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宽甸宝城矿业有限公司尾矿库

安全现状评价报告

ln-LNWZ-XZPJ-2024-0004

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评价项目负责人:王 飞

2024年12月20日

(评价机构公章)

前 言

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第 1 章 目的、依据、范围与程序

1.1 评价目的

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1.2 评价依据

1.2.1 法律法规

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1.2.2 行政法规

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1.2.3 标准规范

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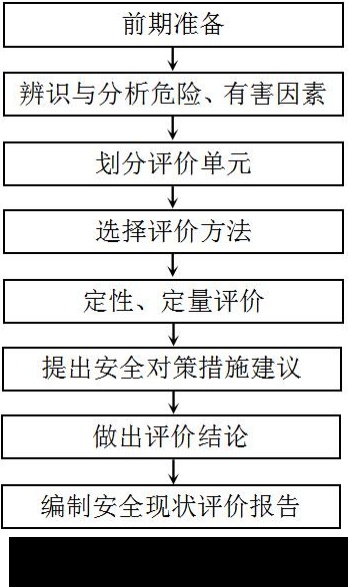
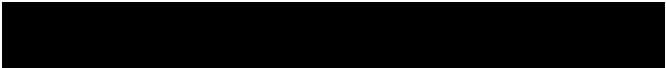
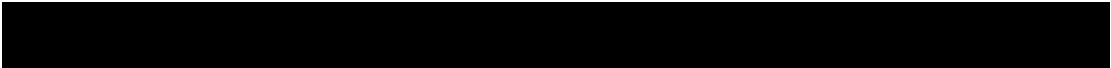
1.2.3 企业提供的主要相关文件

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1.3 评价范围和程序

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第 2 章 尾矿库概况

2.1 企业简介

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2.2 尾矿库库区基本情况

2.1.1 地理位置及周边环境

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图 2-1 宽甸宝城矿业有限公司尾矿库交通位置图

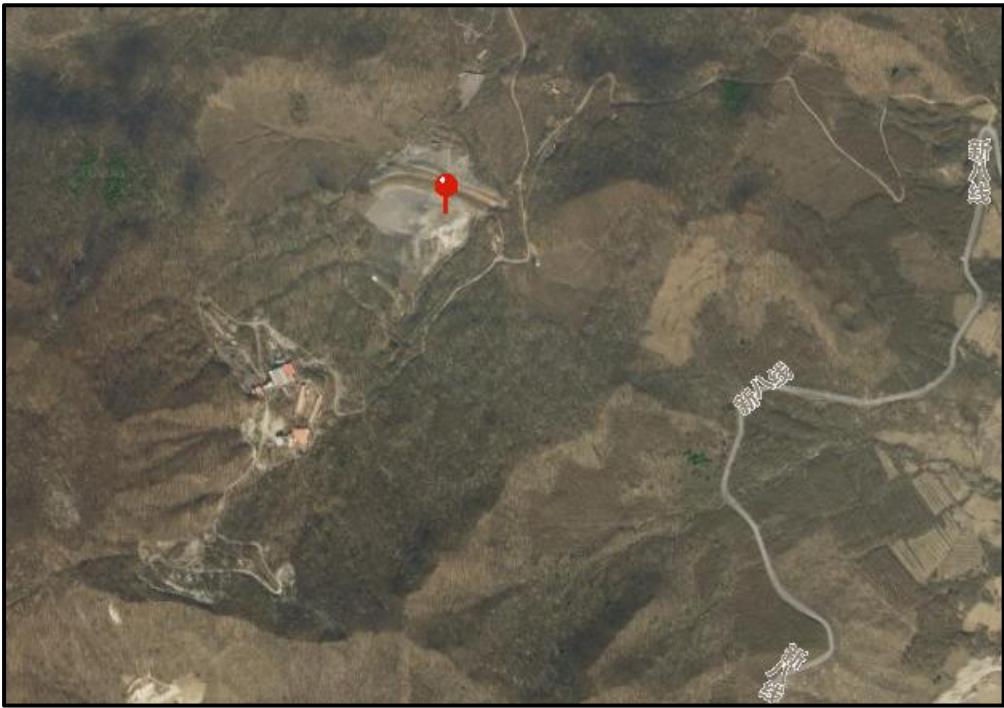


图 2-2 周边环境图

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2.2.2 尾矿库地形地貌

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2.2.3 尾矿库水文气象条件

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2.2.4 库区工程地质条件

[Redacted]

2.2.4.1 库区地质概况

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2.2.4.1 地层岩性构成及其分布

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2.2.5 水文地质条件

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2.2.6 场地地震效应

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2.2.7 尾矿库等别、防洪标准及最小安全超高与最小滩长

