

# **OIL ANALYSIS REPORT**

Sample Rating Trend



# Machine Id 070-COMPAIR-08 Component

Air Compressor Fluid NOT GIVEN (--- GAL)

## DIAGNOSIS

## Recommendation

Resample at the next service interval to monitor.

#### Wear

All component wear rates are normal.

#### Contamination

There is no indication of any contamination in the component. The amount and size of particulates present in the system is acceptable.

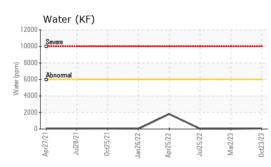
# Fluid Condition

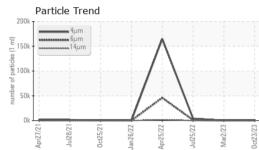
The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

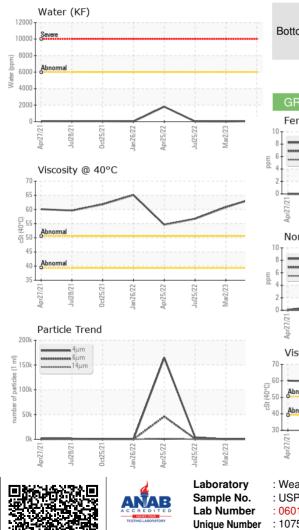
Sample Date  Client Info  23 Oct 2023  02 Mar 2023  25 Jul 2022    Machine Age  hrs  Client Info  0  0  0    Oil Age  hrs  Client Info  0  0  0    Oil Age  Nra  N/A  N/A  N/A  N/A    Sample Status  Imite  Imitebase  current  history1  history2    Iron  ppm  ASTM D5185m  >50  0  0  0    Chromium  ppm  ASTM D5185m  >4  0  0  0    Nickel  ppm  ASTM D5185m  >4  0  0  0    Aluminum  ppm  ASTM D5185m  >20  0  0  0    Capper  ppm  ASTM D5185m  >20  0  0  1  0    Capper  ppm  ASTM D5185m  >50  0  0  1  0    Capper  ppm  ASTM D5185m  >20  0  0  1  0	SAMPLE INFORM	1ATION	method	limit/base	current	history1	history2
Machine Age  hrs  Client Info  0  0  0    Oil Age  hrs  Client Info  0  0  0    Oil Age  Hrs  Client Info  N/A  N/A  N/A    Sample Status  Imit/base  current  history1  history2    Iron  ppm  ASTM D5185m  >50  0  0  0    Nickel  ppm  ASTM D5185m  >4  0  0  0    Silver  ppm  ASTM D5185m  <1  <1  0  0    Cadmium  ppm  ASTM D5185m  >0  0  0  0    Cadmium  ppm  ASTM D5185m  >0  0  0  0    Cadmium  ppm  ASTM D5185m  <0  0  0  0    ASTM D5185m  <0  0  0  0  0  0    Cadmium  ppm  ASTM D5185m  <1  0  0  0    Manganese  ppm	Sample Number		Client Info		USP245355	USP245351	USP231471
Oil Age  hrs  Client Info  0  0  0    Oil Changed  Client Info  N/A  N/A  N/A  N/A    Sample Status  method  limit/base  current  history1  history2    Iron  ppm  ASTM D5185m  >50  0  0  0    Chromium  ppm  ASTM D5185m  >4  -1  0  0    Nickel  ppm  ASTM D5185m  >4  0  0  0    Silver  ppm  ASTM D5185m  >10  2  <1  0  0    Auminum  ppm  ASTM D5185m  >20  0  0  0  0    Copper  ppm  ASTM D5185m  >0  0  <1  0  0    Arandum  ppm  ASTM D5185m  0  0  <1  0  0    Capper  ppm  ASTM D5185m  0  0  0  0  0    Capper  ppm  ASTM D5185m	Sample Date		Client Info		23 Oct 2023	02 Mar 2023	25 Jul 2022
Oil Age  hrs  Client Info  0  0  0    Oil Changed  Client Info  N/A  N/A  N/A  N/A    Sample Status  method  limit/base  current  history1  history2    Iron  ppm  ASTM D5185m  >50  0  0  0    Chromium  ppm  ASTM D5185m  >4  -1  0  0    Nickel  ppm  ASTM D5185m  >4  0  0  0    Silver  ppm  ASTM D5185m  >10  2  <1  0  0    Auminum  ppm  ASTM D5185m  >20  0  0  0  0    Copper  ppm  ASTM D5185m  >0  0  <1  0  0    Arandum  ppm  ASTM D5185m  0  0  <1  0  0    Capper  ppm  ASTM D5185m  0  0  0  0  0    Capper  ppm  ASTM D5185m	Machine Age	hrs	Client Info		0	0	0
Oil Changed  Client Info  N/A	-	hrs	Client Info		0	0	0
Sample Status  method  Imit/base  current.  NORMAL  NORMAL  NORMAL    WEAR METALS  method  limit/base  current.  history1  history2    Iron  ppm  ASTM D5185m  >50  0  0  0    Chromium  ppm  ASTM D5185m  >4  0  0  0    Nickel  ppm  ASTM D5185m  >4  0  0  0    Titanium  ppm  ASTM D5185m  >10  2  <1  0    Aluminum  ppm  ASTM D5185m  >20  0  0  0    Copper  ppm  ASTM D5185m  >20  0  0  0    Copper  ppm  ASTM D5185m  >5  0  0  0    Cadmium  ppm  ASTM D5185m  <1  0  0  0    Boron  ppm  ASTM D5185m  <1  0  0  0    Magnesium  ppm  ASTM D5185m  <1  0	-		Client Info		N/A	N/A	N/A
Iron  ppm  ASTM D5185m  >50  0  0  0    Chromium  ppm  ASTM D5185m  >4  <1  0  0    Nickel  ppm  ASTM D5185m  >4  0  0  0    Silver  ppm  ASTM D5185m  0  0  0  0    Aluminum  ppm  ASTM D5185m  >10  2  <1  0  0    Copper  ppm  ASTM D5185m  >20  0  0  0  0    Yanadium  ppm  ASTM D5185m  >40  <1  0  0  0    Yanadium  ppm  ASTM D5185m  0  0  0  0  0    Admium  ppm  ASTM D5185m  0  0  0  0  0    Admium  ppm  ASTM D5185m  0  0  0  0  0  0  0    Admium  ppm  ASTM D5185m  0  <1  0  0  0	Sample Status				NORMAL	NORMAL	NORMAL
Dpm  ASTM D5165m  >4  <1	WEAR METALS		method	limit/base	current	history1	history2
Chromium  ppm  ASTM D5185m  >4  <1	Iron	ppm	ASTM D5185m	>50	0	0	0
Nickel  ppm  ASTM D5185m  >4  0  0  0    Titanium  ppm  ASTM D5185m  0  0  0  0    Silver  ppm  ASTM D5185m  0  0  0  0    Lead  ppm  ASTM D5185m  >20  0  0  0    Copper  ppm  ASTM D5185m  >20  0  0  0    Cadmium  ppm  ASTM D5185m  >20  0  0  <1    Vanadium  ppm  ASTM D5185m  >5  0  0  <1  0  <1    Cadmium  ppm  ASTM D5185m  <1  0  0  0  0    Boron  ppm  ASTM D5185m  <1  0  0  0  0    Barium  ppm  ASTM D5185m  <1  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0	Chromium		ASTM D5185m	>4	<1	0	0
Titanium  ppm  ASTM D5185m  <1	Nickel			>4	0		
Silver  ppm  ASTM D5185m  0  0  0  0    Aluminum  ppm  ASTM D5185m  >10  2  <1  0    Lead  ppm  ASTM D5185m  >20  0  0  0    Copper  ppm  ASTM D5185m  >20  0  0  <1    Tin  ppm  ASTM D5185m  >0  0  <1  0    Vanadium  ppm  ASTM D5185m  0  0  0  0    Cadmium  ppm  ASTM D5185m  0  0  0  0    ADDITIVES  method  limit/base  current  history1  history2    Boron  ppm  ASTM D5185m  0  <1  0  0    Magnasium  ppm  ASTM D5185m  <1  3  0  0    Calcium  ppm  ASTM D5185m  <284  258  265  2    Zinc  ppm  ASTM D5185m  20  1  0  0							
Aluminum  ppm  ASTM D5185m  >10  2  <1	Silver						
Lead  ppm  ASTM D5185m  >20  0  0  0    Copper  ppm  ASTM D5185m  >40  <1  0  <1    Tin  ppm  ASTM D5185m  >5  0  0  <1    Vanadium  ppm  ASTM D5185m   0  0  0    Cadmium  ppm  ASTM D5185m   0  0  0    ADDITIVES  method  limit/base  current  history1  history2    Boron  ppm  ASTM D5185m  0  0  0  0    Manganese  ppm  ASTM D5185m  <1  0  0    Magnesium  ppm  ASTM D5185m  <1  3  0    Calcium  ppm  ASTM D5185m  <1  3  0    Sulfur  ppm  ASTM D5185m  <284  258  265    Zinc  ppm  ASTM D5185m  22  <1  1  0    Sulfur  ppm <td< th=""><th></th><th></th><th></th><th>&gt;10</th><th></th><th></th><th></th></td<>				>10			
Copper  ppm  ASTM D5185m  >40  <1							
Tin  ppm  ASTM D5185m  >5  0  0  <1							
