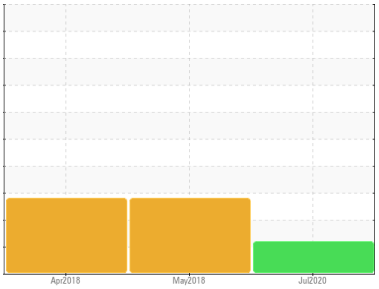
OIL ANALYSIS REPORT

Sample Rating Trend



ADDITIVES

Area
BETON PROVINCIAL [02362245]
Machine Id
2018 VAN AALST BULKHANDLING 1614-51
Component
Hydraulic System
Fluid
PANOLIN HLP SYNTH 32 (1000 LTR)

DIAGNOSIS

▲ Recommendation

Nous recommandons le remplacement des filtres de ce composant. Confirm the source of the lubricant being utilized for top-up/fill. Nous vous recommandons d`échantillonner de nouveau dès que possible afin de contrôler la situation.

Wear

Les taux d`usure de tous les composants sont normaux.

▲ Contamination

Il y a une quantité modérée de particules (de 4 à 14 microns) dans l`huile. Il n`y a pas d`huile minérale présente dans le fluide. La propreté du système est supérieure à la limite acceptable pour votre objectif de propreté ISO 4406.

▲ Fluid Condition

Les niveaux d`additifs indiquent l`ajout d`une autre marque ou d`un autre type d`huile. Le AN est acceptable pour ce fluide. L`état de l`huile permet d`en prolonger l`utilisation.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**WC**	WC	WC
Sample Date		Client Info		**16 Jul 2020**	15 May 2018	11 Apr 2018
Machine Age	hrs	Client Info		**2000**	50	10
Oil Age	hrs	Client Info		**0**	0	0
Oil Changed		Client Info		**N/A**	N/A	N/A
Sample Status				**ABNORMAL**	ABNORMAL	ABNORMAL

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>20	**4**	<1	<1
Chromium	ppm	ASTM D5185(m)	>10	**<1**	0	0
Nickel	ppm	ASTM D5185(m)		**0**	<1	<1
Titanium	ppm	ASTM D5185(m)		**0**	0	0
Silver	ppm	ASTM D5185(m)		**0**	0	0
Aluminum	ppm	ASTM D5185(m)	>10	**<1**	0	0
Lead	ppm	ASTM D5185(m)	>10	**<1**	<1	0
Copper	ppm	ASTM D5185(m)	>75	**<1**	<1	<1
Tin	ppm	ASTM D5185(m)	>10	**<1**	2	2
Antimony	ppm	ASTM D5185(m)		**<1**	0	0
Vanadium	ppm	ASTM D5185(m)		**0**	0	0
Beryllium	ppm	ASTM D5185(m)		**0**	0	0
Cadmium	ppm	ASTM D5185(m)		**0**	0	0

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)		**4**	9	8
Barium	ppm	ASTM D5185(m)		**0**	<1	<1
Molybdenum	ppm	ASTM D5185(m)		**0**	0	0
Manganese	ppm	ASTM D5185(m)		**<1**	0	0
Magnesium	ppm	ASTM D5185(m)		**<1**	<1	1
Calcium	ppm	ASTM D5185(m)		**6**	13	15
Phosphorus	ppm	ASTM D5185(m)		▲ **846**	▲ 854	▲ 886
Zinc	ppm	ASTM D5185(m)		▲ **33**	▲ 25	▲ 27
Sulfur	ppm	ASTM D5185(m)		**1167**	▲ 994	▲ 972
Lithium	ppm	ASTM D5185(m)		**<1**	<1	<1

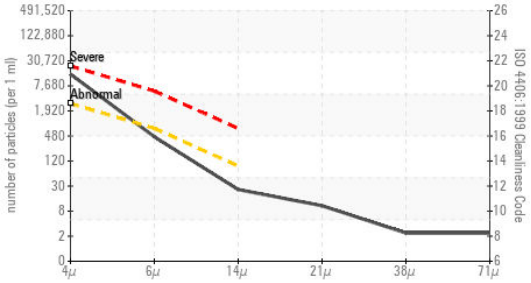
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>20	**4**	5	5
Sodium	ppm	ASTM D5185(m)		**<1**	0	0
Potassium	ppm	ASTM D5185(m)	>20	**<1**	<1	1

