



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ATTENTION
FLUID CONDITION	ATTENTION

Area
GUAY SON [CONHER]
Machine Id
IBACO ARCENIO VICENTE MAIN
Component
Diesel Engine
Fluid
RALOY 15W40 (160 LTR)

RECOMMENDATION

No corrective action is recommended at this time. Resample at the next service interval to monitor. (Customer Sample Comment: Fluid: Raloy 15W40)

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		KL0014172	KL0013484	KL0012847
Sample Date		Client Info		20 Mar 2024	20 Jan 2024	20 Sep 2023
Machine Age	hrs	Client Info		0	17357	16159
Oil Age	hrs	Client Info		272	151	2
Filter Age	hrs	Client Info		272	151	2
Oil Changed		Client Info		Not Changd	Not Changd	Not Changd
Filter Changed		Client Info		Not Changd	Not Changd	Not Changd
Sample Status				ATTENTION	ATTENTION	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	9	11	3
Chromium	ppm	ASTM D5185m	>20	0	<1	0
Nickel	ppm	ASTM D5185m	>2	0	0	0
Titanium	ppm	ASTM D5185m	>2	0	0	<1
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>25	2	2	3
Lead	ppm	ASTM D5185m	>40	1	0	0
Copper	ppm	ASTM D5185m	>330	2	2	<1
Tin	ppm	ASTM D5185m	>15	<1	0	<1
Vanadium	ppm	ASTM D5185m		<1	0	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

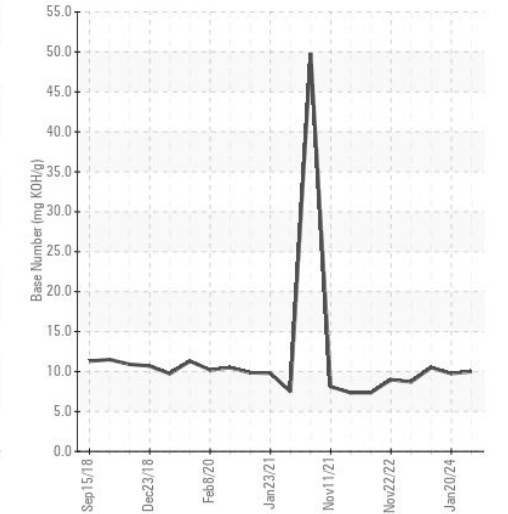
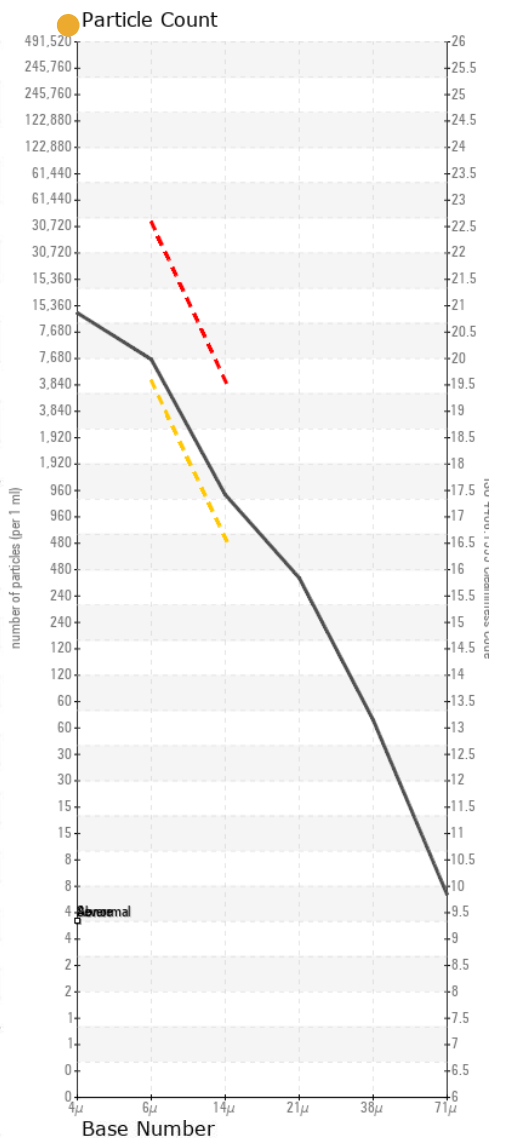
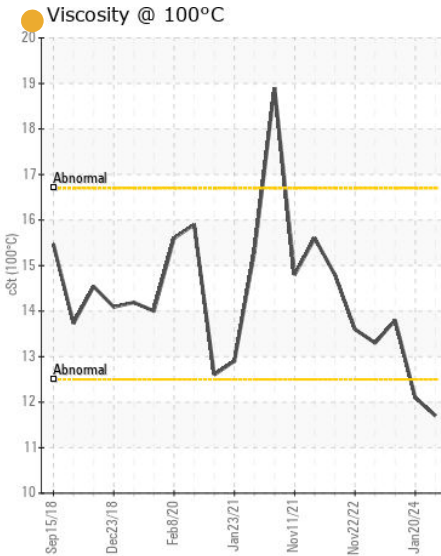
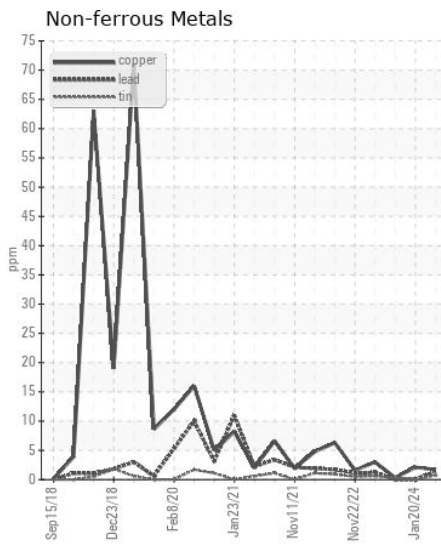
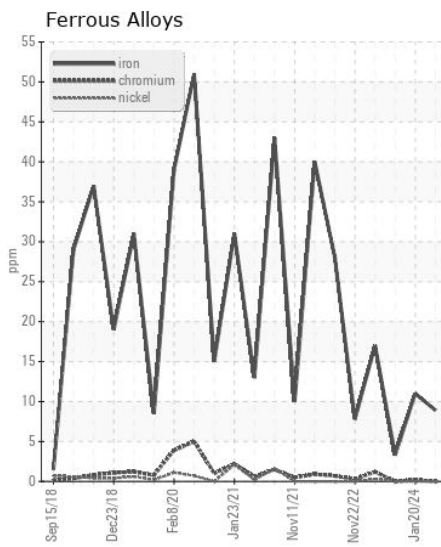
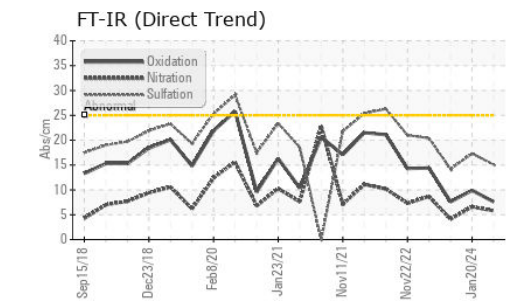
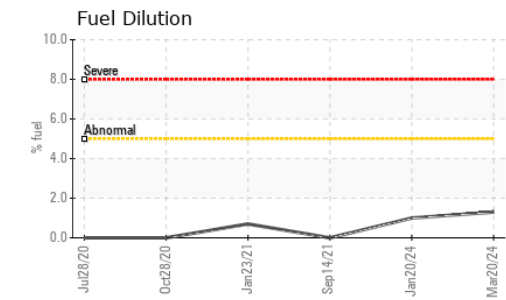
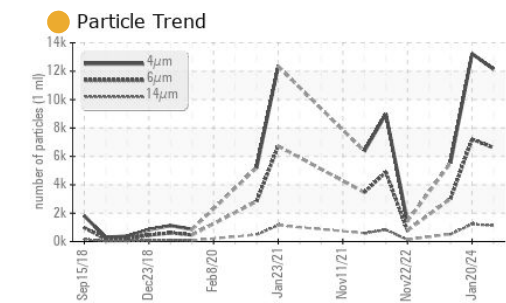
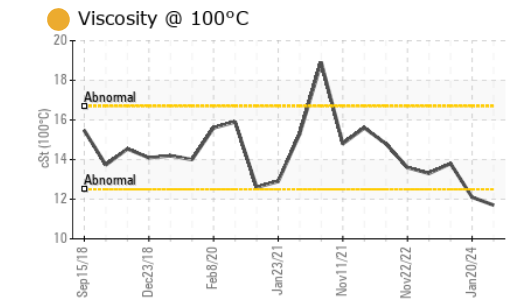
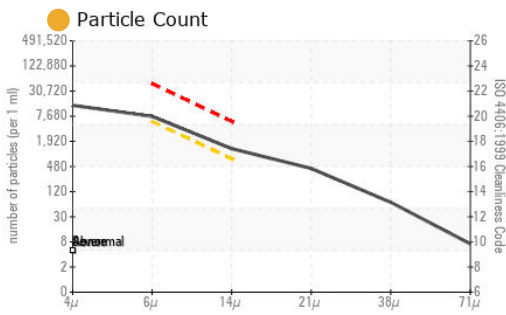
There is a moderate amount of particulates present in the oil. Fuel content negligible.

