355     Zinc  ppm  ASTM D5185m  370  175  162     Sulfur  ppm  ASTM D5185m  2500  1168  1229	Manganese	ppm	ASTM D5185m		<1	0	
Phosphorus  ppm  ASTM D5185m  300  362  355     Zinc  ppm  ASTM D5185m  370  175  162     Sulfur  ppm  ASTM D5185m  2500  1168  1229	Magnesium	ppm	ASTM D5185m	25	2	2	
Phosphorus  ppm  ASTM D5185m  300  362  355     Zinc  ppm  ASTM D5185m  370  175  162     Sulfur  ppm  ASTM D5185m  2500  1168  1229	Calcium		ASTM D5185m	200	82	83	
Zinc  ppm  ASTM D5185m  370  175  162     Sulfur  ppm  ASTM D5185m  2500  1168  1229	Phosphorus		ASTM D5185m	300	362	355	
Sulfur  ppm  ASTM D5185m  2500  1168  1229			ASTM D5185m		175	162	
	Sulfur		ASTM D5185m	2500	1168	1229	
	Visc @ 40°C		ASTM D445		37.0	36.2	

Submitted By: RANDY PRICE



Ferrous Alloys 10 mqq 0 Non-ferrous Metals 10 lead mdo Viscosity @ 40°C 39 38 37 31 35 34 (10°C) ŝ 32 Ba 3 30 29 28 27 Jun15/23 lun6/24



Lab Number : 06222770 Tested : 01 Jul 2024 Unique Number : 11100967 Diagnosed : 01 Jul 2024 - Wes Davis Test Package : FLEET Certificate L2367 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. T: (937)333-3142 Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

: WearCheck USA - 501 Madison Ave., Cary, NC 27513

Received

: 27 Jun 2024

DAYTON FIRE DEPT 300 NORTH MAIN DAYTON, OH US 45404 Contact: MIKE RICE

Laboratory

Sample No.

: WC0947564

F: Submitted By: RANDY PRICE

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