

**PAC-RIM (QLD) PTY LTD**

**WORK ORDER HISTORY REPORT - FEL029**

<b>Asset No.</b>	<b>Asset Description</b>	<b>Work Order No</b>	<b>Work Order Description</b>	<b>Date WO Completed</b>
FEL029	988G FRONT END LOADER	3372	Hydraulic faults	04-Dec-08
FEL029	988G FRONT END LOADER	3374	Repairs to auto greasing system	07-Dec-08
FEL029	988G FRONT END LOADER	3693	Fire suppression fauns	16-Dec-08
FEL029	988G FRONT END LOADER	4049	Replace alternator	22-Dec-08
FEL029	988G FRONT END LOADER	4787	Repair auto greasing system	15-Jan-09
FEL029	988G FRONT END LOADER	4998	Repair boom pin seal leaks. Worked scoped by Hastings, job given to Isa Diesel.	19-Jan-09
FEL029	988G FRONT END LOADER	5921	Replace all four tyres	08-Feb-09
FEL029	988G FRONT END LOADER	6459	Repairs to engine latch assenmbly	10-Feb-09
FEL029	988G FRONT END LOADER	6520	Replacement tyres as supplied by Xstrata and fitted by Klinges.	07-Feb-09
FEL029	988G FRONT END LOADER	6858	Repair and replace damaged grease line	27-Feb-09
FEL029-BDY	BODYCHASSIS	8770	Manufacture blind mounts	07-Apr-09
FEL029-ELE	ELECTRICAL	7208	Repair electrical faults and modify housing	06-Mar-09
FEL029-GET	GROUND ENGAGING TOOLS	8176	GET for bucket maintenance	25-Mar-09
FEL029-HYD	HYDRAULICS	7398	Brakes binding (machine down)	16-Mar-09
FEL029-HYD	HYDRAULICS	8245	Replace damaged hoses	27-Mar-09
FEL029-HYD	HYDRAULICS	8278	Diagnose and repair hydraulic oil leak and brake temp warning	09-Apr-09

NOT ACTIONED  
NOT RESOLVED



Hastings Deering (Australia) Ltd. - A.B.N. 49 054 094 647

**Call 131 228**  
**BRISBANE** (Head Office)  
 Kerry Road, Archerfield, Qld. 4108  
 P.O. Box 46, Archerfield, Qld. 4108  
 Fax: (07) 3365 9228  
 Web: www.hastingsdeering.cat.com

- CAIRNS
- EMERALD
- GOLD COAST
- MACKAY
- MOUNT ISA
- ROCKHAMPTON
- SUNSHINE COAST
- TOOWOOMBA
- TOWNSVILLE
- DARWIN
- ALICE SPRINGS
- GOVE

PAC-RIM MINING SERVICES  
 ATT:  
 PO BOX 7237  
 GARBUTT  
 QLD, 4814

Unit Number **FEL29**  
 Location **BSOC**  
 Make **CATERPILLAR**  
 Model **988G**  
 Serial Number **2TW00640**  
 Compartment **engine-primary**  
 Oil Brand/Type **CASTROL RX SUPER 15W40**  
 Oil Changed **Y**

Lab Control Number **03770222**

Current Evaluation **A**

<b>CURRENT</b>	EVAL: <b>A</b>	Wear Levels in the 5 Micron Range appear OK. InfraRed Analysis appears acceptable. Viscosity Normal for Oil Type Indicated. All other Test Results appear Acceptable. Continue Sampling at the Recommended Interval.
DAYS TAKEN TO REACH LABORATORY: 8		
DATE TAKEN	DATE REC'D	OIL ADDED
26-05-09	02-06-09	0
METER HRS/KM	METER HRS/KM	METER HRS/KM
15483	15483	150

<b>PREVIOUS #1</b>	EVAL: <b>A</b>	Wear Levels in the 5 Micron Range appear OK. InfraRed Analysis appears acceptable. Viscosity Normal for Oil Type Indicated. All other Test Results appear Acceptable. Continue Sampling at the Recommended Interval.
DATE TAKEN	DATE REC'D	OIL ADDED
20-05-09	26-05-09	5
METER HRS/KM	METER HRS/KM	METER HRS/KM
15353	15353	300

<b>PREVIOUS #2</b>	EVAL: <b>A</b>	Wear Levels in the 5 Micron Range appear OK. InfraRed Analysis appears acceptable. Viscosity Normal for Oil Type Indicated. All other Test Results appear Acceptable. Continue Sampling at the Recommended Interval.
DATE TAKEN	DATE REC'D	OIL ADDED
06-05-09	11-05-09	5
METER HRS/KM	METER HRS/KM	METER HRS/KM
15050	15050	225

<b>PREVIOUS #3</b>	EVAL: <b>A</b>	Wear Levels in the 5 Micron Range appear OK. InfraRed Analysis appears acceptable. Viscosity Normal for Oil Type Indicated. All other Test Results appear Acceptable. Continue Sampling at the Recommended Interval.
DATE TAKEN	DATE REC'D	OIL ADDED
24-04-09	05-05-09	0
METER HRS/KM	METER HRS/KM	METER HRS/KM
14825	14825	225

DATE TAKEN	ELEMENTS:- Concentration in ppm (weight/weight)											FLUID CONDITION/CONTAMINANTS												
	Wear metals							Additives																
	Cu	Fe	Cr	Pb	Al	Si	Sn	Ni	Na	K	Ca	Mg	Zn	P	Ba	W	F	ST	OXI	NIT	SUL	PQ	DEP	V100
260509	1	5	<1	<1	<1	2	<1	<1	<1	<1	2284	269	1280	1155	<1	<0.1	<3.0	32	10	16	7	<1	OK	14
200509	2	10	<1	<1	<1	2	<1	<1	<1	<1	2093	245	1177	1046	<1	<0.1	<3.0	52	14	23	12	1	OK	13
060509	2	8	<1	<1	<1	3	<1	<1	<1	<1	2189	255	1197	1088	<1	<0.1	<3.0	57	20	30	18	<1	OK	13
240409	1	6	<1	<1	<1	2	<1	<1	<1	<1	2032	238	1126	1010	<1	<0.1	<3.0	47	19	30	40	3	OK	13
140409	3	13	<1	<1	<1	2	<1	<1	<1	1	2018	244	1130	973	<1	<0.1	<3.0	59	18	29	33	9	OK	13
260309	5	16	<1	1	<1	3	<1	<1	<1	<1	2327	279	1209	1112	<1	<0.1	<3.0	74	20	31	18	3	OK	13

Cu - Copper	Fe - Iron	Cr - Chromium	Pb - Lead	Al - Aluminium	Si - Silicon
Sn - Tin	Ni - Nickel	Na - Sodium	K - Potassium	Ca - Calcium	Mg - Magnesium
Zn - Zinc	P - Phosphorus	Ba - Barium	W - % Water	F - %Fuel Dilution	ST - Soot
OXI - Oxidation	NIT - Nitration	SUL - Sulphur product	PQ - PQ Index	DEP - Visible Dep.	V100 - Viscosity 100C

**OVERALL SAMPLE EVALUATION:** "A" - normal wear is occurring; no action required.  
 "B" - increased wear is occurring; corrective action may be required.  
 "C" - abnormal wear is occurring; corrective action is required.  
 "X" - extreme or critical wear is occurring; immediate corrective action is required.

NOT ACTIONED  
NOT RESOLVED



Hastings Deering (Australia) Ltd. - A.B.N. 49 054 094 647

**Call 131 228**  
**BRISBANE** (Head Office)  
 Kerry Road, Archerfield, Qld. 4108  
 P.O. Box 46, Archerfield, Qld. 4108  
 Fax: (07) 3365 9228  
 Web: www.hastingsdeering.cat.com

- CAIRNS
- EMERALD
- GOLD COAST
- MACKAY
- MOUNT ISA
- ROCKHAMPTON
- SUNSHINE COAST
- TOOWOOMBA
- TOWNSVILLE
- DARWIN
- ALICE SPRINGS
- GOVE

PAC-RIM MINING SERVICES  
 ATT:  
 PO BOX 7237  
 GARBUTT  
 QLD, 4814

Unit Number **FEL29**  
 Location **BSOC**  
 Make **CATERPILLAR**  
 Model **988G**  
 Serial Number **2TW00640**  
 Compartment **trans - prim**  
 Oil Brand/Type **UNKNOWN OIL**  
 Oil Changed **N**

