

Account Information	Sample Information	Other Sample Information
Lab Customer ID#: 244919 Company Name: Power Equipment Company Company Worksite: La Vergne, TN (Nashville) Company Address: 1290 BRIDGESTONE PKWY LA VERGNE, TN, 37086-3509	Lab No.: 201801030608 Sample Tracking #: NONE Sample Date Dec 28, 2017 Received Date: Jan 03, 2018 Completed Date: Jan 04, 2018	PO No.: POWER EQUIPMENT NASHVILLE TN Work Order No.: Reference No.: 6158046
Unit Information	Component Information	Fluid Information
Unit ID: C5867 / A20439 Unit Mfg: Komatsu Unit Model: PC240LC-10 Unit Serial #: A20439 Unit Worksite: La Vergne, TN (Nashville)	Cpnt. Description: ENGINE Cpnt. Mfg: Komatsu Cpnt. Model: PC240LC-10 Cpnt. Serial #: A20439 Cpnt. Type: ENGINE	Fluid Manufacturer: KOMATSU Fluid Brand/Product: LOW ASH Fluid Grade: 15W40

Maintenance Recommendations for Lab No.: 201801030608

Evaluated By: Zufelt, John

ANALYSIS REFLECTS CONDITIONS / VALUES NOTED FOR MONITORING PURPOSES ONLY. NO SPECIFIC diagnostic or corrective MAINTENANCE is REQUIRED at this time. Corrosion and/or wear of system components is indicated. Possible causes include short-term or infrequent operation. Other test results are satisfactory. 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
0608	12/28/17	143 *	4	1	21	1	29 *	<1	<0.1	31	<1	7	<1	3	29	36	1036	1239	1550	<1	638	<1
0405	08/30/16	151 *	4	<1	8	1	55 *	<1	<0.1	3	<1	11	11	17	37	101	1023	1237	2707	<1	47	1
0783	05/05/16	87	1	<1	2	<1	6	<1	<0.1	2	<1	6	<1	16	53	108	1134	1341	3022	<1	59	<1
1490	11/11/15	105	2	1	4	1	5	<1	<0.1	<1	<1	8	3	17	47	99	885	1060	2404	<1	13	1
1280	08/01/14	15	1	<1	3	<1	4	<1	<0.1	<1	<1	5	3	<10	16	9	1173	1371	2583	<10	20	<30

SAMPLE INFORMATION

LAB NO.	SAMPLE DRAWN	UNIT TIME	FLUID TIME	UOM	FILTER CHG.	LUBE SERVICE
0608	12/28/17	2888		HR	Yes	C
0405	08/30/16	2414	500	HR	Yes	C
0783	05/05/16	1959	500	HR	Yes	C
1490	11/11/15	1491	1491	HR	Yes	C
1280	08/01/14	526		HR	Yes	C

FLUID PROPERTIES/CONTAMINANTS

D7279 Vis 100 °C	Visc Grade	E2412 SOOT	E2412 OX	E2412 NTR	E2412 GLY	Water	Fuel	D7686 Soot %	D4739(M) TBN
13.5	40	0.5	18	13	NEG	<0.1	<0.50		7.46
10.6 *	30 *	1.1 *	21	15	NEG	<0.1	3.0 *	2.00 *	3.65
13.2	40	0.6	16	10	NEG	<0.1	<0.50		5.67
13.6	40	0.5	17	12 *	NEG	<0.1	<0.50		
12.8	40	<0.1	14	6	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

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Account Information	Sample Information	Other Sample Information
Lab Customer ID#: 244919 Company Name: Power Equipment Company Company Worksite: La Vergne, TN (Nashville) Company Address: 1290 BRIDGESTONE PKWY LA VERGNE, TN, 37086-3509	Lab No.: 201609020405 Sample Tracking #: NONE Sample Date Aug 30, 2016 Received Date: Sep 02, 2016 Completed Date: Sep 07, 2016	PO No.: NS01WQ Work Order No.: Reference No.: 6158046
Unit Information	Component Information	Fluid Information
Unit ID: C5867 / A20439 Unit Mfg: Komatsu Unit Model: PC240LC-10 Unit Serial #: A20439 Unit Worksite: La Vergne, TN (Nashville)	Cpnt. Description: ENGINE Cpnt. Mfg: Komatsu Cpnt. Model: PC240LC-10 Cpnt. Serial #: A20439 Cpnt. Type: ENGINE	Fluid Manufacturer: KOMATSU Fluid Brand/Product: LOW ASH Fluid Grade: 15W40

Maintenance Recommendations for Lab No.: 201609020405

Evaluated By: Zufelt, John

ANALYSIS INDICATES ABNORMAL COMPONENT CONDITIONS! VISCOSITY is LOW. FUEL dilution is MODERATE. Fuel dilution result has been verified by retest. CHECK the fuel system for leaks, component serviceability and proper settings. MODERATE level of FUEL SOOT present. For an accurate (%wt.) measurement of the soot content, this sample was processed by ASTM D7686. CHECK for air intake or exhaust restriction and proper fuel system settings. Corrosion and/or wear of system components is indicated. CHANGE the OIL and OIL FILTER(s). RESAMPLE after diagnostics / corrective action to confirm improved conditions.

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
0405	08/30/16	151 *	4	<1	8	1	55 *	<1	<0.1	3	<1	11	11	17	37	101	1023	1237	2707	<1	47	1
0783	05/05/16	87	1	<1	2	<1	6	<1	<0.1	2	<1	6	<1	16	53	108	1134	1341	3022	<1	59	<1
1490	11/11/15	105	2	1	4	1	5	<1	<0.1	<1	<1	8	3	17	47	99	885	1060	2404	<1	13	1
1280	08/01/14	15	1	<1	3	<1	4	<1	<0.1	<1	<1	5	3	<10	16	9	1173	1371	2583	<10	20	<30

SAMPLE INFORMATION

LAB NO.	SAMPLE DRAWN	UNIT TIME	FLUID TIME	UOM	FILTER CHG.	LUBE SERVICE
0405	08/30/16	2414	500	HR	Yes	C
0783	05/05/16	1959	500	HR	Yes	C
1490	11/11/15	1491	1491	HR	Yes	C
1280	08/01/14	526		HR	Yes	C

FLUID PROPERTIES/CONTAMINANTS

D7279 Vis 100 °C	Visc Grade	E2412 SOOT	E2412 OX	E2412 NTR	E2412 GLY	Water	Fuel	D7686 Soot %	D4739(M) TBN
10.6 *	30 *	1.1 *	21	15	NEG	<0.1	3.0 *	2.00 *	3.65
13.2	40	0.6	16	10	NEG	<0.1	<0.50		5.67
13.6	40	0.5	17	12 *	NEG	<0.1	<0.50		
12.8	40	<0.1	14	6	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

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Account Information	Sample Information	Other Sample Information
Lab Customer ID#: 244919 Company Name: Power Equipment Company Company Worksite: La Vergne, TN (Nashville) Company Address: 1290 BRIDGESTONE PKWY LA VERGNE, TN, 37086-3509	Lab No.: 201605100785 Sample Tracking #: NONE Sample Date: May 05, 2016 Received Date: May 10, 2016 Completed Date: May 10, 2016	PO No.: NS016V Work Order No.: Reference No.: 6158050
Unit Information	Component Information	Fluid Information
Unit ID: C5867 / A20439 Unit Mfg: Komatsu Unit Model: PC240LC-10 Unit Serial #: A20439 Unit Worksite: La Vergne, TN (Nashville)	Cpnt. Description: RIGHT FINAL DRIVE Cpnt. Mfg: Komatsu Cpnt. Model: PC240LC-10 Cpnt. Serial #: A20439 Cpnt. Type: FINAL DRIVE	Fluid Manufacturer: KOMATSU Fluid Brand/Product: POWER RAIN OIL T O-30 Fluid Grade: 30

Maintenance Recommendations for Lab No.: 201605100785

Evaluated By: Gibbons, Timothy

ANALYSIS INDICATES COMPONENT & LUBRICANT CONDITIONS WERE ACCEPTABLE. Data reflects the system was serviced and this fluid was drained at the time of sampling. 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
0785	05/05/16	313	4	<1	2	<1	92	<1	<0.1	3	<1	28	2	1	<1	<1	836	1054	4486	16	14	<1
1492	11/11/15	258	4	1	4	1	71	<1	<0.1	4	<1	26	6	3	1	1	728	911	3771	16	13	1
1283	08/01/14	88	2	1	4	1	23	<1	<0.1	1	<1	21	2	<10	4	<5	888	1075	4558	13	13	<30

SAMPLE INFORMATION

LAB NO.	SAMPLE DRAWN	UNIT TIME	FLUID TIME	UOM	FILTER CHG.	LUBE SERVICE
0785	05/05/16	1959	1959	HR	-	C
1492	11/11/15	1491	1491	HR	No	S
1283	08/01/14	526		HR	-	S

FLUID PROPERTIES/CONTAMINANTS

Water	D7279 Vis 100 °C
<0.1	11.4
<0.1	11.7
<0.1	11.6

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

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Account Information	Sample Information	Other Sample Information
Lab Customer ID#: 244919 Company Name: Power Equipment Company Company Worksite: La Vergne, TN (Nashville) Company Address: 1290 BRIDGESTONE PKWY LA VERGNE, TN, 37086-3509	Lab No.: 201511161493 Sample Tracking #: NONE Sample Date: Nov 11, 2015 Received Date: Nov 17, 2015 Completed Date: Nov 17, 2015	PO No.: POWER EQUIPMENT NASHVILLE TN - DS5001A Work Order No.: Reference No.: 6158049
Unit Information	Component Information	Fluid Information
Unit ID: C5867 / A20439 Unit Mfg: Komatsu Unit Model: PC240LC-10 Unit Serial #: A20439 Unit Worksite: La Vergne, TN (Nashville)	Cpnt. Description: LEFT FINAL DRIVE Cpnt. Mfg: Komatsu Cpnt. Model: PC240LC-10 Cpnt. Serial #: A20439 Cpnt. Type: FINAL DRIVE	Fluid Manufacturer: KOMATSU Fluid Brand/Product: POWER RAIN OIL T O-30 Fluid Grade: 30

Maintenance Recommendations for Lab No.: 201511161493

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
1493	11/11/15	200	3	1	4	1	68	<1	<0.1	2	<1	22	7	3	1	1	647	818	3339	12	11	1
1281	08/01/14	73	1	1	3	1	22	<1	<0.1	1	<1	21	3	<10	3	<5	797	978	4158	12	12	<30

SAMPLE INFORMATION

LAB NO.	SAMPLE DRAWN	UNIT TIME	FLUID TIME	UOM	FILTER CHG.	LUBE SERVICE
1493	11/11/15	1491	1491	HR	No	S
1281	08/01/14	526		HR	-	S

FLUID PROPERTIES/CONTAMINANTS

Water	D7279 Vis 100 °C
<0.1	11.7
<0.1	11.4

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

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Account Information	Sample Information	Other Sample Information
Lab Customer ID#: 244919 Company Name: Power Equipment Company Company Worksite: La Vergne, TN (Nashville) Company Address: 1290 BRIDGESTONE PKWY LA VERGNE, TN, 37086-3509	Lab No.: 201801030609 Sample Tracking #: NONE Sample Date: Dec 28, 2017 Received Date: Jan 03, 2018 Completed Date: Jan 04, 2018	PO No.: POWER EQUIPMENT NASHVILLE TN Work Order No.: Reference No.: 6158048
Unit Information	Component Information	Fluid Information
Unit ID: C5867 / A20439 Unit Mfg: Komatsu Unit Model: PC240LC-10 Unit Serial #: A20439 Unit Worksite: La Vergne, TN (Nashville)	Cpnt. Description: HYDRAULIC Cpnt. Mfg: Komatsu Cpnt. Model: PC240LC-10 Cpnt. Serial #: A20439 Cpnt. Type: HYDRAULIC	Fluid Manufacturer: KOMATSU Fluid Brand/Product: HYDRAULIC OIL 46 AW Fluid Grade: 46

Maintenance Recommendations for Lab No.: 201801030609

Evaluated By: Zufelt, John

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
0609	12/28/17	12	1	<1	1	1	12	<1	<0.1	<1	<1	5	<1	1	13	<1	339	393	298	2	13	1
0406	08/30/16	8	<1	<1	2	1	13	<1	<0.1	<1	<1	7	9	1	16	1	342	416	293	1	9	<1
0784	05/05/16	7	<1	<1	<1	<1	13	<1	<0.1	<1	<1	5	<1	<1	17	1	419	501	391	1	12	<1
1491	11/11/15	5	<1	<1	1	1	11	<1	<0.1	<1	<1	7	5	2	17	3	337	401	293	1	10	1
1282	08/01/14	3	<1	<1	1	1	9	<1	<0.1	<1	<1	10	<1	<10	18	<5	400	483	361	<10	12	<30

SAMPLE INFORMATION

LAB NO.	SAMPLE DRAWN	UNIT TIME	FLUID TIME	UOM	FILTER CHG.	LUBE SERVICE
0609	12/28/17	2888		HR	Yes	C
0406	08/30/16	2414	500	HR	-	S
0784	05/05/16	1959	1959	HR	Yes	S
1491	11/11/15	1491	1491	HR	No	S
1282	08/01/14	526		HR	-	S

FLUID PROPERTIES/CONTAMINANTS

Water	D7279 Vis 100 °C
<0.1	9.0
<0.1	9.1
<0.1	9.4
<0.1	9.9
<0.1	10.7

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Account Information	Sample Information	Other Sample Information
Lab Customer ID#: 244919 Company Name: Power Equipment Company Company Worksite: La Vergne, TN (Nashville) Company Address: 1290 BRIDGESTONE PKWY LA VERGNE, TN, 37086-3509	Lab No.: 201511161492 Sample Tracking #: NONE Sample Date: Nov 11, 2015 Received Date: Nov 17, 2015 Completed Date: Nov 17, 2015	PO No.: POWER EQUIPMENT NASHVILLE TN - DS5001A Work Order No.: Reference No.: 6158050
Unit Information	Component Information	Fluid Information
Unit ID: C5867 / A20439 Unit Mfg: Komatsu Unit Model: PC240LC-10 Unit Serial #: A20439 Unit Worksite: La Vergne, TN (Nashville)	Cpnt. Description: RIGHT FINAL DRIVE Cpnt. Mfg: Komatsu Cpnt. Model: PC240LC-10 Cpnt. Serial #: A20439 Cpnt. Type: FINAL DRIVE	Fluid Manufacturer: KOMATSU Fluid Brand/Product: POWER RAIN OIL T O-30 Fluid Grade: 30

Maintenance Recommendations for Lab No.: 201511161492

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
1492	11/11/15	258	4	1	4	1	71	<1	<0.1	4	<1	26	6	3	1	1	728	911	3771	16	13	1
1283	08/01/14	88	2	1	4	1	23	<1	<0.1	1	<1	21	2	<10	4	<5	888	1075	4558	13	13	<30

SAMPLE INFORMATION

LAB NO.	SAMPLE DRAWN	UNIT TIME	FLUID TIME	UOM	FILTER CHG.	LUBE SERVICE
1492	11/11/15	1491	1491	HR	No	S
1283	08/01/14	526		HR	-	S

FLUID PROPERTIES/CONTAMINANTS

Water	D7279 Vis 100 °C
<0.1	11.7
<0.1	11.6

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

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Lab Customer ID#: 244919 Company Name: Power Equipment Company Company Worksite: La Vergne, TN (Nashville) Company Address: 1290 BRIDGESTONE PKWY LA VERGNE, TN, 37086-3509	Lab No.: HOU201408181283 Sample Tracking #: NONE Sample Date Aug 01, 2014 Received Date: Aug 18, 2014 Completed Date: Aug 19, 2014	PO No.: POWER EQUIPMENT NASHVILLE TN Work Order No.: Reference No.: 6158050
Unit Information	Component Information	Fluid Information
Unit ID: C5867 / A20439 Unit Mfg: Komatsu Unit Model: PC240LC-10 Unit Serial #: A20439 Unit Worksite: La Vergne, TN (Nashville)	Cpnt. Description: RIGHT FINAL DRIVE Cpnt. Mfg: Komatsu Cpnt. Model: PC240LC-10 Cpnt. Serial #: A20439 Cpnt. Type: FINAL DRIVE	Fluid Manufacturer: KOMATSU Fluid Brand/Product: UNKNOWN Fluid Grade: 30

Maintenance Recommendations for Lab No.: HOU201408181283

Evaluated By: **Hodges, Ray**

ANALYSIS INDICATES ACCEPTABLE CONDITIONS FOR A "PRE-TREND" SAMPLE. Additional samples will contribute toward a baseline and rate determination for this compartment. Assure continued routine sampling.

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
1283	08/01/14	88	2	1	4	1	23	<1	<0.1	1	<1	21	2	<10	4	<5	888	1075	4558	13	13	<30

SAMPLE INFORMATION

LAB NO.	SAMPLE DRAWN	UNIT TIME	FLUID TIME	UOM	FILTER CHG.	LUBE SERVICE
1283	08/01/14	526		HR	-	S

FLUID PROPERTIES/CONTAMINANTS

Water	D7279 Vis 100 °C
<0.1	11.6

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

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Account Information	Sample Information	Other Sample Information
Lab Customer ID#: 244919 Company Name: Power Equipment Company Company Worksite: La Vergne, TN (Nashville) Company Address: 1290 BRIDGESTONE PKWY LA VERGNE, TN, 37086-3509	Lab No.: HOU201408181280 Sample Tracking #: NONE Sample Date: Aug 01, 2014 Received Date: Aug 18, 2014 Completed Date: Aug 19, 2014	PO No.: POWER EQUIPMENT NASHVILLE TN Work Order No.: Reference No.: 6158046
Unit Information	Component Information	Fluid Information
Unit ID: C5867 / A20439 Unit Mfg: Komatsu Unit Model: PC240LC-10 Unit Serial #: A20439 Unit Worksite: La Vergne, TN (Nashville)	Cpnt. Description: ENGINE Cpnt. Mfg: Komatsu Cpnt. Model: PC240LC-10 Cpnt. Serial #: A20439 Cpnt. Type: ENGINE	Fluid Manufacturer: KOMATSU Fluid Brand/Product: LOW ASH Fluid Grade: 15W40

Maintenance Recommendations for Lab No.: HOU201408181280

Evaluated By: **Hodges, Ray**

ANALYSIS INDICATES ACCEPTABLE CONDITIONS FOR A "PRE-TREND" SAMPLE. Additional samples will contribute toward a baseline and rate determination for this compartment. Assure continued routine sampling. Data provided indicates oil and filter were changed at sampling.

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
1280	08/01/14	15	1	<1	3	<1	4	<1	<0.1	<1	<1	5	3	<10	16	9	1173	1371	2583	<10	20	<30

SAMPLE INFORMATION

LAB NO.	SAMPLE DRAWN	UNIT TIME	FLUID TIME	UOM	FILTER CHG.	LUBE SERVICE
1280	08/01/14	526		HR	Yes	C

FLUID PROPERTIES/CONTAMINANTS

D7279 Vis 100 °C	Visc Grade	E2412 SOOT	E2412 OX	E2412 NTR	E2412 GLY	Water	Fuel
12.8	40	<0.1	14	6	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

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Account Information	Sample Information	Other Sample Information
Lab Customer ID#: 244919 Company Name: Power Equipment Company Company Worksite: La Vergne, TN (Nashville) Company Address: 1290 BRIDGESTONE PKWY LA VERGNE, TN, 37086-3509	Lab No.: 201511161491 Sample Tracking #: NONE Sample Date: Nov 11, 2015 Received Date: Nov 17, 2015 Completed Date: Nov 17, 2015	PO No.: POWER EQUIPMENT NASHVILLE TN - DS5001A Work Order No.: Reference No.: 6158048
Unit Information	Component Information	Fluid Information
Unit ID: C5867 / A20439 Unit Mfg: Komatsu Unit Model: PC240LC-10 Unit Serial #: A20439 Unit Worksite: La Vergne, TN (Nashville)	Cpnt. Description: HYDRAULIC Cpnt. Mfg: Komatsu Cpnt. Model: PC240LC-10 Cpnt. Serial #: A20439 Cpnt. Type: HYDRAULIC	Fluid Manufacturer: KOMATSU Fluid Brand/Product: HYDRAULIC OIL 46 AW Fluid Grade: 46

Maintenance Recommendations for Lab No.: 201511161491

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
1491	11/11/15	5	<1	<1	1	1	11	<1	<0.1	<1	<1	7	5	2	17	3	337	401	293	1	10	1
1282	08/01/14	3	<1	<1	1	1	9	<1	<0.1	<1	<1	10	<1	<10	18	<5	400	483	361	<10	12	<30

