

OIL ANALYSIS REPORT

Sample Rating Trend



MACRODYNE

Component Hydraulic System Fluid BEACON HYD OIL (--- GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with 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.

SAMPLE INFORM	IATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0736337		
Sample Date		Client Info		16 Oct 2023		
Machine Age	yrs	Client Info		0		
Oil Age	yrs	Client Info		4		
Oil Changed		Client Info		N/A		
Sample Status				NORMAL		
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>20	0		
Chromium	ppm	ASTM D5185m	>20	0		
Nickel	ppm	ASTM D5185m	>20	0		
Titanium	ppm	ASTM D5185m		0		
Silver	ppm	ASTM D5185m		0		
Aluminum	ppm	ASTM D5185m	>20	1		
Lead	ppm	ASTM D5185m	>20	<1		
Copper	ppm	ASTM D5185m	>20	3		
Tin	ppm	ASTM D5185m	>20	0		
Vanadium	ppm	ASTM D5185m		0		
Cadmium	ppm	ASTM D5185m		0		
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		0		
Barium	ppm	ASTM D5185m		6		
Molybdenum	ppm	ASTM D5185m		0		
Manganese	ppm	ASTM D5185m		0		
Magnesium	ppm	ASTM D5185m		1		
Calcium	ppm	ASTM D5185m		37		
Phosphorus	ppm	ASTM D5185m		539		
Zinc	ppm	ASTM D5185m		637		
Sulfur	ppm	ASTM D5185m		1482		
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>15	0		
Sodium	ppm	ASTM D5185m		0		
Potassium	ppm	ASTM D5185m	>20	<1		
FLUID CLEANLIN	ESS	method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>5000	666		
Particles >6µm		ASTM D7647	>1300	97		
Particles >14µm		ASTM D7647	>160	5		
Particles >21µm		ASTM D7647	>40	1		
Particles >38µm		ASTM D7647	>10	0		
Particles >71µm		ASTM D7647	>3	0		
Oil Cleanliness		ISO 4406 (c)	>19/17/14	17/14/10		
FLUID DEGRADA	TION	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		0.40		



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	VISUAL		method	limit/base	current	history1	history2
	White Metal	scalar	*Visual	NONE	NONE		
	Yellow Metal	scalar	*Visual	NONE	NONE		
	Precipitate	scalar	*Visual	NONE	NONE		
	Silt	scalar	*Visual	NONE	NONE		
	Debris	scalar	*Visual	NONE	NONE		
	Sand/Dirt	scalar	*Visual	NONE	NONE		
t16/23	Appearance	scalar	*Visual	NORML	NORML		
00	Odor	scalar	*Visual	NORML	NORML		
	Emulsified Water	scalar	*Visual	>0.05	NEG		
	Free Water	scalar	*Visual		NEG		
	FLUID PROPERT	IES	method	limit/base	current	history1	history2
	Visc @ 40°C	cSt	ASTM D445		45.4		
	SAMPLE IMAGES	5	method	limit/base	current	history1	history2
0ct16/23 -	Color					no image	no image
	Bottom					no image	no image
	GRAPHS						
	Ferrous Alloys			491,520	Particle Count		T ²⁶
	6 mickel			122,880 30,720 7,680 22 定 正 1,920	Severe Abnormal		-22 -20 -18
Ē	Non-ferrous Metal	S		b sapcitized 480			-16 Clean -16 Clean -14 ses Code -12 de -10
	Viscosity @ 40°C			0ct16/23	4μ 6μ Acid Number	14µ 21µ	-8 38µ 71µ
cSt (40°C)	55 - Abnormal 45 - 40 - Abnormal			0.50 0.40 0.30 0.20 0.10 0.10)		
	35 L			00.0 V Oct16/23	0ct16/23		0ct16/23
.aboratory Sample No. .ab Number Jnique Number Fest Package ample report, com	: WearCheck USA - 5 : WC0736337 I : 06009076 I : 10742838 I : IND 2 ontact Customer Servi o outgide of the ISO 1	i01 Madii Received Diagnos Diagnos ice at 1-8	son Ave., Ca d : 15 ed : 16 tician : We	ary, NC 27513 Nov 2023 Nov 2023 Is Davis 9.	3	F CAMBRIDGE Contact: marc_j	PARKER LORD 124 GRANT ST 5 SPRINGS, PA US 16403 MARC JOHNS ohns@lord.com

To discuss this sample repor * - 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)

Contact/Location: MARC JOHNS - PARCAMPA

F:

Certificate L2367