Lab Control Number **03770017**  
 Current Evaluation **A**

<b>CURRENT</b>	EVAL: <b>A</b>	Wear Levels in the 5 Micron Range appear OK. InfraRed Analysis appears acceptable. Viscosity is typical of 50 Grade Oil. All other Test Results appear Acceptable. Continue Sampling at the Recommended Interval.
DAYS TAKEN TO REACH LABORATORY: 8		
DATE TAKEN	DATE REC'D	OIL ADDED
26-05-09	02-06-09	0
METER HRS/KM	METER HRS/KM	ON OIL
15483	500	

<b>PREVIOUS #1</b>	EVAL: <b>B</b>	Wear Levels in the 5 Micron Range appear OK. No NEW OIL Found in Sample Bottle for I.R. Test. Viscosity Low for oil type indicated. Viscosity is typical of 30 Grade Oil. All other Test Results appear Acceptable. Continue Sampling at the Recommended Interval.
DATE TAKEN	DATE REC'D	OIL ADDED
06-05-09	11-05-09	15
METER HRS/KM	METER HRS/KM	ON OIL
15050	1000	

<b>PREVIOUS #2</b>	EVAL: <b>B</b>	Copper is Slightly High for Hrs/Kms on the Oil, Possible Residue from Prior Contamination. Other Wear Levels in the 5 Micron Range appear Consistent. Particle Count Results appear acceptable. InfraRed Analysis appears acceptable for Hrs/Kms. Viscosity Normal for Oil Type Indicated. All other Test Results appear Acceptable. Continue Sampling at the Recommended Interval.
DATE TAKEN	DATE REC'D	OIL ADDED
14-04-09	20-04-09	0
METER HRS/KM	METER HRS/KM	ON OIL
14604	600	

<b>PREVIOUS #3</b>	EVAL: <b>B</b>	Copper is Slightly High for Hrs/Kms on the Oil, No NEW OIL Found in Sample Bottle for I.R. Test. Viscosity is typical of 50 Grade Oil. All other Test Results appear Acceptable. Inspect the Filter(s) for Debris. Copper may be due to Chemical Leaching by the oils Additives. Resample after 250 hours.
DATE TAKEN	DATE REC'D	OIL ADDED
02-03-09	11-03-09	0
METER HRS/KM	METER HRS/KM	ON OIL
14044	500	

DATE TAKEN	ELEMENTS:- Concentration in ppm (weight/weight)											FLUID CONDITION/CONTAMINANTS												
	Wear metals							Additives																
	Cu	Fe	Cr	Pb	Al	Si	Sn	Ni	Na	K	Ca	Mg	Zn	P	Ba	ISO	W	OXI	NIT	PQ	DEP	Mo	B	Cd
260509	33	3	<1	<1	<1	4	<1	<1	1	<1	3353	14	872	712	<117/14	<0.1	1	15	<1	OK	<1	2	<1	
060509	1	5	<1	4	4	8	<1	<1	2	<1	2421	289	1349	1215	<115/11	<0.1				<1	OK	<1	4	<1
140409	81	4	<1	<1	<1	4	<1	<1	3	<1	3481	17	945	817	<114/10	<0.1	3	19	<1	OK	<1	1	<1	
020309	149	5	<1	<1	<1	1	<1	<1	5	<1	2717	16	1033	894	<116/12	<0.1				<1	OK	<1	<1	<1
260109	7	4	<1	<1	2	4	<1	<1	4	1	2647	16	1094	889	<122/19	<0.1	6	15	13	MMTP	<1	<1	<1	
201208	3	5	<1	<1	2	4	<1	<1	5	1	2802	35	1197	1011	<121/17	<0.1	11	21	6	OK	<1	<1	<1	

Cu - Copper	Fe - Iron	Cr - Chromium	Pb - Lead	Al - Aluminium	Si - Silicon
Sn - Tin	Ni - Nickel	Na - Sodium	K - Potassium	Ca - Calcium	Mg - Magnesium
Zn - Zinc	P - Phosphorus	Ba - Barium	ISO - ISO 4406.2	W - % Water	OXI - Oxidation
NIT - Nitration	PQ - PQ Index	DEP - Visible Dep.	Mo - Molybdenum	B - Boron	Cd - Cadmium

**OVERALL SAMPLE EVALUATION:** "A" - normal wear is occurring; no action required.  
 "B" - increased wear is occurring; corrective action may be required.  
 "C" - abnormal wear is occurring; corrective action is required.  
 "X" - extreme or critical wear is occurring; immediate corrective action is required.