Silicon	ppm	ASTM D5185m	>25	10	9	9
Potassium	ppm	ASTM D5185m	>20	2	6	5
Fuel	%	ASTM D3524	>5	1.3	1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.4	0.5	0.1
Nitration	Abs/cm	*ASTM D7624	>20	5.8	6.6	4.1
Sulfation	Abs/.1mm	*ASTM D7415	>30	15.1	17.3	14.2
Particles >4µm		ASTM D7647		12136	13232	5533
Particles >6µm		ASTM D7647	>5000	6611	7208	3014
Particles >14µm		ASTM D7647	>640	1125	1227	513
Particles >21µm		ASTM D7647	>160	379	413	173
Particles >38µm		ASTM D7647	>40	59	64	27
Particles >71µm		ASTM D7647	>10	6	7	3
Oil Cleanliness		ISO 4406 (c)	>19/16	20/17	20/17	19/16
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	NEG

FLUID CONDITION

The oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.

Sodium	ppm	ASTM D5185m		<1	0	<1
Boron	ppm	ASTM D5185m		0	59	104
Barium	ppm	ASTM D5185m		0	1	0
Molybdenum	ppm	ASTM D5185m		<1	17	17
Manganese	ppm	ASTM D5185m		0	0	<1
Magnesium	ppm	ASTM D5185m		8	82	92
Calcium	ppm	ASTM D5185m		2875	2508	2344
Phosphorus	ppm	ASTM D5185m		1208	1145	1126
Zinc	ppm	ASTM D5185m		1404	1335	1374
Sulfur	ppm	ASTM D5185m		4174	3734	3788
Oxidation	Abs/.1mm	*ASTM D7414	>25	7.6	9.9	7.6
Base Number (BN)	mg KOH/g	ASTM D2896		10.00	9.74	10.50
Visc @ 100°C	cSt	ASTM D445		11.7	12.1	13.8



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KL0014172
Lab Number : 06153324
Unique Number : 10983402
Test Package : MOB 2 (Additional Tests: FuelDilution, PercentFuel, PrtCount)

Received : 18 Apr 2024
Tested : 23 Apr 2024
Diagnosed : 23 Apr 2024 - Jonathan Hester

To discuss this sample report, contact Customer Service at 1-800-237-1369.

* - 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)

CONOR
 JUAREZ 348
 HERMOSILLO,
 MX 83140

Contact: EDUARDO GARCIA
 egarcia.comsa@gmail.com

T: (526)622-1581 x:81

F: x: