

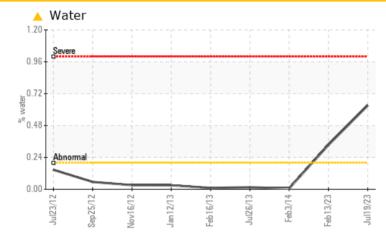
PROBLEM SUMMARY

Area AREA I [500302246] Machine Id CHEMINEER A1003 (S/N AD-3-21) Component

Gearbox

Fluid ROYAL PURPLE SYNFILM GT 220 (3 GAL)

COMPONENT CONDITION SUMMARY



RECOMMENDATION

Check seals and/or filters for points of contaminant entry. We advise that you check for the source of water entry. Inspect/change air breather if applicable. We advise that you use off-line filtration with water adsorbent filters to attempt to remove the water from this oil. We recommend an early resample to monitor this condition.

PROBLEMATIC TEST RESULTS Sample Status NORMAL ABNORMAL ABNORMAL Water % ASTM D6304 >0.2 0.631 ▲ 0.334 ppm Water ASTM D6304 >2000 **6310** ▲ 3340 ppm

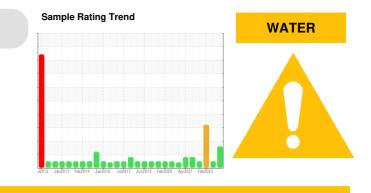
Customer Id: ALBORA Sample No.: WC0810618 Lab Number: 05929814 Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data: Angela Borella +1 800-237-1369 angela.borella@wearcheckusa.com

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



RECOMMENDED ACTIONS						
Action	Status	Date	Done By	Description		
Resample			?	We recommend an early resample to monitor this condition.		
Check Breathers			?	The air breather requires service. If unrated, we recommend that you replace with a suitable micron rated and/or desiccant air breather. If rated, we recommend that you service/replace the breather.		
Check Water Access			?	We advise that you check for the source of water entry.		
Check Seals			?	Check seals and/or filters for points of contaminant entry.		
Filter Fluid			?	We advise that you use off-line filtration with water adsorbent filters to attempt to remove the water from this oil.		

HISTORICAL DIAGNOSIS

18 Apr 2023 Diag: Don Baldridge



To Apr 2023 Diag. Doit Baldinage



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

13 Feb 2023 Diag: Don Baldridge



No corrective action is recommended at this time. We recommend an early resample to monitor this condition. The aluminum level is abnormal. An increase in the iron level is noted. There is a light concentration of water present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

NORMAL



11 Oct 2022 Diag: Angela Borella

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.







OIL ANALYSIS REPORT

Area AREA I [500302246] Machine Id CHEMINEER A1003 (S/N AD-3-21) Component

Gearbox

ROYAL PURPLE SYNFILM GT 220 (3 GAL)

DIAGNOSIS

Recommendation

Check seals and/or filters for points of contaminant entry. We advise that you check for the source of water entry. Inspect/change air breather if applicable. We advise that you use off-line filtration with water adsorbent filters to attempt to remove the water from this oil. We recommend an early resample to monitor this condition.

Wear

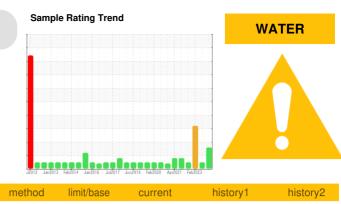
All component wear rates are normal.

Contamination

There is a moderate concentration of water present in the oil.

Fluid Condition

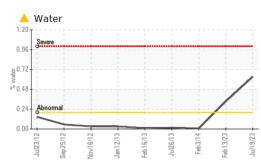
The AN level is acceptable for this fluid. The condition of the oil is acceptable for the time in service.

