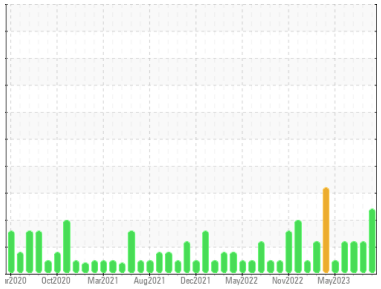
PROBLEM SUMMARY

Sample Rating Trend

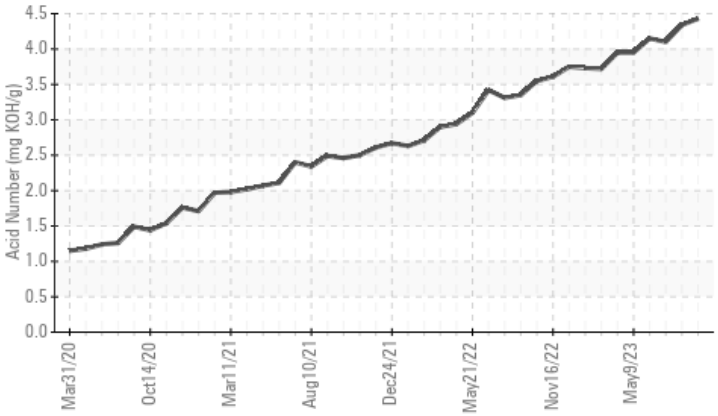


DEGRADATION

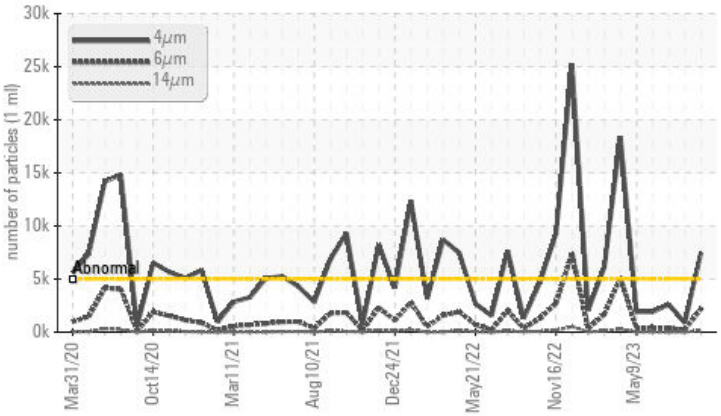
Area
M13
Machine Id
71-A-3350 MPG HYDRUALIC START SYSTEM (71-T-3350) (S/N Maint Plan 22480)
Component
2 Hydraulic System
Fluid
NOT GIVEN (286 LTR)

COMPONENT CONDITION SUMMARY

▲ Acid Number



▲ Particle Trend



RECOMMENDATION

We recommend that you drain the oil from the component if this has not already been done. We recommend you service the filters on this component. Resample at the next service interval to monitor. Please specify the brand, type, and viscosity of the oil on your next sample.

PROBLEMATIC TEST RESULTS

Sample Status				**ABNORMAL**	ABNORMAL	ABNORMAL
Particles >4µm		ASTM D7647	>5000	▲ **7490**	882	2606
Particles >6µm		ASTM D7647	>1300	▲ **2173**	231	353
Oil Cleanliness		ISO 4406 (c)	>19/17/14	▲ **20/18/14**	17/15/11	19/16/11
Acid Number (AN)	mg KOH/g	ASTM D974*		▲ **4.43**	▲ 4.34	4.10

Customer Id: SPESTJ
Sample No.: PP
Lab Number: 02591432
Test Package: IND 2

To manage this report scan the QR code

To discuss the diagnosis or test data:
Kevin Marson +1 (289)291-4644 x4644
Kevin.Marson@wearcheck.com

To change component or sample information:
Gloria Gonzalez +1 (289)291-4643 x4643
gloria.gonzalez@wearcheck.com

RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Change Fluid	---	---	?	We recommend that you drain the oil from the component if this has not already been done.
Change Filter	---	---	?	We recommend you service the filters on this component.
Information Required	---	---	?	Please specify the brand, type, and viscosity of the oil on your next sample.

HISTORICAL DIAGNOSIS

23 Aug 2023 Diag: Bill Quesnel

DEGRADATION

We recommend that you drain the oil from the component if this has not already been done. Resample at the next service interval to monitor. Please specify the brand, type, and viscosity of the oil on your next sample.All component wear rates are normal. The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable. The AN level is above the recommended limit. The oil is no longer serviceable.

view report

18 Jul 2023 Diag: Kevin Marson

VISUAL METAL

We advise that you check for visible metal particles in the oil. We recommend an early resample to monitor this condition. Please specify the brand, type, and viscosity of the oil on your next sample.Light concentration of visible metal present. The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report

23 May 2023 Diag: Kevin Marson

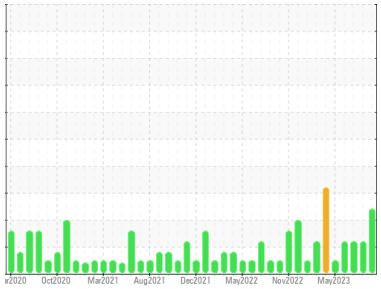
VISUAL METAL

We advise that you check for visible metal particles in the oil. We recommend an early resample to monitor this condition. Please specify the brand, type, and viscosity of the oil on your next sample.Light concentration of visible metal present. The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report

OIL ANALYSIS REPORT

Sample Rating Trend



DEGRADATION

Area
M13
Machine Id
71-A-3350 MPG HYDRUALIC START SYSTEM (71-T-3350) (S/N Maint Plan 22480)
Component
2 Hydraulic System
Fluid
NOT GIVEN (286 LTR)

DIAGNOSIS

Recommendation

We recommend that you drain the oil from the component if this has not already been done. We recommend you service the filters on this component. 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 a light amount of silt (particulates < 14 microns in size) present in the oil.

Fluid Condition

The AN level is above the recommended limit. The oil is no longer serviceable.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**PP**	PP	PP
Sample Date		Client Info		**11 Sep 2023**	23 Aug 2023	18 Jul 2023
Machine Age	hrs	Client Info		**0**	0	0
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**	3	3
Chromium	ppm	ASTM D5185(m)	>10	**0**	0	0
Nickel	ppm	ASTM D5185(m)	>10	**<1**	0	<1
Titanium	ppm	ASTM D5185(m)		**0**	0	0
Silver	ppm	ASTM D5185(m)		**<1**	0	0
Aluminum	ppm	ASTM D5185(m)	>10	**0**	<1	0
Lead	ppm	ASTM D5185(m)	>20	**5**	5	4
Copper	ppm	ASTM D5185(m)	>20	**<1**	<1	<1
Tin	ppm	ASTM D5185(m)	>10	**0**	0	0
Antimony	ppm	ASTM D5185(m)		**0**	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)		**1**	1	<1
Barium	ppm	ASTM D5185(m)		**0**	0	0
Molybdenum	ppm	ASTM D5185(m)		**0**	0	0
Manganese	ppm	ASTM D5185(m)		**0**	0	0
Magnesium	ppm	ASTM D5185(m)		**0**	0	<1
Calcium	ppm	ASTM D5185(m)		**<1**	1	1
Phosphorus	ppm	ASTM D5185(m)		**3188**	3078	2984
Zinc	ppm	ASTM D5185(m)		**3**	3	4
Sulfur	ppm	ASTM D5185(m)		**9**	9	8
Lithium	ppm	ASTM D5185(m)		**<1**	<1	<1

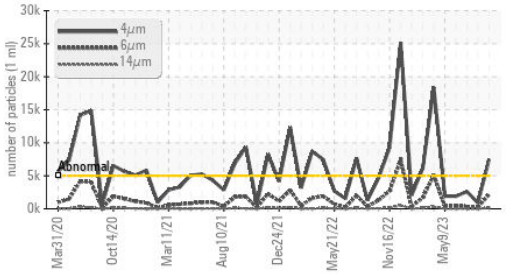
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>15	**8**	7	7
Sodium	ppm	ASTM D5185(m)		**1**	1	1
Potassium	ppm	ASTM D5185(m)	>20	**<1**	2	<1

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>5000	▲ **7490**	882	2606
Particles >6µm		ASTM D7647	>1300	▲ **2173**	231	353
Particles >14µm		ASTM D7647	>160	**139**	17	16
Particles >21µm		ASTM D7647	>40	**28**	5	6
Particles >38µm		ASTM D7647	>10	**4**	1	0
Particles >71µm		ASTM D7647	>3	**1**	0	0
Oil Cleanliness		ISO 4406 (c)	>19/17/14	▲ **20/18/14**	17/15/11	19/16/11

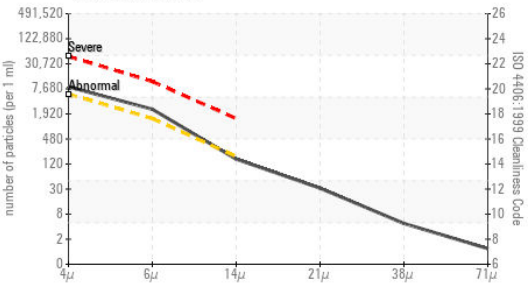
FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*		▲ **4.43**	▲ 4.34	4.10

