

### **OIL ANALYSIS REPORT**

# Grinding Room #4 FEEDER AUGER

Component Gearbox

#### Mobilgear 600 XP 150 (16 GAL)

#### DIAGNOSIS

#### Recommendation

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

#### Wear

All component wear rates are normal.

#### Contamination

There is a moderate amount of silt (particulates < 14 microns in size) present in the oil.

#### Fluid Condition

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

# 1002 Jun2014 Ap2005 Ju2006 Spg2077 Jun2010 Feb322 Mag202 Du20

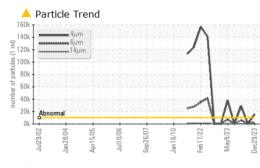
Sample Rating Trend

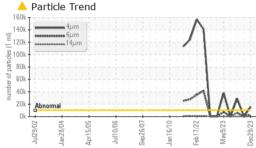
SAMPLE INFOR	MATION	method				history2
Sample Number		Client Info		PCA0103602	PCA0103601	PCA0099630
Sample Date		Client Info		29 Dec 2023	24 Oct 2023	08 Sep 2023
Machine Age	hrs	Client Info		0	0	0
Oil Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	N/A	N/A
Sample Status				ATTENTION	NORMAL	ABNORMAL
CONTAMINAT	ION	method	limit/base	current	history1	history2
Water		WC Method	>0.2	NEG	NEG	NEG
WEAR METAL	S	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>200	18	14	17
Chromium	ppm	ASTM D5185m	>15	<1	<1	0
Nickel	ppm	ASTM D5185m	>15	<1	<1	0
Titanium	ppm	ASTM D5185m		0	<1	0
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>25	1	1	0
Lead	ppm	ASTM D5185m	>100	<1	0	0
Copper	ppm	ASTM D5185m	>200	<1	<1	<1
Tin	ppm	ASTM D5185m	>25	<1	<1	0
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		<1	<1	0
ADDITIVES		method	limit/base	current	history1	history2
				oanon		
Boron	ppm	ASTM D5185m		0	1	0
	ppm ppm	ASTM D5185m ASTM D5185m			1 0	0
Barium				0		
Barium Molybdenum	ppm	ASTM D5185m		0 2	0	0
Boron Barium Molybdenum Manganese Magnesium	ppm ppm	ASTM D5185m ASTM D5185m		0 2 <1	0 <1	0 <1
Barium Molybdenum Manganese	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m		0 2 <1 <1	0 <1 0	0 <1 <1
Barium Molybdenum Manganese Magnesium	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		0 2 <1 <1 1	0 <1 0 0	0 <1 <1 1
Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		0 2 <1 <1 1 1 13	0 <1 0 0 2	0 <1 <1 1 5
Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		0 2 <1 <1 1 1 3 341	0 <1 0 0 2 321	0 <1 <1 1 5 300
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	0 2 <1 <1 1 1 3 341 66	0 <1 0 0 2 321 17	0 <1 <1 1 5 300 24
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m <b>Method</b>	limit/base >50	0 2 <1 1 1 3 341 66 15150	0 <1 0 2 321 17 17056	0 <1 1 5 300 24 14846
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m <b>Method</b>		0 2 <1 <1 1 1 3 341 66 15150 current	0 <1 0 2 321 17 17056 history1	0 <1 <1 5 300 24 14846 history2
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m <b>method</b> ASTM D5185m	>50	0 2 <1 <1 1 1 3 3 41 66 15150 current 5	0 <1 0 2 321 17 17056 history1 6	0 <1 <1 5 300 24 14846 history2 7
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	>50	0 2 <1 <1 1 1 341 66 15150 current 5 0	0 <1 0 2 321 17 17056 history1 6 0	0 <1 <1 5 300 24 14846 history2 7 0
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	>50 >20 limit/base >10000	0 2 <1 <1 1 1 3 3 4 1 6 6 1 5 1 5 0 0 0	0 <1 0 2 321 17 17056 history1 6 0 2 2 history1 415	0 <1 <1 5 300 24 14846 history2 7 0 <1
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	>50 >20 limit/base >10000	0 2 <1 <1 1 1 341 66 15150 current 5 0 0 0	0 <1 0 2 321 17 17056 history1 6 0 2 history1	0 <1 <1 5 300 24 14846 history2 7 0 <1 history2
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium FLUID CLEANI Particles >4µm Particles >6µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	>50 >20 limit/base >10000	0 2 <1 <1 1 13 341 66 15150	0 <1 0 2 321 17 17056 history1 6 0 2 2 history1 415	0 <1 <1 1 5 300 24 14846 history2 7 0 <1 ×1 history2 ▲ 28882
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium FLUID CLEANI Particles >4µm Particles >6µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	>50 >20 limit/base >10000 >2500 >640	0 2 <1 <1 1 13 341 66 15150 current 5 0 0 0 current 15551 ▲ 15551	0 <1 0 0 2 321 17 17056 history1 6 0 2 2 history1 415 100	0 <1 <1 5 300 24 14846 <b>bistory2</b> 7 0 <1 <b>bistory2</b> <1 28882 ▲ 28882 ▲ 6079 282 57
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium FLUID CLEANI Particles >4µm Particles >6µm Particles >14µm Particles >21µm Particles >38µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D7647 ASTM D7647 ASTM D7647	>50 >20 limit/base >10000 >2500 >640	0 2 <1 <1 1 13 341 66 15150 current 5 0 0 0 current ▲ 15551 ▲ 15551 ▲ 2947 185	0 <1 0 0 2 321 17 17056 history1 6 0 2 2 history1 415 100 12	0 <1 1 5 300 24 14846
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium FLUID CLEANI Particles >4µm Particles >14µm Particles >21µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647	>50 >20 limit/base >10000 >2500 >640 >160 >40	0 2 <1 <1 1 13 341 66 15150 current 5 0 0 0 current ↓ 15551 ↓ 2947 185 40	0 <1 0 2 321 17 17056 history1 6 0 2 2 history1 415 100 12 3	0 <1 1 5 300 24 14846 14846
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium FLUID CLEANI Particles >4µm Particles >6µm Particles >14µm Particles >21µm Particles >38µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647	>50 >20 limit/base >10000 >2500 >640 >160 >40	0 2 <1 <1 1 13 341 66 15150 current 5 0 0 0 current ↓ 15551 ↓ 2947 185 40 1	0 <1 0 2 321 17 17056 history1 6 0 2 history1 415 100 12 3 1	0 <1 <1 1 5 300 24 14846 bistory2 7 0 <1 bistory2 ▲ 28882 ▲ 6079 282 57 2
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium FLUID CLEANI Particles >4µm Particles >6µm Particles >14µm Particles >21µm Particles >38µm Particles >71µm	ppm ppm ppm ppm ppm ppm ppm ppm TS ppm ppm ppm	ASTM D5185m ASTM D7647 ASTM D7647	>50 >20 limit/base >10000 >2500 >640 >160 >40 >10	0 2 <1 <1 1 13 341 66 15150 current 5 0 0 0 current ▲ 15551 ▲ 15551 ▲ 2947 185 40 1 0 0	0 <1 0 2 321 17 17056 history1 6 0 2 history1 415 100 12 3 1 1 0	0 <1 <1 1 5 300 24 14846 history2 7 0 <1 vistory2 × 28882 ▲ 6079 282 57 2 57 2 1 1
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium FLUID CLEANI Particles >4µm Particles >4µm	ppm ppm ppm ppm ppm ppm ppm ppm TS ppm ppm ppm	ASTM D5185m ASTM D7647 ASTM D7647	>50 >20 <b>limit/base</b> >10000 >2500 >640 >160 >40 >10 >10 >20/18/16	0 2 <1 <1 1 13 341 66 15150 current 5 0 0 0 current 15551 ▲ 15551 ▲ 15551 ▲ 2947 185 40 1 0 21/19/15	0 <1 0 2 321 17 17056 history1 6 0 2 2 history1 415 100 12 3 1 100 12 3 1 100 12 3 1 100 12 3 1 100 12 3 1 100 12 3 1 100 12 3 1 100 10 12 3 1 100 10 12 3 1 100 10 12 3 10 10 12 10 10 10 10 10 10 10 10 10 10 10 10 10	0 <1 <1 5 300 24 14846 bistory2 7 0 <1 × 88882 ▲ 6079 282 57 282 57 2 1 1 282 1 282 1 282 282 2 57 2 2

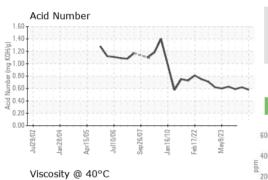
ISO

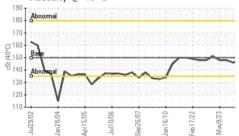


## **OIL ANALYSIS REPORT**





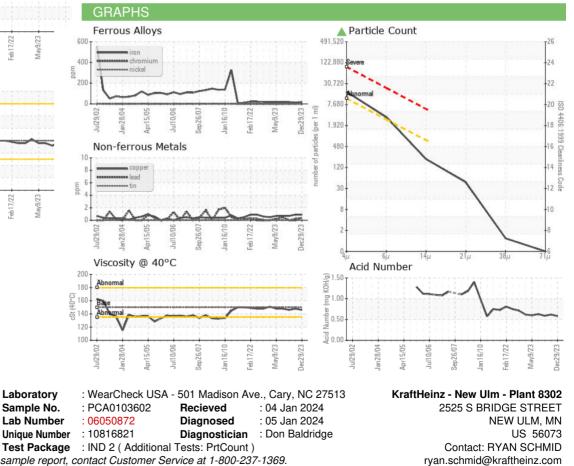




VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	LIGHT
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	LIGHT	NONE	LIGHT
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG	NEG
FLUID PROPE	RTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	150	146	148	146
SAMPLE IMAG	iES	method	limit/base	current	history1	history2
Color						



Bottom



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)



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