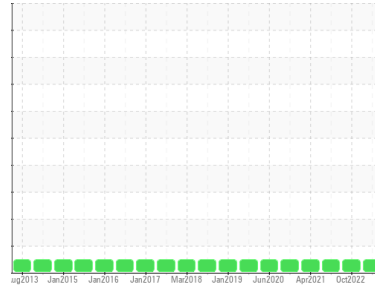




OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL



Area
A3
 Machine Id
Shipping pump-31009A
 Component
Pump
 Fluid
NOT GIVEN (--- GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable.

Fluid Condition

The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			WC0745570	WC0670614	WC05477922
Sample Date	Client Info			24 Aug 2023	05 Oct 2022	28 Jan 2022
Machine Age	mths	Client Info		0	0	0
Oil Age	mths	Client Info		0	0	0
Oil Changed	Client Info			N/A	N/A	N/A
Sample Status				NORMAL	NORMAL	NORMAL

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>90	0	<1	2
Chromium	ppm	ASTM D5185m	>5	0	0	0
Nickel	ppm	ASTM D5185m	>5	0	0	0
Titanium	ppm	ASTM D5185m	>3	0	0	0
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>7	0	<1	0
Lead	ppm	ASTM D5185m	>12	0	<1	2
Copper	ppm	ASTM D5185m	>30	<1	<1	3
Tin	ppm	ASTM D5185m	>9	0	0	0
Antimony	ppm	ASTM D5185m		---	---	0
Vanadium	ppm	ASTM D5185m		<1	0	0
Cadmium	ppm	ASTM D5185m		0	0	0

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		0	0	<1
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		0	0	0
Manganese	ppm	ASTM D5185m		0	0	0
Magnesium	ppm	ASTM D5185m		83	85	96
Calcium	ppm	ASTM D5185m		<1	2	4
Phosphorus	ppm	ASTM D5185m		<1	6	34
Zinc	ppm	ASTM D5185m		0	0	<1
Sulfur	ppm	ASTM D5185m		20634	20779	15546

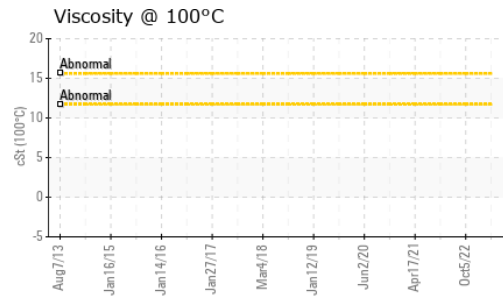
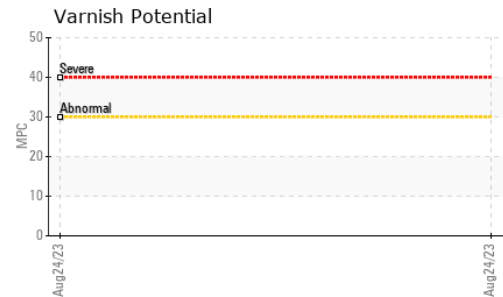
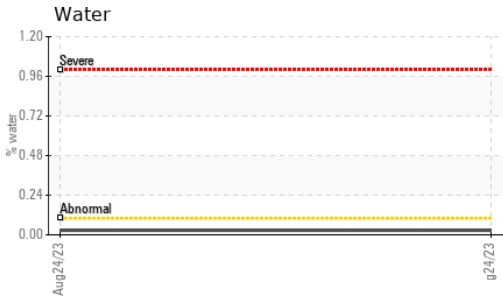
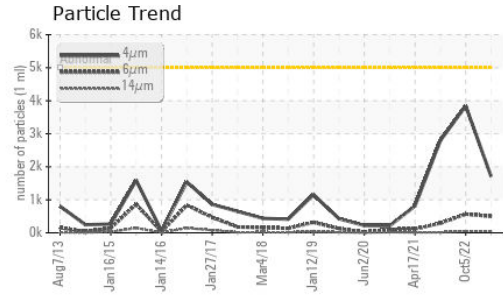
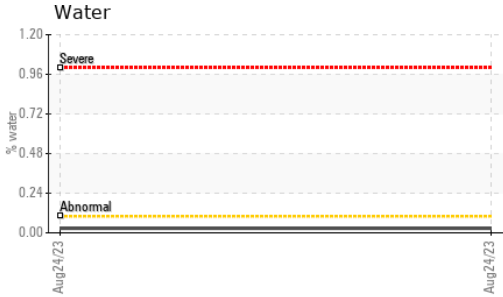
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>60	2	2	8
Sodium	ppm	ASTM D5185m		2	0	0
Potassium	ppm	ASTM D5185m	>20	0	0	1
Water	%	ASTM D6304		0.027	---	---
ppm Water	ppm	ASTM D6304	>.1	271.2	---	---

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>5000	1710	3842	2796
Particles >6µm		ASTM D7647	>1300	500	566	288
Particles >14µm		ASTM D7647	>160	45	49	13
Particles >21µm		ASTM D7647	>40	14	17	5
Particles >38µm		ASTM D7647	>10	1	1	0
Particles >71µm		ASTM D7647	>3	0	0	0
Oil Cleanliness		ISO 4406 (c)	>19/17/14	18/16/13	19/16/13	19/15/11

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		0.376	0.36	0.34



OIL ANALYSIS REPORT



VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	LIGHT
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	NEG	NEG	NEG
Free Water	scalar	*Visual	NEG	NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	31.7	32.1	37.6

SAMPLE IMAGES	method	limit/base	current	history1	history2
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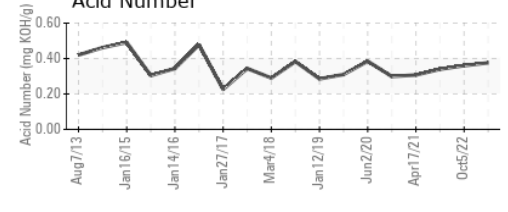
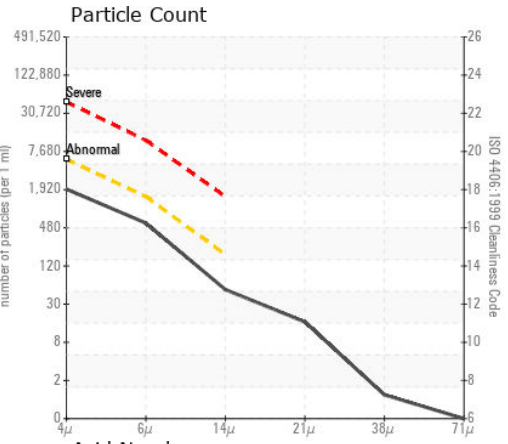
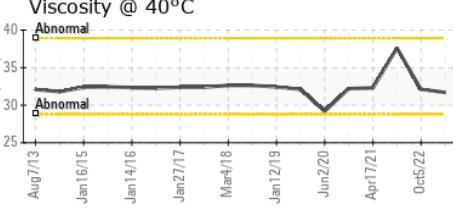
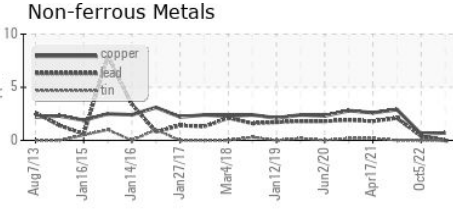
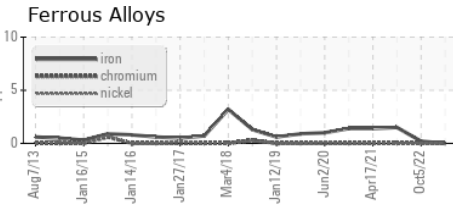
Color

Bottom

MPC

no image no image no image

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0745570 **Received** : 25 Aug 2023
Lab Number : 05935381 **Diagnosed** : 01 Sep 2023
Unique Number : 10620652 **Diagnostician** : Doug Bogart

Conoco Phillips ALASKA INC
 C/O LAF (ALPINE), 6441 S AIRPARK PL
 ANCHORAGE, AK
 US 99502

Certificate L2367 **Test Package** : IND 2 (Additional Tests: KF, KV100, MPC, PrtCount, RULER, ORT)
 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)