

# **PROBLEM SUMMARY**

Sample Rating Trend

WEAR

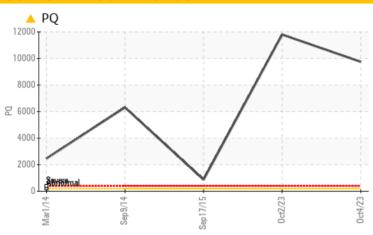
# CRANES [450207985]

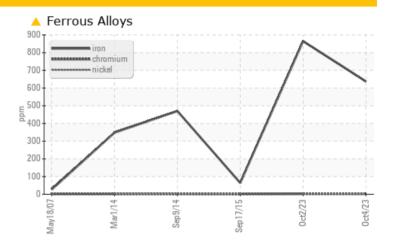
Slew Bearing - Fwd Crane - Boom 90 DEGREES (S/N Sample Tag MA-04003)

Grease

PETRO CANADA PRECISION XL EP2 (--- LTR)

### **COMPONENT CONDITION SUMMARY**





### RECOMMENDATION

We recommend an early resample to monitor this condition.

PROBLEMATIC TEST RESULTS									
Sample Status				<b>ABNORMAL</b>	ABNORMAL	NORMAL			
PQ		ASTM D8184*	>200	<b>4</b> 9750	<u>11800</u>	878			
Iron	ppm	ASTM D5185(m)	>250	<b>△</b> 637	<u></u> 865	64			
PrtFilter				•		no image			

Customer Id: TERHAM Sample No.: PC Lab Number: 02590171 Test Package: GRS 1

To manage this report scan the QR code

To discuss the diagnosis or test data: Bill Quesnel CLS,OMA II,MLA-III,LLA-I +1 (289)291-4641 x4641

Bill.Quesnel@wearcheck.com

To change component or sample information: Gloria Gonzalez +1 (289)291-4643 x4643 gloria.gonzalez@wearcheck.com

### **RECOMMENDED ACTIONS**

Action	Status	Date	Done By	Description
Resample			?	We recommend an early resample to monitor this condition.

### HISTORICAL DIAGNOSIS

02 Oct 2023 Diag: Bill Quesnel





We recommend an early resample to monitor this condition.PQ levels are abnormal. Iron ppm levels are abnormal. The high ferrous density (PQ) index indicates that abnormal wear is occurring. There is no indication of any contamination in the grease. The condition of the grease is acceptable for the time in service.



### 17 Sep 2015 Diag: Kevin Marson

NORMAL



This is a baseline read-out on the submitted sample. {not applicable} {not applicable} {not applicable}



### 09 Sep 2014 Diag: Kevin Marson

NORMAL



This is a baseline read-out on the submitted sample.





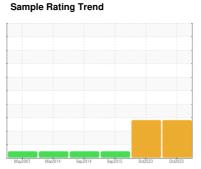
# **GREASE ANALYSIS**

**CRANES** [450207985]

Slew Bearing - Fwd Crane - Boom 90 DEGREES (S/N Sample Tag MA-04003)

Grease

PETRO CANADA PRECISION XL EP2 (--- LTR)





### **DIAGNOSIS**

#### Recommendation

We recommend an early resample to monitor this condition.

#### Wear

PQ levels are abnormal. Iron ppm levels are abnormal. The high ferrous density (PQ) index indicates that abnormal wear is occurring.

### **Grease Condition**

The condition of the grease is acceptable for the time in service.

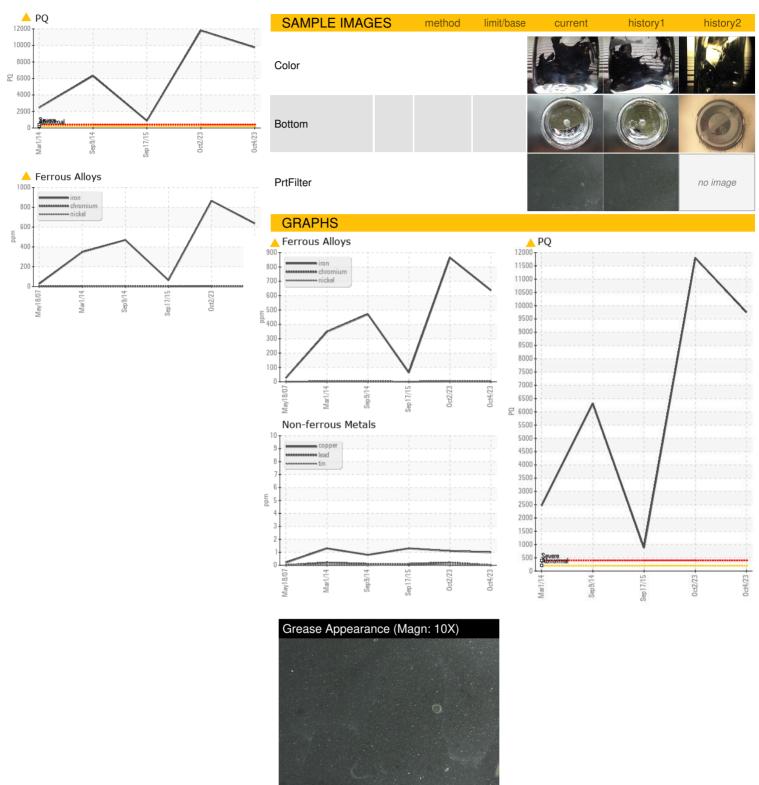
### Contaminants

There is no indication of any contamination in the grease.

IH)		May2007	Mar2014 Sep2014	Sep 2015 Oct2023	0ct2023	
SAMPLE INFOR	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PC	PC	PC366393
Sample Date		Client Info		04 Oct 2023	02 Oct 2023	17 Sep 2015
Machine Age	hrs	Client Info		0	0	0
Grease Age	hrs	Client Info		0	0	0
Grease Serviced		Client Info		N/A	N/A	N/A
Sample Status				ABNORMAL	ABNORMAL	NORMAL
WEAR METAL	S	method	limit/base	current	history1	history2
PQ		ASTM D8184*	>200	<b>4</b> 9750	<u> </u>	878
Iron	ppm	ASTM D5185(m)	>250	<u></u> 637	<u>▲</u> 865	64
Chromium	ppm	ASTM D5185(m)	>10	2	3	<1
Nickel	ppm	ASTM D5185(m)	>5	<1	<1	<1
Cadmium	ppm	ASTM D5185(m)		0	0	0
Titanium	ppm	ASTM D5185(m)		0	0	<1
Vanadium	ppm	ASTM D5185(m)		0	0	0
Lead	ppm	ASTM D5185(m)	>25	0	<1	<1
Copper	ppm	ASTM D5185(m)	>75	1	1	1
Tin	ppm	ASTM D5185(m)	>5	0	0	<1
Silver	ppm	ASTM D5185(m)	>5	<1	<1	0
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)		1	1	<1
Magnesium	ppm	ASTM D5185(m)		6	4	<1
Manganese	ppm	ASTM D5185(m)		8	11	<1
Molybdenum	ppm	ASTM D5185(m)		25	27	12
Phosphorus	ppm	ASTM D5185(m)		60	52	98
Zinc	ppm	ASTM D5185(m)		81	63	99
Antimony	ppm	ASTM D5185(m)		34	36	68
THICKENER/S	OAP	method	limit/base	current	history1	history2
Aluminum	ppm	ASTM D5185(m)		1	1	<1
Barium	ppm	ASTM D5185(m)		4	4	1
Calcium	ppm	ASTM D5185(m)		56	58	32
Sodium	ppm	ASTM D5185(m)		36	30	7
Lithium	ppm	ASTM D5185(m)		253	263	298
Sulfur	ppm	ASTM D5185(m)		660	648	822
CONTAMINAN	ITS	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>150	3	4	1
Potassium	ppm	ASTM D5185(m)		<1	<1	1
GREASE CON	DITION	method	limit/base	current	history1	history2
Grease Color		Visual*	Brown	Brown	Brown	
Texture		In-house*	Stringy	Short fiber	Short fiber	
NLGI Consistency	NLGI Scale	SKF Method*	2	1-2	1-2	



### **GREASE ANALYSIS**





CALA ISO 17025:2017 Accredited Laboratory

Laboratory Sample No. Lab Number Unique Number : 5659237

: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 : PC

: 02590171

Received : 18 Oct 2023 Diagnosed : 20 Oct 2023 Diagnostician : Bill Quesnel

**Test Package**: GRS 1 (Additional Tests: BottomAnalysis) To discuss this sample report, contact Customer Service at 1-800-268-2131.

Test denoted (\*) outside scope of accreditation, (m) method modified, (e) tested at external lab. Validity of results and interpretation are based on the sample and information as supplied.

**Suncor - Terra Nova Projects** Scotia Centre, 235 Water Strret

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