

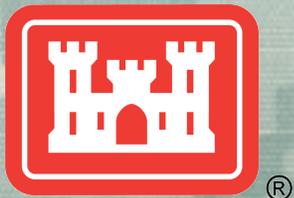
# R. C. BYRD LOCKS & DAM

## Main Lock Dewatering

**Presented by: Scott Kinzel, PE**

Huntington District

February 10, 2015



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# R.C. Byrd Locks & Dam

- LOCATION: Ohio River, 279.2 miles below Pittsburgh, PA, and 9 miles below the City of Gallipolis, OH. Replaced locks and dams Nos. 24, 25 & 26 on Ohio River and Nos. 9, 10 and 11 on the Kanawha River.
- LOCKS : Two new parallel locks, main lock 110' by 1200', auxiliary lock 110' by 600', miter service gates. Locks were activated on January 30, 1993.
- DAM: Non-navigable, high-lift, gated dam, top length of gated section 1,132'. Eight roller gates, clear span 125'-6 between 16-foot piers, damming height of 29'- 6' above sills.
- COST: Lock Replacement \$244,550,000; Dam Rehabilitation \$ 46,700,000; Fish Hatchery Mitigation \$ 13,800,000



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Pintle Casting



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Gap in Pintle Casting  
where it attaches to  
Miter Gate



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Cracks in Pintle Casting



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Cracks in Pintle Casting



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Cracks in Pintle Casting



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Miter Blocks, Quoin Blocks and Wall  
Quoins in poor condition



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Miter Block Showing Material Loss



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Heel section of gate showing backing material



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Auxiliary Gate showing heel plate removed and new plate installed



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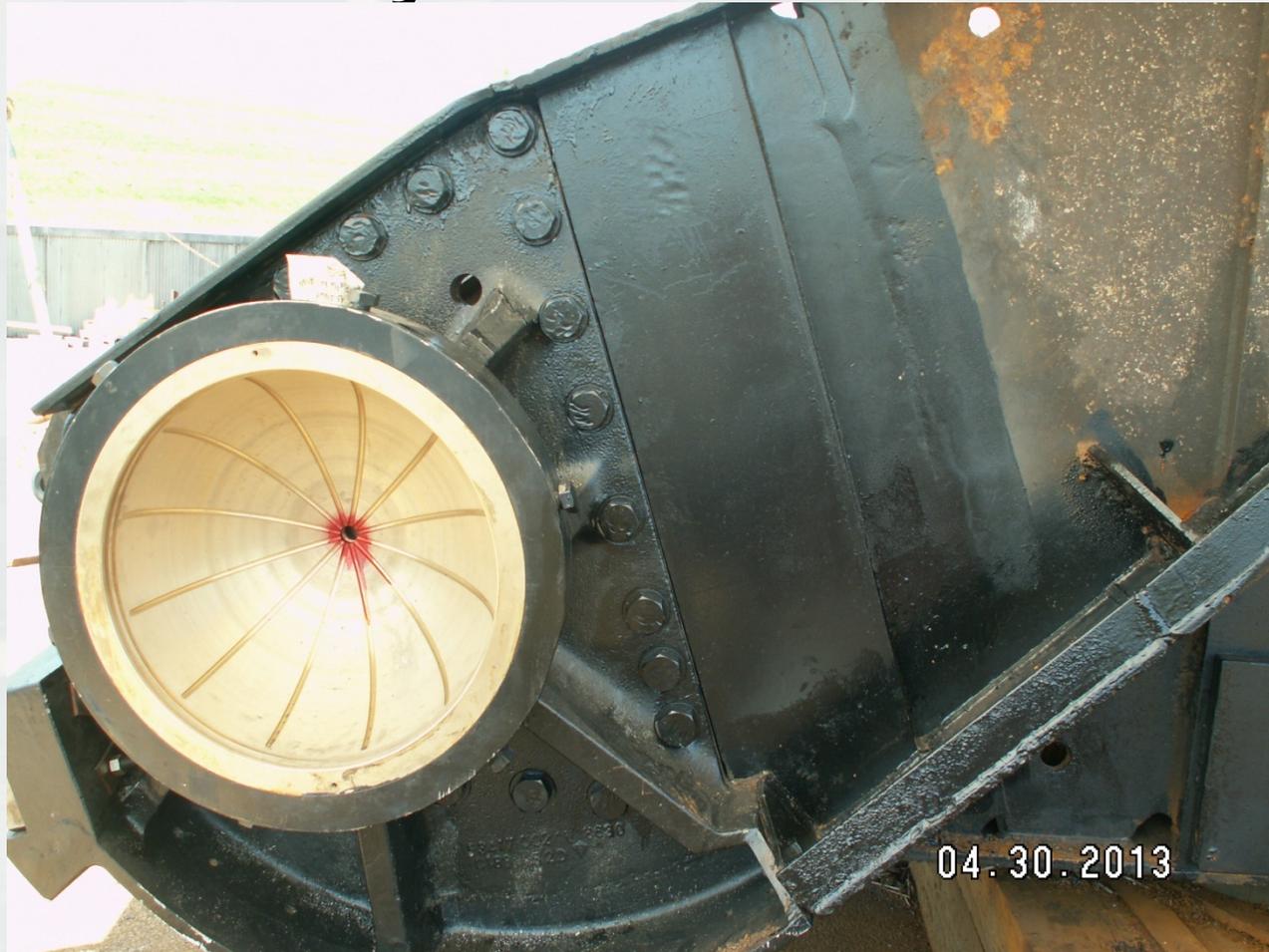


Heel plate after machining



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New Pintle Casting Installed



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Cracks around mounting holes of heel plate



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New Heel Plate



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Gudgeon Hood Welded and Machined  
Embedded Anchorage Sleeved



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New Anchorage



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New Miter, Quoin and Wall Quoin Blocks



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# Questions?



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