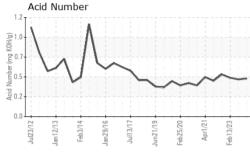


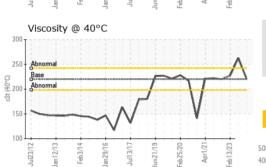
SAMPLE INFORM	IATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0810618	WC0804414	WC0777486
Sample Date		Client Info		19 Jul 2023	18 Apr 2023	13 Feb 2023
Machine Age	hrs	Client Info		0	0	0
Oil Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	N/A	N/A
Sample Status				ABNORMAL	NORMAL	ABNORMAL
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>200	35	33	1 61
Chromium	ppm	ASTM D5185m	>15	0	0	<1
Nickel	ppm	ASTM D5185m	>15	<1	0	1
Titanium	ppm	ASTM D5185m		<1	0	1
Silver	ppm	ASTM D5185m		0	0	<1
Aluminum	ppm	ASTM D5185m	>25	12	16	▲ 68
Lead	ppm	ASTM D5185m	>100	<1	0	0
Copper	ppm	ASTM D5185m	>200	1	<1	2
Tin	ppm	ASTM D5185m	>25	0	0	0
Vanadium	ppm	ASTM D5185m		0	0	<1
Cadmium	ppm	ASTM D5185m		<1	<1	4
ADDITIVES		method	limit/base	current	history1	history2
ADDITIVES Boron	ppm	method ASTM D5185m	limit/base	current <1	history1 0	<mark>history2</mark> <1
	ppm ppm		limit/base	<1 0	0	<1 0
Boron		ASTM D5185m	limit/base	<1	0	<1 0 2
Boron Barium	ppm	ASTM D5185m ASTM D5185m	limit/base	<1 0	0	<1 0 2 3
Boron Barium Molybdenum	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	<1 0 <1 <1 30	0 0 <1 <1 58	<1 0 2 3 106
Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	<1 0 <1 <1 30 12	0 0 <1 <1 58 <1	<1 0 2 3 106 8
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	<1 0 <1 <1 30 12 15	0 0 <1 <1 58 <1 4	<1 0 2 3 106 8 14
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	<1 0 <1 <1 30 12 15 12	0 0 <1 <1 58 <1 4 88	<1 0 2 3 106 8 14 281
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	<1 0 <1 <1 30 12 15	0 0 <1 <1 58 <1 4 88 20639	<1 0 2 3 106 8 14 281 24240
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	<1 0 <1 <1 30 12 15 12	0 0 <1 58 <1 4 88 20639 history1	<1 0 2 3 106 8 14 281 24240 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		<1 0 <1 <1 30 12 15 12 21926	0 0 <1 58 <1 4 88 20639 history1 2	<1 0 2 3 106 8 14 281 24240 history2 6
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	limit/base	<1 0 <1 <1 30 12 15 12 21926 current	0 0 <1 58 <1 4 88 20639 history1	<1 0 2 3 106 8 14 281 24240 history2 6 3
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 ASTM D5185m	limit/base >50 >20	<1 0 <1 <1 30 12 15 12 21926 current 4 0 1	0 0 <1 58 <1 4 88 20639 history1 2	<1 0 2 3 106 8 14 281 24240 history2 6 3 2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m	limit/base >50	<1 0 <1 <1 30 12 15 12 21926 current 4 0	0 0 <1 58 <1 4 88 20639 history1 2 0	<1 0 2 3 106 8 14 281 24240 history2 6 3
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 ASTM D5185m	limit/base >50 >20	<1 0 <1 <1 30 12 15 12 21926 current 4 0 1	0 0 <1 58 <1 4 88 20639 history1 2 0 <1	<1 0 2 3 106 8 14 281 24240 history2 6 3 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 ASTM D5185m	limit/base >50 >20 >0.2	<1 0 <1 <1 30 12 15 12 21926 current 4 0 1 1 ▲ 0.631	0 0 <1 58 <1 4 88 20639 history1 2 0 <1 	<1 0 2 3 106 8 14 281 24240 history2 6 3 2 2 4 0.334



OIL ANALYSIS REPORT





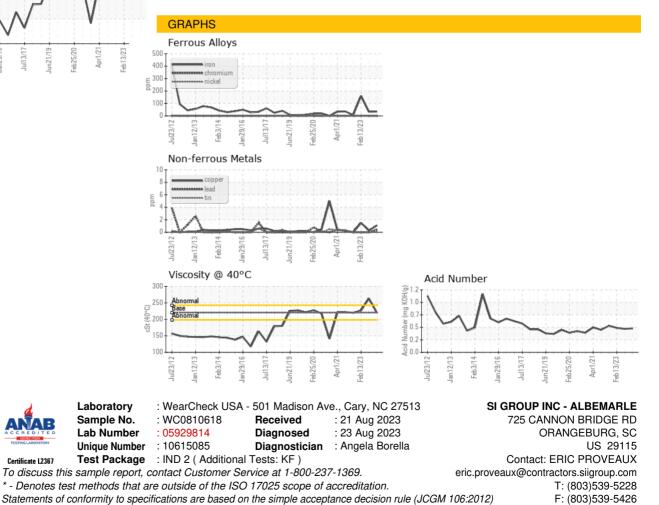


VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	LIGHT	LIGHT
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	LIGHT
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	0.2%	NEG	0.2%
Free Water	scalar	*Visual		NEG	NEG	NEG
FLUID PROPERT	IES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	220	220	263	227
SAMPLE IMAGES		method	limit/base	current	history1	history2

Color



Bottom



Submitted By: KIRK WILLIAMS

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