



WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL



Area
[W68304]
 Machine Id
ATLAS COPCO DM30 1E-7912
 Component
Hydraulic System
 Fluid
HITACHI HYDRAULIC SUPER EX 46HN (81 GAL)

RECOMMENDATION

Oil and filter change at the time of sampling has been noted. No corrective action is recommended at this time. Resample at the next service interval to monitor. (Customer Sample Comment: W68304)

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0220367	JR0161767	JR0143318
Sample Date		Client Info		08 Jul 2024	01 May 2023	22 Dec 2022
Machine Age	hrs	Client Info		23561	22177	21272
Oil Age	hrs	Client Info		22429	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Changed	Not Changd	N/A
Filter Changed		Client Info		Changed	Not Changd	N/A
Sample Status				ABNORMAL	ABNORMAL	ABNORMAL

WEAR

All component wear rates are normal.

PQ	UOM	Method	Limit/Abn	Current	History1	History2
PQ		ASTM D8184		14	13	9
Iron	ppm	ASTM D5185m	>20	17	11	0
Chromium	ppm	ASTM D5185m	>10	<1	<1	0
Nickel	ppm	ASTM D5185m	>10	0	0	0
Titanium	ppm	ASTM D5185m		<1	<1	0
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>10	3	2	<1
Lead	ppm	ASTM D5185m	>10	0	0	0
Copper	ppm	ASTM D5185m	>75	10	7	<1
Tin	ppm	ASTM D5185m	>10	<1	0	0
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	LIGHT
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

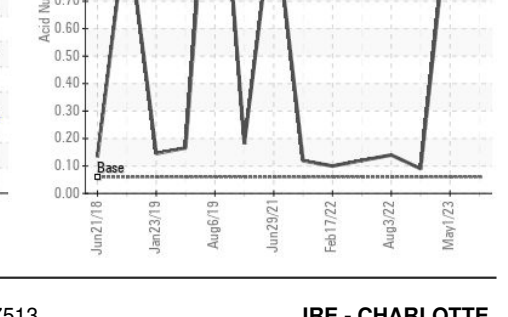
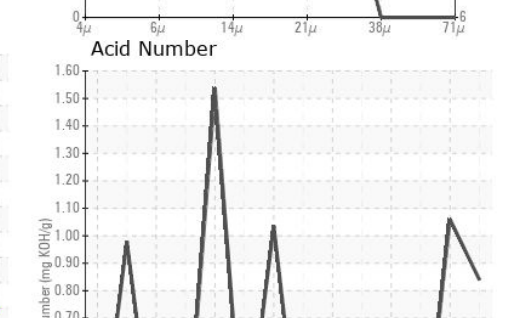
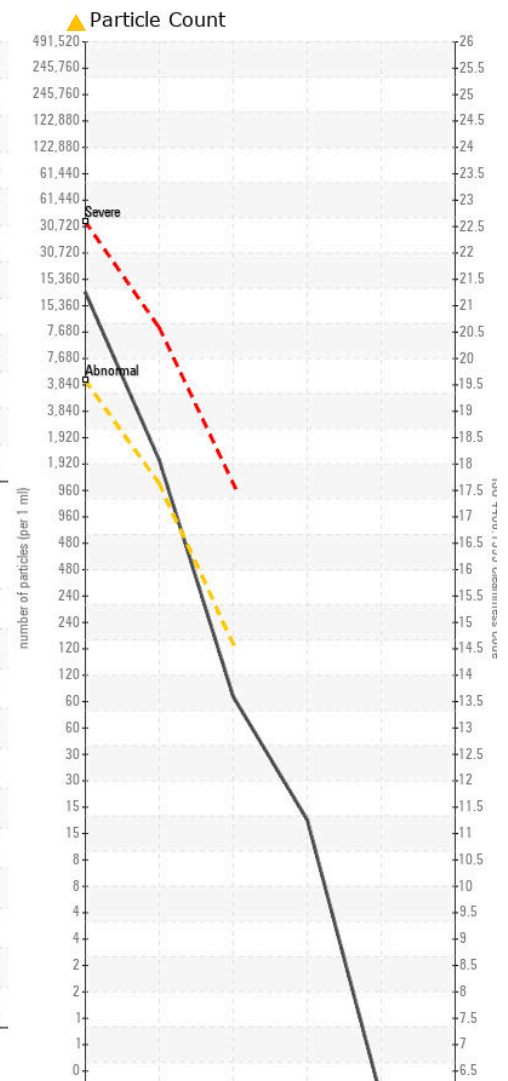
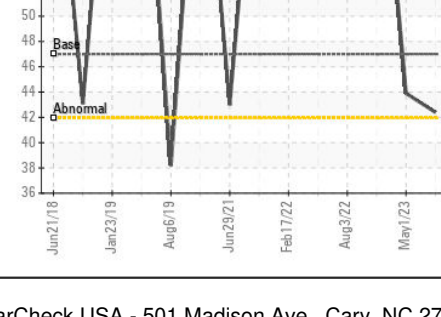
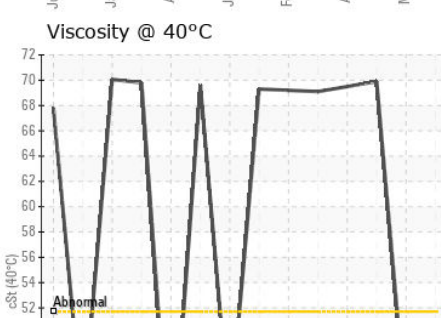
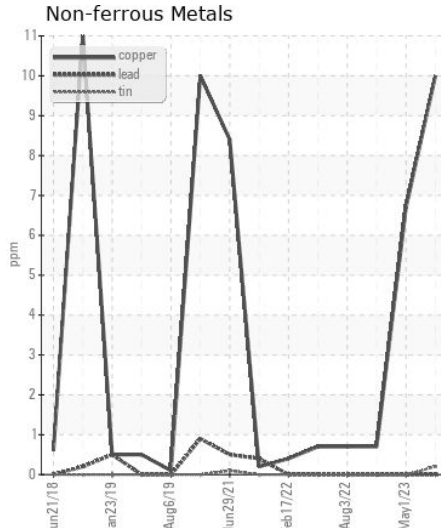
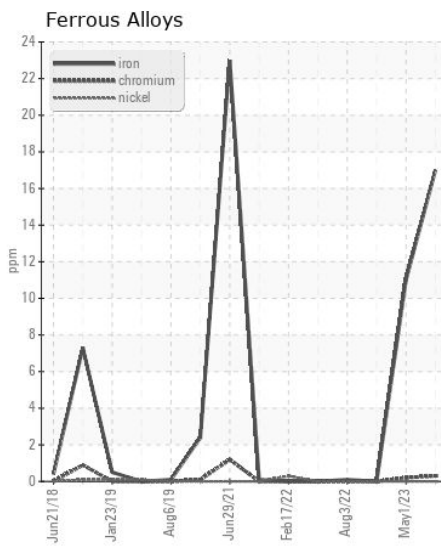
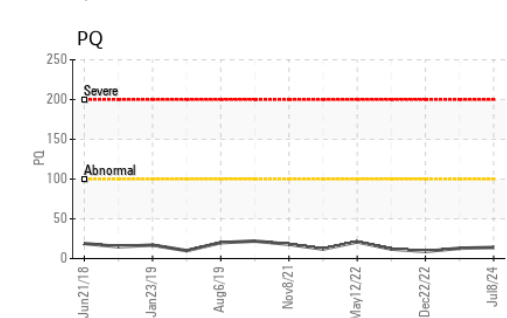
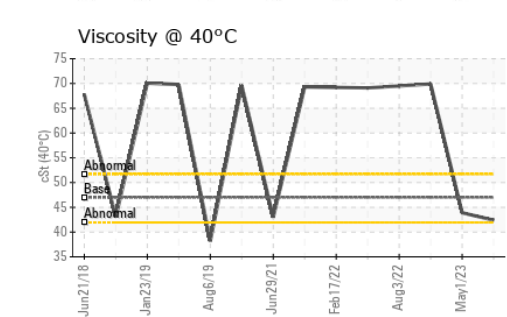
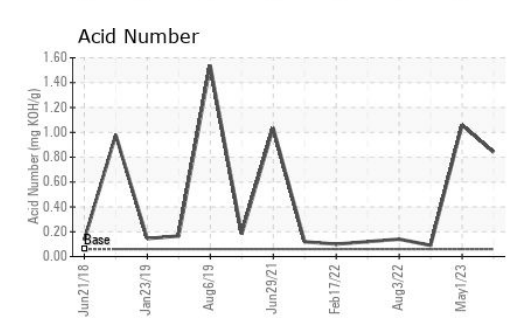
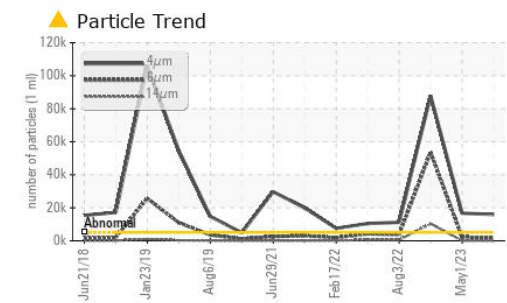
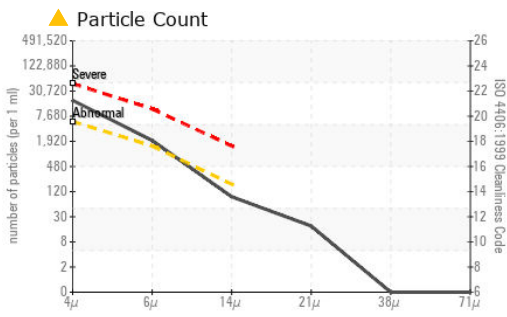
There is a high amount of silt (particulates < 14 microns in size) present in the oil.

Silicon	ppm	ASTM D5185m	>20	10	6	1
Potassium	ppm	ASTM D5185m	>20	2	0	0
Water		WC Method	>0.1	NEG	NEG	NEG
Particles >4µm		ASTM D7647	>5000	▲ 15930	▲ 16738	▲ 87854
Particles >6µm		ASTM D7647	>1300	● 1769	● 2218	▲ 53682
Particles >14µm		ASTM D7647	>160	80	94	▲ 10307
Particles >21µm		ASTM D7647	>40	16	14	▲ 1978
Particles >38µm		ASTM D7647	>10	0	1	▲ 38
Particles >71µm		ASTM D7647	>3	0	0	0
Oil Cleanliness		ISO 4406 (c)	>19/17/14	▲ 21/18/13	▲ 21/18/14	▲ 24/23/21
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	VLITE
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	>0.1	NEG	NEG	NEG

FLUID CONDITION

The AN level is acceptable for this fluid. The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185m		4	1	0
Boron	ppm	ASTM D5185m		5	4	0
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		2	2	0
Manganese	ppm	ASTM D5185m		<1	<1	0
Magnesium	ppm	ASTM D5185m		19	● 21	0
Calcium	ppm	ASTM D5185m		2486	● 2144	0
Phosphorus	ppm	ASTM D5185m	827	827	● 653	4
Zinc	ppm	ASTM D5185m	0	790	● 664	0
Sulfur	ppm	ASTM D5185m	13	3044	2278	1619
Acid Number (AN)	mg KOH/g	ASTM D8045	0.06	0.84	1.06	0.09
Visc @ 40°C	cSt	ASTM D445	47	42.4	● 43.9	69.9



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513

Sample No. : JR0220367

Lab Number : 06232199

Unique Number : 11115692

Test Package : CONST (Additional Tests: PQ)

Received : 10 Jul 2024

Tested : 11 Jul 2024

Diagnosed : 11 Jul 2024 - Don Baldridge

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)

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