OIL ANALYSIS REPORT

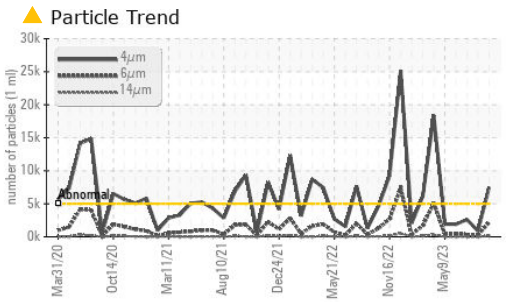
Particle Trend



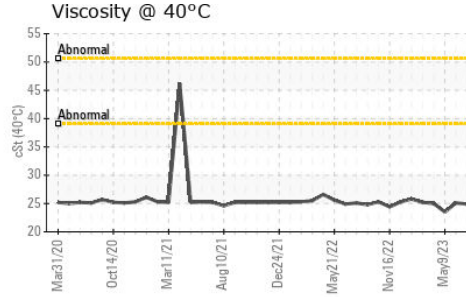
Particle Count



Particle Trend

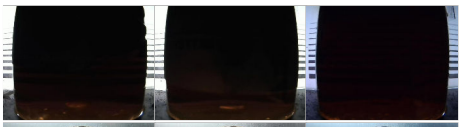
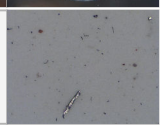


Viscosity @ 40°C



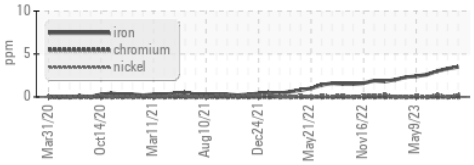
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	**NONE**	NONE	▲ VLITE
Yellow Metal	scalar	Visual*	NONE	**NONE**	NONE	NONE
Precipitate	scalar	Visual*	NONE	**NONE**	NONE	NONE
Silt	scalar	Visual*	NONE	**NONE**	NONE	NONE
Debris	scalar	Visual*	NONE	**NONE**	NONE	NONE
Sand/Dirt	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)		**24.9**	24.6	24.9

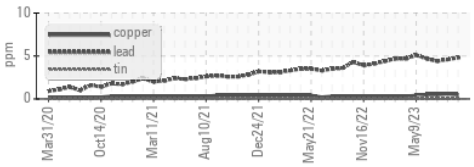
SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					
PrtFilter			*no image*	*no image*	

GRAPHS

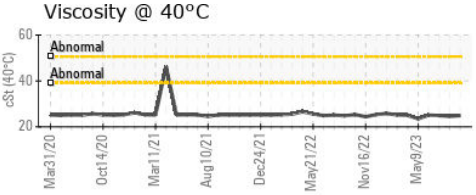
Ferrous Alloys



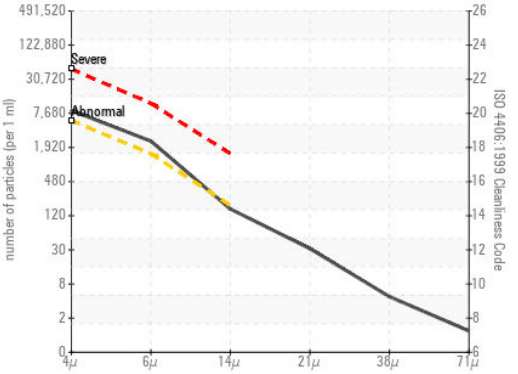
Non-ferrous Metals



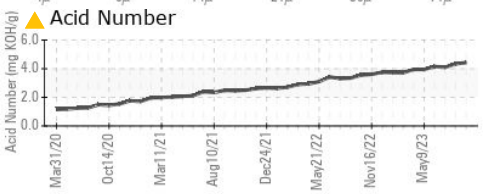
Viscosity @ 40°C



Particle Count



Acid Number



ISO 17025:2017 Accredited Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 **HUSKY SEA ROSE /AKER SOLUTIONS**
Sample No. : PP **Received** : 24 Oct 2023
Lab Number : 02591432 **Diagnosed** : 25 Oct 2023
Unique Number : 5668511 **Diagnostician** : Kevin Marson
Test Package : IND 2 (Additional Tests: TAN Man)

PO BOX 20
ST. JOHN`S, NL
CA A1C 6C9
Contact: Maintenance Supervisor
maintsuper.searose@huskyenergy.ca
T: x:
F: x:

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.