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2.2.8 尾矿库库容及服务年限

2.3 尾矿库设计概况

2.3.1 《改造设计》概况

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2.3.2 《隐患治理安全设施设计》概况

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2.4 尾矿库现状

2.4.1 尾矿坝

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图 2-3 初期坝



图 2-4 堆积坝整体照片



图 2-5 堆积坝坝顶照片



图 2-6 坝肩排水沟

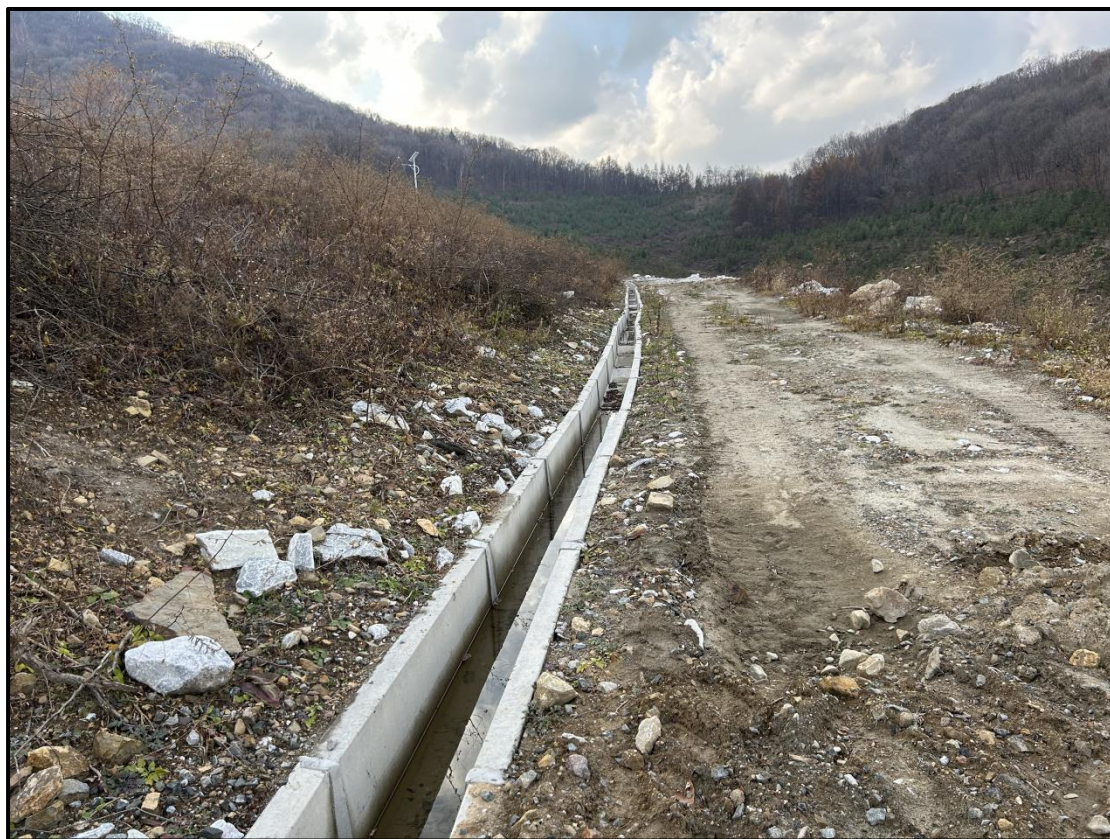


图 2-7 堆积坝横向排水沟



图 2-8 堆积坝纵向排水沟

2.4.2 尾矿库排渗设施



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图 2-9 排渗设施

2.4.2 尾矿库排洪设施

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图 2-10 排水斜槽入口



图 2-11 排水斜槽入口



图 2-12 尾矿库截洪沟

2.4.3 尾矿库内滩面



图 2-13 尾矿库滩面

2.4.4 尾矿库回水系统



图 2-14 尾矿库回水系统

2.4.5 尾矿库安全监测设施

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图 2-15 在线监测设施



图 2-16 在线监测设施



图 2-17 人工观测设施



图 2-18 尾矿库照明



图 2-19 尾矿库位标示杆



图 2-20 干滩标尺

2.4.6 辅助设施





图 2-21 安全警示标志



图 2-22 尾矿库值班室

2.5 尾矿库安全管理

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第 3 章 主要危险、有害因素辨识与分析

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3.1 尾矿库主要危险、有害因素辨识与分析

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3.1.2 库内放矿引发的主要危险、有害因素辨识与分析

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3.1.3 排洪设施引发的主要危险、有害因素辨识与分析

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3.1.4 尾矿输送与回水利用的主要危险、有害因素辨识与分析

