



# OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	SEVERE
FLUID CONDITION	NORMAL

Area

## EAST PLANT

Machine Id

## 107702 ROCK BREAKER HYDRAULIC UNIT

Component

### Hydraulic System

Fluid

### ESSO NUTO H ISO 68 (90 GAL)

#### RECOMMENDATION

Check seals and/or filters for points of contaminant entry. The air breather requires service. If unrated, we recommend that you replace with a suitable micron rated and/or desiccant air breather. If rated, we recommend that you service/replace the breather. We recommend you service the filters on this component. Resample in 30-45 days to monitor this situation.

#### WEAR

All component wear rates are normal.

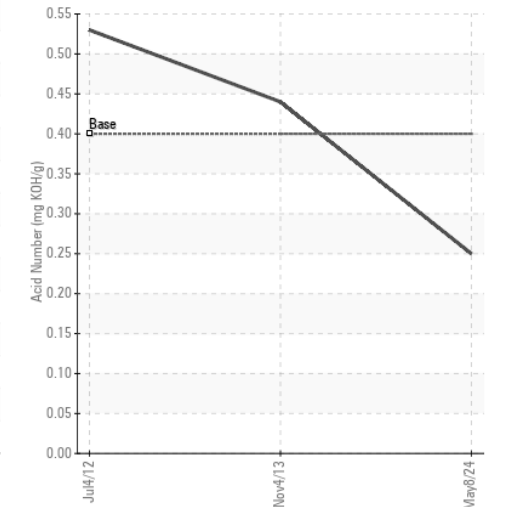
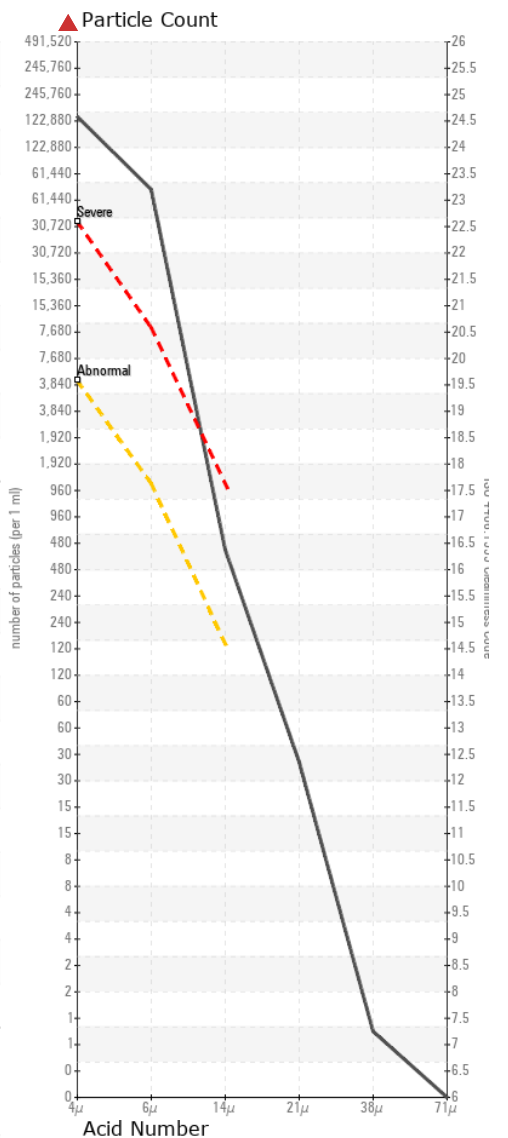
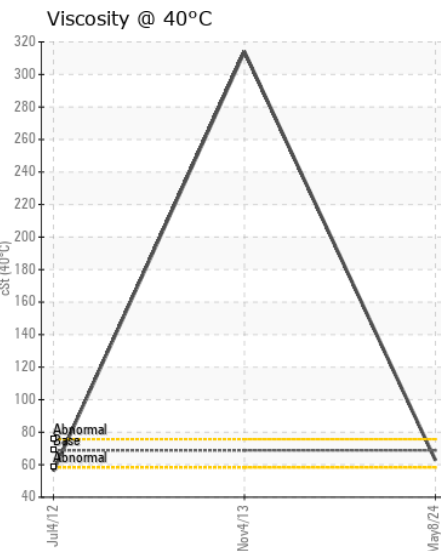
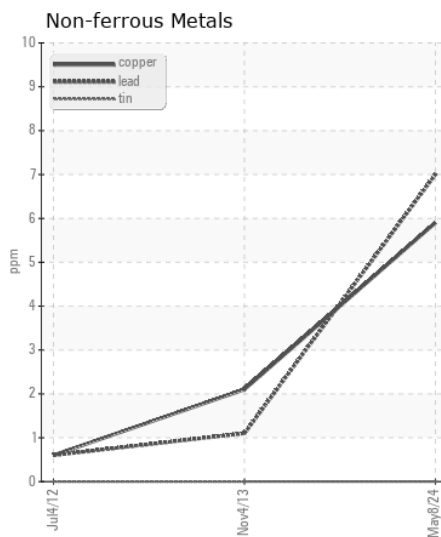
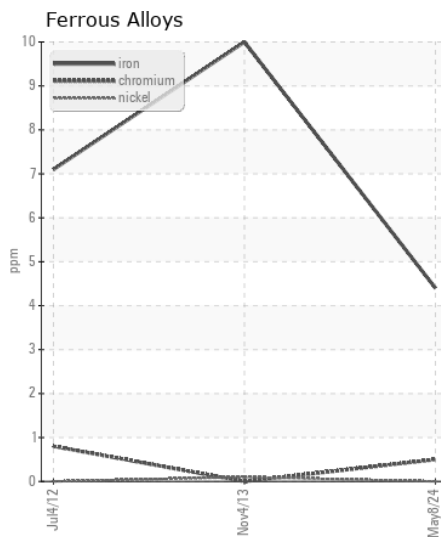
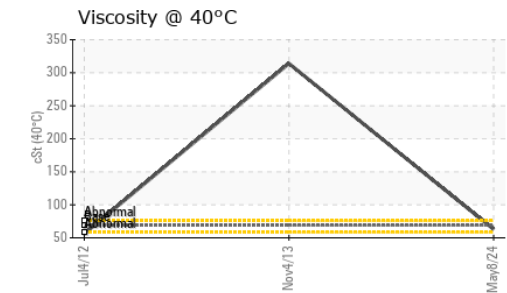
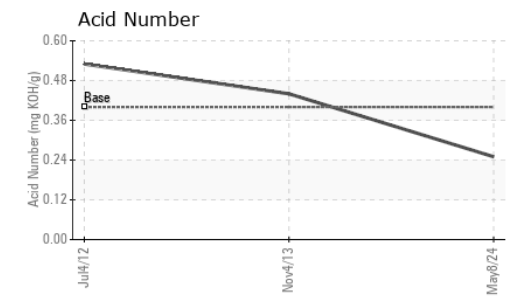
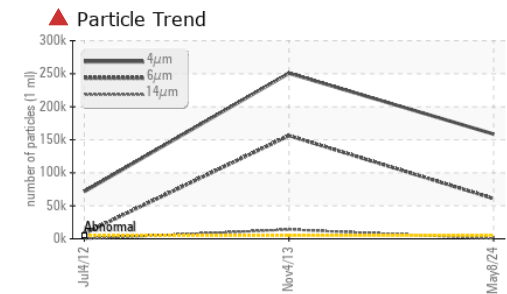
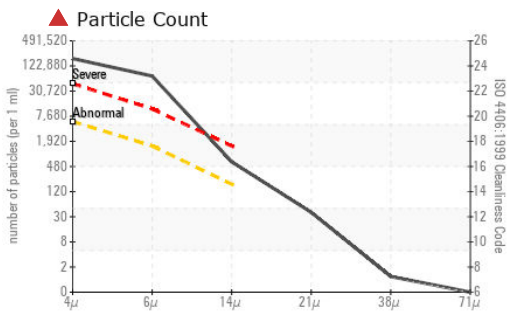
#### CONTAMINATION

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 oil is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0807913	WC865666	WC865486
Sample Date		Client Info		08 May 2024	04 Nov 2013	04 Jul 2012
Machine Age	yrs	Client Info		0	2	0
Oil Age	yrs	Client Info		0	0	0
Filter Age	yrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	N/A	N/A
Filter Changed		Client Info		N/A	N/A	N/A
Sample Status				SEVERE	SEVERE	ABNORMAL
Iron	ppm	ASTM D5185(m)	>20	4	10	7
Chromium	ppm	ASTM D5185(m)	>20	<1	0	<1
Nickel	ppm	ASTM D5185(m)	>20	0	<1	0
Titanium	ppm	ASTM D5185(m)		0	0	0
Silver	ppm	ASTM D5185(m)		0	0	<1
Aluminum	ppm	ASTM D5185(m)	>20	0	<1	<1
Lead	ppm	ASTM D5185(m)	>20	7	1	<1
Copper	ppm	ASTM D5185(m)	>20	6	2	<1
Tin	ppm	ASTM D5185(m)	>20	0	0	0
Vanadium	ppm	ASTM D5185(m)		0	0	0
White Metal	scalar	Visual*	NONE	NONE	NONE	VLITE
Yellow Metal	scalar	Visual*	NONE	NONE	NONE	NONE
Silicon	ppm	ASTM D5185(m)	>15	0	1	<1
Potassium	ppm	ASTM D5185(m)	>20	0	<1	<1
Water		WC Method	>0.05	NEG	NEG	NEG
Particles >4µm		ASTM D7647	>5000	▲ 158590	250707	71511
Particles >6µm		ASTM D7647	>1300	▲ 60897	▲ 156299	▲ 8086
Particles >14µm		ASTM D7647	>160	▲ 547	▲ 14044	121
Particles >21µm		ASTM D7647	>40	34	▲ 2140	20
Particles >38µm		ASTM D7647	>10	1	9	2
Particles >71µm		ASTM D7647	>3	0	0	0
Oil Cleanliness		ISO 4406 (c)	>19/17/14	▲ 24/23/16	▲ 25/24/21	▲ 23/20/14
Silt	scalar	Visual*	NONE	VLITE	NONE	NONE
Debris	scalar	Visual*	NONE	NONE	VLITE	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*	>0.05	NEG	NEG	NEG
Sodium	ppm	ASTM D5185(m)		<1	0	<1
Boron	ppm	ASTM D5185(m)	0	<1	15	<1
Barium	ppm	ASTM D5185(m)	0	<1	0	<1
Molybdenum	ppm	ASTM D5185(m)	0	0	0	<1
Manganese	ppm	ASTM D5185(m)		0	<1	0
Magnesium	ppm	ASTM D5185(m)	5	<1	<1	<1
Calcium	ppm	ASTM D5185(m)	50	37	43	70
Phosphorus	ppm	ASTM D5185(m)	330	200	219	341
Zinc	ppm	ASTM D5185(m)	420	163	● 2	480
Sulfur	ppm	ASTM D5185(m)	3100	6585	● 8907	2849
Acid Number (AN)	mg KOH/g	ASTM D974*	.40	0.25	0.44	0.53
Visc @ 40°C	cSt	ASTM D7279(m)	68.8	62.8	▲ 314	▲ 56.1



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : WC0807913 **Received** : 15 May 2024  
**Lab Number** : 02635655 **Tested** : 16 May 2024  
**Unique Number** : 5776808 **Diagnosed** : 16 May 2024 - Wes Davis  
**Test Package** : IND 2 ( Additional Tests: TAN Man )

**CARMEUSE LIME**  
 374681 OXFORD COUNTY ROAD 6., P.O. BOX 190  
 INGERSOLL, ON  
 CA N5C 3K5  
 Contact: Jeff Geddes  
 jeff.geddes@carmeusena.com  
 T: (519)423-6283  
 F: (519)423-6568

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.