

Machine Id
CRANE 4 EAST BRIDGE

Component
Gearbox
 Fluid
PETRO CANADA ENDURATEX EP 220 (--- GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.
 NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination 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	PCA0101568	PCA0080280	---
Sample Date	Client Info	28 Aug 2023	22 Sep 2022	---
Machine Age	hrs	Client Info	0	0
Oil Age	hrs	Client Info	0	0
Oil Changed	Client Info	N/A	Not Chngd	---
Sample Status		NORMAL	NORMAL	---

WEAR METALS method limit/base current history1 history2

PQ	ASTM D8184		16	20	---
Iron	ppm	ASTM D5185m	>200	20	18
Chromium	ppm	ASTM D5185m	>15	0	0
Nickel	ppm	ASTM D5185m	>15	<1	0
Titanium	ppm	ASTM D5185m		0	0
Silver	ppm	ASTM D5185m		0	0
Aluminum	ppm	ASTM D5185m	>25	0	0
Lead	ppm	ASTM D5185m	>100	<1	0
Copper	ppm	ASTM D5185m	>200	2	3
Tin	ppm	ASTM D5185m	>25	0	0
Vanadium	ppm	ASTM D5185m		0	0
Cadmium	ppm	ASTM D5185m		0	0

ADDITIVES method limit/base current history1 history2

Boron	ppm	ASTM D5185m	60	8	3
Barium	ppm	ASTM D5185m	0	7	0
Molybdenum	ppm	ASTM D5185m	0	0	<1
Manganese	ppm	ASTM D5185m	0	<1	<1
Magnesium	ppm	ASTM D5185m	0	1	<1
Calcium	ppm	ASTM D5185m	0	8	10
Phosphorus	ppm	ASTM D5185m	270	259	246
Zinc	ppm	ASTM D5185m	0	18	15
Sulfur	ppm	ASTM D5185m	11200	8945	10729

CONTAMINANTS method limit/base current history1 history2

Silicon	ppm	ASTM D5185m	>50	13	12
Sodium	ppm	ASTM D5185m		0	0
Potassium	ppm	ASTM D5185m	>20	0	<1

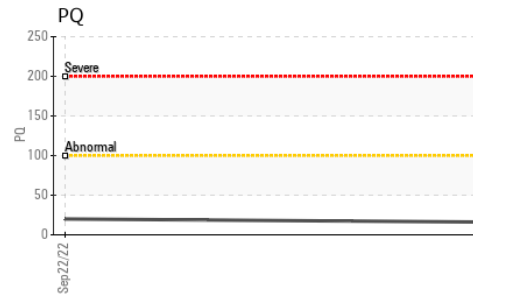
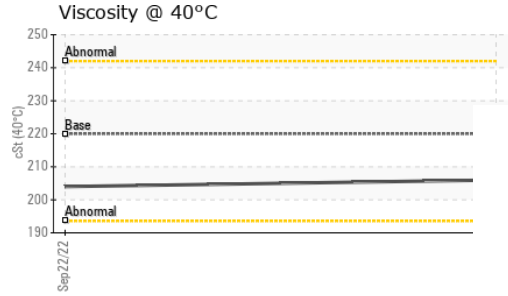
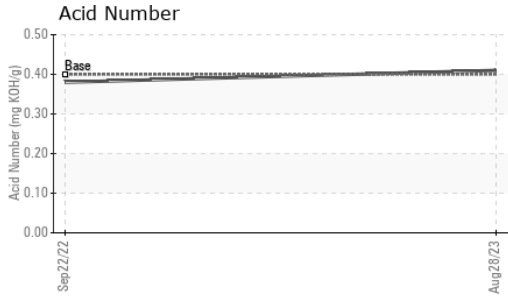
FLUID DEGRADATION method limit/base current history1 history2

Acid Number (AN)	mg KOH/g	ASTM D8045	0.40	0.41	0.38
------------------	----------	------------	------	-------------	------

VISUAL method limit/base current history1 history2

White Metal	scalar	*Visual	NONE	NONE	NONE
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	>0.2	NEG	NEG
Free Water	scalar	*Visual		NEG	---