Vanadium  ppm  ASTM D5185m  0  0  0  0    Cadmium  ppm  ASTM D5185m  <1  0  0    ADDITIVES  method  limit/base  current  history1  history2    Boron  ppm  ASTM D5185m  0  0  0  0    Barium  ppm  ASTM D5185m  0  0  0  0    Magnese  ppm  ASTM D5185m  <1  0  0  0    Magnesium  ppm  ASTM D5185m  <1  0  0  0    Calcium  ppm  ASTM D5185m  <1  0  0  0    Sulfur  ppm  ASTM D5185m  284  258  265  2    Solium  ppm  ASTM D5185m  319  49  333    CONTAMINANTS  method  imit/base  current  history1  history2    Silicon  ppm  ASTM D5185m  >20  1  0  0							
Cadmium  ppm  ASTM D5185m  <1				~0			
ADDITIVES  method  limit/base  current  history1  history2    Boron  ppm  ASTM D5185m  0  0  0  0    Barium  ppm  ASTM D5185m  0  0  0  0    Molybdenum  ppm  ASTM D5185m  <1  0  0  0    Magnese  ppm  ASTM D5185m  <1  3  0  0    Galcium  ppm  ASTM D5185m  <1  0  0  0    Phosphorus  ppm  ASTM D5185m  <1  0  0  0    Sulfur  ppm  ASTM D5185m  284  258  265    Zinc  ppm  ASTM D5185m  20  0  3  0    Sulfur  ppm  ASTM D5185m  20  0  0  0  0    Sodium  ppm  ASTM D5185m  >20  1  0  0  0    Potassium  ppm  ASTM D5185m  >20  1  0	Cadmium						
Barium  ppm  ASTM D5185m  0  0  0    Molybdenum  ppm  ASTM D5185m  <1  0  0    Maganese  ppm  ASTM D5185m  0  <1  0    Magnesium  ppm  ASTM D5185m  <1  3  0    Calcium  ppm  ASTM D5185m  <1  0  0    Phosphorus  ppm  ASTM D5185m  284  258  265    Zinc  ppm  ASTM D5185m  0  319  49  333    CONTAMINANTS  method  limit/base  current  history1  history2    Silicon  ppm  ASTM D5304  >0.6  0.006  0.001  0.002    Pottassium  ppm  ASTM D6304  >6000  69<	ADDITIVES		method	limit/base	current	history1	history2
Barium  ppm  ASTM D5185m  0  0  0    Molybdenum  ppm  ASTM D5185m  <1  0  0    Maganese  ppm  ASTM D5185m  0  <1  0    Magnesium  ppm  ASTM D5185m  <1  3  0    Calcium  ppm  ASTM D5185m  <1  0  0    Phosphorus  ppm  ASTM D5185m  284  258  265    Zinc  ppm  ASTM D5185m  0  319  49  333    CONTAMINANTS  method  limit/base  current  history1  history2    Silicon  ppm  ASTM D5304  >0.6  0.006  0.001  0.002    Pottassium  ppm  ASTM D6304  >6000  69<	Boron	nom	ASTM D5185m		0	0	0
Molybdenum  ppm  ASTM D5185m  <1							
Manganese  ppm  ASTM D5185m  0  <1					-		
Magnesium  ppm  ASTM D5185m  <1	,						
Calcium  ppm  ASTM D5185m  <1	0				-		
Phosphorus  ppm  ASTM D5185m  284  258  265    Zinc  ppm  ASTM D5185m  0  3  0    Sulfur  ppm  ASTM D5185m  319  49  333    CONTAMINANTS  method  limit/base  current  history1  history2    Silicon  ppm  ASTM D5185m  >25  <1  <1  0	U						
Zinc  ppm  ASTM D5185m  0  3  0    Sulfur  ppm  ASTM D5185m  319  49  333    CONTAMINANTS  method  limit/base  current  history1  history2    Silicon  ppm  ASTM D5185m  >25  <1  <1  0    Sodium  ppm  ASTM D5185m  >25  <1  <1  0    Potassium  ppm  ASTM D5185m  >20  1  0  0    Water  %  ASTM D6304  >0.6  0.006  0.001  0.002    ppm Water  ppm  ASTM D6304  >6000  69  13.3  24.8    FLUID CLEANLINESS  method  limit/base  current  history1  history2    Particles >4µm  ASTM D7647  >2500  30  32  1002    Particles >6µm  ASTM D7647  >320  5  2  86    Particles >14µm  ASTM D7647  >80  2  1  19							÷
Sulfur  ppm  ASTM D5185m  319  49  333    CONTAMINANTS  method  limit/base  current  history1  history2    Silicon  ppm  ASTM D5185m  >25  <1  <1  0    Sodium  ppm  ASTM D5185m  >25  <1  <1  0    Sodium  ppm  ASTM D5185m  >20  1  0  0    Potassium  ppm  ASTM D6304  >0.6  0.0066  0.001  0.002    ppm Water  ppm  ASTM D6304  >0.6  0.0066  0.001  0.002    ppm Water  ppm  ASTM D6304  >0.6  0.006  0.001  0.002    ppm Water  ppm  ASTM D7647  287  112  4062    Particles >4µm  ASTM D7647  >2500  30  32  1002    Particles >6µm  ASTM D7647  >320  5  2  86    Particles >14µm  ASTM D7647  >80  2  1  19							
CONTAMINANTS  method  limit/base  current  history1  history2    Silicon  ppm  ASTM D5185m  >25  <1  <1  0    Sodium  ppm  ASTM D5185m  >20  1  0  0    Potassium  ppm  ASTM D5185m  >20  1  0  0    Water  %  ASTM D5185m  >20  1  0  0    ppm  ASTM D5185m  >20  1  0  0    Water  %  ASTM D5185m  >20  1  0  0    ppm Water  ppm  ASTM D6304  >0.6  0.006  0.001  0.002    ppm Water  ppm  ASTM D6304  >6000  69  13.3  24.8    FLUID CLEANLINESS  method  limit/base  current  history1  history2    Particles >4µm  ASTM D7647  >2500  30  32  1002    Particles >14µm  ASTM D7647  >80  2  1  19					-		
Silicon  ppm  ASTM D5185m  >25  <1		pp		limit/base			
Sodium  ppm  ASTM D5185m  0  0  0  0    Potassium  ppm  ASTM D5185m<>20  1  0  0    Water  %  ASTM D5304  >0.6  0.006  0.001  0.002    ppm Water  ppm  ASTM D6304  >6000  69  13.3  24.8    FLUID CLEANLINESS  method  limit/base  current  history1  history2    Particles >4µm  ASTM D7647  287  112  4062    Particles >6µm  ASTM D7647  >2500  30  32  1002    Particles >6µm  ASTM D7647  >320  5  2  86    Particles >14µm  ASTM D7647  >30  2  1  19    Particles >38µm  ASTM D7647  >20  0  1  1    Particles >71µm  ASTM D7647  >4  0  0  0    Oil Cleanliness  ISO 4406 (c)  >/18/15  15/12/10  14/12/9  19/17/14    FLUID DEGRADATION		nom					
Potassium  ppm  ASTM D5185m  >20  1  0  0    Water  %  ASTM D6304  >0.6  0.006  0.001  0.002    ppm  ASTM D6304  >6000  69  13.3  24.8    FLUID CLEANLINESS  method  limit/base  current  history1  history2    Particles >4µm  ASTM D7647  287  112  4062    Particles >6µm  ASTM D7647  >2500  30  32  1002    Particles >6µm  ASTM D7647  >220  5  2  86    Particles >14µm  ASTM D7647  >20  0  1  1    Particles >21µm  ASTM D7647  >20  0  1  1    Particles >38µm  ASTM D7647  >20  0  1  1    Particles >71µm  ASTM D7647  >4  0  0  0    Oil Cleanliness  ISO 4406 (c)  >/18/15  15/12/10  14/12/9  19/17/14    FLUID DEGRADATION  method				>20			
Water  %  ASTM D6304  >0.6  0.006  0.001  0.002    ppm Water  ppm  ASTM D6304  >6000  69  13.3  24.8    FLUID CLEANLINESS  method  limit/base  current  history1  history2    Particles >4µm  ASTM D7647  287  112  4062    Particles >6µm  ASTM D7647  >2500  30  32  1002    Particles >6µm  ASTM D7647  >2500  30  32  1002    Particles >14µm  ASTM D7647  >320  5  2  86    Particles >21µm  ASTM D7647  >80  2  1  19    Particles >38µm  ASTM D7647  >20  0  1  1    Particles >71µm  ASTM D7647  >4  0  0  0    Oil Cleanliness  ISO 4406 (c)  >/18/15  15/12/10  14/12/9  19/17/14    FLUID DEGRADATION  method  limit/base  current  history1  history2				> 20	-		
ppm Water  ppm  ASTM D6304  >6000  69  13.3  24.8    FLUID CLEANLINESS  method  limit/base  current  history1  history2    Particles >4µm  ASTM D7647  287  112  4062    Particles >6µm  ASTM D7647  >2500  30  32  1002    Particles >14µm  ASTM D7647  >320  5  2  86    Particles >14µm  ASTM D7647  >30  2  1  19    Particles >21µm  ASTM D7647  >20  0  1  1    Particles >38µm  ASTM D7647  >20  0  1  1    Particles >71µm  ASTM D7647  >4  0  0  0    Oil Cleanliness  ISO 4406 (c) /18/15  15/12/10  14/12/9  19/17/14    FLUID DEGRADATION  method  limit/base  current  history1  history2							
FLUID CLEANLINESS  method  limit/base  current  history1  history2    Particles >4μm  ASTM D7647  287  112  4062    Particles >6μm  ASTM D7647  >2500  30  32  1002    Particles >6μm  ASTM D7647  >320  5  2  86    Particles >14μm  ASTM D7647  >30  2  1002    Particles >21μm  ASTM D7647  >320  5  2  86    Particles >21μm  ASTM D7647  >80  2  1  19    Particles >38μm  ASTM D7647  >20  0  1  1    Particles >71μm  ASTM D7647  >4  0  0  0    OIl Cleanliness  ISO 4406 (c)  >/18/15  15/12/10  14/12/9  19/17/14    FLUID DEGRADATION  method  limit/base  current  history1  history2							
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Particles >6μm  ASTM D7647  >2500  30  32  1002    Particles >14μm  ASTM D7647  >320  5  2  86    Particles >21μm  ASTM D7647  >80  2  1  19    Particles >38μm  ASTM D7647  >20  0  1  1    Particles >38μm  ASTM D7647  >20  0  1  1    Particles >38μm  ASTM D7647  >4  0  0  0    Oil Cleanliness  ISO 4406 (c)  >/18/15  15/12/10  14/12/9  19/17/14    FLUID DEGRADATION  method  limit/base  current  history1  history2		200					
Particles >14μm  ASTM D7647  >320  5  2  86    Particles >21μm  ASTM D7647  >80  2  1  19    Particles >38μm  ASTM D7647  >20  0  1  1    Particles >371μm  ASTM D7647  >4  0  0  0    Oil Cleanliness  ISO 4406 (c)  >/18/15  15/12/10  14/12/9  19/17/14    FLUID DEGRADATION  method  limit/base  current  history1  history2				0500			
Particles >21μm  ASTM D7647  >80  2  1  19    Particles >38μm  ASTM D7647  >20  0  1  1    Particles >38μm  ASTM D7647  >20  0  1  1    Particles >71μm  ASTM D7647  >4  0  0  0    Oil Cleanliness  ISO 4406 (c)  >/18/15  15/12/10  14/12/9  19/17/14    FLUID DEGRADATION  method  limit/base  current  history1  history2							
Particles >38μm  ASTM D7647  >20  0  1  1    Particles >71μm  ASTM D7647  >4  0  0  0    Oil Cleanliness  ISO 4406 (c)  >/18/15  15/12/10  14/12/9  19/17/14    FLUID DEGRADATION  method  limit/base  current  history1  history2							
Particles >71μm  ASTM D7647  >4  0  0  0    Oil Cleanliness  ISO 4406 (c)  >/18/15  15/12/10  14/12/9  19/17/14    FLUID DEGRADATION  method  limit/base  current  history1  history2							
Oil Cleanliness  ISO 4406 (c)  >/18/15  15/12/10  14/12/9  19/17/14    FLUID DEGRADATION  method  limit/base  current  history1  history2							
FLUID DEGRADATION method limit/base current history1 history2							
			ISO 4406 (c)	>/18/15	15/12/10	14/12/9	19/17/14
Acid Number (AN) mg KOH/g ASTM D8045 0.151 0.07 0.083	FLUID DEGRADA	TION	method	limit/base	current	history1	history2
	Acid Number (AN)	mg KOH/g	ASTM D8045		0.151	0.07	0.083



