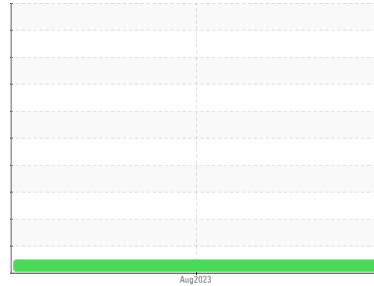




OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL



Area
Chem-Ecol
Machine Id
A2308042

Component
New (Unused) Oil
Fluid

CHEM-ECOL FORM RELEASE C (--- GAL)

DIAGNOSIS

Recommendation

This is a baseline read-out on the submitted sample. (Customer Sample Comment: IND2-ICP KV AN KF)

Wear

{not applicable}

Contamination

{not applicable}

Fluid Condition

{not applicable}

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		E30000199	---	---
Sample Date	Client Info		14 Aug 2023	---	---
Machine Age	hrs	Client Info	0	---	---
Oil Age	hrs	Client Info	0	---	---
Oil Changed	Client Info		Not Chngd	---	---
Sample Status			NORMAL	---	---

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m) >5	5	---	---
Chromium	ppm	ASTM D5185(m) >5	0	---	---
Nickel	ppm	ASTM D5185(m) >5	0	---	---
Titanium	ppm	ASTM D5185(m)	0	---	---
Silver	ppm	ASTM D5185(m) >5	0	---	---
Aluminum	ppm	ASTM D5185(m) >5	<1	---	---
Lead	ppm	ASTM D5185(m) >5	<1	---	---
Copper	ppm	ASTM D5185(m) >5	<1	---	---
Tin	ppm	ASTM D5185(m) >5	<1	---	---
Antimony	ppm	ASTM D5185(m)	0	---	---
Vanadium	ppm	ASTM D5185(m)	0	---	---
Beryllium	ppm	ASTM D5185(m)	0	---	---
Cadmium	ppm	ASTM D5185(m)	0	---	---

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)	<1	---	---
Barium	ppm	ASTM D5185(m)	0	---	---
Molybdenum	ppm	ASTM D5185(m)	0	---	---
Manganese	ppm	ASTM D5185(m)	0	---	---
Magnesium	ppm	ASTM D5185(m)	<1	---	---
Calcium	ppm	ASTM D5185(m)	3	---	---
Phosphorus	ppm	ASTM D5185(m)	13	---	---
Zinc	ppm	ASTM D5185(m)	11	---	---
Sulfur	ppm	ASTM D5185(m)	615	---	---
Lithium	ppm	ASTM D5185(m)	<1	---	---

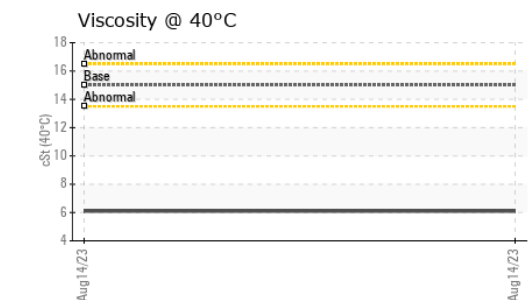
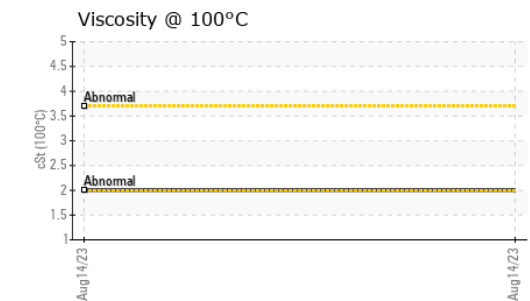
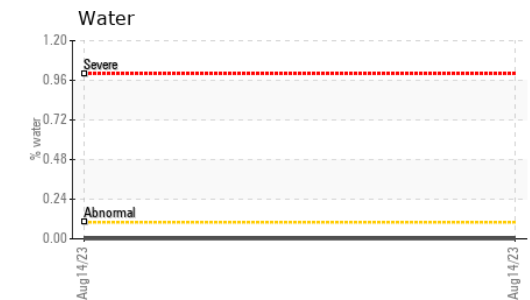
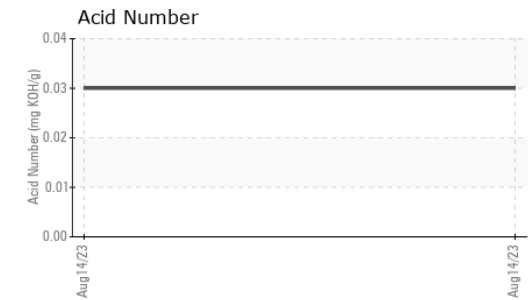
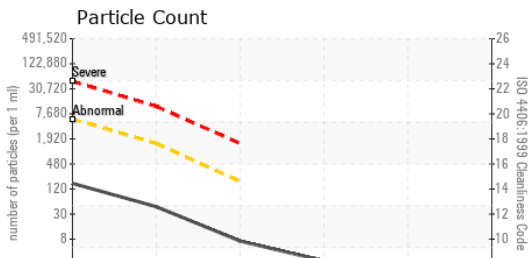
CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m) >15	5	---	---
Sodium	ppm	ASTM D5185(m)	0	---	---
Potassium	ppm	ASTM D5185(m) >20	<1	---	---
Water	%	ASTM D6304*	0.001	---	---
ppm Water	ppm	ASTM D6304*	2.1	---	---

INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	ASTM D7844*	0	---	---
Nitration	Abs/cm	ASTM D7624*	3.2	---	---
Sulfation	Abs/.1mm	ASTM D7415*	17.6	---	---

OIL ANALYSIS REPORT





FLUID CLEANLINESS	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>5000	145	---	---
Particles >6µm	ASTM D7647	>1300	40	---	---
Particles >14µm	ASTM D7647	>160	6	---	---
Particles >21µm	ASTM D7647	>40	2	---	---
Particles >38µm	ASTM D7647	>10	0	---	---
Particles >71µm	ASTM D7647	>3	0	---	---
Oil Cleanliness	ISO 4406 (c)	>19/17/14	14/12/10	---	---

FLUID DEGRADATION	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	ASTM D7414*	11.3	---	---
Acid Number (AN)	mg KOH/g	ASTM D974*	0.03	---	---

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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	6.1	---	---
Visc @ 100°C	cSt	ASTM D7279(m)	2	---	---
Viscosity Index (VI)	Scale	ASTM D2270*	123	---	---

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color				no image	no image
Bottom				no image	no image



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : E30000199 **Received** : 17 Aug 2023
Lab Number : **02576438** **Diagnosed** : 23 Aug 2023
Unique Number : 5629498 **Diagnostician** : Tatiana Sorkina
Test Package : IND 2 (Additional Tests: FT-IR, ICP-NewOil, KF, KV100, PrtCount, VI)

Environmental 360 Solutions Ltd.
 640 Victoria Street
 Cobourg, ON
 CA K9A 5H5
 Contact: Fred Kosseim
 fkosseim@e360s.ca
 T: (905)372-2251
 F: (905)372-1658

To discuss this sample report, contact Customer Service at 1-800-268-2131.
 Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab.
 Validity of results and interpretation are based on the sample and information as supplied.