

PROBLEM SUMMARY

Sample Rating Trend

VISCOSITY

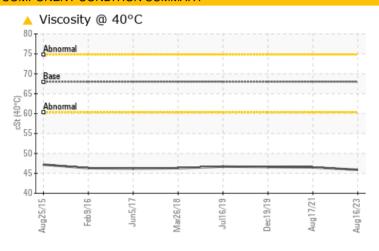
HOUND CHUTES G.5. G1 UNIT UPPER GENERATOR BEARING

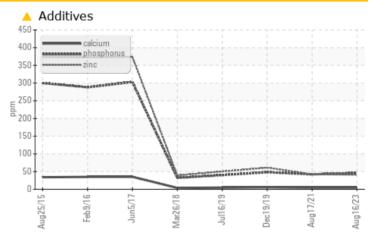
Component

Non-Drive End Bearing

ESSO TERESSO ISO 68 (--- GAL)

COMPONENT CONDITION SUMMARY





RECOMMENDATION

Confirm the source of the lubricant being utilized for top-up/fill. Resample at the next service interval to monitor. The fluid was specified as ESSO TERESSO ISO 68, however, a fluid match indicates that this fluid is ISO 46 R&O Hydraulic Oil. Please confirm the oil type and grade on your next sample. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.

PROBLEMATIC TEST RESUL	TS
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Sample Status				ABNORMAL	ATTENTION	ATTENTION
Phosphorus	ppm	ASTM D5185(m)	0.7	46	<u>42</u>	4 8
Zinc	ppm	ASTM D5185(m)	0	41	4 2	<u></u> ▲ 61
Visc @ 40°C	cSt	ASTM D7279(m)	68	45.9	46.5	46.6

Customer Id: ONTNEW Sample No.: WC0750948 Lab Number: 02576787 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
Alert			?	The fluid was specified as ESSO TERESSO ISO 68, however, a fluid match indicates that this fluid is ISO 46 R&O Hydraulic Oil. Please confirm the oil type and grade on your next sample.
Information Required			?	NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.
Check Fluid Source			?	Confirm the source of the lubricant being utilized for top-up/fill.

HISTORICAL DIAGNOSIS

17 Aug 2021 Diag: Kevin Marson

ADDITIVES



Confirm the source of the lubricant being utilized for top-up/fill. Resample at the next service interval to monitor. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with 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. Additive levels indicate the addition of a different brand, or type of oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.



19 Dec 2019 Diag: Kevin Marson

ADDITIVES



Confirm the source of the lubricant being utilized for top-up/fill. Resample at the next service interval to monitor. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with 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. Additive levels indicate the addition of a different brand, or type of oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

View report

16 Jul 2019 Diag: Kevin Marson

ADDITIVES



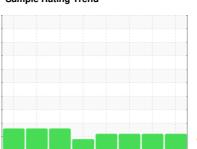
Confirm the source of the lubricant being utilized for top-up/fill. Resample at the next service interval to monitor. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.All component wear rates are normal. The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable. Additive levels indicate the addition of a different brand, or type of oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.





OIL ANALYSIS REPORT

Sample Rating Trend



VISCOSITY



Machine Id

HOUND CHUTES G.5. G1 UNIT UPPER GENERATOR BEARING

Component

Non-Drive End Bearing

ESSO TERESSO ISO 68 (--- GAL)

DIAGNOSIS

Recommendation

Confirm the source of the lubricant being utilized for top-up/fill. Resample at the next service interval to monitor. The fluid was specified as ESSO TERESSO ISO 68, however, a fluid match indicates that this fluid is ISO 46 R&O Hydraulic Oil. Please confirm the oil type and grade on your next sample. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with 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.

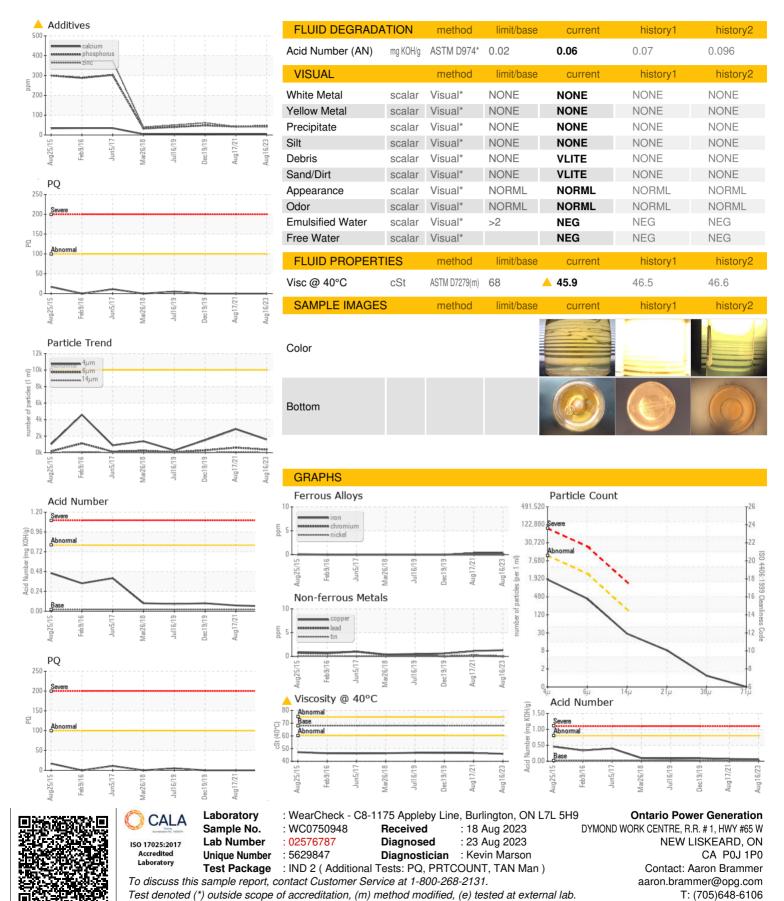
Fluid Condition

Viscosity of sample indicates oil is within ISO 46 range, advise investigate. This plus the additive levels indicates that this is not the same brand, or type of oil as reported. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

