

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.: 201708221449 Sample Tracking #: E201708141073 Sample Date Aug 17, 2017 Received Date: Aug 22, 2017 Completed Date: Aug 23, 2017	PO No.: POWER EQUIPMENT NASHVILLE TN Work Order No.: Reference No.: 7007196
Unit Information	Component Information	Fluid Information
Unit ID: 41296 / C1038-N Unit Mfg: Komatsu Unit Model: PC138USLC-10 Unit Serial #: 41296 Unit Worksite: La Vergne, TN (Nashville)	Cpnt. Description: HYDRAULIC Cpnt. Mfg: Komatsu Cpnt. Model: PC138USLC-10 Cpnt. Serial #: 41296 Cpnt. Type: HYDRAULIC	Fluid Manufacturer: KOMATSU Fluid Brand/Product: HYDRAULIC OIL 46 AW Fluid Grade: ISO 46

Maintenance Recommendations for Lab No.: 201708221449

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
1449	08/17/17	6	<1	<1	2	6	9	<1	<0.1	<1	<1	5	15	2	4	2	422	571	1386	<1	8	<1
0929	04/19/17	7	1	2	3	5	12	<1	<0.1	<1	<1	7	7	3	5	5	544	701	2185	<1	8	3
0613	01/09/17	4	<1	<1	2	6	13	<1	<0.1	<1	<1	7	6	3	4	1	533	696	2285	<1	11	<1
0498	10/05/16	5	<1	<1	<1	3	8	<1	<0.1	<1	<1	8	<1	<1	3	2	498	641	1990	<1	12	1

SAMPLE INFORMATION

LAB NO.	SAMPLE DRAWN	UNIT TIME	FLUID TIME	UOM	FILTER CHG.	LUBE SERVICE
1449	08/17/17	2924	2915	HR	Yes	S
0929	04/19/17	2500	2491	HR	No	S
0613	01/09/17	1939	1930	HR	Yes	S
0498	10/05/16	1485	1485	HR	-	S

FLUID PROPERTIES/CONTAMINANTS

Water %	D7279 Vis 100 °C
<0.1	7.8
<0.1	7.1
<0.1	7.1
<0.1	7.0

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>.
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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.: 201708221462 Sample Tracking #: E201708141074 Sample Date: Aug 17, 2017 Received Date: Aug 22, 2017 Completed Date: Aug 23, 2017	PO No.: POWER EQUIPMENT NASHVILLE TN Work Order No.: Reference No.: 7007198
Unit Information	Component Information	Fluid Information
Unit ID: 41296 / C1038-N Unit Mfg: Komatsu Unit Model: PC138USLC-10 Unit Serial #: 41296 Unit Worksite: La Vergne, TN (Nashville)	Cpnt. Description: LEFT FINAL DRIVE Cpnt. Mfg: Komatsu Cpnt. Model: PC138USLC-10 Cpnt. Serial #: 41296 Cpnt. Type: FINAL DRIVE	Fluid Manufacturer: KOMATSU Fluid Brand/Product: POWER RAIN OIL T O-30 Fluid Grade: 30

Maintenance Recommendations for Lab No.: 201708221462

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
1462	08/17/17	396	6	<1	4	4	<1	<1	<0.1	2	<1	31	9	1	17	6	719	904	2564	3	88	1
0812	04/19/17	493	8	1	10	<1	1	<1	<0.1	3	<1	62	1	2	17	4	730	887	2602	4	84	<1
0615	01/09/17	524 *	9	1	4	<1	1	<1	<0.1	4	<1	33	3	2	34	2	811	923	3145	14	46	<1
0500	10/05/16	349	6	1	3	<1	<1	<1	<0.1	3	<1	23	3	<1	32	1	771	890	3076	12	49	1

SAMPLE INFORMATION

LAB NO.	SAMPLE DRAWN	UNIT TIME	FLUID TIME	UOM	FILTER CHG.	LUBE SERVICE
1462	08/17/17	2924	985	HR	No	C
0812	04/19/17	2500	561	HR	No	S
0615	01/09/17	1939	939	HR	No	C
0500	10/05/16	1485	1485	HR	-	S

FLUID PROPERTIES/CONTAMINANTS

Water %	D7279 Vis 100 °C
<0.1	10.7
<0.1	11.0
<0.1	11.4
<0.1	11.8

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.: 201801040282 Sample Tracking #: E201712201230 Sample Date Dec 28, 2017 Received Date: Jan 04, 2018 Completed Date: Jan 04, 2018	PO No.: POWER EQUIPMENT NASHVILLE TN Work Order No.: Reference No.: 7007195
Unit Information	Component Information	Fluid Information
Unit ID: 41296 / C1038-N Unit Mfg: Komatsu Unit Model: PC138USLC-10 Unit Serial #: 41296 Unit Worksite: La Vergne, TN (Nashville)	Cpnt. Description: DIESEL ENGINE Cpnt. Mfg: Komatsu Cpnt. Model: PC138USLC-10 Cpnt. Serial #: 41296 Cpnt. Type: ENGINE	Fluid Manufacturer: KOMATSU Fluid Brand/Product: LOW ASH Fluid Grade: 15W40

