

OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL

CORE MOLDING - C16700 Machine Id M13349

Component Hydraulic System Fluid NOT GIVEN (--- GAL)

DIAGNOSIS

Recommendation

This is a baseline read-out on the submitted sample.

Wear

Copper and iron ppm levels are noted.

Contamination

Silicon ppm levels are notably high.

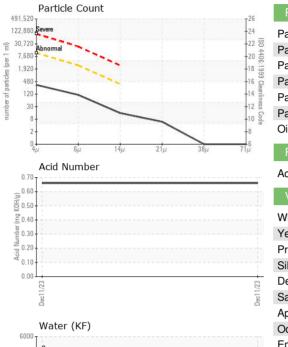
Fluid Condition

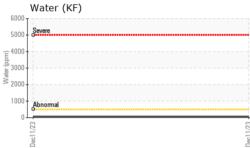
{not applicable}

				Dec2023		
				Dec2023		
SAMPLE INFORM	1ATION	method	limit/base	current	history1	history2
Batch #		Client Info		MOBILE		
Department		Client Info		Production		
Sample From		Client Info		Machine		
Production Stage		Client Info		Final		
Sent to WC		Client Info		12/13/2023		
Sample Number		Client Info		E30000924		
Sample Date		Client Info		11 Dec 2023		
Machine Age	hrs	Client Info		0		
Oil Age	hrs	Client Info		0		
Oil Changed		Client Info		N/A		
Sample Status				NORMAL		
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>20	24		
Chromium	ppm	ASTM D5185(m)	>20	0		
Nickel	ppm	ASTM D5185(m)	>20	<1		
Titanium	ppm	ASTM D5185(m)		0		
Silver	ppm	ASTM D5185(m)		<1		
Aluminum	ppm	ASTM D5185(m)	>20	3		
Lead	ppm	ASTM D5185(m)	>20	3		
Copper	ppm	ASTM D5185(m)	>20	32		
Tin	ppm	ASTM D5185(m)	>20	0		
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)		<1		
Molybdenum	ppm	ASTM D5185(m)		0		
Manganese	ppm	ASTM D5185(m)		0		
Magnesium	ppm	ASTM D5185(m)		7		
Calcium	ppm	ASTM D5185(m)		30		
Phosphorus	ppm	ASTM D5185(m)		812		
Zinc	ppm	ASTM D5185(m)		457		
Sulfur	ppm	ASTM D5185(m)		2538		
Lithium	ppm	ASTM D5185(m)		<1		
CONTAMINANTS	lele	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>15	10		
Sodium	ppm	ASTM D5185(m)	00	<1		
Potassium	ppm	ASTM D5185(m)	>20	0		
Water	%	ASTM D6304*	>0.05	0.003		
ppm Water	ppm	ASTM D6304*	>500	37		



OIL ANALYSIS REPORT





12

nber of particles (1 ml)

2 0k

cSt (100°C)

Dec11/23

lec]



FLUID CLEANLINESS method limit/base current history1 history2 Particles >4µm ASTM D7647 >10000 294 Particles >6µm ASTM D7647 >2500 97 Particles >14µm ASTM D7647 >20 0 Particles >3µm ASTM D7647 >20 0 Particles >3µm ASTM D7647 >40 0 Particles >71µm ASTM D7647 >4 0 Oil Cleanliness ISO 4406 (c) >20/18/15 15/14/11 FLUID DEGRADATION method Imit/base current history1 history2 Acid Number (AN) mgKHg ASTM D7647 NONE no.66 VISUAL method Imit/base current history1 history1 history2 White Metal scalar Visual* NONE no.66							
Particles >6µm ASTM D7647 >2500 97 Particles >14µm ASTM D7647 >320 13 Particles >21µm ASTM D7647 >80 5 Particles >38µm ASTM D7647 >20 0 Particles >38µm ASTM D7647 >4 0 Oll Cleanliness ISO 4406 (o) >20/18/15 15/14/11 FLUID DEGRADATION method limit/base current history1 history2 Acid Number (AN) mg KOHg ASTM D74 NONE VISUAL method limit/base current history1 history2 White Metal scalar Visual* NONE NONE Yellow Metal scalar Visual* NONE NONE Sit scalar Visual* NONE NONE	FLUID CLEANLIN	IESS	method	limit/base	current	history1	history2
Particles >14µm ASTM D7647 >320 13 Particles >21µm ASTM D7647 >80 5 Particles >38µm ASTM D7647 >20 0 Particles >71µm ASTM D7647 >4 0 Particles >71µm ASTM D7647 >4 0 Oil Cleanliness ISO 4406 (c) >20/18/15 15/14/11 FLUID DEGRADATION method imit/base current history1 history2 Acid Number (AN) mg KOHg ASTM D974* 0.666 VISUAL method imit/base current history1 history2 White Metal scalar Visual* NONE Yellow Metal scalar Visual* NONE NONE Sit scalar Visual* NONE NONE Sand/Dirt scalar Visual* NORML	Particles >4µm		ASTM D7647	>10000	294		
Particles >21µm ASTM D7647 >80 5 Particles >38µm ASTM D7647 >20 0 Particles >71µm ASTM D7647 >4 0 Oil Cleanliness ISO 4406 (c) >20/18/15 15/14/11 FLUID DEGRADATION method imit/base current history1 history2 Acid Number (AN) mg KOHg ASTM D974* 0.666 VISUAL method imit/base current history1 history2 White Metal scalar Visual* NONE Yellow Metal scalar Visual* NONE none Precipitate scalar Visual* NONE NONE Sitt scalar Visual* NONE NONE Appearance scalar Visual* NORML NORML God scalar Visual* NORML NORML Appearance scalar Visual* NORML NORML Emulsified Water <	Particles >6µm		ASTM D7647	>2500	97		
Particles >38µm ASTM D7647 >20 0 Particles >71µm ASTM D7647 >4 0 Oil Cleanliness ISO 4406 (c) >20/18/15 15/14/11 FLUID DEGRADATION method limit/base current history1 history2 Acid Number (AN) mg KOHg ASTM D974* 0.66 VISUAL method limit/base current history1 history2 White Metal scalar Visual* NONE NONE Yellow Metal scalar Visual* NONE NONE Yellow Metal scalar Visual* NONE NONE Precipitate scalar Visual* NONE NONE Sand/Dirt scalar Visual* NONE NORML Appearance scalar Visual* NORML NORML Odor scalar Visual* NORML NORML Emulsified Water scalar Visual* NORML NEG	Particles >14µm		ASTM D7647	>320	13		
Particles >71µm ASTM D7647 >4 0 Oil Cleanliness ISO 4406 (c) >20/18/15 15/14/11 FLUID DEGRADATION method limit/base current history1 history2 Acid Number (AN) mg K0Hg ASTM D974* 0.66 VISUAL method limit/base current history1 history2 White Metal scalar Visual* NONE NONE Yellow Metal scalar Visual* NONE NONE Yellow Metal scalar Visual* NONE NONE Precipitate scalar Visual* NONE NONE Sitt scalar Visual* NONE NONE Sand/Dirt scalar Visual* NORML NORML Appearance scalar Visual* NORML NORML Godor scalar	Particles >21µm		ASTM D7647	>80	5		
Oil Cleanliness ISO 4406 (c) >20/18/15 15/14/11 FLUID DEGRADATION method limit/base current history1 history2 Acid Number (AN) mg KOHg ASTM D974* 0.66 VISUAL method limit/base current history1 history2 White Metal scalar Visual* NONE Yellow Metal scalar Visual* NONE NONE Precipitate scalar Visual* NONE NONE Silt scalar Visual* NONE NONE Debris scalar Visual* NONE NONE Sand/Dirt scalar Visual* NONE NONE Appearance scalar Visual* NORML NORML Striget Water scalar Visual* NORML NORML Free Water scalar Visual* NORML NORML Free Water scalar Visual* NORM NORM Visc @ 40°C cSt ASTM D7279(m) 70.5 <	Particles >38µm		ASTM D7647	>20	0		