		Aug2015 F	eb2016 Jun2017 Mar201	18 Jul2019 Dec2019 Aug2021	Pageoes	
SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0750948	WC0595978	WC0299166
Sample Date		Client Info		16 Aug 2023	17 Aug 2021	19 Dec 2019
Machine Age	wks	Client Info		0	0	0
Oil Age	wks	Client Info		1	1	0
Oil Changed		Client Info		N/A	Filtered	N/A
Sample Status				ABNORMAL	ATTENTION	ATTENTION
WEAR METALS		method	limit/base	current	history1	history2
PQ		ASTM D8184*		0	0	0
Iron	ppm	ASTM D5185(m)	>20	<1	<1	0
Chromium	ppm	ASTM D5185(m)	>20	0	0	0
Nickel	ppm	ASTM D5185(m)	>20	<1	0	0
Titanium	ppm	ASTM D5185(m)		0	0	0
Silver	ppm	ASTM D5185(m)		<1	<1	<1
Aluminum	ppm	ASTM D5185(m)	>20	<1	<1	<1
Lead	ppm	ASTM D5185(m)	>20	0	<1	0
Copper	ppm	ASTM D5185(m)	>20	1	1	<1
Tin	ppm	ASTM D5185(m)	>20	0	<1	0
Antimony	ppm	ASTM D5185(m)		0	0	<1
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
ADDITIVES Boron	ppm	method ASTM D5185(m)	limit/base 4.5	current <1	history1 <1	history2 <1
	ppm ppm					
Boron Barium		ASTM D5185(m)	4.5	<1	<1 0 0	<1
Boron Barium Molybdenum	ppm	ASTM D5185(m) ASTM D5185(m)	4.5 0.4	<1 0	<1 0	<1 <1
Boron Barium Molybdenum Manganese Magnesium	ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	4.5 0.4 0	<1 0 0 0 0	<1 0 0 0	<1 <1 0 <1 <1 <1 <1
Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	4.5 0.4 0 0	<1 0 0 0 0 0 5	<1 0 0 0 0 0 4	<1 <1 0 <1 <1 <1 6
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm	ASTM D5185(m)	4.5 0.4 0 0 0 0 0	<1 0 0 0 0 0 5 46	<1 0 0 0 0 0 4 42	<1 <1 0 <1 <1 <1 6
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm	ASTM D5185(m)	4.5 0.4 0 0 0 0 0 0.7	<1 0 0 0 0 0 5 46 41	<1 0 0 0 0 0 4 42 42	<1 <1 0 <1 <1 6 48
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m)	4.5 0.4 0 0 0 0 0	<1 0 0 0 0 5 46 41 2522	<1 0 0 0 0 0 4 42 42 2587	<1 <1 0 <1 <1 <1 6 48 61
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm	ASTM D5185(m)	4.5 0.4 0 0 0 0 0 0.7	<1 0 0 0 0 0 5 46 41	<1 0 0 0 0 0 4 42 42	<1 <1 0 <1 <1 <1 6 • 48 • 61
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m)	4.5 0.4 0 0 0 0 0 0.7	<1 0 0 0 0 5 46 41 2522	<1 0 0 0 0 0 4 42 42 2587	<1 <1 0 <1 <1 <1 6 48 61
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m)	4.5 0.4 0 0 0 0 0.7 0 1315	<1 0 0 0 0 5 46 41 2522 <1	<1 0 0 0 0 4 42 42 42 <1	<1 <1 0 <1 <1 <1 6 48 61 2580 <1
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m)	4.5 0.4 0 0 0 0.7 0 1315	<1 0 0 0 0 5 46 41 2522 <1	<1 0 0 0 0 4 4 42 42 2587 <1	<1 <1 0 <1 <1 <1 6 48 61 2580 <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)	4.5 0.4 0 0 0 0.7 0 1315 limit/base >15	<1 0 0 0 0 5 46 41 2522 <1 current	<1 0 0 0 0 4 42 42 42 2587 <1 history1 2	<1 <1 0 <1 <1 <1 6 48 61 2580 <1 history2 <1
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m)	4.5 0.4 0 0 0 0.7 0 1315 limit/base >15	<1 0 0 0 0 5 46 41 2522 <1 current 2 <1	<1 0 0 0 0 4 42 42 42 <1 history1 2 <1	<1 <1 0 <1 <1 <1 6 48 48 61 2580 <1 history2 <1 0
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m)	4.5 0.4 0 0 0 0.7 0 1315 limit/base >15	<1 0 0 0 0 5 46 41 2522 <1 current 2 <1 <1	<1 0 0 0 0 4 42 42 42 2587 <1 history1 2 <1 <1	<1 <1 0 <1 6 48 61 2580 <1 history2 <1 0 <1
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 ppm	ASTM D5185(m) METHOD ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	4.5 0.4 0 0 0 0.7 0 1315 limit/base >15 >20 limit/base >10000	<1 0 0 0 0 5 ▲ 46 ▲ 41 2522 <1 current 2 <1 <1 current	<1 0 0 0 0 4 42 ▲ 42 ▲ 42 ▲ 2587 <1 history1 2 <1 <1 history1	<1 <1 0 <1 <1 6 48 48 61 2580 <1 history2 <1 0 <1 history2
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 ppm	ASTM D5185(m) MASTM D5185(m) ASTM D5185(m)	4.5 0.4 0 0 0 0.7 0 1315 limit/base >15 >20 limit/base >10000	<1 0 0 0 0 5 46 41 2522 <1 current 2 <1 <1 current 1585	<1 0 0 0 0 4 42 42 42 42 12587 <1 history1 2 <1 <1 history1 2850	<1 <1 0 <1 0 <1 <1 6 48 48 61 2580 <1 history2 <1 0 <1 history2 1512
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >14µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m)	4.5 0.4 0 0 0 0.7 0 1315 limit/base >15 >20 limit/base >10000 >2500 >160	<1 0 0 0 0 0 5 ▲ 46 ▲ 41 2522 <1 current 2 <1 <1 current 1585 368	<1 0 0 0 0 4 42 42 42 42 42 1 2587 <1 history1 2 <1 <1 history1 2850 600	<1 <1 0 <1 6 48 61 2580 <1 history2 <1 0 <1 history2 286
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >14µm Particles >14µm Particles >21µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) method ASTM D5185(m) ASTM D7647 ASTM D7647	4.5 0.4 0 0 0 0.7 0 1315 limit/base >15 >20 limit/base >10000 >2500 >160	<1 0 0 0 0 0 5 46 41 2522 <1 current 2 <1 <1 current 1585 368 25	<1 0 0 0 0 4 4 42 42 42 42 42 5587 <1 history1 2 <1 <1 history1 2850 600 72	<1 <1 0 <1 6 48 61 2580 <1 history2 <1 0 <1 history2 21 1512 286 15
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) method ASTM D5185(m) ASTM D7647 ASTM D7647 ASTM D7647	4.5 0.4 0 0 0 0.7 0 1315 limit/base >15 >20 limit/base >10000 >2500 >160 >40 >10	<1 0 0 0 0 5 46 41 2522 <1 current 2 <1 <1 current 1585 368 25 7	<1 0 0 0 0 4 42 42 42 42 42 42 41 <1 history1 2 <1 <1 history1 2850 600 72 22	<1 <1 0 <1 0 <1 <1 6 48 48 61 2580 <1 history2 <1 0 <1 history2 1512 286 15 5



OIL ANALYSIS REPORT



Validity of results and interpretation are based on the sample and information as supplied.

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