SAMPLE INFORMATION

LAB NO.	SAMPLE DRAWN	UNIT TIME	FLUID TIME	UOM	FILTER CHG.	LUBE SERVICE
1491	11/11/15	1491	1491	HR	No	S
1282	08/01/14	526		HR	-	S

FLUID PROPERTIES/CONTAMINANTS

Water	D7279 Vis 100 °C
<0.1	9.9
<0.1	10.7

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

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Account Information	Sample Information	Other Sample Information
Lab Customer ID#: 244919 Company Name: Power Equipment Company Company Worksite: La Vergne, TN (Nashville) Company Address: 1290 BRIDGESTONE PKWY LA VERGNE, TN, 37086-3509	Lab No.: HOU201408181281 Sample Tracking #: NONE Sample Date Aug 01, 2014 Received Date: Aug 18, 2014 Completed Date: Aug 19, 2014	PO No.: POWER EQUIPMENT NASHVILLE TN Work Order No.: Reference No.: 6158049
Unit Information	Component Information	Fluid Information
Unit ID: C5867 / A20439 Unit Mfg: Komatsu Unit Model: PC240LC-10 Unit Serial #: A20439 Unit Worksite: La Vergne, TN (Nashville)	Cpnt. Description: LEFT FINAL DRIVE Cpnt. Mfg: Komatsu Cpnt. Model: PC240LC-10 Cpnt. Serial #: A20439 Cpnt. Type: FINAL DRIVE	Fluid Manufacturer: KOMATSU Fluid Brand/Product: AX080 Fluid Grade:

Maintenance Recommendations for Lab No.: HOU201408181281

Evaluated By: **Hodges, Ray**

ANALYSIS INDICATES ACCEPTABLE CONDITIONS FOR A "PRE-TREND" SAMPLE. Additional samples will contribute toward a baseline and rate determination for this compartment. Assure continued routine sampling.

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
1281	08/01/14	73	1	1	3	1	22	<1	<0.1	1	<1	21	3	<10	3	<5	797	978	4158	12	12	<30

SAMPLE INFORMATION

LAB NO.	SAMPLE DRAWN	UNIT TIME	FLUID TIME	UOM	FILTER CHG.	LUBE SERVICE
1281	08/01/14	526		HR	-	S

FLUID PROPERTIES/CONTAMINANTS

Water	D7279 Vis 100 °C
<0.1	11.4

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

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Account Information	Sample Information	Other Sample Information
Lab Customer ID#: 244919 Company Name: Power Equipment Company Company Worksite: La Vergne, TN (Nashville) Company Address: 1290 BRIDGESTONE PKWY LA VERGNE, TN, 37086-3509	Lab No.: 201609020407 Sample Tracking #: NONE Sample Date Aug 30, 2016 Received Date: Sep 02, 2016 Completed Date: Sep 06, 2016	PO No.: NS01WQ Work Order No.: Reference No.: 6158050
Unit Information	Component Information	Fluid Information
Unit ID: C5867 / A20439 Unit Mfg: Komatsu Unit Model: PC240LC-10 Unit Serial #: A20439 Unit Worksite: La Vergne, TN (Nashville)	Cpnt. Description: RIGHT FINAL DRIVE Cpnt. Mfg: Komatsu Cpnt. Model: PC240LC-10 Cpnt. Serial #: A20439 Cpnt. Type: FINAL DRIVE	Fluid Manufacturer: KOMATSU Fluid Brand/Product: POWER RAIN OIL T O-30 Fluid Grade: 30

Maintenance Recommendations for Lab No.: 201609020407

Evaluated By: Zufelt, John

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
0407	08/30/16	83	2	<1	2	1	13	<1	<0.1	2	<1	19	7	<1	5	2	876	1097	3879	2	18	1
0785	05/05/16	313	4	<1	2	<1	92	<1	<0.1	3	<1	28	2	1	<1	<1	836	1054	4486	16	14	<1
1492	11/11/15	258	4	1	4	1	71	<1	<0.1	4	<1	26	6	3	1	1	728	911	3771	16	13	1
1283	08/01/14	88	2	1	4	1	23	<1	<0.1	1	<1	21	2	<10	4	<5	888	1075	4558	13	13	<30

SAMPLE INFORMATION

LAB NO.	SAMPLE DRAWN	UNIT TIME	FLUID TIME	UOM	FILTER CHG.	LUBE SERVICE
0407	08/30/16	2414	500	HR	-	S
0785	05/05/16	1959	1959	HR	-	C
1492	11/11/15	1491	1491	HR	No	S
1283	08/01/14	526		HR	-	S

FLUID PROPERTIES/CONTAMINANTS

Water	D7279 Vis 100 °C
<0.1	10.7
<0.1	11.4
<0.1	11.7
<0.1	11.6

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

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Account Information	Sample Information	Other Sample Information
Lab Customer ID#: 244919 Company Name: Power Equipment Company Company Worksite: La Vergne, TN (Nashville) Company Address: 1290 BRIDGESTONE PKWY LA VERGNE, TN, 37086-3509	Lab No.: HOU201408181282 Sample Tracking #: NONE Sample Date Aug 01, 2014 Received Date: Aug 18, 2014 Completed Date: Aug 19, 2014	PO No.: POWER EQUIPMENT NASHVILLE TN Work Order No.: Reference No.: 6158048
Unit Information	Component Information	Fluid Information
Unit ID: C5867 / A20439 Unit Mfg: Komatsu Unit Model: PC240LC-10 Unit Serial #: A20439 Unit Worksite: La Vergne, TN (Nashville)	Cpnt. Description: HYDRAULIC Cpnt. Mfg: Komatsu Cpnt. Model: PC240LC-10 Cpnt. Serial #: A20439 Cpnt. Type: HYDRAULIC	Fluid Manufacturer: KOMATSU Fluid Brand/Product: HYDRAULIC OIL 46 AW Fluid Grade: 46

Maintenance Recommendations for Lab No.: HOU201408181282

Evaluated By: **Hodges, Ray**

ANALYSIS INDICATES ACCEPTABLE CONDITIONS FOR A "PRE-TREND" SAMPLE. Additional samples will contribute toward a baseline and rate determination for this compartment. Assure continued routine sampling.

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
1282	08/01/14	3	<1	<1	1	1	9	<1	<0.1	<1	<1	10	<1	<10	18	<5	400	483	361	<10	12	<30

SAMPLE INFORMATION

LAB NO.	SAMPLE DRAWN	UNIT TIME	FLUID TIME	UOM	FILTER CHG.	LUBE SERVICE
1282	08/01/14	526		HR	-	S

FLUID PROPERTIES/CONTAMINANTS

Water	D7279 Vis 100 °C
<0.1	10.7

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

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Account Information	Sample Information	Other Sample Information
Lab Customer ID#: 244919 Company Name: Power Equipment Company Company Worksite: La Vergne, TN (Nashville) Company Address: 1290 BRIDGESTONE PKWY LA VERGNE, TN, 37086-3509	Lab No.: 201609020406 Sample Tracking #: NONE Sample Date Aug 30, 2016 Received Date: Sep 02, 2016 Completed Date: Sep 06, 2016	PO No.: NS01WQ Work Order No.: Reference No.: 6158048
Unit Information	Component Information	Fluid Information
Unit ID: C5867 / A20439 Unit Mfg: Komatsu Unit Model: PC240LC-10 Unit Serial #: A20439 Unit Worksite: La Vergne, TN (Nashville)	Cpnt. Description: HYDRAULIC Cpnt. Mfg: Komatsu Cpnt. Model: PC240LC-10 Cpnt. Serial #: A20439 Cpnt. Type: HYDRAULIC	Fluid Manufacturer: KOMATSU Fluid Brand/Product: HYDRAULIC OIL 46 AW Fluid Grade: 46

Maintenance Recommendations for Lab No.: 201609020406

Evaluated By: Zufelt, John

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
0406	08/30/16	8	<1	<1	2	1	13	<1	<0.1	<1	<1	7	9	1	16	1	342	416	293	1	9	<1
0784	05/05/16	7	<1	<1	<1	<1	13	<1	<0.1	<1	<1	5	<1	<1	17	1	419	501	391	1	12	<1
1491	11/11/15	5	<1	<1	1	1	11	<1	<0.1	<1	<1	7	5	2	17	3	337	401	293	1	10	1
1282	08/01/14	3	<1	<1	1	1	9	<1	<0.1	<1	<1	10	<1	<10	18	<5	400	483	361	<10	12	<30

SAMPLE INFORMATION

LAB NO.	SAMPLE DRAWN	UNIT TIME	FLUID TIME	UOM	FILTER CHG.	LUBE SERVICE
0406	08/30/16	2414	500	HR	-	S
0784	05/05/16	1959	1959	HR	Yes	S
1491	11/11/15	1491	1491	HR	No	S
1282	08/01/14	526		HR	-	S

FLUID PROPERTIES/CONTAMINANTS

Water	D7279 Vis 100 °C
<0.1	9.1
<0.1	9.4
<0.1	9.9
<0.1	10.7

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

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Account Information	Sample Information	Other Sample Information
Lab Customer ID#: 244919 Company Name: Power Equipment Company Company Worksite: La Vergne, TN (Nashville) Company Address: 1290 BRIDGESTONE PKWY LA VERGNE, TN, 37086-3509	Lab No.: 201605100784 Sample Tracking #: NONE Sample Date: May 05, 2016 Received Date: May 10, 2016 Completed Date: May 10, 2016	PO No.: NS016V Work Order No.: Reference No.: 6158048
Unit Information	Component Information	Fluid Information
Unit ID: C5867 / A20439 Unit Mfg: Komatsu Unit Model: PC240LC-10 Unit Serial #: A20439 Unit Worksite: La Vergne, TN (Nashville)	Cpnt. Description: HYDRAULIC Cpnt. Mfg: Komatsu Cpnt. Model: PC240LC-10 Cpnt. Serial #: A20439 Cpnt. Type: HYDRAULIC	Fluid Manufacturer: KOMATSU Fluid Brand/Product: HYDRAULIC OIL HO-56 Fluid Grade: 46

Maintenance Recommendations for Lab No.: 201605100784

Evaluated By: Gibbons, Timothy

ANALYSIS INDICATES COMPONENT & LUBRICANT CONDITIONS ARE ACCEPTABLE. Data provided reflects the oil filter was changed at the time of sampling. 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
0784	05/05/16	7	<1	<1	<1	<1	13	<1	<0.1	<1	<1	5	<1	<1	17	1	419	501	391	1	12	<1
1491	11/11/15	5	<1	<1	1	1	11	<1	<0.1	<1	<1	7	5	2	17	3	337	401	293	1	10	1
1282	08/01/14	3	<1	<1	1	1	9	<1	<0.1	<1	<1	10	<1	<10	18	<5	400	483	361	<10	12	<30

SAMPLE INFORMATION

LAB NO.	SAMPLE DRAWN	UNIT TIME	FLUID TIME	UOM	FILTER CHG.	LUBE SERVICE
0784	05/05/16	1959	1959	HR	Yes	S
1491	11/11/15	1491	1491	HR	No	S
1282	08/01/14	526		HR	-	S

FLUID PROPERTIES/CONTAMINANTS

Water	D7279 Vis 100 °C
<0.1	9.4
<0.1	9.9
<0.1	10.7

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

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Account Information	Sample Information	Other Sample Information
Lab Customer ID#: 244919 Company Name: Power Equipment Company Company Worksite: La Vergne, TN (Nashville) Company Address: 1290 BRIDGESTONE PKWY LA VERGNE, TN, 37086-3509	Lab No.: HOU201408181279 Sample Tracking #: NONE Sample Date Aug 01, 2014 Received Date: Aug 18, 2014 Completed Date: Aug 19, 2014	PO No.: POWER EQUIPMENT NASHVILLE TN Work Order No.: Reference No.: 6158051
Unit Information	Component Information	Fluid Information
Unit ID: C5867 / A20439 Unit Mfg: Komatsu Unit Model: PC240LC-10 Unit Serial #: A20439 Unit Worksite: La Vergne, TN (Nashville)	Cpnt. Description: SWING GEAR Cpnt. Mfg: Komatsu Cpnt. Model: PC240LC-10 Cpnt. Serial #: A20439 Cpnt. Type: SWING GEAR	Fluid Manufacturer: KOMATSU Fluid Brand/Product: UNKNOWN Fluid Grade: 30

Maintenance Recommendations for Lab No.: HOU201408181279

Evaluated By: **Hodges, Ray**

ANALYSIS INDICATES ACCEPTABLE CONDITIONS FOR A "PRE-TREND" SAMPLE. Additional samples will contribute toward a baseline and rate determination for this compartment. Assure continued routine sampling.

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
1279	08/01/14	88	2	<1	2	1	1	<1	<0.1	1	<1	20	2	<10	6	<5	910	1079	4473	<10	16	<30

SAMPLE INFORMATION

LAB NO.	SAMPLE DRAWN	UNIT TIME	FLUID TIME	UOM	FILTER CHG.	LUBE SERVICE
1279	08/01/14	526		HR	-	S

FLUID PROPERTIES/CONTAMINANTS

Water	D7279 Vis 100 °C
<0.1	12.4

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

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Account Information	Sample Information	Other Sample Information
Lab Customer ID#: 244919 Company Name: Power Equipment Company Company Worksite: La Vergne, TN (Nashville) Company Address: 1290 BRIDGESTONE PKWY LA VERGNE, TN, 37086-3509	Lab No.: 201801030610 Sample Tracking #: NONE Sample Date Dec 28, 2017 Received Date: Jan 03, 2018 Completed Date: Jan 04, 2018	PO No.: POWER EQUIPMENT NASHVILLE TN Work Order No.: Reference No.: 6158049
Unit Information	Component Information	Fluid Information
Unit ID: C5867 / A20439 Unit Mfg: Komatsu Unit Model: PC240LC-10 Unit Serial #: A20439 Unit Worksite: La Vergne, TN (Nashville)	Cpnt. Description: LEFT FINAL DRIVE Cpnt. Mfg: Komatsu Cpnt. Model: PC240LC-10 Cpnt. Serial #: A20439 Cpnt. Type: FINAL DRIVE	Fluid Manufacturer: KOMATSU Fluid Brand/Product: POWER RAIN OIL T O-30 Fluid Grade: 30

Maintenance Recommendations for Lab No.: 201801030610

Evaluated By: Zufelt, John

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
0610	12/28/17	125	3	<1	3	1	16	<1	<0.1	3	<1	21	4	<1	4	<1	848	1034	3801	3	18	1
0408	08/30/16	108	2	<1	2	<1	21	<1	<0.1	2	<1	23	7	<1	5	2	891	1103	3976	3	17	<1
0786	05/05/16	303	5	<1	2	<1	95	<1	<0.1	2	<1	31	<1	<1	<1	<1	907	1065	4589	16	14	<1
1493	11/11/15	200	3	1	4	1	68	<1	<0.1	2	<1	22	7	3	1	1	647	818	3339	12	11	1
1281	08/01/14	73	1	1	3	1	22	<1	<0.1	1	<1	21	3	<10	3	<5	797	978	4158	12	12	<30

SAMPLE INFORMATION

LAB NO.	SAMPLE DRAWN	UNIT TIME	FLUID TIME	UOM	FILTER CHG.	LUBE SERVICE
0610	12/28/17	2888		HR	No	S
0408	08/30/16	2414	500	HR	-	S
0786	05/05/16	1959	1959	HR	-	C
1493	11/11/15	1491	1491	HR	No	S
1281	08/01/14	526		HR	-	S

FLUID PROPERTIES/CONTAMINANTS

Water	D7279 Vis 100 °C
<0.1	10.4
<0.1	10.8
<0.1	11.5
<0.1	11.7
<0.1	11.4

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

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Account Information	Sample Information	Other Sample Information
Lab Customer ID#: 244919 Company Name: Power Equipment Company Company Worksite: La Vergne, TN (Nashville) Company Address: 1290 BRIDGESTONE PKWY LA VERGNE, TN, 37086-3509	Lab No.: 201511161490 Sample Tracking #: NONE Sample Date: Nov 11, 2015 Received Date: Nov 17, 2015 Completed Date: Nov 17, 2015	PO No.: POWER EQUIPMENT NASHVILLE TN - DS5001A Work Order No.: Reference No.: 6158046
Unit Information	Component Information	Fluid Information
Unit ID: C5867 / A20439 Unit Mfg: Komatsu Unit Model: PC240LC-10 Unit Serial #: A20439 Unit Worksite: La Vergne, TN (Nashville)	Cpnt. Description: ENGINE Cpnt. Mfg: Komatsu Cpnt. Model: PC240LC-10 Cpnt. Serial #: A20439 Cpnt. Type: ENGINE	Fluid Manufacturer: KOMATSU Fluid Brand/Product: LOW ASH Fluid Grade: 15W40

Maintenance Recommendations for Lab No.: 201511161490

Evaluated By: Gibbons, Timothy

ANALYSIS REFLECTS CONDITIONS / VALUES NOTED FOR MONITORING PURPOSES ONLY. Other tests results are satisfactory and data reflects the system was serviced with the appropriate oil and/or filter change at the time of sampling. No additional action is required at this time. 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
1490	11/11/15	105	2	1	4	1	5	<1	<0.1	<1	<1	8	3	17	47	99	885	1060	2404	<1	13	1
1280	08/01/14	15	1	<1	3	<1	4	<1	<0.1	<1	<1	5	3	<10	16	9	1173	1371	2583	<10	20	<30

SAMPLE INFORMATION

LAB NO.	SAMPLE DRAWN	UNIT TIME	FLUID TIME	UOM	FILTER CHG.	LUBE SERVICE
1490	11/11/15	1491	1491	HR	Yes	C
1280	08/01/14	526		HR	Yes	C

FLUID PROPERTIES/CONTAMINANTS

D7279 Vis 100 °C	Visc Grade	E2412 SOOT	E2412 OX	E2412 NTR	E2412 GLY	Water	Fuel
13.6	40	0.5	17	12 *	NEG	<0.1	<0.50
12.8	40	<0.1	14	6	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

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Account Information	Sample Information	Other Sample Information
Lab Customer ID#: 244919 Company Name: Power Equipment Company Company Worksite: La Vergne, TN (Nashville) Company Address: 1290 BRIDGESTONE PKWY LA VERGNE, TN, 37086-3509	Lab No.: 201605100787 Sample Tracking #: NONE Sample Date: May 05, 2016 Received Date: May 10, 2016 Completed Date: May 10, 2016	PO No.: NS016V Work Order No.: Reference No.: 6158051
Unit Information	Component Information	Fluid Information
Unit ID: C5867 / A20439 Unit Mfg: Komatsu Unit Model: PC240LC-10 Unit Serial #: A20439 Unit Worksite: La Vergne, TN (Nashville)	Cpnt. Description: SWING GEAR Cpnt. Mfg: Komatsu Cpnt. Model: PC240LC-10 Cpnt. Serial #: A20439 Cpnt. Type: SWING GEAR	Fluid Manufacturer: KOMATSU Fluid Brand/Product: POWER RAIN OIL T O-30 Fluid Grade: 30

Maintenance Recommendations for Lab No.: 201605100787

Evaluated By: Gibbons, Timothy

ANALYSIS INDICATES COMPONENT & LUBRICANT CONDITIONS WERE ACCEPTABLE. Data reflects the system was serviced and this fluid was drained at the time of sampling. 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
0787	05/05/16	3	<1	<1	<1	<1	<1	<1	<0.1	1	<1	13	<1	<1	13	12	994	1210	4201	<1	22	<1
1494	11/11/15	2	<1	<1	2	2	<1	<1	<0.1	1	<1	16	6	<1	10	2	798	1009	3329	<1	24	1
1279	08/01/14	88	2	<1	2	1	1	<1	<0.1	1	<1	20	2	<10	6	<5	910	1079	4473	<10	16	<30

SAMPLE INFORMATION

LAB NO.	SAMPLE DRAWN	UNIT TIME	FLUID TIME	UOM	FILTER CHG.	LUBE SERVICE
0787	05/05/16	1959	1000	HR	-	C
1494	11/11/15	1491	1491	HR	No	S
1279	08/01/14	526		HR	-	S

FLUID PROPERTIES/CONTAMINANTS

Water	D7279 Vis 100 °C
<0.1	11.9
<0.1	10.7
<0.1	12.4

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

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Account Information	Sample Information	Other Sample Information
Lab Customer ID#: 244919 Company Name: Power Equipment Company Company Worksite: La Vergne, TN (Nashville) Company Address: 1290 BRIDGESTONE PKWY LA VERGNE, TN, 37086-3509	Lab No.: 201609020408 Sample Tracking #: NONE Sample Date Aug 30, 2016 Received Date: Sep 02, 2016 Completed Date: Sep 06, 2016	PO No.: NS01WQ Work Order No.: Reference No.: 6158049
Unit Information	Component Information	Fluid Information
Unit ID: C5867 / A20439 Unit Mfg: Komatsu Unit Model: PC240LC-10 Unit Serial #: A20439 Unit Worksite: La Vergne, TN (Nashville)	Cpnt. Description: LEFT FINAL DRIVE Cpnt. Mfg: Komatsu Cpnt. Model: PC240LC-10 Cpnt. Serial #: A20439 Cpnt. Type: FINAL DRIVE	Fluid Manufacturer: KOMATSU Fluid Brand/Product: POWER RAIN OIL T O-30 Fluid Grade: 30

Maintenance Recommendations for Lab No.: 201609020408

Evaluated By: Zufelt, John

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
0408	08/30/16	108	2	<1	2	<1	21	<1	<0.1	2	<1	23	7	<1	5	2	891	1103	3976	3	17	<1
0786	05/05/16	303	5	<1	2	<1	95	<1	<0.1	2	<1	31	<1	<1	<1	<1	907	1065	4589	16	14	<1
1493	11/11/15	200	3	1	4	1	68	<1	<0.1	2	<1	22	7	3	1	1	647	818	3339	12	11	1
1281	08/01/14	73	1	1	3	1	22	<1	<0.1	1	<1	21	3	<10	3	<5	797	978	4158	12	12	<30

SAMPLE INFORMATION

LAB NO.	SAMPLE DRAWN	UNIT TIME	FLUID TIME	UOM	FILTER CHG.	LUBE SERVICE
0408	08/30/16	2414	500	HR	-	S
0786	05/05/16	1959	1959	HR	-	C
1493	11/11/15	1491	1491	HR	No	S
1281	08/01/14	526		HR	-	S

FLUID PROPERTIES/CONTAMINANTS

Water	D7279 Vis 100 °C
<0.1	10.8
<0.1	11.5
<0.1	11.7
<0.1	11.4

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

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Account Information	Sample Information	Other Sample Information
Lab Customer ID#: 244919 Company Name: Power Equipment Company Company Worksite: La Vergne, TN (Nashville) Company Address: 1290 BRIDGESTONE PKWY LA VERGNE, TN, 37086-3509	Lab No.: 201801030611 Sample Tracking #: NONE Sample Date Dec 28, 2017 Received Date: Jan 03, 2018 Completed Date: Jan 04, 2018	PO No.: POWER EQUIPMENT NASHVILLE TN Work Order No.: Reference No.: 6158050
Unit Information	Component Information	Fluid Information
Unit ID: C5867 / A20439 Unit Mfg: Komatsu Unit Model: PC240LC-10 Unit Serial #: A20439 Unit Worksite: La Vergne, TN (Nashville)	Cpnt. Description: RIGHT FINAL DRIVE Cpnt. Mfg: Komatsu Cpnt. Model: PC240LC-10 Cpnt. Serial #: A20439 Cpnt. Type: FINAL DRIVE	Fluid Manufacturer: KOMATSU Fluid Brand/Product: POWER RAIN OIL T O-30 Fluid Grade: 30

Maintenance Recommendations for Lab No.: 201801030611

Evaluated By: Zufelt, John

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
0611	12/28/17	156	5	<1	5	<1	28	<1	<0.1	2	<1	29	1	1	4	<1	855	1038	3890	3	19	1
0407	08/30/16	83	2	<1	2	1	13	<1	<0.1	2	<1	19	7	<1	5	2	876	1097	3879	2	18	1
0785	05/05/16	313	4	<1	2	<1	92	<1	<0.1	3	<1	28	2	1	<1	<1	836	1054	4486	16	14	<1
1492	11/11/15	258	4	1	4	1	71	<1	<0.1	4	<1	26	6	3	1	1	728	911	3771	16	13	1
1283	08/01/14	88	2	1	4	1	23	<1	<0.1	1	<1	21	2	<10	4	<5	888	1075	4558	13	13	<30

SAMPLE INFORMATION

LAB NO.	SAMPLE DRAWN	UNIT TIME	FLUID TIME	UOM	FILTER CHG.	LUBE SERVICE
0611	12/28/17	2888		HR	No	S
0407	08/30/16	2414	500	HR	-	S
0785	05/05/16	1959	1959	HR	-	C
1492	11/11/15	1491	1491	HR	No	S
1283	08/01/14	526		HR	-	S

FLUID PROPERTIES/CONTAMINANTS

Water	D7279 Vis 100 °C
<0.1	10.6
<0.1	10.7
<0.1	11.4
<0.1	11.7
<0.1	11.6

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

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Account Information	Sample Information	Other Sample Information
Lab Customer ID#: 244919 Company Name: Power Equipment Company Company Worksite: La Vergne, TN (Nashville) Company Address: 1290 BRIDGESTONE PKWY LA VERGNE, TN, 37086-3509	Lab No.: 201801030612 Sample Tracking #: NONE Sample Date: Dec 28, 2017 Received Date: Jan 03, 2018 Completed Date: Jan 04, 2018	PO No.: POWER EQUIPMENT NASHVILLE TN Work Order No.: Reference No.: 6158051
Unit Information	Component Information	Fluid Information
Unit ID: C5867 / A20439 Unit Mfg: Komatsu Unit Model: PC240LC-10 Unit Serial #: A20439 Unit Worksite: La Vergne, TN (Nashville)	Cpnt. Description: SWING GEAR Cpnt. Mfg: Komatsu Cpnt. Model: PC240LC-10 Cpnt. Serial #: A20439 Cpnt. Type: SWING GEAR	Fluid Manufacturer: KOMATSU Fluid Brand/Product: POWER RAIN OIL T O-30 Fluid Grade: 30

Maintenance Recommendations for Lab No.: 201801030612

Evaluated By: Zufelt, John

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
0612	12/28/17	32	<1	<1	1	4	8	<1	0.3	2	<1	14	<1	8	17	<1	800	993	3144	39	72	<1
0787	05/05/16	3	<1	<1	<1	<1	<1	<1	<0.1	1	<1	13	<1	<1	13	12	994	1210	4201	<1	22	<1
1494	11/11/15	2	<1	<1	2	2	<1	<1	<0.1	1	<1	16	6	<1	10	2	798	1009	3329	<1	24	1
1279	08/01/14	88	2	<1	2	1	1	<1	<0.1	1	<1	20	2	<10	6	<5	910	1079	4473	<10	16	<30

SAMPLE INFORMATION

LAB NO.	SAMPLE DRAWN	UNIT TIME	FLUID TIME	UOM	FILTER CHG.	LUBE SERVICE
0612	12/28/17	2888		HR	No	C
0787	05/05/16	1959	1000	HR	-	C
1494	11/11/15	1491	1491	HR	No	S
1279	08/01/14	526		HR	-	S