FLUID DEGRADATION method limit/base current history1 history2 Acid Number (AN) mg K0H/g ASTM D974* 0.66 VISUAL method limit/base current history1 history2 White Metal scalar Visual* NONE Yellow Metal scalar Visual* NONE NONE Precipitate scalar Visual* NONE NONE Silt scalar Visual* NONE NONE Debris scalar Visual* NONE NONE Appearance scalar Visual* NORML NORML Odor scalar Visual* NORML NORML Odor scalar Visual* NORML NORML Emulsified Water scalar Visual* NORML NORML	Particles >71µm		ASTM D7647	>4	0		
Acid Number (AN) mg KOHg ASTM D974* 0.66 VISUAL method limit/base current history1 history2 White Metal scalar Visual* NONE NONE Yellow Metal scalar Visual* NONE NONE Precipitate scalar Visual* NONE NONE Silt scalar Visual* NONE NONE Debris scalar Visual* NONE NONE Appearance scalar Visual* NORML NORML NORML Odor scalar Visual* NORML NORML NORML Nor	Oil Cleanliness		ISO 4406 (c)	>20/18/15	15/14/11		
VISUAL method limit/base current history1 history2 White Metal scalar Visual* NONE Yellow Metal scalar Visual* NONE NONE Precipitate scalar Visual* NONE NONE Silt scalar Visual* NONE NONE Debris scalar Visual* NONE NONE Sand/Dirt scalar Visual* NONE NONE Appearance scalar Visual* NORML NORML Odor scalar Visual* NORML NORML Odor scalar Visual* NORML NORML Odor scalar Visual* NORML NORML Emulsified Water scalar Visual* >0.05 NEG Free Water scalar Visual* NORM Visc@ 40°C cSt ASTM D2270* 70.5 <th>FLUID DEGRADA</th> <th>TION</th> <th>method</th> <th>limit/base</th> <th>current</th> <th>history1</th> <th>history2</th>	FLUID DEGRADA	TION	method	limit/base	current	history1	history2
White MetalscalarVisual*NONENONEYellow MetalscalarVisual*NONENONEPrecipitatescalarVisual*NONENONESiltscalarVisual*NONENONEDebrisscalarVisual*NONENONESand/DirtscalarVisual*NONENONEAppearancescalarVisual*NORMLNORMLOdorscalarVisual*NORMLNORMLOdorscalarVisual*NORMLNORMLCodorscalarVisual*NORMLNORMLFree WaterscalarVisual*>0.05NEGFLUID PROPERTIESmethodlimit/basecurrenthistory1history2Visc @ 40°CcStASTM D7279(m)70.5Visc @ 100°CcStASTM D7279(m)9.4Viscosity Index (VI)ScaleASTM D2270*110SAMPLE IMAGESmethodlimit/basecurrenthistory1history2ColorImit basecurrenthistory1history2no image	Acid Number (AN)	mg KOH/g	ASTM D974*		0.66		
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PrecipitatescalarVisual*NONENONESiltscalarVisual*NONENONEDebrisscalarVisual*NONENONESand/DirtscalarVisual*NONENONEAppearancescalarVisual*NORMLNORMLOdorscalarVisual*NORMLNORMLOdorscalarVisual*NORMLNORMLCodorscalarVisual*NORMLNORMLEmulsified WaterscalarVisual*>0.05NEGFree WaterscalarVisual*>0.05NEGFLUID PROPERTIESmethodlimit/basecurrenthistory1history2Visc @ 40°CcStASTM D7279(m)9.4Viscosity Index (VI)ScaleASTM D2270*110SAMPLE IMAGESmethodlimit/basecurrenthistory1history2ColorImageno imageno imageno imageno image	White Metal	scalar	Visual*	NONE	NONE		
Silt scalar Visual* NONE Debris scalar Visual* NONE NONE Sand/Dirt scalar Visual* NONE NONE Appearance scalar Visual* NORML NORML Odor scalar Visual* NORML NORML Emulsified Water scalar Visual* NORML NORML Free Water scalar Visual* >0.05 NEG FLUID PROPERTIES method limit/base current history1 history2 Visc @ 40°C cSt ASTM D7279(m) 9.4 Visco@ 100°C cSt ASTM D7279(m) 9.4 Viscosity Index (VI) Scale ASTM D2270* 110 SAMPLE IMAGES method limit/base current history1 history2 <	Yellow Metal	scalar	Visual*	NONE	NONE		
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Sand/Dirt scalar Visual* NONE Appearance scalar Visual* NORML NORML Odor scalar Visual* NORML NORML Odor scalar Visual* NORML NORML Odor scalar Visual* NORML NORML Emulsified Water scalar Visual* >0.05 NEG Free Water scalar Visual* >0.05 NEG FLUID PROPERTIES method limit/base current history1 history2 Visc @ 40°C cSt ASTM D7279(m) 70.5 Visc @ 100°C cSt ASTM D7279(m) 9.4 Viscosity Index (VI) Scale ASTM D2270* 110 SAMPLE IMAGES method limit/base current history1 history2 Color Image no image <	Silt	scalar	Visual*	NONE	NONE		
Appearance scalar Visual* NORML NORML Odor scalar Visual* NORML NORML Emulsified Water scalar Visual* NORML NORML Emulsified Water scalar Visual* >0.05 NEG Free Water scalar Visual* One Mail Normal history1 history2 Visc @ 40°C cSt ASTM D7279(m) 70.5 Visc @ 100°C cSt ASTM D7279(m) 9.4 Visc @ 100°C cSt ASTM D7279(m) 9.4 Visc @ 100°C cSt ASTM D7279(m) 9.4 SAMPLE IMAGES method limit/base current history1 history2 Color	Debris	scalar	Visual*	NONE	NONE		
Odor scalar Visual* NORML NORML Emulsified Water scalar Visual* >0.05 NEG Free Water scalar Visual* NOR NEG FLUID PROPERTIES method limit/base current history1 history2 Visc @ 40°C cSt ASTM D7279(m) 70.5 Visc @ 100°C cSt ASTM D7279(m) 9.4 Viscosity Index (VI) Scale ASTM D2270* 110 SAMPLE IMAGES method limit/base current history1 history2 Color Image Image no image no image no image	Sand/Dirt	scalar	Visual*	NONE	NONE		
Emulsified Water scalar Visual* >0.05 NEG Free Water scalar Visual* NEG FLUID PROPERTIES method limit/base current history1 history2 Visc @ 40°C cSt ASTM D7279(m) 70.5 Visc @ 100°C cSt ASTM D7279(m) 9.4 Visco@index (VI) Scale ASTM D7279(m) 9.4 SAMPLE IMAGES method limit/base current history1 history2 Color	Appearance	scalar	Visual*	NORML	NORML		
Free Water scalar Visual* NEG FLUID PROPERTIES method limit/base current history1 history2 Visc @ 40°C cSt ASTM D7279(m) 70.5 Visc @ 100°C cSt ASTM D7279(m) 9.4 Visc @ 100°C cSt ASTM D7279(m) 9.4 Viscosity Index (VI) Scale ASTM D2270* 110 SAMPLE IMAGES method limit/base current history1 history2 Color	Odor	scalar	Visual*	NORML	NORML		
FLUID PROPERTIES method limit/base current history1 history2 Visc @ 40°C cSt ASTM D7279(m) 70.5 Visc @ 100°C cSt ASTM D7279(m) 9.4 Visc @ 100°C cSt ASTM D7279(m) 9.4 Viscosity Index (VI) Scale ASTM D7270* 110 SAMPLE IMAGES method limit/base current history1 history2 Color Imit/base current history1 history2	Emulsified Water	scalar	Visual*	>0.05	NEG		
Visc @ 40°C cSt ASTM D7279(m) 70.5 Visc @ 100°C cSt ASTM D7279(m) 9.4 Viscosity Index (VI) Scale ASTM D7270* 110 SAMPLE IMAGES method limit/base current history1 history2 Color	Free Water	scalar	Visual*		NEG		
Visc @ 100°C cSt ASTM D7279(m) 9.4 Viscosity Index (VI) Scale ASTM D2270* 110 SAMPLE IMAGES method limit/base current history1 history2 Color Imit/base Imit/base Imit/base Imit/base Imit/base Imit/base	FLUID PROPERT	IES	method	limit/base	current	history1	history2
Visc @ 100°C cSt ASTM D7279(m) 9.4 Viscosity Index (VI) Scale ASTM D2270* 110 SAMPLE IMAGES method limit/base current history1 history2 Color Image no image no image no image no image	Visc @ 40°C	cSt	ASTM D7279(m)		70.5		
SAMPLE IMAGES method limit/base current history1 history2 Color Image no image no image					9.4		
Color no image no image	Viscosity Index (VI)	Scale	ASTM D2270*		110		
	SAMPLE IMAGES	5	method	limit/base	current	history1	history2
	Color					no image	no image
Bottom no image no image				Î			
Bottom no image no image							
	Bottom					no image	no image

: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 Environmental 360 Solutions Ltd. Recieved : 15 Dec 2023 640 Victoria Street Diagnosed : 19 Dec 2023 Cobourg, ON Accredited Laboratory Unique Number : 5696573 Diagnostician : Tatiana Sorkina CA K9A 5H5 Test Package : IND 2 (Additional Tests: KF, KV100, VI) Contact: Fred Kosseim To discuss this sample report, contact Customer Service at 1-905-372-2251. fkosseim@e360s.ca T: (905)372-2251 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. F: (905)372-1658