

OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL

Hembrug Finish Turn # 421 (Core Ring) - cc4410

Hydraulic System

AW HYDRAULIC OIL ISO 10 (--- GAL)

DIAGNOSIS

Recommendation

Little or no information is provided as to the component and lubricant being tested. Recommendations are therefore generic in nature and may not apply to the current application. Please forward information as to equipment type, reservoir capacity, lubricant type and any pertinent information to allow for a more accurate assessment. Resample at the next service interval to monitor. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample. Please specify the brand, type, and viscosity of the oil on your next sample.

Wear

All component wear rates are normal.

Contamination

The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.

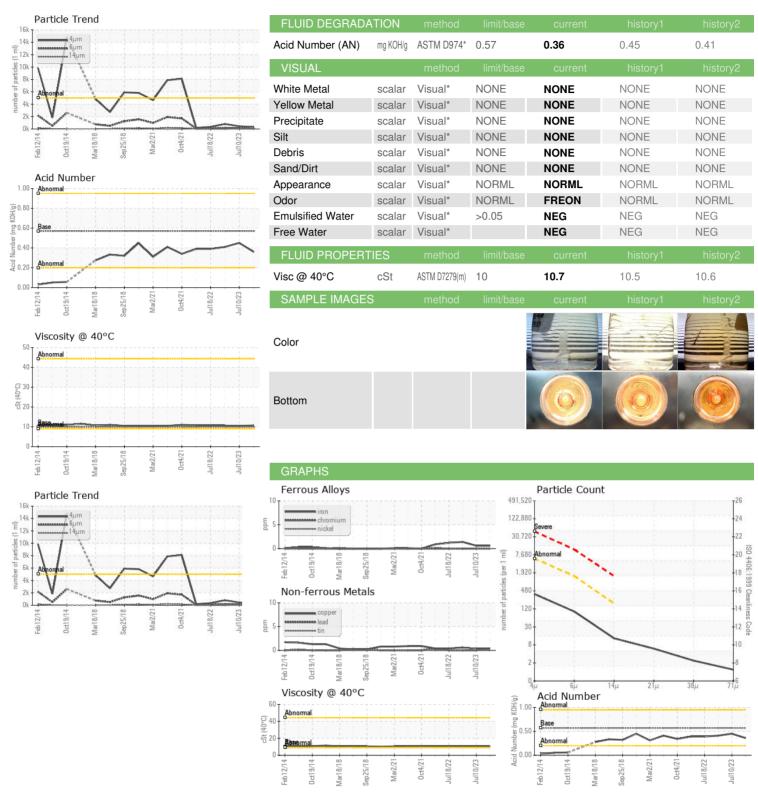
Fluid Condition

The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

SAMPLE INFORM	//ATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0887651	WC0838560	WC0768072
Sample Date		Client Info		10 Dec 2023	10 Jul 2023	05 Dec 2022
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				NORMAL	NORMAL	NORMAL
CONTAMINATION	V	method	limit/base	current	history1	history2
Water		WC Method	>0.05	NEG	NEG	NEG
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>20	<1	<1	1
Chromium	ppm	ASTM D5185(m)	>20	0	0	0
Nickel	ppm	ASTM D5185(m)	>20	0	0	<1
Titanium	ppm	ASTM D5185(m)		0	0	0
Silver	ppm	ASTM D5185(m)		<1	<1	0
Aluminum	ppm	ASTM D5185(m)	>20	0	0	0
Lead	ppm	ASTM D5185(m)	>20	<1	0	0
Copper	ppm	ASTM D5185(m)	>20	<1	<1	<1
Tin	ppm	ASTM D5185(m)	>20	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)	5	1	1	1
Boron Barium	ppm	ASTM D5185(m) ASTM D5185(m)	5 5	1 <1	1	1
Boron Barium Molybdenum	ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	5	1 <1 0	1 0 0	1 0 0
Boron Barium Molybdenum Manganese	ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	5 5 5	1 <1 0	1 0 0	1 0 0
Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	5 5 5 25	1 <1 0 0 <1	1 0 0 0 0 <1	1 0 0 0 0 <1
Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm	ASTM D5185(m)	5 5 5 25 200	1 <1 0 0 <1 34	1 0 0 0 0 <1 35	1 0 0 0 0 <1 38
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm ppm	ASTM D5185(m)	5 5 5 25 200 300	1 <1 0 0 <1 34 313	1 0 0 0 0 <1 35 345	1 0 0 0 <1 38 361
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm	ASTM D5185(m)	5 5 5 25 200 300 370	1 <1 0 0 0 <1 34 313 388	1 0 0 0 0 <1 35 345 395	1 0 0 0 0 <1 38 361 397
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m)	5 5 5 25 200 300	1 <1 0 0 0 <1 34 313 388 636	1 0 0 0 0 <1 35 345 395 759	1 0 0 0 0 <1 38 361 397 705
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m)	5 5 5 25 200 300 370	1 <1 0 0 0 <1 34 313 388	1 0 0 0 <1 35 345 395 759 <1	1 0 0 0 0 <1 38 361 397
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m)	5 5 5 25 200 300 370 2500	1 <1 0 0 0 <1 34 313 388 636 <1 current	1 0 0 0 0 <1 35 345 395 759 <1	1 0 0 0 <1 38 361 397 705 <1
