

OIL ANALYSIS REPORT

Area BRUCE A/3/75120 3-75120-CP3002

Reciprocating Compressor Fluid ATLAS COPCO ROTO Z FLUID (35 LTR)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

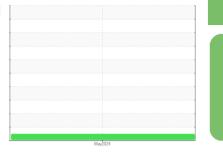
All component wear rates are normal.

Contamination

The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The water content is negligible. The system and fluid cleanliness is acceptable.

Fluid Condition

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





NORMAL

SAMPLE INFORM	/IATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC		
Sample Date		Client Info		31 May 2024		
Machine Age	hrs	Client Info		0		
Oil Age	hrs	Client Info		0		
Oil Changed		Client Info		N/A		
Sample Status				NORMAL		
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>90	<1		
Chromium	ppm	ASTM D5185(m)	>5	0		
Nickel	ppm	ASTM D5185(m)		<1		
Titanium	ppm	ASTM D5185(m)		0		
Silver	ppm	ASTM D5185(m)		0		
Aluminum	ppm	ASTM D5185(m)	>40	<1		
Lead	ppm	ASTM D5185(m)	>7	0		
Copper	ppm	ASTM D5185(m)	>35	<1		
Tin	ppm	ASTM D5185(m)	>7	0		
Antimony	ppm	ASTM D5185(m)		0		
Vanadium	ppm	ASTM D5185(m)		0		
Beryllium	ppm	ASTM D5185(m)		0		
Cadmium	ppm	ASTM D5185(m)		0		
ADDITIVES		method	limit/base	current	history1	history2
ADDITIVES Boron	ppm	method ASTM D5185(m)	limit/base 0	current <1	history1	history2
	ppm ppm		0			
Boron		ASTM D5185(m)	0	<1		
Boron Barium	ppm	ASTM D5185(m) ASTM D5185(m)	0	<1 0		
Boron Barium Molybdenum	ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	0	<1 0 0		
Boron Barium Molybdenum Manganese	ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	0 0 0	<1 0 0 0		
Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	0 0 0 0	<1 0 0 0 <1		
Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	0 0 0 0 10 450	<1 0 0 0 <1 16	 	
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	0 0 0 0 10 450	<1 0 0 0 <1 16 367	 	
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	0 0 0 0 10 450 0	<1 0 0 <1 16 367 6		
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	0 0 0 0 10 450 0	<1 0 0 <1 16 367 6 611	 	
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	0 0 0 10 450 0 650	<1 0 0 <1 16 367 6 611 <1		
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	0 0 0 10 450 0 650	<1 0 0 <1 16 367 6 611 <1 <1	 history1	
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	0 0 0 10 450 0 650	<1 0 0 <1 16 367 6 611 <1 <1 current 0	 history1	
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) method ASTM D5185(m) ASTM D5185(m)	0 0 0 10 450 0 650 imit/base >15	<1 0 0 <1 16 367 6 611 <1 <1 current 0 <1	 history1	 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m)	0 0 0 10 450 0 650 650 limit/base >15 >20	<1 0 0 4 1 16 367 6 611 <1 <1 current 0 <1 <1	 history1	 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium Water	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m)	0 0 0 10 450 0 650 650 5 15 >15 >20 >0.1	<1 0 0 (1 16 367 6 6 611 <1 (1 0 0 (1 1 (1 0,002	 history1	 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium Water ppm Water	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m)	0 0 0 10 450 0 650 650 imit/base >15 >20 >0.1 >1000	<1 0 0 (1 (367) 6 6 611 <1 (0 (1 (1 (1 0.002) 16	 history1 	 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium Water ppm Water	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m)	0 0 0 10 450 650 650 515 >15 >20 >0.1 >1000	<1 0 0 1 16 367 6 611 <1 current 0 <1 <1 0.002 16 current	 history1 -	 history2 history2

ASTM D7647 >80

ASTM D7647 >20

ASTM D7647 >4

ISO 4406 (c) >20/18/15

3

0

0 15/13/10

Particles >21µm

Particles >38µm

Particles >71µm

Oil Cleanliness

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Sample Rating Trend



OIL ANALYSIS REPORT

Water (KF)	FLUID DEGRAD	ATION	method	limit/base	current	history1	history2
J000 Severe	Acid Number (AN)	mg KOH/g	ASTM D974*	0.18	0.18		
3000 -	VISUAL		method	limit/base	current	history1	history2
000 -	White Metal	scalar	Visual*	NONE	NONE		
1000 -	Yellow Metal	scalar	Visual*	NONE	NONE		
Abnormal	Precipitate	scalar	Visual*	NONE	NONE		
24	Silt	scalar	Visual*	NONE	NONE		
May31/24	Debris	scalar	Visual*	NONE	NONE		
	Sand/Dirt	scalar	Visual*	NONE	NONE		
Particle Trend	Appearance	scalar	Visual*	NORML	NORML		
10k - 20000000 - 4µm 20000000 - 6µm	Odor	scalar	Visual*	NORML	NORML		
8k	Emulsified Water	scalar	Visual*	>0.1	NEG		
6k -	Free Water	scalar	Visual*		NEG		
8k 6k 4k	FLUID PROPER	TIES	method	limit/base	current	history1	history2
2k	Visc @ 40°C	cSt	ASTM D7279(m)	68.0	66.1		
May31/24 May31/24	SAMPLE IMAGE	S	method	limit/base	current	history1	history2
≊ ≊ Water (KF)	Color					no image	no image
1000	Bottom					no image	no image
Abnormal	GRAPHS						
42/1/24	Ferrous Alloys			10.02.00.00	Particle Count		0.000
May	10iron1			491,52	⁰		T ²⁶
Viscosity @ 40°C	E 5-			122,88	0 Severe		-24
76 Abnormal				30,72	0		-22
72-	0				Abnormal		-20
5 70 - Base	May31/24			s [per 1 m]] 24		•	-18
					1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		-20 -18 -16
64	Non-ferrous Meta	ls				•	+16
62 - Abnormal	copper			jo ng 12	0		-14
42 v	E 5-			²	-		-12
May31/24					8-		+10
	24 10			24	2		8
Particle Trend	May31/			May31/24			
10k - μμη 4μη	Z Viscosity @ 40°C			2	4μ 6μ Acid Number	14μ 21μ	38µ 71µ
8k -	⁸⁰ T			² 0.2			
δk 6k 4k 2k	75 Ahnormal G 75 Ahnormal Base 65			(B) 0.2 B) 0.1 b 0.1 b 0.1 b 0.1 0.0	5-		
4k	€ 70 - Base			ja 0.1	0		
2k -	Abnormal				5		
0k	60			0.0 Acid	74		č
421/24 40.10-41	May31/24			May31/24	May31/24		50 EC
Laboratory Sample No.	e : IND 2 t, contact Customer Serv	Recei Teste Diagr	ved : 05 d : 08 nosed : 08 200-268-213	5 Jul 2024 3 Jul 2024 3 Jul 2024 - W 1.	P.O.Box 154 /es Davis pi	ierre.adouki@b	2 U2 Column 2N11 61 Tiverton, OI CA N0G 2T t: Pierre Adoul

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