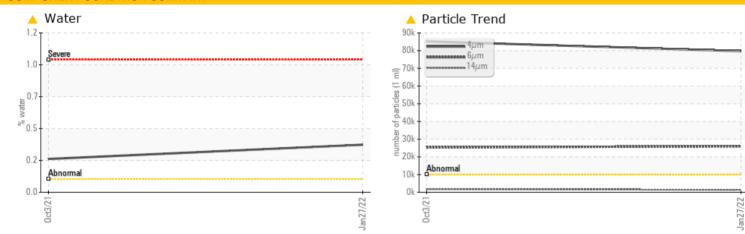


PROBLEM SUMMARY

Machine Id FRICK FRICK B

Screw Compressor Fluid NOT GIVEN (--- GAL)

COMPONENT CONDITION SUMMARY



RECOMMENDATION

We recommend you service the filters on this component. Resample at the next service interval to monitor.

PROBLEMATIC TEST RESULTS

THOBELMATIO LEST RESULTS								
Sample Status				ABNORMAL	ABNORMAL			
Water	%	ASTM D6304	>0.1	<u> </u>	0.251			
ppm Water	ppm	ASTM D6304	>1000	A 3589.6	4 2511.2			
Particles >4µm		ASTM D7647	>10000	<u> </u>	▲ 85222			
Particles >6µm		ASTM D7647	>2500	🔺 25980	🔺 25315			
Particles >14µm		ASTM D7647	>320	<u> </u>	1 768			
Particles >21µm		ASTM D7647	>80	A 330	5 46			
Oil Cleanliness		ISO 4406 (c)	>20/18/15	<u> </u>	<u> </u>			

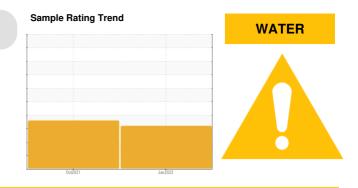
Customer Id: GARROW Sample No.: TO50000454 Lab Number: 05535255 Test Package: IND 2



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

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



RECOMMENDED A	CTIONS			
Action	Status	Date	Done By	Description
Change Filter	MISSED	May 23 2022	?	We recommend you service the filters on this component.

HISTORICAL DIAGNOSIS



03 Oct 2021 Diag: Doug Bogart

We recommend you service the filters on this component. Resample at the next service interval to monitor.All component wear rates are normal. There is a high amount of particulates present in the oil. 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.





OIL ANALYSIS REPORT

Sample Rating Trend

WATER

Machine Id FRICK FRICK B Component Screw Compressor Fluid

NOT GIVEN (--- GAL)

DIAGNOSIS

A Recommendation

We recommend you service the filters on this component. Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

There is a high amount of particulates present in the oil. There is a light concentration of water present in the oil.

Fluid Condition

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

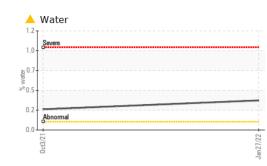
Sample Number	IATION	method	limit/base	current	history1	history2
		Client Info		TO50000454	TO50000452	
Sample Date		Client Info		27 Jan 2022	03 Oct 2021	
Machine Age	hrs	Client Info		0	0	
Oil Age	hrs	Client Info		0	0	
Oil Changed		Client Info		N/A	N/A	
Sample Status				ABNORMAL	ABNORMAL	
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>60	0	<1	
Chromium	ppm	ASTM D5185m	>4	0	0	
Nickel	ppm	ASTM D5185m		0	<1	
Titanium	ppm	ASTM D5185m		0	0	
Silver	ppm	ASTM D5185m		0	1	
Aluminum	ppm	ASTM D5185m	>5	0	<1	
Lead	ppm	ASTM D5185m	>10	0	<1	
Copper	ppm	ASTM D5185m	>30	0	<1	
Tin	ppm		>15	<1	<1	
Antimony	ppm	ASTM D5185m			<1	
Vanadium	ppm	ASTM D5185m		0	<1	
Cadmium	ppm	ASTM D5185m		0	<1	
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		<1	<1	
Barium	ppm	ASTM D5185m		0	0	
Molybdenum	ppm	ASTM D5185m		0	<1	
Manganese	ppm	ASTM D5185m		0	<1	
Magnesium	ppm	ASTM D5185m		0	<1	
Calcium	ppm	ASTM D5185m		0	<1	
Phosphorus	ppm	ASTM D5185m		7	6	
•	ppm	ASTM D5185m		0	0	
linc	ppiii	AOTIVI DOTODITI		0	0	
		ASTM D5185m		19/17	756	
Sulfur	ppm	ASTM D5185m		1247	756	
Sulfur CONTAMINANTS	ppm	ASTM D5185m method	limit/base	1247 current	history1	 history2
Sulfur CONTAMINANTS Silicon	ppm ppm	method ASTM D5185m	limit/base >50	current 30	history1 24	
Sulfur CONTAMINANTS Silicon Sodium	ppm	method ASTM D5185m ASTM D5185m	>50	current 30 0	history1 24 1	history2
Sulfur CONTAMINANTS Silicon Sodium Potassium	ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m	>50 >20	current 30 0 1	history1 24 1 1	history2
Sulfur CONTAMINANTS Silicon Sodium Potassium Water	ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D6304	>50 >20 >0.1	current 30 0 1 ▲ 0.358	history1 24 1 1 ▲ 0.251	history2
Sulfur CONTAMINANTS Silicon Sodium Potassium Water	ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m	>50 >20	current 30 0 1	history1 24 1 1	history2
Sulfur CONTAMINANTS Silicon Sodium Potassium Water	ppm ppm ppm ppm % ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D6304	>50 >20 >0.1	current 30 0 1 ▲ 0.358	history1 24 1 1 ▲ 0.251	history2
Sulfur CONTAMINANTS Silicon Sodium Potassium Water ppm Water FLUID CLEANLIN Particles >4µm	ppm ppm ppm ppm % ppm	method ASTM D5185m ASTM D5185m ASTM D6304 ASTM D6304 Method ASTM D7647	>50 >20 >0.1 >1000 limit/base >10000	current 30 0 1 ▲ 0.358 ▲ 3589.6 current ▲ 79723	history1 24 1 1 ▲ 0.251 ▲ 2511.2 history1 ▲ 85222	history2
Sulfur CONTAMINANTS Silicon Sodium Potassium Water ppm Water FLUID CLEANLIN Particles >4µm Particles >6µm	ppm ppm ppm ppm % ppm	methodASTM D5185mASTM D5185mASTM D6304ASTM D6304MethodASTM D7647ASTM D7647	>50 >20 >0.1 >1000 limit/base >10000 >2500	current 30 0 1 ▲ 0.358 ▲ 3589.6 current	history1 24 1 1 ▲ 0.251 ▲ 2511.2 history1 ▲ 85222 ▲ 25315	history2 history2