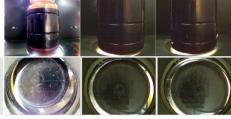
# **OIL ANALYSIS REPORT**



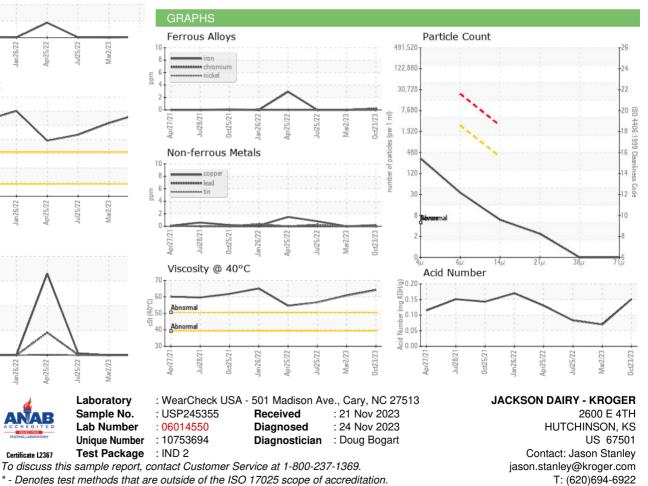




VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.6	NEG	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG	NEG
FLUID PROPERT	IES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445		64.2	60.78	56.7
SAMPLE IMAGES		method	limit/base	current	history1	history2
Color						



Bottom



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

Contact/Location: Jason Stanley - JACHUT

F: (620)663-5135