

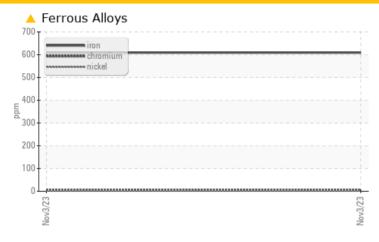
PROBLEM SUMMARY

SEAWARD EXPLORER Explorer - 2 Genset PTO Hub Component Distribution Gear

GEAR OIL SAE 80W90 (2 GAL)

Sample Rating Trend **WEAR**

COMPONENT CONDITION SUMMARY



RECOMMENDATION

No corrective action is recommended at this time. Resample at the next service interval to monitor.

PROBLEMATION	C TEST R	ESULTS			
Sample Status				ABNORMAL	
Iron	ppm	ASTM D5185m	>300	△ 609	
Chromium	nnm	ASTM D5185m	>3	<u> </u>	

Customer Id: SEANEW **Sample No.:** WC0859386 Lab Number: 06007815 Test Package: MAR 2



To manage this report scan the QR code

To discuss the diagnosis or test data:

Don Baldridge +1 don.b505@comcast.net

To change component or sample information: Customer Service +1 1-800-237-1369 customerservice@wearcheck.com

RECOMMENDED ACTIONS

There are no recommended actions for this sample.

HISTORICAL DIAGNOSIS

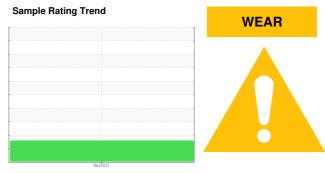


OIL ANALYSIS REPORT

SEAWARD EXPLORER **Explorer - 2 Genset PTO Hub**

Distribution Gear

GEAR OIL SAE 80W90 (2 GAL)



DIAGNOSIS

Recommendation

No corrective action is recommended at this time. Resample at the next service interval to monitor.

Gear wear is indicated. All other component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

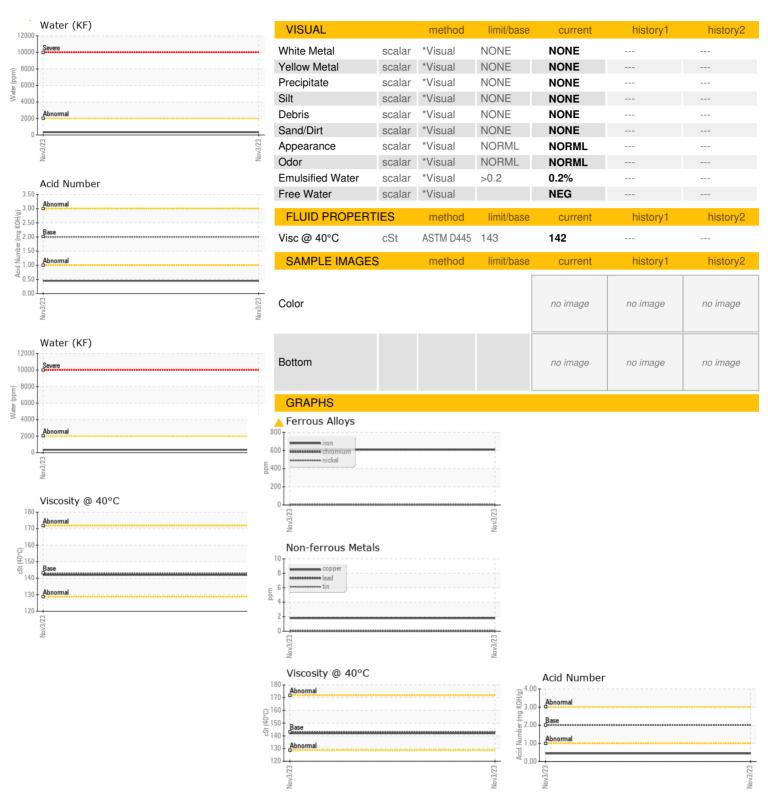
Fluid Condition

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

SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0859386		
Sample Date		Client Info		03 Nov 2023		
Machine Age	hrs	Client Info		0		
Oil Age	hrs	Client Info		0		
Oil Changed		Client Info		Not Changd		
Sample Status				ABNORMAL		
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>300	609		
Chromium	ppm	ASTM D5185m	>3	<u></u> 4		
Nickel	ppm	ASTM D5185m	>10	2		
Titanium	ppm	ASTM D5185m		1		
Silver	ppm	ASTM D5185m		<1		
Aluminum	ppm	ASTM D5185m	>5	2		
Lead	ppm	ASTM D5185m	>60	0		
Copper	ppm	ASTM D5185m	>35	2		
Tin	ppm	ASTM D5185m	>5	0		
Vanadium	ppm	ASTM D5185m		<1		
Cadmium	ppm	ASTM D5185m		<1		
ADDITIVES		method	limit/base	current	history1	history2
ADDITIVES Boron	ppm	method ASTM D5185m	limit/base	current 17	history1	history2
	ppm ppm					
Boron		ASTM D5185m	400	17		
Boron Barium	ppm	ASTM D5185m ASTM D5185m	400 200	17 0		
Boron Barium Molybdenum	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	400 200	17 0 2		
Boron Barium Molybdenum Manganese	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	400 200 12	17 0 2 9		
Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	400 200 12	17 0 2 9 8		
Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	400 200 12 12 12	17 0 2 9 8 18		
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	400 200 12 12 150 1650	17 0 2 9 8 18 1230	 	
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	400 200 12 12 150 1650 125	17 0 2 9 8 18 1230		
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	400 200 12 12 150 1650 125 22500	17 0 2 9 8 18 1230 4 17527		
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	400 200 12 12 150 1650 125 22500 limit/base	17 0 2 9 8 18 1230 4 17527		
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m method ASTM D5185m	400 200 12 12 150 1650 125 22500 limit/base >25	17 0 2 9 8 18 1230 4 17527 current		
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	400 200 12 12 150 1650 125 22500 Iimit/base >25 >170	17 0 2 9 8 18 1230 4 17527 current 8		history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	400 200 12 12 150 1650 125 22500 limit/base >25 >170 >20	17 0 2 9 8 18 1230 4 17527 current 8 2		
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Water	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	400 200 12 12 150 1650 125 22500 limit/base >25 >170 >20 >0.2	17 0 2 9 8 18 1230 4 17527 current 8 2 4 0.034	history1	



OIL ANALYSIS REPORT







Certificate L2367

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

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : WC0859386 : 06007815

Received Diagnosed : 10741577

Diagnostician : Don Baldridge Test Package : MAR 2 (Additional Tests: KF)

: 14 Nov 2023 : 16 Nov 2023 **SEAWARD SERVICES** 222 PEARL ST NEW ALBANY, IN US 47150

Contact: PETER CHARBONNET PCHARBONNET@HMS-SEAWARD.COM

To discuss this sample report, contact Customer Service at 1-800-237-1369. * - Denotes test methods that are outside of the ISO 17025 scope of accreditation.

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

T: F: