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Revision 0

Modutank Engineering Evaluation/Cost Analysis

Prepared for the U.S. Department of Energy
Assistant Secretary for Environmental Management

Contractor for the U.S. Department of Energy
under Contract DE-AC06-08RL14788



CH2MHILL
Plateau Remediation Company

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Modutank Engineering Evaluation/Cost Analysis

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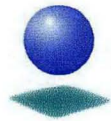
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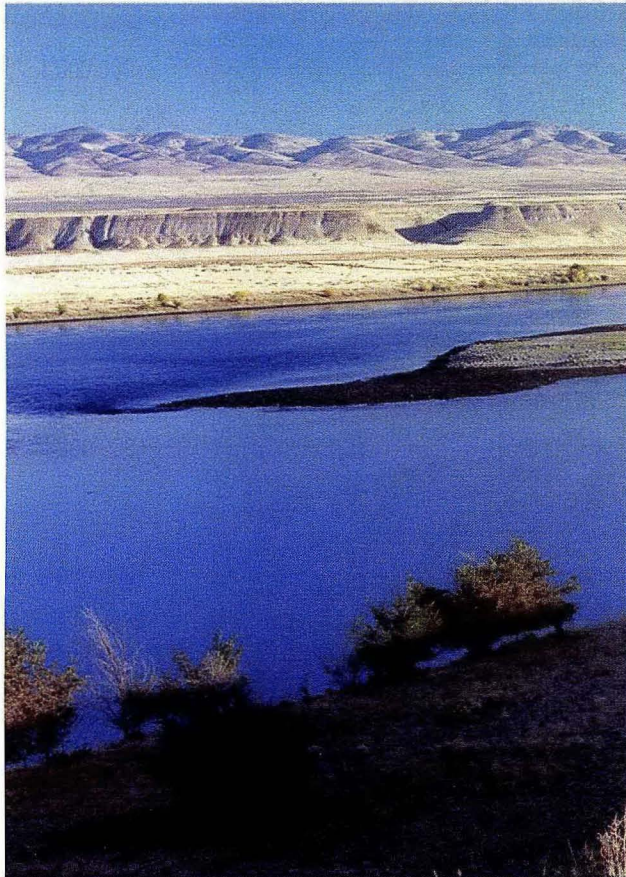
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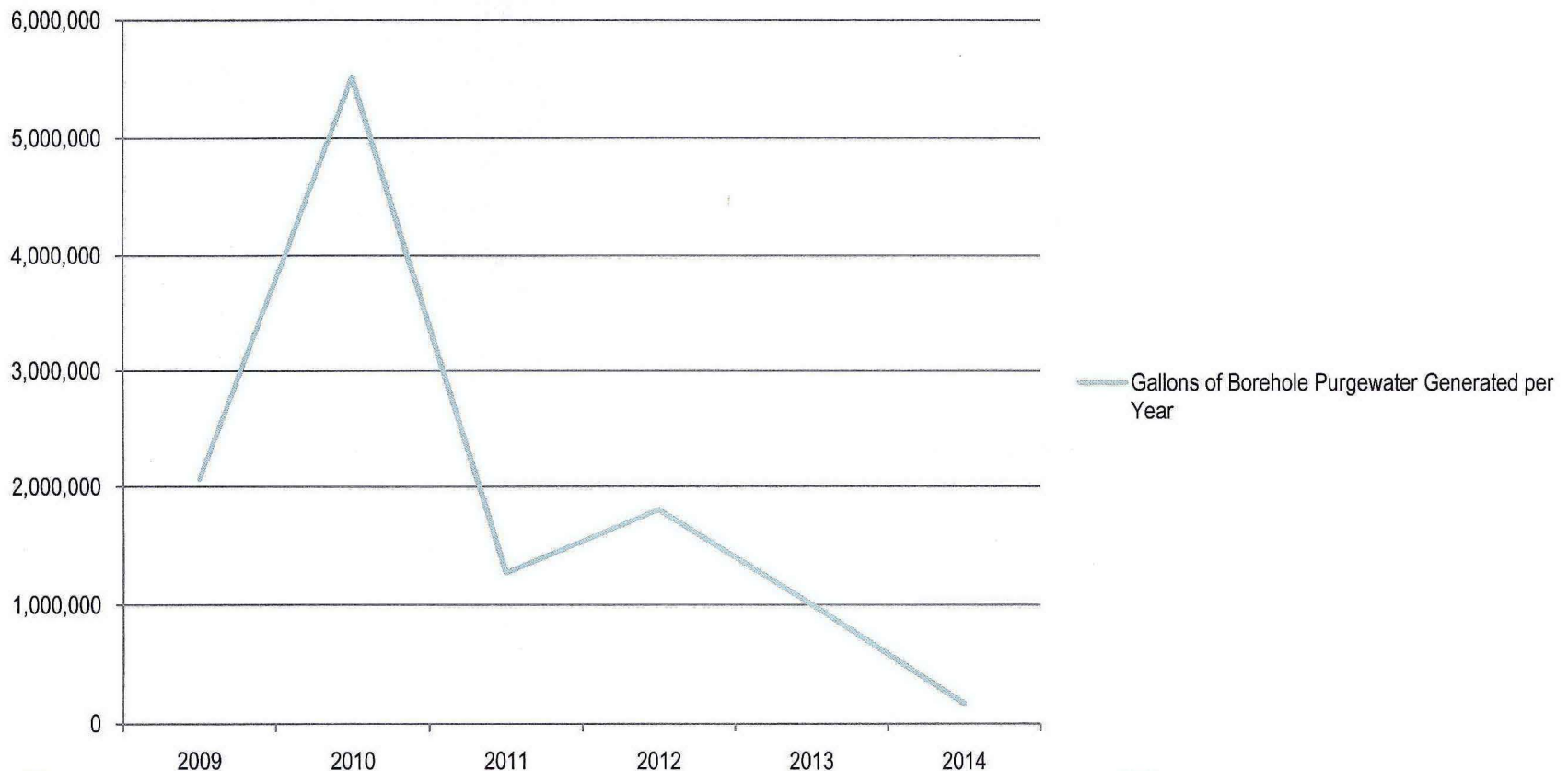
**Presented to:
Department of Energy RL
Department of Ecology**

**Presented by:
Dyan Foss
Colburn Kennedy**

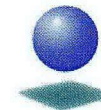
One Team. One Culture.

Estimated Purgewater Volume

Forecasted Purgewater Volume to be Managed per Year



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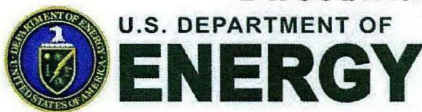
Alternatives Evaluated

- **Six Alternatives Reviewed**
 - **Alternative 1 No Action**
 - **Alternative 2 Transport Purgewater Directly to Groundwater Operable Unit Pump & Treat Facility**
 - **Alternative 3 Use Modular Storage Units for Purgewater Management**
 - **Alternative 4 Discharge Purgewater at or Near Source**
 - **Alternative 5 Transport Purgewater Directly to TEDF**
 - **Alternative 6 Transport Purgewater Directly to ETF**



Alternatives Evaluation Criteria

- **Three Major Criterion**
 - **Effectiveness to Meet Removal Objectives**
 - Overall Protection of Human Health and the Environment
 - Compliance with ARARs and Standards Listed in Appendix A of EE/CA
 - Long Term Effectiveness and Purance
 - Reduction of Toxicity, Mobility or Volume Through Treatment
 - Short Term Effectiveness
 - **Implementation Capability**
 - Technical and Administrative Feasibility
 - Availability of Services and Material
 - **Cost**
 - Direct/Indirect



Alternatives Eliminated

- **Alternative 1, No Action**
 - ~120,000 to 150,000 gallons of storage capacity available
 - Result in curtailment and/or limited Drilling Operations
 - Does not allow increased treatment to control spread of groundwater contamination
- **Alternative 5, Transport Purgewater to TEDF**
 - NPDES Permit does not include all purgewater contaminants
 - TEDF is scheduled for closure and D&D by the end of the calendar year



Preferred Alternative

- **Alternative 3, Modular Storage Units for Purgewater**
 - **Meets Objectives**
 - Overall Protection of Human Health and the Environment
 - Compliance with ARARs and Standards Listed in Appendix A of EE/CA
 - Long Term Effectiveness and Permance
 - Reduction of Toxicity, Mobility or Volume Through Treatment
 - Short Term Effectiveness
 - Off the Shelf Availability
 - Cost Reasonableness



EECA Path Forward

- **EECA Schedule**

- **RL/Regulator Initial Review** 4/7 – 4/15
- **Comments Identified & Resolved** 4/16 – 4/23
- **EECA Approval from RL/Regulator** 4/27 – 4/28

