

Area Wonder Machine Id Kobelt 7213-020A Component Port Steering Fluid AW HYDRAULIC OIL ISO 32 (38 LTR)

RECOMMENDATION

Resample at the next service interval to monitor. Please specify the brand, type, and viscosity of the oil on your next sample.

WEAR

All component wear rates are normal.

CONTAMINATION

The system cleanliness is acceptable for your target ISO 4406 cleanliness code. 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.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC909856		
Sample Date		Client Info		02 Feb 2017		
Machine Age	mths	Client Info		3		
Oil Age	mths	Client Info		3		
Filter Age	mths	Client Info		1		
Oil Changed		Client Info		N/A		
Filter Changed		Client Info		N/A		
Sample Status				NORMAL		
Iron				4		
Iron Chromium	ppm	ASTM D5185(m) ASTM D5185(m)	>60 >12	4 <1		
Nickel	ppm	()		<1 0		
Titanium	ppm	ASTM D5185(m) ASTM D5185(m)	>6	0		
Silver	ppm	ASTM D5185(m) ASTM D5185(m)		0		
Aluminum	ppm	ASTM D5185(m)	>4	0 <1		
Lead	ppm	ASTM D5185(m) ASTM D5185(m)	>4 >12	<1 <1		
Copper	ppm ppm	ASTM D5185(m)	>30	12		
Tin		ASTM D5185(m)	200	0		
Vanadium	ppm ppm	ASTM D5185(m)		0		
White Metal	scalar	Visual*	NONE	NONE		
Yellow Metal	scalar	Visual*	NONE	NONE		
	Scalai	Visual				
Silicon	ppm	ASTM D5185(m)	>10	<1		
Potassium	ppm	ASTM D5185(m)	>20	0		
Water		WC Method		NEG		
Particles >4µm		ASTM D7647	>2500	19197		
Particles >6µm		ASTM D7647	>640	608		
Particles >14µm		ASTM D7647	>80	36		
Particles >21µm		ASTM D7647	>20	10		
Particles >38µm		ASTM D7647	>4	1		
Particles >71µm		ASTM D7647	>3	0		
Oil Cleanliness		ISO 4406 (c)	>18/16/13	21/16/12		
Silt	scalar	Visual*	NONE	NONE		
Debris	scalar	Visual*	NONE	NONE		
Sand/Dirt	scalar	Visual*	NONE	NONE		
Appearance	scalar	Visual*	NORML	NORML		
Odor	scalar	Visual*	NORML	NORML		
Emulsified Water	scalar	Visual*		NEG		
Codium				4		
Sodium	ppm	ASTM D5185(m) ASTM D5185(m)	5	1		
Boron Barium	ppm	ASTM D5185(m) ASTM D5185(m)	5	<1		
	ppm	()	5	<1 0		
Molybdenum Manganese	ppm	ASTM D5185(m) ASTM D5185(m)	5			
-	ppm	ASTM D5185(m)	25	0		
Magnesium Calcium	ppm	ASTM D5185(m) ASTM D5185(m)		111		
Phosphorus	ppm	ASTM D5185(m)	200	411		
Zinc	ppm	ASTM D5185(m) ASTM D5185(m)	300	556		
Sulfur	ppm	ASTM D5185(m)	370 2500	3856		
Acid Number (AN)	ppm ma KOH/a	ASTM D5165(III) ASTM D974*		0.70		
Visc @ 40°C	mg KOH/g	ASTM D974 ASTM D7279(m)	0.57			
VISC @ 40°C	cSt	NO 1 M D / 2 / 9(III)	32	35.6		

WEAR

CONTAMINATION

FLUID CONDITION

NORMAL

NORMAL

NORMAL



