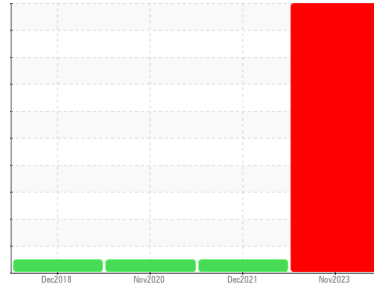




# PROBLEM SUMMARY

Sample Rating Trend

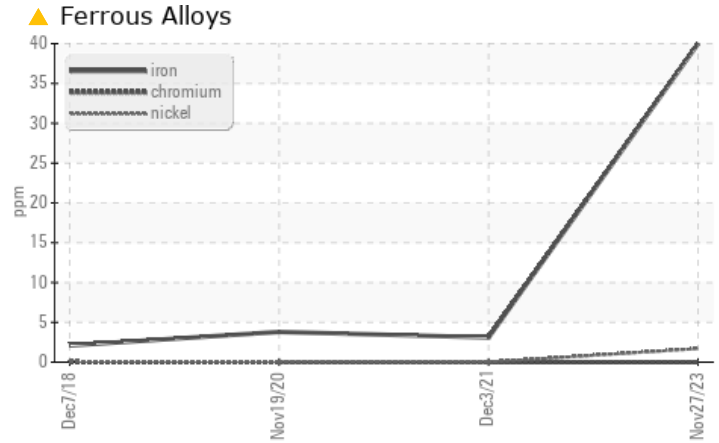
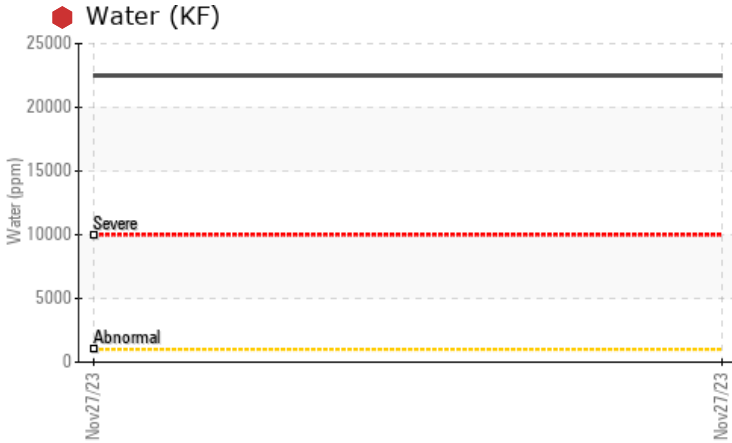


WATER



Machine Id  
**INGERSOLL RAND 2 - APPALACHIAN SKI (S/N 32082U82)**  
 Component  
**Compressor**  
 Fluid  
**PG 32 (--- GAL)**

## COMPONENT CONDITION SUMMARY



## RECOMMENDATION

The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

## PROBLEMATIC TEST RESULTS

Sample Status				SEVERE	NORMAL	NORMAL
Iron	ppm	ASTM D5185m	>50	▲ <b>40</b>	3	4
Water	%	ASTM D6304	>0.1	● <b>2.25</b>	---	---
ppm Water	ppm	ASTM D6304	>1000	● <b>22500</b>	---	---
Silt	scalar	*Visual	NONE	▲ <b>MODER</b>	NONE	NONE
Debris	scalar	*Visual	NONE	▲ <b>MODER</b>	VLITE	NONE
Emulsified Water	scalar	*Visual	>0.1	● <b>0.2%</b>	NEG	NEG
Free Water	scalar	*Visual		● <b>10.0</b>	NEG	NEG

Customer Id: AIRGREWC  
 Sample No.: WC0874236  
 Lab Number: 06026637  
 Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data:  
 Jonathan Hester +1 919-379-4092 x4092  
[jhester@wearcheckusa.com](mailto:jhester@wearcheckusa.com)

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

RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Resample	---	---	?	We recommend an early resample to monitor this condition.

HISTORICAL DIAGNOSIS

03 Dec 2021 Diag: Jonathan Hester

NORMAL



Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report



19 Nov 2020 Diag: Don Baldrige

NORMAL



Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report



07 Dec 2018 Diag: Don Baldrige

NORMAL



Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

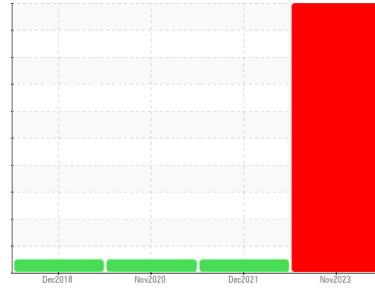
view report





# OIL ANALYSIS REPORT

Sample Rating Trend



WATER



Machine Id  
**INGERSOLL RAND 2 - APPALACHIAN SKI (S/N 32082U82)**  
 Component  
**Compressor**  
 Fluid  
**PG 32 (--- GAL)**

## DIAGNOSIS

### Recommendation

The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

### Wear

The iron level is marginal.

### Contamination

Excessive free water present. There is a high concentration of water present in the oil. Moderate concentration of visible dirt/debris present in the oil. There is a moderate amount of visible silt present in the sample.

### Fluid Condition

The AN level is acceptable for this fluid. The oil is no longer serviceable due to the presence of contaminants.

## SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>WC0874236</b>	WC0628119	WC0500880
Sample Date	Client Info		<b>27 Nov 2023</b>	03 Dec 2021	19 Nov 2020
Machine Age	hrs	Client Info	<b>10354</b>	9768	9375
Oil Age	hrs	Client Info	<b>1376</b>	0	1260
Oil Changed	Client Info		<b>Changed</b>	Not Changd	Not Changd
Sample Status			<b>SEVERE</b>	NORMAL	NORMAL

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >50	<b>40</b>	3	4
Chromium	ppm	ASTM D5185m >10	<b>0</b>	0	0
Nickel	ppm	ASTM D5185m	<b>2</b>	0	0
Titanium	ppm	ASTM D5185m	<b>0</b>	0	0
Silver	ppm	ASTM D5185m	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m >25	<b>&lt;1</b>	0	0
Lead	ppm	ASTM D5185m >25	<b>3</b>	0	1
Copper	ppm	ASTM D5185m >50	<b>10</b>	<1	2
Tin	ppm	ASTM D5185m >15	<b>6</b>	0	1
Antimony	ppm	ASTM D5185m	<b>---</b>	0	<1
Vanadium	ppm	ASTM D5185m	<b>&lt;1</b>	0	0
Cadmium	ppm	ASTM D5185m	<b>3</b>	2	3

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	<b>4</b>	0	2
Barium	ppm	ASTM D5185m	<b>518</b>	888	892
Molybdenum	ppm	ASTM D5185m	<b>0</b>	0	<1
Manganese	ppm	ASTM D5185m	<b>0</b>	0	<1
Magnesium	ppm	ASTM D5185m	<b>0</b>	0	<1
Calcium	ppm	ASTM D5185m	<b>8</b>	0	2
Phosphorus	ppm	ASTM D5185m	<b>6</b>	0	2
Zinc	ppm	ASTM D5185m	<b>8</b>	0	4
Sulfur	ppm	ASTM D5185m	<b>392</b>	9	282

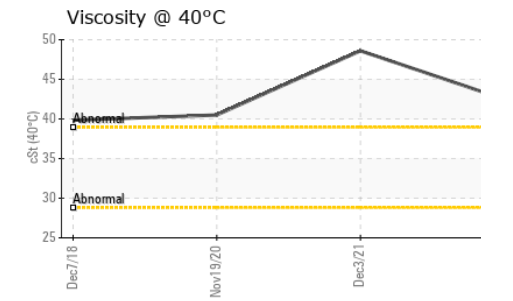
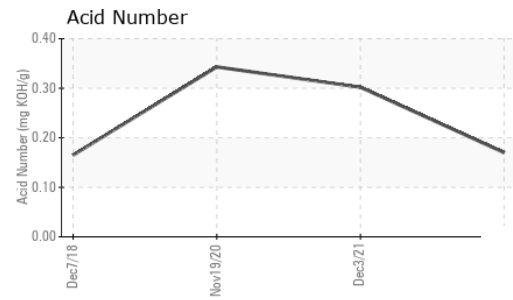
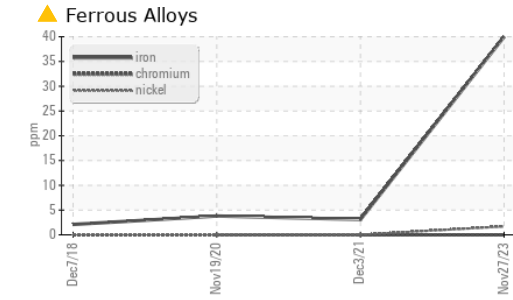
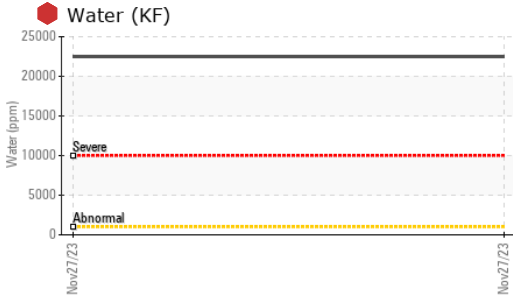
## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	<b>4</b>	0	0
Sodium	ppm	ASTM D5185m	<b>15</b>	26	22
Potassium	ppm	ASTM D5185m >20	<b>7</b>	0	1
Water	%	ASTM D6304 >0.1	<b>2.25</b>	---	---
ppm Water	ppm	ASTM D6304 >1000	<b>22500</b>	---	---

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	<b>0.17</b>	0.302	0.343

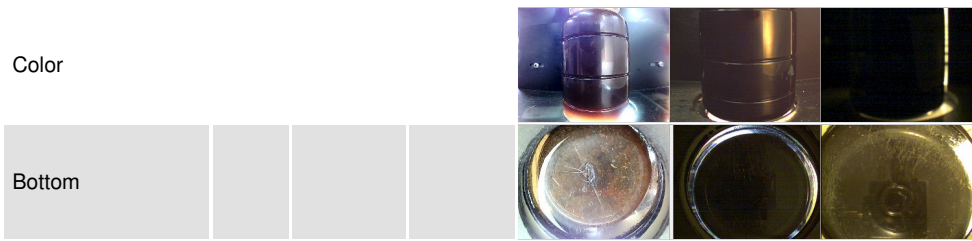
# OIL ANALYSIS REPORT



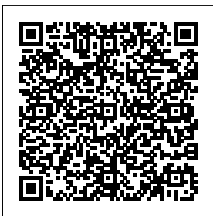
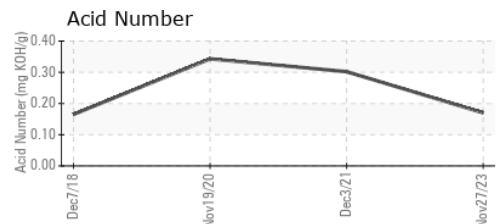
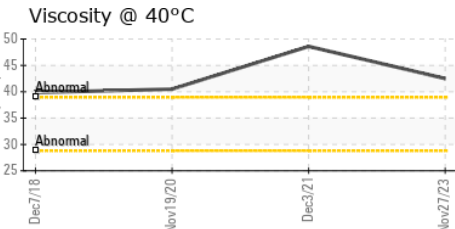
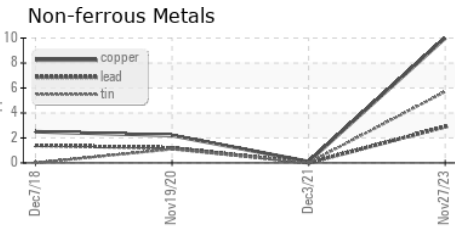
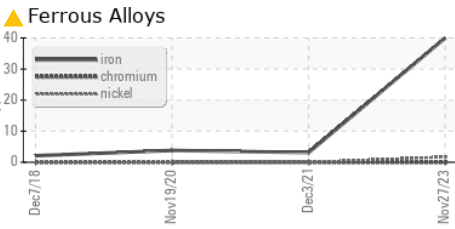
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	▲ MODER	NONE
Debris	scalar	*Visual	NONE	▲ MODER	VLITE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.1	● 0.2%	NEG
Free Water	scalar	*Visual		● 10.0	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	42.5	48.6	40.5

SAMPLE IMAGES	method	limit/base	current	history1	history2
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## GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0874236 **Received** : 06 Dec 2023  
**Lab Number** : 06026637 **Diagnosed** : 12 Dec 2023  
**Unique Number** : 10776428 **Diagnostician** : Jonathan Hester  
**Test Package** : IND 2 ( Additional Tests: KF )

**FS-COMPRESSION CO, LLC**  
 203 AERO COURT  
 GREENSBORO, NC  
 US 27409

Contact: Dallas Burcham  
 dallas.burcham@fs-compression.com  
 T: (336)605-9622  
 F: (336)605-9844

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)