Sulfur CONTAMINANTS Silicon Sodium Potassium Water ppm Water FLUID CLEANLIN Particles >4µm Particles >6µm Particles >14µm	ppm ppm ppm ppm % ppm	methodASTM D5185mASTM D5185mASTM D6304ASTM D6304MethodASTM D7647ASTM D7647ASTM D7647ASTM D7647ASTM D7647ASTM D7647	>50 >20 >0.1 >1000 limit/base >10000 >2500 >320	current 30 0 1 ▲ 0.358 ▲ 3589.6 current ▲ 79723 ▲ 25980 ▲ 1375	history1 24 1 1 ▲ 0.251 ▲ 2511.2 history1 ▲ 85222 ▲ 25315 ▲ 1768	history2 history2
Sulfur CONTAMINANTS Silicon Sodium Potassium Water ppm Water FLUID CLEANLIN Particles >4µm Particles >6µm Particles >14µm	ppm ppm ppm ppm % ppm	methodASTM D5185mASTM D5185mASTM D6304ASTM D6304MethodASTM D7647ASTM D7647	>50 >20 >0.1 >1000 limit/base >10000 >2500	Current 30 0 1 ▲ 0.358 ▲ 3589.6 Current ▲ 79723 ▲ 25980 ▲ 1375 ▲ 330	history1 24 1 1 0.251 2511.2 history1 ▲ 85222 ▲ 25315 ▲ 1768 ▲ 546	history2 history2 history2
Silicon Sodium Potassium Water ppm Water FLUID CLEANLIN Particles >4µm Particles >6µm Particles >21µm Particles >38µm	ppm ppm ppm ppm % ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D6304 ASTM D6304 ASTM D6304 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647	>50 >20 >0.1 >1000 limit/base >10000 >2500 >320 >320 >80 >20	Current 30 0 1 ▲ 0.358 ▲ 3589.6 Current ▲ 79723 ▲ 25980 ▲ 1375 ▲ 330 9	history1 24 1 1 ▲ 0.251 ▲ 2511.2 history1 ▲ 85222 ▲ 25315 ▲ 1768	history2 history2 history2
Sulfur CONTAMINANTS Silicon Sodium Potassium Water ppm Water FLUID CLEANLIN Particles >4µm Particles >6µm Particles >14µm Particles >38µm Particles >71µm	ppm ppm ppm ppm % ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D6304 ASTM D7647 ASTM D7647	>50 >20 >0.1 >1000 limit/base >10000 >2500 >320 >320 >80 >20 >4	current 30 0 1 ▲ 0.358 ▲ 3589.6 current ▲ 79723 ▲ 25980 ▲ 1375 ▲ 330 9 0	history1 24 1 1 0.251 ▲ 0.251 ▲ 2511.2 history1 ▲ 85222 ▲ 25315 ▲ 1768 ▲ 546 ▲ 22 0	history2 history2 history2
Sulfur CONTAMINANTS Silicon Sodium Potassium Water ppm Water FLUID CLEANLIN Particles >4µm Particles >6µm Particles >14µm Particles >21µm Particles >38µm	ppm ppm ppm ppm % ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D6304 ASTM D6304 ASTM D6304 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647	>50 >20 >0.1 >1000 limit/base >10000 >2500 >320 >320 >80 >20	Current 30 0 1 ▲ 0.358 ▲ 3589.6 Current ▲ 79723 ▲ 25980 ▲ 1375 ▲ 330 9	history1 24 1 0.251 ▲ 0.251 ▲ 2511.2 history1 ▲ 85222 ▲ 25315 ▲ 1768 ▲ 546 ▲ 22	history2 history2 history2
Sulfur CONTAMINANTS Silicon Sodium Potassium Water ppm Water FLUID CLEANLIN Particles >4µm Particles >6µm Particles >14µm Particles >38µm Particles >71µm	ppm ppm ppm % ppm ESS	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D6304 ASTM D7647 ASTM D7647	>50 >20 >0.1 >1000 limit/base >10000 >2500 >320 >320 >80 >20 >4	current 30 0 1 ▲ 0.358 ▲ 3589.6 current ▲ 79723 ▲ 25980 ▲ 1375 ▲ 330 9 0	history1 24 1 1 0.251 ▲ 0.251 ▲ 2511.2 history1 ▲ 85222 ▲ 25315 ▲ 1768 ▲ 546 ▲ 22 0	history2 history2 history2 history2