Maintenance Recommendations for Lab No.: 201801040282

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
0282	12/28/17	2	1	2	1	<1	1	<1	<0.1	<1	<1	11	6	3	359	122	799	928	1362	<1	620	<1
0550	08/17/17	10	<1	<1	3	<1	1	1	<0.1	<1	<1	16	<1	<1	265	137	854	943	1375	<1	655	<1
0934	04/19/17	13	1	<1	<1	7	3	1	<0.1	3	<1	10	6	11	19	45	899	1183	1037	<1	991	1
0612	01/09/17	12	<1	<1	3	4	5	<1	<0.1	14	<1	13	4	2	28	47	1119	1325	1324	<1	985	<1
0497	10/05/16	25	1	<1	3	11	16	<1	<0.1	5	<1	15	3	4	25	54	1001	1213	2002	1	494	<1

SAMPLE INFORMATION

LAB NO.	SAMPLE DRAWN	UNIT TIME	FLUID TIME	UOM	FILTER CHG.	LUBE SERVICE
0282	12/28/17	3355	431	HR	Yes	C
0550	08/17/17	2924	424	HR	Yes	C
0934	04/19/17	2500	561	HR	Yes	C
0612	01/09/17	1939	439	HR	Yes	C
0497	10/05/16	1485	500	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
13.5	40	<0.1	14	7	NEG	<0.1	<0.50	
13.4	40	<0.1	18	8	NEG	<0.1	<0.50	4.15
13.8	40	0.1	16	9	NEG	<0.1	<0.50	6.28
14.6	40	0.3	17	11 *	NEG	<0.1	<0.50	6.34
14.2	40	0.3	20 *	12 *	NEG	<0.1	<0.50	4.82

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.: 201704250812 Sample Tracking #: E201704191250 Sample Date: Apr 19, 2017 Received Date: Apr 25, 2017 Completed Date: Apr 26, 2017	PO No.: POWER EQUIPMENT NASHVILLE TN Work Order No.: Reference No.: 7007198
Unit Information	Component Information	Fluid Information
Unit ID: 41296 / C1038-N Unit Mfg: Komatsu Unit Model: PC138USLC-10 Unit Serial #: 41296 Unit Worksite: La Vergne, TN (Nashville)	Cpnt. Description: LEFT FINAL DRIVE Cpnt. Mfg: Komatsu Cpnt. Model: PC138USLC-10 Cpnt. Serial #: 41296 Cpnt. Type: FINAL DRIVE	Fluid Manufacturer: KOMATSU Fluid Brand/Product: POWER RAIN OIL T O-30 Fluid Grade: 30

Maintenance Recommendations for Lab No.: 201704250812

Evaluated By: Kullas, Stephen

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
0812	04/19/17	493	8	1	10	<1	1	<1	<0.1	3	<1	62	1	2	17	4	730	887	2602	4	84	<1
0615	01/09/17	524 *	9	1	4	<1	1	<1	<0.1	4	<1	33	3	2	34	2	811	923	3145	14	46	<1
0500	10/05/16	349	6	1	3	<1	<1	<1	<0.1	3	<1	23	3	<1	32	1	771	890	3076	12	49	1

SAMPLE INFORMATION

LAB NO.	SAMPLE DRAWN	UNIT TIME	FLUID TIME	UOM	FILTER CHG.	LUBE SERVICE
0812	04/19/17	2500	561	HR	No	S
0615	01/09/17	1939	939	HR	No	C
0500	10/05/16	1485	1485	HR	-	S

FLUID PROPERTIES/CONTAMINANTS

Water %	D7279 Vis 100 °C
<0.1	11.0
<0.1	11.4
<0.1	11.8

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.: 201704250929 Sample Tracking #: E201704191249 Sample Date: Apr 19, 2017 Received Date: Apr 25, 2017 Completed Date: Apr 26, 2017	PO No.: POWER EQUIPMENT NASHVILLE TN Work Order No.: Reference No.: 7007196
Unit Information	Component Information	Fluid Information
Unit ID: 41296 / C1038-N Unit Mfg: Komatsu Unit Model: PC138USLC-10 Unit Serial #: 41296 Unit Worksite: La Vergne, TN (Nashville)	Cpnt. Description: HYDRAULIC Cpnt. Mfg: Komatsu Cpnt. Model: PC138USLC-10 Cpnt. Serial #: 41296 Cpnt. Type: HYDRAULIC	Fluid Manufacturer: KOMATSU Fluid Brand/Product: HYDRAULIC OIL 46 AW Fluid Grade: ISO 46

Maintenance Recommendations for Lab No.: 201704250929

Evaluated By: Zuffelt, 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
0929	04/19/17	7	1	2	3	5	12	<1	<0.1	<1	<1	7	7	3	5	5	544	701	2185	<1	8	3
0613	01/09/17	4	<1	<1	2	6	13	<1	<0.1	<1	<1	7	6	3	4	1	533	696	2285	<1	11	<1
0498	10/05/16	5	<1	<1	<1	3	8	<1	<0.1	<1	<1	8	<1	<1	3	2	498	641	1990	<1	12	1

SAMPLE INFORMATION

LAB NO.	SAMPLE DRAWN	UNIT TIME	FLUID TIME	UOM	FILTER CHG.	LUBE SERVICE
0929	04/19/17	2500	2491	HR	No	S
0613	01/09/17	1939	1930	HR	Yes	S
0498	10/05/16	1485	1485	HR	-	S

FLUID PROPERTIES/CONTAMINANTS

Water %	D7279 Vis 100 °C
<0.1	7.1
<0.1	7.1
<0.1	7.0

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.: 201701130615 Sample Tracking #: NONE Sample Date: Jan 09, 2017 Received Date: Jan 13, 2017 Completed Date: Jan 13, 2017	PO No.: NS02SU Work Order No.: Reference No.: 7007198
Unit Information	Component Information	Fluid Information
Unit ID: 41296 / C1038-N Unit Mfg: Komatsu Unit Model: PC138USLC-10 Unit Serial #: 41296 Unit Worksite: La Vergne, TN (Nashville)	Cpnt. Description: LEFT FINAL DRIVE Cpnt. Mfg: Komatsu Cpnt. Model: PC138USLC-10 Cpnt. Serial #: 41296 Cpnt. Type: FINAL DRIVE	Fluid Manufacturer: KOMATSU Fluid Brand/Product: POWER RAIN OIL T O-30 Fluid Grade: 30

Maintenance Recommendations for Lab No.: 201701130615

Evaluated By: Kullas, Stephen

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
0615	01/09/17	524 *	9	1	4	<1	1	<1	<0.1	4	<1	33	3	2	34	2	811	923	3145	14	46	<1
0500	10/05/16	349	6	1	3	<1	<1	<1	<0.1	3	<1	23	3	<1	32	1	771	890	3076	12	49	1

SAMPLE INFORMATION

LAB NO.	SAMPLE DRAWN	UNIT TIME	FLUID TIME	UOM	FILTER CHG.	LUBE SERVICE
0615	01/09/17	1939	939	HR	No	C
0500	10/05/16	1485	1485	HR	-	S

FLUID PROPERTIES/CONTAMINANTS

Water %	D7279 Vis 100 °C
<0.1	11.4
<0.1	11.8

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.: 201610100498 Sample Tracking #: NONE Sample Date Oct 05, 2016 Received Date: Oct 10, 2016 Completed Date: Oct 10, 2016	PO No.: NS026R Work Order No.: Reference No.: 7007196
Unit Information	Component Information	Fluid Information
Unit ID: 41296 / C1038-N Unit Mfg: Komatsu Unit Model: PC138USLC-10 Unit Serial #: 41296 Unit Worksite: La Vergne, TN (Nashville)	Cpnt. Description: HYDRAULIC Cpnt. Mfg: Komatsu Cpnt. Model: PC138USLC-10 Cpnt. Serial #: 41296 Cpnt. Type: HYDRAULIC	Fluid Manufacturer: KOMATSU Fluid Brand/Product: HYDRAULIC OIL HO-56 Fluid Grade:

Maintenance Recommendations for Lab No.: 201610100498

Evaluated By: Kullas, Stephen

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
0498	10/05/16	5	<1	<1	<1	3	8	<1	<0.1	<1	<1	8	<1	<1	3	2	498	641	1990	<1	12	1

SAMPLE INFORMATION

LAB NO.	SAMPLE DRAWN	UNIT TIME	FLUID TIME	UOM	FILTER CHG.	LUBE SERVICE
0498	10/05/16	1485	1485	HR	-	S

FLUID PROPERTIES/CONTAMINANTS

Water %	D7279 Vis 100 °C
<0.1	7.0

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.: 201704250815 Sample Tracking #: E201704191251 Sample Date: Apr 19, 2017 Received Date: Apr 25, 2017 Completed Date: Apr 26, 2017	PO No.: POWER EQUIPMENT NASHVILLE TN Work Order No.: Reference No.: 7007197
Unit Information	Component Information	Fluid Information
Unit ID: 41296 / C1038-N Unit Mfg: Komatsu Unit Model: PC138USLC-10 Unit Serial #: 41296 Unit Worksite: La Vergne, TN (Nashville)	Cpnt. Description: RIGHT FINAL DRIVE Cpnt. Mfg: Komatsu Cpnt. Model: PC138USLC-10 Cpnt. Serial #: 41296 Cpnt. Type: FINAL DRIVE	Fluid Manufacturer: KOMATSU Fluid Brand/Product: POWER RAIN OIL T O-30 Fluid Grade: 30

Maintenance Recommendations for Lab No.: 201704250815

Evaluated By: Kullas, Stephen

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
0815	04/19/17	425	7	1	9	<1	1	<1	<0.1	2	<1	58	<1	2	17	4	711	878	2573	4	83	<1
0614	01/09/17	594 *	10	1	12	1	1	<1	<0.1	4	<1	67	2	1	40	2	830	943	3251	13	51	<1
0499	10/05/16	331	6	1	2	<1	<1	<1	<0.1	3	<1	25	2	<1	35	2	764	890	3110	11	48	<1

SAMPLE INFORMATION

LAB NO.	SAMPLE DRAWN	UNIT TIME	FLUID TIME	UOM	FILTER CHG.	LUBE SERVICE
0815	04/19/17	2500	561	HR	No	S
0614	01/09/17	1939	939	HR	No	C
0499	10/05/16	1485	1485	HR	-	S

FLUID PROPERTIES/CONTAMINANTS

Water %	D7279 Vis 100 °C
<0.1	11.0
<0.1	11.3
<0.1	11.7

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.: 201801040286 Sample Tracking #: E201712201232 Sample Date Dec 30, 2017 Received Date: Jan 04, 2018 Completed Date: Jan 04, 2018	PO No.: POWER EQUIPMENT NASHVILLE TN Work Order No.: Reference No.: 7007198
Unit Information	Component Information	Fluid Information
Unit ID: 41296 / C1038-N Unit Mfg: Komatsu Unit Model: PC138USLC-10 Unit Serial #: 41296 Unit Worksite: La Vergne, TN (Nashville)	Cpnt. Description: LEFT FINAL DRIVE Cpnt. Mfg: Komatsu Cpnt. Model: PC138USLC-10 Cpnt. Serial #: 41296 Cpnt. Type: FINAL DRIVE	Fluid Manufacturer: KOMATSU Fluid Brand/Product: POWER RAIN OIL T O-30 Fluid Grade: 30

Maintenance Recommendations for Lab No.: 201801040286

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
0286	12/30/17	174	3	2	2	5	<1	<1	<0.1	4	<1	18	14	3	13	<1	827	1016	3279	1	69	1
1462	08/17/17	396	6	<1	4	4	<1	<1	<0.1	2	<1	31	9	1	17	6	719	904	2564	3	88	1
0812	04/19/17	493	8	1	10	<1	1	<1	<0.1	3	<1	62	1	2	17	4	730	887	2602	4	84	<1
0615	01/09/17	524 *	9	1	4	<1	1	<1	<0.1	4	<1	33	3	2	34	2	811	923	3145	14	46	<1
0500	10/05/16	349	6	1	3	<1	<1	<1	<0.1	3	<1	23	3	<1	32	1	771	890	3076	12	49	1

SAMPLE INFORMATION

LAB NO.	SAMPLE DRAWN	UNIT TIME	FLUID TIME	UOM	FILTER CHG.	LUBE SERVICE
0286	12/30/17	3355	431	HR	No	S
1462	08/17/17	2924	985	HR	No	C
0812	04/19/17	2500	561	HR	No	S
0615	01/09/17	1939	939	HR	No	C
0500	10/05/16	1485	1485	HR	-	S

FLUID PROPERTIES/CONTAMINANTS

Water %	D7279 Vis 100 °C
<0.1	10.4
<0.1	10.7
<0.1	11.0
<0.1	11.4
<0.1	11.8

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.: 201708220550 Sample Tracking #: E201708141072 Sample Date Aug 17, 2017 Received Date: Aug 22, 2017 Completed Date: Aug 23, 2017	PO No.: POWER EQUIPMENT NASHVILLE TN Work Order No.: Reference No.: 7007195
Unit Information	Component Information	Fluid Information
Unit ID: 41296 / C1038-N Unit Mfg: Komatsu Unit Model: PC138USLC-10 Unit Serial #: 41296 Unit Worksite: La Vergne, TN (Nashville)	Cpnt. Description: DIESEL ENGINE Cpnt. Mfg: Komatsu Cpnt. Model: PC138USLC-10 Cpnt. Serial #: 41296 Cpnt. Type: ENGINE	Fluid Manufacturer: KOMATSU Fluid Brand/Product: LOW ASH Fluid Grade: 15W40

Maintenance Recommendations for Lab No.: 201708220550

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
0550	08/17/17	10	<1	<1	3	<1	1	1	<0.1	<1	<1	16	<1	<1	265	137	854	943	1375	<1	655	<1
0934	04/19/17	13	1	<1	<1	7	3	1	<0.1	3	<1	10	6	11	19	45	899	1183	1037	<1	991	1
0612	01/09/17	12	<1	<1	3	4	5	<1	<0.1	14	<1	13	4	2	28	47	1119	1325	1324	<1	985	<1
0497	10/05/16	25	1	<1	3	11	16	<1	<0.1	5	<1	15	3	4	25	54	1001	1213	2002	1	494	<1

SAMPLE INFORMATION

LAB NO.	SAMPLE DRAWN	UNIT TIME	FLUID TIME	UOM	FILTER CHG.	LUBE SERVICE
0550	08/17/17	2924	424	HR	Yes	C
0934	04/19/17	2500	561	HR	Yes	C
0612	01/09/17	1939	439	HR	Yes	C
0497	10/05/16	1485	500	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
13.4	40	<0.1	18	8	NEG	<0.1	<0.50	4.15
13.8	40	0.1	16	9	NEG	<0.1	<0.50	6.28
14.6	40	0.3	17	11 *	NEG	<0.1	<0.50	6.34
14.2	40	0.3	20 *	12 *	NEG	<0.1	<0.50	4.82

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.: 201610100499 Sample Tracking #: NONE Sample Date Oct 05, 2016 Received Date: Oct 10, 2016 Completed Date: Oct 10, 2016	PO No.: NS026R Work Order No.: Reference No.: 7007197
Unit Information	Component Information	Fluid Information
Unit ID: 41296 / C1038-N Unit Mfg: Komatsu Unit Model: PC138USLC-10 Unit Serial #: 41296 Unit Worksite: La Vergne, TN (Nashville)	Cpnt. Description: RIGHT FINAL DRIVE Cpnt. Mfg: Komatsu Cpnt. Model: PC138USLC-10 Cpnt. Serial #: 41296 Cpnt. Type: FINAL DRIVE	Fluid Manufacturer: KOMATSU Fluid Brand/Product: POWER RAIN OIL T O-30 Fluid Grade:

Maintenance Recommendations for Lab No.: 201610100499

Evaluated By: **Kullas, Stephen**

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
0499	10/05/16	331	6	1	2	<1	<1	<1	<0.1	3	<1	25	2	<1	35	2	764	890	3110	11	48	<1

SAMPLE INFORMATION

LAB NO.	SAMPLE DRAWN	UNIT TIME	FLUID TIME	UOM	FILTER CHG.	LUBE SERVICE
0499	10/05/16	1485	1485	HR	-	S

FLUID PROPERTIES/CONTAMINANTS

Water %	D7279 Vis 100 °C
<0.1	11.7

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.: 201801040287 Sample Tracking #: E201712201233 Sample Date Dec 30, 2017 Received Date: Jan 04, 2018 Completed Date: Jan 04, 2018	PO No.: POWER EQUIPMENT NASHVILLE TN Work Order No.: Reference No.: 7007197
Unit Information	Component Information	Fluid Information
Unit ID: 41296 / C1038-N Unit Mfg: Komatsu Unit Model: PC138USLC-10 Unit Serial #: 41296 Unit Worksite: La Vergne, TN (Nashville)	Cpnt. Description: RIGHT FINAL DRIVE Cpnt. Mfg: Komatsu Cpnt. Model: PC138USLC-10 Cpnt. Serial #: 41296 Cpnt. Type: FINAL DRIVE	Fluid Manufacturer: KOMATSU Fluid Brand/Product: POWER RAIN OIL T O-30 Fluid Grade: 30

Maintenance Recommendations for Lab No.: 201801040287

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
0287	12/30/17	305	4	2	4	<1	<1	<1	<0.1	4	<1	30	15	3	15	<1	851	1045	3381	1	72	2
1461	08/17/17	548	8	1	13	2	1	<1	<0.1	3	<1	62	10	2	20	5	712	896	2595	4	83	2
0815	04/19/17	425	7	1	9	<1	1	<1	<0.1	2	<1	58	<1	2	17	4	711	878	2573	4	83	<1
0614	01/09/17	594 *	10	1	12	1	1	<1	<0.1	4	<1	67	2	1	40	2	830	943	3251	13	51	<1
0499	10/05/16	331	6	1	2	<1	<1	<1	<0.1	3	<1	25	2	<1	35	2	764	890	3110	11	48	<1

SAMPLE INFORMATION

LAB NO.	SAMPLE DRAWN	UNIT TIME	FLUID TIME	UOM	FILTER CHG.	LUBE SERVICE
0287	12/30/17	3355	431	HR	No	S
1461	08/17/17	2924	985	HR	No	C
0815	04/19/17	2500	561	HR	No	S
0614	01/09/17	1939	939	HR	No	C
0499	10/05/16	1485	1485	HR	-	S

FLUID PROPERTIES/CONTAMINANTS

Water %	D7279 Vis 100 °C
<0.1	10.7
<0.1	11.0
<0.1	11.0
<0.1	11.3
<0.1	11.7

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.: 201704250934 Sample Tracking #: E201704191248 Sample Date: Apr 19, 2017 Received Date: Apr 25, 2017 Completed Date: Apr 26, 2017	PO No.: POWER EQUIPMENT NASHVILLE TN Work Order No.: Reference No.: 7007195
Unit Information	Component Information	Fluid Information
Unit ID: 41296 / C1038-N Unit Mfg: Komatsu Unit Model: PC138USLC-10 Unit Serial #: 41296 Unit Worksite: La Vergne, TN (Nashville)	Cpnt. Description: DIESEL ENGINE Cpnt. Mfg: Komatsu Cpnt. Model: PC138USLC-10 Cpnt. Serial #: 41296 Cpnt. Type: ENGINE	Fluid Manufacturer: KOMATSU Fluid Brand/Product: LOW ASH Fluid Grade: 15W40

Maintenance Recommendations for Lab No.: 201704250934

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
0934	04/19/17	13	1	<1	<1	7	3	1	<0.1	3	<1	10	6	11	19	45	899	1183	1037	<1	991	1
0612	01/09/17	12	<1	<1	3	4	5	<1	<0.1	14	<1	13	4	2	28	47	1119	1325	1324	<1	985	<1
0497	10/05/16	25	1	<1	3	11	16	<1	<0.1	5	<1	15	3	4	25	54	1001	1213	2002	1	494	<1

SAMPLE INFORMATION

LAB NO.	SAMPLE DRAWN	UNIT TIME	FLUID TIME	UOM	FILTER CHG.	LUBE SERVICE
0934	04/19/17	2500	561	HR	Yes	C
0612	01/09/17	1939	439	HR	Yes	C
0497	10/05/16	1485	500	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
13.8	40	0.1	16	9	NEG	<0.1	<0.50	6.28
14.6	40	0.3	17	11 *	NEG	<0.1	<0.50	6.34
14.2	40	0.3	20 *	12 *	NEG	<0.1	<0.50	4.82

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.: 201610100500 Sample Tracking #: NONE Sample Date Oct 05, 2016 Received Date: Oct 10, 2016 Completed Date: Oct 10, 2016	PO No.: NS026R Work Order No.: Reference No.: 7007198
Unit Information	Component Information	Fluid Information
Unit ID: 41296 / C1038-N Unit Mfg: Komatsu Unit Model: PC138USLC-10 Unit Serial #: 41296 Unit Worksite: La Vergne, TN (Nashville)	Cpnt. Description: LEFT FINAL DRIVE Cpnt. Mfg: Komatsu Cpnt. Model: PC138USLC-10 Cpnt. Serial #: 41296 Cpnt. Type: FINAL DRIVE	Fluid Manufacturer: KOMATSU Fluid Brand/Product: POWER RAIN OIL T O-30 Fluid Grade:

Maintenance Recommendations for Lab No.: 201610100500

Evaluated By: Kullas, Stephen

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
0500	10/05/16	349	6	1	3	<1	<1	<1	<0.1	3	<1	23	3	<1	32	1	771	890	3076	12	49	1

SAMPLE INFORMATION

LAB NO.	SAMPLE DRAWN	UNIT TIME	FLUID TIME	UOM	FILTER CHG.	LUBE SERVICE
0500	10/05/16	1485	1485	HR	-	S

FLUID PROPERTIES/CONTAMINANTS

Water %	D7279 Vis 100 °C
<0.1	11.8

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.: 201708221464 Sample Tracking #: E201708141076 Sample Date Aug 17, 2017 Received Date: Aug 22, 2017 Completed Date: Aug 23, 2017	PO No.: POWER EQUIPMENT NASHVILLE TN Work Order No.: Reference No.: 7422935
Unit Information	Component Information	Fluid Information
Unit ID: 41296 / C1038-N Unit Mfg: Komatsu Unit Model: PC138USLC-10 Unit Serial #: 41296 Unit Worksite: La Vergne, TN (Nashville)	Cpnt. Description: SWING DRIVE Cpnt. Mfg: Komatsu Cpnt. Model: PC138USLC-10 Cpnt. Serial #: 41296 Cpnt. Type: SWING DRIVE	Fluid Manufacturer: KOMATSU Fluid Brand/Product: POWER RAIN OIL T O-30 Fluid Grade: 30

Maintenance Recommendations for Lab No.: 201708221464

Evaluated By: Gibbons, Timothy

ANALYSIS INDICATES AN ABNORMAL LEVEL OF CONTAMINATION IS PRESENT! ABRASIVES (dirt) present. Data provided indicates oil was changed when sampled. 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
1464	08/17/17	32	1	<1	2	3	120	<1	<0.1	3	<1	32 *	11	1	8	2	803	1005	3419	1	42	4

SAMPLE INFORMATION

LAB NO.	SAMPLE DRAWN	UNIT TIME	FLUID TIME	UOM	FILTER CHG.	LUBE SERVICE
1464	08/17/17	2924	966	HR	No	C

FLUID PROPERTIES/CONTAMINANTS

Water %	D7279 Vis 100 °C
<0.1	10.8

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.: 201708221461 Sample Tracking #: E201708141075 Sample Date: Aug 17, 2017 Received Date: Aug 22, 2017 Completed Date: Aug 23, 2017	PO No.: POWER EQUIPMENT NASHVILLE TN Work Order No.: Reference No.: 7007197
Unit Information	Component Information	Fluid Information
Unit ID: 41296 / C1038-N Unit Mfg: Komatsu Unit Model: PC138USLC-10 Unit Serial #: 41296 Unit Worksite: La Vergne, TN (Nashville)	Cpnt. Description: RIGHT FINAL DRIVE Cpnt. Mfg: Komatsu Cpnt. Model: PC138USLC-10 Cpnt. Serial #: 41296 Cpnt. Type: FINAL DRIVE	Fluid Manufacturer: KOMATSU Fluid Brand/Product: POWER RAIN OIL T O-30 Fluid Grade: 30

Maintenance Recommendations for Lab No.: 201708221461

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
1461	08/17/17	548	8	1	13	2	1	<1	<0.1	3	<1	62	10	2	20	5	712	896	2595	4	83	2
0815	04/19/17	425	7	1	9	<1	1	<1	<0.1	2	<1	58	<1	2	17	4	711	878	2573	4	83	<1
0614	01/09/17	594 *	10	1	12	1	1	<1	<0.1	4	<1	67	2	1	40	2	830	943	3251	13	51	<1
0499	10/05/16	331	6	1	2	<1	<1	<1	<0.1	3	<1	25	2	<1	35	2	764	890	3110	11	48	<1

SAMPLE INFORMATION

LAB NO.	SAMPLE DRAWN	UNIT TIME	FLUID TIME	UOM	FILTER CHG.	LUBE SERVICE
1461	08/17/17	2924	985	HR	No	C
0815	04/19/17	2500	561	HR	No	S
0614	01/09/17	1939	939	HR	No	C
0499	10/05/16	1485	1485	HR	-	S

FLUID PROPERTIES/CONTAMINANTS

Water %	D7279 Vis 100 °C
<0.1	11.0
<0.1	11.0
<0.1	11.3
<0.1	11.7

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

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>.
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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.: 201801040283 Sample Tracking #: E201712201231 Sample Date Dec 30, 2017 Received Date: Jan 04, 2018 Completed Date: Jan 04, 2018	PO No.: POWER EQUIPMENT NASHVILLE TN Work Order No.: Reference No.: 7007196
Unit Information	Component Information	Fluid Information
Unit ID: 41296 / C1038-N Unit Mfg: Komatsu Unit Model: PC138USLC-10 Unit Serial #: 41296 Unit Worksite: La Vergne, TN (Nashville)	Cpnt. Description: HYDRAULIC Cpnt. Mfg: Komatsu Cpnt. Model: PC138USLC-10 Cpnt. Serial #: 41296 Cpnt. Type: HYDRAULIC	Fluid Manufacturer: KOMATSU Fluid Brand/Product: HYDRAULIC OIL 46 AW Fluid Grade: ISO 46

Maintenance Recommendations for Lab No.: 201801040283

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
0283	12/30/17	7	1	2	1	<1	9	<1	<0.1	<1	<1	5	16	4	5	<1	471	607	1496	<1	6	4
1449	08/17/17	6	<1	<1	2	6	9	<1	<0.1	<1	<1	5	15	2	4	2	422	571	1386	<1	8	<1
0929	04/19/17	7	1	2	3	5	12	<1	<0.1	<1	<1	7	7	3	5	5	544	701	2185	<1	8	3
0613	01/09/17	4	<1	<1	2	6	13	<1	<0.1	<1	<1	7	6	3	4	1	533	696	2285	<1	11	<1
0498	10/05/16	5	<1	<1	<1	3	8	<1	<0.1	<1	<1	8	<1	<1	3	2	498	641	1990	<1	12	1

SAMPLE INFORMATION

LAB NO.	SAMPLE DRAWN	UNIT TIME	FLUID TIME	UOM	FILTER CHG.	LUBE SERVICE
0283	12/30/17	3355	3346	HR	No	S
1449	08/17/17	2924	2915	HR	Yes	S
0929	04/19/17	2500	2491	HR	No	S
0613	01/09/17	1939	1930	HR	Yes	S
0498	10/05/16	1485	1485	HR	-	S

FLUID PROPERTIES/CONTAMINANTS

Water %	D7279 Vis 100 °C
<0.1	7.7
<0.1	7.8
<0.1	7.1
<0.1	7.1
<0.1	7.0

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.: 201701130613 Sample Tracking #: NONE Sample Date: Jan 09, 2017 Received Date: Jan 13, 2017 Completed Date: Jan 13, 2017	PO No.: NS02SU Work Order No.: Reference No.: 7007196
Unit Information	Component Information	Fluid Information
Unit ID: 41296 / C1038-N Unit Mfg: Komatsu Unit Model: PC138USLC-10 Unit Serial #: 41296 Unit Worksite: La Vergne, TN (Nashville)	Cpnt. Description: HYDRAULIC Cpnt. Mfg: Komatsu Cpnt. Model: PC138USLC-10 Cpnt. Serial #: 41296 Cpnt. Type: HYDRAULIC	Fluid Manufacturer: KOMATSU Fluid Brand/Product: HYDRAULIC OIL 46 AW Fluid Grade:

Maintenance Recommendations for Lab No.: 201701130613

Evaluated By: Kullas, Stephen

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
0613	01/09/17	4	<1	<1	2	6	13	<1	<0.1	<1	<1	7	6	3	4	1	533	696	2285	<1	11	<1
0498	10/05/16	5	<1	<1	<1	3	8	<1	<0.1	<1	<1	8	<1	<1	3	2	498	641	1990	<1	12	1

SAMPLE INFORMATION

LAB NO.	SAMPLE DRAWN	UNIT TIME	FLUID TIME	UOM	FILTER CHG.	LUBE SERVICE
0613	01/09/17	1939	1930	HR	Yes	S
0498	10/05/16	1485	1485	HR	-	S

FLUID PROPERTIES/CONTAMINANTS

Water %	D7279 Vis 100 °C
<0.1	7.1
<0.1	7.0

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.: 201701130614 Sample Tracking #: NONE Sample Date: Jan 09, 2017 Received Date: Jan 13, 2017 Completed Date: Jan 13, 2017	PO No.: NS02SU Work Order No.: Reference No.: 7007197
Unit Information	Component Information	Fluid Information
Unit ID: 41296 / C1038-N Unit Mfg: Komatsu Unit Model: PC138USLC-10 Unit Serial #: 41296 Unit Worksite: La Vergne, TN (Nashville)	Cpnt. Description: RIGHT FINAL DRIVE Cpnt. Mfg: Komatsu Cpnt. Model: PC138USLC-10 Cpnt. Serial #: 41296 Cpnt. Type: FINAL DRIVE	Fluid Manufacturer: KOMATSU Fluid Brand/Product: POWER RAIN OIL T O-30 Fluid Grade:

Maintenance Recommendations for Lab No.: 201701130614

Evaluated By: Kullas, Stephen

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
0614	01/09/17	594 *	10	1	12	1	1	<1	<0.1	4	<1	67	2	1	40	2	830	943	3251	13	51	<1
0499	10/05/16	331	6	1	2	<1	<1	<1	<0.1	3	<1	25	2	<1	35	2	764	890	3110	11	48	<1

SAMPLE INFORMATION

LAB NO.	SAMPLE DRAWN	UNIT TIME	FLUID TIME	UOM	FILTER CHG.	LUBE SERVICE
0614	01/09/17	1939	939	HR	No	C
0499	10/05/16	1485	1485	HR	-	S

FLUID PROPERTIES/CONTAMINANTS

Water %	D7279 Vis 100 °C
<0.1	11.3
<0.1	11.7

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.: 201701130612 Sample Tracking #: NONE Sample Date: Jan 09, 2017 Received Date: Jan 13, 2017 Completed Date: Jan 13, 2017	PO No.: NS02SU Work Order No.: Reference No.: 7007195
Unit Information	Component Information	Fluid Information
Unit ID: 41296 / C1038-N Unit Mfg: Komatsu Unit Model: PC138USLC-10 Unit Serial #: 41296 Unit Worksite: La Vergne, TN (Nashville)	Cpnt. Description: DIESEL ENGINE Cpnt. Mfg: Komatsu Cpnt. Model: PC138USLC-10 Cpnt. Serial #: 41296 Cpnt. Type: ENGINE	Fluid Manufacturer: KOMATSU Fluid Brand/Product: LOW ASH Fluid Grade: 15W40

Maintenance Recommendations for Lab No.: 201701130612

Evaluated By: Kullas, Stephen

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
0612	01/09/17	12	<1	<1	3	4	5	<1	<0.1	14	<1	13	4	2	28	47	1119	1325	1324	<1	985	<1
0497	10/05/16	25	1	<1	3	11	16	<1	<0.1	5	<1	15	3	4	25	54	1001	1213	2002	1	494	<1

SAMPLE INFORMATION

LAB NO.	SAMPLE DRAWN	UNIT TIME	FLUID TIME	UOM	FILTER CHG.	LUBE SERVICE
0612	01/09/17	1939	439	HR	Yes	C
0497	10/05/16	1485	500	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
14.6	40	0.3	17	11 *	NEG	<0.1	<0.50	6.34
14.2	40	0.3	20 *	12 *	NEG	<0.1	<0.50	4.82

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.: 201610100497 Sample Tracking #: NONE Sample Date Oct 05, 2016 Received Date: Oct 10, 2016 Completed Date: Oct 10, 2016	PO No.: NS026R Work Order No.: Reference No.: 7007195
Unit Information	Component Information	Fluid Information
Unit ID: 41296 / C1038-N Unit Mfg: Komatsu Unit Model: PC138USLC-10 Unit Serial #: 41296 Unit Worksite: La Vergne, TN (Nashville)	Cpnt. Description: DIESEL ENGINE Cpnt. Mfg: Komatsu Cpnt. Model: PC138USLC-10 Cpnt. Serial #: 41296 Cpnt. Type: ENGINE	Fluid Manufacturer: KOMATSU Fluid Brand/Product: LOW ASH Fluid Grade: 15W40

Maintenance Recommendations for Lab No.: 201610100497

Evaluated By: Kullas, Stephen

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
0497	10/05/16	25	1	<1	3	11	16	<1	<0.1	5	<1	15	3	4	25	54	1001	1213	2002	1	494	<1

SAMPLE INFORMATION

LAB NO.	SAMPLE DRAWN	UNIT TIME	FLUID TIME	UOM	FILTER CHG.	LUBE SERVICE
0497	10/05/16	1485	500	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
14.2	40	0.3	20 *	12 *	NEG	<0.1	<0.50	4.82

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.: 201801040285 Sample Tracking #: E201712201234 Sample Date Dec 30, 2017 Received Date: Jan 04, 2018 Completed Date: Jan 04, 2018	PO No.: POWER EQUIPMENT NASHVILLE TN Work Order No.: Reference No.: 7422935
Unit Information	Component Information	Fluid Information
Unit ID: 41296 / C1038-N Unit Mfg: Komatsu Unit Model: PC138USLC-10 Unit Serial #: 41296 Unit Worksite: La Vergne, TN (Nashville)	Cpnt. Description: SWING DRIVE Cpnt. Mfg: Komatsu Cpnt. Model: PC138USLC-10 Cpnt. Serial #: 41296 Cpnt. Type: SWING DRIVE	Fluid Manufacturer: KOMATSU Fluid Brand/Product: POWER RAIN OIL T O-30 Fluid Grade: 30

Maintenance Recommendations for Lab No.: 201801040285

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
0285	12/30/17	11	<1	2	1	<1	24	<1	<0.1	4	<1	17	14	3	12	<1	884	1059	3512	<1	65	<1
1464	08/17/17	32	1	<1	2	3	120	<1	<0.1	3	<1	32 *	11	1	8	2	803	1005	3419	1	42	4

SAMPLE INFORMATION

LAB NO.	SAMPLE DRAWN	UNIT TIME	FLUID TIME	UOM	FILTER CHG.	LUBE SERVICE
0285	12/30/17	3355	431	HR	No	S
1464	08/17/17	2924	966	HR	No	C

FLUID PROPERTIES/CONTAMINANTS

Water %	D7279 Vis 100 °C
<0.1	10.5
<0.1	10.8

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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