INFRA-RED		method	limit/base	current	history1	history2
Mineral Oil Content	%	ASTM D7418*	<5.0%	**0.0**	▲ 5.82	▲ 6.34

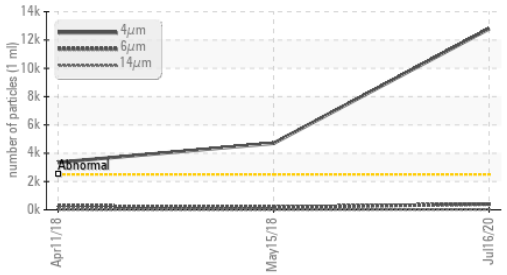
FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>2500	▲ **12791**	▲ 4698	▲ 3357
Particles >6µm		ASTM D7647	>640	**404**	182	270
Particles >14µm		ASTM D7647	>80	**22**	11	8
Particles >21µm		ASTM D7647	>20	**9**	3	2
Particles >38µm		ASTM D7647	>4	**2**	0	0
Particles >71µm		ASTM D7647	>3	**2**	0	0
Oil Cleanliness		ISO 4406 (c)	>18/16/13	▲ **21/16/12**	▲ 19/15/11	▲ 19/15/10

OIL ANALYSIS REPORT

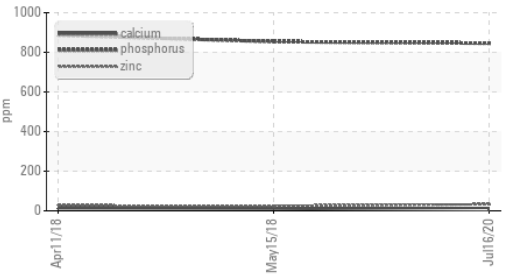
Particle Count



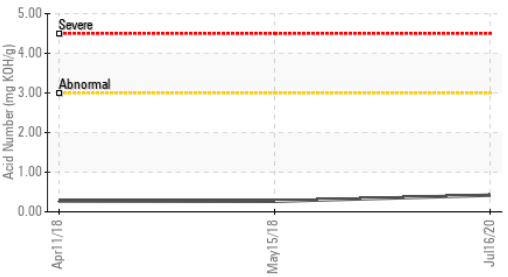
Particle Trend



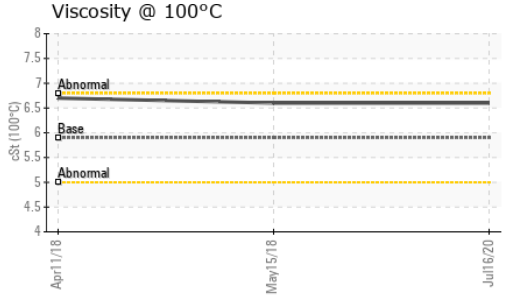
Additives



Acid Number



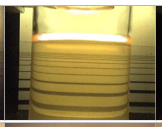
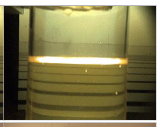
Viscosity @ 100°C



FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*		**0.42**	0.266	0.273

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**	NONE	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*	>0.05	**NEG**	NEG	NEG
Free Water	scalar	Visual*		**NEG**	NEG	NEG

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	30.6	**34.0**	35.2	35.1
Visc @ 100°C	cSt	ASTM D7279(m)	5.9	**6.6**	6.6	6.7
Viscosity Index (VI)	Scale	ASTM D2270*	140	**153**	145	150

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

ISO 17025:2017 Accredited Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC **Received** : 22 Jul 2020
Lab Number : 02366276 **Diagnosed** : 27 Jul 2020
Unique Number : 5081723 **Diagnostician** : Bill Quesnel
Test Package : MOB 2 (Additional Tests: TAN Man)

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.

