

PROBLEM SUMMARY

Sample Rating Trend

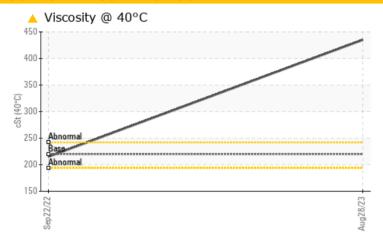
DIRT

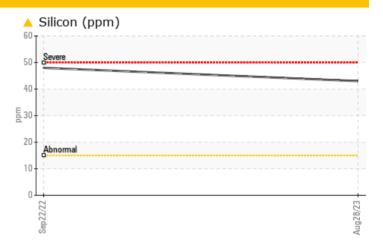
Machine Id CRANE 11

Main Hoist

PETRO CANADA ENDURATEX EP 220 (--- GAL)

COMPONENT CONDITION SUMMARY





RECOMMENDATION

No corrective action is recommended at this time. Resample at the next service interval to monitor.

PROBLEMATION	C TEST RESULTS ABNORMAL ABNORMAL ppm ASTM D5185m >15 ▲ 43 ▲ 48					
Sample Status				ABNORMAL	ABNORMAL	
Silicon	ppm	ASTM D5185m	>15	43	4 8	
Visc @ 40°C	cSt	ASTM D445	220	435.1	215	

Customer Id: SDITER Sample No.: PCA0101448 Lab Number: 05937353 Test Package: PLANT



To manage this report scan the QR code

To discuss the diagnosis or test data: Doug Bogart +1 (800)237-1369 x4016 dougb@wearcheckusa.com

To change component or sample information: Customer Service +1 1-800-237-1369 customerservice@wearcheck.com

RECOMMENDED ACTIONS

There are no recommended actions for this sample.

HISTORICAL DIAGNOSIS

22 Sep 2022 Diag: Jonathan Hester

DIRT



No corrective action is recommended at this time. Resample at the next service interval to monitor.All component wear rates are normal. Elemental level of silicon (Si) above normal indicating ingress of seal material. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.





OIL ANALYSIS REPORT

Sample Rating Trend



[] CRANE 11

Main Hoist

PETRO CANADA ENDURATEX EP 220 (---

DIAGNOSIS

Recommendation

No corrective action is recommended at this time. Resample at the next service interval to monitor.

All component wear rates are normal.

Contamination

Elemental level of silicon (Si) above normal.

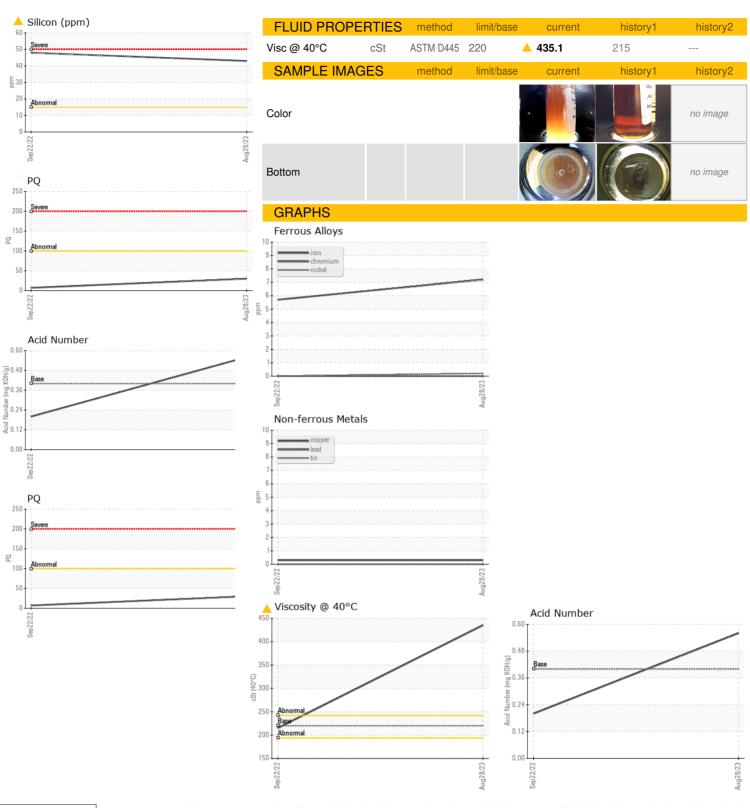
Fluid Condition

Viscosity of sample indicates oil is within ISO 460 range, advise investigate. Confirm oil type. The AN level is acceptable for this fluid.

GAL)			Sep 2022	Aug ² 023		
SAMPLE INFOR	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PCA0101448	PCA0079659	
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 Changd	
Sample Status				ABNORMAL	ABNORMAL	
WEAR METAL	.S	method	limit/base	current	history1	history2
PQ		ASTM D8184		30	7	
Iron	ppm	ASTM D5185m	>20	7	6	
Chromium	ppm	ASTM D5185m	>20	0	0	
Nickel	ppm	ASTM D5185m	>20	<1	0	
Titanium	ppm	ASTM D5185m		0	0	
Silver	ppm	ASTM D5185m		0	0	
Aluminum	ppm	ASTM D5185m	>20	1	0	
Lead	ppm	ASTM D5185m		0	0	
Copper	ppm	ASTM D5185m	>20	<1	<1	
Tin	ppm	ASTM D5185m		0	0	
Vanadium	ppm	ASTM D5185m	7 = 0	0	0	
Cadmium	ppm	ASTM D5185m		0	0	
ADDITIVES	ррт	method	limit/base	current	history1	history2
				0		
Boron	ppm	ASTM D5185m	60	8	<1	
Barium	ppm	ASTM D5185m		-	0	
Molybdenum	ppm	ASTM D5185m	0	0	0	
Manganese	ppm	ASTM D5185m		<1	0	
Magnesium	ppm	ASTM D5185m	0	1	0	
Calcium	ppm	ASTM D5185m		5	2	
Phosphorus	ppm	ASTM D5185m	270	460	84	
Zinc	ppm	ASTM D5185m	0	45	0	
Sulfur	ppm	ASTM D5185m	11200	292	11887	
CONTAMINAN	NTS	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>15	<u>43</u>	<u>48</u>	
Sodium	ppm	ASTM D5185m		0	0	
Potassium	ppm	ASTM D5185m	>20	<1	1	
FLUID DEGRA	DATION	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.40	0.56	0.20	
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	LIGHT	VLITE	
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	
Precipitate	scalar	*Visual	NONE	NONE	NONE	
Silt	scalar	*Visual	NONE	NONE	NONE	
Debris	scalar	*Visual	NONE	NONE	LIGHT	
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	
Appearance	scalar	*Visual	NORML	NORML	NORML	
Odor	scalar	*Visual	NORML	NORML	NORML	
Emulsified Water	scalar	*Visual	>0.05	NEG	NEG	
Free Water	scalar	*Visual		NEG	ocative BRAD B	LLIS - SDITE



OIL ANALYSIS REPORT





Certificate L2367

Laboratory Sample No. Lab Number **Unique Number**

: PCA0101448 : 05937353 : 10622624

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received : 29 Aug 2023 : 04 Sep 2023 Diagnosed Diagnostician : Doug Bogart Test Package : PLANT

SDI - Steel DynamicsInc. - Heartland 455 West Industrial Drive

Contact/Location: BRAD ELLIS - SDITER

Terre Haute, IN US 47802

Contact: BRAD ELLIS brad.ellis@steeldynamics.com

* - 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)

To discuss this sample report, contact Customer Service at 1-800-237-1369.

T:

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