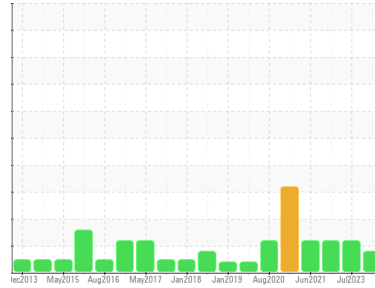




OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Area
L2
Machine Id
UNION Grey Water Pump-58033B
Component
Pump
Fluid
DIESEL ENGINE OIL SAE 30 (16 QTS)

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

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		WC0771987	WC0686725	WC0469446
Sample Date	Client Info		02 Jan 2024	02 Jul 2023	03 Sep 2022
Machine Age	hrs	Client Info	0	0	0
Oil Age	hrs	Client Info	0	0	0
Oil Changed	Client Info		N/A	N/A	N/A
Sample Status			ABNORMAL	ABNORMAL	ABNORMAL

CONTAMINATION

	method	limit/base	current	history1	history2
Water	WC Method	>.1	NEG	NEG	NEG

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >90	9	7	14
Chromium	ppm	ASTM D5185m >5	<1	0	0
Nickel	ppm	ASTM D5185m >5	0	<1	0
Titanium	ppm	ASTM D5185m >3	105	101	67
Silver	ppm	ASTM D5185m >3	0	0	0
Aluminum	ppm	ASTM D5185m >7	2	<1	<1
Lead	ppm	ASTM D5185m >12	11	8	13
Copper	ppm	ASTM D5185m >30	5	3	7
Tin	ppm	ASTM D5185m >9	<1	<1	<1
Antimony	ppm	ASTM D5185m	---	---	---
Vanadium	ppm	ASTM D5185m	1	<1	<1
Cadmium	ppm	ASTM D5185m	0	0	0

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 250	168	202	166
Barium	ppm	ASTM D5185m 10	0	0	0
Molybdenum	ppm	ASTM D5185m 100	<1	<1	<1
Manganese	ppm	ASTM D5185m	0	<1	<1
Magnesium	ppm	ASTM D5185m 450	743	701	658
Calcium	ppm	ASTM D5185m 3000	1418	1394	1307
Phosphorus	ppm	ASTM D5185m 1150	936	1063	907
Zinc	ppm	ASTM D5185m 1350	1157	1164	989
Sulfur	ppm	ASTM D5185m 4250	4009	3809	3404

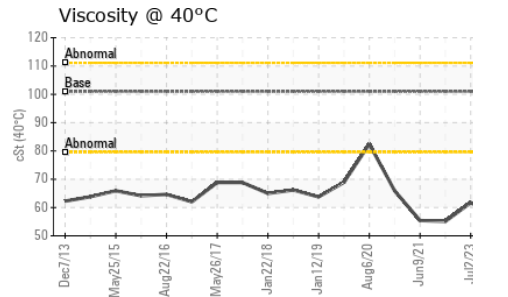
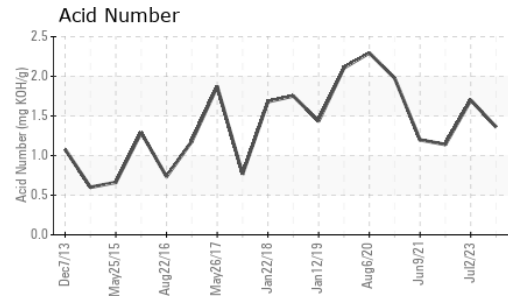
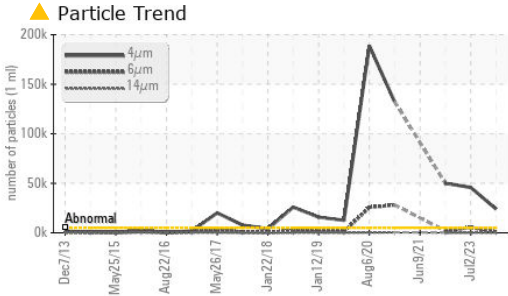
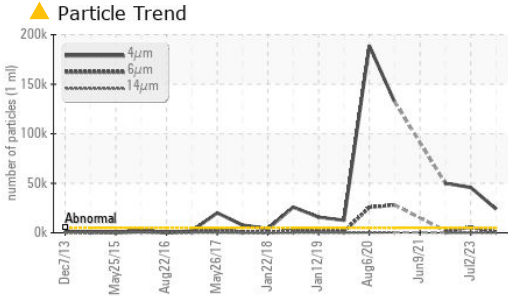
CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >60	6	7	8
Sodium	ppm	ASTM D5185m >75	0	0	3
Potassium	ppm	ASTM D5185m >20	4	4	1

FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>5000	▲ 24024	▲ 45825	▲ 49966
Particles >6µm	ASTM D7647	>1300	1092	▲ 5343	▲ 1910
Particles >14µm	ASTM D7647	>160	11	132	37
Particles >21µm	ASTM D7647	>40	2	31	6
Particles >38µm	ASTM D7647	>10	0	1	0
Particles >71µm	ASTM D7647	>3	0	0	0
Oil Cleanliness	ISO 4406 (c)	>19/17/14	▲ 22/17/11	▲ 23/20/14	▲ 23/18/12

OIL ANALYSIS REPORT

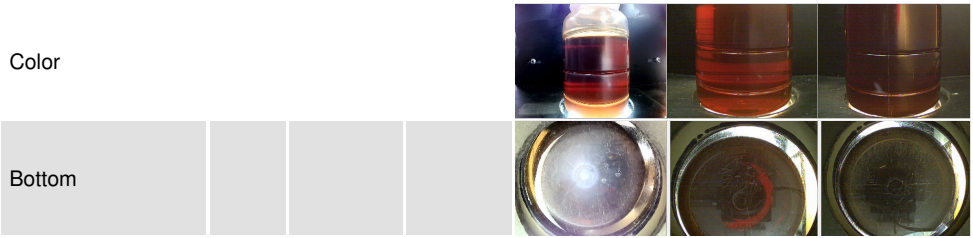


FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		1.36	1.70	1.14

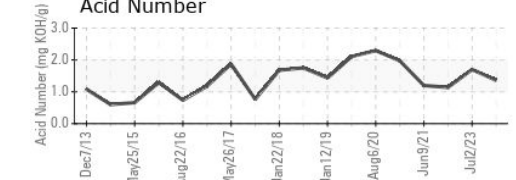
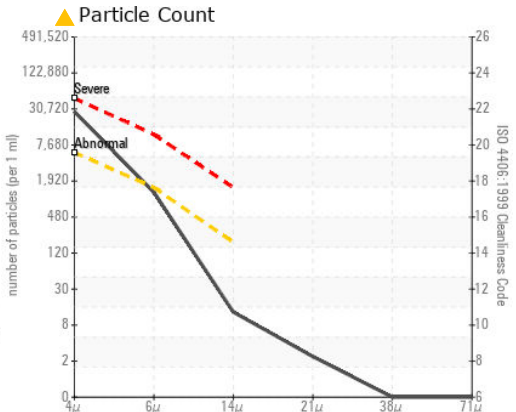
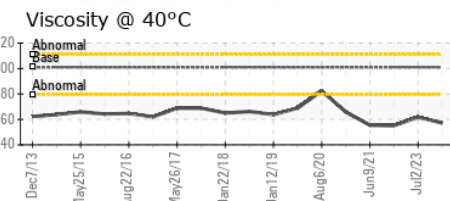
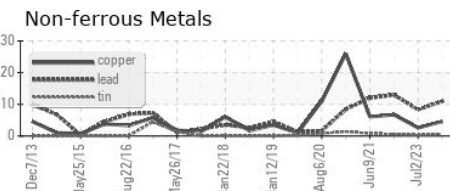
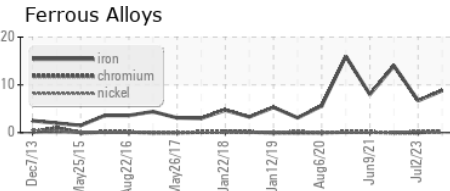
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	LIGHT	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>.1	NEG	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG	NEG

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	101	57.2	61.7	55.1

SAMPLE IMAGES



GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0771987 **Received** : 16 Jan 2024
Lab Number : **06061910** **Diagnosed** : 18 Jan 2024
Unique Number : 10833292 **Diagnostician** : Don Baldrige
Test Package : IND 2 (Additional Tests: PrtCount)

Conoco Phillips ALASKA INC
 C/O LAF (ALPINE), 6441 S AIRPARK PL
 ANCHORAGE, AK
 US 99502
 Contact: Chris Van Ryzin Ben DeRaeve
 alp1084@conocophillips.com
 T: (907)670-4128
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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)