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3.1.5 自然灾害引发的主要危险、危害因素辨识与分析

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3.2 生产过程中的主要危险、有害因素辨识分析

3.2.1 物体打击

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3.2.2 高处坠落

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3.2.3 淹溺伤害

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3.2.4 机械伤害

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3.2.5 电气伤害

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3.2.6 尾矿库扬尘

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3.3 安全管理危险、有害因素分析

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3.4 重大危险源辨识分析

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4.1 评价单元划分

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4.2.1 安全检查表法

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4.2.2 专家评议法

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5.1.1 库区环境安全检查

表 5-1 尾矿库库址选择及周边环境安全检查表

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5.2 尾矿坝单元

5.2.1 尾矿坝单元安全检查

表 5-2 尾矿坝单元安全检查

I				

5.2.2 坝体稳定性分析

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表 5-3 尾矿坝稳定计算的荷载组合

表 5-4 尾矿的物理力学指标采用值

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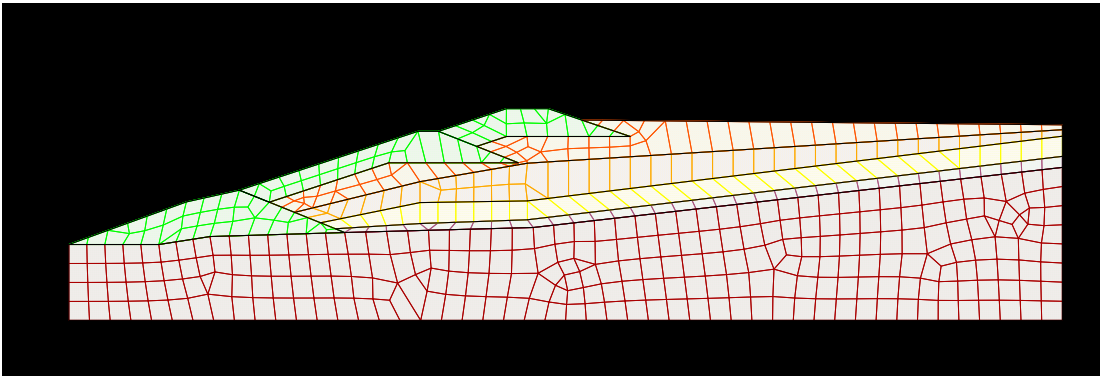
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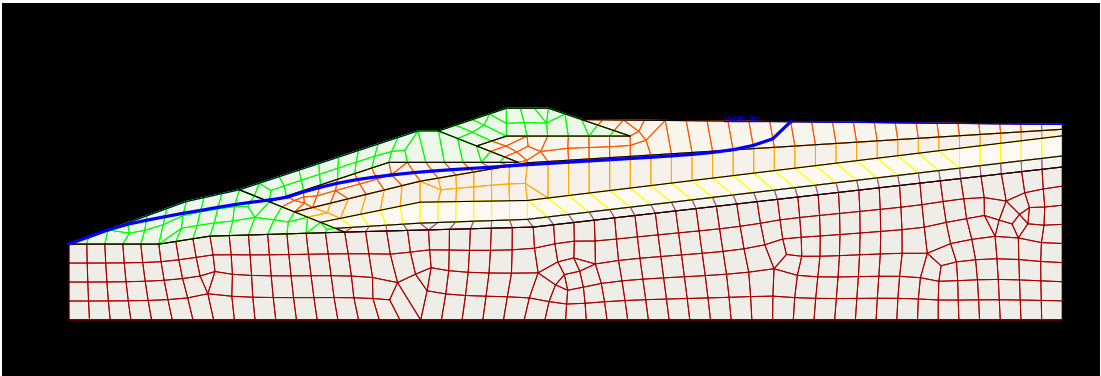
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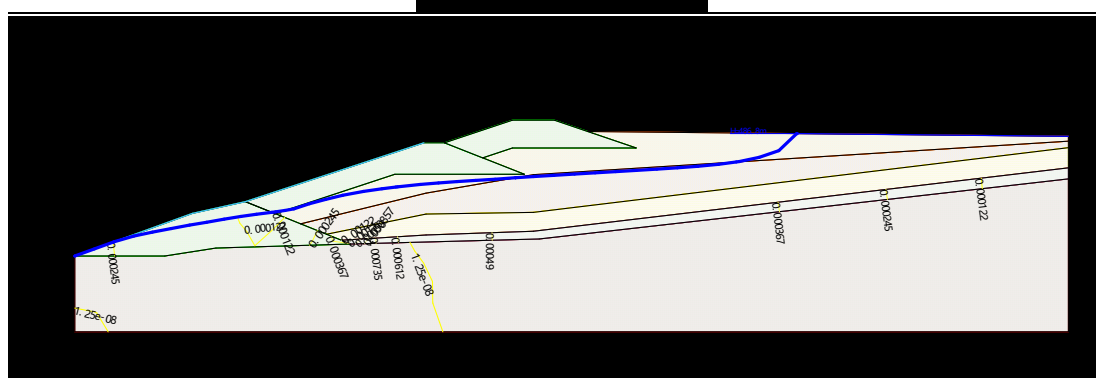
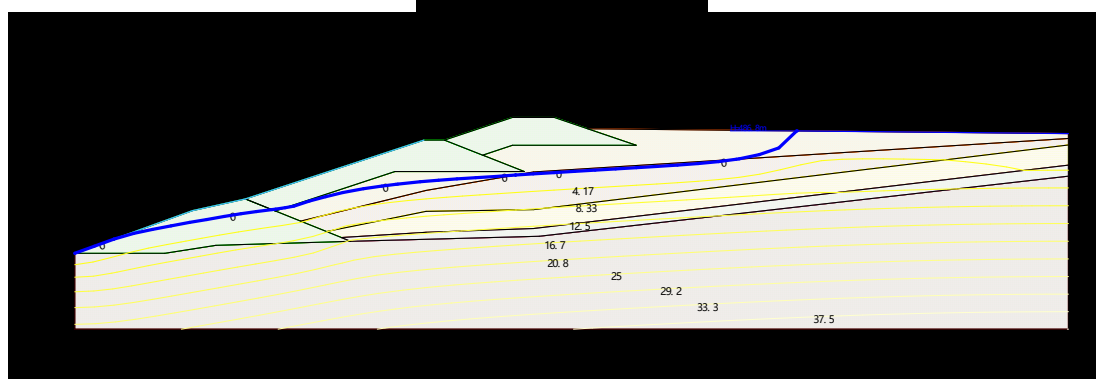
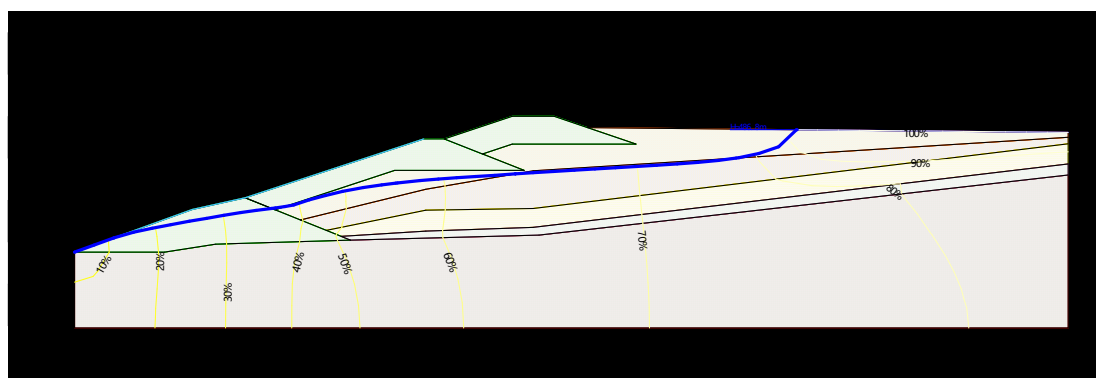
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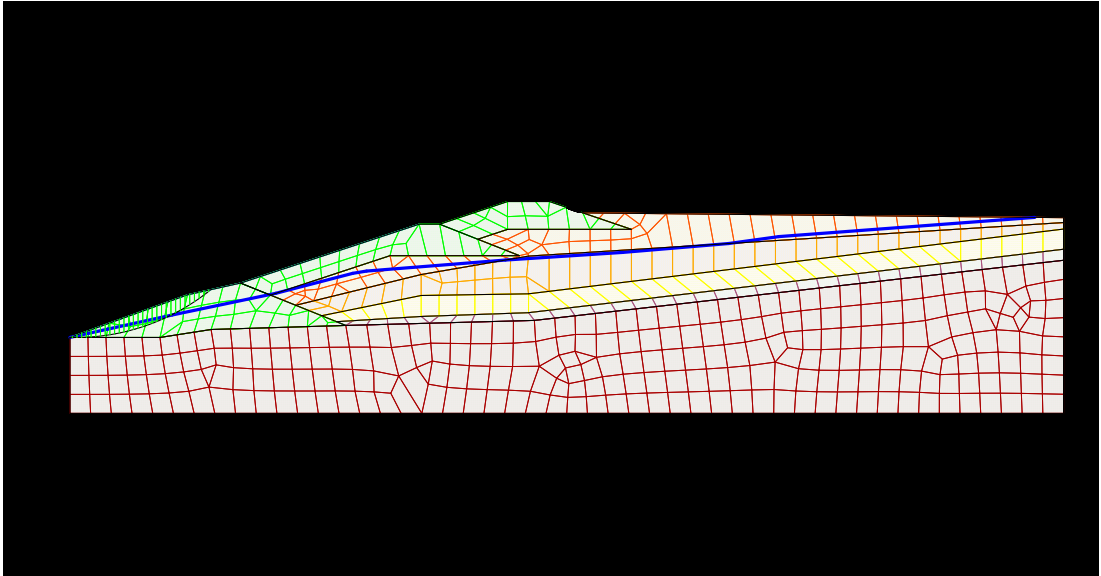
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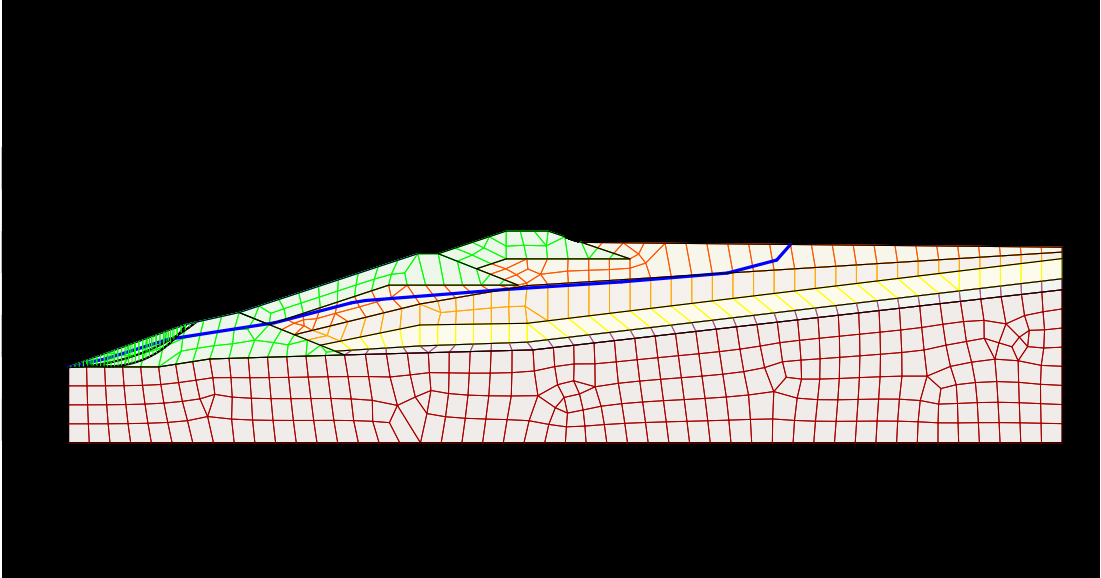
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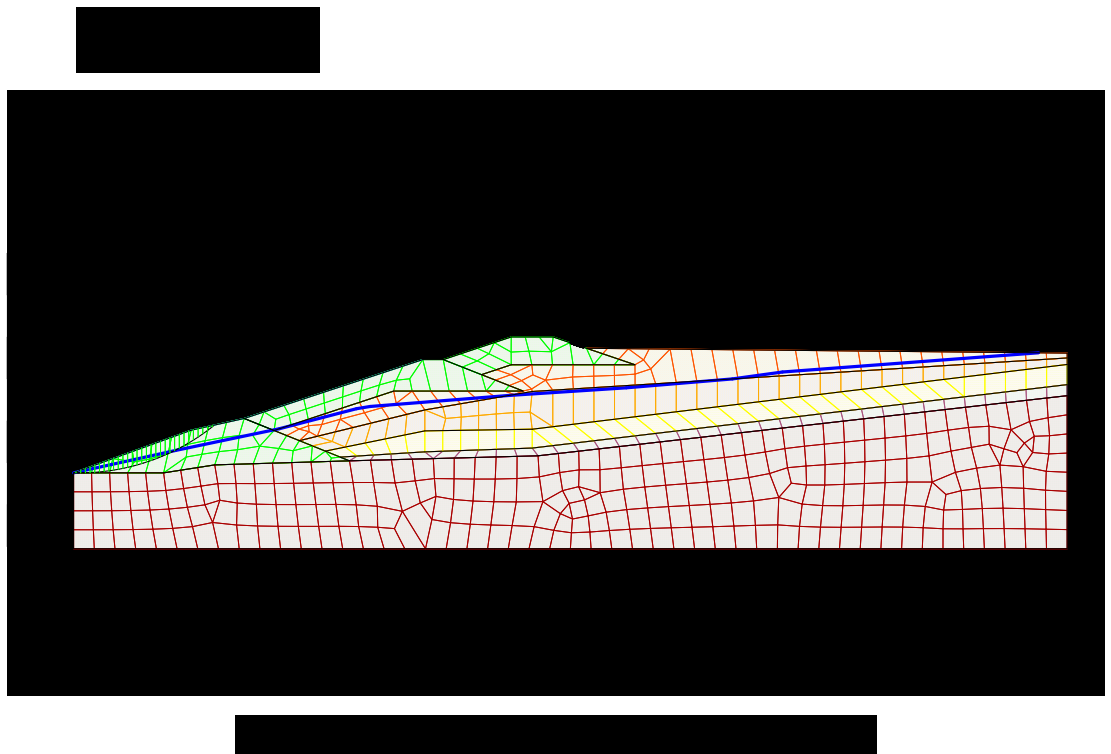


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5.2.3 评价结果分析

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5.3 尾矿库防洪系统单元

5.3.1 尾矿库防洪安全度评价分析

表 5-9 防洪排水系统安全检查表

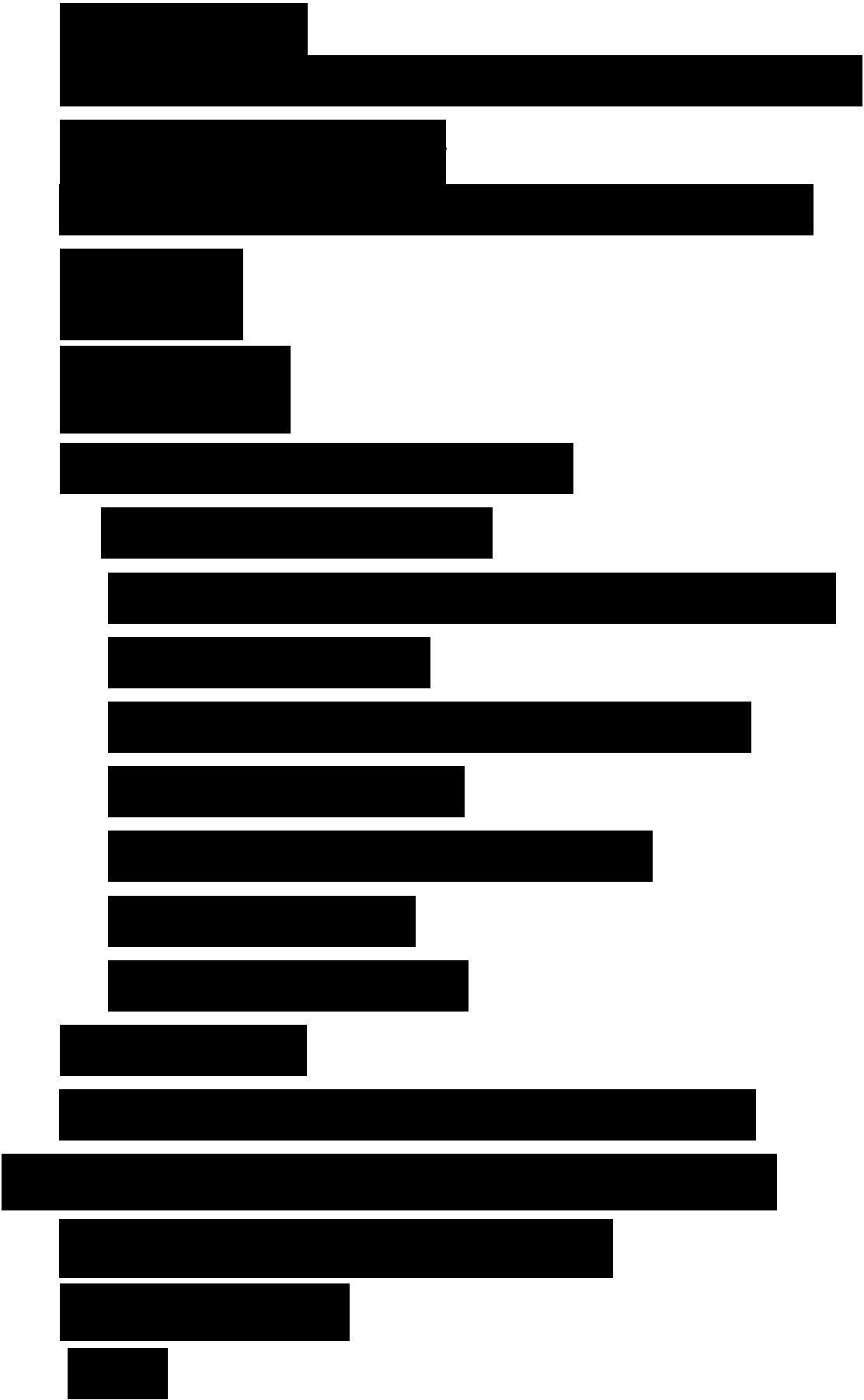
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5.3.2.1 洪峰流量、洪水总量及洪水过程线推求