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) method ASTM D5185(m)	5 5 5 25 200 300 370 2500	1	1 0 0 0 0 < 1 35 345 395 759 < 1 history1 < 1	1 0 0 0 <1 38 361 397 705 <1 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m)	5 5 5 25 200 300 370 2500	1	1 0 0 0 0 0 < 1 35 345 395 759 < 1 history1 < 1 < 1	1 0 0 0 0 <1 38 361 397 705 <1 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) method ASTM D5185(m)	5 5 5 25 200 300 370 2500	1	1 0 0 0 0 < 1 35 345 395 759 < 1 history1 < 1	1 0 0 0 <1 38 361 397 705 <1 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) MASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	5 5 5 25 200 300 370 2500 limit/base >15 >20	1	1 0 0 0 0 <1 35 345 395 759 <1 history1 <1 <1	1 0 0 0 0 <1 38 361 397 705 <1 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) METHOD ASTM D5185(m)	5 5 5 25 200 300 370 2500 limit/base >15 >20 limit/base >5000	1	1 0 0 0 0 0 0 <1 35 345 395 759 <1 history1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1	1 0 0 0 0 <1 38 361 397 705 <1 history2 <1 <1 799
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >6µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) METHOD ASTM D5185(m)	5 5 5 25 200 300 370 2500 limit/base >15 >20 limit/base >5000 >1300	1	1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	1 0 0 0 0 <1 38 361 397 705 <1 history2 <1 <1 <1 799 183
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >6µm Particles >14µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) METHOD ASTM D5185(m) ASTM D7647 ASTM D7647 ASTM D7647	5 5 5 25 200 300 370 2500 limit/base >15 >20 limit/base >5000 >1300 >160	1	1 0 0 0 0 0 0 <1 35 345 395 759 <1 history1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1	1 0 0 0 0 <1 38 361 397 705 <1 history2 <1 <1 <1 history2 799 183 7
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >14µm Particles >21µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) METHOD ASTM D5185(m) ASTM D7647 ASTM D7647 ASTM D7647	5 5 5 25 200 300 370 2500 limit/base >15 >20 limit/base >5000 >1300 >160 >40	1	1 0 0 0 0 0 0 < 1 35 345 395 759 < 1 history1 < 1 < 1 < 1 < 1 < 1 < 1 < 1 < 1 < 1 <	1 0 0 0 0 <1 38 361 397 705 <1 history2 <1 <1 <1 history2 799 183 7
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >14µm Particles >21µm Particles >38µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) METHOD ASTM D5185(m) ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647	5 5 5 25 200 300 370 2500 limit/base >15 >20 limit/base >5000 >160 >40 >10	1	1 0 0 0 0 0 0 < 1 35 345 395 759 < 1 history1 < 1 < 1 < 1 < 1 < 1 < 1 < 1 < 1 < 1 <	1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >14µm Particles >21µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) METHOD ASTM D5185(m) ASTM D7647 ASTM D7647 ASTM D7647	5 5 5 25 200 300 370 2500 limit/base >15 >20 limit/base >5000 >160 >40 >10	1	1 0 0 0 0 0 0 < 1 35 345 395 759 < 1 history1 < 1 < 1 < 1 < 1 < 1 < 1 < 1 < 1 < 1 <	1 0 0 0 0 <1 38 361 397 705 <1 history2 <1 <1 <1 history2 799 183 7



OIL ANALYSIS REPORT





CALA ISO 17025:2017 Accredited

Laboratory

Laboratory Sample No. Lab Number **Unique Number** Test Package

: WC0887651

To discuss this sample report, contact Customer Service at 1-800-268-2131.

: IND 2

: 02602254 : 5695339

Received Diagnosed Diagnostician

: 11 Dec 2023 : 12 Dec 2023 : Kevin Marson

: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 HUSKY INJECTION MOLDING SYSTEMS LTD 530 QUEEN STREET SOUTH BOLTON, ON

CA L7E 5S5 Contact: Robert Cameron rcameron@husky.ca

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.

Submitted By: Robert Cameron

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