

## **OIL ANALYSIS REPORT**

### GUAY SON [CONHER] Machine Id PERKINS Ibaco Ismar 6 Aux-2 Component

Auxiliary Engine

## Auxiliary Engine Oil (9 LTR)

#### DIAGNOSIS

#### Recommendation

No corrective action is recommended at this time. Resample at the next service interval to monitor.

#### Wear

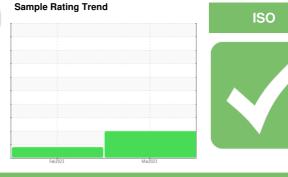
All component wear rates are normal.

#### Contamination

There is a moderate amount of particulates present in the oil.

#### **Fluid Condition**

The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.



SAMPLE INFORM	IATION	method	limit/base	current	history1	history2
Sample Number		Client Info		KL0011412	KL0010248	
Sample Date		Client Info		30 Mar 2023	24 Feb 2023	
Machine Age	hrs	Client Info		10432	9856	
Oil Age	hrs	Client Info		176	24	
Oil Changed		Client Info		Not Changd	Not Changd	
Sample Status				ATTENTION	MARGINAL	
CONTAMINATION	٧	method	limit/base	current	history1	history2
Fuel		WC Method	>4.0	<1.0	<b>2</b> .6	
Water		WC Method	>0.1	NEG	NEG	
Glycol		WC Method		NEG	NEG	
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>100	27	6	
Chromium	ppm	ASTM D5185m	>20	<1	<1	
Nickel	ppm	ASTM D5185m	>2	0	0	
Titanium	ppm	ASTM D5185m	>2	0	0	
Silver	ppm	ASTM D5185m	>2	0	0	
Aluminum	ppm	ASTM D5185m	>20	<1	2	
Lead	ppm	ASTM D5185m	>40	0	<1	
Copper	ppm	ASTM D5185m	>330	1	<1	
Tin	ppm	ASTM D5185m	>15	<1	<1	
Vanadium	ppm	ASTM D5185m		0	0	
Cadmium	ppm	ASTM D5185m		0	0	
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		0	0	
Barium	ppm	ASTM D5185m		0	0	
Molybdenum	ppm	ASTM D5185m		<1	<1	
Manganese	ppm	ASTM D5185m		<1	<1	
Magnesium	ppm	ASTM D5185m		10	8	
Calcium	ppm	ASTM D5185m		3607	3019	
Phosphorus	ppm	ASTM D5185m		1289	1166	
Zinc	ppm	ASTM D5185m		1713	1462	
Sulfur	ppm	ASTM D5185m		3908	3919	
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	6	6	
Sodium	ppm	ASTM D5185m		0	<1	
Potassium	ppm	ASTM D5185m	>20	2	2	
INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844		0.1	0.1	
Nitration	Abs/cm	*ASTM D7624	>20	14.5	7.9	
Sulfation	Abs/.1mm	*ASTM D7415	>30	22.5	15.9	