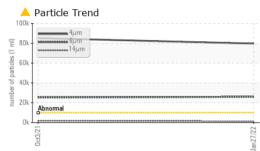
Report Id: GARROW [WUSCAR] 05535255 (Generated: 07/19/2023 15:26:46) Rev: 1

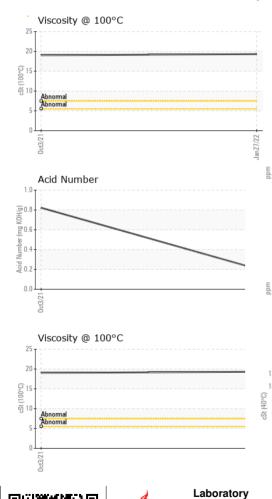
Contact/Location: DUSTIN FRY - GARROW



OIL ANALYSIS REPORT







		-	VISUAL		method	limit/base	current	history1	history2
			White Metal	scalar	*Visual	NONE	NONE	LIGHT	
		•	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	
			Precipitate	scalar	*Visual	NONE	NONE	NONE	
			Silt	scalar	*Visual	NONE	NONE	NONE	
			Debris	scalar	*Visual	NONE	LIGHT	NONE	
			Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	
	60		Appearance	scalar	*Visual	NORML	NORML	NORML	
	<i>CC/LC</i> ue		Odor	scalar	*Visual	NORML	NORML	NORML	
			Emulsified Water	scalar	*Visual	>0.1	NEG	NEG	
			Free Water	scalar	*Visual	20.1	NEG	NEG	
		-							
			FLUID PROPERT		method	limit/base	current	history1	history2
			Visc @ 40°C	cSt	ASTM D445		110	107	
			Visc @ 100°C	cSt	ASTM D445		19.3	19.03	
			Viscosity Index (VI)	Scale	ASTM D2270		197	199	
	2	1 77	SAMPLE IMAGES	6	method	limit/base	current	history1	history2
			Color						no image
		-	Bottom						no image
		-	GRAPHS						
	22	⊥ ∛ 10	Ferrous Alloys			491,520	Particle Count		72
	CC/LCuel	17 10	8 iron						
		, mgg g	6 - nickel			122,880	Severe		-2
		1d 4	4			30,720			-2
		2					Abnormal		21
			0ct3/21			1 ml)			
			Oct			22//2/ml 1,920			-18
			Non-ferrous Metal	5		응 480			-16
		10	⁰ T:			 5 120			
		3	6- copper			aquir 120			1
		udd 4	4			≓ 30	-		12
		udd 4	4			≅ 30	-		
		udd 4	2			8	-		
		udd 4	2			8	-		
		udd 4	004321			e 30 8 72/27 2 2 2 2 2 2 2 0	- 	14μ 21μ	
		2	Viscosity @ 40°C			Jan 27/22	ہے۔ بیر قبلہ Acid Number	14μ 21μ	-10
		E 4 2 0 120 100	Viscosity @ 40°C			Jan 27/22	ہے۔ بیر قبلہ Acid Number	14 _µ 21 _µ	-10
		2 0 120 100	Viscosity @ 40°C			Jan 27/22	ہے۔ بیر قبلہ Acid Number	14μ 21μ	-10
		2 0 120 100	Viscosity @ 40°C			Jan 27/22	ہے۔ بیر قبلہ Acid Number	14μ 21μ	-10
		2 0 120 (0-0 1) 30 (0-0 1) 30 40	Viscosity @ 40°C			Jan 27/22	ہے۔ بیر قبلہ Acid Number	14μ 21μ	-10
		2 0 120 100 (0=0+) ts 60	Viscosity @ 40°C			۵۵ ۲۰۰۲ ۲۰۰۳ ۲۰۰۳ ۲۰۰۳ ۲۰۰۳ ۲۰۰۳ ۲۰۰۳ ۲۰۰۳	مرافع م مرافع مرافع مر مرافع مرافع مرافع مرافع مرافع مرمو مر مرافع مرافع مرافع مرافع مرافع مرافع مرافع مرافع مرافع مراف	14μ 21μ	
		2 0 120 (0-0 1) 30 (0-0 1) 30 40	Viscosity @ 40°C			Jan 27/22	ہے۔ بیر قبلہ Acid Number	14μ 21μ	-20 -18 -14 -14 -12 -10
Sal	boratory mple No. b Number que Number	12C 10C 10C 2 8 6 6 7 4 2 2 2 7 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	Viscosity @ 40°C	Received Diagnos Diagnosi	d : 03 M ed : 05 M tician : Jon	ry, NC 27513 May 2022 May 2022 athan Hester	Acid Number	GARLAND R 3175 EL F	ENEWABLE M GROVE F ROWLETT, T US 7508
Salution Sal	mple No. b Number que Numbe st Package	120 100 (20-5)-80 40 20 	Viscosity @ 40°C	Received Diagnos Diagnost Diagnost	d : 03 M ed : 05 M tician : Jon KV100, PrtC	ry, NC 27513 May 2022 May 2022 athan Hester Count, VI)	Acid Number	GARLAND R 3175 EL F	

* - 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) Т:

F: