



Account Information	Sample Information	Other Sample Information
Lab Customer ID#: 265354 Company Name: <a href="#">Brandeis Machinery And Supply Company-Rental</a> Company Worksite: Louisville, KY Company Address: 1801 WAT T ERSON T RAIL LOUISVILLE, KY, 40299	Lab No.: 201806111013 Sample Tracking #: Sample Date Jun 08, 2018 Received Date: Jun 11, 2018 Completed Date: Jun 13, 2018	PO No.: BRANDEIS EVANSVILLE IN Work Order No.: Reference No.: 5698992
Unit Information	Component Information	Fluid Information
Unit ID: <a href="#">71426 / C0869</a> Unit Mfg: Komatsu Unit Model: WA200PZ-6 Unit Serial #: 71426 Unit Worksite: Louisville, KY	Cpnt. Description: <a href="#">DIESEL ENGINE</a> Cpnt. Mfg: Komatsu Cpnt. Model: WA200PZ-6 Cpnt. Serial #: 71426 Cpnt. Type: ENGINE	Fluid Manufacturer: - Fluid Brand/Product: UNKNOWN Fluid Grade: 15W40

**Maintenance Recommendations for Lab No.: 201806111013**

Evaluated By: Gibbons, Timothy

ANALYSIS INDICATES AN ABNORMAL LEVEL OF CONTAMINATION IS PRESENT! ABRASIVES (dirt) present. CHANGE the OIL and FILTER(s) if not already performed. RESAMPLE at the next scheduled interval.

SPECTROCHEMICAL ANALYSIS IN PARTS PER MILLION

LAB NO.	SAMPLE DRAWN	Wear Metals										Contaminants			Additives							
		Iron	Chromium	Nickel	Aluminum	Lead	Copper	Tin	Silver	Titanium	Vanadium	Silicon	Sodium	Potassium	Boron	Molybdenum	Phosphorus	Zinc	Calcium	Barium	Magnesium	Antimony
1013	06/08/18	27	1	<1	3	6	23	<1	<0.1	<1	<1	40 *	5	<1	5	7	958	1197	4748	6	13	<1
0842	04/26/16	20	1	<1	2	<1	8	1	<0.1	1	<1	7	<1	2	7	5	976	1159	2307	1	8	<1
0058	04/22/13	68	3	1	4	1	47	<1	<0.1	<1	<1	23	6	<10	39	95	1118	1364	3653	<10	12	<30

SAMPLE INFORMATION

LAB NO.	SAMPLE DRAWN	UNIT TIME	FLUID TIME	UOM	FILTER CHG.	LUBE SERVICE
1013	06/08/18	1205			-	S
0842	04/26/16	1548		HR	Yes	C
0058	04/22/13	586		HR	Yes	Y

FLUID PROPERTIES/CONTAMINANTS

D7279 Vis 100 °C	Visc Grade	E2412 SOOT	E2412 OX	E2412 NTR	E2412 GLY	Water	Fuel
14.7	40	<0.1	5	3	NEG	<0.1	<0.50
13.9	150	0.2	14	9	NEG	<0.1	<0.50
13.2	40	0.2	10	7	NEG	<0.1	<0.50

KEY: UoM - Unit of Measure Y - Yes N - No C - Changed S - Sampled > - Greater Than < - Less Than N/R - Not Reported (M) - Modified /method

Testing performed by Bureau Veritas®, an ISO/IEC 17025:2005 accredited laboratory, L-A-B accredited Certificate Number L2264. †: Not in scope of accreditation. For further details on outsourced testing, contact the laboratory directly. ‡: This test is run based on a trigger test, in this case "<" values indicate that the trigger test was either not positive or the result was below the reportable limit. For a list of trigger tests refer to <http://www.bureauveritas.com/oil-analysis>.  
Notice: This analysis is intended as an aid in predicting mechanical wear. Test results, maintenance recommendations and accuracy are affected by customer provided samples, equipment identification, maintenance history and apply only to this sample as provided. No guarantee, expressed or implied, is made against failure of this piece of equipment or a component thereof. The ultimate responsibility for the maintenance of this piece of equipment and all of its components is the responsibility of the equipment owner.



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Lab Customer ID#: 265354 Company Name: <a href="#">Brandeis Machinery And Supply Company-Rental</a> Company Worksite: Louisville, KY Company Address: 1801 WAT T ERSON T RAIL LOUISVILLE, KY, 40299	Lab No.: 201806111015 Sample Tracking #: Sample Date Jun 08, 2018 Received Date: Jun 11, 2018 Completed Date: Jun 12, 2018	PO No.: BRANDEIS EVANSVILLE IN Work Order No.: Reference No.: 5698994
Unit Information	Component Information	Fluid Information
Unit ID: <a href="#">71426 / C0869</a> Unit Mfg: Komatsu Unit Model: WA200PZ-6 Unit Serial #: 71426 Unit Worksite: Louisville, KY	Cpnt. Description: <a href="#">HYDRAULIC</a> Cpnt. Mfg: Komatsu Cpnt. Model: WA200PZ-6 Cpnt. Serial #: 71426 Cpnt. Type: HYDRAULIC	Fluid Manufacturer: KOMAT SU Fluid Brand/Product: HO46-HM Fluid Grade:

**Maintenance Recommendations for Lab No.: 201806111015**

Evaluated By: Gibbons, Timothy

ANALYSIS INDICATES COMPONENT & LUBRICANT CONDITIONS ARE ACCEPTABLE. RESAMPLE at the next scheduled interval.

SPECTROCHEMICAL ANALYSIS IN PARTS PER MILLION

LAB NO.	SAMPLE DRAWN	Wear Metals										Contaminants			Additives							
		Iron	Chromium	Nickel	Aluminum	Lead	Copper	Tin	Silver	Titanium	Vanadium	Silicon	Sodium	Potassium	Boron	Molybdenum	Phosphorus	Zinc	Calcium	Barium	Magnesium	Antimony
1015	06/08/18	9	<1	<1	4	6	30	<1	0.1	<1	<1	13	3	3	46	76	950	1166	3107	1	9	<1
0845	04/26/16	11	<1	<1	2	4	33	<1	<0.1	<1	<1	13	<1	<1	56	103	1100	1381	3766	<1	9	1
0060	04/22/13	8	<1	1	4	3	24	<1	<0.1	<1	<1	12	3	<10	49	91	1027	1289	3354	<10	10	<30

SAMPLE INFORMATION

LAB NO.	SAMPLE DRAWN	UNIT TIME	FLUID TIME	UOM	FILTER CHG.	LUBE SERVICE
1015	06/08/18	1205			-	S
0845	04/26/16	1548		HR	Yes	S
0060	04/22/13	586		HR	-	S

FLUID PROPERTIES/CONTAMINANTS

Water	D7279 Vis 100 °C
<0.1	7.8
<0.1	8.2
<0.1	8.0

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Unit Information	Component Information	Fluid Information
Unit ID: <a href="#">71426 / C0869</a> Unit Mfg: Komatsu Unit Model: WA200PZ-6 Unit Serial #: 71426 Unit Worksite: Louisville, KY	Cpnt. Description: <a href="#">FRONT DIFFERENTIAL</a> Cpnt. Mfg: Komatsu Cpnt. Model: WA200PZ-6 Cpnt. Serial #: 71426 Cpnt. Type: DIFFERENTIAL	Fluid Manufacturer: KOMATSU Fluid Brand/Product: AX080 Fluid Grade:

**Maintenance Recommendations for Lab No.: 201806111016**  
 Evaluated By: Gibbons, Timothy  
 ANALYSIS INDICATES COMPONENT & LUBRICANT CONDITIONS ARE ACCEPTABLE. RESAMPLE at the next scheduled interval.

SPECTROCHEMICAL ANALYSIS IN PARTS PER MILLION

LAB NO.	SAMPLE DRAWN	Wear Metals										Contaminants			Additives							
		Iron	Chromium	Nickel	Aluminum	Lead	Copper	Tin	Silver	Titanium	Vanadium	Silicon	Sodium	Potassium	Boron	Molybdenum	Phosphorus	Zinc	Calcium	Barium	Magnesium	Antimony
1016	06/08/18	195	3	<1	2	<1	4	<1	<0.1	<1	<1	23	7	3	123	6	1305	1577	3886	10	11	<1
0843	04/26/16	152	2	<1	<1	1	3	<1	<0.1	<1	<1	21	<1	<1	125	10	1306	1629	4033	9	10	<1

SAMPLE INFORMATION

LAB NO.	SAMPLE DRAWN	UNIT TIME	FLUID TIME	UOM	FILTER CHG.	LUBE SERVICE
1016	06/08/18	1205			-	S
0843	04/26/16	1548		HR	No	S

FLUID PROPERTIES/CONTAMINANTS

Water	D7279 Vis 100 °C
<0.1	8.6
<0.1	8.9

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Unit Information	Component Information	Fluid Information
Unit ID: <a href="#">71426 / C0869</a> Unit Mfg: Komatsu Unit Model: WA200PZ-6 Unit Serial #: 71426 Unit Worksite: Louisville, KY	Cpnt. Description: <a href="#">REAR DIFFERENTIAL</a> Cpnt. Mfg: Komatsu Cpnt. Model: WA200PZ-6 Cpnt. Serial #: 71426 Cpnt. Type: DIFFERENTIAL	Fluid Manufacturer: KOMATSU Fluid Brand/Product: AX080 Fluid Grade:

**Maintenance Recommendations for Lab No.: 201806111017**

Evaluated By: Gibbons, Timothy

ANALYSIS INDICATES COMPONENT & LUBRICANT CONDITIONS ARE ACCEPTABLE. RESAMPLE at the next scheduled interval.

SPECTROCHEMICAL ANALYSIS IN PARTS PER MILLION

LAB NO.	SAMPLE DRAWN	Wear Metals										Contaminants			Additives							
		Iron	Chromium	Nickel	Aluminum	Lead	Copper	Tin	Silver	Titanium	Vanadium	Silicon	Sodium	Potassium	Boron	Molybdenum	Phosphorus	Zinc	Calcium	Barium	Magnesium	Antimony
1017	06/08/18	107	2	<1	2	1	5	<1	<0.1	<1	<1	15	4	2	119	5	1270	1520	3733	10	10	<1
0844	04/26/16	129	1	<1	<1	<1	5	<1	<0.1	<1	<1	17	<1	<1	127	8	1335	1635	4033	9	10	<1

SAMPLE INFORMATION

LAB NO.	SAMPLE DRAWN	UNIT TIME	FLUID TIME	UOM	FILTER CHG.	LUBE SERVICE
1017	06/08/18	1205			-	S
0844	04/26/16	1548		HR	No	S

FLUID PROPERTIES/CONTAMINANTS

Water	D7279 Vis 100 °C
<0.1	8.6
<0.1	8.9

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