# **OIL ANALYSIS REPORT**

Particle Trend		FLUID CLEANLIN	IESS	method	limit/base	current	history1	history2
=10k - 4µm		Particles >4µm		ASTM D7647		11849		
Tel 10k   B 14μm   B 14μm   B 4k   B 4k		Particles >6µm		ASTM D7647	>5000	<b>6455</b>		
		Particles >14µm		ASTM D7647		<b>1099</b>		
ti to ta 4k -		Particles >21µm		ASTM D7647	>160	<b>▲</b> 370		
		Particles >38µm		ASTM D7647	>40	<b>5</b> 7		
0k		Particles >71µm		ASTM D7647	>10	6		
Feb24/23	Mar30/23	Oil Cleanliness		ISO 4406 (c)	>19/16	<b>20/17</b>		
Feb2	Mar3	FLUID DEGRADA	TION	method	limit/base	current	history1	history2
🔺 Particle Trend		Oxidation	Abs/.1mm	*ASTM D7414	>25	21.0	11.0	
12k = 10k		Base Number (BN)		ASTM D2896	225	12.13	9.7	
10k μμm   6μm μμm   6μm μμm   14μm μμm   6k μμm   6k μμm   2k μμm		VISUAL		method	limit/base	current	history1	history2
et 6k		White Metal	scalar	*Visual	NONE	NONE	NONE	
a 4k -		Yellow Metal	scalar	*Visual	NONE	NONE	NONE	
₽ 2k		Precipitate	scalar	*Visual	NONE	NONE	NONE	
ok L		Silt	scalar	*Visual	NONE	NONE	NONE	
Feb24/23	Mar30/23	Debris	scalar	*Visual	NONE	NONE	NONE	
يت.	Mi	Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	
Base Number		Appearance	scalar	*Visual	NORML	NORML	NORML	
14.0		Odor	scalar	*Visual	NORML	NORML	NORML	
。 別 12.0 9 10.0		Emulsified Water	scalar	*Visual	>0.1	NEG	NEG	
<u> </u>		Free Water	scalar	*Visual		NEG	NEG	
a 6.0 W 32.0 8.0 8.0 9.0 9.0 9.0 9.0 9.0 9.0 9.0 9		FLUID PROPERT	IES	method	limit/base	current	history1	history2
2.0		Visc @ 100°C	cSt	ASTM D445		13.8	13.8	
Viscosity @ 100°C		Non-ferrous Metal			491.520 122.88( 30.72( 122.89) (122.89) (122.89) (122.89) (122.89) (122.89) (122.89) (122.89) (122.89) (122.89) (122.89) (122.89) (122.89) (122.89) (122.89) (122.89) (122.89) (122.89) (122.89) (122.89) (122.89) (122.89) (122.89) (122.89) (122.89) (122.89) (122.89) (122.89) (122.89) (122.89) (122.89) (122.89) (122.89) (122.89) (122.89) (122.89) (122.89) (122.89) (122.89) (122.89) (122.89) (122.89) (122.89) (122.89) (122.89) (122.89) (122.89) (122.89) (122.89) (122.89) (122.89) (122.89) (122.89) (122.89) (122.99) (122.99) (122.99) (122.99) (122.99) (122.99) (122.99) (122.99) (122.99) (122.99) (122.99) (122.99) (122.99) (122.99) (122.99) (122.99) (122.99) (122.99) (122.99) (122.99) (122.99) (122.99) (122.99) (122.99) (122.99) (122.99) (122.99) (122.99) (122.99) (122.99) (122.99) (122.99) (122.99) (122.99) (122.99) (122.99) (122.99) (122.99) (122.99) (122.99) (122.99) (122.99) (122.99) (122.99) (122.99) (122.99) (122.99) (122.99) (122.99) (122.99) (122.99) (122.99) (122.99) (122.99) (122.99) (122.99) (122.99) (122.99) (122.99) (122.99) (122.99) (122.99) (122.99) (122.99) (122.99) (122.99) (122.99) (122.99) (122.99) (122.99) (122.99) (122.99) (122.99) (122.99) (122.99) (122.99) (122.99) (122.99) (122.99) (122.99) (122.99) (122.99) (122.99) (122.99) (122.99) (122.99) (122.99) (122.99) (122.99) (122.99) (122.99) (122.99) (122.99) (122.99) (122.99) (122.99) (122.99) (122.99) (122.99) (122.99) (122.99) (122.99) (122.99) (122.99) (122.99) (122.99) (122.99) (122.99) (122.99) (122.99) (122.99) (122.99) (122.99) (122.99) (122.99) (122.99) (122.99) (122.99) (122.99) (122.99) (122.99) (122.99) (122.99) (122.99) (122.99) (122.99) (122.99) (122.99) (122.99) (122.99) (122.99) (122.99) (122.99) (122.99) (122.99) (122.99) (122.99) (122.99) (122.99) (122.99) (122.99) (122.99) (122.99) (122.99) (122.99) (122.99) (122.99) (122.99) (122.99) (122.99) (122.99) (122.99) (122.99) (122.99) (122.99) (122.99) (122.99) (122.99) (122.99) (122.99) (122.99) (122.99) (122.99) (122.99) (122.99) (122.99) (122.99) (122.99) (122.99) (122.99) (122.99)	a brownal 2 4μ 6μ Base Number	14µ 21µ	-24 -22 20 100 1406:1999 Clean/Insess Code -14 12 Cde -12 12 -10 -14 -14 -12 20 -10 -14 -14 -12 20 -10 -14 -12 20 -20 -20 -20 -20 -20 -20 -20 -20 -20 -
	Laboratory Sample No. Lab Number Unique Number Test Package o discuss this sample report, of Denotes test methods that an atements of conformity to speci	: 05821129 : 10429212 : MOB 2 ( Additional contact Customer Servi re outside of the ISO 1	Recieved Diagnos Diagnos Tests: Pr fce at 1-8 7025 scc	d : 14 / ed : 19 / tician : Jon tCount ) 800-237-1369 ope of accred	Apr 2023 Apr 2023 athan Hester D. Jitation.	r	Contact: EDUA egarcia.com T: (526)	CONOR JUAREZ 348 ERMOSILLO, MX 83140 RDO GARCIA sa@gmail.com 622-1581 x:81 F: x:

Submitted By: EDUARDO GARCIA

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