Envirolin Canada
520 rue Adanac
Quebec, QC
CA G1C 7B7
Contact: Patrick Levesque
patrick.levesque@envirolin.com
T: (418)623-1216
F: (418)660-8889

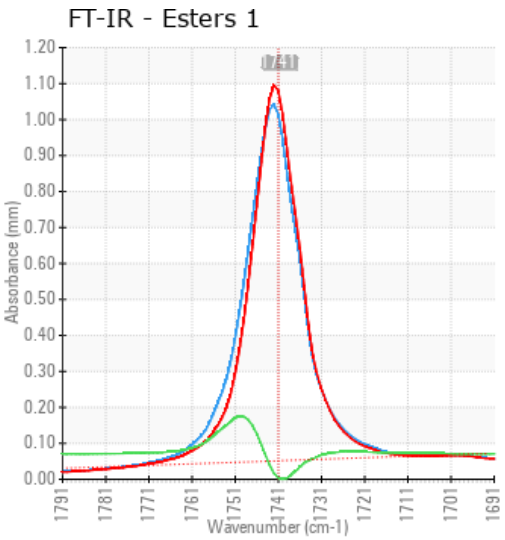
MINERAL OIL CONTENT REPORT

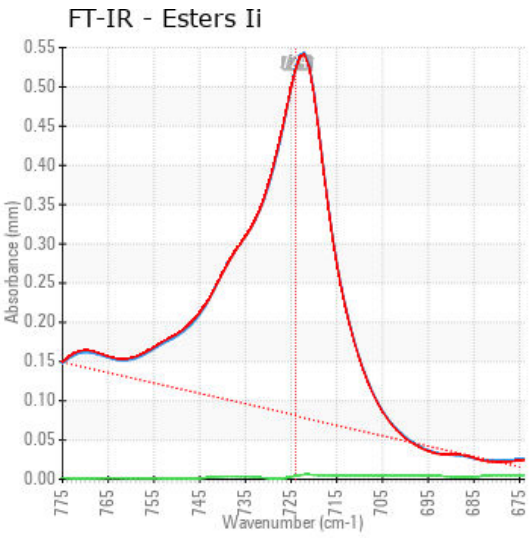
PASS

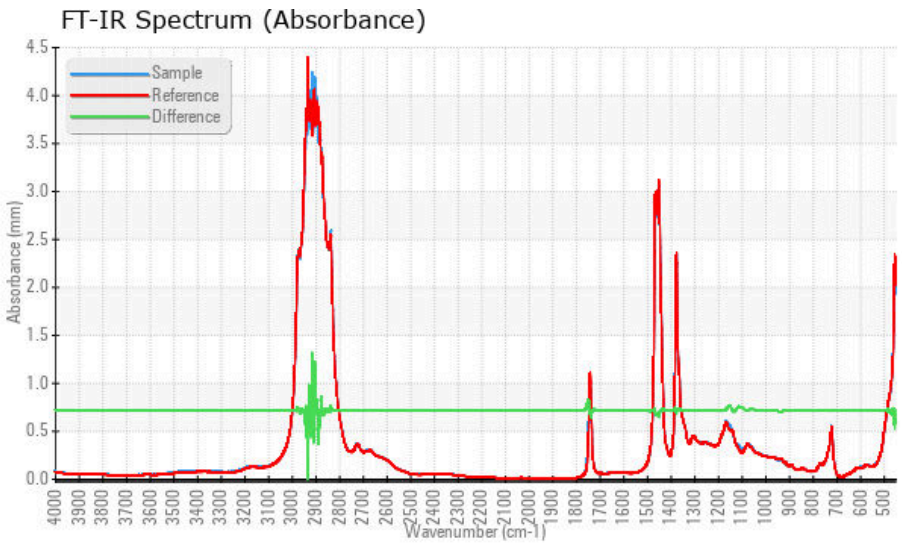
Area
BETON PROVINCIAL [02362245]
Machine Id
2018 VAN AALST BULKHANDLING 1614-51
Component
Hydraulic System
Fluid
PANOLIN HLP SYNTH 32 (1000 LTR)

SPECTRAL ANALYSIS

		method	limit/base	current	history1	history2
Zinc	ppm	ASTM D5185(m)		▲ **33**	▲ 25	▲ 27
Mineral Oil Content	%	ASTM D7418*	<5.0%	**0.0**	▲ 5.82	▲ 6.34







ISO 17025:2017 Accredited Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC **Received** : 22 Jul 2020
Lab Number : 02366276 **Diagnosed** : 27 Jul 2020
Unique Number : 5081723 **Diagnostician** : Bill Quesnel
Test Package : MOB 2 (Additional Tests: TAN Man)

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.

Envirolin Canada
520 rue Adanac
Quebec, QC
CA G1C 7B7
Contact: Patrick Levesque
patrick.levesque@envirolin.com
T: (418)623-1216
F: (418)660-8889

This page left intentionally blank