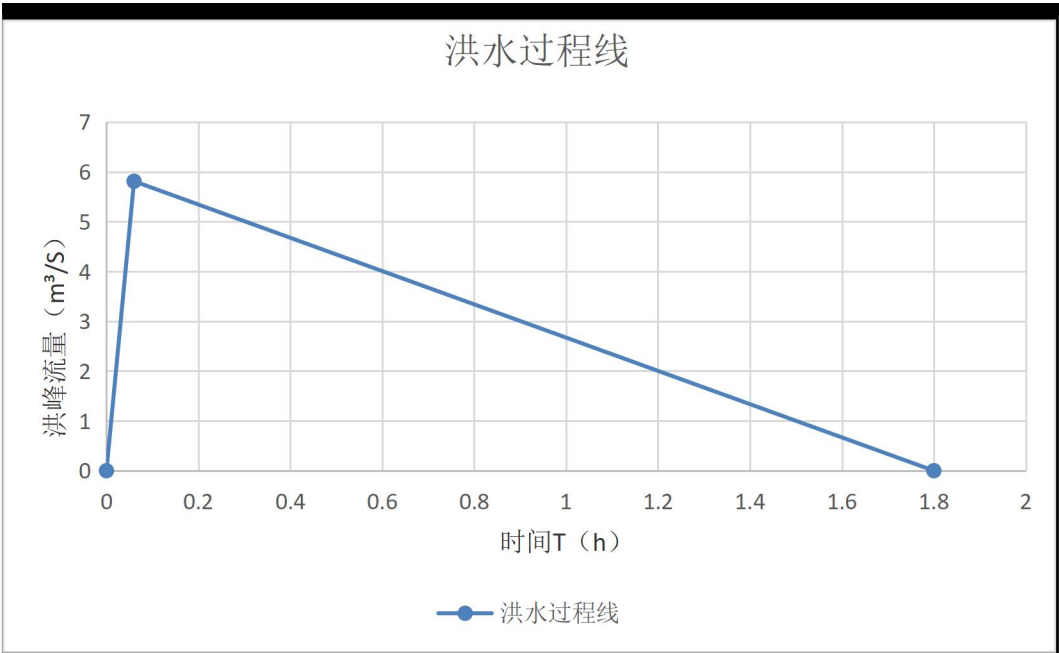
5.3.2.1 洪峰流量、洪水总量及洪水过程线推求

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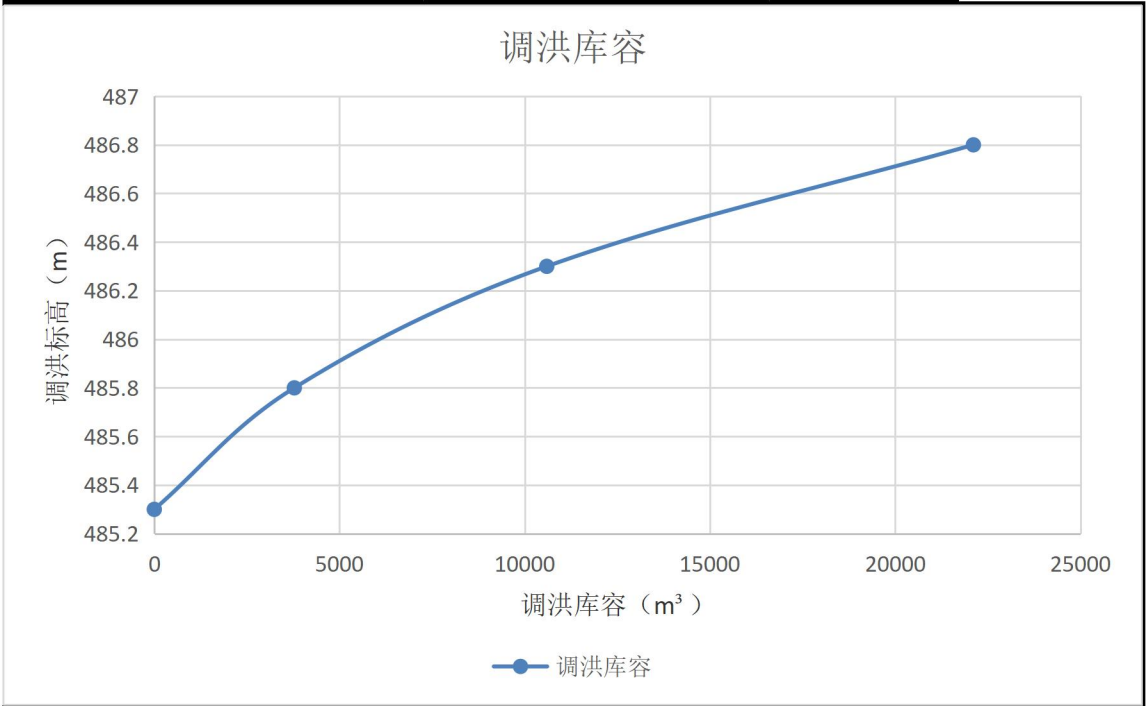
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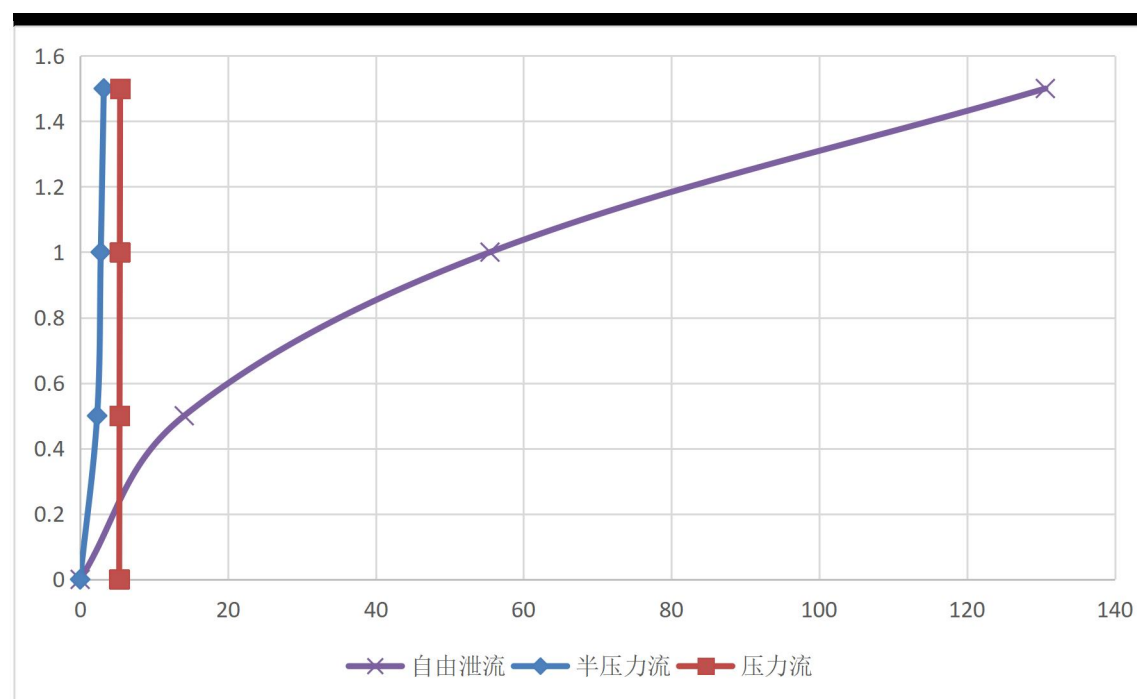
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
































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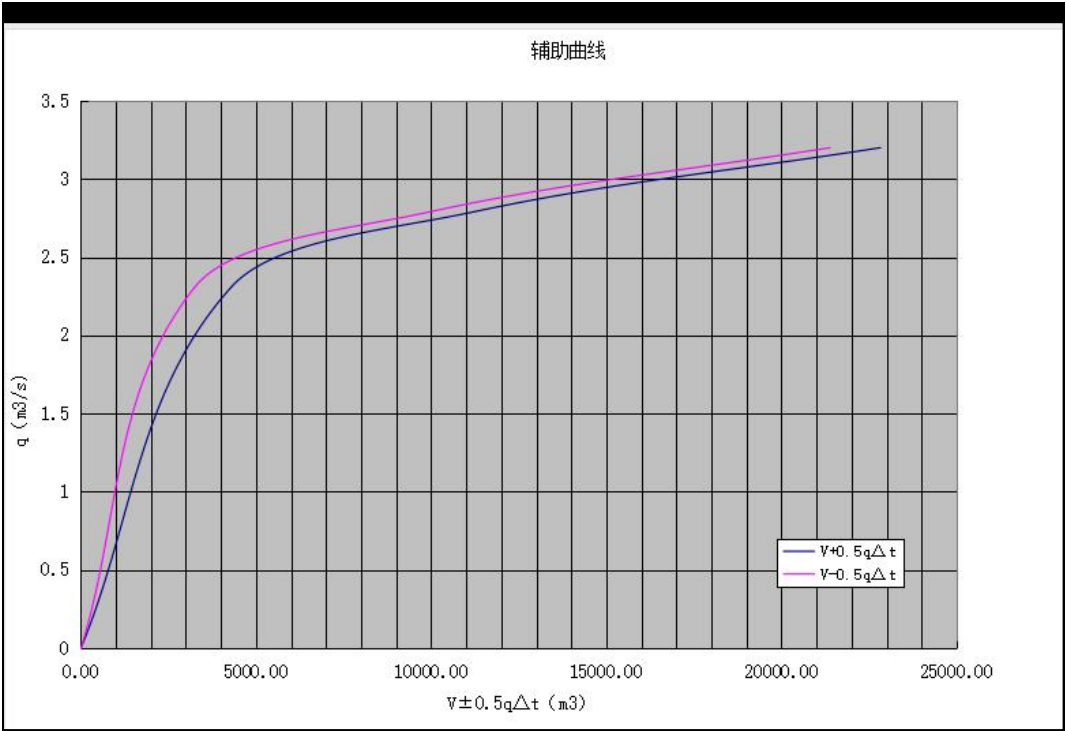


$$Q = m(b + 0.8Hctg\beta)\sqrt{2gH}^{1.5}$$







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



































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78	79	80	81	82	83	84
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92	93	94	95	96	97	98
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(6) 结论

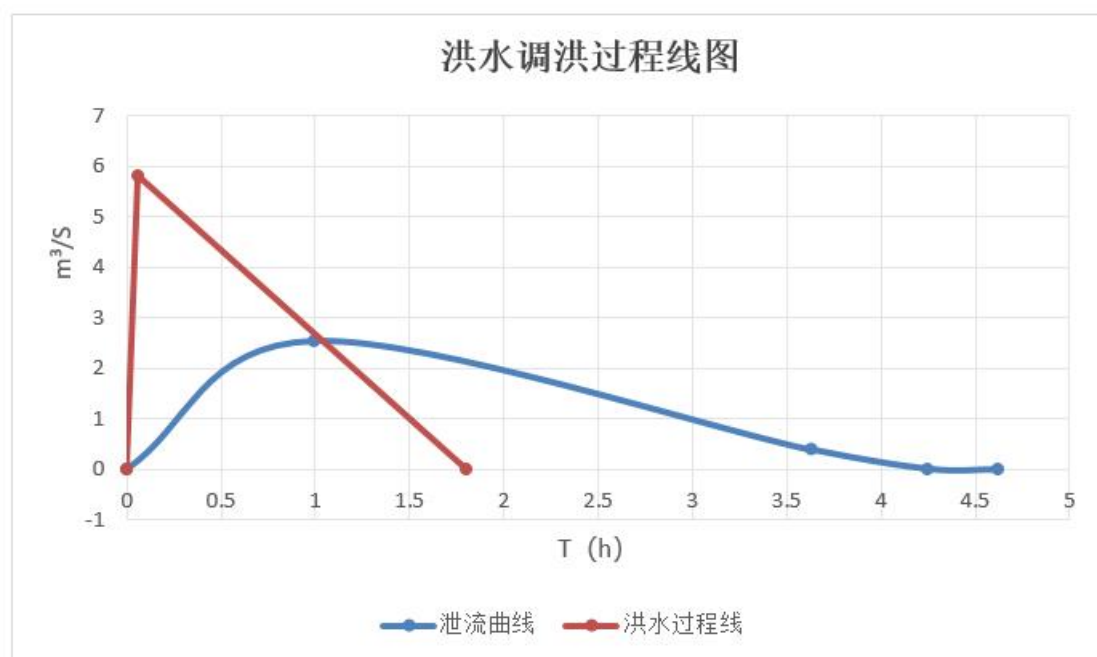










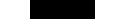



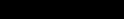
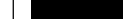
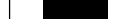
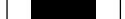
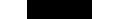
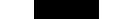


图 5-13 调洪过程线

表 5-13 调洪演算成果表

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5.4 尾矿库安全监测设施单元

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5.5 尾矿库安全管理单元

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表 5-8 安全管理安全检查表

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5.6 重大安全隐患排查单元

5.6.1 重大安全隐患排查单元评价

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5.6.2 单元评价小结

第 6 章 安全对策措施及建议

6.1 尾矿库库址及周边环境安全对策措施

6.2 尾矿坝坝体安全对策措施

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6.3 尾矿库排洪系统安全对策措施

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6.4 尾矿库监测设施安全对策措施

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6.5 尾矿库安全管理安全对策措施

[Redacted text block]

6.5.1 尾矿库维护

[Redacted text block]

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6.5.2 尾矿库水位控制与防汛

[Redacted text block]

6.5.3 应急救援预案

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6.5.4 尾矿库的档案管理

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第 7 章 评价结论

7.1 尾矿库坝体稳定性安全复核

[Redacted]

7.2 尾矿库排洪系统可靠性复核

[Redacted]

7.3 尾矿库安全监测评价

[Redacted]

7.4 尾矿库评价结论

[Redacted]

附件目录

附图目录

