



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ATTENTION
FLUID CONDITION	NORMAL

Area
GUAY SON [CONHER]
Machine Id
IBACO BM LOPEZ VENTURA
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		KL0014178	KL0014128	KL0013315
Sample Date		Client Info		20 Mar 2024	06 Feb 2024	20 Oct 2023
Machine Age	hrs	Client Info		20819	20446	19040
Oil Age	hrs	Client Info		373	428	610
Filter Age	hrs	Client Info		373	428	610
Oil Changed		Client Info		Not Chngd	Not Chngd	Not Chngd
Filter Changed		Client Info		Not Chngd	Not Chngd	Not Chngd
Sample Status				ATTENTION	ATTENTION	ABNORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	7	8	13
Chromium	ppm	ASTM D5185m	>20	<1	<1	<1
Nickel	ppm	ASTM D5185m	>4	0	0	0
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>20	2	2	1
Lead	ppm	ASTM D5185m	>40	1	<1	1
Copper	ppm	ASTM D5185m	>330	2	6	23
Tin	ppm	ASTM D5185m	>15	<1	<1	<1
Vanadium	ppm	ASTM D5185m		<1	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

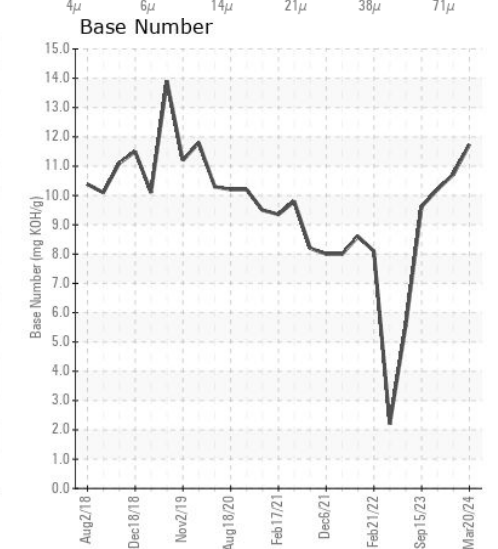
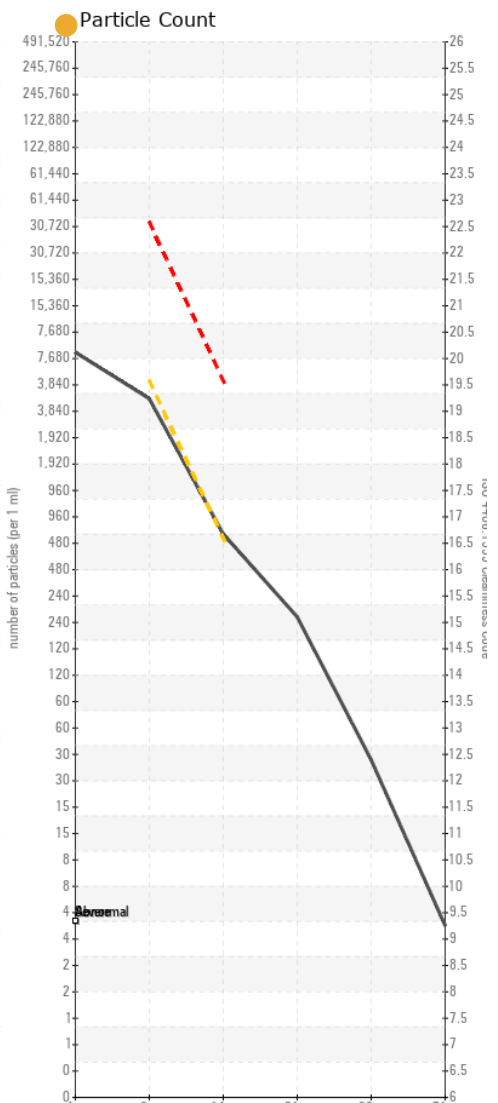
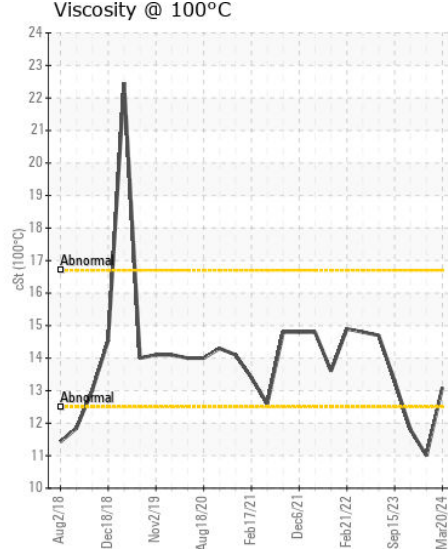
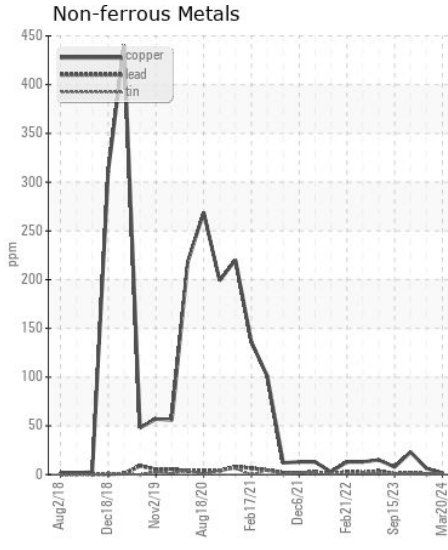
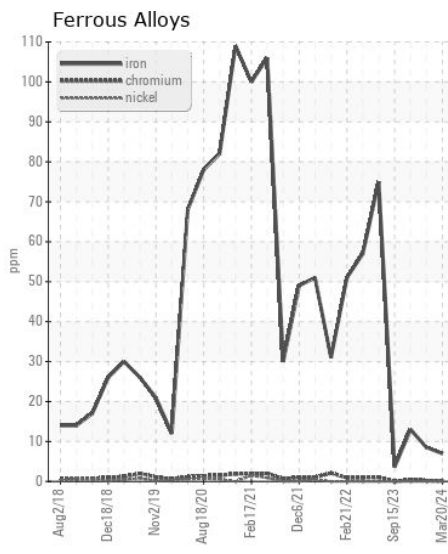
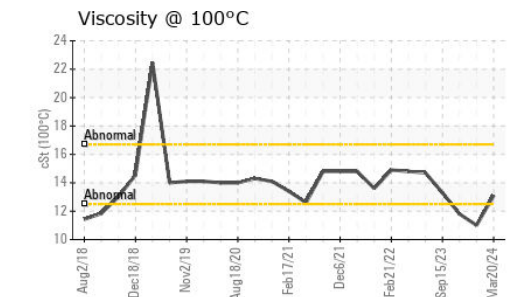
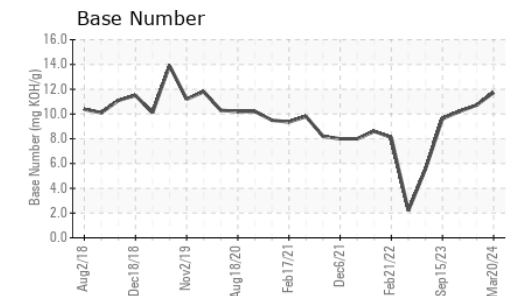
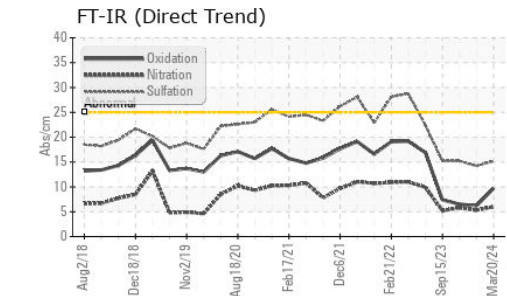
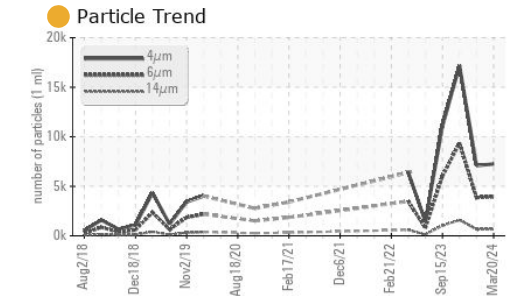
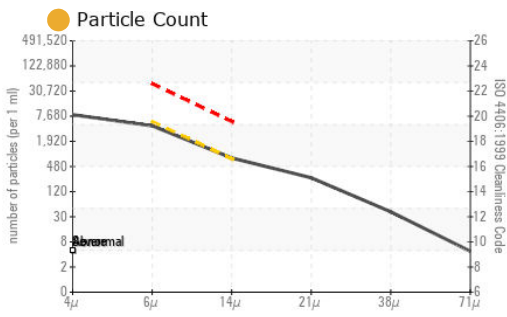
There is a moderate amount of particulates present in the oil.