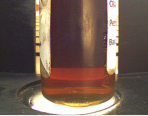


OIL ANALYSIS REPORT



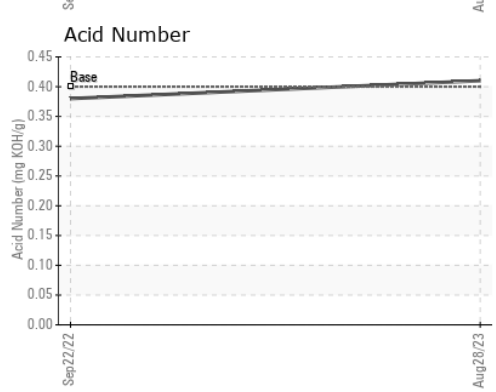
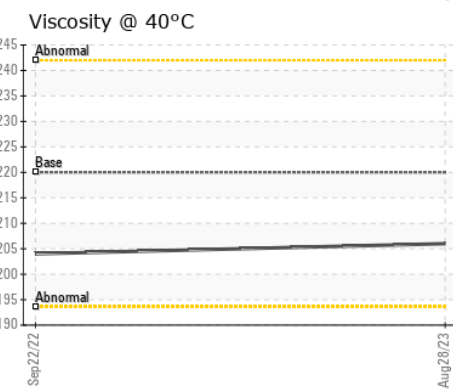
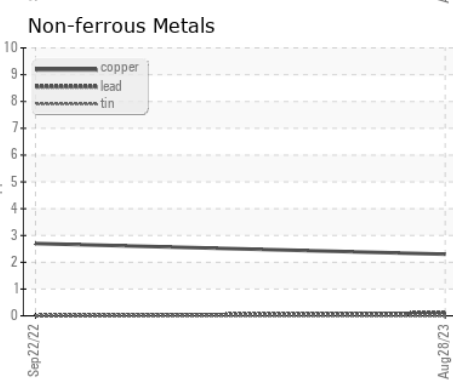
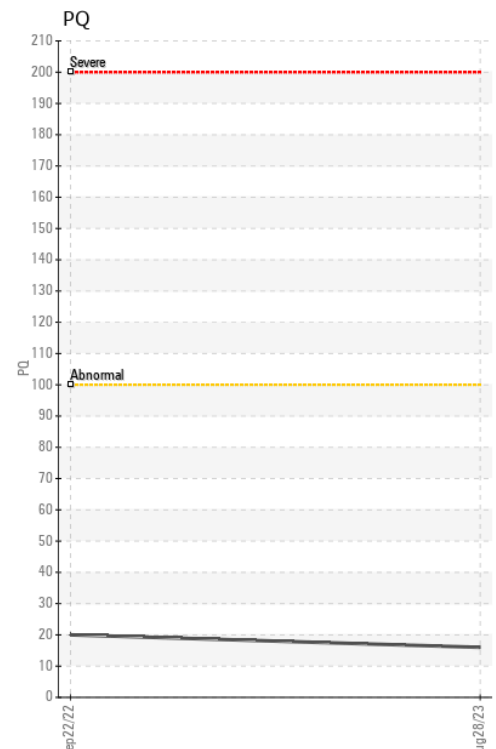
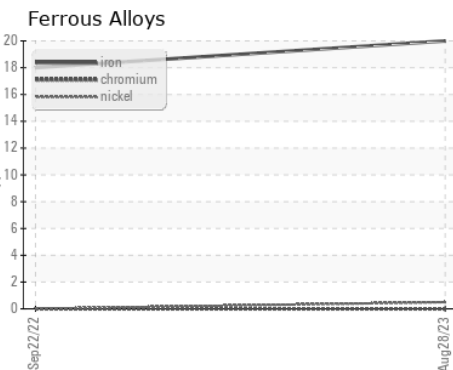
FLUID PROPERTIES

method	limit/base	current	history1	history2
Visc @ 40°C	cSt ASTM D445 220	206	204	---

SAMPLE IMAGES

method	limit/base	current	history1	history2
Color				no image
Bottom				no image

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0101568 **Received** : 29 Aug 2023
Lab Number : 05937344 **Diagnosed** : 30 Aug 2023
Unique Number : 10622615 **Diagnostician** : Wes Davis
Test Package : PLANT

SDI - Steel Dynamics Inc. - Heartland
 455 West Industrial Drive
 Terre Haute, IN
 US 47802
 Contact: BRAD ELLIS
 brad.ellis@steeldynamics.com
 T:
 F:

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)