FLUID PROPERTIES/CONTAMINANTS

Water	D7279 Vis 100 °C
0.5	9.3
<0.1	11.9
<0.1	10.7
<0.1	12.4

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

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Account Information	Sample Information	Other Sample Information
Lab Customer ID#: 244919 Company Name: Power Equipment Company Company Worksite: La Vergne, TN (Nashville) Company Address: 1290 BRIDGESTONE PKWY LA VERGNE, TN, 37086-3509	Lab No.: 201605100783 Sample Tracking #: NONE Sample Date: May 05, 2016 Received Date: May 10, 2016 Completed Date: May 10, 2016	PO No.: NS016V Work Order No.: Reference No.: 6158046
Unit Information	Component Information	Fluid Information
Unit ID: C5867 / A20439 Unit Mfg: Komatsu Unit Model: PC240LC-10 Unit Serial #: A20439 Unit Worksite: La Vergne, TN (Nashville)	Cpnt. Description: ENGINE Cpnt. Mfg: Komatsu Cpnt. Model: PC240LC-10 Cpnt. Serial #: A20439 Cpnt. Type: ENGINE	Fluid Manufacturer: KOMATSU Fluid Brand/Product: LOW ASH Fluid Grade: 15W40

Maintenance Recommendations for Lab No.: 201605100783

Evaluated By: **Gibbons, Timothy**

ANALYSIS INDICATES COMPONENT & LUBRICANT CONDITIONS WERE ACCEPTABLE. Data reflects the system was serviced and the oil & filter(s) were changed at the time of sampling. RESAMPLE at 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
0783	05/05/16	87	1	<1	2	<1	6	<1	<0.1	2	<1	6	<1	16	53	108	1134	1341	3022	<1	59	<1
1490	11/11/15	105	2	1	4	1	5	<1	<0.1	<1	<1	8	3	17	47	99	885	1060	2404	<1	13	1
1280	08/01/14	15	1	<1	3	<1	4	<1	<0.1	<1	<1	5	3	<10	16	9	1173	1371	2583	<10	20	<30

SAMPLE INFORMATION

LAB NO.	SAMPLE DRAWN	UNIT TIME	FLUID TIME	UOM	FILTER CHG.	LUBE SERVICE
0783	05/05/16	1959	500	HR	Yes	C
1490	11/11/15	1491	1491	HR	Yes	C
1280	08/01/14	526		HR	Yes	C

FLUID PROPERTIES/CONTAMINANTS

D7279 Vis 100 °C	Visc Grade	E2412 SOOT	E2412 OX	E2412 NTR	E2412 GLY	Water	Fuel	D4739(M) TBN
13.2	40	0.6	16	10	NEG	<0.1	<0.50	5.67
13.6	40	0.5	17	12 *	NEG	<0.1	<0.50	
12.8	40	<0.1	14	6	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

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Account Information	Sample Information	Other Sample Information
Lab Customer ID#: 244919 Company Name: Power Equipment Company Company Worksite: La Vergne, TN (Nashville) Company Address: 1290 BRIDGESTONE PKWY LA VERGNE, TN, 37086-3509	Lab No.: 201605100786 Sample Tracking #: NONE Sample Date: May 05, 2016 Received Date: May 10, 2016 Completed Date: May 10, 2016	PO No.: NS016V Work Order No.: Reference No.: 6158049
Unit Information	Component Information	Fluid Information
Unit ID: C5867 / A20439 Unit Mfg: Komatsu Unit Model: PC240LC-10 Unit Serial #: A20439 Unit Worksite: La Vergne, TN (Nashville)	Cpnt. Description: LEFT FINAL DRIVE Cpnt. Mfg: Komatsu Cpnt. Model: PC240LC-10 Cpnt. Serial #: A20439 Cpnt. Type: FINAL DRIVE	Fluid Manufacturer: KOMATSU Fluid Brand/Product: POWER RAIN OIL T O-30 Fluid Grade: 30

Maintenance Recommendations for Lab No.: 201605100786

Evaluated By: **Gibbons, Timothy**

ANALYSIS INDICATES COMPONENT & LUBRICANT CONDITIONS WERE ACCEPTABLE. Data reflects the system was serviced and this fluid was drained at the time of sampling. 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
0786	05/05/16	303	5	<1	2	<1	95	<1	<0.1	2	<1	31	<1	<1	<1	<1	907	1065	4589	16	14	<1
1493	11/11/15	200	3	1	4	1	68	<1	<0.1	2	<1	22	7	3	1	1	647	818	3339	12	11	1
1281	08/01/14	73	1	1	3	1	22	<1	<0.1	1	<1	21	3	<10	3	<5	797	978	4158	12	12	<30

SAMPLE INFORMATION

LAB NO.	SAMPLE DRAWN	UNIT TIME	FLUID TIME	UOM	FILTER CHG.	LUBE SERVICE
0786	05/05/16	1959	1959	HR	-	C
1493	11/11/15	1491	1491	HR	No	S
1281	08/01/14	526		HR	-	S

FLUID PROPERTIES/CONTAMINANTS

Water	D7279 Vis 100 °C
<0.1	11.5
<0.1	11.7
<0.1	11.4

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 if its components is the responsibility of the equipment owner.

Account Information	Sample Information	Other Sample Information
Lab Customer ID#: 244919 Company Name: Power Equipment Company Company Worksite: La Vergne, TN (Nashville) Company Address: 1290 BRIDGESTONE PKWY LA VERGNE, TN, 37086-3509	Lab No.: 201511161494 Sample Tracking #: NONE Sample Date: Nov 11, 2015 Received Date: Nov 17, 2015 Completed Date: Nov 17, 2015	PO No.: POWER EQUIPMENT NASHVILLE TN - DS5001A Work Order No.: Reference No.: 6158051
Unit Information	Component Information	Fluid Information
Unit ID: C5867 / A20439 Unit Mfg: Komatsu Unit Model: PC240LC-10 Unit Serial #: A20439 Unit Worksite: La Vergne, TN (Nashville)	Cpnt. Description: SWING GEAR Cpnt. Mfg: Komatsu Cpnt. Model: PC240LC-10 Cpnt. Serial #: A20439 Cpnt. Type: SWING GEAR	Fluid Manufacturer: KOMATSU Fluid Brand/Product: POWER RAIN OIL T O-30 Fluid Grade: 30

Maintenance Recommendations for Lab No.: 201511161494

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
1494	11/11/15	2	<1	<1	2	2	<1	<1	<0.1	1	<1	16	6	<1	10	2	798	1009	3329	<1	24	1
1279	08/01/14	88	2	<1	2	1	1	<1	<0.1	1	<1	20	2	<10	6	<5	910	1079	4473	<10	16	<30

SAMPLE INFORMATION

LAB NO.	SAMPLE DRAWN	UNIT TIME	FLUID TIME	UOM	FILTER CHG.	LUBE SERVICE
1494	11/11/15	1491	1491	HR	No	S
1279	08/01/14	526		HR	-	S

FLUID PROPERTIES/CONTAMINANTS

Water	D7279 Vis 100 °C
<0.1	10.7
<0.1	12.4

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