Silicon	ppm	ASTM D5185m	>25	6	11	7
Potassium	ppm	ASTM D5185m	>20	0	2	2
Fuel		WC Method	>5	<1.0	<1.0	1.3
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.5	0.7	0.9
Nitration	Abs/cm	*ASTM D7624	>20	6.0	5.3	5.8
Sulfation	Abs/.1mm	*ASTM D7415	>30	15.2	14.2	15.2
Particles >4µm		ASTM D7647		7255	7090	17182
Particles >6µm		ASTM D7647	>5000	3952	3862	▲ 9360
Particles >14µm		ASTM D7647	>640	673	657	▲ 1593
Particles >21µm		ASTM D7647	>160	227	221	▲ 537
Particles >38µm		ASTM D7647	>40	35	34	▲ 83
Particles >71µm		ASTM D7647	>10	4	3	8
Oil Cleanliness		ISO 4406 (c)	>19/16	19/17	19/17	▲ 20/18
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 BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		<1	0	1
Boron	ppm	ASTM D5185m		62	0	0
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		34	0	<1
Manganese	ppm	ASTM D5185m		0	<1	<1
Magnesium	ppm	ASTM D5185m		20	8	7
Calcium	ppm	ASTM D5185m		3559	2578	2687
Phosphorus	ppm	ASTM D5185m		978	1088	1058
Zinc	ppm	ASTM D5185m		1110	1295	1424
Sulfur	ppm	ASTM D5185m		4061	3150	3682
Oxidation	Abs/.1mm	*ASTM D7414	>25	9.7	6.2	6.5
Base Number (BN)	mg KOH/g	ASTM D2896		11.74	10.72	10.21
Visc @ 100°C	cSt	ASTM D445		13.1	11.0	11.8



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KL0014178 **Received** : 18 Apr 2024
Lab Number : 06153311 **Tested** : 23 Apr 2024
Unique Number : 10983389 **Diagnosed** : 23 Apr 2024 - Jonathan Hester
Test Package : MOB 2 (Additional Tests: PrtCount)

CONOR
 JUAREZ 348
 HERMOSILLO,
 MX 83140
 Contact: EDUARDO GARCIA
 egarcia.comsa@gmail.com
 T: (526)622-1581 x:81
 F: x:

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)