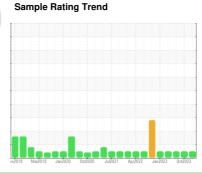


OIL ANALYSIS REPORT

Utilities Terry Turbine

Reservoir Turbine

PETRO CANADA TURBOFLO XL32 (750 GAL)





Recommendation

Resample at the next service interval to monitor.

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.

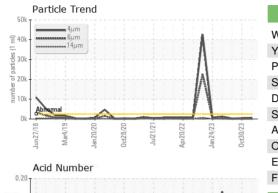
Fluid Condition

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

IAL)		ın2018 Marz	019 Jan 2020 Oct 2020	Jul2021 Apr2022 Jan2023	0et2023	
SAMPLE INFORM	/ATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0886195	WC0816917	WC0635842
Sample Date		Client Info		24 Jan 2024	30 Oct 2023	26 Jul 2023
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
CONTAMINATION	V	method	limit/base	current	history1	history2
Water		WC Method	>0.03	NEG	NEG	NEG
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>15	0	0	<1
Chromium	ppm	ASTM D5185m	>4	0	0	0
Nickel	ppm	ASTM D5185m	>2	0	0	0
Titanium	ppm	ASTM D5185m		<1	0	0
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>10	0	0	0
Lead	ppm	ASTM D5185m		0	0	0
Copper	ppm	ASTM D5185m	>5	2	2	0
Tin	ppm	ASTM D5185m	>5	<1	0	<1
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	0	0
Barium	ppm	ASTM D5185m	0	0	0	0
Molybdenum	ppm	ASTM D5185m	0	0	0	0
Manganese	ppm	ASTM D5185m	0	<1	0	0
Magnesium	ppm	ASTM D5185m	0	0	0	4
Calcium	ppm	ASTM D5185m	0	0	<1	0
Phosphorus	ppm	ASTM D5185m	5	2	<1	3
Zinc	ppm	ASTM D5185m	0	0	0	0
Sulfur	ppm	ASTM D5185m	750	630	631	967
CONTAMINANTS	;	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>15	<1	0	0
Sodium	ppm	ASTM D5185m		<1	<1	0
Potassium	ppm	ASTM D5185m	>20	0	<1	0
FLUID CLEANLIN	IESS	method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>2500	612	439	277
Particles >6μm		ASTM D7647	>640	183	119	85
Particles >14μm		ASTM D7647	>80	24	11	8
Particles >21µm		ASTM D7647	>20	9	4	2
Particles >38µm		ASTM D7647	>4	1	1	0
Particles >71µm		ASTM D7647	>3	0	0	0
Oil Cleanliness		ISO 4406 (c)	>18/16/13	16/15/12	16/14/11	15/14/10
FLUID DEGRADA	ATION	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.04	0.05	0.16	0.049



OIL ANALYSIS REPORT



VISUAL		method				history2
White Metal	scalar	*Visual	NONE	NONE	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	>0.03	NEG	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG	NEG

0.15	M		1	1	٨	Λ	1
0.15 0.10 Base	1		/ \/		\bigwedge	1	\mathbb{N}
1	- 1		V	V		V	V .
0.05 - Base		V			***********		

FLUID PROPERTIES 30.7 30.3 30.3 Visc @ 40°C cSt ASTM D445 33.86

SAMPLE IMAGES

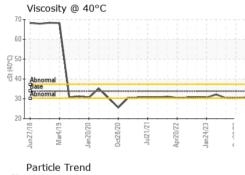
Color

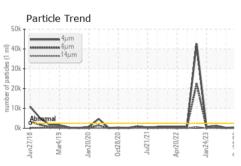


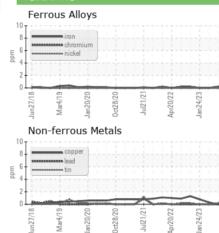


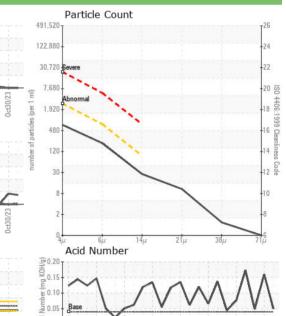
















Certificate L2367

Laboratory Sample No. Lab Number **Unique Number** Test Package : IND 2

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : WC0886195 : 06075732

Viscosity @ 40°C

: 10857823

: 31 Jan 2024 Recieved Diagnosed : 01 Feb 2024 Diagnostician : Don Baldridge

INGREDION INC WINSTON SALEM PLANT, 4501 OVERDALE ROAD

WINSTON SALEM, NC US 27107

Contact: MATTHEW KING matthew.king@ingredion.com

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)

F: (336)785-8809

Contact/Location: MATTHEW KING - CORWIN

T: