

OIL ANALYSIS REPORT

Sample Rating Trend



Machine Id 65 - ACOUSTICAL Component

Hydraulic System Fluid AW HYDRAULIC OIL ISO 32 (--- GAL)

DIAGNOSIS

Wear

All component wear rates are normal.

Contamination

The amount and size of particulates present in the system are acceptable.

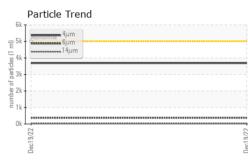
Fluid Condition

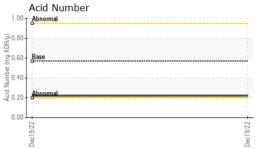
Indicate the oil is naphthenic mineral based. The condition of the oil is acceptable for the time in service.

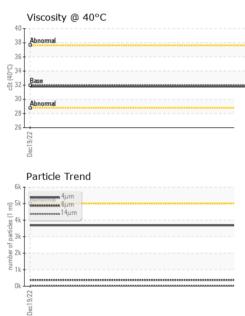
SAMPLE INFORM	IATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0747223		
Sample Date		Client Info		19 Dec 2022		
Machine Age	hrs	Client Info		0		
Oil Age	hrs	Client Info		0		
Oil Changed		Client Info		N/A		
Sample Status				NORMAL		
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>20	4		
Chromium	ppm	ASTM D5185m	>10	<1		
Nickel	ppm	ASTM D5185m	>10	0		
Titanium	ppm	ASTM D5185m		0		
Silver	ppm	ASTM D5185m		0		
Aluminum	ppm	ASTM D5185m	>10	0		
Lead	ppm	ASTM D5185m	>10	0		
Copper	ppm	ASTM D5185m	>75	2		
Tin	ppm	ASTM D5185m	>10	0		
Vanadium	ppm	ASTM D5185m		0		
Cadmium	ppm	ASTM D5185m		0		
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	5	0		
Barium	ppm	ASTM D5185m	5	<1		
Molybdenum	ppm	ASTM D5185m	5	<1		
Manganese	ppm	ASTM D5185m		<1		
Magnesium	ppm	ASTM D5185m	25	4		
Calcium	ppm	ASTM D5185m	200	54		
Phosphorus	ppm	ASTM D5185m	300	249		
Zinc	ppm	ASTM D5185m	370	309		
Sulfur	ppm	ASTM D5185m	2500	1047		
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>20	<1		
Sodium	ppm	ASTM D5185m		1		
Potassium	ppm	ASTM D5185m	>20	0		
FLUID CLEANLIN	IESS	method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>5000	3684		
Particles >6µm		ASTM D7647	>1300	375		
Particles >14µm		ASTM D7647	>160	23		
Particles >21µm		ASTM D7647	>40	7		
Particles >38µm		ASTM D7647	>10	1		
Particles >71µm		ASTM D7647	>3	0		
Oil Cleanliness		ISO 4406 (c)	>19/17/14	19/16/12		
FLUID DEGRADA	TION	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.57	0.22		



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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		
2	_ Sand/Dirt	scalar	*Visual	NONE	NONE		
Dec19/22	Appearance Odor	scalar	*Visual	NORML	NORML		
	Emulsified Water	scalar scalar	*Visual *Visual	NORML	NORML NEG		
	Free Water	scalar	*Visual	>0.1	NEG		
	FLUID PROPER		method	limit/base	current	history1	history2
	Visc @ 40°C	cSt	ASTM D445	32	31.8		
	SAMPLE IMAGE	ES	method	limit/base	current	history1	history2
Dec19/22	Color					no image	no image
	Bottom					no image	no image
	GRAPHS						
	Ferrous Alloys			491,520	Particle Count		т26
	8 iron						
	E 6-			122,880	- Severe		-24
	ä 4.			30,720			-22
	2			7 680	Abnormal		-20
	27 ⁰				- Dironna		20
	Dec19/22			of particles (per 1 m) 989		•	-18
	Non-ferrous Meta	als		· :단 480			-20 -18 -16 -14
	¹⁰ T			r of pa			
	8 - copper Iead						14
	e 6			- 30	-		-12
	2			8			-10
	2						
	Dec19/22			9/22			-8
	Dec1			Dec19/22			6
	Viscosity @ 40°C				Acid Number	14µ 21µ	38µ 71µ
	40 Abnormal			€ 1.00	Abnormal		
	Ţ			0.80 KOH			
	승 35 응 Base 경 30 Abnormal			Ĕ 0.60	- Base		
	³⁰ Abnormal			- C.40	Abnormal		
	25			(b)HO 0.80 Bull 0.60 Bull 0.40 V 0.20 V 0.20			
							600
	Dec19/22			Dec19/22	Dec19/22		50/0 Lood
Laboratory Sample No.	: WearCheck USA - : WC0747223 : 05721939	PALFINGER - BRANCH 410 632 CEDAR SWAMP RE JACKSON, N US 0852 Contact: DON DRESS d.dress@palfinger.com					
Lab Number Unique Number Unique Number Unique Sumber discuss this sample report,	: 10266520 : CONST	Diagnost	-	jela Borella 9.			t: DON DRES

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